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Pennsylvania Public Utility Commission, v. Pennsylvania-American Water Company	Docket Nos.: R-2023-3043189 R-2023-3043190
Call-In Telephonic Evidentiary Hearing	

Pages 1894 - 2185

Judge's Chambers

Keystone Building

400 North Street

Harrisburg, PA 17120

March 7, 2024

Commencing at 10:18 a.m.

INDEX TO EXHIBITS

Docket Nos. R-2023-3043189/R-2023-3043190

Hearing Date: March 7, 2024

NUMBER	FOR IDENTIFICATION	IN EVIDENCE
PAWC Statement No.		
1 (Direct Testimony of Ashley E. Everette with PAWC Exhibits 3A		

	through 3C, and		
	Schedules AEE-1 and AEE-2)	1929	1929
1-R	(Rebuttal Testimony of		
	Ashley E. Everette with		
	Exhibit 3-A Revised and		
	Exhibits AEE-1R and AEE-2R)	1929	1929
2	(Direct Testimony of		
	James Runzer with		
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2-R	Rebuttal Testimony of		
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3	(Direct Testimony of		
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4	(Direct Testimony of		

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5	(Direct Testimony of Lori N. O'Malley)	1930	1930
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6	Direct Testimony of E. Christopher Abruzzo, Esq.)	1930	1930
6-R	(Rebuttal Testimony of E. Christopher Abruzzo, Esquire with Exhibits ECA-1R **Confidential** and ECA-2R through ECA-3R)	1931	1931
7	(Direct Testimony of Melissa Ciullo)	1931	1931

8	(Direct Testimony of J. Cas Swiz with Exhibit JCS-1)	1931	1931
8-R	(Rebuttal Testimony of J. Cas Swiz Corrected Version with Exhibit JCS-1R)	1931	1931
9	(Direct Testimony of Deborah A. Degillio)	1931	1931
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10	(Direct Testimony of Charles B. Rea with Exhibits 10-A through 10-E)	1931	1931
10-R	(Rebuttal Testimony of Charles B. Rea with Exhibit 10R and 10EWWBASA Operations Revised)	1932	1931

10-SR	(Surrebuttal Testimony of Charles B. Rea)	1932	1932
11	(Direct Testimony of John J. Spanos with Exhibits 11-A through 11-M)	1932	1932
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12	(Direct Testimony of Constance E. Heppenstall with Exhibits 12-A through 12-E.)	1932	1932
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13	(Direct Testimony of Ann E. Bulkley with Exhibit 13-A)	1932	1932

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14-R	(Rebuttal Testimony of Tawana Dean with Exhibit TD-1_**Confidential**)	1933	1933
15-R	(Rebuttal Testimony of Justin L. Ladner)	1933	1933
16-R	(Rebuttal Testimony of Paul J. Hibbard)	1933	1933

PAWC Cross Exhibit:

1	(Cost of Capital)	2125	--
2	(Cost of Capital Referenced Pages)	2140	2144

I&E Statement No.

1	(Direct Testimony of Vanessa Okum with Exhibit Number 1 Public and		

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2	(Direct Testimony of D.C. Patel with Exhibit 2)	1936	1936
2R	(Rebuttal Testimony of D.C. Patel)	1936	1936
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3	(Direct Testimony of Joseph Kubas with Exhibit 3 and Exhibit Schedule 1-Corrected)	1936	1936
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1-Supp	(Supplemental Direct Testimony of Christine Maloni Hoover)	1941	1941
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6-Supp	(Supplemental Direct Testimony of Barbara R. Alexander)	1943	1943
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7-Supp (Supplemental Direct Testimony of Terry L. Fought with Exhibit TLF-4)	1944	1944
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1 (List of Evidence)	1944	1944
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2	(Testimony of Teri Ooms)	1951	1951

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3	(City of Scranton S&P Rating)	1951	1951
4	(Curriculum Vitae of Teri Ooms)	1952	1952

CAUSE-PA Statement:

1	(Direct Testimony of Harry S. Geller, Esquire with Exhibit 1 And Appendix A and B)	1954	1955
1-R	(Rebuttal Testimony of Harry S. Geller, Esquire)	1955	1955
1-SR	(Surrebuttal Testimony of Harry S. Geller, Esquire)	1955	1955

Exeter Township Exhibit:

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Borough of St. Lawrence

Statement No.

1 (Direct Testimony of Robert J. May, P.E. with Exhibits 1 and 2)	1957	1957

Kyle Donahue Statement:

1 (Direct Testimony Of Kyle Donahue)	1959	1959

PAWLUG Statement NO.

1	(Direct Testimony of LaConte C**onfidential** and Public with Exhibits BSL-1 through 4)	2181	2182
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Statement No. 1

Everette

PAWC STATEMENT NO. 1

TESTIMONY
OF
ASHLEY E. EVERETTE

WITH REGARD TO
(1) AN OVERVIEW OF PENNSYLVANIA-AMERICAN WATER COMPANY'S RATE FILING AND PRINCIPAL ACCOUNTING EXHIBIT, INCLUDING A SUMMARY OF THE FACTORS DRIVING ITS NEED FOR RATE RELIEF; (2) AFFORDABILITY OF WATER AND WASTEWATER SERVICE; (3) SUPPORT FOR SPECIFIC CLAIMS, INCLUDING ALLOCATION OF A PORTION OF WASTEWATER REVENUE REQUIREMENT TO WATER OPERATIONS, THE COMPANY'S PROPOSED REVENUE DECOUPLING MECHANISM AND ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE, REQUEST FOR REGULATORY ACCOUNTING AUTHORIZATION TO DEFER DEVIATIONS IN PENSION, OTHER POST-EMPLOYMENT BENEFITS, AND PRODUCTION EXPENSES, AND COMPLIANCE WITH SECTION 1301.1(B) OF THE PENNSYLVANIA PUBLIC UTILITY CODE; (4) COMMITMENTS FROM PRIOR RATE CASE SETTLEMENT; AND (5) PERFORMANCE FACTORS UNDER SECTION 523 OF THE CODE AND THE POLICY STATEMENT AT 69 PA. CODE § 69.711

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: NOVEMBER 8, 2023

PENNSYLVANIA-AMERICAN WATER COMPANY

DIRECT TESTIMONY OF ASHLEY E. EVERETTE

INTRODUCTION

Q. Please state your name and business address.

A. My name is Ashley E. Everette, and my business address is 852 Wesley Drive, Mechanicsburg, Pennsylvania 17055.

Q. By whom are you employed and in what capacity?

A. I am employed by American Water Works Service Company, Inc. ("Service Company" or "AWWSC") as the Senior Director of Rates and Regulatory. The Service Company is a wholly owned subsidiary of American Water Works Company, Inc. that provides services to Pennsylvania-American Water Company ("PAWC" or "Company") and its affiliates. I work in the Mechanicsburg office of PAWC.

Q. Please describe your educational background and business experience.

A. I hold a Bachelor's degree in Economics and a Master's degree in Business Administration, both from the University of Illinois. I have been employed by the Service Company since September 2019, first as the Director of Rates and Regulatory and now in my current role as Senior Director of Rates and Regulatory for PAWC. In these positions, I am responsible for preparing and presenting rate applications as well as certain aspects of the financial, budgeting and regulatory functions of the Company.

Prior to my employment at the Service Company, I was employed by the Pennsylvania Office of Consumer Advocate ("OCA") as a Regulatory Analyst from September 2012 to September 2019.

Q. Have you previously testified before regulatory agencies?

A. Yes. I have testified on behalf of PAWC before the Pennsylvania Public Utility Commission ("Commission") in several cases. Additionally, I submitted testimony to the West Virginia Public Service Commission on behalf of West Virginia American Water in 2021. Prior to my employment by the Service Company, I testified on behalf of the OCA in approximately 35 proceedings.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain the overall structure of PAWC's case and to address certain specific claims being made by the Company to support its proposed rates. My testimony is divided into several parts.

First, I will provide general information about the Company and this rate filing. Next, I discuss the major drivers of the Company's request for rate relief in this proceeding, which is primarily the significant capital investments that the Company has made and plans to make through June 30, 2025. Second, as part of this discussion, I address the affordability of water and wastewater service under present and proposed rates and proposals the Company is making to improve affordability for its customers; explain the sources of the accounting data that were the starting point for the Company's rate case presentation; identify the test years the Company is employing in this case; and give an overview of PAWC's Exhibit No. 3-A.

Third, I will discuss and, together with other PAWC witnesses, support the following specific parts of the Company's case:

(1) The Company's use of authority conferred by Act 11 of 2012 ("Act 11") and Section 1311(c) of the Pennsylvania Public Utility Code ("Code") to mitigate the impact of

revenue increases on wastewater customers by recovering a portion of the Company's wastewater revenue requirement from its total water and wastewater customer base;

(2) The Company's proposal to implement alternative ratemaking mechanisms under Section 1330 of the Code consisting of a Revenue Decoupling Mechanism and an Environmental Compliance Investment Charge;

(3) The Company's request for regulatory and accounting treatment for the deferral of pension, other post-employment benefits ("OPEB") and production expenses;

(4) The Company's compliance with Section 1301.1(b) of the Code by calculating the "differential" in tax costs recognized for ratemaking purposes before and after the enactment of Act 40 of 2016 and identifying how 50% of that differential will be invested in water and wastewater infrastructure.

Fourth, I will discuss, or identify other witnesses who discuss, the Company's compliance with commitments it made in the Joint Petition for Settlement of Rate Investigation ("Joint Petition for Settlement") approved by the Commission in the Company's last base rate case at Docket Nos. R-2022-3031671 and R-2022-3031672.

Finally, I will discuss the Company's overall management performance in relation to the factors identified in Section 523 of the Code and the Commission's Policy Statement at 52 Pa. Code § 69.711 and explain why the Company's superior management performance supports a rate of return on equity at the upper end of the range determined by PAWC's rate of return witness, Ms. Ann E. Bulkley, in PAWC Statement No. 13.

Q. Please identify the other witnesses who are providing direct testimony on behalf of PAWC in this proceeding.

A. In addition to me, the following witnesses will be responsible for presenting PAWC's direct case:

- **PAWC Statement No. 2 - Jim Runzer** is the Vice President of Operations for PAWC. Mr. Runzer discusses the general operations of the Company; PAWC's commitment to supplying high quality water and wastewater service; initiatives taken to increase efficiency, enhance service and control costs, including efforts to control non-revenue water; employee and customer safety and employee training and development; PAWC's commitment to advanced metering infrastructure ("AMI") technology; support for employee levels and compensation; and the Company's implementation of operations-related settlement commitments from the last base rate case.
- **PAWC Statement No. 3 - Bruce W. Aiton** is the Vice President of Engineering for PAWC. Mr. Aiton's testimony discusses the Company's capital investment planning process and the challenges posed by new and changed environmental mandates between rate cases; PAWC's plant additions to be placed in service during the future test year ("FTY") ending June 30, 2024 and fully projected future test year ("FPFTY") ending June 30, 2025; operational and regulatory risks associated with maintaining safe and adequate water quantity and water quality and complying with applicable drinking water and environmental regulations associated with owning and operating facilities for supplying water and wastewater services to the public, complying with environmental regulations applicable to owning and operating facilities for furnishing wastewater service to the public, and the challenges climate change could create for water and wastewater utilities; and the bulk treatment service provided to municipal and utility wastewater systems adjacent to the Company's York wastewater treatment plant.

- **PAWC Statement No. 4 - Stacey D. Gress** is Director of Rates and Regulatory for PAWC. Her testimony discusses the Company's claims for rate base, depreciation and amortization, taxes other than income and acquisitions since its last rate case that the Company has reflected in its proposed rate base in this case, the Company's claim for rate case and regulatory expense, proposed tariff changes, the allocation of expenses between water and wastewater operations, and PAWC's rate structure and rate design proposals.
- **PAWC Statement No. 5 - Lori O'Malley** is Senior Manager Regulatory Services for AWWSC. Her testimony addresses the Company's claim for labor and labor-related expenses, Service Company expenses, other operation and maintenance ("O&M") expenses, and miscellaneous expenses.
- **PAWC Statement No. 6 - E. Christopher Abruzzo** is Senior Director of Business Development for PAWC. His testimony describes various acquisitions that PAWC has included in this base rate case and provides support for the Company's request for acquisition adjustments pursuant to 66 Pa. C.S. § 1327 (relating to acquisition of water and sewer utilities) and 52 Pa. Code § 69.711 (statement of policy regarding small nonviable water and wastewater systems).
- **PAWC Statement No. 7 - Melissa Ciullo** is Vice President of Tax for AWWSC. Her testimony addresses the Company's computation of income tax expense in compliance with Act 40 of 2016, the Pennsylvania state tax rate change, and the Corporate Alternative Minimum Tax.
- **PAWC Statement No. 8 - J. Cas Swiz** is Senior Director, Enterprise-Wide Regulatory Strategy of AWWSC. His testimony discusses PAWC's claim for uncollectible accounts expense and amortization of the deferred amounts recorded to the regulatory asset for

incremental COVID-19 related financial impacts authorized in the Company's last base rate case. His testimony also discusses PAWC's proposed deferred accounting treatment for pension, OPEB, and production expenses, as well as the Company's proposed Environmental Compliance Investment Charge.

- **PAWC Statement No. 9 – Deborah A. Degillio** is Vice President and Chief Customer Officer of AWWSC. Her testimony provides an overview of PAWC's customer service function and addresses how the Customer Service Organization ("CSO") uses customer feedback to drive customer satisfaction, the CSO's efforts to improve customer service and achieve customer service performance objectives, and PAWC's customer assistance programs and proposed enhancements to those programs in this base rate case.
- **PAWC Statement No. 10 - Charles B. Rea** is Senior Director, Enterprise-Wide Regulatory Pricing & Affordability of AWWSC. His testimony explains the design of current and proposed tariff rates, presents the Company's affordability analyses for water and wastewater service, describes the Company's analysis of residential, commercial, and municipal water consumption, discusses the Company's claimed revenues, and supports the Company's proposed Revenue Decoupling Mechanism.
- **PAWC Statement No. 11 - John J. Spanos** is President of Gannett Fleming Valuation and Rate Consultants LLC. Mr. Spanos' testimony explains the development of the depreciated original cost of the Company's utility plant in service and its claims for annual depreciation expense.
- **PAWC Statement No. 12 - Constance E. Heppenstall** is Senior Project Manager for rate studies of Gannet Fleming Valuation and Rate Consultants LLC. Ms. Heppenstall's

testimony explains the allocation of the cost of service to customer classifications and the identification of stormwater-related costs of service of combined sewer systems ("CSSs").

- **PAWC Statement No. 13 - Ann E. Bulkley** is a Principal with The Brattle Group. Ms. Bulkley's testimony provides a recommendation regarding PAWC's authorized return on equity and assesses the reasonableness of its proposed capital structure for ratemaking purposes.

OVERVIEW: GENERAL INFORMATION ABOUT THE COMPANY AND THIS CASE REASONS FOR RATE RELIEF REQUESTED

Q. Please summarize the rate increase sought by PAWC in this proceeding.

A. The Company is seeking an increase in the rates of its water and wastewater operations that will produce additional annual operating revenues of $203.9 million, or 20.2%, over PAWC's annualized total revenues at present rates including Distribution System Improvement Charge revenue. The key elements of the Company's rate request are summarized on Schedule AEE-1 to this statement. Schedule AEE-2 to this statement is a more detailed summary that provides an overview of revenue requirements and revenues at existing and proposed rates on a total-Company basis.

Q. What are the major drivers of the Company's request for rate relief?

A. The most significant driver of this request for rate relief is PAWC's ongoing infrastructure investment. As explained in Mr. Aiton's direct testimony (PAWC Statement No. 3), maintaining PAWC's facilities requires substantial capital investment. PAWC has made, and must continue to make, substantial investments in new and replacement plant and equipment to replace aging infrastructure, comply with mandates imposed by the Safe Drinking Water Act, the Clean Water Act and the Clean Streams Law and their associated regulations, and

meet customers' demands for water and wastewater service. From the end of the FPFTY in the Company's last base rate case (December 31, 2023) through the end of the FPFTY in this case (June 30, 2025), the Company will have invested over $1 billion in new or replacement plant and equipment, and the overwhelming majority of this investment is and will be in source of supply, treatment, distribution and collection assets. Part of this investment is also being used to improve service to small, troubled water and wastewater systems that PAWC has acquired. While the acquisition of smaller systems will result in increased economies of scale over time, the Company is currently incurring increased capital investment and an increase in operating costs.

Although PAWC is requesting a rate increase in this case, the Company has been generally successful in controlling O&M expense over the last decade. Comparing operating expense levels in 2013 with historic test year ("HTY") operating expenses, a period of 10 years, annual operating costs per customer have increased moderately from an estimated $300 to $336 per customer, a $36.00 annual increase over the 10-year period. This equates to an overall increase since 2013 of 11.91%, representing a compound annual growth rate of 1.13%. In comparison, the Gross Domestic Price Deflator,[1] an index measuring inflation, increased from 101.77 in 2013 to 121.80 for 2023. This equates to a 19.68% increase, representing a compound annual growth rate of 1.81%. This demonstrates that the Company has been successful in controlling its O&M costs per customer over the past decade. The Company's ability to mitigate O&M increases is attributable to the Company's prudent management of operating costs. Our management initiatives, as explained by Mr. Runzer (PAWC Statement No. 2), and our prudent capital investments described by Mr. Aiton have

[1] The GDP deflator, also called implicit price deflator, is a measure of inflation. It is the ratio of the value of goods and services an economy produces in a particular year at current prices to that of prices that prevailed during the HTY.

enabled us to work more efficiently and effectively in managing O&M expenses. However, like others, the Company is not immune to inflationary pressures. PAWC's requested increase in O&M expense is driven by increases in production costs, employee-related expenses and the cost of bringing high quality and reliable water service to additional communities in the Commonwealth and supports the Company's efforts to continue providing high quality water and wastewater service in the most cost-effective way to our customers in the long-term.

In addition, to address the Company's diverse capital needs, PAWC must raise substantial amounts of debt and equity capital and, in the process, must demonstrate its ability to provide a reasonable return for investors to commit their funds to the Company for its use. On an annual basis, PAWC's capital investment program is greater than its allowance for depreciation, which results in negative free cash flow. Therefore, the Company needs to seek financing for its capital investments beyond any internally generated cash flow. As shown in Schedule AEE-2 and explained in the Statement of Specific Reasons for Proposed Increase in Rates that accompanies the Company's filing, absent rate relief, the Company's overall rate of return on an original cost basis will be only 5.78% as of June 30, 2025. More significantly, the indicated return on common equity is anticipated to be 6.63% as of June 30, 2025, which is clearly far less than is required.

AFFORDABILITY OF WATER AND WASTEWATER SERVICE

Q. In general, why is PAWC's proposed rate increase reasonable and appropriate?

A. PAWC's proposed rate increase is reasonable and appropriate because, as I previously discussed, it is driven primarily by investments that keep our water and wastewater service safe and reliable. Such investments cannot be avoided and are in the long-term best interests of our customers. If such investment is not made, our customers will be adversely impacted

in the long run as costs will increase even more. For example, when mains are not replaced in a timely fashion, or equipment is neglected, our costs rise, as unanticipated main breaks create water quality issues, unexpected expenses, and disruption to our customers and communities. Similarly, equipment in need of replacement makes workers less efficient and can create safety issues.

Q. Has PAWC evaluated the impact of the proposed rate increases on its customers?

A. Yes, we have. We know our water and wastewater service is critical, and we know how important it is for that service to remain affordable. A Zone 1 residential customer using 105 gallons of water per day would pay approximately $2.90 per day for water under our rate proposal. Therefore, for about $2.90 per day an average residential customer has all the water they and their family need to drink, cook, wash, and maintain their general health and well-being.

Q. Has the Company performed an analysis of the affordability of its water and wastewater service under the proposed rates?

A. Yes. Mr. Rea (PAWC Statement No. 10) has conducted a detailed analysis of the affordability of our historical and proposed residential rates and relates the median household income ("MHI") for customers in our service territory to our utility bills over time. Mr. Rea's analysis demonstrates that our water and wastewater service, overall, has been affordable over time and will remain affordable for the majority of residential customers under the proposed rates. His testimony compares historical average monthly water bills to monthly household income for PAWC customers from 2012 through 2023, both in absolute terms and in terms of bill to income ("BTI") ratios. Mr. Rea then analyzed the Company's proposed bills in this case and estimated MHI for PAWC customers during the FPFTY. His analysis shows that BTI Ratios

for PAWC's residential customer base have held steady from 2012 to 2023 at levels between 0.8% and 1.0% of MHI and are expected to be 1.12% under the Company's proposed rates in this case during the FPFTY. Mr. Rea shows that BTI Ratios for wastewater service have similarly held steady from 2012 through 2022 at levels between 0.9% and 1.2% of MHI but rose in 2023 to 1.55% and are expected to be 1.37% under the Company's proposed wastewater rates in this case. This is a tangible demonstration that our customer bills will remain affordable for the majority of customers even with PAWC's requested rate increase.

Q. How does PAWC maintain the affordability of its water service?

A. As I noted previously, an important way that we maintain affordability is by continuously seeking to improve our business processes and make investments that improve operational efficiencies, and we have been very successful in doing so. As Mr. Aiton and Mr. Runzer explain, we use targeted and proactive investments to permit us to work smarter and more efficiently as well as leveraging the power of our organization to purchase equipment and supplies at advantageous terms. All of these help us better manage our cost structure and mitigate cost increases.

Q. Notwithstanding the overall affordability of PAWC's rates, are there customers who might face affordability issues?

A. Yes, some of our customers face challenging economic circumstances. Thus, Mr. Rea also examined the affordability of our rates for customers at different MHI levels. His assessment compares annualized bills for "basic water and/or wastewater service" (i.e., service that is necessary and reasonable to meet basic household needs for drinking, cooking, sanitation, and general health service that does not include seasonal discretionary water use) to measures of household income for lower income groups. The Company estimates that there are

approximately 108,000 residential water customers in its service areas with household incomes at or below 150% of Federal Poverty Level ("FPL"), or approximately 17% of the Company's residential water customer base. For these customers, the Company continues to offer various assistance programs, which I describe below. The Company is also proposing in this case to expand its income-based tariff discount program to include customers between 150% and 200% of FPL in order to further address the affordability of water or wastewater service, as explained in more detail by Mr. Rea.

Q. What customer assistance programs does PAWC offer its low-income customers to maintain the affordability of its service?

A. PAWC offers several customer assistance programs to help our low-income customers. The Company supports low-income customers through PAWC's H2O Help to Others Program™ ("H2O"). The H2O program currently offers a three-fold approach, including bill discounts for water and wastewater service, hardship grants, and water conservation assistance. The Company also anticipates offering an Arrearage Management Program ("AMP").

The bill discount program currently includes a three-tier discount with discounts on the total bill ranging from 30% to 80%. I discuss the proposed expansion of the low-income discount below.

The hardship grant assistance program is a bill-paying assistance program funded by PAWC shareholders and donations from customers and others who want to help our customers in need. Customers who qualify may receive grants of up to $500 annually toward their water bill and $500 annually toward their wastewater bill. The hardship grant assistance program is administered by Dollar Energy Fund, an independent, non-profit organization. The Company currently contributes $750,000 annually to the hardship fund and anticipates increasing this

contribution by $700,000 annually for the next five years, or a total annual donation of $1,450,000.[2] This donation is funded by PAWC's shareholders and is not recovered from customers.

The water conservation assistance program offers tools and tips to help customers save water and money. The program includes a leak detection kit to help identify household leaks, conservation tips and water use calculator.

The AMP is a program that will assist low-income customers with arrearages. This program is described in more detail below. A Settlement of the AMP is currently pending approval before the Commission. If the Company receives approval of the AMP in 2023, the Company anticipates the AMP being available to customers in late 2024.

In addition, the Company offers its customers who qualify flexible payment arrangements through installment agreements if they are financially unable to pay a water and/or wastewater service bill when due. The Company also offers residential customers the option of paying bills under its budget billing plan. For customers electing budget-billing, the Company estimates the customer's total billed amount for service during a succeeding twelve-month period and, for that period, issues monthly bills based on one-twelfth of the twelve-month estimate. The Company recently undertook a statewide promotional effort through emails and bill inserts to educate customers on budget billing and preferred due date options.

Q. Has the Company been able to use American Rescue Plan Act funding to assist customers?

[2] The increased annual donation is a provision of the proposed settlement of the Company's application to acquire the Butler Area Sewer Authority ("BASA") wastewater system, which is currently pending at Docket No. A-2022-3037047. If the settlement is approved by the Commission, the increased annual donation will commence upon closing of the BASA acquisition.

A. Yes. The Low-Income Household Water Assistance Program ("LIHWAP"), which was authorized by the federal government pursuant to the American Rescue Plan Act of 2021 and the Consolidated Appropriations Act, 2021, has provided bill assistance for our qualifying customers. At the state level, this program was administered by the Pennsylvania Department of Human Services ("DHS"). PAWC had a vendor agreement with the DHS. Customers could apply online at www.compass.state.pa.us, call DHS and request an application or apply in person at a local county assistance office.

Prior to the program ceasing in October 2022 due to funds being depleted, PAWC customers received nearly 13,000 grants totaling over $7.5 million. When additional funds were made available in 2023, PAWC customers received over 2,400 additional grants totaling over $1.1 million. As explained in more detail later in my testimony, the Company went above and beyond to promote the availability of these funds to low-income customers to help them to pay their bills and also undertook efforts to help ensure that additional funds were allocated to Pennsylvania to be made available to our customers.

Q. Has the Company been able to use other state and federal funding to assist customers?

A. Yes. The Pennsylvania Homeowner Assistance Fund, or PAHAF, is a housing-related program funded by the U.S. Treasury to assist Pennsylvania homeowners facing financial hardship as a result of the COVID-19 pandemic. The program provides financial assistance to homeowners for qualified mortgage and housing-related expenses to address delinquency and avoid default, foreclosure, or displacement. The Pennsylvania Housing Finance Authority was allocated $350 million under the American Rescue Plan Act of 2021 to develop the PAHAF program to help Pennsylvania homeowners avoid mortgage delinquency, foreclosure, or displacement. As of October 12, 2023, PAWC has received approximately $261,000 under

the PAHAF program. At this time, the program is not accepting new applications but is continuing to process applications already received.

Q. You mentioned PAWC is proposing an expanded low-income discount to assist its low-income customers. What is PAWC's proposal?

A. The Company's current discount tariff rates are based on the customers' percentage of federal poverty level, with three tiers from 0% to 150% of the FPL. The Company is proposing to expand this tariff to include customers with household incomes between 150% and 200% of the FPL. As explained by Mr. Rea, the Company's proposed expansion to the low-income discount program will improve the affordability of water and wastewater service for this group of customers.

The proposed modification to this tariff would reduce the typical basic water service ("BWS") bill as shown in the chart below:

Proposed Low Income Discount Program

Income Group	**BWS Bill Pre-Discount**	**Pre-Discount BTI Ratio**	**BWS Bill Post-Discount**	**Post-Discount BTI Ratio**
0% - 50% FPL	$75.43	16.17%	$16.45	3.53%
51% - 100% FPL	$80.29	5.73%	$38.09	2.72%
101% - 150% FPL	$81.46	3.55%	$58.65	2.56%
151%-200% FPL	$84.69	2.70%	$71.59	2.28%

Q. Please summarize the Company's Arrearage Management Plan ("AMP") that is pending Commission review and approval.

A. In accordance with a stipulation between the Company and the Commission on Economic Opportunity in the Company's 2020 base rate case, on August 25, 2021, PAWC filed with the Commission a Petition of Pennsylvania-American Water Company for Approval of an Arrearage Management Plan at Docket No. P-2021-3028195. Under this program, qualifying

customers will receive $25 of arrearage forgiveness per month. A Settlement of this proceeding was filed with the Commission on May 13, 2022 and an amended settlement was filed on July 27, 2022. On December 28, 2022, the Commission entered an Order remanding the proceeding to the Office of Administrative Law Judge for further proceedings. The purpose of the remand was to require income verification for customers seeking to enroll in the AMP. A further amended settlement was filed on September 11, 2023. Consistent with the Commission's Order, the further amended settlement establishes a framework for income verification and periodic income recertification. On October 12, 2023, a Recommended Decision was entered recommending approval of the further amended settlement without modification.

Q. When will the Company implement its AMP?

A. The proposed settlement of the AMP proceeding provides that the Company will implement the plan no later than twelve months after the Commission issues a Final Order in the AMP proceeding. The Company anticipates implementing the AMP as close to the effective date of new rates as possible, dependent on when Commission approval of the settlement is received. The Company has included $2,864,700 in its expense claims in this case to fund the AMP, which is consistent with the settlement.

Q. Is the Company's AMP a pilot program?

A. Yes, from a cost recovery standpoint, the AMP is being implemented as a pilot program. The settlement also provides that during the period that the AMP is considered a pilot program, the Company will record a regulatory asset or liability for amounts over or under the amount included in rates for recovery or refund in the next base rate case.

SOURCE OF ACCOUNTING DATA AND THE TEST YEARS EMPLOYED BY THE COMPANY

Q. What is PAWC's principal accounting exhibit in this case?

A. PAWC Exhibit No. 3-A is PAWC's principal accounting exhibit in this case. PAWC Exhibit No. 3-A includes five separate revenue requirement studies, one of which relates to the Company's water operations and four that relate to its wastewater operations.

Q. What is the source of the accounting data used in PAWC Exhibit No. 3-A?

A. The starting point for each of the revenue requirement studies in PAWC Exhibit No. 3-A is the accounting information recorded in the Company's books and records for the twelve months ended June 30, 2023. The Company's books and records are maintained in conformity with the National Association of Regulatory Utility Commissioners ("NARUC") Uniform System of Accounts for Water Companies, the NARUC Uniform System of Accounts for Wastewater Companies and generally accepted accounting principles. Because the purpose of ratemaking is to establish rates to be applied in the future, per-book data were adjusted on a pro forma basis, as appropriate, to reflect changes in operating conditions that are not fully reflected in the book data for the HTY, the FTY or the FPFTY.

Q. Why is the Company presenting five separate revenue requirement studies in PAWC Exhibit No. 3-A?

A. The Company is presenting five separate revenue requirement studies in its Exhibit No. 3-A to comply with the terms set forth in the Joint Petition for Settlement and the terms and conditions of the anticipated Commission's approvals of PAWC's acquisitions of certain wastewater systems that are included in this case.

Paragraph 14 of the Joint Petition for Settlement provides that "in future rate filings, PAWC will submit one or more separate stormwater and wastewater cost-of-service studies

for each of its [CSSs]" [3] and further provides that "the Company is not required to provide a separate study for each combined sewer system." Accordingly, PAWC Exhibit No. 3-A includes a separate revenue requirement study, in aggregate, for the CSSs it currently owns, which consist of the Scranton, McKeesport, and Kane systems.

The Company is also submitting separate cost of service studies for the wastewater systems that PAWC expects to acquire from the Butler Areas Sewer Authority ("BASA") and the Borough of Brentwood, pursuant to the proposed settlement agreement for the BASA acquisition pending before the Commission and consistent with past practice for systems acquired pursuant to Section 1329.

Q. In the Company's last base rate case, it submitted separate revenue requirement studies for Royersford Wastewater Sanitary Sewer System ("SSS") Operations, Upper Pottsgrove Wastewater SSS Operations, and York Wastewater SSS Operations. Please identify where the information with respect to these systems is included in the Company's filing in this case.

A. Each of these systems are included in the Wastewater SSS General Operations revenue requirement.

Q. Briefly explain what is set forth in Exhibit No. 3-A.

A. As previously explained, PAWC Exhibit No. 3-A contains five separate revenue requirement studies, each of which is set forth at a separate tab within the exhibit, consisting of the following:

Tab 1	Water Operations
Tab 2	Wastewater Sanitary Sewer Systems General Operations

[3] The cost-of-service studies that separately identify and quantify storm water costs are sponsored by Ms. Heppenstall and are explained in her direct testimony (PAWC Statement No. 12).

Tab 3 Butler Wastewater ("WW") Operations
Tab 4 Brentwood WW Operations
Tab 5 Wastewater Combined Sewer Systems Operations

A summary page at the beginning of PAWC Exhibit No. 3-A shows the Company's rate request on a consolidated (total Company) basis. Applicable workpapers and supporting documentation for PAWC Exhibit No. 3-A are set forth in PAWC Exhibit Nos. 3-B and 3-C. I am responsible for portions of each of these exhibits. Other witnesses are responsible for other portions of these exhibits as explained in their respective statements. Each page of PAWC Exhibit No. 3-A identifies the witness responsible for that portion of the exhibit.

In order to reflect data for the FPFTY, PAWC Exhibit No. 3-A presents PAWC's rate base, revenues, expenses and tax information on the basis of an HTY ended June 30, 2023, a FTY ending June 30, 2024, and a FPFTY ending June 30, 2025. The support for the Company's requested revenue increase is based principally upon the data presented for the FPFTY. Within PAWC Exhibit No. 3-A, HTY data are generally identified by the title or heading "Present Rates at June 30, 2023" and FTY data are generally identified by the title or heading "Present Rates at June 30, 2024." Data for the FPFTY are generally identified by the title or heading "Present Rates at June 30, 2025."

SUPPORT FOR SPECIFIC ELEMENTS OF THE COMPANY'S FILING

Development of Water and Wastewater Revenue Requirements and the Application of Section 1311(c) of the Code

Q. Has the Company relied upon provisions of Act 11 in developing its proposed rates in this case?

A. Yes, it has. As authorized by Section 1311(c) of the Code, PAWC is proposing to allocate in the FPFTY approximately $71 million of its wastewater cost of service to its water operations,

which is approximately 7% of total proposed water revenue. Thus, the authority granted by Act 11 would be used to mitigate the increases that wastewater customers in certain service areas would experience if their rates were established on a stand-alone basis. The Company's proposed rates would also make meaningful progress in moving the rates of its separate wastewater rate zones closer to a single consolidated wastewater rate design for all of the Company's wastewater operations.

The following table shows the effect on each wastewater operation of allocating a portion of wastewater revenue requirement to water operations and developing rates in the manner discussed above in summary form for the FPFTY:

Revenue Requirement Allocated from Wastewater to Water Customer Base	
Wastewater Operations	**FPFTY June 30, 2025**
Wastewater Sanitary Sewer Systems General Operations	$31,962,411
Butler Wastewater ("WW") Operations	$21,552,699
Brentwood WW Operations	$1,565,232
Wastewater Combined Sewer Systems Operations	$16,007,052
Total	**$71,087,394**

Q. What is the impact on the Company's proposed revenue requirement for water and wastewater customers of allocating a portion of wastewater revenue requirement to water operations, as shown above?

A. Based on the Company's cost of service and proposed customer class revenue allocation in this case, the allocation would increase the monthly water bill of a residential water customer by approximately $6.08 per month at proposed rates. The allocation would decrease the

monthly wastewater bill of a residential wastewater customer by approximately $10 to $90 per month at proposed rates depending on the rate and location of the customer.

Q. What does Section 1311(c) of the Code state concerning the allocation of wastewater revenue requirement to water customers?

A. Section 1311(c) of the Code states: "The commission, when setting base rates, after notice and an opportunity to be heard, may allocate a portion of the wastewater revenue requirement to the combined water and wastewater customer base if in the public interest."

Q. What is your understanding of the phrase "in the public interest" in Section 1311(c) of the Code?

A. The phrase is not specifically defined in Section 1311(c). However, I am advised by counsel that the Commission provided guidance on the meaning of "in the public interest" in the Company's 2020 base rate proceeding with respect to acquisitions that were approved under Section 1329 of the Public Utility Code.[4] The Commission held that it is in the public interest for a utility to recover a portion of the wastewater revenue requirement associated with an acquired wastewater system from the combined water and wastewater customer base, "because otherwise, large viable public utilities would be discouraged from acquiring municipal and wastewater systems and contravene legislative intent and the Commission's policy of encouraging consolidation and regionalization."[5]

Q. Is the public interest served by distributing a portion of the revenue requirement of the Company's wastewater operations across PAWC's approximately 780,000 water customers?

[4] *Pa. Pub. Util. Comm'n v. Pennsylvania-American Water Co.*, Docket Nos. R-2020-3019369 and R-2010-3019371 (Opinion and Order entered Feb. 25, 2021), p. 82.
[5] *Id.*

A. Yes, it is. As indicated by the Commission in the Company's 2020 rate case, it is in the public interest for the Company to recover a portion of its wastewater revenue requirement associated with its acquired wastewater systems from its combined water and wastewater customer base.[6] Distributing a portion of the revenue requirement of the Company's wastewater operations across all of the Company's approximately 780,000 water customers is consistent with legislative intent and the important policy considerations underlying Sections 1311(c) and Section 1329, including ameliorating rate impacts on wastewater customers while imposing only a modest increase on the water bills of the much larger base of water customers, and promoting the Commission's policy of encouraging consolidation and regionalization.

The amendment Act 11 made to Section 1311(c) has extended to combined water and wastewater utilities a policy similar to the concept of single tariff pricing, which this Commission has approved and encouraged water utilities to adopt for nearly forty years. Like single tariff pricing, allocating a portion of wastewater revenue requirement to the entire customer base recognizes that: (1) PAWC is an integrated water and wastewater company; (2) a multitude of functions needed to provide water and wastewater service are performed on a consolidated basis by PAWC employees and by the Service Company; (3) providing both water and wastewater service creates opportunities, over time, to capture additional economies of scale and scope; (4) the need for capital additions in different parts of the Company's water and wastewater systems will be higher in some areas and lower in others at any given point in time, but will average out over time ; (5) "averaging" water and wastewater costs is very much like the cost averaging that single tariff pricing is explicitly designed to accomplish and stabilizes rates and mitigates rate impacts for all customers over the long run. Consistent with

[6] *Id.*

these factors, PAWC's proposal represents a reasonable approach to allocating revenue requirement that supports economies of scale over the long term.

Q. You described the pending acquisition of the BASA wastewater system above. Please discuss the hardship fund contribution that will benefit PAWC's water and wastewater customers.

A. In February 2023, PAWC filed with the Commission an application to acquire the BASA wastewater assets. On August 14, 2023, PAWC filed with the Commission a Joint Petition for Unanimous Settlement of All Issues.[7] In this Settlement, the Company agreed to increase its shareholder donation to its hardship fund by $700,000 per year for five years, or a total of $3.5 million. The first donation will be made following closing, which is expected before the end of 2023. This additional shareholder contribution will nearly double the funds available for low-income hardship grants, and eligibility will be expanded to include customers between 200%-250% of the federal poverty level.

Of this $700,000 annual donation, the Company anticipates that in 2023, nearly 80%, or $555,000, will be made available to the Company's water customers. In this way, the Company's acquisition of the BASA system will provide an immediate benefit to the Company's low-income water and wastewater customers.

Proposed Revenue Decoupling Mechanism

Q. Is the Company proposing a Revenue Decoupling Mechanism in this proceeding?

A. Yes. As outlined in the testimony of Mr. Rea, the Company requests approval of a Revenue Decoupling Mechanism ("RDM") for both water and wastewater service as part of this

[7] This settlement is currently pending before the Commission, as discussed in more detail by Mr. Abruzzo in Statement No. 6.

proceeding. The RDM is an alternative rate design mechanism designed to provide the Company with the opportunity to more reliably recover its authorized revenue requirement and the fixed costs authorized in this proceeding. As explained by Mr. Rea, the RDM will compare the difference between actual revenue collected from eligible customers under the Commission-approved rates in this case against cost components calculated to recover the Company's fixed costs of providing service. If actual revenues are higher than would have been collected under the RDM formula, the difference will be credited to customers in the subsequent year through the mechanism. If actual revenues are lower than would have been collected under the RDM formula, the difference will be collected from customers in the subsequent year through the mechanism.

Q. Does Pennsylvania law allow the Commission to approve a Revenue Decoupling Mechanism as PAWC requests?

A. Yes. 66 Pa. Code C.S. § 1330(b) was added to the Public Utility Code in a 2018 amendment. I am advised by counsel that Section 1330 allows the Commission to approve an application by PAWC to establish various forms of alternative ratemaking. One such form of alternative ratemaking, as identified in Section 1330(b)(i), is a decoupling mechanism.

Q. Does Section 1330 state the policy goals of this alternative ratemaking treatment?

A. Yes. Section 1330(a)(2) states as follows:

> It is the policy of the Commonwealth that utility ratemaking should encourage and sustain investment through appropriate cost-recovery mechanisms to enhance the safety, security, reliability or availability of utility infrastructure and be consistent with the efficient consumption of utility service.

The Commission policy objectives state that the utility's alternative ratemaking proposals: "should encourage and sustain investment" through mechanisms that (1) "enhance safety,

security, reliability or availability of utility infrastructure", and (2) are "consistent with the efficient consumption of utility service."

Q. How does the Company's proposed RDM meet these policy objectives?

A. The authorized water and wastewater revenue requirements approved by the Commission represent the amount of revenue the Commission determines that the Company needs to operate, maintain, and invest in its water and wastewater system in a prudent and efficient manner. The Company's investment priorities continue to focus on non-revenue producing investments (e.g., water efficiency investments, aging infrastructure replacement and compliance with environmental regulations) (PAWC Statement No. 3). A rate design that relies heavily on sales volumes means that the Company's revenues are driven by factors which are largely outside of its control. The need to recover these significant investments, including an opportunity to earn a return on those investments, however, does not vary with usage. The ability to reliably recover the Company's approved revenue requirement improves the Company's ability to plan, manage, maintain, and invest in the facilities necessary to continue providing safe, reliable, and high-quality water and wastewater service at a reasonable cost to customers (PAWC Statement No. 3).

Further, the volumetric components of the Company's current rate structure can create a "throughput incentive": the more water customers use, the more revenue the Company collects and, to the extent this revenue exceeds variable costs, the better its financial performance. Rather than implicitly encouraging water use and penalizing a water utility for encouraging conservation, an RDM removes a disincentive for utilities to promote end-use efficiency. Removing the disincentive to improving end-use efficiency is consistent with the policy objective of "the efficient consumption of utility service."

Just as prudent energy efficiency investments can be the least-cost investments in energy resources, improving water efficiency reduces operating costs (e.g., energy, treatment and residuals handling/storage costs) and reduces the need to develop new supplies and expand our water infrastructure. Thus, both the Company and customers ultimately benefit from the RDM because it provides a consistent regulatory framework to support long-term capital investment, properly matches cost incurrence with cost recovery, and facilitates more consistent and efficient planning and deployment of resources.

Proposed Environmental Compliance Investment Charge

Q. Is the Company proposing an Environmental Compliance Investment Charge in this proceeding?

A. Yes. As outlined in the testimony of PAWC witness Cas Swiz, the Company requests approval of an Environmental Compliance Investment Charge ("ECIC") as part of this proceeding. The ECIC is a rate adjustment clause designed to reflect and recover, between rate cases, the capital costs and expenses imposed on the Company to address and comply with new or changed federal and state environmental mandates. Costs that are recoverable through the ECIC must be consistent with the set of projects and activities set forth in an annual environmental compliance plan to be filed by the Company and approved by the Commission.

Q. Does Pennsylvania law allow the Commission to approve an Environmental Compliance Investment Charge as PAWC requests?

A. Yes, the Commission has the express authority to approve the ECIC pursuant to 66 Pa. Code C.S. § 1330(b)(2), which expressly authorizes automatic adjustment clauses like the ECIC as a form of alternative ratemaking.

Q. How does the Company's proposed ECIC meet the policy objectives of Section 1330 alternative ratemaking treatment?

A. The Company's environmental compliance requirements are continuously evolving and this is one of the drivers that increases the costs of water and wastewater service and the need for rate relief. As discussed in more detail by PAWC witnesses Aiton and Swiz, the need for and timing of measures to comply with new or changed government mandates under applicable environmental laws are outside of the Company's control. The Company's proposed ECIC will provide a reasonable mechanism for adjusting the Company's rates between base rate cases to support full and timely rate recognition of PAWC's costs to comply with new and updated environmental regulatory mandates in a prudent and efficient manner as they emerge. The ECIC will also mitigate customer exposure to less frequent but more significant rate increases in a general base rate case by producing much smaller, gradual increases to customer bills.

Request for Regulatory and Accounting Treatment

Q. Please describe PAWC's request for deferral accounting treatment for pension and OPEB expenses and why it is appropriate.

A. PAWC is requesting Commission authorization to establish regulatory accounts for its pension and OPEB expenses. These expenses are difficult to predict and can materially increase or decrease from year-to-year because pension and OPEB costs are based on actuarial forecasts that take into account a number of economic and demographic factors described by Mr. Swiz. When the actual outcomes differ from the predicted values for those factors, pension and OPEB costs can be materially higher or lower than forecasted for recovery in rates, resulting in under- or over-recovery by the Company and corresponding under- or

overpayment by customers. The Company's proposal would compare its actual pension and OPEB expenses incurred to the amount included within base rates. The differences between the two would be deferred to a regulatory asset or liability, and the net balance would be addressed in PAWC's next base rate case.

Q. Please describe PAWC's request for deferred accounting treatment for production expenses and why it is appropriate.

A. The Company's production expenses can materially increase or decrease based on the prices charged by suppliers from whom the Company purchases water, fuel and power, wastewater treatment service, and waste disposal services needed to provide safe and reliable water and wastewater service to customers. As discussed in Mr. Swiz's testimony, the chemical market has been extremely volatile and fuel and power pricing has experienced significant increases in recent years. The Company actively manages its chemical and energy use, but external market forces are outside of the Company's and many of its suppliers' control. The Company requests deferral in order to protect both the Company's customers and PAWC against this volatility and ensure that neither customers nor the Company would be required to bear more than the Company's actual costs incurred for production costs.

Q. Have you reviewed Ms. Ciullo's direct testimony regarding Section 1301.1(b)(1) of the Code and the Company's plan to invest 50% of the "differential" resulting from the implementation of Act 40?

A. Yes, I have. As Ms. Ciullo noted, I will address that issue.

Q. How does the Company plan to invest 50% of the "differential" (approximately $2.3 million per year) that Ms. Ciullo calculated?

A. The Company plans to invest in projects that will enhance the reliability of the Company's systems and may include projects to extend the Company's mains to address health and safety issues pursuant to Rule 27.1(F) of its tariff or for infrastructure enhancement projects that will improve the quality and reliability of service.

2022 RATE CASE SETTLEMENT COMMITMENTS

Q. Has the Company complied with the terms and conditions of the Joint Petition for Settlement approved by the Commission in its 2022 base rate case?

A. Yes, it has. The Joint Petition for Settlement, together with its attachments and accompanying exhibits, is a lengthy document setting forth a number of terms and conditions. I will briefly explain PAWC's compliance with major commitments in the Joint Petition for Settlement directly affecting customer rates, customer service and assistance to low-income customers, which I will reference by the applicable paragraph of the Joint Petition for Settlement.

Paragraph No. 21. PAWC filed an amendment to its second wastewater Long Term Infrastructure Improvement Plan for 2024 through 2028 ("Second LTIIP") at Docket No. P-2023-3038874 to include systems acquired under Section 1329 of the Public Utility Code, which did not re-prioritize other existing commitments in other service areas. Following Commission approval of the Second LTIIP on June 15, 2023, the Company filed a compliance tariff supplement that incorporates the acquired systems into PAWC's DSIC tariff.

Paragraph No. 25. On March 31, 2023, PAWC filed updates to PAWC Exhibit 3-A, pp. 26, 90, 136, 177, 207, and 243 at the dockets for its last base rate case, including actual plant additions and retirements for the twelve months ending December 31, 2022. PAWC also committed to provide the actual plant additions and retirements, by account, for the twelve months ending December 31, 2023, no later than April 1, 2024. Given the timing of

the filing of this base rate case, Mr. Aiton's Direct Testimony, PAWC Statement No. 3 provides an update reflecting plant in service through September 30, 2023.

Paragraph No. 33. PAWC has proposed to eliminate minimum usage allowances for all systems.

Paragraph Nos. 40 and 41. PAWC has proposed in this filing to create a separate tariff group for current and future CSS customers and submitted a wastewater cost-of-service study that includes a separate customer class for bulk customers in the York system whose rates are set by contract.

Paragraph Nos. 43 through 46. With respect to PAWC's Bill Discount Program ("BDP"), the three tier structure was implemented, a system for tracking and reporting on the subject data has been developed and BDP participation has been made portable for customers when changing residences.[8]

Paragraph Nos. 47 through 56. With respect to PAWC's Hardship Fund and community outreach, all settlement commitments have been accomplished, including increasing the annual contribution, reducing the good faith payment requirement, working to develop a solution so that customers can receive more than one grant each year (up to the maximum grant amount),[9] and undertaking targeted community outreach efforts in geographic areas with a higher percentage of low-income customers.

Paragraph Nos. 57 to 58. PAWC committed to three main extension projects. Applications for extension of service territory to serve in Project Area 1 (Campbell Road and Old Steubenville Pike, Robinson and Smith Townships) and Project Area 2 (Donaldson Road,

[8] The settlement commitments in Paragraph Nos. 45 and 46 with respect to the Company's Arrearage Management Plan are not applicable as approval is still pending before the Commission.

[9] Customers cannot currently get more than one grant each year, but Dollar Energy is developing the technology and anticipates having this capability for the 2024-2025 program year.

Robinson Township) are currently pending at the Commission and construction will commence soon after certificates of public convenience are issued. Construction is underway with respect to Project Area 3.

Paragraph Nos. 59 through 61. Commitments regarding inspecting storage tanks over 15 years old, exercising isolation valves on a 5-years cycle and inspecting critical valves annually,[10] and marking fire hydrants that cannot provide minimum fire flow have all been met.

Paragraph No. 62. PAWC has the ability to provide a Complaint Log as agreed upon, including the final disposition of disputes.

Paragraph Nos. 63 through 69. PAWC implemented the requirements with respect to customer service, including training for representatives handling Pennsylvania customer calls, tariff amendments regarding the process for how prior unpaid debt is handled, reports to the Customer Assistance Advisory Group ("CAAG") on the progress of reaching certain performance objectives, updates to termination notices to inform customers of the right to make a verbal declaration of a medical emergency, revisions to bills and the Company's interactive voice response system to clarify that convenience fees are not charged for payments by phone and tariff changes to clarify that security deposits will not be charged to customers who are eligible for the BDP.

PERFORMANCE FACTORS: SECTION 523 OF THE CODE AND 52 PA. CODE § 69.711

Q. Does the Code authorize the Commission to consider performance factors in arriving at a utility's allowable revenue requirement in a base rate case?

[10] A small number of valves have yet to be inspected as of the date this testimony was finalized, but the Company anticipates inspection will be complete soon thereafter.

A. Yes. Section 523 of the Public Utility Code provides that the Commission "shall consider" the "efficiency, effectiveness and adequacy of service" of a utility when determining just and reasonable rates.

Q. What does Section 523 provide regarding performance factors to be considered by the Commission?

A. Section 523(a) requires the Commission to consider performance factors, while Section 523(b) identifies the kinds of factors that are relevant in assessing a utility's performance. Section 523(a) and the portions of 523(b) that are relevant to a water and wastewater utility are set forth below:

> (a) Considerations. – The Commission shall consider, in addition to all other relevant evidence of record, the efficiency, effectiveness and adequacy of service of each utility when determining just and reasonable rates under this title. On the basis of the commission's consideration of such evidence, it shall give effect to this section by making such adjustments to specific components of the utility's claimed cost of service as it may determine to be proper and appropriate. Any adjustment made under this section shall be made on the basis of the specific findings upon evidence of record, which findings shall be set forth explicitly, together with their underlying rationale, in the final order of the commission.
>
> (b) Fixed Utilities. – As part of its duties pursuant to subsection (a), the commission shall set forth criteria by which it will evaluate future fixed utility performance and in assessing the performance of a fixed utility pursuant to subsection (a), the commission shall consider specifically the following:
>
> (1) Management effectiveness and operating efficiency as measured by an audit pursuant to Section 516 (relating to audits of certain utilities) to the extent that the audit or portions of the audit have been properly introduced with applicable rules of evidence and procedure.
> * * *
> (5) Action or failure to act to encourage cost-effective conservation by customers of water utilities
> * * *

(7) Any other relevant and material evidence of efficiency, effectiveness and adequacy of service.

Q. Is the Company proposing that performance factors relating to its "efficiency, effectiveness and adequacy of service" be considered by the Commission in this case?

A. Yes, it is. For the reasons I will discuss later in my direct testimony, the Company strongly believes, and proposes, that the Commission should implement the terms of Section 523 in determining the Company's allowed rate of return on equity in this case. Specifically, Ms. Bulkley has recommended a range of reasonable rates of return on equity from 10.0% to 11.00%. Both Ms. Bulkley and I recommend that the Commission adopt a rate of return on equity of 10.95% – at the upper end of Ms. Bulkley's range – in recognition of PAWC's superior management performance based on the factors that apply to water utilities in Section 523 of the Code. In addition, and for the same reason, if the Commission were to approve a rate of return on equity that is lower than the upper end of Ms. Bulkley's recommended range, it should add no less than 25 basis points to its market-determined rate of return.[11]

Q. Please summarize the factors demonstrating the Company's exemplary management performance.

A. I am addressing eight areas: (1) the Company's industry-leading programs to assist low-income and payment-troubled customers; (2) the Company's environmental record and commitment to water quality; (3) the Company's strong safety performance; (4) the Company's commitment to operational and water efficiency for the benefit of customers; (5) the Company's significant infrastructure investment; (6) the Company's community

[11] Of course, if the Commission's market-determined rate of return on equity is greater than 10.70%, then the performance-based increment could be less than 25 basis points to achieve a final equity return rate of 10.95%.

engagement and consumer education initiatives; (7) the Company's efforts to support the Commission's and the Pennsylvania Department of Environmental Protection's ("DEP") long-standing policy to eliminate the problems of small, troubled and nonviable water and wastewater systems by acquiring those systems and making the improvements needed to assure safe and reliable service; and (8) the Company's efforts to extend service to meet the needs of customers without access to safe and reliable water service.

Q. Please discuss the Company's industry-leading efforts assisting low-income customers.

A. For more than 30 years, PAWC's H2O program has assisted customers in need. In fact, the H2O program ranks at the top of Pennsylvania water utility customer assistance programs for the benefits it provides. To support the H2O hardship grant program, PAWC contributes more of its shareholders' money, $750,000 annually, than any other water utility in the Commonwealth to help customers in need. As discussed above, PAWC anticipates increasing this donation by $700,000 in late 2023.

The H2O program also includes a low-income bill discount program. In this proceeding, the Company is proposing to further enhance this program. Specifically, as further discussed in Mr. Rea's direct testimony (PAWC Statement No. 10), the Company is proposing to expand the eligibility for the program to include a fourth tier to assist households with incomes from 150% to 200% of the federal poverty level. It is PAWC's understanding that no other utility in Pennsylvania has extended bill discounts to customers at this income level.

Moreover, as discussed earlier in my testimony, PAWC is expanding its H2O program to assist low-income customers by offering arrearage forgiveness through its AMP. Under this program, qualifying customers will receive $25 of arrearage forgiveness per month.

In addition, in the past two years, PAWC successfully participated in LIHWAP where, as previously noted, customers have received over $8 million in relief to assist with unpaid bills. As of August 2023, all LIHWAP funds have been depleted but PAWC continues advocacy efforts to support the establishment of a permanent program. For example, the Company worked to build a coalition of stakeholders who advocated for a state-funded LIHWAP-like program through a coalition letter signed by 13 supporting organizations, which was sent to the State Senate and Governor Shapiro in June 2023. When SB 767 was introduced by Senator Lisa Boscola, the Company continued to ask lawmakers and the Governor's office to include funding in the 2023-2024 state budget. The successful implementation of LIHWAP for PAWC customers is due to PAWC's proactive engagement and collaboration with DHS and extensive customer outreach. PAWC attended stakeholder meetings, webinars and briefings prior to the LIHWAP launch. Additionally, prior to the LIHWAP launch, PAWC developed a customer communications and outreach plan to help maximize the impact of the program for customers facing challenges paying their bills. The Company published a LIHWAP-specific page on its website, prepared talking points and a one-pager about the program for its customer service, customer advocacy and external and government affairs teams, included LIHWAP information in a statewide customer email campaign, and sent information to municipal, county and state elected officials across PAWC's service territory. From mid-January to mid-February 2022, the Company sent a bill enclosure about LIHWAP to all customers statewide, with a second bill image about LIHWAP running statewide the following month. PAWC continued to actively promote the LIHWAP program approximately once per week through its various social media channels, reaching tens of thousands of customers.

In addition to these widespread education and outreach efforts, PAWC launched a targeted LIHWAP email campaign on January 25, 2022 to approximately 10,000 customers with past-due balances, notifying them that they may qualify for grant assistance. On March 18, 2022 in advance of the end of the winter moratorium, PAWC launched a targeted LIHWAP direct mail letter campaign to approximately 31,000 customers with past-due balances. Additionally, for customers contacting the Company seeking payment arrangements or assistance to avoid shutoff, PAWC's scripting referred the customer to LIHWAP. When additional funds were reallocated in July 2023, the Company conducted additional targeted outreach to customers with past-due balances through a direct mail campaign to approximately 37,000 customers in July 2023 and two customer email campaigns in July and August 2023 to 28,000 and 11,000 customers, respectively. PAWC also continued to promote this LIHWAP grant re-opening on its social media channels until funding was again depleted.

The Company also created customer assistance cards containing information about all available water/wastewater utility assistance programs for field employees to distribute during customer interactions in the field. To further assist customers who received bill payment assistance through LIHWAP, the Company established a process to review each LIHWAP grant recipient's account and enroll all customers in PAWC's H2O bill discount program, which optimizes the level of assistance provided to those customers. The established process also includes sending a letter to each customer informing them of enrollment in the Company's H2O bill discount program. Over the course of the LIHWAP program, PAWC enrolled over 8,100 LIHWAP grantees in the Company's bill discount program, meaning they continue to receive financial relief on their bills every month going forward.

Q. Does the Company's environmental record and commitment to water quality demonstrate excellent management performance?

A. Yes, it does. The Company has met and continues to meet all federal and state drinking water regulations. As described in more detail in the testimony of PAWC witness Jim Runzer (PAWC Statement No. 2), PAWC treatment plants are nationally recognized for optimization and performance above and beyond regulatory standards. PAWC is a leader in the Environmental Protection Agency's ("EPA") Partnership for Safe Water Treatment Program, which means the Company treats water to a standard that surpasses the requirements imposed by EPA and DEP. Part of providing water of the highest quality is starting with quality water in the first place. As Mr. Runzer shares in his testimony, PAWC is proud of our efforts in source water protection. Through our participation in these programs and our internal practices and policies, the Company consistently meets our goal of providing high quality drinking water to customers.

PAWC is also committed to ongoing water quality improvement. To monitor water quality and improve our processes, the Company relies on its central laboratory in Bellville, Illinois to process hundreds of process samples in addition to compliance samples. These process samples contribute to the Company's ability to continually improve water treatment and optimize our facilities. As regulatory standards continue to shift, PAWC continues to remain a leader. For example, the Company often monitors for potential pollutants where such monitoring is not yet required by regulation. Where issues are identified, treatment technology is put in place to continue to provide the Company's customers safe and reliable service. Finally, to help ensure that water is safe all the way to the tap, PAWC has worked with the Commission and OCA to develop and institute a lead service line replacement

program, which allows the Company to address lead service line concerns ahead of regulatory changes and remove this health risk for customers as soon as possible.

As the Company continues to grow in its provision of wastewater treatment services, so grows the Company's commitment to ensuring that discharges leaving our plants are not impacting water quality in streams. Perhaps just as importantly, the Company has undertaken significant efforts to reduce the inflow of stormwater into our collection systems, thus keeping clean water clean and reducing treatment costs for customers. As described in more detail in the testimony of PAWC witnesses Mr. Runzer (PAWC Statement No. 2) and Mr. Aiton (PAWC Statement No. 3), it is the Company's commitment to water quality, environmental protection, and our customers that drive our investment in highly effective water treatment and the attention to detail at all levels of the organization to meet or exceed regulatory requirements. We are proud of the quality of water and wastewater service that we provide to our customers and the quality of water that we release back into our streams.

Q. Does the Company's safety record exhibit exemplary management performance?

A. Yes. The health and safety of our customers, communities and employees continues to be our top priority. In fact, safety is a defined core value and strategy for the Company. The effectiveness of our commitment to safety is illustrated by our year-over-year safety performance. The Company's OSHA recordable incident rate ("ORIR") improved from 2.62 in 2018 to 0.85 in 2022. At this point in 2023, PAWC is having its best safety record in its operational history. Mr. Runzer, in his direct testimony (PAWC Statement No. 2), further describes the Company's safety initiatives and programs that benefit our customers.

Q. Does the Company's dedication to operational and water efficiency exhibit exemplary management performance?

A. Yes. In PAWC Statement No. 2, Mr. Runzer highlights the Company's operational and water efficiency initiatives to mitigate capital and operating costs, while also helping to protect and preserve our natural resources. Such initiatives include supply-side practices, such as increased pump efficiency, more accurate meter reading and leak detection, and main replacement and repair programs, as well as demand-side strategies, such as customer efficiency and public education programs to support water and energy efficiency. Mr. Runzer further describes the Company's (1) use of technology to enhance employee effectiveness and benefit customers; (2) robust program to reduce non-revenue water; (3) improvements in energy efficiency and resulting reductions in energy costs; 4) improvements in operational efficiency including successful efforts to control waste disposal, purchased water and vehicle fleet expenses; and (5) the Company's procedures related to the Underground Damage Prevention Program, which resulted in 99.99% of tickets being responded to timely in 2022.

Q. Do the Company's significant infrastructure investments in the Commonwealth demonstrate superior management performance?

A. Yes. PAWC has invested, over the past 17 years, more than $5 billion in PAWC infrastructure. The Company's capital investments have resulted in infrastructure reliability and resilience, which are important priorities for PAWC's leadership. Resilient infrastructure allows the Company to avoid or minimize service disruptions during extraordinary events, such as extreme weather events. As explained in Mr. Aiton's testimony, the Company uses its High Risk Asset Management ("HRAM") process to formulate its Strategic Capital Expenditure Plan (PAWC Statement No. 3). Through the HRAM process, the Company identifies facilities or assets that may pose a high risk to the Company's system and evaluates facilities and critical assets against risk and consequence of failure. The Company then

prioritizes capital investment programs and projects using the HRAM process, leading to accelerated investments in high risk assets or facilities before problems arise. Mr. Aiton's testimony also includes several projects that will continue to improve the safety, reliability, and resilience of PAWC's systems (PAWC Statement No. 3).

Q. Has PAWC taken a leadership role in community engagement and consumer education?

A. Yes. Investing in and giving back to the communities we serve is very important to us. In 2022, we donated more than $560,000 to 330 organizations throughout the communities we serve through general charitable contributions, grants, sponsorships and programming support. The Company primarily directs its giving to community sustainability, food insecurity, environmental programs, fire departments, health and wellness, education and workforce development, and Inclusion, Diversity & Equity initiatives. Through the American Water Charitable Foundation, an additional $373,000 was donated to non-profit organizations in PAWC's service territory as part of the Foundation's "Keep Communities Flowing" grant programs as well as its employee matching gift program. In 2022, PAWC representatives engaged with customers and community leaders through participation in 210 volunteer projects, speaking engagements, educational programs and community events, and our employees spent 2,431 hours volunteering their time at local non-profits. PAWC offers a robust public education program focused especially on educating the youth of the Commonwealth. Not only do we conduct water camps for children ages 7-11 during the summer and teach classes on watershed protection, water treatment, the water cycle and water conservation in the classroom during the school year, we also conduct treatment plant tours for students and adults alike, judge "Envirothon" competitions, and participate in Earth Day activities. PAWC's annual "Protect Our Watershed Art Contest" for 4th, 5th and 6th graders

throughout the Commonwealth attracted more than 300 applications this year and serves as an educational tool about the short- and long-term benefits of protecting the environment and our critical water resources.

The Company also plays a leadership role in educating the workforce of tomorrow. PAWC offers paid summer internships in its operations, water quality, and engineering departments to build a future talent pipeline, increase diversity, and bring new perspectives to the Company while providing important real-life work experience to college students in local communities. Likewise, the American Water Inclusion and Diversity Scholarship Program offers 10 renewable scholarships of $10,000 each to students residing in or attending college in one of the states where American Water operates, including Pennsylvania.

Q. Is there any other reason why you believe PAWC is entitled to an equity allowance that recognizes exemplary management performance?

A. Yes. The Commission adopted a Policy Statement on Small Nonviable Water and Wastewater Systems at 69 Pa. Code § 69.711 stating that it will consider regulatory incentives including "rate of return premiums," to encourage and reward the continued acquisition of troubled water and wastewater systems by large, viable utilities.

Q. What does the Commission's Policy Statement at 52 Pa. Code § 69.711 provide regarding performance-based incentives?

A. Section 69.711 states in relevant part as follows:

> *(a) Acquisition incentives.* In its efforts to foster acquisition of suitable water and wastewater systems by viable utilities when the acquisitions are in the public interest, the Commission seeks to assist these acquisitions by permitting the use of a number of regulatory incentives. Accordingly, the Commission will consider the following acquisition incentives:
>
> (1) *Rate of return premiums*. Under 66 Pa.C.S. § 523 (relating to performance factor considerations),

> additional rate of return basis points may be awarded for certain acquisitions and for certain associated improvement costs, based on sufficient supporting data submitted by the acquiring utility within its rate case filing. The rate of return premium as an acquisition incentive may be the most straightforward and its use is encouraged.

Q. Has PAWC acted as receiver for and acquired troubled water and wastewater systems?

A. Yes. For more than 25 years, PAWC has been an industry leader in helping resolve the significant challenges faced by troubled water and wastewater systems. In the last ten years alone, the Company has completed sixteen acquisitions of very small, less-viable water and wastewater systems – systems with less than 1,000 customer connections each. Four additional small water and wastewater acquisitions are contemplated as part of this base rate filing: Sadsbury Township Municipal Authority wastewater system, Farmington Township water system, Farmington Township wastewater system, and Audubon Water Company. None of these were acquired under 66 Pa. Code C.S. § 1329 for fair market value although Sadsbury and Farmington, as municipal sellers, are eligible. In addition to these small acquisitions with applications pending before the Commission and included in this base rate case, PAWC has also executed agreements to acquire several other small non- or less-viable systems including: Manwalamink (water and wastewater), East Dunkard Water Authority (water), and Appalachian Utilities, Inc. (water). Similarly, none of these systems are being acquired under 66 Pa. Code C.S. § 1329 for fair market value, although East Dunkard Water Authority would be eligible.

Over the last few years, the Company has also completed the acquisitions of systems that were not, at the time of acquisition, providing adequate, efficient, safe and reasonable service. These systems, which were acquired pursuant to 66 Pa. C.S. § 529, include Delaware Sewer Company ("Delaware Sewer") and Winola Water Company. Prior to acquisition, the

Company also acted as the receiver for Winola Water Company. The Company has made capital investments to improve service to customers of these systems and increase environmental compliance. The Company also acted as the receiver for Indian Springs Water Company ("Indian Springs") during the pendency of the Commission's proceeding under 66 Pa.C.S. § 529. As a resolution for the Commission's Section 529 investigation into Indian Springs, the Company coordinated a plan for all customers to have an adequate alternative supply of water from private wells. PAWC offset all of its receivership costs and a significant portion of the costs that customers had to pay for private wells by negotiating a sale of land owned by Indian Springs, to the benefit of PAWC and Indian Springs customers. The land was sold back to the community to be preserved for the recreation and enjoyment of the residents.

In addition to providing solutions for small, troubled systems, PAWC has also had a positive impact on communities through acquisitions of larger systems such as in McKeesport, Scranton and York where significant investment has and continues to address environmental challenges and aging infrastructure.

Q. Please explain PAWC's recent willingness and efforts to provide an emergency solution for the customers of the East Dunkard Water Authority.

A. The East Dunkard Water Authority ("EDWA") is a municipal water authority which owns, operates and maintains a municipal drinking water system that serves approximately 1,800 households, businesses and schools and a population of approximately 4,200 in the following municipalities in Greene County: Dunkard Township, Greene Township, and portions of Monongahela, Cumberland, Perry and Whiteley Townships ("EDWA System"). Although PAWC has a signed agreement to acquire the EDWA System and is currently conducting due

diligence and preparing an application pursuant to Section 1102 of the Public Utility Code for approval from the Commission for that acquisition, EDWA is facing current and dire challenges that are in need of a more immediate solution. Since July 2021, DEP has conducted numerous inspections and issued multiple Orders to EDWA for violations of the Safe Drinking Water Act and Regulations. Since September 2023, the EDWA System has been without a certified water operator and on October 23, 2023, DEP issued a boil water order due to elevated levels of turbidity above the regulatory limits. On October 24, 2023, the EDWA System experienced a major upset resulting from operational failure of the filters at the water treatment plant and the clarifier system at the water treatment plant ceased proper operation. The EDWA System's water treatment plant ceased producing water and all customers were without even non-potable water for several days for basic sanitary and hygienic purposes, including bathing, dishwashing, and toilet flushing. Water service was eventually restored but all customers remained under a boil water advisory and had to continue to boil their water before consumption. Because EDWA has made representations to DEP that it does not have the financial resources to effectively and properly operate the EDWA System, comply with DEP Orders and a Commonwealth Court Order, and employ a Certified Operator and because EDWA's actions threaten immediate harm to public health and safety, DEP prepared an application to be filed in the Commonwealth Court to seek the appointment of a receiver for the EDWA System. When DEP reached out to the Company regarding its intention to seek appointment of a receiver for EDWA by the Commonwealth Court and asked that PAWC agree to be appointed as such receiver the Company was willing to provide a solution for the approximately 4,200 residents who were without adequate service, provided that it had the Commission's approval as it is not customary for a jurisdictional utility to be appointed

receiver of a municipal authority. Shortly before this base rate case was filed, DEP and PAWC jointly requested that the Commission take emergency action to permit PAWC to be appointed as receiver of EDWA by the Commonwealth Court and the Commission entered an Order providing PAWC with the necessary authorization.[12] If appointed as receiver of EDWA by the Commonwealth Court, PAWC will take the steps necessary for EDWA to provide water that complies with relevant safe drinking water standards.

The Company remains committed to helping DEP and the Commission resolve the issues posed by the many troubled water and wastewater systems that still exist across the state. Consistent with 52 Pa. Code § 69.711, a rate of return premium is appropriate to recognize the Company's efforts with respect to troubled systems.

Q. In addition to acquisitions of troubled systems and acting as a receiver for troubled systems, how else has PAWC provided a solution for customers in need of safe and reliable service?

A. PAWC routinely extends service to customers who are in need of water and/or wastewater service. For example, the Company recently broke ground on a $21 million water main extension project that will bring high-quality, reliable drinking water and fire service to the Avella School District and portions of surrounding communities in Washington County.

The Company has also filed an application to extend its service territory for a public groundwater project in Dimock, Pennsylvania. In late 2021, the Office of then Attorney General Josh Shapiro reached out to PAWC to ask if the Company would assist in helping to find a drinking water solution for a community of approximately 21 Dimock properties that

[12] *Joint Petition of Pennsylvania-American Water Company and the Pennsylvania Department of Environmental Protection Requesting an Ex Parte Emergency Order in Regard to Receivership of East Dunkard Water Authority*, Docket No. P-2023-3043950 (Order entered November 1, 2023).

have not had access to safe well water due to unsafe levels of methane and other contaminants for approximately 15 years. In recognition of the severe water quality problems facing this community, the Company worked to develop a plan for the most effective public drinking water system for Dimock residents. In November 2022, the Company and the Office of Attorney General presented the proposed system design to Dimock residents who expressed strong support for the project. Subsequently, the Office of Attorney General and Coterra Energy entered into a Plea Agreement under which PAWC's construction of this project is fully funded, and thus provides the benefit of public water to these residents without a cost to other PAWC customers. PAWC projects that the new drinking water system in Dimock will be in service by the end of 2026. The Company remains committed to being a community partner throughout the Commonwealth and providing solutions for those in need of safe and reliable water and wastewater service.

Q. What should the Commission conclude from all of the evidence PAWC has presented on its performance factors?

A. The well-documented exemplary performance of the Company's management discussed above fully justifies approving a rate of return at the upper end of Ms. Bulkley's recommended range – namely, 10.95% – and, in any event, an increment of at least 25 basis points to a lesser market-determined rate of return on equity approved by the Commission, up to 10.95%.

CONCLUSION

Q. Does this conclude your direct testimony at this time?

A. Yes, it does. However, I reserve the right to supplement my testimony as additional issues and facts arise during the course of the proceeding. Thank you.

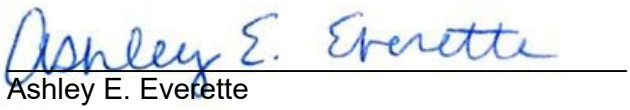
BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)**
	:	**R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Ashley E. Everette**, hereby state that the facts set forth in the pre-marked Statement No. 1 and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: November 8, 2023



Ashley E. Everette

VOLUME 3

PENNSYLVANIA-AMERICAN WATER COMPANY

2023 GENERAL BASE RATE CASE
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

EXHIBIT NO. 3-A
REVENUE DEFICIENCY AND ADJUSTMENTS

Pennsylvania-American Water Company
Exhibit No. 3-A
Revenue Deficiency and Adjustments

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Pennsylvania-American Water Company

3-A Combined Water and Wastewater Revenue Requirement - Summary

		Total Company	Water Operations	Wastewater SSS General Operations	BASA Wastewater Operations	Brentwood Wastewater Operations	CSS Wastewater Operations
Present Rate Revenue	(1)	$1,011,895,862	$824,117,186	$95,470,867	$11,847,402	$1,824,191	$78,636,216
Additional Revenue Requirement	(2)	203,945,911	$128,149,690	$31,793,150	$26,288,308	$1,934,637	$15,780,126
Act 11 - Wastewater Allocation	(3)	0	71,087,394	(31,962,411)	(21,552,699)	(1,565,232)	(16,007,052)
Proposed Revenues		$1,215,841,773	$1,023,354,270	$95,301,606	$16,583,011	$2,193,596	$78,409,290
Rate Increase/(Decrease)		$203,945,911	$199,237,084	($169,261)	$4,735,609	$369,405	($226,926)
		20.2%	24.2%	-0.2%	40.0%	20.3%	-0.3%

Notes:

(1) Present Rate Revenue: Present Rate Revenues are developed in the sections of Exhibit 3-A that relate to each of these operations.

(2) Additional Revenue Requirement: The Additional Revenue Requirement are developed in subsequent sections of this Exhibit 3-A for each of the operations.

(3) Act 11 - Wastewater Allocation is the allocation between wastewater operations and water operations achieved by the proposed consolidation of water and wastewater revenue requirements to derive the water and wastewater rates proposed by the Company in this case.

Water Operations

Pennsylvania-American Water Company - Water Operations

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Pennsylvania-American Water Company - Water Operations

Pro Forma Statement of Income for the Twelve Months Ending June 30, 2023

June 30, 2024, and June 30, 2025 Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PER BOOKS	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	LINE NO.
1	Operating Revenue	$761,522,517	$52,731,430	$814,253,947	($4,194,144)	$810,059,803	$14,057,383	$824,117,186	$128,149,690	$952,266,876	1
2	Operating Revenue Deductions:										2
3	Operating Expenses	226,839,835	3,937,603	230,777,438	19,304,903	250,082,341	6,742,233	256,824,574	1,507,040	258,331,614	3
4	Depreciation	147,332,145	38,232,587	185,564,732	12,221,610	197,786,342	15,013,456	212,799,798	0	212,799,798	4
5	Amortizations	1,850,736	0	1,850,736	(2,397,852)	(547,116)	(1,552,346)	(2,099,462)	0	(2,099,462)	5
6	Taxes, Other Than Income:										6
7	Local Property And Miscellaneous	1,718,277	0	1,718,277	232,364	1,950,641	122,724	2,073,365	0	2,073,365	7
8	Federal Environmental Tax	0	0	0	0	0	0	0	0	0	8
9	Public Utility Realty Taxes	2,046,257	0	2,046,257	(18,305)	2,027,952	98,780	2,126,732	0	2,126,732	9
10	Payroll Taxes	4,440,056	0	4,440,056	454,545	4,894,601	139,397	5,033,998	0	5,033,998	10
11	General Assessment	4,267,439	834,192	5,101,631	(25,651)	5,075,980	88,157	5,164,137	809,959	5,974,096	11
12	Other Taxes and Licenses	350	(350)	0	0	0	0	0	0	0	12
13	Total Taxes Other Than Income	12,472,379	833,842	13,306,221	642,953	13,949,174	449,058	14,398,232	809,959	15,208,191	13
14	**Utility Operating Income Before Income Taxes**	**373,027,422**	**9,727,398**	**382,754,820**	**(33,965,758)**	**348,789,062**	**(6,595,018)**	**342,194,044**	**125,832,691**	**468,026,735**	14
15	Income Taxes:										15
16	State Income Tax	22,760,185	774,233	23,534,418	(9,462,602)	14,071,816	(724,796)	13,347,020	10,054,748	23,401,768	16
17	Federal Income Tax	46,482,235	1,676,363	48,158,598	(8,652,574)	39,506,024	(5,637,074)	33,868,950	24,315,248	58,184,198	17
18	Amortization Of ITC & Excess Deferred Taxes	(233,592)	0	(233,592)	0	(233,592)	0	(233,592)	0	(233,592)	18
19	Total Income Taxes	69,008,828	2,450,596	71,459,424	(18,115,176)	53,344,248	(6,361,870)	46,982,378	34,369,996	81,352,374	19
20	Total Operating Revenue Deductions	457,503,923	45,454,628	502,958,551	11,656,438	514,614,989	14,290,531	528,905,520	36,686,995	565,592,515	20
21	**Utility Operating Income**	**304,018,594**	**7,276,802**	**311,295,396**	**(15,850,582)**	**295,444,814**	**(233,148)**	**295,211,666**	**91,462,695**	**386,674,361**	21
22	Income Deductions:										22
23	Interest On Long Term Debt	66,694,160	0	66,694,160	18,557,998	85,252,158	13,071,807	98,323,965	(8,951)	98,315,014	23
24	Amortization Of Debt Discount Expense	0	0	0	0	0	0	0	0	0	24
25	Interest On Notes Payable To Others	0	0	0	0	0	0	0	0	0	25
26	Total Income Deductions	66,694,160	0	66,694,160	18,557,998	85,252,158	13,071,807	98,323,965	(8,951)	98,315,014	26
27	**Net Income**	**$237,324,434**	**$7,276,802**	**$244,601,236**	**($34,408,580)**	**$210,192,656**	**($13,304,955)**	**$196,887,701**	**$91,471,646**	**$288,359,347**	27
28	Preferred Dividends	0		0		0		0		0	28
29	**Net Income To Common**	**$237,324,434**		**$244,601,236**		**$210,192,656**		**$196,887,701**		**$288,359,347**	29

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

TOTAL REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2023 AND JUNE 30, 2024

LINE NO.	ACCT. NO.	CUSTOMER CLASS	PER BOOKS 12 ME June 2023	UNBILLED, EADIT AMP AND DSIC ADJUSTMENTS (*)	ANNUALIZE 2023 RATE CHANGE	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	OTHER REVENUE AND CUSTOMER ADJUSTMENTS (**)	PRO FORMA PRESENT RATES 12 ME June 2023	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	AUDUBON & FARMINGTON ACQUISITION ADJUSTMENT	OTHER REVENUE AND CUSTOMER ADJUSTMENTS (***)	PRO FORMA PRESENT RATES 12 ME June 2024
1		OPERATING REVENUES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2		METERED SALES										
3	461.1	RESIDENTIAL	$495,611,936	($6,244,885)	$48,328,510	($12,670,325)	$69,902	525,095,138	($6,783,787)	$2,052,695	$361,855	$520,725,900
4	461.2	COMMERCIAL	179,404,878	(3,215,209)	17,651,547	3,701,686		197,542,902	(947,652)	1,144,279	266,194	198,005,723
5	461.3	INDUSTRIAL	38,292,718	(564,375)	3,118,375		91,411	40,938,129		6,480	106,202	41,050,811
6	464	MUNICIPAL	20,783,502	(354,259)	764,920	1,520,971		22,715,135	(651,058)	19,377	36,106	22,119,560
7	466	SALES FOR RESALE	3,025,954	(147,850)	21,538		85,130	2,984,772		359,446	99,352	3,443,569
8		**TOTAL METERED SALES**	**$737,118,988**	**($10,526,578)**	**$69,884,890**	**($7,447,668)**	**$246,443**	**$789,276,076**	**($8,382,498)**	**$3,582,277**	**$869,708**	**$785,345,563**
9		UNMETERED SALES										
10	460	RESIDENTIAL	$67,620		3,016			$70,636				$70,636
11	460	COMMERCIAL						0				0
12	460	INDUSTRIAL						0				0
13	460	MUNICIPAL						0				0
14	460	MISCELLANEOUS						0				0
15		**TOTAL UNMETERED SALES**	**$67,620**	**$0**	**$3,016**		**$0**	**$70,636**	**$0**	**$0**	**$0**	**$70,636**
16	462.1	PRIVATE FIRE PROTECTION	4,592,437	42,358	290,447		4,192	4,929,434		101,960	152,747	5,184,141
17	462.2	PUBLIC FIRE PROTECTION	8,792,506	249,252	368,867			9,410,626		82,433	26,309	9,519,368
18		**TOTAL WATER SALES**	**$750,571,552**	**($10,234,967)**	**$70,547,220**	**($7,447,668)**	**$250,635**	**$803,686,772**	**($8,382,498)**	**$3,766,670**	**$1,048,764**	**$800,119,708**
19		OTHER OPERATING REVENUES										
20	469	GUARANTEED REVENUES	$0					$0				$0
21	470	LATE PAYMENT FEES	4,419,511				(379,378)	4,040,133			(17,932)	4,022,201
22	471	MISC SERVICE REVENUES	4,828,286				(4,439)	4,823,847			16,325	4,840,172
23	472	RENTS FROM PROPERTIES	1,186,476					1,186,476			(397,369)	789,107
24	473	INTERCOMPANY RENTS	516,719					516,719			(228,104)	288,615
25	474	OTHER WATER REVENUES	(27)	$27	0			0				0
26		**TOTAL OTHER OPERATING**										
27		**REVENUES**	**$10,950,965**	**$27**	**$0**	**$0**	**($383,817)**	**$10,567,175**	**$0**	**$0**	**($627,080)**	**$9,940,095**
28		**TOTAL OPERATING REVENUES**	**$761,522,517**	**($10,234,941)**	**$70,547,220**	**($7,447,668)**	**($133,182)**	**$814,253,947**	**($8,382,498)**	**$3,766,670**	**$421,684**	**$810,059,803**

(*) The metered sales adjustments represent the removal of the Unbilled, EADIT, DSIC and AMP surcharges.

(**) The metered sales adjustments represent revenues from Creekside Development, annualization of revenues from change in contract customer rates and changes in other operating revenues.

(***) The metered sales adjustments represent revenue from Findlay Township, annualization of revenues from change in Valley and contract customer rates and changes in other operating revenues.

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

LINE NO.	ACCT. NO.	CUSTOMER CLASSIFICATION	PRO FORMA PRESENT RATES 12 ME June 2024	CUSTOMER GROWTH (LOSS) ADJUSTMENTS (*)	USAGE NORMALIZATION	ANNUALIZE DSIC ADJUSTMENT	OTHER REVENUE ADJUSTMENT	PRO FORMA PRESENT RATES 12 ME June 2025	PERCENT	AMOUNT	PRO FORMA PROPOSED RATES
1		OPERATING REVENUES	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
2		METERED SALES									
3	461.1	RESIDENTIAL	$520,725,900	$1,899,124	($6,236,951)	$11,831,339		$528,219,412	14.16%	$74,776,213	$602,995,624
4	461.2	COMMERCIAL	198,005,723	1,397,102	(1,156,531)	4,533,346		202,779,639	14.47%	29,335,396	232,115,036
5	461.3	INDUSTRIAL	41,050,811	167,247		844,778		42,062,836	17.91%	7,534,895	49,597,730
6	464	MUNICIPAL	22,119,560		(66,790)	506,768		22,559,538	55.92%	12,615,921	35,175,459
7	466	SALES FOR RESALE	3,443,569	121,059		5,716		3,570,344	10.69%	381,786	3,952,130
8		**TOTAL METERED SALES**	**$785,345,563**	**$3,584,531**	**($7,460,272)**	**$17,721,947**	**$0**	**$799,191,769**	**15.60%**	**$124,644,210**	**$923,835,979**
9		UNMETERED SALES									
10	460	RESIDENTIAL	$70,636					$70,636	84.65%	59,795	$130,431
11	460	COMMERCIAL	0					0	0.00%	0	0
12	460	INDUSTRIAL	0					0	0.00%	0	0
13	460	MUNICIPAL	0					0	0.00%	0	0
14	460	MISCELLANEOUS	0					0	0.00%	0	0
15		**TOTAL UNMETERED SALES**	**$70,636**	**$0**	**$0**	**$0**	**$0**	**$70,636**	**84.65%**	**$59,795**	**$130,431**
16	462.1	PRIVATE FIRE PROTECTION	5,184,141			116,890		5,301,031	8.99%	476,594	5,777,625
17	462.2	PUBLIC FIRE PROTECTION	9,519,368					9,519,368	24.46%	2,328,103	11,847,471
18		**TOTAL WATER SALES**	**$800,119,708**	**$3,584,531**	**($7,460,272)**	**$17,838,837**	**$0**	**$814,082,804**	**15.66%**	**$127,508,703**	**$941,591,507**
19		OTHER OPERATING REVENUES									
20	469	GUARANTEED REVENUES	$0					$0	0.00%	0	$0
21	470	LATE PAYMENT FEES	4,022,201				70,192	4,092,393	15.66%	640,987	4,733,380
22	471	MISC SERVICE REVENUES	4,840,172				16,947	4,857,119	0.00%	0	4,857,119
23	472	RENTS FROM PROPERTIES	789,107				7,148.00	796,255	0.00%	0	796,255
24	473	INTERCOMPANY RENTS	288,615				0	288,615	0.00%	0	288,615
25	474	OTHER WATER REVENUES	0					0	0.00%	0	0
26		**TOTAL OTHER OPERATING**									
27		**REVENUES**	**$9,940,095**	**$0**	**$0**	**$0**	**$94,288**	**$10,034,382**	**6.39%**	**$640,987**	**$10,675,369**
28		**TOTAL OPERATING REVENUES**	**$810,059,803**	**$3,584,531**	**($7,460,272)**	**$17,838,837**	**$94,288**	**$824,117,186**	**15.55%**	**$128,149,690**	**$952,266,876**

(*) The metered sales adjustment represent revenue from organic growth (loss) in customers and change in contract customer rates.

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	ADJUSTMENT	PRESENT RATES 12 ME JUNE 2023 AMOUNT	ADJUSTMENT	PRESENT RATES 12 ME JUNE 2024 AMOUNT	ADJUSTMENT	PRESENT RATES 12 ME JUNE 2025 AMOUNT
1	Per Books		$761,522,517				
2	Present Rates At 6/30/2024				$814,253,947		
3	Present Rates At 6/30/2025						$810,059,803
4							
5	TCJA & EADIT Adjustment	6,908,979					
6	Unbilled Adjustment	(9,429,136)					
7	DSIC Adjustment	(8,436,657)				17,838,837	
8	AMP Adjustment	$721,875					
9	Annualize 2023 Rate Change	69,887,906					
10	Change in Customers	2,653,585		1,631,539		3,263,078	
11	Usage Normalization	(10,101,253)		(10,014,037)		(7,460,272)	
12	Annualize - Valley Water			413,150			
13	Creekside Development	74,094				33,147	
14	Acquisition - Audubon Water			2,965,024			
15	Acquisition - Farmington Water			266,371			
16	Specific Customer Adjustment	176,541		205,121		269,192	
17	Findlay Township Bulk W			535,275		19,113	
18	Public Fire Protection	368,867		26,309		0	
19	Private Fire Protection	290,447		152,747			
20	Shale Gas Commercial Usage			251,438			
21							
22							
23	Other Operating Revenues						
24	469 - Guaranteed Revenues						
25	470 - Penalties	(379,378)		(17,932)		70,192	
26	471 - Misc Service Revenues	(4,439)		16,325		16,947	
27	472 -Rents From Properties			(397,369)		7,148	
28	473 -Intercompany Rents			(228,104)		0	
29							
30	Pro Forma Adjustment		52,731,430		(4,194,144)		14,057,383
31							
32	Pro Forma Present Rates At June 30, 2023		$814,253,947				
33							
34	Pro Forma Present Rates At June 30, 2024				$810,059,803		
	Pro Forma Present Rates At June 30, 2025						$824,117,186

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

TCJA & EADIT Adjustment

The following adjustment is being made to eliminate the tax credit and EADIT revenues per books for the twelve months ended June 30, 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT
1	**Metered Sales**	
2	Residential	$4,582,599
3	Commercial	1,665,509
4	Industrial	322,372
5	Municipal	198,963
6	Sales For Resale	5,761
7	Other Water Revenue	84
8	Total Metered Sales	$6,775,289
9	**Unmetered Sales**	
10	Residential	$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Sales For Resale	0
15	Total Unmetered Sales	$0
16	Private Fire Protection	44,322
17	Public Fire Protection	89,367
18	Total Water Surcharges	$6,908,979
19	Other Operating Revenues	$0
20	Pro Forma Adjustment	$6,908,979

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Unbilled Revenue Adjustment

The following adjustment is being made to eliminate unbilled revenue accrued per books for the twelve months ended June 30, 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT
1	**Metered Sales**	
2	Residential	($5,859,308)
3	Commercial	(2,832,836)
4	Industrial	(492,618)
5	Municipal	(307,054)
6	Sales For Resale	(145,199)
7	Miscellaneous	(56)
8	Total Metered Sales	($9,637,071)
9	**Unmetered Sales**	
10	Residential	$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Sales For Resale	0
15	Total Unmetered Sales	$0
16	Private Fire Protection	48,049
17	Public Fire Protection	159,885
18	Total Unbilled	($9,429,136)
19	Other Operating Revenues	$0
20	Pro Forma Adjustment	($9,429,136)

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

DSIC Adjustment

The 06/30/2023 pro forma revenue adjustment is being made to eliminate the Distribution System Inprovement Charge (DSIC) revenues per book for the 12 months ended June 30, 2023 in order to reset the DSIC to zero. The 06/30/2025 pro froma revenue adjustment is to annualize the DSIC revenues for 12 months ending June 30, 2025 based on the Company's pro forma level rate of 2.30%.

LINE NO.	DESCRIPTION	6/30/2023 PER BOOK DSIC REVENUE	6/30/2023 ANNUALIZED DSIC REVENUE	6/30/2025 ANNUALIZED DSIC REVENUE	6/30/2023 PRO FORMA ADJUSTMENT	6/30/2025 PRO FORMA ADJUSTMENT
1	**Metered Sales**					
2	Residential	$5,690,051	$0	$11,829,714	($5,690,051)	$11,829,714
3	Commercial	2,047,883	0	4,533,346	(2,047,883)	4,533,346
4	Industrial	394,130	0	844,778	(394,130)	844,778
5	Municipal	246,167	0	507,139	(246,167)	507,139
6	Sales For Resale	8,412	0	5,716	(8,412)	5,716
7	Miscellaneous					
8	Total Metered Sales	$8,386,643	$0	$17,720,693	($8,386,643)	$17,720,693
9	**Unmetered Sales**					
10	Residential	$0	$0	$1,625	$0	$1,625
11	Commercial					
12	Industrial					
13	Municipal					
14	Sales For Resale					
15	Total Unmetered Sales	$0	$0	$1,625	$0	$1,625
16	Private Fire Protection	50,014		116,890	(50,014)	116,890
17	Public Fire Protection	0	0	0	0	0
18	Total DSIC Water Sales	$8,436,657	$0	$17,839,208	($8,436,657)	$17,839,208
19	Other Operating Revenues	$0	$0	$0	$0	$0
20	Pro Forma Adjustment	$8,436,657	$0	$17,839,208	($8,436,657)	$17,839,208

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

AMP Deferred Revenue Adjustment

The following adjustment is being made to remove Arrearage Management Program (AMP) revenue credit booked in residential account for the twelve months ended June 30, 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT
1	**Metered Sales**	
2	Residential	$721,875
3	Commercial	
4	Industrial	
5	Municipal	
6	Sales For Resale	
7	Miscellaneous	
8	Total Metered Sales	$721,875
9	**Unmetered Sales**	
10	Residential	$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Sales For Resale	0
15	Total Unmetered Sales	$0
16	Private Fire Protection	
17	Public Fire Protection	
18	Total AMP Deferred Revenue	$721,875
19	Other Operating Revenues	$0
20	Pro Forma Adjustment	$721,875

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Annualized Base Year Rate Change

This revenue adjustment is being made to reflect the annualization of base year revenue from the new base rates which took effect on January 28, 2023.

LINE NO.	DESCRIPTION	6/30/2023 PER BOOKS REVENUE	6/30/2023 ANNUALIZED REVENUE	6/30/2023 PRO FORMA ADJUSTMENT
1	**Metered Sales**			
2	Residential	$488,645,176	$536,973,686	$48,328,510
3	Commercial	176,189,669	193,841,216	17,651,547
4	Industrial*	37,728,343	40,846,718	3,118,375
5	Municipal	20,429,244	21,194,164	764,920
6	Sales For Resale *	2,878,104	2,899,641	21,538
7	Miscellaneous	0	0	0
8	Total Metered Sales	$725,870,536	$795,755,425	$69,884,890
9	**Unmetered Sales**			
10	Residential	$67,620	$70,636	$3,016
11	Commercial	0	0	0
12	Industrial	0	0	0
13	Municipal	0	0	0
14	Sales For Resale	0	0	0
15	Total Unmetered Sales	$67,620	$70,636	$3,016
16	Private Fire Protection	0	0	0
17	Public Fire Protection	0	0	0
18	Total Billed Water Sales	$725,938,156	$795,826,061	$69,887,906
19	Other Operating Revenues	$0	$0	$0
20	Pro Forma Adjustment	$725,938,156	$795,826,061	$69,887,906

* Annualized excluded adjustment FRII.02u

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Private Fire Protection

This revenue adjustment is being made to reflect the annualization of rates for private fire service based upon the number of customers receiving such service at June 30, 2023. The revenue adjustment for 12 months ending June 30, 2024 includes an adjustment for additional customer. There is no change in customers for 12 months ending June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annual Charge For Private Fire Protection			
2		$4,925,242	$5,077,989	$5,077,989
3	Less: Private Fire Protection Revenue For			
4	During The Twelve Months Ended 6/30/2023	4,634,795		
5	Less: Private Fire Protection Revenue For			
6	During The Twelve Months Ended 6/30/2024		4,925,242	
7	Less: Private Fire Protection Revenue For			
8	During The Twelve Months Ended 6/30/2025			5,077,989
9	Pro Forma Adjustment	$290,447	$152,747	$0

Witness: Charles Rea
Reference: FR II.2 & FR11.10

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Public Fire Protection

This adjustment is being made to reflect the annualization of rates and revenues for public fire service based upon the number of customers/hydrants at June 30, 2023 and as projected at June 30, 2024 through June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annual Charge For Public Fire Protection			
2		$9,410,626	$9,436,935	$9,436,935
3	Less: Public Fire Protection Revenue For			
4	During the Twelve Months Ended 6/30/23	9,041,759		
5	Less: Public Fire Protection Revenue For			
6	During the Twelve Months Ended 6/30/24		9,410,626	
7	Less: Public Fire Protection Revenue For			
8	During the Twelve Months Ended 6/30/25			9,436,935
9	Pro Forma Adjustment	$368,867	$26,309	$0

Witness: Charles Rea
Reference: FR II.2 & FR11.10

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Change in Number of Customers

The following historic revenue adjustment reflects the change in revenues due to the average change in number of customers during the twelve months ended June 30,2023. The following future and fully forecasted revenue adjustment reflects the change in revenues due to the projected change in number of customers during the twelve months ending June 30,2024 through June 30, 2025. Projections were based on a two year historical growth average exclusive of acquisitions.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 REVENUE ADJUSTMENT	PRESENT RATES 6/30/2024 REVENUE ADJUSTMENT	PRESENT RATES 6/30/2025 REVENUE ADJUSTMENT
1	**Residential Metered Customers**	$1,099,437	$932,988	$1,865,976
2	Residential revenue was adjusted by applying			
3	the average annual consumption per residential			
4	customer to the projected increase in customers			
5	for the test year 12 Months Ending 2023, 2024, 2025			
6	**Residential Unmetered Customers**			
7	**Commercial Metered Customers**	1,554,148	698,551	1,397,102
8	Commercial revenue was adjusted by applying			
9	the average annual consumption per residential			
10	customer to the projected increase in customers			
11	for the test year 12 months ending 2023, 2024, 2025			
12				
13	Any adjustments to large commercial accounts			
14	would be shown as specific customer adjustments.			
15	**Industrial, Municipal And Sale For Resale**			
16	**Metered Customers**			
17	Those large enough to warrant an adjustment are			
18	shown as specific customer adjustments.			
19	Pro Forma Adjustment	$2,653,585	$1,631,539	$3,263,078

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Usage Trend Adjustment

This adjustment is being made to normalize usage and address the change in usage trend in residential, commercial and municipal usage as well as the decline in usage that has been experienced for many years and is expected to continue to occur. Please refer to the testimony of Charles Rea (PAWC Statement No. 10).

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	**Metered Sales**			
2	Residential	($13,769,762)	($7,716,775)	($6,236,951)
3	Commercial	2,147,538	(1,646,203)	(1,156,531)
4	Industrial	0	0	0
5	Municipal	1,520,971	(651,058)	(66,790)
6	Sales For Resale	0	0	0
7	Miscellaneous	0	0	0
8	Total Metered Sales	($10,101,253)	($10,014,037)	($7,460,272)
9	**Unmetered Sales**			
10	Residential	$0	$0	$0
11	Commercial	0	0	0
12	Industrial	0	0	0
13	Municipal	0	0	0
14	Sales For Resale	0	0	0
15	Total Unmetered Sales	$0	$0	$0
16	Private Fire Protection	$0	$0	$0
17	Public Fire Protection	0	0	0
18	Total Water Sales	($10,101,253)	($10,014,037)	($7,460,272)
19	Other Operating Revenues	$0	$0	$0
20	Pro Forma Adjustment	($10,101,253)	($10,014,037)	($7,460,272)

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Annualization - Valley Water

This adjustment is to annualized Valley water revenue from the change in rates effective November 19, 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 REVENUE ADJUSTMENT
1	**Metered Sales**	
2	Residential	$361,855
3	Commercial	14,756
4	Industrial	433
5	Municipal	36,106
6	Sales For Resale	0
7	Miscellaneous	0
8	Total Metered Sales	$413,150
9	**Unmetered Sales**	
10	Residential	$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Sales For Resale	0
15	Total Unmetered Sales	$0
16	Private Fire Protection	
17	Public Fire Protection	
18	Total Water Sales	$413,150
19	Other Operating Revenues	$0
20	Pro Forma Adjustment	$413,150

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Commercial Shale Gas Customer Usage Adjustment

This adjustment is to normalize the usage for Commercial Shale Gas Customers using a three-year average 12 months ended June 2021, June 2022, June 2023 historical usage.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT
1	**Metered Sales**	
2	Residential	$0
3	Commercial	251,438
4	Industrial	0
5	Municipal	0
6	Sales For Resale	0
7	Miscellaneous	0
8	Total Metered Sales	$251,438
9	**Unmetered Sales**	
10	Residential	$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Sales For Resale	0
15	**Total Unmetered Sales**	$0
16	Private Fire Protection	$0
17	Public Fire Protection	0
18	**Total Water Sales**	$251,438
19	**Other Operating Revenues**	$0
20	**Pro Forma Adjustment**	$251,438

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Annualization - Creekside Water

On June 22, 2023, the Company closed on the acquisition of the water utility property of the Creekside Homeowner's Association and began providing service to that entity's customers. The following adjustment annualizes the revenues associated with this acquisition.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	**Metered Sales**			
2	Residential	$69,902	$69,902	$103,050
3	Commercial	0	0	0
4	Industrial	0	0	0
5	Municipal	0	0	0
6	Sales For Resale	0	0	0
7	Miscellaneous	0	0	0
8	Total Metered Sales	$69,902	$69,902	$103,050
9	**Unmetered Sales**			
10	Residential	$0	$0	$0
11	Commercial	0	0	0
12	Industrial	0	0	0
13	Municipal	0	0	0
14	Sales For Resale	0	0	0
15	Total Unmetered Sales	$0	$0	$0
16	Private Fire Protection	$4,192	$4,192	$4,192
17	Total Water Sales	$74,094	$74,094	$107,241
18	Miscellaneous Service Fees	$0	$0	$0
19	Late Payment Fees	0	0	0
20	Total Operating Revenues	$74,094	$74,094	$107,241
21	Pro Forma Adjustment	$74,094	$0	$33,147

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Rental Income - Cell Phone Towers & Timber Rights

The Company receives money from cellular phone providers for the lease of space on top of its water towers for the placement of antennas. This adjustment is being made to adjust for the difference between revenues that were recorded in 12 months ended June 2023 and the revenue that is expected to be recorded as cell tower rental income for 12 months ending June 2024 and June 2025. The Company receives money for the rights to land that it owns for tree harvesting. The Timber Rights income is expected to end in 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Cell Tower Rental Income	$789,106	$796,254
2	Less: Cell Tower Rental Income and Timber Rights		
3	During The Twelve Months Ended 06/30/2023	1,186,476	
4	Pro Forma Adjustment	($397,369)	$7,148
5	472 Other Water Revenues	($397,369)	$7,148

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Rental Income - Intercompany Office

The Company charges the Service Company for employees that work in the Stafford Avenue & Mechanicsburg offices. This adjustment is being made to adjust for the difference between revenues that were recorded during the 12 months ended June 2023 and the revenue that are expected to be recorded as Intercompany Office rental income 12 months ending Jun 2024 and June 2025. The Stafford Avenue intercompany rent will expire after July 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Intercompany Office Rental Income	$288,615	$288,615
2	Less: Intercompany Office Rental Income		
3	During The Twelve Months Ended 06/30/2023	516,719	
4	Pro Forma Adjustment	($228,104)	$0
5	473 Other Water Revenues	($228,104)	$0

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Usage Data Adjustment

The Company supplies water usage data to municipalities so they can bill their residents for sewer. The Company adjusted the 2023 per book revenues to eliminate localities no longer using service. In addition, the Company increases this fee annually based on the change in the CPI. An adjustment is being made in 2024 & 2025 for 3.81%, which is the five year average of the change in the CPI.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Fee Increase		$444,853	$461,800
2	During the Twelve Months Ended 06/30/2023	$432,967		
3	Adjustments to remove localities no longer using service	(4,439)		
4	Usage Data Revenue	$428,528	$444,853	$461,800
5	Pro Forma Adjustment	($4,439)	$16,325	$16,947
6	471 Other Water Revenues	($4,439)	$16,325	$16,947

Witness: Charles Rea
Reference: FRII.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Specific Customer Adjustment

The following adjustments are for Industrial Standby and Resale Standby customers to account for the rate changes and terms per contract agreement.

LINE NO.	DESCRIPTION	6/30/2023 BILLED AMOUNT	ANNUALIZED JUNE 2023 AMOUNT	ANNUALIZED JUNE 2024 AMOUNT	ANNUALIZED JUNE 2025 AMOUNT
1	**Metered Sales**				
2	Residential	$0	$0	$0	$0
3	Commercial	0	0	0	0
4	Industrial	4,117,672	4,209,083	4,314,852	4,482,099
5	Municipal	0	0	0	0
6	Sales For Resale	2,475,271	2,560,401	2,659,752	2,761,698
7	Miscellaneous				
8	Total Metered Sales	$6,592,943	$6,769,484	$6,974,604	$7,243,797
9	**Unmetered Sales**				
10	Residential	$0	$0	$0	$0
11	Commercial	0	0	0	0
12	Industrial	0	0	0	0
13	Municipal	0	0	0	0
14	Sales For Resale	0	0	0	0
15	Total Unmetered Sales	$0	$0	$0	$0
16	Private Fire Protection	$0	$0	$0	$0
17	Public Fire Protection	0	0	0	0
18	Total Water Sales	$6,592,943	$6,769,484	$6,974,604	$7,243,797
19	Other Operating Revenues	$0	$0	$0	$0
20	Total Operating Revenues	$6,592,943	$6,769,484	$6,974,604	$7,243,797
21	Adjustment Amount		$176,541	$205,121	$269,192

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Annualization - Findlay Township

Findlay Township started taking water from PAWC August 2023. This is adjustment is to annualize the sales from Findlay Township for 12 months ending June 2024. The adjustment for 12 months ending June 2025 is to annualize the revenu from the expected rate change in August 2024 and consider the impact of change in minimum take or pay from 366 days leap year to a normal 365 days year.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	**Metered Sales**			
2	Residential	$0	$0	$0
3	Commercial	0	0	0
4	Industrial	0	0	0
5	Municipal	0	0	0
6	Sales For Resale	0	535,275	554,388
7	Miscellaneous	0	0	0
8	Total Metered Sales	$0	$535,275	$554,388
9	**Unmetered Sales**			
10	Residential	$0	$0	$0
11	Commercial	0	0	0
12	Industrial	0	0	0
13	Municipal	0	0	0
14	Sales For Resale	0	0	0
15	Total Unmetered Sales	$0	$0	$0
16	Public Fire Protection	$0	$0	$0
17	Total Water Sales	$0	$535,275	$554,388
18	Miscellaneous Service Fees	$0	$0	$0
19	Late Payment Fees	0	0	0
20	Total Operating Revenues	$0	$535,275	$554,388
21	Pro Forma Adjustment	$0	$535,275	$19,113

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Acquisition Audubon Water System

The Company anticipates acquiring Audubon Water System before the end of the fully projected test year and will begin providing service to the entity's customers. The following adjustment annualizes the revenues associated with this acquisition. Since PAWC will be serving Audubon premises directly, no sale for resale revenue will be expected from Audubon Water Company.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 REVENUE ADJUSTMENT
1	**Metered Sales**	
2	Residential	$1,704,395
3	Commercial	1,082,719
4	Industrial	0
5	Municipal	16,137
6	Sale For Resale	(5,568)
7	Total Metered Sales	$2,797,683
8	**Unmetered Sales**	
9	Residential	$0
10	Commercial	0
11	Industrial	0
12	Municipal	0
13	Sale For Resale	0
14	Total Unmetered Sales	$0
15	Public Fire	$65,381
16	Private Fire	101,960
17	Total Water Sales	$2,965,024
18	Other Operating Revenues	$0
19	Pro Forma Adjustment	$2,965,024

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Acquisition Farmington Water System

The Company anticipates acquiring Farmington Township Water System in April 2024 and will begin privding service to the entity's customers. The following adjustment annualizes the revenues associated with this acquisition. Since PAWC will be serving directly the premises, Farmington Township will no longer purchase water from PAWC, therefore no sale for resale revenue is expected from Farmington Township.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 REVENUE ADJUSTMENT
1	**Metered Sales**	
2	Residential	$348,300
3	Commercial	61,560
4	Industrial	6,480
5	Municipal	3,240
6	Sale For Resale	(170,261)
7	Total Metered Sales	$249,319
8	**Unmetered Sales**	
9	Residential	$0
10	Commercial	0
11	Industrial	0
12	Municipal	0
13	Sale For Resale	0
14	Total Unmetered Sales	$0
15	Public Fire	$17,052
16	Private Fire	0
17	Total Sales	$266,371
18	Other Operating Revenues	$0
19	Pro Forma Adjustment	$266,371

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Penalties

The following adjustment reflects the annualization of revenues associated with changes imposed during twelve months ending June 30, 2023 and projected to be imposed during twelve months ending June 30, 2024 and twelve months ending June 30, 2025. Additionally, annualized late payment charges are calculated based on revenues at the proposed rate level.

LINE NO.	DESCRIPTION	PER BOOKS 6/30/23	PRESENT RATES 6/30/23	PRESENT RATES 6/30/24	PRESENT RATES 6/30/25	PROPOSED RATES 6/30/25
1	Total Billed Water Sales	$741,142,416	$803,686,799	$800,119,735	$814,082,831	$941,591,534
2	% Of Penalties To Total					
3	Total Company Sales - 2 Year Avg	0.5027%	0.5027%	0.5027%	0.5027%	0.5027%
4	Penalties	4,419,511	4,040,134	4,022,202	4,092,394	4,733,381
5	Less: Per Books At 06/30/2023		4,419,511			
6	Less: Present Rates At 06/30/2023			4,040,134		
7	Less: Present Rates At 06/30/2024				4,022,202	
8	Less: Present Rates At 06/30/2025					4,092,394
9	Pro Forma Adjustments		($379,377)	($17,932)	$70,192	$640,987

Witness: Charles Rea

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Summary of Rate Base Adjustments

LINE NO.	DESCRIPTION		DEPRECIATED ORIGINAL COST 6/30/23	DEPRECIATED ORIGINAL COST 6/30/24	DEPRECIATED ORIGINAL COST 6/30/25	DEPRECIATED ORIGINAL COST PROPOSED
1	Non-Depreciable Plant		$18,082,360	$18,796,114	$20,746,039	$20,746,039
2	Depreciable Plant		6,254,251,663	6,772,387,138	7,329,946,867	7,329,946,867
3	Total Utility Plant In Service		6,272,334,023	6,791,183,252	7,350,692,906	7,350,692,906
4	Deduct:					
5	Contributions In Aid Of Construction		279,323,043	283,906,333	290,552,978	290,552,978
6	Customer Advances For Construction		61,692,641	61,749,773	63,679,220	63,679,220
7	Excluded Property		1,558,014	1,558,014	1,558,014	1,558,014
8	Sub-Total		342,573,698	347,214,120	355,790,212	355,790,212
9	Net Utility Plant In Service		5,929,760,325	6,443,969,132	6,994,902,694	6,994,902,694
10	Accumulated Depreciation		1,170,835,898	1,206,308,085	1,240,368,309	1,240,368,309
11	Depreciated Utility Plant In Service		4,758,924,427	5,237,661,047	5,754,534,385	5,754,534,385
12	Add:					
13	Materials And Supplies		21,781,099	21,781,099	21,781,099	21,781,099
14	Cash Working Capital - Expenses		21,443,055	22,732,430	23,164,070	23,164,070
15	Accrued And Prepaid Taxes		1,677,015	1,785,981	2,123,607	1,694,560
16	Acquisition Adjustments		6,930,897	14,449,163	13,205,080	13,205,080
17	Other Additions		444,213	385,635	327,057	327,057
18	Deduct:					
19	Cash Working Capital - Int And Div		5,666,271	7,242,944	8,353,505	8,352,730
20	Unamortized Itc (3%)		244,932	229,128	213,324	213,324
21	Extension Deposits In Suspense		20,895	20,895	20,895	20,895
22	Citizens Acquistion CIAC & CAC, per settlement		0	18,157,468	17,729,494	17,729,494
23	Tax Cuts and Jobs Act -Stub Period		5,780,327	3,015,645	1,508,401	1,508,401
24	Other Deductions		486,888	459,198	431,508	431,508
25	Deferred Taxes		1,009,560,462	1,070,056,381	1,082,382,243	1,082,382,243
26	Total Rate Base Elements		$3,789,440,931	$4,199,613,696	$4,704,495,928	$4,704,067,656
27	Utility Operating Income					
28	Per Books	$304,018,594	8.02%	7.24%	6.46%	6.46%
29	Present Rates At 06/30/2023	311,295,396	8.21%	-	-	-
30	Present Rates At 06/30/2024	295,444,814	-	7.04%	-	-
31	Present Rates At 06/30/2025	295,211,666	-	-	6.28%	-
32	Proposed Rates At 06/30/2025	386,674,361	-	-	-	8.22%

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 6/30/2023	ADDITIONS	RETIREMENTS	FARMINGTON ACQUISITION	ESTIMATED BOOK COST 6/30/2024	ADDITIONS	RETIREMENTS	AUDUBON ACQUISITION	ESTIMATED BOOK COST 6/30/2025
1	301.00	Organization	$766,405	$0	$0	$0	$766,405	$0	$0	$0	$766,405
2	302.00	Franchises & Consents	2,404,599	0	0	0	2,404,599	0	0	0	2,404,599
3	303.00	Miscellaneous Intangible Plant	15,572	721,546	8,949	1,157	729,326	1,949,818	36,412	0	2,642,733
4		Total Intangible Plant	$3,186,576	$721,546	$8,949	$1,157	$3,900,330	$1,949,818	$36,412	$0	$5,813,737
5	303.20	Power and Pumping Land	$14,895,784	$0	$0	$0	$14,895,784	$0	$0	36,518	$14,932,302
5		Total Land & Land Rights	$14,895,784	$0	$0	$0	$14,895,784	$0	$0	$36,518	$14,932,302
6	303.14	Water Rights - Hibernia	$1,942,823	$0	$0	$0	$1,942,823	$0	$0	$0	$1,942,823
7	303.35	Waste Handling and Treatment Land	7,704,484	0	0	0	7,704,484	0	0	0	7,704,484
8	303.99	Comprehensive Planning Studies	11,052,834	785,586	0	0	11,838,420	1,661,805	161,747	0	13,338,479
9	304.15	Other Water Source Structures	95,740,075	30,449,122	4,192,028	0	121,997,169	39,614,975	6,682,502	0	154,929,642
10	304.20	Power and Pumping Structures	99,749,611	0	0	0	99,749,611	0	0	40,805	99,790,416
11	304.30	Purification Buildings	341,412,320	0	0	222,374	341,634,694	0	0	0	341,634,694
12	304.36	Waste Handling Struct. & Improv.	11,777,004	0	0	0	11,777,004	0	0	0	11,777,004
13	304.61	Office Buildings	47,851,444	97,024	17,554	0	47,930,914	150,680	30,229	0	48,051,365
14	304.62	Stores, Shop and Garage Buildings	64,145,021	0	0	0	64,145,021	0	0	6,725	64,151,746
15	304.63	Miscellaneous Structures and Improvements	21,922,598	2,313,101	418,491	0	23,817,207	3,250,904	652,185	0	26,415,927
16	305.00	Collecting and Impounding Reservoirs	135,474,936	3,579,926	647,688	0	138,407,175	75,110,866	15,068,472	0	198,449,569
17	306.00	Lake, River and Other Intakes	17,350,909	588,451	106,464	0	17,832,897	1,102,500	221,180	0	18,714,217
18	307.00	Wells and Springs	11,984,294	614,708	111,214	0	12,487,788	4,010,078	152,473	819,979	17,165,372
19	310.00	Other Power Production Equipment	19,053,151	7,329,315	1,084,889	4,200	25,301,776	894,500	179,451	0	26,016,825
20	311.00	Pumping Equipment	98,108,981	13,615,923	2,463,422	0	109,261,483	25,342,483	3,398,471	384,318	131,589,812
21	320.00	Purification System	331,734,676	62,494,128	11,080,749	0	383,148,055	74,583,893	13,799,177	568,166	444,500,936
22	320.30	Granular Activated Carbon	12,431,720	922,062	166,821	6,526	13,193,487	1,140,033	228,709	0	14,104,810
23	320.37	Waste Handling and Treatment Equipment	15,839,221	0	0	0	15,839,221	0	0	0	15,839,221
24	330.00	Distribution Reservoirs and Standpipes	209,217,894	22,270,147	2,284,731	411,560	229,614,871	39,478,910	3,908,275	726,972	265,912,477
25	331.00	Mains and Accessories	3,355,224,094	327,123,716	56,063,568	3,471,882	3,629,756,124	249,641,769	41,655,348	4,251,387	3,841,993,932
26	333.00	Services	705,318,212	46,407,942	6,043,953	667,488	746,349,688	46,349,988	5,718,338	289,495	787,270,833
27	334.00	Meters	223,217,608	33,121,068	5,345,570	107,398	251,100,504	30,804,473	5,574,665	1,002,702	277,333,014
28	335.00	Fire Hydrants	141,592,696	12,962,887	2,041,116	214,282	152,728,748	12,939,368	2,126,717	192,535	163,733,934
29	340.00	Office Furniture and Equipment	21,960,885	4,810,963	1,173,476	0	25,598,372	6,029,894	1,311,842	17,653	30,334,077
30	340.31	Computer Software	82,171,613	17,325,135	6,603,217	0	92,893,532	12,649,818	20,867,176	0	84,676,173
31	341.00	Transportation Equipment	78,268,335	11,520,440	2,084,303	0	87,704,473	17,664,230	3,543,734	761,041	102,586,009
32	342.00	Stores Equipment	469,790	0	0	0	469,790	0	0	0	469,790
33	343.00	Tools and Work Equipment	43,247,015	4,863,376	947	25,053	48,134,497	5,904,456	200,918	61,086	53,899,122
34	344.00	Laboratory Equipment	2,262,021	0	32,722	0	2,229,299	0	103,310	0	2,125,989
35	345.00	Power Operated Equipment	2,122,807	0	0	0	2,122,807	150,000	30,092	0	2,242,714
36	346.00	Communication Equipment	14,843,318	3,741,814	80,106	125,179	18,630,206	4,333,464	288,890	2,897	22,677,678
37	347.00	Miscellaneous Equipment	28,263,695	8,023,201	37,475	0	36,249,421	7,565,565	25,703	25,203	43,814,486
38	348.00	Other Tangible Equipment	795,578	0	0	0	795,578	13,963,718	0	0	14,759,296
39		Total Tangible Plant	$6,254,251,663	$614,960,035	$102,080,504	$5,255,943	$6,772,387,138	$674,338,370	$125,929,605	$9,150,964	$7,329,946,867
40		Total Utility Plant In Service	$6,272,334,023	$615,681,581	$102,089,453	$5,257,100	$6,791,183,252	$676,288,188	$125,966,017	$9,187,482	$7,350,692,906

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Contributions in Aid of Construction (CIAC)

The Company receives Contributions in Aid of Construction (CIAC) on an annual basis. The Commission's Order dated April 21, 1993, at Docket No. R-922428 approved the use of a three year average to calculate the future test year additions to CIAC. The following adjustment reflects the projected CIAC to be received during the twelve months ended June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Contributions In Aid Of Construction	$279,323,043	$283,906,333
2	Plus: Three Year Average Of Contributions	2,436,273	2,436,273
2	Plus: Farmington Water Acquired Contributions	2,147,017	
2	Plus: Audubon Water Acquired Contributions		4,210,372
3	Contributions In Aid Of Construction	($283,906,333)	($290,552,978)

Witness: Stacey D. Gress
Reference: FR V.16 & Exhibit No. 3-C

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Customer Advances For Construction (CAC)

The Company requires Customer Advances for Construction (CAC) for all main extensions requested by developers. New projects increase the CAC account and refunds to be made during the future test year to developers for prior year CAC decrease the CAC account. The following adjustment reflects the level of activity (advances and refunds) projected for the twelve months ended June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Customer Advances For Construction	$61,692,641	$61,749,773
2	Plus: Customer Advances For Construction To Be Capitalized	3,789,774	8,464,954
3	Sub-Total	65,482,415	70,214,728
4	Less: Customer Advances For Construction To Be Refunded	3,732,642	6,535,508
5	Customer Advances For Construction	($61,749,773)	($63,679,220)

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Excluded Property

Contained on the Company's records as of June 30, 2023 are several items which the Company excludes for rate-making purposes.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT
1	Excluded Property At 06/30/2023	$1,558,014

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Materials And Supplies

The Company's claim for materials and supplies at June 30, 2024 and June 30, 2025 is calculated on the basis of the average monthly balances in the materials and supplies account during the period June 30, 2022 and June 30, 2023.

LINE NO.	MONTH	DETAIL	PRESENT RATES 06/30/2024 and 06/30/2025 AMOUNT
1	June, 2022	$20,175,434	
2	July	21,520,326	
3	August	20,807,507	
4	September	21,639,120	
5	October	21,531,443	
6	November	20,846,783	
7	December	20,675,124	
8	January, 2023	21,275,068	
9	February	21,569,119	
10	March	22,402,563	
11	April	22,516,688	
12	May	23,047,792	
13	June, 2023	25,147,324	
14	Total	$283,154,293	
15	Average		$21,781,099
16	Allowance For Materials And Supplies		
17	At 06/30/2024 and 06/30/2025		$21,781,099

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for water service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months ended June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2025.

The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2023				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	$752,093,381	$814,253,947	$810,059,803	$824,117,186
9	Lag Days	50.6	50.6	50.6	50.6
10	Dollar Days	$38,063,444,538	$41,209,390,662	$40,997,125,042	$41,708,569,168
11	Total Billed Revenue	$752,093,381	$814,253,947	$810,059,803	$824,117,186
12	Total Dollar Days	$38,063,444,538	$41,209,390,662	$40,997,125,042	$41,708,569,168
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	50.6	50.6	50.6	50.6
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	15.2	15.0	16.1	16.4
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	35.4	35.6	34.5	34.2
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		$219,851,712	$240,502,390	$247,218,705
20	Operating Expenses Per Day (Line 20 / 365 Days)		602,333	658,911	677,312
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		$21,443,055	$22,732,430	$23,164,070

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Support of Expense Days

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PER BOOKS AMOUNT	PER BOOKS DOLLAR DAYS	PRESENT RATES 06/30/2023 AMOUNT	PRESENT RATES 06/30/2023 DOLLAR DAYS	PRESENT RATES 06/30/2024 AMOUNT	PRESENT RATES 06/30/2024 DOLLAR DAYS	PRESENT RATES 06/30/2025 AMOUNT	PRESENT RATES 06/30/2025 DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	$61,754,027	$744,395,392	$61,754,027	$744,395,392	$67,470,213	$813,299,442	$69,405,426	$836,626,886
2	Group Insurance	11.00	8,892,464	97,817,104	8,892,464	97,817,104	11,083,781	121,921,591	11,419,826	125,618,086
3	OPEB's and VEBA	0.00	(7,426,224)	0	(5,801,363)	0	(5,817,327)	0	(5,817,327)	0
4	Pension	(6.41)	(3,633,918)	23,311,479	(3,633,918)	23,311,479	22,219	(142,534)	22,219	(142,534)
5	Purchased Power	31.00	16,094,811	499,006,371	15,793,003	489,649,063	16,086,300	498,742,495	15,812,740	490,260,992
6	Purchased Water	35.22	2,994,925	105,481,797	2,994,925	105,481,797	3,008,292	105,952,585	3,099,741	109,173,435
7	Chemicals	47.20	17,953,000	847,411,314	17,953,000	847,411,314	22,511,182	1,062,565,048	23,528,121	1,110,566,252
8	Miscellaneous	30.46	34,764,800	1,058,947,998	33,789,014	1,029,225,215	36,767,376	1,119,947,166	39,493,144	1,202,975,015
9	Transportation	54.08	4,058,077	219,478,206	4,058,077	219,478,206	4,581,636	247,794,522	5,043,012	272,747,715
10	Ins Other Than Group	(69.48)	16,520,747	(1,147,786,121)	16,520,747	(1,147,786,121)	14,485,606	(1,006,393,810)	14,893,805	(1,034,753,614)
11	Service Company	12.05	58,323,517	703,043,339	58,323,517	703,043,339	61,024,733	735,604,337	60,645,901	731,037,820
12	Waste Disposal	41.96	2,797,872	117,399,849	2,797,872	117,399,849	2,919,617	122,508,319	3,337,122	140,026,999
13	Telephone	3.88	4,996,974	19,398,219	4,996,974	19,398,219	4,996,974	19,398,219	4,996,974	19,398,219
14	Rents	(13.36)	180,747	(2,414,266)	180,747	(2,414,266)	129,162	(1,725,237)	105,375	(1,407,511)
15	Natural Gas	33.33	1,232,626	41,087,081	1,232,626	41,087,081	1,232,626	41,087,081	1,232,626	41,087,081
16	Totals		$219,504,445	$3,326,577,762	$219,851,712	$3,287,497,671	$240,502,390	$3,880,559,224	$247,218,705	$4,043,214,841
17	Average Lag			15.2		15.0		16.1		16.4
18	Sum. Of Expense Pro Forma Present Rates & Payroll Taxes		$231,279,891		$235,217,494		$254,976,942		$261,858,572	
19	Uncollectibles		5,985,290		9,575,626		9,526,303		9,691,618	
20	Amortizations		5,790,156		5,790,156		4,948,249		4,948,249	
21	Sum Of Other Expenses		184,739,645		186,062,698		203,735,014		207,725,561	
22	Miscellaneous		$34,764,800		$33,789,014		$36,767,376		$39,493,144	

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	NET REVENUE LAG DAYS FUTURE	PRESENT RATES 06/30/2023 TAXES PAYABLE	PRESENT RATES 06/30/2023 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2024 TAXES PAYABLE	PRESENT RATES 06/30/2024 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2025 TAXES PAYABLE	PRESENT RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT	PROPOSED RATES 06/30/2025 TAXES PAYABLE	PROPOSED RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT
1	General Assessment	190.2	$5,101,631	$2,658,439	$5,075,980	$2,645,072	$5,164,137	$2,691,011	$5,974,096	$3,113,077
2	Public Utility Realty Tax	47.4	2,046,257	265,453	2,027,952	263,078	2,126,732	275,892	2,126,732	275,892
3	Local Property Tax	64.6	1,718,277	303,945	1,950,641	345,048	2,073,365	366,756	2,073,365	366,756
4	State Income Tax	13.6	23,534,418	876,899	14,071,816	524,320	13,347,020	497,314	23,401,768	871,956
5	Federal Income Tax	(18.4)	48,158,598	(2,427,721)	39,506,024	(1,991,537)	33,868,950	(1,707,366)	58,184,198	(2,933,121)
6	Totals			$1,677,015		$1,785,981		$2,123,607		$1,694,560

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Calulation of Lag Days for Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	TAX PERIOD BEGINNING	TAX PERIOD ENDING	PAYMENTS 2022 - 2023 TAX				TOTAL TAX LAG DAY	REVENUE LAG LESS TAX LAG
1	General Assessment	7/1/22	6/30/23	9/13/22	9/27/22			(139.6)	190.3
	Percent of Payment			11%	31%				
	Lag Days			(11.30)	(28.85)				
		7/1/23	6/30/24	6/27/23					
	Percent of Payment			59%					
	Lag Days			(109.04)					
2	Public Utility Realty Tax	1/1/22	12/31/22	9/14/22				3.3	46.6
	Percent Of Payment			25%	25%	25%	25%		
	Lag Days			18.63					
		1/1/2023	12/31/2023	5/1/2023					
	Percent of Payment			25%	25%	25%	25%		
	Lag Days			(15.38)					
3	Local Property Tax			Lag calculated using expense lag method				(14)	64.6
	Payment Lag Days								
4	State Income Tax	1/1/2022	12/31/2022	9/15/22	12/15/22			37.0	12.8
	Percent Of Payment			25%	25%	25%	25%		
	Lag Days			18.88	41.63				
		1/1/2023	12/31/2023	4/15/23	6/15/23				
	Percent Of Payment			25%	25%	25%	25%		
	Lag Days			(19.38)	(4.13)				
5	Federal Income Tax	1/1/22	12/31/22	7/26/2022	10/26/2022	12/21/2022	12/22/2022	69.00	(19.2)
	Percent Of Payment			25%	25%	25%	13%		
	Lag Days			6.13	29.13	43.13	21.69		
		1/1/2023	12/31/2023	3/21/2023	4/25/2023	6/26/2023			
	Percent Of Payment			13%	25%	25%			
	Lag Days			(12.81)	(16.88)	(1.38)			

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

The payment of interest on the Company's long term debt is made six months in arrears. Payment of interest on the Company's short term debt is made monthly in arrears. The payment of dividends on the Company's preferred stock is made quarterly in arrears. The average lag days of interest and dividend payments and the deduction of the average lag days for the receipt of revenue is calculated below to determine cash working capital requirements.

LINE NO.	DESCRIPTION							
1	**Average Lag Calculation**	**LONG TERM INTEREST**	**SHORT TERM INTEREST**	**PREFERRED DIVIDEND**				
2	Future Revenue Lag Days	50.6	50.6	50.6				
3	Less: Interest Payments Lag Days	81.6	15.0	46.4				
4	Average Lag Between The Payment	(31.0)	35.6	4.2				
5	Of Interest And The Receipt							
6	Of Revenues							
7	**Long Term Debt**	**PRESENT RATES 6/30/23**		**PRESENT RATES 6/30/24**		**PRESENT RATES 6/30/25**	**PROPOSED AMOUNT 6/30/25**	
8	Working Capital Requirements							
9	Pro Forma Annual Interest Expense	$66,694,160		$85,252,158		$98,323,965	$98,315,014	
10	Interest Expense Per Day							
11	(Line 9 / 365 Days)	182,724		233,568		269,381	269,356	
12	Cash Working Capital Required							
13	(Line 4 Col.1 X Line 11)		(5,666,271)		(7,242,944)	(8,353,505)		(8,352,730)
14	**Short Term Debt**							
15	Working Capital Requirements							
16	Pro Forma Annual Interest Expense	0		0		0	0	
17	Interest Expense Per Day							
18	(Line 16 / 365 Days)	0		0		0	0	
19	Cash Working Capital Required							
20	(Line 4 Col.2 X Line 18)		0		0	0		0
21	**Preferred Dividends**							
22	Working Capital Requirements							
23	Pro Forma Annual Dividend Expense	0		0		0	0	
24	Dividend Expense Per Day							
25	(Line 23 / 365 Days)	0		0		0	0	
26	Cash Working Capital Required							
27	(Line 4 Col.3 X Line 25)		0		0	0		0
28	Total Cash Working Capital Required							
29	(Line 13 + Line 20 + Line 27)		($5,666,271)		($7,242,944)	($8,353,505)		($8,352,730)

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Acquisition Adjustments

The following adjustment reflects the recognition of the positive Utility Plant Acquisition Adjustments (UPAA) and transaction costs associated with the acquisition of the various water utility assets pursuant to the terms of the Commission-approved settlement of the Company's rate cases at Docket Nos. R-973944, R-2013-2355276, R-2020-3019369 and R-2022-3031672. In addition, the Company is requesting recognition of the transaction costs associated with its acquisition of the water assets of the Farmington Township (Water) at Docket No. A-2023-3042567 and Audubon Water at Docket No. A-2023-3043194.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2023 AMOUNT	2024 Amortizations	PRESENT RATES 6/30/2024 AMOUNT	2025 Amortizations	PRESENT RATES 6/30/2025 AMOUNT
1	PG&W	Approved Docket No. R-973944	$6,497,380	$455,956	$6,041,424	$455,956	$5,585,468
2	Lake Spangenberg Water Co.	Approved Docket No. R-2013-2355276	10,661	$4,569	6,092	2,999	3,093
3	Fernwood Community Water System	Approved Docket No. R-2013-2355276	4,380	$1,877	2,503	1,232	1,271
4	Olwen Heights Water Service Co.	Approved Docket No. R-2013-2355276	4,194	$1,798	2,396	1,179	1,217
5	Steelton Transaction Costs	Approved Docket No. R-2020-3019369	120,556	$15,898	104,658	15,898	88,760
6	Turbotville Water Transaction costs	Approved Docket No. R-2020-3019369	8,201	$1,082	7,119	1,082	6,037
7	Valley Township Water Transaction costs	Approved Docket No. R-2022-3031672	203,723	$21,258	182,465	21,258	161,207
8	SLIBCO Utilities Transactions Costs	Approved Docket No. R-2022-3031672	45,558	$4,754	40,804	4,754	36,050
9	Creekside Homeowner's Association Transaction costs	Approved Docket No. R-2022-3031672	36,244	$2,581	33,663	3,822	29,841
10	Farmington Township (Water)	Seeking Approval			215,489	19,753	195,736
11	Audubon Water	Seeking Approval			7,639,771	700,312	6,939,459
12	Farmington Township (Water) Transactions Costs	Seeking Approval			54,825	5,026	49,799
13	Audubon Water Transactions Costs	Seeking Approval			117,954	10,812	107,142
12	Effect to Rate Base Element		$6,930,897	$509,773	$14,449,163	$1,244,083	$13,205,080

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Other Rate Base Additions

The Company is requesting ongoing amortization of the costs incurred by the Company as receiver of Winola Water Company as approved at Docket Nos. R-2020-3019369 and R-2022-3031672.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Winola Water Company (P-2018-3006216)	Beginning Balance	$473,502	$444,213	385,635
2		Less: 6 months 2023 Amortizations	29,289		
3		Less: 2023/2024 Amortizations		58,578	
4		Less: 2024/2025 Amortizations			$58,578
5	Effect to Rate Base Element		$444,213	385,635	$327,057

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Other Rate Base Deductions

The Company is reflecting the ongoing rate base deduction associated with an equipment discount in 2019 amortized over 20 years and as approved at Docket No. R-2020-3019369.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2023 AMOUNT	2024 Amortizations	PRESENT RATES 6/30/2024 AMOUNT	2025 Amortizations	PRESENT RATES 6/30/2025 AMOUNT
1	Equipment Discount	Approved Docket No. R-2020-3019369	($486,888)	($27,690)	($459,198)	($27,690)	($431,508)
2	Effect to Rate Base Element		($486,888)	($27,690)	($459,198)	($27,690)	($431,508)

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Tax Cuts and Jobs Act Stub Period and Negative Surcharge for Deferred Tax Credit

The following adjustment reflects the amortization of the federal income tax savings associated with the 2017 Tax Cuts and Jobs Act ("TCJA") for January 1, 2018 through June 30, 2018 (the "Stub Period"), as authorized in the settlement at Docket No. R-2020-3019369. The adjustment reflects a true-up to the accrual of interest at the residential mortgage lending rate specified by the Secretary of Banking in accordance with the Loan Interest and Protection Law (41. P.S. §§ 101, et seq.), which was lower than the amount projected in 2020, as well as the reconciliation amounts shown in the Company's 2021 and 2022 TCJA Surcharge Reconciliation filings are included as part of this adjustment, including the over/(under) collection plus interest, all approved at Docket No. R-2022-3019369. The Company is also proposing to amortize the balance at 06/30/2024 over a two-year period. In addition, the Company has included the reconciliation for the over/(under) collection of the Negative Surcharge for Deferred Tax Credit ("EADIT") as required by Tariff Water- PA P.U.C. No. 5 page 40. This amount includes the under collected surcharge, plus applicable interest, for the period from January 1, 2022 through January 27, 2023 to be amortized over a two-year period.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Tax Cuts and Jobs Act Stub Period			
2	Beginning Balance	$11,862,572	$6,339,782	$3,643,020
3	Less: 2022/2023 Amortization	(5,522,791)		
4	Less: 2023/2024 Amortization		(2,696,762)	
5	Less: 2024/2025 Amortization			(1,791,446)
6	EADIT Beginning Balance	222,283	(553,280)	(627,374)
7	EADIT 2023 Reconciliation	(744,690)		
8	Less: 2023 Amortization (6 months)	(37,047)		
9	Less: 2023/2024 Amortization		(74,094)	
10	Less: 2024/2025 Amortization			284,203
11	Effect to Rate Base Element	$5,780,327	$3,015,645	$1,508,401

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Unamortized Investment Tax Credit

The unamortized balance of the 3% Investment Tax Credit is not allowed as a part of the Rate Base Elements. The following sets forth the unamortized portion of the 3% Investment Tax Credit at June 30, 2023. The unamortized balance at the twelve months ending June 30, 2024 and twelve months ending June 30, 2025 reflects one additional year of amortization.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Unamortized 3% ITC	$244,932	$229,128
2	Less: 3% ITC Amortization For The Twelve		
3	Months Ending 06/30/2024	15,804	
4	Less: 3% ITC Amortization For The Twelve		
5	Months Ending 06/30/2025		15,804
6	Effect On Rate Base Elements	($229,128)	($213,324)

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Extension Deposits in Suspense

The Company requires customer advances for construction to extend its mains to serve new developments based upon an estimate of construction costs. At the completion of the project, entries are made to adjust estimated costs of construction to actual cost of construction. The difference is charged to the extension deposit in suspense account until it is refunded to the customer. The Commission's Order at Docket No. R-891208 approved an adjustment to rate base of an average of extension deposits in suspense. The following reflects the adjustment to rate base for such an average.

LINE NO.	MONTH	DETAIL	06/30/2024 and 06/30/2025 AMOUNT
1	June, 2022	($18,750)	
2	July	(19,500)	
3	August	(20,950)	
4	September	(20,200)	
5	October	(20,200)	
6	November	(20,950)	
7	December	(20,200)	
8	January	(16,838)	
9	February	(14,950)	
10	March	(15,700)	
11	April	(26,800)	
12	May	(27,550)	
13	June, 2023	(29,050)	
14	Total	($271,638)	
15	Average		($20,895)
16	Effect On Rate Base Elements		$20,895

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Citizens Utilities Water Company Acquisition

Customer Advances for Construction (CAC) and Contributions in Aid of Construction (CIAC) Adjustment

Paragraph 8.d of the Joint Petition for Settlement at Docket No. R-2009-2097323, which was approved by the Commission in its final order entered November 7, 2009, provides that: "for ratemaking purposes: (i) $14,147,208, or 40%, of the December 31, 2009 balance of the net customer advances for which Citizens Utilities Water Company of Pennsylvania ("Citizens") retained the refund liability upon the Company's acquisition of Citizens' water utility assets will be deemed deducted from the Company's rate base; (ii) $8,895,830 (100%) of the December 31, 2009 balance of the net contributions in aid of construction the OCA proposed to attribute to PAWC from its acquisition of Citizens' water assets will be deducted from PAWC's rate base; (iii) in future base rate cases, the foregoing balances, adjusted to reflect accumulated amortization, will be deducted for ratemaking purposes until such balances are fully amortized; and (iv) the applicable depreciation rate for PAWC's transmission and distribution mains will be used to calculate the amortization of such balances for ratemaking purposes to offset the portion of depreciation expense on gross plant in service that is related to these advances and contributions." Shown below are the adjustments that are called for by the settlement at Docket No. R-2009-2097323.

LINE NO.	DESCRIPTION	Advances Acquisition Adjustment	CIAC Acquisition Adjustment	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	AMOUNT ESTABLISHED IN CASE R-2009-2097323	$14,147,208	$8,895,830		
2	Less: 2010 - AMORTIZATION	202,846	152,873		
3	2011 - AMORTIZATION	202,846	152,873		
4	2012 - AMORTIZATION	202,846	152,873		
5	2013 - AMORTIZATION	202,846	152,873		
6	2014 - AMORTIZATION	186,998	140,930		
7	2015 - AMORTIZATION	186,998	140,930		
8	2016 - AMORTIZATION	186,998	140,930		
9	2017 - AMORTIZATION	186,998	140,930		
10	2018 - AMORTIZATION	185,413	139,735		
11	2019 - AMORTIZATION	185,413	139,735		
12	2020 - AMORTIZATION	185,413	139,735		
13	2021 - AMORTIZATION	190,168	143,318		
14	2022 - AMORTIZATION	190,168	143,318		
15	2023 - AMORTIZATION (Jan-Dec)	96,669	72,854		
15	2023 - AMORTIZATION (Jul-Dec)	96,669	72,854		
16	2024 - AMORTIZATION (Jan-Jun)	96,669	72,854		
15	PRESENT RATES 06/30/2024	$11,361,252	$6,796,217	$18,157,468	
16	2024 - AMORTIZATION (Jul-Dec)	122,025	91,963		
16	2025 - AMORTIZATION (Jan-Jun)	122,025	91,963		
17	Present Rates 06/30/2025	$11,117,203	$6,612,292		$17,729,494
18	Total Citizens Acquisition Adjustment			($18,157,468)	($17,729,494)

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Deferred Income Tax

The following calculation is being made to reflect the federal tax difference between using accelerated and straight-line depreciation, the effects of the Tax Cuts and Jobs Act, taxable contributions and advances and normalizing the effect of the repairs and maintenance deduction for state and federal tax. This adjustment is carried as a rate base reduction.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Deferred Tax	($1,009,560,462)	($1,070,056,381)	($1,082,382,243)
2	Less: Prior Year		(1,009,560,462)	(1,070,056,381)
3	Effect to Rate Base Element	($1,009,560,462)	($60,495,919)	($12,325,862)

Witness: Melissa Ciullo
Reference: FR IV.4

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
1		**Source Of Supply Expenses**				
2		-Operations-				
3	601.1	Salary And Wages	$178,593	$178,593	$194,989	$200,585
4	601.2	Salary And Wages	194,660	194,660	212,531	218,630
5	610.1	Purchased Water	2,994,925	2,994,925	3,008,292	3,099,741
6	615.1	Purchased Power	2,899,448	2,873,613	2,979,319	2,955,902
7	616.1	Purchased Fuel	67,006	67,006	67,006	67,006
8	620.1	Materials And Supplies	27,006	27,006	27,006	27,006
9	631.1	Contract Services - Engineering	267,118	267,118	267,118	267,118
10	633.1	Contract Services - Legal	0	0	0	0
11	636.1	Contract Services	596,009	596,009	596,009	596,009
12	604.1	Other Benefits	0	0	0	0
13	642.1	Rental Of Equipment	284	284	284	284
14	650.1	Transportation	117	117	117	117
15		-Maintenance-				
16	620.2	Materials And Supplies	19,714	19,714	19,714	19,714
17	631.2	Contract Services - Engineering	174,594	174,594	174,594	174,594
18	636.2	Contract Services	323,184	323,184	323,184	323,184
19	650.2	Transportation	0	0	0	0
20		-Miscellaneous-				
21	675.1	Miscellaneous Operating Expense	1,670,487	1,670,487	1,670,987	1,674,987
22	675.2	Miscellaneous Maintenance Expense	17,886	17,886	17,886	17,886
23		Total Source Of Supply Expenses	$9,431,031	$9,405,196	$9,559,036	$9,642,763
24		**Water Treatment**				
25		-Operation-				
26	601.3	Salary And Wages	$11,992,960	$11,992,960	$13,093,960	$13,469,735
27	601.4	Salary And Wages	2,632,647	2,632,647	2,874,334	2,956,823
28	604.3	Employee Pension And Benefits	172	172	172	172
29	615.3	Purchased Power	12,132,226	12,024,115	12,466,414	12,368,422
30	618.3	Chemicals	17,953,000	17,793,018	22,311,376	23,183,305
31	620.3	Materials And Supplies	882,144	882,144	882,144	882,144
32	631.3	Contract Services - Engineering	82,454	82,454	82,454	82,454

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
33	633.3	Contract Services - Legal	0	0	0	0
34	634.3	Contract Services - Management	0	0	0	0
35	635.3	Contract Services - Test	289,335	289,335	289,335	289,335
36	636.3	Contract Services	1,342,664	1,342,664	1,503,192	1,503,192
37	641.3	Rental Of Building	640	640	640	640
38	642.3	Rental Of Equipment	13,718	13,718	13,718	13,718
39	650.3	Transportation	206,827	206,827	206,827	206,827
40		-Maintenance-				
41	620.4	Materials And Supplies	911,734	911,734	911,734	911,734
42	631.4	Contract Services - Engineering	164,513	164,513	164,513	164,513
43	636.4	Contract Services	1,073,816	1,073,816	1,073,816	1,073,816
44	650.4	Transportation	3,461	3,461	3,461	3,461
45	675.4	Miscellaneous Maintenance Expense	105,382	105,382	105,382	105,382
46		-Miscellaneous-				
47	675.3	Miscellaneous Operating Expense	6,543,893	6,543,893	6,667,987	6,928,840
48		Total Water Treatment Expense	$56,331,586	$56,063,493	$62,651,458	$64,144,513
49		**Transmission And Distribution**				
50		-Operation-				
51	601.5	Salary And Wages	$6,639,872	$6,639,872	$7,249,438	$7,457,485
52	601.6	Salary And Wages	8,408,287	8,408,287	9,180,200	9,443,656
53	604.5	Employee Pension And Benefits	6,349	6,349	6,349	6,349
54	615.5	Purchased Power	884,018	876,141	908,369	901,229
55	620.5	Materials And Supplies	1,214,988	1,214,988	1,214,988	1,214,988
56	631.5	Contract Services - Engineering	5,638	5,638	5,638	5,638
57	636.5	Contract Services	429,983	429,983	429,983	429,983
58	641.5	Rental Of Building	25,975	25,975	27,852	27,852
59	642.5	Rental Of Equipment	5,965	5,965	5,965	5,965
60	650.5	Transportation	74,136	74,136	74,136	74,136
61		-Maintenance-				
62	620.6	Materials And Supplies	$868,910	$868,910	$968,088	$968,088
63	631.6	Contract Services - Engineering	226,727	226,727	226,727	226,727
64	636.6	Contract Services	1,372,991	1,372,991	1,372,991	1,372,991

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
65	650.6	Transportation	137,640	137,640	137,640	137,640
66	675.6	Miscellaneous Operating Expense	3,711,716	3,711,716	3,711,716	3,711,716
67		-Miscellaneous-				
68	675.5	Miscellaneous Operating Expense	1,544,893	1,544,893	1,652,735	1,652,735
69		Total Transmission And Distribution	$25,558,088	$25,550,211	$27,172,815	$27,637,178
70		**Customer Accounting**				
71		-Operation-				
72	601.7	Salary And Wages	$4,808,655	$4,808,655	$5,250,108	$5,400,777
73	604.7	Employee Pension And Benefits	293	293	293	293
74	615.7	Purchased Power	0	0	0	0
75	620.7	Materials And Supplies	43,775	43,775	43,775	43,775
76	631.7	Contract Services - Engineering	0	0	0	0
77	633.7	Contract Services - Legal	0	0	0	0
78	636.7	Contract Services	155,866	155,866	155,866	155,866
79	641.7	Rental Of Building	0	0	0	0
80	642.7	Rental Of Equipment	1,862	1,862	1,862	1,862
81	650.7	Transportation	367	367	367	367
82	657.7	Insurance	0	0	0	0
83	670.7	Bad Debt	5,985,290	9,575,626	9,526,303	12,139,503
84		-Miscellaneous-				
85	675.7	Miscellaneous Expense	2,681,027	2,681,027	2,738,507	2,744,294
86		Total Customer Accounting	$13,677,135	$17,267,471	$17,717,081	$20,486,736
87		**Administrative And General**				
88	601.8	Salary And Wages	$22,458,297	$22,458,297	$24,942,196	$25,658,773
89	603.8	Salary Of Officers	0	0	0	0
90	604.8	Employee Pension And Benefits	2,212,979	3,837,840	10,107,360	10,560,035
91	615.8	Purchased Power	112,113	112,113	112,113	112,113
92	620.8	Materials And Supplies	513,543	513,543	513,543	513,543
93	631.8	Contract Services	150,100	150,100	150,100	150,100
94	632.8	Contract Services - Accounting	646,641	646,641	646,641	646,641

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
95	633.8	Contract Services - Legal	1,164,271	1,126,427	1,126,427	1,126,427
96	634.8	Contract Services - Management	58,323,517	58,323,517	61,325,819	60,948,639
97	635.8	Contract Services - Test	0	0	0	0
98	636.8	Contract Services	1,961,059	1,819,225	1,819,225	1,819,225
99	641.8	Rental Of Building	89,529	89,529	58,794	62,740
100	642.8	Rental Of Equipment	42,773	42,773	25,668	(2,065)
101	650.8	Transportation	3,635,529	3,635,529	4,159,088	4,620,464
102	656.8	Insurance - Vehicles	278,559	278,559	230,443	235,390
103	657.8	Insurance	11,653,365	11,653,365	10,275,925	10,453,060
104	658.8	Workers Compensation	786,789	786,789	768,235	780,043
105	659.8	Insurance	3,802,034	3,802,034	3,282,455	3,496,763
106	660.8	Advertising	0	0	0	0
107	666.8	Amortization Of Rate Case	1,812,830	1,812,830	970,923	970,923
108	667.8	Regulatory Commission	47,541	47,541	47,541	47,541
109		-Miscellaneous-				
110	675.8	Miscellaneous Expense	12,150,526	11,354,415	12,419,457	12,713,029
111		Total Administrative And General	$121,841,995	$122,491,067	$132,981,951	$134,913,384
112		Total Operating Expenses	$226,839,835	$230,777,438	$250,082,341	$256,824,574

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	DESCRIPTION	6/30/23 DETAIL	PRESENT RATES 6/30/23 AMOUNT	6/30/24 DETAIL	PRESENT RATES 6/30/24 AMOUNT	6/30/25 DETAIL	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$226,839,835				
2	Present Rates At 06/30/2023				$230,777,438		
3	Present Rates At 06/30/2024						$250,082,341
4	Proposed Rates At 06/30/2025						
5	Compensation	$0		$5,261,641		$1,795,816	
6	Group Insurance	0		2,191,317		336,045	
7	Other Post Employment Benefits & VEBA	1,624,861		(15,964)		-	
8	Pension	0		3,656,137		-	
9	Purchased Power	0		550,415		-	
10	Purchased Water	0		13,367		91,449	
11	Chemicals	0		4,558,182		1,016,939	
12	Change In Consumption Expense	(301,808)		(257,118)		(273,560)	
13	Transportation Expense	0		523,559		461,376	
14	Insurance Other Than Group	0		(2,035,141)		408,199	
15	Regulatory Expense (Rate Case Expense)	0		(841,907)		-	
16	Service Company Expense	0		2,701,216		(378,832)	
17	Postage and Customer Accounting	0		-		-	
18	Acquisition O&M	0		1,657,302		18,407	
19	401K & Defined Contribution Plan	0		310,464		112,769	
20	Rent Expense	0		(51,585)		(23,787)	
21	Waste Disposal	0		121,745		417,505	
22	Miscellaneous Adjustments	(975,786)		1,010,596		2,594,592	
23	Uncollectibles	3,590,336		(49,323)		165,315	
24	Pro Forma Adjustments		3,937,603		19,304,903		6,742,233
25	Present Rates At 06/30/2023		$230,777,438				
26	Present Rates At 06/30/2024				$250,082,341		
27	Present Rates At 06/30/2025						$256,824,574

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Compensation

The following adjustment sets forth a summary of the Company's annualization of labor expense. The pro forma payroll for the future test years were developed by applying pay rates and associated performance pay that will become effective by June 30, 2024 and June 30, 2025 to the Company's full complement of employees.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Salary and Wages	$95,704,797	$98,433,947
2	Annualized Performance Plan	7,811,518	8,053,114
3	Less: 39.55% Capitalized portion not charged to operating expense	40,940,703	42,115,633
4	Sub-Total	62,575,612	64,371,428
5	Less: Amount Charged To Operating Expense		
6	During The Twelve Months Ended 06/30/23	57,313,971	
7	Less: Amount Charged To Present Rates		
8	During the Twelve Months Ended 06/30/24		62,575,612
9	Pro Forma Adjustment	$5,261,641	$1,795,816
	601.1 Salary and Wages - Source of Supply	$16,396	$5,596
	601.2 Salary and Wages - Source of Supply	$17,871	$6,099
	601.3 Salary and Wages - Water Treatment	1,101,000	375,775
	601.4 Salary and Wages - Water Treatment	241,687	82,489
	601.5 Salary and Wages - Transmission & Distribution	609,566	208,047
	601.6 Salary and Wages - Transmission & Distribution	771,913	263,456
	601.7 Salary and Wages - Customer Accounting	441,453	150,669
	601.8 Salary and Wages - Administrative and General	2,061,757	703,685

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Group Insurance

The adjustment of the group insurance cost is based on the January 2024 premiums annualized for the future test year number of employees, less the annualized employee contribution, and adjusted for the portion not charged to operations. The fully projected future test year was developed by adjusting the annualized 2024 amount by a 3 year average of 3.03%.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Group Insurance Cost	$18,335,452	$18,891,357
2	Less: 39.55% Not Charged To Operating Expense	7,251,671	7,471,532
3	Sub-Total	11,083,781	11,419,825
4	Less: Amount Charged To Operating Expense		
5	During the Twelve Months Ended 06/30/23	8,892,464	
6	Less: Amount Charged To Operating Expense		
7	During the Twelve Months Ended 06/30/24		11,083,781
8	Pro Forma Adjustment	$2,191,317	$336,045
	604.8 A&G Employees Pension And Benefits	$2,191,317	$336,045

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Other Post Employment Benefits (OPEB)

The following sets forth the Company's adjustment for post-retirement benefit costs under FAS 106 using the methodology approved by the Commission in the Company's base rate cases since 1992. In addition the Company has included the expense associated with the Company's contributions to the Voluntary Employee Beneficiary Association (VEBA).

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized OPEB Expense	($5,747,929)	($5,747,929)	($5,747,929)
2	Annualized Retiree VEBA Expense ($600 x 381 employees)	255,008	228,600	228,600
3	Less: 39.55% Capitalized portion not charged to operating expense	308,442	297,998	297,998
4	Sub-Total	(5,801,363)	(5,817,327)	(5,817,327)
5	Less: Amount Charged To Operating Expenses			
6	For The Twelve Months Ended 06/30/2023, 06/30/2024, and 06/30/2025	(7,426,224)	(5,801,363)	(5,817,327)
7	Pro Forma Adjustment	$1,624,861	($15,964)	$0
	604.8 A&G Employees' Welfare Expenses	$1,624,861	($15,964)	$0

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Pension

The following adjustment is being made to reflect the Company's projected Pension cost based on ASC715 (formerly FAS87) for PAWC employees. In addition, as approved at Docket No. R-2017-2595853, the Company continues to amortize the deferred pension liability for the difference between ASC 715 and ERISA for both PAWC and Service Company over a 10 year period beginning January 1, 2018.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	PAWC Pension Costs	$3,222,468
2	Less: 39.55% Capitalized service costs portion not charged to operating expense	1,241,832
3	10 yr. amortization of Deferred Pension Liability	(1,958,418)
4	Sub-Total	22,218
5	Less: Amount Charged To Operating Expense	
6	During The Twelve Months Ended 6/30/2023	(3,633,918)
7	Pro Forma Adjustment	$3,656,137
	604.8 A&G Employee Pension And Benefits	$3,656,137

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

401K, Defined Contribution Plan (DCP) and Employee Stock Purchase Plan (ESPP) Expense

The following adjustment is being made to annualize 401K, DCP contributions and ESPP contributions based on the annualized compensation claim at June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized 401K - Company Match	$2,707,388	$2,785,594
2	Annualized DCP	3,456,948	3,556,764
3	Less: 39.55% Not Charged To Operating Expense	2,437,995	2,508,402
4	Sub-Total	3,726,341	3,833,956
5	Annualized ESPP	276,055	281,209
6	Less: Amount Charged To Operating Expense	3,691,932	4,002,396
7	Pro Forma Adjustment	$310,464	$112,769
	604.8 Employee Pension And Benefits AG	$310,464	$112,769

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Purchased Power

This adjustment reflects the application of rates for purchased power to be in effect as of June 2023 to anticipated billing units for the future and fully projected rate years. Accounts were adjusted for any known rate changes in either the future or fully projected rate years and were also adjusted to reflect 12 monthly bills.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Power Cost	$16,466,106	$16,466,106
2	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/23 and 06/30/24	15,915,691	16,466,106
3	Pro Forma Adjustment	$550,415	$0
	615.1 Purchased Power - Source Of Supply	$100,272	$0
	615.3 Purchased Power - Water Treatment	419,571	-
	615.5 Purchased Power - Transmission and Distribution	30,572	-

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Purchased Water

This adjustment reflects the application of rates for purchased water in effect as of June 30, 2023 to anticipated billing units for the future test year. 12-month June 2024 Diversion rights were adjusted by a three year average change in expense of 3.04% over 12-month June 2023 amounts.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Purchased Water Cost	$3,008,292	$3,099,741
2	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/23 and 06/30/24	2,994,925	3,008,292
3	Pro Forma Adjustment	$13,367	$91,449
	610.1 Purchased Water	$13,367	$91,449

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Taxes, Other than Income

Chemicals

The annualization of chemical costs was based on the application of quarterly contract prices during 2023 to anticipated 12-month June 2024 usage. Current intra-2023 prices were adjusted by chemical family based on the current volatility in the market to project 2024 and 2025 cost levels.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Chemical Costs	$22,511,182	$23,528,120
2	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/23 and 06/30/24	17,953,000	22,511,182
3	Pro Forma Adjustment	$4,558,182	$1,016,939
	618.3 Chemicals - Water Treatment	$4,558,182	$1,016,939

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Waste Disposal

The waste disposal adjustment is the annualized test year costs adjusted for the three year average change in expense for the twelve months ended 06/30/2024 and 06/30/2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Waste Disposal Costs	$2,919,617	$3,337,122
2	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/23 and 06/30/24	2,797,872	2,919,617
3	Pro Forma Adjustment	$121,745	$417,505
	675.3 Waste Disposal	$121,745	$417,505

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Change in Consumption

During the future test year - twelve months ending 06/30/2024, and fully projected future test year - twelve months ending 06/30/2025, the Company will experience changes in consumption due to net addition or loss of customers and other factors affecting the usage of specific customers. The calculations shown below reflect estimates of the change in operating expenses that will be realized by these changes in consumption.

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Consumption (00 Gallons)	452,977,698	448,941,215	445,502,426	441,843,739
2	Change In Consumption		(4,036,483)	(3,438,789)	(3,658,687)
3	Power Costs Per Book	$15,915,691			
4	Chemical Costs Per Book	17,953,000			
5	Total	$33,868,691			
6	Rate Of Production Costs (00 Gallons) (Line 5/Line 1)		$0.07477	$0.07477	$0.07477
7	Pro Forma Adjustment		($301,808)	($257,118)	($273,560)
	615.1 Source of Supply - Purchased Power		($25,835)	($22,009)	($23,417)
	615.3 Water Treatment - Purchased Power		(108,111)	(92,102)	(97,992)
	615.5 Transmission & Distribution - Purchased Power		(7,877)	(6,711)	(7,140)
	618.3 Water Treatment - Chemicals		(159,982)	(136,293)	(145,009)

Witness: Lori O'Malley
Reference: FR II.09

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Transportation Expense

The following adjustment reflects the annualization of transportation expense for the years ended June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Leased Vehicles Expense	$7,579,267	$8,342,509
2	Less: 39.55% Not Charged To Operating Expense	2,997,631	3,299,497
3	Sub-Total	4,581,636	5,043,012
4	Less: Amount Charged To Operating Expense		
5	During the Twelve Months Ended 06/30/23	4,058,077	
6	Less: Present Rates During the Twelve Months Ended 06/30/24		4,581,636
7	Pro Forma Adjustment	$523,559	$461,376
	650.8 A & G - Miscellaneous General Expense	$523,559	$461,376

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Insurance Other Than Group

The annualizations of Insurance Other Than Group (IOTG) costs were based on the actual IOTG premiums for the twelve months ending June 30, 2023, adjusted for the 5 year average of retroactive adjustments. The present rates 6/30/2024 amounts are based on twelve months ending June 30, 2023 increased by a 5 year average of 6.53%, except for claims amounts which were held at twelve months ended June 30, 2023 levels. Amounts for present rates 6/30/2025 were increased by a 5 year average of 6.53%, except for claims amounts which were held at present rates 6/30/2024 levels. Present rates have been allocated to other cost of service areas based on depreciated utility plant in service as of 6/30/23.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Workers Compensation Premium		$1,270,868	$1,290,403
2	Less: 39.55% Not Charged To Operating Expense		(502,634)	(510,360)
3	Sub-Total		768,234	780,043
4	Add: Annualized Vehicle, General Liability,			
5	Property And Other Insurance		13,717,372	14,113,762
6	Sub-Total		14,485,606	14,893,805
7	Less: Per Books and Present Rates		16,520,747	14,485,606
8	Pro Forma Adjustment		($2,035,141)	$408,199
	656.8 Vehicle Insurance	55110000	($48,116)	$4,947
	657.8 General Liability Insurance	55710000	(1,448,891)	177,135
	658.8 Workers Compensation	55720000	(74,518)	19,535
	658.8 Insurance WC Capitalized Credits	55720100	55,964	(7,726)
	659.8 Other Insurance	55730000	(519,579)	214,308

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Regulatory Expense (Rate Case Expense)

The following adjustment reflects the estimated cost of this rate case normalized over a two-year period. Additionally, there are adjustments for 10 year amortizations of the Customer Class Demand Study, as well as Lead Service Line Program costs.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	Rate Case Expense Allocation	$1,827,452
2	Normalized Over 2 Years	913,726
3	Plus Allocation of Amortization of Demand Study	22,823
4	Plus Allocation of Amortization of Lead Service Line Costs	25,224
5	Less: Amount Charged To Operating Expense	
6	During The Twelve Months Ended 06/30/2023	1,803,680
7	Pro Forma Adjustment	($841,907)
	666.8 Regulatory Commission Expense	($841,907)

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Service Company

This adjustment reflects the cost of services provided by American Water Works Service Company (AWWSC), for the twelve months ended June 30, 2024, and June 30, 2025. An allocation factor based on customer counts was applied to each cost of service area to allocate a portion of the total projected Service Company costs.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Service Company Cost	$61,024,733	$60,645,901
2	Less: Amount Charged To Operating Expense		
3	During The Twelve Months Ended 06/30/23	58,323,517	
4	And Present Rates 06/30/24		61,024,733
5	Pro Forma Adjustment	$2,701,216	($378,832)
	634.8 AG - Contract Services - Management	$2,701,216	($378,832)

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Acquisition O&M Expense Adjustment

The following adjustment reflects an adjustment to annualize O&M expenses related to the future acquisitions of the Farmington and Audubon water systems, which are expected to close before the end of the fully projected future test year.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Additions:		
2	Farmington Water Annualized O&M	$149,338	$152,385
3	Audubon Annualized O&M	1,541,517	1,585,572
4	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/24	$0	$1,690,855
5	Pro Forma Adjustment	$1,690,855	$47,102
	408.12 Payroll Taxes	$33,553	$986
	408.2 Taxes, Other Than Income - Property	-	27,709
	601.8 Salary and Wages- Admin & General	422,142	12,893
	604.8 A&G Employee Pension And Benefits	127,566	3,862
	615.1 Purch Power Oper SS	27,443	-
	615.3 Purch Power Oper WT	114,830	-
	615.5 Purch Power Oper TD	8,367	-
	618.3 Chemicals- Water Treatment	96,468	-
	620.6 M&S Maint TD	99,178	-
	634.8 AG - Contract Services Management	301,086	1,653
	636.3 Cont Serv Other Oper	160,528	-
	641.8 Rents - Admin & General	5,622	-
	657.8 General Liability	71,451	-
	675.3 Misc Exp Oper WT	2,349	-
	675.5 Misc Exp Oper TD	107,842	-
	675.8 Misc Expense Admin & General	112,431	-

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Miscellaneous Expense Adjustment

The following adjustment reflects miscellaneous additions or deductions from pro forma expenses.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Additions:			
2	DEP Adjustment		$500	$4,000
3	Credit Card/E-check Transaction Fees		57,480	5,787
4	Amortization of Revolving Credit Line Fees			293,571
5	Arrearage Management Plan and Low Income Program			2,447,886
6	General Facility Maintenance		1,450,000	
7	Deductions:			
8	Donations	(618,327)		
9	Lobbying	(70,696)		
10	Temporary Employee Costs	(141,831)		
11	Fines	(5,699)		
12	Injuries And Damages 3 Year Average	(72,389)		
13	Remove expenses	(66,844)		(156,652)
14	PA HQ - Corporate Campus		(497,383)	
15	Pro Forma Adjustment	($975,786)	$1,010,596	$2,594,592
	675.3 Waste Disposal			(156,652)
	633.8 Contract Services - Legal	(37,844)		
	636.8 Contract Service - Admin & General	(141,831)		
	670.7 Uncollectible Accounts Exp - CA			2,447,886
	675.1 Misc Operations SS		500	4,000
	675.7 Misc Exp Customer Accounting		57,480	5,787
	675.8 Misc Expense Admin & General	(796,111)	952,617	293,571

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Calculation of Uncollectible Accounts Expenses

The following adjustment develops the Company's uncollectible accounts expense claim calculated on the ratio of actual per books revenue to net write-offs. This ratio is applied to pro forma sales at present and proposed rates.

LINE NO	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Total Sales	$752,093,381	$814,253,947	$810,059,803	$824,117,186	$952,266,876
2	2 Year Average	1.1760%	1.1760%	1.1760%	1.1760%	1.1760%
3	Annualized Uncollectible Expense		$9,575,626	$9,526,303	$9,691,618	$11,198,658
4	Less: Amount Charged To Operating Expense					
5	During The Twelve Months Ended 06/30/2023		5,985,290			
6	Less: Present Rates 06/30/2023			9,575,626		
7	Less: Present Rates 06/30/2024				9,526,303	
8	Less: Present Rates 06/30/2025					9,691,618
9	Pro Forma Adjustment		$3,590,336	($49,323)	$165,315	$1,507,040
670.7	Customer Accounting And Collecting - Bad Debt		$3,590,336	($49,323)	$165,315	$1,507,040

Witness: Cas Swiz

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Depreciation

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Depreciation	$185,564,732	$200,810,877	$216,716,701
2	Less: Citizens Acquisition CIAC & CAC		339,044	427,974
3	Less: Depreciation on Vehicles - Capitalized Portion		2,685,491	3,488,929
4	Subtotal	$185,564,732	$197,786,342	$212,799,798
5	Book Depreciation	147,332,145	185,564,732	197,786,342
6	Pro Forma Adjustment	$38,232,587	$12,221,610	$15,013,455
	503 Depreciation	$38,232,587	$12,221,610	$15,013,455

Witness: Stacey D. Gress, John Spanos
Reference: Exhibit No. 3-B, Exhibit No. 3-C, Exhibits No. 11

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Amortization Expense

This adjustment is being made to reflect the Company's claim for amortizations.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	PG&W	Approved Docket No. R-973944	$455,956	$455,956
2	Lake Spangenberg Water Co.	Approved Docket No. R-2013-2355276	4,569	2,856
3	Fernwood Community Water System	Approved Docket No. R-2013-2355276	1,877	1,173
4	Olwen Heights Water Service Co.	Approved Docket No. R-2013-2355276	1,798	1,123
5	Indian Rocks Prop. Owners Assoc.	Approved Docket No. R-2013-2355276	(411)	(257)
6	North Fayette County Mun. Auth	Approved Docket No. R-2013-2355276	(20,989)	(13,118)
7	Wildcat Park Corporation	Approved Docket No. R-2013-2355276	(2,757)	(1,724)
8	Turbotville Water	Approved Docket No. R-2020-3019369	(81,601)	(81,601)
9	Creekside Homeowner's Association	Approved Docket No. R-2022-3031672	(75,104)	(99,243)
10	Steelton Transaction Costs	Approved Docket No. R-2020-3019369	15,898	15,898
11	Turbotville Water Transaction costs	Approved Docket No. R-2020-3019369	1,082	1,082
12	Creekside Homeowner's Association transaction costs	Approved Docket No. R-2022-3031672	2,581	3,935
13	Valley Township Water Transaction costs	Approved Docket No. R-2022-3031672	21,258	21,258
14	Slibco Utilities Transactions Costs	Approved Docket No. R-2022-3031672	4,754	4,754
15	DEP Safe Drinking Water Fees	Approved Docket No. R-2020-3019369	201,741	128,028
16	Steelton Post-in-service AFUDC	Approved Docket No. R-2020-3019369	3,292	2,444
17	Steelton Deferred Depreciation	Approved Docket No. R-2020-3019369	12,181	9,056
18	Farmington Township (Water)	Seeking Approval	-	21,549
19	Audubon Water	Seeking Approval	-	763,977
20	Farmington Township (Water) Transactions Costs	Seeking Approval	-	5,483
21	Audubon Water Transactions Costs	Seeking Approval	-	11,795
22	Arrearage Management Program - AMP	Seeking Approval	-	(1,351,149)
23	Equipment Discount	Approved Docket No. R-2020-3019369	(27,690)	(27,690)
24	SFAS 109 Regulatory Assets Afudc	Approved Docket No. R-00072229	371,076	167,280
25	Receivership Costs:			
26	Winola Water Company (P-2018-3006216)	Approved Docket No. R-2022-3031672	58,578	58,578
27	Tax Cuts and Jobs Act Stub Period and Reconciliation	Approved Docket No. R-2020-3019369	(2,696,762)	(1,709,145)
28	Negative Surcharge for Deferred Tax Credit Reconciliation	Approved Docket No. R-2022-3031672	(74,095)	316,775
29	COVID-19 Emergency Response	Approved Docket No. R-2022-3031672	1,275,652	(808,535)
30	Pro Forma Expense		(547,116)	(2,099,462)
31	Less: Per Books		1,850,736	(547,116)
32	Pro Forma Adjustment		($2,397,852)	($1,552,346)

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Rent Expense

This adjustment reflects the annualization of rates for rentals in effect as of the twelve months ending 06/30/2024 and 06/30/2025. Accounts were also adjusted for ending rental contracts and for expenses not likely to recur.

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
1	Annualized Rent Expense	$177,780	$153,993
2	Less: Per Books Amount and Present Rates	229,365	177,780
3	Pro Forma Adjustment	($51,585)	($23,787)
	641.5 Rents-Real Property - Transmission & Distribution	$1,877	$0
	641.8 Rents - Real Property - Admin & General	(36,357)	3,946
	642.8 Rents-Equipment - Admin & General	(17,105)	(27,733)

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Taxes, Other than Income

Pennsylvania Property Tax

The following adjustment reflects the projected property tax expense, local and PURTA, for the twelve months ended June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Property Subject to Tax	$705,198,342	$733,651,889	$769,387,581
2	PURTA Tax 2022	$1,949,237		
3	Property Tax	1,874,927		
4	Total	$3,824,164		
5	Rate (Line 4 / Line 1)	$0.005423	$0.005423	$0.005423
6	Projected property tax expense (Line 1 x Line 5)		$3,978,594	$4,172,389
7	Less: Amount Charged To Operating Expense			
8	During The 12 Months Ended 6/30/2023 & 06/30/2024		3,764,534	$3,978,594
9	Pro Forma Adjustment		$214,060	$193,795
	408.11 Taxes, Other Than Income - PURTA		$109,110	$98,780
	408.2 Taxes, Other Than Income - Property		104,950	$95,015
	Total PURTA		$2,027,952	$2,126,732
	Total Local Property Tax		1,950,641	2,045,656
	Total		$3,978,594	$4,172,389

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Taxes, Other than Income

Payroll Taxes

The following adjustment is being made to annualize payroll tax expense based on the annualized compensation claim at June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Payroll Taxes	$8,041,436	$8,270,403
2	Less: 39.55% Not Charged To Operating Expense	3,180,388	3,270,944
3	Sub-Total	4,861,048	4,999,459
4	Less: Amount Charged To Operating Expense	4,440,056	4,861,048
5	Pro Forma Adjustment	$420,992	$138,411
	408.12 - Taxes - Payroll	$420,992	$138,411

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Calculation of General Assessment by the Pennsylvania Public Utility Commission, Consumer Advocate and Small Business Advocate Fees

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED RATES 06/30/25 AMOUNT
1	Total Water Sales	$800,702,028	$796,676,166	$810,512,488	$937,635,547
2	Estimated General Assessment Fee				
3	Public Utility Commission At 0.004324859316	3,462,924	3,445,512	3,505,352	4,055,142
4	Consumer Advocate Fee At 0.001742389526	1,395,135	1,388,120	1,412,228	1,633,726
5	Small Business Advocate Fee At 0.000303478942	242,996	241,774	245,973	284,553
6	Damage Prevention Comittee Fee At 0.000000719937	576	574	584	675
7	Subtotal	5,101,631	5,075,980	5,164,137	5,974,096
8	Less: Amount Charged To Operating Expenses During				
9	The Twelve Months Ended 06/30/2023	4,267,439			
10	Less: Pro Forma Under Present Rates At 06/30/2023		5,101,631		
11	Less: Pro Forma Under Present Rates At 06/30/2024			5,075,980	
12	Less: Pro Forma Under Present Rates At 06/30/2025				5,164,137
13	Pro Forma Adjustment	$834,192	($25,651)	$88,157	$809,959

507.1 Taxes Other Than Income $1,706,657

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Pro Forma State And Federal Income Taxes Under Present And Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED 06/30/25 AMOUNT
1	State Income Tax Per Computation				
2	Shown On Following Page	$23,534,418	$14,071,816	$13,347,020	$23,401,768
3	Less: State Income Tax Per Book				
4	Computation Shown On Following Page	22,760,185			
5	Less: Present Rates 06/30/2023		23,534,418		
6	Less: Present Rates 06/30/2024			14,071,816	
7	Less: Present Rates 06/30/2025				13,347,020
8	Pro Forma Adjustment	$774,233	($9,462,602)	($724,796)	$10,054,748
9	Federal Income Tax Per Computation				
10	Shown On Following Page	$48,158,598	$39,506,024	$33,868,950	$58,184,198
11	Less: Federal Income Tax Per Book				
12	Computation Shown On Following Page	46,482,235			
13	Less: Present Rates 06/30/2023		48,158,598		
14	Less: Present Rates 06/30/2024			39,506,024	
15	Less: Present Rates 06/30/2025				33,868,950
19	Pro Forma Adjustment	$1,676,363	($8,652,574)	($5,637,074)	$24,315,248

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Water Operations
Notes to Statement Of Income
Calculation Of State And Federal Income Taxes

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Utility Operating Income Before Taxes	$373,027,422	$382,754,820	$348,789,062	$342,194,044	$468,026,735
2	Less: Interest Expense	66,694,160	66,694,160	85,252,158	98,323,965	98,315,014
3	Taxable Operating Income	306,333,262	316,060,660	263,536,904	243,870,079	369,711,721
4	Add: Premature Property Losses / Amortizations	1,850,736	1,850,736	(547,116)	(2,099,462)	(2,099,462)
5	Depr - Straight Line-Remaining Life (Including COR)	147,332,145	185,564,732	197,786,342	212,799,798	212,799,798
6	Taxable Meals & Entertainment	170,260	170,260	170,260	170,260	170,260
7	Total	149,353,141	187,585,728	197,409,486	210,870,596	210,870,596
8	Deduct:					
9	Tax Depreciation:					
10	State Tax Depreciation Adjustments	202,514,154	241,861,984	295,200,617	287,694,111	287,694,111
11	Total	202,514,154	241,861,984	295,200,617	287,694,111	287,694,111
12	State Taxable Income	253,172,249	261,784,404	165,745,773	167,046,564	292,888,206
13	State Income Tax At:					
14	Historic at 8.99%, Future At 8.49% And Fully Projected At 7.99%	22,760,185	23,534,418	14,071,816	13,347,020	23,401,768
15	Taxable Income After State Income Tax	230,412,064	238,249,986	151,673,957	153,699,544	269,486,438
16	Add:					
17	Federal Tax Depreciation Adjustments	40,261,460	40,261,460	76,153,215	55,855,277	55,855,277
18	Income Subject To Federal Income Tax	270,673,524	278,511,446	227,827,172	209,554,821	325,341,715
19	Federal Income Tax @ 21%	56,841,440	58,487,404	47,843,706	44,006,512	68,321,760
20	Excess ADIT	10,359,205	10,328,806	8,337,682	10,137,562	10,137,562
21	Federal Tax Liability	$46,482,235	$48,158,598	$39,506,024	$33,868,950	$58,184,198

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Pro Forma Interest Expense Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED 6/30/25 AMOUNT
1	Interest On Long Term Debt Per Computation				
2	Shown On Following Page	$66,694,160	$85,252,158	$98,323,965	$98,315,014
3	Less: Interest On Long Term Debt As Per Book				
4	Computation On Following Page	66,694,160			
5	Less: Present Rates At 06/30/2023		66,694,160		
6	Less: Present Rates At 06/30/2024			85,252,158	
7	Less: Present Rates At 06/30/2025				98,323,965
8	Pro Forma Adjustment	$0	$18,557,998	$13,071,807	($8,951)
9	Interest On Short Term Debt Per Computation				
10	Shown On Following Page	$0	$0	$0	$0
11	Less: Interest On Short Term Debt As Per Book				
12	Computation On Following Page	0			
13	Less: Present Rates At 06/30/2023		0		
14	Less: Present Rates At 06/30/2024			0	
15	Less: Present Rates At 06/30/2025				0
16	Pro Forma Adjustment	$0	$0	$0	$0

Witness: Ann E. Bulkley

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Application of Income Deductions

LINE NO.	DESCRIPTION	PRESENT RATES AT JUNE 30, 2023 AMOUNT	PRESENT RATES AT JUNE 30, 2023 CAPITAL STRUCTURE	PRESENT RATES AT JUNE 30, 2023 COST RATE	PRESENT RATES AT JUNE 30, 2024 AMOUNT	PRESENT RATES AT JUNE 30, 2024 CAPITAL STRUCTURE	PRESENT RATES AT JUNE 30, 2024 COST RATE	PRESENT RATES AT JUNE 30, 2025 AMOUNT	PRESENT RATES AT JUNE 30, 2025 CAPITAL STRUCTURE	PRESENT RATES AT JUNE 30, 2025 COST RATE
1	**Capital Structure**									
2	Long Term Debt	$1,754,647,031	40.12%	4.39%	$2,006,604,708	43.80%	4.63%	$2,155,515,957	44.01%	4.76%
3	Short Term Debt	3,664,702	0.08%	0.18%	0	0.00%	0.00%	0	0.00%	0.00%
4	Total Debt	1,758,311,733	40.20%		2,006,604,708	43.80%		2,155,515,957	44.01%	
5	Preferred Stock	357,646	0.01%	9.70%	0	0.00%	0.00%	0	0.00%	0.00%
6	Common Equity	2,615,164,818	59.79%		2,574,821,171	56.20%		2,741,754,985	55.99%	
7	Totals	$4,373,834,197	100.00%		$4,581,425,879	100.00%		$4,897,270,942	100.00%	

		PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
8	**Application Of Long Term Debt Interest:**				
9	Original Cost Rate Base	$3,789,440,931	$4,199,613,696	$4,704,495,928	$4,704,067,656
10	Debt Percentage (From Above)	40.12%	43.80%	44.01%	44.01%
11	Debt Portion Of Rate Base	1,520,323,702	1,839,430,799	2,070,448,658	2,070,260,175
12	Interest Cost (From Above)	4.39%	4.63%	4.76%	4.76%
13	Pro Forma Long Term Interest Deduction	$66,694,160	$85,252,158	$98,323,965	$98,315,014
14	**Application Of Short Term Debt Interest:**				
15	Original Cost Rate Base	$3,789,440,931	$4,199,613,696	$4,704,495,928	$4,704,067,656
16	Debt Percentage (From Above)	0.08%	0.00%	0.00%	0.00%
17	Debt Portion Of Rate Base	3,031,553	0	0	0
18	Interest Cost (From Above)	0.18%	0.00%	0.00%	0.00%
19	Pro Forma Short Term Interest Deduction	$0	$0	$0	$0

Witness: Ann E. Bulkley

Wastewater SSS General Operations

Pennsylvania-American Water Company - Wastewater SSS General Operations

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Pennsylvania-American Water Company - Wastewater SSS General Operations

Pro Forma Statement of Income for the Twelve Months Ending June 30, 2023

June 30, 2024, and June 30, 2025 Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PER BOOKS	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	LINE NO.
1	Operating Revenue	$72,018,572	$11,239,899	$83,258,471	$11,906,994	$95,165,465	$305,402	$95,470,867	$31,793,150	$127,264,017	1
2	Operating Revenue Deductions:										2
3	Operating Expenses	19,393,952	172,934	19,566,886	3,644,917	23,211,803	2,797,449	26,009,252	373,888	26,383,140	3
4	Depreciation	21,451,478	4,594,445	26,045,923	811,389	26,857,312	624,810	27,482,122	0	27,482,122	4
5	Amortizations	9,962	0	9,962	89,279	99,241	(174,874)	(75,633)	0	(75,633)	5
6	Taxes, Other Than Income:										6
7	Local Property And Miscellaneous	2,172,894	0	2,172,894	22,970	2,195,864	31,839	2,227,703	0	2,227,703	7
8	Federal Environmental Tax	0	0	0	0	0	0	0	0	0	8
9	Public Utility Realty Taxes	0	0	0	0	0	0	0	0	0	9
10	Payroll Taxes	406,237	0	406,237	(25,966)	380,271	11,254	391,525	0	391,525	10
11	General Assessment	404,178	117,099	521,277	75,485	596,762	1,937	598,699	201,554	800,253	11
12	Other Taxes and Licenses	0	0	0	0	0	0	0	0	0	12
13	Total Taxes Other Than Income	2,983,309	117,099	3,100,408	72,489	3,172,897	45,030	3,217,927	201,554	3,419,481	13
14	**Utility Operating Income Before Income Taxes**	**28,179,871**	**6,355,421**	**34,535,292**	**7,288,920**	**41,824,212**	**(2,987,013)**	**38,837,199**	**31,217,708**	**70,054,907**	14
15	Income Taxes:										15
16	State Income Tax	2,376,040	775,748	3,151,788	178,585	3,330,373	(423,870)	2,906,503	2,494,476	5,400,979	16
17	Federal Income Tax	4,938,969	1,650,979	6,589,948	1,349,225	7,939,173	(874,453)	7,064,720	6,032,357	13,097,077	17
18	Amortization Of ITC & Excess Deferred Taxes	0	0	0	0	0	0	0	0	0	18
19	Total Income Taxes	7,315,009	2,426,727	9,741,736	1,527,810	11,269,546	(1,298,323)	9,971,223	8,526,833	18,498,056	19
20	Total Operating Revenue Deductions	51,153,710	7,311,205	58,464,915	6,145,884	64,610,799	1,994,092	66,604,891	9,102,275	75,707,166	20
21	**Utility Operating Income**	**20,864,862**	**3,928,694**	**24,793,556**	**5,761,110**	**30,554,666**	**(1,688,690)**	**28,865,976**	**22,690,875**	**51,556,851**	21
22	Income Deductions:										22
23	Interest On Long Term Debt	10,243,220	0	10,243,220	2,156,073	12,399,293	784,269	13,183,562	(2,150)	13,181,412	23
24	Amortization Of Debt Discount Expense	0	0	0	0	0	0	0	0	0	24
25	Interest On Notes Payable To Others	1,030,383	0	1,030,383	(249,416)	780,967	(1,643)	779,324	(127)	779,197	25
26	Total Income Deductions	11,273,603	0	11,273,603	1,906,657	13,180,260	782,626	13,962,886	(2,277)	13,960,609	26
27	**Net Income**	**$9,591,259**	**$3,928,694**	**$13,519,953**	**$3,854,453**	**$17,374,406**	**($2,471,316)**	**$14,903,090**	**$22,693,152**	**$37,596,242**	27
28	Preferred Dividends	0		0		0		0		0	28
29	**Net Income To Common**	**$9,591,259**		**$13,519,953**		**$17,374,406**		**$14,903,090**		**$37,596,242**	29

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER SSS OPERATIONS

TOTAL REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2023 AND JUNE 30, 2024

LINE NO.	ACCT. NO.	CUSTOMER CLASS	PER BOOKS 12 ME June 2023	UNBILLED EADIT, DSIC, AMP ADJUSTMENTS	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	ANNUALIZE FOSTER TOWNSHIP	OTHER REVENUE AND CUSTOMER ADJUSTMENTS (*)	PRO FORMA PRESENT RATES 12 ME June 2023	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	ANNUALIZE YORK WW, VALLEY WW AND FOSTER TOWNSHIP	ANNUALIZE ACQUISITION ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2024
1		OPERATING REVENUES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2		METERED SALES										
3	522.1	RESIDENTIAL	$43,957,994	($595,191)	$131,053	$170,537	$9,399,322	$53,063,715	($867,387)	$9,162,122	$613,819	$61,972,269
4	522.2	COMMERCIAL	12,842,785	(501,412)	33,724	12,244	2,156,210	14,543,552	(202,007)	2,380,050	172,631	16,894,226
5	522.3	INDUSTRIAL	2,041,917	(55,317)		177,299	61,825	2,225,725		101,039	5,136	2,331,900
6	522.4	MUNICIPAL	1,077,554	(38,076)		4,449	206,307	1,250,234	(42,995)	182,447	2,568	1,392,254
7	522.4	MSICELLANEOUS	10,812,481	(1,772,670)			(36,206)	9,003,605		340,014		9,343,619
8		**TOTAL METERED SALES**	**$70,732,732**	**($2,962,666)**	**$164,777**	**$364,529**	**$11,787,459**	**$80,086,831**	**($1,112,389)**	**$12,165,672**	**$794,154**	**$91,934,268**
9		UNMETERED SALES										
10	522.1	RESIDENTIAL					$0	$0				$0
11	522.2	COMMERCIAL					0	0				0
12	522.3	INDUSTRIAL					0	0				0
13	522.4	MUNICIPAL					0	0				0
14	522.4	MSICELLANEOUS					0	0				0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$70,732,732**	**($2,962,666)**	**$164,777**	**$364,529**	**$11,787,459**	**$80,086,831**	**($1,112,389)**	**$12,165,672**	**$794,154**	**$91,934,268**
17		OTHER OPERATING REVENUES										
18	530	GUARANTEED REVENUES	$0					$0				$0
19	532	LATE PAYMENT FEES	292,939				109,657	402,597			59,557	462,154
20	536	MISC SERVICE REVENUES	934,004					934,004				934,004
21	534	RENTS FROM PROPERTIES						0				0
22	535	INTERCOMPANY RENTS						0				0
23	523	OTHER WW REVENUES	$58,897	$48,442			$1,727,701	1,835,040				1,835,040
24		**TOTAL OTHER OPERATING**										
25		**REVENUES**	**$1,285,840**	**$48,442**	**$0**	**$0**	**$1,837,358**	**$3,171,640**	**$0**	**$0**	**$59,557**	**$3,231,197**
26		**TOTAL OPERATING REVENUES**	**$72,018,572**	**($2,914,224)**	**$164,777**	**$364,529**	**$13,624,817**	**$83,258,471**	**($1,112,389)**	**$12,165,672**	**$853,711**	**$95,165,465**

(*) The metered sales adjustments represents annualizing specific customers for 12 months of billing and annualization of the 2023 base rates.

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER SSS OPERATIONS

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

LINE NO.	ACCT. NO.	CUSTOMER CLASSIFICATION	PRO FORMA PRESENT RATES 12 ME June 2024	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION	ANNUALIZE DSIC ADJUSTMENT	OTHER REVENUE ADJUSTMENT	PRO FORMA PRESENT RATES 12 ME June 2025	PERCENT	AMOUNT	PRO FORMA PROPOSED RATES
1		OPERATING REVENUES	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
2		METERED SALES									
3	522.1	RESIDENTIAL	$61,972,269	$219,811	($787,209)	$656,543		$62,061,414	-22.07%	($13,696,035)	$48,365,379
4	522.2	COMMERCIAL	16,894,226	60,704	(162,064)	179,499		16,972,365	145.47%	24,689,929	41,662,294
5	522.3	INDUSTRIAL	2,331,900			25,129		2,357,029	145.47%	3,428,802	5,785,831
6	522.4	MUNICIPAL	1,392,254		(4,411)	14,961		1,402,804	145.47%	2,040,678	3,443,482
7	522.4	MSICELLANEOUS	9,343,619			100,911		9,444,530	160.63%	15,170,751	24,615,281
8		**TOTAL METERED SALES**	**$91,934,268**	**$280,515**	**($953,684)**	**$977,043**	**$0**	**$92,238,142**	**34.30%**	**$31,634,125**	**$123,872,267**
9		UNMETERED SALES									
10	522.1	RESIDENTIAL	$0					$0	0.00%	0	$0
11	522.2	COMMERCIAL	0					0	0.00%	0	0
12	522.3	INDUSTRIAL	0					0	0.00%	0	0
13	522.4	MUNICIPAL	0					0	0.00%	0	0
14	522.4	MSICELLANEOUS	0					0	0.00%	0	0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**0.00%**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$91,934,268**	**$280,515**	**($953,684)**	**$977,043**	**$0**	**$92,238,142**	**34.30%**	**$31,634,125**	**$123,872,267**
17		OTHER OPERATING REVENUES									
18	530	GUARANTEED REVENUES	$0					0	0.00%	0	$0
19	532	LATE PAYMENT FEES	462,154				$1,528	463,682	34.30%	159,024	622,706
20	536	MISC SERVICE REVENUES	934,004					934,004	0.00%	0	934,004
21	534	RENTS FROM PROPERTIES	$0					0	0.00%	0	0
22	535	INTERCOMPANY RENTS	$0					0	0.00%	0	0
23	523	OTHER WW REVENUES	$1,835,040					1,835,040	0.00%	0	1,835,040
23 24		**TOTAL OTHER OPERATING REVENUES**	**$3,231,197**	**$0**	**$0**	**$0**	**$1,528**	**$3,232,725**	**4.92%**	**$159,024**	**$3,391,750**
25		**TOTAL OPERATING REVENUES**	**$95,165,465**	**$280,515**	**($953,684)**	**$977,043**	**$1,528**	**$95,470,867**	**33.30%**	**$31,793,150**	**$127,264,017**

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER SSS OPERATIONS

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$72,018,572				
2	Present Rates At 06/30/2024				$83,258,471		
3	Present Rates At 06/30/2025						$95,165,465
4							
5	TCJA & EADIT Adjustment	48,442					
6	Unbilled Adjustment	(2,746,186)					
7	DSIC Adjustment	(322,710)				977,043	
8	Arrearage Management Program Adjustment	106,230					
9	Annualize 2023 Rate Change	12,652,954					
10	Change in Customers	164,777		$140,258		280,515	
11	Usage Normalization			(1,252,647)		(953,684)	
12	Annualize Valley WW			1,426,222			
13	Annualize Foster WW	364,529		232,268			
14	Annualize York WW			$10,507,182			
15	Annualize Upper Pottsgrove WW	172,272					
16	IPP Revenue Adjustment	683,734					
17	Strattanville Borough Adjustment Acquisition	6,200					
18	Farmington WW			322,926			
19	Acquisition Sadsbury WW			471,228			
20	Late Payment Fee Adjustment	109,657		59,557		1,528	
21							
22	Pro Forma Adjustment		11,239,899		11,906,994		305,402
23	Pro Forma Present Rates At June 30, 2023		$83,258,471				
24	Pro Forma Present Rates At June 30, 2024				$95,165,465		
25	Pro Forma Present Rates At June 30, 2025						$95,470,867

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

TCJA & EADIT Adjustment

The following adjustment is being made to eliminate the tax credit, and EADIT revenues per books for the twelve months ended June 30, 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT
1	**Metered Sales**	
2	Residential	($0)
3	Commercial	0
4	Industrial	0
5	Municipal	0
6	Miscellaneous (Bulk Customers)	0
7	Other WW Revenue	48,442
8	Total Metered Sales	$48,442
9	**Unmetered Sales**	
10	Residential	$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Miscellaneous (Bulk Customers)	0
15	Total Unmetered Sales	$0
16	Total Wastewater Surcharges	$48,442
17	Other Operating Revenues	$0
18	Pro Forma Adjustment	$48,442

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

Unbilled Revenue Adjustment

The following adjustment is being made to eliminate unbilled revenue accrued per books for the twelve months ended June 30, 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT
1	**Metered Sales**	
2	Residential	($466,950)
3	Commercial	(443,613)
4	Industrial	(43,962)
5	Municipal	(31,392)
6	Miscellaneous (Bulk Customers)	(1,760,270)
7	Total Metered Sales	($2,746,186)
8	**Unmetered Sales**	
9	Residential	$0
10	Commercial	0
11	Industrial	0
12	Municipal	0
13	Miscellaneous (Bulk Customers)	0
14	Total Unmetered Sales	$0
15	Total Unbilled	($2,746,186)
16	Other Operating Revenues	$0
17	Pro Forma Adjustment	($2,746,186)

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

DSIC Adjustment

The 06/30/2023 pro forma revenue adjustment is being made to eliminate the Distribution System Inprovement Charge (DSIC) revenues per book for the 12 months ended June 30, 2023 in order to reset the DSIC to zero. The 06/30/2025 pro froma revenue adjustment is to annualize the DSIC revenues for 12 months ending June 30, 2025 based on the Company's pro forma level rate of 2.30%.

LINE NO.	DESCRIPTION	6/30/2023 PER BOOK DSIC REVENUE	6/30/2023 ANNUALIZED DSIC REVENUE	6/30/2025 ANNUALIZED DSIC REVENUE	6/30/2023 PRO FORMA ADJUSTMENT	6/30/2025 PRO FORMA ADJUSTMENT
1	**Metered Sales**					
2	Residential	$234,471	$0	$656,543	($234,471)	$656,543
3	Commercial	57,799	0	179,499	(57,799)	179,499
4	Industrial	11,355	0	25,129	(11,355)	25,129
5	Municipal	6,684	0	14,961	(6,684)	14,961
6	Sales For Resale	92	0		(92)	0
7	Miscellaneous (Bulk)	12,309	0	100,911	(12,309)	100,911
8	Total Metered Sales	$322,710	$0	$977,043	($322,710)	$977,043
9	**Unmetered Sales**					
10	Residential					
11	Commercial					
12	Industrial					
13	Municipal					
14	Miscellaneous (Bulk)					
15	Total Unmetered Sales	$0	$0	$0	0	$0
16	Total DSIC Wastewater Sales	$322,710	$0	$977,043	($322,710)	$977,043
17	Other Operating Revenues	$0	$0	$0	$0	$0
18	Pro Forma Adjustment	$322,710	$0	$977,043	($322,710)	$977,043

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

AMP Deferred Revenue Adjustment

The following adjustment is being made to remove Arrearage Management Program (AMP) revenue credit booked in residential account for the twelve months ended June 30, 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT
1	**Metered Sales**	
2	Residential	$106,230
3	Commercial	0
4	Industrial	0
5	Municipal	0
6	Miscellaneous (Bulk Customers)	0
7	Total Metered Sales	$106,230
8	**Unmetered Sales**	
9	Residential	$0
10	Commercial	0
11	Industrial	0
12	Municipal	0
13	Miscellaneous (Bulk Customers)	0
14	Total Unmetered Sales	$0
15	Total AMP Deferred Revenue	$106,230
16	Other Operating Revenues	$0
17	Pro Forma Adjustment	$106,230

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

Annualized Base Year Rate Change

This revenue adjustment is being made to reflect the annualization of base year revenue from the new base rates which took effect on January 28, 2023.

LINE NO.	DESCRIPTION	6/30/2023 PER BOOKS REVENUE	6/30/2023 ANNUALIZED REVENUE	6/30/2023 PRO FORMA ADJUSTMENT
1	**Metered Sales**			
2	Residential	$43,362,936	$52,598,885	$9,235,949
3	Commercial	12,145,052	14,488,552	2,343,500
4	Industrial	1,648,669	2,048,426	399,757
5	Municipal	1,039,110	1,239,585	200,475
6	Sales For Resale	0	0	0
7	Miscellaneous (Bulk)	8,530,333	9,003,605	473,272
8	Total Metered Sales	$66,726,099	$79,379,053	$12,652,954
9	**Unmetered Sales**			
10	Residential	$0	$0	$0
11	Commercial	0	0	0
12	Industrial	0	0	0
13	Municipal	0	0	0
14	Miscellaneous (Bulk)	0	0	0
15	Total Unmetered Sales	$0	$0	$0
16	Total Billed Wastewater Sales	$66,726,099	$79,379,053	$12,652,954
17	Other Operating Revenues	$0	$0	$0
18	Pro Forma Adjustment	$66,726,099	$79,379,053	$12,652,954

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

Change in Number of Customers

The following historic revenue adjustment reflects the change in revenues due to the average change in number of customers during the twelve months ended June 30,2023. The following future and fully forecasted revenue adjustment reflects the change in revenues due to the projected change in number of customers during the twelve months ending June 30,2024 through June 30, 2025. Projections were based on a two year historical growth average exclusive of acquisitions.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 REVENUE ADJUSTMENT	PRESENT RATES 6/30/2024 REVENUE ADJUSTMENT	PRESENT RATES 6/30/2025 REVENUE ADJUSTMENT
1	**Metered Sales**			
2	Residential	$131,053	$109,906	$219,811
3	Commercial	33,724	30,352	60,704
4	Industrial			
5	Municipal			
6	Miscellaneous (Bulk Customers)			
7	Other WW Revenue			
8	Total Metered Sales	$164,777	$140,258	$280,515
9	**Unmetered Sales**			
10	Residential	$0	$0	$0
11	Commercial	0	0	0
12	Industrial	0	0	0
13	Municipal	0	0	0
14	Miscellaneous (Bulk Customers)	0	0	0
15	Total Unmetered Sales	$0	$0	$0
16	Total Wastewater Surcharges	$164,777	$140,258	$280,515
17	Other Operating Revenues	$0	$0	$0
18	Pro Forma Adjustment	$164,777	$140,258	$280,515

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

Usage Trend Adjustment

This adjustment is being made to normalize usage and address the change in usage trend in residential, commercial and municipal usage as well as the decline in usage that has been experienced for many years and is expected to continue to occur. Please refer to the testimony of Charles Rea (PAWC Statement No. 10).

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	**Metered Sales**		
2	Residential	($977,293)	($787,209)
3	Commercial	(232,359)	(162,064)
4	Industrial	0	0
5	Municipal	(42,995)	(4,411)
6	Sales For Resale	0	0
7	Miscellaneous (Bulk)	0	0
8	Total Metered Sales	($1,252,647)	($953,684)
9	**Unmetered Sales**		
10	Residential	$0	$0
11	Commercial	0	0
12	Industrial	0	0
13	Municipal	0	0
14	Miscellaneous (Bulk)	0	0
15	Total Unmetered Sales	$0	$0
16	Total Wastewater Sales	($1,252,647)	($953,684)
17	Other Operating Revenues	$0	$0
18	Pro Forma Adjustment	($1,252,647)	($953,684)

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

Annualization - Valley Wastewater

This adjustment is to annualized Valley wastewater revenue from the change in rates effective November 19, 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 REVENUE ADJUSTMENT
1	**Metered Sales**	
2	Residential	$1,264,081
3	Commercial	117,789
4	Industrial	0
5	Municipal	44,352
6	Miscellaneous (Bulk Customers)	0
7	Total Metered Sales	$1,426,222
8	**Unmetered Sales**	
9	Residential	$0
10	Commercial	0
11	Industrial	0
12	Municipal	0
13	Miscellaneous (Bulk Customers)	0
14	Total Unmetered Sales	$0
15	Total Sales	$1,426,222
16	Other Operating Revenues	$0
17	Pro Forma Adjustment	$1,426,222

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

Annualization - Foster Township Wastewater

Foster Township WW system was acquired October 2022. The adjustment forJune 2023 is to annualized the revenue for full 12 months of billing. The adjustment for June 2024 is annualized revenue applying the approved rates in Docket No. R-2022-3031673.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 REVENUE ADJUSTMENT	PRESENT RATES 6/30/2024 REVENUE ADJUSTMENT	PRESENT RATES 6/30/2025 REVENUE ADJUSTMENT
1	**Metered Sales**			
2	Residential	$170,537	$126,680	$0
3	Commercial	12,244	8,820	0
4	Industrial	177,299	96,768	0
5	Municipal	4,449	0	0
6	Miscellaneous (Bulk Customers)	0	0	0
7	Total Metered Sales	$364,529	$232,268	$0
8	**Unmetered Sales**			
9	Residential	$0	$0	$0
10	Commercial	0	0	0
11	Industrial	0	0	0
12	Municipal	0	0	0
13	Miscellaneous (Bulk Customers)	0	0	0
14	Total Unmetered Sales	$0	$0	$0
15	Total Wastewater Sales	$364,529	$232,268	$0
16	Other Operating Revenues	$0	$0	$0
17	Pro Forma Adjustment	$364,529	$232,268	$0

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

Annualization - York Township Wastewater

York Township WW system was acquired May 2022. The adjustment for 12 Months Ending June 2024 is to recognize the revenue using the authorized rates that will take into effect on 05/27/2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 ANNUALIZED REVENUE	PRESENT RATES 6/30/2024 ANNUALIZED REVENUE	REVENUE ADJUSTMENT
1	**Metered Sales**			
2	Residential	$6,592,965	$14,364,326	$7,771,361
3	Commercial	3,041,701	5,295,142	2,253,441
4	Industrial	5,708	9,979	4,271
5	Municipal	185,648	323,743	138,095
6	Miscellaneous (Bulk Customers)	7,005,759	7,345,773	340,014
7	Total Metered Sales	$16,831,781	$27,338,963	$10,507,182
8	**Unmetered Sales**			
9	Residential	$0	$0	$0
10	Commercial	0	0	0
11	Industrial	0	0	0
12	Municipal	0	0	0
13	Miscellaneous (Bulk Customers)	0	0	0
14	Total Unmetered Sales	$0	$0	$0
15	Total Wastewater Sales	$16,831,781	$27,338,963	$10,507,182
16	Other Operating Revenues	$0	$0	$0
17	Pro Forma Adjustment			$10,507,182

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

Annualization - Upper Pottsgrove Wastewater

Upper Pottsgrove was acquired July 2022. The customer received the first bill in August 2022. The base year for Upper Pottsgrove WW had only 11 billed months. This adjustment is to account for 1 bill to reflect 12 full months of billing determinants.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 REVENUE ADJUSTMENT
1	**Metered Sales**	
2	Residential	$163,240
3	Commercial	9,032
4	Industrial	0
5	Municipal	0
6	Miscellaneous (Bulk Customers)	0
7	Total Metered Sales	$172,272
8	**Unmetered Sales**	
9	Residential	$0
10	Commercial	0
11	Industrial	0
12	Municipal	0
13	Miscellaneous (Bulk Customers)	0
14	Total Unmetered Sales	$0
15	Total Wastewater Sales	$172,272
16	Other Operating Revenues	$0
17	Pro Forma Adjustment	$172,272

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

IPP Surcharge Adjustment

This adjustment is to account for the change in IPP surcharge as well as to reflect all IPP revenues in Miscellaneous account line.

LINE NO.	DESCRIPTION	6/30/2023 PER BOOK IPP REVENUE	6/30/2023 ANNUALIZED IPP Revenue	Adjustment
1	**Metered Sales**			
2	Residential	($133)	$0	$133
3	Commercial	196,322	0	(196,322)
4	Industrial	337,932	0	(337,932)
5	Municipal	368	0	(368)
6	Miscellaneous/Bulk	509,478	0	(509,478)
8	Total Metered Sales	$1,043,967	$0	($1,043,967)
9	**Unmetered Sales**			
10	Residential			
11	Commercial			
12	Industrial			
13	Municipal			
14	Miscellaneous/Bulk			
15	Total Unmetered Sales	$0	$0	$0
16	Other Wastewater Revenue	$58,897	$1,835,040	$1,776,143
17	Other Operating Revenues	$0	$0	$0
18	Pro Forma Adjustment			$732,176

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

Adjustment for Strattanvile Borough Billing

During the 12 months ending June 2023, Strattanville Borough customer received 11 bills. This is adjustment is to account for the missing one bill which was billed and posted outside of the 12 months period ending June 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 REVENUE ADJUSTMENT
1	**Metered Sales**	
2	Residential	$0
3	Commercial	0
4	Industrial	0
5	Municipal	6,200
6	Miscellaneous (Bulk Customers)	0
7	Total Metered Sales	$6,200
8	**Unmetered Sales**	
9	Residential	$0
10	Commercial	0
11	Industrial	0
12	Municipal	0
13	Miscellaneous (Bulk Customers)	0
14	Total Unmetered Sales	$0
15	Total Wastewater Sales	$6,200
16	Other Operating Revenues	$0
17	Pro Forma Adjustment	$6,200

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

Acquisition Farmington Wastewater

The Company anticipates acquiring Farmington Township Wastewater System in April 2024 and will begin providing service to the entity's customers. The following adjustment annualizes the revenues associated with this acquisition.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 REVENUE ADJUSTMENT
1	**Metered Sales**	
2	Residential	$265,788
3	Commercial	49,434
4	Industrial	5,136
5	Municipal	2,568
6	Miscellaneous (Bulk Customers)	0
7	Total Metered Sales	$322,926
8	**Unmetered Sales**	
9	Residential	$0
10	Commercial	0
11	Industrial	0
12	Municipal	0
13	Miscellaneous (Bulk Customers)	0
14	Total Unmetered Sales	$0
15	Total Wastewater Sales	$322,926
16	Other Operating Revenues	$0
17	Pro Forma Adjustment	$322,926

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

Acquisition Sadsbury Township Municipal Authority WW

The Company anticipates acquiring Sadsbury Municipal Township Wastewater System before the end of the fully projected test year and will begin providing service to the entity's customers. The following adjustment annualizes the revenues associated with this acquisition.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 REVENUE ADJUSTMENT
1	**Metered Sales**	
2	Residential	$348,031
3	Commercial	123,197
4	Industrial	0
5	Municipal	0
6	Miscellaneous (Bulk Customers)	0
7	Total Metered Sales	$471,228
8	**Unmetered Sales**	
9	Residential	$0
10	Commercial	0
11	Industrial	0
12	Municipal	0
13	Miscellaneous (Bulk Customers)	0
14	Total Unmetered Sales	$0
15	Total Wastewater Sales	$471,228
16	Other Operating Revenues	$0
17	Pro Forma Adjustment	$471,228

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

Penalties

The following adjustment reflects the annualization of revenues associated with changes imposed during twelve months ending June 30, 2023 and projected to be imposed during twelve months ending June 30, 2024 and twelve months ending June 30, 2025. Additionally, annualized late payment charges are calculated based on revenues at the proposed rate level.

LINE NO.	DESCRIPTION	PER BOOKS 6/30/23	PRESENT RATES 6/30/23	PRESENT RATES 6/30/24	PRESENT RATES 6/30/25	PROPOSED RATES 6/30/25
1	Total Billed Wastewater Sales	$67,986,546	$81,814,532	$93,661,969	$93,965,843	$125,599,969
2	% Of Penalties To Total					
3	Total Company Sales - 2 Year Avg	0.5027%	0.5027%	0.5027%	0.5027%	0.5027%
4	Penalties	292,939	411,282	470,839	472,366	631,391
5	Less: Per Books At 06/30/2023		292,939			
6	Less: Present Rates At 06/30/2023			411,282		
7	Less: Present Rates At 06/30/2024				470,839	
8	Less: Present Rates At 06/30/2025					472,366
9	Pro Forma Adjustments		$118,343	$59,557	$1,527	$159,025

Witness: Charles Rea

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Summary of Rate Base Adjustments

LINE NO.	DESCRIPTION		DEPRECIATED ORIGINAL COST 6/30/23	DEPRECIATED ORIGINAL COST 6/30/24	DEPRECIATED ORIGINAL COST 6/30/25	DEPRECIATED ORIGINAL COST PROPOSED
1	Non-Depreciable Plant		$15,255,948	$15,975,719	$15,975,719	$15,975,719
2	Depreciable Plant		906,492,568	954,434,573	995,398,807	995,398,807
3	Total Utility Plant In Service		921,748,516	970,410,292	1,011,374,526	1,011,374,526
4	Deduct:					
5	Contributions In Aid Of Construction		45,689,787	49,337,134	50,089,276	50,089,276
6	Customer Advances For Construction		833,590	833,590	833,590	833,590
7	Excluded Property		0	0	0	0
8	Sub-Total		46,523,377	50,170,724	50,922,866	50,922,866
9	Net Utility Plant In Service		875,225,139	920,239,568	960,451,660	960,451,660
10	Accumulated Depreciation		214,954,156	236,964,175	256,394,760	256,394,760
11	Depreciated Utility Plant In Service		660,270,983	683,275,393	704,056,900	704,056,900
12	Add:					
13	Materials And Supplies		439,941	439,941	439,941	439,941
14	Cash Working Capital - Expenses		1,295,746	1,970,240	2,230,011	2,230,011
15	Accrued And Prepaid Taxes		441,227	423,265	458,195	352,072
16	Acquisition Adjustments		4,453,933	4,179,248	3,749,235	3,749,235
17	Other Additions		0	0	0	0
18	Deduct:					
19	Cash Working Capital - Int And Div		957,806	1,119,802	1,186,256	1,186,070
20	Unamortized Itc (3%)		0	0	0	0
21	Extension Deposits In Suspense		0	0	0	0
22	Tax Cuts and Jobs Act -Stub Period		289,364	165,959	84,324	84,324
23	Other Deductions		0	0	0	0
24	Deferred Taxes		59,546,959	59,596,580	60,227,143	60,227,143
25	Total Rate Base Elements		$606,107,701	$629,405,746	$649,436,559	$649,330,622
26	Utility Operating Income					
27	Per Books	$20,864,862	3.44%	3.32%	3.21%	3.21%
28	Present Rates At 06/30/2023	24,793,556	4.09%	-	-	-
29	Present Rates At 06/30/2024	30,554,666	-	4.85%	-	-
30	Present Rates At 06/30/2025	28,865,976	-	-	4.44%	-
31	Proposed Rates At 06/30/2025	51,556,851	-	-	-	7.94%

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 6/30/2023	ADDITIONS	SADSBURY ACQUISITION	FARMINGTON WW ACQUISITION	RETIREMENTS	ESTIMATED BOOK COST 6/30/2024	ADDITIONS	RETIREMENTS	ESTIMATED BOOK COST 6/30/2025
1	352.00	Franchises & Consents	$221,140	$0	$0	$0	$0	$221,140	$0	$0	$221,140
2	353.00	Land & Land Rights	15,034,808	0	698,106	21,666	0	15,754,580	0	0	15,754,580
3		Total Intangible Plant	$15,255,948	$0	$698,106	$21,666	$0	$15,975,719	$0	$0	$15,975,719
4	354.20	Structures And Improvements - Collection	$8,981,081	$664,337	$0	$0	$119,051	$9,526,366	$692,081	$78,459	$10,139,988
5	354.30	Structures And Improvements - SPP	24,476,334	0	98,829	252,055	0	24,827,218	0	0	24,827,218
6	354.40	Structures And Improvements - TDP	279,404,971	0	132,948	536,916	0	280,074,835	0	0	280,074,835
7	354.70	Structures And Improvements - General	4,934,435	1,501,798	0	0	269,127	6,167,105	4,195,640	475,644	9,887,101
8	355.00	Power Generation Equipment	6,013,489	1,686,056	0	0	302,147	7,397,397	0	0	7,397,397
9	360.10	Collection Sewers - Force Mains	54,333,332	3,893,524	0	2,343,082	684,258	59,885,680	1,997,523	215,559	61,667,644
10	361.10	Collection Sewers - Gravity Mains	244,629,963	5,918,996	2,304,670	1,068,952	1,046,813	252,875,767	7,904,074	884,945	259,894,896
11	361.20	Manholes	46,191,914	1,309,474	114,786	347,289	193,412	47,770,051	1,075,086	100,330	48,744,806
12	363.00	Services	60,663,633	2,715,651	3,378	286,835	390,177	63,279,321	1,536,725	120,738	64,695,307
13	364.00	Flow Measuring Devices	662,476	0	0	0	0	662,476	0	0	662,476
14	365.00	Flow Measuring Installations	272,564	0	0	0	0	272,564	0	0	272,564
15	370.00	Receiving Wells	675,841	0	0	0	0	675,841	0	0	675,841
16	371.00	Pumping Equipment	17,249,718	1,500,493	21,393	248,619	268,894	18,751,330	5,026,791	569,869	23,208,253
17	380.00	Treatment Equipment	135,952,510	21,552,749	0	533,623	847,634	157,191,247	18,555,033	1,961,807	173,784,473
18	381.00	Plant Sewers	6,608,602	0	0	0	0	6,608,602	0	0	6,608,602
19	382.00	Outfall Sewer Lines	603,465	0	0	0	0	603,465	2,100,000	181,386	2,522,079
20	389.10	Other Plant And Miscellaneous Equipment - Intangibles	2,477,450	153,183	0	0	0	2,630,633	1,230,144	90,693	3,770,083
21	390.00	Office Furniture And Equipment	852,187	25,050	0	0	0	877,237	0	0	877,237
22	390.20	Computers & Peripheral	0	45,090	0	0	0	45,090	0	0	45,090
23	391.00	Transportation Equipment	3,747,275	379,135	0	36,879	67,942	4,095,347	16,241	1,841	4,109,747
24	392.00	Stores Equipment	107,351	0	0	0	0	107,351	0	0	107,351
25	393.00	Tools, Shop And Garage Equipment	1,217,562	225,798	5,873	2,100	0	1,451,333	125,866	0	1,577,200
26	394.00	Laboratory Equipment	705,530	7,284	0	42,162	26,822	728,154	4,060	105,930	626,284
27	395.00	Power Operated Equipment	571,397	41,399	0	0	7,419	605,377	1,140,737	129,321	1,616,793
28	396.00	Communication Equipment	3,257,338	1,514,598	10,210	0	7,652	4,774,494	78,054	521,963	4,330,584
29	397.00	Miscellaneous Equipment	1,887,921	648,139	0	0	0	2,536,060	730,936	6,270	3,260,727
30	398.00	Other Tangible Plant	14,232	0	0	0	0	14,232	0	0	14,232
31		Total Tangible Plant	$906,492,568	$43,782,754	$2,692,087	$5,698,512	$4,231,348	$954,434,573	$46,408,989	$5,444,755	$995,398,807
32		Total Utility Plant In Service	$921,748,516	$43,782,754	$3,390,193	$5,720,178	$4,231,348	$970,410,292	$46,408,989	$5,444,755	$1,011,374,526

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Contributions in Aid of Construction (CIAC)

The Company receives Contributions in Aid of Construction (CIAC) on an annual basis. The Commission's Order dated April 21, 1993, at Docket No. R-922428 approved the use of a three year average to calculate the future test year additions to CIAC. The following adjustment reflects the projected CIAC to be received during the twelve months ended June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Contributions In Aid Of Construction	$45,689,787	$49,337,134
2	Plus: Three Year Average Of Contributions	752,142	752,142
3	Plus: Sadsbury WW Acquired Contributions	925,000	
4	Plus: Farmington WW Acquired Contributions	1,970,206	
5	Contributions In Aid Of Construction	($49,337,134)	($50,089,276)

Witness: Stacey D. Gress
Reference: FR V.16 & Exhibit No. 3-C

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Customer Advances For Construction (CAC)

The Company requires Customer Advances for Construction (CAC) for all main extensions requested by developers. New projects increase the CAC account and refunds to be made during the future test year to developers for prior year CAC decrease the CAC account. The following adjustment reflects the level of activity (advances and refunds) projected for the twelve months ended June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Customer Advances For Construction	$833,590	$833,590
2	Plus: Customer Advances For Construction To Be Capitalized	0	0
3	Sub-Total	833,590	833,590
4	Less: Customer Advances For Construction To Be Refunded	0	0
5	Customer Advances For Construction	($833,590)	($833,590)

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Materials And Supplies

The Company's claim for materials and supplies at June 30, 2024 and June 30, 2025 is calculated on the basis of the average monthly balances in the materials and supplies account during the period June 30, 2022 and June 30, 2023.

LINE NO.	MONTH	DETAIL	PRESENT RATES 06/30/2024 and 06/30/2025 AMOUNT
1	June, 2022	$399,436	
2	July	414,046	
3	August	403,861	
4	September	401,626	
5	October	521,627	
6	November	520,513	
7	December	528,638	
8	January, 2023	372,662	
9	February	441,215	
10	March	365,059	
11	April	391,959	
12	May	476,991	
13	June, 2023	481,594	
14	Total	$5,719,227	
15	Average		$439,941
16	Allowance For Materials And Supplies		
17	At 06/30/2024 and 06/30/2025		$439,941

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for wastewater service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months ended June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2025.

The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2023				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	$69,272,386	$83,258,471	$95,165,465	$95,470,867
9	Lag Days	50.6	50.6	50.6	50.6
10	Dollar Days	$3,505,875,320	$4,213,711,054	$4,816,323,997	$4,831,780,392
11	Total Billed Revenue	$69,272,386	$83,258,471	$95,165,465	$95,470,867
12	Total Dollar Days	$3,505,875,320	$4,213,711,054	$4,816,323,997	$4,831,780,392
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	50.6	50.6	50.6	50.6
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	25.8	25.7	18.6	18.4
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	24.8	24.9	32.0	32.2
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		$18,994,003	$22,472,928	$25,278,040
20	Operating Expenses Per Day (Line 20 / 365 Days)		52,038	61,570	69,255
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		$1,295,746	$1,970,240	$2,230,011

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Support of Expense Days

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PER BOOKS AMOUNT	PER BOOKS DOLLAR DAYS	PRESENT RATES 06/30/2023 AMOUNT	PRESENT RATES 06/30/2023 DOLLAR DAYS	PRESENT RATES 06/30/2024 AMOUNT	PRESENT RATES 06/30/2024 DOLLAR DAYS	PRESENT RATES 06/30/2025 AMOUNT	PRESENT RATES 06/30/2025 DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	$5,654,439	$68,159,739	$5,654,439	$68,159,739	$5,086,101	$61,308,879	$5,242,427	$63,193,264
2	Group Insurance	11.00	1,144,567	12,590,237	1,144,567	12,590,237	1,039,286	11,432,146	1,070,797	11,778,767
3	OPEB's and VEBA	0.00	34,704	0	34,704	0	9,810	0	9,810	0
4	Pension	(6.41)	216,538	(1,389,085)	216,538	(1,389,085)	216,538	(1,389,085)	216,538	(1,389,085)
5	Purchased Power	31.00	2,833,130	87,838,864	2,836,413	87,940,651	3,401,689	105,466,568	3,372,968	104,576,097
6	Purchased Water	35.22	0	0	0	0	0	0	0	0
7	Chemicals	47.20	1,476,728	69,704,006	1,476,728	69,704,006	1,741,650	82,208,763	1,827,234	86,248,469
8	Miscellaneous	30.46	4,352,475	132,577,915	4,109,851	125,187,503	5,371,838	163,628,069	5,587,735	170,204,367
9	Transportation	54.08	171,440	9,272,210	171,440	9,272,210	161,722	8,746,619	176,055	9,521,809
10	Ins Other Than Group	(69.48)	74,539	(5,178,630)	74,539	(5,178,630)	2,041,112	(141,807,149)	2,098,237	(145,775,933)
11	Service Company	12.05	0	0	0	0	0	0	1,895,820	22,852,593
12	Waste Disposal	41.96	2,572,562	107,945,750	2,572,562	107,945,750	2,700,960	113,333,382	3,087,197	129,540,044
13	Telephone	3.88	211,445	820,828	211,445	820,828	211,445	820,828	211,445	820,828
14	Rents	(13.36)	59,345	(792,681)	59,345	(792,681)	59,345	(792,681)	50,345	(672,466)
15	Natural Gas	33.33	431,432	14,380,908	431,432	14,380,908	431,432	14,380,908	431,432	14,380,908
16	Totals		$19,233,344	$495,930,061	$18,994,003	$488,641,436	$22,472,928	$417,337,247	$25,278,040	$465,279,662
17	Average Lag			25.8		25.7		18.6		18.4
18	Sum. Of Expense Pro Forma Present Rates & Payroll Taxes		$19,800,189		$19,973,123		$23,592,074		$26,400,777	
19	Uncollectibles		566,845		979,120		1,119,146		1,122,737	
20	Amortizations		0		0		0		0	
21	Sum Of Other Expenses		14,880,869		14,884,152		17,101,090		19,690,305	
22	Miscellaneous		$4,352,475		$4,109,851		$5,371,838		$5,587,735	

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	NET REVENUE LAG DAYS FUTURE	PRESENT RATES 06/30/2023 TAXES PAYABLE	PRESENT RATES 06/30/2023 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2024 TAXES PAYABLE	PRESENT RATES 06/30/2024 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2025 TAXES PAYABLE	PRESENT RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT	PROPOSED RATES 06/30/2025 TAXES PAYABLE	PROPOSED RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT
1	General Assessment	190.2	$521,277	$271,635	$596,762	$310,970	$598,699	$311,980	$800,253	$417,009
2	Public Utility Realty Tax	47.4	0	0	0	0	0	0	0	0
3	Local Property Tax	64.6	2,172,894	384,362	2,195,864	388,425	2,227,703	394,057	2,227,703	394,057
4	State Income Tax	13.6	3,151,788	117,436	3,330,373	124,091	2,906,503	108,297	5,400,979	201,242
5	Federal Income Tax	(18.4)	6,589,948	(332,206)	7,939,173	(400,221)	7,064,720	(356,139)	13,097,077	(660,236)
6	Totals			$441,227		$423,265		$458,195		$352,072

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Calulation of Lag Days for Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	TAX PERIOD BEGINNING	TAX PERIOD ENDING	PAYMENTS 2022 - 2023 TAX				TOTAL TAX LAG DAY	REVENUE LAG LESS TAX LAG
1	General Assessment	7/1/22	6/30/23	9/13/22	9/27/22			(139.6)	190.3
	Percent of Payment			11%	31%				
	Lag Days			(11.30)	(28.85)				
		7/1/23	6/30/24	6/27/23					
	Percent of Payment			59%					
	Lag Days			(109.04)					
2	Public Utility Realty Tax	1/1/22	12/31/22	9/14/22				3.3	46.6
	Percent Of Payment			25%	25%	25%	25%		
	Lag Days			18.63					
		1/1/2023	12/31/2023	5/1/2023					
	Percent of Payment			25%	25%	25%	25%		
	Lag Days			(15.38)					
3	Local Property Tax			Lag calculated using expense lag method				(14)	64.6
	Payment								
	Lag Days								
4	State Income Tax	1/1/2022	12/31/2022	9/15/22	12/15/22			37.0	12.8
	Percent Of Payment			25%	25%	25%	25%		
	Lag Days			18.88	41.63				
		1/1/2023	12/31/2023	4/15/23	6/15/23				
	Percent Of Payment			25%	25%	25%	25%		
	Lag Days			(19.38)	(4.13)				
5	Federal Income Tax	1/1/22	12/31/22	7/26/2022	10/26/2022	12/21/2022	12/22/2022	69.00	(19.2)
	Percent Of Payment			25%	25%	25%	13%		
	Lag Days			6.13	29.13	43.13	21.69		
		1/1/2023	12/31/2023	3/21/2023	4/25/2023	6/26/2023			
	Percent Of Payment			13%	25%	25%			
	Lag Days			(12.81)	(16.88)	(1.38)			

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

The payment of interest on the Company's long term debt is made six months in arrears. Payment of interest on the Company's short term debt is made monthly in arrears. The payment of dividends on the Company's preferred stock is made quarterly in arrears. The average lag days of interest and dividend payments and the deduction of the average lag days for the receipt of revenue is calculated below to determine cash working capital requirements.

LINE NO.	DESCRIPTION	LONG TERM INTEREST	SHORT TERM INTEREST	PREFERRED DIVIDEND
1	**Average Lag Calculation**			
2	Future Revenue Lag Days	50.6	50.6	50.6
3	Less: Interest Payments Lag Days	81.6	15.0	46.4
4	Average Lag Between The Payment	(31.0)	35.6	4.2
5	Of Interest And The Receipt			
6	Of Revenues			

		PRESENT RATES 6/30/23		PRESENT RATES 6/30/24		PRESENT RATES 6/30/25		PROPOSED AMOUNT 6/30/25	
7	**Long Term Debt**								
8	Working Capital Requirements								
9	Pro Forma Annual Interest Expense	$10,243,220		$12,399,293		$13,183,562		$13,181,412	
10	Interest Expense Per Day								
11	(Line 9 / 365 Days)	28,064		33,971		36,119		36,113	
12	Cash Working Capital Required								
13	(Line 4 Col.1 X Line 11)		(870,265)		(1,053,441)		(1,120,050)		(1,119,864)
14	**Long Term Debt - Wastewater Specific**								
15	Working Capital Requirements								
16	Pro Forma Annual Interest Expense	1,030,383		780,967		779,324		779,197	
17	Interest Expense Per Day								
18	(Line 16 / 365 Days)	2,823		2,140		2,135		2,135	
19	Cash Working Capital Required								
20	(Line 4 Col.2 X Line 18)		(87,541)		(66,361)		(66,206)		(66,206)
21	**Preferred Dividends**								
22	Working Capital Requirements								
23	Pro Forma Annual Dividend Expense	0		0		0		0	
24	Dividend Expense Per Day								
25	(Line 23 / 365 Days)	0		0		0		0	
26	Cash Working Capital Required								
27	(Line 4 Col.3 X Line 25)		0		0		0		0
28	Total Cash Working Capital Required								
29	(Line 13 + Line 20 + Line 27)		($957,806)		($1,119,802)		($1,186,256)		($1,186,070)

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Acquisition Adjustments

The following adjustment reflects the recognition of the positive Utility Plant Acquisition Adjustments (UPAA) and transaction costs associated with the acquisition of the various wastewater utility assets pursuant to the terms of the Commission-approved settlement of the Company's rate cases at Docket Nos. R-2013-2355276, R-2017-2595853, R-2020-3019369 and R-2022-3031672. In addition, the Company is requesting recognition of the transaction costs associated with its acquisition of the wastewater assets of the Farmington Township (Wastewater) at Docket No. A-2023-3042567 and Sadsbury Township at Docket No. A-2023-3042058.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2023 AMOUNT	2024 Amortizations	PRESENT RATES 6/30/2024 AMOUNT	2025 Amortizations	PRESENT RATES 6/30/2025 AMOUNT
1	Delaware Sewer Acquisition Positive UPAA	Approved Docket No. R-2020-3019369	$46,789	$6,170	$40,619	$6,170	$34,449
2	Clean Treatment Sewage Company	Approved Docket No. R-2013-2355276	45,719	19,594	26,125	12,858	13,267
3	New Cumberland Borough WW Acq. Costs	Approved Docket No. R-2017-2595853	67,513	15,003	52,510	15,003	37,507
4	Sadsbury Acquisition Costs	Approved Docket No. R-2020-3019369	198,002	26,110	171,892	26,110	145,782
5	Exeter Acquisition Costs	Approved Docket No. R-2020-3019369	989,260	26,322	962,938	26,322	936,616
6	Delaware Sewer Acquisition Transaction Costs	Approved Docket No. R-2020-3019369	202,566	26,769	175,797	26,769	149,028
7	Turbotville WW Transaction costs	Approved Docket No. R-2020-3019369	5,002	660	4,342	660	3,682
8	Valley Township Wastewater Transaction Costs	Approved Docket No. R-2022-3031672	193,775	20,220	173,555	20,220	153,335
9	Foster Township Transactions Costs	Approved Docket No. R-2022-3031672	69,144	7,215	61,929	7,215	54,714
10	Borough of Royersford WW Acquisition Costs	Approved Docket No. R-2022-3031672	341,130	35,596	305,534	35,596	269,938
11	Upper Pottsgrove Township Transaction Costs	Approved Docket No. R-2022-3031672	357,989	37,355	320,634	37,355	283,279
12	City of York Wastewater Authority Acquisitions Costs	Approved Docket No. R-2022-3031672	1,937,044	202,126	1,734,918	202,126	1,532,792
13	Sadsbury WW Transactions Costs	Seeking Approval			91,470	8,385	83,085
14	Farmington Township (Wastewater) Transactions Costs	Seeking Approval			56,985	5,224	51,761
15	Effect to Rate Base Element		$4,453,933	$423,140	$4,179,248	$430,013	$3,749,235

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Tax Cuts and Jobs Act Stub Period

The following adjustment reflects the amortization of the federal income tax savings associated with the 2017 Tax Cuts and Jobs Act ("TCJA") for January 1, 2018 through June 30, 2018 (the "Stub Period"), as authorized in the settlement at Docket No. R-2020-3019369. The adjustment reflects a true-up to the accrual of interest at the residential mortgage lending rate specified by the Secretary of Banking in accordance with the Loan Interest and Protection Law (41. P.S. §§ 101, et seq.), which was lower than the amount projected in 2020, as well as the reconciliation amounts shown in the Company's 2021 and 2022 TCJA Surcharge Reconciliation filings are included as part of this adjustment, including the over/(under) collection plus interest, all approved at Docket No. R-2022-3019369. The Company is also proposing to amortize the balance at 06/30/2024 over a two-year period.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Tax Cuts and Jobs Act Stub Period			
2	Beginning Balance	$546,792	$289,364	$165,959
3	Less: 2022/2023 Amortization	(257,428)		
4	Less: 2023/2024 Amortization		(123,405)	
5	Less: 2024/2025 Amortization			(81,635)
6	Effect to Rate Base Element	$289,364	$165,959	$84,324

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Deferred Income Tax

The following calculation is being made to reflect the federal tax difference between using accelerated and straight-line depreciation, the effects of the Tax Cuts and Jobs Act, taxable contributions and advances and normalizing the effect of the repairs and maintenance deduction for state and federal tax. This adjustment is carried as a rate base reduction.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Deferred Tax	($59,546,959)	($59,596,580)	($60,227,143)
2	Less: Prior Year		(59,546,959)	(59,596,580)
3	Effect to Rate Base Element	($59,546,959)	($49,621)	($630,563)

Witness: Melissa Ciullo
Reference: FR IV.4

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
1		**Source Of Supply Expenses**				
2		-Operations-				
3	601.1	Salary And Wages	$0	$0	$0	$0
4	601.2	Salary And Wages	0	0	0	0
5	610.1	Purchased Water	0	0	0	0
6	615.1	Purchased Power	0	0	0	0
7	616.1	Purchased Fuel	0	0	0	0
8	620.1	Materials And Supplies	0	0	0	0
9	631.1	Contract Services - Engineering	0	0	0	0
10	633.1	Contract Services - Legal	0	0	0	0
11	636.1	Contract Services	0	0	0	0
12	604.1	Other Benefits	0	0	0	0
13	642.1	Rental Of Equipment	0	0	0	0
14	650.1	Transportation	0	0	0	0
15		-Maintenance-				
16	620.2	Materials And Supplies	0	0	0	0
17	631.2	Contract Services - Engineering	0	0	0	0
18	636.2	Contract Services	0	0	0	0
19	650.2	Transportation	0	0	0	0
		-Miscellaneous-				
20	675.1	Miscellaneous Operating Expense	0	0	0	0
21	675.2	Miscellaneous Maintenance Expense	0	0	0	0
22		Total Source Of Supply Expenses	$0	$0	$0	$0
23		**Water Treatment**				
24		-Operation-				
25	601.3	Salary And Wages	$3,200,349	$3,200,349	$2,933,017	$3,023,499
26	601.4	Salary And Wages	245,121	245,121	219,789	226,565
27	604.3	Employee Pension And Benefits	225	225	225	225
28	615.3	Purchased Power	2,649,621	2,651,691	3,252,274	3,234,166
29	618.3	Chemicals	1,476,728	1,477,882	1,735,234	1,810,725
30	620.3	Materials And Supplies	911,627	911,627	911,627	911,627
31	631.3	Contract Services - Engineering	11,497	11,497	11,497	11,497

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
32	633.3	Contract Services - Legal	0	0	0	0
33	634.3	Contract Services - Management	0	0	0	0
34	635.3	Contract Services - Test	336,086	336,086	336,086	336,086
35	636.3	Contract Services	986,703	986,703	1,054,403	1,054,403
36	641.3	Rental Of Building	0	0	0	(9,000)
37	642.3	Rental Of Equipment	645	645	645	645
38	650.3	Transportation	21,621	21,621	21,621	21,621
39		-Maintenance-				
40	620.4	Materials And Supplies	58,189	58,189	58,189	58,189
41	631.4	Contract Services - Engineering	555	555	555	555
42	636.4	Contract Services	54,939	54,939	54,939	54,939
43	650.4	Transportation	0	0	0	0
44	675.4	Miscellaneous Maintenance Expense	7,962	7,962	7,962	7,962
45		-Miscellaneous-				
46	675.3	Miscellaneous Operating Expense	3,878,241	3,878,241	4,196,639	4,582,876
47		Total Water Treatment Expense	$13,840,109	$13,843,333	$14,794,702	$15,326,581
48		**Transmission And Distribution**				
49		-Operation-				
50	601.5	Salary And Wages	$363,718	$363,718	$326,130	$336,184
51	601.6	Salary And Wages	270,295	270,295	242,362	249,834
52	604.5	Employee Pension And Benefits	0	0	0	0
53	615.5	Purchased Power	76,160	76,219	93,482	92,962
54	620.5	Materials And Supplies	15,075	15,075	15,075	15,075
55	631.5	Contract Services - Engineering	0	0	0	0
56	636.5	Contract Services	47,222	47,222	47,222	47,222
57	641.5	Rental Of Building	40,700	40,700	40,700	40,700
58	642.5	Rental Of Equipment	0	0	0	0
59	650.5	Transportation	0	0	0	0
60		-Maintenance-				
61	620.6	Materials And Supplies	$96,394	$96,394	$125,874	$125,874
62	631.6	Contract Services - Engineering	1,981	1,981	1,981	1,981
63	636.6	Contract Services	146,212	129,163	129,163	129,163

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
64	650.6	Transportation	0	0	0	0
65	675.6	Miscellaneous Operating Expense	86,744	86,744	86,744	86,744
66		-Miscellaneous-				
67	675.5	Miscellaneous Operating Expense	28,993	28,993	38,685	38,685
68		Total Transmission And Distribution	$1,173,494	$1,156,504	$1,147,417	$1,164,423
69		**Customer Accounting**				
70		-Operation-				
71	601.7	Salary And Wages	$3,573	$3,573	$3,204	$3,303
72	604.7	Employee Pension And Benefits	0	0	0	0
73	615.7	Purchased Power	0	0	0	0
74	620.7	Materials And Supplies	0	0	0	0
75	631.7	Contract Services - Engineering	0	0	0	0
76	633.7	Contract Services - Legal	0	0	0	0
77	636.7	Contract Services	0	0	0	0
78	641.7	Rental Of Building	18,000	18,000	18,000	18,000
79	642.7	Rental Of Equipment	0	0	0	0
80	650.7	Transportation	0	0	0	0
81	657.7	Insurance	0	0	0	0
82	670.7	Bad Debt	566,845	979,120	1,119,146	1,322,407
83		-Miscellaneous-				
84	675.7	Miscellaneous Expense	10,035	10,035	83,650	84,053
85		Total Customer Accounting	$598,453	$1,010,728	$1,224,000	$1,427,762
86		**Administrative And General**				
87	601.8	Salary And Wages	$1,165,146	$1,165,146	$1,044,735	$1,076,942
88	603.8	Salary Of Officers	0	0	0	0
89	604.8	Employee Pension And Benefits	1,801,198	1,549,957	1,421,216	1,463,981
90	615.8	Purchased Power	107,349	107,349	107,349	107,349
91	620.8	Materials And Supplies	9,769	9,769	9,769	9,769
92	631.8	Contract Services	14,445	14,445	14,445	14,445
93	632.8	Contract Services - Accounting	0	0	0	0

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
94	633.8	Contract Services - Legal	115,507	115,507	115,507	115,507
95	634.8	Contract Services - Management	0	0	61,056	1,959,428
96	635.8	Contract Services - Test	0	0	0	0
97	636.8	Contract Services	13,446	12,226	12,226	12,226
98	641.8	Rental Of Building	0	0	0	0
99	642.8	Rental Of Equipment	0	0	0	0
100	650.8	Transportation	149,818	149,818	140,100	154,433
101	656.8	Insurance - Vehicles	0	0	31,982	32,669
102	657.8	Insurance	0	0	1,429,009	1,453,593
103	658.8	Workers Compensation	74,439	74,439	137,332	139,443
104	659.8	Insurance	100	100	455,559	485,302
105	660.8	Advertising	0	0	0	0
106	666.8	Amortization Of Rate Case	0	0	76,393	76,393
107	667.8	Regulatory Commission	0	0	0	0
108		-Miscellaneous-				
109	675.8	Miscellaneous Expense	330,679	357,565	989,005	989,005
110		Total Administrative And General	$3,781,896	$3,556,321	$6,045,683	$8,090,486
111		Total Operating Expenses	$19,393,952	$19,566,886	$23,211,803	$26,009,252

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	DESCRIPTION	6/30/23 DETAIL	PRESENT RATES 6/30/23 AMOUNT	6/30/24 DETAIL	PRESENT RATES 6/30/24 AMOUNT	6/30/25 DETAIL	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$19,393,952				
2	Present Rates At 06/30/2023				$19,566,886		
3	Present Rates At 06/30/2024						$23,211,803
4	Proposed Rates At 06/30/2025						
5	Compensation	$0		($542,372)		$145,072	
6	Group Insurance	0		(105,281)		31,511	
7	Other Post Employment Benefits & VEBA	0		(24,894)		-	
8	Pension	0		-		-	
9	Purchased Power	0		608,162		-	
10	Waste Disposal	0		128,398		386,237	
11	Chemicals	0		264,922		85,584	
12	Change In Consumption Expense	3,283		(42,886)		(28,721)	
13	Transportation Expense	0		(9,718)		14,333	
14	Insurance Other Than Group	0		1,966,573		57,125	
15	Regulatory Expense (Rate Case Expense)	0		76,393		-	
16	Service Company Expense	0		-		1,895,820	
17	Postage and Customer Accounting	0		-		-	
18	Acquisition O&M	0		499,513		5,196	
19	401K & Defined Contribution Plan	0		(18,974)		10,628	
20	Rent Expense	0		-		(9,000)	
21	Miscellaneous Adjustments	(242,624)		705,055		200,073	
22	Uncollectibles	412,275		140,026		3,591	
23	Pro Forma Adjustments		172,934		3,644,917		2,797,449
24	Present Rates At 06/30/2023		$19,566,886				
25	Present Rates At 06/30/2024				$23,211,803		
26	Present Rates At 06/30/2025						$26,009,252

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Compensation

The following adjustment sets forth a summary of the Company's annualization of labor expense. The pro forma payroll for the future test years were developed by applying pay rates and associated performance pay that will become effective by June 30, 2024 and June 30, 2025 to the Company's full complement of employees.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Salary and Wages	$5,677,830	$5,852,629
2	Annualized Performance Plan	366,134	377,659
3	Less: 22.14% Capitalized portion not charged to operating expense	1,338,134	1,379,386
4	Sub-Total	4,705,830	4,850,902
5	Less: Amount Charged To Operating Expense		
6	During The Twelve Months Ended 06/30/23	5,248,202	
7	Less: Amount Charged To Present Rates		
8	During the Twelve Months Ended 06/30/24		4,705,830
9	Pro Forma Adjustment	($542,372)	$145,072

601.3 Salary and Wages - Water Treatment	($330,739)	$88,464
601.4 Salary and Wages - Water Treatment	(25,332)	6,776
601.5 Salary and Wages - Transmission & Distribution	(37,588)	10,054
601.6 Salary and Wages - Transmission & Distribution	(27,933)	7,472
601.7 Salary and Wages - Customer Accounting	(369.00)	99
601.8 Salary and Wages - Administrative and General	(120,411)	32,207

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Group Insurance

The adjustment of the group insurance cost is based on the January 2024 premiums annualized for the future test year number of employees, less the annualized employee contribution, and adjusted for the portion not charged to operations. The fully projected future test year was developed by adjusting the annualized 2024 amount by a 3 year average of 3.03%.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Group Insurance Cost	$1,334,814	$1,375,285
2	Less: 22.14% Not Charged To Operating Expense	295,528	304,488
3	Sub-Total	1,039,286	1,070,797
4	Less: Amount Charged To Operating Expense		
5	During the Twelve Months Ended 06/30/23	1,144,567	
6	Less: Amount Charged To Operating Expense		
7	During the Twelve Months Ended 06/30/24		1,039,286
8	Pro Forma Adjustment	($105,281)	$31,511
	604.8 A&G Employees Pension And Benefits	($105,281)	$31,511

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Other Post Employment Benefits (OPEB)

The following sets forth the Company's adjustment for post-retirement benefit costs under FAS 106 using the methodology approved by the Commission in the Company's base rate cases since 1992. In addition the Company has included the expense associated with the Company's contributions to the Voluntary Employee Beneficiary Association (VEBA).

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	Annualized OPEB Expense	$0
2	Annualized Retiree VEBA Expense ($600 x 21 employees)	12,600
3	Less: 22.14% Capitalized portion not charged to operating expense	2,790
4	Sub-Total	9,810
5	Less: Amount Charged To Operating Expenses	
6	For The Twelve Months Ended 06/30/2023	34,704
7	Pro Forma Adjustment	($24,894)
	604.8 A&G Employees' Welfare Expenses	($24,894)

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

401K, Defined Contribution Plan (DCP) and Employee Stock Purchase Plan (ESPP) Expense

The following adjustment is being made to annualize 401K, DCP contributions and ESPP contributions based on the annualized compensation claim at June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized 401K - Company Match	$175,671	$181,101
2	Annualized DCP	254,568	262,416
3	Less: 22.14% Not Charged To Operating Expense	95,255	98,195
4	Sub-Total	334,984	345,322
5	Annualized ESPP	11,863	12,153
6	Less: Amount Charged To Operating Expense	365,821	346,847
7	Pro Forma Adjustment	($18,974)	$10,628
	604.8 Employee Pension And Benefits AG	($18,974)	$10,628

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Purchased Power

This adjustment reflects the application of rates for purchased power to be in effect as of June 2023 to anticipated billing units for the future and fully projected rate years. Accounts were adjusted for any known rate changes in either the future or fully projected rate years and were also adjusted to reflect 12 monthly bills.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Power Cost	$3,333,944	$3,333,944
2	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/23 and 06/30/24	2,725,781	3,333,944
3	Pro Forma Adjustment	$608,163	$0
	615.3 Purchased Power - Water Treatment	$591,170	$0
	615.5 Purchased Power - Transmission and Distribution	16,992	-

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Taxes, Other than Income

Chemicals

The annualization of chemical costs was based on the application of quarterly contract prices in during 2023 to anticipated 12-month June 2024 usage. Current intra-2023 prices were adjusted by chemical family based on the current volatility in the market to project 2024 and 2025 cost levels.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Chemical Costs	$1,741,650	$1,827,234
2	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/23 and 06/30/24	1,476,728	1,741,650
3	Pro Forma Adjustment	$264,922	$85,584
	618.3 Chemicals - Water Treatment	$264,922	$85,584

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Waste Disposal

The waste disposal adjustment is the annualized test year costs adjusted for the three year average change in expense for the twelve months ended 06/30/2024 and 06/30/2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Waste Disposal Costs	$2,700,959	$3,087,197
2	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/23 and 06/30/24	2,572,562	2,700,959
3	Pro Forma Adjustment	$128,398	$386,237
	675.3 Waste Disposal	$128,398	$386,237

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Change in Consumption

During the future test year - twelve months ending 06/30/2024, and fully projected future test year - twelve months ending 06/30/2025, the Company will experience changes in consumption due to net addition or loss of customers and other factors affecting the usage of specific customers. The calculations shown below reflect estimates of the change in operating expenses that will be realized by these changes in consumption.

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Consumption (00 Gallons)	49,952,599	49,991,617	49,481,854	49,140,469
2	Change In Consumption		39,018	(509,763)	(341,385)
3	Power Costs Annualized 2021	$2,725,781			
4	Chemical Costs Per Book	1,476,728			
5	Total	$4,202,510			
6	Rate Of Production Costs (00 Gallons) (Line 5/Line 1)		$0.08413	$0.08413	$0.08413
7	Pro Forma Adjustment		$3,283	($42,886)	($28,721)
	615.1 Source of Supply - Purchased Power		$0	$0	$0
	615.3 Water Treatment - Purchased Power		2,070	(27,039)	(18,108)
	615.5 Transmission & Distribution - Purchased Power		59	(777)	(520)
	618.3 Water Treatment - Chemicals		1,154	(15,070)	(10,092)

Witness: Lori O'Malley
Reference: FR II.09

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Transportation Expense

The following adjustment reflects the annualization of transportation expense for the years ended June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Leased Vehicles Expense	$207,703	$226,112
2	Less: 22.14% Not Charged To Operating Expense	45,981	50,057
3	Sub-Total	161,722	176,055
4	Less: Amount Charged To Operating Expense		
5	During the Twelve Months Ended 06/30/23	171,440	
6	Less: Present Rates During the Twelve Months Ended 06/30/24		161,722
7	Pro Forma Adjustment	($9,718)	$14,333
	650.8 A & G - Miscellaneous General Expense	($9,718)	$14,333

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Insurance Other Than Group

The annualizations of Insurance Other Than Group (IOTG) costs were based on the actual IOTG premiums for the twelve months ending June 30, 2023, adjusted for the 5 year average of retroactive adjustments. The present rates 6/30/2024 amounts are based on twelve months ending June 30, 2023 increased by a 5 year average of 6.53%, except for claims amounts which were held at twelve months ended June 30, 2023 levels. Amounts for present rates 6/30/2025 were increased by a 5 year average of 6.53%, except for claims amounts which were held at present rates 6/30/2024 levels. Present rates have been allocated to other cost of service areas based on depreciated utility plant in service as of 6/30/23.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Workers Compensation Premium		$176,379	$179,090
2	Less: 22.14% Not Charged To Operating Expense		(39,047)	(39,647)
3	Sub-Total		137,332	139,443
4	Add: Annualized Vehicle, General Liability,			
5	Property And Other Insurance		1,903,780	1,958,794
6	Sub-Total		2,041,112	2,098,237
7	Less: Per Books and Present Rates		74,539	2,041,112
8	Pro Forma Adjustment		$1,966,573	$57,125
	656.8 Vehicle Insurance	55110000	$31,982	$687
	657.8 General Liability Insurance	55710000	1,416,239	24,584
	658.8 Workers Compensation	55720000	91,335	2,711
	658.8 Insurance WC Capitalized Credits	55720100	(28,442)	(600)
	659.8 Other Insurance	55730000	455,459	29,743

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Regulatory Expense (Rate Case Expense)

The following adjustment reflects the estimated cost of this rate case normalized over a two-year period. Additionally, there is an adjustment for a 10 year amortization of the Customer Class Demand Study.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	Rate Case Expense Allocation	$149,062
2	Normalized Over 2 Years	74,531
3	Plus Allocation of Amortization of Demand Study	1,862
4	Less: Amount Charged To Operating Expense	
5	During The Twelve Months Ended 06/30/2023	-
6	Pro Forma Adjustment	$76,393
	666.8 Regulatory Commission Expense	$76,393

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Service Company

This adjustment reflects the cost of services provided by American Water Works Service Company (AWWSC), for the twelve months ended June 30, 2024, and June 30, 2025. An allocation factor based on customer counts was applied to each cost of service area to allocate a portion of the total projected Service Company costs.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Service Company Cost	$0	$1,895,820
2	Less: Amount Charged To Operating Expense		
3	During The Twelve Months Ended 06/30/23	-	
4	And Present Rates 06/30/24		-
5	Pro Forma Adjustment	$0	$1,895,820
	634.8 AG - Contract Services - Management	$0	$1,895,820

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Acquisition O&M Expense Adjustment

The following adjustment reflects an adjustment to annualize O&M expenses related to the future acquisitions of the Farmington and Sadsbury wastewater systems, which are expected to close before the end of the fully projected future test year.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Additions:		
2	Farmington WW Annualized O&M	$259,725	$264,176
3	Sadsbury Annualized O&M	244,841	249,288
4	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/24	-	504,566
5	Pro Forma Adjustment	$504,566	$8,897
	408.12 Payroll Taxes	$5,053	$154
	408.2 Taxes, Other Than Income - Property	-	3,547
	601.3 Salary and Wages- Water Treatment	63,407	2,017
	604.8 A&G Employee Pension And Benefits	20,407	626
	615.3 Purch Power Oper WT	36,452	-
	615.5 Purch Power Oper TD	1,048	-
	618.3 Chemicals- Water Treatment	7,500	-
	620.5 M&S Oper TD	-	-
	620.6 M&S Maint TD	29,480	-
	634.8 AG - Contract Services Management	61,056	2,552
	636.5 Contract Services - Transmission & Distribution	-	-
	636.3 Cont Serv Other Oper	67,700	-
	636.8 Contract Service - Admin & General	-	-
	657.8 General Liability	12,770	-
	670.7 Uncollectible Acconts Exp - CA	-	
	675.3 Misc Exp Oper WT	190,000	-
	675.5 Misc Exp Oper TD	9,692	-

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Miscellaneous Expense Adjustment

The following adjustment reflects miscellaneous additions or deductions from pro forma expenses.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Additions:			
2	PA HQ - Corporate Campus		$281,440	
3	Nutrient Credits 5 Year Average	27,886		
4	Credit Card/E-check Transaction Fees		73,615	403
5	Arrearage Management Plan and Low Income Program			199,670
6	General Facility Maintenance		350,000	
7	Deductions:			
8	Donations	(1,000)		
9	Temporary Employee Costs	(18,269)		
10	Pension	(216,538)		
11	OPEB	(34,703)		
12	Pro Forma Adjustment	($242,624)	$705,055	$200,073

604.8 A&G Employee Pension And Benefits	(251,241)		
636.3 Cont Serv Other Oper	(17,049)		
636.8 Contract Service - Admin & General	(1,220)		
670.7 Uncollectible Acconts Exp - CA			199,670
675.7 Misc Exp Customer Accounting	-	73,615	403
675.8 Misc Expense Admin & General	26,886	631,440	

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Calculation of Uncollectible Accounts Expenses

The following adjustment develops the Company's uncollectible accounts expense claim calculated on the ratio of actual per books revenue to net write-offs. This ratio is applied to pro forma sales at present and proposed rates.

LINE NO	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Total Sales	$69,272,386	$83,258,471	$95,165,465	$95,470,867	$127,264,017
2	2 Year Average	1.1760%	1.1760%	1.1760%	1.1760%	1.1760%
3	Annualized Uncollectible Expense		$979,120	$1,119,146	$1,122,737	$1,496,625
4	Less: Amount Charged To Operating Expense					
5	During The Twelve Months Ended 06/30/2023		566,845			
6	Less: Present Rates 06/30/2023			979,120		
7	Less: Present Rates 06/30/2024				1,119,146	
8	Less: Present Rates 06/30/2025					1,122,737
9	Pro Forma Adjustment		$412,275	$140,026	$3,591	$373,888
670.7	Customer Accounting And Collecting - Bad Debt		$412,275	$140,026	$3,591	$373,888

Witness: Cas Swiz

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Depreciation

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Depreciation	$26,045,923	$26,885,285	$27,509,373
2	Less: Depreciation on Vehicles - Capitalized Portion		27,973	27,251
3	Subtotal	$26,045,923	$26,857,312	$27,482,122
4	Book Depreciation	21,451,478	26,045,923	26,857,312
5	Pro Forma Adjustment	$4,594,445	$839,362	$652,061
	503 Depreciation	$4,594,445	$839,362	$652,061

Witness: Stacey D. Gress, John Spanos
Reference: Exhibit No. 3-B, Exhibits No. 11

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Amortization Expense

This adjustment is being made to reflect the Company's claim for amortizations.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Clean Treatment Sewage Company	Approved Docket No. R-2013-2355276	$19,594	$12,246
2	New Cumberland Borough WW Acq. Costs	Approved Docket No. R-2017-2595853	15,003	15,003
3	Delaware Sewer Acquisition Positive UPAA	Approved Docket No. R-2020-3019369	6,170	6,170
4	Delaware Sewer Acquisition Transaction Costs	Approved Docket No. R-2020-3019369	26,769	26,769
5	Turbotville WW	Approved Docket No. R-2020-3019369	(20,406)	(20,406)
6	Turbotville WW Transaction costs	Approved Docket No. R-2020-3019369	660	660
7	Sadsbury Acquisition Costs	Approved Docket No. R-2020-3019369	26,110	26,110
8	Exeter Acquisition Costs	Approved Docket No. R-2020-3019369	26,322	26,322
9	Exeter Post-in-service AFUDC	Approved Docket No. R-2020-3019369	3,599	2,592
10	Exeter Deferred Depreciation	Approved Docket No. R-2020-3019369	10,857	8,057
11	Valley Township Wastewater Transaction Costs	Approved Docket No. R-2022-3031667	20,220	20,220
12	Foster Township Transactions Costs	Approved Docket No. R-2022-3031668	7,215	7,215
13	Foster Township WW	Approved Docket No. R-2022-3031669	(205,665)	(204,036)
14	Borough of Royersford WW Acquisition Costs	Approved Docket No. R-2022-3031672	35,596	35,596
15	Upper Pottsgrove Township Transaction Costs	Approved Docket No. R-2022-3031672	37,355	37,355
16	City of York Wastewater Authority Acquisitions Costs	Approved Docket No. R-2022-3031672	202,126	202,126
17	Sadsbury WW	Seeking Approval	-	(94,561)
18	Sadsbury WW Transactions Costs	Seeking Approval	-	9,147
19	Farmington Township (Wastewater) Transactions Costs	Seeking Approval	-	5,699
20	Arrearage Management Program - AMP	Seeking Approval		(110,380)
21	COVID-19 Emergency Response	Approved Docket No. R-2022-3031672	11,121	(9,699)
22	Tax Cuts and Jobs Act Stub Period and Reconciliation	Approved Docket No. R-2020-3019369	(123,405)	(77,838)
23	Pro Forma Expense		99,241	(75,633)
24	Less: Per Books		9,962	99,241
25	Pro Forma Adjustment		$89,279	($174,874)

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Rent Expense

This adjustment reflects the annualization of rates for rentals in effect as of the twelve months ending 06/30/2024 and 06/30/2025.

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
1	Annualized Rent Expense	$58,950	$49,950
2	Less: Per Books Amount and Present Rates	58,950	58,950
3	Pro Forma Adjustment	$0	($9,000)
	641.3 - Rents-Real Property - Water Treatment	$0	($9,000)

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Taxes, Other than Income

Pennsylvania Property Tax

The following adjustment reflects the projected property tax expense, local and PURTA, for the twelve months ended June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Property Subject to Tax	$332,831,629	$336,350,103	$340,683,721
2	Property Tax	$2,172,894		
3	Total	$2,172,894		
4	Rate (Line 3 / Line 1)	$0.006529	$0.006529	$0.006529
5	Projected property tax expense (Line 1 x Line 4)		$2,195,864	$2,224,156
6	Less: Amount Charged To Operating Expense			
7	During The 12 Months Ended 6/30/2023 & 06/30/2024		2,172,894	2,195,864
8	Pro Forma Adjustment		$22,970	$28,292
	408.2 Taxes, Other Than Income - Property		$22,970	$28,292

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Taxes, Other than Income

Payroll Taxes

The following adjustment is being made to annualize payroll tax expense based on the annualized compensation claim at June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Payroll Taxes	$481,914	$496,169
2	Less: 22.14% Not Charged To Operating Expense	106,696	109,852
3	Sub-Total	375,218	386,317
4	Less: Amount Charged To Operating Expense	406,237	375,218
5	Pro Forma Adjustment	($31,019)	$11,099
	408.12 - Taxes - Payroll	($31,019)	$11,099

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Calculation of General Assessment by the Pennsylvania Public Utility Commission, Consumer Advocate and Small Business Advocate Fees

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED RATES 06/30/25 AMOUNT
1	Total Wastewater Sales	$81,814,532	$93,661,969	$93,965,843	$125,599,969
2	Estimated General Assessment Fee				
3	Public Utility Commission At 0.004324859316	353,836	405,075	406,389	543,202
4	Consumer Advocate Fee At 0.001742389526	142,553	163,196	163,725	218,844
5	Small Business Advocate Fee At 0.000303478942	24,829	28,424	28,517	38,117
6	Damage Prevention Comittee Fee At 0.000000719937	59	67	68	90
7	Subtotal	521,277	596,762	598,699	800,253
8	Less: Amount Charged To Operating Expenses During				
9	The Twelve Months Ended 06/30/2023	404,178			
10	Less: Pro Forma Under Present Rates At 06/30/2023		521,277		
11	Less: Pro Forma Under Present Rates At 06/30/2024			596,762	
12	Less: Pro Forma Under Present Rates At 06/30/2025				598,699
13	Pro Forma Adjustment	$117,099	$75,485	$1,937	$201,554

507.1 Taxes Other Than Income $396,075

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Pro Forma State And Federal Income Taxes Under Present And Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED 06/30/25 AMOUNT
1	State Income Tax Per Computation				
2	Shown On Following Page	$3,151,788	$3,330,373	$2,906,503	$5,400,979
3	Less: State Income Tax Per Book				
4	Computation Shown On Following Page	2,376,040			
5	Less: Present Rates 06/30/2023		3,151,788		
6	Less: Present Rates 06/30/2024			3,330,373	
7	Less: Present Rates 06/30/2025				2,906,503
8	Pro Forma Adjustment	$775,748	$178,585	($423,870)	$2,494,476
9	Federal Income Tax Per Computation				
10	Shown On Following Page	$6,589,948	$7,939,173	$7,064,720	$13,097,077
11	Less: Federal Income Tax Per Book				
12	Computation Shown On Following Page	4,938,969			
13	Less: Present Rates 06/30/2023		6,589,948		
14	Less: Present Rates 06/30/2024			7,939,173	
15	Less: Present Rates 06/30/2025				7,064,720
16	Pro Forma Adjustment	$1,650,979	$1,349,225	($874,453)	$6,032,357

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Wastewater SSS General Operations
Notes to Statement Of Income
Calculation Of State And Federal Income Taxes

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Utility Operating Income Before Taxes	$28,179,871	$34,535,292	$41,824,212	$38,837,199	$70,054,907
2	Less: Interest Expense	11,273,603	11,273,603	13,180,260	13,962,886	13,960,609
3	Taxable Operating Income	16,906,268	23,261,689	28,643,952	24,874,313	56,094,298
4	Add: Premature Property Losses / Amortizations	9,962	9,962	99,241	(75,633)	(75,633)
5	Depr - Straight Line-Remaining Life (Including COR)	21,451,478	26,045,923	26,857,312	27,482,122	27,482,122
6	Taxable Meals & Entertainment	7,002	7,002	7,002	7,002	7,002
7	Total	21,468,442	26,062,887	26,963,555	27,413,491	27,413,491
8	Deduct:					
9	Tax Depreciation:					
10	State Tax Depreciation Adjustments	11,944,903	14,265,758	16,380,497	15,911,050	15,911,050
11	Total	11,944,903	14,265,758	16,380,497	15,911,050	15,911,050
12	State Taxable Income	26,429,807	35,058,818	39,227,010	36,376,754	67,596,739
13	State Income Tax At:					
14	Historic at 8.99%, Future At 8.49% And Fully Projected At 7.99%	2,376,040	3,151,788	3,330,373	2,906,503	5,400,979
15	Taxable Income After State Income Tax	24,053,767	31,907,030	35,896,637	33,470,251	62,195,760
16	Add:					
17	Federal Tax Depreciation Adjustments	2,374,744	2,374,744	4,225,694	3,089,101	3,089,101
18	Income Subject To Federal Income Tax	26,428,511	34,281,774	40,122,331	36,559,352	65,284,861
19	Federal Income Tax @ 21%	5,549,987	7,199,173	8,425,690	7,677,464	13,709,821
20	Excess ADIT	611,018	609,225	486,517	612,744	612,744
21	Federal Tax Liability	$4,938,969	$6,589,948	$7,939,173	$7,064,720	$13,097,077

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Pro Forma Interest Expense Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED 6/30/25 AMOUNT
1	Interest On Long Term Debt Per Computation				
2	Shown On Following Page	$10,243,220	$12,399,293	$13,183,562	$13,181,412
3	Less: Interest On Long Term Debt As Per Book				
4	Computation On Following Page	10,243,220			
5	Less: Present Rates At 06/30/2023		10,243,220		
6	Less: Present Rates At 06/30/2024			12,399,293	
7	Less: Present Rates At 06/30/2025				13,183,562
8	Pro Forma Adjustment	$0	$2,156,073	$784,269	($2,150)
9	Interest On Wastewater Specific Long Term Debt Per Computation				
10	Shown On Following Page	$1,030,383	$755,287	$779,324	$779,197
11	Less: Interest On Wastewater Specific Long Term Debt As Per Book				
12	Computation On Following Page	1,030,383			
13	Less: Present Rates At 06/30/2023		1,030,383		
14	Less: Present Rates At 06/30/2024			755,287	
15	Less: Present Rates At 06/30/2025				779,324
16	Pro Forma Adjustment	$0	($275,096)	$24,037	($127)

Witness: Ann E. Bulkley

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Application of Income Deductions

LINE NO.	DESCRIPTION	PRESENT RATES AT JUNE 30, 2023 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2024 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2025 AMOUNT	CAPITAL STRUCTURE	COST RATE
1	**Capital Structure**									
2	Long Term Debt	$384,896,465	38.42%	4.39%	$562,690,015	42.46%	4.63%	$594,902,431	42.73%	4.76%
3	Long Term Debt - WW Spec	63,458,726	6.33%	2.61%	62,348,860	4.70%	2.64%	61,227,844	4.40%	2.62%
4	Total Debt	448,355,191	44.75%		625,038,875	47.16%		656,130,275	47.13%	
5	Preferred Stock	93,854	0.01%	9.70%	0	0.00%	0.00%	0	0.00%	0.00%
6	Common Equity	553,552,633	55.24%		700,362,769	52.84%		735,975,490	52.87%	
7	Totals	$1,002,001,678	100.00%		$1,325,401,644	100.00%		$1,392,105,765	100.00%	

		PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
8	**Application Of Long Term Debt Interest:**				
9	Original Cost Rate Base	$606,107,701	$629,405,746	$649,436,559	$649,330,622
10	Debt Percentage (From Above)	38.42%	42.46%	42.73%	42.73%
11	Debt Portion Of Rate Base	232,866,579	267,245,680	277,504,242	277,458,975
12	Interest Cost (From Above)	4.39%	4.63%	4.76%	4.76%
13	Pro Forma Long Term Interest Deduction	$10,243,220	$12,399,293	$13,183,562	$13,181,412
14	**Application Of Wastewater Specific Long Term Debt Interest:**				
15	Original Cost Rate Base	$606,107,701	$629,405,746	$649,436,559	$649,330,622
16	Debt Percentage (From Above)	6.33%	4.70%	4.40%	4.40%
17	Debt Portion Of Rate Base	38,366,617	29,582,070	28,575,209	28,570,547
18	Interest Cost (From Above)	2.61%	2.64%	2.62%	2.62%
19	Pro Forma Wastewater Specific Long Term Interest Deduction	$1,030,383	$755,287	$779,324	$779,197

Witness: Ann E. Bulkley

BASA
WW
Operations

Pennsylvania-American Water Company - BASA WW Operations

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Pennsylvania-American Water Company - BASA WW Operations

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Pennsylvania-American Water Company - BASA WW Operations

Pro Forma Statement of Income for the Twelve Months Ending June 30, 2023

June 30, 2024, and June 30, 2025 Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PER BOOKS	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	LINE NO.
1	Operating Revenue	$0	$0	$0	$11,720,908	$11,720,908	$126,494	$11,847,402	$26,288,308	$38,135,710	1
2	Operating Revenue Deductions:										2
3	Operating Expenses	0	0	0	6,396,883	6,396,883	203,305	6,600,188	309,151	6,909,339	3
4	Depreciation	0	0	0	4,806,499	4,806,499	285,253	5,091,752	0	5,091,752	4
5	Amortizations	0	0	0	0	0	120,264	120,264	0	120,264	5
6	Taxes, Other Than Income:										6
7	Local Property And Miscellaneous	0	0	0	0	0	589,414	589,414	0	589,414	7
8	Federal Environmental Tax	0	0	0	0	0	0	0	0	0	8
9	Public Utility Realty Taxes	0	0	0	0	0	0	0	0	0	9
10	Payroll Taxes	0	0	0	185,531	185,531	5,512	191,043	0	191,043	10
11	General Assessment	0	0	0	74,305	74,305	802	75,107	166,658	241,765	11
12	Other Taxes and Licenses	0	0	0	0	0	0	0	0	0	12
13	Total Taxes Other Than Income	0	0	0	259,836	259,836	595,728	855,564	166,658	1,022,222	13
14	**Utility Operating Income Before Income Taxes**	**0**	**0**	**0**	**257,690**	**257,690**	**(1,078,056)**	**(820,366)**	**25,812,499**	**24,992,133**	14
15	Income Taxes:										15
16	State Income Tax	0	0	0	(31,744)	(31,744)	(112,122)	(143,866)	2,062,569	1,918,703	16
17	Federal Income Tax	0	0	0	(29,949)	(29,949)	(268,533)	(298,482)	4,987,881	4,689,399	17
18	Amortization Of ITC & Excess Deferred Taxes	0	0	0	0	0	0	0	0	0	18
19	Total Income Taxes	0	0	0	(61,693)	(61,693)	(380,655)	(442,348)	7,050,450	6,608,102	19
20	Total Operating Revenue Deductions	0	0	0	11,401,525	11,401,525	823,895	12,225,420	7,526,259	19,751,679	20
21	**Utility Operating Income**	**0**	**0**	**0**	**319,383**	**319,383**	**(697,401)**	**(378,018)**	**18,762,049**	**18,384,031**	21
22	Income Deductions:										22
23	Interest On Long Term Debt	0	0	0	4,388,202	4,388,202	313,775	4,701,977	(1,778)	4,700,199	23
24	Amortization Of Debt Discount Expense	0	0	0	0	0	0	0	0	0	24
25	Interest On Notes Payable To Others	0	0	0	276,390	276,390	1,559	277,949	(105)	277,844	25
26	Total Income Deductions	0	0	0	4,664,592	4,664,592	315,334	4,979,926	(1,883)	4,978,043	26
27	**Net Income**	**$0**	**$0**	**$0**	**($4,345,209)**	**($4,345,209)**	**($1,012,735)**	**($5,357,944)**	**$18,763,932**	**$13,405,988**	27
28	Preferred Dividends	0		0		0		0		0	28
29	**Net Income To Common**	**$0**		**$0**		**($4,345,209)**		**($5,357,944)**		**$13,405,988**	29

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER BASA

TOTAL REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2023 AND JUNE 30, 2024

LINE NO.	ACCT. NO.	CUSTOMER CLASS	PER BOOKS 12 ME June 2023	UNBILLED EADIT, DSIC, AMP ADJUSTMENTS	ANNUALIZE 2023 RATE CHANGE	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	OTHER REVENUE ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2023	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION ADJUSTMENTS	ACQUISITION ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2024
1		OPERATING REVENUES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2		METERED SALES										
3	522.1	RESIDENTIAL	$0					$0			$8,601,138	$8,601,138
4	522.2	COMMERCIAL	0					0			2,264,808	2,264,808
5	522.3	INDUSTRIAL	0					0			422,604	422,604
6	522.4	MUNICIPAL	0					0			365,274	365,274
7	522.4	BULK	0					0				0
8		**TOTAL METERED SALES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$11,653,824**	**$11,653,824**
9		UNMETERED SALES										
10	522.1	RESIDENTIAL						$0				$0
11	522.2	COMMERCIAL						0				0
12	522.3	INDUSTRIAL						0				0
13	522.4	MUNICIPAL						0				0
14	522.4	BULK						0				0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$11,653,824**	**$11,653,824**
17		OTHER OPERATING REVENUES										
18	530	GUARANTEED REVENUES						$0				$0
19	532	LATE PAYMENT FEES	$0		$0			0			58,584	58,584
20	536	MISC SERVICE REVENUES						0				0
21	534	RENTS FROM PROPERTIES						0				0
22	535	INTERCOMPANY RENTS						0				0
23	523	OTHER WW REVENUES									8,500	8,500
24		**TOTAL OTHER OPERATING**										
25		**REVENUES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$67,084**	**$67,084**
26		**TOTAL OPERATING REVENUES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$11,720,908**	**$11,720,908**

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PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER BASA

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

LINE NO.	ACCT. NO.	CUSTOMER CLASSIFICATION	PRO FORMA PRESENT RATES 12 ME June 2024	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION	ANNUALIZE DSIC ADJUSTMENT	OTHER REVENUE ADJUSTMENT	PRO FORMA PRESENT RATES 12 ME June 2025	PERCENT	AMOUNT	PRO FORMA PROPOSED RATES
1		OPERATING REVENUES	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
2		METERED SALES									
3	522.1	RESIDENTIAL	$8,601,138			$92,892		$8,694,030	50.98%	$4,432,543	$13,126,573
4	522.2	COMMERCIAL	2,264,808			24,460		2,289,268	704.04%	16,117,384	18,406,652
5	522.3	INDUSTRIAL	422,604			4,564		427,168	704.04%	3,007,438	3,434,607
6	522.4	MUNICIPAL	365,274			3,945		369,219	704.04%	2,599,453	2,968,672
7	522.4	BULK	0					0	0.00%	0	0
8		**TOTAL METERED SALES**	**$11,653,824**	**$0**	**$0**	**$125,861**	**$0**	**$11,779,685**	**222.05%**	**$26,156,818**	**$37,936,503**
9		UNMETERED SALES									
10	522.1	RESIDENTIAL	$0					$0	0.00%	0	$0
11	522.2	COMMERCIAL	0					0	0.00%	0	0
12	522.3	INDUSTRIAL	0					0	0.00%	0	0
13	522.4	MUNICIPAL	0					0	0.00%	0	0
14	522.4	BULK	0					0	0.00%	0	0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**0.00%**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$11,653,824**	**$0**	**$0**	**$125,861**	**$0**	**$11,779,685**	**222.05%**	**$26,156,818**	**$37,936,503**
17		OTHER OPERATING REVENUES									
18	530	GUARANTEED REVENUES	$0					$0	0.00%	$0	$0
19	532	LATE PAYMENT FEES	58,584				$633	59,216	222.05%	131,490	190,707
20	536	MISC SERVICE REVENUES	0					0	0.00%	0	0
21	534	RENTS FROM PROPERTIES	0					0	0.00%	0	0
22	535	INTERCOMPANY RENTS	0					0	0.00%	0	0
23	523	OTHER WW REVENUES	8,500					8,500	0.00%	0	8,500
24		**TOTAL OTHER OPERATING**									
25		**REVENUES**	**$67,084**	**$0**	**$0**	**$0**	**$633**	**$67,716**	**194.18%**	**$131,490**	**$199,207**
26		**TOTAL OPERATING REVENUES**	**$11,720,908**	**$0**	**$0**	**$125,861**	**$633**	**$11,847,402**	**221.89%**	**$26,288,308**	**$38,135,710**

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER BASA

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$0				
2	Present Rates At 06/30/2024				$0		
3	Present Rates At 06/30/2025						$11,720,908
4							
5	Annualization of Acquired System			11,662,324			
6	DSIC Adjustment					125,861	
7							
8							
9							
10							
11							
12							
13							
14							
15							
16	Late Payment Fees			58,584		633	
17							
18		0					
19							
20							
21	Pro Forma Adjustment		0		11,720,908		126,494
22	Pro Forma Present Rates At June 30, 2023		$0				
23	Pro Forma Present Rates At June 30, 2024				$11,720,908		
24	Pro Forma Present Rates At June 30, 2025						$11,847,402

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Revenues

Acquisition Butler Area Sewer Authority

The Company anticipates acquiring Butler Area Sewer Authority System in 2023 and will begin providing service to the entity's customers. The following adjustment annualizes the revenues associated with this acquisition for 12 months ending June 30, 2024 and additional annualized DSIC for 12 months ending June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 REVENUE ADJUSTMENT	PRESENT RATES 6/30/2025 REVENUE ADJUSTMENT
1	**Metered Sales**		
2	Residential	$8,601,138	$92,892
3	Commercial	2,264,808	24,460
4	Industrial	422,604	4,564
5	Municipal	365,274	3,945
6	Miscellaneous (Bulk Customers)	0	0
7	Total Metered Sales	$11,653,824	$125,861
8	**Unmetered Sales**		
9	Residential	$0	$0
10	Commercial	0	0
11	Industrial	0	0
12	Municipal	0	0
13	Miscellaneous (Bulk Customers)	0	0
14	Total Unmetered Sales	$0	$0
15	Other WW Revenue	$8,500	$0
16	Total Sales	$11,662,324	$125,861
17	Other Operating Revenues	$58,584	$0
18	Pro Forma Adjustment	$11,720,908	$125,861

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Revenues

Penalties

The following adjustment reflects the annualization of revenues associated with changes imposed during twelve months ending June 30, 2023 and projected to be imposed during twelve months ending June 30, 2024 and twelve months ending June 30, 2025. Additionally, annualized late payment charges are calculated based on revenues at the proposed rate level.

LINE NO.	DESCRIPTION	PER BOOKS 6/30/23	PRESENT RATES 6/30/23	PRESENT RATES 6/30/24	PRESENT RATES 6/30/25	PROPOSED RATES 6/30/25
1	Total Billed Wastewater Sales	$0	$0	$11,662,324	$11,788,185	$37,945,002
2	% Of Penalties To Total					
3	Total Company Sales - 2 Year Avg	0.5027%	0.5027%	0.5027%	0.5027%	0.5027%
4	Penalties	0	0	58,627	59,259	190,750
5	Less: Per Books At 06/30/2023		0			
6	Less: Present Rates At 06/30/2023			0		
7	Less: Present Rates At 06/30/2024				58,627	
8	Less: Present Rates At 06/30/2025					59,259
9	Pro Forma Adjustments		$0	$58,627	$632	$131,491

Witness: Charles Rea

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Summary of Rate Base Adjustments

LINE NO.	DESCRIPTION		DEPRECIATED ORIGINAL COST 6/30/23	DEPRECIATED ORIGINAL COST 6/30/24	DEPRECIATED ORIGINAL COST 6/30/25	DEPRECIATED ORIGINAL COST PROPOSED
1	Non-Depreciable Plant		$0	$13,335,927	$13,335,927	$13,335,927
2	Depreciable Plant		0	215,412,267	229,732,400	229,732,400
3	Total Utility Plant In Service		0	228,748,194	243,068,327	243,068,327
4	Deduct:					
5	Contributions In Aid Of Construction		0	0	0	0
6	Customer Advances For Construction		0	0	0	0
7	Excluded Property		0	0	0	0
8	Sub-Total		0	0	0	0
9	Net Utility Plant In Service		0	228,748,194	243,068,327	243,068,327
10	Accumulated Depreciation		0	4,719,233	8,496,233	8,496,233
11	Depreciated Utility Plant In Service		0	224,028,961	234,572,094	234,572,094
12	Add:					
13	Materials And Supplies		0	117,597	117,597	117,597
14	Cash Working Capital - Expenses		0	361,948	373,592	373,592
15	Accrued And Prepaid Taxes		0	39,047	153,086	65,338
16	Acquisition Adjustments		0	1,202,635	1,092,393	1,092,393
17	Other Additions		0	0	0	0
18	Deduct:					
19	Cash Working Capital - Int And Div		0	396,277	423,101	422,915
20	Unamortized Itc (3%)		0	0	0	0
21	Extension Deposits In Suspense		0	0	0	0
22	Tax Cuts and Jobs Act -Stub Period		0	0	0	0
23	Other Deductions		0	0	0	0
24	Deferred Taxes		0	2,602,562	4,261,182	4,261,182
25	Total Rate Base Elements		$0	$222,751,349	$231,624,479	$231,536,917
26	Utility Operating Income					
27	Per Books	$0	0.00%	0.00%	0.00%	0.00%
28	Present Rates At 06/30/2023	0	0.00%	-	-	-
29	Present Rates At 06/30/2024	319,383	-	0.14%	-	-
30	Present Rates At 06/30/2025	(378,018)	-	-	-0.16%	-
31	Proposed Rates At 06/30/2025	18,384,031	-	-	-	7.94%

Witness: Stacey D. Gress

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 6/30/2023	ADDITIONS	ACQUISITION	RETIREMENTS	ESTIMATED BOOK COST 6/30/2024	ADDITIONS	RETIREMENTS	ESTIMATED BOOK COST 6/30/2025
1	353.00	Land & Land Rights	$0	$0	13,335,927	$0	$13,335,927	$0	$0	$13,335,927
2		Total Intangible Plant	$0	$0	$13,335,927	$0	$13,335,927	$0	$0	$13,335,927
3	354.20	Structures And Improvements - Collection	$0	$10,500	$0	$0	$10,500	$8,314,500	$0	$8,325,000
4	354.30	Structures And Improvements - SPP	0	0	38,517,189	$0	$38,517,189	150,000	16,458	38,650,730
5	354.40	Structures And Improvements - TDP	0	0	14,466,232	$0	$14,466,232	0	0	14,466,232
6	354.70	Structures And Improvements - General	0	0	10,073,793	$0	$10,073,793	350,000	0	10,423,793
7	355.00	Power Generation Equipment	0	52,500	1,311,438	$5,683	$1,358,255	235,000	25,785	1,567,470
8	360.10	Collection Sewers - Force Mains	0	0	8,234,547	$0	$8,234,547	0	0	8,234,547
9	361.10	Collection Sewers - Gravity Mains	0	705,000	97,520,212	$75,181	$98,150,031	2,920,000	310,569	100,759,462
10	361.20	Manholes	0	6,300	0	$0	$6,300	323,700	0	330,000
11	363.00	Services	0	15,750	11,554,884	$1,137	$11,569,497	171,750	15,306	11,725,941
12	364.00	Flow Measuring Devices	0	0	227,130	$0	$227,130	0	0	227,130
13	371.00	Pumping Equipment	0	0	6,390,560	$0	$6,390,560	2,625,000	288,021	8,727,539
14	380.00	Treatment Equipment	0	0	24,572,236	$0	$24,572,236	0	0	24,572,236
15	382.00	Outfall Sewer Lines	0	0	73,814	$0	$73,814	0	0	73,814
16	390.00	Office Furniture And Equipment	0	2,100	48,109	$0	$50,209	32,900	0	83,109
17	390.20	Computers & Peripheral	0	0	22,362	$7,338	$15,024	0	15,024	0
18	391.00	Transportation Equipment	0	10,500	435,673	$1,137	$445,037	42,000	4,608	482,428
19	393.00	Tools, Shop And Garage Equipment	0	21,000	0	$0	$21,000	129,000	0	150,000
20	395.00	Power Operated Equipment	0	0	697,506	$0	$697,506	0	0	697,506
21	396.00	Communication Equipment	0	15,750	517,657	$0	$533,407	111,750	409,696	235,461
22	397.00	Miscellaneous Equipment	0	0	730	$730	$0	0	0	0
23		Total Tangible Plant	$0	$839,400	$214,664,073	$91,206	$215,412,267	$15,405,600	$1,085,468	$229,732,400
24		Total Utility Plant In Service	$0	$839,400	$228,000,000	$91,206	$228,748,194	$15,405,600	$1,085,468	$243,068,327

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Materials And Supplies

The Company's claim for materials and supplies at June 30, 2024 and June 30, 2025 is calculated on the basis of the average monthly balances in the material and supplies accounts for PAWC's other wastewater districts for the period of June 2022 to July 2023. This balance was divided by the total number of customers in the other wastewater districts in order to calculate the amount of materials and supplies per customer. This per customer number was then multiplied by the total number of BASA Wastewater customers to calculate the Company's claim.

LINE NO.	DETAIL	06/30/2024 and 06/30/2025 AMOUNT
1	13-Month average of M&S for PAWC's 22 other WW SSS districts	$439,941
2	Number of customers in PAWC's 22 other WW SSS districts	55,222
3	Amount of M&S per customer	$7.97
4	Total number of BASA WW customers	14,755
5	Allowance for Materials and Supplies	
6	At 06/30/2024 and 06/30/2025	$117,597

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for wastewater service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months ended June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2023.

The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2023				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	$0	$0	$11,720,908	$11,847,402
9	Lag Days	50.6	50.6	50.6	50.6
10	Dollar Days	$0	$0	$593,195,131	$599,596,992
11	Total Billed Revenue	$0	$0	$11,720,908	$11,847,402
12	Total Dollar Days	$0	$0	$593,195,131	$599,596,992
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	0.0	0.0	50.6	50.6
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	0.0	0.0	30.1	30.1
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	0.0	0.0	20.5	20.5
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		$0	$6,444,576	$6,651,906
20	Operating Expenses Per Day (Line 20 / 365 Days)		0	17,656	18,224
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		$0	$361,948	$373,592

Witness: Stacey D. Gress

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Support of Expense Days

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PER BOOKS AMOUNT	PER BOOKS DOLLAR DAYS	PRESENT RATES 06/30/2023 AMOUNT	PRESENT RATES 06/30/2023 DOLLAR DAYS	PRESENT RATES 06/30/2024 AMOUNT	PRESENT RATES 06/30/2024 DOLLAR DAYS	PRESENT RATES 06/30/2025 AMOUNT	PRESENT RATES 06/30/2025 DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	$0	$0	$0	$0	$185,531	$2,236,428	$191,043	$2,302,871
2	Group Insurance	11.00	0	0	0	0	0	0	0	0
3	OPEB's and VEBA	0.00	0	0	0	0	0	0	0	0
4	Pension	(6.41)	0	0	0	0	0	0	0	0
5	Purchased Power	31.00	0	0	0	0	0	0	0	0
6	Purchased Water	35.22	0	0	0	0	0	0	0	0
7	Chemicals	47.20	0	0	0	0	0	0	0	0
8	Miscellaneous	30.46	0	0	0	0	6,205,711	189,028,133	6,402,852	195,033,117
9	Transportation	54.08	0	0	0	0	53,334	2,884,531	58,011	3,137,484
10	Ins Other Than Group	(69.48)	0	0	0	0	0	0	0	0
11	Service Company	12.05	0	0	0	0	0	0	0	0
12	Waste Disposal	41.96	0	0	0	0	0	0	0	0
13	Telephone	3.88	0	0	0	0	0	0	0	0
14	Rents	(13.36)	0	0	0	0	0	0	0	0
15	Natural Gas	33.33	0	0	0	0	0	0	0	0
16	Totals		$0	$0	$0	$0	$6,444,576	$194,149,092	$6,651,906	$200,473,472
17	Average Lag			0.0		0.0		30.1		30.1
18	Sum. Of Expense Pro Forma Present Rates & Payroll Taxes		$0		$0		$6,582,414		$6,791,231	
19	Uncollectibles		0		0		137,838		139,325	
20	Amortizations		0		0		0		0	
21	Sum Of Other Expenses		0		0		238,865		249,054	
22	Miscellaneous		$0		$0		$6,205,711		$6,402,852	

Witness: Stacey D. Gress

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	NET REVENUE LAG DAYS FUTURE	PRESENT RATES 06/30/2023 TAXES PAYABLE	PRESENT RATES 06/30/2023 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2024 TAXES PAYABLE	PRESENT RATES 06/30/2024 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2025 TAXES PAYABLE	PRESENT RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT	PROPOSED RATES 06/30/2025 TAXES PAYABLE	PROPOSED RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT
1	General Assessment	190.2	$0	$0	$74,305	$38,720	$75,107	$39,138	$241,765	$125,983
2	Public Utility Realty Tax	47.4	0	0	0	0	0	0	0	0
3	Local Property Tax	64.6	0	0	0	0	589,414	104,261	589,414	104,261
4	State Income Tax	13.6	0	0	(31,744)	(1,183)	(143,866)	(5,360)	1,918,703	71,491
5	Federal Income Tax	(18.4)	0	0	(29,949)	1,510	(298,482)	15,047	4,689,399	(236,397)
6	Totals			$0		$39,047		$153,086		$65,338

Witness: Stacey D. Gress

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Calulation of Lag Days for Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	TAX PERIOD BEGINNING	TAX PERIOD ENDING	PAYMENTS 2022 - 2023 TAX				TOTAL TAX LAG DAY	REVENUE LAG LESS TAX LAG
1	General Assessment	7/1/22	6/30/23	9/13/22	9/27/22			(139.6)	190.3
	Percent of Payment			11%	31%				
	Lag Days			(11.30)	(28.85)				
		7/1/23	6/30/24	6/27/23					
	Percent of Payment			59%					
	Lag Days			(109.04)					
2	Public Utility Realty Tax	1/1/22	12/31/22	9/14/22				3.3	46.6
	Percent Of Payment			25%	25%	25%	25%		
	Lag Days			18.63					
		1/1/2023	12/31/2023	5/1/2023					
	Percent of Payment			25%	25%	25%	25%		
	Lag Days			(15.38)					
3	Local Property Tax			Lag calculated using expense lag method				(14)	64.6
	Payment								
	Lag Days								
4	State Income Tax	1/1/2022	12/31/2022	9/15/22	12/15/22			37.0	12.8
	Percent Of Payment			25%	25%	25%	25%		
	Lag Days			18.88	41.63				
		1/1/2023	12/31/2023	4/15/23	6/15/23				
	Percent Of Payment			25%	25%	25%	25%		
	Lag Days			(19.38)	(4.13)				
5	Federal Income Tax	1/1/22	12/31/22	7/26/2022	10/26/2022	12/21/2022	12/22/2022	69.00	(19.2)
	Percent Of Payment			25%	25%	25%	13%		
	Lag Days			6.13	29.13	43.13	21.69		
		1/1/2023	12/31/2023	3/21/2023	4/25/2023	6/26/2023			
	Percent Of Payment			13%	25%	25%			
	Lag Days			(12.81)	(16.88)	(1.38)			

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

The payment of interest on the Company's long term debt is made six months in arrears. Payment of interest on the Company's short term debt is made monthly in arrears. The payment of dividends on the Company's preferred stock is made quarterly in arrears. The average lag days of interest and dividend payments and the deduction of the average lag days for the receipt of revenue is calculated below to determine cash working capital requirements.

LINE NO.	DESCRIPTION										
1	**Average Lag Calculation**	**LONG TERM INTEREST**		**SHORT TERM INTEREST**		**PREFERRED DIVIDEND**					
2	Future Revenue Lag Days	50.6		50.6		50.6					
3	Less: Interest Payments Lag Days	81.6		15.0		46.4					
4	Average Lag Between The Payment	(31.0)		35.6		4.2					
5	Of Interest And The Receipt										
6	Of Revenues										
		PRESENT RATES 6/30/23			**PRESENT RATES 6/30/24**		**PRESENT RATES 6/30/25**		**PROPOSED AMOUNT 6/30/25**		
7	**Long Term Debt**										
8	Working Capital Requirements										
9	Pro Forma Annual Interest Expense	$0			$4,388,202		$4,701,977		$4,700,199		
10	Interest Expense Per Day										
11	(Line 9 / 365 Days)	0			12,022		12,882		12,877		
12	Cash Working Capital Required										
13	(Line 4 Col.1 X Line 11)			0		(372,802)		(399,471)			(399,316)
14	**Long Term Debt - Wastewater Specific**										
15	Working Capital Requirements										
16	Pro Forma Annual Interest Expense	0			276,390		277,949		277,844		
17	Interest Expense Per Day										
18	(Line 16 / 365 Days)	0			757		762		761		
19	Cash Working Capital Required										
20	(Line 4 Col.2 X Line 18)			0		(23,475)		(23,630)			(23,599)
21	**Preferred Dividends**										
22	Working Capital Requirements										
23	Pro Forma Annual Dividend Expense	0			0		0		0		
24	Dividend Expense Per Day										
25	(Line 23 / 365 Days)	0			0		0		0		
26	Cash Working Capital Required										
27	(Line 4 Col.3 X Line 25)			0		0		0			0
28	Total Cash Working Capital Required										
29	(Line 13 + Line 20 + Line 27)			$0		($396,277)		($423,101)			($422,915)

Witness: Stacey D. Gress

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Acquisition Adjustments

The Company is requesting recognition of the transaction costs associated with its acquisition of the wastewater assets of the BASA at Docket No. R-2022-3037047.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2023 AMOUNT	2024 Amortizations	PRESENT RATES 6/30/2024 AMOUNT	2025 Amortizations	PRESENT RATES 6/30/2025 AMOUNT
1	BASA WW Transactions Costs	Seeking Approval			$1,202,635	$110,242	$1,092,393
2	Effect to Rate Base Element		$0	$0	$1,202,635	$110,242	$1,092,393

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Deferred Income Tax

The following calculation is being made to reflect the federal tax difference between using accelerated and straight-line depreciation, taxable contributions and advances and normalizing the effect of the repairs and maintenance deduction for state and federal tax. This adjustment is carried as a rate base reduction.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Deferred Tax	$0	($2,602,562)	($4,261,182)
2	Less: Prior Year		0	(2,602,562)
3	Effect to Rate Base Element	$0	($2,602,562)	($1,658,620)

Witness: Melissa Ciullo
Reference: FR IV.4

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
1		**Source Of Supply Expenses**				
2		-Operations-				
3	601.1	Salary And Wages	$0	$0	$0	$0
4	601.2	Salary And Wages	0	0	0	0
5	610.1	Purchased Water	0	0	0	0
6	615.1	Purchased Power	0	0	0	0
7	616.1	Purchased Fuel	0	0	0	0
8	620.1	Materials And Supplies	0	0	0	0
9	631.1	Contract Services - Engineering	0	0	0	0
10	633.1	Contract Services - Legal	0	0	0	0
11	636.1	Contract Services	0	0	0	0
12	604.1	Other Benefits	0	0	0	0
13	642.1	Rental Of Equipment	0	0	0	0
14	650.1	Transportation	0	0	0	0
15		-Maintenance-				
16	620.2	Materials And Supplies	0	0	0	0
17	631.2	Contract Services - Engineering	0	0	0	0
18	636.2	Contract Services	0	0	0	0
19	650.2	Transportation	0	0	0	0
19		-Miscellaneous-				
20	675.1	Miscellaneous Operating Expense	0	0	0	0
21	675.2	Miscellaneous Maintenance Expense	0	0	0	0
22		Total Source Of Supply Expenses	$0	$0	$0	$0
23		**Water Treatment**				
24		-Operation-				
25	601.3	Salary And Wages	$0	$0	$2,335,416	$2,407,470
26	601.4	Salary And Wages	0	0	0	0
27	604.3	Employee Pension And Benefits	0	0	0	0
28	615.3	Purchased Power	0	0	368,561	368,561
29	618.3	Chemicals	0	0	221,550	221,550
30	620.3	Materials And Supplies	0	0	0	0
31	631.3	Contract Services - Engineering	0	0	0	0

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
32	633.3	Contract Services - Legal	0	0	0	0
33	634.3	Contract Services - Management	0	0	0	0
34	635.3	Contract Services - Test	0	0	0	0
35	636.3	Contract Services	0	0	106,594	106,594
36	641.3	Rental Of Building	0	0	0	0
37	642.3	Rental Of Equipment	0	0	0	0
38	650.3	Transportation	0	0	0	0
39		-Maintenance-				
40	620.4	Materials And Supplies	0	0	0	0
41	631.4	Contract Services - Engineering	0	0	0	0
42	636.4	Contract Services	0	0	0	0
43	650.4	Transportation	0	0	0	0
44	675.4	Miscellaneous Maintenance Expense	0	0	0	0
45		-Miscellaneous-				
46	675.3	Miscellaneous Operating Expense	0	0	285,000	285,000
47		Total Water Treatment Expense	$0	$0	$3,317,122	$3,389,176
48		**Transmission And Distribution**				
49		-Operation-				
50	601.5	Salary And Wages	$0	$0	$0	$0
51	601.6	Salary And Wages	0	0	0	0
52	604.5	Employee Pension And Benefits	0	0	0	0
53	615.5	Purchased Power	0	0	10,594	10,594
54	620.5	Materials And Supplies	0	0	0	0
55	631.5	Contract Services - Engineering	0	0	0	0
56	636.5	Contract Services	0	0	0	0
57	641.5	Rental Of Building	0	0	0	0
58	642.5	Rental Of Equipment	0	0	0	0
59	650.5	Transportation	0	0	0	0
60		-Maintenance-				
61	620.6	Materials And Supplies	$0	$0	$194,254	$194,254
62	631.6	Contract Services - Engineering	0	0	0	0
63	636.6	Contract Services	0	0	0	0

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
64	650.6	Transportation	0	0	0	0
65	675.6	Miscellaneous Operating Expense	0	0	0	0
66		-Miscellaneous-				
67	675.5	Miscellaneous Operating Expense	0	0	171,872	171,872
68		Total Transmission And Distribution	$0	$0	$376,721	$376,721
69		**Customer Accounting**				
70		-Operation-				
71	601.7	Salary And Wages	$0	$0	$0	$0
72	604.7	Employee Pension And Benefits	0	0	0	0
73	615.7	Purchased Power	0	0	0	0
74	620.7	Materials And Supplies	0	0	0	0
75	631.7	Contract Services - Engineering	0	0	0	0
76	633.7	Contract Services - Legal	0	0	0	0
77	636.7	Contract Services	0	0	0	0
78	641.7	Rental Of Building	0	0	0	0
79	642.7	Rental Of Equipment	0	0	0	0
80	650.7	Transportation	0	0	0	0
81	657.7	Insurance	0	0	0	0
82	670.7	Bad Debt	0	0	137,838	191,749
83		-Miscellaneous-				
84	675.7	Miscellaneous Expense	0	0	32,994	33,099
85		Total Customer Accounting	$0	$0	$170,832	$224,848
86		**Administrative And General**				
87	601.8	Salary And Wages	$0	$0	$0	$0
88	603.8	Salary Of Officers	0	0	0	0
89	604.8	Employee Pension And Benefits	0	0	662,986	682,879
90	615.8	Purchased Power	0	0	0	0
91	620.8	Materials And Supplies	0	0	0	0
92	631.8	Contract Services	0	0	0	0
93	632.8	Contract Services - Accounting	0	0	0	0

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
94	633.8	Contract Services - Legal	0	0	0	0
95	634.8	Contract Services - Management	0	0	1,259,972	1,312,636
96	635.8	Contract Services - Test	0	0	0	0
97	636.8	Contract Services	0	0	0	0
98	641.8	Rental Of Building	0	0	0	0
99	642.8	Rental Of Equipment	0	0	0	0
100	650.8	Transportation	0	0	53,334	58,011
101	656.8	Insurance - Vehicles	0	0	0	0
102	657.8	Insurance	0	0	445,104	445,104
103	658.8	Workers Compensation	0	0	0	0
104	659.8	Insurance	0	0	0	0
105	660.8	Advertising	0	0	0	0
106	666.8	Amortization Of Rate Case	0	0	20,057	20,057
107	667.8	Regulatory Commission	0	0	0	0
108		-Miscellaneous-				
109	675.8	Miscellaneous Expense	0	0	90,755	90,755
110		Total Administrative And General	$0	$0	$2,532,209	$2,609,443
111		Total Operating Expenses	$0	$0	$6,396,883	$6,600,188

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	DESCRIPTION	6/30/23 DETAIL	PRESENT RATES 6/30/23 AMOUNT	6/30/24 DETAIL	PRESENT RATES 6/30/24 AMOUNT	6/30/25 DETAIL	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$0				
2	Present Rates At 06/30/2023				$0		
3	Present Rates At 06/30/2024						$6,396,883
4	Proposed Rates At 06/30/2025						
5	Compensation	$0		$0		$0	
6	Group Insurance	0		-		-	
7	Other Post Employment Benefits & VEBA	0		-		-	
8	Pension	0		-		-	
9	Purchased Power	0		-		-	
10	Waste Disposal	0		-		-	
11	Chemicals	0		-		-	
12	Change In Consumption Expense	0		-		-	
13	Transportation Expense	0		53,334		4,677	
14	Insurance Other Than Group	0		-		-	
15	Regulatory Expense (Rate Case Expense)	0		20,057		-	
16	Service Company Expense	0		-		-	
17	Postage and Customer Accounting	0		-		-	
18	Acquisition O&M	0		6,152,660		144,611	
19	401K & Defined Contribution Plan	0		-		-	
20	Rent Expense	0		-		-	
21	Miscellaneous Adjustments	0		32,994		52,530	
22	Uncollectibles	0		137,838		1,487	
23	Pro Forma Adjustments		0		6,396,883		203,305
24	Present Rates At 06/30/2023		$0				
25	Present Rates At 06/30/2024				$6,396,883		
26	Present Rates At 06/30/2025						$6,600,188

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Transportation Expense

The following adjustment reflects the annualization of transportation expense for the years ended June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Leased Vehicles Expense	$68,498	$74,505
2	Less: 22.14% Not Charged To Operating Expense	15,164	16,494
3	Sub-Total	53,334	58,011
4	Less: Amount Charged To Operating Expense		
5	During the Twelve Months Ended 06/30/23	-	
6	Less: Present Rates During the Twelve Months Ended 06/30/24		53,334
7	Pro Forma Adjustment	$53,334	$4,677
	650.8 A & G - Miscellaneous General Expense	$53,334	$4,677

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Regulatory Expense (Rate Case Expense)

The following adjustment reflects the estimated cost of this rate case normalized over a two-year period. Additionally, there is an adjustment for a 10 year amortization of the Customer Class Demand Study.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	Rate Case Expense Allocation	$39,137
2	Normalized Over 2 Years	19,569
3	Plus Allocation of Amortization of Demand Study	489
4	Less: Amount Charged To Operating Expense	
5	During The Twelve Months Ended 06/30/2023	-
6	Pro Forma Adjustment	$20,057
	666.8 Regulatory Commission Expense	$20,057

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Acquisition O&M Expense Adjustment

The following adjustment reflects an adjustment to annualize O&M expenses related to the future acquisition of the Butler Area Sewer Authority wastewater assets, which is expected to close before the end of the fully projected future test year.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	BASA WW Annualized O&M	$6,338,191	$7,077,728
2	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/24		6,338,191
3	Pro Forma Adjustment	$6,338,191	$739,537
	408.12 Payroll Taxes	185,531	5,512
	408.2 Taxes, Other Than Income - Property	0	589,414
	601.3 Salary and Wages- Water Treatment	2,335,416	72,054
	604.8 A&G Employee Pension And Benefits	662,986	19,893
	615.3 Purch Power Oper WT	368,561	-
	615.5 Purch Power Oper TD	10,594	-
	618.3 Chemicals- Water Treatment	221,550	-
	620.6 M&S Maint TD	194,254	-
	634.8 AG - Contract Services Management	1,259,972	52,665
	636.3 Cont Serv Other Oper	106,594	-
	657.8 General Liability	445,104	-
	675.3 Misc Exp Oper WT	285,000	-
	675.5 Misc Exp Oper TD	171,872	-
	675.8 Misc Expense Admin & General	90,755	-

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Miscellaneous Expense Adjustment

The following adjustment reflects miscellaneous additions or deductions from pro forma expenses.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Credit Card/E-check Transaction Fees		32,994	106
2	Arrearage Management Plan and Low Income Program			52,424
3	Pro Forma Adjustment	$0	$32,994	$52,530
	675.7 Misc Exp Customer Accounting		32,994	106
	670.7 Uncollectible Acconts Exp - CA			52,424

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Calculation of Uncollectible Accounts Expenses

The following adjustment develops the Company's uncollectible accounts expense claim calculated on the ratio of actual per books revenue to net write-offs. This ratio is applied to pro forma sales at present and proposed rates.

LINE NO	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Total Sales	$0	$0	$11,720,908	$11,847,402	$38,135,710
2	2 Year Average	1.1760%	1.1760%	1.1760%	1.1760%	1.1760%
3	Annualized Uncollectible Expense		$0	$137,838	$139,325	$448,476
4	Less: Amount Charged To Operating Expense					
5	During The Twelve Months Ended 06/30/2023		0			
6	Less: Present Rates 06/30/2023			0		
7	Less: Present Rates 06/30/2024				137,838	
8	Less: Present Rates 06/30/2025					139,325
9	Pro Forma Adjustment		$0	$137,838	$1,487	$309,151
670.7	Customer Accounting And Collecting - Bad Debt		$0	$137,838	$1,487	$309,151

Witness: Cas Swiz

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Depreciation

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Depreciation	$0	$4,810,439	$5,094,513
2	Less: Depreciation on Vehicles - Capitalized Portion		3,940	2,761
3	Subtotal	$0	$4,806,499	$5,091,752
4	Book Depreciation	-	-	4,806,499
5	Pro Forma Adjustment	$0	$4,810,439	$288,014
	503 Depreciation	$0	$4,810,439	$288,014

Witness: Stacey D. Gress, John Spanos
Reference: Exhibit No. 3-B, Exhibits No. 11

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Amortization Expense

This adjustment is being made to reflect the Company's claim for amortizations.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	BASA WW Acquisition Costs	Seeking Approval	$0	$120,264
4	Proforma Expense		0	120,264
5	Less: Per Books		0	0
6	Pro Forma Adjustment		$0	$120,264

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Calculation of General Assessment by the Pennsylvania Public Utility Commission, Consumer Advocate and Small Business Advocate Fees

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED RATES 06/30/25 AMOUNT
1	Total Wastewater Sales	$0	$11,662,324	$11,788,185	$37,945,002
2	Estimated General Assessment Fee				
3	Public Utility Commission At 0.004324859316	0	50,438	50,982	164,107
4	Consumer Advocate Fee At 0.001742389526	0	20,320	20,540	66,115
5	Small Business Advocate Fee At 0.000303478942	0	3,539	3,577	11,516
6	Damage Prevention Comittee Fee At 0.000000719937	0	8	8	27
7	Subtotal	0	74,305	75,107	241,765
8	Less: Amount Charged To Operating Expenses During				
9	The Twelve Months Ended 06/30/2023	0			
10	Less: Pro Forma Under Present Rates At 06/30/2023		0		
11	Less: Pro Forma Under Present Rates At 06/30/2024			74,305	
12	Less: Pro Forma Under Present Rates At 06/30/2025				75,107
13	Pro Forma Adjustment	$0	$74,305	$802	$166,658

507.1 Taxes Other Than Income $241,765

Witness: Stacey D. Gress

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Pro Forma State And Federal Income Taxes Under Present And Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED 06/30/25 AMOUNT
1	State Income Tax Per Computation				
2	Shown On Following Page	$0	($31,744)	($143,866)	$1,918,703
3	Less: State Income Tax Per Book				
4	Computation Shown On Following Page	0			
5	Less: Present Rates 06/30/2023		0		
6	Less: Present Rates 06/30/2024			(31,744)	
7	Less: Present Rates 06/30/2025				(143,866)
8	Pro Forma Adjustment	$0	($31,744)	($112,122)	$2,062,569
9	Federal Income Tax Per Computation				
10	Shown On Following Page	$0	($29,949)	($298,482)	$4,689,399
11	Less: Federal Income Tax Per Book				
12	Computation Shown On Following Page	0			
13	Less: Present Rates 06/30/2023		0		
14	Less: Present Rates 06/30/2024			(29,949)	
15	Less: Present Rates 06/30/2025				(298,482)
16	Pro Forma Adjustment	$0	($29,949)	($268,533)	$4,987,881

Witness: Melissa Ciullo

Pennsylvania-American Water Company - BASA WW Operations
Notes to Statement Of Income
Calculation Of State And Federal Income Taxes

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Utility Operating Income Before Taxes	$0	$0	$257,690	($820,366)	$24,992,133
2	Less: Interest Expense	0	0	4,664,592	4,979,926	4,978,043
3	Taxable Operating Income	0	0	(4,406,902)	(5,800,292)	20,014,090
4	Add: Premature Property Losses / Amortizations	0	0	0	120,264	120,264
5	Depr - Straight Line-Remaining Life (Including COR)	0	0	4,806,499	5,091,752	5,091,752
6	Taxable Meals & Entertainment	0	0	0	0	0
7	Total	0	0	4,806,499	5,212,016	5,212,016
8	Deduct:					
9	Tax Depreciation:					
10	State Tax Depreciation Adjustments	0	0	773,496	1,212,296	1,212,296
11	Total	0	0	773,496	1,212,296	1,212,296
12	State Taxable Income	0	0	(373,899)	(1,800,572)	24,013,810
13	State Income Tax At:					
14	Historic at 8.99%, Future At 8.49% And Fully Projected At 7.99%	0	0	(31,744)	(143,866)	1,918,703
15	Taxable Income After State Income Tax	0	0	(342,155)	(1,656,706)	22,095,107
16	Add:					
17	Federal Tax Depreciation Adjustments	0	0	199,539	235,365	235,365
18	Income Subject To Federal Income Tax	0	0	(142,616)	(1,421,341)	22,330,472
19	Federal Income Tax @ 21%	0	0	(29,949)	(298,482)	4,689,399
20	Excess ADIT	0	0	0	0	0
21	Federal Tax Liability	$0	$0	($29,949)	($298,482)	$4,689,399

Witness: Melissa Ciullo

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Pro Forma Interest Expense Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED 6/30/25 AMOUNT
1	Interest On Long Term Debt Per Computation				
2	Shown On Following Page	$0	$4,388,202	$4,701,977	$4,700,199
3	Less: Interest On Long Term Debt As Per Book				
4	Computation On Following Page	0			
5	Less: Present Rates At 06/30/2023		0		
6	Less: Present Rates At 06/30/2024			4,388,202	
7	Less: Present Rates At 06/30/2025				4,701,977
8	Pro Forma Adjustment	$0	$4,388,202	$313,775	($1,778)
9	Interest On Wastewater Specific Long Term Debt Per Computation				
10	Shown On Following Page	$0	$267,302	$277,949	$277,844
11	Less: Interest On Wastewater Specific Long Term Debt As Per Book				
12	Computation On Following Page	0			
13	Less: Present Rates At 06/30/2023		0		
14	Less: Present Rates At 06/30/2024			267,302	
15	Less: Present Rates At 06/30/2025				277,949
16	Pro Forma Adjustment	$0	$267,302	$10,647	($105)

Witness: Ann E. Bulkley

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Application of Income Deductions

LINE NO.	DESCRIPTION	PRESENT RATES AT JUNE 30, 2023 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2024 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2025 AMOUNT	CAPITAL STRUCTURE	COST RATE
1	**Capital Structure**									
2	Long Term Debt	$384,896,465	38.42%	4.39%	$562,690,015	42.46%	4.63%	$594,902,431	42.73%	4.76%
3	Long Term Debt - WW Spec	63,458,726	6.33%	2.61%	62,348,860	4.70%	2.64%	61,227,844	4.40%	2.62%
4	Total Debt	448,355,191	44.75%		625,038,875	47.16%		656,130,275	47.13%	
5	Preferred Stock	93,854	0.01%	9.70%	0	0.00%	0.00%	0	0.00%	0.00%
6	Common Equity	553,552,633	55.24%		700,362,769	52.84%		735,975,490	52.87%	
7	Totals	$1,002,001,678	100.00%		$1,325,401,644	100.00%		$1,392,105,765	100.00%	

		PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
8	**Application Of Long Term Debt Interest:**				
9	Original Cost Rate Base	$0	$222,751,349	$231,624,479	$231,536,917
10	Debt Percentage (From Above)	38.42%	42.46%	42.73%	42.73%
11	Debt Portion Of Rate Base	0	94,580,223	98,973,140	98,935,725
12	Interest Cost (From Above)	4.39%	4.63%	4.76%	4.76%
13	Pro Forma Long Term Interest Deduction	$0	$4,388,202	$4,701,977	$4,700,199
14	**Application Of Wastewater Specific Long Term Debt Interest:**				
15	Original Cost Rate Base	$0	$222,751,349	$231,624,479	$231,536,917
16	Debt Percentage (From Above)	6.33%	4.70%	4.40%	4.40%
17	Debt Portion Of Rate Base	0	10,469,313	10,191,477	10,187,624
18	Interest Cost (From Above)	2.61%	2.64%	2.62%	2.62%
19	Pro Forma Wastewater Specific Long Term Interest Deduction	$0	$267,302	$277,949	$277,844

Witness: Ann E. Bulkley

Brentwood WW Operations

Pennsylvania-American Water Company - Brentwood WW Operations

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Pennsylvania-American Water Company - Brentwood WW Operations

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Pennsylvania-American Water Company - Brentwood WW Operations

Pro Forma Statement of Income for the Twelve Months Ending June 30, 2023

June 30, 2024, and June 30, 2025 Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PER BOOKS	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	LINE NO.
1	Operating Revenue	$0	$0	$0	$1,824,191	$1,824,191	$0	$1,824,191	$1,934,637	$3,758,828	1
2	Operating Revenue Deductions:										2
3	Operating Expenses	0	0	0	769,365	769,365	32,520	801,885	22,752	824,637	3
4	Depreciation	0	0	0	377,948	377,948	77,441	455,389	0	455,389	4
5	Amortizations	0	0	0	0	0	70,194	70,194	0	70,194	5
6	Taxes, Other Than Income:										6
7	Local Property And Miscellaneous	0	0	0	0	0	35,268	35,268	0	35,268	7
8	Federal Environmental Tax	0	0	0	0	0	0	0	0	0	8
9	Public Utility Realty Taxes	0	0	0	0	0	0	0	0	0	9
10	Payroll Taxes	0	0	0	5,901	5,901	183	6,084	0	6,084	10
11	General Assessment	0	0	0	11,565	11,565	0	11,565	12,265	23,830	11
12	Other Taxes and Licenses	0	0	0	0	0	0	0	0	0	12
13	Total Taxes Other Than Income	0	0	0	17,466	17,466	35,451	52,917	12,265	65,182	13
14	**Utility Operating Income Before Income Taxes**	**0**	**0**	**0**	**659,412**	**659,412**	**(215,606)**	**443,806**	**1,899,620**	**2,343,426**	14
15	Income Taxes:										15
16	State Income Tax	0	0	0	46,956	46,956	(28,629)	18,327	151,790	170,117	16
17	Federal Income Tax	0	0	0	110,154	110,154	(55,001)	55,153	367,073	422,226	17
18	Amortization Of ITC & Excess Deferred Taxes	0	0	0	0	0	0	0	0	0	18
19	Total Income Taxes	0	0	0	157,110	157,110	(83,630)	73,480	518,863	592,343	19
20	Total Operating Revenue Deductions	0	0	0	1,321,889	1,321,889	131,976	1,453,865	553,880	2,007,745	20
21	**Utility Operating Income**	**0**	**0**	**0**	**502,302**	**502,302**	**(131,976)**	**370,326**	**1,380,757**	**1,751,083**	21
22	Income Deductions:										22
23	Interest On Long Term Debt	0	0	0	388,397	388,397	59,429	447,826	(131)	447,695	23
24	Amortization Of Debt Discount Expense	0	0	0	0	0	0	0	0	0	24
25	Interest On Notes Payable To Others	0	0	0	24,463	24,463	2,009	26,472	(7)	26,465	25
26	Total Income Deductions	0	0	0	412,860	412,860	61,438	474,298	(138)	474,160	26
27	**Net Income**	**$0**	**$0**	**$0**	**$89,442**	**$89,442**	**($193,414)**	**($103,972)**	**$1,380,895**	**$1,276,923**	27
28	Preferred Dividends	0		0		0		0		0	28
29	**Net Income To Common**	**$0**		**$0**		**$89,442**		**($103,972)**		**$1,276,923**	29

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER BRENTWOOD

TOTAL REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2023 AND JUNE 30, 2024

LINE NO.	ACCT. NO.	CUSTOMER CLASS	PER BOOKS 12 ME June 2023	UNBILLED EADIT, DSIC, AMP ADJUSTMENTS	ANNUALIZE 2023 RATE CHANGE	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	OTHER REVENUE ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2023	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION ADJUSTMENTS	ACQUISITION ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2024
1		OPERATING REVENUES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2		METERED SALES										
3	522.1	RESIDENTIAL						$0			$1,434,460	$1,434,460
4	522.2	COMMERCIAL						0			344,866	344,866
5	522.3	INDUSTRIAL						0			0	0
6	522.4	MUNICIPAL						0			35,740	35,740
7	522.4	BULK						0				0
8		**TOTAL METERED SALES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$1,815,067**	**$1,815,067**
9		UNMETERED SALES										
10	522.1	RESIDENTIAL						$0				$0
11	522.2	COMMERCIAL						0				0
12	522.3	INDUSTRIAL						0				0
13	522.4	MUNICIPAL						0				0
14	522.4	BULK						0				0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$1,815,067**	**$1,815,067**
17		OTHER OPERATING REVENUES										
18	530	GUARANTEED REVENUES						$0				$0
19	532	LATE PAYMENT FEES						0			9,124	9,124
20	536	MISC SERVICE REVENUES						0				0
21	534	RENTS FROM PROPERTIES						0				0
22	535	INTERCOMPANY RENTS						0				0
23	523	OTHER WW REVENUES										
24		**TOTAL OTHER OPERATING**										
25		**REVENUES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$9,124**	**$9,124**
26		**TOTAL OPERATING REVENUES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$1,824,191**	**$1,824,191**

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER BRENTWOOD

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

LINE NO.	ACCT. NO.	CUSTOMER CLASSIFICATION	PRO FORMA PRESENT RATES 12 ME June 2024	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION	ANNUALIZE DSIC ADJUSTMENT	OTHER REVENUE ADJUSTMENT	PRO FORMA PRESENT RATES 12 ME June 2025	PERCENT	AMOUNT	PRO FORMA PROPOSED RATES
1		OPERATING REVENUES	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
2		METERED SALES									
3	522.1	RESIDENTIAL	$1,434,460					$1,434,460	22.30%	$319,868	$1,754,328
4	522.2	COMMERCIAL	344,866					344,866	421.72%	1,454,367	1,799,234
5	522.3	INDUSTRIAL	0					0	0.00%	0	-
6	522.4	MUNICIPAL	35,740					35,740	421.72%	150,724	186,465
7	522.4	BULK	0					0	0.00%	0	-
8		**TOTAL METERED SALES**	**$1,815,067**	**$0**	**$0**	**$0**	**$0**	**$1,815,067**	**106.05%**	**$1,924,960**	**$3,740,027**
9		UNMETERED SALES									
10	522.1	RESIDENTIAL	$0					$0	0.00%	$0	$0
11	522.2	COMMERCIAL	0					0	0.00%	0	0
12	522.3	INDUSTRIAL	0					0	0.00%	0	0
13	522.4	MUNICIPAL	0					0	0.00%	0	0
14	522.4	BULK	0					0	0.00%	0	0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**0.00%**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$1,815,067**	**$0**	**$0**	**$0**	**$0**	**$1,815,067**	**106.05%**	**$1,924,960**	**$3,740,027**
17		OTHER OPERATING REVENUES									
18	530	GUARANTEED REVENUES	$0					$0	0.00%	$0	0
19	532	LATE PAYMENT FEES	9,124					9,124	106.05%	9,677	18,801
20	536	MISC SERVICE REVENUES	0					0	0.00%	0	0
21	534	RENTS FROM PROPERTIES	0					0	0.00%	0	0
22	535	INTERCOMPANY RENTS	0					0	0.00%	0	0
23	523	OTHER WW REVENUES	0					0	0.00%	0	0
24		**TOTAL OTHER OPERATING**									
25		**REVENUES**	**$9,124**	**$0**	**$0**	**$0**	**$0**	**$9,124**	**106.05%**	**$9,677**	**$18,801**
26		**TOTAL OPERATING REVENUES**	**$1,824,191**	**$0**	**$0**	**$0**	**$0**	**$1,824,191**	**106.05%**	**$1,934,637**	**$3,758,828**

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER BRENTWOOD

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$0				
2	Present Rates At 06/30/2024				$0		
3	Present Rates At 06/30/2025						$1,824,191
4							
5	Annualization of Acquired System			$1,815,067			
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16	Late Payment Fees			9,124		0	
17							
18							
19							
20							
21	Pro Forma Adjustment		0		1,824,191		0
22	Pro Forma Present Rates At June 30, 2023		$0				
23	Pro Forma Present Rates At June 30, 2024				$1,824,191		
24	Pro Forma Present Rates At June 30, 2025						$1,824,191

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Revenues

Acquisition Brentwood Wastewater

The Company anticipates acquiring Brentwood Wastewater System in 2024 and will begin providing service to the entity's customers. The following adjustment annualizes the revenues associated with this acquisition.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 REVENUE ADJUSTMENT
1	**Metered Sales**	
2	Residential	$1,434,460
3	Commercial	344,866
4	Industrial	0
5	Municipal	35,740
6	Miscellaneous (Bulk Customers)	0
7	Total Metered Sales	$1,815,067
8	**Unmetered Sales**	
9	Residential	$0
10	Commercial	0
11	Industrial	0
12	Municipal	0
13	Miscellaneous (Bulk Customers)	0
14	Total Unmetered Sales	$0
15	Total Wastewater Sales	$1,815,067
16	Other Operating Revenues	$9,124
17	Pro Forma Adjustment	$1,824,191

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Revenues

Penalties

The following adjustment reflects the annualization of revenues associated with changes imposed during twelve months ending June 30, 2023 and projected to be imposed during twelve months ending June 30, 2024 and twelve months ending June 30, 2025. Additionally, annualized late payment charges are calculated based on revenues at the proposed rate level.

LINE NO.	DESCRIPTION	PER BOOKS 6/30/23	PRESENT RATES 6/30/23	PRESENT RATES 6/30/24	PRESENT RATES 6/30/25	PROPOSED RATES 6/30/25
1	Total Billed Wastewater Sales	$0	$0	$1,815,067	$1,815,067	$3,740,026
2	% Of Penalties To Total					
3	Total Company Sales - 2 Year Avg	0.5027%	0.5027%	0.5027%	0.5027%	0.5027%
4	Penalties	0	0	9,124	9,124	18,801
5	Less: Per Books At 06/30/2023		0			
6	Less: Present Rates At 06/30/2023			0		
7	Less: Present Rates At 06/30/2024				9,124	
8	Less: Present Rates At 06/30/2025					9,124
9	Pro Forma Adjustments		$0	$9,124	$0	$9,677

Witness: Charles Rea

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Summary of Rate Base Adjustments

LINE NO.	DESCRIPTION		DEPRECIATED ORIGINAL COST 6/30/23	DEPRECIATED ORIGINAL COST 6/30/24	DEPRECIATED ORIGINAL COST 6/30/25	DEPRECIATED ORIGINAL COST PROPOSED
1	Non-Depreciable Plant		$0	$32,371	$32,371	$32,371
2	Depreciable Plant		0	19,536,587	22,662,888	22,662,888
3	Total Utility Plant In Service		0	19,568,958	22,695,259	22,695,259
4	Deduct:					
5	Contributions In Aid Of Construction		0	0	0	0
6	Customer Advances For Construction		0	0	0	0
7	Excluded Property		0	0	0	0
8	Sub-Total		0	0	0	0
9	Net Utility Plant In Service		0	19,568,958	22,695,259	22,695,259
10	Accumulated Depreciation		0	355,547	383,500	383,500
11	Depreciated Utility Plant In Service		0	19,213,411	22,311,759	22,311,759
12	Add:					
13	Materials And Supplies		0	31,673	31,673	31,673
14	Cash Working Capital - Expenses		0	41,713	43,531	43,531
15	Accrued And Prepaid Taxes		0	2,223	10,168	3,711
16	Acquisition Adjustments		0	701,935	637,591	637,591
17	Other Additions		0	0	0	0
18	Deduct:					
19	Cash Working Capital - Int And Div		0	35,073	40,313	40,313
20	Unamortized Itc (3%)		0	0	0	0
21	Extension Deposits In Suspense		0	0	0	0
22	Tax Cuts and Jobs Act -Stub Period		0	0	0	0
23	Other Deductions		0	0	0	0
24	Deferred Taxes		0	240,320	934,006	934,006
25	Total Rate Base Elements		$0	$19,715,562	$22,060,403	$22,053,946
26	Utility Operating Income					
27	Per Books	$0	0.00%	0.00%	0.00%	0.00%
28	Present Rates At 06/30/2023	0	0.00%	-	-	-
29	Present Rates At 06/30/2024	502,302	-	2.55%	-	-
30	Present Rates At 06/30/2025	370,326	-	-	1.68%	-
31	Proposed Rates At 06/30/2025	1,751,083	-	-	-	7.94%

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 6/30/2023	ADDITIONS	ACQUISITION	RETIREMENTS	ESTIMATED BOOK COST 6/30/2024	ADDITIONS	RETIREMENTS	ESTIMATED BOOK COST 6/30/2025
1	353.10	Land & Land Rights		$0	$32,371	$0	$32,371	$0	$0	$32,371
2		Total Intangible Plant	$0	$0	$32,371	$0	$32,371	$0	$0	$32,371
3	361.10	Collection Sewers - Gravity Mains		$165,270	$16,100,565	$17,510	$16,248,325	$3,162,730	$335,091	$19,075,964
4	361.20	Manholes		30,030	1,803,713	3,182	1,830,561	184,470	19,545	1,995,487
5	363.00	Services		5,460	1,427,794	578	1,432,675	33,540	3,554	1,462,662
6	390.00	Office Furniture And Equipment		1,050	0	111	939	3,950	0	4,889
7	391.00	Transportation Equipment		14,700	0	0	14,700	55,300	0	70,000
8	393.00	Tools, Shop And Garage Equipment		10,500	0	1,112	9,388	44,500	0	53,888
9		Total Tangible Plant	$0	$227,010	$19,332,072	$22,494	$19,536,587	$3,484,490	$358,189	$22,662,888
10		Total Utility Plant In Service	$0	$227,010	$19,364,443	$22,494	$19,568,958	$3,484,490	$358,189	$22,695,259

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Materials And Supplies

The Company's claim for materials and supplies at June 30, 2024 and June 30, 2025 is calculated on the basis of the average monthly balances in the material and supplies accounts for PAWC's other wastewater districts for the period of June 2022 to July 2023. This balance was divided by the total number of customers in the other wastewater districts in order to calculate the amount of materials and supplies per customer. This per customer number was then multiplied by the total number of Brentwood Wastewater customers to calculate the Company's claim.

LINE NO.	DETAIL	06/30/2024 and 06/30/2025 AMOUNT
1	13-Month average of M&S for PAWC's 22 other WW SSS districts	$439,941
2	Number of customers in PAWC's 22 other WW SSS districts	55,222
3	Amount of M&S per customer	$7.97
4	Total number of Brentwood WW customers	3,974
5	Allowance for Materials and Supplies	
6	At 06/30/2024 and 06/30/2025	$31,673

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for wastewater service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months ended June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2025.

The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2023				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	$0	$0	$1,824,191	$1,824,191
9	Lag Days	50.6	50.6	50.6	50.6
10	Dollar Days	$0	$0	$92,322,303	$92,322,303
11	Total Billed Revenue	$0	$0	$1,824,191	$1,824,191
12	Total Dollar Days	$0	$0	$92,322,303	$92,322,303
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	0.0	0.0	50.6	50.6
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	0.0	0.0	30.4	30.4
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	0.0	0.0	20.2	20.2
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		$0	$753,814	$786,517
20	Operating Expenses Per Day (Line 20 / 365 Days)		0	2,065	2,155
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		$0	$41,713	$43,531

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Support of Expense Days

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PER BOOKS AMOUNT	PER BOOKS DOLLAR DAYS	PRESENT RATES 06/30/2023 AMOUNT	PRESENT RATES 06/30/2023 DOLLAR DAYS	PRESENT RATES 06/30/2024 AMOUNT	PRESENT RATES 06/30/2024 DOLLAR DAYS	PRESENT RATES 06/30/2025 AMOUNT	PRESENT RATES 06/30/2025 DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	$0	$0	$0	$0	$5,901	$71,132	$6,084	$73,338
2	Group Insurance	11.00	0	0	0	0	0	0	0	0
3	OPEB's and VEBA	0.00	0	0	0	0	0	0	0	0
4	Pension	(6.41)	0	0	0	0	0	0	0	0
5	Purchased Power	31.00	0	0	0	0	0	0	0	0
6	Purchased Water	35.22	0	0	0	0	0	0	0	0
7	Chemicals	47.20	0	0	0	0	0	0	0	0
8	Miscellaneous	30.46	0	0	0	0	744,654	22,682,422	776,882	23,664,098
9	Transportation	54.08	0	0	0	0	3,259	176,261	3,551	192,053
10	Ins Other Than Group	(69.48)	0	0	0	0	0	0	0	0
11	Service Company	12.05	0	0	0	0	0	0	0	0
12	Waste Disposal	41.96	0	0	0	0	0	0	0	0
13	Telephone	3.88	0	0	0	0	0	0	0	0
14	Rents	(13.36)	0	0	0	0	0	0	0	0
15	Natural Gas	33.33	0	0	0	0	0	0	0	0
16	Totals		$0	$0	$0	$0	$753,814	$22,929,815	$786,517	$23,929,489
17	Average Lag			0.0		0.0		30.4		30.4
18	Sum. Of Expense Pro Forma Present Rates & Payroll Taxes		$0		$0		$775,266		$807,969	
19	Uncollectibles		0		0		21,452		21,452	
20	Amortizations		0		0		0		0	
21	Sum Of Other Expenses		0		0		9,160		9,635	
22	Miscellaneous		$0		$0		$744,654		$776,882	

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	NET REVENUE LAG DAYS FUTURE	PRESENT RATES 06/30/2023 TAXES PAYABLE	PRESENT RATES 06/30/2023 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2024 TAXES PAYABLE	PRESENT RATES 06/30/2024 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2025 TAXES PAYABLE	PRESENT RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT	PROPOSED RATES 06/30/2025 TAXES PAYABLE	PROPOSED RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT
1	General Assessment	190.2	$0	$0	$11,565	$6,026	$11,565	$6,026	$23,830	$12,418
2	Public Utility Realty Tax	47.4	0	0	0	0	0	0	0	0
3	Local Property Tax	64.6	0	0	0	0	35,268	6,239	35,268	6,239
4	State Income Tax	13.6	0	0	46,956	1,750	18,327	683	170,117	6,339
5	Federal Income Tax	(18.4)	0	0	110,154	(5,553)	55,153	(2,780)	422,226	(21,285)
6	Totals			$0		$2,223		$10,168		$3,711

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

The payment of interest on the Company's long term debt is made six months in arrears. Payment of interest on the Company's short term debt is made monthly in arrears. The payment of dividends on the Company's preferred stock is made quarterly in arrears. The average lag days of interest and dividend payments and the deduction of the average lag days for the receipt of revenue is calculated below to determine cash working capital requirements.

LINE NO.	DESCRIPTION							
1	**Average Lag Calculation**	**LONG TERM INTEREST**		**SHORT TERM INTEREST**		**PREFERRED DIVIDEND**		
2	Future Revenue Lag Days	50.6		50.6		50.6		
3	Less: Interest Payments Lag Days	81.6		15.0		46.4		
4	Average Lag Between The Payment	(31.0)		35.6		4.2		
5	Of Interest And The Receipt							
6	Of Revenues							
		PRESENT RATES		**PRESENT RATES**		**PRESENT RATES**		**PROPOSED AMOUNT**
7	**Long Term Debt**	**6/30/23**		**6/30/24**		**6/30/25**		**6/30/25**
8	Working Capital Requirements							
9	Pro Forma Annual Interest Expense	$0		$388,397		$447,826		$447,695
10	Interest Expense Per Day							
11	(Line 9 / 365 Days)	0		1,064		1,227		1,227
12	Cash Working Capital Required							
13	(Line 4 Col.1 X Line 11)		0		(32,995)		(38,049)	(38,049)
14	**Long Term Debt - Wastewater Specific**							
15	Working Capital Requirements							
16	Pro Forma Annual Interest Expense	0		24,463		26,472		26,465
17	Interest Expense Per Day							
18	(Line 16 / 365 Days)	0		67		73		73
19	Cash Working Capital Required							
20	(Line 4 Col.2 X Line 18)		0		(2,078)		(2,264)	(2,264)
21	**Preferred Dividends**							
22	Working Capital Requirements							
23	Pro Forma Annual Dividend Expense	0		0		0		0
24	Dividend Expense Per Day							
25	(Line 23 / 365 Days)	0		0		0		0
26	Cash Working Capital Required							
27	(Line 4 Col.3 X Line 25)		0		0		0	0
28	Total Cash Working Capital Required							
29	(Line 13 + Line 20 + Line 27)		$0		($35,073)		($40,313)	($40,313)

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Acquisition Adjustments

The Company is requesting recognition of the transaction costs associated with its acquisition of the wastewater assets of Brentwood WW at Docket No. R-2021-3024058.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2023 AMOUNT	2024 Amortizations	PRESENT RATES 6/30/2024 AMOUNT	2025 Amortizations	PRESENT RATES 6/30/2025 AMOUNT
1	Brentwood WW	Seeking Approval	$0	$0	$701,935	$64,345	$637,591
2	Effect to Rate Base Element		$0	$0	$701,935	$64,345	$637,591

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Deferred Income Tax

The following calculation is being made to reflect the federal tax difference between using accelerated and straight-line depreciation, taxable contributions and advances and normalizing the effect of the repairs and maintenance deduction for state and federal tax. This adjustment is carried as a rate base reduction.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Deferred Tax	$0	($240,320)	($934,006)
2	Less: Prior Year		0	(240,320)
3	Effect to Rate Base Element	$0	($240,320)	($693,686)

Witness: Melissa Ciullo
Reference: FR IV.4

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
1		**Source Of Supply Expenses**				
2		-Operations-				
3	601.1	Salary And Wages	$0	$0	$0	$0
4	601.2	Salary And Wages	0	0	0	0
5	610.1	Purchased Water	0	0	0	0
6	615.1	Purchased Power	0	0	0	0
7	616.1	Purchased Fuel	0	0	0	0
8	620.1	Materials And Supplies	0	0	0	0
9	631.1	Contract Services - Engineering	0	0	0	0
10	633.1	Contract Services - Legal	0	0	0	0
11	636.1	Contract Services	0	0	0	0
12	604.1	Other Benefits	0	0	0	0
13	642.1	Rental Of Equipment	0	0	0	0
14	650.1	Transportation	0	0	0	0
15		-Maintenance-				
16	620.2	Materials And Supplies	0	0	0	0
17	631.2	Contract Services - Engineering	0	0	0	0
18	636.2	Contract Services	0	0	0	0
19	650.2	Transportation	0	0	0	0
19		-Miscellaneous-				
20	675.1	Miscellaneous Operating Expense	0	0	0	0
21	675.2	Miscellaneous Maintenance Expense	0	0	0	0
22		Total Source Of Supply Expenses	$0	$0	$0	$0
23		**Water Treatment**				
24		-Operation-				
25	601.3	Salary And Wages	$0	$0	$74,491	$76,876
26	601.4	Salary And Wages	0	0	0	0
27	604.3	Employee Pension And Benefits	0	0	0	0
28	615.3	Purchased Power	0	0	0	0
29	618.3	Chemicals	0	0	0	0
30	620.3	Materials And Supplies	0	0	0	0
31	631.3	Contract Services - Engineering	0	0	0	0
32	633.3	Contract Services - Legal	0	0	0	0

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
33	634.3	Contract Services - Management	0	0	0	0
34	635.3	Contract Services - Test	0	0	0	0
35	636.3	Contract Services	0	0	151,404	151,404
36	641.3	Rental Of Building	0	0	0	0
37	642.3	Rental Of Equipment	0	0	0	0
38	650.3	Transportation	0	0	0	0
39		-Maintenance-				
40	620.4	Materials And Supplies	0	0	0	0
41	631.4	Contract Services - Engineering	0	0	0	0
42	636.4	Contract Services	0	0	0	0
43	650.4	Transportation	0	0	0	0
44	675.4	Miscellaneous Maintenance Expense	0	0	0	0
45		-Miscellaneous-				
46	675.3	Miscellaneous Operating Expense	0	0	0	0
47		Total Water Treatment Expense	$0	$0	$225,894	$228,280
48		**Transmission And Distribution**				
49		-Operation-				
50	601.5	Salary And Wages	$0	$0	$0	$0
51	601.6	Salary And Wages	0	0	0	0
52	604.5	Employee Pension And Benefits	0	0	0	0
53	615.5	Purchased Power	0	0	0	0
54	620.5	Materials And Supplies	0	0	0	0
55	631.5	Contract Services - Engineering	0	0	0	0
56	636.5	Contract Services	0	0	0	0
57	641.5	Rental Of Building	0	0	0	0
58	642.5	Rental Of Equipment	0	0	0	0
59	650.5	Transportation	0	0	0	0
60		-Maintenance-				
61	620.6	Materials And Supplies	$0	$0	$56,530	$56,530
62	631.6	Contract Services - Engineering	0	0	0	0
63	636.6	Contract Services	0	0	0	0
64	650.6	Transportation	0	0	0	0
65	675.6	Miscellaneous Operating Expense	0	0	0	0

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
66		-Miscellaneous-				
67	675.5	Miscellaneous Operating Expense	0	0	18,297	18,297
68		Total Transmission And Distribution	$0	$0	$74,826	$74,826
69		**Customer Accounting**				
70		-Operation-				
71	601.7	Salary And Wages	$0	$0	$0	$0
72	604.7	Employee Pension And Benefits	0	0	0	0
73	615.7	Purchased Power	0	0	0	0
74	620.7	Materials And Supplies	0	0	0	0
75	631.7	Contract Services - Engineering	0	0	0	0
76	633.7	Contract Services - Legal	0	0	0	0
77	636.7	Contract Services	0	0	0	0
78	641.7	Rental Of Building	0	0	0	0
79	642.7	Rental Of Equipment	0	0	0	0
80	650.7	Transportation	0	0	0	0
81	657.7	Insurance	0	0	0	0
82	670.7	Bad Debt	0	0	48,423	63,404
83		-Miscellaneous-				
84	675.7	Miscellaneous Expense	0	0	8,834	8,863
85		Total Customer Accounting	$0	$0	$57,258	$72,267
86		**Administrative And General**				
87	601.8	Salary And Wages	$0	$0	$0	$0
88	603.8	Salary Of Officers	0	0	0	0
89	604.8	Employee Pension And Benefits	0	0	21,082	21,731
90	615.8	Purchased Power	0	0	0	0
91	620.8	Materials And Supplies	0	0	0	0
92	631.8	Contract Services	0	0	0	0
93	632.8	Contract Services - Accounting	0	0	0	0
94	633.8	Contract Services - Legal	0	0	0	0
95	634.8	Contract Services - Management	0	0	339,351	353,535
96	635.8	Contract Services - Test	0	0	0	0

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
97	636.8	Contract Services	0	0	0	0
98	641.8	Rental Of Building	0	0	12,318	12,318
99	642.8	Rental Of Equipment	0	0	0	0
100	650.8	Transportation	0	0	3,259	3,551
101	656.8	Insurance - Vehicles	0	0	0	0
102	657.8	Insurance	0	0	25,387	25,387
103	658.8	Workers Compensation	0	0	0	0
104	659.8	Insurance	0	0	0	0
105	660.8	Advertising	0	0	0	0
106	666.8	Amortization Of Rate Case	0	0	5,370	5,370
107	667.8	Regulatory Commission	0	0	0	0
108		-Miscellaneous-				
109	675.8	Miscellaneous Expense	0	0	4,619	4,619
110		Total Administrative And General	$0	$0	$411,387	$426,512
111		Total Operating Expenses	$0	$0	$769,365	$801,885

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	DESCRIPTION	6/30/23 DETAIL	PRESENT RATES 6/30/23 AMOUNT	6/30/24 DETAIL	PRESENT RATES 6/30/24 AMOUNT	6/30/25 DETAIL	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$0				
2	Present Rates At 06/30/2023				$0		
3	Present Rates At 06/30/2024						$769,365
4	Proposed Rates At 06/30/2025						
5	Compensation	$0		$0		$0	
6	Group Insurance	0		-		-	
7	Other Post Employment Benefits & VEBA	0		-		-	
8	Pension	0		-		-	
9	Purchased Power	0		-		-	
10	Waste Disposal	0		-		-	
11	Chemicals	0		-		-	
12	Change In Consumption Expense	0		-		-	
13	Transportation Expense	0		3,259		292	
14	Insurance Other Than Group	0		-		-	
15	Regulatory Expense (Rate Case Expense)	0		5,370		-	
16	Service Company Expense	0		-		-	
17	Postage and Customer Accounting	0		-		-	
18	Acquisition O&M	0		703,478		17,219	
19	401K & Defined Contribution Plan	0		-		-	
20	Rent Expense	0		-		-	
21	Miscellaneous Adjustments	0		35,806		15,009	
22	Uncollectibles	0		21,452		0	
23	Pro Forma Adjustments		0		769,365		32,520
24	Present Rates At 06/30/2023		$0				
25	Present Rates At 06/30/2024				$769,365		
26	Present Rates At 06/30/2025						$801,885

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Transportation Expense

The following adjustment reflects the annualization of transportation expense for the years ended June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Leased Vehicles Expense	$4,186	$4,561
2	Less: 22.14% Not Charged To Operating Expense	927	1,010
3	Sub-Total	3,259	3,551
4	Less: Amount Charged To Operating Expense		
5	During the Twelve Months Ended 06/30/23	-	
6	Less: Present Rates During the Twelve Months Ended 06/30/24		3,259
7	Pro Forma Adjustment	$3,259	$292
	650.8 A & G - Miscellaneous General Expense	$3,259	$292

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Regulatory Expense (Rate Case Expense)

The following adjustment reflects the estimated cost of this rate case normalized over a two-year period. Additionally, there is an adjustment for a 10 year amortization of the Customer Class Demand Study.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	Rate Case Expense Allocation	$10,479
2	Normalized Over 2 Years	5,240
3	Plus Allocation of Amortization of Demand Study	131
4	Less: Amount Charged To Operating Expense	
5	During The Twelve Months Ended 06/30/2023	-
6	Pro Forma Adjustment	$5,370

666.8 Regulatory Commission Expense $5,370

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Acquisition O&M Expense Adjustment

The following adjustment reflects an adjustment to annualize O&M expenses related to the future acquisition of the Brentwood Borough wastewater assets, which is expected to close before the end of the fully projected future test year.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNTS
1	Brentwood WW Annualized O&M	$709,379	$762,049
2	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/24		709,379
3	Pro Forma Adjustment	$709,379	$52,670
	408.12 Payroll Taxes	5,901	183
	408.2 Taxes, Other Than Income - Property	-	35,268
	601.3 Salary and Wages- Water Treatment	74,491	2,386
	604.8 A&G Employee Pension And Benefits	21,082	649
	620.6 M&S Maint TD	56,530	-
	634.8 AG - Contract Services Management	339,351	14,184
	636.3 Cont Serv Other Oper	151,404	-
	641.8 Rents - Admin & General	12,318	-
	657.8 General Liability	25,387	-
	675.5 Misc Exp Oper TD	18,297	-
	675.8 Misc Expense Admin & General	4,619	-

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Miscellaneous Expense Adjustment

The following adjustment is being made to add Upper Pottsgrove WW expenses to pro forma expenses.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNTS
1	Credit Card/E-check Transaction Fees		8,834	28
2	Arrearage Management Plan and Low Income Program			14,037
3	Uncollectible Expense Adjustment - ALCOSAN Billing		26,971	944
4	Pro Forma Adjustment	$0	$35,806	$15,009

675.7 Misc Exp Customer Accounting	8,834	28
670.7 Uncollectible Acconts Exp - CA	26,971	14,981

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Calculation of Uncollectible Accounts Expenses

The following adjustment develops the Company's uncollectible accounts expense claim calculated on the ratio of actual per books revenue to net write-offs. This ratio is applied to pro forma sales at present and proposed rates.

LINE NO	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Total Sales	$0	$0	$1,824,191	$1,824,191	$3,758,828
2	2 Year Average	1.1760%	1.1760%	1.1760%	1.1760%	1.1760%
3	Annualized Uncollectible Expense		$0	$21,452	$21,452	$44,204
4	Less: Amount Charged To Operating Expense					
5	During The Twelve Months Ended 06/30/2023		0			
6	Less: Present Rates 06/30/2023			0		
7	Less: Present Rates 06/30/2024				21,452	
8	Less: Present Rates 06/30/2025					21,452
9	Pro Forma Adjustment		$0	$21,452	$0	$22,752
670.7	Customer Accounting And Collecting - Bad Debt		$0	$21,452	$0	$22,752

Witness: Cas Swiz

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Depreciation

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Depreciation	$0	$378,041	$455,806
2	Less: Depreciation on Vehicles - Capitalized Portion		93	417
3	Subtotal	$0	$377,948	$455,389
4	Book Depreciation	-	-	377,948
5	Pro Forma Adjustment	$0	$378,041	$77,858
	503 Depreciation	$0	$378,041	$77,858

Witness: Stacey D. Gress, John Spanos
Reference: Exhibit No. 3-B, Exhibits No. 11

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Amortization Expense

This adjustment is being made to reflect the Company's claim for amortizations.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Brentwood WW Transaction Costs	Seeking Approval	$0	$70,194
2	Proforma Expense		0	70,194
3	Less: Per Books		0	0
4	Pro Forma Adjustment		$0	$70,194

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Calculation of General Assessment by the Pennsylvania Public Utility Commission, Consumer Advocate and Small Business Advocate Fees

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED RATES 06/30/25 AMOUNT
1	Total Wastewater Sales	$0	$1,815,067	$1,815,067	$3,740,026
2	Estimated General Assessment Fee				
3	Public Utility Commission At 0.004324859316	0	7,850	7,850	16,175
4	Consumer Advocate Fee At 0.001742389526	0	3,163	3,163	6,517
5	Small Business Advocate Fee At 0.000303478942	0	551	551	1,135
6	Damage Prevention Comittee Fee At 0.000000719937	0	1	1	3
7	Subtotal	0	11,565	11,565	23,830
8	Less: Amount Charged To Operating Expenses During				
9	The Twelve Months Ended 06/30/2023	0			
10	Less: Pro Forma Under Present Rates At 06/30/2023		0		
11	Less: Pro Forma Under Present Rates At 06/30/2024			11,565	
12	Less: Pro Forma Under Present Rates At 06/30/2025				11,565
13	Pro Forma Adjustment	$0	$11,565	$0	$12,265

507.1 Taxes Other Than Income $23,830

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Pro Forma State And Federal Income Taxes Under Present And Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED 06/30/25 AMOUNT
1	State Income Tax Per Computation				
2	Shown On Following Page	$0	$46,956	$18,327	$170,117
3	Less: State Income Tax Per Book				
4	Computation Shown On Following Page	0			
5	Less: Present Rates 06/30/2023		0		
6	Less: Present Rates 06/30/2024			46,956	
7	Less: Present Rates 06/30/2025				18,327
8	Pro Forma Adjustment	$0	$46,956	($28,629)	$151,790
9	Federal Income Tax Per Computation				
10	Shown On Following Page	$0	$110,154	$55,153	$422,226
11	Less: Federal Income Tax Per Book				
12	Computation Shown On Following Page	0			
13	Less: Present Rates 06/30/2023		0		
14	Less: Present Rates 06/30/2024			110,154	
15	Less: Present Rates 06/30/2025				55,153
16	Pro Forma Adjustment	$0	$110,154	($55,001)	$367,073

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Brentwood WW Operations
Notes to Statement Of Income
Calculation Of State And Federal Income Taxes

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Utility Operating Income Before Taxes	$0	$0	$659,412	$443,806	$2,343,426
2	Less: Interest Expense	0	0	412,860	474,298	474,160
3	Taxable Operating Income	0	0	246,552	(30,492)	1,869,266
4	Add: Premature Property Losses / Amortizations	0	0	0	70,194	70,194
5	Depr - Straight Line-Remaining Life (Including COR)	0	0	377,948	455,389	455,389
6	Taxable Meals & Entertainment	0	0	0	0	0
7	Total	0	0	377,948	525,583	525,583
8	Deduct:					
9	Tax Depreciation:					
10	State Tax Depreciation Adjustments	0	0	71,424	265,723	265,723
11	Total	0	0	71,424	265,723	265,723
12	State Taxable Income	0	0	553,076	229,368	2,129,126
13	State Income Tax At:					
14	Historic at 8.99%, Future At 8.49% And Fully Projected At 7.99%	0	0	46,956	18,327	170,117
15	Taxable Income After State Income Tax	0	0	506,120	211,041	1,959,009
16	Add:					
17	Federal Tax Depreciation Adjustments	0	0	18,425	51,590	51,590
18	Income Subject To Federal Income Tax	0	0	524,545	262,631	2,010,599
19	Federal Income Tax @ 21%	0	0	110,154	55,153	422,226
20	Excess ADIT	0	0	0	0	0
21	Federal Tax Liability	$0	$0	$110,154	$55,153	$422,226

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Pro Forma Interest Expense Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED 6/30/25 AMOUNT
1	Interest On Long Term Debt Per Computation				
2	Shown On Following Page	$0	$388,397	$447,826	$447,695
3	Less: Interest On Long Term Debt As Per Book				
4	Computation On Following Page	0			
5	Less: Present Rates At 06/30/2023		0		
6	Less: Present Rates At 06/30/2024			388,397	
7	Less: Present Rates At 06/30/2025				447,826
8	Pro Forma Adjustment	$0	$388,397	$59,429	($131)
9	Interest On Wastewater Specific Long Term Debt Per Computation				
10	Shown On Following Page	$0	$23,659	$26,472	$26,465
11	Less: Interest On Wastewater Specific Long Term Debt As Per Book				
12	Computation On Following Page	0			
13	Less: Present Rates At 06/30/2023		0		
14	Less: Present Rates At 06/30/2024			23,659	
15	Less: Present Rates At 06/30/2025				26,472
16	Pro Forma Adjustment	$0	$23,659	$2,813	($7)

Witness: Ann E. Bulkley

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Application of Income Deductions

LINE NO.	DESCRIPTION	PRESENT RATES AT JUNE 30, 2023 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2024 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2025 AMOUNT	CAPITAL STRUCTURE	COST RATE
1	**Capital Structure**									
2	Long Term Debt	$384,896,465	38.42%	4.39%	$562,690,015	42.46%	4.63%	$594,902,431	42.73%	4.76%
3	Long Term Debt - WW Spec	63,458,726	6.33%	2.61%	62,348,860	4.70%	2.64%	61,227,844	4.40%	2.62%
4	Total Debt	448,355,191	44.75%		625,038,875	47.16%		656,130,275	47.13%	
5	Preferred Stock	93,854	0.01%	9.70%	0	0.00%	0.00%	0	0.00%	0.00%
6	Common Equity	553,552,633	55.24%		700,362,769	52.84%		735,975,490	52.87%	
7	Totals	$1,002,001,678	100.00%		$1,325,401,644	100.00%		$1,392,105,765	100.00%	

		PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
8	**Application Of Long Term Debt Interest:**				
9	Original Cost Rate Base	$0	$19,715,562	$22,060,403	$22,053,946
10	Debt Percentage (From Above)	38.42%	42.46%	42.73%	42.73%
11	Debt Portion Of Rate Base	0	8,371,228	9,426,410	9,423,651
12	Interest Cost (From Above)	4.39%	4.63%	4.76%	4.76%
13	Pro Forma Long Term Interest Deduction	$0	$388,397	$447,826	$447,695
14	**Application Of Wastewater Specific Long Term Debt Interest:**				
15	Original Cost Rate Base	$0	$19,715,562	$22,060,403	$22,053,946
16	Debt Percentage (From Above)	6.33%	4.70%	4.40%	4.40%
17	Debt Portion Of Rate Base	0	926,631	970,658	970,374
18	Interest Cost (From Above)	2.61%	2.64%	2.62%	2.62%
19	Pro Forma Wastewater Specific Long Term Interest Deduction	$0	$23,659	$26,472	$26,465

Witness: Ann E. Bulkley

Wastewater
CSS Operations

Pennsylvania-American Water Company - Wastewater CSS Operations

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Pennsylvania-American Water Company - Wastewater CSS Operations

Pro Forma Statement of Income for the Twelve Months Ending June 30, 2023

June 30, 2024, and June 30, 2025 Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PER BOOKS	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	LINE NO.
1	Operating Revenue	$61,579,392	$17,907,727	$79,487,119	($1,023,743)	$78,463,376	$172,840	$78,636,216	$15,780,126	$94,416,342	1
2	Operating Revenue Deductions:										2
3	Operating Expenses	15,716,772	193,686	15,910,458	3,743,707	19,654,165	1,784,362	21,438,527	185,574	21,624,101	3
4	Depreciation	16,014,537	1,188,684	17,203,221	1,922,156	19,125,377	1,375,582	20,500,959	0	20,500,959	4
5	Amortizations	67,853	0	67,853	25,599	93,452	(97,395)	(3,943)	0	(3,943)	5
6	Taxes, Other Than Income:										6
7	Local Property And Miscellaneous	1,030,760	0	1,030,760	94,049	1,124,809	73,251	1,198,060	0	1,198,060	7
8	Federal Environmental Tax	0	0	0	0	0	0	0	0	0	8
9	Public Utility Realty Taxes	0	0	0	0	0	0	0	0	0	9
10	Payroll Taxes	450,560	0	450,560	73,058	523,618	11,520	535,138	0	535,138	10
11	General Assessment	345,592	157,747	503,339	(6,491)	496,848	1,097	497,945	100,040	597,985	11
12	Other Taxes and Licenses	0	0	0	0	0	0	0	0	0	12
13	Total Taxes Other Than Income	1,826,912	157,747	1,984,659	160,616	2,145,275	85,868	2,231,143	100,040	2,331,183	13
14	**Utility Operating Income Before Income Taxes**	**27,953,318**	**16,367,610**	**44,320,928**	**(6,875,821)**	**37,445,107**	**(2,975,577)**	**34,469,530**	**15,494,512**	**49,964,042**	14
15	Income Taxes:										15
16	State Income Tax	2,211,325	1,367,313	3,578,638	(1,224,514)	2,354,124	(370,076)	1,984,048	1,238,102	3,222,150	16
17	Federal Income Tax	4,587,531	2,908,623	7,496,154	(1,663,429)	5,832,725	(926,148)	4,906,577	2,994,083	7,900,660	17
18	Amortization Of ITC & Excess Deferred Taxes	0	0	0	0	0	0	0	0	0	18
19	Total Income Taxes	6,798,856	4,275,936	11,074,792	(2,887,943)	8,186,849	(1,296,224)	6,890,625	4,232,185	11,122,810	19
20	Total Operating Revenue Deductions	40,424,930	5,816,053	46,240,983	2,964,135	49,205,118	1,852,193	51,057,311	4,517,799	55,575,110	20
21	**Utility Operating Income**	**21,154,462**	**12,091,674**	**33,246,136**	**(3,987,878)**	**29,258,258**	**(1,679,353)**	**27,578,905**	**11,262,327**	**38,841,232**	21
22	Income Deductions:										22
23	Interest On Long Term Debt	6,690,608	0	6,690,608	2,243,913	8,934,521	996,987	9,931,508	(1,067)	9,930,441	23
24	Amortization Of Debt Discount Expense	0	0	0	0	0	0	0	0	0	24
25	Interest On Notes Payable To Others	673,020	0	673,020	(110,281)	562,739	24,345	587,084	(63)	587,021	25
26	Total Income Deductions	7,363,628	0	7,363,628	2,133,632	9,497,260	1,021,332	10,518,592	(1,130)	10,517,462	26
27	**Net Income**	**$13,790,834**	**$12,091,674**	**$25,882,508**	**($6,121,510)**	**$19,760,998**	**($2,700,685)**	**$17,060,313**	**$11,263,457**	**$28,323,770**	27
28	Preferred Dividends	0		0		0		0		0	28
29	**Net Income To Common**	**$13,790,834**		**$25,882,508**		**$19,760,998**		**$17,060,313**		**$28,323,770**	29

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER CSS OPERATIONS

TOTAL REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2023 AND JUNE 30, 2024

LINE NO.	ACCT. NO.	CUSTOMER CLASS	PER BOOKS 12 ME June 2023	UNBILLED EADIT, DSIC, AMP ADJUSTMENTS	ANNUALIZE 2023 RATE CHANGE	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	OTHER REVENUE ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2023	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION ADJUSTMENTS	OTHER REVENUE ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2024
1		OPERATING REVENUES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2		METERED SALES										
3	522.1	RESIDENTIAL	$36,130,486	($1,303,189)	$12,211,803	$63,668	$747	$47,103,514	$7,407	($799,671)		$46,311,250
4	522.2	COMMERCIAL	16,142,324	(711,113)	4,740,927	103,860	(72,555)	20,203,444	81,867	(275,378)		20,009,933
5	522.3	INDUSTRIAL	2,095,530	(96,104)	365,045		(119,925)	2,244,546				2,244,546
6	522.4	MUNICIPAL	813,279	(16,198)	220,091		0	1,017,172	(32,847)			984,325
7	522.4	BULK	5,899,357	(346,137)	2,687,597		0	8,240,817				8,240,817
8		**TOTAL METERED SALES**	**$61,080,975**	**($2,472,740)**	**$20,225,463**	**$167,528**	**($191,734)**	**$78,809,493**	**$56,427**	**($1,075,049)**	**$0**	**$77,790,871**
9		UNMETERED SALES										
10	522.1	RESIDENTIAL						$0				$0
11	522.2	COMMERCIAL						0				0
12	522.3	INDUSTRIAL						0				0
13	522.4	MUNICIPAL						0				0
14	522.4	BULK						0				0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$61,080,975**	**($2,472,740)**	**$20,225,463**	**$167,528**	**($191,734)**	**$78,809,493**	**$56,427**	**($1,075,049)**	**$0**	**$77,790,871**
17		OTHER OPERATING REVENUES										
18	530	GUARANTEED REVENUES	$0					$0				$0
19	532	LATE PAYMENT FEES	443,629				(47,454)	396,175			(5,121)	391,054
20	536	MISC SERVICE REVENUES	55,412					55,412				55,412
21	534	RENTS FROM PROPERTIES						0				0
22	535	INTERCOMPANY RENTS						0				0
23	523	OTHER WW REVENUES	(624)	36,990			189,674	226,040				226,040
24		**TOTAL OTHER OPERATING**										
25		**REVENUES**	**$498,417**	**$36,990**	**$0**	**$0**	**$142,220**	**$677,627**	**$0**	**$0**	**($5,121)**	**$672,506**
26		**TOTAL OPERATING REVENUES**	**$61,579,392**	**($2,435,750)**	**$20,225,463**	**$167,528**	**($49,514)**	**$79,487,119**	**56,427**	**($1,075,049)**	**(5,121)**	**$78,463,376**

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER CSS OPERATIONS

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

LINE NO.	ACCT. NO.	CUSTOMER CLASSIFICATION	PRO FORMA PRESENT RATES 12 ME June 2024	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION	ANNUALIZE DSIC ADJUSTMENT	OTHER REVENUE ADJUSTMENT	PRO FORMA PRESENT RATES 12 ME June 2025	PERCENT	AMOUNT	PRO FORMA PROPOSED RATES
1		OPERATING REVENUES	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
2		METERED SALES									
3	522.1	RESIDENTIAL	$46,311,250	$14,813	($644,138)	$493,365		$46,175,290	-5.04%	($2,327,412)	$43,847,878
4	522.2	COMMERCIAL	20,009,933	163,736	(192,068)	215,801		20,197,402	87.72%	17,716,502	37,913,903
5	522.3	INDUSTRIAL	2,244,546			24,241		2,268,787	87.72%	1,990,106	4,258,893
6	522.4	MUNICIPAL	984,325		(3,370)	10,594		991,549	87.72%	869,754	1,861,303
7	522.4	BULK	8,240,817			89,001		8,329,818	-30.59%	(2,547,753)	5,782,065
8		**TOTAL METERED SALES**	**$77,790,871**	**$178,549**	**($839,576)**	**$833,002**	**$0**	**$77,962,846**	**20.14%**	**$15,701,196**	**$93,664,042**
9		UNMETERED SALES									
10	522.1	RESIDENTIAL	$0					$0	0.00%	0	$0
11	522.2	COMMERCIAL	0					0	0.00%	0	0
12	522.3	INDUSTRIAL	0					0	0.00%	0	0
13	522.4	MUNICIPAL	0					0	0.00%	0	0
14	522.4	BULK	0					0	0.00%	0	0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**0.00%**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$77,790,871**	**$178,549**	**($839,576)**	**$833,002**	**$0**	**$77,962,846**	**20.14%**	**$15,701,196**	**$93,664,042**
17		OTHER OPERATING REVENUES									
18	530	GUARANTEED REVENUES	$0					$0	0.00%	$0	$0
19	532	LATE PAYMENT FEES	391,054				$865	391,919	20.14%	78,930	470,848
20	536	MISC SERVICE REVENUES	55,412					55,412	0.00%	0	55,412
21	534	RENTS FROM PROPERTIES	0					0	0.00%	0	0
22	535	INTERCOMPANY RENTS	0					0	0.00%	0	0
23	523	OTHER WW REVENUES	226,040					226,040	0.00%	0	226,040
24 25		**TOTAL OTHER OPERATING REVENUES**	**$672,506**	**$0**	**$0**	**$0**	**$865**	**$673,370**	**11.72%**	**$78,930**	**$752,300**
26		**TOTAL OPERATING REVENUES**	**$78,463,376**	**$178,549**	**($839,576)**	**$833,002**	**$865**	**$78,636,216**	**20.07%**	**$15,780,126**	**$94,416,342**

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER CSS OPERATIONS

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$61,579,392				
2	Present Rates At 06/30/2024				$79,487,119		
3	Present Rates At 06/30/2025						$78,463,376
4							
5	TCJA & EADIT Adjustment	36,990					
6	Unbilled Adjustment	(1,981,963)					
6	DSIC Adjustment	(572,047)				833,002	
7	Arrearage Management Program Adjustment	81,270					
8	Annualize 2023 Rate Change	20,225,463					
9	Change in Customers	167,528		89,274		178,549	
10	Usage Normalization			(1,107,896)		(839,576)	
11	IPP Revenue Adjustment	(2,060)					
12	Late Payment Fee Adjustment	(47,454)		(5,121)		865	
13							
14							
15							
16							
17							
18							
19							
20							
21	Pro Forma Adjustment		17,907,727		(1,023,743)		172,840
22	Pro Forma Present Rates At June 30, 2023		$79,487,119				
23	Pro Forma Present Rates At June 30, 2024				$78,463,376		
24	Pro Forma Present Rates At June 30, 2025						$78,636,216

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Revenues

TCJA & EADIT Adjustment

The following adjustment is being made to eliminate the tax credit and EADIT per books for the twelve months ended June 30, 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT
1	**Metered Sales**	
2	Residential	$0
3	Commercial	(0)
4	Industrial	0
5	Municipal	0
6	Miscellaneous (Bulk Customers)	0
7	Other WW Revenue	36,990
8	Total Metered Sales	$36,990
9	**Unmetered Sales**	
10	Residential	$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Miscellaneous (Bulk Customers)	0
15	Total Unmetered Sales	$0
16	Total Wastewater Surcharges	$36,990
17	Other Operating Revenues	$0
18	Pro Forma Adjustment	$36,990

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Revenues

Unbilled Revenue Adjustment

The following adjustment is being made to eliminate unbilled revenue accrued per books for the twelve months ended June 30, 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT
1	**Metered Sales**	
2	Residential	($1,059,977)
3	Commercial	(564,581)
4	Industrial	(77,520)
5	Municipal	(8,157)
6	Miscellaneous (Bulk Customers)	(271,728)
7	Total Metered Sales	($1,981,963)
8	**Unmetered Sales**	
9	Residential	$0
10	Commercial	0
11	Industrial	0
12	Municipal	0
13	Miscellaneous (Bulk Customers)	0
14	Total Unmetered Sales	$0
15	Total Unbilled	($1,981,963)
16	Other Operating Revenues	$0
17	Pro Forma Adjustment	($1,981,963)

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Revenues

DSIC Adjustment

The 06/30/2023 pro forma revenue adjustment is being made to eliminate the Distribution System Inprovement Charge (DSIC) revenues per book for the 12 months ended June 30, 2023 in order to reset the DSIC to zero. The 06/30/2025 pro froma revenue adjustment is to annualize the DSIC revenues for 12 months ending June 30, 2025 based on the Company's pro forma level rate of 2.30%.

LINE NO.	DESCRIPTION	6/30/2023 PER BOOK DSIC REVENUE	6/30/2023 ANNUALIZED DSIC REVENUE	6/30/2024 ANNUALIZED DSIC REVENUE	6/30/2023 PRO FORMA ADJUSTMENT	6/30/2025 PRO FORMA ADJUSTMENT
1	**Metered Sales**					
2	Residential	$324,482	$0	$493,365	($324,482)	$493,365
3	Commercial	146,532	0	215,801	(146,532)	215,801
4	Industrial	18,584	0	24,241	(18,584)	24,241
5	Municipal	8,041	0	10,594	(8,041)	10,594
6	Sales For Resale	53	0	89,001	(53)	89,001
7	Miscellaneous (Bulk)	74,356	0		(74,356)	0
8	Total Metered Sales	$572,047	$0	$833,002	($572,047)	$833,002
9	**Unmetered Sales**					
10	Residential					
11	Commercial					
12	Industrial					
13	Municipal					
14	Miscellaneous (Bulk)					
15	Total Unmetered Sales	$0	$0	$0	0	$0
16	Total DSIC Wastewater Sales	$572,047	$0	$833,002	($572,047)	$833,002
17	Other Operating Revenues	$0	$0	$0	$0	$0
18	Pro Forma Adjustment	$572,047	$0	$833,002	($572,047)	$833,002

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Revenues

AMP Deferred Revenue Adjustment

The following adjustment is being made to remove Arrearage Management Program (AMP) revenue credit booked in residential account for the twelve months ended June 30, 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT
1	**Metered Sales**	
2	Residential	$81,270
3	Commercial	0
4	Industrial	0
5	Municipal	0
6	Miscellaneous (Bulk Customers)	0
7	Total Metered Sales	$81,270
8	**Unmetered Sales**	
9	Residential	$0
10	Commercial	0
11	Industrial	0
12	Municipal	0
13	Miscellaneous (Bulk Customers)	0
14	Total Unmetered Sales	$0
15	Total AMP Deferred Revenue	$81,270
16	Other Operating Revenues	$0
17	Pro Forma Adjustment	$81,270

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Revenues

Annualized Base Year Rate Change

This revenue adjustment is being made to reflect the annualization of base year revenue from the new base rates which took effect on January 28, 2023.

LINE NO.	DESCRIPTION	6/30/2023 PER BOOKS REVENUE	6/30/2023 ANNUALIZED REVENUE	6/30/2023 PRO FORMA ADJUSTMENT
1	**Metered Sales**			
2	Residential	$34,828,043	$47,039,846	$12,211,803
3	Commercial	15,358,657	20,099,584	4,740,927
4	Industrial	1,879,501	2,244,546	365,045
5	Municipal	797,081	1,017,172	220,091
6	Sales For Resale	0	0	0
7	Miscellaneous (Bulk)	5,553,220	8,240,817	2,687,597
8	Total Metered Sales	$58,416,502	$78,641,965	$20,225,463
9	**Unmetered Sales**			
10	Residential	$0	$0	$0
11	Commercial	0	0	0
12	Industrial	0	0	0
13	Municipal	0	0	0
14	Miscellaneous (Bulk)	0	0	0
15	Total Unmetered Sales	$0	$0	$0
16	Total Billed Wastewater Sales	$58,416,502	$78,641,965	$20,225,463
17	Other Operating Revenues	$0	$0	$0
18	Pro Forma Adjustment	$58,416,502	$78,641,965	$20,225,463

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Revenues

Change in Number of Customers

The following historic revenue adjustment reflects the change in revenues due to the average change in number of customers during the twelve months ended June 30,2023. The following future and fully forecasted revenue adjustment reflects the change in revenues due to the projected change in number of customers during the twelve months ending June 30,2024 through June 30, 2025. Projections were based on a two year historical growth average exclusive of acquisitions.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 REVENUE ADJUSTMENT	PRESENT RATES 6/30/2024 REVENUE ADJUSTMENT	PRESENT RATES 6/30/2025 REVENUE ADJUSTMENT
1	**Metered Sales**			
2	Residential	$63,668	$7,407	$14,813
3	Commercial	103,860	81,867	163,736
4	Industrial			
5	Municipal			
6	Miscellaneous (Bulk Customers)			
7	Other WW Revenue			
8	Total Metered Sales	$167,528	$89,274	$178,549
9	**Unmetered Sales**			
10	Residential	$0	$0	$0
11	Commercial	0	0	0
12	Industrial	0	0	0
13	Municipal	0	0	0
14	Miscellaneous (Bulk Customers)	0	0	0
15	Total Unmetered Sales	$0	$0	$0
16	Total Wastewater Surcharges	$167,528	$89,274	$178,549
17	Other Operating Revenues	$0	$0	$0
18	Pro Forma Adjustment	$167,528	$89,274	$178,549

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Revenues

Usage Trend Adjustment

This adjustment is being made to normalize usage and address the change in usage trend in residential, commercial and municipal usage as well as the decline in usage that has been experienced for many years and is expected to continue to occur. Please refer to the testimony of Charles Rea (PAWC Statement No. 10).

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	**Metered Sales**		
2	Residential	($799,671)	($644,138)
3	Commercial	(275,378)	(192,068)
4	Industrial	0	0
5	Municipal	(32,847)	(3,370)
6	Sales For Resale	0	0
7	Miscellaneous (Bulk)	0	0
8	Total Metered Sales	($1,107,896)	($839,576)
9	**Unmetered Sales**		
10	Residential	$0	$0
11	Commercial	0	0
12	Industrial	0	0
13	Municipal	0	0
14	Miscellaneous (Bulk)	0	0
15	Total Unmetered Sales	$0	$0
16	Total Waterwater Sales	($1,107,896)	($839,576)
17	Other Operating Revenues	$0	$0
18	Pro Forma Adjustment	($1,107,896)	($839,576)

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Revenues

IPP Surcharge Adjustment

This adjustment is to account for the change in IPP surcharge as well as to reflect all IPP revenues in Miscellaneous account line.

LINE NO.	DESCRIPTION	6/30/2023 PER BOOK IPP REVENUE	6/30/2023 ANNUALIZED IPP Revenue	Adjustment
1	**Metered Sales**			
2	Residential	($747)	$0	$747
3	Commercial	72,555	0	(72,555)
4	Industrial	119,925	0	(119,925)
5	Municipal	0	0	0
6	Miscellaneous/Bulk	0	0	0
8	Total Metered Sales	$191,733	$0	($191,733)
9	**Unmetered Sales**			
10	Residential			
11	Commercial			
12	Industrial			
13	Municipal			
14	Miscellaneous/Bulk			
15	Total Unmetered Sales	$0	$0	$0
16	Other Wastewater Revenue	$36,366	$226,040	$189,674
17	Other Operating Revenues	$0	$0	$0
18	Pro Forma Adjustment			($2,060)

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Revenues

Penalties

The following adjustment reflects the annualization of revenues associated with changes imposed during twelve months ending June 30, 2023 and projected to be imposed during twelve months ending June 30, 2024 and twelve months ending June 30, 2025. Additionally, annualized late payment charges are calculated based on revenues at the proposed rate level.

LINE NO.	DESCRIPTION	PER BOOKS 6/30/23	PRESENT RATES 6/30/23	PRESENT RATES 6/30/24	PRESENT RATES 6/30/25	PROPOSED RATES 6/30/25
1	Total Billed Wastewater Sales	$59,099,012	$78,999,166	$77,980,544	$78,152,519	$93,853,714
2	% Of Penalties To Total					
3	Total Company Sales - 2 Year Avg	0.5027%	0.5027%	0.5027%	0.5027%	0.5027%
4	Penalties	443,629	397,129	392,008	392,873	471,803
5	Less: Per Books At 06/30/2023		443,629			
6	Less: Present Rates At 06/30/2023			397,129		
7	Less: Present Rates At 06/30/2024				392,008	
8	Less: Present Rates At 06/30/2025					392,873
9	Pro Forma Adjustments		($46,500)	($5,121)	$865	$78,930

Witness: Charles Rea

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Summary of Rate Base Adjustments

LINE NO.	DESCRIPTION		DEPRECIATED ORIGINAL COST 6/30/23	DEPRECIATED ORIGINAL COST 6/30/24	DEPRECIATED ORIGINAL COST 6/30/25	DEPRECIATED ORIGINAL COST PROPOSED
1	Non-Depreciable Plant		$4,463,355	$4,463,355	$4,463,355	$4,463,355
2	Depreciable Plant		739,866,378	812,897,332	863,395,439	863,395,439
3	Total Utility Plant In Service		744,329,733	817,360,687	867,858,794	867,858,794
4	Deduct:					
5	Contributions In Aid Of Construction		11,746,599	11,879,265	12,011,932	12,011,932
6	Customer Advances For Construction		0	0	0	0
7	Excluded Property		0	0	0	0
8	Sub-Total		11,746,599	11,879,265	12,011,932	12,011,932
9	Net Utility Plant In Service		732,583,134	805,481,422	855,846,862	855,846,862
10	Accumulated Depreciation		281,138,370	286,523,462	297,870,665	297,870,665
11	Depreciated Utility Plant In Service		451,444,764	518,957,960	557,976,197	557,976,197
12	Add:					
13	Materials And Supplies		176,374	176,374	176,374	176,374
14	Cash Working Capital - Expenses		1,158,034	1,725,056	1,879,977	1,879,977
15	Accrued And Prepaid Taxes		200,072	251,554	297,982	245,310
16	Acquisition Adjustments		3,978,967	3,832,491	3,686,015	3,686,015
17	Other Additions		0	0	0	0
18	Deduct:					
19	Cash Working Capital - Int And Div		625,595	806,880	893,646	893,553
20	Unamortized Itc (3%)		0	0	0	0
21	Extension Deposits In Suspense		0	0	0	0
22	Tax Cuts and Jobs Act -Stub Period		220,069	127,427	64,842	64,842
23	Other Deductions		0	0	0	0
24	Deferred Taxes		60,218,570	70,480,141	73,821,198	73,821,198
25	Total Rate Base Elements		$395,893,977	$453,528,987	$489,236,859	$489,184,280
26	Utility Operating Income					
27	Per Books	$21,154,462	5.34%	4.66%	4.32%	4.32%
28	Present Rates At 06/30/2023	33,246,136	8.40%	-	-	-
29	Present Rates At 06/30/2024	29,258,258	-	6.45%	-	-
30	Present Rates At 06/30/2025	27,578,905	-	-	5.64%	-
31	Proposed Rates At 06/30/2025	38,841,232	-	-	-	7.94%

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 6/30/2023	ADDITIONS	RETIREMENTS	ESTIMATED BOOK COST 6/30/2024	ADDITIONS	RETIREMENTS	ESTIMATED BOOK COST 6/30/2025
1	353.00	Land & Land Rights - Collection	$4,463,355	$0	$0	$4,463,355	$0	$0	$4,463,355
2		Total Intangible Plant	$4,463,355	$0	$0	$4,463,355	$0	$0	$4,463,355
3	354.20	Structures And Improvements - Collection	$16,346,670	$813,155	$88,613	$17,071,212	$817,826	$121,249	$17,767,789
4	354.30	Structures And Improvements - SPP	20,987,891	40,901	4,457	21,024,335	36,752	5,449	21,055,638
5	354.40	Structures And Improvements - TDP	117,121,745	15,229,148	1,488,689	130,862,205	10,568,617	2,760	141,428,062
6	355.00	Power Generation Equipment	908,631	141,944	15,468	1,035,107	4,200,000	0	5,235,107
7	360.10	Collection Sewers - Force Mains	9,576,689	13,504,107	1,470,140	21,610,656	3,846,077	567,018	24,889,714
8	361.10	Collection Sewers - Gravity Mains	391,547,733	30,885,474	3,333,254	419,099,952	9,689,286	1,373,939	427,415,300
9	361.20	Manholes	38,889,416	8,587,016	917,252	46,559,180	14,885,444	2,117,755	59,326,869
10	363.00	Services	14,254,769	2,925,224	295,660	16,884,334	2,683,355	358,151	19,209,538
11	364.00	Flow Measuring Devices	2,099,194	0	0	2,099,194	0	0	2,099,194
12	371.00	Pumping Equipment	14,926,205	2,582,801	281,460	17,227,545	955,553	141,668	18,041,430
13	380.00	Treatment Equipment	78,524,654	4,624,801	503,986	82,645,469	7,341,699	1,088,466	88,898,702
14	381.00	Plant Sewers	1,576,345	0	0	1,576,345	0	0	1,576,345
15	382.00	Outfall Sewer Lines	189,250	0	0	189,250	0	0	189,250
16	389.10	Other Plant And Miscellaneous Equipment - Intangibles	10,740,054	0	0	10,740,054	0	0	10,740,054
17	390.00	Office Furniture And Equipment	2,551,002	398,392	0	2,949,394	397,860	0	3,347,254
18	391.00	Transportation Equipment	7,930,532	551,148	60,061	8,421,619	82,825	12,279	8,492,165
19	392.00	Stores Equipment	106,844	0	0	106,844	0	0	106,844
20	393.00	Tools, Shop And Garage Equipment	3,612,057	799,336	0	4,411,393	439,044	0	4,850,437
21	394.00	Laboratory Equipment	1,323,997	40,901	0	1,364,898	36,752	0	1,401,650
22	395.00	Power Operated Equipment	1,797,120	0	0	1,797,120	0	0	1,797,120
23	396.00	Communication Equipment	2,220,985	89,228	0	2,310,212	47,328	0	2,357,541
24	397.00	Miscellaneous Equipment	2,634,594	276,417	0	2,911,012	258,422	0	3,169,434
25		Total Tangible Plant	$739,866,378	$81,489,995	$8,459,041	$812,897,332	$56,286,842	$5,788,735	$863,395,439
26		Total Utility Plant In Service	$744,329,733	$81,489,995	$8,459,041	$817,360,687	$56,286,842	$5,788,735	$867,858,794

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Contributions in Aid of Construction (CIAC)

The Company receives Contributions in Aid of Construction (CIAC) on an annual basis. The Commission's Order dated April 21, 1993, at Docket No. R-922428 approved the use of a three year average to calculate the future test year additions to CIAC. The following adjustment reflects the projected CIAC to be received during the twelve months ended June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Contributions In Aid Of Construction	$11,746,599	$11,879,265
2	Plus: Three Year Average Of Contributions	132,667	132,667
3	Contributions In Aid Of Construction	($11,879,265)	($12,011,932)

Witness: Stacey D. Gress
Reference: FR V.16

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Materials And Supplies

The Company's claim for materials and supplies at June 30, 2024 and June 30, 2025 is calculated on the basis of the average monthly balances in the materials and supplies account during the period June 30, 2022 and June 30, 2023.

LINE NO.	MONTH	DETAIL	PRESENT RATES 06/30/2024 and 06/30/2025 AMOUNT
1	June, 2022	$515,730	
2	July	543,701	
3	August	540,149	
4	September	498,421	
5	October	510,045	
6	November	498,942	
7	December	497,495	
8	January, 2023	519,439	
9	February	521,112	
10	March	502,379	
11	April	443,803	
12	May	410,504	
13	June, 2023	398,808	
14	Total	$6,400,528	
15	Average		$492,348
16	Allowance For Materials And Supplies		
17	At 06/30/2024 and 06/30/2025		$492,348

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for wastewater service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months ended June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2025.

The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2023				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	$59,597,429	$79,487,119	$78,463,376	$78,636,216
9	Lag Days	50.6	50.6	50.6	50.6
10	Dollar Days	$3,016,225,765	$4,022,842,937	$3,971,031,306	$3,979,778,738
11	Total Billed Revenue	$59,597,429	$79,487,119	$78,463,376	$78,636,216
12	Total Dollar Days	$3,016,225,765	$4,022,842,937	$3,971,031,306	$3,979,778,738
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	50.6	50.6	50.6	50.6
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	23.3	23.2	17.9	18.0
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	27.3	27.4	32.7	32.6
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		$15,426,249	$19,255,054	$21,048,903
20	Operating Expenses Per Day (Line 20 / 365 Days)		42,264	52,754	57,668
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		$1,158,034	$1,725,056	$1,879,977

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Support of Expense Days

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PER BOOKS AMOUNT	PER BOOKS DOLLAR DAYS	PRESENT RATES 06/30/2023 AMOUNT	PRESENT RATES 06/30/2023 DOLLAR DAYS	PRESENT RATES 06/30/2024 AMOUNT	PRESENT RATES 06/30/2024 DOLLAR DAYS	PRESENT RATES 06/30/2025 AMOUNT	PRESENT RATES 06/30/2025 DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	$6,367,755	$76,758,192	$6,367,755	$76,758,192	$7,105,978	$85,656,880	$7,268,095	$87,611,071
2	Group Insurance	11.00	1,124,750	12,372,250	1,124,750	12,372,250	1,288,040	14,168,440	1,327,092	14,598,012
3	OPEB's and VEBA	0.00	68,423	0	68,423	0	32,234	0	32,234	0
4	Pension	(6.41)	245,439	(1,574,484)	245,439	(1,574,484)	245,439	(1,574,484)	245,439	(1,574,484)
5	Purchased Power	31.00	1,436,870	44,548,972	1,442,990	44,738,718	1,711,501	53,063,680	1,691,208	52,434,512
6	Purchased Water	35.22	0	0	0	0	0	0	0	0
7	Chemicals	47.20	1,218,032	57,493,126	1,218,032	57,493,126	2,020,199	95,356,736	2,129,667	100,523,807
8	Miscellaneous	30.46	2,959,367	90,143,357	2,696,844	82,146,814	3,044,041	92,722,556	3,204,307	97,604,315
9	Transportation	54.08	546,312	29,546,896	546,312	29,546,896	633,322	34,252,770	690,475	37,343,849
10	Ins Other Than Group	(69.48)	84,146	(5,846,080)	84,146	(5,846,080)	1,395,214	(96,933,103)	1,434,260	(99,645,841)
11	Service Company	12.05	0	0	0	0	0	0	1,033,737	12,460,873
12	Waste Disposal	41.96	1,344,100	56,398,984	1,344,100	56,398,984	1,491,628	62,589,319	1,704,931	71,539,599
13	Telephone	3.88	120,976	469,628	120,976	469,628	120,976	469,628	120,976	469,628
14	Rents	(13.36)	16,425	(219,391)	16,425	(219,391)	16,425	(219,391)	16,425	(219,391)
15	Natural Gas	33.33	150,057	5,001,845	150,057	5,001,845	150,057	5,001,845	150,057	5,001,845
16	Totals		$15,682,652	$365,093,295	$15,426,249	$357,286,498	$19,255,054	$344,554,876	$21,048,903	$378,147,795
17	Average Lag			23.3		23.2		17.9		18.0
18	Sum. Of Expense Pro Forma Present Rates & Payroll Taxes		$16,167,332		$16,361,018		$20,177,783		$21,973,665	
19	Uncollectibles		484,680		934,769		922,729		924,762	
20	Amortizations		0		0		0		0	
21	Sum Of Other Expenses		12,723,285		12,729,405		16,211,013		17,844,596	
22	Miscellaneous		$2,959,367		$2,696,844		$3,044,041		$3,204,307	

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	NET REVENUE LAG DAYS FUTURE	PRESENT RATES 06/30/2023 TAXES PAYABLE	PRESENT RATES 06/30/2023 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2024 TAXES PAYABLE	PRESENT RATES 06/30/2024 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2025 TAXES PAYABLE	PRESENT RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT	PROPOSED RATES 06/30/2025 TAXES PAYABLE	PROPOSED RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT
1	General Assessment	190.2	$503,339	$262,288	$496,848	$258,905	$497,945	$259,477	$597,985	$311,608
2	Public Utility Realty Tax	47.4	0	0	0	0	0	0	0	0
3	Local Property Tax	64.6	1,030,760	182,331	1,124,809	198,967	1,198,060	211,924	1,198,060	211,924
4	State Income Tax	13.6	3,578,638	133,341	2,354,124	87,715	1,984,048	73,926	3,222,150	120,058
5	Federal Income Tax	(18.4)	7,496,154	(377,888)	5,832,725	(294,033)	4,906,577	(247,345)	7,900,660	(398,280)
6	Totals			$200,072		$251,554		$297,982		$245,310

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Calulation of Lag Days for Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	TAX PERIOD BEGINNING	TAX PERIOD ENDING	PAYMENTS 2022 - 2023 TAX				TOTAL TAX LAG DAY	REVENUE LAG LESS TAX LAG
1	General Assessment	7/1/22	6/30/23	9/13/22	9/27/22			(139.6)	190.3
	Percent of Payment			11%	31%				
	Lag Days			(11.30)	(28.85)				
		7/1/23	6/30/24	6/27/23					
	Percent of Payment			59%					
	Lag Days			(109.04)					
2	Public Utility Realty Tax	1/1/22	12/31/22	9/14/22				3.3	46.6
	Percent Of Payment			25%	25%	25%	25%		
	Lag Days			18.63					
		1/1/2023	12/31/2023	5/1/2023					
	Percent of Payment			25%	25%	25%	25%		
	Lag Days			(15.38)					
3	Local Property Tax			Lag calculated using expense lag method				(14)	64.6
	Payment								
	Lag Days								
4	State Income Tax	1/1/2022	12/31/2022	9/15/22	12/15/22			37.0	12.8
	Percent Of Payment			25%	25%	25%	25%		
	Lag Days			18.88	41.63				
		1/1/2023	12/31/2023	4/15/23	6/15/23				
	Percent Of Payment			25%	25%	25%	25%		
	Lag Days			(19.38)	(4.13)				
5	Federal Income Tax	1/1/22	12/31/22	7/26/2022	10/26/2022	12/21/2022	12/22/2022	69.00	(19.2)
	Percent Of Payment			25%	25%	25%	13%		
	Lag Days			6.13	29.13	43.13	21.69		
		1/1/2023	12/31/2023	3/21/2023	4/25/2023	6/26/2023			
	Percent Of Payment			13%	25%	25%			
	Lag Days			(12.81)	(16.88)	(1.38)			

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

The payment of interest on the Company's long term debt is made six months in arrears. Payment of interest on the Company's short term debt is made monthly in arrears. The payment of dividends on the Company's preferred stock is made quarterly in arrears. The average lag days of interest and dividend payments and the deduction of the average lag days for the receipt of revenue is calculated below to determine cash working capital requirements.

LINE NO.	DESCRIPTION	LONG TERM INTEREST	SHORT TERM INTEREST	PREFERRED DIVIDEND
1	**Average Lag Calculation**			
2	Future Revenue Lag Days	50.6	50.6	50.6
3	Less: Interest Payments Lag Days	81.6	15.0	46.4
4	Average Lag Between The Payment	(31.0)	35.6	4.2
5	Of Interest And The Receipt			
6	Of Revenues			

		PRESENT RATES 6/30/23		PRESENT RATES 6/30/24		PRESENT RATES 6/30/25		PROPOSED AMOUNT 6/30/25	
7	**Long Term Debt**								
8	Working Capital Requirements								
9	Pro Forma Annual Interest Expense	$6,690,608		$8,934,521		$9,931,508		$9,930,441	
10	Interest Expense Per Day								
11	(Line 9 / 365 Days)	18,330		24,478		27,210		27,207	
12	Cash Working Capital Required								
13	(Line 4 Col.1 X Line 11)		(568,413)		(759,063)		(843,782)		(843,689)
14	**Long Term Debt - Wastewater Specific**								
15	Working Capital Requirements								
16	Pro Forma Annual Interest Expense	673,020		562,739		587,084		587,021	
17	Interest Expense Per Day								
18	(Line 16 / 365 Days)	1,844		1,542		1,608		1,608	
19	Cash Working Capital Required								
20	(Line 4 Col.2 X Line 18)		(57,182)		(47,817)		(49,864)		(49,864)
21	**Preferred Dividends**								
22	Working Capital Requirements								
23	Pro Forma Annual Dividend Expense	0		0		0		0	
24	Dividend Expense Per Day								
25	(Line 23 / 365 Days)	0		0		0		0	
26	Cash Working Capital Required								
27	(Line 4 Col.3 X Line 25)		0		0		0		0
28	Total Cash Working Capital Required								
29	(Line 13 + Line 20 + Line 27)		($625,595)		($806,880)		($893,646)		($893,553)

Witness: Stacey D. Gress

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Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Acquisition Adjustments

The following adjustment reflects the recognition of the transaction costs associated with the acquisition of the various wastewater utility assets pursuant to the terms of the Commission-approved settlement of the Company's rate cases at Docket Nos. R-2017-2595853, R-2020-3019369 and R-2022-3031672.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2023 AMOUNT	2024 Amortizations	PRESENT RATES 6/30/2024 AMOUNT	2025 Amortizations	PRESENT RATES 6/30/2025 AMOUNT
1	Scranton Wastewater Transaction Costs	Approved Docket No. R-2017-2595853	$2,568,047	$74,436	$2,493,611	$74,436	$2,419,175
2	McKeesport Transaction Costs	Approved Docket No. R-2020-3019369	1,083,168	28,820	1,054,348	28,820	1,025,528
3	Kane Transaction Costs	Approved Docket No. R-2020-3019369	327,752	43,220	284,532	43,220	241,312
4	Effect to Rate Base Element		$3,978,967	$146,476	$3,832,491	$146,476	$3,686,015

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Tax Cuts and Jobs Act Stub Period

The following adjustment reflects the amortization of the federal income tax savings associated with the 2017 Tax Cuts and Jobs Act ("TCJA") for January 1, 2018 through June 30, 2018 (the "Stub Period"), as authorized in the settlement at Docket No. R-2020-3019369. The adjustment reflects a true-up to the accrual of interest at the residential mortgage lending rate specified by the Secretary of Banking in accordance with the Loan Interest and Protection Law (41. P.S. §§ 101, et seq.), which was lower than the amount projected in 2020, as well as the reconciliation amounts shown in the Company's 2021 and 2022 TCJA Surcharge Reconciliation filings are included as part of this adjustment, including the over/(under) collection plus interest, all approved at Docket No. R-2022-3019369. The Company is also proposing to amortize the balance at 06/30/2024 over a two-year period.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Tax Cuts and Jobs Act Stub Period			
2	Beginning Balance	$393,477	$220,069	$127,427
3	Less: 2022/2023 Amortization	(173,408)		
4	Less: 2023/2024 Amortization		(92,642)	
5	Less: 2024/2025 Amortization			(62,585)
6	Effect to Rate Base Element	$220,069	$127,427	$64,842

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Deferred Income Tax

The following calculation is being made to reflect the federal tax difference between using accelerated and straight-line depreciation, the effects of the Tax Cuts and Jobs Act, taxable contributions and advances and normalizing the effect of the repairs and maintenance deduction for state and federal tax. This adjustment is carried as a rate base reduction.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Deferred Tax	($60,218,570)	($70,480,141)	($73,821,198)
2	Less: Prior Year		(60,218,570)	(70,480,141)
3	Effect to Rate Base Element	($60,218,570)	($10,261,571)	($3,341,057)

Witness: Melissa Ciullo
Reference: FR IV.4

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
1		**Source Of Supply Expenses**				
2		-Operations-				
3	601.1	Salary And Wages	$0	$0	$0	$0
4	601.2	Salary And Wages	0	0	0	0
5	610.1	Purchased Water	0	0	0	0
6	615.1	Purchased Power	0	0	0	0
7	616.1	Purchased Fuel	0	0	0	0
8	620.1	Materials And Supplies	0	0	0	0
9	631.1	Contract Services - Engineering	0	0	0	0
10	633.1	Contract Services - Legal	0	0	0	0
11	636.1	Contract Services	0	0	0	0
12	604.1	Other Benefits	0	0	0	0
13	642.1	Rental Of Equipment	0	0	0	0
14	650.1	Transportation	0	0	0	0
15		-Maintenance-				
16	620.2	Materials And Supplies	0	0	0	0
17	631.2	Contract Services - Engineering	0	0	0	0
18	636.2	Contract Services	0	0	0	0
19		-Miscellaneous-				
20	675.1	Miscellaneous Operating Expense	0	0	0	0
21	675.2	Miscellaneous Maintenance Expense	0	0	0	0
22		Total Source Of Supply Expenses	$0	$0	$0	$0
23		**Water Treatment**				
24		-Operation-				
25	601.3	Salary And Wages	$2,181,412	$2,181,412	$2,426,629	$2,482,147
26	601.4	Salary And Wages	678,422	678,422	754,685	771,951
27	604.3	Employee Pension And Benefits	0	0	0	0
28	615.3	Purchased Power	1,138,481	1,141,393	1,418,155	1,408,498
29	618.3	Chemicals	1,218,032	1,221,148	2,006,330	2,105,466
30	620.3	Materials And Supplies	74,486	74,486	74,486	74,486
31	631.3	Contract Services - Engineering	4,683	4,683	4,683	4,683
32	633.3	Contract Services - Legal	0	0	0	0

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
33	634.3	Contract Services - Management	0	0	0	0
34	635.3	Contract Services - Test	127,573	127,573	127,573	127,573
35	636.3	Contract Services	236,056	236,056	236,056	236,056
36	641.3	Rental Of Building	0	0	0	0
37	642.3	Rental Of Equipment	0	0	0	0
38	650.3	Transportation	1,519	1,519	1,519	1,519
39		-Maintenance-				
40	620.4	Materials And Supplies	46,243	46,243	46,243	46,243
41	631.4	Contract Services - Engineering	0	0	0	0
42	636.4	Contract Services	275,818	275,818	275,818	275,818
43	650.4	Transportation	9,182	9,182	9,182	9,182
44	675.4	Miscellaneous Maintenance Expense	71,964	71,964	71,964	71,964
45		-Miscellaneous-				
46	675.3	Miscellaneous Operating Expense	1,894,258	1,894,258	2,041,786	2,255,089
47						
48		Total Water Treatment Expense	$7,958,129	$7,964,157	$9,495,110	$9,870,675
49		**Transmission And Distribution**				
50		-Operation-				
51	601.5	Salary And Wages	$583,172	$583,172	$648,728	$663,570
52	601.6	Salary And Wages	1,373,113	1,373,113	1,527,468	1,562,415
53	604.5	Employee Pension And Benefits	0	0	0	0
54	615.5	Purchased Power	35,929	36,021	44,755	44,450
55	620.5	Materials And Supplies	199,330	199,330	199,330	199,330
56	631.5	Contract Services - Engineering	0	0	0	0
57	636.5	Contract Services	152,132	152,132	152,132	152,132
58	641.5	Rental Of Building	0	0	0	0
59	642.5	Rental Of Equipment	2,449	2,449	2,449	2,449
60	650.5	Transportation	8,934	8,934	8,934	8,934
61		-Maintenance-				
62	620.6	Materials And Supplies	$2,948	$2,948	$2,948	$2,948
63	631.6	Contract Services - Engineering	0	0	0	0
64	636.6	Contract Services	57,069	57,069	57,069	57,069
65	650.6	Transportation	0	0	0	0

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
66	675.6	Miscellaneous Operating Expense	191,298	191,298	191,298	191,298
67		-Miscellaneous-				
68	675.5	Miscellaneous Operating Expense	226,927	226,927	226,927	226,927
69		Total Transmission And Distribution	$2,833,301	$2,833,393	$3,062,038	$3,111,522
70		**Customer Accounting**				
71		-Operation-				
72	601.7	Salary And Wages	$0	$0	$0	$0
73	604.7	Employee Pension And Benefits	0	0	0	0
74	615.7	Purchased Power	0	0	0	0
75	620.7	Materials And Supplies	0	0	0	0
76	631.7	Contract Services - Engineering	0	0	0	0
77	633.7	Contract Services - Legal	0	0	0	0
78	636.7	Contract Services	0	0	0	0
79	641.7	Rental Of Building	0	0	0	0
80	642.7	Rental Of Equipment	0	0	0	0
81	650.7	Transportation	0	0	0	0
82	657.7	Insurance	0	0	0	0
83	670.7	Bad Debt	484,680	934,769	922,729	1,075,448
84		-Miscellaneous-				
85	675.7	Miscellaneous Expense	1,080	1,080	67,533	67,837
86		Total Customer Accounting	$485,760	$935,849	$990,262	$1,143,285
87		**Administrative And General**				
88	601.8	Salary And Wages	$1,101,076	$1,101,076	$1,224,850	$1,252,873
89	603.8	Salary Of Officers	0	0	0	0
90	604.8	Employee Pension And Benefits	2,032,099	1,747,350	1,715,289	1,763,620
91	615.8	Purchased Power	262,460	262,460	262,460	262,460
92	620.8	Materials And Supplies	5,402	5,402	5,402	5,402
93	631.8	Contract Services	0	0	0	0
94	632.8	Contract Services - Accounting	0	0	0	0
95	633.8	Contract Services - Legal	(2,844)	(2,844)	(2,844)	(2,844)

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 06/30/23	PRESENT RATES 06/30/23	PRESENT RATES 06/30/24	PRESENT RATES 06/30/25
96	634.8	Contract Services - Management	0	0	0	1,033,737
97	635.8	Contract Services - Test	0	0	0	0
98	636.8	Contract Services	55,280	55,280	55,280	55,280
99	641.8	Rental Of Building	13,934	13,934	13,934	13,934
100	642.8	Rental Of Equipment	42	42	42	42
101	650.8	Transportation	526,677	526,677	613,687	670,840
102	656.8	Insurance - Vehicles	0	0	21,862	22,331
103	657.8	Insurance	0	0	968,078	984,882
104	658.8	Workers Compensation	84,146	84,146	93,874	95,317
105	659.8	Insurance	0	0	311,400	331,730
106	660.8	Advertising	0	0	0	0
107	666.8	Amortization Of Rate Case	0	0	98,964	98,964
108	667.8	Regulatory Commission	0	0	0	0
109		-Miscellaneous-				
110	675.8	Miscellaneous Expense	361,310	383,536	724,477	724,477
111		Total Administrative And General	$4,439,582	$4,177,059	$6,106,755	$7,313,044
112		Total Operating Expenses	$15,716,772	$15,910,458	$19,654,165	$21,438,527

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	DESCRIPTION	6/30/23 DETAIL	PRESENT RATES 6/30/23 AMOUNT	6/30/24 DETAIL	PRESENT RATES 6/30/24 AMOUNT	6/30/25 DETAIL	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$15,716,772				
2	Present Rates At 06/30/2023				$15,910,458		
3	Present Rates At 06/30/2024						$19,654,165
4	Proposed Rates At 06/30/2025						
5	Compensation	$0		$665,165		$150,597	
6	Group Insurance	0		163,290		39,052	
7	Other Post Employment Benefits & VEBA	0		(36,189)		-	
8	Pension	0		-		-	
9	Purchased Power	0		301,872		-	
10	Waste Disposal	0		147,528		213,303	
11	Chemicals	0		802,167		109,468	
12	Change In Consumption Expense	6,120		(33,361)		(20,293)	
13	Transportation Expense	0		87,010		57,153	
14	Insurance Other Than Group	0		1,311,068		39,046	
15	Regulatory Expense (Rate Case Expense)	0		98,963		-	
16	Service Company Expense	0		-		1,033,737	
17	Postage and Customer Accounting	0		-		-	
18	Acquisition O&M	0		-		-	
19	401K & Defined Contribution Plan	0		(159,162)		9,278	
20	Rent Expense	0		-		-	
21	Miscellaneous Adjustments	(262,523)		407,396		150,988	
22	Uncollectibles	450,089		(12,040)		2,033	
23	Pro Forma Adjustments		193,686		3,743,707		1,784,362
24	Present Rates At 06/30/2023		$15,910,458				
25	Present Rates At 06/30/2024				$19,654,165		
26	Present Rates At 06/30/2025						$21,438,527

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Compensation

The following adjustment sets forth a summary of the Company's annualization of labor expense. The pro forma payroll for the future test years were developed by applying pay rates and associated performance pay that will become effective by June 30, 2024 and June 30, 2025 to the Company's full complement of employees.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Salary and Wages	$8,138,168	$8,323,263
2	Annualized Performance Plan	315,929	324,254
3	Less: 22.14% Capitalized portion not charged to operating expense	1,871,737	1,914,560
4	Sub-Total	6,582,360	6,732,957
5	Less: Amount Charged To Operating Expense		
6	During The Twelve Months Ended 06/30/23	5,917,195	
7	Less: Amount Charged To Present Rates		
8	During the Twelve Months Ended 06/30/24		6,582,360
9	Pro Forma Adjustment	$665,165	$150,597
	601.3 Salary and Wages - Water Treatment	$245,217	$55,518
	601.4 Salary and Wages - Water Treatment	76,263	17,266
	601.5 Salary and Wages - Transmission & Distribution	65,556	14,842
	601.6 Salary and Wages - Transmission & Distribution	154,355	34,947
	601.7 Salary and Wages - Customer Accounting	-	-
	601.8 Salary and Wages - Administrative and General	123,774	28,023

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Group Insurance

The adjustment of the group insurance cost is based on the January 2024 premiums annualized for the future test year number of employees, less the annualized employee contribution, and adjusted for the portion not charged to operations. The fully projected future test year was developed by adjusting the annualized 2024 amount by a 3 year average of 3.03%.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Group Insurance Cost	$1,654,303	$1,704,460
2	Less: 22.14% Not Charged To Operating Expense	366,263	377,367
3	Sub-Total	1,288,040	1,327,093
4	Less: Amount Charged To Operating Expense		
5	During the Twelve Months Ended 06/30/23	1,124,750	
6	Less: Amount Charged To Operating Expense		
7	During the Twelve Months Ended 06/30/24		1,288,040
8	Pro Forma Adjustment	$163,290	$39,052
	604.8 A&G Employees Pension And Benefits	$163,290	$39,052

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Other Post Employment Benefits (OPEB)

The following sets forth the Company's adjustment for post-retirement benefit costs under FAS 106 using the methodology approved by the Commission in the Company's base rate cases since 1992. In addition the Company has included the expense associated with the Company's contributions to the Voluntary Employee Beneficiary Association (VEBA).

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	Annualized OPEB Expense	$0
2	Annualized Retiree VEBA Expense ($600 x 69 employees)	41,400
3	Less: 22.14% Capitalized portion not charged to operating expense	9,166
4	Sub-Total	32,234
5	Less: Amount Charged To Operating Expenses	
6	For The Twelve Months Ended 06/30/2023	68,423
7	Pro Forma Adjustment	($36,189)
	604.8 A&G Employees' Welfare Expenses	($36,189)

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

401K, Defined Contribution Plan (DCP) and Employee Stock Purchase Plan (ESPP) Expense

The following adjustment is being made to annualize 401K, DCP contributions and ESPP contributions based on the annualized compensation claim at June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized 401K - Company Match	$132,213	$135,647
2	Annualized DCP	353,416	361,654
3	Less: 22.14% Not Charged To Operating Expense	107,518	110,102
4	Sub-Total	378,111	387,199
5	Annualized ESPP	11,363	11,553
6	Less: Amount Charged To Operating Expense	548,636	389,474
7	Pro Forma Adjustment	($159,162)	$9,278
	604.8 Employee Pension And Benefits AG	($159,162)	$9,278

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Purchased Power

This adjustment reflects the application of rates for purchased power to be in effect as of June 2023 to anticipated billing units for the future and fully projected rate years. Accounts were adjusted for any known rate changes in either the future or fully projected rate years and were also adjusted to reflect 12 monthly bills.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Power Cost	$1,476,282	$1,476,282
2	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/23 and 06/30/24	1,174,410	1,476,282
3	Pro Forma Adjustment	$301,872	$0
	615.3 Purchased Power - Water Treatment	$292,637	$0
	615.5 Purchased Power - Transmission and Distribution	9,235	-

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Taxes, Other than Income

Chemicals

The annualization of chemical costs was based on the application of quarterly contract prices in during 2023 to anticipated 12-month June 2024 usage. Current intra-2023 prices were adjusted by chemical family based on the current volatility in the market to project 2024 and 2025 cost levels.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Chemical Costs	$2,020,199	$2,129,667
2	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/23 and 06/30/24	1,218,032	2,020,199
3	Pro Forma Adjustment	$802,167	$109,468
	618.3 Chemicals - Water Treatment	$802,167	$109,468

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Waste Disposal

The waste disposal adjustment is the annualized test year costs adjusted for the three year average change in expense for the twelve months ended 06/30/2024 and 06/30/2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Waste Disposal Costs	$1,491,628	$1,704,931
2	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/23 and 06/30/24	1,344,100	1,491,628
3	Pro Forma Adjustment	$147,528	$213,303
	675.3 Waste Disposal	$147,528	$213,303

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Change in Consumption

During the future test year - twelve months ending 06/30/2024, and fully projected future test year - twelve months ending 06/30/2025, the Company will experience changes in consumption due to net addition or loss of customers and other factors affecting the usage of specific customers. The calculations shown below reflect estimates of the change in operating expenses that will be realized by these changes in consumption.

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Consumption (00 Gallons)	32,015,089	32,096,981	31,650,561	31,379,007
2	Change In Consumption		81,892	(446,420)	(271,554)
3	Power Costs Per Book	$1,174,410			
4	Chemical Costs Per Book	1,218,032			
5	Total	$2,392,442			
6	Rate Of Production Costs (00 Gallons) (Line 5/Line 1)		$0.07473	$0.07473	$0.07473
7	Pro Forma Adjustment		$6,120	($33,361)	($20,293)
	615.1 Source of Supply - Purchased Power		$0	$0	$0
	615.3 Water Treatment - Purchased Power		2,912	(15,875)	(9,657)
	615.5 Transmission & Distribution - Purchased Power		92	(501)	(305)
	618.3 Water Treatment - Chemicals		3,116	(16,985)	(10,332)

Witness: Lori O'Malley
Reference: FR II.09

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Transportation Expense

The following adjustment reflects the annualization of transportation expense for the years ended June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Leased Vehicles Expense	$813,391	$886,794
2	Less: 22.14% Not Charged To Operating Expense	180,069	196,319
3	Sub-Total	633,322	690,475
4	Less: Amount Charged To Operating Expense		
5	During the Twelve Months Ended 06/30/23	546,312	
6	Less: Present Rates During the Twelve Months Ended 06/30/24		633,322
7	Pro Forma Adjustment	$87,010	$57,153
	650.8 A & G - Miscellaneous General Expense	$87,010	$57,153

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Insurance Other Than Group

The annualizations of Insurance Other Than Group (IOTG) costs were based on the actual IOTG premiums for the twelve months ending June 30, 2023, adjusted for the 5 year average of retroactive adjustments. The present rates 6/30/2024 amounts are based on twelve months ending June 30, 2023 increased by a 5 year average of 6.53%, except for claims amounts which were held at twelve months ended June 30, 2023 levels. Amounts for present rates 6/30/2025 were increased by a 5 year average of 6.53%, except for claims amounts which were held at present rates 6/30/2024 levels. Present rates have been allocated to other cost of service areas based on depreciated utility plant in service as of 6/30/23.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Workers Compensation Premium		$120,565	$122,418
2	Less: 22.14% Not Charged To Operating Expense		(26,691)	(27,101)
3	Sub-Total		93,874	95,317
4	Add: Annualized Vehicle, General Liability,			
5	Property And Other Insurance		1,301,340	1,338,943
6	Sub-Total		1,395,214	1,434,260
7	Less: Per Books and Present Rates		84,146	1,395,214
8	Pro Forma Adjustment		$1,311,068	$39,046
	656.8 Vehicle Insurance	55110000	$21,862	$469
	657.8 General Liability Insurance	55710000	968,078	16,804
	658.8 Workers Compensation	55720000	5,805	1,853
	658.8 Insurance WC Capitalized Credits	55720100	3,923	(410)
	659.8 Other Insurance	55730000	311,400	20,330

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Regulatory Expense (Rate Case Expense)

The following adjustment reflects the estimated cost of this rate case normalized over a two-year period. Additionally, there is an adjustment for a 10 year amortization of the Customer Class Demand Study and a 2 year amortization of the Stormwater Fee Feasibility Study.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	Rate Case Expense Allocation	$167,491
2	Normalized Over 2 Years	83,746
3	Plus Allocation of Amortization of Demand Study	1,405
4	Plus Allocation of Amortization of Stormwater Fee	13,813
5	Feasibility Study	
6	Less: Amount Charged To Operating Expense	
7	During The Twelve Months Ended 06/30/2023	-
8	Pro Forma Adjustment	$98,963
	666.8 Regulatory Commission Expense	$98,963

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Service Company

This adjustment reflects the cost of services provided by American Water Works Service Company (AWWSC), for the twelve months ended June 30, 2024, and June 30, 2025. An allocation factor based on customer counts was applied to each cost of service area to allocate a portion of the total projected Service Company costs.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Service Company Cost	$0	$1,033,737
2	Less: Amount Charged To Operating Expense		
3	During The Twelve Months Ended 06/30/23	-	
4	And Present Rates 06/30/24		-
5	Pro Forma Adjustment	$0	$1,033,737
	634.8 AG - Contract Services - Management	$0	$1,033,737

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Miscellaneous Expense Adjustment

The following adjustment is being made to add Wastewater CSS expenses to pro forma expenses.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNTS
1	Additions:			
2	PA HQ - Corporate Campus		$215,943	
3	Nutrient Credits 5 Year Average	44,726		
4	Credit Card/E-check Transaction Fees		66,453	304
5	Arrearage Management Plan and Low Income Program			150,683
6	General Facility Maintenance		125,000	
7	Deductions:			
8	Fines	(22,300)		
9	Donations	(200)		
10	Pension	(245,439)		
11	OPEB	(39,310)		
12	Pro Forma Adjustment	($262,523)	$407,396	$150,988
	604.8 A&G Employee Pension And Benefits	(284,749)	-	
	670.7 Uncollectible Acconts Exp - CA			150,683
	675.7 Misc Exp Customer Accounting		66,453	304
	675.8 Misc Expense Admin & General	22,226	340,943	-

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Calculation of Uncollectible Accounts Expenses

The following adjustment develops the Company's uncollectible accounts expense claim calculated on the ratio of actual per books revenue to net write-offs.
This ratio is applied to pro forma sales at present and proposed rates.

LINE NO	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Total Sales	$59,597,429	$79,487,119	$78,463,376	$78,636,216	$94,416,342
2	2 Year Average	1.1760%	1.1760%	1.1760%	1.1760%	1.1760%
3	Annualized Uncollectible Expense		$934,769	$922,729	$924,762	$1,110,336
4	Less: Amount Charged To Operating Expense					
5	During The Twelve Months Ended 06/30/2023		484,680			
6	Less: Present Rates 06/30/2023			934,769		
7	Less: Present Rates 06/30/2024				922,729	
8	Less: Present Rates 06/30/2025					924,762
9	Pro Forma Adjustment		$450,089	($12,040)	$2,033	$185,574
670.7	Customer Accounting And Collecting - Bad Debt		$450,089	($12,040)	$2,033	$185,574

Witness: Cas Swiz

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Depreciation

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Depreciation	$17,203,221	$19,210,861	$20,581,261
2	Less: Depreciation on Vehicles - Capitalized Portion		85,484	80,302
3	Subtotal	$17,203,221	$19,125,377	$20,500,959
4	Book Depreciation	16,014,537	17,203,221	19,125,377
5	Pro Forma Adjustment	$1,188,684	$2,007,640	$1,455,884
	503 Depreciation	$1,188,684	$2,007,640	$1,455,884

Witness: Stacey D. Gress, John Spanos
Reference: Exhibit No. 3-B, Exhibits No. 11

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Amortization Expense

This adjustment is being made to reflect the Company's claim for amortizations.

LINE NO.	DESCRIPTION		PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Scranton Sewer Auth - Acquisition Costs	Approved Docket No. R-2020-3019369	$74,436	$74,436
2	McKeesport Acquisition Costs	Approved Docket No. R-2020-3019369	28,820	28,820
3	Kane Acquisition Costs	Approved Docket No. R-2020-3019369	43,220	43,220
4	McKeesport Deferred Depreciation	Approved Docket No. R-2022-3031672	17,610	7,768
5	Arrearage Management Program - AMP	Seeking Approval		(84,408)
6	Tax Cuts and Jobs Act Stub Period and Reconciliation	Approved Docket No. R-2020-3019369	($92,642)	(59,854)
7	COVID-19 Emergency Response	Approved Docket No. R-2022-3031672	22,008	(13,925)
8	Proforma Expense		93,452	(3,943)
9	Less: Per Books		67,853	93,452
10	Pro Forma Adjustment		$25,599	($97,395)

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Taxes, Other than Income

Pennsylvania Property Tax

The following adjustment reflects the projected property tax expense for the twelve months ended June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Property Subject to Tax	$158,919,661	$173,421,107	$184,714,845
2	Property Tax	$1,030,760		
3	Total	$1,030,760		
4	Rate (Line 3 / Line 1)	$0.006486	$0.006486	$0.006486
5	Projected property tax expense (Line 1 x Line 4)		$1,124,809	$1,198,060
6	Less: Amount Charged To Operating Expense			
7	During The 12 Months Ended 6/30/2023 & 06/30/2024		1,030,760	1,124,809
8	Pro Forma Adjustment		$94,049	$73,251
	408.2 Taxes, Other Than Income - Property		$94,049	$73,251

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Taxes, Other than Income

Payroll Taxes

The following adjustment is being made to annualize payroll tax expense based on the annualized compensation claim at June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Payroll Taxes	$672,512	$687,308
2	Less: 22.14% Not Charged To Operating Expense	148,894	152,170
3	Sub-Total	523,618	535,138
4	Less: Amount Charged To Operating Expense	450,560	523,618
5	Pro Forma Adjustment	$73,058	$11,520
	408.12 - Taxes - Payroll	$73,058	$11,520

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Calculation of General Assessment by the Pennsylvania Public Utility Commission, Consumer Advocate and Small Business Advocate Fees

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED RATES 06/30/25 AMOUNT
1	Total Wastewater Sales	$78,999,166	$77,980,544	$78,152,519	$93,853,714
2	Estimated General Assessment Fee				
3	Public Utility Commission At 0.004324859316	341,660	337,255	337,999	405,904
4	Consumer Advocate Fee At 0.001742389526	137,647	135,872	136,172	163,530
5	Small Business Advocate Fee At 0.000303478942	23,975	23,665	23,718	28,483
6	Damage Prevention Comittee Fee At 0.000000719937	57	56	56	68
7	Subtotal	503,339	496,848	497,945	597,985
8	Less: Amount Charged To Operating Expenses During				
9	The Twelve Months Ended 06/30/2023	345,592			
10	Less: Pro Forma Under Present Rates At 06/30/2023		503,339		
11	Less: Pro Forma Under Present Rates At 06/30/2024			496,848	
12	Less: Pro Forma Under Present Rates At 06/30/2025				497,945
13	Pro Forma Adjustment	$157,747	($6,491)	$1,097	$100,040

507.1 Taxes Other Than Income $252,393

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Pro Forma State And Federal Income Taxes Under Present And Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED 06/30/25 AMOUNT
1	State Income Tax Per Computation				
2	Shown On Following Page	$3,578,638	$2,354,124	$1,984,048	$3,222,150
3	Less: State Income Tax Per Book				
4	Computation Shown On Following Page	2,211,325			
5	Less: Present Rates 06/30/2023		3,578,638		
6	Less: Present Rates 06/30/2024			2,354,124	
7	Less: Present Rates 06/30/2025				1,984,048
8	Pro Forma Adjustment	$1,367,313	($1,224,514)	($370,076)	$1,238,102
9	Federal Income Tax Per Computation				
10	Shown On Following Page	$7,496,154	$5,832,725	$4,906,577	$7,900,660
11	Less: Federal Income Tax Per Book				
12	Computation Shown On Following Page	4,587,531			
13	Less: Present Rates 06/30/2023		7,496,154		
14	Less: Present Rates 06/30/2024			5,832,725	
15	Less: Present Rates 06/30/2025				4,906,577
16	Pro Forma Adjustment	$2,908,623	($1,663,429)	($926,148)	$2,994,083

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Wastewater CSS Operations
Notes to Statement Of Income
Calculation Of State And Federal Income Taxes

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Utility Operating Income Before Taxes	$27,953,318	$44,320,928	$37,445,107	$34,469,530	$49,964,042
2	Less: Interest Expense	7,363,628	7,363,628	9,497,260	10,518,592	10,517,462
3	Taxable Operating Income	20,589,690	36,957,300	27,947,847	23,950,938	39,446,580
4	Add: Premature Property Losses / Amortizations	67,853	67,853	93,452	(3,943)	(3,943)
5	Depr - Straight Line-Remaining Life (Including COR)	16,014,537	17,203,221	19,125,377	20,500,959	20,500,959
6	Taxable Meals & Entertainment	5,154	5,154	5,154	5,154	5,154
7	Total	16,087,544	17,276,228	19,223,983	20,502,170	20,502,170
8	Deduct:					
9	Tax Depreciation:					
10	State Tax Depreciation Adjustments	12,079,626	14,426,657	19,443,631	19,621,464	19,621,464
11	Total	12,079,626	14,426,657	19,443,631	19,621,464	19,621,464
12	State Taxable Income	24,597,608	39,806,871	27,728,199	24,831,644	40,327,286
13	State Income Tax At:					
14	Historic at 8.99%, Future At 8.49% And Fully Projected At 7.99%	2,211,325	3,578,638	2,354,124	1,984,048	3,222,150
15	Taxable Income After State Income Tax	22,386,283	36,228,233	25,374,075	22,847,596	37,105,136
16	Add:					
17	Federal Tax Depreciation Adjustments	2,401,528	2,401,528	5,015,894	3,809,471	3,809,471
18	Income Subject To Federal Income Tax	24,787,811	38,629,761	30,389,969	26,657,067	40,914,607
19	Federal Income Tax @ 21%	5,205,440	8,112,250	6,381,893	5,597,984	8,592,067
20	Excess ADIT	617,909	616,096	549,168	691,407	691,407
21	Federal Tax Liability	$4,587,531	$7,496,154	$5,832,725	$4,906,577	$7,900,660

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Pro Forma Interest Expense Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED 6/30/25 AMOUNT
1	Interest On Long Term Debt Per Computation				
2	Shown On Following Page	$6,690,608	$8,934,521	$9,931,508	$9,930,441
3	Less: Interest On Long Term Debt As Per Book				
4	Computation On Following Page	6,690,608			
5	Less: Present Rates At 06/30/2023		6,690,608		
6	Less: Present Rates At 06/30/2024			8,934,521	
7	Less: Present Rates At 06/30/2025				9,931,508
8	Pro Forma Adjustment	$0	$2,243,913	$996,987	($1,067)
9	Interest On Wastewater Specific Long Term Debt Per Computation				
10	Shown On Following Page	$673,020	$544,235	$587,084	$587,021
11	Less: Interest On Wastewater Specific Long Term Debt As Per Book				
12	Computation On Following Page	673,020			
13	Less: Present Rates At 06/30/2023		673,020		
14	Less: Present Rates At 06/30/2024			544,235	
15	Less: Present Rates At 06/30/2025				587,084
16	Pro Forma Adjustment	$0	($128,785)	$42,849	($63)

Witness: Ann E. Bulkley

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Application of Income Deductions

LINE NO.	DESCRIPTION	PRESENT RATES AT JUNE 30, 2023 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2024 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2025 AMOUNT	CAPITAL STRUCTURE	COST RATE
1	**Capital Structure**									
2	Long Term Debt	$384,896,465	38.42%	4.39%	$562,690,015	42.46%	4.63%	$594,902,431	42.73%	4.76%
3	Long Term Debt - WW Spec	63,458,726	6.33%	2.61%	62,348,860	4.70%	2.64%	61,227,844	4.40%	2.62%
4	Total Debt	448,355,191	44.75%		625,038,875	47.16%		656,130,275	47.13%	
5	Preferred Stock	93,854	0.01%	9.70%	0	0.00%	0.00%	0	0.00%	0.00%
6	Common Equity	553,552,633	55.24%		700,362,769	52.84%		735,975,490	52.87%	
7	Totals	$1,002,001,678	100.00%		$1,325,401,644	100.00%		$1,392,105,765	100.00%	

		PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
8	**Application Of Long Term Debt Interest:**				
9	Original Cost Rate Base	$395,893,977	$453,528,987	$489,236,859	$489,184,280
10	Debt Percentage (From Above)	38.42%	42.46%	42.73%	42.73%
11	Debt Portion Of Rate Base	152,102,466	192,568,408	209,050,910	209,028,443
12	Interest Cost (From Above)	4.39%	4.63%	4.76%	4.76%
13	Pro Forma Long Term Interest Deduction	$6,690,608	$8,934,521	$9,931,508	$9,930,441
14	**Application Of Wastewater Specific Long Term Debt Interest:**				
15	Original Cost Rate Base	$395,893,977	$453,528,987	$489,236,859	$489,184,280
16	Debt Percentage (From Above)	6.33%	4.70%	4.40%	4.40%
17	Debt Portion Of Rate Base	25,060,089	21,315,862	21,526,422	21,524,108
18	Interest Cost (From Above)	2.61%	2.64%	2.62%	2.62%
19	Pro Forma Wastewater Specific Long Term Interest Deduction	$673,020	$544,235	$587,084	$587,021

Witness: Ann E. Bulkley

VOLUME 4

PENNSYLVANIA-AMERICAN WATER COMPANY

2023 GENERAL BASE RATE CASE
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

EXHIBIT NO. 3-B
OPERATING EXPENSES

Pennsylvania-American Water Company
Operating Expenses

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Pennsylvania-American Water Company
Operating Expenses

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Compensation

Pennsylvania-American Water Company
Compensation
3 Year - Capitalization Rate %

Account Number Description	6/30/2023 - Actual			6/30/2022 - Actual			6/30/2021 - Actual		
	Total Company	Water	Wastewater	Total Company	Water	Wastewater	Total Company	Water	Wastewater
Operations and Maintenance Compensation	$68,479,368	$57,313,971	$11,165,397	$64,917,635	$55,667,778	$9,249,857	$60,885,512	$52,538,947	$8,346,566
Capital Compensation	42,006,148	39,134,629	2,871,519	37,586,254	35,124,207	2,462,047	36,916,096	34,143,463	2,772,633
Total Compensation	$110,485,516	$96,448,600	$14,036,916	$102,503,889	$90,791,985	$11,711,904	$97,801,608	$86,682,409	$11,119,199
Operations and Maintenance Compensation	61.98%	59.42%	79.54%	63.33%	61.31%	78.98%	62.25%	60.61%	75.06%
Capital Compensation	38.02%	40.58%	20.46%	36.67%	38.69%	21.02%	37.75%	39.39%	24.94%
Total Compensation	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

3 Year Average Total Company	37.48%
3 Year Average Water	39.55%
3 Year Average Wastewater	22.14%

Pennsylvania-American Water Company
Annualized Salary and Wages

	2024	2025
Water Operations		
Non-Collective Bargaining Unit Salary	$31,136,290	$32,130,323
Collective Bargaining Unit	47,300,961	48,486,288
Non-Collective Bargaining Unit Hourly	17,267,546	17,817,336
Total	$95,704,797	$98,433,947
Wastewater SSS General Operations		
Non-Collective Bargaining Unit Salary	$1,015,860	$1,048,292
Collective Bargaining Unit	$1,448,344	$1,488,359
Non-Collective Bargaining Unit Hourly	3,213,626	3,315,978
Total	$5,677,830	$5,852,629
Wastewater CSS Operations		
Non-Collective Bargaining Unit Salary	$1,097,034	$1,132,061
Collective Bargaining Unit	6,978,970	7,127,053
Non-Collective Bargaining Unit Hourly	62,164	64,149
Total	$8,138,168	$8,323,263

Pennsylvania-American Water Company - Water Operations
Compensation
Number of Employees

	6/30/2023	Positions to be Filled 2024	Total 6/30/2024	Positions to be Filled 2025	Total 6/30/2025
Salary - Non-Collective Bargaining Unit	287.0	12.0	299.0	-	299.0
Hourly - Collective Bargaining Unit	536.0	11.0	547.0	-	547.0
Hourly - Non-Collective Bargaining Unit	223.0	7.0	230.0		230.0
Hourly Total	759.0	18.0	777.0	-	777.0
Total	1,046.0	30.0	1,076.0	-	1,076.0

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor						
					Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
Non-Collective Bargaining Unit Salary											
1	240106	CORP-Field Services	Project Manager	1/18/1999	$68.45		$142,367	$70.60	$72.85	$146,848	$151,528
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001	56.47		117,457	58.25	60.11	121,160	125,029
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994	116.00		241,280	119.65	123.47	248,872	256,818
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998	45.67		95,000	47.11	48.61	97,989	101,109
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993	83.98		174,675	86.62	89.39	180,170	185,931
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997	43.07		89,583	44.42	45.84	92,394	95,347
7	249160	WILK-Watres	Supvr Production	1/11/1988	37.62		78,241	38.80	40.04	80,704	83,283
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993	55.45		115,341	57.20	59.03	118,976	122,782
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990	54.66		113,697	56.38	58.18	117,270	121,014
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987	43.54		90,563	44.91	46.34	93,413	96,387
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983	49.49		102,945	51.05	52.68	106,184	109,574
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998	43.77		91,038	45.15	46.59	93,912	96,907
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998	34.70		72,167	35.79	36.93	74,443	76,814
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992	47.20		98,180	48.69	50.24	101,275	104,499
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986	39.00		81,120	40.23	41.51	83,678	86,341
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997	36.33		75,570	37.47	38.67	77,938	80,434
17	249150	WILK-Other	Sr Supt Production	9/13/1993	52.15		108,478	53.79	55.51	111,883	115,461
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998	68.07		141,583	70.21	72.45	146,037	150,696
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994	54.79		113,960	56.51	58.31	117,541	121,285
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997	51.12		106,338	52.73	54.41	109,678	113,173
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995	42.08		87,524	43.40	44.79	90,272	93,163
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995	42.06		87,493	43.39	44.78	90,251	93,142
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995	38.85		80,813	40.08	41.36	83,366	86,029
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995	69.06		143,639	71.23	73.50	148,158	152,880
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982	45.81		95,294	47.26	48.77	98,301	101,442
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998	51.50		107,130	53.13	54.83	110,510	114,046
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989	64.90		135,000	66.95	69.09	139,256	143,707
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978	46.95		97,657	48.43	49.98	100,734	103,958
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998	48.22		100,295	49.74	51.33	103,459	106,766
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989	95.00		197,600	97.99	101.12	203,819	210,330
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993	69.66		144,892	71.85	74.14	149,448	154,211
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994	52.01		108,173	53.64	55.35	111,571	115,128
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984	43.19		89,826	44.54	45.96	92,643	95,597
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987	88.94		185,000	91.74	94.67	190,819	196,914
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984	53.63		111,551	55.32	57.09	115,066	118,747
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991	103.40		215,072	106.65	110.05	221,832	228,904
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994	50.66		105,370	52.25	53.92	108,680	112,154
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992	48.24		100,332	49.75	51.34	103,480	106,787
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986	42.83		89,088	44.18	45.59	91,894	94,827
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986	72.03		149,824	74.30	76.67	154,544	159,474
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998	46.13		95,947	47.58	49.10	98,966	102,128
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998	68.19		141,831	70.33	72.58	146,286	150,966
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998	44.55		92,673	45.96	47.43	95,597	98,654
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999	48.23		100,319	49.75	51.34	103,480	106,787
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999	56.62		117,762	58.40	60.26	121,472	125,341
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999	45.00		93,600	46.42	47.90	96,554	99,632
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000	82.29		171,164	84.88	87.59	176,550	182,187
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000	41.36		86,030	42.66	44.02	88,733	91,562
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000	41.18		85,651	42.47	43.83	88,338	91,166
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000	41.36		86,026	42.66	44.02	88,733	91,562
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001	67.50		140,400	69.62	71.84	144,810	149,427
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994	55.70		115,866	57.46	59.29	119,517	123,323
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990	42.06		87,494	43.39	44.78	90,251	93,142
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001	55.17		114,763	56.91	58.73	118,373	122,158
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999	52.00		108,150	53.63	55.34	111,550	115,107
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990	54.51		113,383	56.23	58.02	116,958	120,682
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999	64.78		134,740	66.82	68.95	138,986	143,416
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992	97.52		202,840	100.59	103.80	209,227	215,904
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997	96.07		199,823	99.09	102.25	206,107	212,680
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002	68.56		142,604	70.72	72.98	147,098	151,798
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003	58.80		122,299	60.65	62.59	126,152	130,187
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003	39.94		83,075	41.20	42.52	85,696	88,442
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003	50.82		105,708	52.42	54.09	109,034	112,507
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003	43.33		90,123	44.69	46.12	92,955	95,930
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003	38.46		80,000	39.67	40.94	82,514	85,155
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003	56.39		117,300	58.17	60.03	120,994	124,862
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004	46.64		97,008	48.11	49.65	100,069	103,272
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005	59.16		123,054	61.02	62.97	126,922	130,978
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005	50.74		105,538	52.34	54.01	108,867	112,341
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005	51.50		107,130	53.13	54.83	110,510	114,046

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor										
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
Non-Collective Bargaining Unit Salary															
1	240106	CORP-Field Services	Project Manager	1/18/1999									$146,848		$151,528
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001									121,160		125,029
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994									248,872		256,818
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998									97,989		101,109
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993									180,170		185,931
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997									92,394		95,347
7	249160	WILK-Watres	Supvr Production	1/11/1988									80,704		83,283
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993									118,976		122,782
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990									117,270		121,014
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987									93,413		96,387
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983									106,184		109,574
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998									93,912		96,907
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998									74,443		76,814
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992									101,275		104,499
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986									83,678		86,341
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997									77,938		80,434
17	249150	WILK-Other	Sr Supt Production	9/13/1993									111,883		115,461
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998									146,037		150,696
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994									117,541		121,285
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997									109,678		113,173
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995									90,272		93,163
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995									90,251		93,142
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995									83,366		86,029
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995									148,158		152,880
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982									98,301		101,442
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998									110,510		114,046
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989									139,256		143,707
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978									100,734		103,958
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998									103,459		106,766
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989									203,819		210,330
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993									149,448		154,211
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994									111,571		115,128
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984									92,643		95,597
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987									190,819		196,914
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984									115,066		118,747
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991									221,832		228,904
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994									108,680		112,154
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992									103,480		106,787
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986									91,894		94,827
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986									154,544		159,474
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998									98,966		102,128
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998									146,286		150,966
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998									95,597		98,654
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999									103,480		106,787
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999									121,472		125,341
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999									96,554		99,632
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000									176,550		182,187
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000									88,733		91,562
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000									88,338		91,166
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000									88,733		91,562
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001									144,810		149,427
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994									119,517		123,323
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990									90,251		93,142
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001									118,373		122,158
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999									111,550		115,107
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990									116,958		120,682
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999									138,986		143,416
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992									209,227		215,904
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997									206,107		212,680
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002									147,098		151,798
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003									126,152		130,187
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003									85,696		88,442
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003									109,034		112,507
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003									92,955		95,930
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003									82,514		85,155
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003									120,994		124,862
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004									100,069		103,272
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005									126,922		130,978
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005									108,867		112,341
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005									110,510		114,046

Pennsylvania-American Water Company - Water Operations
Compensation

								Gross Labor				
						Base Year		Hourly Wage Rate		Regular Time		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005	52.02		108,200	53.66	55.37	111,613	115,170
72	241151	PITT-Production Haye	Supvr Production	3/16/2005	41.57		86,455	42.87	44.24	89,170	92,019
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005	45.69		95,042	47.13	48.63	98,030	101,150
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005	44.81		93,207	46.22	47.70	96,138	99,216
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005	59.17		123,083	61.04	62.99	126,963	131,019
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005	46.35		96,408	47.81	49.34	99,445	102,627
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005	46.35		96,408	47.81	49.34	99,445	102,627
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005	63.00		131,040	64.98	67.05	135,158	139,464
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005	56.09		116,677	57.86	59.71	120,349	124,197
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006	37.65		78,315	38.84	40.08	80,787	83,366
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006	71.80		149,350	74.06	76.42	154,045	158,954
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006	53.35		110,959	55.02	56.78	114,442	118,102
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006	41.01		85,292	42.30	43.65	87,984	90,792
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006	40.66		84,564	41.94	43.28	87,235	90,022
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006	37.50		78,000	38.68	39.91	80,454	83,013
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006	38.46		80,000	39.67	40.94	82,514	85,155
87	240106	CORP-Field Services	Mgr Opns	1/22/2007	48.62		101,136	50.15	51.75	104,312	107,640
88	249150	WILK-Other	Production Asset Administrator	1/22/2007	42.31		88,000	43.64	45.03	90,771	93,662
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007	51.92		108,000	53.56	55.27	111,405	114,962
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007	36.69		76,321	37.85	39.06	78,728	81,245
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009	56.39		117,300	58.17	60.03	120,994	124,862
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007	55.10		114,600	56.83	58.64	118,206	121,971
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007	46.10		95,887	47.55	49.07	98,904	102,066
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007	54.52		113,400	56.23	58.02	116,958	120,682
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007	58.65		122,000	60.50	62.43	125,840	129,854
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007	48.41		100,689	49.93	51.52	103,854	107,162
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008	67.50		140,400	69.62	71.84	144,810	149,427
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008	39.42		82,002	40.66	41.96	84,573	87,277
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008	58.85		122,400	60.70	62.64	126,256	130,291
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008	61.86		128,671	63.81	65.85	132,725	136,968
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008	42.00		87,358	43.32	44.70	90,106	92,976
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009	40.80		84,864	42.08	43.42	87,526	90,314
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009	42.87		89,169	44.22	45.63	91,978	94,910
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009	45.93		95,544	47.38	48.89	98,550	101,691
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009	71.15		148,000	73.39	75.73	152,651	157,518
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009	106.22		220,933	109.56	113.06	227,885	235,165
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009	47.45		98,705	48.95	50.51	101,816	105,061
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009	40.02		83,239	41.28	42.60	85,862	88,608
109	246501	COAT-Production	Supvr Production	4/12/2010	39.36		81,872	40.60	41.90	84,448	87,152
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010	38.46		80,000	39.67	40.94	82,514	85,155
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010	46.11		95,909	47.56	49.08	98,925	102,086
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010	56.00		116,472	57.76	59.60	120,141	123,968
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010	47.05		97,854	48.53	50.08	100,942	104,166
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011	44.71		93,000	46.12	47.59	95,930	98,987
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011	39.90		83,000	41.16	42.47	85,613	88,338
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011	34.71		72,203	35.81	36.95	74,485	76,856
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011	39.24		81,621	40.48	41.77	84,198	86,882
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011	57.62		119,852	59.43	61.33	123,614	127,566
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012	41.09		85,466	42.38	43.73	88,150	90,958
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012	56.68		117,889	58.46	60.33	121,597	125,486
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012	58.54		121,768	60.38	62.31	125,590	129,605
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012	34.76		72,310	35.86	37.00	74,589	76,960
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013	58.92		122,545	60.77	62.71	126,402	130,437
124	240306	CORP-Field Service	Project Manager	3/4/2013	54.07		112,467	55.77	57.55	116,002	119,704
125	243151	NEWC-New Castle	Supvr Production	4/29/2013	39.92		83,040	41.18	42.49	85,654	88,379
126	247150	MILT-Prod Other	Supvr Production	5/28/2013	38.25		79,565	39.46	40.72	82,077	84,698
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013	39.51		82,182	40.75	42.05	84,760	87,464
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013	38.46		80,000	39.67	40.94	82,514	85,155
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013	78.91		164,141	81.40	84.00	169,312	174,720
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013	49.52		103,000	51.08	52.71	106,246	109,637
131	240114	CORP-Engineering	GIS Manager	3/31/2014	44.70		92,969	46.10	47.57	95,888	98,946
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014	55.77		115,999	57.52	59.36	119,642	123,469
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014	41.80		86,940	43.11	44.49	89,669	92,539
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014	38.94		81,000	40.17	41.45	83,554	86,216
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014	37.02		77,000	38.18	39.40	79,414	81,952
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014	42.90		89,224	44.25	45.66	92,040	94,973
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014	33.24		69,135	34.28	35.37	71,302	73,570
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014	41.68		86,700	42.99	44.36	89,419	92,269
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014	61.16		127,203	63.08	65.09	131,206	135,387
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015	40.81		84,885	42.09	43.43	87,547	90,334
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015	36.95		76,863	38.12	39.34	79,290	81,827

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor										
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005									111,613		115,170
72	241151	PITT-Production Haye	Supvr Production	3/16/2005									89,170		92,019
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005									98,030		101,150
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005									96,138		99,216
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005									126,963		131,019
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005									99,445		102,627
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005									99,445		102,627
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005									135,158		139,464
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005									120,349		124,197
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006									80,787		83,366
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006									154,045		158,954
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006									114,442		118,102
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006									87,984		90,792
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006									87,235		90,022
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006									80,454		83,013
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006									82,514		85,155
87	240106	CORP-Field Services	Mgr Opns	1/22/2007									104,312		107,640
88	249150	WILK-Other	Production Asset Administrator	1/22/2007									90,771		93,662
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007									111,405		114,962
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007									78,728		81,245
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009									120,994		124,862
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007									118,206		121,971
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007									98,904		102,066
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007									116,958		120,682
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007									125,840		129,854
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007									103,854		107,162
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008									144,810		149,427
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008									84,573		87,277
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008									126,256		130,291
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008									132,725		136,968
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008									90,106		92,976
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009									87,526		90,314
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009									91,978		94,910
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009									98,550		101,691
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009									152,651		157,518
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009									227,885		235,165
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009									101,816		105,061
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009									85,862		88,608
109	246501	COAT-Production	Supvr Production	4/12/2010									84,448		87,152
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010									82,514		85,155
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010									98,925		102,086
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010									120,141		123,968
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010									100,942		104,166
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011									95,930		98,987
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011									85,613		88,338
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011									74,485		76,856
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011									84,198		86,882
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011									123,614		127,566
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012									88,150		90,958
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012									121,597		125,486
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012									125,590		129,605
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012									74,589		76,960
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013									126,402		130,437
124	240306	CORP-Field Service	Project Manager	3/4/2013									116,002		119,704
125	243151	NEWC-New Castle	Supvr Production	4/29/2013									85,654		88,379
126	247150	MILT-Prod Other	Supvr Production	5/28/2013									82,077		84,698
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013									84,760		87,464
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013									82,514		85,155
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013									169,312		174,720
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013									106,246		109,637
131	240114	CORP-Engineering	GIS Manager	3/31/2014									95,888		98,946
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014									119,642		123,469
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014									89,669		92,539
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014									83,554		86,216
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014									79,414		81,952
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014									92,040		94,973
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014									71,302		73,570
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014									89,419		92,269
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014									131,206		135,387
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015									87,547		90,334
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015									79,290		81,827

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								Gross Labor				
						Base Year		Hourly Wage Rate		Regular Time		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
142	240114	CORP-Engineering	GIS Manager	2/2/2015	44.70		92,969	46.10	47.57	95,888	98,946
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015	36.19		75,275	37.33	38.52	77,646	80,122
144	240114	CORP-Engineering	Engineer	6/22/2015	39.19		81,520	40.43	41.72	84,094	86,778
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015	37.84		78,702	39.03	40.28	81,182	83,782
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015	48.56		101,000	50.09	51.69	104,187	107,515
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015	37.50		78,000	38.68	39.91	80,454	83,013
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015	37.63		78,280	38.82	40.06	80,746	83,325
149	243301	BUTL-Production	Supvr Production	12/7/2015	39.79		82,753	41.04	42.35	85,363	88,088
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015	38.00		79,035	39.19	40.44	81,515	84,115
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015	104.24		216,819	107.52	110.95	223,642	230,776
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016	38.55		80,176	39.76	41.03	82,701	85,342
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016	67.66		140,737	69.79	72.02	145,163	149,802
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016	34.15		71,026	35.22	36.34	73,258	75,587
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016	41.68		86,703	43.00	44.37	89,440	92,290
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016	49.54		103,042	51.10	52.73	106,288	109,678
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016	37.33		77,646	38.50	39.73	80,080	82,638
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016	36.21		75,327	37.35	38.54	77,688	80,163
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016	44.00		91,520	45.38	46.83	94,390	97,406
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016	47.36		98,500	48.85	50.41	101,608	104,853
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017	79.33		165,000	81.82	84.43	170,186	175,614
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990	40.28		83,779	41.55	42.88	86,424	89,190
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016	37.74		78,508	38.93	40.17	80,974	83,554
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017	49.90		103,800	51.47	53.11	107,058	110,469
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017	61.92		128,795	63.87	65.91	132,850	137,093
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017	48.08		100,000	49.59	51.17	103,147	106,434
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017	47.27		98,323	48.76	50.32	101,421	104,666
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017	51.92		108,000	53.56	55.27	111,405	114,962
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017	38.50		80,071	39.71	40.98	82,597	85,238
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017	33.00		68,637	34.04	35.13	70,803	73,070
171	240114	CORP-Engineering	Planning Engineer	8/14/2017	40.80		84,854	42.08	43.42	87,526	90,314
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017	61.06		127,000	62.98	64.99	130,998	135,179
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017	46.11		95,910	47.56	49.08	98,925	102,086
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011	41.74		86,822	43.05	44.42	89,544	92,394
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018	47.23		98,230	48.71	50.26	101,317	104,541
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018	50.33		104,682	51.91	53.57	107,973	111,426
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018	50.28		104,580	51.86	53.52	107,869	111,322
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018	39.39		81,927	40.63	41.93	84,510	87,214
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018	46.68		97,092	48.15	49.69	100,152	103,355
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018	47.50		98,800	48.99	50.55	101,899	105,144
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018	40.98		85,237	42.27	43.62	87,922	90,730
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018	47.73		99,271	49.23	50.80	102,398	105,664
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018	37.85		78,733	39.04	40.29	81,203	83,803
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018	37.14		77,250	38.31	39.53	79,685	82,222
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018	61.06		127,000	62.98	64.99	130,998	135,179
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018	37.98		79,000	39.18	40.43	81,494	84,094
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018	44.00		91,520	45.38	46.83	94,390	97,406
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018	39.66		82,484	40.90	42.21	85,072	87,797
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018	33.57		69,828	34.63	35.74	72,030	74,339
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018	38.25		79,560	39.45	40.71	82,056	84,677
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018	45.24		94,099	46.66	48.15	97,053	100,152
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018	40.87		85,000	42.15	43.50	87,672	90,480
193	240114	CORP-Engineering	Staff Engineer	8/27/2018	36.50		75,920	37.65	38.85	78,312	80,808
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018	37.29		77,565	38.46	39.69	79,997	82,555
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018	37.24		77,466	38.42	39.65	79,914	82,472
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018	151.44		315,000	156.21	161.20	324,917	335,296
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018	44.00		91,520	45.38	46.83	94,390	97,406
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018	37.02		76,996	38.18	39.40	79,414	81,952
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018	37.50		78,004	38.68	39.91	80,454	83,013
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018	39.73		82,640	40.98	42.29	85,238	87,963
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018	33.80		70,298	34.86	35.97	72,509	74,818
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019	44.67		92,909	46.07	47.54	95,826	98,883
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019	37.87		78,774	39.06	40.31	81,245	83,845
204	240114	CORP-Engineering	Planning Engineer	2/4/2019	47.73		99,275	49.23	50.80	102,398	105,664
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019	38.53		80,146	39.74	41.01	82,659	85,301
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019	41.42		86,154	42.72	44.08	88,858	91,686
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019	38.43		79,937	39.64	40.91	82,451	85,093
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019	38.26		79,577	39.46	40.72	82,077	84,698
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019	38.46		80,000	39.67	40.94	82,514	85,155
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019	42.45		88,293	43.78	45.18	91,062	93,974
211	240114	CORP-Engineering	Staff Engineer	5/20/2019	37.43		77,850	38.61	39.84	80,309	82,867
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019	40.54		84,323	41.82	43.15	86,986	89,752

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					Gross Labor										
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
142	240114	CORP-Engineering	GIS Manager	2/2/2015									95,888		98,946
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015									77,646		80,122
144	240114	CORP-Engineering	Engineer	6/22/2015									84,094		86,778
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015									81,182		83,782
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015									104,187		107,515
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015									80,454		83,013
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015									80,746		83,325
149	243301	BUTL-Production	Supvr Production	12/7/2015									85,363		88,088
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015									81,515		84,115
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015									223,642		230,776
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016									82,701		85,342
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016									145,163		149,802
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016									73,258		75,587
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016									89,440		92,290
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016									106,288		109,678
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016									80,080		82,638
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016									77,688		80,163
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016									94,390		97,406
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016									101,608		104,853
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017									170,186		175,614
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990									86,424		89,190
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016									80,974		83,554
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017									107,058		110,469
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017									132,850		137,093
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017									103,147		106,434
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017									101,421		104,666
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017									111,405		114,962
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017									82,597		85,238
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017									70,803		73,070
171	240114	CORP-Engineering	Planning Engineer	8/14/2017									87,526		90,314
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017									130,998		135,179
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017									98,925		102,086
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011									89,544		92,394
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018									101,317		104,541
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018									107,973		111,426
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018									107,869		111,322
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018									84,510		87,214
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018									100,152		103,355
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018									101,899		105,144
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018									87,922		90,730
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018									102,398		105,664
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018									81,203		83,803
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018									79,685		82,222
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018									130,998		135,179
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018									81,494		84,094
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018									94,390		97,406
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018									85,072		87,797
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018									72,030		74,339
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018									82,056		84,677
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018									97,053		100,152
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018									87,672		90,480
193	240114	CORP-Engineering	Staff Engineer	8/27/2018									78,312		80,808
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018									79,997		82,555
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018									79,914		82,472
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018									324,917		335,296
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018									94,390		97,406
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018									79,414		81,952
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018									80,454		83,013
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018									85,238		87,963
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018									72,509		74,818
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019									95,826		98,883
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019									81,245		83,845
204	240114	CORP-Engineering	Planning Engineer	2/4/2019									102,398		105,664
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019									82,659		85,301
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019									88,858		91,686
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019									82,451		85,093
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019									82,077		84,698
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019									82,514		85,155
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019									91,062		93,974
211	240114	CORP-Engineering	Staff Engineer	5/20/2019									80,309		82,867
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019									86,986		89,752

Pennsylvania-American Water Company - Water Operations
Compensation

								Gross Labor			
						Base Year		Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019	45.51		94,671	46.95	48.45	97,656	100,776
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019	37.50		78,000	38.68	39.91	80,454	83,013
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019	32.50		67,600	33.52	34.59	69,722	71,947
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019	41.35		86,000	42.65	44.01	88,712	91,541
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019	45.67		95,000	47.11	48.61	97,989	101,109
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019	47.62		99,051	49.12	50.69	102,170	105,435
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019	40.97		85,215	42.26	43.61	87,901	90,709
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019	40.62		84,492	41.90	43.24	87,152	89,939
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019	39.92		83,026	41.17	42.48	85,634	88,358
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019	36.00		74,880	37.13	38.32	77,230	79,706
223	240120	CORP-Bus Dev	Vice President of Business Development,	11/4/2019	115.57		240,377	119.20	123.01	247,936	255,861
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019	34.66		72,100	35.75	36.89	74,360	76,731
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020	36.23		75,352	37.37	38.56	77,730	80,205
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020	66.85		139,050	68.95	71.15	143,416	147,992
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020	75.00		156,000	77.36	79.83	160,909	166,046
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020	54.60		113,568	56.32	58.12	117,146	120,890
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020	32.75		68,128	33.78	34.86	70,262	72,509
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020	41.94		87,229	43.26	44.64	89,981	92,851
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020	32.57		67,749	33.60	34.67	69,888	72,114
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020	47.50		98,800	48.99	50.55	101,899	105,144
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020	84.18		175,100	86.83	89.60	180,606	186,368
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020	32.67		67,948	33.70	34.78	70,096	72,342
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020	52.88		110,000	54.55	56.29	113,464	117,083
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020	51.37		106,852	52.99	54.68	110,219	113,734
237	249151	WILK-Brownell	Supvr Production	8/24/2020	36.06		75,000	37.19	38.38	77,355	79,830
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020	52.90		110,028	54.56	56.30	113,485	117,104
239	240114	CORP-Engineering	Engineer	10/12/2020	33.31		69,290	34.36	35.46	71,469	73,757
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997	35.00		72,800	36.10	37.25	75,088	77,480
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020	38.09		79,218	39.28	40.53	81,702	84,302
242	240114	CORP-Engineering	Engineer	1/4/2021	33.31		69,290	34.36	35.46	71,469	73,757
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020	37.16		77,299	38.33	39.55	79,726	82,264
244	241151	PITT-Production Haye	Supvr Production	3/29/2021	39.52		82,202	40.76	42.06	84,781	87,485
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021	79.33		165,000	81.82	84.43	170,186	175,614
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021	54.60		113,568	56.32	58.12	117,146	120,890
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021	35.76		74,376	36.88	38.06	76,710	79,165
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021	43.82		91,141	45.20	46.64	94,016	97,011
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021	37.74		78,507	38.93	40.17	80,974	83,554
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021	41.60		86,528	42.91	44.28	89,253	92,102
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021	38.37		79,799	39.57	40.83	82,306	84,926
252	240114	CORP-Engineering	Engineer	9/13/2021	31.89		66,340	32.90	33.95	68,432	70,616
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021	83.83		174,369	86.47	89.23	179,858	185,598
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021	36.93		76,808	38.09	39.31	79,227	81,765
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022	38.46		80,000	39.67	40.94	82,514	85,155
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022	30.77		64,000	31.74	32.75	66,019	68,120
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022	38.46		80,000	39.67	40.94	82,514	85,155
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022	37.82		78,660	39.01	40.26	81,141	83,741
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	39.19		81,510	40.42	41.71	84,074	86,757
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	40.61		84,460	41.88	43.22	87,110	89,898
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022	33.65		70,000	34.71	35.82	72,197	74,506
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022	54.84		114,070	56.57	58.38	117,666	121,430
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022	44.86		93,300	46.27	47.75	96,242	99,320
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022	52.35		108,885	54.00	55.72	112,320	115,898
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022	38.95		81,012	40.17	41.45	83,554	86,216
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022	47.00		97,760	48.48	50.03	100,838	104,062
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007	33.12		68,890	34.16	35.25	71,053	73,320
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022	35.34		73,500	36.45	37.61	75,816	78,229
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995	34.32		71,386	35.40	36.53	73,632	75,982
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022	36.68		76,293	37.83	39.04	78,686	81,203
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022	32.19		66,950	33.20	34.26	69,056	71,261
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022	38.24		79,541	39.44	40.70	82,035	84,656
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022	40.70		84,660	41.98	43.32	87,318	90,106
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022	41.48		86,275	42.78	44.15	88,982	91,832
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022	42.07		87,500	43.39	44.78	90,251	93,142
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022	40.87		85,000	42.15	43.50	87,672	90,480
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022	39.42		82,000	40.66	41.96	84,573	87,277
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022	36.54		76,000	37.69	38.89	78,395	80,891
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023	40.38		84,000	41.66	42.99	86,653	89,419
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023	36.06		75,000	37.19	38.38	77,355	79,830
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023	36.06		75,000	37.19	38.38	77,355	79,830
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023	57.69		120,000	59.51	61.41	123,781	127,733
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023	45.67		95,000	47.11	48.61	97,989	101,109

Pennsylvania-American Water Company - Water Operations
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					Gross Labor										
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019									97,656		100,776
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019									80,454		83,013
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019									69,722		71,947
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019									88,712		91,541
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019									97,989		101,109
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019									102,170		105,435
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019									87,901		90,709
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019									87,152		89,939
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019									85,634		88,358
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019									77,230		79,706
223	240120	CORP-Bus Dev	Vice President of Business Development,	11/4/2019									247,936		255,861
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019									74,360		76,731
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020									77,730		80,205
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020									143,416		147,992
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020									160,909		166,046
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020									117,146		120,890
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020									70,262		72,509
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020									89,981		92,851
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020									69,888		72,114
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020									101,899		105,144
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020									180,606		186,368
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020									70,096		72,342
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020									113,464		117,083
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020									110,219		113,734
237	249151	WILK-Brownell	Supvr Production	8/24/2020									77,355		79,830
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020									113,485		117,104
239	240114	CORP-Engineering	Engineer	10/12/2020									71,469		73,757
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997									75,088		77,480
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020									81,702		84,302
242	240114	CORP-Engineering	Engineer	1/4/2021									71,469		73,757
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020									79,726		82,264
244	241151	PITT-Production Haye	Supvr Production	3/29/2021									84,781		87,485
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021									170,186		175,614
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021									117,146		120,890
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021									76,710		79,165
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021									94,016		97,011
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021									80,974		83,554
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021									89,253		92,102
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021									82,306		84,926
252	240114	CORP-Engineering	Engineer	9/13/2021									68,432		70,616
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021									179,858		185,598
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021									79,227		81,765
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022									82,514		85,155
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022									66,019		68,120
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022									82,514		85,155
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022									81,141		83,741
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022									84,074		86,757
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022									87,110		89,898
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022									72,197		74,506
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022									117,666		121,430
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022									96,242		99,320
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022									112,320		115,898
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022									83,554		86,216
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022									100,838		104,062
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007									71,053		73,320
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022									75,816		78,229
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995									73,632		75,982
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022									78,686		81,203
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022									69,056		71,261
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022									82,035		84,656
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022									87,318		90,106
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022									88,982		91,832
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022									90,251		93,142
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022									87,672		90,480
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022									84,573		87,277
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022									78,395		80,891
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023									86,653		89,419
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023									77,355		79,830
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023									77,355		79,830
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023									123,781		127,733
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023									97,989		101,109

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor							
						Base Year		Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023	48.08		100,000	49.59	51.17	103,147	106,434
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023	42.07		87,500	43.39	44.78	90,251	93,142
286	240114	CORP-Engineering	Engineer	6/26/2023	29.81		62,000	30.75	31.73	63,960	65,998
287	240114	CORP-Engineering	Project Manager	6/26/2023	52.88		110,000	54.55	56.29	113,464	117,083
288	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023				55.30	57.07	115,024	118,706
289	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023				55.30	57.07	115,024	118,706
290	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023				55.30	57.07	115,024	118,706
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023				47.35	48.86	98,488	101,629
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023				47.35	48.86	98,488	101,629
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Filled	12/31/2023				55.30	57.07	115,024	118,706
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023				47.35	48.86	98,488	101,629
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Filled	12/31/2023				47.35	48.86	98,488	101,629
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Filled	12/31/2023				47.35	48.86	98,488	101,629
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Filled	12/31/2023				83.06	85.71	172,765	178,277
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Filled	12/31/2023				68.19	70.37	141,835	146,370
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023				47.35	48.86	98,488	101,629
			Total Non-Collective Bargaining Unit Salary			$0	$28,862,534			$31,136,290	$32,130,322
Collective Bargaining Unit											
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	$35.48	$39,216	$74,082	$36.36	$37.27	$75,920	$77,820
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	35.90	11,108	74,959	36.80	37.72	76,838	78,759
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	35.25	4,152	73,602	36.14	37.04	75,460	77,340
4	241103	PITT-Cust Service	Field Service Representative U537P	3/31/1994	35.34	1,395	73,790	36.22	37.13	75,627	77,527
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	36.37	24,031	75,941	37.27	38.20	77,820	79,762
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987	35.67	60,141	74,479	36.55	37.46	76,316	78,217
7	241103	PITT-Cust Service	Field Service Representative U537P	2/2/1988	35.34	54	73,790	36.22	37.13	75,627	77,527
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	38.16	23,171	79,678	39.10	40.07	81,641	83,666
9	241103	PITT-Cust Service	Field Service Representative U537P	7/5/1983	35.34	-	73,790	36.22	37.13	75,627	77,527
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	2/1/1985	36.33	19,819	75,857	37.23	38.16	77,736	79,678
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	36.37	45,947	75,941	37.27	38.20	77,820	79,762
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991	35.76	8,276	74,667	36.64	37.55	76,504	78,404
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	4/22/1991	36.58	3,037	76,379	37.48	38.41	78,258	80,200
14	241103	PITT-Cust Service	Field Service Representative U537P	5/6/1985	35.34	12,905	73,790	36.22	37.13	75,627	77,527
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	35.66	32,069	74,459	36.37	37.09	75,941	77,445
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	35.58	20,788	74,291	36.30	37.02	75,794	77,298
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	36.64	23,436	76,504	37.70	38.62	78,718	80,639
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	35.74	6,989	74,625	36.80	37.72	76,838	78,759
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	35.83	28,952	74,813	36.55	37.27	76,317	77,820
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	35.31	383	73,727	36.01	36.73	75,189	76,692
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	35.91	17,464	74,980	36.63	37.35	76,484	77,987
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	36.74	10,330	76,713	37.47	38.22	78,237	79,803
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	35.41	9,816	73,936	36.12	36.84	75,419	76,922
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	35.66	12,559	74,458	36.37	37.09	75,941	77,444
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	35.54	1,345	74,208	36.60	37.52	76,421	78,342
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	35.70	12,223	74,535	36.76	37.68	76,748	78,669
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	35.83	13,123	74,813	36.55	37.27	76,317	77,820
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	35.41	260	73,936	36.12	36.84	75,419	76,922
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	35.58	19,114	74,291	36.30	37.02	75,794	77,298
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	35.91	13,635	74,980	36.63	37.35	76,484	77,987
31	243301	BUTL-Production	Operator U537O	5/4/1998	36.74	26,997	76,713	37.47	38.22	78,237	79,803
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	35.81	9,848	74,771	36.52	37.25	76,254	77,778
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	35.56	3,063	74,249	36.27	37.00	75,732	77,256
34	243301	BUTL-Production	Operator U537O	11/2/1984	36.74	20,404	76,713	37.47	38.22	78,237	79,803
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	35.41	979	73,936	36.12	36.84	75,419	76,922
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	35.31	5,485	73,727	36.01	36.73	75,189	76,692
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	35.25	314	73,602	35.95	36.67	75,064	76,567
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	35.91	33,677	74,981	36.63	37.35	76,484	77,987
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	35.66	24,676	74,459	36.37	37.09	75,941	77,444
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	35.58	5,799	74,291	36.30	37.02	75,794	77,298
41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	35.41	117	73,936	36.12	36.84	75,419	76,922
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	36.74	191	76,713	37.47	38.22	78,237	79,803
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	35.58	18,021	74,291	36.30	37.02	75,794	77,298
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	35.83	16,209	74,813	36.55	37.27	76,317	77,820
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	35.56	54	74,250	36.26	36.98	75,711	77,214
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	35.93	4,228	75,022	36.64	37.37	76,505	78,029
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	35.91	21,646	74,980	36.63	37.35	76,484	77,987
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	35.66	1,519	74,458	36.37	37.09	75,941	77,444
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	32.41	30,459	67,672	33.37	34.36	69,677	71,744
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	32.18	10,803	67,192	33.14	34.14	69,196	71,284
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	31.78	42,962	66,357	32.72	33.70	68,320	70,366
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	31.28	26,819	65,313	32.22	33.19	67,275	69,301
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	31.97	32,812	66,753	32.93	33.92	68,758	70,825

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					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023									103,147		106,434
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023									90,251		93,142
286	240114	CORP-Engineering	Engineer	6/26/2023									63,960		65,998
287	240114	CORP-Engineering	Project Manager	6/26/2023									113,464		117,083
288	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023									115,024		118,706
289	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023									115,024		118,706
290	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023									115,024		118,706
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023									98,488		101,629
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023									98,488		101,629
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Filled	12/31/2023									115,024		118,706
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023									98,488		101,629
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Filled	12/31/2023									98,488		101,629
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Filled	12/31/2023									98,488		101,629
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Filled	12/31/2023									172,765		178,277
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Filled	12/31/2023									141,835		146,370
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023									98,488		101,629
			Total Non-Collective Bargaining Unit Salary		$0	$0	-	-	-	-	-	$0	$31,136,290	$0	$32,130,322
Collective Bargaining Unit															
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	$1,038	$0	-	-	620.7	83.6	-	$40,182	$117,140	$41,182	$120,039
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	37	894	-	-	151.8	40.0	-	11,385	89,154	11,668	91,358
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	-	-	-	-	78.5	-	-	4,256	79,717	4,362	81,702
4	241103	PITT-Cust Service	Field Service Representative U537P	3/31/1994	-	-	-	-	26.0	-	-	1,429	77,056	1,465	78,992
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	60	-	-	-	432.6	3.8	-	24,621	102,501	25,232	105,053
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987	2,283	-	-	-	924.0	145.0	-	61,616	140,215	63,141	143,641
7	241103	PITT-Cust Service	Field Service Representative U537P	2/2/1988	-	-	-	-	1.0	-	-	55	75,682	56	77,584
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	-	783	-	-	269.7	99.3	-	23,738	106,162	24,323	108,772
9	241103	PITT-Cust Service	Field Service Representative U537P	7/5/1983	-	-	-	-	-	-	-	-	75,627	-	77,527
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	2/1/1985	-	-	-	-	351.6	6.7	-	20,306	98,042	20,809	100,487
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	1,044	-	-	-	784.7	39.2	-	47,077	125,940	48,244	129,050
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991	127	-	-	-	152.3	0.5	-	8,478	85,109	8,687	87,218
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	4/22/1991	15	-	-	-	54.8	-	-	3,111	81,384	3,187	83,402
14	241103	PITT-Cust Service	Field Service Representative U537P	5/6/1985	-	-	-	-	242.5	-	-	13,225	88,852	13,556	91,083
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	7,825	-	-	-	402.4	144.2	-	32,702	116,468	33,344	118,614
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	4,652	-	-	-	273.8	84.2	-	21,205	101,651	21,622	103,572
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	1,300	-	-	-	405.3	13.7	-	24,109	104,127	24,694	106,633
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	532	-	-	-	128.5	0.5	-	7,195	84,565	7,373	86,664
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	7,465	-	-	-	400.4	100.6	-	29,529	113,311	30,106	115,391
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	59	-	-	-	7.2	-	-	390	75,638	398	77,149
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	3,189	-	-	-	297.2	18.5	-	17,811	97,484	18,159	99,335
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	243	8	-	-	167.5	14.0	-	10,534	89,022	10,743	90,798
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	1,174	-	-	-	146.5	27.8	-	10,012	86,604	10,210	88,306
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	1,554	-	-	-	198.0	26.3	-	12,807	90,302	13,059	92,057
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	8	-	-	-	21.0	3.0	-	1,385	77,813	1,419	79,769
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	806	-	-	-	211.7	11.0	-	12,583	90,136	12,895	92,370
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	3,511	-	-	-	171.2	53.0	-	13,384	93,212	13,645	94,976
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	-	-	-	-	4.8	-	-	265	75,683	270	77,192
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	5,393	-	-	-	272.7	61.7	-	19,497	100,685	19,880	102,571
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	4,442	-	-	-	199.3	38.8	-	13,906	94,832	14,177	96,606
31	243301	BUTL-Production	Operator U537O	5/4/1998	1,030	414	-	181.3	263.6	54.8	-	27,531	107,212	28,080	109,327
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	1,730	-	-	-	134.3	35.3	-	10,041	88,025	10,240	89,748
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	907	-	-	-	53.0	3.0	-	3,124	79,762	3,186	81,349
34	243301	BUTL-Production	Operator U537O	11/2/1984	123	424	-	178.7	168.5	38.7	-	20,808	99,592	21,223	101,573
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	118	-	-	-	10.3	6.0	-	998	76,534	1,018	78,057
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	1,144	-	-	-	51.4	38.3	-	5,593	81,926	5,703	83,540
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	174	-	-	-	5.8	-	-	320	75,557	326	77,067
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	7,316	-	-	-	491.3	96.9	-	34,347	118,148	35,017	120,321
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	4,184	-	-	-	363.7	70.5	-	25,163	105,288	25,657	107,286
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	2,752	-	-	-	81.0	20.0	-	5,916	84,462	6,032	86,081
41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	-	-	-	-	2.2	-	-	119	75,537	121	77,043
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	-	-	-	-	3.4	-	-	195	78,432	199	80,002
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	4,808	-	-	-	238.2	72.3	-	18,382	98,984	18,743	100,849
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	4,123	-	-	-	205.7	69.8	-	16,531	96,970	16,854	98,797
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	-	-	-	-	1.0	-	-	55	75,766	56	77,271
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	538	-	-	-	46.6	23.4	-	4,311	81,354	4,396	82,963
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	2,003	-	-	-	391.2	5.5	-	22,076	100,563	22,507	102,496
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	-	-	-	-	28.2	-	-	1,549	77,490	1,579	79,023
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	1,200	-	-	-	498.2	92.7	-	31,354	102,231	32,277	105,221
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	224	682	-	-	201.8	15.4	-	11,123	81,226	11,457	83,647
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	1,760	-	-	-	786.7	81.2	-	44,224	114,303	45,539	117,665
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	1,448	-	-	-	561.5	4.5	-	27,619	96,343	28,445	99,194
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	696	-	-	-	582.6	72.3	-	33,790	103,244	34,798	106,319

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					Gross Labor							
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988	32.41	30,240	67,672	33.37	34.36	69,677	71,744
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987	32.22	33,966	67,275	33.18	34.17	69,280	71,347
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	30.92	30,087	64,561	31.84	32.79	66,482	68,466
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	32.41	5,000	67,672	33.37	34.36	69,677	71,744
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	31.78	47,200	66,357	32.72	33.70	68,320	70,366
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	31.97	20,511	66,753	32.93	33.92	68,758	70,825
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	32.16	10,091	67,150	33.12	34.11	69,155	71,222
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	31.78	27,226	66,357	32.72	33.70	68,319	70,366
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	32.18	6,044	67,192	33.14	34.14	69,196	71,284
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	32.18	10,091	67,192	33.14	34.14	69,196	71,284
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	32.18	10,662	67,192	33.14	34.14	69,196	71,284
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	30.92	8,360	64,561	31.84	32.79	66,482	68,466
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	30.92	33,712	64,561	31.84	32.79	66,482	68,466
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	32.41	33,763	67,672	33.37	34.36	69,677	71,744
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	32.18	4,319	67,192	33.14	34.14	69,196	71,284
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	32.18	4,351	67,192	33.14	34.14	69,196	71,284
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	30.92	18,270	64,561	31.84	32.79	66,482	68,466
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	32.18	4,821	67,192	33.14	34.14	69,196	71,284
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	31.78	26,530	66,357	32.72	33.70	68,320	70,366
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	30.67	12,314	64,039	31.59	32.54	65,960	67,944
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	32.22	29,714	67,276	33.18	34.17	69,280	71,347
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	32.18	4,622	67,192	33.14	34.14	69,196	71,284
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	31.97	30,007	66,753	32.93	33.92	68,758	70,825
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	32.18	9,669	67,192	33.14	34.14	69,196	71,284
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	32.41	43,932	67,672	33.37	34.36	69,677	71,744
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	32.18	8,696	67,192	33.14	34.14	69,196	71,284
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986	31.78	18,662	66,357	32.72	33.70	68,320	70,366
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	31.78	30,468	66,357	32.72	33.70	68,320	70,366
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	31.53	1,960	65,835	32.47	33.44	67,797	69,823
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	32.18	13,630	67,192	33.14	34.14	69,196	71,284
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	32.18	15,066	67,192	33.14	34.14	69,196	71,284
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	32.18	14,972	67,192	33.14	34.14	69,196	71,284
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	31.28	17,869	65,313	32.22	33.19	67,275	69,301
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	31.97	25,195	66,753	32.93	33.92	68,758	70,825
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	32.18	13,262	67,192	33.14	34.14	69,196	71,284
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	31.97	44,593	66,753	32.93	33.92	68,758	70,825
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	31.28	167	65,313	32.22	33.19	67,275	69,301
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	30.50	1,606	63,684	31.41	32.36	65,584	67,568
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	32.18	15,951	67,192	33.14	34.14	69,196	71,284
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	31.78	22,425	66,357	32.72	33.70	68,319	70,366
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	31.97	5,391	66,753	32.93	33.92	68,758	70,825
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	30.50	127	63,684	31.41	32.36	65,584	67,568
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	31.78	11,637	66,357	32.72	33.70	68,320	70,366
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	32.22	36,512	67,276	33.18	34.17	69,280	71,347
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	31.28	27,821	65,313	32.22	33.19	67,275	69,301
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	31.78	27,922	66,357	32.72	33.70	68,319	70,366
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	31.53	4,007	65,835	32.47	33.44	67,797	69,823
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	32.18	15,481	67,192	33.14	34.14	69,196	71,284
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	33.25	7,647	69,426	34.00	34.86	70,992	72,788
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	35.65	16,221	74,437	36.45	37.37	76,108	78,029
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	32.49	13	67,839	33.22	34.05	69,363	71,096
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	33.52	1,575	69,990	34.45	35.31	71,932	73,727
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	32.38	4,785	67,609	33.11	33.95	69,134	70,888
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996	33.17	2,742	69,259	34.09	34.94	71,180	72,955
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	33.17	50	69,259	34.09	34.94	71,180	72,955
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	33.17	5,556	69,259	34.09	34.94	71,180	72,955
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	34.95	5,140	72,976	35.74	36.63	74,625	76,483
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	32.49	765	67,839	33.22	34.05	69,363	71,096
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	35.65	10,356	74,437	36.45	37.37	76,108	78,029
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	35.67	10,528	74,479	36.55	37.46	76,316	78,216
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	35.67	35,377	74,479	36.55	37.46	76,316	78,217
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	35.66	3,955	74,458	36.37	37.09	75,941	77,444
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	38.16	26,786	79,678	39.10	40.07	81,641	83,666
117	241103	PITT-Cust Service	Field Service Representative U537P	11/18/1998	35.34	-	73,790	36.22	37.13	75,627	77,527
118	244101	INDI-Production	Operator U537O	8/9/1999	36.74	14,355	76,713	37.47	38.22	78,237	79,803
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	35.66	8,578	74,458	36.38	37.10	75,961	77,465
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	35.56	13,344	74,250	36.26	36.98	75,711	77,215
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	33.02	4,739	68,946	33.76	34.61	70,491	72,266
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	35.56	4,118	74,249	36.26	36.98	75,711	77,214
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	35.67	24,857	74,479	36.55	37.46	76,316	78,217
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	32.41	4,727	67,672	33.37	34.36	69,677	71,744

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988	1,448	-	-	-	513.2	78.3	-	31,129	102,253	32,046	105,238
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987	1,280	-	-	-	569.0	96.5	-	34,970	105,530	36,006	108,633
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	1,200	-	-	-	521.3	92.2	-	30,976	98,658	31,894	101,560
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	40	-	-	-	91.5	7.8	-	5,147	74,864	5,298	77,082
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	1,584	-	-	-	788.8	145.2	-	48,586	118,489	50,030	121,979
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	1,088	-	-	-	387.3	28.0	-	21,122	90,968	21,753	93,666
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	280	-	-	-	165.8	31.3	-	10,390	79,824	10,698	82,200
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	1,368	-	-	-	516.5	37.8	-	28,026	97,713	28,859	100,593
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	104	13	-	-	86.2	28.3	-	6,223	75,537	6,409	77,811
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	104	20	-	-	150.8	42.3	-	10,390	79,710	10,700	82,109
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	136	463	-	-	208.8	8.0	-	10,978	80,773	11,307	83,190
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	464	-	-	-	153.9	18.6	-	8,606	75,552	8,861	77,791
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	1,352	-	-	-	600.5	90.7	-	34,708	102,542	35,736	105,554
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	1,520	-	-	-	571.3	88.8	-	34,757	105,953	35,781	109,045
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	8	348	-	-	88.9	-	-	4,447	74,000	4,581	76,221
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	8	7	-	-	53.6	26.5	-	4,479	73,691	4,613	75,912
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	688	-	-	-	330.7	45.2	-	18,809	85,979	19,366	88,520
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	88	-	-	-	65.9	24.8	-	4,964	74,248	5,112	76,485
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	1,136	-	-	-	465.5	65.0	-	27,309	96,765	28,121	99,622
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	272	-	-	-	234.2	23.5	-	12,680	78,912	13,059	81,274
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	976	-	-	-	517.7	69.3	-	30,592	100,848	31,498	103,822
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	-	4	-	-	53.2	31.0	-	4,758	73,958	4,900	76,188
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	1,104	-	-	-	557.3	47.7	-	30,901	100,763	31,823	103,752
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	128	10	-	-	140.1	43.7	-	9,954	79,289	10,252	81,675
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	1,040	-	-	-	770.5	95.0	-	45,224	115,941	46,556	119,340
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	96	24	-	-	129.7	36.5	-	8,953	78,269	9,220	80,624
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986	1,016	-	-	-	388.3	-	-	19,210	88,546	19,781	91,163
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	1,080	-	-	-	513.7	90.3	-	31,362	100,761	32,294	103,740
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	40	-	-	-	32.8	6.3	-	2,019	69,856	2,078	71,941
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	824	884	-	-	258.6	16.2	-	14,033	84,938	14,453	87,446
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	632	769	-	-	256.2	40.0	-	15,512	86,109	15,976	88,661
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	256	322	-	-	247.8	45.0	-	15,415	85,190	15,877	87,739
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	1,072	-	-	-	369.7	6.0	-	18,402	86,749	18,951	89,324
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	1,088	-	-	-	457.8	47.7	-	25,946	95,792	26,720	98,633
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	592	711	-	-	262.5	8.0	-	13,655	84,155	14,065	86,653
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	1,696	-	-	-	743.7	134.2	-	45,921	116,375	47,291	119,812
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	-	-	-	-	3.5	-	-	171	67,447	177	69,477
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	88	-	-	-	34.9	-	-	1,653	67,325	1,703	69,359
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	200	10	-	-	194.3	99.7	-	16,422	85,829	16,913	88,407
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	1,064	-	-	-	401.3	49.3	-	23,083	92,467	23,770	95,200
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	152	-	-	-	77.3	25.5	-	5,552	74,461	5,717	76,694
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	-	-	-	-	2.0	-	-	130	65,714	133	67,701
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	616	-	-	-	242.0	-	-	11,978	80,914	12,334	83,316
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	1,360	-	-	-	628.3	91.2	-	37,592	108,232	38,705	111,413
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	1,232	-	-	-	578.0	8.0	-	28,651	97,158	29,507	100,040
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	1,168	-	-	-	518.8	46.8	-	28,742	98,229	29,596	101,130
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	112	-	-	-	65.0	14.5	-	4,126	72,035	4,248	74,183
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	840	910	-	-	301.8	12.7	-	15,940	86,887	16,418	89,453
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	84	-	72.7	-	104.2	-	-	7,819	78,895	8,016	80,887
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	-	-	-	-	278.7	17.0	-	16,583	92,690	16,998	95,027
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	36	-	-	-	0.3	-	-	13	69,412	13	71,146
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	19	-	-	-	24.4	5.0	-	1,618	73,569	1,659	75,405
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	-	-	70.0	-	51.6	-	-	4,893	74,027	5,017	75,904
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996	50	-	-	-	54.8	-	-	2,818	74,048	2,888	75,892
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	-	-	-	-	1.0	-	-	52	71,231	53	73,008
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	100	-	-	-	97.8	9.9	-	5,709	76,989	5,850	78,905
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	-	-	11.5	-	90.0	-	-	5,255	79,880	5,386	81,869
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	-	-	-	-	7.6	6.0	-	782	70,145	802	71,898
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	-	-	-	-	183.0	7.0	-	10,587	86,695	10,852	88,881
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	310	-	-	-	188.3	5.3	-	10,786	87,412	11,053	89,579
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	1,038	-	-	-	640.3	12.3	-	36,243	113,598	37,140	116,395
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	474	-	-	-	46.8	20.0	-	4,033	80,447	4,112	82,030
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	15	829	-	-	349.3	86.7	-	27,441	109,927	28,118	112,628
117	241103	PITT-Cust Service	Field Service Representative U537P	11/18/1998	-	-	-	-	-	-	-	-	75,627	-	77,527
118	244101	INDI-Production	Operator U537O	8/9/1999	243	341	-	114.7	147.7	12.0	-	14,639	93,460	14,930	95,318
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	2,560	-	-	-	152.3	4.7	-	8,749	87,270	8,920	88,944
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	2,161	-	-	-	214.7	25.2	-	13,604	91,477	13,872	93,248
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	156	-	14.9	-	63.7	16.2	-	4,845	75,492	4,966	77,388
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	568	-	-	-	59.7	12.7	-	4,198	80,478	4,281	82,064
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	931	-	-	-	404.9	42.5	-	25,467	102,714	26,097	105,244
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	16	-	-	-	80.5	12.0	-	4,866	74,558	5,009	76,769

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						Gross Labor						
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
125	241103	PITT-Cust Service	Field Service Representative U537P	12/28/2001	35.34	453	73,790	36.22	37.13	75,627	77,527
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	35.41	1,948	73,936	36.12	36.84	75,419	76,922
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	36.74	14,826	76,713	37.47	38.22	78,237	79,803
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	35.58	8,092	74,291	36.30	37.02	75,794	77,298
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	35.56	382	74,251	36.26	36.98	75,712	77,216
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	33.17	448	69,259	34.09	34.94	71,180	72,955
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	35.67	85,289	74,479	36.55	37.46	76,317	78,217
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	36.37	44,274	75,941	37.27	38.20	77,820	79,762
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	30.92	34,853	64,561	31.84	32.79	66,482	68,466
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	36.74	28,973	76,713	37.47	38.22	78,237	79,803
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	35.83	6,782	74,813	36.55	37.27	76,317	77,820
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002	35.60	255	74,333	36.48	37.38	76,170	78,049
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	35.60	57,225	74,333	36.48	37.38	76,171	78,050
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	35.81	7,854	74,772	36.52	37.25	76,254	77,778
139	241103	PITT-Cust Service	Field Service Representative U537P	4/14/2003	35.34	-	73,790	36.22	37.13	75,627	77,527
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	32.18	10,779	67,192	33.14	34.14	69,196	71,284
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	36.37	31,904	75,941	37.27	38.20	77,820	79,762
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	30.92	26,760	64,561	31.84	32.79	66,482	68,466
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	36.37	74,351	75,941	37.27	38.20	77,820	79,762
144	241103	PITT-Cust Service	Field Service Representative U537P	8/29/2003	35.34	6,348	73,790	36.22	37.13	75,627	77,527
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	35.31	1,986	73,727	36.01	36.73	75,189	76,692
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	33.17	1,581	69,259	34.09	34.94	71,180	72,955
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	32.41	19,844	67,672	33.37	34.36	69,677	71,744
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	36.49	12,882	76,191	37.22	37.97	77,715	79,281
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	36.08	26,423	75,335	36.97	37.89	77,193	79,114
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	30.78	5,177	64,269	31.47	32.26	65,709	67,359
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005	35.83	5,445	74,813	36.72	37.64	76,671	78,592
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	35.50	8,678	74,124	36.21	36.94	75,606	77,131
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	33.17	9,014	69,259	34.09	34.94	71,180	72,955
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	35.66	40,040	74,458	36.38	37.10	75,961	77,465
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	35.50	3,854	74,124	36.20	36.92	75,586	77,089
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	35.60	16,575	74,333	36.48	37.38	76,170	78,049
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	33.17	15,800	69,259	34.09	34.94	71,180	72,955
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	35.31	4,858	73,727	36.01	36.73	75,189	76,692
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	35.66	11,498	74,458	36.37	37.09	75,941	77,444
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	30.67	18,513	64,039	31.59	32.54	65,960	67,944
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005	32.16	6,258	67,150	33.12	34.11	69,155	71,222
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	32.49	4,335	67,839	33.22	34.05	69,363	71,096
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	35.56	2,176	74,249	36.27	37.00	75,732	77,256
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	35.30	4,580	73,706	36.18	37.08	75,544	77,423
165	241103	PITT-Cust Service	Field Service Representative U537P	12/19/2005	35.34	7,886	73,790	36.22	37.13	75,627	77,527
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	35.41	427	73,936	36.12	36.84	75,419	76,922
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	36.37	36,153	75,941	37.27	38.20	77,820	79,762
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	36.37	36,486	75,941	37.27	38.20	77,820	79,762
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	35.78	29,128	74,709	36.66	37.57	76,546	78,446
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	35.58	5,642	74,291	36.30	37.02	75,794	77,298
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	36.42	47,431	76,045	37.33	38.26	77,945	79,887
172	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	35.34	856	73,790	36.22	37.13	75,627	77,527
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	30.67	16,991	64,039	31.59	32.54	65,960	67,944
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	30.67	15,445	64,039	31.59	32.54	65,960	67,944
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	36.37	28,848	75,941	37.27	38.20	77,820	79,762
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	35.48	22,458	74,082	36.36	37.27	75,920	77,820
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	35.93	5,568	75,022	36.64	37.37	76,504	78,029
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	35.93	6,121	75,024	36.64	37.37	76,506	78,030
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	35.31	7,277	73,727	36.01	36.73	75,189	76,692
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	30.92	40,400	64,561	31.84	32.79	66,482	68,466
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006	32.16	13,727	67,150	33.12	34.11	69,155	71,222
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	36.37	31,998	75,941	37.27	38.20	77,820	79,762
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	32.41	30,693	67,672	33.37	34.36	69,677	71,744
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	36.74	491	76,713	37.47	38.22	78,237	79,803
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	35.83	12,116	74,813	36.72	37.64	76,671	78,592
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	32.41	9,353	67,672	33.37	34.36	69,677	71,744
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	35.31	2,282	73,727	36.01	36.73	75,189	76,692
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	35.20	8,672	73,498	35.99	36.90	75,147	77,047
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	32.49	25,088	67,839	33.22	34.05	69,363	71,096
190	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	35.34	3,134	73,790	36.22	37.13	75,627	77,527
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	32.18	4,555	67,192	33.14	34.14	69,196	71,284
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	35.31	2,575	73,727	36.01	36.73	75,189	76,692
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006	35.48	31,677	74,082	36.36	37.27	75,920	77,820
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	35.56	6,182	74,249	36.26	36.98	75,711	77,214
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	35.56	14,676	74,250	36.26	36.98	75,712	77,215

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
125	241103	PITT-Cust Service	Field Service Representative U537P	12/28/2001	-	-	-	-	8.5	-	-	464	76,091	476	78,003
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	289	-	-	-	22.2	10.7	-	1,986	77,694	2,026	79,237
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	-	352	-	160.0	118.0	12.6	-	15,119	93,709	15,421	95,576
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	1,996	-	-	-	125.0	18.7	-	8,254	86,044	8,416	87,710
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	-	-	-	-	3.1	3.0	-	389	76,102	397	77,613
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	-	-	-	-	8.9	-	-	460	71,640	471	73,426
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	3,043	-	-	-	1,338.8	184.8	-	87,381	166,740	89,545	170,804
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	687	-	-	-	563.1	181.9	-	45,362	123,868	46,485	126,934
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	1,448	-	-	-	631.3	86.0	-	35,883	103,813	36,946	106,859
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	522	425	-	173.3	265.5	85.1	-	29,546	108,730	30,135	110,885
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	1,409	-	-	-	104.3	15.6	-	6,917	84,643	7,052	86,281
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002	-	-	-	-	4.8	-	-	261	76,431	267	78,317
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	929	1,356	-	-	784.5	210.0	-	58,630	137,086	60,067	140,402
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	2,319	-	-	-	118.7	19.7	-	8,008	86,581	8,167	88,264
139	241103	PITT-Cust Service	Field Service Representative U537P	4/14/2003	-	357	-	-	-	-	-	-	75,984	-	77,884
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	304	656	-	-	200.5	16.0	-	11,098	81,254	11,431	83,675
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	852	-	-	-	551.3	21.8	-	32,688	111,360	33,497	114,111
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	1,144	-	-	-	519.7	39.7	-	27,550	95,176	28,366	97,976
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	1,949	-	-	-	1,095.0	194.5	-	76,180	155,948	78,069	159,779
144	241103	PITT-Cust Service	Field Service Representative U537P	8/29/2003	15	-	-	-	108.8	8.0	-	6,506	82,148	6,669	84,211
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	351	635	-	-	15.3	16.3	-	2,025	78,200	2,065	79,744
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	6	-	-	-	24.3	5.3	-	1,624	72,810	1,664	74,625
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	912	-	-	-	360.0	33.5	-	20,426	91,015	21,027	93,683
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	822	51	-	16.0	175.3	33.7	-	13,137	91,725	13,400	93,554
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	97	-	-	-	459.0	19.2	-	27,070	104,360	27,739	106,950
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	72	-	20.4	-	83.8	10.5	-	5,292	71,074	5,424	72,855
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005	15	-	-	-	87.3	10.0	-	5,579	82,266	5,718	84,325
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	1,163	-	-	-	130.6	23.3	-	8,850	85,620	9,027	87,321
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	56	-	-	-	125.6	40.5	-	9,262	80,498	9,491	82,502
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	5,108	-	-	-	706.8	26.8	-	40,842	121,912	41,644	124,217
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	1,100	-	-	-	54.5	13.0	-	3,929	80,615	4,007	82,196
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	163	-	-	-	307.8	-	-	16,981	93,315	17,397	95,609
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	256	-	-	-	225.3	67.7	-	16,236	87,672	16,638	89,849
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	605	-	-	-	68.5	16.8	-	4,954	80,748	5,052	82,349
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	1,182	235	-	-	176.3	27.5	-	11,725	89,082	11,955	90,815
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	904	-	-	-	358.5	30.5	-	19,064	85,928	19,632	88,480
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005	8	-	-	-	112.8	11.8	-	6,443	75,606	6,634	77,864
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	204	-	-	-	75.2	10.0	-	4,432	73,999	4,542	75,843
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	119	-	-	-	27.3	9.9	-	2,219	78,070	2,263	79,638
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	88	-	-	-	85.4	-	-	4,693	80,325	4,808	82,320
165	241103	PITT-Cust Service	Field Service Representative U537P	12/19/2005	75	-	-	-	131.0	12.6	-	8,081	83,783	8,282	85,885
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	-	-	-	-	-	6.0	-	436	75,854	445	77,366
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	942	-	-	-	636.9	16.1	-	37,042	115,804	37,961	118,664
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	979	-	-	-	662.8	1.0	-	37,382	116,181	38,309	119,050
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	756	-	-	-	514.8	17.8	-	29,839	107,141	30,574	109,776
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	2,213	-	-	-	81.2	17.9	-	5,755	83,763	5,869	85,380
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	1,700	-	-	-	796.8	49.9	-	48,609	128,255	49,814	131,401
172	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	-	-	-	-	16.0	-	-	878	76,505	899	78,427
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	704	-	-	-	336.8	22.0	-	17,496	84,160	18,018	86,666
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	864	-	-	-	312.2	16.0	-	15,905	82,729	16,380	85,188
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	534	-	-	-	449.5	56.8	-	29,557	107,911	30,290	110,585
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	165	641	-	-	352.6	49.5	-	23,010	99,736	23,582	102,207
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	2,077	-	-	-	73.3	22.0	-	5,677	84,258	5,790	85,895
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	705	-	-	-	81.9	23.0	-	6,241	83,453	6,365	85,100
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	1,496	-	-	-	117.5	13.9	-	7,420	84,104	7,567	85,754
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	1,776	-	-	-	765.2	75.0	-	41,594	109,852	42,827	113,069
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006	712	-	-	-	282.2	-	-	14,133	84,000	14,552	86,486
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	616	-	-	-	451.2	98.3	-	32,784	111,220	33,596	113,974
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	720	-	-	-	526.0	75.5	-	31,595	101,992	32,526	104,990
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	60	-	-	-	4.8	3.0	-	500	78,798	510	80,374
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	30	120	-	-	212.3	8.3	-	12,415	89,236	12,723	91,465
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	176	-	-	-	152.4	28.7	-	9,628	79,480	9,911	81,830
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	237	-	-	-	20.8	16.5	-	2,327	77,752	2,373	79,302
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	216	-	-	-	163.0	-	-	8,865	84,228	9,087	86,350
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	312	-	29.7	-	397.5	71.0	-	25,648	95,324	26,286	97,694
190	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	90	-	-	-	53.6	4.0	-	3,212	78,929	3,292	80,910
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	112	-	-	-	64.5	21.7	-	4,689	73,997	4,829	76,225
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	387	-	-	-	30.2	13.5	-	2,626	78,201	2,678	79,757
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006	1,469	-	-	-	537.3	40.4	-	32,458	109,847	33,265	112,554
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	759	-	-	-	89.8	18.8	-	6,302	82,773	6,426	84,400
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	3,722	-	-	-	194.0	59.0	-	14,962	94,396	15,257	96,194

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor							
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	32.18	11,807	67,192	33.14	34.14	69,196	71,284
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	35.60	36,079	74,333	36.48	37.38	76,170	78,049
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	36.37	35,354	75,941	37.27	38.20	77,820	79,762
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	35.81	5,310	74,771	36.52	37.25	76,254	77,778
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	35.31	12,870	73,727	36.01	36.73	75,189	76,692
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	30.67	15,659	64,039	31.59	32.54	65,960	67,944
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	30.67	27,101	64,039	31.59	32.54	65,960	67,944
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007	30.67	4,947	64,039	31.59	32.54	65,960	67,944
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	32.41	24,611	67,672	33.37	34.36	69,677	71,744
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	32.16	16,989	67,150	33.12	34.11	69,155	71,222
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	32.16	10,678	67,150	33.12	34.11	69,155	71,222
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	32.95	7,124	68,800	33.86	34.70	70,700	72,454
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	29.91	10,245	62,452	30.73	31.50	64,164	65,772
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	33.17	13,798	69,259	34.09	34.94	71,180	72,955
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	32.41	27,061	67,673	33.37	34.36	69,677	71,744
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	30.67	6,110	64,039	31.59	32.54	65,960	67,944
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	35.30	6,747	73,706	36.18	37.08	75,544	77,423
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	36.37	44,910	75,941	37.27	38.20	77,820	79,762
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	32.49	2,573	67,839	33.22	34.05	69,363	71,096
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	32.49	9,351	67,839	33.22	34.05	69,363	71,096
216	244101	INDI-Production	Operator U537O	8/13/2007	36.74	19,411	76,713	37.47	38.22	78,237	79,803
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	30.67	17,882	64,039	31.59	32.54	65,960	67,944
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	31.28	614	65,313	32.22	33.19	67,275	69,301
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	32.18	10,842	67,192	33.14	34.14	69,196	71,284
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	35.56	2,335	74,249	36.27	37.00	75,732	77,256
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	35.68	30,949	74,499	36.74	37.66	76,713	78,634
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007	35.41	6,277	73,936	36.12	36.84	75,419	76,922
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	33.51	9,832	69,969	34.26	35.13	71,535	73,351
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	35.60	1,684	74,333	36.48	37.38	76,170	78,049
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	30.67	15,646	64,039	31.59	32.54	65,960	67,944
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	35.56	17,153	74,249	36.26	36.98	75,711	77,214
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007	32.41	19,293	67,672	33.37	34.36	69,677	71,744
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	35.78	5,550	74,709	36.66	37.57	76,546	78,446
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	32.16	12,827	67,150	33.12	34.11	69,155	71,222
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008	35.31	18,328	73,727	36.01	36.73	75,189	76,692
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	33.85	16,252	70,679	34.78	35.65	72,621	74,437
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008	35.31	5,465	73,727	36.01	36.73	75,189	76,692
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	32.41	12,932	67,672	33.37	34.36	69,677	71,744
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	32.18	4,752	67,192	33.14	34.14	69,196	71,284
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	35.30	2,967	73,706	36.18	37.08	75,544	77,423
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	33.02	11,590	68,946	33.76	34.61	70,491	72,266
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	35.30	4,180	73,706	36.18	37.08	75,544	77,423
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008	34.32	208	71,660	35.00	35.70	73,080	74,542
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	35.41	801	73,936	36.12	36.84	75,419	76,922
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	35.48	34,258	74,082	36.36	37.27	75,920	77,820
241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	35.83	15,417	74,813	36.72	37.64	76,671	78,592
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	35.67	10,267	74,479	36.55	37.46	76,316	78,217
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	36.07	70,372	75,314	36.97	37.90	77,193	79,135
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	35.25	399	73,602	35.95	36.67	75,064	76,567
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	35.31	8,398	73,727	36.01	36.73	75,189	76,692
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	35.56	14,113	74,249	36.27	37.00	75,732	77,256
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009	35.25	1,214	73,602	35.95	36.67	75,064	76,567
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	35.56	10,356	74,249	36.27	37.00	75,732	77,256
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009	32.18	3,902	67,192	33.14	34.14	69,196	71,284
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	30.78	16,839	64,269	31.47	32.26	65,709	67,359
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	36.07	487	75,314	36.97	37.90	77,193	79,135
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	35.31	6,830	73,727	36.01	36.73	75,189	76,692
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	35.31	6,893	73,727	36.01	36.73	75,189	76,692
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	35.66	21,288	74,458	36.38	37.10	75,961	77,465
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	35.31	13,406	73,727	36.01	36.73	75,189	76,692
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009	34.95	53	72,976	35.65	36.36	74,437	75,920
257	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	35.34	580	73,790	36.22	37.13	75,627	77,527
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	35.81	9,420	74,771	36.52	37.25	76,254	77,778
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	35.56	5,104	74,250	36.26	36.98	75,711	77,215
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	35.56	20,947	74,249	36.26	36.98	75,711	77,214
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	35.31	7,377	73,727	36.01	36.73	75,189	76,692
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	35.31	5,133	73,727	36.01	36.73	75,189	76,692
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	35.31	5,598	73,727	36.01	36.73	75,189	76,692
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	35.56	6,555	74,250	36.26	36.98	75,712	77,215
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	35.31	15,569	73,727	36.01	36.73	75,189	76,692
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	36.42	65,330	76,045	37.33	38.26	77,945	79,887

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					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	88	11	-	-	208.3	25.7	-	12,156	81,451	12,520	83,903
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	1,412	-	-	-	671.2	-	-	36,965	114,547	37,871	117,333
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	1,056	-	-	-	591.2	39.1	-	36,222	115,098	37,119	117,937
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	2,426	-	-	-	67.0	23.2	-	5,415	84,095	5,522	85,726
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	762	59	-	28.0	176.0	31.4	-	13,124	89,133	13,384	90,897
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	1,024	-	-	-	324.3	10.0	-	16,125	83,109	16,607	85,574
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	1,336	-	-	-	494.6	67.0	-	27,907	95,203	28,739	98,019
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007	-	-	-	-	80.6	19.0	-	5,093	71,053	5,244	73,188
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	600	-	-	-	421.2	61.3	-	25,335	95,612	26,082	98,425
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	872	-	-	-	324.0	19.0	-	17,492	87,519	18,011	90,104
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	760	-	-	-	171.0	37.0	-	10,995	80,910	11,322	83,304
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	113	-	-	-	121.8	16.3	-	7,320	78,132	7,501	80,067
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	38	-	-	-	183.1	32.7	-	10,524	74,726	10,786	76,595
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	6	-	-	-	275.8	-	-	14,178	85,364	14,530	87,491
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	1,224	-	-	-	496.0	42.5	-	27,857	98,758	28,677	101,645
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	368	-	-	-	104.7	20.7	-	6,292	72,620	6,481	74,792
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	225	-	-	-	126.3	-	-	6,914	82,683	7,084	84,733
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	1,594	-	-	-	731.4	64.9	-	46,014	125,429	47,156	128,512
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	132	-	-	-	52.5	-	-	2,630	72,126	2,696	73,924
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	96	-	23.4	-	141.3	25.5	-	9,560	79,019	9,798	80,990
216	244101	INDI-Production	Operator U537O	8/13/2007	646	409	-	168.0	197.7	10.0	-	19,795	99,087	20,190	101,048
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	936	-	-	-	364.5	15.8	-	18,414	85,310	18,964	87,843
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	16	-	-	-	13.0	-	-	633	67,924	652	69,968
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	160	669	-	-	191.9	23.5	-	11,163	81,189	11,498	83,612
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	823	-	-	-	32.9	8.0	-	2,381	78,936	2,429	80,508
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	1,533	-	-	-	528.7	34.2	-	31,862	110,107	32,654	112,820
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007	509	-	-	-	101.2	12.1	-	6,402	82,329	6,528	83,959
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	312	-	-	-	194.5	-	-	10,051	81,898	10,305	83,968
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	15	-	-	-	31.2	-	-	1,725	77,910	1,767	79,831
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	976	-	-	-	337.7	-	-	16,112	83,048	16,593	85,512
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	4,590	-	-	-	279.8	29.3	-	17,488	97,789	17,832	99,637
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007	880	-	-	-	353.2	30.3	-	19,860	90,417	20,445	93,068
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	45	-	-	-	72.3	22.8	-	5,686	82,277	5,826	84,317
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	168	-	-	-	234.0	22.5	-	13,207	82,530	13,599	84,989
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008	2,856	-	-	-	312.2	23.3	-	18,688	96,733	19,059	98,607
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	-	-	-	-	199.8	88.4	-	16,695	89,316	17,110	91,547
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008	2,299	-	-	-	80.0	16.8	-	5,573	83,061	5,684	84,675
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	416	-	-	-	225.0	29.5	-	13,313	83,406	13,706	85,865
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	56	-	-	-	56.3	30.8	-	4,892	74,145	5,039	76,379
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	-	-	-	-	55.8	-	-	3,041	78,585	3,116	80,539
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	288	-	31.3	-	170.0	31.3	-	11,848	82,627	12,144	84,698
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	135	-	-	-	78.4	-	-	4,283	79,962	4,389	81,947
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008	-	-	-	-	4.0	-	-	212	73,292	216	74,758
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	315	-	-	-	5.0	7.5	-	817	76,550	833	78,070
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	1,287	-	-	-	609.9	22.0	-	35,102	112,308	35,974	115,081
241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	29	74	-	-	260.2	18.3	-	15,797	92,571	16,190	94,884
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	60	-	-	-	92.5	73.3	-	10,518	86,895	10,778	89,054
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	1,919	-	-	-	1,081.5	158.5	-	72,117	151,229	73,921	154,975
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	119	-	-	-	7.5	-	-	407	75,589	415	77,101
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	3,256	-	-	-	118.5	29.1	-	8,563	87,008	8,733	88,681
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	1,840	-	-	-	214.0	36.1	-	14,392	91,964	14,679	93,776
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009	59	-	-	-	16.7	4.5	-	1,238	76,361	1,262	77,888
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	2,609	-	-	-	149.4	32.3	-	10,561	88,902	10,772	90,637
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009	64	-	-	-	63.8	12.2	-	4,017	73,278	4,138	75,486
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	552	-	28.2	-	258.5	63.8	-	17,214	83,476	17,644	85,555
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	-	945	-	-	6.4	1.9	-	499	78,637	511	80,591
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	3,962	-	-	-	93.3	25.8	-	6,964	86,115	7,102	87,756
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	2,493	-	-	-	103.3	19.3	-	7,028	84,710	7,167	86,353
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	1,908	-	-	-	356.0	29.3	-	21,715	99,584	22,142	101,514
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	3,374	-	-	-	186.2	48.3	-	13,669	92,232	13,940	94,006
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009	-	-	-	-	1.0	-	-	54	74,492	56	75,975
257	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	-	-	-	-	-	8.0	-	594	76,221	609	78,136
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	1,638	-	-	-	136.3	28.2	-	9,605	87,497	9,795	89,211
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	1,175	-	-	-	78.2	12.5	-	5,204	82,090	5,306	83,696
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	6,408	-	-	-	277.0	84.3	-	21,355	103,475	21,776	105,398
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	1,637	-	-	-	78.8	44.3	-	7,521	84,347	7,670	86,000
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	626	-	-	-	81.7	10.8	-	5,234	81,049	5,337	82,656
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	1,090	-	-	-	95.0	7.2	-	5,708	81,986	5,821	83,603
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	801	-	-	-	86.5	26.3	-	6,683	83,196	6,814	84,830
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	3,826	-	-	-	177.1	85.6	-	15,875	94,890	16,189	96,707
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	1,468	-	-	-	998.4	142.3	-	66,952	146,364	68,609	149,964

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					Gross Labor							
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	32.18	20,122	67,192	33.14	34.14	69,196	71,284
268	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	35.34	5,973	73,790	36.22	37.13	75,627	77,527
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	32.41	20,708	67,672	33.37	34.36	69,677	71,744
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	35.65	12,423	74,437	36.45	37.37	76,108	78,029
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	35.41	4,391	73,936	36.12	36.84	75,419	76,922
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	36.15	19,854	75,484	37.04	37.96	77,343	79,263
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	35.31	2,717	73,727	36.01	36.73	75,189	76,692
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	35.41	13,126	73,936	36.12	36.84	75,419	76,922
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	35.23	50,564	73,560	36.11	37.02	75,398	77,298
276	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	35.34	4,055	73,790	36.22	37.13	75,627	77,527
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010	35.48	12,260	74,082	36.36	37.27	75,920	77,820
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	35.56	11,140	74,249	36.26	36.98	75,711	77,214
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	32.16	5,678	67,150	33.12	34.11	69,155	71,222
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	35.41	980	73,936	36.12	36.84	75,419	76,922
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	35.50	28,958	74,124	36.21	36.94	75,606	77,131
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	35.41	53,329	73,936	36.12	36.84	75,419	76,922
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	35.56	5,064	74,251	36.26	36.98	75,712	77,216
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	35.31	3,336	73,727	36.01	36.73	75,189	76,692
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	36.08	7,453	75,335	36.97	37.89	77,193	79,114
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	33.17	10,843	69,259	34.09	34.94	71,180	72,955
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	35.31	6,581	73,727	36.01	36.73	75,189	76,692
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	35.50	3,597	74,125	36.20	36.92	75,587	77,090
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	35.31	17,000	73,727	36.01	36.73	75,189	76,692
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	35.31	969	73,727	36.01	36.73	75,189	76,692
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	36.08	10,987	75,335	36.97	37.89	77,193	79,114
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	35.31	1,573	73,727	36.01	36.73	75,189	76,692
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	34.95	29,519	72,976	35.65	36.36	74,437	75,920
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	35.31	32,786	73,727	36.01	36.73	75,189	76,692
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012	32.16	4,825	67,150	33.12	34.11	69,155	71,222
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	36.66	26,543	76,546	37.60	38.57	78,509	80,534
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	30.78	7,239	64,269	31.47	32.26	65,709	67,359
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	35.41	4,745	73,936	36.12	36.84	75,419	76,922
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	34.32	26	71,660	35.00	35.70	73,080	74,542
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	35.90	12,043	74,959	36.80	37.72	76,838	78,759
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013	36.64	25,491	76,504	37.70	38.62	78,718	80,639
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	35.31	4,479	73,727	36.01	36.73	75,189	76,692
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	35.31	12,686	73,727	36.01	36.73	75,189	76,692
304	244101	INDI-Production	Operator U537O	5/13/2013	36.74	24,082	76,713	37.47	38.22	78,237	79,803
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	35.31	12,126	73,727	36.01	36.73	75,189	76,692
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	36.07	12,986	75,314	36.97	37.90	77,193	79,135
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	35.56	3,311	74,250	36.26	36.98	75,711	77,215
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	35.66	1,159	74,458	36.37	37.09	75,941	77,444
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	35.30	32,779	73,706	36.18	37.08	75,544	77,423
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	35.31	11,987	73,727	36.01	36.73	75,189	76,692
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	30.67	9,460	64,039	31.59	32.54	65,960	67,944
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	35.56	3,147	74,249	36.27	37.00	75,732	77,256
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	32.41	22,758	67,672	33.37	34.36	69,677	71,744
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	32.03	315	66,879	32.99	33.98	68,883	70,950
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	36.42	43,861	76,045	37.33	38.26	77,945	79,887
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	30.92	12,220	64,561	31.84	32.79	66,482	68,466
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	32.16	3,891	67,150	33.12	34.11	69,155	71,222
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	32.16	3,422	67,150	33.12	34.11	69,155	71,222
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	30.67	17,482	64,039	31.59	32.54	65,960	67,944
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014	34.32	1,359	71,660	35.00	35.70	73,080	74,542
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	35.65	13,154	74,437	36.45	37.37	76,108	78,029
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	36.74	11,539	76,713	37.47	38.22	78,237	79,803
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	35.31	3,946	73,727	36.01	36.73	75,189	76,692
324	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014	35.34	63	73,790	36.22	37.13	75,627	77,527
325	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	35.34	25,713	73,790	36.22	37.13	75,627	77,527
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	35.31	14,396	73,727	36.01	36.73	75,189	76,692
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	35.30	39,607	73,706	36.18	37.08	75,544	77,423
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	35.30	74,728	73,706	36.18	37.08	75,544	77,423
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	35.30	38,728	73,706	36.18	37.08	75,544	77,423
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	36.74	25,957	76,713	37.47	38.22	78,237	79,803
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	32.16	44,765	67,150	33.12	34.11	69,155	71,222
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	32.18	3,633	67,192	33.14	34.14	69,196	71,284
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	36.66	29,008	76,546	37.60	38.57	78,509	80,534
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	35.42	28,672	73,957	36.33	37.26	75,857	77,799
335	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015	34.34	3,988	71,702	35.22	36.13	73,539	75,439
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	34.72	27,505	72,495	35.61	36.53	74,354	76,275
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	35.56	2,266	74,249	36.27	37.00	75,732	77,256

Pennsylvania-American Water Company - Water Operations
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					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	376	410	-	-	363.0	38.2	-	20,718	90,700	21,338	93,409
268	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	37	-	-	-	91.8	15.3	-	6,122	81,786	6,275	83,839
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	592	-	-	-	365.2	43.2	-	21,317	91,586	21,945	94,281
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	-	-	-	-	217.1	10.0	-	12,700	88,807	13,018	91,046
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	1,491	-	-	-	44.2	28.2	-	4,478	81,388	4,567	82,980
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	-	100	-	-	347.4	12.0	-	20,339	97,782	20,841	100,204
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	719	-	-	-	41.5	7.0	-	2,770	78,679	2,825	80,237
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	4,548	-	-	-	184.5	45.5	-	13,387	93,354	13,652	95,122
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	1,301	555	-	-	679.3	202.6	-	51,817	129,070	53,113	132,267
276	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	-	-	-	-	76.0	-	-	4,156	79,783	4,260	81,787
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010	204	-	-	-	152.2	57.5	-	12,562	88,686	12,874	90,899
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	1,969	16	-	8.0	167.2	25.0	-	11,358	89,054	11,582	90,781
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	40	-	-	-	99.4	13.2	-	5,847	75,041	6,020	77,282
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	521	-	-	-	7.7	8.0	-	999	76,938	1,019	78,462
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	4,174	-	-	-	424.6	86.2	-	29,532	109,313	30,123	111,428
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	13,519	-	-	-	724.7	204.2	-	54,390	143,328	55,467	145,908
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	1,136	-	-	-	63.8	22.9	-	5,163	82,011	5,265	83,617
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	802	-	-	-	56.8	4.2	-	3,401	79,392	3,469	80,962
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	30	98	-	-	119.3	13.0	-	7,636	84,958	7,824	87,067
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	425	-	-	-	182.2	25.8	-	11,142	82,747	11,418	84,798
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	2,430	-	-	-	109.9	9.9	-	6,710	84,330	6,843	85,966
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	1,160	-	-	-	54.8	9.0	-	3,667	80,415	3,740	81,990
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	3,005	-	-	-	246.5	53.8	-	17,334	95,528	17,678	97,375
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	296	-	-	-	18.2	-	-	988	76,473	1,008	77,996
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	15	456	-	-	159.0	32.0	-	11,256	88,920	11,534	91,120
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	59	-	-	-	25.5	3.0	-	1,604	76,852	1,636	78,388
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	2,999	-	-	-	453.4	79.1	-	30,105	107,541	30,701	109,619
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	7,714	-	-	-	432.8	135.8	-	33,430	116,333	34,093	118,500
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012	-	-	-	-	94.2	4.0	-	4,968	74,123	5,116	76,338
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	15	690	-	-	370.0	81.8	-	27,218	106,432	27,915	109,154
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	744	-	32.0	-	93.0	30.5	-	7,399	73,853	7,583	75,686
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	1,744	306	-	-	59.6	21.7	-	4,839	82,307	4,934	83,906
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	-	-	-	-	0.5	-	-	27	73,107	27	74,569
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	45	882	-	-	172.5	37.3	-	12,343	90,108	12,650	92,336
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013	1,837	799	-	-	416.0	33.7	-	26,224	107,578	26,860	110,135
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	1,459	-	-	-	51.5	24.3	-	4,567	81,215	4,658	82,809
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	3,298	-	-	-	184.7	39.4	-	12,935	91,422	13,191	93,181
304	244101	INDI-Production	Operator U537O	5/13/2013	852	412	-	184.0	244.0	28.3	-	24,559	104,060	25,048	106,115
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	2,876	-	-	-	189.9	28.2	-	12,365	90,430	12,610	92,179
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	-	-	-	-	238.6	-	-	13,308	90,502	13,641	92,776
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	117	-	-	-	24.2	28.0	-	3,375	79,204	3,442	80,773
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	119	-	-	-	18.2	2.5	-	1,182	77,241	1,205	78,768
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	1,258	-	-	-	594.8	15.0	-	33,591	110,392	34,421	113,102
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	712	-	-	-	162.2	46.3	-	12,222	88,123	12,464	89,868
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	464	-	-	-	203.8	-	-	9,742	76,165	10,032	78,440
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	253	-	-	-	43.3	11.6	-	3,209	79,194	3,274	80,783
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	952	-	-	-	382.2	61.7	-	23,427	94,056	24,117	96,812
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	16	1,383	-	-	6.5	-	-	324	70,606	334	72,683
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	2,271	-	-	-	787.1	8.0	-	44,950	125,166	46,063	128,220
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	648	-	-	-	261.2	-	-	12,580	79,710	12,952	82,066
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	40	-	-	-	69.5	7.8	-	4,006	73,200	4,124	75,386
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	-	-	-	-	56.9	10.0	-	3,524	72,678	3,628	74,850
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	1,128	-	-	-	357.3	15.0	-	18,003	85,091	18,540	87,612
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014	-	-	-	-	26.3	-	-	1,386	74,466	1,414	75,955
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	-	-	-	-	223.3	15.7	-	13,447	89,554	13,784	91,812
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	425	14	-	-	195.8	9.0	-	11,766	90,442	12,000	92,242
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	612	-	-	-	54.3	14.9	-	4,024	79,824	4,104	81,408
324	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014	-	832	-	-	1.2	-	-	64	76,523	66	78,425
325	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	388	128	-	-	334.1	111.3	-	26,350	102,493	27,008	105,051
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	4,037	-	-	-	191.3	58.8	-	14,679	93,905	14,970	95,699
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	266	-	-	-	667.4	56.9	-	40,588	116,398	41,592	119,281
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	2,482	-	-	-	1,306.3	72.3	-	76,580	154,605	78,473	158,378
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	923	-	-	-	703.3	17.5	-	39,687	116,154	40,668	119,014
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	264	452	-	194.7	227.3	60.0	-	26,471	105,424	26,999	107,518
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	1,528	-	-	-	785.5	101.8	-	46,091	116,774	47,460	120,209
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	56	-	-	-	56.5	13.5	-	3,740	72,993	3,852	75,192
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	292	692	-	-	425.9	73.5	-	29,747	109,239	30,509	112,027
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	644	-	-	-	509.5	19.7	-	29,403	105,905	30,151	108,594
335	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015	74	844	-	-	77.1	-	-	4,090	78,547	4,195	80,552
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	1,179	-	-	-	509.2	11.6	-	28,205	103,738	28,929	106,383
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	118	-	-	-	30.1	9.0	-	2,310	78,160	2,356	79,730

Pennsylvania-American Water Company - Water Operations
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							Gross Labor					
						Base Year		Hourly Wage Rate		Regular Time		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016	35.25	186	73,602	35.95	36.67	75,064	76,567
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	32.16	3,373	67,150	33.12	34.11	69,155	71,222
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	35.56	32,530	74,249	36.27	37.00	75,732	77,256
341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	32.41	29,466	67,672	33.37	34.36	69,677	71,744
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	35.41	830	73,936	36.12	36.84	75,419	76,922
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	35.41	3,762	73,936	36.12	36.84	75,419	76,922
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	35.07	48,960	73,226	35.97	36.90	75,105	77,047
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	34.30	5,067	71,618	35.18	36.08	73,456	75,335
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	30.92	35,361	64,561	31.84	32.79	66,482	68,466
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	35.07	17,899	73,226	35.97	36.90	75,105	77,047
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016	36.49	12,085	76,191	37.22	37.97	77,715	79,281
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	33.02	8,298	68,946	33.76	34.61	70,491	72,266
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	32.95	9,913	68,800	33.86	34.70	70,700	72,454
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012	30.35	3,097	63,371	30.95	31.56	64,624	65,897
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011	30.35	13,960	63,371	30.95	31.56	64,624	65,897
353	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	34.34	4,477	71,702	35.22	36.13	73,539	75,439
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	36.49	18,325	76,191	37.22	37.97	77,715	79,281
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	32.18	5,979	67,192	33.14	34.14	69,196	71,284
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	35.31	7,792	73,727	36.01	36.73	75,189	76,692
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	32.18	7,141	67,192	33.14	34.14	69,196	71,284
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	32.41	33,761	67,672	33.37	34.36	69,677	71,744
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	32.16	20,383	67,150	33.12	34.11	69,155	71,222
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	33.51	11,968	69,969	34.26	35.13	71,535	73,351
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	30.35	1,883	63,371	30.95	31.56	64,624	65,897
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	34.36	8,757	71,744	35.07	35.79	73,226	74,730
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	31.35	16,771	65,459	32.28	33.15	67,401	69,217
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	36.16	22,843	75,502	37.10	38.07	77,465	79,490
365	244601	KANE-Production	Operator U537O	11/6/2017	35.74	4,980	74,625	36.47	37.22	76,149	77,715
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	32.18	15,136	67,192	33.14	34.14	69,196	71,284
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	32.18	16,148	67,192	33.14	34.14	69,196	71,284
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	32.37	909	67,589	33.23	34.11	69,384	71,222
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	33.90	19,134	70,783	34.80	35.72	72,662	74,583
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	33.83	16,789	70,637	34.72	35.64	72,495	74,416
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	34.31	19,536	71,639	35.01	35.73	73,101	74,604
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	35.24	36,463	73,581	36.30	37.22	75,794	77,715
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	34.42	22,921	71,869	35.33	36.26	73,769	75,711
374	241106	PITT-Field Services	Utility Person U537P	2/27/2018	33.30	24,395	69,530	34.18	35.08	71,368	73,247
375	245206	YARD-Field Services	Utility A F473Y	3/26/2018	31.21	8,431	65,166	31.91	32.72	66,628	68,319
376	249160	WILK-Watres	Plant Operator U648S	4/30/2018	32.18	14,628	67,192	33.14	34.14	69,196	71,284
377	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	34.31	5,635	71,639	35.01	35.73	73,101	74,604
378	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	30.92	25,773	64,561	31.84	32.79	66,482	68,466
379	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	31.53	31,109	65,835	32.47	33.44	67,797	69,823
380	246106	MECH-Field Services	Utility A U648R	5/14/2018	30.42	6,053	63,517	31.34	32.19	65,438	67,213
381	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	32.16	13,485	67,150	33.12	34.11	69,155	71,222
382	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	32.16	25,893	67,150	33.12	34.11	69,155	71,222
383	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	33.90	20,037	70,783	34.80	35.72	72,662	74,583
384	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	32.41	4,026	67,672	33.37	34.36	69,677	71,744
385	241106	PITT-Field Services	Utility Person U537P	7/10/2018	33.30	26,232	69,530	34.18	35.08	71,368	73,247
386	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	33.31	11,663	69,551	34.01	34.73	71,013	72,516
387	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	35.66	20,793	74,458	36.60	37.57	76,421	78,446
388	241106	PITT-Field Services	Utility Person U537P	7/24/2018	33.30	16,881	69,530	34.18	35.08	71,368	73,247
389	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	33.41	5,600	69,760	34.12	34.84	71,243	72,746
390	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	33.31	12,265	69,551	34.01	34.73	71,013	72,516
391	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018	29.67	5,346	61,951	30.59	31.44	63,872	65,647
392	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	33.37	11,975	69,677	34.25	35.16	71,514	73,414
393	241103	PITT-Cust Service	Field Service Representative U537P	9/4/2018	33.34	2,215	69,614	34.22	35.13	71,451	73,351
394	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	33.31	11,125	69,551	34.01	34.73	71,013	72,516
395	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	34.49	19,070	72,015	35.22	35.97	73,539	75,105
396	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	33.31	26,514	69,551	34.01	34.73	71,013	72,516
397	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	33.90	16,383	70,783	34.80	35.72	72,662	74,583
398	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	32.16	25,625	67,150	33.12	34.11	69,155	71,222
399	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	32.16	11,926	67,150	33.12	34.11	69,155	71,222
400	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	31.28	22,239	65,313	32.22	33.19	67,275	69,301
401	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	32.18	12,383	67,192	33.14	34.14	69,196	71,284
402	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	32.16	16,897	67,150	33.12	34.11	69,155	71,222
403	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	30.67	30,654	64,039	31.59	32.54	65,960	67,944
404	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	32.16	15,078	67,150	33.12	34.11	69,155	71,222
405	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	32.16	31,239	67,150	33.12	34.11	69,155	71,222
406	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	32.16	21,922	67,150	33.12	34.11	69,155	71,222
407	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	32.31	5,267	67,463	33.01	33.73	68,925	70,428
408	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	32.31	25,267	67,463	33.01	33.73	68,925	70,428

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016	-	-	-	-	3.5	-	-	190	75,254	194	76,761
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	-	-	-	-	53.6	12.0	-	3,473	72,628	3,576	74,798
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	7,889	-	-	-	436.6	126.3	-	33,174	116,795	33,837	118,982
341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	1,496	-	-	-	575.2	20.0	-	30,333	101,506	31,226	104,466
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	321	-	-	-	8.0	5.5	-	847	76,586	863	78,106
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	31	385	-	-	58.0	9.3	-	3,837	79,672	3,913	81,251
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	2,447	1,524	-	-	899.4	19.3	-	50,209	129,285	51,499	132,517
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	197	-	-	-	97.7	-	-	5,196	78,849	5,328	80,860
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	1,544	-	-	-	651.3	79.3	-	36,406	104,432	37,485	107,494
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	-	-	-	-	293.2	34.0	-	18,356	93,462	18,829	95,876
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016	756	21	-	10.8	156.3	40.4	-	12,325	90,816	12,571	92,629
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	228	-	26.0	-	122.3	20.2	-	8,483	79,202	8,696	81,189
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	113	(2)	-	-	175.0	18.2	-	10,185	80,996	10,436	83,001
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012	15	11	-	-	35.3	24.0	-	3,158	67,808	3,219	69,143
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011	45	101	-	-	209.4	70.8	-	14,233	79,003	14,511	80,554
353	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	-	-	-	-	77.0	7.1	-	4,591	78,131	4,710	80,149
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	120	223	-	128.0	203.9	17.0	-	18,690	96,749	19,065	98,689
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	56	-	-	-	66.1	42.3	-	6,156	75,408	6,339	77,680
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	1,383	-	-	-	126.0	14.9	-	7,946	84,518	8,103	86,179
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	56	15	-	-	119.0	20.7	-	7,352	76,619	7,572	78,927
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	1,344	-	-	-	570.2	89.3	-	34,753	105,774	35,777	108,865
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	248	938	-	-	324.4	71.2	-	20,987	91,327	21,609	94,017
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	372	-	-	-	236.9	-	-	12,235	84,142	12,544	86,267
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	-	-	-	-	23.2	13.4	-	1,920	66,544	1,958	67,855
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	55	-	-	-	148.5	15.0	-	8,936	82,218	9,118	83,903
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	-	-	-	-	197.8	117.3	-	17,265	84,666	17,727	86,944
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	60	843	-	-	299.4	89.4	-	23,433	101,801	24,042	104,435
365	244601	KANE-Production	Operator U537O	11/6/2017	174	-	-	-	83.2	7.0	-	5,082	81,405	5,186	83,075
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	280	1,137	-	-	306.0	4.0	-	15,584	86,197	16,051	88,752
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	256	1,046	-	-	311.0	16.0	-	16,626	87,125	17,125	89,711
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	-	-	-	-	8.0	8.0	-	933	70,317	958	72,179
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	105	692	-	-	276.1	73.0	-	19,638	93,098	20,154	95,534
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	75	92	-	-	287.3	30.8	-	17,227	89,890	17,680	92,264
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	4,607	-	-	-	287.0	67.3	-	19,931	97,640	20,338	99,550
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	1,749	-	-	-	645.8	29.3	-	37,552	115,096	38,497	117,962
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	907	-	-	-	440.8	-	-	23,523	98,199	24,138	100,756
374	241106	PITT-Field Services	Utility Person U537P	2/27/2018	987	-	-	-	465.4	14.8	-	25,035	97,390	25,690	99,924
375	245206	YARD-Field Services	Utility A F473Y	3/26/2018	168	-	79.7	-	126.3	-	-	8,620	75,416	8,838	77,325
376	249160	WILK-Watres	Plant Operator U648S	4/30/2018	240	1,064	-	-	298.3	2.0	-	15,061	85,561	15,513	88,101
377	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	897	-	-	-	105.3	2.5	-	5,749	79,747	5,866	81,367
378	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	528	-	-	-	456.3	71.2	-	26,533	93,543	27,319	96,312
379	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	1,632	-	-	-	582.0	53.5	-	32,030	101,459	32,980	104,435
380	246106	MECH-Field Services	Utility A U648R	5/14/2018	50	-	-	-	114.2	13.3	-	6,235	71,723	6,403	73,666
381	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	936	-	-	-	271.5	4.3	-	13,884	83,974	14,295	86,453
382	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	1,088	-	-	-	449.0	62.8	-	26,660	96,903	27,451	99,761
383	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	59	801	-	-	322.3	51.7	-	20,565	94,087	21,105	96,548
384	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	-	-	-	-	63.8	13.8	-	4,145	73,821	4,267	76,011
385	241106	PITT-Field Services	Utility Person U537P	7/10/2018	1,298	-	-	-	493.8	20.8	-	26,920	99,586	27,624	102,170
386	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	2,190	-	-	-	190.1	31.2	-	11,906	85,109	12,157	86,863
387	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	37	973	-	-	303.1	62.7	-	21,338	98,769	21,901	101,357
388	241106	PITT-Field Services	Utility Person U537P	7/24/2018	467	-	-	-	317.0	13.8	-	17,323	89,158	17,776	91,490
389	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	1,181	305	-	-	99.0	8.8	-	5,718	78,446	5,837	80,069
390	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	2,283	-	-	-	209.2	25.7	-	12,521	85,817	12,783	87,583
391	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018	119	-	-	-	89.1	22.8	-	5,510	69,501	5,663	71,428
392	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	316	-	-	-	159.9	58.0	-	12,288	84,117	12,612	86,341
393	241103	PITT-Cust Service	Field Service Representative U537P	9/4/2018	-	-	-	-	20.3	17.8	-	2,273	73,724	2,333	75,684
394	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	1,269	-	-	104.0	115.6	14.4	-	11,357	83,639	11,596	85,381
395	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	850	403	-	128.0	204.5	42.0	-	19,472	94,264	19,885	96,243
396	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	2,868	-	-	-	366.6	119.7	-	27,066	100,947	27,634	103,019
397	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	75	778	-	-	264.8	41.3	-	16,815	90,330	17,256	92,693
398	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	1,384	-	-	-	483.8	32.7	-	26,385	96,923	27,168	99,773
399	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	688	-	-	-	233.3	9.0	-	12,280	82,122	12,644	84,554
400	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	944	-	-	-	470.3	-	-	22,902	91,122	23,587	93,831
401	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	200	493	-	-	244.5	7.8	-	12,750	82,640	13,133	85,110
402	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	1,096	-	-	-	337.2	8.0	-	17,398	87,649	17,914	90,232
403	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	1,544	-	-	-	560.8	75.5	-	31,567	99,071	32,510	101,997
404	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	664	-	-	-	270.8	29.5	-	15,524	85,343	15,985	87,871
405	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	584	-	-	-	323.7	239.2	-	32,164	101,903	33,118	104,924
406	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	584	-	-	-	301.1	112.2	-	22,571	92,310	23,240	95,046
407	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	161	-	-	48.5	50.8	12.5	-	5,381	74,466	5,497	76,086
408	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	7,464	-	-	-	342.1	131.3	-	25,809	102,199	26,368	104,260

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					Gross Labor							
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
409	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	32.18	10,588	67,192	33.14	34.14	69,196	71,284
410	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	32.31	41,113	67,463	33.01	33.73	68,925	70,428
411	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	32.18	9,382	67,192	33.14	34.14	69,196	71,284
412	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	32.41	9,426	67,672	33.12	33.84	69,155	70,658
413	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	32.16	20,557	67,150	33.12	34.11	69,155	71,222
414	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	32.31	11,875	67,463	33.01	33.73	68,925	70,428
415	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	32.91	6,696	68,716	33.63	34.35	70,219	71,723
416	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	33.42	69,354	69,781	34.33	35.26	71,681	73,623
417	244601	KANE-Production	Operator U537O	9/9/2019	33.74	4,421	70,449	34.47	35.22	71,973	73,539
418	243151	NEWC-New Castle	Operator U537O	9/23/2019	33.74	30,543	70,449	34.47	35.22	71,973	73,539
419	243301	BUTL-Production	Operator U537O	9/23/2019	33.74	27,469	70,449	34.47	35.22	71,973	73,539
420	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	33.42	27,063	69,781	34.33	35.26	71,681	73,623
421	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	32.66	19,928	68,194	33.38	34.10	69,697	71,201
422	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	32.18	15,173	67,192	33.14	34.14	69,196	71,284
423	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	30.35	11,798	63,371	31.28	32.15	65,313	67,129
424	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	32.16	4,665	67,150	33.12	34.11	69,155	71,222
425	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	32.31	20,870	67,463	33.01	33.73	68,925	70,428
426	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	32.66	10,267	68,194	33.38	34.10	69,697	71,201
427	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	32.18	9,104	67,192	33.14	34.14	69,196	71,284
428	244301	CLAR-Production	Operator U537O	4/27/2020	33.74	17,384	70,449	34.47	35.22	71,973	73,539
429	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	31.28	6,004	65,313	32.22	33.19	67,275	69,301
430	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	34.54	-	72,120	35.48	36.38	74,082	75,961
431	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	33.07	33,656	69,050	33.97	34.90	70,929	72,871
432	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	32.28	17,330	67,401	32.98	33.70	68,862	70,366
433	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	32.41	3,132	67,672	33.12	33.84	69,155	70,658
434	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	31.66	3,632	66,106	32.62	33.61	68,111	70,178
435	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	30.35	2,838	63,371	30.95	31.56	64,624	65,897
436	245206	YARD-Field Services	Utility B F473Y	7/13/2020	25.66	6,176	53,578	26.34	27.01	54,998	56,397
437	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	32.42	34,906	67,693	33.33	34.26	69,593	71,535
438	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	29.68	4,907	61,972	30.64	31.64	63,976	66,064
439	249160	WILK-Watres	Plant Operator U648S	12/15/2020	31.68	12,653	66,148	32.64	33.64	68,152	70,240
440	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	31.91	31,528	66,628	32.87	33.86	68,633	70,700
441	249160	WILK-Watres	Plant Operator U648S	12/21/2020	31.68	8,971	66,148	32.64	33.64	68,152	70,240
442	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	30.35	9,052	63,371	31.28	32.15	65,313	67,129
443	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	30.35	10,849	63,371	31.28	32.15	65,313	67,129
444	245206	YARD-Field Services	Utility B F473Y	3/15/2021	25.66	7,111	53,578	26.34	27.01	54,998	56,397
445	244101	INDI-Production	Operator U537O	3/22/2021	32.74	14,396	68,361	33.47	34.22	69,885	71,451
446	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	31.66	3,554	66,106	32.37	33.09	67,589	69,092
447	243152	NEWC-Ellwood	Operator U537O	4/26/2021	32.74	15,271	68,361	33.47	34.22	69,885	71,451
448	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	31.16	11,682	65,062	32.12	33.11	67,067	69,134
449	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	29.92	10,498	62,473	30.84	31.79	64,394	66,378
450	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	31.31	11,406	65,375	32.01	32.73	66,837	68,340
451	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	31.31	16,408	65,375	32.01	32.73	66,837	68,340
452	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	31.31	12,550	65,375	32.01	32.73	66,837	68,340
453	241106	PITT-Field Services	Utility Person U537P	5/24/2021	31.30	30,414	65,354	32.18	33.08	67,192	69,071
454	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	31.31	6,263	65,375	32.01	32.73	66,837	68,340
455	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	29.67	12,018	61,951	30.59	31.54	63,872	65,856
456	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	32.49	8,386	67,839	33.22	33.97	69,363	70,929
457	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	31.16	8,564	65,062	32.12	33.11	67,067	69,134
458	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	32.49	3,409	67,839	33.22	33.97	69,363	70,929
459	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	29.77	10,623	62,160	30.51	31.36	63,705	65,480
460	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	30.68	16,355	64,060	31.64	32.64	66,064	68,152
461	244506	WARR-Field Services	Utility Person U537O	8/16/2021	30.31	7,465	63,287	31.01	31.73	64,749	66,252
462	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	30.31	12,159	63,287	31.01	31.73	64,749	66,252
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	33.40	15,524	69,739	34.20	35.12	71,410	73,331
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	30.31	2,973	63,287	31.01	31.73	64,749	66,252
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	30.66	19,126	64,018	31.62	32.61	66,023	68,090
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	30.91	21,316	64,540	31.87	32.86	66,545	68,612
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	30.48	609	63,642	31.36	32.27	65,480	67,380
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	29.77	17,721	62,160	30.51	31.36	63,705	65,480
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	30.68	7,093	64,060	31.64	32.64	66,064	68,152
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	27.53	18,121	57,483	28.22	29.01	58,923	60,573
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	29.24	4,815	61,053	29.97	30.80	62,577	64,310
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	31.67	18,310	66,127	32.58	33.51	68,027	69,969
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	32.91	11,612	68,716	33.85	34.82	70,679	72,704
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	29.17	18,900	60,907	30.09	31.04	62,828	64,812
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	29.64	9,960	61,888	30.57	31.43	63,830	65,626
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	30.85	25,787	64,415	31.73	32.63	66,252	68,132
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	30.31	2,744	63,287	31.01	31.73	64,749	66,252
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	30.41	776	63,496	31.12	31.84	64,979	66,482
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	30.18	6,373	63,016	31.14	32.14	65,020	67,108

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					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
409	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	56	10	-	-	183.1	26.0	-	10,901	80,164	11,228	82,579
410	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	9,665	-	-	-	631.9	157.6	-	41,997	120,587	42,906	123,000
411	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	368	225	-	-	154.0	29.3	-	9,660	79,449	9,950	81,827
412	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	2,804	-	-	-	163.5	21.8	-	9,631	81,589	9,839	83,301
413	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	1,064	-	-	-	399.7	17.5	-	21,166	91,385	21,794	94,080
414	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	1,067	19	-	56.0	167.3	22.1	-	12,130	82,141	12,393	83,907
415	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	1,542	-	-	-	63.3	53.3	-	6,841	78,602	6,986	80,251
416	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	1,767	-	-	-	1,210.0	124.3	-	71,231	144,679	73,150	148,540
417	244601	KANE-Production	Operator U537O	9/9/2019	54	-	-	-	76.3	8.0	-	4,516	76,544	4,614	78,208
418	243151	NEWC-New Castle	Operator U537O	9/23/2019	241	456	-	186.7	326.2	89.6	-	31,201	103,871	31,877	106,114
419	243301	BUTL-Production	Operator U537O	9/23/2019	968	456	-	202.7	305.9	49.3	-	28,061	101,458	28,669	103,632
420	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	585	54	-	-	377.6	119.1	-	27,795	100,115	28,543	102,805
421	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	3,242	-	-	-	327.3	57.2	-	20,364	93,303	20,799	95,242
422	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	328	1,112	-	-	298.8	10.3	-	15,623	86,259	16,092	88,816
423	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	-	-	-	-	209.3	36.3	-	12,157	77,470	12,494	79,623
424	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	-	-	-	-	84.1	9.1	-	4,803	73,958	4,946	76,168
425	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	1,565	31	-	104.0	282.7	44.3	-	21,320	91,840	21,782	93,806
426	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	2,405	158	-	-	127.7	60.0	-	10,491	82,752	10,716	84,480
427	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	168	370	-	-	169.9	13.3	-	9,374	79,109	9,655	81,478
428	244301	CLAR-Production	Operator U537O	4/27/2020	55	177	-	104.0	237.3	13.7	-	17,758	89,964	18,143	91,915
429	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	240	-	-	-	116.7	7.8	-	6,183	73,699	6,368	75,909
430	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	-	-	-	-	-	-	-	-	74,082	-	75,961
431	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	690	1,089	-	-	576.8	73.3	-	34,567	107,276	35,508	110,159
432	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	1,156	221	-	255.8	123.3	15.2	-	17,705	87,944	18,090	89,832
433	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	296	-	-	-	58.3	4.3	-	3,201	72,651	3,270	74,223
434	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	8	305	-	-	69.7	4.7	-	3,741	72,164	3,854	74,344
435	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	-	-	-	-	44.0	13.4	-	2,894	67,517	2,950	68,848
436	245206	YARD-Field Services	Utility B F473Y	7/13/2020	144	-	70.3	-	113.1	-	-	6,340	61,481	6,500	63,041
437	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	1,223	16	-	-	630.8	62.2	-	35,880	106,712	36,876	109,649
438	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	15	-	-	-	79.0	22.5	-	5,064	69,056	5,228	71,307
439	249160	WILK-Watres	Plant Operator U648S	12/15/2020	368	1,092	-	-	248.3	12.0	-	13,033	82,645	13,430	85,130
440	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	1,504	-	-	-	547.2	78.8	-	32,468	102,604	33,436	105,640
441	249160	WILK-Watres	Plant Operator U648S	12/21/2020	176	805	-	-	187.2	-	-	9,240	78,373	9,521	80,742
442	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	44	-	-	-	130.9	49.7	-	9,327	74,683	9,584	76,757
443	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	25	-	-	-	184.2	39.3	-	11,179	76,517	11,488	78,642
444	245206	YARD-Field Services	Utility B F473Y	3/15/2021	228	-	102.5	-	115.7	-	-	7,299	62,525	7,484	64,109
445	244101	INDI-Production	Operator U537O	3/22/2021	600	443	-	144.0	145.2	20.0	-	14,715	85,643	15,043	87,538
446	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	400	389	-	-	57.8	12.4	-	3,633	72,011	3,713	73,594
447	243152	NEWC-Ellwood	Operator U537O	4/26/2021	158	426	-	146.7	160.8	20.0	-	15,610	86,079	15,958	87,994
448	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	824	-	-	-	234.5	9.5	-	12,037	79,928	12,405	82,362
449	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	696	-	-	-	213.8	13.3	-	10,818	75,908	11,147	78,221
450	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	3,470	-	-	-	186.5	41.0	-	11,659	81,966	11,919	83,730
451	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	3,869	231	-	-	284.3	47.3	-	16,773	87,710	17,148	89,589
452	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	2,739	-	-	-	214.0	38.5	-	12,829	82,405	13,115	84,194
453	241106	PITT-Field Services	Utility Person U537P	5/24/2021	1,224	-	-	-	575.0	50.8	-	31,262	99,678	32,130	102,425
454	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	1,245	247	-	-	129.8	2.0	-	6,402	74,731	6,545	76,377
455	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	960	-	-	-	213.3	41.0	-	12,388	77,220	12,770	79,585
456	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	271	101	-	60.0	108.5	10.0	-	8,574	78,309	8,767	80,068
457	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	240	1,219	-	-	148.8	24.5	-	8,825	77,351	9,095	79,688
458	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	52	281	-	16.0	48.4	6.0	-	3,485	73,182	3,563	74,826
459	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	300	-	35.5	-	153.0	45.0	-	10,886	74,891	11,188	76,967
460	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	632	729	-	-	249.3	78.0	-	16,864	84,289	17,393	86,907
461	244506	WARR-Field Services	Utility Person U537O	8/16/2021	705	-	-	-	125.6	28.4	-	7,637	73,090	7,813	74,770
462	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	3,411	315	-	-	246.3	14.6	-	12,438	80,914	12,725	82,704
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	1,944	-	-	-	223.6	63.0	-	15,893	89,247	16,318	91,592
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	232	-	-	-	40.9	18.0	-	3,041	68,022	3,111	69,596
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	832	-	-	-	339.5	55.3	-	19,721	86,576	20,335	89,256
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	944	-	-	-	386.3	53.0	-	21,974	89,463	22,653	92,209
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	52	40	-	-	13.1	-	-	626	66,198	644	68,116
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	648	-	51.0	-	273.5	64.3	-	18,157	82,510	18,658	84,786
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	24	1,519	-	-	137.0	12.0	-	7,314	74,921	7,543	77,238
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	864	-	55.0	-	321.0	58.5	-	18,572	78,359	19,088	80,525
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	624	-	-	-	108.6	-	-	4,934	68,136	5,069	70,004
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	815	-	-	-	364.8	12.1	-	18,830	87,672	19,361	90,146
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	75	710	-	-	200.0	24.5	-	11,940	83,404	12,279	85,768
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	824	-	-	-	368.3	43.8	-	19,489	83,141	20,097	85,733
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	88	-	-	-	176.5	33.3	-	10,268	74,185	10,553	76,266
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	850	409	-	-	442.6	82.0	-	26,515	94,027	27,260	96,651
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	360	42	-	8.0	47.3	4.5	-	2,806	67,957	2,871	69,525
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	150	312	-	-	16.8	-	-	794	66,234	812	67,756
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	376	744	-	-	132.0	6.0	-	6,575	72,715	6,785	75,013

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					Gross Labor							
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	29.64	2,607	61,888	30.38	31.22	63,433	65,187
481	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	30.59	934	63,872	31.47	32.38	65,709	67,609
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	30.55	11,453	63,788	31.43	32.33	65,626	67,505
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	28.67	3,812	59,863	29.59	30.54	61,784	63,768
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	30.18	16,067	63,016	31.14	32.14	65,020	67,108
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	30.55	25,227	63,788	31.43	32.33	65,626	67,505
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	30.55	15,172	63,788	31.43	32.33	65,626	67,505
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	30.16	5,372	62,974	31.12	32.11	64,979	67,046
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	29.85	8,634	62,327	30.78	31.65	64,269	66,085
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	30.18	9,673	63,016	31.14	32.14	65,020	67,108
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022	31.15	15,225	65,041	32.05	32.97	66,920	68,841
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	30.55	13,982	63,788	31.43	32.33	65,626	67,505
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	30.55	18,631	63,788	31.43	32.33	65,626	67,505
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	30.55	10,047	63,788	31.43	32.33	65,626	67,505
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	32.91	18,859	68,716	33.85	34.82	70,679	72,704
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	29.18	2,407	60,928	30.14	31.14	62,932	65,020
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	27.95	2,131	58,360	28.86	29.70	60,260	62,014
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	29.64	7,955	61,888	30.38	31.22	63,433	65,187
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	30.73	16,914	64,164	31.61	32.52	66,002	67,902
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	31.32	25,803	65,396	32.22	33.15	67,275	69,217
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	29.68	7,996	61,972	30.64	31.64	63,976	66,064
501	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	30.59	6,530	63,872	31.47	32.38	65,709	67,609
502	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	30.59	8,481	63,872	31.47	32.38	65,709	67,609
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	29.66	15,285	61,930	30.62	31.61	63,935	66,002
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	30.73	14,630	64,164	31.61	32.52	66,002	67,902
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	26.78	8,927	55,917	27.47	28.26	57,357	59,007
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	28.51	1,657	59,529	29.26	30.00	61,095	62,640
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	29.66	7,319	61,930	30.62	31.61	63,935	66,002
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	29.31	2,495	61,199	30.01	30.73	62,661	64,164
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	29.66	4,067	61,930	30.62	31.61	63,935	66,002
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	30.62	11,337	63,935	31.50	32.41	65,772	67,672
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	31.67	10,863	66,127	32.58	33.51	68,027	69,969
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	31.67	9,881	66,127	32.58	33.51	68,027	69,969
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	29.31	2,477	61,199	30.01	30.73	62,661	64,164
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	29.31	4,492	61,199	30.01	30.73	62,661	64,164
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	29.64	13,757	61,888	30.57	31.43	63,830	65,626
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	29.31	967	61,199	30.01	30.73	62,661	64,164
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	30.49	3,316	63,663	31.22	31.97	65,187	66,753
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	31.67	7,383	66,127	32.58	33.51	68,027	69,969
519	243301	BUTL-Production	Operator U537O	3/20/2023	30.74	4,058	64,185	31.47	32.22	65,709	67,275
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	30.74	7,558	64,185	31.47	32.22	65,709	67,275
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	29.16	131	60,886	30.12	31.11	62,891	64,958
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	30.62	6,269	63,935	31.50	32.41	65,772	67,672
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	30.74	4,234	64,185	31.47	32.22	65,709	67,275
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	31.15	3,177	65,041	32.05	32.97	66,920	68,841
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	31.15	1,495	65,041	32.05	32.97	66,920	68,841
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	26.78	944	55,917	27.47	28.26	57,357	59,007
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	29.18	2,378	60,928	30.14	31.14	62,932	65,020
528	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	30.59	-	63,872	31.47	32.38	65,709	67,609
529	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	30.59	-	63,872	31.47	32.38	65,709	67,609
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	29.18	-	60,928	30.14	31.14	62,932	65,020
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023	29.31	22	61,199	30.01	30.73	62,661	64,164
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	29.31	-	61,199	30.01	30.73	62,661	64,164
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023	29.41	-	61,408	30.12	30.84	62,891	64,394
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023	31.08	1,787	64,895	31.97	32.89	66,753	68,674
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	29.16	-	60,886	30.12	31.11	62,891	64,958
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023	27.45	-	57,316	28.36	29.20	59,216	60,970
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023		-	-	35.74	36.63	74,625	76,483
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023		-	-	34.47	35.22	71,973	73,539
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023		-	-	31.01	31.73	64,749	66,252
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023		-	-	31.01	31.73	64,749	66,252
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023		-	-	30.01	30.73	62,661	64,164
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023		-	-	31.47	32.22	65,709	67,275
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023		-	-	33.01	33.73	68,925	70,428
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023		-	-	32.05	32.97	66,920	68,841
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023		-	-	31.97	32.89	66,753	68,674
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023		-	-	35.48	36.38	74,082	75,961
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023		-	-	30.14	31.14	62,932	65,020
			Total Collective Bargaining Unit			$7,614,195	$37,266,144			$38,950,095	$39,934,441
Non-Collective Bargaining Unit Hourly											
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	$33.57	$1,082	$70,094	$34.63	$35.74	$72,307	$74,625

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						Gross Labor										
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	480	-	-	-	34.1	17.9	-	2,671	66,584	2,744	68,411
481	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	15	754	-	-	20.3	-	-	961	67,439	988	69,367
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	165	-	-	-	181.3	49.0	-	11,778	77,569	12,111	79,781
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	304	85	-	-	88.1	-	-	3,934	66,106	4,059	68,215
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	288	982	-	-	330.5	17.3	-	16,576	82,866	17,106	85,484
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	1,307	700	-	-	378.0	126.0	-	25,948	93,580	26,685	96,197
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	712	949	-	-	278.9	37.0	-	15,606	82,893	16,049	85,215
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	256	323	-	-	106.1	8.8	-	5,541	71,099	5,716	73,341
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	6	-	-	-	144.3	35.0	-	8,900	73,175	9,149	75,241
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	288	697	-	-	199.0	10.5	-	9,980	75,985	10,299	78,392
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022	60	718	-	-	289.8	26.0	-	15,663	83,361	16,111	85,730
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	773	-	-	-	237.6	48.5	-	14,381	80,779	14,789	83,067
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	473	-	-	-	214.0	142.8	-	19,165	85,264	19,711	87,689
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	994	-	-	-	217.0	-	-	10,333	76,953	10,626	79,125
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	105	738	-	-	298.0	62.0	-	19,396	90,918	19,950	93,497
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	72	211	-	-	55.0	-	-	2,487	65,702	2,569	67,872
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	44	(5)	-	-	30.9	14.8	-	2,200	62,498	2,263	64,316
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	1,308	-	-	-	161.3	12.0	-	8,151	72,893	8,375	74,870
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	510	-	-	-	292.0	55.0	-	17,396	83,908	17,895	86,306
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	525	-	-	-	510.5	27.8	-	26,542	94,343	27,306	97,048
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	32	1,286	-	-	159.8	14.5	-	8,254	73,548	8,522	75,905
501	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	15	752	-	-	141.5	-	-	6,717	73,193	6,910	75,286
502	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	-	724	-	-	184.3	-	-	8,724	75,158	8,976	77,309
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	656	-	-	-	300.5	31.0	-	15,777	80,368	16,285	82,942
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	270	587	-	-	278.8	28.5	-	15,048	81,907	15,480	84,239
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	480	-	23.0	-	176.8	22.0	-	9,156	66,993	9,418	68,905
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	180	-	-	-	38.8	-	-	1,701	62,976	1,744	64,564
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	456	-	-	-	164.5	-	-	7,555	71,946	7,800	74,257
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	858	-	-	-	56.8	-	-	2,555	66,073	2,616	67,638
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	80	-	-	-	88.8	2.0	-	4,199	68,213	4,335	70,416
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	330	-	-	-	225.5	16.0	-	11,663	77,765	12,000	80,002
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	195	292	-	-	207.0	16.3	-	11,175	79,689	11,494	81,950
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	105	-	-	-	183.0	18.8	-	10,165	78,297	10,455	80,529
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	776	-	-	-	31.0	19.0	-	2,536	65,973	2,597	67,537
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	395	36	-	80.0	19.5	12.0	-	4,599	67,691	4,709	69,305
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	6	-	-	-	165.8	107.8	-	14,188	78,025	14,587	80,220
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	301	-	-	-	22.0	-	-	990	63,953	1,014	65,480
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	52	68	-	24.0	52.5	-	-	3,395	68,703	3,477	70,351
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	165	-	-	-	143.8	8.8	-	7,595	75,787	7,812	77,946
519	243301	BUTL-Production	Operator U537O	3/20/2023	-	104	-	64.0	22.0	9.5	-	4,154	69,968	4,253	71,633
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	-	110	-	56.0	73.3	33.0	-	7,738	73,557	7,922	75,308
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	8	-	-	-	3.0	-	-	136	63,034	140	65,106
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	135	96	-	-	113.5	17.3	-	6,450	72,453	6,636	74,539
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	-	72	-	32.0	42.5	17.0	-	4,335	70,116	4,438	71,786
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	-	114	-	-	68.0	-	-	3,269	70,304	3,363	72,318
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	-	114	-	-	32.0	-	-	1,538	68,573	1,583	70,538
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	12	-	-	-	23.5	-	-	968	58,338	996	60,015
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	96	10	-	-	33.0	16.0	-	2,456	65,495	2,538	67,665
528	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	-	76	-	-	-	-	-	-	65,785	-	67,685
529	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	-	48	-	-	-	-	-	-	65,757	-	67,657
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	-	26	-	-	-	-	-	-	62,958	-	65,046
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023	-	-	-	-	0.5	-	-	23	62,683	23	64,187
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	-	-	-	-	-	-	-	-	62,661	-	64,164
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023	-	-	-	-	-	-	-	-	62,891	-	64,394
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023	30	-	-	-	25.0	10.0	-	1,838	68,622	1,891	70,595
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	-	-	-	-	-	-	-	-	62,891	-	64,958
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023	-	-	-	-	-	-	-	-	59,216	-	60,970
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	74,625	-	76,483
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	71,973	-	73,539
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	64,749	-	66,252
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	64,749	-	66,252
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	62,661	-	64,164
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	65,709	-	67,275
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	68,925	-	70,428
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	66,920	-	68,841
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	66,753	-	68,674
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	74,082	-	75,961
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	62,932	-	65,020
				Total Collective Bargaining Unit	$478,833	$62,198	777.2	3,365.8	124,449.8	16,990.3	-	$7,809,834	$47,300,961	$8,010,816	$48,486,288
Non-Collective Bargaining Unit Hourly															
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	$0	$0	-	-	21.3	-	-	$1,116	$73,424	$1,152	$75,777

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					Gross Labor							
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	41.76	7,968	87,195	43.07	44.44	89,930	92,791
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	36.36	1,108	75,920	37.50	38.70	78,300	80,806
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	38.59	276	80,576	39.80	41.07	83,102	85,754
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	10/3/1988	32.80	1,269	68,486	33.83	34.91	70,637	72,892
6	246801	LEHP-Production	Plant Operator	2/1/1996	33.62	18,957	70,199	34.68	35.79	72,412	74,730
7	245706	POCO-Field Services	Crew Leader	9/16/1996	33.71	10,815	70,386	34.77	35.88	72,600	74,917
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	32.83	3,910	68,549	33.86	34.94	70,700	72,955
9	245706	POCO-Field Services	Utility Person	7/1/1994	33.22	9,498	69,363	34.27	35.36	71,556	73,832
10	245501	BNGR-Production	Plant Operator	7/23/1990	36.64	15,670	76,504	37.79	39.00	78,906	81,432
11	247406	FRCK-Field Services	Utility Person	4/18/1988	33.29	2,115	69,510	34.34	35.44	71,702	73,999
12	247406	FRCK-Field Services	Utility Person	1/15/1986	34.39	5,436	71,806	35.47	36.60	74,061	76,421
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	30.99	1,836	64,707	31.97	32.99	66,753	68,883
14	246201	HSHY-Production	Plant Operator	9/27/1993	32.45	14,238	67,756	33.47	34.54	69,885	72,120
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	32.01	1,099	66,837	33.02	34.07	68,946	71,138
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	34.85	7,297	72,767	35.95	37.10	75,064	77,465
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	40.45	797	84,460	41.72	43.05	87,111	89,888
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990	31.19	-	65,125	32.17	33.20	67,171	69,322
19	247106	MILT-Field Services	Utility Person	11/16/1998	32.11	9,183	67,046	33.12	34.18	69,155	71,368
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	32.79	4,402	68,466	33.82	34.90	70,616	72,871
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	31.25	-	65,250	32.23	33.26	67,296	69,447
22	246506	COAT-Field Services	Utility Person	1/26/1998	28.60	3,472	59,717	29.50	30.44	61,596	63,559
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	36.26	8,973	75,711	37.40	38.59	78,091	80,576
24	245906	GLEN-Field Services	Utility Person	12/27/1994	35.26	11,890	73,623	36.37	37.53	75,941	78,363
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999	34.13	8,454	71,263	35.20	36.32	73,498	75,836
26	245606	NAZA-Field Services	Utility Person	10/4/1993	33.94	8,871	70,867	35.01	36.13	73,101	75,439
27	245906	GLEN-Field Services	Utility Person	6/20/1983	33.89	5,682	70,762	34.96	36.08	72,996	75,335
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	35.49	14,725	74,103	36.61	37.78	76,442	78,885
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	35.10	12,334	73,289	36.20	37.36	75,586	78,008
30	246401	ROYF-Production	Plant Operator	3/9/1998	35.89	11,263	74,938	37.02	38.20	77,298	79,762
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987	35.99	23,518	75,147	37.12	38.30	77,507	79,970
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	36.13	8,867	75,439	37.27	38.46	77,820	80,304
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	34.24	3,634	71,493	35.32	36.45	73,748	76,108
34	245606	NAZA-Field Services	Utility Person	11/26/2001	34.27	12,945	71,556	35.35	36.48	73,811	76,170
35	246801	LEHP-Production	Utility Person	2/26/1990	33.08	6,027	69,071	34.12	35.21	71,243	73,518
36	246501	COAT-Production	Plant Operator	5/28/2002	33.65	24,752	70,261	34.71	35.82	72,474	74,792
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	34.70	-	72,454	35.79	36.93	74,730	77,110
38	245906	GLEN-Field Services	Utility Person	1/5/2004	33.58	12,214	70,115	34.64	35.75	72,328	74,646
39	245606	NAZA-Field Services	Utility Person	2/16/2004	32.89	8,926	68,674	33.92	35.00	70,825	73,080
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N)	12/1/2004	31.09	200	64,916	32.07	33.09	66,962	69,092
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	31.92	4,941	66,649	32.92	33.97	68,737	70,929
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	33.27	8,048	69,468	34.32	35.42	71,660	73,957
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	32.58	10,042	68,027	33.61	34.68	70,178	72,412
44	245506	BNGR-Field Services	Utility Person	11/7/2005	32.84	6,632	68,570	33.87	34.95	70,721	72,976
45	245401	SUSQ-Production	Plant Operator	5/15/2006	32.18	9,307	67,192	33.19	34.25	69,301	71,514
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006	32.99	10,504	68,883	34.03	35.12	71,055	73,331
47	245606	NAZA-Field Services	Utility Person	12/18/2006	33.14	7,348	69,196	34.18	35.27	71,368	73,644
48	246206	HSHY-Field Services	Utility Person	3/26/2007	33.83	23,671	70,637	34.89	36.00	72,850	75,168
49	247106	MILT-Field Services	Utility Person	5/7/2007	31.51	1,747	65,793	32.50	33.54	67,860	70,032
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	35.20	1,249	73,498	36.31	37.47	75,815	78,237
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	32.87	9,123	68,633	33.90	34.98	70,783	73,038
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007	40.98	38,289	85,566	42.27	43.62	88,260	91,079
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	39.37	10,462	82,205	40.61	41.91	84,794	87,508
54	247201	PHBG-Production	Operations Specialist	6/2/2008	35.13	5,576	73,351	36.24	37.40	75,669	78,091
55	247106	MILT-Field Services	Utility Person	7/21/2008	30.70	3,888	64,102	31.67	32.68	66,127	68,236
56	246501	COAT-Production	Plant Operator	10/6/2008	33.55	12,266	70,052	34.61	35.71	72,266	74,562
57	247701	BOGGS-Production	Plant Operator	5/4/2009	34.41	3,354	71,848	35.49	36.62	74,103	76,463
58	245706	POCO-Field Services	Utility Person	9/28/2009	33.10	14,017	69,113	34.14	35.23	71,284	73,560
59	246506	COAT-Field Services	Utility Person	11/2/2009	33.05	7,764	69,008	34.09	35.18	71,180	73,456
60	247401	FRCK-Production	Operator	1/25/2010	31.70	5,489	66,190	32.70	33.74	68,278	70,449
61	247206	PHBG-Field Services	Utility Person	3/29/2010	33.96	4,948	70,908	35.03	36.15	73,143	75,481
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	36.29	6,375	75,774	37.43	38.62	78,154	80,639
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	37.97	14,229	79,281	39.16	40.41	81,766	84,376
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	34.31	13,006	71,639	35.39	36.52	73,894	76,254
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	30.03	-	62,703	30.97	31.96	64,665	66,732
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	32.21	8,507	67,254	33.22	34.28	69,363	71,577
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	38.00	20,846	79,344	39.20	40.45	81,850	84,460
68	247206	PHBG-Field Services	Utility Person	11/7/2011	32.74	2,931	68,361	33.77	34.85	70,512	72,767
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	29.05	-	60,656	29.96	30.92	62,556	64,561
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	30.99	1,347	64,707	31.97	32.99	66,753	68,883
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	31.25	-	65,250	32.23	33.26	67,296	69,447
72	249150	WILK-Other	Operations Specialist	3/4/2013	31.00	24	64,728	31.98	33.00	66,774	68,904

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					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	-	-	-	-	122.7	-	-	8,209	98,140	8,462	101,252
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	-	-	-	-	20.3	-	-	1,142	79,442	1,179	81,984
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	-	-	-	-	4.7	-	-	284	83,387	293	86,047
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	10/3/1988	-	-	-	-	25.8	-	-	1,309	71,946	1,351	74,243
6	246801	LEHP-Production	Plant Operator	2/1/1996	290	-	-	-	197.3	130.5	-	19,548	92,249	20,166	95,185
7	245706	POCO-Field Services	Crew Leader	9/16/1996	40	-	66.3	-	109.5	42.5	-	11,150	83,790	11,500	86,458
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	50	-	49.3	-	41.8	3.0	-	4,031	74,781	4,159	77,164
9	245706	POCO-Field Services	Utility Person	7/1/1994	20	-	70.3	-	99.8	30.3	-	9,793	81,368	10,099	83,950
10	245501	BNGR-Production	Plant Operator	7/23/1990	70	-	193.7	-	96.1	42.5	-	16,156	95,132	16,668	98,170
11	247406	FRCK-Field Services	Utility Person	4/18/1988	10	-	-	-	36.5	4.0	-	2,180	73,892	2,249	76,258
12	247406	FRCK-Field Services	Utility Person	1/15/1986	80	-	-	-	79.2	18.5	-	5,604	79,745	5,780	82,281
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	-	-	-	-	39.5	-	-	1,894	68,648	1,955	70,838
14	246201	HSHY-Production	Plant Operator	9/27/1993	90	-	157.0	-	107.3	58.7	-	14,682	84,658	15,148	87,357
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	-	-	2.0	-	14.8	4.8	-	1,133	70,078	1,168	72,306
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	-	-	-	-	137.3	-	-	7,524	82,588	7,761	85,226
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	-	-	-	-	13.0	-	-	821	87,933	847	90,736
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990	-	-	-	-	-	-	-	-	67,171	-	69,322
19	247106	MILT-Field Services	Utility Person	11/16/1998	150	-	-	-	145.2	31.7	-	9,466	78,771	9,764	81,282
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	20	-	-	-	45.8	32.0	-	4,539	75,175	4,682	77,573
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	-	-	-	-	-	-	-	-	67,296	-	69,447
22	246506	COAT-Field Services	Utility Person	1/26/1998	10	-	-	-	69.3	7.5	-	3,579	65,185	3,691	67,259
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	60	-	61.7	-	77.4	33.4	-	9,252	87,403	9,543	90,179
24	245906	GLEN-Field Services	Utility Person	12/27/1994	120	-	69.7	-	128.3	34.6	-	12,257	88,318	12,642	91,124
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999	30	-	57.7	-	86.8	28.7	-	8,716	82,244	8,991	84,857
26	245606	NAZA-Field Services	Utility Person	10/4/1993	40	-	86.0	-	88.2	19.5	-	9,146	82,287	9,435	84,914
27	245906	GLEN-Field Services	Utility Person	6/20/1983	20	-	49.0	-	51.0	19.8	-	5,859	78,875	6,043	81,398
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	80	-	176.7	-	92.8	47.5	-	15,186	91,707	15,666	94,631
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	350	143	-	-	143.8	62.8	-	12,710	88,789	13,106	91,607
30	246401	ROYF-Production	Plant Operator	3/9/1998	470	427	-	-	127.3	59.3	-	11,613	89,808	11,978	92,637
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987	40	-	153.7	-	208.7	89.3	-	24,247	101,793	25,008	105,018
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	-	-	-	-	160.4	-	-	9,142	86,961	9,428	89,733
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	100	-	8.7	-	51.3	9.3	-	3,747	77,595	3,865	80,073
34	245606	NAZA-Field Services	Utility Person	11/26/2001	90	-	90.3	-	146.3	31.3	-	13,347	87,248	13,768	90,028
35	246801	LEHP-Production	Utility Person	2/26/1990	50	-	73.3	-	46.9	18.2	-	6,214	77,507	6,410	79,979
36	246501	COAT-Production	Plant Operator	5/28/2002	30	-	-	-	270.0	159.2	-	25,519	98,024	26,322	101,144
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	-	-	-	-	-	-	-	-	74,730	-	77,110
38	245906	GLEN-Field Services	Utility Person	1/5/2004	90	-	88.7	-	129.8	37.4	-	12,593	85,012	12,991	87,727
39	245606	NAZA-Field Services	Utility Person	2/16/2004	40	-	82.3	-	98.6	19.0	-	9,202	80,067	9,491	82,611
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N)	12/1/2004	-	-	-	-	4.3	-	-	206	67,169	213	69,305
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	-	-	-	-	101.1	-	-	5,093	73,830	5,252	76,182
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	-	-	-	-	158.3	-	-	8,298	79,958	8,559	82,516
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	-	394	-	-	138.8	48.0	-	10,355	80,927	10,681	83,487
44	245506	BNGR-Field Services	Utility Person	11/7/2005	20	-	131.7	-	43.5	2.0	-	6,839	77,579	7,056	80,051
45	245401	SUSQ-Production	Plant Operator	5/15/2006	130	-	55.0	-	122.6	22.8	-	9,595	79,025	9,896	81,540
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006	30	-	59.3	-	115.8	41.2	-	10,832	81,917	11,176	84,537
47	245606	NAZA-Field Services	Utility Person	12/18/2006	40	-	86.7	-	57.8	23.1	-	7,576	78,984	7,815	81,499
48	246206	HSHY-Field Services	Utility Person	3/26/2007	100	-	107.0	-	306.0	61.3	-	24,401	97,351	25,165	100,433
49	247106	MILT-Field Services	Utility Person	5/7/2007	50	-	-	-	36.2	-	-	1,801	69,711	1,857	71,939
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	-	-	-	-	23.2	-	-	1,288	77,103	1,328	79,565
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	20	-	66.0	-	87.8	38.3	-	9,405	80,209	9,702	82,760
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007	-	-	-	-	604.7	-	-	39,459	127,718	40,683	131,762
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	-	-	-	-	172.0	-	-	10,782	95,575	11,117	98,625
54	247201	PHBG-Production	Operations Specialist	6/2/2008	120	-	6.0	-	75.7	18.3	-	5,749	81,539	5,931	84,142
55	247106	MILT-Field Services	Utility Person	7/21/2008	30	-	-	-	63.7	14.5	-	4,009	70,166	4,135	72,400
56	246501	COAT-Production	Plant Operator	10/6/2008	100	-	-	-	152.8	65.5	-	12,648	85,014	13,044	87,707
57	247701	BOGGS-Production	Plant Operator	5/4/2009	110	-	3.3	-	46.3	11.3	-	3,457	77,670	3,565	80,137
58	245706	POCO-Field Services	Utility Person	9/28/2009	80	-	74.7	-	153.8	56.7	-	14,452	85,816	14,908	88,549
59	246506	COAT-Field Services	Utility Person	11/2/2009	380	-	20.5	-	117.5	17.5	-	8,005	79,565	8,258	82,094
60	247401	FRCK-Production	Operator	1/25/2010	60	-	-	-	85.4	21.3	-	5,660	73,998	5,837	76,346
61	247206	PHBG-Field Services	Utility Person	3/29/2010	140	-	12.5	-	64.7	17.0	-	5,102	78,384	5,263	80,884
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	-	-	-	-	114.7	-	-	6,572	84,725	6,776	87,415
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	-	-	-	-	230.8	12.0	-	14,670	96,436	15,133	99,509
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	276	-	-	-	126.1	93.1	-	13,411	87,582	13,836	90,365
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	-	-	-	-	-	-	-	-	64,665	-	66,732
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	160	-	53.3	-	115.3	16.8	-	8,769	78,292	9,045	80,781
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	30	-	-	-	345.4	12.9	-	21,499	103,378	22,179	106,668
68	247206	PHBG-Field Services	Utility Person	11/7/2011	10	-	5.0	-	38.0	13.2	-	3,022	73,544	3,118	75,894
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	-	-	-	-	-	-	-	-	62,556	-	64,561
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	-	4	-	-	14.4	10.7	-	1,389	68,146	1,433	70,320
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	-	-	-	-	-	-	-	-	67,296	-	69,447
72	249150	WILK-Other	Operations Specialist	3/4/2013	-	-	-	-	0.5	-	-	24	66,799	25	68,929

Pennsylvania-American Water Company - Water Operations
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					Gross Labor							
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
73	247306	BRWK-Field Services	Utility Person	4/29/2013	33.57	9,588	70,094	34.63	35.74	72,307	74,625
74	245601	NAZA-Production	Plant Operator	6/27/2013	35.09	42,491	73,268	36.19	37.35	75,565	77,987
75	247301	BRWK-Production	Operator	9/16/2013	34.11	9,121	71,222	35.18	36.30	73,456	75,794
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	32.66	274	68,194	33.69	34.77	70,345	72,600
77	247201	PHBG-Production	Plant Operator	2/2/2015	32.90	8,122	68,695	33.94	35.02	70,867	73,122
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	32.82	18,066	68,528	33.85	34.93	70,679	72,934
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	30.53	4,015	63,747	31.49	32.50	65,751	67,860
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	33.26	15,237	69,447	34.31	35.41	71,639	73,936
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	28.21	-	58,902	29.10	30.03	60,761	62,703
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	34.41	7,785	71,848	35.49	36.62	74,103	76,463
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	29.96	1	62,556	30.90	31.89	64,519	66,586
84	245406	SUSQ-Field Services	Utility Person	12/14/2015	28.30	5,238	59,090	29.19	30.12	60,949	62,891
85	246506	COAT-Field Services	Utility Person	2/3/2016	30.56	45,410	63,809	31.52	32.53	65,814	67,923
86	247103	MILT-Cust Service	Utility Person	3/7/2016	30.55	2,198	63,788	31.51	32.52	65,793	67,902
87	246206	HSHY-Field Services	Utility Person	2/29/2016	34.22	10,617	71,451	35.30	36.43	73,706	76,066
88	246201	HSHY-Production	Plant Operator	2/29/2016	32.45	45,440	67,756	33.47	34.54	69,885	72,120
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	33.02	13,235	68,946	34.06	35.15	71,117	73,393
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016	32.45	468	67,756	33.47	34.54	69,885	72,120
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	49.28	18,198	102,897	50.83	52.45	106,133	109,516
92	246206	HSHY-Field Services	Utility Person	6/13/2016	30.95	6,088	64,624	31.92	32.94	66,649	68,779
93	246206	HSHY-Field Services	Utility Person	7/11/2016	30.43	1,760	63,538	31.39	32.39	65,542	67,630
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	35.09	-	73,268	36.19	37.35	75,565	77,987
95	245306	ABNG-Field Services	Utility Person	10/24/2016	31.01	12,050	64,749	31.99	33.01	66,795	68,925
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	32.96	3,394	68,820	34.00	35.09	70,992	73,268
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	28.38	2	59,257	29.27	30.20	61,116	63,058
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	39.33	19,553	82,121	40.57	41.87	84,710	87,425
99	247306	BRWK-Field Services	Utility Person	1/16/2017	29.66	5,222	61,930	30.59	31.57	63,872	65,918
100	246506	COAT-Field Services	Utility Person	2/13/2017	28.95	12,922	60,448	29.86	30.81	62,348	64,331
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	31.11	308	64,958	32.09	33.11	67,004	69,134
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015	18.11	49	37,814	18.68	19.28	39,004	40,257
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	17.95	330	37,480	18.51	19.10	38,649	39,881
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018	28.84	8,603	60,218	29.75	30.70	62,118	64,102
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	28.60	402	59,717	29.50	30.44	61,596	63,559
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018	31.77	-	66,336	32.77	33.82	68,424	70,616
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	38.02	2,906	79,386	39.22	40.47	81,891	84,501
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	31.67	1,153	66,127	32.67	33.71	68,215	70,386
109	246801	LEHP-Production	Utility Person	7/23/2018	27.41	15,904	57,232	28.27	29.17	59,028	60,907
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	41.59	16,483	86,840	42.90	44.27	89,575	92,436
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	33.06	22,630	69,029	34.10	35.19	71,201	73,477
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	24.29	991	50,718	25.05	25.85	52,304	53,975
113	246501	COAT-Production	Plant Operator	9/24/2018	31.49	18,867	65,751	32.48	33.52	67,818	69,990
114	245906	GLEN-Field Services	Utility Person	10/8/2018	28.66	5,614	59,842	29.56	30.50	61,721	63,684
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	30.01	7,165	62,661	30.95	31.94	64,624	66,691
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	26.01	1,205	54,309	26.83	27.69	56,021	57,817
117	246206	HSHY-Field Services	Utility Person	10/8/2018	28.82	8,074	60,176	29.73	30.68	62,076	64,060
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	33.28	16,348	69,489	34.33	35.43	71,681	73,978
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	31.32	3,503	65,396	32.31	33.34	67,463	69,614
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	31.19	8,773	65,125	32.17	33.20	67,171	69,322
121	246206	HSHY-Field Services	Utility Person	1/14/2019	29.12	9,603	60,803	30.04	31.00	62,724	64,728
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	32.02	1,187	66,858	33.03	34.08	68,967	71,159
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	32.64	1,123	68,152	33.67	34.74	70,303	72,537
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	46.65	33,330	97,405	48.12	49.66	100,475	103,690
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	34.12	-	71,243	35.19	36.31	73,477	75,815
126	248801	TURB-Production	Plant Operator	7/8/2019	30.29	7,564	63,246	31.24	32.24	65,229	67,317
127	240116	CORP-Maint Services	Sr Reliability Engineering Analyst	7/15/2019	49.34	13,795	103,022	50.89	52.51	106,258	109,641
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	32.87	20,522	68,633	33.90	34.98	70,783	73,038
129	241406	STNW-Field Service	Utility Person	12/5/2018	25.55	7,401	53,348	26.35	27.19	55,019	56,773
130	246206	HSHY-Field Services	Utility Person	2/2/2016	28.09	5,683	58,652	28.97	29.89	60,489	62,410
131	241406	STNW-Field Service	Utility Person	3/3/1999	25.55	9,169	53,348	26.35	27.19	55,019	56,773
132	247201	PHBG-Production	Plant Operator	10/21/2019	30.00	9,632	62,640	30.94	31.93	64,603	66,670
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	30.91	1,300	64,540	31.88	32.90	66,565	68,695
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	31.52	692	65,814	32.51	33.55	67,881	70,052
135	247206	PHBG-Field Services	Utility Person	1/27/2020	29.75	8,734	62,118	30.69	31.67	64,081	66,127
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	36.78	2,151	76,797	37.94	39.15	79,219	81,745
137	241406	STNW-Field Service	Foreperson	1/8/1990	34.88	5,574	72,829	35.98	37.13	75,126	77,527
138	246406	ROYF-Field Services	Utility Person	3/23/2020	30.87	9,107	64,457	31.84	32.86	66,482	68,612
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	31.24	19,465	65,229	32.22	33.25	67,275	69,426
140	246406	ROYF-Field Services	Utility Person	4/13/2020	30.93	10,621	64,582	31.90	32.92	66,607	68,737
141	247106	MILT-Field Services	Utility Person	4/13/2020	29.69	5,298	61,993	30.62	31.60	63,935	65,981
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	31.22	12,162	65,187	32.20	33.23	67,234	69,384
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	27.20	8,091	56,794	28.06	28.96	58,589	60,468

Pennsylvania-American Water Company - Water Operations
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					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
73	247306	BRWK-Field Services	Utility Person	4/29/2013	40	-	14.7	-	137.1	30.8	-	9,887	82,234	10,200	84,865
74	245601	NAZA-Production	Plant Operator	6/27/2013	150	-	215.3	-	377.2	207.8	-	43,807	119,522	45,195	123,332
75	247301	BRWK-Production	Operator	9/16/2013	30	-	15.7	-	119.0	34.6	-	9,403	82,889	9,698	85,523
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	-	-	-	-	5.5	-	-	282	70,627	291	72,891
77	247201	PHBG-Production	Plant Operator	2/2/2015	70	414	5.0	-	55.4	77.9	-	8,376	79,727	8,639	82,245
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	90	-	207.7	-	171.8	39.1	-	18,626	89,395	19,213	92,237
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	-	-	-	-	86.5	-	-	4,140	69,891	4,271	72,131
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	350	-	79.7	-	175.9	53.8	-	15,710	87,700	16,207	90,493
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	-	-	-	-	-	-	-	-	60,761	-	62,703
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	-	-	-	-	147.7	-	-	8,024	82,127	8,274	84,737
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	-	-	-	-	-	-	-	1	64,520	1	66,587
84	245406	SUSQ-Field Services	Utility Person	12/14/2015	80	-	61.0	-	67.8	10.0	-	5,401	66,430	5,571	68,541
85	246506	COAT-Field Services	Utility Person	2/3/2016	2,650	-	151.7	-	742.5	100.8	-	46,818	115,282	48,299	118,872
86	247103	MILT-Cust Service	Utility Person	3/7/2016	-	-	-	-	35.9	8.5	-	2,267	68,059	2,338	70,240
87	246206	HSHY-Field Services	Utility Person	2/29/2016	30	-	-	-	185.5	13.3	-	10,946	84,683	11,291	87,386
88	246201	HSHY-Production	Plant Operator	2/29/2016	40	-	194.3	-	519.5	204.9	-	46,851	116,777	48,332	120,491
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	370	-	6.0	-	179.5	59.0	-	13,644	85,131	14,073	87,836
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016	-	-	-	-	9.5	-	-	483	70,368	498	72,618
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	-	-	-	-	238.3	-	-	18,752	124,885	19,331	128,847
92	246206	HSHY-Field Services	Utility Person	6/13/2016	80	-	24.0	-	94.6	14.1	-	6,276	73,005	6,474	75,332
93	246206	HSHY-Field Services	Utility Person	7/11/2016	-	-	-	-	33.8	3.0	-	1,814	67,357	1,871	69,501
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	-	-	-	-	-	-	-	-	75,565	-	77,987
95	245306	ABNG-Field Services	Utility Person	10/24/2016	100	-	80.7	-	122.7	59.3	-	12,425	79,320	12,816	81,841
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	-	-	42.7	-	28.2	8.5	-	3,500	74,492	3,611	76,879
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	-	-	-	-	-	-	-	2	61,118	2	63,060
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	-	84	-	-	266.7	46.3	-	20,164	104,958	20,804	108,313
99	247306	BRWK-Field Services	Utility Person	1/16/2017	90	-	13.3	-	69.3	28.3	-	5,384	69,346	5,554	71,562
100	246506	COAT-Field Services	Utility Person	2/13/2017	360	-	82.7	-	195.4	32.0	-	13,322	76,030	13,740	78,431
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	-	-	-	-	6.5	-	-	318	67,322	328	69,462
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015	-	-	-	-	1.8	-	-	50	39,054	52	40,309
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	-	-	-	-	12.0	-	-	340	38,989	351	40,232
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018	-	-	-	-	195.3	-	-	8,870	70,988	9,148	73,250
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	-	-	-	-	9.2	-	-	414	62,010	427	63,986
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018	-	-	-	-	-	-	-	-	68,424	-	70,616
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	-	-	-	-	48.5	-	-	2,993	84,885	3,084	87,585
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	-	-	-	-	23.7	-	-	1,189	69,404	1,226	71,612
109	246801	LEHP-Production	Utility Person	7/23/2018	170	-	84.3	-	241.7	62.0	-	16,395	75,593	16,909	77,986
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	-	-	-	-	256.7	-	-	16,987	106,562	17,515	109,950
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	150	-	44.0	-	287.4	99.3	-	23,330	94,681	24,065	97,692
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	-	-	-	-	26.7	-	-	1,021	53,326	1,053	55,028
113	246501	COAT-Production	Plant Operator	9/24/2018	-	-	-	-	272.8	90.5	-	19,451	87,269	20,065	90,055
114	245906	GLEN-Field Services	Utility Person	10/8/2018	30	-	53.3	-	64.8	21.2	-	5,787	67,539	5,969	69,683
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	50	33	-	-	96.8	44.7	-	7,385	72,092	7,617	74,391
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	-	-	-	-	30.3	-	-	1,242	57,263	1,281	59,097
117	246206	HSHY-Field Services	Utility Person	10/8/2018	100	-	32.0	-	128.1	26.3	-	8,326	70,502	8,589	72,749
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	-	-	99.5	-	173.1	61.8	-	16,854	88,535	17,385	91,363
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	-	-	-	-	72.8	-	-	3,611	71,075	3,724	73,338
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	-	-	-	-	183.7	-	-	9,043	76,214	9,327	78,648
121	246206	HSHY-Field Services	Utility Person	1/14/2019	50	-	32.0	-	136.2	44.1	-	9,902	72,675	10,213	74,991
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	-	-	-	-	24.3	-	-	1,224	70,191	1,262	72,421
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	-	-	-	-	22.1	-	-	1,157	71,460	1,193	73,730
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	-	-	-	-	463.3	-	-	34,352	134,826	35,422	139,112
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	-	-	-	-	-	-	-	-	73,477	-	75,815
126	248801	TURB-Production	Plant Operator	7/8/2019	60	-	-	-	58.3	79.9	-	7,799	73,088	8,046	75,424
127	240116	CORP-Maint Services	Sr Reliability Engineering Analyst	7/15/2019	-	-	-	-	181.2	-	-	14,216	120,475	14,656	124,297
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	20	-	278.3	-	222.0	5.0	-	21,162	91,965	21,833	94,891
129	241406	STNW-Field Service	Utility Person	12/5/2018	10	-	170.3	-	79.2	-	-	7,632	62,661	7,875	64,658
130	246206	HSHY-Field Services	Utility Person	2/2/2016	20	-	58.0	-	56.8	28.5	-	5,859	66,369	6,043	68,474
131	241406	STNW-Field Service	Utility Person	3/3/1999	-	-	163.0	-	125.8	3.0	-	9,455	64,474	9,756	66,529
132	247201	PHBG-Production	Plant Operator	10/21/2019	100	441	3.0	-	97.8	83.8	-	9,931	75,075	10,245	77,456
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	-	-	-	-	27.5	-	-	1,340	67,906	1,382	70,077
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	-	-	-	-	14.4	-	-	713	68,594	735	70,788
135	247206	PHBG-Field Services	Utility Person	1/27/2020	60	392	-	-	79.5	85.7	-	9,007	73,541	9,292	75,872
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	-	-	-	-	38.2	-	-	2,217	81,436	2,286	84,031
137	241406	STNW-Field Service	Foreperson	1/8/1990	10	-	41.5	-	74.3	3.0	-	5,749	80,886	5,932	83,470
138	246406	ROYF-Field Services	Utility Person	3/23/2020	130	-	65.0	-	118.8	24.3	-	9,390	76,002	9,688	78,429
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	-	-	-	-	408.2	-	-	20,065	87,341	20,696	90,122
140	246406	ROYF-Field Services	Utility Person	4/13/2020	290	-	68.7	-	148.0	24.2	-	10,949	77,847	11,295	80,322
141	247106	MILT-Field Services	Utility Person	4/13/2020	30	88	-	-	60.8	42.5	-	5,462	69,515	5,635	71,734
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	-	-	-	-	254.8	-	-	12,536	79,770	12,930	82,314
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	-	-	-	-	195.0	-	-	8,342	66,932	8,606	69,074

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								Gross Labor				
						Base Year		Hourly Wage Rate		Regular Time		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
144	245701	POCO-Production	Plant Operator	4/27/2020	29.97	16,245	62,577	30.91	31.90	64,540	66,607
145	246401	ROYF-Production	Plant Operator	5/4/2020	32.80	9,049	68,486	33.83	34.91	70,637	72,892
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	24.96	513	52,116	25.75	26.57	53,766	55,478
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	36.51	14,057	76,233	37.66	38.86	78,634	81,140
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	26.39	1,786	55,102	27.22	28.09	56,835	58,652
149	240116	CORP-Maint Services	Reliability Engineering Analyst	6/1/2020	43.00	10,170	89,784	44.35	45.77	92,603	95,568
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	28.60	281	59,717	29.50	30.44	61,596	63,559
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	29.16	411	60,886	30.08	31.04	62,807	64,812
152	247106	MILT-Field Services	Utility Person	10/19/2020	29.26	4,671	61,095	30.18	31.14	63,016	65,020
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	41.32	11,465	86,276	42.62	43.98	88,991	91,830
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	29.70	6,408	62,014	30.63	31.61	63,955	66,002
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	28.05	679	58,568	28.93	29.85	60,406	62,327
156	245506	BNGR-Field Services	Utility Person	2/22/2021	27.66	5,574	57,754	28.53	29.44	59,571	61,471
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	25.88	284	54,037	26.69	27.54	55,729	57,504
158	246801	LEHP-Production	Utility Person	4/12/2021	27.58	8,002	57,587	28.45	29.36	59,404	61,304
159	246506	COAT-Field Services	Utility Person	4/13/2021	30.77	13,111	64,248	31.74	32.75	66,273	68,382
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	28.12	13,065	58,715	29.00	29.93	60,552	62,494
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	33.28	9,830	69,489	34.33	35.43	71,681	73,978
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	26.55	7,173	55,436	27.39	28.26	57,190	59,007
163	240114	CORP-Engineering	GIS Analyst	6/1/2021	26.00	-	54,288	26.82	27.68	56,000	57,796
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	30.50	13,647	63,684	31.46	32.46	65,688	67,776
165	247206	PHBG-Field Services	Utility Person	7/6/2021	30.92	3,339	64,561	31.89	32.91	66,586	68,716
166	245906	GLEN-Field Services	Utility Person	7/12/2021	30.12	7,239	62,891	31.07	32.06	64,874	66,941
167	246401	ROYF-Production	Plant Operator	7/19/2021	32.93	8,232	68,758	33.97	35.05	70,929	73,184
168	241106	PITT-Field Services	Operations Specialist	9/7/2021	30.20	-	63,058	31.15	32.14	65,041	67,108
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	32.21	1,078	67,254	33.22	34.28	69,363	71,577
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	31.20	1,498	65,146	32.18	33.21	67,192	69,342
171	240116	CORP-Maint Services	Reliability Engineering Analyst	10/18/2021	37.00	14,241	77,256	38.16	39.38	79,678	82,225
172	246506	COAT-Field Services	Utility Person	11/8/2021	28.06	18,544	58,589	28.94	29.86	60,427	62,348
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	46.35	8,407	96,779	47.81	49.34	99,827	103,022
174	246506	COAT-Field Services	Utility Person	11/9/2021	28.06	11,258	58,589	28.94	29.86	60,427	62,348
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	20.50	1,804	42,804	21.15	21.83	44,161	45,581
176	247106	MILT-Field Services	Utility Person	11/22/2021	28.80	2,779	60,134	29.71	30.66	62,034	64,018
177	246201	HSHY-Production	Plant Operator	1/10/2022	30.50	7,290	63,684	31.46	32.46	65,688	67,776
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	1/10/2022	27.76	2,906	57,963	28.63	29.54	59,779	61,680
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	30.90	116	64,519	31.87	32.89	66,545	68,674
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	28.89	-	60,322	29.80	30.75	62,222	64,206
181	247206	PHBG-Field Services	Utility Person	2/21/2022	29.96	3,398	62,556	30.90	31.89	64,519	66,586
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	2/28/2022	23.77	2,877	49,632	24.52	25.30	51,198	52,826
183	245306	ABNG-Field Services	Utility Person	2/21/2022	27.45	5,799	57,316	28.31	29.21	59,111	60,990
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	29.51	5,854	61,617	30.44	31.41	63,559	65,584
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	20.60	-	43,013	21.25	21.93	44,370	45,790
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	28.98	-	60,510	29.89	30.84	62,410	64,394
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	26.13	-	54,559	26.95	27.81	56,272	58,067
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	27.81	21	58,067	28.69	29.61	59,905	61,826
189	240306	CORP-Field Service	Operations Specialist	4/25/2022	31.93	-	66,670	32.93	33.98	68,758	70,950
190	245306	ABNG-Field Services	Utility Person	5/16/2022	28.25	9,080	58,986	29.14	30.07	60,844	62,786
191	241401	STNW-Production	Plant Operator	6/6/2022	26.55	3,330	55,436	27.39	28.26	57,190	59,007
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	32.80	1,353	68,486	33.83	34.91	70,637	72,892
193	245506	BNGR-Field Services	Utility Person	6/20/2022	30.99	9,309	64,707	31.97	32.99	66,753	68,883
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	6/20/2022	23.12	781	48,275	23.85	24.61	49,799	51,386
195	245401	SUSQ-Production	Plant Operator	6/27/2022	27.89	17,666	58,234	28.77	29.69	60,072	61,993
196	241401	STNW-Production	Plant Operator	7/5/2022	26.55	7,037	55,436	27.39	28.26	57,190	59,007
197	246801	LEHP-Production	Utility Person	7/18/2022	26.86	16,135	56,084	27.71	28.59	57,858	59,696
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/18/2022	23.64	90	49,360	24.38	25.16	50,905	52,534
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	29.40	3,245	61,387	30.33	31.30	63,329	65,354
200	247106	MILT-Field Services	Utility Person	7/18/2022	28.97	7,090	60,489	29.88	30.83	62,389	64,373
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	29.36	8,311	61,304	30.28	31.25	63,225	65,250
202	245501	BNGR-Production	Plant Operator	8/29/2022	27.95	4,904	58,360	28.83	29.75	60,197	62,118
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	27.94	629	58,339	28.82	29.74	60,176	62,097
204	245401	SUSQ-Production	Plant Operator	9/19/2022	27.89	8,539	58,234	28.77	29.69	60,072	61,993
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	28.87	9,121	60,281	29.78	30.73	62,181	64,164
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	30.50	1,487	63,684	31.46	32.46	65,688	67,776
207	245306	ABNG-Field Services	Utility Person	10/10/2022	26.50	2,551	55,332	27.33	28.20	57,065	58,882
208	245306	ABNG-Field Services	Utility Person	10/17/2022	26.50	6,012	55,332	27.33	28.20	57,065	58,882
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	25.50	-	53,244	26.30	27.14	54,914	56,668
210	246406	ROYF-Field Services	Utility Person	11/14/2022	29.00	3,792	60,552	29.91	30.86	62,452	64,436
211	246501	COAT-Production	Plant Operator	11/28/2022	29.75	14,168	62,118	30.69	31.67	64,081	66,127
212	246406	ROYF-Field Services	Utility Person	1/3/2023	30.00	2,925	62,640	30.94	31.93	64,603	66,670
213	245706	POCO-Field Services	Utility Person	1/3/2023	27.00	2,518	56,376	27.85	28.74	58,151	60,009
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	26.50	-	55,332	27.33	28.20	57,065	58,882

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					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
144	245701	POCO-Production	Plant Operator	4/27/2020	140	-	138.7	-	159.4	78.5	-	16,748	81,428	17,278	84,025
145	246401	ROYF-Production	Plant Operator	5/4/2020	10	436	-	-	85.2	72.0	-	9,329	80,412	9,622	82,961
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	-	-	-	-	13.5	-	-	529	54,295	546	56,024
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	-	-	-	-	221.2	23.0	-	14,491	93,125	14,945	96,084
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	-	-	-	-	44.8	-	-	1,841	58,677	1,900	60,552
149	240116	CORP-Maint Services	Reliability Engineering Analyst	6/1/2020	-	-	-	-	154.3	-	-	10,482	103,085	10,811	106,379
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	-	-	-	-	6.5	-	-	290	61,886	299	63,858
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	-	-	-	-	9.2	-	-	423	63,230	436	65,248
152	247106	MILT-Field Services	Utility Person	10/19/2020	140	-	5.0	-	64.3	27.7	-	4,815	67,971	4,966	70,126
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	-	-	-	-	181.1	-	-	11,818	100,809	12,188	104,018
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	-	-	-	-	141.7	-	-	6,605	70,561	6,813	72,815
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	-	-	-	-	15.8	-	-	700	61,106	722	63,049
156	245506	BNGR-Field Services	Utility Person	2/22/2021	80	-	100.3	-	44.2	16.4	-	5,747	65,398	5,928	67,479
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	-	-	-	-	7.3	-	-	293	56,022	302	57,806
158	246801	LEHP-Production	Utility Person	4/12/2021	190	-	51.7	-	91.1	47.8	-	8,249	67,843	8,507	70,001
159	246506	COAT-Field Services	Utility Person	4/13/2021	454	-	51.5	-	216.8	23.1	-	13,521	80,248	13,948	82,784
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	520	-	79.5	-	167.5	63.0	-	13,467	74,539	13,891	76,905
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	290	-	66.5	-	128.3	16.0	-	10,136	82,107	10,456	84,724
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	-	-	-	-	157.5	16.0	-	7,398	64,589	7,632	66,639
163	240114	CORP-Engineering	GIS Analyst	6/1/2021	-	-	-	-	-	-	-	-	56,000	-	57,796
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	40	-	81.0	-	151.8	66.1	-	14,071	79,799	14,512	82,328
165	247206	PHBG-Field Services	Utility Person	7/6/2021	30	-	10.0	-	39.5	18.5	-	3,442	70,058	3,550	72,296
166	245906	GLEN-Field Services	Utility Person	7/12/2021	180	-	43.0	-	97.8	23.6	-	7,464	72,518	7,698	74,820
167	246401	ROYF-Production	Plant Operator	7/19/2021	240	578	-	-	79.9	63.6	-	8,489	80,236	8,756	82,758
168	241106	PITT-Field Services	Operations Specialist	9/7/2021	-	-	-	-	-	-	-	-	65,041	-	67,108
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	-	-	-	-	21.6	-	-	1,111	70,475	1,146	72,722
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	-	-	-	-	32.0	-	-	1,545	68,736	1,594	70,937
171	240116	CORP-Maint Services	Reliability Engineering Analyst	10/18/2021	100	-	90.0	-	124.0	50.5	-	14,679	94,457	15,139	97,464
172	246506	COAT-Field Services	Utility Person	11/8/2021	1,360	-	62.0	-	348.3	31.8	-	19,114	80,901	19,710	83,418
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	-	-	-	-	114.9	-	-	8,658	108,485	8,922	111,944
174	246506	COAT-Field Services	Utility Person	11/9/2021	450	-	32.0	-	190.3	37.0	-	11,602	72,479	11,962	74,760
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	-	-	-	-	57.8	-	-	1,860	46,021	1,919	47,500
176	247106	MILT-Field Services	Utility Person	11/22/2021	30	146	-	-	42.3	16.0	-	2,866	65,076	2,956	67,150
177	246201	HSHY-Production	Plant Operator	1/10/2022	23	-	-	-	100.6	42.6	-	7,517	73,228	7,753	75,552
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	1/10/2022	-	-	-	-	67.8	-	-	2,994	62,774	3,087	64,766
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	-	-	-	-	2.4	-	-	119	66,664	123	68,797
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	-	-	-	-	-	-	-	-	62,222	-	64,206
181	247206	PHBG-Field Services	Utility Person	2/21/2022	140	-	1.0	-	54.5	14.0	-	3,502	68,162	3,612	70,338
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	2/28/2022	-	-	-	-	79.6	-	-	2,966	54,164	3,060	55,886
183	245306	ABNG-Field Services	Utility Person	2/21/2022	170	-	70.0	-	58.8	25.0	-	5,978	65,259	6,165	67,326
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	-	832	-	-	103.0	20.0	-	6,035	70,425	6,223	72,639
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	-	-	-	-	-	-	-	-	44,370	-	45,790
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	-	-	-	-	-	-	-	-	62,410	-	64,394
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	-	-	-	-	-	-	-	-	56,272	-	58,067
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	-	-	-	-	0.5	-	-	22	59,926	22	61,848
189	240306	CORP-Field Service	Operations Specialist	4/25/2022	-	-	-	-	-	-	-	-	68,758	-	70,950
190	245306	ABNG-Field Services	Utility Person	5/16/2022	290	-	75.0	-	103.1	43.5	-	9,362	70,496	9,656	72,732
191	241401	STNW-Production	Plant Operator	6/6/2022	-	-	-	-	72.1	8.0	-	3,434	60,624	3,542	62,549
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	-	-	-	-	27.5	-	-	1,395	72,033	1,440	74,332
193	245506	BNGR-Field Services	Utility Person	6/20/2022	80	-	133.0	-	82.5	20.5	-	9,601	76,434	9,905	78,868
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	6/20/2022	-	-	-	-	22.5	-	-	805	50,604	831	52,217
195	245401	SUSQ-Production	Plant Operator	6/27/2022	40	-	-	-	244.0	132.0	-	18,221	78,332	18,800	80,833
196	241401	STNW-Production	Plant Operator	7/5/2022	-	-	-	-	154.5	16.0	-	7,258	64,449	7,488	66,495
197	246801	LEHP-Production	Utility Person	7/18/2022	740	-	63.0	-	237.0	87.8	-	16,640	75,239	17,163	77,599
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/18/2022	-	-	-	-	2.5	-	-	92	50,998	95	52,629
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	-	-	-	-	12.3	46.0	-	3,348	66,677	3,455	68,809
200	247106	MILT-Field Services	Utility Person	7/18/2022	10	630	-	-	83.5	59.0	-	7,312	70,341	7,543	72,556
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	-	4	-	-	118.5	52.0	-	8,570	71,799	8,844	74,098
202	245501	BNGR-Production	Plant Operator	8/29/2022	-	-	126.0	-	10.3	17.0	-	5,058	65,255	5,219	67,337
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	-	-	-	-	15.0	-	-	648	60,825	669	62,766
204	245401	SUSQ-Production	Plant Operator	9/19/2022	70	-	36.0	-	116.0	46.8	-	8,806	68,948	9,085	71,148
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	-	-	-	-	209.5	-	-	9,407	71,587	9,705	73,869
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	-	-	-	-	32.5	-	-	1,534	67,222	1,582	69,359
207	245306	ABNG-Field Services	Utility Person	10/10/2022	20	-	28.0	-	36.5	6.8	-	2,631	59,716	2,714	61,616
208	245306	ABNG-Field Services	Utility Person	10/17/2022	180	-	39.0	-	97.3	21.0	-	6,200	63,446	6,398	65,459
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	-	-	-	-	-	-	-	-	54,914	-	56,668
210	246406	ROYF-Field Services	Utility Person	11/14/2022	120	-	22.0	-	72.5	-	-	3,911	66,483	4,035	68,591
211	246501	COAT-Production	Plant Operator	11/28/2022	230	-	-	-	252.5	48.8	-	14,616	78,927	15,083	81,440
212	246406	ROYF-Field Services	Utility Person	1/3/2023	60	-	21.0	-	47.0	3.0	-	3,017	67,679	3,113	69,843
213	245706	POCO-Field Services	Utility Person	1/3/2023	40	-	17.0	-	21.5	22.0	-	2,597	60,788	2,680	62,729
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	-	-	-	-	-	-	-	-	57,065	-	58,882

Pennsylvania-American Water Company - Water Operations
Compensation

						Gross Labor							
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
215	247306	BRWK-Field Services	Utility Person	3/6/2023	27.50	1,925	57,420	28.37	29.28	59,237	61,137
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	29.25	3,400	61,074	30.17	31.13	62,995	64,999
217	245606	NAZA-Field Services	Utility Person	3/20/2023	29.25	782	61,074	30.17	31.13	62,995	64,999
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023	27.41	-	57,232	28.27	29.17	59,028	60,907
219	245601	NAZA-Production	Plant Operator	6/5/2023	29.00	-	60,552	29.91	30.86	62,452	64,436
220	245106	NORR-Field Services	Utility Person	6/5/2023	30.00	-	62,640	30.94	31.93	64,603	66,670
221	246406	ROYF-Field Services	Utility Person	6/5/2023	28.50	64	59,508	29.40	30.34	61,387	63,350
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	30.00	-	62,640	30.94	31.93	64,603	66,670
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017	23.20	527	24,221	23.93	24.69	24,983	25,776
224	245106	NORR-Field Services	Operations Specialist - To Be Filled	12/31/2023	-	-	-	36.45	37.61	76,108	78,530
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	-	-	-	36.45	37.61	76,108	78,530
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	-	-	-	36.45	37.61	76,108	78,530
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	-	-	-	36.45	37.61	76,108	78,530
228	241103	PITT-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	-	-	-	29.02	29.95	60,594	62,536
229	249103	WILK-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	-	-	-	29.02	29.95	60,594	62,536
230	241103	PITT-Cust Service	Compliance Representative - To Be Filled	12/31/2023	-	-	-	25.54	26.36	53,328	55,040
			Total Non-Collective Bargaining Unit Hourly			$1,627,513	$14,628,737			$15,567,888	$16,064,874

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor										
						Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
215	247306	BRWK-Field Services	Utility Person	3/6/2023	30	-	4.0	-	40.0	3.0	-	1,986	61,252	2,050	63,216
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	-	22	-	-	61.5	12.0	-	3,507	66,524	3,619	68,640
217	245606	NAZA-Field Services	Utility Person	3/20/2023	10	-	8.0	-	8.5	3.0	-	807	63,812	833	65,842
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023	-	-	-	-	-	-	-	-	59,028	-	60,907
219	245601	NAZA-Production	Plant Operator	6/5/2023	-	-	-	-	-	-	-	-	62,452	-	64,436
220	245106	NORR-Field Services	Utility Person	6/5/2023	-	-	-	-	-	-	-	-	64,603	-	66,670
221	246406	ROYF-Field Services	Utility Person	6/5/2023	-	-	-	-	1.5	-	-	66	61,453	68	63,418
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	-	-	-	-	-	-	-	-	64,603	-	66,670
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017	-	-	-	-	15.0	-	-	543	25,526	560	26,336
224	245106	NORR-Field Services	Operations Specialist - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	76,108	-	78,530
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	76,108	-	78,530
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	76,108	-	78,530
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	76,108	-	78,530
228	241103	PITT-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	60,594	-	62,536
229	249103	WILK-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	60,594	-	62,536
230	241103	PITT-Cust Service	Compliance Representative - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	53,328	-	55,040
			Total Non-Collective Bargaining Unit Hourly		$16,643	$5,069	6,058.83	-	22,007.92	4,994.29	-	$1,677,947	$17,267,546	$1,730,751	$17,817,336

Pennsylvania-American Water Company - Wastewater SSS General Operations
Compensation
Number of Employees

	6/30/2023	Positions to be Filled (Including Time Allocated to Acquired Systems) 2024	Total 6/30/2024	Positions to be Filled 2025	Total 6/30/2025
Salary - Non-Collective Bargaining Unit	12.0	(0.9)	11.1	0	11.1
Hourly - Collective Bargaining Unit	22.0	0.0	22.0	0	22.0
Hourly - Non-Collective Bargaining Unit	42.0	-	42.0	0	42.0
Hourly Total	64.0	-	64.0	0	64.0
Total	76.0	(0.9)	75.1	0	75.1

Pennsylvania-American Water Company - Wastewater SSS General Operations
Compensation

							Gross Labor					
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	2023 Hourly Wage Rate	2023 Total Overtime Pay	2023 Annualized Salaries & Wages	2024 Hourly Wage Rate	2025 Hourly Wage Rate	2024 Base Pay	2025 Base Pay
Non-Collective Bargaining Unit Salary											
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	$43.47	$0	$90,418	$44.84	$46.27	$9,327	$9,624
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	56.92	-	118,398	58.71	60.58	122,117	126,006
3	246701	COWW-Production	Supvr Production	3/6/2000	44.04	-	91,603	45.43	46.88	94,494	97,510
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	46.15	-	95,986	47.60	49.12	99,008	102,170
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	35.10	-	73,008	36.20	37.36	75,296	77,709
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	43.17	-	89,784	44.52	45.94	92,602	95,555
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	37.50	-	78,000	38.68	39.91	80,454	83,013
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	46.14	-	95,976	47.59	49.11	98,987	102,149
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020	41.19	-	85,680	42.49	43.85	88,379	91,208
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	42.52	-	88,434	43.85	45.25	91,208	94,120
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	36.32	-	75,555	37.47	38.67	77,938	80,434
12	249401	YORKWW-Production	Supvr Production	6/24/2013	40.11	-	83,430	41.37	42.69	86,050	88,795
			Total Non-Collective Bargaining Unit Salary			$0	$1,066,272			$1,015,860	$1,048,293
Collective Bargaining Unit											
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/4/2008	$28.24	$6,230	$58,965	$28.94	$29.74	$60,427	$62,097
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	28.24	810	58,965	28.94	29.74	60,427	62,097
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	27.31	1,342	57,023	28.01	28.81	58,485	60,155
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/17/1984	28.24	17,193	58,965	28.94	29.74	60,427	62,097
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	10/26/2009	28.24	8,913	58,965	28.94	29.74	60,427	62,097
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	5/22/2017	28.24	16,055	58,965	28.94	29.74	60,427	62,097
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	25.72	389	53,703	26.42	27.22	55,165	56,835
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	30.24	10,470	63,141	30.94	31.74	64,603	66,273
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	30.24	15,341	63,141	30.94	31.74	64,603	66,273
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	25.72	4,746	53,703	26.42	27.22	55,165	56,835
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/7/2009	28.24	6,225	58,965	28.94	29.74	60,427	62,097
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/20/2018	28.24	1,764	58,965	28.94	29.74	60,427	62,097
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/3/2020	28.24	4,190	58,965	28.94	29.74	60,427	62,097
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	4/24/2017	28.24	3,615	58,965	28.94	29.74	60,427	62,097
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	30.24	17,634	63,141	30.94	31.74	64,603	66,273
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	27.31	298	57,023	28.01	28.81	58,485	60,155
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	27.31	236	57,023	28.01	28.81	58,485	60,155
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	28.24	2,058	58,965	28.94	29.74	60,427	62,097
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	27.31	61	57,023	28.01	28.81	58,485	60,155
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	28.24	678	58,965	28.94	29.74	60,427	62,097
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	25.72	96	53,703	26.42	27.22	55,165	56,835
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	27.31	-	57,023	28.01	28.81	58,485	60,155
			Total Collective Bargaining Unit			$118,344	$1,284,266			$1,316,421	$1,353,170

Pennsylvania-American Water Company - Wastewater SSS General Operations
Compensation

						Gross Labor						
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	2023 Hourly Wage Rate	2023 Total Overtime Pay	2023 Annualized Salaries & Wages	2024 Hourly Wage Rate	2025 Hourly Wage Rate	2024 Base Pay	2025 Base Pay
Non-Collective Bargaining Unit Hourly											
1	246701	COWW-Production	Wastewater Operator	9/20/1999	$33.37	$9,317	$69,677	$34.42	$35.52	$71,869	$74,166
2	246706	COWW-Field Services	Utility Person	5/30/1995	30.78	11,212	64,269	31.75	32.76	66,294	68,403
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	35.11	4,273	73,310	36.21	37.37	75,606	78,029
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	34.91	11,643	72,892	36.01	37.16	75,189	77,590
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	36.10	10,496	75,377	37.24	38.43	77,757	80,242
6	246706	COWW-Field Services	Crew Leader	11/10/2003	32.59	7,068	68,048	33.62	34.69	70,199	72,433
7	246901	LPWW-Production	Plant Operator	6/2/2008	33.09	6,130	69,092	34.13	35.22	71,263	73,539
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	35.65	4,059	74,437	36.77	37.94	76,776	79,219
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	35.38	18,930	73,873	36.49	37.65	76,191	78,613
10	242601	CLYWW-Production	Plant Operator	7/31/2008	32.60	4,166	68,069	33.63	34.70	70,219	72,454
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	34.69	13,371	72,433	35.78	36.92	74,709	77,089
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	30.77	8,730	64,248	31.74	32.75	66,273	68,382
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	38.38	11,371	80,137	39.59	40.85	82,664	85,295
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	31.77	9,468	66,336	32.77	33.82	68,424	70,616
15	246706	COWW-Field Services	Utility Person	3/14/2016	29.79	9,101	62,202	30.73	31.71	64,164	66,210
16	246901	LPWW-Production	Plant Operator	9/11/2017	29.98	8,842	62,598	30.92	31.91	64,561	66,628
17	246701	COWW-Production	Wastewater Operator	5/14/2018	32.13	10,847	67,087	33.14	34.20	69,196	71,410
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	28.74	17,904	60,009	29.64	30.59	61,888	63,872
19	248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	10/15/2018	33.06	9,150	69,029	34.10	35.19	71,201	73,477
20	246706	COWW-Field Services	Utility Person	3/25/2019	28.73	11,020	59,988	29.63	30.58	61,867	63,851
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	37.32	2,988	77,924	38.49	39.72	80,367	82,935
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	36.10	2,363	75,377	37.24	38.43	77,757	80,242
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	30.96	7,824	64,644	31.93	32.95	66,670	68,800
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	30.73	10,633	64,164	31.70	32.71	66,190	68,298
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	31.00	13,625	64,728	31.98	33.00	66,774	68,904
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	38.39	9,931	80,158	39.60	40.86	82,685	85,316
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	31.46	8,918	65,688	32.45	33.49	67,756	69,927
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	31.00	10,356	64,728	31.98	33.00	66,774	68,904
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	30.92	8,629	64,561	31.89	32.91	66,586	68,716
30	248706	Nw Cmbrlnd WW FS	Utility Person	9/20/2021	26.86	8,944	56,084	27.71	28.59	57,858	59,696
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021	28.47	7,454	59,445	29.37	30.31	61,325	63,287
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	30.99	7,457	64,707	31.97	32.99	66,753	68,883
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	30.00	3,047	62,640	30.94	31.93	64,603	66,670
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	28.35	2,204	59,195	29.24	30.17	61,053	62,995
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	30.99	3,934	64,707	31.97	32.99	66,753	68,883
36	248706	Nw Cmbrlnd WW FS	Utility Person	9/6/2022	28.92	6,971	60,385	29.83	30.78	62,285	64,269
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	26.86	3,103	56,084	27.71	28.59	57,858	59,696
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	29.50	3,820	61,596	30.43	31.40	63,538	65,563
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	30.00	4,103	62,640	30.94	31.93	64,603	66,670
40	246701	COWW-Production	Wastewater Operator	1/3/2023	32.00	4,572	66,816	33.01	34.06	68,925	71,117
41	248701	Nw Cmbrnlnd WW Prod	Utility Person	2/6/2023	27.25	906	56,898	28.11	29.01	58,694	60,573
42	246706	COWW-Field Services	Utility Person	3/6/2023	28.00	375	58,464	28.88	29.80	60,301	62,222
			Total Non-Collective Bargaining Unit Hourly			$329,254	$2,784,745			$2,872,420	$2,964,083

Pennsylvania-American Water Company - Wastewater SSS General Operations
Compensation

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	Overtime Hours 1.0	Overtime Hours 1.25	Overtime Hours 1.5	Overtime Hours 2.0	2024 Total Overtime Pay	2024 Annualized Salaries & Wages	2025 Total Overtime Pay	2025 Annualized Salaries & Wages
					Gross Labor								Gross Labor	
Non-Collective Bargaining Unit Salary														
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	$0	$0					$0	$9,327	$0	$9,624
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	-	-					-	122,117	-	126,006
3	246701	COWW-Production	Supvr Production	3/6/2000	-	-					-	94,494	-	97,510
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	-	-					-	99,008	-	102,170
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	-	-					-	75,296	-	77,709
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	-	-					-	92,602	-	95,555
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	-	-					-	80,454	-	83,013
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	-	-					-	98,987	-	102,149
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020	-	-					-	88,379	-	91,208
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	-	-					-	91,208	-	94,120
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	-	-					-	77,938	-	80,434
12	249401	YORKWW-Production	Supvr Production	6/24/2013	-	-					-	86,050	-	88,795
			Total Non-Collective Bargaining Unit Salary		$0	$0	-	-	-	-	$0	$1,015,860	$0	$1,048,293
Collective Bargaining Unit														
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/4/2008	$0	$1,277	-	-	72.25	56.00	$6,385	$68,088	$6,561	$69,935
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	-	13	-	-	19.00	-	830	61,270	853	62,963
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	-	27	-	-	27.13	4.00	1,376	59,888	1,415	61,598
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/17/1984	-	488	-	-	343.88	44.00	17,615	78,530	18,098	80,684
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	10/26/2009	-	156	-	-	158.13	38.00	9,132	69,715	9,383	71,636
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	5/22/2017	-	2,324	-	-	327.50	36.00	16,449	79,200	16,900	81,321
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	-	9	-	-	10.00	-	400	55,574	412	57,256
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	-	244	-	-	175.38	40.00	10,710	75,557	10,984	77,501
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	-	371	-	-	281.50	40.00	15,692	80,665	16,094	82,738
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	-	15	-	-	106.63	12.00	4,875	60,055	5,022	61,872
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/7/2009	-	1,213	-	-	103.88	32.00	6,379	68,018	6,555	69,865
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/20/2018	-	1,306	-	-	9.50	24.00	1,808	63,540	1,858	65,261
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/3/2020	-	1,397	-	-	65.88	24.00	4,293	66,117	4,410	67,905
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	4/24/2017	-	46	-	-	28.88	42.00	3,704	64,177	3,806	65,949
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	-	1,786	-	-	307.75	60.00	18,041	84,430	18,507	86,565
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	-	3	-	-	7.25	-	305	58,794	314	60,473
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	-	3	-	-	5.75	-	242	58,730	249	60,407
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	-	-	-	-	44.50	3.00	2,109	62,535	2,167	64,264
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	-	-	-	-	1.50	-	63	58,548	65	60,220
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	-	43	-	-	16.00	-	695	61,164	714	62,854
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	-	-	-	-	2.50	-	99	55,264	102	56,937
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	-	-	-	-	-	-	-	58,485	-	60,155
			Total Collective Bargaining Unit		$0	$10,721	-	-	2,114.75	455.00	$121,202	$1,448,344	$124,468	$1,488,359

Pennsylvania-American Water Company - Wastewater SSS General Operations
Compensation

							Gross Labor								Gross Labor	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	Overtime Hours 1.0	Overtime Hours 1.25	Overtime Hours 1.5	Overtime Hours 2.0	2024 Total Overtime Pay	2024 Annualized Salaries & Wages	2025 Total Overtime Pay	2025 Annualized Salaries & Wages
Non-Collective Bargaining Unit Hourly														
1	246701	COWW-Production	Wastewater Operator	9/20/1999	$40	$0	108.67	-	57.83	40.58	$9,607	$81,516	$9,911	$84,117
2	246706	COWW-Field Services	Utility Person	5/30/1995	90	-	130.33	-	115.83	28.67	11,563	77,947	11,928	80,420
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	-	-	8.33	-	35.67	28.50	4,404	80,010	4,542	82,570
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	50	-	-	-	146.08	54.75	12,005	87,244	12,383	90,023
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	170	-	98.33	-	79.83	34.50	10,823	88,750	11,165	91,577
6	246706	COWW-Field Services	Crew Leader	11/10/2003	30	-	98.67	-	59.17	13.50	7,288	77,517	7,518	79,981
7	246901	LPWW-Production	Plant Operator	6/2/2008	10	-	-	-	45.17	57.50	6,320	77,594	6,519	80,069
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	-	-	5.67	-	30.67	29.67	4,184	80,959	4,313	83,532
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	-	-	-	-	140.50	155.17	19,508	95,699	20,113	98,726
10	242601	CLYWW-Production	Plant Operator	7/31/2008	20	-	-	-	38.17	33.67	4,294	74,534	4,428	76,901
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	-	-	49.00	-	102.83	87.42	13,784	88,492	14,215	91,304
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	120	-	94.67	-	80.50	32.67	9,002	75,395	9,286	77,788
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	80	-	124.00	-	83.50	21.67	11,725	94,469	12,093	97,468
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	80	-	121.00	-	82.50	25.00	9,763	78,267	10,073	80,769
15	246706	COWW-Field Services	Utility Person	3/14/2016	10	-	92.33	-	113.75	20.00	9,386	73,560	9,682	75,903
16	246901	LPWW-Production	Plant Operator	9/11/2017	50	-	-	-	115.50	58.67	9,115	73,726	9,403	76,081
17	246701	COWW-Production	Wastewater Operator	5/14/2018	40	-	141.33	-	98.83	22.67	11,185	80,421	11,540	82,989
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	90	-	-	-	205.42	150.50	18,453	80,431	19,031	82,993
19	248701	Nw CmbrnInd WW Prod	Lead Plant Operator	10/15/2018	-	-	120.00	-	77.92	18.67	9,435	80,636	9,734	83,211
20	246706	COWW-Field Services	Utility Person	3/25/2019	30	-	89.67	-	151.58	31.33	11,362	73,259	11,722	75,603
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	-	-	-	-	51.83	-	3,079	83,446	3,174	86,109
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	20	-	-	-	27.92	10.75	2,435	80,213	2,511	82,773
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	40	-	108.00	-	63.33	23.42	8,067	74,777	8,322	77,161
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	190	-	-	-	107.33	90.17	10,964	77,344	11,309	79,797
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	-	-	49.00	-	118.33	103.50	14,050	80,825	14,492	83,396
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	-	-	-	-	169.67	-	10,239	92,923	10,559	95,875
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	150	-	-	-	96.58	68.25	9,196	77,102	9,489	79,566
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	-	-	42.00	-	96.00	71.83	10,680	77,454	11,016	79,920
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	20	-	-	-	72.17	81.33	8,891	75,498	9,168	77,904
30	248706	Nw CmbrInd WW FS	Utility Person	9/20/2021	30	-	144.00	-	110.50	11.00	9,226	67,114	9,518	69,244
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021	110	-	56.00	-	72.63	46.75	7,687	69,121	7,930	71,327
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	50	-	99.00	-	65.88	19.13	7,689	74,492	7,929	76,863
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	30	-	37.00	-	33.38	6.50	3,141	67,774	3,240	69,940
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	-	-	-	-	50.50	-	2,271	63,324	2,341	65,336
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	20	-	-	-	17.75	50.00	4,058	70,831	4,187	73,090
36	248706	Nw CmbrInd WW FS	Utility Person	9/6/2022	80	-	88.00	-	62.00	29.50	7,189	69,555	7,417	71,766
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	30	-	64.00	-	28.50	4.00	3,201	61,089	3,302	63,028
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	-	-	53.00	-	35.00	12.00	3,941	67,479	4,066	69,630
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	10	-	52.00	-	32.50	18.00	4,231	68,844	4,366	71,046
40	246701	COWW-Production	Wastewater Operator	1/3/2023	40	-	51.00	-	29.25	24.00	4,716	73,681	4,866	76,024
41	248701	Nw CmbrnInd WW Prod	Utility Person	2/6/2023	-	-	16.00	-	7.50	3.00	935	59,628	965	61,537
42	246706	COWW-Field Services	Utility Person	3/6/2023	-	-	7.00	-	4.25	-	386	60,688	399	62,621
			Total Non-Collective Bargaining Unit Hourly		$1,730	$0	2,148	-	3,214	1,618	$339,476	$3,213,626	$350,164	$3,315,978

Pennsylvania-American Water Company - Wastewater CSS Operations
Compensation
Number of Employees

	6/30/2023	Positions to be Filled 2024	Total 6/30/2024	Positions to be Filled 2025	Total 6/30/2025
Salary - Non-Collective Bargaining Unit	12	0	12	0	12
Hourly - Collective Bargaining Unit	85	1	86	0	86
Hourly - Non-Collective Bargaining Unit	1	0	1	0	1
Hourly Total	86	1	87	0	87
Total	98	1	99	0	99

Pennsylvania-American Water Company - Wastewater CSS Operations
Compensation

					Gross Labor							
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	2023 Hourly Wage Rate	2023 Total Overtime Pay	2023 Annualized Salaries & Wages	2024 Hourly Wage Rate	2025 Hourly Wage Rate	2024 Base Pay	2025 Base Pay
Non-Collective Bargaining Unit Salary											
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000	$45.98		$95,637	$47.43	$48.94	$98,654	$101,795
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006	37.22		77,407	38.39	39.62	79,851	82,410
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016	32.69		68,000	33.72	34.80	70,138	72,384
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002	56.37		117,249	58.14	60.00	120,931	124,800
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007	37.02		77,000	38.18	39.40	79,414	81,952
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007	40.87		85,000	42.15	43.50	87,672	90,480
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008	40.45		84,140	41.72	43.05	86,778	89,544
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982	44.65		92,880	46.06	47.53	95,805	98,862
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003	49.77		103,526	51.34	52.98	106,787	110,198
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015	42.31		88,000	43.64	45.03	90,771	93,662
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019	45.89		95,455	47.34	48.85	98,467	101,608
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020	38.11		79,275	39.31	40.56	81,765	84,365
			Total Non-Collective Bargaining Unit Salary			$0	$1,063,569			$1,097,034	$1,132,061
Collective Bargaining Unit											
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	$30.35	$21,929	$63,371	$30.95	$31.56	$64,624	$65,897
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006	32.79	47,090	68,466	33.44	34.10	69,823	71,201
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	28.98	12,056	60,510	29.55	30.13	61,700	62,911
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002	30.35	15,995	63,371	30.95	31.56	64,624	65,897
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008	30.35	5,080	63,371	30.95	31.56	64,624	65,897
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016	28.98	22,806	60,510	29.55	30.13	61,700	62,911
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012	28.98	12,788	60,510	29.55	30.13	61,700	62,911
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013	28.98	9,172	60,510	29.55	30.13	61,700	62,911
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990	30.35	6,861	63,371	30.95	31.56	64,624	65,897
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005	30.35	678	63,371	30.95	31.56	64,624	65,897
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008	28.98	17,170	60,510	29.55	30.13	61,700	62,911
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007	28.98	19,527	60,510	29.55	30.13	61,700	62,911
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016	28.98	9,069	60,510	29.55	30.13	61,700	62,911
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009	30.35	31,113	63,371	30.95	31.56	64,624	65,897
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005	32.79	10,702	68,466	33.44	34.10	69,823	71,201
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005	28.98	8,032	60,510	29.55	30.13	61,700	62,911
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	30.35	9,336	63,371	30.95	31.56	64,624	65,897
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008	30.35	47,689	63,371	30.95	31.56	64,624	65,897
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008	30.35	67,928	63,371	30.95	31.56	64,624	65,897
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009	30.35	13,040	63,371	30.95	31.56	64,624	65,897
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005	32.79	28,065	68,466	33.44	34.10	69,823	71,201
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011	30.35	7,539	63,371	30.95	31.56	64,624	65,897
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987	30.35	9,551	63,371	30.95	31.56	64,624	65,897
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997	32.79	61,522	68,466	33.44	34.10	69,823	71,201
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	28.98	5,279	60,510	29.55	30.13	61,700	62,911
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	28.98	10,298	60,510	29.55	30.13	61,700	62,911
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011	28.98	8,575	60,510	29.55	30.13	61,700	62,911
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013	28.98	23,120	60,510	29.55	30.13	61,700	62,911
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012	30.35	16,541	63,371	30.95	31.56	64,624	65,897
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009	28.98	2,836	60,510	29.55	30.13	61,700	62,911
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013	32.79	11,476	68,466	33.44	34.10	69,823	71,201
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992	28.98	53,117	60,510	29.55	30.13	61,700	62,911
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016	30.35	8,894	63,371	30.95	31.56	64,624	65,897
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	28.98	26,671	60,510	29.55	30.13	61,700	62,911
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012	28.98	22	60,510	29.55	30.13	61,700	62,911
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007	28.98	7,271	60,510	29.55	30.13	61,700	62,911
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006	28.98	19,415	60,510	29.55	30.13	61,700	62,911
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997	30.35	1,607	63,371	30.95	31.56	64,624	65,897
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	28.98	15,021	60,510	29.55	30.13	61,700	62,911
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006	30.35	68,486	63,371	30.95	31.56	64,624	65,897
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017	32.79	17,666	68,466	33.44	34.10	69,823	71,201
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008	30.35	13,709	63,371	30.95	31.56	64,624	65,897
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016	30.35	16,614	63,371	30.95	31.56	64,624	65,897
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	28.98	646	60,510	29.55	30.13	61,700	62,911
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005	28.98	12,911	60,510	29.55	30.13	61,700	62,911

Pennsylvania-American Water Company - Wastewater CSS Operations
Compensation

					Gross Labor									Gross Labor	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	Overtime Hours 1.0	Overtime Hours 1.25	Overtime Hours 1.5	Overtime Hours 2.0	Overtime Hours 2.5	2024 Total Overtime Pay	2024 Annualized Salaries & Wages	2025 Total Overtime Pay	2025 Annualized Salaries & Wages
Non-Collective Bargaining Unit Salary															
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000									$98,654		$101,795
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006									79,851		82,410
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016									70,138		72,384
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002									120,931		124,800
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007									79,414		81,952
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007									87,672		90,480
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008									86,778		89,544
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982									95,805		98,862
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003									106,787		110,198
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015									90,771		93,662
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019									98,467		101,608
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020									81,765		84,365
			Total Non-Collective Bargaining Unit Salary		$0	$0						$0	$1,097,034	$0	$1,132,061
Collective Bargaining Unit															
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	$285	$647	-	-	415.67	47.00	-	$22,360	$87,915	$22,797	$89,626
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006	30	-	-	-	851.83	76.67	-	48,021	117,873	48,965	120,196
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	-	-	-	-	227.08	36.00	-	12,291	73,991	12,530	75,442
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002	-	-	-	-	168.33	135.00	-	16,309	80,932	16,627	82,525
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008	15	-	-	-	68.58	32.00	-	5,180	69,819	5,282	71,194
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016	225	-	-	-	476.75	32.33	-	23,251	85,176	23,703	86,839
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012	255	298	-	-	279.17	9.33	-	13,037	75,290	13,291	76,755
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013	15	134	-	-	187.42	16.00	-	9,351	71,201	9,532	72,593
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990	-	-	-	-	53.67	72.00	-	6,995	71,619	7,132	73,030
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005	-	-	-	-	14.75	-	-	692	65,315	705	66,602
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008	180	-	-	-	331.00	45.25	-	17,504	79,385	17,845	80,936
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007	15	2,378	-	-	229.17	161.67	-	19,907	84,001	20,294	85,599
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016	75	-	-	-	188.92	13.33	-	9,246	71,021	9,426	72,412
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009	120	3,469	-	-	396.67	210.17	-	31,722	99,935	32,342	101,828
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005	15	-	-	-	188.08	20.67	-	10,912	80,749	11,125	82,341
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005	-	-	-	-	120.50	47.50	-	8,189	69,890	8,349	71,261
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	60	39	-	-	158.67	34.00	-	9,520	74,243	9,707	75,703
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008	-	-	-	-	912.25	98.42	-	48,628	113,252	49,583	115,480
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008	45	-	-	-	1,333.00	114.00	-	69,264	133,933	70,623	136,565
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009	15	-	-	-	239.08	33.33	-	13,295	77,934	13,554	79,467
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005	120	2,501	-	-	310.50	191.50	-	28,617	101,061	29,177	102,999
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011	-	-	-	-	146.50	13.33	-	7,686	72,310	7,837	73,734
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987	-	-	-	-	179.42	21.33	-	9,738	74,361	9,928	75,825
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997	30	-	-	-	1,087.33	117.00	-	62,734	132,587	63,965	135,196
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	-	-	-	-	102.42	13.50	-	5,382	67,082	5,486	68,398
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	15	-	-	-	190.92	33.00	-	10,499	72,214	10,703	73,630
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011	30	-	-	-	179.92	12.00	-	8,743	70,473	8,913	71,855
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013	105	-	-	-	479.00	36.33	-	23,571	85,377	24,030	87,047
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012	15	-	-	-	319.83	30.00	-	16,865	81,504	17,195	83,107
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009	-	6	-	-	58.50	4.67	-	2,891	64,597	2,947	65,864
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013	60	-	-	-	219.00	9.50	-	11,702	81,585	11,932	83,192
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992	915	3,708	-	-	822.17	292.50	-	54,154	120,477	55,208	122,743
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016	-	-	-	-	174.83	14.25	-	9,069	73,692	9,246	75,143
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	270	649	-	-	483.58	94.00	-	27,192	89,811	27,722	91,552
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012	-	-	-	-	0.50	-	-	23	61,723	23	62,934
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007	45	-	-	-	136.92	21.67	-	7,413	69,158	7,557	70,514
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006	-	-	-	-	361.75	61.50	-	19,794	81,495	20,180	83,092
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997	-	-	-	-	35.00	-	-	1,638	66,262	1,670	67,567
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	180	2,814	-	-	220.92	91.33	-	15,314	80,009	15,612	81,518
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006	15	-	-	-	1,297.08	150.00	-	69,833	134,472	71,203	137,115
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017	195	-	-	-	320.83	26.33	-	18,013	88,031	18,366	89,762
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008	60	333	-	-	239.83	44.33	-	13,978	78,995	14,252	80,542
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016	30	-	-	-	342.75	14.00	-	16,939	81,593	17,270	83,197
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	-	-	-	-	4.00	8.00	-	659	62,359	672	63,583
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005	105	2,816	-	-	249.92	33.67	-	13,163	77,785	13,420	79,252

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						Gross Labor					
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	2023 Hourly Wage Rate	2023 Total Overtime Pay	2023 Annualized Salaries & Wages	2024 Hourly Wage Rate	2025 Hourly Wage Rate	2024 Base Pay	2025 Base Pay
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	32.79	53,265	68,466	33.44	34.10	69,823	71,201
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	34.08	5,322	71,159	35.00	35.89	73,080	74,938
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	36.35	20,135	75,899	37.32	38.25	77,924	79,866
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	36.32	889	75,836	37.28	38.21	77,841	79,782
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	35.57	282	74,270	36.53	37.46	76,275	78,216
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	36.31	1,937	75,815	37.27	38.20	77,820	79,762
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	36.35	1,925	75,899	37.32	38.25	77,924	79,866
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	33.36	5,487	69,656	34.24	35.10	71,493	73,289
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	32.28	11,187	67,401	33.14	33.98	69,196	70,950
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	26.10	4,275	54,497	26.80	27.49	55,958	57,399
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	33.36	11,622	69,656	34.24	35.10	71,493	73,289
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	31.78	14,279	66,357	32.64	33.48	68,152	69,906
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	33.36	5,525	69,656	34.24	35.10	71,493	73,289
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	33.97	6,249	70,929	34.89	35.78	72,850	74,709
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	28.78	5,720	60,093	29.54	30.27	61,680	63,204
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	38.46	87	80,304	39.50	40.50	82,476	84,564
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	31.78	14,374	66,357	32.64	33.48	68,152	69,906
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	30.31	91	63,287	31.13	31.92	64,999	66,649
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	36.35	18,228	75,899	37.32	38.25	77,924	79,866
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	36.32	2,004	75,836	37.28	38.21	77,841	79,782
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	30.31	845	63,287	31.13	31.92	64,999	66,649
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	31.78	383	66,357	32.64	33.48	68,152	69,906
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	30.35	20,078	63,371	30.95	31.56	64,624	65,897
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	30.35	21,647	63,371	30.95	31.56	64,624	65,897
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	30.35	24,230	63,371	30.95	31.56	64,624	65,897
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	24.48	5,646	51,114	25.09	25.72	52,388	53,703
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	26.48	6,094	55,290	27.14	27.82	56,668	58,088
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	30.35	9,441	63,371	30.95	31.56	64,624	65,897
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	28.98	20,598	60,510	29.55	30.13	61,700	62,911
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	36.74	1,056	76,713	37.73	38.69	78,780	80,785
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	26.10	1,522	54,497	26.80	27.49	55,958	57,399
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	36.74	1,076	76,713	37.73	38.69	78,780	80,785
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	30.35	21,383	63,371	30.95	31.56	64,624	65,897
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	21.27	4,347	44,412	21.88	22.50	45,685	46,980
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	28.48	10,197	59,466	29.04	29.61	60,636	61,826
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	28.48	15,012	59,466	29.04	29.61	60,636	61,826
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	28.48	7,451	59,466	29.04	29.61	60,636	61,826
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	36.35	14,758	75,899	37.32	38.25	77,924	79,866
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	29.35	1,922	61,283	29.93	30.52	62,494	63,726
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	29.35	1,717	61,283	29.93	30.52	62,494	63,726
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023		-	-	37.32	38.25	77,924	79,866
			Total Collective Bargaining Unit			$1,207,204	$5,472,064			$5,671,238	$5,794,284
Non-Collective Bargaining Unit Hourly											
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	$28.84	$13,318	$60,218	$29.75	$30.70	$62,118	$64,102
			Total Non-Collective Bargaining Unit Hourly			$13,318	$60,218			$62,118	$64,102

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					Gross Labor									Gross Labor		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	Overtime Hours 1.0	Overtime Hours 1.25	Overtime Hours 1.5	Overtime Hours 2.0	Overtime Hours 2.5	2024 Total Overtime Pay	2024 Annualized Salaries & Wages	2025 Total Overtime Pay	2025 Annualized Salaries & Wages
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	465	1,453	-	-	751.92	243.17	-	54,314	126,055	55,380	128,499
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	-	17	-	-	103.50	-	-	5,465	78,561	5,603	80,558
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	32	3,785	-	-	349.33	8.00	4.00	20,668	102,409	21,180	104,863
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	-	1	-	-	16.17	-	-	912	78,754	935	80,719
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	-	1	-	-	5.17	-	-	289	76,564	296	78,513
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	-	-	-	-	27.33	6.00	-	1,988	79,807	2,037	81,798
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	-	-	-	-	32.42	2.00	-	1,977	79,901	2,025	81,891
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	-	6,174	-	-	108.50	-	-	5,630	83,297	5,770	85,233
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	144	3,074	-	-	229.67	-	-	11,483	83,898	11,773	85,941
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	32	1,066	-	-	83.17	4.00	12.00	4,389	61,446	4,501	62,999
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	-	48	-	-	229.58	1.25	-	11,927	83,468	12,226	85,562
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	56	4,085	-	-	297.17	-	-	14,662	86,955	15,037	89,084
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	-	5,250	-	-	109.33	-	-	5,670	82,413	5,811	84,349
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	-	-	-	-	121.17	-	-	6,417	79,267	6,578	81,287
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	120	3,230	-	-	121.00	8.00	-	5,870	70,900	6,014	72,568
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	-	-	-	-	1.50	-	-	89	82,565	91	84,655
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	152	3,731	-	-	294.17	4.00	-	14,760	86,795	15,138	88,927
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	-	-	-	-	2.00	-	-	94	65,093	96	66,745
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	96	3,925	-	-	325.33	-	4.00	18,711	100,656	19,174	103,061
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	-	-	-	-	36.33	-	-	2,057	79,897	2,107	81,890
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	-	5	-	-	18.50	-	-	868	65,872	890	67,543
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	-	1	-	-	7.92	-	-	393	68,547	403	70,311
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	150	-	-	-	414.83	17.00	-	20,471	85,245	20,872	86,919
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	165	-	-	-	416.25	43.33	-	22,074	86,862	22,507	88,570
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	165	-	-	-	493.33	25.67	-	24,705	89,494	25,188	91,250
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	-	-	-	-	152.33	-	-	5,785	58,173	5,929	59,633
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	-	-	-	-	144.67	5.50	-	6,245	62,913	6,400	64,488
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	15	-	-	-	195.75	8.00	-	9,627	74,266	9,816	75,728
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	540	2,682	-	-	284.75	139.13	-	21,000	85,923	21,409	87,543
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	-	-	-	-	19.00	-	-	1,084	79,865	1,112	81,896
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	16	630	-	-	38.50	-	-	1,562	58,167	1,602	59,648
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	-	-	-	-	19.25	-	-	1,105	79,885	1,132	81,917
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	180	4,142	-	-	234.63	173.50	-	21,802	90,748	22,229	92,448
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	-	-	-	-	135.50	-	-	4,471	50,156	4,597	51,577
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	45	1,519	-	-	161.00	57.00	-	10,396	72,596	10,599	73,989
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	15	1,675	-	-	242.00	80.00	-	15,305	77,631	15,603	79,119
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	90	-	-	-	162.25	9.00	-	7,598	68,323	7,747	69,662
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	48	2,915	-	-	264.00	-	4.00	15,152	96,039	15,530	98,359
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	15	319	-	-	33.00	8.00	-	1,960	64,788	1,999	66,059
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	30	88	-	-	39.00	-	-	1,751	64,362	1,785	65,629
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	77,924	-	79,866
			Total Collective Bargaining Unit		$6,111	$69,609	-	-	21,525.21	3,410.96	24.00	$1,232,012	$6,978,970	$1,257,049	$7,127,053
Non-Collective Bargaining Unit Hourly															
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	$0	$0	-	-	1.00	-	-	$46	$62,164	$47	$64,149
			Total Non-Collective Bargaining Unit Hourly		$0	$0	-	-	1.00	-		$46	$62,164	$47	$64,149

Pennsylvania-American Water Company
Annualized Performance Plan

	2024	2025
Water Operations		
Non-Collective Bargaining Unit Salary	$5,493,746	$5,669,121
Collective Bargaining Unit	1,168,524	1,198,064
Non-Collective Bargaining Unit Hourly	1,149,248	1,185,929
Total	$7,811,518	$8,053,114
Wastewater SSS General Operations		
Non-Collective Bargaining Unit Salary	$125,568	$129,575
Collective Bargaining Unit	39,497	40,597
Non-Collective Bargaining Unit Hourly	201,069	207,487
Total	$366,134	$377,659
Wastewater CSS Operations		
Non-Collective Bargaining Unit Salary	$141,432	$145,944
Collective Bargaining Unit	170,149	173,823
Non-Collective Bargaining Unit Hourly	4,348	4,487
Total	$315,929	$324,254

Pennsylvania-American Water Company - Water Operations
Compensation

								Performance Pay APP & LTPP	
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
Non-Collective Bargaining Unit Salary								
1	240106	CORP-Field Services	Project Manager	1/18/1999	15%	0%	$22,027	$22,729
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001	15%	0%	18,174	18,754
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994	30%	40%	174,211	179,772
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998	12%	0%	11,759	12,133
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993	20%	10%	54,051	55,779
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997	12%	0%	11,087	11,442
7	249160	WILK-Watres	Supvr Production	1/11/1988	12%	0%	9,684	9,994
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993	15%	0%	17,846	18,417
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990	15%	0%	17,591	18,152
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987	12%	0%	11,210	11,566
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983	15%	0%	15,928	16,436
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998	12%	0%	11,269	11,629
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998	12%	0%	8,933	9,218
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992	12%	0%	12,153	12,540
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986	12%	0%	10,041	10,361
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997	12%	0%	9,353	9,652
17	249150	WILK-Other	Sr Supt Production	9/13/1993	15%	0%	16,782	17,319
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998	20%	0%	29,207	30,139
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994	15%	0%	17,631	18,193
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997	15%	0%	16,452	16,976
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995	12%	0%	10,833	11,180
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995	12%	0%	10,830	11,177
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995	12%	0%	10,004	10,323
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995	20%	0%	29,632	30,576
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982	12%	0%	11,796	12,173
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998	12%	0%	13,261	13,686
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989	20%	0%	27,851	28,741
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978	12%	0%	12,088	12,475
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998	12%	0%	12,415	12,812
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989	20%	15%	71,337	73,615
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993	20%	0%	29,890	30,842
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994	15%	0%	16,736	17,269
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984	12%	0%	11,117	11,472
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987	20%	10%	57,246	59,074
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984	15%	0%	17,260	17,812
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991	20%	15%	77,641	80,117
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994	12%	0%	13,042	13,458
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992	12%	0%	12,418	12,814
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986	12%	0%	11,027	11,379
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986	20%	0%	30,909	31,895
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998	12%	0%	11,876	12,255
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998	20%	0%	29,257	30,193
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998	12%	0%	11,472	11,839
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999	12%	0%	12,418	12,814
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999	15%	0%	18,221	18,801
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999	12%	0%	11,586	11,956
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000	20%	0%	35,310	36,437
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000	12%	0%	10,648	10,987
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000	12%	0%	10,601	10,940
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000	12%	0%	10,648	10,987
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001	20%	0%	28,962	29,885
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994	15%	0%	17,928	18,498

Pennsylvania-American Water Company - Water Operations
Compensation

								Performance Pay APP & LTPP	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990	12%	0%	10,830	11,177
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001	15%	0%	17,756	18,324
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999	15%	0%	16,733	17,266
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990	15%	0%	17,544	18,102
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999	20%	0%	27,797	28,683
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992	20%	15%	73,229	75,567
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997	20%	15%	72,137	74,438
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002	20%	0%	29,420	30,360
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003	15%	0%	18,923	19,528
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003	12%	0%	10,284	10,613
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003	15%	0%	16,355	16,876
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003	12%	0%	11,155	11,512
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003	12%	0%	9,902	10,219
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003	15%	0%	18,149	18,729
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004	12%	0%	12,008	12,393
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005	20%	0%	25,384	26,196
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005	12%	0%	13,064	13,481
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005	15%	0%	16,577	17,107
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005	15%	0%	16,742	17,275
72	241151	PITT-Production Haye	Supvr Production	3/16/2005	12%	0%	10,700	11,042
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005	12%	0%	11,764	12,138
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005	12%	0%	11,537	11,906
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005	20%	0%	25,393	26,204
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005	12%	0%	11,933	12,315
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005	12%	0%	11,933	12,315
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005	20%	0%	27,032	27,893
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005	15%	0%	18,052	18,630
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006	12%	0%	9,694	10,004
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006	20%	0%	30,809	31,791
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006	15%	0%	17,166	17,715
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006	12%	0%	10,558	10,895
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006	12%	0%	10,468	10,803
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006	12%	0%	9,655	9,962
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006	12%	0%	9,902	10,219
87	240106	CORP-Field Services	Mgr Opns	1/22/2007	15%	0%	15,647	16,146
88	249150	WILK-Other	Production Asset Administrator	1/22/2007	12%	0%	10,893	11,239
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007	15%	0%	16,711	17,244
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007	12%	0%	9,447	9,749
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009	15%	0%	18,149	18,729
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007	15%	0%	17,731	18,296
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007	12%	0%	11,868	12,248
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007	15%	0%	17,544	18,102
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007	15%	0%	18,876	19,478
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007	15%	0%	15,578	16,074
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008	20%	0%	28,962	29,885
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008	12%	0%	10,149	10,473
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008	15%	0%	18,938	19,544
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008	20%	0%	26,545	27,394
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008	12%	0%	10,813	11,157
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009	12%	0%	10,503	10,838
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009	12%	0%	11,037	11,389
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009	12%	0%	11,826	12,203
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009	20%	0%	30,530	31,504

Pennsylvania-American Water Company - Water Operations
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						Performance Pay APP & LTPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009	30%	40%	159,519	164,615
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009	12%	0%	12,218	12,607
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009	12%	0%	10,303	10,633
109	246501	COAT-Production	Supvr Production	4/12/2010	12%	0%	10,134	10,458
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010	12%	0%	9,902	10,219
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010	15%	0%	14,839	15,313
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010	15%	0%	18,021	18,595
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010	12%	0%	12,113	12,500
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011	15%	0%	14,389	14,848
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011	12%	0%	10,274	10,601
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011	12%	0%	8,938	9,223
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011	12%	0%	10,104	10,426
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011	15%	0%	18,542	19,135
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012	12%	0%	10,578	10,915
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012	15%	0%	18,240	18,823
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012	15%	0%	18,839	19,441
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012	12%	0%	8,951	9,235
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013	20%	0%	25,280	26,087
124	240306	CORP-Field Service	Project Manager	3/4/2013	15%	0%	17,400	17,956
125	243151	NEWC-New Castle	Supvr Production	4/29/2013	12%	0%	10,279	10,606
126	247150	MILT-Prod Other	Supvr Production	5/28/2013	12%	0%	9,849	10,164
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013	12%	0%	10,171	10,496
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013	12%	0%	9,902	10,219
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013	20%	0%	33,862	34,944
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013	15%	0%	15,937	16,446
131	240114	CORP-Engineering	GIS Manager	3/31/2014	15%	0%	14,383	14,842
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014	15%	0%	17,946	18,520
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014	12%	0%	10,760	11,105
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014	12%	0%	10,026	10,346
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014	12%	0%	9,530	9,834
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014	12%	0%	11,045	11,397
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014	12%	0%	8,556	8,828
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014	12%	0%	10,730	11,072
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014	20%	0%	26,241	27,077
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015	12%	0%	10,506	10,840
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015	12%	0%	9,515	9,819
142	240114	CORP-Engineering	GIS Manager	2/2/2015	15%	0%	14,383	14,842
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015	12%	0%	9,318	9,615
144	240114	CORP-Engineering	Engineer	6/22/2015	7%	0%	5,887	6,074
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015	12%	0%	9,742	10,054
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015	15%	0%	15,628	16,127
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015	12%	0%	9,655	9,962
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015	12%	0%	9,689	9,999
149	243301	BUTL-Production	Supvr Production	12/7/2015	12%	0%	10,244	10,571
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015	12%	0%	9,782	10,094
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015	20%	15%	78,274	80,771
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016	12%	0%	9,924	10,241
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016	20%	0%	29,033	29,960
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016	12%	0%	8,791	9,070
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016	12%	0%	10,733	11,075
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016	15%	0%	15,943	16,452
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016	12%	0%	9,610	9,917
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016	12%	0%	9,323	9,620

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								Performance Pay APP & LTPP	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016	12%	0%	11,327	11,689
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016	12%	0%	12,193	12,582
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017	20%	10%	51,056	52,684
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990	12%	0%	10,371	10,703
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016	12%	0%	9,717	10,026
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017	15%	0%	16,059	16,570
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017	20%	0%	26,570	27,419
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017	12%	0%	12,378	12,772
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017	12%	0%	12,170	12,560
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017	15%	0%	16,711	17,244
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017	12%	0%	9,912	10,229
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017	12%	0%	8,496	8,768
171	240114	CORP-Engineering	Planning Engineer	8/14/2017	12%	0%	10,503	10,838
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017	20%	0%	26,200	27,036
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017	12%	0%	11,871	12,250
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011	15%	0%	13,432	13,859
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018	15%	0%	15,198	15,681
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018	12%	0%	12,957	13,371
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018	12%	0%	12,944	13,359
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018	12%	0%	10,141	10,466
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018	12%	0%	12,018	12,403
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018	15%	0%	15,285	15,772
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018	12%	0%	10,551	10,888
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018	12%	0%	12,288	12,680
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018	12%	0%	9,744	10,056
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018	12%	0%	9,562	9,867
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018	20%	0%	26,200	27,036
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018	12%	0%	9,779	10,091
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018	12%	0%	11,327	11,689
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018	12%	0%	10,209	10,536
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018	12%	0%	8,644	8,921
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018	12%	0%	9,847	10,161
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018	12%	0%	11,646	12,018
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018	12%	0%	10,521	10,858
193	240114	CORP-Engineering	Staff Engineer	8/27/2018	12%	0%	9,397	9,697
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018	12%	0%	9,600	9,907
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018	12%	0%	9,590	9,897
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018	50%	75%	406,146	419,120
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018	12%	0%	11,327	11,689
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018	12%	0%	9,530	9,834
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018	12%	0%	9,655	9,962
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018	12%	0%	10,229	10,556
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018	12%	0%	8,701	8,978
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019	12%	0%	11,499	11,866
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019	12%	0%	9,749	10,061
204	240114	CORP-Engineering	Planning Engineer	2/4/2019	12%	0%	12,288	12,680
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019	12%	0%	9,919	10,236
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019	12%	0%	10,663	11,002
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019	12%	0%	9,894	10,211
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019	12%	0%	9,849	10,164
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019	12%	0%	9,902	10,219
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019	12%	0%	10,927	11,277
211	240114	CORP-Engineering	Staff Engineer	5/20/2019	12%	0%	9,637	9,944

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019	12%	0%	10,438	10,770
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019	12%	0%	11,719	12,093
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019	12%	0%	9,655	9,962
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019	12%	0%	8,367	8,634
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019	12%	0%	10,645	10,985
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019	15%	0%	14,698	15,166
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019	12%	0%	12,260	12,652
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019	12%	0%	10,548	10,885
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019	12%	0%	10,458	10,793
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019	12%	0%	10,276	10,603
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019	12%	0%	9,268	9,565
223	240120	CORP-Bus Dev	Vice President of Business Development,	11/4/2019	30%	30%	148,762	153,516
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019	12%	0%	8,923	9,208
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020	12%	0%	9,328	9,625
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020	20%	0%	28,683	29,598
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020	20%	10%	48,273	49,814
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020	15%	0%	17,572	18,133
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020	12%	0%	8,431	8,701
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020	12%	0%	10,798	11,142
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020	12%	0%	8,387	8,654
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020	12%	0%	12,228	12,617
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020	20%	10%	54,182	55,911
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020	12%	0%	8,412	8,681
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020	15%	0%	17,020	17,562
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020	15%	0%	16,533	17,060
237	249151	WILK-Brownell	Supvr Production	8/24/2020	12%	0%	9,283	9,580
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020	15%	0%	17,023	17,566
239	240114	CORP-Engineering	Engineer	10/12/2020	7%	0%	5,003	5,163

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997	12%	0%	9,011	9,298
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020	12%	0%	9,804	10,116
242	240114	CORP-Engineering	Engineer	1/4/2021	7%	0%	5,003	5,163
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020	12%	0%	9,567	9,872
244	241151	PITT-Production Haye	Supvr Production	3/29/2021	12%	0%	10,174	10,498
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021	20%	10%	51,056	52,684
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021	15%	0%	17,572	18,133
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021	12%	0%	9,205	9,500
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021	12%	0%	11,282	11,641
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021	12%	0%	9,717	10,026
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021	12%	0%	10,710	11,052
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021	12%	0%	9,877	10,191
252	240114	CORP-Engineering	Engineer	9/13/2021	7%	0%	4,790	4,943
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021	20%	10%	53,958	55,680
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021	12%	0%	9,507	9,812
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022	12%	0%	9,902	10,219
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022	12%	0%	7,922	8,174
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022	12%	0%	9,902	10,219
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022	12%	0%	9,737	10,049
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	12%	0%	10,089	10,411
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	12%	0%	10,453	10,788
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022	12%	0%	8,664	8,941
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022	15%	0%	17,650	18,215
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022	12%	0%	11,549	11,918
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022	15%	0%	16,848	17,385
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022	12%	0%	10,026	10,346
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022	12%	0%	12,101	12,487
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007	12%	0%	8,526	8,798
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022	12%	0%	9,098	9,387
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995	12%	0%	8,836	9,118
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022	12%	0%	9,442	9,744
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022	12%	0%	8,287	8,551
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022	12%	0%	9,844	10,159
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022	12%	0%	10,478	10,813
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022	12%	0%	10,678	11,020
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022	12%	0%	10,830	11,177
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022	12%	0%	10,521	10,858
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022	12%	0%	10,149	10,473
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022	12%	0%	9,407	9,707
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023	12%	0%	10,398	10,730
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023	12%	0%	9,283	9,580
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023	12%	0%	9,283	9,580
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023	20%	0%	24,756	25,547
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023	12%	0%	11,759	12,133
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023	12%	0%	12,378	12,772
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023	12%	0%	10,830	11,177
286	240114	CORP-Engineering	Engineer	6/26/2023	7%	0%	4,477	4,620
287	240114	CORP-Engineering	Project Manager	6/26/2023	15%	0%	17,020	17,562

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Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
288	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	15%	0%	17,254	17,806
289	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	15%	0%	17,254	17,806
290	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	15%	0%	17,254	17,806
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023	12%	0%	11,819	12,195
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023	12%	0%	11,819	12,195
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Filled	12/31/2023	15%	0%	17,254	17,806
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023	12%	0%	11,819	12,195
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Filled	12/31/2023	12%	0%	11,819	12,195
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Filled	12/31/2023	12%	0%	11,819	12,195
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Filled	12/31/2023	20%	10%	51,829	53,483
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Filled	12/31/2023	20%	0%	28,367	29,274
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023	12%	0%	11,819	12,195
			Total Non-Collective Bargaining Unit Salary				$5,493,746	$5,669,121
Collective Bargaining Unit								
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	3%	0%	$2,278	$2,335
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	3%	0%	2,305	2,363
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	3%	0%	2,264	2,320
4	241103	PITT-Cust Service	Field Service Representative U537P	3/31/1994	3%	0%	2,269	2,326
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	3%	0%	2,335	2,393
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987	3%	0%	2,289	2,346
7	241103	PITT-Cust Service	Field Service Representative U537P	2/2/1988	3%	0%	2,269	2,326
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	3%	0%	2,449	2,510
9	241103	PITT-Cust Service	Field Service Representative U537P	7/5/1983	3%	0%	2,269	2,326
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	2/1/1985	3%	0%	2,332	2,390
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	3%	0%	2,335	2,393
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991	3%	0%	2,295	2,352
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	4/22/1991	3%	0%	2,348	2,406
14	241103	PITT-Cust Service	Field Service Representative U537P	5/6/1985	3%	0%	2,269	2,326
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	3%	0%	2,278	2,323
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	3%	0%	2,274	2,319
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	3%	0%	2,362	2,419
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	3%	0%	2,305	2,363
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	3%	0%	2,289	2,335
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	3%	0%	2,256	2,301
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	3%	0%	2,295	2,340
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	3%	0%	2,347	2,394
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	3%	0%	2,263	2,308
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	3%	0%	2,278	2,323
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	3%	0%	2,293	2,350
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	3%	0%	2,302	2,360
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	3%	0%	2,290	2,335
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	3%	0%	2,263	2,308
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	3%	0%	2,274	2,319
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	3%	0%	2,295	2,340
31	243301	BUTL-Production	Operator U537O	5/4/1998	3%	0%	2,347	2,394
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	3%	0%	2,288	2,333
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	3%	0%	2,272	2,318

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
34	243301	BUTL-Production	Operator U537O	11/2/1984	3%	0%	2,347	2,394
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	3%	0%	2,263	2,308
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	3%	0%	2,256	2,301
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	3%	0%	2,252	2,297
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	3%	0%	2,295	2,340
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	3%	0%	2,278	2,323
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	3%	0%	2,274	2,319
41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	3%	0%	2,263	2,308
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	3%	0%	2,347	2,394
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	3%	0%	2,274	2,319
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	3%	0%	2,290	2,335
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	3%	0%	2,271	2,316
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	3%	0%	2,295	2,341
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	3%	0%	2,295	2,340
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	3%	0%	2,278	2,323
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	3%	0%	2,090	2,152
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	3%	0%	2,076	2,139
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	3%	0%	2,050	2,111
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	3%	0%	2,018	2,079
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	3%	0%	2,063	2,125
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988	3%	0%	2,090	2,152
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987	3%	0%	2,078	2,140
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	3%	0%	1,994	2,054
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	3%	0%	2,090	2,152
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	3%	0%	2,050	2,111
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	3%	0%	2,063	2,125
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	3%	0%	2,075	2,137
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	3%	0%	2,050	2,111
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	3%	0%	2,076	2,139
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	3%	0%	2,076	2,139
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	3%	0%	2,076	2,139
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	3%	0%	1,994	2,054
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	3%	0%	1,994	2,054
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	3%	0%	2,090	2,152
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	3%	0%	2,076	2,139
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	3%	0%	2,076	2,139
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	3%	0%	1,994	2,054
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	3%	0%	2,076	2,139
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	3%	0%	2,050	2,111
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	3%	0%	1,979	2,038
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	3%	0%	2,078	2,140
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	3%	0%	2,076	2,139
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	3%	0%	2,063	2,125
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	3%	0%	2,076	2,139
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	3%	0%	2,090	2,152
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	3%	0%	2,076	2,139
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986	3%	0%	2,050	2,111
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	3%	0%	2,050	2,111
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	3%	0%	2,034	2,095
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	3%	0%	2,076	2,139
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	3%	0%	2,076	2,139
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	3%	0%	2,076	2,139
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	3%	0%	2,018	2,079

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								Performance Pay APP & LTPP	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	3%	0%	2,063	2,125
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	3%	0%	2,076	2,139
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	3%	0%	2,063	2,125
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	3%	0%	2,018	2,079
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	3%	0%	1,968	2,027
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	3%	0%	2,076	2,139
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	3%	0%	2,050	2,111
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	3%	0%	2,063	2,125
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	3%	0%	1,968	2,027
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	3%	0%	2,050	2,111
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	3%	0%	2,078	2,140
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	3%	0%	2,018	2,079
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	3%	0%	2,050	2,111
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	3%	0%	2,034	2,095
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	3%	0%	2,076	2,139
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	3%	0%	2,130	2,184
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	3%	0%	2,283	2,341
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	3%	0%	2,081	2,133
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	3%	0%	2,158	2,212
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	3%	0%	2,074	2,127
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996	3%	0%	2,135	2,189
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	3%	0%	2,135	2,189
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	3%	0%	2,135	2,189
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	3%	0%	2,239	2,295
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	3%	0%	2,081	2,133
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	3%	0%	2,283	2,341
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	3%	0%	2,289	2,346
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	3%	0%	2,289	2,346
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	3%	0%	2,278	2,323
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	3%	0%	2,449	2,510
117	241103	PITT-Cust Service	Field Service Representative U537P	11/18/1998	3%	0%	2,269	2,326
118	244101	INDI-Production	Operator U537O	8/9/1999	3%	0%	2,347	2,394
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	3%	0%	2,279	2,324
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	3%	0%	2,271	2,316
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	3%	0%	2,115	2,168
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	3%	0%	2,271	2,316
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	3%	0%	2,289	2,346
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	3%	0%	2,090	2,152
125	241103	PITT-Cust Service	Field Service Representative U537P	12/28/2001	3%	0%	2,269	2,326
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	3%	0%	2,263	2,308
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	3%	0%	2,347	2,394
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	3%	0%	2,274	2,319
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	3%	0%	2,271	2,316
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	3%	0%	2,135	2,189
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	3%	0%	2,289	2,346
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	3%	0%	2,335	2,393
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	3%	0%	1,994	2,054
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	3%	0%	2,347	2,394
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	3%	0%	2,289	2,335
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002	3%	0%	2,285	2,341
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	3%	0%	2,285	2,341
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	3%	0%	2,288	2,333
139	241103	PITT-Cust Service	Field Service Representative U537P	4/14/2003	3%	0%	2,269	2,326

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount	
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	3%	0%	2,076	2,139	
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	3%	0%	2,335	2,393	
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	3%	0%	1,994	2,054	
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	3%	0%	2,335	2,393	
144	241103	PITT-Cust Service	Field Service Representative U537P	8/29/2003	3%	0%	2,269	2,326	
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	3%	0%	2,256	2,301	
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	3%	0%	2,135	2,189	
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	3%	0%	2,090	2,152	
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	3%	0%	2,331	2,378	
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	3%	0%	2,316	2,373	
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	3%	0%	1,971	2,021	
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005	3%	0%	2,300	2,358	
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	3%	0%	2,268	2,314	
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	3%	0%	2,135	2,189	
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	3%	0%	2,279	2,324	
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	3%	0%	2,268	2,313	
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	3%	0%	2,285	2,341	
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	3%	0%	2,135	2,189	
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	3%	0%	2,256	2,301	
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	3%	0%	2,278	2,323	
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	3%	0%	1,979	2,038	
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005	3%	0%	2,075	2,137	
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	3%	0%	2,081	2,133	
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	3%	0%	2,272	2,318	
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	3%	0%	2,266	2,323	
165	241103	PITT-Cust Service	Field Service Representative U537P	12/19/2005	3%	0%	2,269	2,326	
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	3%	0%	2,263	2,308	
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	3%	0%	2,335	2,393	
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	3%	0%	2,335	2,393	
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	3%	0%	2,296	2,353	
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	3%	0%	2,274	2,319	
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	3%	0%	2,338	2,397	
172	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	3%	0%	2,269	2,326	
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	3%	0%	1,979	2,038	
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	3%	0%	1,979	2,038	
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	3%	0%	2,335	2,393	
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	3%	0%	2,278	2,335	
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	3%	0%	2,295	2,341	
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	3%	0%	2,295	2,341	
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	3%	0%	2,256	2,301	
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	3%	0%	1,994	2,054	
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006	3%	0%	2,075	2,137	
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	3%	0%	2,335	2,393	
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	3%	0%	2,090	2,152	
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	3%	0%	2,347	2,394	
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	3%	0%	2,300	2,358	
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	3%	0%	2,090	2,152	
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	3%	0%	2,256	2,301	
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	3%	0%	2,254	2,311	
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	3%	0%	2,081	2,133	
190	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	3%	0%	2,269	2,326	
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	3%	0%	2,076	2,139	
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	3%	0%	2,256	2,301	

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006	3%	0%	2,278	2,335
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	3%	0%	2,271	2,316
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	3%	0%	2,271	2,316
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	3%	0%	2,076	2,139
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	3%	0%	2,285	2,341
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	3%	0%	2,335	2,393
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	3%	0%	2,288	2,333
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	3%	0%	2,256	2,301
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	3%	0%	1,979	2,038
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	3%	0%	1,979	2,038
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007	3%	0%	1,979	2,038
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	3%	0%	2,090	2,152
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	3%	0%	2,075	2,137
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	3%	0%	2,075	2,137
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	3%	0%	2,121	2,174
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	3%	0%	1,925	1,973
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	3%	0%	2,135	2,189
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	3%	0%	2,090	2,152
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	3%	0%	1,979	2,038
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	3%	0%	2,266	2,323
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	3%	0%	2,335	2,393
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	3%	0%	2,081	2,133
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	3%	0%	2,081	2,133
216	244101	INDI-Production	Operator U537O	8/13/2007	3%	0%	2,347	2,394
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	3%	0%	1,979	2,038
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	3%	0%	2,018	2,079
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	3%	0%	2,076	2,139
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	3%	0%	2,272	2,318
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	3%	0%	2,301	2,359
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007	3%	0%	2,263	2,308
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	3%	0%	2,146	2,201
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	3%	0%	2,285	2,341
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	3%	0%	1,979	2,038
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	3%	0%	2,271	2,316
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007	3%	0%	2,090	2,152
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	3%	0%	2,296	2,353
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	3%	0%	2,075	2,137
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008	3%	0%	2,256	2,301
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	3%	0%	2,179	2,233
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008	3%	0%	2,256	2,301
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	3%	0%	2,090	2,152
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	3%	0%	2,076	2,139
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	3%	0%	2,266	2,323
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	3%	0%	2,115	2,168
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	3%	0%	2,266	2,323
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008	3%	0%	2,192	2,236
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	3%	0%	2,263	2,308
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	3%	0%	2,278	2,335
241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	3%	0%	2,300	2,358
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	3%	0%	2,289	2,346
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	3%	0%	2,316	2,374
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	3%	0%	2,252	2,297
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	3%	0%	2,256	2,301

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	3%	0%	2,272	2,318
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009	3%	0%	2,252	2,297
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	3%	0%	2,272	2,318
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009	3%	0%	2,076	2,139
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	3%	0%	1,971	2,021
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	3%	0%	2,316	2,374
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	3%	0%	2,256	2,301
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	3%	0%	2,256	2,301
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	3%	0%	2,279	2,324
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	3%	0%	2,256	2,301
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009	3%	0%	2,233	2,278
257	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	3%	0%	2,269	2,326
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	3%	0%	2,288	2,333
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	3%	0%	2,271	2,316
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	3%	0%	2,271	2,316
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	3%	0%	2,256	2,301
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	3%	0%	2,256	2,301
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	3%	0%	2,256	2,301
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	3%	0%	2,271	2,316
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	3%	0%	2,256	2,301
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	3%	0%	2,338	2,397
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	3%	0%	2,076	2,139
268	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	3%	0%	2,269	2,326
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	3%	0%	2,090	2,152
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	3%	0%	2,283	2,341
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	3%	0%	2,263	2,308
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	3%	0%	2,320	2,378
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	3%	0%	2,256	2,301
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	3%	0%	2,263	2,308
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	3%	0%	2,262	2,319
276	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	3%	0%	2,269	2,326
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010	3%	0%	2,278	2,335
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	3%	0%	2,271	2,316
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	3%	0%	2,075	2,137
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	3%	0%	2,263	2,308
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	3%	0%	2,268	2,314
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	3%	0%	2,263	2,308
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	3%	0%	2,271	2,316
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	3%	0%	2,256	2,301
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	3%	0%	2,316	2,373
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	3%	0%	2,135	2,189
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	3%	0%	2,256	2,301
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	3%	0%	2,268	2,313
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	3%	0%	2,256	2,301
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	3%	0%	2,256	2,301
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	3%	0%	2,316	2,373
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	3%	0%	2,256	2,301
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	3%	0%	2,233	2,278
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	3%	0%	2,256	2,301
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012	3%	0%	2,075	2,137
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	3%	0%	2,355	2,416
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	3%	0%	1,971	2,021
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	3%	0%	2,263	2,308

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount	
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	3%	0%	2,192	2,236	
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	3%	0%	2,305	2,363	
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013	3%	0%	2,362	2,419	
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	3%	0%	2,256	2,301	
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	3%	0%	2,256	2,301	
304	244101	INDI-Production	Operator U537O	5/13/2013	3%	0%	2,347	2,394	
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	3%	0%	2,256	2,301	
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	3%	0%	2,316	2,374	
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	3%	0%	2,271	2,316	
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	3%	0%	2,278	2,323	
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	3%	0%	2,266	2,323	
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	3%	0%	2,256	2,301	
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	3%	0%	1,979	2,038	
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	3%	0%	2,272	2,318	
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	3%	0%	2,090	2,152	
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	3%	0%	2,066	2,129	
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	3%	0%	2,338	2,397	
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	3%	0%	1,994	2,054	
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	3%	0%	2,075	2,137	
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	3%	0%	2,075	2,137	
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	3%	0%	1,979	2,038	
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014	3%	0%	2,192	2,236	
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	3%	0%	2,283	2,341	
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	3%	0%	2,347	2,394	
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	3%	0%	2,256	2,301	
324	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014	3%	0%	2,269	2,326	
325	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	3%	0%	2,269	2,326	
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	3%	0%	2,256	2,301	
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	3%	0%	2,266	2,323	
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	3%	0%	2,266	2,323	
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	3%	0%	2,266	2,323	
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	3%	0%	2,347	2,394	
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	3%	0%	2,075	2,137	
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	3%	0%	2,076	2,139	
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	3%	0%	2,355	2,416	
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	3%	0%	2,276	2,334	
335	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015	3%	0%	2,206	2,263	
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	3%	0%	2,231	2,288	
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	3%	0%	2,272	2,318	
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016	3%	0%	2,252	2,297	
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	3%	0%	2,075	2,137	
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	3%	0%	2,272	2,318	
341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	3%	0%	2,090	2,152	
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	3%	0%	2,263	2,308	
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	3%	0%	2,263	2,308	
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	3%	0%	2,253	2,311	
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	3%	0%	2,204	2,260	
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	3%	0%	1,994	2,054	
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	3%	0%	2,253	2,311	
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016	3%	0%	2,331	2,378	
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	3%	0%	2,115	2,168	
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	3%	0%	2,121	2,174	
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012	3%	0%	1,939	1,977	

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011	3%	0%	1,939	1,977
353	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	3%	0%	2,206	2,263
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	3%	0%	2,331	2,378
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	3%	0%	2,076	2,139
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	3%	0%	2,256	2,301
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	3%	0%	2,076	2,139
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	3%	0%	2,090	2,152
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	3%	0%	2,075	2,137
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	3%	0%	2,146	2,201
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	3%	0%	1,939	1,977
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	3%	0%	2,197	2,242
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	3%	0%	2,022	2,077
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	3%	0%	2,324	2,385
365	244601	KANE-Production	Operator U537O	11/6/2017	3%	0%	2,284	2,331
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	3%	0%	2,076	2,139
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	3%	0%	2,076	2,139
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	3%	0%	2,082	2,137
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	3%	0%	2,180	2,238
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	3%	0%	2,175	2,232
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	3%	0%	2,193	2,238
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	3%	0%	2,274	2,331
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	3%	0%	2,213	2,271
374	241106	PITT-Field Services	Utility Person U537P	2/27/2018	3%	0%	2,141	2,197
375	245206	YARD-Field Services	Utility A F473Y	3/26/2018	3%	0%	1,999	2,050
376	249160	WILK-Watres	Plant Operator U648S	4/30/2018	3%	0%	2,076	2,139
377	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	3%	0%	2,193	2,238
378	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	3%	0%	1,994	2,054
379	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	3%	0%	2,034	2,095
380	246106	MECH-Field Services	Utility A U648R	5/14/2018	3%	0%	1,963	2,016
381	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	3%	0%	2,075	2,137
382	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	3%	0%	2,075	2,137
383	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	3%	0%	2,180	2,238
384	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	3%	0%	2,090	2,152
385	241106	PITT-Field Services	Utility Person U537P	7/10/2018	3%	0%	2,141	2,197
386	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	3%	0%	2,130	2,175
387	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	3%	0%	2,293	2,353
388	241106	PITT-Field Services	Utility Person U537P	7/24/2018	3%	0%	2,141	2,197
389	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	3%	0%	2,137	2,182
390	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	3%	0%	2,130	2,175
391	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018	3%	0%	1,916	1,969
392	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	3%	0%	2,145	2,202
393	241103	PITT-Cust Service	Field Service Representative U537P	9/4/2018	3%	0%	2,144	2,201
394	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	3%	0%	2,130	2,175
395	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	3%	0%	2,206	2,253
396	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	3%	0%	2,130	2,175
397	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	3%	0%	2,180	2,238
398	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	3%	0%	2,075	2,137
399	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	3%	0%	2,075	2,137
400	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	3%	0%	2,018	2,079
401	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	3%	0%	2,076	2,139
402	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	3%	0%	2,075	2,137
403	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	3%	0%	1,979	2,038
404	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	3%	0%	2,075	2,137

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
405	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	3%	0%	2,075	2,137
406	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	3%	0%	2,075	2,137
407	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	3%	0%	2,068	2,113
408	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	3%	0%	2,068	2,113
409	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	3%	0%	2,076	2,139
410	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	3%	0%	2,068	2,113
411	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	3%	0%	2,076	2,139
412	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	3%	0%	2,075	2,120
413	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	3%	0%	2,075	2,137
414	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	3%	0%	2,068	2,113
415	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	3%	0%	2,107	2,152
416	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	3%	0%	2,150	2,209
417	244601	KANE-Production	Operator U537O	9/9/2019	3%	0%	2,159	2,206
418	243151	NEWC-New Castle	Operator U537O	9/23/2019	3%	0%	2,159	2,206
419	243301	BUTL-Production	Operator U537O	9/23/2019	3%	0%	2,159	2,206
420	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	3%	0%	2,150	2,209
421	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	3%	0%	2,091	2,136
422	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	3%	0%	2,076	2,139
423	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	3%	0%	1,959	2,014
424	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	3%	0%	2,075	2,137
425	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	3%	0%	2,068	2,113
426	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	3%	0%	2,091	2,136
427	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	3%	0%	2,076	2,139
428	244301	CLAR-Production	Operator U537O	4/27/2020	3%	0%	2,159	2,206
429	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	3%	0%	2,018	2,079
430	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	3%	0%	2,222	2,279
431	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	3%	0%	2,128	2,186
432	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	3%	0%	2,066	2,111
433	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	3%	0%	2,075	2,120
434	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	3%	0%	2,043	2,105
435	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	3%	0%	1,939	1,977
436	245206	YARD-Field Services	Utility B F473Y	7/13/2020	3%	0%	1,650	1,692
437	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	3%	0%	2,088	2,146
438	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	3%	0%	1,919	1,982
439	249160	WILK-Watres	Plant Operator U648S	12/15/2020	3%	0%	2,045	2,107
440	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	3%	0%	2,059	2,121
441	249160	WILK-Watres	Plant Operator U648S	12/21/2020	3%	0%	2,045	2,107
442	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	3%	0%	1,959	2,014
443	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	3%	0%	1,959	2,014
444	245206	YARD-Field Services	Utility B F473Y	3/15/2021	3%	0%	1,650	1,692
445	244101	INDI-Production	Operator U537O	3/22/2021	3%	0%	2,097	2,144
446	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	3%	0%	2,028	2,073
447	243152	NEWC-Ellwood	Operator U537O	4/26/2021	3%	0%	2,097	2,144
448	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	3%	0%	2,012	2,074
449	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	3%	0%	1,932	1,991
450	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	3%	0%	2,005	2,050
451	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	3%	0%	2,005	2,050
452	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	3%	0%	2,005	2,050
453	241106	PITT-Field Services	Utility Person U537P	5/24/2021	3%	0%	2,016	2,072
454	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	3%	0%	2,005	2,050
455	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	3%	0%	1,916	1,976
456	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	3%	0%	2,081	2,128
457	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	3%	0%	2,012	2,074

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								Performance Pay APP & LTPP	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
458	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	3%	0%	2,081	2,128
459	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	3%	0%	1,911	1,964
460	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	3%	0%	1,982	2,045
461	244506	WARR-Field Services	Utility Person U537O	8/16/2021	3%	0%	1,942	1,988
462	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	3%	0%	1,942	1,988
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	3%	0%	2,142	2,200
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	3%	0%	1,942	1,988
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	3%	0%	1,981	2,043
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	3%	0%	1,996	2,058
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	3%	0%	1,964	2,021
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	3%	0%	1,911	1,964
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	3%	0%	1,982	2,045
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	3%	0%	1,768	1,817
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	3%	0%	1,877	1,929
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	3%	0%	2,041	2,099
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	3%	0%	2,120	2,181
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	3%	0%	1,885	1,944
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	3%	0%	1,915	1,969
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	3%	0%	1,988	2,044
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	3%	0%	1,942	1,988
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	3%	0%	1,949	1,994
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	3%	0%	1,951	2,013
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	3%	0%	1,903	1,956
481	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	3%	0%	1,971	2,028
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	3%	0%	1,969	2,025
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	3%	0%	1,854	1,913
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	3%	0%	1,951	2,013
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	3%	0%	1,969	2,025
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	3%	0%	1,969	2,025
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	3%	0%	1,949	2,011
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	3%	0%	1,928	1,983
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	3%	0%	1,951	2,013
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022	3%	0%	2,008	2,065
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	3%	0%	1,969	2,025
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	3%	0%	1,969	2,025
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	3%	0%	1,969	2,025
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	3%	0%	2,120	2,181
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	3%	0%	1,888	1,951
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	3%	0%	1,808	1,860
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	3%	0%	1,903	1,956
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	3%	0%	1,980	2,037
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	3%	0%	2,018	2,077
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	3%	0%	1,919	1,982
501	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	3%	0%	1,971	2,028
502	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	3%	0%	1,971	2,028
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	3%	0%	1,918	1,980
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	3%	0%	1,980	2,037
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	3%	0%	1,721	1,770
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	3%	0%	1,833	1,879
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	3%	0%	1,918	1,980
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	3%	0%	1,880	1,925
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	3%	0%	1,918	1,980
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	3%	0%	1,973	2,030

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Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	3%	0%	2,041	2,099
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	3%	0%	2,041	2,099
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	3%	0%	1,880	1,925
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	3%	0%	1,880	1,925
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	3%	0%	1,915	1,969
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	3%	0%	1,880	1,925
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	3%	0%	1,956	2,003
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	3%	0%	2,041	2,099
519	243301	BUTL-Production	Operator U537O	3/20/2023	3%	0%	1,971	2,018
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	3%	0%	1,971	2,018
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	3%	0%	1,887	1,949
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	3%	0%	1,973	2,030
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	3%	0%	1,971	2,018
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	3%	0%	2,008	2,065
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	3%	0%	2,008	2,065
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	3%	0%	1,721	1,770
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	3%	0%	1,888	1,951
528	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	3%	0%	1,971	2,028
529	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	3%	0%	1,971	2,028
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	3%	0%	1,888	1,951
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023	3%	0%	1,880	1,925
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	3%	0%	1,880	1,925
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023	3%	0%	1,887	1,932
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023	3%	0%	2,003	2,060
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	3%	0%	1,887	1,949
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023	3%	0%	1,776	1,829
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023	3%	0%	2,239	2,295
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023	3%	0%	2,159	2,206
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	3%	0%	1,942	1,988
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	3%	0%	1,942	1,988
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	3%	0%	1,880	1,925
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023	3%	0%	1,971	2,018
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023	3%	0%	2,068	2,113
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023	3%	0%	2,008	2,065
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023	3%	0%	2,003	2,060
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023	3%	0%	2,222	2,279
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023	3%	0%	1,888	1,951
			Total Collective Bargaining Unit				$1,168,524	$1,198,064

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Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
Non-Collective Bargaining Unit Hourly								
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	7%	0%	$5,062	$5,224
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	12%	0%	10,792	11,135
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	7%	0%	5,481	5,656
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	7%	0%	5,817	6,003
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	10/3/1988	7%	0%	4,945	5,102
6	246801	LEHP-Production	Plant Operator	2/1/1996	7%	0%	5,069	5,231
7	245706	POCO-Field Services	Crew Leader	9/16/1996	7%	0%	5,082	5,244
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	7%	0%	4,949	5,107
9	245706	POCO-Field Services	Utility Person	7/1/1994	7%	0%	5,009	5,168
10	245501	BNGR-Production	Plant Operator	7/23/1990	7%	0%	5,523	5,700
11	247406	FRCK-Field Services	Utility Person	4/18/1988	7%	0%	5,019	5,180
12	247406	FRCK-Field Services	Utility Person	1/15/1986	7%	0%	5,184	5,349
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	7%	0%	4,673	4,822
14	246201	HSHY-Production	Plant Operator	9/27/1993	7%	0%	4,892	5,048
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	7%	0%	4,826	4,980
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	7%	0%	5,254	5,423
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	7%	0%	6,098	6,292
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990	7%	0%	4,702	4,853
19	247106	MILT-Field Services	Utility Person	11/16/1998	7%	0%	4,841	4,996
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	7%	0%	4,943	5,101
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	7%	0%	4,711	4,861
22	246506	COAT-Field Services	Utility Person	1/26/1998	7%	0%	4,312	4,449
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	7%	0%	5,466	5,640
24	245906	GLEN-Field Services	Utility Person	12/27/1994	7%	0%	5,316	5,485
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999	7%	0%	5,145	5,309
26	245606	NAZA-Field Services	Utility Person	10/4/1993	7%	0%	5,117	5,281
27	245906	GLEN-Field Services	Utility Person	6/20/1983	7%	0%	5,110	5,273
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	7%	0%	5,351	5,522
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	7%	0%	5,291	5,461
30	246401	ROYF-Production	Plant Operator	3/9/1998	7%	0%	5,411	5,583
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987	7%	0%	5,425	5,598
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	7%	0%	5,447	5,621
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	7%	0%	5,162	5,328
34	245606	NAZA-Field Services	Utility Person	11/26/2001	7%	0%	5,167	5,332
35	246801	LEHP-Production	Utility Person	2/26/1990	7%	0%	4,987	5,146
36	246501	COAT-Production	Plant Operator	5/28/2002	7%	0%	5,073	5,235
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	7%	0%	5,231	5,398
38	245906	GLEN-Field Services	Utility Person	1/5/2004	7%	0%	5,063	5,225
39	245606	NAZA-Field Services	Utility Person	2/16/2004	7%	0%	4,958	5,116
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N)	12/1/2004	7%	0%	4,687	4,836
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	7%	0%	4,812	4,965
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	7%	0%	5,016	5,177
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	7%	0%	4,912	5,069
44	245506	BNGR-Field Services	Utility Person	11/7/2005	7%	0%	4,950	5,108
45	245401	SUSQ-Production	Plant Operator	5/15/2006	7%	0%	4,851	5,006
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006	7%	0%	4,974	5,133
47	245606	NAZA-Field Services	Utility Person	12/18/2006	7%	0%	4,996	5,155
48	246206	HSHY-Field Services	Utility Person	3/26/2007	7%	0%	5,100	5,262
49	247106	MILT-Field Services	Utility Person	5/7/2007	7%	0%	4,750	4,902
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	7%	0%	5,307	5,477
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	7%	0%	4,955	5,113

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount	
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007	12%	0%	10,591	10,929	
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	12%	0%	10,175	10,501	
54	247201	PHBG-Production	Operations Specialist	6/2/2008	7%	0%	5,297	5,466	
55	247106	MILT-Field Services	Utility Person	7/21/2008	7%	0%	4,629	4,777	
56	246501	COAT-Production	Plant Operator	10/6/2008	7%	0%	5,059	5,219	
57	247701	BOGGS-Production	Plant Operator	5/4/2009	7%	0%	5,187	5,352	
58	245706	POCO-Field Services	Utility Person	9/28/2009	7%	0%	4,990	5,149	
59	246506	COAT-Field Services	Utility Person	11/2/2009	7%	0%	4,983	5,142	
60	247401	FRCK-Production	Operator	1/25/2010	7%	0%	4,779	4,931	
61	247206	PHBG-Field Services	Utility Person	3/29/2010	7%	0%	5,120	5,284	
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	7%	0%	5,471	5,645	
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	7%	0%	5,724	5,906	
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	7%	0%	5,173	5,338	
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	7%	0%	4,527	4,671	
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	7%	0%	4,855	5,010	
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	7%	0%	5,729	5,912	
68	247206	PHBG-Field Services	Utility Person	11/7/2011	7%	0%	4,936	5,094	
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	7%	0%	4,379	4,519	
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	7%	0%	4,673	4,822	
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	7%	0%	4,711	4,861	
72	249150	WILK-Other	Operations Specialist	3/4/2013	7%	0%	4,674	4,823	
73	247306	BRWK-Field Services	Utility Person	4/29/2013	7%	0%	5,062	5,224	
74	245601	NAZA-Production	Plant Operator	6/27/2013	7%	0%	5,290	5,459	
75	247301	BRWK-Production	Operator	9/16/2013	7%	0%	5,142	5,306	
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	7%	0%	4,924	5,082	
77	247201	PHBG-Production	Plant Operator	2/2/2015	7%	0%	4,961	5,119	
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	7%	0%	4,948	5,105	
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	7%	0%	4,603	4,750	
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	7%	0%	5,015	5,176	
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	7%	0%	4,253	4,389	
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	7%	0%	5,187	5,352	
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	7%	0%	4,516	4,661	
84	245406	SUSQ-Field Services	Utility Person	12/14/2015	7%	0%	4,266	4,402	
85	246506	COAT-Field Services	Utility Person	2/3/2016	7%	0%	4,607	4,755	
86	247103	MILT-Cust Service	Utility Person	3/7/2016	7%	0%	4,606	4,753	
87	246206	HSHY-Field Services	Utility Person	2/29/2016	7%	0%	5,159	5,325	
88	246201	HSHY-Production	Plant Operator	2/29/2016	7%	0%	4,892	5,048	
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	7%	0%	4,978	5,138	
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016	7%	0%	4,892	5,048	
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	12%	0%	12,736	13,142	
92	246206	HSHY-Field Services	Utility Person	6/13/2016	7%	0%	4,665	4,815	
93	246206	HSHY-Field Services	Utility Person	7/11/2016	7%	0%	4,588	4,734	
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	7%	0%	5,290	5,459	
95	245306	ABNG-Field Services	Utility Person	10/24/2016	7%	0%	4,676	4,825	
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	7%	0%	4,969	5,129	
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	7%	0%	4,278	4,414	
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	12%	0%	10,165	10,491	
99	247306	BRWK-Field Services	Utility Person	1/16/2017	7%	0%	4,471	4,614	
100	246506	COAT-Field Services	Utility Person	2/13/2017	7%	0%	4,364	4,503	
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	7%	0%	4,690	4,839	
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015	7%	0%	2,730	2,818	
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	7%	0%	2,705	2,792	
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018	7%	0%	4,348	4,487	

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						Performance Pay APP & LTPP			
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount	
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	7%	0%	4,312	4,449	
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018	7%	0%	4,790	4,943	
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	7%	0%	5,732	5,915	
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	7%	0%	4,775	4,927	
109	246801	LEHP-Production	Utility Person	7/23/2018	7%	0%	4,132	4,263	
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	12%	0%	10,749	11,092	
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	7%	0%	4,984	5,143	
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	7%	0%	3,661	3,778	
113	246501	COAT-Production	Plant Operator	9/24/2018	7%	0%	4,747	4,899	
114	245906	GLEN-Field Services	Utility Person	10/8/2018	7%	0%	4,320	4,458	
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	7%	0%	4,524	4,668	
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	7%	0%	3,921	4,047	
117	246206	HSHY-Field Services	Utility Person	10/8/2018	7%	0%	4,345	4,484	
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	7%	0%	5,018	5,178	
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	7%	0%	4,722	4,873	
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	7%	0%	4,702	4,853	
121	246206	HSHY-Field Services	Utility Person	1/14/2019	7%	0%	4,391	4,531	
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	7%	0%	4,828	4,981	
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	7%	0%	4,921	5,078	
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	12%	0%	12,057	12,443	
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	7%	0%	5,143	5,307	
126	248801	TURB-Production	Plant Operator	7/8/2019	7%	0%	4,566	4,712	
127	240116	CORP-Maint Services	Sr Reliability Engineering Analyst	7/15/2019	12%	0%	12,751	13,157	
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	7%	0%	4,955	5,113	
129	241406	STNW-Field Service	Utility Person	12/5/2018	7%	0%	3,851	3,974	
130	246206	HSHY-Field Services	Utility Person	2/2/2016	7%	0%	4,234	4,369	
131	241406	STNW-Field Service	Utility Person	3/3/1999	7%	0%	3,851	3,974	
132	247201	PHBG-Production	Plant Operator	10/21/2019	7%	0%	4,522	4,667	
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	7%	0%	4,660	4,809	
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	7%	0%	4,752	4,904	
135	247206	PHBG-Field Services	Utility Person	1/27/2020	7%	0%	4,486	4,629	
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	7%	0%	5,545	5,722	
137	241406	STNW-Field Service	Foreperson	1/8/1990	7%	0%	5,259	5,427	
138	246406	ROYF-Field Services	Utility Person	3/23/2020	7%	0%	4,654	4,803	
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	7%	0%	4,709	4,860	
140	246406	ROYF-Field Services	Utility Person	4/13/2020	7%	0%	4,663	4,812	
141	247106	MILT-Field Services	Utility Person	4/13/2020	7%	0%	4,475	4,619	
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	7%	0%	4,706	4,857	
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	7%	0%	4,101	4,233	
144	245701	POCO-Production	Plant Operator	4/27/2020	7%	0%	4,518	4,663	
145	246401	ROYF-Production	Plant Operator	5/4/2020	7%	0%	4,945	5,102	
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	7%	0%	3,764	3,883	
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	12%	0%	9,436	9,737	
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	7%	0%	3,978	4,106	
149	240116	CORP-Maint Services	Reliability Engineering Analyst	6/1/2020	12%	0%	11,112	11,468	
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	7%	0%	4,312	4,449	
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	7%	0%	4,396	4,537	
152	247106	MILT-Field Services	Utility Person	10/19/2020	7%	0%	4,411	4,551	
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	12%	0%	10,679	11,020	
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	7%	0%	4,477	4,620	
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	7%	0%	4,228	4,363	
156	245506	BNGR-Field Services	Utility Person	2/22/2021	7%	0%	4,170	4,303	
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	7%	0%	3,901	4,025	

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount	
158	246801	LEHP-Production	Utility Person	4/12/2021	7%	0%	4,158	4,291	
159	246506	COAT-Field Services	Utility Person	4/13/2021	7%	0%	4,639	4,787	
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	7%	0%	4,239	4,375	
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	7%	0%	5,018	5,178	
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	7%	0%	4,003	4,130	
163	240114	CORP-Engineering	GIS Analyst	6/1/2021	7%	0%	3,920	4,046	
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	7%	0%	4,598	4,744	
165	247206	PHBG-Field Services	Utility Person	7/6/2021	7%	0%	4,661	4,810	
166	245906	GLEN-Field Services	Utility Person	7/12/2021	7%	0%	4,541	4,686	
167	246401	ROYF-Production	Plant Operator	7/19/2021	7%	0%	4,965	5,123	
168	241106	PITT-Field Services	Operations Specialist	9/7/2021	7%	0%	4,553	4,698	
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	7%	0%	4,855	5,010	
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	7%	0%	4,703	4,854	
171	240116	CORP-Maint Services	Reliability Engineering Analyst	10/18/2021	12%	0%	9,561	9,867	
172	246506	COAT-Field Services	Utility Person	11/8/2021	7%	0%	4,230	4,364	
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	12%	0%	11,979	12,363	
174	246506	COAT-Field Services	Utility Person	11/9/2021	7%	0%	4,230	4,364	
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	7%	0%	3,091	3,191	
176	247106	MILT-Field Services	Utility Person	11/22/2021	7%	0%	4,342	4,481	
177	246201	HSHY-Production	Plant Operator	1/10/2022	7%	0%	4,598	4,744	
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	1/10/2022	7%	0%	4,185	4,318	
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	7%	0%	4,658	4,807	
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	7%	0%	4,356	4,494	
181	247206	PHBG-Field Services	Utility Person	2/21/2022	7%	0%	4,516	4,661	
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	2/28/2022	7%	0%	3,584	3,698	
183	245306	ABNG-Field Services	Utility Person	2/21/2022	7%	0%	4,138	4,269	
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	7%	0%	4,449	4,591	
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	7%	0%	3,106	3,205	
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	7%	0%	4,369	4,508	
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	7%	0%	3,939	4,065	
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	7%	0%	4,193	4,328	
189	240306	CORP-Field Service	Operations Specialist	4/25/2022	7%	0%	4,813	4,967	
190	245306	ABNG-Field Services	Utility Person	5/16/2022	7%	0%	4,259	4,395	
191	241401	STNW-Production	Plant Operator	6/6/2022	7%	0%	4,003	4,130	
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	7%	0%	4,945	5,102	
193	245506	BNGR-Field Services	Utility Person	6/20/2022	7%	0%	4,673	4,822	
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	6/20/2022	7%	0%	3,486	3,597	
195	245401	SUSQ-Production	Plant Operator	6/27/2022	7%	0%	4,205	4,339	
196	241401	STNW-Production	Plant Operator	7/5/2022	7%	0%	4,003	4,130	
197	246801	LEHP-Production	Utility Person	7/18/2022	7%	0%	4,050	4,179	
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/18/2022	7%	0%	3,563	3,677	
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	7%	0%	4,433	4,575	
200	247106	MILT-Field Services	Utility Person	7/18/2022	7%	0%	4,367	4,506	
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	7%	0%	4,426	4,568	
202	245501	BNGR-Production	Plant Operator	8/29/2022	7%	0%	4,214	4,348	
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	7%	0%	4,212	4,347	
204	245401	SUSQ-Production	Plant Operator	9/19/2022	7%	0%	4,205	4,339	
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	7%	0%	4,353	4,491	
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	7%	0%	4,598	4,744	
207	245306	ABNG-Field Services	Utility Person	10/10/2022	7%	0%	3,995	4,122	
208	245306	ABNG-Field Services	Utility Person	10/17/2022	7%	0%	3,995	4,122	
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	7%	0%	3,844	3,967	
210	246406	ROYF-Field Services	Utility Person	11/14/2022	7%	0%	4,372	4,510	

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Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
211	246501	COAT-Production	Plant Operator	11/28/2022	7%	0%	4,486	4,629
212	246406	ROYF-Field Services	Utility Person	1/3/2023	7%	0%	4,522	4,667
213	245706	POCO-Field Services	Utility Person	1/3/2023	7%	0%	4,071	4,201
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	7%	0%	3,995	4,122
215	247306	BRWK-Field Services	Utility Person	3/6/2023	7%	0%	4,147	4,280
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	7%	0%	4,410	4,550
217	245606	NAZA-Field Services	Utility Person	3/20/2023	7%	0%	4,410	4,550
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023	7%	0%	4,132	4,263
219	245601	NAZA-Production	Plant Operator	6/5/2023	7%	0%	4,372	4,510
220	245106	NORR-Field Services	Utility Person	6/5/2023	7%	0%	4,522	4,667
221	246406	ROYF-Field Services	Utility Person	6/5/2023	7%	0%	4,297	4,434
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	7%	0%	4,522	4,667
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017	7%	0%	1,749	1,804
224	245106	NORR-Field Services	Operations Specialist - To Be Filled	12/31/2023	7%	0%	5,328	5,497
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	7%	0%	5,328	5,497
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	7%	0%	5,328	5,497
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	7%	0%	5,328	5,497
228	241103	PITT-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	7%	0%	4,242	4,377
229	249103	WILK-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	7%	0%	4,242	4,377
230	241103	PITT-Cust Service	Compliance Representative - To Be Filled	12/31/2023	7%	0%	3,733	3,853
			Total Non-Collective Bargaining Unit Hourly				$1,149,248	$1,185,929

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Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
Non-Collective Bargaining Unit Salary								
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	12%	0%	$1,119	$1,155
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	15%	0%	18,318	18,901
3	246701	COWW-Production	Supvr Production	3/6/2000	12%	0%	11,339	11,701
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	12%	0%	11,881	12,260
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	12%	0%	9,036	9,325
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	12%	0%	11,112	11,467
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	12%	0%	9,655	9,962
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	12%	0%	11,878	12,258
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020	12%	0%	10,606	10,945
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	12%	0%	10,945	11,294
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	12%	0%	9,353	9,652
12	249401	YORKWW-Production	Supvr Production	6/24/2013	12%	0%	10,326	10,655
			Total Non-Collective Bargaining Unit Salary				$125,568	$129,575
Collective Bargaining Unit								
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/4/2008	3%	0%	$1,813	$1,863
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	3%	0%	1,813	1,863
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	3%	0%	1,755	1,805
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/17/1984	3%	0%	1,813	1,863
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	10/26/2009	3%	0%	1,813	1,863
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	5/22/2017	3%	0%	1,813	1,863
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	3%	0%	1,655	1,705
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	3%	0%	1,938	1,988
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	3%	0%	1,938	1,988
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	3%	0%	1,655	1,705
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/7/2009	3%	0%	1,813	1,863
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/20/2018	3%	0%	1,813	1,863
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/3/2020	3%	0%	1,813	1,863
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	4/24/2017	3%	0%	1,813	1,863
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	3%	0%	1,938	1,988
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3%	0%	1,755	1,805
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3%	0%	1,755	1,805
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	3%	0%	1,813	1,863
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	3%	0%	1,755	1,805
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	3%	0%	1,813	1,863
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	3%	0%	1,655	1,705
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	3%	0%	1,755	1,805
			Total Collective Bargaining Unit				$39,497	$40,597
Non-Collective Bargaining Unit Hourly								
1	246701	COWW-Production	Wastewater Operator	9/20/1999	7%	0%	$5,031	$5,192
2	246706	COWW-Field Services	Utility Person	5/30/1995	7%	0%	4,641	4,788
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	7%	0%	5,292	5,462
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	7%	0%	5,263	5,431
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	7%	0%	5,443	5,617
6	246706	COWW-Field Services	Crew Leader	11/10/2003	7%	0%	4,914	5,070
7	246901	LPWW-Production	Plant Operator	6/2/2008	7%	0%	4,988	5,148
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	7%	0%	5,374	5,545
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	7%	0%	5,333	5,503

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Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
10	242601	CLYWW-Production	Plant Operator	7/31/2008	7%	0%	4,915	5,072
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	7%	0%	5,230	5,396
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	7%	0%	4,639	4,787
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	7%	0%	5,786	5,971
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	7%	0%	4,790	4,943
15	246706	COWW-Field Services	Utility Person	3/14/2016	7%	0%	4,491	4,635
16	246901	LPWW-Production	Plant Operator	9/11/2017	7%	0%	4,519	4,664
17	246701	COWW-Production	Wastewater Operator	5/14/2018	7%	0%	4,844	4,999
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	7%	0%	4,332	4,471
19	248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	10/15/2018	7%	0%	4,984	5,143
20	246706	COWW-Field Services	Utility Person	3/25/2019	7%	0%	4,331	4,470
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	7%	0%	5,626	5,805
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	7%	0%	5,443	5,617
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	7%	0%	4,667	4,816
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	7%	0%	4,633	4,781
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	7%	0%	4,674	4,823
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	7%	0%	5,788	5,972
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	7%	0%	4,743	4,895
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	7%	0%	4,674	4,823
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	7%	0%	4,661	4,810
30	248706	Nw Cmbrlnd WW FS	Utility Person	9/20/2021	7%	0%	4,050	4,179
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021	7%	0%	4,293	4,430
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	7%	0%	4,673	4,822
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	7%	0%	4,522	4,667
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	7%	0%	4,274	4,410
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	7%	0%	4,673	4,822
36	248706	Nw Cmbrlnd WW FS	Utility Person	9/6/2022	7%	0%	4,360	4,499
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	7%	0%	4,050	4,179
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	7%	0%	4,448	4,589
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	7%	0%	4,522	4,667
40	246701	COWW-Production	Wastewater Operator	1/3/2023	7%	0%	4,825	4,978
41	248701	Nw Cmbrnlnd WW Prod	Utility Person	2/6/2023	7%	0%	4,109	4,240
42	246706	COWW-Field Services	Utility Person	3/6/2023	7%	0%	4,221	4,356
			Total Non-Collective Bargaining Unit Hourly				$201,069	$207,487

Pennsylvania-American Water Company - Wastewater CSS Operations
Compensation

							Performance Pay APP & LTPP	
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
Non-Collective Bargaining Unit Salary								
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000	12%	0%	$11,839	$12,215
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006	12%	0%	9,582	9,889
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016	12%	0%	8,417	8,686
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002	15%	0%	18,140	18,720
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007	12%	0%	9,530	9,834
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007	12%	0%	10,521	10,858
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008	12%	0%	10,413	10,745
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982	12%	0%	11,497	11,863
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003	15%	0%	16,018	16,530
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015	12%	0%	10,893	11,239
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019	15%	0%	14,770	15,241
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020	12%	0%	9,812	10,124
			Total Non-Collective Bargaining Unit Salary				$141,432	$145,944
Collective Bargaining Unit								
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	3%	0%	$1,939	$1,977
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006	3%	0%	2,095	2,136
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	3%	0%	1,851	1,887
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002	3%	0%	1,939	1,977
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008	3%	0%	1,939	1,977
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016	3%	0%	1,851	1,887
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012	3%	0%	1,851	1,887
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013	3%	0%	1,851	1,887
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990	3%	0%	1,939	1,977
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005	3%	0%	1,939	1,977
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008	3%	0%	1,851	1,887
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007	3%	0%	1,851	1,887
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016	3%	0%	1,851	1,887
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009	3%	0%	1,939	1,977
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005	3%	0%	2,095	2,136
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005	3%	0%	1,851	1,887
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	3%	0%	1,939	1,977
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008	3%	0%	1,939	1,977
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008	3%	0%	1,939	1,977
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009	3%	0%	1,939	1,977
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005	3%	0%	2,095	2,136
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011	3%	0%	1,939	1,977
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987	3%	0%	1,939	1,977
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997	3%	0%	2,095	2,136
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	3%	0%	1,851	1,887
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	3%	0%	1,851	1,887
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011	3%	0%	1,851	1,887
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013	3%	0%	1,851	1,887
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012	3%	0%	1,939	1,977
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009	3%	0%	1,851	1,887
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013	3%	0%	2,095	2,136
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992	3%	0%	1,851	1,887
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016	3%	0%	1,939	1,977
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	3%	0%	1,851	1,887
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012	3%	0%	1,851	1,887
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007	3%	0%	1,851	1,887
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006	3%	0%	1,851	1,887
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997	3%	0%	1,939	1,977
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	3%	0%	1,851	1,887
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006	3%	0%	1,939	1,977
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017	3%	0%	2,095	2,136
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008	3%	0%	1,939	1,977
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016	3%	0%	1,939	1,977
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	3%	0%	1,851	1,887
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005	3%	0%	1,851	1,887

Pennsylvania-American Water Company - Wastewater CSS Operations
Compensation

							Performance Pay APP & LTPP	
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	3%	0%	2,095	2,136
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	3%	0%	2,192	2,248
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	3%	0%	2,338	2,396
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	3%	0%	2,335	2,393
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	3%	0%	2,288	2,346
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	3%	0%	2,335	2,393
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	3%	0%	2,338	2,396
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	3%	0%	2,145	2,199
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	3%	0%	2,076	2,129
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	3%	0%	1,679	1,722
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	3%	0%	2,145	2,199
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	3%	0%	2,045	2,097
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	3%	0%	2,145	2,199
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	3%	0%	2,186	2,241
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	3%	0%	1,850	1,896
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	3%	0%	2,474	2,537
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	3%	0%	2,045	2,097
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	3%	0%	1,950	1,999
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	3%	0%	2,338	2,396
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	3%	0%	2,335	2,393
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	3%	0%	1,950	1,999
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	3%	0%	2,045	2,097
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	3%	0%	1,939	1,977
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	3%	0%	1,939	1,977
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	3%	0%	1,939	1,977
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	3%	0%	1,572	1,611
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	3%	0%	1,700	1,743
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	3%	0%	1,939	1,977
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	3%	0%	1,851	1,887
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	3%	0%	2,363	2,424
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	3%	0%	1,679	1,722
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	3%	0%	2,363	2,424
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	3%	0%	1,939	1,977
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	3%	0%	1,371	1,409
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	3%	0%	1,819	1,855
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	3%	0%	1,819	1,855
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	3%	0%	1,819	1,855
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	3%	0%	2,338	2,396
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	3%	0%	1,875	1,912
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	3%	0%	1,875	1,912
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023	3%	0%	2,338	2,396
			Total Collective Bargaining Unit				$170,149	$173,823
Non-Collective Bargaining Unit Hourly								
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	7%	0%	$4,348	$4,487
			Total Non-Collective Bargaining Unit Hourly				$4,348	$4,487

Pennsylvania-American Water Company
Payroll Taxes

	2024	2025
Water Operations		
Non-Collective Bargaining Unit Salary	$2,723,391	$2,814,509
Collective Bargaining Unit	3,849,282	3,942,266
Non-Collective Bargaining Unit Hourly	1,468,763	1,513,628
Total	$8,041,436	$8,270,403
Wastewater SSS General Operations		
Non-Collective Bargaining Unit Salary	$90,209	$92,997
Collective Bargaining Unit	119,547	122,693
Non-Collective Bargaining Unit Hourly	272,158	280,479
Total	$481,914	$496,169
Wastewater CSS Operations		
Non-Collective Bargaining Unit Salary	$97,867	$100,891
Collective Bargaining Unit	569,297	580,906
Non-Collective Bargaining Unit Hourly	5,348	5,511
Total	$672,512	$687,308

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Salary														
1	240106	CORP-Field Services	Project Manager	1/18/1999	$9,932	$2,374	$218	$42	$12,567	$10,450	$2,449	$218	$42	$13,159
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001	8,375	1,959	218	42	10,594	8,639	2,020	218	42	10,919
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994	9,932	5,948	218	42	16,140	10,450	6,135	218	42	16,845
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998	6,597	1,543	218	42	8,400	6,804	1,591	218	42	8,656
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993	9,932	3,293	218	42	13,485	10,450	3,396	218	42	14,106
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997	6,221	1,455	218	42	7,936	6,416	1,500	218	42	8,177
7	249160	WILK-Watres	Supvr Production	1/11/1988	5,433	1,271	218	42	6,964	5,604	1,311	218	42	7,175
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993	8,224	1,923	218	42	10,407	8,483	1,984	218	42	10,727
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990	8,107	1,896	218	42	10,263	8,361	1,955	218	42	10,577
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987	6,289	1,471	218	42	8,020	6,487	1,517	218	42	8,264
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983	7,340	1,717	218	42	9,317	7,571	1,771	218	42	9,602
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998	6,322	1,478	218	42	8,061	6,521	1,525	218	42	8,307
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998	5,011	1,172	218	42	6,444	5,169	1,209	218	42	6,639
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992	6,818	1,594	218	42	8,672	7,033	1,645	218	42	8,938
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986	5,633	1,317	218	42	7,211	5,811	1,359	218	42	7,430
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997	5,248	1,227	218	42	6,735	5,412	1,266	218	42	6,938
17	249150	WILK-Other	Sr Supt Production	9/13/1993	7,735	1,809	218	42	9,804	7,977	1,866	218	42	10,103
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998	9,932	2,464	218	42	12,656	10,450	2,541	218	42	13,251
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994	8,125	1,900	218	42	10,286	8,381	1,960	218	42	10,601
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997	7,582	1,773	218	42	9,615	7,820	1,829	218	42	9,909
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995	6,078	1,421	218	42	7,759	6,269	1,466	218	42	7,995
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995	6,075	1,421	218	42	7,757	6,267	1,466	218	42	7,993
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995	5,612	1,312	218	42	7,184	5,789	1,354	218	42	7,403
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995	9,932	2,499	218	42	12,692	10,450	2,578	218	42	13,288
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982	6,617	1,548	218	42	8,425	6,826	1,596	218	42	8,683
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998	7,439	1,740	218	42	9,439	7,674	1,795	218	42	9,729
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989	9,932	2,349	218	42	12,542	10,361	2,423	218	42	13,044
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978	6,781	1,586	218	42	8,628	6,995	1,636	218	42	8,891
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998	6,964	1,629	218	42	8,854	7,184	1,680	218	42	9,125
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989	9,932	3,868	218	42	14,061	10,450	3,990	218	42	14,700
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993	9,932	2,521	218	42	12,714	10,450	2,600	218	42	13,310
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994	7,713	1,804	218	42	9,777	7,955	1,860	218	42	10,076
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984	6,238	1,459	218	42	7,957	6,433	1,505	218	42	8,198
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987	9,932	3,487	218	42	13,680	10,450	3,597	218	42	14,307
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984	7,954	1,860	218	42	10,074	8,204	1,919	218	42	10,383
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991	9,932	4,210	218	42	14,403	10,450	4,342	218	42	15,052
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994	7,317	1,711	218	42	9,288	7,547	1,765	218	42	9,572
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992	6,967	1,629	218	42	8,857	7,186	1,681	218	42	9,127
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986	6,186	1,447	218	42	7,893	6,381	1,492	218	42	8,134
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986	9,932	2,607	218	42	12,800	10,450	2,689	218	42	13,399
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998	6,663	1,558	218	42	8,481	6,872	1,607	218	42	8,740
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998	9,932	2,468	218	42	12,661	10,450	2,545	218	42	13,255
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998	6,435	1,505	218	42	8,201	6,638	1,552	218	42	8,451
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999	6,966	1,629	218	42	8,856	7,186	1,681	218	42	9,127
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999	8,396	1,964	218	42	10,620	8,661	2,026	218	42	10,947
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999	6,500	1,520	218	42	8,280	6,705	1,568	218	42	8,533
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000	9,932	2,978	218	42	13,171	10,450	3,072	218	42	13,782
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000	5,974	1,397	218	42	7,631	6,162	1,441	218	42	7,863
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000	5,948	1,391	218	42	7,599	6,134	1,435	218	42	7,829
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000	5,974	1,397	218	42	7,631	6,162	1,441	218	42	7,863
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001	9,932	2,443	218	42	12,636	10,450	2,520	218	42	13,230
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994	8,261	1,932	218	42	10,454	8,522	1,993	218	42	10,775
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990	6,076	1,421	218	42	7,757	6,267	1,466	218	42	7,993
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001	8,183	1,914	218	42	10,357	8,440	1,974	218	42	10,674
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999	7,711	1,803	218	42	9,775	7,954	1,860	218	42	10,074
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990	8,084	1,891	218	42	10,235	8,339	1,950	218	42	10,550
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999	9,932	2,344	218	42	12,537	10,341	2,418	218	42	13,019
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992	9,932	3,971	218	42	14,163	10,450	4,096	218	42	14,806
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997	9,932	3,912	218	42	14,104	10,450	4,035	218	42	14,745
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002	9,932	2,481	218	42	12,674	10,450	2,560	218	42	13,270
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003	8,720	2,039	218	42	11,020	8,995	2,104	218	42	11,359
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003	5,769	1,349	218	42	7,378	5,951	1,392	218	42	7,603
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003	7,537	1,763	218	42	9,560	7,774	1,818	218	42	9,853
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003	6,258	1,464	218	42	7,982	6,455	1,510	218	42	8,225
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003	5,555	1,299	218	42	7,115	5,730	1,340	218	42	7,330
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003	8,363	1,956	218	42	10,580	8,627	2,018	218	42	10,905
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004	6,736	1,575	218	42	8,572	6,949	1,625	218	42	8,834
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005	9,155	2,141	218	42	11,557	9,443	2,208	218	42	11,912
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005	7,329	1,714	218	42	9,303	7,560	1,768	218	42	9,588
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005	7,638	1,786	218	42	9,685	7,879	1,843	218	42	9,983
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005	7,715	1,804	218	42	9,779	7,958	1,861	218	42	10,079
72	241151	PITT-Production Haye	Supvr Production	3/16/2005	6,003	1,404	218	42	7,668	6,192	1,448	218	42	7,900
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005	6,600	1,543	218	42	8,404	6,807	1,592	218	42	8,660
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005	6,472	1,514	218	42	8,246	6,676	1,561	218	42	8,497
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005	9,157	2,142	218	42	11,559	9,446	2,209	218	42	11,916
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005	6,695	1,566	218	42	8,521	6,905	1,615	218	42	8,781
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005	6,695	1,566	218	42	8,521	6,905	1,615	218	42	8,781
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005	9,749	2,280	218	42	12,290	10,056	2,352	218	42	12,668
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005	8,319	1,946	218	42	10,525	8,581	2,007	218	42	10,848
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006	5,438	1,272	218	42	6,970	5,610	1,312	218	42	7,182
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006	9,932	2,599	218	42	12,791	10,450	2,680	218	42	13,390
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006	7,911	1,850	218	42	10,022	8,160	1,908	218	42	10,328
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006	5,923	1,385	218	42	7,568	6,110	1,429	218	42	7,799
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006	5,872	1,373	218	42	7,506	6,058	1,417	218	42	7,735

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					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
Non-Collective Bargaining Unit Salary									
1	240106	CORP-Field Services	Project Manager	1/18/1999	$10,804	$2,527	$218	$42	$13,591
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001	8,915	2,085	218	42	11,260
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994	10,994	6,331	218	42	17,585
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998	7,021	1,642	218	42	8,923
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993	10,994	3,505	218	42	14,759
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997	6,621	1,548	218	42	8,430
7	249160	WILK-Watres	Supvr Production	1/11/1988	5,783	1,353	218	42	7,396
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993	8,754	2,047	218	42	11,062
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990	8,628	2,018	218	42	10,907
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987	6,693	1,565	218	42	8,519
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983	7,813	1,827	218	42	9,900
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998	6,729	1,574	218	42	8,563
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998	5,334	1,247	218	42	6,842
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992	7,256	1,697	218	42	9,214
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986	5,996	1,402	218	42	7,658
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997	5,585	1,306	218	42	7,152
17	249150	WILK-Other	Sr Supt Production	9/13/1993	8,232	1,925	218	42	10,418
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998	10,994	2,622	218	42	13,876
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994	8,648	2,022	218	42	10,930
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997	8,069	1,887	218	42	10,217
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995	6,469	1,513	218	42	8,243
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995	6,468	1,513	218	42	8,241
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995	5,974	1,397	218	42	7,631
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995	10,994	2,660	218	42	13,914
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982	7,044	1,647	218	42	8,952
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998	7,919	1,852	218	42	10,032
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989	10,692	2,500	218	42	13,453
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978	7,219	1,688	218	42	9,167
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998	7,414	1,734	218	42	9,408
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989	10,994	4,117	218	42	15,371
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993	10,994	2,683	218	42	13,938
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994	8,209	1,920	218	42	10,389
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984	6,638	1,552	218	42	8,451
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987	10,994	3,712	218	42	14,966
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984	8,467	1,980	218	42	10,707
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991	10,994	4,481	218	42	15,735
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994	7,788	1,821	218	42	9,870
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992	7,415	1,734	218	42	9,410
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986	6,585	1,540	218	42	8,385
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986	10,994	2,775	218	42	14,029
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998	7,092	1,659	218	42	9,011
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998	10,994	2,627	218	42	13,881
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998	6,851	1,602	218	42	8,713
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999	7,415	1,734	218	42	9,410
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999	8,937	2,090	218	42	11,287
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999	6,918	1,618	218	42	8,797
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000	10,994	3,170	218	42	14,424
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000	6,358	1,487	218	42	8,105
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000	6,331	1,481	218	42	8,071
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000	6,358	1,487	218	42	8,105
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001	10,994	2,600	218	42	13,854
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994	8,793	2,056	218	42	11,110
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990	6,468	1,513	218	42	8,241
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001	8,710	2,037	218	42	11,007
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999	8,207	1,919	218	42	10,387
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990	8,605	2,012	218	42	10,877
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999	10,670	2,495	218	42	13,426
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992	10,994	4,226	218	42	15,481
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997	10,994	4,163	218	42	15,417
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002	10,994	2,641	218	42	13,896
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003	9,282	2,171	218	42	11,714
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003	6,141	1,436	218	42	7,838
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003	8,022	1,876	218	42	10,158
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003	6,661	1,558	218	42	8,480
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003	5,913	1,383	218	42	7,556
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003	8,903	2,082	218	42	11,245
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004	7,171	1,677	218	42	9,109
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005	9,745	2,279	218	42	12,284
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005	7,801	1,824	218	42	9,886
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005	8,132	1,902	218	42	10,294
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005	8,212	1,920	218	42	10,392
72	241151	PITT-Production Haye	Supvr Production	3/16/2005	6,390	1,494	218	42	8,145
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005	7,024	1,643	218	42	8,927
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005	6,890	1,611	218	42	8,761
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005	9,748	2,280	218	42	12,288
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005	7,126	1,667	218	42	9,053
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005	7,126	1,667	218	42	9,053
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005	10,376	2,427	218	42	13,063
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005	8,855	2,071	218	42	11,187
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006	5,789	1,354	218	42	7,403
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006	10,994	2,766	218	42	14,020
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006	8,421	1,969	218	42	10,650
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006	6,305	1,474	218	42	8,039
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006	6,251	1,462	218	42	7,973

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Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006	5,416	1,267	218	42	6,943	5,587	1,307	218	42	7,154
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006	5,555	1,299	218	42	7,115	5,730	1,340	218	42	7,330
87	240106	CORP-Field Services	Mgr Opns	1/22/2007	7,211	1,686	218	42	9,158	7,437	1,739	218	42	9,437
88	249150	WILK-Other	Production Asset Administrator	1/22/2007	6,111	1,429	218	42	7,800	6,303	1,474	218	42	8,038
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007	7,700	1,801	218	42	9,762	7,943	1,858	218	42	10,061
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007	5,300	1,239	218	42	6,800	5,467	1,279	218	42	7,006
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009	8,363	1,956	218	42	10,580	8,627	2,018	218	42	10,905
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007	8,171	1,911	218	42	10,342	8,428	1,971	218	42	10,660
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007	6,658	1,557	218	42	8,476	6,868	1,606	218	42	8,734
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007	8,085	1,891	218	42	10,237	8,339	1,950	218	42	10,550
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007	8,699	2,034	218	42	10,993	8,972	2,098	218	42	11,331
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007	7,179	1,679	218	42	9,118	7,405	1,732	218	42	9,397
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008	9,932	2,443	218	42	12,636	10,450	2,520	218	42	13,230
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008	5,694	1,332	218	42	7,286	5,873	1,373	218	42	7,507
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008	8,727	2,041	218	42	11,028	9,002	2,105	218	42	11,368
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008	9,573	2,239	218	42	12,072	9,875	2,309	218	42	12,444
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008	6,066	1,419	218	42	7,745	6,257	1,463	218	42	7,981
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009	5,893	1,378	218	42	7,532	6,078	1,421	218	42	7,760
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009	6,192	1,448	218	42	7,900	6,387	1,494	218	42	8,141
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009	6,635	1,552	218	42	8,447	6,843	1,600	218	42	8,704
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009	9,932	2,575	218	42	12,768	10,450	2,656	218	42	13,366
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009	9,932	5,446	218	42	15,639	10,450	5,617	218	42	16,327
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009	6,854	1,603	218	42	8,717	7,070	1,653	218	42	8,984
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009	5,780	1,352	218	42	7,392	5,962	1,394	218	42	7,617
109	246501	COAT-Production	Supvr Production	4/12/2010	5,685	1,330	218	42	7,275	5,864	1,371	218	42	7,496
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010	5,555	1,299	218	42	7,115	5,730	1,340	218	42	7,330
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010	6,838	1,599	218	42	8,698	7,053	1,650	218	42	8,963
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010	8,304	1,942	218	42	10,507	8,566	2,003	218	42	10,830
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010	6,795	1,589	218	42	8,644	7,009	1,639	218	42	8,909
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011	6,631	1,551	218	42	8,442	6,840	1,600	218	42	8,700
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011	5,764	1,348	218	42	7,372	5,945	1,390	218	42	7,596
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011	5,014	1,173	218	42	6,447	5,172	1,210	218	42	6,642
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011	5,668	1,326	218	42	7,254	5,847	1,367	218	42	7,474
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011	8,545	1,999	218	42	10,804	8,814	2,061	218	42	11,135
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012	5,935	1,388	218	42	7,583	6,121	1,432	218	42	7,813
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012	8,405	1,966	218	42	10,632	8,670	2,028	218	42	10,958
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012	8,682	2,030	218	42	10,973	8,955	2,094	218	42	11,309
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012	5,021	1,174	218	42	6,456	5,179	1,211	218	42	6,651
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013	9,117	2,132	218	42	11,510	9,404	2,199	218	42	11,864
124	240306	CORP-Field Service	Project Manager	3/4/2013	8,019	1,875	218	42	10,155	8,271	1,934	218	42	10,466
125	243151	NEWC-New Castle	Supvr Production	4/29/2013	5,766	1,349	218	42	7,375	5,948	1,391	218	42	7,599
126	247150	MILT-Prod Other	Supvr Production	5/28/2013	5,525	1,292	218	42	7,077	5,699	1,333	218	42	7,293
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013	5,707	1,335	218	42	7,302	5,886	1,376	218	42	7,523
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013	5,555	1,299	218	42	7,115	5,730	1,340	218	42	7,330
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013	9,932	2,856	218	42	13,049	10,450	2,946	218	42	13,656
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013	7,344	1,718	218	42	9,322	7,575	1,772	218	42	9,607
131	240114	CORP-Engineering	GIS Manager	3/31/2014	6,629	1,550	218	42	8,439	6,837	1,599	218	42	8,696
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014	8,271	1,934	218	42	10,465	8,530	1,995	218	42	10,786
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014	6,037	1,412	218	42	7,709	6,227	1,456	218	42	7,943
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014	5,625	1,315	218	42	7,200	5,802	1,357	218	42	7,419
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014	5,347	1,250	218	42	6,858	5,515	1,290	218	42	7,065
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014	6,196	1,449	218	42	7,905	6,391	1,495	218	42	8,146
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014	4,801	1,123	218	42	6,184	4,951	1,158	218	42	6,370
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014	6,020	1,408	218	42	7,689	6,209	1,452	218	42	7,922
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014	9,464	2,213	218	42	11,938	9,762	2,283	218	42	12,305
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015	5,894	1,379	218	42	7,533	6,079	1,422	218	42	7,761
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015	5,337	1,248	218	42	6,846	5,506	1,288	218	42	7,054
142	240114	CORP-Engineering	GIS Manager	2/2/2015	6,629	1,550	218	42	8,439	6,837	1,599	218	42	8,696
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015	5,227	1,222	218	42	6,710	5,392	1,261	218	42	6,913
144	240114	CORP-Engineering	Engineer	6/22/2015	5,408	1,265	218	42	6,933	5,579	1,305	218	42	7,144
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015	5,465	1,278	218	42	7,003	5,637	1,318	218	42	7,216
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015	7,201	1,684	218	42	9,146	7,429	1,737	218	42	9,426
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015	5,416	1,267	218	42	6,943	5,587	1,307	218	42	7,154
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015	5,436	1,271	218	42	6,967	5,607	1,311	218	42	7,179
149	243301	BUTL-Production	Supvr Production	12/7/2015	5,746	1,344	218	42	7,351	5,928	1,386	218	42	7,574
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015	5,488	1,284	218	42	7,032	5,660	1,324	218	42	7,245
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015	9,932	4,244	218	42	14,437	10,450	4,378	218	42	15,088
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016	5,567	1,302	218	42	7,130	5,743	1,343	218	42	7,346
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016	9,932	2,449	218	42	12,642	10,450	2,526	218	42	13,236
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016	4,932	1,153	218	42	6,346	5,087	1,190	218	42	6,537
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016	6,021	1,408	218	42	7,689	6,211	1,453	218	42	7,924
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016	7,347	1,718	218	42	9,325	7,578	1,772	218	42	9,611
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016	5,392	1,261	218	42	6,913	5,561	1,301	218	42	7,122
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016	5,231	1,223	218	42	6,714	5,395	1,262	218	42	6,917
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016	6,355	1,486	218	42	8,102	6,554	1,533	218	42	8,348
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016	6,840	1,600	218	42	8,700	7,056	1,650	218	42	8,966
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017	9,932	3,110	218	42	13,303	10,450	3,208	218	42	13,918
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990	5,818	1,361	218	42	7,438	6,001	1,404	218	42	7,665
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016	5,452	1,275	218	42	6,987	5,623	1,315	218	42	7,198
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017	7,401	1,731	218	42	9,392	7,633	1,785	218	42	9,679
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017	9,582	2,241	218	42	12,084	9,884	2,312	218	42	12,456
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017	6,944	1,624	218	42	8,828	7,163	1,675	218	42	9,098
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017	6,828	1,597	218	42	8,685	7,043	1,647	218	42	8,950
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017	7,700	1,801	218	42	9,762	7,943	1,858	218	42	10,061
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017	5,560	1,300	218	42	7,121	5,736	1,341	218	42	7,337

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Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006	5,764	1,348	218	42	7,373
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006	5,913	1,383	218	42	7,556
87	240106	CORP-Field Services	Mgr Opns	1/22/2007	7,675	1,795	218	42	9,730
88	249150	WILK-Other	Production Asset Administrator	1/22/2007	6,504	1,521	218	42	8,285
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007	8,197	1,917	218	42	10,374
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007	5,642	1,319	218	42	7,221
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009	8,903	2,082	218	42	11,245
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007	8,697	2,034	218	42	10,991
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007	7,087	1,658	218	42	9,005
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007	8,605	2,012	218	42	10,877
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007	9,259	2,165	218	42	11,684
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007	7,641	1,787	218	42	9,688
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008	10,994	2,600	218	42	13,854
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008	6,060	1,417	218	42	7,738
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008	9,290	2,173	218	42	11,723
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008	10,190	2,383	218	42	12,834
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008	6,456	1,510	218	42	8,227
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009	6,271	1,467	218	42	7,998
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009	6,591	1,541	218	42	8,392
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009	7,061	1,651	218	42	8,973
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009	10,994	2,741	218	42	13,995
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009	10,994	5,797	218	42	17,051
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009	7,295	1,706	218	42	9,262
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009	6,153	1,439	218	42	7,852
109	246501	COAT-Production	Supvr Production	4/12/2010	6,052	1,415	218	42	7,728
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010	5,913	1,383	218	42	7,556
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010	7,279	1,702	218	42	9,241
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010	8,839	2,067	218	42	11,166
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010	7,233	1,692	218	42	9,185
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011	7,058	1,651	218	42	8,969
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011	6,134	1,435	218	42	7,829
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011	5,337	1,248	218	42	6,845
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011	6,033	1,411	218	42	7,704
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011	9,095	2,127	218	42	11,483
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012	6,316	1,477	218	42	8,054
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012	8,947	2,092	218	42	11,300
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012	9,241	2,161	218	42	11,662
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012	5,344	1,250	218	42	6,854
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013	9,704	2,270	218	42	12,234
124	240306	CORP-Field Service	Project Manager	3/4/2013	8,535	1,996	218	42	10,791
125	243151	NEWC-New Castle	Supvr Production	4/29/2013	6,137	1,435	218	42	7,833
126	247150	MILT-Prod Other	Supvr Production	5/28/2013	5,881	1,375	218	42	7,517
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013	6,074	1,420	218	42	7,754
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013	5,913	1,383	218	42	7,556
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013	10,994	3,040	218	42	14,294
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013	7,817	1,828	218	42	9,906
131	240114	CORP-Engineering	GIS Manager	3/31/2014	7,055	1,650	218	42	8,965
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014	8,803	2,059	218	42	11,122
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014	6,426	1,503	218	42	8,189
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014	5,987	1,400	218	42	7,647
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014	5,691	1,331	218	42	7,282
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014	6,595	1,542	218	42	8,398
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014	5,109	1,195	218	42	6,564
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014	6,407	1,498	218	42	8,166
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014	10,073	2,356	218	42	12,689
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015	6,273	1,467	218	42	8,000
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015	5,682	1,329	218	42	7,271
142	240114	CORP-Engineering	GIS Manager	2/2/2015	7,055	1,650	218	42	8,965
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015	5,564	1,301	218	42	7,125
144	240114	CORP-Engineering	Engineer	6/22/2015	5,757	1,346	218	42	7,363
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015	5,818	1,361	218	42	7,439
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015	7,666	1,793	218	42	9,719
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015	5,764	1,348	218	42	7,373
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015	5,786	1,353	218	42	7,400
149	243301	BUTL-Production	Supvr Production	12/7/2015	6,117	1,431	218	42	7,808
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015	5,841	1,366	218	42	7,467
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015	10,994	4,517	218	42	15,772
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016	5,926	1,386	218	42	7,572
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016	10,994	2,607	218	42	13,861
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016	5,249	1,228	218	42	6,737
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016	6,409	1,499	218	42	8,168
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016	7,820	1,829	218	42	9,909
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016	5,738	1,342	218	42	7,341
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016	5,567	1,302	218	42	7,129
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016	6,764	1,582	218	42	8,606
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016	7,281	1,703	218	42	9,244
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017	10,994	3,310	218	42	14,565
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990	6,193	1,448	218	42	7,902
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016	5,802	1,357	218	42	7,419
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017	7,876	1,842	218	42	9,979
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017	10,200	2,385	218	42	12,845
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017	7,391	1,728	218	42	9,380
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017	7,268	1,700	218	42	9,228
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017	8,197	1,917	218	42	10,374
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017	5,919	1,384	218	42	7,564

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Payroll Taxes

					2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017	4,766	1,115	218	42	6,141	4,917	1,150	218	42	6,327
171	240114	CORP-Engineering	Planning Engineer	8/14/2017	5,892	1,378	218	42	7,531	6,078	1,421	218	42	7,760
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017	9,449	2,210	218	42	11,919	9,746	2,279	218	42	12,286
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017	6,660	1,558	218	42	8,478	6,869	1,607	218	42	8,736
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011	6,190	1,448	218	42	7,898	6,385	1,493	218	42	8,138
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018	7,004	1,638	218	42	8,902	7,224	1,689	218	42	9,174
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018	7,269	1,700	218	42	9,230	7,498	1,753	218	42	9,511
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018	7,262	1,698	218	42	9,221	7,490	1,752	218	42	9,503
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018	5,689	1,330	218	42	7,280	5,868	1,372	218	42	7,501
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018	6,742	1,577	218	42	8,579	6,955	1,626	218	42	8,841
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018	7,044	1,647	218	42	8,952	7,265	1,699	218	42	9,225
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018	5,919	1,384	218	42	7,563	6,105	1,428	218	42	7,793
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018	6,893	1,612	218	42	8,766	7,111	1,663	218	42	9,034
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018	5,467	1,279	218	42	7,006	5,639	1,319	218	42	7,218
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018	5,364	1,255	218	42	6,879	5,533	1,294	218	42	7,088
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018	9,449	2,210	218	42	11,919	9,746	2,279	218	42	12,286
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018	5,486	1,283	218	42	7,029	5,659	1,323	218	42	7,243
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018	6,355	1,486	218	42	8,102	6,554	1,533	218	42	8,348
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018	5,728	1,340	218	42	7,328	5,907	1,382	218	42	7,549
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018	4,849	1,134	218	42	6,243	5,002	1,170	218	42	6,432
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018	5,525	1,292	218	42	7,077	5,698	1,333	218	42	7,291
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018	6,534	1,528	218	42	8,323	6,739	1,576	218	42	8,576
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018	5,902	1,380	218	42	7,543	6,088	1,424	218	42	7,772
193	240114	CORP-Engineering	Staff Engineer	8/27/2018	5,272	1,233	218	42	6,765	5,438	1,272	218	42	6,970
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018	5,386	1,260	218	42	6,906	5,555	1,299	218	42	7,114
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018	5,379	1,258	218	42	6,898	5,549	1,298	218	42	7,107
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018	9,932	6,851	218	42	17,044	10,450	10,600	218	42	21,310
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018	6,355	1,486	218	42	8,102	6,554	1,533	218	42	8,348
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018	5,347	1,250	218	42	6,857	5,515	1,290	218	42	7,065
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018	5,417	1,267	218	42	6,944	5,587	1,307	218	42	7,154
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018	5,739	1,342	218	42	7,341	5,919	1,384	218	42	7,564
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018	4,881	1,142	218	42	6,283	5,035	1,178	218	42	6,473
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019	6,452	1,509	218	42	8,221	6,654	1,556	218	42	8,471
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019	5,470	1,279	218	42	7,010	5,642	1,319	218	42	7,221
204	240114	CORP-Engineering	Planning Engineer	2/4/2019	6,894	1,612	218	42	8,766	7,111	1,663	218	42	9,034
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019	5,565	1,302	218	42	7,127	5,740	1,342	218	42	7,343
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019	5,983	1,399	218	42	7,642	6,170	1,443	218	42	7,874
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019	5,551	1,298	218	42	7,109	5,725	1,339	218	42	7,325
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019	5,526	1,292	218	42	7,078	5,699	1,333	218	42	7,293
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019	5,555	1,299	218	42	7,115	5,730	1,340	218	42	7,330
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019	6,131	1,434	218	42	7,825	6,323	1,479	218	42	8,063
211	240114	CORP-Engineering	Staff Engineer	5/20/2019	5,406	1,264	218	42	6,931	5,577	1,304	218	42	7,141
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019	5,855	1,369	218	42	7,485	6,040	1,413	218	42	7,713
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019	6,574	1,537	218	42	8,372	6,781	1,586	218	42	8,628
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019	5,416	1,267	218	42	6,943	5,587	1,307	218	42	7,154
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019	4,694	1,098	218	42	6,052	4,841	1,132	218	42	6,234
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019	5,972	1,397	218	42	7,629	6,160	1,441	218	42	7,861
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019	6,774	1,584	218	42	8,618	6,987	1,634	218	42	8,881
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019	6,878	1,609	218	42	8,747	7,095	1,659	218	42	9,014
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019	5,917	1,384	218	42	7,562	6,104	1,428	218	42	7,792
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019	5,867	1,372	218	42	7,500	6,052	1,415	218	42	7,728
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019	5,765	1,348	218	42	7,374	5,946	1,391	218	42	7,597
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019	5,200	1,216	218	42	6,676	5,363	1,254	218	42	6,877
223	240120	CORP-Bus Dev	Vice President of Business Development,	11/4/2019	9,932	5,577	218	42	15,769	10,450	5,752	218	42	16,462
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019	5,007	1,171	218	42	6,438	5,164	1,208	218	42	6,631
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020	5,232	1,224	218	42	6,716	5,398	1,262	218	42	6,920
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020	9,932	2,419	218	42	12,612	10,450	2,495	218	42	13,205
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020	9,932	2,941	218	42	13,133	10,450	3,033	218	42	13,743
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020	8,097	1,894	218	42	10,251	8,352	1,953	218	42	10,566
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020	4,731	1,106	218	42	6,098	4,879	1,141	218	42	6,280
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020	6,057	1,417	218	42	7,734	6,248	1,461	218	42	7,970
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020	4,705	1,100	218	42	6,065	4,853	1,135	218	42	6,248
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020	6,861	1,605	218	42	8,726	7,076	1,655	218	42	8,991
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020	9,932	3,301	218	42	13,493	10,450	3,404	218	42	14,114
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020	4,718	1,103	218	42	6,082	4,867	1,138	218	42	6,266
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020	7,843	1,834	218	42	9,938	8,090	1,892	218	42	10,242
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020	7,619	1,782	218	42	9,661	7,859	1,838	218	42	9,957
237	249151	WILK-Brownell	Supvr Production	8/24/2020	5,208	1,218	218	42	6,686	5,372	1,256	218	42	6,888
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020	7,845	1,835	218	42	9,940	8,091	1,892	218	42	10,244
239	240114	CORP-Engineering	Engineer	10/12/2020	4,597	1,075	218	42	5,932	4,741	1,109	218	42	6,110
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997	5,055	1,182	218	42	6,498	5,214	1,219	218	42	6,694
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020	5,501	1,286	218	42	7,048	5,673	1,327	218	42	7,261
242	240114	CORP-Engineering	Engineer	1/4/2021	4,597	1,075	218	42	5,932	4,741	1,109	218	42	6,110
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020	5,368	1,255	218	42	6,883	5,536	1,295	218	42	7,091
244	241151	PITT-Production Haye	Supvr Production	3/29/2021	5,708	1,335	218	42	7,303	5,887	1,377	218	42	7,524
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021	9,932	3,110	218	42	13,303	10,450	3,208	218	42	13,918
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021	8,097	1,894	218	42	10,251	8,352	1,953	218	42	10,566
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021	5,165	1,208	218	42	6,633	5,327	1,246	218	42	6,833
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021	6,329	1,480	218	42	8,069	6,528	1,527	218	42	8,316
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021	5,452	1,275	218	42	6,987	5,623	1,315	218	42	7,198
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021	6,008	1,405	218	42	7,674	6,198	1,449	218	42	7,907
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021	5,541	1,296	218	42	7,098	5,715	1,337	218	42	7,312
252	240114	CORP-Engineering	Engineer	9/13/2021	4,401	1,029	218	42	5,691	4,540	1,062	218	42	5,862
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021	9,932	3,287	218	42	13,480	10,450	3,390	218	42	14,100
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021	5,334	1,247	218	42	6,841	5,502	1,287	218	42	7,049

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017	5,074	1,187	218	42	6,521
171	240114	CORP-Engineering	Planning Engineer	8/14/2017	6,271	1,467	218	42	7,998
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017	10,057	2,352	218	42	12,670
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017	7,089	1,658	218	42	9,007
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011	6,588	1,541	218	42	8,389
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018	7,454	1,743	218	42	9,457
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018	7,737	1,810	218	42	9,807
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018	7,730	1,808	218	42	9,798
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018	6,056	1,416	218	42	7,733
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018	7,177	1,678	218	42	9,116
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018	7,497	1,753	218	42	9,510
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018	6,300	1,473	218	42	8,034
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018	7,337	1,716	218	42	9,314
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018	5,819	1,361	218	42	7,441
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018	5,710	1,335	218	42	7,305
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018	10,057	2,352	218	42	12,670
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018	5,839	1,366	218	42	7,466
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018	6,764	1,582	218	42	8,606
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018	6,097	1,426	218	42	7,783
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018	5,162	1,207	218	42	6,630
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018	5,880	1,375	218	42	7,515
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018	6,955	1,626	218	42	8,841
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018	6,283	1,469	218	42	8,013
193	240114	CORP-Engineering	Staff Engineer	8/27/2018	5,611	1,312	218	42	7,184
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018	5,733	1,341	218	42	7,334
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018	5,727	1,339	218	42	7,327
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018	10,994	10,939	218	42	22,193
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018	6,764	1,582	218	42	8,606
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018	5,691	1,331	218	42	7,282
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018	5,764	1,348	218	42	7,373
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018	6,108	1,429	218	42	7,797
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018	5,195	1,215	218	42	6,671
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019	6,866	1,606	218	42	8,733
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019	5,822	1,362	218	42	7,444
204	240114	CORP-Engineering	Planning Engineer	2/4/2019	7,337	1,716	218	42	9,314
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019	5,923	1,385	218	42	7,569
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019	6,367	1,489	218	42	8,116
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019	5,909	1,382	218	42	7,551
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019	5,881	1,375	218	42	7,517
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019	5,913	1,383	218	42	7,556
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019	6,526	1,526	218	42	8,312
211	240114	CORP-Engineering	Staff Engineer	5/20/2019	5,754	1,346	218	42	7,360
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019	6,232	1,458	218	42	7,950
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019	6,998	1,637	218	42	8,895
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019	5,764	1,348	218	42	7,373
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019	4,996	1,168	218	42	6,425
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019	6,357	1,487	218	42	8,104
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019	7,209	1,686	218	42	9,155
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019	7,321	1,712	218	42	9,294
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019	6,299	1,473	218	42	8,032
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019	6,245	1,461	218	42	7,966
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019	6,136	1,435	218	42	7,831
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019	5,535	1,294	218	42	7,090
223	240120	CORP-Bus Dev	Vice President of Business Development,	11/4/2019	10,994	5,936	218	42	17,190
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019	5,328	1,246	218	42	6,835
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020	5,569	1,303	218	42	7,132
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020	10,994	2,575	218	42	13,829
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020	10,994	3,130	218	42	14,384
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020	8,619	2,016	218	42	10,896
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020	5,035	1,178	218	42	6,473
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020	6,448	1,508	218	42	8,216
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020	5,008	1,171	218	42	6,439
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020	7,301	1,708	218	42	9,269
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020	10,994	3,513	218	42	14,767
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020	5,023	1,175	218	42	6,459
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020	8,348	1,952	218	42	10,561
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020	8,109	1,897	218	42	10,266
237	249151	WILK-Brownell	Supvr Production	8/24/2020	5,543	1,296	218	42	7,100
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020	8,350	1,953	218	42	10,563
239	240114	CORP-Engineering	Engineer	10/12/2020	4,893	1,144	218	42	6,298
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997	5,380	1,258	218	42	6,899
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020	5,854	1,369	218	42	7,483
242	240114	CORP-Engineering	Engineer	1/4/2021	4,893	1,144	218	42	6,298
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020	5,712	1,336	218	42	7,309
244	241151	PITT-Production Haye	Supvr Production	3/29/2021	6,075	1,421	218	42	7,756
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021	10,994	3,310	218	42	14,565
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021	8,619	2,016	218	42	10,896
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021	5,497	1,286	218	42	7,043
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021	6,736	1,575	218	42	8,572
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021	5,802	1,357	218	42	7,419
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021	6,396	1,496	218	42	8,152
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021	5,897	1,379	218	42	7,537
252	240114	CORP-Engineering	Engineer	9/13/2021	4,685	1,096	218	42	6,041
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021	10,994	3,499	218	42	14,753
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021	5,678	1,328	218	42	7,266

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022	5,555	1,299	218	42	7,115	5,730	1,340	218	42	7,330
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022	4,444	1,039	218	42	5,744	4,584	1,072	218	42	5,917
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022	5,555	1,299	218	42	7,115	5,730	1,340	218	42	7,330
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022	5,462	1,277	218	42	7,000	5,634	1,318	218	42	7,212
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	5,660	1,324	218	42	7,244	5,838	1,365	218	42	7,464
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	5,865	1,372	218	42	7,497	6,049	1,415	218	42	7,724
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022	4,861	1,137	218	42	6,258	5,013	1,172	218	42	6,446
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022	8,133	1,902	218	42	10,296	8,390	1,962	218	42	10,612
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022	6,479	1,515	218	42	8,254	6,683	1,563	218	42	8,506
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022	7,764	1,816	218	42	9,840	8,008	1,873	218	42	10,142
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022	5,625	1,316	218	42	7,201	5,802	1,357	218	42	7,419
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022	6,788	1,588	218	42	8,636	7,002	1,638	218	42	8,900
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007	4,784	1,119	218	42	6,163	4,934	1,154	218	42	6,348
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022	5,104	1,194	218	42	6,558	5,265	1,231	218	42	6,756
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995	4,957	1,159	218	42	6,377	5,113	1,196	218	42	6,569
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022	5,298	1,239	218	42	6,797	5,464	1,278	218	42	7,002
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022	4,649	1,087	218	42	5,997	4,795	1,121	218	42	6,177
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022	5,523	1,292	218	42	7,075	5,697	1,332	218	42	7,289
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022	5,879	1,375	218	42	7,514	6,063	1,418	218	42	7,742
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022	5,991	1,401	218	42	7,652	6,179	1,445	218	42	7,884
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022	6,076	1,421	218	42	7,757	6,267	1,466	218	42	7,993
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022	5,902	1,380	218	42	7,543	6,088	1,424	218	42	7,772
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022	5,694	1,332	218	42	7,286	5,873	1,373	218	42	7,507
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022	5,277	1,234	218	42	6,772	5,444	1,273	218	42	6,977
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023	5,833	1,364	218	42	7,457	6,017	1,407	218	42	7,685
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023	5,208	1,218	218	42	6,686	5,372	1,256	218	42	6,888
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023	5,208	1,218	218	42	6,686	5,372	1,256	218	42	6,888
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023	8,928	2,088	218	42	11,276	9,209	2,154	218	42	11,623
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023	6,597	1,543	218	42	8,400	6,804	1,591	218	42	8,656
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023	6,944	1,624	218	42	8,828	7,163	1,675	218	42	9,098
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023	6,076	1,421	218	42	7,757	6,267	1,466	218	42	7,993
286	240114	CORP-Engineering	Engineer	6/26/2023	4,113	962	218	42	5,335	4,243	992	218	42	5,496
287	240114	CORP-Engineering	Project Manager	6/26/2023	7,843	1,834	218	42	9,938	8,090	1,892	218	42	10,242
288	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	-	-	-	-	-	8,201	1,918	218	42	10,380
289	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	-	-	-	-	-	8,201	1,918	218	42	10,380
290	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	-	-	-	-	-	8,201	1,918	218	42	10,380
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023	-	-	-	-	-	6,839	1,599	218	42	8,699
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023	-	-	-	-	-	6,839	1,599	218	42	8,699
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Filled	12/31/2023	-	-	-	-	-	8,201	1,918	218	42	10,380
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023	-	-	-	-	-	6,839	1,599	218	42	8,699
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Filled	12/31/2023	-	-	-	-	-	6,839	1,599	218	42	8,699
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Filled	12/31/2023	-	-	-	-	-	6,839	1,599	218	42	8,699
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Filled	12/31/2023	-	-	-	-	-	10,450	3,257	218	42	13,967
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Filled	12/31/2023	-	-	-	-	-	10,450	2,468	218	42	13,178
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023	-	-	-	-	-	6,839	1,599	218	42	8,699
			Total Non-Collective Bargaining Unit Salary		$1,951,705	$489,216	$62,664	$12,054	$2,515,638	$2,114,413	$531,136	$65,284	$12,558	$2,723,391

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022	5,913	1,383	218	42	7,556
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022	4,730	1,106	218	42	6,097
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022	5,913	1,383	218	42	7,556
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022	5,815	1,360	218	42	7,435
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	6,024	1,409	218	42	7,694
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	6,243	1,460	218	42	7,963
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022	5,174	1,210	218	42	6,644
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022	8,658	2,025	218	42	10,943
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022	6,897	1,613	218	42	8,770
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022	8,264	1,933	218	42	10,456
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022	5,987	1,400	218	42	7,647
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022	7,226	1,690	218	42	9,176
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007	5,091	1,191	218	42	6,542
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022	5,432	1,270	218	42	6,963
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995	5,276	1,234	218	42	6,771
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022	5,639	1,319	218	42	7,218
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022	4,948	1,157	218	42	6,366
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022	5,879	1,375	218	42	7,514
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022	6,257	1,463	218	42	7,981
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022	6,377	1,491	218	42	8,129
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022	6,468	1,513	218	42	8,241
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022	6,283	1,469	218	42	8,013
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022	6,060	1,417	218	42	7,738
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022	5,617	1,314	218	42	7,191
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023	6,209	1,452	218	42	7,922
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023	5,543	1,296	218	42	7,100
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023	5,543	1,296	218	42	7,100
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023	9,503	2,223	218	42	11,986
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023	7,021	1,642	218	42	8,923
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023	7,391	1,728	218	42	9,380
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023	6,468	1,513	218	42	8,241
286	240114	CORP-Engineering	Engineer	6/26/2023	4,378	1,024	218	42	5,663
287	240114	CORP-Engineering	Project Manager	6/26/2023	8,348	1,952	218	42	10,561
288	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	8,464	1,979	218	42	10,703
289	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	8,464	1,979	218	42	10,703
290	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	8,464	1,979	218	42	10,703
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023	7,057	1,650	218	42	8,968
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023	7,057	1,650	218	42	8,968
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Filled	12/31/2023	8,464	1,979	218	42	10,703
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023	7,057	1,650	218	42	8,968
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Filled	12/31/2023	7,057	1,650	218	42	8,968
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Filled	12/31/2023	7,057	1,650	218	42	8,968
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Filled	12/31/2023	10,994	3,361	218	42	14,615
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Filled	12/31/2023	10,890	2,547	218	42	13,697
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023	7,057	1,650	218	42	8,968
			Total Non-Collective Bargaining Unit Salary		$2,188,575	$548,092	$65,284	$12,558	$2,814,509

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
Collective Bargaining Unit														
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	$7,227	$1,690	$218	$42	$9,177	$7,404	$1,732	$218	$42	$9,396
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	5,533	1,294	218	42	7,088	5,670	1,326	218	42	7,257
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	4,958	1,159	218	42	6,377	5,083	1,189	218	42	6,532
4	241103	PITT-Cust Service	Field Service Representative U537P	3/31/1994	4,799	1,122	218	42	6,181	4,918	1,150	218	42	6,329
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	6,343	1,483	218	42	8,087	6,500	1,520	218	42	8,280
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987	8,627	2,017	218	42	10,904	8,835	2,066	218	42	11,162
7	241103	PITT-Cust Service	Field Service Representative U537P	2/2/1988	4,716	1,103	218	42	6,079	4,833	1,130	218	42	6,224
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	6,573	1,537	218	42	8,371	6,734	1,575	218	42	8,569
9	241103	PITT-Cust Service	Field Service Representative U537P	7/5/1983	4,712	1,102	218	42	6,075	4,830	1,129	218	42	6,219
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	2/1/1985	6,073	1,420	218	42	7,754	6,223	1,455	218	42	7,939
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	7,763	1,816	218	42	9,839	7,953	1,860	218	42	10,073
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991	5,289	1,237	218	42	6,787	5,419	1,267	218	42	6,947
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	4/22/1991	5,067	1,185	218	42	6,512	5,191	1,214	218	42	6,666
14	241103	PITT-Cust Service	Field Service Representative U537P	5/6/1985	5,512	1,289	218	42	7,062	5,650	1,321	218	42	7,231
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	7,228	1,691	218	42	9,179	7,362	1,722	218	42	9,344
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	6,322	1,478	218	42	8,060	6,443	1,507	218	42	8,211
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	6,419	1,501	218	42	8,181	6,602	1,544	218	42	8,407
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	5,232	1,224	218	42	6,716	5,386	1,260	218	42	6,906
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	7,035	1,645	218	42	8,941	7,167	1,676	218	42	9,104
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	4,736	1,108	218	42	6,103	4,829	1,129	218	42	6,219
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	6,069	1,419	218	42	7,748	6,186	1,447	218	42	7,893
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	5,555	1,299	218	42	7,114	5,665	1,325	218	42	7,250
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	5,403	1,264	218	42	6,927	5,510	1,289	218	42	7,059
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	5,630	1,317	218	42	7,207	5,740	1,342	218	42	7,343
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	4,823	1,128	218	42	6,211	4,967	1,162	218	42	6,388
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	5,568	1,302	218	42	7,130	5,731	1,340	218	42	7,332
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	5,809	1,359	218	42	7,428	5,921	1,385	218	42	7,566
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	4,738	1,108	218	42	6,106	4,833	1,130	218	42	6,223
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	6,264	1,465	218	42	7,989	6,383	1,493	218	42	8,137
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	5,909	1,382	218	42	7,551	6,022	1,408	218	42	7,691
31	243301	BUTL-Production	Operator U537O	5/4/1998	6,662	1,558	218	42	8,481	6,793	1,589	218	42	8,642
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	5,493	1,285	218	42	7,038	5,599	1,310	218	42	7,169
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	4,988	1,166	218	42	6,414	5,086	1,189	218	42	6,536
34	243301	BUTL-Production	Operator U537O	11/2/1984	6,198	1,449	218	42	7,908	6,320	1,478	218	42	8,059
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	4,790	1,120	218	42	6,170	4,885	1,143	218	42	6,288
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	5,119	1,197	218	42	6,577	5,219	1,221	218	42	6,700
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	4,730	1,106	218	42	6,097	4,824	1,128	218	42	6,213
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	7,330	1,714	218	42	9,304	7,467	1,746	218	42	9,474
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	6,544	1,531	218	42	8,335	6,669	1,560	218	42	8,489
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	5,274	1,234	218	42	6,768	5,378	1,258	218	42	6,896
41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	4,729	1,106	218	42	6,095	4,824	1,128	218	42	6,212
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	4,911	1,148	218	42	6,320	5,008	1,171	218	42	6,440
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	6,160	1,441	218	42	7,861	6,278	1,468	218	42	8,007
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	6,038	1,412	218	42	7,711	6,154	1,439	218	42	7,854
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	4,745	1,110	218	42	6,115	4,838	1,132	218	42	6,230
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	5,086	1,190	218	42	6,536	5,186	1,213	218	42	6,659
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	6,254	1,463	218	42	7,978	6,377	1,491	218	42	8,129
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	4,849	1,134	218	42	6,243	4,946	1,157	218	42	6,363
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	6,284	1,470	218	42	8,014	6,468	1,513	218	42	8,241
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	5,017	1,173	218	42	6,450	5,165	1,208	218	42	6,633
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	7,010	1,640	218	42	8,910	7,214	1,687	218	42	9,161
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	5,923	1,385	218	42	7,569	6,098	1,426	218	42	7,785
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	6,340	1,483	218	42	8,084	6,529	1,527	218	42	8,316
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988	6,286	1,470	218	42	8,017	6,469	1,513	218	42	8,243
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987	6,481	1,516	218	42	8,258	6,672	1,560	218	42	8,492
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	6,063	1,418	218	42	7,741	6,240	1,459	218	42	7,960
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	4,634	1,084	218	42	5,978	4,771	1,116	218	42	6,147
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	7,262	1,698	218	42	9,221	7,473	1,748	218	42	9,482
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	5,602	1,310	218	42	7,173	5,768	1,349	218	42	7,377
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	4,931	1,153	218	42	6,345	5,078	1,188	218	42	6,526
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	6,010	1,406	218	42	7,676	6,185	1,447	218	42	7,892
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	4,673	1,093	218	42	6,026	4,812	1,125	218	42	6,198
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	4,924	1,152	218	42	6,336	5,071	1,186	218	42	6,517
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	4,989	1,167	218	42	6,416	5,137	1,201	218	42	6,598
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	4,670	1,092	218	42	6,022	4,808	1,124	218	42	6,193
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	6,297	1,473	218	42	8,030	6,481	1,516	218	42	8,257
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	6,509	1,522	218	42	8,292	6,699	1,567	218	42	8,526
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	4,581	1,071	218	42	5,912	4,717	1,103	218	42	6,080
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	4,562	1,067	218	42	5,889	4,698	1,099	218	42	6,056
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	5,298	1,239	218	42	6,798	5,454	1,276	218	42	6,990
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	4,595	1,075	218	42	5,930	4,732	1,107	218	42	6,099
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	5,953	1,392	218	42	7,605	6,126	1,433	218	42	7,820
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	4,870	1,139	218	42	6,269	5,015	1,173	218	42	6,449
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	6,199	1,450	218	42	7,909	6,381	1,492	218	42	8,134
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	4,578	1,071	218	42	5,909	4,714	1,102	218	42	6,077
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	6,192	1,448	218	42	7,900	6,375	1,491	218	42	8,127
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	4,899	1,146	218	42	6,305	5,045	1,180	218	42	6,485
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	7,110	1,663	218	42	9,033	7,318	1,711	218	42	9,290
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	4,837	1,131	218	42	6,229	4,981	1,165	218	42	6,407
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986	5,458	1,276	218	42	6,994	5,617	1,314	218	42	7,191
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	6,194	1,448	218	42	7,902	6,374	1,491	218	42	8,125
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	4,328	1,012	218	42	5,601	4,457	1,042	218	42	5,760
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	5,242	1,226	218	42	6,728	5,395	1,262	218	42	6,917
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	5,312	1,242	218	42	6,814	5,467	1,279	218	42	7,006

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					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
Collective Bargaining Unit									
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	$7,587	$1,774	$218	$42	$9,622
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	5,811	1,359	218	42	7,430
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	5,209	1,218	218	42	6,688
4	241103	PITT-Cust Service	Field Service Representative U537P	3/31/1994	5,042	1,179	218	42	6,481
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	6,662	1,558	218	42	8,480
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987	9,051	2,117	218	42	11,428
7	241103	PITT-Cust Service	Field Service Representative U537P	2/2/1988	4,954	1,159	218	42	6,373
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	6,900	1,614	218	42	8,773
9	241103	PITT-Cust Service	Field Service Representative U537P	7/5/1983	4,951	1,158	218	42	6,369
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	2/1/1985	6,378	1,492	218	42	8,130
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	8,149	1,906	218	42	10,316
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991	5,553	1,299	218	42	7,112
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	4/22/1991	5,320	1,244	218	42	6,825
14	241103	PITT-Cust Service	Field Service Representative U537P	5/6/1985	5,791	1,354	218	42	7,406
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	7,498	1,754	218	42	9,512
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	6,565	1,535	218	42	8,361
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	6,761	1,581	218	42	8,603
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	5,520	1,291	218	42	7,071
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	7,299	1,707	218	42	9,266
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	4,926	1,152	218	42	6,338
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	6,304	1,474	218	42	8,038
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	5,778	1,351	218	42	7,390
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	5,618	1,314	218	42	7,192
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	5,852	1,369	218	42	7,480
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	5,091	1,191	218	42	6,542
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	5,873	1,374	218	42	7,507
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	6,033	1,411	218	42	7,705
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	4,929	1,153	218	42	6,342
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	6,503	1,521	218	42	8,284
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	6,135	1,435	218	42	7,830
31	243301	BUTL-Production	Operator U537O	5/4/1998	6,927	1,620	218	42	8,807
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	5,709	1,335	218	42	7,305
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	5,187	1,213	218	42	6,661
34	243301	BUTL-Production	Operator U537O	11/2/1984	6,446	1,508	218	42	8,214
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	4,983	1,165	218	42	6,408
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	5,322	1,245	218	42	6,827
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	4,921	1,151	218	42	6,332
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	7,605	1,779	218	42	9,644
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	6,796	1,589	218	42	8,645
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	5,481	1,282	218	42	7,023
41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	4,920	1,151	218	42	6,331
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	5,109	1,195	218	42	6,564
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	6,396	1,496	218	42	8,153
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	6,270	1,466	218	42	7,997
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	4,934	1,154	218	42	6,349
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	5,289	1,237	218	42	6,786
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	6,500	1,520	218	42	8,280
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	5,043	1,180	218	42	6,483
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	6,657	1,557	218	42	8,474
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	5,319	1,244	218	42	6,823
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	7,426	1,737	218	42	9,423
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	6,279	1,468	218	42	8,008
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	6,724	1,572	218	42	8,556
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988	6,658	1,557	218	42	8,476
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987	6,868	1,606	218	42	8,735
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	6,424	1,502	218	42	8,187
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	4,913	1,149	218	42	6,322
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	7,694	1,799	218	42	9,753
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	5,939	1,389	218	42	7,588
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	5,229	1,223	218	42	6,712
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	6,368	1,489	218	42	8,117
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	4,957	1,159	218	42	6,376
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	5,223	1,222	218	42	6,705
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	5,290	1,237	218	42	6,788
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	4,950	1,158	218	42	6,368
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	6,672	1,560	218	42	8,492
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	6,894	1,612	218	42	8,767
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	4,858	1,136	218	42	6,255
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	4,839	1,132	218	42	6,231
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	5,616	1,313	218	42	7,189
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	4,875	1,140	218	42	6,275
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	6,307	1,475	218	42	8,043
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	5,165	1,208	218	42	6,634
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	6,570	1,536	218	42	8,366
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	4,856	1,136	218	42	6,252
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	6,564	1,535	218	42	8,360
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	5,196	1,215	218	42	6,672
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	7,533	1,762	218	42	9,554
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	5,131	1,200	218	42	6,592
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986	5,783	1,352	218	42	7,396
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	6,563	1,535	218	42	8,358
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	4,590	1,074	218	42	5,924
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	5,554	1,299	218	42	7,114
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	5,630	1,317	218	42	7,207

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				2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	5,255	1,229	218	42	6,744	5,410	1,265	218	42	6,936
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	5,345	1,250	218	42	6,856	5,504	1,287	218	42	7,051
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	5,892	1,378	218	42	7,531	6,067	1,419	218	42	7,746
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	5,194	1,215	218	42	6,669	5,346	1,250	218	42	6,857
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	7,133	1,668	218	42	9,061	7,343	1,717	218	42	9,321
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	4,181	978	218	42	5,419	4,307	1,007	218	42	5,574
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	4,172	976	218	42	5,408	4,296	1,005	218	42	5,561
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	5,293	1,238	218	42	6,791	5,450	1,275	218	42	6,985
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	5,694	1,332	218	42	7,286	5,860	1,370	218	42	7,491
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	4,607	1,077	218	42	5,944	4,745	1,110	218	42	6,114
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	4,075	953	218	42	5,288	4,196	981	218	42	5,438
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	4,997	1,169	218	42	6,426	5,144	1,203	218	42	6,607
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	6,644	1,554	218	42	8,459	6,839	1,599	218	42	8,699
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	5,972	1,397	218	42	7,629	6,149	1,438	218	42	7,847
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	6,041	1,413	218	42	7,714	6,217	1,454	218	42	7,932
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	4,460	1,043	218	42	5,763	4,592	1,074	218	42	5,927
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	5,359	1,253	218	42	6,873	5,516	1,290	218	42	7,066
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	4,913	1,149	218	42	6,322	5,024	1,175	218	42	6,459
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	5,759	1,347	218	42	7,367	5,888	1,377	218	42	7,526
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	4,335	1,014	218	42	5,609	4,433	1,037	218	42	5,730
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	4,568	1,068	218	42	5,897	4,695	1,098	218	42	6,053
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	4,614	1,079	218	42	5,954	4,718	1,103	218	42	6,082
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996	4,596	1,075	218	42	5,931	4,723	1,105	218	42	6,088
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	4,426	1,035	218	42	5,721	4,549	1,064	218	42	5,873
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	4,774	1,116	218	42	6,150	4,906	1,147	218	42	6,313
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	4,979	1,164	218	42	6,404	5,091	1,191	218	42	6,542
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	4,380	1,024	218	42	5,664	4,478	1,047	218	42	5,786
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	5,396	1,262	218	42	6,918	5,517	1,290	218	42	7,067
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	5,428	1,269	218	42	6,958	5,561	1,301	218	42	7,122
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	7,014	1,640	218	42	8,915	7,185	1,680	218	42	9,126
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	5,029	1,176	218	42	6,466	5,129	1,200	218	42	6,589
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	6,801	1,591	218	42	8,652	6,967	1,629	218	42	8,857
117	241103	PITT-Cust Service	Field Service Representative U537P	11/18/1998	4,712	1,102	218	42	6,075	4,830	1,129	218	42	6,219
118	244101	INDI-Production	Operator U537O	8/9/1999	5,825	1,362	218	42	7,448	5,940	1,389	218	42	7,590
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	5,445	1,274	218	42	6,979	5,552	1,298	218	42	7,111
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	5,703	1,334	218	42	7,297	5,812	1,359	218	42	7,432
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	4,706	1,101	218	42	6,067	4,812	1,125	218	42	6,197
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	5,032	1,177	218	42	6,469	5,130	1,200	218	42	6,591
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	6,355	1,486	218	42	8,102	6,510	1,523	218	42	8,293
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	4,616	1,079	218	42	5,955	4,752	1,111	218	42	6,124
125	241103	PITT-Cust Service	Field Service Representative U537P	12/28/2001	4,740	1,109	218	42	6,109	4,858	1,136	218	42	6,255
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	4,860	1,137	218	42	6,257	4,957	1,159	218	42	6,377
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	5,840	1,366	218	42	7,466	5,955	1,393	218	42	7,609
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	5,370	1,256	218	42	6,886	5,476	1,281	218	42	7,017
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	4,765	1,114	218	42	6,140	4,859	1,136	218	42	6,256
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	4,451	1,041	218	42	5,752	4,574	1,070	218	42	5,904
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	9,932	2,393	218	42	12,586	10,450	2,451	218	42	13,161
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	7,637	1,786	218	42	9,684	7,825	1,830	218	42	9,915
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	6,374	1,491	218	42	8,124	6,560	1,534	218	42	8,355
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	6,754	1,580	218	42	8,594	6,887	1,611	218	42	8,758
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	5,285	1,236	218	42	6,782	5,390	1,261	218	42	6,911
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002	4,763	1,114	218	42	6,137	4,880	1,141	218	42	6,282
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	8,437	1,973	218	42	10,670	8,641	2,021	218	42	10,922
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	5,406	1,264	218	42	6,930	5,510	1,289	218	42	7,059
139	241103	PITT-Cust Service	Field Service Representative U537P	4/14/2003	4,734	1,107	218	42	6,102	4,852	1,135	218	42	6,247
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	5,019	1,174	218	42	6,453	5,166	1,208	218	42	6,635
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	6,880	1,609	218	42	8,750	7,049	1,649	218	42	8,958
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	5,853	1,369	218	42	7,482	6,025	1,409	218	42	7,694
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	9,580	2,241	218	42	12,081	9,814	2,295	218	42	12,369
144	241103	PITT-Cust Service	Field Service Representative U537P	8/29/2003	5,107	1,194	218	42	6,561	5,234	1,224	218	42	6,718
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	4,893	1,144	218	42	6,297	4,988	1,167	218	42	6,415
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	4,521	1,057	218	42	5,839	4,647	1,087	218	42	5,994
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	5,608	1,312	218	42	7,180	5,773	1,350	218	42	7,383
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	5,718	1,337	218	42	7,316	5,831	1,364	218	42	7,456
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	6,455	1,510	218	42	8,225	6,614	1,547	218	42	8,421
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	4,430	1,036	218	42	5,726	4,529	1,059	218	42	5,848
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005	5,116	1,196	218	42	6,573	5,243	1,226	218	42	6,730
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	5,344	1,250	218	42	6,854	5,449	265	218	42	5,975
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	4,985	1,166	218	42	6,411	5,123	1,198	218	42	6,582
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	7,554	1,767	218	42	9,581	7,700	1,801	218	42	9,761
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	5,041	1,179	218	42	6,480	5,139	1,202	218	42	6,601
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	5,785	1,353	218	42	7,398	5,927	1,386	218	42	7,574
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	5,418	1,267	218	42	6,946	5,568	1,302	218	42	7,131
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	5,047	1,180	218	42	6,488	5,146	1,204	218	42	6,610
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	5,556	1,299	218	42	7,115	5,664	1,325	218	42	7,249
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	5,293	1,238	218	42	6,792	5,450	1,275	218	42	6,985
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005	4,677	1,094	218	42	6,031	4,816	1,126	218	42	6,203
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	4,614	1,079	218	42	5,953	4,717	1,103	218	42	6,080
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	4,884	1,142	218	42	6,286	4,981	1,165	218	42	6,406
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	4,996	1,168	218	42	6,425	5,121	1,198	218	42	6,579
165	241103	PITT-Cust Service	Field Service Representative U537P	12/19/2005	5,206	1,217	218	42	6,684	5,335	1,248	218	42	6,843
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	4,748	1,110	218	42	6,119	4,843	1,133	218	42	6,236
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	7,149	1,672	218	42	9,082	7,325	1,713	218	42	9,298
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	7,172	1,677	218	42	9,110	7,348	1,718	218	42	9,327
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	6,624	1,549	218	42	8,433	6,785	1,587	218	42	8,632

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					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	5,572	1,303	218	42	7,136
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	5,667	1,325	218	42	7,253
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	6,247	1,461	218	42	7,968
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	5,505	1,287	218	42	7,053
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	7,560	1,768	218	42	9,589
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	4,436	1,038	218	42	5,734
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	4,426	1,035	218	42	5,721
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	5,614	1,313	218	42	7,187
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	6,033	1,411	218	42	7,705
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	4,887	1,143	218	42	6,290
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	4,323	1,011	218	42	5,594
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	5,296	1,239	218	42	6,795
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	7,040	1,647	218	42	8,947
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	6,331	1,481	218	42	8,072
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	6,401	1,497	218	42	8,158
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	4,729	1,106	218	42	6,096
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	5,679	1,328	218	42	7,267
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	5,150	1,205	218	42	6,615
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	6,037	1,412	218	42	7,709
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	4,543	1,063	218	42	5,866
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	4,812	1,125	218	42	6,198
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	4,838	1,131	218	42	6,230
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996	4,841	1,132	218	42	6,234
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	4,662	1,090	218	42	6,013
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	5,028	1,176	218	42	6,464
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	5,218	1,220	218	42	6,699
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	4,590	1,073	218	42	5,924
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	5,656	1,323	218	42	7,239
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	5,699	1,333	218	42	7,293
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	7,362	1,722	218	42	9,344
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	5,230	1,223	218	42	6,713
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	7,139	1,670	218	42	9,068
117	241103	PITT-Cust Service	Field Service Representative U537P	11/18/1998	4,951	1,158	218	42	6,369
118	244101	INDI-Production	Operator U537O	8/9/1999	6,058	1,417	218	42	7,735
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	5,659	1,323	218	42	7,242
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	5,925	1,386	218	42	7,571
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	4,932	1,154	218	42	6,346
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	5,232	1,224	218	42	6,715
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	6,671	1,560	218	42	8,491
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	4,893	1,144	218	42	6,298
125	241103	PITT-Cust Service	Field Service Representative U537P	12/28/2001	4,980	1,165	218	42	6,406
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	5,056	1,182	218	42	6,499
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	6,074	1,421	218	42	7,755
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	5,582	1,305	218	42	7,148
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	4,956	1,159	218	42	6,375
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	4,688	1,096	218	42	6,045
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	10,735	2,511	218	42	13,506
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	8,018	1,875	218	42	10,154
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	6,753	1,579	218	42	8,592
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	7,023	1,643	218	42	8,926
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	5,494	1,285	218	42	7,039
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002	5,001	1,170	218	42	6,431
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	8,850	2,070	218	42	11,180
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	5,617	1,314	218	42	7,191
139	241103	PITT-Cust Service	Field Service Representative U537P	4/14/2003	4,973	1,163	218	42	6,396
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	5,320	1,244	218	42	6,825
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	7,223	1,689	218	42	9,173
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	6,202	1,450	218	42	7,913
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	10,055	2,352	218	42	12,667
144	241103	PITT-Cust Service	Field Service Representative U537P	8/29/2003	5,365	1,255	218	42	6,880
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	5,087	1,190	218	42	6,537
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	4,762	1,114	218	42	6,137
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	5,942	1,390	218	42	7,592
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	5,948	1,391	218	42	7,599
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	6,778	1,585	218	42	8,624
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	4,642	1,086	218	42	5,988
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005	5,374	1,257	218	42	6,892
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	5,557	306	218	42	6,124
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	5,251	1,228	218	42	6,739
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	7,846	1,835	218	42	9,941
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	5,240	1,225	218	42	6,725
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	6,073	1,420	218	42	7,754
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	5,706	1,335	218	42	7,301
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	5,248	1,227	218	42	6,736
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	5,775	1,351	218	42	7,385
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	5,612	1,313	218	42	7,185
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005	4,960	1,160	218	42	6,380
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	4,834	1,131	218	42	6,225
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	5,081	1,188	218	42	6,530
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	5,248	1,227	218	42	6,735
165	241103	PITT-Cust Service	Field Service Representative U537P	12/19/2005	5,469	1,279	218	42	7,008
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	4,940	1,155	218	42	6,355
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	7,506	1,755	218	42	9,521
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	7,529	1,761	218	42	9,551
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	6,952	1,626	218	42	8,838

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					2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes		FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	5,231	1,223	218	42	6,715		5,334	1,248	218	42	6,842
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	7,902	1,848	218	42	10,011		8,097	1,894	218	42	10,251
172	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	4,765	1,114	218	42	6,140		4,884	1,142	218	42	6,287
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	5,187	1,213	218	42	6,660		5,341	1,249	218	42	6,850
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	5,101	1,193	218	42	6,554		5,252	1,228	218	42	6,740
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	6,671	1,560	218	42	8,492		6,835	1,599	218	42	8,694
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	6,173	1,444	218	42	7,877		6,325	1,479	218	42	8,064
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	5,265	1,231	218	42	6,757		5,366	1,255	218	42	6,882
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	5,214	1,219	218	42	6,694		5,316	1,243	218	42	6,820
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	5,252	1,228	218	42	6,741		5,354	1,252	218	42	6,867
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	6,738	1,576	218	42	8,574		6,934	1,622	218	42	8,817
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006	5,183	1,212	218	42	6,656		5,337	1,248	218	42	6,845
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	6,872	1,607	218	42	8,739		7,040	1,647	218	42	8,947
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	6,269	1,466	218	42	7,996		6,453	1,509	218	42	8,223
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	4,933	1,154	218	42	6,347		5,031	1,177	218	42	6,468
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	5,538	1,295	218	42	7,094		5,675	1,327	218	42	7,263
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	4,912	1,149	218	42	6,322		5,057	1,183	218	42	6,500
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	4,864	1,138	218	42	6,262		4,961	1,160	218	42	6,381
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	5,245	1,227	218	42	6,731		5,362	1,254	218	42	6,876
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	5,907	1,381	218	42	7,549		6,039	1,412	218	42	7,712
190	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	4,912	1,149	218	42	6,321		5,034	1,177	218	42	6,472
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	4,580	1,071	218	42	5,912		4,717	1,103	218	42	6,080
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	4,892	1,144	218	42	6,296		4,988	1,167	218	42	6,415
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006	6,786	1,587	218	42	8,633		6,952	1,626	218	42	8,838
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	5,172	1,210	218	42	6,642		5,273	1,233	218	42	6,766
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	5,882	1,376	218	42	7,518		5,993	1,402	218	42	7,655
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	5,029	1,176	218	42	6,466		5,179	1,211	218	42	6,650
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	7,071	1,654	218	42	8,985		7,244	1,694	218	42	9,198
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	7,107	1,662	218	42	9,029		7,281	1,703	218	42	9,244
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	5,255	1,229	218	42	6,744		5,356	1,253	218	42	6,869
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	5,557	1,300	218	42	7,117		5,666	1,325	218	42	7,252
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	5,124	1,198	218	42	6,583		5,275	1,234	218	42	6,770
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	5,853	1,369	218	42	7,482		6,025	1,409	218	42	7,695
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007	4,396	1,028	218	42	5,685		4,528	1,059	218	42	5,847
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	5,885	1,376	218	42	7,521		6,057	1,417	218	42	7,735
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	5,396	1,262	218	42	6,918		5,555	1,299	218	42	7,114
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	4,997	1,169	218	42	6,426		5,145	1,203	218	42	6,609
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	4,842	1,132	218	42	6,235		4,976	1,164	218	42	6,400
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	4,626	1,082	218	42	5,968		4,752	1,111	218	42	6,124
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	5,279	1,235	218	42	6,774		5,425	1,269	218	42	6,954
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	6,075	1,421	218	42	7,756		6,253	1,462	218	42	7,975
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	4,491	1,050	218	42	5,802		4,625	1,082	218	42	5,967
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	5,139	1,202	218	42	6,601		5,267	1,232	218	42	6,759
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	7,733	1,808	218	42	9,802		7,921	1,853	218	42	10,034
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	4,500	1,052	218	42	5,813		4,601	1,076	218	42	5,937
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	4,918	1,150	218	42	6,328		5,028	1,176	218	42	6,465
216	244101	INDI-Production	Operator U537O	8/13/2007	6,168	1,442	218	42	7,871		6,289	1,471	218	42	8,020
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	5,256	1,229	218	42	6,746		5,412	1,266	218	42	6,938
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	4,210	985	218	42	5,455		4,336	1,014	218	42	5,611
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	5,015	1,173	218	42	6,448		5,162	1,207	218	42	6,630
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	4,937	1,155	218	42	6,352		5,035	1,178	218	42	6,473
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	6,771	1,584	218	42	8,615		6,969	1,630	218	42	8,860
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007	5,142	1,203	218	42	6,605		5,245	1,227	218	42	6,732
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	5,097	1,192	218	42	6,550		5,211	1,219	218	42	6,690
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	4,852	1,135	218	42	6,247		4,972	1,163	218	42	6,395
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	5,120	1,197	218	42	6,578		5,272	1,233	218	42	6,765
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	6,090	1,424	218	42	7,774		6,204	1,451	218	42	7,915
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007	5,572	1,303	218	42	7,136		5,735	1,341	218	42	7,337
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	5,118	1,197	218	42	6,575		5,244	1,226	218	42	6,730
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	5,094	1,191	218	42	6,546		5,245	1,227	218	42	6,733
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008	6,022	1,408	218	42	7,690		6,137	1,435	218	42	7,833
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	5,521	1,291	218	42	7,073		5,673	1,327	218	42	7,260
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008	5,190	1,214	218	42	6,664		5,290	1,237	218	42	6,787
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	5,149	1,204	218	42	6,614		5,301	1,240	218	42	6,801
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	4,589	1,073	218	42	5,923		4,726	1,105	218	42	6,091
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	4,891	1,144	218	42	6,295		5,013	1,172	218	42	6,445
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	5,139	1,202	218	42	6,602		5,254	1,229	218	42	6,743
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	4,974	1,163	218	42	6,398		5,098	1,192	218	42	6,551
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008	4,589	1,073	218	42	5,923		4,680	1,095	218	42	6,035
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	4,791	1,120	218	42	6,171		4,886	1,143	218	42	6,290
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	6,935	1,622	218	42	8,817		7,104	1,661	218	42	9,026
241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	5,740	1,342	218	42	7,342		5,882	1,376	218	42	7,518
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	5,396	1,262	218	42	6,919		5,529	1,293	218	42	7,083
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	9,292	2,173	218	42	11,725		9,520	2,226	218	42	12,007
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	4,732	1,107	218	42	6,099		4,826	1,129	218	42	6,215
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	5,431	1,270	218	42	6,961		5,534	1,294	218	42	7,089
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	5,731	1,340	218	42	7,331		5,843	1,366	218	42	7,469
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009	4,779	1,118	218	42	6,157		4,874	1,140	218	42	6,274
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	5,545	1,297	218	42	7,103		5,653	1,322	218	42	7,235
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009	4,537	1,061	218	42	5,858		4,672	1,093	218	42	6,025
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	5,182	1,212	218	42	6,655		5,298	1,239	218	42	6,797
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	4,898	1,146	218	42	6,304		5,019	1,174	218	42	6,453
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	5,377	1,258	218	42	6,895		5,479	1,281	218	42	7,021
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	5,290	1,237	218	42	6,788		5,392	1,261	218	42	6,913
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	6,193	1,448	218	42	7,902		6,316	1,477	218	42	8,053

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					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	5,437	1,272	218	42	6,969
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	8,295	1,940	218	42	10,496
172	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	5,007	1,171	218	42	6,438
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	5,500	1,286	218	42	7,046
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	5,408	1,265	218	42	6,933
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	7,005	1,638	218	42	8,903
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	6,482	1,516	218	42	8,258
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	5,471	1,279	218	42	7,010
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	5,421	1,268	218	42	6,950
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	5,459	1,277	218	42	6,997
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	7,138	1,669	218	42	9,067
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006	5,495	1,285	218	42	7,040
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	7,215	1,687	218	42	9,162
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	6,643	1,554	218	42	8,457
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	5,132	1,200	218	42	6,592
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	5,817	1,360	218	42	7,438
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	5,207	1,218	218	42	6,685
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	5,059	1,183	218	42	6,503
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	5,497	1,286	218	42	7,043
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	6,189	1,447	218	42	7,897
190	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	5,161	1,207	218	42	6,628
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	4,859	1,136	218	42	6,255
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	5,088	1,190	218	42	6,538
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006	7,123	1,666	218	42	9,049
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	5,376	1,257	218	42	6,894
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	6,108	1,428	218	42	7,796
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	5,335	1,248	218	42	6,843
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	7,420	1,735	218	42	9,415
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	7,460	1,745	218	42	9,466
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	5,460	1,277	218	42	6,997
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	5,778	1,351	218	42	7,390
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	5,432	1,270	218	42	6,963
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	6,204	1,451	218	42	7,915
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007	4,664	1,091	218	42	6,015
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	6,236	1,458	218	42	7,955
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	5,719	1,338	218	42	7,317
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	5,297	1,239	218	42	6,797
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	5,099	1,192	218	42	6,552
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	4,871	1,139	218	42	6,271
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	5,560	1,300	218	42	7,121
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	6,435	1,505	218	42	8,201
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	4,763	1,114	218	42	6,138
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	5,397	1,262	218	42	6,920
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	8,116	1,898	218	42	10,275
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	4,716	1,103	218	42	6,079
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	5,154	1,205	218	42	6,619
216	244101	INDI-Production	Operator U537O	8/13/2007	6,413	1,500	218	42	8,174
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	5,573	1,303	218	42	7,136
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	4,467	1,045	218	42	5,772
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	5,317	1,243	218	42	6,820
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	5,135	1,201	218	42	6,597
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	7,141	1,670	218	42	9,072
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007	5,349	1,251	218	42	6,860
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	5,342	1,249	218	42	6,852
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	5,095	1,192	218	42	6,547
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	5,428	1,269	218	42	6,958
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	6,321	1,478	218	42	8,060
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007	5,904	1,381	218	42	7,545
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	5,374	1,257	218	42	6,891
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	5,402	1,263	218	42	6,925
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008	6,256	1,463	218	42	7,980
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	5,814	1,360	218	42	7,434
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008	5,393	1,261	218	42	6,914
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	5,457	1,276	218	42	6,994
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	4,868	1,139	218	42	6,267
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	5,137	1,202	218	42	6,599
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	5,386	1,260	218	42	6,906
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	5,225	1,222	218	42	6,707
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008	4,774	1,116	218	42	6,150
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	4,983	1,165	218	42	6,409
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	7,280	1,703	218	42	9,243
241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	6,029	1,410	218	42	7,699
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	5,667	1,325	218	42	7,252
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	9,756	2,282	218	42	12,298
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	4,923	1,151	218	42	6,334
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	5,641	1,319	218	42	7,220
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	5,958	1,393	218	42	7,611
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009	4,972	1,163	218	42	6,395
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	5,763	1,348	218	42	7,371
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009	4,813	1,126	218	42	6,199
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	5,430	1,270	218	42	6,960
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	5,144	1,203	218	42	6,607
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	5,584	1,306	218	42	7,150
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	5,497	1,285	218	42	7,042
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	6,438	1,506	218	42	8,204

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					2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	5,749	1,344	218	42	7,353	5,858	1,370	218	42	7,489
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009	4,664	1,091	218	42	6,015	4,757	1,113	218	42	6,130
257	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	4,748	1,110	218	42	6,119	4,866	1,138	218	42	6,265
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	5,460	1,277	218	42	6,998	5,567	1,302	218	42	7,129
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	5,131	1,200	218	42	6,591	5,230	1,223	218	42	6,714
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	6,438	1,506	218	42	8,203	6,556	1,533	218	42	8,350
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	5,267	1,232	218	42	6,759	5,369	1,256	218	42	6,885
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	5,065	1,185	218	42	6,510	5,165	1,208	218	42	6,633
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	5,123	1,198	218	42	6,581	5,223	1,222	218	42	6,705
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	5,198	1,216	218	42	6,674	5,299	1,239	218	42	6,799
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	5,911	1,382	218	42	7,553	6,023	1,409	218	42	7,692
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	8,998	2,104	218	42	11,362	9,220	2,156	218	42	11,636
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	5,587	1,307	218	42	7,154	5,752	1,345	218	42	7,358
268	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	5,085	1,189	218	42	6,534	5,211	1,219	218	42	6,691
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	5,642	1,320	218	42	7,222	5,808	1,358	218	42	7,427
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	5,524	1,292	218	42	7,076	5,648	1,321	218	42	7,229
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	5,086	1,190	218	42	6,536	5,186	1,213	218	42	6,660
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	6,058	1,417	218	42	7,735	6,206	1,451	218	42	7,918
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	4,921	1,151	218	42	6,333	5,018	1,174	218	42	6,452
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	5,817	1,361	218	42	7,438	5,928	1,386	218	42	7,575
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	7,948	1,859	218	42	10,067	8,143	1,904	218	42	10,307
276	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	4,964	1,161	218	42	6,385	5,087	1,190	218	42	6,537
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010	5,504	1,287	218	42	7,051	5,640	1,319	218	42	7,219
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	5,555	1,299	218	42	7,115	5,662	1,324	218	42	7,247
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	4,643	1,086	218	42	5,989	4,781	1,118	218	42	6,160
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	4,815	1,126	218	42	6,201	4,910	1,148	218	42	6,319
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	6,788	1,587	218	42	8,636	6,918	1,618	218	42	8,796
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	8,866	2,074	218	42	11,200	9,027	2,111	218	42	11,398
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	5,126	1,199	218	42	6,585	5,226	1,222	218	42	6,708
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	4,965	1,161	218	42	6,386	5,062	1,184	218	42	6,506
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	5,281	1,235	218	42	6,776	5,411	1,265	218	42	6,937
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	5,121	1,198	218	42	6,580	5,263	1,231	218	42	6,754
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	5,267	1,232	218	42	6,759	5,368	1,255	218	42	6,884
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	5,029	1,176	218	42	6,465	5,126	1,199	218	42	6,586
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	5,949	1,391	218	42	7,600	6,063	1,418	218	42	7,741
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	4,787	1,119	218	42	6,166	4,881	1,142	218	42	6,283
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	5,521	1,291	218	42	7,073	5,657	1,323	218	42	7,240
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	4,809	1,125	218	42	6,195	4,905	1,147	218	42	6,312
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	6,676	1,561	218	42	8,498	6,806	1,592	218	42	8,658
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	7,219	1,688	218	42	9,168	7,353	1,720	218	42	9,332
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012	4,587	1,073	218	42	5,921	4,724	1,105	218	42	6,089
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	6,578	1,538	218	42	8,376	6,745	1,577	218	42	8,583
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	4,599	1,076	218	42	5,935	4,701	1,099	218	42	6,061
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	5,143	1,203	218	42	6,606	5,243	1,226	218	42	6,730
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	4,578	1,071	218	42	5,909	4,669	1,092	218	42	6,021
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	5,591	1,308	218	42	7,159	5,730	1,340	218	42	7,330
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013	6,629	1,550	218	42	8,440	6,816	1,594	218	42	8,671
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	5,076	1,187	218	42	6,524	5,175	1,210	218	42	6,646
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	5,699	1,333	218	42	7,292	5,808	1,358	218	42	7,427
304	244101	INDI-Production	Operator U537O	5/13/2013	6,470	1,513	218	42	8,244	6,597	1,543	218	42	8,400
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	5,638	1,319	218	42	7,217	5,747	1,344	218	42	7,351
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	5,615	1,313	218	42	7,188	5,755	1,346	218	42	7,361
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	4,954	1,159	218	42	6,373	5,051	1,181	218	42	6,493
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	4,834	1,131	218	42	6,225	4,930	1,153	218	42	6,344
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	6,817	1,594	218	42	8,672	6,985	1,634	218	42	8,879
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	5,496	1,285	218	42	7,041	5,604	1,310	218	42	7,174
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	4,705	1,100	218	42	6,065	4,845	1,133	218	42	6,238
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	4,952	1,158	218	42	6,371	5,051	1,181	218	42	6,493
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	5,792	1,354	218	42	7,406	5,961	1,394	218	42	7,615
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	4,377	1,024	218	42	5,661	4,506	1,054	218	42	5,820
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	7,716	1,805	218	42	9,781	7,905	1,849	218	42	10,014
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	4,921	1,151	218	42	6,332	5,066	1,185	218	42	6,511
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	4,532	1,060	218	42	5,852	4,667	1,091	218	42	6,019
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	4,500	1,053	218	42	5,813	4,635	1,084	218	42	5,979
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	5,243	1,226	218	42	6,730	5,398	1,263	218	42	6,921
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014	4,661	1,090	218	42	6,011	4,753	1,112	218	42	6,125
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	5,569	1,302	218	42	7,132	5,694	1,332	218	42	7,286
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	5,641	1,319	218	42	7,221	5,753	1,345	218	42	7,359
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	4,991	1,167	218	42	6,418	5,089	1,190	218	42	6,539
324	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014	4,768	1,115	218	42	6,143	4,885	1,142	218	42	6,288
325	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	6,338	1,482	218	42	8,081	6,495	1,519	218	42	8,275
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	5,851	1,368	218	42	7,480	5,962	1,394	218	42	7,617
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	7,179	1,679	218	42	9,118	7,357	1,721	218	42	9,338
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	9,494	2,220	218	42	11,975	9,726	2,275	218	42	12,261
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	7,165	1,676	218	42	9,101	7,342	1,717	218	42	9,319
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	6,553	1,532	218	42	8,345	6,682	1,563	218	42	8,505
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	7,158	1,674	218	42	9,093	7,369	1,723	218	42	9,352
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	4,520	1,057	218	42	5,837	4,654	1,088	218	42	6,003
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	6,748	1,578	218	42	8,586	6,919	1,618	218	42	8,797
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	6,541	1,530	218	42	8,331	6,707	1,569	218	42	8,536
335	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015	4,883	1,142	218	42	6,285	5,007	1,171	218	42	6,438
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	6,408	1,499	218	42	8,167	6,570	1,537	218	42	8,367
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	4,889	1,143	218	42	6,293	4,987	1,166	218	42	6,413
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016	4,712	1,102	218	42	6,074	4,805	1,124	218	42	6,190
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	4,497	1,052	218	42	5,809	4,632	1,083	218	42	5,975

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					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	5,971	1,396	218	42	7,628
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009	4,852	1,135	218	42	6,247
257	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	4,989	1,167	218	42	6,416
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	5,676	1,327	218	42	7,263
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	5,333	1,247	218	42	6,840
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	6,678	1,562	218	42	8,500
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	5,475	1,280	218	42	7,015
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	5,267	1,232	218	42	6,760
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	5,326	1,246	218	42	6,832
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	5,403	1,264	218	42	6,927
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	6,139	1,436	218	42	7,834
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	9,446	2,209	218	42	11,916
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	5,924	1,385	218	42	7,570
268	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	5,342	1,249	218	42	6,852
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	5,979	1,398	218	42	7,637
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	5,790	1,354	218	42	7,404
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	5,288	1,237	218	42	6,785
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	6,360	1,487	218	42	8,108
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	5,117	1,197	218	42	6,574
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	6,041	1,413	218	42	7,714
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	8,344	1,951	218	42	10,556
276	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	5,215	1,220	218	42	6,695
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010	5,780	1,352	218	42	7,393
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	5,772	1,350	218	42	7,382
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	4,924	1,152	218	42	6,336
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	5,008	1,171	218	42	6,439
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	7,052	1,649	218	42	8,962
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	9,189	2,149	218	42	11,599
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	5,328	1,246	218	42	6,834
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	5,162	1,207	218	42	6,630
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	5,545	1,297	218	42	7,103
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	5,393	1,261	218	42	6,915
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	5,473	1,280	218	42	7,013
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	5,227	1,222	218	42	6,710
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	6,180	1,445	218	42	7,886
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	4,978	1,164	218	42	6,403
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	5,797	1,356	218	42	7,413
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	5,003	1,170	218	42	6,433
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	6,938	1,623	218	42	8,820
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	7,490	1,752	218	42	9,502
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012	4,865	1,138	218	42	6,264
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	6,917	1,618	218	42	8,795
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	4,818	1,127	218	42	6,205
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	5,345	1,250	218	42	6,856
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	4,762	1,114	218	42	6,136
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	5,871	1,373	218	42	7,505
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013	6,978	1,632	218	42	8,871
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	5,277	1,234	218	42	6,771
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	5,920	1,384	218	42	7,565
304	244101	INDI-Production	Operator U537O	5/13/2013	6,728	1,573	218	42	8,561
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	5,858	1,370	218	42	7,488
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	5,899	1,380	218	42	7,539
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	5,152	1,205	218	42	6,617
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	5,028	1,176	218	42	6,464
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	7,156	1,674	218	42	9,090
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	5,715	1,336	218	42	7,311
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	4,990	1,167	218	42	6,417
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	5,152	1,205	218	42	6,618
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	6,136	1,435	218	42	7,831
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	4,638	1,085	218	42	5,983
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	8,098	1,894	218	42	10,253
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	5,215	1,220	218	42	6,696
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	4,806	1,124	218	42	6,191
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	4,773	1,116	218	42	6,150
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	5,558	1,300	218	42	7,119
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014	4,848	1,134	218	42	6,242
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	5,837	1,365	218	42	7,463
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	5,867	1,372	218	42	7,500
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	5,190	1,214	218	42	6,664
324	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014	5,007	1,171	218	42	6,438
325	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	6,657	1,557	218	42	8,475
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	6,076	1,421	218	42	7,757
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	7,539	1,763	218	42	9,563
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	9,963	2,330	218	42	12,554
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	7,523	1,759	218	42	9,543
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	6,815	1,594	218	42	8,669
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	7,585	1,774	218	42	9,620
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	4,795	1,121	218	42	6,176
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	7,095	1,659	218	42	9,015
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	6,878	1,608	218	42	8,746
335	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015	5,135	1,201	218	42	6,596
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	6,738	1,576	218	42	8,574
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	5,087	1,190	218	42	6,537
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016	4,902	1,146	218	42	6,308
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	4,770	1,116	218	42	6,146

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				2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	7,248	1,695	218	42	9,203	7,382	1,726	218	42	9,369
341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	6,241	1,460	218	42	7,961	6,423	1,502	218	42	8,185
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	4,793	1,121	218	42	6,174	4,889	1,143	218	42	6,292
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	4,981	1,165	218	42	6,406	5,080	1,188	218	42	6,528
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	7,958	1,861	218	42	10,079	8,155	1,907	218	42	10,323
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	4,900	1,146	218	42	6,306	5,025	1,175	218	42	6,461
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	6,411	1,499	218	42	8,171	6,598	1,543	218	42	8,402
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	5,786	1,353	218	42	7,400	5,934	1,388	218	42	7,583
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016	5,663	1,324	218	42	7,248	5,775	1,351	218	42	7,386
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	4,931	1,153	218	42	6,345	5,042	1,179	218	42	6,481
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	5,015	1,173	218	42	6,448	5,153	1,205	218	42	6,619
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012	4,241	992	218	42	5,493	4,324	1,011	218	42	5,596
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011	4,921	1,151	218	42	6,333	5,018	1,174	218	42	6,452
353	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	4,856	1,136	218	42	6,253	4,981	1,165	218	42	6,406
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	6,023	1,409	218	42	7,692	6,143	1,437	218	42	7,840
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	4,665	1,091	218	42	6,016	4,804	1,124	218	42	6,188
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	5,277	1,234	218	42	6,772	5,380	1,258	218	42	6,899
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	4,738	1,108	218	42	6,106	4,879	1,141	218	42	6,281
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	6,498	1,520	218	42	8,278	6,688	1,564	218	42	8,512
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	5,626	1,316	218	42	7,201	5,791	1,354	218	42	7,406
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	5,233	1,224	218	42	6,718	5,350	1,251	218	42	6,861
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	4,164	974	218	42	5,398	4,246	993	218	42	5,499
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	5,128	1,199	218	42	6,587	5,234	1,224	218	42	6,718
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	5,220	1,221	218	42	6,701	5,375	1,257	218	42	6,892
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	6,294	1,472	218	42	8,026	6,456	1,510	218	42	8,226
365	244601	KANE-Production	Operator U537O	11/6/2017	5,085	1,189	218	42	6,535	5,189	1,213	218	42	6,663
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	5,317	1,244	218	42	6,821	5,473	1,280	218	42	7,013
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	5,373	1,257	218	42	6,890	5,530	1,293	218	42	7,084
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	4,373	1,023	218	42	5,656	4,489	1,050	218	42	5,799
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	5,756	1,346	218	42	7,362	5,907	1,382	218	42	7,549
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	5,562	1,301	218	42	7,123	5,708	1,335	218	42	7,303
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	6,072	1,420	218	42	7,752	6,190	1,448	218	42	7,898
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	7,068	1,653	218	42	8,981	7,277	1,702	218	42	9,239
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	6,067	1,419	218	42	7,746	6,226	1,456	218	42	7,942
374	241106	PITT-Field Services	Utility Person U537P	2/27/2018	6,014	1,406	218	42	7,681	6,171	1,443	218	42	7,874
375	245206	YARD-Field Services	Utility A F473Y	3/26/2018	4,695	1,098	218	42	6,053	4,800	1,123	218	42	6,183
376	249160	WILK-Watres	Plant Operator U648S	4/30/2018	5,279	1,235	218	42	6,774	5,434	1,271	218	42	6,965
377	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	4,980	1,165	218	42	6,405	5,080	1,188	218	42	6,529
378	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	5,754	1,346	218	42	7,359	5,923	1,385	218	42	7,569
379	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	6,234	1,458	218	42	7,952	6,417	1,501	218	42	8,178
380	246106	MECH-Field Services	Utility A U648R	5/14/2018	4,435	1,037	218	42	5,732	4,569	1,068	218	42	5,897
381	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	5,182	1,212	218	42	6,655	5,335	1,248	218	42	6,843
382	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	5,961	1,394	218	42	7,616	6,137	1,435	218	42	7,832
383	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	5,816	1,360	218	42	7,436	5,969	1,396	218	42	7,625
384	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	4,571	1,069	218	42	5,901	4,707	1,101	218	42	6,068
385	241106	PITT-Field Services	Utility Person U537P	7/10/2018	6,147	1,438	218	42	7,845	6,307	1,475	218	42	8,042
386	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	5,300	1,240	218	42	6,800	5,409	1,265	218	42	6,934
387	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	6,107	1,428	218	42	7,795	6,266	1,465	218	42	7,992
388	241106	PITT-Field Services	Utility Person U537P	7/24/2018	5,516	1,290	218	42	7,066	5,661	1,324	218	42	7,245
389	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	4,894	1,145	218	42	6,299	4,996	1,168	218	42	6,425
390	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	5,344	1,250	218	42	6,854	5,453	1,275	218	42	6,988
391	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018	4,295	1,004	218	42	5,560	4,428	1,036	218	42	5,724
392	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	5,212	1,219	218	42	6,691	5,348	1,251	218	42	6,859
393	241103	PITT-Cust Service	Field Service Representative U537P	9/4/2018	4,583	1,072	218	42	5,915	4,704	1,100	218	42	6,064
394	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	5,210	1,218	218	42	6,689	5,318	1,244	218	42	6,822
395	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	5,859	1,370	218	42	7,489	5,981	1,399	218	42	7,640
396	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	6,263	1,465	218	42	7,988	6,391	1,495	218	42	8,146
397	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	5,589	1,307	218	42	7,156	5,736	1,341	218	42	7,337
398	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	5,963	1,395	218	42	7,618	6,138	1,435	218	42	7,834
399	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	5,070	1,186	218	42	6,516	5,220	1,221	218	42	6,701
400	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	5,608	1,312	218	42	7,180	5,775	1,351	218	42	7,386
401	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	5,102	1,193	218	42	6,555	5,252	1,228	218	42	6,741
402	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	5,404	1,264	218	42	6,928	5,563	1,301	218	42	7,124
403	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	6,086	1,423	218	42	7,769	6,265	1,465	218	42	7,991
404	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	5,264	1,231	218	42	6,756	5,420	1,268	218	42	6,948
405	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	6,261	1,464	218	42	7,986	6,447	1,508	218	42	8,215
406	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	5,684	1,329	218	42	7,273	5,852	1,369	218	42	7,481
407	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	4,645	1,086	218	42	5,991	4,745	1,110	218	42	6,115
408	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	6,338	1,482	218	42	8,080	6,465	1,512	218	42	8,237
409	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	4,951	1,158	218	42	6,370	5,099	1,192	218	42	6,552
410	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	7,456	1,744	218	42	9,461	7,605	1,778	218	42	9,643
411	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	4,909	1,148	218	42	6,318	5,055	1,182	218	42	6,497
412	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	5,080	1,188	218	42	6,528	5,187	1,213	218	42	6,661
413	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	5,629	1,316	218	42	7,205	5,794	1,355	218	42	7,410
414	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	5,112	1,195	218	42	6,568	5,221	1,221	218	42	6,702
415	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	4,899	1,146	218	42	6,305	5,004	1,170	218	42	6,435
416	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	8,866	2,073	218	42	11,199	9,103	2,129	218	42	11,493
417	244601	KANE-Production	Operator U537O	9/9/2019	4,776	1,117	218	42	6,154	4,880	1,141	218	42	6,281
418	243151	NEWC-New Castle	Operator U537O	9/23/2019	6,436	1,505	218	42	8,201	6,574	1,537	218	42	8,372
419	243301	BUTL-Production	Operator U537O	9/23/2019	6,290	1,471	218	42	8,022	6,424	1,502	218	42	8,187
420	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	6,174	1,444	218	42	7,878	6,340	1,483	218	42	8,084
421	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	5,791	1,354	218	42	7,406	5,914	1,383	218	42	7,558
422	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	5,321	1,244	218	42	6,826	5,477	1,281	218	42	7,018
423	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	4,778	1,118	218	42	6,156	4,925	1,152	218	42	6,337
424	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	4,577	1,071	218	42	5,908	4,714	1,102	218	42	6,077

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	7,521	1,759	218	42	9,540
341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	6,610	1,546	218	42	8,417
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	4,986	1,166	218	42	6,412
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	5,181	1,212	218	42	6,653
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	8,359	1,955	218	42	10,575
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	5,153	1,205	218	42	6,619
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	6,792	1,588	218	42	8,641
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	6,088	1,424	218	42	7,772
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016	5,890	1,378	218	42	7,528
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	5,168	1,209	218	42	6,637
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	5,281	1,235	218	42	6,776
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012	4,409	1,031	218	42	5,701
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011	5,117	1,197	218	42	6,574
353	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	5,110	1,195	218	42	6,565
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	6,266	1,465	218	42	7,992
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	4,949	1,157	218	42	6,366
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	5,486	1,283	218	42	7,029
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	5,026	1,175	218	42	6,462
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	6,883	1,610	218	42	8,753
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	5,962	1,394	218	42	7,616
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	5,485	1,283	218	42	7,028
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	4,330	1,013	218	42	5,602
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	5,341	1,249	218	42	6,850
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	5,519	1,291	218	42	7,070
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	6,623	1,549	218	42	8,432
365	244601	KANE-Production	Operator U537O	11/6/2017	5,295	1,238	218	42	6,794
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	5,635	1,318	218	42	7,214
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	5,695	1,332	218	42	7,287
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	4,608	1,078	218	42	5,946
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	6,062	1,418	218	42	7,740
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	5,859	1,370	218	42	7,489
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	6,311	1,476	218	42	8,047
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	7,458	1,744	218	42	9,463
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	6,388	1,494	218	42	8,142
374	241106	PITT-Field Services	Utility Person U537P	2/27/2018	6,332	1,481	218	42	8,073
375	245206	YARD-Field Services	Utility A F473Y	3/26/2018	4,921	1,151	218	42	6,333
376	249160	WILK-Watres	Plant Operator U648S	4/30/2018	5,595	1,308	218	42	7,164
377	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	5,184	1,212	218	42	6,656
378	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	6,099	1,426	218	42	7,785
379	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	6,605	1,545	218	42	8,410
380	246106	MECH-Field Services	Utility A U648R	5/14/2018	4,692	1,097	218	42	6,050
381	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	5,493	1,285	218	42	7,037
382	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	6,318	1,478	218	42	8,056
383	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	6,125	1,432	218	42	7,817
384	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	4,846	1,133	218	42	6,240
385	241106	PITT-Field Services	Utility Person U537P	7/10/2018	6,471	1,513	218	42	8,244
386	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	5,520	1,291	218	42	7,072
387	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	6,430	1,504	218	42	8,194
388	241106	PITT-Field Services	Utility Person U537P	7/24/2018	5,809	1,358	218	42	7,427
389	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	5,100	1,193	218	42	6,553
390	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	5,565	1,301	218	42	7,127
391	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018	4,551	1,064	218	42	5,875
392	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	5,490	1,284	218	42	7,034
393	241103	PITT-Cust Service	Field Service Representative U537P	9/4/2018	4,829	1,129	218	42	6,219
394	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	5,428	1,270	218	42	6,958
395	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	6,107	1,428	218	42	7,795
396	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	6,522	1,525	218	42	8,308
397	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	5,886	1,376	218	42	7,523
398	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	6,318	1,478	218	42	8,056
399	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	5,375	1,257	218	42	6,892
400	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	5,946	1,391	218	42	7,597
401	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	5,409	1,265	218	42	6,935
402	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	5,727	1,339	218	42	7,327
403	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	6,450	1,509	218	42	8,219
404	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	5,580	1,305	218	42	7,146
405	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	6,638	1,552	218	42	8,451
406	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	6,025	1,409	218	42	7,695
407	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	4,848	1,134	218	42	6,243
408	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	6,595	1,542	218	42	8,398
409	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	5,253	1,228	218	42	6,741
410	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	7,757	1,814	218	42	9,831
411	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	5,206	1,218	218	42	6,684
412	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	5,296	1,239	218	42	6,795
413	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	5,965	1,395	218	42	7,621
414	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	5,333	1,247	218	42	6,841
415	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	5,109	1,195	218	42	6,564
416	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	9,346	2,186	218	42	11,793
417	244601	KANE-Production	Operator U537O	9/9/2019	4,986	1,166	218	42	6,412
418	243151	NEWC-New Castle	Operator U537O	9/23/2019	6,716	1,571	218	42	8,547
419	243301	BUTL-Production	Operator U537O	9/23/2019	6,562	1,535	218	42	8,357
420	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	6,511	1,523	218	42	8,294
421	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	6,037	1,412	218	42	7,710
422	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	5,639	1,319	218	42	7,218
423	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	5,061	1,184	218	42	6,506
424	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	4,855	1,135	218	42	6,251

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				2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
425	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	5,701	1,333	218	42	7,295	5,822	1,362	218	42	7,444
426	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	5,150	1,205	218	42	6,615	5,260	1,230	218	42	6,751
427	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	4,889	1,143	218	42	6,292	5,033	1,177	218	42	6,471
428	244301	CLAR-Production	Operator U537O	4/27/2020	5,591	1,308	218	42	7,159	5,712	1,336	218	42	7,308
429	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	4,558	1,066	218	42	5,884	4,694	1,098	218	42	6,053
430	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	4,606	1,077	218	42	5,943	4,731	1,106	218	42	6,098
431	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	6,607	1,545	218	42	8,412	6,783	1,586	218	42	8,630
432	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	5,464	1,278	218	42	7,002	5,581	1,305	218	42	7,146
433	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	4,534	1,060	218	42	5,855	4,633	1,084	218	42	5,977
434	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	4,466	1,044	218	42	5,771	4,601	1,076	218	42	5,937
435	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	4,223	988	218	42	5,471	4,306	1,007	218	42	5,574
436	245206	YARD-Field Services	Utility B F473Y	7/13/2020	3,813	892	218	42	4,966	3,914	915	218	42	5,090
437	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	6,564	1,535	218	42	8,359	6,746	1,578	218	42	8,584
438	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	4,263	997	218	42	5,520	4,400	1,029	218	42	5,690
439	249160	WILK-Watres	Plant Operator U648S	12/15/2020	5,099	1,193	218	42	6,552	5,251	1,228	218	42	6,739
440	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	6,303	1,474	218	42	8,037	6,489	1,518	218	42	8,267
441	249160	WILK-Watres	Plant Operator U648S	12/21/2020	4,841	1,132	218	42	6,234	4,986	1,166	218	42	6,412
442	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	4,611	1,078	218	42	5,949	4,752	1,111	218	42	6,123
443	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	4,721	1,104	218	42	6,086	4,866	1,138	218	42	6,264
444	245206	YARD-Field Services	Utility B F473Y	3/15/2021	3,876	907	218	42	5,043	3,979	931	218	42	5,170
445	244101	INDI-Production	Operator U537O	3/22/2021	5,323	1,245	218	42	6,828	5,440	1,272	218	42	6,972
446	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	4,491	1,050	218	42	5,801	4,590	1,074	218	42	5,924
447	243152	NEWC-Ellwood	Operator U537O	4/26/2021	5,349	1,251	218	42	6,860	5,467	1,279	218	42	7,006
448	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	4,930	1,153	218	42	6,344	5,080	1,188	218	42	6,529
449	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	4,684	1,095	218	42	6,039	4,826	1,129	218	42	6,215
450	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	5,097	1,192	218	42	6,550	5,206	1,218	218	42	6,684
451	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	5,446	1,274	218	42	6,980	5,562	1,301	218	42	7,124
452	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	5,123	1,198	218	42	6,581	5,233	1,224	218	42	6,718
453	241106	PITT-Field Services	Utility Person U537P	5/24/2021	6,135	1,435	218	42	7,830	6,305	1,475	218	42	8,040
454	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	4,656	1,089	218	42	6,005	4,758	1,113	218	42	6,131
455	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	4,761	1,113	218	42	6,135	4,906	1,147	218	42	6,314
456	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	4,875	1,140	218	42	6,276	4,984	1,166	218	42	6,410
457	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	4,776	1,117	218	42	6,154	4,921	1,151	218	42	6,332
458	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	4,564	1,067	218	42	5,892	4,666	1,091	218	42	6,018
459	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	4,647	1,087	218	42	5,994	4,762	1,114	218	42	6,136
460	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	5,189	1,214	218	42	6,663	5,349	1,251	218	42	6,860
461	244506	WARR-Field Services	Utility Person U537O	8/16/2021	4,548	1,064	218	42	5,872	4,652	1,088	218	42	6,000
462	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	5,026	1,176	218	42	6,462	5,137	1,201	218	42	6,599
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	5,537	1,295	218	42	7,092	5,666	1,325	218	42	7,252
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	4,240	992	218	42	5,492	4,338	1,014	218	42	5,613
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	5,326	1,246	218	42	6,831	5,491	1,284	218	42	7,035
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	5,502	1,287	218	42	7,049	5,670	1,326	218	42	7,257
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	4,108	961	218	42	5,329	4,226	988	218	42	5,475
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	5,108	1,195	218	42	6,563	5,234	1,224	218	42	6,719
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	4,626	1,082	218	42	5,969	4,768	1,115	218	42	6,143
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	4,848	1,134	218	42	6,242	4,968	1,162	218	42	6,390
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	4,236	991	218	42	5,487	4,341	1,015	218	42	5,616
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	5,409	1,265	218	42	6,934	5,562	1,301	218	42	7,123
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	5,157	1,206	218	42	6,623	5,302	1,240	218	42	6,803
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	5,112	1,196	218	42	6,568	5,272	1,233	218	42	6,765
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	4,575	1,070	218	42	5,905	4,718	1,103	218	42	6,082
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	5,790	1,354	218	42	7,405	5,953	1,392	218	42	7,605
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	4,237	991	218	42	5,488	4,334	1,014	218	42	5,608
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	4,132	966	218	42	5,358	4,227	989	218	42	5,476
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	4,489	1,050	218	42	5,799	4,629	1,083	218	42	5,972
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	4,144	969	218	42	5,373	4,246	993	218	42	5,500
481	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	4,184	979	218	42	5,423	4,303	1,006	218	42	5,570
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	4,794	1,121	218	42	6,175	4,931	1,153	218	42	6,345
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	4,083	955	218	42	5,299	4,214	985	218	42	5,459
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	5,099	1,193	218	42	6,552	5,259	1,230	218	42	6,749
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	5,762	1,348	218	42	7,370	5,924	1,385	218	42	7,570
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	5,117	1,197	218	42	6,574	5,261	1,230	218	42	6,752
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	4,390	1,027	218	42	5,678	4,529	1,059	218	42	5,849
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	4,516	1,056	218	42	5,832	4,656	1,089	218	42	6,006
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	4,685	1,096	218	42	6,041	4,832	1,130	218	42	6,222
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022	5,146	1,203	218	42	6,609	5,293	1,238	218	42	6,791
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	4,988	1,167	218	42	6,415	5,130	1,200	218	42	6,591
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	5,258	1,230	218	42	6,748	5,408	1,265	218	42	6,934
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	4,758	1,113	218	42	6,131	4,893	1,144	218	42	6,298
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	5,610	1,312	218	42	7,182	5,768	1,349	218	42	7,378
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	4,058	949	218	42	5,267	4,191	980	218	42	5,431
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	3,861	903	218	42	5,025	3,987	932	218	42	5,180
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	4,526	1,059	218	42	5,845	4,637	1,085	218	42	5,982
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	5,178	1,211	218	42	6,649	5,325	1,245	218	42	6,831
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	5,809	1,358	218	42	7,427	5,974	1,397	218	42	7,632
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	4,535	1,061	218	42	5,856	4,679	1,094	218	42	6,034
501	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	4,531	1,060	218	42	5,851	4,660	1,090	218	42	6,010
502	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	4,650	1,087	218	42	5,997	4,782	1,118	218	42	6,161
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	4,943	1,156	218	42	6,360	5,102	1,193	218	42	6,555
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	5,058	1,183	218	42	6,501	5,201	1,216	218	42	6,678
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	4,154	972	218	42	5,386	4,260	996	218	42	5,517
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	3,915	916	218	42	5,091	4,018	940	218	42	5,218
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	4,437	1,038	218	42	5,735	4,580	1,071	218	42	5,911
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	4,116	963	218	42	5,339	4,213	985	218	42	5,459
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	4,212	985	218	42	5,457	4,348	1,017	218	42	5,625

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					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
425	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	5,947	1,391	218	42	7,598
426	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	5,370	1,256	218	42	6,886
427	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	5,184	1,212	218	42	6,657
428	244301	CLAR-Production	Operator U537O	4/27/2020	5,835	1,365	218	42	7,461
429	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	4,835	1,131	218	42	6,226
430	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	4,851	1,134	218	42	6,246
431	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	6,965	1,629	218	42	8,855
432	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	5,700	1,333	218	42	7,294
433	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	4,733	1,107	218	42	6,101
434	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	4,740	1,109	218	42	6,109
435	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	4,391	1,027	218	42	5,678
436	245206	YARD-Field Services	Utility B F473Y	7/13/2020	4,013	939	218	42	5,212
437	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	6,931	1,621	218	42	8,813
438	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	4,544	1,063	218	42	5,867
439	249160	WILK-Watres	Plant Operator U648S	12/15/2020	5,409	1,265	218	42	6,934
440	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	6,681	1,563	218	42	8,504
441	249160	WILK-Watres	Plant Operator U648S	12/21/2020	5,137	1,201	218	42	6,598
442	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	4,884	1,142	218	42	6,286
443	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	5,001	1,170	218	42	6,431
444	245206	YARD-Field Services	Utility B F473Y	3/15/2021	4,080	954	218	42	5,294
445	244101	INDI-Production	Operator U537O	3/22/2021	5,560	1,300	218	42	7,121
446	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	4,691	1,097	218	42	6,049
447	243152	NEWC-Ellwood	Operator U537O	4/26/2021	5,589	1,307	218	42	7,156
448	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	5,235	1,224	218	42	6,720
449	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	4,973	1,163	218	42	6,397
450	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	5,318	1,244	218	42	6,823
451	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	5,682	1,329	218	42	7,271
452	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	5,347	1,251	218	42	6,858
453	241106	PITT-Field Services	Utility Person U537P	5/24/2021	6,479	1,515	218	42	8,254
454	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	4,862	1,137	218	42	6,260
455	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	5,057	1,183	218	42	6,500
456	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	5,096	1,192	218	42	6,548
457	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	5,069	1,186	218	42	6,515
458	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	4,771	1,116	218	42	6,147
459	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	4,894	1,145	218	42	6,299
460	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	5,515	1,290	218	42	7,065
461	244506	WARR-Field Services	Utility Person U537O	8/16/2021	4,759	1,113	218	42	6,132
462	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	5,251	1,228	218	42	6,739
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	5,815	1,360	218	42	7,435
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	4,438	1,038	218	42	5,736
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	5,661	1,324	218	42	7,245
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	5,845	1,367	218	42	7,472
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	4,348	1,017	218	42	5,626
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	5,378	1,258	218	42	6,897
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	4,916	1,150	218	42	6,326
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	5,105	1,194	218	42	6,560
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	4,460	1,043	218	42	5,763
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	5,719	1,338	218	42	7,317
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	5,453	1,275	218	42	6,988
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	5,436	1,271	218	42	6,968
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	4,851	1,134	218	42	6,245
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	6,119	1,431	218	42	7,811
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	4,434	1,037	218	42	5,731
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	4,324	1,011	218	42	5,596
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	4,776	1,117	218	42	6,153
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	4,363	1,020	218	42	5,643
481	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	4,426	1,035	218	42	5,722
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	5,072	1,186	218	42	6,519
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	4,348	1,017	218	42	5,625
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	5,425	1,269	218	42	6,954
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	6,090	1,424	218	42	7,774
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	5,409	1,265	218	42	6,934
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	4,672	1,093	218	42	6,025
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	4,788	1,120	218	42	6,168
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	4,985	1,166	218	42	6,411
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022	5,443	1,273	218	42	6,977
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	5,276	1,234	218	42	6,770
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	5,562	1,301	218	42	7,123
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	5,031	1,177	218	42	6,468
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	5,932	1,387	218	42	7,580
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	4,329	1,012	218	42	5,602
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	4,103	960	218	42	5,323
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	4,763	1,114	218	42	6,138
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	5,477	1,281	218	42	7,019
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	6,146	1,437	218	42	7,843
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	4,829	1,129	218	42	6,219
501	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	4,793	1,121	218	42	6,175
502	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	4,919	1,150	218	42	6,330
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	5,265	1,231	218	42	6,757
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	5,349	1,251	218	42	6,860
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	4,382	1,025	218	42	5,667
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	4,119	963	218	42	5,343
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	4,727	1,105	218	42	6,093
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	4,313	1,009	218	42	5,582
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	4,489	1,050	218	42	5,799

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Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	4,806	1,124	218	42	6,191	4,944	1,156	218	42	6,360
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	4,927	1,152	218	42	6,339	5,067	1,185	218	42	6,513
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	4,842	1,132	218	42	6,235	4,981	1,165	218	42	6,406
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	4,110	961	218	42	5,331	4,207	984	218	42	5,451
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	4,213	985	218	42	5,459	4,313	1,009	218	42	5,583
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	4,806	1,124	218	42	6,190	4,956	1,159	218	42	6,376
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	3,987	932	218	42	5,180	4,082	955	218	42	5,297
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	4,279	1,001	218	42	5,540	4,381	1,025	218	42	5,666
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	4,691	1,097	218	42	6,048	4,825	1,129	218	42	6,214
519	243301	BUTL-Production	Operator U537O	3/20/2023	4,357	1,019	218	42	5,636	4,460	1,043	218	42	5,764
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	4,574	1,070	218	42	5,904	4,683	1,095	218	42	6,038
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	3,897	911	218	42	5,069	4,025	941	218	42	5,227
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	4,486	1,049	218	42	5,795	4,614	1,079	218	42	5,954
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	4,366	1,021	218	42	5,647	4,469	1,045	218	42	5,775
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	4,358	1,019	218	42	5,637	4,483	1,049	218	42	5,792
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	4,253	995	218	42	5,508	4,376	1,023	218	42	5,660
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	3,630	849	218	42	4,739	3,724	871	218	42	4,855
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	4,045	946	218	42	5,251	4,178	977	218	42	5,415
528	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	4,084	955	218	42	5,299	4,201	982	218	42	5,444
529	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	4,082	955	218	42	5,297	4,199	982	218	42	5,442
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	3,892	910	218	42	5,063	4,020	940	218	42	5,221
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023	3,910	914	218	42	5,084	4,003	936	218	42	5,199
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	3,908	914	218	42	5,083	4,002	936	218	42	5,198
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023	3,922	917	218	42	5,099	4,016	939	218	42	5,216
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023	4,257	996	218	42	5,513	4,379	1,024	218	42	5,663
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	3,888	909	218	42	5,058	4,016	939	218	42	5,216
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023	3,660	856	218	42	4,776	3,781	884	218	42	4,926
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023	-	-	-	-	-	4,766	1,115	218	42	6,140
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023	-	-	-	-	-	4,596	1,075	218	42	5,931
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	-	-	-	-	-	4,135	967	218	42	5,362
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	-	-	-	-	-	4,135	967	218	42	5,362
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	-	-	-	-	-	4,002	936	218	42	5,198
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023	-	-	-	-	-	4,196	981	218	42	5,438
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023	-	-	-	-	-	4,402	1,029	218	42	5,691
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023	-	-	-	-	-	4,274	999	218	42	5,533
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023	-	-	-	-	-	4,263	997	218	42	5,520
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023	-	-	-	-	-	4,731	1,106	218	42	6,098
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023	-	-	-	-	-	4,019	940	218	42	5,219
			Total Collective Bargaining Unit		$2,885,140	$674,821	$117,030	$22,512	$3,699,503	$3,005,078	$701,799	$119,432	$22,974	$3,849,282

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					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	5,086	1,189	218	42	6,536
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	5,211	1,219	218	42	6,690
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	5,123	1,198	218	42	6,581
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	4,307	1,007	218	42	5,574
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	4,416	1,033	218	42	5,709
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	5,096	1,192	218	42	6,548
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	4,179	977	218	42	5,417
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	4,486	1,049	218	42	5,795
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	4,963	1,161	218	42	6,384
519	243301	BUTL-Production	Operator U537O	3/20/2023	4,566	1,068	218	42	5,895
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	4,794	1,121	218	42	6,176
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	4,157	972	218	42	5,390
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	4,747	1,110	218	42	6,118
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	4,576	1,070	218	42	5,906
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	4,612	1,079	218	42	5,951
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	4,501	1,053	218	42	5,814
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	3,831	896	218	42	4,987
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	4,316	1,009	218	42	5,586
528	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	4,322	1,011	218	42	5,593
529	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	4,320	1,010	218	42	5,591
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	4,154	971	218	42	5,386
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023	4,099	959	218	42	5,318
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	4,098	958	218	42	5,316
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023	4,112	962	218	42	5,334
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023	4,505	1,054	218	42	5,818
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	4,148	970	218	42	5,379
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023	3,894	911	218	42	5,064
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023	4,884	1,142	218	42	6,287
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023	4,696	1,098	218	42	6,055
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	4,231	989	218	42	5,481
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	4,231	989	218	42	5,481
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	4,098	958	218	42	5,316
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023	4,296	1,005	218	42	5,561
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023	4,498	1,052	218	42	5,810
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023	4,396	1,028	218	42	5,685
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023	4,386	1,026	218	42	5,672
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023	4,851	1,134	218	42	6,246
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023	4,152	971	218	42	5,384
				Total Collective Bargaining Unit	$3,080,430	$719,430	$119,432	$22,974	$3,942,266

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					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Hourly														
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	$4,717	$1,103	$218	$42	$6,081	$4,866	$1,138	$218	$42	$6,264
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	6,549	1,532	218	42	8,341	6,754	1,580	218	42	8,594
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	5,105	1,194	218	42	6,559	5,265	1,231	218	42	6,757
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	5,362	1,254	218	42	6,877	5,531	1,293	218	42	7,084
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	10/3/1988	4,622	1,081	218	42	5,963	4,767	1,115	218	42	6,143
6	246801	LEHP-Production	Plant Operator	2/1/1996	5,850	1,368	218	42	7,479	6,034	1,411	218	42	7,705
7	245706	POCO-Field Services	Crew Leader	9/16/1996	5,342	1,249	218	42	6,852	5,510	1,289	218	42	7,059
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	4,793	1,121	218	42	6,174	4,943	1,156	218	42	6,360
9	245706	POCO-Field Services	Utility Person	7/1/1994	5,192	1,214	218	42	6,666	5,355	1,252	218	42	6,868
10	245501	BNGR-Production	Plant Operator	7/23/1990	6,051	1,415	218	42	7,727	6,241	1,459	218	42	7,960
11	247406	FRCK-Field Services	Utility Person	4/18/1988	4,743	1,109	218	42	6,113	4,893	1,144	218	42	6,297
12	247406	FRCK-Field Services	Utility Person	1/15/1986	5,106	1,194	218	42	6,560	5,266	1,231	218	42	6,757
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	4,406	1,031	218	42	5,697	4,546	1,063	218	42	5,869
14	246201	HSHY-Production	Plant Operator	9/27/1993	5,383	1,259	218	42	6,903	5,552	1,298	218	42	7,111
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	4,502	1,053	218	42	5,815	4,644	1,086	218	42	5,991
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	5,280	1,235	218	42	6,775	5,446	1,274	218	42	6,980
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	5,652	1,322	218	42	7,235	5,830	1,363	218	42	7,454
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990	4,320	1,010	218	42	5,591	4,456	1,042	218	42	5,759
19	247106	MILT-Field Services	Utility Person	11/16/1998	5,026	1,176	218	42	6,462	5,184	1,212	218	42	6,657
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	4,816	1,126	218	42	6,203	4,967	1,162	218	42	6,389
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	4,329	1,012	218	42	5,601	4,464	1,044	218	42	5,769
22	246506	COAT-Field Services	Utility Person	1/26/1998	4,177	977	218	42	5,415	4,309	1,008	218	42	5,577
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	5,583	1,306	218	42	7,149	5,758	1,347	218	42	7,365
24	245906	GLEN-Field Services	Utility Person	12/27/1994	5,629	1,316	218	42	7,206	5,805	1,358	218	42	7,423
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999	5,254	1,229	218	42	6,743	5,418	1,267	218	42	6,946
26	245606	NAZA-Field Services	Utility Person	10/4/1993	5,254	1,229	218	42	6,743	5,419	1,267	218	42	6,947
27	245906	GLEN-Field Services	Utility Person	6/20/1983	5,048	1,181	218	42	6,489	5,207	1,218	218	42	6,685
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	5,834	1,364	218	42	7,459	6,018	1,407	218	42	7,685
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	5,657	1,323	218	42	7,241	5,833	1,364	218	42	7,457
30	246401	ROYF-Production	Plant Operator	3/9/1998	5,725	1,339	218	42	7,325	5,904	1,381	218	42	7,545
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987	6,446	1,507	218	42	8,214	6,648	1,555	218	42	8,463
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	5,554	1,299	218	42	7,114	5,729	1,340	218	42	7,330
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	4,974	1,163	218	42	6,398	5,131	1,200	218	42	6,591
34	245606	NAZA-Field Services	Utility Person	11/26/2001	5,555	1,299	218	42	7,115	5,730	1,340	218	42	7,330
35	246801	LEHP-Production	Utility Person	2/26/1990	4,959	1,160	218	42	6,379	5,115	1,196	218	42	6,571
36	246501	COAT-Production	Plant Operator	5/28/2002	6,198	1,449	218	42	7,907	6,392	1,495	218	42	8,147
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	4,807	1,124	218	42	6,191	4,958	1,159	218	42	6,377
38	245906	GLEN-Field Services	Utility Person	1/5/2004	5,414	1,266	218	42	6,941	5,585	1,306	218	42	7,151
39	245606	NAZA-Field Services	Utility Person	2/16/2004	5,112	1,195	218	42	6,568	5,272	1,233	218	42	6,765
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N)	12/1/2004	4,319	1,010	218	42	5,589	4,455	1,042	218	42	5,757
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	4,728	1,106	218	42	6,094	4,876	1,140	218	42	6,276
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	5,107	1,194	218	42	6,562	5,268	1,232	218	42	6,761
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	5,160	1,207	218	42	6,627	5,322	1,245	218	42	6,827
44	245506	BNGR-Field Services	Utility Person	11/7/2005	4,961	1,160	218	42	6,382	5,117	1,197	218	42	6,574
45	245401	SUSQ-Production	Plant Operator	5/15/2006	5,043	1,179	218	42	6,482	5,200	1,216	218	42	6,677
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006	5,223	1,221	218	42	6,705	5,387	1,260	218	42	6,907
47	245606	NAZA-Field Services	Utility Person	12/18/2006	5,049	1,181	218	42	6,490	5,207	1,218	218	42	6,685
48	246206	HSHY-Field Services	Utility Person	3/26/2007	6,160	1,441	218	42	7,861	6,352	1,486	218	42	8,098
49	247106	MILT-Field Services	Utility Person	5/7/2007	4,476	1,047	218	42	5,783	4,617	1,080	218	42	5,957
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	4,953	1,158	218	42	6,372	5,109	1,195	218	42	6,565
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	5,120	1,197	218	42	6,578	5,280	1,235	218	42	6,775
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007	8,316	1,945	218	42	10,521	8,575	2,005	218	42	10,841
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	6,357	1,487	218	42	8,104	6,557	1,533	218	42	8,350
54	247201	PHBG-Production	Operations Specialist	6/2/2008	5,219	1,221	218	42	6,700	5,384	1,259	218	42	6,903
55	247106	MILT-Field Services	Utility Person	7/21/2008	4,495	1,051	218	42	5,807	4,637	1,085	218	42	5,982
56	246501	COAT-Production	Plant Operator	10/6/2008	5,414	1,266	218	42	6,941	5,585	1,306	218	42	7,151
57	247701	BOGGS-Production	Plant Operator	5/4/2009	4,981	1,165	218	42	6,406	5,137	1,201	218	42	6,599
58	245706	POCO-Field Services	Utility Person	9/28/2009	5,459	1,277	218	42	6,996	5,630	1,317	218	42	7,207
59	246506	COAT-Field Services	Utility Person	11/2/2009	5,083	1,189	218	42	6,532	5,242	1,226	218	42	6,728
60	247401	FRCK-Production	Operator	1/25/2010	4,735	1,107	218	42	6,103	4,884	1,142	218	42	6,287
61	247206	PHBG-Field Services	Utility Person	3/29/2010	5,020	1,174	218	42	6,454	5,177	1,211	218	42	6,648
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	5,422	1,268	218	42	6,950	5,592	1,308	218	42	7,160
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	6,142	1,436	218	42	7,838	6,334	1,481	218	42	8,076
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	5,576	1,304	218	42	7,140	5,751	1,345	218	42	7,356
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	4,160	973	218	42	5,393	4,290	1,003	218	42	5,554
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	4,999	1,169	218	42	6,428	5,155	1,206	218	42	6,621
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	6,558	1,534	218	42	8,352	6,765	1,582	218	42	8,607
68	247206	PHBG-Field Services	Utility Person	11/7/2011	4,717	1,103	218	42	6,081	4,866	1,138	218	42	6,264
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	4,024	941	218	42	5,225	4,150	971	218	42	5,381
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	4,376	1,024	218	42	5,660	4,515	1,056	218	42	5,831
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	4,329	1,012	218	42	5,601	4,464	1,044	218	42	5,769
72	249150	WILK-Other	Operations Specialist	3/4/2013	4,296	1,005	218	42	5,560	4,431	1,036	218	42	5,728
73	247306	BRWK-Field Services	Utility Person	4/29/2013	5,247	1,227	218	42	6,734	5,412	1,266	218	42	6,938
74	245601	NAZA-Production	Plant Operator	6/27/2013	7,504	1,755	218	42	9,520	7,738	1,810	218	42	9,808
75	247301	BRWK-Production	Operator	9/16/2013	5,292	1,238	218	42	6,790	5,458	1,276	218	42	6,995
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	4,541	1,062	218	42	5,863	4,684	1,095	218	42	6,040
77	247201	PHBG-Production	Plant Operator	2/2/2015	5,091	1,191	218	42	6,542	5,251	1,228	218	42	6,739
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	5,672	1,326	218	42	7,259	5,849	1,368	218	42	7,478
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	4,478	1,047	218	42	5,785	4,619	1,080	218	42	5,959
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	5,573	1,303	218	42	7,137	5,748	1,344	218	42	7,353
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	3,908	914	218	42	5,082	4,031	943	218	42	5,234
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	5,249	1,228	218	42	6,737	5,413	1,266	218	42	6,940
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	4,150	971	218	42	5,381	4,280	1,001	218	42	5,542
84	245406	SUSQ-Field Services	Utility Person	12/14/2015	4,250	994	218	42	5,504	4,383	1,025	218	42	5,669

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					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
Non-Collective Bargaining Unit Hourly									
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	$5,022	$1,175	$218	$42	$6,457
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	6,968	1,630	218	42	8,858
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	5,434	1,271	218	42	6,965
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	5,707	1,335	218	42	7,302
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	10/3/1988	4,919	1,151	218	42	6,330
6	246801	LEHP-Production	Plant Operator	2/1/1996	6,226	1,456	218	42	7,942
7	245706	POCO-Field Services	Crew Leader	9/16/1996	5,685	1,330	218	42	7,276
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	5,101	1,193	218	42	6,554
9	245706	POCO-Field Services	Utility Person	7/1/1994	5,525	1,292	218	42	7,078
10	245501	BNGR-Production	Plant Operator	7/23/1990	6,440	1,506	218	42	8,206
11	247406	FRCK-Field Services	Utility Person	4/18/1988	5,049	1,181	218	42	6,490
12	247406	FRCK-Field Services	Utility Person	1/15/1986	5,433	1,271	218	42	6,964
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	4,691	1,097	218	42	6,048
14	246201	HSHY-Production	Plant Operator	9/27/1993	5,729	1,340	218	42	7,329
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	4,792	1,121	218	42	6,173
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	5,620	1,314	218	42	7,195
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	6,016	1,407	218	42	7,683
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990	4,599	1,076	218	42	5,935
19	247106	MILT-Field Services	Utility Person	11/16/1998	5,349	1,251	218	42	6,861
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	5,126	1,199	218	42	6,585
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	4,607	1,077	218	42	5,945
22	246506	COAT-Field Services	Utility Person	1/26/1998	4,446	1,040	218	42	5,746
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	5,941	1,389	218	42	7,591
24	245906	GLEN-Field Services	Utility Person	12/27/1994	5,990	1,401	218	42	7,651
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999	5,590	1,307	218	42	7,158
26	245606	NAZA-Field Services	Utility Person	10/4/1993	5,592	1,308	218	42	7,160
27	245906	GLEN-Field Services	Utility Person	6/20/1983	5,374	1,257	218	42	6,891
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	6,209	1,452	218	42	7,922
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	6,018	1,407	218	42	7,686
30	246401	ROYF-Production	Plant Operator	3/9/1998	6,090	1,424	218	42	7,774
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987	6,858	1,604	218	42	8,722
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	5,912	1,383	218	42	7,555
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	5,295	1,238	218	42	6,793
34	245606	NAZA-Field Services	Utility Person	11/26/2001	5,912	1,383	218	42	7,555
35	246801	LEHP-Production	Utility Person	2/26/1990	5,278	1,234	218	42	6,772
36	246501	COAT-Production	Plant Operator	5/28/2002	6,596	1,542	218	42	8,398
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	5,115	1,196	218	42	6,572
38	245906	GLEN-Field Services	Utility Person	1/5/2004	5,763	1,348	218	42	7,371
39	245606	NAZA-Field Services	Utility Person	2/16/2004	5,439	1,272	218	42	6,971
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N)	12/1/2004	4,597	1,075	218	42	5,932
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	5,031	1,177	218	42	6,468
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	5,437	1,272	218	42	6,969
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	5,490	1,284	218	42	7,035
44	245506	BNGR-Field Services	Utility Person	11/7/2005	5,280	1,235	218	42	6,775
45	245401	SUSQ-Production	Plant Operator	5/15/2006	5,366	1,255	218	42	6,881
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006	5,560	1,300	218	42	7,120
47	245606	NAZA-Field Services	Utility Person	12/18/2006	5,373	1,256	218	42	6,889
48	246206	HSHY-Field Services	Utility Person	3/26/2007	6,553	1,533	218	42	8,346
49	247106	MILT-Field Services	Utility Person	5/7/2007	4,764	1,114	218	42	6,139
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	5,273	1,233	218	42	6,766
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	5,448	1,274	218	42	6,983
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007	8,847	2,069	218	42	11,176
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	6,766	1,582	218	42	8,608
54	247201	PHBG-Production	Operations Specialist	6/2/2008	5,556	1,299	218	42	7,115
55	247106	MILT-Field Services	Utility Person	7/21/2008	4,785	1,119	218	42	6,164
56	246501	COAT-Production	Plant Operator	10/6/2008	5,761	1,347	218	42	7,369
57	247701	BOGGS-Production	Plant Operator	5/4/2009	5,300	1,240	218	42	6,800
58	245706	POCO-Field Services	Utility Person	9/28/2009	5,809	1,359	218	42	7,428
59	246506	COAT-Field Services	Utility Person	11/2/2009	5,409	1,265	218	42	6,934
60	247401	FRCK-Production	Operator	1/25/2010	5,039	1,179	218	42	6,478
61	247206	PHBG-Field Services	Utility Person	3/29/2010	5,342	1,249	218	42	6,852
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	5,770	1,349	218	42	7,379
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	6,536	1,529	218	42	8,325
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	5,934	1,388	218	42	7,582
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	4,427	1,035	218	42	5,723
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	5,319	1,244	218	42	6,823
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	6,980	1,632	218	42	8,873
68	247206	PHBG-Field Services	Utility Person	11/7/2011	5,021	1,174	218	42	6,456
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	4,283	1,002	218	42	5,545
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	4,659	1,090	218	42	6,009
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	4,607	1,077	218	42	5,945
72	249150	WILK-Other	Operations Specialist	3/4/2013	4,573	1,069	218	42	5,902
73	247306	BRWK-Field Services	Utility Person	4/29/2013	5,585	1,306	218	42	7,152
74	245601	NAZA-Production	Plant Operator	6/27/2013	7,985	1,867	218	42	10,113
75	247301	BRWK-Production	Operator	9/16/2013	5,631	1,317	218	42	7,209
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	4,834	1,131	218	42	6,225
77	247201	PHBG-Production	Plant Operator	2/2/2015	5,417	1,267	218	42	6,944
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	6,035	1,411	218	42	7,707
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	4,767	1,115	218	42	6,142
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	5,931	1,387	218	42	7,579
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	4,160	973	218	42	5,393
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	5,586	1,306	218	42	7,152
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	4,417	1,033	218	42	5,711
84	245406	SUSQ-Field Services	Utility Person	12/14/2015	4,522	1,058	218	42	5,841

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				2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
85	246506	COAT-Field Services	Utility Person	2/3/2016	7,213	1,687	218	42	9,160	7,433	1,738	218	42	9,432
86	247103	MILT-Cust Service	Utility Person	3/7/2016	4,368	1,022	218	42	5,650	4,505	1,054	218	42	5,819
87	246206	HSHY-Field Services	Utility Person	2/29/2016	5,400	1,263	218	42	6,924	5,570	1,303	218	42	7,133
88	246201	HSHY-Production	Plant Operator	2/29/2016	7,315	1,711	218	42	9,286	7,543	1,764	218	42	9,568
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	5,417	1,267	218	42	6,945	5,587	1,307	218	42	7,154
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016	4,524	1,058	218	42	5,842	4,666	1,091	218	42	6,018
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	8,273	1,935	218	42	10,469	8,533	1,996	218	42	10,788
92	246206	HSHY-Field Services	Utility Person	6/13/2016	4,670	1,092	218	42	6,022	4,816	1,126	218	42	6,202
93	246206	HSHY-Field Services	Utility Person	7/11/2016	4,324	1,011	218	42	5,596	4,461	1,043	218	42	5,764
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	4,861	1,137	218	42	6,258	5,013	1,172	218	42	6,446
95	245306	ABNG-Field Services	Utility Person	10/24/2016	5,049	1,181	218	42	6,490	5,208	1,218	218	42	6,686
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	4,776	1,117	218	42	6,153	4,927	1,152	218	42	6,339
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	3,931	919	218	42	5,111	4,055	948	218	42	5,263
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	6,920	1,618	218	42	8,799	7,138	1,669	218	42	9,067
99	247306	BRWK-Field Services	Utility Person	1/16/2017	4,438	1,038	218	42	5,736	4,577	1,070	218	42	5,907
100	246506	COAT-Field Services	Utility Person	2/13/2017	4,834	1,130	218	42	6,224	4,984	1,166	218	42	6,410
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	4,328	1,012	218	42	5,601	4,465	1,044	218	42	5,769
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015	2,512	587	218	42	3,359	2,591	606	218	42	3,457
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	2,507	586	218	42	3,354	2,585	605	218	42	3,450
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018	4,528	1,059	218	42	5,848	4,671	1,092	218	42	6,024
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	3,987	932	218	42	5,179	4,112	962	218	42	5,334
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018	4,401	1,029	218	42	5,690	4,539	1,062	218	42	5,861
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	5,447	1,274	218	42	6,981	5,618	1,314	218	42	7,193
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	4,458	1,043	218	42	5,761	4,599	1,076	218	42	5,935
109	246801	LEHP-Production	Utility Person	7/23/2018	4,793	1,121	218	42	6,175	4,943	1,156	218	42	6,359
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	7,052	1,649	218	42	8,962	7,273	1,701	218	42	9,235
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	5,992	1,401	218	42	7,653	6,179	1,445	218	42	7,885
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	3,426	801	218	42	4,488	3,533	826	218	42	4,620
113	246501	COAT-Production	Plant Operator	9/24/2018	5,532	1,294	218	42	7,086	5,705	1,334	218	42	7,300
114	245906	GLEN-Field Services	Utility Person	10/8/2018	4,320	1,010	218	42	5,590	4,455	1,042	218	42	5,758
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	4,606	1,077	218	42	5,944	4,750	1,111	218	42	6,121
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	3,678	860	218	42	4,798	3,793	887	218	42	4,941
117	246206	HSHY-Field Services	Utility Person	10/8/2018	4,499	1,052	218	42	5,811	4,641	1,085	218	42	5,986
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	5,623	1,315	218	42	7,199	5,800	1,357	218	42	7,417
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	4,556	1,065	218	42	5,881	4,699	1,099	218	42	6,059
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	4,864	1,138	218	42	6,262	5,017	1,173	218	42	6,450
121	246206	HSHY-Field Services	Utility Person	1/14/2019	4,632	1,083	218	42	5,976	4,778	1,117	218	42	6,156
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	4,509	1,055	218	42	5,824	4,651	1,088	218	42	5,999
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	4,591	1,074	218	42	5,925	4,736	1,108	218	42	6,103
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	8,830	2,065	218	42	11,156	9,107	2,130	218	42	11,497
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	4,726	1,105	218	42	6,092	4,874	1,140	218	42	6,275
126	248801	TURB-Production	Plant Operator	7/8/2019	4,668	1,092	218	42	6,021	4,815	1,126	218	42	6,201
127	240116	CORP-Maint Services	Sr Reliability Engineering Analyst	7/15/2019	8,009	1,873	218	42	10,143	8,260	1,932	218	42	10,452
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	5,827	1,363	218	42	7,450	6,009	1,405	218	42	7,675
129	241406	STNW-Field Service	Utility Person	12/5/2018	3,999	935	218	42	5,194	4,124	964	218	42	5,349
130	246206	HSHY-Field Services	Utility Person	2/2/2016	4,245	993	218	42	5,498	4,377	1,024	218	42	5,661
131	241406	STNW-Field Service	Utility Person	3/3/1999	4,108	961	218	42	5,329	4,236	991	218	42	5,487
132	247201	PHBG-Production	Plant Operator	10/21/2019	4,786	1,119	218	42	6,166	4,935	1,154	218	42	6,349
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	4,362	1,020	218	42	5,643	4,499	1,052	218	42	5,812
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	4,409	1,031	218	42	5,700	4,547	1,064	218	42	5,871
135	247206	PHBG-Field Services	Utility Person	1/27/2020	4,690	1,097	218	42	6,048	4,838	1,131	218	42	6,229
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	5,228	1,223	218	42	6,711	5,393	1,261	218	42	6,914
137	241406	STNW-Field Service	Foreperson	1/8/1990	5,178	1,211	218	42	6,649	5,341	1,249	218	42	6,850
138	246406	ROYF-Field Services	Utility Person	3/23/2020	4,849	1,134	218	42	6,243	5,001	1,170	218	42	6,431
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	5,534	1,294	218	42	7,089	5,707	1,335	218	42	7,302
140	246406	ROYF-Field Services	Utility Person	4/13/2020	4,961	1,160	218	42	6,381	5,116	1,196	218	42	6,572
141	247106	MILT-Field Services	Utility Person	4/13/2020	4,448	1,040	218	42	5,749	4,587	1,073	218	42	5,921
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	5,079	1,188	218	42	6,527	5,238	1,225	218	42	6,723
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	4,269	998	218	42	5,528	4,404	1,030	218	42	5,694
144	245701	POCO-Production	Plant Operator	4/27/2020	5,167	1,208	218	42	6,636	5,329	1,246	218	42	6,835
145	246401	ROYF-Production	Plant Operator	5/4/2020	5,132	1,200	218	42	6,593	5,292	1,238	218	42	6,790
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	3,489	816	218	42	4,566	3,600	842	218	42	4,702
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	6,165	1,442	218	42	7,867	6,359	1,487	218	42	8,106
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	3,766	881	218	42	4,907	3,885	908	218	42	5,053
149	240116	CORP-Maint Services	Reliability Engineering Analyst	6/1/2020	6,865	1,606	218	42	8,731	7,080	1,656	218	42	8,996
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	3,979	931	218	42	5,170	4,104	960	218	42	5,324
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	4,065	951	218	42	5,276	4,193	981	218	42	5,434
152	247106	MILT-Field Services	Utility Person	10/19/2020	4,351	1,018	218	42	5,629	4,488	1,050	218	42	5,798
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	6,702	1,567	218	42	8,530	6,912	1,617	218	42	8,789
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	4,511	1,055	218	42	5,827	4,652	1,088	218	42	6,001
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	3,928	919	218	42	5,106	4,051	947	218	42	5,258
156	245506	BNGR-Field Services	Utility Person	2/22/2021	4,182	978	218	42	5,420	4,313	1,009	218	42	5,582
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	3,602	843	218	42	4,705	3,715	869	218	42	4,844
158	246801	LEHP-Production	Utility Person	4/12/2021	4,328	1,012	218	42	5,601	4,464	1,044	218	42	5,768
159	246506	COAT-Field Services	Utility Person	4/13/2021	5,103	1,193	218	42	6,557	5,263	1,231	218	42	6,754
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	4,737	1,108	218	42	6,106	4,884	1,142	218	42	6,287
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	5,237	1,225	218	42	6,723	5,402	1,263	218	42	6,925
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	4,122	964	218	42	5,347	4,253	995	218	42	5,508
163	240114	CORP-Engineering	GIS Analyst	6/1/2021	3,601	842	218	42	4,704	3,715	869	218	42	4,844
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	5,073	1,187	218	42	6,520	5,233	1,224	218	42	6,717
165	247206	PHBG-Field Services	Utility Person	7/6/2021	4,492	1,051	218	42	5,803	4,633	1,083	218	42	5,976
166	245906	GLEN-Field Services	Utility Person	7/12/2021	4,632	1,083	218	42	5,976	4,778	1,117	218	42	6,155
167	246401	ROYF-Production	Plant Operator	7/19/2021	5,122	1,198	218	42	6,581	5,282	1,235	218	42	6,778
168	241106	PITT-Field Services	Operations Specialist	9/7/2021	4,183	978	218	42	5,422	4,315	1,009	218	42	5,584
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	4,529	1,059	218	42	5,848	4,670	1,092	218	42	6,023

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
85	246506	COAT-Field Services	Utility Person	2/3/2016	7,665	1,793	218	42	9,718
86	247103	MILT-Cust Service	Utility Person	3/7/2016	4,650	1,087	218	42	5,997
87	246206	HSHY-Field Services	Utility Person	2/29/2016	5,748	1,344	218	42	7,353
88	246201	HSHY-Production	Plant Operator	2/29/2016	7,783	1,820	218	42	9,864
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	5,764	1,348	218	42	7,373
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016	4,815	1,126	218	42	6,202
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	8,803	2,059	218	42	11,122
92	246206	HSHY-Field Services	Utility Person	6/13/2016	4,969	1,162	218	42	6,392
93	246206	HSHY-Field Services	Utility Person	7/11/2016	4,603	1,076	218	42	5,939
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	5,174	1,210	218	42	6,644
95	245306	ABNG-Field Services	Utility Person	10/24/2016	5,373	1,257	218	42	6,890
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	5,084	1,189	218	42	6,534
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	4,183	978	218	42	5,422
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	7,366	1,723	218	42	9,349
99	247306	BRWK-Field Services	Utility Person	1/16/2017	4,723	1,105	218	42	6,088
100	246506	COAT-Field Services	Utility Person	2/13/2017	5,142	1,203	218	42	6,605
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	4,607	1,077	218	42	5,944
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015	2,674	625	218	42	3,560
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	2,667	624	218	42	3,552
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018	4,820	1,127	218	42	6,207
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	4,243	992	218	42	5,496
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018	4,685	1,096	218	42	6,041
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	5,797	1,356	218	42	7,413
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	4,745	1,110	218	42	6,116
109	246801	LEHP-Production	Utility Person	7/23/2018	5,099	1,193	218	42	6,552
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	7,505	1,755	218	42	9,520
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	6,376	1,491	218	42	8,127
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	3,646	853	218	42	4,759
113	246501	COAT-Production	Plant Operator	9/24/2018	5,887	1,377	218	42	7,524
114	245906	GLEN-Field Services	Utility Person	10/8/2018	4,597	1,075	218	42	5,932
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	4,902	1,146	218	42	6,308
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	3,915	916	218	42	5,091
117	246206	HSHY-Field Services	Utility Person	10/8/2018	4,788	1,120	218	42	6,169
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	5,986	1,400	218	42	7,646
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	4,849	1,134	218	42	6,243
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	5,177	1,211	218	42	6,648
121	246206	HSHY-Field Services	Utility Person	1/14/2019	4,930	1,153	218	42	6,344
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	4,799	1,122	218	42	6,182
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	4,886	1,143	218	42	6,289
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	9,396	2,198	218	42	11,854
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	5,030	1,176	218	42	6,466
126	248801	TURB-Production	Plant Operator	7/8/2019	4,968	1,162	218	42	6,391
127	240116	CORP-Maint Services	Sr Reliability Engineering Analyst	7/15/2019	8,522	1,993	218	42	10,776
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	6,200	1,450	218	42	7,911
129	241406	STNW-Field Service	Utility Person	12/5/2018	4,255	995	218	42	5,511
130	246206	HSHY-Field Services	Utility Person	2/2/2016	4,516	1,056	218	42	5,833
131	241406	STNW-Field Service	Utility Person	3/3/1999	4,371	1,022	218	42	5,654
132	247201	PHBG-Production	Plant Operator	10/21/2019	5,092	1,191	218	42	6,543
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	4,643	1,086	218	42	5,989
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	4,693	1,098	218	42	6,051
135	247206	PHBG-Field Services	Utility Person	1/27/2020	4,991	1,167	218	42	6,419
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	5,565	1,301	218	42	7,126
137	241406	STNW-Field Service	Foreperson	1/8/1990	5,512	1,289	218	42	7,061
138	246406	ROYF-Field Services	Utility Person	3/23/2020	5,160	1,207	218	42	6,628
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	5,889	1,377	218	42	7,526
140	246406	ROYF-Field Services	Utility Person	4/13/2020	5,278	1,234	218	42	6,773
141	247106	MILT-Field Services	Utility Person	4/13/2020	4,734	1,107	218	42	6,101
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	5,405	1,264	218	42	6,929
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	4,545	1,063	218	42	5,868
144	245701	POCO-Production	Plant Operator	4/27/2020	5,499	1,286	218	42	7,045
145	246401	ROYF-Production	Plant Operator	5/4/2020	5,460	1,277	218	42	6,997
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	3,714	869	218	42	4,843
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	6,561	1,534	218	42	8,356
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	4,009	938	218	42	5,207
149	240116	CORP-Maint Services	Reliability Engineering Analyst	6/1/2020	7,306	1,709	218	42	9,276
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	4,235	990	218	42	5,486
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	4,327	1,012	218	42	5,599
152	247106	MILT-Field Services	Utility Person	10/19/2020	4,630	1,083	218	42	5,973
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	7,132	1,668	218	42	9,061
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	4,801	1,123	218	42	6,184
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	4,180	977	218	42	5,417
156	245506	BNGR-Field Services	Utility Person	2/22/2021	4,450	1,041	218	42	5,752
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	3,834	897	218	42	4,990
158	246801	LEHP-Production	Utility Person	4/12/2021	4,606	1,077	218	42	5,944
159	246506	COAT-Field Services	Utility Person	4/13/2021	5,429	1,270	218	42	6,960
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	5,039	1,179	218	42	6,478
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	5,574	1,304	218	42	7,138
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	4,388	1,026	218	42	5,674
163	240114	CORP-Engineering	GIS Analyst	6/1/2021	3,834	897	218	42	4,991
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	5,398	1,263	218	42	6,921
165	247206	PHBG-Field Services	Utility Person	7/6/2021	4,781	1,118	218	42	6,159
166	245906	GLEN-Field Services	Utility Person	7/12/2021	4,929	1,153	218	42	6,343
167	246401	ROYF-Production	Plant Operator	7/19/2021	5,449	1,274	218	42	6,983
168	241106	PITT-Field Services	Operations Specialist	9/7/2021	4,452	1,041	218	42	5,754
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	4,819	1,127	218	42	6,207

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	4,415	1,032	218	42	5,707	4,553	1,065	218	42	5,878
171	240116	CORP-Maint Services	Reliability Engineering Analyst	10/18/2021	6,254	1,463	218	42	7,977	6,449	1,508	218	42	8,218
172	246506	COAT-Field Services	Utility Person	11/8/2021	5,121	1,198	218	42	6,579	5,278	1,234	218	42	6,773
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	7,241	1,694	218	42	9,195	7,469	1,747	218	42	9,476
174	246506	COAT-Field Services	Utility Person	11/9/2021	4,613	1,079	218	42	5,952	4,756	1,112	218	42	6,129
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	2,951	690	218	42	3,902	3,045	712	218	42	4,017
176	247106	MILT-Field Services	Utility Person	11/22/2021	4,173	976	218	42	5,409	4,304	1,007	218	42	5,571
177	246201	HSHY-Production	Plant Operator	1/10/2022	4,678	1,094	218	42	6,033	4,825	1,128	218	42	6,214
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	1/10/2022	4,025	941	218	42	5,227	4,151	971	218	42	5,383
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	4,287	1,003	218	42	5,550	4,422	1,034	218	42	5,716
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	4,002	936	218	42	5,198	4,128	965	218	42	5,354
181	247206	PHBG-Field Services	Utility Person	2/21/2022	4,369	1,022	218	42	5,652	4,506	1,054	218	42	5,820
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	2/28/2022	3,471	812	218	42	4,543	3,580	837	218	42	4,678
183	245306	ABNG-Field Services	Utility Person	2/21/2022	4,172	976	218	42	5,409	4,303	1,006	218	42	5,569
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	4,502	1,053	218	42	5,815	4,642	1,086	218	42	5,988
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	2,853	667	218	42	3,781	2,944	688	218	42	3,892
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	4,014	939	218	42	5,213	4,140	968	218	42	5,369
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	3,619	846	218	42	4,726	3,733	873	218	42	4,866
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	3,853	901	218	42	5,015	3,975	930	218	42	5,165
189	240306	CORP-Field Service	Operations Specialist	4/25/2022	4,423	1,034	218	42	5,718	4,561	1,067	218	42	5,889
190	245306	ABNG-Field Services	Utility Person	5/16/2022	4,494	1,051	218	42	5,805	4,635	1,084	218	42	5,979
191	241401	STNW-Production	Plant Operator	6/6/2022	3,884	908	218	42	5,053	4,007	937	218	42	5,204
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	4,627	1,082	218	42	5,970	4,773	1,116	218	42	6,149
193	245506	BNGR-Field Services	Utility Person	6/20/2022	4,875	1,140	218	42	6,275	5,029	1,176	218	42	6,465
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	6/20/2022	3,251	760	218	42	4,272	3,354	784	218	42	4,398
195	245401	SUSQ-Production	Plant Operator	6/27/2022	4,961	1,160	218	42	6,382	5,117	1,197	218	42	6,574
196	241401	STNW-Production	Plant Operator	7/5/2022	4,114	962	218	42	5,336	4,244	993	218	42	5,497
197	246801	LEHP-Production	Utility Person	7/18/2022	4,767	1,115	218	42	6,142	4,916	1,150	218	42	6,326
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/18/2022	3,280	767	218	42	4,308	3,383	791	218	42	4,434
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	4,274	999	218	42	5,533	4,409	1,031	218	42	5,700
200	247106	MILT-Field Services	Utility Person	7/18/2022	4,492	1,051	218	42	5,803	4,632	1,083	218	42	5,976
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	4,582	1,072	218	42	5,914	4,726	1,105	218	42	6,092
202	245501	BNGR-Production	Plant Operator	8/29/2022	4,176	977	218	42	5,412	4,307	1,007	218	42	5,575
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	3,909	914	218	42	5,084	4,032	943	218	42	5,236
204	245401	SUSQ-Production	Plant Operator	9/19/2022	4,397	1,028	218	42	5,686	4,535	1,061	218	42	5,857
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	4,565	1,068	218	42	5,892	4,708	1,101	218	42	6,070
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	4,317	1,010	218	42	5,587	4,453	1,041	218	42	5,755
207	245306	ABNG-Field Services	Utility Person	10/10/2022	3,830	896	218	42	4,986	3,950	924	218	42	5,134
208	245306	ABNG-Field Services	Utility Person	10/17/2022	4,055	948	218	42	5,263	4,181	978	218	42	5,420
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	3,532	826	218	42	4,619	3,643	852	218	42	4,755
210	246406	ROYF-Field Services	Utility Person	11/14/2022	4,260	996	218	42	5,516	4,393	1,027	218	42	5,681
211	246501	COAT-Production	Plant Operator	11/28/2022	5,014	1,173	218	42	6,446	5,172	1,209	218	42	6,641
212	246406	ROYF-Field Services	Utility Person	1/3/2023	4,341	1,015	218	42	5,616	4,476	1,047	218	42	5,784
213	245706	POCO-Field Services	Utility Person	1/3/2023	3,899	912	218	42	5,071	4,021	940	218	42	5,222
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	3,671	858	218	42	4,790	3,786	885	218	42	4,931
215	247306	BRWK-Field Services	Utility Person	3/6/2023	3,930	919	218	42	5,110	4,055	948	218	42	5,263
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	4,264	997	218	42	5,521	4,398	1,029	218	42	5,687
217	245606	NAZA-Field Services	Utility Person	3/20/2023	4,101	959	218	42	5,320	4,230	989	218	42	5,479
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023	3,797	888	218	42	4,945	3,916	916	218	42	5,092
219	245601	NAZA-Production	Plant Operator	6/5/2023	4,017	939	218	42	5,217	4,143	969	218	42	5,372
220	245106	NORR-Field Services	Utility Person	6/5/2023	4,156	972	218	42	5,388	4,286	1,002	218	42	5,548
221	246406	ROYF-Field Services	Utility Person	6/5/2023	3,952	924	218	42	5,136	4,077	953	218	42	5,290
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	4,156	972	218	42	5,388	4,286	1,002	218	42	5,548
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017	1,639	383	218	42	2,283	1,691	395	218	42	2,347
224	245106	NORR-Field Services	Operations Specialist - To Be Filled	12/31/2023	-	-	-	-	-	5,049	1,181	218	42	6,490
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	-	-	-	-	-	5,049	1,181	218	42	6,490
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	-	-	-	-	-	5,049	1,181	218	42	6,490
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	-	-	-	-	-	5,049	1,181	218	42	6,490
228	241103	PITT-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	-	-	-	-	-	4,020	940	218	42	5,220
229	249103	WILK-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	-	-	-	-	-	4,020	940	218	42	5,220
230	241103	PITT-Cust Service	Compliance Representative - To Be Filled	12/31/2023	-	-	-	-	-	3,538	827	218	42	4,625
			Total Non-Collective Bargaining Unit Hourly		$1,076,298	$251,715	$48,690	$9,366	$1,386,069	$1,141,841	$267,044	$50,218	$9,660	$1,468,763

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	4,699	1,099	218	42	6,058
171	240116	CORP-Maint Services	Reliability Engineering Analyst	10/18/2021	6,655	1,556	218	42	8,471
172	246506	COAT-Field Services	Utility Person	11/8/2021	5,442	1,273	218	42	6,976
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	7,707	1,802	218	42	9,770
174	246506	COAT-Field Services	Utility Person	11/9/2021	4,906	1,147	218	42	6,313
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	3,143	735	218	42	4,138
176	247106	MILT-Field Services	Utility Person	11/22/2021	4,441	1,039	218	42	5,740
177	246201	HSHY-Production	Plant Operator	1/10/2022	4,978	1,164	218	42	6,403
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	1/10/2022	4,283	1,002	218	42	5,545
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	4,563	1,067	218	42	5,891
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	4,259	996	218	42	5,516
181	247206	PHBG-Field Services	Utility Person	2/21/2022	4,650	1,087	218	42	5,998
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	2/28/2022	3,694	864	218	42	4,819
183	245306	ABNG-Field Services	Utility Person	2/21/2022	4,439	1,038	218	42	5,737
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	4,788	1,120	218	42	6,168
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	3,038	710	218	42	4,008
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	4,272	999	218	42	5,531
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	3,852	901	218	42	5,013
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	4,103	960	218	42	5,323
189	240306	CORP-Field Service	Operations Specialist	4/25/2022	4,707	1,101	218	42	6,068
190	245306	ABNG-Field Services	Utility Person	5/16/2022	4,782	1,118	218	42	6,161
191	241401	STNW-Production	Plant Operator	6/6/2022	4,134	967	218	42	5,361
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	4,925	1,152	218	42	6,337
193	245506	BNGR-Field Services	Utility Person	6/20/2022	5,189	1,214	218	42	6,663
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	6/20/2022	3,460	809	218	42	4,530
195	245401	SUSQ-Production	Plant Operator	6/27/2022	5,281	1,235	218	42	6,776
196	241401	STNW-Production	Plant Operator	7/5/2022	4,379	1,024	218	42	5,663
197	246801	LEHP-Production	Utility Person	7/18/2022	5,070	1,186	218	42	6,516
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/18/2022	3,491	816	218	42	4,568
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	4,550	1,064	218	42	5,874
200	247106	MILT-Field Services	Utility Person	7/18/2022	4,778	1,117	218	42	6,156
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	4,877	1,141	218	42	6,278
202	245501	BNGR-Production	Plant Operator	8/29/2022	4,444	1,039	218	42	5,744
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	4,161	973	218	42	5,395
204	245401	SUSQ-Production	Plant Operator	9/19/2022	4,680	1,095	218	42	6,035
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	4,858	1,136	218	42	6,255
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	4,594	1,074	218	42	5,929
207	245306	ABNG-Field Services	Utility Person	10/10/2022	4,076	953	218	42	5,289
208	245306	ABNG-Field Services	Utility Person	10/17/2022	4,314	1,009	218	42	5,583
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	3,759	879	218	42	4,899
210	246406	ROYF-Field Services	Utility Person	11/14/2022	4,532	1,060	218	42	5,853
211	246501	COAT-Production	Plant Operator	11/28/2022	5,336	1,248	218	42	6,845
212	246406	ROYF-Field Services	Utility Person	1/3/2023	4,620	1,080	218	42	5,960
213	245706	POCO-Field Services	Utility Person	1/3/2023	4,150	970	218	42	5,380
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	3,906	914	218	42	5,080
215	247306	BRWK-Field Services	Utility Person	3/6/2023	4,185	979	218	42	5,424
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	4,538	1,061	218	42	5,859
217	245606	NAZA-Field Services	Utility Person	3/20/2023	4,364	1,021	218	42	5,645
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023	4,041	945	218	42	5,246
219	245601	NAZA-Production	Plant Operator	6/5/2023	4,275	1,000	218	42	5,535
220	245106	NORR-Field Services	Utility Person	6/5/2023	4,423	1,034	218	42	5,718
221	246406	ROYF-Field Services	Utility Person	6/5/2023	4,207	984	218	42	5,451
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	4,423	1,034	218	42	5,718
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017	1,745	408	218	42	2,413
224	245106	NORR-Field Services	Operations Specialist - To Be Filled	12/31/2023	5,210	1,218	218	42	6,688
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	5,210	1,218	218	42	6,688
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	5,210	1,218	218	42	6,688
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	5,210	1,218	218	42	6,688
228	241103	PITT-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	4,149	970	218	42	5,379
229	249103	WILK-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	4,149	970	218	42	5,379
230	241103	PITT-Cust Service	Compliance Representative - To Be Filled	12/31/2023	3,651	854	218	42	4,766
			Total Non-Collective Bargaining Unit Hourly		$1,178,202	$275,547	$50,218	$9,660	$1,513,628

Pennsylvania-American Water Company - Wastewater SSS General Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Salary														
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	$6,279	$1,468	$218	$42	$8,007	$648	$151	$22	$4	$825
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	8,442	1,974	218	42	10,676	8,707	2,036	218	42	11,004
3	246701	COWW-Production	Supvr Production	3/6/2000	6,361	1,488	218	42	8,109	6,562	1,535	218	42	8,357
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	6,665	1,559	218	42	8,484	6,875	1,608	218	42	8,743
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	5,070	1,186	218	42	6,516	5,229	1,223	218	42	6,712
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	6,235	1,458	218	42	7,953	6,430	1,504	218	42	8,194
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	5,416	1,267	218	42	6,943	5,587	1,307	218	42	7,154
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	6,665	1,559	218	42	8,484	6,874	1,608	218	42	8,742
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020	5,950	1,391	218	42	7,601	6,137	1,435	218	42	7,833
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	6,141	1,436	218	42	7,837	6,333	1,481	218	42	8,075
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	5,247	1,227	218	42	6,734	5,412	1,266	218	42	6,938
12	249401	YORKWW-Production	Supvr Production	6/24/2013	5,793	1,355	218	42	7,409	5,975	1,397	218	42	7,633
			Total Non-Collective Bargaining Unit Salary		$74,262	$17,368	$2,620	$504	$94,754	$70,769	$16,551	$2,424	$466	$90,209
Collective Bargaining Unit														
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/4/2008	$4,231	$989	$218	$42	$5,481	$4,334	$1,014	$218	$42	$5,608
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	3,817	893	218	42	4,969	3,911	915	218	42	5,086
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	3,726	872	218	42	4,858	3,822	894	218	42	4,976
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/17/1984	4,862	1,137	218	42	6,259	4,981	1,165	218	42	6,407
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	10/26/2009	4,328	1,012	218	42	5,600	4,435	1,037	218	42	5,732
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	5/22/2017	4,905	1,147	218	42	6,312	5,023	1,175	218	42	6,458
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	3,454	808	218	42	4,522	3,548	830	218	42	4,638
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	4,696	1,098	218	42	6,055	4,805	1,124	218	42	6,189
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	5,006	1,171	218	42	6,437	5,121	1,198	218	42	6,580
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	3,725	871	218	42	4,856	3,826	895	218	42	4,981
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/7/2009	4,227	988	218	42	5,475	4,330	1,013	218	42	5,602
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/20/2018	3,956	925	218	42	5,141	4,052	948	218	42	5,260
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/3/2020	4,112	962	218	42	5,334	4,212	985	218	42	5,457
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	4/24/2017	3,993	934	218	42	5,187	4,091	957	218	42	5,309
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	5,236	1,225	218	42	6,721	5,355	1,252	218	42	6,867
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3,660	856	218	42	4,777	3,754	878	218	42	4,892
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3,656	855	218	42	4,772	3,750	877	218	42	4,887
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	3,893	910	218	42	5,064	3,990	933	218	42	5,183
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	3,645	853	218	42	4,758	3,739	874	218	42	4,874
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	3,810	891	218	42	4,962	3,905	913	218	42	5,078
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	3,435	803	218	42	4,499	3,529	825	218	42	4,615
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	3,642	852	218	42	4,754	3,735	873	218	42	4,869
			Total Collective Bargaining Unit		90,015	21,052	4,803	924	116,795	92,246	21,574	4,803	924	119,547

Pennsylvania-American Water Company - Wastewater SSS General Operations
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					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Salary									
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	$668	$156	$22	$4	$851
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	8,984	2,101	218	42	11,346
3	246701	COWW-Production	Supvr Production	3/6/2000	6,771	1,584	218	42	8,615
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	7,095	1,659	218	42	9,014
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	5,396	1,262	218	42	6,918
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	6,635	1,552	218	42	8,448
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	5,764	1,348	218	42	7,373
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	7,093	1,659	218	42	9,012
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020	6,333	1,481	218	42	8,075
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	6,536	1,529	218	42	8,325
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	5,585	1,306	218	42	7,152
12	249401	YORKWW-Production	Supvr Production	6/24/2013	6,166	1,442	218	42	7,868
			Total Non-Collective Bargaining Unit Salary		$73,028	$17,079	$2,424	$466	$92,997
Collective Bargaining Unit									
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/4/2008	$4,451	$1,041	$218	$42	$5,753
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	4,019	940	218	42	5,220
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	3,931	919	218	42	5,111
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/17/1984	5,118	1,197	218	42	6,575
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	10/26/2009	4,557	1,066	218	42	5,883
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	5/22/2017	5,157	1,206	218	42	6,624
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	3,656	855	218	42	4,771
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	4,928	1,153	218	42	6,341
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	5,253	1,229	218	42	6,742
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	3,942	922	218	42	5,124
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/7/2009	4,447	1,040	218	42	5,747
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/20/2018	4,162	973	218	42	5,395
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/3/2020	4,326	1,012	218	42	5,598
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	4/24/2017	4,204	983	218	42	5,448
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	5,490	1,284	218	42	7,035
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3,861	903	218	42	5,025
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3,857	902	218	42	5,020
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	4,100	959	218	42	5,319
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	3,846	899	218	42	5,005
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	4,012	938	218	42	5,211
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	3,636	850	218	42	4,746
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	3,842	898	218	42	5,000
			Total Collective Bargaining Unit		94,795	22,170	4,803	924	122,693

Pennsylvania-American Water Company - Wastewater SSS General Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Hourly														
1	246701	COWW-Production	Wastewater Operator	9/20/1999	$5,202	$1,217	$218	$42	$6,679	$5,366	$1,255	$218	$42	$6,881
2	246706	COWW-Field Services	Utility Person	5/30/1995	4,964	1,161	218	42	6,386	5,120	1,198	218	42	6,578
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	5,128	1,199	218	42	6,588	5,289	1,237	218	42	6,786
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	5,561	1,300	218	42	7,121	5,735	1,341	218	42	7,337
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	5,662	1,324	218	42	7,246	5,840	1,366	218	42	7,466
6	246706	COWW-Field Services	Crew Leader	11/10/2003	4,954	1,159	218	42	6,373	5,111	1,195	218	42	6,566
7	246901	LPWW-Production	Plant Operator	6/2/2008	4,964	1,161	218	42	6,386	5,120	1,197	218	42	6,578
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	5,190	1,214	218	42	6,664	5,353	1,252	218	42	6,865
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	6,074	1,421	218	42	7,755	6,264	1,465	218	42	7,989
10	242601	CLYWW-Production	Plant Operator	7/31/2008	4,775	1,117	218	42	6,152	4,926	1,152	218	42	6,338
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	5,634	1,318	218	42	7,212	5,811	1,359	218	42	7,430
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	4,811	1,125	218	42	6,196	4,962	1,160	218	42	6,383
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	6,026	1,409	218	42	7,696	6,216	1,454	218	42	7,930
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	4,993	1,168	218	42	6,421	5,150	1,204	218	42	6,614
15	246706	COWW-Field Services	Utility Person	3/14/2016	4,691	1,097	218	42	6,049	4,839	1,132	218	42	6,231
16	246901	LPWW-Production	Plant Operator	9/11/2017	4,704	1,100	218	42	6,065	4,851	1,135	218	42	6,246
17	246701	COWW-Production	Wastewater Operator	5/14/2018	5,126	1,199	218	42	6,585	5,286	1,236	218	42	6,783
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	5,097	1,192	218	42	6,549	5,255	1,229	218	42	6,745
19	248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	10/15/2018	5,147	1,204	218	42	6,611	5,308	1,241	218	42	6,810
20	246706	COWW-Field Services	Utility Person	3/25/2019	4,665	1,091	218	42	6,016	4,811	1,125	218	42	6,196
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	5,355	1,252	218	42	6,867	5,522	1,292	218	42	7,074
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	5,148	1,204	218	42	6,613	5,311	1,242	218	42	6,813
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	4,776	1,117	218	42	6,153	4,926	1,152	218	42	6,338
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	4,928	1,152	218	42	6,340	5,083	1,189	218	42	6,532
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	5,139	1,202	218	42	6,601	5,301	1,240	218	42	6,801
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	5,933	1,388	218	42	7,581	6,120	1,431	218	42	7,812
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	4,920	1,151	218	42	6,331	5,074	1,187	218	42	6,521
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	4,936	1,154	218	42	6,351	5,092	1,191	218	42	6,543
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	4,819	1,127	218	42	6,207	4,970	1,162	218	42	6,392
30	248706	Nw Cmbrlnd WW FS	Utility Person	9/20/2021	4,277	1,000	218	42	5,538	4,412	1,032	218	42	5,704
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021	4,413	1,032	218	42	5,705	4,552	1,065	218	42	5,877
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	4,758	1,113	218	42	6,131	4,908	1,148	218	42	6,316
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	4,346	1,016	218	42	5,623	4,482	1,048	218	42	5,791
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	4,064	950	218	42	5,274	4,191	980	218	42	5,432
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	4,538	1,061	218	42	5,859	4,681	1,095	218	42	6,036
36	248706	Nw Cmbrlnd WW FS	Utility Person	9/6/2022	4,443	1,039	218	42	5,743	4,583	1,072	218	42	5,915
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	3,915	916	218	42	5,091	4,039	945	218	42	5,244
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	4,323	1,011	218	42	5,595	4,459	1,043	218	42	5,763
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	4,411	1,031	218	42	5,702	4,549	1,064	218	42	5,873
40	246701	COWW-Production	Wastewater Operator	1/3/2023	4,719	1,104	218	42	6,082	4,867	1,138	218	42	6,266
41	248701	Nw Cmbrnlnd WW Prod	Utility Person	2/6/2023	3,831	896	218	42	4,987	3,952	924	218	42	5,136
42	246706	COWW-Field Services	Utility Person	3/6/2023	3,902	912	218	42	5,075	4,024	941	218	42	5,226
			Total Non-Collective Bargaining Unit Hourly		$205,261	$48,005	$9,170	$1,764	$264,200	$211,711	$49,513	$9,170	$1,764	$272,158

Pennsylvania-American Water Company - Wastewater SSS General Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Hourly									
1	246701	COWW-Production	Wastewater Operator	9/20/1999	$5,537	$1,295	$218	$42	$7,092
2	246706	COWW-Field Services	Utility Person	5/30/1995	5,283	1,236	218	42	6,779
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	5,458	1,276	218	42	6,995
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	5,918	1,384	218	42	7,563
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	6,026	1,409	218	42	7,696
6	246706	COWW-Field Services	Crew Leader	11/10/2003	5,273	1,233	218	42	6,767
7	246901	LPWW-Production	Plant Operator	6/2/2008	5,283	1,236	218	42	6,779
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	5,523	1,292	218	42	7,075
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	6,462	1,511	218	42	8,234
10	242601	CLYWW-Production	Plant Operator	7/31/2008	5,082	1,189	218	42	6,531
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	5,995	1,402	218	42	7,658
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	5,120	1,197	218	42	6,577
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	6,413	1,500	218	42	8,173
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	5,314	1,243	218	42	6,817
15	246706	COWW-Field Services	Utility Person	3/14/2016	4,993	1,168	218	42	6,421
16	246901	LPWW-Production	Plant Operator	9/11/2017	5,006	1,171	218	42	6,437
17	246701	COWW-Production	Wastewater Operator	5/14/2018	5,455	1,276	218	42	6,991
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	5,423	1,268	218	42	6,951
19	248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	10/15/2018	5,478	1,281	218	42	7,019
20	246706	COWW-Field Services	Utility Person	3/25/2019	4,965	1,161	218	42	6,386
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	5,699	1,333	218	42	7,292
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	5,480	1,282	218	42	7,022
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	5,083	1,189	218	42	6,532
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	5,244	1,226	218	42	6,731
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	5,470	1,279	218	42	7,009
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	6,315	1,477	218	42	8,052
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	5,237	1,225	218	42	6,722
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	5,254	1,229	218	42	6,743
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	5,128	1,199	218	42	6,588
30	248706	Nw Cmbrlnd WW FS	Utility Person	9/20/2021	4,552	1,065	218	42	5,877
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021	4,697	1,098	218	42	6,056
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	5,064	1,184	218	42	6,509
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	4,626	1,082	218	42	5,968
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	4,324	1,011	218	42	5,596
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	4,831	1,130	218	42	6,221
36	248706	Nw Cmbrlnd WW FS	Utility Person	9/6/2022	4,728	1,106	218	42	6,095
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	4,167	974	218	42	5,402
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	4,602	1,076	218	42	5,938
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	4,694	1,098	218	42	6,052
40	246701	COWW-Production	Wastewater Operator	1/3/2023	5,022	1,175	218	42	6,457
41	248701	Nw Cmbrnlnd WW Prod	Utility Person	2/6/2023	4,078	954	218	42	5,292
42	246706	COWW-Field Services	Utility Person	3/6/2023	4,153	971	218	42	5,384
			Total Non-Collective Bargaining Unit Hourly		$218,455	$51,090	$9,170	$1,764	$280,479

Pennsylvania-American Water Company - Wastewater CSS Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Salary														
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000	$6,641	$1,553	$218	$42	$8,454	$6,851	$1,602	$218	$42	$8,713
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006	5,375	1,257	218	42	6,893	5,545	1,297	218	42	7,102
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016	4,722	1,104	218	42	6,087	4,870	1,139	218	42	6,270
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002	8,360	1,955	218	42	10,575	8,622	2,017	218	42	10,899
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007	5,347	1,250	218	42	6,858	5,515	1,290	218	42	7,065
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007	5,902	1,380	218	42	7,543	6,088	1,424	218	42	7,772
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008	5,843	1,366	218	42	7,469	6,026	1,409	218	42	7,695
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982	6,450	1,508	218	42	8,218	6,653	1,556	218	42	8,469
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003	7,381	1,726	218	42	9,368	7,614	1,781	218	42	9,655
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015	6,111	1,429	218	42	7,800	6,303	1,474	218	42	8,038
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019	6,806	1,592	218	42	8,658	7,021	1,642	218	42	8,923
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020	5,505	1,287	218	42	7,053	5,678	1,328	218	42	7,266
			Total Non-Collective Bargaining Unit Salary		$74,442	$17,410	$2,620	$504	$94,976	$76,785	$17,958	$2,620	$504	$97,867
Collective Bargaining Unit														
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	$5,464	$1,278	$218	$42	$7,002	$5,571	$1,303	$218	$42	$7,134
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006	7,294	1,706	218	42	9,260	7,438	1,740	218	42	9,438
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	4,612	1,079	218	42	5,950	4,702	1,100	218	42	6,062
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002	5,039	1,178	218	42	6,477	5,138	1,202	218	42	6,600
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008	4,363	1,020	218	42	5,643	4,449	1,040	218	42	5,750
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016	5,292	1,238	218	42	6,790	5,396	1,262	218	42	6,918
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012	4,691	1,097	218	42	6,049	4,783	1,119	218	42	6,162
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013	4,442	1,039	218	42	5,741	4,529	1,059	218	42	5,849
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990	4,472	1,046	218	42	5,778	4,561	1,067	218	42	5,888
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005	4,089	956	218	42	5,306	4,170	975	218	42	5,405
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008	4,940	1,155	218	42	6,355	5,037	1,178	218	42	6,475
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007	5,223	1,222	218	42	6,705	5,323	1,245	218	42	6,828
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016	4,431	1,036	218	42	5,728	4,518	1,057	218	42	5,835
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009	6,198	1,450	218	42	7,908	6,316	1,477	218	42	8,054
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005	5,037	1,178	218	42	6,475	5,136	1,201	218	42	6,598
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005	4,362	1,020	218	42	5,643	4,448	1,040	218	42	5,749
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	4,632	1,083	218	42	5,975	4,723	1,105	218	42	6,088
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008	7,004	1,638	218	42	8,902	7,142	1,670	218	42	9,072
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008	8,261	1,932	218	42	10,454	8,424	1,970	218	42	10,655
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009	4,856	1,136	218	42	6,252	4,952	1,158	218	42	6,371
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005	6,275	1,467	218	42	8,003	6,396	1,496	218	42	8,152
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011	4,514	1,056	218	42	5,830	4,603	1,077	218	42	5,940
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987	4,639	1,085	218	42	5,984	4,731	1,106	218	42	6,097
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997	8,188	1,915	218	42	10,364	8,350	1,953	218	42	10,564
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	4,191	980	218	42	5,432	4,274	1,000	218	42	5,534
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	4,504	1,053	218	42	5,817	4,592	1,074	218	42	5,926
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011	4,398	1,028	218	42	5,687	4,484	1,049	218	42	5,793
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013	5,304	1,240	218	42	6,805	5,408	1,265	218	42	6,933
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012	5,073	1,187	218	42	6,520	5,173	1,210	218	42	6,644
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009	4,040	945	218	42	5,246	4,120	963	218	42	5,344
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013	5,087	1,190	218	42	6,538	5,188	1,213	218	42	6,662
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992	7,444	1,741	218	42	9,445	7,584	1,774	218	42	9,618
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016	4,598	1,075	218	42	5,934	4,689	1,097	218	42	6,046
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	5,575	1,304	218	42	7,139	5,683	1,329	218	42	7,272
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012	3,866	904	218	42	5,030	3,942	922	218	42	5,124

Pennsylvania-American Water Company - Wastewater CSS Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Salary									
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000	$7,069	$1,653	$218	$42	$8,982
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006	5,723	1,338	218	42	7,321
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016	5,026	1,176	218	42	6,462
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002	8,898	2,081	218	42	11,240
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007	5,691	1,331	218	42	7,282
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007	6,283	1,469	218	42	8,013
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008	6,218	1,454	218	42	7,932
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982	6,865	1,606	218	42	8,731
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003	7,857	1,838	218	42	9,955
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015	6,504	1,521	218	42	8,285
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019	7,245	1,694	218	42	9,199
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020	5,858	1,370	218	42	7,489
			Total Non-Collective Bargaining Unit Salary		$79,236	$18,531	$2,620	$504	$100,891
Collective Bargaining Unit									
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	$5,679	$1,328	$218	$42	$7,268
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006	7,585	1,774	218	42	9,619
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	4,794	1,121	218	42	6,176
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002	5,239	1,225	218	42	6,725
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008	4,537	1,061	218	42	5,858
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016	5,501	1,287	218	42	7,048
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012	4,876	1,140	218	42	6,276
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013	4,618	1,080	218	42	5,958
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990	4,650	1,088	218	42	5,998
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005	4,252	994	218	42	5,507
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008	5,135	1,201	218	42	6,596
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007	5,424	1,269	218	42	6,953
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016	4,607	1,077	218	42	5,944
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009	6,436	1,505	218	42	8,201
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005	5,238	1,225	218	42	6,723
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005	4,535	1,061	218	42	5,856
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	4,816	1,126	218	42	6,203
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008	7,282	1,703	218	42	9,246
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008	8,590	2,009	218	42	10,859
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009	5,050	1,181	218	42	6,491
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005	6,518	1,524	218	42	8,303
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011	4,694	1,098	218	42	6,052
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987	4,824	1,128	218	42	6,212
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997	8,515	1,991	218	42	10,766
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	4,358	1,019	218	42	5,637
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	4,682	1,095	218	42	6,037
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011	4,572	1,069	218	42	5,902
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013	5,514	1,290	218	42	7,064
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012	5,275	1,234	218	42	6,769
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009	4,201	982	218	42	5,443
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013	5,290	1,237	218	42	6,788
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992	7,727	1,807	218	42	9,795
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016	4,781	1,118	218	42	6,160
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	5,793	1,355	218	42	7,408
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012	4,019	940	218	42	5,219

Pennsylvania-American Water Company - Wastewater CSS Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007	4,318	1,010	218	42	5,588	4,403	1,030	218	42	5,693
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006	5,068	1,185	218	42	6,513	5,167	1,209	218	42	6,636
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997	4,146	970	218	42	5,377	4,228	989	218	42	5,478
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	4,981	1,165	218	42	6,406	5,075	1,187	218	42	6,523
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006	8,294	1,940	218	42	10,494	8,457	1,978	218	42	10,696
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017	5,480	1,282	218	42	7,021	5,588	1,307	218	42	7,155
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008	4,921	1,151	218	42	6,332	5,018	1,174	218	42	6,452
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016	5,079	1,188	218	42	6,527	5,179	1,211	218	42	6,651
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	3,904	913	218	42	5,078	3,981	931	218	42	5,172
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005	4,846	1,133	218	42	6,239	4,937	1,155	218	42	6,352
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	7,794	1,823	218	42	9,877	7,945	1,858	218	42	10,064
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	4,875	1,140	218	42	6,276	5,007	1,171	218	42	6,438
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	6,332	1,481	218	42	8,073	6,494	1,519	218	42	8,274
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	4,898	1,146	218	42	6,304	5,028	1,176	218	42	6,464
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	4,760	1,113	218	42	6,134	4,889	1,143	218	42	6,293
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	4,962	1,160	218	42	6,382	5,093	1,191	218	42	6,544
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	4,966	1,161	218	42	6,388	5,099	1,192	218	42	6,552
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	5,171	1,209	218	42	6,641	5,297	1,239	218	42	6,797
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	5,197	1,216	218	42	6,673	5,330	1,247	218	42	6,837
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	3,813	892	218	42	4,965	3,914	915	218	42	5,089
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	5,172	1,210	218	42	6,642	5,308	1,241	218	42	6,810
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	5,380	1,258	218	42	6,898	5,518	1,291	218	42	7,069
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	5,116	1,197	218	42	6,573	5,243	1,226	218	42	6,729
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	4,917	1,150	218	42	6,327	5,050	1,181	218	42	6,491
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	4,400	1,029	218	42	5,689	4,510	1,055	218	42	5,826
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	5,134	1,201	218	42	6,595	5,272	1,233	218	42	6,766
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	5,369	1,256	218	42	6,886	5,508	1,288	218	42	7,057
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	4,047	947	218	42	5,254	4,157	972	218	42	5,389
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	6,226	1,456	218	42	7,943	6,386	1,493	218	42	8,139
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	4,967	1,162	218	42	6,389	5,098	1,192	218	42	6,551
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	4,094	958	218	42	5,312	4,205	983	218	42	5,449
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	4,261	997	218	42	5,518	4,377	1,024	218	42	5,661
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	5,301	1,240	218	42	6,801	5,405	1,264	218	42	6,930
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	5,399	1,263	218	42	6,922	5,506	1,288	218	42	7,054
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	5,559	1,300	218	42	7,120	5,669	1,326	218	42	7,255
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	3,614	845	218	42	4,720	3,704	866	218	42	4,831
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	3,909	914	218	42	5,083	4,006	937	218	42	5,203
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	4,633	1,084	218	42	5,977	4,725	1,105	218	42	6,090
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	5,341	1,249	218	42	6,850	5,442	1,273	218	42	6,975
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	4,964	1,161	218	42	6,386	5,098	1,192	218	42	6,551
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	3,615	845	218	42	4,720	3,710	868	218	42	4,839
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	4,966	1,161	218	42	6,387	5,099	1,193	218	42	6,552
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	5,641	1,319	218	42	7,220	5,747	1,344	218	42	7,351
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	3,106	726	218	42	4,092	3,195	747	218	42	4,202
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	4,527	1,059	218	42	5,846	4,614	1,079	218	42	5,953
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	4,833	1,130	218	42	6,224	4,926	1,152	218	42	6,338
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	4,265	997	218	42	5,523	4,349	1,017	218	42	5,626
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	5,946	1,391	218	42	7,596	6,099	1,426	218	42	7,786
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	4,053	948	218	42	5,262	4,133	967	218	42	5,360
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	4,027	942	218	42	5,229	4,107	960	218	42	5,327
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023	-	-	-	-	-	4,976	1,164	218	42	6,400
			Total Collective Bargaining Unit		$428,987	$100,328	$18,559	$3,570	$551,443	$443,245	$103,662	$18,777	$3,612	$569,297
Non-Collective Bargaining Unit Hourly														
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	$3,998	$935	$218	$42	$5,193	$4,124	$964	$218	$42	$5,348
			Total Non-Collective Bargaining Unit Hourly		$3,998	$935	$218	$42	$5,193	$4,124	$964	$218	$42	$5,348

Pennsylvania-American Water Company - Wastewater CSS Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007	4,489	1,050	218	42	5,799
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006	5,269	1,232	218	42	6,761
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997	4,312	1,008	218	42	5,580
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	5,171	1,209	218	42	6,641
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006	8,624	2,017	218	42	10,901
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017	5,698	1,333	218	42	7,291
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008	5,116	1,197	218	42	6,573
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016	5,281	1,235	218	42	6,776
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	4,059	949	218	42	5,269
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005	5,031	1,177	218	42	6,468
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	8,099	1,894	218	42	10,254
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	5,134	1,201	218	42	6,595
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	6,650	1,555	218	42	8,466
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	5,153	1,205	218	42	6,618
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	5,013	1,172	218	42	6,446
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	5,220	1,221	218	42	6,701
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	5,226	1,222	218	42	6,708
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	5,421	1,268	218	42	6,949
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	5,460	1,277	218	42	6,998
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	4,013	938	218	42	5,211
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	5,441	1,273	218	42	6,974
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	5,653	1,322	218	42	7,236
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	5,366	1,255	218	42	6,881
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	5,179	1,211	218	42	6,650
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	4,617	1,080	218	42	5,957
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	5,406	1,264	218	42	6,931
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	5,643	1,320	218	42	7,224
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	4,262	997	218	42	5,519
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	6,538	1,529	218	42	8,328
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	5,226	1,222	218	42	6,708
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	4,312	1,008	218	42	5,580
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	4,489	1,050	218	42	5,800
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	5,512	1,289	218	42	7,061
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	5,614	1,313	218	42	7,187
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	5,780	1,352	218	42	7,392
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	3,797	888	218	42	4,945
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	4,106	960	218	42	5,327
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	4,818	1,127	218	42	6,205
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	5,545	1,297	218	42	7,102
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	5,228	1,223	218	42	6,711
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	3,805	890	218	42	4,955
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	5,229	1,223	218	42	6,712
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	5,854	1,369	218	42	7,484
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	3,285	768	218	42	4,314
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	4,702	1,100	218	42	6,062
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	5,020	1,174	218	42	6,455
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	4,434	1,037	218	42	5,731
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	6,247	1,461	218	42	7,968
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	4,214	986	218	42	5,460
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	4,188	979	218	42	5,427
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023	5,100	1,193	218	42	6,553
				Total Collective Bargaining Unit	$452,654	$105,863	$18,777	$3,612	$580,906
Non-Collective Bargaining Unit Hourly									
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	$4,255	$995	$218	$42	$5,511
				Total Non-Collective Bargaining Unit Hourly	$4,255	$995	$218	$42	$5,511

Group Insurance

Pennsylvania-American Water Company
Group Insurance

	2024	2025
Water Operations		
Non-Collective Bargaining Unit Salary	$5,834,940	$6,011,847
Collective Bargaining Unit	8,537,903	8,796,760
Non-Collective Bargaining Unit Hourly	3,962,609	4,082,750
Total	$18,335,452	$18,891,357
Wastewater SSS General Operations		
Non-Collective Bargaining Unit Salary	$218,494	$225,119
Collective Bargaining Unit	359,828	370,738
Non-Collective Bargaining Unit Hourly	756,492	779,428
Total	$1,334,814	$1,375,285
Wastewater CSS Operations		
Non-Collective Bargaining Unit Salary	$215,670	$222,209
Collective Bargaining Unit	1,428,956	1,472,280
Non-Collective Bargaining Unit Hourly	9,677	9,971
Total	$1,654,303	$1,704,460

Pennsylvania-American Water Company - Water Operations
Group Insurance

								Gross Group Insurance								
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
Non-Collective Bargaining Unit Salary															
1	240106	CORP-Field Services	Project Manager	1/18/1999	$25,947	$5,277	$31,224	$200,000	$200,000	$413	$48	$367	$45	$26,820	$27,633
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001	-	-	-	182,000	188,000	376	44	303	45	767	791
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994	25,947	5,212	31,159	200,000	200,000	413	48	450	45	26,903	27,718
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998	25,947	5,277	31,224	147,000	152,000	303	35	245	45	26,575	27,381
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993	25,947	5,277	31,224	200,000	200,000	413	48	450	45	26,903	27,718
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997	25,947	5,277	31,224	139,000	143,000	287	33	231	45	26,543	27,348
7	249160	WILK-Watres	Supvr Production	1/11/1988	20,360	4,145	24,504	121,000	125,000	250	29	202	45	20,885	21,519
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993	25,947	5,277	31,224	178,000	184,000	367	43	297	45	26,699	27,509
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990	25,947	5,277	31,224	176,000	182,000	363	42	293	45	26,690	27,500
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987	25,947	5,199	31,146	140,000	145,000	289	34	234	45	26,548	27,353
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983	20,360	4,135	24,494	159,000	164,000	328	38	265	45	21,037	21,674
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998	25,947	5,277	31,224	141,000	145,000	291	34	235	45	26,551	27,356
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998	25,947	5,277	31,224	112,000	115,000	231	27	186	45	26,436	27,237
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992	20,360	4,085	24,444	152,000	157,000	314	36	253	45	21,008	21,645
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986	25,947	5,199	31,146	126,000	130,000	260	30	209	45	26,491	27,294
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997	10,082	1,207	11,289	117,000	121,000	241	28	195	45	10,592	10,913
17	249150	WILK-Other	Sr Supt Production	9/13/1993	20,360	4,145	24,504	168,000	173,000	347	40	280	45	21,072	21,710
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998	25,947	5,277	31,224	200,000	200,000	413	48	365	45	26,818	27,631
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994	25,947	5,277	31,224	176,000	182,000	363	42	294	45	26,691	27,500
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997	25,947	5,277	31,224	165,000	170,000	341	40	274	45	26,646	27,454
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995	25,947	5,199	31,146	135,000	140,000	279	32	226	45	26,528	27,333
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995	9,262	1,884	11,146	135,000	140,000	279	32	226	45	9,844	10,143
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995	20,360	4,145	24,504	125,000	129,000	258	30	208	45	20,901	21,535
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995	10,065	2,080	12,145	200,000	200,000	413	48	370	45	10,941	11,273
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982	20,360	4,145	24,504	147,000	152,000	303	35	246	45	20,989	21,626
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998	21,547	4,324	25,871	166,000	171,000	343	40	276	45	22,251	22,925
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989	20,360	4,145	24,504	200,000	200,000	413	48	348	45	21,214	21,857
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978	20,360	4,145	24,504	151,000	156,000	312	36	252	45	21,005	21,641
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998	25,947	5,277	31,224	155,000	160,000	320	37	259	45	26,608	27,414
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989	143	41	184	200,000	200,000	413	48	450	45	1,099	1,133
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993	9,262	1,862	11,124	200,000	200,000	413	48	374	45	10,142	10,449
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994	20,360	4,145	24,504	167,000	173,000	345	40	279	45	21,068	21,707
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984	20,360	4,145	24,504	139,000	143,000	287	33	232	45	20,957	21,592
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987	20,360	4,095	24,454	200,000	200,000	413	48	450	45	21,316	21,962
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984	25,947	5,212	31,159	173,000	178,000	357	42	288	45	26,678	27,487
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991	25,947	5,212	31,159	200,000	200,000	413	48	450	45	26,903	27,718
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994	10,082	1,207	11,289	163,000	168,000	336	39	272	45	10,775	11,101
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992	9,262	1,884	11,146	155,000	160,000	320	37	259	45	9,923	10,224
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986	20,360	4,145	24,504	138,000	142,000	285	33	230	45	20,952	21,588
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986	21,322	4,326	25,648	200,000	200,000	413	48	386	45	22,214	22,888
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998	20,360	4,145	24,504	148,000	153,000	305	36	247	45	20,993	21,630
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998	25,947	5,277	31,224	200,000	200,000	413	48	366	45	26,818	27,631
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998	25,947	5,277	31,224	143,000	148,000	295	34	239	45	26,560	27,365
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999	21,255	4,317	25,573	155,000	160,000	320	37	259	45	21,916	22,581
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999	25,947	5,277	31,224	182,000	188,000	376	44	304	45	26,715	27,525
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999	21,322	4,336	25,658	145,000	149,000	299	35	241	45	21,943	22,608
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000	22,031	2,607	24,638	200,000	200,000	413	48	441	45	22,978	23,675
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000	25,947	5,277	31,224	133,000	137,000	275	32	222	45	26,520	27,324
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000	21,322	4,281	25,603	133,000	137,000	275	32	221	45	21,895	22,558
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000	9,262	1,857	11,119	133,000	137,000	275	32	222	45	9,836	10,134
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001	25,947	5,277	31,224	200,000	200,000	413	48	362	45	26,815	27,628
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994	25,947	5,212	31,159	179,000	185,000	369	43	299	45	26,703	27,513
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990	20,360	4,145	24,504	135,000	140,000	279	32	226	45	20,941	21,576
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001	25,947	5,277	31,224	178,000	183,000	367	43	296	45	26,698	27,507
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999	25,947	5,277	31,224	167,000	173,000	345	40	279	45	26,655	27,464
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990	9,262	1,884	11,146	175,000	181,000	361	42	292	45	10,003	10,306
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999	25,947	5,277	31,224	200,000	200,000	413	48	347	45	26,800	27,613
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992	20,360	4,145	24,504	200,000	200,000	413	48	450	45	21,316	21,962
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997	25,947	5,277	31,224	200,000	200,000	413	48	450	45	26,903	27,718
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002	25,947	5,277	31,224	200,000	200,000	413	48	368	45	26,820	27,633
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003	25,947	5,277	31,224	189,000	195,000	390	45	315	45	26,743	27,553
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003	20,360	4,145	24,504	129,000	133,000	266	31	214	45	20,916	21,550
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003	20,360	4,085	24,444	164,000	169,000	338	39	273	45	21,055	21,694
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003	25,947	5,277	31,224	139,000	144,000	287	33	232	45	26,544	27,349
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003	25,947	5,277	31,224	124,000	128,000	256	30	206	45	26,484	27,287
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003	25,947	5,199	31,146	181,000	187,000	374	43	302	45	26,711	27,521
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004	25,916	5,203	31,119	150,000	155,000	310	36	250	45	26,557	27,362
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005	25,947	5,277	31,224	190,000	196,000	392	46	317	45	26,747	27,558
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005	25,947	5,212	31,159	163,000	169,000	336	39	272	45	26,639	27,447
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005	25,947	5,212	31,159	166,000	171,000	343	40	276	45	26,651	27,459
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005	25,947	5,277	31,224	167,000	173,000	345	40	279	45	26,656	27,464
72	241151	PITT-Production Haye	Supvr Production	3/16/2005	25,947	5,277	31,224	134,000	138,000	277	32	223	45	26,523	27,328
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005	9,262	1,857	11,119	147,000	152,000	303	35	245	45	9,891	10,191
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005	25,947	5,277	31,224	144,000	149,000	297	35	240	45	26,564	27,369
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005	25,947	5,212	31,159	190,000	197,000	392	46	317	45	26,747	27,558
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005	20,360	4,145	24,504	149,000	154,000	308	36	249	45	20,997	21,633
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005	9,262	1,884	11,146	149,000	154,000	308	36	249	45	9,899	10,200
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005	9,262	1,862	11,124	200,000	200,000	413	48	338	45	10,106	10,413
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005	25,947	5,212	31,159	181,000	186,000	374	43	301	45	26,710	27,519
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006	25,947	5,277	31,224	121,000	125,000	250	29	202	45	26,473	27,275
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006	20,360	4,145	24,504	200,000	200,000	413	48	385	45	21,251	21,895
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006	9,262	1,862	11,124	172,000	177,000	355	41	286	45	9,990	10,293
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006	20,360	4,145	24,504	132,000	136,000	272	32	220	45	20,929	21,563
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006	20,360	4,145	24,504	131,000	135,000	270	31	218	45	20,925	21,559
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006	25,947	5,277	31,224	121,000	125,000	250	29	201	45	26,472	27,274
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006	25,947	5,264	31,211	124,000	128,000	256	30	206	45	26,484	27,287
87	240106	CORP-Field Services	Mgr Opns	1/22/2007	25,947	5,277	31,224	156,000	161,000	322	37	261	45	26,612	27,419
88	249150	WILK-Other	Production Asset Administrator	1/22/2007	25,947	5,277	31,224	136,000	140,000	281	33	227	45	26,532	27,336
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007	21,322	4,336	25,658	167,000	172,000	345	40	279	45	22,030	22,698
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007	25,947	5,277	31,224	118,000	122,000	244	28	197	45	26,460	27,263
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009	-	-	-	181,000	187,000	374	43	302	45	765	788
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007	10,082	1,207	11,289	177,000	183,000	365	42	296	45	10,831	11,159
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007	25,947	5,264	31,211	148,000	153,000	305	36	247	45	26,580	27,386
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007	21,547	4,324	25,871	175,000	181,000	361	42	292	45	22,288	22,963
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007	-	-	-	189,000	195,000	390	45	315	45	795	819
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007	25,947	5,212	31,159	156,000	161,000	322	37	260	45	26,611	27,418

Pennsylvania-American Water Company - Water Operations
Group Insurance

								Gross Group Insurance							
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008	-	-	-	200,000	200,000	413	48	362	45	868	894
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008	9,262	1,884	11,146	127,000	131,000	262	30	211	45	9,812	10,109
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008	25,947	5,212	31,159	189,000	195,000	390	45	316	45	26,743	27,554
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008	25,947	5,277	31,224	199,000	200,000	411	48	332	45	26,782	27,594
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008	25,947	5,277	31,224	135,000	139,000	279	32	225	45	26,528	27,332
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009	20,360	4,145	24,504	131,000	135,000	270	31	219	45	20,925	21,560
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009	25,947	5,212	31,159	138,000	142,000	285	33	230	45	26,540	27,344
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009	25,947	5,277	31,224	148,000	153,000	305	36	246	45	26,579	27,385
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009	25,947	5,199	31,146	200,000	200,000	413	48	382	45	26,834	27,648
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009	25,947	5,277	31,224	200,000	200,000	413	48	450	45	26,903	27,718
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009	25,947	5,277	31,224	153,000	158,000	316	37	255	45	26,599	27,405
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009	25,947	5,277	31,224	129,000	133,000	266	31	215	45	26,504	27,307
109	246501	COAT-Production	Supvr Production	4/12/2010	25,947	5,199	31,146	127,000	131,000	262	30	211	45	26,495	27,299
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010	9,262	1,884	11,146	124,000	128,000	256	30	206	45	9,800	10,097
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010	-	-	-	148,000	153,000	305	36	247	45	634	653
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010	21,322	4,336	25,658	180,000	186,000	372	43	300	45	22,082	22,752
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010	25,947	5,277	31,224	151,000	156,000	312	36	252	45	26,592	27,398
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011	27,645	3,305	30,951	144,000	148,000	297	35	240	45	28,262	29,119
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011	25,947	5,277	31,224	128,000	133,000	264	31	214	45	26,501	27,304
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011	9,840	2,027	11,867	112,000	115,000	231	27	186	45	10,329	10,643
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011	9,262	1,862	11,124	126,000	130,000	260	30	210	45	9,808	10,106
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011	22,957	2,780	25,737	185,000	191,000	382	44	309	45	23,738	24,457
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012	25,947	5,277	31,224	132,000	136,000	272	32	220	45	26,516	27,320
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012	25,947	5,277	31,224	182,000	188,000	376	44	304	45	26,715	27,525
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012	25,947	5,277	31,224	188,000	194,000	388	45	314	45	26,739	27,550
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012	9,262	1,884	11,146	112,000	115,000	231	27	186	45	9,752	10,048
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013	9,262	1,862	11,124	190,000	196,000	392	46	316	45	10,061	10,366
124	240306	CORP-Field Service	Project Manager	3/4/2013	25,947	5,277	31,224	174,000	180,000	359	42	290	45	26,683	27,492
125	243151	NEWC-New Castle	Supvr Production	4/29/2013	20,360	4,085	24,444	128,000	133,000	264	31	214	45	20,914	21,548
126	247150	MILT-Prod Other	Supvr Production	5/28/2013	9,262	1,862	11,124	123,000	127,000	254	30	205	45	9,796	10,093
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013	25,947	5,277	31,224	127,000	131,000	262	30	212	45	26,496	27,300
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013	25,947	5,212	31,159	124,000	128,000	256	30	206	45	26,484	27,287
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013	25,947	5,277	31,224	200,000	200,000	413	48	423	45	26,876	27,691
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013	1,247	304	1,551	159,000	164,000	328	38	266	45	1,925	1,983
131	240114	CORP-Engineering	GIS Manager	3/31/2014	27,378	3,267	30,644	144,000	148,000	297	35	240	45	27,994	28,843
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014	22,031	2,607	24,638	179,000	185,000	369	43	299	45	22,788	23,479
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014	27,645	3,383	31,028	135,000	139,000	279	32	224	45	28,226	29,081
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014	10,082	1,185	11,267	125,000	129,000	258	30	209	45	10,624	10,946
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014	25,947	5,277	31,224	119,000	123,000	246	29	199	45	26,464	27,267
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014	10,031	1,193	11,224	138,000	142,000	285	33	230	45	10,624	10,946
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014	20,360	4,145	24,504	107,000	110,000	221	26	178	45	20,830	21,461
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014	25,947	5,277	31,224	134,000	138,000	277	32	224	45	26,524	27,328
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014	27,645	3,383	31,028	197,000	200,000	407	47	328	45	28,472	29,336
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015	-	-	-	131,000	136,000	270	31	219	45	566	583
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015	25,947	5,277	31,224	119,000	123,000	246	29	198	45	26,464	27,267
142	240114	CORP-Engineering	GIS Manager	2/2/2015	-	-	-	144,000	148,000	297	35	240	45	617	635
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015	9,262	1,857	11,119	116,000	120,000	239	28	194	45	9,769	10,065
144	240114	CORP-Engineering	Engineer	6/22/2015	10,082	1,180	11,262	126,000	130,000	260	30	210	45	10,628	10,950
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015	25,947	5,212	31,159	122,000	126,000	252	29	203	45	26,476	27,279
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015	25,947	5,277	31,224	156,000	161,000	322	37	260	45	26,612	27,418
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015	25,947	5,212	31,159	121,000	125,000	250	29	201	45	26,472	27,274
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015	-	-	-	121,000	125,000	250	29	202	45	526	542
149	243301	BUTL-Production	Supvr Production	12/7/2015	25,947	5,199	31,146	128,000	132,000	264	31	213	45	26,500	27,304
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015	22,957	2,780	25,737	122,000	126,000	252	29	204	45	23,487	24,199
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015	27,645	3,318	30,963	200,000	200,000	413	48	450	45	28,601	29,468
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016	10,082	1,207	11,289	124,000	128,000	256	30	207	45	10,620	10,942
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016	10,082	1,185	11,267	200,000	200,000	413	48	363	45	10,951	11,283
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016	10,082	1,207	11,289	110,000	113,000	227	26	183	45	10,564	10,884
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016	25,947	5,277	31,224	134,000	138,000	277	32	224	45	26,524	27,328
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016	25,947	5,212	31,159	159,000	165,000	328	38	266	45	26,624	27,431
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016	25,947	5,277	31,224	120,000	124,000	248	29	200	45	26,468	27,271
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016	25,947	5,277	31,224	117,000	120,000	241	28	194	45	26,456	27,258
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016	25,947	5,212	31,159	142,000	146,000	293	34	236	45	26,555	27,360
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016	10,741	1,298	12,039	152,000	157,000	314	36	254	45	11,391	11,736
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017	25,947	5,212	31,159	200,000	200,000	413	48	425	45	26,878	27,693
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990	25,947	5,277	31,224	130,000	134,000	268	31	216	45	26,507	27,311
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016	9,262	1,857	11,119	121,000	125,000	250	29	202	45	9,789	10,085
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017	25,947	5,277	31,224	161,000	166,000	332	39	268	45	26,630	27,438
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017	27,645	3,318	30,963	199,000	200,000	411	48	332	45	28,481	29,344
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017	25,947	5,277	31,224	155,000	160,000	320	37	258	45	26,607	27,413
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017	25,947	5,277	31,224	152,000	157,000	314	36	254	45	26,596	27,402
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017	25,947	5,277	31,224	167,000	172,000	345	40	279	45	26,655	27,463
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017	25,947	5,212	31,159	124,000	128,000	256	30	206	45	26,484	27,287
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017	25,947	5,212	31,159	106,000	110,000	219	25	177	45	26,413	27,214
171	240114	CORP-Engineering	Planning Engineer	8/14/2017	25,947	5,277	31,224	131,000	135,000	270	31	219	45	26,512	27,316
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017	25,947	5,277	31,224	196,000	200,000	405	47	327	45	26,771	27,582
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017	21,322	4,336	25,658	148,000	153,000	305	36	247	45	21,956	22,621
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011	22,031	2,657	24,688	134,000	139,000	277	32	224	45	22,609	23,294
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018	25,947	5,277	31,224	152,000	157,000	314	36	253	45	26,595	27,402
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018	1,104	263	1,367	162,000	167,000	334	39	270	45	1,792	1,847
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018	10,082	1,207	11,289	162,000	167,000	334	39	270	45	10,770	11,097
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018	25,947	5,277	31,224	127,000	131,000	262	30	211	45	26,496	27,299
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018	1,247	304	1,551	150,000	155,000	310	36	250	45	1,889	1,946
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018	25,947	5,212	31,159	153,000	158,000	316	37	255	45	26,599	27,405
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018	25,947	5,277	31,224	132,000	136,000	272	32	220	45	26,516	27,320
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018	10,082	1,180	11,262	154,000	158,000	318	37	256	45	10,738	11,064
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018	25,947	5,277	31,224	122,000	126,000	252	29	203	45	26,476	27,279
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018	10,082	1,207	11,289	120,000	123,000	248	29	199	45	10,603	10,924
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018	9,262	1,857	11,119	196,000	200,000	405	47	327	45	10,087	10,392
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018	9,262	1,884	11,146	122,000	126,000	252	29	204	45	9,792	10,089
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018	10,082	1,207	11,289	142,000	146,000	293	34	236	45	10,690	11,015
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018	25,947	5,277	31,224	128,000	132,000	264	31	213	45	26,499	27,303
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018	9,262	1,862	11,124	108,000	112,000	223	26	180	45	9,736	10,032
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018	25,947	5,212	31,159	123,000	127,000	254	30	205	45	26,480	27,283
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018	25,947	5,277	31,224	146,000	150,000	301	35	243	45	26,571	27,376
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018	21,322	4,336	25,658	132,000	136,000	272	32	219	45	21,891	22,554
193	240114	CORP-Engineering	Staff Engineer	8/27/2018	21,656	2,657	24,313	117,000	121,000	241	28	196	45	22,167	22,839

Pennsylvania-American Water Company - Water Operations
Group Insurance

									Gross Group Insurance								
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018	21,322	4,336	25,658	120,000	124,000	248	29	200	45	21,844	22,506
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018	25,947	5,277	31,224	120,000	124,000	248	29	200	45	26,468	27,270
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018	27,645	3,383	31,028	200,000	200,000	413	48	450	45	28,601	29,468
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018	25,947	5,199	31,146	142,000	146,000	293	34	236	45	26,555	27,360
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018	27,645	3,305	30,951	119,000	123,000	246	29	199	45	28,163	29,017
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018	9,262	1,857	11,119	121,000	125,000	250	29	201	45	9,787	10,084
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018	25,947	5,277	31,224	128,000	132,000	264	31	213	45	26,500	27,303
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018	9,262	1,884	11,146	109,000	112,000	225	26	181	45	9,740	10,035
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019	20,360	4,095	24,454	144,000	148,000	297	35	240	45	20,976	21,612
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019	9,262	1,884	11,146	122,000	126,000	252	29	203	45	9,792	10,089
204	240114	CORP-Engineering	Planning Engineer	2/4/2019	445	81	526	154,000	158,000	318	37	256	45	1,101	1,134
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019	25,947	5,277	31,224	124,000	128,000	256	30	207	45	26,484	27,287
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019	10,031	1,170	11,201	133,000	138,000	275	32	222	45	10,605	10,926
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019	-	-	-	124,000	128,000	256	30	206	45	537	553
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019	21,255	4,313	25,568	123,000	127,000	254	30	205	45	21,789	22,450
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019	25,947	5,277	31,224	124,000	128,000	256	30	206	45	26,484	27,287
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019	10,082	1,185	11,267	137,000	141,000	283	33	228	45	10,671	10,994
211	240114	CORP-Engineering	Staff Engineer	5/20/2019	27,645	3,383	31,028	120,000	124,000	248	29	201	45	28,168	29,022
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019	25,617	5,139	30,756	130,000	135,000	268	31	217	45	26,179	26,973
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019	10,082	1,207	11,289	146,000	151,000	301	35	244	45	10,708	11,032
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019	25,947	5,212	31,159	121,000	125,000	250	29	201	45	26,472	27,274
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019	10,082	1,207	11,289	105,000	108,000	217	25	174	45	10,544	10,863
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019	10,082	1,185	11,267	133,000	137,000	275	32	222	45	10,655	10,979
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019	9,211	1,869	11,080	147,000	152,000	303	35	245	45	9,840	10,138
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019	10,082	1,207	11,289	153,000	158,000	316	37	255	45	10,735	11,061
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019	25,947	5,277	31,224	132,000	136,000	272	32	220	45	26,516	27,320
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019	143	41	184	131,000	135,000	270	31	218	45	708	730
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019	20,360	4,145	24,504	128,000	133,000	264	31	214	45	20,914	21,548
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019	20,360	4,095	24,454	116,000	120,000	239	28	193	45	20,865	21,498
223	240120	CORP-Bus Dev	Vice President of Business Development,	11/4/2019	25,947	5,277	31,224	200,000	200,000	413	48	450	45	26,903	27,718
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019	9,262	1,884	11,146	112,000	115,000	231	27	186	45	9,752	10,047
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020	-	-	-	117,000	120,000	241	28	194	45	509	525
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020	25,947	5,277	31,224	200,000	200,000	413	48	359	45	26,811	27,624
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020	25,947	5,277	31,224	200,000	200,000	413	48	402	45	26,855	27,669
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020	20,360	4,145	24,504	176,000	181,000	363	42	293	45	21,103	21,743
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020	9,262	1,884	11,146	105,000	109,000	217	25	176	45	9,725	10,020
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020	21,322	4,326	25,648	135,000	139,000	279	32	225	45	21,903	22,567
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020	-	-	-	105,000	108,000	217	25	175	45	462	476
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020	10,082	1,180	11,262	153,000	158,000	316	37	255	45	10,734	11,060
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020	25,947	5,277	31,224	200,000	200,000	413	48	450	45	26,903	27,718
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020	22,031	2,657	24,688	105,000	109,000	217	25	175	45	22,493	23,175
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020	-	-	-	170,000	176,000	351	41	284	45	721	742
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020	25,947	5,277	31,224	165,000	171,000	341	40	276	45	26,647	27,455
237	249151	WILK-Brownell	Supvr Production	8/24/2020	10,082	1,185	11,267	116,000	120,000	239	28	193	45	10,588	10,909
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020	27,645	3,383	31,028	170,000	176,000	351	41	284	45	28,366	29,226
239	240114	CORP-Engineering	Engineer	10/12/2020	51	15	66	107,000	111,000	221	26	179	45	522	537
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997	20,360	4,145	24,504	113,000	116,000	233	27	188	45	20,853	21,485
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020	25,947	5,212	31,159	123,000	126,000	254	30	204	45	26,479	27,282
242	240114	CORP-Engineering	Engineer	1/4/2021	22,031	2,607	24,638	107,000	111,000	221	26	179	45	22,501	23,184
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020	27,645	3,383	31,028	120,000	123,000	248	29	199	45	28,166	29,020
244	241151	PITT-Production Haye	Supvr Production	3/29/2021	25,947	5,277	31,224	127,000	131,000	262	30	212	45	26,496	27,300
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021	25,947	5,277	31,224	200,000	200,000	413	48	425	45	26,878	27,693
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021	10,082	1,180	11,262	176,000	181,000	363	42	293	45	10,826	11,154
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021	25,947	5,277	31,224	115,000	119,000	237	28	192	45	26,448	27,250
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021	10,065	2,080	12,145	141,000	146,000	291	34	235	45	10,670	10,993
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021	9,262	1,857	11,119	121,000	125,000	250	29	202	45	9,789	10,085
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021	10,082	1,207	11,289	134,000	138,000	277	32	223	45	10,659	10,982
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021	25,947	5,277	31,224	123,000	127,000	254	30	206	45	26,481	27,284
252	240114	CORP-Engineering	Engineer	9/13/2021	-	-	-	103,000	106,000	213	25	171	45	454	467
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021	25,947	5,277	31,224	200,000	200,000	413	48	450	45	26,902	27,718
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021	25,947	5,277	31,224	119,000	123,000	246	29	198	45	26,464	27,266
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022	25,947	5,277	31,224	124,000	128,000	256	30	206	45	26,484	27,287
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022	10,082	1,203	11,285	99,000	102,000	204	24	165	45	10,520	10,839
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022	9,843	1,170	11,014	124,000	128,000	256	30	206	45	10,381	10,695
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022	9,262	1,862	11,124	122,000	126,000	252	29	203	45	9,792	10,088
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	9,262	1,862	11,124	126,000	130,000	260	30	210	45	9,808	10,105
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	27,645	3,383	31,028	131,000	135,000	270	31	218	45	28,210	29,065
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022	22,957	2,780	25,737	108,000	112,000	223	26	180	45	23,432	24,142
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022	-	-	-	176,000	182,000	363	42	294	45	745	767
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022	-	-	-	144,000	149,000	297	35	241	45	618	636
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022	9,262	1,884	11,146	168,000	174,000	347	40	281	45	9,975	10,278
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022	9,262	1,884	11,146	125,000	129,000	258	30	209	45	9,804	10,102
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022	22,031	2,657	24,688	151,000	156,000	312	36	252	45	22,676	23,364
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007	22,957	2,715	25,672	107,000	110,000	221	26	178	45	23,427	24,137
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022	25,947	5,212	31,159	114,000	117,000	235	27	190	45	26,444	27,246
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995	9,262	1,884	11,146	110,000	114,000	227	26	184	45	9,745	10,041
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022	23,707	2,725	26,433	118,000	122,000	244	28	197	45	24,221	24,955
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022	-	-	-	104,000	107,000	215	25	173	45	457	471
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022	-	-	-	123,000	127,000	254	30	205	45	534	550
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022	10,457	1,185	11,642	131,000	135,000	270	31	218	45	11,022	11,357
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022	25,947	5,277	31,224	133,000	138,000	275	32	222	45	26,521	27,325
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022	10,270	1,207	11,477	135,000	140,000	279	32	226	45	10,851	11,180
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022	113	32	145	132,000	136,000	272	32	219	45	681	702
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022	21,255	4,317	25,573	127,000	131,000	262	30	211	45	21,805	22,466
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022	11,072	1,403	12,475	118,000	121,000	244	28	196	45	11,585	11,936
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023	-	-	-	130,000	134,000	268	31	217	45	561	578
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023	27,645	3,383	31,028	116,000	120,000	239	28	193	45	28,151	29,005
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023	20,360	4,145	24,504	116,000	120,000	239	28	193	45	20,865	21,498
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023	9,895	1,185	11,080	186,000	192,000	384	45	309	45	10,678	11,002
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023	9,843	1,170	11,014	147,000	152,000	303	35	245	45	10,472	10,790
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023	20,360	4,095	24,454	155,000	160,000	320	37	258	45	21,020	21,657
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023	27,178	3,288	30,465	135,000	140,000	279	32	226	45	27,760	28,601
286	240114	CORP-Engineering	Engineer	6/26/2023	9,262	1,884	11,146	96,000	99,000	198	23	160	45	9,689	9,982
287	240114	CORP-Engineering	Project Manager	6/26/2023	8,817	1,776	10,594	170,000	176,000	351	41	284	45	9,538	9,827
288	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	19,084	3,621	22,705	173,000	178,000	357	42	288	45	19,815	20,416
289	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	19,084	3,621	22,705	173,000	178,000	357	42	288	45	19,815	20,416
290	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	19,084	3,621	22,705	173,000	178,000	357	42	288	45	19,815	20,416

Pennsylvania-American Water Company - Water Operations
Group Insurance

					Gross Group Insurance										
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023	19,084	3,621	22,705	148,000	152,000	305	36	246	45	19,716	20,314
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023	19,084	3,621	22,705	148,000	152,000	305	36	246	45	19,716	20,314
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Filled	12/31/2023	19,084	3,621	22,705	173,000	178,000	357	42	288	45	19,815	20,416
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023	19,084	3,621	22,705	148,000	152,000	305	36	246	45	19,716	20,314
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Filled	12/31/2023	19,084	3,621	22,705	148,000	152,000	305	36	246	45	19,716	20,314
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Filled	12/31/2023	19,084	3,621	22,705	148,000	152,000	305	36	246	45	19,716	20,314
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Filled	12/31/2023	19,084	3,621	22,705	200,000	200,000	413	48	432	45	20,022	20,629
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Filled	12/31/2023	19,084	3,621	22,705	200,000	200,000	413	48	355	45	19,944	20,549
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023	19,084	3,621	22,705	148,000	152,000	305	36	246	45	19,716	20,314
			Total Non-Collective Bargaining Unit Salary		$5,642,572	$1,060,716	$6,703,288	$44,386,000	$45,556,000	$91,613	$10,653	$76,576	$13,527	$5,834,940	$6,011,847
Collective Bargaining Unit															
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	$8,651	$2,045	$10,696	$95,000	$97,000	$196	$2	$0	$45	$8,895	$9,165
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	8,651	2,045	10,696	96,000	98,000	198	2	-	45	8,897	9,167
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	18,670	3,791	22,461	94,000	97,000	194	2	-	45	18,911	19,485
4	241103	PITT-Cust Service	Field Service Representative U537P	3/31/1994	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	26,402	4,616	31,018	97,000	100,000	200	2	-	45	26,650	27,458
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987	15,320	3,884	19,204	95,000	98,000	196	2	-	45	15,564	16,036
7	241103	PITT-Cust Service	Field Service Representative U537P	2/2/1988	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	18,670	3,736	22,405	102,000	105,000	211	2	-	45	18,928	19,502
9	241103	PITT-Cust Service	Field Service Representative U537P	7/5/1983	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	2/1/1985	18,670	3,791	22,461	97,000	100,000	200	2	-	45	18,918	19,491
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	26,402	4,616	31,018	97,000	100,000	200	2	-	45	26,650	27,458
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991	-	-	-	96,000	98,000	198	2	-	45	246	253
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	4/22/1991	8,651	2,045	10,696	98,000	100,000	202	2	-	45	8,901	9,171
14	241103	PITT-Cust Service	Field Service Representative U537P	5/6/1985	15,320	3,932	19,252	95,000	97,000	196	2	-	45	15,564	16,036
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	26,402	4,553	30,955	95,000	97,000	196	2	-	45	26,646	27,454
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	26,402	4,602	31,004	98,000	101,000	202	2	-	45	26,652	27,460
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	26,402	4,616	31,018	96,000	98,000	198	2	-	45	26,648	27,456
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	27,614	3,218	30,831	94,000	96,000	194	2	-	45	27,855	28,700
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	8,651	2,045	10,696	96,000	97,000	198	2	-	45	8,897	9,167
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	26,402	4,539	30,941	98,000	100,000	202	2	-	45	26,652	27,460
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	18,670	3,791	22,461	94,000	96,000	194	2	-	45	18,911	19,485
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	9,095	2,168	11,263	95,000	97,000	196	2	-	45	9,339	9,622
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	18,670	3,746	22,416	96,000	98,000	198	2	-	45	18,916	19,489
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	26,402	4,553	30,955	96,000	98,000	198	2	-	45	26,648	27,456
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	26,402	4,553	30,955	95,000	97,000	196	2	-	45	26,646	27,454
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	18,670	3,791	22,461	94,000	96,000	194	2	-	45	18,911	19,485
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	18,670	3,746	22,416	96,000	97,000	198	2	-	45	18,916	19,489
31	243301	BUTL-Production	Operator U537O	5/4/1998	1,171	325	1,496	98,000	100,000	202	2	-	45	1,421	1,464
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
34	243301	BUTL-Production	Operator U537O	11/2/1984	18,670	3,736	22,405	98,000	100,000	202	2	-	45	18,920	19,493
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	848	236	1,084	94,000	96,000	194	2	-	45	1,090	1,123
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	9,095	2,158	11,253	96,000	97,000	198	2	-	45	9,341	9,624
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	8,651	2,045	10,696	98,000	100,000	202	2	-	45	8,901	9,171
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	632	175	807	95,000	97,000	196	2	-	45	876	902
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	18,670	3,736	22,405	95,000	97,000	196	2	-	45	18,913	19,487
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	18,670	3,791	22,461	96,000	98,000	198	2	-	45	18,916	19,489
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	8,651	2,045	10,696	96,000	97,000	198	2	-	45	8,897	9,167
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	18,670	3,746	22,416	87,000	90,000	180	2	-	45	18,897	19,470
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	15,320	3,932	19,252	85,000	88,000	175	2	-	45	15,543	16,015
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	26,402	4,616	31,018	84,000	87,000	173	2	-	45	26,623	27,430
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	18,670	3,746	22,416	86,000	89,000	178	2	-	45	18,895	19,468
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988	18,670	3,791	22,461	87,000	90,000	180	2	-	45	18,897	19,470
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987	18,670	3,791	22,461	87,000	89,000	180	2	-	45	18,897	19,470
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	8,651	2,045	10,696	83,000	86,000	171	2	-	45	8,870	9,139
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	18,670	3,791	22,461	87,000	90,000	180	2	-	45	18,897	19,470
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	18,670	3,791	22,461	85,000	88,000	175	2	-	45	18,893	19,466
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	26,402	4,616	31,018	85,000	88,000	175	2	-	45	26,625	27,432
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	26,402	4,553	30,955	86,000	89,000	178	2	-	45	26,627	27,435
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	26,402	4,553	30,955	86,000	89,000	178	2	-	45	26,627	27,435
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	8,651	2,045	10,696	83,000	86,000	171	2	-	45	8,870	9,139
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	8,651	2,045	10,696	83,000	86,000	171	2	-	45	8,870	9,139
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	26,402	4,553	30,955	87,000	90,000	180	2	-	45	26,629	27,437
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	26,402	4,553	30,955	86,000	89,000	178	2	-	45	26,627	27,435
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	18,670	3,746	22,416	86,000	89,000	178	2	-	45	18,895	19,468
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	18,670	3,791	22,461	83,000	86,000	171	2	-	45	18,889	19,461
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	18,670	3,791	22,461	85,000	88,000	175	2	-	45	18,893	19,466
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	18,670	3,791	22,461	82,000	85,000	169	2	-	45	18,887	19,459
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	18,670	3,791	22,461	87,000	89,000	180	2	-	45	18,897	19,470
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	15,320	3,893	19,213	86,000	89,000	178	2	-	45	15,546	16,017
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	8,651	2,045	10,696	87,000	90,000	180	2	-	45	8,878	9,148
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	8,651	2,018	10,669	86,000	89,000	178	2	-	45	8,876	9,145
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986	18,670	3,791	22,461	85,000	88,000	175	2	-	45	18,893	19,466
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	18,670	3,791	22,461	85,000	88,000	175	2	-	45	18,893	19,466
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	15,320	3,932	19,252	85,000	87,000	175	2	-	45	15,543	16,015
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	8,651	2,018	10,669	86,000	89,000	178	2	-	45	8,876	9,145
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	8,651	2,018	10,669	86,000	89,000	178	2	-	45	8,876	9,145
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145

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										Gross Group Insurance						
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	18,670	3,791	22,461	84,000	87,000	173	2	-	45	18,891	19,464
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	9,755	1,110	10,864	86,000	89,000	178	2	-	45	9,980	10,282
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	18,670	3,781	22,451	86,000	89,000	178	2	-	45	18,895	19,468
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	18,670	3,791	22,461	84,000	87,000	173	2	-	45	18,891	19,464
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	26,402	4,616	31,018	82,000	84,000	169	2	-	45	26,619	27,426
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	26,402	4,616	31,018	85,000	88,000	175	2	-	45	26,625	27,432
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	26,402	4,616	31,018	82,000	84,000	169	2	-	45	26,619	27,426
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	18,670	3,791	22,461	85,000	88,000	175	2	-	45	18,893	19,466
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	18,670	3,791	22,461	87,000	89,000	180	2	-	45	18,897	19,470
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	26,402	4,616	31,018	84,000	87,000	173	2	-	45	26,623	27,430
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	18,670	3,791	22,461	85,000	88,000	175	2	-	45	18,893	19,466
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	26,402	4,616	31,018	85,000	87,000	175	2	-	45	26,625	27,432
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	8,651	2,018	10,669	86,000	89,000	178	2	-	45	8,876	9,145
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	18,670	3,791	22,461	89,000	91,000	184	2	-	45	18,901	19,474
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	8,651	2,045	10,696	95,000	98,000	196	2	-	45	8,895	9,165
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	26,402	4,602	31,004	87,000	89,000	180	2	-	45	26,629	27,437
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	8,651	2,045	10,696	90,000	92,000	186	2	-	45	8,885	9,154
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	18,670	3,746	22,416	86,000	89,000	178	2	-	45	18,895	19,468
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996	9,327	1,200	10,527	89,000	91,000	184	2	-	45	9,559	9,849
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	18,670	3,746	22,416	89,000	91,000	184	2	-	45	18,901	19,474
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	15,320	3,932	19,252	89,000	91,000	184	2	-	45	15,552	16,023
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	18,670	3,746	22,416	93,000	96,000	192	2	-	45	18,909	19,483
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	8,651	2,018	10,669	87,000	89,000	180	2	-	45	8,878	9,148
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	8,651	2,045	10,696	95,000	98,000	196	2	-	45	8,895	9,165
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	8,651	2,045	10,696	95,000	98,000	196	2	-	45	8,895	9,165
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	18,670	3,791	22,461	95,000	98,000	196	2	-	45	18,914	19,487
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	26,402	4,553	30,955	95,000	97,000	196	2	-	45	26,646	27,454
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	8,651	2,045	10,696	102,000	105,000	211	2	-	45	8,909	9,179
117	241103	PITT-Cust Service	Field Service Representative U537P	11/18/1998	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
118	244101	INDI-Production	Operator U537O	8/9/1999	8,651	2,023	10,674	98,000	100,000	202	2	-	45	8,901	9,171
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	8,651	2,045	10,696	88,000	90,000	182	2	-	45	8,880	9,150
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	1,171	325	1,496	95,000	98,000	196	2	-	45	1,415	1,457
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	18,670	3,736	22,405	87,000	90,000	180	2	-	45	18,897	19,470
125	241103	PITT-Cust Service	Field Service Representative U537P	12/28/2001	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	26,402	4,553	30,955	94,000	96,000	194	2	-	45	26,644	27,452
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	18,670	3,746	22,416	98,000	100,000	202	2	-	45	18,920	19,493
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	26,402	4,553	30,955	95,000	97,000	196	2	-	45	26,646	27,454
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	9,755	1,110	10,864	95,000	97,000	196	2	-	45	9,998	10,301
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	8,651	2,045	10,696	89,000	91,000	184	2	-	45	8,882	9,152
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	18,670	3,746	22,416	95,000	98,000	196	2	-	45	18,913	19,487
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	15,320	3,932	19,252	97,000	100,000	200	2	-	45	15,568	16,040
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	26,402	4,616	31,018	83,000	86,000	171	2	-	45	26,621	27,428
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	9,755	1,110	10,864	98,000	100,000	202	2	-	45	10,004	10,308
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002	8,651	2,045	10,696	95,000	98,000	196	2	-	45	8,895	9,165
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	8,651	2,045	10,696	95,000	98,000	196	2	-	45	8,895	9,165
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	18,670	3,746	22,416	95,000	97,000	196	2	-	45	18,913	19,487
139	241103	PITT-Cust Service	Field Service Representative U537P	4/14/2003	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	8,651	2,045	10,696	97,000	100,000	200	2	-	45	8,899	9,169
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	26,402	4,553	30,955	83,000	86,000	171	2	-	45	26,621	27,428
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	8,651	2,045	10,696	97,000	100,000	200	2	-	45	8,899	9,169
144	241103	PITT-Cust Service	Field Service Representative U537P	8/29/2003	15,320	3,932	19,252	95,000	97,000	196	2	-	45	15,564	16,036
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	26,360	4,541	30,901	94,000	96,000	194	2	-	45	26,602	27,409
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	26,402	4,616	31,018	89,000	91,000	184	2	-	45	26,633	27,441
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	8,651	2,018	10,669	87,000	90,000	180	2	-	45	8,878	9,148
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	8,974	2,135	11,109	97,000	99,000	200	2	-	45	9,222	9,501
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	18,670	3,791	22,461	96,000	99,000	198	2	-	45	18,916	19,489
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	15,320	3,932	19,252	82,000	84,000	169	2	-	45	15,537	16,008
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005	8,599	2,008	10,607	96,000	98,000	198	2	-	45	8,844	9,113
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	15,320	3,932	19,252	95,000	96,000	196	2	-	45	15,564	16,036
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	26,402	4,616	31,018	89,000	91,000	184	2	-	45	26,633	27,441
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	15,320	3,932	19,252	95,000	97,000	196	2	-	45	15,564	16,036
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	8,651	2,023	10,674	94,000	96,000	194	2	-	45	8,893	9,162
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	8,651	2,023	10,674	95,000	98,000	196	2	-	45	8,895	9,164
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	8,651	2,045	10,696	89,000	91,000	184	2	-	45	8,882	9,152
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	-	-	-	95,000	97,000	196	2	-	45	244	251
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	26,402	4,553	30,955	82,000	85,000	169	2	-	45	26,619	27,426
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005	15,320	3,884	19,204	86,000	89,000	178	2	-	45	15,545	16,017
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	18,670	3,791	22,461	87,000	89,000	180	2	-	45	18,897	19,470
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	26,402	4,539	30,941	95,000	97,000	196	2	-	45	26,646	27,454
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	-	-	-	94,000	97,000	194	2	-	45	242	249
165	241103	PITT-Cust Service	Field Service Representative U537P	12/19/2005	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	15,320	3,932	19,252	94,000	96,000	194	2	-	45	15,562	16,034
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	26,402	4,553	30,955	97,000	100,000	200	2	-	45	26,650	27,458
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	26,402	4,553	30,955	97,000	100,000	200	2	-	45	26,650	27,458
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	26,402	4,616	31,018	96,000	98,000	198	2	-	45	26,648	27,456
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	18,283	3,652	21,936	95,000	97,000	196	2	-	45	18,527	19,089
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	-	-	-	97,000	100,000	200	2	-	45	248	255
172	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	15,320	3,932	19,252	82,000	85,000	169	2	-	45	15,537	16,008
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	8,651	2,045	10,696	82,000	85,000	169	2	-	45	8,868	9,137
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	8,651	2,018	10,669	97,000	100,000	200	2	-	45	8,899	9,169
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	9,702	1,073	10,775	96,000	98,000	198	2	-	45	9,948	10,249
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	26,402	4,616	31,018	96,000	98,000	198	2	-	45	26,648	27,456
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	26,402	4,553	30,955	94,000	96,000	194	2	-	45	26,644	27,452
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	18,670	3,791	22,461	83,000	86,000	171	2	-	45	18,889	19,461
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	18,670	3,791	22,461	97,000	100,000	200	2	-	45	18,918	19,491

Pennsylvania-American Water Company - Water Operations
Group Insurance

						Gross Group Insurance									
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	18,670	3,791	22,461	87,000	90,000	180	2	-	45	18,897	19,470
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	15,320	3,932	19,252	98,000	100,000	202	2	-	45	15,570	16,042
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	8,651	2,040	10,691	96,000	98,000	198	2	-	45	8,897	9,167
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	18,670	3,791	22,461	87,000	90,000	180	2	-	45	18,897	19,470
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	18,670	3,791	22,461	94,000	96,000	194	2	-	45	18,911	19,485
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	8,651	2,045	10,696	87,000	89,000	180	2	-	45	8,878	9,148
190	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	1,019	282	1,301	95,000	97,000	196	2	-	45	1,262	1,301
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	8,651	2,023	10,674	94,000	96,000	194	2	-	45	8,893	9,162
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	15,320	3,884	19,204	95,000	97,000	196	2	-	45	15,564	16,036
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	26,402	4,553	30,955	86,000	89,000	178	2	-	45	26,627	27,435
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	26,402	4,553	30,955	95,000	98,000	196	2	-	45	26,646	27,454
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	8,651	2,040	10,691	97,000	100,000	200	2	-	45	8,899	9,169
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	-	-	-	94,000	96,000	194	2	-	45	242	249
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	8,651	2,045	10,696	82,000	85,000	169	2	-	45	8,868	9,137
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	18,670	3,746	22,416	82,000	85,000	169	2	-	45	18,887	19,459
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007	26,402	4,616	31,018	82,000	85,000	169	2	-	45	26,619	27,426
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	15,320	3,923	19,244	87,000	90,000	180	2	-	45	15,547	16,019
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	26,402	4,553	30,955	88,000	91,000	182	2	-	45	26,631	27,439
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	15,320	3,932	19,252	80,000	82,000	165	2	-	45	15,533	16,004
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	8,651	2,045	10,696	89,000	91,000	184	2	-	45	8,882	9,152
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	8,651	2,023	10,674	87,000	90,000	180	2	-	45	8,878	9,147
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	15,320	3,932	19,252	82,000	85,000	169	2	-	45	15,537	16,008
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	26,402	4,616	31,018	94,000	97,000	194	2	-	45	26,644	27,452
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	-	-	-	97,000	100,000	200	2	-	45	248	255
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	18,670	3,791	22,461	87,000	89,000	180	2	-	45	18,897	19,470
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	26,402	4,616	31,018	87,000	89,000	180	2	-	45	26,629	27,437
216	244101	INDI-Production	Operator U537O	8/13/2007	15,320	3,932	19,252	98,000	100,000	202	2	-	45	15,570	16,042
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	18,670	3,746	22,416	82,000	85,000	169	2	-	45	18,887	19,459
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	26,402	4,616	31,018	84,000	87,000	173	2	-	45	26,623	27,430
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	26,402	4,616	31,018	96,000	98,000	198	2	-	45	26,648	27,456
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007	8,651	2,023	10,674	94,000	96,000	194	2	-	45	8,893	9,162
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	26,402	4,616	31,018	89,000	92,000	184	2	-	45	26,633	27,441
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	26,402	4,616	31,018	95,000	98,000	196	2	-	45	26,646	27,454
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	8,651	2,045	10,696	82,000	85,000	169	2	-	45	8,868	9,137
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007	26,402	4,616	31,018	87,000	90,000	180	2	-	45	26,629	27,437
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	18,670	3,791	22,461	96,000	98,000	198	2	-	45	18,916	19,489
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008	26,402	4,553	30,955	94,000	96,000	194	2	-	45	26,644	27,452
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	8,651	2,045	10,696	91,000	93,000	188	2	-	45	8,887	9,156
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008	8,932	2,084	11,015	94,000	96,000	194	2	-	45	9,173	9,452
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	18,670	3,791	22,461	87,000	90,000	180	2	-	45	18,897	19,470
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	15,320	3,932	19,252	86,000	89,000	178	2	-	45	15,546	16,017
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	26,402	4,553	30,955	94,000	97,000	194	2	-	45	26,644	27,452
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	8,651	2,045	10,696	88,000	90,000	182	2	-	45	8,880	9,150
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	26,402	4,616	31,018	94,000	97,000	194	2	-	45	26,644	27,452
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008	26,402	4,616	31,018	91,000	93,000	188	2	-	45	26,638	27,445
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	26,402	4,616	31,018	96,000	98,000	198	2	-	45	26,648	27,456
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	9,755	1,110	10,864	95,000	98,000	196	2	-	45	9,998	10,301
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	8,651	2,045	10,696	96,000	99,000	198	2	-	45	8,897	9,167
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	9,754	1,088	10,842	94,000	96,000	194	2	-	45	9,996	10,299
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	15,320	3,932	19,252	94,000	96,000	194	2	-	45	15,562	16,034
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	26,402	4,539	30,941	95,000	97,000	196	2	-	45	26,646	27,454
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	15,320	3,932	19,252	95,000	97,000	196	2	-	45	15,564	16,036
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009	15,320	3,932	19,252	86,000	89,000	178	2	-	45	15,546	16,017
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	26,402	4,616	31,018	82,000	84,000	169	2	-	45	26,619	27,426
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	18,670	3,791	22,461	96,000	99,000	198	2	-	45	18,916	19,489
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	8,651	2,018	10,669	94,000	96,000	194	2	-	45	8,893	9,162
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	26,402	4,553	30,955	95,000	97,000	196	2	-	45	26,646	27,454
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009	26,402	4,616	31,018	93,000	95,000	192	2	-	45	26,642	27,449
257	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	15,320	3,932	19,252	95,000	97,000	196	2	-	45	15,564	16,036
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	15,320	3,932	19,252	94,000	96,000	194	2	-	45	15,562	16,034
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	8,651	2,023	10,674	94,000	96,000	194	2	-	45	8,893	9,162
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	-	-	-	94,000	96,000	194	2	-	45	242	249
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	15,320	3,932	19,252	94,000	96,000	194	2	-	45	15,562	16,034
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	15,226	3,905	19,131	97,000	100,000	200	2	-	45	15,474	15,943
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	8,651	2,023	10,674	86,000	89,000	178	2	-	45	8,876	9,145
268	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	18,670	3,791	22,461	87,000	90,000	180	2	-	45	18,897	19,470
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	9,755	1,110	10,864	95,000	98,000	196	2	-	45	9,998	10,301
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	8,651	2,018	10,669	94,000	96,000	194	2	-	45	8,893	9,162
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	-	-	-	97,000	99,000	200	2	-	45	248	255
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	-	-	-	94,000	96,000	194	2	-	45	242	249
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	1,171	325	1,496	94,000	96,000	194	2	-	45	1,412	1,455
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	18,670	3,746	22,416	94,000	97,000	194	2	-	45	18,911	19,485
276	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435

Pennsylvania-American Water Company - Water Operations
Group Insurance

										Gross Group Insurance						
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	26,402	4,539	30,941	94,000	96,000	194	2	-	45	26,644	27,452
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	26,402	4,616	31,018	95,000	96,000	196	2	-	45	26,646	27,454
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	-	-	-	94,000	96,000	194	2	-	45	242	249
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	-	-	-	96,000	99,000	198	2	-	45	246	253
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	15,320	3,932	19,252	89,000	91,000	184	2	-	45	15,552	16,023
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	404	112	516	94,000	96,000	194	2	-	45	645	665
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	26,402	4,553	30,955	94,000	96,000	194	2	-	45	26,644	27,452
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	-	-	-	94,000	96,000	194	2	-	45	242	249
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	404	112	516	96,000	99,000	198	2	-	45	650	669
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	8,651	2,018	10,669	94,000	96,000	194	2	-	45	8,893	9,162
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	18,670	3,791	22,461	93,000	95,000	192	2	-	45	18,909	19,483
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012	15,320	3,884	19,204	86,000	89,000	178	2	-	45	15,545	16,017
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	15,320	3,932	19,252	98,000	101,000	202	2	-	45	15,570	16,042
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	8,651	2,045	10,696	82,000	84,000	169	2	-	45	8,868	9,137
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	-	-	-	91,000	93,000	188	2	-	45	235	243
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	8,651	2,045	10,696	96,000	98,000	198	2	-	45	8,897	9,167
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013	15,320	3,932	19,252	98,000	101,000	202	2	-	45	15,570	16,042
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	152	43	195	94,000	96,000	194	2	-	45	394	406
304	244101	INDI-Production	Operator U537O	5/13/2013	9,755	1,083	10,838	98,000	100,000	202	2	-	45	10,004	10,308
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	8,651	2,045	10,696	96,000	99,000	198	2	-	45	8,897	9,167
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	18,670	3,736	22,405	95,000	97,000	196	2	-	45	18,913	19,487
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	-	-	-	95,000	97,000	196	2	-	45	244	251
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	26,402	4,553	30,955	94,000	97,000	194	2	-	45	26,644	27,452
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	9,755	1,110	10,864	82,000	85,000	169	2	-	45	9,971	10,274
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	15,320	3,923	19,244	95,000	97,000	196	2	-	45	15,564	16,036
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	26,402	4,539	30,941	87,000	90,000	180	2	-	45	26,629	27,437
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	26,402	4,602	31,004	97,000	100,000	200	2	-	45	26,650	27,458
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	18,670	3,746	22,416	83,000	86,000	171	2	-	45	18,889	19,461
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	26,402	4,616	31,018	82,000	85,000	169	2	-	45	26,619	27,426
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014	8,651	2,045	10,696	91,000	93,000	188	2	-	45	8,887	9,156
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	9,755	1,110	10,864	95,000	98,000	196	2	-	45	9,998	10,301
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	-	-	-	98,000	100,000	202	2	-	45	250	257
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
324	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014	8,651	2,018	10,669	95,000	97,000	196	2	-	45	8,895	9,165
325	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	15,320	3,932	19,252	94,000	97,000	194	2	-	45	15,562	16,034
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	26,402	4,616	31,018	94,000	97,000	194	2	-	45	26,644	27,452
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	8,651	2,018	10,669	94,000	97,000	194	2	-	45	8,893	9,162
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	8,651	2,045	10,696	98,000	100,000	202	2	-	45	8,901	9,171
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	-	-	-	86,000	89,000	178	2	-	45	225	232
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	8,651	2,045	10,696	98,000	101,000	202	2	-	45	8,901	9,171
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	8,651	2,040	10,691	95,000	97,000	196	2	-	45	8,895	9,165
335	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015	18,670	3,791	22,461	92,000	94,000	190	2	-	45	18,907	19,481
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	-	-	-	93,000	95,000	192	2	-	45	240	247
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016	8,651	2,018	10,669	94,000	96,000	194	2	-	45	8,893	9,162
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	8,651	2,018	10,669	86,000	89,000	178	2	-	45	8,876	9,145
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	9,702	1,073	10,775	87,000	90,000	180	2	-	45	9,929	10,230
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	26,402	4,602	31,004	94,000	96,000	194	2	-	45	26,644	27,452
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	9,004	1,088	10,092	94,000	96,000	194	2	-	45	9,246	9,526
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	18,670	3,791	22,461	94,000	96,000	194	2	-	45	18,911	19,485
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	26,402	4,553	30,955	92,000	94,000	190	2	-	45	26,640	27,447
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	8,651	2,023	10,674	83,000	86,000	171	2	-	45	8,870	9,139
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016	8,651	2,040	10,691	97,000	99,000	200	2	-	45	8,899	9,169
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	-	-	-	88,000	90,000	182	2	-	45	229	236
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	26,402	4,616	31,018	88,000	91,000	182	2	-	45	26,631	27,439
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012	8,651	2,045	10,696	81,000	82,000	167	2	-	45	8,866	9,135
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011	26,402	4,616	31,018	81,000	82,000	167	2	-	45	26,617	27,424
353	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	8,651	2,045	10,696	92,000	94,000	190	2	-	45	8,889	9,158
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	26,402	4,553	30,955	97,000	99,000	200	2	-	45	26,650	27,458
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	8,651	2,018	10,669	94,000	96,000	194	2	-	45	8,893	9,162
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	18,670	3,746	22,416	86,000	89,000	178	2	-	45	18,895	19,468
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	26,402	4,616	31,018	87,000	90,000	180	2	-	45	26,629	27,437
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	15,320	3,932	19,252	86,000	89,000	178	2	-	45	15,546	16,017
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	15,320	3,932	19,252	89,000	92,000	184	2	-	45	15,552	16,023
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	26,402	4,616	31,018	81,000	82,000	167	2	-	45	26,617	27,424
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	-	-	-	92,000	93,000	190	2	-	45	238	245
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	8,651	2,045	10,696	84,000	87,000	173	2	-	45	8,872	9,141
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	18,670	3,791	22,461	97,000	99,000	200	2	-	45	18,918	19,491
365	244601	KANE-Production	Operator U537O	11/6/2017	1,171	325	1,496	95,000	97,000	196	2	-	45	1,415	1,457
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	18,670	3,746	22,416	86,000	89,000	178	2	-	45	18,895	19,468
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	18,670	3,791	22,461	87,000	89,000	180	2	-	45	18,897	19,470
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	-	-	-	91,000	93,000	188	2	-	45	235	243
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	15,320	3,932	19,252	91,000	93,000	188	2	-	45	15,556	16,027
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	26,402	4,616	31,018	91,000	93,000	188	2	-	45	26,638	27,445
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	8,651	2,023	10,674	92,000	95,000	190	2	-	45	8,889	9,158
374	241106	PITT-Field Services	Utility Person U537P	2/27/2018	8,651	2,045	10,696	89,000	92,000	184	2	-	45	8,882	9,152
375	245206	YARD-Field Services	Utility A F473Y	3/26/2018	26,402	4,616	31,018	83,000	85,000	171	2	-	45	26,621	27,428
376	249160	WILK-Watres	Plant Operator U648S	4/30/2018	15,320	3,893	19,213	86,000	89,000	178	2	-	45	15,546	16,017

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Group Insurance

														Gross Group Insurance		
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
377	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	9,005	1,083	10,088	91,000	93,000	188	2	-	45	9,240	9,520
378	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	26,402	4,553	30,955	83,000	86,000	171	2	-	45	26,621	27,428
379	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	8,651	2,045	10,696	85,000	87,000	175	2	-	45	8,874	9,143
380	246106	MECH-Field Services	Utility A U648R	5/14/2018	848	236	1,084	82,000	84,000	169	2	-	45	1,065	1,097
381	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	-	-	-	86,000	89,000	178	2	-	45	225	232
382	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
383	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	8,651	2,023	10,674	91,000	93,000	188	2	-	45	8,887	9,156
384	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	-	-	-	87,000	90,000	180	2	-	45	227	234
385	241106	PITT-Field Services	Utility Person U537P	7/10/2018	26,402	4,616	31,018	89,000	92,000	184	2	-	45	26,633	27,441
386	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	17,709	1,997	19,706	89,000	91,000	184	2	-	45	17,940	18,484
387	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	8,651	2,045	10,696	96,000	98,000	198	2	-	45	8,897	9,167
388	241106	PITT-Field Services	Utility Person U537P	7/24/2018	8,651	2,040	10,691	89,000	92,000	184	2	-	45	8,883	9,152
389	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	8,651	2,040	10,691	89,000	91,000	184	2	-	45	8,883	9,152
390	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	8,651	2,023	10,674	89,000	91,000	184	2	-	45	8,882	9,152
391	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018	9,754	1,088	10,842	80,000	82,000	165	2	-	45	9,967	10,269
392	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	8,651	2,023	10,674	89,000	92,000	184	2	-	45	8,882	9,152
393	241103	PITT-Cust Service	Field Service Representative U537P	9/4/2018	8,651	2,045	10,696	89,000	92,000	184	2	-	45	8,882	9,152
394	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	26,402	4,553	30,955	89,000	91,000	184	2	-	45	26,633	27,441
395	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	26,402	4,616	31,018	92,000	94,000	190	2	-	45	26,640	27,447
396	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	26,402	4,539	30,941	89,000	91,000	184	2	-	45	26,633	27,441
397	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	15,320	3,884	19,204	91,000	93,000	188	2	-	45	15,556	16,027
398	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
399	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
400	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	26,402	4,616	31,018	84,000	87,000	173	2	-	45	26,623	27,430
401	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	9,754	1,088	10,842	86,000	89,000	178	2	-	45	9,980	10,282
402	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	9,755	1,083	10,838	86,000	89,000	178	2	-	45	9,980	10,282
403	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	53	10	63	82,000	85,000	169	2	-	45	269	278
404	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
405	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
406	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	8,651	2,023	10,674	86,000	89,000	178	2	-	45	8,876	9,145
407	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	8,651	2,040	10,691	86,000	88,000	178	2	-	45	8,876	9,146
408	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	-	-	-	86,000	88,000	178	2	-	45	225	232
409	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
410	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	26,402	4,616	31,018	86,000	88,000	178	2	-	45	26,627	27,435
411	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	9,755	1,110	10,864	86,000	89,000	178	2	-	45	9,980	10,282
412	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	26,402	4,616	31,018	86,000	88,000	178	2	-	45	26,627	27,435
413	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
414	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	8,651	2,045	10,696	86,000	88,000	178	2	-	45	8,876	9,145
415	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	9,755	1,110	10,864	88,000	90,000	182	2	-	45	9,984	10,287
416	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	26,402	4,616	31,018	90,000	92,000	186	2	-	45	26,636	27,443
417	244601	KANE-Production	Operator U537O	9/9/2019	18,670	3,781	22,451	90,000	92,000	186	2	-	45	18,903	19,476
418	243151	NEWC-New Castle	Operator U537O	9/23/2019	26,402	4,616	31,018	90,000	92,000	186	2	-	45	26,636	27,443
419	243301	BUTL-Production	Operator U537O	9/23/2019	9,755	1,110	10,864	90,000	92,000	186	2	-	45	9,988	10,291
420	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	9,755	1,110	10,864	90,000	92,000	186	2	-	45	9,988	10,291
421	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	26,402	4,553	30,955	87,000	89,000	180	2	-	45	26,629	27,437
422	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	20,410	2,330	22,740	86,000	89,000	178	2	-	45	20,635	21,261
423	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	9,754	1,088	10,842	82,000	84,000	169	2	-	45	9,971	10,274
424	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
425	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	26,402	4,553	30,955	86,000	88,000	178	2	-	45	26,627	27,435
426	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	9,755	1,110	10,864	87,000	89,000	180	2	-	45	9,982	10,284
427	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	9,754	1,088	10,842	86,000	89,000	178	2	-	45	9,980	10,282
428	244301	CLAR-Production	Operator U537O	4/27/2020	26,402	4,616	31,018	90,000	92,000	186	2	-	45	26,636	27,443
429	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	8,651	2,045	10,696	84,000	87,000	173	2	-	45	8,872	9,141
430	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	20,410	2,285	22,695	93,000	95,000	192	2	-	45	20,650	21,276
431	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	20,410	2,330	22,740	89,000	91,000	184	2	-	45	20,641	21,267
432	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	10,522	1,323	11,844	86,000	88,000	178	2	-	45	10,747	11,073
433	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	26,402	4,616	31,018	86,000	88,000	178	2	-	45	26,627	27,435
434	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	9,005	1,105	10,110	85,000	88,000	175	2	-	45	9,228	9,508
435	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	8,651	2,018	10,669	81,000	82,000	167	2	-	45	8,866	9,135
436	245206	YARD-Field Services	Utility B F473Y	7/13/2020	15,320	3,932	19,252	69,000	70,000	142	2	-	45	15,510	15,981
437	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	8,651	2,045	10,696	87,000	89,000	180	2	-	45	8,878	9,148
438	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	-	-	-	80,000	83,000	165	2	-	45	213	219
439	249160	WILK-Watres	Plant Operator U648S	12/15/2020	26,402	4,602	31,004	85,000	88,000	175	2	-	45	26,625	27,432
440	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	26,402	4,616	31,018	86,000	88,000	178	2	-	45	26,627	27,435
441	249160	WILK-Watres	Plant Operator U648S	12/21/2020	8,651	2,045	10,696	85,000	88,000	175	2	-	45	8,874	9,143
442	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	-	-	-	82,000	84,000	169	2	-	45	217	223
443	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	8,651	2,045	10,696	82,000	84,000	169	2	-	45	8,868	9,137
444	245206	YARD-Field Services	Utility B F473Y	3/15/2021	18,670	3,791	22,461	69,000	70,000	142	2	-	45	18,860	19,432
445	244101	INDI-Production	Operator U537O	3/22/2021	9,755	1,110	10,864	87,000	89,000	180	2	-	45	9,982	10,284
446	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	9,702	1,095	10,797	84,000	86,000	173	2	-	45	9,923	10,224
447	243152	NEWC-Ellwood	Operator U537O	4/26/2021	-	-	-	87,000	89,000	180	2	-	45	227	234
448	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	15,320	3,893	19,213	84,000	86,000	173	2	-	45	15,541	16,013
449	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	8,651	2,018	10,669	80,000	83,000	165	2	-	45	8,864	9,133
450	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	18,670	3,791	22,461	84,000	85,000	173	2	-	45	18,891	19,464
451	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	8,651	2,023	10,674	84,000	85,000	173	2	-	45	8,872	9,141
452	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	9,755	1,110	10,864	84,000	85,000	173	2	-	45	9,976	10,278
453	241106	PITT-Field Services	Utility Person U537P	5/24/2021	18,670	3,791	22,461	84,000	86,000	173	2	-	45	18,891	19,464
454	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	9,755	1,083	10,838	84,000	85,000	173	2	-	45	9,976	10,278
455	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	8,651	2,018	10,669	80,000	82,000	165	2	-	45	8,864	9,133
456	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	26,402	4,616	31,018	87,000	89,000	180	2	-	45	26,629	27,437
457	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	-	-	-	84,000	86,000	173	2	-	45	221	228
458	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	26,402	4,553	30,955	87,000	89,000	180	2	-	45	26,629	27,437
459	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	18,670	3,791	22,461	80,000	82,000	165	2	-	45	18,883	19,455
460	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	9,005	1,083	10,088	83,000	85,000	171	2	-	45	9,224	9,503
461	244506	WARR-Field Services	Utility Person U537O	8/16/2021	26,402	4,616	31,018	81,000	83,000	167	2	-	45	26,617	27,424
462	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	26,402	4,616	31,018	81,000	83,000	167	2	-	45	26,617	27,424

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Group Insurance

					Gross Group Insurance										
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	9,754	1,088	10,842	89,000	92,000	184	2	-	45	9,986	10,289
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	20,410	2,330	22,740	81,000	83,000	167	2	-	45	20,625	21,250
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	8,651	2,045	10,696	83,000	85,000	171	2	-	45	8,870	9,139
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	8,651	2,045	10,696	83,000	86,000	171	2	-	45	8,870	9,139
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	8,651	2,045	10,696	82,000	84,000	169	2	-	45	8,868	9,137
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	26,079	4,526	30,605	80,000	82,000	165	2	-	45	26,292	27,089
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	18,670	3,746	22,416	83,000	85,000	171	2	-	45	18,889	19,461
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	8,651	2,045	10,696	74,000	76,000	153	2	-	45	8,852	9,120
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	8,651	2,045	10,696	78,000	80,000	161	2	-	45	8,860	9,128
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	20,410	2,330	22,740	85,000	87,000	175	2	-	45	20,633	21,259
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	9,005	1,083	10,088	88,000	91,000	182	2	-	45	9,234	9,514
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	26,402	4,539	30,941	79,000	81,000	163	2	-	45	26,613	27,420
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	9,983	1,173	11,156	80,000	82,000	165	2	-	45	10,196	10,505
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	9,004	1,088	10,092	83,000	85,000	171	2	-	45	9,223	9,503
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	9,755	1,105	10,860	81,000	83,000	167	2	-	45	9,970	10,272
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	9,755	1,083	10,838	81,000	83,000	167	2	-	45	9,969	10,272
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	9,755	1,110	10,864	81,000	84,000	167	2	-	45	9,969	10,272
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	9,702	1,095	10,797	79,000	81,000	163	2	-	45	9,913	10,213
481	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	8,651	2,045	10,696	82,000	85,000	169	2	-	45	8,868	9,137
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	18,559	3,760	22,320	82,000	84,000	169	2	-	45	18,776	19,345
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	9,755	1,110	10,864	77,000	80,000	159	2	-	45	9,961	10,263
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	8,651	2,045	10,696	81,000	84,000	167	2	-	45	8,866	9,135
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	26,402	4,616	31,018	82,000	84,000	169	2	-	45	26,619	27,426
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	15,320	3,932	19,252	82,000	84,000	169	2	-	45	15,537	16,008
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	8,974	2,087	11,061	81,000	84,000	167	2	-	45	9,189	9,467
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	26,402	4,553	30,955	80,000	83,000	165	2	-	45	26,615	27,422
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	26,402	4,553	30,955	81,000	84,000	167	2	-	45	26,617	27,424
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022	52	15	67	84,000	86,000	173	2	-	45	273	282
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	-	-	-	82,000	84,000	169	2	-	45	217	223
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	26,402	4,616	31,018	82,000	84,000	169	2	-	45	26,619	27,426
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	8,651	2,023	10,674	82,000	84,000	169	2	-	45	8,868	9,137
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	9,755	1,110	10,864	88,000	91,000	182	2	-	45	9,984	10,287
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	8,651	2,045	10,696	79,000	81,000	163	2	-	45	8,862	9,131
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	9,754	1,088	10,842	75,000	78,000	155	2	-	45	9,957	10,259
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	18,670	3,791	22,461	79,000	81,000	163	2	-	45	18,881	19,453
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	26,402	4,616	31,018	83,000	85,000	171	2	-	45	26,621	27,428
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	26,402	4,616	31,018	84,000	87,000	173	2	-	45	26,623	27,430
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	10,130	1,110	11,239	80,000	83,000	165	2	-	45	10,342	10,656
501	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	16,209	1,997	18,206	82,000	85,000	169	2	-	45	16,425	16,923
502	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	8,651	2,023	10,674	82,000	85,000	169	2	-	45	8,868	9,137
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	26,402	4,553	30,955	80,000	83,000	165	2	-	45	26,615	27,422
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	9,942	1,088	11,030	83,000	85,000	171	2	-	45	10,161	10,469
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	25,384	4,334	29,717	72,000	74,000	149	2	-	45	25,580	26,355
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	8,651	2,023	10,674	76,000	78,000	157	2	-	45	8,856	9,124
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	18,226	3,668	21,894	80,000	83,000	165	2	-	45	18,438	18,997
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	26,402	4,616	31,018	78,000	80,000	161	2	-	45	26,611	27,418
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	26,402	4,616	31,018	80,000	83,000	165	2	-	45	26,615	27,422
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	1,171	325	1,496	82,000	85,000	169	2	-	45	1,388	1,430
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	9,755	1,083	10,838	85,000	87,000	175	2	-	45	9,978	10,280
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	15,320	3,932	19,252	85,000	87,000	175	2	-	45	15,543	16,015
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	9,755	1,110	10,864	78,000	80,000	161	2	-	45	9,963	10,265
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	15,320	3,932	19,252	78,000	80,000	161	2	-	45	15,529	16,000
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	9,755	1,110	10,864	80,000	82,000	165	2	-	45	9,967	10,270
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	-	-	-	78,000	80,000	161	2	-	45	209	215
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	17,334	1,997	19,331	81,000	83,000	167	2	-	45	17,548	18,080
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	9,567	1,110	10,677	85,000	87,000	175	2	-	45	9,790	10,087
519	243301	BUTL-Production	Operator U537O	3/20/2023	26,402	4,616	31,018	82,000	84,000	169	2	-	45	26,619	27,426
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	18,670	3,791	22,461	82,000	84,000	169	2	-	45	18,887	19,459
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	18,670	3,791	22,461	79,000	81,000	163	2	-	45	18,881	19,453
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	9,567	1,110	10,677	82,000	85,000	169	2	-	45	9,784	10,081
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	9,567	1,110	10,677	82,000	84,000	169	2	-	45	9,784	10,081
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	-	-	-	84,000	86,000	173	2	-	45	221	228
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	8,651	2,018	10,669	84,000	86,000	173	2	-	45	8,872	9,141
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	9,567	1,088	10,655	72,000	74,000	149	2	-	45	9,763	10,059
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	-	-	-	79,000	81,000	163	2	-	45	211	217
528	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	9,005	1,110	10,114	82,000	85,000	169	2	-	45	9,221	9,501
529	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	9,567	1,088	10,655	82,000	85,000	169	2	-	45	9,784	10,080
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	-	-	-	79,000	81,000	163	2	-	45	211	217
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023	9,005	1,110	10,114	78,000	80,000	161	2	-	45	9,213	9,493
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	26,402	4,616	31,018	78,000	80,000	161	2	-	45	26,611	27,418
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023	15,320	3,932	19,252	79,000	80,000	163	2	-	45	15,531	16,002
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023	15,320	3,893	19,213	83,000	86,000	171	2	-	45	15,539	16,010
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	8,651	2,040	10,691	79,000	81,000	163	2	-	45	8,862	9,131
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023	-	-	-	74,000	76,000	153	2	-	45	200	206
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023	16,575	3,170	19,745	93,000	96,000	192	2	-	45	16,815	17,324
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023	16,575	3,170	19,745	90,000	92,000	186	2	-	45	16,808	17,318
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	16,575	3,170	19,745	81,000	83,000	167	2	-	45	16,790	17,299
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	16,575	3,170	19,745	81,000	83,000	167	2	-	45	16,790	17,299
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	16,575	3,170	19,745	78,000	80,000	161	2	-	45	16,784	17,292
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023	16,575	3,170	19,745	82,000	84,000	169	2	-	45	16,792	17,301
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023	16,575	3,170	19,745	86,000	88,000	178	2	-	45	16,800	17,309
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023	16,575	3,170	19,745	84,000	86,000	173	2	-	45	16,796	17,305
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023	16,575	3,170	19,745	83,000	86,000	171	2	-	45	16,794	17,303
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023	16,575	3,170	19,745	93,000	95,000	192	2	-	45	16,815	17,324
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023	16,575	3,170	19,745	79,000	81,000	163	2	-	45	16,786	17,295
			Total Collective Bargaining Unit		$8,411,420	$1,609,261	$10,020,681	$48,655,000	$49,948,000	$100,424	$1,313	$0	$24,746	$8,537,903	$8,796,760

Pennsylvania-American Water Company - Water Operations
Group Insurance

						Gross Group Insurance									
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
Non-Collective Bargaining Unit Hourly															
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	$9,262	$1,884	$11,146	$108,000	$112,000	$223	$26	$181	$45	$9,737	$10,032
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	25,947	5,277	31,224	135,000	139,000	279	32	225	45	26,528	27,332
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	20,360	4,145	24,504	117,000	121,000	241	28	196	45	20,870	21,503
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	20,360	4,145	24,504	125,000	129,000	258	30	208	45	20,901	21,534
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	10/3/1988	25,947	5,277	31,224	106,000	109,000	219	25	177	45	26,413	27,213
6	246801	LEHP-Production	Plant Operator	2/1/1996	20,360	4,095	24,454	109,000	112,000	225	26	181	45	20,837	21,469
7	245706	POCO-Field Services	Crew Leader	9/16/1996	20,360	4,145	24,504	109,000	112,000	225	26	181	45	20,837	21,469
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	20,360	4,085	24,444	106,000	109,000	219	25	177	45	20,826	21,457
9	245706	POCO-Field Services	Utility Person	7/1/1994	20,360	4,145	24,504	107,000	111,000	221	26	179	45	20,830	21,462
10	245501	BNGR-Production	Plant Operator	7/23/1990	20,360	4,145	24,504	118,000	122,000	244	28	197	45	20,874	21,507
11	247406	FRCK-Field Services	Utility Person	4/18/1988	-	-	-	108,000	111,000	223	26	179	45	473	488
12	247406	FRCK-Field Services	Utility Person	1/15/1986	20,360	4,085	24,444	111,000	115,000	229	27	185	45	20,846	21,478
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	20,360	4,145	24,504	100,000	103,000	206	24	167	45	20,802	21,433
14	246201	HSHY-Production	Plant Operator	9/27/1993	9,262	1,862	11,124	105,000	108,000	217	25	175	45	9,724	10,019
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	20,360	4,145	24,504	103,000	107,000	213	25	172	45	20,814	21,446
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	25,947	5,212	31,159	113,000	116,000	233	27	188	45	26,440	27,241
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	20,360	4,145	24,504	131,000	135,000	270	31	218	45	20,924	21,559
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990	25,947	5,277	31,224	101,000	104,000	208	24	168	45	26,392	27,193
19	247106	MILT-Field Services	Utility Person	11/16/1998	25,947	5,277	31,224	104,000	107,000	215	25	173	45	26,404	27,205
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	25,947	5,277	31,224	106,000	109,000	219	25	177	45	26,413	27,213
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	20,360	4,145	24,504	101,000	104,000	208	24	168	45	20,806	21,437
22	246506	COAT-Field Services	Utility Person	1/26/1998	21,322	4,271	25,593	92,000	95,000	190	22	154	45	21,733	22,392
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	9,262	1,857	11,119	117,000	121,000	241	28	195	45	9,772	10,069
24	245906	GLEN-Field Services	Utility Person	12/27/1994	20,360	4,145	24,504	114,000	118,000	235	27	190	45	20,857	21,490
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999	-	-	-	110,000	114,000	227	26	184	45	482	497
26	245606	NAZA-Field Services	Utility Person	10/4/1993	8,817	1,776	10,594	110,000	113,000	227	26	183	45	9,299	9,581
27	245906	GLEN-Field Services	Utility Person	6/20/1983	20,360	4,145	24,504	109,000	113,000	225	26	182	45	20,838	21,470
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	25,947	5,199	31,146	115,000	118,000	237	28	191	45	26,448	27,250
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	20,360	4,135	24,494	113,000	117,000	233	27	189	45	20,854	21,486
30	246401	ROYF-Production	Plant Operator	3/9/1998	20,360	4,145	24,504	116,000	120,000	239	28	193	45	20,865	21,498
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987	25,947	5,277	31,224	116,000	120,000	239	28	194	45	26,453	27,255
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	9,262	1,884	11,146	117,000	120,000	241	28	195	45	9,772	10,068
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	25,947	5,212	31,159	111,000	114,000	229	27	184	45	26,432	27,233
34	245606	NAZA-Field Services	Utility Person	11/26/2001	25,947	5,277	31,224	111,000	114,000	229	27	185	45	26,432	27,233
35	246801	LEHP-Production	Utility Person	2/26/1990	20,360	4,085	24,444	107,000	110,000	221	26	178	45	20,829	21,461
36	246501	COAT-Production	Plant Operator	5/28/2002	19,431	3,922	23,353	109,000	112,000	225	26	181	45	19,908	20,512
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	9,262	1,884	11,146	112,000	116,000	231	27	187	45	9,752	10,048
38	245906	GLEN-Field Services	Utility Person	1/5/2004	21,322	4,336	25,658	108,000	112,000	223	26	181	45	21,797	22,458
39	245606	NAZA-Field Services	Utility Person	2/16/2004	20,360	4,145	24,504	106,000	110,000	219	25	177	45	20,826	21,458
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N)	12/1/2004	25,947	5,277	31,224	100,000	104,000	206	24	167	45	26,390	27,190
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	20,360	4,145	24,504	103,000	106,000	213	25	172	45	20,814	21,445
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	9,262	1,884	11,146	107,000	111,000	221	26	179	45	9,733	10,028
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	25,947	5,277	31,224	105,000	109,000	217	25	175	45	26,409	27,210
44	245506	BNGR-Field Services	Utility Person	11/7/2005	20,360	4,145	24,504	106,000	109,000	219	25	177	45	20,826	21,457
45	245401	SUSQ-Production	Plant Operator	5/15/2006	9,262	1,857	11,119	104,000	107,000	215	25	173	45	9,720	10,015
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006	25,947	5,277	31,224	107,000	110,000	221	26	178	45	26,416	27,217
47	245606	NAZA-Field Services	Utility Person	12/18/2006	25,947	5,277	31,224	107,000	110,000	221	26	178	45	26,417	27,218
48	246206	HSHY-Field Services	Utility Person	3/26/2007	25,947	5,212	31,159	109,000	113,000	225	26	182	45	26,425	27,226
49	247106	MILT-Field Services	Utility Person	5/7/2007	-	-	-	102,000	105,000	211	24	170	45	450	464
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	25,947	5,264	31,211	114,000	117,000	235	27	190	45	26,444	27,246
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	20,360	4,085	24,444	106,000	110,000	219	25	177	45	20,826	21,457
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007	25,947	5,277	31,224	132,000	137,000	272	32	221	45	26,517	27,320
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	20,360	4,145	24,504	127,000	131,000	262	30	212	45	20,909	21,543
54	247201	PHBG-Production	Operations Specialist	6/2/2008	25,947	5,212	31,159	114,000	117,000	235	27	189	45	26,444	27,245
55	247106	MILT-Field Services	Utility Person	7/21/2008	20,360	4,095	24,454	99,000	102,000	204	24	165	45	20,798	21,429
56	246501	COAT-Production	Plant Operator	10/6/2008	9,262	1,862	11,124	108,000	112,000	223	26	181	45	9,737	10,032
57	247701	BOGGS-Production	Plant Operator	5/4/2009	20,360	4,145	24,504	111,000	115,000	229	27	185	45	20,846	21,478
58	245706	POCO-Field Services	Utility Person	9/28/2009	22,031	2,657	24,688	107,000	110,000	221	26	178	45	22,501	23,183
59	246506	COAT-Field Services	Utility Person	11/2/2009	-	-	-	107,000	110,000	221	26	178	45	470	484
60	247401	FRCK-Production	Operator	1/25/2010	22,957	2,770	25,727	102,000	106,000	211	24	171	45	23,408	24,118
61	247206	PHBG-Field Services	Utility Person	3/29/2010	22,031	2,597	24,628	110,000	113,000	227	26	183	45	22,512	23,195
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	9,262	1,884	11,146	117,000	121,000	241	28	195	45	9,773	10,069
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	21,322	4,336	25,658	123,000	127,000	254	30	204	45	21,855	22,518
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	25,947	5,277	31,224	111,000	114,000	229	27	185	45	26,432	27,234
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	9,262	1,884	11,146	97,000	100,000	200	23	162	45	9,693	9,987
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	9,262	1,857	11,119	104,000	107,000	215	25	173	45	9,720	10,015
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	9,262	1,884	11,146	123,000	127,000	254	30	205	45	9,796	10,093
68	247206	PHBG-Field Services	Utility Person	11/7/2011	20,360	4,145	24,504	106,000	109,000	219	25	176	45	20,825	21,457
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	25,710	5,170	30,879	94,000	97,000	194	23	156	45	26,128	26,920
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	20,360	4,085	24,444	100,000	103,000	206	24	167	45	20,802	21,433
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	9,262	1,884	11,146	101,000	104,000	208	24	168	45	9,709	10,003
72	249150	WILK-Other	Operations Specialist	3/4/2013	9,262	1,862	11,124	100,000	103,000	206	24	167	45	9,705	9,999
73	247306	BRWK-Field Services	Utility Person	4/29/2013	20,360	4,145	24,504	108,000	112,000	223	26	181	45	20,834	21,466
74	245601	NAZA-Production	Plant Operator	6/27/2013	25,947	5,277	31,224	113,000	117,000	233	27	189	45	26,441	27,243
75	247301	BRWK-Production	Operator	9/16/2013	20,360	4,145	24,504	110,000	114,000	227	26	184	45	20,842	21,474
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	20,360	4,145	24,504	106,000	109,000	219	25	176	45	20,825	21,456
77	247201	PHBG-Production	Plant Operator	2/2/2015	25,947	5,277	31,224	106,000	110,000	219	25	177	45	26,413	27,214
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	25,947	5,277	31,224	106,000	109,000	219	25	177	45	26,413	27,213
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	25,947	5,212	31,159	99,000	102,000	204	24	164	45	26,384	27,184
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	20,360	4,085	24,444	107,000	111,000	221	26	179	45	20,830	21,462
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	1,247	304	1,551	91,000	94,000	188	22	152	45	1,654	1,704
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	9,262	1,879	11,142	111,000	115,000	229	27	185	45	9,748	10,044
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	9,262	1,862	11,124	97,000	100,000	200	23	161	45	9,692	9,986
84	245406	SUSQ-Field Services	Utility Person	12/14/2015	25,947	5,277	31,224	91,000	94,000	188	22	152	45	26,354	27,153
85	246506	COAT-Field Services	Utility Person	2/3/2016	25,947	5,277	31,224	99,000	102,000	204	24	165	45	26,384	27,184
86	247103	MILT-Cust Service	Utility Person	3/7/2016	25,947	5,277	31,224	99,000	102,000	204	24	164	45	26,384	27,184
87	246206	HSHY-Field Services	Utility Person	2/29/2016	27,645	3,383	31,028	111,000	114,000	229	27	184	45	28,130	28,983
88	246201	HSHY-Production	Plant Operator	2/29/2016	25,947	5,277	31,224	105,000	108,000	217	25	175	45	26,408	27,209
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	20,360	4,085	24,444	107,000	110,000	221	26	178	45	20,829	21,461
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016	-	-	-	105,000	108,000	217	25	175	45	462	476
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	27,645	3,383	31,028	159,000	164,000	328	38	265	45	28,322	29,181
92	246206	HSHY-Field Services	Utility Person	6/13/2016	-	-	-	100,000	103,000	206	24	167	45	442	456
93	246206	HSHY-Field Services	Utility Person	7/11/2016	394	71	465	98,000	101,000	202	24	164	45	829	854
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	20,360	4,145	24,504	113,000	117,000	233	27	189	45	20,854	21,486
95	245306	ABNG-Field Services	Utility Person	10/24/2016	20,360	4,145	24,504	100,000	103,000	206	24	167	45	20,802	21,433

Pennsylvania-American Water Company - Water Operations
Group Insurance

								Gross Group Insurance								
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	21,322	4,336	25,658	106,000	110,000	219	25	177	45	21,789	22,450
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	20,360	4,145	24,504	92,000	95,000	190	22	153	45	20,770	21,399
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	9,262	1,884	11,146	127,000	131,000	262	30	212	45	9,812	10,109
99	247306	BRWK-Field Services	Utility Person	1/16/2017	25,947	5,199	31,146	96,000	99,000	198	23	160	45	26,373	27,172
100	246506	COAT-Field Services	Utility Person	2/13/2017	25,947	5,264	31,211	94,000	96,000	194	23	156	45	26,364	27,164
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	1,247	226	1,473	101,000	104,000	208	24	168	45	1,693	1,744
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015	20,360	4,145	24,504	59,000	60,000	122	14	98	45	20,638	21,264
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	19,886	4,032	23,919	58,000	60,000	120	14	97	45	20,162	20,773
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018	1,104	263	1,367	93,000	96,000	192	22	155	45	1,519	1,565
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	10,082	1,180	11,262	92,000	95,000	190	22	154	45	10,493	10,811
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018	-	-	-	103,000	106,000	213	25	171	45	454	467
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	20,360	4,095	24,454	123,000	127,000	254	30	205	45	20,893	21,526
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	9,262	1,884	11,146	102,000	106,000	211	24	171	45	9,713	10,008
109	246801	LEHP-Production	Utility Person	7/23/2018	21,322	4,336	25,658	89,000	91,000	184	21	148	45	21,720	22,378
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	25,947	5,212	31,159	134,000	139,000	277	32	224	45	26,524	27,329
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	10,082	1,180	11,262	107,000	110,000	221	26	178	45	10,552	10,872
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	10,082	1,185	11,267	78,000	81,000	161	19	131	45	10,438	10,754
113	246501	COAT-Production	Plant Operator	9/24/2018	9,262	1,884	11,146	102,000	105,000	211	24	170	45	9,712	10,007
114	245906	GLEN-Field Services	Utility Person	10/8/2018	-	-	-	93,000	96,000	192	22	154	45	414	426
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	22,957	2,780	25,737	97,000	100,000	200	23	162	45	23,387	24,096
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	1,023	196	1,219	84,000	87,000	173	20	140	45	1,401	1,444
117	246206	HSHY-Field Services	Utility Person	10/8/2018	21,457	2,715	24,172	93,000	96,000	192	22	155	45	21,872	22,535
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	21,322	4,336	25,658	108,000	111,000	223	26	179	45	21,795	22,456
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	9,840	2,027	11,867	101,000	104,000	208	24	169	45	10,286	10,598
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	10,660	1,350	12,010	101,000	104,000	208	24	168	45	11,105	11,442
121	246206	HSHY-Field Services	Utility Person	1/14/2019	21,322	4,281	25,603	94,000	97,000	194	23	157	45	21,741	22,400
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	21,281	2,657	23,938	103,000	107,000	213	25	172	45	21,736	22,395
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	25,947	5,277	31,224	105,000	109,000	217	25	176	45	26,409	27,210
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	25,947	5,277	31,224	151,000	156,000	312	36	251	45	26,591	27,397
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	9,211	1,847	11,058	110,000	114,000	227	26	184	45	9,694	9,987
126	248801	TURB-Production	Plant Operator	7/8/2019	20,360	4,095	24,454	98,000	101,000	202	24	163	45	20,794	21,424
127	240116	CORP-Maint Services	Sr Reliability Engineering Analyst	7/15/2019	20,360	4,145	24,504	159,000	164,000	328	38	266	45	21,037	21,675
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	9,262	1,884	11,146	106,000	110,000	219	25	177	45	9,729	10,024
129	241406	STNW-Field Service	Utility Person	12/5/2018	9,262	1,857	11,119	83,000	85,000	171	20	138	45	9,636	9,928
130	246206	HSHY-Field Services	Utility Person	2/2/2016	9,262	1,884	11,146	91,000	94,000	188	22	151	45	9,668	9,962
131	241406	STNW-Field Service	Utility Person	3/3/1999	9,262	1,884	11,146	83,000	85,000	171	20	138	45	9,636	9,928
132	247201	PHBG-Production	Plant Operator	10/21/2019	25,947	5,277	31,224	97,000	100,000	200	23	162	45	26,377	27,176
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	10,082	1,207	11,289	100,000	103,000	206	24	166	45	10,524	10,843
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	10,082	1,207	11,289	102,000	105,000	211	24	170	45	10,532	10,851
135	247206	PHBG-Field Services	Utility Person	1/27/2020	20,360	4,145	24,504	96,000	99,000	198	23	160	45	20,786	21,416
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	25,947	5,277	31,224	119,000	123,000	246	29	198	45	26,464	27,266
137	241406	STNW-Field Service	Foreperson	1/8/1990	25,947	5,212	31,159	113,000	116,000	233	27	188	45	26,440	27,242
138	246406	ROYF-Field Services	Utility Person	3/23/2020	25,947	5,277	31,224	100,000	103,000	206	24	166	45	26,388	27,188
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	27,645	3,383	31,028	101,000	104,000	208	24	168	45	28,091	28,943
140	246406	ROYF-Field Services	Utility Person	4/13/2020	9,262	1,884	11,146	100,000	103,000	206	24	167	45	9,704	9,999
141	247106	MILT-Field Services	Utility Person	4/13/2020	21,322	4,336	25,658	96,000	99,000	198	23	160	45	21,748	22,408
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	10,082	1,207	11,289	101,000	104,000	208	24	168	45	10,528	10,847
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	9,281	1,193	10,474	88,000	91,000	182	21	146	45	9,675	9,969
144	245701	POCO-Production	Plant Operator	4/27/2020	25,947	5,277	31,224	97,000	100,000	200	23	161	45	26,377	27,176
145	246401	ROYF-Production	Plant Operator	5/4/2020	9,262	1,879	11,142	106,000	109,000	219	25	177	45	9,728	10,023
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	25,854	5,182	31,036	81,000	83,000	167	19	134	45	26,220	27,015
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	22,957	2,780	25,737	118,000	122,000	244	28	197	45	23,471	24,182
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	22,957	2,725	25,683	85,000	88,000	175	20	142	45	23,340	24,048
149	240116	CORP-Maint Services	Reliability Engineering Analyst	6/1/2020	9,262	1,884	11,146	139,000	143,000	287	33	232	45	9,859	10,158
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	25,947	5,212	31,159	92,000	95,000	190	22	154	45	26,358	27,157
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	25,916	5,203	31,119	94,000	97,000	194	23	157	45	26,335	27,133
152	247106	MILT-Field Services	Utility Person	10/19/2020	21,322	4,336	25,658	95,000	98,000	196	23	158	45	21,744	22,403
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	22,031	2,657	24,688	133,000	138,000	275	32	222	45	22,605	23,290
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	9,332	1,207	10,539	96,000	99,000	198	23	160	45	9,758	10,054
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	27,502	3,278	30,779	91,000	93,000	188	22	151	45	27,908	28,754
156	245506	BNGR-Field Services	Utility Person	2/22/2021	25,947	5,277	31,224	89,000	92,000	184	21	149	45	26,346	27,145
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	51	15	66	84,000	86,000	173	20	139	45	429	442
158	246801	LEHP-Production	Utility Person	4/12/2021	25,947	5,212	31,159	89,000	92,000	184	21	149	45	26,345	27,144
159	246506	COAT-Field Services	Utility Person	4/13/2021	25,947	5,277	31,224	99,000	103,000	204	24	166	45	26,386	27,186
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	20,360	4,145	24,504	91,000	94,000	188	22	151	45	20,766	21,395
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	25,947	5,277	31,224	108,000	111,000	223	26	179	45	26,420	27,221
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	9,262	1,884	11,146	86,000	89,000	178	21	143	45	9,649	9,941
163	240114	CORP-Engineering	GIS Analyst	6/1/2021	-	-	-	84,000	87,000	173	20	140	45	379	390
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	9,211	1,869	11,080	99,000	102,000	204	24	164	45	9,649	9,941
165	247206	PHBG-Field Services	Utility Person	7/6/2021	9,211	1,847	11,058	100,000	103,000	206	24	166	45	9,653	9,946
166	245906	GLEN-Field Services	Utility Person	7/12/2021	10,082	1,207	11,289	97,000	100,000	200	23	162	45	10,513	10,832
167	246401	ROYF-Production	Plant Operator	7/19/2021	9,262	1,884	11,146	106,000	110,000	219	25	177	45	9,729	10,024
168	241106	PITT-Field Services	Operations Specialist	9/7/2021	-	-	-	98,000	101,000	202	24	163	45	434	447
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	9,840	1,972	11,812	104,000	107,000	215	25	173	45	10,298	10,610
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	21,322	4,336	25,658	101,000	104,000	208	24	168	45	21,768	22,428
171	240116	CORP-Maint Services	Reliability Engineering Analyst	10/18/2021	25,947	5,277	31,224	120,000	123,000	248	29	199	45	26,467	27,270
172	246506	COAT-Field Services	Utility Person	11/8/2021	25,947	5,277	31,224	91,000	94,000	188	22	151	45	26,352	27,151
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	20,360	4,145	24,504	150,000	155,000	310	36	250	45	21,000	21,637
174	246506	COAT-Field Services	Utility Person	11/9/2021	21,322	4,336	25,658	91,000	94,000	188	22	151	45	21,728	22,387
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	9,262	1,884	11,146	66,000	68,000	136	16	110	45	9,570	9,860
176	247106	MILT-Field Services	Utility Person	11/22/2021	25,722	5,224	30,946	93,000	96,000	192	22	155	45	26,136	26,929
177	246201	HSHY-Production	Plant Operator	1/10/2022	9,262	1,879	11,142	99,000	102,000	204	24	164	45	9,700	9,994
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	1/10/2022	20,360	4,095	24,454	90,000	93,000	186	22	149	45	20,762	21,391
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	25,947	5,212	31,159	100,000	103,000	206	24	166	45	26,389	27,189
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	9,262	1,857	11,119	93,000	96,000	192	22	156	45	9,677	9,971
181	247206	PHBG-Field Services	Utility Person	2/21/2022	-	-	-	97,000	100,000	200	23	161	45	430	443
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	2/28/2022	9,262	1,862	11,124	77,000	79,000	159	18	128	45	9,613	9,904
183	245306	ABNG-Field Services	Utility Person	2/21/2022	25,947	5,277	31,224	89,000	91,000	184	21	148	45	26,345	27,143
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	9,332	1,180	10,512	95,000	98,000	196	23	159	45	9,755	10,051
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	51	15	66	67,000	69,000	138	16	111	45	362	373
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	9,262	1,862	11,124	94,000	97,000	194	23	156	45	9,680	9,974
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	27,645	3,383	31,028	84,000	87,000	173	20	141	45	28,025	28,874
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	9,211	1,847	11,058	90,000	93,000	186	22	150	45	9,614	9,905
189	240306	CORP-Field Service	Operations Specialist	4/25/2022	-	-	-	103,000	106,000	213	25	172	45	454	468
190	245306	ABNG-Field Services	Utility Person	5/16/2022	9,332	1,207	10,539	91,000	94,000	188	22	152	45	9,739	10,034
191	241401	STNW-Production	Plant Operator	6/6/2022	10,406	1,170	11,576	86,000	89,000	178	21	143	45	10,792	11,119
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	10,457	1,185	11,642	106,000	109,000	219	25	177	45	10,923	11,254

Pennsylvania-American Water Company - Water Operations
Group Insurance

															Gross Group Insurance	
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
193	245506	BNGR-Field Services	Utility Person	6/20/2022	25,947	5,277	31,224	100,000	103,000	206	24	167	45	26,389	27,189
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	6/20/2022	-	-	-	75,000	77,000	155	18	124	45	343	353
195	245401	SUSQ-Production	Plant Operator	6/27/2022	25,947	5,212	31,159	90,000	93,000	186	22	150	45	26,349	27,148
196	241401	STNW-Production	Plant Operator	7/5/2022	10,457	1,203	11,660	86,000	89,000	178	21	143	45	10,843	11,172
197	246801	LEHP-Production	Utility Person	7/18/2022	9,262	1,884	11,146	87,000	90,000	180	21	145	45	9,653	9,945
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/18/2022	25,947	5,277	31,224	76,000	79,000	157	18	127	45	26,294	27,091
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	9,262	1,862	11,124	95,000	98,000	196	23	158	45	9,685	9,978
200	247106	MILT-Field Services	Utility Person	7/18/2022	9,262	1,884	11,146	94,000	97,000	194	23	156	45	9,680	9,974
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	9,262	1,862	11,124	95,000	98,000	196	23	158	45	9,685	9,978
202	245501	BNGR-Production	Plant Operator	8/29/2022	9,262	1,884	11,146	90,000	93,000	186	22	150	45	9,665	9,958
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	10,457	1,207	11,664	90,000	93,000	186	22	150	45	10,860	11,189
204	245401	SUSQ-Production	Plant Operator	9/19/2022	25,947	5,212	31,159	90,000	93,000	186	22	150	45	26,349	27,148
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	9,262	1,857	11,119	93,000	96,000	192	22	155	45	9,677	9,971
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	21,322	4,336	25,658	99,000	102,000	204	24	164	45	21,760	22,419
207	245306	ABNG-Field Services	Utility Person	10/10/2022	20,744	4,171	24,915	86,000	88,000	178	21	143	45	21,130	21,771
208	245306	ABNG-Field Services	Utility Person	10/17/2022	9,262	1,884	11,146	86,000	88,000	178	21	143	45	9,648	9,941
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	22,957	2,780	25,737	82,000	85,000	169	20	137	45	23,329	24,036
210	246406	ROYF-Field Services	Utility Person	11/14/2022	9,262	1,884	11,146	94,000	97,000	194	23	156	45	9,680	9,974
211	246501	COAT-Production	Plant Operator	11/28/2022	20,360	4,145	24,504	96,000	99,000	198	23	160	45	20,786	21,416
212	246406	ROYF-Field Services	Utility Person	1/3/2023	25,947	5,277	31,224	97,000	100,000	200	23	162	45	26,377	27,176
213	245706	POCO-Field Services	Utility Person	1/3/2023	9,262	1,862	11,124	87,000	90,000	180	21	145	45	9,653	9,946
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	20,360	4,145	24,504	86,000	88,000	178	21	143	45	20,746	21,375
215	247306	BRWK-Field Services	Utility Person	3/6/2023	21,322	4,326	25,648	89,000	92,000	184	21	148	45	21,720	22,379
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	25,803	5,236	31,040	94,000	97,000	194	23	157	45	26,222	27,017
217	245606	NAZA-Field Services	Utility Person	3/20/2023	9,895	1,207	11,102	94,000	97,000	194	23	157	45	10,314	10,627
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023	-	-	-	89,000	91,000	184	21	148	45	398	410
219	245601	NAZA-Production	Plant Operator	6/5/2023	9,262	1,884	11,146	94,000	97,000	194	23	156	45	9,680	9,974
220	245106	NORR-Field Services	Utility Person	6/5/2023	9,332	1,207	10,539	97,000	100,000	200	23	162	45	9,762	10,058
221	246406	ROYF-Field Services	Utility Person	6/5/2023	21,322	4,336	25,658	92,000	95,000	190	22	153	45	21,733	22,392
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	9,262	1,862	11,124	97,000	100,000	200	23	162	45	9,693	9,986
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017	-	-	-	37,000	39,000	76	9	62	45	193	199
224	245106	NORR-Field Services	Operations Specialist - To Be Filled	12/31/2023	19,084	3,621	22,705	114,000	118,000	235	27	190	45	19,582	20,176
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	19,084	3,621	22,705	114,000	118,000	235	27	190	45	19,582	20,176
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	19,084	3,621	22,705	114,000	118,000	235	27	190	45	19,582	20,176
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	19,084	3,621	22,705	114,000	118,000	235	27	190	45	19,582	20,176
228	241103	PITT-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	19,084	3,621	22,705	91,000	94,000	188	22	151	45	19,490	20,081
229	249103	WILK-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	19,084	3,621	22,705	91,000	94,000	188	22	151	45	19,490	20,081
230	241103	PITT-Cust Service	Compliance Representative - To Be Filled	12/31/2023	19,084	3,621	22,705	80,000	83,000	165	19	133	45	19,447	20,036
			Total Non-Collective Bargaining Unit Hourly		$3,859,467	$736,320	$4,595,788	$23,358,000	$24,097,000	$48,211	$5,606	$38,920	$10,405	$3,962,609	$4,082,750

Pennsylvania-American Water Company - Wastewater SSS General Operations
Group Insurance

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Gross Group Insurance											
					Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
Non-Collective Bargaining Unit Salary																
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	$1,008	$119	$1,127	$140,000	$144,000	$29	$3	$23	$5	$1,068	$1,101
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	22,031	2,657	24,688	183,000	189,000	378	44	305	45	22,803	23,494
3	246701	COWW-Production	Supvr Production	3/6/2000	20,360	4,145	24,504	142,000	146,000	293	34	236	45	20,968	21,604
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	20,360	4,085	24,444	149,000	153,000	308	36	248	45	20,996	21,632
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	9,262	1,857	11,119	113,000	117,000	233	27	188	45	9,756	10,052
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	25,947	5,277	31,224	139,000	143,000	287	33	232	45	26,544	27,348
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	25,947	5,277	31,224	121,000	125,000	250	29	201	45	26,472	27,274
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	25,947	5,277	31,224	148,000	153,000	305	36	247	45	26,580	27,386
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020	-	-	-	133,000	137,000	275	32	221	45	573	590
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	20,360	4,145	24,504	137,000	141,000	283	33	228	45	20,948	21,584
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	20,360	4,145	24,504	117,000	121,000	241	28	195	45	20,869	21,502
12	249401	YORKWW-Production	Supvr Production	6/24/2013	20,360	4,145	24,504	129,000	133,000	266	31	215	45	20,917	21,551
			Total Non-Collective Bargaining Unit Salary		$211,939	$41,128	$253,066	$1,651,000	$1,702,000	$3,148	$366	$2,540	$502	$218,494	$225,119
Collective Bargaining Unit																
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/4/2008	$26,402	$4,616	$31,018	$76,000	$78,000	$157	$2	$0	$45	$26,607	$27,413
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	15,320	3,932	19,252	76,000	78,000	157	2	-	45	15,525	15,996
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	8,651	2,045	10,696	73,000	75,000	151	2	-	45	8,849	9,118
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/17/1984	26,402	4,616	31,018	76,000	78,000	157	2	-	45	26,607	27,413
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	10/26/2009	18,670	3,791	22,461	76,000	78,000	157	2	-	45	18,874	19,447
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	5/22/2017	18,670	3,791	22,461	76,000	78,000	157	2	-	45	18,874	19,447
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	15,320	3,932	19,252	69,000	71,000	142	2	-	45	15,510	15,981
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	26,402	4,616	31,018	81,000	83,000	167	2	-	45	26,617	27,424
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	26,402	4,616	31,018	81,000	83,000	167	2	-	45	26,617	27,424
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	27,614	3,218	30,831	69,000	71,000	142	2	-	45	27,804	28,647
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/7/2009	9,754	1,088	10,842	76,000	78,000	157	2	-	45	9,959	10,261
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/20/2018	8,651	2,045	10,696	76,000	78,000	157	2	-	45	8,856	9,124
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/3/2020	8,651	2,045	10,696	76,000	78,000	157	2	-	45	8,856	9,124
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	4/24/2017	8,651	2,045	10,696	76,000	78,000	157	2	-	45	8,856	9,124
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	26,402	4,616	31,018	81,000	83,000	167	2	-	45	26,617	27,424
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	10,130	1,110	11,239	73,000	75,000	151	2	-	45	10,328	10,641
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	18,670	3,791	22,461	73,000	75,000	151	2	-	45	18,868	19,440
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	18,284	3,684	21,968	76,000	78,000	157	2	-	45	18,488	19,049
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	-	-	-	73,000	75,000	151	2	-	45	198	204
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	18,670	3,791	22,461	76,000	78,000	157	2	-	45	18,874	19,447
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	9,004	1,088	10,092	69,000	71,000	142	2	-	45	9,194	9,473
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	8,651	2,045	10,696	73,000	75,000	151	2	-	45	8,849	9,118
			Total Collective Bargaining Unit		$355,373	$66,519	$421,891	$1,651,000	$1,695,000	$3,408	$53	$0	$995	$359,828	$370,738

Pennsylvania-American Water Company - Wastewater SSS General Operations
Group Insurance

					Gross Group Insurance										
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
Non-Collective Bargaining Unit Hourly															
1	246701	COWW-Production	Wastewater Operator	9/20/1999	$9,262	$1,857	$11,119	$108,000	$111,000	$223	$26	$180	$45	$9,736	$10,031
2	246706	COWW-Field Services	Utility Person	5/30/1995	20,360	4,085	24,444	99,000	103,000	204	24	166	45	20,799	21,429
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	25,947	5,277	31,224	113,000	117,000	233	27	189	45	26,441	27,243
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	20,360	4,145	24,504	113,000	116,000	233	27	188	45	20,853	21,485
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	20,360	4,095	24,454	117,000	120,000	241	28	194	45	20,869	21,501
6	246706	COWW-Field Services	Crew Leader	11/10/2003	25,947	5,277	31,224	105,000	109,000	217	25	175	45	26,409	27,210
7	246901	LPWW-Production	Plant Operator	6/2/2008	20,360	4,145	24,504	107,000	110,000	221	26	178	45	20,829	21,461
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	25,947	5,277	31,224	115,000	119,000	237	28	192	45	26,449	27,251
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	20,360	4,085	24,444	114,000	118,000	235	27	190	45	20,858	21,490
10	242601	CLYWW-Production	Plant Operator	7/31/2008	21,322	4,326	25,648	105,000	109,000	217	25	176	45	21,785	22,445
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	25,947	5,277	31,224	112,000	116,000	231	27	187	45	26,437	27,238
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	25,947	5,212	31,159	99,000	103,000	204	24	166	45	26,386	27,186
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	25,947	5,277	31,224	124,000	128,000	256	30	207	45	26,484	27,287
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	9,262	1,857	11,119	103,000	106,000	213	25	171	45	9,716	10,010
15	246706	COWW-Field Services	Utility Person	3/14/2016	9,211	1,847	11,058	96,000	99,000	198	23	160	45	9,638	9,930
16	246901	LPWW-Production	Plant Operator	9/11/2017	25,947	5,277	31,224	97,000	100,000	200	23	161	45	26,377	27,176
17	246701	COWW-Production	Wastewater Operator	5/14/2018	9,262	1,884	11,146	104,000	107,000	215	25	173	45	9,720	10,015
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	9,262	1,884	11,146	93,000	96,000	192	22	155	45	9,677	9,970
19	248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	10/15/2018	20,360	4,145	24,504	107,000	110,000	221	26	178	45	20,829	21,461
20	246706	COWW-Field Services	Utility Person	3/25/2019	21,322	4,281	25,603	93,000	96,000	192	22	155	45	21,736	22,395
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	25,916	5,268	31,184	121,000	124,000	250	29	201	45	26,441	27,243
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	25,947	5,277	31,224	117,000	120,000	241	28	194	45	26,456	27,258
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	143	41	184	100,000	103,000	206	24	167	45	586	603
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	25,947	5,277	31,224	99,000	102,000	204	24	165	45	26,385	27,185
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	27,645	3,305	30,951	100,000	103,000	206	24	167	45	28,088	28,939
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	20,299	4,085	24,385	124,000	128,000	256	30	207	45	20,837	21,469
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	25,803	5,236	31,040	102,000	105,000	211	24	169	45	26,253	27,049
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	1,104	263	1,367	100,000	103,000	206	24	167	45	1,547	1,593
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	25,947	5,277	31,224	100,000	103,000	206	24	166	45	26,389	27,189
30	248706	Nw Cmbrlnd WW FS	Utility Person	9/20/2021	9,281	1,193	10,474	87,000	90,000	180	21	145	45	9,671	9,964
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021	-	-	-	92,000	95,000	190	22	153	45	411	423
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	21,322	4,281	25,603	100,000	103,000	206	24	167	45	21,765	22,424
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	9,262	1,884	11,146	97,000	100,000	200	23	162	45	9,693	9,986
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	21,322	4,336	25,658	92,000	94,000	190	22	153	45	21,732	22,391
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	9,211	1,869	11,080	100,000	103,000	206	24	167	45	9,654	9,946
36	248706	Nw Cmbrlnd WW FS	Utility Person	9/6/2022	20,360	4,145	24,504	93,000	96,000	192	22	156	45	20,775	21,405
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	20,360	4,095	24,454	87,000	90,000	180	21	145	45	20,750	21,379
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	9,262	1,884	11,146	95,000	98,000	196	23	159	45	9,685	9,979
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	25,947	5,277	31,224	97,000	100,000	200	23	162	45	26,377	27,176
40	246701	COWW-Production	Wastewater Operator	1/3/2023	9,262	1,862	11,124	103,000	107,000	213	25	172	45	9,717	10,012
41	248701	Nw Cmbrnlnd WW Prod	Utility Person	2/6/2023	1,247	304	1,551	88,000	91,000	182	21	147	45	1,642	1,692
42	246706	COWW-Field Services	Utility Person	3/6/2023	9,211	1,869	11,080	90,000	93,000	186	22	151	45	9,615	9,906
			Total Non-Collective Bargaining Unit Hourly		$737,485	$146,539	$884,024	$4,308,000	$4,444,000	$8,892	$1,034	$7,181	$1,900	$756,492	$779,428

Pennsylvania-American Water Company - Wastewater CSS Operations
Group Insurance

					Gross Group Insurance										
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
Non-Collective Bargaining Unit Salary															
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000	$25,947	$5,277	$31,224	$148,000	$153,000	$305	$36	$247	$45	$26,579	$27,385
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006	9,262	1,884	11,146	120,000	124,000	248	29	200	45	9,784	10,080
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016	25,947	5,277	31,224	105,000	109,000	217	25	175	45	26,409	27,210
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002	-	-	-	181,000	187,000	374	43	302	45	765	788
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007	21,322	4,336	25,658	119,000	123,000	246	29	199	45	21,840	22,502
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007	1,247	304	1,551	132,000	136,000	272	32	219	45	1,816	1,871
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008	25,947	5,212	31,159	130,000	134,000	268	31	217	45	26,508	27,312
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982	22,031	2,597	24,628	144,000	148,000	297	35	240	45	22,647	23,334
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003	21,322	4,336	25,658	160,000	165,000	330	38	267	45	22,003	22,670
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015	9,262	1,862	11,124	136,000	140,000	281	33	227	45	9,848	10,146
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019	25,947	5,277	31,224	148,000	152,000	305	36	246	45	26,579	27,385
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020	20,360	4,145	24,504	123,000	127,000	254	30	204	45	20,893	21,526
			Total Non-Collective Bargaining Unit Salary		$208,593	$40,507	$249,099	$1,646,000	$1,698,000	$3,397	$395	$2,743	$543	$215,670	$222,209
Collective Bargaining Unit															
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	$26,402	$4,616	$31,018	$81,000	$82,000	$167	$2	$0	$45	$26,617	$27,424
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006	26,402	4,616	31,018	87,000	89,000	180	2	-	45	26,629	27,437
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	26,402	4,539	30,941	77,000	79,000	159	2	-	45	26,609	27,415
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008	15,320	3,932	19,252	81,000	82,000	167	2	-	45	15,535	16,006
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016	-	-	-	77,000	79,000	159	2	-	45	207	213
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012	18,670	3,791	22,461	77,000	79,000	159	2	-	45	18,876	19,449
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013	26,402	4,553	30,955	77,000	79,000	159	2	-	45	26,609	27,415
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990	8,651	2,045	10,696	81,000	82,000	167	2	-	45	8,866	9,135
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005	26,402	4,616	31,018	81,000	82,000	167	2	-	45	26,617	27,424
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008	8,651	2,045	10,696	77,000	79,000	159	2	-	45	8,858	9,126
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007	8,651	2,045	10,696	77,000	79,000	159	2	-	45	8,858	9,126
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016	9,755	1,105	10,860	77,000	79,000	159	2	-	45	9,961	10,263
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009	26,402	4,616	31,018	81,000	82,000	167	2	-	45	26,617	27,424
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005	26,402	4,616	31,018	87,000	89,000	180	2	-	45	26,629	27,437
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005	-	-	-	77,000	79,000	159	2	-	45	207	213
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	26,402	4,616	31,018	81,000	82,000	167	2	-	45	26,617	27,424
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008	8,651	2,045	10,696	81,000	82,000	167	2	-	45	8,866	9,135
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009	-	-	-	81,000	82,000	167	2	-	45	215	221
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005	26,402	4,616	31,018	87,000	89,000	180	2	-	45	26,629	27,437
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011	26,402	4,539	30,941	81,000	82,000	167	2	-	45	26,617	27,424
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997	-	-	-	87,000	89,000	180	2	-	45	227	234
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	26,402	4,539	30,941	77,000	79,000	159	2	-	45	26,609	27,415
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	18,670	3,791	22,461	77,000	79,000	159	2	-	45	18,876	19,449
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011	8,651	2,045	10,696	77,000	79,000	159	2	-	45	8,858	9,126
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013	15,320	3,932	19,252	77,000	79,000	159	2	-	45	15,527	15,998
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009	18,670	3,791	22,461	77,000	79,000	159	2	-	45	18,876	19,449
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013	8,651	2,045	10,696	87,000	89,000	180	2	-	45	8,878	9,148
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992	18,670	3,791	22,461	77,000	79,000	159	2	-	45	18,876	19,449
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	18,670	3,791	22,461	77,000	79,000	159	2	-	45	18,876	19,449
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012	8,651	2,045	10,696	77,000	79,000	159	2	-	45	8,858	9,126
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007	26,402	4,616	31,018	77,000	79,000	159	2	-	45	26,609	27,415
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006	18,670	3,791	22,461	77,000	79,000	159	2	-	45	18,876	19,449
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997	8,651	2,045	10,696	81,000	82,000	167	2	-	45	8,866	9,135
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	8,651	2,045	10,696	77,000	79,000	159	2	-	45	8,858	9,126
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006	-	-	-	81,000	82,000	167	2	-	45	215	221
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017	26,402	4,616	31,018	87,000	89,000	180	2	-	45	26,629	27,437
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008	8,651	2,045	10,696	81,000	82,000	167	2	-	45	8,866	9,135
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016	8,751	2,051	10,802	81,000	82,000	167	2	-	45	8,966	9,238
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	8,651	2,018	10,669	77,000	79,000	159	2	-	45	8,858	9,126
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005	8,651	2,018	10,669	77,000	79,000	159	2	-	45	8,858	9,126
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	-	-	-	87,000	89,000	180	2	-	45	227	234
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	8,651	2,018	10,669	91,000	94,000	188	2	-	45	8,887	9,156
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	18,670	3,791	22,461	97,000	100,000	200	2	-	45	18,918	19,491
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	8,599	2,030	10,628	97,000	100,000	200	2	-	45	8,847	9,115
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	26,402	4,616	31,018	95,000	98,000	196	2	-	45	26,646	27,454

Pennsylvania-American Water Company - Wastewater CSS Operations
Group Insurance

					Gross Group Insurance										
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	26,402	4,616	31,018	97,000	100,000	200	2	-	45	26,650	27,458
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	26,402	4,616	31,018	97,000	100,000	200	2	-	45	26,650	27,458
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	8,651	2,018	10,669	89,000	92,000	184	2	-	45	8,882	9,152
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	26,402	4,616	31,018	70,000	72,000	144	2	-	45	26,594	27,401
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	15,320	3,884	19,204	89,000	92,000	184	2	-	45	15,552	16,023
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	26,402	4,616	31,018	85,000	87,000	175	2	-	45	26,625	27,432
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	8,651	2,040	10,691	89,000	92,000	184	2	-	45	8,883	9,152
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	9,755	1,105	10,860	91,000	93,000	188	2	-	45	9,990	10,293
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	8,651	2,045	10,696	77,000	79,000	159	2	-	45	8,858	9,126
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	18,670	3,791	22,461	103,000	106,000	213	2	-	45	18,930	19,504
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	8,651	2,045	10,696	85,000	87,000	175	2	-	45	8,874	9,143
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	8,651	2,018	10,669	81,000	83,000	167	2	-	45	8,866	9,135
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	8,651	2,045	10,696	97,000	100,000	200	2	-	45	8,899	9,169
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	18,670	3,791	22,461	97,000	100,000	200	2	-	45	18,918	19,491
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	8,651	2,045	10,696	81,000	83,000	167	2	-	45	8,866	9,135
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	26,402	4,616	31,018	85,000	87,000	175	2	-	45	26,625	27,432
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	26,402	4,539	30,941	81,000	82,000	167	2	-	45	26,617	27,424
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	848	190	1,038	81,000	82,000	167	2	-	45	1,063	1,095
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	26,402	4,616	31,018	65,000	67,000	134	2	-	45	26,584	27,390
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	18,670	3,791	22,461	71,000	73,000	147	2	-	45	18,864	19,436
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	26,402	4,539	30,941	81,000	82,000	167	2	-	45	26,617	27,424
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	26,402	4,602	31,004	77,000	79,000	159	2	-	45	26,609	27,415
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	18,670	3,791	22,461	98,000	101,000	202	2	-	45	18,920	19,493
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	25,231	4,290	29,522	70,000	72,000	144	2	-	45	25,423	26,194
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	26,402	4,616	31,018	98,000	101,000	202	2	-	45	26,652	27,460
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	28,364	3,218	31,581	57,000	59,000	118	2	-	45	28,529	29,394
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	26,402	4,616	31,018	76,000	77,000	157	2	-	45	26,607	27,413
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	26,402	4,616	31,018	76,000	77,000	157	2	-	45	26,607	27,413
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	-	-	-	76,000	77,000	157	2	-	45	205	211
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	15,320	3,932	19,252	97,000	100,000	200	2	-	45	15,568	16,040
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	18,670	3,791	22,461	78,000	80,000	161	2	-	45	18,878	19,451
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	18,226	3,668	21,894	78,000	80,000	161	2	-	45	18,434	18,993
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023	16,575	3,170	19,745	97,000	100,000	200	2	-	45	16,823	17,333
			Total Collective Bargaining Unit		$1,410,242	$270,887	$1,681,129	$7,082,000	$7,245,000	$14,617	$206	$0	$3,891	$1,428,956	$1,472,280
Non-Collective Bargaining Unit Hourly															
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	$9,262	$1,884	$11,146	$93,000	$96,000	$192	$22	$155	$45	$9,677	$9,971
			Total Non-Collective Bargaining Unit Hourly		$9,262	$1,884	$11,146	$93,000	$96,000	$192	$22	$155	$45	$9,677	$9,971

401K, Defined Contribution Plan, and Employee Stock Purchase Plan

Pennsylvania-American Water Company
401K, DCP, ESPP

		401K		DCP		ESPP	
		2024	2025	2024	2025	2024	2025
Water Operations							
	Non-Collective Bargaining Unit Salary	$1,000,780	$1,032,729	$1,215,005	$1,253,793	$139,654	$142,345
	Collective Bargaining Unit	1,230,847	1,261,918	1,572,160	1,611,806	99,130	100,890
	Non-Collective Bargaining Unit Hourly	475,761	490,947	669,783	691,165	37,271	37,974
	Total	$2,707,388	$2,785,594	$3,456,948	$3,556,764	$276,055	$281,209
Wastewater SSS General Operations							
	Non-Collective Bargaining Unit Salary	$35,819	$36,963	$42,684	$44,047	$4,022	$4,127
	Collective Bargaining Unit	44,548	45,793	69,112	71,041	1,147	1,147
	Non-Collective Bargaining Unit Hourly	95,304	98,345	142,772	147,328	6,694	6,879
	Total	$175,671	$181,101	$254,568	$262,416	$11,863	$12,153
Wastewater CSS Operations							
	Non-Collective Bargaining Unit Salary	$31,347	$32,348	$52,415	$54,089	$1,306	$1,336
	Collective Bargaining Unit	99,002	101,376	297,740	304,200	10,057	10,217
	Non-Collective Bargaining Unit Hourly	1,864	1,923	3,261	3,365	0	0
	Total	$132,213	$135,647	$353,416	$361,654	$11,363	$11,553

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	Gross Other Benefits 401k, DCP, ESPP 2023 ESPP	2024 ESPP	2025 ESPP
Non-Collective Bargaining Unit Salary															
1	240106	CORP-Field Services	Project Manager	1/18/1999	4.00%	401(k) Match 1-3/100% 4-5/50%	$5,695	$5,874	$6,061	$7,474	$7,710	$7,955	$754	$777	$802
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001	4.00%	401(k) Match 1-3/100% 4-5/50%	4,698	4,846	5,001	6,166	6,361	6,564			
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994	2.50%	401(k) Match 50% up to 5%	6,032	6,222	6,420	-	-	-	426	439	453
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998	2.50%	401(k) Match 50% up to 5%	2,375	2,450	2,528	-	-	-	503	519	535
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993	2.50%	401(k) Match 50% up to 5%	4,367	4,504	4,648	-	-	-	2,466	2,544	2,625
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997	2.50%	401(k) Match 50% up to 5%	2,240	2,310	2,384	-	-	-	316	326	337
7	249160	WILK-Watres	Supvr Production	1/11/1988	1.00%	401(k) Match 50% up to 5%	782	807	833	-	-	-			
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993	1.50%	401(k) Match 50% up to 5%	1,730	1,785	1,842	-	-	-			
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990	2.50%	401(k) Roth Match 50% up to 5%	2,842	2,932	3,025	-	-	-	1,003	1,035	1,068
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987	1.50%	401(k) Match 50% up to 5%	1,358	1,401	1,446	-	-	-			
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983	2.50%	401(k) Roth Match 50% up to 5%	2,574	2,655	2,739	-	-	-			
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998	2.50%	401(k) Match 50% up to 5%	2,276	2,348	2,423	-	-	-	161	166	171
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998	2.50%	401(k) Roth Match 50% up to 5%	1,804	1,861	1,920	-	-	-	4,409	4,409	4,409
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992	2.50%	401(k) Match 50% up to 5%	2,454	2,532	2,612	-	-	-	1,213	1,251	1,291
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986	2.50%	401(k) Match 50% up to 5%	2,028	2,092	2,159	-	-	-			
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997	2.50%	401(k) Match 50% up to 5%	1,889	1,948	2,011	-	-	-	533	550	568
17	249150	WILK-Other	Sr Supt Production	9/13/1993	2.50%	401(k) Match 50% up to 5%	2,712	2,797	2,887	-	-	-	766	790	815
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998	4.00%	401(k) Roth 1-3/100% 4-5/50%	5,663	5,841	6,028	7,433	7,667	7,912	1,749	1,804	1,862
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994	2.50%	401(k) Match 50% up to 5%	2,849	2,939	3,032	-	-	-	1,006	1,037	1,070
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997	2.50%	401(k) Match 50% up to 5%	2,658	2,742	2,829	-	-	-			
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995	2.50%	401(k) Match 50% up to 5%	2,188	2,257	2,329	-	-	-			
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995	2.50%	401(k) Roth Match 50% up to 5%	2,187	2,256	2,329	-	-	-			
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995			-	-	-	-	-	-			
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995	4.00%	401(k) Match 1-3/100% 4-5/50%	5,746	5,926	6,115	7,541	7,778	8,026			
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982	2.00%	401(k) Match 50% up to 5%	1,906	1,966	2,029	-	-	-	168	173	179
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998	2.50%	401(k) Roth Match 50% up to 5%	2,678	2,763	2,851	-	-	-	567	585	604
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989	2.50%	401(k) Match 50% up to 5%	3,375	3,481	3,593	-	-	-			
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978	2.50%	401(k) Match 50% up to 5%	2,441	2,518	2,599	-	-	-	517	533	550
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998	2.50%	401(k) Match 50% up to 5%	2,507	2,586	2,669	-	-	-			
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989	2.50%	401(k) Match 50% up to 5%	4,940	5,095	5,258	-	-	-	2,790	2,877	2,969
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993	2.50%	401(k) Match 50% up to 5%	3,622	3,736	3,855	-	-	-	511	527	544
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994	2.50%	401(k) Match 50% up to 5%	2,704	2,789	2,878	-	-	-			
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984	2.50%	401(k) Match 50% up to 5%	2,246	2,316	2,390	-	-	-			
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987	2.50%	401(k) Match 50% up to 5%	4,625	4,770	4,923	-	-	-	326	337	347
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984	2.50%	401(k) Match 50% up to 5%	2,789	2,877	2,969	-	-	-	984	1,015	1,048
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991	2.50%	401(k) Match 50% up to 5%	5,377	5,546	5,723	-	-	-			
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994	2.50%	401(k) Match 50% up to 5%	2,634	2,717	2,804	-	-	-			
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992	2.50%	401(k) Match 50% up to 5%	2,508	2,587	2,670	-	-	-	1,771	1,826	1,884
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986	2.50%	401(k) Match 50% up to 5%	2,227	2,297	2,371	-	-	-			
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986	2.50%	401(k) Match 50% up to 5%	3,746	3,864	3,987	-	-	-			
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998	2.50%	401(k) Match 50% up to 5%	2,399	2,474	2,553	-	-	-	1,016	1,048	1,081
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998	2.50%	401(k) Match 50% up to 5%	3,546	3,657	3,774	-	-	-	1,251	1,291	1,332
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998	2.50%	401(k) Match 50% up to 5%	2,317	2,390	2,466	-	-	-	327	337	348
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999			-	-	-	-	-	-			
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999	2.50%	401(k) Roth Match 50% up to 5%	2,944	3,037	3,134	-	-	-	1,835	1,835	1,835
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999			-	-	-	-	-	-			
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000	2.50%	401(k) Match 50% up to 5%	4,279	4,414	4,555	-	-	-			
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000	2.50%	401(k) Match 50% up to 5%	2,151	2,218	2,289	-	-	-	1,518	1,566	1,616
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000	2.50%	401(k) Match 50% up to 5%	2,141	2,208	2,279	-	-	-	1,209	1,247	1,287
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000			-	-	-	-	-	-	1,376	1,376	1,376
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001			-	-	-	7,371	7,603	7,845			
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994	2.50%	401(k) Match 50% up to 5%	2,897	2,988	3,083	-	-	-	409	422	435
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990			-	-	-	4,593	4,738	4,890	344	344	344
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001	2.50%	401(k) Match 50% up to 5%	2,869	2,959	3,054	-	-	-			
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999	2.50%	401(k) Match 50% up to 5%	2,704	2,789	2,878	-	-	-	954	984	1,016
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990	2.50%	401(k) Match 50% up to 5%	2,835	2,924	3,017	-	-	-	2,001	2,064	2,130
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999	2.50%	401(k) Match 50% up to 5%	3,369	3,475	3,585	-	-	-	1,902	1,962	2,025
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992	2.50%	401(k) Match 50% up to 5%	5,071	5,231	5,398	-	-	-			
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997	2.50%	401(k) Roth Match 50% up to 5%	4,996	5,153	5,317	-	-	-	705	727	751
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002	2.50%	401(k) Match 50% up to 5%	3,565	3,677	3,795	-	-	-	4,129	4,129	4,129
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003	2.50%	401(k) Match 50% up to 5%	3,057	3,154	3,255	-	-	-	1,079	1,113	1,149
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,323	3,428	3,538	4,361	4,499	4,643	440	454	468
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003	2.50%	401(k) Match 50% up to 5%	2,643	2,726	2,813	-	-	-			
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003			-	-	-	-	-	-			
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,200	3,301	3,406	4,200	4,332	4,471	565	582	601
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003	2.50%	401(k) Match 50% up to 5%	2,933	3,025	3,122	-	-	-	621	641	661
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004	2.50%	401(k) Match 50% up to 5%	2,425	2,502	2,582	-	-	-			
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005	2.50%	401(k) Match 50% up to 5%	3,076	3,173	3,274	-	-	-			
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005	2.50%	401(k) Match 50% up to 5%	2,638	2,722	2,809	-	-	-			
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005	2.50%	401(k) Match 50% up to 5%	2,678	2,763	2,851	-	-	-	567	585	604
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	4,328	4,465	4,607	5,680	5,860	6,046			
72	241151	PITT-Production Haye	Supvr Production	3/16/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	3,458	3,567	3,681	4,539	4,681	4,831	1,526	1,574	1,624
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005			-	-	-	-	-	-			
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005			-	-	-	4,893	5,047	5,209			
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005	2.50%	401(k) Match 50% up to 5%	3,077	3,174	3,275	-	-	-	1,086	1,120	1,156

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005	2.50%	401(k) Match 50% up to 5%	2,410	2,486	2,566	-	-	-	510	526	543
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005	2.50%	401(k) Match 50% up to 5%	2,410	2,486	2,566	-	-	-			
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005			-	-	-	-	-	-			
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	4,667	4,814	4,968	6,126	6,318	6,520	1,441	1,487	1,534
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006			-	-	-	4,112	4,241	4,377	459	459	459
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	5,974	6,162	6,358	7,841	8,087	8,345	1,318	1,359	1,403
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	4,438	4,578	4,724	5,825	6,008	6,200	196	202	208
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,412	3,519	3,632	4,478	4,619	4,767			
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,383	3,489	3,601	4,440	4,580	4,726			
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,120	3,218	3,321	4,095	4,224	4,358			
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,200	3,301	3,406	4,200	4,332	4,471	424	437	451
87	240106	CORP-Field Services	Mgr Opns	1/22/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	3,034	3,129	3,229	5,310	5,476	5,651	115	115	115
88	249150	WILK-Other	Production Asset Administrator	1/22/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	3,520	3,631	3,746	4,620	4,765	4,917	621	641	661
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007	4.00%	401(k) Roth 1-3/100% 4-5/50%	4,320	4,456	4,598	5,670	5,849	6,035	953	983	1,014
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	2,290	2,362	2,437	4,007	4,133	4,265			
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	4,692	4,840	4,994	6,158	6,352	6,555	2,070	2,135	2,203
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	3,438	3,546	3,659	6,017	6,206	6,403			
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	2,877	2,967	3,062	5,034	5,192	5,358			
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	4,536	4,678	4,827	5,954	6,140	6,336			
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007			-	-	-	6,405	6,607	6,817			
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	3,021	3,116	3,215	5,286	5,452	5,626			
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	5,616	5,792	5,977	7,371	7,603	7,845			
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	3,280	3,383	3,491	4,305	4,440	4,582	434	448	462
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	4,896	5,050	5,212	6,426	6,628	6,840			
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	5,147	5,309	5,479	6,755	6,968	7,191			
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008	3.00%	401(k) Match 1-3/100% 4-5/50%	2,621	2,703	2,789	4,586	4,731	4,881	771	795	820
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	3,395	3,501	3,613	4,455	4,595	4,741	1,498	1,545	1,594
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	3,567	3,679	3,796	4,681	4,829	4,983			
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	3,822	3,942	4,068	5,016	5,174	5,339			
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009	4.00%	401(k) Roth 1-3/100% 4-5/50%	5,920	6,106	6,301	7,770	8,014	8,270	1,835	1,835	1,835
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009	3.50%	401(k) Match 1-3/100% 4-5/50%	7,733	7,976	8,231	11,599	11,964	12,346	1,949	2,011	2,075
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,948	4,073	4,202	5,182	5,345	5,516	4,428	4,428	4,428
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	3,330	3,434	3,544	4,370	4,508	4,652			
109	246501	COAT-Production	Supvr Production	4/12/2010	3.00%	401(k) Match 1-3/100% 4-5/50%	2,456	2,533	2,615	4,298	4,434	4,575	344	344	344
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010			-	-	-	4,200	4,332	4,471			
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	3,836	3,957	4,083	5,035	5,194	5,360			
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010			-	-	-	6,115	6,307	6,508	411	424	438
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	3,914	4,038	4,167	5,137	5,299	5,469			
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011	3.00%	401(k) Match 1-3/100% 4-5/50%	2,790	2,878	2,970	4,883	5,036	5,197			
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	3,320	3,425	3,534	4,358	4,495	4,638	1,025	1,058	1,091
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,888	2,979	3,074	3,791	3,910	4,035	637	657	678
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	3,265	3,368	3,475	4,285	4,420	4,561	432	446	460
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011	3.00%	401(k) Match 1-3/100% 4-5/50%	3,596	3,708	3,827	6,292	6,490	6,697	423	436	450
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012	4.00%	401(k) Match 1-3/100% 4-5/50%	3,419	3,526	3,638	4,487	4,628	4,775			
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012	4.00%	401(k) Match 1-3/100% 4-5/50%	4,716	4,864	5,019	6,189	6,384	6,588	229	229	229
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012			-	-	-	6,393	6,593	6,804	2,149	2,216	2,287
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012	4.00%	401(k) Match 1-3/100% 4-5/50%	2,892	2,984	3,078	3,796	3,916	4,040	255	263	272
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	4,902	5,056	5,217	6,434	6,636	6,848	649	669	691
124	240306	CORP-Field Service	Project Manager	3/4/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	4,499	4,640	4,788	5,904	6,090	6,284	992	1,024	1,056
125	243151	NEWC-New Castle	Supvr Production	4/29/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	3,322	3,426	3,535	4,360	4,497	4,640	1,465	1,512	1,560
126	247150	MILT-Prod Other	Supvr Production	5/28/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	3,183	3,283	3,388	4,177	4,309	4,447			
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013	2.00%	401(k) Match 1-3/100% 4-5/50%	1,644	1,695	1,749	4,315	4,450	4,592	435	449	463
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013	2.00%	401(k) Match 1-3/100% 4-5/50%	1,600	1,650	1,703	4,200	4,332	4,471			
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	6,566	6,772	6,989	8,617	8,889	9,173	290	299	308
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013	3.00%	401(k) Match 1-3/100% 4-5/50%	3,090	3,187	3,289	5,408	5,578	5,756			
131	240114	CORP-Engineering	GIS Manager	3/31/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,719	3,836	3,958	4,881	5,034	5,195			
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	4,640	4,786	4,939	6,090	6,281	6,482	2,047	2,111	2,179
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,478	3,587	3,702	4,564	4,708	4,858			
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,240	3,342	3,449	4,253	4,387	4,526	858	885	913
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,080	3,177	3,278	4,043	4,169	4,302			
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,569	3,682	3,799	4,684	4,832	4,986			
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,765	2,852	2,943	3,630	3,743	3,862	732	755	779
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,468	3,577	3,691	4,552	4,695	4,844			
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	5,088	5,248	5,415	6,678	6,888	7,108	2,245	2,315	2,389
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015	3.00%	401(k) Match 1-3/100% 4-5/50%	2,547	2,626	2,710	4,456	4,596	4,743			
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015	2.00%	401(k) Match 1-3/100% 4-5/50%	1,537	1,586	1,637	4,035	4,163	4,296			
142	240114	CORP-Engineering	GIS Manager	2/2/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,719	3,836	3,958	4,881	5,034	5,195			
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,011	3,106	3,205	3,952	4,076	4,206	266	274	283
144	240114	CORP-Engineering	Engineer	6/22/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,261	3,364	3,471	4,280	4,415	4,556			
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,148	3,247	3,351	4,132	4,262	4,399	278	287	296
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015	4.00%	401(k) Roth 1-3/100% 4-5/50%	4,040	4,167	4,301	5,303	5,470	5,645			
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,120	3,218	3,321	4,095	4,224	4,358			
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,131	3,230	3,333	4,110	4,239	4,375			
149	243301	BUTL-Production	Supvr Production	12/7/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,310	3,415	3,524	4,345	4,482	4,625	584	603	622
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015	3.00%	401(k) Match 1-3/100% 4-5/50%	2,371	2,445	2,523	4,149	4,280	4,416			

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	8,673	8,946	9,231	11,383	11,741	12,116			
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,207	3,308	3,414	4,209	4,342	4,480	1,132	1,168	1,205
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	5,629	5,807	5,992	7,389	7,621	7,865	248	256	264
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,841	2,930	3,023	3,729	3,846	3,968	1,376	1,376	1,376
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,468	3,578	3,692	4,552	4,696	4,845			
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	4,122	4,252	4,387	5,410	5,580	5,758			
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,106	3,203	3,306	4,076	4,204	4,339			
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,013	3,108	3,207	3,955	4,079	4,209	266	274	283
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,661	3,776	3,896	4,805	4,955	5,114	229	229	229
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,940	4,064	4,194	5,171	5,334	5,505			
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	6,600	6,807	7,025	8,663	8,935	9,220			
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990	4.00%	401(k) Match 1-3/100% 4-5/50%	3,351	3,457	3,568	4,398	4,537	4,682			
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,140	3,239	3,342	4,122	4,251	4,387			
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	4,152	4,282	4,419	5,450	5,621	5,800	550	567	585
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	5,152	5,314	5,484	6,762	6,975	7,197	459	459	459
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	4,000	4,126	4,257	5,250	5,415	5,588	529	546	563
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	3,933	4,057	4,187	5,162	5,325	5,495	521	537	554
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	4,320	4,456	4,598	5,670	5,849	6,035			
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	3,203	3,304	3,410	4,204	4,336	4,475	141	146	150
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017	3.00%	401(k) Roth 1-3/100% 4-5/50%	2,059	2,124	2,192	3,603	3,717	3,836	92	92	92
171	240114	CORP-Engineering	Planning Engineer	8/14/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	3,394	3,501	3,613	4,455	4,595	4,741			
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017	1.00%	401(k) Match 1-3/100% 4-5/50%	1,270	1,310	1,352	6,668	6,877	7,097	4,588	4,588	4,588
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,836	3,957	4,083	5,035	5,194	5,360			
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	3,473	3,582	3,696	4,558	4,701	4,851	153	158	163
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,929	4,053	4,182	5,157	5,319	5,488	92	92	92
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018	4.00%	401(k) Roth 1-3/100% 4-5/50%	4,187	4,319	4,457	5,496	5,669	5,850	1,478	1,524	1,573
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	4,183	4,315	4,453	5,490	5,663	5,844	369	381	393
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,277	3,380	3,489	4,301	4,437	4,579	578	597	616
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,884	4,006	4,134	5,097	5,258	5,426	688	688	688
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,952	4,076	4,206	5,187	5,350	5,520			
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,409	3,517	3,629	4,475	4,616	4,763	184	184	184
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	3,474	3,584	3,698	5,212	5,376	5,547			
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,149	3,248	3,352	4,133	4,263	4,400			
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,090	3,187	3,289	4,056	4,183	4,317			
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	5,080	5,240	5,407	6,668	6,877	7,097	1,121	1,156	1,193
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,160	3,260	3,364	4,148	4,278	4,415			
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,661	3,776	3,896	4,805	4,955	5,114	459	459	459
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	2,887	2,978	3,073	4,330	4,466	4,609			
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,793	2,881	2,974	3,666	3,782	3,903	370	381	394
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,182	3,282	3,387	4,177	4,308	4,446	601	601	601
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,764	3,882	4,006	4,940	5,095	5,258	498	514	530
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018			-	-	-	4,463	4,603	4,750			
193	240114	CORP-Engineering	Staff Engineer	8/27/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	2,657	2,741	2,828	3,986	4,111	4,242	1,340	1,382	1,426
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,103	3,200	3,302	4,072	4,200	4,334			
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,099	3,197	3,299	4,067	4,195	4,330	184	184	184
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018	4.00%	401(k) Roth 1-3/100% 4-5/50%	12,600	12,997	13,412	16,538	17,058	17,603			
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,746	2,832	2,922	4,805	4,955	5,114	459	459	459
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,080	3,177	3,278	4,042	4,169	4,302	408	420	434
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,120	3,218	3,321	4,095	4,224	4,358			
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,306	3,410	3,519	4,339	4,475	4,618			
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	2,460	2,538	2,619	3,691	3,807	3,928			
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,716	3,833	3,955	4,878	5,031	5,191	440	440	440
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,151	3,250	3,354	4,136	4,265	4,402	46	46	46
204	240114	CORP-Engineering	Planning Engineer	2/4/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,971	4,096	4,227	5,212	5,376	5,547	964	964	964
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,404	2,480	2,559	4,208	4,340	4,478			
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,446	3,554	3,667	4,523	4,665	4,814	918	918	918
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,197	3,298	3,404	4,197	4,329	4,467			
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,183	3,283	3,388	4,178	4,309	4,447			
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,200	3,301	3,406	4,200	4,332	4,471	229	229	229
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,532	3,642	3,759	4,635	4,781	4,934			
211	240114	CORP-Engineering	Staff Engineer	5/20/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,114	3,212	3,315	4,087	4,216	4,351	459	459	459
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,373	3,479	3,590	4,427	4,567	4,712	459	459	459
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,787	3,906	4,031	4,970	5,127	5,291	334	345	356
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,120	3,218	3,321	4,095	4,224	4,358	413	426	439
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,704	2,789	2,878	3,549	3,660	3,777			
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,580	2,661	2,746	4,515	4,657	4,806	1,518	1,566	1,615
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,800	3,920	4,044	4,988	5,144	5,308	1,676	1,729	1,784
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,962	4,087	4,217	5,200	5,364	5,535			
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,409	3,516	3,628	4,474	4,615	4,762			
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,380	3,486	3,598	4,436	4,575	4,722	505	505	505
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,321	3,425	3,534	4,359	4,496	4,639	229	229	229
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,995	3,089	3,188	3,931	4,055	4,185			
223	240120	CORP-Bus Dev	Vice President of Business Development,	11/4/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	9,615	9,917	10,234	12,620	13,017	13,433			
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,884	2,974	3,069	3,785	3,904	4,028			
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,014	3,109	3,208	3,956	4,081	4,211			

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	Gross Other Benefits 401k, DCP, ESPP 2023 ESPP	2024 ESPP	2025 ESPP
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	5,562	5,737	5,920	7,300	7,529	7,770	459	459	459
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	6,240	6,436	6,642	8,190	8,448	8,717			
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020	1.00%	401(k) Roth 1-3/100% 4-5/50%	1,136	1,171	1,209	5,962	6,150	6,347			
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	2,044	2,108	2,175	3,577	3,689	3,807			
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	2,617	2,699	2,786	4,580	4,724	4,875			
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,710	2,796	2,885	3,557	3,669	3,786	229	229	229
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,952	4,076	4,206	5,187	5,350	5,520			
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020	2.00%	401(k) Match 1-3/100% 4-5/50%	3,502	3,612	3,727	9,193	9,482	9,784			
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,718	2,804	2,894	3,567	3,680	3,798			
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	4,400	4,539	4,683	5,775	5,957	6,147			
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	3,206	3,307	3,412	5,610	5,787	5,971			
237	249151	WILK-Brownell	Supvr Production	8/24/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,000	3,094	3,193	3,938	4,061	4,191	115	115	115
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	4,401	4,539	4,684	5,776	5,958	6,148	1,165	1,202	1,240
239	240114	CORP-Engineering	Engineer	10/12/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,772	2,859	2,950	3,638	3,752	3,872	856	883	911
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997	3.00%	401(k) Roth 1-3/100% 4-5/50%	2,184	2,253	2,324	3,822	3,942	4,068	128	133	137
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,169	3,268	3,372	4,159	4,289	4,426	138	138	138
242	240114	CORP-Engineering	Engineer	1/4/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,772	2,859	2,950	3,638	3,752	3,872	1,147	1,147	1,147
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	2,319	2,392	2,468	4,058	4,186	4,319	682	703	726
244	241151	PITT-Production Haye	Supvr Production	3/29/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,466	2,543	2,625	4,316	4,451	4,593			
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021	3.50%	401(k) Match 1-3/100% 4-5/50%	5,775	5,956	6,147	8,663	8,935	9,220	688	688	688
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	4,543	4,686	4,836	5,962	6,150	6,347	2,294	2,294	2,294
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,975	3,068	3,167	3,905	4,027	4,156			
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	3,646	3,761	3,880	4,785	4,936	5,093	528	528	528
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,355	2,429	2,507	4,122	4,251	4,387			
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	3,461	3,570	3,684	4,543	4,686	4,835			
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	3,192	3,292	3,397	4,189	4,321	4,459	229	229	229
252	240114	CORP-Engineering	Engineer	9/13/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,654	2,737	2,825	3,483	3,593	3,707			
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	6,975	7,194	7,424	9,154	9,443	9,744	528	528	528
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,072	3,169	3,271	4,032	4,159	4,293			
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022			-	-	-	4,200	4,332	4,471			
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,920	1,981	2,044	3,360	3,466	3,576			
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,400	2,475	2,555	4,200	4,332	4,471			
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,360	2,434	2,512	4,130	4,260	4,396			
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,260	3,363	3,470	4,279	4,414	4,555	432	445	459
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,378	3,484	3,596	4,434	4,573	4,720	229	229	229
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,100	2,166	2,235	3,675	3,790	3,912			
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	4,563	4,707	4,857	5,989	6,177	6,375	1,376	1,376	1,376
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,732	3,850	3,973	4,898	5,053	5,214	165	170	175
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	4,355	4,493	4,636	5,716	5,897	6,085	1,147	1,147	1,147
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,240	3,342	3,449	4,253	4,387	4,526			
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,910	4,034	4,162	5,132	5,294	5,463			
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,756	2,842	2,933	3,617	3,730	3,849	459	459	459
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,940	3,033	3,129	3,859	3,980	4,107	344	344	344
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995	4.00%	401(k) Match 1-3/100% 4-5/50%	2,855	2,945	3,039	3,748	3,866	3,989	459	459	459
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,052	3,147	3,248	4,005	4,131	4,263			
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,678	2,762	2,850	3,515	3,625	3,741			
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,182	3,281	3,386	4,176	4,307	4,444			
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,386	3,493	3,604	4,445	4,584	4,731			
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,451	3,559	3,673	4,529	4,672	4,821			
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,500	3,610	3,726	4,594	4,738	4,890	11,471	11,471	11,471
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,400	3,507	3,619	4,463	4,603	4,750	600	619	639
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,460	2,537	2,618	4,305	4,440	4,582			
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,280	2,352	2,427	3,990	4,116	4,247			
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	3,360	3,466	3,577	4,410	4,549	4,695			
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	3,000	3,094	3,193	3,938	4,061	4,191			
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	3,000	3,094	3,193	3,938	4,061	4,191			
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	3,600	3,713	3,832	6,300	6,498	6,706			
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	2,850	2,940	3,033	4,988	5,144	5,308			
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023	4.00%	401(k) Roth 1-3/100% 4-5/50%	4,000	4,126	4,257	5,250	5,415	5,588	344	344	344
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	3,500	3,610	3,726	4,594	4,738	4,890			
286	240114	CORP-Engineering	Engineer	6/26/2023			-	-	-	3,255	3,358	3,465			
287	240114	CORP-Engineering	Project Manager	6/26/2023			-	-	-	5,775	5,957	6,147			
288	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,978	4,105	-	6,039	6,232	-	-	-
289	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,978	4,105	-	6,039	6,232	-	-	-
290	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,978	4,105	-	6,039	6,232	-	-	-
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,406	3,515	-	5,171	5,336	-	-	-
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,406	3,515	-	5,171	5,336	-	-	-
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,978	4,105	-	6,039	6,232	-	-	-
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,406	3,515	-	5,171	5,336	-	-	-
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,406	3,515	-	5,171	5,336	-	-	-
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,406	3,515	-	5,171	5,336	-	-	-
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	5,975	6,166	-	9,070	9,360	-	-	-
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	4,905	5,062	-	7,446	7,684	-	-	-
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,406	3,515	-	5,171	5,336	-	-	-
			Total Non-Collective Bargaining Unit Salary				$924,465	$1,000,780	$1,032,729	$1,108,438	$1,215,005	$1,253,793	$137,082	$139,654	$142,345

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	Gross Other Benefits 401k, DCP, ESPP 2023 ESPP	2024 ESPP	2025 ESPP
Collective Bargaining Unit															
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	2.00%	401(k) Match 50% up to 5%	$1,482	$1,518	$1,556	$0	$0	$0	$0	$0	$0
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	2.50%	401(k) Match 50% up to 5%	1,874	1,921	1,969	-	-	-	-	-	-
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	1.00%	401(k) Match 50% up to 5%	736	755	773	-	-	-	-	-	-
4	241103	PITT-Cust Service	Field Service Representative U537P	3/31/1994	2.50%	401(k) Match 50% up to 5%	1,845	1,891	1,938	-	-	-	-	-	-
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	2.50%	401(k) Match 50% up to 5%	1,899	1,945	1,994	-	-	-	536	549	563
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987			-	-	-	-	-	-	-	-	-
7	241103	PITT-Cust Service	Field Service Representative U537P	2/2/1988	2.50%	401(k) Match 50% up to 5%	1,845	1,891	1,938	-	-	-	-	-	-
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	2.50%	401(k) Match 50% up to 5%	1,992	2,041	2,092	-	-	-	-	-	-
9	241103	PITT-Cust Service	Field Service Representative U537P	7/5/1983	2.50%	401(k) Match 50% up to 5%	1,845	1,891	1,938	-	-	-	-	-	-
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	2/1/1985	2.50%	401(k) Match 50% up to 5%	1,896	1,943	1,992	-	-	-	574	574	574
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	2.50%	401(k) Match 50% up to 5%	1,899	1,945	1,994	-	-	-	-	-	-
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991			-	-	-	-	-	-	132	135	138
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	4/22/1991	2.50%	401(k) Match 50% up to 5%	1,909	1,956	2,005	-	-	-	944	967	991
14	241103	PITT-Cust Service	Field Service Representative U537P	5/6/1985	2.50%	401(k) Match 50% up to 5%	1,845	1,891	1,938	-	-	-	-	-	-
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	2.50%	401(k) Match 50% up to 5%	1,861	1,899	1,936	-	-	-	-	-	-
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	2.50%	401(k) Match 50% up to 5%	1,857	1,895	1,932	-	-	-	-	-	-
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	2.50%	401(k) Match 50% up to 5%	1,913	1,968	2,016	-	-	-	405	417	427
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	2.00%	401(k) Match 50% up to 5%	1,493	1,537	1,575	-	-	-	263	271	278
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	2.50%	401(k) Match 50% up to 5%	1,870	1,908	1,945	-	-	-	-	-	-
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	2.50%	401(k) Match 50% up to 5%	1,843	1,880	1,917	-	-	-	-	-	-
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	2.50%	401(k) Match 50% up to 5%	1,875	1,912	1,950	-	-	-	132	135	138
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	2.50%	401(k) Match 50% up to 5%	1,918	1,956	1,995	-	-	-	-	-	-
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	2.50%	401(k) Match 50% up to 5%	1,848	1,885	1,923	-	-	-	-	-	-
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	2.50%	401(k) Match 50% up to 5%	1,861	1,899	1,936	-	-	-	-	-	-
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	2.50%	401(k) Match 50% up to 5%	1,855	1,911	1,959	-	-	-	917	944	968
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	2.50%	401(k) Match 50% up to 5%	1,863	1,919	1,967	-	-	-	658	677	694
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	2.50%	401(k) Match 50% up to 5%	1,870	1,908	1,946	-	-	-	-	-	-
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	2.50%	401(k) Match 50% up to 5%	1,848	1,885	1,923	-	-	-	391	399	407
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	2.50%	401(k) Match 50% up to 5%	1,857	1,895	1,932	-	-	-	-	-	-
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	2.50%	401(k) Match 50% up to 5%	1,875	1,912	1,950	-	-	-	662	675	688
31	243301	BUTL-Production	Operator U537O	5/4/1998	2.50%	401(k) Match 50% up to 5%	1,918	1,956	1,995	-	-	-	-	-	-
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	2.50%	401(k) Match 50% up to 5%	1,869	1,906	1,944	-	-	-	396	404	412
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	2.50%	401(k) Match 50% up to 5%	1,856	1,893	1,931	-	-	-	-	-	-
34	243301	BUTL-Production	Operator U537O	11/2/1984	2.50%	401(k) Match 50% up to 5%	1,918	1,956	1,995	-	-	-	-	-	-
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	2.00%	401(k) Match 50% up to 5%	1,479	1,508	1,538	-	-	-	-	-	-
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	2.50%	401(k) Match 50% up to 5%	1,843	1,880	1,917	-	-	-	-	-	-
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	2.50%	401(k) Match 50% up to 5%	1,840	1,877	1,914	-	-	-	-	-	-
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	2.50%	401(k) Match 50% up to 5%	1,875	1,912	1,950	-	-	-	-	-	-
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	2.50%	401(k) Match 50% up to 5%	1,861	1,899	1,936	-	-	-	-	-	-
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	2.50%	401(k) Match 50% up to 5%	1,857	1,895	1,932	-	-	-	-	-	-
41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	2.50%	401(k) Match 50% up to 5%	1,848	1,885	1,923	-	-	-	391	399	407
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	2.50%	401(k) Match 50% up to 5%	1,918	1,956	1,995	-	-	-	-	-	-
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	2.50%	401(k) Match 50% up to 5%	1,857	1,895	1,932	-	-	-	-	-	-
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	2.50%	401(k) Match 50% up to 5%	1,870	1,908	1,946	-	-	-	-	-	-
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	2.50%	401(k) Match 50% up to 5%	1,856	1,893	1,930	-	-	-	-	-	-
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	2.50%	401(k) Match 50% up to 5%	1,876	1,913	1,951	-	-	-	-	-	-
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	2.50%	401(k) Match 50% up to 5%	1,875	1,912	1,950	-	-	-	-	-	-
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	2.50%	401(k) Match 50% up to 5%	1,861	1,899	1,936	-	-	-	657	670	683
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	2.50%	401(k) Match 50% up to 5%	1,692	1,742	1,794	-	-	-	597	615	633
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	2.50%	401(k) Match 50% up to 5%	1,659	1,708	1,759	-	-	-	234	241	248
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	2.50%	401(k) Match 50% up to 5%	1,633	1,682	1,733	-	-	-	-	-	-
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	2.50%	401(k) Match 50% up to 5%	1,669	1,719	1,771	-	-	-	1,178	1,213	1,250
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988			-	-	-	-	-	-	-	-	-
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987			-	-	-	-	-	-	-	-	-
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	2.50%	401(k) Match 50% up to 5%	1,614	1,662	1,712	-	-	-	342	352	362
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	2.50%	401(k) Match 50% up to 5%	1,692	1,742	1,794	-	-	-	1,194	1,230	1,266
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	2.50%	401(k) Match 50% up to 5%	1,659	1,708	1,759	-	-	-	586	603	621
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	2.50%	401(k) Match 50% up to 5%	1,669	1,719	1,771	-	-	-	-	-	-
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	2.00%	401(k) Match 50% up to 5%	1,343	1,383	1,424	-	-	-	-	-	-
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	2.00%	401(k) Match 50% up to 5%	1,327	1,366	1,407	-	-	-	-	-	-
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	237	244	252
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	2.50%	401(k) Match 50% up to 5%	1,614	1,662	1,712	-	-	-	-	-	-
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	2.50%	401(k) Match 50% up to 5%	1,614	1,662	1,712	-	-	-	1,139	1,173	1,208
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	2.50%	401(k) Match 50% up to 5%	1,692	1,742	1,794	-	-	-	1,194	1,230	1,266
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	2.00%	401(k) Match 50% up to 5%	1,344	1,384	1,426	-	-	-	-	-	-
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	1,067	1,099	1,132
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	2.50%	401(k) Match 50% up to 5%	1,614	1,662	1,712	-	-	-	-	-	-
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	2.50%	401(k) Match 50% up to 5%	1,659	1,708	1,759	-	-	-	-	-	-
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	2.00%	401(k) Match 50% up to 5%	1,281	1,319	1,359	-	-	-	-	-	-
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	2.50%	401(k) Match 50% up to 5%	1,682	1,732	1,784	-	-	-	-	-	-
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

						Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	2.50%	401(k) Match 50% up to 5%	1,669	1,719	1,771	-	-	-	-	-	-
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	2.00%	401(k) Match 50% up to 5%	1,353	1,394	1,435	-	-	-	-	-	-
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986			-	-	-	-	-	-	-	-	-
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	2.50%	401(k) Match 50% up to 5%	1,659	1,708	1,759	-	-	-	-	-	-
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	2.50%	401(k) Match 50% up to 5%	1,646	1,695	1,746	-	-	-	581	598	616
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	237	244	252
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	1.50%	401(k) Match 50% up to 5%	980	1,009	1,040	-	-	-	231	237	245
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	2.50%	401(k) Match 50% up to 5%	1,669	1,719	1,771	-	-	-	353	364	375
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	2.50%	401(k) Match 50% up to 5%	1,669	1,719	1,771	-	-	-	2,294	2,294	2,294
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	2.50%	401(k) Match 50% up to 5%	1,633	1,682	1,733	-	-	-	-	-	-
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	2.50%	401(k) Match 50% up to 5%	1,592	1,640	1,689	-	-	-	-	-	-
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	2.00%	401(k) Match 50% up to 5%	1,344	1,384	1,426	-	-	-	-	-	-
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	2.50%	401(k) Match 50% up to 5%	1,659	1,708	1,759	-	-	-	-	-	-
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	2.50%	401(k) Match 50% up to 5%	1,669	1,719	1,771	-	-	-	-	-	-
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	2.50%	401(k) Match 50% up to 5%	1,592	1,640	1,689	-	-	-	-	-	-
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	2.50%	401(k) Match 50% up to 5%	1,659	1,708	1,759	-	-	-	-	-	-
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	2.50%	401(k) Match 50% up to 5%	1,682	1,732	1,784	-	-	-	-	-	-
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	2.50%	401(k) Match 50% up to 5%	1,633	1,682	1,733	-	-	-	461	475	489
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	0.50%	401(k) Match 50% up to 5%	332	342	352	-	-	-	-	-	-
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	2.50%	401(k) Match 50% up to 5%	1,646	1,695	1,746	-	-	-	-	-	-
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	2.50%	401(k) Roth Match 50% up to 5%	1,680	1,730	1,782	-	-	-	4,359	4,359	4,359
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	2.50%	401(k) Match 50% up to 5%	1,736	1,775	1,820	-	-	-	-	-	-
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	2.50%	401(k) Match 50% up to 5%	1,861	1,903	1,951	-	-	-	-	-	-
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	2.50%	401(k) Match 50% up to 5%	1,696	1,734	1,777	-	-	-	1,197	1,224	1,255
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	2.50%	401(k) Match 50% up to 5%	1,750	1,798	1,843	-	-	-	247	254	260
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	2.50%	401(k) Match 50% up to 5%	1,690	1,728	1,772	-	-	-	-	-	-
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996			-	-	-	-	-	-	-	-	-
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	2.50%	401(k) Match 50% up to 5%	1,731	1,779	1,824	-	-	-	-	-	-
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	2.50%	401(k) Match 50% up to 5%	1,731	1,779	1,824	-	-	-	-	-	-
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	2.50%	401(k) Match 50% up to 5%	1,824	1,866	1,912	-	-	-	-	-	-
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	2.50%	401(k) Match 50% up to 5%	1,696	1,734	1,777	-	-	-	-	-	-
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	2.50%	401(k) Match 50% up to 5%	1,861	1,903	1,951	-	-	-	-	-	-
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	2.50%	401(k) Match 50% up to 5%	1,862	1,908	1,955	-	-	-	-	-	-
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	2.50%	401(k) Match 50% up to 5%	1,862	1,908	1,955	-	-	-	-	-	-
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	2.50%	401(k) Match 50% up to 5%	1,861	1,899	1,936	-	-	-	-	-	-
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	2.50%	401(k) Match 50% up to 5%	1,992	2,041	2,092	-	-	-	1,265	1,297	1,329
117	241103	PITT-Cust Service	Field Service Representative U537P	11/18/1998	2.50%	401(k) Match 50% up to 5%	1,845	1,891	1,938	-	-	-	1,302	1,335	1,368
118	244101	INDI-Production	Operator U537O	8/9/1999	2.50%	401(k) Match 50% up to 5%	1,918	1,956	1,995	-	-	-	-	-	-
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	2.50%	401(k) Match 50% up to 5%	1,861	1,899	1,937	-	-	-	-	-	-
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	2.50%	401(k) Match 50% up to 5%	1,856	1,893	1,930	-	-	-	393	401	409
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	2.00%	401(k) Match 50% up to 5%	1,379	1,410	1,445	-	-	-	-	-	-
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	2.50%	401(k) Match 50% up to 5%	1,856	1,893	1,930	-	-	-	-	-	-
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	2.50%	401(k) Match 50% up to 5%	1,862	1,908	1,955	-	-	-	-	-	-
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	-	-	-
125	241103	PITT-Cust Service	Field Service Representative U537P	12/28/2001	3.00%	401(k) Match 1-3/100% 4-5/50%	2,214	2,269	2,326	3,874	3,970	4,070	-	-	-
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	1.00%	401(k) Match 50% up to 5%	739	754	769	-	-	-	-	-	-
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	4.00%	401(k) Match 1-3/100% 4-5/50%	3,069	3,129	3,192	4,027	4,107	4,190	-	-	-
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,972	3,032	3,092	3,900	3,979	4,058	918	936	955
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	262	267	273
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	2,770	2,847	2,918	3,636	3,737	3,830	-	-	-
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	2,979	3,053	3,129	3,910	4,007	4,106	4,129	4,129	4,129
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	1,147	1,147	1,147
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,582	2,659	2,739	3,389	3,490	3,594	570	587	604
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	3,069	3,129	3,192	4,027	4,107	4,190	542	552	563
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	2,993	3,053	3,113	3,928	4,007	4,086	-	-	-
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002			-	-	-	3,902	3,999	4,098	-	-	-
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	2,973	3,047	3,122	3,902	3,999	4,098	-	-	-
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	2,991	3,050	3,111	3,926	4,003	4,083	-	-	-
139	241103	PITT-Cust Service	Field Service Representative U537P	4/14/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	1,606	1,606	1,606
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,659	2,739	3,389	3,490	3,594	1,139	1,173	1,208
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	-	-	-
144	241103	PITT-Cust Service	Field Service Representative U537P	8/29/2003	1.00%	401(k) Match 1-3/100% 4-5/50%	738	756	775	3,874	3,970	4,070	-	-	-
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	2,770	2,847	2,918	3,636	3,737	3,830	-	-	-
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	-	-	-
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,048	3,109	3,171	4,000	4,080	4,162	269	274	280
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,013	3,088	3,165	3,955	4,053	4,154	1,606	1,606	1,606
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	3.00%	401(k) Match 1-3/100% 4-5/50%	1,928	1,971	2,021	3,374	3,450	3,536	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	Gross Other Benefits 401k, DCP, ESPP 2023 ESPP	2024 ESPP	2025 ESPP
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005			-	-	-	3,928	4,025	4,126	792	812	832
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,965	3,024	3,085	3,892	3,969	4,049	-	-	-
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,770	2,847	2,918	3,636	3,737	3,830	-	-	-
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	0.50%	401(k) Roth Match 50% up to 5%	372	380	387	3,909	3,988	4,067	-	-	-
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,965	3,023	3,084	3,892	3,968	4,047	-	-	-
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,973	3,047	3,122	3,902	3,999	4,098	-	-	-
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,770	2,847	2,918	3,636	3,737	3,830	-	-	-
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,978	3,038	3,098	3,909	3,987	4,066	-	-	-
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	2.00%	401(k) Match 1-3/100% 4-5/50%	1,281	1,319	1,359	3,362	3,463	3,567	-	-	-
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005			-	-	-	3,525	3,631	3,739	-	-	-
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,714	2,775	2,844	3,562	3,642	3,733	-	-	-
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,029	3,090	3,898	3,976	4,056	-	-	-
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	3.50%	401(k) Match 1-3/100% 4-5/50%	2,580	2,644	2,710	3,870	3,966	4,065	1,301	1,333	1,366
165	241103	PITT-Cust Service	Field Service Representative U537P	12/19/2005			-	-	-	3,874	3,970	4,070	-	-	-
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	-	-	-
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	3.50%	401(k) Match 1-3/100% 4-5/50%	2,658	2,724	2,792	3,987	4,086	4,187	268	275	282
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	134	137	141
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,988	3,062	3,138	3,922	4,019	4,118	-	-	-
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,972	3,032	3,092	3,900	3,979	4,058	-	-	-
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,042	3,118	3,195	3,992	4,092	4,194	-	-	-
172	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006			-	-	-	3,362	3,463	3,567	339	349	360
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	-	-	-
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	3.00%	401(k) Match 1-3/100% 4-5/50%	2,222	2,278	2,335	3,889	3,986	4,086	459	459	459
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,001	3,060	3,121	3,939	4,016	4,097	-	-	-
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,001	3,060	3,121	3,939	4,017	4,097	-	-	-
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	1,301	1,327	1,353
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,659	2,739	3,389	3,490	3,594	-	-	-
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006			-	-	-	3,525	3,631	3,739	-	-	-
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,188	-	-	-
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	-	-	-
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,069	3,129	3,192	4,027	4,107	4,190	-	-	-
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,993	3,067	3,144	3,928	4,025	4,126	1,320	1,353	1,387
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	239	246	253
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	688	688	688
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	1.00%	401(k) Match 1-3/100% 4-5/50%	735	751	770	3,859	3,945	4,045	-	-	-
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,714	2,775	2,844	3,562	3,642	3,733	599	612	627
190	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006			-	-	-	3,889	3,986	4,086	-	-	-
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	-	-	-
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	-	-	-
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,973	3,047	3,122	3,902	3,999	4,098	115	115	115
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	459	459	459
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,991	3,050	3,111	3,925	4,003	4,083	132	135	137
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	520	531	541
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007			-	-	-	3,362	3,463	3,567	791	815	839
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	119	123	127
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	2,015	2,075	2,137	3,525	3,631	3,739	-	-	-
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	593	610	628
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,752	2,828	2,898	3,612	3,712	3,804	-	-	-
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,498	2,567	2,631	3,279	3,369	3,453	-	-	-
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,770	2,847	2,918	3,636	3,737	3,830	733	754	772
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	358	369	380
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	1,921	1,979	2,038	3,362	3,463	3,567	-	-	-
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	-	-	-
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	1,340	1,373	1,408
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,714	2,775	2,844	3,562	3,642	3,733	-	-	-
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,714	2,775	2,844	3,562	3,642	3,733	-	-	-
216	244101	INDI-Production	Operator U537O	8/13/2007			-	-	-	4,027	4,107	4,190	-	-	-
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,613	2,691	2,772	3,429	3,532	3,638	231	237	245
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	593	611	629
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	2,227	2,272	2,318	3,898	3,976	4,056	-	-	-
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,980	3,069	3,145	3,911	4,027	4,128	-	-	-
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007			-	-	-	3,882	3,959	4,038	-	-	-
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	2.00%	401(k) Match 1-3/100% 4-5/50%	1,399	1,431	1,467	3,673	3,756	3,851	-	-	-
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	2,230	2,285	2,341	3,902	3,999	4,098	-	-	-
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	1,310	1,336	1,363
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007			-	-	-	3,553	3,658	3,767	-	-	-
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,988	3,062	3,138	3,922	4,019	4,118	-	-	-
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	-	-	-
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008			-	-	-	3,871	3,947	4,026	-	-	-
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,827	2,905	2,977	3,711	3,813	3,908	-	-	-
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008			-	-	-	3,871	3,947	4,026	-	-	-
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	1,194	1,230	1,266
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	-	-	-
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,758	2,820	2,891	3,620	3,701	3,794	-	-	-
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	-	-	-
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008			-	-	-	3,762	3,837	3,913	-	-	-
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	391	399	407
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	3.00%	401(k) Match 1-3/100% 4-5/50%	2,222	2,278	2,335	3,889	3,986	4,086	-	-	-
241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,993	3,067	3,144	3,928	4,025	4,126	-	-	-
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,979	3,053	3,129	3,910	4,007	4,106	2,294	2,294	2,294
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	3,013	3,088	3,165	3,954	4,053	4,155	459	459	459
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,944	3,003	3,063	3,864	3,941	4,020	-	-	-
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	3.00%	401(k) Match 1-3/100% 4-5/50%	2,212	2,256	2,301	3,871	3,947	4,026	-	-	-
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,029	3,090	3,898	3,976	4,056	-	-	-
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009			-	-	-	3,864	3,941	4,020	-	-	-
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,029	3,090	3,898	3,976	4,056	-	-	-
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009			-	-	-	3,528	3,633	3,742	-	-	-
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,571	2,628	2,694	3,374	3,450	3,536	-	-	-
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	3,013	3,088	3,165	3,954	4,053	4,155	-	-	-
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	229	229	229
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,978	3,038	3,099	3,909	3,988	4,067	-	-	-
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	260	265	271
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009			-	-	-	3,831	3,908	3,986	-	-	-
257	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,991	3,050	3,111	3,926	4,003	4,083	-	-	-
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	115	115	115
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	262	267	273
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	2.00%	401(k) Match 1-3/100% 4-5/50%	1,475	1,504	1,534	3,871	3,947	4,026	260	265	271
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	-	-	-
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	3,042	3,118	3,195	3,992	4,092	4,194	918	918	918
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	237	244	252
268	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	358	369	380
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,977	3,044	3,121	3,908	3,996	4,096	-	-	-
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	-	-	-
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	3,019	3,094	3,171	3,963	4,060	4,161	-	-	-
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	130	133	135
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	-	-	-
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,942	3,016	3,092	3,862	3,958	4,058	918	918	918
276	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010			-	-	-	3,889	3,986	4,086	-	-	-
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	344	344	344
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	711	732	754
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	-	-	-
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,965	3,024	3,085	3,892	3,969	4,049	785	801	817
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	1,305	1,331	1,357
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	-	-	-
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	3,013	3,088	3,165	3,955	4,053	4,154	665	681	698
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,770	2,847	2,918	3,636	3,737	3,830	-	-	-
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,965	3,023	3,084	3,892	3,968	4,047	-	-	-
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	3,013	3,088	3,165	3,955	4,053	4,154	1,064	1,090	1,117
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,919	2,977	3,037	3,831	3,908	3,986	1,288	1,314	1,340
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012			-	-	-	3,525	3,631	3,739	-	-	-
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,062	3,140	3,221	4,019	4,122	4,228	675	693	711
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,928	1,971	2,021	3,374	3,450	3,536	-	-	-
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	-	-	-
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,866	2,923	2,982	3,762	3,837	3,913	-	-	-
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,998	3,074	3,150	3,935	4,034	4,135	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	Gross Other Benefits 401k, DCP, ESPP 2023 ESPP	2024 ESPP	2025 ESPP
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013			-	-	-	4,016	4,133	4,234	-	-	-
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
304	244101	INDI-Production	Operator U537O	5/13/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	3,069	3,129	3,192	4,027	4,107	4,190	271	276	282
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	3.00%	401(k) Match 1-3/100% 4-5/50%	2,259	2,316	2,374	3,954	4,053	4,155	-	-	-
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	131	134	136
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,978	3,038	3,098	3,909	3,987	4,066	-	-	-
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	-	-	-
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	339	349	360
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,029	3,090	3,898	3,976	4,056	-	-	-
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	-	-	-
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,675	2,755	2,838	3,511	3,616	3,725	-	-	-
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	3,042	3,118	3,195	3,992	4,092	4,194	671	688	705
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,659	2,739	3,389	3,490	3,594	456	469	483
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	3.50%	401(k) Match 1-3/100% 4-5/50%	2,350	2,420	2,493	3,525	3,631	3,739	-	-	-
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	229	229	229
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014			-	-	-	3,762	3,837	3,913	-	-	-
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	3.50%	401(k) Roth 1-3/100% 4-5/50%	2,605	2,664	2,731	3,908	3,996	4,096	657	672	688
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,069	3,129	3,192	4,027	4,107	4,190	-	-	-
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	2.00%	401(k) Match 1-3/100% 4-5/50%	1,475	1,504	1,534	3,871	3,947	4,026	-	-	-
324	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014			-	-	-	3,874	3,970	4,070	-	-	-
325	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	390	398	406
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	229	229	229
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	-	-	-
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	344	344	344
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,069	3,129	3,192	4,027	4,107	4,190	1,354	1,381	1,408
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	3.50%	401(k) Match 1-3/100% 4-5/50%	2,350	2,420	2,493	3,525	3,631	3,739	-	-	-
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	356	366	377
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	3.00%	401(k) Match 1-3/100% 4-5/50%	2,296	2,355	2,416	4,019	4,122	4,228	270	277	284
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,958	3,034	3,112	3,883	3,982	4,084	653	669	686
335	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015			-	-	-	3,764	3,861	3,961	-	-	-
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,900	2,974	3,051	3,806	3,904	4,004	512	525	538
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,029	3,090	3,898	3,976	4,056	131	134	136
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016			-	-	-	3,864	3,941	4,020	-	-	-
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	138	138	138
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,029	3,090	3,898	3,976	4,056	-	-	-
341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	229	229	229
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	-	-	-
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	3.00%	401(k) Match 1-3/100% 4-5/50%	2,218	2,263	2,308	3,882	3,959	4,038	-	-	-
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,929	3,004	3,082	3,844	3,943	4,045	-	-	-
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,865	2,938	3,013	3,760	3,856	3,955	-	-	-
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,659	2,739	3,389	3,490	3,594	-	-	-
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,929	3,004	3,082	3,844	3,943	4,045	229	229	229
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016			-	-	-	4,000	4,080	4,162	941	960	979
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,758	2,820	2,891	3,620	3,701	3,794	-	-	-
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,752	2,828	2,898	3,612	3,712	3,804	-	-	-
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012			-	-	-	3,327	3,393	3,460	-	-	-
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011			-	-	-	3,327	3,393	3,460	688	688	688
353	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,868	2,942	3,018	3,764	3,861	3,961	-	-	-
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,048	3,109	3,171	4,000	4,080	4,162	1,345	1,371	1,399
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	3.00%	401(k) Match 1-3/100% 4-5/50%	2,016	2,076	2,139	3,528	3,633	3,742	-	-	-
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	3.50%	401(k) Match 1-3/100% 4-5/50%	2,352	2,422	2,495	3,528	3,633	3,742	-	-	-
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	-	-	-
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	-	-	-
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,799	2,861	2,934	3,673	3,756	3,851	-	-	-
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,535	2,585	2,636	3,327	3,393	3,460	224	228	233
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,870	2,929	2,989	3,767	3,844	3,923	-	-	-
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	3.00%	401(k) Match 1-3/100% 4-5/50%	1,964	2,022	2,077	3,437	3,539	3,634	-	-	-
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	3.50%	401(k) Match 1-3/100% 4-5/50%	2,643	2,711	2,782	3,964	4,067	4,173	533	547	561
365	244601	KANE-Production	Operator U537O	11/6/2017			-	-	-	3,918	3,998	4,080	658	672	686
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,704	2,775	2,849	3,548	3,643	3,739	-	-	-
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,831	2,906	2,983	3,716	3,815	3,916	375	385	395
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,825	2,900	2,977	3,708	3,806	3,907	125	128	131
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,866	2,924	2,984	3,761	3,838	3,917	-	-	-
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,943	3,032	3,109	3,863	3,979	4,080	390	401	411
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,875	2,951	3,028	3,773	3,873	3,975	-	-	-
374	241106	PITT-Field Services	Utility Person U537P	2/27/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	2,434	2,498	2,564	3,650	3,747	3,845	-	-	-
375	245206	YARD-Field Services	Utility A F473Y	3/26/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,955	1,999	2,050	3,421	3,498	3,587	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

						Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
376	249160	WILK-Watres	Plant Operator U648S	4/30/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,016	2,076	2,139	3,528	3,633	3,742	-	-	-
377	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,866	2,924	2,984	3,761	3,838	3,917	-	-	-
378	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,937	1,994	2,054	3,389	3,490	3,594	684	704	725
379	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,633	2,712	2,793	3,456	3,559	3,666	115	115	115
380	246106	MECH-Field Services	Utility A U648R	5/14/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,541	2,618	2,689	3,335	3,435	3,529	-	-	-
381	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	2,350	2,420	2,493	3,525	3,631	3,739	275	275	275
382	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	3.00%	401(k) Roth 1-3/100% 4-5/50%	2,015	2,075	2,137	3,525	3,631	3,739	-	-	-
383	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,831	2,906	2,983	3,716	3,815	3,916	574	574	574
384	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	1.00%	401(k) Match 1-3/100% 4-5/50%	677	697	717	3,553	3,658	3,767	-	-	-
385	241106	PITT-Field Services	Utility Person U537P	7/10/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,086	2,141	2,197	3,650	3,747	3,845	-	-	-
386	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,087	2,130	2,175	3,651	3,728	3,807	-	-	-
387	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,978	3,057	3,138	3,909	4,012	4,118	115	115	115
388	241106	PITT-Field Services	Utility Person U537P	7/24/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,086	2,141	2,197	3,650	3,747	3,845	-	-	-
389	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,790	2,850	2,910	3,662	3,740	3,819	739	754	770
390	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,782	2,841	2,901	3,651	3,728	3,807	-	-	-
391	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018			-	-	-	3,252	3,353	3,446	-	-	-
392	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,787	2,861	2,937	3,658	3,754	3,854	-	-	-
393	241103	PITT-Cust Service	Field Service Representative U537P	9/4/2018			-	-	-	3,655	3,751	3,851	-	-	-
394	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,087	2,130	2,175	3,651	3,728	3,807	-	-	-
395	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,881	2,942	3,004	3,781	3,861	3,943	635	649	663
396	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,782	2,841	2,901	3,651	3,728	3,807	491	501	512
397	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,123	2,180	2,238	3,716	3,815	3,916	459	459	459
398	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	-	-	-
399	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	-	-	-
400	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,613	2,691	2,772	3,429	3,532	3,638	1,153	1,187	1,223
401	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
402	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	-	-	-
403	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-
404	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,015	2,075	2,137	3,525	3,631	3,739	-	-	-
405	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	593	610	628
406	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	459	459	459
407	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,699	2,757	2,817	3,542	3,619	3,697	-	-	-
408	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,699	2,757	2,817	3,542	3,619	3,697	-	-	-
409	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
410	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,699	2,757	2,817	3,542	3,619	3,697	357	365	373
411	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,016	2,076	2,139	3,528	3,633	3,742	-	-	-
412	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,707	2,766	2,826	3,553	3,631	3,710	-	-	-
413	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	229	229	229
414	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,024	2,068	2,113	3,542	3,619	3,697	-	-	-
415	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,749	2,809	2,869	3,608	3,687	3,765	-	-	-
416	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	3.50%	401(k) Match 1-3/100% 4-5/50%	2,442	2,509	2,577	3,664	3,763	3,865	616	632	650
417	244601	KANE-Production	Operator U537O	9/9/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,818	2,879	2,942	3,699	3,779	3,861	-	-	-
418	243151	NEWC-New Castle	Operator U537O	9/23/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,113	2,159	2,206	3,699	3,779	3,861	-	-	-
419	243301	BUTL-Production	Operator U537O	9/23/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,113	2,159	2,206	3,699	3,779	3,861	-	-	-
420	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,791	2,867	2,945	3,664	3,763	3,865	-	-	-
421	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,728	2,788	2,848	3,580	3,659	3,738	-	-	-
422	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
423	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,901	1,959	2,014	3,327	3,429	3,524	-	-	-
424	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	-	-	-
425	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,699	2,757	2,817	3,542	3,619	3,697	-	-	-
426	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,728	2,788	2,848	3,580	3,659	3,738	-	-	-
427	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
428	244301	CLAR-Production	Operator U537O	4/27/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,818	2,879	2,942	3,699	3,779	3,861	-	-	-
429	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,613	2,691	2,772	3,429	3,532	3,638	-	-	-
430	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,885	2,963	3,038	3,786	3,889	3,988	-	-	-
431	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,762	2,837	2,915	3,625	3,724	3,826	229	229	229
432	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	2.00%	401(k) Match 1-3/100% 4-5/50%	1,348	1,377	1,407	3,539	3,615	3,694	595	608	621
433	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,766	2,826	3,553	3,631	3,710	-	-	-
434	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,983	2,043	2,105	3,471	3,576	3,684	-	-	-
435	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,535	2,585	2,636	3,327	3,393	3,460	-	-	-
436	245206	YARD-Field Services	Utility B F473Y	7/13/2020	1.00%	401(k) Match 1-3/100% 4-5/50%	536	550	564	2,813	2,887	2,961	-	-	-
437	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,708	2,784	2,861	3,554	3,654	3,756	-	-	-
438	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,479	2,559	2,643	3,254	3,359	3,468	-	-	-
439	249160	WILK-Watres	Plant Operator U648S	12/15/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,646	2,726	2,810	3,473	3,578	3,688	-	-	-
440	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,665	2,745	2,828	3,498	3,603	3,712	-	-	-
441	249160	WILK-Watres	Plant Operator U648S	12/21/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,646	2,726	2,810	3,473	3,578	3,688	-	-	-
442	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,901	1,959	2,014	3,327	3,429	3,524	-	-	-
443	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,901	1,959	2,014	3,327	3,429	3,524	-	-	-
444	245206	YARD-Field Services	Utility B F473Y	3/15/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,143	2,200	2,256	2,813	2,887	2,961	-	-	-
445	244101	INDI-Production	Operator U537O	3/22/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,734	2,795	2,858	3,589	3,669	3,751	229	229	229
446	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,983	2,028	2,073	3,471	3,548	3,627	-	-	-
447	243152	NEWC-Ellwood	Operator U537O	4/26/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,734	2,795	2,858	3,589	3,669	3,751	241	247	252
448	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,952	2,012	2,074	3,416	3,521	3,630	459	473	488
449	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,499	2,576	2,655	3,280	3,381	3,485	-	-	-
450	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,615	2,673	2,734	3,432	3,509	3,588	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

						Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
451	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,615	2,673	2,734	3,432	3,509	3,588	-	-	-
452	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,615	2,673	2,734	3,432	3,509	3,588	-	-	-
453	241106	PITT-Field Services	Utility Person U537P	5/24/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,614	2,688	2,763	3,431	3,528	3,626	-	-	-
454	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,615	2,673	2,734	3,432	3,509	3,588	461	472	482
455	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,478	2,555	2,634	3,252	3,353	3,457	-	-	-
456	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,035	2,081	2,128	3,562	3,642	3,724	-	-	-
457	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,952	2,012	2,074	3,416	3,521	3,630	-	-	-
458	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,714	2,775	2,837	3,562	3,642	3,724	-	-	-
459	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,865	1,911	1,964	3,263	3,345	3,438	-	-	-
460	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,643	2,726	3,363	3,468	3,578	-	-	-
461	244506	WARR-Field Services	Utility Person U537O	8/16/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,899	1,942	1,988	3,323	3,399	3,478	-	-	-
462	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,899	1,942	1,988	3,323	3,399	3,478	-	-	-
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,790	2,856	2,933	3,661	3,749	3,850	1,231	1,260	1,294
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,899	1,942	1,988	3,323	3,399	3,478	-	-	-
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,561	2,641	2,724	3,361	3,466	3,575	-	-	-
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,662	2,744	3,388	3,494	3,602	-	-	-
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,909	1,964	2,021	3,341	3,438	3,537	-	-	-
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	2.00%	401(k) Roth 1-3/100% 4-5/50%	1,243	1,274	1,310	3,263	3,345	3,438	-	-	-
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	3.50%	401(k) Match 1-3/100% 4-5/50%	2,242	2,312	2,385	3,363	3,468	3,578	-	-	-
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,299	2,357	2,423	3,018	3,093	3,180	-	-	-
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,832	1,877	1,929	3,205	3,285	3,376	-	-	-
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,984	2,041	2,099	3,472	3,571	3,673	-	-	-
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,749	2,827	2,908	3,608	3,711	3,817	229	229	229
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,436	2,513	2,592	3,198	3,298	3,403	-	-	-
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,476	2,553	2,625	3,249	3,351	3,445	-	-	-
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,577	2,650	2,725	3,382	3,478	3,577	-	-	-
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,531	2,590	2,650	3,323	3,399	3,478	459	459	459
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,540	2,599	2,659	3,334	3,411	3,490	-	-	-
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	3.50%	401(k) Match 1-3/100% 4-5/50%	2,206	2,276	2,349	3,308	3,414	3,523	-	-	-
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,857	1,903	1,956	3,249	3,330	3,422	-	-	-
481	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,555	2,628	2,704	3,353	3,450	3,549	-	-	-
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,552	2,625	2,700	3,349	3,445	3,544	-	-	-
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,395	2,471	2,551	3,143	3,244	3,348	-	-	-
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,890	1,951	2,013	3,308	3,414	3,523	-	-	-
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,552	2,625	2,700	3,349	3,445	3,544	-	-	-
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,552	2,625	2,700	3,349	3,445	3,544	-	-	-
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,519	2,599	2,682	3,306	3,411	3,520	-	-	-
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,870	1,928	1,983	3,272	3,374	3,469	-	-	-
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,521	2,601	2,684	3,308	3,414	3,523	778	803	829
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022		#N/A	-	-	-	3,415	3,513	3,614	-	-	-
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,552	2,625	2,700	3,349	3,445	3,544	1,126	1,158	1,191
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,552	2,625	2,700	3,349	3,445	3,544	225	232	238
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,914	1,969	2,025	3,349	3,445	3,544	-	-	-
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,749	2,827	2,908	3,608	3,711	3,817	-	-	-
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,828	1,888	1,951	-	3,304	3,414	-	-	-
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	3.00%	401(k) Roth 1-3/100% 4-5/50%	1,751	1,808	1,860	3,064	3,164	3,256	-	-	-
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	2.00%	401(k) Match 1-3/100% 4-5/50%	1,238	1,269	1,304	3,249	3,330	3,422	-	-	-
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,567	2,640	2,716	3,369	3,465	3,565	344	344	344
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,616	2,691	2,769	3,433	3,532	3,634	-	-	-
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,859	1,919	1,982	3,254	3,359	3,468	-	-	-
501	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,916	1,971	2,028	3,353	3,450	3,549	-	-	-
502	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,555	2,628	2,704	3,353	3,450	3,549	-	-	-
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,477	2,557	2,640	3,251	3,357	3,465	-	-	-
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,925	1,980	2,037	3,369	3,465	3,565	-	-	-
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,677	1,721	1,770	2,936	3,011	3,098	-	-	-
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,381	2,444	2,506	3,125	3,207	3,289	-	-	-
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,477	2,557	2,640	3,251	3,357	3,465	-	-	-
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,836	1,880	1,925	3,213	3,290	3,369	-	-	-
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,477	2,557	2,640	3,251	3,357	3,465	-	-	-
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,557	2,631	2,707	3,357	3,453	3,553	344	344	344
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,645	2,721	2,799	3,472	3,571	3,673	-	-	-
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,645	2,721	2,799	3,472	3,571	3,673	459	459	459
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,836	1,880	1,925	3,213	3,290	3,369	-	-	-
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	3.00%	401(k) Roth 1-3/100% 4-5/50%	1,836	1,880	1,925	3,213	3,290	3,369	-	-	-
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,476	2,553	2,625	3,249	3,351	3,445	-	-	-
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,448	2,506	2,567	3,213	3,290	3,369	-	-	-
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,910	1,956	2,003	3,342	3,422	3,505	-	-	-
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,984	2,041	2,099	3,472	3,571	3,673	-	-	-
519	243301	BUTL-Production	Operator U537O	3/20/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,567	2,628	2,691	3,370	3,450	3,532	-	-	-
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,926	1,971	2,018	3,370	3,450	3,532	-	-	-
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,827	1,887	1,949	3,197	3,302	3,410	-	-	-
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,918	1,973	2,030	3,357	3,453	3,553	115	115	115
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,567	2,628	2,691	3,370	3,450	3,532	-	-	-
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating)	4/17/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,951	2,008	2,065	3,415	3,513	3,614	-	-	-
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating)	4/17/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,602	2,677	2,754	3,415	3,513	3,614	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	Gross Other Benefits 401k, DCP, ESPP 2023 ESPP	2024 ESPP	2025 ESPP
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,237	2,294	2,360	2,936	3,011	3,098	-	-	-
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,828	1,888	1,951	3,199	3,304	3,414	-	-	-
528	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,555	2,628	2,704	3,353	3,450	3,549	-	-	-
529	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,916	1,971	2,028	3,353	3,450	3,549	-	-	-
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	3.50%	401(k) Roth 1-3/100% 4-5/50%	2,132	2,203	2,276	3,199	3,304	3,414	-	-	-
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023			-	-	-	3,213	3,290	3,369	-	-	-
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,448	2,506	2,567	3,213	3,290	3,369	-	-	-
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023			-	-	-	3,224	3,302	3,381	-	-	-
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023			-	-	-	3,407	3,505	3,605	-	-	-
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,435	2,516	2,598	3,197	3,302	3,410	-	-	-
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023			-	-	-	3,009	3,109	3,201	-	-	-
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,554	2,618	-	3,918	4,015	-	-	-
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,464	2,517	-	3,779	3,861	-	-	-
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,216	2,268	-	3,399	3,478	-	-	-
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,216	2,268	-	3,399	3,478	-	-	-
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,145	2,196	-	3,290	3,369	-	-	-
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,249	2,303	-	3,450	3,532	-	-	-
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,359	2,411	-	3,619	3,697	-	-	-
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,291	2,356	-	3,513	3,614	-	-	-
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,285	2,351	-	3,505	3,605	-	-	-
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,536	2,600	-	3,889	3,988	-	-	-
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,154	2,226	-	3,304	3,414	-	-	-
			Total Collective Bargaining Unit				$1,175,772	$1,230,847	$1,261,918	$1,492,278	$1,572,160	$1,611,806	$97,415	$99,130	$100,890

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	Gross Other Benefits 401k, DCP, ESPP 2023 ESPP	2024 ESPP	2025 ESPP
Non-Collective Bargaining Unit Hourly															
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	4.00%	401(k) Match 1-3/100% 4-5/50%	$2,804	$2,892	$2,985	$3,680	$3,796	$3,918	$0	$0	$0
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	2.50%	401(k) Match 50% up to 5%	2,180	2,248	2,320	-	-	-	-	-	-
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	2.50%	401(k) Match 50% up to 5%	1,898	1,958	2,020	-	-	-	1,340	1,382	1,426
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	2.00%	401(k) Match 50% up to 5%	1,612	1,662	1,715	-	-	-	142	147	151
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	10/3/1988	1.50%	401(k) Match 50% up to 5%	1,027	1,060	1,093	-	-	-	-	-	-
6	246801	LEHP-Production	Plant Operator	2/1/1996	2.50%	401(k) Match 50% up to 5%	1,755	1,810	1,868	-	-	-	-	-	-
7	245706	POCO-Field Services	Crew Leader	9/16/1996	2.50%	401(k) Match 50% up to 5%	1,760	1,815	1,873	-	-	-	-	-	-
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	2.50%	401(k) Match 50% up to 5%	1,714	1,767	1,824	-	-	-	-	-	-
9	245706	POCO-Field Services	Utility Person	7/1/1994	2.50%	401(k) Match 50% up to 5%	1,734	1,789	1,846	-	-	-	-	-	-
10	245501	BNGR-Production	Plant Operator	7/23/1990	2.50%	401(k) Match 50% up to 5%	1,913	1,973	2,036	-	-	-	270	278	287
11	247406	FRCK-Field Services	Utility Person	4/18/1988			-	-	-	-	-	-	-	-	-
12	247406	FRCK-Field Services	Utility Person	1/15/1986			-	-	-	-	-	-	-	-	-
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	2.50%	401(k) Match 50% up to 5%	1,618	1,669	1,722	-	-	-	-	-	-
14	246201	HSHY-Production	Plant Operator	9/27/1993	4.00%	401(k) Match 1-3/100% 4-5/50%	2,710	2,795	2,885	3,557	3,669	3,786	-	-	-
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	4.00%	401(k) Match 1-3/100% 4-5/50%	2,673	2,758	2,846	3,509	3,620	3,735	-	-	-
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	2.50%	401(k) Match 50% up to 5%	1,819	1,877	1,937	-	-	-	257	265	273
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	2.50%	401(k) Match 50% up to 5%	2,111	2,178	2,247	-	-	-	-	-	-
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990			-	-	-	-	-	-	-	-	-
19	247106	MILT-Field Services	Utility Person	11/16/1998			-	-	-	-	-	-	-	-	-
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	2.50%	401(k) Match 50% up to 5%	1,712	1,765	1,822	-	-	-	-	-	-
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	2.50%	401(k) Match 50% up to 5%	1,631	1,682	1,736	-	-	-	2,753	2,753	2,753
22	246506	COAT-Field Services	Utility Person	1/26/1998			-	-	-	3,135	3,234	3,337	-	-	-
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	2.50%	401(k) Match 50% up to 5%	1,893	1,952	2,014	-	-	-	-	-	-
24	245906	GLEN-Field Services	Utility Person	12/27/1994	1.00%	401(k) Match 50% up to 5%	736	759	784	-	-	-	260	268	277
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999	2.50%	401(k) Match 50% up to 5%	1,782	1,837	1,896	-	-	-	-	-	-
26	245606	NAZA-Field Services	Utility Person	10/4/1993	2.50%	401(k) Match 50% up to 5%	1,772	1,828	1,886	-	-	-	-	-	-
27	245906	GLEN-Field Services	Utility Person	6/20/1983			-	-	-	-	-	-	-	-	-
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	1.50%	401(k) Match 50% up to 5%	1,112	1,147	1,183	-	-	-	-	-	-
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	2.50%	401(k) Match 50% up to 5%	1,832	1,890	1,950	-	-	-	-	-	-
30	246401	ROYF-Production	Plant Operator	3/9/1998	2.50%	401(k) Match 50% up to 5%	1,873	1,932	1,994	-	-	-	-	-	-
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987			-	-	-	-	-	-	-	-	-
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	2.50%	401(k) Match 50% up to 5%	1,886	1,945	2,008	-	-	-	-	-	-
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	2.50%	401(k) Match 50% up to 5%	1,787	1,844	1,903	-	-	-	-	-	-
34	245606	NAZA-Field Services	Utility Person	11/26/2001	2.50%	401(k) Match 50% up to 5%	1,789	1,845	1,904	-	-	-	-	-	-
35	246801	LEHP-Production	Utility Person	2/26/1990	2.50%	401(k) Match 50% up to 5%	1,727	1,781	1,838	-	-	-	-	-	-
36	246501	COAT-Production	Plant Operator	5/28/2002			-	-	-	3,689	3,805	3,927	-	-	-
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	2.50%	401(k) Match 50% up to 5%	1,811	1,868	1,928	-	-	-	-	-	-
38	245906	GLEN-Field Services	Utility Person	1/5/2004	1.50%	401(k) Match 50% up to 5%	1,052	1,085	1,120	-	-	-	124	128	132
39	245606	NAZA-Field Services	Utility Person	2/16/2004	2.50%	401(k) Match 50% up to 5%	1,717	1,771	1,827	-	-	-	-	-	-
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N)	12/1/2004	2.50%	401(k) Match 50% up to 5%	1,623	1,674	1,727	-	-	-	-	-	-
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	2.50%	401(k) Match 50% up to 5%	1,666	1,718	1,773	-	-	-	-	-	-
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	1.00%	401(k) Match 50% up to 5%	695	717	740	-	-	-	115	115	115
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	3.00%	401(k) Match 1-3/100% 4-5/50%	2,041	2,105	2,172	3,571	3,684	3,802	-	-	-
44	245506	BNGR-Field Services	Utility Person	11/7/2005			-	-	-	-	-	-	-	-	-
45	245401	SUSQ-Production	Plant Operator	5/15/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,772	2,861	3,528	3,638	3,754	-	-	-
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006			-	-	-	3,616	3,730	3,850	-	-	-
47	245606	NAZA-Field Services	Utility Person	12/18/2006			-	-	-	3,633	3,747	3,866	-	-	-
48	246206	HSHY-Field Services	Utility Person	3/26/2007	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,825	2,914	3,007	3,708	3,825	3,946	1,376	1,376	1,376
49	247106	MILT-Field Services	Utility Person	5/7/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,632	2,714	2,801	3,454	3,563	3,677	-	-	-
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,940	3,033	3,129	3,859	3,980	4,107	1,038	1,070	1,105
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,745	2,831	2,922	3,603	3,716	3,835	242	250	258
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007			-	-	-	4,492	4,634	4,782	-	-	-
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	3,288	3,392	3,500	4,316	4,452	4,594	115	115	115
54	247201	PHBG-Production	Operations Specialist	6/2/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,934	3,027	3,124	3,851	3,973	4,100	-	-	-
55	247106	MILT-Field Services	Utility Person	7/21/2008			-	-	-	3,365	3,472	3,582	-	-	-
56	246501	COAT-Production	Plant Operator	10/6/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,802	2,891	2,982	3,678	3,794	3,915	803	803	803
57	247701	BOGGS-Production	Plant Operator	5/4/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,874	2,964	3,059	3,772	3,890	4,014	634	654	675
58	245706	POCO-Field Services	Utility Person	9/28/2009			-	-	-	3,628	3,742	3,862	-	-	-
59	246506	COAT-Field Services	Utility Person	11/2/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,760	2,847	2,938	3,623	3,737	3,856	-	-	-
60	247401	FRCK-Production	Operator	1/25/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,648	2,731	2,818	3,475	3,585	3,699	350	361	373
61	247206	PHBG-Field Services	Utility Person	3/29/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,836	2,926	3,019	3,723	3,840	3,963	-	-	-
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	3,031	3,126	3,226	3,978	4,103	4,234	459	459	459
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	3,171	3,271	3,375	4,162	4,293	4,430	1,399	1,443	1,489
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,866	2,956	3,050	3,761	3,879	4,003	-	-	-
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,508	2,587	2,669	3,292	3,395	3,503	996	1,027	1,060
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,690	2,775	2,863	3,531	3,642	3,758	-	-	-
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	3.00%	401(k) Match 1-3/100% 4-5/50%	2,380	2,455	2,534	4,166	4,297	4,434	-	-	-
68	247206	PHBG-Field Services	Utility Person	11/7/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,734	2,820	2,911	3,589	3,702	3,820	-	-	-
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	3.50%	401(k) Match 1-3/100% 4-5/50%	2,123	2,189	2,260	3,184	3,284	3,389	214	221	228
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,588	2,670	2,755	3,397	3,505	3,616	228	236	243
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,610	2,692	2,778	3,426	3,533	3,646	-	-	-
72	249150	WILK-Other	Operations Specialist	3/4/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,589	2,671	2,756	3,398	3,506	3,617	228	236	243
73	247306	BRWK-Field Services	Utility Person	4/29/2013			-	-	-	3,680	3,796	3,918	371	383	395
74	245601	NAZA-Production	Plant Operator	6/27/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,931	3,023	3,119	3,847	3,967	4,094	-	-	-
75	247301	BRWK-Production	Operator	9/16/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,849	2,938	3,032	3,739	3,856	3,979	503	519	535
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,728	2,814	2,904	3,580	3,693	3,811	-	-	-
77	247201	PHBG-Production	Plant Operator	2/2/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,748	2,835	2,925	3,606	3,721	3,839	849	875	903
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,741	2,827	2,917	3,598	3,711	3,829	1,209	1,247	1,287
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,550	2,630	2,714	3,347	3,452	3,563	115	115	115
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,778	2,866	2,957	3,646	3,761	3,882	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

						Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	3.00%	401(k) Match 1-3/100% 4-5/50%	1,767	1,823	1,881	3,092	3,190	3,292	-	-	-
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,874	2,964	3,059	3,772	3,890	4,014	-	-	-
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,502	2,581	2,663	3,284	3,387	3,496	552	569	588
84	245406	SUSQ-Field Services	Utility Person	12/14/2015			-	-	-	3,102	3,200	3,302	-	-	-
85	246506	COAT-Field Services	Utility Person	2/3/2016			-	-	-	3,350	3,455	3,566	-	-	-
86	247103	MILT-Cust Service	Utility Person	3/7/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,552	2,632	2,716	3,349	3,454	3,565	-	-	-
87	246206	HSHY-Field Services	Utility Person	2/29/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,858	2,948	3,043	3,751	3,870	3,993	-	-	-
88	246201	HSHY-Production	Plant Operator	2/29/2016	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,710	2,795	2,885	3,557	3,669	3,786	2,294	2,294	2,294
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,758	2,845	2,936	3,620	3,734	3,853	-	-	-
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,710	2,795	2,885	3,557	3,669	3,786	120	123	127
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	4,116	4,245	4,381	5,402	5,572	5,750	363	375	387
92	246206	HSHY-Field Services	Utility Person	6/13/2016	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,585	2,666	2,751	3,393	3,499	3,611	459	459	459
93	246206	HSHY-Field Services	Utility Person	7/11/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,542	2,622	2,705	3,336	3,441	3,551	785	810	835
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,931	3,023	3,119	3,847	3,967	4,094	388	400	413
95	245306	ABNG-Field Services	Utility Person	10/24/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,590	2,672	2,757	3,399	3,507	3,619	-	-	-
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,753	2,840	2,931	3,613	3,727	3,847	364	376	388
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,370	2,445	2,522	3,111	3,209	3,311	523	539	556
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,285	3,388	3,497	4,311	4,447	4,590	-	-	-
99	247306	BRWK-Field Services	Utility Person	1/16/2017	2.00%	401(k) Match 1-3/100% 4-5/50%	1,239	1,277	1,318	3,251	3,353	3,461	-	-	-
100	246506	COAT-Field Services	Utility Person	2/13/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,418	2,494	2,573	3,173	3,273	3,377	-	-	-
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,598	2,680	2,765	3,410	3,518	3,630	-	-	-
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015			-	-	-	1,985	2,048	2,113	-	-	-
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	1,499	1,546	1,595	1,968	2,029	2,094	-	-	-
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018			-	-	-	3,161	3,261	3,365	-	-	-
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	1.00%	401(k) Match 1-3/100% 4-5/50%	597	616	636	3,135	3,234	3,337	-	-	-
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,653	2,737	2,825	3,483	3,592	3,707	-	-	-
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,175	3,276	3,380	4,168	4,299	4,436	-	-	-
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,645	2,729	2,815	3,472	3,581	3,695	-	-	-
109	246801	LEHP-Production	Utility Person	7/23/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,289	2,361	2,436	3,005	3,099	3,198	505	521	537
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,474	3,583	3,697	4,559	4,703	4,853	-	-	-
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,761	2,848	2,939	3,624	3,738	3,858	229	229	229
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	1.00%	401(k) Match 1-3/100% 4-5/50%	507	523	540	2,663	2,746	2,834	-	-	-
113	246501	COAT-Production	Plant Operator	9/24/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,973	2,035	2,100	3,452	3,560	3,674	928	957	988
114	245906	GLEN-Field Services	Utility Person	10/8/2018			-	-	-	3,142	3,240	3,343	92	92	92
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,506	2,585	2,668	3,290	3,393	3,501	111	114	118
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,172	2,241	2,313	2,851	2,941	3,035	115	115	115
117	246206	HSHY-Field Services	Utility Person	10/8/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,805	1,862	1,922	3,159	3,259	3,363	229	229	229
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,085	2,150	2,219	3,648	3,763	3,884	46	46	46
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,616	2,699	2,785	3,433	3,542	3,655	184	184	184
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	2,279	2,351	2,426	3,419	3,526	3,639	-	-	-
121	246206	HSHY-Field Services	Utility Person	1/14/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,432	2,509	2,589	3,192	3,293	3,398	1,073	1,107	1,142
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,674	2,759	2,846	3,510	3,621	3,736	354	365	377
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,045	2,109	2,176	3,578	3,691	3,808	23	23	23
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,896	4,019	4,148	5,114	5,275	5,444	459	459	459
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	3.50%	401(k) Match 1-3/100% 4-5/50%	2,493	2,572	2,654	3,740	3,858	3,980	115	115	115
126	248801	TURB-Production	Plant Operator	7/8/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,530	2,609	2,693	3,320	3,425	3,534	1,116	1,151	1,188
127	240116	CORP-Maint Services	Sr Reliability Engineering Analyst	7/15/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	3,091	3,188	3,289	5,409	5,579	5,756	-	-	-
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	4.00%	401(k) Match 1-3/100% 4-5/50%	2,745	2,831	2,922	3,603	3,716	3,835	918	918	918
129	241406	STNW-Field Service	Utility Person	12/5/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,600	1,651	1,703	2,801	2,888	2,981	-	-	-
130	246206	HSHY-Field Services	Utility Person	2/2/2016	3.00%	401(k) Match 1-3/100% 4-5/50%	1,760	1,815	1,872	3,079	3,176	3,277	92	92	92
131	241406	STNW-Field Service	Utility Person	3/3/1999	3.00%	401(k) Match 1-3/100% 4-5/50%	1,600	1,651	1,703	2,801	2,888	2,981	-	-	-
132	247201	PHBG-Production	Plant Operator	10/21/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,506	2,584	2,667	3,289	3,392	3,500	442	456	471
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,663	2,748	3,388	3,495	3,606	-	-	-
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,974	2,036	2,102	3,455	3,564	3,678	-	-	-
135	247206	PHBG-Field Services	Utility Person	1/27/2020			-	-	-	3,261	3,364	3,472	-	-	-
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,072	3,169	3,270	4,032	4,159	4,292	-	-	-
137	241406	STNW-Field Service	Foreperson	1/8/1990	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,913	3,005	3,101	3,824	3,944	4,070	459	459	459
138	246406	ROYF-Field Services	Utility Person	3/23/2020	3.00%	401(k) Roth 1-3/100% 4-5/50%	1,934	1,994	2,058	3,384	3,490	3,602	229	229	229
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,609	2,691	2,777	3,425	3,532	3,645	161	161	161
140	246406	ROYF-Field Services	Utility Person	4/13/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,937	1,998	2,062	3,391	3,497	3,609	-	-	-
141	247106	MILT-Field Services	Utility Person	4/13/2020	3.50%	401(k) Match 1-3/100% 4-5/50%	2,170	2,238	2,309	3,255	3,357	3,464	-	-	-
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,607	2,689	2,775	3,422	3,530	3,643	-	-	-
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,704	1,758	1,814	2,982	3,076	3,175	-	-	-
144	245701	POCO-Production	Plant Operator	4/27/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,877	1,936	1,998	3,285	3,388	3,497	-	-	-
145	246401	ROYF-Production	Plant Operator	5/4/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,739	2,825	2,916	3,596	3,708	3,827	688	688	688
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	3.00%	401(k) Roth 1-3/100% 4-5/50%	1,563	1,613	1,664	2,736	2,823	2,913	-	-	-
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	3.50%	401(k) Match 1-3/100% 4-5/50%	2,668	2,752	2,840	4,002	4,128	4,260	229	229	229
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	3.50%	401(k) Match 1-3/100% 4-5/50%	1,929	1,989	2,053	2,893	2,984	3,079	389	401	414
149	240116	CORP-Maint Services	Reliability Engineering Analyst	6/1/2020			-	-	-	4,714	4,862	5,017	-	-	-
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	2.00%	401(k) Roth 1-3/100% 4-5/50%	1,194	1,232	1,271	3,135	3,234	3,337	-	-	-
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,435	2,512	2,592	3,197	3,297	3,403	1,074	1,108	1,144
152	247106	MILT-Field Services	Utility Person	10/19/2020	3.50%	401(k) Match 1-3/100% 4-5/50%	2,138	2,206	2,276	3,207	3,308	3,414	-	-	-
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	2,588	2,670	2,755	4,529	4,672	4,821	-	-	-
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,860	1,919	1,980	3,256	3,358	3,465	-	-	-
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,343	2,416	2,493	3,075	3,171	3,272	46	46	46

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	Gross Other Benefits 401k, DCP, ESPP 2023 ESPP	2024 ESPP	2025 ESPP
156	245506	BNGR-Field Services	Utility Person	2/22/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,310	2,383	2,459	3,032	3,127	3,227	-	-	-
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,161	2,229	2,300	2,837	2,926	3,019	-	-	-
158	246801	LEHP-Production	Utility Person	4/12/2021	3.50%	401(k) Match 1-3/100% 4-5/50%	2,016	2,079	2,146	3,023	3,119	3,218	-	-	-
159	246506	COAT-Field Services	Utility Person	4/13/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,927	1,988	2,051	3,373	3,479	3,590	-	-	-
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,349	2,422	2,500	3,083	3,179	3,281	-	-	-
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,780	2,867	2,959	3,648	3,763	3,884	-	-	-
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,663	1,716	1,770	2,910	3,002	3,098	229	229	229
163	240114	CORP-Engineering	GIS Analyst	6/1/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,172	2,240	2,312	2,850	2,940	3,034	96	99	102
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,547	2,628	2,711	3,343	3,449	3,558	-	-	-
165	247206	PHBG-Field Services	Utility Person	7/6/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,663	2,749	3,389	3,496	3,608	-	-	-
166	245906	GLEN-Field Services	Utility Person	7/12/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,516	2,595	2,678	3,302	3,406	3,514	115	115	115
167	246401	ROYF-Production	Plant Operator	7/19/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,063	2,128	2,196	3,610	3,724	3,842	-	-	-
168	241106	PITT-Field Services	Operations Specialist	9/7/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,522	2,602	2,684	3,311	3,415	3,523	459	459	459
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,018	2,081	2,147	3,531	3,642	3,758	-	-	-
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,954	2,016	2,080	3,420	3,528	3,640	-	-	-
171	240116	CORP-Maint Services	Reliability Engineering Analyst	10/18/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	3,090	3,187	3,289	4,056	4,183	4,317	-	-	-
172	246506	COAT-Field Services	Utility Person	11/8/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,344	2,417	2,494	3,076	3,172	3,273	-	-	-
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,903	2,995	3,091	5,081	5,241	5,409	-	-	-
174	246506	COAT-Field Services	Utility Person	11/9/2021	1.00%	401(k) Match 1-3/100% 4-5/50%	586	604	623	3,076	3,172	3,273	-	-	-
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	3.50%	401(k) Match 1-3/100% 4-5/50%	1,498	1,546	1,595	2,247	2,318	2,393	-	-	-
176	247106	MILT-Field Services	Utility Person	11/22/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,405	2,481	2,561	3,157	3,257	3,361	-	-	-
177	246201	HSHY-Production	Plant Operator	1/10/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,547	2,628	2,711	3,343	3,449	3,558	46	46	46
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	1/10/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,739	1,793	1,850	3,043	3,138	3,238	-	-	-
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,936	1,996	2,060	3,387	3,494	3,605	-	-	-
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,413	2,489	2,568	3,167	3,267	3,371	-	-	-
181	247206	PHBG-Field Services	Utility Person	2/21/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,502	2,581	2,663	3,284	3,387	3,496	1,104	1,139	1,175
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	2/28/2022	3.50%	401(k) Match 1-3/100% 4-5/50%	1,737	1,792	1,849	2,606	2,688	2,773	175	181	186
183	245306	ABNG-Field Services	Utility Person	2/21/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,719	1,773	1,830	3,009	3,103	3,202	-	-	-
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,465	2,542	2,623	3,235	3,337	3,443	-	-	-
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,290	1,331	1,374	2,258	2,329	2,404	-	-	-
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,420	2,496	2,576	3,177	3,277	3,381	229	229	229
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	2.00%	401(k) Match 1-3/100% 4-5/50%	1,091	1,125	1,161	2,864	2,954	3,049	-	-	-
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,323	2,396	2,473	3,049	3,145	3,246	-	-	-
189	240306	CORP-Field Service	Operations Specialist	4/25/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,667	2,750	2,838	3,500	3,610	3,725	-	-	-
190	245306	ABNG-Field Services	Utility Person	5/16/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,770	1,825	1,884	3,097	3,194	3,296	-	-	-
191	241401	STNW-Production	Plant Operator	6/6/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,663	1,716	1,770	2,910	3,002	3,098	-	-	-
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,055	2,119	2,187	3,596	3,708	3,827	-	-	-
193	245506	BNGR-Field Services	Utility Person	6/20/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,588	2,670	2,755	3,397	3,505	3,616	-	-	-
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	6/20/2022	3.50%	401(k) Match 1-3/100% 4-5/50%	1,690	1,743	1,798	2,534	2,614	2,698	23	23	23
195	245401	SUSQ-Production	Plant Operator	6/27/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,747	1,802	1,860	3,057	3,154	3,255	-	-	-
196	241401	STNW-Production	Plant Operator	7/5/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,663	1,716	1,770	2,910	3,002	3,098	-	-	-
197	246801	LEHP-Production	Utility Person	7/18/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,243	2,314	2,388	2,944	3,038	3,134	-	-	-
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/18/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,481	1,527	1,576	2,591	2,673	2,758	-	-	-
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,455	2,533	2,614	3,223	3,325	3,431	-	-	-
200	247106	MILT-Field Services	Utility Person	7/18/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,420	2,496	2,575	3,176	3,275	3,380	-	-	-
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,839	1,897	1,958	3,218	3,319	3,426	-	-	-
202	245501	BNGR-Production	Plant Operator	8/29/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,334	2,408	2,485	3,064	3,160	3,261	206	212	219
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,334	2,407	2,484	3,063	3,159	3,260	-	-	-
204	245401	SUSQ-Production	Plant Operator	9/19/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,329	2,403	2,480	3,057	3,154	3,255	-	-	-
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,411	2,487	2,567	3,165	3,264	3,369	-	-	-
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,547	2,628	2,711	3,343	3,449	3,558	-	-	-
207	245306	ABNG-Field Services	Utility Person	10/10/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,213	2,283	2,355	2,905	2,996	3,091	-	-	-
208	245306	ABNG-Field Services	Utility Person	10/17/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,213	2,283	2,355	2,905	2,996	3,091	-	-	-
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,130	2,197	2,267	2,795	2,883	2,975	-	-	-
210	246406	ROYF-Field Services	Utility Person	11/14/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,422	2,498	2,577	3,179	3,279	3,383	-	-	-
211	246501	COAT-Production	Plant Operator	11/28/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,485	2,563	2,645	3,261	3,364	3,472	1,376	1,376	1,376
212	246406	ROYF-Field Services	Utility Person	1/3/2023	3.50%	401(k) Roth 1-3/100% 4-5/50%	2,192	2,261	2,333	3,289	3,392	3,500	-	-	-
213	245706	POCO-Field Services	Utility Person	1/3/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,255	2,326	2,400	2,960	3,053	3,150	-	-	-
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,660	1,712	1,766	2,905	2,996	3,091	-	-	-
215	247306	BRWK-Field Services	Utility Person	3/6/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,297	2,369	2,445	3,015	3,110	3,210	-	-	-
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,832	1,890	1,950	3,206	3,307	3,412	-	-	-
217	245606	NAZA-Field Services	Utility Person	3/20/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,443	2,520	2,600	3,206	3,307	3,412	-	-	-
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,717	1,771	1,827	3,005	3,099	3,198	-	-	-
219	245601	NAZA-Production	Plant Operator	6/5/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,817	1,874	1,933	3,179	3,279	3,383	-	-	-
220	245106	NORR-Field Services	Utility Person	6/5/2023			-	-	-	3,289	3,392	3,500	-	-	-
221	246406	ROYF-Field Services	Utility Person	6/5/2023			-	-	-	3,124	3,223	3,326	-	-	-
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,506	2,584	2,667	3,289	3,392	3,500	-	-	-
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017	3.00%	401(k) Match 1-3/100% 4-5/50%	727	749	773	1,272	1,312	1,353	-	-	-
224	245106	NORR-Field Services	Operations Specialist - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	2,632	2,716	-	3,996	4,123	-	-	-
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	2,632	2,716	-	3,996	4,123	-	-	-
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	2,632	2,716	-	3,996	4,123	-	-	-
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	2,632	2,716	-	3,996	4,123	-	-	-
228	241103	PITT-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	2,096	2,163	-	3,181	3,283	-	-	-
229	249103	WILK-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	2,096	2,163	-	3,181	3,283	-	-	-
230	241103	PITT-Cust Service	Compliance Representative - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	1,844	1,903	-	2,800	2,890	-	-	-
			Total Non-Collective Bargaining Unit Hourly				$445,191	$475,761	$490,947	$624,977	$669,783	$691,165	$36,601	$37,271	$37,974

Pennsylvania-American Water Company - Wastewater SSS General Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
Non-Collective Bargaining Unit Salary															
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	2.50%	401(k) Match 50% up to 5%	$2,260	$233	$241	$0	$0	$0	$319	$33	$34
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	4.00%	401(k) Match 1-3/100% 4-5/50%	4,736	4,885	5,040	6,216	6,411	6,615	-	-	-
3	246701	COWW-Production	Supvr Production	3/6/2000	2.50%	401(k) Match 50% up to 5%	2,290	2,362	2,438	-	-	-	1,617	1,668	1,721
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	2.50%	401(k) Match 50% up to 5%	2,400	2,475	2,554	-	-	-	339	349	361
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,920	3,012	3,108	3,833	3,953	4,080	1,031	1,063	1,097
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	4.00%	401(k) Match 1-3/100% 4-5/50%	3,591	3,704	3,822	4,714	4,862	5,017	-	-	-
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	3,120	3,218	3,321	4,095	4,224	4,358	275	275	275
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,839	3,959	4,086	5,039	5,197	5,363	169	175	180
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,427	3,535	3,648	4,498	4,640	4,788	-	-	-
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	3.00%	401(k) Match 1-3/100% 4-5/50%	2,653	2,736	2,824	4,643	4,788	4,941	-	-	-
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	4.00%	401(k) Match 1-3/100% 4-5/50%	3,022	3,118	3,217	3,967	4,092	4,223	459	459	459
12	249401	YORKWW-Production	Supvr Production	6/24/2013	3.00%	401(k) Match 1-3/100% 4-5/50%	2,503	2,581	2,664	4,380	4,518	4,662	-	-	-
			Total Non-Collective Bargaining Unit Salary				$36,762	$35,819	$36,963	$41,384	$42,684	$44,047	$4,209	$4,022	$4,127
Collective Bargaining Unit															
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	8/4/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	$2,359	$2,417	$2,484	$3,096	$3,172	$3,260	$0	$0	$0
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	3.50%	401(k) Match 1-3/100% 4-5/50%	2,064	2,115	2,173	3,096	3,172	3,260	92	92	92
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,281	2,339	2,406	2,994	3,070	3,158	-	-	-
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	12/17/1984	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	-	-	-
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/26/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	688	688	688
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	5/22/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	367	367	367
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	3.00%	401(k) Match 1-3/100% 4-5/50%	1,611	1,655	1,705	2,819	2,896	2,984	-	-	-
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	3.00%	401(k) Match 1-3/100% 4-5/50%	1,894	1,938	1,988	3,315	3,392	3,479	-	-	-
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	2.00%	401(k) Match 1-3/100% 4-5/50%	1,263	1,292	1,325	3,315	3,392	3,479	-	-	-
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	3.00%	401(k) Match 1-3/100% 4-5/50%	1,611	1,655	1,705	2,819	2,896	2,984	-	-	-
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	12/7/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	-	-	-
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	8/20/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	-	-	-
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	8/3/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	-	-	-
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	4/24/2017	3.00%	401(k) Match 1-3/100% 4-5/50%	1,769	1,813	1,863	3,096	3,172	3,260	-	-	-
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,894	1,938	1,988	3,315	3,392	3,479	-	-	-
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,711	1,755	1,805	2,994	3,070	3,158	-	-	-
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,711	1,755	1,805	2,994	3,070	3,158	-	-	-
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	-	-	-
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,711	1,755	1,805	2,994	3,070	3,158	-	-	-
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	2.00%	401(k) Roth 1-3/100% 4-5/50%	1,179	1,209	1,242	3,096	3,172	3,260	-	-	-
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,611	1,655	1,705	2,819	2,896	2,984	-	-	-
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,281	2,339	2,406	2,994	3,070	3,158	-	-	-
			Total Collective Bargaining Unit				$43,459	$44,548	$45,793	$67,424	$69,112	$71,041	$1,147	$1,147	$1,147

Pennsylvania-American Water Company - Wastewater SSS General Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
Non-Collective Bargaining Unit Hourly															
1	246701	COWW-Production	Wastewater Operator	9/20/1999	4.00%	401(k) Match 1-3/100% 4-5/50%	$2,787	$2,875	$2,967	$3,658	$3,773	$3,894	$0	$0	$0
2	246706	COWW-Field Services	Utility Person	5/30/1995			-	-	-	3,374	3,480	3,591	-	-	-
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	4.00%	401(k) Match 1-3/100% 4-5/50%	2,932	3,024	3,121	3,849	3,969	4,096	-	-	-
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	2.50%	401(k) Match 50% up to 5%	1,822	1,880	1,940	-	-	-	-	-	-
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	2.50%	401(k) Match 50% up to 5%	1,884	1,944	2,006	-	-	-	-	-	-
6	246706	COWW-Field Services	Crew Leader	11/10/2003	3.00%	401(k) Match 1-3/100% 4-5/50%	2,041	2,106	2,173	3,573	3,685	3,803	-	-	-
7	246901	LPWW-Production	Plant Operator	6/2/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,764	2,851	2,942	3,627	3,741	3,861	610	629	649
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	3.00%	401(k) Match 1-3/100% 4-5/50%	2,233	2,303	2,377	3,908	4,031	4,159	229	229	229
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,955	3,048	3,145	3,878	4,000	4,127	-	-	-
10	242601	CLYWW-Production	Plant Operator	7/31/2008			-	-	-	3,574	3,687	3,804	-	-	-
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,897	2,988	3,084	3,803	3,922	4,047	1,278	1,318	1,360
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,570	2,651	2,735	3,373	3,479	3,590	-	-	-
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	3,205	3,307	3,412	4,207	4,340	4,478	92	92	92
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	4.00%	401(k) Match 1-3/100% 4-5/50%	2,653	2,737	2,825	3,483	3,592	3,707	-	-	-
15	246706	COWW-Field Services	Utility Person	3/14/2016	3.00%	401(k) Match 1-3/100% 4-5/50%	1,866	1,925	1,986	3,266	3,369	3,476	-	-	-
16	246901	LPWW-Production	Plant Operator	9/11/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,504	2,582	2,665	3,286	3,389	3,498	552	570	588
17	246701	COWW-Production	Wastewater Operator	5/14/2018	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,683	2,768	2,856	3,522	3,633	3,749	-	-	-
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,400	2,476	2,555	3,150	3,249	3,353	-	-	-
19	248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	10/15/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,761	2,848	2,939	3,624	3,738	3,858	365	377	389
20	246706	COWW-Field Services	Utility Person	3/25/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,400	2,475	2,554	3,149	3,248	3,352	-	-	-
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,117	3,215	3,317	4,091	4,219	4,354	138	142	146
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,015	3,110	3,210	3,957	4,082	4,213	399	412	425
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	1,939	2,000	2,064	3,394	3,500	3,612	-	-	-
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	3.50%	401(k) Match 1-3/100% 4-5/50%	2,246	2,317	2,390	3,369	3,475	3,586	566	584	603
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,589	2,671	2,756	3,398	3,506	3,617	1,142	1,178	1,216
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,206	3,307	3,413	4,208	4,341	4,479	-	-	-
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,628	2,710	2,797	3,449	3,557	3,671	-	-	-
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,589	2,671	2,756	3,398	3,506	3,617	571	589	608
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,937	1,998	2,061	3,389	3,496	3,608	229	229	229
30	248706	Nw Cmbrlnd WW FS	Utility Person	9/20/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,243	2,314	2,388	2,944	3,038	3,134	-	-	-
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021	3.00%	401(k) Roth 1-3/100% 4-5/50%	1,783	1,840	1,899	3,121	3,220	3,323	-	-	-
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,941	2,003	2,066	3,397	3,505	3,616	-	-	-
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,879	1,938	2,000	3,289	3,392	3,500	-	-	-
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,368	2,442	2,520	3,108	3,205	3,307	344	344	344
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,941	2,003	2,066	3,397	3,505	3,616	-	-	-
36	248706	Nw Cmbrlnd WW FS	Utility Person	9/6/2022	2.00%	401(k) Match 1-3/100% 4-5/50%	1,208	1,246	1,285	3,170	3,270	3,374	-	-	-
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,683	1,736	1,791	2,944	3,038	3,134	-	-	-
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,464	2,542	2,623	3,234	3,336	3,442	-	-	-
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,879	1,938	2,000	3,289	3,392	3,500	-	-	-
40	246701	COWW-Production	Wastewater Operator	1/3/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,673	2,757	2,845	3,508	3,619	3,734	-	-	-
41	248701	Nw Cmbrnlnd WW Prod	Utility Person	2/6/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,707	1,761	1,817	2,987	3,081	3,180	-	-	-
42	246706	COWW-Field Services	Utility Person	3/6/2023			-	-	-	3,069	3,166	3,267	-	-	-
			Total Non-Collective Bargaining Unit Hourly				$92,395	$95,304	$98,345	$138,415	$142,772	$147,328	$6,516	$6,694	$6,879

Pennsylvania-American Water Company - Wastewater CSS Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP								
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
Non-Collective Bargaining Unit Salary															
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000	0.50%	401(k) Match 50% up to 5%	$478	$493	$509	$0	$0	$0	$0	$0	$0
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,096	3,194	3,296	4,064	4,192	4,327	229	229	229
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,720	2,806	2,895	3,570	3,682	3,800	600	619	639
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002			-	-	-	6,156	6,349	6,552			
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007			-	-	-	4,043	4,169	4,302			
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	3,400	3,507	3,619	4,463	4,603	4,750	138	138	138
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	3,366	3,471	3,582	4,417	4,556	4,701			
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982	4.00%	401(k) Match 1-3/100% 4-5/50%	3,715	3,832	3,954	4,876	5,030	5,190			
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003	3.00%	401(k) Match 1-3/100% 4-5/50%	3,106	3,204	3,306	5,435	5,606	5,785			
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,520	3,631	3,746	4,620	4,765	4,917	311	320	331
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,818	3,939	4,064	5,011	5,170	5,334			
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,171	3,271	3,375	4,162	4,293	4,429			
			Total Non-Collective Bargaining Unit Salary				$30,390	$31,347	$32,348	$50,816	$52,415	$54,089	$1,278	$1,306	$1,336
Collective Bargaining Unit															
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009			$0	$0	$0	$3,327	$3,393	$3,460	$783	$798	$814
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006			-	-	-	3,594	3,666	3,738	229	229	229
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005			-	-	-	3,177	3,239	3,303	-	-	-
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002			-	-	-	3,327	3,393	3,460	-	-	-
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008			-	-	-	3,327	3,393	3,460	-	-	-
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016			-	-	-	3,177	3,239	3,303	-	-	-
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012			-	-	-	3,177	3,239	3,303	-	-	-
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013			-	-	-	3,177	3,239	3,303	-	-	-
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990			-	-	-	3,327	3,393	3,460	-	-	-
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005			-	-	-	3,327	3,393	3,460	-	-	-
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008			-	-	-	3,177	3,239	3,303	-	-	-
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007			-	-	-	3,177	3,239	3,303	-	-	-
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016			-	-	-	3,177	3,239	3,303	-	-	-
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009			-	-	-	3,327	3,393	3,460	-	-	-
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005			-	-	-	3,594	3,666	3,738	229	229	229
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005			-	-	-	3,177	3,239	3,303	-	-	-
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009			-	-	-	3,327	3,393	3,460	-	-	-
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008			-	-	-	3,327	3,393	3,460	-	-	-
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008			-	-	-	3,327	3,393	3,460	-	-	-
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009			-	-	-	3,327	3,393	3,460	-	-	-
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005			-	-	-	3,594	3,666	3,738	121	123	126
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011			-	-	-	3,327	3,393	3,460	229	229	229
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987			-	-	-	3,327	3,393	3,460	-	-	-
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997			-	-	-	3,594	3,666	3,738	229	229	229
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005			-	-	-	3,177	3,239	3,303	-	-	-
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006			-	-	-	3,177	3,239	3,303	-	-	-
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011			-	-	-	3,177	3,239	3,303	-	-	-
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013			-	-	-	3,177	3,239	3,303	688	688	688
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012			-	-	-	3,327	3,393	3,460	-	-	-
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009			-	-	-	3,177	3,239	3,303	-	-	-
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013			-	-	-	3,594	3,666	3,738	362	370	377
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992			-	-	-	3,177	3,239	3,303	-	-	-
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016			-	-	-	3,327	3,393	3,460	-	-	-
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006			-	-	-	3,177	3,239	3,303	-	-	-
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012			-	-	-	3,177	3,239	3,303	-	-	-
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007			-	-	-	3,177	3,239	3,303	-	-	-
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006			-	-	-	3,177	3,239	3,303	-	-	-
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997			-	-	-	3,327	3,393	3,460	-	-	-
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006			-	-	-	3,177	3,239	3,303	-	-	-
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006			-	-	-	3,327	3,393	3,460	344	344	344
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017			-	-	-	3,594	3,666	3,738	-	-	-
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008			-	-	-	3,327	3,393	3,460	224	228	233
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016			-	-	-	3,327	3,393	3,460	447	456	465
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006			-	-	-	3,177	3,239	3,303	-	-	-
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005			-	-	-	3,177	3,239	3,303	-	-	-
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	1.00%	401(k) Roth 1-3/100% 4-5/50%	685	698	712	3,594	3,666	3,738	1,208	1,232	1,256
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,846	2,923	2,998	3,736	3,837	3,934	251	258	264
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,036	3,117	3,195	3,985	4,091	4,193	229	229	229
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	3,033	3,114	3,191	3,981	4,087	4,189	-	-	-
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	4.00%	401(k) Match 1-3/100% 4-5/50%	2,971	3,051	3,129	3,899	4,004	4,106	-	-	-

Pennsylvania-American Water Company - Wastewater CSS Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP								
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	4.00%	401(k) Match 1-3/100% 4-5/50%	3,033	3,113	3,190	3,980	4,086	4,187	803	824	845
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	3,036	3,117	3,195	3,985	4,091	4,193	402	413	423
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,786	2,860	2,932	3,657	3,753	3,848	-	-	-
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	4.00%	401(k) Match 1-3/100% 4-5/50%	2,696	2,768	2,838	3,539	3,633	3,725	238	244	250
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	1.00%	401(k) Match 1-3/100% 4-5/50%	545	560	574	2,861	2,938	3,013	-	-	-
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,786	2,860	2,932	3,657	3,753	3,848	459	459	459
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,654	2,726	2,796	3,484	3,578	3,670	585	601	617
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,786	2,860	2,932	3,657	3,753	3,848	-	-	-
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	3.00%	401(k) Match 1-3/100% 4-5/50%	2,128	2,186	2,241	3,724	3,825	3,922	-	-	-
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	3.00%	401(k) Match 1-3/100% 4-5/50%	1,803	1,850	1,896	3,155	3,238	3,318	-	-	-
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	3,212	3,299	3,383	4,216	4,330	4,440	-	-	-
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	4.00%	401(k) Match 1-3/100% 4-5/50%	2,654	2,726	2,796	3,484	3,578	3,670	229	229	229
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,531	2,600	2,666	3,323	3,412	3,499	-	-	-
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	4.00%	401(k) Match 1-3/100% 4-5/50%	3,036	3,117	3,195	3,985	4,091	4,193	938	963	987
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	3,033	3,114	3,191	3,981	4,087	4,189	-	-	-
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,531	2,600	2,666	3,323	3,412	3,499	-	-	-
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,654	2,726	2,796	3,484	3,578	3,670	-	-	-
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	1.00%	401(k) Match 1-3/100% 4-5/50%	634	646	659	3,327	3,393	3,460	-	-	-
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,535	2,585	2,636	3,327	3,393	3,460	-	-	-
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,535	2,585	2,636	3,327	3,393	3,460	559	570	581
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,045	2,096	2,148	2,683	2,750	2,819	-	-	-
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	2,212	2,267	2,324	2,903	2,975	3,050	-	-	-
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,901	1,939	1,977	3,327	3,393	3,460	-	-	-
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,420	2,468	2,516	3,177	3,239	3,303	107	109	111
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,301	2,363	2,424	4,027	4,136	4,241	-	-	-
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,635	1,679	1,722	2,861	2,938	3,013	-	-	-
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,301	2,363	2,424	4,027	4,136	4,241	-	-	-
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,535	2,585	2,636	3,327	3,393	3,460	-	-	-
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	1,776	1,827	1,879	2,332	2,398	2,466	-	-	-
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	2.00%	401(k) Roth 1-3/100% 4-5/50%	1,189	1,213	1,237	3,122	3,183	3,246	-	-	-
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,784	1,819	1,855	3,122	3,183	3,246	-	-	-
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,379	2,425	2,473	3,122	3,183	3,246	-	-	-
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,036	3,117	3,195	3,985	4,091	4,193	-	-	-
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,838	1,875	1,912	3,217	3,281	3,346	-	-	-
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,451	2,500	2,549	3,217	3,281	3,346	-	-	-
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,667	2,734	-	4,091	4,193	-	-	-
			Total Collective Bargaining Unit				$93,985	$99,002	$101,376	$287,283	$297,740	$304,200	$9,896	$10,057	$10,217
Non-Collective Bargaining Unit Hourly															
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	$1,807	$1,864	$1,923	$3,161	$3,261	$3,365	$0	$0	$0
			Total Non-Collective Bargaining Unit Hourly				$1,807	$1,864	$1,923	$3,161	$3,261	$3,365	$0	$0	$0

Other Post-Employment Benefits (OPEB) and Retiree Medical

Pennsylvania-American Water Company
Other Post Employment Benefits (OPEB)
Pro Forma Adjustment

	6/30/2023 Per Books	Adjustment	6/30/2023 Pro forma Expense
Pro Forma OPEB Cost - Service Costs	$598,455	($73,584)	$524,871
Retiree Medical VEBA	255,008		255,008
Subtotal	853,464	(73,584)	779,879
Capitalization Rate			39.55%
Pro Forma OPEB Cost - Service Costs and Retiree Medical VEBA Capitalized	(383,886)	75,444	(308,442)
Pro Forma OPEB Cost - Non-Service Costs	(7,895,802)	1,623,002	(6,272,800)
OPEB Cost - ASC 715 (FAS 106) and Retiree VEBA Medical	(7,426,224)	1,624,861	(5,801,363)
Total 2023 Pro forma OPEB Expense Adjustment			$1,624,861

	6/30/2023 Pro forma Expense	Adjustment	6/30/2024 Pro forma Expense
Pro Forma OPEB Cost - Service Costs	$524,871	$0	$524,871
Retiree Medical VEBA	255,008	(26,408)	228,600
Subtotal	779,879	(26,408)	753,471
Capitalization Rate	39.55%		39.55%
Pro Forma OPEB Cost - Service Costs Capitalized	(308,442)	10,445	(297,998)
Pro Forma OPEB Cost - Non-Service Costs	(6,272,800)	-	(6,272,800)
OPEB Cost - ASC 715 (FAS 106) and Retiree VEBA Medical	(5,801,363)	(15,964)	(5,817,327)
Total 2024 Pro forma OPEB Expense Adjustment			($15,964)

	6/30/2024 Pro forma Expense	Adjustment	6/30/2025 Pro forma Expense
Pro Forma OPEB Cost - Service Costs	$524,871	$0	$524,871
Retiree Medical VEBA	228,600	-	228,600
Subtotal	753,471	-	753,471
Capitalization Rate	39.55%		39.55%
Pro Forma OPEB Cost - Service Costs Capitalized	(297,998)	-	(297,998)
Pro Forma OPEB Cost - Non-Service Costs	(6,272,800)	-	(6,272,800)
OPEB Cost - ASC 715 (FAS 106) and Retiree VEBA Medical	(5,817,327)	-	(5,817,327)
Total 2025 Pro forma OPEB Expense Adjustment			$0

American Water
Allocation of 2023 Post-Retirement Welfare Cost
Not Reflecting Purchase Accounting
Based on census data collected as of July 1, 2022

	Company Code	Allocation Count	FAS 106 Cost Allocation % [(A)]	Expense Allocation	Retiree Contribution Allocation	Service Cost Allocation
[redacted]						
[redacted]						
PENNSYLVANIA - AM	1024	1,519	23.48%	(5,747,929)	(901,950)	524,871
[redacted]						
TOTAL		6,464	100.00%	($24,480,103)	($3,841,357)	$1,935,026

Pennsylvania-American Water Company - Water Operations
Other Post Employment Benefits (OPEB)

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Retiree Medical (VEBA)
Collective Bargaining Unit					
1	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	$600
2	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	600
3	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	600
4	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	600
5	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	600
6	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	600
7	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	600
8	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	600
9	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	600
10	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	600
11	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	600
12	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	600
13	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	600
14	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	600
15	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006	600
16	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	600
17	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	600
18	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	600
19	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	600
20	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	600
21	244406	KITT-Field Services	Utility Person U537O	6/2/2006	600
22	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	600
23	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	600
24	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	600
25	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	600
26	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	600
27	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006	600
28	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	600
29	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	600
30	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	600
31	241106	PITT-Field Services	Utility Person U537P	3/5/2007	600
32	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	600
33	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	600
34	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	600
35	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	600
36	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	600
37	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007	600
38	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	600
39	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	600
40	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	600
41	246106	MECH-Field Services	Utility Person U648R	7/9/2007	600
42	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	600
43	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	600
44	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	600
45	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	600
46	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	600
47	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	600
48	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	600
49	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	600
50	244101	INDI-Production	Operator U537O	8/13/2007	600
51	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	600
52	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	600
53	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	600
54	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	600
55	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	600
56	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007	600
57	245201	YARD-Production	Plant Operator F473Y	10/8/2007	600
58	241106	PITT-Field Services	Utility Person U537P	10/22/2007	600
59	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	600
60	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	600
61	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007	600
62	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	600
63	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	600
64	243106	NEWC-Field Services	Utility Person U537O	4/28/2008	600
65	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	600

Pennsylvania-American Water Company - Water Operations
Other Post Employment Benefits (OPEB)

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Retiree Medical (VEBA)
66	243306	BUTL-Field Services	Utility Person U537O	6/2/2008	600
67	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	600
68	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	600
69	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	600
70	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	600
71	241106	PITT-Field Services	Utility Person U537P	8/4/2008	600
72	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008	600
73	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	600
74	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	600
75	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	600
76	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	600
77	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	600
78	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	600
79	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	600
80	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	600
81	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009	600
82	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	600
83	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009	600
84	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	600
85	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	600
86	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	600
87	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	600
88	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	600
89	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	600
90	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009	600
91	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	600
92	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	600
93	244406	KITT-Field Services	Utility Person U537O	8/18/2009	600
94	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	600
95	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	600
96	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	600
97	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	600
98	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	600
99	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	600
100	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	600
101	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	600
102	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	600
103	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	600
104	245101	NORR-Production	Plant Operator F473N	6/21/2010	600
105	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	600
106	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	600
107	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	600
108	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	600
109	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	600
110	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	600
111	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010	600
112	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	600
113	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	600
114	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	600
115	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	600
116	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	600
117	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	600
118	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	600
119	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	600
120	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	600
121	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	600
122	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	600
123	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	600
124	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	600
125	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	600
126	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	600
127	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	600
128	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	600
129	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012	600
130	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	600

Pennsylvania-American Water Company - Water Operations
Other Post Employment Benefits (OPEB)

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Retiree Medical (VEBA)
131	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	600
132	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	600
133	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	600
134	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	600
135	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013	600
136	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	600
137	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	600
138	244101	INDI-Production	Operator U537O	5/13/2013	600
139	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	600
140	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	600
141	244606	KANE-Field Services	Utility Person U537O	5/28/2013	600
142	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	600
143	241106	PITT-Field Services	Utility Person U537P	6/3/2013	600
144	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	600
145	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	600
146	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	600
147	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	600
148	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	600
149	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	600
150	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	600
151	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	600
152	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	600
153	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	600
154	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014	600
155	245101	NORR-Production	Plant Operator F473N	3/17/2014	600
156	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	600
157	244506	WARR-Field Services	Utility Person U537O	10/28/2014	600
158	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014	600
159	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	600
160	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	600
161	241106	PITT-Field Services	Utility Person U537P	12/16/2014	600
162	241106	PITT-Field Services	Utility Person U537P	12/9/2014	600
163	241106	PITT-Field Services	Utility Person U537P	12/15/2014	600
164	243151	NEWC-New Castle	Operator U537O	11/16/2015	600
165	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	600
166	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	600
167	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	600
168	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	600
169	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015	600
170	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	600
171	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	600
172	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016	600
173	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	600
174	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	600
175	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	600
176	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	600
177	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	600
178	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	600
179	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	600
180	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	600
181	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	600
182	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016	600
183	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	600
184	246106	MECH-Field Services	Utility Person U648R	10/24/2016	600
185	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012	600
186	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011	600
187	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	600
188	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	600
189	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	600
190	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	600
191	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	600
192	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	600
193	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	600
194	245201	YARD-Production	Plant Operator F473Y	6/19/2017	600
195	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	600

Pennsylvania-American Water Company - Water Operations
Other Post Employment Benefits (OPEB)

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Retiree Medical (VEBA)
196	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	600
197	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	600
198	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	600
199	244601	KANE-Production	Operator U537O	11/6/2017	600
200	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	600
201	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	600
202	241106	PITT-Field Services	Garage Attendant	1/8/2018	600
203	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	600
204	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	600
205	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	600
206	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	600
207	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	600
208	241106	PITT-Field Services	Utility Person U537P	2/27/2018	600
209	245206	YARD-Field Services	Utility A F473Y	3/26/2018	600
210	249160	WILK-Watres	Plant Operator U648S	4/30/2018	600
211	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	600
212	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	600
213	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	600
214	246106	MECH-Field Services	Utility A U648R	5/14/2018	600
215	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	600
216	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	600
217	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	600
218	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	600
219	241106	PITT-Field Services	Utility Person U537P	7/10/2018	600
220	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	600
221	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	600
222	241106	PITT-Field Services	Utility Person U537P	7/24/2018	600
223	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	600
224	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	600
225	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018	600
226	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	600
227	241103	PITT-Cust Service	Field Service Representative U537P	9/4/2018	600
228	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	600
229	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	600
230	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	600
231	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	600
232	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	600
233	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	600
234	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	600
235	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	600
236	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	600
237	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	600
238	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	600
239	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	600
240	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	600
241	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	600
242	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	600
243	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	600
244	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	600
245	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	600
246	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	600
247	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	600
248	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	600
249	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	600
250	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	600
251	244601	KANE-Production	Operator U537O	9/9/2019	600
252	243151	NEWC-New Castle	Operator U537O	9/23/2019	600
253	243301	BUTL-Production	Operator U537O	9/23/2019	600
254	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	600
255	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	600

Pennsylvania-American Water Company - Water Operations
Other Post Employment Benefits (OPEB)

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Retiree Medical (VEBA)
256	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	600
257	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	600
258	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	600
259	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	600
260	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	600
261	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	600
262	244301	CLAR-Production	Operator U537O	4/27/2020	600
263	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	600
264	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	600
265	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	600
266	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	600
267	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	600
268	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	600
269	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	600
270	245206	YARD-Field Services	Utility B F473Y	7/13/2020	600
271	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	600
272	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	600
273	249160	WILK-Watres	Plant Operator U648S	12/15/2020	600
274	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	600
275	249160	WILK-Watres	Plant Operator U648S	12/21/2020	600
276	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	600
277	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	600
278	245206	YARD-Field Services	Utility B F473Y	3/15/2021	600
279	244101	INDI-Production	Operator U537O	3/22/2021	600
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	600
281	243152	NEWC-Ellwood	Operator U537O	4/26/2021	600
282	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	600
283	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	600
284	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	600
285	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	600
286	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	600
287	241106	PITT-Field Services	Utility Person U537P	5/24/2021	600
288	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	600
289	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	600
290	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	600
291	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	600
292	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	600
293	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	600
294	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	600
295	244506	WARR-Field Services	Utility Person U537O	8/16/2021	600
296	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	600
297	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	600
298	244606	KANE-Field Services	Utility Person U537O	8/30/2021	600
299	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	600
300	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	600
301	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	600
302	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	600
303	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	600
304	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	600
305	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	600
306	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	600
307	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	600
308	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	600
309	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	600
310	241106	PITT-Field Services	Utility Person U537P	1/18/2022	600
311	244106	INDI-Field Services	Utility Person U537O	2/14/2022	600
312	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	600
313	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	600
314	245101	NORR-Production	Maint&Relief F473N	3/7/2022	600
315	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	600

Pennsylvania-American Water Company - Water Operations
Other Post Employment Benefits (OPEB)

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Retiree Medical (VEBA)
316	241106	PITT-Field Services	Utility Person U537P	3/8/2022	600
317	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	600
318	249160	WILK-Watres	Plant Operator U648S	3/29/2022	600
319	241106	PITT-Field Services	Utility Person U537P	3/28/2022	600
320	241106	PITT-Field Services	Utility Person U537P	4/5/2022	600
321	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	600
322	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	600
323	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	600
324	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022	600
325	241106	PITT-Field Services	Utility Person U537P	4/4/2022	600
326	241106	PITT-Field Services	Utility Person U537P	4/12/2022	600
327	241106	PITT-Field Services	Utility Person U537P	4/26/2022	600
328	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	600
329	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	600
330	246106	MECH-Field Services	Utility Person U648R	5/16/2022	600
331	245101	NORR-Production	Maint&Relief F473N	5/23/2022	600
332	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	600
333	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	600
334	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	600
335	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	600
336	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	600
337	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	600
338	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	600
339	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	600
340	245201	YARD-Production	Plant Operator F473Y	10/10/2022	600
341	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	600
342	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	600
343	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	600
344	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	600
345	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	600
346	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	600
347	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	600
348	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	600
349	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	600
350	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	600
351	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	600
352	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	600
353	243301	BUTL-Production	Operator U537O	3/20/2023	600
354	243151	NEWC-New Castle	Operator U537O	3/13/2023	600
355	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	600
356	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	600
357	243152	NEWC-Ellwood	Operator U537O	4/10/2023	600
358	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	600
359	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	600
360	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	600
361	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	600
362	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	600
363	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	600
364	249160	WILK-Watres	Plant Operator U648S	5/1/2023	600
365	243106	NEWC-Field Services	Utility Person U537O	5/30/2023	600
366	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	600
367	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023	600
368	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023	600
369	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	600
370	246106	MECH-Field Services	Utility Person U648R	6/26/2023	600
371	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023	600
372	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023	600
373	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	600
374	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	600
375	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	600
376	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023	600
377	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023	600
378	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023	600
379	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023	600
380	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023	600
381	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023	600
				Total	$228,600

Pennsylvania-American Water Company - Wastewater SSS General Operations
Other Post Employment Benefits (OPEB)

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Retiree Medical (VEBA)
Collective Bargaining Unit					
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	8/4/2008	$600
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	600
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	600
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/26/2009	600
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	5/22/2017	600
6	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	600
7	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	600
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	600
9	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	600
10	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	12/7/2009	600
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	8/20/2018	600
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	8/3/2020	600
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	4/24/2017	600
14	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	600
15	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	600
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	600
17	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	600
18	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	600
19	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	600
20	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	600
21	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	600
				Total	$12,600

Pennsylvania-American Water Company - Wastewater CSS Operations
Other Post Employment Benefits (OPEB)

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Retiree Medical (VEBA)
Collective Bargaining Unit					
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	$600
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006	600
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	600
4	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008	600
5	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016	600
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013	600
7	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008	600
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016	600
9	249201	Scranton WW-Prod	Plant Operator	5/26/2009	600
10	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005	600
11	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	600
12	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008	600
13	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008	600
14	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005	600
15	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011	600
16	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997	600
17	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	600
18	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011	600
19	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013	600
20	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992	600
21	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016	600
22	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012	600
23	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007	600
24	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997	600
25	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	600
26	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006	600
27	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017	600
28	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016	600
29	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	600
30	249201	Scranton WW-Prod	Master Electrician	10/1/2007	600
31	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	600
32	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	600
33	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	600
34	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	600
35	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	600
36	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	600
37	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	600
38	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	600
39	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	600
40	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	600
41	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	600
42	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	600
43	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	600
44	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	600
45	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	600
46	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	600
47	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	600
48	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	600
49	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	600
50	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	600
51	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	600
52	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	600
53	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	600
54	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	600
55	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	600
56	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	600
57	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	600
58	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	600
59	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	600
60	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	600
61	249201	Scranton WW-Prod	Plant Operator	5/2/2022	600
62	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	600
63	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	600
64	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	600
65	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	600
66	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	600
67	249201	Scranton WW-Prod	Plant Operator	5/1/2023	600
68	249201	Scranton WW-Prod	Plant Operator	5/15/2023	600
69	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023	600
				Total	$41,400

Pension

Pennsylvania-American Water Company - Water Operations
Pension

Pension

	Gross Amount	Capital Rate	Capitalized Service Costs	Pro Forma Expense
Pro Forma Pension Cost - Service Costs	$3,139,905	39.55%	$1,241,832	$1,898,073
Pro Forma Pension Cost - Non-Service Costs	82,563			82,563
Pro Forma Pension Cost - ASC 715 (FAS 87) Accrual	$3,222,468			$1,980,636
10 yr amortization of Deferred Pension Liability - PWAC				($1,479,089)
10 yr amortization of Deferred Pension Liability - Service Company				(479,329)
Total 10 yr amortization of Deferred Pension Liability				($1,958,418)
Total Pro Forma Pension Expense				$22,218

American Water
Allocation Percentages for 2023 Pension Expense (Before Purchase Accounting)
Based on census data collected as of January 1, 2023

Company	Company Code	Active Participants	2022 Valuation Earnings	Allocation Percentage [1]	Plan Expense Allocation	2023 PBO Service Cost [2]
[redacted]						
Pennsylvania - AM	1024	311	30,196,596	18.56%	3,222,468	3,139,905
[redacted]						
Total		1,633	$162,704,845	100.00%	$17,362,434	$16,330,767

[1] The allocation percentage for each company is equal to the ratio of valuation earnings for that company to total valuation earnings for the entire American Water system.
[2] Allocations of Target Normal Cost and PBO Service Cost represent the sum of the individual amounts for each participant in that company. The 2023 Service Cost is

Purchased Power

Pennsylvania American Water Company
Purchased Power by Segment and Vendor
For Bill Months July 2022 to June 2023
Data comes from Engie system Invoice Detail Report

TEST YEAR ACTUAL DATA

Segment	Vendor Name	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr	2023 May	2023 Jun	Base Year Grand Total
Water Operations	Adams Electric Cooperative, PA	$46	$46	$46	$51	$99	$71	$47	$46	$47	$46	$48	$46	$641
Water Operations	Blakely Electric Light Company	9,479	9,435	8,858	8,282	8,289	9,425	10,063	9,004	8,290	7,673	8,313	-	97,110
Water Operations	Borough of Ellwood City	896	901	744	753	876	1,027	1,626	1,366	1,308	1,143	836	741	12,217
Water Operations	Calpine Energy Solutions	607,759	465,179	398,365	452,389	402,972	399,386	411,857	408,817	380,197	385,276	372,018	375,549	5,059,763
Water Operations	Central Electric Cooperative, Inc./PA	527	727	430	457	435	475	722	853	796	762	580	555	7,319
Water Operations	Citizens Electric Company	2,006	2,086	1,982	1,946	1,912	1,647	1,717	1,465	1,539	1,434	1,765	69	19,569
Water Operations	Columbia Gas of Pennsylvania	-	-	-	-	-	89	42	195	320	202	66	40	953
Water Operations	Constellation NewEnergy/4640	647,107	620,988	614,755	573,162	594,288	636,346	709,474	606,630	584,780	602,034	582,575	589,892	7,362,031
Water Operations	Duquesne Light Company	69,389	62,478	62,284	59,641	62,022	73,008	73,091	60,991	58,179	60,108	65,847	72,778	779,816
Water Operations	Knox Energy Cooperative Association, Inc	12	12	12	12	45	1,605	973	1,368	748	299	239	64	5,389
Water Operations	Met-Ed/3687	15,129	15,182	15,341	16,890	19,585	23,324	25,096	25,017	23,587	20,364	19,901	20,438	239,854
Water Operations	National Fuel/371835	25	23	26	25	26	25	4	22	25	25	24	34	283
Water Operations	Olyphant Borough Electric Company	-	-	-	-	-	-	-	-	20	204	250	201	675
Water Operations	PECO/37629	36,905	38,135	38,586	36,833	36,726	39,513	42,469	39,751	38,258	37,830	37,952	38,597	461,554
Water Operations	Penelec/3687	11,914	12,085	11,751	12,381	13,128	14,595	16,466	16,077	16,302	15,624	14,538	14,363	169,222
Water Operations	Penn Power	8,425	8,104	8,567	7,848	7,849	8,654	10,094	9,667	10,190	9,584	10,081	8,822	107,885
Water Operations	Pike County Light & Power Company	1,986	1,726	1,644	1,671	1,962	2,350	1,685	1,680	1,939	1,657	2,306	1,632	22,237
Water Operations	PPL Electric Utilities/419054	-	-	26	26	27	28	-	25	28	27	27	27	239
Water Operations	PPL Electric Utilities/Allentown	44,289	43,547	43,590	44,145	47,524	47,752	53,048	48,544	50,069	50,007	49,110	48,523	570,148
Water Operations	UGI Utilities Inc	36,329	40,507	31,183	31,981	33,754	47,992	30,387	28,079	30,553	25,917	30,729	13,153	380,563
Water Operations	United Electric Cooperative, Inc.-PA	1,817	1,872	1,848	1,956	3,882	4,729	6,240	6,455	5,861	5,856	2,619	1,854	44,989
Water Operations	Watsontown Borough	20	19	19	19	22	27	28	28	26	23	21	19	271
Water Operations	West Penn Power	82,667	84,414	43,724	42,884	43,476	45,391	50,154	50,548	49,850	47,378	46,926	47,499	634,912
Water Operations Total		**$1,576,725**	**$1,407,465**	**$1,283,780**	**$1,293,351**	**$1,278,898**	**$1,357,459**	**$1,445,283**	**$1,316,631**	**$1,262,911**	**$1,273,474**	**$1,246,768**	**$1,234,896**	**$15,977,641**

TEST YEAR Bill ADJUSTMENTS - removal of closed accounts, credit balances and 12 months of activity for all active accounts

Test Year Data - Bill Month Report From Engie System

Segment	Vendor Name	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr	2023 May	2023 Jun	Base Yr Adjusts Grand Total
Water Operations	Adams Electric Cooperative, PA	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Water Operations	Blakely Electric Light Company	4	(17)	(17)	4	-	-	-	-	22	-	-	8,828	8,823
Water Operations	Borough of Ellwood City	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Operations	Calpine Energy Solutions	(43)	785	22,149	(47)	(13)	-	-	-	-	-	53	75,344	98,229
Water Operations	Central Electric Cooperative, Inc./PA	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Operations	Citizens Electric Company	-	-	-	-	15	-	-	-	-	15	-	1,713	1,744
Water Operations	Columbia Gas of Pennsylvania	136	136	136	136	136	-	-	-	-	-	-	-	681
Water Operations	Constellation NewEnergy/4640	348	2,258	2,204	1,811	380	31,011	3,298	2,013	30,538	1,696	685	18,455	94,698
Water Operations	Duquesne Light Company	-	142	-	-	-	-	-	-	-	-	-	663	805
Water Operations	Knox Energy Cooperative Association, Inc	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Operations	Met-Ed/3687	966	966	966	-	-	-	-	-	-	-	-	-	2,899
Water Operations	National Fuel/371835	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Operations	Olyphant Borough Electric Company	169	169	169	169	169	169	169	169	-	-	-	-	1,351
Water Operations	PECO/37629	129	129	129	129	129	129	129	129	129	129	-	-	1,294
Water Operations	Penelec/3687	(13)	-	-	-	-	-	-	-	-	-	-	281	268
Water Operations	Penn Power	67	67	67	67	67	67	67	-	-	-	-	-	466
Water Operations	Pike County Light & Power Company	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Operations	PPL Electric Utilities/419054	27	27	-	-	-	-	27	-	-	-	-	-	80
Water Operations	PPL Electric Utilities/Allentown	3,550	3,687	3,687	2,772	80	1,149	5,151	424	47	25	461	394	21,426
Water Operations	UGI Utilities Inc	18	18	-	-	-	-	-	-	-	4,031	-	19,555	23,622
Water Operations	United Electric Cooperative, Inc.-PA	-	-	-	-	-	-	-	-	-	-	-	74	74
Water Operations	Watsontown Borough	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Operations	West Penn Power	976	977	26,042	25,863	25,869	25,910	25,787	25,153	25,153	25,065	25,090	63	231,949
Water Operations Total		**$6,335**	**$9,343**	**$55,532**	**$30,904**	**$26,833**	**$58,435**	**$34,627**	**$27,888**	**$55,890**	**$30,962**	**$26,288**	**$125,370**	**$488,408**

Pennsylvania American Water Company
Purchased Power by Segment and Vendor
For Bill Months July 2022 to June 2023
Data comes from Engie system Invoice Detail Report

ADJUSTED TEST YEAR

Test Year Data - Bill Month Report From Engie System

Segment	Vendor Name	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr	2023 May	2023 Jun	Base Yr Adjusted Grand Total
Water Operations	Adams Electric Cooperative, PA	$46	$46	$46	$51	$99	$71	$47	$46	$47	$46	$48	$46	$641
Water Operations	Blakely Electric Light Company	9,483	9,418	8,841	8,286	8,289	9,425	10,063	9,004	8,311	7,673	8,313	8,828	105,934
Water Operations	Borough of Ellwood City	896	901	744	753	876	1,027	1,626	1,366	1,308	1,143	836	741	12,217
Water Operations	Calpine Energy Solutions	607,716	465,964	420,514	452,342	402,959	399,386	411,857	408,817	380,197	385,276	372,070	450,894	5,157,992
Water Operations	Central Electric Cooperative, Inc./PA	527	727	430	457	435	475	722	853	796	762	580	555	7,319
Water Operations	Citizens Electric Company	2,006	2,086	1,982	1,946	1,927	1,647	1,717	1,465	1,539	1,449	1,765	1,782	21,313
Water Operations	Columbia Gas of Pennsylvania	136	136	136	136	136	89	42	195	320	202	66	40	1,634
Water Operations	Constellation NewEnergy/4640	647,456	623,246	616,960	574,973	594,668	667,357	712,772	608,643	615,318	603,730	583,260	608,347	7,456,729
Water Operations	Duquesne Light Company	69,389	62,620	62,284	59,641	62,022	73,008	73,091	60,991	58,179	60,108	65,847	73,442	780,622
Water Operations	Knox Energy Cooperative Association, Inc	12	12	12	12	45	1,605	973	1,368	748	299	239	64	5,389
Water Operations	Met-Ed/3687	16,096	16,149	16,307	16,890	19,585	23,324	25,096	25,017	23,587	20,364	19,901	20,438	242,753
Water Operations	National Fuel/371835	25	23	26	25	26	25	4	22	25	25	24	34	283
Water Operations	Olyphant Borough Electric Company	169	169	169	169	169	169	169	169	20	204	250	201	2,026
Water Operations	PECO/37629	37,034	38,264	38,715	36,962	36,855	39,643	42,598	39,881	38,387	37,960	37,952	38,597	462,848
Water Operations	Penelec/3687	11,901	12,085	11,751	12,381	13,128	14,595	16,466	16,077	16,302	15,624	14,538	14,644	169,490
Water Operations	Penn Power	8,491	8,170	8,633	7,914	7,916	8,721	10,161	9,667	10,190	9,584	10,081	8,822	108,350
Water Operations	Pike County Light & Power Company	1,986	1,726	1,644	1,671	1,962	2,350	1,685	1,680	1,939	1,657	2,306	1,632	22,237
Water Operations	PPL Electric Utilities/419054	27	27	26	26	27	28	27	25	28	27	27	27	319
Water Operations	PPL Electric Utilities/Allentown	47,839	47,234	47,277	46,917	47,604	48,901	58,199	48,969	50,116	50,032	49,571	48,917	591,574
Water Operations	UGI Utilities Inc	36,347	40,525	31,183	31,981	33,754	47,992	30,387	28,079	30,553	29,948	30,729	32,708	404,186
Water Operations	United Electric Cooperative, Inc.-PA	1,817	1,872	1,848	1,956	3,882	4,729	6,240	6,455	5,861	5,856	2,619	1,928	45,063
Water Operations	Watsontown Borough	20	19	19	19	22	27	28	28	26	23	21	19	271
Water Operations	West Penn Power	83,644	85,391	69,766	68,747	69,346	71,301	75,941	75,702	75,004	72,443	72,016	47,563	866,861
Water Operations Total		**$1,583,060**	**$1,416,809**	**$1,339,313**	**$1,324,255**	**$1,305,731**	**$1,415,894**	**$1,479,910**	**$1,344,519**	**$1,318,801**	**$1,304,435**	**$1,273,056**	**$1,360,266**	**$16,466,050**

Future Test Year - adjusted for rate changes

Segment	Vendor Name	2023 Jul	2023 Aug	2023 Sep	2023 Oct	2023 Nov	2023 Dec	2024 Jan	2024 Feb	2024 Mar	2024 Apr	2024 May	2024 Jun	12 Mo Jun 2024 Grand Total
Water Operations	Adams Electric Cooperative, PA	$46	$46	$46	$51	$99	$71	$47	$46	$47	$46	$48	$46	$641
Water Operations	Blakely Electric Light Company	9,483	9,418	8,841	8,286	8,289	9,425	10,063	9,004	8,311	7,673	8,313	8,828	105,934
Water Operations	Borough of Ellwood City	896	901	744	753	876	1,027	1,626	1,366	1,308	1,143	836	741	12,217
Water Operations	Calpine Energy Solutions	607,716	465,964	420,514	452,342	402,959	399,386	411,857	408,817	380,197	385,276	372,070	450,894	5,157,992
Water Operations	Central Electric Cooperative, Inc./PA	527	727	430	457	435	475	722	853	796	762	580	555	7,319
Water Operations	Citizens Electric Company	2,006	2,086	1,982	1,946	1,927	1,647	1,717	1,465	1,539	1,449	1,765	1,782	21,313
Water Operations	Columbia Gas of Pennsylvania	138	138	138	138	138	90	43	197	323	204	67	40	1,652
Water Operations	Constellation NewEnergy/4640	647,456	623,246	616,960	574,973	594,668	667,357	712,772	608,643	615,318	603,730	583,260	608,347	7,456,729
Water Operations	Duquesne Light Company	69,389	62,620	62,284	59,641	62,022	73,008	73,091	60,991	58,179	60,108	65,847	73,442	780,622
Water Operations	Knox Energy Cooperative Association, Inc	12	12	12	12	45	1,605	973	1,368	748	299	239	64	5,389
Water Operations	Met-Ed/3687	16,096	16,149	16,307	16,890	19,585	23,324	25,096	25,017	23,587	20,364	19,901	20,438	242,753
Water Operations	National Fuel/371835	26	24	27	26	27	25	5	23	26	26	25	35	294
Water Operations	Olyphant Borough Electric Company	169	169	169	169	169	169	169	169	20	204	250	201	2,026
Water Operations	PECO/37629	37,036	38,267	38,717	36,965	36,857	39,645	42,600	39,883	38,390	37,962	37,954	38,600	462,875
Water Operations	Penelec/3687	11,901	12,085	11,751	12,381	13,128	14,595	16,466	16,077	16,302	15,624	14,538	14,644	169,490
Water Operations	Penn Power	8,491	8,170	8,633	7,914	7,916	8,721	10,161	9,667	10,190	9,584	10,081	8,822	108,350
Water Operations	Pike County Light & Power Company	1,986	1,726	1,644	1,671	1,962	2,350	1,685	1,680	1,939	1,657	2,306	1,632	22,237
Water Operations	PPL Electric Utilities/419054	27	27	26	26	27	28	27	25	28	27	27	27	319
Water Operations	PPL Electric Utilities/Allentown	47,839	47,234	47,277	46,917	47,604	48,901	58,199	48,969	50,116	50,032	49,571	48,917	591,574
Water Operations	UGI Utilities Inc	36,347	40,525	31,183	31,981	33,754	47,992	30,387	28,079	30,553	29,948	30,729	32,708	404,186
Water Operations	United Electric Cooperative, Inc.-PA	1,817	1,872	1,848	1,956	3,882	4,729	6,240	6,455	5,861	5,856	2,619	1,928	45,063
Water Operations	Watsontown Borough	20	19	19	19	22	27	28	28	26	23	21	19	271
Water Operations	West Penn Power	83,644	85,391	69,766	68,747	69,346	71,301	75,941	75,702	75,004	72,443	72,016	47,563	866,861
Water Operations Total		**$1,583,065**	**$1,416,814**	**$1,339,318**	**$1,324,260**	**$1,305,736**	**$1,415,898**	**$1,479,913**	**$1,344,524**	**$1,318,808**	**$1,304,441**	**$1,273,059**	**$1,360,270**	**$16,466,106**

Pennsylvania American Water Company
Purchased Power by Segment and Vendor
For Bill Months July 2022 to June 2023
Data comes from Engie system Invoice Detail Report

Fully Projected Future Test Year - adjusted for rate changes

Segment	Vendor Name	2024 Jul	2024 Aug	2024 Sep	2024 Oct	2024 Nov	2024 Dec	2025 Jan	2025 Feb	2025 Mar	2025 Apr	2025 May	2025 Jun	12 Mo Jun 2025 Grand Total
Water Operations	Adams Electric Cooperative, PA	$46	$46	$46	$51	$99	$71	$47	$46	$47	$46	$48	$46	$641
Water Operations	Blakely Electric Light Company	9,483	9,418	8,841	8,286	8,289	9,425	10,063	9,004	8,311	7,673	8,313	8,828	105,934
Water Operations	Borough of Ellwood City	896	901	744	753	876	1,027	1,626	1,366	1,308	1,143	836	741	12,217
Water Operations	Calpine Energy Solutions	607,716	465,964	420,514	452,342	402,959	399,386	411,857	408,817	380,197	385,276	372,070	450,894	5,157,992
Water Operations	Central Electric Cooperative, Inc./PA	527	727	430	457	435	475	722	853	796	762	580	555	7,319
Water Operations	Citizens Electric Company	2,006	2,086	1,982	1,946	1,927	1,647	1,717	1,465	1,539	1,449	1,765	1,782	21,313
Water Operations	Columbia Gas of Pennsylvania	138	138	138	138	138	90	43	197	323	204	67	40	1,652
Water Operations	Constellation NewEnergy/4640	647,456	623,246	616,960	574,973	594,668	667,357	712,772	608,643	615,318	603,730	583,260	608,347	7,456,729
Water Operations	Duquesne Light Company	69,389	62,620	62,284	59,641	62,022	73,008	73,091	60,991	58,179	60,108	65,847	73,442	780,622
Water Operations	Knox Energy Cooperative Association, Inc	12	12	12	12	45	1,605	973	1,368	748	299	239	64	5,389
Water Operations	Met-Ed/3687	16,096	16,149	16,307	16,890	19,585	23,324	25,096	25,017	23,587	20,364	19,901	20,438	242,753
Water Operations	National Fuel/371835	26	24	27	26	27	25	5	23	26	26	25	35	294
Water Operations	Olyphant Borough Electric Company	169	169	169	169	169	169	169	169	20	204	250	201	2,026
Water Operations	PECO/37629	37,036	38,267	38,717	36,965	36,857	39,645	42,600	39,883	38,390	37,962	37,954	38,600	462,875
Water Operations	Penelec/3687	11,901	12,085	11,751	12,381	13,128	14,595	16,466	16,077	16,302	15,624	14,538	14,644	169,490
Water Operations	Penn Power	8,491	8,170	8,633	7,914	7,916	8,721	10,161	9,667	10,190	9,584	10,081	8,822	108,350
Water Operations	Pike County Light & Power Company	1,986	1,726	1,644	1,671	1,962	2,350	1,685	1,680	1,939	1,657	2,306	1,632	22,237
Water Operations	PPL Electric Utilities/419054	27	27	26	26	27	28	27	25	28	27	27	27	319
Water Operations	PPL Electric Utilities/Allentown	47,839	47,234	47,277	46,917	47,604	48,901	58,199	48,969	50,116	50,032	49,571	48,917	591,574
Water Operations	UGI Utilities Inc	36,347	40,525	31,183	31,981	33,754	47,992	30,387	28,079	30,553	29,948	30,729	32,708	404,186
Water Operations	United Electric Cooperative, Inc.-PA	1,817	1,872	1,848	1,956	3,882	4,729	6,240	6,455	5,861	5,856	2,619	1,928	45,063
Water Operations	Watsontown Borough	20	19	19	19	22	27	28	28	26	23	21	19	271
Water Operations	West Penn Power	83,644	85,391	69,766	68,747	69,346	71,301	75,941	75,702	75,004	72,443	72,016	47,563	866,861
Water Operations Total		**$1,583,065**	**$1,416,814**	**$1,339,318**	**$1,324,260**	**$1,305,736**	**$1,415,898**	**$1,479,913**	**$1,344,524**	**$1,318,808**	**$1,304,441**	**$1,273,059**	**$1,360,270**	**$16,466,106**

Pennsylvania American Water Company
Purchased Power by Segment and Vendor
For Bill Months July 2022 to June 2023
Data comes from Engie system Invoice Detail Report

TEST YEAR ACTUAL DATA

Segment	Vendor Name	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr	2023 May	2023 Jun	Base Year Grand Total
Wastewater SSS General Operations	Adams Electric Cooperative, PA	$44	$44	$44	$44	$44	$46	$45	$44	$45	$45	$45	$44	$534
Wastewater SSS General Operations	Calpine Energy Solutions	18,175	11,309	10,464	12,137	14,375	15,818	15,343	14,992	15,399	12,859	11,811	80	152,762
Wastewater SSS General Operations	Columbia Gas of Pennsylvania	-	-	-	-	-	-	-	-	71,519	65,772	46,160	32	183,483
Wastewater SSS General Operations	Constellation NewEnergy/4640	56,874	53,362	55,997	53,299	56,602	68,943	75,678	67,357	65,897	60,709	59,391	56,057	730,165
Wastewater SSS General Operations	Met-Ed/3687	184,422	206,916	124,033	92,180	107,295	177,413	94,518	48,476	81,853	72,327	84,649	28,904	1,302,986
Wastewater SSS General Operations	PECO/37629	11,558	11,280	12,460	12,284	12,751	13,514	14,221	13,662	13,953	13,731	14,158	12,659	156,229
Wastewater SSS General Operations	Penelec/3687	1,207	1,181	1,325	1,654	2,779	3,373	3,649	3,396	3,321	3,090	2,771	1,817	29,564
Wastewater SSS General Operations	Penn Power	193	196	180	193	187	254	363	335	299	277	250	195	2,922
Wastewater SSS General Operations	PPL Electric Utilities/Allentown	5,171	5,049	5,206	5,057	7,888	8,619	9,199	9,657	8,938	8,684	5,125	5,131	83,723
Wastewater SSS General Operations	UGI Utilities Inc	96	93	94	91	1,291	1,916	1,680	1,883	1,809	296	698	64	10,010
Wastewater SSS General Operations	West Penn Power	4,003	1,742	1,767	1,877	2,153	2,364	2,456	2,461	2,519	2,125	2,062	2,096	27,624
Wastewater SSS General Operations Total		**$281,741**	**$291,173**	**$211,569**	**$178,815**	**$205,365**	**$292,259**	**$217,152**	**$162,264**	**$265,551**	**$239,914**	**$227,120**	**$107,079**	**$2,680,003**

TEST YEAR Bill ADJUSTMENTS - removal of closed accounts, credit balances and 12 months of activity for all active accounts

Test Year Data - Bill Month Report From Engie System

Segment	Vendor Name	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr	2023 May	2023 Jun	Base Yr Adjusts Grand Total
Wastewater SSS General Operations	Adams Electric Cooperative, PA	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Wastewater SSS General Operations	Calpine Energy Solutions	-	-	-	-	-	-	-	-	-	-	-	13,613	13,613
Wastewater SSS General Operations	Columbia Gas of Pennsylvania	61,150	61,150	61,150	61,150	61,150	61,150	61,150	61,150	-	-	-	61,118	550,320
Wastewater SSS General Operations	Constellation NewEnergy/4640	(210)	(53)	70	(285)	(640)	(445)	(661)	1,011	1,011	1,011	0	1,852	2,662
Wastewater SSS General Operations	Met-Ed/3687	-	-	-	-	-	-	-	-	-	-	-	78,816	78,816
Wastewater SSS General Operations	PECO/37629	109	109	109	109	109	109	109	109	71	-	-	-	943
Wastewater SSS General Operations	Penelec/3687	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater SSS General Operations	Penn Power	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater SSS General Operations	PPL Electric Utilities/Allentown	(272)	(262)	(225)	(268)	(295)	(287)	(322)	-	-	-	-	-	(1,932)
Wastewater SSS General Operations	UGI Utilities Inc	-	-	-	-	-	-	-	-	-	-	-	838	838
Wastewater SSS General Operations	West Penn Power	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater SSS General Operations Total		**$60,778**	**$60,944**	**$61,104**	**$60,706**	**$60,324**	**$60,527**	**$60,276**	**$62,270**	**$1,082**	**$1,011**	**$0**	**$156,237**	**$645,259**

ADJUSTED TEST YEAR

Test Year Data - Bill Month Report From Engie System

Segment	Vendor Name	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr	2023 May	2023 Jun	Base Yr Adjusted Grand Total
Wastewater SSS General Operations	Adams Electric Cooperative, PA	$44	$44	$44	$44	$44	$46	$45	$44	$45	$45	$45	$44	$534
Wastewater SSS General Operations	Calpine Energy Solutions	18,175	11,309	10,464	12,137	14,375	15,818	15,343	14,992	15,399	12,859	11,811	13,692	166,375
Wastewater SSS General Operations	Columbia Gas of Pennsylvania	61,150	61,150	61,150	61,150	61,150	61,150	61,150	61,150	71,519	65,772	46,160	61,150	733,802
Wastewater SSS General Operations	Constellation NewEnergy/4640	56,664	53,309	56,067	53,014	55,963	68,497	75,017	68,368	66,908	61,720	59,391	57,909	732,827
Wastewater SSS General Operations	Met-Ed/3687	184,422	206,916	124,033	92,180	107,295	177,413	94,518	48,476	81,853	72,327	84,649	107,720	1,381,802
Wastewater SSS General Operations	PECO/37629	11,667	11,389	12,569	12,393	12,860	13,623	14,330	13,771	14,024	13,731	14,158	12,659	157,173
Wastewater SSS General Operations	Penelec/3687	1,207	1,181	1,325	1,654	2,779	3,373	3,649	3,396	3,321	3,090	2,771	1,817	29,564
Wastewater SSS General Operations	Penn Power	193	196	180	193	187	254	363	335	299	277	250	195	2,922
Wastewater SSS General Operations	PPL Electric Utilities/Allentown	4,899	4,787	4,980	4,788	7,593	8,332	8,877	9,657	8,938	8,684	5,125	5,131	81,791
Wastewater SSS General Operations	UGI Utilities Inc	96	93	94	91	1,291	1,916	1,680	1,883	1,809	296	698	903	10,849
Wastewater SSS General Operations	West Penn Power	4,003	1,742	1,767	1,877	2,153	2,364	2,456	2,461	2,519	2,125	2,062	2,096	27,624
Wastewater SSS General Operations Total		**$342,519**	**$352,118**	**$272,673**	**$239,521**	**$265,689**	**$352,785**	**$277,428**	**$224,534**	**$266,633**	**$240,925**	**$227,120**	**$263,316**	**$3,325,262**

Pennsylvania American Water Company
Purchased Power by Segment and Vendor
For Bill Months July 2022 to June 2023
Data comes from Engie system Invoice Detail Report

Future Test Year - adjusted for rate changes

Segment	Vendor Name	2023 Jul	2023 Aug	2023 Sep	2023 Oct	2023 Nov	2023 Dec	2024 Jan	2024 Feb	2024 Mar	2024 Apr	2024 May	2024 Jun	12 Mo Jun 2024 Grand Total
Wastewater SSS General Operations	Adams Electric Cooperative, PA	$44	$44	$44	$44	$44	$46	$45	$44	$45	$45	$45	$44	$534
Wastewater SSS General Operations	Calpine Energy Solutions	18,175	11,309	10,464	12,137	14,375	15,818	15,343	14,992	15,399	12,859	11,811	13,692	166,375
Wastewater SSS General Operations	Columbia Gas of Pennsylvania	61,851	61,851	61,851	61,851	61,851	61,851	61,851	61,851	72,338	66,526	46,689	61,851	742,210
Wastewater SSS General Operations	Constellation NewEnergy/4640	56,664	53,309	56,067	53,014	55,963	68,497	75,017	68,368	66,908	61,720	59,391	57,909	732,827
Wastewater SSS General Operations	Met-Ed/3687	184,422	206,916	124,033	92,180	107,295	177,413	94,518	48,476	81,853	72,327	84,649	107,720	1,381,802
Wastewater SSS General Operations	PECO/37629	11,678	11,399	12,582	12,407	12,871	13,641	14,348	13,786	14,038	13,742	14,174	12,672	157,339
Wastewater SSS General Operations	Penelec/3687	1,207	1,181	1,325	1,654	2,779	3,373	3,649	3,396	3,321	3,090	2,771	1,817	29,564
Wastewater SSS General Operations	Penn Power	193	196	180	193	187	254	363	335	299	277	250	195	2,922
Wastewater SSS General Operations	PPL Electric Utilities/Allentown	4,899	4,787	4,980	4,788	7,593	8,332	8,877	9,657	8,938	8,684	5,125	5,131	81,791
Wastewater SSS General Operations	UGI Utilities Inc	97	94	95	92	1,303	1,935	1,697	1,902	1,826	298	704	912	10,956
Wastewater SSS General Operations	West Penn Power	4,003	1,742	1,767	1,877	2,153	2,364	2,456	2,461	2,519	2,125	2,062	2,096	27,624
Wastewater SSS General Operations Total		**$343,231**	**$352,829**	**$273,388**	**$240,237**	**$266,414**	**$353,523**	**$278,163**	**$225,269**	**$267,485**	**$241,694**	**$227,671**	**$264,040**	**$3,333,944**

Fully Projected Future Test Year - adjusted for rate changes

Segment	Vendor Name	2024 Jul	2024 Aug	2024 Sep	2024 Oct	2024 Nov	2024 Dec	2025 Jan	2025 Feb	2025 Mar	2025 Apr	2025 May	2025 Jun	12 Mo Jun 2025 Grand Total
Wastewater SSS General Operations	Adams Electric Cooperative, PA	$44	$44	$44	$44	$44	$46	$45	$44	$45	$45	$45	$44	$534
Wastewater SSS General Operations	Calpine Energy Solutions	18,175	11,309	10,464	12,137	14,375	15,818	15,343	14,992	15,399	12,859	11,811	13,692	166,375
Wastewater SSS General Operations	Columbia Gas of Pennsylvania	61,851	61,851	61,851	61,851	61,851	61,851	61,851	61,851	72,338	66,526	46,689	61,851	742,210
Wastewater SSS General Operations	Constellation NewEnergy/4640	56,664	53,309	56,067	53,014	55,963	68,497	75,017	68,368	66,908	61,720	59,391	57,909	732,827
Wastewater SSS General Operations	Met-Ed/3687	184,422	206,916	124,033	92,180	107,295	177,413	94,518	48,476	81,853	72,327	84,649	107,720	1,381,802
Wastewater SSS General Operations	PECO/37629	11,678	11,399	12,582	12,407	12,871	13,641	14,348	13,786	14,038	13,742	14,174	12,672	157,339
Wastewater SSS General Operations	Penelec/3687	1,207	1,181	1,325	1,654	2,779	3,373	3,649	3,396	3,321	3,090	2,771	1,817	29,564
Wastewater SSS General Operations	Penn Power	193	196	180	193	187	254	363	335	299	277	250	195	2,922
Wastewater SSS General Operations	PPL Electric Utilities/Allentown	4,899	4,787	4,980	4,788	7,593	8,332	8,877	9,657	8,938	8,684	5,125	5,131	81,791
Wastewater SSS General Operations	UGI Utilities Inc	97	94	95	92	1,303	1,935	1,697	1,902	1,826	298	704	912	10,956
Wastewater SSS General Operations	West Penn Power	4,003	1,742	1,767	1,877	2,153	2,364	2,456	2,461	2,519	2,125	2,062	2,096	27,624
Wastewater SSS General Operations Total		**$343,231**	**$352,829**	**$273,388**	**$240,237**	**$266,414**	**$353,523**	**$278,163**	**$225,269**	**$267,485**	**$241,694**	**$227,671**	**$264,040**	**$3,333,944**

Pennsylvania American Water Company
Purchased Power by Segment and Vendor
For Bill Months July 2022 to June 2023
Data comes from Engie system Invoice Detail Report

TEST YEAR ACTUAL DATA

Segment	Vendor Name	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr	2023 May	2023 Jun	Base Year Grand Total
Wastewater CSS Operations	Calpine Energy Solutions	$8,332	$6,190	$6,846	$6,425	$6,460	$8,817	$10,057	$10,078	$9,190	$8,123	$7,651	$7,067	$95,235
Wastewater CSS Operations	Constellation NewEnergy/4640	64,326	70,477	53,581	69,254	78,928	88,949	98,290	84,973	89,505	78,034	77,812	73,120	927,248
Wastewater CSS Operations	Duquesne Light Company	19,303	20,367	19,026	17,570	21,464	21,274	24,628	21,712	22,761	20,742	18,814	21,544	249,205
Wastewater CSS Operations	Peoples/644760	70	75	83	540	1,152	1,808	2,027	1,548	1,170	297	153	62	8,985
Wastewater CSS Operations	PPL Electric Utilities/Allentown	5,511	5,597	6,108	5,912	6,076	6,601	7,097	6,549	6,490	6,114	6,099	5,518	73,672
Wastewater CSS Operations	West Penn Power	1,437	1,404	1,532	1,443	1,451	1,708	2,071	2,072	2,035	1,947	1,636	1,593	20,329
Wastewater CSS Operations Total		**$98,979**	**$104,110**	**$87,177**	**$101,143**	**$115,530**	**$129,156**	**$144,170**	**$126,932**	**$131,151**	**$115,257**	**$112,165**	**$108,904**	**$1,374,674**

TEST YEAR Bill ADJUSTMENTS - removal of closed accounts, credit balances and 12 months of activity for all active accounts

Test Year Data - Bill Month Report From Engie System

Segment	Vendor Name	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr	2023 May	2023 Jun	Base Yr Adjusts Grand Total
Wastewater CSS Operations	Calpine Energy Solutions	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Wastewater CSS Operations	Constellation NewEnergy/4640	-	-	21,451	-	-	-	-	-	-	-	-	1,032	22,483
Wastewater CSS Operations	Duquesne Light Company	-	197	-	-	-	-	-	-	-	-	-	-	197
Wastewater CSS Operations	Peoples/644760	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater CSS Operations	PPL Electric Utilities/Allentown	-	-	-	-	-	26	-	98	-	251	251	303	928
Wastewater CSS Operations	West Penn Power	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater CSS Operations Total		**$0**	**$197**	**$21,451**	**$0**	**$0**	**$26**	**$0**	**$98**	**$0**	**$251**	**$251**	**$1,335**	**$23,608**

ADJUSTED TEST YEAR

Test Year Data - Bill Month Report From Engie System

Segment	Vendor Name	2022 Jul	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	2023 Mar	2023 Apr	2023 May	2023 Jun	Base Yr Adjusted Grand Total
Wastewater CSS Operations	Calpine Energy Solutions	$8,332	$6,190	$6,846	$6,425	$6,460	$8,817	$10,057	$10,078	$9,190	$8,123	$7,651	$7,067	$95,235
Wastewater CSS Operations	Constellation NewEnergy/4640	64,326	70,477	75,032	69,254	78,928	88,949	98,290	84,973	89,505	78,034	77,812	74,153	949,731
Wastewater CSS Operations	Duquesne Light Company	19,303	20,564	19,026	17,570	21,464	21,274	24,628	21,712	22,761	20,742	18,814	21,544	249,401
Wastewater CSS Operations	Peoples/644760	70	75	83	540	1,152	1,808	2,027	1,548	1,170	297	153	62	8,985
Wastewater CSS Operations	PPL Electric Utilities/Allentown	5,511	5,597	6,108	5,912	6,076	6,627	7,097	6,647	6,490	6,365	6,350	5,820	74,600
Wastewater CSS Operations	West Penn Power	1,437	1,404	1,532	1,443	1,451	1,708	2,071	2,072	2,035	1,947	1,636	1,593	20,329
Wastewater CSS Operations Total		**$98,979**	**$104,307**	**$108,628**	**$101,143**	**$115,530**	**$129,182**	**$144,170**	**$127,030**	**$131,151**	**$115,508**	**$112,416**	**$110,239**	**$1,398,282**

Future Test Year - adjusted for rate changes

Segment	Vendor Name	2023 Jul	2023 Aug	2023 Sep	2023 Oct	2023 Nov	2023 Dec	2024 Jan	2024 Feb	2024 Mar	2024 Apr	2024 May	2024 Jun	12 Mo Jun 2024 Grand Total
Wastewater CSS Operations	Calpine Energy Solutions	$8,332	$6,190	$6,846	$6,425	$6,460	$8,817	$10,057	$10,078	$9,190	$8,123	$7,651	$7,067	$95,235
Wastewater CSS Operations	Constellation NewEnergy/4640	64,326	70,477	75,032	69,254	78,928	88,949	98,290	84,973	89,505	78,034	77,812	74,153	949,731
Wastewater CSS Operations	Duquesne Light Company	19,303	20,564	19,026	17,570	21,464	21,274	24,628	21,712	22,761	20,742	18,814	21,544	249,401
Wastewater CSS Operations	Peoples/644760	70	75	83	540	1,152	1,808	2,027	1,548	1,170	297	153	62	8,985
Wastewater CSS Operations	PPL Electric Utilities/Allentown	12,011	12,097	12,608	12,412	12,576	13,127	13,597	13,147	12,990	12,865	12,850	12,320	152,600
Wastewater CSS Operations	West Penn Power	1,437	1,404	1,532	1,443	1,451	1,708	2,071	2,072	2,035	1,947	1,636	1,593	20,329
Wastewater CSS Operations Total		**$105,479**	**$110,807**	**$115,128**	**$107,643**	**$122,030**	**$135,682**	**$150,670**	**$133,530**	**$137,651**	**$122,008**	**$118,916**	**$116,739**	**$1,476,282**

Pennsylvania American Water Company
Purchased Power by Segment and Vendor
For Bill Months July 2022 to June 2023
Data comes from Engie system Invoice Detail Report

		Fully Projected Future Test Year - adjusted for rate changes												
		2024	2024	2024	2024	2024	2024	2025	2025	2025	2025	2025	2025	12 Mo Jun 2025
Segment	**Vendor Name**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Grand Total**
Wastewater CSS Operations	Calpine Energy Solutions	$8,332	$6,190	$6,846	$6,425	$6,460	$8,817	$10,057	$10,078	$9,190	$8,123	$7,651	$7,067	$95,235
Wastewater CSS Operations	Constellation NewEnergy/4640	64,326	70,477	75,032	69,254	78,928	88,949	98,290	84,973	89,505	78,034	77,812	74,153	949,731
Wastewater CSS Operations	Duquesne Light Company	19,303	20,564	19,026	17,570	21,464	21,274	24,628	21,712	22,761	20,742	18,814	21,544	249,401
Wastewater CSS Operations	Peoples/644760	70	75	83	540	1,152	1,808	2,027	1,548	1,170	297	153	62	8,985
Wastewater CSS Operations	PPL Electric Utilities/Allentown	12,011	12,097	12,608	12,412	12,576	13,127	13,597	13,147	12,990	12,865	12,850	12,320	152,600
Wastewater CSS Operations	West Penn Power	1,437	1,404	1,532	1,443	1,451	1,708	2,071	2,072	2,035	1,947	1,636	1,593	20,329
Wastewater CSS Operations Total		**$105,479**	**$110,807**	**$115,128**	**$107,643**	**$122,030**	**$135,682**	**$150,670**	**$133,530**	**$137,651**	**$122,008**	**$118,916**	**$116,739**	**$1,476,282**

Purchased Water

Pennsylvania-American Water Company - Water Operations
Purchased Water Summary

			Base Yr - 12 Mos June 2023		Future Test Yr - 12 Mos June 2024				FFFTY - 12 Mos June 2025	
District	Location	Acct Number	Base Yr Expense	Consumption Gallons (000's)	Annualized FTY Expense	Annualized FTY Gallons (000)	FTY-BY Variance Expense	FTY-BY Variance Gallons (000)	Annualized FFFTY Expense	FFFTY-FTY Variance Expense
2423	Route 48 Road	M-099-050-50	$538	-	$1,030	-	$493	-	$1,062	$32
2423	RTE 711- PERRY	S-351-104-00	629,153	265,256	633,966	265,256	4,813	-	653,238	19,272
2423	104 Royal Palm Alley	S-351-104-25	37,597	15,806	37,780	15,806	183	-	38,929	1,149
2423	Fifth & Wine St Intercnct, Connellsville	S-351-113-00	20,317	8,570	20,486	8,570	169	-	21,109	623
2423	Cramer Ave	S-351-107-00	224,505	94,723	226,392	94,723	1,887	-	233,274	6,882
2423	Uniontown Booster Station	S-351-109-00	945,901	399,755	885,260	370,400	(60,641)	(29,355)	912,172	26,912
2422	Rte 51 Opferville	S-355-008-00	44,415	6,297	38,494	5,348	(5,921)	(949)	39,664	1,170
2422	Williamsport Rd.	S-082-201-00	372	-	-	-	(372)	-	-	-
2423	Rte 119 & Pine Motel	14461	10,676	-	11,556	-	880	-	11,907	351
2423	Airport Rd-U Town Dist	14250.1	0	-			-	-	-	-
2423	Connellsville Airport	G301-01770	0	-			-	-	-	-
2423	Connellsville Airport- 2"	14537.1	0	-			-	-	-	-
2423	Rte 119-Mt. Braddock	14250.2	0	-			-	-	-	-
2423	Mt Braddock-Percy	14250.5	0	-			-	-	-	-
2423	Lappa-Rocks Work Rd.	20428	304	21	326	21	22	-	336	10
2423	Sensus- Gallatin Ave	14250.6	0	-			-	-	-	-
2425	Rte 40 Brownsville	14289.1	10,676	-	11,556	-	880	-	11,907	351
2423	Breakiron Connection	050205	18,393	2,102	17,063	1,950	(1,330)	(152)	17,581	519
2411	Arlington Ave	5057737-1009331	89,846	-	93,627	-	3,781	-	96,474	2,847
2451	619 School Ln	349461	9,763	236	9,768	236	6	-	10,065	297
2451	Springfield Pike	2033 97	43,836	2,091	40,219	1,942	(3,617)	(149)	41,442	1,223
2451	Rte. 202 @ Whitpain	90017600	1,283	11	1,280	11	(2)	-	1,319	39
2451	Rte. 202 @ Whitpain	90017600-22759	3,210	1,086	3,204	1,086	(7)	-	3,301	97
2464	Covered Bridge	9165	0	-	0	-	-	-	-	-
2464	Township Line @ Pumphouse	9166	3,400	-	3,400	-	-	-	3,503	103
2464	Sowers Ave	3.01	369,701	51,117	369,701	51,117	-	-	380,939	11,239
2425	Daisytown Road Meter Pit	40058-0	1,745	176	1,745	176	-	-	1,798	53
2474	302 Morea Rd, Frackville	8104900	722	22	748	22	27	-	771	23
2474	Laural Ridge, Frackville	8105000	13,383	2,187	13,383	2,187	-	-	13,790	407
2474	S Eleanor Ave	8104800	844	55	894	55	50	-	921	27
2459/246305	501 S. 19th St.	28656.01	380,508	87,083	380,506	87,083	(1)	-	392,074	11,568
2459/246305	Seidel St.	550470.1	18,569	7,769	18,490	7,769	(80)	-	19,052	562
2459/246305	Meter Pit at St. Lawrence Ave & Bigaman St.	550470.2	106,738	40,756	104,885	40,756	(1,854)	-	108,073	3,188
2462	W. Penn Ave.	15544-01	15,487	1,845	15,935	1,845	448	-	16,419	484
2451	North Wales Interconnect	529950-130668	-	-	0	-	-	-	-	-
	Veolia Water - 19th St Interconnect	40200471-9991-304	4,278	472,700	0	0	(4,278)	(472,700)	-	-
2451	DRBS-Norristown	Diversion Rights	40,859	-	40,859	-	-	-	42,101	1,242
2456	DRBC-Blue Mountain	Diversion Rights	7,328	-	7,328	-	-	-	7,551	223
2455	DRBC-Bangor System	Diversion Rights	106	-	106	-	-	-	110	4
2452	DRBS-Yardley	Diversion Rights	9,975	-	9,975	-	-	-	10,278	303
2464	DRBS-Home Royersford	Diversion Rights	8,328	-	8,328	-	-	-	8,581	253
										-
	Change in Accrual/Adjustments		(77,831)	(17,657)			77,831	17,657	-	-
		Totals Purchased	**$2,994,925**	**1,442,006**	**$3,008,292**	**956,358**	**$13,367**	**(485,648)**	**$3,099,741**	**$91,449**

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT 110 - Pittsburgh PAMV-VY-OPCON
VENDOR: WESTMORELAND
LOCATION: PAAWC-Rippel/Rt 48 Road **Engie MAWC**
ACCT #: M-099-050-50 **Location # 2404737**
METER SIZE:

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Meter Charge 2"	Gallons included with meter charge	Cost per 1,000 gallons, up to 80,000	Cost per 1,000 gallons over 80,000 gallons	Consumption Charge	Cap Surcharge	Total	Difference
2022	JUN													
2022	JUL													
2022	AUG													
2022	SEP													
2022	OCT													
2022	NOV													
2022	DEC													
2023	JAN	$86	0	01/06/23	01/19/23	13	$86	2.00	$8.57	$5.37	$0.00	$0.33	$86	-
2023	FEB	90	0	01/20/23	02/16/23	27	86	2.00	8.57	5.37	0.00	0.33	86	(4)
2023	MAR	90	0	02/17/23	03/22/23	33	86	2.00	8.57	5.37	0.00	0.34	86	(4)
2023	APR	90	0	03/23/23	04/19/23	27	86	2.00	8.57	5.37	0.00	0.33	86	(4)
2023	MAY	90	0	04/20/23	05/22/23	32	86	2.00	8.57	5.37	0.00	0.33	86	(4)
2023	JUN	90	0	05/23/23	06/22/23	30	86	2.00	8.57	5.37	0.00	0.34	86	(4)
		$538	0			162								

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Meter Charge 2"	Gallons included with meter charge	Cost per 1,000 gallons, up to 80,000	Cost per 1,000 gallons over 80,000 gallons	Consumption Charge	Cap Surcharge	Total	Difference
2023	JUL	$86	0	06/23/23	07/23/23	30	$86	2.00	$8.57	$5.37	$0.00	$0.00	$86	-
2023	AUG	86	0	07/24/23	08/23/23	30	86	2.00	8.57	5.37	0.00	0.00	86	-
2023	SEP	86	0	08/24/23	09/23/23	30	86	2.00	8.57	5.37	0.00	0.00	86	-
2023	OCT	86	0	09/24/23	10/23/23	29	86	2.00	8.57	5.37	0.00	0.00	86	-
2023	NOV	86	0	10/24/23	11/23/23	30	86	2.00	8.57	5.37	0.00	0.00	86	-
2023	DEC	86	0	11/24/23	12/23/23	29	86	2.00	8.57	5.37	0.00	0.00	86	-
2024	JAN	86	0	12/24/23	01/23/24	30	86	2.00	8.57	5.37	0.00	0.33	86	-
2024	FEB	86	0	01/24/24	02/23/24	30	86	2.00	8.57	5.37	0.00	0.33	86	-
2024	MAR	86	0	02/24/24	03/23/24	28	86	2.00	8.57	5.37	0.00	0.34	86	-
2024	APR	86	0	03/24/24	04/23/24	30	86	2.00	8.57	5.37	0.00	0.33	86	-
2024	MAY	86	0	04/24/24	05/23/24	29	86	2.00	8.57	5.37	0.00	0.33	86	-
2024	JUN	86	0	05/24/24	06/24/24	31	86	2.00	8.57	5.37	0.00	0.34	86	-
		$1,030	0			356								

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT 230 - Connellsville
VENDOR: WESTMORELAND
LOCATION: Perry St off Snyder Ave **Engie MAWC**
ACCT #: S-351-104-00 Snyder St 36" **Location # 2404238**
METER SIZE: 36" and 54" Snyder St 54"

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gallons	Consumption Charge	Cap Surchg	Total	Difference
2022	JUL	$49,171	20,835	06/16/22	07/19/22	33	$2.36	$49,171	$0.33	$49,171	$0
2022	AUG	44,550	18,877	07/19/22	08/18/22	30	2.36	44,550	0.33	44,550	-
2022	SEP	43,066	18,248	08/18/22	09/16/22	29	2.36	43,065	0.34	43,066	-
2022	OCT	49,799	21,101	09/16/22	10/19/22	33	2.36	49,798	0.33	49,799	-
2022	NOV	50,009	21,190	10/19/22	11/17/22	29	2.36	50,008	0.33	50,009	-
2022	DEC	46,358	19,643	11/17/22	12/19/22	32	2.36	46,357	0.34	46,358	-
2023	JAN	52,477	22,236	12/19/22	01/18/23	30	2.36	52,477	0.33	52,477	-
2023	FEB	43,162	18,289	01/18/23	02/09/23	22	2.36	43,162	0.33	43,162	-
2023	MAR	60,381	25,264	02/09/23	03/21/23	40	2.39	60,381	0.34	60,381	-
2023	APR	70,417	29,463	03/21/23	04/18/23	28	2.39	70,417	0.33	70,417	-
2023	MAY	75,032	31,394	04/18/23	05/19/23	31	2.39	75,032	0.33	75,032	-
2023	JUN	44,732	18,716	05/19/23	06/16/23	28	2.39	44,731	0.34	44,732	-
		$629,153	265,256			365					

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gallons	Consumption Charge	Cap Surchg	Total	Difference
2023	JUL	$49,796	20,835	06/16/23	07/19/23	33	$2.39	$49,796	$0.33	$49,796	$0
2023	AUG	45,116	18,877	07/19/23	08/18/23	30	2.39	45,116	0.33	45,116	-
2023	SEP	43,613	18,248	08/18/23	09/16/23	29	2.39	43,613	0.34	43,613	-
2023	OCT	50,432	21,101	09/16/23	10/19/23	33	2.39	50,431	0.33	50,432	-
2023	NOV	50,644	21,190	10/19/23	11/17/23	29	2.39	50,644	0.33	50,644	-
2023	DEC	46,947	19,643	11/17/23	12/19/23	32	2.39	46,947	0.34	46,947	-
2024	JAN	53,144	22,236	12/19/23	01/18/24	30	2.39	53,144	0.33	53,144	-
2024	FEB	43,711	18,289	01/18/24	02/09/24	22	2.39	43,711	0.33	43,711	-
2024	MAR	60,381	25,264	02/09/24	03/21/24	41	2.39	60,381	0.34	60,381	-
2024	APR	70,417	29,463	03/21/24	04/18/24	28	2.39	70,417	0.33	70,417	-
2024	MAY	75,032	31,394	04/18/24	05/19/24	31	2.39	75,032	0.33	75,032	-
2024	JUN	44,732	18,716	05/19/24	06/16/24	28	2.39	44,731	0.34	44,732	-
		$633,966	265,256			366					

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT 230 - Connellsville PACN-CV-SNYST-54IC
VENDOR: WESTMORELAND Snyder St 54"
LOCATION: 102 Royal Palm Alley **Engie MAWC**
ACCT #: S-351-104-25 **Location # 2404631**
METER SIZE: 2 & 8

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gallons	Consumption Charge	Cap Surchg	Total	Difference
2022	JUL	$6,368	2,698	06/16/22	07/19/22	33	$2.36	$6,367	$0.33	$6,368	$0
2022	AUG	2,835	1,201	07/19/22	08/18/22	30	2.36	2,834	0.33	2,835	-
2022	SEP	2,721	1,153	08/18/22	09/16/22	29	2.36	2,721	0.34	2,721	-
2022	OCT	3,186	1,292	09/16/22	10/19/22	33	2.36	3,049	0.33	3,049	(136)
2022	NOV	3,154	1,332	10/19/22	11/17/22	29	2.36	3,144	0.33	3,144	(11)
2022	DEC	2,542	1,077	11/17/22	12/19/22	32	2.36	2,542	0.34	2,542	-
2023	JAN	2,976	1,261	12/19/22	01/18/23	30	2.36	2,976	0.33	2,976	-
2023	FEB	2,294	972	01/18/23	02/09/23	22	2.36	2,294	0.33	2,294	-
2023	MAR	2,852	1,193	02/09/23	03/21/23	40	2.39	2,851	0.34	2,852	-
2023	APR	2,821	1,180	03/21/23	04/18/23	28	2.39	2,820	0.33	2,821	-
2023	MAY	3,523	1,474	04/18/23	05/19/23	31	2.39	3,523	0.33	3,523	-
2023	JUN	2,326	973	05/19/23	06/16/23	28	2.39	2,325	0.34	2,326	-
		$37,597	15,806			365					

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gallons	Consumption Charge	Cap Surchg	Total	Difference
2023	JUL	$6,449	2,698	06/16/23	07/19/23	33	$2.39	$6,448	$0.33	$6,449	$0
2023	AUG	2,871	1,201	07/19/23	08/18/23	30	2.39	2,870	0.33	2,871	-
2023	SEP	2,756	1,153	08/18/23	09/16/23	29	2.39	2,756	0.34	2,756	-
2023	OCT	3,088	1,292	09/16/23	10/19/23	33	2.39	3,088	0.33	3,088	-
2023	NOV	3,184	1,332	10/19/23	11/17/23	29	2.39	3,183	0.33	3,184	-
2023	DEC	2,574	1,077	11/17/23	12/19/23	32	2.39	2,574	0.34	2,574	-
2024	JAN	3,014	1,261	12/19/23	01/18/24	30	2.39	3,014	0.33	3,014	-
2024	FEB	2,323	972	01/18/24	02/09/24	22	2.39	2,323	0.33	2,323	-
2024	MAR	2,852	1,193	02/09/24	03/21/24	41	2.39	2,851	0.34	2,852	-
2024	APR	2,821	1,180	03/21/24	04/18/24	28	2.39	2,820	0.33	2,821	-
2024	MAY	3,523	1,474	04/18/24	05/19/24	31	2.39	3,523	0.33	3,523	-
2024	JUN	2,326	973	05/19/24	06/16/24	28	2.39	2,325	0.34	2,326	-
		$37,780	15,806			366					

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT: 230 - Connellsville PACN-CV-5WIN
VENDOR: WESTMORELAND **Engie MAWC**
LOCATION: 5TH & WINE, CONNELLSVILLE **Location # 2402195**
ACCT #: S-351-113-00
METER SIZE: 4"

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gallons	Consumption Charge	Cap Surchg	Total	Difference
2022	JUL	$2,181	924	06/16/22	07/19/22	33	$2.36	$2,181	$0.33	$2,181	$0
2022	AUG	1,567	664	07/19/22	08/18/22	30	2.36	1,567	0.33	1,567	-
2022	SEP	1,520	644	08/18/22	09/16/22	29	2.36	1,520	0.34	1,520	-
2022	OCT	1,629	690	09/16/22	10/19/22	33	2.36	1,628	0.33	1,629	-
2022	NOV	1,636	693	10/19/22	11/17/22	29	2.36	1,635	0.33	1,636	-
2022	DEC	1,374	582	11/17/22	12/19/22	32	2.36	1,374	0.34	1,374	-
2023	JAN	2,013	853	12/19/22	01/18/23	30	2.36	2,013	0.33	2,013	-
2023	FEB	1,371	581	01/18/23	02/09/23	22	2.36	1,371	0.33	1,371	-
2023	MAR	1,771	741	02/09/23	03/21/23	40	2.39	1,771	0.34	1,771	-
2023	APR	1,556	651	03/21/23	04/18/23	28	2.39	1,556	0.33	1,556	-
2023	MAY	1,958	819	04/18/23	05/19/23	31	2.39	1,957	0.33	1,958	-
2023	JUN	1,740	728	05/19/23	06/19/23	31	2.39	1,740	0.34	1,740	-
		$20,317	8,570			368					

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gallons	Consumption Charge	Cap Surchg	Total	Difference
2023	JUL	$2,209	924	06/16/23	07/19/23	33	$2.39	$2,208	$0.33	$2,209	$0
2023	AUG	1,587	664	07/19/23	08/18/23	30	2.39	1,587	0.33	1,587	-
2023	SEP	1,540	644	08/18/23	09/16/23	29	2.39	1,539	0.34	1,540	-
2023	OCT	1,649	690	09/16/23	10/19/23	33	2.39	1,649	0.33	1,649	-
2023	NOV	1,657	693	10/19/23	11/17/23	29	2.39	1,656	0.33	1,657	-
2023	DEC	1,391	582	11/17/23	12/19/23	32	2.39	1,391	0.34	1,391	-
2024	JAN	2,039	853	12/19/23	01/18/24	30	2.39	2,039	0.33	2,039	-
2024	FEB	1,389	581	01/18/24	02/09/24	22	2.39	1,389	0.33	1,389	-
2024	MAR	1,771	741	02/09/24	03/21/24	41	2.39	1,771	0.34	1,771	-
2024	APR	1,556	651	03/21/24	04/18/24	28	2.39	1,556	0.33	1,556	-
2024	MAY	1,958	819	04/18/24	05/19/24	31	2.39	1,957	0.33	1,958	-
2024	JUN	1,740	728	05/19/24	06/19/24	31	2.39	1,740	0.34	1,740	-
		$20,486	8,570			369					

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT 230 - Connellsville PACN-CV-CRAM
VENDOR: WESTMORELAND **Engie MAWC**
LOCATION: 307 CRAMER AVE **Location # 2404632**
ACCT #: S-351-107-00
METER SIZE: 2" & 4"

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gallons	Consumption Charge	Cap Surchg	Total	Difference
2022	JUL	$21,509	9,114	06/16/22	07/19/22	33	2.36	$21,509	$0.33	$21,509	$0
2022	AUG	17,330	7,343	07/19/22	08/18/22	30	2.36	17,329	0.33	17,330	-
2022	SEP	17,330	7,086	08/18/22	09/16/22	29	2.36	16,723	0.34	16,723	(607)
2022	OCT	15,720	6,918	09/16/22	10/19/22	33	2.36	16,326	0.33	16,327	607
2022	NOV	18,930	8,021	10/19/22	11/17/22	29	2.36	18,930	0.33	18,930	-
2022	DEC	16,232	6,878	11/17/22	12/19/22	32	2.36	16,232	0.34	16,232	-
2023	JAN	24,974	10,582	12/19/22	01/18/23	30	2.36	24,974	0.33	24,974	-
2023	FEB	16,395	6,947	01/18/23	02/09/23	22	2.36	16,395	0.33	16,395	-
2023	MAR	19,226	8,044	02/09/23	03/21/23	40	2.39	19,225	0.34	19,226	-
2023	APR	18,241	7,632	03/21/23	04/18/23	28	2.39	18,240	0.33	18,241	-
2023	MAY	20,349	8,514	04/18/23	05/19/23	31	2.39	20,348	0.33	20,349	-
2023	JUN	18,270	7,644	05/19/23	06/19/23	31	2.39	18,269	0.34	18,270	-
		$224,505	94,723			368					

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gallons	Consumption Charge	Cap Surchg	Total	Difference
2023	JUL	$21,783	9,114	06/16/23	07/19/23	33	$2.39	$21,782	$0.33	$21,783	$0
2023	AUG	17,550	7,343	07/19/23	08/18/23	30	2.39	17,550	0.33	17,550	-
2023	SEP	16,936	7,086	08/18/23	09/16/23	29	2.39	16,936	0.34	16,936	-
2023	OCT	16,534	6,918	09/16/23	10/19/23	33	2.39	16,534	0.33	16,534	-
2023	NOV	19,171	8,021	10/19/23	11/17/23	29	2.39	19,170	0.33	19,171	-
2023	DEC	16,439	6,878	11/17/23	12/19/23	32	2.39	16,438	0.34	16,439	-
2024	JAN	25,291	10,582	12/19/23	01/18/24	30	2.39	25,291	0.33	25,291	-
2024	FEB	16,604	6,947	01/18/24	02/09/24	22	2.39	16,603	0.33	16,604	-
2024	MAR	19,226	8,044	02/09/24	03/21/24	41	2.39	19,225	0.34	19,226	-
2024	APR	18,241	7,632	03/21/24	04/18/24	28	2.39	18,240	0.33	18,241	-
2024	MAY	20,349	8,514	04/18/24	05/19/24	31	2.39	20,348	0.33	20,349	-
2024	JUN	18,270	7,644	05/19/24	06/19/24	31	2.39	18,269	0.34	18,270	-
		$226,392	94,723			369					

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT 230 - Uniontown PAUT-OP-ICMTR
VENDOR: WESTMORELAND MAWC's ICWTP SFR to PAWC Meter Vault **Engie MAWC**
LOCATION: Uniontown **Location # 2404463**
ACCT #: S-351-109-00
METER SIZE: 10"

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gallons	Consumption Charge	Cap Surchg	Total	Difference
2022	JUN	$69,278	29,355	05/18/22	06/16/22	29	$2.36	$69,278	$0.34	$69,278	$0
2022	JUL	89,378	37,872	06/16/22	07/19/22	33	2.36	89,378	0.33	89,378	-
2022	AUG	73,118	30,982	07/19/22	08/18/22	30	2.36	73,118	0.33	73,118	-
2022	SEP	88,486	37,494	08/18/22	09/16/22	29	2.36	88,486	0.34	88,486	-
2022	OCT	94,176	39,905	09/16/22	10/19/22	33	2.36	94,176	0.33	94,176	-
2022	NOV	80,325	34,036	10/19/22	11/17/22	29	2.36	80,325	0.33	80,325	-
2022	DEC	77,887	33,003	11/17/22	12/19/22	32	2.36	77,887	0.34	77,887	-
2023	JAN	106,802	45,255	12/19/22	01/18/23	30	2.36	106,802	0.33	106,802	-
2023	FEB	69,316	29,371	01/18/23	02/09/23	22	2.36	69,316	0.33	69,316	-
2023	MAR	57,375	24,006	02/09/23	03/21/23	40	2.39	57,374	0.34	57,375	-
2023	APR	48,964	20,487	03/21/23	04/18/23	28	2.39	48,964	0.33	48,964	-
2023	MAY	42,408	17,744	04/18/23	05/19/23	31	2.39	42,408	0.33	42,408	-
2023	JUN	48,386	20,245	05/19/23	06/16/23	28	2.39	48,386	0.34	48,386	-
		$945,901	399,755			394					

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gallons	Consumption Charge	Cap Surchg	Total	Difference
2023	JUL	$90,514	37,872	06/16/23	07/19/23	33	$2.39	$90,514	$0.33	$90,514	$0
2023	AUG	74,047	30,982	07/19/23	08/18/23	30	2.39	74,047	0.33	74,047	-
2023	SEP	89,611	37,494	08/18/23	09/16/23	29	2.39	89,611	0.34	89,611	-
2023	OCT	95,373	39,905	09/16/23	10/19/23	33	2.39	95,373	0.33	95,373	-
2023	NOV	81,346	34,036	10/19/23	11/17/23	29	2.39	81,346	0.33	81,346	-
2023	DEC	78,878	33,003	11/17/23	12/19/23	32	2.39	78,877	0.34	78,878	-
2024	JAN	108,160	45,255	12/19/23	01/18/24	30	2.39	108,159	0.33	108,160	-
2024	FEB	70,197	29,371	01/18/24	02/09/24	22	2.39	70,197	0.33	70,197	-
2024	MAR	57,375	24,006	02/09/24	03/21/24	41	2.39	57,374	0.34	57,375	-
2024	APR	48,964	20,487	03/21/24	04/18/24	28	2.39	48,964	0.33	48,964	-
2024	MAY	42,408	17,744	04/18/24	05/19/24	31	2.39	42,408	0.33	42,408	-
2024	JUN	48,386	20,245	05/19/24	06/16/24	28	2.39	48,386	0.34	48,386	-
		$885,260	370,400			366					

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT 110 - Pittsburgh PAMV-VY-OPCON
VENDOR: WESTMORELAND
LOCATION: Rte 51 Opferville **Engie MAWC**
ACCT #: S-355-008-00 **Location # 2404666**
METER SIZE: 2" & 6"

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Meter Charge 2"	Meter Charge 6"	Gallons included with meter charge	Cost per 1,000 gallons, up to 80,000	Cost per 1,000 gallons over 80,000 gallons	Consumption Charge	Cap Surcharge	Total	Difference
2022	JUN	$5,911	949	05/17/22	06/14/22	28	$85.70	$489.71	2.00	$8.57	$5.37	$5,335	$0.34	$5,911	$0
2022	JUL	10,893	1,875	06/14/22	07/15/22	31	85.70	489.71	2.00	8.57	5.37	10,308	0.33	10,883	(10)
2022	AUG	9,041	1,532	07/15/22	08/22/22	38	85.70	489.71	2.00	8.57	5.37	8,466	0.33	9,041	-
2022	SEP	1,593	145	08/22/22	09/14/22	23	85.70	489.71	2.00	8.57	5.37	1,018	0.34	1,593	-
2022	OCT	2,001	221	09/14/22	10/18/22	34	85.70	489.71	2.00	8.57	5.37	1,426	0.33	2,001	-
2022	NOV	1,953	212	10/18/22	11/18/22	31	85.70	489.71	2.00	8.57	5.37	1,377	0.33	1,953	-
2022	DEC	1,728	170	11/18/22	12/15/22	27	85.70	489.71	2.00	8.57	5.37	1,152	0.34	1,728	-
2023	JAN	1,905	203	12/15/22	01/16/23	32	85.70	489.71	2.00	8.57	5.37	1,329	0.33	1,905	-
2023	FEB	1,872	197	01/16/23	02/17/23	32	85.70	489.71	2.00	8.57	5.37	1,297	0.33	1,872	-
2023	MAR	1,749	174	02/17/23	03/17/23	28	85.70	489.71	2.00	8.57	5.37	1,173	0.34	1,749	-
2023	APR	1,867	196	03/17/23	04/17/23	31	85.70	489.71	2.00	8.57	5.37	1,291	0.33	1,867	-
2023	MAY	1,792	182	04/17/23	05/16/23	29	85.70	489.71	2.00	8.57	5.37	1,216	0.33	1,792	-
2023	JUN	2,109	241	05/16/23	06/19/23	34	85.70	489.71	2.00	8.57	5.37	1,533	0.34	2,109	-
		$44,415	6,297			398									

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Meter Charge 2"	Meter Charge 6"	Gallons included with meter charge	Cost per 1,000 gallons, up to 80,000	Cost per 1,000 gallons over 80,000 gallons	Consumption Charge	Cap Surcharge	Total	Difference
2023	JUL	$10,883	1,875	06/14/23	07/15/23	31	$85.70	$489.71	2.00	$8.57	$5.37	$10,308	$0.33	$10,883	$0
2023	AUG	9,041	1,532	07/15/23	08/23/23	39	85.70	489.71	2.00	8.57	5.37	8,466	0.33	9,041	-
2023	SEP	1,593	145	08/23/23	09/14/23	22	85.70	489.71	2.00	8.57	5.37	1,018	0.34	1,593	-
2023	OCT	2,001	221	09/14/23	10/18/23	34	85.70	489.71	2.00	8.57	5.37	1,426	0.33	2,001	-
2023	NOV	1,953	212	10/18/23	11/18/23	31	85.70	489.71	2.00	8.57	5.37	1,377	0.33	1,953	-
2023	DEC	1,728	170	11/18/23	12/15/23	27	85.70	489.71	2.00	8.57	5.37	1,152	0.34	1,728	-
2024	JAN	1,905	203	12/15/23	01/16/24	32	85.70	489.71	2.00	8.57	5.37	1,329	0.33	1,905	-
2024	FEB	1,872	197	01/16/24	02/17/24	32	85.70	489.71	2.00	8.57	5.37	1,297	0.33	1,872	-
2024	MAR	1,749	174	02/17/24	03/17/24	29	85.70	489.71	2.00	8.57	5.37	1,173	0.34	1,749	-
2024	APR	1,867	196	03/17/24	04/17/24	31	85.70	489.71	2.00	8.57	5.37	1,291	0.33	1,867	-
2024	MAY	1,792	182	04/17/24	05/16/24	29	85.70	489.71	2.00	8.57	5.37	1,216	0.33	1,792	-
2024	JUN	2,109	241	05/16/24	06/19/24	34	85.70	489.71	2.00	8.57	5.37	1,533	0.34	2,109	-
		$38,494	5,348			371									

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT	**110 - Pittsburgh**	Opferville MAWC Interconnection
VENDOR:	**WESTMORELAND**	PAMV-VY-WPCON
LOCATION:	**Williamsport Rd**	**Engie MAWC**
ACCT #:	**S-082-201-00**	**Location # 2404602**
METER SIZE:	**1"**	

	Month	Invoice #	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Service Charge	First 3,000 gal	Next 237,000 gal	Consumption Charge	Cap Surchg	Total	Difference
2022	JUL	Q3	$93	0	04/20/22	07/21/22	92	$91.91	$0.00	$8.57	$0	$1.00	$93	$0
2022	AUG													
2022	SEP													
2022	OCT	Q4	93	0	07/21/22	10/20/22	91	91.91	0.00	8.57	0	1.00	93	-
2022	NOV													
2022	DEC													
2023	JAN	Q1	93	0	10/20/22	01/23/23	95	91.91	0.00	8.57	0	1.00	93	-
2023	FEB													
2023	MAR													
2023	APR	Q2	93	0	01/23/23	04/21/23	88	91.91	0.00	8.57	0	1.00	93	-
2023	MAY													
2023	JUN													
			$372	0			366							

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **230 - Connellsville** PACN-CV-MORL.
VENDOR: **NORTH FAYETTE**
LOCATION: **Pines Motel Morrell** **Morrell Connection** **Engie NORTH FAYETTE**
ACCT #: **14461** **Location # 2404636**
METER SIZE: **6"**

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Meter Charge	First 1,000,000	Over 1,000,000	Consumption Charge	Total	Difference
2022	JUL	$875	0	05/24/22	06/27/22	34	$875.00	$7.45	$5.15	$0	$875	$0
2022	AUG	875	0	06/27/22	07/26/22	29	875.00	7.45	5.15	-	875	-
2022	SEP	875	0	07/26/22	08/26/22	31	875.00	7.45	5.15	-	875	-
2022	OCT	875	0	08/26/22	09/27/22	32	875.00	7.45	5.15	-	875	-
2022	NOV	875	0	09/27/22	10/28/22	31	875.00	7.45	5.15	-	875	-
2022	DEC	875	0	10/28/22	11/29/22	32	875.00	7.45	5.15	-	875	-
2022	JAN	875	0	11/29/22	12/20/22	21	875.00	7.45	5.15	-	875	-
2023	FEB	875	0	12/20/22	01/26/23	37	875.00	7.45	5.15	-	875	-
2023	MAR	875	0	01/26/23	02/23/23	28	875.00	7.45	5.15	-	875	-
2023	APR	875	0	02/23/23	03/29/23	34	875.00	7.45	5.15	-	875	-
2023	MAY	963	0	03/29/23	04/25/23	27	963.00	8.85	8.80	-	963	-
2023	JUN	963	0	04/25/23	05/25/23	30	963.00	8.85	8.80	-	963	-
		$10,676	0			366						

NOTE
Per Dan Hufton, this is an emergency connection with North Fayette that typically won't have regular use, but we want to keep active in case of emergency.

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Meter Charge	First 1,000,000	Over 1,000,000	Consumption Charge	Total	Difference
2023	JUL	$963	0	05/24/23	06/27/23	34	$963.00	$8.85	$8.80	$0	$963	$0
2023	AUG	963	0	06/27/23	07/26/23	29	963.00	8.85	8.80	-	963	-
2023	SEP	963	0	07/26/23	08/26/23	31	963.00	8.85	8.80	-	963	-
2023	OCT	963	0	08/26/23	09/27/23	32	963.00	8.85	8.80	-	963	-
2023	NOV	963	0	09/27/23	10/28/23	31	963.00	8.85	8.80	-	963	-
2023	DEC	963	0	10/28/23	11/29/23	32	963.00	8.85	8.80	-	963	-
2024	JAN	963	0	11/29/23	12/20/23	21	963.00	8.85	8.80	-	963	-
2024	FEB	963	0	12/20/23	01/26/24	37	963.00	8.85	8.80	-	963	-
2024	MAR	963	0	01/26/24	02/24/24	29	963.00	8.85	8.80	-	963	-
2024	APR	963	0	02/24/24	03/29/24	34	963.00	8.85	8.80	-	963	-
2024	MAY	963	0	03/29/24	04/25/24	27	963.00	8.85	8.80	-	963	-
2024	JUN	963	0	04/25/24	05/25/24	30	963.00	8.85	8.80	-	963	-
		$11,556	0			367						

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **2423 - Uniontown/Connellsville**
VENDOR: **NORTH FAYETTE**
LOCATION: **Lappa-Rocks Work Rd** **Engie NORTH FAYETTE**
ACCT #: **20428** **old #G-035-01952** **Location # 2404638**
METER SIZE: **5/8"**

	Month	Invoice #	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Meter Charge	First 1,000,000	Over 1,000,000	Consumption Charge	Adjustment	Total	Difference
2022	JUL													
2022	AUG	Q3	$87	6.7	05/02/22	08/02/22	92	$33.00	$8.05	$8.00	$54	$0	$87	$0
2022	SEP													
2022	OCT													
2022	NOV	Q4	72	4.8	08/02/22	11/02/22	92	33.00	8.05	8.00	39	0.00	72	-
2022	DEC													
2023	JAN													
2023	FEB	Q1	73	5.0	11/02/22	02/07/23	97	33.00	8.05	8.00	40	0.00	73	-
2023	MAR													
2023	APR													
2023	MAY	Q2	72	4.1	02/07/23	05/03/23	85	36.00	8.85	8.80	36	0.00	72	-
2023	JUN													
			$304	20.6			366							

	Month	Invoice #	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Meter Charge	First 1,000,000	Over 1,000,000	Consumption Charge	Adjustment	Total	Difference
2023	JUL													
2023	AUG	Q3	$95	6.7	05/02/23	08/02/23	92	36.00	8.85	8.80	$59	0.00	$95	$0
2023	SEP													
2023	OCT													
2023	NOV	Q4	78	4.8	08/02/23	11/02/23	92	36.00	8.85	8.80	42	0.00	78	-
2023	DEC													
2024	JAN													
2024	FEB	Q1	80	5.0	11/02/23	02/07/24	97	36.00	8.85	8.80	44	0.00	80	-
2024	MAR													
2024	APR													
2024	MAY	Q2	72	4.1	02/07/24	05/03/24	86	36.00	8.85	8.80	36	0.00	72	-
2024	JUN													
			$326	20.6			367							

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT 230 Connellsville
VENDOR: **NORTH FAYETTE**
LOCATION: **Rte 40 Brownsville** **Morrell Connection** **Engie NORTH FAYETTE**
ACCT #: **14289.1** **Location # 2404636**
METER SIZE: **6"**

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Meter Charge	First 1,000,000	Over 1,000,000	Consumption Charge	Total	Difference
2022	JUL	$875	0	05/24/22	06/23/22	30	$875.00	$7.45	$5.15	$0	$875	$0
2022	AUG	875	0	06/23/22	07/25/22	32	875.00	7.45	5.15	-	875	-
2022	SEP	875	0	07/25/22	08/25/22	31	875.00	7.45	5.15	-	875	-
2022	OCT	875	0	08/25/22	09/26/22	32	875.00	7.45	5.15	-	875	-
2022	NOV	875	0	09/26/22	10/25/22	29	875.00	7.45	5.15	-	875	-
2022	DEC	875	0	10/25/22	11/22/22	28	875.00	7.45	5.15	-	875	-
2022	JAN	875	0	11/22/22	12/19/22	27	875.00	7.45	5.15	-	875	-
2023	FEB	875	0	12/19/22	01/25/23	37	875.00	7.45	5.15	-	875	-
2023	MAR	875	0	01/25/23	02/22/23	28	875.00	7.45	5.15	-	875	-
2023	APR	875	0	02/22/23	03/27/23	33	875.00	7.45	5.15	-	875	-
2023	MAY	963	0	03/27/23	04/26/23	30	963.00	8.85	8.80	-	963	-
2023	JUN	963	0	04/26/23	05/26/23	30	963.00	8.85	8.80	-	963	-
		$10,676	0			367						

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Meter Charge	First 1,000,000	Over 1,000,000	Consumption Charge	Total	Difference
2023	JUL	$963	0	05/24/23	06/23/23	30	$963.00	$8.85	$8.80	$0	$963	$0
2023	AUG	963	0	06/23/23	07/25/23	32	963.00	8.85	8.80	-	963	-
2023	SEP	963	0	07/25/23	08/25/23	31	963.00	8.85	8.80	-	963	-
2023	OCT	963	0	08/25/23	09/26/23	32	963.00	8.85	8.80	-	963	-
2023	NOV	963	0	09/26/23	10/25/23	29	963.00	8.85	8.80	-	963	-
2023	DEC	963	0	10/25/23	11/23/23	29	963.00	8.85	8.80	-	963	-
2024	JAN	963	0	11/23/23	12/19/23	26	963.00	8.85	8.80	-	963	-
2024	FEB	963	0	12/19/23	01/25/24	37	963.00	8.85	8.80	-	963	-
2024	MAR	963	0	01/25/24	02/23/24	29	963.00	8.85	8.80	-	963	-
2024	APR	963	0	02/23/24	03/27/24	33	963.00	8.85	8.80	-	963	-
2024	MAY	963	0	03/27/24	04/26/24	30	963.00	8.85	8.80	-	963	-
2024	JUN	963	0	04/26/24	05/26/24	30	963.00	8.85	8.80	-	963	-
		$11,556	0			368						

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **230 - Connellsville** PACN-CV-BRKN
VENDOR: **PLEASANT VALLEY** **Engie Pleasant Valley Water**
LOCATION: **Breakiron Connection** **Location # 2404731**
ACCT #: **** The account number 50205 does not appear on the invoice - use the location # 2404731.**
METER SIZE: **2"** **SAP Supplier #** **202418**

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gallons	Consumption Charge	Total	Difference
2022	MAY	$1,330	152	04/30/22	05/31/22	31	$8.75	$1,330	$1,330	$0
2022	JUN	1,479	169	05/31/22	06/30/22	30	8.75	1,479	1,479	-
2022	JUL	1,496	171	06/30/22	07/31/22	31	8.75	1,496	1,496	-
2022	AUG	1,278	146	07/31/22	08/31/22	31	8.75	1,278	1,278	-
2022	SEP	1,278	146	08/31/22	09/30/22	30	8.75	1,278	1,278	-
2022	OCT	1,461	167	09/30/22	10/31/22	31	8.75	1,461	1,461	-
2022	NOV	1,225	140	10/31/22	11/30/22	30	8.75	1,225	1,225	-
2022	DEC	1,295	148	11/30/22	12/31/22	31	8.75	1,295	1,295	-
2023	JAN	1,873	214	12/31/22	01/31/23	31	8.75	1,873	1,873	-
2023	FEB	1,348	154	01/31/23	02/28/23	28	8.75	1,348	1,348	-
2023	MAR	1,225	140	02/28/23	03/31/23	31	8.75	1,225	1,225	-
2023	APR	1,619	185	03/31/23	04/30/23	30	8.75	1,619	1,619	-
2023	MAY	1,488	170	04/30/23	05/31/23	31	8.75	1,488	1,488	-
		$18,393	2,102			396				

	Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gallons	Consumption Charge	Total	Difference
2023	JUN	$1,479	169	05/31/23	06/30/23	30	$8.75	$1,479	$1,479	$0
2023	JUL	1,496	171	06/30/23	07/31/23	31	8.75	1,496	1,496	-
2023	AUG	1,278	146	07/31/23	08/31/23	31	8.75	1,278	1,278	-
2023	SEP	1,278	146	08/31/23	09/30/23	30	8.75	1,278	1,278	-
2023	OCT	1,461	167	09/30/23	10/31/23	31	8.75	1,461	1,461	-
2023	NOV	1,225	140	10/31/23	11/30/23	30	8.75	1,225	1,225	-
2024	DEC	1,295	148	11/30/23	12/31/23	31	8.75	1,295	1,295	-
2024	JAN	1,873	214	12/31/23	01/31/24	31	8.75	1,873	1,873	-
2024	FEB	1,348	154	01/31/24	02/28/24	28	8.75	1,348	1,348	-
2024	MAR	1,225	140	02/28/24	03/31/24	32	8.75	1,225	1,225	-
2024	APR	1,619	185	03/31/24	04/30/24	30	8.75	1,619	1,619	-
2024	MAY	1,488	170	04/30/24	05/31/24	31	8.75	1,488	1,488	-
		$17,063	1,950			366				

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **110 - Pittsburgh** PAPT-Z5-MWBST
VENDOR: **PITTSBURGH WATER AND SEWER AUTHORITY**
LOCATION: **1217 ARLINGTON AVE** **SAP Supplier #** **202405** **Engie PWSA**
ACCT #: **Old Acct#** **Acct # 5057737-1009331** **Location # 2404727**
METER SIZE: **4"**

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Service Charge	7.16 per 000 Gal	Per contract	Consumption Charge	DSIC	Adjustment	Total	Difference
2022	JUN	$7,307	0	05/31/22	07/01/22	31	$7,246	$0.00	$0.00	$0		$60	$7,307	$0
2022	JUL	7,246	0	07/01/22	08/01/22	31	7,246	0.00	0.00	-			7,246	-
2022	AUG	7,246	0	08/01/22	08/31/22	30	7,246	0.00	0.00	-			7,246	-
2022	SEP	7,246	0	08/31/22	09/30/22	30	7,246	0.00	0.00	-			7,246	-
2022	OCT	7,246	0	09/30/22	11/01/22	32	7,246	0.00	0.00	-			7,246	-
2022	NOV	7,246	0	11/01/22	11/30/22	29	7,246	0.00	0.00	-			7,246	-
2022	DEC	7,296	0	11/30/22	01/03/23	34	7,296	0.00	0.00	-			7,296	-
2023	JAN	7,802	0	01/03/23	02/03/23	31	7,296	0.00	0.00	507			7,802	-
2023	FEB	7,802	0	02/03/23	03/03/23	28	7,296	0.00	0.00	507			7,802	-
2023	MAR	7,802	0	03/03/23	04/03/23	31	7,296	0.00	0.00	507			7,802	-
2023	APR	7,802	0	04/03/23	05/02/23	29	7,296	0.00	0.00	507			7,802	-
2023	MAY	7,802	0	05/02/23	06/01/23	30	7,296	0.00	0.00	507			7,802	-
		$89,846	0			366								

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Service Charge	7.16 per 000 Gal	Per contract	Consumption Charge	DSIC	Adjustment	Total	Difference
2023	JUN	$7,802	0	06/01/23	07/01/23	30	$7,296	$0.00	$0.00	$507			$7,802	$0
2023	JUL	7,802	0	07/01/23	08/01/23	31	7,296	0.00	0.00	507			7,802	-
2023	AUG	7,802	0	08/01/23	08/31/23	30	7,296	0.00	0.00	507			7,802	-
2023	SEP	7,802	0	08/31/23	09/30/23	30	7,296	0.00	0.00	507			7,802	-
2023	OCT	7,802	0	09/30/23	11/01/23	32	7,296	0.00	0.00	507			7,802	-
2023	NOV	7,802	0	11/01/23	11/30/23	29	7,296	0.00	0.00	507			7,802	-
2024	DEC	7,802	0	11/30/23	01/03/24	34	7,296	0.00	0.00	507			7,802	-
2024	JAN	7,802	0	01/03/24	02/03/24	31	7,296	0.00	0.00	507			7,802	-
2024	FEB	7,802	0	02/03/24	03/03/24	29	7,296	0.00	0.00	507			7,802	-
2024	MAR	7,802	0	03/03/24	04/03/24	31	7,296	0.00	0.00	507			7,802	-
2024	APR	7,802	0	04/03/24	05/02/24	29	7,296	0.00	0.00	507			7,802	-
2024	MAY	7,802	0	05/02/24	06/01/24	30	7,296	0.00	0.00	507			7,802	-
		$93,627	0			366								

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **510 - Norristown** PANO-BH-SCHOL
VENDOR: **AQUA PA** **Engie Aqua Pennsylvania**
LOCATION: **619 School Ln. Gulph Mills** **SAP Supplier #** **104638** **Location # 2404727**
ACCT #: **349461**
METER SIZE: **4"**

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Customer Charge	First 2,000 gal	2,000 gal +	Consumption Charge	DSIC Surcharge	Total	Difference
2022	JUL	$2,695	154	06/15/22	07/15/22	30	$536	$14.02	$14.02	$2,159	$0	$2,695	$0
2022	AUG	760	16	07/15/22	08/17/22	33	536	14.02	14.02	224	-	760	-
2022	SEP	802	19	08/17/22	09/15/22	29	536	14.02	14.02	266	-	802	(0)
2022	OCT	536	0	09/15/22	10/17/22	32	536	14.02	14.02	-	-	536	-
2022	NOV	621	4	10/17/22	11/16/22	30	536	14.02	14.02	56	28	621	0
2022	DEC	1,125	42	11/16/22	12/15/22	29	536	14.02	14.02	589	-	1,125	(0)
2023	JAN	550	1	12/15/22	01/16/23	32	536	14.02	14.02	14	-	550	0
2023	FEB	535	0	01/16/23	02/15/23	30	536	14.02	14.02	-	(1)	535	-
2023	MAR	535	0	02/15/23	03/20/23	33	536	14.02	14.02	-	(1)	535	-
2023	APR	535	0	03/20/23	04/18/23	29	536	14.02	14.02	-	(1)	535	-
2023	MAY	535	0	04/18/23	05/16/23	28	536	14.02	14.02	-	(1)	535	-
2023	JUN	535	0	05/16/23	06/15/23	30	536	14.02	14.02	-	(1)	535	-
		$9,763	236			365							

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Customer Charge	First 2,000 gal	2,000 gal +	Consumption Charge	DSIC Surcharge	Total	Difference
2023	JUL	$2,695	154	06/15/23	07/15/23	30	$536	$14.02	$14.02	$2,159	$0	$2,695	$0
2023	AUG	760	16	07/15/23	08/17/23	33	536	14.02	14.02	224	-	760	-
2023	SEP	802	19	08/17/23	09/15/23	29	536	14.02	14.02	266	-	802	-
2023	OCT	536	0	09/15/23	10/17/23	32	536	14.02	14.02	-	-	536	-
2023	NOV	621	4	10/17/23	11/16/23	30	536	14.02	14.02	56	28	621	-
2023	DEC	1,125	42	11/16/23	12/15/23	29	536	14.02	14.02	589	-	1,125	-
2024	JAN	550	1	12/15/23	01/16/24	32	536	14.02	14.02	14	-	550	-
2024	FEB	536	0	01/16/24	02/15/24	30	536	14.02	14.02	-	-	536	-
2024	MAR	536	0	02/15/24	03/20/24	34	536	14.02	14.02	-	-	536	-
2024	APR	536	0	03/20/24	04/18/24	29	536	14.02	14.02	-	-	536	-
2024	MAY	536	0	04/18/24	05/16/24	28	536	14.02	14.02	-	-	536	-
2024	JUN	536	0	05/16/24	06/15/24	30	536	14.02	14.02	-	-	536	-
		$9,768	236			366							

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT
VENDOR: **Indian Creek Valley Water Auth** **Engie Indian Creek Valley Water**
LOCATION: **Springfield Pike** **Location # 2404369**
ACCT #: **2033 97**
Meter size: 6"

	Month	Amount of Bill	Consumption (000) gallons	Beginning Read Date	Ending Read Date	Days	Meter Charge	Price per 1,000 gallons	Consumption Charge	Total	Difference
2022	JUN	$2,835	149.0	05/13/22	06/13/22	31	$600	$15.00	$2,235	$2,835	$0
2022	JUL	12,645	803.0	06/13/22	07/13/22	30	600	15.00	12,045	12,645	-
2022	AUG	5,382	123.3	07/13/22	08/15/22	33	600	15.00	1,850	2,450	2,933
2022	SEP	1,743	76.2	08/15/22	09/14/22	30	600	15.00	1,143	1,743	-
2022	OCT	1,697	73.1	09/14/22	10/13/22	29	600	15.00	1,097	1,697	-
2022	NOV	1,855	73.8	10/13/22	11/14/22	32	600	17.00	1,255	1,855	-
2022	DEC	1,506	53.3	11/14/22	12/13/22	29	600	17.00	906	1,506	-
2023	JAN	1,562	56.6	12/13/22	01/13/23	31	600	17.00	962	1,562	-
2023	FEB	2,868	133.4	01/13/23	02/13/23	31	600	17.00	2,268	2,868	-
2023	MAR	2,669	121.7	02/13/23	03/13/23	28	600	17.00	2,069	2,669	-
2023	APR	3,262	156.6	03/13/23	04/13/23	31	600	17.00	2,662	3,262	-
2023	MAY	1,598	58.7	04/13/23	05/13/23	30	600	17.00	998	1,598	-
2023	JUN	4,214	212.6	05/13/23	06/13/23	31	600	17.00	3,614	4,214	-
		$43,836	2,091.3			396					

	Month	Amount of Bill	Consumption (000) gallons	Beginning Read Date	Ending Read Date	Days	Meter Charge	Price per 1,000 gallons	Consumption Charge	Total	Difference
2023	JUL	$14,251	803.0	06/13/23	07/13/23	30	$600	$17.00	$13,651	$14,251	$0
2023	AUG	2,696	123.3	07/13/23	08/15/23	33	600	17.00	2,096	2,696	-
2023	SEP	1,895	76.2	08/15/23	09/14/23	30	600	17.00	1,295	1,895	-
2023	OCT	1,843	73.1	09/14/23	10/13/23	29	600	17.00	1,243	1,843	-
2023	NOV	1,855	73.8	10/13/23	11/14/23	32	600	17.00	1,255	1,855	-
2023	DEC	1,506	53.3	11/14/23	12/13/23	29	600	17.00	906	1,506	-
2024	JAN	1,562	56.6	12/13/23	01/13/24	31	600	17.00	962	1,562	-
2024	FEB	2,868	133.4	01/13/24	02/13/24	31	600	17.00	2,268	2,868	-
2024	MAR	2,669	121.7	02/13/24	03/13/24	29	600	17.00	2,069	2,669	-
2024	APR	3,262	156.6	03/13/24	04/13/24	31	600	17.00	2,662	3,262	-
2024	MAY	1,598	58.7	04/13/24	05/13/24	30	600	17.00	998	1,598	-
2024	JUN	4,214	212.6	05/13/24	06/13/24	31	600	17.00	3,614	4,214	-
		$40,219	1,942.3			366					

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **2451 - Norristown**
VENDOR: **N. WALES WATER AUTH** **Engie North Wales Water Authority**
LOCATION: **Rt. 202 Whitpain Twp.** **Location # 2404695**
ACCT #: **9001760026447 & 9001760093786** PANO-BL-NBBCC & PANO-BL-NMCCC
METER SIZE: **4", 2"**

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Service Charge *	Standby Charge	Usage @ $2.95/1000 gal	Adjustment	Total	Difference
2022	JUL	$110	2.0	06/30/22	07/29/22	29	$104	$0.00	$5.90		$110	$0
2022	AUG	131	9.0	07/29/22	09/02/22	35	104	0.00	26.55		131	-
2022	SEP	104	0.0	09/02/22	09/30/22	28	104	0.00	0.00		104	-
2022	OCT	104	0.0	09/30/22	10/31/22	31	104	0.00	0.00		104	-
2022	NOV	104	0.0	10/31/22	11/30/22	30	104	0.00	0.00		104	-
2022	DEC	106	0.0	12/01/22	01/03/23	33	104	0.00	0.00	2	106	-
2023	JAN	104	0.0	01/04/23	02/01/23	28	104	0.00	0.00		104	-
2023	FEB	104	0.0	02/02/23	02/27/23	25	104	0.00	0.00		104	-
2023	MAR	104	0.0	02/28/23	03/30/23	30	104	0.00	0.00		104	-
2023	APR	104	0.0	03/31/23	04/28/23	28	104	0.00	0.00		104	-
2023	MAY	104	0.0	04/29/23	05/30/23	31	104	0.00	0.00		104	-
2023	JUN	104	0.0	05/31/23	06/29/23	29	104	0.00	0.00		104	-
		$1,283	11.0			357						

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Service Charge *	Standby Charge	Usage @ $2.95/1000 gal	Adjustment	Total	Difference
2023	JUL	$110	2.0	06/30/23	07/29/23	29	$104	$0.00	$5.90		$110	$0
2023	AUG	131	9.0	07/29/23	09/02/23	35	104	0.00	26.55		131	-
2023	SEP	104	0.0	09/02/23	09/30/23	28	104	0.00	0.00		104	-
2023	OCT	104	0.0	09/30/23	10/31/23	31	104	0.00	0.00		104	-
2023	NOV	104	0.0	10/31/23	11/30/23	30	104	0.00	0.00		104	-
2023	DEC	104	0.0	12/01/23	01/03/24	33	104	0.00	0.00		104	-
2024	JAN	104	0.0	01/04/24	02/01/24	28	104	0.00	0.00		104	-
2024	FEB	104	0.0	02/02/24	02/27/24	25	104	0.00	0.00		104	-
2024	MAR	104	0.0	02/28/24	03/30/24	31	104	0.00	0.00		104	-
2024	APR	104	0.0	03/31/24	04/28/24	28	104	0.00	0.00		104	-
2024	MAY	104	0.0	04/29/24	05/30/24	31	104	0.00	0.00		104	-
2024	JUN	104	0.0	05/31/24	06/29/24	29	104	0.00	0.00		104	-
		$1,280	11.0			358						

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **2451 - Norristown**
VENDOR: **N. WALES WATER AUTH** **Engie North Wales Water Authority**
LOCATION: **Rt. 202 Whitpain Twp.** **Location # 2404695**
ACCT #: **90017600** PANO-BL-NBBCC & PANO-BL-NMCCC
METER SIZE: **6"**

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Service Charge *	Standby Charge	Usage @ $2.95/1000 gal	Adjustment	Total	Difference
2022	JUL											
2022	AUG											
2022	SEP											
2022	OCT											
2022	NOV	909	306	09/02/22	09/30/22	28	0.00	0.00	902.70		903	7
2022	DEC											
2023	JAN	1,794	608	01/04/23	02/01/23	28	0.00	0.00	1,793.60		1,794	-
2023	FEB											
2023	MAR											
2023	APR											
2023	MAY	507	172	01/04/23	02/01/23	28	0.00	0.00	507.40		507	-
2023	JUN											
		$3,210	1,086			84						

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Service Charge *	Standby Charge	Usage @ $2.95/1000 gal	Adjustment	Total	Difference
2023	JUL	$0	0			0	$0.00	$0.00	$0.00		$0	$0
2023	AUG	0	0			0	0.00	0.00	0.00		-	-
2023	SEP	0	0			0	0.00	0.00	0.00		-	-
2023	OCT	0	0			0	0.00	0.00	0.00		-	-
2023	NOV	903	306	09/02/23	09/30/23	28	0.00	0.00	902.70		903	-
2023	DEC	0	0			0	0.00	0.00	0.00		-	-
2024	JAN	1,794	608	01/04/24	02/01/24	28	0.00	0.00	1,793.60		1,794	-
2024	FEB	0	0			0	0.00	0.00	0.00		-	-
2024	MAR	0	0			0	0.00	0.00	0.00		-	-
2024	APR	0	0			0	0.00	0.00	0.00		-	-
2024	MAY	507	172	01/04/24	02/01/24	28	0.00	0.00	507.40		507	-
2024	JUN	0	0			0	0.00	0.00	0.00		-	-
		$3,204	1,086			84						

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **640 - Royersford** PARF-PH-PHC2.
VENDOR: **BOROUGH OF PHOENIXVILLE** **Engie The Borough of Phoenixville**
LOCATION: **Township Line & Pumphouse EP** **Location # 2404629**
ACCT #: **9166.01**
METER SIZE: **Multi**

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Admin Fee	First 333,333 Gal	Next 1,333,333 Gal	Over 1,666,333 Gal	Consumption Charges	Total	Difference
2022	JUL	$283	0	06/22/22	07/18/22	26	$283.33	$4.50	$4.50	$4.50	$0	$283	$0
2022	AUG	283	0	07/18/22	08/17/22	30	283.33	4.50	4.50	4.50	-	283	-
2022	SEP	283	0	08/17/22	09/15/22	29	283.33	4.50	4.50	4.50	-	283	-
2022	OCT	283	0	09/15/22	10/14/22	29	283.33	4.50	4.50	4.50	-	283	-
2022	NOV	283	0	10/14/22	11/15/22	32	283.33	4.50	4.50	4.50	-	283	-
2022	DEC	283	0	11/15/22	12/16/22	31	283.33	4.50	4.50	4.50	-	283	-
2023	JAN	283	0	12/16/22	01/17/23	32	283.33	4.50	4.50	4.50	-	283	-
2023	FEB	283	0	01/17/23	02/22/23	36	283.33	4.50	4.50	4.50	-	283	-
2023	MAR	283	0	02/22/23	03/16/23	22	283.33	4.50	4.50	4.50	-	283	-
2023	APR	283	0	03/16/23	04/21/23	36	283.33	4.50	4.50	4.50	-	283	-
2023	MAY	283	0	04/21/23	05/17/23	26	283.33	4.50	4.50	4.50	-	283	-
2023	JUN	283	0	05/17/23	06/16/23	30		4.50	4.50	4.50	283	283	-
		$3,400	0			359							

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Admin Fee	First 333,333 Gal	Next 1,333,333 Gal	Over 1,666,333 Gal	Consumption Charges	Total	Difference
2023	JUL	$283	0	06/22/23	07/18/23	26	$283.33	$4.50	$4.50	$4.50		$283	$0
2023	AUG	283	0	07/18/23	08/17/23	30	283.33	4.50	4.50	4.50		283	-
2023	SEP	283	0	08/17/23	09/15/23	29	283.33	4.50	4.50	4.50		283	-
2023	OCT	283	0	09/15/23	10/14/23	29	283.33	4.50	4.50	4.50		283	-
2023	NOV	283	0	10/14/23	11/15/23	32	283.33	4.50	4.50	4.50		283	-
2023	DEC	283	0	11/15/23	12/16/23	31	283.33	4.50	4.50	4.50		283	-
2024	JAN	283	0	12/16/23	01/17/24	32	283.33	4.50	4.50	4.50		283	-
2024	FEB	283	0	01/17/24	02/22/24	36	283.33	4.50	4.50	4.50		283	-
2024	MAR	283	0	02/22/24	03/16/24	23	283.33	4.50	4.50	4.50		283	-
2024	APR	283	0	03/16/24	04/21/24	36	283.33	4.50	4.50	4.50		283	-
2024	MAY	283	0	04/21/24	05/17/24	26	283.33	4.50	4.50	4.50		283	-
2024	JUN	283	0	05/17/24	06/16/24	30	283.33	4.50	4.50	4.50		283	-
		$3,400	0			360							

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **640 - Royersford** PARF-PH-PHC1.
VENDOR: **BOROUGH OF PHOENIXVILLE**
LOCATION: **Sowers Ave & Covered Bridge** **Engie The Borough of Phoenixville**
ACCT #: **3.01** **Location # 2404629**
METER SIZE: **Multi**

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Admin Fee	First 333,333 Gal	Next 1,333,333 Gal	Over 1,666,333 Gal	Consumption Charge	Total	Difference
2022	JUN	$24,750	3,076	05/16/22	06/22/22	37					$24,750	$24,750	$0
2022	JUL	40,409	7,347	06/22/22	07/18/22	26					40,409	40,409	-
2022	AUG	24,750	3,790	07/18/22	08/17/22	30					24,750	24,750	-
2022	SEP	30,261	5,502	08/17/22	09/15/22	29					30,261	30,261	-
2022	OCT	31,658	5,756	09/15/22	10/14/22	29					31,658	31,658	-
2022	NOV	27,808	5,056	10/14/22	11/15/22	32					27,808	27,808	-
2022	DEC	24,750	2,930	11/15/22	12/16/22	31					24,750	24,750	-
2023	JAN	29,205	5,310	12/16/22	01/17/23	32					29,205	29,205	-
2023	FEB	29,250	1,499	01/17/23	02/22/23	36					29,250	29,250	-
2023	MAR	29,250	3,411	02/22/23	03/16/23	22					29,250	29,250	-
2023	APR	48,360	7,440	03/16/23	04/21/23	36					48,360	48,360	-
2023	MAY	29,250	0	04/21/23	05/17/23	26					29,250	29,250	-
		$369,701	51,117			366							

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Admin Fee	First 333,333 Gal	Next 1,333,333 Gal	Over 1,666,333 Gal	Consumption Charge	Total	Difference
2023	JUN	$24,750	3,076	05/16/23	06/22/23	37	$0.00	$3.00	$2.45	$2.00	$24,750	$24,750	$0
2023	JUL	40,409	7,347	06/22/23	07/18/23	26	0.00	3.00	2.45	2.00	40,409	40,409	-
2023	AUG	24,750	3,790	07/18/23	08/17/23	30	0.00	3.00	2.45	2.00	24,750	24,750	-
2023	SEP	30,261	5,502	08/17/23	09/15/23	29	0.00	3.00	2.45	2.00	30,261	30,261	-
2023	OCT	31,658	5,756	09/15/23	10/14/23	29	0.00	3.00	2.45	2.00	31,658	31,658	-
2023	NOV	27,808	5,056	10/14/23	11/15/23	32	0.00	3.00	2.45	2.00	27,808	27,808	-
2024	DEC	24,750	2,930	11/15/23	12/16/23	31	0.00	3.00	2.45	2.00	24,750	24,750	-
2024	JAN	29,205	5,310	12/16/23	01/17/24	32	0.00	3.00	2.45	2.00	29,205	29,205	-
2024	FEB	29,250	1,499	01/17/24	02/22/24	36	0.00	3.00	2.45	2.00	29,250	29,250	-
2024	MAR	29,250	3,411	02/22/24	03/16/24	23	0.00	3.00	2.45	2.00	29,250	29,250	-
2024	APR	48,360	7,440	03/16/24	04/21/24	36	0.00	3.00	2.45	2.00	48,360	48,360	-
2024	MAY	29,250	0	04/21/24	05/17/24	26	0.00	3.00	2.45	2.00	29,250	29,250	-
		$369,701	51,117			367							

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **250 - PA-Brownsville Water System** PABV-BV-TCCON
VENDOR: **Tri-County Joint Municipal Authority**
LOCATION: **Daisytown Meter Pit** **Tri-County Joint Municipal Authority**
ACCT #: **40058-0** **Location # 2404724**
METER SIZE: **3/4"**

	Month	Bill Amount	**Consumption (000's)**	Beginning Read Date	Ending Read Date	Days	Service Charge	Usage Charge per 1,000 gallons	Total Usage	CAP Charge	Total Charges	Difference
2022	JUN	$190	19.3	05/27/22	06/28/22	32	$18.33	$8.50	$164	$8	$190	$0
2022	JUL	150	15.5	06/28/22	07/29/22	31	18.33	8.50	132		150	-
2022	AUG	134	13.6	07/29/22	08/31/22	33	18.33	8.50	116		134	-
2022	SEP	126	11.7	08/31/22	09/30/22	30	18.33	8.50	99	8	126	-
2022	OCT	119	11.9	09/30/22	10/31/22	31	18.33	8.50	101		119	-
2022	NOV	122	12.2	10/31/22	11/30/22	30	18.33	8.50	104		122	-
2022	DEC	135	12.8	11/30/22	12/30/22	30	18.33	8.50	109	8	135	-
2023	JAN	158	16.4	12/30/22	01/30/23	31	18.33	8.50	139		158	-
2023	FEB	147	15.1	01/30/23	02/27/23	28	18.33	8.50	128		147	-
2023	MAR	171	17.1	02/27/23	03/31/23	32	18.33	8.50	145	8	171	-
2023	APR	134	13.6	03/31/23	04/28/23	28	18.33	8.50	116		134	-
2023	MAY	159	16.6	04/28/23	05/30/23	32	18.33	8.50	141		159	-
		$1,745	175.8			368						

	Month	Bill Amount	**Consumption (000's)**	Beginning Read Date	Ending Read Date	Days	Service Charge	Usage Charge per 1,000 gallons	Total Usage	CAP Charge	Total Charges	Difference
2023	JUL	$190	19.3	05/30/23	06/28/23	29	$18.33	$8.50	$164	$8	$190	$0
2023	AUG	150	15.5	06/28/23	07/29/23	31	18.33	8.50	132	-	150	-
2023	SEP	134	13.6	07/29/23	08/31/23	33	18.33	8.50	116	-	134	-
2023	OCT	126	11.7	08/31/23	09/30/23	30	18.33	8.50	99	8	126	-
2023	NOV	119	11.9	09/30/23	10/31/23	31	18.33	8.50	101	-	119	-
2023	DEC	122	12.2	10/31/23	11/30/23	30	18.33	8.50	104	-	122	-
2024	JAN	135	12.8	11/30/23	12/30/23	30	18.33	8.50	109	8	135	-
2024	FEB	158	16.4	12/30/23	01/30/24	31	18.33	8.50	139	-	158	-
2024	MAR	147	15.1	01/30/24	02/27/24	28	18.33	8.50	128	-	147	-
2024	APR	171	17.1	02/27/24	03/31/24	33	18.33	8.50	145	8	171	-
2024	MAY	134	13.6	03/31/24	04/28/24	28	18.33	8.50	116	-	134	-
2024	JUN	159	16.6	04/28/24	05/30/24	32	18.33	8.50	141	-	159	-
		$1,745	175.8			366						

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **740 - Frackville** PAFR-FR-SCMA.(consolidated)
VENDOR: **SCHUYLKILL COUNTY**
LOCATION: **302 Morea Rd** Schuylkill County Municipal Authority
ACCT #: **08104900-0** Location # 2402402
METER SIZE: **1"**

	Month	Bill Amount	Consumption 100 CF	Beginning Read Date	Ending Read Date	Days	Service Charge	First 10 (100 CF Units)	All Other Consumption per 100 CF Unit	Total Consumption	Total	Difference
2022	JUN	$55	4	05/31/22	06/30/22	30	$55.20	$0.00	$5.30	$0	$55	$0
2022	JUL	55	0	06/30/22	07/31/22	31	55.20	0.00	5.30	-	55	-
2022	AUG	55	1	07/31/22	08/31/22	31	55.20	0.00	5.30	-	55	-
2022	SEP	55	0	08/31/22	09/30/22	30	55.20	0.00	5.30	-	55	-
2022	OCT	55	3	09/30/22	10/31/22	31	55.20	0.00	5.30	-	55	-
2022	NOV	55	2	10/31/22	11/30/22	30	55.20	0.00	5.30	-	55	-
2022	DEC	55	2	12/01/22	12/31/22	30	55.20	0.00	5.30	-	55	-
2023	JAN	7	0	12/01/22	12/31/22	30	7.17	0.00	0.00	-	7	-
2023	JAN	55	2	01/01/23	01/31/23	30	62.37	0.00	5.30	-	62	(7)
2023	FEB	68	2	02/01/23	02/28/23	27	62.37	0.00	5.30	-	62	6
2023	MAR	69	2	03/01/23	03/31/23	30	62.37	0.00	5.30	-	62	6
2023	APR	68	2	04/01/23	04/30/23	29	62.37	0.00	5.30	-	62	6
2023	MAY	69	2	05/01/23	05/31/23	30	62.37	0.00	5.30	-	62	6
		$722	22			389						

	Month	Bill Amount	Consumption 100 CF	Beginning Read Date	Ending Read Date	Days	Service Charge	First 10 (100 CF Units)	All Other Consumption per 100 CF Unit	Total Consumption	Total	Difference
2023	JUN	$62	4	05/31/23	06/30/23	30	$62.37	$0.00	$5.30	$0	$62	$0
2023	JUL	62	0	06/30/23	07/31/23	31	62.37	0.00	5.30	-	62	-
2023	AUG	62	1	07/31/23	08/31/23	31	62.37	0.00	5.30	-	62	-
2023	SEP	62	0	08/31/23	09/30/23	30	62.37	0.00	5.30	-	62	-
2023	OCT	62	3	09/30/23	10/31/23	31	62.37	0.00	5.30	-	62	-
2023	NOV	62	2	10/31/23	11/30/23	30	62.37	0.00	5.30	-	62	-
2024	DEC	62	2	12/01/23	12/31/23	30	62.37	0.00	5.30	-	62	-
2024	JAN	62	2	01/01/24	01/31/24	30	62.37	0.00	5.30	-	62	-
2024	FEB	62	2	02/01/24	02/28/24	27	62.37	0.00	5.30	-	62	-
2024	MAR	62	2	03/01/24	03/31/24	30	62.37	0.00	5.30	-	62	-
2024	APR	62	2	04/01/24	04/30/24	29	62.37	0.00	5.30	-	62	-
2024	MAY	62	2	05/01/24	05/31/24	30	62.37	0.00	5.30	-	62	-
		$748	22			359						

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **740 - Frackville** PAFR-FR-SCMA.(consolidated)
VENDOR: **SCHUYLKILL COUNTY**
LOCATION: **Laural Ridge, Frackville** **Schuylkill County Municipal Authority**
ACCT #: **08105000-0** **Location # 2402206**
METER SIZE: **6"**

	Month	Bill Amount	Consumption 100 CF	Beginning Read Date	Ending Read Date	Days	Service Charge	First 300CF	All Other Consumption - per 100CF	Total Consumption Charge	Invoice Total	Difference
2022	JUN	$887	142	05/31/22	06/30/22	30	$856.80	$6.55	$6.21	$31	$887	$0
2022	JUL	1,152	202	06/30/22	07/31/22	31	856.80	6.55	6.21	295	1,152	-
2022	AUG	1,249	220	07/31/22	08/31/22	31	856.80	6.55	6.21	392	1,249	-
2022	SEP	1,265	223	08/31/22	09/30/22	30	856.80	6.55	6.21	409	1,265	-
2022	OCT	898	155	09/30/22	10/31/22	31	856.80	6.55	6.21	41	898	-
2022	NOV	898	155	10/31/22	11/30/22	30	856.80	6.55	6.21	41	898	-
2022	DEC	1,076	188	11/30/22	12/31/22	31	856.80	6.55	6.21	220	1,076	-
2023	JAN	1,449	225	12/01/22	12/31/22	30	856.80	6.55	6.21	592	1,449	-
2023	FEB	1,227	174	02/01/23	02/28/23	27	856.80	6.55	6.21	371	1,227	-
2023	MAR	1,027	157	03/01/23	03/31/23	30	856.80	6.55	6.21	170	1,027	-
2023	APR	1,170	180	04/01/23	04/30/23	29	856.80	6.55	6.21	313	1,170	-
2023	MAY	1,083	166	05/01/23	05/31/23	30	856.80	6.55	6.21	226	1,083	-
		$13,383	2,187	Cubic Feet		360						

	Month	Bill Amount	Consumption 100 CF	Beginning Read Date	Ending Read Date	Days	Service Charge	First 300CF	All Other Consumption - per 100CF	Total Consumption Charge	Invoice Total	Difference
2023	JUN	$887	142	05/31/23	06/30/23	30	$856.80	$6.55	$6.21	$31	$887	$0
2023	JUL	1,152	202	06/30/23	07/31/23	31	856.80	6.55	6.21	295	1,152	-
2023	AUG	1,249	220	07/31/23	08/31/23	31	856.80	6.55	6.21	392	1,249	-
2023	SEP	1,265	223	08/31/23	09/30/23	30	856.80	6.55	6.21	409	1,265	-
2023	OCT	898	155	09/30/23	10/31/23	31	856.80	6.55	6.21	41	898	-
2023	NOV	898	155	10/31/23	11/30/23	30	856.80	6.55	6.21	41	898	-
2024	DEC	1,076	188	11/30/23	12/31/23	31	856.80	6.55	6.21	220	1,076	-
2024	JAN	1,449	225	12/01/23	12/31/23	30	856.80	6.55	6.21	592	1,449	-
2024	FEB	1,227	174	02/01/24	02/28/24	27	856.80	6.55	6.21	371	1,227	-
2024	MAR	1,027	157	03/01/24	03/31/24	30	856.80	6.55	6.21	170	1,027	-
2024	APR	1,170	180	04/01/24	04/30/24	29	856.80	6.55	6.21	313	1,170	-
2024	MAY	1,083	166	05/01/24	05/31/24	30	856.80	6.55	6.21	226	1,083	-
		$13,383	2,187	Cubic Feet		360						

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **740 - Frackville** PAFR-FR-SCMA.(consolidated)
VENDOR: **SCHUYLKILL COUNTY**
LOCATION: **6 S Eleanor Ave** **Schuylkill County Municipal Authority**
ACCT #: **08104800-0** **Location # 2402402**
METER SIZE: **1"**

	Month	Bill Amount	Consumption 100 CF	Beginning Read Date	Ending Read Date	Days	Service Charge	First 10 (100 CF Units)	All Other Consumption per 1000 CF Unit	Total Consumption	Total	Difference
2022	JUN	$55	0	05/31/22	06/30/22	30	$55.20	$0.00	$5.60	$0	$55	$0
2022	JUL	55	3	06/30/22	07/31/22	31	55.20	0.00	5.60	-	55	-
2022	AUG	125	23	07/31/22	08/31/22	31	55.20	0.00	5.60	70	125	-
2022	SEP	131	24	08/31/22	09/30/22	30	55.20	0.00	5.60	76	131	-
2022	OCT	55	0	09/30/22	10/31/22	31	55.20	0.00	5.60	-	55	-
2022	NOV	55	1	10/31/22	11/30/22	30	55.20	0.00	5.60	-	55	-
2022	DEC	55	4	11/30/22	12/31/22	31	55.20	0.00	5.60	-	55	-
2023	JAN	62	0	12/31/22	01/31/23	31	62.37	0.00	5.60	-	62	-
2023	FEB	62	0	01/31/23	02/28/23	28	62.37	0.00	5.60	-	62	-
2023	MAR	62	0	02/28/23	03/31/23	31	62.37	0.00	5.60	-	62	-
2023	APR	62	0	03/31/23	04/30/23	30	62.37	0.00	5.60	-	62	-
2023	MAY	62	0	04/30/23	05/31/23	31	62.37	0.00	5.60	-	62	-
		$844	55			365						

	Month	Bill Amount	Consumption 100 CF	Beginning Read Date	Ending Read Date	Days	Service Charge	First 10 (100 CF Units)	All Other Consumption per 1000 CF Unit	Total Consumption	Total	Difference
2023	JUN	$62	0	05/31/23	06/30/23	30	$62.37	$0.00	$5.60	$0	$62	$0
2023	JUL	62	3	06/30/23	07/31/23	31	62.37	0.00	5.60	-	62	-
2023	AUG	133	23	07/31/23	08/31/23	31	62.37	0.00	5.60	70	133	-
2023	SEP	138	24	08/31/23	09/30/23	30	62.37	0.00	5.60	76	138	-
2023	OCT	62	0	09/30/23	10/31/23	31	62.37	0.00	5.60	-	62	-
2023	NOV	62	1	10/31/23	11/30/23	30	62.37	0.00	5.60	-	62	-
2024	DEC	62	4	11/30/23	12/31/23	31	62.37	0.00	5.60	-	62	-
2024	JAN	62	0	12/31/23	01/31/24	31	62.37	0.00	5.60	-	62	-
2024	FEB	62	0	01/31/24	02/28/24	28	62.37	0.00	5.60	-	62	-
2024	MAR	62	0	02/28/24	03/31/24	32	62.37	0.00	5.60	-	62	-
2024	APR	62	0	03/31/24	04/30/24	30	62.37	0.00	5.60	-	62	-
2024	MAY	62	0	04/30/24	05/31/24	31	62.37	0.00	5.60	-	62	-
		$894	55			366						

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **633 - Glen Alsace** Woodvale Pump Station Site
VENDOR: **READING AREA WTR AUTH**
LOCATION: **501 S 19th St.** **Reading Area Water Authority**
ACCT #: **2865601** **Location # 2402853**
METER SIZE: **8" & 0.62**

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gal	Consumption	Water Customer Charge	Sewer Customer Charge	Total	Difference
2022	MAY	$94,755	21,721	05/02/22	06/01/22	30	$4.36	$94,705	$19	$31	$94,755	($0)
2022	JUN	18,925	4,329	06/01/22	07/12/22	41	4.36	18,876	19	31	18,925	0
2022	JUL	28,884	6,613	07/12/22	08/30/22	49	4.36	28,833	19	31	28,883	1
2022	AUG	59,978	13,745	08/30/22	09/01/22	2	4.36	59,928	19	31	59,978	-
2022	SEP	31,355	7,128	09/01/22	10/06/22	35	4.36	31,077	19	259	31,355	0
2022	OCT	6,948	1,582	10/06/22	11/01/22	26	4.36	6,898	19	31	6,948	(0)
2022	NOV	27,104	6,205	11/01/22	12/02/22	31	4.36	27,054	19	31	27,104	0
2022	DEC	29,756	6,813	12/02/22	01/05/23	34	4.36	29,706	19	31	29,756	(0)
2023	JAN	28,011	6,413	01/05/23	02/01/23	27	4.36	27,961	19	31	28,011	(0)
2023	FEB	8,867	2,022	02/01/23	03/02/23	29	4.36	8,817	19	31	8,867	0
2023	MAR	20,054	4,588	03/02/23	04/05/23	34	4.36	20,004	19	31	20,054	(0)
2023	APR	25,870	5,922	04/05/23	05/01/23	26	4.36	25,820	19	31	25,870	0
		$380,508	87,083			364						

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Cost per 1,000 gal	Consumption	Water Customer Charge	Sewer Customer Charge	Total	Difference
2023	MAY	$94,755	21,721	05/02/23	06/01/23	30	$4.36	$94,705	$19	$31	$94,755	$0
2023	JUN	18,925	4,329	06/01/23	07/12/23	41	4.36	18,876	19	31	18,925	-
2023	JUL	28,883	6,613	07/12/23	08/30/23	49	4.36	28,833	19	31	28,883	-
2023	AUG	59,978	13,745	08/30/23	09/01/23	2	4.36	59,928	19	31	59,978	-
2023	SEP	31,355	7,128	09/01/23	10/06/23	35	4.36	31,077	19	259	31,355	-
2023	OCT	6,948	1,582	10/06/23	11/01/23	26	4.36	6,898	19	31	6,948	-
2024	NOV	27,104	6,205	11/01/23	12/02/23	31	4.36	27,054	19	31	27,104	-
2024	DEC	29,756	6,813	12/02/23	01/05/24	34	4.36	29,706	19	31	29,756	-
2024	JAN	28,011	6,413	01/05/24	02/01/24	27	4.36	27,961	19	31	28,011	-
2024	FEB	8,867	2,022	02/01/24	03/02/24	30	4.36	8,817	19	31	8,867	-
2024	MAR	20,054	4,588	03/02/24	04/05/24	34	4.36	20,004	19	31	20,054	-
2024	APR	25,870	5,922	04/05/24	05/01/24	26	4.36	25,820	19	31	25,870	-
		$380,506	87,083			365						

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **633 - Glen Alsace** PAGA-EX-SEIDL
VENDOR: **MT PENN**
LOCATION: **SEIDEL ST** **Engie Mt. Penn Borough Municipal Authority**
ACCT #: **550470 Seidel St.** **Location # 2402418**
METER SIZE: **2"**

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Service Charge (1st 1000 Gal)	Charge for next 1,001 to 6,000,000 Gal	Consumption Charge	Total	Difference
2022	JUL	$5,368	2,265	06/10/22	07/22/22	42	$47.83	$2.35	$5,320	$5,368	$0
2022	AUG							2.35	-	-	-
2022	SEP	10,806	4,579	07/22/22	09/16/22	56	47.83	2.35	10,758	10,806	-
2022	OCT							2.35	-	-	-
2022	NOV							2.35	-	-	-
2022	DEC							2.35	-	-	-
2023	JAN							2.35	-	-	-
2023	FEB	48	0	09/16/22	03/06/23	171	47.83	2.35	-	48	-
2023	MAR							2.35	-	-	-
2023	APR							2.35	-	-	-
2023	MAY	2,299	925	03/06/23	05/05/23	60	47.83	2.35	2,172	2,220	80
2023	JUN	48	0	05/05/23	06/09/23	35	47.83	2.35	-	48	-
		$18,569	7,769			364					

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Service Charge (1st 1000 Gal)	Charge for next 1,001 to 6,000,000 Gal	Consumption Charge	Total	Difference
2023	JUL	$5,368	2,265	06/10/23	07/22/23	42	$47.83	$2.35	$5,320	$5,368	$0
2023	AUG	-						2.35	-	-	-
2023	SEP	10,806	4,579	07/22/23	09/16/23	56	47.83	2.35	10,758	10,806	-
2023	OCT	-						2.35	-	-	-
2023	NOV	-						2.35	-	-	-
2023	DEC	-						2.35	-	-	-
2024	JAN	-						2.35	-	-	-
2024	FEB	48	0	09/16/23	03/06/24	172	47.83	2.35	-	48	-
2024	MAR	-						2.35	-	-	-
2024	APR	-						2.35	-	-	-
2024	MAY	2,220	925	03/06/24	05/05/24	60	47.83	2.35	2,172	2,220	-
2024	JUN	48	0	05/05/24	06/09/24	35	47.83	2.35	-	48	-
		$18,490	7,769			365					

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **633 - Glen Alsace** PAGA-EX-MTPN.-BG. **Engie Mt. Penn Borough Municipal Authority**
VENDOR: **MT PENN** **Location # 2402418**
LOCATION: **METER PIT AT ST. LAWRENCE AVE & BINGAMAN ST**
ACCT #: **550471 St. Lawrence Ave & Bingaman**
METER SIZE: **4**

								$2.35 per 1000	$2.65 per 1000		
	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Service Charge (1st 1,000 Gal)	Next 1,001 to 6,000,000 Gal	All Over 6,000,000 Gal	Total	Difference
2022	JUL	$860	367	06/10/22	07/22/22	42	$127.38	$860.10	$0.00	$987	($127)
2022	AUG					0		0.00	0.00	-	-
2022	SEP	475	140	07/22/22	09/09/22	49	127.38	347.80	0.00	475	-
2022	OCT					0		0.00	0.00	-	-
2022	NOV	14,758	6,227	09/09/22	11/04/22	56	127.38	14,630.54	0.00	14,758	-
2022	DEC										
2023	JAN	21,782	8,105	11/04/22	01/04/23	61	127.38	14,100.00	5,574.00	19,801	1,981
2023	FEB	12,112	5,101	01/04/23	02/04/23	31	127.38	11,984.38	0.00	12,112	-
2023	MAR					0				-	-
2023	APR	26,900	8,536	02/04/23	03/31/23	55	127.38	20,056.34	6,716.74	26,900	-
2023	MAY	15,227	6,201	03/31/23	05/05/23	35	127.38	14,569.91	529.89	15,227	-
2023	JUN	14,623	6,080	05/05/23	06/09/23	35	127.38	14,286.10	209.86	14,623	-
		$106,738	40,756			364					

								$2.35 per 1000	$2.65 per 1000		
	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Service Charge (1st 1,000 Gal)	Next 1,001 to 6,000,000 Gal	All Over 6,000,000 Gal	Total	Difference
2023	JUL	$987	367	06/10/23	07/22/23	42	$127.38	$860.10	$0.00	$987	$0
2023	AUG							0.00	0.00	-	-
2023	SEP	475	140	07/22/23	09/09/23	49	127.38	347.80	0.00	475	-
2023	OCT							0.00	0.00	-	-
2023	NOV	14,758	6,227	09/09/23	11/04/23	56	127.38	14,630.54	0.00	14,758	-
2023	DEC							0.00	0.00	-	-
2024	JAN	19,801	8,105	11/04/23	01/04/24	61	127.38	14,100.00	5,574.00	19,801	-
2024	FEB	12,112	5,101	01/04/24	02/04/24	31	127.38	11,984.38	0.00	12,112	-
2024	MAR							0.00	0.00	-	-
2024	APR	26,900	8,536	02/04/24	03/31/24	56	127.38	20,056.34	6,716.74	26,900	-
2024	MAY	15,227	6,201	03/31/24	05/05/24	35	127.38	14,569.91	529.89	15,227	-
2024	JUN	14,623	6,080	05/05/24	06/09/24	35	127.38	14,286.10	209.86	14,623	-
		$104,885	40,756			365					

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT 510 Indian Creek Interconnect Meter
VENDOR: NPWA - North Penn Water Authority **North Penn Water Authority**
LOCATION: **Location # 2405074**
ACCT #: **529950-130668**
METER SIZE: 6" PA-Norristown Water System North Wales Interconnect

510 Y PANO PANO-NWHAL-INT1 1,421

Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Usage Charge	Per 1,000 gallons	Consumption Charge	Total	Diff
JAN					0		$5.27	$0	$0	$0
FEB					0		5.27	-	-	-
MAR					0		5.27	-	-	-
APR					0		5.27	-	-	-
MAY					0		5.27	-	-	-
JUN					0		5.27	-	-	-
JUL					0		5.27	-	-	-
AUG					0		5.27	-	-	-
SEP					0		5.27	-	-	-
OCT					0		5.27	-	-	-
NOV					0		5.27	-	-	-
DEC					0		5.27	-	-	-
	$0.00	-			0					

Month	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Usage Charge	Per 1,000 gallons	Consumption Charge	Total	Diff
JAN	$0	-			0		$5.27	$0	$0	$0
FEB	-	-			0		5.27	-	-	-
MAR	-	-			0		5.27	-	-	-
APR	-	-			0		5.27	-	-	-
MAY	-	-			0		5.27	-	-	-
JUN	-	-			0		5.27	-	-	-
JUL	-	-			0		5.27	-	-	-
AUG	-	-			0		5.27	-	-	-
SEP	-	-			0		5.27	-	-	-
OCT	-	-			0		5.27	-	-	-
NOV	-	-			0		5.27	-	-	-
DEC	-	-			0		5.27	-	-	-
	$0	-			0					

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **620 - Hershey** Lebanon PRV Stat & Purchased Water Inte
VENDOR: **CITY OF LEBANON**
LOCATION: **W. PENN AVE,** **Engie City of Lebanon, PA**
ACCT #: **15544-38086** **Location # 2402318**
METER SIZE: **6"**

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Meter Charge	First 30,000 gal	Next 120,000 gal	150,000+ gals	Consumption Charge	Total	Difference
2022	JUN	$2,317	431	05/24/22	06/24/22	31	$709.32	$3.73	$3.73	$3.73	$1,608	$2,317	$0
2022	JUL	2,231	408	06/24/22	07/25/22	31	709.32	3.73	3.73	3.73	1,522	2,231	-
2022	AUG	1,862	309	07/25/22	08/26/22	32	709.32	3.73	3.73	3.73	1,153	1,862	-
2022	SEP	1,425	192	08/26/22	09/27/22	32	709.32	3.73	3.73	3.73	716	1,425	-
2022	OCT	1,026	85	09/27/22	10/26/22	29	709.32	3.73	3.73	3.73	317	1,026	-
2022	NOV	1,485	208	10/26/22	11/23/22	28	709.32	3.73	3.73	3.73	776	1,485	-
2022	DEC	1,161	121	11/23/22	12/27/22	34	709.32	3.73	3.73	3.73	451	1,161	-
2023	JAN	732	6	12/27/22	01/23/23	27	709.32	3.73	3.73	3.73	22	732	-
2023	FEB	728	5	01/23/23	02/24/23	32	709.32	3.73	3.73	3.73	19	728	-
2023	MAR	807	18	02/24/23	03/24/23	28	737.49	3.84	3.84	3.84	69	807	-
2023	APR	749	3	03/24/23	04/21/23	28	737.49	3.84	3.84	3.84	12	749	-
2023	MAY	964	59	04/21/23	05/25/23	34	737.49	3.84	3.84	3.84	227	964	-
		$15,487	1,845			366							

	Month	Amount of Bill	Consumption (000)	Beginning Read Date	Ending Read Date	Days	Meter Charge	First 30,000 gal	Next 120,000 gal	150,000+ gals	Consumption Charge	Total	Difference
2023	JUL	$2,393	431	05/25/23	06/24/23	30	$737.49	$3.84	$3.84	$3.84	$1,655	$2,393	$0
2023	AUG	2,304	408	06/24/23	07/25/23	31	737.49	3.84	3.84	3.84	1,567	2,304	-
2023	SEP	1,924	309	07/25/23	08/26/23	32	737.49	3.84	3.84	3.84	1,187	1,924	-
2023	OCT	1,475	192	08/26/23	09/27/23	32	737.49	3.84	3.84	3.84	737	1,475	-
2023	NOV	1,064	85	09/27/23	10/26/23	29	737.49	3.84	3.84	3.84	326	1,064	-
2023	DEC	1,536	208	10/26/23	11/23/23	28	737.49	3.84	3.84	3.84	799	1,536	-
2024	JAN	1,202	121	11/23/23	12/27/23	34	737.49	3.84	3.84	3.84	465	1,202	-
2024	FEB	761	6	12/27/23	01/23/24	27	737.49	3.84	3.84	3.84	23	761	-
2024	MAR	757	5	01/23/24	02/24/24	32	737.49	3.84	3.84	3.84	19	757	-
2024	APR	807	18	02/24/24	03/24/24	29	737.49	3.84	3.84	3.84	69	807	-
2024	MAY	749	3	03/24/24	04/21/24	28	737.49	3.84	3.84	3.84	12	749	-
2024	JUN	964	59	04/21/24	05/25/24	34	737.49	3.84	3.84	3.84	227	964	-
		$15,935	1,845			366							

PENNSYLVANIA-AMERICAN WATER COMPANY PURCHASED WATER

DISTRICT **621 - Steelton** Veolia-Steelton PA-American 19th Street Interconnection
VENDOR: **Veolia Water**
LOCATION: **19th Street Interconnection** **KR Invoice**
ACCT #: **4020047-9991-304** **Location:**
METER SIZE:

	Month	Invoice #	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Service Charge	Per 1000 Gallons	Consumption Charge	Total	Difference
2022	JUL	MISC-1072	$4,278	472,700	06/22/22	06/23/22	1	$0.00	$0.01	$4,278	$4,278	$0
2022	AUG											
2022	SEP											
2022	OCT											
2022	NOV											
2022	DEC											
2023	JAN											
2023	FEB											
2023	MAR											
2023	APR											
2023	MAY											
2023	JUN											
			$4,278	472,700			1					

	Month	Invoice #	Bill Amount	Consumption (in 000's)	Beginning Read Date	Ending Read Date	Days	Service Charge	Next 237,000 gal	Consumption Charge	Total	Difference
2023	JUL											
2023	AUG											
2023	SEP											
2023	OCT											
2023	NOV											
2023	DEC											
2024	JAN											
2024	FEB											
2024	MAR											
2024	APR											
2024	MAY											
2024	JUN											
			$0.00	0			0					

PENNSYLVANIA AMERICAN WATER COMPANY
PURCHASED WATER
DISTRICT **2451**
VENDOR: **Delaware River Basin Commission**
LOCATION: **Norristown System**
CITY: **Spring City**
ACCT #:
METER SIZE: **Diversion Rights**

	Billing Month	VOUCHER #	AMOUNT OF BILL	
2022	JUL	5001049660	$9,421	Q2
2022	AUG			
2022	SEP			
2022	OCT	5001083854	11,479	Q3
2022	NOV			
2022	DEC			
2023	JAN	5001125316	10,281	Q4
2023	FEB			
2023	MAR			
2023	APR			
2023	MAY	5001158665	9,679	Q1
2023	JUN			
			$40,859	

	Billing Month	VOUCHER #	AMOUNT OF BILL	
2023	JUL		$9,421	Q2
2023	AUG			
2023	SEP			
2023	OCT		11,479	Q3
2023	NOV			
2023	DEC			
2024	JAN		10,281	Q4
2024	FEB			
2024	MAR			
2024	APR			
2024	MAY		9,679	Q1
2024	JUN			
			$40,859	

PENNSYLVANIA AMERICAN WATER COMPANY
PURCHASED WATER
DISTRICT **2456**
VENDOR: **Delaware River Basin Commission**
LOCATION: **Wilkes Barre**
ACCT #:
METER SIZE: **Diversion Rights**

	Billing Month	VOUCHER #	AMOUNT OF BILL	
2022	JUL	5001044063	$1,554	Q2
2022	AUG			
2022	SEP			
2022	OCT	5001082961	1,826	Q3
2022	NOV			
2022	DEC	5001120814	1,959	Q4
2023	JAN			
2023	FEB			
2023	MAR			
2023	APR			
2023	MAY	5001160372	1,989	Q1
2023	JUN			
			$7,328	

	Billing Month	VOUCHER #	AMOUNT OF BILL	
2023	JUL		$1,554	Q2
2023	AUG			
2023	SEP			
2023	OCT		1,826	Q3
2023	NOV			
2023	DEC		1,959	Q4
2024	JAN			
2024	FEB			
2024	MAR			
2024	APR			
2024	MAY		1,989	Q1
2024	JUN			
			$7,328	

PENNSYLVANIA AMERICAN WATER COMPANY
PURCHASED WATER
DISTRICT **2455**
VENDOR: **Delaware River Basin Commission**
LOCATION: **Bangor System**
ACCT #:
METER SIZE: **Diversion Rights**

	Billing Month	VOUCHER #	AMOUNT OF BILL	
2022	JUL	5001044063	$13	Q2
2022	AUG			
2022	SEP			
2022	OCT	5001082961	26	Q3
2022	NOV			
2022	DEC			
2023	JAN	5001120814	62	Q4
2023	FEB			
2023	MAR			
2023	APR			
2023	MAY	5001160372	5	Q1
2023	JUN			
			$106	

	Billing Month	VOUCHER #	AMOUNT OF BILL	
2023	JUL		$13	Q2
2023	AUG			
2023	SEP			
2023	OCT		26	Q3
2023	NOV			
2023	DEC			
2024	JAN		62	Q4
2024	FEB			
2024	MAR			
2024	APR			
2024	MAY		5	Q1
2024	JUN			
			$106	

PENNSYLVANIA AMERICAN WATER COMPANY
PURCHASED WATER
DISTRICT 2452
VENDOR: DELAWARE RIVER BASIN
LOCATION: Yardley System
Name of Source: Delaware River
ACCT #:
METER SIZE: Diversion Rights

	Billing Month	VOUCHER #	AMOUNT OF BILL	
2022	JUL	5001049661	$2,276	Q2
2022	AUG			
2022	SEP			
2022	OCT	5001083856	3,146	Q3
2022	NOV			
2022	DEC			
2023	JAN	5001125317	2,374	Q4
2023	FEB			
2023	MAR			
2023	APR			
2023	MAY	5001158661	2,179	Q1
			$9,975	

	Billing Month	VOUCHER #	AMOUNT OF BILL	
2023	JUL		$2,276	Q2
2023	AUG			
2023	SEP			
2023	OCT		3,146	Q3
2023	NOV			
2023	DEC			
2024	JAN		2,374	Q4
2024	FEB			
2024	MAR			
2024	APR			
2024	MAY		2,179	Q1
2024	JUN			
			$9,975	

PENNSYLVANIA AMERICAN WATER COMPANY
PURCHASED WATER
DISTRICT **2464**
VENDOR: **Home Royersford**
CITY: Hershey
ACCT #:
METER SIZE: **Diversion Rights Fees**

	Billing Month	VOUCHER #	AMOUNT OF BILL	
2022	JUL	5001049662	$1,888	Q2
2022	AUG			
2022	SEP			
2022	OCT	5001083855	2,557	Q3
2022	NOV			
2022	DEC			
2023	JAN	5001125315	1,994	Q4
2023	FEB			
2023	MAR			
2023	APR			
2023	MAY	5001158663	1,890	Q1
2023	JUN			
			$8,328	

	Billing Month	VOUCHER #	AMOUNT OF BILL	
2023	JUL		$1,888	Q2
2023	AUG			
2023	SEP			
2023	OCT		2,557	Q3
2023	NOV			
2023	DEC			
2024	JAN		1,994	Q4
2024	FEB			
2024	MAR			
2024	APR			
2024	MAY		1,890	Q1
2024	JUN			
			$8,328	

Chemicals

Pennsylvania American Water Company
Chemical Expense Workpaper
12 Month Actual Ending June 2020 to June 2023

				Quantity					Amount				
Plant	Name 1	Material	Material Description	2020 Total Quantity	2021 Total Quantity	2022 Total Quantity	3-Year Average Quantity	Base Year 12 Mo June 2023 Quantity	2020 Total Amount	2021 Total Amount	2022 Total Amount	3-Year Average Amount	Base Year 12 Mo June 2023 Amount
P101	Abington Prod	1200859	CHM,PHOSPHATE,POLY CALGON C5,30GA	6,387.00	5,573.55	6,504.45	6,155.00	7,508.45	$3,576	$3,168	$5,724	$4,156	$7,643
P101		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	43,170.00	43,393.00	547.00	29,036.67	2,966.00	10,979	13,474	175	8,209	949
P101		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	0.00	0.00	40,825.00	13,608.33	48,048.00	0	0	15,633	5,211	19,385
P101		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	5,053.00	4,457.00	5,630.00	5,046.67	7,567.00	3,416	3,063	6,364	4,281	9,514
P101		1202931	CHM,DIPOTASSIUM PHOS, SLI-DP,5 GA	0.65	8.25	7.80	5.57	10.50	2	31	29	21	39
P101 Total				**54,610.65**	**53,431.80**	**53,514.25**	**53,852.23**	**66,099.95**	**$17,973**	**$19,736**	**$27,925**	**$21,878**	**$37,531**
P102	Bangor Prod	1200551	CHM,ALUM,SULFAT LIQUID,50%,55GA	5,408.00	4,474.00	4,363.00	4,748.33	5,096.00	1,398	1,131	1,258	1,262	2,251
P102		1200596	CHM,CHLORINE,100%,150LB CYLINDER	3,650.00	3,600.00	4,050.00	3,766.67	3,700.00	1,658	1,641	3,347	2,215	3,946
P102		1200915	CHM,SODIUM HYDROXIDE,25%,55GA	6,597.00	7,085.00	6,315.00	6,665.67	6,053.00	1,790	1,956	2,429	2,058	2,616
P102		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	34,300.00	37,312.00	36,636.00	36,082.67	30,820.00	6,102	5,516	7,210	6,276	7,506
P102		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	4,573.00	4,416.00	4,877.00	4,622.00	5,023.00	1,848	2,194	2,811	2,284	3,648
P102		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	4,038.00	3,949.00	4,635.00	4,207.33	4,326.00	2,701	2,739	4,427	3,289	5,393
P102 Total				**58,566.00**	**60,836.00**	**60,876.00**	**60,092.67**	**55,018.00**	**$15,496**	**$15,176**	**$21,481**	**$17,384**	**$25,360**
P103	Blue Mount Nazareth P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	53,916.00	51,504.00	44,020.00	49,813.33	63,005.00	4,667	4,393	3,928	4,329	6,303
P103		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	8,265.00	0.00	0.00	2,755.00	0.00	2,002	0	0	667	0
P103		1200609	CHM,DIATOMACEOUS EARTH,100%,50LB	0.00	500.00	0.00	166.67	0.00	0	371	0	124	0
P103		1200806	CHM,POLYMER,CATIONC SPRFLOC C572,55GA	773.47	1,761.53	760.44	1,098.48	1,102.00	2,680	3,497	1,567	2,581	2,281
P103		1200827	CHM,POLYMER,NONIONC SPRFLOC1986N,5GA	160.00	120.00	80.00	120.00	160.00	596	449	299	448	742
P103		1200882	CHM,LIGHT SODA ASH,100%,50LB	64,800.00	43,300.00	23,300.00	43,800.00	20,708.00	19,977	17,540	10,009	15,842	10,491
P103		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	8,779.80	8,493.00	387.00	5,886.60	0.00	5,162	5,351	252	3,588	0
P103		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	0.00	0.00	3,439.00	1,146.33	1,149.00	0	0	2,579	860	862
P103		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	57,095.00	135,567.00	124,951.00	105,871.00	131,990.00	12,561	16,010	16,502	15,024	21,421
P103		1200982	CHM,ZINC,CHLORIDE,1:10,50LB	16,000.00	17,800.00	11,350.00	15,050.00	400.00	15,833	17,955	15,623	16,470	589
P103		1203191	CHM,ZINC,CHLORIDE,1:10, WHITE BAG, 50LB	0.00	0.00	8,400.00	2,800.00	16,900.00	0	0	19,185	6,395	37,262
P103 Total				**209,789.27**	**259,045.53**	**216,687.44**	**228,507.41**	**235,414.00**	**$63,476**	**$65,566**	**$69,945**	**$66,329**	**$79,951**
P104	Lehman Pike Prod	1200857	CHM,PHOSPHATE,POLY WSU319 CALCIQ MW,55GA	9,249.00	8,778.00	8,778.00	8,935.00	9,718.00	4,625	4,446	5,970	5,013	8,676
P104		1200912	CHM,SODIUM HYDROXIDE,25%,15GA 403	305,150.00	351,610.00	224,580.00	293,780.00	101,160.00	87,198	99,617	84,334	90,383	52,302
P104		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	118,800.00	109,650.00	51,750.00	93,400.00	4,050.00	34,930	39,245	22,007	32,061	2,411
P104		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	0.00	0.00	66,550.00	22,183.33	114,450.00	0	0	39,489	13,163	54,234
P104		1202351	CHM,PHOSPHATE,ORTH-PLY CARUS 8100,55GAL	5,643.00	8,151.00	4,389.00	6,061.00	6,270.00	2,895	4,270	3,568	3,578	6,486
P104		1203222	CHM,SODIUM HYDROXIDE,25%,5GA PAIL	0.00	0.00	147,510.00	49,170.00	220,310.00	0	0	104,074	34,691	159,051
P104 Total				**438,842.00**	**478,189.00**	**503,557.00**	**473,529.33**	**455,958.00**	**$129,648**	**$147,578**	**$259,442**	**$178,889**	**$283,160**
P106	Pocono Prod	1200663	CHM,PHOSPHATE,ORTH-PLY CARUS 8500,55GA	9,802.38	12,181.80	14,028.00	12,004.06	15,336.00	7,126	11,005	16,340	11,490	21,409
P106		1200669	CHM,PHOSPHATE,ORTH-PLY CARUS 8500,58LB	3,017.91	901.00	318.00	1,412.30	171.00	2,717	1,039	368	1,375	198
P106		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	52,754.68	46,627.32	49,117.00	49,499.67	66,850.00	16,983	12,382	16,910	15,425	26,871
P106		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	341,489.00	327,055.18	351,011.00	339,851.73	321,852.00	113,733	112,833	122,411	116,326	117,373
P106		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	92,027.46	88,131.14	73,234.00	84,464.20	69,727.00	25,651	21,170	22,813	23,211	28,313
P106		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	0.00	0.00	0.00	0.00	1,336.00	0	0	0	0	458
P106		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	9,383.00	9,691.00	11,160.00	10,078.00	9,075.00	7,411	11,857	15,112	11,460	12,818
P106 Total				**508,474.43**	**484,587.44**	**498,868.00**	**497,309.96**	**484,347.00**	**$173,622**	**$170,286**	**$193,954**	**$179,287**	**$207,439**
P107	Susquehanna Prod	1200550	CHM,ALUM,SULFAT DRY,100%,50LB	27,350.00	21,750.00	20,300.00	23,133.33	24,850.00	11,098	8,837	10,984	10,306	14,070
P107		1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	64,763.00	75,019.00	81,978.00	73,920.00	77,233.00	22,939	15,447	16,928	18,438	19,226
P107		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0.00	0.00	(250.00)	(83.33)	(450.00)	0	0	(208)	(69)	(375)
P107		1200595	CHM,CHLORINE,100%,100LB CYLINDER	377.00	393.00	322.00	364.00	400.00	644	832	1,318	932	2,178
P107		1200596	CHM,CHLORINE,100%,150LB CYLINDER	4,093.00	4,068.00	3,674.00	3,945.00	3,057.00	6,780	7,700	9,262	7,914	10,253
P107		1200641	CHM,HFS ACID,23%,15GA	2,607.00	1,320.00	150.00	1,359.00	0.00	3,912	2,025	232	2,057	0
P107		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	135.24	36.24	116.00	95.83	118.00	524	151	491	389	500
P107		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	674.00	0.00	1,101.00	591.67	0.00	1,021	0	1,793	938	0
P107		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	1,083.00	616.50	967.00	888.83	935.00	2,647	1,568	2,911	2,375	3,205
P107		1200915	CHM,SODIUM HYDROXIDE,25%,55GA	44,710.00	36,168.00	39,195.00	40,024.33	44,823.00	10,225	8,298	11,056	9,860	13,968
P107		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	29,469.00	28,433.00	29,124.00	29,008.67	31,019.00	10,763	10,366	11,102	10,744	13,654
P107		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	2,759.00	2,903.00	215.00	1,959.00	0.00	4,403	3,108	210	2,574	0
P107		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	0.00	45.00	2,609.00	884.67	1,771.00	0	34	1,957	664	1,328
P107		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	53,322.00	51,588.00	39,168.00	48,026.00	37,332.00	18,210	16,756	15,056	16,674	15,589
P107		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	2,589.92	1,777.00	1,268.00	1,878.31	282.00	3,464	2,803	2,775	3,014	738
P107		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	3,920.00	4,320.00	3,399.00	3,879.67	1,991.00	2,703	3,023	3,345	3,024	2,643
P107		1200993	CHM,ZINC,1:10,50LB	700.00	550.00	564.00	604.67	390.00	1,294	1,041	1,112	1,149	796
P107		1201981	CHM,PHOSPHATE,ORTH-PLY CARUS 8100,30GAL	2,822.00	3,416.00	3,391.00	3,209.67	2,710.00	1,825	2,245	3,401	2,490	3,386
P107		1202752	CHM,ALGICIDE,EARTHTEC,55GA	8,800.00	8,800.00	4,400.00	7,333.33	4,360.00	14,841	14,841	7,420	12,367	9,173
P107		WE	Vita-D-Chlor Dechlorination Tablets, 14				0.00	12.00				0	944
P107 Total				**250,174.16**	**241,202.74**	**231,691.00**	**241,022.63**	**230,833.00**	**$117,292**	**$99,073**	**$101,144**	**$105,837**	**$111,276**
P108	Berwick Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	7,597.00	7,932.00	7,345.00	7,624.67	7,761.00	10,047	10,990	13,171	11,403	20,731
P108		1200911	CHM,SODIUM HEXAMETAPHOSPHATE,100%,50LB	3,300.00	4,000.00	3,950.00	3,750.00	3,650.00	3,198	3,878	6,448	4,508	7,710
P108 Total				**10,897.00**	**11,932.00**	**11,295.00**	**11,374.67**	**11,411.00**	**$13,244**	**$14,868**	**$19,619**	**$15,911**	**$28,441**

Pennsylvania American Water Company
Chemical Expense Workpaper
12 Month Actual Ending June 2020 to June 2023

				Quantity					Amount				
Plant	Name 1	Material	Material Description	2020 Total Quantity	2021 Total Quantity	2022 Total Quantity	3-Year Average Quantity	Base Year 12 Mo June 2023 Quantity	2020 Total Amount	2021 Total Amount	2022 Total Amount	3-Year Average Amount	Base Year 12 Mo June 2023 Amount
P109	Frackville Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	1,575.00	1,839.00	1,800.00	1,738.00	1,811.00	2,438	3,262	4,488	3,396	5,340
P109		1200861	CHM,PHOSPHATE,POLY CALGON C5,5GA	1,561.00	1,574.00	1,406.00	1,513.67	1,473.00	1,264	1,290	2,068	1,541	2,711
P109		1200915	CHM,SODIUM HYDROXIDE,25%,55GA	3,499.00	4,487.00	4,599.00	4,195.00	5,258.00	1,484	1,821	2,465	1,924	2,982
P109		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK										
P109		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	1,802.00	1,960.00	2,388.00	2,050.00	2,342.00	1,398	1,534	2,928	1,953	3,768
P109		1200976	CHM,ZINC,CHLORIDE,1:3,5GA	133.00	0.00	0.00	44.33	0.00	104	0	0	35	0
P109 Total				**8,570.00**	**9,860.00**	**10,193.00**	**9,541.00**	**10,884.00**	**$6,688**	**$7,907**	**$11,950**	**$8,848**	**$14,800**
P110	Hershey Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	59,043.00	77,740.00	62,148.00	66,310.33	57,542.00	5,531	7,227	10,683	7,814	13,457
P110		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0.00	5,600.00	15,935.00	7,178.33	12,629.00	0	3,679	11,383	5,020	9,973
P110		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	118,832.00	35,217.00	0.00	51,349.67	0.00	40,866	12,556	0	17,808	0
P110		1200623	CHM,FERRIC,CHLORID PLYMR FER+PLUS,BULK	946,719.00	1,102,810.00	185,728.00	745,085.67	5,139.00	197,091	234,846	44,315	158,751	1,281
P110		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	12,735.00	9,262.00	6,577.00	9,524.67	7,319.00	12,498	9,089	9,429	10,339	12,626
P110		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	631,247.00	450,084.00	434,475.00	505,268.67	521,161.00	91,973	62,601	96,831	83,802	144,084
P110		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	0.00	876,546.00	1,125,773.00	667,439.67	1,070,420.00	0	75,471	200,496	91,989	213,746
P110		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	66,927.00	69,071.00	66,897.00	67,631.67	61,808.00	23,994	24,878	32,318	27,063	41,721
P110		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	55,864.00	73,411.00	34,747.00	54,674.00	30,528.00	55,864	73,411	44,984	58,086	44,030
P110		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	0.00	0.00	950,403.00	316,801.00	1,215,332.00	0	0	247,971	82,657	365,555
P110		WE	F816 Activated Carbon				0.00	6,000.00				0	18,180
P110		WE	Quote B121636 LPD DCHLR TABLETS 140 PK				0.00	40.00				0	5,760
P110 Total				**1,891,367.00**	**2,699,741.00**	**2,882,683.00**	**2,491,263.67**	**2,987,918.00**	**$427,818**	**$503,758**	**$698,408**	**$543,328**	**$870,413**
P112	Milton / White Deer P	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	30,900.00	24,100.00	18,050.00	24,350.00	18,500.00	21,934	17,111	14,954	18,000	16,983
P112		1200630	CHM,LIME,HYDRATED,50 LB	0.00	0.00	11.00	3.67	0.00	0	0	1	0	0
P112		1200702	CHM,PACL,DELPC2020, BULK	330,142.00	253,633.00	307,598.00	297,124.33	295,663.00	44,569	33,834	43,645	40,683	49,051
P112		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	72.00	185.00	275.00	177.33	107.00	231	581	814	542	310
P112		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	1,933.00	1,916.00	2,098.00	1,982.33	2,328.00	5,156	5,116	6,778	5,683	7,901
P112		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	47,004.00	74,375.00	66,754.00	62,711.00	55,125.00	4,656	6,207	6,903	5,922	8,015
P112		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	307,181.64	281,219.00	311,185.00	299,861.88	308,953.00	32,385	28,677	54,022	38,361	69,883
P112		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	26,030.00	25,580.00	28,550.00	26,720.00	26,640.00	12,494	12,507	24,666	16,556	28,497
P112		WE	SOD METABISULFITE BAG114				0.00	250.00				0	723
P112 Total				**743,262.64**	**661,008.00**	**734,521.00**	**712,930.55**	**707,566.00**	**$121,426**	**$104,033**	**$151,783**	**$125,747**	**$181,363**
P113	Phillipsburg Prod	1200551	CHM,ALUM,SULFAT LIQUID,50%,55GA	26,397.00	15,495.00	20,668.00	20,853.33	20,679.00	9,913	6,004	7,825	7,914	7,705
P113		1200596	CHM,CHLORINE,100%,150LB CYLINDER	16,952.00	15,417.00	15,958.00	16,109.00	16,564.00	17,414	16,804	28,564	20,927	34,066
P113		1200641	CHM,HFS ACID,23%,15GA	18,921.00	6,960.00	2,647.00	9,509.33	2,070.00	28,382	10,676	2,523	13,860	1,845
P113		1200643	CHM,HFS ACID,23%,30GA	0.00	12,550.00	18,740.00	10,430.00	17,340.00	0	4,502	8,259	4,254	7,952
P113		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	0.00	35,253.00	44,644.00	26,632.33	46,002.00	0	6,373	12,607	6,327	15,571
P113		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	155,173.00	120,830.00	127,475.00	134,492.67	134,389.00	27,339	20,136	31,739	26,405	44,250
P113		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	17,557.00	18,634.00	20,323.00	18,838.00	19,685.00	6,084	9,298	12,057	9,146	15,441
P113		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	13,591.00	12,461.00	13,098.00	13,050.00	12,514.00	20,648	19,330	25,528	21,835	26,784
P113		1201253	CHM,ORTHO-POLY P,AQUA MAG 9100,5GA	5,413.00	4,708.00	4,378.00	4,833.00	3,853.00	9,019	7,768	10,280	9,022	9,782
P113 Total				**254,004.00**	**242,308.00**	**267,931.00**	**254,747.67**	**273,096.00**	**$118,798**	**$100,891**	**$139,382**	**$119,690**	**$163,396**
P114	Glen Alsace Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	1,065.00	882.00	946.00	964.33	953.00	1,487	1,380	2,012	1,626	2,381
P114		1200672	CHM,PHOS,ORTH-PLY CARUS 8400,336LB	3,892.00	3,467.00	4,032.00	3,797.00	4,139.00	1,825	1,648	2,917	2,130	3,716
P114		1200859	CHM,PHOSPHATE,POLY CALGON C5,30GA	4,584.00	5,949.00	4,768.00	5,100.33	4,883.00	2,428	3,200	3,630	3,086	5,153
P114		1200882	CHM,LIGHT SODA ASH,100%,50LB	9,650.00	8,000.00	7,550.00	8,400.00	5,850.00	3,269	2,648	2,690	2,869	2,166
P114		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	8,380.00	7,762.00	6,609.00	7,583.67	7,665.00	1,759	1,895	1,901	1,852	2,287
P114		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	31,080.00	28,350.00	25,530.00	28,320.00	26,590.00	9,324	8,505	8,357	8,729	8,951
P114		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	43,570.00	49,180.00	76,340.00	56,363.33	65,045.00	10,410	12,012	20,389	14,270	18,080
P114		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	10,775.00	11,921.00	10,213.00	10,969.67	11,213.00	6,673	7,621	9,456	7,917	14,065
P114		WE	USA Bluebook Dechlorination Tablets 45				0.00	5.00				0	653
P114		WE	USABB Aluminum Dechlorination Diffuser					2.00				0	2,610
P114 Total				**112,996.00**	**115,511.00**	**135,988.00**	**121,498.33**	**126,345.00**	**$37,175**	**$38,909**	**$51,350**	**$42,478**	**$60,062**

Pennsylvania American Water Company
Chemical Expense Workpaper
12 Month Actual Ending June 2020 to June 2023

				Quantity					Amount				
Plant	Name 1	Material	Material Description	2020 Total Quantity	2021 Total Quantity	2022 Total Quantity	3-Year Average Quantity	Base Year 12 Mo June 2023 Quantity	2020 Total Amount	2021 Total Amount	2022 Total Amount	3-Year Average Amount	Base Year 12 Mo June 2023 Amount
P115	Norristown Prod	1200557	CHM,AMMONIA,ANHYDROUS,100%,BULK	9,241.00	0.00	0.00	3,080.33	0.00	7,207	0	0	2,402	0
P115		1200562	CHM,AMMONIUM SULFATE,40%,BULK	179,663.00	268,648.00	267,287.00	238,532.67	263,322.00	36,991	62,476	105,650	68,372	123,883
P115		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	0.00	39,360.00	6,498.00	15,286.00	6,498.00	0	27,552	4,659	10,737	4,659
P115		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	126,836.00	8,969.00	0.00	45,268.33	0.00	27,904	1,973	0	9,959	0
P115		1200782	CHM,POLYMER,CATIONC CATFLOC 71259,BULK	4,850.00	0.00	0.00	1,616.67	0.00	6,288	0	0	2,096	0
P115		1200791	CHM,POLYMER,CATIONC NALCO 8173,55LB	6,337.00	6,547.00	8,074.00	6,986.00	7,265.00	14,076	14,620	21,380	16,692	20,512
P115		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	15,714.64	0.00	0.00	5,238.21	0.00	39,511	0	0	13,170	0
P115		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	0.00	63,253.00	300,240.00	121,164.33	270,288.00	0	50,435	413,522	154,652	379,010
P115		1200900	CHM,SODIUM CHLORIDE,90% PURE,50LB 704	26,261.00	23,682.00	13,424.00	21,122.33	17,200.00	3,545	3,197	1,895	2,879	2,489
P115		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	2,207,632.00	2,286,451.00	2,851,262.00	2,448,448.33	3,036,452.00	183,158	185,838	444,369	271,121	622,713
P115		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	647,176.00	1,914,220.00	1,862,571.00	1,474,655.67	1,963,220.00	53,715	162,117	196,026	137,286	277,540
P115		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	133,278.00	97,612.00	168,193.00	133,027.67	132,737.00	51,978	38,601	97,875	62,818	114,407
P115		1201524	CHM,POLYMER,CATIONC NALCO 7763 55GA	0.00	2,057.00	3,813.00	1,956.67	7,231.00	0	2,617	5,860	2,826	11,232
P115		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	1,930,290.00	2,305,603.00	2,897,614.00	2,377,835.67	3,144,213.00	422,605	521,132	757,610	567,116	951,962
P115		1202111	CHM,POLYMER,ANIONC CEDRFLOC 551,275GAL	39,201.00	29,658.00	29,210.00	32,689.67	30,020.00	43,186	32,666	40,269	38,707	44,846
P115		WE	USA Bluebook Dechlorination Tablets 45				0.00	64.00				0	8,468
P115		WE	USABB Aluminum Dechlorination Diffuser				0.00	3.00				0	3,105
P115		WE	Vita-D-Chlor Dechlorination Tablets, 14				0.00	2.00				0	1,188
P115 Total				**5,326,479.64**	**7,046,060.00**	**8,408,186.00**	**6,926,908.55**	**8,878,515.00**	**$890,163**	**$1,103,223**	**$2,089,116**	**$1,360,834**	**$2,566,013**
P116	Penn Water Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	11,973.00	12,398.00	12,393.00	12,254.67	13,066.00	9,782	10,442	16,322	12,182	21,600
P116		1200662	CHM,PHOSPHATE,ORTH-PLY CARUS 8700,339LB	2,821.00	2,395.00	2,033.00	2,416.33	3,520.00	1,376	1,183	1,451	1,336	3,272
P116		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	459.00	383.00	280.00	374.00	485.00	138	115	91	115	181
P116 Total				**15,253.00**	**15,176.00**	**14,706.00**	**15,045.00**	**17,071.00**	**$11,295**	**$11,739**	**$17,864**	**$13,633**	**$25,053**
P117	Royersford Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	363,737.00	346,480.00	361,916.00	357,377.67	387,642.00	32,614	29,701	33,642	31,986	38,670
P117		1200556	CHM,AMMONIA,ANHYDROUS,100%,150LB	1,623.00	1,685.00	1,570.00	1,626.00	2,620.00	3,237	3,387	5,178	3,934	9,730
P117		1200596	CHM,CHLORINE,100%,150LB CYLINDER	2,295.00	1,175.00	1,260.00	1,576.67	1,484.00	3,024	1,856	2,956	2,612	4,589
P117		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	35,443.00	34,136.00	38,264.00	35,947.67	34,470.00	14,272	14,683	36,992	21,982	49,279
P117		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	1,520.00	2,200.00	1,735.00	1,818.33	1,710.00	3,360	4,916	3,637	3,971	3,219
P117		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	480.00	315.00	142.00	312.33	70.00	1,258	826	373	819	184
P117		1200882	CHM,LIGHT SODA ASH,100%,50LB	2,500.00	9,450.00	932.00	4,294.00	2,050.00	767	2,909	289	1,322	413
P117		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	168,712.00	128,813.00	197,160.00	164,895.00	147,660.00	21,036	16,074	33,338	23,483	35,007
P117		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	5,020.00	9,475.00	9,712.00	8,069.00	10,173.00	1,509	2,838	3,043	2,463	3,122
P117		1200958	CHM,SODIUM ZINC,METASHANNOCOR,50LB	11,550.00	9,990.00	9,350.00	10,296.67	8,550.00	11,550	10,142	15,675	12,456	18,833
P117 Total				**592,880.00**	**543,719.00**	**622,041.00**	**586,213.33**	**596,429.00**	**$92,627**	**$87,329**	**$135,123**	**$105,026**	**$163,044**
P118	Yardley Prod	1200557	CHM,AMMONIA,ANHYDROUS,100%,BULK	3,484.30	3,046.75	2,043.70	2,858.25		2,332	2,030	1,406	1,923	0
P118		1200562	CHM,AMMONIUM SULFATE,40%,BULK	0.00	0.00	20,048.60	6,682.87	43,593.60	0	0	6,817	2,272	16,781
P118		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	0.00	0.00	1,706.00	568.67	19,985.00	0	0	2,022	674	24,231
P118		1200583	CHM,CARBON,PAC LIGNITE,40LB	0.00	(220.00)	0.00	(73.33)	0.00	0	(193)	0	(64)	0
P118		1200596	CHM,CHLORINE,100%,150LB CYLINDER	5,848.00	5,127.00	3,713.50	4,896.17	3,147.00	6,899	6,053	7,149	6,700	7,771
P118		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	29,846.40	30,962.00	15,549.30	25,452.57	0.00	6,606	8,313	8,319	7,746	0
P118		1200774	CHM,POLYMER,CATIONC CF71259,55GA	19,882.70	16,251.50	2,786.30	12,973.50	6,153.00	28,720	23,565	3,956	18,747	11,240
P118		1200859	CHM,PHOSPHATE,POLY CALGON C5,30GA	13,169.80	14,947.60	4,724.80	10,947.40	5,529.00	7,375	8,513	4,014	6,634	6,319
P118		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	320,424.95	314,307.90	370,258.89	334,997.25	385,430.39	23,808	21,215	52,026	32,350	60,797
P118		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	9,484.40	16,417.10	204,810.60	76,904.03	308,867.80	2,898	4,900	71,584	26,461	111,019
P118		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	11,234.50	10,017.50	2,232.30	7,828.10	2,233.50	7,143	6,703	2,187	5,344	2,616
P118		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	0.00	0.00	4,463.60	1,487.87	15,039.80	0	0	6,249	2,083	21,043
P118		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	0.00	0.00	0.00	0.00	2,924.80	0	0	0	0	3,042
P118		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	0.00	0.00	17,042.00	5,680.67	28,629.00	0	0	26,841	8,947	44,458
P118		1201461	CHM,AMMONIUM SULFATE,LIQUID,40%,55GA	15,124.80	20,398.75	10,593.75	15,372.43	15,949.20	7,547	10,633	7,335	8,505	13,237
P118		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	223,925.10	223,123.50	504,820.00	317,289.53	474,373.00	48,558	50,290	130,887	76,579	132,681
P118		1202801	CHM,CALCIUM THIOSULFATE,LIQUID,55GA	0.00	0.00	0.00	0.00	1,366.00	0	0	0	0	1,685
P118		1202821	CHM,ZINC,CHLORID,1:3,3520LB TOTE,CAR3180	17,383.90	15,065.10	16,639.70	16,362.90	7,906.10	11,037	9,627	14,836	11,833	9,049
P118		1203142	CHM,SODIUM HYDROXIDE,25%,2700LB TOTE	0.00	0.00	78,473.90	26,157.97	0.00	0	0	18,258	6,086	0
P118		WE	TK71734147T Water Softener Salt, Contain				0.00	98.00				0	2,076
P118		WE	USA Bluebook Dechlorination Tablets 45				0.00	40.00				0	5,222
P118		KR	Freight Charges					1.00					906
P118 Total				**669,808.85**	**669,444.70**	**1,259,906.94**	**866,386.83**	**1,321,266.19**	**$152,924**	**$151,650**	**$363,885**	**$222,820**	**$474,174**

Pennsylvania American Water Company
Chemical Expense Workpaper
12 Month Actual Ending June 2020 to June 2023

				Quantity					Amount				
Plant	Name 1	Material	Material Description	2020 Total Quantity	2021 Total Quantity	2022 Total Quantity	3-Year Average Quantity	Base Year 12 Mo June 2023 Quantity	2020 Total Amount	2021 Total Amount	2022 Total Amount	3-Year Average Amount	Base Year 12 Mo June 2023 Amount
P119	Clarion Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	15,142.00	16,423.00	18,413.00	16,659.33	16,188.00	2,023	2,223	3,680	2,642	4,674
P119		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	13,850.00	0.00	0.00	4,616.67	0.00	9,566	0	0	3,189	0
P119		1200583	CHM,CARBON,PAC LIGNITE,40LB	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0
P119		1200596	CHM,CHLORINE,100%,150LB CYLINDER	23,116.00	22,220.00	27,531.00	24,289.00	24,877.00	14,912	14,443	37,398	22,251	41,158
P119		1200646	CHM,HFS ACID,23%,55GA	9,749.00	11,278.00	8,279.00	9,768.67	9,430.00	2,684	3,095	2,327	2,702	2,847
P119		1200702	CHM,PACL,DELPC2020, BULK	326,654.00	347,858.00	321,227.00	331,913.00	279,271.00	74,263	82,699	93,996	83,653	93,516
P119		1200779	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,55LB	1,287.00	1,819.00	1,911.00	1,672.33	1,544.00	3,068	4,562	5,514	4,381	5,189
P119		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	6,045.00	6,618.00	7,270.00	6,644.33	7,001.00	15,907	17,406	23,265	18,859	23,702
P119		1200879	CHM,SODIUM PERMANGANATE,20%,BULK										
P119		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	0.00	0.00	600.00	200.00	0.00	0	0	144	48	0
P119		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	192,247.00	218,978.00	228,253.00	213,159.33	199,051.00	16,086	17,140	26,370	19,865	31,612
P119		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	5,346.00	5,806.00	6,901.00	6,017.67	6,737.00	3,365	3,676	6,268	4,436	8,359
P119		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	1,250.00	3,250.00	8,673.00	4,391.00	6,058.00	1,226	3,097	10,649	4,991	8,471
P119		WE	USA Bluebook Dechlorination Tablets 45				0.00	5.00				0	664
P119		WE	USABB Aluminum Dechlorination Diffuser					2.00				0	2,242
P119 Total				**594,686.00**	**634,250.00**	**629,058.00**	**619,331.33**	**550,164.00**	**$143,100**	**$148,341**	**$209,610**	**$167,017**	**$222,434**
P120	Indiana Prod	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	50.00	150.00	100.00	100.00	50.00	46	139	89	91	43
P120		1200612	CHM,FERRIC,CHLORID,38%,BULK	378,300.00	352,180.00	554,240.00	428,240.00	445,240.00	41,409	39,408	75,241	52,020	75,258
P120		1200632	CHM,LIME,LIQUID CAO,37.5%,BULK	76,930.00	94,149.00	318,760.00	163,279.67	260,680.00	6,729	8,931	33,244	16,301	29,496
P120		1200645	CHM,HFS ACID,23%,330GA	16,360.00	15,620.00	21,490.00	17,823.33	19,990.00	4,049	4,176	6,283	4,836	6,170
P120		1200821	CHM,POLYMER,NALCO 8181 ,55GA	2,767.00	399.00	0.00	1,055.33	0.00	3,295	478	0	1,258	0
P120		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	408,000.00	347,700.00	341,240.00	365,646.67	274,820.00	38,532	32,231	52,349	41,037	58,379
P120		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	200,685.00	245,504.00	269,632.00	238,607.00	244,185.00	17,824	20,828	36,431	25,028	45,214
P120		1202582	CHM,PLYMR,NONIONC NALCO 8181,TOTE	0.00	4,003.00	2,946.00	2,316.33	3,856.00	0	5,570	4,867	3,479	6,929
P120 Total				**1,083,092.00**	**1,059,705.00**	**1,508,408.00**	**1,217,068.33**	**1,248,821.00**	**$111,885**	**$111,761**	**$208,506**	**$144,050**	**$221,489**
P121	Kane Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	4,747.00	3,842.00	4,649.00	4,412.67	4,158.00	6,036	5,224	12,480	7,913	20,004
P121		1200646	CHM,HFS ACID,23%,55GA	3,962.00	4,149.00	5,775.00	4,628.67	4,735.00	1,563	1,499	2,232	1,765	1,445
P121		1200752	CHM,POLYMER,CATIONC CATFLOC TL,5GA	327.00	323.00	428.00	359.33	292.00	801	794	1,256	950	935
P121		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	3,150.00	0.00	0.00	1,050.00	0.00	1,272	0	0	424	0
P121		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	28,296.00	41,151.00	54,033.00	41,160.00	45,613.00	5,343	6,973	11,791	8,036	11,586
P121		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK										
P121		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	4,128.00	4,242.00	5,297.00	4,555.67	4,557.00	2,188	2,275	4,611	3,025	5,039
P121		WE	Bio-Max Dechlorination Tablets, 48 lb P				0.00	3.00				0	450
P121 Total				**44,610.00**	**53,707.00**	**70,182.00**	**56,166.33**	**59,358.00**	**$17,203**	**$16,764**	**$32,370**	**$22,113**	**$39,459**
P122	Ellwood Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	1,419,499.00	1,249,237.00	1,544,168.00	1,404,301.33	1,459,856.00	122,670	103,415	140,126	122,070	143,199
P122		1200555	CHM,AMMONIA,ANHYDROUS,100%,100LB	(400.00)	0.00	0.00	(133.33)	0.00	(480)	0	0	(160)	0
P122		1200566	CHM,AMMONIA,AQUA,19%,BULK	43,615.00	42,871.00	51,962.00	46,149.33	48,439.00	5,245	4,904	11,474	7,207	13,824
P122		1200570	CHM,CALCIUM,HYPO,100%,100LB	2,230.00	600.00	0.00	943.33	0.00	3,637	1,014	0	1,550	2
P122		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	(3,200.00)	0.00	0.00	(1,066.67)	0.00	(2,816)	0	0	(939)	0
P122		1200579	CHM,CRBN,PAC BITUMIN 500 IODINE,1000LB	(1,600.00)	0.00	1,600.00	0.00	0.00	(1,239)	0	1,239	0	0
P122		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	(4,000.00)	0.00	0.00	(1,333.33)	0.00	(1,200)	0	0	(400)	0
P122		1200639	CHM,HYDROGEN PEROXIDE,BULK	0.00	0.00	0.00	0.00	(41,005.00)	0	0	0	0	(9,173)
P122		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	(275.60)	0.00	0.00	(91.87)	0.00	(537)	0	0	(179)	0
P122		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	26,518.00	26,065.00	26,813.00	26,465.33	27,506.00	29,776	27,325	34,065	30,388	36,879
P122		1200894	CHM,SODIUM BISULFITE,ROVER,50LB	(500.00)	0.00	0.00	(166.67)	0.00	(230)	0	0	(77)	0
P122		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	0.00	0.00	7,747.00	2,582.33	0.00	0	74	775	283	0
P122		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	604,071.00	668,955.00	802,524.00	691,850.00	804,805.00	52,878	55,715	118,488	75,694	154,427
P122		1201171	CHM,PHOSPHORIC ACID,ORTHO,75%,BULK	23,285.00	14,403.00	18,791.00	18,826.33	23,520.00	12,081	7,530	20,294	13,301	28,486
P122		1202121	CHM,PHOSPHORIC ACID,ORTHO,75%,15GA	(1,332.00)	2,675.00	7,172.00	2,838.33	396.00	(919)	2,864	8,544	3,496	496
P122		1202581	CHM,PLYMR,CATIONC NALCO 8100,TOTE	1,956.00	1,163.00	1,874.00	1,664.33	1,841.00	3,006	1,790	2,887	2,561	2,926
P122		1202582	CHM,PLYMR,NONIONC NALCO 8181,TOTE	0.00	2,306.00	0.00	768.67	0.00	0	3,367	0	1,122	0
P122		1202583	CHM,PLYMR,CATIONC NALCO 7128,TOTE	0.00	2,216.00	0.00	738.67	0.00	0	3,058	0	1,019	0
P122		1202592	CHM,LIME,LIQUID CAO, 30% BULK	224,507.00	238,724.00	226,404.00	229,878.33	301,406.00	34,303	18,383	20,871	24,519	32,007
P122		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	94.00	0.00	157.00	83.67	156.00	21	9	35	21	34
P122		1202672	CHM,CARBON,PAC,CARBPURE800,750LB SUPSACK	0.00	0.00	1,000.00	333.33	1,000.00	0	0	1,231	410	1,236
P122		1202751	CHM,POLYMER,CEDARFLOC 554,2300LB	10,769.00	8,001.00	11,411.00	10,060.33	9,790.00	12,906	9,584	17,305	13,265	15,811
P122		1202761	CHM,PLYMR,CATIONC,NALCO 8102 PLUS,275GA	8,757.00	17,792.00	22,576.00	16,375.00	18,495.00	7,890	16,382	30,754	18,342	26,674
P122 Total				**2,353,993.40**	**2,275,008.00**	**2,724,199.00**	**2,451,066.80**	**2,656,205.00**	**$276,989**	**$255,413**	**$408,087**	**$313,496**	**$446,828**

Pennsylvania American Water Company
Chemical Expense Workpaper
12 Month Actual Ending June 2020 to June 2023

				Quantity					Amount				
Plant	Name 1	Material	Material Description	2020 Total Quantity	2021 Total Quantity	2022 Total Quantity	3-Year Average Quantity	Base Year 12 Mo June 2023 Quantity	2020 Total Amount	2021 Total Amount	2022 Total Amount	3-Year Average Amount	Base Year 12 Mo June 2023 Amount
P123	New Castle Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	1,730,121.00	1,987,769.00	2,141,102.00	1,952,997.33	1,976,279.00	133,392	150,192	169,715	151,100	173,396
P123		1200566	CHM,AMMONIA,AQUA,19%,BULK	51,197.00	52,349.00	56,720.00	53,422.00	54,608.00	3,681	3,944	6,707	4,777	10,311
P123		1200570	CHM,CALCIUM,HYPO,100%,100LB	2,002.00	3,070.00	2,089.00	2,387.00	1,710.00	3,325	5,385	5,138	4,616	4,303
P123		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	4,000.00	4,600.00	0.00	2,866.67	0.00	2,880	3,312	0	2,064	0
P123		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	99,309.00	97,803.00	112,521.00	103,211.00	105,311.00	23,624	25,209	78,569	42,467	112,522
P123		1200632	CHM,LIME,LIQUID CAO,37.5%,BULK	916,853.00	858,762.00	746,323.00	840,646.00	607,203.00	75,602	73,697	76,248	75,183	68,641
P123		1200647	CHM,HFS ACID,23%,BULK	37,691.00	36,112.00	39,566.00	37,789.67	36,726.00	7,729	8,365	10,037	8,710	9,428
P123		1200684	CHM,LIME,PEBBLE,100%,BULK	1.00	0.00	0.00	0.33	0.00	0	0	0	0	0
P123		1200751	CHM,POLYMER,CATIONC NALCO 8102 PLS,55GA	20,125.00	19,560.00	21,115.00	20,266.67	19,650.00	17,839	17,407	25,299	20,182	27,261
P123		1200781	CHM,POLYMER,CATIONC NALCO 8110 PULV,50LB	2,638.00	3,071.00	2,760.00	2,823.00	2,921.00	6,473	7,554	7,896	7,308	8,930
P123		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	16,827.00	19,941.00	21,145.00	19,304.33	17,817.00	42,812	50,251	67,815	53,626	62,574
P123		1200914	CHM,SODIUM HYDROXIDE,25%,330GA	89,416.00	110,559.00	136,365.00	112,113.33	142,685.00	11,461	10,055	25,422	15,646	34,884
P123		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	22,719.00	24,195.00	29,841.00	25,585.00	25,353.00	11,595	12,430	15,598	13,208	13,252
P123		WE	Accu-tab Wastewater Chlorination Tablets				0.00	7.00				0	2,882
P123		WE	USA Bluebook Dechlorination Tablets 45				0.00	2.00				0	265
P123 Total				**2,992,899.00**	**3,217,791.00**	**3,309,547.00**	**3,173,412.33**	**2,990,272.00**	**$340,414**	**$367,802**	**$488,446**	**$398,887**	**$528,651**
P124	Punxsutawney P	1200596	CHM,CHLORINE,100%,150LB CYLINDER	16,835.00	12,992.00	17,046.00	15,624.33	17,020.00	19,388	15,671	46,375	27,145	53,858
P124		1200612	CHM,FERRIC,CHLORID,38%,BULK	121,396.00	98,885.00	116,021.00	112,100.67	111,904.00	12,729	10,834	13,965	12,509	16,112
P124		1200630	CHM,LIME,HYDRATED,50 LB	0.00	300.00	0.00	100.00	0.00	0	58	0	19	0
P124		1200631	CHM,LIME,HYDRATED CAO,72%,BULK	48,998.00	57,691.00	83,037.00	63,242.00	97,869.00	4,612	5,469	8,189	6,090	8,466
P124		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	111.89	94.41	136.84	114.38	132.96	734	500	478	571	530
P124		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	3,704.80	2,456.89	1,923.32	2,695.00	1,520.60	790	528	458	592	397
P124		1200992	CHM,ZINC,ONDEO C39,50LB	5,600.00	5,175.00	7,300.00	6,025.00	7,075.00	5,600	5,263	12,095	7,653	15,806
P124		KR	Carbon Dioxide				0.00	50.00				0	357
P124		WE	USA Bluebook Dechlorination Tablets 45				0.00	12.00				0	1,584
P124 Total				**196,645.69**	**177,594.30**	**225,464.16**	**199,901.38**	**235,583.56**	**$43,853**	**$38,323**	**$81,560**	**$54,579**	**$97,111**
P125	Warren Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	5,428.00	6,431.00	7,575.00	6,478.00	7,092.00	6,519	7,802	14,222	9,515	16,187
P125		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	5,588.00	6,586.00	8,735.00	6,969.67	7,481.00	3,631	4,340	8,968	5,646	10,005
P125 Total				**11,016.00**	**13,017.00**	**16,310.00**	**13,447.67**	**14,573.00**	**$10,150**	**$12,142**	**$23,191**	**$15,161**	**$26,192**
P126	Butler Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	943,982.00	875,608.00	698,318.00	839,302.67	710,130.00	77,665	70,089	62,005	69,919	66,369
P126		1200555	CHM,AMMONIA,ANHYDROUS,100%,100LB	12,262.00	12,753.00	10,465.00	11,826.67	14,035.00	13,596	15,820	22,288	17,235	43,387
P126		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	32,200.00	26,400.00	28,350.00	28,983.33	27,650.00	33,387	30,508	35,836	33,244	35,461
P126		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	87,720.00	92,240.00	98,440.00	92,800.00	96,400.00	20,944	25,731	73,258	39,978	96,605
P126		1200631	CHM,LIME,HYDRATED CAO,72%,BULK	129,571.00	146,237.00	45,362.00	107,056.67	9,420.00	10,632	12,319	3,836	8,929	797
P126		1200690	CHM,PHOSPHORIC ACID,ORTHO,75%,30GA	17,544.00	18,080.00	22,297.00	19,307.00	20,447.00	11,530	12,079	28,461	17,356	34,629
P126		1200702	CHM,PACL,DELPC2020, BULK	346,888.00	301,794.00	408,643.00	352,441.67	418,078.00	65,483	60,399	101,540	75,807	144,981
P126		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	13,676.00	11,128.00	5,078.00	9,960.67	5,179.00	25,597	20,214	9,408	18,406	10,340
P126		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	0.00	0.00	0.00	0.00	87,735.00	0	0	0	0	28,171
P126		1201105	CHM,POLYMER,CATIONC NALCO 8170,55LB	25.00	15.00	75.00	38.33	25.00	60	37	194	97	82
P126		1202121	CHM,PHOSPHORIC ACID,ORTHO,75%,15GA	1,332.00	0.00	0.00	444.00	0.00	919	0	0	306	0
P126		KR	Cylinder Rental					8.00					195
P126		WE	USA Bluebook Dechlorination Tablets 45				0.00	8.00				0	1,044
P126 Total				**1,585,200.00**	**1,484,255.00**	**1,317,028.00**	**1,462,161.00**	**1,389,115.00**	**$259,815**	**$247,195**	**$336,825**	**$281,278**	**$462,061**
P127	Kittanning Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	6,129.00	6,281.00	590.00	4,333.33	0.00	3,840	4,083	384	2,769	0
P127		1200647	CHM,HFS ACID,23%,BULK	5,173.00	3,479.00	4,435.00	4,362.33	7,431.00	1,390	907	1,245	1,180	2,092
P127		1200690	CHM,PHOSPHORIC ACID,ORTHO,75%,30GA	775.00	1,269.00	1,461.00	1,168.33	1,108.00	748	1,216	1,543	1,169	1,378
P127		1200752	CHM,POLYMER,CATIONC CATFLOC TL,5GA	767.00	487.00	562.00	605.33	318.00	1,868	1,194	1,568	1,543	951
P127		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	522.00	210.00	905.00	545.67	687.00	1,970	797	3,220	1,995	2,457
P127		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	134,582.00	95,842.00	120,345.00	116,923.00	89,701.00	11,322	7,435	12,717	10,492	14,542
P127		1200933	CHM,SODIUM HYPOCHLORITE,13%,300GA	0.00	0.00	24,940.00	8,313.33	50,600.00	0	0	7,935	2,645	20,382
P127		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	0.00	0.00	42,279.00	14,093.00	23,510.00	0	0	9,238	3,079	5,859
P127		1201461	CHM,AMMONIUM SULFATE,LIQUID,40%,55GA	8,248.00	5,811.00	8,807.00	7,622.00	7,950.00	2,843	2,324	6,499	3,889	6,602
P127		1202661	CHM,FERRIC,CHLORID,38%,330GA	77,988.00	100,585.00	116,041.00	98,204.67	113,924.00	15,707	20,258	26,371	20,779	30,614
P127		WE	USA Bluebook Dechlorination Tablets 45				0.00	8.00				0	1,057
P127 Total				**234,184.00**	**213,964.00**	**320,365.00**	**256,171.00**	**295,237.00**	**$39,688**	**$38,214**	**$70,718**	**$49,540**	**$85,933**
P128	Brownsville Prod	1200555	CHM,AMMONIA,ANHYDROUS,100%,100LB	5,424.00	6,067.00	4,079.00	5,190.00	4,557.00	9,823	8,228	11,756	9,936	17,848
P128		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0.00	1,950.00	0.00	650.00	0.00	0	1,538	0	513	0
P128		1200596	CHM,CHLORINE,100%,150LB CYLINDER	32,945.00	32,067.00	33,538.00	32,850.00	33,471.00	23,308	29,118	49,907	34,111	60,514
P128		1200702	CHM,PACL,DELPC2020, BULK	420,660.20	407,880.60	374,388.10	400,976.30	354,842.50	110,757	108,028	118,214	112,333	139,788
P128		1200877	CHM,SODIUM PERMANGANATE,20%,55GA	20,812.00	27,472.00	19,168.00	22,484.00	20,637.00	29,350	35,025	27,363	30,579	32,071
P128		1200891	CHM,SODIUM BISULFITE,38%,15GA	1,466.00	1,570.00	1,368.00	1,468.00	1,272.00	615	943	539	699	404
P128		1200914	CHM,SODIUM HYDROXIDE,25%,330GA	0.00	225,768.00	247,259.00	157,675.67	240,763.00	0	19,868	51,518	23,795	63,374
P128		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	144,847.00	12,282.00	0.00	52,376.33	0.00	26,212	2,031	0	9,415	0
P128		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	11,622.00	15,442.00	12,078.00	13,047.33	12,144.00	7,322	10,159	13,234	10,238	17,028
P128		1202031	CHM,POLYMER,CATIONIC NALCO 7763 5GA	2,382.00	1,190.70	1,411.20	1,661.30	1,323.00	6,503	3,234	4,596	4,778	4,537
P128 Total				**640,158.20**	**731,689.30**	**693,289.30**	**688,378.93**	**669,009.50**	**$213,890**	**$218,171**	**$277,127**	**$236,396**	**$335,563**

Pennsylvania American Water Company
Chemical Expense Workpaper
12 Month Actual Ending June 2020 to June 2023

				Quantity					Amount				
Plant	Name 1	Material	Material Description	2020 Total Quantity	2021 Total Quantity	2022 Total Quantity	3-Year Average Quantity	Base Year 12 Mo June 2023 Quantity	2020 Total Amount	2021 Total Amount	2022 Total Amount	3-Year Average Amount	Base Year 12 Mo June 2023 Amount
P131	McMurray Prod	1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	19,960.00	36,694.00	25,011.00	27,221.67	14,779.00	6,900	9,931	5,751	7,527	3,594
P131		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	0.00	0.00	0.00	0.00	274.00	0	0	0	0	71
P131		1201461	CHM,AMMONIUM SULFATE,LIQUID,40%,55GA	9,092.00	13,572.00	5,676.00	9,446.67	4,946.00	4,808	7,393	4,364	5,522	4,079
P131		WE	HYDROFLUOSILICIC ACID 23-25%				0.00	2,200.00				0	649
P131		WE	LPD DCHLR tablets 140 PK - BID B111003				0.00	24.00				0	4,080
P131 Total				**29,052.00**	**50,266.00**	**30,687.00**	**36,668.33**	**22,223.00**	**$11,708**	**$17,323**	**$10,116**	**$13,049**	**$12,473**
P132	Pittsburgh Hays Mine P	1200566	CHM,AMMONIA,AQUA,19%,BULK	351,951.00	348,988.00	311,515.00	337,484.67	347,404.00	23,275	23,916	53,455	33,548	72,895
P132		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	0.00	0.00	68,832.00	22,944.00	68,832.00	0	0	43,562	14,521	43,562
P132		1200623	CHM,FERRIC,CHLORID PLYMR FER+PLUS,BULK	2,489,883.00	2,542,850.00	1,608,815.00	2,213,849.33	1,177,720.00	506,688	528,811	377,084	470,861	359,608
P132		1200647	CHM,HFS ACID,23%,BULK	266,493.00	276,520.00	262,411.00	268,474.67	237,550.00	53,142	51,904	54,930	53,325	53,061
P132		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	11,073.00	11,038.08	12,615.00	11,575.36	10,635.00	22,276	21,915	27,642	23,944	26,529
P132		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	288,533.00	307,989.00	266,973.00	287,831.67	218,877.00	212,022	233,434	334,626	260,027	300,417
P132		1200904	CHM,SODIUM CHLORIDE,100%,BULK	137,020.00	163,200.00	154,580.00	151,600.00	77,160.00	14,350	16,935	16,796	16,027	8,741
P132		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	1,404,246.00	1,192,682.00	1,205,109.00	1,267,345.67	989,689.58	197,148	156,926	248,139	200,738	277,016
P132		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	4,166,606.00	4,294,709.00	4,605,877.00	4,355,730.67	4,497,308.00	339,910	338,765	563,708	414,128	833,108
P132		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	193,478.00	199,689.00	189,731.00	194,299.33	163,013.00	100,093	104,988	164,256	123,112	181,811
P132		1201117	CHM,POLYMER,CATIONC AS 2222,BULK	137,146.00	91,437.00	128,779.00	119,120.67	126,839.00	83,894	53,052	84,905	73,950	93,760
P132		1203151	CHM,POLYMER,FERRI+PLUS 3050,BULK	0.00	0.00	926,093.00	308,697.67	736,826.00	0	0	233,697	77,899	189,379
P132		WE	USA Bluebook Dechlorination Tablets 45				0.00	50.00				0	6,949
P132 Total				**9,446,429.00**	**9,429,102.08**	**9,741,330.00**	**9,538,953.69**	**8,651,903.58**	**$1,552,796**	**$1,530,646**	**$2,202,800**	**$1,762,081**	**$2,446,835**
P133	Pittsburgh Aldrich P	1200566	CHM,AMMONIA,AQUA,19%,BULK	415,738.00	397,181.00	383,637.00	398,852.00	434,479.00	27,491	27,126	68,195	40,937	91,875
P133		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	0.00	0.00	65,580.00	21,860.00	50,000.00	0	0	45,588	15,196	34,758
P133		1200619	CHM,FERRIC,CHLORID PLYMR AS2820,10%,BULK	1,896,726.00	1,982,436.00	1,342,262.00	1,740,474.67	1,422,600.00	528,288	550,126	466,565	514,993	680,900
P133		1200647	CHM,HFS ACID,23%,BULK	288,954.00	253,740.00	244,299.00	262,331.00	215,006.00	57,257	48,964	50,207	52,143	46,967
P133		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	53,648.00	49,888.00	40,563.00	48,033.00	33,262.00	134,394	125,295	130,193	129,961	115,992
P133		1200904	CHM,SODIUM CHLORIDE,100%,BULK	292,056.00	179,391.00	51,629.00	174,358.67	26,684.00	30,529	18,555	5,452	18,179	2,875
P133		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	715,699.00	1,055,698.00	1,189,098.00	986,831.67	1,255,461.00	99,244	140,720	279,220	173,061	370,673
P133		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	4,687,715.61	4,965,517.87	4,623,781.00	4,759,004.83	4,476,407.00	383,353	391,058	566,188	446,866	792,693
P133		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	164,252.00	139,587.00	145,022.00	149,620.33	125,714.00	84,968	75,298	129,445	96,570	146,284
P133		1201117	CHM,POLYMER,CATIONC AS 2222,BULK	14,892.00	8,772.00	(1.00)	7,887.67	0.00	9,172	5,403	(1)	4,858	0
P133		1202401	CHM,POLYMER,AS-1400PW,275GA	25,735.00	34,756.00	31,286.00	30,592.33	31,071.00	39,520	53,504	62,337	51,787	68,689
P133		1203061	CHM,POLYMER,CATIONIC,AS 2222,275GA	0.00	2,430.00	17,298.00	6,576.00	12,382.00	0	2,061	16,957	6,339	12,777
P133		1203151	CHM,POLYMER,FERRI+PLUS 3050,BULK	0.00	0.00	543,340.00	181,113.33	543,340.00	0	0	135,905	45,302	135,905
P133		1203231	CHM,POLYMER,FERRI+PLUS,3025,BULK	0.00	0.00	586,880.00	195,626.67	493,926.00	0	0	146,334	48,778	123,632
P133		1203541	CHM,POLYMER,FERRI+PLUS,5100,BULK	0.00	0.00	0.00	0.00	2,290.00	0	0	0	0	898
P133		WE	Captor Calcium Thiosulfate Solution, 30				0.00	2.00				0	620
P133		WE	Sulfuric Acid 93% 66B Grade: NSF				0.00	900.00				0	954
P133 Total				**8,555,415.61**	**9,069,396.87**	**9,264,674.00**	**8,963,162.16**	**9,123,524.00**	**$1,394,215**	**$1,438,108**	**$2,102,587**	**$1,644,970**	**$2,626,493**
P134	Silver Spring Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	40,060.00	36,500.00	34,400.00	36,986.67	34,166.00	4,648	4,154	6,705	5,169	8,618
P134		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	1,303.00	600.00	951.00	951.33	951.00	932	429	681	681	681
P134		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	65,293.00	53,424.00	0.00	39,572.33	0.00	21,700	19,657	0	13,786	0
P134		1200630	CHM,LIME,HYDRATED,50 LB	19,400.00	25,250.00	40,250.00	28,300.00	25,250.00	2,651	3,626	6,266	4,181	4,052
P134		1200647	CHM,HFS ACID,23%,BULK	35,739.00	23,260.00	33,337.00	30,778.67	29,433.00	6,273	4,698	6,499	5,823	6,492
P134		1200751	CHM,POLYMER,CATIONC NALCO 8102 PLS,55GA	1,087.00	987.00	702.00	925.33	814.00	968	904	768	880	1,012
P134		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	21,682.00	15,867.00	13,409.00	16,986.00	13,284.00	22,318	16,343	19,705	19,455	23,780
P134		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	(450.00)	7,309.00	1,639.32	2,832.77	1,574.32	(1,170)	19,003	4,262	7,365	4,093
P134		1200880	CHM,SODIUM PERMANGANATE,20%,MINI BULK	0.00	508.00	29,392.00	9,966.67	7,444.00	0	497	40,293	13,597	10,715
P134		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	615,982.00	455,661.00	630,777.00	567,473.33	720,244.00	46,041	32,712	85,584	54,779	119,827
P134		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	0.00	137,667.00	575,125.00	237,597.33	608,347.00	0	11,454	90,163	33,872	124,244
P134		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	36,687.00	35,815.00	32,834.00	35,112.00	42,148.00	14,036	13,881	21,052	16,323	35,880
P134		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	0.00	0.00	21,193.83	7,064.61	35,135.83	0	0	31,684	10,561	52,744
P134		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	818,172.00	780,594.00	940,758.00	846,508.00	975,678.00	176,442	172,356	242,104	196,967	291,676
P134		1202801	CHM,CALCIUM THIOSULFATE,LIQUID,55GA	0.00	2,127.00	(749.00)	459.33	(204.00)	0	1,883	(944)	313	(256)
P134		WE	Dechlor Liquid				0.00	18.00				0	1,404
P134		WE	Bio-Max Dechlorination Tablets, 48 lb P				0.00	10.00				0	1,777
P134		WE	USA Bluebook Dechlorination Tablets 45				0.00	210.00				0	30,428
P134		WE	USABB Aluminum Dechlorination Diffuser				0.00	1.00				0	1,575
P134 Total				**1,654,955.00**	**1,575,569.00**	**2,354,019.15**	**1,861,514.38**	**2,494,504.15**	**$294,840**	**$301,597**	**$554,823**	**$383,753**	**$718,741**

Pennsylvania American Water Company
Chemical Expense Workpaper
12 Month Actual Ending June 2020 to June 2023

				Quantity					Amount				
Plant	Name 1	Material	Material Description	2020 Total Quantity	2021 Total Quantity	2022 Total Quantity	3-Year Average Quantity	Base Year 12 Mo June 2023 Quantity	2020 Total Amount	2021 Total Amount	2022 Total Amount	3-Year Average Amount	Base Year 12 Mo June 2023 Amount
P135	West Shore Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	67,578.00	72,941.00	72,784.00	71,101.00	64,518.00	6,920	7,471	13,812	9,401	16,291
P135		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	226.00	769.00	783.00	592.67	979.00	161	547	557	421	745
P135		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	80,846.00	26,594.00	0.00	35,813.33	0.00	24,894	8,557	0	11,150	0
P135		1200647	CHM,HFS ACID,23%,BULK	55,562.00	57,587.00	58,407.00	57,185.33	56,630.00	11,717	11,401	11,746	11,622	12,516
P135		1200804	CHM,POLYMER,CATIONC AS 2222,55GA	448.00	871.00	23.00	447.33	17.00	398	774	20	398	15
P135		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	8,406.00	7,633.00	6,190.00	7,409.67	7,166.00	8,577	7,790	8,168	8,178	11,579
P135		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	1,252,138.00	1,041,695.00	747,014.00	1,013,615.67	701,987.00	87,782	66,229	84,785	79,598	101,444
P135		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	0.00	720,563.00	885,510.00	535,357.67	836,226.00	0	64,130	143,128	69,086	166,723
P135		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	78,354.00	79,667.00	78,002.00	78,674.33	74,234.00	28,403	29,359	46,197	34,653	59,049
P135		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	1,611.00	6,472.03	1,187.00	3,090.01	4,688.00	1,763	7,414	1,448	3,542	6,270
P135		1202391	CHM,PLYMR,FER+PLUS 3075,39945,BULK	1,011,467.00	1,097,071.00	270,154.00	792,897.33	0.00	218,152	241,992	65,254	175,133	0
P135		1203151	CHM,POLYMER,FERRI+PLUS 3050,BULK	0.00	0.00	698,193.00	232,731.00	934,323.00	0	0	181,674	60,558	275,309
P135 Total				**2,556,636.00**	**3,111,863.03**	**2,818,247.00**	**2,828,915.34**	**2,680,768.00**	**$388,768**	**$445,664**	**$556,790**	**$463,741**	**$649,941**
P136	Coatesville Prod	1200562	CHM,AMMONIUM SULFATE,40%,BULK	65,208.00	58,919.00	55,793.00	59,973.33	74,055.00	23,179	18,776	23,777	21,911	42,192
P136		1200586	CHM,CARBON,PAC LIGNITE,BULK	20,944.00	32,267.00	7,671.00	20,294.00	7,671.00	11,535	19,756	4,865	12,052	4,865
P136		1200604	CHM,COPPER SULFATE,100%,50LB	2,900.00	4,200.00	0.00	2,366.67	0.00	6,134	9,409	0	5,181	0
P136		1200647	CHM,HFS ACID,23%,BULK	32,880.00	29,649.00	28,559.00	30,362.67	24,053.00	6,164	6,045	6,312	6,174	5,974
P136		1200772	CHM,POLYMER,CATIONC DELTA FLOC 801,BULK	889,330.00	90,019.00	0.00	326,449.67	0.00	152,075	15,336	0	55,804	0
P136		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	0.00	993.40	0.00	331.13	0.00	0	1,470	0	490	0
P136		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	98,212.00	121,802.00	86,076.00	102,030.00	82,612.00	76,659	97,433	89,109	87,734	104,877
P136		1200904	CHM,SODIUM CHLORIDE,100%,BULK	337,290.00	378,716.00	42,539.00	252,848.33	0.00	25,988	29,482	3,318	19,596	0
P136		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	254,533.00	1,167,076.00	925,106.00	782,238.33	824,748.00	21,937	111,208	143,708	92,284	170,060
P136		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	0.00	0.00	512,094.00	170,698.00	717,650.00	0	0	53,790	17,930	145,421
P136		1201174	CHM,PHOSPHATE,ORTH-PLY CARUS 8700,BULK	58,625.00	52,379.00	41,880.00	50,961.33	41,474.00	23,423	21,825	21,694	22,314	27,493
P136		1202461	CHM,POLYMER,FERRI+PLUS 1050,BULK	0.00	1,065,203.00	938,155.00	667,786.00	879,922.00	0	235,632	241,057	158,896	247,357
P136		ZI	Buckmans - Polymer purchases				0.00	1.00				0	3,570
P136 Total				**1,759,922.00**	**3,001,223.40**	**2,637,873.00**	**2,466,339.47**	**2,652,186.00**	**$347,093**	**$566,373**	**$587,629**	**$500,365**	**$751,810**
P137	Lake Heritage Prod	1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	6,104.00	5,733.00	7,018.00	6,285.00	7,621.00	3,241	3,733	4,226	3,733	4,982
P137 Total				**6,104.00**	**5,733.00**	**7,018.00**	**6,285.00**	**7,621.00**	**$3,241**	**$3,733**	**$4,226**	**$3,733**	**$4,982**
P138	Boggs Township Prod	1200705	CHM,POLYMER,DELTA FLOC 807,55GA	552.00	328.00	1,086.00	655.33	365.00	345	220	869	478	404
P138		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	2,241.00	2,423.00	1,795.00	2,153.00	1,747.00	2,449	2,288	3,382	2,706	3,156
P138 Total				**2,793.00**	**2,751.00**	**2,881.00**	**2,808.33**	**2,112.00**	**$2,794**	**$2,508**	**$4,251**	**$3,184**	**$3,560**
P139	Nittany Prod	1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	7,281.00	7,566.00	7,391.00	7,412.67	7,925.00	8,809	8,830	8,118	8,585	9,000
P139 Total				**7,281.00**	**7,566.00**	**7,391.00**	**7,412.67**	**7,925.00**	**$8,809**	**$8,830**	**$8,118**	**$8,585**	**$9,000**
P140	S W B Brownell Podr	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	82,038.00	112,961.00	86,501.00	93,833.33	65,648.00	7,047	9,674	7,472	8,065	5,741
P140		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	35,550.00	39,850.00	27,950.00	34,450.00	19,050.00	24,154	27,095	22,587	24,612	17,476
P140		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	30,635.00	36,698.00	31,598.00	32,977.00	26,081.00	13,289	16,713	29,350	19,784	36,085
P140		1200630	CHM,LIME,HYDRATED,50 LB	47,750.00	59,700.00	50,750.00	52,733.33	40,450.00	9,929	12,120	10,945	10,998	11,537
P140		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	0.00	0.00	0.00	0.00	90.00	0	0	0	0	292
P140		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	990.00	2,200.00	1,870.00	1,686.67	4,075.00	853	1,833	1,546	1,411	4,748
P140		1200993	CHM,ZINC,1:10,50LB	9,900.00	12,050.00	9,500.00	10,483.33	7,450.00	9,886	12,142	12,457	11,495	12,085
P140		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	0.00	0.00	0.00	0.00	11,405.00	0	0	0	0	14,906
P140		WE	USA Bluebook Dechlorination Tablets 45				0.00	60.00				0	7,920
P140 Total				**206,863.00**	**263,459.00**	**208,169.00**	**226,163.67**	**174,309.00**	**$65,159**	**$79,578**	**$84,358**	**$76,365**	**$110,790**
P141	Ceasetown WTP	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	674,145.00	793,179.00	837,204.50	768,176.17	954,884.00	58,785	68,665	76,901	68,117	96,967
P141		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	35,492.00	109,778.00	8,287.00	51,185.67	169,186.00	19,871	57,595	4,314	27,260	199,104
P141		1200586	CHM,CARBON,PAC LIGNITE,BULK	35,940.00	0.00	0.00	11,980.00	0.00	18,689	0	0	6,230	0
P141		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	90,400.00	94,370.00	108,870.00	97,880.00	102,310.00	38,473	37,340	108,100	61,304	155,671
P141		1200604	CHM,COPPER SULFATE,100%,50LB	13,400.00	16,250.00	17,350.00	15,666.67	15,100.00	24,739	29,971	40,332	31,680	37,095
P141		1200630	CHM,LIME,HYDRATED,50 LB	217,500.00	244,015.00	250,235.00	237,250.00	252,820.00	30,880	34,372	37,421	34,224	41,094
P141		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	575.00	92.30	322.50	329.93	103.80	1,122	182	631	645	203
P141		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	3,972.00	4,207.30	4,949.50	4,376.27	3,827.60	10,486	10,775	14,505	11,922	12,588
P141		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	2,704.00	1,053.50	2,428.70	2,062.07	2,428.70	7,069	2,757	6,381	5,402	6,381
P141		1200890	CHM,SODIUM BICARBONATE,100%,50LB	0.00	50.00	2,050.00	700.00	1,750.00	0	24	1,193	405	1,050
P141		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	0.00	0.00	504.00	168.00	504.00	0	0	413	138	413
P141		1200993	CHM,ZINC,1:10,50LB	28,200.00	27,275.00	34,425.00	29,966.67	37,685.00	28,200	27,741	57,329	37,757	84,624
P141 Total				**1,102,328.00**	**1,290,270.10**	**1,266,626.20**	**1,219,741.43**	**1,540,599.10**	**$238,314**	**$269,421**	**$347,518**	**$285,084**	**$635,189**
P143	S W B Crystal Lake P	1200597	CHM,CHLORINE,100%,2000LB CYLINDER	19,540.00	23,430.00	24,952.00	22,640.67	21,691.00	7,484	9,552	23,349	13,461	30,077
P143		1200630	CHM,LIME,HYDRATED,50 LB	15,100.00	19,863.00	19,937.00	18,300.00	16,150.00	2,877	4,025	5,410	4,104	5,490
P143		1200702	CHM,PACL,DELPC2020, BULK	104,588.00	167,425.00	225,408.00	165,807.00	234,440.00	33,476	55,545	83,742	57,588	85,221
P143		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	669.00	726.00	594.00	663.00	490.00	1,761	1,916	1,568	1,748	1,333
P143		1200890	CHM,SODIUM BICARBONATE,100%,50LB	100.00	100.00	(700.00)	(166.67)	(500.00)	31	41	(287)	(72)	(205)
P143		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	44,800.00	56,211.00	58,589.00	53,200.00	54,937.00	13,341	17,089	28,628	19,686	32,551
P143		1200993	CHM,ZINC,1:10,50LB	12,450.00	13,905.00	14,145.00	13,500.00	13,611.00	12,447	14,084	17,887	14,806	24,100
P143 Total				**197,247.00**	**281,660.00**	**342,925.00**	**273,944.00**	**340,819.00**	**$71,417**	**$102,252**	**$160,297**	**$111,322**	**$178,567**

Pennsylvania American Water Company
Chemical Expense Workpaper
12 Month Actual Ending June 2020 to June 2023

				Quantity					Amount				
Plant	Name 1	Material	Material Description	2020 Total Quantity	2021 Total Quantity	2022 Total Quantity	3-Year Average Quantity	Base Year 12 Mo June 2023 Quantity	2020 Total Amount	2021 Total Amount	2022 Total Amount	3-Year Average Amount	Base Year 12 Mo June 2023 Amount
P144	S W B Fallbrook P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	107,121.00	96,661.00	89,167.00	97,649.67	91,697.80	8,108	7,830	7,889	7,942	8,298
P144		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	16,450.00	11,350.00	10,150.00	12,650.00	9,800.00	10,948	7,574	7,762	8,761	8,789
P144		1200596	CHM,CHLORINE,100%,150LB CYLINDER	7,493.00	6,783.00	6,655.00	6,977.00	5,890.00	7,026	7,485	10,563	8,358	11,147
P144		1200630	CHM,LIME,HYDRATED,50 LB	8,000.00	9,300.00	5,750.00	7,683.33	4,150.00	1,660	2,012	1,382	1,685	1,162
P144		1200819	CHM,POLYMER,NONIONC SPRFLOC 1986N,55GA	893.00	845.00	651.00	796.33	596.00	1,617	1,484	1,116	1,406	1,048
P144		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	1,485.00	825.00	605.00	971.67	495.00	3,898	2,169	1,592	2,553	1,302
P144		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	57,373.98	56,785.65	44,218.08	52,792.57	34,215.00	11,456	11,215	16,135	12,935	15,479
P144		1200993	CHM,ZINC,1:10,50LB	0.00	1,750.00	2,050.00	1,266.67	1,850.00	0	2,748	3,972	2,240	4,132
P144		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	0.00	0.00	0.00	0.00	2,500.00	0	0	0	0	3,207
P144 Total				**198,815.98**	**184,299.65**	**159,246.08**	**180,787.24**	**151,193.80**	**$44,713**	**$42,517**	**$50,409**	**$45,880**	**$54,563**
P145	S W B Forest City P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	54,180.00	16,117.00	19,869.00	30,055.33	23,412.00	4,561	1,376	1,696	2,544	2,088
P145		1200596	CHM,CHLORINE,100%,150LB CYLINDER	2,644.00	1,271.00	1,389.00	1,768.00	1,696.00	3,845	1,870	2,606	2,774	3,585
P145		1200630	CHM,LIME,HYDRATED,50 LB	5,950.00	1,900.00	1,550.00	3,133.33	2,050.00	1,210	402	423	678	560
P145		1200819	CHM,POLYMER,NONIONC SPRFLOC 1986N,55GA	0.00	0.00	0.00	0.00	7.90	0	0	0	0	19
P145		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	0.00	220.00	220.00	146.67	275.00	0	667	667	444	833
P145		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	19,487.00	6,734.00	9,607.00	11,942.67	11,766.00	5,302	1,855	4,004	3,720	6,375
P145		1200993	CHM,ZINC,1:10,50LB	0.00	100.00	300.00	133.33	250.00	0	131	393	175	328
P145 Total				**82,261.00**	**26,342.00**	**32,935.00**	**47,179.33**	**39,456.90**	**$14,917**	**$6,299**	**$9,789**	**$10,335**	**$13,788**
P146	S W B Huntsville P	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	13,100.00	1,050.00	0.00	4,716.67	2,050.00	8,838	712	0	3,184	1,179
P146		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	15,089.00	17,323.00	16,372.30	16,261.43	14,708.50	5,823	7,291	13,061	8,725	15,571
P146		1200753	CHM,POLYMER,CATIONC ZETAG 8812,55GA	882.00	0.00	441.00	441.00	0.00	1,478	0	751	743	0
P146		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	1,329.00	109.40	495.00	644.47	504.10	3,370	275	1,244	1,630	1,274
P146		1200890	CHM,SODIUM BICARBONATE,100%,50LB	0.00	150.00	0.00	50.00	0.00	0	36	0	12	0
P146		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	74,580.00	84,465.50	71,673.60	76,906.37	69,927.50	12,185	15,828	21,392	16,468	26,327
P146		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	7,050.00	6,600.00	2,549.20	5,399.73	2,099.20	5,318	5,742	1,876	4,312	1,617
P146		1200993	CHM,ZINC,1:10,50LB	4,900.00	5,494.60	6,787.20	5,727.27	5,963.95	4,998	5,655	10,687	7,113	12,422
P146		1201152	CHM,PACL BASICITY,70% PAX-XL8,BULK	324,195.00	314,087.70	338,362.50	325,548.40	302,434.50	56,487	53,708	78,865	63,020	81,642
P146		1201861	CHM,SODIUM HYPOCHLORITE,12.5%,4X1GAL	0.00	0.00	0.00	0.00	800.00	0	0	0	0	1,518
P146 Total				**441,125.00**	**429,280.20**	**436,680.80**	**435,695.33**	**398,487.75**	**$98,498**	**$89,247**	**$127,876**	**$105,207**	**$141,550**
P147	S W B Nesbitt P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	625,479.00	821,523.00	673,266.00	706,756.00	576,984.00	53,916	70,294	59,913	61,374	55,515
P147		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	42,000.00	50,900.00	37,050.00	43,316.67	30,800.00	27,955	33,885	30,343	30,728	30,636
P147		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	76,999.00	71,859.00	73,207.00	74,021.67	69,148.00	34,152	32,956	83,392	50,167	105,462
P147		1200630	CHM,LIME,HYDRATED,50 LB	224,000.00	249,350.00	216,500.00	229,950.00	193,300.00	30,567	34,473	32,238	32,426	30,378
P147		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	825.00	829.80	660.00	771.60	660.00	1,871	2,022	1,626	1,840	1,626
P147		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	2,145.00	3,475.00	2,755.00	2,791.67	1,764.52	5,622	8,182	6,511	6,772	4,261
P147		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	14,883.02	14,581.78	12,590.60	14,018.47	11,928.60	36,747	36,017	39,649	37,471	39,439
P147		1200890	CHM,SODIUM BICARBONATE,100%,50LB	150.00	100.00	100.00	116.67	100.00	42	28	28	33	28
P147		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	220.00	3,029.00	825.00	1,358.00	330.00	168	2,330	663	1,054	265
P147		1200993	CHM,ZINC,1:10,50LB	34,355.00	35,800.00	35,400.00	35,185.00	35,450.00	34,005	36,062	56,791	42,286	76,138
P147		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	0.00	0.00	0.00	0.00	250.00	0	0	0	0	321
P147 Total				**1,021,056.02**	**1,251,447.58**	**1,052,353.60**	**1,108,285.73**	**920,715.12**	**$225,045**	**$256,250**	**$311,155**	**$264,150**	**$344,069**
P148	S W B Lake Scranton P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	1,910,460.30	2,078,019.00	1,756,874.60	1,915,117.97	1,722,719.00	158,073	167,825	156,132	160,677	163,282
P148		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	244,515.69	181,902.80	161,842.00	196,086.83	72,453.00	129,255	111,270	99,034	113,186	43,529
P148		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	(16,360.00)	0.00	0.00	(5,453.33)	0.00	(3,578)	0	0	(1,193)	0
P148		1200631	CHM,LIME,HYDRATED CAO,72%,BULK	322,800.48	211,278.10	303,301.80	279,126.79	277,353.00	31,722	21,606	28,855	27,394	26,424
P148		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	3,525.00	3,420.00	1,595.00	2,846.67	1,100.00	6,872	6,777	3,266	5,638	2,439
P148		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	48,278.20	55,707.14	15,180.00	39,721.78	18,590.00	118,841	137,056	43,076	99,657	52,754
P148		1200879	CHM,SODIUM PERMANGANATE,20%,BULK										
P148		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	4,145.80	4,597.90	3,559.20	4,100.97	2,331.00	4,002	5,247	6,679	5,309	4,764
P148		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	2,084,291.52	2,206,913.70	1,846,495.02	2,045,900.08	1,785,028.00	187,586	198,622	206,821	197,677	251,233
P148		1200993	CHM,ZINC,1:10,50LB	97,000.00	83,900.00	84,200.00	88,366.67	85,300.00	96,026	90,112	125,431	103,856	177,330
P148		1201191	CHM,POLYMER,CATIONIC ZETAG 7523 50LB	7,600.92	10,472.08	5,745.00	7,939.33	4,425.00	19,816	27,305	16,515	21,212	14,561
P148		1201861	CHM,SODIUM HYPOCHLORITE,12.5%,4X1GAL	0.00	0.00	0.00	0.00	1,257.00	0	0	0	0	2,385
P148		1203201	CHM,WATERCARB800,SUB-BITUM,800IODINE,BUL	0.00	0.00	0.00	0.00	30,464.00	0	0	0	0	92,032
P148		WE	Methanol, Tryptic Soy Agar & Buffer solution				0.00	1.00				0	296
P148 Total				**4,706,257.91**	**4,836,210.72**	**4,178,792.62**	**4,573,753.75**	**4,001,021.00**	**$748,615**	**$765,819**	**$685,809**	**$733,414**	**$831,029**
P149	S W B Watres P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	755,109.00	823,543.00	829,501.00	802,717.67	812,656.00	65,090	70,446	74,001	69,846	80,671
P149		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	57,800.00	34,633.00	42,287.00	44,906.67	44,897.00	31,992	20,907	25,572	26,157	26,889
P149		1200630	CHM,LIME,HYDRATED,50 LB	146,750.00	188,250.00	197,200.00	177,400.00	183,774.00	20,888	26,073	29,409	25,457	30,344
P149		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	495.80	(385.00)	0.00	36.93	0.00	972	(754)	0	72	0
P149		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	2,200.00	2,425.00	2,260.00	2,295.00	2,135.00	5,682	5,729	5,302	5,571	5,660
P149		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	2,336.20	860.00	3,596.40	2,264.20	3,208.40	5,821	2,147	10,859	6,276	9,890
P149		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	666,710.00	733,590.00	772,707.00	724,335.67	760,640.00	60,004	68,029	111,715	79,916	125,864
P149		1200993	CHM,ZINC,1:10,50LB	25,755.00	28,391.00	35,424.00	29,856.67	34,410.00	25,497	28,480	57,265	37,081	72,907
P149		1202851	CHM,POLYMER,ANIONC SPRFLC A-120,50LB	1,600.00	1,765.00	1,489.62	1,618.21	1,470.00	3,324	3,627	3,639	3,530	3,926
P149 Total				**1,658,756.00**	**1,813,072.00**	**1,884,465.02**	**1,785,431.01**	**1,843,190.40**	**$219,270**	**$224,683**	**$317,762**	**$253,905**	**$356,149**

Pennsylvania American Water Company
Chemical Expense Workpaper
12 Month Actual Ending June 2020 to June 2023

				Quantity					Amount				
Plant	Name 1	Material	Material Description	2020 Total Quantity	2021 Total Quantity	2022 Total Quantity	3-Year Average Quantity	Base Year 12 Mo June 2023 Quantity	2020 Total Amount	2021 Total Amount	2022 Total Amount	3-Year Average Amount	Base Year 12 Mo June 2023 Amount
P151	White Deer Creek Prod	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0.00	50.00	0.00	16.67	0.00	0	38	0	13	0
P151		1200630	CHM,LIME,HYDRATED,50 LB	50.00	0.00	40.00	30.00	50.00	7	0	5	4	7
P151		1200702	CHM,PACL,DELPC2020, BULK	180,837.00	189,484.00	193,250.00	187,857.00	180,883.00	24,407	25,271	27,627	25,768	30,504
P151		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	40,050.00	19,730.00	18,370.00	26,050.00	19,310.00	10,037	5,012	6,558	7,203	8,400
P151		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	169,716.00	187,485.00	187,418.00	181,539.67	180,710.00	73,932	84,693	85,975	81,533	84,407
P151		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	20,560.00	20,655.00	21,525.00	20,913.33	20,455.00	9,869	10,089	18,986	12,981	22,388
P151 Total				**411,213.00**	**417,404.00**	**420,603.00**	**416,406.67**	**401,408.00**	**$118,250**	**$125,104**	**$139,152**	**$127,502**	**$145,705**
P152	Wildcat Prod	1200882	CHM,LIGHT SODA ASH,100%,50LB	1,328.00	1,236.00	1,150.00	1,238.00	1,911.00	905	958	739	867	1,206
P152		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	718.00	753.00	427.00	632.67	98.00	1,475	1,098	383	985	88
P152		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	0.00	0.00	469.00	156.33	1,093.00	0	0	948	316	2,249
P152 Total				**2,046.00**	**1,989.00**	**2,046.00**	**2,027.00**	**3,102.00**	**$2,380**	**$2,056**	**$2,070**	**$2,169**	**$3,543**
P154	McEwensville Prod	1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	1,565.00	1,660.00	1,490.00	1,571.67	1,750.00	1,800	1,669	2,597	2,022	3,498
P154 Total				**1,565.00**	**1,660.00**	**1,490.00**	**1,571.67**	**1,750.00**	**$1,800**	**$1,669**	**$2,597**	**$2,022**	**$3,498**
P155	Steelton_PROD	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	638,505.00	329,827.90	333,226.60	433,853.17	264,187.60	61,453	32,257	35,267	42,992	30,042
P155		1200596	CHM,CHLORINE,100%,150LB CYLINDER	17,440.00	17,079.40	15,424.82	16,648.07	14,428.98	11,355	14,685	23,680	16,573	26,647
P155		1200630	CHM,LIME,HYDRATED,50 LB	83,650.00	42,100.00	44,630.12	56,793.37	21,191.10	25,430	10,291	12,492	16,071	7,245
P155		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	1,877.75	983.26	1,203.87	1,354.96	939.00	5,224	2,868	3,605	3,899	2,802
P155		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	3,593.00	3,126.00	1,498.61	2,739.20	1,476.00	14,482	10,972	5,002	10,152	5,219
P155		1200882	CHM,LIGHT SODA ASH,100%,50LB	62,600.00	53,700.00	55,804.06	57,368.02	68,981.94	22,974	21,292	29,653	24,640	35,868
P155		1200926	CHM,SODIUM HYDROXIDE,50%,55GA					14,736.00					3,513
P155 Total				**807,665.75**	**446,816.56**	**451,788.08**	**568,756.80**	**385,940.62**	**$140,917**	**$92,365**	**$109,698**	**$114,327**	**$111,336**
P188	Turbotville_PROD	1200596	CHM,CHLORINE,100%,150LB CYLINDER	60.00	240.00	0.00	100.00	0.00	200	799	0	333	0
P188		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	0.00	1,554.00	4,240.00	1,931.33	4,110.00	0	1,579	8,197	3,259	8,546
P188		1202811	CHM,POLY AL SULFATE,CLARION A410P,55GA	120.00	150.00	60.00	110.00	80.00	114	141	56	104	75
P188 Total				**180.00**	**1,944.00**	**4,300.00**	**2,141.33**	**4,190.00**	**$314**	**$2,520**	**$8,253**	**$3,696**	**$8,621**
Grand Total				**55,738,426.20**	**60,952,358.00**	**64,033,035.65**	**60,241,273.28**	**62,415,458.61**	**$9,840,528**	**$10,470,410**	**$14,876,894**	**$11,729,277**	**$17,919,431**

Pennsylvania American Water Company
Chemical Expense Workpaper
Projected Annual Usage

Plant	Name 1	Material	Material Description	Base Year Annual Usage	Usage Adjustment	Projected Annual Usage	Comment
P101	Abington Prod	1200859	CHM,PHOSPHATE,POLY CALGON C5,30GA	7,508.45		7,508.45	
P101		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	2,966.00		2,966.00	
P101		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	48,048.00		48,048.00	
P101		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	7,567.00		7,567.00	
P101		1202931	CHM,DIPOTASSIUM PHOS, SLI-DP,5 GA	10.50		10.50	
P101 Total				**66,099.95**	**0.00**	**66,099.95**	
P102	Bangor Prod	1200551	CHM,ALUM,SULFAT LIQUID,50%,55GA	5,096.00		5,096.00	
P102		1200596	CHM,CHLORINE,100%,150LB CYLINDER	3,700.00		3,700.00	
P102		1200915	CHM,SODIUM HYDROXIDE,25%,55GA	6,053.00		6,053.00	
P102		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	30,820.00		30,820.00	
P102		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	5,023.00		5,023.00	
P102		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	4,326.00		4,326.00	
P102 Total				**55,018.00**	**0.00**	**55,018.00**	
P103	Blue Mount Nazareth P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	63,005.00		63,005.00	
P103		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0.00		0.00	Currently not being used
P103		1200609	CHM,DIATOMACEOUS EARTH,100%,50LB	0.00		0.00	Currently not being used
P103		1200806	CHM,POLYMER,CATIONC SPRFLOC C572,55GA	1,102.00		1,102.00	
P103		1200827	CHM,POLYMER,NONIONC SPRFLOC1986N,5GA	160.00		160.00	
P103		1200882	CHM,LIGHT SODA ASH,100%,50LB	20,708.00		20,708.00	
P103		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	0.00		0.00	Currently not being used
P103		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	1,149.00		1,149.00	
P103		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	131,990.00		131,990.00	
P103		1200982	CHM,ZINC,CHLORIDE,1:10,50LB	400.00	(400.00)	0.00	Currently not being used
P103		1203191	CHM,ZINC,CHLORIDE,1:10, WHITE BAG, 50LB	16,900.00		16,900.00	
P103 Total				**235,414.00**	**(400.00)**	**235,014.00**	
P104	Lehman Pike Prod	1200857	CHM,PHOSPHATE,POLY WSU319 CALCIQ MW,55GA	9,718.00		9,718.00	
P104		1200912	CHM,SODIUM HYDROXIDE,25%,15GA 403	101,160.00		101,160.00	
P104		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	4,050.00		4,050.00	
P104		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	114,450.00		114,450.00	
P104		1202351	CHM,PHOSPHATE,ORTH-PLY CARUS 8100,55GAL	6,270.00		6,270.00	
P104		1203222	CHM,SODIUM HYDROXIDE,25%,5GA PAIL	220,310.00		220,310.00	
P104 Total				**455,958.00**	**0.00**	**455,958.00**	
P106	Pocono Prod	1200663	CHM,PHOSPHATE,ORTH-PLY CARUS 8500,55GA	15,336.00		15,336.00	
P106		1200669	CHM,PHOSPHATE,ORTH-PLY CARUS 8500,58LB	171.00		171.00	
P106		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	66,850.00		66,850.00	
P106		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	321,852.00		321,852.00	
P106		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	69,727.00		69,727.00	
P106		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	1,336.00		1,336.00	
P106		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	9,075.00		9,075.00	
P106 Total				**484,347.00**	**0.00**	**484,347.00**	
P107	Susquehanna Prod	1200550	CHM,ALUM,SULFAT DRY,100%,50LB	24,850.00		24,850.00	
P107		1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	77,233.00		77,233.00	
P107		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	(450.00)		(450.00)	
P107		1200595	CHM,CHLORINE,100%,100LB CYLINDER	400.00		400.00	
P107		1200596	CHM,CHLORINE,100%,150LB CYLINDER	3,057.00		3,057.00	
P107		1200641	CHM,HFS ACID,23%,15GA	0.00		0.00	Currently not being used
P107		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	118.00		118.00	
P107		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	0.00		0.00	Currently not being used
P107		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	935.00		935.00	
P107		1200915	CHM,SODIUM HYDROXIDE,25%,55GA	44,823.00		44,823.00	
P107		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	31,019.00		31,019.00	
P107		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	0.00		0.00	Currently not being used
P107		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	1,771.00		1,771.00	
P107		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	37,332.00		37,332.00	
P107		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	282.00		282.00	
P107		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	1,991.00		1,991.00	
P107		1200993	CHM,ZINC,1:10,50LB	390.00		390.00	
P107		1201981	CHM,PHOSPHATE,ORTH-PLY CARUS 8100,30GAL	2,710.00		2,710.00	
P107		1202752	CHM,ALGICIDE,EARTHTEC,55GA	4,360.00		4,360.00	
P107		WE	Vita-D-Chlor Dechlorination Tablets, 14	12.00		12.00	
P107 Total				**230,833.00**	**0.00**	**230,833.00**	
P108	Berwick Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	7,761.00		7,761.00	
P108		1200911	CHM,SODIUM HEXAMETAPHOSPHATE,100%,50LB	3,650.00		3,650.00	
P108 Total				**11,411.00**	**0.00**	**11,411.00**	

Pennsylvania American Water Company
Chemical Expense Workpaper
Projected Annual Usage

Plant	Name 1	Material	Material Description	Base Year Annual Usage	Usage Adjustment	Projected Annual Usage	Comment
P109	Frackville Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	1,811.00	(1,811.00)	0.00	Remove - converting to sodium hypochlorite
P109		1200861	CHM,PHOSPHATE,POLY CALGON C5,5GA	1,473.00		1,473.00	
P109		1200915	CHM,SODIUM HYDROXIDE,25%,55GA	5,258.00		5,258.00	
P109		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	0.00	18,500.00	18,500.00	New chemical
P109		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	2,342.00		2,342.00	
P109		1200976	CHM,ZINC,CHLORIDE,1:3,5GA	0.00		0.00	Currently not being used
P109 Total				**10,884.00**	**16,689.00**	**27,573.00**	
P110	Hershey Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	57,542.00		57,542.00	
P110		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	12,629.00		12,629.00	
P110		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0.00		0.00	Currently not being used
P110		1200623	CHM,FERRIC,CHLORID PLYMR FER+PLUS,BULK	5,139.00		5,139.00	
P110		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	7,319.00		7,319.00	
P110		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	521,161.00	10,000.00	531,161.00	Revised based on info from field
P110		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	1,070,420.00	105,000.00	1,175,420.00	Revised based on info from field
P110		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	61,808.00	20,000.00	81,808.00	Revised based on info from field
P110		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	30,528.00		30,528.00	
P110		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	1,215,332.00		1,215,332.00	
P110		WE	F816 Activated Carbon	6,000.00		6,000.00	
P110		WE	Quote B121636 LPD DCHLR TABLETS 140 PK	40.00		40.00	
P110 Total				**2,987,918.00**	**135,000.00**	**3,122,918.00**	
P112	Milton / White Deer P	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	18,500.00		18,500.00	
P112		1200630	CHM,LIME,HYDRATED,50 LB	0.00		0.00	Currently not being used
P112		1200702	CHM,PACL,DELPC2020, BULK	295,663.00		295,663.00	
P112		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	107.00		107.00	
P112		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	2,328.00		2,328.00	
P112		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	55,125.00		55,125.00	
P112		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	308,953.00		308,953.00	
P112		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	26,640.00		26,640.00	
P112		WE	SOD METABISULFITE BAG114	250.00		250.00	
P112 Total				**707,566.00**	**0.00**	**707,566.00**	
P113	Phillipsburg Prod	1200551	CHM,ALUM,SULFAT LIQUID,50%,55GA	20,679.00		20,679.00	
P113		1200596	CHM,CHLORINE,100%,150LB CYLINDER	16,564.00		16,564.00	
P113		1200641	CHM,HFS ACID,23%,15GA	2,070.00		2,070.00	
P113		1200643	CHM,HFS ACID,23%,30GA	17,340.00		17,340.00	
P113		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	46,002.00		46,002.00	
P113		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	134,389.00		134,389.00	
P113		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	19,685.00		19,685.00	
P113		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	12,514.00		12,514.00	
P113		1201253	CHM,ORTHO-POLY P,AQUA MAG 9100,5GA	3,853.00		3,853.00	
P113 Total				**273,096.00**	**0.00**	**273,096.00**	
P114	Glen Alsace Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	953.00		953.00	
P114		1200672	CHM,PHOS,ORTH-PLY CARUS 8400,336LB	4,139.00		4,139.00	
P114		1200859	CHM,PHOSPHATE,POLY CALGON C5,30GA	4,883.00		4,883.00	
P114		1200882	CHM,LIGHT SODA ASH,100%,50LB	5,850.00		5,850.00	
P114		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	7,665.00		7,665.00	
P114		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	26,590.00		26,590.00	
P114		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	65,045.00		65,045.00	
P114		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	11,213.00		11,213.00	
P114		WE	USA Bluebook Dechlorination Tablets 45	5.00		5.00	
P114		WE	USABB Aluminum Dechlorination Diffuser	2.00	(2.00)	0.00	Equipment purchase- miscoded
P114 Total				**126,345.00**	**(2.00)**	**126,343.00**	

Pennsylvania American Water Company
Chemical Expense Workpaper
Projected Annual Usage

Plant	Name 1	Material	Material Description	Base Year Annual Usage	Usage Adjustment	Projected Annual Usage	Comment
P115	Norristown Prod	1200557	CHM,AMMONIA,ANHYDROUS,100%,BULK	0.00		0.00	Currently not being used
P115		1200562	CHM,AMMONIUM SULFATE,40%,BULK	263,322.00		263,322.00	
P115		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	6,498.00		6,498.00	
P115		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0.00		0.00	Currently not being used
P115		1200782	CHM,POLYMER,CATIONC CATFLOC 71259,BULK	0.00		0.00	Currently not being used
P115		1200791	CHM,POLYMER,CATIONC NALCO 8173,55LB	7,265.00		7,265.00	
P115		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	0.00		0.00	Currently not being used
P115		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	270,288.00		270,288.00	
P115		1200900	CHM,SODIUM CHLORIDE,90% PURE,50LB 704	17,200.00		17,200.00	
P115		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	3,036,452.00		3,036,452.00	
P115		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	1,963,220.00		1,963,220.00	
P115		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	132,737.00		132,737.00	
P115		1201524	CHM,POLYMER,CATIONC NALCO 7763 55GA	7,231.00		7,231.00	
P115		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	3,144,213.00		3,144,213.00	
P115		1202111	CHM,POLYMER,ANIONC CEDRFLOC 551,275GAL	30,020.00		30,020.00	
P115		WE	USA Bluebook Dechlorination Tablets 45	64.00		64.00	
P115		WE	USABB Aluminum Dechlorination Diffuser	3.00		3.00	
P115		WE	Vita-D-Chlor Dechlorination Tablets, 14	2.00		2.00	
P115 Total				**8,878,515.00**	**0.00**	**8,878,515.00**	
P116	Penn Water Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	13,066.00		13,066.00	
P116		1200662	CHM,PHOSPHATE,ORTH-PLY CARUS 8700,339LB	3,520.00		3,520.00	
P116		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	485.00		485.00	
P116 Total				**17,071.00**	**0.00**	**17,071.00**	
P117	Royersford Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	387,642.00		387,642.00	
P117		1200556	CHM,AMMONIA,ANHYDROUS,100%,150LB	2,620.00		2,620.00	
P117		1200596	CHM,CHLORINE,100%,150LB CYLINDER	1,484.00		1,484.00	
P117		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	34,470.00		34,470.00	
P117		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	1,710.00		1,710.00	
P117		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	70.00		70.00	
P117		1200882	CHM,LIGHT SODA ASH,100%,50LB	2,050.00		2,050.00	
P117		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	147,660.00		147,660.00	
P117		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	10,173.00		10,173.00	
P117		1200958	CHM,SODIUM ZINC,METASHANNOCOR,50LB	8,550.00		8,550.00	
P117 Total				**596,429.00**	**0.00**	**596,429.00**	
P118	Yardley Prod	1200557	CHM,AMMONIA,ANHYDROUS,100%,BULK	0.00		0.00	Currently not being used
P118		1200562	CHM,AMMONIUM SULFATE,40%,BULK	43,593.60		43,593.60	
P118		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	19,985.00		19,985.00	
P118		1200583	CHM,CARBON,PAC LIGNITE,40LB	0.00		0.00	
P118		1200596	CHM,CHLORINE,100%,150LB CYLINDER	3,147.00		3,147.00	
P118		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0.00		0.00	
P118		1200774	CHM,POLYMER,CATIONC CF71259,55GA	6,153.00		6,153.00	
P118		1200859	CHM,PHOSPHATE,POLY CALGON C5,30GA	5,529.00		5,529.00	
P118		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	385,430.39		385,430.39	
P118		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	308,867.80		308,867.80	
P118		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	2,233.50		2,233.50	
P118		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	15,039.80	(15,039.80)	0.00	Revised based on info from field
P118		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	2,924.80		2,924.80	
P118		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	28,629.00		28,629.00	
P118		1201461	CHM,AMMONIUM SULFATE,LIQUID,40%,55GA	15,949.20		15,949.20	
P118		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	474,373.00		474,373.00	
P118		1202801	CHM,CALCIUM THIOSULFATE,LIQUID,55GA	1,366.00		1,366.00	
P118		1202821	CHM,ZINC,CHLORID,1:3,3520LB TOTE,CAR3180	7,906.10		7,906.10	
P118		1203142	CHM,SODIUM HYDROXIDE,25%,2700LB TOTE	0.00		0.00	Currently not being used
P118		WE	TK71734147T Water Softener Salt, Contain	98.00		98.00	
P118		WE	USA Bluebook Dechlorination Tablets 45	40.00		40.00	
P118		KR	Freight Charges	1.00	(1.00)	0.00	Equipment purchase- remove
P118 Total				**1,321,266.19**	**(15,040.80)**	**1,306,225.39**	

Pennsylvania American Water Company
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Projected Annual Usage

Plant	Name 1	Material	Material Description	Base Year Annual Usage	Usage Adjustment	Projected Annual Usage	Comment
P119	Clarion Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	16,188.00		16,188.00	
P119		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0.00		0.00	
P119		1200583	CHM,CARBON,PAC LIGNITE,40LB	0.00		0.00	
P119		1200596	CHM,CHLORINE,100%,150LB CYLINDER	24,877.00		24,877.00	
P119		1200646	CHM,HFS ACID,23%,55GA	9,430.00		9,430.00	
P119		1200702	CHM,PACL,DELPC2020, BULK	279,271.00		279,271.00	
P119		1200779	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,55LB	1,544.00		1,544.00	
P119		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	7,001.00	(7,001.00)	0.00	Remove, switching to Sodium Permanganate
P119		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	0.00	22,500.00	22,500.00	New chemical
P119		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	0.00		0.00	
P119		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	199,051.00		199,051.00	
P119		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	6,737.00		6,737.00	
P119		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	6,058.00		6,058.00	
P119		WE	USA Bluebook Dechlorination Tablets 45	5.00		5.00	
P119		WE	USABB Aluminum Dechlorination Diffuser	2.00	(2.00)	0.00	Equipment purchase- miscoded
P119 Total				**550,164.00**	**15,497.00**	**565,661.00**	
P120	Indiana Prod	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	50.00		50.00	
P120		1200612	CHM,FERRIC,CHLORID,38%,BULK	445,240.00		445,240.00	
P120		1200632	CHM,LIME,LIQUID CAO,37.5%,BULK	260,680.00		260,680.00	
P120		1200645	CHM,HFS ACID,23%,330GA	19,990.00		19,990.00	
P120		1200821	CHM,POLYMER,NALCO 8181 ,55GA	0.00		0.00	
P120		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	274,820.00		274,820.00	
P120		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	244,185.00		244,185.00	
P120		1202582	CHM,PLYMR,NONIONC NALCO 8181,TOTE	3,856.00		3,856.00	
P120 Total				**1,248,821.00**	**0.00**	**1,248,821.00**	
P121	Kane Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	4,158.00		4,158.00	
P121		1200646	CHM,HFS ACID,23%,55GA	4,735.00		4,735.00	
P121		1200752	CHM,POLYMER,CATIONC CATFLOC TL,5GA	292.00		292.00	
P121		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	0.00		0.00	Currently not being used
P121		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	45,613.00		45,613.00	
P121		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	0.00	43,587.00	43,587.00	New chemical
P121		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	4,557.00		4,557.00	
P121		WE	Bio-Max Dechlorination Tablets, 48 lb P	3.00		3.00	
P121 Total				**59,358.00**	**43,587.00**	**102,945.00**	
P122	Ellwood Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	1,459,856.00		1,459,856.00	
P122		1200555	CHM,AMMONIA,ANHYDROUS,100%,100LB	0.00		0.00	Currently not being used
P122		1200566	CHM,AMMONIA,AQUA,19%,BULK	48,439.00		48,439.00	
P122		1200570	CHM,CALCIUM,HYPO,100%,100LB	0.00		0.00	
P122		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0.00		0.00	Currently not being used
P122		1200579	CHM,CRBN,PAC BITUMIN 500 IODINE,1000LB	0.00		0.00	Currently not being used
P122		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0.00		0.00	Currently not being used
P122		1200639	CHM,HYDROGEN PEROXIDE,BULK	(41,005.00)		(41,005.00)	
P122		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	0.00		0.00	Currently not being used
P122		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	27,506.00		27,506.00	
P122		1200894	CHM,SODIUM BISULFITE,ROVER,50LB	0.00		0.00	Currently not being used
P122		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	0.00		0.00	
P122		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	804,805.00		804,805.00	
P122		1201171	CHM,PHOSPHORIC ACID,ORTHO,75%,BULK	23,520.00		23,520.00	
P122		1202121	CHM,PHOSPHORIC ACID,ORTHO,75%,15GA	396.00		396.00	
P122		1202581	CHM,PLYMR,CATIONC NALCO 8100,TOTE	1,841.00		1,841.00	
P122		1202582	CHM,PLYMR,NONIONC NALCO 8181,TOTE	0.00		0.00	Currently not being used
P122		1202583	CHM,PLYMR,CATIONC NALCO 7128,TOTE	0.00		0.00	Currently not being used
P122		1202592	CHM,LIME,LIQUID CAO, 30% BULK	301,406.00		301,406.00	
P122		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	156.00		156.00	
P122		1202672	CHM,CARBON,PAC,CARBPURE800,750LB SUPSACK	1,000.00		1,000.00	
P122		1202751	CHM,POLYMER,CEDARFLOC 554,2300LB	9,790.00		9,790.00	
P122		1202761	CHM,PLYMR,CATIONC,NALCO 8102 PLUS,275GA	18,495.00		18,495.00	
P122 Total				**2,656,205.00**	**0.00**	**2,656,205.00**	

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Plant	Name 1	Material	Material Description	Base Year Annual Usage	Usage Adjustment	Projected Annual Usage	Comment
P123	New Castle Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	1,976,279.00		1,976,279.00	
P123		1200566	CHM,AMMONIA,AQUA,19%,BULK	54,608.00		54,608.00	
P123		1200570	CHM,CALCIUM,HYPO,100%,100LB	1,710.00		1,710.00	
P123		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0.00		0.00	Currently not being used
P123		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	105,311.00		105,311.00	
P123		1200632	CHM,LIME,LIQUID CAO,37.5%,BULK	607,203.00		607,203.00	
P123		1200647	CHM,HFS ACID,23%,BULK	36,726.00		36,726.00	
P123		1200684	CHM,LIME,PEBBLE,100%,BULK	0.00		0.00	Currently not being used
P123		1200751	CHM,POLYMER,CATIONC NALCO 8102 PLS,55GA	19,650.00		19,650.00	
P123		1200781	CHM,POLYMER,CATIONC NALCO 8110 PULV,50LB	2,921.00		2,921.00	
P123		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	17,817.00		17,817.00	
P123		1200914	CHM,SODIUM HYDROXIDE,25%,330GA	142,685.00		142,685.00	
P123		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	25,353.00	20,000.00	45,353.00	Revised based on info from field
P123		WE	Accu-tab Wastewater Chlorination Tablets	7.00		7.00	
P123		WE	USA Bluebook Dechlorination Tablets 45	2.00		2.00	
P123 Total				**2,990,272.00**	**20,000.00**	**3,010,272.00**	
P124	Punxsutawney P	1200596	CHM,CHLORINE,100%,150LB CYLINDER	17,020.00		17,020.00	
P124		1200612	CHM,FERRIC,CHLORID,38%,BULK	111,904.00		111,904.00	
P124		1200630	CHM,LIME,HYDRATED,50 LB	0.00		0.00	Currently not being used
P124		1200631	CHM,LIME,HYDRATED CAO,72%,BULK	97,869.00		97,869.00	
P124		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	132.96		132.96	
P124		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	1,520.60		1,520.60	
P124		1200992	CHM,ZINC,ONDEO C39,50LB	7,075.00		7,075.00	
P124		KR	Carbon Dioxide	50.00		50.00	
P124		WE	USA Bluebook Dechlorination Tablets 45	12.00		12.00	
P124 Total				**235,583.56**	**0.00**	**235,583.56**	
P125	Warren Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	7,092.00		7,092.00	
P125		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	7,481.00		7,481.00	
P125 Total				**14,573.00**	**0.00**	**14,573.00**	
P126	Butler Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	710,130.00		710,130.00	
P126		1200555	CHM,AMMONIA,ANHYDROUS,100%,100LB	14,035.00		14,035.00	
P126		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	27,650.00		27,650.00	
P126		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	96,400.00		96,400.00	
P126		1200631	CHM,LIME,HYDRATED CAO,72%,BULK	9,420.00		9,420.00	
P126		1200690	CHM,PHOSPHORIC ACID,ORTHO,75%,30GA	20,447.00		20,447.00	
P126		1200702	CHM,PACL,DELPC2020, BULK	418,078.00		418,078.00	
P126		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	5,179.00		5,179.00	
P126		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	87,735.00		87,735.00	
P126		1201105	CHM,POLYMER,CATIONC NALCO 8170,55LB	25.00		25.00	
P126		1202121	CHM,PHOSPHORIC ACID,ORTHO,75%,15GA	0.00		0.00	
P126		KR	Cylinder Rental	8.00		8.00	
P126		WE	USA Bluebook Dechlorination Tablets 45	8.00		8.00	
P126 Total				**1,389,115.00**	**0.00**	**1,389,115.00**	
P127	Kittanning Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	0.00		0.00	
P127		1200647	CHM,HFS ACID,23%,BULK	7,431.00		7,431.00	
P127		1200690	CHM,PHOSPHORIC ACID,ORTHO,75%,30GA	1,108.00		1,108.00	
P127		1200752	CHM,POLYMER,CATIONC CATFLOC TL,5GA	318.00		318.00	
P127		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	687.00		687.00	
P127		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	89,701.00		89,701.00	
P127		1200933	CHM,SODIUM HYPOCHLORITE,13%,300GA	50,600.00		50,600.00	
P127		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	23,510.00		23,510.00	
P127		1201461	CHM,AMMONIUM SULFATE,LIQUID,40%,55GA	7,950.00		7,950.00	
P127		1202661	CHM,FERRIC,CHLORID,38%,330GA	113,924.00		113,924.00	
P127		WE	USA Bluebook Dechlorination Tablets 45	8.00		8.00	
P127 Total				**295,237.00**	**0.00**	**295,237.00**	
P128	Brownsville Prod	1200555	CHM,AMMONIA,ANHYDROUS,100%,100LB	4,557.00		4,557.00	
P128		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0.00		0.00	
P128		1200596	CHM,CHLORINE,100%,150LB CYLINDER	33,471.00		33,471.00	
P128		1200702	CHM,PACL,DELPC2020, BULK	354,842.50		354,842.50	
P128		1200877	CHM,SODIUM PERMANGANATE,20%,55GA	20,637.00		20,637.00	
P128		1200891	CHM,SODIUM BISULFITE,38%,15GA	1,272.00		1,272.00	
P128		1200914	CHM,SODIUM HYDROXIDE,25%,330GA	240,763.00		240,763.00	
P128		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	0.00		0.00	
P128		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	12,144.00		12,144.00	
P128		1202031	CHM,POLYMER,CATIONIC NALCO 7763 5GA	1,323.00		1,323.00	
P128 Total				**669,009.50**	**0.00**	**669,009.50**	

Pennsylvania American Water Company
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Plant	Name 1	Material	Material Description	Base Year Annual Usage	Usage Adjustment	Projected Annual Usage	Comment
P131	McMurray Prod	1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	14,779.00		14,779.00	
P131		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	274.00	75,000.00	75,274.00	New chemical, revised based on info from field
P131		1201461	CHM,AMMONIUM SULFATE,LIQUID,40%,55GA	4,946.00		4,946.00	
P131		WE	HYDROFLUOSILICIC ACID 23-25%	2,200.00		2,200.00	
P131		WE	LPD DCHLR tablets 140 PK - BID B111003	24.00		24.00	
P131 Total				**22,223.00**	**75,000.00**	**97,223.00**	
P132	Pittsburgh Hays Mine P	1200566	CHM,AMMONIA,AQUA,19%,BULK	347,404.00		347,404.00	
P132		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	68,832.00	82,000.00	150,832.00	Revised based on info from field
P132		1200623	CHM,FERRIC,CHLORID PLYMR FER+PLUS,BULK	1,177,720.00	980,000.00	2,157,720.00	Revised based on info from field
P132		1200647	CHM,HFS ACID,23%,BULK	237,550.00		237,550.00	
P132		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	10,635.00		10,635.00	
P132		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	218,877.00	20,000.00	238,877.00	Revised based on info from field
P132		1200904	CHM,SODIUM CHLORIDE,100%,BULK	77,160.00		77,160.00	
P132		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	989,689.58	135,000.00	1,124,689.58	Revised based on info from field
P132		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	4,497,308.00		4,497,308.00	
P132		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	163,013.00		163,013.00	
P132		1201117	CHM,POLYMER,CATIONC AS 2222,BULK	126,839.00	74,000.00	200,839.00	Revised based on info from field
P132		1203151	CHM,POLYMER,FERRI+PLUS 3050,BULK	736,826.00	(736,826.00)	0.00	Switching type of Ferric, revised based on info from the field
P132		WE	USA Bluebook Dechlorination Tablets 45	50.00		50.00	
P132 Total				**8,651,903.58**	**554,174.00**	**9,206,077.58**	
P133	Pittsburgh Aldrich P	1200566	CHM,AMMONIA,AQUA,19%,BULK	434,479.00		434,479.00	
P133		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	50,000.00		50,000.00	
P133		1200619	CHM,FERRIC,CHLORID PLYMR AS2820,10%,BULK	1,422,600.00		1,422,600.00	
P133		1200647	CHM,HFS ACID,23%,BULK	215,006.00		215,006.00	
P133		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	33,262.00		33,262.00	
P133		1200904	CHM,SODIUM CHLORIDE,100%,BULK	26,684.00		26,684.00	
P133		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	1,255,461.00		1,255,461.00	
P133		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	4,476,407.00		4,476,407.00	
P133		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	125,714.00		125,714.00	
P133		1201117	CHM,POLYMER,CATIONC AS 2222,BULK	0.00		0.00	
P133		1202401	CHM,POLYMER,AS-1400PW,275GA	31,071.00		31,071.00	
P133		1203061	CHM,POLYMER,CATIONIC,AS 2222,275GA	12,382.00		12,382.00	
P133		1203151	CHM,POLYMER,FERRI+PLUS 3050,BULK	543,340.00	(543,340.00)	0.00	No longer use, revised based on info from field
P133		1203231	CHM,POLYMER,FERRI+PLUS,3025,BULK	493,926.00	(493,926.00)	0.00	No longer use, revised based on info from field
P133		1203541	CHM,POLYMER,FERRI+PLUS,5100,BULK	2,290.00	2,500,000.00	2,502,290.00	Replacing Ferri+Plus 3050 and 3025
P133		WE	Captor Calcium Thiosulfate Solution, 30	2.00		2.00	
P133		WE	Sulfuric Acid 93% 66B Grade: NSF	900.00		900.00	
P133 Total				**9,123,524.00**	**1,462,734.00**	**10,586,258.00**	
P134	Silver Spring Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	34,166.00		34,166.00	
P134		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	951.00		951.00	
P134		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0.00		0.00	
P134		1200630	CHM,LIME,HYDRATED,50 LB	25,250.00		25,250.00	
P134		1200647	CHM,HFS ACID,23%,BULK	29,433.00		29,433.00	
P134		1200751	CHM,POLYMER,CATIONC NALCO 8102 PLS,55GA	814.00		814.00	
P134		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	13,284.00		13,284.00	
P134		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	1,574.32		1,574.32	
P134		1200880	CHM,SODIUM PERMANGANATE,20%,MINI BULK	7,444.00		7,444.00	
P134		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	720,244.00		720,244.00	
P134		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	608,347.00		608,347.00	
P134		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	42,148.00		42,148.00	
P134		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	35,135.83		35,135.83	
P134		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	975,678.00		975,678.00	
P134		1202801	CHM,CALCIUM THIOSULFATE,LIQUID,55GA	(204.00)		(204.00)	remove negative
P134		WE	Dechlor Liquid	18.00		18.00	
P134		WE	Bio-Max Dechlorination Tablets, 48 lb P	10.00		10.00	
P134		WE	USA Bluebook Dechlorination Tablets 45	210.00		210.00	
P134		WE	USABB Aluminum Dechlorination Diffuser	1.00		1.00	
P134 Total				**2,494,504.15**	**0.00**	**2,494,504.15**	

Pennsylvania American Water Company
Chemical Expense Workpaper
Projected Annual Usage

Plant	Name 1	Material	Material Description	Base Year Annual Usage	Usage Adjustment	Projected Annual Usage	Comment
P135	West Shore Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	64,518.00		64,518.00	
P135		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	979.00		979.00	
P135		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0.00		0.00	
P135		1200647	CHM,HFS ACID,23%,BULK	56,630.00		56,630.00	
P135		1200804	CHM,POLYMER,CATIONC AS 2222,55GA	17.00		17.00	
P135		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	7,166.00		7,166.00	
P135		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	701,987.00		701,987.00	
P135		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	836,226.00		836,226.00	
P135		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	74,234.00		74,234.00	
P135		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	4,688.00		4,688.00	
P135		1202391	CHM,PLYMR,FER+PLUS 3075,39945,BULK	0.00		0.00	
P135		1203151	CHM,POLYMER,FERRI+PLUS 3050,BULK	934,323.00		934,323.00	
P135 Total				**2,680,768.00**	**0.00**	**2,680,768.00**	
P136	Coatesville Prod	1200562	CHM,AMMONIUM SULFATE,40%,BULK	74,055.00		74,055.00	
P136		1200586	CHM,CARBON,PAC LIGNITE,BULK	7,671.00		7,671.00	
P136		1200604	CHM,COPPER SULFATE,100%,50LB	0.00		0.00	
P136		1200647	CHM,HFS ACID,23%,BULK	24,053.00		24,053.00	
P136		1200772	CHM,POLYMER,CATIONC DELTA FLOC 801,BULK	0.00		0.00	
P136		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	0.00		0.00	
P136		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	82,612.00		82,612.00	
P136		1200904	CHM,SODIUM CHLORIDE,100%,BULK	0.00		0.00	
P136		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	824,748.00		824,748.00	
P136		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	717,650.00	2,880.00	720,530.00	Creekside Hypo (30 gallons a month)
P136		1201174	CHM,PHOSPHATE,ORTH-PLY CARUS 8700,BULK	41,474.00		41,474.00	
P136		1202461	CHM,POLYMER,FERRI+PLUS 1050,BULK	879,922.00		879,922.00	
P136		ZI	Buckmans - Polymer purchases	1.00		1.00	
P136 Total				**2,652,186.00**	**2,880.00**	**2,655,066.00**	
P137	Lake Heritage Prod	1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	7,621.00		7,621.00	
P137 Total				**7,621.00**	**0.00**	**7,621.00**	
P138	Boggs Township Prod	1200705	CHM,POLYMER,DELTA FLOC 807,55GA	365.00		365.00	
P138		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	1,747.00		1,747.00	
P138 Total				**2,112.00**	**0.00**	**2,112.00**	
P139	Nittany Prod	1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	7,925.00		7,925.00	
P139 Total				**7,925.00**	**0.00**	**7,925.00**	
P140	S W B Brownell Podr	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	65,648.00		65,648.00	
P140		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	19,050.00		19,050.00	
P140		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	26,081.00		26,081.00	
P140		1200630	CHM,LIME,HYDRATED,50 LB	40,450.00		40,450.00	
P140		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	90.00		90.00	
P140		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	4,075.00		4,075.00	
P140		1200993	CHM,ZINC,1:10,50LB	7,450.00		7,450.00	
P140		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	11,405.00		11,405.00	
P140		WE	USA Bluebook Dechlorination Tablets 45	60.00		60.00	
P140 Total				**174,309.00**	**0.00**	**174,309.00**	
P141	Ceasetown WTP	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	954,884.00		954,884.00	
P141		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	169,186.00		169,186.00	
P141		1200586	CHM,CARBON,PAC LIGNITE,BULK	0.00		0.00	
P141		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	102,310.00		102,310.00	
P141		1200604	CHM,COPPER SULFATE,100%,50LB	15,100.00		15,100.00	
P141		1200630	CHM,LIME,HYDRATED,50 LB	252,820.00		252,820.00	
P141		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	103.80		103.80	
P141		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	3,827.60		3,827.60	
P141		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	2,428.70		2,428.70	
P141		1200890	CHM,SODIUM BICARBONATE,100%,50LB	1,750.00		1,750.00	
P141		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	504.00		504.00	
P141		1200993	CHM,ZINC,1:10,50LB	37,685.00		37,685.00	
P141 Total				**1,540,599.10**	**0.00**	**1,540,599.10**	
P143	S W B Crystal Lake P	1200597	CHM,CHLORINE,100%,2000LB CYLINDER	21,691.00		21,691.00	
P143		1200630	CHM,LIME,HYDRATED,50 LB	16,150.00		16,150.00	
P143		1200702	CHM,PACL,DELPC2020, BULK	234,440.00		234,440.00	
P143		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	490.00		490.00	
P143		1200890	CHM,SODIUM BICARBONATE,100%,50LB	(500.00)		(500.00)	Eliminate negative
P143		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	54,937.00		54,937.00	
P143		1200993	CHM,ZINC,1:10,50LB	13,611.00		13,611.00	
P143 Total				**340,819.00**	**0.00**	**340,819.00**	

Pennsylvania American Water Company
Chemical Expense Workpaper
Projected Annual Usage

Plant	Name 1	Material	Material Description	Base Year Annual Usage	Usage Adjustment	Projected Annual Usage	Comment
P144	S W B Fallbrook P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	91,697.80		91,697.80	
P144		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	9,800.00		9,800.00	
P144		1200596	CHM,CHLORINE,100%,150LB CYLINDER	5,890.00		5,890.00	
P144		1200630	CHM,LIME,HYDRATED,50 LB	4,150.00		4,150.00	
P144		1200819	CHM,POLYMER,NONIONC SPRFLOC 1986N,55GA	596.00		596.00	
P144		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	495.00		495.00	
P144		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	34,215.00		34,215.00	
P144		1200993	CHM,ZINC,1:10,50LB	1,850.00		1,850.00	
P144		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	2,500.00		2,500.00	
P144 Total				**151,193.80**	**0.00**	**151,193.80**	
P145	S W B Forest City P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	23,412.00		23,412.00	
P145		1200596	CHM,CHLORINE,100%,150LB CYLINDER	1,696.00		1,696.00	
P145		1200630	CHM,LIME,HYDRATED,50 LB	2,050.00		2,050.00	
P145		1200819	CHM,POLYMER,NONIONC SPRFLOC 1986N,55GA	7.90		7.90	
P145		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	275.00		275.00	
P145		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	11,766.00		11,766.00	
P145		1200993	CHM,ZINC,1:10,50LB	250.00		250.00	
P145 Total				**39,456.90**	**0.00**	**39,456.90**	
P146	S W B Huntsville P	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	2,050.00		2,050.00	
P146		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	14,708.50		14,708.50	
P146		1200753	CHM,POLYMER,CATIONC ZETAG 8812,55GA	0.00		0.00	Currently not being used
P146		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	504.10		504.10	
P146		1200890	CHM,SODIUM BICARBONATE,100%,50LB	0.00		0.00	Currently not being used
P146		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	69,927.50		69,927.50	
P146		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	2,099.20		2,099.20	
P146		1200993	CHM,ZINC,1:10,50LB	5,963.95		5,963.95	
P146		1201152	CHM,PACL BASICITY,70% PAX-XL8,BULK	302,434.50		302,434.50	
P146		1201861	CHM,SODIUM HYPOCHLORITE,12.5%,4X1GAL	800.00		800.00	
P146 Total				**398,487.75**	**0.00**	**398,487.75**	
P147	S W B Nesbitt P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	576,984.00		576,984.00	
P147		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	30,800.00		30,800.00	
P147		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	69,148.00		69,148.00	
P147		1200630	CHM,LIME,HYDRATED,50 LB	193,300.00		193,300.00	
P147		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	660.00		660.00	
P147		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	1,764.52		1,764.52	
P147		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	11,928.60		11,928.60	
P147		1200890	CHM,SODIUM BICARBONATE,100%,50LB	100.00		100.00	
P147		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	330.00		330.00	
P147		1200993	CHM,ZINC,1:10,50LB	35,450.00		35,450.00	
P147		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	250.00		250.00	
P147 Total				**920,715.12**	**0.00**	**920,715.12**	
P148	S W B Lake Scranton P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	1,722,719.00		1,722,719.00	
P148		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	72,453.00		72,453.00	
P148		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0.00		0.00	Currently not being used
P148		1200631	CHM,LIME,HYDRATED CAO,72%,BULK	277,353.00		277,353.00	
P148		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	1,100.00		1,100.00	
P148		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	18,590.00	(18,590.00)	0.00	Being replaced by Sodium Permanganate, see new line
P148		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	0.00	9,100.00	9,100.00	New chemical
P148		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	2,331.00		2,331.00	
P148		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	1,785,028.00		1,785,028.00	
P148		1200993	CHM,ZINC,1:10,50LB	85,300.00		85,300.00	
P148		1201191	CHM,POLYMER,CATIONIC ZETAG 7523 50LB	4,425.00		4,425.00	
P148		1201861	CHM,SODIUM HYPOCHLORITE,12.5%,4X1GAL	1,257.00		1,257.00	
P148		1203201	CHM,WATERCARB800,SUB-BITUM,800IODINE,BUL	30,464.00		30,464.00	
P148		WE	Methanol, Tryptic Soy Agar & Buffer solution	1.00		1.00	
P148 Total				**4,001,021.00**	**(9,490.00)**	**3,991,531.00**	
P149	S W B Watres P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	812,656.00		812,656.00	
P149		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	44,897.00		44,897.00	
P149		1200630	CHM,LIME,HYDRATED,50 LB	183,774.00		183,774.00	
P149		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	0.00		0.00	
P149		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	2,135.00		2,135.00	
P149		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	3,208.40		3,208.40	
P149		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	760,640.00		760,640.00	
P149		1200993	CHM,ZINC,1:10,50LB	34,410.00		34,410.00	
P149		1202851	CHM,POLYMER,ANIONC SPRFLC A-120,50LB	1,470.00		1,470.00	
P149 Total				**1,843,190.40**	**0.00**	**1,843,190.40**	

Pennsylvania American Water Company
Chemical Expense Workpaper
Projected Annual Usage

Plant	Name 1	Material	Material Description	Base Year Annual Usage	Usage Adjustment	Projected Annual Usage	Comment
P151	White Deer Creek Prod	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0.00		0.00	
P151		1200630	CHM,LIME,HYDRATED,50 LB	50.00		50.00	
P151		1200702	CHM,PACL,DELPC2020, BULK	180,883.00		180,883.00	
P151		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	19,310.00		19,310.00	
P151		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	180,710.00		180,710.00	
P151		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	20,455.00		20,455.00	
P151 Total				**401,408.00**	**0.00**	**401,408.00**	
P152	Wildcat Prod	1200882	CHM,LIGHT SODA ASH,100%,50LB	1,911.00		1,911.00	
P152		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	98.00		98.00	
P152		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	1,093.00		1,093.00	
P152 Total				**3,102.00**	**0.00**	**3,102.00**	
P154	McEwensville Prod	1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	1,750.00		1,750.00	
P154 Total				**1,750.00**	**0.00**	**1,750.00**	
P155	Steelton_PROD	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	264,187.60	38,000.00	302,187.60	Revised based on info from field
P155		1200596	CHM,CHLORINE,100%,150LB CYLINDER	14,428.98		14,428.98	
P155		1200630	CHM,LIME,HYDRATED,50 LB	21,191.10	22,000.00	43,191.10	Revised based on info from field
P155		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	939.00		939.00	
P155		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	1,476.00		1,476.00	
P155		1200882	CHM,LIGHT SODA ASH,100%,50LB	68,981.94	(11,000.00)	57,981.94	Revised based on info from field
P155		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	14,736.00		14,736.00	
P155 Total				**385,940.62**	**49,000.00**	**434,940.62**	
P188	Turbotville_PROD	1200596	CHM,CHLORINE,100%,150LB CYLINDER	0.00		0.00	
P188		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	4,110.00		4,110.00	
P188		1202811	CHM,POLY AL SULFATE,CLARION A410P,55GA	80.00		80.00	
P188 Total				**4,190.00**	**0.00**	**4,190.00**	
Grand Total				**62,415,458.61**	**2,349,628.20**	**64,765,086.81**	

Pennsylvania American Water Company
Chemical Expense Workpaper
Projected 12-Months June 2024 and June 2025

				PRICING								
Plant	Name 1	Material	Material Description	Chemical Family	Current Unit Price 3Q-2023	Unit Price 4Q-2023	Unit Price 1Q-2024	Unit Price 2Q-2024	Unit Price 3Q-2024	Unit Price 4Q-2024	Unit Price 1Q-2025	Unit Price 2Q-2025
P101	Abington Prod	1200859	CHM,PHOSPHATE,POLY CALGON C5,30GA	Phosphates	$1.4000	$1.4000	$1.4770	$1.4770	$1.4770	$1.4770	$1.5582	$1.5582
P101		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	Sodium Hypochlorite	$0.5316	$0.5316	$0.5635	$0.5635	$0.5635	$0.5635	$0.5973	$0.5973
P101		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$0.5085	$0.5085	$0.5390	$0.5390	$0.5390	$0.5390	$0.5714	$0.5714
P101		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	Phosphates	$1.5400	$1.5400	$1.6247	$1.6247	$1.6247	$1.6247	$1.7141	$1.7141
P101		1202931	CHM,DIPOTASSIUM PHOS, SLI-DP,5 GA	Chemicals - Other	$3.7533	$3.7533	$3.9785	$3.9785	$3.9785	$3.9785	$4.2172	$4.2172
P101 Total												
P102	Bangor Prod	1200551	CHM,ALUM,SULFAT LIQUID,50%,55GA	Aluminum Sulfate	$0.7306	$0.7306	$0.7598	$0.7598	$0.7598	$0.7598	$0.7902	$0.7902
P102		1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$1.3608	$1.3608	$1.4561	$1.4561	$1.4561	$1.4561	$1.5434	$1.5434
P102		1200915	CHM,SODIUM HYDROXIDE,25%,55GA	Caustic Soda	$0.4200	$0.4200	$0.4536	$0.4536	$0.4536	$0.4536	$0.4808	$0.4808
P102		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	Caustic Soda	$0.3221	$0.3221	$0.3479	$0.3479	$0.3479	$0.3479	$0.3687	$0.3687
P102		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	Sodium Hypochlorite	$0.8667	$0.8667	$0.9187	$0.9187	$0.9187	$0.9187	$0.9738	$0.9738
P102		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	Phosphates	$1.5600	$1.5600	$1.6458	$1.6458	$1.6458	$1.6458	$1.7363	$1.7363
P102 Total												
P103	Blue Mount Nazareth P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1295	$0.1295	$0.1347	$0.1347	$0.1347	$0.1347	$0.1401	$0.1401
P103		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine								
P103		1200609	CHM,DIATOMACEOUS EARTH,100%,50LB	Chemicals - Other								
P103		1200806	CHM,POLYMER,CATIONC SPRFLOC C572,55GA	Polymers	$2.1400	$2.1400	$2.2470	$2.2470	$2.2470	$2.2470	$2.3594	$2.3594
P103		1200827	CHM,POLYMER,NONIONC SPRFLOC1986N,5GA	Polymers	$6.0000	$6.0000	$6.3000	$6.3000	$6.3000	$6.3000	$6.6150	$6.6150
P103		1200882	CHM,LIGHT SODA ASH,100%,50LB	Chemicals - Other	$0.5250	$0.5250	$0.5565	$0.5565	$0.5565	$0.5565	$0.5899	$0.5899
P103		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	Sodium Hypochlorite	$0.9667	$0.9667	$1.0247	$1.0247	$1.0247	$1.0247	$1.0862	$1.0862
P103		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$0.3500	$0.3500	$0.3710	$0.3710	$0.3710	$0.3710	$0.3933	$0.3933
P103		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.2250	$0.2250	$0.2385	$0.2385	$0.2385	$0.2385	$0.2528	$0.2528
P103		1200982	CHM,ZINC,CHLORIDE,1:10,50LB	Phosphates	$2.4500	$2.4500	$2.5848	$2.5848	$2.5848	$2.5848	$2.7269	$2.7269
P103		1203191	CHM,ZINC,CHLORIDE,1:10, WHITE BAG, 50LB	Phosphates	$2.4500	$2.4500	$2.5848	$2.5848	$2.5848	$2.5848	$2.7269	$2.7269
P103 Total												
P104	Lehman Pike Prod	1200857	CHM,PHOSPHATE,POLY WSU319 CALCIQ MW,55GA	Phosphates	$1.2300	$1.2300	$1.2977	$1.2977	$1.2977	$1.2977	$1.3690	$1.3690
P104		1200912	CHM,SODIUM HYDROXIDE,25%,15GA 403	Caustic Soda	$0.6165	$0.6165	$0.6658	$0.6658	$0.6658	$0.6658	$0.7058	$0.7058
P104		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	Sodium Hypochlorite	$0.7680	$0.7680	$0.8141	$0.8141	$0.8141	$0.8141	$0.8629	$0.8629
P104		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$0.6302	$0.6302	$0.6680	$0.6680	$0.6680	$0.6680	$0.7081	$0.7081
P104		1202351	CHM,PHOSPHATE,ORTH-PLY CARUS 8100,55GAL	Phosphates	$1.1300	$1.1300	$1.1922	$1.1922	$1.1922	$1.1922	$1.2577	$1.2577
P104		1203222	CHM,SODIUM HYDROXIDE,25%,5GA PAIL	Caustic Soda	$0.6811	$0.6811	$0.7356	$0.7356	$0.7356	$0.7356	$0.7797	$0.7797
P104 Total												
P106	Pocono Prod	1200663	CHM,PHOSPHATE,ORTH-PLY CARUS 8500,55GA	Phosphates	$2.1100	$2.1100	$2.2261	$2.2261	$2.2261	$2.2261	$2.3485	$2.3485
P106		1200669	CHM,PHOSPHATE,ORTH-PLY CARUS 8500,58LB	Phosphates	$4.7800	$4.7800	$5.0429	$5.0429	$5.0429	$5.0429	$5.3203	$5.3203
P106		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	Caustic Soda	$0.4450	$0.4450	$0.4806	$0.4806	$0.4806	$0.4806	$0.5094	$0.5094
P106		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	Caustic Soda	$0.4000	$0.4000	$0.4320	$0.4320	$0.4320	$0.4320	$0.4579	$0.4579
P106		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	Sodium Hypochlorite	$0.5700	$0.5700	$0.6042	$0.6042	$0.6042	$0.6042	$0.6405	$0.6405
P106		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$0.3500	$0.3500	$0.3710	$0.3710	$0.3710	$0.3710	$0.3933	$0.3933
P106		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	Phosphates	$1.7400	$1.7400	$1.8357	$1.8357	$1.8357	$1.8357	$1.9367	$1.9367
P106 Total												
P107	Susquehanna Prod	1200550	CHM,ALUM,SULFAT DRY,100%,50LB	Aluminum Sulfate	$0.5044	$0.5044	$0.5246	$0.5246	$0.5246	$0.5246	$0.5456	$0.5456
P107		1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.3103	$0.3103	$0.3227	$0.3227	$0.3227	$0.3227	$0.3356	$0.3356
P107		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P107		1200595	CHM,CHLORINE,100%,100LB CYLINDER	Chlorine	$7.1500	$7.1500	$7.6505	$7.6505	$7.6505	$7.6505	$8.1095	$8.1095
P107		1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$7.1500	$7.1500	$7.6505	$7.6505	$7.6505	$7.6505	$8.1095	$8.1095
P107		1200641	CHM,HFS ACID,23%,15GA	HFS (Fluoride)								
P107		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	Polymers	$8.1936	$8.1936	$8.6033	$8.6033	$8.6033	$8.6033	$9.0334	$9.0334
P107		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	Polymers	$2.1400	$2.1400	$2.2470	$2.2470	$2.2470	$2.2470	$2.3594	$2.3594
P107		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	Chemicals - Other	$3.6700	$3.6700	$3.8902	$3.8902	$3.8902	$3.8902	$4.1236	$4.1236
P107		1200915	CHM,SODIUM HYDROXIDE,25%,55GA	Caustic Soda	$0.3190	$0.3190	$0.3445	$0.3445	$0.3445	$0.3445	$0.3652	$0.3652
P107		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	Caustic Soda	$0.5270	$0.5270	$0.5692	$0.5692	$0.5692	$0.5692	$0.6033	$0.6033
P107		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	Sodium Hypochlorite	$2.1000	$2.1000	$2.2260	$2.2260	$2.2260	$2.2260	$2.3596	$2.3596
P107		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$1.2560	$1.2560	$1.3314	$1.3314	$1.3314	$1.3314	$1.4112	$1.4112
P107		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	Sodium Hypochlorite	$0.5475	$0.5475	$0.5804	$0.5804	$0.5804	$0.5804	$0.6152	$0.6152
P107		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	Chemicals - Other	$2.5000	$2.5000	$2.6500	$2.6500	$2.6500	$2.6500	$2.8090	$2.8090
P107		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	Phosphates	$1.5400	$1.5400	$1.6247	$1.6247	$1.6247	$1.6247	$1.7141	$1.7141
P107		1200993	CHM,ZINC,1:10,50LB	Phosphates	$2.1500	$2.1500	$2.2683	$2.2683	$2.2683	$2.2683	$2.3930	$2.3930
P107		1201981	CHM,PHOSPHATE,ORTH-PLY CARUS 8100,30GAL	Phosphates	$1.3000	$1.3000	$1.3715	$1.3715	$1.3715	$1.3715	$1.4469	$1.4469
P107		1202752	CHM,ALGICIDE,EARTHTEC,55GA	Chemicals - Other	$2.2000	$2.2000	$2.3320	$2.3320	$2.3320	$2.3320	$2.4719	$2.4719
P107		WE	Vita-D-Chlor Dechlorination Tablets, 14	Chemicals - Other	$78.6583	$78.6583	$83.3778	$83.3778	$83.3778	$83.3778	$88.3805	$88.3805
P107 Total												
P108	Berwick Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$4.0292	$4.0292	$4.3112	$4.3112	$4.3112	$4.3112	$4.5699	$4.5699
P108		1200911	CHM,SODIUM HEXAMETAPHOSPHATE,100%,50LB	Phosphates	$2.7254	$2.7254	$2.8753	$2.8753	$2.8753	$2.8753	$3.0334	$3.0334
P108 Total												

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				PRICING								
Plant	Name 1	Material	Material Description	Chemical Family	Current Unit Price 3Q-2023	Unit Price 4Q-2023	Unit Price 1Q-2024	Unit Price 2Q-2024	Unit Price 3Q-2024	Unit Price 4Q-2024	Unit Price 1Q-2025	Unit Price 2Q-2025
P109	Frackville Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$3.5014	$3.5014	$3.7465	$3.7465	$3.7465	$3.7465	$3.9713	$3.9713
P109		1200861	CHM,PHOSPHATE,POLY CALGON C5,5GA	Phosphates	$2.1000	$2.1000	$2.2155	$2.2155	$2.2155	$2.2155	$2.3374	$2.3374
P109		1200915	CHM,SODIUM HYDROXIDE,25%,55GA	Caustic Soda	$0.5812	$0.5812	$0.6277	$0.6277	$0.6277	$0.6277	$0.6654	$0.6654
P109		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	Sodium Hypochlorite	$0.3850	$0.3850	$0.4081	$0.4081	$0.4081	$0.4081	$0.4326	$0.4326
P109		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	Phosphates	$1.9200	$1.9200	$2.0256	$2.0256	$2.0256	$2.0256	$2.1370	$2.1370
P109		1200976	CHM,ZINC,CHLORIDE,1:3,5GA	Phosphates								
P109 Total												
P110	Hershey Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	Chemicals - Other	$0.2520	$0.2520	$0.2671	$0.2671	$0.2671	$0.2671	$0.2831	$0.2831
P110		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P110		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine								
P110		1200623	CHM,FERRIC,CHLORID PLYMR FER+PLUS,BULK	Ferric Chloride	$0.2494	$0.2494	$0.2444	$0.2444	$0.2444	$0.2444	$0.2444	$0.2444
P110		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	Polymers	$2.1400	$2.1400	$2.2470	$2.2470	$2.2470	$2.2470	$2.3594	$2.3594
P110		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	Caustic Soda	$0.2645	$0.2645	$0.2857	$0.2857	$0.2857	$0.2857	$0.3028	$0.3028
P110		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.1980	$0.1980	$0.2099	$0.2099	$0.2099	$0.2099	$0.2225	$0.2225
P110		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	Phosphates	$0.9900	$0.9900	$1.0445	$1.0445	$1.0445	$1.0445	$1.1019	$1.1019
P110		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	Chemicals - Other	$1.4300	$1.4300	$1.5158	$1.5158	$1.5158	$1.5158	$1.6067	$1.6067
P110		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	Ferric Chloride	$0.3830	$0.3830	$0.3753	$0.3753	$0.3753	$0.3753	$0.3753	$0.3753
P110		WE	F816 Activated Carbon	Chemicals - Other	$3.0300	$3.0300	$3.2118	$3.2118	$3.2118	$3.2118	$3.4045	$3.4045
P110		WE	Quote B121636 LPD DCHLR TABLETS 140 PK	Chemicals - Other	$144.0000	$144.0000	$152.6400	$152.6400	$152.6400	$152.6400	$161.7984	$161.7984
P110 Total												
P112	Milton / White Deer P	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P112		1200630	CHM,LIME,HYDRATED,50 LB	Lime								
P112		1200702	CHM,PACL,DELPC2020, BULK	Chemicals - Other	$0.2500	$0.2500	$0.2650	$0.2650	$0.2650	$0.2650	$0.2809	$0.2809
P112		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	Polymers	$3.5400	$3.5400	$3.7170	$3.7170	$3.7170	$3.7170	$3.9029	$3.9029
P112		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	Chemicals - Other	$3.6700	$3.6700	$3.8902	$3.8902	$3.8902	$3.8902	$4.1236	$4.1236
P112		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	Caustic Soda	$0.1842	$0.1842	$0.1989	$0.1989	$0.1989	$0.1989	$0.2109	$0.2109
P112		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.2767	$0.2767	$0.2933	$0.2933	$0.2933	$0.2933	$0.3109	$0.3109
P112		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	Phosphates	$1.1400	$1.1400	$1.2027	$1.2027	$1.2027	$1.2027	$1.2688	$1.2688
P112		WE	SOD METABISULFITE BAG114	Chemicals - Other	$2.8900	$2.8900	$3.0634	$3.0634	$3.0634	$3.0634	$3.2472	$3.2472
P112 Total												
P113	Phillipsburg Prod	1200551	CHM,ALUM,SULFAT LIQUID,50%,55GA	Aluminum Sulfate	$0.3191	$0.3191	$0.3319	$0.3319	$0.3319	$0.3319	$0.3451	$0.3451
P113		1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$2.2514	$2.2514	$2.4090	$2.4090	$2.4090	$2.4090	$2.5535	$2.5535
P113		1200641	CHM,HFS ACID,23%,15GA	HFS (Fluoride)	$1.0120	$1.0120	$0.9816	$0.9816	$0.9816	$0.9816	$0.9816	$0.9816
P113		1200643	CHM,HFS ACID,23%,30GA	HFS (Fluoride)	$0.5390	$0.5390	$0.5228	$0.5228	$0.5228	$0.5228	$0.5228	$0.5228
P113		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	Caustic Soda	$0.4024	$0.4024	$0.4346	$0.4346	$0.4346	$0.4346	$0.4607	$0.4607
P113		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	Caustic Soda	$0.3746	$0.3746	$0.4046	$0.4046	$0.4046	$0.4046	$0.4288	$0.4288
P113		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	Sodium Hypochlorite	$0.9500	$0.9500	$1.0070	$1.0070	$1.0070	$1.0070	$1.0674	$1.0674
P113		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	Phosphates	$2.3700	$2.3700	$2.5004	$2.5004	$2.5004	$2.5004	$2.6379	$2.6379
P113		1201253	CHM,ORTHO-POLY P,AQUA MAG 9100,5GA	Phosphates	$2.6548	$2.6548	$2.8008	$2.8008	$2.8008	$2.8008	$2.9549	$2.9549
P113 Total												
P114	Glen Alsace Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$3.1403	$3.1403	$3.3601	$3.3601	$3.3601	$3.3601	$3.5617	$3.5617
P114		1200672	CHM,PHOS,ORTH-PLY CARUS 8400,336LB	Phosphates	$1.0600	$1.0600	$1.1183	$1.1183	$1.1183	$1.1183	$1.1798	$1.1798
P114		1200859	CHM,PHOSPHATE,POLY CALGON C5,30GA	Phosphates	$1.3100	$1.3100	$1.3821	$1.3821	$1.3821	$1.3821	$1.4581	$1.4581
P114		1200882	CHM,LIGHT SODA ASH,100%,50LB	Chemicals - Other	$0.4100	$0.4100	$0.4346	$0.4346	$0.4346	$0.4346	$0.4607	$0.4607
P114		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	Caustic Soda	$0.3650	$0.3650	$0.3942	$0.3942	$0.3942	$0.3942	$0.4179	$0.4179
P114		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$0.3500	$0.3500	$0.3710	$0.3710	$0.3710	$0.3710	$0.3933	$0.3933
P114		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.3250	$0.3250	$0.3445	$0.3445	$0.3445	$0.3445	$0.3652	$0.3652
P114		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	Phosphates	$1.5100	$1.5100	$1.5931	$1.5931	$1.5931	$1.5931	$1.6807	$1.6807
P114		WE	USA Bluebook Dechlorination Tablets 45	Chemicals - Other	$130.5600	$130.5600	$138.3936	$138.3936	$138.3936	$138.3936	$146.6972	$146.6972
P114		WE	USABB Aluminum Dechlorination Diffuser	Chemicals - Other	$1,304.9600	$1,304.9600	$1,383.2576	$1,383.2576	$1,383.2576	$1,383.2576	$1,466.2531	$1,466.2531
P114 Total												

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Chemical Expense Workpaper
Projected 12-Months June 2024 and June 2025

				PRICING								
Plant	Name 1	Material	Material Description	Chemical Family	Current Unit Price 3Q-2023	Unit Price 4Q-2023	Unit Price 1Q-2024	Unit Price 2Q-2024	Unit Price 3Q-2024	Unit Price 4Q-2024	Unit Price 1Q-2025	Unit Price 2Q-2025
P115	Norristown Prod	1200557	CHM,AMMONIA,ANHYDROUS,100%,BULK	Chemicals - Other								
P115		1200562	CHM,AMMONIUM SULFATE,40%,BULK	Chemicals - Other	$0.4800	$0.4800	$0.5088	$0.5088	$0.5088	$0.5088	$0.5393	$0.5393
P115		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	Chemicals - Other	$1.4780	$1.4780	$1.5667	$1.5667	$1.5667	$1.5667	$1.6607	$1.6607
P115		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine								
P115		1200782	CHM,POLYMER,CATIONC CATFLOC 71259,BULK	Polymers								
P115		1200791	CHM,POLYMER,CATIONC NALCO 8173,55LB	Polymers	$3.1300	$3.1300	$3.2865	$3.2865	$3.2865	$3.2865	$3.4508	$3.4508
P115		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other								
P115		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	Chemicals - Other	$1.4200	$1.4200	$1.5052	$1.5052	$1.5052	$1.5052	$1.5955	$1.5955
P115		1200900	CHM,SODIUM CHLORIDE,90% PURE,50LB 704	Chemicals - Other	$0.1550	$0.1550	$0.1643	$0.1643	$0.1643	$0.1643	$0.1742	$0.1742
P115		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	Caustic Soda	$0.1895	$0.1895	$0.2047	$0.2047	$0.2047	$0.2047	$0.2169	$0.2169
P115		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.1980	$0.1980	$0.2099	$0.2099	$0.2099	$0.2099	$0.2225	$0.2225
P115		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	Phosphates	$0.9900	$0.9900	$1.0445	$1.0445	$1.0445	$1.0445	$1.1019	$1.1019
P115		1201524	CHM,POLYMER,CATIONC NALCO 7763 55GA	Polymers	$1.5400	$1.5400	$1.6170	$1.6170	$1.6170	$1.6170	$1.6979	$1.6979
P115		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	Ferric Chloride	$0.3830	$0.3830	$0.3753	$0.3753	$0.3753	$0.3753	$0.3753	$0.3753
P115		1202111	CHM,POLYMER,ANIONC CEDRFLOC 551,275GAL	Polymers	$1.5600	$1.5600	$1.6380	$1.6380	$1.6380	$1.6380	$1.7199	$1.7199
P115		WE	USA Bluebook Dechlorination Tablets 45	Chemicals - Other	$132.3069	$132.3069	$140.2453	$140.2453	$140.2453	$140.2453	$148.6600	$148.6600
P115		WE	USABB Aluminum Dechlorination Diffuser	Chemicals - Other	$1,034.9600	$1,034.9600	$1,097.0576	$1,097.0576	$1,097.0576	$1,097.0576	$1,162.8811	$1,162.8811
P115		WE	Vita-D-Chlor Dechlorination Tablets, 14	Chemicals - Other	$593.7500	$593.7500	$629.3750	$629.3750	$629.3750	$629.3750	$667.1375	$667.1375
P115 Total												
P116	Penn Water Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$1.9403	$1.9403	$2.0761	$2.0761	$2.0761	$2.0761	$2.2007	$2.2007
P116		1200662	CHM,PHOSPHATE,ORTH-PLY CARUS 8700,339LB	Phosphates	$1.0700	$1.0700	$1.1289	$1.1289	$1.1289	$1.1289	$1.1909	$1.1909
P116		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$0.4300	$0.4300	$0.4558	$0.4558	$0.4558	$0.4558	$0.4831	$0.4831
P116 Total												
P117	Royersford Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1115	$0.1115	$0.1160	$0.1160	$0.1160	$0.1160	$0.1206	$0.1206
P117		1200556	CHM,AMMONIA,ANHYDROUS,100%,150LB	Chemicals - Other	$3.7936	$3.7936	$4.0212	$4.0212	$4.0212	$4.0212	$4.2625	$4.2625
P117		1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$3.6958	$3.6958	$3.9545	$3.9545	$3.9545	$3.9545	$4.1918	$4.1918
P117		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine	$1.8783	$1.8783	$2.0098	$2.0098	$2.0098	$2.0098	$2.1304	$2.1304
P117		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	Polymers	$2.1400	$2.1400	$2.2470	$2.2470	$2.2470	$2.2470	$2.3594	$2.3594
P117		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$3.5400	$3.5400	$3.7524	$3.7524	$3.7524	$3.7524	$3.9775	$3.9775
P117		1200882	CHM,LIGHT SODA ASH,100%,50LB	Chemicals - Other	$0.4100	$0.4100	$0.4346	$0.4346	$0.4346	$0.4346	$0.4607	$0.4607
P117		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	Caustic Soda	$0.2600	$0.2600	$0.2808	$0.2808	$0.2808	$0.2808	$0.2976	$0.2976
P117		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$0.3500	$0.3500	$0.3710	$0.3710	$0.3710	$0.3710	$0.3933	$0.3933
P117		1200958	CHM,SODIUM ZINC,METASHANNOCOR,50LB	Phosphates	$2.4500	$2.4500	$2.5848	$2.5848	$2.5848	$2.5848	$2.7269	$2.7269
P117 Total												
P118	Yardley Prod	1200557	CHM,AMMONIA,ANHYDROUS,100%,BULK	Chemicals - Other	$1.3300	$1.3300	$1.4098	$1.4098	$1.4098	$1.4098	$1.4944	$1.4944
P118		1200562	CHM,AMMONIUM SULFATE,40%,BULK	Chemicals - Other	$0.5537	$0.5537	$0.5869	$0.5869	$0.5869	$0.5869	$0.6221	$0.6221
P118		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	Chemicals - Other	$1.1600	$1.1600	$1.2296	$1.2296	$1.2296	$1.2296	$1.3034	$1.3034
P118		1200583	CHM,CARBON,PAC LIGNITE,40LB	Chemicals - Other	$1.1800	$1.1800	$1.2508	$1.2508	$1.2508	$1.2508	$1.3258	$1.3258
P118		1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$2.8416	$2.8416	$3.0405	$3.0405	$3.0405	$3.0405	$3.2229	$3.2229
P118		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine	$1.9283	$1.9283	$2.0633	$2.0633	$2.0633	$2.0633	$2.1871	$2.1871
P118		1200774	CHM,POLYMER,CATIONC CF71259,55GA	Polymers	$2.0800	$2.0800	$2.1840	$2.1840	$2.1840	$2.1840	$2.2932	$2.2932
P118		1200859	CHM,PHOSPHATE,POLY CALGON C5,30GA	Phosphates	$1.4000	$1.4000	$1.4770	$1.4770	$1.4770	$1.4770	$1.5582	$1.5582
P118		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	Caustic Soda	$0.1631	$0.1631	$0.1761	$0.1761	$0.1761	$0.1761	$0.1867	$0.1867
P118		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.3850	$0.3850	$0.4081	$0.4081	$0.4081	$0.4081	$0.4326	$0.4326
P118		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	Phosphates	$1.5600	$1.5600	$1.6458	$1.6458	$1.6458	$1.6458	$1.7363	$1.7363
P118		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	Phosphates	$1.3200	$1.3200	$1.3926	$1.3926	$1.3926	$1.3926	$1.4692	$1.4692
P118		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	Phosphates	$1.7300	$1.7300	$1.8252	$1.8252	$1.8252	$1.8252	$1.9255	$1.9255
P118		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	Chemicals - Other	$1.5800	$1.5800	$1.6748	$1.6748	$1.6748	$1.6748	$1.7753	$1.7753
P118		1201461	CHM,AMMONIUM SULFATE,LIQUID,40%,55GA	Chemicals - Other	$0.7797	$0.7797	$0.8265	$0.8265	$0.8265	$0.8265	$0.8761	$0.8761
P118		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	Ferric Chloride	$0.3830	$0.3830	$0.3753	$0.3753	$0.3753	$0.3753	$0.3753	$0.3753
P118		1202801	CHM,CALCIUM THIOSULFATE,LIQUID,55GA	Chemicals - Other	$1.1640	$1.1640	$1.2338	$1.2338	$1.2338	$1.2338	$1.3079	$1.3079
P118		1202821	CHM,ZINC,CHLORID,1:3,3520LB TOTE,CAR3180	Phosphates	$1.3100	$1.3100	$1.3821	$1.3821	$1.3821	$1.3821	$1.4581	$1.4581
P118		1203142	CHM,SODIUM HYDROXIDE,25%,2700LB TOTE	Caustic Soda	$0.2900	$0.2900	$0.3132	$0.3132	$0.3132	$0.3132	$0.3320	$0.3320
P118		WE	TK71734147T Water Softener Salt, Contain	Chemicals - Other	$21.1800	$21.1800	$22.4508	$22.4508	$22.4508	$22.4508	$23.7978	$23.7978
P118		WE	USA Bluebook Dechlorination Tablets 45	Chemicals - Other	$130.5600	$130.5600	$138.3936	$138.3936	$138.3936	$138.3936	$146.6972	$146.6972
P118		KR	Freight Charges	Chemicals - Other	$906.3100	$906.3100	$960.6886	$960.6886	$960.6886	$960.6886	$1,018.3299	$1,018.3299
P118 Total												

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				PRICING								
Plant	Name 1	Material	Material Description	Chemical Family	Current Unit Price 3Q-2023	Unit Price 4Q-2023	Unit Price 1Q-2024	Unit Price 2Q-2024	Unit Price 3Q-2024	Unit Price 4Q-2024	Unit Price 1Q-2025	Unit Price 2Q-2025
P119	Clarion Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	Chemicals - Other	$0.2950	$0.2950	$0.3127	$0.3127	$0.3127	$0.3127	$0.3315	$0.3315
P119		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other								
P119		1200583	CHM,CARBON,PAC LIGNITE,40LB	Chemicals - Other								
P119		1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$1.8800	$1.8800	$2.0116	$2.0116	$2.0116	$2.0116	$2.1323	$2.1323
P119		1200646	CHM,HFS ACID,23%,55GA	HFS (Fluoride)	$0.3900	$0.3900	$0.3783	$0.3783	$0.3783	$0.3783	$0.3783	$0.3783
P119		1200702	CHM,PACL,DELPC2020, BULK	Chemicals - Other	$0.3600	$0.3600	$0.3816	$0.3816	$0.3816	$0.3816	$0.4045	$0.4045
P119		1200779	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,55LB	Polymers	$4.0168	$4.0168	$4.2176	$4.2176	$4.2176	$4.2176	$4.4285	$4.4285
P119		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	Chemicals - Other	$3.6700	$3.6700	$3.8902	$3.8902	$3.8902	$3.8902	$4.1236	$4.1236
P119		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	Chemicals - Other	$1.4700	$1.4700	$1.5582	$1.5582	$1.5582	$1.5582	$1.6517	$1.6517
P119		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	Chemicals - Other	$0.2900	$0.2900	$0.3074	$0.3074	$0.3074	$0.3074	$0.3258	$0.3258
P119		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	Caustic Soda	$0.1981	$0.1981	$0.2139	$0.2139	$0.2139	$0.2139	$0.2268	$0.2268
P119		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	Phosphates	$1.5600	$1.5600	$1.6458	$1.6458	$1.6458	$1.6458	$1.7363	$1.7363
P119		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P119		WE	USA Bluebook Dechlorination Tablets 45	Chemicals - Other	$132.7100	$132.7100	$140.6726	$140.6726	$140.6726	$140.6726	$149.1130	$149.1130
P119		WE	USABB Aluminum Dechlorination Diffuser	Chemicals - Other	$1,121.2000	$1,121.2000	$1,188.4720	$1,188.4720	$1,188.4720	$1,188.4720	$1,259.7803	$1,259.7803
P119 Total												
P120	Indiana Prod	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P120		1200612	CHM,FERRIC,CHLORID,38%,BULK	Ferric Chloride	$0.2570	$0.2570	$0.2519	$0.2519	$0.2519	$0.2519	$0.2519	$0.2519
P120		1200632	CHM,LIME,LIQUID CAO,37.5%,BULK	Lime	$0.1200	$0.1200	$0.1260	$0.1260	$0.1260	$0.1260	$0.1323	$0.1323
P120		1200645	CHM,HFS ACID,23%,330GA	HFS (Fluoride)	$0.4100	$0.4100	$0.3977	$0.3977	$0.3977	$0.3977	$0.3977	$0.3977
P120		1200821	CHM,POLYMER,NALCO 8181 ,55GA	Polymers	$2.5500	$2.5500	$2.6775	$2.6775	$2.6775	$2.6775	$2.8114	$2.8114
P120		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	Caustic Soda	$0.2045	$0.2045	$0.2209	$0.2209	$0.2209	$0.2209	$0.2341	$0.2341
P120		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.2750	$0.2750	$0.2915	$0.2915	$0.2915	$0.2915	$0.3090	$0.3090
P120		1202582	CHM,PLYMR,NONIONC NALCO 8181,TOTE	Polymers	$2.5500	$2.5500	$2.6775	$2.6775	$2.6775	$2.6775	$2.8114	$2.8114
P120 Total												
P121	Kane Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$6.1125	$6.1125	$6.5404	$6.5404	$6.5404	$6.5404	$6.9328	$6.9328
P121		1200646	CHM,HFS ACID,23%,55GA	HFS (Fluoride)	$0.5390	$0.5390	$0.5228	$0.5228	$0.5228	$0.5228	$0.5228	$0.5228
P121		1200752	CHM,POLYMER,CATIONC CATFLOC TL,5GA	Polymers	$3.2500	$3.2500	$3.4125	$3.4125	$3.4125	$3.4125	$3.5831	$3.5831
P121		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	Caustic Soda								
P121		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	Caustic Soda	$0.3460	$0.3460	$0.3737	$0.3737	$0.3737	$0.3737	$0.3961	$0.3961
P121		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	Sodium Hypochlorite	$0.3850	$0.3850	$0.4081	$0.4081	$0.4081	$0.4081	$0.4326	$0.4326
P121		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	Phosphates	$1.2300	$1.2300	$1.2977	$1.2977	$1.2977	$1.2977	$1.3690	$1.3690
P121		WE	Bio-Max Dechlorination Tablets, 48 lb P	Chemicals - Other	$150.0500	$150.0500	$159.0530	$159.0530	$159.0530	$159.0530	$168.5962	$168.5962
P121 Total												
P122	Ellwood Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1092	$0.1092	$0.1136	$0.1136	$0.1136	$0.1136	$0.1181	$0.1181
P122		1200555	CHM,AMMONIA,ANHYDROUS,100%,100LB	Chemicals - Other								
P122		1200566	CHM,AMMONIA,AQUA,19%,BULK	Chemicals - Other	$0.2733	$0.2733	$0.2897	$0.2897	$0.2897	$0.2897	$0.3071	$0.3071
P122		1200570	CHM,CALCIUM,HYPO,100%,100LB	Chemicals - Other	$2.8179	$2.8179	$2.9870	$2.9870	$2.9870	$2.9870	$3.1662	$3.1662
P122		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other								
P122		1200579	CHM,CRBN,PAC BITUMIN 500 IODINE,1000LB	Chemicals - Other								
P122		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine								
P122		1200639	CHM,HYDROGEN PEROXIDE,BULK	Chemicals - Other	$0.5268	$0.5268	$0.5584	$0.5584	$0.5584	$0.5584	$0.5919	$0.5919
P122		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other								
P122		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	Chemicals - Other	$1.4800	$1.4800	$1.5688	$1.5688	$1.5688	$1.5688	$1.6629	$1.6629
P122		1200894	CHM,SODIUM BISULFITE,ROVER,50LB	Chemicals - Other								
P122		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	Caustic Soda	$0.2045	$0.2045	$0.2209	$0.2209	$0.2209	$0.2209	$0.2341	$0.2341
P122		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.2311	$0.2311	$0.2450	$0.2450	$0.2450	$0.2450	$0.2597	$0.2597
P122		1201171	CHM,PHOSPHORIC ACID,ORTHO,75%,BULK	Phosphates	$1.6300	$1.6300	$1.7197	$1.7197	$1.7197	$1.7197	$1.8142	$1.8142
P122		1202121	CHM,PHOSPHORIC ACID,ORTHO,75%,15GA	Phosphates	$1.2532	$1.2532	$1.3222	$1.3222	$1.3222	$1.3222	$1.3949	$1.3949
P122		1202581	CHM,PLYMR,CATIONC NALCO 8100,TOTE	Polymers	$2.2300	$2.2300	$2.3415	$2.3415	$2.3415	$2.3415	$2.4586	$2.4586
P122		1202582	CHM,PLYMR,NONIONC NALCO 8181,TOTE	Polymers								
P122		1202583	CHM,PLYMR,CATIONC NALCO 7128,TOTE	Polymers								
P122		1202592	CHM,LIME,LIQUID CAO, 30% BULK	Lime	$0.1100	$0.1100	$0.1155	$0.1155	$0.1155	$0.1155	$0.1213	$0.1213
P122		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	Chemicals - Other	$0.2900	$0.2900	$0.3074	$0.3074	$0.3074	$0.3074	$0.3258	$0.3258
P122		1202672	CHM,CARBON,PAC,CARBPURE800,750LB SUPSACK	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P122		1202751	CHM,POLYMER,CEDARFLOC 554,2300LB	Polymers	$1.6800	$1.6800	$1.7640	$1.7640	$1.7640	$1.7640	$1.8522	$1.8522
P122		1202761	CHM,PLYMR,CATIONC,NALCO 8102 PLUS,275GA	Polymers	$1.3800	$1.3800	$1.4490	$1.4490	$1.4490	$1.4490	$1.5215	$1.5215
P122 Total												

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Projected 12-Months June 2024 and June 2025

				PRICING								
Plant	Name 1	Material	Material Description	Chemical Family	Current Unit Price 3Q-2023	Unit Price 4Q-2023	Unit Price 1Q-2024	Unit Price 2Q-2024	Unit Price 3Q-2024	Unit Price 4Q-2024	Unit Price 1Q-2025	Unit Price 2Q-2025
P123	New Castle Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1007	$0.1007	$0.1047	$0.1047	$0.1047	$0.1047	$0.1089	$0.1089
P123		1200566	CHM,AMMONIA,AQUA,19%,BULK	Chemicals - Other	$0.2733	$0.2733	$0.2897	$0.2897	$0.2897	$0.2897	$0.3071	$0.3071
P123		1200570	CHM,CALCIUM,HYPO,100%,100LB	Chemicals - Other	$3.3500	$3.3500	$3.5510	$3.5510	$3.5510	$3.5510	$3.7641	$3.7641
P123		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other								
P123		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine	$1.4100	$1.4100	$1.5087	$1.5087	$1.5087	$1.5087	$1.5992	$1.5992
P123		1200632	CHM,LIME,LIQUID CAO,37.5%,BULK	Lime	$0.1175	$0.1175	$0.1234	$0.1234	$0.1234	$0.1234	$0.1295	$0.1295
P123		1200647	CHM,HFS ACID,23%,BULK	HFS (Fluoride)	$0.2500	$0.2500	$0.2425	$0.2425	$0.2425	$0.2425	$0.2425	$0.2425
P123		1200684	CHM,LIME,PEBBLE,100%,BULK	Lime								
P123		1200751	CHM,POLYMER,CATIONC NALCO 8102 PLS,55GA	Polymers	$1.4300	$1.4300	$1.5015	$1.5015	$1.5015	$1.5015	$1.5766	$1.5766
P123		1200781	CHM,POLYMER,CATIONC NALCO 8110 PULV,50LB	Polymers	$3.1400	$3.1400	$3.2970	$3.2970	$3.2970	$3.2970	$3.4619	$3.4619
P123		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	Chemicals - Other	$3.6700	$3.6700	$3.8902	$3.8902	$3.8902	$3.8902	$4.1236	$4.1236
P123		1200914	CHM,SODIUM HYDROXIDE,25%,330GA	Caustic Soda	$0.2600	$0.2600	$0.2808	$0.2808	$0.2808	$0.2808	$0.2976	$0.2976
P123		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	Phosphates	$1.3400	$1.3400	$1.4137	$1.4137	$1.4137	$1.4137	$1.4915	$1.4915
P123		WE	Accu-tab Wastewater Chlorination Tablets	Chemicals - Other	$411.7057	$411.7057	$436.4081	$436.4081	$436.4081	$436.4081	$462.5925	$462.5925
P123		WE	USA Bluebook Dechlorination Tablets 45	Chemicals - Other	$132.7100	$132.7100	$140.6726	$140.6726	$140.6726	$140.6726	$149.1130	$149.1130
P123 Total												
P124	Punxsutawney P	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$3.3625	$3.3625	$3.5979	$3.5979	$3.5979	$3.5979	$3.8137	$3.8137
P124		1200612	CHM,FERRIC,CHLORID,38%,BULK	Ferric Chloride	$0.2570	$0.2570	$0.2519	$0.2519	$0.2519	$0.2519	$0.2519	$0.2519
P124		1200630	CHM,LIME,HYDRATED,50 LB	Lime								
P124		1200631	CHM,LIME,HYDRATED CAO,72%,BULK	Lime	$0.1264	$0.1264	$0.1327	$0.1327	$0.1327	$0.1327	$0.1394	$0.1394
P124		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	Polymers	$3.5400	$3.5400	$3.7170	$3.7170	$3.7170	$3.7170	$3.9029	$3.9029
P124		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	Chemicals - Other	$0.2900	$0.2900	$0.3074	$0.3074	$0.3074	$0.3074	$0.3258	$0.3258
P124		1200992	CHM,ZINC,ONDEO C39,50LB	Phosphates	$2.4500	$2.4500	$2.5848	$2.5848	$2.5848	$2.5848	$2.7269	$2.7269
P124		KR	Carbon Dioxide	Chemicals - Other	$7.1460	$7.1460	$7.5748	$7.5748	$7.5748	$7.5748	$8.0292	$8.0292
P124		WE	USA Bluebook Dechlorination Tablets 45	Chemicals - Other	$131.9933	$131.9933	$139.9129	$139.9129	$139.9129	$139.9129	$148.3077	$148.3077
P124 Total												
P125	Warren Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$2.5042	$2.5042	$2.6795	$2.6795	$2.6795	$2.6795	$2.8403	$2.8403
P125		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	Phosphates	$1.5400	$1.5400	$1.6247	$1.6247	$1.6247	$1.6247	$1.7141	$1.7141
P125 Total												
P126	Butler Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1067	$0.1067	$0.1110	$0.1110	$0.1110	$0.1110	$0.1154	$0.1154
P126		1200555	CHM,AMMONIA,ANHYDROUS,100%,100LB	Chemicals - Other	$4.4800	$4.4800	$4.7488	$4.7488	$4.7488	$4.7488	$5.0337	$5.0337
P126		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P126		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine	$1.4100	$1.4100	$1.5087	$1.5087	$1.5087	$1.5087	$1.5992	$1.5992
P126		1200631	CHM,LIME,HYDRATED CAO,72%,BULK	Lime	$0.1145	$0.1145	$0.1202	$0.1202	$0.1202	$0.1202	$0.1262	$0.1262
P126		1200690	CHM,PHOSPHORIC ACID,ORTHO,75%,30GA	Phosphates	$1.7700	$1.7700	$1.8674	$1.8674	$1.8674	$1.8674	$1.9701	$1.9701
P126		1200702	CHM,PACL,DELPC2020, BULK	Chemicals - Other	$0.3800	$0.3800	$0.4028	$0.4028	$0.4028	$0.4028	$0.4270	$0.4270
P126		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$2.6400	$2.6400	$2.7984	$2.7984	$2.7984	$2.7984	$2.9663	$2.9663
P126		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	Caustic Soda	$0.3075	$0.3075	$0.3321	$0.3321	$0.3321	$0.3321	$0.3520	$0.3520
P126		1201105	CHM,POLYMER,CATIONC NALCO 8170,55LB	Polymers	$3.5400	$3.5400	$3.7170	$3.7170	$3.7170	$3.7170	$3.9029	$3.9029
P126		1202121	CHM,PHOSPHORIC ACID,ORTHO,75%,15GA	Phosphates								
P126		KR	Cylinder Rental	Chemicals - Other	$24.3725	$24.3725	$25.8349	$25.8349	$25.8349	$25.8349	$27.3849	$27.3849
P126		WE	USA Bluebook Dechlorination Tablets 45	Chemicals - Other	$130.5600	$130.5600	$138.3936	$138.3936	$138.3936	$138.3936	$146.6972	$146.6972
P126 Total												
P127	Kittanning Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine								
P127		1200647	CHM,HFS ACID,23%,BULK	HFS (Fluoride)	$0.4100	$0.4100	$0.3977	$0.3977	$0.3977	$0.3977	$0.3977	$0.3977
P127		1200690	CHM,PHOSPHORIC ACID,ORTHO,75%,30GA	Phosphates	$1.3900	$1.3900	$1.4665	$1.4665	$1.4665	$1.4665	$1.5471	$1.5471
P127		1200752	CHM,POLYMER,CATIONC CATFLOC TL,5GA	Polymers	$3.2500	$3.2500	$3.4125	$3.4125	$3.4125	$3.4125	$3.5831	$3.5831
P127		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$3.5400	$3.5400	$3.7524	$3.7524	$3.7524	$3.7524	$3.9775	$3.9775
P127		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	Caustic Soda	$0.1981	$0.1981	$0.2139	$0.2139	$0.2139	$0.2139	$0.2268	$0.2268
P127		1200933	CHM,SODIUM HYPOCHLORITE,13%,300GA	Sodium Hypochlorite	$0.4800	$0.4800	$0.5088	$0.5088	$0.5088	$0.5088	$0.5393	$0.5393
P127		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	Sodium Hypochlorite	$0.4800	$0.4800	$0.5088	$0.5088	$0.5088	$0.5088	$0.5393	$0.5393
P127		1201461	CHM,AMMONIUM SULFATE,LIQUID,40%,55GA	Chemicals - Other	$0.8400	$0.8400	$0.8904	$0.8904	$0.8904	$0.8904	$0.9438	$0.9438
P127		1202661	CHM,FERRIC,CHLORID,38%,330GA	Ferric Chloride	$0.3150	$0.3150	$0.3087	$0.3087	$0.3087	$0.3087	$0.3087	$0.3087
P127		WE	USA Bluebook Dechlorination Tablets 45	Chemicals - Other	$132.1725	$132.1725	$140.1029	$140.1029	$140.1029	$140.1029	$148.5090	$148.5090
P127 Total												
P128	Brownsville Prod	1200555	CHM,AMMONIA,ANHYDROUS,100%,100LB	Chemicals - Other	$4.9100	$4.9100	$5.2046	$5.2046	$5.2046	$5.2046	$5.5169	$5.5169
P128		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P128		1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$2.0900	$2.0900	$2.2363	$2.2363	$2.2363	$2.2363	$2.3705	$2.3705
P128		1200702	CHM,PACL,DELPC2020, BULK	Chemicals - Other	$0.4400	$0.4400	$0.4664	$0.4664	$0.4664	$0.4664	$0.4944	$0.4944
P128		1200877	CHM,SODIUM PERMANGANATE,20%,55GA	Chemicals - Other	$1.6100	$1.6100	$1.7066	$1.7066	$1.7066	$1.7066	$1.8090	$1.8090
P128		1200891	CHM,SODIUM BISULFITE,38%,15GA	Chemicals - Other	$0.3300	$0.3300	$0.3498	$0.3498	$0.3498	$0.3498	$0.3708	$0.3708
P128		1200914	CHM,SODIUM HYDROXIDE,25%,330GA	Caustic Soda	$0.2600	$0.2600	$0.2808	$0.2808	$0.2808	$0.2808	$0.2976	$0.2976
P128		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	Caustic Soda	$0.4200	$0.4200	$0.4536	$0.4536	$0.4536	$0.4536	$0.4808	$0.4808
P128		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	Phosphates	$1.5200	$1.5200	$1.6036	$1.6036	$1.6036	$1.6036	$1.6918	$1.6918
P128		1202031	CHM,POLYMER,CATIONIC NALCO 7763 5GA	Polymers	$3.3000	$3.3000	$3.4650	$3.4650	$3.4650	$3.4650	$3.6383	$3.6383
P128 Total												

Pennsylvania American Water Company
Chemical Expense Workpaper
Projected 12-Months June 2024 and June 2025

				PRICING								
Plant	Name 1	Material	Material Description	Chemical Family	Current Unit Price 3Q-2023	Unit Price 4Q-2023	Unit Price 1Q-2024	Unit Price 2Q-2024	Unit Price 3Q-2024	Unit Price 4Q-2024	Unit Price 1Q-2025	Unit Price 2Q-2025
P131	McMurray Prod	1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	Sodium Hypochlorite	$0.3320	$0.3320	$0.3519	$0.3519	$0.3519	$0.3519	$0.3730	$0.3730
P131		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.2750	$0.2750	$0.2915	$0.2915	$0.2915	$0.2915	$0.3090	$0.3090
P131		1201461	CHM,AMMONIUM SULFATE,LIQUID,40%,55GA	Chemicals - Other	$1.1563	$1.1563	$1.2257	$1.2257	$1.2257	$1.2257	$1.2992	$1.2992
P131		WE	HYDROFLUOSILICIC ACID 23-25%	Chemicals - Other	$0.2950	$0.2950	$0.3127	$0.3127	$0.3127	$0.3127	$0.3315	$0.3315
P131		WE	LPD DCHLR tablets 140 PK - BID B111003	Chemicals - Other	$170.0000	$170.0000	$180.2000	$180.2000	$180.2000	$180.2000	$191.0120	$191.0120
P131 Total												
P132	Pittsburgh Hays Mine P	1200566	CHM,AMMONIA,AQUA,19%,BULK	Chemicals - Other	$0.1901	$0.1901	$0.2015	$0.2015	$0.2015	$0.2015	$0.2136	$0.2136
P132		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	Chemicals - Other	$1.1600	$1.1600	$1.2296	$1.2296	$1.2296	$1.2296	$1.3034	$1.3034
P132		1200623	CHM,FERRIC,CHLORID PLYMR FER+PLUS,BULK	Ferric Chloride	$0.3800	$0.3800	$0.3724	$0.3724	$0.3724	$0.3724	$0.3724	$0.3724
P132		1200647	CHM,HFS ACID,23%,BULK	HFS (Fluoride)	$0.2860	$0.2860	$0.2774	$0.2774	$0.2774	$0.2774	$0.2774	$0.2774
P132		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	Polymers	$3.2000	$3.2000	$3.3600	$3.3600	$3.3600	$3.3600	$3.5280	$3.5280
P132		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	Chemicals - Other	$1.3400	$1.3400	$1.4204	$1.4204	$1.4204	$1.4204	$1.5056	$1.5056
P132		1200904	CHM,SODIUM CHLORIDE,100%,BULK	Chemicals - Other	$0.1058	$0.1058	$0.1121	$0.1121	$0.1121	$0.1121	$0.1189	$0.1189
P132		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	Caustic Soda	$0.2795	$0.2795	$0.3019	$0.3019	$0.3019	$0.3019	$0.3200	$0.3200
P132		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.1988	$0.1988	$0.2107	$0.2107	$0.2107	$0.2107	$0.2234	$0.2234
P132		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	Phosphates	$1.3000	$1.3000	$1.3715	$1.3715	$1.3715	$1.3715	$1.4469	$1.4469
P132		1201117	CHM,POLYMER,CATIONC AS 2222,BULK	Polymers	$0.8500	$0.8500	$0.8925	$0.8925	$0.8925	$0.8925	$0.9371	$0.9371
P132		1203151	CHM,POLYMER,FERRI+PLUS 3050,BULK	Ferric Chloride	$0.3800	$0.3800	$0.3724	$0.3724	$0.3724	$0.3724	$0.3724	$0.3724
P132		WE	USA Bluebook Dechlorination Tablets 45	Chemicals - Other	$138.9700	$138.9700	$147.3082	$147.3082	$147.3082	$147.3082	$156.1467	$156.1467
P132 Total												
P133	Pittsburgh Aldrich P	1200566	CHM,AMMONIA,AQUA,19%,BULK	Chemicals - Other	$0.1901	$0.1901	$0.2015	$0.2015	$0.2015	$0.2015	$0.2136	$0.2136
P133		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	Chemicals - Other	$1.1600	$1.1600	$1.2296	$1.2296	$1.2296	$1.2296	$1.3034	$1.3034
P133		1200619	CHM,FERRIC,CHLORID PLYMR AS2820,10%,BULK	Ferric Chloride	$0.5150	$0.5150	$0.5047	$0.5047	$0.5047	$0.5047	$0.5047	$0.5047
P133		1200647	CHM,HFS ACID,23%,BULK	HFS (Fluoride)	$0.2500	$0.2500	$0.2425	$0.2425	$0.2425	$0.2425	$0.2425	$0.2425
P133		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	Chemicals - Other	$3.6700	$3.6700	$3.8902	$3.8902	$3.8902	$3.8902	$4.1236	$4.1236
P133		1200904	CHM,SODIUM CHLORIDE,100%,BULK	Chemicals - Other	$0.1055	$0.1055	$0.1118	$0.1118	$0.1118	$0.1118	$0.1185	$0.1185
P133		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	Caustic Soda	$0.2795	$0.2795	$0.3019	$0.3019	$0.3019	$0.3019	$0.3200	$0.3200
P133		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.1988	$0.1988	$0.2107	$0.2107	$0.2107	$0.2107	$0.2234	$0.2234
P133		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	Phosphates	$1.3500	$1.3500	$1.4243	$1.4243	$1.4243	$1.4243	$1.5026	$1.5026
P133		1201117	CHM,POLYMER,CATIONC AS 2222,BULK	Polymers	$0.8500	$0.8500	$0.8925	$0.8925	$0.8925	$0.8925	$0.9371	$0.9371
P133		1202401	CHM,POLYMER,AS-1400PW,275GA	Polymers	$2.1800	$2.1800	$2.2890	$2.2890	$2.2890	$2.2890	$2.4035	$2.4035
P133		1203061	CHM,POLYMER,CATIONIC,AS 2222,275GA	Polymers	$1.1100	$1.1100	$1.1655	$1.1655	$1.1655	$1.1655	$1.2238	$1.2238
P133		1203151	CHM,POLYMER,FERRI+PLUS 3050,BULK	Ferric Chloride	$0.3700	$0.3700	$0.3626	$0.3626	$0.3626	$0.3626	$0.3626	$0.3626
P133		1203231	CHM,POLYMER,FERRI+PLUS,3025,BULK	Ferric Chloride	$0.3700	$0.3700	$0.3626	$0.3626	$0.3626	$0.3626	$0.3626	$0.3626
P133		1203541	CHM,POLYMER,FERRI+PLUS,5100,BULK	Polymers	$0.3700	$0.3700	$0.3885	$0.3885	$0.3885	$0.3885	$0.4079	$0.4079
P133		WE	Captor Calcium Thiosulfate Solution, 30	Chemicals - Other	$310.0000	$310.0000	$328.6000	$328.6000	$328.6000	$328.6000	$348.3160	$348.3160
P133		WE	Sulfuric Acid 93% 66B Grade: NSF	Chemicals - Other	$1.0600	$1.0600	$1.1236	$1.1236	$1.1236	$1.1236	$1.1910	$1.1910
P133 Total												
P134	Silver Spring Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	Chemicals - Other	$0.2772	$0.2772	$0.2938	$0.2938	$0.2938	$0.2938	$0.3115	$0.3115
P134		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P134		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine								
P134		1200630	CHM,LIME,HYDRATED,50 LB	Lime	$0.1742	$0.1742	$0.1829	$0.1829	$0.1829	$0.1829	$0.1921	$0.1921
P134		1200647	CHM,HFS ACID,23%,BULK	HFS (Fluoride)	$0.3300	$0.3300	$0.3201	$0.3201	$0.3201	$0.3201	$0.3201	$0.3201
P134		1200751	CHM,POLYMER,CATIONC NALCO 8102 PLS,55GA	Polymers	$1.5300	$1.5300	$1.6065	$1.6065	$1.6065	$1.6065	$1.6868	$1.6868
P134		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	Polymers	$2.1400	$2.1400	$2.2470	$2.2470	$2.2470	$2.2470	$2.3594	$2.3594
P134		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$2.6000	$2.6000	$2.7560	$2.7560	$2.7560	$2.7560	$2.9214	$2.9214
P134		1200880	CHM,SODIUM PERMANGANATE,20%,MINI BULK	Chemicals - Other	$1.7500	$1.7500	$1.8550	$1.8550	$1.8550	$1.8550	$1.9663	$1.9663
P134		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	Caustic Soda	$0.1763	$0.1763	$0.1904	$0.1904	$0.1904	$0.1904	$0.2018	$0.2018
P134		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.2700	$0.2700	$0.2862	$0.2862	$0.2862	$0.2862	$0.3034	$0.3034
P134		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	Phosphates	$1.0200	$1.0200	$1.0761	$1.0761	$1.0761	$1.0761	$1.1353	$1.1353
P134		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	Chemicals - Other	$1.4300	$1.4300	$1.5158	$1.5158	$1.5158	$1.5158	$1.6067	$1.6067
P134		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	Ferric Chloride	$0.3800	$0.3800	$0.3724	$0.3724	$0.3724	$0.3724	$0.3724	$0.3724
P134		1202801	CHM,CALCIUM THIOSULFATE,LIQUID,55GA	Chemicals - Other	$1.1640	$1.1640	$1.2338	$1.2338	$1.2338	$1.2338	$1.3079	$1.3079
P134		WE	Dechlor Liquid	Chemicals - Other	$77.9800	$77.9800	$82.6588	$82.6588	$82.6588	$82.6588	$87.6183	$87.6183
P134		WE	Bio-Max Dechlorination Tablets, 48 lb P	Chemicals - Other	$177.7100	$177.7100	$188.3726	$188.3726	$188.3726	$188.3726	$199.6750	$199.6750
P134		WE	USA Bluebook Dechlorination Tablets 45	Chemicals - Other	$144.8971	$144.8971	$153.5910	$153.5910	$153.5910	$153.5910	$162.8064	$162.8064
P134		WE	USABB Aluminum Dechlorination Diffuser	Chemicals - Other	$1,574.9600	$1,574.9600	$1,669.4576	$1,669.4576	$1,669.4576	$1,669.4576	$1,769.6251	$1,769.6251
P134 Total												

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				PRICING								
Plant	Name 1	Material	Material Description	Chemical Family	Current Unit Price 3Q-2023	Unit Price 4Q-2023	Unit Price 1Q-2024	Unit Price 2Q-2024	Unit Price 3Q-2024	Unit Price 4Q-2024	Unit Price 1Q-2025	Unit Price 2Q-2025
P135	West Shore Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	Chemicals - Other	$0.2618	$0.2618	$0.2775	$0.2775	$0.2775	$0.2775	$0.2942	$0.2942
P135		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P135		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine								
P135		1200647	CHM,HFS ACID,23%,BULK	HFS (Fluoride)	$0.2970	$0.2970	$0.2881	$0.2881	$0.2881	$0.2881	$0.2881	$0.2881
P135		1200804	CHM,POLYMER,CATIONC AS 2222,55GA	Polymers	$1.1200	$1.1200	$1.1760	$1.1760	$1.1760	$1.1760	$1.2348	$1.2348
P135		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	Polymers	$2.1400	$2.1400	$2.2470	$2.2470	$2.2470	$2.2470	$2.3594	$2.3594
P135		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	Caustic Soda	$0.1665	$0.1665	$0.1798	$0.1798	$0.1798	$0.1798	$0.1906	$0.1906
P135		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.2200	$0.2200	$0.2332	$0.2332	$0.2332	$0.2332	$0.2472	$0.2472
P135		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	Phosphates	$1.0200	$1.0200	$1.0761	$1.0761	$1.0761	$1.0761	$1.1353	$1.1353
P135		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	Chemicals - Other	$1.4300	$1.4300	$1.5158	$1.5158	$1.5158	$1.5158	$1.6067	$1.6067
P135		1202391	CHM,PLYMR,FER+PLUS 3075,39945,BULK	Polymers								
P135		1203151	CHM,POLYMER,FERRI+PLUS 3050,BULK	Ferric Chloride	$0.3430	$0.3430	$0.3361	$0.3361	$0.3361	$0.3361	$0.3361	$0.3361
P135 Total												
P136	Coatesville Prod	1200562	CHM,AMMONIUM SULFATE,40%,BULK	Chemicals - Other	$0.5500	$0.5500	$0.5830	$0.5830	$0.5830	$0.5830	$0.6180	$0.6180
P136		1200586	CHM,CARBON,PAC LIGNITE,BULK	Chemicals - Other	$1.2242	$1.2242	$1.2977	$1.2977	$1.2977	$1.2977	$1.3755	$1.3755
P136		1200604	CHM,COPPER SULFATE,100%,50LB	Chemicals - Other	$2.4800	$2.4800	$2.6288	$2.6288	$2.6288	$2.6288	$2.7865	$2.7865
P136		1200647	CHM,HFS ACID,23%,BULK	HFS (Fluoride)	$0.2750	$0.2750	$0.2668	$0.2668	$0.2668	$0.2668	$0.2668	$0.2668
P136		1200772	CHM,POLYMER,CATIONC DELTA FLOC 801,BULK	Polymers	$0.2700	$0.2700	$0.2835	$0.2835	$0.2835	$0.2835	$0.2977	$0.2977
P136		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	Polymers	$2.1400	$2.1400	$2.2470	$2.2470	$2.2470	$2.2470	$2.3594	$2.3594
P136		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	Chemicals - Other	$1.3400	$1.3400	$1.4204	$1.4204	$1.4204	$1.4204	$1.5056	$1.5056
P136		1200904	CHM,SODIUM CHLORIDE,100%,BULK	Chemicals - Other								
P136		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	Caustic Soda	$0.1945	$0.1945	$0.2101	$0.2101	$0.2101	$0.2101	$0.2227	$0.2227
P136		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.1980	$0.1980	$0.2099	$0.2099	$0.2099	$0.2099	$0.2225	$0.2225
P136		1201174	CHM,PHOSPHATE,ORTH-PLY CARUS 8700,BULK	Phosphates	$0.9600	$0.9600	$1.0128	$1.0128	$1.0128	$1.0128	$1.0685	$1.0685
P136		1202461	CHM,POLYMER,FERRI+PLUS 1050,BULK	Ferric Chloride	$0.3830	$0.3830	$0.3753	$0.3753	$0.3753	$0.3753	$0.3753	$0.3753
P136		ZI	Buckmans - Polymer purchases	Chemicals - Other	$3,569.8300	$3,569.8300	$3,784.0198	$3,784.0198	$3,784.0198	$3,784.0198	$4,011.0610	$4,011.0610
P136 Total												
P137	Lake Heritage Prod	1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	Sodium Hypochlorite	$0.9667	$0.9667	$1.0247	$1.0247	$1.0247	$1.0247	$1.0862	$1.0862
P137 Total												
P138	Boggs Township Prod	1200705	CHM,POLYMER,DELTA FLOC 807,55GA	Polymers	$1.0954	$1.0954	$1.1502	$1.1502	$1.1502	$1.1502	$1.2077	$1.2077
P138		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$2.1500	$2.1500	$2.2790	$2.2790	$2.2790	$2.2790	$2.4157	$2.4157
P138 Total												
P139	Nittany Prod	1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$1.2880	$1.2880	$1.3653	$1.3653	$1.3653	$1.3653	$1.4472	$1.4472
P139 Total												
P140	S W B Brownell Podr	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1085	$0.1085	$0.1128	$0.1128	$0.1128	$0.1128	$0.1174	$0.1174
P140		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P140		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine	$1.7263	$1.7263	$1.8471	$1.8471	$1.8471	$1.8471	$1.9580	$1.9580
P140		1200630	CHM,LIME,HYDRATED,50 LB	Lime	$0.5599	$0.5599	$0.5879	$0.5879	$0.5879	$0.5879	$0.6173	$0.6173
P140		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	Polymers	$8.1936	$8.1936	$8.6033	$8.6033	$8.6033	$8.6033	$9.0334	$9.0334
P140		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	Chemicals - Other	$1.6815	$1.6815	$1.7824	$1.7824	$1.7824	$1.7824	$1.8893	$1.8893
P140		1200993	CHM,ZINC,1:10,50LB	Phosphates	$2.4500	$2.4500	$2.5848	$2.5848	$2.5848	$2.5848	$2.7269	$2.7269
P140		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	Chemicals - Other	$1.2500	$1.2500	$1.3250	$1.3250	$1.3250	$1.3250	$1.4045	$1.4045
P140		WE	USA Bluebook Dechlorination Tablets 45	Chemicals - Other	$131.9933	$131.9933	$139.9129	$139.9129	$139.9129	$139.9129	$148.3077	$148.3077
P140 Total												
P141	Ceasetown WTP	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1068	$0.1068	$0.1111	$0.1111	$0.1111	$0.1111	$0.1155	$0.1155
P141		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	Chemicals - Other	$1.2462	$1.2462	$1.3210	$1.3210	$1.3210	$1.3210	$1.4002	$1.4002
P141		1200586	CHM,CARBON,PAC LIGNITE,BULK	Chemicals - Other	$1.1600	$1.1600	$1.2296	$1.2296	$1.2296	$1.2296	$1.3034	$1.3034
P141		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine	$1.9200	$1.9200	$2.0544	$2.0544	$2.0544	$2.0544	$2.1777	$2.1777
P141		1200604	CHM,COPPER SULFATE,100%,50LB	Chemicals - Other	$2.5700	$2.5700	$2.7242	$2.7242	$2.7242	$2.7242	$2.8877	$2.8877
P141		1200630	CHM,LIME,HYDRATED,50 LB	Lime	$0.1934	$0.1934	$0.2031	$0.2031	$0.2031	$0.2031	$0.2132	$0.2132
P141		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	Polymers	$3.2000	$3.2000	$3.3600	$3.3600	$3.3600	$3.3600	$3.5280	$3.5280
P141		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	Polymers	$4.0042	$4.0042	$4.2044	$4.2044	$4.2044	$4.2044	$4.4146	$4.4146
P141		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$3.5400	$3.5400	$3.7524	$3.7524	$3.7524	$3.7524	$3.9775	$3.9775
P141		1200890	CHM,SODIUM BICARBONATE,100%,50LB	Chemicals - Other	$0.5676	$0.5676	$0.6017	$0.6017	$0.6017	$0.6017	$0.6378	$0.6378
P141		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	Chemicals - Other	$1.6815	$1.6815	$1.7824	$1.7824	$1.7824	$1.7824	$1.8893	$1.8893
P141		1200993	CHM,ZINC,1:10,50LB	Phosphates	$2.4500	$2.4500	$2.5848	$2.5848	$2.5848	$2.5848	$2.7269	$2.7269
P141 Total												
P143	S W B Crystal Lake P	1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine	$1.9617	$1.9617	$2.0990	$2.0990	$2.0990	$2.0990	$2.2250	$2.2250
P143		1200630	CHM,LIME,HYDRATED,50 LB	Lime	$0.3882	$0.3882	$0.4076	$0.4076	$0.4076	$0.4076	$0.4280	$0.4280
P143		1200702	CHM,PACL,DELPC2020, BULK	Chemicals - Other	$0.3847	$0.3847	$0.4078	$0.4078	$0.4078	$0.4078	$0.4322	$0.4322
P143		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$3.5400	$3.5400	$3.7524	$3.7524	$3.7524	$3.7524	$3.9775	$3.9775
P143		1200890	CHM,SODIUM BICARBONATE,100%,50LB	Chemicals - Other								
P143		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	Caustic Soda	$0.5675	$0.5675	$0.6129	$0.6129	$0.6129	$0.6129	$0.6497	$0.6497
P143		1200993	CHM,ZINC,1:10,50LB	Phosphates	$2.4500	$2.4500	$2.5848	$2.5848	$2.5848	$2.5848	$2.7269	$2.7269
P143 Total												

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					PRICING							
Plant	Name 1	Material	Material Description	Chemical Family	Current Unit Price 3Q-2023	Unit Price 4Q-2023	Unit Price 1Q-2024	Unit Price 2Q-2024	Unit Price 3Q-2024	Unit Price 4Q-2024	Unit Price 1Q-2025	Unit Price 2Q-2025
P144	S W B Fallbrook P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1073	$0.1073	$0.1116	$0.1116	$0.1116	$0.1116	$0.1161	$0.1161
P144		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P144		1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$2.1673	$2.1673	$2.3190	$2.3190	$2.3190	$2.3190	$2.4582	$2.4582
P144		1200630	CHM,LIME,HYDRATED,50 LB	Lime	$0.4100	$0.4100	$0.4305	$0.4305	$0.4305	$0.4305	$0.4520	$0.4520
P144		1200819	CHM,POLYMER,NONIONC SPRFLOC 1986N,55GA	Polymers	$2.1400	$2.1400	$2.2470	$2.2470	$2.2470	$2.2470	$2.3594	$2.3594
P144		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$3.5400	$3.5400	$3.7524	$3.7524	$3.7524	$3.7524	$3.9775	$3.9775
P144		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	Caustic Soda	$0.4675	$0.4675	$0.5049	$0.5049	$0.5049	$0.5049	$0.5352	$0.5352
P144		1200993	CHM,ZINC,1:10,50LB	Phosphates	$2.4500	$2.4500	$2.5848	$2.5848	$2.5848	$2.5848	$2.7269	$2.7269
P144		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P144 Total												
P145	S W B Forest City P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1068	$0.1068	$0.1111	$0.1111	$0.1111	$0.1111	$0.1155	$0.1155
P145		1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$2.4792	$2.4792	$2.6527	$2.6527	$2.6527	$2.6527	$2.8119	$2.8119
P145		1200630	CHM,LIME,HYDRATED,50 LB	Lime	$0.4100	$0.4100	$0.4305	$0.4305	$0.4305	$0.4305	$0.4520	$0.4520
P145		1200819	CHM,POLYMER,NONIONC SPRFLOC 1986N,55GA	Polymers	$2.1400	$2.1400	$2.2470	$2.2470	$2.2470	$2.2470	$2.3594	$2.3594
P145		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$3.5400	$3.5400	$3.7524	$3.7524	$3.7524	$3.7524	$3.9775	$3.9775
P145		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	Caustic Soda	$0.8267	$0.8267	$0.8928	$0.8928	$0.8928	$0.8928	$0.9464	$0.9464
P145		1200993	CHM,ZINC,1:10,50LB	Phosphates	$2.6300	$2.6300	$2.7747	$2.7747	$2.7747	$2.7747	$2.9273	$2.9273
P145 Total												
P146	S W B Huntsville P	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P146		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine	$1.7117	$1.7117	$1.8315	$1.8315	$1.8315	$1.8315	$1.9414	$1.9414
P146		1200753	CHM,POLYMER,CATIONC ZETAG 8812,55GA	Polymers	$2.1900	$2.1900	$2.2995	$2.2995	$2.2995	$2.2995	$2.4145	$2.4145
P146		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$3.5400	$3.5400	$3.7524	$3.7524	$3.7524	$3.7524	$3.9775	$3.9775
P146		1200890	CHM,SODIUM BICARBONATE,100%,50LB	Chemicals - Other								
P146		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	Caustic Soda	$0.4050	$0.4050	$0.4374	$0.4374	$0.4374	$0.4374	$0.4636	$0.4636
P146		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	Sodium Hypochlorite	$1.0494	$1.0494	$1.1124	$1.1124	$1.1124	$1.1124	$1.1791	$1.1791
P146		1200993	CHM,ZINC,1:10,50LB	Phosphates	$2.4500	$2.4500	$2.5848	$2.5848	$2.5848	$2.5848	$2.7269	$2.7269
P146		1201152	CHM,PACL BASICITY,70% PAX-XL8,BULK	Chemicals - Other	$0.3160	$0.3160	$0.3350	$0.3350	$0.3350	$0.3350	$0.3551	$0.3551
P146		1201861	CHM,SODIUM HYPOCHLORITE,12.5%,4X1GAL	Sodium Hypochlorite	$1.7974	$1.7974	$1.9052	$1.9052	$1.9052	$1.9052	$2.0196	$2.0196
P146 Total												
P147	S W B Nesbitt P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1220	$0.1220	$0.1269	$0.1269	$0.1269	$0.1269	$0.1320	$0.1320
P147		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other	$1.2100	$1.2100	$1.2826	$1.2826	$1.2826	$1.2826	$1.3596	$1.3596
P147		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine	$1.7800	$1.7800	$1.9046	$1.9046	$1.9046	$1.9046	$2.0189	$2.0189
P147		1200630	CHM,LIME,HYDRATED,50 LB	Lime	$0.1868	$0.1868	$0.1961	$0.1961	$0.1961	$0.1961	$0.2059	$0.2059
P147		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	Polymers	$4.0042	$4.0042	$4.2044	$4.2044	$4.2044	$4.2044	$4.4146	$4.4146
P147		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	Polymers	$3.5400	$3.5400	$3.7170	$3.7170	$3.7170	$3.7170	$3.9029	$3.9029
P147		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$3.5400	$3.5400	$3.7524	$3.7524	$3.7524	$3.7524	$3.9775	$3.9775
P147		1200890	CHM,SODIUM BICARBONATE,100%,50LB	Chemicals - Other	$0.2800	$0.2800	$0.2968	$0.2968	$0.2968	$0.2968	$0.3146	$0.3146
P147		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	Chemicals - Other	$1.6815	$1.6815	$1.7824	$1.7824	$1.7824	$1.7824	$1.8893	$1.8893
P147		1200993	CHM,ZINC,1:10,50LB	Phosphates	$2.4500	$2.4500	$2.5848	$2.5848	$2.5848	$2.5848	$2.7269	$2.7269
P147		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	Chemicals - Other	$1.2826	$1.2826	$1.3596	$1.3596	$1.3596	$1.3596	$1.4411	$1.4411
P147 Total												
P148	S W B Lake Scranton P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1073	$0.1073	$0.1116	$0.1116	$0.1116	$0.1116	$0.1161	$0.1161
P148		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	Chemicals - Other	$1.2523	$1.2523	$1.3274	$1.3274	$1.3274	$1.3274	$1.4071	$1.4071
P148		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine								
P148		1200631	CHM,LIME,HYDRATED CAO,72%,BULK	Lime	$0.1168	$0.1168	$0.1226	$0.1226	$0.1226	$0.1226	$0.1288	$0.1288
P148		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	Polymers	$3.2000	$3.2000	$3.3600	$3.3600	$3.3600	$3.3600	$3.5280	$3.5280
P148		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$3.5400	$3.5400	$3.7524	$3.7524	$3.7524	$3.7524	$3.9775	$3.9775
P148		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	Chemicals - Other	$1.3000	$1.3000	$1.3780	$1.3780	$1.3780	$1.3780	$1.4607	$1.4607
P148		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$2.0438	$2.0438	$2.1664	$2.1664	$2.1664	$2.1664	$2.1664	$2.2964
P148		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.1980	$0.1980	$0.2099	$0.2099	$0.2099	$0.2099	$0.2225	$0.2225
P148		1200993	CHM,ZINC,1:10,50LB	Phosphates	$2.4500	$2.4500	$2.5848	$2.5848	$2.5848	$2.5848	$2.7269	$2.7269
P148		1201191	CHM,POLYMER,CATIONIC ZETAG 7523 50LB	Polymers	$3.2400	$3.2400	$3.4020	$3.4020	$3.4020	$3.4020	$3.5721	$3.5721
P148		1201861	CHM,SODIUM HYPOCHLORITE,12.5%,4X1GAL	Sodium Hypochlorite	$2.0500	$2.0500	$2.1730	$2.1730	$2.1730	$2.1730	$2.3034	$2.3034
P148		1203201	CHM,WATERCARB800,SUB-BITUM,800IODINE,BUL	Chemicals - Other	$3.0210	$3.0210	$3.2023	$3.2023	$3.2023	$3.2023	$3.3944	$3.3944
P148		WE	Methanol, Tryptic Soy Agar & Buffer solution	Chemicals - Other	$295.6400	$295.6400	$313.3784	$313.3784	$313.3784	$313.3784	$332.1811	$332.1811
P148 Total												
P149	S W B Watres P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1195	$0.1195	$0.1243	$0.1243	$0.1243	$0.1243	$0.1293	$0.1293
P149		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	Chemicals - Other	$1.2523	$1.2523	$1.3274	$1.3274	$1.3274	$1.3274	$1.4071	$1.4071
P149		1200630	CHM,LIME,HYDRATED,50 LB	Lime	$0.1942	$0.1942	$0.2039	$0.2039	$0.2039	$0.2039	$0.2141	$0.2141
P149		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	Polymers								
P149		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	Polymers	$3.5400	$3.5400	$3.7170	$3.7170	$3.7170	$3.7170	$3.9029	$3.9029
P149		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$3.5400	$3.5400	$3.7524	$3.7524	$3.7524	$3.7524	$3.9775	$3.9775
P149		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.1980	$0.1980	$0.2099	$0.2099	$0.2099	$0.2099	$0.2225	$0.2225
P149		1200993	CHM,ZINC,1:10,50LB	Phosphates	$2.4500	$2.4500	$2.5848	$2.5848	$2.5848	$2.5848	$2.7269	$2.7269
P149		1202851	CHM,POLYMER,ANIONC SPRFLC A-120,50LB	Polymers	$3.2000	$3.2000	$3.3600	$3.3600	$3.3600	$3.3600	$3.5280	$3.5280
P149 Total												

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				PRICING								
Plant	Name 1	Material	Material Description	Chemical Family	Current Unit Price 3Q-2023	Unit Price 4Q-2023	Unit Price 1Q-2024	Unit Price 2Q-2024	Unit Price 3Q-2024	Unit Price 4Q-2024	Unit Price 1Q-2025	Unit Price 2Q-2025
P151	White Deer Creek Prod	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	Chemicals - Other								
P151		1200630	CHM,LIME,HYDRATED,50 LB	Lime	$0.1318	$0.1318	$0.1384	$0.1384	$0.1384	$0.1384	$0.1453	$0.1453
P151		1200702	CHM,PACL,DELPC2020, BULK	Chemicals - Other	$0.2500	$0.2500	$0.2650	$0.2650	$0.2650	$0.2650	$0.2809	$0.2809
P151		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	Caustic Soda	$0.4450	$0.4450	$0.4806	$0.4806	$0.4806	$0.4806	$0.5094	$0.5094
P151		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	Sodium Hypochlorite	$0.4775	$0.4775	$0.5062	$0.5062	$0.5062	$0.5062	$0.5365	$0.5365
P151		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	Phosphates	$1.1600	$1.1600	$1.2238	$1.2238	$1.2238	$1.2238	$1.2911	$1.2911
P151 Total												
P152	Wildcat Prod	1200882	CHM,LIGHT SODA ASH,100%,50LB	Chemicals - Other	$0.6355	$0.6355	$0.6736	$0.6736	$0.6736	$0.6736	$0.7140	$0.7140
P152		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	Sodium Hypochlorite	$0.8965	$0.8965	$0.9503	$0.9503	$0.9503	$0.9503	$1.0073	$1.0073
P152		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$2.1500	$2.1500	$2.2790	$2.2790	$2.2790	$2.2790	$2.4157	$2.4157
P152 Total												
P154	McEwensville Prod	1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$2.1500	$2.1500	$2.2790	$2.2790	$2.2790	$2.2790	$2.4157	$2.4157
P154 Total												
P155	Steelton_PROD	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1225	$0.1225	$0.1274	$0.1274	$0.1274	$0.1274	$0.1325	$0.1325
P155		1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$2.0847	$2.0847	$2.2306	$2.2306	$2.2306	$2.2306	$2.3645	$2.3645
P155		1200630	CHM,LIME,HYDRATED,50 LB	Lime	$0.3960	$0.3960	$0.4158	$0.4158	$0.4158	$0.4158	$0.4366	$0.4366
P155		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	Polymers	$3.3900	$3.3900	$3.5595	$3.5595	$3.5595	$3.5595	$3.7375	$3.7375
P155		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$3.5400	$3.5400	$3.7524	$3.7524	$3.7524	$3.7524	$3.9775	$3.9775
P155		1200882	CHM,LIGHT SODA ASH,100%,50LB	Chemicals - Other	$0.4300	$0.4300	$0.4558	$0.4558	$0.4558	$0.4558	$0.4831	$0.4831
P155		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	Caustic Soda	$0.2384	$0.2384	$0.2575	$0.2575	$0.2575	$0.2575	$0.2729	$0.2729
P155 Total												
P188	Turbotville_PROD	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine								
P188		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	Sodium Hypochlorite	$2.1500	$2.1500	$2.2790	$2.2790	$2.2790	$2.2790	$2.4157	$2.4157
P188		1202811	CHM,POLY AL SULFATE,CLARION A410P,55GA	Aluminum Sulfate	$1.1400	$1.1400	$1.1856	$1.1856	$1.1856	$1.1856	$1.2330	$1.2330
P188 Total												
Grand Total												

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Plant	Name 1	Material	Material Description	Annualized 12 month Jun-24 Usage	Annualized 12 Month Jun-24 Amount	Annualized 12 month Jun-25 Usage	Annualized 12 Month Jun-25 Amount	COS Segment
P101	Abington Prod	1200859	CHM,PHOSPHATE,POLY CALGON C5,30GA	7,508	$11,090	7,508	$11,700	Water Operations
P101		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	2,966	1,671	2,966	1,772	Water Operations
P101		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	48,048	25,898	48,048	27,452	Water Operations
P101		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	7,567	12,294	7,567	12,970	Water Operations
P101		1202931	CHM,DIPOTASSIUM PHOS, SLI-DP,5 GA	11	42	11	44	Water Operations
P101 Total				**66,100**	**$50,996**	**66,100**	**$53,938**	
P102	Bangor Prod	1200551	CHM,ALUM,SULFAT LIQUID,50%,55GA	5,096	3,872	5,096	4,027	Water Operations
P102		1200596	CHM,CHLORINE,100%,150LB CYLINDER	3,700	5,387	3,700	5,711	Water Operations
P102		1200915	CHM,SODIUM HYDROXIDE,25%,55GA	6,053	2,746	6,053	2,910	Water Operations
P102		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	30,820	10,721	30,820	11,365	Water Operations
P102		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	5,023	4,615	5,023	4,892	Water Operations
P102		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	4,326	7,120	4,326	7,511	Water Operations
P102 Total				**55,018**	**$34,461**	**55,018**	**$36,415**	
P103	Blue Mount Nazareth P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	63,005	8,486	63,005	8,825	Water Operations
P103		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0	0	0	0	Water Operations
P103		1200609	CHM,DIATOMACEOUS EARTH,100%,50LB	0	0	0	0	Water Operations
P103		1200806	CHM,POLYMER,CATIONC SPRFLOC C572,55GA	1,102	2,476	1,102	2,600	Water Operations
P103		1200827	CHM,POLYMER,NONIONC SPRFLOC1986N,5GA	160	1,008	160	1,058	Water Operations
P103		1200882	CHM,LIGHT SODA ASH,100%,50LB	20,708	11,524	20,708	12,215	Water Operations
P103		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	0	0	0	0	Water Operations
P103		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	1,149	426	1,149	452	Water Operations
P103		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	131,990	31,480	131,990	33,368	Water Operations
P103		1200982	CHM,ZINC,CHLORIDE,1:10,50LB	0	0	0	0	Water Operations
P103		1203191	CHM,ZINC,CHLORIDE,1:10, WHITE BAG, 50LB	16,900	43,682	16,900	46,085	Water Operations
P103 Total				**235,014**	**$99,082**	**235,014**	**$104,604**	
P104	Lehman Pike Prod	1200857	CHM,PHOSPHATE,POLY WSU319 CALCIQ MW,55GA	9,718	12,611	9,718	13,304	Water Operations
P104		1200912	CHM,SODIUM HYDROXIDE,25%,15GA 403	101,160	67,354	101,160	71,396	Water Operations
P104		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	4,050	3,297	4,050	3,495	Water Operations
P104		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	114,450	76,454	114,450	81,041	Water Operations
P104		1202351	CHM,PHOSPHATE,ORTH-PLY CARUS 8100,55GAL	6,270	7,475	6,270	7,886	Water Operations
P104		1203222	CHM,SODIUM HYDROXIDE,25%,5GA PAIL	220,310	162,057	220,310	171,781	Water Operations
P104 Total				**455,958**	**$329,248**	**455,958**	**$348,903**	
P106	Pocono Prod	1200663	CHM,PHOSPHATE,ORTH-PLY CARUS 8500,55GA	15,336	34,139	15,336	36,016	Water Operations
P106		1200669	CHM,PHOSPHATE,ORTH-PLY CARUS 8500,58LB	171	862	171	910	Water Operations
P106		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	66,850	32,128	66,850	34,056	Water Operations
P106		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	321,852	139,040	321,852	147,382	Water Operations
P106		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	69,727	42,129	69,727	44,657	Water Operations
P106		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	1,336	496	1,336	525	Water Operations
P106		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	9,075	16,659	9,075	17,575	Water Operations
P106 Total				**484,347**	**$265,453**	**484,347**	**$281,122**	
P107	Susquehanna Prod	1200550	CHM,ALUM,SULFAT DRY,100%,50LB	24,850	13,036	24,850	13,557	Water Operations
P107		1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	77,233	24,924	77,233	25,921	Water Operations
P107		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	(450)	(577)	(450)	(612)	Water Operations
P107		1200595	CHM,CHLORINE,100%,100LB CYLINDER	400	3,060	400	3,244	Water Operations
P107		1200596	CHM,CHLORINE,100%,150LB CYLINDER	3,057	23,388	3,057	24,791	Water Operations
P107		1200641	CHM,HFS ACID,23%,15GA	0	0	0	0	Water Operations
P107		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	118	1,015	118	1,066	Water Operations
P107		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	0	0	0	0	Water Operations
P107		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	935	3,637	935	3,856	Water Operations
P107		1200915	CHM,SODIUM HYDROXIDE,25%,55GA	44,823	15,442	44,823	16,369	Water Operations
P107		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	31,019	17,655	31,019	18,714	Water Operations
P107		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	0	0	0	0	Water Operations
P107		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	1,771	2,358	1,771	2,499	Water Operations
P107		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	37,332	21,666	37,332	22,966	Water Operations
P107		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	282	747	282	792	Water Operations
P107		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	1,991	3,235	1,991	3,413	Water Operations
P107		1200993	CHM,ZINC,1:10,50LB	390	885	390	933	Water Operations
P107		1201981	CHM,PHOSPHATE,ORTH-PLY CARUS 8100,30GAL	2,710	3,717	2,710	3,921	Water Operations
P107		1202752	CHM,ALGICIDE,EARTHTEC,55GA	4,360	10,168	4,360	10,778	Water Operations
P107		WE	Vita-D-Chlor Dechlorination Tablets, 14	12	1,001	12	1,061	Water Operations
P107 Total				**230,833**	**$145,355**	**230,833**	**$153,268**	
P108	Berwick Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	7,761	33,460	7,761	35,467	Water Operations
P108		1200911	CHM,SODIUM HEXAMETAPHOSPHATE,100%,50LB	3,650	10,495	3,650	11,072	Water Operations
P108 Total				**11,411**	**$43,954**	**11,411**	**$46,539**	

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Plant	Name 1	Material	Material Description	Annualized 12 month Jun-24 Usage	Annualized 12 Month Jun-24 Amount	Annualized 12 month Jun-25 Usage	Annualized 12 Month Jun-25 Amount	COS Segment
P109	Frackville Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	0	0	0	0	Water Operations
P109		1200861	CHM,PHOSPHATE,POLY CALGON C5,5GA	1,473	3,263	1,473	3,443	Water Operations
P109		1200915	CHM,SODIUM HYDROXIDE,25%,55GA	5,258	3,300	5,258	3,498	Water Operations
P109		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	18,500	7,550	18,500	8,003	Water Operations
P109		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	2,342	4,744	2,342	5,005	Water Operations
P109		1200976	CHM,ZINC,CHLORIDE,1:3,5GA	0	0	0	0	Water Operations
P109 Total				**27,573**	**$18,858**	**27,573**	**$19,949**	
P110	Hershey Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	57,542	15,371	57,542	16,293	Water Operations
P110		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	12,629	16,198	12,629	17,170	Water Operations
P110		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0	0	0	0	Water Operations
P110		1200623	CHM,FERRIC,CHLORID PLYMR FER+PLUS,BULK	5,139	1,256	5,139	1,256	Water Operations
P110		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	7,319	16,446	7,319	17,268	Water Operations
P110		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	531,161	151,731	531,161	160,835	Water Operations
P110		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	1,175,420	246,697	1,175,420	261,499	Water Operations
P110		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	81,808	85,444	81,808	90,144	Water Operations
P110		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	30,528	46,274	30,528	49,051	Water Operations
P110		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	1,215,332	456,163	1,215,332	456,163	Water Operations
P110		WE	F816 Activated Carbon	6,000	19,271	6,000	20,427	Water Operations
P110		WE	Quote B121636 LPD DCHLR TABLETS 140 PK	40	6,106	40	6,472	Water Operations
P110 Total				**3,122,918**	**$1,060,957**	**3,122,918**	**$1,096,577**	
P112	Milton / White Deer P	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	18,500	23,728	18,500	25,152	Water Operations
P112		1200630	CHM,LIME,HYDRATED,50 LB	0	0	0	0	Water Operations
P112		1200702	CHM,PACL,DELPC2020, BULK	295,663	78,351	295,663	83,052	Water Operations
P112		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	107	398	107	418	Water Operations
P112		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	2,328	9,056	2,328	9,600	Water Operations
P112		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	55,125	10,966	55,125	11,624	Water Operations
P112		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	308,953	90,617	308,953	96,054	Water Operations
P112		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	26,640	32,040	26,640	33,802	Water Operations
P112		WE	SOD METABISULFITE BAG114	250	766	250	812	
P112 Total				**707,566**	**$245,922**	**707,566**	**$260,513**	
P113	Phillipsburg Prod	1200551	CHM,ALUM,SULFAT LIQUID,50%,55GA	20,679	6,863	20,679	7,137	Water Operations
P113		1200596	CHM,CHLORINE,100%,150LB CYLINDER	16,564	39,903	16,564	42,297	Water Operations
P113		1200641	CHM,HFS ACID,23%,15GA	2,070	2,032	2,070	2,032	Water Operations
P113		1200643	CHM,HFS ACID,23%,30GA	17,340	9,066	17,340	9,066	Water Operations
P113		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	46,002	19,992	46,002	21,192	Water Operations
P113		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	134,389	54,369	134,389	57,632	Water Operations
P113		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	19,685	19,823	19,685	21,012	Water Operations
P113		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	12,514	31,289	12,514	33,010	Water Operations
P113		1201253	CHM,ORTHO-POLY P,AQUA MAG 9100,5GA	3,853	10,792	3,853	11,385	Water Operations
P113 Total				**273,096**	**$194,128**	**273,096**	**$204,763**	
P114	Glen Alsace Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	953	3,202	953	3,394	Water Operations
P114		1200672	CHM,PHOS,ORTH-PLY CARUS 8400,336LB	4,139	4,629	4,139	4,883	Water Operations
P114		1200859	CHM,PHOSPHATE,POLY CALGON C5,30GA	4,883	6,749	4,883	7,120	Water Operations
P114		1200882	CHM,LIGHT SODA ASH,100%,50LB	5,850	2,542	5,850	2,695	Water Operations
P114		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	7,665	3,022	7,665	3,203	Water Operations
P114		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	26,590	9,865	26,590	10,457	Water Operations
P114		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	65,045	22,408	65,045	23,752	Water Operations
P114		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	11,213	17,863	11,213	18,845	Water Operations
P114		WE	USA Bluebook Dechlorination Tablets 45	5	692	5	733	Water Operations
P114		WE	USABB Aluminum Dechlorination Diffuser	0	0	0	0	Water Operations
P114 Total				**126,343**	**$70,971**	**126,343**	**$75,083**	

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Plant	Name 1	Material	Material Description	Annualized 12 month Jun-24 Usage	Annualized 12 Month Jun-24 Amount	Annualized 12 month Jun-25 Usage	Annualized 12 Month Jun-25 Amount	COS Segment
P115	Norristown Prod	1200557	CHM,AMMONIA,ANHYDROUS,100%,BULK	0	0	0	0	Water Operations
P115		1200562	CHM,AMMONIUM SULFATE,40%,BULK	263,322	133,978	263,322	142,017	Water Operations
P115		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	6,498	10,180	6,498	10,791	Water Operations
P115		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0	0	0	0	Water Operations
P115		1200782	CHM,POLYMER,CATIONC CATFLOC 71259,BULK	0	0	0	0	Water Operations
P115		1200791	CHM,POLYMER,CATIONC NALCO 8173,55LB	7,265	23,876	7,265	25,070	Water Operations
P115		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	0	0	0	0	Water Operations
P115		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	270,288	406,837	270,288	431,248	Water Operations
P115		1200900	CHM,SODIUM CHLORIDE,90% PURE,50LB 704	17,200	2,826	17,200	2,996	Water Operations
P115		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	3,036,452	621,440	3,036,452	658,727	Water Operations
P115		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	1,963,220	412,041	1,963,220	436,763	Water Operations
P115		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	132,737	138,637	132,737	146,262	Water Operations
P115		1201524	CHM,POLYMER,CATIONC NALCO 7763 55GA	7,231	11,693	7,231	12,277	Water Operations
P115		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	3,144,213	1,180,149	3,144,213	1,180,149	Water Operations
P115		1202111	CHM,POLYMER,ANIONC CEDRFLOC 551,275GAL	30,020	49,173	30,020	51,631	Water Operations
P115		WE	USA Bluebook Dechlorination Tablets 45	64	8,976	64	9,514	Water Operations
P115		WE	USABB Aluminum Dechlorination Diffuser	3	3,291	3	3,489	Water Operations
P115		WE	Vita-D-Chlor Dechlorination Tablets, 14	2	1,259	2	1,334	Water Operations
P115 Total				**8,878,515**	**$3,004,356**	**8,878,515**	**$3,112,268**	
P116	Penn Water Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	13,066	27,127	13,066	28,754	Water Operations
P116		1200662	CHM,PHOSPHATE,ORTH-PLY CARUS 8700,339LB	3,520	3,974	3,520	4,192	Water Operations
P116		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	485	221	485	234	Water Operations
P116 Total				**17,071**	**$31,321**	**17,071**	**$33,181**	
P117	Royersford Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	387,642	44,951	387,642	46,749	Water Operations
P117		1200556	CHM,AMMONIA,ANHYDROUS,100%,150LB	2,620	10,536	2,620	11,168	Water Operations
P117		1200596	CHM,CHLORINE,100%,150LB CYLINDER	1,484	5,868	1,484	6,221	Water Operations
P117		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	34,470	69,277	34,470	73,434	Water Operations
P117		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	1,710	3,842	1,710	4,034	Water Operations
P117		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	70	263	70	278	Water Operations
P117		1200882	CHM,LIGHT SODA ASH,100%,50LB	2,050	891	2,050	944	Water Operations
P117		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	147,660	41,463	147,660	43,951	Water Operations
P117		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	10,173	3,774	10,173	4,001	Water Operations
P117		1200958	CHM,SODIUM ZINC,METASHANNOCOR,50LB	8,550	22,100	8,550	23,315	Water Operations
P117 Total				**596,429**	**$202,965**	**596,429**	**$214,095**	
P118	Yardley Prod	1200557	CHM,AMMONIA,ANHYDROUS,100%,BULK	0	0	0	0	Water Operations
P118		1200562	CHM,AMMONIUM SULFATE,40%,BULK	43,594	25,586	43,594	27,121	Water Operations
P118		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	19,985	24,574	19,985	26,048	Water Operations
P118		1200583	CHM,CARBON,PAC LIGNITE,40LB	0	0	0	0	Water Operations
P118		1200596	CHM,CHLORINE,100%,150LB CYLINDER	3,147	9,568	3,147	10,143	Water Operations
P118		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0	0	0	0	Water Operations
P118		1200774	CHM,POLYMER,CATIONC CF71259,55GA	6,153	13,438	6,153	14,110	Water Operations
P118		1200859	CHM,PHOSPHATE,POLY CALGON C5,30GA	5,529	8,166	5,529	8,615	Water Operations
P118		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	385,430	67,893	385,430	71,966	Water Operations
P118		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	308,868	126,049	308,868	133,612	Water Operations
P118		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	2,234	3,676	2,234	3,878	Water Operations
P118		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	0	0	0	0	Water Operations
P118		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	2,925	5,338	2,925	5,632	Water Operations
P118		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	28,629	47,948	28,629	50,825	Water Operations
P118		1201461	CHM,AMMONIUM SULFATE,LIQUID,40%,55GA	15,949	13,182	15,949	13,973	Water Operations
P118		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	474,373	178,051	474,373	178,051	Water Operations
P118		1202801	CHM,CALCIUM THIOSULFATE,LIQUID,55GA	1,366	1,685	1,366	1,787	Water Operations
P118		1202821	CHM,ZINC,CHLORID,1:3,3520LB TOTE,CAR3180	7,906	10,927	7,906	11,528	Water Operations
P118		1203142	CHM,SODIUM HYDROXIDE,25%,2700LB TOTE	0	0	0	0	Water Operations
P118		WE	TK71734147T Water Softener Salt, Contain	98	2,200	98	2,332	Water Operations
P118		WE	USA Bluebook Dechlorination Tablets 45	40	5,536	40	5,868	Water Operations
P118		KR	Freight Charges	0	0	0	0	Water Operations
P118 Total				**1,306,225**	**$543,817**	**1,306,225**	**$565,488**	

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Plant	Name 1	Material	Material Description	Annualized 12 month Jun-24 Usage	Annualized 12 Month Jun-24 Amount	Annualized 12 month Jun-25 Usage	Annualized 12 Month Jun-25 Amount	COS Segment
P119	Clarion Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	16,188	5,062	16,188	5,366	Water Operations
P119		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0	0	0	0	Water Operations
P119		1200583	CHM,CARBON,PAC LIGNITE,40LB	0	0	0	0	Water Operations
P119		1200596	CHM,CHLORINE,100%,150LB CYLINDER	24,877	50,043	24,877	53,045	Water Operations
P119		1200646	CHM,HFS ACID,23%,55GA	9,430	3,567	9,430	3,567	Water Operations
P119		1200702	CHM,PACL,DELPC2020, BULK	279,271	106,570	279,271	112,964	Water Operations
P119		1200779	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,55LB	1,544	6,512	1,544	6,838	Water Operations
P119		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	0	0	0	0	Water Operations
P119		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	22,500	35,060	22,500	37,163	Water Operations
P119		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	0	0	0	0	Water Operations
P119		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	199,051	42,587	199,051	45,142	Water Operations
P119		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	6,737	11,088	6,737	11,698	Water Operations
P119		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	6,058	7,770	6,058	8,236	Water Operations
P119		WE	USA Bluebook Dechlorination Tablets 45	5	703	5	746	Water Operations
P119		WE	USABB Aluminum Dechlorination Diffuser	0	0	0	0	Water Operations
P119 Total				**565,661**	**$268,961**	**565,661**	**$284,764**	
P120	Indiana Prod	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	50	64	50	68	Water Operations
P120		1200612	CHM,FERRIC,CHLORID,38%,BULK	445,240	112,138	445,240	112,138	Water Operations
P120		1200632	CHM,LIME,LIQUID CAO,37.5%,BULK	260,680	32,846	260,680	34,488	Water Operations
P120		1200645	CHM,HFS ACID,23%,330GA	19,990	7,950	19,990	7,950	Water Operations
P120		1200821	CHM,POLYMER,NALCO 8181 ,55GA	0	0	0	0	Water Operations
P120		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	274,820	60,697	274,820	64,339	Water Operations
P120		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	244,185	71,180	244,185	75,451	Water Operations
P120		1202582	CHM,PLYMR,NONIONC NALCO 8181,TOTE	3,856	10,324	3,856	10,841	Water Operations
P120 Total				**1,248,821**	**$295,199**	**1,248,821**	**$305,274**	
P121	Kane Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	4,158	27,195	4,158	28,827	Water Operations
P121		1200646	CHM,HFS ACID,23%,55GA	4,735	2,476	4,735	2,476	Water Operations
P121		1200752	CHM,POLYMER,CATIONC CATFLOC TL,5GA	292	996	292	1,046	Water Operations
P121		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	0	0	0	0	Water Operations
P121		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	45,613	17,045	45,613	18,067	Water Operations
P121		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	43,587	17,788	43,587	18,855	Water Operations
P121		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	4,557	5,913	4,557	6,239	Water Operations
P121		WE	Bio-Max Dechlorination Tablets, 48 lb P	3	477	3	506	Water Operations
P121 Total				**102,945**	**$71,890**	**102,945**	**$76,015**	
P122	Ellwood Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	1,459,856	165,793	1,459,856	172,425	Water Operations
P122		1200555	CHM,AMMONIA,ANHYDROUS,100%,100LB	0	0	0	0	Water Operations
P122		1200566	CHM,AMMONIA,AQUA,19%,BULK	48,439	14,033	48,439	14,875	Water Operations
P122		1200570	CHM,CALCIUM,HYPO,100%,100LB	0	0	0	0	Water Operations
P122		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0	0	0	0	Water Operations
P122		1200579	CHM,CRBN,PAC BITUMIN 500 IODINE,1000LB	0	0	0	0	Water Operations
P122		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0	0	0	0	Water Operations
P122		1200639	CHM,HYDROGEN PEROXIDE,BULK	(41,005)	(22,898)	(41,005)	(24,271)	Water Operations
P122		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	0	0	0	0	Water Operations
P122		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	27,506	43,151	27,506	45,740	Water Operations
P122		1200894	CHM,SODIUM BISULFITE,ROVER,50LB	0	0	0	0	Water Operations
P122		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	0	0	0	0	Water Operations
P122		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	804,805	197,150	804,805	208,979	Water Operations
P122		1201171	CHM,PHOSPHORIC ACID,ORTHO,75%,BULK	23,520	40,446	23,520	42,671	Water Operations
P122		1202121	CHM,PHOSPHORIC ACID,ORTHO,75%,15GA	396	524	396	552	Water Operations
P122		1202581	CHM,PLYMR,CATIONC NALCO 8100,TOTE	1,841	4,311	1,841	4,526	Water Operations
P122		1202582	CHM,PLYMR,NONIONC NALCO 8181,TOTE	0	0	0	0	Water Operations
P122		1202583	CHM,PLYMR,CATIONC NALCO 7128,TOTE	0	0	0	0	Water Operations
P122		1202592	CHM,LIME,LIQUID CAO, 30% BULK	301,406	34,812	301,406	36,553	Water Operations
P122		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	156	48	156	51	Water Operations
P122		1202672	CHM,CARBON,PAC,CARBPURE800,750LB SUPSACK	1,000	1,283	1,000	1,360	Water Operations
P122		1202751	CHM,POLYMER,CEDARFLOC 554,2300LB	9,790	17,270	9,790	18,133	Water Operations
P122		1202761	CHM,PLYMR,CATIONC,NALCO 8102 PLUS,275GA	18,495	26,799	18,495	28,139	Water Operations
P122 Total				**2,656,205**	**$522,722**	**2,656,205**	**$549,732**	

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Plant	Name 1	Material	Material Description	Annualized 12 month Jun-24 Usage	Annualized 12 Month Jun-24 Amount	Annualized 12 month Jun-25 Usage	Annualized 12 Month Jun-25 Amount	COS Segment
P123	New Castle Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	1,976,279	206,972	1,976,279	215,251	Water Operations
P123		1200566	CHM,AMMONIA,AQUA,19%,BULK	54,608	15,820	54,608	16,769	Water Operations
P123		1200570	CHM,CALCIUM,HYPO,100%,100LB	1,710	6,072	1,710	6,437	Water Operations
P123		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0	0	0	0	Water Operations
P123		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	105,311	158,883	105,311	168,416	Water Operations
P123		1200632	CHM,LIME,LIQUID CAO,37.5%,BULK	607,203	74,914	607,203	78,659	Water Operations
P123		1200647	CHM,HFS ACID,23%,BULK	36,726	8,906	36,726	8,906	Water Operations
P123		1200684	CHM,LIME,PEBBLE,100%,BULK	0	0	0	0	Water Operations
P123		1200751	CHM,POLYMER,CATIONC NALCO 8102 PLS,55GA	19,650	29,504	19,650	30,980	Water Operations
P123		1200781	CHM,POLYMER,CATIONC NALCO 8110 PULV,50LB	2,921	9,631	2,921	10,112	Water Operations
P123		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	17,817	69,312	17,817	73,470	Water Operations
P123		1200914	CHM,SODIUM HYDROXIDE,25%,330GA	142,685	40,066	142,685	42,470	Water Operations
P123		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	45,353	64,116	45,353	67,642	Water Operations
P123		WE	Accu-tab Wastewater Chlorination Tablets	7	3,055	7	3,238	Water Operations
P123		WE	USA Bluebook Dechlorination Tablets 45	2	281	2	298	Water Operations
P123 Total				**3,010,272**	**$687,531**	**3,010,272**	**$722,648**	
P124	Punxsutawney P	1200596	CHM,CHLORINE,100%,150LB CYLINDER	17,020	61,236	17,020	64,910	Water Operations
P124		1200612	CHM,FERRIC,CHLORID,38%,BULK	111,904	28,184	111,904	28,184	Water Operations
P124		1200630	CHM,LIME,HYDRATED,50 LB	0	0	0	0	Water Operations
P124		1200631	CHM,LIME,HYDRATED CAO,72%,BULK	97,869	12,989	97,869	13,639	Water Operations
P124		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	133	494	133	519	Water Operations
P124		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	1,521	467	1,521	495	Water Operations
P124		1200992	CHM,ZINC,ONDEO C39,50LB	7,075	18,287	7,075	19,293	Water Operations
P124		KR	Carbon Dioxide	50	379	50	401	Water Operations
P124		WE	USA Bluebook Dechlorination Tablets 45	12	1,679	12	1,780	Water Operations
P124 Total				**235,584**	**$123,716**	**235,584**	**$129,221**	
P125	Warren Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	7,092	19,003	7,092	20,143	Water Operations
P125		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	7,481	12,154	7,481	12,823	Water Operations
P125 Total				**14,573**	**$31,157**	**14,573**	**$32,966**	
P126	Butler Prod	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	710,130	78,802	710,130	81,954	Water Operations
P126		1200555	CHM,AMMONIA,ANHYDROUS,100%,100LB	14,035	66,649	14,035	70,648	Water Operations
P126		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	27,650	35,464	27,650	37,592	Water Operations
P126		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	96,400	145,439	96,400	154,165	Water Operations
P126		1200631	CHM,LIME,HYDRATED CAO,72%,BULK	9,420	1,133	9,420	1,189	Water Operations
P126		1200690	CHM,PHOSPHORIC ACID,ORTHO,75%,30GA	20,447	38,182	20,447	40,282	Water Operations
P126		1200702	CHM,PACL,DELPC2020, BULK	418,078	168,402	418,078	178,506	Water Operations
P126		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	5,179	14,493	5,179	15,362	Water Operations
P126		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	87,735	29,137	87,735	30,885	Water Operations
P126		1201105	CHM,POLYMER,CATIONC NALCO 8170,55LB	25	93	25	98	Water Operations
P126		1202121	CHM,PHOSPHORIC ACID,ORTHO,75%,15GA	0	0	0	0	Water Operations
P126		KR	Cylinder Rental	8	207	8	219	Water Operations
P126		WE	USA Bluebook Dechlorination Tablets 45	8	1,107	8	1,174	Water Operations
P126 Total				**1,389,115**	**$579,106**	**1,389,115**	**$612,073**	
P127	Kittanning Prod	1200596	CHM,CHLORINE,100%,150LB CYLINDER	0	0	0	0	Water Operations
P127		1200647	CHM,HFS ACID,23%,BULK	7,431	2,955	7,431	2,955	Water Operations
P127		1200690	CHM,PHOSPHORIC ACID,ORTHO,75%,30GA	1,108	1,625	1,108	1,714	Water Operations
P127		1200752	CHM,POLYMER,CATIONC CATFLOC TL,5GA	318	1,085	318	1,139	Water Operations
P127		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	687	2,578	687	2,733	Water Operations
P127		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	89,701	19,191	89,701	20,343	Water Operations
P127		1200933	CHM,SODIUM HYPOCHLORITE,13%,300GA	50,600	25,745	50,600	27,290	Water Operations
P127		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	23,510	11,962	23,510	12,680	Water Operations
P127		1201461	CHM,AMMONIUM SULFATE,LIQUID,40%,55GA	7,950	7,079	7,950	7,503	Water Operations
P127		1202661	CHM,FERRIC,CHLORID,38%,330GA	113,924	35,168	113,924	35,168	Water Operations
P127		WE	USA Bluebook Dechlorination Tablets 45	8	1,121	8	1,188	Water Operations
P127 Total				**295,237**	**$108,510**	**295,237**	**$112,714**	
P128	Brownsville Prod	1200555	CHM,AMMONIA,ANHYDROUS,100%,100LB	4,557	23,717	4,557	25,140	Water Operations
P128		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0	0	0	0	Water Operations
P128		1200596	CHM,CHLORINE,100%,150LB CYLINDER	33,471	74,851	33,471	79,342	Water Operations
P128		1200702	CHM,PACL,DELPC2020, BULK	354,843	165,499	354,843	175,428	Water Operations
P128		1200877	CHM,SODIUM PERMANGANATE,20%,55GA	20,637	35,219	20,637	37,332	Water Operations
P128		1200891	CHM,SODIUM BISULFITE,38%,15GA	1,272	445	1,272	472	Water Operations
P128		1200914	CHM,SODIUM HYDROXIDE,25%,330GA	240,763	67,606	240,763	71,663	Water Operations
P128		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	0	0	0	0	Water Operations
P128		1200974	CHM,ZINC,CHLORIDE,1:3,30GA	12,144	19,474	12,144	20,545	Water Operations
P128		1202031	CHM,POLYMER,CATIONIC NALCO 7763 5GA	1,323	4,584	1,323	4,813	Water Operations
P128 Total				**669,010**	**$391,396**	**669,010**	**$414,736**	

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Plant	Name 1	Material	Material Description	Annualized 12 month Jun-24 Usage	Annualized 12 Month Jun-24 Amount	Annualized 12 month Jun-25 Usage	Annualized 12 Month Jun-25 Amount	COS Segment
P131	McMurray Prod	1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	14,779	5,201	14,779	5,513	Water Operations
P131		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	75,274	21,942	75,274	23,259	Water Operations
P131		1201461	CHM,AMMONIUM SULFATE,LIQUID,40%,55GA	4,946	6,062	4,946	6,426	Water Operations
P131		WE	HYDROFLUOSILICIC ACID 23-25%	2,200	688	2,200	729	Water Operations
P131		WE	LPD DCHLR tablets 140 PK - BID B111003	24	4,325	24	4,584	Water Operations
P131 Total				**97,223**	**$38,218**	**97,223**	**$40,511**	
P132	Pittsburgh Hays Mine P	1200566	CHM,AMMONIA,AQUA,19%,BULK	347,404	70,004	347,404	74,204	Water Operations
P132		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	150,832	185,463	150,832	196,591	Water Operations
P132		1200623	CHM,FERRIC,CHLORID PLYMR FER+PLUS,BULK	2,157,720	803,535	2,157,720	803,535	Water Operations
P132		1200647	CHM,HFS ACID,23%,BULK	237,550	65,901	237,550	65,901	Water Operations
P132		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	10,635	35,734	10,635	37,520	Water Operations
P132		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	238,877	339,301	238,877	359,659	Water Operations
P132		1200904	CHM,SODIUM CHLORIDE,100%,BULK	77,160	8,653	77,160	9,173	Water Operations
P132		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	1,124,690	339,499	1,124,690	359,869	Water Operations
P132		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	4,497,308	947,709	4,497,308	1,004,571	Water Operations
P132		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	163,013	223,572	163,013	235,869	Water Operations
P132		1201117	CHM,POLYMER,CATIONC AS 2222,BULK	200,839	179,249	200,839	188,211	Water Operations
P132		1203151	CHM,POLYMER,FERRI+PLUS 3050,BULK	0	0	0	0	Water Operations
P132		WE	USA Bluebook Dechlorination Tablets 45	50	7,365	50	7,807	Water Operations
P132 Total				**9,206,078**	**$3,205,985**	**9,206,078**	**$3,342,910**	
P133	Pittsburgh Aldrich P	1200566	CHM,AMMONIA,AQUA,19%,BULK	434,479	87,550	434,479	92,803	Water Operations
P133		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	50,000	61,480	50,000	65,169	Water Operations
P133		1200619	CHM,FERRIC,CHLORID PLYMR AS2820,10%,BULK	1,422,600	717,986	1,422,600	717,986	Water Operations
P133		1200647	CHM,HFS ACID,23%,BULK	215,006	52,139	215,006	52,139	Water Operations
P133		1200870	CHM,POTASSIUM PERMANGANATE,100%,330LB	33,262	129,396	33,262	137,160	Water Operations
P133		1200904	CHM,SODIUM CHLORIDE,100%,BULK	26,684	2,984	26,684	3,163	Water Operations
P133		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	1,255,461	378,973	1,255,461	401,712	Water Operations
P133		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	4,476,407	943,304	4,476,407	999,903	Water Operations
P133		1200977	CHM,ZINC,CHLORIDE,1:3,BULK	125,714	179,048	125,714	188,896	Water Operations
P133		1201117	CHM,POLYMER,CATIONC AS 2222,BULK	0	0	0	0	Water Operations
P133		1202401	CHM,POLYMER,AS-1400PW,275GA	31,071	71,122	31,071	74,678	Water Operations
P133		1203061	CHM,POLYMER,CATIONIC,AS 2222,275GA	12,382	14,431	12,382	15,153	Water Operations
P133		1203151	CHM,POLYMER,FERRI+PLUS 3050,BULK	0	0	0	0	Water Operations
P133		1203231	CHM,POLYMER,FERRI+PLUS,3025,BULK	0	0	0	0	Water Operations
P133		1203541	CHM,POLYMER,FERRI+PLUS,5100,BULK	2,502,290	972,140	2,502,290	1,020,747	Water Operations
P133		WE	Captor Calcium Thiosulfate Solution, 30	2	657	2	697	Water Operations
P133		WE	Sulfuric Acid 93% 66B Grade: NSF	900	1,011	900	1,072	Water Operations
P133 Total				**10,586,258**	**$3,612,222**	**10,586,258**	**$3,771,276**	
P134	Silver Spring Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	34,166	10,039	34,166	10,641	Water Operations
P134		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	951	1,220	951	1,293	Water Operations
P134		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0	0	0	0	Water Operations
P134		1200630	CHM,LIME,HYDRATED,50 LB	25,250	4,618	25,250	4,849	Water Operations
P134		1200647	CHM,HFS ACID,23%,BULK	29,433	9,422	29,433	9,422	Water Operations
P134		1200751	CHM,POLYMER,CATIONC NALCO 8102 PLS,55GA	814	1,308	814	1,373	Water Operations
P134		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	13,284	29,849	13,284	31,342	Water Operations
P134		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	1,574	4,339	1,574	4,599	Water Operations
P134		1200880	CHM,SODIUM PERMANGANATE,20%,MINI BULK	7,444	13,809	7,444	14,637	Water Operations
P134		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	720,244	137,137	720,244	145,366	Water Operations
P134		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	608,347	174,109	608,347	184,555	Water Operations
P134		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	42,148	45,355	42,148	47,850	Water Operations
P134		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	35,136	53,259	35,136	56,454	Water Operations
P134		1201822	CHM,POLYMER,FERRI+PLUS 1025,BULK	975,678	363,342	975,678	363,342	Water Operations
P134		1202801	CHM,CALCIUM THIOSULFATE,LIQUID,55GA	(204)	(252)	(204)	(267)	Water Operations
P134		WE	Dechlor Liquid	18	1,488	18	1,577	Water Operations
P134		WE	Bio-Max Dechlorination Tablets, 48 lb P	10	1,884	10	1,997	Water Operations
P134		WE	USA Bluebook Dechlorination Tablets 45	210	32,254	210	34,189	Water Operations
P134		WE	USABB Aluminum Dechlorination Diffuser	1	1,669	1	1,770	Water Operations
P134 Total				**2,494,504**	**$884,850**	**2,494,504**	**$914,990**	

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Plant	Name 1	Material	Material Description	Annualized 12 month Jun-24 Usage	Annualized 12 Month Jun-24 Amount	Annualized 12 month Jun-25 Usage	Annualized 12 Month Jun-25 Amount	COS Segment
P135	West Shore Prod	1200566	CHM,AMMONIA,AQUA,19%,BULK	64,518	17,904	64,518	18,979	Water Operations
P135		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	979	1,256	979	1,331	Water Operations
P135		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0	0	0	0	Water Operations
P135		1200647	CHM,HFS ACID,23%,BULK	56,630	16,315	56,630	16,315	Water Operations
P135		1200804	CHM,POLYMER,CATIONC AS 2222,55GA	17	20	17	21	Water Operations
P135		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	7,166	16,102	7,166	16,907	Water Operations
P135		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	701,987	126,231	701,987	133,805	Water Operations
P135		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	836,226	195,008	836,226	206,708	Water Operations
P135		1200981	CHM,ZINC,CHLORIDE,1:5,BULK	74,234	79,883	74,234	84,277	Water Operations
P135		1201118	CHM,SODIUM PERMANGANATE,20%,300GA	4,688	7,106	4,688	7,532	Water Operations
P135		1202391	CHM,PLYMR,FER+PLUS 3075,39945,BULK	0	0	0	0	Water Operations
P135		1203151	CHM,POLYMER,FERRI+PLUS 3050,BULK	934,323	314,063	934,323	314,063	Water Operations
P135 Total				**2,680,768**	**$773,888**	**2,680,768**	**$799,938**	
P136	Coatesville Prod	1200562	CHM,AMMONIUM SULFATE,40%,BULK	74,055	43,174	74,055	45,765	Water Operations
P136		1200586	CHM,CARBON,PAC LIGNITE,BULK	7,671	9,954	7,671	10,552	Water Operations
P136		1200604	CHM,COPPER SULFATE,100%,50LB	0	0	0	0	Water Operations
P136		1200647	CHM,HFS ACID,23%,BULK	24,053	6,416	24,053	6,416	Water Operations
P136		1200772	CHM,POLYMER,CATIONC DELTA FLOC 801,BULK	0	0	0	0	Water Operations
P136		1200826	CHM,POLYMER,NONIONC SPRFLOC1986N,55GA	0	0	0	0	Water Operations
P136		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	82,612	117,342	82,612	124,383	Water Operations
P136		1200904	CHM,SODIUM CHLORIDE,100%,BULK	0	0	0	0	Water Operations
P136		1200916	CHM,SODIUM HYDROXIDE,25%,BULK 403	824,748	173,247	824,748	183,641	Water Operations
P136		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	720,530	151,225	720,530	160,298	Water Operations
P136		1201174	CHM,PHOSPHATE,ORTH-PLY CARUS 8700,BULK	41,474	42,005	41,474	44,315	Water Operations
P136		1202461	CHM,POLYMER,FERRI+PLUS 1050,BULK	879,922	330,270	879,922	330,270	Water Operations
P136		ZI	Buckmans - Polymer purchases	1	3,784	1	4,011	Water Operations
P136 Total				**2,655,066**	**$877,417**	**2,655,066**	**$909,651**	
P137	Lake Heritage Prod	1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	7,621	7,809	7,621	8,278	Water Operations
P137 Total				**7,621**	**$7,809**	**7,621**	**$8,278**	
P138	Boggs Township Prod	1200705	CHM,POLYMER,DELTA FLOC 807,55GA	365	420	365	441	Water Operations
P138		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	1,747	3,981	1,747	4,220	Water Operations
P138 Total				**2,112**	**$4,401**	**2,112**	**$4,661**	
P139	Nittany Prod	1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	7,925	10,820	7,925	11,469	Water Operations
P139 Total				**7,925**	**$10,820**	**7,925**	**$11,469**	
P140	S W B Brownell Podr	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	65,648	7,408	65,648	7,704	Water Operations
P140		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	19,050	24,434	19,050	25,900	Water Operations
P140		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	26,081	48,175	26,081	51,066	Water Operations
P140		1200630	CHM,LIME,HYDRATED,50 LB	40,450	23,780	40,450	24,969	Water Operations
P140		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	90	774	90	813	Water Operations
P140		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	4,075	7,263	4,075	7,699	Water Operations
P140		1200993	CHM,ZINC,1:10,50LB	7,450	19,256	7,450	20,315	Water Operations
P140		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	11,405	15,112	11,405	16,018	Water Operations
P140		WE	USA Bluebook Dechlorination Tablets 45	60	8,395	60	8,898	Water Operations
P140 Total				**174,309**	**$154,597**	**174,309**	**$163,383**	
P141	Ceasetown WTP	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	954,884	106,061	954,884	110,303	Water Operations
P141		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	169,186	223,490	169,186	236,899	Water Operations
P141		1200586	CHM,CARBON,PAC LIGNITE,BULK	0	0	0	0	Water Operations
P141		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	102,310	210,186	102,310	222,797	Water Operations
P141		1200604	CHM,COPPER SULFATE,100%,50LB	15,100	41,135	15,100	43,604	Water Operations
P141		1200630	CHM,LIME,HYDRATED,50 LB	252,820	51,340	252,820	53,907	Water Operations
P141		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	104	349	104	366	Water Operations
P141		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	3,828	16,093	3,828	16,897	Water Operations
P141		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	2,429	9,113	2,429	9,660	Water Operations
P141		1200890	CHM,SODIUM BICARBONATE,100%,50LB	1,750	1,053	1,750	1,116	Water Operations
P141		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	504	898	504	952	Water Operations
P141		1200993	CHM,ZINC,1:10,50LB	37,685	97,406	37,685	102,764	Water Operations
P141 Total				**1,540,599**	**$757,125**	**1,540,599**	**$799,266**	
P143	S W B Crystal Lake P	1200597	CHM,CHLORINE,100%,2000LB CYLINDER	21,691	45,530	21,691	48,262	Water Operations
P143		1200630	CHM,LIME,HYDRATED,50 LB	16,150	6,583	16,150	6,912	Water Operations
P143		1200702	CHM,PACL,DELPC2020, BULK	234,440	95,600	234,440	101,336	Water Operations
P143		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	490	1,839	490	1,949	Water Operations
P143		1200890	CHM,SODIUM BICARBONATE,100%,50LB	(500)	0	(500)	0	Water Operations
P143		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	54,937	33,671	54,937	35,691	Water Operations
P143		1200993	CHM,ZINC,1:10,50LB	13,611	35,181	13,611	37,116	Water Operations
P143 Total				**340,819**	**$218,404**	**340,819**	**$231,266**	

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Plant	Name 1	Material	Material Description	Annualized 12 month Jun-24 Usage	Annualized 12 Month Jun-24 Amount	Annualized 12 month Jun-25 Usage	Annualized 12 Month Jun-25 Amount	COS Segment
P144	S W B Fallbrook P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	91,698	10,233	91,698	10,642	Water Operations
P144		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	9,800	12,569	9,800	13,324	Water Operations
P144		1200596	CHM,CHLORINE,100%,150LB CYLINDER	5,890	13,659	5,890	14,479	Water Operations
P144		1200630	CHM,LIME,HYDRATED,50 LB	4,150	1,787	4,150	1,876	Water Operations
P144		1200819	CHM,POLYMER,NONIONC SPRFLOC 1986N,55GA	596	1,339	596	1,406	Water Operations
P144		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	495	1,857	495	1,969	Water Operations
P144		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	34,215	17,275	34,215	18,312	Water Operations
P144		1200993	CHM,ZINC,1:10,50LB	1,850	4,782	1,850	5,045	Water Operations
P144		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	2,500	3,207	2,500	3,399	Water Operations
P144 Total				**151,194**	**$66,708**	**151,194**	**$70,451**	
P145	S W B Forest City P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	23,412	2,600	23,412	2,704	Water Operations
P145		1200596	CHM,CHLORINE,100%,150LB CYLINDER	1,696	4,499	1,696	4,769	Water Operations
P145		1200630	CHM,LIME,HYDRATED,50 LB	2,050	883	2,050	927	Water Operations
P145		1200819	CHM,POLYMER,NONIONC SPRFLOC 1986N,55GA	8	18	8	19	Water Operations
P145		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	275	1,032	275	1,094	Water Operations
P145		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	11,766	10,505	11,766	11,135	Water Operations
P145		1200993	CHM,ZINC,1:10,50LB	250	694	250	732	Water Operations
P145 Total				**39,457**	**$20,230**	**39,457**	**$21,380**	
P146	S W B Huntsville P	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	2,050	2,629	2,050	2,787	Water Operations
P146		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	14,709	26,939	14,709	28,555	Water Operations
P146		1200753	CHM,POLYMER,CATIONC ZETAG 8812,55GA	0	0	0	0	Water Operations
P146		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	504	1,892	504	2,005	Water Operations
P146		1200890	CHM,SODIUM BICARBONATE,100%,50LB	0	0	0	0	Water Operations
P146		1200928	CHM,SODIUM HYDROXIDE,50%,BULK	69,928	30,586	69,928	32,421	Water Operations
P146		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	2,099	2,335	2,099	2,475	Water Operations
P146		1200993	CHM,ZINC,1:10,50LB	5,964	15,415	5,964	16,263	Water Operations
P146		1201152	CHM,PACL BASICITY,70% PAX-XL8,BULK	302,435	101,303	302,435	107,382	Water Operations
P146		1201861	CHM,SODIUM HYPOCHLORITE,12.5%,4X1GAL	800	1,524	800	1,616	Water Operations
P146 Total				**398,488**	**$182,624**	**398,488**	**$193,505**	
P147	S W B Nesbitt P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	576,984	73,208	576,984	76,136	Water Operations
P147		1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	30,800	39,504	30,800	41,874	Water Operations
P147		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	69,148	131,699	69,148	139,601	Water Operations
P147		1200630	CHM,LIME,HYDRATED,50 LB	193,300	37,914	193,300	39,810	Water Operations
P147		1200777	CHM,POLYMER,CATIONC MAGNAFLOC LT22S,50LB	660	2,775	660	2,914	Water Operations
P147		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	1,765	6,559	1,765	6,887	Water Operations
P147		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	11,929	44,761	11,929	47,447	Water Operations
P147		1200890	CHM,SODIUM BICARBONATE,100%,50LB	100	30	100	31	Water Operations
P147		1200952	CHM,SODIUM THIOSULFATE,DRY,100%,55LB	330	588	330	623	Water Operations
P147		1200993	CHM,ZINC,1:10,50LB	35,450	91,629	35,450	96,669	Water Operations
P147		1201381	CHM,CARBON,PAC,800 IODINE,20BF,50LB BAG	250	340	250	360	Water Operations
P147 Total				**920,715**	**$429,007**	**920,715**	**$452,352**	
P148	S W B Lake Scranton P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	1,722,719	192,242	1,722,719	199,931	Water Operations
P148		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	72,453	96,177	72,453	101,947	Water Operations
P148		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0	0	0	0	Water Operations
P148		1200631	CHM,LIME,HYDRATED CAO,72%,BULK	277,353	34,015	277,353	35,715	Water Operations
P148		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	1,100	3,696	1,100	3,881	Water Operations
P148		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	0	0	0	0	Water Operations
P148		1200879	CHM,SODIUM PERMANGANATE,20%,BULK	9,100	12,540	9,100	13,292	Water Operations
P148		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	2,331	5,050	2,331	5,353	Water Operations
P148		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	1,785,028	374,642	1,785,028	397,120	Water Operations
P148		1200993	CHM,ZINC,1:10,50LB	85,300	220,479	85,300	232,606	Water Operations
P148		1201191	CHM,POLYMER,CATIONIC ZETAG 7523 50LB	4,425	15,054	4,425	15,807	Water Operations
P148		1201861	CHM,SODIUM HYPOCHLORITE,12.5%,4X1GAL	1,257	2,731	1,257	2,895	Water Operations
P148		1203201	CHM,WATERCARB800,SUB-BITUM,800IODINE,BUL	30,464	97,554	30,464	103,407	Water Operations
P148		WE	Methanol, Tryptic Soy Agar & Buffer solution	1	313	1	332	
P148 Total				**3,991,531**	**$1,054,492**	**3,991,531**	**$1,112,287**	
P149	S W B Watres P	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	812,656	100,997	812,656	105,037	Water Operations
P149		1200578	CHM,CRBN,PAC BITUMIN 500 IODINE,BULK	44,897	59,598	44,897	63,174	Water Operations
P149		1200630	CHM,LIME,HYDRATED,50 LB	183,774	37,473	183,774	39,347	Water Operations
P149		1200717	CHM,POLYMER,ANIONC SPRFLC A-130,50LB	0	0	0	0	Water Operations
P149		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	2,135	7,936	2,135	8,333	Water Operations
P149		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	3,208	12,039	3,208	12,762	Water Operations
P149		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	760,640	159,643	760,640	169,222	Water Operations
P149		1200993	CHM,ZINC,1:10,50LB	34,410	88,941	34,410	93,833	Water Operations
P149		1202851	CHM,POLYMER,ANIONC SPRFLC A-120,50LB	1,470	4,939	1,470	5,186	Water Operations
P149 Total				**1,843,190**	**$471,567**	**1,843,190**	**$496,893**	

Pennsylvania American Water Company
Chemical Expense Workpaper
Projected 12-Months June 2024 and June 2025

Plant	Name 1	Material	Material Description	Annualized 12 month Jun-24 Usage	Annualized 12 Month Jun-24 Amount	Annualized 12 month Jun-25 Usage	Annualized 12 Month Jun-25 Amount	COS Segment
P151	White Deer Creek Prod	1200577	CHM,CRBN,PAC BITUMIN 500 IODINE,50LB	0	0	0	0	Water Operations
P151		1200630	CHM,LIME,HYDRATED,50 LB	50	7	50	7	Water Operations
P151		1200702	CHM,PACL,DELPC2020, BULK	180,883	47,934	180,883	50,810	Water Operations
P151		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	19,310	9,280	19,310	9,837	Water Operations
P151		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	180,710	91,466	180,710	96,954	Water Operations
P151		1200980	CHM,ZINC,CHLORIDE,1:5,30GA	20,455	25,033	20,455	26,410	Water Operations
P151 Total				**401,408**	**$173,720**	**401,408**	**$184,018**	
P152	Wildcat Prod	1200882	CHM,LIGHT SODA ASH,100%,50LB	1,911	1,287	1,911	1,365	Water Operations
P152		1200931	CHM,SODIUM HYPOCHLORITE,13%,15GA	98	93	98	99	Water Operations
P152		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	1,093	2,491	1,093	2,640	Water Operations
P152 Total				**3,102**	**$3,871**	**3,102**	**$4,104**	
P154	McEwensville Prod	1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	1,750	3,988	1,750	4,228	Water Operations
P154 Total				**1,750**	**$3,988**	**1,750**	**$4,228**	
P155	Steelton_PROD	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	302,188	38,499	302,188	40,039	Water Operations
P155		1200596	CHM,CHLORINE,100%,150LB CYLINDER	14,429	32,186	14,429	34,117	Water Operations
P155		1200630	CHM,LIME,HYDRATED,50 LB	43,191	17,959	43,191	18,857	Water Operations
P155		1200829	CHM,POLYMER,NONIONC SPRFLOC N300,50LB	939	3,342	939	3,509	Water Operations
P155		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	1,476	5,539	1,476	5,871	Water Operations
P155		1200882	CHM,LIGHT SODA ASH,100%,50LB	57,982	26,428	57,982	28,014	Water Operations
P155		1200926	CHM,SODIUM HYDROXIDE,50%,55GA	14,736	3,794	14,736	4,022	Water Operations
P155 Total				**434,941**	**$127,747**	**434,941**	**$134,428**	
P188	Turbotville_PROD	1200596	CHM,CHLORINE,100%,150LB CYLINDER	0	0	0	0	Water Operations
P188		1200939	CHM,SODIUM HYPOCHLORITE,13%,5GA	4,110	9,367	4,110	9,929	Water Operations
P188		1202811	CHM,POLY AL SULFATE,CLARION A410P,55GA	80	95	80	99	Water Operations
P188 Total				**4,190**	**$9,462**	**4,190**	**$10,027**	
Grand Total				**64,765,087**	**$22,511,182**	**64,765,087**	**$23,528,120**	

Pennsylvania American Water Company
Chemical Expense Workpaper - Wastewater SSS Operations
12 Month Actual Ending June 2020 to June 2023

				Quantity					Amount				
Plant	Name 1	Material	Material Description	2020 Total Quantity	2021 Total Quantity	2022 Total Quantity	3-Year Average Quantity	Base Year 12 Mo June 2023 Quantity	2020 Total Amount	2021 Total Amount	2022 Total Amount	3-Year Average Amount	Base Year 12 Mo June 2023 Amount
S104	Lehman Pike Sewer	1200550	CHM,ALUM,SULFAT DRY,100%,50LB	750.00	1,300.00	3,150.00	1,733.33	4,050.00	$297	$522	$1,526	$782	$2,023
S104		1200630	CHM,LIME,HYDRATED,50 LB	3,900.00	1,700.00	3,850.00	3,150.00	1,900.00	1,017	396	983	798	574
S104		1200882	CHM,LIGHT SODA ASH,100%,50LB	8,400.00	11,800.00	11,137.00	10,445.67	8,392.00	2,615	3,640	3,767	3,341	3,165
S104		1200891	CHM,SODIUM BISULFITE,38%,15GA	6,765.00	4,125.00	4,125.00	5,005.00	4,785.00	4,332	2,395	2,880	3,202	3,495
S104		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	73,736.00	56,598.00	49,263.00	59,865.67	54,731.00	8,849	6,792	6,731	7,457	9,523
S104		1201037	CHM,PLYMR,CAT MAGNAFLOC LT22S 502,50LB	700.00	942.16	728.00	790.05	750.00	1,828	2,386	2,069	2,094	2,254
S104		1201060	CHM,SODIUM ALUMINATE,38.5%,30GA	41,070.00	40,664.00	35,266.00	39,000.00	36,630.00	23,649	23,556	22,917	23,374	26,234
S104		1201961	CHM,POLYMER,CATIONC PRAESTOL K279FLX 55	6,525.50	5,512.00	4,329.00	5,455.50	5,062.00	12,198	10,215	10,483	10,966	13,352
S104 Total				**141,846.50**	**122,641.16**	**111,848.00**	**125,445.22**	**116,300.00**	**$54,786**	**$49,900**	**$51,356**	**$52,014**	**$60,620**
S106	Pocono Sewer	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	192,020.00	261,106.00	266,365.00	239,830.33	269,809.00	15,986	21,113	23,878	20,325	26,180
S106		1201018	CHM,MAGNESIUM HYDROXIDE,53%,55GA	101,760.00	96,130.00	130,960.00	109,616.67	139,220.00	43,665	40,748	60,965	48,459	63,735
S106		1201048	CHM,POLYMER,CATIONC SPRFLOC SD2085,55GA	3,255.35	3,224.00	2,422.00	2,967.12	2,440.00	6,241	6,253	4,994	5,830	5,854
S106		1200912	CHM,SODIUM HYDROXIDE,25%,15GA 403					25,031.00					5,946
S106		KR	USA Bluebook Formula 52 5-Gallon					1.00					87
S106 Total				**297,035.35**	**360,460.00**	**399,747.00**	**352,414.12**	**436,501.00**	**$65,892**	**$68,115**	**$89,837**	**$74,614**	**$101,801**
S114	EXETER_WW	1200596	CHM,CHLORINE,100%,150LB CYLINDER	1,150.00	2,000.00	2,250.00	1,800.00	0.00	767	1,058	1,573	1,133	0
S114		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	35,935.00	26,274.00	25,791.00	29,333.33	0.00	13,026	9,252	15,403	12,560	0
S114		1200898	CHM,SODIUM BISULFITE,38%,TOTE	3,360.00	16,687.00	32,123.75	17,390.25	25,435.25	1,226	4,811	13,566	6,534	11,370
S114		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	0.00	0.00	263,630.00	87,876.67	449,870.00	0	0	34,272	11,424	70,853
S114		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	0.00	0.00	0.00	0.00	6,474.00	0	0	0	0	2,939
S114		1202791	CHM,POLYMER,CLARIFLOC NE-1745,250GA	40,250.00	25,529.09	53,820.91	39,866.67	37,605.00	47,879	29,021	75,844	50,915	58,527
S114 Total				**80,695.00**	**70,490.09**	**377,615.66**	**176,266.92**	**519,384.25**	**$62,898**	**$44,141**	**$140,658**	**$82,566**	**$143,689**
S117	Royersford_WW	1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	0.00	10,322.00	25,932.00	12,084.67	21,697.00	0	2,240	6,352	2,864	6,084
S117		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	0.00	14,631.00	11,581.40	8,737.47	11,065.45	0	4,636	3,676	2,770	3,484
S117		1203041	CHM,PACL,DELPAC 1525, BULK	0.00	73,587.00	97,789.93	57,125.64	128,645.15	0	18,331	26,251	14,861	40,338
S117 Total				**0.00**	**98,540.00**	**135,303.33**	**77,947.78**	**161,407.60**	**$0**	**$25,206**	**$36,279**	**$20,495**	**$49,906**
S119	Clarion Sewer	1200597	CHM,CHLORINE,100%,2000LB CYLINDER	6,387.00	7,421.00	6,901.00	6,903.00	6,631.00	6,778	3,398	7,293	5,823	8,814
S119		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	55.00	60.00	0.00	38.33	0.00	111	121	0	77	0
S119		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	0.00	0.00	0.00	0.00	2,200.00	0	0	0	0	484
S119		1201881	CHM,BIOXIDE-AQ,BULK	39,704.00	34,167.00	40,709.00	38,193.33	38,556.00	10,534	9,324	11,359	10,406	11,105
S119		1202692	CHM,PLYMR,POLLUTREAT CL-835,2290LB,TOTE	4,180.00	4,480.00	6,420.00	5,026.67	5,240.00	7,410	8,191	13,368	9,656	13,313
S119		WE	Accu-tab Wastewater Chlorination Tablets				0.00	60.00				0	24,275
S119		WE	Aquabac for redworm treatment				0.00	200.00				0	14,132
S119		WE	Aquashade Aquatic Plant-Algae Control, 1				0.00	50.00				0	3,126
S119		WE	Qwik-Zyme Grease Degrader 2 x 2.5 Gallon				0.00	15.00				0	2,852
S119		WE	Qwik-Zyme Grease Degrader 55 Gallon Drum				0.00	2.00				0	3,432
S119		WE	Aquafix				0.00	16.00				0	5,520
S119 Total				**50,326.00**	**46,128.00**	**54,030.00**	**50,161.33**	**52,970.00**	**$24,833**	**$21,034**	**$32,021**	**$25,963**	**$87,052**
S136	Coatesville Sewer	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	204,094.00	315,263.00	264,429.00	261,262.00	230,723.00	15,265	23,532	20,741	19,846	20,827
S136		1200630	CHM,LIME,HYDRATED,50 LB	5,550.00	8,600.00	8,800.00	7,650.00	6,400.00	1,263	1,939	2,284	1,829	1,870
S136		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	620.00	1,051.00	110.00	593.67	630.00	214	333	33	193	191
S136		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	121,600.00	102,650.00	105,900.00	110,050.00	73,600.00	24,760	20,521	28,094	24,458	21,466
S136		1201026	CHM,LIME,GROUND QUICK,BULK	486,488.00	695,246.00	1,112,066.00	764,600.00	1,071,148.00	36,856	56,424	98,439	63,906	108,809
S136		1201321	CHM,THIOGUARD/MAGOX 93 HR 325M 50LB	6,300.00	3,300.00	0.00	3,200.00	0.00	4,942	2,589	0	2,510	0
S136		1202102	CHM,PLYMR,SLUDGE POLLUTREAT CL-888,2290L	0.00	2,290.00	0.00	763.33	18,400.00	0	3,824	0	1,275	38,640
S136		1202411	CHM,PLYMR,SLDGE POLLUTREAT,CL-186,2290LB	123,797.00	150,316.00	131,333.00	135,148.67	95,119.00	210,069	256,153	237,048	234,423	188,602
S136 Total				**948,449.00**	**1,278,716.00**	**1,622,638.00**	**1,283,267.67**	**1,496,020.00**	**$293,369**	**$365,314**	**$386,639**	**$348,441**	**$380,405**
S139	Claysville Sewer	1200596	CHM,CHLORINE,100%,150LB CYLINDER	6,995.00	7,376.00	8,712.00	7,694.33	8,148.00	4,529	4,794	14,837	8,053	20,014
S139		1200701	CHM,PACL,DELPC2020,55GA	42,812.00	42,397.00	47,821.00	44,343.33	43,428.00	14,096	14,725	20,068	16,296	20,608
S139		1200890	CHM,SODIUM BICARBONATE,100%,50LB	39,150.00	41,250.00	43,950.00	41,450.00	42,050.00	13,640	15,196	17,001	15,279	17,965
S139		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	10,136.00	9,931.00	9,665.00	9,910.67	8,902.00	2,027	1,915	2,054	1,999	2,206
S139 Total				**99,093.00**	**100,954.00**	**110,148.00**	**103,398.33**	**102,528.00**	**$34,292**	**$36,630**	**$53,960**	**$41,627**	**$60,793**
S154	Koppel Borough	1200596	CHM,CHLORINE,100%,150LB CYLINDER	560.00	334.00	0.00	298.00	0.00	404	243	0	216	0
S154		1200849	CHM,POLYMER,SLUDGE POLLUTECH,40LB	187.00	449.00	419.00	351.67	420.00	821	2,016	1,982	1,606	1,986
S154 Total				**747.00**	**783.00**	**419.00**	**649.67**	**420.00**	**$1,225**	**$2,259**	**$1,982**	**$1,822**	**$1,986**
S157	Paint-Elk Twp Sewer	1200596	CHM,CHLORINE,100%,150LB CYLINDER	1,303.00	1,032.00	1,131.00	1,155.33	987.00	2,064	1,893	2,402	2,120	2,520
S157		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	0.00	0.00	0.00	0.00	5,636.00	0	0	0	0	3,658
S157		WE	Accu-Tab Wastewater Chlorination Ta				0.00	90.00				0	18,549
S157		ZI	Seven Seas Pool - Algaecide					1.00					1,437
S157 Total				**1,303.00**	**1,032.00**	**1,131.00**	**1,155.33**	**6,714.00**	**$2,064**	**$1,893**	**$2,402**	**$2,120**	**$26,164**
S158	McEwensville Sewer	1201115	CHM,SOD SULFITE, TAB 2 5/8"X13/16",92%	0.00	0.00	270.00	90.00	185.00	0	0	986	329	675
S158		1202041	CHM,CALCIUM,HYPO,70%,BIOSANITIZER,100LB	225.00	145.00	550.00	306.67	560.00	948	611	1,951	1,170	2,472
S158		WE	USA Bluebook Dechlorination Tablets 45				0.00	4.00				0	617
S158 Total				**225.00**	**145.00**	**820.00**	**396.67**	**749.00**	**$948**	**$611**	**$2,936**	**$1,498**	**$3,765**

Pennsylvania American Water Company
Chemical Expense Workpaper - Wastewater SSS Operations
12 Month Actual Ending June 2020 to June 2023

				Quantity					Amount				
Plant	Name 1	Material	Material Description	2020 Total Quantity	2021 Total Quantity	2022 Total Quantity	3-Year Average Quantity	Base Year 12 Mo June 2023 Quantity	2020 Total Amount	2021 Total Amount	2022 Total Amount	3-Year Average Amount	Base Year 12 Mo June 2023 Amount
S159	Fairview Sewer North	1202056	CHM,SODIUM ALUMINATE,38%,BULK	45,826.00	39,316.00	45,387.00	43,509.67	40,597.00	13,196	12,036	15,020	13,418	15,945
S159 Total				**45,826.00**	**39,316.00**	**45,387.00**	**43,509.67**	**40,597.00**	**$13,196**	**$12,036**	**$15,020**	**$13,418**	**$15,945**
S160	Fairview Sewer South	1200596	CHM,CHLORINE,100%,150LB CYLINDER	3,174.40	2,246.00	8.40	1,809.60	0.00	2,930	2,119	8	1,685	0
S160		1202055	CHM,PLYMR,SLUDGE POLLUTREAT CL-981,55GA	7,200.00	7,200.00	2,700.00	5,700.00	4,950.00	10,455	10,532	4,224	8,404	9,410
S160		1202056	CHM,SODIUM ALUMINATE,38%,BULK	56,626.00	60,660.00	69,300.00	62,195.33	80,323.00	15,835	18,048	22,276	18,719	31,452
S160		WE	PlantPRO Bio-Health Bacterial Supplement				0.00	2.00				0	677
S160 Total				**67,000.40**	**70,106.00**	**72,008.40**	**69,704.93**	**85,275.00**	**$29,220**	**$30,698**	**$26,508**	**$28,809**	**$41,539**
S162	New Cumberland Sewer	1201001	CHM,ALUM,SULFATE,100%,50LB	49,598.00	67,702.00	52,400.00	56,566.67	46,650.00	12,332	16,923	14,104	14,453	12,011
S162		1202055	CHM,PLYMR,SLUDGE POLLUTREAT CL-981,55GA	10,823.00	12,145.00	7,205.00	10,057.67	7,846.00	15,753	17,766	11,792	15,104	15,602
S162 Total				**60,421.00**	**79,847.00**	**59,605.00**	**66,624.33**	**54,496.00**	**$28,086**	**$34,688**	**$25,896**	**$29,557**	**$27,612**
S189	Turbotville_SEWER	1200551	CHM,ALUM,SULFAT LIQUID,50%,55GA	25,160.00	18,535.00	21,805.00	21,833.33	10,150.00	6,542	6,642	8,023	7,069	3,820
S189		1202041	CHM,CALCIUM,HYPO,70%,BIOSANITIZER,100LB	650.00	530.00	445.00	541.67	225.00	1,335	1,444	1,661	1,480	985
S189		1202702	CHM,ALUM,SULFATE LIQUID,50%,220 GA TOTE	1,300.00	0.00	0.00	433.33	0.00	405	0	0	135	0
S189 Total				**27,110.00**	**19,065.00**	**22,250.00**	**22,808.33**	**10,375.00**	**$8,282**	**$8,086**	**$9,684**	**$8,684**	**$4,805**
S190	York_WW	1200615	CHM,FERRIC,CHLORID,45%,275GA	0.00	0.00	0.00	0.00	235,847.44	0	0	0	0	95,982
S190		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	0.00	0.00	0.00	0.00	13,304.92	0	0	0	0	3,420
S190		1203211	CHM,FLOCCULANT 3022A, 265GA, TOTE	0.00	0.00	0.00	0.00	140,009.56	0	0	0	0	304,172
S190		1203212	CHM,MICROC 2000,265GA, TOTE	0.00	0.00	0.00	0.00	7.50	0	0	0	0	5
S190		1203213	CHM,ANTI-FOAM NS 8484, 50 GA, DRUM	0.00	0.00	0.00	0.00	520.37	0	0	0	0	593
S190		1203481	CHM POLYMER,CLARIFLOC NE-1554, BULK	0.00	0.00	0.00	0.00	64,297.48	0	0	0	0	102,233
S190		WE	F-625 Closed Loop D20/D75					3.00				0	3,805
S190		WE	Filter feeder 5gal.					1.00				0	1,061
S190 Total				**0.00**	**0.00**	**0.00**	**0.00**	**453,991.27**	**$0**	**$0**	**$0**	**$0**	**$511,271**
Grand Total				**1,820,077.25**	**2,288,223.25**	**3,012,950.39**	**2,373,750.30**	**3,537,728.12**	**$619,090**	**$700,612**	**$875,178**	**$731,627**	**$1,517,353**

Pennsylvania American Water Company
Chemical Expense Workpaper - Wastewater SSS Operations
Projected Annual Usage

Plant	Name 1	Material	Material Description	Base Year Annual Usage	Usage Adjustment	Projected Annual Usage	Comment
S104	Lehman Pike Sewer	1200550	CHM,ALUM,SULFAT DRY,100%,50LB	4,050.00		4,050.00	
S104		1200630	CHM,LIME,HYDRATED,50 LB	1,900.00		1,900.00	
S104		1200882	CHM,LIGHT SODA ASH,100%,50LB	8,392.00		8,392.00	
S104		1200891	CHM,SODIUM BISULFITE,38%,15GA	4,785.00		4,785.00	
S104		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	54,731.00		54,731.00	
S104		1201037	CHM,PLYMR,CAT MAGNAFLOC LT22S 502,50LB	750.00		750.00	
S104		1201060	CHM,SODIUM ALUMINATE,38.5%,30GA	36,630.00		36,630.00	
S104		1201961	CHM,POLYMER,CATIONC PRAESTOL K279FLX 55	5,062.00		5,062.00	
S104 Total				**116,300.00**	**0.00**	**116,300.00**	
S106	Pocono Sewer	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	269,809.00		269,809.00	
S106		1201018	CHM,MAGNESIUM HYDROXIDE,53%,55GA	139,220.00		139,220.00	
S106		1201048	CHM,POLYMER,CATIONC SPRFLOC SD2085,55GA	2,440.00		2,440.00	
S106		1200912	CHM,SODIUM HYDROXIDE,25%,15GA 403	25,031.00	8,343.67	33,374.67	Full Year of Foster WW
S106		KR	USA Bluebook Formula 52 5-Gallon	1.00	1.00	2.00	Full Year of Foster WW
S106 Total				**436,501.00**	**8,344.67**	**444,845.67**	
S114	EXETER_WW	1200596	CHM,CHLORINE,100%,150LB CYLINDER	0.00		0.00	
S114		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0.00		0.00	
S114		1200898	CHM,SODIUM BISULFITE,38%,TOTE	25,435.25	(25,435.25)	0.00	Revised based on info from field
S114		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	449,870.00		449,870.00	
S114		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	6,474.00		6,474.00	
S114		1202791	CHM,POLYMER,CLARIFLOC NE-1745,250GA	37,605.00		37,605.00	
S114 Total				**519,384.25**	**(25,435.25)**	**493,949.00**	
S117	Royersford_WW	1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	21,697.00		21,697.00	
S117		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	11,065.45		11,065.45	
S117		1203041	CHM,PACL,DELPAC 1525, BULK	128,645.15		128,645.15	
S117 Total				**161,407.60**	**0.00**	**161,407.60**	
S119	Clarion Sewer	1200597	CHM,CHLORINE,100%,2000LB CYLINDER	6,631.00		6,631.00	
S119		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	0.00		0.00	
S119		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	2,200.00		2,200.00	
S119		1201881	CHM,BIOXIDE-AQ,BULK	38,556.00		38,556.00	
S119		1202692	CHM,PLYMR,POLLUTREAT CL-835,2290LB,TOTE	5,240.00		5,240.00	
S119		WE	Accu-tab Wastewater Chlorination Tablets	60.00		60.00	
S119		WE	Aquabac for redworm treatment	200.00		200.00	
S119		WE	Aquashade Aquatic Plant-Algae Control, 1	50.00		50.00	
S119		WE	Qwik-Zyme Grease Degrader 2 x 2.5 Gallon	15.00		15.00	
S119		WE	Qwik-Zyme Grease Degrader 55 Gallon Drum	2.00		2.00	
S119		WE	Aquafix	16.00		16.00	
S119 Total				**52,970.00**	**0.00**	**52,970.00**	
S136	Coatesville Sewer	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	230,723.00		230,723.00	
S136		1200630	CHM,LIME,HYDRATED,50 LB	6,400.00		6,400.00	
S136		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	630.00		630.00	
S136		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	73,600.00		73,600.00	
S136		1201026	CHM,LIME,GROUND QUICK,BULK	1,071,148.00		1,071,148.00	
S136		1201321	CHM,THIOGUARD/MAGOX 93 HR 325M 50LB	0.00		0.00	
S136		1202102	CHM,PLYMR,SLUDGE POLLUTREAT CL-888,2290L	18,400.00		18,400.00	
S136		1202411	CHM,PLYMR,SLDGE POLLUTREAT,CL-186,2290LB	95,119.00		95,119.00	
S136 Total				**1,496,020.00**	**0.00**	**1,496,020.00**	
S139	Claysville Sewer	1200596	CHM,CHLORINE,100%,150LB CYLINDER	8,148.00		8,148.00	
S139		1200701	CHM,PACL,DELPC2020,55GA	43,428.00		43,428.00	
S139		1200890	CHM,SODIUM BICARBONATE,100%,50LB	42,050.00		42,050.00	
S139		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	8,902.00		8,902.00	
S139 Total				**102,528.00**	**0.00**	**102,528.00**	
S154	Koppel Borough	1200596	CHM,CHLORINE,100%,150LB CYLINDER	0.00		0.00	
S154		1200849	CHM,POLYMER,SLUDGE POLLUTECH,40LB	420.00		420.00	
S154 Total				**420.00**	**0.00**	**420.00**	
S157	Paint-Elk Twp Sewer	1200596	CHM,CHLORINE,100%,150LB CYLINDER	987.00	(987.00)	0.00	Remove, have switched to hypo, revised based on info from field
S157		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	5,636.00	4,000.00	9,636.00	Increased due to switching from gas chlorine
S157		WE	Accu-Tab Wastewater Chlorination Ta	90.00		90.00	
S157		ZI	Seven Seas Pool - Algaecide	1.00		1.00	
S157 Total				**6,714.00**	**3,013.00**	**9,727.00**	
S158	McEwensville Sewer	1201115	CHM,SOD SULFITE, TAB 2 5/8"X13/16",92%	185.00		185.00	
S158		1202041	CHM,CALCIUM,HYPO,70%,BIOSANITIZER,100LB	560.00		560.00	
S158		WE	USA Bluebook Dechlorination Tablets 45	4.00		4.00	
S158 Total				**749.00**	**0.00**	**749.00**	

Pennsylvania American Water Company
Chemical Expense Workpaper - Wastewater SSS Operations
Projected Annual Usage

Plant	Name 1	Material	Material Description	Base Year Annual Usage	Usage Adjustment	Projected Annual Usage	Comment
S159	Fairview Sewer North	1202056	CHM,SODIUM ALUMINATE,38%,BULK	40,597.00		40,597.00	
S159 Total				**40,597.00**	**0.00**	**40,597.00**	
S160	Fairview Sewer South	1200596	CHM,CHLORINE,100%,150LB CYLINDER	0.00		0.00	
S160		1202055	CHM,PLYMR,SLUDGE POLLUTREAT CL-981,55GA	4,950.00		4,950.00	
S160		1202056	CHM,SODIUM ALUMINATE,38%,BULK	80,323.00		80,323.00	
S160		WE	PlantPRO Bio-Health Bacterial Supplement	2.00		2.00	
S160 Total				**85,275.00**	**0.00**	**85,275.00**	
S162	New Cumberland Sewer	1201001	CHM,ALUM,SULFATE,100%,50LB	46,650.00		46,650.00	
S162		1202055	CHM,PLYMR,SLUDGE POLLUTREAT CL-981,55GA	7,846.00		7,846.00	
S162 Total				**54,496.00**	**0.00**	**54,496.00**	
S189	Turbotville_SEWER	1200551	CHM,ALUM,SULFAT LIQUID,50%,55GA	10,150.00		10,150.00	
S189		1202041	CHM,CALCIUM,HYPO,70%,BIOSANITIZER,100LB	225.00		225.00	
S189		1202702	CHM,ALUM,SULFATE LIQUID,50%,220 GA TOTE	0.00		0.00	
S189 Total				**10,375.00**	**0.00**	**10,375.00**	
S190	York_WW	1200615	CHM,FERRIC,CHLORID,45%,275GA	235,847.44		235,847.44	
S190		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	13,304.92		13,304.92	
S190		1203211	CHM,FLOCCULANT 3022A, 265GA, TOTE	140,009.56		140,009.56	
S190		1203212	CHM,MICROC 2000,265GA, TOTE	7.50		7.50	
S190		1203213	CHM,ANTI-FOAM NS 8484, 50 GA, DRUM	520.37		520.37	
S190		1203481	CHM POLYMER,CLARIFLOC NE-1554, BULK	64,297.48		64,297.48	
S190		WE	F-625 Closed Loop D20/D75	3.00	(3.00)	0.00	Equipment purchase- miscoded
S190		WE	Filter feeder 5gal.	1.00	(1.00)	0.00	Equipment purchase- miscoded
S190 Total				**453,991.27**	**(4.00)**	**453,987.27**	
Grand Total				**3,537,728.12**	**(14,081.58)**	**3,523,646.54**	

Pennsylvania American Water Company
Chemical Expense Workpaper - Wastewater SSS Operations
Projected 12-Months June 2024 and June 2025

				PRICING								
Plant	Name 1	Material	Material Description	Chemical Family	Current Unit Price 3Q-2023	Unit Price 4Q-2023	Unit Price 1Q-2024	Unit Price 2Q-2024	Unit Price 3Q-2024	Unit Price 4Q-2024	Unit Price 1Q-2025	Unit Price 2Q-2025
S104	Lehman Pike Sewer	1200550	CHM,ALUM,SULFAT DRY,100%,50LB	Aluminum Sulfate	$0.4753	$0.4753	$0.4943	$0.4943	$0.4943	$0.4943	$0.5141	$0.5141
S104		1200630	CHM,LIME,HYDRATED,50 LB	Lime	$0.3524	$0.3524	$0.3700	$0.3700	$0.3700	$0.3700	$0.3885	$0.3885
S104		1200882	CHM,LIGHT SODA ASH,100%,50LB	Chemicals - Other	$0.4100	$0.4100	$0.4346	$0.4346	$0.4346	$0.4346	$0.4607	$0.4607
S104		1200891	CHM,SODIUM BISULFITE,38%,15GA	Chemicals - Other	$0.7194	$0.7194	$0.7626	$0.7626	$0.7626	$0.7626	$0.8083	$0.8083
S104		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.2400	$0.2400	$0.2544	$0.2544	$0.2544	$0.2544	$0.2697	$0.2697
S104		1201037	CHM,PLYMR,CAT MAGNAFLOC LT22S 502,50LB	Polymers	$4.0042	$4.0042	$4.2044	$4.2044	$4.2044	$4.2044	$4.4146	$4.4146
S104		1201060	CHM,SODIUM ALUMINATE,38.5%,30GA	Chemicals - Other	$0.8150	$0.8150	$0.8639	$0.8639	$0.8639	$0.8639	$0.9157	$0.9157
S104		1201961	CHM,POLYMER,CATIONC PRAESTOL K279FLX 55	Polymers	$2.6500	$2.6500	$2.7825	$2.7825	$2.7825	$2.7825	$2.9216	$2.9216
S104 Total												
S106	Pocono Sewer	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1073	$0.1073	$0.1116	$0.1116	$0.1116	$0.1116	$0.1161	$0.1161
S106		1201018	CHM,MAGNESIUM HYDROXIDE,53%,55GA	Chemicals - Other	$0.4438	$0.4438	$0.4704	$0.4704	$0.4704	$0.4704	$0.4987	$0.4987
S106		1201048	CHM,POLYMER,CATIONC SPRFLOC SD2085,55GA	Polymers	$2.6100	$2.6100	$2.7405	$2.7405	$2.7405	$2.7405	$2.8775	$2.8775
S106		1200912	CHM,SODIUM HYDROXIDE,25%,15GA 403	Caustic Soda	$0.2376	$0.2376	$0.2566	$0.2566	$0.2566	$0.2566	$0.2720	$0.2720
S106		KR	USA Bluebook Formula 52 5-Gallon	Chemicals - Other	$86.7200	$86.7200	$91.9232	$91.9232	$91.9232	$91.9232	$97.4386	$97.4386
S106 Total												
S114	EXETER_WW	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine								
S114		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine								
S114		1200898	CHM,SODIUM BISULFITE,38%,TOTE	Chemicals - Other	$0.3470	$0.3470	$0.3678	$0.3678	$0.3678	$0.3678	$0.3899	$0.3899
S114		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.1980	$0.1980	$0.2099	$0.2099	$0.2099	$0.2099	$0.2225	$0.2225
S114		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	Chemicals - Other	$0.4900	$0.4900	$0.5194	$0.5194	$0.5194	$0.5194	$0.5506	$0.5506
S114		1202791	CHM,POLYMER,CLARIFLOC NE-1745,250GA	Polymers	$1.7500	$1.7500	$1.8375	$1.8375	$1.8375	$1.8375	$1.9294	$1.9294
S114 Total												
S117	Royersford_WW	1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	Sodium Hypochlorite	$0.3850	$0.3850	$0.4081	$0.4081	$0.4081	$0.4081	$0.4326	$0.4326
S117		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	Chemicals - Other	$0.4783	$0.4783	$0.5070	$0.5070	$0.5070	$0.5070	$0.5374	$0.5374
S117		1203041	CHM,PACL,DELPAC 1525, BULK	Polymers	$0.3340	$0.3340	$0.3507	$0.3507	$0.3507	$0.3507	$0.3682	$0.3682
S117 Total												
S119	Clarion Sewer	1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine	$1.9425	$1.9425	$2.0785	$2.0785	$2.0785	$2.0785	$2.2032	$2.2032
S119		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	Chemicals - Other	$3.1100	$3.1100	$3.2966	$3.2966	$3.2966	$3.2966	$3.4944	$3.4944
S119		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	Sodium Hypochlorite	$0.3320	$0.3320	$0.3519	$0.3519	$0.3519	$0.3519	$0.3730	$0.3730
S119		1201881	CHM,BIOXIDE-AQ,BULK	Chemicals - Other	$0.3150	$0.3150	$0.3339	$0.3339	$0.3339	$0.3339	$0.3539	$0.3539
S119		1202692	CHM,PLYMR,POLLUTREAT CL-835,2290LB,TOTE	Phosphates	$2.9200	$2.9200	$3.0806	$3.0806	$3.0806	$3.0806	$3.2500	$3.2500
S119		WE	Accu-tab Wastewater Chlorination Tablets	Chemicals - Other	$404.5800	$404.5800	$428.8548	$428.8548	$428.8548	$428.8548	$454.5861	$454.5861
S119		WE	Aquabac for redworm treatment	Chemicals - Other	$70.6600	$70.6600	$74.8996	$74.8996	$74.8996	$74.8996	$79.3936	$79.3936
S119		WE	Aquashade Aquatic Plant-Algae Control, 1	Chemicals - Other	$62.5200	$62.5200	$66.2712	$66.2712	$66.2712	$66.2712	$70.2475	$70.2475
S119		WE	Qwik-Zyme Grease Degrader 2 x 2.5 Gallon	Chemicals - Other	$190.1300	$190.1300	$201.5378	$201.5378	$201.5378	$201.5378	$213.6301	$213.6301
S119		WE	Qwik-Zyme Grease Degrader 55 Gallon Drum	Chemicals - Other	$1,716.0000	$1,716.0000	$1,818.9600	$1,818.9600	$1,818.9600	$1,818.9600	$1,928.0976	$1,928.0976
S119		WE	Aquafix	Chemicals - Other	$345.0000	$345.0000	$365.7000	$365.7000	$365.7000	$365.7000	$387.6420	$387.6420
S119 Total												
S136	Coatesville Sewer	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1073	$0.1073	$0.1116	$0.1116	$0.1116	$0.1116	$0.1161	$0.1161
S136		1200630	CHM,LIME,HYDRATED,50 LB	Lime	$0.3524	$0.3524	$0.3700	$0.3700	$0.3700	$0.3700	$0.3885	$0.3885
S136		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	Sodium Hypochlorite	$0.3029	$0.3029	$0.3211	$0.3211	$0.3211	$0.3211	$0.3403	$0.3403
S136		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.3850	$0.3850	$0.4081	$0.4081	$0.4081	$0.4081	$0.4326	$0.4326
S136		1201026	CHM,LIME,GROUND QUICK,BULK	Lime	$0.1229	$0.1229	$0.1290	$0.1290	$0.1290	$0.1290	$0.1355	$0.1355
S136		1201321	CHM,THIOGUARD/MAGOX 93 HR 325M 50LB	Chemicals - Other								
S136		1202102	CHM,PLYMR,SLUDGE POLLUTREAT CL-888,2290L	Polymers	$2.1000	$2.1000	$2.2050	$2.2050	$2.2050	$2.2050	$2.3153	$2.3153
S136		1202411	CHM,PLYMR,SLDGE POLLUTREAT,CL-186,2290LB	Polymers	$2.1600	$2.1600	$2.2680	$2.2680	$2.2680	$2.2680	$2.3814	$2.3814
S136 Total												
S139	Claysville Sewer	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$2.8500	$2.8500	$3.0495	$3.0495	$3.0495	$3.0495	$3.2325	$3.2325
S139		1200701	CHM,PACL,DELPC2020,55GA	Chemicals - Other	$0.5100	$0.5100	$0.5406	$0.5406	$0.5406	$0.5406	$0.5730	$0.5730
S139		1200890	CHM,SODIUM BICARBONATE,100%,50LB	Chemicals - Other	$0.4200	$0.4200	$0.4452	$0.4452	$0.4452	$0.4452	$0.4719	$0.4719
S139		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	Chemicals - Other	$0.2900	$0.2900	$0.3074	$0.3074	$0.3074	$0.3074	$0.3258	$0.3258
S139 Total												
S154	Koppel Borough	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine								
S154		1200849	CHM,POLYMER,SLUDGE POLLUTECH,40LB	Polymers	$4.5000	$4.5000	$4.7250	$4.7250	$4.7250	$4.7250	$4.9613	$4.9613
S154 Total												
S157	Paint-Elk Twp Sewer	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$2.8958	$2.8958	$3.0985	$3.0985	$3.0985	$3.0985	$3.2844	$3.2844
S157		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	Sodium Hypochlorite	$0.6490	$0.6490	$0.6879	$0.6879	$0.6879	$0.6879	$0.7292	$0.7292
S157		WE	Accu-Tab Wastewater Chlorination Ta	Chemicals - Other	$206.1000	$206.1000	$218.4660	$218.4660	$218.4660	$218.4660	$231.5740	$231.5740
S157		ZI	Seven Seas Pool - Algaecide	Chemicals - Other	$1,437.3000	$1,437.3000	$1,523.5380	$1,523.5380	$1,523.5380	$1,523.5380	$1,614.9503	$1,614.9503
S157 Total												
S158	McEwensville Sewer	1201115	CHM,SOD SULFITE, TAB 2 5/8"X13/16",92%	Chemicals - Other	$6.1500	$6.1500	$6.5190	$6.5190	$6.5190	$6.5190	$6.9101	$6.9101
S158		1202041	CHM,CALCIUM,HYPO,70%,BIOSANITIZER,100LB	Sodium Hypochlorite	$4.4149	$4.4149	$4.6798	$4.6798	$4.6798	$4.6798	$4.9606	$4.9606
S158		WE	USA Bluebook Dechlorination Tablets 45	Chemicals - Other	$154.3600	$154.3600	$163.6216	$163.6216	$163.6216	$163.6216	$173.4389	$173.4389
S158 Total												

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				PRICING								
Plant	Name 1	Material	Material Description	Chemical Family	Current Unit Price 3Q-2023	Unit Price 4Q-2023	Unit Price 1Q-2024	Unit Price 2Q-2024	Unit Price 3Q-2024	Unit Price 4Q-2024	Unit Price 1Q-2025	Unit Price 2Q-2025
S159	Fairview Sewer North	1202056	CHM,SODIUM ALUMINATE,38%,BULK	Aluminum sulfate	$0.4710	$0.4710	$0.4898	$0.4898	$0.4898	$0.4898	$0.5094	$0.5094
S159 Total												
S160	Fairview Sewer South	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine								
S160		1202055	CHM,PLYMR,SLUDGE POLLUTREAT CL-981,55GA	Polymers	$2.3200	$2.3200	$2.4360	$2.4360	$2.4360	$2.4360	$2.5578	$2.5578
S160		1202056	CHM,SODIUM ALUMINATE,38%,BULK	Aluminum sulfate	$0.4710	$0.4710	$0.4898	$0.4898	$0.4898	$0.4898	$0.5094	$0.5094
S160		WE	PlantPRO Bio-Health Bacterial Supplement	Chemicals - Other	$338.2700	$338.2700	$358.5662	$358.5662	$358.5662	$358.5662	$380.0802	$380.0802
S160 Total												
S162	New Cumberland Sewer	1201001	CHM,ALUM,SULFATE,100%,50LB	Aluminum Sulfate	$0.3350	$0.3350	$0.3484	$0.3484	$0.3484	$0.3484	$0.3623	$0.3623
S162		1202055	CHM,PLYMR,SLUDGE POLLUTREAT CL-981,55GA	Polymers	$2.3200	$2.3200	$2.4360	$2.4360	$2.4360	$2.4360	$2.5578	$2.5578
S162 Total												
S189	Turbotville_SEWER	1200551	CHM,ALUM,SULFAT LIQUID,50%,55GA	Aluminum Sulfate	$0.3359	$0.3359	$0.3493	$0.3493	$0.3493	$0.3493	$0.3633	$0.3633
S189		1202041	CHM,CALCIUM,HYPO,70%,BIOSANITIZER,100LB	Sodium Hypochlorite	$3.7500	$3.7500	$3.9750	$3.9750	$3.9750	$3.9750	$4.2135	$4.2135
S189		1202702	CHM,ALUM,SULFATE LIQUID,50%,220 GA TOTE	Aluminum Sulfate								
S189 Total												
S190	York_WW	1200615	CHM,FERRIC,CHLORID,45%,275GA	Ferric Chloride	$0.4183	$0.4183	$0.4099	$0.4099	$0.4099	$0.4099	$0.4099	$0.4099
S190		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	Sodium Hypochlorite	$0.3129	$0.3129	$0.3317	$0.3317	$0.3317	$0.3317	$0.3516	$0.3516
S190		1203211	CHM,FLOCCULANT 3022A, 265GA, TOTE	Polymers	$2.4450	$2.4450	$2.5673	$2.5673	$2.5673	$2.5673	$2.6956	$2.6956
S190		1203212	CHM,MICROC 2000,265GA, TOTE	Chemicals - Other	$0.6470	$0.6470	$0.6858	$0.6858	$0.6858	$0.6858	$0.7270	$0.7270
S190		1203213	CHM,ANTI-FOAM NS 8484, 50 GA, DRUM	Chemicals - Other	$1.2200	$1.2200	$1.2932	$1.2932	$1.2932	$1.2932	$1.3708	$1.3708
S190		1203481	CHM POLYMER,CLARIFLOC NE-1554, BULK	Polymers	$1.5000	$1.5000	$1.5750	$1.5750	$1.5750	$1.5750	$1.6538	$1.6538
S190		WE	F-625 Closed Loop D20/D75	Chemicals - Other	$1,268.4667	$1,268.4667	$1,344.5747	$1,344.5747	$1,344.5747	$1,344.5747	$1,425.2491	$1,425.2491
S190		WE	Filter feeder 5gal.	Chemicals - Other	$1,060.6700	$1,060.6700	$1,124.3102	$1,124.3102	$1,124.3102	$1,124.3102	$1,191.7688	$1,191.7688
S190 Total												
Grand Total												

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Plant	Name 1	Material	Material Description	Annualized 12 month Jun-24 Usage	Annualized 12 Month Jun-24 Amount	Annualized 12 month Jun-25 Usage	Annualized 12 Month Jun-25 Amount	COS Segment
S104	Lehman Pike Sewer	1200550	CHM,ALUM,SULFAT DRY,100%,50LB	4,050	$2,002	4,050	$2,082	Wastewater SSS General Operations
S104		1200630	CHM,LIME,HYDRATED,50 LB	1,900	703	1,900	738	Wastewater SSS General Operations
S104		1200882	CHM,LIGHT SODA ASH,100%,50LB	8,392	3,647	8,392	3,866	Wastewater SSS General Operations
S104		1200891	CHM,SODIUM BISULFITE,38%,15GA	4,785	3,649	4,785	3,868	Wastewater SSS General Operations
S104		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	54,731	13,924	54,731	14,759	Wastewater SSS General Operations
S104		1201037	CHM,PLYMR,CAT MAGNAFLOC LT22S 502,50LB	750	3,153	750	3,311	Wastewater SSS General Operations
S104		1201060	CHM,SODIUM ALUMINATE,38.5%,30GA	36,630	31,645	36,630	33,543	Wastewater SSS General Operations
S104		1201961	CHM,POLYMER,CATIONC PRAESTOL K279FLX 55	5,062	14,085	5,062	14,789	Wastewater SSS General Operations
S104 Total				**116,300**	**$72,808**	**116,300**	**$76,957**	
S106	Pocono Sewer	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	269,809	30,109	269,809	31,313	Wastewater SSS General Operations
S106		1201018	CHM,MAGNESIUM HYDROXIDE,53%,55GA	139,220	65,493	139,220	69,423	Wastewater SSS General Operations
S106		1201048	CHM,POLYMER,CATIONC SPRFLOC SD2085,55GA	2,440	6,687	2,440	7,021	Wastewater SSS General Operations
S106		1200912	CHM,SODIUM HYDROXIDE,25%,15GA 403	33,375	8,563	33,375	9,077	Wastewater SSS General Operations
S106		KR	USA Bluebook Formula 52 5-Gallon	2	184	2	195	Wastewater SSS General Operations
S106 Total				**444,846**	**$111,035**	**444,846**	**$117,028**	
S114	EXETER_WW	1200596	CHM,CHLORINE,100%,150LB CYLINDER	0	0	0	0	Wastewater SSS General Operations
S114		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0	0	0	0	Wastewater SSS General Operations
S114		1200898	CHM,SODIUM BISULFITE,38%,TOTE	0	0	0	0	Wastewater SSS General Operations
S114		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	449,870	94,419	449,870	100,084	Wastewater SSS General Operations
S114		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	6,474	3,363	6,474	3,564	Wastewater SSS General Operations
S114		1202791	CHM,POLYMER,CLARIFLOC NE-1745,250GA	37,605	69,099	37,605	72,554	Wastewater SSS General Operations
S114 Total				**493,949**	**$166,880**	**493,949**	**$176,202**	
S117	Royersford_WW	1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	21,697	8,855	21,697	9,386	Wastewater SSS General Operations
S117		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	11,065	5,610	11,065	5,947	Wastewater SSS General Operations
S117		1203041	CHM,PACL,DELPAC 1525, BULK	128,645	45,116	128,645	47,372	Wastewater SSS General Operations
S117 Total				**161,408**	**$59,581**	**161,408**	**$62,704**	
S119	Clarion Sewer	1200597	CHM,CHLORINE,100%,2000LB CYLINDER	6,631	13,782	6,631	14,609	Wastewater SSS General Operations
S119		1200871	CHM,POTASSIUM PERMANGANATE,100%,55LB	0	0	0	0	Wastewater SSS General Operations
S119		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	2,200	774	2,200	821	Wastewater SSS General Operations
S119		1201881	CHM,BIOXIDE-AQ,BULK	38,556	12,874	38,556	13,646	Wastewater SSS General Operations
S119		1202692	CHM,PLYMR,POLLUTREAT CL-835,2290LB,TOTE	5,240	16,142	5,240	17,030	Wastewater SSS General Operations
S119		WE	Accu-tab Wastewater Chlorination Tablets	60	25,731	60	27,275	Wastewater SSS General Operations
S119		WE	Aquabac for redworm treatment	200	14,980	200	15,879	Wastewater SSS General Operations
S119		WE	Aquashade Aquatic Plant-Algae Control, 1	50	3,314	50	3,512	Wastewater SSS General Operations
S119		WE	Qwik-Zyme Grease Degrader 2 x 2.5 Gallon	15	3,023	15	3,204	Wastewater SSS General Operations
S119		WE	Qwik-Zyme Grease Degrader 55 Gallon Drum	2	3,638	2	3,856	Wastewater SSS General Operations
S119		WE	Aquafix	16	5,851	16	6,202	Wastewater SSS General Operations
S119 Total				**52,970**	**$100,110**	**52,970**	**$106,036**	
S136	Coatesville Sewer	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	230,723	25,747	230,723	26,777	Wastewater SSS General Operations
S136		1200630	CHM,LIME,HYDRATED,50 LB	6,400	2,368	6,400	2,487	Wastewater SSS General Operations
S136		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	630	202	630	214	Wastewater SSS General Operations
S136		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	73,600	30,036	73,600	31,838	Wastewater SSS General Operations
S136		1201026	CHM,LIME,GROUND QUICK,BULK	1,071,148	138,226	1,071,148	145,138	Wastewater SSS General Operations
S136		1201321	CHM,THIOGUARD/MAGOX 93 HR 325M 50LB	0	0	0	0	Wastewater SSS General Operations
S136		1202102	CHM,PLYMR,SLUDGE POLLUTREAT CL-888,2290L	18,400	40,572	18,400	42,601	Wastewater SSS General Operations
S136		1202411	CHM,PLYMR,SLDGE POLLUTREAT,CL-186,2290LB	95,119	215,730	95,119	226,516	Wastewater SSS General Operations
S136 Total				**1,496,020**	**$452,882**	**1,496,020**	**$475,571**	
S139	Claysville Sewer	1200596	CHM,CHLORINE,100%,150LB CYLINDER	8,148	24,847	8,148	26,338	Wastewater SSS General Operations
S139		1200701	CHM,PACL,DELPC2020,55GA	43,428	23,477	43,428	24,886	Wastewater SSS General Operations
S139		1200890	CHM,SODIUM BICARBONATE,100%,50LB	42,050	18,721	42,050	19,844	Wastewater SSS General Operations
S139		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	8,902	2,736	8,902	2,901	Wastewater SSS General Operations
S139 Total				**102,528**	**$69,782**	**102,528**	**$73,969**	
S154	Koppel Borough	1200596	CHM,CHLORINE,100%,150LB CYLINDER	0	0	0	0	Wastewater SSS General Operations
S154		1200849	CHM,POLYMER,SLUDGE POLLUTECH,40LB	420	1,985	420	2,084	Wastewater SSS General Operations
S154 Total				**420**	**$1,985**	**420**	**$2,084**	
S157	Paint-Elk Twp Sewer	1200596	CHM,CHLORINE,100%,150LB CYLINDER	0	0	0	0	Wastewater SSS General Operations
S157		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	9,636	6,629	9,636	7,027	Wastewater SSS General Operations
S157		WE	Accu-Tab Wastewater Chlorination Ta	90	19,662	90	20,842	Wastewater SSS General Operations
S157		ZI	Seven Seas Pool - Algaecide	1	1,524	1	1,615	Wastewater SSS General Operations
S157 Total				**9,727**	**$27,814**	**9,727**	**$29,483**	
S158	McEwensville Sewer	1201115	CHM,SOD SULFITE, TAB 2 5/8"X13/16",92%	185	1,206	185	1,278	Wastewater SSS General Operations
S158		1202041	CHM,CALCIUM,HYPO,70%,BIOSANITIZER,100LB	560	2,621	560	2,778	Wastewater SSS General Operations
S158		WE	USA Bluebook Dechlorination Tablets 45	4	654	4	694	Wastewater SSS General Operations
S158 Total				**749**	**$4,481**	**749**	**$4,750**	

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Plant	Name 1	Material	Material Description	Annualized 12 month Jun-24 Usage	Annualized 12 Month Jun-24 Amount	Annualized 12 month Jun-25 Usage	Annualized 12 Month Jun-25 Amount	COS Segment
S159	Fairview Sewer North	1202056	CHM,SODIUM ALUMINATE,38%,BULK	40,597	19,886	40,597	20,681	Wastewater SSS General Operations
S159 Total				**40,597**	**$19,886**	**40,597**	**$20,681**	
S160	Fairview Sewer South	1200596	CHM,CHLORINE,100%,150LB CYLINDER	0	0	0	0	Wastewater SSS General Operations
S160		1202055	CHM,PLYMR,SLUDGE POLLUTREAT CL-981,55GA	4,950	12,058	4,950	12,661	Wastewater SSS General Operations
S160		1202056	CHM,SODIUM ALUMINATE,38%,BULK	80,323	39,345	80,323	40,919	Wastewater SSS General Operations
S160		WE	PlantPRO Bio-Health Bacterial Supplement	2	717	2	760	Wastewater SSS General Operations
S160 Total				**85,275**	**$52,121**	**85,275**	**$54,341**	
S162	New Cumberland Sewer	1201001	CHM,ALUM,SULFATE,100%,50LB	46,650	16,253	46,650	16,903	Wastewater SSS General Operations
S162		1202055	CHM,PLYMR,SLUDGE POLLUTREAT CL-981,55GA	7,846	19,113	7,846	20,068	Wastewater SSS General Operations
S162 Total				**54,496**	**$35,366**	**54,496**	**$36,971**	
S189	Turbotville_SEWER	1200551	CHM,ALUM,SULFAT LIQUID,50%,55GA	10,150	3,546	10,150	3,688	Wastewater SSS General Operations
S189		1202041	CHM,CALCIUM,HYPO,70%,BIOSANITIZER,100LB	225	894	225	948	Wastewater SSS General Operations
S189		1202702	CHM,ALUM,SULFATE LIQUID,50%,220 GA TOTE	0	0	0	0	Wastewater SSS General Operations
S189 Total				**10,375**	**$4,440**	**10,375**	**$4,636**	
S190	York_WW	1200615	CHM,FERRIC,CHLORID,45%,275GA	235,847	96,682	235,847	96,682	Wastewater SSS General Operations
S190		1200942	CHM,SODIUM HYPOCHLORITE,13%,MINI BULK	13,305	4,413	13,305	4,678	Wastewater SSS General Operations
S190		1203211	CHM,FLOCCULANT 3022A, 265GA, TOTE	140,010	359,440	140,010	377,412	Wastewater SSS General Operations
S190		1203212	CHM,MICROC 2000,265GA, TOTE	8	5	8	5	Wastewater SSS General Operations
S190		1203213	CHM,ANTI-FOAM NS 8484, 50 GA, DRUM	520	673	520	713	Wastewater SSS General Operations
S190		1203481	CHM POLYMER,CLARIFLOC NE-1554, BULK	64,297	101,269	64,297	106,332	Wastewater SSS General Operations
S190		WE	F-625 Closed Loop D20/D75	0	0	0	0	Wastewater SSS General Operations
S190		WE	Filter feeder 5gal.	0	0	0	0	Wastewater SSS General Operations
S190 Total				**453,987**	**$562,481**	**453,987**	**$585,822**	
Grand Total				**3,523,647**	**$1,741,650**	**3,523,647**	**$1,827,234**	

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12 Month Actual Ending June 2020 to June 2023

				Quantity					Amount				
Plant	Name 1	Material	Material Description	2020 Total Quantity	2021 Total Quantity	2022 Total Quantity	3-Year Average Quantity	Base Year 12 Mo June 2023 Quantity	2020 Total Amount	2021 Total Amount	2022 Total Amount	3-Year Average Amount	Base Year 12 Mo June 2023 Amount
S121	Kane_WW	1200596	CHM,CHLORINE,100%,150LB CYLINDER	(1,348.00)	3,568.00	4,254.00	2,158.00	4,042.00	($1,788)	$4,975	$14,073	$5,753	$21,457
S121		1200611	CHM,FERRIC,CHLORID,38% 55GA	450.00	22,749.00	24,532.00	15,910.33	19,580.00	232	8,217	9,784	6,078	8,605
S121		1200882	CHM,LIGHT SODA ASH,100%,50LB	(2,767.00)	1,752.00	2,330.00	438.33	55.00	(1,015)	650	1,003	213	27
S121		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	(1,481.00)	19,855.00	23,222.00	13,865.33	21,932.00	(480)	9,412	10,873	6,602	10,828
S121		1202881	CHM,POLYMER,SUPERFLOC SD2081,55GA	(886.00)	2,079.00	4,283.00	1,825.33	3,866.00	(2,060)	5,015	10,013	4,322	9,109
S121 Total				**(6,032.00)**	**50,003.00**	**58,621.00**	**34,197.33**	**49,475.00**	**($5,111)**	**$28,269**	**$45,746**	**$22,968**	**$50,026**
S129	McKeesport WW	1200596	CHM,CHLORINE,100%,150LB CYLINDER	250.00	730.00	0.00	326.67	662.00	236	587	0	275	908
S129		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	31,768.00	28,300.00	0.00	20,022.67	35,499.00	12,777	11,205	0	7,994	50,189
S129		1202362	CHM,POLYMER, NMFC 46030,55GA	0.00	0.00	0.00	0.00	36,236.00	0	0	0	0	79,096
S129		WE	Accu-tab Wastewater Chlorination Tablets				0.00	9.00				0	1,842
S129 Total				**32,018.00**	**29,030.00**	**0.00**	**20,349.33**	**72,406.00**	**$13,013**	**$11,793**	**$0**	**$8,269**	**$132,036**
S161	Scranton Sewer	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	882,165.00	375,062.00	272,370.00	509,865.67	492,371.00	73,484	31,013	23,137	42,545	46,054
S161		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	110,824.00	103,988.00	89,637.00	101,483.00	73,140.00	24,343	27,221	55,875	35,813	68,742
S161		1200914	CHM,SODIUM HYDROXIDE,25%,330GA	0.00	4,260.00	21,790.00	8,683.33	31,340.00	0	692	4,710	1,801	8,188
S161		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	83,715.00	0.00	0.00	27,905.00	0.00	14,905	0	0	4,968	0
S161		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	462.00	0.00	0.00	154.00	0.00	134	0	0	45	0
S161		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	0.00	9,412.78	122,589.00	44,000.59	140,540.00	0	932	17,679	6,204	25,563
S161		1201019	CHM,MAGNESIUM HYDROXIDE,60%,BULK	1,762,053.00	1,803,226.00	1,879,512.00	1,814,930.33	1,800,969.00	343,552	355,943	398,617	366,037	398,394
S161		1202171	CHM,SULPHUR DIOXIDE,100%,2000LB CYLINDER	36,423.00	41,325.00	44,698.00	40,815.33	41,884.00	19,706	23,336	23,244	22,096	21,210
S161		1202172	CHM,POLYMER,CATIONC CEDRFLOC 347,275GA	35,477.00	49,402.00	38,880.00	41,253.00	41,404.00	54,904	80,107	72,424	69,145	87,965
S161		1202174	CHM,POLYMER,CATIONC CEDRFLOC 349,BULK	44,640.00	50,380.00	63,202.00	52,740.67	62,985.00	68,905	81,789	121,008	90,567	135,281
S161		1202175	CHM,MICROC2000,BULK	1,443,531.00	547,888.00	511,106.00	834,175.00	809,051.00	322,732	125,708	176,045	208,162	295,698
S161		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK										
S161		1202761	CHM,PLYMR,CATIONC,NALCO 8102 PLUS,275GA										
S161		1202771	CHM,POLYMER,CEDARFLOC,5326,2300LB	46,669.00	0.00	0.00	15,556.33	0.00	71,730	0	0	23,910	0
S161 Total				**4,445,959.00**	**2,984,943.78**	**3,043,784.00**	**3,491,562.26**	**3,493,684.00**	**$994,396**	**$726,741**	**$892,738**	**$871,292**	**$1,087,096**
Grand Total				**4,471,945.00**	**3,063,976.78**	**3,102,405.00**	**3,546,108.93**	**3,615,565.00**	**$1,002,298**	**$766,803**	**$938,484**	**$902,528**	**$1,269,157**

Pennsylvania American Water Company
Chemical Expense Workpaper - Wastewater CSS Operations
Projected Annual Usage

Plant	Name 1	Material	Material Description	Base Year Annual Usage	Usage Adjustment	Projected Annual Usage	Comment
S121	Kane_WW	1200596	CHM,CHLORINE,100%,150LB CYLINDER	4,042.00		4,042.00	
S121		1200611	CHM,FERRIC,CHLORID,38% 55GA	19,580.00		19,580.00	
S121		1200882	CHM,LIGHT SODA ASH,100%,50LB	55.00		55.00	
S121		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	21,932.00		21,932.00	
S121		1202881	CHM,POLYMER,SUPERFLOC SD2081,55GA	3,866.00		3,866.00	
S121 Total				**49,475.00**	**0.00**	**49,475.00**	
S129	McKeesport WW	1200596	CHM,CHLORINE,100%,150LB CYLINDER	662.00		662.00	
S129		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	35,499.00		35,499.00	
S129		1202362	CHM,POLYMER, NMFC 46030,55GA	36,236.00		36,236.00	
S129		WE	Accu-tab Wastewater Chlorination Tablets	9.00		9.00	
S129 Total				**72,406.00**	**0.00**	**72,406.00**	
S161	Scranton Sewer	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	492,371.00		492,371.00	
S161		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	73,140.00	(73,140.00)	0.00	Remove, switching to UV
S161		1200914	CHM,SODIUM HYDROXIDE,25%,330GA	31,340.00		31,340.00	
S161		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	0.00		0.00	Currently not being used
S161		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	0.00		0.00	Currently not being used
S161		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	140,540.00		140,540.00	
S161		1201019	CHM,MAGNESIUM HYDROXIDE,60%,BULK	1,800,969.00		1,800,969.00	
S161		1202171	CHM,SULPHUR DIOXIDE,100%,2000LB CYLINDER	41,884.00	(41,884.00)	0.00	Remove, switching to UV
S161		1202172	CHM,POLYMER,CATIONC CEDRFLOC 347,275GA	41,404.00	(41,404.00)	0.00	Remove, will not need with new centrifuge project
S161		1202174	CHM,POLYMER,CATIONC CEDRFLOC 349,BULK	62,985.00		62,985.00	
S161		1202175	CHM,MICROC2000,BULK	809,051.00		809,051.00	
S161		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	0.00	11,000.00	11,000.00	New chemical
S161		1202761	CHM,PLYMR,CATIONC,NALCO 8102 PLUS,275GA	0.00	528,000.00	528,000.00	New chemical
S161		1202771	CHM,POLYMER,CEDARFLOC,5326,2300LB	0.00		0.00	
S161 Total				**3,493,684.00**	**382,572.00**	**3,876,256.00**	
Grand Total				**3,615,565.00**	**382,572.00**	**3,998,137.00**	

Pennsylvania American Water Company
Chemical Expense Workpaper - Wastewater CSS Operations
Projected 12-Months June 2024 and June 2025

				PRICING								
Plant	Name 1	Material	Material Description	Chemical Family	Current Unit Price 3Q-2023	Unit Price 4Q-2023	Unit Price 1Q-2024	Unit Price 2Q-2024	Unit Price 3Q-2024	Unit Price 4Q-2024	Unit Price 1Q-2025	Unit Price 2Q-2025
S121	Kane_WW	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$6.1125	$6.1125	$6.5404	$6.5404	$6.5404	$6.5404	$6.9328	$6.9328
S121		1200611	CHM,FERRIC,CHLORID,38% 55GA	Ferric Chloride	$0.4508	$0.4508	$0.4418	$0.4418	$0.4418	$0.4418	$0.4418	$0.4418
S121		1200882	CHM,LIGHT SODA ASH,100%,50LB	Chemicals - Other	$0.5752	$0.5752	$0.6097	$0.6097	$0.6097	$0.6097	$0.6463	$0.6463
S121		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	Chemicals - Other	$0.5564	$0.5564	$0.5898	$0.5898	$0.5898	$0.5898	$0.6252	$0.6252
S121		1202881	CHM,POLYMER,SUPERFLOC SD2081,55GA	Polymers	$2.4200	$2.4200	$2.5410	$2.5410	$2.5410	$2.5410	$2.6681	$2.6681
S121 Total												
S129	McKeesport WW	1200596	CHM,CHLORINE,100%,150LB CYLINDER	Chlorine	$1.9600	$1.9600	$2.0972	$2.0972	$2.0972	$2.0972	$2.2230	$2.2230
S129		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine	$1.9600	$1.9600	$2.0972	$2.0972	$2.0972	$2.0972	$2.2230	$2.2230
S129		1202362	CHM,POLYMER, NMFC 46030,55GA	Polymers	$2.2600	$2.2600	$2.3730	$2.3730	$2.3730	$2.3730	$2.4917	$2.4917
S129		WE	Accu-tab Wastewater Chlorination Tablets	Chemicals - Other	$204.7000	$204.7000	$216.9820	$216.9820	$216.9820	$216.9820	$230.0009	$230.0009
S129 Total												
S161	Scranton Sewer	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	Aluminum Sulfate	$0.1050	$0.1050	$0.1092	$0.1092	$0.1092	$0.1092	$0.1136	$0.1136
S161		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	Chlorine	$1.3775	$1.3775	$1.4739	$1.4739	$1.4739	$1.4739	$1.5624	$1.5624
S161		1200914	CHM,SODIUM HYDROXIDE,25%,330GA	Caustic Soda	$0.3039	$0.3039	$0.3282	$0.3282	$0.3282	$0.3282	$0.3479	$0.3479
S161		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	Caustic Soda								
S161		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	Sodium Hypochlorite	$0.8126	$0.8126	$0.8614	$0.8614	$0.8614	$0.8614	$0.9130	$0.9130
S161		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	Sodium Hypochlorite	$0.1980	$0.1980	$0.2099	$0.2099	$0.2099	$0.2099	$0.2225	$0.2225
S161		1201019	CHM,MAGNESIUM HYDROXIDE,60%,BULK	Chemicals - Other	$0.2434	$0.2434	$0.2580	$0.2580	$0.2580	$0.2580	$0.2735	$0.2735
S161		1202171	CHM,SULPHUR DIOXIDE,100%,2000LB CYLINDER	Chemicals - Other	$0.4478	$0.4478	$0.4747	$0.4747	$0.4747	$0.4747	$0.5031	$0.5031
S161		1202172	CHM,POLYMER,CATIONC CEDRFLOC 347,275GA	Polymers	$2.3300	$2.3300	$2.4465	$2.4465	$2.4465	$2.4465	$2.5688	$2.5688
S161		1202174	CHM,POLYMER,CATIONC CEDRFLOC 349,BULK	Polymers	$2.3300	$2.3300	$2.4465	$2.4465	$2.4465	$2.4465	$2.5688	$2.5688
S161		1202175	CHM,MICROC2000,BULK	Chemicals - Other	$0.3680	$0.3680	$0.3901	$0.3901	$0.3901	$0.3901	$0.4135	$0.4135
S161		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	Chemicals - Other	$0.4783	$0.4783	$0.5070	$0.5070	$0.5070	$0.5070	$0.5374	$0.5374
S161		1202761	CHM,PLYMR,CATIONC,NALCO 8102 PLUS,275GA	Polymers	$1.3800	$1.3800	$1.4490	$1.4490	$1.4490	$1.4490	$1.5215	$1.5215
S161		1202771	CHM,POLYMER,CEDARFLOC,5326,2300LB	Polymers								
S161 Total												
Grand Total												

Pennsylvania American Water Company
Chemical Expense Workpaper - Wastewater CSS Operations
Projected 12-Months June 2024 and June 2025

Plant	Name 1	Material	Material Description	Annualized 12 month Jun-24 Usage	Annualized 12 Month Jun-24 Amount	Annualized 12 month Jun-25 Usage	Annualized 12 Month Jun-25 Amount	COS Segment
S121	Kane_WW	1200596	CHM,CHLORINE,100%,150LB CYLINDER	4,042	$26,436	4,042	$28,022	Wastewater CSS Operations
S121		1200611	CHM,FERRIC,CHLORID,38% 55GA	19,580	8,650	19,580	8,650	Wastewater CSS Operations
S121		1200882	CHM,LIGHT SODA ASH,100%,50LB	55	34	55	36	Wastewater CSS Operations
S121		1200895	CHM,SODIUM BISULFITE,38%,55GA 310	21,932	12,935	21,932	13,711	Wastewater CSS Operations
S121		1202881	CHM,POLYMER,SUPERFLOC SD2081,55GA	3,866	9,824	3,866	10,315	Wastewater CSS Operations
S121 Total				**49,475**	**$57,879**	**49,475**	**$60,734**	
S129	McKeesport WW	1200596	CHM,CHLORINE,100%,150LB CYLINDER	662	1,388	662	1,472	Wastewater CSS Operations
S129		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	35,499	74,449	35,499	78,915	Wastewater CSS Operations
S129		1202362	CHM,POLYMER, NMFC 46030,55GA	36,236	85,988	36,236	90,287	Wastewater CSS Operations
S129		WE	Accu-tab Wastewater Chlorination Tablets	9	1,953	9	2,070	Wastewater CSS Operations
S129 Total				**72,406**	**$163,778**	**72,406**	**$172,744**	
S161	Scranton Sewer	1200552	CHM,ALUM,SULFAT LIQUID,50%,BULK	492,371	53,767	492,371	55,918	Wastewater CSS Operations
S161		1200597	CHM,CHLORINE,100%,2000LB CYLINDER	0	0	0	0	Wastewater CSS Operations
S161		1200914	CHM,SODIUM HYDROXIDE,25%,330GA	31,340	10,286	31,340	10,903	Wastewater CSS Operations
S161		1200917	CHM,SODIUM HYDROXIDE,25%,MINI BULK	0	0	0	0	Wastewater CSS Operations
S161		1200938	CHM,SODIUM HYPOCHLORITE,13%,55GA	0	0	0	0	Wastewater CSS Operations
S161		1200941	CHM,SODIUM HYPOCHLORITE,13%,BULK	140,540	29,497	140,540	31,266	Wastewater CSS Operations
S161		1201019	CHM,MAGNESIUM HYDROXIDE,60%,BULK	1,800,969	464,657	1,800,969	492,537	Wastewater CSS Operations
S161		1202171	CHM,SULPHUR DIOXIDE,100%,2000LB CYLINDER	0	0	0	0	Wastewater CSS Operations
S161		1202172	CHM,POLYMER,CATIONC CEDRFLOC 347,275GA	0	0	0	0	Wastewater CSS Operations
S161		1202174	CHM,POLYMER,CATIONC CEDRFLOC 349,BULK	62,985	154,093	62,985	161,797	Wastewater CSS Operations
S161		1202175	CHM,MICROC2000,BULK	809,051	315,595	809,051	334,530	Wastewater CSS Operations
S161		1202632	CHM,SODIUM BISULFITE,38%,MINI BULK	11,000	5,577	11,000	5,912	Wastewater CSS Operations
S161		1202761	CHM,PLYMR,CATIONC,NALCO 8102 PLUS,275GA	528,000	765,072	528,000	803,326	Wastewater CSS Operations
S161		1202771	CHM,POLYMER,CEDARFLOC,5326,2300LB	0	0	0	0	Wastewater CSS Operations
S161 Total				**3,876,256**	**$1,798,543**	**3,876,256**	**$1,896,189**	
Grand Total				**3,998,137**	**$2,020,199**	**3,998,137**	**$2,129,667**	

Waste Disposal

Pennsylvania American Water
Waste Disposal Costs

			3-Yr Avg Change in Expense	14.30%	14.30%
			12 Mos June 2023	12 Mos June 2024	12 Mos June 2025
Segment	**Vendor**	**Services Provided**	**Amount**	**Amount**	**Amount**
Water Operations	Borough of Freeland Municipal	Sewer billing	$25,481	$29,124	$33,289
	Borough of Pottstown	Bulk sewer collection	22,909	26,185	29,929
	Borough of Steelton	Sewer billing	20,604	23,551	26,919
	Brownsville Municipal Authority	Sewer billing	29,082	33,240	37,994
	Butler Area Sewer Authority	Sewer billing	141,752	162,023	185,192
	Casella Waste Management of	Waste disposal	547	625	715
	Clym Environmental Services LL	Biohazard waste disposal	1,627	1,859	2,125
	Commonwealth Disposal Inc.	Sludge removal and disposal	324,960	371,429	424,544
	Connell Equipment Inc t/a RLE	Sludge removal and disposal	38,975	44,548	50,919
	Custom AG Service	Sludge removal and disposal	582,455	665,746	760,948
	Dallas Area Municipal Authority	Sewer billing	180	206	235
	Daltons Service Company LLC	Sludge removal and disposal	4,000	4,572	5,226
	Denali Water Solutions LLC	Sludge removal and disposal	862,220	985,517	1,126,446
	Eldredge Inc.	Removal of lab waste	13,733	15,697	17,942
	Hallstead Sanitary Service	Sludge removal and disposal	16,165	18,477	21,119
	Heritage-Crystal Clean Inc	Waste testing	424	485	554
	Keystone Sanitary Landfill Inc	Sludge removal and disposal	74,959	85,678	97,930
	Klines Services	Sludge removal and disposal	19,889	22,733	25,984
	Mealy Excavating & Construction	Sludge removal and disposal	3,864	4,417	5,048
	PA-American Sludge Surcharge Brownsville	Brownsville sludge surcharge	80,590	92,114	105,287
	RC Stahlnecker Co.	Sludge removal and disposal	88,048	100,639	115,030
	Robinson Portable Toilets	Toilet rentals	420	480	549
	Safety Clean Systems Inc.	Waste testing	3,639	4,160	4,755
	Soils Inc.	Residuals removal	189,443	216,533	247,498
	Waste Management National Services Inc	Waste removal	8,379	9,577	10,946
Water Operations Total			**$2,554,345**	**$2,919,617**	**$3,337,122**

Pennsylvania American Water
Waste Disposal Costs

			3-Yr Avg Change in Expense	14.30%	14.30%
			12 Mos	12 Mos	12 Mos
			June 2023	June 2024	June 2025
Segment	**Vendor**	**Services Provided**	**Amount**	**Amount**	**Amount**
Wastewater SSS General Operations	Allstate Septic Systems	Septic services	$71,346	$81,549	$93,210
	Amerigreen Inc.	Sludge removal and disposal	21,686	24,788	28,332
	Borough of Freeland Municipal	Sewer billing	220,563	252,104	288,155
	Borough of Pottstown	Sewer billing	175,827	200,970	229,709
	Carbon Limestone Landfill LLC	Sewer grit	2,439	2,788	3,187
	Connell Equipment Inc t/a RLE	Sludge removal and disposal	171,274	195,766	223,761
	Daltons Service Company LLC	Sludge removal and disposal	9,295	10,624	12,143
	Hapchuk Inc.	Sludge removal and disposal	74,536	85,194	97,377
	HydroTech Environmental LLC	Sludge removal and disposal	110,330	126,107	144,141
	Klines Services	Sludge removal and disposal	89,056	101,791	116,347
	Koberlein Environmental Svcs.	Sludge removal and disposal	18,466	21,106	24,124
	Lower Allen Township Authority	Fairview Township treatment plant	129,859	148,429	169,654
	Material Matters Inc.	Sludge removal and disposal	472,487	540,053	617,280
	Modern Landfill	Sewer grit	9,641	11,019	12,595
	Penn Waste Inc	Sludge removal and disposal	237,979	272,010	310,907
	RC Stahlnecker Co.	Sludge removal and disposal	18,485	21,128	24,150
	Republic Services	Sewer grit	10,324	11,801	13,488
	Synagro Technologies Inc.	Sludge recycling	247,252	282,609	323,023
	Waste Management National Services Inc	Waste removal	266,064	304,111	347,599
	Wind Driven Environmental	Septic and sludge removal	6,135	7,012	8,015
Wastewater SSS General Operations Total			**$2,363,044**	**$2,700,959**	**$3,087,197**

Pennsylvania American Water
Waste Disposal Costs

Segment	Vendor	Services Provided	3-Yr Avg Change in Expense 12 Mos June 2023 Amount	14.30% 12 Mos June 2024 Amount	14.30% 12 Mos June 2025 Amount
Wastewater CSS Operations	Casella Waste Management of	Waste removal	$45,379	$51,868	$59,285
	County Hauling	Sludge removal and disposal	284,471	325,151	371,647
	CWM Environmental Labs	Sludge removal and disposal	31,668	36,197	41,373
	Fournier Industries Inc.	Rotary press repairs	6,383	7,296	8,339
	Hapchuk Inc.	Sludge removal and disposal	86,220	98,549	112,642
	Keystone Sanitary Landfill Inc	Sludge removal and disposal	846,385	967,418	1,105,759
	MSL Oil & Gas Corp.	Sludge removal and disposal	4,505	5,149	5,886
Wastewater CSS Operations Total			**$1,305,011**	**$1,491,628**	**$1,704,931**

Transportation Expense

Pennsylvania-American Water Company - Water Operations
Transportation Expense

	Number of Units			Average Monthly Fees	Annual Costs	
Fleet Management	**6/30/2023**	**6/30/2024**	**6/30/2025**	**ARI Leasing**	**6/30/2024**	**6/30/2025**
Car & Light Duty trucks	600	608	616	$8.98	$65,517	$66,379
Medium & Heavy duty trucks	242	242	242	11.47	33,302	33,302
Trailers & Equipment	243	244	245	10.17	29,783	29,905
Total (excludes leased)	1,085	1,094	1,103			

				Other Expense	
Other Transportation Expenses[1]	**6/30/2023**	**6/30/2024**	**6/30/2025**	**6/30/2024**	**6/30/2025**
Fuel Expense	3,859,044	$4,254,504	$4,690,075	$4,254,504	$4,690,075
Titling and Registration fees	243,053	267,960	295,394	267,960	295,394
Maintenance Expense	2,609,057	2,876,424	3,170,908	2,876,424	3,170,908
Reimbursement of personal use	47,410	51,777	56,546	51,777	56,546
			Subtotal	$7,579,267	$8,342,509
Per unit cost (to be applied to change in number of units)			Capitalization %	39.55%	39.55%
Fuel Expense	$4,583	$5,005	$5,466	Less Amount Capitalized	$2,997,631	$3,299,497
Titling and Registration fees	289	315	344			
Maintenance Expense	3,099	3,384	3,696	**Pro forma**	**$4,581,636**	**$5,043,012**
			Per Book 6/30/23	$4,058,077	
3 Year Average - CPI Transportation Services		**9.21%**	**9.21%**		
			Pro forma 6/30/24		$4,581,636
			Adjustment	$523,559	$461,376

[1] 6/30/2024, 6/30/2025 costs are calculated using the 3 year average CPI Transportation Services

Pennsylvania-American Water Company - Wastewater SSS General Operations
Transportation Expense

	Number of Units			Average Monthly Fees	Annual Costs	
Fleet Management	**6/30/2023**	**6/30/2024**	**6/30/2025**	**ARI Leasing**	**6/30/2024**	**6/30/2025**
Car & Light Duty trucks	32	32	32	$9.05	$3,474	$3,474
Medium & Heavy duty trucks	17	17	17	11.34	2,312	2,312
Trailers & Equipment	16	16	16	10.64	2,044	2,044
Total (excludes leased)	65	65	65			

					Other Expense	
Other Transportation Expenses[1]	**6/30/2023**	**6/30/2024**	**6/30/2025**		**6/30/2024**	**6/30/2025**
Fuel Expense	$104,841	$114,496	$125,042		$114,496	$125,042
Titling and Registration fees	12,825	14,006	15,296		14,006	15,296
Maintenance Expense	65,223	71,230	77,790		71,230	77,790
Reimbursement of personal use	129	141	154		141	154
				Subtotal	$207,703	$226,112
Per unit cost (to be applied to change in number of units				Capitalization %	22.14%	22.14%
Fuel Expense	$2,140	$2,337	$2,552	Less Amount Capitalized	$45,981	$50,057
Titling and Registration fees	262	286	312			
Maintenance Expense	1,331	1,454	1,588	**Pro forma**	**$161,722**	**$176,055**
				Per Book 6/30/23	$171,440	
3 Year Average - CPI Transportation Services		**9.21%**	**9.21%**			
				Pro forma 6/30/24		$161,722
				Adjustment	($9,718)	$14,333

[1] 6/30/2024, 6/30/2025 costs are calculated using the 3 year average CPI Transportation Services

Pennsylvania-American Water Company - BASA WW Operations
Transportation Expense

Fleet Management	Number of Units 6/30/2023	6/30/2024	6/30/2025	Average Monthly Fees ARI Leasing	Annual Costs 6/30/2024	6/30/2025
Car & Light Duty trucks	0	11	11	$9.05	$1,194	$1,194
Medium & Heavy duty trucks	0	5	5	11.34	680	680
Trailers & Equipment	0	11	11	10.64	1,405	1,405
Total (excludes leased)	0	27	27			

Other Transportation Expenses[1]	6/30/2023	6/30/2024	6/30/2025
Fuel Expense	$0	$37,387	$40,830
Titling and Registration fees	0	4,573	4,995
Maintenance Expense	0	23,259	25,401
Per unit cost (to be applied to change in number of units			
Fuel Expense	$2,140	$2,337	$2,552
Titling and Registration fees	262	286	312
Maintenance Expense	1,331	1,454	1,588
3 Year Average - CPI Transportation Services		**9.21%**	**9.21%**

	Other Expense 6/30/2024	6/30/2025
	$37,387	$40,830
	4,573	4,995
	23,259	25,401
Subtotal	$68,498	$74,505
Capitalization %	22.14%	22.14%
Less Amount Capitalized	$15,164	$16,494
Pro forma	**$53,334**	**$58,011**
Per Book 6/30/23	$0	
Pro forma 6/30/24		$53,334
Adjustment	$53,334	$4,677

[1] 6/30/2024, 6/30/2025 costs are calculated using the 3 year average CPI Transportation Services

Pennsylvania-American Water Company - Brentwood WW Operations
Transportation Expense

	Number of Units			Average Monthly Fees	Annual Costs	
Fleet Management	**6/30/2023**	**6/30/2024**	**6/30/2025**	**ARI Leasing**	**6/30/2024**	**6/30/2025**
Car & Light Duty trucks	0	1	1	$9.05	$109	$109
Medium & Heavy duty trucks	0	0	0	11.34	0	0
Trailers & Equipment	0	0	0	10.64	0	0
Total (excludes leased)	0	1	1			

					Other Expense	
Other Transportation Expenses[1]	**6/30/2023**	**6/30/2024**	**6/30/2025**		**6/30/2024**	**6/30/2025**
Fuel Expense	$0	$2,337	$2,552		$2,337	$2,552
Titling and Registration fees	0	286	312		286	312
Maintenance Expense	0	1,454	1,588		1,454	1,588
				Subtotal	$4,186	$4,561
Per unit cost (to be applied to change in number of units				Capitalization %	22.14%	22.14%
Fuel Expense	$2,140	$2,337	$2,552	Less Amount Capitalized	$927	$1,010
Titling and Registration fees	262	286	312			
Maintenance Expense	1,331	1,454	1,588	**Pro forma**	**$3,259**	**$3,551**
				Per Book 6/30/23	$0	
3 Year Average - CPI Transportation Services		**9.21%**	**9.21%**			
				Pro forma 6/30/24		$3,259
				Adjustment	$3,259	$292

[1] 6/30/2024, 6/30/2025 costs are calculated using the 3 year average CPI Transportation Services

Pennsylvania-American Water Company - Wastewater CSS Operations
Transportation Expense

Fleet Management	Number of Units 6/30/2023	6/30/2024	6/30/2025	Average Monthly Fees ARI Leasing	Annual Costs 6/30/2024	6/30/2025
Car & Light Duty trucks	43	43	43	$8.87	$4,577	$4,577
Medium & Heavy duty trucks	29	29	29	11.59	4,034	4,034
Trailers & Equipment	25	25	25	25.94	7,781	7,781
Total (excludes leased)	97	97	97			

Other Transportation Expenses[1]	6/30/2023	6/30/2024	6/30/2025
Fuel Expense	$358,426	$391,437	$427,488
Titling and Registration fees	44,295	48,375	52,830
Maintenance Expense	326,903	357,011	389,892
Reimbursement of personal use	161	176	192
Per unit cost (to be applied to change in number of units			
Fuel Expense	$4,978	$5,437	$5,937
Titling and Registration fees	615	672	734
Maintenance Expense	4,540	4,958	5,415
3 Year Average - CPI Transportation Services		**9.21%**	**9.21%**

	Other Expense 6/30/2024	6/30/2025
	$391,437	$427,488
	48,375	52,830
	357,011	389,892
	176	192
Subtotal	$813,391	$886,794
Capitalization %	22.14%	22.14%
Less Amount Capitalized	$180,069	$196,319
Pro forma	**$633,322**	**$690,475**
Per Book 6/30/23	$546,312	
Pro forma 6/30/24		$633,322
Adjustment	$87,010	$57,153

[1] 6/30/2024, 6/30/2025 costs are calculated using the 3 year average CPI Transportation Services

Insurance Other Than Group

Pennsylvania-American Water Company
Insurance Other Than Group

Policy	Account	Per Books 6/30/2023	Adjustment	Present Rates 6/30/2024	Adjustment	Present Rates 6/30/2025
Workers Compensation	55720000	$346,495	$22,622	$369,117	$24,099	$393,217
Workers Compensation - Claims	55720000	1,198,695	0	1,198,695	0	1,198,695
Total Workers Compensation		1,545,189	22,622	1,567,812	24,099	1,591,911
Less: Capitalized	55720100	(599,816)	31,444	(568,371)	(8,737)	(577,108)
Expensed Workers Compensation		$945,374	$54,067	$999,441	$15,363	$1,014,803
General Liability	55710000	$964,056	$62,942	$1,026,999	$67,052	$1,094,051
General Liability - Claims	55710000	9,247,588	0	9,247,588	0	9,247,588
Balance Sheet Reserve Adjustment	55711000	181,430	(181,430)	0	0	0
Travelers Retrospective Premium Adjustment	55711000	2,055	(7,874)	(5,819)	0	(5,819)
Broker Service Fee	55730000	57,282	3,740	61,022	3,984	65,006
Excess General Liability	55710000	1,787,698	116,717	1,904,415	124,337	2,028,752
Property	55740000	3,716,320	242,635	3,958,955	258,476	4,217,431
Surety Bonds / Risk	55730000	22,869	1,493	24,362	1,591	25,953
Fiduciary Responsibility	55710000	33,162	2,165	35,327	2,306	37,633
Comprehensive Crime	55710000	6,449	421	6,870	449	7,319
Employment Practices	55710000	56,433	3,684	60,117	3,925	64,042
Directors & Officers	55710000	101,504	6,627	108,131	7,060	115,190
Business Travel	55730000	4,708	307	5,016	327	5,343
Aviation	55730000	56	4	59	4	63
Other Insurance	55730000	900	(900)	0	0	0
It Security / Cyber Risk	55710000	182,416	11,910	194,326	12,687	207,013
Law Liability	55710000	10,173	664	10,837	708	11,545
Auto Liability	55110000	87,734	5,728	93,462	6,102	99,564
Auto Liability - Claims	55110000	190,825	0	190,825	0	190,825
Equipment Discount	55710000	(919,599)	919,599	0	0	0
Total Policies Other Than Workers Compensation		$15,734,058	$1,188,433	$16,922,491	$489,008	$17,411,499
Total Expensed Policies		$16,679,432	$1,242,500	$17,921,932	$504,371	$18,426,302
Five year average change in expense, net Balance Sheet Reserves				**6.53%**		**6.53%**
Total Company						
Vehicle	55110000	$278,559	$5,728	$284,287	$6,102	$290,389
General Liability	55710000	11,469,880	1,124,730	12,594,610	218,524	12,813,133
Retro Premium Adjustment	55711000	183,485	(189,304)	(5,819)	0	(5,819)
Workmans Comp	55720000	1,545,189	22,622	1,567,812	24,099	1,591,911
Capital Credit	55720100	(599,816)	31,444	(568,371)	(8,737)	(577,108)
Insurance other	55730000	85,815	4,644	90,459	5,906	96,364
Insurance Property	55740000	3,716,320	242,635	3,958,955	258,476	4,217,431
		$16,679,432	$1,242,500	$17,921,932	$504,371	$18,426,302

Allocation of Revenue Requirement from Water to Wastewater
Factor 4: Depreciated Utility Plant in Service

As of 06/30/23	Depreciated Utility Plant in Service	Percentage
Water Operations	$4,758,924,437	81.06%
Wastewater SSS General Operations	660,270,985	11.25%
Wastewater CSS Operations	451,444,764	7.69%
Total Net Utility Plant in Service	$5,870,640,186	100.00%

Capitalization Rate	6/30/2024	6/30/2025
Water	39.55%	39.55%
Wastewater SSS	22.14%	22.14%
Wastewater CSS	22.14%	22.14%

Allocation of Present Rates 6/30/2024	Vehicle	General Liability	Workmans Comp	Capital Credit	Insurance other	Insurance Property	Total
Water Operations	$230,443	$10,204,474	$1,270,868	($502,634)	$73,326	$3,209,129	$14,485,606
Wastewater SSS General Operations	31,982	1,416,239	176,379	(39,047)	10,177	445,382	2,041,112
Wastewater CSS Operations	21,862	968,078	120,565	(26,691)	6,956	304,444	1,395,214
Total Company	$284,287	$12,588,791	$1,567,812	($568,371)	$90,459	($568,371)	$17,921,933

Allocation of Present Rates 6/30/2025	Vehicle	General Liability	Workmans Comp	Capital Credit	Insurance other	Insurance Property	Total
Water Operations	$235,390	$10,381,609	$1,290,403	($510,360)	$78,113	$3,418,650	$14,893,805
Wastewater SSS General Operations	32,669	1,440,823	179,090	(39,647)	10,841	474,461	2,098,237
Wastewater CSS Operations	22,331	984,882	122,418	(27,101)	7,410	324,320	1,434,260
Total Company	$290,390	$12,807,314	$1,591,911	($577,108)	$96,364	$4,217,431	$18,426,302

PENNSYLVANIA-AMERICAN WATER COMPANY
Travelers Retrospective Premium Adjustment

2018	($62,426)
2019	121,931
2020	(7,768)
2021	(82,887)
2022	2,055
5 YEAR AVERAGE	($5,819)
2018 - 2022	

Per Books	12 Months Ending June 2018	12 Months Ending June 2019	12 Months Ending June 2020	12 Months Ending June 2021	12 Months Ending June 2022	12 Months Ending June 2023
55110000 Insurance Vehicle	$225,420	$207,332	$225,377	$249,451	$265,232	$278,559
55710000 Insurance General Liabilty	9,122,239	9,755,759	9,620,594	11,375,771	11,038,467	11,469,880
55711000 Insurance Casualty Reserve	(2,017,551)	(25,216)	(901,767)	(2,221,572)	(2,369,245)	183,485
55720000 Insurance Workers Compensation	2,359,754	2,514,031	2,827,264	2,375,609	1,831,039	1,545,189
55720100 Insurance WC Capitalized Credits	(840,218)	(762,997)	(1,126,401)	(1,010,742)	(724,233)	(599,816)
55730000 Insurance Other	81,462	68,282	92,858	156,984	125,215	85,815
55740000 Insurance Property	1,173,794	1,321,643	2,072,272	2,905,236	3,245,712	3,716,320
Total: Insurance other than group	$10,104,899	$13,078,835	$12,810,198	$13,830,737	$13,412,187	$16,679,432
Total Without Reserve & Retro Adjustment	$12,122,451	$13,104,051	$13,711,965	$16,052,309	$15,781,432	$16,495,948
Annual % Change		8.10%	4.64%	17.07%	-1.69%	4.53%
					5 YEAR AVERAGE	**6.53%**

Regulatory and Rate Case Expense

Pennsylvania American Water - 2023 Rate Case
Water and Wastewater
Cost Estimate

		2023 Estimate
Legal Fees And Expenses		$1,350,000
Rate of Return		136,000
Depreciation		110,000
Cost of Service Studies		85,000
Miscellaneous / Customer Notice		457,622
Total		$2,138,622
Cost of Service Study and Stormwater (WW CSS)		$55,000
Subtotal Company Rate Case Expense		$2,193,622
Plus 10 year amortization of Demand Study (Approved R-2017-2595853; 10 year amortization period beginning January 2018)	26,709	$267,090
Plus 10 year amortization of Lead Service Line Costs (Approved R-2020-3019369; 10 year amortization period beginning January 2021)	25,224	252,241
Stormwater Fee Feasibility Study annual amortization adjusted for revised balance and amortization period extended 2 years. (Amortize balance 2 years starting 8/1/2024 to end 7/31/2026).	13,813	29,065
Total Company Regulatory Expense		$2,742,018

Miscellaneous / Customer Notice

Customer Notices	$451,622
Transcripts	3,000
Miscellaneous	3,000
Total	$457,622

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CONSULTING AGREEMENT between
Pennsylvania American Water and The Brattle Group, Inc.

This Consulting Agreement ("Agreement") is entered into as of this date 8/4/2023 ("Effective Date") by and between **Pennsylvania American Water Company**, a Pennsylvania corporation ("Company"), with its principal office located at 852 Wesley Drive Mechanicsburg PA 17055, and **The Brattle Group, Inc.** ("Consultant"), with its principal office located at One Beacon Street, Suite 2600, Boston, MA 02108 (sometimes individually referred to herein as a "Party," and collectively as the "Parties").

1. **Consultation Services**. The Company hereby retains the Consultant to provide services for the Company as described in **Attachment A** and such other related duties as discussed by the parties during the term of the Agreement. The Consultant will provide such services and related work product to the Company in accordance with the terms and provisions of this Agreement.

2. **Term of Agreement**. This Agreement shall remain in effect until an order is issued in the Company's next general base rate case or through **December 31, 2026**, whichever comes first (the "Term'), but may be extended by mutual, written Agreement of the parties. Notwithstanding the preceding sentence, the obligation of each party to maintain confidentiality shall be unlimited in duration.

3. **Relationship of the Parties**.

   A. Consultant is an independent contractor and not an agent or employee of the Company. Consultant shall not be or represent himself as being an agent of the Company, and shall not be, nor represent himself as being authorized to bind the Company to any liability or undertaking with any third party, nor shall the Company be liable for any liability, contractual representation, or warranty of the Consultant to any third party.

   B. As an independent contractor, Consultant will not be eligible for any benefits provided by the Company to its employees. Specifically, performance of services under this Agreement does not entitle Consultant to participate in or accrue benefits under any employee welfare or pension benefit plan. The Company shall not provide social security, unemployment compensation, disability insurance or worker's compensation or similar coverage, nor any other statutory benefits to Consultant. Consultant shall be solely responsible for all taxes, withholdings, insurance, business licensing fees and any other similar statutory obligations.

   C. Consultant shall be under no obligation to work any set or particular hours, except that Consultant will be expected to coordinate with the Company's designated contact(s), to the extent necessary for the performance of Consultant's services under this Agreement. Notwithstanding the foregoing, Consultant will be required to meet deadlines for filing testimony and responding to discovery, and be available for hearings, as necessary.

   D. Consultant shall meet such deadlines in the performance of services under this Agreement as the parties shall mutually agree, and Consultant shall make periodic reports related to the status of services being performed as the Company shall request upon reasonable notice.

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E. Consultant will be expected to furnish tools, materials, and other equipment necessary for the performance of Consultant's services provided under this Agreement.

4. **Compensation**. In consideration for the services rendered under this Agreement, the Company agrees to pay the Consultant for the services identified and, in the amount, stated in **Attachment B.** The Consultant will provide an invoice for payment at the completion of the services identified in **Attachment A** or, at a minimum, on a monthly basis. Payment will be approved and paid through the Company's normal payment processes. Detailed invoicing requirements can be found at:

   http://www.amwater.com/working-with-us/vendors-and-suppliers/index.html

   under the heading "American Water Invoicing Requirements", as may be revised from time to time by the Company, which terms are hereby incorporated by reference herein.

   All undisputed invoices shall be due and payable within sixty (60) days of receipt by Company. If Company disputes any invoice or a portion thereof, Company shall pay any portion not disputed and the disputed portion of such invoice shall be retained pending resolution of the dispute.

5. **Expenses**. Consultant agrees to be responsible for the cost of all expenses incurred in the performance of Consultant's services under the Agreement unless such expenses are authorized in advance by the Company. Expenses authorized in advance will be charged to the Company at cost without mark-up, overhead, or similar charges.

6. **Employment Taxes**. Consultant shall be solely responsible for the preparation and filing of all of Consultant's tax returns and the withholding and payment of all income tax withholding, FICA, FUTA and all other applicable federal, state, or local employment taxes. Consultant agrees to indemnify and hold harmless the Company for any employment, withholding or other tax obligations that the Company may incur with respect to any amounts paid to Consultant under this Agreement.

7. **RESERVED.**

8. **PAYMENT/INVOICING. American Water (Owner) asks that all Contractors / Suppliers / and Vendors promptly invoice Owner through the Taulia Portal until further notice.**

   A. All acceptable invoices shall be due and payable within thirty (30) days net calendar days of receipt by Owner. Owner agrees to make payment to Contractor in lawful money of the United States of America.

   B. Owner has an established method of submitting invoices, E-Invoicing via Owner's Supplier Portal:

      1. The Taulia portal for suppliers to upload invoices can be found at http://supplierinfo.taulia.com/americanwater .

      2. Invoices submitted via the Supplier Portal shall be submitted electronically in the portal using one of the following forms most appropriate for you:

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- E-Form - Web-form standard template invoices completed by Contractor.
- E-Flip - A flip of Owner's Order into an Invoice by Contractor.
- E-File - Invoices sent directly from Contractor's billing system or accounting software known as "Integrated eInvoicing." eFile transmission protocols can include AS2, sFTP or FTPs. Taulia's standard eFile formats can include (but are not limited to) EDI 810 ANSI X12, EDIFACT/INVOIC, cXML Invoice, UBL Invoice or CSV invoice file formats.
- E-Send - Submission of metadata PDF (not scanned .tiff PDF) invoices via email and cloud-based data capture with subsequent Contractor verification.

3. Invoices must contain the Purchase Order number and plainly identify the invoice number on the invoice. Only one Purchase Order number may be billed on each invoice. If you need to bill against multiple Order numbers, you MUST issue separate invoices.

4. The Invoice MUST contain Vendor's name and "Remit to" address. Payments shall be remitted to:

   The Brattle Group, Inc.
   1 Beacon Street
   Suite 2600
   Boston, MA 02108

5. Contractor must include the approver's email address on each invoice as follows:

   Pennsylvania American Water
   AP Department 1024
   1 Water Street
   Camden, NJ 08102-1658
   Fname.Lname@amwater.com (Person Authorizing Work)

6. If American Water disputes any invoice or a portion thereof, American Water shall not pay the disputed portion of such invoice until the parties have resolved such dispute in accordance with the dispute resolution process delineated in Section 23 of this Agreement. The undisputed portion of any invoice shall be paid as set forth herein.

7. If any undisputed fees remain unpaid sixty (60) calendar days after American Water's receipt of an invoice, Contractor will notify American Water in writing of the late payments and, in Contractor's discretion, the dispute resolution procedures delineated in Section 23 shall begin to resolve payment of such fees. If such matter remains unresolved following completion of the dispute resolution process delineated in Section 23, then the parties may resolve such dispute through litigation, the losing party bearing all costs of such litigation.

9. Licenses/Permits. Consultant represents and warrants to the Company that during the term of the Agreement Consultant will maintain all necessary licenses and/or permits, if any, to perform Consultant's services.

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10. **Confidentiality**. Consultant agrees that any information provided to the Consultant by the Company in connection with the Consultant's performance under this Agreement which concerns financial or other confidential or proprietary matters of the Company or any of its affiliated companies will be treated by the Consultant in full confidence and will not be revealed to any other persons, firms or organizations without the prior written consent of the President of the Company and its legal counsel. Consultant agrees to keep confidential all information discovered in connection with services provided under this Agreement and not to disclose the information to any third party without the prior written consent of the Company. This obligation shall survive the termination of this Agreement. The nondisclosure obligations herein shall not apply to information that: (i) is or becomes publicly known through no fault or breach of this Agreement by the receiving Party; (ii) is independently developed by the receiving Party without using the disclosing Party's Confidential Information; (iii) is rightfully obtained from a third party without restriction on use or disclosure; or (iv) is already in the possession of the receiving Party at the time of the disclosure without the obligation of confidentiality.

    Except as may be required by law or regulatory process, if either Party receives a summons, subpoena, regulatory order, court order or other demand to disclose any information referred to in this Agreement, each Party agrees to first notify the other Party of such demand in writing, and shall provide an opportunity for such other Party to lawfully object and defend any rights it may have to the information. No rights or licenses under patents, trademarks, or copyrights are granted or implied by any disclosure of Confidential Information. Each Party's Confidential Information shall remain the property of that Party and shall be destroyed or returned to that Party following the completion of the Services, unless otherwise agreed to in writing by the Parties.

11. **Work Product**. Upon payment to the Consultant for the same, all work product generated pursuant to this Agreement ("Work Product") shall become the sole and exclusive property of the Company, which may use such work product for any purpose without additional compensation to the Consultant. For the purposes of this Agreement, "Work Product" includes all reports, drawings, plans, specifications, calculations, submittals, and any other documents or records related to the Project and this Agreement. Work Product does not include Consultant's working notes and internal documents. Notwithstanding the foregoing, each Party retains all right, title and interest (including all patents, copyrights, trade secrets, trademarks or other intellectual property rights) in their respective pre-existing materials (and any materials developed by such party) that it provides to the other Party, and this Agreement does not grant any rights or licenses except as expressly set forth herein, and no other right or license is to be implied by or inferred from any provision of this Agreement or by the conduct of the Parties.

12. **Performance Standard**. All work will be performed by appropriately skilled and qualified personnel in a timely, professional, work person-like manner using the degree of care and skill ordinarily exercised by reputable professionals practicing in the same field of service.

13. **Code of Ethics**. Subject to the limitations in this Section, Consultant represents and warrants that it will conform its business dealings with the Company in accordance with the underlying principles of the Company's Code of Ethics, a copy of which is available on the Company website: http://ir.amwater.com/governance-documents. For

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the avoidance of doubt, nothing in the Code of Ethics shall preclude Consultant from providing similar services for a broad range of other clients, or from performing services for other clients outside the specific proceeding or matter for which Consultant is engaged by Company. Notwithstanding the foregoing, the Consultant agrees it will not provide any services in the proceeding listed in Exhibit A for any other client whose interests are averse to the Company in the proceeding.

14. **Compliance with Laws**. Consultant shall perform all of the services provided under this Agreement in accordance with federal, state, and local laws, regulations, or ordinances, including but not limited laws, regulations and ordinances related to lobbying. Without limiting the generality of the foregoing, Consultant covenants that Consultant is in full compliance with the immigration laws of the United States relating to Consultant's employees assigned by Consultant to perform services for the Company. Consultant further certifies that all of Consultant's employees are authorized by law to work in the United States, and that Consultant's employees have presented documentation to Consultant that establishes both identity and work authorization in accordance with applicable immigration regulations. Consultant certifies that to the best of its knowledge, information, and belief, after due inquiry, the documentation presented to Consultant is genuine and accurate. Consultant further certifies that Consultant complies with all federal, state, and local labor and employment laws, and wage and hour laws, as these laws may relate to Consultant's employees performing services for the Company. Consultant also agrees to comply with applicable laws concerning Consultant registration, including the timely submission of all necessary Consultant filings required under such laws. Consultant shall inform the Company if Consultant is required to make such Consultant filings. Consultant shall notify the Company if any filing requirements are applicable to the Company itself as a result of Consultant's representation of the Company under this Agreement and shall assist the Company in satisfying such requirements.

15. **Indemnification**. The parties each shall give prompt notice to the other of any claims made against either or both of them arising out of or related to the performance of the terms of this Agreement and shall cooperate fully with each other and with any insurance and/or self-insurance program to the end that all such claims will be properly investigated, defended, and adjusted. Consultant shall protect, defend, pay, indemnify and hold harmless the Company and its directors, officers, employees, agents, and successors from any and all claims, actions, judgments, damages, costs and expenses, including reasonable attorney's fees, of any kind or nature relating to or in connection with (a) any loss of life, bodily or personal injury or property damage to the pro rata extent arising, directly or indirectly out of or relating to any of Consultant's actions, or (b) any claim relating to a failure of Consultant to comply with federal, state, or local laws or regulations. Consultant's duty to indemnify and hold harmless shall not include any claims or liability arising from the established negligence or willful misconduct of Company, its agents, officers, or employees. Company may, at its own election, conduct its defense or participate in the defense of any claim related in any way to this Agreement. Section shall survive the expiration or termination of this Agreement.

16. **Termination**.

A. This Agreement shall terminate at the end of its term or upon completion of the services identified in **Attachment A** or at any time upon thirty (30) days written

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notice to the other party, whichever is earlier. The parties may extend the Agreement upon mutual written consent. Consultant shall be entitled to fair and reasonable compensation for services performed by Consultant prior to the effective date of termination.

B. Either party may terminate the Agreement, at any time, upon a material breach of this Agreement by the other party, and upon written notice to the other party.

C. The Company may terminate the Agreement, at any time, for cause. As used herein, "cause" with respect to the Consultant, means that, in the good faith determination of the Company, the Consultant or its employees or its members: (i) has engaged in misconduct which is injurious to the Company including conduct that is injurious or likely to injure the reputation of the Company; or (ii) has been convicted of or pleaded guilty or *nolo contendere* to any felony, or to any misdemeanor relating to the affairs of the Company or impacting Consultant's ability to perform under this Agreement.

17. Waivers. No waiver by either party hereto or any failure by the other party to keep or perform any covenant or condition of this Agreement shall be deemed to be a waiver of any preceding or succeeding breach of the same or other covenant or condition. No failure to enforce any provision hereof shall operate as a waiver thereof or be deemed to be a release of any rights granted hereunder.

18. Conflict of Terms. Except as otherwise provided in this Agreement, if any provision contained in this Agreement conflicts with any provision in Appendix A or Consultant's proposal, this Agreement shall govern and control**.**

19. Severability. If any provision of this Agreement shall be held or made invalid or unenforceable by a court decision, statute, rule or otherwise, the remaining provisions of this Agreement shall not be affected thereby and shall continue in full force and effect.

20. Assignment. The Company specifically contracts for services of the Consultant, and the Consultant may not assign, subcontract, or delegate the performance of the services contemplated by this Agreement without the express written consent of the Company.

21. Governing Law. This Agreement shall be construed, interpreted, and enforced in accordance with, and governed by, the laws of the State of New Jersey without regard to conflicts of law principles.

22. DIVERSITY SUBCONTRACTORS AND SUPPLIERS.
It is the Owner's desire that qualified Diversity Subcontractors be utilized as part of the Contract, where the Diversity Subcontractor meets the form, fit, and function of the Goods and Services, and is commercially competitive. The Owner's goal is that at least 20% of the Contract Price be directed to qualified Diversity.

A. Subcontractors (the "Diversity Spend"), including 10% of the Contract Price be directed to qualified Minority Business Enterprise (MBE) Subcontractors:
   - African American
   - Asian Pacific
   - Hispanic
   - Native American

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B. Contractor agrees to use best efforts to award subcontracts to qualified Diversity Subcontractors, and in connection therewith Contractor shall complete and submit the "Supplier Diversity Questionnaire", Attachment C.

C. If Contractor utilizes Diversity Subcontractors to fulfill any portion of this Contract, including freight, Contractor shall report the following to Owner's representative:
   - Contractor's name
   - Contact person, including email and phone number.
   - Contractor's Diversity classification and copy of certificate.
   - Value of subcontract provided to Diversity Subcontractor.

D. Contractor shall provide such report (Attachment C) on January 15, April 15, July 15, and October 15 for the previous quarter during the contract period and/or not later 30 days prior to Contractor's application for final payment. Contractor shall also report if no Diversity Subcontractors are used in fulfillment of the Contractor's obligations under the Contract.

E. Definition of a Diversity Subcontractor: A business that provides services or materials to Contractor in fulfillment of this Contract which is at least 51% owned, operated and controlled on a daily basis by a person of one or more of the following characteristics: American citizens of ethnic minority classifications, women, veteran, disabled veteran owned businesses, and disabled owned businesses.

F. Report to be provided to:
   American Water Service Company
   Attn: Diversity Reporting
   Online: https://amwater.diversitycompliance.com/

23. DISPUTE RESOLUTION.

A. The intent of the parties is to identify and resolve disputes promptly after any dispute arises. Before attempting to exercise any legal or equitable remedy, each party agrees to follow the dispute resolution procedure described below. Except as provided otherwise elsewhere in this Agreement, in the event that either party determines that following the procedure described below in this section could potentially be harmful or damaging to their respective businesses or third-party suppliers, that party may elect to forego the dispute resolution process and pursue injunctive relief.

B. Escalation of Dispute. If there is a dispute between the parties arising out of this Agreement, each party agrees to engage in good faith negotiations between progressively more senior representatives of each party, as follows:

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Level	Representatives of the Parties	Maximum Duration of Negotiations Prior to Escalation to Next Level
One	PAWC: Mary Ann Royer, Procurement Specialist, 717-550-1541 Mary.royer@amwater.com Supplier: Ann Bulkley, Principal 508-981-0866, Ann.bulkley@brattle.com	5 business days
Two	PAWC: Stacey Gress, Director Rates, 856-955-4479 Stacey.Gress@amwater.com Supplier: Ann Bulkley, Principal 508-981-0866, Ann.bulkley@brattle.com	5 business days
Three	PAWC: Ashley Everette, Director Rates, 717-550-1536 Ashley.everette@amwater.com Supplier: Barbara Levine, General Counsel, 617-234-5712 generalcounsel@brattle.com	5 business days

C. Either party may at any time change its representative party designated above by providing written notice to the other party.

D. If such matter remains unresolved following the negotiations and the expiration of the periods specified above in this section each party may immediately exercise or pursue any other rights or remedies available hereunder or at law or in equity, and it is acknowledged by the parties that nothing herein shall preclude, limit, or otherwise restrict any legal or equitable remedies available to either party for failure of the other party to perform its obligations under this Agreement.

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IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their respective duly authorized representatives as of the day and year last set forth below.

Pennsylvania American Water Company

DocuSigned by:
By: Ashley Everette
1DFC4DF184FE4E7...

Name: Ashley Everette

Title: Sr. Director, Rates & Regulatory

Date: 8/4/2023

The Brattle Group, Inc.

DocuSigned by:
By: Ann Bulkley
13599DC60FE14BA...

Name: Ann Bulkley

Title: Principal

Date: 8/4/2023

DocuSign Envelope ID: 7078441D-0049-404F-B916-D6C931CBC045

ATTACHMENT - A – SCOPE OF SERVICES

In connection with 2024 Rate Case, Consultant shall perform the following Consulting Services regarding new rate case:

- Preparation of Direct Testimony
- Responding to discovery Requests
- Preparation of Responsive Testimony
- Defense of Recommendations and Ongoing Support

- **Hourly rate subject to change per project. Both parties must agree prior to start of work.**

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ATTACHMENT - B

Hourly pricing – Refer to Attachment A

Phase of Proceeding	Estimated Fee
Direct Testimony	$40,000
Discovery	$5,000
Rebuttal	$50,000
Discovery	$5,000
Rejoinder	$25,000
Hearing	$10,000
Total (excluding travel expenses)	**$136,000**

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ATTACHMENT – C – DIVERSITY

AMERICAN WATER

AMERICAN WATER SUPPLIER DIVERSITY SUBCONTRACTING PLAN

Required for submission with all responses to Requests for Proposals, quarterly reports and with final payment application (with actuals). Tier 1 prime suppliers are required to submit quarterly. Tier 2 diversity spend reporting is required through the Supplier Diversity Portal found at https://www.unifiedtier2.com/amwater.html

COMPANY OVERVIEW

Prime Supplier Business Name:	The Brattle Group
Corporate Address:	
City, State, Zip:	
Prime Supplier Contact Person's Name:	Ann Bulkley
Email Address:	
Phone Number: ☐ Office ☐ Mobile	

Supplier Diversity Business Classifications: "Certified" means currently certified by an authorized certifying body. "Owned" means at least 51% minority-owned operated and controlled. The company must be a profit enterprise and physically located in the U.S. or its trust territories.

Is your business a certified diverse supplier? If yes, please provide copy of certification(s) with your bid response. ☐ Yes ☐ No

☐ **Minority Business Enterprise (MBE)**

- ☐ MBE-AF - Minority Owned Business African American
- ☐ MBE-AP - Minority Owned Business Asian Pacific
- ☐ MBE-H - Minority Owned Business Hispanic
- ☐ MBE-NA - Minority Owned Business Native American

☐ **Veteran Business Enterprise (VBE)**

- ☐ SDVBE - Service-disabled Veteran Owned Business

☐ **Other Disadvantaged Business**

- ☐ DBE - Disable Owned Business
- ☐ HUB – Historically Underutilized Business
- ☐ LGBTQ - Lesbian, Gay, Bisexual, Transgender

☐ **Women Business Enterprise (WBE)**

BID / PROJECT SUBMISSION

Please describe the goods and /or services being provided by your company.

American Water Regulated State Operations:	**Total Diverse Supplier Subcontracted ($):**
	Projected spend with the following diversity classes:
Original/Prior Contract Value ($):	(For Change Orders – Complete for Change Order Values)
Current Change Order Value ($):	Minority Business Enterprise (MBEs) $
Total Contract Value ($):	Veteran Business Enterprise (VBEs) $
	Woman Business Enterprise (WBEs) $
	Other Disadvantaged Business (DBE) $

DETAILED SUBCONTRACTING PLAN

Detailed plan for use of M/W/VBEs and other disadvantage businesses as subcontractors, distributors, value added resellers are counted towards your contractual supplier diversity goal. Small business spend is tracked but not counted towards the diversity spend goal. **For every product and service, you intend to use, provide the following information (attach additional sheets if necessary)**

Company Name	Classification (MBE/WBE/VBE/LGBT/ SMB)	Principal Owner Gender (M/F)	Certification Agency	Certification Expiration	Products or Services to be provided	Estimated Amount of Spend ($):
ABC Example Co	*MBE*	*M*	*NMSDC*	*05/2025*	Excavation	$150,000

DocuSign Envelope ID: 7078441D-0049-404F-B916-D6C931CBC045

AMERICAN WATER

NATIONAL SUPPLIER DIVERSITY

OUR PRIME SUPPLIER DIVERSITY PROGRAM

Firms interested in doing business with American Water should register on the https://supplierone.co/ to use the database to search for diverse suppliers and to report diverse spend quarterly once a project is awarded.

OVERVIEW OF HOW IT WORKS

American Water is focused on opportunities for minority suppliers who provide a wide array of utility products and services In our efforts to ensure we are consistent in what we define as diverse businesses enterprises, the determination is that small business is not defined as a diverse business category. American Water continues to support and engage small business in all that we do in addition to creating opportunity for both social and economically disadvantaged business (Diverse). The business units within American Water are aware of the importance of supplier diversity when making their decisions.

BID/AWARD PROCESS

Qualified firms invited to bid on specific contracts are sent a Request for Proposal (RFP). Some RFPs require the bidder to attend pre-bid meetings to review procedures and specifications. Bidders are strongly encouraged, and sometimes required, to attend these meetings and submit proposals by the due date to be considered for a contract. On occasion, purchase orders are used to test and evaluate the product and services of new and promising firms and can often lead to larger bidding opportunities. Bids and proposals that meet specified requirements are thoroughly evaluated, and awards are made to the firms offering the best value to American Water.

2ND TIER PROGRAM

American Water's 2nd Tier Spend Program increases the opportunities available to diverse certified suppliers in our business and ensures a diverse certified supplier pool across the supply chain. We believe these efforts will stimulate the local economy by creating jobs. 2nd Tier spend consists of payments made from a prime supplier to a diverse certified supplier for the purchase of products or services used directly in support of a contract with American Water. Direct and Indirect expenditures with Minority Business Enterprise (MBE), Women Business Enterprise (WBE), Veteran Business Enterprise (VBE), Service-Disabled Veteran Business Enterprise (SDVBE), Disabled Veteran Business Enterprise (DVBE), Lesbian, Gay, Bisexual, Transgender Business Enterprise (LGBTBE), Disability Owned Business Enterprise (DOBE), Disadvantaged Business Enterprise (DBE) or Historically Underutilized Business (HUB) as subcontractors, distributors, value added resellers are counted towards the contractual supplier diversity goal.

NATIONAL SUPPLIER DIVERSITY

For more information on our program, visit https://www.amwater.com/corp/About-Us/Supplier-Diversity/supplier-diversity-strategy

Contact Us: For more information about American Water's National Supplier Diversity Strategy, please contact our team through email at supplierdiversity@amwater.com or work with your state procurement buyer or national category lead.

DISCLAIMER AND SIGNATURE

Prime Supplier agrees that it will maintain all necessary documents and records to support its efforts to achieve its MBE/WBE/VBE/DBE participation goal(s). Prime Supplier also acknowledges the fact that it is responsible for identifying, soliciting, and qualifying MBE/WBE/VBE/DBE subcontractors, distributors and value-added resellers.

The following individual, acting in the capacity of MBE/WBE/VBE/DBE coordinator for Prime Supplier will administer the MBE/WBE/VBE/DBE participation plan, submit summary reports quarterly through the Supplier Portal found at https://www.unifiedtier2.com/amwater.html and cooperate in any studies or surveys as may be required to determine the extent of compliance by the Prime Supplier with the participation plan.

Name: Ann Bulkley

Title: Principal

Authorized Signature: DocuSigned by: Ann Bulkley 13599DC60FF14BA...

Date Submitted: 8/4/2023

DocuSign

Certificate Of Completion

Envelope Id: 7078441D0049404FB916D6C931CBC045 Status: Completed

Subject: Contract 51802 '51802 SA Brattle Group PA Consulting Services Rate Case' requires your action

Source Envelope:

Document Pages: 13 Signatures: 3 Envelope Originator:

Certificate Pages: 5 Initials: 0 Mary Royer

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EnvelopeId Stamping: Enabled Camden, NJ 08102

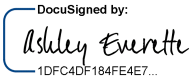
Time Zone: (UTC-05:00) Eastern Time (US & Canada) Mary.Royer@amwater.com

IP Address: 54.236.3.35

Record Tracking

Status: Original Holder: Mary Royer Location: DocuSign

8/4/2023 11:45:53 AM Mary.Royer@amwater.com

Signer Events	Signature	Timestamp
Ann Bulkley ann.bulkley@brattle.com Principal The Brattle Group Security Level: Email, Account Authentication (None)	DocuSigned by: 13599DC60FF14BA... Signature Adoption: Pre-selected Style Using IP Address: 45.73.136.196	Sent: 8/4/2023 11:54:12 AM Viewed: 8/4/2023 11:56:00 AM Signed: 8/4/2023 11:56:53 AM
Electronic Record and Signature Disclosure: Accepted: 2/4/2022 5:42:30 PM ID: df11d955-3d68-4aae-a888-a820ae7069e4		
Ashley Everette ashley.everette@amwater.com Sr. Director, Rates & Regulatory Security Level: Email, Account Authentication (None)	DocuSigned by:  1DFC4DF184FE4E7... Signature Adoption: Pre-selected Style Using IP Address: 161.69.116.11	Sent: 8/4/2023 11:56:54 AM Viewed: 8/4/2023 11:58:00 AM Signed: 8/4/2023 11:58:53 AM
Electronic Record and Signature Disclosure: Accepted: 8/4/2023 11:58:00 AM ID: a8ff8fc7-63b0-4d7f-a0d2-5d2def2f34a0		

In Person Signer Events	Signature	Timestamp

Editor Delivery Events	Status	Timestamp

Agent Delivery Events	Status	Timestamp

Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp
Stacey Gress stacey.gress@amwater.com Director Rates and Regulatory Security Level: Email, Account Authentication (None)	COPIED	Sent: 8/4/2023 11:58:54 AM
Electronic Record and Signature Disclosure: Accepted: 2/5/2022 10:14:51 AM ID: acec74a7-4a30-4784-b58b-1ac8dbc7941e		

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AMENDMENT No. 1
TO
Agreement for Depreciation and Cost of Service Allocation Studies between **Pennsylvania American Water Company** AND **Gannett Fleming Valuation and Rate Consultants LLC** DATED **January 20, 2022.**

This **Amendment No. 1** (Amendment) to the Agreement is entered into this date 6/27/2023 (Effective Date) by and between **Gannett Fleming Valuation and Rate Consultants LLC** (Contractor) and **Pennsylvania American Water Company** (Owner).

RECITALS

A. Contractor and Owner entered into an Agreement dated as of **January 20, 2022** (the Original Agreement);

B. Contractor and Owner desire to set forth in this **Amendment No. 1** certain modifications to the Original Agreement; and,

C. In all other respects, the Original Agreement shall control the relationship between the parties and all references to the Agreement in the Original Agreement and this Amendment shall mean the Original Agreement as amended hereby.

NOW, THEREFORE, in consideration of the Recitals and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. **Term.** The parties agree that the date **January 31, 2024,** listed in Original Agreement will be deleted and replaced with **January 31, 2026.**

2. **Price/Scope.** The scope of services performed or furnished by Consultant under the terms of this Agreement is defined in **Attachment A-1** which will authorize Consultant to perform specific services. Unless modified in writing by both parties, duties of Consultant shall not be construed to exceed those services specifically established in **Attachment A-1**. **Any additional fees associated with services not included in Attachment A-1 must be defined and agreed to by Owner in writing prior to initiation of those services.**

3. **Diversity Reporting.** Contractor commits to actively seek and contract with diverse suppliers. The Contractor agrees to provide opportunities for suppliers identified and Certified in accordance, at a minimum, with the terms and conditions of **Attachment E-1**

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4. **Other Provisions.** All terms and conditions of the Agreement as previously amended shall remain unchanged and in full force and effect to the extent not modified by this Amendment.

This Amendment may be executed in any number of original counterparts. All such counterparts shall constitute one and the same Amendment.

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IN WITNESS WHEREOF, Contractor and Owner have signed this Amendment in duplicate. One counterpart each has been delivered to both Contractor and Owner.

Pennsylvania American Water Company

By: DocuSigned by: Ashley Everette 1DFC4DF184FE4E7...

Print: Ashley Everette

Title: Sr. Director, Rates & Regulatory

Date: 6/27/2023

Gannett Fleming Valuation and Rate Consultants LLC

By: DocuSigned by: John Spanos 9CEF3134F1A2448...

Print: John Spanos

Title: President

Date: 6/27/2023

DocuSign Envelope ID: ABFACEB5-E427-4DF6-BFE6-AEAF66296A75

Attachment A-1 Price/Scope

GANNETT FLEMING

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | F 717.763.8150

gannettfleming.com

June 7, 2023

Via email to Stacey.Gress@amwater.com

Stacey Gress
Director, Rates and Regulation
Pennsylvania American Water Company
1 Water Street
Camden, NJ 08102

Dear Stacey:

Proposal for Depreciation and
Cost of Service Allocation Studies – Water and Wastewater

In response to your request, Gannett Fleming Valuation and Rate Consultants, LLC (Gannett Fleming) is pleased to submit this proposal to conduct depreciation and cost of service allocation studies for Pennsylvania American's 2023 water and wastewater rate filing. We understand that the filing is projected to be based on the combined revenue requirements for the twelve months ended June 30, 2023, a future test year ending June 30, 2024, and a fully projected future test year ending June 30, 2025. The filing date is planned for October 2023.

The depreciation studies will be conducted under the direction of John J. Spanos. Mr. Spanos will provide a separate depreciation study for each test year for water assets. The wastewater depreciation studies will have separate rates determined for each test year, as well as results for each of the areas for which separate depreciation rates are required.

The cost of service allocation studies will be conducted under the direction of Constance E. Heppenstall. Gannett Fleming will provide a total of six (6) separate water and wastewater cost of service studies.

The studies and direct testimony will be prepared in a manner similar to the prior rate case and will be suitable for filing with the Pennsylvania Public Utility Commission (Pa PUC). Responses to filing requirements and standard data requests that are not included in the studies also will be prepared. We understand that we will be provided covers for the copies of our reports by the Company, and Gannett Fleming will make sufficient copies (approximately 25) for the filing with the Pa PUC, if needed.

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GANNETT FLEMING

Gannett Fleming will perform these services based on hourly billing rates for our personnel in effect when the work is performed. A copy of our billing rates is attached. Invoices will be rendered monthly for services performed during the previous month including reimbursement of direct expenses. Inasmuch as we have little control over the amount of time required to respond to interrogatories and prepare for formal litigation, the following estimates of costs include only those services required to the date of filing. Estimated additional, post-filing services, are listed below for budgeting purposes and will be provided on an hourly basis. Based on our experience in conducting similar assignments, we estimate that the cost of the studies will be as follows:

	Water and Wastewater Rate Filing	
Description	Up to Filing Date	Estimated Post-Filing
Depreciation Studies	$90,000	$20,000
Cost of Service Allocation Studies	$50,000	$35,000
Combined Sewer Systems COS Study	$35,000	$20,000
Total	$175,000	$75,000

Thank you for the opportunity to submit this proposal. If you have any questions, please don't hesitate to contact John Spanos at either 717-886-5721 or jspanos@gfnet.com, or Connie Heppenstall at 610-783-3675 or cheppenstall@gfnet.com.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

CONSTANCE E. HEPPENSTALL
Senior Project Manager, Rate Studies

DocuSign Envelope ID: ABFACEB5-E427-4DF6-BFE6-AEAF66296A75

GANNETT FLEMING

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

2023 BILLING RATES

Personnel	Hourly Rate
SUPERVISORY STAFF	
John J. Spanos, President	310.00
Ned W. Allis, Vice President	280.00
Harold Walker, III, Manager, Financial Studies	280.00
Constance E. Heppenstall, Senior Project Manager, Rate Studies	270.00
John F. Wiedmayer, Jr., Senior Project Manager, Depreciation Studies	260.00
STAFF	
Senior Analysts	200.00
Analysts	190.00
Associate Analysts	180.00
Assistant Analysts III	170.00
Assistant Analysts II	160.00
Assistant Analysts I	150.00
Senior Technicians	130.00
Support Staff	130.00

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Attachment E-1 – Diversity Reporting

AMERICAN WATER

AMERICAN WATER SUPPLIER DIVERSITY SUBCONTRACTING PLAN

Required for submission with all responses to Requests for Proposals, quarterly reports and with final payment application (with actuals). Tier 1 prime suppliers are required to submit quarterly. Tier 2 diversity spend reporting is required through the Supplier Diversity Portal found at https://www.unifiedtier2.com/amwater.html

COMPANY OVERVIEW

Prime Supplier Business Name:	Gannett Fleming Valuation & Rate Consultants,LLC
Corporate Address:	
City, State, Zip:	
Prime Supplier Contact Person's Name:	John Spanos
Email Address:	
Phone Number: ☐ Office ☐ Mobile	

Supplier Diversity Business Classifications: "Certified" means currently certified by an authorized certifying body. "Owned" means at least 51% minority-owned operated and controlled. The company must be a profit enterprise and physically located in the U.S. or its trust territories.

Is your business a certified diverse supplier? If yes, please provide copy of certification(s) with your bid response. ☐ Yes ☐ No

☐ **Minority Business Enterprise (MBE)**

- ☐ MBE-AF - Minority Owned Business African American
- ☐ MBE-AP - Minority Owned Business Asian Pacific
- ☐ MBE-H - Minority Owned Business Hispanic
- ☐ MBE-NA - Minority Owned Business Native American

☐ **Veteran Business Enterprise (VBE)**

- ☐ SDVBE - Service-disabled Veteran Owned Business

☐ **Other Disadvantaged Business**

- ☐ DBE - Disable Owned Business
- ☐ HUB – Historically Underutilized Business
- ☐ LGBTQ - Lesbian, Gay, Bisexual, Transgender

☐ **Women Business Enterprise (WBE)**

BID / PROJECT SUBMISSION

Please describe the goods and /or services being provided by your company.

American Water Regulated State Operations:	**Total Diverse Supplier Subcontracted ($):**
	Projected spend with the following diversity classes:
Original/Prior Contract Value ($):	(For Change Orders – Complete for Change Order Values)
Current Change Order Value ($):	Minority Business Enterprise (MBEs) $
Total Contract Value ($):	Veteran Business Enterprise (VBEs) $
	Woman Business Enterprise (WBEs) $
	Other Disadvantaged Business (DBE) $

DETAILED SUBCONTRACTING PLAN

Detailed plan for use of M/W/VBEs and other disadvantage businesses as subcontractors, distributors, value added resellers are counted towards your contractual supplier diversity goal. Small business spend is tracked but not counted towards the diversity spend goal. **For every product and service, you intend to use, provide the following information (attach additional sheets if necessary)**

Company Name	Classification (MBE/WBE/VBE/LGBT/ SMB)	Principal Owner Gender (M/F)	Certification Agency	Certification Expiration	Products or Services to be provided	Estimated Amount of Spend ($):
ABC Example Co	*MBE*	*M*	*NMSDC*	*05/2025*	Excavation	$150,000

DocuSign Envelope ID: ABFACEB5-E427-4DF6-BFE6-AEAF66296A75

AMERICAN WATER

NATIONAL SUPPLIER DIVERSITY

OUR PRIME SUPPLIER DIVERSITY PROGRAM

Firms interested in doing business with American Water should register on the https://supplierone.co/ to use the database to search for diverse suppliers and to report diverse spend quarterly once a project is awarded.

OVERVIEW OF HOW IT WORKS

American Water is focused on opportunities for minority suppliers who provide a wide array of utility products and services In our efforts to ensure we are consistent in what we define as diverse businesses enterprises, the determination is that small business is not defined as a diverse business category. American Water continues to support and engage small business in all that we do in addition to creating opportunity for both social and economically disadvantaged business (Diverse). The business units within American Water are aware of the importance of supplier diversity when making their decisions.

BID/AWARD PROCESS

Qualified firms invited to bid on specific contracts are sent a Request for Proposal (RFP). Some RFPs require the bidder to attend pre-bid meetings to review procedures and specifications. Bidders are strongly encouraged, and sometimes required, to attend these meetings and submit proposals by the due date to be considered for a contract. On occasion, purchase orders are used to test and evaluate the product and services of new and promising firms and can often lead to larger bidding opportunities. Bids and proposals that meet specified requirements are thoroughly evaluated, and awards are made to the firms offering the best value to American Water.

2ND TIER PROGRAM

American Water's 2nd Tier Spend Program increases the opportunities available to diverse certified suppliers in our business and ensures a diverse certified supplier pool across the supply chain. We believe these efforts will stimulate the local economy by creating jobs. 2nd Tier spend consists of payments made from a prime supplier to a diverse certified supplier for the purchase of products or services used directly in support of a contract with American Water. Direct and Indirect expenditures with Minority Business Enterprise (MBE), Women Business Enterprise (WBE), Veteran Business Enterprise (VBE), Service-Disabled Veteran Business Enterprise (SDVBE), Disabled Veteran Business Enterprise (DVBE), Lesbian, Gay, Bisexual, Transgender Business Enterprise (LGBTBE), Disability Owned Business Enterprise (DOBE), Disadvantaged Business Enterprise (DBE) or Historically Underutilized Business (HUB) as subcontractors, distributors, value added resellers are counted towards the contractual supplier diversity goal.

NATIONAL SUPPLIER DIVERSITY

For more information on our program, visit https://www.amwater.com/corp/About-Us/Supplier-Diversity/supplier-diversity-strategy

Contact Us: For more information about American Water's National Supplier Diversity Strategy, please contact our team through email at supplierdiversity@amwater.com or work with your state procurement buyer or national category lead.

DISCLAIMER AND SIGNATURE

Prime Supplier agrees that it will maintain all necessary documents and records to support its efforts to achieve its MBE/WBE/VBE/DBE participation goal(s). Prime Supplier also acknowledges the fact that it is responsible for identifying, soliciting, and qualifying MBE/WBE/VBE/DBE subcontractors, distributors and value-added resellers.

The following individual, acting in the capacity of MBE/WBE/VBE/DBE coordinator for Prime Supplier will administer the MBE/WBE/VBE/DBE participation plan, submit summary reports quarterly through the Supplier Portal found at https://www.unifiedtier2.com/amwater.html and cooperate in any studies or surveys as may be required to determine the extent of compliance by the Prime Supplier with the participation plan.

Name: John Spanos

Title: President

Authorized Signature: DocuSigned by: John Spanos 9CEF3134F1A2448...

Date Submitted: 6/27/2023

DocuSign

Certificate Of Completion

Envelope Id: ABFACEB5E4274DF6BFE6AEAF66296A75 Status: Completed

Subject: Contract 50984 '50984 AMD1 RATE Depreciation-Cost of Service Allocation 2022 Rate Case' requires you

Source Envelope:

Document Pages: 8 Signatures: 3 Envelope Originator:

Certificate Pages: 5 Initials: 0 Mary Royer

AutoNav: Enabled 1 Water St

EnvelopeId Stamping: Enabled Camden, NJ 08102

Time Zone: (UTC-05:00) Eastern Time (US & Canada) Mary.Royer@amwater.com

IP Address: 54.236.3.38

Record Tracking

Status: Original Holder: Mary Royer Location: DocuSign

6/27/2023 10:44:44 AM Mary.Royer@amwater.com

Signer Events	Signature	Timestamp
John Spanos jspanos@gfnet.com President Gannett Fleming Valuation & Rate Consultants,LLC Security Level: Email, Account Authentication (None)	DocuSigned by: John Spanos 9CEF3134F1A2448... Signature Adoption: Pre-selected Style Using IP Address: 98.235.186.84	Sent: 6/27/2023 11:05:06 AM Viewed: 6/27/2023 3:14:34 PM Signed: 6/27/2023 3:31:03 PM
Electronic Record and Signature Disclosure: Accepted: 6/27/2023 3:14:34 PM ID: c351a7b6-3dc3-4d09-9e87-c0d500f30c0e		
Ashley Everette ashley.everette@amwater.com Sr. Director, Rates & Regulatory Security Level: Email, Account Authentication (None)	DocuSigned by: Ashley Everette 1DFC4DF184FE4E7... Signature Adoption: Pre-selected Style Using IP Address: 161.69.57.14	Sent: 6/27/2023 3:31:05 PM Viewed: 6/27/2023 3:34:09 PM Signed: 6/27/2023 3:35:35 PM
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In Person Signer Events	Signature	Timestamp

Editor Delivery Events	Status	Timestamp

Agent Delivery Events	Status	Timestamp

Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp
Stacey Gress stacey.gress@amwater.com Director Rates and Regulatory Security Level: Email, Account Authentication (None)	COPIED	Sent: 6/27/2023 3:35:36 PM
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Pennsylvania-American Water Company
Water and Wastewater
Allocation of 2023 Rate Case and Regulatory Expense

	2023 Estimate	Water	Wastewater SSS	BASA WW Operations	Brentwood WW Operations	Wastewater CSS
Legal Fees And Expenses	$1,350,000	$1,153,575	$94,095	$24,705	$6,615	$71,010
Rate of Return	136,000	116,212	9,479	2,489	666	7,154
Depreciation	110,000	93,995	7,667	2,013	539	5,786
Cost Of Service Studies	85,000	72,633	5,925	1,556	417	4,471
Miscellaneous / Customer Notice	457,622	391,038	31,896	8,374	2,242	24,071
Total	$2,138,622	$1,827,452	$149,062	$39,137	$10,479	$112,491
Cost Of Service And Stormwater (WW CSS)	$55,000					$55,000
Total Company Rate Case Expense	$2,193,622	$1,827,452	$149,062	$39,137	$10,479	$167,491
Normalized Over 2 Years	$1,096,811	$913,726	$74,531	$19,569	$5,240	$83,746
Amortization of Demand Study	26,709	22,823	1,862	489	131	1,405
Amortization of Lead Service Line Costs	25,224	25,224				
Amortization of Stormwater Fee Feasibility Study	13,813					13,813
Total Allocation	$1,162,557	$961,773	$76,393	$20,057	$5,370	$98,963

Factor 2: Customers						
As of 06/30/25	Total Customers	Allocation Factor	Water	WW SSS Only	W & WW SSS Only	WW CSS
Water Operations	688,859	85.5%	100.0%		92.5%	
Wastewater SSS General Operations	56,212	7.0%		100.0%	7.5%	
BASA WW Operations	14,755	1.8%				
Brentwood WW Operations	3,974	0.5%				
Wastewater CSS	42,414	5.3%				100.0%
Total	806,214	100.00%	100%	100%	100%	100%

Service Company

Pennsylvania American Water Company
Base Period 12 Months Ended 06/30/23
Future Test Year - 12 months ended 06/30/24
Fully Projected Future Test Year - 12 Months Ending 06/30/25

Service Company
Total Costs

	12 Months June 2023						**12 Months June 2024**				**12 Months June 2025**				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Base Year Labor & Related Expense	Base Year Other Expense	Base Year Total Expense	Adjusted Base Year Total Labor & Related Expense	Adjusted Base Year Other Expense	Adjusted Base Year Total Expense	FTY 06/30/24 Labor & Related Expense	FTY 06/30/24 Other Expense	FTY 06/30/24 Total Expense	**Total FTY** Going Level Expense Adjustments	FPFTY 06/30/25 Labor & Related Expense	FPFTY 06/30/25 Other Expense	FPFTY 06/30/25 Total Expense	**Total FPFTY** Going Level Expense Adjustments	**Total** Going Level Expense Adjustments
	LR (1)	OC (1)	(1) + (2)	LR (6)	OC (6)	(4)+(5)	LR (9)	OC (8)	(7)+(8)	(9)-(6)	LR (12)	OC (10)	(11)+(12)	(13)-(9)	(13)-(3)
Business Development	$372,106	$94,509	$466,615	$443,777	$94,509	$538,286	$462,984	$98,566	$561,550	$94,935	$477,522	$102,797	$580,319	$18,769	$113,704
Central Lab	369,867	295,533	665,400	378,536	295,315	673,851	402,649	307,950	710,599	45,199	415,292	321,127	736,419	25,820	71,019
Corp Admin	(1,503,674)	3,443,993	1,940,319	(1,491,604)	3,443,698	1,952,094	(1,307,411)	3,869,098	2,561,687	621,368	(1,050,058)	4,219,062	3,169,004	607,317	1,228,685
Corporate Security	1,835,352	3,261,993	5,097,345	1,874,063	3,255,183	5,129,246	1,948,362	3,394,926	5,343,288	245,943	2,009,541	3,540,668	5,550,209	206,921	452,864
Customer Service Organization (CSO)	6,174,823	9,302,627	15,477,450	6,311,261	9,298,655	15,609,916	6,787,946	8,609,069	15,397,015	(80,435)	7,001,090	8,817,763	15,818,853	421,838	341,403
Environmental Leadership	850,459	132,075	982,534	863,517	131,400	994,917	915,948	137,040	1,052,988	70,454	944,708	142,922	1,087,630	34,642	105,096
External Affairs & Public Policy	1,027,657	249,492	1,277,149	1,042,327	247,188	1,289,515	1,100,773	257,800	1,358,573	81,424	1,135,337	268,867	1,404,204	45,631	127,055
Facilities	103,991	1,674,647	1,778,638	106,428	1,674,647	1,781,075	109,770	1,730,354	1,840,124	61,486	113,217	1,788,452	1,901,669	61,545	123,031
Finance	8,244,507	1,223,265	9,467,772	8,331,742	1,214,881	9,546,623	8,741,303	1,267,035	10,008,338	540,566	9,015,815	1,321,428	10,337,243	328,905	869,471
Human Resources	3,643,234	978,087	4,621,321	3,718,485	974,597	4,693,082	3,876,207	1,016,441	4,892,648	271,327	3,997,919	1,060,082	5,058,001	165,353	436,680
Information Technology (IT)	1,849,565	4,538,802	6,388,367	1,883,670	4,538,150	6,421,820	1,946,785	4,732,947	6,679,732	291,365	2,007,914	4,936,107	6,944,021	264,289	555,654
Investor Relations	202,883	268,119	471,002	207,638	268,119	475,757	214,158	279,629	493,787	22,785	220,883	291,633	512,516	18,729	41,514
Legal	4,168,608	604,464	4,773,072	3,969,260	604,464	4,573,724	4,155,854	626,315	4,782,169	9,097	4,275,369	649,104	4,924,473	142,304	151,401
Operations Excellence	887,577	392,593	1,280,170	884,360	391,075	1,275,435	1,014,243	407,864	1,422,107	141,937	1,042,478	425,373	1,467,851	45,744	187,681
Regulated Ops	2,049,214	427,034	2,476,248	2,097,243	427,034	2,524,277	2,201,531	445,366	2,646,897	170,649	2,312,667	464,485	2,777,152	130,255	300,904
Safety	164,480	36,647	201,127	168,335	35,972	204,307	173,621	37,516	211,137	10,010	179,072	39,127	218,199	7,062	17,072
Supply Chain	771,140	187,845	958,985	840,288	187,844	1,028,132	870,076	192,018	1,062,094	103,109	891,324	196,371	1,087,695	25,601	128,710
Total	**$31,211,789**	**$27,111,725**	**$58,323,514**	**$31,629,326**	**$27,082,731**	**$58,712,057**	**$33,614,799**	**$27,409,934**	**$61,024,733**	**$2,701,219**	**$34,990,090**	**$28,585,368**	**$63,575,458**	**$2,550,725**	**$5,251,944**
Change in Test Year to Adjusted 2023 (Labor)				417,537											
Change in Test Year to Adjusted 2023 (Other)					($28,994)										
Change in Adjusted 2023 to 2024 Projected (Labor)							$1,985,473								
Change in Adjusted 2023 to 2024 Projected (Other)								$327,203							
Change in 2024 Projected to 2025 Projected (Labor)											$1,375,291				
Change in 2024 Projected to 2025 Projected (Other)												$1,175,434			
Total Change in Test Year to Going Level										$2,701,219				$2,550,725	$5,251,944

Pennsylvania American Water Company
Base Period 12 Months Ended 06/30/23
Future Test Year - 12 months ended 06/30/24
Fully Projected Future Test Year - 12 Months Ending 06/30/25

Service Company
Labor & Related Expenses

	12 Months June 2023					12 Months June 2024				12 Months June 2025				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Base Year Labor & Related Expense	Base Year Capitalized & Deferred	Base Year Total Labor & Related	Adjustments to Base Year Labor & Related Expense	Adjusted Base Year Labor & Related Expense	**Total** Inc for **2024** Labor & Related Expense	**Total** Adjustment to Labor & Related Expense	**Total FTY 06/30/24** Labor & Related Expense	**Total FTY** Labor Service Co. Adjustment	**Total** Inc for **2025** Labor & Related Expense	**Total** Adjustment to Labor & Related Expense	**Total FPFTY 06/30/25** Labor & Related Expense	**Total FPFTY** Labor Service Co. Adjustment	**Total** Labor & Related Service Co. Adjustment
	(1a)+(1b)		(1)+(2)	(4a)+(4b)	(5a)+(5b)	(6a)+(6b)	(7a)+(7b)	(5)+(6)+(7)	(8)-(1)	(10a)+(10b)	(11a)+(11b)	(8)+(10)+(11)	(12)-(8)	(12)-(1)
Business Development	$372,106	$1,612	$373,718	$71,671	$443,777	$13,935	$5,272	$462,984	$90,878	$14,538	$0	$477,522	$14,538	$105,416
Central Lab	369,867	1,269	371,136	8,669	378,536	11,886	12,227	402,649	32,782	12,643	-	415,292	12,643	45,425
Corp Admin	(1,503,674)	3,446,666	1,942,992	12,070	(1,491,604)	13,923	170,270	(1,307,411)	196,263	14,719	242,634	(1,050,058)	257,353	453,616
Corporate Security	1,835,352	610,295	2,445,647	38,711	1,874,063	58,845	15,454	1,948,362	113,010	61,179	-	2,009,541	61,179	174,189
Customer Service Organization (CSO)	6,174,823	132,629	6,307,452	136,438	6,311,261	198,175	278,510	6,787,946	613,123	213,144	-	7,001,090	213,144	826,267
Environmental Leadership	850,459	44,103	894,562	13,058	863,517	27,115	25,316	915,948	65,489	28,760	-	944,708	28,760	94,249
External Affairs & Public Policy	1,027,657	1,313	1,028,970	14,670	1,042,327	32,729	25,717	1,100,773	73,116	34,564	-	1,135,337	34,564	107,680
Facilities	103,991	-	103,991	2,437	106,428	3,342	-	109,770	5,779	3,447	-	113,217	3,447	9,226
Finance	8,244,507	249,412	8,493,919	87,235	8,331,742	261,652	147,909	8,741,303	496,796	274,512	-	9,015,815	274,512	771,308
Human Resources	3,643,234	18,770	3,662,004	75,251	3,718,485	116,761	40,961	3,876,207	232,973	121,712	-	3,997,919	121,712	354,685
Information Technology (IT)	1,849,565	2,565,679	4,415,244	34,105	1,883,670	59,147	3,968	1,946,785	97,220	61,129	-	2,007,914	61,129	158,349
Investor Relations	202,883	-	202,883	4,755	207,638	6,520	-	214,158	11,275	6,725	-	220,883	6,725	18,000
Legal	4,168,608	17,424	4,186,032	(199,348)	3,969,260	113,656	72,938	4,155,854	(12,754)	119,515	-	4,275,369	119,515	106,761
Operations Excellence	887,577	3,143,981	4,031,558	(3,217)	884,360	24,156	105,727	1,014,243	126,666	28,235	-	1,042,478	28,235	154,901
Regulated Ops	2,049,214	91,914	2,141,128	48,029	2,097,243	65,854	38,434	2,201,531	152,317	69,128	42,008	2,312,667	111,136	263,453
Safety	164,480	-	164,480	3,855	168,335	5,286	-	173,621	9,141	5,451	-	179,072	5,451	14,592
Supply Chain	771,140	1,099,133	1,870,273	69,148	840,288	20,335	9,453	870,076	98,936	21,248	-	891,324	21,248	120,184
Total	**$31,211,789**	**$11,424,200**	**$42,635,989**	**$417,537**	**$31,629,326**	**$1,033,317**	**$952,156**	**$33,614,799**	**$2,403,010**	**$1,090,649**	**$284,642**	**$34,990,090**	**$1,375,291**	**$3,778,301**

Pennsylvania American Water Company
Base Period 12 Months Ended 06/30/23
Future Test Year - 12 months ended 06/30/24
Fully Projected Future Test Year - 12 Months Ending 06/30/25

Service Company
Other Non-Labor & Related Costs

	12 Months June 2023						12 Months June 2024			12 Months June 2025			
	(1) Base Year Other Expense	(2) Base Year Other Capitalized Costs	(3) Base Year Total Other Costs	(4) Adjustments to Base Year Expenses	(5) Additional Adjustments to Other Expense	(6) Adjusted Base Year Other Expenses	(7) Inc for 2024 to Base Year Other Expense	(7a) Additional Adjustments to Other Expense	(8) **FTY 06/30/24** Total Other Expense	(9) Inc for 2025 to Base Year Other Expense	(9a) Additional Adjustments to Other Expense	(10) **FPFTY 06/30/25** Total Other Expense	(11) Total Other Service Co. Adjustment
	(1)	(2)	(1)+(2)	(4)	(5)	(1)+(4)+(5)	(6) x %age	(7a)	(6)+(7)+(7a)	(8) x %age	(9a)	(8)+(9)+(9a)	(10)-(1)
Business Development	$94,509	$698	$95,207	$0	$0	$94,509	$4,057	$0	$98,566	$4,231	$0	$102,797	$8,288
Central Lab	295,533	$0	295,533	(218)	-	295,315	12,635	-	307,950	13,177	-	321,127	25,594
Corp Admin	3,443,993	($76,551)	3,367,442	(295)	-	3,443,698	(30,055)	455,455	3,869,098	(13,422)	363,386	4,219,062	775,069
Corporate Security	3,261,993	$1,676,475	4,938,468	(6,810)	-	3,255,183	139,743	-	3,394,926	145,742	-	3,540,668	278,675
Customer Service Organization (CSO)	9,302,627	$36,716	9,339,343	(3,972)	-	9,298,655	200,104	(889,690)	8,609,069	208,694	-	8,817,763	(484,864)
Environmental Leadership	132,075	$20,738	152,813	(675)	-	131,400	5,640	-	137,040	5,882	-	142,922	10,847
External Affairs & Public Policy	249,492	$1,587	251,079	(2,304)	-	247,188	10,612	-	257,800	11,067	-	268,867	19,375
Facilities	1,674,647	$64,725	1,739,372	-	-	1,674,647	55,707	-	1,730,354	58,098	-	1,788,452	113,805
Finance	1,223,265	$22,310	1,245,575	(8,384)	-	1,214,881	52,154	-	1,267,035	54,393	-	1,321,428	98,163
Human Resources	978,087	$7,224	985,311	(3,490)	-	974,597	41,844	-	1,016,441	43,641	-	1,060,082	81,995
Information Technology (IT)	4,538,802	$12,866,805	17,405,607	(652)	-	4,538,150	194,797	-	4,732,947	203,160	-	4,936,107	397,305
Investor Relations	268,119	$308	268,427	-	-	268,119	11,510	-	279,629	12,004	-	291,633	23,514
Legal	604,464	$8,645	613,109	-	-	604,464	21,851	-	626,315	22,789	-	649,104	44,640
Operations Excellence	392,593	$268,940	661,533	(1,518)	-	391,075	16,789	-	407,864	17,509	-	425,373	32,780
Regulated Ops	427,034	$29,187	456,221	-	-	427,034	18,332	-	445,366	19,119	-	464,485	37,451
Safety	36,647	$469	37,116	(675)	-	35,972	1,544	-	37,516	1,611	-	39,127	2,480
Supply Chain	187,845	$39,261	227,106	(1)	-	187,844	4,174	-	192,018	4,353	-	196,371	8,526
Total	**$27,111,725**	**$14,967,537**	**$42,079,262**	**($28,994)**	**$0**	**$27,082,731**	**$761,438**	**($434,235)**	**$27,409,934**	**$812,048**	**$363,386**	**$28,585,368**	**$1,473,643**

Pennsylvania-American Water Company
Summary of Pro Forma Adjustments

						Adjustments														
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
Function	**12 months ended 06/30/23**	**Removed one-time items**	**Normalize for merit - Labor and Labor Related [1]**	**Employee Movement**	**4/1/24 Merit Increase - Labor and Related [2]**	**2024 LTPP Adjustment**	**2024 Depreciation and LOP Interest**	**2024 Adjustment for Changes in Expense**	**2024 Pension / OPEB**	**2024 Alton-Pensacola Building Adjustment**	**2024 Evansville Building Adjustment**	**2024 Postage Adjustment**	**2024 Sales Tax Refund Adjustment**	**FTY 12 months ended 06/30/24**	**4/1/25 Merit Increase - Labor and Related [3]**	**2025 LTPP Adjustment**	**2025 Depreciation and LOP Interest**	**2025 Adjustment for Changes in Expense**	**2025 Pension / OPEB Adjustment**	**FPFTY 12 months ended 06/30/25**	**Total Adjustments**
Business Development	$466,615	$0	$8,721	$62,950	$13,935	$0	$0	$4,057	$5,272	$0	$0	$0	$0	$561,551	$14,538	$0	$0	$4,231	$0	$580,320	$113,705
Central Lab	665,400	(218)	8,669	0	11,886	0	0	12,635	12,227	0	0	0	0	710,598	12,643	0	0	13,177	0	736,419	71,019
Corp Admin	1,940,320	1,621	10,154	0	13,923	211,261	37,937	(30,055)	(40,991)	0	97,119	0	320,399	2,561,688	14,719	242,634	363,386	(13,422)	0	3,169,006	1,228,686
Corporate Security	5,097,346	(11,016)	42,917	0	58,846	0	0	139,743	15,454	0	0	0	0	5,343,290	61,179	0	0	145,742	0	5,550,210	452,865
Customer Service Organization (CSO)	15,477,451	(12,067)	144,534	0	198,175	0	0	200,104	278,510	(1,098,092)	0	208,402	0	15,397,017	213,143	0	0	208,694	0	15,818,854	341,403
Environmental Leadership	982,534	(7,393)	19,775	0	27,114	0	0	5,640	25,316	0	0	0	0	1,052,987	28,761	0	0	5,882	0	1,087,629	105,095
External Affairs & Public Policy	1,277,148	(11,504)	23,870	0	32,729	0	0	10,612	25,717	0	0	0	0	1,358,573	34,564	0	0	11,067	0	1,404,204	127,056
Facilities	1,778,638	0	2,437	0	3,342	0	0	55,707	0	0	0	0	0	1,840,123	3,447	0	0	58,098	0	1,901,668	123,030
Finance	9,467,772	(111,977)	190,829	0	261,652	0	0	52,154	147,909	0	0	0	0	10,008,340	274,513	0	0	54,393	0	10,337,245	869,473
Human Resources	4,621,322	(13,395)	85,156	0	116,760	0	0	41,844	40,961	0	0	0	0	4,892,647	121,713	0	0	43,641	0	5,058,001	436,679
Information Technology (IT)	6,388,367	(9,684)	43,137	0	59,147	0	0	194,797	3,968	0	0	0	0	6,679,733	61,129	0	0	203,160	0	6,944,021	555,655
Investor Relations	471,002	0	4,755	0	6,520	0	0	11,510	0	0	0	0	0	493,787	6,725	0	0	12,004	0	512,516	41,514
Legal	4,773,072	(262,508)	63,160	0	113,656	0	0	21,851	72,938	0	0	0	0	4,782,169	119,515	0	0	22,789	0	4,924,473	151,401
Operations Excellence	1,280,170	(22,353)	17,618	0	24,156	0	0	16,789	105,727	0	0	0	0	1,422,107	28,235	0	0	17,509	0	1,467,851	187,681
Regulated Ops	2,476,248	0	48,028	0	65,853	27,502	0	18,332	10,932	0	0	0	0	2,646,897	69,128	42,008	0	19,119	0	2,777,152	300,904
Safety	201,127	(675)	3,855	0	5,286	0	0	1,544	0	0	0	0	0	211,137	5,452	0	0	1,611	0	218,199	17,072
Supply Chain	958,985	(7,645)	1,494	75,298	20,335	0	0	4,174	9,453	0	0	0	0	1,062,094	21,249	0	0	4,353	0	1,087,696	128,711
Total	$58,323,516	($468,813)	$719,111	$138,249	$1,033,316	$238,762	$37,937	$761,437	$713,394	($1,098,092)	$97,119	$208,402	$320,399	$61,024,736	$1,090,651	$284,642	$363,386	$812,049	$0	$63,575,463	$5,251,948

[1] 2023 Merit increase for non-collective bargaining employees was calculated at 3.2% (used actual average merit increase %). For collective bargaining employees, respective contract increases were used calculated at 2.75%

[2] 2024 Merit increase for non-collective bargaining employees was calculated at 3.14% (used a 3 year average 2021-2023). For collective bargaining employees, respective contract increases were used calculated at 2.60%

[3] 2025 Merit increase for non-collective bargaining employees was calculated at 3.14% (used a 3 year average 2021-2023). For collective bargaining employees, respective contract increases were used calculated at 2.60%

Pennsylvania American Water Company
Allocation of Revenue Requirement from Water to Wastewater
Base Year Ending June 2023

Base Year 06/30/2023

Factor 1: Customers for Service Company	Total Customers	Dual Water/Wastewater Customers	Wastewater Only Customer Equivalent (5% of Dual Customers)	Wastewater Only	Total Customers For Allocation	Allocation Factor
As of 06/30/23						
Water Operations	681,707				681,707	95.4%
Wastewater SSS	55,222	35,697	1,785	19,525	21,310	3.0%
Wastewater CSS	42,363	32,363	1,618	10,000	11,618	1.6%
Total	779,292	68,060	3,403	29,525	714,635	100%

Allocation of Present Rates	$61,024,733 FTY 06/30/2024	$63,575,458 FPFTY 06/30/25
Water Operations	$61,024,733	$60,645,901
Wastewater SSS		1,895,820
Wastewater CSS		1,033,737
Total Company	$61,024,733	$63,575,458

Acquisition O&M

Pennsylvania-American Water Company - Farmington Water Operations
Acquisition O&M Adjustment

Farmington Water Adjustment

O&M Expenses	Present Rates 2024	Present Rates 2025
Production Costs:		
Fuel & Power	$5,641	$5,641
Chemicals	4,468	4,468
Waste Disposal	2,349	2,349
Labor and Labor Related:		
Labor	46,815	47,751
Group Insurance	10,166	10,474
401K	1,556	1,587
DCP	2,386	2,434
VEBA	363	363
Other O&M		
Service Company	39,537	41,189
Insurance Other Than Group	8,255	8,255
Miscellaneous	5,632	5,632
Maintenance	18,432	18,432
Taxes Other Than Income		
Payroll Tax	3,739	3,810
Total Farmington Water Adjustment	**$149,338**	**$152,385**

Pennsylvania-American Water Company - Audubon Water Operations
Acquisition O&M Adjustment

Audubon Water Adjustment

O&M Expenses	Present Rates 2024	Present Rates 2025
Production Costs:		
Fuel & Power	$145,000	$145,000
Chemicals	92,000	92,000
Labor and Labor Related:		
Labor	375,326	387,283
Group Insurance	83,002	85,518
401K	11,952	12,332
DCP	18,143	18,721
Other O&M		
Service Company	261,549	261,549
Contracted Services	160,528	160,528
Insurance Other Than Group	63,196	63,196
Rents	5,622	5,622
General Office	112,431	112,431
Miscellaneous	102,210	102,210
Maintenance	80,746	80,746
Taxes Other Than Income		
Payroll Tax	29,814	30,729
Property Tax		27,709
Total Audubon Water Adjustment	**$1,541,517**	**$1,585,572**

Pennsylvania-American Water Company - Farmington WW Operations
Acquisition O&M Adjustment

Farmington Wastewater Adjustment

O&M Expenses	Present Rates 2024	Present Rates 2025
Production Costs:		
Fuel & Power	$30,000	$30,000
Chemicals	7,500	7,500
Waste Disposal	5,000	5,000
Labor and Labor Related:		
Labor	63,407	65,425
Group Insurance	15,247	15,709
401K	2,049	2,115
DCP	3,111	3,210
Other O&M		
Service Company	39,537	41,189
Contracted Services	51,200	51,200
Insurance Other Than Group	8,948	8,948
Miscellaneous	8,192	8,192
Maintenance	20,480	20,480
Taxes Other Than Income		
Payroll Tax	5,053	5,208
Total Farmington WW Adjustment	**$259,725**	**$264,176**

Pennsylvania-American Water Company - Sadsbury WW Operations
Acquisition O&M Adjustment

Sadsbury Wastewater Adjustment

O&M Expenses	Present Rates 2024	Present Rates 2025
Production Costs:		
Fuel & Power	$7,500	$7,500
Waste Disposal	185,000	185,000
Other O&M		
Service Company	21,519	22,418
Contracted Services	16,500	16,500
Insurance Other Than Group	3,822	3,822
Miscellaneous	1,500	1,500
Maintenance	9,000	9,000
Taxes Other Than Income		
Property Tax		3,547
Total Sadsbury WW Adjustment	**$244,841**	**$249,288**

Pennsylvania-American Water Company - BASA WW Operations
Acquisition O&M Adjustment

BASA Wastewater Adjustment

O&M Expenses	Present Rates 2024	Present Rates 2025
Production Costs:		
Fuel & Power	$379,155	$379,155
Chemicals	221,550	221,550
Waste Disposal	285,000	285,000
Labor and Labor Related:		
Labor	2,335,416	2,407,470
Group Insurance	466,394	480,535
401K	74,772	77,076
DCP	111,713	115,152
VEBA	9,811	9,811
ESPP	296	306
Other O&M		
Service Company	1,259,972	1,312,636
Contracted Services	106,594	106,594
Insurance Other Than Group	445,104	445,104
General Office	90,755	90,755
Miscellaneous	171,872	171,872
Maintenance	194,254	194,254
Taxes Other Than Income		
Payroll Tax	185,531	191,043
Property Tax		589,414
Total BASA WW Adjustment	**$6,338,191**	**$7,077,728**

Pennsylvania-American Water Company - Brentwood WW Operations
Acquisition O&M Adjustment

Brentwood Wastewater Adjustment

O&M Expenses	Present Rates 2024	Present Rates 2025
Labor and Labor Related:		
Labor	74,491	76,876
Group Insurance	15,290	15,754
401K	2,300	2,374
DCP	3,492	3,604
VEBA	-	-
ESPP	-	-
Other O&M		
Service Company	339,351	353,536
Contracted Services	151,404	151,404
Insurance Other Than Group	25,387	25,387
Rents	12,318	12,318
General Office	4,619	4,619
Miscellaneous	18,297	18,297
Maintenance	56,530	56,530
Taxes Other Than Income		
Payroll Tax	5,901	6,084
Property Tax		35,268
Total Brentwood WW Adjustment	**$709,379**	**$762,049**

Rent Expense

Pennsylvania-American Water Company - Water Operations
Notes to Statement Of Income

Vendor	Description		6/30/2023 Expense	6/30/2024 Expense	6/30/2024 Adjustment	6/30/2025 Expense	6/30/2025 Adjustment
SBA PROPERTIES INC	Bald Mountain Tower site rent		$10,856	$11,815	$959	$11,815	$0
SBA TOWERS LLC	Penobscot Mountain tower site rent		9,506	10,425	919	10,425	-
		Total	**$20,362**	**$22,239**	**$1,877**	**$22,239**	**$0**
High Properties	Coatesville Operations Center		$135,386	$127,808	($7,579)	$131,754	$3,946
Weeber Enterprises	Wyomissing Operations Center		28,779	-	(28,779)	-	-
		Total	**$164,165**	**$127,808**	**($36,357)**	**$131,754**	**$3,946**
Canon Solutions America Inc	Copiers		$44,838	$27,733	($17,105)	$0	($27,733)
		Total	**$44,838**	**$27,733**	**($17,105)**	**$0**	**($27,733)**
		Total	**$229,365**	**$177,780**	**($51,585)**	**$153,993**	**($23,787)**

Pennsylvania-American Water Company - Wastewater SSS General Operations
Notes to Statement Of Income

Vendor	Description	6/30/2023 Expense	6/30/2024 Expense	6/30/2024 Adjustment	6/30/2025 Expense	6/30/2025 Adjustment
City of York, PA	Service garage for York WW Treatment Plant	$58,950	$58,950	$0	$49,950	($9,000)
	Total	**$58,950**	**$58,950**	**$0**	**$49,950**	**($9,000)**

Miscellaneous Adjustments

Pennsylvania American Water Company
Miscellaneous Expense Statement

General Facility Maintenance Service & Supplies
Pro Forma Adjustment

Miscellaneous Expense

System	Expense Type	Present Rates 2024
Water Operations	Clear Right-of Ways	$600,000
Water Operations	General Plant Maintenance	750,000
Water Operations	PRV Maintenance	100,000
	Total Water Operations	**$1,450,000**
Wastewater SSS General Operations	Clear Right-of Ways	$200,000
Wastewater SSS General Operations	Digester cleaning	150,000
	Total Wastewater SSS General Operations	**$350,000**
Wastewater CSS Operations	Clear Right-of Ways	$75,000
Wastewater CSS Operations	Digester cleaning	50,000
	Total Wastewater CSS Operations	**$125,000**

Pennsylvania American Water Company
Chapter 109 - Safe Drinking Water Annual Fees (SDWA)
PWS ID - Public Water System ID

Description		**Water Operations**	
DEP-SDW Annual Fee	7/1/22 - 6/30/23	$848,000	
Projected Annual Ongoing Fees	7/1/23 - 6/30/24	$848,500	
Adjustment			$500
Projected Annual Ongoing Fees	7/1/24 - 6/30/25	$852,500	
Adjustment			$4,000

SYSTEM NAME	PWS ID #	Population Served	Actual 2023 Fee	Invoice Number (For Invoices Received)	Projected 2025 Fee
Yardley	PA1090074	32,976	$25,000	1284935	$25,000
Coatesville	PA1150106	36,967	25,000	1284696	25,000
Home Water-Royersford/Shady	PA1150166	46,844	25,000	1284736	25,000
Phoenixville	PA1150206	2,661	4,000	1297321	4,000
Norristown	PA1460046	88,896	35,000	1284888	35,000
Lake Spangenberg	PA2350026	370	500	1259974	500
Olwen Heights	PA2350032	330	500	1260241	500
Brownell	PA2359001	12,560	20,000	1284732	20,000
Fallbrook	PA2359006	2,851	4,000	1297110	4,000
Lake Scranton	PA2359008	134,570	40,000	1284836	40,000
Forest City	PA2359014	3,188	4,000	1297208	4,000
Hillcrest	PA2400070	125	500	1260269	500
Homesite	PA2400072	68	250	1274416	250
Sutton Hills	PA2400128	185	500	1259973	500
Ceasetown	PA2409002	58,467	30,000	1284833	30,000
Crystal Lake	PA2409003	9,773	10,000	1284978	10,000
Nesbitt	PA2409010	52,640	30,000	1285048	30,000
Watres	PA2409011	52,002	30,000	1284998	30,000
Huntsville	PA2409013	11,987	20,000	1284691	20,000
Pocono	PA2450063	17,860	20,000	1284776	20,000
Mid Monroe	PA2450119	1,580	2,000	1297177	2,000
Blue Mtn. Lake	PA2450133	1,753	2,000	1296984	2,000
Fernwood (Resort)	PA2450134	545	500	1296911	500
Wild Acres	PA2520034	2,943	4,000	1297644	4,000
Marcel Lakes (Silver)	PA2520035	845	1,000	1297379	1,000
Pocono Mt. Lake Forest Estates	PA2520050	203	500	1260481	500
All Seasons Water	PA2520056	100	250	1272228	250
Saw Creek (Lehman Pike)	PA2520062	7,016	10,000	1284964	10,000
Milford Landing (Three Lanes)	PA2520085	468	500	1260486	500
Pine Ridge	PA2520096	2,450	4,000	1297319	4,000
Montrose	PA2580023	1,890	2,000	1297409	2,000
Susquehanna	PA2580024	4,230	6,500	1284899	6,500
Thompson	PA2580026	225	500	1260550	500
Indian Rocks	PA2640047	1,100	2,000	1297180	2,000
Winola Water	PA2660004	130	500	1260632	500
Penn	PA3060069	28,508	25,000	1284997	25,000
Glen Alsace	PA3060088	24,951	20,000	1284734	20,000
Golden Oaks	PA3060126	100	250	1271431	250
Bangor	PA3480038	9,008	10,000	1284909	10,000

Pennsylvania American Water Company
Chapter 109 - Safe Drinking Water Annual Fees (SDWA)
PWS ID - Public Water System ID

Description		**Water Operations**	
DEP-SDW Annual Fee	7/1/22 - 6/30/23	$848,000	
Projected Annual Ongoing Fees	7/1/23 - 6/30/24	$848,500	
Adjustment			$500
Projected Annual Ongoing Fees	7/1/24 - 6/30/25	$852,500	
Adjustment			$4,000

SYSTEM NAME	PWS ID #	Population Served	Actual 2023 Fee	Invoice Number (For Invoices Received)	Projected 2025 Fee
Berry Hollow	PA3480053	70	250	122676	250
Blue Mountain/Nazareth	PA3480055	23,763	20,000	1284987	20,000
Frackville	PA3540032	5,583	10,000	1284859	10,000
Wildcat Park	PA3540053	63	250	1273291	250
Laurel Ridge	PA3540072	105	500	1260990	500
Nittany	PA4140081	1,600	2,000	1297291	2,000
Phillipsburg	PA4140087	20,095	20,000	1284871	20,000
Boggs Township	PA4140101	80	250	1274880	250
Berwick	PA4190013	12,880	20,000	1284925	20,000
Turbotville	PA4490016	705	1,000	1297264	1,000
White Deer (Milton)	PA4490023	30,209	25,000	1284692	25,000
McEwensville	PA4490298	282	500	1261189	500
Pittsburgh	PA5020039	686,000	40,000	1284891	40,000
Kittanning	PA5030008	5,000	6,500	1285017	6,500
Butler	PA5100012	43,414	25,000	1284697	25,000
Brownsville	PA5260005	15,817	20,000	1284823	20,000
Uniontown	PA5260020	23,125	20,000	1284730	20,000
Connellsville	PA5260022	11,425	20,000	1284877	20,000
Indiana	PA5320025	22,360	20,000	1284822	20,000
Clarion	PA6160001	16,600	20,000	1285039	20,000
Punxsutawney	PA6330010	8,800	10,000	1284979	10,000
Ellwood City	PA6370011	17,200	20,000	1284779	20,000
New Castle	PA6370034	43,279	25,000	1284740	25,000
Kane	PA6420019	5,725	10,000	1284669	10,000
Warren	PA6620020	14,650	20,000	1284928	20,000
Lake Heritage	PA7010035	1,648	2,000	1297195	2,000
Mechanicsburg (Riverton)	PA7210029	93,368	35,000	1233807	35,000
Hershey	PA7220017	46,000	25,000	1285042	25,000
Steelton	PA7220036	6,300	10,000	1284918	10,000
Valley Springs	PA1150185	2,500	4,000	1243776	4,000
Farmington Township		549			500
Audubon		2,893			4,000
Total Company			$848,000		$852,500

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Donation expense to be eliminated from Charitable Donations - Community
Per Book Amount

Miscellaneous Expenses

Recipient	2023 Amount
Aclamo	$5,000
African American Chamber Found	15,000
AKA Foundation of Central PA	2,000
Allegheny League Of Municipali	15,600
Allison No 2 Volunteer Fire De	500
American Cancer Society	500
American Heart Association Inc	5,000
Amity Fire Company	500
Amity Township	5,000
Annville Free Library Associat	5,000
Appalachian Audubon Society	500
Avella Volunteer Fire Departme	500
Avoca Hose Co No 1	500
Berks County Conservation Dist	660
Berks Latino Workforce Develop	5,000
Berwick Borough	500
Big Brothers Big Sisters Of Th	700
Big Brothers Big Sisters Of Yo	500
Bjw Volunteer Fire Co	500
Black Rock Volunteer Fire Dept	500
Blaine Hill Volunteer Fire Com	500
Borough Of Brownsville	3,000
Borough Of Steelton	7,500
Boys & Girls Clubs Of Northeas	1,000
Brandywine Red Clay Alliance	4,500
Brentwood Borough	1,000
Brookline Breeze	500
Broughton Volunteer Fire Dept	500
Browndale Fire Company No 1	500
Brownsville Fire Company 1	500
Bullskin Township Volunteer Fi	500
Burgettstown Volunteer Fire Co	500
Bushkill Twp Vfc	500
Butler Am Rotary Charities	3,000

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Donation expense to be eliminated from Charitable Donations - Community
Per Book Amount

Miscellaneous Expenses

Recipient	2023 Amount
Butler City Of	5,500
Butler County Chamber Of Commerce	9,500
Butler Township Volunteer Fire	500
Caitlins Smiles	250
California Volunteer Fire Dept	500
Caln Township	1,000
Camp Hill Borough	5,000
Campbelltown Volunteer Fire Co	500
Canonsburg Volunteer Fire Dept	500
Capital Area Girls On The Run	3,500
Capital Area Greenbelt Assoc	2,000
Carlisle Cares	4,500
Casa San Jose	5,000
Castle Shannon Borough	500
Cdc Of Butler County	10,000
Central Pa Chamber Of Commerce	2,395
Central Pennsylvania Conservan	2,000
Centre Square Fire Company	500
Chartiers Twp Vol Fire Dept #1	500
Chester County Conservation	1,000
Chester County Food Bank	7,500
Chester Hill Hose Company	500
Chinchilla Hose Company	500
Christiana Fire Company No 1	500
Citizens Hose Co #1 Vfd	500
City Of Mckeesport	500
City Of York Police	750
Clarendon Fire Department	500
Clarks Summit Fire Co #1	500
Cmaa Central Pa Chapter	400
Coatesville Christmas Parade	500
Coatesville City Of	6,500
Coatesville Youth Initiative	8,558
Colonial Flag Foundation	1,500

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Donation expense to be eliminated from Charitable Donations - Community
Per Book Amount

Miscellaneous Expenses

Recipient	2023 Amount
Columbia Fire Co No 1	500
Commission On Economic Opportu	500
Connellsville City Of	2,500
Connellsville Township Fire De	500
Connoquenessing Volunteer	500
Conodoguinet Creek Watershed A	1,000
Cover Me With Hope Outreach	2,000
Cpwqa	340
Cumberland Area Economic	1,500
Cumberland Valley Trout Unlimi	2,000
Downtown Inc	5,000
Downtown Mechanicsburg Partner	750
Dreamwrights Center For Commun	5,000
Dress For Success Lackawanna	720
Dunbar Volunteer Fire Co	500
Eagle Hose Company #1	500
East End United Community Cent	1,000
East Fallowfield Township	1,000
East Norriton Township	500
Elizabeth Forward School Distr	400
Elizabeth Township Fire Dept #	500
Elm Hill Hose Company #3	500
Elmhurst Roaring Brook	500
Elrama Volunteer Fire Co	500
Eureka Hose Co #44	500
Excelsior Hose Co #2	500
Exeter Hose Company #1	500
Exeter Township	3,000
Experience Inc Of Warren Pa	500
Eynon Sturges Vol Hose Co #3	500
Farmington Township Volunteer	500
Fayette County Association	840
Fayette County Emergency Manag	500
Floreffe Volunteer Fire Compan	500

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Donation expense to be eliminated from Charitable Donations - Community
Per Book Amount

Miscellaneous Expenses

Recipient	2023 Amount
Footedale Volunteer Fire Dept	500
Foundation For Ohio River Educ	1,000
Friends Of Derry Twp Parks And	5,000
Friends Of Preston Park	500
Friends Of The West Shore Thea	750
Friendship Fire Co	500
Glassport Borough	1,000
Good Will Hose Co #1	500
Greater Reading Chamber Of Com	1,900
Greater Reading Of Commerce & Ind	(2,750)
Greenwood Hose Co #1	500
Grindstone Community Vfd	500
Hanover Area Fire District	500
Harmonville Fire Co No 1	500
Harrisburg Area Ymca	2,500
Harrisburg Regional Chamber	2,500
Harrisburg Senators Baseball C	5,000
Healthy Kids Running Series	900
Help A Single Parent	4,000
Heritage Conservancy	3,000
Hershey Volunteer Fire Co	500
Hickory Township Volunteer Fir	500
Hiller Volunteer Fire Co	500
Hilltop Alliance	5,000
Hilltop Economic Development	2,500
Hope Fire Company No 2	500
Hughestown Hose Co #1	500
Indian County Community Action	500
Indiana County Chamber Of Comm	610
Indiana County Conservation	4,650
Indiana Fire Association	500
Indiana Fire Association Found	500
Jdrf International	5,250
Jessup Hose Company Number One	500

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Donation expense to be eliminated from Charitable Donations - Community
Per Book Amount

Miscellaneous Expenses

Recipient	2023 Amount
Joseph Priestley Pta	100
Joshua Burick	5,000
Jr Achievement Of South Centra	500
Kaitlyn Farrell	5,000
Kane Area Community Center	1,000
Kane Volunteer Fire Dept Inc	500
Keystone Business Alliance	5,750
Keystone Trails Association	1,000
Kingston Borough	1,000
Kittanning Fire Dept #4	500
Kittanning Hose Co #6	500
Koppel Volunteer Fire Co	500
Larksville Borough	500
Larksville Volunteer Fire Co N	500
Larosa Youth Development	2,500
Lawrence County Chamber Of Com	1,500
Lewisburg Neighborhoods	1,200
Lgbt Equality Alliance	500
Lgbt Equality Alliance Of Ches	5,000
Limerick Fire Company	500
Limerick Township	1,000
Lindsey Fire Company	500
Lisburn Community Fire Co	400
Local Government Academy	10,000
Lower Allen Fire Company #1	500
Lower Allen Township	10,000
Lower Makefield Township	4,500
Lower Providence Twp Vol Fire	500
Luzerne Volunteer Fire Dept	500
Manada Conservancy	1,000
Marywood University	2,905
Mcdonald Volunteer Fire Dept	500
Midway Volunteer Fire Departme	500
Midwest Food Bank	4,100

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Donation expense to be eliminated from Charitable Donations - Community
Per Book Amount

Miscellaneous Expenses

Recipient	2023 Amount
Milton Fire Department Inc	500
Mocanaqua Volunteer Fire Co No	500
Mon Yough Trail Council	1,000
Monongahela Fire Company	500
Montgomery County Lgbt Busines	500
Morris Twp Vol. Fire Co	500
Mountain Top Fire Company	500
Mountaintop Hose Company 1	1,000
Nanticoke City Of	500
National Flag Foundation	5,000
Nepa Rainbow Alliance	5,000
Nepa Youth Shelter	11,000
New Castle Fire Dept	500
New Cumberland Fire Dept	500
New Cumberland Olde Town Found	150
New Cumberland River Rescue	500
New Eagle Fire Company	500
New Haven Hose Company Inc	500
New Leash On Life Usa	2,500
New Salem Volunteer Fire Dept	500
Nfgwayne County Commu	721
Nick Staples Presents Llc	5,000
Norristown Borough	3,000
Norristown Chamber Of Commerce	500
Norriton Fire Engine Company	500
North Union Township	697
North Union Twp Volunteer Fire	500
Northeast Fire & Rescue Compan	500
Northeastern School District O	250
Northumberland Fire Co #1	500
Northumberland Hook & Ladder	500
Old Forge Hose & Engine Compan	500
Olyphant Hose Co #2	500
Osterhout Free Library	750

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Donation expense to be eliminated from Charitable Donations - Community
Per Book Amount

Miscellaneous Expenses

Recipient	2023 Amount
OTHER - Charitable Contributions, Community Partnerships, Community Relations, etc.	279
Pa Resources Council	5,000
Pa Section Awwa Water For Peop	2,775
Palmyra Public Library Birdies	250
Penn-Cumberland Garden Club	250
Penns Corner Conservancey	5,000
Pennsbury School District	5,800
Pennsylvania Bar Association	5,000
Pennsylvania Envirothon	5,000
Pennsylvania Recreation And Pa	10,000
Pennsylvania State Cooperative	750
Perkiomen Valley School Dist	250
Perkiomen Watershed Conservanc	1,000
Pike County Conservation Distr	2,700
Pittsburgh Airport Area Chambe	6,000
Pittsburgh For All Inaugural	2,500
Pittsburgh Parks Conservancy	5,000
Plains Township	500
Pleasant Hills Volunteer Fire	500
Pleasant Volunteer Fire Depart	500
Plymouth Borough Ambulance	500
Presto Volunteer Fire Dept	500
Printmaps Llc	405
Punxsutawney Borough	3,333
Punxsutawney Rotary Club	1,500
Quarryville Fire Co No 1	500
Rainbow Kitchen Community Serv	2,500
Rainbow Rose Center	3,000
Republic Fire Dept	500
Richeyville Volunteer Fire Com	500
Roller Nation Foundation	500
Royersford Fire Department	500
Saint Helena School	800

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Donation expense to be eliminated from Charitable Donations - Community
Per Book Amount

Miscellaneous Expenses

Recipient	2023 Amount
Sanatoga Fire Company	500
Saxonburg Volunteer Fire Co	500
Schuylkill River Greenway Assn	7,000
Scranton City Of	1,000
Shippenville Elk Twp Vol Fire	500
Shiremanstown Fire Department	500
Silver Spring Community Fire C	500
Silver Spring Township	500
Skyview Volntr Fire Co West	500
South Brownsville Fire Co #1	500
South Connellsville Vol Fire	500
South Franklin Twp Vol Fire De	500
South Hills Area Council of Governments (SHACOG)	1,000
South Park Township	500
South Union Fire Co	500
South Union Township	400
Starbrick Vol Fire Department	500
Steelton Volunteer Fire Dept	500
Strattanville Vol Fie Co	500
Stroud Water Research Center	7,500
Susan P Byrnes Health Educatio	300
Susquehanna Fire Department	500
Swatara Creek Watershed Assn	1,619
Swedesburg Volunteer Fire Co	500
The Alliance For Health Equity	500
The Butler Rotary Foundation	1,000
The Chamber Of Commerce For	40,000
The Golden Tornado Scholastic	1,500
The Luzerne Foundation	100
The New Cumberland Collective	1,500
The Pennsylvania State Univers	500
The Salvation Army	500
Thorndale Vol Fire Co	500
Three Rivers Waterkeeper	6,000

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Donation expense to be eliminated from Charitable Donations - Community
Per Book Amount

Miscellaneous Expenses

Recipient	2023 Amount
Trappe Fire Company No 1	500
Travel Champs	1,000
Tri-County Society For Childre	800
Turbot Twp Fire Company	500
Twp Of Spring Fire Rescue Svcs	500
United Way Of Chester County	520
United Way Of Greater Philadel	130
United Way Of Lackawanna Count	338
United Way Of Lawrence Co	650
United Way Of Lewis County	130
United Way Of Southwestern Pa	260
United Way Of The Capital Regi	1,300
United Way Of The River Cities	1,300
United Way Of Washington Count	520
United Way Of Wyoming Valley	780
United Way Worldwide	585
Upper Allen Township Fire Dept	500
Valley Inn Volunteer Fire Dept	500
Variety The Childrens Charity	3,000
Vfd Of Carroll Township	500
Vigilant Hose Co #1 Of Port Vu	500
Wallaceton Area Vol Fire Co #1	500
Wal-Mart #2945	4,007
Warren City Of	500
Warren County Chamber Of Comme	2,500
Washington City Of	500
Washington County Association	1,500
Washington County Chamber Of	12,000
Washington Township Vol Fiire	500
Watershed Alliance Of York	1,000
Wave - *Montco Lgbt Counc	500
West Brownsville Vol Fire Co 1	500
West End Fire Co	500
West Homestead Volntr Fire Co	500

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Donation expense to be eliminated from Charitable Donations - Community
Per Book Amount

Miscellaneous Expenses

Recipient	**2023 Amount**
West Leisenring Volunteer Fire	500
West Mifflin Volunteer Fire	500
West Pittston Hose Co #1	500
West Shore Bureau Of Fire	500
West Shore Chamber Of Commerce	625
Western Chester County	6,500
Western Pennsylvania Conservan	16,000
Whitehall Fire Company	500
Wilkes-Barre Bureau Of Fire Ci	1,000
Wilkes-Barre City Of	1,000
William Cameron Engine Co	500
Wilson Fire Co #1	500
Womens Business Enterprise	2,500
Worcester Volunteer Fire Co	500
Wyoming Vol Hose Co #2	500
Wyomissing Borough	500
Yardley Harvest Day Inc	1,200
Yellow Breeches Watershed	1,000
Ymca Of Centre County	1,500
York City Parks Conservancy	3,500
York County Conservation Distr	1,000
York County Economic Alliance	575
York Professional Baseball Clu	6,400
	$618,327
Total Donations - Water Operations	**($618,327)**
Abington Heights Fbla Activity Fund	$200
Total Donations - Wastewater CSS Operations	**($200)**
Exeter Township	$1,000
Total Donations - Wastewater SSS General Operations	**($1,000)**

Pennsylvania American Water
Credit Card and Echeck transactions
Volumes and Amounts Paid by PA-American for the 12 Months Ending Jun 2023

		Volume			Amount				
Fee Paid	Trans	$1.50	$1.95	$0.45					Invoice
Month	Month	VI/MC/DI	AMEX	E-checks	Credit Card	AMEX	ACH	Total	amount
Jul-22	Jun-22	68,755	722	83,927	$103,133	$1,408	$37,767	$142,308	$142,308
Aug-22	Jul-22	72,170	784	85,469	108,255	1,529	38,461	148,245	148,245
Sep-22	Jul-22	886	11	1,189	1,329	21	535	1,886	1,886
Oct-22	Aug-22	76,495	1,003	92,634	114,743	1,956	41,685	158,384	158,384
Nov-22	Sep-22	74,446	897	84,680	111,669	1,749	38,106	151,524	151,524
Dec-22	Oct-22	78,843	1,032	83,001	118,265	2,012	37,350	157,627	157,627
Jan-23	Nov-22	79,365	1,000	82,766	119,048	1,950	37,245	158,242	158,242
Feb-23	Dec-22	81,558	1,111	84,705	122,337	2,166	38,117	162,621	162,621
Mar-23	Jan-23	77,916	1,122	77,316	116,874	2,188	34,792	153,854	153,854
Apr-23	Feb-23	82,212	1,229	81,022	123,318	2,397	36,460	162,174	162,174
May-23	Mar-23	93,397	1,290	89,708	140,096	2,516	40,369	182,980	182,980
Jun-23	Apr-23	85,763	1,151	77,145	128,645	2,244	34,715	165,604	165,604
		871,806	11,352	923,562	$1,307,709	$22,136	$415,603	$1,745,448	$1,745,448

June 2023 Residential Customers (less dual WW customers)	654,517				
Percentage of Fees per Residential Customer	$2.00	$0.03	$0.63	$2.67	
June 2024 Residential Customers (less dual WW customers)	676,071				$1,802,928
June 2025 Residential Customers (less dual WW customers)	678,241				$1,808,715

	BYR Allocation Factor 1: Customers	Future Allocation Factor 2: Customers	Base Yr	12 Mos Jun 2024	12 Mos Jun 2025	Adjustment 2023	Adjustment 2024	Adjustment 2025
Water Operations	95.39%	85.45%	$1,665,018	$1,540,602	$1,545,547		($124,416)	$4,945
Wastewater SSS General Operations	2.98%	6.97%	52,049	125,664	126,067		73,615	403
Brentwood WW		0.49%	-	8,834	8,863		8,834	28
BASA WW		1.83%	-	32,994	33,099		32,994	106
Wastewater CSS Operations	1.63%	5.26%	28,381	94,834	95,138		66,453	304
Total	100.00%	100.00%	$1,745,448	$1,802,928	$1,808,715	$0	$57,480	$5,787

Pennsylvania-American Water Company - Water Operations
Miscellaneous Expense Adjustment

Revolving Credit Line Annual Expense
Pro Forma Adjustment

Amortization of Inside Credit Line Revolver Fees

	Amortization Period	Revolver Total	Monthly Amortization	Annualized Amount
2023 Revolver Fees	04/01/2022-06/30/2027	$1,467,854	$24,464	$293,571
Total Annualized Revolver Credit Line		$1,467,854	$24,464	$293,571

Pennsylvania-American Water Company - Water Operations
Miscellaneous Expense Adjustment

Removal of Expense
Per Book Amount

Miscellaneous Expenses

	6/30/2023	6/30/2025
Contract Services[1]	$37,844	
Remove IPP Expenses[2]		$156,652
Remove Trade Show Expenses	29,000	
Removal of Expense	$66,844	$156,652

[1]Remove one time credit to Contract Service - Legal

[2]Removal of charges PAWC is currently paying to BASA that will be eliminated when BASA system is acquired.

Pennsylvania-American Water Company - Water Operations
Miscellaneous Expense Adjustment

Lobbying expense to be eliminated from Dues & Membership
Per Book Amount

Miscellaneous Expenses

Dues & Memberships	Dues	Lobbying %	Amount
NAWC Membership Dues	$500,947	5%	$23,832
NAWC PA Chapter - Governmental Relations Fund	26,364	100%	26,364
PA Chamber	41,000	50%	20,500
Lobbying expense to be eliminated			$70,696
Adjustment			($70,696)

Pennsylvania-American Water Company - Water Operations
Miscellaneous Expense Adjustment

Injuries and Damages adjustment to normalize per book amount

Year	Injuries & Damages
2021	$0
2022	37,750
2023	127,458
Total	$165,208
Three-year average	$55,069
Test year expense	127,458
Pro forma adjustment	($72,389)

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Temporary Employee Expense to be eliminated from Contract Services
Per Book Amount

Contract Services Other

NARUC Account	Account Description	Water Operations 2023 Amount	Wastewater SSS General Operations 2023 Amount
636.3	53151013 Contract Svc-Temp Empl - Water Treatment	$0	$17,049
636.5	53151014 Contract Svc-Temp Empl - Transmssn & Distr	823	-
636.7	53151015 Contract Svc-Temp Empl - Customer Accounting	3,433	-
636.8	53151016 Contract Svc-Temp Empl - Admin & General	137,575	1,220
	Total - Water Operations	$141,831	$18,269
		($141,831)	($18,269)

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Pension and OPEB Expense to be Eliminated
Per Book Amount

Pension and OPEB

NARUC Account	Account Description	2023 Amount
604.8	50610000 Pension Expense	$247,065
604.8	50610100 Pension Capitalized Credits	(30,528)
604.8	50510000 PBOP Expense	39,585
604.8	50510100 PBOP Capitalized Credits	(4,882)
	Total - Wastewater SSS	$251,241

NARUC Account	Account Description	Amount
604.8	50610000 Pension Expense	$334,447
604.8	50610100 Pension Capitalized Credits	(89,008)
604.8	50510000 PBOP Expense	53,544
604.8	50510100 PBOP Capitalized Credits	(14,234)
	Total - Wastewater CSS	$284,749

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Nutrient Credit Expense Adjustment to normalize per book amount

Year	Wastewater CSS Operations Nutrient Credit Expense	Wastewater SSS General Operations Nutrient Credit Expense
2019	$0	$42,737
2020	165,012	33,843
2021	58,617	28,212
2022	-	34,640
2023	-	-
Total	$223,629	$139,432
Five-year average	44,726	27,886
Test year expense	-	-
Pro forma adjustment		
	$44,726	$27,886

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment

Fines expense to be eliminated from Penalties - Non deductible
Per Book Amount

Name	Description	Amount
Commonwealth Of Pa - Clean Water Fund	Discharge Penalty - December 2022	$3,000
Commonwealth Of Pa - Clean Water Fund	Discharge Penalty - January 2023	3,000
Commonwealth Of Pa - Clean Water Fund	Discharge Penalty - February 2023	1,500
Commonwealth Of Pa - Clean Water Fund	Discharge Penalty - March 2023	1,500
Commonwealth Of Pa - Clean Water Fund	Discharge Penalty - April 2023	1,500
Commonwealth Of Pa - Clean Water Fund	Discharge Penalty - May 2023	1,500
Commonwealth Of Pa - Clean Water Fund	General - Penalty	100
Commonwealth Of Pa - Clean Water Fund	Sewage Discharge	4,500
Commonwealth Of Pa - Clean Water Fund	Kane Wastewater System - Penalty	100
Commonwealth Of Pa - Clean Water Fund	Discharge Penalty - July	1,500
Commonwealth Of Pa - Clean Water Fund	Discharge Penalty - July 2022	700
Commonwealth Of Pa - Clean Water Fund	DEP - August	1,500
Commonwealth Of Pa - Clean Water Fund	Sewage Discharge - November 2022	1,500
Pennsylvania Department Of Environmental Protection	Kane Wastewater System - January 2023	400
	Total - Wastewater CSS Operations	$22,300
Pennsylvania Public Utility Commission	Administrative Penalty - Excavator	$500
Pennsylvania Public Utility Commission	Administrative Penalty - Excavator	1,000
Pennsylvania Public Utility Commission	Administrative Penalty - Excavator	250
Pennsylvania Public Utility Commission	Line Strike - April 2022	1,000
Pa Dept Of Revenue	Sales Tax and Use Penalty (Late Payment) - 2023	2,949
	Total - Water Operations	$5,699

Pennsylvania-American Water Company - Water Operations
Miscellaneous Expense Adjustment

PA HQ - Corporate Campus Allocation from Water to Other Cost of Service Areas
Pro Forma Adjustment

Miscellaneous Expenses

NARUC	Expenses	Corporate Campus Costs
675.8	Landscaping/Snow Removal	$4,284
675.8	Fire Protection	6,187
675.8	Building Maintenance	93,096
675.8	Utilities	100,534
675.8	Recycling/Waste Service/Trash	5,127
675.8	Janitorial/Plant Services	142,926
408.2	Taxes - Property	143,458
675.8	Corporate Office Return and Depreciation	3,473,928
		$3,969,541

	Allocation Factor 3: Customers	Allocated Costs
Water Operations	87.47%	($497,383)
Wastewater SSS	7.09%	281,440
Wastewater CSS	5.44%	215,943
Total	100.00%	-

Pennsylvania-American Water Company
Miscellaneous Expense Adjustment
Arrearage Management Plan and Low Income Program Costs

PA H2O Discount Customers w/Arrears >= $150

Year and Month	Water	Wastewater	Combined	Total
202206	6,640	372	1,624	8,636
202207	6,612	383	1,614	8,609
202208	6,588	394	1,591	8,573
202209	6,126	389	1,467	7,982
202210	5,892	364	1,504	7,760
202211	5,796	385	1,444	7,625
202212	5,728	402	1,449	7,579
202301	5,894	329	1,462	7,685
202302	5,955	374	1,476	7,805
202303	6,139	383	1,532	8,054
202304	5,755	328	1,477	7,560
202305	5,696	371	1,544	7,611
202306	5,688	357	1,488	7,533
Average	6,039	372	1,513	7,924

Average Number of H2O Discount Customer with Arrears	7,924
Estimated Rate of Participation in AMP	100%
Annual Credits	$300
Total Cost of Discounts	$2,377,200

Dollar Energy Costs

$8,000	MyApp Customer Service Representative Monthly Cost
2.5	AMP Customer Service Representatives
$20,000	AMP Monthly Cost
$8,000	MyApp Customer Service Representative Monthly Cost
2.5	H2O Customer Service Representatives
$20,000	H2O Program Monthly Cost
$480,000	Annual Customer Service Representative Costs
$15,000	AMP One Time Start-Up Costs*
2	Number of Years - Normalize
$7,500	Amount Normalized
$487,500	Total Annual Costs

As of 6/30/2023	Total Customers	Allocation Factor	670.7 Uncollectible Expense	636.8 Contract Svc-Other AG	Total
Water Operations	688,859	85.45%	$2,031,317	$416,569	$2,447,886
Wastewater SSS General Operations	56,212	6.97%	165,691	33,979	199,670
BASA WW Operations	14,755	1.83%	43,503	8,921	52,424
Brentwood WW Operations	3,974	0.49%	11,648	2,389	14,037
Wastewater CSS	42,414	5.26%	125,041	25,643	150,683
Total	806,214	100.00%	$2,377,200	$487,500	$2,864,700

* AMP one time start-up costs includes MyApp Development, hiring Customer Service Representatives and training prior to AMP launch date.

Pennsylvania-American Water Company
Calculation of Uncollectible Account Expense Adjustment
Brentwood WW Operations

	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
Revenues - ALCOSAN Charges Only	$2,293,482	$2,373,754
3 Year Average - Uncollectible Ratio	1.176%	1.176%
Annualized Uncollectible Expense	26,971	27,915
Less: Present Rates 06/30/2023	-	
Less: Present Rates 06/30/2024		26,971
	$26,971	**$944**

Uncollectible Accounts

Pennsylvania-American Water Company
Calculation of Uncollectible Account Expense

	July 1, 2021 to June 30, 2022	July 1, 2022 to June 30, 2023	Total	Two Year Average
Write Offs	$10,736,970	$10,146,054	$20,883,024	$10,441,512
Bad Debt Recovery	562,041	771,389	1,333,430	666,715
Net Uncollectibles (net write offs)	10,174,929	9,374,665	19,549,594	9,774,797
Revenues -Billed only	775,900,531	886,675,101	1,662,575,631	831,287,816
Total	1.311%	1.057%	1.176%	**1.176%**

Amortization Expense

Pennsylvania American Water Company
Water Operations

	Amortization Period (Years)[1]	Balance 12/31/2022	R-2020-3019369 Annual Amortization	R-2022-3031672 Annual Amortization	Amortization 2023		Adjustment to Balance		Balance 6/30/2023	Balance 6/30/2024	7/31/2024 July Amortization 2024	Annual Amortization 2025		Balance 6/30/2025	Amortization End Date	Revised Amortization End Date
Water Operations																
Positive Utility Plant Acquisition Adjustments																
PG&W	40	$6,725,358	$455,956	$455,956	$227,978				$6,497,380	$6,041,424	$37,996	$455,956		$5,585,468	9/30/2037	
Lake Spangenberg Water Co.	2	13,707	13,709	4,569	3,046	2			10,661	6,092	381	2,856	4	3,093	12/31/2025	7/31/2026
Fernwood Community Water System	2	5,631	5,630	1,877	1,251	2			4,380	2,503	156	1,174	4	1,271	12/31/2025	7/31/2026
Olwen Heights Water Service Co.	2	5,393	5,396	1,798	1,199	2			4,194	2,396	150	1,123	4	1,217	12/31/2025	7/31/2026
Farmington Township (Water)	10	Seeking Approval								215,489		21,549	**	195,736	7/26/2034	
Audubon Water	10	Seeking Approval								7,639,771		763,977	**	6,939,459	7/26/2034	
Other Acquisition Adjustments																
Steelton Transaction Costs	10	128,505	15,898	15,898	7,949				120,556	104,658	1,325	15,898		88,760	1/28/2031	
Turbotville Water Transaction costs	10	8,742	1,082	1,082	541				8,201	7,119	90	1,082		6,037	1/28/2031	
Creekside Homeowner's Association transaction costs	10	25,807		2,581	1,075	*	11,512	3	36,244	33,663	215	3,935		29,841	1/28/2033	
Valley Township Water Transaction costs	10	212,581		21,258	8,858	*			203,723	182,465	1,772	21,258		161,207	1/28/2033	
Slibco Utilities Transactions Costs	10	47,539		4,754	1,981	*			45,558	40,804	396	4,754		36,050	1/28/2033	
Farmington Township (Water) Transactions Costs	10	Seeking Approval								54,825		5,483	**	49,799	7/26/2034	
Audubon Water Transactions Costs	10	Seeking Approval								117,954		11,795	**	107,142	7/26/2034	
Regulatory Liability Acquisition Adjustments* **																
Indian Rocks Prop. Owners Assoc.	2	(1,234)	(1,234)	(411)	(274)	2			(960)	(549)	(34)	(258)	4	(278)	12/31/2025	7/31/2026
North Fayette County Mun. Auth	2	(62,967)	(62,966)	(20,989)	(13,993)	2			(48,974)	(27,985)	(1,749)	(13,118)	4	(14,211)	12/31/2025	7/31/2026
Wildcat Park Corporation	2	(8,272)	(8,271)	(2,757)	(1,838)	2			(6,434)	(3,677)	(230)	(1,724)	4	(1,867)	12/31/2025	7/31/2026
Turbotville Water	10	(659,608)	(81,601)	(81,601)	(40,801)				(618,807)	(537,206)	(6,800)	(81,601)		(455,605)	1/28/2031	
Creekside Homeowner's Association	10	(751,037)		(75,104)	(31,293)	*	(205,184)	3	(924,928)	(849,824)	(6,259)	(99,243)		(752,592)	1/28/2033	
Other Amortizations																
Receivership - Winola Water	10	473,502	40,619	58,578	29,289				444,213	385,635	4,882	58,578		327,057	1/28/2031	
Equipment Discount	20	(500,733)	(27,690)	(27,690)	(13,845)				(486,888)	(459,198)	(2,308)	(27,690)		(431,508)	1/28/2041	
DEP Safe Drinking Water Fees	2	605,222	558,667	201,741	130,614	2			474,608	272,867	16,812	128,028	4	138,696	12/31/2025	7/31/2026
Steelton Post-in-service AFUDC	2	9,875	597	3,292	1,421	2			8,454	5,162	274	2,444	4	2,648	1/28/2026	7/31/2026
Steelton Deferred Depreciation	2	36,542	1,898	12,181	5,234	2			31,308	19,127	1,015	9,056	4	9,811	1/28/2026	7/31/2026
Tax Cuts & Jobs Act (TCJA Stub Period)	2	(8,090,284)	(7,544,576)	(2,696,762)	(1,750,503)	2			(6,339,782)	(3,643,020)	(224,730)	(1,709,145)	4	(1,851,574)	1/28/2024	7/31/2026
Negative Surcharge for Deferred Tax Credit Reconciliation	2	(222,283)		(74,095)	(30,873)	*	744,690	3	553,280	627,375	(6,175)	316,775	4	343,173	1/28/2026	7/31/2026
SFAS 109 Regulatory Assets Afudc			371,076	371,076								167,280				
Total Water Operations		**($1,998,014)**	**($6,255,811)**	**($1,822,768.00)**	**($1,462,984)**		**$551,019**		**$15,988**	**$10,237,870**	**($182,821)**	**$60,222**		**$10,518,830**		

[1] Docket Nos. R-973944, R-2013-2355276, R-2017-2595853, R-2020-3019369, R-2022-3031672.
[2] Amortizations at Docket No. R-2022-3031672 amortized 5 months in 2023 and Amortizations at Docket No. R-2020-30319369 amortized 1 month.
[3] Annual Amortization adjusted for revised Balance.
[4] Amortization period extended 2 years. (Amortize balance 2 years starting 8/1/2024 to end 7/31/2026)
*New amortizations at Docket No. R-2022-3031672 amortized 5 months in 2023.
**New amortizations at Docket No. R-2023-3043189 amortized 11 months starting August 2024.
***Amortizations described as "Regulatory Liability" were described as "Negative Utility Plant Acquisition Adjustment" in prior base rate cases.

Pennsylvania American Water Company
Water Operations
Settlement
Appendix D, Amortizations

	Case Approved Docket No.	Amortization Period (Years)	Unamortized Balance 12/31/2022	Amortization End Date	Annual Amortization	Reference
Positive Utility Plant Acquisition Adjustments						
PG&W	Docket No. R-973944	40	$6,725,358	9/30/2037	$455,956	Exhibit 3-A, p. 36
Lake Spangenberg Water Co.	Docket No. R-2013-2355276	10	13,707	12/31/2025	4,569	Exhibit 3-A, p. 36
Fernwood Community Water System	Docket No. R-2013-2355276	10	5,631	12/31/2025	1,877	Exhibit 3-A, p. 36
Olwen Heights Water Service Co.	Docket No. R-2013-2355276	10	5,393	12/31/2025	1,798	Exhibit 3-A, p. 36
Steelton Transaction Costs	Docket No. R-2020-3019369	10	128,505	1/28/2031	15,898	Exhibit 3-A, p. 36
Turbotville Water Transaction costs	Docket No. R-2020-3019369	10	8,742	1/28/2031	1,082	Exhibit 3-A, p. 36
Creekside Homeowner's Association transaction costs	Docket No. R-2022-3031672	10	25,807	1/28/2033	2,581	Exhibit 3-A Revised, p. 36R
Valley Township Water Transaction costs	Docket No. R-2022-3031672	10	212,581	1/28/2033	21,258	Exhibit 3-A, p. 36
Slibco Utilities Transactions Costs	Docket No. R-2022-3031672	10	47,539	1/28/2033	4,754	Exhibit 3-A, p. 36
Negative Utility Plant Acquisition Adjustments						
Indian Rocks Prop. Owners Assoc.	Docket No. R-2013-2355276	10	(1,234)	12/31/2025	(411)	Exhibit 3-A, p. 65
North Fayette County Mun. Auth	Docket No. R-2013-2355276	10	(62,967)	12/31/2025	(20,989)	Exhibit 3-A, p. 65
Wildcat Park Corporation	Docket No. R-2013-2355276	10	(8,272)	12/31/2025	(2,757)	Exhibit 3-A, p. 65
Turbotville Water	Docket No. R-2020-3019369	10	(659,608)	1/28/2031	(81,601)	Exhibit 3-A, p. 65
Creekside Homeowner's Association Negative UPAA	Docket No. R-2022-3031672	10	(751,037)	1/28/2033	(75,104)	Exhibit 3-A, p. 65
Other Amortizations						
Demand Study	Docket No. R-2017-2595853	10	$133,545	12/31/2027	$26,709	Exhibit 3-B, p. 247
Lead Service Line Costs	Docket No. R-2020-3019369	10	203,895	1/28/2031	25,224	Exhibit 3-B, p. 247
DEP Safe Drinking Water Fees	Docket No. R-2020-3019369	3	605,222	12/31/2025	201,741	Exhibit 3-A, p. 65
Equipment Discount	Docket No. R-2020-3019369	20	(500,733)	1/28/2041	(27,690)	Exhibit 3-A, p. 38
Receivership - Winola Water	Docket No. R-2020-3019369	10	473,502	1/28/2031	58,578	Exhibit 3-A, p. 37
Steelton DEP Safe Drinking Water Fees	Docket No. R-2020-3019369	3	3,611	1/28/2024	3,333	Exhibit 3-A, p. 65
Steelton Post-in-service AFUDC	Docket No. R-2020-3019369	3	9,875	1/28/2026	3,292	Exhibit 3-A, p. 65
Steelton Deferred Depreciation	Docket No. R-2020-3019369	3	36,542	1/28/2026	12,181	Exhibit 3-A, p. 65
COVID-19 Emergency Response	Docket No. R-2022-3031672	3	3,926,344	1/28/2026	1,308,781	PAWC Exhibit No. SDG-2R
Total Water Operations			**$10,581,948**		**$1,941,060**	

Pennsylvania American Water Company
Creekside Homeowner's Association
Regulatory Liability

Filed Regulatory Liability Acquisition Adjustment* (R-2022-3031672)	($751,037)
Purchase Price	151,580
Final DOC	1,107,801
Final Regulatory Liability Acquisition Adjustment	(956,221)
Regulatory Liability Balance Adjustment	(205,184)

*Amortizations described as “Regulatory Liability” were described as “Negative Utility Plant Acquisition Adjustment” in prior base rate cases.

Pennsylvania American Wastewater Company
Wastewater SSS General Operations

	Amortization Period (Years)[1]	Balance 12/31/2022	R-2020-3019369 Annual Amortization	R-2022-3031672 Annual Amortization	Amortization 2023		Adjustment to Balance		Balance 6/30/2023	Balance 6/30/2024	7/31/2024 July Amortization 2024	Annual Amortization 2025		Balance 6/30/2025	Amortization End Date	Revised Amortization End Date
Wastewater Operations																
Positive Utility Plant Acquisition Adjustments																
Delaware Sewer Acquisition Positive UPAA	10	$49,874	$6,170	$6,170	$3,085				$46,789	$40,619	$514	$6,170		$34,449	1/28/2031	
Clean Treatment Sewage Company	2	58,782	58,782	19,594	13,063	2			45,719	26,125	1,633	12,246	4	13,266	12/31/2025	7/31/2026
Other Acquisition Adjustments																
New Cumberland Borough WW Acq. Costs	10	75,015	15,003	15,003	7,502				67,513	52,510	1,250	15,003		37,507	12/31/2027	
Sadsbury Acquisition Costs	10	211,057	26,110	26,110	13,055				198,002	171,892	2,176	26,110		145,782	1/28/2031	
Exeter Acquisition Costs	40	1,002,421	26,322	26,322	13,161				989,260	962,938	2,194	26,322		936,616	1/28/2061	
Delaware Sewer Acquisition Transaction Costs	10	216,386	32,000	26,769	13,820	2			202,566	175,797	2,231	26,769		149,028	1/28/2031	
Turbotville WW Transaction costs	10	5,332	660	660	330				5,002	4,342	55	660		3,682	1/28/2031	
Valley Township Wastewater Transaction Costs	10	202,200	-	20,220	8,425	*			193,775	173,555	1,685	20,220		153,335	1/28/2033	
Foster Township Transactions Costs	10	72,150	-	7,215	3,006	*			69,144	61,929	601	7,215		54,714	1/28/2033	
Borough of Royersford WW Acquisition Costs	10	355,962	-	35,596	14,832	*			341,130	305,534	2,966	35,596		269,938	1/28/2033	
Upper Pottsgrove Township Transaction Costs	10	373,554	-	37,355	15,565	*			357,989	320,634	3,113	37,355		283,279	1/28/2033	
City of York Wastewater Authority Acquisitions Costs	10	2,021,263	-	202,126	84,219	*			1,937,044	1,734,918	16,844	202,126		1,532,792	1/28/2033	
Sadsbury WW Transactions Costs	10	Seeking Approval								91,470		9,147	**	83,085	7/26/2034	
Farmington Township (Wastewater) Transactions Costs	10	Seeking Approval								56,985		5,699	**	51,761	7/26/2034	
Regulatory Liability Acquisition Adjustments* **																
Turbotville WW	10	(164,952)	(20,406)	(20,406)	(10,203)				(154,749)	(134,343)	(1,701)	(20,406)		(113,937)	1/28/2031	
Foster Township WW	10	(2,056,652)	-	(205,665)	(85,694)	*	13,848	3	(1,957,110)	(1,751,445)	(17,139)	(204,036)		(1,547,273)	1/28/2033	
Sadsbury WW	10	Seeking Approval	-	-						(945,612)		(94,561)	**	(858,931)	7/26/2034	
Other Amortizations																
Exeter Post-in-service AFUDC	2	10,798	2,597	3,599	1,716	2			9,082	5,483	300	2,592	4	2,807	12/31/2025	7/31/2026
Exeter Deferred Depreciation	2	32,572	2,064	10,857	4,696	2			27,876	17,019	905	8,057	4	8,728	12/31/2025	7/31/2026
Tax Cuts & Jobs Act (TCJA Stub Period)	2	(370,214)	(353,157)	(123,405)	(80,849)	2			(289,365)	(165,960)	(10,284)	(77,838)	4	(84,324)	1/28/2024	7/31/2026
Total Wastewater Operations		**$2,095,549**	**($203,855)**	**$88,120**	**$19,729**		**$13,848**		**$2,089,668**	**$1,204,390**	**$7,343**	**$44,446**		**$1,156,304**		

[1] Docket Nos. R-2013-2355276, R-2017-2595853, R-2020-3019369, and R-2022-3031672.
[2] Amortizations at Docket No. R-2022-3031672 amortized 5 months in 2023 and Amortizations at Docket No. R-2020-30319369 amortized 1 month.
[3] Annual Amortization adjusted for revised Balance.
[4] Amortization period extended 2 years. (Amortize balance 2 years starting 8/1/2024 to end 7/31/2026)
*Amortizations at Docket No. R-2022-3031672 amortized 5 months in 2023.
**New amortizations at Docket No. R-2023-3043189 amortized 11 months starting August 2024.
***Amortizations described as "Regulatory Liability" were described as "Negative Utility Plant Acquisition Adjustment" in prior base rate cases.

Pennsylvania American Water Company
Wastewater SSS General Operations
Settlement
Appendix D, Amortizations

	Case Approved Docket No.	Amortization Period (Years)	Unamortized Balance 12/31/2022	Amortization End Date	Annual Amortization	Reference
Positive Utility Plant Acquisition Adjustments						
Clean Treatment Sewage Company	Docket No. R-2013-2355276	10	$58,782	12/31/2025	$19,594	Exhibit 3-A, p. 99
Delaware Sewer Acquisition Positive UPAA	Docket No. R-2020-3019369	10	49,874	1/28/2031	6,170	Exhibit 3-A, p. 99
New Cumberland Borough WW Acq. Costs	Docket No. R-2016-2544151	10	75,015	12/31/2027	15,003	Exhibit 3-A, p. 99
Sadsbury Acquisition Costs	Docket No. R-2020-3019369	10	211,057	1/28/2031	26,110	Exhibit 3-A, p. 99
Exeter Acquisition Costs	Docket No. R-2020-3019369	40	1,002,421	1/28/2061	26,322	Exhibit 3-A, p. 99
Delaware Sewer Acquisition Transaction Costs	Docket No. R-2020-3019369	10	216,386	1/28/2031	26,769	Exhibit 3-A, p. 99
Turbotville WW Transaction costs	Docket No. R-2020-3019369	10	5,332	1/28/2031	660	Exhibit 3-A, p. 99
Valley Township Wastewater Transaction Costs	Docket No. R-2022-3031672	10	202,200	1/28/2033	20,220	Exhibit 3-A, p. 99
Foster Township Transactions Costs	Docket No. R-2022-3031672	10	72,150	1/28/2033	7,215	Exhibit 3-A Revised, p. 99R
Borough of Royersford WW Acquisition Costs	Docket No. R-2022-3031672	10	355,962	1/28/2033	35,596	Exhibit 3-A, p. 143
Upper Pottsgrove Township Transaction Costs	Docket No. R-2022-3031672	10	373,554	1/28/2033	37,355	Exhibit 3-A Revised, p. 184R
City of York Wastewater Authority Acquisitions Costs	Docket No. R-2022-3031672	10	2,021,263	1/28/2033	202,126	Exhibit 3-A Revised, p. 214R
Negative Utility Plant Acquisition Adjustments						
Turbotville WW Negative UPAA	Docket No. R-2020-3019369	10	(164,952)	1/28/2031	(20,406)	Exhibit 3-A, p. 119
Foster Township Negative UPAA	Docket No. R-2022-3031672	10	(2,056,652)	1/28/2033	(205,665)	Exhibit 3-A, p. 119
Other Amortizations						
Sadsbury Post-in-service AFUDC	Docket No. R-2020-3019369	3	514	12/31/2025	171	Exhibit 3-A, p. 119
Sadsbury Deferred Depreciation	Docket No. R-2020-3019369	3	168	12/31/2025	56	Exhibit 3-A, p. 119
Exeter Post-in-service AFUDC	Docket No. R-2020-3019369	3	10,798	12/31/2025	3,599	Exhibit 3-A, p. 119
Exeter Deferred Depreciation	Docket No. R-2020-3019369	3	32,572	12/31/2025	10,857	Exhibit 3-A, p. 119
Valley Township Wastewater Post-in-service AFUDC	Docket No. R-2022-3031672	10	934	1/28/2033	93	Exhibit 3-A, p. 119
Valley Township Wastewater Deferred Depreciation	Docket No. R-2022-3031672	10	4,612	1/28/2033	461	Exhibit 3-A, p. 119
Borough of Royersford WW Post-in-service AFUDC	Docket No. R-2022-3031672	10	132	1/28/2033	13	Exhibit 3-A, p. 162
Borough of Royersford WW Deferred Depreciation	Docket No. R-2022-3031672	10	1,055	1/28/2033	105	Exhibit 3-A, p. 162
City of York Wastewater Authority Post-in-service AFUDC	Docket No. R-2022-3031672	10	1,320	1/28/2033	132	Exhibit 3-A, p. 224
City of York Wastewater Authority Deferred Depreciation	Docket No. R-2022-3031672	10	14,774	1/28/2033	1,477	Exhibit 3-A, p. 224
Total Wastewater SSS General Operations			**$2,489,272**		**$214,033**	

Pennsylvania American Water Company
Foster Township WW
Regulatory Liability

Filed Regulatory Liability Acquisition Adjustment* (R-2022-3031672)	($2,056,651)
Purchase Price	3,750,000
Final DOC	5,792,803
Final Regulatory Liability Acquisition Adjustment	(2,042,803)
Regulatory Liability Balance Adjustment	$13,848

*Amortizations described as “Regulatory Liability” were described as “Negative Utility Plant Acquisition Adjustment” in prior base rate cases.

Pennsylvania American Wastewater Company
BASA WW Operations

Other Acquisition Adjustments	Amortization Period (Years)	Balance 6/30/2024	Annual Amortization 2025	Balance 6/30/2025*	Amortization End Date
BASA WW Transactions Costs	10	1,202,635	120,264	1,092,393	7/26/2034

*New amortizations at Docket No. R-2023-3043189 amortized 11 months starting August 2024.

Pennsylvania American Wastewater Company
Brentwood WW Operations

Other Acquisition Adjustments	Amortization Period (Years)	Balance 6/30/2024	Annual Amortization 2025	Balance 6/30/2025*	Amortization End Date
Brentwood WW Transactions Costs	10	$701,935	$70,194	$637,591	7/26/2034

*New amortizations at Docket No. R-2023-3043189 amortized 11 months starting August 2024.

Pennsylvania American Water Company
Wastewater CSS Operations

Amortizations	Amortization Period (Years)[1]	Balance 12/31/2022	R-2020-3019369 Annual Amortization	R-2022-3031672 Annual Amortization	Amortization 2023		Balance 6/30/2023	Balance 6/30/2024	7/31/2024 July Amortization 2024	Annual Amortization 2025		Balance 6/30/2025	Amortization End Date	Revised Amortization End Date
Other Acquisition Adjustments														
Scranton Sewer Auth - Acquisition Costs	40	$2,605,265	$74,436	$74,436	$37,218		$2,568,047	$2,493,611	$6,203	$74,436		$2,419,175	12/31/2057	
McKeesport Acquisition Costs	40	1,097,578	28,820	28,820	14,410		1,083,168	1,054,348	2,402	28,820		1,025,528	1/28/2061	
Kane Acquisition Costs	10	349,362	17,670	43,220	21,610		327,752	284,532	3,602	43,220		241,312	1/28/2031	
Other Amortizations														
Tax Cuts & Jobs Act (TCJA Stub Period)	2	(277,927)	(231,100)	(92,642)	(57,858)	2	(220,069)	(127,427)	(7,720)	(59,854)	3	(64,841)	1/28/2024	7/31/2026
McKeesport Deferred Depreciation	2	52,830	130,549	17,610	18,217	2	34,613	17,003	1,468	7,768	3	8,414	12/31/2025	7/31/2026
Total Wastewater Operations		**$3,827,108**	**$20,375**	**$71,444**	**$33,597**		**$3,793,511**	**$3,722,067**	**$5,955**	**$94,390**		**$3,629,588**		

[1] Docket Nos. R-2017-2595853, R-2020-3019369, and R-2022-3031672.
[2] Amortizations at Docket No. R-2022-3031672 amortized 5 months in 2023 and Amortizations at Docket No. R-2020-30319369 amortized 1 month.
[3] Amortization period extended 2 years. (Amortize balance 2 years starting 8/1/2024 to end 7/31/2026)

Pennsylvania American Water Company
Wastewater CSS Operations
Settlement
Appendix D, Amortizations

	Case Approved Docket No.	Amortization Period (Years)	Unamortized Balance 12/31/2022	Amortization End Date	Annual Amortization	Reference
Positive Utility Plant Acquisition Adjustments						
Scranton Sewer Auth - Acquisition Costs	Docket No. R-2017-2595853	40	$2,605,265	12/31/2057	$74,436	Exhibit 3-A, p. 251
McKeesport Acquisition Costs	Docket No. R-2020-3019369	40	1,097,578	1/28/2061	28,820	Exhibit 3-A, p. 251
Kane Acquisition Costs	Docket No. R-2020-3019369	10	349,362	1/28/2031	43,220	Exhibit 3-A, p. 251
Other Amortizations						
McKeesport Deferred Depreciation	Docket No. R-2020-3019369	3	52,830	1/28/2024	17,610	Exhibit 3-A, p. 273
Storm Water Fee Feasibility Study	Docket No. R-2022-3031672	3	51,800	1/28/2026	17,266	Exhibit 3-A, p. 266
Total Wastewater CSS Operations			**$4,156,835**		**$181,352**	

Pennsylvania American Water Company
COVID-19 Emergency Response

	Amortization Period (Years)	Balance 12/31/2022	R-2022-3031672 Annual Amortization	Amortization 2023*	Adjustment to Balance[1]	Balance 6/30/2023	Balance 6/30/2024	7/31/2024 July Amortization 2024	Balance 7/31/2024	Annual Amortization 2025	Balance 6/30/2025	Amortization End Date	Revised Amortization End Date
Other Amortizations													
Water Operations													
COVID-19 Emergency Response	2	$3,826,957	$1,275,652	$531,522	($3,530,549)	($235,114)	($1,510,766)	$106,304	($1,617,070)	($808,535)	($875,913)	1/28/2026	7/31/2026
Wastewater SSS General Operations													
COVID-19 Emergency Response	2	33,362	11,121	4,634	(36,078)	(7,350)	(18,471)	927	(19,398)	(9,699)	(10,507)	1/28/2026	7/31/2026
Wastewater CSS Operations													
COVID-19 Emergency Response	2	66,025	22,008	9,170	(60,863)	(4,008)	(26,016)	1,834	(27,850)	(13,925)	(15,085)	1/28/2026	7/31/2026
Total COVID-19 Emergency Response		**$3,926,344**	**$1,308,781**	**$545,326**	**($3,627,490)**	**($246,472)**	**($1,555,253)**	**$109,065**	**($1,664,318)**	**($832,159)**	**($901,505)**		

[1] Annual Amortization adjusted for revised Balance.
*Amortization at Docket No. R-2022-3031672 amortized 5 months in 2023.

Pennsylvania American Water Company
Arrearage Management Program - AMP

	Amortization Period (Years)	Balance 6/30/2024	Annual Amortization 2025	Balance 6/30/2025*
Other Amortizations				
Water Operations				
Arrearage Management Program - AMP	2	($2,702,299)	($1,351,149)	($1,463,746)
Wastewater SSS General Operations				
Arrearage Management Program - AMP	2	(220,760)	(110,380)	(119,578)
Wastewater CSS Operations				
Arrearage Management Program - AMP	2	(168,816)	(84,408)	(91,442)
Total Arrearage Management Program - AMP		**($3,091,875)**	**($1,545,937)**	**($1,674,766)**

*Amortized 11 months starting August 2024.

Depreciation Expense

Pennsylvania-American Water Company
Depreciation on Vehicles - Capitalized Portion

		6/30/2024			
		Net Original Cost As Of	Calculated Annual Accrual	Capitalization	Vehicles Capitalized Depreciation
Transportation Equipment		**June 30, 2024**	**Amount**	**Rate**	**Expense**
341	Water Operations	$87,704,473	$6,119,420	43.88%	($2,685,491)
391	Wastewater SSS General Operations	4,095,347	320,037	8.74%	(27,973)
391	BASA WW Operations	417,058	45,075	8.74%	(3,940)
391	Brentwood WW Operations	14,700	1,059	8.74%	(93)
391	Wastewater CSS Operations	8,309,341	542,354	15.76%	(85,484)

		6/30/2025			
		Net Original Cost As Of	Calculated Annual Accrual	Capitalization	Vehicles Capitalized Depreciation
Transportation Equipment		**June 30, 2025**	**Amount**	**Rate**	**Expense**
341	Water Operations	$102,586,009	$7,950,213	43.88%	($3,488,929)
391	Wastewater SSS General Operations	4,109,747	311,781	8.74%	(27,251)
391	BASA WW Operations	365,729	31,592	8.74%	(2,761)
391	Brentwood WW Operations	70,000	4,774	8.74%	(417)
391	Wastewater CSS Operations	8,379,887	509,477	15.76%	(80,302)

VOLUME 5

PENNSYLVANIA-AMERICAN WATER COMPANY

2023 GENERAL BASE RATE CASE
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

EXHIBIT NO. 3-C
PLANT ADDITIONS & RETIREMENTS, EXCL. PROPERTY, M&S, ACQUISITION ADJ., TCJA- STUB PERIOD & NEG SURCHARGE, CITIZENS UTILITIES CAC/CIAC ADJ., TAXES OTHER THAN INC.

Pennsylvania-American Water Company

Exhibit No. 3-C

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Pennsylvania-American Water Company

Exhibit No. 3-C

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Plant Additions and Retirements by Month

Pennsylvania-American Water Company - Water Operations
Plant Additions and Retirements by Month
July 2023 to June 2024

Additions

Project Number	Project Title	Utility Account	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	2024 Total
R24-##DV	Projects Funded by Others-Additions	331.00	$390,610	$390,610	$40,610	$1,143,472	$40,610	$1,143,472	$332,800	$301,015	$341,602	$559,194	$824,547	$717,506	$6,226,047
R24-##A1	Mains - New	331.00	369,280	481,853	20,323	100,000	20,323	409,822	140,280	225,282	141,865	352,121	352,121	551,158	3,164,428
R24-##B1	Mains - Replaced / Restored	333.00	612,445	622,709	659,018	904,464	1,034,375	957,304	1,076,705	1,194,291	1,542,709	1,484,611	744,473	434,361	11,267,466
R24-##B1	Mains - Replaced / Restored	335.00	306,223	311,355	329,509	452,232	517,188	478,652	538,353	597,145	771,354	742,306	372,237	217,180	5,633,733
R24-##B1	Mains - Replaced / Restored	333.10	36,747	37,363	39,541	54,268	62,063	57,438	64,602	71,657	92,563	89,077	44,668	26,062	676,048
R24-##B1	Mains - Replaced / Restored	334.30	24,498	24,908	26,361	36,179	41,375	38,292	43,068	47,772	61,708	59,384	29,779	17,374	450,699
R24-##B1	Mains - Replaced / Restored	331.00	11,268,990	11,457,847	12,125,936	16,642,138	19,032,507	17,614,397	19,811,380	21,974,949	28,385,840	27,316,843	13,698,306	7,992,239	207,321,372
R24-##C1	Mains - Unscheduled	333.10	85,659	77,236	80,690	71,172	69,117	88,347	61,658	56,252	39,310	50,265	61,738	70,771	812,215
R24-##C1	Mains - Unscheduled	331.00	2,769,647	2,497,282	2,608,969	2,301,237	2,234,795	2,856,546	1,993,615	1,818,813	1,271,008	1,625,251	1,996,204	2,288,266	26,261,633
R24-##D1	Mains - Relocated	333.00	16,471	16,471	16,471	16,471	16,471	49,911	949	17,700	15,286	6,274	32,034	19,807	224,312
R24-##D1	Mains - Relocated	335.00	8,235	8,235	8,235	8,235	8,235	24,955	474	8,850	7,643	3,137	16,017	9,903	112,156
R24-##D1	Mains - Relocated	331.00	387,057	387,057	387,057	387,057	387,057	1,172,897	22,292	415,943	359,220	147,429	752,802	465,463	5,271,333
R24-##E1	Hydrants, Valves, and Manholes - New	335.00	123,582	155,474	116,317	144,351	143,684	140,188	130,459	83,350	157,863	82,102	132,345	112,213	1,521,927
R24-##E1	Hydrants, Valves, and Manholes - New	333.10	275,326	346,379	259,142	321,598	320,111	312,323	290,648	185,695	351,701	182,915	294,851	249,998	3,390,685
R24-##F1	Hydrants, Valves, and Manholes - Replaced	333.00	7,641	8,806	8,547	16,853	8,920	7,378	5,477	5,569	7,102	8,626	9,524	10,971	105,414
R24-##F1	Hydrants, Valves, and Manholes - Replaced	335.00	382,047	440,301	427,369	842,645	446,006	368,920	273,850	278,439	355,085	431,311	476,196	548,528	5,270,696
R24-##F1	Hydrants, Valves, and Manholes - Replaced	331.00	374,406	431,495	418,821	825,793	437,086	361,541	268,373	272,870	347,983	422,685	466,673	537,557	5,165,282
R24-##G1	Services and Laterals - New	333.00	619,650	632,994	600,377	630,889	536,167	573,264	432,067	287,594	477,940	304,834	369,502	458,455	5,923,735
R24-##G1	Services and Laterals - New	331.00	92,591	94,585	89,712	94,271	80,117	85,660	64,562	42,974	71,416	45,550	55,213	68,505	885,156
R24-##H1	Services and Laterals - Replaced	333.00	1,921,168	1,958,643	1,834,851	2,192,176	2,054,185	1,921,168	1,137,116	1,073,469	1,091,387	1,169,253	1,350,122	1,463,058	19,166,596
R24-##H1	Services and Laterals - Replaced	333.10	40,446	41,235	38,628	46,151	43,246	40,446	23,939	22,599	22,977	24,616	28,424	30,801	403,507
R24-##H1	Services and Laterals - Replaced	331.00	60,668	61,852	57,943	69,227	64,869	60,668	35,909	33,899	34,465	36,924	42,635	46,202	605,261
R24-##H2	Customer Side Lead Service Lines	333.00	84,889	85,718	85,358	180,291	177,420	144,689	398,075	375,794	382,067	409,326	472,643	512,179	3,308,448
R24-##H2	Customer Side Lead Service Lines	333.10	1,787	1,805	1,797	3,796	3,735	3,046	8,381	7,911	8,044	8,617	9,950	10,783	69,652
R24-##H2	Customer Side Lead Service Lines	331.00	2,681	2,707	2,696	5,693	5,603	4,569	12,571	11,867	12,065	12,926	14,926	16,174	104,477
R24-##I1	Meters - New	334.10	272,218	196,696	204,241	194,797	174,887	165,229	165,373	151,455	168,610	110,298	253,768	175,778	2,233,351
R24-##I1	Meters - New	334.20	111,188	80,341	83,422	79,565	71,433	67,488	67,547	61,862	68,869	45,051	103,652	71,797	912,214
R24-##J1	Meters - Replaced	334.10	1,224,063	1,268,500	1,358,705	2,017,799	2,241,113	2,103,834	2,098,542	2,602,491	1,265,949	968,548	1,029,094	1,502,044	19,680,682
R24-##J1	Meters - Replaced	334.20	576,029	596,941	639,390	949,552	1,054,642	990,040	987,549	1,224,702	595,741	455,787	484,280	706,844	9,261,497
R24-##K1 & K3	ITS Equipment and Systems	340.20	529,023	102,554	837,661	588,983	309,610	310,416	35,565	197,738	157,586	182,502	288,011	91,688	3,631,337
R24-##K1 & K3	ITS Equipment and Systems - Service Co.	340.30	348,709		397,370	1,384,062		14,674,542						110,350	16,915,033
R24-##L1	SCADA Equipment and Systems	320.10	42,506	68,659	50,854	53,614	11,884	34,500	10,551	9,610	14,553	33,294	39,468	40,610	410,102
R24-##L1	SCADA Equipment and Systems	340.20	35,422	57,216	42,378	44,678	9,903	28,750	8,793	8,009	12,127	27,745	32,890	33,841	341,752
R24-##L1	SCADA Equipment and Systems	343.00	49,591	80,102	59,329	62,549	13,864	40,250	12,310	11,212	16,978	38,843	46,045	47,378	478,453
R24-##L1	SCADA Equipment and Systems	346.00	92,097	148,761	110,183	116,163	25,748	74,750	22,861	20,823	31,531	72,137	85,513	87,988	888,555
R24-##L1	SCADA Equipment and Systems	347.00	233,785	377,625	279,695	294,876	65,360	189,750	58,031	52,857	80,041	183,117	217,071	223,354	2,255,563
R24-##L1	SCADA Equipment and Systems	304.10	28,338	45,773	33,902	35,743	7,922	23,000	7,034	6,407	9,702	22,196	26,312	27,073	273,402
R24-##L1	SCADA Equipment and Systems	304.50	7,084	11,443	8,476	8,936	1,981	5,750	1,759	1,602	2,425	5,549	6,578	6,768	68,350
R24-##L1	SCADA Equipment and Systems	340.10	56,675	91,546	67,805	71,485	15,845	46,000	14,068	12,814	19,404	44,392	52,623	54,146	546,803
R24-##L1	SCADA Equipment and Systems	340.30	42,506	68,659	50,854	53,614	11,884	34,500	10,551	9,610	14,553	33,294	39,468	40,610	410,102
R24-##L1	SCADA Equipment and Systems	346.10	21,253	34,330	25,427	26,807	5,942	17,250	5,276	4,805	7,276	16,647	19,734	20,305	205,051
R24-##L1	SCADA Equipment and Systems	346.19	99,182	160,205	118,659	125,099	27,728	80,500	24,619	22,424	33,957	77,686	92,091	94,756	956,905
R24-##M1	Security Equipment and Systems	346.00		6,622	2,430	749	230	745	1,753	2,322	2,510	4,235	4,347	3,616	29,560
R24-##M1	Security Equipment and Systems	304.50		46,353	17,013	5,242	1,607	5,217	12,274	16,256	17,572	29,646	30,428	25,310	206,917
R24-##M1	Security Equipment and Systems	346.10		258,255	94,785	29,203	8,951	29,067	68,382	90,567	97,901	165,168	169,530	141,013	1,152,822
R24-##M1	Security Equipment and Systems	346.20		3,311	1,215	374	115	373	877	1,161	1,255	2,118	2,173	1,808	14,780
R24-##M1	Security Equipment and Systems	346.00		16,555	6,076	1,872	574	1,863	4,383	5,806	6,276	10,588	10,867	9,039	73,899
R24-##N1	Offices and Operations Centers	304.61	3,618	20,430	19,888	15,160	4,870	10,723	2,779	2,329	2,357	3,737	5,167	5,965	97,024
R24-##N1	Offices and Operations Centers	320.10	9,045	51,075	49,720	37,900	12,175	26,809	6,948	5,822	5,891	9,342	12,918	14,914	242,559
R24-##N1	Offices and Operations Centers	343.00	3,618	20,430	19,888	15,160	4,870	10,723	2,779	2,329	2,357	3,737	5,167	5,965	97,024
R24-##N1	Offices and Operations Centers	304.10	112,158	633,330	616,528	469,960	150,970	332,427	86,152	72,198	73,053	115,845	160,181	184,929	3,007,731
R24-##N1	Offices and Operations Centers	304.50	41,607	234,945	228,712	174,340	56,005	123,320	31,960	26,783	27,100	42,975	59,422	68,603	1,115,771
R24-##N1	Offices and Operations Centers	340.10	10,854	61,290	59,664	45,480	14,610	32,170	8,337	6,987	7,070	11,211	15,501	17,896	291,071
R24-##O1	Vehicles	341.10	224,376	2,367,831	1,350,855	1,088,508	917,028	4,238,931	29,346	278,953	261,059	194,424	206,750	224,997	11,383,059
R24-##P1	Tools and Equipment	343.00	171,239	622,587	183,885	261,591	50,830	407,057	194,902	239,378	311,696	291,938	316,471	314,265	3,365,838
R24-##P1	Tools and Equipment	347.00	171,239	622,587	183,885	261,591	50,830	407,057	194,902	239,378	311,696	291,938	316,471	314,265	3,365,838
R24-##P1	Tools and Equipment	341.10	6,989	25,412	7,506	10,677	2,075	16,615	7,955	9,771	12,722	11,916	12,917	12,827	137,381
R24-##Q1	Process Plant Facilities and Equipment	307.00	54,581	60,816	62,267	83,731	71,270	130,017	26,167	16,966	23,080	27,112	31,507	27,195	614,708
R24-##Q1	Process Plant Facilities and Equipment	320.10	1,364,537	1,520,391	1,556,672	2,093,264	1,781,743	3,250,426	654,176	424,141	576,997	677,804	787,678	679,873	15,367,702
R24-##Q1	Process Plant Facilities and Equipment	343.00	81,872	91,223	93,400	125,596	106,905	195,026	39,251	25,448	34,620	40,668	47,261	40,792	922,062
R24-##Q1	Process Plant Facilities and Equipment	347.00	54,581	60,816	62,267	83,731	71,270	130,017	26,167	16,966	23,080	27,112	31,507	27,195	614,708
R24-##Q1	Process Plant Facilities and Equipment	304.10	627,687	699,380	716,069	962,901	819,602	1,495,196	300,921	195,105	265,419	311,790	362,332	312,742	7,069,143
R24-##Q1	Process Plant Facilities and Equipment	304.50	81,872	91,223	93,400	125,596	106,905	195,026	39,251	25,448	34,620	40,668	47,261	40,792	922,062
R24-##Q1	Process Plant Facilities and Equipment	311.50	382,070	425,709	435,868	586,114	498,888	910,119	183,169	118,760	161,559	189,785	220,550	190,364	4,302,957
R24-##Q1	Process Plant Facilities and Equipment	320.20	81,872	91,223	93,400	125,596	106,905	195,026	39,251	25,448	34,620	40,668	47,261	40,792	922,062
R24-##R1	Capitalized Tank Rehabilitation / Painting	330.00	39,200	68,800	77,600	64,800	17,600	4,800	4,273	2,799	9,293	38,005	53,144	72,206	452,520

Pennsylvania-American Water Company - Water Operations
Plant Additions and Retirements by Month
July 2023 to June 2024

Additions

Project Number	Project Title	Utility Account	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	2024 Total
R24-##R1	Capitalized Tank Rehabilitation / Painting	330.59	450,800	791,200	892,400	745,200	202,400	55,200	49,145	32,184	106,871	437,054	611,151	830,371	5,203,976
R24-##S1	Engineering Studies	339.60	35,000	54,649	57,000	52,000	30,000	30,000	87,945	87,945	87,945	87,945	87,945	87,213	785,586
I24-110012	Replace Solids handling Equipment	331.00						8,528,180							8,528,180
I24-110034	Hayes Mine Filter Renovations	320.00						6,719,121							6,719,121
I24-110046	Additional Aldrich Wastewater Clari	331.00					13,998,802								13,998,802
I24-110063	Aldrich WTP Chemical Room Floor	304.00					899,747								899,747
I24-110066	Hays Mine Clarifier Retaining Wall Repl	304.00					303,616								303,616
I24-110068	Hays Mine Bulk Caustic Soda Tank Rplcmnt	320.00	1,300,000												1,300,000
I24-110070	42" Edgebrook/Brook St WL Replacement	331.00											7,890,178		7,890,178
I24-110071	Snowden Rd- 24" approx. 2,500"	335.00											117,127		117,127
I24-110071	Snowden Rd- 24" approx. 2,500"	331.00											2,225,418		2,225,418
I24-110073	Arla Drive Waterline Replacement	333.00			187,778										187,778
I24-110073	Arla Drive Waterline Replacement	335.00			62,593										62,593
I24-110073	Arla Drive Waterline Replacement	331.00			1,001,480										1,001,480
I24-110075	Baptist Road 12" Waterline Replacement	333.00					256,304								256,304
I24-110075	Baptist Road 12" Waterline Replacement	335.00					85,435								85,435
I24-110075	Baptist Road 12" Waterline Replacement	331.00					1,366,954								1,366,954
I24-110076	Hays Mine Chemical Floor	304.00					539,120								539,120
I24-110077	Hays Mine Storage Building	304.00		1,274,180											1,274,180
I24-140001	Steelton WTP Filter Replacement	320.00						1,443,761							1,443,761
I24-140002	Steelton Booster Pump Station Replacement	304.00												1,250,277	1,250,277
I24-140002	Steelton Booster Pump Station Replacement	310.00												340,985	340,985
I24-140002	Steelton Booster Pump Station Replacement	311.00												568,308	568,308
I24-140002	Steelton Booster Pump Station Replacement	331.00												113,662	113,662
I24-140003	Steelton Water Treatment Plant Filter Improvements	303.00												49,461	49,461
I24-140003	Steelton Water Treatment Plant Filter Improvements	304.00												445,148	445,148
I24-140003	Steelton Water Treatment Plant Filter Improvements	320.00												4,451,484	4,451,484
I24-210011	McMurray System Flow Monitoring	334.00						429,254							429,254
I24-210011	McMurray System Flow Monitoring	347.00						429,254							429,254
I24-210026	Snowberry Booster Station Replacement	311.00				550,206									550,206
I24-210032	Washington PA Garage	303.00				48,000									48,000
I24-210032	Washington PA Garage	304.00				432,000									432,000
I24-210035	Donaldson Rd Water Line Extension	333.00										27,240			27,240
I24-210035	Donaldson Rd Water Line Extension	335.00										13,620			13,620
I24-210035	Donaldson Rd Water Line Extension	331.00										1,321,140			1,321,140
I24-210035	Donaldson Road Water Line Extension	333.00						204,300							204,300
I24-210035	Donaldson Road Water Line Extension	335.00						68,100							68,100
I24-210035	Donaldson Road Water Line Extension	331.00						1,089,600							1,089,600
I24-220012	Replace Monongahela PRV Station	331.00						1,149,752							1,149,752
I24-220015	Mon Valley PRV Station Replacements	331.00						1,320,264							1,320,264
I24-220015	Mon Valley PRV Station Replacements - Douglas Run	304.00											555,000		555,000
I24-220015	Mon Valley PRV Station Replacements - Douglas Run	331.00											185,000		185,000
I24-220019	Monogahela 4th St Water Line Replacement	331.00			1,600,000										1,600,000
I24-230014	Connellsville System Wide SCADA Install	346.00						420,243							420,243
I24-230014	Connellsville System Wide SCADA Install	347.00						105,061							105,061
I24-230015	SR 40 from Duck Hollow Rd to Haddenville	331.00		1,239,363											1,239,363
I24-250007	Hiller Reservoir Liner & Cover Replace	330.00				2,191,613									2,191,613
I24-310005	Neshannock Gradient-Storage NC	330.00			1,246,039										1,246,039
I24-310013	Mecklam Booster Pump Station	311.00		3,197,087											3,197,087
I24-310018	New Castle Electrical	320.00						5,977,805							5,977,805
I24-310018-02	New Castle WTP Improvements - Filter and UV	320.00												11,474,862	11,474,862
I24-310025	Ellwood Raw Water Pump Replacement	311.00				855,000									855,000

Pennsylvania-American Water Company - Water Operations
Plant Additions and Retirements by Month
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Additions

Project Number	Project Title	Utility Account	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	2024 Total
I24-420008	Punxsutawney West End Reservoir	330.00						3,092,172							3,092,172
I24-430003	Clarion WTP - Sodium Permanganate Feed	320.00	815,678												815,678
I24-430004	Clarion WTP Office Building	304.00						3,480,137							3,480,137
I24-440005	Troy Hill Booster Replacement	311.00	845,306												845,306
I24-460006	Kane WTP Improvements Project	320.00		3,683,107											3,683,107
I24-460008	Kane Transmission Mains	331.00	2,134,006												2,134,006
I24-510025	Norristown WTP Filter Ugrades	320.00						4,600,232							4,600,232
I24-510026	Forrest Ave 2023-NT-5EO	331.00		1,569,989											1,569,989
I24-510030	W. Main St (Swede St - Markely St)	331.00						2,900,000							2,900,000
I24-510031	Norristown Laffayette Street	331.00											1,800,000		1,800,000
I24-510032	Norris WTP Flood Imprvmnt - Install Door	304.00						400,000							400,000
I24-540011	Montrose Plant Phase 2 Upgrades	320.00					2,170,612								2,170,612
I24-560018	Cherry Valley Pump Station Upgrades	304.00						300,000							300,000
I24-560018	Cherry Valley Pump Station Upgrades	310.00						600,000							600,000
I24-560018	Cherry Valley Pump Station Upgrades	311.00						600,000							600,000
I24-570009	PCP Well #2 Treatment Building Improvs	304.00					559,280								559,280
I24-570009	PCP Well #2 Treatment Building Improvs	320.00					559,280								559,280
I24-570010	Mt. Pocono Ops Center Wall Cladding	304.00				360,000									360,000
I24-590003	New Water Main in Exeter per Acquisition	333.00						77,500							77,500
I24-590003	New Water Main in Exeter per Acquisition	335.00						77,500							77,500
I24-590003	New Water Main in Exeter per Acquisition	331.00						1,395,000							1,395,000
I24-610024	Silver Spring WTP Traveling Screens	306.00			588,451										588,451
I24-620011	Kaylor Rd Main Extension	331.00						1,636,536							1,636,536
I24-640016	Connect Phoenixville Gradient to Merlin Hills/Terry	331.00											1,500,000		1,500,000
I24-650018	Rock Run Sedimentation Basin Covers	320.00		1,246,468											1,246,468
I24-650021	E Lincoln Highway 2023-GT7	331.00						980,245							980,245
I24-680029	Saw Creek Well 2 & 3 Manganese Removal	303.00						624,085							624,085
I24-680029	Saw Creek Well 2 & 3 Manganese Removal	304.00						1,248,170							1,248,170
I24-680029	Saw Creek Well 2 & 3 Manganese Removal	320.00						1,248,170							1,248,170
I24-680030	Winona Falls/Millford Rd WM Replacement	333.00		306,741											306,741
I24-680030	Winona Falls/Millford Rd WM Replacement	334.00		153,370											153,370
I24-680030	Winona Falls/Millford Rd WM Replacement	331.00		1,073,593											1,073,593
I24-680031	Pocono Mtn Lake Forest Estates Booster	304.00					550,000								550,000
I24-680031	Pocono Mtn Lake Forest Estates Booster	311.00					550,000								550,000
I24-680031	Pocono Mtn Lake Forest Estates Booster	331.00					1,100,000								1,100,000
I24-710010	Level1 WBS-West Milton Booster	304.00						555,364							555,364
I24-710010	Level1 WBS-West Milton Booster	310.00						555,364							555,364
I24-710010	Level1 WBS-West Milton Booster	311.00						1,110,727							1,110,727
I24-710021	White Deer Creek Contact Clearwell Tank	304.00	2,915,596												2,915,596
I24-720006	Philipsburg Spring Valley 2nd Tank	330.00						1,687,974							1,687,974
I24-740001	Frackville Center Street WTP Upgrade	304.00						444,291							444,291
I24-740001	Frackville Center Street WTP Upgrade	310.00						1,332,873							1,332,873
I24-740001	Frackville Center Street WTP Upgrade	331.00						444,291							444,291
I24-910007	Fallbrook Waste handling Improvemen	320.00						783,184							783,184
I24-910064	Lake Scranton Permanganate Conversion	304.00	1,252,777												1,252,777
I24-910064	Lake Scranton Permanganate Conversion	347.00	1,252,777												1,252,777
I24-910067	Watres & Nesbitt WTP Tank Baffling Imp.	330.00					1,195,853								1,195,853
I24-910069	Gardner Creek Outlet Works Rehab	305.00						2,124,247							2,124,247
I24-910071	Summit Lake Outlet Works Rehab	305.00						1,455,679							1,455,679
I24-910074	Ceasetown Rt 29 - Bridge Crossing & PRV	304.00					1,763,517								1,763,517
I24-910074	Ceasetown Rt 29 - Bridge Crossing & PRV	331.00					1,763,517								1,763,517
I24-910075	Sugar Notch Pump Station Improvements	304.00					570,627								570,627
I24-910075	Sugar Notch Pump Station Improvements	310.00					285,313								285,313
I24-910075	Sugar Notch Pump Station Improvements	311.00					570,627								570,627
I24-910076	Lake Scranton 48 Trans Main/Tunnel Rehab	331.00						5,091,758							5,091,758
I24-910079	WTP Generator Upgrade	310.00					4,015,192								4,015,192
I24-910081	Georgetown 0.2 MG Tank #2	330.00					700,000								700,000
I24-910082	Lake Scranton 3.5 MG Tank #3	330.00												6,500,000	6,500,000
I24-910084	Volgebacher Pump Station Improvements	310.00				199,588									199,588
I24-910084	Volgebacher Pump Station Improvements	311.00				465,705									465,705
I24-910086	Rushbrook Road Water Main Replacement	331.00					2,000,000								2,000,000
I24-910090	W. Parker to Viewmont Drive (Main Steet)	331.00											3,700,000		3,700,000
			$38,557,372	$46,654,611	$36,321,364	$46,167,426	$72,728,030	$126,766,585	$32,801,474	$35,781,371	$41,348,124	$42,362,090	$47,093,156	$49,099,979	$615,681,581

Pennsylvania-American Water Company - Water Operations
Plant Additions and Retirements by Month
July 2023 to June 2024

Retirements

Project Number	Project Title	Utility Account	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	2024 Total
R24-##B1	Mains - Replaced / Restored	333.00	$110,805	$112,662	$119,231	$163,638	$187,141	$173,198	$194,800	$216,074	$279,110	$268,599	$134,692	$78,585	$2,038,534
R24-##B1	Mains - Replaced / Restored	335.00	55,402	56,331	59,615	81,819	93,571	86,599	97,400	108,037	139,555	134,299	67,346	39,293	1,019,267
R24-##B1	Mains - Replaced / Restored	333.10	6,648	6,760	7,154	9,818	11,228	10,392	11,688	12,964	16,747	16,116	8,081	4,715	122,312
R24-##B1	Mains - Replaced / Restored	334.30	4,432	4,506	4,769	6,546	7,486	6,928	7,792	8,643	11,164	10,744	5,388	3,143	81,541
R24-##B1	Mains - Replaced / Restored	331.00	2,038,810	2,072,978	2,193,850	3,010,931	3,443,402	3,186,834	3,584,317	3,975,754	5,135,626	4,942,221	2,478,327	1,445,973	37,509,023
R24-##C1	Mains - Unscheduled	333.10	15,498	13,974	14,599	12,877	12,505	15,984	11,155	10,177	7,112	9,094	11,170	12,804	146,948
R24-##C1	Mains - Unscheduled	331.00	501,090	451,814	472,020	416,345	404,324	516,812	360,689	329,063	229,954	294,044	361,158	413,998	4,751,310
R24-##D1	Mains - Relocated	333.00	2,980	2,980	2,980	2,980	2,980	9,030	172	3,202	2,766	1,135	5,796	3,584	40,583
R24-##D1	Mains - Relocated	335.00	1,490	1,490	1,490	1,490	1,490	4,515	86	1,601	1,383	568	2,898	1,792	20,292
R24-##D1	Mains - Relocated	331.00	70,027	70,027	70,027	70,027	70,027	212,203	4,033	75,253	64,991	26,673	136,199	84,213	953,701
R24-##F1	Hydrants, Valves, and Manholes - Replaced	333.00	1,382	1,593	1,546	3,049	1,614	1,335	991	1,008	1,285	1,561	1,723	1,985	19,072
R24-##F1	Hydrants, Valves, and Manholes - Replaced	335.00	69,121	79,660	77,320	152,453	80,692	66,746	49,546	50,376	64,243	78,034	86,154	99,241	953,586
R24-##F1	Hydrants, Valves, and Manholes - Replaced	331.00	67,738	78,067	75,774	149,404	79,078	65,411	48,555	49,368	62,958	76,473	84,431	97,256	934,514
R24-##H1	Services and Laterals - Replaced	333.00	347,582	354,362	331,965	396,613	371,647	347,582	205,729	194,214	197,456	211,544	244,267	264,700	3,467,661
R24-##H1	Services and Laterals - Replaced	333.10	7,318	7,460	6,989	8,350	7,824	7,318	4,331	4,089	4,157	4,454	5,142	5,573	73,003
R24-##H1	Services and Laterals - Replaced	331.00	10,976	11,190	10,483	12,525	11,736	10,976	6,497	6,133	6,235	6,680	7,714	8,359	109,505
R24-##J1	Meters - Replaced	334.10	221,460	229,500	245,820	365,064	405,467	380,630	379,673	470,848	229,038	175,232	186,186	271,753	3,560,671
R24-##J1	Meters - Replaced	334.20	104,216	108,000	115,680	171,795	190,808	179,120	178,669	221,576	107,783	82,462	87,617	127,884	1,675,610
R24-##K1 & K3	ITS Equipment and Systems	340.20	156,250	30,290	247,408	173,960	91,445	91,683	10,504	58,403	46,544	53,903	85,066	27,081	1,072,537
R24-##K1 & K3	ITS Equipment and Systems - Service Co.	340.30	123,216	0	140,411	489,059	0	5,185,253	0	0	0	0	0	38,992	5,976,930
R24-##L1	SCADA Equipment and Systems	320.10	7,690	12,422	9,201	9,700	2,150	6,242	1,909	1,739	2,633	6,024	7,141	7,347	74,197
R24-##L1	SCADA Equipment and Systems	340.20	10,462	16,899	12,517	13,196	2,925	8,491	2,597	2,365	3,582	8,195	9,714	9,995	100,938
R24-##L1	SCADA Equipment and Systems	343.00	10	16	12	12	3	8	2	2	3	8	9	9	93
R24-##L1	SCADA Equipment and Systems	347.00	1,154	1,864	1,380	1,455	323	936	286	261	395	904	1,071	1,102	11,131
R24-##L1	SCADA Equipment and Systems	304.10	25,419	122,865	6,134	6,467	1,433	4,161	1,273	1,159	1,755	4,016	4,760	4,898	184,340
R24-##L1	SCADA Equipment and Systems	304.50	1,282	10,457	4,611	2,565	649	1,984	2,539	3,231	3,618	6,367	6,695	5,804	49,802
R24-##L1	SCADA Equipment and Systems	340.30	15,020	24,261	17,969	18,944	4,199	12,191	3,728	3,396	5,142	11,764	13,946	14,349	144,910
R24-##L1	SCADA Equipment and Systems	346.10	59	812	334	155	41	129	204	265	292	505	525	448	3,769
R24-##L1	SCADA Equipment and Systems	346.19	7,912	12,780	9,466	9,980	2,212	6,422	1,964	1,789	2,709	6,197	7,347	7,559	76,337
R24-##L1	Office Furniture & Equipment - Computer Software	340.31	40,115	40,115	40,115	40,115	40,115	40,115	40,115	40,115	40,115	40,115	40,115	40,115	481,377
R24-##M1	Security Equipment and Systems	304.50	7,528	42,507	41,379	31,542	10,133	22,311	5,782	4,846	4,903	7,775	10,751	12,412	201,868
R24-##N1	Offices and Operations Centers	304.61	655	3,696	3,598	2,743	881	1,940	503	421	426	676	935	1,079	17,554
R24-##N1	Offices and Operations Centers	320.10	1,636	9,241	8,995	6,857	2,203	4,850	1,257	1,053	1,066	1,690	2,337	2,698	43,884
R24-##N1	Offices and Operations Centers	343.00	34	125	40	54	11	81	39	47	61	58	63	62	674
R24-##N1	Offices and Operations Centers	304.10	113,562	126,533	241,096	259,236	175,598	330,657	70,030	48,361	61,237	77,369	94,534	90,040	1,688,254
R24-##N1	Offices and Operations Centers	304.50	14,812	16,504	16,898	22,723	19,341	35,284	7,101	4,604	6,263	0	0	0	143,533
R24-##O1	Vehicles	341.10	40,595	428,393	244,400	196,935	165,911	766,916	5,309	50,469	47,231	35,176	37,406	40,707	2,059,447
R24-##P1	Tools and Equipment	347.00	845	3,072	907	1,291	251	2,009	962	1,181	1,538	1,441	1,562	1,551	16,610
R24-##P1	Tools and Equipment	341.10	1,265	4,598	1,358	1,932	375	3,006	1,439	1,768	2,302	2,156	2,337	2,321	24,855
R24-##P1	Laboratory Equipment	344.00	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727	32,722
R24-##Q1	Process Plant Facilities and Equipment	307.00	9,875	11,003	11,265	15,149	12,894	23,523	4,734	3,069	4,176	4,905	5,700	4,920	111,214
R24-##Q1	Process Plant Facilities and Equipment	320.10	246,875	275,072	281,636	378,718	322,357	588,074	118,355	76,737	104,392	122,630	142,508	123,004	2,780,357
R24-##Q1	Process Plant Facilities and Equipment	343.00	16	18	18	24	21	38	8	5	7	8	9	8	180
R24-##Q1	Process Plant Facilities and Equipment	347.00	269	300	307	413	352	642	129	84	114	134	155	134	3,033
R24-##Q1	Process Plant Facilities and Equipment	304.50	0	0	0	0	0	0	0	0	0	7,358	8,551	7,380	23,289
R24-##Q1	Process Plant Facilities and Equipment	311.50	69,125	77,020	78,858	106,041	90,260	164,661	33,139	21,486	29,230	34,336	39,902	34,441	778,500
R24-##Q1	Process Plant Facilities and Equipment	320.20	14,812	16,504	16,898	22,723	19,341	35,284	7,101	4,604	6,263	7,358	8,551	7,380	166,821
R24-##R1	Capitalized Tank Rehabilitation / Painting	330.00	7,092	12,447	14,040	11,724	3,184	306,260	773	506	1,681	6,876	9,615	13,064	387,263
R24-##R1	Capitalized Tank Rehabilitation / Painting	330.59	81,560	143,146	161,455	134,823	36,619	9,987	8,891	5,823	19,335	79,073	110,571	150,232	941,514
I24-110012	Replace Solids handling Equipment	331.00	0	0	0	0	0	1,542,936	0	0	0	0	0	0	1,542,936
I24-110034	Hayes Mine Filter Renovations	320.00	0	0	0	0	0	1,215,638	0	0	0	0	0	0	1,215,638
I24-110046	Additional Aldrich Wastewater Clari	331.00	0	0	0	0	2,532,693	0	0	0	0	0	0	0	2,532,693
I24-110063	Aldrich WTP Chemical Room Floor	304.00	0	0	0	0	162,784	0	0	0	0	0	0	0	162,784
I24-110066	Hays Mine Clarifier Retaining Wall Repl	304.00	0	0	0	0	54,931	0	0	0	0	0	0	0	54,931
I24-110068	Hays Mine Bulk Caustic Soda Tank Rplcmnt	320.00	235,199	0	0	0	0	0	0	0	0	0	0	0	235,199
I24-110070	42" Edgebrook/Brook St WL Replacement	331.00	0	0	0	0	0	0	0	0	0	0	1,427,508	0	1,427,508
I24-110071	Snowden Rd- 24" approx. 2,500"	335.00	0	0	0	0	0	0	0	0	0	0	21,191	0	21,191
I24-110071	Snowden Rd- 24" approx. 2,500"	331.00	0	0	0	0	0	0	0	0	0	0	402,627	0	402,627
I24-110073	Arla Drive Waterline Replacement	333.00	0	0	33,973	0	0	0	0	0	0	0	0	0	33,973
I24-110073	Arla Drive Waterline Replacement	335.00	0	0	11,324	0	0	0	0	0	0	0	0	0	11,324

Pennsylvania-American Water Company - Water Operations
Plant Additions and Retirements by Month
July 2023 to June 2024

Retirements

Project Number	Project Title	Utility Account	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	2024 Total
I24-110073	Arla Drive Waterline Replacement	331.00	0	0	181,190	0	0	0	0	0	0	0	0	0	181,190
I24-110075	Baptist Road 12" Waterline Replacement	333.00	0	0	0	0	46,371	0	0	0	0	0	0	0	46,371
I24-110075	Baptist Road 12" Waterline Replacement	335.00	0	0	0	0	15,457	0	0	0	0	0	0	0	15,457
I24-110075	Baptist Road 12" Waterline Replacement	331.00	0	0	0	0	247,312	0	0	0	0	0	0	0	247,312
I24-110076	Hays Mine Chemical Floor	304.00	0	0	0	0	97,539	0	0	0	0	0	0	0	97,539
I24-140001	Steelton WTP Filter Replacement	320.00	0	0	0	0	0	261,208	0	0	0	0	0	0	261,208
I24-140002	Steelton Booster Pump Station Replacement	304.00	0	0	0	0	0	0	0	0	0	0	0	226,203	226,203
I24-140002	Steelton Booster Pump Station Replacement	310.00	0	0	0	0	0	0	0	0	0	0	0	61,692	61,692
I24-140002	Steelton Booster Pump Station Replacement	311.00	0	0	0	0	0	0	0	0	0	0	0	102,819	102,819
I24-140002	Steelton Booster Pump Station Replacement	331.00	0	0	0	0	0	0	0	0	0	0	0	20,564	20,564
I24-140003	Steelton Water Treatment Plant Filter Improvements	303.00	0	0	0	0	0	0	0	0	0	0	0	8,949	8,949
I24-140003	Steelton Water Treatment Plant Filter Improvements	304.00	0	0	0	0	0	0	0	0	0	0	0	80,537	80,537
I24-140003	Steelton Water Treatment Plant Filter Improvements	320.00	0	0	0	0	0	0	0	0	0	0	0	805,372	805,372
I24-210026	Snowberry Booster Station Replacement	311.00	0	0	0	99,545	0	0	0	0	0	0	0	0	99,545
I24-220012	Replace Monongahela PRV Station	331.00	0	0	0	0	0	208,016	0	0	0	0	0	0	208,016
I24-220015	Mon Valley PRV Station Replacements	331.00	0	0	0	0	0	238,865	0	0	0	0	0	0	238,865
I24-220015	Mon Valley PRV Station Replacements - Douglas Run	304.00	0	0	0	0	0	0	0	0	0	0	100,412	0	100,412
I24-220015	Mon Valley PRV Station Replacements - Douglas Run	331.00	0	0	0	0	0	0	0	0	0	0	33,471	0	33,471
I24-220019	Monogahela 4th St Water Line Replacement	331.00	0	0	289,475	0	0	0	0	0	0	0	0	0	289,475
I24-230014	Connellsville System Wide SCADA Install	347.00	0	0	0	0	0	518	0	0	0	0	0	0	518
I24-230015	SR 40 from Duck Hollow Rd to Haddenville	331.00	0	224,228	0	0	0	0	0	0	0	0	0	0	224,228
I24-250007	Hiller Reservoir Liner & Cover Replace	330.00	0	0	0	396,511	0	0	0	0	0	0	0	0	396,511
I24-310013	Mecklam Booster Pump Station	311.00	0	578,424	0	0	0	0	0	0	0	0	0	0	578,424
I24-310018	New Castle Electrical	320.00	0	0	0	0	0	1,081,517	0	0	0	0	0	0	1,081,517
I24-310018-02	New Castle WTP Improvements - Filter and UV	320.00	0	0	0	0	0	0	0	0	0	0	0	2,076,056	2,076,056
I24-310025	Ellwood Raw Water Pump Replacement	311.00	0	0	0	154,688	0	0	0	0	0	0	0	0	154,688
I24-420008	Punxsutawney West End Reservoir	330.00	0	0	0	0	0	559,442	0	0	0	0	0	0	559,442
I24-430003	Clarion WTP - Sodium Permanganate Feed	320.00	147,574	0	0	0	0	0	0	0	0	0	0	0	147,574
I24-440005	Troy Hill Booster Replacement	311.00	152,935	0	0	0	0	0	0	0	0	0	0	0	152,935
I24-460006	Kane WTP Improvements Project	320.00	0	666,356	0	0	0	0	0	0	0	0	0	0	666,356
I24-460008	Kane Transmission Mains	331.00	386,089	0	0	0	0	0	0	0	0	0	0	0	386,089
I24-510025	Norristown WTP Filter Ugrades	320.00	0	0	0	0	0	832,284	0	0	0	0	0	0	832,284
I24-510026	Forrest Ave 2023-NT-5EO	331.00	0	284,046	0	0	0	0	0	0	0	0	0	0	284,046
I24-510030	W. Main St (Swede St - Markely St)	331.00	0	0	0	0	0	524,674	0	0	0	0	0	0	524,674
I24-510031	Norristown Laffayette Street	331.00	0	0	0	0	0	0	0	0	0	0	325,660	0	325,660
I24-540011	Montrose Plant Phase 2 Upgrades	320.00	0	0	0	0	392,712	0	0	0	0	0	0	0	392,712
I24-560018	Cherry Valley Pump Station Upgrades	304.00	0	0	0	0	0	54,277	0	0	0	0	0	0	54,277
I24-560018	Cherry Valley Pump Station Upgrades	310.00	0	0	0	0	0	108,553	0	0	0	0	0	0	108,553
I24-560018	Cherry Valley Pump Station Upgrades	311.00	0	0	0	0	0	108,553	0	0	0	0	0	0	108,553
I24-570009	PCP Well #2 Treatment Building Improvs	304.00	0	0	0	0	101,186	0	0	0	0	0	0	0	101,186
I24-570009	PCP Well #2 Treatment Building Improvs	320.00	0	0	0	0	101,186	0	0	0	0	0	0	0	101,186
I24-570010	Mt. Pocono Ops Center Wall Cladding	304.00	0	0	0	65,132	0	0	0	0	0	0	0	0	65,132
I24-610024	Silver Spring WTP Traveling Screens	306.00	0	0	106,464	0	0	0	0	0	0	0	0	0	106,464
I24-640016	Connect Phoenixville Gradient to Merlin Hills/Terry	331.00	0	0	0	0	0	0	0	0	0	0	271,383	0	271,383
I24-650018	Rock Run Sedimentation Basin Covers	320.00	0	225,514	0	0	0	0	0	0	0	0	0	0	225,514
I24-680030	Winona Falls/Millford Rd WM Replacement	333.00	0	55,496	0	0	0	0	0	0	0	0	0	0	55,496
I24-680030	Winona Falls/Millford Rd WM Replacement	334.00	0	27,748	0	0	0	0	0	0	0	0	0	0	27,748
I24-680030	Winona Falls/Millford Rd WM Replacement	331.00	0	194,237	0	0	0	0	0	0	0	0	0	0	194,237
I24-680031	Pocono Mtn Lake Forest Estates Booster	304.00	0	0	0	0	99,507	0	0	0	0	0	0	0	99,507
I24-680031	Pocono Mtn Lake Forest Estates Booster	311.00	0	0	0	0	99,507	0	0	0	0	0	0	0	99,507
I24-680031	Pocono Mtn Lake Forest Estates Booster	331.00	0	0	0	0	199,014	0	0	0	0	0	0	0	199,014
I24-710010	Level1 WBS-West Milton Booster	304.00	0	0	0	0	0	100,478	0	0	0	0	0	0	100,478
I24-710010	Level1 WBS-West Milton Booster	310.00	0	0	0	0	0	100,478	0	0	0	0	0	0	100,478
I24-710010	Level1 WBS-West Milton Booster	311.00	0	0	0	0	0	200,955	0	0	0	0	0	0	200,955
I24-710021	White Deer Creek Contact Clearwell Tank	304.00	527,496	0	0	0	0	0	0	0	0	0	0	0	527,496
I24-910007	Fallbrook Waste handling Improvemen	320.00	0	0	0	0	0	141,695	0	0	0	0	0	0	141,695
I24-910064	Lake Scranton Permanganate Conversion	304.00	226,655	0	0	0	0	0	0	0	0	0	0	0	226,655
I24-910064	Lake Scranton Permanganate Conversion	347.00	6,182	0	0	0	0	0	0	0	0	0	0	0	6,182
I24-910069	Gardner Creek Outlet Works Rehab	305.00	0	0	0	0	0	384,323	0	0	0	0	0	0	384,323
I24-910071	Summit Lake Outlet Works Rehab	305.00	0	0	0	0	0	263,365	0	0	0	0	0	0	263,365
I24-910074	Ceasetown Rt 29 - Bridge Crossing & PRV	304.00	0	0	0	0	319,059	0	0	0	0	0	0	0	319,059
I24-910074	Ceasetown Rt 29 - Bridge Crossing & PRV	331.00	0	0	0	0	319,059	0	0	0	0	0	0	0	319,059
I24-910075	Sugar Notch Pump Station Improvements	304.00	0	0	0	0	103,239	0	0	0	0	0	0	0	103,239
I24-910075	Sugar Notch Pump Station Improvements	310.00	0	0	0	0	51,620	0	0	0	0	0	0	0	51,620
I24-910075	Sugar Notch Pump Station Improvements	311.00	0	0	0	0	103,239	0	0	0	0	0	0	0	103,239
I24-910076	Lake Scranton 48 Trans Main/Tunnel Rehab	331.00	0	0	0	0	0	921,212	0	0	0	0	0	0	921,212
I24-910079	WTP Generator Upgrade	310.00	0	0	0	0	726,437	0	0	0	0	0	0	0	726,437
I24-910084	Volgebacher Pump Station Improvements	310.00	0	0	0	36,110	0	0	0	0	0	0	0	0	36,110
I24-910084	Volgebacher Pump Station Improvements	311.00	0	0	0	84,256	0	0	0	0	0	0	0	0	84,256
I24-910086	Rushbrook Road Water Main Replacement	331.00	0	0	0	0	361,844	0	0	0	0	0	0	0	361,844
I24-910090	W. Parker to Viewmont Drive (Main Steet)	331.00	0	0	0	0	0	0	0	0	0	0	669,412	0	669,412
			$6,320,977	$7,365,088	$6,049,173	$7,833,227	$12,525,671	$21,786,465	$5,479,524	$6,078,897	$6,961,303	$6,869,673	$7,820,552	$6,998,901	$102,089,452

Pennsylvania-American Water Company - Water Operations
Plant Additions and Retirements by Month
July 2024 to June 2025

Additions

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
R24-##DV	Projects Funded by Others-Additions	331.00	$807,169	$901,423	$902,150	$928,997	$966,248	$757,349	$984,461	$910,582	$941,602	$959,194	$924,547	$917,506	$10,901,228
R24-##A1	Mains - New	331.00	1,195,833	633,420	(4,703)	130,443	127,740	241,698	131,736	13,174	141,865	153,692	916,275	3,516,753	7,197,926
R24-##B1	Mains - Replaced / Restored	333.00	444,919	378,602	247,989	260,845	252,014	258,103	362,617	502,517	560,837	721,429	815,882	813,720	5,619,475
R24-##B1	Mains - Replaced / Restored	335.00	222,460	189,301	123,995	130,422	126,007	129,052	181,308	251,259	280,418	360,714	407,941	406,860	2,809,737
R24-##B1	Mains - Replaced / Restored	333.10	26,695	22,716	14,879	15,651	15,121	15,486	21,757	30,151	33,650	43,286	48,953	48,823	337,168
R24-##B1	Mains - Replaced / Restored	334.30	17,797	15,144	9,920	10,434	10,081	10,324	14,505	20,101	22,433	28,857	32,635	32,549	224,779
R24-##B1	Mains - Replaced / Restored	331.00	8,186,510	6,966,285	4,563,001	4,799,545	4,637,064	4,749,095	6,672,148	9,246,318	10,319,397	13,274,290	15,012,229	21,855,456	110,281,338
R24-##C1	Mains - Unscheduled	333.10	92,841	82,995	74,849	77,157	64,457	95,987	88,438	83,032	92,869	103,825	88,518	97,551	1,042,520
R24-##C1	Mains - Unscheduled	331.00	3,001,846	2,683,493	2,420,112	2,494,750	2,084,120	3,103,592	2,859,498	2,684,696	3,002,774	3,357,017	2,862,088	3,154,149	33,708,134
R24-##D1	Mains - Relocated	333.00	26,331	3,690	14,834	22,392	27,598	23,263	11,487	17,700	15,286	16,812	32,034	33,859	245,286
R24-##D1	Mains - Relocated	335.00	13,166	1,845	7,417	11,196	13,799	11,631	5,744	8,850	7,643	8,406	16,017	16,929	122,643
R24-##D1	Mains - Relocated	331.00	618,780	86,706	348,605	526,203	648,546	546,677	269,956	415,943	359,220	395,093	752,802	795,682	5,764,213
R24-##E1	Hydrants, Valves, and Manholes - New	335.00	108,270	104,161	100,698	157,868	144,164	133,273	130,459	172,109	157,863	141,275	161,932	171,385	1,683,456
R24-##E1	Hydrants, Valves, and Manholes - New	333.10	241,214	232,059	224,345	351,712	321,181	296,916	290,648	383,440	351,701	314,745	360,766	381,827	3,750,552
R24-##F1	Hydrants, Valves, and Manholes - Replaced	333.00	12,369	13,573	14,414	14,191	12,914	10,191	9,347	10,900	11,949	13,322	14,768	14,768	152,706
R24-##F1	Hydrants, Valves, and Manholes - Replaced	335.00	618,469	678,635	720,707	709,537	645,696	509,526	467,350	544,975	597,465	666,087	738,418	738,418	7,635,282
R24-##F1	Hydrants, Valves, and Manholes - Replaced	331.00	606,100	665,062	706,293	695,346	632,782	499,335	458,003	534,076	585,516	652,765	723,650	723,650	7,482,576
R24-##G1	Services and Laterals - New	333.00	543,269	507,938	516,701	580,740	454,398	535,208	432,067	287,594	477,940	540,931	605,599	615,853	6,098,239
R24-##G1	Services and Laterals - New	331.00	81,178	75,899	77,208	86,777	67,899	79,974	64,562	42,974	71,416	80,829	90,492	92,024	911,231
R24-##H1	Services and Laterals - Replaced	333.00	1,529,904	1,583,592	1,464,290	1,550,086	1,441,618	1,613,930	1,137,116	1,825,484	1,906,070	1,983,937	2,227,474	2,277,742	20,541,242
R24-##H1	Services and Laterals - Replaced	333.10	32,208	33,339	30,827	32,633	30,350	33,977	23,939	38,431	40,128	41,767	46,894	47,952	432,447
R24-##H1	Services and Laterals - Replaced	331.00	48,313	50,008	46,241	48,950	45,525	50,966	35,909	57,647	60,192	62,651	70,341	71,929	648,671
R24-##H2	Customer Side Lead Service Lines	333.00	535,580	554,375	512,610	542,646	504,674	564,996	398,075	639,055	667,266	694,526	779,782	797,379	7,190,964
R24-##H2	Customer Side Lead Service Lines	333.10	11,275	11,671	10,792	11,424	10,625	11,895	8,381	13,454	14,048	14,622	16,416	16,787	151,389
R24-##H2	Customer Side Lead Service Lines	331.00	16,913	17,507	16,188	17,136	15,937	17,842	12,571	20,181	21,072	21,932	24,625	25,180	227,083
R24-##I1	Meters - New	334.10	132,550	182,759	171,443	124,071	160,823	131,992	165,373	151,455	168,610	252,298	253,768	246,778	2,141,921
R24-##I1	Meters - New	334.20	54,140	74,648	70,026	50,677	65,688	53,912	67,547	61,862	68,869	103,051	103,652	100,797	874,869
R24-##J1	Meters - Replaced	334.10	1,813,045	1,643,073	1,680,054	989,479	896,431	291,317	1,418,542	1,922,491	2,625,949	1,648,548	2,729,094	1,084,753	18,742,775
R24-##J1	Meters - Replaced	334.20	853,198	773,211	790,614	465,637	421,850	137,090	667,549	904,702	1,235,741	775,787	1,284,280	510,472	8,820,130
R24-##K1 & K3	ITS Equipment and Systems	340.20	49,306	152,119	880,790	304,598	326,101	492,284	135,565	297,738	357,586	382,502	488,011	615,353	4,481,954
R24-##K1 & K3	ITS Equipment and Systems - Service Co.	340.30						11,812,968						331,050	12,144,018
R24-##L1	SCADA Equipment and Systems	320.10	35,083	43,424	45,054	48,412	51,650	33,891	28,551	33,610	38,553	45,294	51,468	50,810	505,800
R24-##L1	SCADA Equipment and Systems	340.20	29,236	36,187	37,545	40,343	43,042	28,243	23,793	28,009	32,127	37,745	42,890	42,341	421,500
R24-##L1	SCADA Equipment and Systems	343.00	40,931	50,661	52,563	56,480	60,259	39,540	33,310	39,212	44,978	52,843	60,045	59,278	590,100
R24-##L1	SCADA Equipment and Systems	346.00	76,014	94,085	97,616	104,892	111,909	73,431	61,861	72,823	83,531	98,137	111,513	110,088	1,095,900
R24-##L1	SCADA Equipment and Systems	347.00	192,959	238,831	247,796	266,264	284,078	186,401	157,031	184,857	212,041	249,117	283,071	279,454	2,781,900
R24-##L1	SCADA Equipment and Systems	304.10	23,389	28,949	30,036	32,274	34,434	22,594	19,034	22,407	25,702	30,196	34,312	33,873	337,200
R24-##L1	SCADA Equipment and Systems	304.50	5,847	7,237	7,509	8,069	8,608	5,649	4,759	5,602	6,425	7,549	8,578	8,468	84,300
R24-##L1	SCADA Equipment and Systems	340.10	46,778	57,899	60,072	64,549	68,867	45,188	38,068	44,814	51,404	60,392	68,623	67,746	674,400
R24-##L1	SCADA Equipment and Systems	340.30	35,083	43,424	45,054	48,412	51,650	33,891	28,551	33,610	38,553	45,294	51,468	50,810	505,800
R24-##L1	SCADA Equipment and Systems	346.10	17,542	21,712	22,527	24,206	25,825	16,946	14,276	16,805	19,276	22,647	25,734	25,405	252,900
R24-##L1	SCADA Equipment and Systems	346.19	81,861	101,322	105,125	112,960	120,518	79,079	66,619	78,424	89,957	105,686	120,091	118,556	1,180,200
R24-##M1	Security Equipment and Systems	346.00	3,571	3,571	3,125	3,125	3,091	3,125	1,753	2,322	2,510	4,235	4,347	7,187	41,964
R24-##M1	Security Equipment and Systems	304.50	25,000	25,000	21,875	21,875	21,640	21,875	12,274	16,256	17,572	29,646	30,428	50,310	293,750
R24-##M1	Security Equipment and Systems	346.10	139,286	139,286	121,875	121,875	120,564	121,875	68,382	90,567	97,901	165,168	169,530	280,299	1,636,607
R24-##M1	Security Equipment and Systems	346.20	1,786	1,786	1,563	1,563	1,546	1,563	877	1,161	1,255	2,118	2,173	3,594	20,982
R24-##M1	Security Equipment and Systems	346.00	8,929	8,929	7,813	7,813	7,728	7,813	4,383	5,806	6,276	10,588	10,867	17,968	104,911
R24-##N1	Offices and Operations Centers	304.61	9,310	12,449	14,054	16,018	17,292	22,466	4,559	5,889	9,477	10,857	14,067	14,241	150,680
R24-##N1	Offices and Operations Centers	320.10	23,276	31,123	35,134	40,046	43,229	56,166	11,398	14,723	23,692	27,143	35,169	35,601	376,700
R24-##N1	Offices and Operations Centers	343.00	9,310	12,449	14,054	16,018	17,292	22,466	4,559	5,889	9,477	10,857	14,067	14,241	150,680
R24-##N1	Offices and Operations Centers	304.10	288,621	385,930	435,664	496,565	536,045	696,461	141,334	182,562	293,781	336,573	436,090	441,456	4,671,083
R24-##N1	Offices and Operations Centers	304.50	107,069	143,168	161,617	184,210	198,855	258,365	52,430	67,725	108,983	124,858	161,775	163,766	1,732,821
R24-##N1	Offices and Operations Centers	340.10	27,931	37,348	42,161	48,055	51,875	67,399	13,677	17,667	28,430	32,572	42,202	42,722	452,040
R24-##O1	Vehicles	341.10	1,039,605	1,424,217	1,632,833	1,756,239	2,230,271	2,221,304	129,346	1,278,953	1,261,059	1,194,424	1,206,750	2,124,997	17,500,000
R24-##P1	Tools and Equipment	343.00	269,818	229,712	229,938	267,619	293,920	617,222	239,578	284,054	356,373	381,291	405,824	448,295	4,023,643
R24-##P1	Tools and Equipment	347.00	269,818	229,712	229,938	267,619	293,920	617,222	239,578	284,054	356,373	381,291	405,824	448,295	4,023,643
R24-##P1	Tools and Equipment	341.10	11,013	9,376	9,385	10,923	11,997	25,193	9,779	11,594	14,546	15,563	16,564	18,298	164,230
R24-##Q1	Process Plant Facilities and Equipment	307.00	36,094	70,301	69,488	79,196	73,259	82,375	42,338	44,456	63,507	59,454	63,848	75,707	760,022
R24-##Q1	Process Plant Facilities and Equipment	320.10	902,346	1,757,523	1,737,200	1,979,899	1,831,485	2,059,369	1,058,443	1,111,395	1,587,665	1,486,338	1,596,212	1,892,674	19,000,549
R24-##Q1	Process Plant Facilities and Equipment	343.00	54,141	105,451	104,232	118,794	109,889	123,562	63,507	66,684	95,260	89,180	95,773	113,560	1,140,033
R24-##Q1	Process Plant Facilities and Equipment	347.00	36,094	70,301	69,488	79,196	73,259	82,375	42,338	44,456	63,507	59,454	63,848	75,707	760,022
R24-##Q1	Process Plant Facilities and Equipment	304.10	415,079	808,461	799,112	910,754	842,483	947,310	486,884	511,242	730,326	683,715	734,258	870,630	8,740,253
R24-##Q1	Process Plant Facilities and Equipment	304.50	54,141	105,451	104,232	118,794	109,889	123,562	63,507	66,684	95,260	89,180	95,773	113,560	1,140,033
R24-##Q1	Process Plant Facilities and Equipment	311.50	252,657	492,106	486,416	554,372	512,816	576,623	296,364	311,191	444,546	416,175	446,939	529,949	5,320,154
R24-##Q1	Process Plant Facilities and Equipment	320.20	54,141	105,451	104,232	118,794	109,889	123,562	63,507	66,684	95,260	89,180	95,773	113,560	1,140,033
R24-##R1	Capitalized Tank Rehabilitation / Painting	330.00	73,267	81,110	82,082	87,658	64,963	32,000	12,273	18,799	25,293	46,005	125,144	136,206	784,800

Pennsylvania-American Water Company - Water Operations
Plant Additions and Retirements by Month
July 2024 to June 2025

Additions

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
R24-##R1	Capitalized Tank Rehabilitation / Painting	330.59	842,566	932,766	943,947	1,008,071	747,074	368,000	141,145	216,184	290,871	529,054	1,439,151	1,566,371	9,025,200
R24-##S1	Engineering Studies	339.60	138,980	87,945	87,945	87,945	87,945	87,945	35,483	15,735	40,907	57,746	39,767	87,213	855,555
I24-110035	Hays Mine Raw Pipeline	309.00												34,240,404	34,240,404
I24-110080	Aldrich Plant Intake Modifications	304.00											473,947		473,947
I24-110080	Aldrich Plant Intake Modifications	320.00											473,947		473,947
I24-110085	Aldrich WTP Tech House Replacement	304.00												1,750,000	1,750,000
I24-110087	Aldrich Chemical Unloading Area Containment	304.00											750,000		750,000
I24-110088	Aldrich WTP Chemical Pumps T2 Upgrades	320.00												1,000,000	1,000,000
I24-110090	Aldrich #1 Clarifier Rehabilitation	320.00												1,050,000	1,050,000
I24-11XX08	Madeline St and Becks Run Rd 24" Main Replacement	333.00												133,000	133,000
I24-11XX08	Madeline St and Becks Run Rd 24" Main Replacement	335.00												33,250	33,250
I24-11XX08	Madeline St and Becks Run Rd 24" Main Replacement	331.00												3,158,750	3,158,750
I24-11XX19	Hays Mine Ferric and C9 Tank Replacement	320.00											3,036,125		3,036,125
I24-14XX03-02	Property-Hershey-Steelton Regional Water Treatment Plant	303.00						1,500,000							1,500,000
I24-210030-04	FTMA Improvements - wbs element #04 Only inservice 2025 (Li Note: Suggest to change the Description to " FTMA Improvements -Grant Street Booster Station")	311.00											954,081		954,081
I24-210030-04	FTMA Improvements - wbs element #04 Only inservice 2025 (Li Note: Suggest to change the Description to " FTMA Improvements -Grant Street Booster Station")	331.00											50,215		50,215
I24-210034	Avella Rd Water Line Extension	304.00												655,000	655,000
I24-210034	Avella Rd Water Line Extension	333.00												655,000	655,000
I24-210034	Avella Rd Water Line Extension	335.00												655,000	655,000
I24-210034	Avella Rd Water Line Extension	331.00												11,135,000	11,135,000
I24-210038	Replace Hannas Knob Booster Station	311.00												1,147,500	1,147,500
I24-230016	Replace Menallen Chemical Feed / Metering Station	320.00												750,825	750,825
I24-250010	Brownsville to California Second River Crossing - Brownsville District	331.00												3,260,000	3,260,000
I24-250011	Brownsville WTP Sedimentation Basin Upgrades	320.00												2,613,000	2,613,000
I24-250012	Brownsville Chemical T2 Improvements - Upgrades to Liquid Chemical Feed Piping and Valving	320.00												245,000	245,000
I24-310020	Ellwood - Jackson Twp. Gradient Improvements - BPS, elevated tank and pipeline	311.00						1,046,043							1,046,043
I24-310020	Ellwood - Jackson Twp. Gradient Improvements - BPS, elevated tank and pipeline	330.00						5,927,576							5,927,576
I24-310026	New Castle WTP - Residual Imrprovements	304.00												3,000,000	3,000,000
I24-310026	New Castle WTP - Residual Imrprovements	311.00												1,500,000	1,500,000
I24-310026	New Castle WTP - Residual Imrprovements	320.00												3,000,000	3,000,000
I24-310027	New Castle WTP - Filter Rehabilitation	320.00												2,000,000	2,000,000
I24-330015	Butler Portman Road BPS	311.00				825,000									825,000
I24-330016	Butler WTP Chemical Improvements	320.00												3,878,821	3,878,821
I24-410010	Indiana Pleasant Hills Gradient Improvements	311.00												918,750	918,750
I24-410010	Indiana Pleasant Hills Gradient Improvements	339.00												306,250	306,250
I24-420007	Punxsy S Main New Elevated Tank	330.00						4,500,000							4,500,000
I24-420008-02	Punxsutawney - Install new storage at West End Reservoir Site - 2nd Tank	330.00												2,414,394	2,414,394
I24-430006	Clarion WTP - Replacement of Carbon System	320.00						450,000							450,000
I24-430007	Clarion WTP - Chlorine Gas Elimination	320.00												3,650,000	3,650,000
I24-440006	Kittanning - Edgewood BPS	311.00												788,700	788,700
I24-440007	Kittanning - Orchard BPS	311.00						815,464							815,464
I24-44XX03	Kittanning WTP - stormwater improvements	339.00												500,000	500,000
I24-44XX06	Kittanning WTP - filter improvements	320.00												1,500,000	1,500,000
I24-45XX03	Warren - 8,300 LF 12" on Pleasant Drive	331.00				2,490,000									2,490,000
I24-46XX01	Kane WTP - Sedimentation Basin Improvements	305.00						450,000							450,000
I24-510028-02	Second 16" Main to E Norriton Twp & BPS	311.00												2,000,000	2,000,000
I24-51XX12	Sludge Blow down Valve replacement	320.00												500,000	500,000
I24-51XX19	Norristown WTP New Blower and Backup	320.00												1,000,000	1,000,000
I24-520006	Williams Lane Tank ,booster station & chemical feed	330.00												4,006,940	4,006,940
I24-520007	PFAS Treatment - Yardley College Ave Wells and Highland Drive Wells	304.00												875,000	875,000
I24-520007	PFAS Treatment - Yardley College Ave Wells and Highland Drive Wells	320.00												2,625,000	2,625,000
I24-52XX05	Heller Drive pressure Improvements	331.00						400,000							400,000
I24-52XX07	Yardley Raw Water Pump Station Flood Improvements	304.00						500,000							500,000
I24-540005	Susquehanna Operations Center	304.00												3,550,000	3,550,000
I24-540007	Lake Montrose Dam Rehabilitation	305.00						4,866,026							4,866,026
I24-540012	Montrose plant - traffic safety	304.00					700,000								700,000

Pennsylvania-American Water Company - Water Operations
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Additions

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I24-540012	Montrose plant - traffic safety	348.00					2,800,000								2,800,000
I24-550007	Bangor Chemical Injection Improvements	320.00				400,000									400,000
I24-560007	Stoney Garden Intake Improvements	305.00						8,376,706							8,376,706
I24-570011	Pocono Well 4k	304.00						1,500,000							1,500,000
I24-570012	PFAS Treatment - Pocono Pine Hill and Summit Point	304.00												1,600,000	1,600,000
I24-570012	PFAS Treatment - Pocono Pine Hill and Summit Point	310.00												200,000	200,000
I24-570012	PFAS Treatment - Pocono Pine Hill and Summit Point	311.00												600,000	600,000
I24-570012	PFAS Treatment - Pocono Pine Hill and Summit Point	320.00												1,600,000	1,600,000
I24-590003-02	Phase II New water main in Exeter as per Acquisition	331.00						1,450,000							1,450,000
I24-590005	PFAS Treatment - Glen Alsace Wells 8 and 9/9A	304.00												950,000	950,000
I24-590005	PFAS Treatment - Glen Alsace Wells 8 and 9/9A	320.00												2,850,000	2,850,000
I24-59XX02	Glen Corrosion Control	304.00						275,000							275,000
I24-59XX02	Glen Corrosion Control	320.00						825,000							825,000
I24-59XX05	Reading Interconnect	320.00						500,000							500,000
I24-610022	PA Lead Service Line Inventory	348.00				11,163,718									11,163,718
I24-610023	West Shore Clearwell Roof	304.00						1,517,344							1,517,344
I24-62XX08	Hershey WTP MV Electrical Rebuild	304.00												650,000	650,000
I24-62xxxx	Manada Creek Intake Project	305.00												1,200,000	1,200,000
I24-630009-01	Wyomissing High Grad Tank #2	330.00												2,000,000	2,000,000
I24-630009-02	Wyomissing High Grad Tank #2	331.00											2,750,000		2,750,000
I24-630010	PFAS Treatment - Penn Wells 19 and 23	304.00												950,000	950,000
I24-630010	PFAS Treatment - Penn Wells 19 and 23	320.00												2,850,000	2,850,000
I24-63XX08	Penn Lead and Copper upgrades	320.00						1,600,000							1,600,000
I24-640015	Loop western end of Royersford System together	331.00						2,985,000							2,985,000
I24-650010	West Chester BPS	330.00												2,000,000	2,000,000
I24-650020	Rock Run Dam Improvements	305.00												1,624,212	1,624,212
I24-650022	Rock Run wastewater connection to public sewer	320.00											2,000,000		2,000,000
I24-650023	Coatesville Route 340 BPS Replacement	311.00												2,000,000	2,000,000
I24-650024	Lining the existing 24" CI water main Parkesburg to Caln	331.00											7,600,000		7,600,000
I24-65XX05	Raw water slip lining from Chambers Lake to Rock Run	331.00											3,000,000		3,000,000
I24-680023	Pine Ridge Well 5 - High Manganese (NEW GW SUPPLY)	303.00						268,318							268,318
I24-680023	Pine Ridge Well 5 - High Manganese (NEW GW SUPPLY)	304.00						268,318							268,318
I24-680023	Pine Ridge Well 5 - High Manganese (NEW GW SUPPLY)	307.00						268,318							268,318
I24-680023	Pine Ridge Well 5 - High Manganese (NEW GW SUPPLY)	311.00						268,318							268,318
I24-680024	Mid-Monroe GW development	307.00						1,299,930							1,299,930
I24-680032	All Seasons Well Replacement	307.00												1,000,000	1,000,000
I24-680033	PFAS Treatment - Pine Ridge Well 3	320.00												1,700,000	1,700,000
I24-710008	White Deer WTP Solids Handling	304.00												1,750,000	1,750,000
I24-710008	White Deer WTP Solids Handling	311.00												700,000	700,000
I24-710008	White Deer WTP Solids Handling	320.00												1,050,000	1,050,000
I24-710018	Milton WTP Raw Water Intake Modification	306.00												1,102,500	1,102,500
I24-710018	Milton WTP Raw Water Intake Modification	320.00												472,500	472,500
I24-720002	Philipsburg Well #2 (Trout Run)	304.00												681,807	681,807
I24-720002	Philipsburg Well #2 (Trout Run)	307.00												681,807	681,807
I24-720002	Philipsburg Well #2 (Trout Run)	311.00												340,904	340,904
I24-720003	Emigh Run System Improvements	311.00												4,537,070	4,537,070
I24-720005	Philipsburg WTP - Filter Improvements	304.00						199,522							199,522
I24-720005	Philipsburg WTP - Filter Improvements	320.00						1,130,625							1,130,625
I24-720007	Philipsburg - Sandy Ridge & Linwood BPS	303.00												100,000	100,000
I24-720007	Philipsburg - Sandy Ridge & Linwood BPS	304.00												800,000	800,000
I24-720007	Philipsburg - Sandy Ridge & Linwood BPS	310.00												300,000	300,000
I24-720007	Philipsburg - Sandy Ridge & Linwood BPS	311.00												800,000	800,000
I24-720008	Philipsburg 2nd Tank at WTP	311.00												210,000	210,000
I24-720008	Philipsburg 2nd Tank at WTP	330.00												3,570,000	3,570,000
I24-730002	Berwick - Salem BPS Replacement	303.00												81,500	81,500
I24-730002	Berwick - Salem BPS Replacement	304.00												570,500	570,500
I24-730002	Berwick - Salem BPS Replacement	310.00												244,500	244,500
I24-730002	Berwick - Salem BPS Replacement	311.00												570,500	570,500
I24-910005	Dunmore #7 Dam Rehabilitation	305.00						17,075,370							17,075,370
I24-910008	Curtis Dam Rehabilatation	305.00												16,491,001	16,491,001
I24-910028	Griffin Dam Rehabilitation	305.00				11,272,153									11,272,153
I24-910068	Maple Lake Outlet Works Rehabilitation	305.00												5,541,000	5,541,000
I24-910070	Marshwood Dam Outlet Works Rehabilitation	305.00												4,988,000	4,988,000
I24-910072	Dunmore No. 1 Outlet Works Rehabilitation	305.00						3,226,399							3,226,399
I24-910078	Watres Plant - residuals handling	320.00						3,350,000							3,350,000
I24-910080	Day Street BPS Electrical & Generator Imprmnts.	310.00	150,000												150,000

Pennsylvania-American Water Company - Water Operations
Plant Additions and Retirements by Month
July 2024 to June 2025

Additions

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
I24-910080	Day Street BPS Electrical & Generator Imprmnts.	345.00	150,000												150,000
I24-910087	Old Boston 3rd Tank	330.00												4,000,000	4,000,000
I24-910089	Olwen Heights Storage Tank and Hydroneumatic Tanks Replacement	330.00												1,250,000	1,250,000
I24-910093	PFAS Treatment - Homesite Well	304.00												400,000	400,000
I24-910093	PFAS Treatment - Homesite Well	320.00												1,600,000	1,600,000
I24-910095	Rushbrook Pump Station Replacement/Relocation	304.00												1,500,000	1,500,000
I24-91XX03	WTP Chlorine Gas Conversations - Ceasetown	320.00												2,500,000	2,500,000
I24-91XX08	WTP Chlorine Gas Conversations - Huntsville	320.00												2,500,000	2,500,000
			$27,920,218	$27,353,901	$25,057,585	$51,502,310	$27,944,507	$103,991,177	$21,242,204	$27,395,794	$31,960,031	$34,901,754	$62,328,154	$234,690,554	$676,288,189

Pennsylvania-American Water Company - Water Operations
Plant Additions and Retirements by Month
July 2024 to June 2025

Retirements

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
R24-##B1	Mains - Replaced / Restored	333.00	$89,258	$75,954	$49,751	$52,330	$50,558	$51,780	$72,747	$100,813	$112,513	$144,730	$163,679	$163,246	$1,127,359
R24-##B1	Mains - Replaced / Restored	333.10	0	0	0	0	0	0	0	0	0	0	9,821	9,795	19,615
R24-##B1	Mains - Replaced / Restored	334.30	3,570	3,038	1,990	2,093	2,022	2,071	2,910	4,033	4,501	5,789	6,547	6,530	45,094
R24-##B1	Mains - Replaced / Restored	331.00	1,642,348	1,397,551	915,413	962,868	930,271	952,746	1,338,542	1,854,963	2,070,240	2,663,040	0	0	14,727,983
R24-##C1	Mains - Unscheduled	333.10	23,981	21,207	18,001	18,619	15,965	22,363	22,107	22,706	25,382	29,513	17,758	19,570	257,173
R24-##C1	Mains - Unscheduled	331.00	602,220	538,353	485,514	500,488	0	0	0	0	0	0	3,011,699	3,003,720	8,141,994
R24-##D1	Mains - Relocated	335.00	2,641	370	1,488	2,246	2,768	2,333	1,152	1,775	1,533	1,686	3,213	3,396	24,604
R24-##E1	Hydrants, Valves, and Manholes - New	335.00	44,629	37,977	24,875	26,165	25,279	25,890	36,373	50,407	56,257	72,365	81,840	81,623	563,679
R24-##F1	Hydrants, Valves, and Manholes - Replaced	333.00	2,482	2,723	2,892	2,847	2,591	2,044	1,875	2,187	2,397	2,673	2,963	2,963	30,635
R24-##F1	Hydrants, Valves, and Manholes - Replaced	335.00	124,075	136,145	144,586	142,345	129,537	102,219	93,758	109,331	119,861	133,628	148,139	148,139	1,531,763
R24-##F1	Hydrants, Valves, and Manholes - Replaced	331.00	124,137	17,395	69,936	105,565	545,055	722,806	665,545	645,738	719,870	804,428	719,358	777,950	5,917,783
R24-##G1	Services and Laterals - New	333.00	5,282	740	2,976	4,492	0	0	0	0	0	0	0	0	13,491
R24-##G1	Services and Laterals - New	331.00	0	0	0	0	130,109	109,672	54,158	83,445	72,065	79,262	151,024	159,627	839,363
R24-##H1	Services and Laterals - Replaced	333.00	306,924	317,694	293,761	310,973	294,749	328,448	230,429	369,773	385,456	401,383	453,294	463,745	4,156,628
R24-##H1	Services and Laterals - Replaced	333.10	6,462	6,688	6,184	6,547	6,089	6,816	4,803	7,710	8,050	8,379	9,408	9,620	86,756
R24-##H1	Services and Laterals - Replaced	331.00	131,286	143,455	150,971	149,318	9,133	10,225	7,204	11,565	12,075	12,569	14,112	14,430	666,342
R24-##J1	Meters - Replaced	334.10	363,727	329,627	337,046	198,506	179,839	58,443	284,583	385,683	526,808	330,726	547,501	217,619	3,760,108
R24-##J1	Meters - Replaced	334.20	171,165	155,119	158,610	93,414	84,630	27,503	133,921	181,498	247,910	155,636	257,648	102,409	1,769,463
R24-##K1 & K3	ITS Equipment and Systems	340.20	13,014	40,149	232,471	80,394	86,069	129,931	35,780	78,583	94,379	100,955	128,803	162,413	1,182,941
R24-##K1 & K3	ITS Equipment and Systems - Service Co.	340.30	0	0	0	0	0	18,690,616	0	0	0	0	0	523,791	19,214,407
R24-##L1	SCADA Equipment and Systems	340.20	7,716	9,551	9,909	10,648	11,360	7,454	6,280	7,392	8,480	9,962	11,320	11,175	111,248
R24-##L1	SCADA Equipment and Systems	346.00	8,210	9,957	10,191	10,894	11,564	7,853	6,403	7,600	8,681	10,509	11,829	12,378	116,068
R24-##L1	SCADA Equipment and Systems	347.00	656	811	842	905	965	633	533	628	720	846	962	949	9,451
R24-##L1	SCADA Equipment and Systems	340.30	55,509	68,706	71,285	76,597	81,722	53,623	45,174	53,179	60,999	71,665	81,432	80,392	800,283
R24-##L1	SCADA Equipment and Systems	346.10	1	1	1	1	1	1	1	1	1	1	1	1	13
R24-##L1	SCADA Equipment and Systems	346.19	6,725	8,323	8,636	9,279	9,900	6,496	5,472	6,442	7,390	8,682	9,865	9,739	96,948
R24-##L1	Office Furniture & Equipment - Computer Software Centrally Sponsored	340.31	71,041	71,041	71,041	71,041	71,041	71,041	71,041	71,041	71,041	71,041	71,041	71,041	852,486
R24-##M1	Security Equipment and Systems	346.00	345	345	302	302	299	302	169	224	243	409	420	695	4,056
R24-##M1	Security Equipment and Systems	304.50	5,015	5,015	4,388	4,388	4,341	4,388	2,462	3,261	3,525	5,947	6,104	10,093	58,931
R24-##M1	Security Equipment and Systems	346.10	7	7	6	6	6	6	3	5	5	8	8	14	82
R24-##M1	Security Equipment and Systems	346.20	6,104	6,104	5,341	5,341	5,284	5,341	2,997	3,969	4,290	7,238	7,430	12,284	71,724
R24-##N1	Offices and Operations Centers	304.61	1,868	2,498	2,819	3,214	3,469	4,507	915	1,181	1,901	2,178	2,822	2,857	30,229
R24-##N1	Offices and Operations Centers	320.10	4,670	6,244	7,049	8,034	8,673	11,268	2,287	2,954	4,753	5,445	7,055	7,142	75,572
R24-##N1	Offices and Operations Centers	343.00	317	424	478	545	588	764	155	200	322	369	479	485	5,127
R24-##N1	Offices and Operations Centers	304.10	141,174	239,614	247,716	282,331	276,555	329,767	126,031	139,189	205,453	204,687	234,791	263,226	2,690,534
R24-##N1	Offices and Operations Centers	304.50	32,341	49,877	53,334	60,787	61,939	76,621	23,259	26,965	40,975	42,940	51,668	55,636	576,342
R24-##N1	Office Furniture & Equipment - Other	340.50	1,471	1,471	1,471	1,471	1,471	1,471	1,471	1,471	1,471	1,471	1,471	1,471	17,653
R24-##O1	Vehicles	341.10	208,562	285,721	327,573	352,330	447,429	445,630	25,949	256,579	252,989	239,621	242,094	426,309	3,510,787
R24-##P1	Tools and Equipment	343.00	11,024	11,405	11,371	13,149	13,741	25,208	10,313	11,935	15,368	16,009	17,068	19,119	175,711
R24-##P1	Tools and Equipment	347.00	1,039	1,019	1,017	1,178	1,247	2,377	958	1,116	1,426	1,497	1,596	1,780	16,252
R24-##P1	Tools and Equipment	341.10	2,209	1,881	1,883	2,191	2,407	5,054	1,962	2,326	2,918	3,122	3,323	3,671	32,947
R24-##P1	Laboratory Equipment	344.00	8,609	8,609	8,609	8,609	8,609	8,609	8,609	8,609	8,609	8,609	8,609	8,609	103,310
R24-##Q1	Process Plant Facilities and Equipment	307.00	7,241	14,104	13,940	15,888	14,697	16,526	8,494	8,919	12,740	11,927	12,809	15,188	152,473
R24-##Q1	Process Plant Facilities and Equipment	320.10	188,064	361,299	357,549	406,912	377,788	419,942	218,069	229,707	326,246	307,270	330,552	389,895	3,913,294
R24-##Q1	Process Plant Facilities and Equipment	343.00	1,393	1,724	1,789	1,922	2,051	1,345	1,133	1,334	1,531	1,798	2,043	2,017	20,080
R24-##Q1	Process Plant Facilities and Equipment	304.10	4,692	5,808	6,026	6,475	6,908	4,533	3,819	4,495	5,156	6,058	6,883	6,796	67,648
R24-##Q1	Process Plant Facilities and Equipment	304.50	1,173	1,452	1,506	1,619	1,727	1,133	955	1,124	1,289	1,514	1,721	1,699	16,912
R24-##Q1	Process Plant Facilities and Equipment	311.50	50,687	98,725	97,583	111,216	102,879	115,680	59,455	62,430	89,183	83,491	89,663	106,316	1,067,310
R24-##Q1	Process Plant Facilities and Equipment	320.20	10,862	21,155	20,911	23,832	22,046	24,789	12,740	13,378	19,111	17,891	19,214	22,782	228,709
R24-##R1	Capitalized Tank Rehabilitation / Painting	330.00	14,698	16,272	16,467	17,586	13,033	6,420	2,462	3,771	5,074	9,229	25,106	27,325	157,444
R24-##R1	Capitalized Tank Rehabilitation / Painting	330.59	169,033	187,128	189,371	202,236	149,875	73,827	28,316	43,370	58,353	106,137	288,717	314,240	1,810,603
I24-110035	Hays Mine Raw Pipeline	309.00	0	0	0	0	0	0	0	0	0	0	0	6,869,187	6,869,187
I24-110080	Aldrich Plant Intake Modifications	304.00	0	0	0	0	0	0	0	0	0	0	95,082	0	95,082
I24-110080	Aldrich Plant Intake Modifications	320.00	0	0	0	0	0	0	0	0	0	0	95,082	0	95,082
I24-110085	Aldrich WTP Tech House Replacement	304.00	0	0	0	0	0	0	0	0	0	0	0	351,079	351,079
I24-110088	Aldrich WTP Chemical Pumps T2 Upgrades	320.00	0	0	0	0	0	0	0	0	0	0	0	200,616	200,616
I24-110090	Aldrich #1 Clarifier Rehabilitation	320.00	0	0	0	0	0	0	0	0	0	0	0	210,647	210,647
I24-11XX08	Madeline St and Becks Run Rd 24" Main Replacement	333.00	0	0	0	0	0	0	0	0	0	0	0	26,682	26,682
I24-11XX08	Madeline St and Becks Run Rd 24" Main Replacement	335.00	0	0	0	0	0	0	0	0	0	0	0	6,670	6,670
I24-11XX08	Madeline St and Becks Run Rd 24" Main Replacement	331.00	0	0	0	0	0	0	0	0	0	0	0	633,697	633,697
I24-11XX19	Hays Mine Ferric and C9 Tank Replacement	320.00	0	0	0	0	0	0	0	0	0	0	609,096	0	609,096
I24-210030-04	FTMA Improvements - wbs element #04 Only inservice 2025 (Li Note: Suggest to change the Description to " FTMA Improvements -Grant Street Booster Station")	311.00	0	0	0	0	0	0	0	0	0	0	191,404	0	191,404

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Retirements

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
I24-210030-04	FTMA Improvements - wbs element #04 Only inservice 2025 (Li Note: Suggest to change the Description to " FTMA Improvements -Grant Street Booster Station")	331.00	0	0	0	0	0	0	0	0	0	0	10,074	0	10,074
I24-210038	Replace Hannas Knob Booster Station	311.00	0	0	0	0	0	0	0	0	0	0	0	230,207	230,207
I24-210038	Replace Hannas Knob Booster Station	331.00	0	0	0	0	0	0	0	0	0	0	0	76,736	76,736
I24-230016	Replace Menallen Chemical Feed / Metering Station	320.00	0	0	0	0	0	0	0	0	0	0	0	150,628	150,628
I24-250011	Brownsville WTP Sedimentation Basin Upgrades	320.00	0	0	0	0	0	0	0	0	0	0	0	524,211	524,211
I24-250012	Brownsville Chemical T2 Improvements - Upgrades to Liquid Chemical Feed Piping and Valving	320.00	0	0	0	0	0	0	0	0	0	0	0	49,151	49,151
I24-310026	New Castle WTP - Residual Imrprovements	304.00	0	0	0	0	0	0	0	0	0	0	0	601,849	601,849
I24-310026	New Castle WTP - Residual Imrprovements	311.00	0	0	0	0	0	0	0	0	0	0	0	300,925	300,925
I24-310026	New Castle WTP - Residual Imrprovements	320.00	0	0	0	0	0	0	0	0	0	0	0	601,849	601,849
I24-310027	New Castle WTP - Filter Rehabilitation	320.00	0	0	0	0	0	0	0	0	0	0	0	401,233	401,233
I24-330015	Butler Portman Road BPS	311.00	0	0	0	165,509	0	0	0	0	0	0	0	0	165,509
I24-330016	Butler WTP Chemical Improvements	320.00	0	0	0	0	0	0	0	0	0	0	0	778,155	778,155
I24-410010	Indiana Pleasant Hills Gradient Improvements	311.00	0	0	0	0	0	0	0	0	0	0	0	184,316	184,316
I24-410010	Indiana Pleasant Hills Gradient Improvements	339.00	0	0	0	0	0	0	0	0	0	0	0	61,439	61,439
I24-420008-02	Punxsutawney - Install new storage at West End Reservoir Site - 2nd Tank	330.00	0	0	0	0	0	0	0	0	0	0	0	484,367	484,367
I24-42XX02	Punxsutawney Snyder Hill Rd./Rockland Extension	331.00	0	0	0	0	0	0	0	0	0	0	0	561,726	561,726
I24-430006	Clarion WTP - Replacement of Carbon System	320.00	0	0	0	0	0	90,277	0	0	0	0	0	0	90,277
I24-430007	Clarion WTP - Chlorine Gas Elimination	320.00	0	0	0	0	0	0	0	0	0	0	0	732,250	732,250
I24-440006	Kittanning - Edgewood BPS	311.00	0	0	0	0	0	0	0	0	0	0	0	158,226	158,226
I24-440007	Kittanning - Orchard BPS	311.00	0	0	0	0	0	163,595	0	0	0	0	0	0	163,595
I24-44XX03	Kittanning WTP - stormwater improvements	339.00	0	0	0	0	0	0	0	0	0	0	0	100,308	100,308
I24-44XX06	Kittanning WTP - filter improvements	320.00	0	0	0	0	0	0	0	0	0	0	0	300,925	300,925
I24-45XX03	Warren - 8,300 LF 12" on Pleasant Drive	331.00	0	0	0	499,535	0	0	0	0	0	0	0	0	499,535
I24-46XX01	Kane WTP - Sedimentation Basin Improvements	305.00	0	0	0	0	0	90,277	0	0	0	0	0	0	90,277
I24-51XX12	Sludge Blow down Valve replacement	320.00	0	0	0	0	0	0	0	0	0	0	0	100,308	100,308
I24-51XX19	Norristown WTP New Blower and Backup	320.00	0	0	0	0	0	0	0	0	0	0	0	200,616	200,616
I24-520006	Williams Lane Tank ,booster station & chemical feed	330.00	0	0	0	0	0	0	0	0	0	0	0	803,858	803,858
I24-520007	PFAS Treatment - Yardley College Ave Wells and Highland Drive Wells	304.00	0	0	0	0	0	0	0	0	0	0	0	175,539	175,539
I24-520007	PFAS Treatment - Yardley College Ave Wells and Highland Drive Wells	320.00	0	0	0	0	0	0	0	0	0	0	0	526,618	526,618
I24-52XX07	Yardley Raw Water Pump Station Flood Improvements	304.00	0	0	0	0	0	100,308	0	0	0	0	0	0	100,308
I24-540007	Lake Montrose Dam Rehabilitation	305.00	0	0	0	0	0	976,205	0	0	0	0	0	0	976,205
I24-540012	Montrose plant - traffic safety	304.00	0	0	0	0	140,431	0	0	0	0	0	0	0	140,431
I24-550007	Bangor Chemical Injection Improvements	320.00	0	0	0	80,247	0	0	0	0	0	0	0	0	80,247
I24-560007	Stoney Garden Intake Improvements	305.00	0	0	0	0	0	1,680,505	0	0	0	0	0	0	1,680,505
I24-570011	Pocono Well 4k	304.00	0	0	0	0	0	300,925	0	0	0	0	0	0	300,925
I24-570012	PFAS Treatment - Pocono Pine Hill and Summit Point	304.00	0	0	0	0	0	0	0	0	0	0	0	320,986	320,986
I24-570012	PFAS Treatment - Pocono Pine Hill and Summit Point	310.00	0	0	0	0	0	0	0	0	0	0	0	40,123	40,123
I24-570012	PFAS Treatment - Pocono Pine Hill and Summit Point	311.00	0	0	0	0	0	0	0	0	0	0	0	120,370	120,370
I24-570012	PFAS Treatment - Pocono Pine Hill and Summit Point	320.00	0	0	0	0	0	0	0	0	0	0	0	320,986	320,986
I24-590005	PFAS Treatment - Glen Alsace Wells 8 and 9/9A	304.00	0	0	0	0	0	0	0	0	0	0	0	190,586	190,586
I24-590005	PFAS Treatment - Glen Alsace Wells 8 and 9/9A	320.00	0	0	0	0	0	0	0	0	0	0	0	571,757	571,757
I24-59XX02	Glen Corrosion Control	304.00	0	0	0	0	0	55,170	0	0	0	0	0	0	55,170
I24-59XX02	Glen Corrosion Control	320.00	0	0	0	0	0	165,509	0	0	0	0	0	0	165,509
I24-610023	West Shore Clearwell Roof	304.00	0	0	0	0	0	304,404	0	0	0	0	0	0	304,404
I24-62XX08	Hershey WTP MV Electrical Rebuild	304.00	0	0	0	0	0	0	0	0	0	0	0	130,401	130,401
I24-62xxxx	Manada Creek Intake Project	305.00	0	0	0	0	0	0	0	0	0	0	0	240,740	240,740
I24-630009-02	Wyomissing High Grad Tank #2	331.00	0	0	0	0	0	0	0	0	0	0	551,695	0	551,695
I24-630010	PFAS Treatment - Penn Wells 19 and 23	304.00	0	0	0	0	0	0	0	0	0	0	0	190,586	190,586
I24-630010	PFAS Treatment - Penn Wells 19 and 23	320.00	0	0	0	0	0	0	0	0	0	0	0	571,757	571,757
I24-63XX08	Penn Lead and Copper upgrades	320.00	0	0	0	0	0	320,986	0	0	0	0	0	0	320,986
I24-650010	West Chester BPS	330.00	0	0	0	0	0	0	0	0	0	0	0	401,233	401,233
I24-650020	Rock Run Dam Improvements	305.00	0	0	0	0	0	0	0	0	0	0	0	325,844	325,844
I24-650023	Coatesville Route 340 BPS Replacement	311.00	0	0	0	0	0	0	0	0	0	0	0	401,233	401,233
I24-650024	Lining the existing 24" CI water main Parkesburg to Caln	331.00	0	0	0	0	0	0	0	0	0	0	1,524,685	0	1,524,685
I24-65XX05	Raw water slip lining from Chambers Lake to Rock Run	331.00	0	0	0	0	0	0	0	0	0	0	601,849	0	601,849
I24-710008	White Deer WTP Solids Handling	304.00	0	0	0	0	0	0	0	0	0	0	0	351,079	351,079
I24-710008	White Deer WTP Solids Handling	311.00	0	0	0	0	0	0	0	0	0	0	0	140,431	140,431
I24-710008	White Deer WTP Solids Handling	320.00	0	0	0	0	0	0	0	0	0	0	0	210,647	210,647
I24-710018	Milton WTP Raw Water Intake Modification	306.00	0	0	0	0	0	0	0	0	0	0	0	221,180	221,180
I24-710018	Milton WTP Raw Water Intake Modification	320.00	0	0	0	0	0	0	0	0	0	0	0	94,791	94,791

Pennsylvania-American Water Company - Water Operations
Plant Additions and Retirements by Month
July 2024 to June 2025

Retirements

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
I24-720005	Philipsburg WTP - Filter Improvements	304.00	0	0	0	0	0	40,027	0	0	0	0	0	0	40,027
I24-720005	Philipsburg WTP - Filter Improvements	320.00	0	0	0	0	0	226,822	0	0	0	0	0	0	226,822
I24-720007	Philipsburg - Sandy Ridge & Linwood BPS	303.00	0	0	0	0	0	0	0	0	0	0	0	20,062	20,062
I24-720007	Philipsburg - Sandy Ridge & Linwood BPS	304.00	0	0	0	0	0	0	0	0	0	0	0	160,493	160,493
I24-720007	Philipsburg - Sandy Ridge & Linwood BPS	310.00	0	0	0	0	0	0	0	0	0	0	0	60,185	60,185
I24-720007	Philipsburg - Sandy Ridge & Linwood BPS	311.00	0	0	0	0	0	0	0	0	0	0	0	160,493	160,493
I24-730002	Berwick - Salem BPS Replacement	303.00	0	0	0	0	0	0	0	0	0	0	0	16,350	16,350
I24-730002	Berwick - Salem BPS Replacement	304.00	0	0	0	0	0	0	0	0	0	0	0	114,452	114,452
I24-730002	Berwick - Salem BPS Replacement	310.00	0	0	0	0	0	0	0	0	0	0	0	49,051	49,051
I24-730002	Berwick - Salem BPS Replacement	311.00	0	0	0	0	0	0	0	0	0	0	0	114,452	114,452
I24-730002	Berwick - Salem BPS Replacement	331.00	0	0	0	0	0	0	0	0	0	0	0	32,700	32,700
I24-910005	Dunmore #7 Dam Rehabilitation	305.00	0	0	0	0	0	3,425,599	0	0	0	0	0	0	3,425,599
I24-910008	Curtis Dam Rehabilatation	305.00	0	0	0	0	0	0	0	0	0	0	0	3,308,365	3,308,365
I24-910028	Griffin Dam Rehabilitation	305.00	0	0	0	2,261,379	0	0	0	0	0	0	0	0	2,261,379
I24-910068	Maple Lake Outlet Works Rehabilitation	305.00	0	0	0	0	0	0	0	0	0	0	0	1,111,615	1,111,615
I24-910070	Marshwood Dam Outlet Works Rehabilitation	305.00	0	0	0	0	0	0	0	0	0	0	0	1,000,675	1,000,675
I24-910072	Dunmore No. 1 Outlet Works Rehabilitation	305.00	0	0	0	0	0	647,269	0	0	0	0	0	0	647,269
I24-910078	Watres Plant - residuals handling	320.00	0	0	0	0	0	672,065	0	0	0	0	0	0	672,065
I24-910080	Day Street BPS Electrical & Generator Imprmnts.	310.00	30,092	0	0	0	0	0	0	0	0	0	0	0	30,092
I24-910080	Day Street BPS Electrical & Generator Imprmnts.	345.00	30,092	0	0	0	0	0	0	0	0	0	0	0	30,092
I24-910089	Olwen Heights Storage Tank and Hydroneumatic Tanks Replacement	330.00	0	0	0	0	0	0	0	0	0	0	0	250,771	250,771
I24-910095	Rushbrook Pump Station Replacement/Relocation	304.00	0	0	0	0	0	0	0	0	0	0	0	300,925	300,925
I24-91XX03	WTP Chlorine Gas Conversations - Ceasetown	320.00	0	0	0	0	0	0	0	0	0	0	0	501,541	501,541
I24-91XX08	WTP Chlorine Gas Conversations - Huntsville	320.00	0	0	0	0	0	0	0	0	0	0	0	501,541	501,541
			$4,739,841	$4,720,478	$4,446,868	$7,376,805	$4,348,710	$32,238,459	$3,663,774	$4,885,005	$5,679,542	$6,204,338	$10,953,871	$36,708,326	$125,966,017

Pennsylvania American Water Company

Acquisition of the Farmington Township Water System

Summary of Original Cost, Calculated Depreciation Reserve
and Depreciated Original Cost as of April 30, 2024
Based Upon Broad Group/Remaining Life Procedure and Technique

Acct. No.		Account Title	Original Cost	ASL/Iowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost 04/30/2024
		Non-Depreciable Plant				
303.00		Land and Land Rights	$1,157			
		Total Non-Depreciable Plant	1,157			
		Depreciable Plant				
304.30		Structures & Improvements - Purification Bldg.	$222,374	60-R3	$57,584	$164,790
310.00		Power Generation Equipment	4,200	43-S1	464	3,737
320.30		Water Treatment Equipment	6,526	36-R0.5	682	5,844
330.00		Distribution Reservoirs and Standpipe	411,560	65-S0.5	106,515	305,045
331.00		Transmission & Distribution Mains and Accessories				
	331.11	Mains 4" and Under	$127,499	110-R2	$16,324	$111,175
	331.12	Mains 6" - 8"	2,593,613	110-R2	383,367	2,210,245
	331.13	Mains 10" - 12"	516,798	110-R2	72,297	444,501
	331.21	Valves 4" & Under	10,268	110-R2	1,289	8,979
	331.22	Valves 6" - 8"	52,469	110-R2	7,424	45,045
	331.23	Valves 10" - 12"	27,088	110-R2	3,496	23,593
	331.31	Blow Off	11,017	110-R2	1,448	9,569
	331.33	Air Release	29,686	110-R2	4,726	24,961
	331.90	Concrete Encasement	78,310	110-R2	10,155	68,155
	331.95	Sampling Station	25,134	110-R2	3,142	21,992
		Total Account 331.00	$3,471,882		$503,668	$2,968,215
333.00		Services				
	333.10	1" & Under	$537,710	70-R2.5	$131,050	$406,661
	333.20	Over 1"	129,778	70-R2.5	33,369	96,409
		Total Account 333	$667,488		$164,418	$503,070
334.00		Meters				
	334.10	1" & Under	$105,468	21-L1	$52,452	$53,016
	334.20	Over 1"	1,930	21-L1	991	938
		Total Account 334	$107,398		$53,443	$53,955
335.00		Hydrants	$214,282	75-R2.5	$45,782	$168,500
343.00		Tools and Work Equipment	25,053	20-SQ	24,437	616
346.00		Communication Equipment	125,179	10-SQ	122,667	2,513
		Total Depreciable Plant	$5,255,943		$1,079,659	$4,176,284
		Total Plant in Service	**$5,257,100**		**$1,079,659**	**$4,176,284**

Pennsylvania American Water Company

Acquisition of the Farmington Township Water System

Summary of Original Cost, Calculated Depreciation Reserve
and Depreciated Original Cost as of April 30, 2024
Based Upon Broad Group/Remaining Life Procedure and Technique

Acct. No.		Account Title	Original Cost	ASL/Iowa Curve	Calculated Depreciation Reserve	Depreciated Original Cost 04/30/2024
		Contributions in Aid of Construction				
304.30		Structures & Improvements - Wells and Pump House	$112,268	60-R3	$29,072	$83,196
330.00		Distribution Reservoirs and Standpipe	209,945	65-S0.5	54,335	155,609
331.00		Transmission & Distribution Mains and Accessories				
	331.11	Mains 4" and Under	32,384	110-R2	4,344	28,040
	331.12	Mains 10" - 12"	1,105,333	110-R2	168,864	936,469
	331.13	Mains 6" - 8"	134,128	110-R2	21,351	112,776
	331.21	Valves 4" & Under	2,368	110-R2	308	2,060
	331.22	Valves 6" - 8"	18,595	110-R2	2,794	15,802
	331.23	Valves 10" - 12"	7,099	110-R2	964	6,135
	331.31	Blow Off	3,596	110-R2	489	3,107
	331.32	Air Release	15,144	110-R2	2,411	12,733
	331.90	Concrete Encasement	18,841	110-R2	2,617	16,223
	331.95	Sampling Station	6,190	110-R2	791	5,399
		Total Account 331.00	$1,343,677		$204,932	$1,138,745
333.00		Services				
	333.10	1" & Under	$233,127	70-R2.5	$58,650	$174,476
	333.20	Over 1"	64,617	70-R2.5	16,710	47,908
		Total Account 333	$297,744		$75,360	$222,384
334.00		Meters				
	334.10	1" & Under	$46,934	21-L1	$23,763	$23,171
	334.20	Over 1"	984	21-L1	506	479
		Total Account 334	$47,918		$24,268	$23,650
335.00		Hydrants	$66,132	75-R2.5	$15,400	$50,732
343.00		Tools and Work Equipment	12,780	20-SQ	12,466	314
346.00		Communication Equipment	56,553	10-SQ	56,553	-
		Total CIAC	$2,147,017		$472,387	$1,674,630
		Total Plant Net of CIAC	**$3,110,083**		**$607,272**	**$2,501,654**

AUDUBON WATER COMPANY
Asset Detail - Acquisition
Estimated Close 12/31/2024

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
303.20	311.13	Other Source of Supply Land	1980	$ 20,505	n/a	n/a	$ -	$ 20,505	$ -	$ -	$ 20,505
303.20	311.13	Other Source of Supply Land	1998	15,000	n/a	n/a	-	15,000	-	-	15,000
		Total - Account 311.13		$ 35,505			$ -	$ 35,505	$ -	$ -	$ 35,505
311.20	311.2	Power and Pumping Land	1963	$ 6,000	n/a	n/a	$ -	$ 6,000	$ -	$ -	$ 6,000
303.40	311.5	Distribution Reservoir & Standpipe Land	1976	$ 546	n/a	n/a	$ -	$ 546	$ -	$ -	$ 546
303.40	311.5	Distribution Reservoir & Standpipe Land	1978	467	n/a	n/a	-	467	-	-	467
		Total Account - 311.5		$ 1,013			$ -	$ 1,013	$ -	$ -	$ 1,013
304.20	312.1	Source of Supply Structures	1965	$ 39,947	30	3.33%	$ 39,947	$ -	$ -	$ 39,947	$ -
304.20	312.1	Source of Supply Structures	1979	476	30	3.33%	476	-	-	476	-
304.20	312.1	Source of Supply Structures	1985	382	30	3.33%	382	-	-	382	-
		Total Account - 312.1		$ 40,805			$ 40,805	$ -	$ -	$ 40,805	$ -
307.00	312.13	Springs & Wells	1966	$ 67,127	30	3.33%	$ 67,127	$ -	$ -	$ 67,127	$ -
307.00	312.13	Springs & Wells	1973	6,465	30	3.33%	6,465	-	-	6,465	-
307.00	312.13	Springs & Wells	1974	1,254	30	3.33%	1,254	-	-	1,254	-
307.00	312.13	Springs & Wells	1977	623	30	3.33%	623	-	-	623	-
307.00	312.13	Springs & Wells	1978	10,160	30	3.33%	10,160	-	-	10,160	-
307.00	312.13	Springs & Wells	1979	25,648	30	3.33%	25,648	-	-	25,648	-
307.00	312.13	Springs & Wells	1980	71,673	30	3.33%	71,673	-	-	71,673	-
307.00	312.13	Springs & Wells	1981	6,939	30	3.33%	6,939	-	-	6,939	-
307.00	312.13	Springs & Wells	1982	4,138	30	3.33%	4,138	-	-	4,138	-
307.00	312.13	Springs & Wells	1983	2,219	30	3.33%	2,219	-	-	2,219	-
307.00	312.13	Springs & Wells	1984	6,717	30	3.33%	6,717	-	-	6,717	-
307.00	312.13	Springs & Wells	1985	7,392	30	3.33%	7,392	-	-	7,392	-
307.00	312.13	Springs & Wells	1986	8,719	30	3.33%	8,719	-	-	8,719	-
307.00	312.13	Springs & Wells	1986	10,375	30	3.33%	10,375	-	-	10,375	-
307.00	312.13	Springs & Wells	1987	72,521	30	3.33%	72,521	-	-	72,521	-
307.00	312.13	Springs & Wells	1990	1,473	30	3.33%	1,473	-	-	1,473	-
307.00	312.13	Springs & Wells	1996	13,316	30	3.33%	12,141	1,175	887	13,028	288
307.00	312.13	Springs & Wells	1997	55,583	30	3.33%	48,760	6,823	3,702	52,462	3,121
307.00	312.13	Springs & Wells	1998	37,325	30	3.33%	31,456	5,869	2,486	33,942	3,383
307.00	312.13	Springs & Wells 10/15 Worthing	2006	84,300	50	2.00%	28,672	55,628	3,372	32,044	52,256
307.00	312.13	Springs & Wells VFTP & Wren Road upgrade	2007	3,400	15	6.67%	3,394	6.29	6.29	3,400.00	-
307.00	312.13	Springs & Wells Well #14	2010	230,633	50	2.00%	59,346	171,287	9,225	68,571	162,062
307.00	312.13	Springs & Wells AWC#1	2012	1,183	15	6.67%	851	332	158	1,009	174
307.00	312.13	Springs & Wells AWC#2	2012	28,337	15	6.67%	20,398	7,939	3,780	24,178	4,159
307.00	312.13	Springs & Wells Wells 6&9	2012	10,959	15	6.67%	7,888	3,071	1,462	9,350	1,609
307.00	312.13	Springs & Wells Well#14	2012	5,655	15	6.67%	4,071	1,584	754	4,825	830
307.00	312.13	Springs & Wells Well #15	2012	6,459	15	6.67%	4,649	1,810	862	5,511	948
307.00	312.13	Springs & Wells	2014	7,938	15	6.67%	4,619	3,319	1,059	5,678	2,260
307.00	312.13	Springs & Wells Wells 7&8	2018	20,878	15	6.67%	6,386	14,492	2,785	9,171	11,707
307.00	312.13	Springs & Wells Wells 6&9	2018	1,800	15	6.67%	551	1,249	240	791	1,009
307.00	312.13	Springs & Wells VFCC #2	2019	700	15	6.67%	166	534	93	259	441
307.00	312.13	Springs & Wells	2021	8,070	15	6.67%	807	7,263	1,077	1,884	6,186
		Total Account - 312.13		$ 819,979			$ 537,599	282,380	31,948	569,547	250,432

AUDUBON WATER COMPANY
Asset Detail - Acquisition
Estimated Close 12/31/2024

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
311.20	312.2	Power and Pumping Structure	1966	$ 19,856	40	2.50%	$ 19,856	$ -	$ -	$ 19,856	$ -
311.20	312.2	Power and Pumping Structure	1972	5,235	40	2.50%	5,235	-	-	5,235	-
311.20	312.2	Power and Pumping Structure	1974	2,761	40	2.50%	2,761	-	-	2,761	-
311.20	312.2	Power and Pumping Structure	1977	3,948	40	2.50%	3,948	-	-	3,948	-
311.20	312.2	Power and Pumping Structure	1978	1,782	40	2.50%	1,782	-	-	1,782	-
311.20	312.2	Power and Pumping Structure	1987	3,349	40	2.50%	3,070	279	167	3,238	111
311.20	312.2	Power and Pumping Structure	1997	21,912	40	2.50%	14,418	7,494	1,096	15,513	6,399
		Total - Account 312.2		$ 58,843			$ 51,070	$ 7,773	$ 1,263	$ 52,333	$ 6,510
330.00	312.5	Distribution Reservoirs & Standpipes	1967	$ 10,333	40	2.50%	$ 10,333	$ -	$ -	$ 10,333	$ -
330.00	312.5	Distribution Reservoirs & Standpipes	1976	49,399	40	2.50%	49,399	-	-	49,399	-
330.00	312.5	Distribution Reservoirs & Standpipes	1977	136	40	2.50%	136	-	-	136	-
330.00	312.5	Distribution Reservoirs & Standpipes	1979	6,736	40	2.50%	6,736	-	-	6,736	-
330.00	312.5	Distribution Reservoirs & Standpipes	1981	826	40	2.50%	826	-	-	826	-
330.00	312.5	Distribution Reservoirs & Standpipes	1982	157,868	40	2.50%	157,789	79	79	157,868	-
330.00	312.5	Distribution Reservoirs & Standpipes	1986	144,024	40	2.50%	135,761	8,263	7,201	142,962	1,062
330.00	312.5	Distribution Reservoirs & Standpipes	1987	10,606	40	2.50%	9,722	884	530	10,253	353
330.00	312.5	Distribution Reservoirs & Standpipes	1988	34,053	40	2.50%	30,337	3,716	1,703	32,040	2,013
330.00	312.5	Distribution Reservoirs & Standpipes	1991	2,655	40	2.50%	2,159	496	133	2,292	363
330.00	312.5	Distribution Reservoirs & Standpipes	1996	21,000	40	2.50%	14,362	6,638	1,050	15,412	5,588
330.00	312.5	Distribution Reservoirs & Standpipes	2000	194,349	40	2.50%	112,798	81,551	9,717	122,516	71,833
330.00	312.5	Distribution Reservoirs & Standpipes	2002	1,800	40	2.50%	952	848	90	1,042	758
330.00	312.5	Distribution Reservoirs & Standpipes	2005	89,750	40	2.50%	40,479	49,271	4,488	44,966	44,784
330.00	312.5	Distribution Reservoirs & Standpipes	2021	3,437	40	2.50%	129	3,308	172	301	3,136
		Total - Account 312.5		$ 726,972			$ 571,918	$ 155,054	$ 25,163	$ 597,081	$ 129,891
304.62	312.62	Stores, Shop and Garage Buildings	1967	$ 5,143	30	3.33%	$ 5,143	$ -	$ -	$ 5,143	$ -
304.62	312.62	Stores, Shop and Garage Buildings	1988	1,161	30	3.33%	1,161	-	-	1,161	-
304.62	312.62	Stores, Shop and Garage Buildings	2005	421	30	3.33%	253	168	28	281	140
		Total - Account 312.62		$ 6,725			$ 6,557	$ 168	$ 28	$ 6,585	$ 140
311.20	316	Electric Pumping Equipment	1974	$ 5,101	10	10.00%	5,101	$ -	$ -	$ 5,101	$ -
311.20	316	Electric Pumping Equipment	1977	10,669	10	10.00%	10,669	-	-	10,669	-
311.20	316	Electric Pumping Equipment	1978	19,466	10	10.00%	19,466	-	-	19,466	-
311.20	316	Electric Pumping Equipment	1979	2,217	10	10.00%	2,217	-	-	2,217	-
311.20	316	Electric Pumping Equipment	1981	6,701	10	10.00%	6,701	-	-	6,701	-
311.20	316	Electric Pumping Equipment	1984	1,419	10	10.00%	1,419	-	-	1,419	-
311.20	316	Electric Pumping Equipment	1989	517	10	10.00%	517	-	-	517	-
311.20	316	Electric Pumping Equipment	1990	7,455	10	10.00%	7,455	-	-	7,455	-
311.20	316	Electric Pumping Equipment	1991	3,895	10	10.00%	3,895	-	-	3,895	-
311.20	316	Electric Pumping Equipment	1992	7,222	10	10.00%	7,222	-	-	7,222	-
311.20	316	Electric Pumping Equipment	1993	5,904	10	10.00%	5,904	-	-	5,904	-
311.20	316	Electric Pumping Equipment	1995	1,239	10	10.00%	1,239	-	-	1,239	-
311.20	316	Electric Pumping Equipment	1996	13,105	10	10.00%	13,105	-	-	13,105	-
311.20	316	Electric Pumping Equipment	1997	16,692	10	10.00%	16,692	-	-	16,692	-
311.20	316	Electric Pumping Equipment	1998	15,203	10	10.00%	15,203	-	-	15,203	-
311.20	316	Electric Pumping Equipment	2000	1,885	10	10.00%	1,885	-	-	1,885	-
311.20	316	Electric Pumping Equipment	2001	3,332	10	10.00%	3,332	-	-	3,332	-
311.20	316	Electric Pumping Equipment	2002	9,849	10	10.00%	9,849	-	-	9,849	-
311.20	316	Electric Pumping Equipment	2003	22,660	15	6.67%	22,660	-	-	22,660	-
311.20	316	Electric Pumping Equipment-Generator	2007	47,669	15	6.67%	47,581	88	88	47,669	-
311.20	316	Electric Pumping Equipment-VPTP	2009	14,252	15	6.67%	13,209	1,043	1,043	14,252	-
311.20	316	Electric Pumping Equipment	2011	19,014	15	6.67%	14,999	4,015	2,536	17,536	1,478
311.20	319	Electric Pumping Equipment	2012	907	15	6.67%	653	254	121	774	133
311.20	316	Electric Pumping Equipment - VF Trl Prk	2013	40,000	25	4.00%	15,618	24,382	3,200	18,818	21,182
311.20	316	Electric Pumping Equipment	2014	5,475	15	6.67%	3,186	2,289	730	3,916	1,559

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311.20	316	Electric Pumping Equipment	2017	3,300	15	6.67%	1,237	2,063	440	1,677	1,623
311.20	316	Electric Pumping Equipment	2021	1,759	15	6.67%	176	1,583	235	411	1,348
		Total Account 316		$ 286,907			$ 251,191	$ 35,716	$ 8,393	$ 259,584	$ 27,323
311.50	319	Other Power Pumping Equipment	1972	$ 183	10	10.00%	$ 183	$ -	$ -	$ 183	$ -
311.50	319	Other Power Pumping Equipment	1988	352	10	10.00%	352	-	-	352	-
311.50	319	Other Power Pumping Equipment	1990	171	10	10.00%	171	-	-	171	-
311.50	319	Other Power Pumping Equipment	1998	1,537	10	10.00%	1,537	-	-	1,537	-
311.50	319	Other Power Pumping Equipment	1999	3,900	10	10.00%	3,900	-	-	3,900	-
311.50	319	Other Power Pumping Equipment	2004	26,425	15	6.67%	26,425	-	-	26,425	-
		Total - Account 319		$ 32,568			$ 32,568	$ -	$ -	$ 32,568	$ -
320.00	320	Purification System	1968	$ 58,309	15	6.67%	$ 58,309	$ -	$ -	$ 58,309	$ -
320.00	320	Purification System	1973	1,136	15	6.67%	1,136	-	-	1,136	-
320.00	320	Purification System	1978	515	15	6.67%	515	-	-	515	-
320.00	320	Purification System	1979	1,133	15	6.67%	1,133	-	-	1,133	-
320.00	320	Purification System	1980	1,409	15	6.67%	1,409	-	-	1,409	-
320.00	320	Purification System	1981	327	15	6.67%	327	-	-	327	-
320.00	320	Purification System	1985	1,865	15	6.67%	1,865	-	-	1,865	-
320.00	320	Purification System	1986	67,713	15	6.67%	67,713	-	-	67,713	-
320.00	320	Purification System	1988	830	15	6.67%	830	-	-	830	-
320.00	320	Purification System	1989	1,050	15	6.67%	1,050	-	-	1,050	-
320.00	320	Purification System	1989	264,491	15	6.67%	264,491	-	-	264,491	-
320.00	320	Purification System	1989	1,074	15	6.67%	1,074	-	-	1,074	-
320.00	320	Purification System	1990	211	15	6.67%	211	-	-	211	-
320.00	320	Purification System	1991	2,178	15	6.67%	2,178	-	-	2,178	-
320.00	320	Purification System	1996	89,850	20	5.00%	89,850	-	-	89,850	-
320.00	320	Purification System	2000	66,295	20	5.00%	66,295	-	-	66,295	-
320.00	320	Purification System	2006	1,605	20	5.00%	1,364	241	161	1,525	80
320.00	320	Purification System	2021	8,175	20	5.00%	613	7,562	818	1,430	6,745
		Total - Account 320		$ 568,166			$ 560,363	$ 7,803	$ 978	$ 561,341	$ 6,825
331.00	322	Mains & Accessories	1969	$ 578,668	60	1.67%	$ 533,385	$ 45,283	$ 19,328	$ 552,712	$ 25,956
331.00	322	Mains & Accessories	1973	40,021	60	1.67%	34,128	5,893	1,337	35,464	4,557
331.00	322	Mains & Accessories	1974	35,067	60	1.67%	29,299	5,768	1,171	30,470	4,597
331.00	322	Mains & Accessories	1975	7,687	60	1.67%	6,291	1,396	257	6,547	1,140
331.00	322	Mains & Accessories	1976	40,120	60	1.67%	32,136	7,984	1,340	33,476	6,644
331.00	322	Mains & Accessories	1977	9,361	60	1.67%	7,337	2,024	313	7,650	1,711
331.00	322	Mains & Accessories	1978	44,947	60	1.67%	34,452	10,495	1,501	35,954	8,993
331.00	322	Mains & Accessories	1979	31,486	60	1.67%	23,591	7,895	1,052	24,642	6,844
331.00	322	Mains & Accessories	1980	72,506	60	1.67%	53,074	19,432	2,422	55,496	17,010
331.00	322	Mains & Accessories	1981	121,315	60	1.67%	86,710	34,605	4,052	90,762	30,553
331.00	322	Mains & Accessories	1982	21,403	60	1.67%	14,929	6,474	715	15,643	5,760
331.00	322	Mains & Accessories	1983	7,284	60	1.67%	4,956	2,328	243	5,199	2,085
331.00	322	Mains & Accessories	1984	11,530	60	1.67%	7,645	3,885	385	8,030	3,500
331.00	322	Mains & Accessories	1985	4,827	60	1.67%	3,116	1,711	161	3,278	1,549
331.00	322	Mains & Accessories	1986	(14,117)		0.00%	(14,117)	-	-	(14,117)	-
331.00	322	Mains & Accessories	1987	6,927	60	1.67%	4,234	2,693	231	4,466	2,461
331.00	322	Mains & Accessories	1990	616	60	1.67%	344	272	21	365	251
331.00	322	Mains & Accessories	1992	193,349	60	1.67%	101,511	91,838	6,458	107,969	85,380
331.00	322	Mains & Accessories	1993	138,501	60	1.67%	70,325	68,176	4,626	74,951	63,550
331.00	322	Mains & Accessories	1993	315,314	60	1.67%	160,104	155,210	10,531	170,636	144,678
331.00	322	Mains & Accessories	1993	113,132	60	1.67%	57,444	55,688	3,779	61,223	51,909
331.00	322	Mains & Accessories	1994	15,694	60	1.67%	7,698	7,996	524	8,222	7,472
331.00	322	Mains & Accessories	1995	148,671	60	1.67%	70,361	78,310	4,966	75,327	73,344
331.00	322	Mains & Accessories	1996	32,825	60	1.67%	14,968	17,857	1,096	16,065	16,760
331.00	322	Mains & Accessories	1997	402,970	60	1.67%	176,810	226,160	13,459	190,269	212,701

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331.00	322	Mains & Accessories	1998	362,740	60	1.67%	152,901	209,839	12,116	165,016	197,724
331.00	322	Mains & Accessories	1999	275,858	60	1.67%	111,521	164,337	9,214	120,734	155,124
331.00	322	Mains & Accessories	2000	210,756	60	1.67%	81,567	129,189	7,039	88,606	122,150
331.00	322	Mains & Accessories	2001	237,924	60	1.67%	87,977	149,947	7,947	95,923	142,001
331.00	322	Mains & Accessories	2002	43,289	60	1.67%	15,260	28,029	1,446	16,706	26,583
331.00	322	Mains & Accessories	2003	243,826	60	1.67%	81,748	162,078	8,144	89,891	153,935
331.00	322	Mains & Accessories	2004	76,377	60	1.67%	24,290	52,087	2,551	26,841	49,536
331.00	322	Mains & Accessories	2005	23,907	60	1.67%	7,190	16,717	798	7,989	15,918
331.00	322	Mains & Accessories	2006	120,084	60	1.67%	34,046	86,038	4,011	38,057	82,027
331.00	322	Mains & Accessories	2007	118,409	60	1.67%	31,529	86,880	3,955	35,484	82,925
331.00	322	Mains & Accessories	2008	18,204	60	1.67%	4,533	13,671	608	5,141	13,063
331.00	322	Mains & Accessories	2010	1,365	60	1.67%	293	1,072	46	339	1,026
331.00	322	Mains & Accessories	2012	2,716	60	1.67%	489	2,227	91	580	2,136
331.00	322	Mains & Accessories	2021	70,270	60	1.67%	1,759	68,511	2,347	4,106	66,164
331.00	322	Mains & Accessories	2022	65,558	60	1.67%	547	65,011	2,190	2,737	62,821
		Total - Account 322		$ 4,251,387			$ 2,156,380	$ 2,095,007	$ 142,468	$ 2,298,848	$ 1,952,539
333.00	323	Services	1972	$ 4,035	60	1.67%	$ 3,510	$ 525	$ 135	$ 3,645	$ 390
333.00	323	Services	1973	5,819	60	1.67%	4,962	857	194	5,157	662
333.00	323	Services	1974	4,976	60	1.67%	4,157	819	166	4,323	653
333.00	323	Services	1976	5,382	60	1.67%	4,311	1,071	180	4,490	892
333.00	323	Services	1977	6,882	60	1.67%	5,393	1,489	230	5,623	1,259
333.00	323	Services	1978	8,591	60	1.67%	6,585	2,006	287	6,872	1,719
333.00	323	Services	1979	4,202	60	1.67%	3,149	1,053	140	3,289	913
333.00	323	Services	1980	19,674	60	1.67%	14,401	5,273	657	15,059	4,615
333.00	323	Services	1981	15,963	60	1.67%	11,409	4,554	533	11,942	4,021
333.00	323	Services	1982	23,356	60	1.67%	16,291	7,065	780	17,071	6,285
333.00	323	Services	1983	11,691	60	1.67%	7,953	3,738	390	8,344	3,347
333.00	323	Services	1984	5,164	60	1.67%	3,424	1,740	172	3,596	1,568
333.00	323	Services	1985	13,021	60	1.67%	8,408	4,613	435	8,843	4,178
333.00	323	Services	1986	458	60	1.67%	288	170	15	304	154
333.00	322	Services	1987	(3,705)		0.00%	(3,705)	-	-	(3,705)	-
333.00	323	Services	1989	1,168	60	1.67%	674	494	39	713	455
333.00	323	Services	1992	160	60	1.67%	84	76	5	89	71
333.00	323	Services	1993	3,305	60	1.67%	1,679	1,626	110	1,789	1,516
333.00	323	Services	1999	91,952	60	1.67%	37,173	54,779	3,071	40,244	51,708
333.00	323	Services	2000	50,129	60	1.67%	19,401	30,728	1,674	21,075	29,054
333.00	323	Services	2003	2,282	60	1.67%	765	1,517	76	841	1,441
333.00	323	Services	2004	9,981	60	1.67%	3,174	6,807	333	3,508	6,473
333.00	323	Services	2005	1,872	60	1.67%	563	1,309	63	625	1,247
333.00	323	Services	2021	3,137	60	1.67%	79	3,058	105	183	2,954
		Total - Account 323		$ 289,495			$ 154,129	$ 135,366	$ 9,793	$ 163,922	$ 125,573
334.00	324	Meters	1987	$ 206,795	30	3.33%	$ 206,795	-	-	206,795	-
334.00	324	Meters	1989	9,622	30	3.33%	9,622	-	-	9,622	-
334.00	324	Meters	1990	754	30	3.33%	754	-	-	754	-
334.00	324	Meters	1991	4,942	30	3.33%	4,942	-	-	4,942	-
334.00	324	Meters	1992	6,367	30	3.33%	6,363	4	4	6,367	-
334.00	324	Meters	1993	9,164	30	3.33%	9,159	5	5	9,164	-
334.00	324	Meters	1994	7,169	30	3.33%	7,031	138	138	7,169	-
334.00	324	Meters	1995	4,293	30	3.33%	4,063	230	230	4,293	-
334.00	324	Meters	1996	6,870	30	3.33%	6,264	606	458	6,722	148
334.00	324	Meters	1997	8,176	30	3.33%	7,172	1,004	545	7,717	459
334.00	324	Meters	1998	16,129	30	3.33%	13,593	2,536	1,074	14,668	1,461
334.00	324	Meters	1999	24,926	30	3.33%	20,146	4,780	1,660	21,806	3,120
334.00	324	Meters	2000	12,667	30	3.33%	9,801	2,866	844	10,645	2,022
334.00	324	Meters	2001	20,387	30	3.33%	15,071	5,316	1,358	16,429	3,958

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334.00	324	Meters	2002	12,604	30	3.33%	8,882	3,722	839	9,722	2,882
334.00	324	Meters	2003	2,752	25	4.00%	2,214	538	220	2,434	318
334.00	324	Meters	2004	6,200	25	4.00%	4,731	1,469	496	5,227	973
334.00	324	Meters	2005	118,657	25	4.00%	85,627	33,030	9,493	95,120	23,537
334.00	324	Meters	2006	34,396	25	4.00%	23,398	10,998	2,752	26,149	8,247
334.00	324	Meters	2007	71,077	25	4.00%	45,406	25,671	5,686	51,092	19,985
334.00	324	Meters	2008	20,468	25	4.00%	12,228	8,240	1,637	13,866	6,602
334.00	324	Meters	2009	125,997	25	4.00%	70,060	55,937	10,080	80,139	45,858
334.00	324	Meters	2010	77,307	25	4.00%	39,786	37,521	6,185	45,970	31,337
334.00	324	Meters	2011	50,187	25	4.00%	23,750	26,437	4,015	27,765	22,422
334.00	324	Meters	2012	73,750	25	4.00%	31,849	41,901	5,900	37,749	36,001
334.00	324	Meters	2013	5,968	25	4.00%	2,330	3,638	477	2,807	3,161
334.00	324	Meters	2014	25,953	25	4.00%	9,059	16,894	2,076	11,135	14,818
334.00	324	Meters	2015	12,237	25	4.00%	3,765	8,472	979	4,744	7,493
334.00	324	Meters	2016	8,411	25	4.00%	2,240	6,171	673	2,913	5,498
334.00	324	Meters	2017	3,493	25	4.00%	785	2,708	279	1,065	2,428
334.00	324	Meters	2021	14,984	25	4.00%	899	14,085	1,199	2,097	12,887
		Total - Account 324		$ 1,002,702			$ 687,785	$ 314,917	$ 59,301	$ 747,086	$ 255,616
335.00	325	Fire Hydrants	1968	$ 18,664	40	2.50%	$ 18,664	$ -	$ -	$ 18,664	$ -
335.00	325	Fire Hydrants	1973	3,430	40	2.50%	3,430	-	-	3,430	-
335.00	325	Fire Hydrants	1974	78	40	2.50%	78	-	-	78	-
335.00	325	Fire Hydrants	1975	1,383	40	2.50%	1,383	-	-	1,383	-
335.00	325	Fire Hydrants	1976	822	40	2.50%	822	-	-	822	-
335.00	325	Fire Hydrants	1977	1,089	40	2.50%	1,089	-	-	1,089	-

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335.00	325	Fire Hydrants	1978	6,762	40	2.50%	6,762	-	-	6,762	-
335.00	325	Fire Hydrants	1979	2,040	40	2.50%	2,040	-	-	2,040	-
335.00	325	Fire Hydrants	1980	4,261	40	2.50%	4,261	-	-	4,261	-
335.00	325	Fire Hydrants	1991	798	40	2.50%	649	149	40	689	109
335.00	325	Fire Hydrants	1992	2,192	40	2.50%	1,726	466	110	1,836	356
335.00	325	Fire Hydrants	1993	3,454	40	2.50%	2,630	824	173	2,803	651
335.00	325	Fire Hydrants	1997	4,153	40	2.50%	2,733	1,420	208	2,940	1,213
335.00	325	Fire Hydrants	1999	94,412	40	2.50%	57,238	37,174	4,721	61,959	32,453
335.00	325	Fire Hydrants	2000	27,044	40	2.50%	15,696	11,348	1,352	17,048	9,996
335.00	325	Fire Hydrants	2001	1,429	40	2.50%	793	636	71	864	565
335.00	325	Fire Hydrants	2002	2,701	40	2.50%	1,428	1,273	135	1,563	1,138
335.00	325	Fire Hydrants	2003	3,915	40	2.50%	1,968	1,947	196	2,164	1,751
335.00	325	Fire Hydrants	2004	3,220	40	2.50%	1,536	1,684	161	1,697	1,523
335.00	325	Fire Hydrants	2006	2,736	40	2.50%	1,164	1,572	137	1,301	1,435
335.00	325	Fire Hydrants	2021	763	40	2.50%	29	734	38	67	696
335.00	325	Fire Hydrants	2022	7,189	40	2.50%	90	7,099	359	449	6,740
		Total - Account 325		$ 192,535			$ 126,209	$ 66,326	$ 7,700	$ 133,909	$ 58,626
340.50	328	Office Furniture & Equipment - Ret 2014	2000	$ 58	5	20.00%	$ 58	$ -	$ -	$ 58	$ -
340.50	328	Office Furniture & Equipment	2002	2,585	3	33.33%	2,585	-	-	2,585	-
340.50	328	Office Furniture & Equipment	2003	4,266	5	20.00%	4,266	-	-	4,266	-
340.50	328	Office Furniture & Equipment	2004	776	7	14.29%	776	-	-	776	-
340.50	328	Office Furniture & Equipment	2004	3,125	7	14.29%	3,125	-	-	3,125	-
340.50	328	Office Furniture & Equipment	2013	6,843	7	14.29%	6,830	13	13	6,843	-
		Total - Account 328		$ 17,653			$ 17,640	$ 13	$ 13	$ 17,653	$ -
341.20	329	Transportation Equipment	2000	$ 58,209	5	20.00%	$ 58,209	$ -	$ -	$ 58,209	$ -
341.30	329	Atkins Auto Sales Transp. Equip.	2007	5,276	7	14.29%	5,276	-	-	5,276	-
341.30	329	2013 Auto	2013	57,943	7	14.29%	57,827	116	116	57,943	-
341.10	329	2010 F150 Truck	2015	29,864	7	14.29%	28,551	1,313	1,313	29,864	-
341.10	329	2016 GMC Truck	2016	(1,000)	7	14.29%	-	(1,000)	-	-	(1,000)
341.30	329	2018 Auto	2018	62,186	7	14.29%	40,752	21,434	17,773	58,525	3,661
341.10	329	2019 GMC Truck	2019	65,641	7	14.29%	33,311	32,330	18,760	52,071	13,570
341.20	329	Transportation Equipment	2020	145,401	7	14.29%	42,524	102,877	41,556	84,079	61,322
341.20	329	Transportation Equipment	2021	164,921	7	14.29%	65,951	98,970	47,134	113,086	51,835
341.20	329	Transportation Equipment	2022	172,600	7	14.29%	24,104	148,496	49,329	73,433	99,167
		Total - Account 329		$ 761,041			$ 356,505	$ 404,536	$ 175,981	$ 532,485	$ 228,556
343.00	332	Tools and Work Equipment	1996	$ 34,935	15	6.67%	$ 34,935	$ -	$ -	$ 34,935	$ -
343.00	332	Tools and Work Equipment	1998	12,500	15	6.67%	12,500	-	-	12,500	-
343.00	332	Tools and Work Equipment	2006	4,768	15	6.67%	4,768	-	-	4,768	-
343.00	332	Tools and Work Equipment	2012	5,783	15	6.67%	4,163	1,620	771	4,934	849
343.00	332	Tools and Work Equipment	2013	3,100	15	6.67%	2,018	1,082	414	2,431	669
		Total - Account 332		$ 61,086			$ 58,384	$ 2,702	$ 1,185	$ 59,568	$ 1,518
346.00	333	Communication Equipment	1984	$ 2,141	10	10.00%	$ 2,141	$ -	$ -	$ 2,141	$ -
346.00	333	Communication Equipment	1985	51	10	10.00%	51	-	-	51	-
346.00	333	Communication Equipment	1990	705	10	10.00%	705	-	-	705	-
		Total - Account 333		$ 2,897			$ 2,897	$ -	$ -	$ 2,897	$ -
347.00	334	Miscellaneous Equipment	1978	3,700	10	10.00%	$ 3,700	$ -	$ -	$ 3,700	$ -
347.00	334	Miscellaneous Equipment	1987	1,255	10	10.00%	1,255	-	-	1,255	-
347.00	334	Miscellaneous Equipment	1991	248	10	10.00%	248	-	-	248	-
347.00	334	Miscellaneous Equipment	1995	20,000	10	10.00%	20,000	-	-	20,000	-
		Total - Account 334		$ 25,203			$ 25,203	$ -	$ -	$ 25,203	$ -
		Grand Total		$ 9,187,482			$ 5,637,201	$ 3,550,281	$ 464,214	$ 6,101,415	$ 3,086,067

AUDUBON WATER COMPANY
Asset Detail - Acquisition
Estimated Close 12/31/2024

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
	Contributions in Aid of Construction:										
303.40	311.13	Other Source of Supply Land	1980	(20,505)	n/a	n/a	$ -	$ (20,505)	$ -	$ -	$ (20,505)
304.20	312.1	Source of Supply Structures	1965	(14,422)	30	3.33%	$ (14,422)	$ -	$ -	$ (14,422)	$ -
307.00	312.13	Springs & Wells	1966	$ (5,605)	30	3.33%	$ (5,605)	$ -	$ -	$ (5,605)	$ -
307.00	312.13	Springs & Wells	1979	(3,359)	30	3.33%	(3,359)	-	-	(3,359)	-
307.00	312.13	Springs & Wells	1980	(70,106)	30	3.33%	(70,106)	-	-	(70,106)	-
307.00	312.13	Springs & Wells	1981	(4,304)	30	3.33%	(4,304)	-	-	(4,304)	-
307.00	312.13	Springs & Wells Well #14	2010	(99,490)	50	2.00%	(16,297)	(83,193)	(3,980)	(20,277)	(79,213)
307.00	312.13	Springs & Wells AWC#1	2012	(1,183)	15	6.67%	(553)	(630)	(158)	(711)	(472)
307.00	312.13	Springs & Wells AWC#2	2012	(28,337)	15	6.67%	(13,249)	(15,088)	(3,780)	(17,029)	(11,308)
307.00	312.13	Springs & Wells Wells 6&9	2012	(10,959)	15	6.67%	(5,124)	(5,835)	(1,462)	(6,586)	(4,373)
307.00	312.13	Springs & Wells Well#14	2012	(5,655)	15	6.67%	(2,644)	(3,011)	(754)	(3,398)	(2,257)
307.00	312.13	Springs & Wells Well #15	2012	(6,459)	15	6.67%	(3,020)	(3,439)	(862)	(3,881)	(2,578)
		Total Account - 312.13		$ (235,457)			$ (124,261)	$ (111,196)	$ (10,996)	$ (135,257)	$ (100,200)
330.00	312.5	Distribution Reservoirs & Standpipes	2000	$ (194,349)	40	2.50%	$ (68,423)	$ (125,926)	$ (9,717)	$ (78,140)	$ (116,209)
311.20	316	Electric Pumping Equipment	1981	$ (4,054)	10	10.00%	$ (4,054)	$ -	$ -	$ (4,054)	$ -
311.20	316	Electric Pumping Equipment	2011	(5,573)	15	6.67%	(2,825)	(2,748)	(743)	(3,568)	(2,005)
		Total Account 316		(9,627)			$ (6,879)	$ (2,748)	$ (743)	$ (7,622)	$ (2,005)
320.00	320	Purification System	1968	$ (1,812)	15	6.67%	$ (1,812)	$ -	$ -	$ (1,812)	$ -
320.00	320	Purification System	1980	(1,230)	15	6.67%	(1,230)	-	-	(1,230)	-
320.00	320	Purification System	2000	(39,153)	20	5.00%	(22,781)	(16,372)	(3,915)	(26,696)	(12,457)
		Total - Account 320		(42,195)			$ (25,823)	$ (16,372)	$ (3,915)	$ (29,738)	$ (12,457)
331.00	322	Mains & Accessories	1969	$ (165,635)	60	1.67%	$ (89,312)	$ (76,323)	$ (5,532)	$ (94,844)	$ (70,791)
331.00	322	Mains & Accessories	1979	(3,484)	60	1.67%	(1,536)	(1,948)	(116)	(1,653)	(1,831)
331.00	322	Mains & Accessories	1980	(33,930)	60	1.67%	(14,630)	(19,300)	(1,133)	(15,764)	(18,166)
331.00	322	Mains & Accessories	1981	(98,744)	60	1.67%	(41,608)	(57,136)	(3,298)	(44,906)	(53,838)
331.00	322	Mains & Accessories	1982	(4,747)	60	1.67%	(1,954)	(2,793)	(159)	(2,112)	(2,635)
331.00	322	Mains & Accessories	1983	(7,020)	60	1.67%	(2,820)	(4,200)	(234)	(3,055)	(3,965)
331.00	322	Mains & Accessories	1985	(113,945)	60	1.67%	(43,537)	(70,408)	(3,806)	(47,343)	(66,602)
331.00	322	Mains & Accessories	1985	(119,839)	60	1.67%	(45,789)	(74,050)	(4,003)	(49,792)	(70,047)
331.00	322	Mains & Accessories	1992	(193,349)	60	1.67%	(60,586)	(132,763)	(6,458)	(67,043)	(126,306)
331.00	322	Mains & Accessories	1993	(138,501)	60	1.67%	(42,039)	(96,462)	(4,626)	(46,665)	(91,836)
331.00	322	Mains & Accessories	1993	(315,314)	60	1.67%	(95,706)	(219,608)	(10,531)	(106,238)	(209,076)
331.00	322	Mains & Accessories	1993	(113,132)	60	1.67%	(34,339)	(78,793)	(3,779)	(38,117)	(75,015)
331.00	322	Mains & Accessories	1995	(148,671)	60	1.67%	(42,206)	(106,465)	(4,966)	(47,172)	(101,499)
331.00	322	Mains & Accessories	1996	(32,825)	60	1.67%	(8,996)	(23,829)	(1,096)	(10,092)	(22,733)
331.00	322	Mains & Accessories	1997	(402,970)	60	1.67%	(106,484)	(296,486)	(13,459)	(119,943)	(283,027)
331.00	322	Mains & Accessories	1998	(389,996)	60	1.67%	(99,226)	(290,770)	(13,026)	(112,252)	(277,744)
331.00	322	Mains & Accessories	1999	(221,290)	60	1.67%	(54,129)	(167,161)	(7,391)	(61,520)	(159,770)
331.00	322	Mains & Accessories	2000	(210,756)	60	1.67%	(49,483)	(161,273)	(7,039)	(56,522)	(154,234)
331.00	322	Mains & Accessories	2001	(196,336)	60	1.67%	(44,169)	(152,167)	(6,558)	(50,727)	(145,609)
331.00	322	Mains & Accessories	2004	(71,147)	60	1.67%	(13,910)	(57,237)	(2,376)	(16,286)	(54,861)
331.00	322	Mains & Accessories	2005	(5,481)	60	1.67%	(1,018)	(4,463)	(183)	(1,201)	(4,280)
331.00	322	Mains & Accessories	2007	(167,502)	60	1.67%	(27,813)	(139,689)	(5,595)	(33,408)	(134,094)
331.00	322	Mains & Accessories	2008	(21,861)	60	1.67%	(3,415)	(18,446)	(730)	(4,145)	(17,716)
331.00	322	Mains & Accessories	2009	(112,527)	60	1.67%	(16,475)	(96,052)	(3,758)	(20,233)	(92,294)
331.00	322	Mains & Accessories	2010	(99,490)	60	1.67%	(13,589)	(85,901)	(3,323)	(16,912)	(82,578)
		Total - Account 322		$ (3,388,492)			$ (954,769)	$ (2,433,723)	$ (113,176)	$ (1,067,945)	$ (2,320,547)

AUDUBON WATER COMPANY
Asset Detail - Acquisition
Estimated Close 12/31/2024

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
333.00	323	Services	1972	$ (3,090)	60	1.67%	$ (1,575)	$ (1,515)	$ (103)	$ (1,678)	$ (1,412)
333.00	323	Services	1973	(929)	60	1.67%	(465)	(464)	(31)	(496)	(433)
333.00	323	Services	1980	(11,865)	60	1.67%	(5,116)	(6,749)	(396)	(5,513)	(6,352)
333.00	323	Services	1981	(13,605)	60	1.67%	(5,733)	(7,872)	(454)	(6,187)	(7,418)
333.00	323	Services	1982	(5,508)	60	1.67%	(2,267)	(3,241)	(184)	(2,451)	(3,057)
333.00	323	Services	1983	(9,267)	60	1.67%	(3,723)	(5,544)	(310)	(4,032)	(5,235)
333.00	323	Services	1999	(73,763)	60	1.67%	(18,043)	(55,720)	(2,464)	(20,507)	(53,256)
333.00	323	Services	2000	(2,329)	60	1.67%	(547)	(1,782)	(78)	(625)	(1,704)
		Total - Account 323		$ (120,356)			$ (37,468)	$ (82,888)	$ (4,020)	$ (41,488)	$ (78,868)
334.23	324	Meters	2011	$ (50,187)	25	4.00%	$ (23,587)	$ (26,600)	$ (4,015)	$ (27,602)	$ (22,585)
334.23	324	Meters	2012	(13,643)	25	4.00%	(5,866)	(7,777)	(1,091)	(6,958)	(6,685)
334.23	324	Meters	2014	(20,398)	25	4.00%	(7,140)	(13,258)	(1,632)	(8,772)	(11,626)
		Total - Account 324		$ (84,228)			$ (36,593)	$ (47,635)	$ (6,738)	$ (43,332)	$ (40,896)
335.00	325	Fire Hydrants	1968	$ (6,328)	40	2.50%	$ (6,328)	$ -	$ -	$ (6,328)	$ -
335.00	325	Fire Hydrants	1999	$ (73,763)	40	2.50%	(43,797)	(29,966)	(3,688)	(47,485)	(26,278)
335.00	325	Fire Hydrants	2000	(20,650)	40	2.50%	(11,745)	(8,905)	(1,033)	(12,777)	(7,873)
		Total - Account 325		$ (100,741)			$ (61,870)	$ (38,871)	$ (4,721)	$ (66,591)	$ (34,150)
		Grand Total		$ (4,210,372)			$ (1,330,508)	$ (2,879,864)	$ (154,026)	$ (1,484,534)	$ (2,725,838)
		Total Plant Net of CIAC		**$ 4,977,110**			**$ 4,306,693**	**$ 670,417**	**$ 310,188**	**$ 4,616,881**	**$ 360,229**

Pennsylvania-American Water Company - Wastewater SSS General Operations
Plant Additions and Retirements By Month
July 2023 to June 2024

Additions

Project Number	Project Title	Utility Account	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	2024 Total
R24-##A1	Collection Sewers Force Mains - New	360.10						$37,500	$3,000	$4,817	$3,034	$7,530	$7,530	$11,786	$75,195
R24-##A1	Collection Sewers Gravity Mains - New	361.10						37,500	3,000	4,817	3,034	7,530	7,530	11,786	75,195
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.10	156,228	158,747	167,658	236,782	268,664	246,787	223,769	248,207	320,618	308,543	154,722	90,272	2,581,000
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	360.10	108,802	110,556	116,762	164,902	187,106	171,870	155,839	172,858	223,287	214,878	107,753	62,868	1,797,482
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.20	13,949	14,174	14,969	21,141	23,988	22,035	19,979	22,161	28,627	27,549	13,814	8,060	230,446
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.10	156,228	158,747	167,658	236,782	268,664	246,787	223,769	248,207	320,618	308,543	154,722	90,272	2,581,000
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	360.10	108,802	110,556	116,762	164,902	187,106	171,870	155,839	172,858	223,287	214,878	107,753	62,868	1,797,482
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.20	13,949	14,174	14,969	21,141	23,988	22,035	19,979	22,161	28,627	27,549	13,814	8,060	230,446
R24-##C1	Collection Sewers Force Mains - Unscheduled	361.10	32,445	34,654	33,463	26,670	27,301	32,011	14,518	13,245	9,256	11,835	14,537	16,664	266,599
R24-##C1	Collection Sewers Force Mains - Unscheduled	360.10	8,625	9,212	8,895	7,089	7,257	8,509	3,859	3,521	2,460	3,146	3,864	4,430	70,868
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10	32,445	34,654	33,463	26,670	27,301	32,011	14,518	13,245	9,256	11,835	14,537	16,664	266,599
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	360.10	8,625	9,212	8,895	7,089	7,257	8,509	3,859	3,521	2,460	3,146	3,864	4,430	70,868
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10						12,500	254	4,731	4,086	1,677	8,562	5,294	37,104
R24-##D1	Collection Sewers Gravity Mains - Relocated	360.10						27,500	558	10,408	8,989	3,689	18,837	11,647	81,629
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.20						10,000	203	3,785	3,269	1,342	6,850	4,235	29,683
R24-##E1	Manholes - New	361.10	186	173	172	237	343	417	149	95	180	94	151	128	2,325
R24-##E1	Manholes - New	361.20	18,424	17,159	17,064	23,512	33,918	41,264	14,730	9,411	17,824	9,270	14,943	12,670	230,188
R24-##F1	Manholes - Replaced	361.10	1,327	1,532	1,969	3,611	1,670	1,523	680	691	881	1,071	1,182	1,362	17,499
R24-##F1	Manholes - Replaced	361.20	42,912	49,548	63,663	116,748	53,987	49,248	21,979	22,347	28,499	34,617	38,219	44,024	565,791
R24-##G1	Laterals - New	363.00	62,088	62,035	58,525	62,244	52,997	60,222	33,420	22,245	36,969	23,579	28,581	35,461	538,368
R24-##H1	Laterals - Replaced	361.10	12,266	12,260	12,201	12,889	13,337	12,819	2,482	2,343	2,383	2,553	2,947	3,194	91,675
R24-##H1	Laterals - Replaced	361.20	3,067	3,065	3,050	3,222	3,334	3,205	621	586	596	638	737	798	22,919
R24-##H1	Laterals - Replaced	363.00	291,328	291,184	289,768	306,112	316,757	304,452	58,957	55,657	56,586	60,624	70,001	75,857	2,177,284
R24-##L1	SCADA Equipment and Systems	380.00	3,900	9,600	3,360	3,600	4,800	4,800							30,060
R24-##L1	SCADA Equipment and Systems	396.00	29,900	73,600	25,760	27,600	36,800	36,800							230,460
R24-##L1	SCADA Equipment and Systems	371.10	22,100	54,400	19,040	20,400	27,200	27,200							170,340
R24-##L1	SCADA Equipment and Systems	390.00	1,950	4,800	1,680	1,800	2,400	2,400							15,030
R24-##L1	SCADA Equipment and Systems	390.20	5,850	14,400	5,040	5,400	7,200	7,200							45,090
R24-##L1	SCADA Equipment and Systems	390.30	1,300	3,200	1,120	1,200	1,600	1,600							10,020
R24-##M1	Security Equipment and Systems	396.00		31,000	27,900			15,500	3,261	4,319	4,669	7,877	8,085	6,725	109,337
R24-##M1	Security Equipment and Systems	354.70		55,000	49,500			27,500	5,786	7,663	8,284	13,976	14,345	11,932	193,986
R24-##M1	Security Equipment and Systems	397.00		14,000	12,600			7,000	1,473	1,951	2,109	3,557	3,651	3,037	49,378
R24-##N1	Offices and Operations Centers	354.20		40,600		49,300		36,250							126,150
R24-##N1	Offices and Operations Centers	354.70		99,400		120,700		88,750							308,850
R24-##O1	Transportation Equipment and Vehicles	391.00			100,000			250,000							350,000
R24-##P1	Tools and Equipment	397.00			22,400			56,000	2,753	3,382	4,403	4,124	4,471	4,440	101,973
R24-##P1	Tools and Equipment	391.00			6,400			16,000	787	966	1,258	1,178	1,277	1,268	29,135
R24-##P1	Tools and Equipment	393.00			49,600			124,000	6,097	7,488	9,750	9,132	9,900	9,831	225,798
R24-##P1	Tools and Equipment	394.00			1,600			4,000	197	242	315	295	319	317	7,284
R24-##Q1	Process Plant Facilities and Equipment	354.20	48,750	26,000	13,000	39,000	39,000	234,000	23,828	15,449	21,017	24,688	28,691	24,764	538,187
R24-##Q1	Process Plant Facilities and Equipment	380.00	187,500	100,000	50,000	150,000	150,000	900,000	91,646	59,419	80,833	94,956	110,348	95,246	2,069,948
R24-##Q1	Process Plant Facilities and Equipment	395.00	3,750	2,000	1,000	3,000	3,000	18,000	1,833	1,188	1,617	1,899	2,207	1,905	41,399
R24-##Q1	Process Plant Facilities and Equipment	371.10	60,000	32,000	16,000	48,000	48,000	288,000	29,327	19,014	25,867	30,386	35,311	30,479	662,383
R24-##Q1	Process Plant Facilities and Equipment	354.70	30,000	16,000	8,000	24,000	24,000	144,000	14,663	9,507	12,933	15,193	17,656	15,239	331,192
R24-##Q1	Process Plant Facilities and Equipment	397.00	45,000	24,000	12,000	36,000	36,000	216,000	21,995	14,261	19,400	22,789	26,484	22,859	496,788
R24-##S1	Engineering Studies	389.60	31,000	32,183	38,000	22,000	15,000	15,000							153,183
I24-130008	Exeter WWTP Final Clarifier Upgrades	380.00					2,630,000								2,630,000
I24-260001	Claysville Electrical Improvements	355.00						1,686,056							1,686,056
I24-600007	Fairview South Bienhower Lift Station	354.00									667,770				667,770
I24-600007	Fairview South Bienhower Lift Station	371.00									667,770				667,770
I24-670009	Coatesville Digester Improvements	380.00						16,822,741							16,822,741
I24-940002	York WWTP SCADA Improvements	396.00				1,174,800									1,174,800
			$1,542,697	$1,723,827	$1,593,910	$3,168,544	$4,529,976	$22,589,371	$1,179,607	$1,206,769	$2,862,818	$1,516,166	$1,058,197	$810,871	$43,782,754

Pennsylvania-American Water Company - Wastewater SSS General Operations
Plant Additions and Retirements By Month
July 2023 to June 2024

Retirements

Project Number	Project Title	Utility Account	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	2024 Total
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.10	$27,997	$28,448	$30,045	$42,432	$48,146	$44,225	$40,100	$44,480	$57,456	$55,292	$27,727	$16,177	$462,524
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	360.10	19,498	19,812	20,924	29,551	33,530	30,800	27,927	30,977	40,014	38,507	19,310	11,266	322,115
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.20	2,500	2,540	2,683	3,789	4,299	3,949	3,580	3,971	5,130	4,937	2,476	1,444	41,297
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.10	27,997	28,448	30,045	42,432	48,146	44,225	40,100	44,480	57,456	55,292	27,727	16,177	462,524
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	360.10	19,498	19,812	20,924	29,551	33,530	30,800	27,927	30,977	40,014	38,507	19,310	11,266	322,115
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.20	2,500	2,540	2,683	3,789	4,299	3,949	3,580	3,971	5,130	4,937	2,476	1,444	41,297
R24-##C1	Collection Sewers Force Mains - Unscheduled	361.10	5,814	6,210	5,997	4,779	4,892	5,737	2,602	2,374	1,659	2,121	2,605	2,986	47,775
R24-##C1	Collection Sewers Force Mains - Unscheduled	360.10	1,546	1,651	1,594	1,270	1,301	1,525	692	631	441	564	692	794	12,700
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10	5,814	6,210	5,997	4,779	4,892	5,737	2,602	2,374	1,659	2,121	2,605	2,986	47,775
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	360.10	1,546	1,651	1,594	1,270	1,301	1,525	692	631	441	564	692	794	12,700
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10	0	0	0	0	0	2,240	45	848	732	301	1,534	949	6,649
R24-##D1	Collection Sewers Gravity Mains - Relocated	360.10	0	0	0	0	0	4,928	100	1,865	1,611	661	3,376	2,087	14,628
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.20	0	0	0	0	0	1,792	36	678	586	240	1,228	759	5,319
R24-##F1	Manholes - Replaced	361.10	238	275	353	647	299	273	122	124	158	192	212	244	3,136
R24-##F1	Manholes - Replaced	361.20	7,690	8,879	11,409	20,922	9,675	8,825	3,939	4,005	5,107	6,203	6,849	7,889	101,392
R24-##H1	Laterals - Replaced	361.10	2,198	2,197	2,186	2,310	2,390	2,297	445	420	427	457	528	572	16,429
R24-##H1	Laterals - Replaced	361.20	550	549	547	577	598	574	111	105	107	114	132	143	4,107
R24-##H1	Laterals - Replaced	363.00	52,207	52,181	51,927	54,856	56,764	54,559	10,565	9,974	10,140	10,864	12,544	13,594	390,177
R24-##L1	SCADA Equipment and Systems	380.00	699	1,720	602	645	860	860	0	0	0	0	0	0	5,387
R24-##L1	SCADA Equipment and Systems	396.00	151	372	130	139	186	186	0	0	0	0	0	0	1,164
R24-##L1	SCADA Equipment and Systems	371.10	3,960	9,749	3,412	3,656	4,874	4,874	0	0	0	0	0	0	30,526
R24-##M1	Security Equipment and Systems	396.00	0	157	141	0	0	78	16	22	24	40	41	34	552
R24-##M1	Security Equipment and Systems	354.70	0	9,856	8,871	0	0	4,928	1,037	1,373	1,485	2,505	2,571	2,138	34,763
R24-##N1	Offices and Operations Centers	354.20	0	7,276	0	8,835	0	6,496	0	0	0	0	0	0	22,607
R24-##N1	Offices and Operations Centers	354.70	0	17,813	0	21,630	0	15,904	0	0	0	0	0	0	55,347
R24-##O1	Transportation Equipment and Vehicles	391.00	0	0	17,920	0	0	44,801	0	0	0	0	0	0	62,721
R24-##P1	Tools and Equipment	391.00	0	0	1,147	0	0	2,867	141	173	225	211	229	227	5,221
R24-##P1	Tools and Equipment	394.00	0	0	5,892	0	0	14,730	724	889	1,158	1,085	1,176	1,168	26,822
R24-##Q1	Process Plant Facilities and Equipment	354.20	8,736	4,659	2,330	6,989	6,989	41,934	4,270	2,769	3,766	4,424	5,141	4,438	96,445
R24-##Q1	Process Plant Facilities and Equipment	380.00	33,601	17,920	8,960	26,881	26,881	161,283	16,423	10,648	14,486	17,016	19,775	17,068	370,942
R24-##Q1	Process Plant Facilities and Equipment	395.00	672	358	179	538	538	3,226	328	213	290	340	395	341	7,419
R24-##Q1	Process Plant Facilities and Equipment	371.10	10,752	5,735	2,867	8,602	8,602	51,611	5,255	3,407	4,635	5,445	6,328	5,462	118,701
R24-##Q1	Process Plant Facilities and Equipment	354.70	5,376	2,867	1,434	4,301	4,301	25,805	2,628	1,704	2,318	2,723	3,164	2,731	59,351
I24-130008	Exeter WWTP Final Clarifier Upgrades	380.00	0	0	0	0	471,305	0	0	0	0	0	0	0	471,305
I24-260001	Claysville Electrical Improvements	355.00	0	0	0	0	0	302,147	0	0	0	0	0	0	302,147
I24-600007	Fairview South Bienhower Lift Station	354.00	0	0	0	0	0	0	0	0	119,667	0	0	0	119,667
I24-600007	Fairview South Bienhower Lift Station	371.00	0	0	0	0	0	0	0	0	119,667	0	0	0	119,667
I24-940002	York WWTP SCADA Improvements	396.00	0	0	0	5,935	0	0	0	0	0	0	0	0	5,935
			$241,538	$259,885	$242,792	$331,105	$778,595	$929,689	$195,989	$204,082	$495,986	$255,663	$170,842	$125,181	$4,231,348

Pennsylvania-American Water Company - Wastewater SSS General Operations
Plant Additions and Retirements By Month
July 2024 to June 2025

Additions

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
R24-##A1	Collection Sewers Force Mains - New	360.10	$25,571	$6,722	$6,722	$2,789	$2,732	$5,168	$2,817	$282	$3,034	$3,286	$19,593	$17,371	$96,087
R24-##A1	Collection Sewers Gravity Mains - New	361.10	25,571	6,722	6,722	2,789	2,732	5,168	2,817	282	3,034	3,286	19,593	17,371	96,087
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.10	92,467	78,684	51,539	54,211	52,376	53,641	75,362	104,437	116,557	149,933	169,563	169,114	1,167,883
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	360.10	64,396	54,798	35,893	37,754	36,476	37,357	52,484	72,733	81,174	104,418	118,088	117,776	813,347
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.20	8,256	7,025	4,602	4,840	4,676	4,789	6,729	9,325	10,407	13,387	15,140	15,099	104,275
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.10	92,467	78,684	51,539	54,211	52,376	53,641	75,362	104,437	116,557	149,933	169,563	169,114	1,167,883
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	360.10	64,396	54,798	35,893	37,754	36,476	37,357	52,484	72,733	81,174	104,418	118,088	117,776	813,347
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.20	8,256	7,025	4,602	4,840	4,676	4,789	6,729	9,325	10,407	13,387	15,140	15,099	104,275
R24-##C1	Collection Sewers Force Mains - Unscheduled	361.10	21,860	19,542	17,624	18,167	15,177	22,601	20,824	19,551	21,867	24,447	20,842	22,969	245,471
R24-##C1	Collection Sewers Force Mains - Unscheduled	360.10	5,811	5,195	4,685	4,829	4,034	6,008	5,535	5,197	5,813	6,498	5,540	6,106	65,252
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10	21,860	19,542	17,624	18,167	15,177	22,601	20,824	19,551	21,867	24,447	20,842	22,969	245,471
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	360.10	5,811	5,195	4,685	4,829	4,034	6,008	5,535	5,197	5,813	6,498	5,540	6,106	65,252
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10	7,038	986	3,965	5,985	7,377	6,218	3,071	4,731	4,086	4,494	8,562	9,050	65,563
R24-##D1	Collection Sewers Gravity Mains - Relocated	360.10	15,484	2,170	8,723	13,167	16,229	13,680	6,755	10,408	8,989	9,886	18,837	19,910	144,238
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.20	5,630	789	3,172	4,788	5,901	4,974	2,456	3,785	3,269	3,595	6,850	7,240	52,450
R24-##E1	Manholes - New	361.10	123	119	115	180	164	152	149	196	180	161	185	195	1,920
R24-##E1	Manholes - New	361.20	12,224	11,760	11,370	17,824	16,277	15,047	14,730	19,432	17,824	15,951	18,283	19,351	190,074
R24-##F1	Manholes - Replaced	361.10	1,535	1,685	1,789	1,761	1,603	1,265	1,160	1,353	1,483	1,653	1,833	1,833	18,953
R24-##F1	Manholes - Replaced	361.20	49,638	54,467	57,843	56,947	51,823	40,894	37,509	43,739	47,952	53,459	59,265	59,265	612,800
R24-##G1	Laterals - New	363.00	42,022	39,289	39,967	44,920	35,148	41,398	33,420	22,245	36,969	41,841	46,843	47,636	471,699
R24-##H1	Laterals - Replaced	361.10	3,340	3,457	3,197	3,384	3,147	3,523	2,482	3,985	4,161	4,331	4,863	4,972	44,843
R24-##H1	Laterals - Replaced	361.20	835	864	799	846	787	881	621	996	1,040	1,083	1,216	1,243	11,211
R24-##H1	Laterals - Replaced	363.00	79,323	82,106	75,921	80,369	74,745	83,679	58,957	94,648	98,826	102,863	115,490	118,097	1,065,026
R24-##M1	Security Equipment and Systems	396.00	6,643	6,643	5,812	5,812	5,750	5,812	3,261	4,319	4,669	7,877	8,085	13,368	78,054
R24-##M1	Security Equipment and Systems	354.70	11,786	11,786	10,312	10,312	10,202	10,312	5,786	7,663	8,284	13,976	14,345	23,718	138,482
R24-##M1	Security Equipment and Systems	397.00	3,000	3,000	2,625	2,625	2,597	2,625	1,473	1,951	2,109	3,557	3,651	6,037	35,250
R24-##P1	Tools and Equipment	397.00	3,812	3,245	3,248	3,781	4,152	8,720	3,385	4,013	5,035	5,387	5,733	6,333	56,843
R24-##P1	Tools and Equipment	391.00	1,089	927	928	1,080	1,186	2,491	967	1,147	1,438	1,539	1,638	1,809	16,241
R24-##P1	Tools and Equipment	393.00	8,440	7,186	7,193	8,372	9,194	19,308	7,494	8,886	11,148	11,927	12,695	14,023	125,866
R24-##P1	Tools and Equipment	394.00	272	232	232	270	297	623	242	287	360	385	410	452	4,060
R24-##Q1	Process Plant Facilities and Equipment	354.20	32,867	64,016	63,276	72,116	66,710	75,011	38,553	40,482	57,829	54,139	58,141	68,939	692,081
R24-##Q1	Process Plant Facilities and Equipment	380.00	126,413	246,217	243,370	277,370	256,579	288,504	148,281	155,699	222,421	208,226	223,619	265,151	2,661,848
R24-##Q1	Process Plant Facilities and Equipment	395.00	2,528	4,924	4,867	5,547	5,132	5,770	2,966	3,114	4,448	4,165	4,472	5,303	53,237
R24-##Q1	Process Plant Facilities and Equipment	371.10	40,452	78,789	77,878	88,759	82,105	92,321	47,450	49,824	71,175	66,632	71,558	84,848	851,791
R24-##Q1	Process Plant Facilities and Equipment	354.70	20,226	39,395	38,939	44,379	41,053	46,161	23,725	24,912	35,587	33,316	35,779	42,424	425,896
R24-##Q1	Process Plant Facilities and Equipment	397.00	30,339	59,092	58,409	66,569	61,579	69,241	35,587	37,368	53,381	49,974	53,668	63,636	638,844
R24-##S1	Engineering Studies	389.60						208,663	28,386	12,588	32,725	46,197	31,814	69,770	430,144
I24-13XX08	Lincoln Road Pump Station Upgrade	354.00												337,500	337,500
I24-13XX08	Lincoln Road Pump Station Upgrade	371.00												675,000	675,000
I24-13XX08	Lincoln Road Pump Station Upgrade	395.00												337,500	337,500
I24-13XX13	Electrical Upgrades per Arcflash study	395.00												750,000	750,000
I24-150001	Sadsbury Pump Station Rehab	371.00												2,000,000	2,000,000
I24-17XX02	Disinfection conversion to UV	380.00						1,350,000							1,350,000
I24-260003	Claysville WW Chlorine Gas Elimination	380.00												820,000	820,000
I24-350003	Koppel WWTP - Digestor Improvements	380.00						400,000							400,000
I24-350004	Koppel WWTP - SBR Improvements	380.00												1,750,000	1,750,000
I24-47XX01	Clarion WWTP - Process Water Improvements	389.00						800,000							800,000
I24-47XX03	Clarion WWTP Outfall Sewer Replacement	382.00												1,600,000	1,600,000
I24-47XX06	Liberty LS Wet Weather Tank Access Flushing/Washdown System	371.00						500,000							500,000
I24-600008	Fairview WWTP Dewatering and Chemical Feed System	380.00						1,249,744							1,249,744
I24-60XX03	Fairview North - Hydraulic Improvements Northern Developments	361.00												1,800,000	1,800,000
I24-60XX06	Fairview North WWTP Blower System Piping	380.00												400,000	400,000
I24-670013	Coatesville WW - UV replacement	380.00						1,600,000							1,600,000
I24-690006	Saw Creek WWTP - EQ Tank Replacement	354.00					1,893,762								1,893,762
I24-690006	Saw Creek WWTP - EQ Tank Replacement	380.00					473,440								473,440
I24-690008	Marcel Lakes WWTP EQ Tank	380.00												2,000,000	2,000,000
I24-69XX03	Timothy Lake EQ Station Replacement	371.00												1,000,000	1,000,000
I24-87XX02	New Cumberland Effluent Sewer	382.00						500,000							500,000
I24-940005	EPA Project 8 - Outfall 001 Improvements	380.00						1,250,000							1,250,000
I24-940006	York WW Train 3 Transform	354.00						400,000							400,000
I24-94XX01	York WW Propspect Street Interceptor	361.00											3,050,000		3,050,000
I24-94XX03	York WW New Boilers and Boiler Lines	354.00						1,000,000							1,000,000
I24-94XX05	York WW Dewatering, UV & Tertuary Treatment Improvements	380.00												4,600,000	4,600,000
			$941,781	$1,067,076	$966,081	$1,062,348	$3,357,880	$10,356,147	$836,367	$980,818	$1,213,091	$1,350,554	$4,555,369	$19,721,476	$46,408,989

Pennsylvania-American Water Company - Wastewater SSS General Operations
Plant Additions and Retirements By Month
July 2024 to June 2025

Retirements

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.10	$10,483	$8,920	$5,843	$6,146	$5,938	$6,081	$8,543	$11,840	$13,214	$16,997	$19,223	$19,172	$132,399
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	360.10	7,300	6,212	4,069	4,280	4,135	4,235	5,950	8,245	9,202	11,837	13,387	13,352	92,206
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.20	936	796	522	549	530	543	763	1,057	1,180	1,518	1,716	1,712	11,821
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.10	10,483	8,920	5,843	6,146	5,938	6,081	8,543	11,840	13,214	16,997	19,223	19,172	132,399
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	360.10	7,300	6,212	4,069	4,280	4,135	4,235	5,950	8,245	9,202	11,837	13,387	13,352	92,206
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.20	936	796	522	549	530	543	763	1,057	1,180	1,518	1,716	1,712	11,821
R24-##C1	Collection Sewers Force Mains - Unscheduled	361.10	2,478	2,215	1,998	2,060	1,721	2,562	2,361	2,216	2,479	2,771	2,363	2,604	27,828
R24-##C1	Collection Sewers Force Mains - Unscheduled	360.10	659	589	531	547	457	681	628	589	659	737	628	692	7,397
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10	2,478	2,215	1,998	2,060	1,721	2,562	2,361	2,216	2,479	2,771	2,363	2,604	27,828
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	360.10	659	589	531	547	457	681	628	589	659	737	628	692	7,397
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10	798	112	450	679	836	705	348	536	463	509	971	1,026	7,433
R24-##D1	Collection Sewers Gravity Mains - Relocated	360.10	1,755	246	989	1,493	1,840	1,551	766	1,180	1,019	1,121	2,136	2,257	16,352
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.20	638	89	360	543	669	564	278	429	371	408	777	821	5,946
R24-##F1	Manholes - Replaced	361.10	174	191	203	200	182	143	132	153	168	187	208	208	2,149
R24-##F1	Manholes - Replaced	361.20	5,627	6,175	6,557	6,456	5,875	4,636	4,252	4,959	5,436	6,061	6,719	6,719	69,471
R24-##H1	Laterals - Replaced	361.10	379	392	362	384	357	399	281	452	472	491	551	564	5,084
R24-##H1	Laterals - Replaced	361.20	95	98	91	96	89	100	70	113	118	123	138	141	1,271
R24-##H1	Laterals - Replaced	363.00	8,993	9,308	8,607	9,111	8,474	9,486	6,684	10,730	11,204	11,661	13,093	13,388	120,738
R24-##M1	Security Equipment and Systems	396.00	44,422	44,422	38,870	38,870	38,452	38,870	21,809	28,884	31,224	52,677	54,068	89,396	521,963
R24-##M1	Security Equipment and Systems	354.70	1,336	1,336	1,169	1,169	1,157	1,169	656	869	939	1,584	1,626	2,689	15,699
R24-##M1	Security Equipment and Systems	397.00	26	26	23	23	22	23	13	17	18	31	31	52	302
R24-##P1	Tools and Equipment	397.00	33	28	28	32	36	75	29	34	43	46	49	54	488
R24-##P1	Tools and Equipment	391.00	123	105	105	122	134	282	110	130	163	174	186	205	1,841
R24-##P1	Tools and Equipment	394.00	7,103	6,048	6,054	7,046	7,738	16,250	6,307	7,478	9,382	10,038	10,684	11,802	105,930
R24-##Q1	Process Plant Facilities and Equipment	354.20	3,726	7,257	7,173	8,176	7,563	8,504	4,371	4,589	6,556	6,138	6,591	7,815	78,459
R24-##Q1	Process Plant Facilities and Equipment	380.00	14,331	27,913	27,590	31,444	29,087	32,707	16,810	17,651	25,215	23,606	25,351	30,059	301,764
R24-##Q1	Process Plant Facilities and Equipment	395.00	287	558	552	629	582	654	336	353	504	472	507	601	6,035
R24-##Q1	Process Plant Facilities and Equipment	371.10	4,586	8,932	8,829	10,062	9,308	10,466	5,379	5,648	8,069	7,554	8,112	9,619	96,564
R24-##Q1	Process Plant Facilities and Equipment	354.70	2,293	4,466	4,414	5,031	4,654	5,233	2,690	2,824	4,034	3,777	4,056	4,809	48,282
R24-##Q1	Process Plant Facilities and Equipment	397.00	260	507	501	571	528	594	305	321	458	429	460	546	5,480
I24-13XX08	Lincoln Road Pump Station Upgrade	354.00	0	0	0	0	0	0	0	0	0	0	0	38,261	38,261
I24-13XX08	Lincoln Road Pump Station Upgrade	371.00	0	0	0	0	0	0	0	0	0	0	0	76,522	76,522
I24-13XX08	Lincoln Road Pump Station Upgrade	395.00	0	0	0	0	0	0	0	0	0	0	0	38,261	38,261
I24-13XX13	Electrical Upgrades per Arcflash study	395.00	0	0	0	0	0	0	0	0	0	0	0	85,025	85,025
I24-150001	Sadsbury Pump Station Rehab	371.00	0	0	0	0	0	0	0	0	0	0	0	226,733	226,733
I24-17XX02	Disinfection conversion to UV	380.00	0	0	0	0	0	153,044	0	0	0	0	0	0	153,044
I24-260003	Claysville WW Chlorine Gas Elimination	380.00	0	0	0	0	0	0	0	0	0	0	0	92,960	92,960
I24-350003	Koppel WWTP - Digestor Improvements	380.00	0	0	0	0	0	45,347	0	0	0	0	0	0	45,347
I24-350004	Koppel WWTP - SBR Improvements	380.00	0	0	0	0	0	0	0	0	0	0	0	198,391	198,391
I24-47XX01	Clarion WWTP - Process Water Improvements	389.00	0	0	0	0	0	90,693	0	0	0	0	0	0	90,693
I24-47XX03	Clarion WWTP Outfall Sewer Replacement	382.00	0	0	0	0	0	0	0	0	0	0	0	181,386	181,386
I24-47XX06	Liberty LS Wet Weather Tank Access Flushing/Washdown System	371.00	0	0	0	0	0	56,683	0	0	0	0	0	0	56,683
I24-600008	Fairview WWTP Dewatering and Chemical Feed System	380.00	0	0	0	0	0	141,679	0	0	0	0	0	0	141,679
I24-60XX03	Fairview North - Hydraulic Improvements Northern Developments	361.00	0	0	0	0	0	0	0	0	0	0	0	204,059	204,059
I24-60XX06	Fairview North WWTP Blower System Piping	380.00	0	0	0	0	0	0	0	0	0	0	0	45,347	45,347
I24-670013	Coatesville WW - UV replacement	380.00	0	0	0	0	0	181,386	0	0	0	0	0	0	181,386
I24-690006	Saw Creek WWTP - EQ Tank Replacement	354.00	0	0	0	0	214,689	0	0	0	0	0	0	0	214,689
I24-690006	Saw Creek WWTP - EQ Tank Replacement	380.00	0	0	0	0	53,672	0	0	0	0	0	0	0	53,672
I24-690008	Marcel Lakes WWTP EQ Tank	380.00	0	0	0	0	0	0	0	0	0	0	0	226,733	226,733
I24-69XX03	Timothy Lake EQ Station Replacement	371.00	0	0	0	0	0	0	0	0	0	0	0	113,366	113,366
I24-940006	York WW Train 3 Transform	354.00	0	0	0	0	0	45,347	0	0	0	0	0	0	45,347
I24-94XX01	York WW Propspect Street Interceptor	361.00	0	0	0	0	0	0	0	0	0	0	345,767	0	345,767
I24-94XX03	York WW New Boilers and Boiler Lines	354.00	0	0	0	0	0	113,366	0	0	0	0	0	0	113,366
I24-94XX05	York WW Dewatering, UV & Tertuary Treatment Improvements	380.00	0	0	0	0	0	0	0	0	0	0	0	521,485	521,485
			$140,697	$155,675	$138,851	$149,298	$411,504	$988,160	$108,115	$135,246	$159,324	$194,808	$556,715	$2,306,363	$5,444,755

Pennsylvania American Water Company
Acquisition of the Farmington Township WW System

Non-Depreciable Plant & Depreciable Plant

Account No.	Item	Year Installed	Quantity Unit	Quantity No.	Original Cost	Calculated Depreciation Reserve	Depreciated Original Cost 4/30/2024
353.00	Land and Land Rights	2004	Lot		$20,773	$0	$20,773
353.00	Land and Land Rights	2008	Lot		893	-	893
354.30	Tylersburg (Sunny)	2002	Lot		33,158	9,765	23,393
354.30	Pflanders Campground	2002	Lot		23,214	6,836	16,378
354.30	Pflanders Campground	2008	Lot		22,005	4,970	17,035
354.30	Pflanders Campground	2016	Lot		8,350	1,023	7,327
354.30	Crown Rt.66	2008	Lot		86,521	19,537	66,983
354.30	Beer Barn	2008	Lot		78,808	17,796	61,012
354.40	Treatment Plant	2002	Lot		522,135	153,761	368,373
354.40	Treatment Plant	2009	Lot		1,459	312	1,147
354.40	Furnace	2019	Lot		2,763	218	2,545
354.40	WWTP Lift Station	2022	Lot		10,559	334	10,225
360.10	Mains	2002	Ft	46,350	769,687	214,666	555,021
360.10	Mains	2008	Ft	36,709	716,910	146,479	570,431
360.10	Mains	2009	Ft	19,692	394,650	75,657	318,993
360.13	Air Release	2002	Ea	29	99,573	27,771	71,802
360.13	Air Release	2008	Ea	5	12,142	2,481	9,661
360.13	Air Release	2009	Ea	1	5,238	1,004	4,234
360.14	Valve	2008	Ea	30	13,197	2,696	10,501
360.14	Valve	2009	Ea	22	18,257	3,500	14,757
360.15	Crossings	2008	Ea	1,742	53,616	10,955	42,661
360.15	Crossings	2009	Ea	340	7,811	1,498	6,314
360.20	Clean Outs	2002	Ea	41	84,089	23,452	60,637
360.20	Clean Outs	2008	Ea	32	86,805	17,736	69,069
360.20	Clean Outs	2009	Ea	26	81,107	15,549	65,558
361.10	Mains	2002	Ft	34,135	904,007	252,128	651,879
361.10	Mains	2008	Ft	911	48,327	9,874	38,453
361.11	Concrete Encasements	2002	Ea	2	10,691	2,982	7,709
361.12	Road Borings	2002	Ea	3	105,927	29,543	76,384
361.20	Manholes	2002	Ea	196	318,420	88,807	229,613
361.20	Manholes	2008	Ea	5	13,266	2,711	10,556
361.20	Manholes	2013	Rehab		10,113	1,424	8,689
361.20	Manholes	2016	Rehab		1,895	194	1,701
361.20	Manholes	2018	Rehab		3,595	274	3,321
363.00	Services	2002	Ea	336	115,981	50,142	65,839
363.00	Services	2008	Ea	105	112,016	35,912	76,104
363.00	Services	2009	Ea	60	58,838	17,729	41,109
371.00	Tylersburg (Sunny)	2002	Lot		33,158	17,066	16,092
371.00	Pflanders Campground	2002	Lot		28,128	14,477	13,650
371.00	Pflanders Campground	2008	Lot		22,005	8,913	13,092
371.00	Crown Rt 66	2008	Lot		86,521	35,046	51,475
371.00	Beer Barn	2008	Lot		78,808	31,922	46,886
380.00	Treatment Plant	2002	Lot		520,174	273,378	246,796
380.00	Treatment Plant	2009	Lot		7,949	3,074	4,875
380.00	Sludge Tank Paining	2011	Lot		5,500	1,877	3,623
391.00	Dodge Truck	2020	Ea	1	36,879	10,097	26,782
393.00	Tools, Shop and Garage Equip.	2008	Lot		600	467	133
393.00	Tools, Shop and Garage Equip.	2009	Lot		1,500	1,094	406
394.00	Laboratory Equip.	2002	Lot		20,754	20,754	-
394.00	Laboratory Equip.	2008	Lot		21,408	21,408	-
	Total Plant in Service				**$5,720,178**	**$1,689,290**	**$4,030,888**

Pennsylvania-American Water Company - Wastewater SSS General Operations
Acquisition of the Farmington Township WW System

Contributions in Aid of Construction

Account No.	Item	Year Installed	Quantity Unit	Quantity No.	Original Cost	Calculated Depreciation Reserve	Depreciated Original Cost 4/30/2024
354.30	Tylersburg (Sunny)	2002	Lot		$33,158	$9,765	$23,393
354.30	Pflanders Campground	2002	Lot		23,214	6,836	16,378
354.30	Pflanders Campground	2008	Lot		22,005	4,970	17,035
354.30	Crown Rt.66	2008	Lot		86,521	19,537	66,983
354.30	Beer Barn	2008	Lot		78,808	17,796	61,012
354.40	Treatment Plant	2002	Lot		522,135	153,761	368,373
361.10	Mains	2002	Ft	5,486	145,262	40,514	104,749
361.11	Concrete Encasements	2002	Ea	-	1,718	479	1,239
361.12	Road Borings	2002	Ea	-	17,021	4,747	12,274
361.20	Manholes	2002	Ea	31	51,166	14,270	36,896
363.00	Services	2002	Ea	336	115,981	50,142	65,839
363.00	Services	2008	Ea	58	61,663	19,769	41,894
371.00	Tylersburg (Sunny)	2002	Lot		33,158	17,066	16,092
371.00	Pflanders Campground	2002	Lot		28,128	14,477	13,650
371.00	Pflanders Campground	2008	Lot		22,005	8,913	13,092
371.00	Crown Rt 66	2008	Lot		86,521	35,046	51,475
371.00	Beer Barn	2008	Lot		78,808	31,922	46,886
380.00	Treatment Plant	2002	Lot		520,174	273,378	246,796
393.00	Tools, Shop and Garage Equip.	2008	Lot		600	467	133
394.00	Laboratory Equip.	2002	Lot		20,754	20,754	-
394.00	Laboratory Equip.	2008	Lot		21,408	21,408	-
	Total Contributions in Aid of Construction				**$1,970,206**	**$766,018**	**$1,204,188**

Pennsylvania American Water Company
Acquisition of the Sadsbury Township Municipal Authority - Wastewater Assets

NARUC Acct	Project Description	Year	Quantity	Unit	Estimated Original Cost	PAWC Life	Annual Depr. Expense	Accumulated Depreciation	Depreciated Original Cost
MACHINERY & EQUIPMENT:									
371	Hydromatic Grinder Pump HPG	2004	1	EA	$11,970	30	$399	$7,781	$4,189
371	Hydromatic AC Sub/Pump	2008	1	EA	1,687	30	56	868	819
393	Radial Cutter	2011	1	EA	5,873	20	294	3,675	2,198
371	Grinder Pump	2011	1	EA	1,436	30	48	600	836
371	Hydro Pump	2016	1	EA	6,300	30	210	1,575	4,725
396	Six sensaphone sentinels	2019	6	EA	10,210	15	681	3,065	7,145
TOTAL MACHINERY & EQUIPMENT					**$37,476**		**$1,688**	**$17,564**	**$19,912**
SEWER TREATMENT CAPACITY:									
353.3	Purchased WW Treatment Capacity - Christiana	1997	40,000	GPD	$423,206		$0	$0	$423,206
353.3	Purchased WW Treatment Capacity - Christiana	2001	5,000	GPD	52,900		-	-	52,900
353.3	Purchased WW Treatment Capacity - Salisbury	2001	25,900	GPD	222,000		-	-	222,000
354.4	Salisbury Upgrade	2011		LOT	49,790	45	1,106	13,825	35,965
354.4	Salisbury Upgrade	2015		LOT	61,509	45	1,367	11,620	49,889
354.4	Salisbury Upgrade	2015		LOT	21,649	45	481	4,089	17,560
TOTAL SEWER TREATMENT CAPACITY					**$831,054**		**$2,954**	**$29,534**	**$801,520**
SEWER TREATMENT FACILITY:									
361.1	Phase I - Collection Mains	1998		LOT	$410,931	80	$5,137	$130,994	$279,937
361.2	Phase I - Manholes	1998	9	EA	22,876	50	458	11,679	11,197
361.1	Phase II - Collection Mains	1998		LOT	641,650	80	8,021	204,536	437,114
361.2	Phase II - Manholes	1998	12	EA	29,823	50	596	15,198	14,625
354.3	Phase III - Pumping Station	1999		LOT	46,508	55	846	20,727	25,781
361.1	Phase III - Collection Mains	1999		LOT	413,218	80	5,165	126,543	286,675
361.2	Phase III - Manholes	1999	3	EA	22,556	50	451	11,050	11,506
354.3	Phase IV - Pumping Station	2000		LOT	52,321	55	951	22,349	29,972
361.1	Phase IV - Collection Mains	2000		LOT	818,229	80	10,228	240,358	577,871
361.2	Phase IV - Manholes	2000	12	EA	39,531	50	791	18,589	20,942
363	Lateral - Zimmerman Hardware	2009	1	EA	3,378	80	42	609	2,769
TOTAL SEWER TREATMENT FACILITY					**$2,501,021**		**$32,686**	**$802,632**	**$1,698,389**
TOTAL PLANT IN SERVICE					**$3,369,551**		**$37,328**	**$849,730**	**$2,519,821**
361.1	**(Mains with in-service Dec 2023)**				**$20,642**		**-**	**-**	**$20,642**
TOTAL PLANT IN SERVICE + MAINS IN-SERVICE 2023					**$3,390,193**		**$37,328**	**$849,730**	**$2,540,463**

Pennsylvania American Water Company
Acquisition of the Sadsbury Township Municipal Authority - Wastewater Assets

NARUC Acct	Project Description	Year	Quantity	Unit	Estimated Original Cost	PAWC Life	Annual Depr. Expense	Accumulated Depreciation	Depreciated Original Cost
DEDUCT: CIAC (Grants)									
361	Phase I - Collection Mains	1998		LOT	($227,124)	$80	($2,839)	($72,395)	($154,729)
361	Phase I - Manholes	1998		LOT	(22,876)	50	(458)	(11,679)	(11,197)
361	Phase II - Collection Mains	1998		LOT	(145,177)	80	(1,815)	(46,283)	(98,894)
361	Phase II - Manholes	1998		LOT	(29,823)	50	(596)	(15,198)	(14,625)
354.3	Phase III - Pumping Station	1999		LOT	(46,508)	55	(846)	(20,727)	(25,781)
361	Phase III - Collection Mains	1999		LOT	(180,936)	80	(2,262)	(55,419)	(125,517)
361	Phase III - Manholes	1999		LOT	(22,556)	50	(451)	(11,050)	(11,506)
354.3	Phase IV - Pumping Station	2000		LOT	(52,321)	55	(951)	(22,349)	(29,972)
361	Phase IV - Collection Mains	2000		LOT	(158,148)	80	(1,977)	(46,460)	(111,688)
361	Phase IV - Manholes	2000		LOT	(39,531)	50	(791)	(18,589)	(20,942)
TOTAL CIAC (Grants)					**($925,000)**		**($12,986)**	**($320,149)**	**($604,851)**
TOTAL PLANT IN SERVICE - CIAC					**$2,465,193**		**$24,342**	**$529,581**	**$1,935,612**

Pennsylvania-American Water Company - BASA WW Operations
Plant Additions and Retirements By Month
July 2023 to June 2024

Additions

Project Number	Project Title	Utility Account	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	2024 Total
R24-##A1	Collection Sewers Gravity Mains - New	361.10							$1,000	$1,000	$1,000	$1,500	$2,000	$4,000	$10,500
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.10							57,000	57,000	57,000	110,500	164,000	228,000	673,500
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10							1,000	1,000	1,000	1,500	2,000	4,000	10,500
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10							1,000	1,000	1,000	1,500	2,000	4,000	10,500
R24-##E1	Manholes - New	361.20							200	200	200	300	400	800	2,100
R24-##F1	Manholes - Replaced	361.20							400	400	400	600	800	1,600	4,200
R24-##G1	Laterals - New	363.00							500	500	500	750	1,000	2,000	5,250
R24-##H1	Laterals - Replaced	363.00							1,000	1,000	1,000	1,500	2,000	4,000	10,500
R24-##K1	ITS Equipment and Systems	390.00							200	200	200	300	400	800	2,100
R24-##L1	SCADA Equipment and Systems	396.00							1,000	1,000	1,000	1,500	2,000	4,000	10,500
R24-##M1	Security Equipment and Systems	396.00							500	500	500	750	1,000	2,000	5,250
R24-##N1	Offices and Operations Centers	354.20							1,000	1,000	1,000	1,500	2,000	4,000	10,500
R24-##O1	Transportation Equipment and Vehicles	391.00							1,000	1,000	1,000	1,500	2,000	4,000	10,500
R24-##P1	Tools and Equipment	393.00							2,000	2,000	2,000	3,000	4,000	8,000	21,000
R24-##Q1	Process Plant Facilities and Equipment	355.00							5,000	5,000	5,000	7,500	10,000	20,000	52,500
			$0	$0	$0	$0	$0	$0	$72,800	$72,800	$72,800	$134,200	$195,600	$291,200	$839,400

Pennsylvania-American Water Company - BASA WW Operations
Plant Additions and Retirements By Month
July 2023 to June 2024

Retirements

Project Number	Project Title	Utility Account	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	2024 Total
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.10							$6,170	$6,170	$6,170	$11,962	$17,753	$24,681	$72,908
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10							108	108	108	162	217	433	1,137
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10							108	108	108	162	217	433	1,137
R24-##H1	Laterals - Replaced	363.00							108	108	108	162	217	433	1,137
R24-##K1 & K3	ITS Equipment and Systems	390.20							1,223	1,223	1,223	1,223	1,223	1,223	7,338
R24-##L1	SCADA Equipment and Systems	397.00							122	122	122	122	122	122	730
R24-##O1	Transportation Equipment and Vehicles	391.00							108	108	108	162	217	433	1,137
R24-##Q1	Process Plant Facilities and Equipment	355.00							541	541	541	812	1,083	2,165	5,683
			$0	$0	$0	$0	$0	$0	$8,489	$8,489	$8,489	$14,768	$21,047	$29,923	$91,206

Pennsylvania-American Water Company - BASA WW Operations
Plant Additions and Retirements By Month
July 2024 to June 2025

Additions

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
R24-##A1	Collection Sewers Gravity Mains - New	361.10	$4,500	$5,000	$7,500	$7,500	$7,500	$7,500	$4,500	$5,500	$7,500	$7,500	$12,500	$12,500	$89,500
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.10	331,500	385,000	402,500	352,500	352,500	352,500	45,000	55,000	75,000	75,000	125,000	125,000	2,676,500
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10	4,500	5,000	7,500	7,500	7,500	7,500	4,500	5,500	7,500	7,500	12,500	12,500	89,500
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10	4,500	5,000	7,500	7,500	7,500	7,500	2,250	2,750	3,750	3,750	6,250	6,250	64,500
R24-##E1	Manholes - New	361.20	900	1,000	1,500	1,500	1,500	1,500	4,500	5,500	7,500	7,500	12,500	12,500	57,900
R24-##F1	Manholes - Replaced	361.20	1,800	2,000	3,000	3,000	3,000	3,000	22,500	27,500	37,500	37,500	62,500	62,500	265,800
R24-##G1	Laterals - New	363.00	2,250	2,500	3,750	3,750	3,750	3,750	1,125	1,375	1,875	1,875	3,125	3,125	32,250
R24-##H1	Laterals - Replaced	363.00	4,500	5,000	7,500	7,500	7,500	7,500	9,000	11,000	15,000	15,000	25,000	25,000	139,500
R24-##K1	ITS Equipment and Systems	390.00	900	1,000	1,500	1,500	1,500	1,500	2,250	2,750	3,750	3,750	6,250	6,250	32,900
R24-##L1	SCADA Equipment and Systems	396.00	4,500	5,000	7,500	7,500	7,500	7,500	225	275	375	375	625	625	42,000
R24-##M1	Security Equipment and Systems	396.00	2,250	2,500	3,750	3,750	3,750	3,750	4,500	5,500	7,500	7,500	12,500	12,500	69,750
R24-##N1	Offices and Operations Centers	354.20	4,500	5,000	7,500	7,500	7,500	7,500	6,750	8,250	11,250	11,250	18,750	18,750	114,500
R24-##O1	Transportation Equipment and Vehicles	391.00	4,500	5,000	7,500	7,500	7,500	7,500	225	275	375	375	625	625	42,000
R24-##P1	Tools and Equipment	393.00	9,000	10,000	15,000	15,000	15,000	15,000	4,500	5,500	7,500	7,500	12,500	12,500	129,000
R24-##Q1	Process Plant Facilities and Equipment	355.00	22,500	25,000	37,500	37,500	37,500	37,500	3,375	4,125	5,625	5,625	9,375	9,375	235,000
I24-XXXXXX	Arc Flash	354.00						350,000							350,000
I24-XXXXXX	FBB System Improvements	354.20												5,250,000	5,250,000
I24-XXXXXX	FBB System Improvements	371.00												1,750,000	1,750,000
I24-XXXXXX	GBB System Improvements	354.20												2,625,000	2,625,000
I24-XXXXXX	GBB System Improvements	371.00												875,000	875,000
I24-XXXXXX	Primary Tank 3_4_5 Improvements	354.30												150,000	150,000
I24-XXXXXX	Structure Safey Improvements	354.20												325,000	325,000
			$402,600	$464,000	$521,000	$471,000	$471,000	$821,000	$115,200	$140,800	$192,000	$192,000	$320,000	$11,295,000	$15,405,600

Pennsylvania-American Water Company - BASA WW Operations
Plant Additions and Retirements By Month
July 2024 to June 2025

Retirements

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.10	$36,373	$42,243	$44,163	$38,677	$38,677	$38,677	$4,938	$6,035	$8,229	$8,229	$13,715	$13,715	$293,672
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10	494	549	823	823	823	823	494	603	823	823	1,372	1,372	9,820
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10	494	549	823	823	823	823	247	302	411	411	686	686	7,077
R24-##H1	Laterals - Replaced	363.00	494	549	823	823	823	823	988	1,207	1,646	1,646	2,743	2,743	15,306
R24-##K1 & K3	ITS Equipment and Systems	390.20	1,252	1,252	1,252	1,252	1,252	1,252	1,252	1,252	1,252	1,252	1,252	1,252	15,024
R24-##L1	SCADA Equipment and Systems	396.00	16,498	18,331	27,496	27,496	27,496	27,496	825	1,008	1,375	1,375	2,291	2,291	153,980
R24-##M1	Security Equipment and Systems	396.00	8,249	9,165	13,748	13,748	13,748	13,748	16,498	20,164	27,496	27,496	45,827	45,827	255,716
R24-##O1	Transportation Equipment and Vehicles	391.00	494	549	823	823	823	823	25	30	41	41	69	69	4,608
R24-##Q1	Process Plant Facilities and Equipment	355.00	2,469	2,743	4,115	4,115	4,115	4,115	370	453	617	617	1,029	1,029	25,785
I24-XXXXXX	FBB System Improvements	371.00	0	0	0	0	0	0	0	0	0	0	0	192,014	192,014
I24-XXXXXX	GBB System Improvements	371.00	0	0	0	0	0	0	0	0	0	0	0	96,007	96,007
I24-XXXXXX	Primary Tank 3_4_5 Improvements	354.30	0	0	0	0	0	0	0	0	0	0	0	16,458	16,458
			$66,815	$75,929	$94,066	$88,580	$88,580	$88,580	$25,635	$31,054	$41,891	$41,891	$68,984	$373,463	$1,085,468

Pennsylvania-American Water Company - BASA WW Operations
Plant Assets - Acquisition

Utility Account	LONG DESCRIPTION	ENG IN SERVICE YEAR	Amount
353.40	AGREEMENT	196801	$3,198
353.40	WARRANTY DEED	196801	-
353.40	EASEMENT	196901	1,066
353.40	DECLARATION OF TAKING	197001	3,198
353.40	RIGHT OF WAY	197001	4,264
353.40	CONDEMNATION	197101	1,066
353.40	EASEMENT	197101	2,133
353.40	AGREEMENT	197201	1,066
353.40	EASEMENT	197201	1,066
353.40	DECLARATION OF TAKING	197301	1,066
353.40	SEWERAGE PERMIT	197301	18,124
353.40	EASEMENT	197401	3,198
353.40	RIGHT OF WAY	197401	1,066
353.40	WARRANTY DEED	197401	-
353.40	RIGHT OF WAY	197501	2,133
353.40	SEWERAGE PERMIT	197501	2,133
353.40	RIGHT OF WAY	197601	1,066
353.40	SEWERAGE PERMIT	197601	1,066
353.40	RIGHT OF WAY	197701	81,027
353.40	SEWERAGE PERMIT	197701	2,133
353.40	WARRANTY DEED	197701	-
353.40	AFFIDAVIT	197801	2,133
353.40	AGREEMENT	197801	4,264
353.40	CONDEMNATION	197801	1,066
353.40	DECLARATION OF ACQUISITION	197801	1,066
353.40	DECLARATION OF TAKING	197801	10,661
353.40	EASEMENT	197801	1,066
353.40	NON-MORTGAGE ASSIGNMENT	197801	1,066
353.40	OIL & GAS LEASE	197801	1,066
353.40	ORDER OF COURT	197801	2,133
353.40	RIGHT OF WAY	197801	658,881
353.40	SEWERAGE PERMIT	197801	1,066
353.40	WARRANTY DEED	197801	-
353.40	AGREEMENT	197901	2,133
353.40	CONDEMNATION	197901	4,264
353.40	DECLARATION OF TAKING	197901	1,066
353.40	NON-MORTGAGE ASSIGNMENT	197901	1,066
353.40	RIGHT OF WAY	197901	171,651
353.40	SEWERAGE PERMIT	197901	2,133
353.40	TERMINATION	197901	1,066
353.40	WARRANTY DEED	197901	-
353.40	RIGHT OF WAY	198001	27,720
353.40	SEWERAGE PERMIT	198001	9,595
353.40	AGREEMENT	198101	1,066
353.40	RIGHT OF WAY	198101	9,595
353.40	WARRANTY DEED	198101	-
353.40	WARRANTY DEED	198201	-
353.40	OIL & GAS LEASE	198301	1,066
353.40	SEWERAGE PERMIT	198301	2,133
353.40	WARRANTY DEED	198301	-
353.40	AGREEMENT	198401	3,198
353.40	RIGHT OF WAY	198401	2,133
353.40	SEWERAGE PERMIT	198401	1,066
353.40	RIGHT OF WAY	198501	4,264
353.40	SEWERAGE PERMIT	198501	1,066
353.40	RIGHT OF WAY	198601	1,066
353.40	SEWERAGE PERMIT	198601	1,066
353.40	EASEMENT	198701	1,066
353.40	OIL & GAS LEASE	198701	1,066
353.40	SURRENDER OF LEASE/OPTION	198701	1,066
353.40	AGREEMENT	198801	1,066
353.40	RIGHT OF WAY	198801	1,066
353.40	SEWERAGE PERMIT	198801	1,066
353.40	TAX CLAIM DEED	198801	3,198
353.40	WARRANTY DEED	198801	-

Pennsylvania-American Water Company - BASA WW Operations
Plant Assets - Acquisition

Utility Account	LONG DESCRIPTION	ENG IN SERVICE YEAR	Amount
353.40	AGREEMENT	198901	1,066
353.40	RIGHT OF WAY	198901	1,066
353.40	SEWERAGE PERMIT	198901	1,066
353.40	WARRANTY DEED	198901	-
353.40	AGREEMENT	199001	2,133
353.40	CONSENT	199101	1,066
353.40	PLANS AND SUBDIVISIONS	199101	2,133
353.40	RIGHT OF WAY	199101	3,198
353.40	WARRANTY DEED	199101	-
353.40	EASEMENT	199201	1,066
353.40	RIGHT OF WAY	199201	3,198
353.40	TAX CLAIM DEED	199301	1,066
353.40	AGREEMENT	199401	2,133
353.40	RIGHT OF WAY	199401	6,397
353.40	RIGHT OF WAY	199501	3,198
353.40	RIGHT OF WAY	199601	13,860
353.40	AGREEMENT	199701	14,926
353.40	RIGHT OF WAY	199701	1,066
353.40	WARRANTY DEED	199701	-
353.40	AGREEMENT	199801	6,397
353.40	RIGHT OF WAY	199801	2,133
353.40	AGREEMENT	199901	2,133
353.40	RIGHT OF WAY	199901	13,860
353.40	AGREEMENT	200001	10,661
353.40	RIGHT OF WAY	200001	4,264
353.40	AGREEMENT	200101	15,992
353.40	RIGHT OF WAY	200101	2,133
353.40	WARRANTY DEED	200101	-
353.40	AGREEMENT	200201	2,133
353.40	RIGHT OF WAY	200201	6,397
353.40	AGREEMENT	200301	6,397
353.40	RIGHT OF WAY	200301	1,066
353.40	AGREEMENT	200401	5,331
353.40	BILL OF SALE	200401	2,133
353.40	RIGHT OF WAY	200401	21,404
353.40	AGREEMENT	200501	12,794
353.40	EASEMENT	200501	2,133
353.40	RIGHT OF WAY	200501	1,066
353.40	WARRANTY DEED	200501	-
353.40	AGREEMENT	200601	7,463
353.40	EASEMENT	200601	1,066
353.40	AGREEMENT	200701	6,397
353.40	AGREEMENT	200801	6,397
353.40	PLANS AND SUBDIVISIONS	200801	1,066
353.40	RIGHT OF WAY	200801	9,595
353.40	AGREEMENT	200901	4,264
353.40	CONDEMNATION	200901	1,066
353.40	RIGHT OF WAY	200901	7,463
353.40	TERMINATION	200901	1,066
353.40	WARRANTY DEED	200901	-
353.40	AGREEMENT	201001	2,133
353.40	CONDEMNATION	201001	3,198
353.40	EASEMENT	201001	2,133
353.40	RIGHT OF WAY	201001	33,107
353.40	x_MODIFICATION DOCUMENT	201001	1,066
353.40	AGREEMENT	201101	2,133
353.40	RIGHT OF WAY	201101	2,133
353.40	RIGHT OF WAY	201201	1,066
353.40	ADMINSTRATORS DEED	201301	8,134
353.40	AGREEMENT	201301	2,133
353.40	RIGHT OF WAY	201301	8,855
353.40	AGREEMENT	201401	6,397
353.40	MEMORANDUM OF LEASE W/O STAMPS	201401	1,066
353.40	NON-MORTGAGE ASSIGNMENT	201401	1,066
353.40	WARRANTY DEED	201401	-

Pennsylvania-American Water Company - BASA WW Operations
Plant Assets - Acquisition

Utility Account	LONG DESCRIPTION	ENG IN SERVICE YEAR	Amount
353.40	x_MODIFICATION DOCUMENT	201401	2,133
353.40	AGREEMENT	201501	4,264
353.40	DECLARATION	201501	2,133
353.40	LICENSE AGREEMENT	201501	2,133
353.40	MEMORANDUM OF LEASE W/O STAMPS	201501	1,066
353.40	RIGHT OF WAY	201501	2,801
353.40	AGREEMENT	201601	4,264
353.40	AMENDMENT TO MTG.	201601	1,066
353.40	EASEMENT	201601	1,066
353.40	FINANCING STATEMENT AMENDMENT	201601	1,066
353.40	FINANCING STATEMENT FILING	201601	1,066
353.40	x_MODIFICATION DOCUMENT	201601	2,133
353.40	AGREEMENT	201701	2,133
353.40	BILL OF SALE	201801	2,133
353.40	EASEMENT	201801	1,066
353.40	LICENSE AGREEMENT	201801	2,133
353.40	AGREEMENT	201901	4,264
353.40	EASEMENT	201901	1,066
353.40	MISCELLANEOUS DOCUMENT RECORDING	202001	2,133
353.40	LICENSE AGREEMENT	202101	2,133
353.40	Land - Parcel 051-37-12A-0000 - 119 PITTSBURGH RD - Pt Lots 3-4	202201	4,274
353.40	Land - Parcel 051-37-12C-0000 - 121 PITTSBURGH RD - Lot	202201	4,274
353.40	Land - Parcel 051-37-7-0000 - LITMAN RD - 40.468 Ac 3 Comm. Bldgs, Club House	202201	6,918,911
353.40	Land - Parcel 051-37-7B-0000 - PITTSBURGH RD - 12.55 Ac Disposal Plant, 2 Hses Bldg	202201	2,145,703
353.40	Land - Parcel 051-62-5AA1-0000 - 199 DUTCHTOWN RD - Parcel A1R, Pump House	202201	42,743
353.40	Land - Parcel 053-24-D1B-0000 - B & O R R - Tract, Pump Station	202201	42,743
353.40	Land - Parcel 054-34-2A-0000 - SAWMILL RUN RD - 0.85 Ac, Pump Station	202201	145,327
353.40	Land - Parcel 054-35-X-0000 - SAWMILL RUN RD - 3.13 Ac, Disposal Plant	202201	535,144
353.40	Land - Parcel 056-1-5E-0000 - GREENWOOD DR - Tract, Pump Station	202201	42,743
353.40	Land - Parcel 056-9-11C-0000 - 524 S BENBROOK RD - Tract, Pump Station	202201	42,743
353.40	Land - Parcel 056-9-11D-0000 - BRYSON RD - Tract, Pump Station	202201	42,743
353.40	Land - Parcel 060-2F104-4C-0000 - E BREWSTER RD - 0.14 Ac, Comm. Bldg	202201	23,936
353.40	Land - Parcel 060-2F104-8HA-0000 - 171 E BREWSTER RD - Tract of land - Booster Station	202201	42,743
353.40	Land - Parcel 060-3F41-41H-0000 - W OF WM FLYNN HWY - 0.28 Ac, Comm Bldg	202201	47,872
353.40	Land - Parcel 060-S16-DB-0000 - PUFF LN - 0.19 Ac, Comm Bldg	202201	32,485
353.40	Land - Parcel 120-3F47-13A-0000 - CUPPS RD - Tract of land, Comm Bldg	202201	42,743
353.40	Land - Parcel 561-25-54B-0000 - S MONROE ST - 0.20 Ac, Pum House	202201	34,194
353.40	Land - Parcel 561-3-67-0000 - 105 MORTON AVE - 0.09 Ac.	202201	15,388
353.40	Land - Parcel 561-5-144B-0000 - CENTER AVE - Lot	202201	42,743
353.40	Land - Parcel 561-63-6A-0000 - 468 ZEIGLER AVE - 0.23 Ac, Lot 1 Pump Station	202201	39,324
353.40	Land - Parcel 562-25-38C-0000 - 335 E CUNNINGHAM ST - 0.91 Ac	202201	155,585
353.40	Land - Parcel 562-25-58A-0000 - E CUNNINGHAM ST - 0.24 Ac	202201	41,033
353.40	Land - Parcel 562-5-147-0000 - 122 CENTER AVE - Lot	202201	42,743
353.40	Land - Parcel 563-26-91A-0000 - PILLOW ST - 0.28 Ac; Lot 2 Comm Bldg	202201	47,872
353.40	Land - Parcel 563-3-1-0000 - 130 ETNA ST - 0.54 Ac	202201	92,325
353.40	Land - Parcel 563-6-240B-0000 - 507 NEGLEY AVE - 7.24 Ac, Pum Station	202201	1,237,840
353.40	Land - Parcel 051-61-D20A-0000 - GARDEN GROVE DR - 0.032 Ac	202201	5,471
353.40	Land - Parcel 051-61-12A-0000 - TOWNSHIP LINE RD - 0.07 Ac	202201	11,968
354.70	General Plant Improvements: WWTP Purchase By BASA	196401	537,548
354.70	General Plant Improvements: WWTP General Construction	196501	1,707,898
354.70	General Plant Improvements: WWTP Plumbing	196501	20,247
354.70	General Plant Improvements: WWTP Heating	196501	51,948
354.70	General Plant Improvements: WWTP Electrical	196501	172,570
354.70	General Plant Improvements: WWTP - Heating System Improvements	199401	221,255
354.70	General Plant Improvements: WWTP Heating and Air Conditioning Improvements and Repairs	200701	26,478
354.70	Administration Buildings: Billing Office General Construction	196601	151,658
354.70	Administration Buildings: Billing Office HVAC and Electrical	196601	-
354.70	Administration Buildings: WWTP Improvements	198201	1,258,417
354.70	Administration Buildings: WWTP Improvements - Paving Maintenance Project	199501	-
354.70	Administration Buildings: WWTP Improvements - Re-Roofing Project	199501	-
354.70	Administration Buildings: Heating Sytem Maintenance & Repair - Admin Building	200001	-
354.70	Administration Buildings: Employee Locker Room Facility	200301	639,132
354.70	Administration Buildings: Refurbushing Office AC System	200601	-
354.70	Administration Buildings: Maintenance Building and Sewer Crew Garage - General Construction	201201	408,141
354.70	Administration Buildings: Maintenance Building and Sewer Crew Garage - Plumbing Construction	201201	57,109

Pennsylvania-American Water Company - BASA WW Operations
Plant Assets - Acquisition

Utility Account	LONG DESCRIPTION	ENG IN SERVICE YEAR	Amount
354.70	Administration Buildings: Maintenance Building and Sewer Crew Garage - HVAC Construction	201201	99,658
354.70	Administration Buildings: Maintenance Building and Sewer Crew Garage - Electrical Construction	201201	163,812
354.70	Administration Buildings: Adminstrative Office Building - General Construction	201301	888,518
354.70	Administration Buildings: Adminstrative Office Building - Plumbing Construction	201301	66,701
354.70	Administration Buildings: Adminstrative Office Building - HVAC Construction	201301	569,276
354.70	Administration Buildings: Adminstrative Office Building - Electrical Construction	201301	316,424
354.70	Administration Buildings: Four Roofs Replacement Project	201301	201,778
354.70	Administration Buildings: BASA Roofing Projects	201301	146,246
354.70	Administration Buildings: BASA Roofing Projects	201501	124,068
354.70	Administration Buildings: Plant Security and Door Hardware	202101	55,170
354.70	Administration Buildings: WWTP Paving Maintenance Project	202101	428,024
354.70	Administration Buildings: Energy Performance Contract (Phase I Improvements)	201101	1,036,061
354.70	Administration Buildings: Energy Performance Contract (Phase II Improvements)	202101	577,628
354.70	Administration Buildings: Roofing Projects	201601	138,807
390.00	Administration Buildings: WWTP Security Camera Replacement Total:	202101	28,705
354.70	Administration Buildings: Roof Restoration Project	202001	9,219
355.00	Power Generation: WWTP Standby Generator System	200101	354,078
355.00	Power Generation: WWTP Generator ATS	202101	64,241
396.00	SCADA/Controls: Plant SCADA Upgrade - Phase 1	202101	163,052
396.00	SCADA/Controls: Plant SCADA Upgrade - Phase 2	202101	255,592
396.00	SCADA/Controls: PS SCADA Integration with New Plant SCADA	202101	21,760
380.00	Process 1 - Influent: WWTP - Headworks Improvements - General Construction	199101	-
380.00	Process 1 - Influent: WWTP Headworks Improvements	201901	1,091,650
380.00	Process 2 - Mechanical Bar Screen: WWTP General Construction	196501	-
380.00	Process 2 - Mechanical Bar Screen: WWTP - Headworks Improvements - General Construction	199101	-
380.00	Process 2 - Mechanical Bar Screen: WWTP Headworks Improvements	201901	515,586
354.40	Process 3 - Aerated Grit Chamber: WWTP General Construction	196501	-
354.40	Process 3 - Aerated Grit Chamber: WWTP Improvements	198201	101,951
380.00	Process 3 - Aerated Grit Chamber: WWTP - Headworks Improvements - General Construction	199101	-
354.40	Process 3 - Aerated Grit Chamber: WWTP Improvements - Re-Roofing Project	199501	47,939
380.00	Process 3 - Aerated Grit Chamber: WWTP - Grit Building Odor Control	200001	567,647
380.00	Process 3 - Aerated Grit Chamber: Rebuild/Replace Grit Machine Cross-Collector Screw and Trough	202101	6,313
354.40	Process 3 - Aerated Grit Chamber: WWTP Grit Building MCC Replacements	201601	91,546
380.00	Process 3 - Aerated Grit Chamber: WWTP Headworks Improvements	201901	1,200,897
354.40	Process 4 - Primary Sedimentation: WWTP General Construction	196501	-
354.40	Process 4 - Primary Sedimentation: WWTP Improvements	198201	2,039,013
380.00	Process 4 - Primary Sedimentation: Primary Sludge Collection Equipment Replacement	199201	47,509
380.00	Process 4 - Primary Sedimentation: Equipment Replacement at Primary Tanks 1 & 2	202101	75,962
380.00	Process 5 - Trickling Filters: Trickling Filter Improvements (trickling filter gravel, new lime feed system, etc.)	196601	217,071
354.40	Process 5 - Trickling Filters: WWTP Improvements	198201	305,586
354.40	Process 5 - Trickling Filters: WWTP Improvements - Re-Roofing Project	199501	44,222
354.40	Process 6 - Aeration Tanks: WWTP General Construction	196501	-
380.00	Process 6 - Aeration Tanks: WWTP Improvements	198201	3,309,558
354.40	Process 6 - Aeration Tanks: WWTP Improvements	198201	101,951
354.40	Process 6 - Aeration Tanks: Odor Control System Additions	201101	388,140
380.00	Process 6 - Aeration Tanks: Energy Performance Contract (Phase I Improvements)	201101	920,729
354.40	Process 7 - Secondary Sedimentation: WWTP Improvements	198201	6,422,892
380.00	Process 8 - Reactor Clarifiers: WWTP Improvements	198201	3,723,252
380.00	Process 8 - Reactor Clarifiers: New Chains for Grit and Clairfiers	202101	41,964
396.00	Process 8 - Reactor Clarifiers: WWTP Automation Project	200501	55,148
354.40	Process 9 - Chlorine Contact Tanks: WWTP General Construction	196501	-
354.40	Process 9 - Chlorine Contact Tanks: WWTP Improvements	198201	1,860,600
380.00	Process 9 - Chlorine Contact Tanks: Chlorine Contact Tank Improvements	202101	74,993
354.40	Pump House - Recirculation & Emergency Bypass: WWTP Improvements	198201	305,852
371.00	Pump House - Recirculation & Emergency Bypass: WWTP - Switchgear Upgrade	199901	301,227
371.00	Pump House - Recirculation & Emergency Bypass: WWTP - Pump Station Upgrade	199901	560,732
382.00	Process 10 - Effluent to Creek: Reconstruction of Plant Effluent Line Project	196501	73,814
354.40	Process 10 - Effluent to Creek: WWTP Improvements	198201	57,297
354.40	Process 11 - Sludge Thickening: WWTP Improvements	198201	318,596
354.40	Process 11 - Sludge Thickening: WWTP Improvements - Re-Roofing Project	199501	-
380.00	Process 11 - Sludge Thickening: WWTP - Odor Control - Sludge Holding Tanks	199801	547,933
371.00	Process 11 - Sludge Thickening: Thickener Sludge Pump	200101	-
354.40	Process 11 - Sludge Thickening: Sludge Loading Area Replacement	200701	69,937
354.40	Process 11 - Sludge Thickening: Solids Building Roof Replacement	200601	-
380.00	Process 11 - Sludge Thickening: Press Area Sludge Pit Blowers Rebuild	200601	-

Pennsylvania-American Water Company - BASA WW Operations
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Utility Account	LONG DESCRIPTION	ENG IN SERVICE YEAR	Amount
354.40	Process 11 - Sludge Thickening: Concrete Paving Project - Sludge Storage Area	200701	60,575
380.00	Process 11 - Sludge Thickening: Sludge Aeration Tank Blowers	202101	-
380.00	Process 11 - Sludge Thickening: Sludge Dewatering Improvements - General Construction	201901	4,466,650
354.40	Process 11 - Sludge Thickening: Sludge Dewatering Improvements - Electrical	201901	362,081
354.40	Process 11 - Sludge Thickening: Solids Building Roof Replacement Project	201701	165,167
380.00	Process 11 - Sludge Thickening: Sludge Thickener Upgrade Project - General Construction	202201	351,941
354.40	Process 11 - Sludge Thickening: Sludge Thickener Upgrade Project - Electrical Construction	202201	55,061
354.40	Process 12 - Lime Stabilization: WWTP Improvements	198201	764,630
380.00	Process 12 - Lime Stabilization: Lime Dust Control Equipment	202001	212,936
380.00	Process 13 - Rotary Sludge Press: WWTP Improvements	198201	764,630
380.00	Process 14 - Compost Facility: Compost Handling Facility - General Construction	199301	2,264,086
354.40	Process 14 - Compost Facility: Compost Handling Facility - Electrical	199301	447,217
380.00	Process 14 - Compost Facility: Batch Mixers	199101	234,951
397.00	Process 14 - Compost Facility: High Pressure Cleaner	199101	730
354.40	Process 14 - Compost Facility: Energy Performance Contract (Phase I Improvements)	201101	455,979
354.30	Benbrook PS	202201	119,418
354.30	Brewster Booster PS	202201	119,418
354.30	Brewster PS	202201	119,418
354.30	Bryson PS	202201	119,418
354.30	Fisher Heights PS	202201	119,418
354.30	Greenwood PS	202201	119,418
354.30	Rock Lick PS	202201	20,468
360.10	Rock Lick PS	202201	30,787
354.30	Construction by BASA before Closing	202201	664,043
360.10	Ballpark Lift Station - Force main	201301	878,196
371.00	Ballpark Lift Station - Pumps, Piping, Electrical Connections, VFDs	201301	491,251
355.00	Ballpark Lift Station - Generator	201301	36,677
380.00	Ballpark Lift Station - Screening Equipment	201401	1,567,576
354.30	Ballpark Lift Station - Diversion Structure	201401	2,153,480
354.30	Benbrook Lift Station - Package Pump Station	198001	234,465
360.10	Benbrook Lift Station - DIP Force main	198001	93,614
371.00	Benbrook Lift Station - Electrical connections	198101	82,820
371.00	Benbrook Lift Station - Automatic Transfer Switch	200901	6,893
354.30	Benbrook Lift Station - Roof replacement	201001	8,950
371.00	Benbrook Lift Station - Pump and valve replacement	201801	84,606
354.30	Brewster Booster Lift Station - Package Pump Station	198001	218,999
360.10	Brewster Booster Lift Station - DIP Force main	198001	205,511
371.00	Brewster Booster Lift Station - Electrical connections	198101	82,820
371.00	Brewster Booster Lift Station - Automatic Transfer Switch	200901	13,907
354.30	Brewster Booster Lift Station - Roof replacement	201001	8,950
360.10	Brewster Lift Station - Force main	197901	276,093
354.30	Brewster Lift Station - Package Pump Station	198001	210,428
371.00	Brewster Lift Station - Electrical connections	198101	82,820
371.00	Brewster Lift Station - Automatic Transfer Switch	200901	13,907
354.30	Brewster Lift Station - Roof replacement	201001	8,950
371.00	Brewster Lift Station - Pump VFDs	201101	139,218
371.00	Brewster Lift Station - Pump Replacement	201901	30,886
354.30	Bryson Lift Station - Package Pump Station	198001	220,247
360.10	Bryson Lift Station - DIP Force main	198001	169,658
371.00	Bryson Lift Station - Electrical connections	198101	82,820
371.00	Bryson Lift Station - Automatic Transfer Switch	200901	13,994
354.30	Bryson Lift Station - Roof replacement	201001	8,950
371.00	Bryson Lift Station - Pump Replacement	201501	52,864
371.00	Center Ave Lift Station - Pumps, piping, electrical	196401	125,565
360.10	Center Ave Lift Station - Force main	196401	18,193
371.00	Center Ave Lift Station - Pump and valve replacement	201801	71,379
354.30	Central Storage Facility - EQ Tanks, Structures	201301	10,181,333
371.00	Central Storage Facility - Electrical connections	201301	279,774
360.10	Connoquenessing Lift Station - Force main	201301	1,707,066
371.00	Connoquenessing Lift Station - Pumps, Piping, Electrical connections, VFDs	201301	491,251
355.00	Connoquenessing Lift Station - Generator	201301	36,677
380.00	Connoquenessing Lift Station - Screening Equipment	201401	1,252,292
354.30	Connoquenessing Lift Station - Diversion Structure	201401	3,350,618
354.30	Cupps Lift Station - Package Pump Station	198001	209,980
360.10	Cupps Lift Station - DIP Force main	198001	338,766

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Utility Account	LONG DESCRIPTION	ENG IN SERVICE YEAR	Amount
371.00	Cupps Lift Station - Electrical connections	198101	82,820
371.00	Cupps Lift Station - Automatic Transfer Switch	200901	13,909
354.30	Cupps Lift Station - Roof replacement	201001	9,947
354.30	Deshon Lift Station - Package Pump Station	197901	313,696
360.10	Deshon Lift Station - Force main	198001	2,044,734
354.30	Deshon Lift Station - EQ Tanks	201301	3,122,898
354.30	Deshon Lift Station - Diversion Structures	201301	4,725,988
355.00	Deshon Lift Station - Electrical, generator	201301	513,576
380.00	Deshon Lift Station - Screening Equipment	201401	1,062,238
371.00	Diamond Street Lift Station - Pumps, electrical	196901	627
354.30	Diamond Street Lift Station - Structures	196901	27,794
371.00	Diamond Street Lift Station - Piping	196901	1,222
360.10	Diamond Street Lift Station - CI Force main	196901	43,907
360.10	Fisher Heights Lift Station - Force main	197901	78,595
354.30	Fisher Heights Lift Station - Package Pump Station	198001	178,299
371.00	Fisher Heights Lift Station - Electrical connections	198101	72,017
371.00	Fisher Heights Lift Station - Automatic Transfer Switch	200901	12,093
354.30	Fisher Heights Lift Station - Roof replacement	201001	7,783
354.30	Garden Grove Lift Station - Structures	197201	5,411
371.00	Garden Grove Lift Station - Pumps, piping, electrical	197201	62,661
360.10	Garden Grove Lift Station - CI Force main	197201	90,716
355.00	Garden Grove Lift Station - Generator	200001	52,566
354.30	Greenwood Lift Station - Package Pump Station	198001	218,468
360.10	Greenwood Lift Station - Force main	198001	162,244
371.00	Greenwood Lift Station - Electrical connections	198101	72,017
371.00	Greenwood Lift Station - Automatic Transfer Switch	200901	12,093
354.30	Greenwood Lift Station - Roof replacement	201001	7,783
371.00	Greenwood Lift Station - Pump VFDs	201101	121,059
360.10	Karns Crossing Lift Station - Force main	197901	171,880
354.30	Karns Crossing Lift Station - Package Pump Station	198101	1,010,081
371.00	Karns Crossing Lift Station - Automatic Transfer Switch	200901	17,661
371.00	Karns Crossing Lift Station - Pump VFDs	201101	208,826
354.30	Karns Crossing Lift Station - Roof replacement	201201	47,606
354.30	Monroe St Lift Station - Package Pump Station	196401	714,682
360.10	Monroe St Lift Station - Force main	197901	638,080
371.00	Monroe St Lift Station - Pump Station Upgrade	198101	168,616
371.00	Monroe St Lift Station - Pump Station Upgrade- Electrical	198101	1,802
354.30	Monroe St Lift Station - Pump Station Rehab	199201	368,984
371.00	Monroe St Lift Station - Pump Rebuild	200401	17,462
354.30	Monroe St Lift Station - Roof replacement (PS)	201201	47,606
354.30	Monroe St Lift Station - EQ Tanks	201301	4,363,429
371.00	Monroe St Lift Station - Pumps, piping, electrical connections (EQ)	201301	491,251
355.00	Monroe St Lift Station - Generator (EQ)	201301	36,677
360.10	Monroe St Lift Station - Force main (EQ)	201301	242,134
371.00	Monroe St Lift Station - Pumps, pipes (EQ)	201301	1,136,118
355.00	Monroe St Lift Station - Electrical, Generator (PS)	201401	40,374
354.30	Monroe St Lift Station - Structures Rehab	201401	821,567
354.30	Monroe St Lift Station - Pump Station Structures	201401	1,913,514
371.00	Negley Ave Lift Station - Addition of standby pump	200501	9,280
371.00	Negley Ave Lift Station - Pumps, piping, electrical	201801	147,062
380.00	Negley Ave Lift Station - Sodium Hypo Equipment	201801	20,185
354.30	Negley Ave Lift Station - Structures	201801	795,306
355.00	Negley Ave Lift Station - Electrical, generator	201801	29,016
360.10	Negley Ave Lift Station - Force main	201801	198,223
360.10	Northvue Lift Station - Force main	197901	35,539
354.30	Northvue Lift Station - Package Pump Station	198001	193,223
371.00	Northvue Lift Station - Electrical connections	198101	82,820
371.00	Northvue Lift Station - Automatic Transfer Switch	200901	13,907
354.30	Northvue Lift Station - Roof replacement	201001	8,950
354.30	Pullman Lift Station - Structures	201001	386,160
371.00	Pullman Lift Station - Pumps, Piping, Electrical, VFDs	201001	164,491
355.00	Pullman Lift Station - Generator	201001	15,571
360.10	Pullman Lift Station - Force main	201001	48,349
354.30	Rock Lick Lift Station - Package Pump Station	198001	248,884
360.10	Rock Lick Lift Station - Force main	198001	505,623

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Utility Account	LONG DESCRIPTION	ENG IN SERVICE YEAR	Amount
371.00	Rock Lick Lift Station - Electrical connections	198101	82,820
371.00	Rock Lick Lift Station - Automatic Transfer Switch	200901	17,628
354.30	Rock Lick Lift Station - Roof replacement	201001	9,947
360.10	Sugar Creek Lift Station - Force main	200501	121,164
355.00	Sugar Creek Lift Station - Electrical and Generator	200501	41,787
396.00	Sugar Creek Lift Station - SCADA	200501	22,105
371.00	Sugar Creek Lift Station - Pumps, piping	200501	29,795
354.30	Sugar Creek Lift Station - Structures	200501	56,188
360.10	Township Line Lift Station - CI Force main	197201	49,684
354.30	Township Line Lift Station - Structures	199901	101,492
371.00	Township Line Lift Station - Pumps, piping, electrical	199901	38,708
355.00	Township Line Lift Station - Pump Station Generator	199901	15,844
371.00	Township Line Lift Station - Pumps replacement	201901	18,632
354.30	Zeigler Ave Lift Station - Structures	201601	595,132
355.00	Zeigler Ave Lift Station - Generator	201601	74,352
360.10	Zeigler Ave Lift Station - Force main	201601	85,790
380.00	Zeigler Ave Lift Station - Sodium Hypo Equipment	201601	33,688
371.00	Zeigler Ave Lift Station - Pumps, piping, electrical	201601	284,429
361.10	Original Sewers Sanitary Sewer 6-36	192801	3,689,913
361.10	Original Sewers Sanitary Sewer 6-36	193501	4,070,183
361.10	Original Sewers Sanitary Sewer 6-36	194501	1,727,235
361.10	Meadowood Area Sanitary Sewer 8	195401	1,197,363
361.10	Original Sewers Sanitary Sewer 6-36	195501	3,555,172
361.10	Original Sewers Sanitary Sewer 6-36	196001	5,265,720
361.10	Main interceptor, Lyndora siphon, ARMCO siphon, main siphon Sanitary Sewer 48	196301	920,082
361.10	Main interceptor, Lyndora siphon, ARMCO siphon, main siphon Sanitary Sewer 36	196301	118,085
361.10	Butler Interceptor Sewers Sanitary Sewer 36	196401	582,302
361.10	Butler Interceptor Sewers Sanitary Sewer 24	196401	172,014
361.10	Butler Interceptor Sewers Sanitary Sewer 15	196401	73,502
361.10	Butler Interceptor Sewers Sanitary Sewer 12	196401	56,876
361.10	Butler Interceptor Sewers Sanitary Sewer 10	196401	7,525
361.10	Interceptor Sewer in Tunnel Sanitary Sewer 36	196401	1,203,621
361.10	Hull Plan Sewers Sanitary Sewer 8	196501	157,239
361.10	24" Sewer on West Penn Street Sanitary Sewer 24	196501	38,345
361.10	Route 8 main interceptor Sanitary Sewer 15	196701	213,286
361.10	Route 8 main interceptor Sanitary Sewer 12	196701	87,529
361.10	Route 8 main interceptor Sanitary Sewer 8	196701	17,119
361.10	Route 8 main interceptor extension Sanitary Sewer 8	196701	128,992
361.10	Connoquenessing interceptor Sanitary Sewer 24	197001	471,170
361.10	Fifth Street interceptor Sanitary Sewer 15	197001	238,146
361.10	Fifth Street interceptor Sanitary Sewer 12	197001	7,683
361.10	Three Degree Road Sewer Sanitary Sewer 8	197001	237,794
361.10	North Butler Area Sewers Sanitary Sewer 8	197001	850,576
361.10	Alameda Road Sewer Sanitary Sewer 18	197201	195,148
361.10	Furnishing of Pipe for Alameda Park Road Sewer Sanitary Sewer 18	197201	77,885
361.10	Construction of 1,210 feet of 8-inch San Sewer on Schaffner Road Sanitary Sewer 8	197301	36,375
361.10	Construction of 879 feet of 10-inch San Sewer on Home Avenue Sanitary Sewer 10	197301	41,910
361.10	3,000 feet of 8-inch San Sewer in Alameda Commercial Park Sanitary Sewer 8	197401	3,507
361.10	North Butler Interceptor Sewers Sanitary Sewer 8-21	197901	1,524,177
361.10	Lick Hill Area Sewers Sanitary Sewer 8-10	197901	1,376,630
361.10	Bessmer Main Sanitary Sewer 8-21	197901	1,680,087
361.10	Northvue Force main Sanitary Sewer 8	197901	20,307
361.10	Windward Heights, Timberly Heights, Rt 308, Northvue Farms, Drainage Areas Sanitary Sewer 8-15	197901	3,743,078
361.10	Spring Run, Hull Plan Drainage Areas Sanitary Sewer 8,12	197901	2,192,376
361.10	East Butler Service Area Sanitary Sewer 8-18	197901	1,836,603
361.10	East Butler Service Area Sanitary Sewer 8,10	197901	1,814,286
361.10	Beech Road Sewers Sanitary Sewer 8	198001	1,141,941
361.10	Butcher Run Sewers Sanitary Sewer 8-12	198001	3,129,323
361.10	Deshon Service Area and Forcemains Sanitary Sewer 8-18	198001	1,169,905
361.10	Sullivan Run Drainage Area Sanitary Sewer 8-15	198001	3,978,402
361.10	Crooked Run Drainage Area Sanitary Sewer 8,12	198001	3,205,877
361.10	Mercer Road Area Sanitary Sewer 8-18	198001	2,033,930
361.10	Meridian Service Area Sanitary Sewer 8-24	198001	3,764,096
361.10	Meridian Service Area Sanitary Sewer 8-15	198001	2,194,966
361.10	Meridian Service Area Sanitary Sewer 8-12	198001	1,679,418

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Utility Account	LONG DESCRIPTION	ENG IN SERVICE YEAR	Amount
361.10	Greenwood Village Area Sanitary Sewer 8,10	198001	2,551,667
361.10	Forest Heights (72 units) Sanitary Sewer 8	197901	406,913
361.10	Sanitary Sewer Realignment LR 73- Route 8 Sanitary Sewer 8	198501	52,227
361.10	Sanitary Sewer Replacement Elm Street and Third Street Sanitary Sewer 12	198601	84,952
361.10	Sanitary Sewer Replacement Elm Street and Third Street Sanitary Sewer 16	198601	7,701
361.10	Sanitary Sewer Construction Brown, Morton, Whippo and White Avenues Sanitary Sewer 8	199101	100,430
361.10	Sanitary Sewer Construction Brown, Morton, Whippo and White Avenues Sanitary Sewer 6	199101	10,646
361.10	Alva Hill Subdivision Sanitary Sewer 8	199301	31,427
361.10	Clearview Meadows Sanitary Sewer 8	199301	18,278
361.10	Deer Run Plan Sanitary Sewer 8	199301	113,434
361.10	Hillcrest Townhomes Sanitary Sewer 8	199301	16,205
361.10	Ietto Estate Ph 3 Sanitary Sewer 8	199301	30,009
361.10	Moraine Commons Sanitary Sewer 8	199301	89,535
361.10	Moraine Pointe Plaza Sanitary Sewer 8	199301	163,739
361.10	Southgate Ph 1 Sanitary Sewer 8	199301	67,383
361.10	Stirling Glen Ph 2 Sanitary Sewer 8	199301	88,880
361.10	Timberidge Ph 6 Sanitary Sewer 8	199301	103,394
361.10	Pullman Center Sanitary Sewer 8-10	199301	125,328
361.10	Carriage Place Sanitary Sewer 8	199401	78,711
361.10	Coretsky Subdivision Sanitary Sewer 8	199401	27,050
361.10	Musko Subdivision Sanitary Sewer 8	199401	4,820
361.10	Sunrise Village Sanitary Sewer 8	199401	17,013
361.10	Timberidge Ph 7 Sanitary Sewer 8	199401	84,778
361.10	Heather Drive Sewer Extension Sanitary Sewer 8	199401	259,807
361.10	Bean Street Sewer Project Sanitary Sewer 8	199701	155,387
361.10	Emily Brittain School Sewer Sanitary Sewer 8	199701	41,478
361.10	East Jefferson Street Sewer Project Sanitary Sewer 8	199901	33,046
361.10	Heartland Estates Ph 2 Sanitary Sewer 8	199901	43,524
361.10	Highfield Youth Baseball Association Sanitary Sewer 8	200001	40,615
361.10	Highfield Youth Baseball Association Sanitary Sewer 6	200001	8,249
361.10	Hidden Meadows Sanitary Sewer 8	200001	162,691
361.10	Kovach Subdivision Sanitary Sewer 8	200001	9,695
361.10	Stone Ridge Estates Ph 2 Sanitary Sewer 8	200001	34,668
361.10	Heartland Estates Ph 2B Sanitary Sewer 8	200101	37,782
361.10	Sullivan Run Interceptor Realignment Sanitary Sewer 27	200201	40,946
361.10	Blossom Ridge Sanitary Sewer 8	200201	45,390
361.10	Meridian Pines Ph 1 Sanitary Sewer 8	200201	17,455
361.10	Ken Fab and Weld Sanitary Sewer 8	200201	26,053
361.10	Meadowview Sanitary Sewer 8	200201	8,684
361.10	Shady Lane Farms Ph 1 Sanitary Sewer 8	200201	84,121
361.10	Stratford Heights Ph I-II Sanitary Sewer 8	200201	187,747
361.10	Diehl Automotive Sanitary Sewer 8	200301	10,708
361.10	Sheetz (Ritenour) Sanitary Sewer 8	200301	27,772
361.10	Shady Farms Ph II and IV Sanitary Sewer 8	200301	56,156
361.10	Cherrywood Springs Sanitary Sewer 8	200401	117,965
361.10	Butler Commons Sanitary Sewer 6	200401	103,605
361.10	Butler Commons Sanitary Sewer 8	200401	34,535
361.10	Meridian Pines Ph 2 Sanitary Sewer 8	200401	81,772
361.10	Heartland Estates Ph 2C Sanitary Sewer 8	200401	23,887
361.10	Pine Needles Estates Sanitary Sewer 8	200501	7,229
361.10	Sugar Creek- gravity Sanitary Sewer 8	200501	104,604
361.10	Sanitary Sewer Relocation- Washington Street Crossover Sanitary Sewer 8	200601	89,688
361.10	Fairways at Krendale Ph1 Sanitary Sewer 8	200601	63,987
361.10	Meridian Pines Ph 3 Sanitary Sewer 8	200601	16,306
361.10	Afton Residential Development Sanitary Sewer 8	200601	59,833
361.10	Ritenour Commercial Dev. Ph 1 Sanitary Sewer 8	200601	44,998
361.10	Joseph Gray Residential Development Sanitary Sewer 8	200601	10,152
361.10	Cedarwood- Butler Crossing Sanitary Sewer 8	200701	138,041
361.10	Gatto Subdivision Sanitary Sewer 8	200801	10,096
361.10	Wyncrest Estates Sanitary Sewer 8	200801	110,352
361.10	Bessemer Alton Storm and Sanitary Sewer Sanitary Sewer 8	200901	209,191
361.10	Comer Subdivision Sanitary Sewer 8	200901	26,855
361.10	Dutchtown Road Sanitary Sewer Project Sanitary Sewer 8	201001	73,452
361.10	Pullman Center Business Park- gravity Sanitary Sewer 8	201001	149,537
361.10	ED Elliot Plan Sanitary Sewer 8	201001	23,591

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Utility Account	LONG DESCRIPTION	ENG IN SERVICE YEAR	Amount
361.10	Fairways at Krendale Ph 2 Sanitary Sewer 8	201101	17,503
361.10	CSR Development Sanitary Sewer 8	201201	40,946
361.10	Ballpark Pipelines and Appurtenances Sanitary Sewer 48	201301	97,059
361.10	Monroe Pipelines and Appurtenances Sanitary Sewer 18	201301	38,072
361.10	Monroe Pipelines and Appurtenances Sanitary Sewer 24	201301	269,860
361.10	Sullivan Run Interceptor Improvements Sanitary Sewer 36	201401	1,821,429
361.10	Sullivan Run Interceptor Improvements Sanitary Sewer 24	201401	2,340,724
361.10	Sheetz Store 217R Sanitary Sewer 8	201501	19,887
361.10	Jefferson Street Sewer and Siphon Replacement Sanitary Sewer 48	201601	7,227
361.10	Jefferson Street Sewer and Siphon Replacement Sanitary Sewer 30	201601	164,727
361.10	Jefferson Street Sewer and Siphon Replacement Sanitary Sewer 24	201601	4,251
361.10	Jefferson Street Sewer and Siphon Replacement Sanitary Sewer 15	201601	77,514
361.10	Jefferson Street Sewer and Siphon Replacement Sanitary Sewer 8	201601	63,975
361.10	Jefferson Street Sewer and Siphon Replacement Sanitary Sewer -	201601	225,715
361.10	Zeigler Avenue PS Replacement GRAVITY Sanitary Sewer 8	201601	26,058
361.10	Negley Avenue PS Replacement GRAVITY Sanitary Sewer 24	201801	39,276
361.10	Negley Avenue PS Replacement GRAVITY Sanitary Sewer 15	201801	32,153
361.10	Negley Avenue PS Replacement GRAVITY Sanitary Sewer 8	201801	41,610
361.10	VA Butler Healthcare Facility Sanitary Sewer 8	201801	31,687
361.10	Duffy Highlands Ph 1 Sanitary Sewer 8	202001	193,587
361.10	Autumn Woods Ph 1 Sanitary Sewer 8	202101	51,050
361.10	The Villas at Forest Oaks Sanitary Sewer 8	202101	235,189
361.10	Highfield Trails Ph 1 Sanitary Sewer 8	202201	347,569
361.10	Rehabilitation of Westwood Manor 1 Sewer Rehab 8	200001	41,331
361.10	Rehabilitation of Westwood Manor 3 Sewer Rehab 8	200201	298,325
361.10	Rehabilitation of Cunningham Street Sewer Rehab 8	200701	52,972
361.10	Rehabilitation of Cunningham Street Sewer Rehab 12	200701	37,282
361.10	Old Deshon Sewer Rehab Sewer Rehab 8-18	200701	5,498,333
361.10	NW Area Sanitary Sewer Rehabilitation Project Sewer Rehab 12	201201	98,601
361.10	NW Area Sanitary Sewer Rehabilitation Project Sewer Rehab 8	201201	2,961,126
361.10	NW Area Sanitary Sewer Rehabilitation Project Sewer Rehab 6	201201	17,115
361.10	Butcher Run Interceptor Improvements Sewer Rehab 12	201201	655,906
361.10	Sullivan Run Interceptor Improvements Sewer Rehab 18	201401	184,316
361.10	Negley Avenue PS Replacement GRAVITY Sewer Rehab 15	201801	90,191
361.10	Upper Sullivan Run Sewer Rehab Sewer Rehab 8	201801	217,872
361.10	Upper Sullivan Run Sewer Rehab Sewer Rehab 12	201801	15,305
361.10	Center Ave Sewer Repair Sewer Rehab 16	201901	113,847
361.10	2020-2021 CAP Sewer Rehab (to date) Sewer Rehab 8	202201	5,059
361.10	Original Manholes Manholes	192801	134,791
361.10	Original Manholes Manholes	193501	143,738
361.10	Original Manholes Manholes	194501	185,255
361.10	Meadowood Area Manholes	195401	140,254
361.10	Original Manholes Manholes	195501	408,634
361.10	Original Manholes Manholes	196001	622,658
361.10	Main interceptor, Lyndora siphon, ARMCO siphon, main siphon Manholes	196301	109,628
361.10	Interceptor Sewers and Force mains Manholes	196401	44,964
361.10	Interceptor Sewer in Tunnel Manholes	196401	274,483
361.10	Hull Plan Sewers Manholes	196501	22,526
361.10	24" Sewer on West Penn Street Manholes	196501	3,606
361.10	Route 8 main interceptor Manholes	196701	27,873
361.10	Route 8 main interceptor extension Manholes	196701	12,937
361.10	Connoquenessing interceptor Manholes	197001	20,850
361.10	Fifth Street interceptor Manholes	197001	19,380
361.10	Three Degree Road Sewer Manholes	197001	18,052
361.10	North Butler Area Sewers Manholes	197001	223,046
361.10	Alameda Road Sewer Manholes	197201	6,454
361.10	Construction of 1,210 feet of 8-inch San Sewer on Schaffner Road Manholes	197301	4,943
361.10	Construction of 879 feet of 10-inch San Sewer on Home Avenue Manholes	197301	8,307
361.10	North Butler Interceptor Sewers Manholes	197901	245,774
361.10	Lick Hill Area Sewers Manholes	197901	221,982
361.10	Bessmer Main Manholes	197901	270,915
361.10	Northvue Force main Manholes	197901	3,275
361.10	Windward Heights, Timberly Heights, Rt 308, Northvue Farms, Drainage Areas Manholes	197901	603,574
361.10	Spring Run, Hull Plan Drainage Areas Manholes	197901	353,522
361.10	East Butler Service Area Manholes	197901	296,153

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361.10	East Butler Service Area Manholes	197901	292,555
361.10	Forest Heights (72 units) Manholes	197901	56,162
361.10	Beech Road Sewers Manholes	198001	177,403
361.10	Butcher Run Sewers Manholes	198001	486,147
361.10	Deshon Service Area and Forcemains Manholes	198001	181,747
361.10	Sullivan Run Drainage Area Manholes	198001	618,054
361.10	Crooked Run Drainage Area Manholes	198001	498,041
361.10	Mercer Road Area Manholes	198001	315,976
361.10	Meridian Service Area Manholes	198001	584,760
361.10	Meridian Service Area Manholes	198001	340,993
361.10	Meridian Service Area Manholes	198001	260,902
361.10	Greenwood Village Area Manholes	198001	396,407
361.10	Sanitary Sewer Realignment LR 73- Route 9 Manholes	198501	33,787
361.10	Sanitary Sewer Replacement Elm Street and Third Street Manholes	198601	9,077
361.10	Sanitary Sewer Construction Brown, Morton, Whippo and White Avenues Manholes	199101	15,569
361.10	Alva Hill Subdivision Manholes	199301	6,368
361.10	Clearview Meadows Manholes	199301	4,776
361.10	Deer Run Plan Manholes	199301	12,735
361.10	Hillcrest Townhomes Manholes	199301	4,776
361.10	Ietto Estate Ph 3 Manholes	199301	4,776
361.10	Moraine Commons Manholes	199301	11,143
361.10	Moraine Pointe Plaza Manholes	199301	27,061
361.10	Southgate Ph 1 Manholes	199301	6,368
361.10	Stirling Glen Ph 2 Manholes	199301	12,735
361.10	Timberidge Ph 6 Manholes	199301	15,919
361.10	Pullman Center Manholes	199301	17,510
361.10	Carriage Place Manholes	199401	11,249
361.10	Coretsky Subdivision Manholes	199401	3,215
361.10	Musko Subdivision Manholes	199401	1,607
361.10	Sunrise Village Manholes	199401	1,607
361.10	Timberidge Ph 7 Manholes	199401	12,856
361.10	Heather Drive Sewer Extension Manholes	199401	24,348
361.10	Bean Street Sewer Project Manholes	199701	25,814
361.10	Emily Brittain School Sewer Manholes	199701	8,006
361.10	East Jefferson Street Sewer Project Manholes	199901	7,730
361.10	Heartland Estates Ph 2 Manholes	199901	7,135
361.10	Highfield Youth Baseball Association Manholes	200001	22,364
361.10	Hidden Meadows Manholes	200001	5,894
361.10	Kovach Subdivision Manholes	200001	8,257
361.10	Stone Ridge Estates Ph 2 Manholes	200001	9,246
361.10	Heartland Estates Ph 2B Manholes	200101	30,965
361.10	Sullivan Run Interceptor Realignment Manholes	200201	10,371
361.10	Meridian Pines Ph 1 Manholes	200201	5,612
361.10	Ken Fab and Weld Manholes	200201	12,950
361.10	Meadowview Manholes	200201	17,735
361.10	Shady Lane Farms Ph 1 Manholes	200201	48,938
361.10	Stratford Heights Ph I-II Manholes	200201	4,041
361.10	Sheetz (Ritenour) Manholes	200301	23,488
361.10	Shady Farms Ph II and IV Manholes	200301	427,476
361.10	Deshon/Meridian Area Manhole Raising Rehab	200301	28,934
361.10	Cherrywood Springs Manholes	200401	89,351
361.10	Butler Commons Manholes	200401	13,702
361.10	Meridian Pines Ph 2 Manholes	200401	8,033
361.10	Heartland Estates Ph 2C Manholes	200401	359,089
361.10	Upper Sullivan Run Manhole Raising Rehab	200401	232,761
361.10	Lower Sullivan Run Manhole Raising Rehab	200401	1,142
361.10	Pine Needles Estates Manholes	200501	29,356
361.10	Sugar Creek Manholes	200501	9,413
361.10	Sanitary Sewer Relocation- Washington Street Crossover Manholes	200601	9,094
361.10	Fairways at Krendale Ph1 Manholes	200601	2,577
361.10	Meridian Pines Ph 3 Manholes	200601	10,523
361.10	Ritenour Commercial Dev. Ph 1 Manholes	200601	2,768
361.10	Joseph Gray Residential Development Manholes	200601	33,070
361.10	Cedarwood- Butler Crossing Manholes	200701	3,040
361.10	Gatto Subdivision Manholes	200801	33,341

Pennsylvania-American Water Company - BASA WW Operations
Plant Assets - Acquisition

Utility Account	LONG DESCRIPTION	ENG IN SERVICE YEAR	Amount
361.10	Wyncrest Estates Manholes	200801	45,033
361.10	Bessemer Alton Storm and Sanitary Sewer Manholes	200901	3,034
361.10	Comer Subdivision Manholes	200901	8,496
361.10	Dutchtown Road Sanitary Sewer Project Manholes	201001	50,584
361.10	Pullman Center Business Park Manholes	201001	2,962
361.10	ED Elliot Plan Manholes	201001	2,962
361.10	Fairways at Krendale Ph 2 Manholes	201101	337,671
361.10	NW Area Sanitary Sewer Rehabilitation Project Rehab	201201	66,614
361.10	Butcher Run Interceptor Improvements Rehab	201201	420,402
361.10	Sullivan Run Interceptor Improvements Rehab	201401	13,547
361.10	Sheetz Store 217R Manholes	201501	36,333
361.10	Jefferson Street Sewer and Siphon Replacement Manholes	201601	30,864
361.10	Zeigler Avenue PS Replacement GRAVITY Manholes	201601	73,518
361.10	Negley Avenue PS Replacement GRAVITY Manholes	201801	1,155
361.10	Upper Sullivan Run Sewer Rehab Rehab	201801	61,517
361.10	Upper Sullivan Run Sewer Rehab Ph 2 Rehab	201901	62,631
361.10	Duffy Highlands Ph 1 Manholes	202001	16,567
361.10	Autumn Woods Ph 1 Manholes	202101	38,389
361.10	The Villas at Forest Oaks Manholes	202101	103,023
361.10	Highfield Trails Ph 1 Manholes	202201	4,960
361.10	2020-2021 CAP Sewer Rehab (to date) Rehab	202201	215,015
363.00	Original laterals Sanitary Sewer Service Connection	193001	491,061
363.00	Original laterals Sanitary Sewer Service Connection	193501	531,892
363.00	Original laterals Sanitary Sewer Service Connection	194501	463,988
363.00	Meadowood Area Sanitary Sewer Service Connection	195401	97,456
363.00	Original laterals Sanitary Sewer Service Connection	195501	654,661
363.00	Original laterals Sanitary Sewer Service Connection	196001	801,518
363.00	Hull Plan Sewers Sanitary Sewer Service Connection	196501	13,107
363.00	24" Sewer on West Penn Street Sanitary Sewer Service Connection	196501	2,593
363.00	Route 8 main interceptor Sanitary Sewer Service Connection	196701	3,005
363.00	Route 8 main interceptor extension Sanitary Sewer Service Connection	196701	877
363.00	Butler County Community College Sanitary Sewer Service Connection	196901	87,022
363.00	Connoquenessing interceptor Sanitary Sewer Service Connection	197001	1,154
363.00	Fifth Street interceptor Sanitary Sewer Service Connection	197001	2,476
363.00	North Butler Area Sewers Sanitary Sewer Service Connection	197001	117,241
363.00	Alameda Road Sewer Sanitary Sewer Service Connection	197201	1,350
363.00	Construction of 879 feet of 10-inch San Sewer on Home Avenue Sanitary Sewer Service Connection	197301	4,567
363.00	1980s expansion service connections Sanitary Sewer Service Connection	198001	4,307,071
363.00	Forest Heights (72 units) Sanitary Sewer Service Connection	197901	22,149
363.00	Sanitary Sewer Realignment LR 73- Route 10 Sanitary Sewer Service Connection	198501	682
363.00	Sanitary Sewer Replacement Elm Street and Third Street Sanitary Sewer Service Connection	198601	3,729
363.00	Sanitary Sewer Construction Brown, Morton, Whippo and White Avenues Sanitary Sewer Service Connection	199101	6,196
363.00	Alva Hill Subdivision Sanitary Sewer Service Connection	199301	2,174
363.00	Clearview Meadows Sanitary Sewer Service Connection	199301	6,522
363.00	Deer Run Plan Sanitary Sewer Service Connection	199301	19,025
363.00	Hillcrest Townhomes Sanitary Sewer Service Connection	199301	5,436
363.00	Ietto Estate Ph 3 Sanitary Sewer Service Connection	199301	4,893
363.00	Moraine Commons Sanitary Sewer Service Connection	199301	543
363.00	Moraine Pointe Plaza Sanitary Sewer Service Connection	199301	543
363.00	Southgate Ph 1 Sanitary Sewer Service Connection	199301	9,241
363.00	Stirling Glen Ph 2 Sanitary Sewer Service Connection	199301	10,872
363.00	Timberidge Ph 6 Sanitary Sewer Service Connection	199301	8,698
363.00	Pullman Center Sanitary Sewer Service Connection	199301	543
363.00	Carriage Place Sanitary Sewer Service Connection	199401	10,067
363.00	Coretsky Subdivision Sanitary Sewer Service Connection	199401	2,237
363.00	Musko Subdivision Sanitary Sewer Service Connection	199401	1,678
363.00	Sunrise Village Sanitary Sewer Service Connection	199401	7,830
363.00	Timberidge Ph 7 Sanitary Sewer Service Connection	199401	8,948
363.00	Heather Drive Sewer Extension Sanitary Sewer Service Connection	199401	34,377
363.00	Heather Drive Sewer Extension Sanitary Sewer Service Connection	199401	23,654
363.00	Bean Street Sewer Project Sanitary Sewer Service Connection	199701	5,026
363.00	Emily Brittain School Sewer Sanitary Sewer Service Connection	199701	6,331
363.00	East Jefferson Street Sewer Project Sanitary Sewer Service Connection	199901	8,069
363.00	Heartland Estates Ph 2 Sanitary Sewer Service Connection	199901	9,053
363.00	Hidden Meadows Sanitary Sewer Service Connection	200001	22,141

Pennsylvania-American Water Company - BASA WW Operations
Plant Assets - Acquisition

Utility Account	LONG DESCRIPTION	ENG IN SERVICE YEAR	Amount
363.00	Kovach Subdivision Sanitary Sewer Service Connection	200001	6,175
363.00	Stone Ridge Estates Ph 2 Sanitary Sewer Service Connection	200001	8,650
363.00	Heartland Estates Ph 2B Sanitary Sewer Service Connection	200101	11,450
363.00	North Main Christian School Sanitary Sewer Service Connection	200101	41,584
363.00	Ken Fab and Weld Sanitary Sewer Service Connection	200201	6,362
363.00	Meadowview Sanitary Sewer Service Connection	200201	4,454
363.00	Meridian Pines Ph 1 Sanitary Sewer Service Connection	200201	4,947
363.00	Shady Lane Farms Ph 1 Sanitary Sewer Service Connection	200201	21,091
363.00	Stratford Heights Ph I-II Sanitary Sewer Service Connection	200201	31,228
363.00	Lighthouse Foundation Sanitary Sewer Service Connection	200301	15,856
363.00	Sheetz (Ritenour) Sanitary Sewer Service Connection	200301	6,013
363.00	Shady Farms Ph II and IV Sanitary Sewer Service Connection	200301	21,175
363.00	Paraska Subdivision Sanitary Sewer Service Connection	200301	32,767
363.00	Cherrywood Springs Sanitary Sewer Service Connection	200401	32,405
363.00	Butler Commons Sanitary Sewer Service Connection	200401	5,943
363.00	Meridian Pines Ph 2 Sanitary Sewer Service Connection	200401	10,081
363.00	Heartland Estates Ph 2C Sanitary Sewer Service Connection	200401	8,142
363.00	Penn Avenue Grinder Pump Project Sanitary Sewer Service Connection	200501	24,464
363.00	Pine Needles Estates Sanitary Sewer Service Connection	200501	1,222
363.00	Sugar Creek Sanitary Sewer Service Connection	200501	11,006
363.00	Fairways at Krendale Ph1 Sanitary Sewer Service Connection	200601	12,934
363.00	Meridian Pines Ph 3 Sanitary Sewer Service Connection	200601	725
363.00	Ritenour Commercial Dev. Ph 1 Sanitary Sewer Service Connection	200601	7,666
363.00	Wash King Car Wash Sanitary Sewer Service Connection	200601	14,176
363.00	Joseph Gray Residential Development Sanitary Sewer Service Connection	200601	2,924
363.00	Cedarwood- Butler Crossing Sanitary Sewer Service Connection	200701	24,017
363.00	Wyncrest Estates Sanitary Sewer Service Connection	200801	36,808
363.00	Bessemer Alton Storm and Sanitary Sewer Sanitary Sewer Service Connection	200901	53,134
363.00	Comer Subdivision Sanitary Sewer Service Connection	200901	5,731
363.00	Dutchtown Road Sanitary Sewer Project Sanitary Sewer Service Connection	201001	17,586
363.00	Center Twp Municipal Maintenance Facility Sanitary Sewer Service Connection	201001	827
363.00	Pullman Center Business Park Sanitary Sewer Service Connection	201001	9,099
363.00	Fairways at Krendale Ph 2 Sanitary Sewer Service Connection	201101	71,089
363.00	Jefferson Street Sewer and Siphon Replacement Sanitary Sewer Service Connection	201601	53,651
363.00	Zeigler Avenue PS Replacement GRAVITY Sanitary Sewer Service Connection	201601	3,389
363.00	Duffy Highlands Ph 1 Sanitary Sewer Service Connection	202001	37,561
363.00	Autumn Woods Ph 1 Sanitary Sewer Service Connection	202101	9,612
363.00	The Villas at Forest Oaks Sanitary Sewer Service Connection	202101	227,874
363.00	Highfield Trails Ph 1 Sanitary Sewer Service Connection	202201	97,106
363.00	Rehabilitation of Westwood Manor 1 Rehabilitation	200001	34,100
363.00	Rehabilitation of Westwood Manor 3 Rehabilitation	200201	331,232
363.00	Rehabilitation of Cunningham Street Rehabilitation	200701	84,662
363.00	NW Area Sanitary Sewer Rehabilitation Project Rehabilitation	201201	34,895
363.00	NW Area Sanitary Sewer Rehabilitation Project Rehabilitation	201201	1,651,573
363.00	Butcher Run Interceptor Improvements Rehabilitation	201201	10,106
363.00	Sullivan Run Interceptor Improvements Rehabilitation	201401	377,356
363.00	Upper Sullivan Run Sewer Rehab Rehabilitation	201801	20,500
363.00	Upper Sullivan Run Sewer Rehab Ph 2 Rehabilitation	201901	128,988
363.00	2020-2021 CAP Sewer Rehab Rehabilitation	202201	25,341
364.00	Flow Meters	199901	186,148
364.00	Flow Meters	201201	40,982
363.00	Grinder Pump - 210 October Drive	201901	2,837
363.00	Grinder Pump - 212 October Drive	201901	2,837
363.00	Grinder Pump - 108 Afton Drive	202001	2,728
363.00	Grinder Pump - 331 Belmont Road	202001	2,728
363.00	Grinder Pump - 209 October Drive	202001	2,728
363.00	Grinder Pump - 323 Pleasant Avenue	202101	2,696
363.00	Grinder Pump - 168 Ambler Drive	202101	2,696
363.00	Grinder Pump - 206 October Drive	202101	2,696
363.00	Grinder Pump - 1124 N. Main Street	202101	2,696
363.00	Grinder Pump - 115 ½ Bradmoor Lane	202101	2,696
363.00	Grinder Pump - 1723 N. Main Street	202101	2,696
363.00	Grinder Pump - 211 October Drive	202101	2,696
363.00	Grinder Pump - 422 Evans City Road	202101	2,696
363.00	Grinder Pump - 203 October Drive	202101	2,696

Pennsylvania-American Water Company - BASA WW Operations
Plant Assets - Acquisition

Utility Account	LONG DESCRIPTION	ENG IN SERVICE YEAR	Amount
363.00	Grinder Pump - 170 Ambler Drive	202101	2,696
363.00	Grinder Pump - 172 Ambler Drive	202101	2,696
390.20	Office Equipment - TAMERSON003	201501	78
390.20	Office Equipment - MBRESNAHAN001	201701	132
390.20	Office Equipment - DMIKE02	201701	132
390.20	Office Equipment - VFERDERBER02	201701	132
390.20	Office Equipment - RFINK03	201801	572
390.20	Office Equipment - LAB003	201701	132
390.20	Office Equipment - BMCKINNEY02	202001	390
390.20	Office Equipment - MMILLER01	202001	390
390.20	Office Equipment - EVANO-LAPTOP	202001	530
390.20	Office Equipment - SOLIDS01	201701	132
390.20	Office Equipment - LABOFFICE001	202101	252
390.20	Office Equipment - SECURITYSYS	201701	132
390.20	Office Equipment - WSLAGLE03	201801	572
390.20	Office Equipment - MSPOHN003	201601	107
390.20	Office Equipment - KHAY002	201501	78
390.20	Office Equipment - SPITZER02	202001	390
390.20	Office Equipment - OPERATORS02	201801	167
390.20	Office Equipment - RDIBIASE001	202101	252
390.20	Office Equipment - BASA-LAPTOP-AGE	202201	1,185
390.20	Office Equipment - FLOMO-LAPTOP2	201801	887
390.20	Office Equipment - BASA-LAPTOP	201901	309
390.20	Office Equipment - ENGINEERINGAREA	202101	252
390.20	Office Equipment - SCADA-1	202101	252
390.20	Office Equipment - SPITZER02	201501	78
390.20	Office Equipment - EVANO001	201501	78
390.20	Office Equipment - HVAC-DESKTOP	201501	78
390.20	Office Equipment - LAB02	201501	78
390.20	Office Equipment - SOLIDS01	201501	78
390.20	Office Equipment - BMCKINNEY01	201501	78
390.00	Office Equipment - BASAHOST	202101	9,982
390.20	Office Equipment - Xerox Altalink 8030	201801	4,384
390.20	Office Equipment - Lanier MPC 4502	201301	3,595
390.20	Office Equipment - Oce Colorwave 300 Plotter	201101	4,069
390.20	Office Equipment - Canon ImageCLASS MF264DW	201801	225
390.20	Office Equipment - Brother MFC-8890DW	201801	225
390.20	Office Equipment - HP Lasejet 6700 Premium	201801	225
390.20	Office Equipment - Brother HL-L8260CDW	202201	373
390.20	Office Equipment - HP Laserjet Pro MFP M180nw	201801	225
390.20	Office Equipment - HP Laserjet Pro MFP M180nw	201801	225
390.20	Office Equipment - Brother Printer 2360DW	202001	257
390.20	Office Equipment - Brother Printer 2370DW	202101	282
390.20	Office Equipment - Brother Printer HL-L6200DW	202201	354
390.00	Office Equipment - PFE 1190 Burster	202101	1,301
390.00	Office Equipment - Neopost Ds-40i Envelope Stuffer	201901	5,874
390.00	Office Equipment - Quadient A0002360 Mail Opener	202201	2,247
391.00	Ford F350 Super Duty 4x4 Pickup Truck (Maint #2)	200901	5,678
391.00	Ford E350 Econoline Sewer TV Van	201101	45,202
391.00	Ford Ranger Super Cab 4x4 Pickup Truck	201101	7,226
391.00	Ford E350 Econoline SD Cargo Van (Dye Test 2)	201201	9,267
391.00	Ford F350 Service Body Truck (Pump Stations)	201201	14,974
391.00	Ford F250 Super Duty 4x4 Ext. Cab Pickup Truck	201201	11,584
391.00	Ford 250 Locating Truck	201401	13,200
391.00	Ford Explorer (Engineering)	201701	21,090
391.00	Ford 350 Sewer Maint. (Brian)	201801	31,291
391.00	Ford Transit Van (Dye Test 1)	201901	27,597
391.00	Ford Super Duty	202001	28,977
391.00	Ford Super Duty, F-350	202201	37,903
391.00	Ford Transit (Realty Van)	202201	38,351
391.00	Ford Ranger (Sewer crew Superintendent)	202301	34,290
391.00	Ford Ranger (Locating)	202301	34,290
391.00	International 4400 Aluminum Body Dump Truck	201101	32,396
391.00	Ford F450 4x2 Aluminum Body Dump Truck	201101	15,304
391.00	Ford F550 Service Body Truck (Maintenance)	201101	27,055

Pennsylvania-American Water Company - BASA WW Operations
Plant Assets - Acquisition

Utility Account	LONG DESCRIPTION	ENG IN SERVICE YEAR	Amount
395.00	Ford Louisville LT8501 Vactor Truck	199701	39,446
395.00	Western Star 4700SF Vactor Truck	202101	454,246
395.00	John Deere Model 310SE Backhoe	200001	14,848
395.00	Viking Dye Testing Trailer	200101	1,862
395.00	Forest River Enclosed TV Trailer	200101	470
395.00	Viking Fender Model Tag Equipment Trailer	201101	2,556
395.00	John Deere Front Loader 624D	199301	18,226
395.00	John Deere Skid Steer Loader 426D	201201	17,571
395.00	Kubota Compact Excavator	201101	20,033
395.00	John Deere Gator Utility Vehicle	201201	9,344
395.00	Godwin pump on trailer	201501	35,871
395.00	Toyota Forklift Model 8FGU25	201801	25,317
395.00	E-Z GO RXV Electric Golf Cart	201901	7,665
395.00	Polaris Ranger SP 570 (R23MAA57B1)	202301	11,523
395.00	PowerBoss Model SW9XV Sweeper	199201	6,491
395.00	John Deere Model 326D Skid Steer Loader	201201	17,571
395.00	John Deere Model XUV 825i Gator ATV	201401	14,465
		Total	$228,000,000

Pennsylvania-American Water Company - Brentwood WW Operations
Plant Additions and Retirements By Month
July 2023 to June 2024

Additions

Project Number	Project Title	Utility Account	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	2024 Total
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.10										$63,540	$28,240	$56,480	$148,260
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10										1,350	600	1,200	3,150
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10										5,940	2,640	5,280	13,860
R24-##F1	Manholes - Replaced	361.20										12,870	5,720	11,440	30,030
R24-##H1	Laterals - Replaced	363.00										2,340	1,040	2,080	5,460
R24-##K1	ITS Equipment and Systems	390.00										450	200	400	1,050
R24-##O1	Transportation Equipment and Vehicles	391.00										6,300	2,800	5,600	14,700
R24-##P1	Tools and Equipment	393.00										4,500	2,000	4,000	10,500
			$0	$0	$0	$0	$0	$0	$0	$0	$0	$97,290	$43,240	$86,480	$227,010

Pennsylvania-American Water Company - Brentwood WW Operations
Plant Additions and Retirements By Month
July 2023 to June 2024

Retirements

Project Number	Project Title	Utility Account	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	2024 Total
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.10										$6,732	$2,992	$5,984	$15,708
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10										143	64	127	334
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10										629	280	559	1,468
R24-##F1	Manholes - Replaced	361.20										1,364	606	1,212	3,182
R24-##H1	Laterals - Replaced	363.00										248	110	220	578
R24-##K1	ITS Equipment and Systems	390.00										48	21	42	111
R24-##P1	Tools and Equipment	393.00										477	212	424	1,112
			$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,640	$4,285	$8,569	$22,494

Pennsylvania-American Water Company - Brentwood WW Operations
Plant Additions and Retirements By Month
July 2024 to June 2025

Additions

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.10	$63,540	$70,600	$105,900	$105,900	$105,900	$105,900	$31,770	$38,830	$52,950	$52,950	$88,250	$88,250	$910,740
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10	1,350	1,500	2,250	2,250	2,250	2,250	675	825	1,125	1,125	1,875	1,875	19,350
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10	5,940	6,600	9,900	9,900	9,900	9,900	2,970	3,630	4,950	4,950	8,250	8,250	85,140
R24-##F1	Manholes - Replaced	361.20	12,870	14,300	21,450	21,450	21,450	21,450	6,435	7,865	10,725	10,725	17,875	17,875	184,470
R24-##H1	Laterals - Replaced	363.00	2,340	2,600	3,900	3,900	3,900	3,900	1,170	1,430	1,950	1,950	3,250	3,250	33,540
R24-##K1	ITS Equipment and Systems	390.00	450	500	750	750	750	750							3,950
R24-##O1	Transportation Equipment and Vehicles	391.00	6,300	7,000	10,500	10,500	10,500	10,500							55,300
R24-##P1	Tools and Equipment	393.00	4,500	5,000	7,500	7,500	7,500	7,500	450	550	750	750	1,250	1,250	44,500
I24-XXXXXX	MH4200 Collection systemproject	361.10												1,296,500	1,296,500
I24-XXXXXX	MH8900 Collection system project	361.10												851,000	851,000
			$97,290	$108,100	$162,150	$162,150	$162,150	$162,150	$43,470	$53,130	$72,450	$72,450	$120,750	$2,268,250	$3,484,490

Pennsylvania-American Water Company - Brentwood WW Operations
Plant Additions and Retirements By Month
July 2024 to June 2025

Retirements

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
R24-##B1	Collection Sewers Gravity Mains - Replaced/Restored	361.10	$6,732	$7,480	$11,220	$11,220	$11,220	$11,220	$3,366	$4,114	$5,610	$5,610	$9,350	$9,350	$96,493
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10	143	159	238	238	238	238	72	87	119	119	199	199	2,050
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10	629	699	1,049	1,049	1,049	1,049	315	385	524	524	874	874	9,021
R24-##F1	Manholes - Replaced	361.20	1,364	1,515	2,273	2,273	2,273	2,273	682	833	1,136	1,136	1,894	1,894	19,545
R24-##H1	Laterals - Replaced	363.00	248	275	413	413	413	413	124	152	207	207	344	344	3,554
I24-XXXXXX	MH4200 Collection systemproject	361.10	0	0	0	0	0	0	0	0	0	0	0	137,364	137,364
I24-XXXXXX	MH8900 Collection system project	361.10	0	0	0	0	0	0	0	0	0	0	0	90,163	90,163
			$9,116	$10,129	$15,193	$15,193	$15,193	$15,193	$4,558	$5,571	$7,597	$7,597	$12,661	$240,189	$358,189

Pennsylvania-American Water Company - Brentwood WW Operations
Plant Assets - Acquisition

Utility Account	Description	In Service Year	Amount
353.20	Easement - 3940 Edge Rd	199801	899
353.20	Easement - 4010 Edge Rd	199801	899
353.20	Easement - 3970 Edge Rd	199801	899
353.20	Easement - 3954 Edge Rd	199801	899
353.20	Easement - 3944 Edge Rd	199801	899
353.20	Easement - 3950 Edge Rd	199801	899
353.20	Easement - 4020 Edge Rd	199801	899
353.20	Easement - 3966 Edge Rd	199801	899
353.20	Easement - 4016 Edge Rd	199801	899
353.20	Easement - 3960 Edge Rd	199801	899
353.20	Easement - Lot 16 Colonial Park	200101	899
353.20	Easement - Lot 15 Colonial Park	200101	899
353.20	Easement - Lot 14 Colonial Park	200101	899
353.20	Easement - Lot 18 Colonial Park	200101	899
353.20	Easement - Lot 17 Colonial Park	200101	899
353.20	Easement - 4110 Tuxey Ave	200401	899
353.20	Easement - 4114 Tuxey Ave	200401	899
353.20	Easement - 4116 Tuxey Ave	200401	899
353.20	Easement - 4120 Tuxey Ave	200401	899
353.20	Easement - 3312 Shadyway Dr	200501	899
353.20	Easement - 3338 Shadyway Dr	200501	899
353.20	Easement - 425 E Garden Rd	200501	899
353.20	Easement - 217 Burdine Ave	200501	899
353.20	Easement - 3310 Brownsville Rd	200501	899
353.20	Easement - 3500 Brownsville Rd	200501	899
353.20	Easement - 3340 Shadyway Dr	200501	899
353.20	Easement - 3311 Villawood Ave	200501	899
353.20	Easement - 451 E Garden Rd	200501	899
353.20	Easement - 3330 Willett Ave	200501	899
353.20	Easement - 3316 Willett Ave	200501	899
353.20	Easement - 3242 Willett Ave	200501	899
353.20	Easement - 437 E Garden Rd	200501	899
353.20	Easement - 4080 Edge Rd	200501	899
353.20	Easement - 445 E Garden Rd	200501	899
353.20	Easement - 441 E Garden Rd	200501	899
353.20	Easement - 3316 Shadyway Dr	200501	899
361.10	8" Cast Iron Gravity Collection Sewer	197101	18,493
361.10	8" Ductile Iron Gravity Collection Sewer	199101	68,299
361.10	8" Polyvinyl Chloride Gravity Collection Sewer	198201	63,421
361.10	8" Polyvinyl Chloride Gravity Collection Sewer	199101	79,897
361.10	8" Polyvinyl Chloride Gravity Collection Sewer	200201	45,275
361.10	8" Polyvinyl Chloride Gravity Collection Sewer	200301	100,785
361.10	8" Polyvinyl Chloride Gravity Collection Sewer	200401	123,071
361.10	8" Polyvinyl Chloride Gravity Collection Sewer	200501	7,071
361.10	8" Polyvinyl Chloride Gravity Collection Sewer	200601	628,522
361.10	8" Polyvinyl Chloride Gravity Collection Sewer	200701	920,059

Pennsylvania-American Water Company - Brentwood WW Operations
Plant Assets - Acquisition

Utility Account	Description	In Service Year	Amount
361.10	8" Polyvinyl Chloride Gravity Collection Sewer	200801	584,327
361.10	8" Polyvinyl Chloride Gravity Collection Sewer	201201	65,975
361.10	8" Polyvinyl Chloride Gravity Collection Sewer	201401	21,299
361.10	10" Polyvinyl Chloride Gravity Collection Sewer	199101	13,792
361.10	10" Polyvinyl Chloride Gravity Collection Sewer	200301	166,857
361.10	10" Polyvinyl Chloride Gravity Collection Sewer	200601	130,049
361.10	10" Polyvinyl Chloride Gravity Collection Sewer	200701	82,546
361.10	10" Polyvinyl Chloride Gravity Collection Sewer	200801	51,999
361.10	12" Polyvinyl Chloride Pipe Gravity Collection Sewer	200501	17,696
361.10	12" Polyvinyl Chloride Pipe Gravity Collection Sewer	200701	22,294
361.10	15" Polyvinyl Chloride Pipe Gravity Collection Sewer	200101	29,353
361.10	15" Polyvinyl Chloride Pipe Gravity Collection Sewer	200501	90,560
361.10	15" Polyvinyl Chloride Pipe Gravity Collection Sewer	200601	15,847
361.10	6" Vitrified Clay Gravity Collection Sewer	193001	267
361.10	8" Vitrified Clay Gravity Collection Sewer - Relined	191901	67,055
361.10	8" Vitrified Clay Gravity Collection Sewer - Relined	192001	422,889
361.10	8" Vitrified Clay Gravity Collection Sewer - Relined	192401	38,162
361.10	8" Vitrified Clay Gravity Collection Sewer - Relined	192701	1,270,918
361.10	8" Vitrified Clay Gravity Collection Sewer - Relined	192901	210,039
361.10	8" Vitrified Clay Gravity Collection Sewer	192901	1,187,833
361.10	8" Vitrified Clay Gravity Collection Sewer	193001	2,778,739
361.10	8" Vitrified Clay Gravity Collection Sewer	193801	318,065
361.10	8" Vitrified Clay Gravity Collection Sewer	194501	8,795
361.10	8" Vitrified Clay Gravity Collection Sewer	194601	25,571
361.10	8" Vitrified Clay Gravity Collection Sewer	194701	19,152
361.10	8" Vitrified Clay Gravity Collection Sewer	194801	48,262
361.10	8" Vitrified Clay Gravity Collection Sewer	194901	78,169
361.10	8" Vitrified Clay Gravity Collection Sewer	195001	91,332
361.10	8" Vitrified Clay Gravity Collection Sewer	195201	43,550
361.10	8" Vitrified Clay Gravity Collection Sewer	195801	129,033
361.10	8" Vitrified Clay Gravity Collection Sewer	196101	19,319
361.10	8" Vitrified Clay Gravity Collection Sewer	196301	13,973
361.10	8" Vitrified Clay Gravity Collection Sewer	196401	3,933
361.10	8" Vitrified Clay Gravity Collection Sewer	196601	57,378
361.10	8" Vitrified Clay Gravity Collection Sewer	197101	12,462
361.10	8" Vitrified Clay Gravity Collection Sewer	197201	8,881
361.10	8" Vitrified Clay Gravity Collection Sewer	199101	590,173
361.10	10" Vitrified Clay Gravity Collection Sewer	192701	100,747
361.10	10" Vitrified Clay Gravity Collection Sewer	192901	130,378
361.10	10" Vitrified Clay Gravity Collection Sewer	193001	535,509
361.10	10" Vitrified Clay Gravity Collection Sewer	196101	6,995
361.10	10" Vitrified Clay Gravity Collection Sewer	199101	47,693
361.10	12" Vitrified Clay Gravity Collection Sewer	192701	20,819
361.10	12" Vitrified Clay Gravity Collection Sewer	193001	535,906
361.10	12" Vitrified Clay Gravity Collection Sewer	196101	22,175
361.10	12" Vitrified Clay Gravity Collection Sewer	196301	30,269

Pennsylvania-American Water Company - Brentwood WW Operations
Plant Assets - Acquisition

Utility Account	Description	In Service Year	Amount
361.10	12" Vitrified Clay Gravity Collection Sewer	199001	1,099,236
361.10	15" Vitrified Clay Gravity Collection Sewer	192701	7,038
361.10	15" Vitrified Clay Gravity Collection Sewer	192901	54,424
361.10	15" Vitrified Clay Gravity Collection Sewer	193001	286,278
361.10	15" Vitrified Clay Gravity Collection Sewer	195801	11,779
361.10	15" Vitrified Clay Gravity Collection Sewer	196201	3,041
361.10	15" Vitrified Clay Gravity Collection Sewer	197101	48,697
361.10	18" Vitrified Clay Gravity Collection Sewer	192001	10,090
361.10	18" Vitrified Clay Gravity Collection Sewer	193001	14,845
361.20	Manhole Structures 0-8' Deep	192701	8,983
361.20	Manhole Structures 0-8' Deep	192901	42,553
361.20	Manhole Structures 0-8' Deep	193001	103,152
361.20	Manhole Structures 0-8' Deep	193801	10,403
361.20	Manhole Structures 0-8' Deep	194501	637
361.20	Manhole Structures 0-8' Deep	194601	641
361.20	Manhole Structures 0-8' Deep	194701	3,453
361.20	Manhole Structures 0-8' Deep	194801	7,391
361.20	Manhole Structures 0-8' Deep	194901	11,161
361.20	Manhole Structures 0-8' Deep	195001	9,767
361.20	Manhole Structures 0-8' Deep	195201	3,362
361.20	Manhole Structures 0-8' Deep	195801	13,425
361.20	Manhole Structures 0-8' Deep	196101	4,180
361.20	Manhole Structures 0-8' Deep	196201	1,080
361.20	Manhole Structures 0-8' Deep	196301	1,138
361.20	Manhole Structures 0-8' Deep	196401	2,359
361.20	Manhole Structures 0-8' Deep	196601	7,562
361.20	Manhole Structures 0-8' Deep	197201	3,115
361.20	Manhole Structures 0-8' Deep	199101	32,097
361.20	Manhole Structures 0-8' Deep	200301	12,929
361.20	Manhole Structures 0-8' Deep	200401	7,065
361.20	Manhole Structures 0-8' Deep	201901	4,985
361.20	Manhole Structures 0-8' Deep	202001	18,799
361.20	Manhole Structures 0-8' Deep	202201	17,981
361.20	Manhole Structures 8-12' Deep	192701	27,286
361.20	Manhole Structures 8-12' Deep	192901	31,742
361.20	Manhole Structures 8-12' Deep	193001	77,312
361.20	Manhole Structures 8-12' Deep	193801	6,683
361.20	Manhole Structures 8-12' Deep	194501	1,501
361.20	Manhole Structures 8-12' Deep	194601	755
361.20	Manhole Structures 8-12' Deep	194801	3,482
361.20	Manhole Structures 8-12' Deep	194901	1,878
361.20	Manhole Structures 8-12' Deep	195001	4,793
361.20	Manhole Structures 8-12' Deep	195201	990
361.20	Manhole Structures 8-12' Deep	195801	2,259
361.20	Manhole Structures 8-12' Deep	196101	3,692
361.20	Manhole Structures 8-12' Deep	196201	1,272

Pennsylvania-American Water Company - Brentwood WW Operations
Plant Assets - Acquisition

Utility Account	Description	In Service Year	Amount
361.20	Manhole Structures 8-12' Deep	196301	2,681
361.20	Manhole Structures 8-12' Deep	196601	1,484
361.20	Manhole Structures 8-12' Deep	197101	5,098
361.20	Manhole Structures 8-12' Deep	199101	40,711
361.20	Manhole Structures 8-12' Deep	200301	22,841
361.20	Manhole Structures 8-12' Deep	200401	16,641
361.20	Manhole Structures 8-12' Deep	200601	69,749
361.20	Manhole Structures 8-12' Deep	200701	281,077
361.20	Manhole Structures 8-12' Deep	200801	158,523
361.20	Manhole Structures 8-12' Deep	201101	120,823
361.20	Manhole Structures 8-12' Deep	201201	25,899
361.20	Manhole Structures 8-12' Deep	201301	42,410
361.20	Manhole Structures 8-12' Deep	201401	92,485
361.20	Manhole Structures 8-12' Deep	201501	11,041
361.20	Manhole Structures 8-12' Deep	201601	5,586
361.20	Manhole Structures 8-12' Deep	201701	22,625
361.20	Manhole Structures 12-16' Deep	192701	5,768
361.20	Manhole Structures 12-16' Deep	192901	5,768
361.20	Manhole Structures 12-16' Deep	193001	13,317
361.20	Manhole Structures 12-16' Deep	194601	1,739
361.20	Manhole Structures 12-16' Deep	194801	1,002
361.20	Manhole Structures 12-16' Deep	194901	4,323
361.20	Manhole Structures 12-16' Deep	196601	1,708
361.20	Manhole Structures 12-16' Deep	199101	23,428
361.20	Manhole Structures 12-16' Deep	200301	30,672
361.20	Manhole Structures 12-16' Deep	201301	74,488
361.20	Manhole Structures 12-16' Deep	201401	55,059
361.20	Manhole Structures 12-16' Deep	202001	11,978
361.20	Manhole Structures 12-16' Deep	202201	63,907
361.20	Manhole Structures Over 16' Deep	192701	2,564
361.20	Manhole Structures Over 16' Deep	192901	3,846
361.20	Manhole Structures Over 16' Deep	193001	4,237
361.20	Manhole Structures Over 16' Deep	193801	641
361.20	Manhole Structures Over 16' Deep	196101	2,834
361.20	Manhole Structures Over 16' Deep	196301	1,543
361.20	Manhole Structures Over 16' Deep	197101	7,825
361.20	Manhole Structures Over 16' Deep	199101	20,081
361.20	Manhole Structures Over 16' Deep	200401	9,577
361.20	Manhole Structures Over 16' Deep	201801	45,870
361.10	Manhole to Manhole Liner Replacement	200501	215,236
361.10	Manhole to Manhole Liner Replacement	200701	265,834
361.10	Manhole to Manhole Liner Replacement	201001	61,058
361.10	Manhole to Manhole Liner Replacement	201201	249,029
361.10	Manhole to Manhole Liner Replacement	201301	126,677
361.10	Manhole to Manhole Liner Replacement	201401	62,458
361.10	Manhole to Manhole Liner Replacement	201501	307,284

Pennsylvania-American Water Company - Brentwood WW Operations
Plant Assets - Acquisition

Utility Account	Description	In Service Year	Amount
361.10	Manhole to Manhole Liner Replacement	201701	436,240
361.10	Manhole to Manhole Liner Replacement	201801	197,738
361.10	Manhole to Manhole Liner Replacement	201901	243,672
361.10	Manhole to Manhole Liner Replacement	202001	97,439
361.10	Manhole to Manhole Liner Replacement	202101	80,546
363.00	Service Laterals	191901	13,880
363.00	Service Laterals	192001	75,654
363.00	Service Laterals	192401	5,587
363.00	Service Laterals	192701	191,649
363.00	Service Laterals	192901	222,542
363.00	Service Laterals	193001	481,930
363.00	Service Laterals	193801	40,853
363.00	Service Laterals	194501	4,102
363.00	Service Laterals	194601	7,243
363.00	Service Laterals	194701	2,955
363.00	Service Laterals	194801	17,258
363.00	Service Laterals	194901	25,998
363.00	Service Laterals	195001	17,428
363.00	Service Laterals	195201	7,195
363.00	Service Laterals	195801	16,249
363.00	Service Laterals	196101	6,549
363.00	Service Laterals	196201	1,724
363.00	Service Laterals	196301	3,364
363.00	Service Laterals	196401	1,096
363.00	Service Laterals	196601	3,611
363.00	Service Laterals	197101	5,830
363.00	Service Laterals	197201	918
363.00	Service Laterals	199101	88,693
363.00	Service Laterals	200301	24,490
363.00	Service Laterals	200401	15,603
363.00	Service Laterals	201501	7,019
363.00	Service Laterals	201601	24,992
363.00	Service Laterals	201701	34,928
363.00	Service Laterals	201801	10,343
363.00	Service Laterals	201901	13,163
363.00	Service Laterals	202001	20,795
363.00	Service Laterals	202101	27,461
363.00	Service Laterals	202201	6,692
	Total		$19,364,443

Pennsylvania-American Water Company - Wastewater CSS Operations
Plant Additions and Retirements By Month
July 2023 to June 2024

Additions

Project Number	Project Title	Utility Account	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	2024 Total
R24-##A1	Collection Sewers Force Mains - New	360.10				$5,000			$672	$1,080	$680	$1,688	$1,688	$2,642	$13,450
R24-##A1	Collection Sewers Gravity Mains - New	361.10				95,000			12,777	20,519	12,921	32,071	32,071	50,199	255,557
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.10	1,639,374	1,664,193	1,751,993	2,583,119	2,897,261	2,631,691	1,003,281	1,112,847	1,437,505	1,383,370	693,705	404,740	19,203,077
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	360.10	1,141,707	1,158,992	1,220,138	1,798,958	2,017,735	1,832,785	698,713	775,019	1,001,120	963,418	483,116	281,873	13,373,572
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.20	146,373	148,589	156,428	230,636	258,684	234,972	89,579	99,361	128,349	123,515	61,938	36,138	1,714,560
R24-##C1	Collection Sewers Force Mains - Unscheduled	360.10	9,657	10,835	10,377	9,285	9,143	9,784	10,519	9,597	6,706	8,575	10,533	12,074	117,085
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10	183,483	205,870	197,162	176,414	173,715	185,896	199,860	182,336	127,419	162,932	200,120	229,399	2,224,606
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10							2,274	42,423	36,638	15,037	76,780	47,474	220,625
R24-##E1	Manholes - New	361.10	7,036	6,523	6,138	5,327	5,782	6,380	992	634	1,201	624	1,007	854	42,498
R24-##E1	Manholes - New	361.20	28,129	26,080	24,542	21,296	23,118	25,508	3,967	2,535	4,801	2,497	4,025	3,412	169,909
R24-##F1	Manholes - Replaced	361.10	10,595	12,942	12,575	31,811	16,487	16,434	520	529	674	819	904	1,042	105,332
R24-##F1	Manholes - Replaced	361.20	121,847	148,834	144,616	365,823	189,600	188,989	5,980	6,080	7,754	9,418	10,398	11,978	1,211,316
R24-##G1	Laterals - New	363.00	16,468	20,840	22,199	20,133	16,253	13,956	18,962	12,622	20,975	13,378	16,216	20,120	212,122
R24-##H1	Laterals - Replaced	361.10	6,133	6,130	6,100	6,444	6,669	6,410	2,729	2,576	2,619	2,806	3,240	3,511	55,369
R24-##H1	Laterals - Replaced	363.00	300,528	300,379	298,918	315,779	326,759	314,066	133,729	126,244	128,351	137,508	158,779	172,061	2,713,103
R24-##N1	Offices and Operations Centers	354.20			55,000	99,000	13,750	220,000	9,443	7,913	8,007	12,697	17,557	20,269	463,637
R24-##N1	Offices and Operations Centers	390.00			23,000	41,400	5,750	92,000	3,949	3,309	3,348	5,310	7,342	8,476	193,884
R24-##N1	Offices and Operations Centers	397.00			20,000	36,000	5,000	80,000	3,434	2,878	2,912	4,617	6,384	7,371	168,595
R24-##N1	Offices and Operations Centers	354.40			2,000	3,600	500	8,000	343	288	291	462	638	737	16,860
R24-##O1	Transportation Equipment and Vehicles	391.00		115,000	200,000			80,000							395,000
R24-##P1	Tools and Equipment	354.20	6,000	1,600			800	9,000	573	704	917	858	931	924	22,307
R24-##P1	Tools and Equipment	380.00	6,000	1,600			800	9,000	573	704	917	858	931	924	22,307
R24-##P1	Tools and Equipment	396.00	24,000	6,400			3,200	36,000	2,293	2,816	3,666	3,434	3,723	3,697	89,228
R24-##P1	Tools and Equipment	397.00	18,000	4,800			2,400	27,000	1,719	2,112	2,750	2,575	2,792	2,772	66,921
R24-##P1	Tools and Equipment	391.00	42,000	11,200			5,600	63,000	4,012	4,927	6,416	6,009	6,514	6,469	156,148
R24-##P1	Tools and Equipment	393.00	204,000	54,400			27,200	306,000	19,487	23,933	31,164	29,188	31,641	31,421	758,435
R24-##Q1	Process Plant Facilities and Equipment	354.20	8,000	2,800	12,000	11,200	75,200	159,200	10,123	6,563	8,929	10,488	12,189	10,520	327,212
R24-##Q1	Process Plant Facilities and Equipment	354.30	1,000	350	1,500	1,400	9,400	19,900	1,265	820	1,116	1,311	1,524	1,315	40,901
R24-##Q1	Process Plant Facilities and Equipment	380.00	57,000	19,950	85,500	79,800	535,800	1,134,300	72,125	46,763	63,616	74,730	86,844	74,958	2,331,385
R24-##Q1	Process Plant Facilities and Equipment	371.10	22,000	7,700	33,000	30,800	206,800	437,800	27,838	18,049	24,553	28,843	33,519	28,931	899,833
R24-##Q1	Process Plant Facilities and Equipment	390.00	5,000	1,750	7,500	7,000	47,000	99,500	6,327	4,102	5,580	6,555	7,618	6,575	204,507
R24-##Q1	Process Plant Facilities and Equipment	397.00	1,000	350	1,500	1,400	9,400	19,900	1,265	820	1,116	1,311	1,524	1,315	40,901
R24-##Q1	Process Plant Facilities and Equipment	393.00	1,000	350	1,500	1,400	9,400	19,900	1,265	820	1,116	1,311	1,524	1,315	40,901
R24-##Q1	Process Plant Facilities and Equipment	394.00	1,000	350	1,500	1,400	9,400	19,900	1,265	820	1,116	1,311	1,524	1,315	40,901
R24-##Q1	Process Plant Facilities and Equipment	371.20	4,000	1,400	6,000	5,600	37,600	79,600	5,061	3,282	4,464	5,244	6,094	5,260	163,606
I24-120012	Replace Glenn Avenue Pump Station	371.00						905,319							905,319
I24-120020	McKe - White St Interceptor Replacement	361.00					1,028,409								1,028,409
I24-120020	McKe - White St Interceptor Replacement	362.00					1,028,409								1,028,409
I24-120021	DQSN-Wylie Ave 60" Rehabilitation	361.00						750,000							750,000
I24-120021	DQSN-Wylie Ave 60" Rehabilitation	362.00						250,000							250,000
I24-120022	MCKE - Ravine St 72" Rehabilitation	361.00						7,000,000							7,000,000
I24-190001	Kane WW - Pine St. WWTP	354.00						425,833							425,833
I24-190001	Kane WW - Pine St. WWTP	355.00						141,944							141,944
I24-190001	Kane WW - Pine St. WWTP	380.00						2,271,109							2,271,109
I24-190002	Kane WW LS Improvements: SR 66 & Pond St	354.00						1,842,128							1,842,128
I24-190002	Kane WW LS Improvements: SR 66 & Pond St	371.00						614,043							614,043
I24-920024	Building Improvements	354.00						11,376,047							11,376,047
I24-920024-02	Scranton WW Building Improvements phase II	354.00	45,657												45,657
I24-920037	Outfalls #004, 031, & 032	362.00						4,212,821							4,212,821
I24-920039	Scranton WWTP CSO 003 Flow Metering	354.00						1,522,624							1,522,624
			$4,056,987	$3,940,206	$4,301,187	$5,985,023	$9,003,025	$39,698,738	$2,356,914	$2,526,025	$3,089,707	$3,054,772	$1,985,330	$1,492,081	$81,489,995

Pennsylvania-American Water Company - Wastewater CSS Operations
Plant Additions and Retirements By Month
July 2023 to June 2024

Retirements

Project Number	Project Title	Utility Account	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	2024 Total
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.10	$178,650	$181,355	$190,923	$281,495	$315,728	$286,788	$109,332	$121,272	$156,652	$150,752	$75,596	$44,106	$2,092,649
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	360.10	124,417	126,301	132,964	196,041	219,882	199,727	76,142	84,457	109,097	104,988	52,647	30,717	1,457,381
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.20	15,951	16,192	17,047	25,133	28,190	25,606	9,762	10,828	13,987	13,460	6,750	3,938	186,844
R24-##C1	Collection Sewers Force Mains - Unscheduled	360.10	1,052	1,181	1,131	1,012	996	1,066	1,146	1,046	731	934	1,148	1,316	12,759
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10	19,995	22,435	21,486	19,225	18,931	20,258	21,780	19,870	13,885	17,755	21,808	24,999	242,426
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10	0	0	0	0	0	0	248	4,623	3,993	1,639	8,367	5,173	24,043
R24-##F1	Manholes - Replaced	361.10	1,155	1,410	1,370	3,467	1,797	1,791	57	58	73	89	99	114	11,478
R24-##F1	Manholes - Replaced	361.20	13,278	16,219	15,759	39,865	20,662	20,595	652	663	845	1,026	1,133	1,305	132,003
R24-##H1	Laterals - Replaced	361.10	668	668	665	702	727	698	297	281	285	306	353	383	6,034
R24-##H1	Laterals - Replaced	363.00	32,750	32,734	32,575	34,412	35,609	34,225	14,573	13,757	13,987	14,985	17,303	18,750	295,660
R24-##N1	Offices and Operations Centers	354.20	0	0	5,994	10,788	1,498	23,974	1,029	862	873	1,384	1,913	2,209	50,525
R24-##N1	Offices and Operations Centers	354.40	0	0	218	392	54	872	37	31	32	50	70	80	1,837
R24-##O1	Transportation Equipment and Vehicles	391.00	0	12,532	21,795	0	0	8,718	0	0	0	0	0	0	43,045
R24-##P1	Tools and Equipment	354.20	654	174	0	0	87	981	62	77	100	94	101	101	2,431
R24-##P1	Tools and Equipment	380.00	654	174	0	0	87	981	62	77	100	94	101	101	2,431
R24-##P1	Tools and Equipment	391.00	4,577	1,221	0	0	610	6,865	437	537	699	655	710	705	17,016
R24-##Q1	Process Plant Facilities and Equipment	354.20	872	305	1,308	1,221	8,195	17,349	1,103	715	973	1,143	1,328	1,146	35,658
R24-##Q1	Process Plant Facilities and Equipment	354.30	109	38	163	153	1,024	2,169	138	89	122	143	166	143	4,457
R24-##Q1	Process Plant Facilities and Equipment	380.00	6,212	2,174	9,317	8,696	58,389	123,610	7,860	5,096	6,932	8,144	9,464	8,169	254,062
R24-##Q1	Process Plant Facilities and Equipment	371.10	2,397	839	3,596	3,356	22,536	47,709	3,034	1,967	2,676	3,143	3,653	3,153	98,059
R24-##Q1	Process Plant Facilities and Equipment	371.20	436	153	654	610	4,097	8,674	552	358	486	571	664	573	17,829
I24-120012	Replace Glenn Avenue Pump Station	371.00	0	0	0	0	0	98,657	0	0	0	0	0	0	98,657
I24-120020	McKe - White St Interceptor Replacement	361.00	0	0	0	0	112,071	0	0	0	0	0	0	0	112,071
I24-120020	McKe - White St Interceptor Replacement	362.00	0	0	0	0	112,071	0	0	0	0	0	0	0	112,071
I24-120021	DQSN-Wylie Ave 60" Rehabilitation	361.00	0	0	0	0	0	81,731	0	0	0	0	0	0	81,731
I24-120021	DQSN-Wylie Ave 60" Rehabilitation	362.00	0	0	0	0	0	27,244	0	0	0	0	0	0	27,244
I24-120022	MCKE - Ravine St 72" Rehabilitation	361.00	0	0	0	0	0	762,823	0	0	0	0	0	0	762,823
I24-190001	Kane WW - Pine St. WWTP	354.00	0	0	0	0	0	46,405	0	0	0	0	0	0	46,405
I24-190001	Kane WW - Pine St. WWTP	355.00	0	0	0	0	0	15,468	0	0	0	0	0	0	15,468
I24-190001	Kane WW - Pine St. WWTP	380.00	0	0	0	0	0	247,493	0	0	0	0	0	0	247,493
I24-190002	Kane WW LS Improvements: SR 66 & Pond St	354.00	0	0	0	0	0	200,745	0	0	0	0	0	0	200,745
I24-190002	Kane WW LS Improvements: SR 66 & Pond St	371.00	0	0	0	0	0	66,915	0	0	0	0	0	0	66,915
I24-920024	Building Improvements	354.00	0	0	0	0	0	1,239,701	0	0	0	0	0	0	1,239,701
I24-920037	Outfalls #004, 031, & 032	362.00	0	0	0	0	0	459,091	0	0	0	0	0	0	459,091
			$403,827	$416,105	$456,964	$626,568	$963,240	$4,078,930	$248,303	$266,664	$326,527	$321,356	$203,374	$147,181	$8,459,041

Pennsylvania-American Water Company - Wastewater CSS Operations
Plant Additions and Retirements By Month
July 2024 to June 2025

Additions

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.10	$393,849	$335,145	$219,524	$230,904	$223,087	$228,477	$320,994	$444,836	$496,462				$2,893,278
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	360.10	288,724	245,689	160,929	169,272	163,541	167,492	235,315	326,102	363,947	468,161	529,456	528,053	3,646,682
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.20	35,165	29,924	19,600	20,616	19,918	20,400	28,660	39,718	44,327	57,020	64,485	64,314	444,147
R24-##C1	Collection Sewers Force Mains - Unscheduled	360.10	21,571	17,195	12,747	13,788	11,609	17,534	15,719	14,228	16,524	17,713	15,101	16,642	190,372
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10	300,936	269,021	242,617	250,099	208,933	311,136	286,665	269,141	301,029	336,541	286,925	316,204	3,379,246
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10	172,027	66,535	35,127	65,550	77,781	77,771	39,532	43,623	49,559	40,297	76,780	81,154	825,734
R24-##D1	Collection Sewers Force Mains - Relocated	360.10										737	4,392	3,894	9,023
R24-##E1	Manholes - New	361.10	21,552	18,431	12,320	13,354	12,838	13,039	17,887	24,722	27,330	15,073	84,685	75,294	336,525
R24-##E1	Manholes - New	361.20	3,292	3,167	3,062	4,801	4,384	4,053	3,967	5,234	4,801	4,296	4,924	5,212	51,193
R24-##F1	Manholes - Replaced	361.10	1,174	1,289	1,368	1,347	1,226	967	887	1,035	1,134	34,876	39,414	39,314	124,033
R24-##F1	Manholes - Replaced	361.20	15,356	16,394	16,769	16,579	15,148	12,200	11,714	13,991	15,380	17,546	19,518	19,509	190,104
R24-##G1	Laterals - New	363.00	23,842	22,292	22,676	25,487	19,942	23,488	18,962	12,622	20,975	23,740	26,578	27,028	267,631
R24-##H1	Laterals - Replaced	361.10	3,672	3,801	3,514	3,720	3,460	3,874	2,729	4,381	4,575	643,382	727,578	725,785	2,130,470
R24-##H1	Laterals - Replaced	363.00	179,922	186,236	172,206	182,296	169,539	189,804	133,729	214,684	224,161	233,318	261,959	267,871	2,415,724
R24-##N1	Offices and Operations Centers	354.40	1,150	1,538	1,736	1,979	2,136	2,776	563	728	1,171	1,341	1,738	1,759	18,617
R24-##P1	Tools and Equipment	354.20	31,635	42,300	47,751	54,426	58,754	76,336	15,491	20,010	32,200				378,903
R24-##P1	Tools and Equipment	396.00	3,174	2,702	2,705	3,148	3,457	7,260	2,818	3,341	4,192	4,485	4,774	5,273	47,328
R24-##P1	Tools and Equipment	397.00										3,364	3,580	3,955	10,899
R24-##P1	Tools and Equipment	391.00	5,554	4,728	4,733	5,509	6,050	12,705	4,932	5,847	7,336	7,849	8,354	9,228	82,825
R24-##Q1	Process Plant Facilities and Equipment	354.20	14,756	27,872	27,558	31,424	29,205	33,682	17,083	18,033	25,616	61,011	73,691	78,992	438,923
R24-##Q1	Process Plant Facilities and Equipment	354.30	1,745	3,400	3,360	3,830	3,543	3,983	2,047	2,150	3,071	2,875	3,087	3,661	36,752
R24-##Q1	Process Plant Facilities and Equipment	380.00	100,280	194,448	192,208	219,077	202,791	228,867	117,401	123,370	176,093	164,994	177,181	209,991	2,106,699
R24-##Q1	Process Plant Facilities and Equipment	371.10	38,398	74,789	73,924	84,252	77,937	87,634	45,041	47,294	67,561	63,249	67,925	80,540	808,545
R24-##Q1	Process Plant Facilities and Equipment	390.00	21,956	34,687	36,770	41,908	42,283	51,839	16,715	19,116	28,820	29,802	35,426	38,539	397,860
R24-##Q1	Process Plant Facilities and Equipment	397.00	15,629	20,808	22,753	25,982	27,500	37,187	9,794	11,932	17,924	16,290	20,469	21,256	247,523
R24-##Q1	Process Plant Facilities and Equipment	393.00	28,722	26,367	26,350	30,587	32,929	65,694	26,001	30,550	38,702	40,997	43,663	48,482	439,044
R24-##Q1	Process Plant Facilities and Equipment	394.00	1,745	3,400	3,360	3,830	3,543	3,983	2,047	2,150	3,071	2,875	3,087	3,661	36,752
R24-##Q1	Process Plant Facilities and Equipment	371.20	6,981	13,598	13,441	15,319	14,170	15,933	8,189	8,599	12,284	11,500	12,350	14,644	147,008
I24-120023	Chlorine Gas Conversion - Duquesne WWTP	380.00												2,975,000	2,975,000
I24-12XX09	Duquesne Two Clarifiers Rehabilitation - First Clarifier	380.00												1,210,000	1,210,000
I24-190005	Kane WW: Kinzua WWTP Solids Handling	380.00												1,050,000	1,050,000
I24-920024-02	Scranton WW Building Improvements phase II	354.00						10,000,000							10,000,000
I24-920036	Scranton WW Emergency Generator	355.00												4,200,000	4,200,000
I24-920038	Outfall #006 - Gardner Avenue	362.00						12,500,000							12,500,000
I24-920042	CSO Outfall Access and Safety Improvements	362.00					1,150,000								1,150,000
I24-920045	CSO 19 and 20 Lackawanna/Linden Valving Reconfiguration	354.00												550,000	550,000
I24-920045	CSO 19 and 20 Lackawanna/Linden Valving Reconfiguration	362.00												550,000	550,000
			$1,732,810	$1,665,754	$1,379,109	$1,519,083	$2,585,706	$24,198,115	$1,384,883	$1,707,435	$1,988,242	$2,303,331	$2,597,120	$13,225,254	$56,286,842

Pennsylvania-American Water Company - Wastewater CSS Operations
Plant Additions and Retirements By Month
July 2024 to June 2025

Retirements

Project Number	Project Title	Utility Account	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	2025 Total
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.10	$58,391	$49,688	$32,546	$34,233	$33,074	$33,874	$47,590	$65,951	$73,604	$94,681	$107,077	$106,793	$737,502
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	360.10	42,806	36,425	23,859	25,096	24,246	24,832	34,887	48,347	53,958	69,409	78,496	78,288	540,650
R24-##B1	Collection Sewers Force Mains - Replaced/Restored	361.20	5,488	4,670	3,059	3,217	3,109	3,184	4,473	6,198	6,918	8,899	10,064	10,037	69,314
R24-##C1	Collection Sewers Force Mains - Unscheduled	360.10	2,348	2,099	1,893	1,952	1,630	2,428	2,237	2,100	2,349	2,626	2,239	2,467	26,368
R24-##C1	Collection Sewers Gravity Mains - Unscheduled	361.10	44,616	39,884	35,970	37,079	30,976	46,128	42,500	39,902	44,630	49,895	42,539	46,880	501,000
R24-##D1	Collection Sewers Gravity Mains - Relocated	361.10	9,357	1,311	5,271	7,957	9,807	8,266	4,082	6,290	5,432	5,974	11,383	12,032	87,162
R24-##F1	Manholes - Replaced	361.10	3,247	2,806	1,916	2,002	1,923	1,926	2,636	3,625	4,042	188	208	208	24,726
R24-##F1	Manholes - Replaced	361.20	2,002	2,197	2,333	2,297	2,090	1,650	1,513	1,764	1,934	2,156	2,391	2,391	24,719
R24-##H1	Laterals - Replaced	361.10	544	563	521	552	513	574	405	650	678	5,689	6,428	6,431	23,549
R24-##H1	Laterals - Replaced	363.00	26,675	27,611	25,531	27,027	25,136	28,140	19,826	31,829	33,234	34,591	38,838	39,714	358,151
R24-##N1	Offices and Operations Centers	354.40	171	228	257	293	317	412	84	108	174	199	258	261	2,760
R24-##P1	Tools and Equipment	354.20	4,690	6,271	7,080	8,069	8,711	11,317	2,297	2,967	4,774	-	-	-	56,175
R24-##P1	Tools and Equipment	391.00	823	701	702	817	897	1,884	731	867	1,088	1,164	1,239	1,368	12,279
R24-##Q1	Process Plant Facilities and Equipment	354.20	2,188	4,132	4,086	4,659	4,330	4,994	2,533	2,674	3,798	9,045	10,925	11,711	65,074
R24-##Q1	Process Plant Facilities and Equipment	354.30	259	504	498	568	525	591	304	319	455	426	458	543	5,449
R24-##Q1	Process Plant Facilities and Equipment	380.00	14,867	28,828	28,496	32,480	30,065	33,931	17,406	18,291	26,107	24,462	26,268	31,133	312,335
R24-##Q1	Process Plant Facilities and Equipment	371.10	5,693	11,088	10,960	12,491	11,555	12,992	6,678	7,012	10,016	9,377	10,070	11,941	119,873
R24-##Q1	Process Plant Facilities and Equipment	371.20	1,035	2,016	1,993	2,271	2,101	2,362	1,214	1,275	1,821	1,705	1,831	2,171	21,795
I24-120023	Chlorine Gas Conversion - Duquesne WWTP	380.00	-	-	-	-	-	-	-	-	-	-	-	441,068	441,068
I24-12XX09	Duquesne Two Clarifiers Rehabilitation - First Clarifier	380.00	-	-	-	-	-	-	-	-	-	-	-	179,392	179,392
I24-190005	Kane WW: Kinzua WWTP Solids Handling	380.00	-	-	-	-	-	-	-	-	-	-	-	155,671	155,671
I24-920038	Outfall #006 - Gardner Avenue	362.00	-	-	-	-	-	1,853,226	-	-	-	-	-	-	1,853,226
I24-920042	CSO Outfall Access and Safety Improvements	362.00	-	-	-	-	170,497	-	-	-	-	-	-	-	170,497
			$225,201	$221,025	$186,971	$203,059	$361,501	$2,072,710	$191,395	$240,166	$275,012	$320,486	$350,711	$1,140,499	$5,788,735

Excluded Property

Reference PAWC Exhibit 3-A

Regarding the Company's deduction for Excluded Propoerty - $1,558,014

Excluded property:

White Deer Creek Filter Plant 1981 $942,914

Per PUC Order R-832511 7/20/1984 (pg 7) & Commonwealth Court Decision

Berwick (Nescopeck Bridge Crossing) 1981 &1982 $180,764
PUC Audit Recommendation (pg 22)

Contractor Retentions – AFUDC 1990-1993 $434,336
Per PUC Order R-932670 7/21/94 & Recommended Decision (pg 15)

Materials and Supplies

Pennsylvania-American Water Company - Water Operations
Material and Supplies
For the Period of June 2022 - June 2023

Account #	Description	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Average
15110000	Inventory - Plant Material	17,122,704	18,225,000	17,660,739	18,482,174	18,337,261	17,780,528	17,393,591	17,842,697	18,136,653	18,708,110	18,647,517	19,066,575	21,308,515	$18,362,466
15130000	Inventory - Chemicals	2,241,225	2,420,775	2,376,067	2,749,827	2,879,611	2,849,312	2,889,401	3,128,144	3,297,608	3,193,375	3,239,734	3,258,749	3,225,038	2,903,759
15140000	Inventory - Other Materials & Supplies	811,505	874,551	770,702	407,119	314,571	216,943	392,132	304,226	134,859	501,078	629,437	722,469	613,771	514,874
		$20,175,434	$21,520,326	$20,807,507	$21,639,120	$21,531,443	$20,846,783	$20,675,124	$21,275,068	$21,569,119	$22,402,563	$22,516,688	$23,047,792	$25,147,324	$21,781,099

Pennsylvania-American Water Company - Wastewater SSS General Operations
Material and Supplies
For the Period of June 2022 - June 2023

Account #	Description	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Average
15110000	Inventory - Plant Material	$187,980	$197,366	$191,905	$191,504	$191,504	$190,920	$190,724	$190,207	$190,007	$165,396	$177,446	$213,527	$211,821	$191,562
15130000	Inventory - Chemicals	211,456	216,680	211,956	210,122	330,123	329,593	337,914	182,455	251,208	199,663	214,513	263,464	269,773	248,378
		$399,436	$414,046	$403,861	$401,626	$521,627	$520,513	$528,638	$372,662	$441,215	$365,059	$391,959	$476,991	$481,594	$439,941

Pennsylvania-American Water Company - BASA WW Operations
Material and Supplies

	Average Wastewater SSS M&S	# of Wastewater SSS Customers	M&S Per Customer (Col.1 / Col. 2)	# of BASA WW Customers	BASA WW M&S (Col. 3 * Col.4)
	$439,941	55,222	$7.97	14,755	$117,597
TOTAL	$439,941				$117,597

Pennsylvania-American Water Company - Brentwood WW Operations
Material and Supplies

	Average Wastewater SSS M&S	# of Wastewater SSS Customers	M&S Per Customer (Col.1 / Col. 2)	# of Brentwood WW Customers	Brentwood WW M&S (Col. 3 * Col.4)
	$439,941	55,222	$7.97	3,974	$31,673
TOTAL	$439,941				$31,673

Pennsylvania-American Water Company - Wastewater CSS Operations
Material and Supplies
For the Period of June 2022 - June 2023

Account #	Description	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Average
15110000	Inventory - Plant Material	$330,054	$330,500	$331,353	$260,029	$259,334	$257,936	$256,782	$246,727	$245,593	$241,067	$258,007	$237,043	$237,043	$268,574
15130000	Inventory - Chemicals	185,676	213,200	208,796	238,393	250,711	241,006	240,713	272,712	275,519	261,312	185,796	173,461	161,765	223,774
		$515,730	$543,701	$540,149	$498,421	$510,045	$498,942	$497,495	$519,439	$521,112	$502,379	$443,803	$410,504	$398,808	$492,348

Acquisition Adjustments

Pennsylvania American Water Company
Water Operations

	Amortization Period (Years)[1]	Balance 12/31/2022	R-2020-3019369 Annual Amortization	R-2022-3031672 Annual Amortization	Amortization 2023*		Adjustment to Balance		Balance 6/30/2023	Balance 6/30/2024	7/31/2024 July Amortization 2024	Annual Amortization 2025		Balance 6/30/2025	Amortization End Date	Revised Amortization End Date
Water Operations																
Positive Utility Plant Acquisition Adjustments																
PG&W	40	$6,725,358	$455,956	$455,956	$227,978				$6,497,380	$6,041,424	$37,996	$455,956		$5,585,468	9/30/2037	
Lake Spangenberg Water Co.	2	13,707	13,709	4,569	3,046	2			10,661	6,092	381	2,856	4	3,093	12/31/2025	7/31/2026
Fernwood Community Water System	2	5,631	5,630	1,877	1,251	2			4,380	2,503	156	1,173	4	1,271	12/31/2025	7/31/2026
Olwen Heights Water Service Co.	2	5,393	5,396	1,798	1,199	2			4,194	2,396	150	1,123	4	1,217	12/31/2025	7/31/2026
Farmington Township (Water)	10	Seeking Approval								215,489		21,549	**	195,736	7/26/2034	
Audubon Water	10	Seeking Approval								7,639,771		763,977	**	6,939,459	7/26/2034	
Other Acquisition Adjustments																
Steelton Transaction Costs	10	128,505	15,898	15,898	7,949				120,556	104,658	1,325	15,898		88,760	1/28/2031	
Turbotville Water Transaction costs	10	8,742	1,082	1,082	541				8,201	7,119	90	1,082		6,037	1/28/2031	
Creekside Homeowner's Association transaction costs	10	25,807		2,581	1,075	*	11,512	3	36,244	33,663	215	3,935		29,841	1/28/2033	
Valley Township Water Transaction costs	10	212,581		21,258	8,858	*			203,723	182,465	1,772	21,258		161,207	1/28/2033	
Slibco Utilities Transactions Costs	10	47,539		4,754	1,981	*			45,558	40,804	396	4,754		36,050	1/28/2033	
Farmington Township (Water) Transactions Costs	10	Seeking Approval								54,825		5,483	**	49,799	7/26/2034	
Audubon Water Transactions Costs	10	Seeking Approval								117,954		11,795	**	107,142	7/26/2034	
Total Water Operations		**$7,173,263**	**$497,671**	**$509,773**	**$253,878**		**$11,512**		**$6,930,897**	**$14,449,163**	**$42,481**	**$1,310,839**		**$13,205,080**		

[1] Docket Nos. R-973944, R-2013-2355276, R-2017-2595853, R-2020-3019369, R-2022-3031672.
[2] Amortizations at Docket No. R-2022-3031672 amortized 5 months in 2023 and Amortizations at Docket No. R-2020-30319369 amortized 1 month.
[3] Annual Amortization adjusted for revised Balance.
[4] Amortization period extended 2 years. (Amortize balance 2 years starting 8/1/2024 to end 7/31/2026)
*New amortizations at Docket No. R-2022-3031672 amortized 5 months in 2023.
**New amortizations at Docket No. R-2023-3043189 amortized 11 months starting August 2024.

Creekside Homeowners Association, Inc.
Transaction Costs
As of June YTD 2023

Object	Document Type	Document Number	Cost Element Description	Cost Element	Description	Period	Years	Amount
B24-01-0102	SG	1011751107	Contract Services - Legal	53155000	Legal Accrual	10	2022	($600.00)
B24-01-0102	YL	1011790291	Contract Services - Legal	53155000	202100202	10	2022	841
B24-01-0102	ZI	1010999089	Regulatory Exp - Other	56670000	JANA HURST	3	2022	350
B24-01-0102	KR	1011078966	Contract Svc-Other - Natural Account	53150000		4	2022	7,949
B24-01-0102	SV	1011275093	Contract Services - Legal	53155000	Legal Accrual	5	2022	175
B24-01-0102	SG	1011278734	Contract Services - Legal	53155000	Legal Accrual	6	2022	(175)
B24-01-0102	SV	1011392675	Contract Services - Legal	53155000	Legal Accrual	6	2022	450
B24-01-0102	YL	1011338388	Contract Services - Legal	53155000	202100202	6	2022	1,067
B24-01-0102	SG	1011394494	Contract Services - Legal	53155000	Legal Accrual	7	2022	(450)
B24-01-0102	YL	1011416131	Contract Services - Legal	53155000	202100202	7	2022	384
B24-01-0102	SV	1011748162	Contract Services - Legal	53155000	Legal Accrual	9	2022	600
B24-01-0102	SV	1012200853	Contract Services - Legal	53155000	Legal Accrual	1	2023	700
B24-01-0102	SG	1012208317	Contract Services - Legal	53155000	Legal Accrual	2	2023	(700)
B24-01-0102	SV	1012311579	Contract Services - Legal	53155000	Legal Accrual	2	2023	3,765
B24-01-0102	SG	1012314608	Contract Services - Legal	53155000	Legal Accrual	3	2023	(3,765)
B24-01-0102	SV	1012430661	Contract Services - Legal	53155000	Legal Accrual	3	2023	1,350
B24-01-0102	YL	1012346328	Contract Services - Legal	53155000	202100202	3	2023	765
B24-01-0102	YL	1012365814	Contract Services - Legal	53155000	202100202	3	2023	2,343
B24-01-0102	SG	1012437097	Contract Services - Legal	53155000	Legal Accrual	4	2023	(1,350)
B24-01-0102	SV	1012544633	Contract Services - Legal	53155000	Legal Accrual	4	2023	4,838
B24-01-0102	YL	1012492198	Contract Services - Legal	53155000	202100202	4	2023	1,231
B24-01-0102	ZF	1012465470	Misc Maint Permits - Natural Account	62520800		4	2023	100
B24-01-0102	KR	1012630753	Customer Education Communication - Print	52514905		5	2023	166
B24-01-0102	SG	1012548250	Contract Services - Legal	53155000	Legal Accrual	5	2023	(4,838)
B24-01-0102	SV	1012665782	Contract Services - Legal	53155000	Legal Accrual	5	2023	2,700
B24-01-0102	YL	1012626054	Contract Services - Legal	53155000	202100202	5	2023	4,912
B24-01-0102	KR	1012667034	Customer Education Communication - Print	52514905		6	2023	35
B24-01-0102	SG	1012668864	Contract Services - Legal	53155000	Legal Accrual	6	2023	(2,700)
B24-01-0102	SV	1012788837	Contract Services - Legal	53155000	Legal Accrual	6	2023	12,000
B24-01-0102	UA	1012784525	Misc Exp (O&M) - Natural Acct	52500000	Z07 - Creekside W	6	2023	947
B24-01-0102	YL	1012713330	Contract Services - Legal	53155000	202100202	6	2023	4,230
Grand Total								$37,319 Total
								$25,807 Amount Authorized R-2022-3031672
								$11,512 Balance Adjustment

Farmington Water and Wastewater Acquisitions

Acquisition	**Water assets of Farmington Township**
Operations	Water Operations
Acquisition Docket No.	A-2023-3042567
Application of Acquisition	https://www.puc.pa.gov/pcdocs/1797695.pdf
Application Filed	August 28, 2023
Acquisition Closing	Anticipated Q2 2024
Purchase Price	$2,718,300
Total Plant in Service	$2,502,811
Utility Plant Acq. Adj. (UPAA)	$215,489
Amortization Period for UPAA	10 years
Transaction and Closing Costs Estimate	$54,825
Legal Costs included in Transaction and Closing Costs	$45,000
Amortization Period for Transaction Costs	10 years

Acquisition	**Wastewater assets of Farmington Township**
Operations	Wastewater SSS General Operations
Application Docket No.	A-2023-3042587
Application of Acquisition	https://www.puc.pa.gov/pcdocs/1797656.pdf
Application Filed	August 28, 2023
Acquisition Closing	Anticipated Q2 2024
Purchase Price	$2,826,700
Total Plant in Service	$2,826,700
Transaction and Closing Costs	$56,985
Legal Costs included in Transaction and Closing Costs	$45,000
Amortization Period for Transaction Costs	10 years

Farmington Township Water
Transaction Costs

Estimated Additional Costs to Close

Legal	$45,000
PUC/Copying/Publication	675
DOC Study	8,325
Customer Welcome Packets	825
Total Estimated Costs at Close	$54,825

Farmington Township Wastewater
Transaction Costs

Estimated Additional Costs to Close

Legal	$45,000
PUC/Copying/Publication	675
DOC Study	10,485
Customer Welcome Packets	825
Total Estimated Costs at Close	$56,985

Audubon Water Company Acquisition

Acquisition	**Audubon Water Company**
Operations	Water Operations
Acquisition Docket No.	A-2023-3043194
Application of Acquisition	https://www.puc.pa.gov/pcdocs/1799944.pdf
Application Filed	September 21, 2023
Acquisition Closing	Anticipated Q4 2024
Purchase Price	$8,000,000
Total Plant in Service	$360,229
Utility Plant Acq. Adj. (UPAA)	$7,639,771
Amortization Period for UPAA	10 years
Transaction and Closing Costs Estimate	$117,954
Estimated Legal Costs included in Transaction and Closing Costs	$105,000
Amortization Period for Transaction Costs	10 years

Audubon Water
Transaction Costs

Estimated Additional Costs to Close

Legal	$105,000
Title Insurance	3,854
Customer Welcome Packets	9,100
Total Estimated Costs at Close	$117,954

Pennsylvania American Wastewater Company
Wastewater SSS General Operations

	Amortization Period (Years)[1]	Balance 12/31/2022	R-2020-3019369 Annual Amortization	R-2022-3031672 Annual Amortization	Amortization 2023*		Balance 6/30/2023	Balance 6/30/2024	7/31/2024 July Amortization 2024	Annual Amortization 2025		Balance 6/30/2025	Amortization End Date	Revised Amortization End Date
Wastewater Operations														
Positive Utility Plant Acquisition Adjustments														
Delaware Sewer Acquisition Positive UPAA	10	$49,874	$6,170	$6,170	3,085		$46,789	$40,619	$514	$6,170		$34,449	1/28/2031	
Clean Treatment Sewage Company	2	58,782	58,782	19,594	13,063	2	45,719	26,125	1,633	12,246	3	13,267	12/31/2025	7/31/2026
Other Acquisition Adjustments														
New Cumberland Borough WW Acq. Costs	10	75,015	15,003	15,003	7,502		67,513	52,510	1,250	15,003		37,507	12/31/2027	
Sadsbury Acquisition Costs	10	211,057	26,110	26,110	13,055		198,002	171,892	2,176	26,110		145,782	1/28/2031	
Exeter Acquisition Costs	40	1,002,421	26,322	26,322	13,161		989,260	962,938	2,194	26,322		936,616	1/28/2061	
Delaware Sewer Acquisition Transaction Costs	10	216,386	32,000	26,769	13,820	2	202,566	175,797	2,231	26,769		149,028	1/28/2031	
Turbotville WW Transaction costs	10	5,332	660	660	330		5,002	4,342	55	660		3,682	1/28/2031	
Valley Township Wastewater Transaction Costs	10	202,200	-	20,220	8,425	*	193,775	173,555	1,685	20,220		153,335	1/28/2033	
Foster Township Transactions Costs	10	72,150	-	7,215	3,006	*	69,144	61,929	601	7,215		54,714	1/28/2033	
Borough of Royersford WW Acquisition Costs	10	355,962	-	35,596	14,832	*	341,130	305,534	2,966	35,596		269,938	1/28/2033	
Upper Pottsgrove Township Transaction Costs	10	373,554	-	37,355	15,565	*	357,989	320,634	3,113	37,355		283,279	1/28/2033	
City of York Wastewater Authority Acquisitions Costs	10	2,021,263	-	202,126	84,219	*	1,937,044	1,734,918	16,844	202,126		1,532,792	1/28/2033	
Sadsbury WW Transactions Costs	10	Seeking Approval						91,470		9,147	**	83,085	7/26/2034	
Farmington Township (Wastewater) Transactions Costs	10	Seeking Approval						56,985		5,699	**	51,761	7/26/2034	
Total Wastewater Operations		**$4,643,996**	**$165,047**	**$423,140**	**$190,063**		**$4,453,933**	**$4,179,248**	**$35,262**	**$430,638**		**$3,749,235**		

[1] Docket Nos. R-2013-2355276, R-2017-2595853, R-2020-3019369, and R-2022-3031672.
[2] Amortizations at Docket No. R-2022-3031672 amortized 5 months in 2023 and Amortizations at Docket No. R-2020-30319369 amortized 1 month.
[3] Amortization period extended 2 years. (Amortize balance 2 years starting 8/1/2024 to end 7/31/2026)
*New amortizations at Docket No. R-2022-3031672 amortized 5 months in 2023.
**New amortizations at Docket No. R-2023-3043189 amortized 11 months starting August 2024.

Sadsbury Township Municipal Authority Acquisition

Acquisition	**Wastewater Assets of Sadsbury Township Municipal Authority**
Operations	Wastewater SSS General Operations
Application Docket No.	A-2023-3042058
Application of Acquisition	https://www.puc.pa.gov/pcdocs/1794892.pdf
Application Filed	August 3, 2023
Acquisition Closing	Anticipated Q3 2024
Purchase Price	$990,000
Total Plant in Service	$1,935,612
Negative Utility Plant Acq. Adj. (UPAA)	$945,612
Amortization Period for UPAA	10 years
Transaction and Closing Costs Estimate	$91,470
Estimated Legal Costs included in Transaction and Closing Costs	$80,000
Amortization Period for Transaction Costs	10 years

Sadsbury Wastewater
Transaction Costs

Estimated Additional Costs to Close

Legal	$80,000
PUC/Copying/Publication	1,350
DOC Study	9,250
Customer Welcome Packets	870
Total Estimated Costs at Close	$91,470

Butler Area Sewer Authority (BASA) Acquisition

Acquisition	**Wastewater assets of the Butler Area Sewer Authority**
Operations	BASA WW Operations
Application Docket No.	A-2022-3037047
Application of Acquisition	https://www.puc.pa.gov/pcdocs/1774174.pdf
Application Filed	February 14, 2023
Acquisition Closing	Anticipated Q4 2023
Ratemaking R.B. Appr. by Settlement	$228,000,000
Transaction and Closing Costs	$1,202,635
Legal Costs included in Transaction and Closing Costs	$500,000
Amortization Period for Transaction Costs	10 years

Pennsylvania American Wastewater Company
BASA WW Operations

Other Acquisition Adjustments	Amortization Period (Years)	Balance 6/30/2024	Annual Amortization 2025	Balance 6/30/2025		Amortization End Date
BASA WW Transactions Costs	10	$1,202,635	$120,264	$1,092,393	**	7/26/2034

**New amortizations at Docket No. R-2023-3043189 amortized 11 months starting August 2024.

Butler Area Sewer Authority (BASA)
Transaction Costs
As of June YTD 2023

Object	Document Type	Document Number	Cost Element Description	Cost Element	Description	Period	Years	Amount
B24-01-0094		303285775	SCE-SVC Dir Labor CAPX (21)	95348100		2	2023	$628
B24-01-0094		303285775	SCE-SVC Gen Tax CAPX (21)	95348230		2	2023	126
B24-01-0094		303285775	SCE-SVC Group Ins CAPX (21)	95348120		2	2023	150
B24-01-0094		303285775	SCE-SVC Oth Labor CAPX (21)	95348105		2	2023	897
B24-01-0094		303285775	SCE-SVC Other Ben CAPX (21)	95348130		2	2023	121
B24-01-0094		303316801	SCE-SVC Dir Labor CAPX (21)	95348100		3	2023	(628)
B24-01-0094		303316801	SCE-SVC Gen Tax CAPX (21)	95348230		3	2023	(47)
B24-01-0094		303316801	SCE-SVC Group Ins CAPX (21)	95348120		3	2023	(62)
B24-01-0094		303316801	SCE-SVC Other Ben CAPX (21)	95348130		3	2023	(50)
B24-01-0094		303286599	SCE-SVC Gen Tax CAPX (42)	95348231	SC_CAP20230201ServCo CAPEX OH cycl	2	2023	0
B24-01-0094		303286599	SCE-SVC Group Ins CAPX (42)	95348121	SC_CAP20230201ServCo CAPEX OH cycl	2	2023	0
B24-01-0094		303286599	SCE-SVC Oth O&M CAPX (42)					12
B24-01-0094		303286599	SCE-SVC Pension CAPX (42)	95348111	SC_CAP20230201ServCo CAPEX OH cycl	2	2023	5
B24-01-0094		303286599	SCE-SVC Rents CAPX (42)	95348171	SC_CAP20230201ServCo CAPEX OH cycl	2	2023	42
B24-01-0094		303286600	SCE-SVC Group Ins CAPX (42)	95348121	SC_CAP20230201ServCo CAPEX OH cycl	2	2023	0
B24-01-0094		303286600	SCE-SVC Oth O&M CAPX (42)					5
B24-01-0094		303286600	SCE-SVC Pension CAPX (42)	95348111	SC_CAP20230201ServCo CAPEX OH cycl	2	2023	2
B24-01-0094		303286600	SCE-SVC Rents CAPX (42)	95348171	SC_CAP20230201ServCo CAPEX OH cycl	2	2023	1
B24-01-0094		303286601	SCE-SVC Oth O&M CAPX (42)					7
B24-01-0094		303286601	SCE-SVC Pension CAPX (42)	95348111	SC_CAP20230201ServCo CAPEX OH cycl	2	2023	3
B24-01-0094		303286601	SCE-SVC Rents CAPX (42)	95348171	SC_CAP20230201ServCo CAPEX OH cycl	2	2023	1
B24-01-0094		303286601	SCE-SVC Cont Serv CAPX (42)	95348141	SC_CAP20230201ServCo CAPEX OH cycl	2	2023	0
B24-01-0094		303414595	SCE-SVC Customer Accounting CAPX (21)	95348180		6	2023	20,085
B24-01-0094	KR	1012621088	Customer Education Communication - Print	52514905		5	2023	4,201
B24-01-0094	KR	1012231983	Contract Svc-Other - Natural Account	53150000		2	2023	6,588
B24-01-0094	KR	1012272163	Contract Svc-Other - Natural Account	53150000		2	2023	18,365
B24-01-0094	KR	1012335280	Contract Svc-Other - Natural Account	53150000		3	2023	19,223
B24-01-0094	KR	1012437562	Contract Services - Legal	53155000		4	2023	3,995
B24-01-0094	SA	1011151652	Contract Svc-Temp Empl - Natural Account	53151000	Reclass - John Ward	4	2022	7,015
B24-01-0094	SA	1011387862	Contract Svc-Temp Empl - Natural Account	53151000	Reclass - John Ward	6	2022	9,760
B24-01-0094	SA	1011500277	Contract Svc-Temp Empl - Natural Account	53151000	Reclass - John Ward	7	2022	13,115
B24-01-0094	SA	1012170021	Business Development	52513200	Butler acq costs	1	2023	12,750
B24-01-0094	SA	1011628643	Contract Svc-Temp Empl - Natural Account	53151000	Reclass - John Ward	8	2022	15,098
B24-01-0094	SA	1011744945	Contract Svc-Temp Empl - Natural Account	53151000	Reclass - John Ward	9	2022	16,623
B24-01-0094	SA	1012204345	Contract Svc-Temp Empl - Natural Account	53151000	Ward - Reclass of Hours	1	2023	4,880
B24-01-0094	SA	1012316383	Contract Svc-Temp Empl - Natural Account	53151000	Ward - Reclass of Hours	2	2023	8,998
B24-01-0094	SA	1012666543	Contract Svc-Temp Empl - Natural Account	53151000	Ward - Reclass of Hours	5	2023	15,708
B24-01-0094	SG	1011057861	Contract Services - Legal	53155000	Legal Accrual	4	2022	(561)
B24-01-0094	SG	1011164338	Contract Services - Legal	53155000	Legal Accrual	5	2022	(11,774)
B24-01-0094	SG	1011278734	Contract Services - Legal	53155000	Legal Accrual	6	2022	(15,761)
B24-01-0094	SG	1011394494	Contract Services - Legal	53155000	Legal Accrual	7	2022	(15,872)
B24-01-0094	SG	1011507889	Contract Services - Legal	53155000	Legal Accrual	8	2022	(9,571)
B24-01-0094	SG	1011869471	Contract Services - Legal	53155000	Legal Accrual	11	2022	(1,150)
B24-01-0094	SG	1011986748	Contract Services - Legal	53155000	Legal Accrual	12	2022	(3,788)
B24-01-0094	SG	1012208317	Contract Services - Legal	53155000	Legal Accrual	2	2023	(8,000)
B24-01-0094	SG	1012314608	Contract Services - Legal	53155000	Legal Accrual	3	2023	(38,131)
B24-01-0094	SG	1012101696	Contract Services - Legal	53155000	Legal Accrual	1	2023	(700)
B24-01-0094	SG	1012437097	Contract Services - Legal	53155000	Legal Accrual	4	2023	(46,908)
B24-01-0094	SG	1012548250	Contract Services - Legal	53155000	Legal Accrual	5	2023	(26,579)
B24-01-0094	SG	1012668864	Contract Services - Legal	53155000	Legal Accrual	6	2023	(32,975)

Butler Area Sewer Authority (BASA)
Transaction Costs
As of June YTD 2023

Object	Document Type	Document Number	Cost Element Description	Cost Element	Description	Period	Years	Amount
B24-01-0094	YL	1010669633	Contract Services - Legal	53155000	202100111	12	2021	2,979
B24-01-0094	YL	1010773534	Contract Services - Legal	53155000	202100111	1	2022	397
B24-01-0094	YL	1011055597	Contract Services - Legal	53155000	202100111	4	2022	211
B24-01-0094	YL	1011113706	Contract Services - Legal	53155000	202100111	4	2022	456
B24-01-0094	YL	1011202422	Contract Services - Legal	53155000	202100111	5	2022	702
B24-01-0094	YL	1011416117	Contract Services - Legal	53155000	202200079	7	2022	774
B24-01-0094	YL	1011416118	Contract Services - Legal	53155000	202200079	7	2022	4,961
B24-01-0094	YL	1011416135	Contract Services - Legal	53155000	202200079	7	2022	491
B24-01-0094	YL	1011590053	Contract Services - Legal	53155000	202200079	8	2022	9,321
B24-01-0094	YL	1011590079	Contract Services - Legal	53155000	202200079	8	2022	238
B24-01-0094	YL	1011904228	Contract Services - Legal	53155000	202200079	11	2022	1,605
B24-01-0094	YL	1011988242	Contract Services - Legal	53155000	202200079	12	2022	3,788
B24-01-0094	YL	1012009889	Contract Services - Legal	53155000	202200079	12	2022	19,542
B24-01-0094	YL	1012125962	Contract Services - Legal	53155000	202200079	1	2023	614
B24-01-0094	YL	1012214656	Contract Services - Legal	53155000	202200079	2	2023	25,816
B24-01-0094	YL	1012278206	Contract Services - Legal	53155000	202200079	2	2023	36,501
B24-01-0094	YL	1012322609	Contract Services - Legal	53155000	202200079	3	2023	8,031
B24-01-0094	YL	1012361707	Contract Services - Legal	53155000	202200079	3	2023	7,451
B24-01-0094	YL	1012431158	Contract Services - Legal	53155000	202200079	4	2023	25,682
B24-01-0094	YL	1012492201	Contract Services - Legal	53155000	202200079	4	2023	2,188
B24-01-0094	YL	1012539962	Contract Services - Legal	53155000	202200079	5	2023	23,831
B24-01-0094	YL	1012626056	Contract Services - Legal	53155000	202200079	5	2023	2,582
B24-01-0094	YL	1012671692	Contract Services - Legal	53155000	202200079	6	2023	18,675
B24-01-0094	YL	1012697275	Contract Services - Legal	53155000	202200079	6	2023	751
B24-01-0094	YL	1012713326	Contract Services - Legal	53155000	202200079	6	2023	20,876
B24-01-0094	ZF	1012717273	Postage - Natural Account	52566000		6	2023	2,382
B24-01-0094	ZI	1012341007	M & S (O&M) - Natural Account	52000000	ANGELA KUBALA	3	2023	76
B24-01-0094	ZI	1011031875	M & S (O&M) - Natural Account	52000000	ANGELA KUBALA	3	2022	14
B24-01-0094	ZI	1011911492	M & S (O&M) - Natural Account	52000000	ANGELA KUBALA	11	2022	13
B24-01-0094	ZI	1012132797	Meals Deductible	52535000	ANGELA KUBALA	1	2023	136
B24-01-0094	ZI	1012080073	Contract Svc-Other - Natural Account	53150000	EMILY T HICKS	12	2022	131
B24-01-0094	ZI	1012366266	Regulatory Exp - Other	56670000	JANA HURST	3	2023	350
							Estimated costs to close	1,015,223
							Total	$1,202,635

Brentwood Acquisition

Acquisition	**Wastewater assets of Brentwood Borough**
Operations	Brentwood WW Operations
Application Docket No.	A-2021-3024058
Application of Acquisition	https://www.puc.pa.gov/pcdocs/1779581.pdf
Application Filed	March 31, 2023
Acquisition Closing	Anticipated Q1 2024
Purchase Price	$19,364,443
Transaction and Closing Costs Estimate	$701,935
Estimated Legal Costs included in Transaction and Closing Costs	$500,000
Legal and Engineering Costs Paid on Behalf of Sellers (included in Transaction and Closing Costs)	$70,000
Amortization Period for Transaction Costs	10 years

Pennsylvania American Wastewater Company
Brentwood WW Operations

Other Acquisition Adjustments	Amortization Period (Years)	Balance 6/30/2024	Annual Amortization 2025	Balance 6/30/2025		Amortization End Date
Brentwood WW Transactions Costs	10	$701,935	$70,194	$637,591	**	7/26/2034

**New amortizations at Docket No. R-2023-3043189 amortized 11 months starting August 2024.

Borough of Brentwood - Wastewater System
Transaction Costs
As of June YTD 2023

Object	Document Type	Document Number	Cost Element Description	Cost Element	Description	Period	Years	Amount
B24-01-0088	KR	1009349575	Contract Svc-Oth	53150000		11	2020	$10,600
B24-01-0088	KR	1009744954	Contract Svc-Oth	53150000		3	2021	9,024
B24-01-0088	KR	1009878044	Contract Svc-Oth	53150000		5	2021	4,157
B24-01-0088	KR	1010222987	Contract Svc-Oth	53150000		8	2021	19,622
B24-01-0088	KR	1012231929	Contract Svc-Oth	53150000		2	2023	1,558
B24-01-0088	KR	1012382616	Contract Svc-Oth	53150000		3	2023	18,550
B24-01-0088	SD	1011842268	Employee Expens	52534000	JORDAN S MERSKY	10	2022	5
B24-01-0088	SD	1011842468	Employee Expens	52534000	JORDAN S MERSKY	10	2022	406
B24-01-0088	SD	1011842553	Employee Expens	52534000	JORDAN S MERSKY	10	2022	269
B24-01-0088	SD	1011842820	Employee Expens	52534000	JORDAN S MERSKY	10	2022	240
B24-01-0088	SD	1011842855	Employee Expens	52534000	JORDAN S MERSKY	10	2022	310
B24-01-0088	SD	1011842983	Employee Expens	52534000	JORDAN S MERSKY	10	2022	(240)
B24-01-0088	SG	1009507092	Contract Services	53155000	PA Legal Accrual	1	2021	(4,562)
B24-01-0088	SG	1009595180	Contract Services	53155000	PA Legal Accrual	2	2021	(12,838)
B24-01-0088	SG	1009689235	Contract Services	53155000	PA Legal Accrual	3	2021	(20,181)
B24-01-0088	SG	1009803416	Contract Services	53155000	PA Legal Accrual	4	2021	(39,315)
B24-01-0088	SG	1009904092	Contract Services	53155000	PA Legal Accrual	5	2021	(6,112)
B24-01-0088	SG	1010001619	Contract Services	53155000	Legal Accrual	6	2021	(7,592)
B24-01-0088	SG	1010105797	Contract Services	53155000	Legal Accrual	7	2021	(11,372)
B24-01-0088	SG	1010210286	Contract Services	53155000	Legal Accrual	8	2021	(14,289)
B24-01-0088	SG	1010317944	Contract Services	53155000	Legal Accrual	9	2021	(3,264)
B24-01-0088	SG	1010426224	Contract Services	53155000	Legal Accrual	10	2021	(7,036)
B24-01-0088	SG	1010530667	Contract Services	53155000	Legal Accrual	11	2021	(6,000)
B24-01-0088	SG	1010638613	Contract Services	53155000	Legal Accrual	12	2021	(4,884)
B24-01-0088	SG	1010746669	Contract Services	53155000	Legal Accrual	1	2022	(5,500)
B24-01-0088	SG	1010841447	Contract Services	53155000	Legal Accrual	2	2022	(2,800)
B24-01-0088	SG	1010941007	Contract Services	53155000	Legal Accrual	3	2022	(2,387)
B24-01-0088	SG	1011057861	Contract Services	53155000	Legal Accrual	4	2022	(550)
B24-01-0088	SG	1011164338	Contract Services	53155000	Legal Accrual	5	2022	(5,200)
B24-01-0088	SG	1011278734	Contract Services	53155000	Legal Accrual	6	2022	(3,700)
B24-01-0088	SG	1011394494	Contract Services	53155000	Legal Accrual	7	2022	(17,550)
B24-01-0088	SG	1011507889	Contract Services	53155000	Legal Accrual	8	2022	(350)
B24-01-0088	SG	1011632430	Contract Services	53155000	Legal Accrual	9	2022	(4,763)
B24-01-0088	SG	1011751107	Contract Services	53155000	Legal Accrual	10	2022	(4,913)
B24-01-0088	SG	1011869471	Contract Services	53155000	Legal Accrual	11	2022	(1,400)
B24-01-0088	SG	1011986748	Contract Services	53155000	Legal Accrual	12	2022	(8,750)
B24-01-0088	SG	1012314608	Contract Services	53155000	Legal Accrual	3	2023	(215)
B24-01-0088	SG	1011850385	Employee Expens	52534000	JORDAN S MERSKY	11	2022	(5)
B24-01-0088	SG	1011850415	Employee Expens	52534000	JORDAN S MERSKY	11	2022	(406)
B24-01-0088	SG	1011850426	Employee Expens	52534000	JORDAN S MERSKY	11	2022	(269)
B24-01-0088	SG	1011850474	Employee Expens	52534000	JORDAN S MERSKY	11	2022	(240)
B24-01-0088	SG	1011850480	Employee Expens	52534000	JORDAN S MERSKY	11	2022	(310)
B24-01-0088	SG	1011850500	Employee Expens	52534000	JORDAN S MERSKY	11	2022	240
B24-01-0088	SG	1012101696	Contract Services	53155000	Legal Accrual	1	2023	(4,900)
B24-01-0088	SG	1012437097	Contract Services	53155000	Legal Accrual	4	2023	(18,139)
B24-01-0088	SG	1012548250	Contract Services	53155000	Legal Accrual	5	2023	(25,535)
B24-01-0088	SG	1012668864	Contract Services	53155000	Legal Accrual	6	2023	(13,750)
B24-01-0088	YL	1009515909	Contract Services	53155000	202000374	1	2021	4,192
B24-01-0088	YL	1009751785	Contract Services	53155000	202000374	3	2021	168
B24-01-0088	YL	1009769281	Contract Services	53155000	202000374	3	2021	8,858
B24-01-0088	YL	1009824924	Contract Services	53155000	202000374	4	2021	6,819
B24-01-0088	YL	1009840272	Contract Services	53155000	202000374	4	2021	10,584
B24-01-0088	YL	1009840289	Contract Services	53155000	202000374	4	2021	22,508
B24-01-0088	YL	1009958779	Contract Services	53155000	202000374	5	2021	5,230
B24-01-0088	YL	1010013558	Contract Services	53155000	202000374	6	2021	2,520
B24-01-0088	YL	1010027705	Contract Services	53155000	202000374	6	2021	672
B24-01-0088	YL	1010051266	Contract Services	53155000	202000374	6	2021	4,264
B24-01-0088	YL	1010141053	Contract Services	53155000	202000374	7	2021	8,960
B24-01-0088	YL	1010164053	Contract Services	53155000	202000374	7	2021	10,592

Borough of Brentwood - Wastewater System
Transaction Costs
As of June YTD 2023

Object	Document Type	Document Number	Cost Element Description	Cost Element	Description	Period	Years	Amount
B24-01-0088	YL	1010247127	Contract Services	53155000	202000374	8	2021	6,098
B24-01-0088	YL	1010266770	Contract Services	53155000	202000374	8	2021	13,002
B24-01-0088	YL	1010339098	Contract Services	53155000	202000374	9	2021	5,512
B24-01-0088	YL	1010359809	Contract Services	53155000	202000374	9	2021	2,940
B24-01-0088	YL	1010484509	Contract Services	53155000	202000374	10	2021	936
B24-01-0088	YL	1010488112	Contract Services	53155000	202000374	10	2021	7,017
B24-01-0088	YL	1010552316	Contract Services	53155000	202000374	11	2021	8,275
B24-01-0088	YL	1010669616	Contract Services	53155000	202000374	12	2021	1,092
B24-01-0088	YL	1010669630	Contract Services	53155000	202000374	12	2021	2,714
B24-01-0088	YL	1010773531	Contract Services	53155000	202000374	1	2022	5,428
B24-01-0088	YL	1010955512	Contract Services	53155000	202000374	3	2022	2,878
B24-01-0088	YL	1010990936	Contract Services	53155000	202000374	3	2022	2,387
B24-01-0088	YL	1011113703	Contract Services	53155000	202000374	4	2022	491
B24-01-0088	YL	1011202419	Contract Services	53155000	202000374	5	2022	4,952
B24-01-0088	YL	1011338381	Contract Services	53155000	202000374	6	2022	3,089
B24-01-0088	YL	1011345991	Contract Services	53155000	202000374	6	2022	460
B24-01-0088	YL	1011416125	Contract Services	53155000	202000374	7	2022	491
B24-01-0088	YL	1011458125	Contract Services	53155000	202000374	7	2022	16,756
B24-01-0088	YL	1011545508	Contract Services	53155000	202000374	8	2022	281
B24-01-0088	YL	1011691186	Contract Services	53155000	202000374	9	2022	4,001
B24-01-0088	YL	1011764720	Contract Services	53155000	202000374	10	2022	2,013
B24-01-0088	YL	1011790278	Contract Services	53155000	202000374	10	2022	4,072
B24-01-0088	YL	1011904224	Contract Services	53155000	202000374	11	2022	8,636
B24-01-0088	YL	1011930357	Contract Services	53155000	202000374	11	2022	460
B24-01-0088	YL	1012009888	Contract Services	53155000	202000374	12	2022	1,825
B24-01-0088	YL	1012032309	Contract Services	53155000	202000374	12	2022	345
B24-01-0088	YL	1012125958	Contract Services	53155000	202000374	1	2023	5,879
B24-01-0088	YL	1012322602	Contract Services	53155000	202000374	3	2023	115
B24-01-0088	YL	1012431160	Contract Services	53155000	202000374	4	2023	115
B24-01-0088	YL	1012492195	Contract Services	53155000	202000374	4	2023	1,295
B24-01-0088	YL	1012539961	Contract Services	53155000	202000374	5	2023	23,971
B24-01-0088	YL	1012610987	Contract Services	53155000	202000374	5	2023	9,038
B24-01-0088	YL	1012626059	Contract Services	53155000	202000374	5	2023	1,755
B24-01-0088	YL	1012697277	Contract Services	53155000	202000374	6	2023	2,036
B24-01-0088	YL	1012713341	Contract Services	53155000	202000374	6	2023	18,015
B24-01-0088	ZI	1012341007	M & S (O&M) - N	52000000	ANGELA KUBALA	3	2023	76
B24-01-0088	ZI	1012479428	Misc Exp (O&M) -	52500000	JANA HURST	4	2023	350
B24-01-0088	ZI	1011837209	Employee Expens	52534000	MICHAEL SALVO	10	2022	231
B24-01-0088	ZI	1011907813	Employee Expens	52534000	JORDAN S MERSKY	11	2022	5
B24-01-0088	ZI	1011907877	Employee Expens	52534000	JORDAN S MERSKY	11	2022	406
B24-01-0088	ZI	1011907901	Employee Expens	52534000	JORDAN S MERSKY	11	2022	269
B24-01-0088	ZI	1011907980	Employee Expens	52534000	JORDAN S MERSKY	11	2022	240
B24-01-0088	ZI	1011907987	Employee Expens	52534000	JORDAN S MERSKY	11	2022	310
B24-01-0088	ZI	1011908022	Employee Expens	52534000	JORDAN S MERSKY	11	2022	(240)
B24-01-0088	ZI	1011911444	Employee Expens	52534000	JORDAN S MERSKY	11	2022	5
Grand Total							Estimated costs to close	$640,880
							Total	$701,935

Pennsylvania American Water Company
Wastewater CSS Operations

Amortizations	Amortization Period (Years)[1]	Balance 12/31/2022	R-2020-3019369 Annual Amortization	R-2022-3031672 Annual Amortization	Amortization 2023	Balance 6/30/2023	Balance 6/30/2024	7/31/2024 July Amortization 2024	Annual Amortization 2025	Balance 6/30/2025	Amortization End Date
Other Acquisition Adjustments											
Scranton Sewer Auth - Acquisition Costs	40	$2,605,265	$74,436	$74,436	37,218	$2,568,047	$2,493,611	$6,203	$74,436	$2,419,175	12/31/2057
McKeesport Acquisition Costs	40	1,097,578	28,820	28,820	14,410	1,083,168	1,054,348	2,402	28,820	1,025,528	1/28/2061
Kane Acquisition Costs	10	349,362	17,670	43,220	21,610	327,752	284,532	3,602	43,220	241,312	1/28/2031
Total Wastewater Operations		**$4,052,205**	**$120,926**	**$146,476**	**$73,238**	**$3,978,967**	**$3,832,491**	**$12,206**	**$146,476**	**$3,686,015**	

[1] Docket Nos. R-2017-2595853, R-2020-3019369, and R-2022-3031672.

Tax Cuts and Jobs Act – Stub Period and Negative Surcharge for Deferred Tax Credit Reconciliation

Pennsylvania-American Water Company
TCJA Stub Period Amortizations

Water Operations	6/30/2022 Balance	Amortization	6/30/2023 Balance	Annual Amortization	6/30/2024 Balance	July 2024 Amortization	New Annual Amortization Begin 8/1/2024	6/30/2025 Balance
Stub Period	$10,523,913	($4,877,311)	$5,646,602	($2,400,191)	$3,246,411	($200,016)	($1,523,198)	$1,650,130
Interest Accrual	1,380,703	(658,251)	722,453	(308,338)	414,115	(25,695)	(194,210)	210,394
Surcharge Reconciliation	(42,044)	12,771	(29,273)	11,767	(17,506)	981	8,263	(8,951)
Total Liability - Water	$11,862,572	($5,522,791)	$6,339,782	($2,696,762)	$3,643,020	($224,730)	($1,709,145)	$1,851,573

Wastewater SSS General Operations	6/30/2022 Balance	Amortization	6/30/2023 Balance	Annual Amortization	6/30/2024 Balance	July 2024 Amortization	New Annual Amortization Begin 8/1/2024	6/30/2025 Balance
Stub Period	$485,124	($224,830)	$260,294	($110,642)	$149,652	($9,220)	($70,216)	$76,067
Interest Accrual	63,248	(30,245)	33,003	(14,123)	18,880	(1,177)	(8,852)	9,589
Surcharge Reconciliation	(1,580)	(2,353)	(3,933)	1,360	(2,573)	113	1,230	(1,332)
Total Liability - Wastewater SSS	$546,792	($257,428)	$289,364	($123,405)	$165,959	($10,284)	($77,838)	$84,324

Wastewater CSS Operations (Scranton WW)	6/30/2022 Balance	Amortization	6/30/2023 Balance	Annual Amortization	6/30/2024 Balance	July 2024 Amortization	New Annual Amortization Begin 8/1/2024	6/30/2025 Balance
Stub Period	$319,414	($148,034)	$171,380	($72,849)	$98,531	($6,071)	($46,230)	$50,083
Interest Accrual	41,975	(20,066)	21,909	(9,374)	12,535	(781)	(5,877)	6,367
Surcharge Reconciliation	32,088	(5,308)	26,780	(10,419)	16,361	(868)	(7,746)	8,392
Total Liability - Scranton WW	$393,477	($173,408)	$220,069	($92,642)	$127,427	($7,720)	($59,853)	$64,842

Pennsylvania-American Water Company
Negative Surcharge for Deferred Tax Credit (EADIT)

Water Operations	12/31/2022 Balance	Annual Amortization	6/30/2023 Balance	E1307 (e) Reconciliation January 27, 2023	6/30/2023 Updated Balance	6/30/2024 Balance	July 2024 Amortization	New Annual Amortization Begin 8/1/2024	6/30/2025 Balance
EADIT Reconciliation	$208,073	($69,358)	$179,174	($719,248)	($540,074)	($609,432)	($5,780)	$307,606	($333,240)
Interest Accrual	14,210	(4,737)	12,236	(25,442)	(13,206)	(17,942)	(395)	9,169	(9,932)
Total Liability - Water	$222,283	($74,094)	$191,410	($744,690)	($553,280)	($627,374)	($6,175)	$316,775	($343,172)

VIA e-Filing

April 24, 2023

Rosemary Chiavetta, Secretary
Commonwealth of Pennsylvania
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Re: Pennsylvania-American Water Company – Water Operations Negative Surcharge for Deferred Tax Credit Section 1307(e) reconciliation for the period January 1, 2022 through January 27, 2023

Dear Secretary Chiavetta:

Attached please find the reconciliation filing for the 13-month period ending January 27, 2023, in conjunction with Pennsylvania-American Water Company's Negative Surcharge for Deferred Tax Credit for its water service territory. This surcharge, as approved at Docket No. R-2020-3019369, was applied to customers' bills during the period January 1, 2022 through January 27, 2023.

Consistent with page 40 of Tariff Water-PA P.U.C. No. 5 Supplement No. 27, the reconciliation amount of $719,248, plus interest, will be deferred to Pennsylvania-American Water Company's next base rate case.

If you have any questions, please contact me.

Sincerely,

Teresa K. Harrold

Attachment

cc. Office of Consumer Advocate w/Attachment **VIA** E-Mail
Bureau of Investigation and Enforcement w/Attachment **VIA** E-Mail
Office of Small Business Advocate w/Attachment **VIA** E-Mail
Bureau of Audits w/Attachment **VIA** E-Mail
Bureau of Technical Utility Services w/Attachment **VIA** E-Mail

PENNSYLVANIA AMERICAN WATER COMPANY
Negative Surcharge for Deferred Tax Credit
Statement of Over / Under Revenue
E1307 (e) - January 27, 2023

DATE	CALCULATED DEFERRED TAX NEGATIVE SURCHARGE	DEFERRED TAX NEGATIVE SURCHARGE COLLECTED	ADJUSTED OVER/ (UNDER) COLLECTIONS	INTEREST RATE	NUMBER OF MONTHS	INTEREST AMOUNT
January-22	$880,928	$890,038	($9,110)	4.25%	18	($581)
February-22	$814,330	$861,823	($47,493)	4.25%	17	($2,859)
March-22	$870,469	$822,287	$48,181	4.50%	16	$2,891
April-22	$862,037	$905,252	($43,215)	4.75%	15	($2,566)
May-22	$916,041	$854,533	$61,508	4.75%	14	$3,409
June-22	$918,923	$940,591	($21,668)	5.25%	13	($1,232)
July-22	$949,020	$982,719	($33,699)	5.50%	12	($1,853)
August-22	$937,173	$937,983	($809)	5.75%	11	($43)
September-22	$901,953	$970,310	($68,356)	5.50%	10	($3,133)
October-22	$891,707	$908,863	($17,155)	5.75%	9	($740)
November-22	$854,246	$830,471	$23,775	6.25%	8	$991
December-22	$875,912	$850,409	$25,503	6.50%	7	$967
January-23[1]	$767,260	$1,403,970	($636,710)	6.50%	6	($20,693)
Total	$11,440,000	$12,159,248	($719,248)			($25,442)

[1] January 2023 includes billing for the period ending January 27th, but posted in February due to timing of the bills.

Citizens Utilities Water Company
CAC/CIAC Adjustment

Pennsylvania American Water
Citizens Utilities Water Company CAC/CIAC Adjustment
Per Commission Order Entered 12.07.09 at Docket No. R-2009-2097323

Customer Advances (CAC)		**12/31/2009**	**PAWC 40% 12/31/2009**
Customer Advances (CAC)		$ (39,618,268)	$ (15,847,307)
Accumulated Amortization		4,250,246	1,700,099
Net CAC		$ (35,368,022)	$ (14,147,208)
	Approved Depreciation Rate (Mains)		
2010 Amortization	**1.28%**		202,846
2011 Amortization	**1.28%**		202,846
2012 Amortization	**1.28%**		202,846
2013 Amortization	**1.28%**		202,846
2014 Amortization	**1.18%**		186,998
2015 Amortization	**1.18%**		186,998
2016 Amortization	**1.18%**		186,998
2017 Amortization	**1.18%**		186,998
2018 Amortization	**1.17%**		185,413
2019 Amortization	**1.17%**		185,413
2020 Amortization	**1.17%**		185,413
2021 Amortization	**1.20%**		190,168
2022 Amortization	**1.20%**		190,168
2023 Amortization (Jan - Jun)	**1.22%**		96,669
2023 Amortization (Jul - Dec)	**1.22%**		96,669
2024 Amortization (Jan - Jun)	**1.22%**		96,669
2024 Amortization (Jul - Dec)	**1.54%**		122,025
2025 Amortization (Jan - Jun)	**1.54%**		122,025
		Balance at 06/30/2024	(11,361,252)
		Balance at 06/30/2025	(11,117,203)

Contributions in Aid of Construction (CIAC)		**12/31/2009**	**PAWC 100% 12/31/2009**
Citizens		$ (11,943,182)	$ (11,943,182)
Accumulated Amortization		3,047,352	3,047,352
Net CIAC		$ (8,895,830)	$ (8,895,830)
	Approved Depreciation Rate (Mains)		
2010 Amortization	**1.28%**		152,873
2011 Amortization	**1.28%**		152,873
2012 Amortization	**1.28%**		152,873
2013 Amortization	**1.28%**		152,873
2014 Amortization	**1.18%**		140,930
2015 Amortization	**1.18%**		140,930
2016 Amortization	**1.18%**		140,930
2017 Amortization	**1.18%**		140,930
2018 Amortization	**1.17%**		139,735
2019 Amortization	**1.17%**		139,735
2020 Amortization	**1.17%**		139,735
2021 Amortization	**1.20%**		143,318
2022 Amortization	**1.20%**		143,318
2023 Amortization (Jul - Dec)	**1.22%**		72,854
2023 Amortization (Jan - Jun)	**1.22%**		72,854
2024 Amortization (Jan - Jun)	**1.22%**		72,854
2024 Amortization (Jul - Dec)	**1.54%**		91,963
2025 Amortization (Jan - Jun)	**1.54%**		91,963
		Balance at 06/30/2024	(6,796,217)
		Balance at 06/30/2025	(6,612,292)

Pennsylvania-American Water
Citizens Utilities Water Company CIAC/CAC Adjustment
Per Commisson Order Entered 12.07.09 at Docket No. R-2009-2097323

Customer Advances (CAC)	**12/31/2009**	**Adj per Order 40%**	**12/31/2010 1.28%**	**12/31/2011 1.28%**	**12/31/2012 1.18%**	**12/31/2013 1.18%**	**12/31/2014 1.18%**	**12/31/2015 1.18%**	**12/31/2016 1.18%**	**12/31/2017 1.17%**	**12/31/2018 1.17%**	**12/31/2019 1.17%**	**12/31/2020 1.17%**	**12/31/2021 1.20%**	**12/31/2022 1.20%**	**12/31/2023 1.22%**	**6/30/2024 1.54%**	**6/30/2025 1.54%**
Customer Advances (CAC)	($39,618,268)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)	($15,847,307)
Accumulated Amortization	3,720,154	1,488,062	1,700,099	1,902,945	2,105,791	2,308,637	2,511,483	2,698,481	2,885,479	3,072,477	3,259,475	3,444,888	3,630,301	3,815,714	4,005,882	4,196,050	4,389,387	4,486,056
Annual Amortization over 5 Years	530,092	212,037	202,846	202,846	202,846	202,846	186,998	186,998	186,998	186,998	185,413	185,413	185,413	190,168	190,168	193,337	96,669	244,049
Net CAC	($35,368,022)	($14,147,208)	($13,944,362)	($13,741,516)	($13,538,670)	($13,335,824)	($13,148,826)	($12,961,828)	($12,774,830)	($12,587,832)	($12,402,419)	($12,217,006)	($12,031,593)	($11,841,425)	($11,651,257)	($11,457,920)	($11,361,252)	($11,117,203)

Contributions in Aid of Construction (CIAC)	**12/31/2009**	**Adj per Order 100%**	**12/31/2010 1.28%**	**12/31/2011 1.28%**	**12/31/2012 1.18%**	**12/31/2013 1.18%**	**12/31/2014 1.18%**	**12/31/2015 1.18%**	**12/31/2016 1.18%**	**12/31/2017 1.17%**	**12/31/2018 1.17%**	**12/31/2019 1.17%**	**12/31/2020 1.17%**	**12/31/2021 1.20%**	**12/31/2022 1.20%**	**12/31/2023 1.22%**	**6/30/2024 1.54%**	**6/30/2025 1.54%**
Citizens	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)	($11,943,182)
Accumulated Amortization	2,887,552	2,887,552	3,047,352	3,200,225	3,353,098	3,505,971	3,658,844	3,799,774	3,940,704	4,081,634	4,222,564	4,362,299	4,502,034	4,641,769	4,785,087	4,928,405	5,074,112	5,146,966
Annual Amortization over 5 Years	159,800	159,800	152,873	152,873	152,873	152,873	140,930	140,930	140,930	140,930	139,735	139,735	139,735	143,318	143,318	145,707	72,854	183,925
Net CIAC	($8,895,830)	($8,895,830)	($8,742,957)	($8,590,084)	($8,437,211)	($8,284,338)	($8,143,408)	($8,002,478)	($7,861,548)	($7,720,618)	($7,580,883)	($7,441,148)	($7,301,413)	($7,158,095)	($7,014,777)	($6,869,070)	($6,796,217)	($6,612,292)

Pennsylvania-American Water Company
CAC & CIAC
Test Year Ended December 31, 2009
R-2009-2097323

			Refund %
	Customer Advances Retained by Citizens	**OCA**	**60%**
1	Customer Advances (CAC)	($39,618,268)	
2	Accumulated Amortization	3,720,154	
3	Annual Amortization over 5 Years	530,092	
4	Net CAC	($35,368,022)	($14,147,209)
	Contributions in Aid of Construction (CIAC)		
5	Citizens	($11,943,182)	
6	Accumulated Amortization	2,887,552	
7	Annual Amortization over 5 Years	159,800	
8	Net CIAC	($8,895,830)	($8,895,830)
9	Total Net CAC & CIAC	($44,263,852)	($23,043,039)
	Revenue Requirement	($5,953,488)	($3,099,289)
	Amortization		
	Customer Advances (CAC)		
10	Accumulated Amortization @ 12/31/08	$3,720,154	
11	Accumulated Amortization @ 12/31/03	1,069,694	
12	Net Accumulated Amortization	2,650,460	
13	Annual Amortization over 5 Years	$530,092	$212,037
	Contributions in Aid (CIAC)		
14	Accumulated Amortization @ 12/31/08	$2,887,552	
15	Accumulated Amortization @ 12/31/03	2,088,554	
16	Net Accumulated Amortization	798,998	
17	Annual Amortization over 5 Years	$159,800	$159,800
18	Total Amortization	$689,892	$371,837
	Total Revenue Requirement	($6,643,380)	($3,471,126)

Taxes, Other Than Income

Pennsylvania Property Tax
Property subject to PURTA or Local Property Tax
For the period ending June 30 of each year

Water Operations

		2023	2024	2025
303.00	Land & Land Rights	$14,895,784	$14,895,784	$14,932,302
303.35	Waste Handling and Treatment Land	7,704,484	7,704,484	7,704,484
304.15	Other Water Source Structures	95,740,075	121,997,169	154,929,642
304.20	Power and Pumping Structures	99,749,611	99,749,611	99,790,416
304.30	Purification Buildings	341,412,320	341,634,694	341,634,694
304.36	Waste Handling Struct. & Improv.	11,777,004	11,777,004	11,777,004
304.61	Office Buildings	47,851,444	47,930,914	48,051,365
304.62	Stores, Shop and Garage Buildings	64,145,021	64,145,021	64,151,746
304.63	Miscellaneous Structures and Improvements	21,922,598	23,817,207	26,415,927
		$705,198,342	$733,651,889	$769,387,581

Wastewater SSS General Operations

		2023	2024	2025
353.00	Land & Land Rights	$15,034,808	$15,754,580	$15,754,580
354.20	Structures And Improvements - Collection	8,981,081	9,526,366	10,139,988
354.30	Structures And Improvements - SPP	24,476,334	24,827,218	24,827,218
354.40	Structures And Improvements - TDP	279,404,971	280,074,835	280,074,835
354.70	Structures And Improvements - General	4,934,435	6,167,105	9,887,101
		$332,831,629	$336,350,103	$340,683,721

Wastewater CSS Operations

		2023	2024	2025
353.00	Land & Land Rights	$4,463,355	$4,463,355	$4,463,355
354.20	Structures And Improvements - Collection	16,346,670	17,071,212	17,767,789
354.30	Structures And Improvements - SPP	20,987,891	21,024,335	21,055,638
354.40	Structures And Improvements - TDP	117,121,745	130,862,205	141,428,062
		$158,919,661	$173,421,107	$184,714,845

Pennsylvania-American Water Company - Water Operations
Pennsylvania Property Tax

Profit Center	County	Municipality	Parcel Number	July - Dec 2022	Jan - June 2023
2401	Berks	Exeter Twp	43-5325-12-95-7098	$0	$142
2401	Berks	Exeter Twp	43-5325-12-95-7098	444	-
2462	Cumberland	Lower Allen Twp	13-09-0545-011A	-	4,145
2461	Cumberland	New Cumberland Boro	25-25-0006-327	-	512
2462	Dauphin	Derry Twp	24-009-052	-	656
2462	Northumberland	Milton Boro.	035-00-021-058-F-008	-	8,056
2462	Northumberland	Milton Boro.	032-00-018-045-A	-	330
2465	Chester	Coatesville Boro	28-09-0082.0500	1,278	-
2465	Chester	Coatesville Boro	38-02-0337.0000	1,879	-
2465	Chester	Coatesville Boro	38-02-0387.0100	128	-
2465	Chester	Coatesville Boro	38-02M-0126.0000	1,218	-
2465	Chester	Coatesville Boro	38-02M-0126.0100	745	-
2465	Chester	Coatesville Boro	38-02-0129.0100	13,886	-
2461	Cumberland	Silver Spring Twp	38-07-0459-011PU	-	393
2461	Cumberland	Cumberland County	13-26-0251-001PU	478	-
2461	Cumberland	Silver Spring Twp	38-07-0459-011PU	1,136	-
2461	Cumberland	Silver Spring Twp	38-07-0459-011PU	255	-
2461	Cumberland	Cumberland County	13-26-0251-001PU	89	-
2462	Cumberland	Lower Allen Twp	13-09-0545-011	241,545	-
2461	Cumberland	Lower Allen Twp	13-26-0251-001PU	41,356	-
2462	Dauphin	South Hanover Twp	56-007-030	-	26,641
2462	Dauphin	South Hanover Twp	56-007-030	-	1,700
2462	Dauphin	South Hanover Twp	56-007-030	-	55,036
2462	Dauphin	South Hanover Twp	56-009-061 0000000 SD	102	-
2401	Lebanon	N. Annville	25:2313572-369555-0000	-	1,385
2401	Lebanon	Annville	25:2313572-369555-0000	5,678	-
2401	Lebanon	S. Londonderry	31:2295404-343517-0000	-	167
2401	Lebanon	S. Londonderry	31:2295404-343517-0000	524	-
2401	Lebanon	S. Londonderry	31:2295416-341250-0000	-	1,377
2401	Lebanon	S. Londonderry	31:2295416-341250-0000	4,331	-
2491	Luzerne	Bear Creek Township	04-K11-00A-010-000	21,644	-
2457	Monroe	Smithfield Twp	16.7C.1.136	308	-
2457	Monroe	Smithfield Twp	16.7C.1.142	776	-
2457	Monroe	Smithfield Twp	16.7C.1.145	632	-
2457	Monroe	Smithfield Twp	16.7C.1.148	612	-
2455	Northampton	Pen Argyl Borough	D8-3-1-0625	12,217	-
2455	Northampton	Washington Twp	D9 1 34 0134	-	8
2455	Northampton	Washington Twp	D9 1 34 0134	55	-
2455	Northampton	Northampton County	D9-6A-10-S0131	-	389
2491	Pike	Lehman Twp.	194.01-02-49	-	517
2468	Pike	Lehman Twp.	167.78-01-06 (060062269)	880	-
2471	Union	White Deer Twp	014-053-039.00000	1,537	-
2421	Washington	Cecil Twp	140-010-00-00-0046-01	-	14
2421	Washington	Peters Twp.	540-010-00-00-0063-00	712	-
2421	Washington	Smith Township	570-018-00-00-0003-00	-	9
2421	Washington	West Pike Run Twp	700-012-04-00-0024-00	-	7
2421	Washington	West Pike Run Twp	700-012-04-00-0024-00	50	-
2455	Northampton	Northampton County	F10-13-1E-15-S0117	-	156
2466	Adams	Lake Heritage-Mt. Joy	30-108-0054 Lot H-0125	-	343
2466	Adams	Lake Heritage-Mt. Joy	30-108-0054 Lot H-0125	887	-
2466	Adams	Lake Heritage-Mt. Pleasant	32-105-0050 Lot H-0589	-	426
2466	Adams	Mt. Pleasant Twp	32-105-0050 Lot H-0589	1,102	-
2466	Allegheny	Allegheny County	0059-J-00228-0000	-	89
2411	Allegheny	Baldwin Boro.	059-J-375 (877078751)	69,400	-
2411	Allegheny	Allegheny County	059-K-171 (877 08000 3)	-	102
2411	Allegheny	Baldwin Boro.	059-K-171 (877 08000 3)	452	-
2411	Allegheny	Baldwin Boro.	059-K-171 Township	-	136
2411	Allegheny	Elizabeth Twp	0655-P-00245-0000-00	11,757	-
2411	Allegheny	Allegheny County	0655-P-00245-0000-00	4,689	-
2411	Allegheny	Lincoln Borough	0655-P-00245-0000-00	-	4,413

Pennsylvania-American Water Company - Water Operations
Pennsylvania Property Tax

Profit Center	County	Municipality	Parcel Number	July - Dec 2022	Jan - June 2023
2411	Allegheny	Allegheny County	0998-J-00001-000	-	3,434
2411	Allegheny	Pittsburgh Ward 28	12900-59-J-00264	-	311
2421	Allegheny	Pittsburgh Ward 28	12800-40-F-00134	-	152
2421	Allegheny	Pittsburgh Ward 28	12800-40-F-00136	-	76
2421	Allegheny	Pittsburgh Ward 28	83300-14-S-00100	-	425
2421	Allegheny	Pittsburgh Ward 28	83300-14-S-00128	-	3,602
2421	Allegheny	Pittsburgh Ward 28	12900-59-J-00228	-	339
2421	Allegheny	Pittsburgh Ward 28	12900-59-J-00262	-	315
2421	Allegheny	Allegheny County	1132-B-00287-0000-00	-	3,321
2411	Allegheny	Allegheny County	1421-G-00093-0000	-	131
2411	Allegheny	Jefferson Hills Boro.	1421-G-93	582	-
2411	Allegheny	Jefferson Hills Boro.	1421-G-93	145	-
2411	Allegheny	North Fayette Twp	410-K-8	-	2
2421	Allegheny	North Fayette Twp	410-K-8	11	-
2421	Allegheny	Allegheny County	556-M-360	-	96
2421	Allegheny	Liberty Boro.	556-M-360	-	150
2421	Allegheny	South Allegheny SD	556-M-360	449	-
2421	Allegheny	Jefferson Hills Boro.	764-A-65	150	-
2411	Allegheny	Jefferson Hills Boro.	764-A-65	37	-
2411	Allegheny	Allegheny County	764-A-65 (878 24599 9)	-	34
2411	Allegheny	Bethel Park Boro.	774-J-475	5	-
2411	Allegheny	Bethel Park	391-L-195	-	96
2411	Allegheny	Bethel Park	391-L-195	450	-
2411	Allegheny	Bethel Park	391-L-195	53	-
2411	Allegheny	Bethel Park Boro.	774-J-475	1	-
2411	Allegheny	Bethel Park	391-K-300	-	12,122
2411	Allegheny	Bethel Park	391-K-300	56,642	-
2411	Allegheny	Bethel Park	391-K-300	6,721	-
2411	Allegheny	Allegheny County	774-J-475 (876 12465 4)	-	1
2411	Allegheny	Elizabeth Twp	998-J-1	17,672	-
2411	Allegheny	Elizabeth Twp	998-J-1	-	2,636
2411	Allegheny	Elizabeth Twp	1132-B-00287-0000-00	17,088	-
2411	Allegheny	Elizabeth Twp	1132-B-00287-0000-00	-	2,549
2411	Allegheny	Port Vue	0465-B-00300-0000	-	1
2411	Allegheny	Port Vue	0465-B-00300-0000	2	-
2411	Armstrong	Rayburn Twp.	118.00-06-02 (39-0-028033)	-	36
2444	Armstrong	Rayburn Twp.	118000602 (139-0-028033)	91	-
2444	Beaver	Franklin Twp	61-104-0253-001-1	-	1,412
2431	Beaver	Franklin Twp	61-104-0253-001-1	-	526
2431	Beaver	Franklin Twp	61-104-0253-002-1	-	13
2431	Beaver	Franklin Twp	61-104-0253-002-1	-	5
2431	Beaver	Franklin Twp	61-104-0164-016-1	-	64
2431	Beaver	Franklin Twp	61-104-0164-016-1	-	24
2431	Beaver	Koppel Boro	32-001-0106-001-1	-	101
2431	Beaver	Koppel Boro	32-001-0106-001-1	71	-
2431	Beaver	Big Beaver Falls	32-001-0106-001-1	280	-
2431	Beaver	North Sewickley Twp	70-016-0210-000-1	-	42
2431	Beaver	North Sewickley Twp	70-016-0211-000-1	-	2,272
2431	Beaver	North Sewickley Twp	70-016-0212-000-1	-	13
2431	Beaver	North Sewickley Twp	70-103-0137-00A-1	-	662
2431	Beaver	North Sewickley Twp	70-103-0137-00A-1	285	-
2431	Beaver	North Sewickley Twp	70-016-0210-000-1	188	-
2431	Beaver	North Sewickley Twp	70-016-0211-000-1	7,584	-
2431	Beaver	North Sewickley Twp	70-016-0212-000-1	91	-
2431	Beaver	North Sewickley Twp	70-103-0137-00A-1	1,925	-
2431	Beaver	Franklin Twp	61-104-0253-001-1	3,906	-
2431	Beaver	Franklin Twp	61-104-0253-002-1	35	-
2431	Beaver	Franklin Twp	61-104-0164-016-1	176	-
2431	Berks	Amity Twp	24-5365-13-14-4338	-	774
2459	Berks	Amity Twp	24-5365-13-14-4338	2,304	-

Pennsylvania-American Water Company - Water Operations
Pennsylvania Property Tax

Profit Center	County	Municipality	Parcel Number	July - Dec 2022	Jan - June 2023
2401	Berks	Exeter Twp	43-5325-12-95-7098	52	-
2401	Berks	Exeter Twp	43-5335-18-40-8384	249	-
2401	Berks	Exeter Twp	43-0000-00-00-0042	22	-
2401	Berks	Exeter Twp	43-5335-20-71-7674	92	-
2401	Berks	Exeter Twp	43-5336-02-89-8753	1	-
2401	Berks	Exeter Twp	43-5344-05-17-8720	90	-
2401	Berks	Exeter Twp	43-5335-14-22-8754	21,694	-
2401	Berks	Exeter Twp	43-5335-18-40-8384	-	699
2401	Berks	Exeter Twp	43-5335-18-40-8384	2,204	-
2401	Berks	Exeter Twp	43-0000-00-00-0042	-	62
2401	Berks	Exeter Twp	43-0000-00-00-0042	194	-
2401	Berks	Exeter Twp	43-5335-20-71-7674	-	256
2401	Berks	Exeter Twp	43-5335-20-71-7674	809	-
2401	Berks	Exeter Twp	43-5336-02-89-8753	-	2
2401	Berks	Exeter Twp	43-5336-02-89-8753	7	-
2401	Berks	Exeter Twp	43-5344-05-17-8720	-	253
2401	Berks	Exeter Twp	43-5344-05-17-8720	798	-
2459	Berks	South Heidelberg Twp	51-4365-02-97-2395	-	31
2463	Berks	South Heidelberg Twp	51-4375-01-28-0567	-	309
2463	Berks	South Heidelberg Twp	51-4375-01-28-0567	806	-
2463	Berks	Sinking Spring	79-4386-14-34-2455	-	350
2463	Berks	Sinking Spring	79-4386-14-34-2455	609	-
2463	Berks	Sinking Spring	79-4386-14-34-2457	-	3
2463	Berks	Sinking Spring	79-4386-14-34-2457	6	-
2463	Berks	Spring Twp	80-4375-02-99-5074	-	2
2463	Berks	Spring Twp	80-4375-02-99-5074-001	6,977	-
2463	Berks	Spring Twp	80-4376-19-62-6387	7,693	-
2463	Berks	Spring Twp	80-4376-19-62-6387	-	3,266
2463	Berks	Spring Twp	80-4376-20-91-4606	-	1
2463	Berks	Spring Twp	80-4385-10-45-0164	-	2
2463	Berks	Spring Twp	80-4375-02-99-5074-001	-	2,947
2463	Berks	Spring Twp	80-4385-10-47-4012	-	3
2463	Berks	Spring Twp	80-4385-11-57-0044	-	2
2463	Berks	Spring Twp	80-4386-06-49-9825	-	3
2463	Berks	Spring Twp	80-4387-18-30-1898	-	2
2463	Berks	Spring Twp	80-4397-10-45-8909	-	3
2452	Bucks	Lower Makefield Twp	20-001-001-001	1,501	-
2452	Bucks	Lower Makefield Twp	20-034-048	-	1,172
2452	Bucks	Lower Makefield Twp	20-034-048	4,565	-
2452	Bucks	Lower Makefield Twp	20-001-001-001	-	386
2452	Bucks	Lower Makefield Twp	20-034-045-002	-	1,511
2452	Bucks	Lower Makefield Twp	20-034-045-000	5,884	-
2452	Butler	Butler Twp Ward #1	051 40 C8	119	-
2433	Butler	Butler Twp.	051-40-c8-0000	-	45
2433	Butler	Butler Twp. Ward #2	052 36 F65A	25	-
2433	Butler	Butler Twp. Ward #2	052-36-f65a-0000	-	10
2433	Butler	Jackson Township	180-4F102-6MF-0001	-	11
2433	Butler	Jackson Township	180-4F102-6MF-0001	38	-
2433	Butler	Jackson Township	180-4F102-6P-0000	-	66
2433	Butler	Jackson Township	180-4F102-6P-0000	234	-
2433	Butler	Oakland Twp.	250 2F20 20	-	267
2433	Butler	Oakland Twp.	250 2F20 20	807	-
2433	Butler	Oakland Twp.	250 2F20 22G	-	74
2433	Butler	Oakland Twp.	250 2F20 22G	223	-
2433	Butler	Oakland Twp.	250 2F20 25B	-	24
2433	Butler	Oakland Twp.	250 2F20 25B	73	-
2433	Butler	Oakland Twp.	250 2F22 15A	-	126
2433	Butler	Oakland Twp.	250 2F22 15A	382	-
2433	Butler	Oakland Twp.	250 2F22 15B	-	236
2433	Butler	Oakland Twp.	250 2F22 15B	716	-

Pennsylvania-American Water Company - Water Operations
Pennsylvania Property Tax

Profit Center	County	Municipality	Parcel Number	July - Dec 2022	Jan - June 2023
2433	Butler	Oakland Twp.	250 2F22 15C	-	10
2433	Butler	Oakland Twp.	250 2F22 15C	31	-
2433	Butler	Oakland Twp.	250 2F22 15D	-	12
2433	Butler	Oakland Twp.	250 2F22 15D	37	-
2433	Butler	Oakland Twp.	250 2F22 15E	-	10
2433	Butler	Oakland Twp.	250 2F22 15E	31	-
2433	Butler	Oakland Twp.	250 2F22 15F	-	13
2433	Butler	Oakland Twp.	250 2F22 15F	40	-
2433	Butler	Oakland Twp.	250 2F22 15G	-	37
2433	Butler	Oakland Twp.	250 2F22 15G	113	-
2433	Butler	Oakland Twp.	250 2F22 15H	-	209
2433	Butler	Oakland Twp.	250 2F22 15H	633	-
2433	Butler	Butler City Ward #4	564 19 142	-	60
2433	Butler	Butler County	564 19 142	37	-
2433	Butler	Butler City Ward #4	564 19 142	144	-
2433	Butler	Butler City Ward #4	564 19 142	-	37
2433	Butler	Butler City Ward #4	564 19 168	-	60
2433	Butler	Butler City Ward #4	564 19 168	-	37
2433	Butler	Butler City Ward #4	564 19 168	144	-
2433	Butler	Butler City Ward #4	564 19 174	-	60
2433	Butler	Butler City Ward #4	564 19 174	-	37
2433	Butler	Butler City Ward #4	564 19 174	144	-
2433	Butler	Butler City Ward #4	564 19 175	-	60
2433	Butler	Butler City Ward #4	564 19 175	-	37
2433	Butler	Butler City Ward #4	564 19 175	144	-
2433	Centre	Rush Twp.	05-014-099-0001	-	2,340
2472	Centre	Rush Twp.	05-014-099-0001	16,559	-
2472	Centre	Rush Twp.	05-018-019A-0000	-	73
2472	Centre	Rush Twp.	05-018-019B	1,145	-
2472	Centre	Rush Twp.	05-018-019B-0000	-	162
2472	Centre	Rush Twp.	05-018-028-0000	-	1,357
2472	Centre	Rush Twp.	05-018-038-0000	-	22
2472	Centre	Rush Twp.	05-019-007J-0000	-	69
2472	Centre	Rush Twp.	05-019-008-0000	-	706
2472	Centre	Rush Twp.	05-022-005	11,275	-
2472	Centre	Rush Twp.	05-022-005-0000	-	1,593
2472	Centre	Rush Twp.	05-18-019A	272	-
2472	Centre	Rush Twp.	05-18-028	9,601	-
2472	Centre	Rush Twp.	05-18-038	157	-
2472	Centre	Rush Twp.	05-19-007J	488	-
2472	Centre	Rush Twp.	05-19-008	4,994	-
2472	Centre	Walker twp	14-004-002E 000	479	-
2472	Centre	Walker	14-004-002E-0000	-	85
2472	Centre	Philipsburg Boro.	29-102-122A	-	18
2472	Centre	Philipsburg Boro.	29-102-122A	42	-
2472	Chester	Parkesburg Borough	08 030 0249 000	-	2,505
2465	Chester	Parkesburg Borough	08 030 0249 000	-	844
2465	Chester	Parkesburg Borough	08 030 0249 000	7,949	-
2465	Chester	Parkesburg Borough	08-06 0068.0000	-	1,659
2465	Chester	Parkesburg Borough	0806 00680000	-	559
2465	Chester	Parkesburg Borough	0806 00680000	5,266	-
2465	Chester	South Coatesville	0902 0001.0000	-	9,849
2465	Chester	South Coatesville	0902 00010000	-	4,926
2465	Chester	Coatesville Boro	09-02-0001.0000	45,521	-
2465	Chester	South Coatesville	0906 00060200	-	972
2465	Chester	South Coatesville	0906 00060200	-	1,944
2465	Chester	Coatesville Boro-city of	1602 00110000	-	4,264
2465	Chester	Coatesville Boro	1602 00110000	-	1,410
2465	Chester	Coatesville Boro	16-02-0011.0000	13,033	-
2465	Chester	Coatesville Boro	16-04-0019.0200	940	-

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2465	Chester	Coatesville Boro	1604 00190200	102	-
2465	Chester	Coatesville Boro	09-06-0006.0200	8,984	-
2465	Chester	Coatesville Boro	1604 00190200	-	102
2465	Chester	Coatesville Boro-city of	1604 00190200	-	307
2465	Chester	Coatesville Boro	1604 00290000	-	48
2465	Chester	Coatesville Boro-city of	1604 00290000	-	146
2465	Chester	Coatesville Boro	16-04-0029.0000	447	-
2465	Chester	Coatesville Boro	1605 00190200	-	11
2465	Chester	Coatesville Boro-city of	1605 00190200	-	33
2465	Chester	Coatesville Boro	16-05-0019.0200	101	-
2465	Chester	Valley Twp	3802-0129010	-	1,255
2465	Chester	Valley Twp	38-02-0129.010	811	-
2465	Chester	Valley Twp	38-02-0337-E	-	170
2464	Chester	East Vincent	2101 00720000	-	8
2464	Chester	East Vincent	2101 00720000	-	4
2464	Chester	East Vincent	2101 00720000	61	-
2464	Chester	East Vincent	2101 00920600	-	260
2464	Chester	East Vincent	2101 00920600	-	114
2464	Chester	East Vincent	2101 00920600	1,936	-
2464	Chester	East Vincent	2101 0093 1400	-	191
2464	Chester	East Vincent	2101 0093 1400	1,421	-
2464	Chester	East Vincent	2101 00931400	-	91
2464	Chester	East Vincent	2101 00920400	-	595
2464	Chester	East Vincent	2101 00920400	-	261
2464	Chester	East Vincent	2101 00920400	4,434	-
2464	Chester	Coatesville Boro	2802 00200200	-	210
2465	Chester	West Caln Twp	2802 00200200	-	81
2465	Chester	Coatesville Boro	28-02-0020.0200	1,944	-
2465	Chester	West Caln Twp	2809 00070000	-	384
2465	Chester	West Caln Twp	2809 00070000	-	147
2465	Chester	Caln Twp	3903 01080000	-	393
2465	Chester	Caln Twp	39-03-0108.0000	3,631	-
2465	Chester	Caln Twp	39-3-108.0	-	443
2465	Clarion	Clarion Boro	05-060-001-001-00	-	903
2443	Clarion	Elk	08-010-144-001-00	-	400
2443	Clarion	Elk	08-010-144-002-00	41	-
2443	Clarion	Elk	08-010-144-002-00	-	19
2443	Clarion	Elk	08-010-232-000-00	-	1,026
2443	Clarion	Elk	08-010-232-000-00	2,187	-
2443	Clarion	Elk	08-020-001-001-02	-	61
2443	Clarion	Elk	08-020-001-001-02	130	-
2443	Clarion	Elk	08-010-231-001-00-SD	83	-
2443	Clarion	Elk	08-010-231-001-00	-	88
2472	Clearfield	Bradford Twp.	N07-000-00154	1	-
2472	Colombia	Briar Creek Twp	07-03-043-00,000	-	201
2473	Colombia	Briar Creek Twp	07-03-043-00,000	499	-
2473	Columbia	Berwick Boro.	04A-06-001-00,000	-	308
2473	Columbia	Berwick Boro.	04A-06-001-00,000	456	-
2473	Cumberland	East Pennsboro Boro	09-11-3005-006A	858	-
2461	Cumberland	East Pennsboro Boro	09-11-3005-006A	-	293
2461	Cumberland	East Pennsboro Boro	09-11-3005-037	334	-
2461	Cumberland	East Pennsboro Boro	09-11-3005-037	-	114
2461	Cumberland	East Pennsboro Boro	09-11-3005-040	443	-
2461	Cumberland	East Pennsboro Boro	09-11-3005-040	-	151
2461	Cumberland	East Pennsboro Boro	09-13-1002-306A	-	303
2461	Cumberland	East Pennsboro Boro	09-13-1002-306A	885	-
2461	Cumberland	Lower Allen Twp	13-09-0545-011A	23,430	-
2461	Cumberland	New Cumberland Boro	25-25-0006-338	603	-
2461	Cumberland	New Cumberland Boro	25-25-0006-338	-	288
2461	Cumberland	New Cumberland Boro	26-23-0541-325	3,015	-

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2461	Cumberland	New Cumberland Boro	26-23-0541-325	-	5,673
2461	Cumberland	New Cumberland Boro	26-24-0809-227	415	-
2461	Cumberland	New Cumberland Boro	26-24-0809-227	-	198
2461	Cumberland	New Cumberland Boro	26-25-0006-327	1,072	-
2462	Dauphin	Derry Twp	24-009-052	1,382	-
2462	Dauphin	South Hanover Twp	56-004-013-000-0000	5,302	-
2462	Dauphin	South Hanover Twp	56-004-013-000-0000	-	2,106
2462	Dauphin	South Hanover Twp	56-009-061 0000000	-	41
2462	Fayette	Brownsville Boro	02-02-0012	-	220
2423	Fayette	Brownsville Boro	02-02-0012	177	-
2423	Fayette	Brownsville Boro	02-02-0013	-	199
2423	Fayette	Brownsville Boro	02-02-0013	154	-
2423	Fayette	Brownsville Boro	02-02-0029	-	91
2423	Fayette	Brownsville Boro	02-02-0029	35	-
2423	Fayette	Brownsville Boro	02-02-0032	-	123
2423	Fayette	Brownsville Boro	02-02-0032	70	-
2423	Fayette	Brownsville Boro	02-02-0044	-	123
2423	Fayette	Brownsville Boro	02-02-0044	70	-
2423	Fayette	Brownsville Boro	02-09-0006	-	330
2423	Fayette	Brownsville Boro	02-09-0006	361	-
2423	Fayette	Bell Twp	03-001-0704 A	-	12
2423	Fayette	Bell Twp	03-547-0105 B	-	91
2423	Fayette	Bell Twp	03-566-0100	-	16
2423	Fayette	Connellsville Twp	06-10-0022	-	33
2423	Fayette	Dunbar Boro	08-01-0018-01	-	34
2423	Fayette	Dunbar Twp	09-24-0218	-	4
2423	Fayette	Dunbar Twp	09-27-0050	-	137
2423	Fayette	Dunbar Twp	09-28-0052	-	140
2423	Fayette	Dunbar Twp	09-31-0079	-	68
2423	Fayette	Luzerne Twp.	19-06-0059F	-	5
2423	Fayette	Menallen Township	22-04-0009-01 F	-	117
2423	Fayette	Menallen Township	22-04-0036	-	98
2423	Fayette	Menallen Township	22-17-0086 F	-	19
2423	Fayette	North Union Twp	25-06-0087	126	-
2423	Fayette	North Union Twp	25-22-0126	131	-
2423	Fayette	North Union Twp	25-22-0120-01	9,766	-
2423	Fayette	North Union Twp	25-22-0126	200	-
2423	Fayette	North Union Twp	25-23-0003	123	-
2423	Fayette	North Union Twp	25-06-0087	187	-
2423	Fayette	North Union Twp	25-16-0381-T0	140	-
2423	Fayette	North Union Twp	25-16-0381-T0	342	-
2423	Fayette	North Union Twp	25-22-0120-01	3,674	-
2423	Fayette	North Union Twp	25-23-0003	99	-
2423	Fayette	South Union Twp	34-42-0019	81	-
2423	Fayette	South Union Twp	34-42-0019	212	-
2423	Fayette	Uniontown City	38-13-0467	-	1,934
2423	Fayette	Uniontown City	38-13-0467	4,758	-
2423	Fayette	Uniontown City	38-13-0467	-	3,717
2423	Fayette	Uniontown City	38-13-0468	-	267
2423	Fayette	Uniontown City	38-13-0468	-	139
2423	Fayette	Uniontown City	38-13-0468	341	-
2423	Fayette	Uniontown City	38-13-0468	256	-
2423	Fayette	Dunbar Twp	08-01-0018-01	30	-
2423	Fayette	Dunbar Twp	08-01-0018-01	51	-
2423	Fayette	Dunbar Twp	09-24-0218	8	-
2423	Fayette	Dunbar Twp	09-27-0050	267	-
2423	Fayette	Dunbar Twp	09-28-0052	273	-
2423	Fayette	Dunbar Twp	09-31-0079	133	-
2423	Fayette	Connellsville Twp	19-06-0059F	57	-
2423	Indiana	White Twp	42-013-112.00-00	-	1,318

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2441	Indiana	White Twp	42-014-102.01-000	-	646
2441	Indiana	White Twp	42-019-0142.00-000	-	12
2441	Indiana	White Twp	42-023-102.00-000	-	316
2441	Indiana	White Twp	42-033-400.00-000	-	1,273
2441	Indiana	White Twp	42-033-421.00-000	-	3,107
2441	Indiana	White Twp	42-013-112.00-00	4,126	-
2441	Indiana	White Twp	42-014-102.01-000 SD	2,023	-
2441	Indiana	White Twp	42-019-0142.00-000	38	-
2441	Indiana	White Twp	42-023-102.00-000	990	-
2441	Indiana	White Twp	42-033-400.00-000	3,987	-
2441	Indiana	White Twp	42-033-421.00-000	9,730	-
2441	Jefferson	Bell Twp.	03-01-0704 A	18	-
2443	Jefferson	Bell Twp.	03-547-0105 B	140	-
2443	Jefferson	Punxutanwney Boro	26-002-0315 AAA	4,074	-
2443	Jefferson	Punxutanwney Boro	26-004-0201 AA	-	4,432
2443	Jefferson	Bell Twp.	3-566-0100	24	-
2491	Lackawanna	Scranton	03401-010-008	-	1,165
2491	Lackawanna	Scranton	05504-010-007	-	1,463
2491	Lackawanna	Scranton	16804-010-001	-	2,302
2491	Lackawanna	Scranton	17701-020-005	-	32,146
2491	Lackawanna	Scranton	17701-020-005	-	9,550
2443	Lackawanna	Fell Twp	03401-010-008	-	221
2491	Lackawanna	Carbondale Twp	05504-010-007	-	320
2491	Lackawanna	Carbondale Twp	05504-010-007	2,820	-
2491	Lackawanna	Dalton Borough	06802-030-00147	-	126
2453	Lackawanna	Dalton Borough	06802-030-00147	621	-
2453	Lackawanna	Dalton Borough	06802-030-00147	-	213
2453	Lackawanna	Dalton Borough	06903 040 00401	-	166
2453	Lackawanna	Dalton Borough	06903 040 00401	822	-
2453	Lackawanna	Dalton Borough	06903-040-00401	-	282
2453	Lackawanna	Clarks Summit Boro.	10001 030 00100	1,868	-
2453	Lackawanna	Clarks Summit Boro.	10001-030-00100	-	940
2453	Lackawanna	Clarks Summit Boro.	1000-103000100	-	467
2453	Lackawanna	Clarks Summit Boro.	10006-010-033	-	296
2453	Lackawanna	Clarks Summit Boro.	10006-010-033	1,183	-
2453	Lackawanna	Clarks Summit	1000-6010033	-	595
2453	Lackawanna	Clarks Summit Boro.	10007 070 00103	580	-
2453	Lackawanna	Clarks Summit	1000-707000103	266	-
2453	Lackawanna	Clarks Summit Boro.	1007-070-00103	-	62
2453	Lackawanna	Scranton	13416-030-00202	-	384
2457	Lackawanna	Jefferson Twp	140.03-030-043.03	-	188
2457	Lackawanna	Jefferson Twp	140.03-030-086.01	-	69
2457	Lackawanna	Jefferson Twp	140.03-030-086.01	165	-
2457	Lackawanna	Jefferson Twp	14001-010-022	-	182
2457	Lackawanna	Jefferson Twp	140-01-010-022	434	-
2457	Lackawanna	Jefferson Twp	140-01-010-022	-	43
2457	Lackawanna	Jefferson Twp	14003-030-04303	-	44
2457	Lackawanna	Jefferson Twp	14003-030-08601	-	16
2457	Lackawanna	Jefferson Twp	14003-040-014	-	29
2457	Lackawanna	Jefferson Twp	14003-040-014	300	-
2457	Lackawanna	Jefferson Twp	14003-040-014	-	125
2457	Lackawanna	Scranton	14416-010-01203	-	1,733
2491	Lackawanna	Roaring Brook Twp	16804-010-001	-	558
2491	Lackawanna	Roaring Brook Twp	16804-010-001	5,506	-
2491	Lackawanna	Roaring Brook Twp	16901-010-00103	749	-
2491	Lackawanna	Roaring Brook Twp	16901-010-00103	-	76
2491	Lackawanna	Roaring Brook Twp	16901-010-00103	-	313
2491	Lackawanna	Scranton	17701-020-00401	-	33,945
2491	Lackawanna	Scranton	17701-020-00401	-	112,404
2431	Lawrence	New Beaver Boro	17-1214.-0109..-000	29,031	-

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2431	Lawrence	New Beaver Boro	17-1214-0109.000	4,041	-
2431	Lawrence	New Beaver Boro	17-1214-0109.000	-	16,786
2431	Lawrence	Neshannock Twp	2402 (25-459100)	-	806
2431	Lawrence	Neshannock Twp	25459100	1,717	-
2431	Lawrence	Neshannock Twp	25-459-100	-	302
2431	Lawrence	Neshannock Twp	2402 (459100NTT)	277	-
2431	Lawrence	Shenango Twp	31-3910.-0261A.-000	252	-
2431	Lawrence	Shenango Twp	31-3910-0261A-000	-	57
2431	Lawrence	Union Twp	34-154406	-	139
2431	Lawrence	Shenango Twp	3905-0261A-000	-	144
2431	Lawrence	Shenango Twp	3905-149 (31-315500)	-	22
2431	Lawrence	Shenango Twp	3905-149 (31-315500)	-	55
2431	Lawrence	Shenango Twp	31-3905-149 (31-315500)	97	-
2431	Lawrence	Shenango Twp	3910-169E-000	-	121
2431	Lawrence	Shenango Twp	3910-169E-000	-	48
2431	Lawrence	Shenango Twp	31-3910.-169E.-000	211	-
2431	Lawrence	Union Twp	4202-173C	255	-
2431	Lawrence	Union Twp	4202-173C (34-154406UNT)	-	93
2431	Luzerne	Dallas Bourough	11-E7-00A-020-001	-	6,358
2491	Luzerne	Kingston Township	35-F8-00A-009-000	603	-
2491	Luzerne	Plains Township	50-G11-00A-16A-000	1,692	-
2491	Luzerne	Plains Township	50-G12-00A-010-000	1,051	-
2491	Luzerne	Plains Township	50-G11-00A-016-000	1,408	-
2491	Luzerne	Jackson Township	31-F8-00A-093-000	-	6,628
2491	Luzerne	Jackson Township	31-G6-00A-000	1,925	-
2491	Luzerne	Lehman Township	40-E7-00A-037-000	5,620	-
2491	Luzerne	Lehman Township	40-G6-00A-027-000	13,311	-
2491	Luzerne	Pittston Township	51-E13-00A-08B-000	2,046	-
2491	Luzerne	Jenkins Township	33-G12-00A-24A-000	2,265	-
2491	Luzerne	Jenkins Township	33-G12-00A-030-000	2,832	-
2491	Luzerne	Dallas Bourough	11-E7-00A-020-001	5,633	-
2491	Luzerne	Kingston Township	35-F8-00A-009-000	-	325
2491	Luzerne	Bear Creek Township	04-K11-00A-010-000	-	7,819
2491	Luzerne	Plains Township	50-G11-00A-16A-001	-	764
2491	Luzerne	Plains Township	50-G12-00A-010-001	-	474
2491	Luzerne	Plains Township	50-G11-00A-016-001	-	636
2491	Luzerne	Jackson Township	31-G6-00A-000	-	1,594
2491	Luzerne	Lehman Township	40-E7-00A-037-000	-	4,600
2491	Luzerne	Lehman Township	40-G6-00A-027-000	-	10,896
2491	Luzerne	Pittston Township	51-E13-00A-08B-000	-	952
2491	Luzerne	Jenkins Township	33-G12-00A-24A-000	-	1,064
2491	Luzerne	Jenkins Township	33-G12-00A-030-000	-	1,330
2491	Luzerne	Duryea Borough	14-C-7-1-D1-R2-D1 (C11-001-04C)	537	-
2491	Luzerne	Duryea Borough	14-C-7-1-D1-R2-D1 (C11-00A-04C)	-	277
2491	Luzerne	Plymouth Twp	49-I8NW3-001-001	404	-
2446	McKean	Kane Boro	10-003.302.05	-	454
2446	McKean	Kane Boro	10-003-302-05 SD	354	-
2446	McKean	Wetmore Twp	30-009-106.14	-	148
2446	McKean	Wetmore Twp	30-009-106.14	214	-
2446	McKean	Wetmore Twp	30-009-115.00	-	1,247
2446	McKean	Wetmore Twp	30-009-115.00	1,713	-
2446	Monroe	Coolbaugh Twp	03//8c/1/103	-	130
2457	Monroe	Coolbaugh Twp	03/14F/2/199	222	-
2457	Monroe	Coolbaugh Twp	03/14F/2/199	-	80
2457	Monroe	Coolbaugh Twp	03/5/2/11-1/	1,027	-
2457	Monroe	Coolbaugh Twp	3/5/2/11-1	-	370
2457	Monroe	Coolbaugh Twp	03/8/1/1-3	-	1,251
2457	Monroe	Coolbaugh Twp	03/8/1/1-3/	3,476	-
2457	Monroe	Coolbaugh Twp	03/8C/1/103/	360	-
2457	Monroe	Coolbaugh Twp	03/8C/1/104/	360	-

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2457	Monroe	Coolbaugh Twp	03/8c/1/105	-	131
2457	Monroe	Coolbaugh Twp	03/8c/1/105/	364	-
2457	Monroe	Coolbaugh Twp	03-8c/1/107	-	95
2457	Monroe	Coolbaugh Twp	03/8C/1/107/	263	-
2457	Monroe	Coolbaugh Twp	03/8e/1/253	-	226
2457	Monroe	Coolbaugh Twp	03/8e/1/253/	628	-
2457	Monroe	Coolbaugh Twp	03/92574///	-	304
2457	Monroe	Coolbaugh Twp	03/92574///	844	-
2457	Monroe	Coolbaugh Twp	03/93090///	-	3,254
2457	Monroe	Coolbaugh Twp	03/93090///	9,038	-
2457	Monroe	Coolbaugh Twp	03/9c/1/445/	-	17
2457	Monroe	Coolbaugh Twp	03/9c/1/445/	48	-
2457	Monroe	Coolbaugh Twp	03-8c-1-104	-	130
2457	Monroe	Coolbaugh Twp	03/4B/2/202	-	153
2457	Monroe	Coolbaugh Twp	03/4B/2/202	426	-
2457	Monroe	Coolbaugh Twp	09/3A/1/324-2	-	13
2457	Monroe	Coolbaugh Twp	09/3A/1/324-2	36	-
2457	Monroe	Coolbaugh Twp	03/8D/1/329	-	9
2457	Monroe	Coolbaugh Twp	03/8D/1/329	25	-
2457	Monroe	Coolbaugh Twp	03/4B/2/203	-	158
2457	Monroe	Coolbaugh Twp	03/4B/2/203	438	-
2457	Monroe	Hamilton Twp.	7/2/1/26	29	-
2468	Monroe	Hamilton Twp.	7/4/1/28-1c	5,668	-
2468	Monroe	Hamilton Twp.	7/2/1/6	13,321	-
2468	Monroe	Hamilton Twp.	07/11/1/30-1c	628	-
2468	Monroe	Hamilton Twp.	07/2/1/12	349	-
2468	Monroe	Hamilton Twp.	7/11/1/30-1C	-	81
2468	Monroe	Hamilton Twp.	7/2/1/12	-	45
2468	Monroe	Hamilton Twp.	7/2/1/26	-	4
2468	Monroe	Hamilton Twp.	7/4/1/28-1c	-	731
2468	Monroe	Hamilton Twp.	7/2/1/6	-	1,719
2468	Monroe	Middle Smithfield Twp	09/119480	-	328
2457	Monroe	Boro. of Mt. Pocono	10/7/2/3	-	185
2457	Monroe	Boro. of Mt. Pocono	10/6/1/21	-	772
2457	Monroe	Mt. Pocono	10/2A/1/97	1,027	-
2457	Monroe	Mt. Pocono	10/6/1/21	1,615	-
2457	Monroe	Mt. Pocono	10/7/2/3	387	-
2457	Monroe	Ross Twp	15-1-1-2-2C	-	1,445
2457	Monroe	Ross Twp	15-1-1-2-2C	11,258	-
2457	Monroe	Smithfield Twp	16.7C.1.148	-	92
2457	Monroe	Smithfield Twp	16.7C.1.136	-	46
2457	Monroe	Smithfield Twp	16.7C.1.142	-	117
2457	Monroe	Smithfield Twp	16.7C.1.145	-	95
2451	Montgomery	Norristown	13-00-33264-01-4	1,990	-
2451	Montgomery	East Norriton Twp	33-00-04702-00-9	39,676	-
2451	Montgomery	East Norriton Twp	33-00-04702-00-9	7,131	-
2451	Montgomery	Limerick Twp	37-00-02163-01-4	2,063	-
2464	Montgomery	Limerick Twp	37-00-02163-01-4 SD	8,863	-
2464	Montgomery	Upper Prov	61-0000240014	-	699
2464	Montgomery	Upper Prov	61-0004730618	-	699
2464	Montgomery	Upper Providence Twp	61-00240014	2,967	-
2464	Montgomery	Upper Providence Twp	61-04730618	2,967	-
2464	Montgomery	Worcester Twp	67-00-03313-00-4	5,183	-
2451	Montgomery	Worcester Twp	67-00-033313-00-4	-	766
2455	Northampton	Upper Mt. Bethel Twp	C10 17 32	4,535	-
2456	Northampton	Northampton County	C10-17-32-S0131	-	887
2456	Northampton	Upper Mt. Bethel Twp	C10-17-32-S0131	-	684
2456	Northampton	Upper Mt. Bethel Twp	C9 2 33	3,855	-
2456	Northampton	Upper Mt. Bethel Twp	C9 2 33 0131	-	581
2456	Northampton	Upper Mt. Bethel Twp	D9 6A 10 0131	-	300

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2456	Northampton	Upper Mt. Bethel Twp	C9-1A-9A -0131	-	560
2456	Northampton	Upper Mt. Bethel Twp	C9-1A-9A -0131	3,712	-
2456	Northampton	Upper Mt. Bethel Twp	C9-1A-9A -S0131	-	726
2456	Northampton	Northampton County	C9-2-33-S0131	-	754
2456	Northampton	Pen Argyl Borough	D8-3-1-0625	-	2,728
2455	Northampton	Pen Argyl Borough	D8-3-1-0625	-	2,312
2455	Northampton	Upper Mt. Bethel Twp	D9 1 33 0131	6,633	-
2455	Northampton	Upper Mt. Bethel Twp	D9 1 33 0131	-	1,000
2455	Northampton	Washington Twp	D9 1 33 0134	-	186
2455	Northampton	Upper Mt. Bethel Twp	D9-1-33-1-S0131	-	1,297
2455	Northampton	Washington Twp	D9 1 33-2 0134	1,309	-
2455	Northampton	Washington Twp	D9 1 33-2 0134	-	256
2455	Northampton	Upper Mt. Bethel Twp	D9 6A 10	1,988	-
2455	Northampton	Northampton County	D9-1-34-S0134	-	11
2455	Northampton	Northampton County	D9-1-34-0134	11	-
2455	Northampton	Wind Gap Boro	E8-1-23-0638	-	37
2456	Northampton	Wind Gap Boro	E8-1-23-0638	126	-
2456	Northampton	Wind Gap Boro	E8-1-23-S0638	-	24
2456	Northampton	Wind Gap Boro	E8-4-3-0638	-	370
2456	Northampton	Wind Gap Boro	E8-4-3-0638	1,267	-
2456	Northampton	Wind Gap Boro	E8-4-3-S0638	-	240
2456	Northampton	Lower Mt. Bethel Twp	F10-13-1E-15	795	-
2455	Northampton	Lower Mt. Bethel Twp	F10-13-1E-15-1701	-	80
2455	Northampton	Lower Mt. Bethel Twp	F10-13-1E-26-1701	6	-
2455	Northampton	Lower Mt. Bethel Twp	F10-13-1E-26-1701	-	1
2455	Northampton	Lower Mt. Bethel Twp	F10-13-1E-26-S0117	-	1
2455	Northampton	Bushkill Twp	H7-14-1-0406	-	5
2456	Northampton	Bushkill Twp	H7-14-1-0406	40	-
2456	Northampton	Bushkill Twp	H7-14-3-S0406	-	140
2456	Northampton	Bushkill Twp	H7-14-3-0406	-	96
2456	Northampton	Bushkill Twp	H7-14-3-0406	738	-
2456	Northampton	Bushkill Twp	H7-14-3A-0406	-	200
2456	Northampton	Bushkill Twp	H7-14-3A-0406	1,545	-
2456	Northampton	Bushkill Twp	H7-14-3A-S0406	-	294
2456	Northampton	Bushkill Twp	H7-14-3-S0406	-	140
2456	Northampton	Bushkill Twp	H7-2-10-0406	-	66
2456	Northampton	Bushkill Twp	H7-2-10-0406	511	-
2456	Northampton	Bushkill Twp	H7-2-10-S0406	-	97
2456	Northampton	Bushkill Twp	H7-7-4-0406	-	60
2456	Northampton	Bushkill Twp	H7-7-4-0406	460	-
2456	Northampton	Bushkill Twp	H7-7-4A-0406	-	650
2456	Northampton	Bushkill Twp	H7-7-4A-S0406	-	956
2456	Northampton	Bushkill Twp	H7-7-4A-S0406	5,027	-
2456	Northampton	Bushkill Twp	H7-7-4-S0406	-	87
2456	Northampton	Bushkill Twp	H7-7-6-0406	-	112
2456	Northampton	Bushkill Twp	H7-7-6-0406	869	-
2456	Northampton	Bushkill Twp	H7-7-6-S0406	-	165
2456	Northampton	Nazareth Borough	J7-10-20-0421	-	822
2456	Northampton	Nazareth Borough	J7-10-20-0421	2,917	-
2456	Northampton	Nazareth Borough	J7-10-20-S0421	-	566
2456	Northampton	Upper Nazareth Twp	J7-11-5-0432	5,182	-
2456	Northampton	Upper Nazareth Twp	J7-11-5-0432	-	693
2456	Northampton	Upper Nazareth Twp	J7-11-5-0432	55	-
2456	Northampton	Upper Nazareth Twp	J7-11-5-S0432	-	1,005
2456	Northampton	Bushkill Twp	J7-1-4B-0406	-	18
2456	Northampton	Bushkill Twp	J7-1-4B-0406	142	-
2456	Northampton	Bushkill Twp	J7-1-4B-S0406	-	27
2456	Northampton	Bushkill Twp	J7-2-9-0406	-	146
2456	Northampton	Bushkill Twp	J7-2-9-0406	1,125	-
2456	Northampton	Bushkill Twp	J7-2-9-S0406	-	214

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2456	Northampton	Palmer Twp	K8-5-2A-1-0324	-	363
2456	Northampton	Palmer Twp	K8-5-2A-1-0324	2,992	-
2456	Northampton	Palmer Twp	K8-5-2A-1-S0324	-	485
2456	Northumberland	Delaware Twp	021-00-014-032-B-001	658	-
2484	Northumberland	McEwensville Boro	030-00-001-017-014	-	120
2484	Northumberland	Milton Boro	032-00-018-045-A	453	-
2471	Northumberland	Milton Boro.	032-03-002-020-A	64	-
2471	Northumberland	Milton Boro.	032-03-002-020-A	-	46
2471	Northumberland	Milton Boro.	035-00-021-058-F-008	11,055	-
2471	Northumberland	Point Twp.	039-00-029-015-E	236	-
2471	Northumberland	Point Twp.	039-00-029-015-E	-	114
2471	Northumberland	West Chillisquaque Twp.	062-00-023-079-A	-	141
2471	Northumberland	West Chillisquaque Twp.	062-00-023-079-A	301	-
2471	Northumberland	Lewis Twp	026-00-011-007-A	2,201	-
2471	Northumberland	Lewis Twp	026-00-011-007	238	-
2471	Northumberland	Lewis Twp	026-00-011-007	-	147
2471	Northumberland	Lewis Twp	026-00-011-007-A	-	1,360
2471	Northumberland	Turbotville Boro	055-00-001-001-A	-	29
2471	Northumberland	Turbotville Boro	055-00-012-022	-	413
2471	Northumberland	Turbotville Boro	055-00-001-001-A	52	-
2471	Northumberland	Turbotville Boro	055-00-012-022	732	-
2471	Pike	Delaware Twp	148.04-03-64.002	-	235
2468	Pike	Delaware Twp	168.00-01-02.001	-	27
2468	Pike	Jackson Township	31-F8-00A-093-000	8,001	-
2491	Pike	Delaware Twp	168.02-01-31	-	43
2468	Pike	Delaware Twp	168.02-01-54.008	-	4
2468	Pike	Delaware Twp	168.03-04-39.001	-	3
2468	Pike	Delaware Twp	148.03-02-01.002	531	-
2468	Pike	Delaware Twp	168.03-05-68.001	-	3
2491	Pike	Lehman Twp.	196.02-02-16	-	1,302
2468	Pike	Lehman Twp.	196.04-03-68.001	-	1,096
2468	Pike	Lehman Twp.	188.04-04-46	-	4
2491	Pike	Lehman Twp.	189.01-02-22	-	166
2491	Pike	Lehman Twp.	189.03-01-12	-	83
2491	Pike	Lehman Twp.	192.02-01-26	-	211
2491	Pike	Lehman Twp.	194.01-02-49	11	-
2491	Pike	Lehman Twp.	194.01-02-50	-	4
2491	Pike	Lehman Twp.	194.01-02-51	-	4
2491	Pike	Lehman Twp.	193.02-01-30	-	83
2491	Pike	Lehman Twp.	194.03-01-23	-	83
2491	Pike	Lehman Twp.	199.02-02-49.002	-	11
2491	Pike	Lehman Twp.	188.04-04-46 (060040318)	18	-
2468	Pike	Lehman Twp.	189.01-02-22 (060075364)	692	-
2468	Pike	Lehman Twp.	189.03-01-12 (060112402)	346	-
2468	Pike	Lehman Twp.	194.01-02-49 (060041783)	2,157	-
2468	Pike	Lehman Twp.	194.01-02-50 (060042916)	18	-
2468	Pike	Lehman Twp.	194.01-02-51 (060039268)	18	-
2468	Pike	Lehman Twp.	193.02-01-30 (060043868)	346	-
2468	Pike	Lehman Twp.	194.03-01-239 (060075366)	346	-
2468	Pike	Lehman Twp.	199.02-02-49.022 (060112348)	48	-
2468	Pike	Lehman Twp.	196.04-03-68.001(106510)	4,575	-
2468	Pike	Lehman Twp.	196.02-02-16 (0102985)	5,437	-
2468	Pike	Delaware Twp	148.03-02-01-	-	542
2474	Schuylkill	West Mahanoy Twp	36-13-14	-	1
2474	Susquehanna	Liberty Twp.	050.00-01-010.00	-	69
2454	Susquehanna	Liberty Twp.	050.00-01-010.00	182	-
2454	Susquehanna	Susquehanna Boro	054.11-4.060.00.000	-	1,135
2454	Susquehanna	Susquehanna Boro	054.11-4.060.00.000	1,753	-
2454	Susquehanna	Susquehanna Boro	054.12-2,087.00,000	-	32
2454	Susquehanna	Susquehanna Boro	054.12-2,087.00,000	50	-

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2454	Susquehanna	Susquehanna Boro	054.14-2,102.00,000	-	265
2454	Susquehanna	Susquehanna Boro	054.14-2,102.00,000	409	-
2454	Susquehanna	Harmony Twp.	055.00-1.002.00.000	5,866	-
2454	Susquehanna	Harmony Twp.	055.00-1.002.00.000	2,606	-
2454	Susquehanna	Liberty Twp.	070.00-01-002.00	369	-
2454	Susquehanna	Liberty Twp.	070.00-1,002.00,	-	140
2454	Susquehanna	Harmony Twp	076.00-01-039.01	1,946	-
2454	Susquehanna	Harmony Twp.	076.00-1,039.01 .000	770	-
2454	Susquehanna	Harmony Twp.	076.00-1.039.00.000	812	-
2454	Susquehanna	Harmony Twp.	076.00-1-039.00 .000	2,051	-
2454	Susquehanna	Thompson Boro.	114.00-02-001.00	1,545	-
2454	Susquehanna	Thompson Boro.	114.00-2,001.00	-	554
2454	Susquehanna	Forest City Boro 2nd Ward	249.15-1,008.00	785	-
2491	Susquehanna	Forest City Boro 2nd Ward	249.15-1,008.00	-	448
2491	Union	Buffalo Twp	001-080-001-00000	-	942
2471	Union	Buffalo Twp	001-080-001-00000	2,424	-
2471	Union	Buffalo Twp	001-080-173-00000	-	1,850
2471	Union	Buffalo Twp	001-080-173-00000	4,762	-
2471	Union	East Buffalo Twp	002-042-093-00001	13,853	-
2471	Union	East Buffalo Twp	002-042-093-00001	-	6,502
2471	Union	Gregg Twp	003-068-019.10000	-	441
2471	Union	Gregg Twp	003-068-019.10000	1,122	-
2471	Union	Kelly Twp	006-046-180	-	226
2471	Union	Kelly Twp	006-046-180	757	-
2471	Union	White Deer Twp	014-053-027.10000	404	-
2471	Union	White Deer Twp	014-053-027.10000	-	117
2471	Union	White Deer Twp	014-053-039.00000	-	445
2471	Union	White Deer Twp	014-055-148.00000	10,564	-
2471	Union	White Deer Twp	014-055-148.00000	-	3,056
2471	Union	White Deer Twp	014-056-066.00000	17,346	-
2471	Union	White Deer Twp	014-056-066.00000	-	5,018
2471	Union	White Deer Twp	014-056-067.1	371	-
2471	Union	White Deer Twp	014-056-067.1	-	107
2471	Union	White Deer Twp	014-056-074.00000	-	1,221
2471	Union	White Deer Twp	014-056-074.L0000	31,500	-
2471	Union	White Deer Twp	014-056-074.L0000	-	9,112
2471	Union	White Deer Twp	014-056-074-00000	4,220	-
2471	Union	White Deer Twp	014-061-060.1	928	-
2471	Union	White Deer Twp	014-061-060.1	-	268
2471	Union	White Deer Twp	014-0NM-069.00000	6,834	-
2471	Union	White Deer Twp	014-0NM-069.00000	-	1,977
2471	Warren	Warren City	WN-823-845700-000	300	-
2445	Warren	Warren City	WN-823-845700-000	229	-
2445	Washington	Canton Township	120-006-00-00-0026-03	1,552	-
2421	Washington	Canton Township	120-006-00-00-0026-03	-	261
2421	Washington	Canton Township	120-006-00-00-0026-03	-	64
2421	Washington	Carroll Twp.	130-012-04-02-0001-00	-	68
2422	Washington	Cecil Twp	140-001-00-00-0046-01	14	-
2422	Washington	Cecil Twp	140-006-04-05-0019-00	101	-
2421	Washington	Cecil Twp	140-006-04-05-0019-00	-	20
2421	Washington	Cecil Twp	140-006-04-05-0019-00	-	13
2421	Washington	Cecil Twp	140-007-04-02-0043-07	-	18
2421	Washington	Cecil Twp	140-007-04-02-0043-07	146	-
2421	Washington	Cecil Twp	140-007-04-02-0043-07	-	30
2421	Washington	Cecil Twp	140-009-00-00-0019-00	-	36
2421	Washington	Cecil Twp	140-009-00-00-0019-00	289	-
2421	Washington	Cecil Twp	140-009-00-00-0019-00	-	59
2421	Washington	Cecil Twp	140-009-00-00-0033-03	2	-
2421	Washington	Cecil Twp	140-009-00-00-0033-03	-	0
2421	Washington	Cecil Twp	140-011-01-05-0016-00	12	-

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2421	Washington	Cecil Twp	140-011-01-05-0016-00	-	2
2421	Washington	Cecil Twp	140-011-01-05-0016-00	-	1
2421	Washington	Cecil Twp	140-011-01-06-0009-00	36	-
2421	Washington	Cecil Twp	140-011-01-06-0009-00	-	7
2421	Washington	Cecil Twp	140-011-01-06-0009-00	-	5
2421	Washington	Chartiers Twp	170-009-00-00-0019-00	5	-
2421	Washington	Chartiers Twp	170-009-00-00-0019-00	-	0
2421	Washington	Chartiers Twp	170-009-00-00-0019-00	-	1
2421	Washington	Donegal Township	230-011-00-00-0027-00	-	290
2421	Washington	Donegal Township	230-011-00-00-0027-00	-	125
2421	Washington	Donegal Township	230-011-00-00-0027-00	1,613	-
2421	Washington	Donegal Township	230-011-00-00-0028-00	-	106
2421	Washington	Donegal Township	230-011-00-00-0028-00	-	46
2421	Washington	Donegal Township	230-011-00-00-0028-00	589	-
2421	Washington	Donegal Township	230-011-00-00-0035-00	-	30
2421	Washington	Washington County	230-011-00-00-0035-00	-	70
2421	Washington	Donegal Township	230-011-00-00-0035-00	390	-
2421	Washington	Washington County	320-007-00-00-0027-02	-	79
2421	Washington	Fallowfield Twp	320-007-00-00-0027-02	-	60
2421	Washington	Fallowfield Twp	320-007-00-00-0027-02	608	-
2421	Washington	Independence Twp	370-005-02-04-0015-01	4	-
2421	Washington	Independence Twp	370-005-02-04-0015-01	-	1
2421	Washington	Mt. Pleasant	460-009-01-02-0033-00	3	-
2421	Washington	Mt. Pleasant	460-009-01-02-0033-00	-	1
2421	Washington	Mt. Pleasant	460-009-01-02-0033-00	-	0
2421	Washington	North Franklin Twp	510-002-15-00-0001-00	1,012	-
2421	Washington	North Franklin Twp	510-002-15-00-0001-00	-	170
2421	Washington	North Franklin Twp	510-002-15-00-0001-00	-	87
2421	Washington	North Strabane Twp.	520-001-00-00-0012-00	23,646	-
2421	Washington	North Strabane Twp.	520-001-00-00-0012-00	-	3,015
2421	Washington	North Strabane Township	520-001-00-00-0012-00	-	4,788
2421	Washington	North Strabane Twp.	520-001-00-00-0014-00	252	-
2421	Washington	North Strabane Twp.	520-001-00-00-0014-00	-	51
2421	Washington	North Strabane Twp.	520-001-00-00-0014-00	-	32
2421	Washington	North Strabane Twp.	520-003-00-00-0004-00	86	-
2421	Washington	North Strabane Twp.	520-003-00-00-0004-00	-	17
2421	Washington	North Strabane Twp.	520-003-00-00-0004-00	-	11
2421	Washington	North Strabane Twp.	520-014-01-00-0016-01	12	-
2421	Washington	North Strabane Twp.	520-014-01-00-0016-01	-	2
2421	Washington	North Strabane Twp.	520-014-01-00-0016-01	-	2
2421	Washington	Peters Twp.	540-010-00-00-0063-00	80	-
2421	Washington	Peters Twp	540-010-00-00-0063-00	117	-
2421	Washington	Smith Township	570-006-00-00-0023-00	-	8
2421	Washington	Smith Township	570-006-00-00-0023-00	43	-
2421	Washington	Smith Township	570-006-00-00-0023-00	-	5
2421	Washington	Smith Township	570-018-00-00-0003-00	-	13
2421	Washington	Smith Township	570-018-00-00-0003-00	73	-
2421	Washington	Smith Township	570-022-00-00-0012-01	-	5
2421	Washington	Smith Township	570-022-00-00-0012-01	29	-
2421	Washington	Smith Township	570-022-00-00-0012-01	-	3
2421	Washington	South Franklin Twp.	590-005-02-01-0001-04	-	29
2421	Washington	South Franklin Twp.	590-005-02-01-0001-04	377	-
2421	Washington	South Franklin Twp.	590-005-02-01-0001-04	-	69
2421	Washington	South Strabane Twp.	600-003-04-02-0002-02	11	-
2421	Washington	South Strabane Twp.	600-003-04-02-0002-02	-	1
2421	Washington	South Strabane Twp.	600-003-04-02-0002-02	-	2
2421	Washington	Union Twp	640-001-01-01-0008-00	-	0
2422	Washington	Union Twp	640-001-01-01-0008-00	3	-
2422	Washington	Union Twp	640-007-00-00-0016-02	-	2
2422	Washington	Union Twp	640-007-00-00-0016-02	12	-

Pennsylvania-American Water Company - Water Operations
Pennsylvania Property Tax

Profit Center	County	Municipality	Parcel Number	July - Dec 2022	Jan - June 2023
2422	Washington	Union Twp	640-007-00-00-0016-02	-	24
2422	Washington	Washington County	640-007-00-00-0038-00	-	305
2422	Washington	Union Twp	640-007-00-00-0038-00	149	-
2422	Washington	Union Twp	640-007-00-00-0038-00	1,904	-
2422	Washington	Union Twp	640-007-01-01-0010-00	-	10
2422	Washington	Union Twp	640-007-01-01-0010-00	5	-
2422	Washington	Union Twp	640-007-01-01-0010-00	64	-
2422	Washington	Union Twp	640-007-01-01-0011-00	-	13
2422	Washington	Union Twp	640-007-01-01-0011-00	6	-
2422	Washington	Union Twp	640-007-01-01-0011-00	79	-
2422	Washington	Union Twp	640-007-02-03-0005-00	-	160
2422	Washington	Union Twp	640-007-02-03-0005-00	78	-
2422	Washington	Union Twp	640-007-02-03-0005-00	999	-
2422	Washington	Union Twp	640-007-02-03-0006-00	-	32
2422	Washington	Union Twp	640-007-02-03-0006-00	110	-
2422	Washington	Union Twp	640-007-02-03-0006-00	31	-
2422	Washington	Union Twp	640-007-02-03-0006-00	-	18
2422	Washington	Union Twp	640-007-02-03-0007-00	-	17
2422	Washington	Union Twp	640-007-02-03-0007-00	30	-
2422	Washington	Union Twp	640-007-02-03-0007-00	104	-
2422	Washington	Union Twp	640-007-02-03-0007-00	-	20
2422	Washington	Union Twp	640-007-02-03-0010-00	-	2
2422	Washington	Union Twp	640-007-02-03-0010-00	-	24
2422	Washington	Union Twp	640-007-02-03-0010-00	10	-
2422	Washington	Union Twp	640-007-02-06-0001-00	-	6
2422	Washington	Union Twp	640-007-02-06-0001-00	-	3
2422	Washington	Union Twp	640-007-02-06-0001-00	36	-
2422	Washington	Union Twp	640-007-02-06-0011-01	-	25
2422	Washington	Union Twp	640-007-02-06-0011-01	-	12
2422	Washington	Union Twp	640-007-02-06-0011-01	158	-
2422	Washington	Union Twp	640-007-07-00-0016-00	-	1
2422	Washington	Union Twp	640-007-07-00-0016-00	6	-
2422	Washington	Union Twp	640-007-07-00-0016-00	22	-
2421	Washington	West Pike Run Twp	700-012-04-00-0024-00	-	9
2421	Washington	City of Washington Ward 5	750-059-00-01-0009-01	15	-
2421	Washington	City of Washington Ward 5	750-059-00-01-0009-01	-	38
2421	Washington	City of Washington Ward 5	750-059-00-01-0009-01	-	2
2421	York	Fairview Twp.	27-000-04-0001-A0-00000	-	22
				$1,297,630	$577,297

Total	**$1,874,927**

Pennsylvania-American Water Company - Wastewater SSS General Operations
Pennsylvania Property Tax

Profit Center	County	Municipality	Parcel Number	July - Dec 2022	Jan - June 2023
2469	Pike	Delaware Twp	168.03-06-16	$0	$64
2469	Pike	Delaware Twp	175.00-01-01	-	748
2401	Berks	Exeter Twp	43-5334-06-39-8756	-	242,690.06
2401	Berks	Exeter Twp	43-5334-06-39-8756	765,621.83	-
2401	Berks	Exeter Twp	43-5335-14-22-8754	2,640	-
2401	Berks	Exeter Twp	43-5335-14-22-8754	-	7,042
2467	Chester	Valley Twp	38-02-387.010-E	-	12
2467	Chester	Valley Twp	38-02M-0126-E	-	110
2467	Clarion	Clarion Boro	38-02M-0126.010-E	-	67
2447	Clarion	Clarion Boro	05-060-001-001-00	1,393	-
2447	Clarion	Clarion Boro	05-060-055-000-00	-	35
2447	Clarion	Clarion Boro	05-060-055-000-00	54	-
2447	Clarion	Clarion Boro	05-060-043-000-00	-	6
2447	Clarion	Clarion Twp.	05-060-043-000-00	10	-
2447	Clarion	Clarion Twp.	06-010-149-000-00	-	66
2447	Clarion	Clarion Twp.	06-010-149-000-00	183	-
2447	Clarion	Clarion Twp.	06-040-039-009-00	-	6
2447	Clarion	Clarion Twp.	06-040-039-009-00	15	-
2447	Clarion	Clarion Twp.	06-040-043-000-00	-	76
2447	Clarion	Clarion Twp.	06-040-043-000-00	209	-
2447	Clarion	Clarion Twp.	06-040-122-004-00	-	66
2447	Clarion	Elk	06-040-122-004-00	183	-
2447	Clarion	Monroe	08-010-144-001-00	852	-
2447	Clarion	Monroe	19-030-039-000-00	-	8,856
2447	Clarion	Paint Twp	19-030-039-000-00	24,092	-
2447	Clarion	Paint Twp	21-025-068-000-00	-	60
2438	Clarion	Paint Twp	21-025-068-000-00	82	-
2438	Clarion	Paint Twp	21-030-034-001-00	46	-
2438	Clarion	Strattanville Boro	21-030-034-001-00	-	19
2438	Clarion	Strattanville Boro	32-010-001-001-01	-	226
2447	Clearfield	Bradford Twp.	32-010-001-001-01	427	-
2447	Luzerne	Foster Twp	N07-000-00154	3	-
2470	Luzerne	Foster Twp	23-Q9-00A-04A-000	-	85
2470	Luzerne	Foster Twp	23-R10S1-003-030-000	-	115
2470	Luzerne	Foster Twp	23-R9S3-003-03A-000	-	36
2470	Luzerne	Foster Twp	23-R9NE3-011-002-000	-	431
2469	Monroe	Middle Smithfield Twp	09/119480	1,961	-
2469	Monroe	Middle Smithfield Twp	09/5A/3/6	-	103
2469	Monroe	Middle Smithfield Twp	09/5A/3/6	614	-
2485	Northumberland	Delaware Twp	021-00-014-032-B-001	-	346
2485	Northumberland	Delaware Twp	021-00-014-056-B-001	139	-
2485	Northumberland	McEwensville Boro	021-00-014-056-B-001	-	73
2485	Pike	Delaware Twp	030-00-001-017-014	234	-
2469	Pike	Delaware Twp	168.02-01-31	144	-
2469	Pike	Delaware Twp	168.03-04-39.001	12	-
2469	Pike	Delaware Twp	168.03-05-68.001	12	-
2469	Pike	Delaware Twp	168.03-06-16	215	-
2469	Schuylkill	West Mahanoy Twp	175.00-01-01	2,508	-
2469	Wyoming	Overfield	36-13-14	3	-
2460	Wyoming	Overfield	21-053.0-171-00-00-00	-	50

Pennsylvania-American Water Company - Wastewater SSS General Operations
Pennsylvania Property Tax

Profit Center	County	Municipality	Parcel Number	July - Dec 2022	Jan - June 2023
2475	Wyoming	Overfield	21-053.0-047-00-00-00	-	12
2475	Wyoming	Overfield	21-053.0-171-00-00-00	148	-
2475	York	Fairview Twp.	21-053.0-047-00-00-00	36	-
2460	York	Fairview Twp.	27-000-07-0062-00-00000	-	742
2460	York	Fairview Twp.	27-000-07-0062-00-00000	1,339	-
2460	York	Fairview Twp.	27-000-13-0006-B0-00000	-	529
2460	York	Fairview Twp.	27-000-13-0006-B0-00000	965	-
2460	York	Fairview Twp.	27-000-23-0234-A0-00000	-	864
2460	York	Fairview Twp.	27-000-23-0234-A0-00000	1,576	-
2460	York	Fairview Twp.	27-000-23-0240-D0-00000	-	8,568
2460	York	Fairview Twp.	27-000-23-0240-D0-00000	15,629	-
2460	York	Fairview Twp.	27-000-35-0043-00-00000	181	-
2460	York	Fairview Twp.	27-000-35-0043-00-00000	-	99
2460	York	Fairview Twp.	27-000-40-0001-A0-00000	40	-
2460	York	Fairview Twp.	27-000-QG-0086-D0-0000	480	-
2460	York	Fairview Twp.	27-000-QG-0086-D0-00000	-	263
2460	York	Fairview Twp.	27-000-QG-0089-D0-0000	823	-
2460	York	Fairview Twp.	27-000-QG-0089-D0-00000	-	451
2460	York	Fairview Twp.	27-000-RE-0132-00-00000	27	-
2460	York	Fairview Twp.	27-000-RE-0132-00-00000	-	15
2460	York	Fairview Twp.	27-000-RF-0006-B0-00000	138	-
2460	York	Fairview Twp.	27-000-RF-0006-B0-00000	-	76
2460	York	Fairview Twp.	27-000-RF-0056-A0-00000	1,117	-
2460	York	Fairview Twp.	27-000-RF-0056-A0-00000	-	619
2460	York	Fairview Twp.	27-000-RF-0099-00-00000	11,406	-
2460	York	Fairview Twp.	27-000-RF-0099-00-00000	-	5,385
2460	York	Fairview Twp.	27-000-RF-0170-A0-00000	5,799	-
2460	York	Fairview Twp.	27-000-RF-0170-A0-00000	-	3,179
2460	York	Fairview Twp.	27-000-RF-0239-K0-00000	35	-
2460	York	Fairview Twp.	27-000-RF-0239-K0-00000	-	19
2460	York	Fairview Twp.	27-000-SF-0067-00-00000	662	-
2460	York	Fairview Twp.	27-000-SF-0067-00-00000	-	367
2460	York	Fairview Twp.	27-000-SF-0067-A0-00000	486	-
2460	York	Fairview Twp.	27-000-SF-0067-A0-00000	-	266
2460	York	Fairview Twp.	27-000-SF-0068-00-00000	649	-
2460	York	Fairview Twp.	27-000-SF-0068-00-00000	-	359
2460	York	Fairview Twp.	27-000-SF-0068-A0-00000	645	-
2460	York	Fairview Twp.	27-000-SF-0068-A0-00000	-	354
2460	York	Fairview Twp.	27-000-SF-0069-00-00000	773	-
2460	York	Fairview Twp.	27-000-SF-0069-00-00000	-	424
2460	York	Fairview Twp.	27-000-SF-0069-A0-00000	27	-
2460	York	Fairview Twp.	27-000-SF-0069-A0-00000	-	15
2460	York	Fairview Twp.	27-000-SF-0069-B0-00000	11,641	-
2460	York	Fairview Twp.	27-000-SF-0069-B0-00000	-	6,448
2460	York	Fairview Twp.	27-000-SF-0080-A0-00000	175	-
2460	York	Fairview Twp.	27-000-SF-0080-A0-00000	-	97
2460	York	Fairview Twp.	27-000-SF-0081.00-00000	-	4,935
2460	York	City of York	27-000-SF-0081-00-00000	8,909	-
2494	York	City of York	14-628-16-0106.B0-00000	-	12
2494	York	City of York	14-628-16-0106.B0-00000	-	4
2494	York	City of York	14-628-16-0106.B0-00000	25	-
2494	York	City of York	36-000-JI-0040.Q0.00000	18,212	-
2494	York	City of York	36-000-JI-0040.Q0.00000	-	6,920
2494	York	City of York	36-000-JI-0038.00-00000	-	271,367
2494	York	City of York	36-000-JI-0038.00-00000	714,141	-
2494	York	City of York	36-000-JI-0039.00-00000	-	241
2469	Monroe	Boro. of Mt. Pocono	10/2A/1/97	-	491
2494	York	City of York	36-000-JI-0039.00-00000	648	-
				$1,598,385	$574,509

Total	**$2,172,894**

Pennsylvania-American Water Company - Wastewater CSS Operations
Pennsylvania Property Tax

Profit Center	County	Municipality	Parcel Number	July - Dec 2022	Jan - June 2023
2412	Allegheny	Mt. Lebanon	019-D-00260-0000	$682	$0
2412	Allegheny	Allegheny County	0059-J-00262-0000	-	83
2412	Allegheny	Allegheny County	0059-J-00264-0000	-	82
2412	Allegheny	Allegheny County	0040-F-00134-0000	-	40
2412	Allegheny	Allegheny County	0040-F-00136-0000	-	20
2412	Allegheny	Allegheny County	0059-J-00375-0000	-	15,690
2412	Allegheny	Allegheny County	0066-C-00030-0000-00	-	40,110
2412	Allegheny	Allegheny County	0066-C-00030-0001-00	-	1,717
2412	Allegheny	Allegheny County	0066-C-00200-0000-00	-	7
2412	Allegheny	Allegheny County	0066-C-00205-0000-00	-	117
2412	Allegheny	Allegheny County	0066-C-00218-0000-00	-	54
2412	Allegheny	Allegheny County	0066-C-00219-0000-00	-	657
2412	Allegheny	Allegheny County	0066-C-00224-0000-00	-	107
2412	Allegheny	Allegheny County	0066-C-00230-0000-00	-	6
2412	Allegheny	Scott Twp	66-c-30-0001	1,735	-
2412	Allegheny	Scott Twp	66-c-30-0001	6,641	-
2412	Allegheny	Greentree Borough	0066-C-200	-	6
2412	Allegheny	Allegheny County	0066-C-200	28	-
2412	Allegheny	Greentree Borough	0066-C-205	-	106
2412	Allegheny	Allegheny County	0066-C-205	470	-
2412	Allegheny	Greentree Borough	0066-C-218	-	48
2412	Allegheny	Allegheny County	0066-C-218	215	-
2412	Allegheny	Greentree Borough	0066-C-219	-	592
2412	Allegheny	Allegheny County	0066-C-219	2,630	-
2412	Allegheny	Greentree Borough	0066-C-224	-	96
2412	Allegheny	Allegheny County	0066-C-224	428	-
2412	Allegheny	Greentree Borough	0066-C-230	-	5
2412	Allegheny	Allegheny County	0066-C-230	24	-
2412	Allegheny	Greentree Borough	0066-C-30	-	36,142
2412	Allegheny	Allegheny County	0066-C-30	266,118	-
2412	Allegheny	Allegheny County	0304-M-00395-0000	-	2,068
2412	Allegheny	Duquesne City	0304-M-00395-0000	-	8,085
2412	Allegheny	Duquesne City	0304-M-00395-0000	6,911	-
2412	Allegheny	Mt Oliver	0014-S-00100-0000-00	-	549
2412	Allegheny	Allegheny County	0014-S-00100-0000-00	192	-
2412	Allegheny	Mt Oliver	0014-S-00128-0000-00	-	4,649
2412	Allegheny	Allegheny County	0014-S-00128-0000-00	1,629	-
2412	Allegheny	Allegheny County	0242-M-00136-0000-00	-	132
2412	Allegheny	Allegheny County	0309-A-00078-0000-00	-	335
2412	Allegheny	Allegheny County	0308-G-00109-0000-00	-	4,655
2412	Allegheny	McKeesprt City	0308-G-00109-0000-00	-	11,325
2412	Allegheny	McKeesprt City	0308-G-00109-0000-00	19,459	-
2412	Allegheny	Allegheny County	0308-G-00132-0000-00	-	2,184
2412	Allegheny	McKeesprt City	0308-G-00132-0000-00	-	4,984
2412	Allegheny	McKeesprt City	0308-G-00132-0000-00	9,128	-
2412	Allegheny	Allegheny County	0308-G-00145-0000-00	-	7
2412	Allegheny	McKeesprt City	0308-G-00145-0000-00	-	26
2412	Allegheny	McKeesprt City	0308-G-00145-0000-00	27	-
2412	Allegheny	Allegheny County	0309-M-00160-0000-00	-	1,431
2412	Allegheny	Dravosburg Boro	0309-M-00160-0000-00	-	2,112
2412	Allegheny	Dravosburg Boro	242-M-00136-0000-00	-	195
2412	Allegheny	Dravosburg Boro	0309-A-00078-0000-00	-	494
2412	Allegheny	McKeesprt City	309-A-78	1,400	-
2412	Allegheny	McKeesprt City	242-M-00136-0000-00	551	-
2412	Allegheny	McKeesprt City	0309-M-00160-0000-00	5,984	-
2412	Allegheny	Allegheny County	0380-B-00141-0000-00	-	170
2412	Allegheny	McKeesprt City	0380-B-00141-0000-00	-	556
2412	Allegheny	McKeesprt City	0380-B-00141-0000-00	713	-
2412	Allegheny	Allegheny County	0391-K-00300-0000	11,207	-
2412	Allegheny	Allegheny County	0410-K-00008-0000	-	3
2412	Allegheny	Allegheny County	0463-S-00010-0000-00	-	21
2412	Allegheny	McKeesprt City	0463-S-00010-0000-00	-	83
2412	Allegheny	McKeesprt City	0463-S-00010-0000-00	86	-
2412	Allegheny	Allegheny County	0464-E-00157-0000-00	-	138

Pennsylvania-American Water Company - Wastewater CSS Operations
Pennsylvania Property Tax

Profit Center	County	Municipality	Parcel Number	July - Dec 2022	Jan - June 2023
2412	Allegheny	McKeesprt City	0464-E-00157-0000-00	-	500
2412	Allegheny	McKeesprt City	0464-E-00157-0000-00	576	-
2412	Allegheny	Allegheny County	0464-E-00180-000-00	-	2,432
2412	Allegheny	McKeesprt City	0464-E-00180-000-00	-	4,343
2412	Allegheny	McKeesprt City	0464-E-00180-000-00	10,168	-
2412	Allegheny	Allegheny County	0464-E-00210-0000-00	-	1,005
2412	Allegheny	McKeesprt City	0464-E-00210-0000-00	-	2,196
2412	Allegheny	McKeesprt City	0464-E-00210-0000-00	4,202	-
2412	Allegheny	Allegheny County	0464-R-00325-0000-00	-	165
2412	Allegheny	McKeesprt City	0464-R-00325-0000-00	-	294
2412	Allegheny	McKeesprt City	0464-R-00325-0000-00	692	-
2412	Allegheny	Allegheny County	0555-C-00203-0000-00	-	241
2412	Allegheny	McKeesprt City	0461-J-00009-0000-00	-	492
2412	Allegheny	McKeesprt City	0555-C-00203-0000-00	-	551
2412	Allegheny	McKeesprt City	0555-C-00203-0000-00	1,008	-
2412	Allegheny	Baldwin Boro.	059-J-375 (877078751)	-	20,792
2492	Lackawanna	Scranton	13416-030-00202	-	63
2492	Lackawanna	Scranton	14416-010-01203	-	313
2492	Lackawanna	Scranton	14416-010-01204	-	251
2492	Lackawanna	Scranton	14512-010-028	-	376
2492	Lackawanna	Scranton	14614-030-054	-	63
2492	Lackawanna	Dunmore Borough	14614-030-054	-	53
2492	Lackawanna	Scranton	14614-030-054	137	-
2492	Lackawanna	Scranton	14615-010-014	-	94
2492	Lackawanna	Dunmore Borough	14615-010-014	-	79
2492	Lackawanna	Scranton	14615-010-014	206	-
2492	Lackawanna	Scranton	15516-030-00101	-	313
2492	Lackawanna	Scranton	15707-020-017	-	1,754
2492	Lackawanna	Scranton	15707-020-017	-	6,124
2492	Lackawanna	Scranton	15718-020-00401	-	1,768
2492	Lackawanna	Scranton	15718-020-00401	-	376
2492	Lackawanna	Scranton	16707-050-075	-	28
2492	Lackawanna	Scranton	16709-010-001	-	105,363
2492	Lackawanna	Scranton	18601-050-004	2,554	-
2492	Lackawanna	Scranton	18601-050-004	8,804	-
2492	Lackawanna	Jefferson Twp	140.03-030-043.03	449	-
2492	Lackawanna	Scranton	14416-010-01204	-	1,537
2492	Lackawanna	Scranton	14512-010-028	-	1,692
2492	Lackawanna	Scranton	15516-030-00101	-	1,166
2492	Lackawanna	Scranton	16707-050-075	-	173
2492	Lackawanna	Scranton	16709-010-001	-	371,221
				$365,056	$665,704

Total	**$1,030,760**

BUREAU OF TAXATION SUPPORT
PO BOX 280704
HARRISBURG PA 17128-0704

pennsylvania
DEPARTMENT OF REVENUE

August 1, 2022

PENNSYLVANIA-AMERICAN WATER CO
GENERAL TAX
PO BOX 2738
CAMDEN, NJ 08101

Re: 2021 Pennsylvania Public Utility Realty Tax
Notice of Determination

Dear Taxpayer:

Pursuant to the Public Utility Realty Tax Act, the Department of Revenue herein provides notice of the state taxable values of PURTA realty and the millage rate for tax year 2021. This notice is based on information provided by County Tax Assessor offices. Any discrepancies must be addressed with that agency and not with the Pennsylvania Department of Revenue. Please note, any net liabilities resulting from prior years' adjustments are due and payable along with the current year liability.

Payment of tax is required within 45 days of the mailing date of this notice. Previous payments, adjustments and credits should be taken into consideration. Payments and correspondence relevant to the PURTA tax or this notice should be mailed directly to the above address.

All payments of $1,000 or more must be made electronically or by certified or cashier's check remitted in person or by express mail courier. For information on electronic filing options, visit **www.etides.state.pa.us**.

If you do not agree with this Notice of Determination, you may file a Petition with the Board of Finance and Revenue pursuant to Section 1109-A of the Tax Reform Code of 1971. The petition must be postmarked by the U.S. Postal Service or received by the Board of Finance and Revenue within 30 days of the mailing date of this notice.

Important update: Beginning in 2023, utilities must file and pay electronically at mypath.pa.gov. More information about the transition to myPATH will be available soon and can be found at **www.revenue.pa.gov/mypathinformation**.

Tax Year	2021	2020	2019	2018	2017
1) Total Realty Tax Equivalent (RTE):	$29,971,978	$30,289,428	$29,192,135	$28,862,295	$28,069,503
2) Total State Taxable Value (STV) for all utilities:	$1,530,348,789	$1,485,072,289	$1,389,010,454	$1,278,147,745	$1,234,849,928
3) PURTA Millage Rate, including PTA (7.6 mills)	27.1851 mills	27.9959 mills	28.6165 mills	30.1813 mills	30.3311 mills
4) Utility STV:	$71,702,388	$68,459,990	$72,409,009	$63,243,632	$63,286,086
5) Liability (Line 3 x Line 4):	$1,949,237	$1,916,599	$2,072,092	$1,908,775	$1,919,537
6) Utility Transition Credit:	N/A	N/A	N/A	N/A	N/A
7) Utility Liability Adjustment:	N/A	$4,426	$4,263	$3,029	$3,084
8) Utility Transition Credit Adjustment:	N/A	N/A	N/A	N/A	N/A

Account ID: 3505313

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
COMMONWEALTH KEYSTONE BUILDING
400 NORTH STREET
HARRISBURG, PENNSYLVANIA 17120

IN REPLY PLEASE REFER TO OUR FILE NUMBER

212285

September 7, 2023

PENNSYLVANIA AMERICAN WATER COMPANY
ASHLEY EVERETTE
852 WESLEY DRIVE
MECHANICSBURG PA 17055

Dear Ashley Everette,

The Commission submitted a request for pre-payment of Pennsylvania American Water Company's estimated Public Utility Commission assessment for fiscal year 2023-24. This pre-payment of $3,000,000.00 was an estimate based on the revenues shown on your Company's GAO-22 submission and the Commission's fiscal year 2023-24 approved budget. The following is a summary of the actual invoice amount less this pre-payment:

Description	Amount
PA Public Utility Commission 2023-24 Assessment	$3,021,645.00
Office of Consumer Advocate 2023-24 Assessment	$1,217,353.00
Office of Small Business Advocate 2023-24 Assessment	$212,031.00
Damage Prevention Committee 2023-24 Assessment	$503.00
Total Assessment for 2023-24	$4,451,532.00
Less: Prepayment of Estimated 2023-24 Assessment	($3,000,000.00)
Remaining Amount Due for 2023-24 Assessment	**$1,451,532.00**

For payment by check, please send to:
Pennsylvania Public Utility Commission
Bureau of Administration
Keystone Bldg. Room 303N
400 North Street
Harrisburg, PA 17120

For payment via ACH/wire transfer:
Bank: Wells Fargo Bank
ABA#: 121000248
Acct Name: Commonwealth of PA
Acct #: 2100019662887
OBI: 2023-24 PUC Assessment

The Commission would like to take this opportunity to express its gratitude for Pennsylvania American Water Company's continued cooperation in the pre-payment methodology.

If you have any questions concerning this pre-billing, please contact Amy Zuvich at (717) 783-6806.

Sincerely,

Robert C. Gramola

Robert C. Gramola

PENNSYLVANIA PUBLIC UTILITY COMMISSION
Harrisburg, PA 17120

NOTICE OF ASSESSMENT

EXPLANATION OF INVOICE FOR GENERAL ASSESSMENT
FOR FISCAL YEAR JULY 1, 2023 TO JUNE 30, 2024

In Section 510 of the Public Utility Code, 66 Pa. C.S. §510, the Pennsylvania General Assembly has authorized the Pennsylvania Public Utility Commission to assess all public utilities a percentage of their gross intrastate operating revenues for the preceding calendar year. Under Section 510, each public utility is required, on or before March 31 of each year to file with the Commission a statement of the utility's gross intrastate operating revenues for the preceding calendar year. After receiving the utilities' statements of gross intrastate operating revenues, the Commission sends general assessment invoices to all public utilities to advise each utility of the amount of assessment that utility owes based upon that utility's activity (gross intrastate operating revenues) in the preceding year. The enclosed assessment is for your proportionate share of the estimated expenses of the Public Utility Commission for the Commission's Fiscal Year July 1, 2023 to June 30, 2024.

YOU ARE REQUIRED TO PAY THIS INVOICE WITHIN THIRTY DAYS AFTER YOU RECEIVE IT. Objections to the assessment must be made in writing within 15 days and shall set out in detail the grounds upon which you regard the assessment to be excessive, erroneous, unlawful, or invalid. Objections may be filed only by the person, partnership, or corporation assessed. Filing an objection, however, does not eliminate your obligation to pay the assessment while your objection is being considered. **FAILURE TO PAY THE ASSESSMENT WHEN PAYMENT IS DUE WILL SUBJECT YOU TO PENALTIES.**

Be sure that your personal check or money order is written out in the same amount as your assessment invoice, and make your remittance payable to, "Commonwealth of PA". **DO NOT SEND CASH**. If you have reason to correspond with the Commission regarding your assessment invoice, please refer to your invoice number. A receipt for payment will not be issued. Please mail your payment with the return portion of your invoice in the enclosed self-addressed envelope. Please note that rounding of your assessment to the nearest dollar has occurred. Your assessment for the PUC, including the OCA, OSBA and the DPC where applicable, has been combined into one invoice; one payment for all applicable assessments is acceptable. **A TWENTY DOLLAR ($20.00) FEE WILL BE CHARGED FOR ALL DISHONORED OR BAD CHECKS REMITTED AS PAYMENT OF ASSESSMENTS.**

Your assessment has been computed by multiplying your gross intrastate operating revenues for the calendar year 2022 by the assessment factor for the public utility group of which you are a member. Your gross intrastate operating revenues for 2022 have been taken from the Assessment Reports Form GAO-22, AR-22-RR or AR-22-MC which you have filed with the Commission, or have been estimated by the Commission if you failed to file a timely report. Gross operating revenue reported to the Commission on the Assessment Reports may have been revised by the Commission to accurately reflect assessable revenue. The assessment factors for the various public utility groups are set forth in Schedule B enclosed herewith.

The approved estimate of expenditures of the Commission for the period July 1, 2023 to June 30, 2024 payable as a General Assessment by the public utilities which the Commission regulates has been determined as follows:

Approved budget for the Commission for the Fiscal Year July 1, 2023 through June 30, 2024:	$80,409,289
Deduct:	
Pipeline Operators Allocation per Act 127 of 2011	557,327
Various Fees Collected in FY 2022-23	249,139
UGWF Administration per Act 13 of 2012	552,500
Prior Year Cost Saving	13,400,000
UCR Collection for CY 2022	4,945,527
EGS/NGS Allocation per Act 155 of 2014	3,929,844
Total Deductions	$23,634,337
General Assessment Total Amount	$56,774,952

The way in which the total Public Utility Commission assessment of $56,774,952 has been allocated to the various groups of public utilities as shown on Schedules A and B enclosed herewith.

Rosemary Chiavetta
Secretary
PA Public Utility Commission

MAKE INQUIRIES TO:

Pennsylvania Public Utility Commission
Bureau of Administrative Services/Assessments
400 North Street
Harrisburg, PA 17120

CONTACT INFORMATION:

Assessment Section - Telephone 717-265-7548 or e-mail pucassessments@pa.gov

Allocation of Expenses based on percent of prior year Public Utility Group work
Budget Fiscal Year 2023-24

SCHEDULE A

Group	Total Expenditures per Utility Group Calendar Year 2022	Percentage Distribution	Estimated Expenditures Fiscal Year 2023-2024 by Utility Group
Electric	$25,325,914	39.4981%	$22,425,027
Gas	$17,476,744	27.2566%	$15,474,922
Pipeline	$649,219	1.0125%	$574,846
Steam Heat	$464,165	0.7239%	$410,994
Tele./Tele.	$5,471,855	8.5339%	$4,845,118
Water/Sewer	$8,466,894	13.2049%	$7,497,076
Transportation - Passenger	$1,815,983	2.8322%	$1,607,980
Transportation - Property	$1,832,032	2.8572%	$1,622,174
Transportation - Rail	$2,616,521	4.0807%	$2,316,815
Total	**$64,119,327**	**100.0000%**	**$56,774,952**

SCHEDULE B

Group	Estimated Expenditures Fiscal Year 2023-2024 by Utility Group	Gross intrastate revenues by utility group Calendar Year 2022	General Assessment Factor by Utility Group (Col. (a) / by Col. (b))
	(a)	(b)	(c)
Electric	$22,425,027	$9,985,247,844	0.002245815762
Gas	$12,341,849 [1]	$4,826,826,037	0.002556928488
Pipeline	$574,846	$15,095,914	0.038079575705
Steam Heat	$410,994	$144,371,036	0.002846789851
Tele./Tele.	$4,845,118	$1,431,000,912	0.003385824537
Water/Sewer	$7,497,076	$1,733,484,364	0.004324859316
Transportation - Passenger	$1,600,381 [2]	$752,047,297	0.002128032381
Transportation - Property	$791,702 [3]	$994,487,532	0.000796090423
Transportation - Rail	$2,316,815	$150,576,162	0.015386333197
Total	**$52,803,808**	**$20,033,137,098**	**0.002635823223**

[1] Federal reimbursement in the amount of $3,133,073 is deducted prior to determination of the final FY 2023-24 factor for Gas utilities.

[2] Federal reimbursement in the amount of $7,599 is deducted prior to determination of the final FY 2023-24 factor for Transportation - Passenger utilities.

[3] Federal reimbursement in the amount of $830,472 is deducted prior to determination of the final FY 2023-24 factor for Transportation - Property utilities.

PENNSYLVANIA PUBLIC UTILITY COMMISSION
Harrisburg, PA 17120

OFFICE OF CONSUMER ADVOCATE
NOTICE OF ASSESSMENT

EXPLANATION OF INVOICE FOR GENERAL ASSESSMENT FOR PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE, OFFICE OF ATTORNEY GENERAL FOR FISCAL YEAR JULY 1, 2023 TO JUNE 30, 2024

The Pennsylvania Public Utility Commission is mandated under Act 15 of 1977, P.L. 19 as amended by Act 107 of 1978 and Act 25 of 1983, to levy upon the public utilities the Commission regulates a yearly assessment to fund the Pennsylvania Office of the Consumer Advocate (herein called Consumer Advocate), Office of the Attorney General. The Governor and the Appropriation Committees of the Pennsylvania House and Senate approved an estimated operating budget of $6,752,000 for the Consumer Advocate for the Fiscal Year July 1, 2023 to June 30, 2024.

The enclosed assessment invoice shows your proportionate share of the expenses of the Consumer Advocate for the Fiscal Year July 1, 2023 to June 30, 2024.

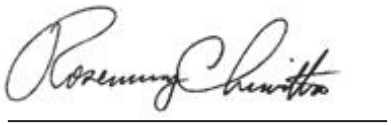
YOU ARE REQUIRED TO PAY THIS INVOICE WITHIN THIRTY DAYS AFTER YOU RECEIVE IT. Objections to the assessment must be made in writing within 15 days and shall set out in detail the grounds upon which you regard the assessment to be excessive, erroneous, unlawful, or invalid. Objections may be filed only by the person, partnership, or corporation assessed. **FAILURE TO PAY THE ASSESSMENT WHEN PAYMENT IS DUE WILL SUBJECT YOU TO PENALTIES.**

Be sure that your personal check or money order is written out in the same amount as your assessment invoice, and make your remittance payable to, “Commonwealth of PA”. **DO NOT SEND CASH**. If you have reason to correspond with the Office of Consumer Advocate regarding your assessment invoice, please refer to your invoice number. Please note that rounding of your assessment to the nearest dollar has occurred. Your assessment for the PUC, including the OCA, OSBA and the DPC where applicable, has been combined into one invoice; one payment for all applicable assessments is acceptable. **A TWENTY DOLLAR ($20.00) FEE WILL BE CHARGED FOR ALL DISHONORED OR BAD CHECKS REMITTED AS PAYMENT OF ASSESSMENTS.**

Your Consumer Advocate assessment has been computed by multiplying your gross intrastate operating revenues for the calendar year 2022 by the assessment factor for the public utility group of which you are a member. Your gross intrastate operating revenues for 2022 have been taken from the report on Form GAO-22 which you have filed with the Commission, or have been estimated by the Commission, if you failed to file a timely report. Gross operating revenue reported to the Commission on the Assessment Reports may have been revised by the Commission to accurately reflect assessable revenue. The assessment factors for the various public utility groups are set forth in Schedule B enclosed herewith.

Estimate of the expenditures of the Office of Consumer Advocate for the Fiscal Year July 1, 2023 through June 30, 2024:	$6,752,000
Deduct:	
Credit from previous fiscal year	$597,353
Total OCA Assessment:	$6,154,647

The way in which the total Consumer Advocate assessment of $6,154,647 has been allocated to the various groups of public utilities as shown on Schedules A and B enclosed herewith.



Rosemary Chiavetta
Secretary
PA Public Utility Commission

MAKE INQUIRIES TO:

Pennsylvania Public Utility Commission
Bureau of Administrative Services/Assessments
400 North Street
Harrisburg, PA 17120

CONTACT INFORMATION:

Assessment Section - Telephone 717-265-7548 or e-mail pucassessments@pa.gov

OFFICE OF CONSUMER ADVOCATE

Allocation of Expenses based on percent of prior year Public Utility Group workload
Budget Fiscal Year 2023-24

SCHEDULE A

Group	Total Expenditures per Utility Group Calendar Year 2022	Percentage Distribution	Estimated Expenditures Fiscal Year 2023-2024 by Utility Group
Electric	$855,757	15.6322%	$962,107
Gas	$1,712,407	31.2807%	$1,925,217
Steam Heat	$0	0.0000%	$0
Tele./Tele.	$219,622	4.0119%	$246,918
Water/Sewer	$2,686,546	49.0752%	$3,020,405
Total	**$5,474,332**	**100.0000%**	**$6,154,647**

SCHEDULE B

Group	Estimated Expenditures Fiscal Year 2023-2024 by Utility Group	Gross intrastate revenues by utility group Calendar Year 2022	General Assessment Factor by Utility Group (Col. (a) / by Col. (b))
	(a)	(b)	(c)
Electric	$962,107	$9,985,247,844	0.000096352841
Gas	$1,925,217	$4,826,826,037	0.000398857756
Steam Heat	$0	$144,371,036	0.000000000000
Tele./Tele.	$246,918	$1,431,000,912	0.000172549156
Water/Sewer	$3,020,405	$1,733,484,364	0.001742389526
Total	**$6,154,647**	**$18,120,930,193**	**0.000339642995**

PENNSYLVANIA PUBLIC UTILITY COMMISSION
Harrisburg, PA 17120

OFFICE OF SMALL BUSINESS ADVOCATE
DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT
NOTICE OF ASSESSMENT

EXPLANATION OF INVOICE FOR GENERAL ASSESSMENT
FOR FISCAL YEAR JULY 1, 2023 TO JUNE 30, 2024

The Pennsylvania Public Utility Commission is mandated under Act 181 of 1988, to levy upon the public utilities the Commission regulates a yearly assessment to fund the Pennsylvania Office of Small Business Advocate (herein called Small Business Advocate). The Governor and the Appropriation Committees of the Pennsylvania House and Senate approved an estimated operating budget of $2,126,000 for the Small Business Advocate for the Fiscal Year July 1, 2023 to June 30, 2024.

The enclosed assessment invoice shows your proportionate share of the expenses of the Small Business Advocate for the Fiscal Year July 1, 2023 to June 30, 2024.

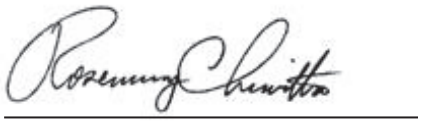
YOU ARE REQUIRED TO PAY THIS INVOICE WITHIN THIRTY DAYS AFTER YOU RECEIVE IT. Objections to the assessment must be made in writing within 15 days and shall set out in detail the grounds upon which you regard the assessment to be excessive, erroneous, unlawful, or invalid. Objections may be filed only by the person, partnership, or corporation assessed. **FAILURE TO PAY THE ASSESSMENT WHEN PAYMENT IS DUE WILL SUBJECT YOU TO PENALTIES.**

Be sure that your personal check or money order is written out in the same amount as your assessment invoice, and make your remittance payable to, “Commonwealth of PA”. **DO NOT SEND CASH**. If you have reason to correspond with the Office of Small Business Advocate regarding your assessment invoice, please refer to your invoice number. Please note that rounding of your assessment to the nearest dollar has occurred. Your assessment for the PUC, including the OCA, OSBA and the DPC where applicable, has been combined into one invoice; one payment for all applicable assessments is acceptable. **A TWENTY DOLLAR ($20.00) FEE WILL BE CHARGED FOR ALL DISHONORED OR BAD CHECKS REMITTED AS PAYMENT OF ASSESSMENTS.**

Your Small Business Advocate assessment has been computed by multiplying your gross intrastate operating revenues for the calendar year 2022 by the assessment factor for the public utility group of which you are a member. Your gross intrastate operating revenues for 2022 have been taken from the report on Form GAO-22 which you have filed with the Commission, or have been estimated by the Commission, if you failed to file a timely report. Gross operating revenue reported to the Commission on the Assessment Reports may have been revised by the Commission to accurately reflect assessable revenue. The assessment factors for the various public utility groups are set forth in Schedule B enclosed herewith.

Estimate of the expenditures of the Office of Small Business Advocate for the Fiscal Year July 1, 2023 through June 30, 2024:	$2,126,000
Deduct:	
Credit from previous fiscal year	$311,945
Total Assessment:	$1,814,055

The way in which the total Small Business Advocate assessment of $1,814,055 has been allocated to the various groups of public utilities as shown on Schedules A and B enclosed herewith.



Rosemary Chiavetta
Secretary
PA Public Utility Commission

MAKE INQUIRIES TO:

Pennsylvania Public Utility Commission
Bureau of Administrative Services/Assessments
400 North Street
Harrisburg, PA 17120

CONTACT INFORMATION:

Assessment Section - Telephone 717-265-7548 or e-mail pucassessments@pa.gov

OFFICE OF SMALL BUSINESS ADVOCATE

Allocation of Expenses based on percent of prior year Public Utility Group workload
Budget Fiscal Year 2023-24

SCHEDULE A

Group	Total Expenditures per Utility Group Calendar Year 2022	Percentage Distribution	Estimated Expenditures Fiscal Year 2023-2024 by Utility Group
Electric	$467,054	30.0000%	$544,217
Gas	$544,897	35.0000%	$634,918
Steam Heat	$15,568	1.0000%	$18,141
Tele./Tele.	$77,842	5.0000%	$90,703
Water/Sewer	$451,486	29.0000%	$526,076
Total	**$1,556,847**	**100.0000%**	**$1,814,055**

SCHEDULE B

Group	Estimated Expenditures Fiscal Year 2023-2024 by Utility Group	Gross intrastate revenues by utility group Calendar Year 2022	General Assessment Factor by Utility Group (Col. (a) / by Col. (b))
	(a)	(b)	(c)
Electric	$544,217	$9,985,247,844	0.000054502102
Gas	$634,918	$4,826,826,037	0.000131539441
Steam Heat	$18,141	$144,371,036	0.000125655398
Tele./Tele.	$90,703	$1,431,000,912	0.000063384306
Water/Sewer	$526,076	$1,733,484,364	0.000303478942
Total	**$1,814,055**	**$18,120,930,193**	**0.000100108272**

PENNSYLVANIA PUBLIC UTILITY COMMISSION
Harrisburg, PA 17120

PENNSYLVANIA ONE CALL LAW
PUBLIC UTILITY COMMISSION DAMAGE PREVENTION COMMITTEE
NOTICE OF ASSESSMENT

EXPLANATION OF INVOICE FOR GENERAL ASSESSMENT
FOR FISCAL YEAR JULY 1, 2023 TO JUNE 30, 2024

The Pennsylvania Public Utility Commission is mandated under Act 50 of 2017, to levy upon the applicable public utilities the Commission regulates a yearly assessment to fund the Pennsylvania Public Utility Commission's Damage Prevention Committee (herein called Damage Prevention Committee or DPC). The Governor and the Appropriation Committees of the Pennsylvania House and Senate approved an estimated operating budget of $1,486,711 for the Damage Prevention Committee for the Fiscal Year July 1, 2023 to June 30, 2024.

The enclosed assessment invoice shows your proportionate share of the expenses of the Damage Prevention Committee for the Fiscal Year July 1, 2023 to June 30, 2024.

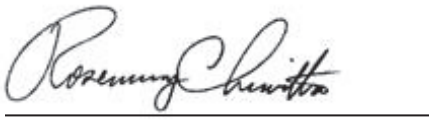
YOU ARE REQUIRED TO PAY THIS INVOICE WITHIN THIRTY DAYS AFTER YOU RECEIVE IT. Objections to the assessment must be made in writing within 15 days and shall set out in detail the grounds upon which you regard the assessment to be excessive, erroneous, unlawful, or invalid. Objections may be filed only by the person, partnership, or corporation assessed. **FAILURE TO PAY THE ASSESSMENT WHEN PAYMENT IS DUE WILL SUBJECT YOU TO PENALTIES.**

Be sure that your personal check or money order is written out in the same amount as your assessment invoice, and make your remittance payable to, "Commonwealth of PA". **DO NOT SEND CASH.** Please note that rounding of your assessment to the nearest dollar has occurred. Your assessment for the PUC, including the OCA, OSBA and the DPC where applicable, has been combined into one invoice; one payment for all applicable assessments is acceptable. **A TWENTY DOLLAR ($20.00) FEE WILL BE CHARGED FOR ALL DISHONORED OR BAD CHECKS REMITTED AS PAYMENT OF ASSESSMENTS.**

Your Damage Prevention Committee assessment has been computed by following the formula prescribed in the Act. We subtract from the estimated budget to operate the DPC in fiscal year 2023-24 the amount that was received in DPC fines in FY 2022-23 and Federal Grant funds that were received toward the operation of the program. Eighty percent of the remaining balance shall be included within the amount assessed to applicable public utilities under 66 PA.C.S. Section 510 and twenty percent of the remaining costs shall be assessed to the PA One Call System, with the fee to be paid to the Commission.

Estimate of the expenditures of the Damage Prevention Committee for the Fiscal Year July 1, 2023 through June 30, 2024:	$1,486,711
Deduct:	
Amount billed to Federal Grants (One Call Grant):	$46,770
Amount of fines collected in FY 2022-23:	$1,314,770
Prior year cost savings:	$116,137
Total Assessment:	$9,034
Amount paid by PA One Call System (20%):	$1,807
Amount paid by public utilities (80%):	$7,227

The way in which the total Damage Prevention Committee assessment of $7,227 has been allocated to the various groups of public utilities as shown on Schedules A and B enclosed herewith.



Rosemary Chiavetta
Secretary
PA Public Utility Commission

MAKE INQUIRIES TO:

Pennsylvania Public Utility Commission
Bureau of Administrative Services/Assessments
400 North Street
Harrisburg, PA 17120

CONTACT INFORMATION:

Assessment Section - Telephone 717-265-7548 or e-mail pucassessments@pa.gov

DAMAGE PREVENTION COMMITTEE

Allocation of Expenses based on percent of prior year DPC workload
Budget Fiscal Year 2023-24

SCHEDULE A

Group	Total Expenditures per Utility Group Calendar Year 2022	Percentage Distribution	Estimated Expenditures Fiscal Year 2023-2024 by Utility Group
Electric	$143,854	15.6570%	$1,132
Gas	$433,026	47.1304%	$3,406
Pipeline	$23,519	2.5598%	$185
Tele./Tele.	$159,729	17.3848%	$1,256
Water/Sewer	$158,656	17.2680%	$1,248
Total	**$918,784**	**100.0000%**	**$7,227**

SCHEDULE B

Group	Estimated Expenditures Fiscal Year 2023-2024 by Utility Group	Gross intrastate revenues by utility group Calendar Year 2022	General Assessment Factor by Utility Group (Col. (a) / by Col. (b))
	(a)	(b)	(c)
Electric	$1,132	$9,985,247,844	0.000000113367
Gas	$0 [(1)]	$4,826,826,037	0.000000000000
Pipeline	$185	$15,095,914	0.000012254972
Tele./Tele.	$1,256	$1,431,000,912	0.000000877707
Water/Sewer	$1,248	$1,733,484,364	0.000000719937
Total	**$3,821**	**$17,991,655,071**	**0.000000212376**

[(1)] Federal reimbursement for the PHMSA Base Grant, in the amount of $79,020, is deducted prior to determination of the final FY 2023-24 factor for gas utilities. The Base Grant covered the FY 2023-24 estimated expenditures of gas utilities; therefore, gas utilities will not receive a Damage Prevention assessment this Fiscal Year. The excess PHMSA Base Grant will be used to offset the estimated expenditures of gas utilities in the General Assessment factor calculation.

Commonwealth of Pennsylvania

Pennsylvania Public Utility Commission

Harrisburg, PA 17105-3265

GENERAL ASSESSMENTS INVOICE

Invoice Date	Invoice Number
9/8/2023	23-230073
Fiscal Year	
July 1, 2023 to June 30, 2024	

PA AMERICAN WATER CO - WASTERWATER
ASHLEY EVERETTE
852 WESLEY DRIVE
MECHANICSBURG PA 17055

- Read carefully Notice of Assessment
- Use return envelope provided
- Make check payable to: **Commonwealth of Pennsylvania**
- If you desire confirmation of receipt, use a mailing service that provides one, such as USPS-Return Receipt, or overnight delivery with receipt confimation

PUC Assessment	$454,092.00
Consumer Advocate Assessment	$182,944.00
SBA Assessment	$31,864.00
DPC Assessment	$76.00
PAY THIS AMOUNT WITHIN 30 DAYS	**$668,976.00**

TO RECEIVE PROPER CREDIT FOR YOUR PAYMENT, REMOVE THE BOTTOM PART OF THIS INVOICE AT THE PERFORATION AND RETURN WITH YOUR REMITTANCE

MAIL PAYMENT TO:

PA DOR
PO BOX 61380
HARRISBURG, PA 17106-1380

FOLD AND CUT HERE

RETURN THIS PORTION WITH YOUR REMITTANCE

PA AMERICAN WATER CO - WASTERWATER
ASHLEY EVERETTE
852 WESLEY DRIVE
MECHANICSBURG PA 17055

Invoice Date	Invoice Number
9/8/2023	23-230073
Fiscal Year	
July 1, 2023 to June 30, 2024	

PAY THIS AMOUNT WITHIN 30 DAYS	$668,976.00

2300002300731 1 090823100454168002001829440030000318640 0 000668976001

Pennsylvania-American Water Company
Rate Increase Request

Filing Date:	November 8, 2023
Historic Test Year:	12 Months Ended June 30, 2023
Future Test Year:	12 Months Ending June 30, 2024
Fully Projected Future Test Year:	12 Months Ending June 30, 2025
Increase Requested	$203.9 Million
Percentage Increase:	20.2% in overall revenues
Effective Date:	August 7, 2024 (based on full suspension)
Rate of Return:	8.17% on rate base; 10.95% ROE

Type of Capital	Proportion of Total	Cost Rate	Weighted Cost
Debt	44.70%	4.72%	2.11%
Common Stock	55.30%	10.95%	6.06%
Total	100%		8.17%

Elements of Increase	Revenue Requirement
Capital Investment	$93.8 Million
Cost of Capital	$54.2 Million
Acquisitions	$25.9 Million
O&M and General Taxes	$30.0 Million
Total	**$203.9 Million**

PENNSYLVANIA-AMERICAN WATER
RATE CASE FILING Schedule AEE-2
Docket No. R-2023-3043189
Docket No. R-2023-3043190

		Total Company PROPOSED
1.	Revenues at Present Rates	$1,011,895,862
2.	Amount of Increase (Decrease)	203,945,911
3.	% Increase	20.2%
4.	Revenue	1,215,841,773
5.	O & M Expense	314,072,831
6.	Depreciation	264,341,440
7.	General taxes	22,046,259
8.	Income Taxes	118,173,685
9.	Sub-Total	718,634,215
10.	Utility Operating Income	497,207,558
11.	Interest on Long-Term Debt	126,574,761
12.	Other Interest	1,670,527
13.	Preferred Dividends	0
14.	Other Deductions	0
15.	Sub-Total	128,245,288
16.	Income to Common Stock (Fallout)	$368,962,270
17.	Original Cost of Rate Base	$6,096,173,421

Rate of Return and Return on Common Equity Absent Rate Relief

Utility Operating Income	$351,650,912
Income to Common Stock (Fallout)	223,391,333
Original Cost of Rate Base	6,096,852,927
Common Equity	3,371,559,669
Rate of Return	5.77%
Return on Common Equity	6.63%

PAWC STATEMENT NO. 1-R

TESTIMONY
OF
ASHLEY E. EVERETTE

WITH REGARD TO
UPDATING AND REVISING THE COMPANY'S CLAIMS; RESPONDING TO OPPOSING PARTY WITNESSES' TESTIMONY REGARDING MANAGEMENT PERFORMANCE ADJUSTMENT TO EQUITY RETURN; RECOMMENDATIONS TO IMPUTE REVENUES AND ELIMINATE INCURRED COSTS; RATEMKAING RATE BASE OF SECTION 1329 ACQUISITIONS; ACT 11 ALLOCATION OF WASTEWATER REVENUE REQUIREMENT; RECOMMENDATIONS ON CUSTOMER ASSISTANCE PROGRAMS; RECOMMENDATIONS ON ADDITIONAL NOTICE TO CUSTOMERS OF RATE INCREASES; COST OF SERVICE AND BULK AGREEMENTS; AND CUSTOMER SERVICE PERFORMANCE FACTORS

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: FEBRUARY 21, 2024

PENNSYLVANIA-AMERICAN WATER COMPANY

REBUTTAL TESTIMONY OF ASHLEY E. EVERETTE

Introduction

Q. What is your name and address?

A. My name is Ashley E. Everette and my business address is 852 Wesley Drive, Mechanicsburg, Pennsylvania 17055.

Q. Have you submitted direct testimony in this proceeding?

A. Yes, I submitted direct testimony as PAWC Statement No. 1. I also sponsored portions of PAWC Exhibits 3-A.

Q. What is the purpose of your rebuttal testimony?

A. Initially, I will update and revise the Company's claims as originally set forth in PAWC Exhibit No. 3-A. Thereafter, I will address the following points raised in the testimony of other parties' witnesses:

(1) I will respond to the direct testimony of witnesses for the Bureau of Investigation and Enforcement ("I&E") and the Office of Consumer Advocate ("OCA"), who contend that the Commission should ignore the exceptional management performance exhibited by the Company in assessing the reasonable return on equity to be allowed in this case.

(2) I will respond to the testimony of witnesses for OCA regarding OCA's recommendations to impute revenues and eliminate incurred costs.

(3) I will respond to testimony of the OCA regarding the Company's rate base of Section 1329 acquisitions.

(4) I will respond to the testimony of witnesses for I&E, OCA, the Office of Small Business Advocate ("OSBA"), and the Pennsylvania-American Water Large Users Group

("PAWLUG") concerning the Company's proposal to employ the authority conferred by Act 11 of 2012 to recover a portion of the revenue requirement of its wastewater operations from its total customer base.

(5) I will address low-income customer assistance recommendations raised by the Coalition for Affordable Utility Service and Energy Efficiency ("CAUSE-PA") witness Harry S. Geller and Commission on Economic Opportunity ("CEO") witness Jennifer Warabak.

(6) I will address notice to customers of the rate increase in response to OCA witness Christine Hoover.

(7) I will respond to witnesses from I&E and OCA regarding cost of service studies and bulk agreements.

(8) I will respond to the testimony of OCA witness Barbara R. Alexander that any increase in this case should be contingent upon the Company acquiescing to her proposed customer service performance standards.

Updates and Revisions to the Company's Claims

Q. Has the Company prepared a revised statement of its revenue requirement in this proceeding?

A. Yes, it has. PAWC Exhibit 3-A Revised sets forth the Company's revised claims in this proceeding and incorporates revisions explained in the rebuttal testimony of the Company's witnesses, revisions to the Company's original claims as previously supplied in interrogatory responses, and the acceptance of certain adjustments proposed by other parties. Each page of Exhibit 3-A Revised that has been revised from the original Exhibit 3-A is noted by an "R" following the page number. In addition, a summary of the revisions is provided in Exhibit 3-A Revised, which sets forth: (1) a brief description of the revision;

(2) the page of Exhibit 3-A to which it relates; (3) a reference to where the revision has been identified or discussed in testimony; (4) the Company's original claimed amount; (5) the Company's revised claim; and (6) the net change between the original and revised claims. The net effect of these revisions is to change the Company's claimed increase in revenue requirement from $203.9 to $204.3 million.[1]

Q. In their direct testimony, I&E, OCA and OSBA recommend that the Butler Area Sewer Authority ("BASA") revenue requirement not be recovered in this case because the Commission's approval of the acquisition was appealed to Commonwealth Court of Pennsylvania. What is the current status of that appeal?

A. The Commonwealth Court has granted the Company's request for expedited consideration and consolidated the separate appeals filed by Center and Summit Townships. The Court will consider the Company's Applications to Dismiss and the Motions to Quash filed by BASA, the City of Butler and the Township of Butler (collectively, the "Butler Parties") along with the merits of the appeals. Both the Company's Applications and the Butler Parties' Motions argue that Center and Summit Townships waived their appellate rights and are estopped from pursuing appeals due to their adoption of resolutions that they would not oppose or contest the settlement and their failure to in fact timely oppose the settlement before the ALJ. On February 15, 2024, the Commission certified the record and Center and Summit briefs will be filed by March 1. Briefs by the Commission, the Company and the Butler Parties are due March 16 and reply briefs are due March 23. The appeals will be submitted to a panel of judges on the next available list for expedited disposition on the

[1] Although the Company has provided a revised claim that supports a revenue requirement increase of $204.3 million, it acknowledges that the Commission cannot approve a revenue requirement increase greater than the $203.9 million in the Company's initial filing that was noticed to customers.

briefs without oral argument. Therefore, the Company expects that a decision could be issued as early as May 2024, but certainly prior to a final order being issued in this proceeding.

Q. In their direct testimony, I&E, OCA and OSBA recommend that the Borough of Brentwood ("Brentwood") revenue requirement not be recovered in this case because the acquisition has not been approved by the Commission and/or is not certain to close by the end of the FPFTY. What is the current status of that acquisition?

A. As described in PAWC witness Mr. Abruzzo's rebuttal testimony, a final Commission order is expected to be entered on March 14, 2024 and PAWC intends to close shortly after a Commission Order approving the acquisition becomes final and unappealable, which would be before the Commission issues its decision in this proceeding, and if appealed and approved by the Commonwealth Court would be prior to the end of the FPFTY.

Q. What is the Company proposing regarding the BASA and Brentwood revenue requirements?

A. The Company maintains that the BASA and Brentwood acquisitions are likely to close prior to the end of the FPFTY and therefore should be reflected in this rate case on the effective date of new rates. Alternatively, if the Commission agrees with OCA, I&E and OSBA with respect to the certainty of closing the BASA and Brentwood acquisitions before the end of the FPFTY, rather than disallowing any recovery in this rate case which would factor into the timing of the Company's next rate case, the Company proposes that the Commission approve revenue requirements in this proceeding as follows: 1) a revenue requirement that excludes the BASA and Brentwood acquisitions; 2) a revenue requirement that excludes the Brentwood acquisition but includes the BASA acquisition; and 3) a

revenue requirement that includes the Brentwood and BASA acquisitions. This is possible because the Company filed a separate revenue requirement for the BASA and Brentwood systems, so the revenue requirements with and without the BASA and Brentwood systems are readily identifiable in the Company's filing. Additionally, the Company anticipates that the Commission's Order in this case would have separately identified the revenue requirements associated with BASA and Brentwood in any event.

Q. Please explain how the Company's alternative proposal would work.

A. I will refer to the revenue requirement that excludes the BASA and Brentwood acquisitions as "Step 1;" the revenue requirement in this proceeding that includes the BASA acquisition as "Step 2;" and the revenue requirement in this proceeding that includes both BASA and Brentwood as "Step 3". If the Commission agrees with OCA, I&E and OSBA with respect to the certainty of closing the BASA and Brentwood acquisitions, the Company is asking the Commission to approve rates for Step 1, Step 2 and Step 3. Step 1 rates would become effective on August 7, 2024, which is the end of the normal suspension period in this case. Step 2 rates would become effective on one day's notice, no earlier than August 7, 2024, and only after the Company has certified to the Commission that it has closed the BASA acquisition. If, for any reason, the BASA acquisition does not close, Step 2 rates would never become effective. Step 3 rates would become effective on one day's notice, again no earlier than August 7, 2024, and only after the Company has certified to the Commission that it has closed both the Brentwood and BASA acquisitions. If, for any reason, the Brentwood acquisition does not close, Step 3 rates would never become effective. A summary of the proposed revenue requirements is as follows:

	Step 1 Excludes BASA and Brentwood	**Step 2** Includes BASA Excludes Brentwood	**Step 3** Includes BASA and Brentwood
Proposed Incremental Rate Increase	$177,033,198	$25,322,947	$1,935,019
Proposed Cumulative Rate Increase	$177,033,198	$203,356,145	$204,291,164

Q. Borough of St. Lawrence witness Robert J. May testified in his supplemental direct testimony[2] that PAWC should disclose individual items that comprise the rate increase, specifically items related to the maintenance and upgrade to the wastewater treatment. How do you respond?

A. Regarding the individual components of the rate increase, the Company provided detailed calculations of its revenue requirements in its initial filing, Exhibit No. 3-A, which as I just indicated, the Company is now updating in rebuttal testimony. These studies provide a full calculation of each revenue requirement. Workpapers and documentation were provided in Exhibit Nos. 3-B and 3-C. The Company has provided additional information in its responses to more than 900 data requests in support of its revenue requirement calculations.

Management Performance Adjustment to Return on Equity

Q. Has the Company proposed that the Commission grant a rate of return on equity that reflects performance factors under Section 523 of the Public Utility Code and the Commission's Policy Statement at 52 Pa. Code § 69.711?

[2] I note that Borough of St. Lawrence witness May's "supplemental direct" testimony submitted on February 13, 2024 was untimely because the statement reiterates allegations set forth in the Borough of St. Lawrence formal complaint and was not limited to issues raised at the public input hearings as directed by the presiding Administrative Law Judges. The deadline for non-Company direct testimony was February 1, 2024.

A. Yes, it has. As I explained in my direct testimony, the Company is proposing that the Commission adopt a rate of return on equity at the upper end (10.95%) of Ms. Bulkley's range of reasonable equity returns (10%-11.25%) in recognition of PAWC's superior performance based on the factors delineated in Section 523 and 52 Pa. Code § 69.711. In addition, and for the same reason, the Company proposes that, if the Commission were to approve a rate of return on equity that is lower than the upper end of Ms. Bulkley's range, it should add 25 basis points to its market-determined rate of return. If the Commission's market-determined rate of return is less than 10.95% but greater than 10.70%, then the performance-based increment could be less than 25 basis points to achieve a final equity return rate of 10.95%.

Q. What areas of the Company's performance support its proposed equity return increment?

A. The Public Utility Code requires the Commission to consider the "efficiency, effectiveness, and adequacy of service" when establishing a utility's rates. My direct testimony explains the Company's exemplary management performance in several areas, including: (1) the Company's industry-leading programs to assist low-income and payment-troubled customers; (2) the Company's environmental record and commitment to water quality; (3) the Company's strong safety performance; (4) the Company's commitment to operational and water efficiency for the benefit of customers; (5) the Company's significant infrastructure investment; (6) the Company's community engagement and consumer education initiatives; (7) the Company's efforts to support the Commission's and the Pennsylvania Department of Environmental Protection's ("DEP") long-standing policy to eliminate the problems of small, troubled and nonviable water and wastewater systems by

acquiring those systems and making the improvements needed to assure safe and reliable service; and (8) the Company's efforts to extend service to meet the needs of customers without access to safe and reliable water service.

Q. Please discuss other parties' positions regarding the Company's proposal for performance factor recognition.

A. I&E and the OCA contend that PAWC's management effectiveness does not warrant recognition by the Commission through a performance enhancement to return on equity; I&E witness D.C. Patel and OCA witness Garrett contend that the Company should not be provided any management recognition for doing what they assert is simply required under the Public Utility Code. Mr. Patel also argues that the Company should not receive any management performance adjustment based on other alleged premiums and benefits that accrue to the Company's shareholders, including benefits associated with the Company's acquisitions of troubled water and wastewater systems. Mr. Patel further asserts no management performance adjustment is warranted because the Company's recent rate increases have "burdened" customers, the Company's low-income assistance programs are "largely funded" by residential customers, and the Company's most recent management audit indicated areas for improvement and possible additional customer savings that could be realized. For her part, OCA witness Hoover simply refers to the testimony of OCA witnesses Garrett, Alexander and Colton to object to the Company's proposed adjustment, and I will address the testimony of each of those witnesses.

Q. How do you respond to the contentions of OCA witness Garrett and I&E witness Patel that the Company should not be rewarded for performing duties that they believe are already required as a public utility?

A. At the outset, the attempt by Mr. Patel and Mr. Garret to characterize exemplary performance as something the law requires is contradicted by Section 523. I am advised by counsel that the legislature clearly envisioned that utilities can achieve levels of performance that exceed the base level of their legal requirements because otherwise there would be no point in enacting Section 523. In short, if Mr. Patel's and Mr. Garrett's position were adopted, it would be the same as writing Section 523 out of the Public Utility Code. Notably, the Company's actions described in my direct testimony are not merely examples of reasonable service, but instead demonstrate superior service because the Company went above and beyond the requirements of the Public Utility Code in many respects. In PAWC Statement No. 15-R, Company President Justin L. Ladner highlights the accomplishments of the Company in delivering superior performance that go well beyond what is required by the Public Utility Code.

In addition, over 50 witnesses who attended the Company's public input hearings testified to the excellent service provided by the Company. Below are highlights of the testimony of several of those witnesses which demonstrate the many ways the Company's performance substantially exceeds the statutory standards of reasonableness when serving customers, business partners, and its communities:

- The Vice President of the Board of Education for the Avella Area School District testified that the Company has committed to invest and install over ten miles of water mains extending public water service to portions throughout Washington County. This investment will provide the District, its students and administration, access to safe and clean drinking water as well as fire protection for the first time in history.

- A representative for the Dollar Energy Fund testified about its long-term partnership with the Company that began in 1991 when the Company voluntarily started the Help to Others (or H20) program. The representative commended the Company in that it not only has maintained, but has also grown the H20 program. The representative is supportive of the proposed rate change as the Company is proposing to expand eligibility under its Bill Discount Program.
- A representative of the Washington County Chamber of Commerce explained that the Company is a respected and professional partner in nearly every successful economic development project in the County and is committed to upgrading aging infrastructure. This representative reiterated the significance and gratitude the county of Washington has for PAWC's investment to extend the water main to serve the Avella Area School District. In addition, the Company contributes to the County through a variety of other programs including providing grants to firefighters, emergency responders, and local food banks.
- A representative of Pioneer Construction testified that in Pioneer Construction's capacity as a utility contractor, PAWC has been essential in growing their company and providing livelihoods to their employees and communities. Further, PAWC is committed to building and maintaining critical infrastructure showing the Company is striving to deliver safe and reliable water service to customers.
- A representative of Pennsbury School Board of Directors testified that PAWC took an active role and was "instrumental" in implementing the school's sustainability management plan. PAWC donated money to start the program and also donated 200 reusable water bottles to students who could not afford water bottles.

- A representative of Chester County Chamber of Business and Industry testified in support of the Company's proposed rate change, highlighting the need for upgrading the infrastructure which will benefit the health and safety of the public as well as the economic wellbeing of communities.
- The Executive Director of Fayette County Chamber of Commerce testified that they are proud that the Company "is not just a utility here, but they're a partner in the work that we do to continue to build and grow Fayette County." The Company is clearly dedicated to helping the communities they serve and that is evidenced by their participation and sponsorship of community events such as the County Consumer Resource Fairs as well as their investment in replacing aged water mains in Fayette County.
- A representative of Aclamo testified that PAWC has been a supporter of their organization over the past eight years, not only providing financial support but also working directly with families and children of the organization. PAWC has been available to work directly with people to help them access, read, and understand their bills.
- Bob Bielich: A representative of Disaster Restoration Services testified that in his capacity of working with PAWC providing emergency services for residential water damage, the Company provides great customer satisfaction often leaving the customer in a better place than before any water damage occurred.
- The Chief Financial Officer of EK Services, a certified women-owned utility contractor, testified that in their capacity of working with PAWC, the Company is a "good steward of the funds it requests and continues to optimally plan for and utilize these funds throughout the communities that they serve to enhance our everyday lives."

- A representative of the Yardely-Makefield Fire Company testified that their relationship with the Company and the Company's customer service is "outstanding." and that PAWC has been helpful and accommodating when the Company had to upgrade systems and mains, install new fire hydrants and update the fire codes.

This public input testimony establishes that PAWC's performance is not only reasonable, but superior in many different areas, including distribution system improvements, community engagement, its commitment to supplier diversity, and the financial and educational resources offered to its communities.

Q. Please respond to Mr. Patel's contention that the Commission should not recognize the Company's superior performance in the form of a higher rate of return since shareholders will already benefit from any savings in operations and maintenance costs that the Company achieves.

A. Mr. Patel's position is contrary to the terms of Section 523(a), which direct the Commission to consider "efficiency." Moreover, as Mr. Ladner explains, the Company has focused its attention on many areas where superior performance has not necessarily yielded a direct economic benefit to shareholders, but where superior performance will deliver direct benefits to customers, such as the Company's recognized excellence in addressing water quality and environmental issues, its success in streamlining field operations and reducing response times, and the Company's unwavering commitment to employee safety and employee training and development.

Q. What is your response to I&E's argument that because the Company's shareholders have benefited from higher returns on the ratemaking rate base associated with Section 1329 acquisitions, the Company's requested management performance adjustment should be denied?

A. I disagree. Section 1329 was added to the Public Utility Code to encourage the consolidation of the highly fragmented water and wastewater systems in the Commonwealth. For these systems, sale to an investor-owned public utility or entity with extensive technical expertise and financial resources can facilitate necessary infrastructure improvements and ensure the continued provision of safe, reliable service to customers at reasonable rates. Due to the age of many municipal systems, however, traditional depreciated original cost measures produce very low purchase prices, discouraging many transactions. Section 1329 establishes a voluntary fair market valuation process that mitigates the risk that a utility will not be able to fully recover its investment when water or wastewater assets are acquired from a municipality or authority. In a Section 1329 proceeding, the Commission establishes the amount that the acquiring public utility can put into rate base in its next base rate case as a result of the acquisition. The Company is simply recovering the ratemaking rate base amount approved by the Commission (which is never more than the Company's actual cost to acquire) and a return on its investment in the acquired systems when those systems are included in rate base.

Q. What is your response to I&E's and OCA's position that the Company's efforts to assist troubled water systems do not warrant an adjustment to the Company's rate of return?

A. I disagree. The Company has been providing support for troubled water and wastewater systems for many years. Since 1985, the Company has acquired approximately 110 small water and wastewater systems, several of which were deemed troubled, non-viable systems, including sixteen acquisitions of very small less-viable water and wastewater systems. As I explained in my direct testimony, PAWC has completed sixteen acquisitions of such systems in the last ten years, and the rebuttal testimony of Company witness Bruce W. Aiton (PAWC Statement No. 3-R) describes several recent water and wastewater acquisitions where PAWC addressed longstanding water quality and environmental compliance issues. In addition, PAWC recently began acting as receiver for the East Dunkard Water Authority ("EDWA") where the EDWA water treatment plant had simply ceased producing water and all customers were without even non-potable water for several days. It would be reasonable and consistent with the Commission's Policy Statement at 52 Pa. Code § 69.711 to recognize all of the Company's efforts and long-standing commitment to assist troubled systems by approving an upward adjustment to the Company's rate of return.

Q. Ms. Everette, do you agree with Mr. Patel's assertion that the Company's most recent Management Performance Audit is inconsistent with superior management performance?

A. No, I do not. As a threshold matter, I note that the Company filed its Implementation Plan with the Commission which details exactly how the Company will implement each of the audit recommendations. The Company entirely accepted 23 of the audit recommendations and partially accepted the remaining eight. With respect to the twelve functional areas reviewed by the Commission audit staff, none were marked for "Significant Improvement"

or "Major Improvement," and eight of the twelve functional areas reviewed were simply marked for "Minor Improvement Necessary." To provide just two examples of the minor improvements recommended: (i) in the area of Corporate Governance, the sole audit recommendation was to perform a market comparison for local board compensation to ensure PAWC board fees are at market rates, and the Company agreed to undertake such an analysis if it continues to have external board members; (ii) in the area of Human Resources and Diversity, the only recommendation was to document PAWC's policies and procedures or guidance for the application of remote work.[3] As reflected in the Implementation Plan, the Company is committed to implementing other Commission recommendations, including the recommendations that will achieve the potential annual savings of $3,130,000 relating to inventory stockpiles and unaccounted for water and the one-time savings of $4,000,000 associated with reducing inventory stockpiles (subject to availability of supplies and supplier shortages).

Q. Do you agree with Mr. Patel's argument that no management performance adjustment is warranted because PAWC's rate increases have "burdened" customers, its low-income assistance programs are "largely funded" by residential customers, and PAWC's customers will pay the costs of wastewater services used by other customers?

A. No, I do not. As Mr. Ladner explains, the Company faces monumental investment challenges to maintain its consistently strong record of delivering safe and reliable water and wastewater services, and the rate cases filed by the Company are necessary to make ongoing, significant capital investments. PAWC has also been expanding its customer

[3] See Pennsylvania-American Water Company Management and Operations Audit, Docket No. D-2022-3035217 (October 2023) ("Management Audit"), pp. 25 and 95.

assistance programs to help our most vulnerable customers, including its proposal in this proceeding to increase the Company's Bill Discount Program to residential customers whose household incomes are between 151% and 200% of Federal Poverty Level, and upon closing the BASA acquisition, additional voluntary shareholder contributions to the Company's Hardship Grant program over 5 years totaling $3,500,000 (which are not recovered in rates) on top of the current $750,000 annual shareholder contribution.

Mr. Patel's objection to any management performance adjustment due to the allocation of some of the costs of acquired wastewater systems to other customers is simply misplaced. Such an allocation is explicitly permitted if it is in the public interest, which the Commission has previously determined in other proceedings and which the Company has also demonstrated here.

Q. How do you respond to the issues raised by OCA witness Colton and Alexander?

A. OCA witnesses Colton and Alexander contend that the Company's proposed 25 basis point enhancement to its equity return rate is not warranted by alleging suboptimal performance exhibited by PAWC's long-term arrearages, justified complaint rate, percentage of justified payment arrangement requests, verified infractions, customer satisfaction, and call center performance. As I discussed below and further explained in the testimony of PAWC witnesses Dean and Degillio, their assertions and allegations should have no bearing on the Commission's decision to approve a management performance adjustment for the Company.

Arrearages. Reduced to its essence, Mr. Colton contends that PAWC's collection performance has not returned to pre-pandemic levels. While Mr. Colton quotes from the

2023 Management Audit's review of this issue, I believe it is worth reviewing the full statement of the Management Audit on this issue:

> Despite measures to address payment difficulties, especially among the most vulnerable customers, customer account balances aged more than 150 days increased significantly since early-2020, as illustrated by Exhibit XI-2. Although PAWC's effort are commendable, as of February 2023, the company's over 150-day customer receivables continue to reflect substantially higher balances than those experienced prior to the pandemic. ***This trend has been noted across Pennsylvania and is not unique to PAWC.*** However, while not caused by the company, its effects must be addressed by PAWC.[4]

While PAWC continues to work to reduce its arrearages to pre-pandemic levels, the Management Audit makes clear that this is not a PAWC-specific problem. Indeed, Mr. Colton's own chart showing his calculations of PAWC's arrearages (p. 113) shows that the Company has actually been quite successful at reducing arrearages from the levels reached during the pandemic. Contrary to Mr. Colton's approach, the proper conclusion is that PAWC's collection efforts are not "declining since 2018," but are in fact continuing to move towards pre-pandemic levels – results the Commission concluded were "commendable." In addition, the Company's new arrearage management program to further assist customers was just approved by the Commission on December 7, 2023 and the full roll out of the program will not be completed until the end of this year. As discussed by PAWC witness Dean, the Company is optimistic that its arrearage management program will offer an additional solution for customers to address their arrearages.

Justified Complaints and Requests for Payment Arrangements. Mr. Colton contends that the 25% of PAWC's complaints that were found to be justified (i.e., valid) does not reflect exemplary management. He also contends that the number of PAWC customers

[4] Management Audit, p. 83 (emphasis added).

seeking payment arrangements is high when compared to Aqua PA. As Mr. Colton concedes, however, the number of justified payment arrangements is far lower than Aqua (18% for PAWC compared to 28% for Aqua). As discussed in Company witness Dean's rebuttal testimony regarding the Company's justified complaint rates and requests for payment arrangements ("PAR"), several utilities, including another water utility, experienced increases in the number of PARs from 2021 to 2022, but the percentage of PAWC's increases were less than any other electric, gas and water/wastewater utility. PAWC also saw a 6% decline in non-PAR residential customer complaints from 2021 to 2022. An increase in the number of complaints filed and Commission payment arrangements requested after the COVID-19 pandemic is unsurprising. The Commission should disregard Mr. Colton's claim that the number of complaints and payment arrangement requests post-pandemic is evidence that a management performance adjustment is not warranted.

Verified Infractions. Mr. Colton further contends that PAWC's number of verified infractions reflects a "sharp decline" in recent years. As described further in PAWC witness Dean's rebuttal testimony, the Company takes proactive steps to determine the root cause of infractions to prevent future infractions. While the Company strives to provide exemplary service and, as discussed herein and throughout the testimony of other PAWC witnesses, frequently achieves its goal, infractions occasionally occur. These occasional lapses should not preclude the Commission from recognizing the Company's overall superior management performance.

Customer Satisfaction. Mr. Colton also asserts that PAWC has not compiled information that can actually be used to assess how PAWC might improve its customer satisfaction its

collection outcomes. As described further in PAWC witness Degillio's rebuttal testimony, Mr. Colton's concerns about the adequacy of PAWC's transaction surveys are unfounded.

H2O Program and Disconnections. Mr. Colton further argues that PAWC's H2O program does not "rank at the top" of water utility customer assistance programs, and its number of disconnections is higher than other Class A water companies. PAWC's shareholder contributions to its Hardship Grant program are significantly higher than other Pennsylvania water utilities. In addition, PAWC was the first water utility to launch customer assistance programs in the Commonwealth and continues to implement targeted changes to these programs to assist its low and moderate income customers, such as PAWC's arrearage management plan implementation and proposed income eligibility expansion for the bill discount program. With respect to its number of disconnections, the Company has an obligation to collect amounts billed to mitigate uncollectible expense. As further discussed in PAWC Witness Dean's rebuttal testimony, as part of PAWC's most recent management audit, the Commission's Bureau of Audits made only two-customer service findings related to PAWC, neither of which specifically related to uncollectibles or service disconnections. It is interesting that Mr. Colton both criticizes the Company's collection performance and the use of its primary and most effective method of collections. The Company's significant shareholder contributions to the Hardship Grant program, continued efforts to enhance its customer assistance programs, and prudent collection efforts are further evidence of exemplary management performance, rather than evidence against as Mr. Colton argues.

Call Center Performance. Ms. Alexander asserts that PAWC's call center performance does not support a management enhancement. However, as PAWC witness Degillio

explains, Ms. Alexander's criticism is derived solely from call center answering metrics and does not reflect the quality and value of service PAWC provides and the Company's improved call metrics, nor does she account for customer use of the Company's IVR system.

Q. **Do you continue to believe an upward adjustment to the Company's return on equity is reasonable to reflect the Company's superior management performance and efforts to assist troubled and nonviable systems?**

A. Yes. PAWC continues to actively work to enhance and improve its collections and CSO performance. For all the reasons discussed above and within my direct testimony, I believe the Company's exemplary management performance justifies approving a rate of return of 10.95% or an increase of 25 basis points if a lower rate of return on equity is approved by the Commission.

OCA Recommendations to Impute Revenues and Eliminate Incurred Costs

Q. What revenues does PAWC receive related to the "on-bill" billing of charges on behalf of American Water Resources ("AWR") for its non-utility products and services?

A. For the year ended June 30, 2023, PAWC received $659,624 of revenues. PAWC recorded these revenues above-the-line which provides a benefit to PAWC's customers by offsetting the Company's operating and maintenance expenses recovered through rates. As OCA witness Ralph D. Smith notes, the Company included $659,624 of miscellaneous revenue from AWR in the revenue requirement for the FPFTY in this case.

Q. Please summarize the recommendation of the OCA regarding the on-bill billing on behalf of AWR.

A. OCA recommends that PAWC "suspend" billing on behalf of AWR. OCA St. 6, page 41. Ms. Degilio discusses this recommendation and the Company's response in PAWC Statement No. 9-R. In response to discovery, Ms. Alexander clarified that billing PAWC customers on behalf of AWR should be halted for "additional (new)" enrollments pending her recommended Commission investigation.

Q. Given that the OCA recommends PAWC not be permitted to provide the on-bill billing service, did OCA also remove the revenues associated with this service?

A. No. Ms. Alexander states that she only wants to "benefit consumers, not harm them" (OCA St. 6, page 41) and therefore PAWC should be required to impute the revenues.

Q. Please respond to this recommendation.

A. If the OCA's recommendation is adopted by the Commission, the Company may not be permitted to bill for AWR during the FPFTY. The suggestion that PAWC not be permitted to provide a service, but the Commission should act as if PAWC will still receive revenues for that service, is unreasonable and inconsistent with proper ratemaking. If the Commission's Order in this proceeding determines that PAWC is not allowed to continue to bill for AWR, PAWC's rates should be set excluding any beneficial impact of the then-excluded billing arrangement with AWR.

Q. Please describe the OCA's proposed adjustment to third party call handling expense.

A. PAWC has claimed $3,082,255 for expenses associated with third-party call handling agencies in this case for the FPFTY. The OCA proposes to disallow 100% of this claimed expense based on Ms. Alexander's conclusion that the Company's third-party call handling agencies have "failed" to meet standards that Ms. Alexander finds reasonable. OCA St. 6, pages 25-26.

Q. How do you respond to this recommendation?

A. Ms. Degilio addresses Ms. Alexander's claims about PAWC's call center performance in PAWC St. No. 9-R.

As Ms. Alexander acknowledges, call handling operations are necessary to provide service to PAWC's customers. The cost of third party agents available to handle customer calls was and is incurred by the Company and is necessary to provide services to customers. If, hypothetically, the Company did not utilize third-party call handling agencies, the Company would incur additional Service Company cost to increase Customer Service Organization staffing to handle the call volumes (inbound and outbound) previously answered by third-party contractors. Therefore, the OCA's recommendation that an expense PAWC necessarily incurs to serve customers should be excluded for ratemaking purposes is inappropriate and should be rejected by the Commission.

Application Of 66 Pa. Code C.S. § 1329

Q. In her direct testimony, OCA witness Hoover discusses the Company's prior Section 1329 acquisitions. Please discuss this testimony.

A. Ms. Hoover discusses the Company's prior ten Section 1329 acquisitions, totaling approximately $576 million of rate base, characterizing these acquisitions as being "almost double the depreciated original cost of these assets" and that the revenues "do not recover the revenue requirement associated with the ratemaking rate base." OCA St. 1 at 33.

It is accurate that the revenues of acquired customers often do not cover the revenue requirement of the system upon acquisition. This is often in part due to the very low rates of the municipal system at the time of acquisition. For example, when the York system was

included in PAWC's 2022 rate case, an average customer in York had a monthly bill of $29.36, which was less than 40% of the Zone 1 wastewater rate at that time.[5]

Regarding the ratemaking rate base, while Ms. Hoover's testimony describes the Section 1329 rate base as it compares to original cost, the ratemaking rate base determination for each of these systems was part of a settlement agreement between the Company and parties, including the OCA. In other words, while the OCA criticizes in this case the ratemaking rate base of the Company's Section 1329 acquisitions, the OCA agreed to that ratemaking rate base in the context of the application proceeding.[6]

Application Of 66 Pa. Code C.S. § 1311(c)

Q. Do any parties take issue with PAWC's proposal to re-allocate a portion of the Company's wastewater revenue requirement across PAWC's 684,000 water customers as authorized by Section 1311(c) of the Public Utility Code?

A. Yes. Several non-Company witnesses recommend increasing rates for wastewater customers and reducing the amount of wastewater revenue requirement allocated to water customers. As discussed in more detail in PAWC Statement No. 10-R, PAWC proposed allocating approximately $71 million of its wastewater revenue requirement to water customers, while I&E, the OCA, OSBA and PAWLUG propose much lower Act 11 allocations.

Q. Do you believe the proposals to reduce the allocation of wastewater revenue requirement to water customers are "in the public interest"?

[5] Docket No. R-2022-3031673, Customer Notices.

[6] The OCA separately discusses the 10 closed acquisitions and the two pending acquisitions. Of the two pending acquisitions, the OCA agreed to the BASA ratemaking rate base in settlement while the Brentwood proceeding was not settled and is currently under Commission review.

A. No. They would result in a large increase in the rates of wastewater customers, which the Company believes may result in rate shock. For example, PAWC's original proposal would decrease rates for a Zone 1 residential wastewater customer from approximately $105 to approximately $100 per month for the average customer. Under I&E's recommended rate structure, the average monthly bill for PAWC's wastewater customers jumps to $132. The higher rate increases for PAWC's wastewater sanitary sewer operations proposed by other parties to reduce the portion of the revenue requirement recovered from water customers will exacerbate the adverse impacts on elderly customers and those with fixed incomes in those systems noted by Exeter Township witness Piho, as well as customers in Scranton as discussed by Scranton witness Cognetti.

Customer Assistance Programs

Q. Please discuss the recommendations of CAUSE-PA witness Geller and CEO witness Warabak regarding the Company's annual contribution to the H2O grant program.

A. The Company has a strong commitment to its Dollar Energy Hardship Fund and intends to maintain its current annual level of voluntary contributions ($750,000).[7] The level of that contribution was agreed to as part of the settlement of the Company's 2022 base rate case. Mr. Warabak recommends that the Company increase its annual contribution by $330,000 and distribute those funds based on the percentage of low-income customers within the service region or county. Similarly, Mr. Geller recommends increasing annual funding by $1,000,000.

[7] As discussed in my direct testimony, the Company will contribute an additional $700,000 annually for five years upon closing of the acquisition of the Butler Area Sewer Authority wastewater system.

It is my understanding that utility payments to the Dollar Energy Hardship Fund are voluntary shareholder contributions and, as such, the Commission has previously held that it cannot order a utility to increase its contributions.

Customer Notice

Q. Did the Company provide notice to its customers of the proposed rate increase?

A. Yes. The Company provided notice consistent with 52 Pa. Code § 53.45.

Q. Please summarize the OCA's testimony on this issue.

A. OCA witness Hoover discusses two "concerns" with the notice PAWC provided to customers upon filing this case: 1) That bill impacts are shown after the proposed Act 11 wastewater-to-water revenue requirement sharing; 2) That PAWC's notices are calculated based on a typical usage level and do not show bill impacts for customers at higher usage levels. Ms. Hoover discusses a third "concern" regarding notice to customers at the end of the case.

Q. Please discuss Ms. Hoover's concern regarding the impact of Act 11 on the customer notices.

A. As permitted by Section 1311 of the Public Utility Code, the Company has proposed to allocate a portion of the wastewater revenue requirement to its combined water and wastewater customer base. Notices to customers state that the Company is making this proposal. In her direct testimony, Ms. Hoover objects to the way the Company has calculated its notices and states "PAWC should have shown what it wants to charge for wastewater service before the shift."

First, I would note that notices sent to the Company's customers of the proposed rate increase must be consistent with the Company's proposed tariffs filed in the case. In

this case, the Company filed Supplement No. 45 to Tariff Water-PA P.U.C. No. 5 proposing a Zone 1 water service charge of $20.00 per month and a Zone 1 water usage charge of $2.1319 per 100 gallons and Supplement No. 47 to Tariff Wastewater PA P.U.C. No. 16 proposing a Zone 1 wastewater service charge of $20.00 per month and a Zone 1 usage charge of $2.5650 per 100 gallons. Both supplements carry an issue date of November 8, 2023 and an effective date of January 7, 2024. Notices sent to customers in this case reflected average monthly bills at those proposed rates.

Second, in every case the Company has filed since Act 11 of 2012, the Company has provided notice to customers of its proposed rates, inclusive of the impact of Act 11. There is not an alternative set of rates as Ms. Hoover suggests: the notices reflect the rates shown in the proposed tariff as described above. In my opinion, the testimony at the Public Input Hearings from wastewater customers concerned about rate increases confirms that customers understand that the final result may be different than what the Company is requesting.

Q. Please discuss Ms. Hoover's recommendation that the Company be required to show bill impacts for multiple usage levels on the customer notice.

A. Ms. Hoover describes that customers of different usage levels will have different bill impacts than the typical customer. Ms. Hoover appears to acknowledge that a "typical" usage level, as PAWC's current notices show, is what is required by the applicable regulation. PAWC is not unique in that customers have varying levels of usage, but the Commission has determined (evidenced by the regulations) that a typical usage level is sufficient notice. If the OCA believes that the notice required by regulation should be expanded, it should propose changes to the regulation in the proper forum, rather than

proposing a change in the context of a rate case that would apply only to PAWC and not all other utilities regulated by the Commission.[8]

Additionally, providing an arbitrary additional two levels of usage (5,000 and 10,000 gallons) for residential customers does not provide meaningful information to the Company's customers and may serve to confuse both residential and non-residential customers. Furthermore, customers also have the option, as indicated in the notice, to contact PAWC to determine how the proposed rate changes would impact their bill or to visit the Company's website to review the proposed rates in the tariff supplements filed, a fact which Ms. Hoover admits in her testimony. OCA St. 1, p. 60, footnote 30.

Q. Please discuss Ms. Hoover's recommendation that PAWC be required to provide additional notice to customers at the end of the rate case based on the Commission's final Order.

A. Ms. Hoover proposes an additional notice by bill insert at the end of the proceeding of the Commission's determination in the rate case. The OCA's recommendation appears to be about two issues: 1) the final Commission determination on the case and 2) showing the impact at multiple usage levels. I discuss the proposal regarding multiple usage levels above.

Regarding the first part of OCA's recommendation, the Company already provides information to customers that is substantially what the OCA appears to be requesting. When a rate change is implemented at the end of a rate case, the Company includes a bill message on customer bills informing customers that the Commission approved a rate increase and what the impact on the average residential customer is as well as other relevant

[8] In response to PAWC-OCA-III-4, the OCA clarified that it has only requested this additional notice in PAWC proceedings. PAWC Exhibit AEE-2R.

information the customer may want to know. For example, following the Company's last base rate case, the Company provided the following bill message on bills for customers in the Steelton water system:

> The PA Public Utility Commission recently approved a water rate increase for Pennsylvania American Water, effective Jan. 28, 2023. The average monthly residential water bill for Steelton customers increased by $30.48 (78.7%). The rate change included lowering the minimum charge and eliminating the usage allowance. This increase was part of a process to change Steelton's water rates over time to be more consistent with Pennsylvania American's existing base water rate structure.

In response to PAWC-OCA-III-3, Ms. Hoover clarified the OCA's proposal to include a direct mailing between when the Commission approves new rates and when customers receive their first bills containing new rates. PAWC Exhibit AEE-1R.

Q. Is the OCA's recommendation of a direct mailing feasible?

A. No. After the Company receives the Commission Order, it will need to calculate rates based on the revenue requirement, cost allocation and rate design approved by the Commission. Once calculated consistent with the Order, rates are typically effective on one day's notice. Because the Company has a large number of rate zones with different rates, the process of sending a customized direct mail notice to its nearly 800,000 customers (similar to what is done at the time of filing) takes several weeks. The Company is not able to send a direct mail notice between final determination of rates and when those rates are applied on customer bills. As described above, the Company already provides information to customers on the first bills sent after the rate increase in order to provide customers with information regarding the Commission's approval.

Additionally, I would note that notifying customers through direct mail costs over $300,000, which is a cost the OCA has not included in its calculation of the Company's revenue requirement.

Q. Please summarize the Company's response to the OCA's recommendation that the Company be required to provide additional notice at the end of the case.

A. The Company recommends that the Commission reject the OCA's proposal on this issue, both because it is inappropriate to impose additional notice requirements on one utility that is not required of other utilities, because it is unnecessary given the information the Company already provides to its customers, and because the recommendation to provide additional direct notice prior to billing at new rates is not feasible.

Cost of Service Studies and Bulk Customer Agreements

Q. Please discuss the OCA's recommendation regarding separate revenue requirements in PAWC's future rate cases.

A. OCA witness Jerome D. Mierzwa recommends that PAWC 1) prepare separate cost of service studies ("COSSs") for future Section 1329 acquisitions in the first base rate case that includes those systems and 2) "continue to prepare" separate cost of service studies for Section 1329 acquisitions that were included in this case.[9]

Q. Should the Commission decide as part of this proceeding whether to require the preparation of separate COSSs for all future Section 1329 acquisitions?

A. No. The current base rate case is not the appropriate place to determine whether or not PAWC should be required to provide separate COSSs for future acquisitions. There are

[9] Mr. Mierzwa further explains that under his proposal, "PAWC should continue to prepare separate CCOS studies either individually for each acquisition or as a group" and that "The group should not include Section 1329 acquisitions that are combined sewer systems." OCA St. 4, page 21.

circumstances where a separate COSS is inappropriate or unnecessary, and the Commission should have flexibility to only require a separate COSS when the situation merits it.

For example, when PAWC filed its application to acquire the Valley Township ("Valley") water and wastewater systems, PAWC explained that including these in PAWC's general wastewater revenue requirement was more reasonable than a separate COSS because Valley was a bulk customer of the Coatesville water and wastewater systems. Creating separate depreciation rates for the interconnected Valley system was unreasonable, so the Company requested that a separate COSS not be required.

The settlements of the Valley acquisition proceedings did not require separate COSSs for the Valley water and wastewater systems. It would be inappropriate to pre-judge situations like this one and institute a blanket requirement that applies to proceedings outside of the base rate case. The Company recommends that the Commission reject this recommendation and continue to evaluate the necessity of separate COSSs as part of future acquisition proceedings.

Q. Should the Commission require as part of this proceeding that PAWC prepare separate COSSs for all Section 1329 acquisitions, as recommended by the OCA?

A. No, this requirement is not reasonable. The Company recommends that the Commission continue its approach of moving toward single tariff pricing for all of its systems, including those acquired under Section 1329 of the Public Utility Code.[10] The service provided to customers of a system acquired under Section 1329 is indistinguishable from the service

[10] For the Company's wastewater operations, the Company is moving toward two sets of single tariff pricing: sanitary sewer systems and combined sewer systems.

provided to customers acquired either organically or through non-Section 1329 acquisitions.

The OCA, in recommending the Company "should continue to prepare separate CCOS studies" does not appear to acknowledge that the Company's first ten Section 1329 acquisitions, totaling approximately $576 million of rate base, have already been consolidated into the Company's main operating areas: Water Operations, Wastewater SSS Operations, and Wastewater CSS Operations. While the OCA says the Company should "continue" to separate the cost of service for these systems, these systems have already been integrated into the Company's general operations and rate case revenue requirements. I would also note that the Commission did not require as part of the 2020 base rate case or the 2022 base rate case that the Company continue to separate the requirements for its Section 1329 acquisitions. Instead, the Commission approved rates for these acquired systems that made significant progress toward single tariff pricing, and approved a settlement provision that allowed the Company to provide only one separate revenue requirement for its combined sewer systems. This approach should continue.

Q. I&E witness Kubas recommends that the proposed rates for the York Bulk Customers should increase by 50 percent. Please discuss these recommendations.

A. The Company strongly disagrees with this argument. As discussed in Company witness Abruzzo's rebuttal testimony, the Company negotiated the contracted rates to the bulk customers because it is in the best interest of <u>all</u> of PAWC's customers to have the bulk customers connected to the system and paying a portion of the fixed costs of operation. In his rebuttal testimony, Mr. Abruzzo discusses the bulk customers' competitive alternatives

and the Company's need to negotiate contracted rates for these customers in order to keep them connected to the system for the benefit of all customers.

As explained by PAWC witness Heppenstall in PAWC Statement No. 12 at 19, the revenues from the York Bulk customers cover the variable costs of bulk treatment service and provide a meaningful contribution to the total fixed costs incurred to furnish wastewater service to retail customers in the Company's WW SSS General Operations. As a result, all retail customers benefit from having the bulk customers connected to the York system. As such, it is appropriate that these customers are included in the proof of revenues at exactly the rate that they will be billed and in accordance with the negotiated agreements.

Q. Mr. Kubas claims that the bulk customers' competitive alternatives may have been higher priced than the negotiated rate, and this means that the rate may be set too low. Is this a reasonable approach?

A. No. Mr. Kubas has not shown that the rates the bulk customers would have paid under their competitive alternative would have been higher. The potential rate that the customers would have paid for service by a different provider is not an appropriate standard for evaluating the contracts. As noted in Mr. Abruzzo's rebuttal testimony, "'maximizing the revenue that could be received from each customer' is not always realistic or desirable." PAWC St. No. 6-R. The Company negotiated the contract rates in good faith in order to keep the bulk customers on the system for the good of all of its customers. It is important to understand that the Commission modifying the contract rates has the potential to lead to the customers leaving the system in favor of an alternative. It is uncontested that the bulk customers are contributing to the fixed costs of the York system. Therefore, if modifying the contract rates caused the customers to leave the system, this would be a detriment to

other PAWC wastewater customers. Therefore, these rates should be accepted by the Commission without modification.

Customer Service Performance Standards

Q. OCA witness Alexander proposes that the Commission impose several customer service performance standards on the Company as a condition of any rate increase. Does the Company agree with Ms. Alexander's proposal?

A. No. As a threshold issue, I note that Ms. Alexander does not clearly explain why she believes that the Commission has the authority to impose performance-based rates on the Company in this proceeding. Under Act 58, the General Assembly made clear that the Commission has authority to approve alternative rates and rate mechanisms following the application by a utility to establish such mechanisms.[11] While PAWC has proposed an RDM and ECIC in this proceeding, it has not made any proposal for performance-based rates. On advice of counsel, I do not believe that a utility's application for approval of one form of alternative rate mechanism identified in Act 58 permits the Commission to impose any or all other forms of alternative rate mechanisms. I also note that, to the extent the Commission has imposed customer service standards, those have been approved in the context of merger and acquisition proceedings – not base rate proceedings. As PAWC witness Deborah Degillio explains in PAWC Statement No. 9-R, the performance standards that Ms. Alexander advocates are based on a flawed analysis of PAWC's call center performance. The Commission should therefore reject Ms. Alexander's proposal for performance-based rate standards in this proceeding.

[11] 66 Pa. C.S. § 1330(b).

Conclusion

Q. Does that conclude your rebuttal testimony at this time?

A. Yes, but I reserve the right to supplement this testimony as additional facts arise during the proceeding.

Pennsylvania-American Water

Exhibit 3-A Revised

Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)

February 21, 2024

- 3-A Revised Summary
- 3-A Revised Water Operations
- 3-A Revised Wastewater SSS General Operations
- 3-A Revised BASA WW Operations
- 3-A Revised Brentwood WW Operations
- 3-A Revised Wastewater CSS Operations

Pennsylvania-American Water Company

3-A Combined Water and Wastewater Revenue Requirement - Summary

		Total Company	Water Operations	Wastewater SSS General Operations	BASA Wastewater Operations	Brentwood Wastewater Operations	CSS Wastewater Operations
Present Rate Revenue	(1)	$1,012,862,653	$824,117,186	$95,470,867	$12,814,193	$1,824,191	$78,636,216
Additional Revenue Requirement	(2)	204,291,164	$129,343,180	$31,855,090	$25,322,947	$1,935,019	$15,834,928
Act 11 - Wastewater Allocation	(3)	0	71,087,394	(31,962,411)	(21,552,699)	(1,565,232)	(16,007,052)
Proposed Revenues		$1,217,153,817	$1,024,547,760	$95,363,546	$16,584,441	$2,193,978	$78,464,092
Rate Increase/(Decrease)		$204,291,164	$200,430,574	($107,321)	$3,770,248	$369,787	($172,124)
		20.2%	24.3%	-0.1%	29.4%	20.3%	-0.2%

Notes:

(1) Present Rate Revenue: Present Rate Revenues are developed in the sections of Exhibit 3-A that relate to each of these operations.

(2) Additional Revenue Requirement: The Additional Revenue Requirement are developed in subsequent sections of this Exhibit 3-A for each of the operations.

(3) Act 11 - Wastewater Allocation is the allocation between wastewater operations and water operations achieved by the proposed consolidation of water and wastewater revenue requirements to derive the water and wastewater rates proposed by the Company in this case.

Water Operations

Pennsylvania-American Water Company - Water Operations
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Exhibit 3-A Revised

Adjustment	Reference Statement No.	Description	Revised 3-A Page No.	Original Filed Amount	Revised Filed Amount	Change
Rate Base:						
Utility Plant	Stmt 4R	Revised NARUC account for Lead Service Line Inventory project	26R	$7,350,692,906	$7,350,692,906	$0
Accumulated Depreciation	Stmt 4R	Revised NARUC account for Lead Service Line Inventory project	25R	1,240,368,309	1,241,627,202	1,258,893
Deferred Taxes	Stmt 4R	Update ADIT calculation for the Audubon acquisition	43R	1,082,382,243	1,084,234,439	1,852,196
Expenses:						
Compensation Adjustment	Stmt 5R	Update for 2024 actual merit increase and apply vacancy rate	49R	64,371,428	63,617,247	(754,181)
Group Insurance Expense	Stmt 5R	Update for 2024 actual merit increase and apply vacancy rate	50R	11,419,825	11,220,477	(199,349)
OPEB	Stmt 5R	OPEB update for 2024 costs	51R	(5,817,327)	(6,496,737)	(679,410)
Pension	Stmt 5R	Pension update for 2024 costs	52R	22,218	971,071	948,853
401K, DCP, ESPP	Stmt 5R	Update for 2024 actual merit increase and apply vacancy rate	53R	4,115,165	4,067,092	(48,073)
Rate Case Expense	Stmt 4R	Update for public input hearings and legal expenses	61R	961,773	1,026,937	65,164
Service Company	Stmt 5R	Update for 2024 actual merit increase and remove SERP expense	62R	60,645,901	60,897,948	252,047
Acquisition O&M Adjustments	Stmt 5R	Correct FTY Service Company expense for the Audubon Water acquisition	63R	1,690,855	1,680,361	(10,494)
Miscellaneous Adjustments	Stmt 5R	Update Credit Card allocation and remove external board expense	64R	2,629,402	2,323,414	(305,988)
Depreciation Expense	Stmt 4R	Revised NARUC account for Lead Service Line Inventory project	66R	212,799,798	214,460,165	1,660,367
Taxes, Other than Income:						
Payroll Taxes	Stmt 5R	Concomitant changes related to merit increase and vacancy rate	70R	4,999,459	4,937,137	(62,321)
Concomitant Changes:						
Pro Forma Statement of Income			1R			
Revenue			2R, 3R			
Summary of Adjustments to Operating Revenues			4R			
Penalties			24R			
Summary of Rate Base Adjustments			25R			
Cash Working Capital Requirements - Expense			31R			
Support of Expense Days			32R			
Accrued and Prepaid Taxes			33R			
Cash Working Capital Requirements - Interest & Dividends			35R			
Summary of Operating Expense Adjustments			48R			
Uncollectible Accounts			65R			
General Assessment			71R			
Income Taxes			72R & 73R			
Interest Expense			74R			
Income Deductions			75R			

Pennsylvania-American Water Company - Water Operations

Pro Forma Statement of Income for the Twelve Months Ending June 30, 2023

June 30, 2024, and June 30, 2025 Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PER BOOKS	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	LINE NO.
1	Operating Revenue	$761,522,517	$52,731,430	$814,253,947	($4,194,144)	$810,059,803	$14,057,383	$824,117,186	$129,343,180	$953,460,366	1
2	Operating Revenue Deductions:										2
3	Operating Expenses	226,839,835	3,814,353	230,654,188	18,566,753	249,220,941	6,882,695	256,103,636	1,521,076	257,624,712	3
4	Depreciation	147,332,145	38,232,587	185,564,732	12,221,610	197,786,342	16,673,823	214,460,165	0	214,460,165	4
5	Amortizations	1,850,736	0	1,850,736	(2,397,852)	(547,116)	(1,552,346)	(2,099,462)	0	(2,099,462)	5
6	Taxes, Other Than Income:										6
7	Local Property And Miscellaneous	1,718,277	0	1,718,277	232,364	1,950,641	122,724	2,073,365	0	2,073,365	7
8	Federal Environmental Tax	0	0	0	0	0	0	0	0	0	8
9	Public Utility Realty Taxes	2,046,257	0	2,046,257	(18,305)	2,027,952	98,780	2,126,732	0	2,126,732	9
10	Payroll Taxes	4,440,056	0	4,440,056	387,550	4,827,606	144,070	4,971,676	0	4,971,676	10
11	General Assessment	4,267,439	834,192	5,101,631	(25,651)	5,075,980	88,157	5,164,137	817,525	5,981,662	11
12	Other Taxes and Licenses	350	(350)	0	0	0	0	0	0	0	12
13	Total Taxes Other Than Income	12,472,379	833,842	13,306,221	575,958	13,882,179	453,731	14,335,910	817,525	15,153,435	13
14	**Utility Operating Income Before Income Taxes**	**373,027,422**	**9,850,648**	**382,878,070**	**(33,160,613)**	**349,717,457**	**(8,400,520)**	**341,316,937**	**127,004,579**	**468,321,516**	14
15	Income Taxes:										15
16	State Income Tax	22,760,110	785,313	23,545,423	(9,394,614)	14,150,809	(735,990)	13,414,819	10,148,387	23,563,206	16
17	Federal Income Tax	46,482,076	1,699,918	48,181,994	(8,497,170)	39,684,824	(5,651,919)	34,032,905	24,541,698	58,574,603	17
18	Amortization Of ITC & Excess Deferred Taxes	(233,592)	0	(233,592)	0	(233,592)	0	(233,592)	0	(233,592)	18
19	Total Income Taxes	69,008,594	2,485,231	71,493,825	(17,891,784)	53,602,041	(6,387,909)	47,214,132	34,690,085	81,904,217	19
20	Total Operating Revenue Deductions	457,503,689	45,366,013	502,869,702	11,074,685	513,944,387	16,069,994	530,014,381	37,028,686	567,043,067	20
21	**Utility Operating Income**	**304,018,828**	**7,365,417**	**311,384,245**	**(15,268,829)**	**296,115,416**	**(2,012,611)**	**294,102,805**	**92,314,494**	**386,417,299**	21
22	Income Deductions:										22
23	Interest On Long Term Debt	66,694,994	0	66,694,994	18,555,138	85,250,132	13,008,556	98,258,688	(9,034)	98,249,654	23
24	Amortization Of Debt Discount Expense	0	0	0	0	0	0	0	0	0	24
25	Interest On Notes Payable To Others	0	0	0	0	0	0	0	0	0	25
26	Total Income Deductions	66,694,994	0	66,694,994	18,555,138	85,250,132	13,008,556	98,258,688	(9,034)	98,249,654	26
27	**Net Income**	**$237,323,834**	**$7,365,417**	**$244,689,251**	**($33,823,967)**	**$210,865,284**	**($15,021,167)**	**$195,844,117**	**$92,323,528**	**$288,167,645**	27
28	Preferred Dividends	0		0		0		0		0	28
29	**Net Income To Common**	**$237,323,834**		**$244,689,251**		**$210,865,284**		**$195,844,117**		**$288,167,645**	29

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

TOTAL REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2023 AND JUNE 30, 2024

LINE NO.	ACCT. NO.	CUSTOMER CLASS	PER BOOKS 12 ME June 2023	UNBILLED, EADIT AMP AND DSIC ADJUSTMENTS (*)	ANNUALIZE 2023 RATE CHANGE	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	OTHER REVENUE AND CUSTOMER ADJUSTMENTS (**)	PRO FORMA PRESENT RATES 12 ME June 2023	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	AUDUBON & FARMINGTON ACQUISITION ADJUSTMENT	OTHER REVENUE AND CUSTOMER ADJUSTMENTS (***)	PRO FORMA PRESENT RATES 12 ME June 2024
1		OPERATING REVENUES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2		METERED SALES										
3	461.1	RESIDENTIAL	$495,611,936	($6,244,885)	$48,328,510	($12,670,325)	$69,902	525,095,138	($6,783,787)	$2,052,695	$361,855	$520,725,900
4	461.2	COMMERCIAL	179,404,878	(3,215,209)	17,651,547	3,701,686		197,542,902	(947,652)	1,144,279	266,194	198,005,723
5	461.3	INDUSTRIAL	38,292,718	(564,375)	3,118,375		91,411	40,938,129		6,480	106,202	41,050,811
6	464	MUNICIPAL	20,783,502	(354,259)	764,920	1,520,971		22,715,135	(651,058)	19,377	36,106	22,119,560
7	466	SALES FOR RESALE	3,025,954	(147,850)	21,538		85,130	2,984,772		359,446	99,352	3,443,569
8		**TOTAL METERED SALES**	**$737,118,988**	**($10,526,578)**	**$69,884,890**	**($7,447,668)**	**$246,443**	**$789,276,076**	**($8,382,498)**	**$3,582,277**	**$869,708**	**$785,345,563**
9		UNMETERED SALES										
10	460	RESIDENTIAL	$67,620		3,016			$70,636				$70,636
11	460	COMMERCIAL						0				0
12	460	INDUSTRIAL						0				0
13	460	MUNICIPAL						0				0
14	460	MISCELLANEOUS						0				0
15		**TOTAL UNMETERED SALES**	**$67,620**	**$0**	**$3,016**		**$0**	**$70,636**	**$0**	**$0**	**$0**	**$70,636**
16	462.1	PRIVATE FIRE PROTECTION	4,592,437	42,358	290,447		4,192	4,929,434		101,960	152,747	5,184,141
17	462.2	PUBLIC FIRE PROTECTION	8,792,506	249,252	368,867			9,410,626		82,433	26,309	9,519,368
18		**TOTAL WATER SALES**	**$750,571,552**	**($10,234,967)**	**$70,547,220**	**($7,447,668)**	**$250,635**	**$803,686,772**	**($8,382,498)**	**$3,766,670**	**$1,048,764**	**$800,119,708**
19		OTHER OPERATING REVENUES										
20	469	GUARANTEED REVENUES	$0					$0				$0
21	470	LATE PAYMENT FEES	4,419,511				(379,378)	4,040,133			(17,932)	4,022,201
22	471	MISC SERVICE REVENUES	4,828,286				(4,439)	4,823,847			16,325	4,840,172
23	472	RENTS FROM PROPERTIES	1,186,476					1,186,476			(397,369)	789,107
24	473	INTERCOMPANY RENTS	516,719					516,719			(228,104)	288,615
25	474	OTHER WATER REVENUES	(27)	$27	0			0				0
26		**TOTAL OTHER OPERATING**										
27		**REVENUES**	**$10,950,965**	**$27**	**$0**	**$0**	**($383,817)**	**$10,567,175**	**$0**	**$0**	**($627,080)**	**$9,940,095**
28		**TOTAL OPERATING REVENUES**	**$761,522,517**	**($10,234,941)**	**$70,547,220**	**($7,447,668)**	**($133,182)**	**$814,253,947**	**($8,382,498)**	**$3,766,670**	**$421,684**	**$810,059,803**

(*) The metered sales adjustments represent the removal of the Unbilled, EADIT, DSIC and AMP surcharges.

(**) The metered sales adjustments represent revenues from Creekside Development, annualization of revenues from change in contract customer rates and changes in other operating revenues.

(***) The metered sales adjustments represent revenue from Findlay Township, annualization of revenues from change in Valley and contract customer rates and changes in other operating revenues.

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

LINE NO.	ACCT. NO.	CUSTOMER CLASSIFICATION	PRO FORMA PRESENT RATES 12 ME June 2024	CUSTOMER GROWTH (LOSS) ADJUSTMENTS (*)	USAGE NORMALIZATION	ANNUALIZE DSIC ADJUSTMENT	OTHER REVENUE ADJUSTMENT	PRO FORMA PRESENT RATES 12 ME June 2025	PERCENT	AMOUNT	PRO FORMA PROPOSED RATES
1		OPERATING REVENUES	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
2		METERED SALES									
3	461.1	RESIDENTIAL	$520,725,900	$1,899,124	($6,236,951)	$11,831,339		$528,219,412	14.30%	$75,536,866	$603,756,278
4	461.2	COMMERCIAL	198,005,723	1,397,102	(1,156,531)	4,533,346		202,779,639	14.61%	29,628,136	232,407,776
5	461.3	INDUSTRIAL	41,050,811	167,247		844,778		42,062,836	18.06%	7,597,447	49,660,282
6	464	MUNICIPAL	22,119,560		(66,790)	506,768		22,559,538	56.12%	12,660,284	35,219,822
7	466	SALES FOR RESALE	3,443,569	121,059		5,716		3,570,344	10.83%	386,770	3,957,114
8		**TOTAL METERED SALES**	**$785,345,563**	**$3,584,531**	**($7,460,272)**	**$17,721,947**	**$0**	**$799,191,769**	**15.74%**	**$125,809,503**	**$925,001,272**
9		UNMETERED SALES									
10	460	RESIDENTIAL	$70,636					$70,636	84.65%	59,795	$130,431
11	460	COMMERCIAL	0					0	0.00%	0	0
12	460	INDUSTRIAL	0					0	0.00%	0	0
13	460	MUNICIPAL	0					0	0.00%	0	0
14	460	MISCELLANEOUS	0					0	0.00%	0	0
15		**TOTAL UNMETERED SALES**	**$70,636**	**$0**	**$0**	**$0**	**$0**	**$70,636**	**84.65%**	**$59,795**	**$130,431**
16	462.1	PRIVATE FIRE PROTECTION	5,184,141			116,890		5,301,031	9.13%	483,881	5,784,912
17	462.2	PUBLIC FIRE PROTECTION	9,519,368					9,519,368	24.61%	2,343,045	11,862,413
18		**TOTAL WATER SALES**	**$800,119,708**	**$3,584,531**	**($7,460,272)**	**$17,838,837**	**$0**	**$814,082,804**	**15.81%**	**$128,696,224**	**$942,779,028**
19		OTHER OPERATING REVENUES									
20	469	GUARANTEED REVENUES	$0					$0	0.00%	0	$0
21	470	LATE PAYMENT FEES	4,022,201				70,192	4,092,393	15.81%	646,956	4,739,349
22	471	MISC SERVICE REVENUES	4,840,172				16,947	4,857,119	0.00%	0	4,857,119
23	472	RENTS FROM PROPERTIES	789,107				7,148.00	796,255	0.00%	0	796,255
24	473	INTERCOMPANY RENTS	288,615				0	288,615	0.00%	0	288,615
25	474	OTHER WATER REVENUES	0					0	0.00%	0	0
26		**TOTAL OTHER OPERATING**									
27		**REVENUES**	**$9,940,095**	**$0**	**$0**	**$0**	**$94,288**	**$10,034,382**	**6.45%**	**$646,956**	**$10,681,338**
28		**TOTAL OPERATING REVENUES**	**$810,059,803**	**$3,584,531**	**($7,460,272)**	**$17,838,837**	**$94,288**	**$824,117,186**	**15.69%**	**$129,343,180**	**$953,460,366**

(*) The metered sales adjustment represent revenue from organic growth (loss) in customers and change in contract customer rates.

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	ADJUSTMENT	PRESENT RATES 12 ME JUNE 2023 AMOUNT	ADJUSTMENT	PRESENT RATES 12 ME JUNE 2024 AMOUNT	ADJUSTMENT	PRESENT RATES 12 ME JUNE 2025 AMOUNT
1	Per Books		$761,522,517				
2	Present Rates At 6/30/2024				$814,253,947		
3	Present Rates At 6/30/2025						$810,059,803
4							
5	TCJA & EADIT Adjustment	6,908,979					
6	Unbilled Adjustment	(9,429,136)					
7	DSIC Adjustment	(8,436,657)				17,838,837	
8	AMP Adjustment	$721,875					
9	Annualize 2023 Rate Change	69,887,906					
10	Change in Customers	2,653,585		1,631,539		3,263,078	
11	Usage Normalization	(10,101,253)		(10,014,037)		(7,460,272)	
12	Annualize - Valley Water			413,150			
13	Creekside Development	74,094				33,147	
14	Acquisition - Audubon Water			2,965,024			
15	Acquisition - Farmington Water			266,371			
16	Specific Customer Adjustment	176,541		205,121		269,192	
17	Findlay Township Bulk W			535,275		19,113	
18	Public Fire Protection	368,867		26,309		0	
19	Private Fire Protection	290,447		152,747			
20	Shale Gas Commercial Usage			251,438			
21							
22							
23	Other Operating Revenues						
24	469 - Guaranteed Revenues						
25	470 - Penalties	(379,378)		(17,932)		70,192	
26	471 - Misc Service Revenues	(4,439)		16,325		16,947	
27	472 -Rents From Properties			(397,369)		7,148	
28	473 -Intercompany Rents			(228,104)		0	
29							
30	Pro Forma Adjustment		52,731,430		(4,194,144)		14,057,383
31							
32	Pro Forma Present Rates At June 30, 2023		$814,253,947				
33							
34	Pro Forma Present Rates At June 30, 2024				$810,059,803		
	Pro Forma Present Rates At June 30, 2025						$824,117,186

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Revenues

Penalties

The following adjustment reflects the annualization of revenues associated with changes imposed during twelve months ending June 30, 2023 and projected to be imposed during twelve months ending June 30, 2024 and twelve months ending June 30, 2025. Additionally, annualized late payment charges are calculated based on revenues at the proposed rate level.

LINE NO.	DESCRIPTION	PER BOOKS 6/30/23	PRESENT RATES 6/30/23	PRESENT RATES 6/30/24	PRESENT RATES 6/30/25	PROPOSED RATES 6/30/25
1	Total Billed Water Sales	$741,142,416	$803,686,799	$800,119,735	$814,082,831	$942,779,055
2	% Of Penalties To Total					
3	Total Company Sales - 2 Year Avg	0.5027%	0.5027%	0.5027%	0.5027%	0.5027%
4	Penalties	4,419,511	4,040,134	4,022,202	4,092,394	4,739,350
5	Less: Per Books At 06/30/2023		4,419,511			
6	Less: Present Rates At 06/30/2023			4,040,134		
7	Less: Present Rates At 06/30/2024				4,022,202	
8	Less: Present Rates At 06/30/2025					4,092,394
9	Pro Forma Adjustments		($379,377)	($17,932)	$70,192	$646,956

Witness: Charles Rea

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Summary of Rate Base Adjustments

LINE NO.	DESCRIPTION		DEPRECIATED ORIGINAL COST 6/30/23	DEPRECIATED ORIGINAL COST 6/30/24	DEPRECIATED ORIGINAL COST 6/30/25	DEPRECIATED ORIGINAL COST PROPOSED
1	Non-Depreciable Plant		$18,082,360	$18,796,114	$20,746,039	$20,746,039
2	Depreciable Plant		6,254,251,663	6,772,387,138	7,329,946,867	7,329,946,867
3	Total Utility Plant In Service		6,272,334,023	6,791,183,252	7,350,692,906	7,350,692,906
4	Deduct:					
5	Contributions In Aid Of Construction		279,323,043	283,906,333	290,552,978	290,552,978
6	Customer Advances For Construction		61,692,641	61,749,773	63,679,220	63,679,220
7	Excluded Property		1,558,014	1,558,014	1,558,014	1,558,014
8	Sub-Total		342,573,698	347,214,120	355,790,212	355,790,212
9	Net Utility Plant In Service		5,929,760,325	6,443,969,132	6,994,902,694	6,994,902,694
10	Accumulated Depreciation		1,170,835,898	1,206,308,085	1,241,627,202	1,241,627,202
11	Depreciated Utility Plant In Service		4,758,924,427	5,237,661,047	5,753,275,492	5,753,275,492
12	Add:					
13	Materials And Supplies		21,781,099	21,781,099	21,781,099	21,781,099
14	Cash Working Capital - Expenses		21,491,257	22,638,521	23,152,054	23,152,054
15	Accrued And Prepaid Taxes		1,676,245	1,779,911	2,117,868	1,684,837
16	Acquisition Adjustments		6,930,897	14,449,163	13,205,080	13,205,080
17	Other Additions		444,213	385,635	327,057	327,057
18	Deduct:					
19	Cash Working Capital - Int And Div		5,666,333	7,242,758	8,347,954	8,347,179
20	Unamortized Itc (3%)		244,932	229,128	213,324	213,324
21	Extension Deposits In Suspense		20,895	20,895	20,895	20,895
22	Citizens Acquistion CIAC & CAC, per settlement		0	18,157,468	17,729,494	17,729,494
23	Tax Cuts and Jobs Act -Stub Period		5,780,327	3,015,645	1,508,401	1,508,401
24	Other Deductions		486,888	459,198	431,508	431,508
25	Deferred Taxes		1,009,560,462	1,070,056,381	1,084,234,439	1,084,234,439
26	Total Rate Base Elements		$3,789,488,301	$4,199,513,903	$4,701,372,635	$4,700,940,379
27	Utility Operating Income					
28	Per Books	$304,018,828	8.02%	7.24%	6.47%	6.47%
29	Present Rates At 06/30/2023	311,384,245	8.22%	-	-	-
30	Present Rates At 06/30/2024	296,115,416	-	7.05%	-	-
31	Present Rates At 06/30/2025	294,102,805	-	-	6.26%	-
32	Proposed Rates At 06/30/2025	386,417,299	-	-	-	8.22%

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 6/30/2023	ADDITIONS	RETIREMENTS	FARMINGTON ACQUISITION	ESTIMATED BOOK COST 6/30/2024	ADDITIONS	RETIREMENTS	AUDUBON ACQUISITION	ESTIMATED BOOK COST 6/30/2025
1	301.00	Organization	$766,405	$0	$0	$0	$766,405	$0	$0	$0	$766,405
2	302.00	Franchises & Consents	2,404,599	0	0	0	2,404,599	0	0	0	2,404,599
3	303.00	Miscellaneous Intangible Plant	15,572	721,546	8,949	1,157	729,326	1,949,818	36,412	0	2,642,733
4		Total Intangible Plant	$3,186,576	$721,546	$8,949	$1,157	$3,900,330	$1,949,818	$36,412	$0	$5,813,737
5	303.20	Power and Pumping Land	$14,895,784	$0	$0	$0	$14,895,784	$0	$0	36,518	$14,932,302
5		Total Land & Land Rights	$14,895,784	$0	$0	$0	$14,895,784	$0	$0	$36,518	$14,932,302
6	303.14	Water Rights - Hibernia	$1,942,823	$0	$0	$0	$1,942,823	$0	$0	$0	$1,942,823
7	303.35	Waste Handling and Treatment Land	7,704,484	0	0	0	7,704,484	0	0	0	7,704,484
8	303.99	Comprehensive Planning Studies	11,052,834	785,586	0	0	11,838,420	1,661,805	161,747	0	13,338,479
9	304.15	Other Water Source Structures	95,740,075	30,449,122	4,192,028	0	121,997,169	39,614,975	6,682,502	0	154,929,642
10	304.20	Power and Pumping Structures	99,749,611	0	0	0	99,749,611	0	0	40,805	99,790,416
11	304.30	Purification Buildings	341,412,320	0	0	222,374	341,634,694	0	0	0	341,634,694
12	304.36	Waste Handling Struct. & Improv.	11,777,004	0	0	0	11,777,004	0	0	0	11,777,004
13	304.61	Office Buildings	47,851,444	97,024	17,554	0	47,930,914	150,680	30,229	0	48,051,365
14	304.62	Stores, Shop and Garage Buildings	64,145,021	0	0	0	64,145,021	0	0	6,725	64,151,746
15	304.63	Miscellaneous Structures and Improvements	21,922,598	2,313,101	418,491	0	23,817,207	3,250,904	652,185	0	26,415,927
16	305.00	Collecting and Impounding Reservoirs	135,474,936	3,579,926	647,688	0	138,407,175	75,110,866	15,068,472	0	198,449,569
17	306.00	Lake, River and Other Intakes	17,350,909	588,451	106,464	0	17,832,897	1,102,500	221,180	0	18,714,217
18	307.00	Wells and Springs	11,984,294	614,708	111,214	0	12,487,788	4,010,078	152,473	819,979	17,165,372
19	310.00	Other Power Production Equipment	19,053,151	7,329,315	1,084,889	4,200	25,301,776	894,500	179,451	0	26,016,825
20	311.00	Pumping Equipment	98,108,981	13,615,923	2,463,422	0	109,261,483	25,342,483	3,398,471	384,318	131,589,812
21	320.00	Purification System	331,734,676	62,494,128	11,080,749	0	383,148,055	74,583,893	13,799,177	568,166	444,500,936
22	320.30	Granular Activated Carbon	12,431,720	922,062	166,821	6,526	13,193,487	1,140,033	228,709	0	14,104,810
23	320.37	Waste Handling and Treatment Equipment	15,839,221	0	0	0	15,839,221	0	0	0	15,839,221
24	330.00	Distribution Reservoirs and Standpipes	209,217,894	22,270,147	2,284,731	411,560	229,614,871	39,478,910	3,908,275	726,972	265,912,477
25	331.00	Mains and Accessories	3,355,224,094	327,123,716	56,063,568	3,471,882	3,629,756,124	249,641,769	41,655,348	4,251,387	3,841,993,932
26	333.00	Services	705,318,212	46,407,942	6,043,953	667,488	746,349,688	46,349,988	5,718,338	289,495	787,270,833
27	334.00	Meters	223,217,608	33,121,068	5,345,570	107,398	251,100,504	30,804,473	5,574,665	1,002,702	277,333,014
28	335.00	Fire Hydrants	141,592,696	12,962,887	2,041,116	214,282	152,728,748	12,939,368	2,126,717	192,535	163,733,934
29	340.00	Office Furniture and Equipment	21,960,885	4,810,963	1,173,476	0	25,598,372	6,029,894	1,311,842	17,653	30,334,077
30	340.31	Computer Software	82,171,613	17,325,135	6,603,217	0	92,893,532	23,813,535	20,867,176	0	95,839,891
31	341.00	Transportation Equipment	78,268,335	11,520,440	2,084,303	0	87,704,473	17,664,230	3,543,734	761,041	102,586,009
32	342.00	Stores Equipment	469,790	0	0	0	469,790	0	0	0	469,790
33	343.00	Tools and Work Equipment	43,247,015	4,863,376	947	25,053	48,134,497	5,904,456	200,918	61,086	53,899,122
34	344.00	Laboratory Equipment	2,262,021	0	32,722	0	2,229,299	0	103,310	0	2,125,989
35	345.00	Power Operated Equipment	2,122,807	0	0	0	2,122,807	150,000	30,092	0	2,242,714
36	346.00	Communication Equipment	14,843,318	3,741,814	80,106	125,179	18,630,206	4,333,464	288,890	2,897	22,677,678
37	347.00	Miscellaneous Equipment	28,263,695	8,023,201	37,475	0	36,249,421	7,565,565	25,703	25,203	43,814,486
38	348.00	Other Tangible Equipment	795,578	0	0	0	795,578	2,800,000	0	0	3,595,578
39		Total Tangible Plant	$6,254,251,663	$614,960,035	$102,080,504	$5,255,943	$6,772,387,138	$674,338,370	$125,929,605	$9,150,964	$7,329,946,867
40		Total Utility Plant In Service	$6,272,334,023	$615,681,581	$102,089,453	$5,257,100	$6,791,183,252	$676,288,188	$125,966,017	$9,187,482	$7,350,692,906

Witness: Stacey D. Gress
Reference: Exhibit No. 3-C

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for water service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months ended June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2025.

The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2023				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	$752,093,381	$814,253,947	$810,059,803	$824,117,186
9	Lag Days	50.6	50.6	50.6	50.6
10	Dollar Days	$38,063,444,538	$41,209,390,662	$40,997,125,042	$41,708,569,168
11	Total Billed Revenue	$752,093,381	$814,253,947	$810,059,803	$824,117,186
12	Total Dollar Days	$38,063,444,538	$41,209,390,662	$40,997,125,042	$41,708,569,168
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	50.6	50.6	50.6	50.6
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	15.2	14.9	16.1	16.3
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	35.4	35.7	34.5	34.3
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		$219,728,462	$239,508,832	$246,370,282
20	Operating Expenses Per Day (Line 20 / 365 Days)		601,996	656,189	674,987
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		$21,491,257	$22,638,521	$23,152,054

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Support of Expense Days

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PER BOOKS AMOUNT	DOLLAR DAYS	PRESENT RATES 06/30/2023 AMOUNT	DOLLAR DAYS	PRESENT RATES 06/30/2024 AMOUNT	DOLLAR DAYS	PRESENT RATES 06/30/2025 AMOUNT	DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	$61,754,027	$744,395,392	$61,754,027	$744,395,392	$66,577,135	$802,534,101	$68,588,923	$826,784,596
2	Group Insurance	11.00	8,892,464	97,817,104	8,892,464	97,817,104	10,890,298	119,793,278	11,220,476	123,425,236
3	OPEB's and VEBA	0.00	(7,426,224)	0	(5,801,363)	0	(6,496,737)	0	(6,496,737)	0
4	Pension	(6.41)	(3,633,918)	23,311,479	(3,633,918)	23,311,479	971,072	(6,229,399)	971,072	(6,229,399)
5	Purchased Power	31.00	16,094,811	499,006,371	15,793,003	489,649,063	16,086,300	498,742,495	15,812,740	490,260,992
6	Purchased Water	35.22	2,994,925	105,481,797	2,994,925	105,481,797	3,008,292	105,952,585	3,099,741	109,173,435
7	Chemicals	47.20	17,953,000	847,411,314	17,953,000	847,411,314	22,511,182	1,062,565,048	23,528,121	1,110,566,252
8	Miscellaneous	30.46	34,764,800	1,058,947,998	33,665,764	1,025,470,976	36,398,993	1,108,726,090	39,139,084	1,192,190,223
9	Transportation	54.08	4,058,077	219,478,206	4,058,077	219,478,206	4,581,636	247,794,522	5,043,012	272,747,715
10	Ins Other Than Group	(69.48)	16,520,747	(1,147,786,121)	16,520,747	(1,147,786,121)	14,485,606	(1,006,393,810)	14,893,805	(1,034,753,614)
11	Service Company	12.05	58,323,517	703,043,339	58,323,517	703,043,339	61,216,676	737,918,056	60,897,948	734,076,045
12	Waste Disposal	41.96	2,797,872	117,399,849	2,797,872	117,399,849	2,919,617	122,508,319	3,337,122	140,026,999
13	Telephone	3.88	4,996,974	19,398,219	4,996,974	19,398,219	4,996,974	19,398,219	4,996,974	19,398,219
14	Rents	(13.36)	180,747	(2,414,266)	180,747	(2,414,266)	129,162	(1,725,237)	105,375	(1,407,511)
15	Natural Gas	33.33	1,232,626	41,087,081	1,232,626	41,087,081	1,232,626	41,087,081	1,232,626	41,087,081
16	Totals		$219,504,445	$3,326,577,762	$219,728,462	$3,283,743,432	$239,508,832	$3,852,671,348	$246,370,282	$4,017,346,269
17	Average Lag			15.2		14.9		16.1		16.3
18	Sum. Of Expense Pro Forma Present Rates & Payroll Taxes		$231,279,891		$235,094,244		$254,048,547		$261,075,312	
19	Uncollectibles		5,985,290		9,575,626		9,526,303		9,691,618	
20	Amortizations		5,790,156		5,790,156		5,013,412		5,013,412	
21	Sum Of Other Expenses		184,739,645		186,062,698		203,109,839		207,231,198	
22	Miscellaneous		$34,764,800		$33,665,764		$36,398,993		$39,139,084	

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	NET REVENUE LAG DAYS FUTURE	PRESENT RATES 06/30/2023 TAXES PAYABLE	PRESENT RATES 06/30/2023 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2024 TAXES PAYABLE	PRESENT RATES 06/30/2024 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2025 TAXES PAYABLE	PRESENT RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT	PROPOSED RATES 06/30/2025 TAXES PAYABLE	PROPOSED RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT
1	General Assessment	190.2	$5,101,631	$2,658,439	$5,075,980	$2,645,072	$5,164,137	$2,691,011	$5,981,662	$3,117,019
2	Public Utility Realty Tax	47.4	2,046,257	265,453	2,027,952	263,078	2,126,732	275,892	2,126,732	275,892
3	Local Property Tax	64.6	1,718,277	303,945	1,950,641	345,048	2,073,365	366,756	2,073,365	366,756
4	State Income Tax	13.6	23,545,423	877,309	14,150,809	527,263	13,414,819	499,840	23,563,206	877,972
5	Federal Income Tax	(18.4)	48,181,994	(2,428,901)	39,684,824	(2,000,550)	34,032,905	(1,715,631)	58,574,603	(2,952,802)
6	Totals			$1,676,245		$1,779,911		$2,117,868		$1,684,837

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

The payment of interest on the Company's long term debt is made six months in arrears. Payment of interest on the Company's short term debt is made monthly in arrears. The payment of dividends on the Company's preferred stock is made quarterly in arrears. The average lag days of interest and dividend payments and the deduction of the average lag days for the receipt of revenue is calculated below to determine cash working capital requirements.

LINE NO.	DESCRIPTION	LONG TERM INTEREST	SHORT TERM INTEREST	PREFERRED DIVIDEND
1	**Average Lag Calculation**			
2	Future Revenue Lag Days	50.6	50.6	50.6
3	Less: Interest Payments Lag Days	81.6	15.0	46.4
4	Average Lag Between The Payment	(31.0)	35.6	4.2
5	Of Interest And The Receipt			
6	Of Revenues			

		PRESENT RATES 6/30/23		PRESENT RATES 6/30/24		PRESENT RATES 6/30/25		PROPOSED AMOUNT 6/30/25	
7	**Long Term Debt**								
8	Working Capital Requirements								
9	Pro Forma Annual Interest Expense	$66,694,994		$85,250,132		$98,258,688		$98,249,654	
10	Interest Expense Per Day								
11	(Line 9 / 365 Days)	182,726		233,562		269,202		269,177	
12	Cash Working Capital Required								
13	(Line 4 Col.1 X Line 11)		(5,666,333)		(7,242,758)		(8,347,954)		(8,347,179)
14	**Short Term Debt**								
15	Working Capital Requirements								
16	Pro Forma Annual Interest Expense	0		0		0		0	
17	Interest Expense Per Day								
18	(Line 16 / 365 Days)	0		0		0		0	
19	Cash Working Capital Required								
20	(Line 4 Col.2 X Line 18)		0		0		0		0
21	**Preferred Dividends**								
22	Working Capital Requirements								
23	Pro Forma Annual Dividend Expense	0		0		0		0	
24	Dividend Expense Per Day								
25	(Line 23 / 365 Days)	0		0		0		0	
26	Cash Working Capital Required								
27	(Line 4 Col.3 X Line 25)		0		0		0		0
28	Total Cash Working Capital Required								
29	(Line 13 + Line 20 + Line 27)		($5,666,333)		($7,242,758)		($8,347,954)		($8,347,179)

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Deferred Income Tax

The following calculation is being made to reflect the federal tax difference between using accelerated and straight-line depreciation, the effects of the Tax Cuts and Jobs Act, taxable contributions and advances and normalizing the effect of the repairs and maintenance deduction for state and federal tax. This adjustment is carried as a rate base reduction.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Deferred Tax	($1,009,560,462)	($1,070,056,381)	($1,084,234,439)
2	Less: Prior Year		(1,009,560,462)	(1,070,056,381)
3	Effect to Rate Base Element	($1,009,560,462)	($60,495,919)	($14,178,058)

Witness: Melissa Ciullo
Reference: FR IV.4

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	DESCRIPTION	6/30/23 DETAIL	PRESENT RATES 6/30/23 AMOUNT	6/30/24 DETAIL	PRESENT RATES 6/30/24 AMOUNT	6/30/25 DETAIL	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$226,839,835				
2	Present Rates At 06/30/2023				$230,654,188		
3	Present Rates At 06/30/2024						$249,220,941
4	Proposed Rates At 06/30/2025						
5	Compensation	$0		$4,435,558		$1,867,718	
6	Group Insurance	0		1,997,834		330,178	
7	Other Post Employment Benefits & VEBA	1,624,861		(695,374)		-	
8	Pension	0		4,604,990		-	
9	Purchased Power	0		550,415		-	
10	Purchased Water	0		13,367		91,449	
11	Chemicals	0		4,558,182		1,016,939	
12	Change In Consumption Expense	(301,808)		(257,118)		(273,560)	
13	Transportation Expense	0		523,559		461,376	
14	Insurance Other Than Group	0		(2,035,141)		408,199	
15	Regulatory Expense (Rate Case Expense)	0		(776,744)		-	
16	Service Company Expense	0		2,893,159		(318,728)	
17	Postage and Customer Accounting	0		-		-	
18	Acquisition O&M	0		1,646,809		28,901	
19	401K & Defined Contribution Plan	0		257,720		117,440	
20	Rent Expense	0		(51,585)		(23,787)	
21	Waste Disposal	0		121,745		417,505	
22	Miscellaneous Adjustments	(1,099,036)		828,700		2,593,750	
23	Uncollectibles	3,590,336		(49,323)		165,315	
24	Pro Forma Adjustments		3,814,353		18,566,753		6,882,695
25	Present Rates At 06/30/2023		$230,654,188				
26	Present Rates At 06/30/2024				$249,220,941		
27	Present Rates At 06/30/2025						$256,103,636

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Compensation

The following adjustment sets forth a summary of the Company's annualization of labor expense. The pro forma payroll for the future test years were developed by applying pay rates and associated performance pay that will become effective by June 30, 2024 and June 30, 2025 to the Company's full complement of employees.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Salary and Wages	$94,420,874	$97,252,534
2	Annualized Performance Plan	7,728,885	7,986,916
3	Less: 39.55% Capitalized portion not charged to operating expense	40,400,230	41,622,202
4	Sub-Total	61,749,529	63,617,247
5	Less: Amount Charged To Operating Expense		
6	During The Twelve Months Ended 06/30/23	57,313,971	
7	Less: Amount Charged To Present Rates		
8	During the Twelve Months Ended 06/30/24		61,749,529
9	Pro Forma Adjustment	$4,435,558	$1,867,718
	601.1 Salary and Wages - Source of Supply	$13,821	$5,820
	601.2 Salary and Wages - Source of Supply	$15,065	$6,343
	601.3 Salary and Wages - Water Treatment	928,141	390,820
	601.4 Salary and Wages - Water Treatment	203,742	85,791
	601.5 Salary and Wages - Transmission & Distribution	513,863	216,377
	601.6 Salary and Wages - Transmission & Distribution	650,722	274,005
	601.7 Salary and Wages - Customer Accounting	372,144	156,702
	601.8 Salary and Wages - Administrative and General	1,738,059	731,859

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Group Insurance

The adjustment of the group insurance cost is based on the January 2024 premiums annualized for the future test year number of employees, less the annualized employee contribution, and adjusted for the portion not charged to operations. The fully projected future test year was developed by adjusting the annualized 2024 amount by a 3 year average of 3.03%.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Group Insurance Cost	$18,015,382	$18,561,583
2	Less: 39.55% Not Charged To Operating Expense	7,125,084	7,341,106
3	Sub-Total	10,890,298	11,220,477
4	Less: Amount Charged To Operating Expense		
5	During the Twelve Months Ended 06/30/23	8,892,464	
6	Less: Amount Charged To Operating Expense		
7	During the Twelve Months Ended 06/30/24		10,890,298
8	Pro Forma Adjustment	$1,997,834	$330,178
	604.8 A&G Employees Pension And Benefits	$1,997,834	$330,178

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Other Post Employment Benefits (OPEB)

The following sets forth the Company's adjustment for post-retirement benefit costs under FAS 106 using the methodology approved by the Commission in the Company's base rate cases since 1992. In addition the Company has included the expense associated with the Company's contributions to the Voluntary Employee Beneficiary Association (VEBA).

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized OPEB Expense	($5,747,929)	($6,419,464)	($6,419,464)
2	Annualized Retiree VEBA Expense ($600 x 381 employees)	255,008	228,600	228,600
3	Less: 39.55% Capitalized portion not charged to operating expense	308,442	305,873	305,873
4	Sub-Total	(5,801,363)	(6,496,737)	(6,496,737)
5	Less: Amount Charged To Operating Expenses			
6	For The Twelve Months Ended 06/30/2023, 06/30/2024, and 06/30/2025	(7,426,224)	(5,801,363)	(6,496,737)
7	Pro Forma Adjustment	$1,624,861	($695,374)	$0
	604.8 A&G Employees' Welfare Expenses	$1,624,861	($695,374)	$0

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Pension

The following adjustment is being made to reflect the Company's projected Pension cost based on ASC715 (formerly FAS87) for PAWC employees. In addition, as approved at Docket No. R-2017-2595853, the Company continues to amortize the deferred pension liability for the difference between ASC 715 and ERISA for both PAWC and Service Company over a 10 year period beginning January 1, 2018.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	PAWC Pension Costs	$4,239,157
2	Less: 39.55% Capitalized service costs portion not charged to operating expense	1,309,668
3	10 yr. amortization of Deferred Pension Liability	(1,958,418)
4	Sub-Total	971,071
5	Less: Amount Charged To Operating Expense	
6	During The Twelve Months Ended 6/30/2023	(3,633,918)
7	Pro Forma Adjustment	$4,604,990
	604.8 A&G Employee Pension And Benefits	$4,604,990

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

401K, Defined Contribution Plan (DCP) and Employee Stock Purchase Plan (ESPP) Expense

The following adjustment is being made to annualize 401K, DCP contributions and ESPP contributions based on the annualized compensation claim at June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized 401K - Company Match	$2,671,957	$2,753,384
2	Annualized DCP	3,411,703	3,515,628
3	Less: 39.55% Not Charged To Operating Expense	2,406,087	2,479,394
4	Sub-Total	3,677,572	3,789,618
5	Annualized ESPP	272,080	277,474
6	Less: Amount Charged To Operating Expense	3,691,932	3,949,652
7	Pro Forma Adjustment	$257,720	$117,440
	604.8 Employee Pension And Benefits AG	$257,720	$117,440

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Regulatory Expense (Rate Case Expense)

The following adjustment reflects the estimated cost of this rate case normalized over a two-year period. Additionally, there are adjustments for 10 year amortizations of the Customer Class Demand Study, as well as Lead Service Line Program costs.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	Rate Case Expense Allocation	$1,957,779
2	Normalized Over 2 Years	978,890
3	Plus Allocation of Amortization of Demand Study	22,823
4	Plus Allocation of Amortization of Lead Service Line Costs	25,224
5	Less: Amount Charged To Operating Expense	
6	During The Twelve Months Ended 06/30/2023	1,803,680
7	Pro Forma Adjustment	($776,744)
	666.8 Regulatory Commission Expense	($776,744)

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Service Company

This adjustment reflects the cost of services provided by American Water Works Service Company (AWWSC), for the twelve months ended June 30, 2024, and June 30, 2025. An allocation factor based on customer counts was applied to each cost of service area to allocate a portion of the total projected Service Company costs.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Service Company Cost	$61,216,676	$60,897,948
2	Less: Amount Charged To Operating Expense		
3	During The Twelve Months Ended 06/30/23	58,323,517	
4	And Present Rates 06/30/24		61,216,676
5	Pro Forma Adjustment	$2,893,159	($318,728)
	634.8 AG - Contract Services - Management	$2,893,159	($318,728)

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Acquisition O&M Expense Adjustment

The following adjustment reflects an adjustment to annualize O&M expenses related to the future acquisitions of the Farmington and Audubon water systems, which are expected to close before the end of the fully projected future test year.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Additions:		
2	Farmington Water Annualized O&M	$149,338	$152,385
3	Audubon Annualized O&M	1,531,023	1,585,572
4	Less: Amount Charged To Operating Expense During the Twelve Months Ended 06/30/24	0	1,680,361
5	Pro Forma Adjustment	$1,680,361	$57,596
	408.12 Payroll Taxes	$33,553	$986
	408.2 Taxes, Other Than Income - Property	0	27,709
	601.8 Salary and Wages- Admin & General	422,142	12,893
	604.8 A&G Employee Pension And Benefits	127,566	3,862
	615.1 Purch Power Oper SS	27,443	0
	615.3 Purch Power Oper WT	114,830	0
	615.5 Purch Power Oper TD	8,367	0
	618.3 Chemicals- Water Treatment	96,468	0
	620.6 M&S Maint TD	99,178	0
	634.8 AG - Contract Services Management	290,592	12,146
	636.3 Cont Serv Other Oper	160,528	0
	641.8 Rents - Admin & General	5,622	0
	657.8 General Liability	71,451	0
	675.3 Misc Exp Oper WT	2,349	0
	675.5 Misc Exp Oper TD	107,842	0
	675.8 Misc Expense Admin & General	112,431	0

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Miscellaneous Expense Adjustment

The following adjustment reflects miscellaneous additions or deductions from pro forma expenses.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Additions:			
2	DEP Adjustment		$500	$4,000
3	Credit Card/E-check Transaction Fees		(124,416)	4,945
4	Amortization of Revolving Credit Line Fees			293,571
5	Arrearage Management Plan and Low Income Program			2,447,886
6	General Facility Maintenance		1,450,000	
7	Deductions:			
8	Donations	(618,327)		
9	Lobbying	(70,696)		
10	Temporary Employee Costs	(141,831)		
11	Fines	(5,699)		
12	Injuries And Damages 3 Year Average	(72,389)		
13	Remove expenses	(190,094)		(156,652)
14	PA HQ - Corporate Campus		(497,383)	
15	Pro Forma Adjustment	($1,099,036)	$828,700	$2,593,750

675.3 Waste Disposal			($156,652)
633.8 Contract Services - Legal	(37,844)		
636.8 Contract Service - Admin & General	(141,831)		
670.7 Uncollectible Acconts Exp - CA			2,447,886
675.1 Misc Operations SS		500	4,000
675.7 Misc Exp Customer Accounting		(124,416)	4,945
675.8 Misc Expense Admin & General	(919,361)	952,617	293,571

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Calculation of Uncollectible Accounts Expenses

The following adjustment develops the Company's uncollectible accounts expense claim calculated on the ratio of actual per books revenue to net write-offs. This ratio is applied to pro forma sales at present and proposed rates.

LINE NO	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Total Sales	$752,093,381	$814,253,947	$810,059,803	$824,117,186	$953,460,366
2	2 Year Average	1.1760%	1.1760%	1.1760%	1.1760%	1.1760%
3	Annualized Uncollectible Expense		$9,575,626	$9,526,303	$9,691,618	$11,212,694
4	Less: Amount Charged To Operating Expense					
5	During The Twelve Months Ended 06/30/2023		5,985,290			
6	Less: Present Rates 06/30/2023			9,575,626		
7	Less: Present Rates 06/30/2024				9,526,303	
8	Less: Present Rates 06/30/2025					9,691,618
9	Pro Forma Adjustment		$3,590,336	($49,323)	$165,315	$1,521,076
670.7	Customer Accounting And Collecting - Bad Debt		$3,590,336	($49,323)	$165,315	$1,521,076

Witness: Cas Swiz

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Depreciation

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2023 AMOUNT	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Depreciation	$185,564,732	$200,810,877	$218,377,068
2	Less: Citizens Acquisition CIAC & CAC		339,044	427,974
3	Less: Depreciation on Vehicles - Capitalized Portion		2,685,491	3,488,929
4	Subtotal	$185,564,732	$197,786,342	$214,460,165
5	Book Depreciation	147,332,145	185,564,732	197,786,342
6	Pro Forma Adjustment	$38,232,587	$12,221,610	$16,673,822
	503 Depreciation	$38,232,587	$12,221,610	$16,673,822

Witness: Stacey D. Gress, John Spanos
Reference: Exhibit No. 3-B, Exhibit No. 3-C, Exhibits No. 11

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Taxes, Other than Income

Payroll Taxes

The following adjustment is being made to annualize payroll tax expense based on the annualized compensation claim at June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Payroll Taxes	$7,930,609	$8,167,307
2	Less: 39.55% Not Charged To Operating Expense	3,136,556	3,230,170
3	Sub-Total	4,794,053	4,937,137
4	Less: Amount Charged To Operating Expense	4,440,056	4,794,053
5	Pro Forma Adjustment	$353,997	$143,084
	408.12 - Taxes - Payroll	$353,997	$143,084

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Calculation of General Assessment by the Pennsylvania Public Utility Commission, Consumer Advocate and Small Business Advocate Fees

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED RATES 06/30/25 AMOUNT
1	Total Water Sales	$800,702,027	$796,676,166	$810,512,487	$938,823,068
2	Estimated General Assessment Fee				
3	Public Utility Commission At 0.004324859316	3,462,924	3,445,512	3,505,352	4,060,278
4	Consumer Advocate Fee At 0.001742389526	1,395,135	1,388,120	1,412,228	1,635,795
5	Small Business Advocate Fee At 0.000303478942	242,996	241,774	245,973	284,913
6	Damage Prevention Comittee Fee At 0.000000719937	576	574	584	676
7	Subtotal	5,101,631	5,075,980	5,164,137	5,981,662
8	Less: Amount Charged To Operating Expenses During				
9	The Twelve Months Ended 06/30/2023	4,267,439			
10	Less: Pro Forma Under Present Rates At 06/30/2023		5,101,631		
11	Less: Pro Forma Under Present Rates At 06/30/2024			5,075,980	
12	Less: Pro Forma Under Present Rates At 06/30/2025				5,164,137
13	Pro Forma Adjustment	$834,192	($25,651)	$88,157	$817,525

507.1 Taxes Other Than Income $1,714,223

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Pro Forma State And Federal Income Taxes Under Present And Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED 06/30/25 AMOUNT
1	State Income Tax Per Computation				
2	Shown On Following Page	$23,545,423	$14,150,809	$13,414,819	$23,563,206
3	Less: State Income Tax Per Book				
4	Computation Shown On Following Page	22,760,110			
5	Less: Present Rates 06/30/2023		23,545,423		
6	Less: Present Rates 06/30/2024			14,150,809	
7	Less: Present Rates 06/30/2025				13,414,819
8	Pro Forma Adjustment	$785,313	($9,394,614)	($735,990)	$10,148,387
9	Federal Income Tax Per Computation				
10	Shown On Following Page	$48,181,994	$39,684,824	$34,032,905	$58,574,603
11	Less: Federal Income Tax Per Book				
12	Computation Shown On Following Page	46,482,076			
13	Less: Present Rates 06/30/2023		48,181,994		
14	Less: Present Rates 06/30/2024			39,684,824	
15	Less: Present Rates 06/30/2025				34,032,905
19	Pro Forma Adjustment	$1,699,918	($8,497,170)	($5,651,919)	$24,541,698

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Water Operations
Notes to Statement Of Income
Calculation Of State And Federal Income Taxes

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Utility Operating Income Before Taxes	$373,027,422	$382,878,070	$349,717,457	$341,316,937	$468,321,516
2	Less: Interest Expense	66,694,994	66,694,994	85,250,132	98,258,688	98,249,654
3	Taxable Operating Income	306,332,428	316,183,076	264,467,325	243,058,249	370,071,862
4	Add: Premature Property Losses / Amortizations	1,850,736	1,850,736	(547,116)	(2,099,462)	(2,099,462)
5	Depr - Straight Line-Remaining Life (Including COR)	147,332,145	185,564,732	197,786,342	214,460,165	214,460,165
6	Taxable Meals & Entertainment	170,260	170,260	170,260	170,260	170,260
7	Total	149,353,141	187,585,728	197,409,486	212,530,963	212,530,963
8	Deduct:					
9	Tax Depreciation:					
10	State Tax Depreciation Adjustments	202,514,154	241,861,984	295,200,617	287,694,111	287,694,111
11	Total	202,514,154	241,861,984	295,200,617	287,694,111	287,694,111
12	State Taxable Income	253,171,415	261,906,820	166,676,194	167,895,101	294,908,714
13	State Income Tax At:					
14	Historic at 8.99%, Future At 8.49% And Fully Projected At 7.99%	22,760,110	23,545,423	14,150,809	13,414,819	23,563,206
15	Taxable Income After State Income Tax	230,411,305	238,361,397	152,525,385	154,480,282	271,345,508
16	Add:					
17	Federal Tax Depreciation Adjustments	40,261,460	40,261,460	76,153,215	55,855,277	55,855,277
18	Income Subject To Federal Income Tax	270,672,765	278,622,857	228,678,600	210,335,559	327,200,785
19	Federal Income Tax @ 21%	56,841,281	58,510,800	48,022,506	44,170,467	68,712,165
20	Excess ADIT	10,359,205	10,328,806	8,337,682	10,137,562	10,137,562
21	Federal Tax Liability	$46,482,076	$48,181,994	$39,684,824	$34,032,905	$58,574,603

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Pro Forma Interest Expense Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED 6/30/25 AMOUNT
1	Interest On Long Term Debt Per Computation				
2	Shown On Following Page	$66,694,994	$85,250,132	$98,258,688	$98,249,654
3	Less: Interest On Long Term Debt As Per Book				
4	Computation On Following Page	66,694,994			
5	Less: Present Rates At 06/30/2023		66,694,994		
6	Less: Present Rates At 06/30/2024			85,250,132	
7	Less: Present Rates At 06/30/2025				98,258,688
8	Pro Forma Adjustment	$0	$18,555,138	$13,008,556	($9,034)
9	Interest On Short Term Debt Per Computation				
10	Shown On Following Page	$0	$0	$0	$0
11	Less: Interest On Short Term Debt As Per Book				
12	Computation On Following Page	0			
13	Less: Present Rates At 06/30/2023		0		
14	Less: Present Rates At 06/30/2024			0	
15	Less: Present Rates At 06/30/2025				0
16	Pro Forma Adjustment	$0	$0	$0	$0

Witness: Ann E. Bulkley

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Application of Income Deductions

LINE NO.	DESCRIPTION	PRESENT RATES AT JUNE 30, 2023 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2024 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2025 AMOUNT	CAPITAL STRUCTURE	COST RATE
1	**Capital Structure**									
2	Long Term Debt	$1,754,647,031	40.12%	4.39%	$2,006,604,708	43.80%	4.63%	$2,155,515,957	44.01%	4.76%
3	Short Term Debt	3,664,702	0.08%	0.18%	0	0.00%	0.00%	0	0.00%	0.00%
4	Total Debt	1,758,311,733	40.20%		2,006,604,708	43.80%		2,155,515,957	44.01%	
5	Preferred Stock	357,646	0.01%	9.70%	0	0.00%	0.00%	0	0.00%	0.00%
6	Common Equity	2,615,164,818	59.79%		2,574,821,171	56.20%		2,741,754,985	55.99%	
7	Totals	$4,373,834,197	100.00%		$4,581,425,879	100.00%		$4,897,270,942	100.00%	

		PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
8	**Application Of Long Term Debt Interest:**				
9	Original Cost Rate Base	$3,789,488,301	$4,199,513,903	$4,701,372,635	$4,700,940,379
10	Debt Percentage (From Above)	40.12%	43.80%	44.01%	44.01%
11	Debt Portion Of Rate Base	1,520,342,706	1,839,387,090	2,069,074,097	2,068,883,861
12	Interest Cost (From Above)	4.39%	4.63%	4.76%	4.76%
13	Pro Forma Long Term Interest Deduction	$66,694,994	$85,250,132	$98,258,688	$98,249,654
14	**Application Of Short Term Debt Interest:**				
15	Original Cost Rate Base	$3,789,488,301	$4,199,513,903	$4,701,372,635	$4,700,940,379
16	Debt Percentage (From Above)	0.08%	0.00%	0.00%	0.00%
17	Debt Portion Of Rate Base	3,031,591	0	0	0
18	Interest Cost (From Above)	0.18%	0.00%	0.00%	0.00%
19	Pro Forma Short Term Interest Deduction	$0	$0	$0	$0

Witness: Ann E. Bulkley

Wastewater SSS General Operations

Pennsylvania-American Water Company - Wastewater SSS General Operations
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Exhibit 3-A Revised

Adjustment	Reference Statement No.	Description	Revised 3-A Page No.	Original Filed Amount	Revised Filed Amount	Change
Capital Structure:	Stmt 13R	Update cost rate of LTD WW Specific Financing at June 30, 2025	138R	2.62%	2.67%	0.05%
Expenses:						
Compensation Adjustment	Stmt 5R	Update for 2024 actual merit increase and apply vacancy rate	114R	$4,850,902	$4,891,739	$40,837
Group Insurance Expense	Stmt 5R	Update for 2024 actual merit increase and apply vacancy rate	115R	1,070,797	1,070,958	161
401K, DCP, ESPP	Stmt 5R	Update for 2024 actual merit increase and apply vacancy rate	117R	357,475	360,423	2,948
Rate Case Expense	Stmt 4R	Update for public input hearings and legal expenses	124R	76,393	81,708	5,315
Service Company	Stmt 5R	Update for 2024 actual merit increase and remove SERP expense	125R	1,895,820	1,903,699	7,879
Taxes, Other than Income:						
Payroll Taxes	Stmt 5R	Concomitant changes related to merit increase and vacancy rate	133R	386,317	389,441	3,124
Concomitant Changes:						
Pro Forma Statement of Income			76R			
Revenue			77R & 78R			
Summary of Adjustments to Operating Revenues			79R			
Penalties			95R			
Summary of Rate Base Adjustments			96R			
Cash Working Capital Requirements - Expense			101R			
Support of Expense Days			102R			
Accrued and Prepaid Taxes			103R			
Cash Working Capital Requirements - Interest & Dividends			105R			
Summary of Operating Expense Adjustments			113R			
Uncollectible Accounts			128R			
General Assessment			134R			
Income Taxes			135R & 136R			
Interest Expense			137R			
Income Deductions			138R			

Pennsylvania-American Water Company - Wastewater SSS General Operations

Pro Forma Statement of Income for the Twelve Months Ending June 30, 2023

June 30, 2024, and June 30, 2025 Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PER BOOKS	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	LINE NO.
1	Operating Revenue	$72,018,572	$11,239,899	$83,258,471	$11,906,994	$95,165,465	$305,402	$95,470,867	$31,855,090	$127,325,957	1
2	Operating Revenue Deductions:										2
3	Operating Expenses	19,393,952	172,934	19,566,886	3,682,100	23,248,986	2,817,406	26,066,392	374,616	26,441,008	3
4	Depreciation	21,451,478	4,594,445	26,045,923	811,389	26,857,312	624,810	27,482,122	0	27,482,122	4
5	Amortizations	9,962	0	9,962	89,279	99,241	(174,874)	(75,633)	0	(75,633)	5
6	Taxes, Other Than Income:										6
7	Local Property And Miscellaneous	2,172,894	0	2,172,894	22,970	2,195,864	31,839	2,227,703	0	2,227,703	7
8	Federal Environmental Tax	0	0	0	0	0	0	0	0	0	8
9	Public Utility Realty Taxes	0	0	0	0	0	0	0	0	0	9
10	Payroll Taxes	406,237	0	406,237	(23,703)	382,534	12,115	394,649	0	394,649	10
11	General Assessment	404,178	117,099	521,277	75,485	596,762	1,937	598,699	201,947	800,646	11
12	Other Taxes and Licenses	0	0	0	0	0	0	0	0	0	12
13	Total Taxes Other Than Income	2,983,309	117,099	3,100,408	74,752	3,175,160	45,891	3,221,051	201,947	3,422,998	13
14	**Utility Operating Income Before Income Taxes**	**28,179,871**	**6,355,421**	**34,535,292**	**7,249,474**	**41,784,766**	**(3,007,831)**	**38,776,935**	**31,278,527**	**70,055,462**	14
15	Income Taxes:										15
16	State Income Tax	2,376,040	775,748	3,151,788	175,230	3,327,018	(425,340)	2,901,678	2,499,336	5,401,014	16
17	Federal Income Tax	4,938,969	1,650,979	6,589,948	1,341,629	7,931,577	(878,525)	7,053,052	6,044,109	13,097,161	17
18	Amortization Of ITC & Excess Deferred Taxes	0	0	0	0	0	0	0	0	0	18
19	Total Income Taxes	7,315,009	2,426,727	9,741,736	1,516,859	11,258,595	(1,303,865)	9,954,730	8,543,445	18,498,175	19
20	Total Operating Revenue Deductions	51,153,710	7,311,205	58,464,915	6,174,379	64,639,294	2,009,368	66,648,662	9,120,008	75,768,670	20
21	**Utility Operating Income**	**20,864,862**	**3,928,694**	**24,793,556**	**5,732,615**	**30,526,171**	**(1,703,966)**	**28,822,205**	**22,735,082**	**51,557,287**	21
22	Income Deductions:										22
23	Interest On Long Term Debt	10,243,220	0	10,243,220	2,156,146	12,399,366	784,312	13,183,678	(2,155)	13,181,523	23
24	Amortization Of Debt Discount Expense	0	0	0	0	0	0	0	0	0	24
25	Interest On Notes Payable To Others	1,030,383	0	1,030,383	(249,412)	780,971	(1,640)	779,331	(128)	779,203	25
26	Total Income Deductions	11,273,603	0	11,273,603	1,906,734	13,180,337	782,672	13,963,009	(2,283)	13,960,726	26
27	**Net Income**	**$9,591,259**	**$3,928,694**	**$13,519,953**	**$3,825,881**	**$17,345,834**	**($2,486,638)**	**$14,859,196**	**$22,737,365**	**$37,596,561**	27
28	Preferred Dividends	0		0		0		0		0	28
29	**Net Income To Common**	**$9,591,259**		**$13,519,953**		**$17,345,834**		**$14,859,196**		**$37,596,561**	29

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER SSS OPERATIONS

TOTAL REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2023 AND JUNE 30, 2024

LINE NO.	ACCT. NO.	CUSTOMER CLASS	PER BOOKS 12 ME June 2023	UNBILLED EADIT, DSIC, AMP ADJUSTMENTS	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	ANNUALIZE FOSTER TOWNSHIP	OTHER REVENUE AND CUSTOMER ADJUSTMENTS (*)	PRO FORMA PRESENT RATES 12 ME June 2023	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	ANNUALIZE YORK WW, VALLEY WW AND FOSTER TOWNSHIP	ANNUALIZE ACQUISITION ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2024
1		OPERATING REVENUES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2		METERED SALES										
3	522.1	RESIDENTIAL	$43,957,994	($595,191)	$131,053	$170,537	$9,399,322	$53,063,715	($867,387)	$9,162,122	$613,819	$61,972,269
4	522.2	COMMERCIAL	12,842,785	(501,412)	33,724	12,244	2,156,210	14,543,552	(202,007)	2,380,050	172,631	16,894,226
5	522.3	INDUSTRIAL	2,041,917	(55,317)		177,299	61,825	2,225,725		101,039	5,136	2,331,900
6	522.4	MUNICIPAL	1,077,554	(38,076)		4,449	206,307	1,250,234	(42,995)	182,447	2,568	1,392,254
7	522.4	MSICELLANEOUS	10,812,481	(1,772,670)			(36,206)	9,003,605		340,014		9,343,619
8		**TOTAL METERED SALES**	**$70,732,732**	**($2,962,666)**	**$164,777**	**$364,529**	**$11,787,459**	**$80,086,831**	**($1,112,389)**	**$12,165,672**	**$794,154**	**$91,934,268**
9		UNMETERED SALES										
10	522.1	RESIDENTIAL					$0	$0				$0
11	522.2	COMMERCIAL					0	0				0
12	522.3	INDUSTRIAL					0	0				0
13	522.4	MUNICIPAL					0	0				0
14	522.4	MSICELLANEOUS					0	0				0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$70,732,732**	**($2,962,666)**	**$164,777**	**$364,529**	**$11,787,459**	**$80,086,831**	**($1,112,389)**	**$12,165,672**	**$794,154**	**$91,934,268**
17		OTHER OPERATING REVENUES										
18	530	GUARANTEED REVENUES	$0					$0				$0
19	532	LATE PAYMENT FEES	292,939				109,657	402,597			59,557	462,154
20	536	MISC SERVICE REVENUES	934,004					934,004				934,004
21	534	RENTS FROM PROPERTIES						0				0
22	535	INTERCOMPANY RENTS						0				0
23	523	OTHER WW REVENUES	$58,897	$48,442			$1,727,701	1,835,040				1,835,040
24		**TOTAL OTHER OPERATING**										
25		**REVENUES**	**$1,285,840**	**$48,442**	**$0**	**$0**	**$1,837,358**	**$3,171,640**	**$0**	**$0**	**$59,557**	**$3,231,197**
26		**TOTAL OPERATING REVENUES**	**$72,018,572**	**($2,914,224)**	**$164,777**	**$364,529**	**$13,624,817**	**$83,258,471**	**($1,112,389)**	**$12,165,672**	**$853,711**	**$95,165,465**

(*) The metered sales adjustments represents annualizing specific customers for 12 months of billing and annualization of the 2023 base rates.

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER SSS OPERATIONS

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

LINE NO.	ACCT. NO.	CUSTOMER CLASSIFICATION	PRO FORMA PRESENT RATES 12 ME June 2024	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION	ANNUALIZE DSIC ADJUSTMENT	OTHER REVENUE ADJUSTMENT	PRO FORMA PRESENT RATES 12 ME June 2025	PERCENT	AMOUNT	PRO FORMA PROPOSED RATES
1		OPERATING REVENUES	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
2		METERED SALES									
3	522.1	RESIDENTIAL	$61,972,269	$219,811	($787,209)	$656,543		$62,061,414	-22.07%	($13,696,035)	$48,365,379
4	522.2	COMMERCIAL	16,894,226	60,704	(162,064)	179,499		16,972,365	145.77%	24,740,382	41,712,747
5	522.3	INDUSTRIAL	2,331,900			25,129		2,357,029	145.77%	3,435,809	5,792,838
6	522.4	MUNICIPAL	1,392,254		(4,411)	14,961		1,402,804	145.77%	2,044,848	3,447,652
7	522.4	MSICELLANEOUS	9,343,619			100,911		9,444,530	160.63%	15,170,751	24,615,281
8		**TOTAL METERED SALES**	**$91,934,268**	**$280,515**	**($953,684)**	**$977,043**	**$0**	**$92,238,142**	**34.36%**	**$31,695,755**	**$123,933,897**
9		UNMETERED SALES									
10	522.1	RESIDENTIAL	$0					$0	0.00%	0	$0
11	522.2	COMMERCIAL	0					0	0.00%	0	0
12	522.3	INDUSTRIAL	0					0	0.00%	0	0
13	522.4	MUNICIPAL	0					0	0.00%	0	0
14	522.4	MSICELLANEOUS	0					0	0.00%	0	0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**0.00%**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$91,934,268**	**$280,515**	**($953,684)**	**$977,043**	**$0**	**$92,238,142**	**34.36%**	**$31,695,755**	**$123,933,897**
17		OTHER OPERATING REVENUES									
18	530	GUARANTEED REVENUES	$0					0	0.00%	0	$0
19	532	LATE PAYMENT FEES	462,154				$1,528	463,682	34.36%	159,334	623,016
20	536	MISC SERVICE REVENUES	934,004					934,004	0.00%	0	934,004
21	534	RENTS FROM PROPERTIES	$0					0	0.00%	0	0
22	535	INTERCOMPANY RENTS	$0					0	0.00%	0	0
23	523	OTHER WW REVENUES	$1,835,040					1,835,040	0.00%	0	1,835,040
23 24		**TOTAL OTHER OPERATING REVENUES**	**$3,231,197**	**$0**	**$0**	**$0**	**$1,528**	**$3,232,725**	**4.93%**	**$159,334**	**$3,392,060**
25		**TOTAL OPERATING REVENUES**	**$95,165,465**	**$280,515**	**($953,684)**	**$977,043**	**$1,528**	**$95,470,867**	**33.37%**	**$31,855,090**	**$127,325,957**

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER SSS OPERATIONS

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$72,018,572				
2	Present Rates At 06/30/2024				$83,258,471		
3	Present Rates At 06/30/2025						$95,165,465
4							
5	TCJA & EADIT Adjustment	48,442					
6	Unbilled Adjustment	(2,746,186)					
7	DSIC Adjustment	(322,710)				977,043	
8	Arrearage Management Program Adjustment	106,230					
9	Annualize 2023 Rate Change	12,652,954					
10	Change in Customers	164,777		$140,258		280,515	
11	Usage Normalization			(1,252,647)		(953,684)	
12	Annualize Valley WW			1,426,222			
13	Annualize Foster WW	364,529		232,268			
14	Annualize York WW			$10,507,182			
15	Annualize Upper Pottsgrove WW	172,272					
16	IPP Revenue Adjustment	683,734					
17	Strattanville Borough Adjustment	6,200					
18	Acquisition Farmington WW			322,926			
19	Acquisition Sadsbury WW			471,228			
20	Late Payment Fee Adjustment	109,657		59,557		1,528	
21							
22	Pro Forma Adjustment		11,239,899		11,906,994		305,402
23	Pro Forma Present Rates At June 30, 2023		$83,258,471				
24	Pro Forma Present Rates At June 30, 2024				$95,165,465		
25	Pro Forma Present Rates At June 30, 2025						$95,470,867

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Revenues

Penalties

The following adjustment reflects the annualization of revenues associated with changes imposed during twelve months ending June 30, 2023 and projected to be imposed during twelve months ending June 30, 20 twelve months ending June 30, 2025. Additionally, annualized late payment charges are calculated based on revenues at the proposed rate level.

LINE NO.	DESCRIPTION	PER BOOKS 6/30/23	PRESENT RATES 6/30/23	PRESENT RATES 6/30/24	PRESENT RATES 6/30/25	PROPOSED RATES 6/30/25
1	Total Billed Wastewater Sales	$67,986,546	$81,814,532	$93,661,969	$93,965,843	$125,661,598
2	% Of Penalties To Total					
3	Total Company Sales - 2 Year Avg	0.5027%	0.5027%	0.5027%	0.5027%	0.5027%
4	Penalties	292,939	411,282	470,839	472,366	631,701
5	Less: Per Books At 06/30/2023		292,939			
6	Less: Present Rates At 06/30/2023 **7**			411,282		
	Less: Present Rates At 06/30/2024 **8**				470,839	
	Less: Present Rates At 06/30/2025					472,366
9	Pro Forma Adjustments		$118,343	$59,557	$1,527	$159,335

Witness: Charles Rea

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Summary of Rate Base Adjustments

LINE NO.	DESCRIPTION		DEPRECIATED ORIGINAL COST 6/30/23	DEPRECIATED ORIGINAL COST 6/30/24	DEPRECIATED ORIGINAL COST 6/30/25	DEPRECIATED ORIGINAL COST PROPOSED
1	Non-Depreciable Plant		$15,255,948	$15,975,719	$15,975,719	$15,975,719
2	Depreciable Plant		906,492,568	954,434,573	995,398,807	995,398,807
3	Total Utility Plant In Service		921,748,516	970,410,292	1,011,374,526	1,011,374,526
4	Deduct:					
5	Contributions In Aid Of Construction		45,689,787	49,337,134	50,089,276	50,089,276
6	Customer Advances For Construction		833,590	833,590	833,590	833,590
7	Excluded Property		0	0	0	0
8	Sub-Total		46,523,377	50,170,724	50,922,866	50,922,866
9	Net Utility Plant In Service		875,225,139	920,239,568	960,451,660	960,451,660
10	Accumulated Depreciation		214,954,156	236,964,175	256,394,760	256,394,760
11	Depreciated Utility Plant In Service		660,270,983	683,275,393	704,056,900	704,056,900
12	Add:					
13	Materials And Supplies		439,941	439,941	439,941	439,941
14	Cash Working Capital - Expenses		1,295,746	1,973,696	2,235,324	2,235,324
15	Accrued And Prepaid Taxes		441,227	423,523	458,603	352,273
16	Acquisition Adjustments		4,453,933	4,179,248	3,749,235	3,749,235
17	Other Additions		0	0	0	0
18	Deduct:					
19	Cash Working Capital - Int And Div		957,806	1,119,802	1,186,287	1,186,101
20	Unamortized Itc (3%)		0	0	0	0
21	Extension Deposits In Suspense		0	0	0	0
22	Tax Cuts and Jobs Act -Stub Period		289,364	165,959	84,324	84,324
23	Other Deductions		0	0	0	0
24	Deferred Taxes		59,546,959	59,596,580	60,227,143	60,227,143
25	Total Rate Base Elements		$606,107,701	$629,409,460	$649,442,249	$649,336,105
26	Utility Operating Income					
27	Per Books	$20,864,862	3.44%	3.31%	3.21%	3.21%
28	Present Rates At 06/30/2023	24,793,556	4.09%	-	-	-
29	Present Rates At 06/30/2024	30,526,171	-	4.85%	-	-
30	Present Rates At 06/30/2025	28,822,205	-	-	4.44%	-
31	Proposed Rates At 06/30/2025	51,557,287	-	-	-	7.94%

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for wastewater service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months enc June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2025.

The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2023				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	$69,272,386	$83,258,471	$95,165,465	$95,470,867
9	Lag Days	50.6	50.6	50.6	50.6
10	Dollar Days	$3,505,875,320	$4,213,711,054	$4,816,323,997	$4,831,780,392
11	Total Billed Revenue	$69,272,386	$83,258,471	$95,165,465	$95,470,867
12	Total Dollar Days	$3,505,875,320	$4,213,711,054	$4,816,323,997	$4,831,780,392
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	50.6	50.6	50.6	50.6
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	25.8	25.7	18.6	18.4
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	24.8	24.9	32.0	32.2
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		$18,994,003	$22,512,374	$25,338,304
20	Operating Expenses Per Day (Line 20 / 365 Days)		52,038	61,678	69,420
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		$1,295,746	$1,973,696	$2,235,324

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Support of Expense Days

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PER BOOKS AMOUNT	PER BOOKS DOLLAR DAYS	PRESENT RATES 06/30/2023 AMOUNT	PRESENT RATES 06/30/2023 DOLLAR DAYS	PRESENT RATES 06/30/2024 AMOUNT	PRESENT RATES 06/30/2024 DOLLAR DAYS	PRESENT RATES 06/30/2025 AMOUNT	PRESENT RATES 06/30/2025 DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	$5,654,439	$68,159,739	$5,654,439	$68,159,739	$5,117,941	$61,692,684	$5,286,389	$63,723,190
2	Group Insurance	11.00	1,144,567	12,590,237	1,144,567	12,590,237	1,039,443	11,433,873	1,070,958	11,780,538
3	OPEB's and VEBA	0.00	34,704	0	34,704	0	9,810	0	9,810	0
4	Pension	(6.41)	216,538	(1,389,085)	216,538	(1,389,085)	216,538	(1,389,085)	216,538	(1,389,085)
5	Purchased Power	31.00	2,833,130	87,838,864	2,836,413	87,940,651	3,401,689	105,466,568	3,372,968	104,576,097
6	Purchased Water	35.22	0	0	0	0	0	0	0	0
7	Chemicals	47.20	1,476,728	69,704,006	1,476,728	69,704,006	1,741,650	82,208,763	1,827,234	86,248,469
8	Miscellaneous	30.46	4,352,475	132,577,915	4,109,851	125,187,503	5,379,287	163,854,968	5,595,997	170,456,031
9	Transportation	54.08	171,440	9,272,210	171,440	9,272,210	161,722	8,746,619	176,055	9,521,809
10	Ins Other Than Group	(69.48)	74,539	(5,178,630)	74,539	(5,178,630)	2,041,112	(141,807,149)	2,098,237	(145,775,933)
11	Service Company	12.05	0	0	0	0	0	0	1,903,699	22,947,568
12	Waste Disposal	41.96	2,572,562	107,945,750	2,572,562	107,945,750	2,700,960	113,333,382	3,087,197	129,540,044
13	Telephone	3.88	211,445	820,828	211,445	820,828	211,445	820,828	211,445	820,828
14	Rents	(13.36)	59,345	(792,681)	59,345	(792,681)	59,345	(792,681)	50,345	(672,466)
15	Natural Gas	33.33	431,432	14,380,908	431,432	14,380,908	431,432	14,380,908	431,432	14,380,908
16	Totals		$19,233,344	$495,930,061	$18,994,003	$488,641,436	$22,512,374	$417,949,678	$25,338,304	$466,157,998
17	Average Lag			25.8		25.7		18.6		18.4
18	Sum. Of Expense Pro Forma Present Rates & Payroll Taxes		$19,800,189		$19,973,123		$23,631,520		$26,461,041	
19	Uncollectibles		566,845		979,120		1,119,146		1,122,737	
20	Amortizations		0		0		0		0	
21	Sum Of Other Expenses		14,880,869		14,884,152		17,133,087		19,742,307	
22	Miscellaneous		$4,352,475		$4,109,851		$5,379,287		$5,595,997	

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	NET REVENUE LAG DAYS FUTURE	PRESENT RATES 06/30/2023 TAXES PAYABLE	PRESENT RATES 06/30/2023 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2024 TAXES PAYABLE	PRESENT RATES 06/30/2024 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2025 TAXES PAYABLE	PRESENT RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT	PROPOSED RATES 06/30/2025 TAXES PAYABLE	PROPOSED RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT
1	General Assessment	190.2	$521,277	$271,635	$596,762	$310,970	$598,699	$311,980	$800,646	$417,213
2	Public Utility Realty Tax	47.4	0	0	0	0	0	0	0	0
3	Local Property Tax	64.6	2,172,894	384,362	2,195,864	388,425	2,227,703	394,057	2,227,703	394,057
4	State Income Tax	13.6	3,151,788	117,436	3,327,018	123,966	2,901,678	108,117	5,401,014	201,243
5	Federal Income Tax	(18.4)	6,589,948	(332,206)	7,931,577	(399,838)	7,053,052	(355,551)	13,097,161	(660,240)
6	Totals			$441,227		$423,523		$458,603		$352,273

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

The payment of interest on the Company's long term debt is made six months in arrears. Payment of interest on the Company's short term debt is made monthly in arrears. The payment of dividends on the Company's preferred stock is made quarterly in arrears. The average lag days of interest and dividend payments and the deduction of the average lag days for the receipt of revenue is calculated below to determine cash working capital requirements.

LINE NO.	DESCRIPTION								
1	**Average Lag Calculation**	**LONG TERM INTEREST**		**SHORT TERM INTEREST**		**PREFERRED DIVIDEND**			
2	Future Revenue Lag Days	50.6		50.6		50.6			
3	Less: Interest Payments Lag Days	81.6		15.0		46.4			
4	Average Lag Between The Payment	(31.0)		35.6		4.2			
5	Of Interest And The Receipt								
6	Of Revenues								
		PRESENT RATES		**PRESENT RATES**		**PRESENT RATES**		**PROPOSED AMOUNT**	
7	**Long Term Debt**	**6/30/23**		**6/30/24**		**6/30/25**		**6/30/25**	
8	Working Capital Requirements								
9	Pro Forma Annual Interest Expense	$10,243,220		$12,399,366		$13,183,678		$13,181,523	
10	Interest Expense Per Day								
11	(Line 9 / 365 Days)	28,064		33,971		36,120		36,114	
12	Cash Working Capital Required								
13	(Line 4 Col.1 X Line 11)		(870,265)		(1,053,441)		(1,120,081)		(1,119,895)
14	**Long Term Debt - Wastewater Specific**								
15	Working Capital Requirements								
16	Pro Forma Annual Interest Expense	1,030,383		780,971		779,331		779,203	
17	Interest Expense Per Day								
18	(Line 16 / 365 Days)	2,823		2,140		2,135		2,135	
19	Cash Working Capital Required								
20	(Line 4 Col.2 X Line 18)		(87,541)		(66,361)		(66,206)		(66,206)
21	**Preferred Dividends**								
22	Working Capital Requirements								
23	Pro Forma Annual Dividend Expense	0		0		0		0	
24	Dividend Expense Per Day								
25	(Line 23 / 365 Days)	0		0		0		0	
26	Cash Working Capital Required								
27	(Line 4 Col.3 X Line 25)		0		0		0		0
28	Total Cash Working Capital Required								
29	(Line 13 + Line 20 + Line 27)		($957,806)		($1,119,802)		($1,186,287)		($1,186,101)

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	DESCRIPTION	6/30/23 DETAIL	PRESENT RATES 6/30/23 AMOUNT	6/30/24 DETAIL	PRESENT RATES 6/30/24 AMOUNT	6/30/25 DETAIL	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$19,393,952				
2	Present Rates At 06/30/2023				$19,566,886		
3	Present Rates At 06/30/2024						$23,248,986
4	Proposed Rates At 06/30/2025						
5	Compensation	$0		($512,795)		$156,333	
6	Group Insurance	0		(105,124)		31,515	
7	Other Post Employment Benefits & VEBA	0		(24,894)		-	
8	Pension	0		-		-	
9	Purchased Power	0		608,162		-	
10	Waste Disposal	0		128,398		386,237	
11	Chemicals	0		264,922		85,584	
12	Change In Consumption Expense	3,283		(42,886)		(28,721)	
13	Transportation Expense	0		(9,718)		14,333	
14	Insurance Other Than Group	0		1,966,573		57,125	
15	Regulatory Expense (Rate Case Expense)	0		81,708		-	
16	Service Company Expense	0		-		1,903,699	
17	Postage and Customer Accounting	0		-		-	
18	Acquisition O&M	0		499,513		5,196	
19	401K & Defined Contribution Plan	0		(16,840)		11,441	
20	Rent Expense	0		-		(9,000)	
21	Miscellaneous Adjustments	(242,624)		705,055		200,073	
22	Uncollectibles	412,275		140,026		3,591	
23	Pro Forma Adjustments		172,934		3,682,100		2,817,406
24	Present Rates At 06/30/2023		$19,566,886				
25	Present Rates At 06/30/2024				$23,248,986		
26	Present Rates At 06/30/2025						$26,066,392

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Compensation

The following adjustment sets forth a summary of the Company's annualization of labor expense. The pro forma payroll for the future test years were developed by applying pay rates and associated performance pay that will become effective by June 30, 2024 and June 30, 2025 to the Company's full complement of employees.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Salary and Wages	$5,713,091	$5,901,313
2	Annualized Performance Plan	368,859	381,425
3	Less: 22.14% Capitalized portion not charged to operating expense	1,346,544	1,390,998
4	Sub-Total	4,735,407	4,891,739
5	Less: Amount Charged To Operating Expense		
6	During The Twelve Months Ended 06/30/23	5,248,202	
7	Less: Amount Charged To Present Rates		
8	During the Twelve Months Ended 06/30/24		4,735,407
9	Pro Forma Adjustment	($512,795)	$156,333

601.3 Salary and Wages - Water Treatment	($312,703)	$95,331
601.4 Salary and Wages - Water Treatment	(23,950)	7,302
601.5 Salary and Wages - Transmission & Distribution	(35,538)	10,834
601.6 Salary and Wages - Transmission & Distribution	(26,410)	8,052
601.7 Salary and Wages - Customer Accounting	(349.00)	106
601.8 Salary and Wages - Administrative and General	(113,845)	34,707

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Group Insurance

The adjustment of the group insurance cost is based on the January 2024 premiums annualized for the future test year number of employees, less the annualized employee contribution, and adjusted for the portion not charged to operations. The fully projected future test year was developed by adjusting the annualized 2024 amount by a 3 year average of 3.03%.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Group Insurance Cost	$1,335,016	$1,375,492
2	Less: 22.14% Not Charged To Operating Expense	295,573	304,534
3	Sub-Total	1,039,443	1,070,958
4	Less: Amount Charged To Operating Expense		
5	During the Twelve Months Ended 06/30/23	1,144,567	
6	Less: Amount Charged To Operating Expense		
7	During the Twelve Months Ended 06/30/24		1,039,443
8	Pro Forma Adjustment	($105,124)	$31,515
	604.8 A&G Employees Pension And Benefits	($105,124)	$31,515

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

401K, Defined Contribution Plan (DCP) and Employee Stock Purchase Plan (ESPP) Expense

The following adjustment is being made to annualize 401K, DCP contributions and ESPP contributions based on the annualized compensation claim at June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized 401K - Company Match	$176,767	$182,614
2	Annualized DCP	256,117	264,555
3	Less: 22.14% Not Charged To Operating Expense	95,841	99,003
4	Sub-Total	337,043	348,166
5	Annualized ESPP	11,938	12,257
6	Less: Amount Charged To Operating Expense	365,821	348,981
7	Pro Forma Adjustment	($16,840)	$11,441
	604.8 Employee Pension And Benefits AG	($16,840)	$11,441

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Regulatory Expense (Rate Case Expense)

The following adjustment reflects the estimated cost of this rate case normalized over a two-year period. Additionally, there is an adjustment for a 10 year amortization of the Customer Class Demand Study.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	Rate Case Expense Allocation	$159,692
2	Normalized Over 2 Years	79,846
3	Plus Allocation of Amortization of Demand Study	1,862
4	Less: Amount Charged To Operating Expense	
5	During The Twelve Months Ended 06/30/2023	-
6	Pro Forma Adjustment	$81,708
	666.8 Regulatory Commission Expense	$81,708

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Service Company

This adjustment reflects the cost of services provided by American Water Works Service Company (AWWSC), for the twelve months ended June 30, 2024, and June 30, 2025. An allocation factor based on customer counts was applied to each cost of service area to allocate a portion of the total projected Service Company costs.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Service Company Cost	$0	$1,903,699
2	Less: Amount Charged To Operating Expense		
3	During The Twelve Months Ended 06/30/23	-	
4	And Present Rates 06/30/24		-
5	Pro Forma Adjustment	$0	$1,903,699
	634.8 AG - Contract Services - Management	$0	$1,903,699

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Operating Expenses

Calculation of Uncollectible Accounts Expenses

The following adjustment develops the Company's uncollectible accounts expense claim calculated on the ratio of actual per books revenue to net write-offs. This ratio is applied to pro forma sales at present and proposed rates.

LINE NO	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Total Sales	$69,272,386	$83,258,471	$95,165,465	$95,470,867	$127,325,957
2	2 Year Average	1.1760%	1.1760%	1.1760%	1.1760%	1.1760%
3	Annualized Uncollectible Expense		$979,120	$1,119,146	$1,122,737	$1,497,353
4	Less: Amount Charged To Operating Expense					
5	During The Twelve Months Ended 06/30/2023		566,845			
6	Less: Present Rates 06/30/2023			979,120		
7	Less: Present Rates 06/30/2024				1,119,146	
8	Less: Present Rates 06/30/2025					1,122,737
9	Pro Forma Adjustment		$412,275	$140,026	$3,591	$374,616
670.7	Customer Accounting And Collecting - Bad Debt		$412,275	$140,026	$3,591	$374,616

Witness: Cas Swiz

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Taxes, Other than Income

Payroll Taxes

The following adjustment is being made to annualize payroll tax expense based on the annualized compensation claim at June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Payroll Taxes	$484,820	$500,181
2	Less: 22.14% Not Charged To Operating Expense	107,339	110,740
3	Sub-Total	377,481	389,441
4	Less: Amount Charged To Operating Expense	406,237	377,481
5	Pro Forma Adjustment	($28,756)	$11,960
	408.12 - Taxes - Payroll	($28,756)	$11,960

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Calculation of General Assessment by the Pennsylvania Public Utility Commission, Consumer Advocate and Small Business Advocate Fees

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED RATES 06/30/25 AMOUNT
1	Total Wastewater Sales	$81,814,532	$93,661,969	$93,965,843	$125,661,598
2	Estimated General Assessment Fee				
3	Public Utility Commission At 0.004324859316	353,836	405,075	406,389	543,469
4	Consumer Advocate Fee At 0.001742389526	142,553	163,196	163,725	218,951
5	Small Business Advocate Fee At 0.000303478942	24,829	28,424	28,517	38,136
6	Damage Prevention Comittee Fee At 0.000000719937	59	67	68	90
7	Subtotal	521,277	596,762	598,699	800,646
8	Less: Amount Charged To Operating Expenses During				
9	The Twelve Months Ended 06/30/2023	404,178			
10	Less: Pro Forma Under Present Rates At 06/30/2023		521,277		
11	Less: Pro Forma Under Present Rates At 06/30/2024			596,762	
12	Less: Pro Forma Under Present Rates At 06/30/2025				598,699
13	Pro Forma Adjustment	$117,099	$75,485	$1,937	$201,947

507.1 Taxes Other Than Income $396,468

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Pro Forma State And Federal Income Taxes Under Present And Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED 06/30/25 AMOUNT
1	State Income Tax Per Computation				
2	Shown On Following Page	$3,151,788	$3,327,018	$2,901,678	$5,401,014
3	Less: State Income Tax Per Book				
4	Computation Shown On Following Page	2,376,040			
5	Less: Present Rates 06/30/2023		3,151,788		
6	Less: Present Rates 06/30/2024			3,327,018	
7	Less: Present Rates 06/30/2025				2,901,678
8	Pro Forma Adjustment	$775,748	$175,230	($425,340)	$2,499,336
9	Federal Income Tax Per Computation				
10	Shown On Following Page	$6,589,948	$7,931,577	$7,053,052	$13,097,161
11	Less: Federal Income Tax Per Book				
12	Computation Shown On Following Page	4,938,969			
13	Less: Present Rates 06/30/2023		6,589,948		
14	Less: Present Rates 06/30/2024			7,931,577	
15	Less: Present Rates 06/30/2025				7,053,052
16	Pro Forma Adjustment	$1,650,979	$1,341,629	($878,525)	$6,044,109

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Wastewater SSS General Operations
Notes to Statement Of Income
Calculation Of State And Federal Income Taxes

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Utility Operating Income Before Taxes	$28,179,871	$34,535,292	$41,784,766	$38,776,935	$70,055,462
2	Less: Interest Expense	11,273,603	11,273,603	13,180,337	13,963,009	13,960,726
3	Taxable Operating Income	16,906,268	23,261,689	28,604,429	24,813,926	56,094,736
4	Add: Premature Property Losses / Amortizations	9,962	9,962	99,241	(75,633)	(75,633)
5	Depr - Straight Line-Remaining Life (Including COR)	21,451,478	26,045,923	26,857,312	27,482,122	27,482,122
6	Taxable Meals & Entertainment	7,002	7,002	7,002	7,002	7,002
7	Total	21,468,442	26,062,887	26,963,555	27,413,491	27,413,491
8	Deduct:					
9	Tax Depreciation:					
10	State Tax Depreciation Adjustments	11,944,903	14,265,758	16,380,497	15,911,050	15,911,050
11	Total	11,944,903	14,265,758	16,380,497	15,911,050	15,911,050
12	State Taxable Income	26,429,807	35,058,818	39,187,487	36,316,367	67,597,177
13	State Income Tax At:					
14	Historic at 8.99%, Future At 8.49% And Fully Projected At 7.99%	2,376,040	3,151,788	3,327,018	2,901,678	5,401,014
15	Taxable Income After State Income Tax	24,053,767	31,907,030	35,860,469	33,414,689	62,196,163
16	Add:					
17	Federal Tax Depreciation Adjustments	2,374,744	2,374,744	4,225,694	3,089,101	3,089,101
18	Income Subject To Federal Income Tax	26,428,511	34,281,774	40,086,163	36,503,790	65,285,264
19	Federal Income Tax @ 21%	5,549,987	7,199,173	8,418,094	7,665,796	13,709,905
20	Excess ADIT	611,018	609,225	486,517	612,744	612,744
21	Federal Tax Liability	$4,938,969	$6,589,948	$7,931,577	$7,053,052	$13,097,161

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Pro Forma Interest Expense Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED 6/30/25 AMOUNT
1	Interest On Long Term Debt Per Computation				
2	Shown On Following Page	$10,243,220	$12,399,366	$13,183,678	$13,181,523
3	Less: Interest On Long Term Debt As Per Book				
4	Computation On Following Page	10,243,220			
5	Less: Present Rates At 06/30/2023		10,243,220		
6	Less: Present Rates At 06/30/2024			12,399,366	
7	Less: Present Rates At 06/30/2025				13,183,678
8	Pro Forma Adjustment	$0	$2,156,146	$784,312	($2,155)
9	Interest On Wastewater Specific Long Term Debt Per Computation				
10	Shown On Following Page	$1,030,383	$755,291	$779,331	$779,203
11	Less: Interest On Wastewater Specific Long Term Debt As Per Book				
12	Computation On Following Page	1,030,383			
13	Less: Present Rates At 06/30/2023		1,030,383		
14	Less: Present Rates At 06/30/2024			755,291	
15	Less: Present Rates At 06/30/2025				779,331
16	Pro Forma Adjustment	$0	($275,092)	$24,040	($128)

Witness: Ann E. Bulkley

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Statement Of Income

Application of Income Deductions

LINE NO.	DESCRIPTION	PRESENT RATES AT JUNE 30, 2023 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2024 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2025 AMOUNT	CAPITAL STRUCTURE	COST RATE
1	**Capital Structure**									
2	Long Term Debt	$384,896,465	38.42%	4.39%	$562,690,015	42.46%	4.63%	$594,902,431	42.73%	4.76%
3	Long Term Debt - WW Spe	63,458,726	6.33%	2.61%	62,348,860	4.70%	2.64%	61,227,844	4.40%	2.67%
4	Total Debt	448,355,191	44.75%		625,038,875	47.16%		656,130,275	47.13%	
5	Preferred Stock	93,854	0.01%	9.70%	0	0.00%	0.00%	0	0.00%	0.00%
6	Common Equity	553,552,633	55.24%		700,362,769	52.84%		735,975,490	52.87%	
7	Totals	$1,002,001,678	100.00%		$1,325,401,644	100.00%		$1,392,105,765	100.00%	

		PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
8	**Application Of Long Term Debt Interest:**				
9	Original Cost Rate Base	$606,107,701	$629,409,460	$649,442,249	$649,336,105
10	Debt Percentage (From Above)	38.42%	42.46%	42.73%	42.73%
11	Debt Portion Of Rate Base	232,866,579	267,247,257	277,506,673	277,461,318
12	Interest Cost (From Above)	4.39%	4.63%	4.76%	4.76%
13	Pro Forma Long Term Interest Deduction	$10,243,220	$12,399,366	$13,183,678	$13,181,523
14	**Application Of Wastewater Specific Long Term Debt Interest:**				
15	Original Cost Rate Base	$606,107,701	$629,409,460	$649,442,249	$649,336,105
16	Debt Percentage (From Above)	6.33%	4.70%	4.40%	4.40%
17	Debt Portion Of Rate Base	38,366,617	29,582,245	28,575,459	28,570,789
18	Interest Cost (From Above)	2.61%	2.64%	2.67%	2.67%
19	Pro Forma Wastewater Specific Long Term Interest Deduction	$1,030,383	$755,291	$779,331	$779,203

Witness: Ann E. Bulkley

BASA WW Operations

Pennsylvania-American Water Company - BASA WW Operations
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Exhibit 3-A Revised

Adjustment	Reference Statement No.	Description	Revised 3-A Page No.	Original Filed Amount	Revised Filed Amount	Change
Capital Structure:	Stmt 13R	Update cost rate of LTD WW Specific Financing at June 30, 2025	171R	2.62%	2.67%	0.05%
Revenues:						
BASA	Stmt 10R	Update billing determinants associated with the BASA acquisition	143R	$11,847,402	$12,814,193	$966,791
Expenses:						
Rate Case Expense	Stmt 4R	Update for public input hearings and legal expenses	161R	20,057	21,453	1,396

Concomitant Changes:

Pro Forma Statement of Income	139R
Revenue	140R & 141R
Summary of Adjustments to Operating Revenues	142R
Penalties	144R
Summary of Rate Base Adjustments	145R
Cash Working Capital Requirements - Expense	148R
Support of Expense Days	149R
Accrued and Prepaid Taxes	150R
Cash Working Capital Requirements - Interest & Dividends	152R
Summary of Operating Expense Adjustments	159R
Uncollectible Accounts	164R
General Assessment	167R
Income Taxes	168R & 169R
Interest Expense	170R
Income Deductions	171R

Pennsylvania-American Water Company - BASA WW Operations

Pro Forma Statement of Income for the Twelve Months Ending June 30, 2023

June 30, 2024, and June 30, 2025 Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PER BOOKS	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	LINE NO.
1	Operating Revenue	$0	$0	$0	$12,677,370	$12,677,370	$136,823	$12,814,193	$25,322,947	$38,137,140	1
2	Operating Revenue Deductions:										2
3	Operating Expenses	0	0	0	6,409,527	6,409,527	203,427	6,612,954	297,798	6,910,752	3
4	Depreciation	0	0	0	4,806,499	4,806,499	285,253	5,091,752	0	5,091,752	4
5	Amortizations	0	0	0	0	0	120,264	120,264	0	120,264	5
6	Taxes, Other Than Income:										6
7	Local Property And Miscellaneous	0	0	0	0	0	589,414	589,414	0	589,414	7
8	Federal Environmental Tax	0	0	0	0	0	0	0	0	0	8
9	Public Utility Realty Taxes	0	0	0	0	0	0	0	0	0	9
10	Payroll Taxes	0	0	0	185,531	185,531	5,512	191,043	0	191,043	10
11	General Assessment	0	0	0	80,370	80,370	867	81,237	160,536	241,773	11
12	Other Taxes and Licenses	0	0	0	0	0	0	0	0	0	12
13	Total Taxes Other Than Income	0	0	0	265,901	265,901	595,793	861,694	160,536	1,022,230	13
14	**Utility Operating Income Before Income Taxes**	**0**	**0**	**0**	**1,195,443**	**1,195,443**	**(1,067,914)**	**127,529**	**24,864,613**	**24,992,142**	14
15	Income Taxes:										15
16	State Income Tax	0	0	0	47,876	47,876	(116,000)	(68,124)	1,986,828	1,918,704	16
17	Federal Income Tax	0	0	0	150,271	150,271	(265,587)	(115,316)	4,804,716	4,689,400	17
18	Amortization Of ITC & Excess Deferred Taxes	0	0	0	0	0	0	0	0	0	18
19	Total Income Taxes	0	0	0	198,147	198,147	(381,587)	(183,440)	6,791,544	6,608,104	19
20	Total Operating Revenue Deductions	0	0	0	11,680,074	11,680,074	823,150	12,503,224	7,249,878	19,753,102	20
21	**Utility Operating Income**	**0**	**0**	**0**	**997,296**	**997,296**	**(686,327)**	**310,969**	**18,073,069**	**18,384,038**	21
22	Income Deductions:										22
23	Interest On Long Term Debt	0	0	0	4,388,145	4,388,145	313,769	4,701,914	(1,713)	4,700,201	23
24	Amortization Of Debt Discount Expense	0	0	0	0	0	0	0	0	0	24
25	Interest On Notes Payable To Others	0	0	0	276,386	276,386	1,560	277,946	(102)	277,844	25
26	Total Income Deductions	0	0	0	4,664,531	4,664,531	315,329	4,979,860	(1,815)	4,978,045	26
27	**Net Income**	**$0**	**$0**	**$0**	**($3,667,235)**	**($3,667,235)**	**($1,001,656)**	**($4,668,891)**	**$18,074,884**	**$13,405,993**	27
28	Preferred Dividends	0		0		0		0		0	28
29	**Net Income To Common**	**$0**		**$0**		**($3,667,235)**		**($4,668,891)**		**$13,405,993**	29

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER BASA

TOTAL REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2023 AND JUNE 30, 2024

LINE NO.	ACCT. NO.	CUSTOMER CLASS	PER BOOKS 12 ME June 2023	UNBILLED EADIT, DSIC, AMP ADJUSTMENTS	ANNUALIZE 2023 RATE CHANGE	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	OTHER REVENUE ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2023	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION ADJUSTMENTS	ACQUISITION ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2024
1		OPERATING REVENUES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2		METERED SALES										
3	522.1	RESIDENTIAL	$0					$0			$8,663,382	$8,663,382
4	522.2	COMMERCIAL	0					0			3,172,260	3,172,260
5	522.3	INDUSTRIAL	0					0			327,054	327,054
6	522.4	MUNICIPAL	0					0			442,806	442,806
7	522.4	BULK	0					0				0
8		**TOTAL METERED SALES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$12,605,502**	**$12,605,502**
9		UNMETERED SALES										
10	522.1	RESIDENTIAL						$0				$0
11	522.2	COMMERCIAL						0				0
12	522.3	INDUSTRIAL						0				0
13	522.4	MUNICIPAL						0				0
14	522.4	BULK						0				0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$12,605,502**	**$12,605,502**
17		OTHER OPERATING REVENUES										
18	530	GUARANTEED REVENUES						$0				$0
19	532	LATE PAYMENT FEES	$0		$0			0			63,368	63,368
20	536	MISC SERVICE REVENUES						0				0
21	534	RENTS FROM PROPERTIES						0				0
22	535	INTERCOMPANY RENTS						0				0
23	523	OTHER WW REVENUES									8,500	8,500
24		**TOTAL OTHER OPERATING**										
25		**REVENUES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$71,868**	**$71,868**
26		**TOTAL OPERATING REVENUES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$12,677,370**	**$12,677,370**

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER BASA

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

LINE NO.	ACCT. NO.	CUSTOMER CLASSIFICATION	PRO FORMA PRESENT RATES 12 ME June 2024	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION	ANNUALIZE DSIC ADJUSTMENT	OTHER REVENUE ADJUSTMENT	PRO FORMA PRESENT RATES 12 ME June 2025	PERCENT	AMOUNT	PRO FORMA PROPOSED RATES
1		OPERATING REVENUES	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
2		METERED SALES									
3	522.1	RESIDENTIAL	$8,663,382			$93,565		$8,756,947	49.90%	$4,369,678	$13,126,624
4	522.2	COMMERCIAL	3,172,260			34,260		3,206,520	522.67%	16,759,402	19,965,922
5	522.3	INDUSTRIAL	327,054			3,532		330,586	522.67%	1,727,863	2,058,449
6	522.4	MUNICIPAL	442,806			4,782		447,588	522.67%	2,339,394	2,786,982
7	522.4	BULK	0					0	0.00%	0	0
8		**TOTAL METERED SALES**	**$12,605,502**	**$0**	**$0**	**$136,139**	**$0**	**$12,741,641**	**197.75%**	**$25,196,336**	**$37,937,977**
9		UNMETERED SALES									
10	522.1	RESIDENTIAL	$0					$0	0.00%	0	$0
11	522.2	COMMERCIAL	0					0	0.00%	0	0
12	522.3	INDUSTRIAL	0					0	0.00%	0	0
13	522.4	MUNICIPAL	0					0	0.00%	0	0
14	522.4	BULK	0					0	0.00%	0	0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**0.00%**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$12,605,502**	**$0**	**$0**	**$136,139**	**$0**	**$12,741,641**	**197.75%**	**$25,196,336**	**$37,937,977**
17		OTHER OPERATING REVENUES									
18	530	GUARANTEED REVENUES	$0					$0	0.00%	$0	$0
19	532	LATE PAYMENT FEES	63,368				$633	64,001	197.91%	126,662	190,663
20	536	MISC SERVICE REVENUES	0					0	0.00%	0	0
21	534	RENTS FROM PROPERTIES	0					0	0.00%	0	0
22	535	INTERCOMPANY RENTS	0					0	0.00%	0	0
23	523	OTHER WW REVENUES	8,500					8,500	0.00%	0	8,500
24		**TOTAL OTHER OPERATING**									
25		**REVENUES**	**$71,868**	**$0**	**$0**	**$0**	**$633**	**$72,501**	**174.71%**	**$126,662**	**$199,163**
26		**TOTAL OPERATING REVENUES**	**$12,677,370**	**$0**	**$0**	**$136,139**	**$633**	**$12,814,142**	**197.62%**	**$25,322,998**	**$38,137,140**

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER BASA

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$0				
2	Present Rates At 06/30/2024				$0		
3	Present Rates At 06/30/2025						$12,677,370
4							
5	Annualization of Acquired System			12,614,002			
6	DSIC Adjustment					136,139	
7							
8							
9							
10							
11							
12							
13							
14							
15							
16	Late Payment Fees			63,368		684	
17							
18		0					
19							
20							
21	Pro Forma Adjustment		0		12,677,370		136,824
22	Pro Forma Present Rates At June 30, 2023		$0				
23	Pro Forma Present Rates At June 30, 2024				$12,677,370		
24	Pro Forma Present Rates At June 30, 2025						$12,814,194

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Revenues

Acquisition Butler Area Sewer Authority

The Company anticipates acquiring Butler Area Sewer Authority System in 2023 and will begin providing service to the entity's customers. The following adjustment annualizes the revenues associated with this acquisition for 12 months ending June 30, 2024 and additional annualized DSIC for 12 months ending June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 REVENUE ADJUSTMENT	PRESENT RATES 6/30/2025 REVENUE ADJUSTMENT
1	**Metered Sales**		
2	Residential	$8,663,382	$93,565
3	Commercial	3,172,260	34,260
4	Industrial	327,054	3,532
5	Municipal	442,806	4,782
6	Miscellaneous (Bulk Customers)	0	0
7	Total Metered Sales	$12,605,502	$136,139
8	**Unmetered Sales**		
9	Residential	$0	$0
10	Commercial	0	0
11	Industrial	0	0
12	Municipal	0	0
13	Miscellaneous (Bulk Customers)	0	0
14	Total Unmetered Sales	$0	$0
15	Other WW Revenue	$8,500	$0
16	Total Sales	$12,614,002	$136,139
17	Other Operating Revenues	$63,368	$684
18	Pro Forma Adjustment	$12,677,370	$136,824

Witness: Charles Rea
Reference: FR II.2

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Revenues

Penalties

The following adjustment reflects the annualization of revenues associated with changes imposed during twelve months ending June 30, 2023 and projected to be imposed during twelve months ending June 30, 20 twelve months ending June 30, 2025. Additionally, annualized late payment charges are calculated based on revenues at the proposed rate level.

LINE NO.	DESCRIPTION	PER BOOKS 6/30/23	PRESENT RATES 6/30/23	PRESENT RATES 6/30/24	PRESENT RATES 6/30/25	PROPOSED RATES 6/30/25
1	Total Billed Wastewater Sales	$0	$0	$12,614,002	$12,750,141	$37,946,427
2	% Of Penalties To Total					
3	Total Company Sales - 2 Year Avg	0.5027%	0.5027%	0.5027%	0.5027%	0.5027%
4	Penalties	0	0	63,411	64,095	190,757
5	Less: Per Books At 06/30/2023		0			
6	Less: Present Rates At 06/30/2023			0		
7	Less: Present Rates At 06/30/2024				63,411	
8	Less: Present Rates At 06/30/2025					64,095
9	Pro Forma Adjustments		$0	$63,411	$684	$126,662

Witness: Charles Rea

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Summary of Rate Base Adjustments

LINE NO.	DESCRIPTION		DEPRECIATED ORIGINAL COST 6/30/23	DEPRECIATED ORIGINAL COST 6/30/24	DEPRECIATED ORIGINAL COST 6/30/25	DEPRECIATED ORIGINAL COST PROPOSED
1	Non-Depreciable Plant		$0	$13,335,927	$13,335,927	$13,335,927
2	Depreciable Plant		0	215,412,267	229,732,400	229,732,400
3	Total Utility Plant In Service		0	228,748,194	243,068,327	243,068,327
4	Deduct:					
5	Contributions In Aid Of Construction		0	0	0	0
6	Customer Advances For Construction		0	0	0	0
7	Excluded Property		0	0	0	0
8	Sub-Total		0	0	0	0
9	Net Utility Plant In Service		0	228,748,194	243,068,327	243,068,327
10	Accumulated Depreciation		0	4,719,233	8,496,233	8,496,233
11	Depreciated Utility Plant In Service		0	224,028,961	234,572,094	234,572,094
12	Add:					
13	Materials And Supplies		0	117,597	117,597	117,597
14	Cash Working Capital - Expenses		0	362,030	373,674	373,674
15	Accrued And Prepaid Taxes		0	36,089	149,868	65,342
16	Acquisition Adjustments		0	1,202,635	1,092,393	1,092,393
17	Other Additions		0	0	0	0
18	Deduct:					
19	Cash Working Capital - Int And Div		0	396,277	423,070	422,915
20	Unamortized Itc (3%)		0	0	0	0
21	Extension Deposits In Suspense		0	0	0	0
22	Tax Cuts and Jobs Act -Stub Period		0	0	0	0
23	Other Deductions		0	0	0	0
24	Deferred Taxes		0	2,602,562	4,261,182	4,261,182
25	Total Rate Base Elements		$0	$222,748,473	$231,621,374	$231,537,003
26	Utility Operating Income					
27	Per Books	$0	0.00%	0.00%	0.00%	0.00%
28	Present Rates At 06/30/2023	0	0.00%	-	-	-
29	Present Rates At 06/30/2024	997,296	-	0.45%	-	-
30	Present Rates At 06/30/2025	310,969	-	-	0.13%	-
31	Proposed Rates At 06/30/2025	18,384,038	-	-	-	7.94%

Witness: Stacey D. Gress

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for wastewater service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months enc
June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2025.

The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2023				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	$0	$0	$12,677,370	$12,814,193
9	Lag Days	50.6	50.6	50.6	50.6
10	Dollar Days	$0	$0	$641,601,671	$648,526,283
11	Total Billed Revenue	$0	$0	$12,677,370	$12,814,193
12	Total Dollar Days	$0	$0	$641,601,671	$648,526,283
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	0.0	0.0	50.6	50.6
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	0.0	0.0	30.1	30.1
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	0.0	0.0	20.5	20.5
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		$0	$6,445,972	$6,653,302
20	Operating Expenses Per Day (Line 20 / 365 Days)		0	17,660	18,228
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		$0	$362,030	$373,674

Witness: Stacey D. Gress

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Support of Expense Days

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PER BOOKS AMOUNT	PER BOOKS DOLLAR DAYS	PRESENT RATES 06/30/2023 AMOUNT	PRESENT RATES 06/30/2023 DOLLAR DAYS	PRESENT RATES 06/30/2024 AMOUNT	PRESENT RATES 06/30/2024 DOLLAR DAYS	PRESENT RATES 06/30/2025 AMOUNT	PRESENT RATES 06/30/2025 DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	$0	$0	$0	$0	$185,531	$2,236,428	$191,043	$2,302,871
2	Group Insurance	11.00	0	0	0	0	0	0	0	0
3	OPEB's and VEBA	0.00	0	0	0	0	0	0	0	0
4	Pension	(6.41)	0	0	0	0	0	0	0	0
5	Purchased Power	31.00	0	0	0	0	0	0	0	0
6	Purchased Water	35.22	0	0	0	0	0	0	0	0
7	Chemicals	47.20	0	0	0	0	0	0	0	0
8	Miscellaneous	30.46	0	0	0	0	6,207,107	189,070,656	6,404,248	195,075,640
9	Transportation	54.08	0	0	0	0	53,334	2,884,531	58,011	3,137,484
10	Ins Other Than Group	(69.48)	0	0	0	0	0	0	0	0
11	Service Company	12.05	0	0	0	0	0	0	0	0
12	Waste Disposal	41.96	0	0	0	0	0	0	0	0
13	Telephone	3.88	0	0	0	0	0	0	0	0
14	Rents	(13.36)	0	0	0	0	0	0	0	0
15	Natural Gas	33.33	0	0	0	0	0	0	0	0
16	Totals		$0	$0	$0	$0	$6,445,972	$194,191,615	$6,653,302	$200,515,995
17	Average Lag			0.0		0.0		30.1		30.1
18	Sum. Of Expense Pro Forma Present Rates & Payroll Taxes		$0		$0		$6,595,058		$6,803,997	
19	Uncollectibles		0		0		149,086		150,695	
20	Amortizations		0		0		0		0	
21	Sum Of Other Expenses		0		0		238,865		249,054	
22	Miscellaneous		$0		$0		$6,207,107		$6,404,248	

Witness: Stacey D. Gress

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	NET REVENUE LAG DAYS FUTURE	PRESENT RATES 06/30/2023 TAXES PAYABLE	PRESENT RATES 06/30/2023 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2024 TAXES PAYABLE	PRESENT RATES 06/30/2024 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2025 TAXES PAYABLE	PRESENT RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT	PROPOSED RATES 06/30/2025 TAXES PAYABLE	PROPOSED RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT
1	General Assessment	190.2	$0	$0	$80,370	$41,880	$81,237	$42,332	$241,773	$125,987
2	Public Utility Realty Tax	47.4	0	0	0	0	0	0	0	0
3	Local Property Tax	64.6	0	0	0	0	589,414	104,261	589,414	104,261
4	State Income Tax	13.6	0	0	47,876	1,784	(68,124)	(2,538)	1,918,704	71,491
5	Federal Income Tax	(18.4)	0	0	150,271	(7,575)	(115,316)	5,813	4,689,400	(236,397)
6	Totals			$0		$36,089		$149,868		$65,342

Witness: Stacey D. Gress

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

The payment of interest on the Company's long term debt is made six months in arrears. Payment of interest on the Company's short term debt is made monthly in arrears. The payment of dividends on the Company's preferred stock is made quarterly in arrears. The average lag days of interest and dividend payments and the deduction of the average lag days for the receipt of revenue is calculated below to determine cash working capital requirements.

LINE NO.	DESCRIPTION											
1	**Average Lag Calculation**	**LONG TERM INTEREST**		**SHORT TERM INTEREST**		**PREFERRED DIVIDEND**						
2	Future Revenue Lag Days	50.6		50.6		50.6						
3	Less: Interest Payments Lag Days	81.6		15.0		46.4						
4	Average Lag Between The Payment	(31.0)		35.6		4.2						
5	Of Interest And The Receipt											
6	Of Revenues											
		PRESENT RATES 6/30/23			**PRESENT RATES 6/30/24**		**PRESENT RATES 6/30/25**		**PROPOSED AMOUNT 6/30/25**			
7	**Long Term Debt**											
8	Working Capital Requirements											
9	Pro Forma Annual Interest Expense	$0			$4,388,145		$4,701,914		$4,700,201			
10	Interest Expense Per Day											
11	(Line 9 / 365 Days)	0			12,022		12,882		12,877			
12	Cash Working Capital Required											
13	(Line 4 Col.1 X Line 11)			0		(372,802)		(399,471)		(399,316)		
14	**Long Term Debt - Wastewater Specific**											
15	Working Capital Requirements											
16	Pro Forma Annual Interest Expense	0			276,386		277,946		277,844			
17	Interest Expense Per Day											
18	(Line 16 / 365 Days)	0			757		761		761			
19	Cash Working Capital Required											
20	(Line 4 Col.2 X Line 18)			0		(23,475)		(23,599)		(23,599)		
21	**Preferred Dividends**											
22	Working Capital Requirements											
23	Pro Forma Annual Dividend Expense	0			0		0		0			
24	Dividend Expense Per Day											
25	(Line 23 / 365 Days)	0			0		0		0			
26	Cash Working Capital Required											
27	(Line 4 Col.3 X Line 25)			0		0		0		0		
28	Total Cash Working Capital Required											
29	(Line 13 + Line 20 + Line 27)			$0		($396,277)		($423,070)		($422,915)		

Witness: Stacey D. Gress

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	DESCRIPTION	6/30/23 DETAIL	PRESENT RATES 6/30/23 AMOUNT	6/30/24 DETAIL	PRESENT RATES 6/30/24 AMOUNT	6/30/25 DETAIL	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$0				
2	Present Rates At 06/30/2023				$0		
3	Present Rates At 06/30/2024						$6,409,527
4	Proposed Rates At 06/30/2025						
5	Compensation	$0		$0		$0	
6	Group Insurance	0		-		-	
7	Other Post Employment Benefits & VEBA	0		-		-	
8	Pension	0		-		-	
9	Purchased Power	0		-		-	
10	Waste Disposal	0		-		-	
11	Chemicals	0		-		-	
12	Change In Consumption Expense	0		-		-	
13	Transportation Expense	0		53,334		4,677	
14	Insurance Other Than Group	0		-		-	
15	Regulatory Expense (Rate Case Expense)	0		21,453		-	
16	Service Company Expense	0		-		-	
17	Postage and Customer Accounting	0		-		-	
18	Acquisition O&M	0		6,152,660		144,611	
19	401K & Defined Contribution Plan	0		-		-	
20	Rent Expense	0		-		-	
21	Miscellaneous Adjustments	0		32,994		52,530	
22	Uncollectibles	0		149,086		1,609	
23	Pro Forma Adjustments		0		6,409,527		203,427
24	Present Rates At 06/30/2023		$0				
25	Present Rates At 06/30/2024				$6,409,527		
26	Present Rates At 06/30/2025						$6,612,954

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Regulatory Expense (Rate Case Expense)

The following adjustment reflects the estimated cost of this rate case normalized over a two-year period. Additionally, there is an adjustment for a 10 year amortization of the Customer Class Demand Study.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	Rate Case Expense Allocation	$41,928
2	Normalized Over 2 Years	20,964
3	Plus Allocation of Amortization of Demand Study	489
4	Less: Amount Charged To Operating Expense	
5	During The Twelve Months Ended 06/30/2023	-
6	Pro Forma Adjustment	$21,453
	666.8 Regulatory Commission Expense	$21,453

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Operating Expenses

Calculation of Uncollectible Accounts Expenses

The following adjustment develops the Company's uncollectible accounts expense claim calculated on the ratio of actual per books revenue to net write-offs. This ratio is applied to pro forma sales at present and proposed rates.

LINE NO	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Total Sales	$0	$0	$12,677,370	$12,814,193	$38,137,140
2	2 Year Average	1.1760%	1.1760%	1.1760%	1.1760%	1.1760%
3	Annualized Uncollectible Expense		$0	$149,086	$150,695	$448,493
4	Less: Amount Charged To Operating Expense					
5	During The Twelve Months Ended 06/30/2023		0			
6	Less: Present Rates 06/30/2023			0		
7	Less: Present Rates 06/30/2024				149,086	
8	Less: Present Rates 06/30/2025					150,695
9	Pro Forma Adjustment		$0	$149,086	$1,609	$297,798
670.7	Customer Accounting And Collecting - Bad Debt		$0	$149,086	$1,609	$297,798

Witness: Cas Swiz

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Calculation of General Assessment by the Pennsylvania Public Utility Commission, Consumer Advocate and Small Business Advocate Fees

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED RATES 06/30/25 AMOUNT
1	Total Wastewater Sales	$0	$12,614,002	$12,750,141	$37,946,427
2	Estimated General Assessment Fee				
3	Public Utility Commission At 0.004324859316	0	54,554	55,143	164,113
4	Consumer Advocate Fee At 0.001742389526	0	21,979	22,216	66,117
5	Small Business Advocate Fee At 0.000303478942	0	3,828	3,869	11,516
6	Damage Prevention Comittee Fee At 0.000000719937	0	9	9	27
7	Subtotal	0	80,370	81,237	241,773
8	Less: Amount Charged To Operating Expenses During				
9	The Twelve Months Ended 06/30/2023	0			
10	Less: Pro Forma Under Present Rates At 06/30/2023		0		
11	Less: Pro Forma Under Present Rates At 06/30/2024			80,370	
12	Less: Pro Forma Under Present Rates At 06/30/2025				81,237
13	Pro Forma Adjustment	$0	$80,370	$867	$160,536

507.1 Taxes Other Than Income $241,773

Witness: Stacey D. Gress

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Pro Forma State And Federal Income Taxes Under Present And Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED 06/30/25 AMOUNT
1	State Income Tax Per Computation				
2	Shown On Following Page	$0	$47,876	($68,124)	$1,918,704
3	Less: State Income Tax Per Book				
4	Computation Shown On Following Page	0			
5	Less: Present Rates 06/30/2023		0		
6	Less: Present Rates 06/30/2024			47,876	
7	Less: Present Rates 06/30/2025				(68,124)
8	Pro Forma Adjustment	$0	$47,876	($116,000)	$1,986,828
9	Federal Income Tax Per Computation				
10	Shown On Following Page	$0	$150,271	($115,316)	$4,689,400
11	Less: Federal Income Tax Per Book				
12	Computation Shown On Following Page	0			
13	Less: Present Rates 06/30/2023		0		
14	Less: Present Rates 06/30/2024			150,271	
15	Less: Present Rates 06/30/2025				(115,316)
16	Pro Forma Adjustment	$0	$150,271	($265,587)	$4,804,716

Witness: Melissa Ciullo

Pennsylvania-American Water Company - BASA WW Operations
Notes to Statement Of Income
Calculation Of State And Federal Income Taxes

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Utility Operating Income Before Taxes	$0	$0	$1,195,443	$127,529	$24,992,142
2	Less: Interest Expense	0	0	4,664,531	4,979,860	4,978,045
3	Taxable Operating Income	0	0	(3,469,088)	(4,852,331)	20,014,097
4	Add: Premature Property Losses / Amortizations	0	0	0	120,264	120,264
5	Depr - Straight Line-Remaining Life (Including COR)	0	0	4,806,499	5,091,752	5,091,752
6	Taxable Meals & Entertainment	0	0	0	0	0
7	Total	0	0	4,806,499	5,212,016	5,212,016
8	Deduct:					
9	Tax Depreciation:					
10	State Tax Depreciation Adjustments	0	0	773,496	1,212,296	1,212,296
11	Total	0	0	773,496	1,212,296	1,212,296
12	State Taxable Income	0	0	563,915	(852,611)	24,013,817
13	State Income Tax At:					
14	Historic at 8.99%, Future At 8.49% And Fully Projected At 7.99%	0	0	47,876	(68,124)	1,918,704
15	Taxable Income After State Income Tax	0	0	516,039	(784,487)	22,095,113
16	Add:					
17	Federal Tax Depreciation Adjustments	0	0	199,539	235,365	235,365
18	Income Subject To Federal Income Tax	0	0	715,578	(549,122)	22,330,478
19	Federal Income Tax @ 21%	0	0	150,271	(115,316)	4,689,400
20	Excess ADIT	0	0	0	0	0
21	Federal Tax Liability	$0	$0	$150,271	($115,316)	$4,689,400

Witness: Melissa Ciullo

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Pro Forma Interest Expense Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED 6/30/25 AMOUNT
1	Interest On Long Term Debt Per Computation				
2	Shown On Following Page	$0	$4,388,145	$4,701,914	$4,700,201
3	Less: Interest On Long Term Debt As Per Book				
4	Computation On Following Page	0			
5	Less: Present Rates At 06/30/2023		0		
6	Less: Present Rates At 06/30/2024			4,388,145	
7	Less: Present Rates At 06/30/2025				4,701,914
8	Pro Forma Adjustment	$0	$4,388,145	$313,769	($1,713)
9	Interest On Wastewater Specific Long Term Debt Per Computation				
10	Shown On Following Page	$0	$267,298	$277,946	$277,844
11	Less: Interest On Wastewater Specific Long Term Debt As Per Book				
12	Computation On Following Page	0			
13	Less: Present Rates At 06/30/2023		0		
14	Less: Present Rates At 06/30/2024			267,298	
15	Less: Present Rates At 06/30/2025				277,946
16	Pro Forma Adjustment	$0	$267,298	$10,648	($102)

Witness: Ann E. Bulkley

Pennsylvania-American Water Company - BASA WW Operations

Notes to Statement Of Income

Application of Income Deductions

LINE NO.	DESCRIPTION	PRESENT RATES AT JUNE 30, 2023 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2024 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2025 AMOUNT	CAPITAL STRUCTURE	COST RATE
1	**Capital Structure**									
2	Long Term Debt	$384,896,465	38.42%	4.39%	$562,690,015	42.46%	4.63%	$594,902,431	42.73%	4.76%
3	Long Term Debt - WW Spe	63,458,726	6.33%	2.61%	62,348,860	4.70%	2.64%	61,227,844	4.40%	2.67%
4	Total Debt	448,355,191	44.75%		625,038,875	47.16%		656,130,275	47.13%	
5	Preferred Stock	93,854	0.01%	9.70%	0	0.00%	0.00%	0	0.00%	0.00%
6	Common Equity	553,552,633	55.24%		700,362,769	52.84%		735,975,490	52.87%	
7	Totals	$1,002,001,678	100.00%		$1,325,401,644	100.00%		$1,392,105,765	100.00%	

		PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
8	**Application Of Long Term Debt Interest:**				
9	Original Cost Rate Base	$0	$222,748,473	$231,621,374	$231,537,003
10	Debt Percentage (From Above)	38.42%	42.46%	42.73%	42.73%
11	Debt Portion Of Rate Base	0	94,579,002	98,971,813	98,935,761
12	Interest Cost (From Above)	4.39%	4.63%	4.76%	4.76%
13	Pro Forma Long Term Interest Deduction	$0	$4,388,145	$4,701,914	$4,700,201
14	**Application Of Wastewater Specific Long Term Debt Interest:**				
15	Original Cost Rate Base	$0	$222,748,473	$231,621,374	$231,537,003
16	Debt Percentage (From Above)	6.33%	4.70%	4.40%	4.40%
17	Debt Portion Of Rate Base	0	10,469,178	10,191,340	10,187,628
18	Interest Cost (From Above)	2.61%	2.64%	2.67%	2.67%
19	Pro Forma Wastewater Specific Long Term Interest Deduction	$0	$267,298	$277,946	$277,844

Witness: Ann E. Bulkley

Brentwood WW Operations

Pennsylvania-American Water Company - Brentwood WW Operations
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Exhibit 3-A Revised

Adjustment	Reference Statement No.	Description	Revised 3-A Page No.	Original Filed Amount	Revised Filed Amount	Change
Capital Structure:	Stmt 13R	Update cost rate of LTD WW Specific Financing at June 30, 2025	203R	2.62%	2.67%	0.05%
Expenses:						
Rate Case Expense	Stmt 4R	Update for public input hearings and legal expenses	193R	$5,370	$5,744	$374
Concomitant Changes:						
Pro Forma Statement of Income			172R			
Revenue			173R & 174R			
Summary of Adjustments to Operating Revenues			175R			
Penalties			177R			
Summary of Rate Base Adjustments			178R			
Cash Working Capital Requirements - Expense			181R			
Support of Expense Days			182R			
Accrued and Prepaid Taxes			183R			
Cash Working Capital Requirements - Interest & Dividends			184R			
Summary of Operating Expense Adjustments			191R			
Uncollectible Accounts			196R			
General Assessment			199R			
Income Taxes			200R & 201R			
Interest Expense			202R			
Income Deductions			203R			

Pennsylvania-American Water Company - Brentwood WW Operations

Pro Forma Statement of Income for the Twelve Months Ending June 30, 2023

June 30, 2024, and June 30, 2025 Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PER BOOKS	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	LINE NO.
1	Operating Revenue	$0	$0	$0	$1,824,191	$1,824,191	$0	$1,824,191	$1,935,019	$3,759,210	1
2	Operating Revenue Deductions:										2
3	Operating Expenses	0	0	0	769,739	769,739	32,520	802,259	22,756	825,015	3
4	Depreciation	0	0	0	377,948	377,948	77,441	455,389	0	455,389	4
5	Amortizations	0	0	0	0	0	70,194	70,194	0	70,194	5
6	Taxes, Other Than Income:										6
7	Local Property And Miscellaneous	0	0	0	0	0	35,268	35,268	0	35,268	7
8	Federal Environmental Tax	0	0	0	0	0	0	0	0	0	8
9	Public Utility Realty Taxes	0	0	0	0	0	0	0	0	0	9
10	Payroll Taxes	0	0	0	5,901	5,901	183	6,084	0	6,084	10
11	General Assessment	0	0	0	11,565	11,565	0	11,565	12,267	23,832	11
12	Other Taxes and Licenses	0	0	0	0	0	0	0	0	0	12
13	Total Taxes Other Than Income	0	0	0	17,466	17,466	35,451	52,917	12,267	65,184	13
14	**Utility Operating Income Before Income Taxes**	**0**	**0**	**0**	**659,038**	**659,038**	**(215,606)**	**443,432**	**1,899,996**	**2,343,428**	14
15	Income Taxes:										15
16	State Income Tax	0	0	0	46,924	46,924	(28,628)	18,296	151,821	170,117	16
17	Federal Income Tax	0	0	0	110,083	110,083	(55,003)	55,080	367,146	422,226	17
18	Amortization Of ITC & Excess Deferred Taxes	0	0	0	0	0	0	0	0	0	18
19	Total Income Taxes	0	0	0	157,007	157,007	(83,631)	73,376	518,967	592,343	19
20	Total Operating Revenue Deductions	0	0	0	1,322,160	1,322,160	131,975	1,454,135	553,990	2,008,125	20
21	**Utility Operating Income**	**0**	**0**	**0**	**502,031**	**502,031**	**(131,975)**	**370,056**	**1,381,029**	**1,751,085**	21
22	Income Deductions:										22
23	Interest On Long Term Debt	0	0	0	388,397	388,397	59,430	447,827	(131)	447,696	23
24	Amortization Of Debt Discount Expense	0	0	0	0	0	0	0	0	0	24
25	Interest On Notes Payable To Others	0	0	0	24,463	24,463	2,010	26,473	(8)	26,465	25
26	Total Income Deductions	0	0	0	412,860	412,860	61,440	474,300	(139)	474,161	26
27	**Net Income**	**$0**	**$0**	**$0**	**$89,171**	**$89,171**	**($193,415)**	**($104,244)**	**$1,381,168**	**$1,276,924**	27
28	Preferred Dividends	0		0		0		0		0	28
29	**Net Income To Common**	**$0**		**$0**		**$89,171**		**($104,244)**		**$1,276,924**	29

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER BRENTWOOD

TOTAL REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2023 AND JUNE 30, 2024

LINE NO.	ACCT. NO.	CUSTOMER CLASS	PER BOOKS 12 ME June 2023	UNBILLED EADIT, DSIC, AMP ADJUSTMENTS	ANNUALIZE 2023 RATE CHANGE	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	OTHER REVENUE ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2023	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION ADJUSTMENTS	ACQUISITION ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2024
1		OPERATING REVENUES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2		METERED SALES										
3	522.1	RESIDENTIAL						$0			$1,434,460	$1,434,460
4	522.2	COMMERCIAL						0			344,866	344,866
5	522.3	INDUSTRIAL						0			0	0
6	522.4	MUNICIPAL						0			35,740	35,740
7	522.4	BULK						0				0
8		**TOTAL METERED SALES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$1,815,067**	**$1,815,067**
9		UNMETERED SALES										
10	522.1	RESIDENTIAL						$0				$0
11	522.2	COMMERCIAL						0				0
12	522.3	INDUSTRIAL						0				0
13	522.4	MUNICIPAL						0				0
14	522.4	BULK						0				0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$1,815,067**	**$1,815,067**
17		OTHER OPERATING REVENUES										
18	530	GUARANTEED REVENUES						$0				$0
19	532	LATE PAYMENT FEES						0			9,124	9,124
20	536	MISC SERVICE REVENUES						0				0
21	534	RENTS FROM PROPERTIES						0				0
22	535	INTERCOMPANY RENTS						0				0
23	523	OTHER WW REVENUES										
24		**TOTAL OTHER OPERATING**										
25		**REVENUES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$9,124**	**$9,124**
26		**TOTAL OPERATING REVENUES**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$1,824,191**	**$1,824,191**

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER BRENTWOOD

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

LINE NO.	ACCT. NO.	CUSTOMER CLASSIFICATION	PRO FORMA PRESENT RATES 12 ME June 2024	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION	ANNUALIZE DSIC ADJUSTMENT	OTHER REVENUE ADJUSTMENT	PRO FORMA PRESENT RATES 12 ME June 2025	PERCENT	AMOUNT	PRO FORMA PROPOSED RATES
1		OPERATING REVENUES	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
2		METERED SALES									
3	522.1	RESIDENTIAL	$1,434,460					$1,434,460	22.30%	$319,868	$1,754,328
4	522.2	COMMERCIAL	344,866					344,866	421.82%	1,454,712	1,799,578
5	522.3	INDUSTRIAL	0					0	0.00%	0	-
6	522.4	MUNICIPAL	35,740					35,740	421.82%	150,760	186,500
7	522.4	BULK	0					0	0.00%	0	-
8		**TOTAL METERED SALES**	**$1,815,067**	**$0**	**$0**	**$0**	**$0**	**$1,815,067**	**106.08%**	**$1,925,340**	**$3,740,407**
9		UNMETERED SALES									
10	522.1	RESIDENTIAL	$0					$0	0.00%	$0	$0
11	522.2	COMMERCIAL	0					0	0.00%	0	0
12	522.3	INDUSTRIAL	0					0	0.00%	0	0
13	522.4	MUNICIPAL	0					0	0.00%	0	0
14	522.4	BULK	0					0	0.00%	0	0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**0.00%**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$1,815,067**	**$0**	**$0**	**$0**	**$0**	**$1,815,067**	**106.08%**	**$1,925,340**	**$3,740,407**
17		OTHER OPERATING REVENUES									
18	530	GUARANTEED REVENUES	$0					$0	0.00%	$0	0
19	532	LATE PAYMENT FEES	9,124					9,124	106.08%	9,679	18,803
20	536	MISC SERVICE REVENUES	0					0	0.00%	0	0
21	534	RENTS FROM PROPERTIES	0					0	0.00%	0	0
22	535	INTERCOMPANY RENTS	0					0	0.00%	0	0
23	523	OTHER WW REVENUES	0					0	0.00%	0	0
24		**TOTAL OTHER OPERATING**									
25		**REVENUES**	**$9,124**	**$0**	**$0**	**$0**	**$0**	**$9,124**	**106.08%**	**$9,679**	**$18,803**
26		**TOTAL OPERATING REVENUES**	**$1,824,191**	**$0**	**$0**	**$0**	**$0**	**$1,824,191**	**106.08%**	**$1,935,019**	**$3,759,210**

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER BRENTWOOD

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$0				
2	Present Rates At 06/30/2024				$0		
3	Present Rates At 06/30/2025						$1,824,191
4							
5	Annualization of Acquired System			$1,815,067			
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16	Late Payment Fees			9,124		0	
17							
18							
19							
20							
21	Pro Forma Adjustment		0		1,824,191		0
22	Pro Forma Present Rates At June 30, 2023		$0				
23	Pro Forma Present Rates At June 30, 2024				$1,824,191		
24	Pro Forma Present Rates At June 30, 2025						$1,824,191

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Revenues

Penalties

The following adjustment reflects the annualization of revenues associated with changes imposed during twelve months ending June 30, 2023 and projected to be imposed during twelve months ending June 30, 20 twelve months ending June 30, 2025. Additionally, annualized late payment charges are calculated based on revenues at the proposed rate level.

LINE NO.	DESCRIPTION	PER BOOKS 6/30/23	PRESENT RATES 6/30/23	PRESENT RATES 6/30/24	PRESENT RATES 6/30/25	PROPOSED RATES 6/30/25
1	Total Billed Wastewater Sales	$0	$0	$1,815,067	$1,815,067	$3,740,407
2	% Of Penalties To Total					
3	Total Company Sales - 2 Year Avg	0.5027%	0.5027%	0.5027%	0.5027%	0.5027%
4	Penalties	0	0	9,124	9,124	18,803
5	Less: Per Books At 06/30/2023		0			
6	Less: Present Rates At 06/30/2023			0		
7	Less: Present Rates At 06/30/2024				9,124	
8	Less: Present Rates At 06/30/2025					9,124
9	Pro Forma Adjustments		$0	$9,124	$0	$9,679

Witness: Charles Rea

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Summary of Rate Base Adjustments

LINE NO.	DESCRIPTION		DEPRECIATED ORIGINAL COST 6/30/23	DEPRECIATED ORIGINAL COST 6/30/24	DEPRECIATED ORIGINAL COST 6/30/25	DEPRECIATED ORIGINAL COST PROPOSED
1	Non-Depreciable Plant		$0	$32,371	$32,371	$32,371
2	Depreciable Plant		0	19,536,587	22,662,888	22,662,888
3	Total Utility Plant In Service		0	19,568,958	22,695,259	22,695,259
4	Deduct:					
5	Contributions In Aid Of Construction		0	0	0	0
6	Customer Advances For Construction		0	0	0	0
7	Excluded Property		0	0	0	0
8	Sub-Total		0	0	0	0
9	Net Utility Plant In Service		0	19,568,958	22,695,259	22,695,259
10	Accumulated Depreciation		0	355,547	383,500	383,500
11	Depreciated Utility Plant In Service		0	19,213,411	22,311,759	22,311,759
12	Add:					
13	Materials And Supplies		0	31,673	31,673	31,673
14	Cash Working Capital - Expenses		0	41,733	43,551	43,551
15	Accrued And Prepaid Taxes		0	2,225	10,170	3,712
16	Acquisition Adjustments		0	701,935	637,591	637,591
17	Other Additions		0	0	0	0
18	Deduct:					
19	Cash Working Capital - Int And Div		0	35,073	40,313	40,313
20	Unamortized Itc (3%)		0	0	0	0
21	Extension Deposits In Suspense		0	0	0	0
22	Tax Cuts and Jobs Act -Stub Period		0	0	0	0
23	Other Deductions		0	0	0	0
24	Deferred Taxes		0	240,320	934,006	934,006
25	Total Rate Base Elements		$0	$19,715,584	$22,060,425	$22,053,967
26	Utility Operating Income					
27	Per Books	$0	0.00%	0.00%	0.00%	0.00%
28	Present Rates At 06/30/2023	0	0.00%	-	-	-
29	Present Rates At 06/30/2024	502,031	-	2.55%	-	-
30	Present Rates At 06/30/2025	370,056	-	-	1.68%	-
31	Proposed Rates At 06/30/2025	1,751,085	-	-	-	7.94%

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for wastewater service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months enc
June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2025.

The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2023				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	$0	$0	$1,824,191	$1,824,191
9	Lag Days	50.6	50.6	50.6	50.6
10	Dollar Days	$0	$0	$92,322,303	$92,322,303
11	Total Billed Revenue	$0	$0	$1,824,191	$1,824,191
12	Total Dollar Days	$0	$0	$92,322,303	$92,322,303
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	0.0	0.0	50.6	50.6
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	0.0	0.0	30.4	30.4
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	0.0	0.0	20.2	20.2
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		$0	$754,188	$786,891
20	Operating Expenses Per Day (Line 20 / 365 Days)		0	2,066	2,156
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		$0	$41,733	$43,551

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Support of Expense Days

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PER BOOKS AMOUNT	PER BOOKS DOLLAR DAYS	PRESENT RATES 06/30/2023 AMOUNT	PRESENT RATES 06/30/2023 DOLLAR DAYS	PRESENT RATES 06/30/2024 AMOUNT	PRESENT RATES 06/30/2024 DOLLAR DAYS	PRESENT RATES 06/30/2025 AMOUNT	PRESENT RATES 06/30/2025 DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	$0	$0	$0	$0	$5,901	$71,132	$6,084	$73,338
2	Group Insurance	11.00	0	0	0	0	0	0	0	0
3	OPEB's and VEBA	0.00	0	0	0	0	0	0	0	0
4	Pension	(6.41)	0	0	0	0	0	0	0	0
5	Purchased Power	31.00	0	0	0	0	0	0	0	0
6	Purchased Water	35.22	0	0	0	0	0	0	0	0
7	Chemicals	47.20	0	0	0	0	0	0	0	0
8	Miscellaneous	30.46	0	0	0	0	745,028	22,693,814	777,256	23,675,490
9	Transportation	54.08	0	0	0	0	3,259	176,261	3,551	192,053
10	Ins Other Than Group	(69.48)	0	0	0	0	0	0	0	0
11	Service Company	12.05	0	0	0	0	0	0	0	0
12	Waste Disposal	41.96	0	0	0	0	0	0	0	0
13	Telephone	3.88	0	0	0	0	0	0	0	0
14	Rents	(13.36)	0	0	0	0	0	0	0	0
15	Natural Gas	33.33	0	0	0	0	0	0	0	0
16	Totals		$0	$0	$0	$0	$754,188	$22,941,207	$786,891	$23,940,881
17	Average Lag			0.0		0.0		30.4		30.4
18	Sum. Of Expense Pro Forma Present Rates & Payroll Taxes		$0		$0		$775,640		$808,343	
19	Uncollectibles		0		0		21,452		21,452	
20	Amortizations		0		0		0		0	
21	Sum Of Other Expenses		0		0		9,160		9,635	
22	Miscellaneous		$0		$0		$745,028		$777,256	

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	NET REVENUE LAG DAYS FUTURE	PRESENT RATES 06/30/2023 TAXES PAYABLE	PRESENT RATES 06/30/2023 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2024 TAXES PAYABLE	PRESENT RATES 06/30/2024 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2025 TAXES PAYABLE	PRESENT RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT	PROPOSED RATES 06/30/2025 TAXES PAYABLE	PROPOSED RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT
1	General Assessment	190.2	$0	$0	$11,565	$6,026	$11,565	$6,026	$23,832	$12,419
2	Public Utility Realty Tax	47.4	0	0	0	0	0	0	0	0
3	Local Property Tax	64.6	0	0	0	0	35,268	6,239	35,268	6,239
4	State Income Tax	13.6	0	0	46,924	1,748	18,296	682	170,117	6,339
5	Federal Income Tax	(18.4)	0	0	110,083	(5,549)	55,080	(2,777)	422,226	(21,285)
6	Totals			$0		$2,225		$10,170		$3,712

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

The payment of interest on the Company's long term debt is made six months in arrears. Payment of interest on the Company's short term debt is made monthly in arrears. The payment of dividends on the Company's preferred stock is made quarterly in arrears. The average lag days of interest and dividend payments and the deduction of the average lag days for the receipt of revenue is calculated below to determine cash working capital requirements.

LINE NO.	DESCRIPTION										
1	**Average Lag Calculation**	**LONG TERM INTEREST**		**SHORT TERM INTEREST**		**PREFERRED DIVIDEND**					
2	Future Revenue Lag Days	50.6		50.6		50.6					
3	Less: Interest Payments Lag Days	81.6		15.0		46.4					
4	Average Lag Between The Payment	(31.0)		35.6		4.2					
5	Of Interest And The Receipt										
6	Of Revenues										
		PRESENT RATES 6/30/23		**PRESENT RATES 6/30/24**		**PRESENT RATES 6/30/25**		**PROPOSED AMOUNT 6/30/25**			
7	**Long Term Debt**										
8	Working Capital Requirements										
9	Pro Forma Annual Interest Expense	$0		$388,397		$447,827		$447,696			
10	Interest Expense Per Day										
11	(Line 9 / 365 Days)	0		1,064		1,227		1,227			
12	Cash Working Capital Required										
13	(Line 4 Col.1 X Line 11)		0		(32,995)		(38,049)		(38,049)		
14	**Long Term Debt - Wastewater Specific**										
15	Working Capital Requirements										
16	Pro Forma Annual Interest Expense	0		24,463		26,473		26,465			
17	Interest Expense Per Day										
18	(Line 16 / 365 Days)	0		67		73		73			
19	Cash Working Capital Required										
20	(Line 4 Col.2 X Line 18)		0		(2,078)		(2,264)		(2,264)		
21	**Preferred Dividends**										
22	Working Capital Requirements										
23	Pro Forma Annual Dividend Expense	0		0		0		0			
24	Dividend Expense Per Day										
25	(Line 23 / 365 Days)	0		0		0		0			
26	Cash Working Capital Required										
27	(Line 4 Col.3 X Line 25)		0		0		0		0		
28	Total Cash Working Capital Required										
29	(Line 13 + Line 20 + Line 27)		$0		($35,073)		($40,313)		($40,313)		

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	DESCRIPTION	6/30/23 DETAIL	PRESENT RATES 6/30/23 AMOUNT	6/30/24 DETAIL	PRESENT RATES 6/30/24 AMOUNT	6/30/25 DETAIL	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$0				
2	Present Rates At 06/30/2023				$0		
3	Present Rates At 06/30/2024						$769,739
4	Proposed Rates At 06/30/2025						
5	Compensation	$0		$0		$0	
6	Group Insurance	0		-		-	
7	Other Post Employment Benefits & VEBA	0		-		-	
8	Pension	0		-		-	
9	Purchased Power	0		-		-	
10	Waste Disposal	0		-		-	
11	Chemicals	0		-		-	
12	Change In Consumption Expense	0		-		-	
13	Transportation Expense	0		3,259		292	
14	Insurance Other Than Group	0		-		-	
15	Regulatory Expense (Rate Case Expense)	0		5,744		-	
16	Service Company Expense	0		-		-	
17	Postage and Customer Accounting	0		-		-	
18	Acquisition O&M	0		703,478		17,219	
19	401K & Defined Contribution Plan	0		-		-	
20	Rent Expense	0		-		-	
21	Miscellaneous Adjustments	0		35,806		15,009	
22	Uncollectibles	0		21,452		0	
23	Pro Forma Adjustments		0		769,739		32,520
24	Present Rates At 06/30/2023		$0				
25	Present Rates At 06/30/2024				$769,739		
26	Present Rates At 06/30/2025						$802,259

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Regulatory Expense (Rate Case Expense)

The following adjustment reflects the estimated cost of this rate case normalized over a two-year period. Additionally, there is an adjustment for a 10 year amortization of the Customer Class Demand Study.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	Rate Case Expense Allocation	$11,227
2	Normalized Over 2 Years	5,614
3	Plus Allocation of Amortization of Demand Study	131
4	Less: Amount Charged To Operating Expense	
5	During The Twelve Months Ended 06/30/2023	-
6	Pro Forma Adjustment	$5,744
	666.8 Regulatory Commission Expense	$5,744

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Operating Expenses

Calculation of Uncollectible Accounts Expenses

The following adjustment develops the Company's uncollectible accounts expense claim calculated on the ratio of actual per books revenue to net write-offs. This ratio is applied to pro forma sales at present and proposed rates.

LINE NO	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Total Sales	$0	$0	$1,824,191	$1,824,191	$3,759,210
2	2 Year Average	1.1760%	1.1760%	1.1760%	1.1760%	1.1760%
3	Annualized Uncollectible Expense		$0	$21,452	$21,452	$44,208
4	Less: Amount Charged To Operating Expense					
5	During The Twelve Months Ended 06/30/2023		0			
6	Less: Present Rates 06/30/2023			0		
7	Less: Present Rates 06/30/2024				21,452	
8	Less: Present Rates 06/30/2025					21,452
9	Pro Forma Adjustment		$0	$21,452	$0	$22,756
670.7	Customer Accounting And Collecting - Bad Debt		$0	$21,452	$0	$22,756

Witness: Cas Swiz

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Calculation of General Assessment by the Pennsylvania Public Utility Commission, Consumer Advocate and Small Business Advocate Fees

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED RATES 06/30/25 AMOUNT
1	Total Wastewater Sales	$0	$1,815,067	$1,815,067	$3,740,407
2	Estimated General Assessment Fee				
3	Public Utility Commission At 0.004324859316	0	7,850	7,850	16,177
4	Consumer Advocate Fee At 0.001742389526	0	3,163	3,163	6,517
5	Small Business Advocate Fee At 0.000303478942	0	551	551	1,135
6	Damage Prevention Comittee Fee At 0.000000719937	0	1	1	3
7	Subtotal	0	11,565	11,565	23,832
8	Less: Amount Charged To Operating Expenses During				
9	The Twelve Months Ended 06/30/2023	0			
10	Less: Pro Forma Under Present Rates At 06/30/2023		0		
11	Less: Pro Forma Under Present Rates At 06/30/2024			11,565	
12	Less: Pro Forma Under Present Rates At 06/30/2025				11,565
13	Pro Forma Adjustment	$0	$11,565	$0	$12,267

507.1 Taxes Other Than Income $23,832

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Pro Forma State And Federal Income Taxes Under Present And Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED 06/30/25 AMOUNT
1	State Income Tax Per Computation				
2	Shown On Following Page	$0	$46,924	$18,296	$170,117
3	Less: State Income Tax Per Book				
4	Computation Shown On Following Page	0			
5	Less: Present Rates 06/30/2023		0		
6	Less: Present Rates 06/30/2024			46,924	
7	Less: Present Rates 06/30/2025				18,296
8	Pro Forma Adjustment	$0	$46,924	($28,628)	$151,821
9	Federal Income Tax Per Computation				
10	Shown On Following Page	$0	$110,083	$55,080	$422,226
11	Less: Federal Income Tax Per Book				
12	Computation Shown On Following Page	0			
13	Less: Present Rates 06/30/2023		0		
14	Less: Present Rates 06/30/2024			110,083	
15	Less: Present Rates 06/30/2025				55,080
16	Pro Forma Adjustment	$0	$110,083	($55,003)	$367,146

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Brentwood WW Operations
Notes to Statement Of Income
Calculation Of State And Federal Income Taxes

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Utility Operating Income Before Taxes	$0	$0	$659,038	$443,432	$2,343,428
2	Less: Interest Expense	0	0	412,860	474,300	474,161
3	Taxable Operating Income	0	0	246,178	(30,868)	1,869,267
4	Add: Premature Property Losses / Amortizations	0	0	0	70,194	70,194
5	Depr - Straight Line-Remaining Life (Including COR)	0	0	377,948	455,389	455,389
6	Taxable Meals & Entertainment	0	0	0	0	0
7	Total	0	0	377,948	525,583	525,583
8	Deduct:					
9	Tax Depreciation:					
10	State Tax Depreciation Adjustments	0	0	71,424	265,723	265,723
11	Total	0	0	71,424	265,723	265,723
12	State Taxable Income	0	0	552,702	228,992	2,129,127
13	State Income Tax At:					
14	Historic at 8.99%, Future At 8.49% And Fully Projected At 7.99%	0	0	46,924	18,296	170,117
15	Taxable Income After State Income Tax	0	0	505,778	210,696	1,959,010
16	Add:					
17	Federal Tax Depreciation Adjustments	0	0	18,425	51,590	51,590
18	Income Subject To Federal Income Tax	0	0	524,203	262,286	2,010,600
19	Federal Income Tax @ 21%	0	0	110,083	55,080	422,226
20	Excess ADIT	0	0	0	0	0
21	Federal Tax Liability	$0	$0	$110,083	$55,080	$422,226

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Pro Forma Interest Expense Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED 6/30/25 AMOUNT
1	Interest On Long Term Debt Per Computation				
2	Shown On Following Page	$0	$388,397	$447,827	$447,696
3	Less: Interest On Long Term Debt As Per Book				
4	Computation On Following Page	0			
5	Less: Present Rates At 06/30/2023		0		
6	Less: Present Rates At 06/30/2024			388,397	
7	Less: Present Rates At 06/30/2025				447,827
8	Pro Forma Adjustment	$0	$388,397	$59,430	($131)
9	Interest On Wastewater Specific Long Term Debt Per Computation				
10	Shown On Following Page	$0	$23,659	$26,473	$26,465
11	Less: Interest On Wastewater Specific Long Term Debt As Per Book				
12	Computation On Following Page	0			
13	Less: Present Rates At 06/30/2023		0		
14	Less: Present Rates At 06/30/2024			23,659	
15	Less: Present Rates At 06/30/2025				26,473
16	Pro Forma Adjustment	$0	$23,659	$2,814	($8)

Witness: Ann E. Bulkley

Pennsylvania-American Water Company - Brentwood WW Operations

Notes to Statement Of Income

Application of Income Deductions

LINE NO.	DESCRIPTION	PRESENT RATES AT JUNE 30, 2023 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2024 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2025 AMOUNT	CAPITAL STRUCTURE	COST RATE
1	**Capital Structure**									
2	Long Term Debt	$384,896,465	38.42%	4.39%	$562,690,015	42.46%	4.63%	$594,902,431	42.73%	4.76%
3	Long Term Debt - WW Spe	63,458,726	6.33%	2.61%	62,348,860	4.70%	2.64%	61,227,844	4.40%	2.67%
4	Total Debt	448,355,191	44.75%		625,038,875	47.16%		656,130,275	47.13%	
5	Preferred Stock	93,854	0.01%	9.70%	0	0.00%	0.00%	0	0.00%	0.00%
6	Common Equity	553,552,633	55.24%		700,362,769	52.84%		735,975,490	52.87%	
7	Totals	$1,002,001,678	100.00%		$1,325,401,644	100.00%		$1,392,105,765	100.00%	

		PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
8	**Application Of Long Term Debt Interest:**				
9	Original Cost Rate Base	$0	$19,715,584	$22,060,425	$22,053,967
10	Debt Percentage (From Above)	38.42%	42.46%	42.73%	42.73%
11	Debt Portion Of Rate Base	0	8,371,237	9,426,420	9,423,660
12	Interest Cost (From Above)	4.39%	4.63%	4.76%	4.76%
13	Pro Forma Long Term Interest Deduction	$0	$388,397	$447,827	$447,696
14	**Application Of Wastewater Specific Long Term Debt Interest:**				
15	Original Cost Rate Base	$0	$19,715,584	$22,060,425	$22,053,967
16	Debt Percentage (From Above)	6.33%	4.70%	4.40%	4.40%
17	Debt Portion Of Rate Base	0	926,632	970,659	970,375
18	Interest Cost (From Above)	2.61%	2.64%	2.67%	2.67%
19	Pro Forma Wastewater Specific Long Term Interest Deduction	$0	$23,659	$26,473	$26,465

Witness: Ann E. Bulkley

Wastewater
CSS Operations

Pennsylvania-American Water Company - Wastewater CSS Operations
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Exhibit 3-A Revised

Adjustment	Reference Statement No.	Description	Revised 3-A Page No.	Original Filed Amount	Revised Filed Amount	Change
Capital Structure:	Stmt 13R	Update cost rate of LTD WW Specific Financing at June 30, 2025	256R	2.62%	2.67%	0.05%
Rate Base:						
Materials & Supplies	Stmt 4R	Correct Materials and Supplies in revenue requirement model	217R	$176,374	$492,348	$315,974
Expenses:						
Compensation Adjustment	Stmt 5R	Update for 2024 actual merit increase and apply vacancy rate	234R	6,732,957	6,744,611	11,654
Group Insurance Expense	Stmt 5R	Update for 2024 actual merit increase and apply vacancy rate	235R	1,327,093	1,327,139	47
401K, DCP, ESPP	Stmt 5R	Update for 2024 actual merit increase and apply vacancy rate	237R	398,752	399,557	805
Rate Case Expense	Stmt 4R	Update for public input hearings and legal expenses	244R	98,963	102,975	4,012
Service Company	Stmt 5R	Update for 2024 actual merit increase and remove SERP expense	245R	1,033,737	1,038,033	4,296
Taxes, Other than Income:						
Payroll Taxes	Stmt 5R	Concomitant changes related to merit increase and vacancy rate	251R	535,138	536,030	891
Concomitant Changes:						
Pro Forma Statement of Income			204R			
Revenue			205R & 206R			
Summary of Adjustments to Operating Revenues			207R			
Penalties			216R			
Summary of Rate Base Adjustments			217R			
Cash Working Capital Requirements - Expense			221R			
Support of Expense Days			222R			
Accrued and Prepaid Taxes			223R			
Cash Working Capital Requirements - Interest & Dividends			225R			
Summary of Operating Expense Adjustments			233R			
Uncollectible Accounts			247R			
General Assessment			252R			
Income Taxes			253R & 254R			
Interest Expense			255R			
Income Deductions			256R			

Pennsylvania-American Water Company - Wastewater CSS Operations

Pro Forma Statement of Income for the Twelve Months Ending June 30, 2023

June 30, 2024, and June 30, 2025 Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PER BOOKS	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	LINE NO.
1	Operating Revenue	$61,579,392	$17,907,727	$79,487,119	($1,023,743)	$78,463,376	$172,840	$78,636,216	$15,834,928	$94,471,144	1
2	Operating Revenue Deductions:										2
3	Operating Expenses	15,716,772	193,686	15,910,458	3,756,808	19,667,266	1,792,074	21,459,340	186,219	21,645,559	3
4	Depreciation	16,014,537	1,188,684	17,203,221	1,922,156	19,125,377	1,375,582	20,500,959	0	20,500,959	4
5	Amortizations	67,853	0	67,853	25,599	93,452	(97,395)	(3,943)	0	(3,943)	5
6	Taxes, Other Than Income:										6
7	Local Property And Miscellaneous	1,030,760	0	1,030,760	94,049	1,124,809	73,251	1,198,060	0	1,198,060	7
8	Federal Environmental Tax	0	0	0	0	0	0	0	0	0	8
9	Public Utility Realty Taxes	0	0	0	0	0	0	0	0	0	9
10	Payroll Taxes	450,560	0	450,560	73,705	524,265	11,765	536,030	0	536,030	10
11	General Assessment	345,592	157,747	503,339	(6,491)	496,848	1,097	497,945	100,387	598,332	11
12	Other Taxes and Licenses	0	0	0	0	0	0	0	0	0	12
13	Total Taxes Other Than Income	1,826,912	157,747	1,984,659	161,263	2,145,922	86,113	2,232,035	100,387	2,332,422	13
14	**Utility Operating Income Before Income Taxes**	**27,953,318**	**16,367,610**	**44,320,928**	**(6,889,569)**	**37,431,359**	**(2,983,534)**	**34,447,825**	**15,548,322**	**49,996,147**	14
15	Income Taxes:										15
16	State Income Tax	2,210,797	1,367,313	3,578,110	(1,225,716)	2,352,394	(370,625)	1,981,769	1,242,401	3,224,170	16
17	Federal Income Tax	4,586,410	2,908,622	7,495,032	(1,666,223)	5,828,809	(927,745)	4,901,064	3,004,481	7,905,545	17
18	Amortization Of ITC & Excess Deferred Taxes	0	0	0	0	0	0	0	0	0	18
19	Total Income Taxes	6,797,207	4,275,935	11,073,142	(2,891,939)	8,181,203	(1,298,370)	6,882,833	4,246,882	11,129,715	19
20	Total Operating Revenue Deductions	40,423,281	5,816,052	46,239,333	2,973,887	49,213,220	1,858,004	51,071,224	4,533,488	55,604,712	20
21	**Utility Operating Income**	**21,156,111**	**12,091,675**	**33,247,786**	**(3,997,630)**	**29,250,156**	**(1,685,164)**	**27,564,992**	**11,301,440**	**38,866,432**	21
22	Income Deductions:										22
23	Interest On Long Term Debt	6,695,940	0	6,695,940	2,244,821	8,940,761	997,194	9,937,955	(1,071)	9,936,884	23
24	Amortization Of Debt Discount Expense	0	0	0	0	0	0	0	0	0	24
25	Interest On Notes Payable To Others	673,556	0	673,556	(110,424)	563,132	24,333	587,465	(63)	587,402	25
26	Total Income Deductions	7,369,496	0	7,369,496	2,134,397	9,503,893	1,021,527	10,525,420	(1,134)	10,524,286	26
27	**Net Income**	**$13,786,615**	**$12,091,675**	**$25,878,290**	**($6,132,027)**	**$19,746,263**	**($2,706,691)**	**$17,039,572**	**$11,302,574**	**$28,342,146**	27
28	Preferred Dividends	0		0		0		0		0	28
29	**Net Income To Common**	**$13,786,615**		**$25,878,290**		**$19,746,263**		**$17,039,572**		**$28,342,146**	29

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER CSS OPERATIONS

TOTAL REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2023 AND JUNE 30, 2024

LINE NO.	ACCT. NO.	CUSTOMER CLASS	PER BOOKS 12 ME June 2023	UNBILLED EADIT, DSIC, AMP ADJUSTMENTS	ANNUALIZE 2023 RATE CHANGE	CUSTOMER GROWTH (LOSS) & USAGE ADJUSTMENTS	OTHER REVENUE ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2023	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION ADJUSTMENTS	OTHER REVENUE ADJUSTMENTS	PRO FORMA PRESENT RATES 12 ME June 2024
1		OPERATING REVENUES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2		METERED SALES										
3	522.1	RESIDENTIAL	$36,130,486	($1,303,189)	$12,211,803	$63,668	$747	$47,103,514	$7,407	($799,671)		$46,311,250
4	522.2	COMMERCIAL	16,142,324	(711,113)	4,740,927	103,860	(72,555)	20,203,444	81,867	(275,378)		20,009,933
5	522.3	INDUSTRIAL	2,095,530	(96,104)	365,045		(119,925)	2,244,546				2,244,546
6	522.4	MUNICIPAL	813,279	(16,198)	220,091		0	1,017,172	(32,847)			984,325
7	522.4	BULK	5,899,357	(346,137)	2,687,597		0	8,240,817				8,240,817
8		**TOTAL METERED SALES**	**$61,080,975**	**($2,472,740)**	**$20,225,463**	**$167,528**	**($191,734)**	**$78,809,493**	**$56,427**	**($1,075,049)**	**$0**	**$77,790,871**
9		UNMETERED SALES										
10	522.1	RESIDENTIAL						$0				$0
11	522.2	COMMERCIAL						0				0
12	522.3	INDUSTRIAL						0				0
13	522.4	MUNICIPAL						0				0
14	522.4	BULK						0				0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$61,080,975**	**($2,472,740)**	**$20,225,463**	**$167,528**	**($191,734)**	**$78,809,493**	**$56,427**	**($1,075,049)**	**$0**	**$77,790,871**
17		OTHER OPERATING REVENUES										
18	530	GUARANTEED REVENUES	$0					$0				$0
19	532	LATE PAYMENT FEES	443,629				(47,454)	396,175			(5,121)	391,054
20	536	MISC SERVICE REVENUES	55,412					55,412				55,412
21	534	RENTS FROM PROPERTIES						0				0
22	535	INTERCOMPANY RENTS						0				0
23	523	OTHER WW REVENUES	(624)	$36,990			189,674	226,040				226,040
24		**TOTAL OTHER OPERATING**										
25		**REVENUES**	**$498,417**	**$36,990**	**$0**	**$0**	**$142,220**	**$677,627**	**$0**	**$0**	**($5,121)**	**$672,506**
26		**TOTAL OPERATING REVENUES**	**$61,579,392**	**($2,435,750)**	**$20,225,463**	**$167,528**	**($49,514)**	**$79,487,119**	**56,427**	**($1,075,049)**	**(5,121)**	**$78,463,376**

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER CSS OPERATIONS

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

LINE NO.	ACCT. NO.	CUSTOMER CLASSIFICATION	PRO FORMA PRESENT RATES 12 ME June 2024	CUSTOMER GROWTH (LOSS) ADJUSTMENTS	USAGE NORMALIZATION	ANNUALIZE DSIC ADJUSTMENT	OTHER REVENUE ADJUSTMENT	PRO FORMA PRESENT RATES 12 ME June 2025	PERCENT	AMOUNT	PRO FORMA PROPOSED RATES
1		OPERATING REVENUES	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
2		METERED SALES									
3	522.1	RESIDENTIAL	$46,311,250	$14,813	($644,138)	$493,365		$46,175,290	-5.04%	($2,327,412)	$43,847,878
4	522.2	COMMERCIAL	20,009,933	163,736	(192,068)	215,801		20,197,402	87.95%	17,763,451	37,960,852
5	522.3	INDUSTRIAL	2,244,546			24,241		2,268,787	87.95%	1,995,380	4,264,167
6	522.4	MUNICIPAL	984,325		(3,370)	10,594		991,549	87.95%	872,059	1,863,608
7	522.4	BULK	8,240,817			89,001		8,329,818	-30.59%	(2,547,753)	5,782,065
8		**TOTAL METERED SALES**	**$77,790,871**	**$178,549**	**($839,576)**	**$833,002**	**$0**	**$77,962,846**	**20.21%**	**$15,755,724**	**$93,718,570**
9		UNMETERED SALES									
10	522.1	RESIDENTIAL	$0					$0	0.00%	0	$0
11	522.2	COMMERCIAL	0					0	0.00%	0	0
12	522.3	INDUSTRIAL	0					0	0.00%	0	0
13	522.4	MUNICIPAL	0					0	0.00%	0	0
14	522.4	BULK	0					0	0.00%	0	0
15		**TOTAL UNMETERED SALES**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**0.00%**	**$0**	**$0**
16		**TOTAL WASTEWATER SALES**	**$77,790,871**	**$178,549**	**($839,576)**	**$833,002**	**$0**	**$77,962,846**	**20.21%**	**$15,755,724**	**$93,718,570**
17		OTHER OPERATING REVENUES									
18	530	GUARANTEED REVENUES	$0					$0	0.00%	$0	$0
19	532	LATE PAYMENT FEES	391,054				$865	391,919	20.21%	79,204	471,123
20	536	MISC SERVICE REVENUES	55,412					55,412	0.00%	0	55,412
21	534	RENTS FROM PROPERTIES	0					0	0.00%	0	0
22	535	INTERCOMPANY RENTS	0					0	0.00%	0	0
23	523	OTHER WW REVENUES	226,040					226,040	0.00%	0	226,040
24 25		**TOTAL OTHER OPERATING REVENUES**	**$672,506**	**$0**	**$0**	**$0**	**$865**	**$673,370**	**11.76%**	**$79,204**	**$752,574**
26		**TOTAL OPERATING REVENUES**	**$78,463,376**	**$178,549**	**($839,576)**	**$833,002**	**$865**	**$78,636,216**	**20.14%**	**$15,834,928**	**$94,471,144**

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER CSS OPERATIONS

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	ADJUSTMENT	PRESENT RATES 6/30/23 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/24 AMOUNT	ADJUSTMENT	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$61,579,392				
2	Present Rates At 06/30/2024				$79,487,119		
3	Present Rates At 06/30/2025						$78,463,376
4							
5	TCJA & EADIT Adjustment	36,990					
6	Unbilled Adjustment	(1,981,963)					
6	DSIC Adjustment	(572,047)				833,002	
7	Arrearage Management Program Adjustment	81,270					
8	Annualize 2023 Rate Change	20,225,463					
9	Change in Customers	167,528		89,274		178,549	
10	Usage Normalization			(1,107,896)		(839,576)	
11	IPP Revenue Adjustment	(2,060)					
12	Late Payment Fee Adjustment	(47,454)		(5,121)		865	
13							
14							
15							
16							
17							
18							
19							
20							
21	Pro Forma Adjustment		17,907,727		(1,023,743)		172,840
22	Pro Forma Present Rates At June 30, 2023		$79,487,119				
23	Pro Forma Present Rates At June 30, 2024				$78,463,376		
24	Pro Forma Present Rates At June 30, 2025						$78,636,216

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Revenues

Penalties

The following adjustment reflects the annualization of revenues associated with changes imposed during twelve months ending June 30, 2023 and projected to be imposed during twelve months ending June 30, 20 twelve months ending June 30, 2025. Additionally, annualized late payment charges are calculated based on revenues at the proposed rate level.

LINE NO.	DESCRIPTION	PER BOOKS 6/30/23	PRESENT RATES 6/30/23	PRESENT RATES 6/30/24	PRESENT RATES 6/30/25	PROPOSED RATES 6/30/25
1	Total Billed Wastewater Sales	$59,099,012	$78,999,166	$77,980,544	$78,152,519	$93,908,242
2	% Of Penalties To Total					
3	Total Company Sales - 2 Year Avg	0.5027%	0.5027%	0.5027%	0.5027%	0.5027%
4	Penalties	443,629	397,129	392,008	392,873	472,077
5	Less: Per Books At 06/30/2023		443,629			
6	Less: Present Rates At 06/30/2023			397,129		
7	Less: Present Rates At 06/30/2024				392,008	
8	Less: Present Rates At 06/30/2025					392,873
9	Pro Forma Adjustments		($46,500)	($5,121)	$865	$79,204

Witness: Charles Rea

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Summary of Rate Base Adjustments

LINE NO.	DESCRIPTION		DEPRECIATED ORIGINAL COST 6/30/23	DEPRECIATED ORIGINAL COST 6/30/24	DEPRECIATED ORIGINAL COST 6/30/25	DEPRECIATED ORIGINAL COST PROPOSED
1	Non-Depreciable Plant		$4,463,355	$4,463,355	$4,463,355	$4,463,355
2	Depreciable Plant		739,866,378	812,897,332	863,395,439	863,395,439
3	Total Utility Plant In Service		744,329,733	817,360,687	867,858,794	867,858,794
4	Deduct:					
5	Contributions In Aid Of Construction		11,746,599	11,879,265	12,011,932	12,011,932
6	Customer Advances For Construction		0	0	0	0
7	Excluded Property		0	0	0	0
8	Sub-Total		11,746,599	11,879,265	12,011,932	12,011,932
9	Net Utility Plant In Service		732,583,134	805,481,422	855,846,862	855,846,862
10	Accumulated Depreciation		281,138,370	286,523,462	297,870,665	297,870,665
11	Depreciated Utility Plant In Service		451,444,764	518,957,960	557,976,197	557,976,197
12	Add:					
13	Materials And Supplies		492,348	492,348	492,348	492,348
14	Cash Working Capital - Expenses		1,158,034	1,726,266	1,881,933	1,881,933
15	Accrued And Prepaid Taxes		200,108	251,687	298,175	245,319
16	Acquisition Adjustments		3,978,967	3,832,491	3,686,015	3,686,015
17	Other Additions		0	0	0	0
18	Deduct:					
19	Cash Working Capital - Int And Div		626,091	807,438	894,204	894,111
20	Unamortized Itc (3%)		0	0	0	0
21	Extension Deposits In Suspense		0	0	0	0
22	Tax Cuts and Jobs Act -Stub Period		220,069	127,427	64,842	64,842
23	Other Deductions		0	0	0	0
24	Deferred Taxes		60,218,570	70,480,141	73,821,198	73,821,198
25	Total Rate Base Elements		$396,209,491	$453,845,746	$489,554,424	$489,501,661
26	Utility Operating Income					
27	Per Books	$21,156,111	5.34%	4.66%	4.32%	4.32%
28	Present Rates At 06/30/2023	33,247,786	8.39%	-	-	-
29	Present Rates At 06/30/2024	29,250,156	-	6.44%	-	-
30	Present Rates At 06/30/2025	27,564,992	-	-	5.63%	-
31	Proposed Rates At 06/30/2025	38,866,432	-	-	-	7.94%

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for wastewater service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months enc June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2025.

The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2023				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	$59,597,429	$79,487,119	$78,463,376	$78,636,216
9	Lag Days	50.6	50.6	50.6	50.6
10	Dollar Days	$3,016,225,765	$4,022,842,937	$3,971,031,306	$3,979,778,738
11	Total Billed Revenue	$59,597,429	$79,487,119	$78,463,376	$78,636,216
12	Total Dollar Days	$3,016,225,765	$4,022,842,937	$3,971,031,306	$3,979,778,738
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	50.6	50.6	50.6	50.6
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	23.3	23.2	17.9	18.0
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	27.3	27.4	32.7	32.6
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		$15,426,249	$19,268,802	$21,070,608
20	Operating Expenses Per Day (Line 20 / 365 Days)		42,264	52,791	57,728
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		$1,158,034	$1,726,266	$1,881,933

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Support of Expense Days

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PER BOOKS AMOUNT	PER BOOKS DOLLAR DAYS	PRESENT RATES 06/30/2023 AMOUNT	PRESENT RATES 06/30/2023 DOLLAR DAYS	PRESENT RATES 06/30/2024 AMOUNT	PRESENT RATES 06/30/2024 DOLLAR DAYS	PRESENT RATES 06/30/2025 AMOUNT	PRESENT RATES 06/30/2025 DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	$6,367,755	$76,758,192	$6,367,755	$76,758,192	$7,115,084	$85,766,646	$7,280,640	$87,762,291
2	Group Insurance	11.00	1,124,750	12,372,250	1,124,750	12,372,250	1,288,086	14,168,946	1,327,139	14,598,529
3	OPEB's and VEBA	0.00	68,423	0	68,423	0	32,234	0	32,234	0
4	Pension	(6.41)	245,439	(1,574,484)	245,439	(1,574,484)	245,439	(1,574,484)	245,439	(1,574,484)
5	Purchased Power	31.00	1,436,870	44,548,972	1,442,990	44,738,718	1,711,501	53,063,680	1,691,208	52,434,512
6	Purchased Water	35.22	0	0	0	0	0	0	0	0
7	Chemicals	47.20	1,218,032	57,493,126	1,218,032	57,493,126	2,020,199	95,356,736	2,129,667	100,523,807
8	Miscellaneous	30.46	2,959,367	90,143,357	2,696,844	82,146,814	3,048,637	92,862,552	3,209,124	97,751,042
9	Transportation	54.08	546,312	29,546,896	546,312	29,546,896	633,322	34,252,770	690,475	37,343,849
10	Ins Other Than Group	(69.48)	84,146	(5,846,080)	84,146	(5,846,080)	1,395,214	(96,933,103)	1,434,260	(99,645,841)
11	Service Company	12.05	0	0	0	0	0	0	1,038,033	12,512,657
12	Waste Disposal	41.96	1,344,100	56,398,984	1,344,100	56,398,984	1,491,628	62,589,319	1,704,931	71,539,599
13	Telephone	3.88	120,976	469,628	120,976	469,628	120,976	469,628	120,976	469,628
14	Rents	(13.36)	16,425	(219,391)	16,425	(219,391)	16,425	(219,391)	16,425	(219,391)
15	Natural Gas	33.33	150,057	5,001,845	150,057	5,001,845	150,057	5,001,845	150,057	5,001,845
16	Totals		$15,682,652	$365,093,295	$15,426,249	$357,286,498	$19,268,802	$344,805,144	$21,070,608	$378,498,043
17	Average Lag			23.3		23.2		17.9		18.0
18	Sum. Of Expense Pro Forma Present Rates & Payroll Taxes		$16,167,332		$16,361,018		$20,191,531		$21,995,370	
19	Uncollectibles		484,680		934,769		922,729		924,762	
20	Amortizations		0		0		0		0	
21	Sum Of Other Expenses		12,723,285		12,729,405		16,220,165		17,861,484	
22	Miscellaneous		$2,959,367		$2,696,844		$3,048,637		$3,209,124	

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Accrued and Prepaid Taxes

LINE NO.	DESCRIPTION	NET REVENUE LAG DAYS FUTURE	PRESENT RATES 06/30/2023 TAXES PAYABLE	PRESENT RATES 06/30/2023 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2024 TAXES PAYABLE	PRESENT RATES 06/30/2024 ACCRUED TAXES ADJUSTMENT	PRESENT RATES 06/30/2025 TAXES PAYABLE	PRESENT RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT	PROPOSED RATES 06/30/2025 TAXES PAYABLE	PROPOSED RATES 06/30/2025 ACCRUED TAXES ADJUSTMENT
1	General Assessment	190.2	$503,339	$262,288	$496,848	$258,905	$497,945	$259,477	$598,332	$311,788
2	Public Utility Realty Tax	47.4	0	0	0	0	0	0	0	0
3	Local Property Tax	64.6	1,030,760	182,331	1,124,809	198,967	1,198,060	211,924	1,198,060	211,924
4	State Income Tax	13.6	3,578,110	133,321	2,352,394	87,651	1,981,769	73,841	3,224,170	120,133
5	Federal Income Tax	(18.4)	7,495,032	(377,832)	5,828,809	(293,836)	4,901,064	(247,067)	7,905,545	(398,526)
6	Totals			$200,108		$251,687		$298,175		$245,319

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

The payment of interest on the Company's long term debt is made six months in arrears. Payment of interest on the Company's short term debt is made monthly in arrears. The payment of dividends on the Company's preferred stock is made quarterly in arrears. The average lag days of interest and dividend payments and the deduction of the average lag days for the receipt of revenue is calculated below to determine cash working capital requirements.

LINE NO.	DESCRIPTION								
1	**Average Lag Calculation**	**LONG TERM INTEREST**	**SHORT TERM INTEREST**	**PREFERRED DIVIDEND**					
2	Future Revenue Lag Days	50.6	50.6	50.6					
3	Less: Interest Payments Lag Days	81.6	15.0	46.4					
4	Average Lag Between The Payment	(31.0)	35.6	4.2					
5	Of Interest And The Receipt								
6	Of Revenues								
		PRESENT RATES		**PRESENT RATES**		**PRESENT RATES**		**PROPOSED AMOUNT**	
7	**Long Term Debt**	**6/30/23**		**6/30/24**		**6/30/25**		**6/30/25**	
8	Working Capital Requirements								
9	Pro Forma Annual Interest Expense	$6,695,940		$8,940,761		$9,937,955		$9,936,884	
10	Interest Expense Per Day								
11	(Line 9 / 365 Days)	18,345		24,495		27,227		27,224	
12	Cash Working Capital Required								
13	(Line 4 Col.1 X Line 11)		(568,878)		(759,590)		(844,309)		(844,216)
14	**Long Term Debt - Wastewater Specific**								
15	Working Capital Requirements								
16	Pro Forma Annual Interest Expense	673,556		563,132		587,465		587,402	
17	Interest Expense Per Day								
18	(Line 16 / 365 Days)	1,845		1,543		1,609		1,609	
19	Cash Working Capital Required								
20	(Line 4 Col.2 X Line 18)		(57,213)		(47,848)		(49,895)		(49,895)
21	**Preferred Dividends**								
22	Working Capital Requirements								
23	Pro Forma Annual Dividend Expense	0		0		0		0	
24	Dividend Expense Per Day								
25	(Line 23 / 365 Days)	0		0		0		0	
26	Cash Working Capital Required								
27	(Line 4 Col.3 X Line 25)		0		0		0		0
28	Total Cash Working Capital Required								
29	(Line 13 + Line 20 + Line 27)		($626,091)		($807,438)		($894,204)		($894,111)

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Summary of Operating Expense Adjustments

LINE NO.	DESCRIPTION	6/30/23 DETAIL	PRESENT RATES 6/30/23 AMOUNT	6/30/24 DETAIL	PRESENT RATES 6/30/24 AMOUNT	6/30/25 DETAIL	PRESENT RATES 6/30/25 AMOUNT
1	Per Books		$15,716,772				
2	Present Rates At 06/30/2023				$15,910,458		
3	Present Rates At 06/30/2024						$19,667,266
4	Proposed Rates At 06/30/2025						
5	Compensation	$0		$673,624		$153,791	
6	Group Insurance	0		163,336		39,053	
7	Other Post Employment Benefits & VEBA	0		(36,189)		-	
8	Pension	0		-		-	
9	Purchased Power	0		301,872		-	
10	Waste Disposal	0		147,528		213,303	
11	Chemicals	0		802,167		109,468	
12	Change In Consumption Expense	6,120		(33,361)		(20,293)	
13	Transportation Expense	0		87,010		57,153	
14	Insurance Other Than Group	0		1,311,068		39,046	
15	Regulatory Expense (Rate Case Expense)	0		102,975		-	
16	Service Company Expense	0		-		1,038,033	
17	Postage and Customer Accounting	0		-		-	
18	Acquisition O&M	0		-		-	
19	401K & Defined Contribution Plan	0		(158,578)		9,499	
20	Rent Expense	0		-		-	
21	Miscellaneous Adjustments	(262,523)		407,396		150,988	
22	Uncollectibles	450,089		(12,040)		2,033	
23	Pro Forma Adjustments		193,686		3,756,808		1,792,074
24	Present Rates At 06/30/2023		$15,910,458				
25	Present Rates At 06/30/2024				$19,667,266		
26	Present Rates At 06/30/2025						$21,459,340

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Compensation

The following adjustment sets forth a summary of the Company's annualization of labor expense. The pro forma payroll for the future test years were developed by applying pay rates and associated performance pay that will become effective by June 30, 2024 and June 30, 2025 to the Company's full complement of employees.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Salary and Wages	$8,147,821	$8,336,557
2	Annualized Performance Plan	317,141	325,928
3	Less: 22.14% Capitalized portion not charged to operating expense	1,874,143	1,917,874
4	Sub-Total	6,590,819	6,744,611
5	Less: Amount Charged To Operating Expense		
6	During The Twelve Months Ended 06/30/23	5,917,195	
7	Less: Amount Charged To Present Rates		
8	During the Twelve Months Ended 06/30/24		6,590,819
9	Pro Forma Adjustment	$673,624	$153,791
	601.3 Salary and Wages - Water Treatment	$248,336	$56,696
	601.4 Salary and Wages - Water Treatment	77,233	17,633
	601.5 Salary and Wages - Transmission & Distribution	66,389	15,157
	601.6 Salary and Wages - Transmission & Distribution	156,318	35,688
	601.7 Salary and Wages - Customer Accounting	-	-
	601.8 Salary and Wages - Administrative and General	125,349	28,618

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Group Insurance

The adjustment of the group insurance cost is based on the January 2024 premiums annualized for the future test year number of employees, less the annualized employee contribution, and adjusted for the portion not charged to operations. The fully projected future test year was developed by adjusting the annualized 2024 amount by a 3 year average of 3.03%.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Group Insurance Cost	$1,654,362	$1,704,520
2	Less: 22.14% Not Charged To Operating Expense	366,276	377,381
3	Sub-Total	1,288,086	1,327,139
4	Less: Amount Charged To Operating Expense		
5	During the Twelve Months Ended 06/30/23	1,124,750	
6	Less: Amount Charged To Operating Expense		
7	During the Twelve Months Ended 06/30/24		1,288,086
8	Pro Forma Adjustment	$163,336	$39,053
	604.8 A&G Employees Pension And Benefits	$163,336	$39,053

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

401K, Defined Contribution Plan (DCP) and Employee Stock Purchase Plan (ESPP) Expense

The following adjustment is being made to annualize 401K, DCP contributions and ESPP contributions based on the annualized compensation claim at June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized 401K - Company Match	$132,488	$136,027
2	Annualized DCP	353,881	362,294
3	Less: 22.14% Not Charged To Operating Expense	107,682	110,328
4	Sub-Total	378,687	387,993
5	Annualized ESPP	11,371	11,564
6	Less: Amount Charged To Operating Expense	548,636	390,058
7	Pro Forma Adjustment	($158,578)	$9,499
	604.8 Employee Pension And Benefits AG	($158,578)	$9,499

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Regulatory Expense (Rate Case Expense)

The following adjustment reflects the estimated cost of this rate case normalized over a two-year period. Additionally, there is an adjustment for a 10 year amortization of the Customer Class Demand Study and a 2 year amortization of the Stormwater Fee Feasibility Study.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT
1	Rate Case Expense Allocation	$175,514
2	Normalized Over 2 Years	87,757
3	Plus Allocation of Amortization of Demand Study	1,405
4	Plus Allocation of Amortization of Stormwater Fee	13,813
5	Feasibility Study	
6	Less: Amount Charged To Operating Expense	
7	During The Twelve Months Ended 06/30/2023	-
8	Pro Forma Adjustment	$102,975
	666.8 Regulatory Commission Expense	$102,975

Witness: Stacey D. Gress
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Service Company

This adjustment reflects the cost of services provided by American Water Works Service Company (AWWSC), for the twelve months ended June 30, 2024, and June 30, 2025. An allocation factor based on customer counts was applied to each cost of service area to allocate a portion of the total projected Service Company costs.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Service Company Cost	$0	$1,038,033
2	Less: Amount Charged To Operating Expense		
3	During The Twelve Months Ended 06/30/23	-	
4	And Present Rates 06/30/24		-
5	Pro Forma Adjustment	$0	$1,038,033
	634.8 AG - Contract Services - Management	$0	$1,038,033

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Operating Expenses

Calculation of Uncollectible Accounts Expenses

The following adjustment develops the Company's uncollectible accounts expense claim calculated on the ratio of actual per books revenue to net write-offs. This ratio is applied to pro forma sales at present and proposed rates.

LINE NO	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Total Sales	$59,597,429	$79,487,119	$78,463,376	$78,636,216	$94,471,144
2	2 Year Average	1.1760%	1.1760%	1.1760%	1.1760%	1.1760%
3	Annualized Uncollectible Expense		$934,769	$922,729	$924,762	$1,110,981
4	Less: Amount Charged To Operating Expense					
5	During The Twelve Months Ended 06/30/2023		484,680			
6	Less: Present Rates 06/30/2023			934,769		
7	Less: Present Rates 06/30/2024				922,729	
8	Less: Present Rates 06/30/2025					924,762
9	Pro Forma Adjustment		$450,089	($12,040)	$2,033	$186,219
670.7	Customer Accounting And Collecting - Bad Debt		$450,089	($12,040)	$2,033	$186,219

Witness: Cas Swiz

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Taxes, Other than Income

Payroll Taxes

The following adjustment is being made to annualize payroll tax expense based on the annualized compensation claim at June 30, 2024 and June 30, 2025.

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/2024 AMOUNT	PRESENT RATES 6/30/2025 AMOUNT
1	Annualized Payroll Taxes	$673,343	$688,453
2	Less: 22.14% Not Charged To Operating Expense	149,078	152,423
3	Sub-Total	524,265	536,030
4	Less: Amount Charged To Operating Expense	450,560	524,265
5	Pro Forma Adjustment	$73,705	$11,765
	408.12 - Taxes - Payroll	$73,705	$11,765

Witness: Lori O'Malley
Reference: Exhibit No. 3-B

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Calculation of General Assessment by the Pennsylvania Public Utility Commission, Consumer Advocate and Small Business Advocate Fees

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED RATES 06/30/25 AMOUNT
1	Total Wastewater Sales	$78,999,166	$77,980,544	$78,152,519	$93,908,242
2	Estimated General Assessment Fee				
3	Public Utility Commission At 0.004324859316	341,660	337,255	337,999	406,140
4	Consumer Advocate Fee At 0.001742389526	137,647	135,872	136,172	163,625
5	Small Business Advocate Fee At 0.000303478942	23,975	23,665	23,718	28,499
6	Damage Prevention Comittee Fee At 0.000000719937	57	56	56	68
7	Subtotal	503,339	496,848	497,945	598,332
8	Less: Amount Charged To Operating Expenses During				
9	The Twelve Months Ended 06/30/2023	345,592			
10	Less: Pro Forma Under Present Rates At 06/30/2023		503,339		
11	Less: Pro Forma Under Present Rates At 06/30/2024			496,848	
12	Less: Pro Forma Under Present Rates At 06/30/2025				497,945
13	Pro Forma Adjustment	$157,747	($6,491)	$1,097	$100,387
	507.1 Taxes Other Than Income				$252,740

Witness: Stacey D. Gress

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Pro Forma State And Federal Income Taxes Under Present And Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT	PROPOSED 06/30/25 AMOUNT
1	State Income Tax Per Computation				
2	Shown On Following Page	$3,578,110	$2,352,394	$1,981,769	$3,224,170
3	Less: State Income Tax Per Book				
4	Computation Shown On Following Page	2,210,797			
5	Less: Present Rates 06/30/2023		3,578,110		
6	Less: Present Rates 06/30/2024			2,352,394	
7	Less: Present Rates 06/30/2025				1,981,769
8	Pro Forma Adjustment	$1,367,313	($1,225,716)	($370,625)	$1,242,401
9	Federal Income Tax Per Computation				
10	Shown On Following Page	$7,495,032	$5,828,809	$4,901,064	$7,905,545
11	Less: Federal Income Tax Per Book				
12	Computation Shown On Following Page	4,586,410			
13	Less: Present Rates 06/30/2023		7,495,032		
14	Less: Present Rates 06/30/2024			5,828,809	
15	Less: Present Rates 06/30/2025				4,901,064
16	Pro Forma Adjustment	$2,908,622	($1,666,223)	($927,745)	$3,004,481

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Wastewater CSS Operations
Notes to Statement Of Income
Calculation Of State And Federal Income Taxes

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
1	Utility Operating Income Before Taxes	$27,953,318	$44,320,928	$37,431,359	$34,447,825	$49,996,147
2	Less: Interest Expense	7,369,496	7,369,496	9,503,893	10,525,420	10,524,286
3	Taxable Operating Income	20,583,822	36,951,432	27,927,466	23,922,405	39,471,861
4	Add: Premature Property Losses / Amortizations	67,853	67,853	93,452	(3,943)	(3,943)
5	Depr - Straight Line-Remaining Life (Including COR)	16,014,537	17,203,221	19,125,377	20,500,959	20,500,959
6	Taxable Meals & Entertainment	5,154	5,154	5,154	5,154	5,154
7	Total	16,087,544	17,276,228	19,223,983	20,502,170	20,502,170
8	Deduct:					
9	Tax Depreciation:					
10	State Tax Depreciation Adjustments	12,079,626	14,426,657	19,443,631	19,621,464	19,621,464
11	Total	12,079,626	14,426,657	19,443,631	19,621,464	19,621,464
12	State Taxable Income	24,591,740	39,801,003	27,707,818	24,803,111	40,352,567
13	State Income Tax At:					
14	Historic at 8.99%, Future At 8.49% And Fully Projected At 7.99%	2,210,797	3,578,110	2,352,394	1,981,769	3,224,170
15	Taxable Income After State Income Tax	22,380,943	36,222,893	25,355,424	22,821,342	37,128,397
16	Add:					
17	Federal Tax Depreciation Adjustments	2,401,528	2,401,528	5,015,894	3,809,471	3,809,471
18	Income Subject To Federal Income Tax	24,782,471	38,624,421	30,371,318	26,630,813	40,937,868
19	Federal Income Tax @ 21%	5,204,319	8,111,128	6,377,977	5,592,471	8,596,952
20	Excess ADIT	617,909	616,096	549,168	691,407	691,407
21	Federal Tax Liability	$4,586,410	$7,495,032	$5,828,809	$4,901,064	$7,905,545

Witness: Melissa Ciullo

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Pro Forma Interest Expense Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED 6/30/25 AMOUNT
1	Interest On Long Term Debt Per Computation				
2	Shown On Following Page	$6,695,940	$8,940,761	$9,937,955	$9,936,884
3	Less: Interest On Long Term Debt As Per Book				
4	Computation On Following Page	6,695,940			
5	Less: Present Rates At 06/30/2023		6,695,940		
6	Less: Present Rates At 06/30/2024			8,940,761	
7	Less: Present Rates At 06/30/2025				9,937,955
8	Pro Forma Adjustment	$0	$2,244,821	$997,194	($1,071)
9	Interest On Wastewater Specific Long Term Debt Per Computation				
10	Shown On Following Page	$673,556	$544,615	$587,465	$587,402
11	Less: Interest On Wastewater Specific Long Term Debt As Per Book				
12	Computation On Following Page	673,556			
13	Less: Present Rates At 06/30/2023		673,556		
14	Less: Present Rates At 06/30/2024			544,615	
15	Less: Present Rates At 06/30/2025				587,465
16	Pro Forma Adjustment	$0	($128,941)	$42,850	($63)

Witness: Ann E. Bulkley

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Statement Of Income

Application of Income Deductions

LINE NO.	DESCRIPTION	PRESENT RATES AT JUNE 30, 2023 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2024 AMOUNT	CAPITAL STRUCTURE	COST RATE	PRESENT RATES AT JUNE 30, 2025 AMOUNT	CAPITAL STRUCTURE	COST RATE
1	**Capital Structure**									
2	Long Term Debt	$384,896,465	38.42%	4.39%	$562,690,015	42.46%	4.63%	$594,902,431	42.73%	4.76%
3	Long Term Debt - WW Spe	63,458,726	6.33%	2.61%	62,348,860	4.70%	2.64%	61,227,844	4.40%	2.67%
4	Total Debt	448,355,191	44.75%		625,038,875	47.16%		656,130,275	47.13%	
5	Preferred Stock	93,854	0.01%	9.70%	0	0.00%	0.00%	0	0.00%	0.00%
6	Common Equity	553,552,633	55.24%		700,362,769	52.84%		735,975,490	52.87%	
7	Totals	$1,002,001,678	100.00%		$1,325,401,644	100.00%		$1,392,105,765	100.00%	

		PRESENT RATES 6/30/23 AMOUNT	PRESENT RATES 6/30/24 AMOUNT	PRESENT RATES 6/30/25 AMOUNT	PROPOSED RATES 6/30/25 AMOUNT
8	**Application Of Long Term Debt Interest:**				
9	Original Cost Rate Base	$396,209,491	$453,845,746	$489,554,424	$489,501,661
10	Debt Percentage (From Above)	38.42%	42.46%	42.73%	42.73%
11	Debt Portion Of Rate Base	152,223,686	192,702,904	209,186,605	209,164,060
12	Interest Cost (From Above)	4.39%	4.63%	4.76%	4.76%
13	Pro Forma Long Term Interest Deduction	$6,695,940	$8,940,761	$9,937,955	$9,936,884
14	**Application Of Wastewater Specific Long Term Debt Interest:**				
15	Original Cost Rate Base	$396,209,491	$453,845,746	$489,554,424	$489,501,661
16	Debt Percentage (From Above)	6.33%	4.70%	4.40%	4.40%
17	Debt Portion Of Rate Base	25,080,061	21,330,750	21,540,395	21,538,073
18	Interest Cost (From Above)	2.61%	2.64%	2.67%	2.67%
19	Pro Forma Wastewater Specific Long Term Interest Deduction	$673,556	$544,615	$587,465	$587,402

Witness: Ann E. Bulkley

Pa. P.U.C. v. Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)

OCA Responses to PAWC Interrogatories
Set III

PAWC-OCA-III-3. Refer to OCA Statement No. 1, page 62, lines 13-16, and page 63, lines 10-12. This testimony states that OCA proposes the additional notice be provided through a bill insert at the end of the rate proceeding and also that under OCA's proposal, customers would not have to wait until their first bill after the increase to find out the bill impact from the case. Please clarify how the OCA proposes that the Company provide a notice through a bill insert at the end of the rate proceeding but prior to the new rates appearing on customer bills.

Response:

With regard to timing, the OCA would support a direct mailing of the notice at the end of the case, just as PAWC used direct mailing for the notices at the time of its filing. The notice – however delivered – should include a link to the alternative ratemaking information posted on PAWC's website as required by regulation or Commission Order, and Section 1330(c)(1) and (2). Additionally, the website posting with the alternative ratemaking information could include information about the bill impact of the Commission's order at three usage levels.

The OCA's main concern about the notice at the end of the case is that, currently, the information customers might see at the end of the case is limited to press releases that use typical usage level and that information is not meaningful for most customers. Because of this, when customers receive the first bills containing the new rates, they have not received any information regarding the Commission's final order or any meaningful information about the bill impact of that order.

Dated: February 15, 2024

Pa. P.U.C. v. Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)

OCA Responses to PAWC Interrogatories
Set III

PAWC-OCA-III-4. To the OCA's knowledge, is any other Pennsylvania utility under Commission jurisdiction required to comply with the additional notice requirements proposed by Ms. Hoover in OCA Statement No. 1? If yes, provide a list of such utility(ies) and supporting information. If not, explain why PAWC should be subject to requirements that are beyond those required by regulation and beyond those required of every other Pennsylvania utility.

Response:

This is the first time that OCA has proposed this addition to a notice in a base rate case. The OCA has recommended this addition in two recent application proceedings. *Application of Pennsylvania-American Water Company, for approval of the acquisition of substantially all of the assets of the wastewater collection and treatment system owned by the Butler Area Sewer Authority*, Docket No. A-2022-3037047 (Order entered November 9, 2023) and *Application of Pennsylvania-American Water Company to Acquire the Brentwood Borough Wastewater Assets*, Docket No. A-2021-3024058. The OCA's proposed revision provides information that is readily available to PAWC and is minimal information for PAWC to add, yet provides useful information for its customers.

Dated: February 15, 2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)**
	:	**R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Ashley E. Everette**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 1-R and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024

Ashley E. Everette

Ashley E. Everette

Statement No. 2

Runzer

PAWC STATEMENT NO. 2

DIRECT TESTIMONY
OF
JIM RUNZER

DESCRIBING
PENNSYLVANIA-AMERICAN WATER COMPANY'S OPERATIONS, WATER QUALITY AND SOURCE WATER MONITORING EFFORTS, SAFETY PERFORMANCE, OPERATING AND MAINTENANCE EXPENSE, OPERATING EFFICIENCIES, AND EMPLOYEE LEVELS AND COMPENSATION

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: November 8, 2023

PENNSYLVANIA-AMERICAN WATER COMPANY

DIRECT TESTIMONY OF JIM RUNZER

Q. Please state your name and business address for the record.

A. Jim Runzer, 852 Wesley Drive, Mechanicsburg, Pennsylvania 17055.

Q. By whom are you employed and in what capacity?

A. I am employed by Pennsylvania-American Water Company ("PAWC" or "Company") as the Vice President – Operations.

Q. What are your responsibilities as PAWC's Vice President - Operations?

A. I am responsible for all the Company's water and wastewater operations across the Commonwealth, managing a team of approximately 1,123 professionals, in 63 districts, serving 2.3 million Pennsylvanians.

Q. Please describe your professional education and experience.

A. I received a bachelor's degree in education in 1991 from Kean University and a Master of Business Administration in 2012 from the Keller Graduate School of Management. I also completed Advanced Water Treatment and Distribution certification from the Camden County Institute of Technology in 2004 and Advanced Wastewater Collection certification from the University of Sacramento in 2014.

I began my career at American Water Works Company, Inc. ("American Water") in 1994 as a bargaining unit employee for New Jersey American Water Company ("NJAWC"), working in both Production and Field Operations until being promoted to Operations Supervisor for NJAWC in Mount Holly, New Jersey in 2008. I was promoted to Field Operations Superintendent in Delran, New Jersey in 2011 and was then promoted

to Operations Manager for the Coastal South New Jersey system in 2014 where I was responsible for Field Operations, Production and Construction Operations. I was named Director of Operations for Iowa American Water Company in April 2018 and was later named Vice President of Operations for New York American Water Company in July of 2019. I held that position until taking on my current role as Vice President of Operations for the Company on June 28, 2021.

Q. What is the purpose of your direct testimony in this proceeding?

A. The purpose of my testimony is to describe PAWC's strong operational performance throughout the Commonwealth. First, I will describe the Company's water and wastewater operations and facilities throughout Pennsylvania. Second, I will explain PAWC's industry leading water quality improvement and source water monitoring efforts. Third, I will describe our strong safety record and Company commitment to safety for the benefit of both our customers and employees. Fourth, I will provide information regarding PAWC's operating and maintenance expenses. Fifth, I will describe several efficiencies within PAWC's Operations, such as the Company's usage of state-of-the-art technology in the field, including Geographic Information System ("GIS") platforms and advanced metering infrastructure ("AMI"). Finally, I will describe the Company's current and anticipated employee levels, employee compensation philosophy and commitment to employee development.

Operations and Facilities

Q. Please describe PAWC's Operations.

A. PAWC owns, operates, and maintains potable water production, treatment, storage, transmission and distribution systems, and wastewater collection, pumping, and/or

treatment systems, for furnishing water and wastewater services to approximately 780,000 residential, commercial, industrial, and governmental customers in communities located in 37 of the 67 counties across Pennsylvania.

The Company has recently established three geographically defined operating areas that collectively serve an estimated population of more than 2.4 million people. The three operating areas are western, northeast, and central/southeast. The western Pennsylvania operating area serves an estimated population of 1,100,000 people. Some of the larger communities served include Butler, New Castle, Ellwood, Indiana, Punxsutawney, Warren, Kane, portions of the City of Pittsburgh and its southern suburbs, McMurray, Uniontown, Brownsville, and Connellsville. Large customers include U.S. Steel, the Western Allegheny County Municipal Authority, AK Steel, Allegheny County Housing Authority, Koppel Steel, United Refining, Clarion University and Eastman Chemical Company. The Northeastern Pennsylvania operating area serves an estimated population of 740,000 people. Some of the larger communities served include Wilkes-Barre, Scranton, and Nazareth. Several of the large customers served in Northeastern Pennsylvania are Fairchild Semiconductor, Lion Brewery, SVC Manufacturing, UGI Utilities, and the State Correctional Institution – Dallas. The Central/Southeast operating area serves an estimated 560,000 people. Some of the larger communities include Camp Hill, Mechanicsburg, Hershey, Palmyra, Philipsburg, Milton, Norristown, Coatesville, Berwick, Milton, Yardley, and the suburbs of Reading. Several large customers include ConAgra Grocery Products Co., Furman Foods Inc., Penn State Hershey Medical Center, and Cleveland-Cliffs Plate LLC.

Q. Please describe the facilities and property that PAWC uses to provide water and wastewater services to customers.

A. PAWC's utility plant accounts include land and land rights, structures and improvements, wells, pumping equipment and associated facilities, purification plant and equipment, sludge disposal facilities, transmission and distribution mains, collection pipes, distribution storage facilities, service lines, meters, hydrants, and other facilities, including materials and supplies. All this plant and property is used to provide safe, adequate, efficient, and reliable water and wastewater services to PAWC's customers. A more detailed description of the source of supply, treatment, storage, and distribution facilities within each district is provided as Volume 2 of the Company's responses to the Pennsylvania Public Utility Commission's ("PUC") filing requirements, which is titled *Scope of Operations.*

Water Quality

Q. Please describe PAWC's overall commitment to water quality and environmental compliance.

A. Water quality is of paramount importance to the health and well-being of our customers. PAWC and its predecessor companies have provided water service to customers for approximately 120 years. We are acutely aware that water is the only utility service intended for customers to ingest, and that our customers rely on PAWC to provide them with safe and reliable water service. Beyond health and safety, we know that PAWC's customers are also interested in the aesthetic of the water we treat and deliver to them. We proactively look for ways to optimize treatment capabilities to continue to improve the overall quality of drinking water delivered to our customers and do so in a way that strives to create operational efficiencies that also benefit our customers.

Q. Has PAWC been recognized for its water quality achievements?

A. Yes. PAWC has received multiple awards and has been recognized for its dedication to and achievements in attaining exemplary water quality. PAWC is a participant in the Partnership for Safe Water treatment plant optimization program and has repeatedly been recognized for its optimization and water quality achievements. Nationwide, the Partnership for Safe Water treatment optimization program currently has 501 treatment plants from 266 utilities in the program. As of 2022, only 44 plants have received one of the program's highest honors, the Phase IV Presidents Award. To date, PAWC has received nine Phase IV Presidents Award recognitions. Moreover, each of these nine PAWC plants was also recognized as a 5-year Presidents Award winner. Only 18 systems nationally have achieved this level of recognition. Therefore, PAWC accounts for 50% of these highest-level award-winning treatment plants.

Since the Company's last base rate case filing, PAWC's Clarion Water Treatment Plant was presented with the Directors 15-year Longevity Award, and Shady Lane Water Treatment Plant was recognized with the Directors 10-year Longevity Award. PAWC has also made a commitment to optimization and water quality within our wastewater treatment plants. We are proud to share that PAWC now has 5 wastewater plants (Coatesville, Exeter, New Cumberland, McKeesport, and Pocono Country Place) currently participating in the Partnership for Clean Water Program.

Q. Please discuss some of PAWC's water quality initiatives.

A. PAWC is deeply committed to ensuring our customers receive water that meets all regulatory requirements, and we strive to provide water that exceeds those requirements.

To meet these goals, PAWC has developed strict internal metrics to support exemplary water service.

For example, PAWC requires that all sample collection, review of results, and reporting undergo dual validation internally prior to submittal to the reviewing regulatory agency. This serves to ensure both data accuracy and that the concerning results are addressed immediately. The Company also instituted a policy requiring the development of internal action plans to address testing results that show a contaminant level above 80% of the established primary maximum contaminant level. The plans will be site specific, and may include changes to treatment chemicals, distribution system improvements, or modifications or additions to treatment trains.

These efforts are supported by our internal monitoring results program, Sample 1 View ("Sample 1V"). Sample 1V provides a user-friendly dashboard for several critical water quality measurements that is reflective of real-time sample collection in the field and includes bacteriological sample information. This is a powerful tool that allows PAWC staff to ensure all required samples are collected and observe and react to trends in samples. It is GIS capable, so employees can more easily route themselves to the sampling locations. In addition, Sample 1V is capable of producing reports for submission to regulating authorities. Sample 1V is being used by all PAWC staff for the collection and reporting of compliance samples and has improved staffing efficiency significantly.

I would also like to highlight the Company's environmental near miss program. I will discuss the Company's near miss program in greater detail later in my testimony but included within that program is a specific focus on environmental and water quality issues. PAWC takes a proactive approach in identifying potential water quality issues and

implementing prompt improvements. The environmental near miss program identifies water quality or environmental vulnerabilities before they can create an adverse impact. In 2022, PAWC employees submitted 197 environmental near miss reports, which identified and avoided potential customer impacts in those 197 instances. In addition, because near miss reports, including environmental near misses, are shared statewide for educational purposes, the impact and positive benefits from such near miss reports is much broader than the specific near misses identified, as the reports often prompt proactive corrections for other customers in different areas of PAWC's system.

Q. Please discuss some of the Company's other water treatment effectiveness initiatives.

A. The Company has invested heavily in facility upgrades to meet regulatory requirements related to the Long Term 2 Enhanced Surface Water Treatment Rule. The Company continually evaluates new treatment chemicals for improved treatment effectiveness, safety, and cost efficiencies. As of October 1, 2023, the Company converted 21 treatment plants from the use of gaseous chlorine for disinfection to liquid sodium hypochlorite or ultra-violet ("UV") disinfection with three additional plant conversions scheduled for completion by the end of 2023. The elimination of chlorine gas reduces the risk of toxic exposure for our employees and the surrounding communities. The Company will continue to convert its remaining treatment plants that utilize gaseous chlorine to either liquid sodium hypochlorite or UV disinfection until all of its chlorine gas locations are eliminated. This conversion process is also now standard practice as new systems are acquired by PAWC.

The Company also employs a proactive approach to protect customers from lead exposure in the drinking water the Company supplies, consistent with federal and state regulatory standards established by the United States Environmental Protection Agency ("USEPA") and the Pennsylvania Department of Environmental Protection ("PADEP"), including the Lead and Copper Rule. Several of PAWC's systems are undergoing corrosion control studies to review the effectiveness of corrosion control treatment measures. The Company is also continuing to implement an industry-leading initiative to replace customer-owned lead service lines to address conditions that may increase the risk of exposure to lead at the customer's tap.

PAWC also changed coagulant options at several of its treatment plants to provide improved treatment at reduced costs. One recent example is our Rock Run treatment plant, which switched to Ferric Chloride-polymer blend in 2021 with approval from PADEP. PAWC also improved the chemical feed systems at our Stony Garden and Montrose facilities. We are also addressing potential contaminants of concern, such as the polyfluoroalkyl substances ("PFAS") contaminant. Our central laboratory is now certified to analyze PFAS samples, improving the Company's ability to test for these contaminants. Please see the Direct Testimony of Bruce Aiton (PAWC Statement No. 3) for more information regarding the Company's PFAS response.

Q. Has the Company made efforts to further improve operations at its wastewater facilities?

A. Yes. With the increasing number of wastewater facilities owned and operated by PAWC, the Company is making significant efforts to improve effluent quality discharged to receiving streams. Examples of improvements include the transition to ultra-violet

disinfection at numerous wastewater plants and efforts to reduce inflow and infiltration in our collection systems. The change to UV disinfection also reduces chemical usage and eliminates the potential for chlorinated water to reach waters of the Commonwealth. This modification has occurred in 10 systems owned by PAWC, including most recently the Turbotville and Franklin Township wastewater treatment plants. Additionally, significant effort to reduce inflow and infiltration has occurred in McKeesport, Dravosburg, Claysville and Duquesne. Finally, as new systems are acquired by PAWC, the Company acts to improve effluent quality and return systems to regulatory compliance. Since the last rate case, construction of the new Turbotville Wastewater Plant was completed, and the plant put into service. The investment into this new facility has significantly decreased the amount of end of pipe exceedances for this system.

Notably, to aid in improvements in wastewater quality, the Company also recently created a new specific area of focus within the Water Quality and Environmental Compliance Department that is dedicated to wastewater facility water quality and compliance. The Manager of Wastewater Compliance reports directly to the Director of Water Quality and Environmental Compliance. This organizational structure allows us to focus on developing and implementing new operating procedures, training, and optimization programs to continually improve our treated effluent. Some concrete examples of improvement in our wastewater treatment include improvements and standardization of our Industrial Pretreatment Program and the development of wastewater specific curricula to continually improve operator knowledge and plant optimization.

Q. Does the Company have any water quality-related settlement commitments it needs to respond to in this proceeding?

A. Yes. In the Company's last base rate case, the Company committed to filing its most recent cost of treatment study for its Coatesville wastewater treatment plant at the time of its next rate case filing. The Company's most recent Coatesville cost of treatment study is attached as PAWC Exhibit JR-1.

Source Water Protection

Q. Please describe how the Company is demonstrating its commitment to water quality through source water protection.

A. The Company has a dedicated source water protection program, which includes personnel who lead efforts to identify and mitigate potential threats to raw sources of supply. The program involves an integrated approach to planning, risk assessment, water quality monitoring, outreach and education. The Company has deployed and continues to evaluate and incorporate innovative technologies that support informed decision-making for changes in raw water quality and corresponding treatment, whether naturally occurring or related to a potential contamination incident.

Q. Please describe the Company's source water protection planning efforts.

A. The Company is committed to developing and implementing source water protection plans for each system with a surface water and/or groundwater source. Each plan consists of the following six elements: 1) local steering committee and public participation; 2) source water protection area delineation; 3) contaminant source inventory; 4) management methods and commitment; 5) contingency planning; and 6) protection of identified new source sites. This work is done in conjunction with the PADEP Source Water Protection

Technical Assistance Program ("SWPTAP"), and all PAWC systems have a source water protection plan, which includes Small System Plans, in place or under development in SWPTAP.

Source water protection is also a critical component of the Company's risk and resilience assessments ("RRAs") to comply with provisions of the federal Water Infrastructure Act of 2018. The Company has conducted all required RRAs and developed plans, strategies, and resources to improve the resiliency of PAWC's water systems.

Q. Please explain the Company's outreach and education efforts related to source water and environmental stewardship.

A. The Company conducts outreach and education to engage the community in protecting sources of drinking water. Activities include watershed service projects, school programs, plant tours, and community events. PAWC also engages the community through annual commitments, such as the Environmental Grant Program, Protect Our Watersheds Art contest, and the Stream of Learning Scholarship. In addition, PAWC staff represent the Company and industry on various professional committees at the local and national levels to share information and practices related to source water protection. These committees include PA AWWA Water Resources, National AWWA Source Water Protection, Local Emergency Planning committees, and several other coalitions and advisory groups.

Q. Please describe any other innovative approaches the Company is using to protect sources of drinking water.

A. The Company partnered with the Natural Resources Conservation Service ("NRCS") on one of sixteen source water protection pilot projects initiated in 2019 under the National Water Quality Initiative. PAWC worked with the State Conservation Office to identify the

Swatara Creek Watershed as a candidate for the program. Swatara Creek is a source of supply for the PAWC G.C. Smith Hershey Water Treatment Plant. The project, funded by the NRCS, is aimed at improving the watershed by reducing nutrient and sediment loading from agricultural runoff. This effort has leveraged and directed funding toward water quality improvements for the entire watershed that will ultimately benefit the whole community including PAWC customers. We continue to support this initiative by providing data and resources. We have also partnered with the 1 million trees campaign, upstream restoration project evaluations at two reservoir locations, and the SolarBee nutrient column study to remove phosphorus in the water column in one of our reservoirs.

Q. Please describe other ways the Company is demonstrating its commitment to source water quality.

A. The Company has enhanced its source water protection program by taking an integrated approach to monitoring its source water quality and evaluating risks. The integrated approach includes source water quality monitoring panels and a map-based information gathering tool called WaterSuite, both of which support the Company's ability to make more informed decisions regarding treatment and in responding to potential source water contamination events.

WaterSuite is a GIS map-based tool that collects information about potential sources of contamination from various sources and integrates that information into a database for a defined area of concern. The data sources may include publicly available regulatory databases, aerial imagery analyses, and local knowledge. The database is updated on a regular basis to include the latest available information and has search and reporting capabilities, which provides a significant advantage over standard static

contaminant assessments. This gives the Company a dynamic tool it can continue to use over time rather than a paper-based equivalent that captures only the circumstances present at a single point in time. The database also provides a larger set of data that is automatically updated on a periodic basis without requiring manual work by PAWC. As a result, PAWC can access more information more efficiently to address water quality concerns than in the past. WaterSuite is fully implemented for surface water and groundwater systems.

The Company also implemented the use of SolarBee mixers in five reservoirs to disrupt algal growth. To support the Company's efforts to combat algal growth, PAWC purchased a Cyanotoxin Automated Assay System for in-house rapid testing associated with harmful algal blooms. In addition, the Company continues to evaluate emerging technologies to help monitor and control algae growth in our reservoirs.

Q. Please describe PAWC's source water quality monitoring panels.

A. The Company has installed an online source water quality monitoring device at each of its surface water treatment plants as an effective tool for optimizing treatment decisions and aiding in the detection of potential source water contamination. All surface water treatment plants will have devices installed and in service by December 31, 2023. The sensors installed at each location were determined based on risk to the source water and monitor parameters in the source water that include turbidity, pH, oxygen reduction potential, temperature, conductivity, dissolved oxygen, dissolved organic carbon, oil, and total organic carbon. This equipment helps establish baseline water quality data for each parameter and alert water plant operators to certain changes in water characteristics. The Company uses this information to better understand the characteristics of its source water

and optimize chemical usage. In addition, a change in the baseline characteristics may indicate an issue that warrants additional investigation.

Q. Does the Company utilize any other sources to obtain source water quality information?

A. The Company also participates in watershed monitoring networks such as the Ohio River Valley Water Sanitation Commission Organics Detection System, Delaware River Valley Early Warning System, and the River Alert Information Network. These networks provide additional information about water quality in the watersheds that contribute water to sources of supply. The Company is also involved with developing the Southwest PA Water Network for the Upper Ohio River Basin and partners with the Susquehanna and Delaware River Basin Commissions.

Q. Please describe how the Company prepares for source contamination events.

A. The Company has developed source water contingency plans to outline the planned response to contamination of surface water sources of supply. These plans include system-specific options to consider in a contamination event along with a phased protocol response. This approach is consistent with National Incident Management System and USEPA guidance, and augments emergency response plans that cover a wide variety of potential emergency situations. The Company also developed Cyanotoxin Management Plans to aid in the identification and response to harmful algal blooms. PAWC employees receive training on the contingency plans through online learning and emergency response drills, which are coordinated by Operations and include on site mock drills, tabletop exercises and after-action reporting.

Q. How does the Company compare to the rest of Pennsylvania drinking water systems for Source Water Protection Plan development?

A. All PAWC systems are in the SWPTAP with approved PADEP Source Water Protection Plans and Small System Plans or have draft Source Water Protection Plans that are awaiting PADEP approval. The Company takes the extra initiative in creating, developing, and implementing Source Water Protection Plans for all their systems. This is a proactive approach that the Company is proud to demonstrate. The total number of systems and PAWC systems is reflected in the statistics below:

- (PADWIS) Community Water Systems in PA: 1,793 (Non-community/non-transient are not in this number)
- TOTAL number of project systems in SWPTAP: 301
- Number of PAWC project systems in SWPTAP: 45
- TOTAL number of Small System Projects: 223
- Number of PAWC small systems: 18

Commitment to Safety

Q. Please describe PAWC's overall commitment to safety.

A. The health and safety of our employees and customers, as well as protecting the quality of the water we deliver, are the top priorities for our Company and critical to our success. Our colleagues', contractors', and customers' safety are very important, and we focus on safety every day. PAWC's commitment is to ensure that every employee chooses safety, so they go home each day in the same or better condition than they came to work.

The Company is also committed to securing assets across our system and recognizes the importance of protecting our water sources, treatment plants, infrastructure, and data from malevolent acts, as demonstrated by our robust security and cyber security

programs. American Water has invested in several technology improvements to our security programs. Investments in a new modernized Video Management System software and expanded the use of video cameras across American Water facilities improve the physical security posture of the American Water locations. American Water has invested heavily in cyber security as well with a focus on Operational Technology ("OT") or SCADA security. These investments include replacement of all OT firewalls across the American Water environment and implementation of Tenable OT, an OT specific technology to help identify vulnerable OT assets across the organization.

Finally, the Company's emergency response program demonstrates the Company's recognition that rapid response and recovery from security incidents are critical to maintaining resilient water and wastewater systems.

Q. How is safety relevant to operational performance?

A. The Company considers safety to be a core value, as well as a strategy. Employee health and safety is the responsibility of every PAWC employee, and to that end, every employee strives for safety. We ask our employees to place safety first in everything they do. We have a strong commitment to our employees (and their families) to keep them, our customers, and the public safe. A safe workplace increases employee morale, increases our commitment to one another, and makes for a more engaged and productive workforce.

Q. Please describe PAWC's safety program and Operations' role in promoting safety and a safe working environment at PAWC.

A. The Company's safety program includes multiple activities and initiatives to maintain compliance, support employee engagement, and help ensure the safety of our workforce and our customers, as well as the public. Operations is responsible for administering the

health and safety program, which includes the delivery of all Occupational Safety and Health Administration ("OSHA") required training, training and qualification of employees, physical security, cyber security, business continuity planning, and event management. We are supported by functional departments within American Water Works Service Company, Inc., such as Health & Safety, Learning & Development, Security, and Human Resources, to deliver core operations services.

Q. How do you know the commitment to safety is effective?

A. We are building a strong safety culture at PAWC, which is illustrated by our year-over-year safety performance. The Company's OSHA recordable incident rate ("ORIR") improved from 2.62 in 2018 to 0.85 in 2022. In the first nine months of 2023, PAWC is having its best safety record in its operational history at 0.32. The Company has experienced 6 OSHA recordable injuries as of October 1, 2023 (as compared to 29 injuries in all of 2018). This reduction has resulted in record rates in two key safety performance metrics: an ORIR of 0.66 and Days Away Restricted or Transferred ("DART") rate of 0.32 as of October 1, 2023, demonstrating an 82% reduction in incidents. The ORIR targets that the Company sets for itself strive for a 20% reduction in injuries and incidents over the prior year.

Q. What other safety programs does PAWC use?

A. In addition to establishing ORIR targets, the Company's Near Miss Reporting Program involves employees identifying hazards that could have resulted in an injury or accident. For example, if a piece of equipment becomes worn outside of a regular maintenance cycle, an employee reports this as a "Near Miss" and we can then replace the worn part and avoid a potential injury from an equipment malfunction. Near Misses improve safety by

encouraging employees to look for hazards in the workplace, which improves the employees' awareness and helps make our workspaces safer. PAWC has continuously sought improved safety results, which correlates with the increase of Near Miss submittals that I describe later in my testimony. American Water's health and safety group collects these Near Misses from operating utilities across the American Water footprint each week and selects several to highlight in a safety video that is distributed across the business for use in safety tailgate discussions.

PAWC also uses the services of an occupational training and information company called Work Right ("WR"). WR supplies two (2) athletic trainers, one in eastern PA and the other in western PA, to provide training, health-related information, on-site first aid medical services and injury (home/work) consultation to our employees. WR has developed and implemented ergonomic programs to reduce and eliminate soft tissue injuries (strains and sprains) for our affected field operations and treatment plant employees. In 2022, PAWC had 5 injuries classified as "ergonomic" in nature, down from our 2018 total of 32 ergonomic related injuries. In 2023, PAWC has also utilized WR to provide First Aid/CPR/AED training for our employees and we now have 95% of our employees certified.

PAWC employees also participated in the American Water "Certified Safe Worker" program. This program is a self-directed program promoting safety and health awareness and participation, documenting work, and at-home safety activities. In 2022, 1,129 PAWC employees completed the program, achieving the highest number of Certified Safe Workers in our history and the highest total in all the American Water subsidiaries.

Q. How did PAWC perform in the Near Miss Reporting Program?

A. PAWC has achieved considerable progress since the program's inception in 2015, with increasing numbers of "Near Miss" reports. In 2022, PAWC employees reported 1,967 near misses from across the state, far surpassing our goal of 1,200. This is more than triple the number of Near Misses reported in 2019 and reflects the increased employee awareness and use of this program. Most Near Miss reports are corrected by an individual employee identifying the issue and resolving the issue or working with the appropriate people to obtain resources where necessary. PAWC has also experienced a 59% increase in Near Miss STOP Work situations from October 1, 2022, to October 1, 2023, a principal indicator of an advancing safety culture. All employees are encouraged to report unsafe behaviors or conditions, and we all have the authority as well as a responsibility to stop work until the safety issue can be resolved. We are a people-powered organization, and the voices of our employees are essential to our success. Employees must feel comfortable sharing their experiences and speaking up – that is how we will continue to improve and create a better organization. Another success is that 99% of all Near Misses reported in 2022 were corrected within 30 days of the report. In 2023, the Company's goal increased from 1,200 Near Misses submitted for 2022 to 4,892 near misses submitted for 2023. This breaks out to 1 Near Miss per quarter, per employee. As of October 1, 2023, PAWC has submitted 2,601 Near Misses. We believe that this increased emphasis on safety awareness will eventually enable PAWC to go a full year without a recordable injury.

Q. How has this benefited PAWC's customers?

A. A strong safety culture is a cornerstone for any high performing organization. A strong safety culture also improves employee morale, as employees understand a meaningful

commitment to them and to their families. In turn, PAWC's safety culture helps ensure that our employees are thoughtful in their work, which directly benefits our customers, as safety is a leading part of our high-performance culture. Lastly, when employees are healthy at work, they are available for work that benefits the customers.

Q. How does PAWC handle emergency response issues?

A. PAWC maintains emergency response manuals at each operating location. The manuals are updated each year and include emergency phone numbers for company personnel, PADEP, the PUC, emergency response services, vendors, suppliers, and critical customers. In 2022, PAWC conducted five functional water/wastewater treatment plant emergency response tabletop exercises. These events test each plant's ability to function during an emergency, which could include a power outage, chemical supply issues, cyber-attack, or other similar event. A significant benefit of these sessions is enhancing our cross-functional communications and also emphasizing the importance of including outside resources such as County Emergency Response teams and local fire departments. During these exercises a key element is the discussions held regarding the testing of our communications; both internally and externally. The exercises included participation from some of our external partners, including state, county and city regulators and first responders. By strengthening our relationships with these external partners, we can better understand their expectations and the support that they may provide during emergencies. Situational awareness is also a key takeaway from these exercises because we alert participants to some hazards they might face if responding to our facilities. Additionally, discussions are held to broaden PAWC's awareness to the American Water Enterprise Crisis Response Team ("ECRT")

which is available to provide support and guidance to the business during significant and severe incidents as they occur.

Future plans for 2023-24 include a tabletop exercise specific to Dam and Dam Safety (e.g., car into reservoir, significant storm, boils and seepage, and dam sinkhole) and tabletop exercises focused on physical security and cybersecurity.

Q. Please describe your Underground Damage Prevention Program as it relates to Act 50.

A. We have over 200 employees that perform underground locate requests in response to PA811 efforts. In 2022, the Company completed 183,343 One Call tickets. This year, as of September 1, 2023, the Company has completed 95,732 One Call tickets. Several PAWC employees perform underground locates as their primary job, and it is imperative to closely track and monitor performance to keep all parties aligned. We have an Underground Damage Prevention Committee that meets once per month to discuss performance trends, alleged violation reports, technical issues and training programs. The cross functional committee is made up of managers for each operating region, GIS team members, Legal and Business Performance who administer the program.

Q. What measures are in place to ensure compliance?

A. The Company's performance is very good with over 99.99% of tickets completed in 2022 and a steadily decreasing percentage of tickets that are responded to late of only 0.5% through October 1, 2023. There are various time frames within which different types of tickets must be completed. Emergency tickets are to be completed as soon as practical and routine tickets must be completed within 3 days. We track both completion of tickets and timeliness, i.e., completed within the applicable statutory time frame for response. Any

missed opportunity is discussed with local management, which has enabled the organization to continually improve.

Operating and Maintenance Expense

Q. What is PAWC's forecasted O&M expense for the fully projected future test year ("FPFTY") ending June 30, 2025?

A. PAWC's total O&M expense for the FPFTY is approximately $314 million, which is discussed in more detail in the Direct Testimony of Lori O'Malley (PAWC Statement No. 5).

Q. What factors contribute to increases in operating expenses?

A. As discussed in the Direct Testimony of Ashley Everette (PAWC Statement No. 1), the Company has managed to keep the rate of increases in O&M expense below that of inflation. However, several factors have caused an increase in the Company's O&M expenses. For example, PAWC has faced higher chemical prices due to volatility in the chemical supply market driven by both materials and transportation, which in turn results in chemical suppliers unwilling to commit to long-term agreements. Another example of an increase in O&M expenses is related to continued cost increases on treatment equipment and maintenance of our pumps, wells and pressure reducing valves. We have also seen increased costs due to municipal and state road opening permits and restoration costs. Increased assets and equipment related to acquisitions have also impacted expenses. We have also been impacted by the increased costs of fuel for our vehicles and generators. The Company has also experienced increased O&M expense from employee-related costs including wage increases, training, and development.

As PAWC has grown over time, many of the systems we acquired require significant work to address outstanding operational issues. In our efforts to provide excellent water and wastewater quality and service, particularly in newly acquired systems, we incur increased expenses related to maintenance of assets and operating the facilities. These efforts will marginally increase operating expenses to improve operational integrity and mitigate operational risk.

Management Efficiency - Operations

Q. Why does the Company focus on increasing and enhancing operational efficiency?

A. Increasing and enhancing operational efficiency reduces expenses and is a more environmentally friendly way of conducting business. When operations are managed efficiently, the Company can reduce capital and operating costs related to the provision of water and wastewater services, while also helping to protect and preserve our natural resources. Increasing and enhancing water efficiency saves customers money overall, protects the environment, supports integrated resource planning, and enhances the economy.

The Company's goal is to provide quality water and wastewater services as efficiently as possible, and by doing so, to increase the value of our services.

Q. Please describe PAWC's operational efficiency initiatives.

A. The Company's ongoing focus on operational efficiency covers a wide range of targeted measures to enhance efficiencies, including supply-side practices, such as increased pump efficiency, more accurate meter reading and leak detection, and main replacement and repair programs, as well as demand-side strategies, such as customer efficiency and public education programs to support water and energy efficiency. From an Operations

perspective, improving water and wastewater efficiency requires achieving a cost-effective mix of prudent investments and improved operations and maintenance management capabilities targeting safety, customer satisfaction, sustainability, and system efficiency. Customers, utilities, businesses, and the environment can all benefit from more efficient, higher quality service, reduced costs, and sustainable use of natural resources.

Q. Please describe PAWC's efforts to improve water and wastewater efficiency.

A. The Company strives to improve water and wastewater efficiency through operational excellence, the use of technology, system maintenance, and efforts to manage costs as efficiently as possible to provide a more cost-effective level of service for our customers over the long term. The Company also leverages the size and scale of American Water to improve transactional efficiencies through increased automation, the adoption of more effective business practices, and a continuous improvement mindset.

Q. How is PAWC using technology to improve employee effectiveness?

A. PAWC is using technology in a number of ways in order to enhance productivity and efficiency. For example, accurate GIS maps ensure that the Company's institutional infrastructure knowledge is readily available for use by employees. To that end, PAWC has loaded its facilities into GIS so that maps of its water and wastewater system assets are accessible on its internal network. The information available in GIS includes the location and a short description of the facilities, giving an electronic spatial view of the entire system. GIS also helps locate customers that might be affected by related service issues and allows us to communicate with our customers more effectively.

PAWC continues to enhance its GIS platform through integration with our Enterprise Asset Management system, our computer-aided design system, our work

management system ("MapCall") and our fixed asset records. This integration allows communication across the various platforms that makes data retrieval more efficient. The Company continues to build the GIS platform by adding new assets and retiring old assets to ensure our technicians have access to the most current information while working in the field. In 2022, the Company implemented a 'Digital As-built Workflow' that is focused on standardizing how, what and when GIS is updated as well as facilitating better integration between GIS and MapCall. This improved the lag time between when the asset was installed to when GIS and other systems are updated. The goal is to keep our GIS current, complete and accurate for our end users.

Q. How have PAWC and its customers benefitted from the GIS platform?

A. The location of water quality events, chlorine residuals, maintenance events, and pipe failures are all plotted on GIS map layers. The spatially presented information can be used to answer customer water quality inquiries, identify trends, and prioritize water main replacement projects. GIS also is a tool used to assist compliance with federal and state lead service line inventory and management. Known customer and Company service line material data has been loaded into the MapCall service records that is integrated to display on the GIS maps. This will provide employees and customers with a visual representation of known and suspected lead service lines within the service territory.

Q. How does PAWC's work management system improve employee effectiveness?

A. MapCall is a web-based application that enables employees and contractors to complete the lifecycle of work orders and assets in the field. Employees and contractors can view historical information, including work order history on an asset, standard operating practices associated with an asset, maintenance history, O&M manuals, and tap card images. MapCall provides

the flexibility to create work orders, configure workflows and report progress while in the field. For example, a supervisor can create a work order to flush a dozen hydrants in a particular area. Using MapCall, the field worker can report progress as flushing is performed, and both the supervisor and others in the field can visually see the progress made toward completing the identified work in real time through the MapCall interface. The same can be done to schedule and monitor other routine work, as well as emergency work, such as main break repairs. MapCall also allows those in the field to communicate water quality and other events more efficiently through preloaded notifications via email to both internal and external stakeholders, including regulators, allowing workers to quickly shift back to focusing on the task at hand and providing quality service to customers. Water main break locations are continually added to GIS and MapCall to help identify sections of pipe that have outlived their useful life. This information is used to prioritize water main replacements by strategically focusing on the pipe with the highest risk of failure.

Q. Are there other technology solutions that have been implemented to improve employee effectiveness?

A. Yes. In addition to GIS and MapCall, PAWC is implementing other technology solutions to enhance employee effectiveness. MyWater and Work1View ("W1V") are software applications that provide more comprehensive and easily accessible information to employees.

Q. Please describe how MyWater and W1V improve employee effectiveness.

A. MyWater has been implemented by the Company to better serve our customers. MyWater provides improved access to customer information (e.g., premise and service order history, meter details, billing and payment information) to field service representatives ("FSRs"), and

customer service representatives ("CSRs") who regularly interact with our customers. This means that FSRs can view the same information as CSRs. This allows our FSRs to review customer information that can help them address the customer's issue and provide customers information while speaking with them, rather than having to contact the Customer Service Center ("CSC") for information or requiring customers themselves to follow up with the CSC. FSRs can also update customer information and record notes on customer interactions on the spot, providing other employees that serve our customers timely access to the most up-to-date information. MyWater is also the customer facing website that allows customers to view much of the same information in the same format as both our FSRs and our CSRs are seeing to make for a more seamless discussion when interacting with the customer. Recent and planned enhancements have and will also improve our customers' self-service capabilities and the resiliency and usability of the website.

W1V provides employees with a single view for managing customer service order work in the field, customer information and meter information. W1V includes a real-time operations map to see work orders with optimized routing, as well as other types of nearby work and alerts. In addition, using W1V, FSRs can manage their own work based on the day's demands by adding or deferring undated work or by putting orders on hold in order to do emergency work needed at another location. Supervisors can also reroute work as appropriate. W1V along with MyWater allows for easy access to customer information during field visits. It has also been integrated with MapCall to provide FSRs one point of access for all information needs. Taken together, these types of improvements continue to support improved customer experience and satisfaction.

Q. Is the Company deploying advanced metering infrastructure technology?

A. Yes, advanced metering infrastructure ("AMI") technology is an integrated system of meters, communications networks, and data management systems. As of October 1, 2023, the Company has installed 138,000 AMI meters and smart endpoint systems. The AMI cellular-network systems utilize smart cellular endpoints installed on each meter to transmit the meter data via an existing third party cellular infrastructure to a central database system for analysis and reporting. The smart endpoint utilizes a cell-based network provided by major companies such as AT&T and Verizon to capture interim customer reads and eliminates the requirements of a fixed data collector network.

Q. Why is PAWC installing AMI technology?

A. The implementation of AMI increases billing accuracy and reduces the likelihood of estimated bills (e.g., due to weather events or other obstacles to accessing customer meters) by automatically providing timely, accurate reads through the network. In addition, AMI will reduce the need for manual re-reads and improve processes from meter reading through billing. AMI reduces the number of certain service orders over time by eliminating the need to drive by premises to collect reads and eliminating the need to roll a truck to complete certain high volume service orders such as "Move in-Move out orders." Reducing truck rolls provides additional environmental benefits related to reduced emissions and safety benefits to PAWC employees who avoid potential safety hazards associated with in-person meter reads. PAWC also can use AMI data to uncover irregularities that may signal a leak, meter tampering or water theft. With the planned implementation of a meter data management system, the Company will also be able to collect, organize and analyze information, to better enable smart water use choices, to enhance customer communication regarding customer

water consumption patterns, and to improve PAWC's ability to measure and address non-revenue water more efficiently.

Q. Please describe the Company's AMI deployment progress.

A. The Company is taking an approach that strategically selects areas for concentrated AMI efforts based on local needs and opportunities. As of August 2023, 31% of the Company's customers are equipped with AMI technology, with Scranton customers comprising the majority of our AMI customers. The Company also adopted cellular AMI technology, and all length of service meter and faulty meter replacements will be upgraded to AMI throughout the Company's service areas. We expect that 35-40% of the Company's customers will be equipped with AMI by the end of 2023.

Q. What are PAWC's other efforts to improve water efficiency?

A. In addition to utilizing its Distribution System Improvement Charge ("DSIC") mechanism to accelerate the replacement of aging infrastructure in the Company's service territory, we are enhancing our leak detection efforts throughout the state to reduce non-revenue water.

Q. What is non-revenue water)?

A. Non-revenue water ("NRW") is the difference between system delivery and water sales. Typically, NRW is measured as a volume, or a percentage of system delivery based on a 12-month rolling average. NRW is not just leakage, but also includes water for beneficial uses such as firefighting, flushing new water mains, flushing to maintain adequate chlorine levels, and annual hydrant flushing, as well as theft, and meter inaccuracies. To avoid any ambiguity, American Water, based in part on guidance from the American Water Works Association ("AWWA"), measures its reduction in water loss in terms of NRW rather than

Unaccounted for Water ("UFW").[1] In contrast to UFW, which can be defined in a variety of ways across the water industry, NRW is consistently calculated by subtracting the number of gallons of water sold from the number of gallons of water treated.

Q. Please describe the Company's program to reduce NRW.

A. As noted, reducing water loss is a complex issue with many contributing factors. To reduce actual water losses as effectively as possible, we strive to gather standard data from our operating centers so that we can efficiently and effectively communicate what is working, what is not working, and how we are progressing on mitigating NRW around the Commonwealth.

The Company rigorously applies water loss reduction practices in the normal course of business. These practices include regular monthly NRW meetings in both our east and west divisions that provide target NRW reductions and goals by independent NRW report cards of activities, routine maintenance, and pursuing and repairing leaks that are identified. In addition, the Company has several NRW control measures embedded in its on-going business practice, which consist principally of:

- Monitoring night flows within the different District Metering Areas ("DMA") across its systems (unexpected usage during off-peak periods can indicate leakage).
- Metering water usage within various parts of a water district as another indicator of possible leakage; the addition of DMAs working in conjunction with advanced metering infrastructure customer metering to assist in lost water identification within an operating district.

[1] The AWWA began to discourage the use of the term Unaccounted for Water in 2012 because its definition is inconsistent from organization to organization. There are several opportunities for inconsistency. For example, some organizations may deduct the number of gallons lost during a known main break, while others exclude gallons lost as a result of main breaks altogether.

- Using NRW-trained crew to find and report leaks daily, which are then promptly repaired.
- In conjunction with the state training lead, PAWC provides NRW and leak detection training for our new and current employees, including hands-on equipment training.
- Using NRW crews periodically in a "SWAT"-type approach to sweep larger areas of a particular system for leaks.
- Implementation of leak detection specialists to help locate leaks throughout PAWC's service territory when needed in the case of an emergency.
- Using the Company's MapCall work management system to capture all work done by our crews, including main break repairs so that patterns can be analyzed geographically (this will allow us to identify future main and service replacement projects).
- Usage of MapCall for more accurate monthly reporting and monitoring of all NRW use; and documenting all unaccounted-for water loss and authorized consumption in total gallons.
- Training meter readers and other field personnel to identify and report possible theft-of-service situations (such as evidence of occupancy or other activity in premises with no registered consumption) and raising public awareness and understanding of the operational and financial consequences of NRW.
- Asking local municipalities to develop theft-of-service ordinances and to enlist citizens and law enforcement to help address this problem.
- Annual and semi-annual testing and calibration of our production delivery meters per AWWA M36 manual standards.
- Metering all automatic blow-offs for water quality flushing and new water main installation flushing to help account for all authorized consumption water loss.

In addition to these operations activities, PAWC has an aggressive capital expenditure program to reduce the number of small diameter mains, which also helps to reduce water loss from the system. The Company's capital expenditures for main replacement and rehabilitation are described in more detail by Mr. Bruce Aiton (PAWC Statement No. 3).

Q. Please describe the leak detection technology used by the Company to control NRW.

A. Approximately 23,000 leak detection sensors have been installed in the Company's distribution system since 2016 and around 11,000 of those sensors have been installed since 2022. These active acoustic listening devices are cellular based and can transmit their findings to us daily for analysis. This transmittal eliminates the need to deploy resources to patrol the areas to collect the data, which allows for more timely analysis of the collected data. This technology also allows us to better identify those areas that need the most attention, resulting in more efficient deployment of repair crews. Since 2022, these leak detection sensors have helped pinpoint over 2,000 non-surfacing leaks that would have otherwise been unknown, allowing for quick repair by field operations staff. The Company plans to install an additional 3,000 acoustic cellular data loggers in 2024 across its service territory.

Our leak detection specialists use a variety of additional state-of-the-art equipment in the field as well, such as ground listening microphones, leak correlators, and line locating devices to locate and pinpoint leaks.

In 2023, an innovative technology was implemented in our regional Scranton Water system. The Company has partnered with a third-party vendor, Asterra, a satellite imagery company that takes photos of water facilities locating the dielectric properties of treated water in soil and marking points of interest overlayed on Company GIS mapping. This technology will be used with leak detection sensor technology to help us locate and repair leaks in remote locations of our operating areas in a more timely way, preventing substantial amounts of water loss and savings on production costs. PAWC plans to expand

the use of this technology to our Philipsburg regional water system in 2023-2024 to further evaluate the technology.

Q. How has the Company created additional efficiencies with respect to its fleet management?

A. With a fleet of over 1,100 vehicles and other rolling equipment, it is imperative that the Company has a program to manage its fleet. In 2023, American Water has restructured a centralized fleet management organization to support the Company in both fleet purchasing and maintenance. The organization is assisting PAWC with standardizing fleet equipment and generating savings by working directly with our senior operations managers and the end-users to optimize both initial cost and lifetime costs for every vehicle in the PAWC fleet. This process results in continuous improvement to better meet the needs of the end user. Our fleet management team is focused on reducing expenses, when possible, without negatively affecting our ability to serve our customers and safety.

As part of the capital planning process, we identify vehicles that are nearing the end of their depreciable life for replacement, targeting smaller replacement vehicles with better fuel consumption and lower initial and lifecycle costs. The mix of vehicle types varies year to year based on business need. Our capital program typically replaces over 120 vehicles per year. A summary of the Company's recent historical and planned vehicle replacements follows:

Year	Capital Spend	Vehicles Replaced
2021	$12.3M	146
2022	$11.5M	148

2023 (planned)	$10.5M	145
2024 (planned)	$10.8M	113

In addition, our third-party fleet management company, ARI Inc., provides us with data each month that allows us to look for trends around vehicle repair costs and fuel consumption.

We also have a policy of strategically sharing vehicles across districts to balance the needs of the business, especially when a vehicle is near the end of its depreciable life and in need of repair before its permanent replacement is available.

Q. Please describe the Company's energy efficiency initiatives and cost controls.

A. PAWC is using various strategies to improve energy efficiency and reduce energy costs that include five principal components: (1) competitive energy procurement; (2) upgrading energy efficiency of treatment and pumping facilities; (3) lighting upgrades; (4) energy-use monitoring and demand response; and (5) obtaining rebates made available under electric utility programs implementing Act 129 of 2008 ("Act 129").

Q. Please describe some of PAWC's energy cost mitigation strategies.

A. ***Competitive Energy Procurement.*** PAWC actively procures a diverse portfolio of electricity supplies across its operations. The Company uses competitive sourcing to procure electricity supplies for its operations in the West Penn Power, Duquesne Light, Met Ed, PECO, Penelec, Penn Power and PPL service territories. PAWC's supply contracts currently are based on "shaped" fixed pricing, which offers both competitive and stable pricing over time. The aggregate annual electricity supply covered by a mix of short-

and long-term fixed contracts accounts for over 95% of the Company's annual electricity consumption.

The remaining percentage of the Company's annual electricity consumption is from bundled sales service provided by the delivery utility. The Company will continue to employ all reasonable efforts to obtain competitive electric pricing for the benefit of customers.

Energy Efficiency Upgrades. The objectives of the Company's energy efficiency efforts are to reduce energy costs and greenhouse gas emissions that are associated with inefficient power consumption. The Company has performed "water-to-wire" efficiency testing (i.e., the efficiency of a pump and motor together) of its largest pumping facilities to identify opportunities to improve the efficiency of motors and pumps. The Company has systematically refurbished and/or replaced pumps at all of the top 20 energy consuming facilities. The Company continues to monitor these large stations to ensure that pumping efficiencies remain at acceptable levels and, in the event further upgrades are required to maintain or efficiently achieve greater efficiencies, PAWC will plan capital projects, as needed, to implement such upgrades.

Lighting Upgrades. The Company has upgraded the lighting and switches at more than 55 treatment plants, pumping stations and office buildings/operations centers. These projects consisted of replacing existing metal halide and T12 fluorescent fixtures with new, high-efficiency T8 fluorescent and/or LED fixtures, installing high-efficiency lamps, installing new high-efficiency outdoor LED lighting, and/or installing new switches with occupancy-sensor controls. The projects have payback periods of about two years and provide energy savings and improved lighting for workspaces well into the future. The

Company continues to look for opportunities during capital upgrade projects to replace inefficient equipment in order to gain efficiencies and realize savings.

Energy Use Monitoring and Demand Response. PAWC uses an American Water enterprise-wide application to monitor its energy accounts across the state. This monitoring tool provides "before and after" benchmarking capabilities to help the Company assess the success of various efficiency initiatives. The Company has also installed real-time electricity meters and dashboards at 19 of its largest pumping facilities. The dashboard provides our operators with real-time visibility of their electricity consumption and wire-to-water efficiency, and also provides our engineers with discrete energy efficiency data on these large units to monitor and plan for future efficiency upgrades.

PAWC was also an early adopter of smart-grid technology to help integrate the way we operate our treatment plants and pumps with electric grid system conditions. PAWC has installed equipment at three of its largest water pumping stations and one of its largest wastewater treatment plants that allows those facilities to vary electric usage (up or down) based on signals from the local grid operator. PAWC receives revenues from participation in demand response programs at these locations ranging from $25,000 to $75,000 annually that are used to offset electricity expense, but more importantly, we are taking proactive steps to help ensure the integrity of the electricity grid during peak demand emergencies.

Act 129 Rebates. PAWC has been working with its electric utilities since the inception of the programs for energy efficiency and conservation ("EE&C") that those utilities instituted to comply with Act 129. When electric utilities were developing their EE&C programs, the Company participated in stakeholder meetings with their service

providers to provide input from the water and wastewater industries. As the EE&C programs were introduced by the electric utilities, PAWC reviewed its capital projects for eligibility under the rebate programs and applied for, and received, several rebates. As of October 1, 2023, the Company has received over 40 rebates for more than $1,020,000.

Q. What are the benefits of PAWC's efforts to improve energy efficiency?

A. The benefits of PAWC's efforts to improve energy efficiency are three-fold. Improved energy efficiency (1) provides more efficient, higher quality service; (2) reduces operating costs through reduced energy consumption; and (3) reduces carbon and other emissions. Through the comprehensive energy efficiency programs outlined above, the Company has been able to minimalize increases to its fuel and power expenses.

Q. Please describe what the Company has done to control waste disposal expenses.

A. The Company has a long history of exploring and implementing cost-effective beneficial uses for its treatment residuals, rather than relying on costly landfill disposal. The Company has been able to implement beneficial use practices at 32 of the Company's 35 surface water treatment plants. On a dry weight basis, approximately 95% of the Company's water treatment residuals are beneficially used across the state, at a cost far lower than conventional disposal at a landfill. The Company recently implemented capital improvement projects at the Ellwood City and Norristown water treatment plants and the Clarion wastewater treatment plant to improve the residuals dewatering process. This process lowers the overall weight of the product to be transported and disposed of; and thus, the associated costs as well. A new volute press process at the Clarion wastewater treatment plant has improved the percentage solids reduction from an original range of 12%-18% to greater than 16%-22%, thus reducing the overall disposal costs. The new

centrifuge process in Ellwood City, completed in 2019, has resulted in a disposal cost saving of over 90%. A residuals improvement project is currently being completed at PAWC's largest water treatment plant, the Hays Mine Plant in Pittsburgh, which is expected to result in similar savings.

Q. Please describe what the Company has done to control purchased water expenses.

A. The Company has implemented changes in two districts to control purchased water expenses. We are currently maximizing all extra capacity from our Brownsville treatment plant by pumping it to Uniontown to reduce the purchased water load. We also increased our leak detection activities in Uniontown to minimize purchased water. The Company is continually investigating potential capital upgrades to be able to shift even more load to the lower-cost provider in the longer term.

Employee Levels and Compensation

Q. Please discuss how PAWC staffs its business operations.

A. As a public utility, PAWC is required to provide safe, reliable, and adequate water and wastewater services. PAWC's employees are responsible for assuring the production of high-quality drinking water, operating and maintaining the Company's production and treatment facilities and its distribution and collection systems, monitoring water quality, providing engineering services, and supporting the efficient management of all the Company's operations.

The Company continually strives to find more efficient and cost-effective ways to operate and maintain its business. As part of that effort, we strive to manage our cost structure as efficiently as possible, including employee costs. We recognize our duty to staff our business in a way consistent with providing safe, reliable and affordable utility

service. This requires a constant evaluation of the right mix of internal and contract labor, straight time versus overtime, training programs, and supplementing or, when prudent, replacing labor with technology. In this vein, we continue to evaluate costs and expenses going forward, always looking for the best solution for the unique and changing challenges we face. A substantial portion of PAWC's cost structure is associated with the Company's cost of labor, and as a position becomes vacant in our organization, we look to the value of that position. We review the overall need for that position and consider, among other things, whether it should be transferred to another area, modified, or even eliminated. Workforce optimization and improved business performance are the goals of these efforts. We continue to evaluate the new roles that will be created as new regulatory requirements are promulgated, and the appropriate positions that PAWC will need to optimize recent technology and most effectively serve our customers.

Q. What is PAWC's forecasted staffing level in this case?

A. We have identified 1,294 equivalent employees as the appropriate staffing level for the Company's water and wastewater operations in the FPFTY. The number of employees is based upon each department and each functional area's need to provide safe, adequate, efficient, and reliable service to the Company's customers. Service needs and related resource requirements are consistent with meeting regulatory requirements, tariff requirements, industry standards, service requests, customer needs, and providing adequate support to PAWC's business operations.

Q. Please describe PAWC's approach to employee compensation.

A. PAWC aims to offer compensation that allows it to attract and retain customer-committed, dedicated and highly qualified employees. The Company's overall compensation

philosophy is to provide employees with a total compensation package that is market based and competitive with those of comparable organizations with jobs of similar responsibility. As part of its compensation philosophy, the Company has chosen to make a portion of its compensation variable, driving continued performance across the enterprise. Specifically, PAWC targets its total direct compensation (base and variable compensation) for each role at the Company near the market median (50th percentile) for that role. By using a combination of fixed and variable compensation, the Company satisfies a dual objective of ensuring competitive market-based total compensation for all employees, while continuing to motivate employees to achieve goals that will improve performance and efficiency for the benefit of our customers.

Q. Please identify the various employee classifications at PAWC and briefly describe how each group is compensated.

A. There are three classifications of employees: collective bargaining unit ("CBU") hourly employees, non-collective bargaining unit ("non-CBU") hourly employees and exempt employees. Full-time hourly employees are compensated through base pay, overtime, performance compensation, and in some instances, shift premium and meal compensation pursuant to the terms of applicable collective bargaining agreements. Exempt employees are compensated through base pay and performance compensation.

Q. How is performance compensation provided to PAWC employees?

A. The performance compensation component of the Company's total direct compensation may be awarded under two performance plans – the Annual Performance Plan ("APP") and the Long-Term Performance Plan ("LTPP"). All full-time employees, including CBU employees, participate in the APP. Eligibility for the LTPP is limited to certain exempt

employees. Copies of the plans, which are marked as confidential and proprietary, are provided as Filing Requirement III.22 (Volume 6b) of the Company's responses to the PUC's filing requirements.

Q. Please describe the key performance objectives underlying the APP.

A. The APP is designed to recognize performance against key performance goals and targets that drive the Company's strategy. For 2023, the APP goals include safety goals related to reducing the ORIR and DART rates, customer goals related to customer satisfaction, environmental goals related to avoiding violations, people goals related to improving diverse representation in the workforce, and growth goals related to the Company's financial performance.

Q. Please describe the Company's LTPP.

A. American Water provides restricted stock units ("RSUs") and performance stock units ("PSUs") as long-term variable compensation under the LTPP. American Water's RSUs and PSUs are based on three-year vesting periods. RSUs are based on time-based vesting and PSUs are based on performance vesting conditions.[2]

Q. Do the Company's compensation plans benefit customers?

A. Yes. As I mentioned, the plans are designed to provide compensation for performance and to focus plan participants on delivering safe, reliable and affordable water and wastewater services. The design of the plans emphasizes customer service, environmental compliance,

[2] American Water uses a combination of compounded EPS growth and relative total shareholder return ("TSR") ranking over a three-year performance period as the basis for measuring performance for PSU awards. For the portion of American Water's PSUs that are contingent on relative TSR percentile performance, American Water compares performance to its peer group.

a safe work environment, and people, as well as certain financial goals. All of the APP and LTPP performance objectives – both operational and financial – focus employees' efforts in ways that ultimately benefit customers. The use of multiple measures further strengthens our ability to drive results across the enterprise. The operational components measure performance that can most directly influence customer satisfaction, health and safety, environmental performance, and workforce diversity. Customers benefit from the plan goals because operational performance is improved by controlling costs, capturing efficiencies, promoting effective safety and risk management practices, enhancing customer service, and doing so with a diverse workforce that reflects the communities we serve. Performance is determined by goals that benefit customers by creating a more productive and engaged workforce that is focused on customer satisfaction and achieving efficiency, environmental and safety goals. Further, well-grounded financial measures keep the organization focused on improved performance at all levels of the organization, particularly in increasing efficiency, decreasing waste, and boosting overall productivity. Finally, a financially healthy utility focused on efficiency and customer satisfaction can attract the capital investments necessary to provide safe and reliable service at favorable rates. Because utilities are capital intensive and must routinely and consistently access the capital markets, customers ultimately benefit when their utility has the financial health to do so at reasonable rates. Simply put, a financially healthy utility benefits customers because it enables the utility to meet its service obligations at reasonable financing costs.

Employee Development

Q. Describe the Company's commitment to employee development.

A. PAWC values the growth and development of its employees. In support of this, an annual training goal of 25 hours or more has been set for all employees. LEARN, American Water's learning management systems provides a one-stop shop for registering for instructor-led courses and participating in e-learning. In addition to the Company's focus on providing employees with relevant training geared towards their primary job responsibilities, there are opportunities for technical, professional, management and leadership development for career advancement opportunities. There are over 200+ eLearning courses around business, leadership, and professional development available in LEARN.

All employees have been assigned the following safety courses for 2023: Blood Born Pathogens and Fire Safety and Prevention, which are an annual requirement. In addition, An Employees Right to Know, Slips, Trips and Falls and Stop Work Authority are on a three-year training recurrence cycle. We consider these courses core to our training program and additional courses are assigned based on the employee's specific job tasks. PAWC has also developed an Operator Training Academy aimed at developing the skills of our treatment plant operators, which consists of both virtual and live sessions. While designed for operators, the program is offered to all employees that wish to develop their understanding of the Production and Treatment processes.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)**
	:	**R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Jim Runzer**, hereby state that the facts set forth in the pre-marked Statement No. 2 and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: November 8, 2023

Jim Runzer

COATESVILLE WASTEWATER TREATMENT PLANT
HIGH STRENGTH WASTEWATER SURCHARGE PROGRAM
RATE EVALUATION

Revised Final Report
Dated April 7, 2022

Prepared for:
Pennsylvania American Water Company
Chester County, Pennsylvania

GANNETT FLEMING

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1.0 INTRODUCTION

1.1 Background

Wastewater discharged from some non-residential (industrial, institutional, or commercial) dischargers can be much higher in strength than domestic wastewater and, as a result, requires additional treatment. These non-residential facilities can discharge wastewater containing high Biochemical Oxygen Demand (BOD_5), Total Suspended Solids (TSS), Total Phosphorus (TP), or Total Nitrogen (TN). Industrial, institutional, and commercial wastewaters can cost more to treat than residential wastewater because it can have a higher dissolved oxygen demand, create more solids for disposal, or require more chemicals for treatment. A High Strength Wastewater Surcharge Program provides a means to recover the additional treatment costs created by these discharges by charging a surcharge fee (in addition to the quarterly user rate) to dischargers of higher-than-normal strength wastewater. Surcharge rates provide an equitable means of distributing treatment costs among rate payers based on discharge characteristics. They are facility-specific and are calculated based on actual facility operating data. By establishing high strength surcharge rates, wastewater treatment plants (WWTPs) have the ability to distribute treatment costs on the basis of actual discharge strength above an established surcharge "baseline concentration.

Pennsylvania American Water Company (PAWC) has developed and implemented a High Strength Surcharge Program, as outlined it its Pennsylvania Wastewater Tariff. The surcharges for the Coatesville District are outlined under Section T, 1.2 and are summarized in *Table 1-1*. Because high strength surcharges are based on actual operating expenses and treatment efficiencies, these calculations must be updated periodically to better reflect the current operations of the WWTP. For these reasons, the PAWC has decided to update the calculations of their High Strength Surcharge Program for the Coatesville District to ensure the surcharge rates are appropriate and defendable. Additionally, PAWC wishes to establish nutrient surcharge rates for Total Nitrogen (TN) and Total Phosphorus (TP) in addition to Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS).

Table 1-1. Current Surcharge Rate Schedule

	Cost/Lb.
BOD_5	$0.10
TSS	$0.06

The surcharge study calculations involve establishing a cost per pound for the pollutants of concern (BOD_5, TSS, TP, and TN) for each of the past three (3) years and then calculating a running 3-year average for each. The calculation tables are set up so that they can be updated periodically to allow the PAWC to establish current treatment costs for each pollutant.

1.2 Methodology

This Report sets forth the results of a High Strength Wastewater Surcharge Rate Study based on actual operations and maintenance expenses and actual influent loadings to the PAWC Coatesville WWTP for calendar years 2017, 2018, and 2019. This report contains explanations of the methods and procedures employed to calculate the High Strength Wastewater Surcharge Rate for the PAWC. Operations and maintenance costs were allocated among eleven (11) treatment processes (Influent Pumping Station, Preliminary Treatment, Bioreactors, Secondary Clarification, Chemical P Removal, Secondary Pumping Station, Tertiary Filtration, Disinfection, Solids Thickening, Aerobic Digestion, and Solids Dewatering). The treatment process O&M costs were allocated to the removal of BOD_5, TSS, TN, and TP. The annual removal (in pounds) of BOD_5, TSS, TN, and TP were calculated using laboratory data. A treatment cost per pound of pollutant removed was then calculated.

2.0 ALLOCATION PROCEDURES

The tables in the appendices of this report represent the step-by-step allocation procedures for the high strength wastewater surcharge calculations. Each appendix contains the calculations for an annual 12-month period, based on the PAWC's fiscal year from January 1 through December 31. The tables for Fiscal Year 2017 are contained in *Appendix 1*, Fiscal Year 2018 in *Appendix 2*, and Fiscal Year 2019 in *Appendix 3*.

2.1 Allocation of Operation and Maintenance Costs

The actual operation and maintenance costs related to the treatment of wastewater at the Coatesville WWTP are identified by account for each Fiscal Year. Each account was reviewed to determine the nature of the cost and to allocate those costs among the eleven (11) stages of the treatment process. This review formed the basis for the cost allocation presented in *Table 1* of the respective appendices.

The Electrical expenses were allocated based on the percent of annual kilowatt hours of equipment operated for each treatment process, as summarized in *Table 2* of the respective appendices.

2.2 Allocation of Cost Functions to Treatment Processes

As previously indicated, eleven (11) stages of treatment processes were included in this evaluation. In *Table 3* of the respective appendices, the costs to operate each treatment process are allocated among the pollutants of concern (Flow, BOD_5, TSS, TN, and TP) for each Fiscal Year.

2.3 Calculation of Removal Costs

The total annual costs associated with the removal of each pollutant for each Fiscal Year is summarized in *Table 4* of the respective appendices. These costs are based on the total operating costs of each treatment process as established in *Table 1* of the respective appendices. The total annual removal costs were divided by the total annual pounds removed of each pollutant in the respective year, as calculated in *Table 4* of the respective appendices, to establish a cost of removal per pound of pollutant.

The results of the High Strength Wastewater Surcharge Evaluation for each pollutant during each Fiscal Year are summarized in *Table 2-1*. A 3-year average has also been developed based on the annual treatment costs for each pollutant and this long-term average is utilized to normalize any anomalies in the annual average values. These 3-year averages should become the basis for the high strength wastewater surcharge rates.

Table 2-1. High Strength Surcharge Rate Summary

Pollutant	Fiscal Year			3-Year Average
	2017	2018	2019	
BOD_5	$0.39	$0.33	$0.33	$0.35
TSS	$0.18	$0.20	$0.20	$0.19
TN	$1.21	$1.03	$1.01	$1.08
TP	$2.82	$2.02	$2.11	$2.32

The National Association of Clean Water Agencies (NACWA) periodically surveys municipalities and authorities nationwide to track financial trends. As part of the NACWA's most recent survey in 2017, over 100 municipalities and authorities were surveyed. The 2017 NACWA National Survey of Municipal Wastewater Management and Financing Trends found the average BOD surcharge rate was $ 0.325 per lb. and the

average TSS surcharge rate was $0.287 per lb. PAWC Coatesville's calculated BOD rate, as presented in *Table 2-1*, appears to be lower than the national average compiled by the NACWA, although the calculated TSS rate is similar to the national average. Additionally, a survey of thirteen (13) wastewater authorities and agencies in central Pennsylvania revealed an average BOD and TSS surcharge rate of $0.384 and $0.381 per lb., respectively. Generally, it appears that the PAWC Coatesville surcharge rates are within the typical range.

Please note that these removal costs are applicable only to discharges into the sewer system that are treated at the Coatesville WWTP. Removal costs for other discharges from different sewer service systems or treated at different wastewater treatment plants cannot be extrapolated from these results.

3.0 APPLICABILITY

3.1 Domestic Strength Wastewater Concentrations

The high strength wastewater surcharge should only be applied to those sources of wastewaters with average discharge qualities that significantly exceed the typical domestic strength concentrations of the Coatesville WWTP's residential and non-regulated commercial (i.e. domestic) users. PAWC's current High Strength Surcharge Program, as outlined it its Pennsylvania Wastewater Tariff under Section T, 1.2, assumes domestic strength BOD and TSS concentrations of 300 mg/L each.

Establishing the "typical" domestic strength concentration for a particular wastewater collection system is accomplished by routine sampling of select locations throughout the system. Without collection system monitoring results, however, a conservative estimate of the typical domestic strength concentration must be utilized for high strength surcharge purposes.

Oftentimes, the average annual WWTP raw influent concentrations can be used for this purpose. These values include the non-residential components in addition to the residential components and, therefore, will typically exhibit higher concentrations than just the domestic wastewater component. This is especially true for the Coatesville WWTP, which includes a large beverage manufacturer in its service area that contributes a significant organic load. For high strength wastewater surcharging purposes, the historical WWTP raw influent concentrations, as presented in *Table 3-1*, can be utilized as the domestic strength concentrations.

Table 3-1. WWTP Raw Influent Characteristics

Pollutant	Year *			3-Year Average
	2017	2018	2019	
BOD_5	324	257	392	324
TSS	305	367	404	359
TN	41.0	29.1	42.1	37.4
TP	6.8	5.5	8.0	6.8

* As calculated in *Table 4* of the respective calculations in *Appendices 1* through *3*.

In addition to the residential, commercial, and non-regulated industrial discharges from the collection system, the PAWC Coatesville WWTP receives flows from several significant contributors. Raw influent to the WWTP, therefore, is comprised of four (4) main sources: Collection System (residential, commercial, and non-regulated industrial discharges); Victory Brewing Process Wastewater; Hauled Septage; and Rock Run Water Treatment Plant Residuals. As part of Gannett Fleming's August 2019 WWTP Process Evaluation, each of these components of the WWTP raw influent were estimated. The pollutant concentrations of the domestic strength wastewater (i.e. residential, commercial, and non-regulated industrial discharges) in the Coatesville service area is estimated as presented in *Table 3-2*.

Table 3-2. Estimated WWTP Raw Influent Characteristics

Pollutant	Average Annual Concentration*, mg/L
BOD_5	163
TSS	127
TN	32.2

* As estimated in Table 1 of the August 2019 GF WWTP Process Evaluation Report

For high strength wastewater surcharging purposes, the recommended pollutant concentrations in the domestic strength wastewater in the Coatesville service area are estimated as presented in *Table 3-3*. Actual domestic strength wastewater within the collection system is most likely lower than the values in *Table 3-3*, however, it is administratively easier to round up the concentrations for compliance monitoring purposes. Additionally, it is appropriate to maintain the BOD and TSS concentrations the same as historically utilized for continuity of the high strength surcharge program.

Table 3-3. Recommended Domestic Strength Wastewater Concentrations

Pollutant	Average Annual Concentration, mg/L
BOD_5	300
TSS	300
TN	40.0
TP	10.0

3.2 Applicability

Dischargers identified through wastewater sampling as contributing wastewater with strengths greater than domestic wastewater for any of the surcharge parameters (BOD, TSS, TN, or TP) shall pay a monthly or quarterly surcharge based on that customer's discharge strength and monthly metered wastewater volume. If metering is impractical, estimates of flow may be used. This surcharge will be in addition to the standard sewer use charge which is based on volume. The surcharge rate applies only to the extra strength (i.e. total concentration minus typical domestic concentration) for each parameter. Parameters with concentrations below typical domestic wastewater concentrations should be assessed the standard sewer use charge. No credit should be given for wastewater with one or more parameter concentrations below the maximum typical domestic concentrations.

A high strength wastewater surcharge should be applied to those sources of wastewater with average discharge qualities that significantly exceed the "Recommended Domestic Strength Wastewater Concentrations" as listed in *Table 3-3*. The high strength wastewater surcharge should be calculated using the 3-year average per pound removal cost as listed in *Table 2-1*. High Strength Wastewater Surcharges shall be calculated in dollars using the following formulas:

BOD	($0.20/lb) x (Total Flow, Mgal) x (8.34) x (BOD Concentration - 300 mg/L)
TSS	($0.29/lb) x (Total Flow, Mgal) x (8.34) x (TSS Concentration - 300 mg/L)
TN	($0.52/lb) x (Total Flow, Mgal) x (8.34) x (TN Concentration - 40.0 mg/L)
TP	($0.73/lb) x (Total Flow, Mgal) x (8.34) x (TP Concentration - 10.0 mg/L)

The total high strength surcharge rate is the sum of the surcharge rates for each parameter.

APPENDIX 1

High Strength Wastewater Surcharge Calculations
Fiscal Year 2017

Table 1
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Allocation of Total Operating Costs by Functional Cost Center
Janaury 1, 2017 through December 31, 2017

Account	Budget Amount [1]	Influent Pumping Station		Preliminary Treatment		Bioreactors		Secondary Clarification		Chemical P Removal		Secondary Pumping Station		Tertiary Filtration		Disinfection		Solids Thickening		Aerobic Digestion		Solids Dewatering	
		Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount
Total Production Costs																							
Fuel and Power	$605,310	3.7%	$22,270	0.2%	$1,150	44.4%	$268,720	0.8%	$4,970	0.0%	$0	3.7%	$22,270	1.4%	$8,620	6.6%	$40,130	2.2%	$13,010	31.4%	$190,020	5.6%	$34,000
Chemicals																							
Quick Lime	$67,270	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	100.0%	$67,270
Polymer	$135,440	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	10.0%	$13,540	0.0%	$0	90.0%	$121,900
Hydrated Lime	$890	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	100.0%	$890
Aluminum Sulfate	$10,470	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	100.0%	$10,470	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0
Sodium Hypochlorite	$670	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	100.0%	$670	0.0%	$0	0.0%	$0	0.0%	$0
Magnesium Hydroxide	$8,020	0.0%	$0	0.0%	$0	100.0%	$8,020	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0
Biosolids and Grit/Screening Disposal	$281,680	0.0%	$0	5.0%	$14,080	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	95.0%	$267,600
Employee Related Costs																							
Salaries and Wages	$444,410	5.0%	$22,220	5.0%	$22,220	25.0%	$111,100	10.0%	$44,440	0.0%	$0	5.0%	$22,220	10.0%	$44,440	10.0%	$44,440	10.0%	$44,440	10.0%	$44,440	10.0%	$44,440
Pensions	$32,530	5.0%	$1,630	5.0%	$1,630	25.0%	$8,130	10.0%	$3,250	0.0%	$0	5.0%	$1,630	10.0%	$3,250	10.0%	$3,250	10.0%	$3,250	10.0%	$3,250	10.0%	$3,250
Group Insurances	$111,100	5.0%	$5,560	5.0%	$5,560	25.0%	$27,780	10.0%	$11,110	0.0%	$0	5.0%	$5,560	10.0%	$11,110	10.0%	$11,110	10.0%	$11,110	10.0%	$11,110	10.0%	$11,110
Other Benefits	$25,780	5.0%	$1,290	5.0%	$1,290	25.0%	$6,450	10.0%	$2,580	0.0%	$0	5.0%	$1,290	10.0%	$2,580	10.0%	$2,580	10.0%	$2,580	10.0%	$2,580	10.0%	$2,580
Operating Supplies and Services																							
Contracted Services	$61,690	5.0%	$3,080	5.0%	$3,080	25.0%	$15,420	10.0%	$6,170	0.0%	$0	5.0%	$3,080	10.0%	$6,170	10.0%	$6,170	10.0%	$6,170	10.0%	$6,170	10.0%	$6,170
Building and Maintenance Services	$23,350	5.0%	$1,170	5.0%	$1,170	25.0%	$5,840	10.0%	$2,340	0.0%	$0	5.0%	$1,170	10.0%	$2,340	10.0%	$2,340	10.0%	$2,340	10.0%	$2,340	10.0%	$2,340
Telecommunication Expenses	$5,190	5.0%	$260	5.0%	$260	25.0%	$1,300	10.0%	$520	0.0%	$0	5.0%	$260	10.0%	$520	10.0%	$520	10.0%	$520	10.0%	$520	10.0%	$520
Postage Printing and Stationery	$290	5.0%	$10	5.0%	$10	25.0%	$70	10.0%	$30	0.0%	$0	5.0%	$10	10.0%	$30	10.0%	$30	10.0%	$30	10.0%	$30	10.0%	$30
Office Supplies & Expenses	$6,340	5.0%	$320	5.0%	$320	25.0%	$1,590	10.0%	$630	0.0%	$0	5.0%	$320	10.0%	$630	10.0%	$630	10.0%	$630	10.0%	$630	10.0%	$630
Advertising & Marketing Expenses	$0	5.0%	$0	5.0%	$0	25.0%	$0	10.0%	$0	0.0%	$0	5.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0
Employee Related Expense Travel & Entertainment	$4,610	5.0%	$230	5.0%	$230	25.0%	$1,150	10.0%	$460	0.0%	$0	5.0%	$230	10.0%	$460	10.0%	$460	10.0%	$460	10.0%	$460	10.0%	$460
Miscellaneous Expenses	$44,970	5.0%	$2,250	5.0%	$2,250	25.0%	$11,240	10.0%	$4,500	0.0%	$0	5.0%	$2,250	10.0%	$4,500	10.0%	$4,500	10.0%	$4,500	10.0%	$4,500	10.0%	$4,500
Rents	$1,150	5.0%	$60	5.0%	$60	25.0%	$290	10.0%	$120	0.0%	$0	5.0%	$60	10.0%	$120	10.0%	$120	10.0%	$120	10.0%	$120	10.0%	$120
Transportation	$31,420	5.0%	$1,570	5.0%	$1,570	25.0%	$7,860	10.0%	$3,140	0.0%	$0	5.0%	$1,570	10.0%	$3,140	10.0%	$3,140	10.0%	$3,140	10.0%	$3,140	10.0%	$3,140
Uncollectible Accounts Expenses	$0	5.0%	$0	5.0%	$0	25.0%	$0	10.0%	$0	0.0%	$0	5.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0
Customer Accounting Other	$0	5.0%	$0	5.0%	$0	25.0%	$0	10.0%	$0	0.0%	$0	5.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0
Regulatory Expense	$0	5.0%	$0	5.0%	$0	25.0%	$0	10.0%	$0	0.0%	$0	5.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0
Insurance (Other Than Group)	$13,260	5.0%	$660	5.0%	$660	25.0%	$3,320	10.0%	$1,330	0.0%	$0	5.0%	$660	10.0%	$1,330	10.0%	$1,330	10.0%	$1,330	10.0%	$1,330	10.0%	$1,330
Maintenance Service & Supplies	$55,060	5.0%	$2,750	5.0%	$2,750	25.0%	$13,770	10.0%	$5,510	0.0%	$0	5.0%	$2,750	10.0%	$5,510	10.0%	$5,510	10.0%	$5,510	10.0%	$5,510	10.0%	$5,510
General Taxes	$40,940	5.0%	$2,050	5.0%	$2,050	25.0%	$10,240	10.0%	$4,090	0.0%	$0	5.0%	$2,050	10.0%	$4,090	10.0%	$4,090	10.0%	$4,090	10.0%	$4,090	10.0%	$4,090
Miscellaneous Operation and Expenses	$364,070	10.0%	$36,410	10.0%	$36,410	10.0%	$36,410	10.0%	$36,410	1.0%	$3,640	10.0%	$36,410	10.0%	$36,410	9.0%	$32,770	10.0%	$36,410	10.0%	$36,410	10.0%	$36,410
Total	**$2,375,910**	**---**	**$103,790**	**---**	**$96,750**	**---**	**$538,700**	**---**	**$131,600**	**---**	**$14,110**	**---**	**$103,790**	**---**	**$135,250**	**---**	**$163,790**	**---**	**$153,180**	**---**	**$316,650**	**---**	**$618,290**

Notes:
[1] Year End Budget amounts from Fiscal Year 2017 with miscellaneous assumptions and estimations based on supplemental data provided by PAWC staff.
[2] Distribution of electric costs are based on allocation established in *Table 2*.

Table 2
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Annual Distribution of Power Costs
Janaury 1, 2017 through December 31, 2017

Treatment Process	hp	Operating Time			Annual kWh	% of Total
		Hours/Day	Days/Year	Hours/Year		
Influent Pumping Station						
Pump No. 1	75.00	24	122	2,920	163,308	---
Pump No. 2	75.00	24	122	2,920	163,308	---
Pump No. 3	75.00	24	122	2,920	163,308	---
Influent PS Total	---	---	---	---	*489,925*	3.7%
Preliminary Treatment						
Mechanical Barscreens						
Motor	5.00	4	365	1,460	5,444	---
Washer/Compactor Motor	0.50	4	365	1,460	544	---
Screw Conveyor	5.00	4	365	1,460	5,444	---
Grit Removal						
Grit Pump Motor	7.50	4	365	1,460	8,165	---
Grit Classifier	5.00	4	365	1,460	5,444	---
Grit Screw Motor	0.33	4	365	1,460	359	---
Preliminary Treatment Total	---	---	---	---	*25,400*	*0.2%*
Bioreactors						
Basin 1 Brush Aerator 1 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 2 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 3 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 4 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 5 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 6 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 7 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 1 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 2 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 3 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 4 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 5 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 6 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 7 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Oxic Mixer 1 Motor	9.00	18	365	6,570	44,093	---
Basin 1 Oxic Mixer 2 Motor	9.00	18	365	6,570	44,093	---
Basin 1 Oxic Mixer 3 Motor	9.00	18	365	6,570	44,093	---
Basin 2 Oxic Mixer 1 Motor	9.00	18	365	6,570	44,093	---
Basin 2 Oxic Mixer 2 Motor	9.00	18	365	6,570	44,093	---
Basin 2 Oxic Mixer 3 Motor	9.00	18	365	6,570	44,093	---
Basin 1 Anaerobic Mixer 1 Motor	3.90	24	365	8,760	25,476	---
Basin 1 Anaerobic Mixer 2 Motor	3.90	24	365	8,760	25,476	---
Basin 2 Anaerobic Mixer 1 Motor	3.90	24	365	8,760	25,476	---
Basin 2 Anaerobic Mixer 2 Motor	3.90	24	365	8,760	25,476	---
RAS Pump No. 1	15.00	24	292	7,008	78,388	---
RAS Pump No. 2	15.00	24	292	7,008	78,388	---
RAS Pump No. 3	15.00	24	292	7,008	78,388	---
RAS Pump No. 4	15.00	24	292	7,008	78,388	---
RAS Pump No. 5	15.00	24	292	7,008	78,388	---
WAS Pump No. 1 Motor	30.00	1	183	183	4,094	---
WAS Pump No. 2 Motor	30.00	1	183	183	4,094	---
WAS Pump No. 1 Grinder	5.00	1	183	183	682	---
WAS Pump No. 2 Grinder	5.00	1	183	183	682	---
Bioreactors Total	---	---	---	---	5,912,167	*44.4%*
Chemical P Removal						
Alum Feed Pump No. 1	0.50	12	365	4,380	1,633	---
Alum Feed Pump No. 2	0.50	12	365	4,380	1,633	---
Chemcial P Removal Total	---	---	---	---	3,266	*0.0%*

Table 2
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Annual Distribution of Power Costs
Janaury 1, 2017 through December 31, 2017

Treatment Process	hp	Operating Time			Annual kWh	% of Total
		Hours/Day	Days/Year	Hours/Year		
Secondary Clarification						
Clarifier No. 1 Drive Motor	0.50	24	365	8,760	3,266	---
Clarifier No. 2 Drive Motor	0.50	24	365	8,760	3,266	---
Clarifier No. 3 Drive Motor	0.75	24	365	8,760	4,899	---
Clarifier No. 1 Scum Pump Motor	5.00	24	365	8,760	32,662	---
Clarifier No. 2 Scum Pump Motor	5.00	24	365	8,760	32,662	---
Clarifier No. 3 Scum Pump Motor	5.00	24	365	8,760	32,662	---
Secondary Clarification Total	---	---	---	---	*109,417*	*0.8%*
Secondary Pumping Station						
Pump No. 1	75.00	24	122	2,920	163,308	---
Pump No. 2	75.00	24	122	2,920	163,308	---
Pump No. 3	75.00	24	122	2,920	163,308	---
Secondary PS Total	---	---	---	---	*489,925*	*3.7%*
Tertiary Filters						
Blower No. 1	75.00	8	183	1,464	81,878	---
Blower No. 2	75.00	8	183	1,464	81,878	---
Backwash Pump No. 1	40.00	2	183	366	10,917	---
Backwash Pump No. 2	40.00	2	183	366	10,917	---
Air Compressor	7.50	4	183	732	4,094	---
Tertiary Filter Total	---	---	---	---	*189,684*	*1.4%*
Disinfection						
UV Lamp Bank No. 1 (kW per lamp)	2.8	12	365	4,380	441,504	---
UV Lamp Bank No. 2 (kW per lamp)	2.8	12	365	4,380	441,504	---
Disinfection Total	---	---	---	---	*883,008*	*6.6%*
Solids Thickening						
Plant Utility Water						
Plant Water Pump No. 1	15.00	24	243	5,840	65,323	---
Plant Water Pump No. 2	15.00	24	243	5,840	65,323	---
Plant Water Pump No. 3	15.00	24	243	5,840	65,323	---
Thickener						
Thickener No. 1 Drive Motor	3.00	8	365	2,920	6,532	---
Spray Wash Pump 1 Motor	10.00	8	365	2,920	21,774	---
Spray Wash Pump 2 Motor	10.00	8	365	2,920	21,774	---
Thickened Sludge Transer Pump N	7.50	8	365	2,920	16,331	---
Thickened Sludge Transer Pump N	7.50	8	365	2,920	16,331	---
Liquid Polymer Batching System	0.50	8	365	2,920	1,089	---
Polymer Tank No. 1 Mixer	1.50	8	365	2,920	3,266	---
Polymer Tank No. 2 Mixer	1.50	8	365	2,920	3,266	---
Thickening Total	---	---	---	---	*286,334*	*2.2%*
Aerobic Digestion						
Blower No. 1 Motor	100.00	24	292	7,008	522,586	---
Blower No. 2 Motor	100.00	24	292	7,008	522,586	---
Blower No. 3 Motor	100.00	24	292	7,008	522,586	---
Blower No. 4 Motor	100.00	24	292	7,008	522,586	---
Blower No. 5 Motor	100.00	24	292	7,008	522,586	---
Digester No. 1 Mixer No. 1	40.00	24	365	8,760	261,293	---
Digester No. 1 Mixer No. 2	40.00	24	365	8,760	261,293	---
Digester No. 1 Mixer No. 3	40.00	24	365	8,760	261,293	---
Digester No. 2 Mixer No. 1	40.00	24	365	8,760	261,293	---
Digester No. 2 Mixer No. 2	40.00	24	365	8,760	261,293	---
Digester No. 2 Mixer No. 3	40.00	24	365	8,760	261,293	---
Aerobic Digestion Total	---	---	---	---	*4,180,692*	*31.4%*

Table 2
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Annual Distribution of Power Costs
Janaury 1, 2017 through December 31, 2017

Treatment Process	hp	Operating Time			Annual kWh	% of Total
		Hours/Day	Days/Year	Hours/Year		
Dewatering						
Feed Pumps						
Feed Pump 1 Motor	7.50	8	365	2,920	16,331	---
Feed Pump 2 Motor	75.00	8	365	2,920	163,308	---
Feed Pump 3 Motor	7.50	8	365	2,920	16,331	---
Feed Pump 1 Grinder Motor	5.00	8	365	2,920	10,887	---
Feed Pump 2 Grinder Motor	5.00	8	365	2,920	10,887	---
Feed Pump 3 Grinder Motor	5.00	8	365	2,920	10,887	---
Centrifuge No. 1						
Bowl Drive Motor	100.00	8	365	2,920	217,744	---
Back Drive Motor	20.00	8	365	2,920	43,549	---
Screw Conveyor 1 Motor	5.00	8	365	2,920	10,887	---
Centrifuge No. 2						
Bowl Drive Motor	100.00	8	365	2,920	217,744	---
Back Drive Motor	20.00	8	365	2,920	43,549	---
Screw Conveyor 2 Motor	5.00	8	365	2,920	10,887	---
Polymer System						
Liquid Polymer Batching System	5.00	8	365	2,920	10,887	---
Polymer Tank No. 1 Mixer	1.50	8	365	2,920	3,266	---
Polymer Tank No. 2 Mixer	1.50	8	365	2,920	3,266	---
Polymer Pump 1	3.00	8	365	2,920	6,532	---
Polymer Pump 2	3.00	8	365	2,920	6,532	---
Screw Conveyor 3 Motor	10.00	8	365	2,920	21,774	---
Post Lime Treatment						
Lime Volumetric Feeder	1.50	8	365	2,920	3,266	---
Lime Feed Screw Conveyor	3.00	8	365	2,920	6,532	---
Lime/Solids Mixer	20.00	8	365	2,920	43,549	---
Screw Conveyor 4 Motor	5.00	8	365	2,920	10,887	---
Screw Conveyor 5 Motor	15.00	8	365	2,920	32,662	---
Screw Conveyor 6 Motor	15.00	8	365	2,920	32,662	---
Leveling Conveyor 7 Motor	5.00	8	365	2,920	10,887	---
Leveling Conveyor 8 Motor	5.00	8	365	2,920	10,887	---
Dewatering Total	---	---	---	---	*747,952*	*5.6%*
Total	**---**	**---**	**---**	**---**	***13,317,768***	***100.0%***

Notes:
(1) One mechanic or hydraulic horsepower is equal to 0.745699872 kilowatts.

Table 3
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Allocation of Function Cost Center Costs by Functional Cost Component
January 1, 2017 through December 31, 2017

		Capacity (Collection and Conveyance Systems)		Customer (Billing, Collection, and Accounting Services)		Volume (Hydraulic Flow)		BOD		TSS		TN		TP	
Treatment Process	**Operating Cost [1]**	**Percent**	**Amount**	**Percent**	**Amount**	**Percent**	**Amount**	**Percent**	**Amount**	**Percent**	**Amount**	**Percent**	**Amount**	**Percent**	**Amount**
Influent Pumping Station	$103,790	0%	$0	0%	$0	100%	$103,790	0%	$0	0%	$0	0%	$0	0%	$0
Preliminary Treatment	$96,750	0%	$0	0%	$0	0%	$0	35%	$33,860	60%	$58,050	0%	$0	5%	$4,840
Bioreactors	$538,700	0%	$0	0%	$0	0%	$0	87%	$470,810	0%	$0	10%	$51,730	3%	$16,160
Secondary Clarification	$131,600	0%	$0	0%	$0	0%	$0	59%	$77,060	30%	$39,480	8%	$11,110	3%	$3,950
Chemical P Removal	$14,110	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	100%	$14,110
Secondary Pumping Station	$103,790	0%	$0	0%	$0	100%	$103,790	0%	$0	0%	$0	0%	$0	0%	$0
Tertiary Filtration	$135,250	0%	$0	0%	$0	0%	$0	59%	$79,200	30%	$40,580	8%	$11,420	3%	$4,060
Disinfection	$163,790	0%	$0	0%	$0	100%	$163,790	0%	$0	0%	$0	0%	$0	0%	$0
Solids Thickening	$153,180	0%	$0	0%	$0	0%	$0	58%	$89,250	33%	$51,060	6%	$9,810	2%	$3,060
Aerobic Digestion	$316,650	0%	$0	0%	$0	0%	$0	58%	$184,500	33%	$105,550	6%	$20,270	2%	$6,330
Solids Dewatering	$618,290	0%	$0	0%	$0	0%	$0	58%	$360,240	33%	$206,100	6%	$39,580	2%	$12,370
Total	**$2,375,900**	**---**	**$0**	**---**	**$0**	**---**	**$371,370**	**---**	**$1,294,920**	**---**	**$500,820**	**---**	**$143,920**	**---**	**$64,880**

Notes:

[1] Operating costs from *Table 1*.

[2] The costs for BOD and TN removal in the secondary treatment process are based on the rate of oxygen demand assuming 1.5 lbs O_2 / lb BOD and 4.6 lbs O_2 / lb NH_3-N.

[3] The allocation of secondary clarification cost is distributed between BOD, TSS, NH3-N based on the estimated contribution of each to solids production. The costs for BOD and NH_3-N removal in the secondary clarifiers are based on the rate of oxygen demand while TSS contribution is estimated based on the primary clarifier influent TSS loading.

[4] Solids generated consist of influent solids, excess cell mass production as a direct result of the metabolism of BOD and TN, as well as chemical sludge from TP removal in the secondary treatment process. The allocation of solids handling cost is therefore distributed between BOD, TSS, TN, and TP based on the estimated contribution of each to solids production. Solids production is estimated based on the raw influent TSS loadings and the waste activated sludge loadings as outlined in*Table 4*.

Table 4
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Annual WWTP Operations Summary
January 1, 2017 through December 31, 2017

Pollutant of Concern	Raw Influent (1a)		Hauled Septage (1b)		Total Combined Process Loadings (1c)		Biological Assimulation (2)	Final Effluent (1)		Removal (3)	
	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	lbs/day	mg/L	lbs/day	lbs/day	lbs/year
BOD	312	8,196	2,000	874	334	9,070	---	2	58	9,070	3,310,497
TSS	276	7,258	1,000	437	284	7,696	---	4	106	7,696	2,808,897
TN	38.4	1,008	100.0	44	38.7	1,051	651	2.9	75.3	325	118,613
TP	7.0	184	20.0	9	7.1	193	123	0.3	6.9	63	23,011

Notes:

(1) Raw Influent and Final Effluent average concentrations and loadings as reported for 2017

a. Raw Influent concentrations and loadings do not include hauled waste contributions.

b. Hauled septage average equivalent concentrations are based on literature value estimates. Loadings are estimated using annual average hauled waste volume in 1d.

c. Total Combined Process Loadings are the sum of the raw wastewater and the hauled septage loadings.

d. Annual average daily flows utilized to calculate the equivalent process loadings concentrations:

Raw Influent: 3.201 mgd

Hauled Waste: 0.052 mgd

(2) Biological assimulation is estimated based on the following assumptions:

Parameter	Unit	Input	Calculation
WAS	mgd	0.170	---
WAS TSS	mg/L	8,832	---
WAS	lbs/day	---	12,556
MLVSS/MLSS Ratio	%	0.85	---
Estimated WAS VSS	lbs/day	---	10,673
Pure Biomass/WAS VSS Ratio	%	0.50	---
Estimated Pure Biomass	lbs/day	---	5,336
Nitrogen Assimulated	%	12.2%	---
Nitrogen Assimulated	lbs/day	---	651
Phosphorus Assimulated	%	2.3%	---
Phosphorus Assimulated	lbs/day	---	123

(3) Removal assumes that all BOD and TSS is removed through the treatment process and the final effluent CBOD and TSS are mostly an artifact of cellular debris.

a. For TN and TP, the annual pounds removed is the raw influent loading minus the final effluent loading. Nutrient assimilation in the biological treatment process is considered part of the removal process.

Table 5
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Cost of Removal Summary
January 1, 2017 through December 31, 2017

Pollutant of Concern	Annual Cost of Removal (1)	Annual Pounds Removed (2)	Cost per Pound Removed (3)
BOD	$1,294,920	3,310,497	$0.39
TSS	$500,820	2,808,897	$0.18
TN	$143,920	118,613	$1.21
TP	$64,880	23,011	$2.82

Notes:

(1) Annual Cost of Removal from *Table 3*.

(2) Annual Pounds Removed based from *Table 4*.

(3) Cost of Removal = Yearly Cost of Pollutant Removed / Yearly Pounds of Pollutant Removed.

APPENDIX 2

High Strength Wastewater Surcharge Calculations
Fiscal Year 2018

Table 1
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Allocation of Total Operating Costs by Functional Cost Center
Janaury 1, 2018 through December 31, 2018

Account	Budget Amount [1]	Influent Pumping Station		Preliminary Treatment		Bioreactors		Secondary Clarification		Chemical P Removal		Secondary Pumping Station		Tertiary Filtration		Disinfection		Solids Thickening		Aerobic Digestion		Solids Dewatering	
		Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount
Total Production Costs																							
Fuel and Power	$518,600	3.7%	$19,080	0.2%	$990	44.4%	$230,220	0.8%	$4,260	0.0%	$0	3.7%	$19,080	1.4%	$7,390	6.6%	$34,380	2.2%	$11,150	31.4%	$162,800	5.6%	$29,130
Chemicals																							
Quick Lime	$98,910	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	100.0%	$98,910
Polymer	$199,140	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	10.0%	$19,910	0.0%	$0	90.0%	$179,230
Hydrated Lime	$1,310	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	100.0%	$1,310
Aluminum Sulfate	$15,390	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	100.0%	$15,390	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0
Sodium Hypochlorite	$660	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	100.0%	$660	0.0%	$0	0.0%	$0	0.0%	$0
Magnesium Hydroxide	$11,790	0.0%	$0	0.0%	$0	100.0%	$11,790	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0
Biosolids and Grit/Screening Disposal	$355,350	0.0%	$0	5.0%	$17,770	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	95.0%	$337,580
Employee Related Costs																							
Salaries and Wages	$669,620	5.0%	$33,480	5.0%	$33,480	25.0%	$167,410	10.0%	$66,960	0.0%	$0	5.0%	$33,480	10.0%	$66,960	10.0%	$66,960	10.0%	$66,960	10.0%	$66,960	10.0%	$66,960
Pensions	$48,950	5.0%	$2,450	5.0%	$2,450	25.0%	$12,240	10.0%	$4,900	0.0%	$0	5.0%	$2,450	10.0%	$4,900	10.0%	$4,900	10.0%	$4,900	10.0%	$4,900	10.0%	$4,900
Group Insurances	$167,180	5.0%	$8,360	5.0%	$8,360	25.0%	$41,800	10.0%	$16,720	0.0%	$0	5.0%	$8,360	10.0%	$16,720	10.0%	$16,720	10.0%	$16,720	10.0%	$16,720	10.0%	$16,720
Other Benefits	$38,790	5.0%	$1,940	5.0%	$1,940	25.0%	$9,700	10.0%	$3,880	0.0%	$0	5.0%	$1,940	10.0%	$3,880	10.0%	$3,880	10.0%	$3,880	10.0%	$3,880	10.0%	$3,880
Operating Supplies and Services																							
Contracted Services	$67,170	5.0%	$3,360	5.0%	$3,360	25.0%	$16,790	10.0%	$6,720	0.0%	$0	5.0%	$3,360	10.0%	$6,720	10.0%	$6,720	10.0%	$6,720	10.0%	$6,720	10.0%	$6,720
Building and Maintenance Services	$25,430	5.0%	$1,270	5.0%	$1,270	25.0%	$6,360	10.0%	$2,540	0.0%	$0	5.0%	$1,270	10.0%	$2,540	10.0%	$2,540	10.0%	$2,540	10.0%	$2,540	10.0%	$2,540
Telecommunication Expenses	$5,650	5.0%	$280	5.0%	$280	25.0%	$1,410	10.0%	$570	0.0%	$0	5.0%	$280	10.0%	$570	10.0%	$570	10.0%	$570	10.0%	$570	10.0%	$570
Postage Printing and Stationery	$310	5.0%	$20	5.0%	$20	25.0%	$80	10.0%	$30	0.0%	$0	5.0%	$20	10.0%	$30	10.0%	$30	10.0%	$30	10.0%	$30	10.0%	$30
Office Supplies & Expenses	$6,910	5.0%	$350	5.0%	$350	25.0%	$1,730	10.0%	$690	0.0%	$0	5.0%	$350	10.0%	$690	10.0%	$690	10.0%	$690	10.0%	$690	10.0%	$690
Advertising & Marketing Expenses	$0	5.0%	$0	5.0%	$0	25.0%	$0	10.0%	$0	0.0%	$0	5.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0
Employee Related Expense Travel & Entertainment	$5,020	5.0%	$250	5.0%	$250	25.0%	$1,260	10.0%	$500	0.0%	$0	5.0%	$250	10.0%	$500	10.0%	$500	10.0%	$500	10.0%	$500	10.0%	$500
Miscellaneous Expenses	$48,650	5.0%	$2,430	5.0%	$2,430	25.0%	$12,160	10.0%	$4,870	0.0%	$0	5.0%	$2,430	10.0%	$4,870	10.0%	$4,870	10.0%	$4,870	10.0%	$4,870	10.0%	$4,870
Rents	$1,260	5.0%	$60	5.0%	$60	25.0%	$320	10.0%	$130	0.0%	$0	5.0%	$60	10.0%	$130	10.0%	$130	10.0%	$130	10.0%	$130	10.0%	$130
Transportation	$34,210	5.0%	$1,710	5.0%	$1,710	25.0%	$8,550	10.0%	$3,420	0.0%	$0	5.0%	$1,710	10.0%	$3,420	10.0%	$3,420	10.0%	$3,420	10.0%	$3,420	10.0%	$3,420
Uncollectible Accounts Expenses	$0	5.0%	$0	5.0%	$0	25.0%	$0	10.0%	$0	0.0%	$0	5.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0
Customer Accounting Other	$0	5.0%	$0	5.0%	$0	25.0%	$0	10.0%	$0	0.0%	$0	5.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0
Regulatory Expense	$0	5.0%	$0	5.0%	$0	25.0%	$0	10.0%	$0	0.0%	$0	5.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0
Insurance (Other Than Group)	$14,440	5.0%	$720	5.0%	$720	25.0%	$3,610	10.0%	$1,440	0.0%	$0	5.0%	$720	10.0%	$1,440	10.0%	$1,440	10.0%	$1,440	10.0%	$1,440	10.0%	$1,440
Maintenance Service & Supplies	$59,950	5.0%	$3,000	5.0%	$3,000	25.0%	$14,990	10.0%	$6,000	0.0%	$0	5.0%	$3,000	10.0%	$6,000	10.0%	$6,000	10.0%	$6,000	10.0%	$6,000	10.0%	$6,000
General Taxes	$44,570	5.0%	$2,230	5.0%	$2,230	25.0%	$11,140	10.0%	$4,460	0.0%	$0	5.0%	$2,230	10.0%	$4,460	10.0%	$4,460	10.0%	$4,460	10.0%	$4,460	10.0%	$4,460
Miscellaneous Operation and Maintenance	$146,020	10.0%	$14,600	10.0%	$14,600	10.0%	$14,600	10.0%	$14,600	1.0%	$1,460	10.0%	$14,600	10.0%	$14,600	9.0%	$13,140	10.0%	$14,600	10.0%	$14,600	10.0%	$14,600
Total	**$2,585,280**	**---**	**$95,590**	**---**	**$95,270**	**---**	**$566,160**	**---**	**$142,690**	**---**	**$16,850**	**---**	**$95,590**	**---**	**$145,820**	**---**	**$172,010**	**---**	**$169,490**	**---**	**$301,230**	**---**	**$784,590**

Notes:
[1] Year End Budget amounts from Fiscal Year 2018 with miscellaneous assumptions and estimations based on supplemental data provided by PAWC staff.
[2] Distribution of electric costs are based on allocation established in *Table 2*.

Table 2
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Annual Distribution of Power Costs
Janaury 1, 2018 through December 31, 2018

Treatment Process	hp	Operating Time			Annual kWh	% of Total
		Hours/Day	Days/Year	Hours/Year		
Influent Pumping Station						
Pump No. 1	75.00	24	122	2,920	163,308	---
Pump No. 2	75.00	24	122	2,920	163,308	---
Pump No. 3	75.00	24	122	2,920	163,308	---
Influent PS Total	---	---	---	---	*489,925*	3.7%
Preliminary Treatment						
Mechanical Barscreens						
Motor	5.00	4	365	1,460	5,444	---
Washer/Compactor Motor	0.50	4	365	1,460	544	---
Screw Conveyor	5.00	4	365	1,460	5,444	---
Grit Removal						
Grit Pump Motor	7.50	4	365	1,460	8,165	---
Grit Classifier	5.00	4	365	1,460	5,444	---
Grit Screw Motor	0.33	4	365	1,460	359	---
Preliminary Treatment Total	---	---	---	---	*25,400*	*0.2%*
Bioreactors						
Basin 1 Brush Aerator 1 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 2 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 3 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 4 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 5 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 6 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 7 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 1 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 2 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 3 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 4 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 5 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 6 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 7 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Oxic Mixer 1 Motor	9.00	18	365	6,570	44,093	---
Basin 1 Oxic Mixer 2 Motor	9.00	18	365	6,570	44,093	---
Basin 1 Oxic Mixer 3 Motor	9.00	18	365	6,570	44,093	---
Basin 2 Oxic Mixer 1 Motor	9.00	18	365	6,570	44,093	---
Basin 2 Oxic Mixer 2 Motor	9.00	18	365	6,570	44,093	---
Basin 2 Oxic Mixer 3 Motor	9.00	18	365	6,570	44,093	---
Basin 1 Anaerobic Mixer 1 Motor	3.90	24	365	8,760	25,476	---
Basin 1 Anaerobic Mixer 2 Motor	3.90	24	365	8,760	25,476	---
Basin 2 Anaerobic Mixer 1 Motor	3.90	24	365	8,760	25,476	---
Basin 2 Anaerobic Mixer 2 Motor	3.90	24	365	8,760	25,476	---
RAS Pump No. 1	15.00	24	292	7,008	78,388	---
RAS Pump No. 2	15.00	24	292	7,008	78,388	---
RAS Pump No. 3	15.00	24	292	7,008	78,388	---
RAS Pump No. 4	15.00	24	292	7,008	78,388	---
RAS Pump No. 5	15.00	24	292	7,008	78,388	---
WAS Pump No. 1 Motor	30.00	1	183	183	4,094	---
WAS Pump No. 2 Motor	30.00	1	183	183	4,094	---
WAS Pump No. 1 Grinder	5.00	1	183	183	682	---
WAS Pump No. 2 Grinder	5.00	1	183	183	682	---
Bioreactors Total	---	---	---	---	5,912,167	*44.4%*
Chemical P Removal						
Alum Feed Pump No. 1	0.50	12	365	4,380	1,633	---
Alum Feed Pump No. 2	0.50	12	365	4,380	1,633	---
Chemcial P Removal Total	---	---	---	---	3,266	*0.0%*

Table 2
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Annual Distribution of Power Costs
Janaury 1, 2018 through December 31, 2018

Treatment Process	hp	Operating Time			Annual kWh	% of Total
		Hours/Day	Days/Year	Hours/Year		
Secondary Clarification						
Clarifier No. 1 Drive Motor	0.50	24	365	8,760	3,266	---
Clarifier No. 2 Drive Motor	0.50	24	365	8,760	3,266	---
Clarifier No. 3 Drive Motor	0.75	24	365	8,760	4,899	---
Clarifier No. 1 Scum Pump Motor	5.00	24	365	8,760	32,662	---
Clarifier No. 2 Scum Pump Motor	5.00	24	365	8,760	32,662	---
Clarifier No. 3 Scum Pump Motor	5.00	24	365	8,760	32,662	---
Secondary Clarification Total	---	---	---	---	*109,417*	*0.8%*
Secondary Pumping Station						
Pump No. 1	75.00	24	122	2,920	163,308	---
Pump No. 2	75.00	24	122	2,920	163,308	---
Pump No. 3	75.00	24	122	2,920	163,308	---
Secondary PS Total	---	---	---	---	*489,925*	*3.7%*
Tertiary Filters						
Blower No. 1	75.00	8	183	1,464	81,878	---
Blower No. 2	75.00	8	183	1,464	81,878	---
Backwash Pump No. 1	40.00	2	183	366	10,917	---
Backwash Pump No. 2	40.00	2	183	366	10,917	---
Air Compressor	7.50	4	183	732	4,094	---
Tertiary Filter Total	---	---	---	---	*189,684*	*1.4%*
Disinfection						
UV Lamp Bank No. 1 (kW per lamp)	2.8	12	365	4,380	441,504	---
UV Lamp Bank No. 2 (kW per lamp)	2.8	12	365	4,380	441,504	---
Disinfection Total	---	---	---	---	*883,008*	*6.6%*
Solids Thickening						
Plant Utility Water						
Plant Water Pump No. 1	15.00	24	243	5,840	65,323	---
Plant Water Pump No. 2	15.00	24	243	5,840	65,323	---
Plant Water Pump No. 3	15.00	24	243	5,840	65,323	---
Thickener						
Thickener No. 1 Drive Motor	3.00	8	365	2,920	6,532	---
Spray Wash Pump 1 Motor	10.00	8	365	2,920	21,774	---
Spray Wash Pump 2 Motor	10.00	8	365	2,920	21,774	---
Thickened Sludge Transer Pump N	7.50	8	365	2,920	16,331	---
Thickened Sludge Transer Pump N	7.50	8	365	2,920	16,331	---
Liquid Polymer Batching System	0.50	8	365	2,920	1,089	---
Polymer Tank No. 1 Mixer	1.50	8	365	2,920	3,266	---
Polymer Tank No. 2 Mixer	1.50	8	365	2,920	3,266	---
Thickening Total	---	---	---	---	*286,334*	*2.2%*
Aerobic Digestion						
Blower No. 1 Motor	100.00	24	292	7,008	522,586	---
Blower No. 2 Motor	100.00	24	292	7,008	522,586	---
Blower No. 3 Motor	100.00	24	292	7,008	522,586	---
Blower No. 4 Motor	100.00	24	292	7,008	522,586	---
Blower No. 5 Motor	100.00	24	292	7,008	522,586	---
Digester No. 1 Mixer No. 1	40.00	24	365	8,760	261,293	---
Digester No. 1 Mixer No. 2	40.00	24	365	8,760	261,293	---
Digester No. 1 Mixer No. 3	40.00	24	365	8,760	261,293	---
Digester No. 2 Mixer No. 1	40.00	24	365	8,760	261,293	---
Digester No. 2 Mixer No. 2	40.00	24	365	8,760	261,293	---
Digester No. 2 Mixer No. 3	40.00	24	365	8,760	261,293	---
Aerobic Digestion Total	---	---	---	---	*4,180,692*	*31.4%*

Table 2
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Annual Distribution of Power Costs
Janaury 1, 2018 through December 31, 2018

Treatment Process	hp	Operating Time			Annual kWh	% of Total
		Hours/Day	Days/Year	Hours/Year		
Dewatering						
Feed Pumps						
Feed Pump 1 Motor	7.50	8	365	2,920	16,331	---
Feed Pump 2 Motor	75.00	8	365	2,920	163,308	---
Feed Pump 3 Motor	7.50	8	365	2,920	16,331	---
Feed Pump 1 Grinder Motor	5.00	8	365	2,920	10,887	---
Feed Pump 2 Grinder Motor	5.00	8	365	2,920	10,887	---
Feed Pump 3 Grinder Motor	5.00	8	365	2,920	10,887	---
Centrifuge No. 1						
Bowl Drive Motor	100.00	8	365	2,920	217,744	---
Back Drive Motor	20.00	8	365	2,920	43,549	---
Screw Conveyor 1 Motor	5.00	8	365	2,920	10,887	---
Centrifuge No. 2						
Bowl Drive Motor	100.00	8	365	2,920	217,744	---
Back Drive Motor	20.00	8	365	2,920	43,549	---
Screw Conveyor 2 Motor	5.00	8	365	2,920	10,887	---
Polymer System						
Liquid Polymer Batching System	5.00	8	365	2,920	10,887	---
Polymer Tank No. 1 Mixer	1.50	8	365	2,920	3,266	---
Polymer Tank No. 2 Mixer	1.50	8	365	2,920	3,266	---
Polymer Pump 1	3.00	8	365	2,920	6,532	---
Polymer Pump 2	3.00	8	365	2,920	6,532	---
Screw Conveyor 3 Motor	10.00	8	365	2,920	21,774	---
Post Lime Treatment						
Lime Volumetric Feeder	1.50	8	365	2,920	3,266	---
Lime Feed Screw Conveyor	3.00	8	365	2,920	6,532	---
Lime/Solids Mixer	20.00	8	365	2,920	43,549	---
Screw Conveyor 4 Motor	5.00	8	365	2,920	10,887	---
Screw Conveyor 5 Motor	15.00	8	365	2,920	32,662	---
Screw Conveyor 6 Motor	15.00	8	365	2,920	32,662	---
Leveling Conveyor 7 Motor	5.00	8	365	2,920	10,887	---
Leveling Conveyor 8 Motor	5.00	8	365	2,920	10,887	---
Dewatering Total	---	---	---	---	*747,952*	*5.6%*
Total	**---**	**---**	**---**	**---**	***13,317,768***	***100.0%***

Notes:
(1) One mechanic or hydraulic horsepower is equal to 0.745699872 kilowatts.

Table 3
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Allocation of Functional Cost Center Costs by Functional Cost Component
January 1, 2018 through December 31, 2018

		Capacity (Collection and Conveyance Systems)		Customer (Billing, Collection, and Accounting Services)		Volume (Hydraulic Flow)		BOD		TSS		TN		TP	
Treatment Process	Operating Cost [1]	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount
Influent Pumping Station	$95,590	0%	$0	0%		100%	$95,590	0%	$0	0%	$0	0%	$0	0%	$0
Preliminary Treatment	$95,270	0%	$0	0%	$0	0%	$0	35%	$33,340	60%	$57,160	0%	$0	5%	$4,760
Bioreactors [2]	$566,160	0%	$0	0%	$0	0%	$0	88%	$499,510	0%	$0	9%	$49,670	3%	$16,980
Secondary Clarification [3]	$142,690	0%	$0	0%	$0	0%	$0	59%	$84,350	30%	$42,810	8%	$11,260	3%	$4,280
Chemical P Removal	$16,850	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	100%	$16,850
Secondary Pumping Station	$95,590	0%	$0	0%	$0	100%	$95,590	0%	$0	0%	$0	0%	$0	0%	$0
Tertiary Filtration	$145,820	0%	$0	0%	$0	0%	$0	59%	$86,200	30%	$43,750	8%	$11,500	3%	$4,370
Disinfection	$172,010	0%	$0	0%	$0	100%	$172,010	0%	$0	0%	$0	0%	$0	0%	$0
Solids Thickening [4]	$169,490	0%	$0	0%	$0	0%	$0	35%	$59,810	60%	$101,690	4%	$5,950	1%	$2,030
Aerobic Digestion [4]	$301,230	0%	$0	0%	$0	0%	$0	35%	$106,310	60%	$180,740	4%	$10,570	1%	$3,610
Solids Dewatering [4]	$784,590	0%	$0	0%	$0	0%	$0	35%	$276,890	60%	$470,750	4%	$27,530	1%	$9,420
Total	**$2,585,290**	**---**	**$0**	**---**	**$0**	**---**	**$363,190**	**---**	**$1,146,410**	**---**	**$896,900**	**---**	**$116,480**	**---**	**$62,300**

Notes:

[1] Operating costs from *Table 1*.

[2] The costs for BOD and TN removal in the secondary treatment process are based on the rate of oxygen demand assuming 1.5 lbs O_2 / lb BOD and 4.6 lbs O_2 / lb NH_3-N.

[3] The allocation of secondary clarification cost is distributed between BOD, TSS, NH3-N based on the estimated contribution of each to solids production. The costs for BOD and NH_3-N removal in the secondary clarifiers are based on the rate of oxygen demand while TSS contribution is estimated based on the primary clarifier influent TSS loading.

[4] Solids generated consist of influent solids, excess cell mass production as a direct result of the metabolism of BOD and TN, as well as chemical sludge from TP removal in the secondary treatment process. The allocation of solids handling cost is therefore distributed between BOD, TSS, TN, and TP based on the estimated contribution of each to solids production. Solids production is estimated based on the raw influent TSS loadings and the waste activated sludge loadings as outlined in *Table 4*.

Table 4
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Annual WWTP Operations Summary
January 1, 2018 through December 31, 2018

Pollutant of Concern	Raw Influent (1a)		Hauled Septage (1b)		Total Combined Process Loadings (1c)		Biological Assimilation (2)	Final Effluent (1)		Removal (3)	
	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	lbs/day	mg/L	lbs/day	lbs/day	lbs/year
BOD	244	8,635	2,000	954	264	9,589	---	2	75	9,589	3,499,983
TSS	341	12,083	1,000	477	346	12,560	---	4	139	12,560	4,584,501
TN	28.4	1,003	100.0	48	28.9	1,051	594	4.3	145.9	311	113,485
TP	5.3	187	20.0	10	5.4	197	112	0.2	0.0	85	30,900

Notes:

(1) Raw Influent and Final Effluent average concentrations and loadings as reported for 2018:

a. Raw Influent concentrations and loadings do not include hauled waste contributions.

b. Hauled septage average equivalent concentrations are based on literature value estimates. Loadings are estimated using annual average hauled waste volume in 1d.

c. Total Combined Process Loadings are the sum of the raw wastewater and the hauled septage loadings.

d. Annual average daily flows utilized to calculate the equivalent process loadings concentrations:

Raw Influent: 4.300 mgd
Hauled Waste: 0.057 mgd

(2) Biological assimilation is estimated based on the following assumptions:

Parameter	Unit	Input	Calculation
WAS	mgd	0.156	---
WAS TSS	mg/L	8,822	---
WAS	lbs/day	---	11,462
MLVSS/MLSS Ratio	%	0.85	---
Estimated WAS VSS	lbs/day	---	9,742
Pure Biomass/WAS VSS Ratio	%	0.50	---
Estimated Pure Biomass	lbs/day	---	4,871
Nitrogen Assimulated	%	12.2%	---
Nitrogen Assimulated	lbs/day	---	594
Phosphorus Assimulated	%	2.3%	---
Phosphorus Assimulated	lbs/day	---	112

(3) Removal assumes that all BOD and TSS is removed through the treatment process and the final effluent CBOD and TSS are mostly an artifact of cellular debris.

a. For TN and TP, the annual pounds removed is the raw influent loading minus the final effluent loading. Nutrient assimilation in the biological treatment process is considered part of the removal process.

Table 5
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Cost of Removal Summary
January 1, 2018 through December 31, 2018

Pollutant of Concern	Annual Cost of Removal (1)	Annual Pounds Removed (2)	Cost per Pound Removed (3)
BOD	$1,146,410	3,499,983	$0.33
TSS	$896,900	4,584,501	$0.20
TN	$116,480	113,485	$1.03
TP	$62,300	30,900	$2.02

Notes:

(1) Annual Cost of Removal from *Table 3*.

(2) Annual Pounds Removed based from *Table 4*.

(3) Cost of Removal = Yearly Cost of Pollutant Removed / Yearly Pounds of Pollutant Removed.

APPENDIX 3

High Strength Wastewater Surcharge Calculations
Fiscal Year 2019

Table 1
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Allocation of Total Operating Costs by Functional Cost Center
Janaury 1, 2019 through December 31, 2019

Account	Budget Amount [1]	Influent Pumping Station		Preliminary Treatment		Bioreactors		Secondary Clarification		Chemical P Removal		Secondary Pumping Station		Tertiary Filtration		Disinfection		Solids Thickening		Aerobic Digestion		Solids Dewatering	
		Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount
Total Production Costs																							
Fuel and Power	$528,570	3.7%	$19,440	0.2%	$1,010	44.4%	$234,650	0.8%	$4,340	0.0%	$0	3.7%	$19,440	1.4%	$7,530	6.6%	$35,050	2.2%	$11,360	31.4%	$165,930	5.6%	$29,690
Chemicals																							
Quick Lime	$104,500	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	100.0%	$104,500
Polymer	$210,390	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	10.0%	$21,040	0.0%	$0	90.0%	$189,350
Hydrated Lime	$1,380	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	100.0%	$1,380
Aluminum Sulfate	$16,260	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	100.0%	$16,260	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0
Sodium Hypochlorite	$1,040	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	100.0%	$1,040	0.0%	$0	0.0%	$0	0.0%	$0
Magnesium Hydroxide	$12,460	0.0%	$0	0.0%	$0	100.0%	$12,460	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0
Biosolids and Grit/Screening Disposal	$510,370	0.0%	$0	5.0%	$25,520	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	95.0%	$484,850
Employee Related Costs																							
Salaries and Wages	$620,060	5.0%	$31,000	5.0%	$31,000	25.0%	$155,020	10.0%	$62,010	0.0%	$0	5.0%	$31,000	10.0%	$62,010	10.0%	$62,010	10.0%	$62,010	10.0%	$62,010	10.0%	$62,010
Pensions	$45,390	5.0%	$2,270	5.0%	$2,270	25.0%	$11,350	10.0%	$4,540	0.0%	$0	5.0%	$2,270	10.0%	$4,540	10.0%	$4,540	10.0%	$4,540	10.0%	$4,540	10.0%	$4,540
Group Insurances	$155,020	5.0%	$7,750	5.0%	$7,750	25.0%	$38,760	10.0%	$15,500	0.0%	$0	5.0%	$7,750	10.0%	$15,500	10.0%	$15,500	10.0%	$15,500	10.0%	$15,500	10.0%	$15,500
Other Benefits	$35,970	5.0%	$1,800	5.0%	$1,800	25.0%	$8,990	10.0%	$3,600	0.0%	$0	5.0%	$1,800	10.0%	$3,600	10.0%	$3,600	10.0%	$3,600	10.0%	$3,600	10.0%	$3,600
Operating Supplies and Services																							
Contracted Services	$84,890	5.0%	$4,240	5.0%	$4,240	25.0%	$21,220	10.0%	$8,490	0.0%	$0	5.0%	$4,240	10.0%	$8,490	10.0%	$8,490	10.0%	$8,490	10.0%	$8,490	10.0%	$8,490
Building and Maintenance Services	$32,130	5.0%	$1,610	5.0%	$1,610	25.0%	$8,030	10.0%	$3,210	0.0%	$0	5.0%	$1,610	10.0%	$3,210	10.0%	$3,210	10.0%	$3,210	10.0%	$3,210	10.0%	$3,210
Telecommunication Expenses	$7,140	5.0%	$360	5.0%	$360	25.0%	$1,790	10.0%	$710	0.0%	$0	5.0%	$360	10.0%	$710	10.0%	$710	10.0%	$710	10.0%	$710	10.0%	$710
Postage Printing and Stationery	$400	5.0%	$20	5.0%	$20	25.0%	$100	10.0%	$40	0.0%	$0	5.0%	$20	10.0%	$40	10.0%	$40	10.0%	$40	10.0%	$40	10.0%	$40
Office Supplies & Expenses	$8,730	5.0%	$440	5.0%	$440	25.0%	$2,180	10.0%	$870	0.0%	$0	5.0%	$440	10.0%	$870	10.0%	$870	10.0%	$870	10.0%	$870	10.0%	$870
Advertising & Marketing Expenses	$0	5.0%	$0	5.0%	$0	25.0%	$0	10.0%	$0	0.0%	$0	5.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0
Employee Related Expense Travel & Entertainment	$6,350	5.0%	$320	5.0%	$320	25.0%	$1,590	10.0%	$640	0.0%	$0	5.0%	$320	10.0%	$640	10.0%	$640	10.0%	$640	10.0%	$640	10.0%	$640
Miscellaneous Expenses	$61,880	5.0%	$3,090	5.0%	$3,090	25.0%	$15,470	10.0%	$6,190	0.0%	$0	5.0%	$3,090	10.0%	$6,190	10.0%	$6,190	10.0%	$6,190	10.0%	$6,190	10.0%	$6,190
Rents	$1,590	5.0%	$80	5.0%	$80	25.0%	$400	10.0%	$160	0.0%	$0	5.0%	$80	10.0%	$160	10.0%	$160	10.0%	$160	10.0%	$160	10.0%	$160
Transportation	$43,240	5.0%	$2,160	5.0%	$2,160	25.0%	$10,810	10.0%	$4,320	0.0%	$0	5.0%	$2,160	10.0%	$4,320	10.0%	$4,320	10.0%	$4,320	10.0%	$4,320	10.0%	$4,320
Uncollectible Accounts Expenses	$0	5.0%	$0	5.0%	$0	25.0%	$0	10.0%	$0	0.0%	$0	5.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0
Customer Accounting Other	$0	5.0%	$0	5.0%	$0	25.0%	$0	10.0%	$0	0.0%	$0	5.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0
Regulatory Expense	$0	5.0%	$0	5.0%	$0	25.0%	$0	10.0%	$0	0.0%	$0	5.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0	10.0%	$0
Insurance (Other Than Group)	$18,250	5.0%	$910	5.0%	$910	25.0%	$4,560	10.0%	$1,830	0.0%	$0	5.0%	$910	10.0%	$1,830	10.0%	$1,830	10.0%	$1,830	10.0%	$1,830	10.0%	$1,830
Maintenance Service & Supplies	$75,770	5.0%	$3,790	5.0%	$3,790	25.0%	$18,940	10.0%	$7,580	0.0%	$0	5.0%	$3,790	10.0%	$7,580	10.0%	$7,580	10.0%	$7,580	10.0%	$7,580	10.0%	$7,580
General Taxes	$56,330	5.0%	$2,820	5.0%	$2,820	25.0%	$14,080	10.0%	$5,630	0.0%	$0	5.0%	$2,820	10.0%	$5,630	10.0%	$5,630	10.0%	$5,630	10.0%	$5,630	10.0%	$5,630
Miscellaneous Operation and Maintenance	$91,130	10.0%	$9,110	10.0%	$9,110	10.0%	$9,110	10.0%	$9,110	1.0%	$910	10.0%	$9,110	10.0%	$9,110	9.0%	$8,200	10.0%	$9,110	10.0%	$9,110	10.0%	$9,110
Total	**$2,729,240**	**---**	**$91,210**	**---**	**$98,300**	**---**	**$569,510**	**---**	**$138,770**	**---**	**$17,170**	**---**	**$91,210**	**---**	**$141,960**	**---**	**$169,610**	**---**	**$166,830**	**---**	**$300,360**	**---**	**$944,200**

Notes:
[1] Year End Budget amounts from Fiscal Year 2019 with miscellaneous assumptions and estimations based on supplemental data provided by PAWC staff.
[2] Distribution of electric costs are based on allocation established in *Table 2*.

Table 2
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Annual Distribution of Power Costs
Janaury 1, 2019 through December 31, 2019

Treatment Process	hp	Operating Time			Annual kWh	% of Total
		Hours/Day	Days/Year	Hours/Year		
Influent Pumping Station						
Pump No. 1	75.00	24	122	2,920	163,308	---
Pump No. 2	75.00	24	122	2,920	163,308	---
Pump No. 3	75.00	24	122	2,920	163,308	---
Influent PS Total	---	---	---	---	*489,925*	3.7%
Preliminary Treatment						
Mechanical Barscreens						
Motor	5.00	4	365	1,460	5,444	---
Washer/Compactor Motor	0.50	4	365	1,460	544	---
Screw Conveyor	5.00	4	365	1,460	5,444	---
Grit Removal						
Grit Pump Motor	7.50	4	365	1,460	8,165	---
Grit Classifier	5.00	4	365	1,460	5,444	---
Grit Screw Motor	0.33	4	365	1,460	359	---
Preliminary Treatment Total	---	---	---	---	*25,400*	*0.2%*
Bioreactors						
Basin 1 Brush Aerator 1 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 2 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 3 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 4 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 5 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 6 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Brush Aerator 7 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 1 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 2 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 3 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 4 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 5 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 6 Motor	75.00	18	365	6,570	367,444	---
Basin 2 Brush Aerator 7 Motor	75.00	18	365	6,570	367,444	---
Basin 1 Oxic Mixer 1 Motor	9.00	18	365	6,570	44,093	---
Basin 1 Oxic Mixer 2 Motor	9.00	18	365	6,570	44,093	---
Basin 1 Oxic Mixer 3 Motor	9.00	18	365	6,570	44,093	---
Basin 2 Oxic Mixer 1 Motor	9.00	18	365	6,570	44,093	---
Basin 2 Oxic Mixer 2 Motor	9.00	18	365	6,570	44,093	---
Basin 2 Oxic Mixer 3 Motor	9.00	18	365	6,570	44,093	---
Basin 1 Anaerobic Mixer 1 Motor	3.90	24	365	8,760	25,476	---
Basin 1 Anaerobic Mixer 2 Motor	3.90	24	365	8,760	25,476	---
Basin 2 Anaerobic Mixer 1 Motor	3.90	24	365	8,760	25,476	---
Basin 2 Anaerobic Mixer 2 Motor	3.90	24	365	8,760	25,476	---
RAS Pump No. 1	15.00	24	292	7,008	78,388	---
RAS Pump No. 2	15.00	24	292	7,008	78,388	---
RAS Pump No. 3	15.00	24	292	7,008	78,388	---
RAS Pump No. 4	15.00	24	292	7,008	78,388	---
RAS Pump No. 5	15.00	24	292	7,008	78,388	---
WAS Pump No. 1 Motor	30.00	1	183	183	4,094	---
WAS Pump No. 2 Motor	30.00	1	183	183	4,094	---
WAS Pump No. 1 Grinder	5.00	1	183	183	682	---
WAS Pump No. 2 Grinder	5.00	1	183	183	682	---
Bioreactors Total	---	---	---	---	5,912,167	*44.4%*
Chemical P Removal						
Alum Feed Pump No. 1	0.50	12	365	4,380	1,633	---
Alum Feed Pump No. 2	0.50	12	365	4,380	1,633	---
Chemcial P Removal Total	---	---	---	---	3,266	*0.0%*

Table 2
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Annual Distribution of Power Costs
Janaury 1, 2019 through December 31, 2019

Treatment Process	hp	Operating Time			Annual kWh	% of Total
		Hours/Day	Days/Year	Hours/Year		
Secondary Clarification						
Clarifier No. 1 Drive Motor	0.50	24	365	8,760	3,266	---
Clarifier No. 2 Drive Motor	0.50	24	365	8,760	3,266	---
Clarifier No. 3 Drive Motor	0.75	24	365	8,760	4,899	---
Clarifier No. 1 Scum Pump Motor	5.00	24	365	8,760	32,662	---
Clarifier No. 2 Scum Pump Motor	5.00	24	365	8,760	32,662	---
Clarifier No. 3 Scum Pump Motor	5.00	24	365	8,760	32,662	---
Secondary Clarification Total	---	---	---	---	*109,417*	*0.8%*
Secondary Pumping Station						
Pump No. 1	75.00	24	122	2,920	163,308	---
Pump No. 2	75.00	24	122	2,920	163,308	---
Pump No. 3	75.00	24	122	2,920	163,308	---
Secondary PS Total	---	---	---	---	*489,925*	*3.7%*
Tertiary Filters						
Blower No. 1	75.00	8	183	1,464	81,878	---
Blower No. 2	75.00	8	183	1,464	81,878	---
Backwash Pump No. 1	40.00	2	183	366	10,917	---
Backwash Pump No. 2	40.00	2	183	366	10,917	---
Air Compressor	7.50	4	183	732	4,094	---
Tertiary Filter Total	---	---	---	---	*189,684*	*1.4%*
Disinfection						
UV Lamp Bank No. 1 (kW per lamp)	2.8	12	365	4,380	441,504	---
UV Lamp Bank No. 2 (kW per lamp)	2.8	12	365	4,380	441,504	---
Disinfection Total	---	---	---	---	*883,008*	*6.6%*
Solids Thickening						
Plant Utility Water						
Plant Water Pump No. 1	15.00	24	243	5,840	65,323	---
Plant Water Pump No. 2	15.00	24	243	5,840	65,323	---
Plant Water Pump No. 3	15.00	24	243	5,840	65,323	---
Thickener						
Thickener No. 1 Drive Motor	3.00	8	365	2,920	6,532	---
Spray Wash Pump 1 Motor	10.00	8	365	2,920	21,774	---
Spray Wash Pump 2 Motor	10.00	8	365	2,920	21,774	---
Thickened Sludge Transer Pump N	7.50	8	365	2,920	16,331	---
Thickened Sludge Transer Pump N	7.50	8	365	2,920	16,331	---
Liquid Polymer Batching System	0.50	8	365	2,920	1,089	---
Polymer Tank No. 1 Mixer	1.50	8	365	2,920	3,266	---
Polymer Tank No. 2 Mixer	1.50	8	365	2,920	3,266	---
Thickening Total	---	---	---	---	*286,334*	*2.2%*
Aerobic Digestion						
Blower No. 1 Motor	100.00	24	292	7,008	522,586	---
Blower No. 2 Motor	100.00	24	292	7,008	522,586	---
Blower No. 3 Motor	100.00	24	292	7,008	522,586	---
Blower No. 4 Motor	100.00	24	292	7,008	522,586	---
Blower No. 5 Motor	100.00	24	292	7,008	522,586	---
Digester No. 1 Mixer No. 1	40.00	24	365	8,760	261,293	---
Digester No. 1 Mixer No. 2	40.00	24	365	8,760	261,293	---
Digester No. 1 Mixer No. 3	40.00	24	365	8,760	261,293	---
Digester No. 2 Mixer No. 1	40.00	24	365	8,760	261,293	---
Digester No. 2 Mixer No. 2	40.00	24	365	8,760	261,293	---
Digester No. 2 Mixer No. 3	40.00	24	365	8,760	261,293	---
Aerobic Digestion Total	---	---	---	---	*4,180,692*	*31.4%*

Table 2
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Annual Distribution of Power Costs
Janaury 1, 2019 through December 31, 2019

Treatment Process	hp	Operating Time			Annual kWh	% of Total
		Hours/Day	Days/Year	Hours/Year		
Dewatering						
Feed Pumps						
Feed Pump 1 Motor	7.50	8	365	2,920	16,331	---
Feed Pump 2 Motor	75.00	8	365	2,920	163,308	---
Feed Pump 3 Motor	7.50	8	365	2,920	16,331	---
Feed Pump 1 Grinder Motor	5.00	8	365	2,920	10,887	---
Feed Pump 2 Grinder Motor	5.00	8	365	2,920	10,887	---
Feed Pump 3 Grinder Motor	5.00	8	365	2,920	10,887	---
Centrifuge No. 1						
Bowl Drive Motor	100.00	8	365	2,920	217,744	---
Back Drive Motor	20.00	8	365	2,920	43,549	---
Screw Conveyor 1 Motor	5.00	8	365	2,920	10,887	---
Centrifuge No. 2						
Bowl Drive Motor	100.00	8	365	2,920	217,744	---
Back Drive Motor	20.00	8	365	2,920	43,549	---
Screw Conveyor 2 Motor	5.00	8	365	2,920	10,887	---
Polymer System						
Liquid Polymer Batching System	5.00	8	365	2,920	10,887	---
Polymer Tank No. 1 Mixer	1.50	8	365	2,920	3,266	---
Polymer Tank No. 2 Mixer	1.50	8	365	2,920	3,266	---
Polymer Pump 1	3.00	8	365	2,920	6,532	---
Polymer Pump 2	3.00	8	365	2,920	6,532	---
Screw Conveyor 3 Motor	10.00	8	365	2,920	21,774	---
Post Lime Treatment						
Lime Volumetric Feeder	1.50	8	365	2,920	3,266	---
Lime Feed Screw Conveyor	3.00	8	365	2,920	6,532	---
Lime/Solids Mixer	20.00	8	365	2,920	43,549	---
Screw Conveyor 4 Motor	5.00	8	365	2,920	10,887	---
Screw Conveyor 5 Motor	15.00	8	365	2,920	32,662	---
Screw Conveyor 6 Motor	15.00	8	365	2,920	32,662	---
Leveling Conveyor 7 Motor	5.00	8	365	2,920	10,887	---
Leveling Conveyor 8 Motor	5.00	8	365	2,920	10,887	---
Dewatering Total	---	---	---	---	*747,952*	*5.6%*
Total	**---**	**---**	**---**	**---**	***13,317,768***	***100.0%***

Notes:
(1) One mechanic or hydraulic horsepower is equal to 0.745699872 kilowatts.

Table 3
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Allocation of Functional Cost Center Costs by Functional Cost Component
January 1, 2019 through December 31, 2019

		Capacity (Collection and Conveyance Systems)		Customer (Billing, Collection, and Accounting Services)		Volume (Hydraulic Flow)		BOD		TSS		TN		TP	
Treatment Process	Operating Cost [1]	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount
Influent Pumping Station	$91,210	0%	$0	0%	$0	100%	$91,210	0%	$0	0%	$0	0%	$0	0%	$0
Preliminary Treatment	$98,300	0%	$0	0%	$0	0%	$0	35%	$34,410	60%	$58,980	0%	$0	5%	$4,920
Bioreactors [2]	$569,510	0%	$0	0%	$0	0%	$0	88%	$500,780	0%	$0	9%	$51,650	3%	$17,090
Secondary Clarification [3]	$138,770	0%	$0	0%	$0	0%	$0	55%	$75,650	35%	$48,570	7%	$10,380	3%	$4,160
Chemical P Removal	$17,170	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	0%	$0	100%	$17,170
Secondary Pumping Station	$91,210	0%	$0	0%	$0	100%	$91,210	0%	$0	0%	$0	0%	$0	0%	$0
Tertiary Filtration	$141,960	0%	$0	0%	$0	0%	$0	55%	$77,390	35%	$49,690	7%	$10,620	3%	$4,260
Disinfection	$169,610	0%	$0	0%	$0	100%	$169,610	0%	$0	0%	$0	0%	$0	0%	$0
Solids Thickening [4]	$166,830	0%	$0	0%	$0	0%	$0	48%	$80,410	45%	$75,380	5%	$8,290	2%	$2,740
Aerobic Digestion [4]	$300,360	0%	$0	0%	$0	0%	$0	48%	$144,770	45%	$135,720	5%	$14,930	2%	$4,940
Solids Dewatering [4]	$944,200	0%	$0	0%	$0	0%	$0	48%	$455,100	45%	$426,640	5%	$46,940	2%	$15,530
Total	**$2,729,130**	---	**$0**	---	**$0**	---	**$352,030**	---	**$1,368,510**	---	**$794,980**	---	**$142,810**	---	**$70,810**

Notes:

(1) Operating costs from *Table 1*.

(2) The costs for BOD and TN removal in the secondary treatment process are based on the rate of oxygen demand assuming 1.5 lbs O_2 / lb BOD and 4.6 lbs O_2 / lb NH_3-N.

(3) The allocation of secondary clarification cost is distributed between BOD, TSS, NH3-N based on the estimated contribution of each to solids production. The costs for BOD and NH_3-N removal in the secondary clarifiers are based on the rate of oxygen demand while TSS contribution is estimated based on the primary clarifier influent TSS loading.

(4) Solids generated consist of influent solids, excess cell mass production as a direct result of the metabolism of BOD and TN, as well as chemical sludge from TP removal in the secondary treatment process. The allocation of solids handling cost is therefore distributed between BOD, TSS, TN, and TP based on the estimated contribution of each to solids production. Solids production is estimated based on the raw influent TSS loadings and the waste activated sludge loadings as outlined in*Table 4*.

Table 4
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Annual WWTP Operations Summary
January 1, 2019 through December 31, 2019

Pollutant of Concern	Raw Influent (1a)		Hauled Septage (1b)		Total Combined Process Loadings (1c)		Biological Assimulation (2)	Final Effluent (1)		Removal (3)	
	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	lbs/day	mg/L	lbs/day	lbs/day	lbs/year
BOD	371	10,364	2,000	1,169	396	11,533	---	2	71	11,533	4,209,699
TSS	379	10,576	1,000	585	384	11,161	---	4	125	11,161	4,073,778
TN	41.8	1,168	100.0	58	42.2	1,227	700	4.6	138.7	388	141,577
TP	7.8	219	20.0	12	7.9	231	132	0.2	6.6	92	33,582

Notes:

(1) Raw Influent and Final Effluent average concentrations and loadings as reported for 2019

a. Raw Influent concentrations and loadings do not include hauled waste contributions.

b. Hauled septage average equivalent concentrations are based on literature value estimates. Loadings are estimated using annual average hauled waste volume in 1d.

c. Total Combined Process Loadings are the sum of the raw wastewater and the hauled septage loadings.

d. Annual average daily flows utilized to calculate the equivalent process loadings concentrations:

Raw Influent: 3.419 mgd
Hauled Waste: 0.070 mgd

(2) Biological assimulation is estimated based on the following assumptions:

Parameter	Unit	Input	Calculation
WAS	mgd	0.183	---
WAS TSS	mg/L	8,869	---
WAS	lbs/day	---	13,506
MLVSS/MLSS Ratio	%	0.85	---
Estimated WAS VSS	lbs/day	---	11,480
Pure Biomass/WAS VSS Ratio	%	0.50	---
Estimated Pure Biomass	lbs/day	---	5,740
Nitrogen Assimulated	%	12.2%	---
Nitrogen Assimulated	lbs/day	---	700
Phosphorus Assimulated	%	2.3%	---
Phosphorus Assimulated	lbs/day	---	132

(3) Removal assumes that all BOD and TSS is removed through the treatment process and the final effluent CBOD and TSS are mostly an artifact of cellular debris.

a. For TN and TP, the annual pounds removed is the raw influent loading minus the final effluent loading. Nutrient assimilation in the biological treatment process is considered part of the removal process.

Table 5
PAWC Coatesville Wastewater Treatment Plant
High Strength Wastewater Surcharge Rate Evaluation

Cost of Removal Summary
January 1, 2019 through December 31, 2019

Pollutant of Concern	Annual Cost of Removal (1)	Annual Pounds Removed (2)	Cost per Pound Removed (3)
BOD	$1,368,510	4,209,699	$0.33
TSS	$794,980	4,073,778	$0.20
TN	$142,810	141,577	$1.01
TP	$70,810	33,582	$2.11

Notes:

(1) Annual Cost of Removal from *Table 3*.

(2) Annual Pounds Removed based from *Table 4*.

(3) Cost of Removal = Yearly Cost of Pollutant Removed / Yearly Pounds of Pollutant Removed.

PAWC STATEMENT NO. 2-R

REBUTTAL TESTIMONY
OF
JAMES RUNZER

WITH REGARD TO
PENNSYLVANIA-AMERICAN WATER COMPANY'S PERFORMANCE BASED COMPENSATION AND EMPLOYEE BENEFITS, RECOMMENDATIONS CONCERNING PRESSURE REDUCING VALVES, AND RESPONSE TO SERVICE-RELATED ISSUES RAISED IN DIRECT TESTIMONY, COMPLAINTS AND PUBLIC INPUT HEARINGS

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: FEBRUARY 21, 2024

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PENNSYLVANIA-AMERICAN WATER COMPANY

REBUTTAL TESTIMONY OF JAMES RUNZER

I.

INTRODUCTION AND PURPOSE OF TESTIMONY

Q. Please state your name and address for the record.

A. James Runzer, 852 Wesley Drive, Mechanicsburg, PA 17055.

Q. By whom are you employed and in what capacity?

A. I am employed by Pennsylvania-American Water Company ("PAWC or "Company") as the Vice President – Operations.

Q. Have you submitted any other testimony in this proceeding?

A. Yes, I submitted PAWC Statement No. 2.

Q. What is the purpose of your rebuttal testimony in this proceeding?

A. My rebuttal testimony will address the following areas:

(1) I will respond to the direct testimony of Ralph C. Smith on behalf of the Office of Consumer Advocate ("OCA"), the direct testimony of Kevin Higgins on behalf of the Office of Small Business Advocate ("OSBA"), and the direct testimony of Billie S. LaConte on behalf of the Pennsylvania-American Water Large Users Group ("PAWLUG"), regarding proposed adjustments to the Company's Annual Performance Plan and Long-Term Performance Plan costs; (2) I will respond to the direct testimony of Barbara Alexander of the OCA and the direct testimony of Terry L. Fought of the OCA regarding their recommendations concerning customer notification and education on

pressure reducing valves; (3) I will respond to the service-related issues and water-quality issues raised in direct testimony of the Honorable Paige G. Cognetti, Mayor, City of Scranton, in the direct testimony of State Representative Kyle Donahue, in the direct testimony of Terry L. Fought of the OCA and in formal complaints filed in this proceeding; and (4) I will respond to the supplemental direct testimony of Terry L. Fought of the OCA and address issues raised at the public input hearings regarding service-related issues or water-quality issues.

II.

PERFORMANCE BASED COMPENSATION AND EMPLOYEE BENEFITS

Q. What is the Company's compensation philosophy?

A. As I explained in my direct testimony, PAWC aims to offer compensation that allows it to attract, motivate and retain customer-committed, dedicated and highly qualified employees needed to successfully run the business. The Company's overall compensation philosophy is to provide employees with a total compensation package that is market based and competitive with those of comparable organizations with jobs of similar responsibility.

Q. Is providing appropriate levels of compensation to employees critical to the Company's ability to continue to provide safe and adequate service?

A. Yes, it is. Competition among companies to attract and retain the best and highest performing employees is keen. In recruiting new employees or retaining existing employees, both the Company and American Water compete with general industry in surrounding regions and nationally. The Company's compensation program seeks to provide employees with a total compensation package on par with those offered by companies with which it competes for employees. While no evidence has been submitted

to challenge the reasonableness of our total compensation, some witnesses dispute how the Company provides part of this compensation, specifically disputing the portion that is awarded through performance pay tied to financial goals or metrics. I do not believe it is reasonable to split out a portion of a reasonable cost and disallow its recovery just because a party disagrees about how the cost is incurred.

Q. Why is it inappropriate to disallow recovery of a portion of reasonable market-based employee compensation simply because part of it is awarded through a performance pay component?

A. The Company should be entitled to recover those expenses reasonably necessary to provide service. Employee compensation is a reasonably necessary cost of providing utility service and the Company should recover those costs through rates just like any other operating costs provided the total expense is reasonable and prudently incurred. So, the Commission should rightly be concerned when total market-based employee compensation is too high, which may unreasonably increase rates, and when employee compensation is too low, which may impact service to customers. The Commission's focus should be on the reasonableness of the Company's overall level of total compensation, giving management the discretion to design a market competitive compensation package that is best structured to compensate employees properly and to motivate efficiency, safety, courtesy and other valuable employee traits. If the Company's overall compensation level is reasonable, regardless of whether it includes a combination of fixed and variable payments that the employees earn, then the Company's overall compensation expense is reasonable and prudently incurred and should be recoverable. It is inappropriate to

disallow a component of that cost simply because it doesn't comport with Mr. Higgins or Ms. LaConte's view of how employee compensation should be structured.

Q. Please summarize adjustments to the Company's Annual Performance Plan and Long-Term Performance Plan costs recommended by Mr. Kevin C. Higgins, Ms. Billie S. LaConte and Mr. Ralph Smith.

A. Mr. Higgins recommends that the Commission remove fifty percent (50%) of claimed Annual Performance Plan ("APP") expense based on the weight of the earnings per share ("EPS") goal in the APP calculation and disallow Long-Term Performance Plan ("LTPP") awards, which he contends should be funded entirely by shareholders, because (1) the performance stock unit ("PSU") component is directly tied to American Water financial performance and (2) the restricted stock unit ("RSU") component is based on continued employment with the Company rather than customer-related goals such as drinking water quality or customer satisfaction (Higgins Direct, pp. 10-13). Ms. LaConte recommends that the Commission disallow 100% of the proposed performance based compensation costs tied to meeting financial targets (approximately $2 million in the fully projected future test year) (LaConte Direct, p. 9). Mr. Smith recommends removal of the portion of stock-based compensation (LTPP) expense paid to American Water's "top executives" (Smith, p. 66) as well as removal of the Dividend Equivalents portion of "Other Compensation" paid to American Water executives (Smith, pp. 70-72).

Q. Do you agree with Mr. Higgins and Ms. LaConte's recommendations regarding the Company's APP and LTPP?

A. No. The focus should be on the reasonableness of the total compensation expense. No party contests that the Company's total market-based employee compensation, including

performance pay, is reasonable. Rather than dispute the reasonableness of the total compensation expense, Mr. Higgins and Ms. LaConte dispute the recoverability of the performance pay portion based on their assessment of who accrues benefits from the costs being incurred. Most costs incurred by a utility benefit both customers (due to the service enabled by the expense) and other parties (who may benefit in some way by providing the service). Notably, PAWC's performance-based compensation expense, including APP and LTPP, was recently reviewed and approved by the Commission in PAWC's 2020 base rate proceeding. The Commission found, among other things, that "the performance compensation program establishes that the employees' eligibility to receive the benefit is based on performance duties and metrics directly related to the provision of service; the fact that the program includes a financial metric does not disqualify it from allowance as an expense for inclusion in the rate base."[1]

Mr. Higgins and Ms. La Conte believe that performance compensation primarily benefits shareholders, but they conveniently ignore the numerous benefits that inure to customers, among them the ability to attract, motivate and retain skilled employees. The Company's compensation structure benefits several parties, including customers, employees and shareholders. Making the adjustment they recommend would not be in the long-term interest of our customers because it would remove the strong incentive APP and LTPP provide employees to proactively work towards efficiency. In my experience, the APP and LTPP metrics (including financial metrics) focus employees on managing the business more efficiently and benefit customers.

[1] PA PUC v. Pennsylvania-American Water Company, Docket Nos. R-2020-3019369 and R-2020-3019371 (Order entered Feb. 25, 2021), p. 53.

Q. How do the financial goals of the APP and the LTPP benefit customers?

A. The financial goals of the APP and LTPP are complementary to the operational goals and benefit customers in many ways. Achieving financial goals, such as targeted EPS, requires attention to operating efficiency. That is, unless the utility controls its operating costs, it likely will not achieve a targeted EPS. Financial goal-based performance pay thus ensures that employees at all levels of the organization, and not just the upper ranks, remain focused on increasing efficiency, decreasing waste, and boosting overall productivity. Incentivizing employees to control operating costs benefits customers, because doing so mitigates increases in costs ultimately collected in rates. Consequently, when financial performance is achieved through efficiency, as is the case for the Company, the interests of customers, employees, and investors are aligned.

Q. Does incentivizing employees to control and reduce operating costs provide other customer benefits?

A. Yes. Where PAWC can reduce operating expenses, it can increase investment in infrastructure without increasing rates, because every dollar of operating expenses saved can fund approximately $8 of investment. Therefore, customers also benefit from PAWC's enhanced ability to invest in the infrastructure to continue to meet its service obligations to customers.

Q. Is there other evidence of the tangible benefit to customers from PAWC's performance pay programs?

A. Yes. Again, it is important to consider the impact a utility's financial health has on its access to capital at reasonable rates. A financially healthy utility focused on efficiency can attract the capital investments necessary to continue to provide safe and reliable service

and to maintain the technological expertise necessary to operate the Company and comply with increasing water quality standards. In fact, PAWC's demonstrated ability to access lower cost debt and internal funds to finance water infrastructure investment has mitigated the financing costs that customers ultimately pay through rates (PAWC Statement No. 13. pp. 58-59; 73-74). The availability of those sources of capital at reasonable costs, however, depends on the utility's financial performance, including credit and bond ratings. So, it is important to focus utility employees on the financial health of the organization. Because utilities are capital intensive and must routinely and consistently access the capital markets, customers ultimately benefit when their utility has the financial health to do so at reasonable rates. Simply put, a financially healthy utility benefits customers because it enables the utility to meet its service obligations at reasonable financing costs.

Q. Ms. LaConte recommends that the Commission disallow 100% of the proposed performance-based compensation costs tied to meeting financial targets. Is the restricted stock unit ("RSU") component of the LTPP tied to any financial metric?

A. No, it is not. RSUs are not "linked to financial goals and targets," but vest in equal increments in the three years following the year in which the RSUs were granted, subject to continued employment through each vesting date. As will be discussed below, retaining well-trained, talented employees directly benefits PAWC customers.

Q. How do you respond to Mr. Higgins' assertion that the RSU component of the LTPP should be rejected because it is based on continued employment with the Company rather than customer-related goals such as drinking water quality or customer satisfaction (Higgins Direct, pp. 10-13)?

A. Mr. Higgins fails to recognize the benefit of having a compensation program that includes a time-based vesting component. Long-term performance pay programs, like the LTPP, are particularly intended to reduce attrition at the higher ranks of the organization. The LTPP, including the RSU component, helps retain talented employees – which, of course, directly benefits customers who have a vested interest in a well-trained, motivated, experienced, and stable workforce. As such, these types of performance pay programs are well-accepted in the industry. Importantly, the LTPP achieves its goals of reducing leadership attrition at a lower cost to customers than simply increasing leadership's base pay, because performance pay under the LTPP is stock-based. Because stock-based compensation vests on a phased basis in three installments over a prospective three-year period, employees must remain with the organization to realize the vesting of their awards.

In addition, maintaining a stable and experienced leadership team has benefits from an operational standpoint, allowing continuity of management of operational programs and personnel, which in turn promotes safe and reliable service and ongoing improvements in efficiency. A stable team also avoids the costs of employee turnover, which can result in lost investment in employee training and the incurrence of costs for employee replacement, such as recruiting, hiring, and new training costs.

Q. Mr. Smith does not recommend removing all stock-based compensation, but only that which is paid to American Water's "top executives." He further recommends removal of the Dividend Equivalents portion of "Other Compensation" paid to American Water executives. Do you agree with his recommendations?

A. I do not agree with Mr. Smith that some portion of the full, market-based compensation expenses for "top executives" should be excluded from the Company's revenue requirement.[2] The Company performs market-based analysis of the compensation of all of its employees, including "top executives", to ensure total compensation is reasonable and market-based. I have already discussed why it is necessary to provide full market-based compensation to our employees. Like all other employees, these "top executives" are necessary to enable the Company to manage the provision of safe and reliable water and wastewater service to customers. Maintaining leadership level employees benefits customers by retaining experienced, high quality employees that understand and support the Company effectively and efficiently. American Water executives also help promote enterprise-wide initiatives (adopted by PAWC) that help maintain a safe and inclusive work environment, promote environmental compliance and stewardship, and improve water and wastewater efficiency, many of which I discussed in my direct testimony. No party has presented evidence that the "top executives" or other employees could be attracted and retained at levels significantly below this total compensation expense. The question should be whether the total compensation is reasonable and market-based. The total compensation expense for the Company's employees, including "top executives", is reasonable and market-based and should be recovered through rates as a necessary expense of serving customers. For the "top executives", this analysis is detailed as part of American Water Works' 2023 Proxy Statement available at American-Water-Works-Company-Inc-2023-Proxy-Statement.pdf (q4cdn.com).

[2] Mr. Smith's definition of "top executives" includes those Service Company employees identified in response to OCA 17-001, which is appended to Mr. Smith's testimony in Confidential Exhibit LA-4. The definition includes the President, Chief Executive Officer, Chief Operating Officer, Chief Financial Officer, and General Counsel.

Instead of disputing the reasonableness of the total compensation level, Mr. Smith takes issue with the manner in which part of this total compensation is provided—specifically the stock-based compensation, including the dividend equivalents associated with it. The design of pieces of the total compensation should not matter in evaluating whether the total expense is necessary to attract and retain talent, but it is worth recognizing that significant benefits accrue to utility customers and utility investors from utilizing stock-based compensation as a portion of the total compensation. Both customers and utility investors benefit from awarding a portion of the total compensation as stock-based compensation because this structure incentives utility employees to manage the business in a healthy manner. A financially healthy business enables access to capital markets at a lower cost than businesses that are not financially healthy must incur, and in a capital-intensive business like the water and wastewater business, customers benefit from these lower costs. Mr. Smith's perspective that stock-based compensation only serves to align the interests of "top executives" with investors is too narrow and ignores the benefits customers reap from a utility that satisfies the reasonable expectations of investors.

III.

RESPONDING TO OCA TESTIMONY REGARDING PRESSURE REDUCING VALVES

Q. Did OCA Witness Alexander make any comments regarding notification and education to customers on pressure reducing valves ("PRVs")?

A. Yes, she did.

Q. Briefly describe Ms. Alexander's comments.

A. On page 43 of her testimony, Ms. Alexander stated that she "recommends that PAWC develop a customer education program concerning pressure reducing values, when they are appropriate, how they work, and what consumers should do to monitor their performance for safety and reliability of water service from PAWC. This program should include a consideration of customer-specific communications relating to complaints about water pressure, general customer information on PAWC's website, and potentially bill inserts. PAWC should develop this outreach and education program as a compliance filing in this proceeding after review and input from stakeholders" (Alexander Direct, p. 43).

Q. Do you agree with Ms. Alexander's recommendation?

A. No, I do not. Rule 4.7 of the Company's tariff outlines the requirement for customers to install and maintain a pressure reducing valve if the pressure at their service location exceeds 100 pounds per square inch ("psi"). PAWC's field service representatives already educate customers in the field regarding this tariff requirement, which only impacts a small percentage of customers. Because a targeted education occurs in the field already, there is no need to develop a comprehensive customer outreach and education plan for an issue that only impacts a limited number of customers.

Q. Did OCA Witness Fought make any comments regarding household operating pressures?

A. Yes. Mr. Fought requests that PAWC identify households with normal operating pressures that exceed 125 psi and inform those customers when to replace their PRVs.

Q. Do you agree with Mr. Fought's recommendation?

A. No. It is not within the Company's scope of operations to identify the pressure of every individual customer's home. The Company is responsible for identifying the pressure on the main up until the curb. Because service lines entering the home are customer-owned, customers should seek advice from a licensed plumber if they are concerned about the water pressure entering their home. In addition, a licensed plumber or PRV manufacturers would be in the better position to answer questions regarding a customer's PRV.

Q. Did Mr. Fought provide any additional testimony regarding PRVs?

A. Yes. Mr. Fought recommends that the Company should provide the pressure available at its water main to customers to allow them to make sure that their plumber is providing an acceptable PRV or expansion tank. He further notes that the Company should record this information as part of its Complaint Log related to pressure complaints to ensure the Company is able to review its responses to customers in these situations.

Q. Do you agree with Mr. Fought's recommendation regarding providing pressure available at its water main to the customer and recording it in the Complaint Log?

A. Yes, I do. The Company already records all pressure information and reports it to the Commission for pressure complaints. The Complaint Log currently contains the date the complaint was received, date report was sent to the Commission's Bureau of Consumer Services ("BCS"), customer account number, BCS case number, turnaround time, complaint type, customer name, analyst assigned to work the case, report type submitted to BCS, informal code (category), comments, customer address, Company region and district, the customer's written complaint, and the BCS decision and decision received date. When the Company takes a pressure reading, the Company will record the pressure available at the water main in a Complaint Log and provide that pressure reading to

customers, upon request. In addition, the Company investigates every pressure complaint and agrees to record the pressure on the main on its Complaint Log.

IV.

SERVICE-RELATED ISSUES AND WATER QUALITY ISSUES RAISED IN DIRECT TESTIMONY OF HON. PAIGE G. COGNETTI, MAYOR, CITY OF SCRANTON, STATE REPRESENTATIVE KYLE DONAHUE, AND FORMAL COMPLAINTS

Q. What are the categories of formal complaints that PAWC received as part of this rate proceeding?

A. The formal complaints PAWC received as part of this rate proceeding can be broken down into three (3) categories: (1) water quality complaints, (2) field service or water service complaints, and (3) rates-related complaints.

Q. For water quality-related formal complaints, what are some types of complaints that PAWC received, and how are they typically addressed?

A. For all water quality formal complaints, the Company follows standard operating procedures attached as PAWC Exhibit JR-1R ("Water Quality SOP"). Although the Company follows the processes detailed in its Water Quality SOP, each complaint is unique and the Company recognizes the need to address each complaint individually. Below are descriptions of the types of complaints typically received, why these types of complaints typically arise, and how the Company typically responds and resolves the issue for our customers.

• **Taste** – General taste complaints are typically related to system maintenance. We respond by first speaking with the customer and figuring out what may be causing their issue. We try to resolve the issue by customer education, flushing, and/or sample collection.

• **Rotten Egg Odor** – This type of complaint is typically related to internal plumbing issues. Our water quality team responds by phone call and resolves the issue by educating the customer on general interior drain line/trap maintenance.

• **Odor/Taste, Chlorine** – This type of complaint is typically related to water temperature changes and customers not understanding our treatment process. Our water quality team responds by phone call and resolves the issue by educating customers on the regulatory requirements around proper distribution system disinfection. If a customer expresses further concern, we will collect a sample at their property and test the chlorine residual.

• **Odor/Taste, Earthy/Musty** – This type of complaint is typically related to dead ends and parts of our system with low water usage. Spikes in complaints can increase during hot weather months where water temperatures are elevated, times of low rain fall and increased organics in our source water. These types of issues are usually resolved by flushing our system and turning over the water. If the complaints are directly tied to source water issues, some of our plants have the option to add powered activated carbon to minimize taste and odor compounds.

• **Slippery/Slimy** – These types of complaints are not typical and are usually a result of internal plumbing. We typically respond with a phone call to the customer. If we are unsure of what the cause is, we will collect a sample from the premise.

• **Particles/Sediments** – This type of complaint is typically related to main line work, flushing lines or leaks in the system. Typically, we respond by asking the customers to flush internally and we flush their street externally.

• **Hard Water** – This type of complaint is typically related to chalky white residue on faucets and showerheads, a buildup of soap scum in bathtubs or shower walls, calcium

deposits inside water using appliances, and spotty dishes. Water hardness is an aesthetic quality of water and is caused mostly by the minerals calcium and magnesium, which are naturally occurring in ground and surface water. The U.S. Environmental Protection Agency (EPA) has not set a maximum contaminant level (MCL) for hardness in water, primarily because the components that contribute to hardness are not toxic; that is, they do not cause harmful health effects.

• **Stained Laundry** – This type of complaint is typically related to flushing or main line repairs. Typically, we send out a code red notice to the customers ahead of such work and ask them to refrain from washing laundry during this time. Our response to this may vary dependent on the specific scenario. Any customers with alleged property damage are referred to our insurance claims department for further investigation of their claims.

• **Cloudy Water, Air/Milky/White –** Typically these types of complaints are tied to trapped air in lines after system maintenance. Cloudy water can also be caused by extreme water temperature changes. These complaints are resolved by asking the customer to flush internally. If the cloudy water is due to a change in water temperature, we educate the customer on why it is happening.

• **Iron, Moving Organisms, Colored Water** – These types of complaints are typically the result of internal plumbing issues. Iron complaints could be a result of old water age, but that is determined by speaking with the customer. These complaints are resolved by talking with the customer.

Q. For all field service-related formal complaints, how does PAWC typically respond to those concerns?

A. For all field service-related formal complaints where field investigations are required, a work order is created, then a field service representative will go out to the customer's premise and investigate the concern, which may entail checking for leaks and/or water-service issues. All of these interactions are recorded in the Company's system of record, Customer One View (C1V), and are subsequently linked to SAP in order to manage to resolution. Achieving a resolution may also result in the involvement of a different department within the Company if further action is needed. The notes from the field service representative are added to the customer's account and available to different departments that may be responsible for addressing the customer's issue.

Q. For all rates-related formal complaints, how does PAWC typically respond to those concerns?

A. For all rates-related formal complaints, the Commission is in the process of evaluating whether the overall rate increase and rate proposals are just and reasonable, which will address these complaints. While the concerns expressed in the rates-related complaints are outside the scope of my testimony, I am aware that some of the Company's rates proposals set forth in this case, such as winter averaging as discussed by PAWC Witness Mr. Rea, directly address the concerns of several formal complainants.

Q. Please respond to the specific customer complaints listed by Hon. Paige G. Cognetti in her Direct Testimony.

A. Ms. Cognetti alleged in her Direct Testimony that their "residents have also been experiencing 'dirty' water that has been discolored and/or chemical taste on a periodic basis." (City of Scranton, p. 6). PAWC is responsive to any complaints that are received within the City of Scranton and we are continuing to invest in the aging infrastructure

within this system. In PAWC Statement No 3-R, PAWC Witness Aiton describes in detail the investments that PAWC has made since acquiring the Scranton wastewater system from the Scranton Sewer Authority in 2016. In 2023, PAWC invested $45 million in infrastructure in the City of Scranton and anticipates investing $53 million in 2024.

Q. Please respond to the customer complaints listed by State Representative Kyle Donahue in his direct testimony regarding the quality of water.

A. Mr. Donahue alleged in his Direct Testimony that the residents of his district contact his offices with complaints regarding the quality of water and that "it is obvious that dirty water is a problem in my district." (Donahue, p. 6). PAWC is responsive to any complaints that are received within Mr. Donahue's service territory and we are continuing to invest in the aging infrastructure within this system. In 2023, PAWC invested $175 million total in the Wilkes-Barre/Scranton District. In 2024, PAWC anticipates the same level of investment.

Q. Please respond to the customer complaints listed by State Representative Kyle Donahue in his direct testimony regarding the protection plans on the service line of the customer.

A. Mr. Donahue alleged in his Direct Testimony that the residents of his district contact his offices with complaints regarding the protection plans that "are billed by PAWC but they sub-contract to repair service to a third party. The sub-contractors take days to respond to customer complaints." (Donahue, p. 6). The protection plan Mr. Donahue references are provided by American Water Resources ("AWR"), a separate company no longer affiliated with PAWC. Although charges for AWR's services appear as a separate line item on the bill for PAWC customers who voluntarily opt into the line protection service offered by

AWR, PAWC has no control over AWR's response time, quality of service, pricing, or any other aspect of AWR's business. PAWC Witness Degillio describes PAWC's relationship with AWR in more detail in PAWC St. No. 09-R.

Q. Please respond to Mr. Fought's request in his direct testimony for information addressing an event in February 2023 identified in PAWC's Complaint Log.

A. The Company provided the requested information in response to OCA 29-001. A copy of the Company's response to OCA 29-001 is attached as PAWC Exhibit JR-2R.

V.

RESPONSES TO SUPPLEMENTAL DIRECT TESTIMONY FROM OCA WITNESS FOUGHT BASED ON PUBLIC INPUT HEARINGS

Q. In responding to customer issues raised at the public input hearings, does the Company follow similar processes as those described in Section IV of your rebuttal testimony?

A. Yes. The Company follows the same resolution processes outlined previously.

A. Lissa Ludinich

Q. What service-related issues were raised by Lissa Ludinich at the public input hearing held on January 29, 2024 and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Ludinich raised concerns regarding metal plates from work performed on her street (28th Street in McKeesport).

Q. Has the Company taken any actions to address the concerns of Ms. Ludinich?

A. Yes. In response to concerns noted in Ms. Ludinich's testimony, PAWC staff spoke to Ms. Ludinich on January 30, 2024, about her concern of multiple metal road plates on her

street. The PAWC representative explained to Ms. Ludinich that the City of McKeesport put the plates down and that PAWC does not own or control the metal road plates. The PAWC representative also explained that our main sewer line in the street has been repaired by lining it and there are no issues with that pipe, and explained that the lateral lines coming from the homes to the main sewer line are the responsibility and ownership of the homeowner.

B. Julian Thomas

Q. What service-related issues were raised by Julian Thomas at the public input hearing held on January 29, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Thomas testified on behalf of himself, and a small online organization called "American-Water Concerned Citizens". Mr. Thomas raised concerns about customers' water being shut off without notice and sewage bills being automatically generated when a customer moves into Westmoreland water service territory.

Q. How does the Company respond to the concerns of Mr. Thomas?

A. In responses to Mr. Thomas's concerns that customers' water service is being shut off without notice, PAWC has agreements with the Municipal Authority of Westmoreland County ("Westmoreland") (filed at Docket No. U-2018-3003921) as well as the City of Duquesne ("Duquesne") (filed at Docket No. U-2020-3019190), that allow for the termination of water services for delinquent sewer customers of PAWC. Pursuant to the terms of these agreements, termination cannot occur without notice being provided to the customer. Additionally, PAWC follows all Commission regulations relating to termination of wastewater service. Regarding Mr. Thomas's concerns about how bills are generated for

new customers, the Company's tariff permits PAWC to use the water customers' information to start a contract for sewer. When the Company receives data from Westmoreland or Duquesne, pursuant to its usage data agreements with each entity, a new sewer contract is started, and corresponding wastewater bills are then generated for the new customer.

C. Christopher Paone

Q. What service-related issues were raised by Christopher Paone at the public input hearing held on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Paone testified that there are concerns over Borough and Company cooperation as it relates to upgrading infrastructure, repair and maintenance of water mains, and the restoration of the roadways.

Q. Has the Company taken any actions to address the concerns of Mr. Paone?

A. Yes. A PAWC representative spoke with Mr. Paone on January 31, 2024, to discuss his concerns about a recently completed temporary restoration. PAWC is currently addressing the concerns of Mr. Paone. The PAWC representative also discussed setting up quarterly touch-base meetings to review upcoming projects scheduled in the Borough, and to address any concerns raised by the Borough and/or their constituents. The first meeting is scheduled for February 26, 2024.

D. Mary Tanealian

Q. What water quality related issues were raised by Mary Tanealian at the public input hearing held on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Tanealian stated that (1) the water quality is poor; (2) she does not drink the water; (3) she does not make ice with the water; (4) she buys bottled water due to the taste of the water.

Q. Has the Company taken any actions to address the concerns of Ms. Tanealian?

A. Yes. In response to the concerns noted in Ms. Tanealian's testimony, PAWC staff spoke to Ms. Tanealian on February 1, 2024. Ms. Tanelian indicated that when she first moved into her home in 2021, she noticed that ice made with the tap water imparted an off taste to her drinks. Ms. Tanealian indicated that her family has not used tap water for ice since then, so she cannot speak to the taste at this point. She was thankful for the dialogue with a PAWC representative about her concerns.

E. <u>Stephen Nelson</u>

Q. What water quality related issues were raised by Mr. Nelson at the public input hearing held on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Nelson indicated that (1) the water is not good to drink; (2) the water is not clear in their coffee pot; (3) there is so much chlorine in the water.

Q. Has the Company taken any actions to address the concerns of Mr. Nelson?

A. Yes. In response to the concerns noted in Mr. Nelson's testimony, PAWC staff spoke to Mr. Nelson on February 1, 2024, about the quality of water being provided. The PAWC representative explained that cloudy water complaints are tied to trapped air in lines after system maintenance and can also be caused by extreme water temperature changes. The PAWC representative also explained that taste and/or odor complaints of chlorine is typically related to water temperature changes and customers not understanding our

treatment process that it is required by the EPA and DEP for disinfection protection. The PAWC representative offered to collect a sample at their property and test the chlorine residual, but the customer declined.

F. James McDermott

Q. What water quality related issues were raised by James McDermott at the public input hearing held on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. McDermott indicated that he uses bottled water to drink, make ice, and to make coffee and displayed the status of his whole house filter during the input hearing.

Q. Has the Company taken any actions to address the concerns of Mr. McDermott?

A. Yes. In response to the concerns noted in Mr. McDermott's testimony, PAWC staff spoke to Mr. McDermott on February 1, 2024, about the quality of water being provided to him. The PAWC representative and Mr. McDermott first started discussing his whole house filter. Mr. McDermott indicated that he has had the whole house filter for about 35 years, and that he replaces the filter about every 1.5 to 2 months, and that the filter will be brown when he replaces it. The PAWC representative explained that some potential causes of discolored water complaints are typically related to main line work, flushing lines or leaks in the system. Mr. McDermott also indicated during this discussion that he would sometimes see some color in the water that wouldn't last long and the PAWC representative explained that when customers see discolored water, we encourage customers to flush internally, and that the color is an aesthetic and is a part of our water treatment plant process in regards to meeting and exceeding regulatory standards in conjunction with our Partnership for Safe Water. The Partnership for Safe Water is the partnership of American

Water Works Association, the Association of Metropolitan Water Agencies, Association of State Drinking Water Administrators, the EPA, the National Association of Water Companies, and the Water Research Foundation which has the mission to improve the quality of water delivered to customers by optimizing water system operations. As explained in my direct testimony, PAWC participates in the Partnership for Safe Water treatment optimization program and accounts for 50% of the highest-level award-winning treatment plants in that program. (PAWC St. No. 2, at 5). Mr. McDermott also indicated that his family consumes bottled water and uses their Brita pitcher for their coffee water. The PAWC representative offered Mr. McDermott a Company representative who would come to his home and collect a sample. On February 5, 2024, a PAWC representative sampled Mr. McDermott's water, and results were within the limits. The PAWC representative provided an explanation to Mr. McDermott that because of the whole house filter that could not be bypassed for the sample, there could be potential impact on results. The PAWC representative contacted the customer and left a message with the results and his callback number.

G. <u>John Borer</u>

Q. What water quality related issues were raised by John Borer at the public input hearing held on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Borer testified that in November 2023 he had a whole wash load of laundry ruined by water with rust and stains.

Q. Has the Company taken any action to address the concerns of Mr. Borer?

A. Yes. In response to the concerns noted in Mr. Borer's testimony, PAWC staff spoke to Mr. Borer on February 1, 2024, about his concerns with the quality of water being provided. The PAWC representative indicated to Mr. Borer that stained laundry complaints are typically related to flushing or main line repairs, but can also include fire hydrant usage. In regards to his request for laundry stain remover to be provided by PAWC, the Company representative explained that PAWC does not provide the detergent and explained the chemical referenced by the customer is aggressive and has hazardous components that could pose a customer risk if used improperly. A PAWC representative offered to sample Mr. Borer's water to address any of his concerns, but Mr. Borer declined.

H. <u>Theresa Fagerlyn</u>

Q. What water quality related issues were raised by Theresa Fagerlyn at the public input hearing held on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Fagerlyn testified that she filled her pool with cloudy water and took a sample to a pool place that said the pH and chlorine were off. She further testified that a Company employee said the water looks fine but would not drink the water.

Q. Has the Company taken any action to address the concerns of Ms. Fagerlyn?

A. Yes. In response to Ms. Fagerlyn's testimony, PAWC staff spoke to Ms. Fagerlyn on February 1, 2024, about her concerns with the quality of water being provided. The PAWC representative discussed her experience with filling her pool during the summer in 2023 and finding the water cloudy, prompting her to take a sample to a pool store, and the results were high for alkalinity and pH. During that time, a PAWC representative went to her home and tested her water, and the results were normal. During the discussions on

February 1, 2024, Ms. Fagerlyn noted that she recalls that there was work being done in her area at the time that they filled their pool, and that she and her husband thought that the work may have caused the cloudiness. The PAWC representative confirmed with Ms. Fagerlyn that normally the water was fine and was fine at the time of their conversation. The PAWC representative offered to come back out to her premise and take an additional sample, but the customer agreed that if she experiences cloudiness or other issues in the future, she will call the customer service number with the issue, prior to going to the pool store, so PAWC can assess the circumstances at that time.

I. <u>David Bergerhoff</u>

Q. What water quality related issues were raised by David Bergerhoff at the public input hearings held on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Bergerhoff testified that (1) the water is dirty and has been dirty for a long time and; (2) his stomachaches stopped when he quit drinking coffee made with Company water.

Q. Has the Company taken any action to address the concerns of Mr. Bergerhoff?

A. Yes. A PAWC representative contacted Mr. Bergerhoff to address his concerns. The PAWC representative explained the need to chlorinate the water provided to our customers, and that the Company routinely tests the water in the service area to assure the water is within drinking standards. The PAWC representative offered Mr. Bergerhoff to come out and sample his water, but he declined. Mr. Bergerhoff was satisfied with the interaction with the PAWC representative.

J. Janet Brier

Q. What water quality and or service issues were raised by Councilwoman Janet Brier at the public input hearings held on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Brier testified that: (1) when the water main burst on Grove Street in Dunmore on Thanksgiving Day, November 23, 2023, the water inundated houses on the 1200 block of Monroe Avenue, destroying basements and driveways; (2) a family of four with two toddlers was displaced for two months; (3) flooding had occurred several times previously in that exact location in 2021 and 2022; (4) on those occasions, the homeowner said that the representative from PAWC told them it would never be fixed because it was too expensive; (5) when PAWC finally put dye down the manhole behind the garage, the dye came right back up because it had no place to go; (6) the family still has not been made whole; (7) the back fence is still broken; (8) the finished basement is still without walls or flooring; (9) they have no washer or dryer or playroom; (10) the homeowner also questioned how much the value of his house has declined.

Q. Has the Company taken any action to address the concerns of Ms. Brier?

A. Yes. A PAWC representative was in contact with Councilwoman Brier on January 31, 2024, and she was provided with an update on each affected homeowner. Councilwoman Brier had concerns related to restoration in the yard of a constituent as a result of the sewer work. The PAWC representative assured her that the restoration would be completed, including fence installation, topsoil and seed, in the spring. Councilwoman Brier also expressed concerns about the timeline for her constituent's basement restoration after the water main break. The PAWC representative informed Ms. Brier that the Company was

waiting on an engineer from the insurance company before performing restoration on the basement. Councilwoman Brier was satisfied with the update and thanked us. The Company reminded Councilwoman Brier that we have a monthly meeting with Dunmore Borough which includes people from several departments of PAWC, the Borough Manager and Borough Engineer. Councilwomen Brier said that she may attend the next meeting, and the Company made sure that she had our contact information and advised her that she can reach out anytime.

K. <u>William King</u>

Q. What water quality and or service issues were raised by Councilman William King at the public input hearings on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. King testified that he was notified (1) that on East Mountain, there was a water outage, pipes broke, and some people went anywhere from "10 to 48 hours" without water; (2) and then once the water was turned on, it took anywhere from four to five days of running brown water; (3) you couldn't drink the brown water; (4) every time he would go to Gary's on Meadow Avenue, people were buying jugs of water for a week; (5) you had to run the water to get rid of the discoloration and pay for that water usage..

Q. Has the Company taken any action to address the concerns of Mr. King?

A. Yes. A meeting was held on February 2, 2024, with members of PAWC and the Council President and Councilmen, including Mr. King. At this meeting, the PAWC representatives provided a list of upcoming main replacement and restoration projects.

L. <u>Jessica Rothschild</u>

Q. What water quality and/or service-related issues were raised by Councilwoman Jessica Rothchild at the public input hearings on January 30, 2024, and highlighted by OCA Witness Fought his in supplemental direct testimony?

A. Councilwoman Rothschild testified that she (1) "had numerous streets that I've had to bring up as concerns because they were Pennsylvania American Water projects, and the paving was not done properly"; (2) has had "dirty" water, including recently when a bath tub was being filled; (3) she sees complaints in the Hill section of Scranton about dirty water at least weekly; (4) after replacing water and sewage lines the entire length of Myrtle Street, the repaving does not appear to have been done properly, quickly develops potholes and is difficult to drive on; (5) when they contacted Pennsylvania American Water, they corrected one block of Myrtle Avenue, which does have a lot of traffic, but the rest of Myrtle Street is still in disrepair until they have better weather; (6) doesn't think that a project in Southside that went on for many years that had large bumps causing trouble driving over is still up to par.

Q. Has the Company taken any action to address the concerns of Councilwoman Rothschild?

A. Yes. Councilwoman Rothschild was invited to the meeting that the Company held with the Scranton City Council, but Mr. Frank Smurl, Council President, had indicated that Councilwoman Rothschild would not be able to attend due to other commitments. Mr. Smurl indicated he would advise Councilwoman Rothschild of the result of the meeting on February 2, 2024 and would direct her to follow-up with the Company as needed.

M. Paul Miller

Q. What water quality issues were raised by Paul Miller at the public input hearing on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Miller testified that the water on East Mountain has been "really dirty" and that his wife and daughter won't drink the water; they buy it in a bottle by the case.

Q. Has the Company taken any action to address the concerns of Mr. Miller.

A. Yes, a PAWC representative contacted Mr. Miller to discuss his concerns and offered to take a water sample. The customer indicated they may be interested in PAWC taking a water sample at a future date.

N. Fay Franus

Q. What service-related issues were raised by Ms. Franus at the public input hearing on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Franus testified that the Company (1) removed all the black top curbs and they never came back and put them back in; (2) now when it rains, the water just pours down their sidewalk and goes in their basements; (3) the Company refuses to come back and put the blacktop curbs in front of these homes; (4) she had to get her sidewalk done over because they did such a terrible job and she had to fight for months to get that.

Q. Has the Company taken any action to address the concerns of Ms. Franus?

A. Yes. A PAWC representative contacted Ms. Franus and discussed the City policy on curb restoration. The PAWC representative explained that the curbing had been restored to the

same condition it was in prior to the main replacement project and that the City would need to be contacted with questions about curb installation.

O. <u>Gerard Dombroski</u>

Q. What water quality related issues were raised by Gerard Dombroski at the public input hearing on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Dombroski testified that he lived on East Mountain and last month he experienced four days of "dirty" water. He further testified that, after some difficulty, he received a $20 credit for the four days of dirty water. Mr. Dombroski buys bottled water in 5-gallon jugs.

Q. Has the Company taken any action to address the concerns of Mr. Dombroski?

A. Yes. A PAWC representative contacted Mr. Dombroski on February 1, 2024, and discussed his concerns about water quality, and Mr. Dombroski indicated that the issues that are sporadic, can last a day or two, and occur roughly every other month that have been associated with main breaks or main work. Mr. Dombroski indicated that he does not like the taste and will not drink the water. Mr. Dombroski indicated that the taste is not like a "swimming pool" but he notices it and does not like it. The PAWC representative explained the need to chlorinate the water provided to our customers, and Mr. Dombroski acknowledged that he understands. The PAWC representative discussed the option of having his water tested. A sample was collected, and results were within water quality standards. During the discussion with the PAWC representative, Mr. Dombroski noted some sediment that builds up in his toilet and the Company representative indicated that it may be iron and/or manganese depending on the circumstances and collecting a sample of his water can investigate that further, as well.

P. <u>Sean McAndrew</u>

Q. What water quality and/or service-related issues were raised by Sean McAndrew during the public input hearings on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. McAndrew testified that multiple times throughout the summer, he had "dirty" water. Also, the Company was working on changing pipes every day for weeks at the bottom of his street.

Q. Was there any main line work, flushing, or leaks in the system at or near the home of Mr. McAndrew?

A. Yes. A main replacement project began in February 2023 on West Gibson St., and the final tie ins were completed in June 2023. West Gibson Street and North Garfield Avenue intersect and this main line replacement project would have caused the customer to experience discolored water periodically and would explain the claim of the Company changing pipes every day for weeks at the bottom of the customer's street.

Q. <u>Doris Koloski</u>

Q. What water quality and/or service-related issues were raised by Doris Koloski during the public input hearings on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Koloski testified that the Company is digging up the streets and she has been having a lot of dirt in the water. She has two filters. If she runs unfiltered water in the sink, on certain days, the water is cloudy or dirty or yellowing. If she runs filtered water, it's fine. Also, she has had (1) expensive plumbing bills when the Company's mains break and they were replacing pipes because her filters were clogged and/or broken; (2) an only three-year old

toilet that started making noise that the plumbers said that also was from the dirt, from the water; (3) on the 1700 block of Olive Street, last year the pipes were replaced, potholes paved, fixed and then within two weeks, the street was blocked off again to re-dig up the streets because the pipe was leaking again. And then maybe about five months later, they were digging it up again. Ms. Koloski testified a second time adding that the Company should provide a warning prior to doing something in your area.

Q. Has the Company taken any action to address the concerns of Ms. Koloski?

A. Yes. A PAWC representative contacted Ms. Koloski on February 1, 2024. Ms. Koloski advised the Company representative that her water is sporadically discolored and she associated the issue with main breaks, repairs, and other work. The PAWC representative offered to sample her water, but the customer reported her water was clear, and there is no immediate need for sampling at this time. A second PAWC representative attempted to contact Ms. Koloski on February 1, 2024 to discuss her service-related concerns, but the PAWC representative could only leave a voicemail, asking the customer to call back at her earliest convenience. PAWC does have General and Emergency alerts notifications that are sent via all methods of communication based on the customer's provided contact information. Emergency alerts are sent via all methods of communication based on the customer's provided contact information, regardless of notification preferences.

R. <u>Elaine Sporko</u>

Q. What water quality issues were raised by Elaine Sporko at the public input hearings on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Sporko testified that there has been no compensation for getting brown and unusable water, being required to buy drinking water, and delaying clothes washing and showering that occurs every other week. The discolored water causes the whole house filter to be changed more often. Ms. Sporko testified a second time about discolored water damaging white fabric items such as clothing or towels.

Q. Has the Company taken any action to address the concerns of Ms. Sporko?

A. Yes. A PAWC representative reached out to Ms. Sporko regarding her water quality issues. Ms. Sporko's main issues were discolored water that she experienced this past fall and late summer. This type of complaint is typically related to main line work, flushing lines or leaks in the system, and can also be attributed to source water issues. Ms. Sporko's complaints can be associated with main breaks, as well as a source water seasonal turnover event at Lake Scranton Water Treatment Plant in the late fall, that caused system wide issues. The PAWC representative explained the alerts process, complaint handling, and options (customer service number, on-line access) for making water quality inquiries or complaints. PAWC offered Ms. Sporko testing of her water, but she declined, noting that it was presently clear. She will call the service number if she has problems in the future and was very appreciative of the dialogue.

S. <u>Frank Serafini</u>

Q. What water quality issues were raised by Frank Serafini at the public input hearings on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Serafini testified that he has (1) installed a whole house filter system for cold water and still had to install carbon filters under every sink in his home and still gets "dirty" hot

water and (2) has had to put a backflow preventer on his home. Additionally, Mr. Serafini testified a second time adding the following to his testimony: (1) In 2017, he applied for a water hookup in a garage he built, and he still doesn't have water in that garage and (2) every couple of months he has to change the filter in his filter system.

Q. Has the Company taken any action to address the concerns of Mr. Serafini?

A. Yes. A PAWC representative contacted Mr. Serafini as it relates to his water quality complaints. Mr. Serafini indicated that he has a system in his home that gives him good water. It was offered to Mr. Serafini to have his water sampled, and he was noncommittal; he indicated that he had his water tested regularly, and it is now fine. As it relates to the backflow preventer, Mr. Serafini testified that he is required to have a backflow preventer on his private home that he pays $250 per year to have tested. Additionally, as it relates to the application for water hook up in his garage, the Company confirmed that Mr. Serafini did not apply for new service; this application was provided to Mr. Serafini on February 1, 2024. Once the application is received, the Company will process the application.

T. <u>Linda Bonczkiewicz</u>

Q. What water quality issues were raised by Linda Bonczkiewicz at the public input hearings on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Bonczkiewicz testified that she wants to wash her dishes, clothes, body, and expects to be clean, not dirty, after using the water.

Q. Has the Company taken any action to address the concerns of Ms. Bonczkiewicz?

A. Yes. A PAWC representative contacted Ms. Bonczkiewicz to discuss her concerns. The PAWC representative offered to take a water sample, but Ms. Bonczkiewicz declined.

U. Eva Siarniak

Q. What service-related issues were raised by Eva Siarniak at the public input hearings on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Siarniak testified that when service is interrupted or when customers are asked to flush their internal plumbing, there is no discount provided by the Company.

Q. How does the Company respond to Ms. Siarniak's stated concerns?

A. Ms. Siarniak referenced a water outage during her testimony that occurred when a large main broke in Dunmore at the intersection of Grove and Quincy Street on November 24, 2023. (Transcript, at 719). The Company sent out a CodeRed to over 22,000 in connection with this incident, and customers along Whitetail Drive lost water service due to the Newton Road pump station shutting down. Ms. Siarniak was one of the customers who received the CodeRed alert. The local team in Scranton provided updates and time tables to Ms. Siarniak when she contacted them for updates. The Company did provide water buffaloes, but due to the number of customers impacted, the Company located the water buffaloes at hospitals and nursing homes, and provided water to community centers.

V. Thomas Coyne

Q. What water quality or service-related issues were raised by Thomas Coyne at the public input hearings on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Coyne testified that the water has a strong chlorine smell and he has experienced shut-offs, line breaks and notices to flush pipes.

Q. Has the Company taken any action to address the concerns of Mr. Coyne?

A. Yes. A PAWC representative contacted Mr. Coyne about the concerns he has with chorine odor in his water. Mr. Coyne noted it happens roughly once per week and will last for a portion of the day, and he feels it is related to main breaks. The PAWC representative noted that both high as well as low chlorine residuals can result in an odor and offered sampling to confirm the residual at his home. Mr. Coyne declined, stating he did not feel it was necessary, as he simply addresses it by placing water in a pitcher in the refrigerator, it dissipates and is fine. Mr. Coyne was also offered an opportunity to discuss any other questions or concerns he might have based on his testimony, but he declined.

W. <u>Joan Hodowanitz</u>

Q. What water quality or service-related issues were raised by Joan Hodowanitz at the public input hearings on January 30, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Hodowanitz testified that she is a renter and has to drink unpalatable water, buy bottled water, and use smelly water to shower and wash clothes. The witness also defined the smell as chlorine and testified that after flushing the toilet, the water still looks yellow; and the "dirty" water occurs for a couple of days two or three times per month.

Q. Has the Company taken any action to address the concerns of Ms. Hodowanitz?

A. Yes. PAWC's records show that Ms. Hodowanitz is not a customer, and as a result, PAWC does not have a phone number for her. PAWC sent a letter to Ms. Hodowanitz based on the address she provided at the public input hearing asking her to contact the Company. PAWC has not been contacted by Ms. Hodowanitz.

X. Amanda Johnsen

Q. What water quality issues were raised by Amanda Johnsen at the public input hearing on January 31, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Johnsen testified that her community has had issues with water quality, and in some areas of Exeter Township, the water is undrinkable, and people are supplementing undrinkable water with bottled water.

Q. Has the Company taken any action to address the concerns of Ms. Johnsen?

A. Yes. A PAWC representative spoke with Ms. Johnsen on February 2, 2024, and explained to Ms. Johnsen that hardness is the measurement of dissolved calcium and magnesium, and that is naturally occurring in ground and surface water. Ms. Johnsen was very understanding and pleased with the explanations regarding hardness. Ms. Johnsen stated that she would not mind if a PAWC representative came out to discuss water quality at a future township meeting, as it would be helpful for all customers.

Y. Kathleen Schwartz

Q. What water quality or service-related issues were raised by Kathleen Schwartz at the public input hearing on January 31, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Schwartz testified that (1) she buys drinking water (bottled) due to water quality concerns; (2) Exeter has extremely hard water and there is calcium and lime buildup on everything; (3) having a water softener is a must, but she had to turn hers off because the water is so hard that her softener cycles constantly, which counts towards wastewater. She

also testified that the water pressure is poor and cuts off in the middle of a laundry cycle for no reason. If the washer is running, it's not possible to take a shower or use the sink.

Q. Has the Company taken any action to address the concerns of Ms. Schwartz?

A. Yes. A PAWC representative contacted the customer on February 2, 2024, and she stated that hardness was her primary water quality concern. The PAWC representative explained to Ms. Schwartz that the water is naturally hard; therefore, additional treatment is not required. Additionally, another PAWC representative spoke with the customer regarding her pressure concerns. The pressure in the customer's service location is around 70 psi. Ms. Schwartz stated that the problem comes and goes sporadically, one week more than others. The PAWC representative explained that we have not had any main breaks or system issues recently and that the pressure concerns could be internal. The Company offered to schedule an appointment to help investigate; the customer declined.

Z. <u>Priscilla Gentry</u>

Q. What water quality issues were raised by Priscilla Gentry at the public input hearings on January 31, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Gentry testified that: (1) the water quality is hard and they have to buy bottled water for a baby to drink; (2) they have a water softener because in preparation to retire, they thought ahead and saved up to upgrade their water heater among other household appliances; and (3) they have to use the water softener to protect the washer, the dishwasher and their tankless hot water heater.

Q. Has the Company taken any action to address the concerns of Ms. Gentry?

A. Yes. A PAWC representative called and spoke with Ms. Gentry regarding her concern and explained hardness is the measurement of dissolved calcium and magnesium that is naturally occurring in ground and surface water. The Company scheduled an appointment with Ms. Gentry on February 6, 2024 to collect a sample for general water quality parameters. The sample that was collected from her home was analyzed for general water quality parameters. The results were normal and copy of report was mailed out to Ms. Gentry.

AA. <u>Ron Foy</u>

Q. What water quality and/or service-related issues were raised by Ron Foy at the public input hearings on January 31, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Foy testified that (1) the water pressure varies from hour to hour; (2) he should be able to not wash clothes and still get full water pressure out of his sink; (3) he does not know about the water quality because he spent $4,000 to install a water system because of the hard and unusable water.

Q. Has the Company taken action to address the concerns of Mr. Foy?

A. Yes. A PAWC representative contacted Mr. Foy about his water quality concerns. During that conversation, Mr. Foy indicated that he has no issues or concerns with his quality of water. Additionally, a PAWC representative contacted Mr. Foy regarding his pressure concerns. Mr. Foy has a service line that is approximately over 400 feet. The pressure concerns that he testified about could be volume loss not pressure; the line pressure at the

water main is over 100 psi. The Company representative offered assistance to help check if he has pressure reducing valve, but Mr. Foy declined.

BB. Alicia Shussett

Q. What water quality related issues were raised by Alicia Shussett at the public input hearings on January 31, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Shussett testified to the less appealing taste of her water, as well as the hardness of the water and its impact on her home, which prompted her to purchase a water softener system and drinking filtration system.

Q. Has the Company taken action to address the concerns of Ms. Shussett?

A. Yes. The Company has attempted to contact Ms. Shussett regarding her concerns but has not been successful in its attempts.

CC. Judith Kraines

Q. What water quality related issues were raised by Judith Kraines at the public input hearing on January 31, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Kraines testified that she does not have any problems with pressure or with water discoloration like others testified to; her water is "fine", except for hardness.

Q. Has the Company taken action to address the concerns of Ms. Kraines?

A. Yes. A PAWC representative contacted Ms. Kraines to discuss her concerns, but Ms. Kraines was unable to talk at length so the PAWC representative provided Ms. Kraines with contact information so that her concerns can be addressed at a time convenient for the customer.

DD. Fiona Reiter

Q. What water quality related issues were raised by Fiona Reiter at the public input hearings on January 31, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Reiter testified that the water was very hard before installing the water softener. Now they have a water softener and have extra water going through that.

Q. Has the Company taken any action to address the concerns of Ms. Reiter?

A Yes. A PAWC representative contacted Ms. Reiter on February 2, 2024. Ms. Reiter indicated that her main concern was hardness. The PAWC representative explained that hardness is the measurement of dissolved calcium and magnesium that is naturally occurring in ground and surface water and that the water in her service territory is naturally hard; therefore, additional treatment is not required. The EPA has not set a MCL for hardness in water, primarily because the components that contribute to hardness are not toxic; that is, they do not cause harmful health effects.

EE. Sheila Jones

Q: What water quality related issues were raised by Sheila Jones at the public input hearings on January 31, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Jones testified that many of her neighbors, as well as herself, experience periods of poor water quality which has led many of them to purchase expensive filtration systems or buy bottled water for safety concerns.

Q. Has the Company taken any action to address the concerns of Ms. Jones?

A. Yes. A PAWC representative spoke with Ms. Jones on February 2, 2024. Ms. Jones stated she sees discolored water from time to time throughout her house. She mentioned, and was aware, that the less she used the water, the more often she noticed the discolored water. She stated she read the material on the Company's website and was aware of the sequestration treatment we employ in the Blue Mountain Lakes water system. The PAWC representative discussed the sequestration treatment process and the effects that time and other factors (heat, chlorine, etc.) have on the treatment. The PAWC representative advised Ms. Jones of the flushing program we use twice a year in the system and the spot flushing we do to alleviate the discolored water, as those concerns appear. The PAWC representative also discussed why and how the discolored water can appear and how to minimize or remedy it. Ms. Jones was interested in having her cold water sampled; those sample results were provided to the customer.

FF. <u>Terence Reilly</u>

Q. What water quality related issues were raised by Terence Reilly at the public input hearings on January 31, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Reilly testified that he replaced the dishwasher and two faucets in the last couple of years just because of the quality of water.

Q. Has the Company taken any action to address the concerns of Mr. Reilly?

A. Yes. A PAWC representative spoke with Mr. Reilly on February 2, 2024. Mr. Reilly conveyed that hardness was his water quality concern. The PAWC representative explained that hardness is the measurement of dissolved calcium and magnesium that is naturally occurring in ground and surface water and that the water in his service territory is naturally

hard; therefore, additional treatment is not required The EPA has not set a MCL for hardness in water, primarily because the components that contribute to hardness are not toxic; that is, they do not cause harmful health effects..

GG. <u>Michelle Kircher</u>

Q. What water quality and/or service-related issues were raised by Michelle Kircher at the public input hearings on January 31, 2024, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Township Supervisor Kircher testified her big problem is the water quality and she gets white rings around her dishes and pans. She also testified that the water quality is terrible and uses plastic bottles for the dogs and herself because of the poor taste of the water. The customer also testified that the water tastes moldy and smells musty and the water pressure goes up and down.

Q. Has the Company taken any action to address the concerns of Township Supervisor Kircher?

A. Yes. A PAWC representative spoke with Township Supervisor Kircher on February 1, 2024 regarding her concerns. The PAWC representative reported on December 12, 2022, there was a service order related to low pressure at this customer's premises. A PAWC Field Service Representative found that the water softener in Township Supervisor Kircher's home caused the pressure issue, and after bypassing the softener, the customer's water pressure went back to normal. The PAWC representative indicated that the water pressure in Township Supervisor Kircher's area is normally 50 psi. A second PAWC representative contacted Township Supervisor Kircher to discuss her water quality concerns, which she clarified were focused on the taste and hardness of the water. The

PAWC representative explained the causes of these concerns and the customer appreciated the explanation.

HH. Jordan Henning

Q. What service-related issues were raised by Jordan Henning during the January 31, 2024, public input hearings, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Henning testified about the alleged difficulties he had when the Company delayed replacing a faulty meter after he contacted the Company numerous times and the Company ended up billing the customer $1,800. After some difficulty, the customer got the Company to allegedly admit it was their mistake and drop the $1,800 bill.

Q. Has the Company taken any action to address the concerns of Mr. Henning?

A. Yes. A PAWC representative spoke with Mr. Henning on February 1, 2024, and Mr. Henning reported having had some issues with having his meter replaced. A PAWC representative reported that on March 7, 2022, a Field Service Representative had a check-meter work order due to a stopped meter. The Field Service Representative could not operate the curb stop due to the curb box needing to be realigned. On March 15, 2022, PAWC replaced the top section of the curb box to access the valve. Mr. Henning's meter was replaced on November 11, 2022. Following having a stopped meter, customers are back billed for their usage that they have not previously been billed for as permitted by regulation, but at times will be given a courtesy adjustment.

II. Patricia Finley

Q. What water quality related issues were raised by Patricia Finley during the January 31, 2024 public input hearings, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Finley testified that the quality of water is an issue. She moved in 2013, and in 2015 installed a water softener because the water is hard.

Q. Has the Company taken any action to address the concerns of Ms. Finley?

A. Hardness is the measurement of dissolved calcium and magnesium, and that is naturally occurring in ground and surface water. The water in her service territory is naturally hard. The EPA has not set a MCL for hardness in water, primarily because the components that contribute to hardness are not toxic; that is, they do not cause harmful health effects. Multiple attempts to contact Ms. Finley, via telephone, with the number provided on her customer account have been unsuccessful, as the number is listed as no longer in service.

JJ. Eva Ross

Q. What water quality and/or service-related issues were raised by Eva Ross during the January 31, 2024 public input hearings, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Ross testified that her water has a bad taste and hardness, which is not only unpleasant but also damaging to appliances requiring additional expenses for repairs, and the changing filters before their time. She stated she buys bottled water because she cannot drink the water out of the faucets. The witness also testified that the water has many minerals, has an odor and low pressure.

Q. Has the Company taken any action to address the concerns of Ms. Ross?

A. Hardness is the measurement of dissolved calcium and magnesium, and that is naturally occurring in ground and surface water. The water in her service territory is naturally hard. The EPA has not set a MCL for hardness in water, primarily because the components that contribute to hardness are not toxic; that is, they do not cause harmful health effects. General taste complaints are typically related to system maintenance. A PAWC representative has indicated that the Company has not received any complaints regarding pressure from Ms. Ross and that the pressure in her service area is around 95 psi. Multiple attempts to contact Ms. Ross, via telephone, with the number provided in her customer account have been unsuccessful, as the number is listed as no longer in service.

KK. <u>Gail Coleman</u>

Q. What service-related issues were raised by Gail Coleman during the January 31, 2024, public input hearings, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Coleman, a wastewater customer, testified that she uses well water and the Company wanted to check her water meter (that doesn't exist) and billed her for water she didn't use because the Company was not allowed to check the water meter. With great difficulty, the customer succeeded in getting a resolution from PAWC.

Q. Has the Company taken any action to address the concern of Ms. Coleman?

A. Yes. A PAWC representative reported that Ms. Coleman had experienced nine consecutive estimates on her wastewater bill. When Ms. Coleman's meter was replaced, it was replaced with a new AMI transmitter, and actual reads were able to take place. Ms. Coleman was

subsequently back billed because her estimated reads were low, but she later received a courtesy adjustment in the amount of $494.

LL. <u>Carla Moran</u>

Q. What water quality and/or service-related issues were raised by Carla Moran during the February 5, 2024, public input hearings, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Moran testified that she doesn't use the water for cooking or drinking, and there is a lot of dirt in the water. The customer also testified that she has been smelling chlorine for a year now.

Q. Has the Company taken any action to address the concern of Ms. Moran?

A. Yes. A PAWC representative contacted Ms. Moran and she indicated that her chief complaint was a chlorine taste in the water. A PAWC representative has made arrangements to sample Ms. Moran's water on February 21, 2024 and the results of the sample will be mailed directly to Ms. Moran. Ms. Moran also indicated that the "dirt" she referred to in her testimony was not dirt, but she has a Brita, and her filter becomes dirty after two months, not the normal three months. Ms. Moran also indicated that she was pleased that she did receive alerts from the Company when there are breaks in her service area, so she knows when not to do laundry.

MM. <u>Kendra Robinson</u>

Q. What water quality issues were raised by Kendra Robinson during the February 5, 2024, public input hearings, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Robinson testified that there is no way she can drink the tap water because it tastes bad and has a strong chlorine odor. Also, she uses a well rated filter for any water that she consumes, even if it's to boil pasta. She claimed the hardness of the water damages her appliances. The witness also stated that the taste and smell is getting worse.

Q. Has the Company taken any action to address the concern of Ms. Robinson?

A. Yes. A PAWC representative spoke with Ms. Robinson, and she will call the Company to schedule a time for a sample to be collected at her convenience.

NN. <u>Kathleen Townsend</u>

Q. What water quality issues were raised by Kathleen Townsend during the February 5, 2024 public input hearings, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Townsend testified that she had her water softener removed to try to save on the water usage. Ms. Townsend indicated the water is "so hard" and her faucets and washing machine have built up calcium buildup and she has to spend money on lotion because now she is really dry too. The witness said she hasn't drank the water for years, it tastes terrible, and even the ice cubes tastes terrible.

Q. Has the Company taken any action to address the concern of Ms. Townsend?

A. Yes. A PAWC representative spoke with Ms. Townsend and has scheduled to have a water sample collected on February 23, 2024.

OO. <u>Jodi Asay</u>

Q. What service-related concerns were raised by Jodi Asay during the February 6, 2024 public input hearing, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Asay testified that in her community (Saw Creek Estates), there are documented broken service lines causing high monthly water bills. Ms. Asay also testified that the Company raised pressure on existing customers to service additional customers on higher ground. The higher pressure caused a current event of flooded basement and broken water pipes. Repairs were at the homeowners' expense, and customers were billed for the unused and "wasted" water.

Q. Has the Company taken any action to address the concern of Ms. Asay?

A. Ms. Asay testified that the Company has engaged with her on her issues, and that her interactions with the Company have been positive. (Transcript, at 1511-1512). Ms. Asay has a formal complaint pending at Docket No. C-2023-3045163 regarding the issues that she raised in her public input hearing testimony. The specific issues raised by Ms. Asay will be addressed in her formal complaint proceeding, giving the parties to that proceeding the opportunity to fully develop the record and address Ms. Asay's concerns with more specificity and greater detail than is provided in the context of a rate case public input hearing.

Q. Can you please summarize Ms. Asay's testimony regarding PRVs?

A. Yes, Ms. Asay testified that the Company boosts pressure on the main for higher topography, but does not have a pressure reducing zone or pressure reducing device on the main. (Transcript, at 1486-1487). She further testified that if a PRV is installed in a home, the water bombards the service line and may lead to breaks. (Transcript, at 1489).

Q. Do you agree with Ms. Asay's testimony regarding PRVs?

A. No. I do not. The Company designs its distribution systems to stay within the 25 psi to 125 psi optimum window of system pressure, but there are circumstances that necessitate higher

pressures. For example, to serve high elevation areas and not add unnecessary booster pump stations that add capital and maintenance costs. If higher pressures are necessary in such circumstances, the Company takes steps designed to prevent the higher pressures from impacting existing customers.

PP. <u>Charles Wilson</u>

Q. What water quality issues were raised by Charles Wilson during the February 7, 2024, public input hearings, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Wilson testified that water quality levels seem to only decline. He stated that his direct experience with the water quality has been an odor and mineral deposits in his toilet water tanks, which result in so much caking that at times the automatic fill and flush mechanism's operation is impeded. The witness also testified that this is the first time the mineral buildup in the toilet tanks impeded the operation of the flushing mechanism and the chlorine odor is quite new.

Q. Has the Company taken any action to address the concern of Mr. Wilson?

A. Yes. A PAWC representative called Mr. Wilson and made arrangements to come to his home to get a water sample on February 14, 2024. The results of his sampling were within normal limits, and a copy of the results were mailed to Mr. Wilson.

QQ. <u>Tacy Rutherford</u>

Q. What water quality issues were raised by Tacy Rutherford during the February 7, 2024, public input hearings, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Rutherford testified that in early 2022 she requested the Company to investigate a sudden and intense increase in the chlorine odor and taste. The Company field representative took samples and determined Ms. Rutherford's chlorine levels were within the approved parameters and the intensity was likely due to colder temperatures. After no change in the spring, she had a water filtration system installed to remove the chlorine taste. The witness also testified that she filters just the water she drinks but chlorine smell persists from faucets and showers. The filter system cost $750 and every replacement filter costs $200.

Q. Has the Company taken any action to address the concern of Ms. Rutherford?

A. Yes. Ms. Rutherford previously called the Company with a water quality complaint on February 14, 2022, for a chlorine odor issue. A PAWC representative visited the customer on February 16, 2022, and checked the chlorine residual at the home and it was normal. The customer was satisfied after the interaction. Multiple attempts to contact Ms. Rutherford regarding re-sampling after the public input hearings have been unsuccessful.

RR. <u>Nereida Colon-Gonzalez</u>

Q. What water quality issues were raised by Nereida Colon-Gonzalez during the February 7, 2024, public input hearings, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. The customer testified that she does not drink the water here because the taste is unpleasant. They are going on 14 years at their home and purchase bottled water for themselves and their pets. Ms. Colon-Gonzalez testified she has hard water which can impact her skin and

appliances. She testified that since they moved here, they had to replace four toilets, a water heater, and a dishwasher. They are on their second washing machine.

Q. Has the Company taken any action to address the concern of Ms. Colon-Gonzalez?

A. Multiple attempts to contact Ms. Colon-Gonzalez regarding re-sampling after the public input hearings have been unsuccessful.

SS. Phil Choff

Q. What service-related issues were raised by Phil Choff during the February 7, 2024 public input hearings and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Choff testified that he is part of the Jefferson Township Municipal Authority formal complaint requesting an extension of a water main in Washington County.

Q. Has the Company taken any action to address the concern of Mr. Choff.

A. The Company's response to the Jefferson Township Municipal Authority's request for extension of a water main is discussed in detail by PAWC Witness Mr. Aiton in PAWC Statement No. 3-R.

TT. Keith Sauer

Q. What service-related issues were raised by Keith Sauer during the February 7, 2024 public input hearings and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Mr. Sauer testified that his area experiences hard water, and that because he has not installed a water softener, his appliances are negatively impacted. He testified that those who have water softeners have excessive water consumption due to the regeneration cycle. He testified that he needed a meter replaced in 2018 due to mineral deposits locking up the

device and causing it not to read. Once the meter was replaced, PAWC back-billed him for his usage during the time the meter was not registering. Finally, Mr. Sauer testified his water has a strong chlorine smell and taste and he does not drink the tap water.

Q. Has the Company taken any action to address the concern of Mr. Sauer.

A. Mr. Sauer has a formal complaint in this rate case proceeding which raises concerns similar to those discussed by Mr. Sauer at the public input hearings. The Company filed an answer to Mr. Sauer's formal complaint on November 27, 2023.

UU. <u>JoAnna Stuck</u>

Q. What water quality issues were raised by JoAnna Stuck during the February 7, 2024 public input hearings, and highlighted by OCA Witness Fought in his supplemental direct testimony?

A. Ms. Stuck testified that within a few years, in their newly constructed home, they began noticing hard water, white residue on glasses, a dishwasher stopped working, their faucets were replaced, and they replaced refrigerators because of the waterline being clogged due to the hard water. They put in a water softener at that time. They have now replaced two water softeners.

Q. Has the Company taken any action to address the concerns of Ms. Stuck?

A. The Company has attempted to contact Ms. Stuck but has not been successful in its attempts.

Q. You note in your above testimony that some customers were unable to be reached, is the Company taking any further action to address these customers' concerns?

A. Yes, the Company is continuing its efforts to contact these customers by phone or by mail to discuss the issues raised at the public input hearings.

VI.

CONCLUSION

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

PENNSYLVANIA AMERICAN WATER

Standard Operating Procedure

SOP #	2400-OPERATIONS-STATEWIDE-SOP-OPS MGMT-3	**Effective**	01/01/22
Task	Water Quality Notifications		
For Roles	Business Performance Associates		
Site	Statewide		
Frequency	As Needed		
Owner	Brenda Jankowski		

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Overview

Use this procedure to handle water quality notifications. This includes:

- Handling visual notifications.
- Handling non-visual notifications.
- Closing out notifications.

Background

This process starts when a customer contacts the call center with a complaint about water quality:

- The call center enters the complaint into SAP.
- SAP automatically emails a notification to all staff who handle water quality complaints.
- Staff handle the complaint based on the type of water quality issue and their job roles.

ℹ **Note:** After the customer call, the FRCC then determines whether or not they create a flush order in MapCall. MapCall assigns the order to a crew and a T&D technician is called to investigate and possibly open a hydrant to flush the main out. If the FSR notices that the problem doesn't clear up, or there may be a distribution-related issue, the FSR notifies a supervisor.

Water Quality Notifications		
Type	**Handled By**	**Comments**
Visual	BPAs	⚠ **Important:** A contact attempt for all visual notifications must be made within one business day, not including weekends. The customer can see indicators of possible water quality issues, such as: • Discolored water. • Cloudy water. • Stains on laundry. • BP handles credit requests; WQ handles the rest. ℹ **Note:** Business Performance associates (BPAs) handle only visual water quality notifications.
Non-Visual	WQ Staff	⚠ **Important:** All non-visual notifications must be completed within one business day, not including weekends. Any issue that is not visual to the customer, such as: • Bitter. • Boil Alert. • External Research Media Stories. • Illness or LSLR Flushing Inq Notifications has been issued: An expert will attempt to contact customer within 1 to 4 hours.

		• Iron. • Lead. • Moving Organisms. • Odor/Taste. • Particles. • Slippery/Slimy. • General Request Notification (ex's Annual-Detailed WQ Report, Basic WQ Summary table, FAQs) has been issued: An expert will attempt to contact customer in one business day. All non-credit-related issues: BP handles credits, WQ handles the rest. This can also include more general inquiries, including questions on: • PAWC water quality reports. • PAWC lead pipe replacement projects. ℹ **Note:** Supervisors handle non-visual water quality notifications.

Safety

See:

- The Personal Protective Equipment Matrix.
- American Water Health & Safety Procedures/Practices Manual 2016 version.

Also reference any site-specific guidance.

JSAs

N/A

Equipment Checklist

N/A

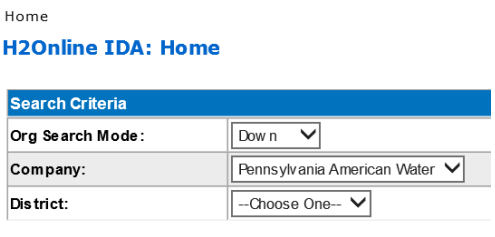
PENNSYLVANIA AMERICAN WATER

Process

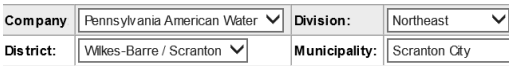
1. Handling Visual Notifications

⚠ **Important:** All visual notifications must be contacted within one business day.

The Business Performance Group (BPG) receives the notification, researches customer information, contacts the customer, and adds notes in the notification in MapCall. If a MapCall order is attached, then local operations is responsible for closing the work order before the BPG closes the notification.

Step	Action	Comment	See
1.	If needed, the FRCC automatically schedules a **flush order within 30 minutes.**	The FRCC receives the email first. They have their own procedure to determine whether a flush order is needed. They will not automatically schedule a flush order for a particle and stained laundry notification. If needed, the FRCC schedules the order within 30 minutes and respond to the complaint.	
2.	The BPG Team receives an **alert via email and also in MapCall**.	We break the state into east and west regions: see BPA Responsibility by Region.	
3.	The BPG Team performs the **following steps before calling** the customer back.		
4.	Search the **customer's area** for alerts.	Reviewing the area's alert history allows us to better understand the complaint.	
5.	Go to **H2Online IDA**.	http://h2o.amwater.net/home.aspx ℹ **Note:** IDA opens in Internet Explorer.	
6.	At the top of the page, in the Quick Links box, select **Alerts**.		
7.	In the Company box, select **Pennsylvania American Water**.		

PENNSYLVANIA AMERICAN WATER

8.	Select the following boxes in order for the customer's location: • **Division** • **District** • **Municipality.**	 The page shows the previous 30 day period. You can expand the date range if desired.	
9.	In the Active box, select **All**.	Selecting All provides a better historical view of incidents in the area. FRCC updates IDA when a complaint has been confirmed.	
10.	Click **Search**.		
11.	Review your **search results**.		
12.	From the notification, copy the customer's **premise number** into CRM.	Entering the premise number into CRM allows you to access the account notes for that premise.	
13.	Review the customer's **account notes**.	To check older notes, select Interaction Record > Interaction History > Search. Look for previous similar complaints. For example: • Is this an ongoing issue? • Does the customer submit unjustified or internal complaints?	

PENNSYLVANIA AMERICAN WATER

14.	Call the customer to make sure: • The issue has been **resolved**. • The customer has **no extended issues**.	We try to call back within the next business day. Extended issues means that either the issue persists after a flush or a new issue appears. ℹ **Note:** The FSR may be delayed in completing the investigative flush in the appropriate timeline. If you call the customer before the flush is completed: • Advise the customer that we will be out to flush (if we are flushing) the area for them or inform them if there is a main break in their area. • Give the customer your direct number in case they have extended issues.	
15.	Return to MapCall and enter **comments** into the notification.		
16.	If a MapCall order is attached to the complaint, then the FSR/supervisor must **close it out before BPG can close out the MapCall notification.**	The MapCall order is the initial FRCC flush order. Sometimes you must follow up with the supervisor to have the order closed.	

2. Non-Visual Notifications

⚠ **Important:** WQ supervisors are expected to make initial contact with the customer within one business day.

WQ handles the customer contact and review process.

Step	Action	Comment	See
1.	WQ supervisors, specialists, or their delegate make the **initial call**.	The same circumstances apply: • Check notes • Call customer • The WQ Team updates the notification in MapCall. ℹ **Note:** WQ supervisors or their delegates call the customers for non-visual notifications	
2.	Water Quality managers handle any **further escalations**.	For example, an escalation may occur when the customer is irate, and has not received a response from the assigned WQ supervisor or specialist. **Water Quality Managers** Central and Southeast: Scott Sharp Scranton/Wilkes-Barre and Northeast: Charles Motley West: Brandy Braun	

Troubleshooting

Scenario	Action	See
Notification not closed out properly. ⚠ **Important:** Customer Advocacy reviews notifications to make sure they are closed properly for PUC compliance.	Make sure that the notification is closed out in MapCall. There should be follow-up notes in MapCall, and everything should be resolved from the customer's end. • Be proactive. • Take detailed notes. • Note that the customer is satisfied. ℹ **Note:** If we have not spoken to the customer (only left a voicemail), we cannot note that the customer is satisfied. • Note if another department is following up on an issue (out of our hands).	
You feel the call center representative who took the call could benefit from mentoring.	For example, customers may advise that the representative did not listen to their concerns, was rude, etc. Take a screen shot of the initial notification email for reference. Email the screen shot to the call center supervisor, who will then follow-up as needed.	

Documentation/Recordkeeping

A BPA maintains records in CRM and in SharePoint, including the current **WQ Follow-Ups** spreadsheet.

References

BPA Responsibility by Region

To add or remove people from the notification list contact Michael Novakoski and provide the WQCLPA number for the region.

Water Quality Notifications BPA Responsibility by Region			
East MaryAnn Goldie (Primary) Kim Carr (Backup)		West MaryAnn Goldie (Primary) Kim Carr (Backup)	
Region	**WQCLPA #**	**Region**	**WQCLPA #**
Abington	WQCLPA101	Brownsville/California	WQCLPA128
Bangor	WQCLPA102	Butler	WQCLPA126
Berwick	WQCLPA108	Clarion	WQCLPA119
Blue Mountain	WQCLPA103	Connellsville	WQCLPA130
Boggs Township	WQCLPA138	Ellwood	WQCLPA122
Coatesville	WQCLPA136	Indiana	WQCLPA120
Frackville	WQCLPA109	Kane	WQCLPA121
Glen Alsace	WQCLPA114	Kittanning	WQCLPA127
Hershey/Palmyra	WQCLPA110	McKeesport	WQCLPA129
Lake Heritage	WQCLPA137	McMurray	WQCLPA131
Lehman Pike	WQCLPA104	Mon Valley	WQCLPA129
McEwensville	WQCLPA141	New Castle	WQCLPA122
Mechanicsburg	WQCLPA111	Nittany	WQCLPA139
Milton	WQCLPA112	Philipsburg	WQCLPA113
Norristown	WQCLPA115	Pitt Mount Oliver	WQCLPA133
Penn Water/Wyomissing	WQCLPA116	Pittsburgh	WQCLPA132
Pocono	WQCLPA106	Punxsutawney	WQCLPA124
Royersford	WQCLPA117	Uniontown	WQCLPA130
Scranton/WB	WQCLPA140	Warren	WQCLPA125
Steelton	WQCLPA155		
Susquehanna	WQCLPA107		
Turbotsville	WQCLPA188		
Yardley	WQCLPA118		

PENNSYLVANIA AMERICAN WATER

Review Record

Date	Version	Reviewer	Comments/Changes	Previous Replaced
06/07/22	13	Marcus Kohl	Clarification: must talk to customer to confirm satisfaction (vs. voicemail).	
06/06/22	12	Brenda Jankowski/ Cheryl DiSanti	Additional clarifications.	
05/16/22	11	Brenda Jankowski/ Cheryl DiSanti	Additional clarifications.	
08/27/20	10	Jenn Milakeve	Additional clarifications.	
08/25/20	9	Jacquelyn Griffin	Update WQ initial contact time from three business days to one.	
08/14/20	8	Jacquelyn Griffin	Incorp Brandy's comments.	
08/13/20	7	Jacquelyn Griffin	Incorp Brandy's comments.	
08/06/20	6	Alyssa Kintz	Move particles to WQ responsibility list.	
07/27/20	5	Alyssa Kintz, Jacquelyn Griffin	Reviewed closing out notifications and added scenarios.	
07/17/20	4	Dave Campbell	Review/incorp. SAP info that Alyssa sent previously.	
03/02/20	3	Alyssa Kintz, Mike Purcell	Response to review comments, add/clarify info.	
02/25/20	2	Dave Campbell	Review and format.	
01/15/20	1	Mike Purcell	Original	

Acknowledgements

I have reviewed and approved this SOP	
Area Supervisor:	
Operators:	

I am aware of this SOP	
Sr. Supervisor:	
Superintendent:	
Sr. Manager:	

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 29

OCA 29-001

Responsible Witness: Jim Runzer, Vice President of Operations for PAWC

Question:

Reference the Pressure Complaint Log provided in response to OCA-7-005_Attachment 5 (confidential).

Please discuss the unexpected pressure surge that caused multiple main breaks and that likely caused damage to the pressure regulator at 507 Sycamore Street, New Eagle on or about February 16, 2023 (see row 1138 of Attachment 5). Include the cause of the pressure surge, the number of customers that experienced damages and estimated repair costs incurred by PAWC and PAWC customers related to the pressure surge.

Response:

On February 15, 2023, the Company experienced a brief power outage, which impacted the New Eagle gradient. When power returned, it caused a pressure spike (water hammer) in the gradient, which resulted in multiple main breaks and two pressure regulator issues in New Eagle. On February 16, a resident of 507 Sycamore Street reported that there was an increase in water pressure in his home. PAWC's field service representative responding to this work order discovered that the pressure reducing valve in the customer's home was faulty. Prior to this incident, there were no known issues.

The Company called Mitchell Plumbing on February 18, 2023, and the customer's pressure regulator was replaced on February 20, 2023, and was set at 70 psi.

In addition to the customer at 507 Sycamore Street, there was one additional customer who experienced the same issue and also had their pressure regulator replaced.

PAWC's cost to repair was approximately $1,100 per customer (total $2,200), at no cost to the customer.

As a result of this incident, there is a current project for replacement of the pressure reduction valves in this service territory with expected completion by June 30, 2024.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)**
	:	**R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **James Runzer**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 2-R and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024

James Runzer

Statement No. 3

Aiton

PAWC STATEMENT NO. 3

DIRECT TESTIMONY

OF

BRUCE W. AITON

WITH REGARD TO

PENNSYLVANIA-AMERICAN WATER COMPANY'S

DOCKET NOS.
R- 2023-3043189(WATER)
R-2023-3043190 (WASTEWATER)

DATE: NOVEMBER 8, 2023

PENNSYLVANIA-AMERICAN WATER COMPANY

DIRECT TESTIMONY OF BRUCE W. AITON

Q. What is your name and business address?

A. My name is Bruce W. Aiton and my business address is 852 Wesley Drive, Mechanicsburg, Pennsylvania 17055.

Q. By whom are you employed and in what capacity?

A. I am employed by Pennsylvania-American Water Company ("PAWC" or the "Company") as Vice President of Engineering.

Q. Please describe your educational background and business experience.

A. I have a Bachelor of Science degree in Civil Engineering from California State University, Sacramento and have been in the engineering and construction field for approximately forty years. I am a licensed Civil Engineer in the State of California.

Q. Do you belong to any professional or industry associations?

A. Yes, I am a member of American Water Works Association and Water Environment Federation.

Q. What are your duties and responsibilities in your current position?

A. As Vice President of Engineering for PAWC, I am responsible for the administration of engineering services, including but not limited to the planning, design and construction of water and wastewater capital investment projects for PAWC's systems and facilities.

Q. What is the purpose of your testimony?

A. First, I will discuss the Company's capital investment planning process. As part of that discussion, I will explain how implementation of PAWC's proposed Environmental

Compliance Investment Charge ("ECIC") described by Company witness J. Cas Swiz in PAWC Statement No. 8 will address the challenges posed by new and changed environmental mandates between rate cases. Second, I will describe and support the additions to the Company's water and wastewater utility plant and equipment that will be placed in service during the future test year ("FTY") ending June 30, 2024 and the fully projected future test year ("FPFTY") ending June 30, 2025. Third, I will describe the risks associated with: maintaining safe and adequate water quantity and water quality and complying with applicable drinking water and environmental regulations associated with owning and operating facilities for supplying water services to the public; complying with environmental regulations applicable to owning and operating facilities for furnishing wastewater service to the public; and the challenges climate change could create for water and wastewater utilities. Ms. Bulkley, in PAWC Statement No. 13, discusses why investors' perceptions of such risks should be considered in establishing a reasonable rate of return on equity for the Company in this case. Finally, I will address the bulk treatment service that the Company provides in its York wastewater system.

The Company's Capital Investment Planning and Governance Process

Q. Please explain the Company's capital investment planning and governance process.

A. The Company uses a standardized Capital Program Management ("CPM") process to prioritize and manage its capital investments. PAWC conducts planning studies that assess necessary improvement projects and prioritize those projects. Further, each facility is evaluated using the Company's High Risk Asset Management ("HRAM") process to identify facilities or individual assets that may pose a high risk to the Company's system(s)

due to either their importance and/or a possibility of failure. All capital investment programs and projects are then prioritized within an overall strategic planning process, utilizing the HRAM process. In the HRAM process, facilities and critical assets are evaluated against risk and consequence of failure to formulate a five-year Strategic Capital Expenditure Plan ("SCEP"). Following more detailed design engineering, implementation plans are developed for those projects that are contained in the SCEP. The Company's annual capital construction plan is based upon projects and programs contained in the SCEP. On an annual basis, main replacement projects are prioritized on a state-wide basis. Numerous factors are considered when determining funding allocations for infrastructure investment, such as current and future service needs, assessments of the physical condition of existing plant, economic and risk factors, performance characteristics, regulatory compliance, and the potential to coordinate with municipalities and other utilities in joint improvement projects. The CPM governance process provides for formal approvals and consistent controls that optimize the effectiveness of asset investment and ensures that capital investment meets the Company's strategic goals.

Q. How does the Company's construction planning process impact its claim for plant additions?

A. The Company's claim for plant additions consists of the projects scheduled for completion during the FTY and the FPFTY. The overwhelming majority of the Company's claimed projects will be constructed and completed as planned. However, as the years progress, some projects may be substituted for others initially included in the budget due to unanticipated events requiring an immediate capital addition, such as plant or equipment

that has experienced failure and needs to be replaced or delay in permitting of a specific project. In general, the overall cost of plant construction will be consistent with the values filed. Often, where one project may lag for a variety of reasons, another may be completed early, thereby offsetting another project's delay such that the overall program remains consistent.

With timely recovery of its investment, the Company is better able to plan and deploy capital more efficiently over the long term. The Company employs a proactive approach to planning construction work and has accelerated investments in replacement of high risk or poor performing water and wastewater underground infrastructure before problems arise, such as leaks and main breaks, through its Commission-approved Distribution System Improvement Charge ("DSIC"). Planned infrastructure replacements are much less costly on a unit cost basis than the costs of addressing pipe breaks on an ad hoc basis that can result in service disruptions, property damage, health risks from potential drinking water contamination exposure during pipe breaks, related community opportunity costs related to community health and economic development, and the steep increase in future underground infrastructure investments resulting from prior deferrals of the replacements. PAWC's above ground assets, such as booster systems and storage tanks, are not DSIC-eligible property. Therefore, the Commission's approval of the Company's proposed FTY and FPFTY plant additions will support PAWC's ability to continue replacing pipes and above ground infrastructure on a planned and proactive basis with timely recovery of those investments.

Q. Why is PAWC proposing to implement a new ECIC in this case to recover certain environmental compliance costs through an automatic adjustment clause?

A. The Company spends a significant effort evaluating and planning a five-year set of needed construction improvements. However, emerging regulations or re-interpretations of existing regulations often result in new environmental compliance obligations that disrupt the five-year plan of construction work and require the Company to undertake additional projects on an expedited basis to comply with those changes. Because the timing of these projects and the need to comply with new environmental mandates are outside PAWC's control, the Company faces the undesirable situation of complying with these mandates and potentially having to delay other prudently planned and important projects to stay within the five-year plan's capital expense forecast. The Company's proposed ECIC would provide a reasonable rate adjustment mechanism to enable the thorough planning and execution of a five-year investment plan and support full and timely rate recognition of PAWC's costs to meet the continuously evolving requirements from the United States Environmental Protection Agency ("EPA"), Pennsylvania Department of Environmental Protection ("PADEP"), and other environmental agencies.

Q. Can you provide an example of such a situation with respect to drinking water systems?

A. One example of such a rapidly changing set of regulatory mandates involves the combination of federal and state regulations concerning per- and polyfluoroalkyl

substances ("PFAS"). On March 14, 2023,[1] the EPA issued proposed drinking water regulations for six PFAS, which will establish legally enforceable levels (Maximum Contaminant Levels, or "MCLs" and Maximum Contaminant Level Goals ("MCLGs")) for each of these six PFAS that are known to occur in drinking water. In addition to the MCLs and enforceable limits for these six PFAS, the EPA is proposing requirements for the continued monitoring of PFAS, public notification of monitoring results if they exceed defined limits, and the treatment of drinking water to reduce PFAS to required limits. The EPA is expected to finalize its PFAS Rule in January 2024 at which point public water systems will be required to modify their facilities to comply within three years.

In addition to these proposed federal regulatory requirements, Pennsylvania has promulgated state drinking water standards establishing strict MCLs and MCLGs for two PFAS chemicals, perfluorooctanoic acid ("PFOA") and perfluorooctanesulfonic acid ("PFOS"), with compliance monitoring mandates that go into effect January 1, 2024. Systems with monitored exceedances of these new standards must proceed expeditiously with corrective actions (in advance of any parallel federal mandates), which in most cases will require additional or modified treatment systems, modification of sources, or a combination of actions.

Together, these impending federal and state regulations in most cases will require additional or modified treatment systems, modification of sources, or a combination of actions. For the Company, these new requirements will require investments in the range

[1] US EPA Fact Sheet – *EPA's Proposal to Limit PFAS in Drinking Water* https://www.epa.gov/system/files/documents/2023-04/Fact%20Sheet_PFAS_NPWDR_Final_4.4.23.pdf.

of $200 million of work before the end of 2027, based on preliminary estimates; specific projects and investments will depend on the results of monitoring and pilot testing as envisioned by the regulations. While the Company believes that certain measures should be taken proactively in the FPFTY to comply with the EPA's impending MCLs for PFAS, the ECIC will provide the Company a reasonable opportunity to recover the capital costs and expenses incurred after June 30, 2025 to comply with the new federal standards.

Q. In the situation you just described, why can't the Company wait until the federal PFAS rules are finalized, and then prudently develop project plans to be incorporated into its five-year investment plan following standard utility procedures?

A. As I mentioned, the proposed federal PFAS drinking water standard rule provides a very short time frame for compliance, and the state rule contemplates an even faster track. Although the federal rule is not finalized, the Company cannot wait for final adoption of the federal regulations before commencing actions and investments. Achieving timely compliance with the proposed federal rule would require one year of pilot testing, nearly a year of design, between 6 to 12-months of permitting, and construction over a period of 1-2 years depending on the scope of treatment modifications necessary. And as noted previously, the state rules on two of the PFAS chemicals go into effect even before the federal rules. Thus, to achieve the combined mandates of these requirements, the Company must begin the work well ahead of the final federal rule.

At the same time, counsel has advised me that irrespective of the compliance timeframes set forth in such regulations, class action lawsuits have been brought in some states against utilities, seeking to impose liability on utilities under theories of product

liability, failure to warn, and negligence for the distribution of drinking water containing PFAS.[2] We are not commenting on the merits of such claims or the defenses which the utilities may assert. Suffice it to say that as a utility with a strong commitment to providing safe, reliable water to our customers, the Company believes it is prudent, appropriate, and consistent with accepted public utility practice to take proactive steps to address the challenge of PFAS and other emerging issues, without waiting for either regulatory deadlines or legal actions.

Q. Do you have an example of potential situations involving wastewater systems that might trigger consideration for use of the ECIC?

A. With respect to wastewater systems, PFAS again poses some impending challenges. The EPA has proposed and is expected soon to finalize rules designating certain PFAS chemicals as "hazardous substances" under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"). The full effect of those regulations is at this point difficult to forecast with any clarity. Because PFAS chemicals are found in a range of wastewaters (and even stormwater) entering community wastewater systems, they may either pass through the treatment plant to discharge to a stream or become entrained in the residuals (sludges) that are produced by treatment processes. The designation of PFAS chemicals as hazardous substances is anticipated to impact the manner and method by which wastewater plants can dispose of sludges and other residuals, and may impose requirements for both additional residual management investment and significantly

[2] *Deborah Vincent, et al. v. Aquarion Water Company,* Connecticut Superior Court, J.D. Fairfield, Docket No. FBT-CV-23-6128205-S (Complaint filed October 16, 2023); *Frances Hoffnagle v. The Connecticut Water Company,* Connecticut Superior Court, J.D. Hartford, Docket No. HHD-CV-23-6175540-S (Compliant filed October 16, 2023).

increased operating costs associated with residuals disposition.

Description of Claimed Plant Additions

Q. Please describe the Company's claimed plant additions, as shown in Exhibit No. 3-C.

A. The Company has undertaken gross plant additions (including projects funded by customer advances and contributions) to be completed by June 30, 2024 (FTY), that are estimated to total $742,020,740. The Company has also undertaken, or will undertake, gross plant additions (including projects funded by customer advances and contributions) to be completed by June 30, 2025 (FPFTY), that are estimated to total $797,874,110. Thus, the total gross plant additions for the FTY and FPFTY are $1,539,894,850. When projected retirements of $253,536,706 are considered for the FTY and FPFTY, the combined net increase in plant additions for those two years is estimated to be $1,286,358,144.

Q. In general terms, could you explain why the Company is planning to spend over $1 billion on infrastructure investment through the fully projected future test year?

A. Pennsylvania's water and wastewater infrastructure requires significant upgrade and repair. In its 2021 Report Card for Pennsylvania's Infrastructure ("Report Card"), the American Society of Civil Engineers concluded that the Commonwealth's water and wastewater infrastructure received grades of D and D-, respectively.[3] With regard to drinking water, the Report Card provides the following Executive Summary:

> Most of Pennsylvania's public drinking water systems are struggling to fund projects to meet their replacement goals as well as new regulations. That's despite recent investment in main replacement and improvement in identifying vulnerability to failures for

[3] Report Card for Pennsylvania's Infrastructure, Pennsylvania State Council of the American Society of Civil Engineers (available at https://infrastructurereportcard.org/wp-content/uploads/2020/12/National_IRC_2021-report.pdf.

> prioritization of repairs. Over the next 10 years, Pennsylvania's public water systems are projected to have a $10.2 billion funding gap, a number only very slightly offset with recent federal actions to provide infrastructure funding. In addition, there remain substantial amounts of lead service lines posing risk to public health, particularly for underserved communities. Emerging contaminants such as perfluoroalkyl and polyfluoroalkyl substances (PFAS) pose growing public health threat. To conquer these issues, water utilities need to adopt full-cost pricing and find technologies that enable more efficient operation and emergency response.[4]

The Report Card's Executive Summary for Wastewater is as follows:

> Aging wastewater management systems discharge billions of gallons of raw sewage into Pennsylvania's surface water each year. The average age of most sewer systems is approaching 75 years with many pipes over 100 years old. 26% of the state is served by on-lot systems with nearly one-quarter failure rate. Two-thirds of the state's Sewage Facility Plans are over 20 years old. The Commonwealth has a funding gap of $8.4 billion over the next 10 years to repair existing systems, upgrade existing systems to meet regulatory requirements, control Combined Sewer Overflows (CSOs), address illicit Sanitary Sewer Overflows, and construct new or expand existing systems to meet increasing demand. Available funding over that time is estimated to be $900 million, only about one-tenth of the required annual investment.[5]

Dams fair a bit better with an overall grade of C. However, as pointed out in the Report Card there is still much work to be done:

> Dams in Pennsylvania manage flood risk, provide fish and wildlife habitats, recreational opportunities, and drinking water supply. Of the 1,498 dams in Pennsylvania, over half (54%) are classified as high-hazard, likely causing death and economic damage under failure. The average age of Pennsylvania dams is 76 years old, nearly 20 years older than the national average and well beyond the typical 50-year design life. The high average age of Pennsylvania dams makes incorporating resiliency and innovation into the

[4] *Id*., at p. 36.

[5] *Id.*, at p. 146.

> redesign cost-prohibitive, especially for the 61% of owners who are private citizens or organizations. Raising the grade on Pennsylvania dams requires increased funding, perhaps the establishment of a loan or grant program to financially assist owners with repairs, abandonment, and removal projects. Supporting modernization of current federal assistance programs through the passage of the 21st Century Dams Act would also serve to benefit Pennsylvanians.[6]

Many of the high hazard dams owned by the Company are well beyond 90-years and no longer fully comply with PADEP regulations**,** thus requiring significant investment in the dams to achieve compliance with newer regulations and to prevent failure to the dam and/or spillways.

The Company, while overall better than the grades for the Commonwealth, needs to increase investment in replacement and improvement of its older and high-risk water mains to avoid the potential health risks, environmental impacts and financial losses noted in the Report Card. Substantial investment in PAWC's wastewater systems is also required to properly address combined and sanitary sewer overflows, repair existing systems, upgrade systems to meet EPA and PADEP regulatory requirements and build new required facilities. The Company's planned infrastructure investment through the FPFTY and beyond is intended to continue to address these infrastructure concerns in the Commonwealth, as well as to meet several environmental and public health standards described later in my testimony.

Q. Can you provide an update on the actual plant in service through September 30, 2023?

[6] *Id.*, at p. 29.

A. The actual plant retirements and additions through September 30, 2023 are listed in Schedule BWA-1.

Q. What types of projects are included in the Company's total gross plant additions for its FTY and FPFTY?

A. The projects that comprise the Company's claim for plant additions are set forth by applicable property account and PAWC Project Number in the portion of PAWC Exhibit No. 3-C that I am sponsoring, along with the estimated completion date and associated retirement for each project. As shown in Exhibit No. 3-C, the Company's claimed plant additions vary from what may be characterized as small, routine projects, such as the installation of individual distribution mains to substantially larger projects, such as the Curtis Dam Rehabilitation. The Company's claims also include projects necessary to satisfy new regulations to ensure the removal of cryptosporidium as well as safety and reliability projects such as the installation of emergency power generation equipment and pipeline reinforcements; water storage tank projects; and improvements to acquired systems which I discuss below along with other large projects.

Q. Does Exhibit No. 3-C also reflect the Company's acquisitions in its FTY and FPFTY?

A. Yes. Exhibit No. 3-C reflects the asset cost, reserve, and depreciated cost by plant account and year for the acquired assets for the systems which the Company will acquire in the FTY and FPFTY, including Farmington Township and Audubon Water Company's water systems, as well as the wastewater systems to be acquired from Butler Area Sewer Authority, the Borough of Brentwood, Sadsbury Township Municipal Authority and Farmington Township. Additionally, as the Borough of Brentwood has not yet closed,

there are no specific projects associated with the interceptors at this time. However, subsequent to closing, the acquisition there may be work required on the interceptor pipes that while not owned by the Company are the responsibility of the Company and required as a component of adequate, reliable service. Therefore, those projects required will be treated as capital investment by the Company.

Q. Are there any particular projects that, because of their size or importance, you would like to discuss further?

A. Yes. While there are hundreds of individual plant additions detailed in Exhibit No. 3-C, the larger individual components of the Company's claim for plant additions are described below. Water system projects are presented first by year of anticipated completion, followed by wastewater system projects also by year of planned completion. In the following summary, I will indicate if a project is either a PADEP or EPA requirement.

FTY (July 2023-June 2024) Water Projects

1. 42" Edgebrook/Brook Street Waterline Replacement (I24-110070):

The Company plans to replace approximately 3,400 linear feet ("LF") of transmission main with 42-inch zinc coated HDSS ductile iron ("DI") pipe along Edgebrook Avenue and Minooka Street in the in the Company's Pittsburgh system in Allegheny County. The existing main has experienced frequent leaks leading to extensive surface damage. Replacement of the main will enhance system reliability and improve customer service. The estimated total cost of the project is approximately $7,990,178.

2. Snowden Road Main Replacement (I24-110071):

The project will replace approximately 3,300 LF of 24-inch high density polyethylene

("HDPE") pipe that has been pulled through 48-inch concrete lockjoint pipe with 24-inch zinc coated DI pipe along Snowden Road in South Park, Allegheny County, in the Company's Pittsburgh system. The 24-inch HDPE pipe was installed in 2002 and the exterior 48-inch concrete lockjoint pipe was installed in 1966. Replacement of the existing main, which has experienced several leaks, will provide better reliability and improved service to customers. The estimated total cost of the project is approximately $2,392,545.

3. Steelton Booster Pump Station ("BPS") Replacement(I24-140002):

The existing Kelker Street BPS serves 660 customers and experiences low pressure issues during periods of high flow demands, has low fire flow capability, and is not capable of providing sufficient flows for flushing the distribution system. The project involves replacing the existing BPS with a new prefabricated BPS with three domestic pumps and a high flow pump for satisfying system flushing and fire flow demands. The Company will construct a new utility building on an adjacent site, for storage and protection of equipment and materials, and to allow for Supervisory Control and Data Acquisition ("SCADA") monitoring and control of the system in the event that the water treatment plant ("WTP") is inaccessible. The total estimated project cost is $2,273,231.

4. Hershey-Steelton Regional WTP (I24-14XX03-02):

PAWC plans to acquire new property in the FTY prior to beginning the design and construction process for a future regional WTP to serve the Hershey and Steelton Districts. The existing Hershey WTP and Steelton WTP are approaching the end of their useful lives and it is not feasible to expand or replace either WTP on the existing site due to limited space and, in the case of the Hershey WTP, additional water allocation is not available

from the Swatara Creek. The Company will purchase property in advance of design and construction of the Hershey-Steelton WTP due to limited inventory adjacent to the Susquehanna River. The total estimated project cost is $1,500,000.

5. Steelton WTP Filter Improvements (I24-140003):

As a new acquisition, an assessment was done on the Steelton WTP. A number of deficiencies were identified that must be addressed to meet safety, reliability, and regulatory treatment requirements. These deficiencies will be addressed through improvements to optimize operation of the filters, including a dedicated backwash tank, air scour system, a filter to waste capability, and associated filter piping improvements. The existing gas chlorine system will also be replaced with a bulk sodium hypochlorite storage and feed system including a chemical unloading station with spill containment. The total estimated project cost is $4,946,094.

6. Donaldson Road Water Line Extension (I24-210035)

During the course of the Company's 2022 base rate case and, in particular, at the telephonic public input hearings held on July 19, 2022, six homeowners on Donaldson Road in Robinson Township, Washington County requested help to resolve ongoing water quality issues with the well water in the area that they attributed to strip mining operations. The affected area was identified by the Office of Consumer Advocate ("OCA") witness Terry L. Fought based on his review of the homeowners' request for service. PAWC analyzed the problem and determined that it would be feasible to construct extensions from its existing mains to the affected area. The Company also determined that the main extension could be constructed pursuant to Rule 27.1(F) of its water tariff, which authorizes

main extensions to be installed without customer contributions, subject to Commission approval, to address public health and safety concerns. Consequently, in Paragraph 57 of the Joint Petition for Settlement of Rate Investigation in its 2022 rate case ("2022 Rate Case Settlement"), the Company agreed to construct a water main extension to the six residences along Donaldson Road delineated by Mr. Fought. The Commission approved the 2022 Rate Case Settlement in its final order entered on December 8, 2022. The project will require the installation of 4,000 LF of new 8-inch and 1.5-inch water main along Donaldson Road and construction commenced in October 2023. The total estimated project cost is $1,362,000.

7. Ellwood - Jackson Township Gradient Improvements (I24-310020):

The project is to design and construct a 750,000-gallon elevated tank, 1,200 LF of 12-inch and 16-inch main, and a 1,500 gallons per minute ("GPM") BPS to create a new pressure gradient in Jackson Township, Butler County. This area of the Ellwood system has experienced high growth which is impacting pressure. The estimated cost of the project is $6,974,000.

8. New Castle WTP Improvements (I24-310018):

The project, which is required by the PADEP, will install ultraviolet light ("UV") disinfection to comply with the EPA's Long Term 2 Enhanced Surface Water Treatment Rule ("LT2") and the addition of a fifth filter to achieve reliable capacity with one filter out of service. The total estimated cost of the project is $11,500,000.

9. Punxsutawney South Main New Elevated Tank (I24-420008-02):

PAWC will install a second 0.50 million gallon ("MG") elevated storage tank within the

South Main gradient of the Punxsutawney system. The second tank will keep the system in pressure while the existing tank is out of service for maintenance and repainting. The overall estimated cost of the project is $4,500,000.

10. Warren 8,300 LF 12-inch Pipe Replacement On Pleasant Drive (I24-45XX03):

The project includes the replacement of approximately 8,300 LF pipe with 12-inch DI pipe along Pleasant Drive to add reliability and to increase flows and reinforce the south side of the Company's Warren system. The total estimated project cost is $2,490,000.

11. Norristown Lafayette Street Pipe Replacement (I24-510031):

The Lafayette Street distribution main services approximately 33,000 customers in the Norristown area in Montgomery County. This project involves the replacement of 2,800 LF of 4-inch and 6-inch cast iron ("CI") pipe with 12-inch DI pipe to improve redundancy and flow. The total estimated project cost is $1,800,000.

12. Lake Montrose Dam Rehabilitation (I24-540007)

The Lake Montrose Dam built in 1919 impounds 160-MG of water and provides a raw water source to the Company's 0.65 million gallon per day ("MGD") Montrose WTP. It is classified as a high hazard (Class C-1) dam under current PADEP dam safety regulations, which requires the structure to safely convey flood flows equal to the Probable Maximum Flood ("PMF") for the associated watershed. Although the dam was originally designed to satisfy the safety standards at the time of construction, the dam's spillway is now considered inadequate because it can pass only 17% of the PMF before water can overtop the dam. Overtopping could cause the structure to fail and result in the loss of life and extensive economic impacts. The project will create additional spillway capacity to ensure

safe and reliable operation and to meet current PADEP dam safety regulations. The estimated cost of the project is $4,866,026.

13. Montrose WTP Improvements (I24-540012)

The purpose of the project is to provide safe accommodations for deliveries, safe off-street parking for employees and visitors, and adequate storage space for tools and spare parts at the Montrose WTP. Due to the existing site constraints, deliveries to the plant are not able to be made in a safe manner and require plant operators to physically stop traffic along PennDOT Route 29 by entering the roadway and flagging oncoming traffic. The total estimated cost is $3,500,000.

14. Stoney Garden Intake Improvements (I24-560007)

The project is a PADEP requirement. Stoney Garden Dam has a severely deteriorated spillway, seepage issues, potential embankment stability issues and has a 100-year-old outlet works and piping. Rehabilitation of the dam includes replacing the deteriorated spillway, adding seepage drainage facilities, flattening downstream dam embankment for stability and upgrading outlet works, including replacing the 100-year-old CI pipe from the dam to the WTP. The total estimated cost is $8,376,706.

15. Pocono Well Improvements (I24-570011)

The existing well building requires significant improvements and has therefore reached the end of its useful life. This project includes constructing a new well house, adding a chlorine contact main, and demolishing the existing well house. The total estimated cost of the project is $1,500,000.

16. New Water Main in Exeter Township (I24-590003-02)

This project involves the installation of a new main in Exeter Township that will extend approximately 4,500 LF. The Company agreed to install the new water main as part of its acquisition of the Exeter water system to provide water service and fire protection to approximately 50 homes and businesses in parts of Exeter Township without existing service. The total estimated cost of the project is $1,550,000.

17. Glen Corrosion Control (I24-59XX02)

The purpose of this project is to install corrosion inhibitors at various entry points in the Glen water system. The corrosion inhibitor will aid in ensuring the customers are protected from potential metals dissolving into the water. The total estimated cost of the project is $1,100,000.

18. Lead Service Line Inventory (I24-610022)

To meet current EPA and PADEP Lead and Copper Rule ("LCR") requirements, PAWC will develop an inventory to identify the material of all service lines connected to the Company's water systems, including the customer-owned and Company-owned segments by October 2024. The purpose of the inventory is to determine the location of lead and galvanized services in PAWC's water systems, track progress toward full replacement of lead service lines ("LSLs") and inform communications with the public. This inventory will be publicly available on the Company's website so that customers can determine which of the four categories (lead, galvanized requiring replacement, non-lead and lead status unknown) is in the service line delivering their water. The project requires the physical examination of virtually all 680,000 services across Pennsylvania often through pothole excavation in order to develop the required inventory. The total estimated cost for the

project is $11,163,718.

19. West Shore Clearwell Roof (I24-610023)

The West Shore WTP serves the Mechanicsburg area in Cumberland County. The project includes replacement of the existing Clearwell roof, which has reached the end of its useful life. The total estimated cost of the project is $1,517,344.

20. Penn LCR Upgrades (I24-63XX08)

This project involves the installation of corrosion inhibitors at various entry points in the Penn water system to meet current LCR requirements. The total estimated cost of the project is $1,600,000.

21. Royersford System Loop (I24-640015)

The purpose of this project is to install a water main to connect the western ends of the Company's Royersford distribution system across Route 422. The total estimated cost of the project is $2,985,000.

22. Connect Phoenixville Gradient to Merlin Hills/Terry Lane Gradient (I24-640016)

The purpose of this project is to install main and pressure relief vaults ("PRV") with control panels to provide two interconnections into a lower pressure service area of the Royersford system currently served by interconnections with Phoenixville Borough. The total estimated cost of the project is $1,500,000.

23. Pine Ridge Well 5 - New Groundwater Supply (I24-680023)

The project will develop a new groundwater well source for the Pine Ridge water system in the Lehman-Pike District. The system is currently supplied by four wells and does not

have adequate capacity to meet average daily demands in the system if the largest well is out of service. The project will provide an additional groundwater source to augment existing supplies and enhance system reliability. The estimated cost of the project is $1,073,374.

24. Mid-Monroe Groundwater Development (I24-680024)

The purpose of this project is to develop a new groundwater source for the Mid-Monroe water system in the Lehman-Pike District. This system is supplied by four bedrock wells that experience recurring problems with reduced yield and decreasing effectiveness of redevelopment efforts. The current system does not have adequate capacity to meet maximum day demands and commercial customers are growing at accelerated rates. The project will provide an additional groundwater source to augment existing supplies, enhance system resiliency, and provide growth opportunities. The scope of the project includes hydrogeology field work, pump sizing and treatment design, well drilling, and existing treatment building and filter modifications. The total estimated cost of this project is $1,299,930.

25. Philipsburg WTP Filter Improvements (I24-720005)

The Phillipsburg WTP provides potable water to approximately 8000 customers in Centre County. The project will replace filter media installed more than 15 years ago and associated underdrain equipment that have reached the end of their useful life. The project was initiated by PADEP requirements after a filter inspection. Other improvements include

replacement of a section of deteriorated pipe and check-valves throughout the plant. The total estimated cost for this project is $1,330,147.

26. Dunmore No. 7 Dam Rehabilitation (I24-910005)

This project is a PADEP requirement. Dunmore Dam No. 7, built in 1877 impounds 107 MG of water and provides a raw water source to the Company's 33 MGD Scranton WTP. It is classified as a high hazard dam (Class B-1) under current PADEP dam safety regulations, which, as previously noted, require the structure to safely convey flood flows equal to the PMF for the associated watershed. Although the dam was originally designed to satisfy the safety standards at the time of construction, the dam's spillway is now considered inadequate because it can pass only 83% of the PMF before water can overtop the dam. Overtopping could cause the structure to fail and result in the loss of life and extensive economic impacts. The project will create additional spillway capacity to ensure safe and reliable operation and to meet current PADEP dam safety regulations. The estimated cost of the project is $17,075,370.

27. Griffin Dam Rehabilitation (I24-910068)

The project is a PADEP requirement. Griffin Dam, built in approximately 1887 and reconstructed in 1890's, impounds 400 MG of water and provides a raw water source to the Company's 5 MGD Chinchilla WTP. It is classified as a high hazard dam (Class B-1) under current PADEP dam safety regulations which, as previously noted, require the structure to safely convey flood flows equal to the PMF for the associated watershed. Although the dam was originally designed to satisfy the safety standards at the time of construction, the dam's spillway is now considered inadequate because it can pass only

28% of the PMF before water can overtop the dam. Overtopping could cause the structure to fail and result in the loss of life and extensive economic impacts. The project will create additional spillway capacity to ensure safe and reliable operation and to meet current PADEP dam safety regulations. The estimated cost of the project is $11,272,153.

28. Scranton Main Replacement West Parker to Viewmont Drive (I24-910090)

The purpose of this project is to replace 5,100 LF of parallel 16-inch and 6-inch diameter CI mains installed in the 1890s along N. Main Ave in the Scranton water system with a history of breaks and repairs. The existing 16-inch and 6-inch mains will be replaced and upgraded to 4,500 LF of 20-inch DI pipe and 800 LF of 24-inch DI water main. The total estimated cost is $3,700,000.

29. Watres WTP Solids Handling Improvements (I24-910078)

This project will improve the solids handling system at the Watres WTP. The existing solids handling facilities are undersized to handle plant upsets and the sand drying beds do not work well during winter months due to the cold climate, and also cause a safety concern for workers who must chisel out the solids in the winter months. The improvements include the installation of mechanical dewatering equipment that will be located inside of a building, providing a more efficient and safer approach during the colder months. The estimated cost of the project is $3,350,000.

30. Lake Scranton 3.5 MG Tank No. 3 (I24-910082)

The Scranton Area WTP utilizes two 2.5 MG storage tanks for chlorine contact time ("CT") and system storage. However, 5 MG of storage is not sufficient to meet the system's average daily demand of 20 MGD. A third 3.5 MG storage tank will be installed in parallel

with the existing tanks to improve the reliability of service to customers and maintain the required CT under all operating conditions. The total estimated project cost is $6,500,000.

31. Dunmore Dam No. 1 Outlet Works Rehabilitation (I24-910072)

Dunmore Dam No. 1 was built in 1877, impounds 66 MG of water, and provides a raw water source to the Company's 33 MGD Scranton WTP. It is classified as a high hazard dam (Class B-1) under current PADEP dam safety regulations, which require inspection of the dam's outlets works every 10 years. The project will modify the Dunmore Dam No. 1 outlet works in several respects to complete the required PADEP inspections, including installing new sluice gates, slip lining the outlet piping, and installing an access portal near the downstream toe of the dam. The estimated cost of the project is $3,226,399.

FTY (July 2023-June 2024) Wastewater Projects

32. Royersford Wastewater Treatment Plant ("WWTP") Disinfection Improvements (I24-17XX02)

The Royersford WWTP currently uses gaseous chlorine for disinfection, which is a toxic gas. For safety reasons and for more effective treatment during high wet weather flow, the plant will be converted to a UV light disinfection system. The existing chlorine and decolor system will be maintained as a backup disinfection process. The estimated cost of the project is $1,350,000.

33. Fairview South Beinhower Lift Station (I24-600007)

The Beinhower Lift Station is the primary lift station conveying wastewater flows to the Fairview South WWTP. The project will replace the existing lift station that has reached the end of its useful life with a new lift station with a greater pumping capacity to provide

reliable capacity when the largest pump is out of service. The total estimated cost for this project is $1,335,540.

34. Fairview WWTP Dewatering and Chemical Feed System Improvements (I24-600008)

Both the Fairview North and Fairview South WWTP use sodium aluminate in the treatment of wastewater to promote settling during the treatment process. This project will upgrade the existing storage and feed systems to meet PAWC's standards for safety and reliability, including chemical unloading containment. The project also includes replacement of the dewatering belt press at the Fairview South WWTP that has reached the end of its useful life. The total estimated cost for this project is $1,249,744.

35. Coatesville WWTP UV Replacement (I24-670013)

The project will replace obsolete UV units that pose safety and reliability concerns at the Coatesville WWTP. The estimated cost of the project is $1,600,000.

36. Saw Creek WWTP Equalization Tank Replacement (I24-690006)

The project will replace the existing heavily corroded steel flow equalization tank at the Saw Creek Estates WWTP. The existing tank will be replaced with a new, similar sized concrete tank and equipped with a replacement aeration system and pumps to convey wastewater to the sequence batch reactors. The estimated cost of the project is $2,367,202.

37. Scranton WWTP Building Improvements - Phase II (I24-920024-02)

The scope of this project is to construct and renovate office and operations space at the Scranton WWTP. Phase I involved the construction of office, garage, and operating facilities for the collections department of the wastewater system and was completed in

2023. Phase II of the project will construct laboratory and office space at the WWTP. The total estimated cost for this portion of the project is $10,000,000.

38. Outfall No. 6 - Gardner Avenue (I24-920038)

The Scranton combined sewer system ("CSS") is required to maintain compliance with the Long Term Control Plan ("LTCP") required by the EPA. One of the main components of the LTCP is the construction of upstream storage and follow management structures to alleviate the uncontrolled outflow of the combined wastewater into the Lackawanna River during wet weather conditions. This project includes the construction of a new offline 780,000-gallon storage system at Outfall #6 to reduce typical year CSO events from 38 to 7 and to reduce discharge to the Lackawanna River by 8.180 MG. In addition to the new storage facilities, the project includes the installation of a new inlet and maintenance/diversion structure, new valve and meter chamber including pinch valve and flow meter, piping, manholes, and a SCADA system at the existing outfall. The estimated cost of the project is $10,000,000.

39. Scranton CSO Outfall Access and Safety Improvements (I24-920042)

The Scranton CSS overflows to more than 80 different outfalls along the Lackawanna River and its tributaries. PAWC is required to clean and inspect the outfalls regularly. However, ten of the outfalls are unsafe or impossible to access. The project scope is to remove overgrowth, extend buried pipes, and install stairs or fall arrest systems on steep embankments at the ten outfall locations to make them safe to inspect and maintain. The total estimated cost of this project is $1,150,000.

40. York WWTP Outfall 001 Improvements (I24-940005)

This project is required by the EPA. The existing York WWTP has a stormwater system that collects and conveys stormwater from Train 2 to Outfall 001, where it is pumped to Codorus Creek. When the York WWTP influent flows reach 53 MGD, a portion of the Train 2 final effluent flow is diverted to the stormwater system for conveyance and disinfected utilizing the original Outfall 001 chlorine contact tank. This project includes installation of a new dechlorination system and upgraded controls for proper dosing to ensure the York WWTP can maintain compliance with the National Pollutant Discharge Elimination System ("NPDES") Permit requirements for disinfection and total residual chlorine discharged to the Codorus Creek. The total estimated cost for this project is $1,250,000.

41. York WWTP Boiler Replacement (I24-94XX03)

The scope of this project is to replace the existing boilers and underground hot water piping at the York WWTP that have reached the end of their useful life. The total estimated cost for this project is $1,000,000.

42. Scranton Outfall #027 (I24-920022)

The project is required by the EPA. Outfall #027 is a proposed off-line combined wastewater storage system being designed and constructed as part of Phase C of the Scranton LTCP. This project will provide a new 211,000 gallon off-line storage facility system to collect 90% of the combined wastewater storm surges, as opposed to discharging into the Lackawanna River, and then gradually pump the collected wastewater back into the CSS after the wet weather event has passed. The project will provide a new inlet

structure, three large diameter pipes installed horizontally acting as storage vessels, and a discharge pump station. The total estimated cost of the project is approximately $5,902,000.

FPFTY (July 2024-June 2025) Water Projects

43. Hays Mine Raw Pipeline (I24-110035)

The Hays Mine WTP is in the Company's Pittsburgh water system. The project will replace 9,500 LF of three parallel 24-inch CI mains with one 42-inch DI main and will replace 6,600 LF of 36-inch raw water main with 42-inch raw water main, which have suffered catastrophic breaks in the past, to maintain operations at the Hays Mine WTP. The estimated cost of the project is approximately $35,240,404.

44. Aldrich WTP Building Replacement (I24-110085)

The scope of this project is to construct a new building at the Aldrich WTP in the Pittsburgh water system. The new structure will replace an existing building that has reached the end of its useful life. The new building will house the SCADA and maintenance services groups and provide a safe and effective work area. The total estimated cost for this project is $1,750,000.

45. Hays Mine Ferric and Corrosion Inhibitor (C9) Tank Replacement (I24-11XX19)

The project involves the replacement of three ferric chloride bulk tanks, two ferric chloride day tanks, one corrosion inhibitor bulk tank, one (1) corrosion inhibitor day tank, and associated equipment that is nearing the end of its useful life at the Hays Mine WTP. One existing ferric chloride bulk tank also has an identified leak near the lower half of the base

of the tank and another is bulging at the bottom. The estimated total cost of the project is approximately $3,136,125.

46. Pittsburgh Water System, Madeline Street Main Replacement (I24-11XX08)

The purpose of this project is the replacement of approximately 3,000 LF of 24-inch water line and 1,800 LF of 6-inch water line in the Company's Pittsburgh system along Madeline Street from Agnew Street to Brownsville Road due to main breaks. This project will also increase the reliability of the system and improve customer service. The total estimated project cost is $3,500,000.

47. Aldrich WTP No. 1 Clarifier Rehabilitation (I24-110090)

The purpose of this project is to rehabilitate the circular 800,000-gallon No. 1 clarifier at the Aldrich WTP in the Company's Pittsburgh system. The Aldrich style clarifiers are steel tanks that corrode over time. The rehabilitation includes replacement of the drive mechanism, structural steel repairs of the sludge removal components, concrete tank repairs, replacement of two 8-inch incline grinder pumps and valves, and replacement of other isolation valves and appurtenances. The estimated total project cost is $1,200,000.

48. Aldrich WTP Chemical Pumps Upgrades (I24-110088)

This project involves the replacement of piping, valving, and metering pumps for several liquid chemical feed systems that have reached the end of their useful lives at the Aldrich WTP. The estimated total cost of the project is $1,030,000.

49. Carnegie Operations Center Parking Area Expansion (I24-11XX21)

The Carnegie Operations Center is the primary operations location in PAWC's Pittsburgh System. The existing parking lot is inadequate for full use of the training center or for

other visitors to the location. Therefore, PAWC will acquire a parcel in the FPFTY for the relocation and expansion of the Carnegie office operations storage yard and ultimately the parking lot. The total estimated project cost is $1,400,000.

50. Grant Street Booster Station (I24-210030-04)

The project will install a new BPS on Grant Street east of Verner Avenue in the Company's McMurray system in Washington County to supply high elevation customers and improve pressures. The estimated total project cost is $1,004,295.

51. Avella Road Water Line Extension (I24-210034)

In accordance with Paragraph 57 of the 2022 Rate Case Settlement, the Company will be extending service to the Avella School District in Washington County to address water quality issues regarding odor and distaste. The project consists of installing approximately 38,000 LF of new water main along Avella Road that will connect the Company's Mt. Pleasant gradient and the Church Street gradient. The main extension will serve the Avella School campus and has the potential for approximately 50 new service connections along the route in Independence Township, Cross Creek Township, and Mt. Pleasant Township. New fire hydrants and a pressure reducing valve ("PRV") station will be included in the project. The estimated cost of the project is approximately $13,100,000.

52. Old Steubenville Pike & Campbell Road Water Line Extension (I-210036)

In accordance with Paragraph 57 of the 2022 Rate Case Settlement, PAWC will be extending service to twenty-three new customers in Robinson Township, Washington County to address the concerns of homeowners and businesses in the area regarding polluted groundwater discussed by OCA witness, Mr. Fought. Similar to the Donaldson

Road Extension, PAWC analyzed the problem and determined that it would be feasible to construct extensions from its existing mains to the affected area. The Company also determined that the main extension could be constructed pursuant to Rule 27.1(F) of its water tariff, which authorizes main extensions to be installed without customer contributions, subject to Commission approval, to address public health and safety concerns. This project will require installation of approximately 15,000 LF of 6-inch and 8-inch new water main along Old Steubenville Pike and Campbell Road to service these residents. The project will also include a PRV station and fire hydrants. The estimated total cost of the project is $6,360,350.

53. Jack Clutter Dam Removal Project (I24-21XX07)

Jack Clutter Dam is a regulated, high hazard dam in Washington County. The existing dam does not meet current PADEP regulations for spillway capacity. The portion of the Company's system which drew water from Jack Clutter Dam can instead receive water from the McMurray District, and therefore the dam is no longer required and will be removed. The estimated total cost of the project is $1,200,000.

54. Replace Hannas Knob Booster Station (I24-210038)

The Hannas Knob BPS serves approximately 40 customers in the Company's McMurray district. The existing BPS was constructed in 1970's and has reached the end of its useful life. A new BPS, with a rated capacity of 75 gpm, will be installed adjacent to the existing pump station and the existing Hannas Knob BPS will be removed from service. The estimated total project cost is $1,600,000.

55. Connellsville – 12-inch Main Across Youghiogheny River (I24-230012)

The west portion of PAWC's Connellsville system is served by a single 12-inch main crossing the Youghiogheny River. The existing main was installed in the 1980s and raises service reliability concerns. The project will install approximately 1,350 LF of 12-inch main across the Youghiogheny River near US 119 by horizontal directional drilling to provide a second water feed to the west portion of the Connellsville system. The estimated total project cost is $2,321,880.

56. Brownsville to California Road 16-inch Main River Crossing (I24-250010)

Currently, approximately 9,200 customers in the Company's Brownsville system are served by one 16-inch main that was installed in 1986. If the existing feed failed, the area would not have a water supply. Accordingly, the project will install approximately 3,000 LF of 16-inch main crossing under the Monongahela River to provide a second water feed to West Brownsville Road and California Road in the Brownsville system. The total estimated cost of this project is $3,260,000.

57. Brownsville WTP Sedimentation Basin Upgrades (I24-250011)

Numerous improvements are needed to the sedimentation basins at the Brownsville WTP to improve safety and operational efficiency. The project will install automated sludge removal equipment, new mixers to replace the existing mixers that are beyond their useful life, and new sluice gates. PAWC will also cover the basins and perform electrical and control improvements. The estimated project cost is $2,680,000.

58. New Castle WTP Residual Improvements (I24-310026)

The New Castle WTP has a design capacity of 8.4 MGD and serves approximately 43,000

customers in Lawrence County. The Company will replace the current sludge press that no longer has maintenance parts available, and also install a new backwash holding tank and new filter backwash recycle pumps. A new building will be constructed to house two presses, polymer feed, electrical room, conveyance system for the finished solids and a new filtrate pump station. The project will also include improvements to the thickener building including electrical improvements, new lighting and heating, ventilation and air conditioning equipment, additional instrumentation, and better access to the thickener dome roof. The total estimated cost of the project is $7,500,000.

59. New Castle WTP Filter Rehabilitation (I24-310027)

The four existing filters at the New Castle WTP pose concerns because of the age and condition of the media. The Company regularly evaluates the condition and efficacy of filter media. The media requires replacement every 15-20 years. The filter work will consist of the removal and replacement of existing media, upgrades to valving and instrumentation, and installation of davit arm retrieval mounts. The total estimated cost of the project is $2,000,000.

60. Butler WTP Chemical Improvements (I24-330016)

The Butler WTP currently uses gas chlorine and gas ammonia for disinfection, which are both toxic gases. The project will convert to the use of liquid sodium hypochlorite and liquid ammonium sulfate, which is much safer for both the public and Company staff. The total estimated cost of the project is $3,900,000.

61. Indiana Pleasant Hills Gradient Improvements (I24-410010)

The Company is undertaking the project to improve reliable flow capacity and pressure at

the Pleasant Hills BPS. The pumps are being replaced at the existing Pleasant Hills BPS and a PRV station will be added within the Pleasant Hills gradient of the Company's Indiana system. The estimated cost of the project is $1,225,000.

62. Punxsutawney - Install New Storage at West End Reservoir (I24-420008-02)

The existing 100-year old storage tank at the West End Reservoir in the Company's Punxsutawney system is at the end of its useful life and a second tank is needed to maintain system pressure while the old tank is removed. The project consists of two parts. In the first part, the Company will construct a new ground storage tank at the West End Reservoir site adjacent to the existing tank. Part Two of the project will consist of demolishing the existing tank and constructing a second tank within the footprint of the existing tank. The estimated cost of this project is $2,414,394.

63. Punxsutawney Snyder Hill Rd./Rockland Extension (I24-42XX02)

This project will extend service to approximately 70 new customers along Snyder Hill Road in Punxsutawney Borough. The extension of water service into Snyder Hill Road will provide a safe, potable water supply to an area that has poor well quality and quantity issues, and improve public safety by providing adequate fire protection in the Rockland gradient. The project will require installation of approximately 11,000 LF of new 6-inch to 12-inch DI water main. In the 4th quarter of 2023, the Company will seek Commission approval for the service territory expansion. The estimated cost of this project is $2,800,000.

64. Clarion Main Across I-80 at Exit 62 to Feed Sligo (I24-43XX01)

This project will install approximately 3,000 LF of a new 12-inch water main across

Interstate 80 at Exit 62 to increase fire flows and reliability of service to customers in the Sligo area of the Company's Clarion system. The total estimated project cost is $1,500,000.

65. Clarion WTP - Chlorine Gas Elimination (I24-430007)

This project will replace the gaseous chorine system with a new bulk liquid sodium hypochlorite system at the Clarion WTP for safety reasons. The project will also include safety and operational improvements to the Clarion WTP. The estimated total project cost is $3,650,000.

66. Kittanning WTP Filter Improvements (I24-44XX06)

The Kittanning WTP provides water for the Company's distribution system serving 5,250 people. Over time, the filter media degrades and requires replacement. During replacement, the Company reviews and replaces as needed the underdrains and hardware. The project will rehabilitate the filters and replace the filter media at the Kittanning WTP. The estimated cost of the project is $1,500,000.

67. Second 16-inch Main to East Norriton Township (I24-510028-02)

The purpose of this project is to construct a new BPS at the existing East Norriton tank site and install approximately 3,000 LF of new 16-inch main, which will take water from the Dekalb pressure zone and transfer water and provide a secondary feed into the Church Road pressure zone for reliability. The estimated cost of the project is $2,000,000.

68. Norristown WTP New Blower and Backup (I24-51XX19)

PAWC will replace the Norristown WTP's aging blower system that experienced operational issues in past years with a new blower and backup system to improve reliability. The estimated cost of the project is $1,000,000.

69. Yardley System: Williams Lane Tank BPS and Chemical Feed (I24-520006)

The project will install pump station upgrades, such as moving the altitude valve inside and adding a redundancy pump, and will replace the 500,000-gallon Williams Lane Tank in the Yardley system with a new storage tank due to the age and condition of the existing 80-year old tank. The estimated cost of the project is $4,006,940.

70. Yardley College Avenue Wells PFAS Treatment (I24-520007)

The Company will proactively deploy treatment processes to remove PFAS at wells along College Avenue in the Company's Yardley system to comply with the new MCLs for six PFAS that are reasonably anticipated to be imposed by the EPA's proposed rule, which is expected to be finalized at the end of 2023. The estimated cost of the project is $6,000,000.

71. Susquehanna Operations Center (I24-540005)

PAWC will purchase land and build a new operations center for its Susquehanna System to replace the existing facility that has reached the end of its useful life and no longer meets the needs of the Company. The total estimated cost for this project is $3,550,000.

72. Pocono District: Pine Hill and Summit Point PFAS Treatment (I24-570012)

The Summit Point and the Pine Hill wells in the Pocono district serving customers in the Mount Pocono area have PFAS levels that exceed the MCLs under the EPA's proposed standards. The project will deploy treatment processes for PFAS removal at those wells to ensure compliance with those regulations that are expected to be finalized in the near future. Piping and pump modifications will be needed to connect the new treatment system to the distribution network. The estimated cost of the project is $4,000,000.

73. Glen Alsace District PFAS Treatment for Wells 8 and 9/9A (I24-590005)

Like the projects in the Yardley and Pocono districts described above, PAWC will proactively deploy treatment processes to remove PFAS at Wells 8 and 9/9A in the Company's Glen Alsace system to ensure compliance with MCLs under the proposed rule that the EPA anticipates finalizing by the end of 2023. The estimated cost of the project is $3,800,000.

74. Hershey District: Manada Creek Intake Project (I24-62xxxx_)

Siltation at the Manada Creek Intake Dam has reached a level that limits PAWC's ability to withdraw and pump water from Manada Creek to the Hershey WTP. The project will remove the sediment behind the dam to restore the capacity of the intake and provide an improved gate system that will allow for flushing sediment. The estimated cost of the project is $1,200,000.

75. Wyomissing System High Gradient Tank No. 2 (I24-630009-01)

PAWC will construct new concrete ground storage tanks on existing Company property with a combined capacity of 0.8 MG storage tank to address storage deficits in the Wyomissing high gradient. The estimated cost of the project is $2,000,000.

76. Wyomissing System High Gradient Tank No. 2 System Connection (I24-630009-02)

This project involves the replacement of 7,700 LF of main to connect the new Wyomissing High Gradient storage tank into the Wyomissing High Pressure zone. The estimated cost of this project is $2,750,000.

77. Penn System Wells 19 and 23 PFAS Treatment (I24-630010)

Like the projects in the Yardley, Pocono, and Glen Alsace districts described above, PAWC will proactively deploy treatment processes to remove PFAS at Wells 19 and 23 in the Company's Penn System to ensure compliance with MCLs under the proposed NPDWR. The estimated cost of the project is $3,800,000.

78. West Chester BPS Relocation (I24-650010)

The existing West Chester BPS was constructed over 40 years ago and is at the end of its useful life. The BPS is a below ground station in a roadway that impedes the ability to maintain and repair the pumping station. The project will relocate the West Chester BPS above ground and install an emergency generator to improve reliability and safety. The estimated cost of the project is $2,000,000.

79. Coatesville System: Rock Run Dam Improvements (I24-650020)

Rock Run Dam, built in the 1920's, impounds 235 MG of water and provides a raw water source to the Company's 7 MGD Rock Run WTP. The Company performs regular inspections of its dams across Pennsylvania and PAWC's recent inspection of Rock Run Dam identified several deficiencies in the dam structure. The project will implement various improvements to address those deficiencies, including valve replacement, access improvements, and intake system improvements. The estimated cost of the project is $1,624,212.

80. Coatesville System: Route 340 BPS Replacement (I24-650023)

To improve water quality and eliminate water age concerns, the Hill Road water tank is taken out of service during the summer. The project will replace the existing Route 340

BPS with a capacity of 0.29 MGD with a new 1.44 MG BPS to maintain system pressure when the Hill Road Water Tank is out of service. The estimated cost of the project is $2,000,000.

81. Coatesville System Main Replacement and/or Relining (I24-650024)

The existing 24-inch CI main that runs from Parkesburg, PA to Caln, PA adjacent to Amtrak railway in the Company's Coatesville system dates back to 1903 and has experienced multiple breaks recently. The project will slipline or replace approximately 7,500 LF of the existing aging and high-risk 24-inch CI main with HDPE or DI pipe depending on the condition of the existing pipe. The main will be placed further from the Amtrak right of way to ensure safe replacement and future pipe access. The estimated cost of the project is $7,600,000.

82. Coatesville System Raw Water Main Slip Lining (I24-65XX05)

The project will install 16-inch HDPE in approximately 750 LF of existing 16-inch raw water main that is in poor condition running from Chambers Lake to the Company's Rock Run WTP in the Coatesville system. The project is estimated to cost $2,000,000.

83. Rock Run WTP Wastewater Connection to Public Sewer (I24-650022)

The project will install a new main to connect Rock Run WTP to PAWC's Coatesville sanitary sewer system so that waste solids do not hinder WTP performance. The project is estimated to cost $2,000,000.

84. All Seasons Well Replacement (I24-680032)

The All Seasons water system in the Company's Lehman Pike district has only one well source to supply 51 customers. Additionally, the existing well has a problem with fine

sand in the source water that must be removed before treatment. The project will construct a new second well and will reconstruct the existing well to prevent sand from entering through it, so the existing well can serve as a reliable back-up source for the All-Seasons system. The estimated cost of the project is $1,000,000.

85. Pine Ridge System Well No. 3 PFAS Treatment (I24-680033)

The groundwater supply at Well No. 3 in the Company's Pine Ridge system contains PFOA and PFOS levels that require removal to meet current PADEP MCLs for those chemicals. The project will incorporate activated carbon into the treatment process to absorb excess PFOA, PFOS and other PFAS in the well water supply to provide safe, high-quality water to customers. The total estimated cost of this project is $1,700,000.

86. Philipsburg System Well No. 2 (I24-720002)

The Philipsburg District has a current supply deficit of 0.94 MGD during drought conditions, and a projected 2026 drought supply deficit of 0.89 MGD. This project is part of a multi-year project to develop an additional 1 MGD of groundwater source of supply to ensure a reliable service for customers in the Philipsburg district. The estimated cost for the project is $1,704,518.

87. Emigh Run BPS Improvements (I24-720003)

The existing Emigh Run BPS in the Philipsburg system serves a large area which includes twenty-one pressure gradients, and is currently supplied by a single 12-inch pipeline located in corrosive soils. The project will install approximately 10,500 LF of new 12-inch pipeline and two BPS in the Philipsburg system to create an alternate supply from the

Windy Hill gradient to the Spring Valley gradient and enhance reliability. The total estimated project cost is $4,537,070.

88. Philipsburg – Sandy Ridge BPS and Linwood BPS (I24-720007)

The project will install two new booster stations in the Philipsburg district. The existing Sandy Ridge BPS is an underground pump station that lacks capacity to serve existing fire hydrants, and it does not have an emergency generator needed to meet PADEP Uninterrupted System Service Plan requirements. Additionally, underground booster stations present safety hazards for workers. Given the small site footprint, an on-site replacement is not feasible. Therefore, PAWC will acquire new property and construct a new above-ground prefabricated BPS, along with a new emergency generator. The existing Linwood BPS is also an underground pump station that lacks fire capacity, does not have an emergency generator, and presents safety hazards for workers. A replacement pump station with a new emergency generator will be installed on existing property near the Phillipsburg WTP. The estimated cost of the project is $2,000,000.

89. Second Storage Tank at Philipsburg WTP (I24-720008)

PAWC will install a new distribution storage tank at the Philipsburg WTP because the existing distribution storage tank cannot be taken out of service for painting or other maintenance due to lack of adequate storage in the system. In addition, the project will install a new small clearwell or additional chlorine contact piping to ensure the Philipsburg WTP can meet minimum chlorine contact time requirements. Finally, a small pump station will also be added to provide potable water to the Philipsburg WTP since the plant's current

water supply does not meet chlorine contact time requirements. The estimated cost of the project is $4,200,000.

90. Berwick - Salem BPS Replacement (I24-730002)

The existing Salem BPS in the Berwick system is in poor condition, located within the 100-year floodplain, and located in an underground vault that requires confined space entry for servicing pumps. In addition, the Salem BPS only has one pump and does not have a fire pump. This project will replace the Salem BPS with a new BPS outside the flood plain to provide a reliable water supply for existing customers and improve fire flow. A 2,200 LF main extension is also required to connect the new BPS to the Berwick distribution system. The total estimated project cost is $1,629,956.

91. Curtis Dam Rehabilitation (I24-910008)

The Curtis Dam, built in 1886-1887, impounds 379 MG of water and provides a raw water source to the Company's 33 MGD Scranton WTP. It is classified as a high hazard dam (Class B-1) under current PADEP dam safety regulations, which as previously noted, require the structure to safely convey flood flows equal to the PMF for the associated watershed. Although the dam was originally designed to satisfy the safety standards at the time of construction, the dam's spillway is now considered inadequate because it can pass only 26% of the PMF before water can overtop the dam. Overtopping could cause the structure to fail and result in the loss of life and extensive economic impacts. The project will create additional spillway capacity to ensure safe and reliable operation and to meet current PADEP dam safety regulations. The estimated cost of the project is 16,491,001.

92. Maple Lake Outlet Works Rehabilitation (I24-910068)

The Maple Lake Dam, built in 1883, impounds 214 MG of water and provides a raw water source to the Company's 12 MGD Nesbitt WTP. It is classified as a high hazard dam (Class B-1) under current PADEP dam safety regulations, which require the outlet works to have upstream closure. The Maple Lakes Dam does not currently have upstream closure capabilities on the outlet works as required by PADEP. The Company will rehabilitate the dam structure to address the outlet works deficiency through several upgrades, including a new intake, new valves, a trash rack, an access catwalk to the new valves, outlet pipe slip lining and a downstream energy dissipation structure. The project is estimated to cost $5,541,000.

93. Marshwood Dam Outlet Works Rehabilitation (I24-910070)

The Marshwood Dam, built in 1927, impounds 59 MG of water and provides a raw water source to the Company's 33 MGD Scranton WTP. It is classified as a high hazard dam (Class C-1) under current PADEP dam safety regulations, which require the outlet works to have upstream closure. The Marshwood Dam does not currently have upstream closure capabilities on the outlet works as required by PADEP. The Company will rehabilitate the dam structure to address the outlet works deficiency through several upgrades, including a new intake, new valves, an access catwalk to the new valves, a trash rack, outlet pipe slip lining and a downstream energy dissipation structure. The estimated cost of the project is $4,988,000.

94. Old Boston Third Tank (I24-910087)

This project will add a third 1 MG finished water storage tank at the Old Boston tank site,

which is part of the Watres system in the Wilkes-Barre/Scranton district, to address growth and increased demands in the system. The tank installation project will also require inlet and outlet piping, valving, and SCADA work. The total estimated cost of the project is $4,000,000.

95. Wilkes Barre/Scranton: Sans Souci Parkway Main Interconnection (I24-910088)

Nanticoke City, located in the Company's Wilkes Barre/Scranton system, is currently served by a single 18-inch CI main crossing under the Susquehanna River. This project will install new 12-inch DI water main along Sans Souci Parkway from Hanover Township to Nanticoke City to supply approximately 15,000 customers. The second feed will reduce the impact to customers and fire protection during main break events. The total estimated cost of this project is $2,000,000.

96. Olwen Heights Storage Tank and Hydropneumatic Tank Replacement (I24-910089)

The project will replace the existing 100,000 gallon water storage tank at the Olwen Heights Well in the Wilkes Barre/Scranton system, along with the existing hydropneumatic tanks in the well houses, that have surpassed their useful life and are in degrading condition. The estimated total project cost is $1,250,000.

97. Homesite Well PFAS Treatment (I24-910093)

Like the projects in the Yardley, Pocono, Glen Alsace, and Penn districts described above, PAWC will proactively deploy treatment processes to remove PFAS at the Homesite Well

in the Company's Wilkes Barre/Scranton system to ensure compliance with MCLs under the EPA's proposed rule. The total estimated project cost is $2,000,000.

98. Rushbrook BPS Upgrades and Roadway Improvements (I24-910095)

The Rushbrook BPS in the Wilkes Barre/Scranton system is past its expected useful life and accessing the site is a safety concern. The project will upgrade the pumps at the Rushbrook BPS, install a standby generator and implement roadway improvements. The cost estimate for the project is $1,500,000.

99. Ceasetown WTP (I24-91XX03) and Huntsville WTP (I24-91XX08) Chlorine Safety

PAWC will convert the disinfection process at the Ceasetown WTP and the Huntsville WTP in the Wilkes Barre/Scranton system from the use of chlorine gas to bulk sodium hypochlorite. The project will eliminate safety hazards associated with the use of large chlorine gas cylinders. The total estimated cost of each project is $2,500,000 (or $5,000,000 total).

100. White Deer WTP Solids Handling (I24-710008)

The current clarifier and sludge drying beds at the White Deer WTP have design limitations that prevent their operation as hybrid lagoons and drying beds. Under worst case backwashing conditions, the current solids handling system does not have adequate wastewater storage to allow the plant to meet PADEP filter-to-waste regulations. Additionally, upgrades are required to meet more stringent residual chlorine limits in the new NPDES permit. Project improvements will include modification of the existing sludge drying beds and wastewater clarifier, addition of a new filter-to-waste holding tank,

installation of a dechlorination chemical feed system, a new recycle pump station, and associated yard piping. The total estimated cost for this project is $3,600,000.

101. Milton WTP Raw Water Intake Modification (I24-710018)

The existing intake at the Milton WTP encounters freezing issues during the winter when river levels are low. The wet well also receives a significant build of silt requiring annual cleaning. In addition, the existing travelling screen at the Milton WTP has reached the end of its useful life. The project will upgrade the existing intake to prevent icing or install of a new passive intake screen system. A mixer or bubbler system will be also installed in the wet well to minimize silt accumulation. The estimated project cost is $1,575,000.

FPFTY (July 2024-June 2025) Wastewater Projects

102. Duquesne Clarifier Rehabilitation - First Clarifier (I24-12XX09)

At the Duquesne WWTP, the existing clarifiers are over 40 years old and have never been maintained below the waterline. Additionally, maintenance parts have become difficult to find without significant cost. The Company has rehabilitated the majority of the Duquesne WWTP except for the clarifiers. This project will rehabilitate the first of the two clarifiers by replacing the clarifier mechanisms and upgrading electrical and controls. The total estimated project cost is $1,230,000.

103. Duquesne WWTP Chlorine Gas Conversion (I24-120023)

The Duquesne WWTP currently utilizes gaseous chlorine for disinfection, a toxic gas. In order to reduce regulatory compliance risk associated with meeting the plant's permitted low chlorine residual limit and for safety reasons, the project will convert the gas chlorine

disinfection system to a UV system and a liquid sodium hypochlorite back-up disinfection system. The total estimated cost of this project is $3,000,000.

104. Exeter: Lincoln Road Pump Station Upgrade (I24-13XX08)

PAWC will install new pumps, a wet well, and upgrade specific electrical equipment within the existing Lincoln Road pump station in the Exeter wastewater system that has deteriorated due to the corrosive environment. The total estimated cost of this project is $1,250,000.

105. Koppel WWTP – Sequence Batch Reactor ("SBR") Improvements (I24-350004)

PAWC will install a new SBR- Intermittent Cycle Extended Aeration System ("ICEAS") and process controls at the Koppel WWTP to address capacity and I&I levels. Structural inspection and repairs will be made to the concrete tankage. The estimated cost of the project is $1,750,000.

106. Sadsbury Pump Station Rehabilitation (I24-150001)

The Sadsbury pump station in the Company's Chester County, Sadsbury Township wastewater system is currently undersized and has experienced sanitary sewer overflows ("SSOs") in the past. The purpose of this project is to upgrade the Sadsbury pump station structurally and mechanically. The total estimated cost of this project is $2,000,000.

107. Kane Wastewater State Route 321 Lift Station ("LS") (I24-190006)

This project includes the construction of a new LS in the Kane wastewater system at a new site near the State Route 321 LS in order to eliminate capacity and access issues. Once the

new lift station is in service, the existing lift station will be removed from service and demolished. The estimated cost of the project is $1,500,000.

108. Kinzua WWTP Solids Handling (I24-190005)

This project will replace the aged belt filter press and solids conveyance system at the Kinzua Road WWTP in the Kane wastewater system, which will improve solids handling at the plant. The estimated total project cost is $1,050,000.

109. Clarion WWTP Outfall Sewer Replacement (I24-47XX03)

PAWC will replace approximately 2,500 LF of existing 12-inch and 18-inch outfall sewer pipe that is either undersized, damaged, or exposed within the Trout Run Stream before discharging into the Clarion River. This project will increase the reliability and capacity of the Clarion WWTP sewer effluent. The total estimated project cost is $1,600,000.

110. Fairview North Hydraulic Improvements (I24-60XX03)

The Company's Fairview North wastewater system has experienced growth, and its existing collection system is not capable of handling the projected additional flows. This project will enable the existing collection system to convey additional wastewater flows to the Fairview North WWTP for treatment by adding 2,800 LF of force main to the discharge of the Pin Oak LS. The cost of the project is offset by capacity charges/tapping fees related to the growth and development in the Fairview North area. The total estimated cost for this project is $1,800,000.

111. Timothy Lake Equalization Pump Station Replacement (I24-69XX03)

The existing Timothy Lake equalization pump station in the Lehman Pike wastewater system consists of two steel tanks that include pumps and an aeration system that require

frequent maintenance. Additionally, the steel tanks are corroded and present safety issues to Company staff. The project will replace the existing Timothy Lake equalization pump station with a new complete pump station. The total estimated cost of the project is $1,000,000.

112. Marcel Lakes WWTP Equalization Tank (I24-690008)

The purpose of this project is to remove the existing clarifier and replace it with separate influent and effluent equalization tanks. The equalization tanks are to enable dealing with flow variation. The total estimated cost of this project is $2,000,000.

113. Scranton WWTP Emergency Generator (I24-91XX07)

The Scranton WWTP has a dual electrical feed into the plant that are both powered by the same substation, and the plant does not otherwise have comprehensive emergency backup power. In the event of an extended power outage, the plant's main systems would not be able to operate. This project scope includes the installation of a new standby generator, switchgear, and metering work that will address the complexity of the site logistics and provide sufficient electrical power supply for continual plant operations in the event of a power outage. The estimated cost of the project is $3,000,000.

114. Scranton Outfall Nos. 19 and 20 Lackawanna/Linden Valving Reconfiguration (I24-920045)

Outfall Nos. 19 and 20 in the Scranton wastewater system consist of a large combined sewer overflow ("CSO") storage tank for the two outfall lines that the Company must regularly access for cleaning and maintenance. PAWC will install valves before the overflow storage facilities to allow for the isolation of each storage tank. The project will

improve safety and improve operation and maintenance of the CSO outfalls. The total estimated cost of this project is $1,100,000.

115. York Wastewater Prospect Street Interceptor (I24-94XX01)

The Prospect Street interceptor sewer line located within the York wastewater collection system conveys flows (primarily from Spring Garden Township) to the York interceptor sewer line for treatment at the York WWTP. The project will replace 1,300 LF of 12-inch interceptor sewer located between manhole MYC-83 and manhole MYC-2038 that is undersized with 18-inch interceptor sewer line. The total estimated cost for this project is $3,050,000.

116. York WWTP Dewatering, UV and Tertiary Treatment Improvements (I24-94XX05)

This project includes improvements at the York WWTP including dewatering, UV treatment and tertiary treatment. The dewatering centrifuges and UV disinfection units have reached the end of their useful life and need replacement. Additionally, in accordance with the EPA Consent Agreement Project 10, the capacity of the Tertiary Treatment Filters and the UV System will be increased to allow treatment of the entire wastewater flow and will eliminate diverted flows above 53 MGD. The total estimated cost for this project is $4,600,000.

117. Butler Area Sewer Authority ("BASA") Fischer–Brewster System Improvements (I24-XXXXXX)

The project is required by the BASA Corrective Action Plan imposed by the PADEP due to a history of SSOs within the collection system that the Company expects to acquire in

2024. The project includes the replacement of two lift stations (Fisher and Brewster) along with the construction of wet weather tanks at each station. A third station (Brewster Booster) will also be improved by installing larger capacity pumps to handle the higher flows from the other stations. The anticipated budget for this project is $7,000,000.

118. BASA Greenwood-Bryson-Benbrook System Improvements (I24-XXXXXX)

The project is required by the BASA Corrective Action Plan imposed by the PADEP due to a history of SSOs within the collection system that the Company expects to acquire in 2024. The project includes the replacement of two lift stations (Greenwood and Bryson) along with the construction of a wet weather tank at one of the Greenwood stations. A third station (Benbrook), located between the two other stations will be bypassed with a new force main from the Greenwood station and replaced with a small grinder pump station to serve the small collection system that currently flows to the Benbrook Station. The current estimate for this project is $3,500,000.

Q. Please explain in general terms the other types of improvements that the Company will make in its water and wastewater systems during the FTY.

A. The Company will replace or upgrade approximately 86,395 existing meters at various points throughout its water distribution system at an estimated cost of approximately $28.9 million, exclusive of meters associated with projects previously described. Meters are routinely replaced as they approach 20 years of age in the case of 5/8 inch meters and at various other ages for larger size meters. Meters are also replaced due to failures or malfunctions or to incorporate new meter technology.

The Company is also planning to replace approximately 2,930 Company-owned old water service lines and 415 wastewater laterals at an estimated cost of approximately $28.7 million, exclusive of services associated with projects previously described. In conjunction with its main replacement projects in the FTY, PAWC anticipates replacing customer-owned LSLs under the Company's LSL Replacement Plan ("Replacement Plan") approved by the Commission at Docket No. P-2017-2606100. Additionally, services are replaced for a variety of reasons, including leakage discovered through the Company's leak detection program and other actions to maintain the quality of water service. Pressure and water quality problems can result from old service lines made from obsolete materials, such as galvanized iron. When municipal paving projects are being planned, the Company reviews its records and determines if there are any obsolete services that should be replaced along the street. Service replacement costs are minimized by doing the service replacements before repaving occurs.

The Company also plans to replace approximately 130 miles of various diameter water mains and 23 miles of sewer mains at a total cost of approximately $269.7 million, exclusive of the larger pipeline investment projects previously described. This construction is being done for a variety of reasons including improving flow capabilities, preventing water quality degradation, systematically replacing aging distribution system infrastructure, enhancing system reliability and minimizing service disruptions to customers caused by main breaks. The Company anticipates additional developer projects in the FTY, which will be funded by developer advances.

Q. Please describe in general terms the types of improvements that the Company will make in its water and wastewater systems during the FPFTY.

A. The following routine improvement activities planned for the FPFTY will be conducted for the same reasons these projects are undertaken in the FTY. The Company will install approximately 5,200 new meters and replace or upgrade approximately 71,300 existing meters at various points throughout its distribution system at an estimated cost of approximately $27.0 million, exclusive of meters associated with projects previously described.

The Company is also planning to replace approximately 3,300 old water service lines and 380 wastewater laterals at an estimated cost of approximately $30.5 million, exclusive of services associated with projects previously described. In conjunction with its main replacement projects in the FTY, PAWC anticipates replacing 900 customer-owned LSLs under the Replacement Plan. The Company plans to replace approximately 88 miles of various diameter water pipes and approximately 15 miles of sewer main at a cost of approximately $181 million, exclusive of the larger pipeline investment projects previously described. The Company anticipates that additional developer projects will occur in the FTY, which will be funded by advances.

Risks Associated with Furnishing Public Water and Wastewater Service

Public Water Service

Q. Please provide an overview of the risks associated with furnishing safe and adequate water quantity and water quality and complying with drinking water and

environmental regulations that apply to PAWC's water supply facilities and operations.

A. Water supply utilities are subject to a complex array of regulations at the federal, state and river basin commission levels with respect to water quantity, water quality and other environmental aspects of their facilities and operations.

With respect to water sources and the quantity of water that can be withdrawn, PAWC's surface water and groundwater sources are subject to a combination of common law riparian rights and groundwater rights coupled with regulatory regimes administered by the PADEP, the Susquehanna River Basin Commission ("SRBC") and Delaware River Basin Commission ("DRBC"). These organizations administer the 1939 Water Rights Act,[7] which requires that public water supply agencies wishing to withdraw water from surface sources, or to acquire rights in surface sources, first obtain a permit. Water systems with sources developed prior to 1939 were accorded "orders of confirmation" confirming grandfathered withdrawals, but subsequent changes to those systems and/or increased withdrawals may trigger permitting requirements and possible loss of the "order of confirmation." Both SRBC and DRBC are empowered to review and approve projects having a substantial effect on basin water resources.[8] Pursuant to their project review authority, SRBC and DRBC review proposed surface and groundwater withdrawals that may have a "substantial effect" on basin waters (which are defined in both basins to include withdrawals of greater than 100,000 gallons per day from any source or combination of

[7] 32 P.S. §§ 631-641.

[8] DRBC Compact § 3.8; SRBC Compact § 3.10(2).

sources). Such project review is focused on determining consistency with Commission-adopted comprehensive plans and "the proper conservation, development, management or control of the water resources of the basin." In administering their permitting programs, the PADEP, SRBC and DRBC apply varying policies imposing limitations on withdrawals or requirements for conservation releases from reservoirs to protect stream flows.

Pennsylvania, overall, does not currently suffer serious constraints on its supply of usable water.[9] However, that assessment does not apply uniformly to all parts of the Commonwealth and can change with the climate. This past summer (June to September 2023), the entire Commonwealth experienced uncommonly dry weather. The drier weather, while not as severe as the Southwest part of the United States, still placed every county on a drought watch. The potential of having sources compromised and the inability to provide water is a significant concern. The legacy of coal mining, the effect of oil and gas drilling, run-off from high-intensity agricultural land use, and contamination from inadequate or malfunctioning on-lot septic systems create challenges to obtaining adequate supplies of water in various areas of Pennsylvania. Today, as in the past, these factors continue to drive requests by homeowners for PAWC to extend its facilities to serve areas that do not have a public water supply, as is further discussed in Ms. Everette's testimony (PAWC Statement No. 1). Under the Commission's regulations on water utilities' responsibility for main extensions, PAWC is required to make a significant investment to extend its facilities to serve bona fide applicants.

[9] As explained below, climate change is expected to affect the pattern of precipitation in ways that will challenge water suppliers by increasing the severity of both major storm events and intermittent periods of drought.

Additionally, as explained above, there are multiple levels of authorization and regulation that apply to a water system that wants to add a new source of supply or increase its withdrawals from existing sources. These factors add to the costs and lead-time for obtaining new, or increasing existing, water sources to meet new demands that may arise in portions of the Company's system. These are additional risk factors that can directly affect PAWC's ability to furnish safe, adequate and reliable service, and increase the costs PAWC incurs to provide that service.

Drinking water quality is addressed by a combination of federal regulation established under the Safe Drinking Water Act of 1973 coupled with state regulation under the Pennsylvania Safe Drinking Water Act. The federal act established the EPA as the federal regulatory authority on drinking water. Under that authority, the EPA has created standards for contaminant levels in drinking water and a series of mandatory treatment method standards, coupled with monitoring and reporting requirements, and public notification mandates in the event of contaminant level or treatment method non-compliance.[10] In turn, Pennsylvania has adopted the federal regulatory standards, plus some even more stringent rules, as codified in 25 Pa. Code Ch. 109, which are administered by the PADEP.

In recent years, there has been an increase in public concern over potential contaminants that laboratories can now identify at levels that, in the past, could not be detected. Certain experts suggest these contaminants might have health effects. The EPA and state drinking water regulators have responded by increasing their own research and,

[10] *See* 40 C.F.R. Parts 141-143.

in some cases, imposing or proposing more stringent regulatory standards, such as with respect to PFAS. As discussed in detail earlier in my testimony, the Company is operating between the current PADEP PFAS rules and the more stringent EPA standards anticipated to come out later this year. The Company is anticipating a rush on materials as the industry grapples with new EPA regulations. To mitigate potential supply shortages, the Company is proactively deploying treatment processes in its water systems to reduce the levels of the six PFAS covered by the proposed NPDWR to levels below the proposed EPA standards, even if the levels of these PFAS in the applicable PAWC system comply with the PADEP MCLs. The Company is proceeding cautiously based on the best available information and preparing to achieve treatment levels for such compounds that can reasonably be anticipated based on current research and actions contemplated by regulators, which the Company carefully studies and monitors. The continued evolution of drinking water regulations and best practices requires PAWC to operate dynamically and be prepared to respond to new contaminants of concern quickly, which can create certain business risks for PAWC. Current studies indicate that in order to remove PFAS from drinking water, PAWC may need to employ additional treatment technologies at existing water treatment facilities. A determination of what technologies to employ if PFAS compounds are present will require a review of the effectiveness of each technology and an analysis of the costs and operational feasibility for each location.

As the result of conditions that arose in Flint, Michigan and other jurisdictions across the country, increasing scrutiny is being placed at all levels concerning lead concentrations in water systems and adoption of more stringent requirements under the

EPA's 2021 Revised LCR. The lead issue arises not from constituents in source water, but rather from the leaching of lead from older pipes and joints into the water as it passes through the distribution lines and household service lines. While controlling of the corrosivity of the water can, in many cases, avoid excessive lead concentrations, the fact is that the plumbing in many older communities (such as those throughout much of PAWC's service territory) contain the type of copper and galvanized pipes with solder joints where lead contamination is an increased risk. Consequently, the Pennsylvania General Assembly determined in Act 120 that it is in the public interest for water utilities to replace customer-owned LSLs "concurrent[ly] with a scheduled utility main replacement project."[11] In addition, as recognized by the Commission, physical replacement of the entire LSL is emerging as a best practice in the water utility industry to improve public health protection from lead in drinking water.[12] To that end, in 2022, the Commission adopted final regulations implementing Act 120 that require all Pennsylvania water utilities to undertake LSL replacements as a matter of course to ensure total removal of LSLs in their water systems within 25 to 30 years (the "LSLR Regulations").[13] The LSLR Regulations became effective on July 23, 2022.[14]

[11] 66 Pa. C.S. § 1311(b)(2)(i). Section 1311(b)(2) was added to the Pennsylvania Public Utility Code by Act 120, which became law on October 24, 2018. Act 120 authorizes customer-owned LSL replacements that are not performed concurrently with main replacement projects if those replacements are done "under a commission-approved program."

[12] *See Petition of Pennsylvania-American Water Company for Approval of Tariff Changes and Accounting and Rate Treatment Related to Replacement of Lead Customer-Owned Service Pipes*, Docket No. P-2017-2606100 (Opinion and Order entered Jan. 4, 2019), pp. 6-7.

[13] *See* 52 Pa. Code §§ 65.51-65.62.

[14] 52 Pa. B. 30 (July 30, 2022).

The Company is at the forefront of the water industry in proactively eliminating the risks posed by the presence of LSLs. PAWC was the first water utility for whom the Commission approved a plan for replacing LSLs pursuant to Act 120. PAWC's efforts to eliminate a potential source of elevated lead levels at the customer's tap under its Replacement Plan require the dedication of management time and resources and the commitment of significant investment capital. The LSLR Regulations also require the Company to develop a comprehensive service line inventory that complies with the EPA's LCR and to modify and resubmit its Replacement Plan to the Commission by July 23, 2024.[15] These factors, in addition to the demands the Company already faces to rehabilitate, replace, and enhance aging infrastructure and meet evolving regulatory demands, add to risk factors that PAWC faces to assure that it meets its statutory obligation to furnish safe, adequate and reliable water service.

Finally, upstream releases of chemicals represent a significant risk and concern for the Company. One recent example of such an event was the train derailment which occurred early in 2023, just outside East Palestine, Ohio. The train derailment caused the release of toxic chemicals both into the air and into waterways. The Company received calls from our concerned customers. While the event did not impact PAWC's source water, the Company took multiple raw water samples to be certain our customers were protected and the water the Company was providing was safe. Similarly, a chemical release in a tributary of the Delaware River caused concern in the Southeast portion of Pennsylvania. While the releases did not impact PAWC's systems, these incidents illustrate that

[15] 52 Pa. Code §§ 65.56 and 65.61.

contamination is a significant risk faced by water suppliers and the importance of their ability to operate dynamically to prepare for and respond to future chemical releases by third parties.

Public Wastewater Service

Q. Provide an overview of the risks that environmental regulation poses for PAWC as the owner and operator of public wastewater systems.

A. Like the provision of public water supply service, the operation of wastewater collection and treatment systems entails a range of environmental regulatory risks. Each of the wastewater systems acquired by the Company over the past several years came with significant regulatory compliance challenges. For example, the York wastewater system acquired by the Company in 2022 is subject to a Consent Agreement with the EPA that requires system upgrades to address violations of untreated wastewater discharges that have occurred historically. The Company is required to ensure any high flow events receive treatment prior to discharge.

Wastewater operations are also regulated at both the federal and state levels pursuant to numerous statutes and voluminous regulations. At the federal level, wastewater systems are regulated pursuant to the Clean Water Act and numerous regulations adopted by the EPA under that law. At the state level, the Pennsylvania Clean Streams Law, Sewage Facilities Act, Solid Waste Management Act, Storage Tank and Spill Prevention Act and other laws administered by the PADEP, coupled with the regulations adopted under those statutes, set standards and requirements for virtually every aspect of wastewater system operations.

One risk associated with operating wastewater systems is that effluent limitations imposed on WWTP discharges are stringent and often become more stringent over time. The Clean Water Act requires wastewater systems to obtain and comply with NPDES permits, which, in Pennsylvania, are issued by PADEP. NPDES permits establish stringent effluent limits based upon the stricter of: (1) technology-based effluent limits; and (2) water quality-based effluent limits.

PAWC has faced significant regulatory compliance challenges with each of the wastewater systems the Company acquired over the past several years. Every five years, NPDES permits are up for renewal, and in any such renewal, more stringent limits may be triggered. One example is the Scranton WW, where the application for NPDES permit was applied for in June 2021 and has not been approved yet. Similarly, the Long-Term Control Plan for McKeesport was submitted to PADEP August 2022 with no finalization yet.

Another risk for PAWC is that several Pennsylvania streams, including those where PAWC is operating wastewater systems, are parts of watersheds that are classified as "impaired," meaning their instream quality does not meet state standards. Such impaired waters are subject to the development and imposition of Total Maximum Daily Loads ("TMDLs") for parameters that contribute to the instream conditions. A prime example is the Chesapeake Bay watershed, which includes the entire Susquehanna River Basin, where a TMDL has been established for sediments (total suspended solids) and nutrients (phosphorous and nitrogen). Where TMDLs are established by the EPA or the PADEP, stringent waste load allocations are made to point-source discharges (such as WWTPs), and allocations are also made to non-point sources, such as agriculture and urban runoff.

In the case of the Chesapeake Bay TMDL, for example, every WWTP in the Susquehanna Basin has been accorded an annual "cap load" for total nitrogen and total phosphorous – where any cap loading exceedance irrespective of the cause (such as increased flows and loadings from system customers or high stormwater flows entering the system) – can lead to stiff penalties and other enforcement actions.

Wastewater systems also face significant regulatory and environmental liability risks. Non-compliance with wastewater system effluent limits and other permit conditions can result in severe penalties. Regulatory violations open the operator to not only governmental agency enforcement actions, but also private lawsuits in which both injunctive relief and civil penalties can be imposed.

Another risk arises from PAWC's Scranton, McKeesport and Kane CSSs where both storm water and sanitary/industrial wastewaters flow in the same sewer lines. CSSs incur high flows during and after storms, which may exceed the system conveyance and/or treatment capacity, with excess untreated wastewater discharged to receiving streams through CSO outfalls. In many cases, separation of CSSs into separate sanitary and storm systems is logistically and economically infeasible. While the Company and the communities it serves did not and do not create the problems facing the treatment of wastewater, additional costs to address actions by previous dischargers and upstream polluters and cleanup water ways cannot be avoided.

EPA's CSO Control Policy,[16] which applies to publicly owned treatment works ("POTWs") (i.e., those systems owned or operated by state or local governmental agencies), seeks to reduce CSOs, while recognizing that CSOs cannot be entirely eliminated. However, the EPA recently issued an enforcement letter no longer allowing the Company to own a CSO system without fully eliminating any CSO discharge within five years. Although the federal Clean Water Act generally requires that all wastewater be treated with at least secondary treatment prior to discharge, the CSO Control Policy provides an exception for POTWs. Currently, the CSO Control Policy, by its terms, does not provide similar exceptions for privately-owned sewage systems. Some utilities (including PAWC) have obtained the EPA's agreement to continue to apply the CSO Control Policy's exception to systems that were formerly POTWs and were acquired by private entities. The EPA's recognition of such exceptions must be obtained by negotiation on a case-by-case basis and typically entails entering into court-approved consent decrees or agency consent orders that impose stringent capital improvement and operating obligations on the non-public owner of the wastewater system. In recent years, EPA has also not been as willing to agree to those exceptions, even where the Company has improved the level of discharge from the acquired system and the quality of the associated waterway.

Under the CSO Control Policy and applicable NPDES permits, operators of CSSs must develop and implement LTCPs, consisting of collection system and treatment plant

[16] 59 Fed. Reg. 18687 (April 19, 1994), available at: https://www.epa.gov/sites/production/files/2015-10/documents/owm0111.pdf.

improvement projects designed to reduce CSOs to no more than four events per year and/or capture and treatment of 85-90% of annual storm water flows. These LTCP requirements often involve very substantial multi-year capital expenditure programs.

CSS operators must adopt and implement a Nine Minimum Controls Plan,[17] consisting of a series of actions that address the management of storm water and constituents in storm water runoff, including regulation of storm water connections, regulation of land development/erosion and sedimentation activities, control of industrial and other dischargers, catch basin maintenance, and street sweeping, etc.

Moreover, even where systems being acquired do not involve combined sewers, high rates of I&I[18] during wet weather can surcharge the system and exceed the hydraulic or treatment capacity of the WWTP. System upgrades to reduce I&I may require major capital expenditures. Some I&I can be isolated and remedied, however the bulk of I&I comes in through small defaults and require relining or replacement of the entire pipeline with services reconnected to the main. The recently acquired York WW system has had historically high I&I. To overcome the I&I challenge will require both projects at the WWTP as well as significant upgrades to the collection system in order to get the I&I down to a level it does not over stress the WWTP.

[17] U.S. Environmental Protection Agency, Combined Sewer Overflows Guidance for Nine Minimum Controls, EPA 832-B-95-003 (May 1995), available at: https://www3.epa.gov/npdes/pubs/owm0030.pdf.

[18] I&I involves the infiltration of groundwater and stormwater into what is considered to be a sanitary only sewer line, such as through joints and other weaknesses in the pipelines.

Challenges Climate Change May Create

Q. Does climate change pose additional risks for water supply and wastewater system utilities such as PAWC?

A. Yes. Whatever the debate may be concerning the causes of climate change, water supply and wastewater utilities face the reality of changing climatic conditions and attendant stresses on water resources. "Climate models project that the Commonwealth will see an increase in average annual precipitation, extreme precipitation events, and drought, as both "very heavy" precipitation events and consecutive dry days increase." That means we can expect more droughts of varying degrees of severity and more frequent and intense high-flow events and floods – which impact water and wastewater utilities.

Water supply systems are fundamentally resource-dependent and, therefore, the effects of climate change pose a significant on-going risk and create challenges with regard to maintaining a reliable water supply during the full range of potential future conditions, including even what might be assumed to be "normal" periods. The safe yields of water supply sources have historically been evaluated based on historical climatic patterns, data from so called "droughts of record" or dry period frequency analysis. However, changing climatic conditions suggest that historical hydrologic data (which in many cases only reflect 50-100 years of rainfall and stream flow measurement collection – a quite short period in geologic or climatic time) may not accurately predict future conditions. Thus, the calculated safe yield of streams, reservoirs and groundwater wells are put in question as the effects of climate change are experienced across the northeastern United States. Thus, in response to climate change, water supply systems must address the risks posed to the reliability and resilience of their sources.

While droughts are the major challenge for water supply systems, heavy precipitation and high-flow events are the concern of wastewater systems. As mentioned previously, wastewater systems of all types are impacted by storm water – directly in the case of CSSs and indirectly (but nevertheless significantly) by I&I in "sanitary only" systems. The prediction of increased intensity of strong storms and high rainfall events in the northeastern United States portends challenges to wastewater systems which must, in turn, cope with and treat higher peak flows while avoiding exceedance of effluent limitations and reducing the potential for untreated overflows. An additional challenge related to high intensity rain events is higher levels and frequency of flooding. Flooding has the potential to impact both water and wastewater treatment facilities which are often located in proximity to water ways.

York System Bulk Treatment Service

Q. Do municipal and utility wastewater systems ("York Bulk Customers")[19] that have entered into Wastewater Treatment and Conveyance Agreements ("Bulk Agreements") to treat their wastewater flows at the York wastewater treatment plant WWTP have competitive alternatives to PAWC service?

A. Yes. The York Bulk Customers are in close geographic proximity – which means that they could enter into (and have in some circumstances already entered into) intermunicipal flow agreements to transmit wastewater flow between themselves and to other surrounding municipalities with existing treatment capacity, instead of sending their flows to the York

[19] The York Bulk Customers consist of The York Water Company, which is the owner of the former West York Borough collection system; Springettsbury Township; North York Borough; York Township; Manchester Township; West Manchester Township; and Spring Garden Township.

WWTP. The York Bulk Customers are sophisticated, knowledgeable, and experienced. Therefore, they could divert flows to alternative treatment providers or develop a new treatment system.

In the proceeding for approval of PAWC's acquisition of the York wastewater system at Docket Nos. A-2021-3024681 et al. ("Acquisition Proceeding"), the York Bulk Customers opposed the transaction and testified that were planning for a competitive alternative to bulk treatment service from PAWC. As witnesses for the York Bulk Customers explained in their testimony in the Acquisition Proceeding and discussed in detail by Company witness Bernard D. Grundusky in Statement No. 7-R submitted on August 19, 2022 in PAWC's 2022 rate case, unless PAWC entered into the Bulk Agreements on the terms and rates set forth in those contracts, each of the York Bulk Customers would leave the York system after PAWC's acquisition and pursue alternative treatment.

Q. Do you believe it is appropriate and in the public interest for PAWC to continue furnishing wastewater treatment and conveyance services to the York Bulk Customers under the terms and rates set forth in the Bulk Agreements?

A. Yes. The Bulk Agreements create broad public interest benefits, which could not have been achieved absent a settlement of the Acquisition Proceeding. In fact, that settlement includes provisions that the Commission would not be authorized to impose unilaterally. For example, by engaging in rigorous, good faith, arm's length negotiations with the York Bulk Customers over a six-month period, PAWC was able to secure specific commitments that it could not have procured otherwise, which include:

- The York Bulk Customers agreed that they will not divert flow to other providers during the 40-year term of the Bulk Agreements. By locking the York Bulk Customers into a 40-year term, which reasonably encompasses most of the service life of major treatment and conveyance facilities, PAWC is able to avoid the possibility that some portion of its investment in those facilities may become "stranded" by the departure of one or more York Bulk Customers.
- The York Bulk Customers have agreed to use commercially reasonable efforts to reduce I&I. This provision will enable PAWC to avoid potentially unforeseen increases in demand on its treatment facilities, which could adversely affect service and increase costs.
- The Bulk Agreements clearly define the services to be provided by PAWC to the York Bulk Customers by including more carefully delineated terms and parameters for service than could be set forth in a typical wastewater service tariff. The more precisely defined terms of service provide for better metering of service, improved billing, and better identification/tracking of inter-municipal flows. These improvements help to ensure that the York Bulk Customers bear the responsibility for the demands and associated costs they impose on the wastewater treatment and conveyance facilities they use.
- As part of the Bulk Agreements, the municipalities agreed to and have already enacted ordinances/resolutions that require Industrial Pretreatment

- Program ("IPP") customers within their municipal boundaries to comply with PAWC's IPP.

Q. What would be the practical consequences if the York bulk customers exercise their early termination rights under the bulk agreements and left the York wastewater system because of increases to the negotiated contract rate?

A. The York Bulk Customers represent approximately 54% of the allocated treatment flow at the Company's York WWTP. If the Bulk Customers left the system, the York WWTP would become uneconomic in the absence of rate increases to retail customers in PAWC's general sanitary sewer system operations. It would also result in a splintering of the current regional and consolidated wastewater collection and treatment system in the York area, which would be contrary to the Commission policy in favor of regionalization and consolidation. Additionally, the bulk flow from surrounding municipalities is essential to the proper functioning of the York WWTP. The bulk flow from the surrounding municipalities contains additional biological oxygen demand materials that aid in the consumption and digestion of bacteria in the flow stream. The Bulk Agreements also contain provisions that facilitate PAWC's ability to exchange capacity between the York Bulk Customers, which will help to reduce system peak treatment demand and, in that way, postpone or potentially avoid entirely, the investment in additional treatment capacity.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Bruce W. Aiton**, hereby state that the facts set forth in the pre-marked Statement No. 3 and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: November 8, 2023

Bruce W. Aiton

Pennsylvania American Water
Total Aggregate Gross Plant Additions
PAWC Statement No. 3 Schedule BWA-1

	Estimated 2023 Sep YTD Additions	Actual 2023 Sep YTD Additions
Water Operations	$240,925,750	$262,342,274
Wastewater SSS General Operations	$16,418,889	$14,548,281
Wastewater CSS Operations	26,850,990	35,102,387
Royersford WW Operations	-	484,755
Upper Pottsgrove WW Operations	-	472,213
York WW Operations	105,000	2,764,810
Total Wastewater Operations	$43,374,879	$53,372,446
Total Water & Wastewater Operations	$284,300,629	$315,714,720

Pennsylvania-American Water Company - Water Operations

Estimated vs Actual

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 12/31/2022	ESTIMATED ADDITIONS	ESTIMATED ACQUISITION	ESTIMATED RETIREMENTS	ESTIMATED BOOK COST 9/30/2023	ACTUAL ADDITIONS	ACTUAL ACQUISITION	ACTUAL RETIREMENTS	ACTUAL BOOK COST 9/30/2023
1	301.00	Organization	$766,405	$0		$0	$766,405	$0	$0	$0	$766,405
2	302.00	Franchises & Consents	2,404,599	0		0	2,404,599	0	0	0	2,404,599
3	303.00	Miscellaneous Intangible Plant	15,572	456,000		52,228	419,344	0	0	0	15,572
4		Total Intangible Plant	$3,186,576	$456,000	$0	$52,228	$3,590,348	$0	$0	$0	$3,186,576
5	303.00	Land & Land Rights	$22,222,038	$0		$0	$22,222,038	$318,069	$0	$11,093	$22,529,014
6		Total Land & Land Rights	$22,222,038	$0	$0	$0	$22,222,038	$318,069	$0	$11,093	$22,529,014
7	303.14	Water Rights - Hibernia	$1,942,823	$0		$0	$1,942,823	$0	$0	$0	$1,942,823
8	303.35	Waste Handling and Treatment Land	155,025	0		0	155,025	0	0	0	155,025
9	303.99	Comprehensive Planning Studies	10,990,375	381,608		0	11,371,983	520,535	0	0	11,510,910
10	304.15	Other Water Source Structures	91,004,897	0		0	91,004,897	7,321,761	20,000	777,503	97,569,155
11	304.20	Power and Pumping Structures	99,745,687	1,194,500		0	100,940,187	255,155	48,974	127,450	99,922,366
12	304.30	Purification Buildings	340,264,511	8,473,176		470,353	348,267,334	2,048,656	0	620,501	341,692,666
13	304.36	Waste Handling Struct. & Improv.	11,896,367	0		0	11,896,367	0	0	0	11,896,367
14	304.61	Office Buildings	47,816,893	791,572		118,629	48,489,836	18,044	0	0	47,834,938
15	304.62	Stores, Shop and Garage Buildings	64,186,673	893,047		133,837	64,945,883	91,950	0	150,185	64,128,437
16	304.63	Miscellaneous Structures and Improvements	19,299,996	0		0	19,299,996	5,883,661	0	611,077	24,572,580
17	305.00	Collecting and Impounding Reservoirs	135,474,936	0		0	135,474,936	0	0	0	135,474,936
18	306.00	Lake, River and Other Intakes	16,689,721	0		0	16,689,721	691,160	0	30,034	17,350,847
19	307.00	Wells and Springs	11,889,909	955,183		86,762	12,758,330	202,155	40,000	54,618	12,077,446
20	310.00	Other Power Production Equipment	18,795,047	375,000		56,200	19,113,847	248,415	49,848	0	19,093,310
21	311.00	Pumping Equipment	97,332,392	981,787		17,352	98,296,826	3,114,936	229,305	543,611	100,133,022
22	320.00	Purification System	331,054,070	37,044,776		4,800,579	363,298,268	8,929,826	0	1,613,683	338,370,214
23	320.30	Granular Activated Carbon	11,616,530	0		0	11,616,530	1,798,386	12,270	22,660	13,404,526
24	320.37	Waste Handling and Treatment Equipment	15,839,221	0		0	15,839,221	0	0	0	15,839,221
25	330.00	Distribution Reservoirs and Standpipes	208,500,037	4,285,350		0	212,785,387	1,941,511	179,349	256,055	210,364,843
26	331.00	Mains and Accessories	3,269,894,465	111,788,711		15,336,657	3,366,346,519	146,980,762	265,542	8,450,570	3,408,690,199
27	333.00	Services	683,180,960	17,361,152		1,344,769	699,197,343	30,779,222	259,745	(5,847,514)	720,067,441
28	334.00	Meters	210,847,927	25,817,157		3,538,053	233,127,032	20,359,589	6,226	4,951,891	226,261,852
29	335.00	Fire Hydrants	135,231,622	6,157,873		693,580	140,695,915	7,337,958	44,874	(2,275,799)	144,890,253
30	340.00	Office Furniture and Equipment	19,119,507	1,947,112		695,952	20,370,668	3,886,184	0	288,471	22,717,220
31	340.31	Computer Software	76,661,613	8,780,613		0	85,442,225	6,367,234	0	6,711,201	76,317,646
32	341.00	Transportation Equipment	81,209,315	4,722,263		707,704	85,223,874	5,273,928	0	7,214,402	79,268,841
33	342.00	Stores Equipment	468,033	0		0	468,033	1,758	0	0	469,790
34	343.00	Tools and Work Equipment	40,504,751	3,222,300		70,823	43,656,228	4,521,337	0	64,889	44,961,200
35	344.00	Laboratory Equipment	2,337,745	0		0	2,337,745	132,283	0	168,435	2,301,593
36	345.00	Power Operated Equipment	2,127,698	375,000		56,200	2,446,498	0	0	4,891	2,122,807
37	346.00	Communication Equipment	14,122,627	4,379,086		185,216	18,316,498	1,533,552	0	472,099	15,184,080
38	347.00	Miscellaneous Equipment	27,698,362	542,484		37,475	28,203,371	628,112	0	75,764	28,250,710
39	348.00	Other Tangible Equipment	795,578	0		0	795,578	0	0	0	795,578
40		Total Tangible Plant	$6,098,695,313	$240,469,750	$0	$28,350,139	$6,310,814,925	$260,868,073	$1,156,132	$25,086,679	$6,335,632,840
41		Total Utility Plant In Service	$6,124,103,927	$240,925,750	$0	$28,402,367	$6,336,627,311	$261,186,142	$1,156,132	$25,097,772	$6,361,348,430

Pennsylvania-American Water Company - Wastewater SSS General Operations

Estimated vs Actual

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 12/31/2022	ESTIMATED ADDITIONS	ESTIMATED RETIREMENTS	ESTIMATED BOOK COST 9/30/2023	ACTUAL ADDITIONS	ACTUAL RETIREMENTS	ACTUAL BOOK COST 9/30/2023
1	352.00	Franchises & Consents	$221,140	$0	$0	$221,140	$0	$0	$221,140
2	353.00	Land & Land Rights	6,043,118	0	0	6,043,118	224	0	6,043,342
3		Total Intangible Plant	$6,264,258	$0	$0	$6,264,258	$224	$0	$6,264,482
4	354.20	Structures And Improvements - Collection	$6,423,992	$164,831	$15,927	$6,572,896	$1,323,154	$40,090	7,707,056
5	354.30	Structures And Improvements - SPP	22,206,952	837,500	63,016	22,981,436	79,907	56,588	22,230,271
6	354.40	Structures And Improvements - TDP	156,179,451	0	0	156,179,451	4,912	174,486	156,009,876
7	354.70	Structures And Improvements - General	4,409,295	131,099	6,340	4,534,054	132,624	53,690	4,488,229
8	355.00	Power Generation Equipment	4,962,505	847,042	63,734	5,745,813	11,743	16,516	4,957,732
9	360.10	Collection Sewers - Force Mains	50,941,888	3,177,462	239,082	53,880,269	3,918,775	2,653	54,858,010
10	361.10	Collection Sewers - Gravity Mains	189,276,807	5,580,575	419,900	194,437,482	3,667,927	1,228,808	191,715,926
11	361.20	Manholes	32,362,549	305,502	17,046	32,651,006	0	0	32,362,549
12	363.00	Services	50,818,991	855,050	43,840	51,630,201	672,754	202,393	51,289,352
13	364.00	Flow Measuring Devices	553,242	31,670	6,415	578,497	0	0	553,242
14	365.00	Flow Measuring Installations	272,564	0	0	272,564	0	0	272,564
15	370.00	Receiving Wells	677,388	0	0	677,388	0	0	677,388
16	371.00	Pumping Equipment	16,020,113	2,512,500	189,048	18,343,565	550,923	112,315	16,458,722
17	380.00	Treatment Equipment	79,817,552	0	0	79,817,552	1,567,958	299,660	81,085,850
18	381.00	Plant Sewers	6,584,710	0	0	6,584,710	51,665	0	6,636,374
19	382.00	Outfall Sewer Lines	603,465	0	0	603,465	0	0	603,465
20	389.10	Other Plant And Miscellaneous Equipment - Intangibles	664,467	508,810	0	1,173,278	1,900,256	0	2,564,724
21	390.00	Office Furniture And Equipment	850,486	21,308	0	871,793	17,090	0	867,576
22	390.20	Computers & Peripheral	0	0	0	0	0	0	0
23	391.00	Transportation Equipment	1,733,136	0	0	1,733,136	122,872	0	1,856,007
24	392.00	Stores Equipment	107,351	0	0	107,351	0	0	107,351
25	393.00	Tools, Shop And Garage Equipment	1,087,927	152,683	13,106	1,227,504	33,111	0	1,121,039
26	394.00	Laboratory Equipment	567,441	0	32,838	534,603	4,480	93,172	478,748
27	395.00	Power Operated Equipment	433,205	0	0	433,205	145,249	0	578,454
28	396.00	Communication Equipment	2,940,079	1,071,839	80,736	3,931,182	327,067	249,671	3,017,475
29	397.00	Miscellaneous Equipment	1,376,647	221,016	16,648	1,581,015	15,591	0	1,392,238
30	398.00	Other Tangible Plant	14,232	0	0	14,232	0	0	14,232
31		Total Tangible Plant	$631,886,435	$16,418,889	$1,207,677	$647,097,647	$14,548,057	$2,530,041	$643,904,451
32		Total Utility Plant In Service	$638,150,693	$16,418,889	$1,207,677	$653,361,905	$14,548,281	$2,530,041	$650,168,933

Pennsylvania-American Water Company - Royersford WW Operations

Estimated vs Actual

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 12/31/2022	ESTIMATED ADDITIONS	ESTIMATED RETIREMENTS	ESTIMATED BOOK COST 9/30/2023	ACTUAL ADDITIONS	ACTUAL RETIREMENTS	ACTUAL BOOK COST 9/30/2023
1	353.00	Land & Land Rights	$3,101	$0	$0	$3,101	$0	$0	$3,101
2		Total Intangible Plant	$3,101	$0	$0	$3,101	$0	$0	$3,101
3	354.20	Structures And Improvements - Collection	$0	$0	$0	$0	$0	$0	$0
4	354.30	Structures And Improvements - SPP	627,002	0	0	627,002	0	2,114	624,889
5	354.40	Structures And Improvements - TDP	834,576	0	0	834,576	0	7,469	827,107
6	354.70	Structures And Improvements - General	363,546	0	0	363,546	36,170	0	399,716
7	355.00	Power Generation Equipment	932,793	0	0	932,793	0	0	932,793
8	360.10	Collection Sewers - Force Mains	79,236	0	0	79,236	0	0	79,236
9	361.10	Collection Sewers - Gravity Mains	2,677,569	0	0	2,677,569	5,805	0	2,683,374
10	361.20	Manholes	106,954	0	0	106,954	0	0	106,954
11	363.00	Services	99,918	0	0	99,918	32,198	0	132,116
12	364.00	Flow Measuring Devices	45,063	0	0	45,063	0	0	45,063
13	365.00	Flow Measuring Installations	0	0	0	0	0	0	0
14	370.00	Receiving Wells	0	0	0	0	0	0	0
15	371.00	Pumping Equipment	441,374	0	0	441,374	119,460	0	560,834
16	380.00	Treatment Equipment	13,968,926	0	0	13,968,926	77,878	0	14,046,804
17	381.00	Plant Sewers	0	0	0	0	0	0	0
18	382.00	Outfall Sewer Lines	0	0	0	0	0	0	0
19	389.10	Other Plant And Miscellaneous Equipment - Intangibles	0	0	0	0	1,950	0	1,950
20	390.00	Office Furniture And Equipment	23,874	0	0	23,874	-	-	23,874
21	390.20	Computers & Peripheral	0	0	0	0	0	0	0
22	391.00	Transportation Equipment	0	0	0	0	28,696	0	28,696
23	392.00	Stores Equipment	0	0	0	0	0	0	0
24	393.00	Tools, Shop And Garage Equipment	17,036	0	0	17,036	0	0	17,036
25	394.00	Laboratory Equipment	9,068	0	0	9,068	0	0	9,068
26	395.00	Power Operated Equipment	0	0	0	0	0	0	0
27	396.00	Communication Equipment	113,708	0	0	113,708	182,597	0	296,305
28	397.00	Miscellaneous Equipment	112,872	0	0	112,872	0	0	112,872
29	398.00	Other Tangible Plant	0	0	0	0	0	0	0
30		Total Tangible Plant	$20,453,515	$0	$0	$20,453,515	$484,755	$9,583	$20,928,687
31		Total Utility Plant In Service	$20,456,616	$0	$0	$20,456,616	$484,755	$9,583	$20,931,788

Pennsylvania-American Water Company - Upper Pottsgrove WW Operations

Estimated vs Actual

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 12/31/2022	ESTIMATED ADDITIONS	ESTIMATED RETIREMENTS	ESTIMATED BOOK COST 9/30/2022	ACTUAL ADDITIONS	ACTUAL RETIREMENTS	ACTUAL BOOK COST 9/30/2023
1	352.00	Franchises & Consents	$0	$0	$0	$0	$0	$0	$0
2	353.10	Land & Land Rights	3,661,632	0	0	3,661,632	0	0	3,661,632
3		Total Intangible Plant	$3,661,632	$0	$0	$3,661,632	$0	$0	$3,661,632
4	354.20	Structures And Improvements - Collection	$0	$0	$0	$0	$0	$0	$0
5	354.30	Structures And Improvements - SPP	1,685,520	0	0	1,685,520	0	0	1,685,520
6	354.40	Structures And Improvements - TDP	0	0	0	0	0	0	0
7	354.70	Structures And Improvements - General	122,480	0	0	122,480	31,948	0	154,428
8	355.00	Power Generation Equipment	109,527	0	0	109,527	0	0	109,527
9	360.10	Collection Sewers - Force Mains	756,805	0	0	756,805	0	0	756,805
10	361.10	Collection Sewers - Gravity Mains	9,488,445	0	0	9,488,445	105,900	0	9,594,345
11	361.20	Manholes	0	0	0	0	0	0	0
12	363.00	Services	2,022,553	0	0	2,022,553	130,978	0	2,153,531
13	364.00	Flow Measuring Devices	0	0	0	0	0	0	0
14	365.00	Flow Measuring Installations	0	0	0	0	0	0	0
15	370.00	Receiving Wells	0	0	0	0	0	0	0
16	371.00	Pumping Equipment	144,029	0	0	144,029	0	0	144,029
17	380.00	Treatment Equipment	0	0	0	0	203,386	0	203,386
18	381.00	Plant Sewers	0	0	0	0	0	0	0
19	382.00	Outfall Sewer Lines	0	0	0	0	0	0	0
20	389.10	Other Plant And Miscellaneous Equipment - Intangibles	0	0	0	0	0	0	0
21	390.00	Office Furniture And Equipment	0	0	0	0	0	0	0
22	390.20	Computers & Peripheral	0	0	0	0	0	0	0
23	391.00	Transportation Equipment	0	0	0	0	0	0	0
24	392.00	Stores Equipment	0	0	0	0	0	0	0
25	393.00	Tools, Shop And Garage Equipment	0	0	0	0	0	0	0
26	394.00	Laboratory Equipment	0	0	0	0	0	0	0
27	395.00	Power Operated Equipment	0	0	0	0	0	0	0
28	396.00	Communication Equipment	0	0	0	0	0	0	0
29	397.00	Miscellaneous Equipment	0	0	0	0	0	0	0
30	398.00	Other Tangible Plant	0	0	0	0	0	0	0
31		Total Tangible Plant	$14,329,358	$0	$0	$14,329,358	$472,213	$0	$14,801,571
32		Total Utility Plant In Service	$17,990,990	$0	$0	$17,990,990	$472,213	$0	$18,463,203

Pennsylvania-American Water Company - York WW Operations

Estimated vs Actual

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 12/31/2022	ESTIMATED ADDITIONS	ESTIMATED RETIREMENTS	ESTIMATED BOOK COST 9/30/2023	ACTUAL ADDITIONS	ACTUAL RETIREMENTS	ACTUAL BOOK COST 9/30/2023
1	352.00	Franchises & Consents	$0	$0	$0	$0	$0	$0	$0
2	353.00	Land & Land Rights	5,198,862	0	0	5,198,862	0	0	5,198,862
3		Total Intangible Plant	$5,198,862	$0	$0	$5,198,862	$0	$0	$5,198,862
4	354.20	Structures And Improvements - Collection	$320,168	$0	$0	$320,168	$735,970	$0	$1,056,137
5	354.30	Structures And Improvements - SPP	106,379	0	0	106,379	0	0	106,379
6	354.40	Structures And Improvements - TDP	122,160,376	0	0	122,160,376	910,539	95,036	122,975,879
7	354.70	Structures And Improvements - General	5,157	0	0	5,157	16,461	0	21,617
8	355.00	Power Generation Equipment	5,976	0	0	5,976	0	0	5,976
9	360.10	Collection Sewers - Force Mains	78,399	0	0	78,399	0	0	78,399
10	361.10	Collection Sewers - Gravity Mains	55,278,841	0	0	55,278,841	18,541	24,519	55,272,863
11	361.20	Manholes	0	0	0	0	0	0	0
12	363.00	Services	7,255,173	0	0	7,255,173	98,686	(8,912)	7,362,771
13	364.00	Flow Measuring Devices	83,864	0	0	83,864	0	0	83,864
14	365.00	Flow Measuring Installations	0	0	0	0	0	0	0
15	370.00	Receiving Wells	0	0	0	0	0	0	0
16	371.00	Pumping Equipment	199,138	0	0	199,138	197,051	23,707	372,481
17	380.00	Treatment Equipment	41,006,636	0	0	41,006,636	239,799	73,812	41,172,622
18	381.00	Plant Sewers	0	0	0	0	0	0	0
19	382.00	Outfall Sewer Lines	0	0	0	0	0	0	0
20	389.10	Other Plant And Miscellaneous Equipment - Intangibles	0	0	0	0	0	0	0
21	390.00	Office Furniture And Equipment	159,198	0	0	159,198	98,340	0	257,538
22	390.20	Computers & Peripheral	0	0	0	0	0	0	0
23	391.00	Transportation Equipment	1,405,304	0	0	1,405,304	502,917	0	1,908,221
24	392.00	Stores Equipment	0	0	0	0	0	0	0
25	393.00	Tools, Shop And Garage Equipment	57,053	31,250	0	88,303	22,434	0	79,488
26	394.00	Laboratory Equipment	302,464	18,750	1,753	319,461	31,474	117,409	216,529
27	395.00	Power Operated Equipment	0	0	0	0	0	0	0
28	396.00	Communication Equipment	0	55,000	0	55,000	0	0	0
29	397.00	Miscellaneous Equipment	208,925	0	0	208,925	(107,400)	0	101,524
30	398.00	Other Tangible Plant	0	0	0	0	0	0	0
31		Total Tangible Plant	$228,633,052	$105,000	$1,753	$228,736,299	$2,764,810	$325,571	$231,072,291
32		Total Utility Plant In Service	$233,831,914	$105,000	$1,753	$233,935,161	$2,764,810	$325,571	$236,271,153

Pennsylvania-American Water Company - Wastewater CSS Operations

Estimated vs Actual

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 12/31/2022	ESTIMATED ADDITIONS	ESTIMATED RETIREMENTS	ESTIMATED BOOK COST 9/30/2023	ACTUAL ADDITIONS	ACTUAL RETIREMENTS	ACTUAL BOOK COST 9/30/2023
1	352.00	Franchises & Consents	$0	$0	$0	$0	$0	$0	$0
2	353.00	Land & Land Rights	4,463,355	0	0	4,463,355	0	0	4,463,355
3		Total Intangible Plant	$4,463,355	$0	$0	$4,463,355	$0	$0	$4,463,355
4	354.20	Structures And Improvements - Collection	$6,232,440	$1,405,793	$57,601	$7,580,632	$2,425,944	$13,204	$8,645,180
5	354.30	Structures And Improvements - SPP	20,953,421	730,561	38,386	21,645,596	32,623	0	20,986,044
6	354.40	Structures And Improvements - TDP	126,015,479	2,988,824	218,901	128,785,403	17,350	161,976	125,870,853
7	354.70	Structures And Improvements - General	0	0	0	0	0	0	0
8	355.00	Power Generation Equipment	932,654	0	0	932,654	0	0	932,654
9	360.10	Collection Sewers - Force Mains	9,494,734	0	0	9,494,734	897,755	278,071	10,114,418
10	361.10	Collection Sewers - Gravity Mains	378,631,623	16,807,495	1,230,976	394,208,143	23,992,358	4,910,835	397,713,146
11	361.20	Manholes	42,198,027	1,345,633	88,189	43,455,471	0	0	42,198,027
12	362.00	Spec Collection Structures	0	0	0	0	0	0	0
13	363.00	Services	13,679,141	712,089	40,814	14,350,415	859,932	38,241	14,500,831
14	364.00	Flow Measuring Devices	2,089,465	0	0	2,089,465	40,012	0	2,129,477
15	365.00	Flow Measuring Installations	0	0	0	0	0	0	0
16	370.00	Receiving Wells	0	0	0	0	0	0	0
17	371.00	Pumping Equipment	14,781,637	945,000	69,212	15,657,425	356,344	6,974	15,131,006
18	380.00	Treatment Equipment	75,500,947	1,122,432	82,207	76,541,172	3,978,527	128,780	79,350,694
19	381.00	Plant Sewers	1,576,345	0	0	1,576,345	0	0	1,576,345
20	382.00	Outfall Sewer Lines	189,250	0	0	189,250	0	0	189,250
21	389.10	Other Plant And Miscellaneous Equipment - Intangibles	10,741,231	105,000	7,690	10,838,541	(1,114)	0	10,740,117
22	390.00	Office Furniture And Equipment	2,360,981	0	0	2,360,981	190,070	0	2,551,051
23	390.20	Computers & Peripheral	0	0	0	0	0	0	0
24	391.00	Transportation Equipment	7,203,931	80,666	5,908	7,278,689	908,435	2,892	8,109,473
25	392.00	Stores Equipment	106,844	0	0	106,844	0	0	106,844
26	393.00	Tools, Shop And Garage Equipment	1,924,409	0	2,216	1,922,193	1,078,712	0	3,003,121
27	394.00	Laboratory Equipment	1,285,384	0	0	1,285,384	125,913	14,941	1,396,356
28	395.00	Power Operated Equipment	1,909,398	34,571	2,532	1,941,437	0	0	1,909,398
29	396.00	Communication Equipment	2,754,188	155,870	0	2,910,057	29,229	489	2,782,928
30	397.00	Miscellaneous Equipment	2,544,799	417,056	0	2,961,854	170,298	2,176	2,712,920
31	398.00	Other Tangible Plant	0	0	0	0	0	0	0
32		Total Tangible Plant	$723,106,328	$26,850,990	$1,844,631	$748,112,687	$35,102,387	$5,558,580	$752,650,136
33		Total Utility Plant In Service	$727,569,683	$26,850,990	$1,844,631	$752,576,042	$35,102,387	$5,558,580	$757,113,491

PAWC STATEMENT NO. 3-R

REBUTTAL TESTIMONY
OF
BRUCE AITON

WITH REGARD TO
PENNSYLVANIA-AMERICAN WATER COMPANY'S POSITIONS REGARDING ACQUISITION INVESTMENT, AND LINE EXTENSION REQUESTS

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: FEBRUARY 21, 2024

PENNSYLVANIA-AMERICAN WATER COMPANY

REBUTTAL TESTIMONY OF BRUCE AITON

Q. What is your name and business address?

A. My name is Bruce Aiton, my business address is 852 Wesley Dr., Mechanicsburg, PA 18055.

Q. Have you submitted direct testimony in this proceeding?

A. Yes, I submitted direct testimony on behalf of Pennsylvania-American Water Company ("PAWC" or the "Company") as PAWC Statement No. 3.

Q. Have you updated Schedule BWA-1 presented in your direct testimony that lists the Company's actual plant retirements and additions for 2023?

A. Yes. Exhibit BWA-1R shows the Company's actual plant in service through December 31, 2023.

Q. What is the purpose of your Rebuttal Testimony?

A. The purpose of my rebuttal testimony is to respond to the direct testimony submitted by Terry L. Fought on behalf of the Office of Consumer Advocate ("OCA") related to proposed main extensions under PAWC Tariff Rule 27.1(F). I will also respond to the characterization of PAWC's investment in acquired systems by various customers at the public input hearings.

Q. Please identify the exhibits you will sponsoring in this proceeding.

A. I am sponsoring three exhibits: PAWC Exhibit BWA-1R, Exhibit BWA-2R, and Exhibit BWA-3R.

MAIN EXTENSIONS

Q. What does Tariff Rule 27.1(F) provide?

A. Tariff Rule 27.1(F) states as follows:

> Where substantial public need exists and the public health and safety may be compromised by the absence of a public water supply in a portion of the Company's authorized service territory, the Company, subject to the Commission's prior approval, may install main extensions and Special Utility Service facilities without the payment of the Customer Contribution that would otherwise be required under subparagraphs (A)(3) and (D)(2), respectively of Rule 27.1.

In relevant part, a customer connection is only eligible for Rule 27.1(F) treatment "where substantial public need exists and the public health and safety may be compromised by the absence of a public water supply" for a particular customer connection "in a portion of the Company's authorized service territory".

Q. Have any parties proposed that the Company evaluate the installation of water main extensions in accordance with the Tariff Rule 27.1(F)?

A. Yes. OCA witness Fought recommended the Company consider a main extension project pursuant to Tariff Rule 27.1(F) along Bethel Ridge Road, Shades of Death Road, Locust and Carter Lanes and Penobscot Road in Jefferson Township, Washington County, Pennsylvania. According to Mr. Fought, the proposed main extension is located about 2.5 miles away from an existing PAWC water main.

As noted by Mr. Fought and explained in my direct testimony, in accordance with the settlement of PAWC's last base rate case, the Company will be extending service to an Avella Area School District ("Avella") elementary school in Washington County to address water quality issues regarding odor and distaste. The Avella main extension also

has the potential for approximately 50 new service connections along the route in Independence Township, Cross Creek Township, and Mt. Pleasant Township. The proposed main extension route is located approximately 2.5 miles from the Avella main extension that is currently being constructed.

Q. Does the Company have a Main Extension Evaluation Process that is to be used in conjunction with this tariff provision?

A. Yes, it does. A copy of this process is attached hereto as PAWC Exhibit BWA-2R.

Q. Did the Company evaluate the main extension proposed by Mr. Fought consistent with that process?

A. The Company is in the process of evaluating the proposed main extension using this process.

Q. What are the expected costs associated with the main extension proposed by Mr. Fought?

A. The main extension along the route presented in OCA Exhibit TLF-4 that would extend an existing water line along Bethel Ridge Road to the West Virginia state border with spurs to serve Shades of Death Road, Locust and Carter Lanes and Penobscot Road would require construction of approximately 29,500 linear feet of new water main. The estimated costs of such a main extension are approximately $5.2 million.

Q. Is the project Mr. Fought discussed within the Company's service area?

A. Yes. Refer to Exhibit BWA-3R which depicts the service territory within Jefferson Township.

Q. Is there a substantial public need for the project, and would the absence of these projects compromise public health and safety?

A. Based on my understanding of the magnitude and locations of water issues currently being experienced by the residents along the proposed main extension route, the proposed project may, subject to further investigation, meet the requirements of Rule 27.1(F). The Company has been in conversations with the Jefferson Township Municipal Authority ("JTMA") regarding this main extension and will continue to work with the JTMA to determine if the extension is eligible under Rule 27.1(F).

Q. What specific actions does Mr. Fought request the Company take with respect to the proposed main extension?

A. Mr. Fought suggests that the Company:

(1) evaluate whether the above main extension is eligible for construction under the requirements of Tariff Rule 27.1(F);

(2) allow the OCA to survey the potential customers and submit pertinent information to PAWC prior to starting the evaluation;

(3) submit the conclusions of its evaluation to OCA and other parties within six months of receiving the survey data from the OCA; and

(4) submit an estimated construction cost and remaining contribution required for those main extensions that are determined not eligible under Tariff Rule 27.1(F).

Q. What is the Company's response?

A. The Company is continuing to evaluate whether the proposed main extension is eligible under Rule 27.1(F) of its tariff. The Company has been in continued discussions with the JTMA outside of these proceedings. Under the JTMA's proposal, approximately 39 potential customers would be served through the main extension. However, the Company has not yet determined whether Rule 27.1(F) is an appropriate mechanism to

fund this extension and is evaluating whether alternate grant funding should be pursued instead.

ACQUISITION INVESTMENT

Q. Did you attend the public input hearings held in this proceeding?

A. Yes, I attended each of the public input hearings held between January 29, 2024 and February 7, 2024.

Q. Do you wish to address any of the topics raised at the public input hearings?

A. Yes, I wish to address the testimony of several witnesses concerning PAWC's investments into the systems it has acquired.

Q. Please describe some recent wastewater acquisitions where PAWC successfully addressed long standing environmental compliance issues.

A. PAWC acquired the Clarion wastewater system in 2008 from the Clarion Area Authority ("CAA"). At the time the CAA system was in violation of the Pennsylvania Clean Streams Law and the Sewage Facilities Act. The sewage facilities were hydraulically overloaded, whereby the flow exceeded the hydraulic carrying capacity in portions of the system and caused sanitary sewer overflows ("SSOs") as defined by 25 Pa. Code § 94.1. SSOs are not authorized or permitted by the Pennsylvania Department of Environmental Protection ("PADEP"). Concurrent with the closing of this transaction, PAWC entered into a Consent Order and Agreement ("COA") with PADEP and proceeded to successfully implement projects to reduce illegal discharges to waters of the Commonwealth. The work included Act 537 planning, design and construction of new facilities, replacement of inadequate infrastructure, and modifications to long standing operational procedures. Specifically, PAWC upgraded the collection system by replacing approximately 10,000 lineal feet of 8"

to 36" interceptor sewers and replacing/upgrading the main lift station (Liberty Street) and equipping it with a new 1.3 MG equalization tank to capture excess storm flows. PAWC also made major hydraulic improvements to the wastewater treatment plant by increasing its design capacity from 1.75 to 4.0 MGD and installing a new 3.8 MG equalization tank. Construction began in July 2013 and was completed by the COA deadline of February 2015. The COA was lifted in January 2016. Under CAA ownership the system experienced approximately 30 SSOs per year and storm flows were routinely bypassed at the wastewater treatment plant with no treatment. Since the new facilities were placed online by PAWC, the SSOs have been reduced to an average of one per year, mainly caused by damaged or clogged/blocked sewer mains, and there have been no bypasses of untreated sewage at the wastewater treatment plant.

PAWC acquired the Scranton wastewater system in 2016 from the Scranton Sewer Authority ("SSA"). The SSA system had been out of compliance for many years prior to the acquisition. On September 29, 2009, the EPA filed a complaint against SSA seeking injunctive relief and civil penalties, and alleging, inter alia, that the SSA violated the Clean Water Act and certain terms and conditions of its National Pollution Discharge Elimination System ("NPDES") permit relating to the municipal wastewater treatment plant and collection system. In 2013, SSA entered into a Consent Order and Long Term Control Plan ("LTCP") with EPA mandating $140 million in upgrades to the system to achieve environmental compliance. Under the agreement, SSA historically faced financial penalties for a number of violations ranging from reporting failures and air quality violations to effluent exceedances and dry weather overflows. Over the years, SSA paid hundreds of thousands of dollars in fines. The LTCP is a 25-year program of nearly

60 combined sewer overflow ("CSO") improvement projects to control and significantly reduce the amount of untreated sewage discharged into the Lackawanna River and its tributaries. Prior to the acquisition, SSA often struggled with routine maintenance requirements outlined in the Consent Order. Lack of proper equipment, training, and a reactive response to improvements caused cleaning and inspection of catch basins and sewer lines to fall behind established goals. Concurrent with the closing of this transaction, PAWC entered into an Amended Consent Decree with EPA and PADEP that outlined the required compliance measures and timelines for system improvements to the Nine Minimum Controls, LTCP and General Compliance. Since 2016, PAWC has completed 30 of 72 CSO control upgrades required under the system's approved LTCP. The remainder will be addressed during the remaining 15 years of the 25-year LTCP. These improvements have reduced the total number of system-wide CSOs from a high of 1,293 in 2018 to 915 in 2022. On average per completed CSO outfall, the improvements have reduced the number of CSOs during a typical year from 25 to four and the total CSO discharge volume from 121 MG to 36 MG (a 70% reduction). These numbers will continue to improve each year as PAWC installs additional CSO control structures. PAWC has also done over 120 main replacement and/or repair projects in the collection system to remedy defects, regain lost capacity, reduce stormwater inflow and infiltration into the system, and eliminate potential sewer overflows into local waterways. At the treatment plant, PAWC increased the peak capacity from 39 MGD to 60 MGD in 2020, which has resulted in a reduction in non-compliance bypass events from a total of nearly 60 in 2019, to only six in 2021 and 2022 combined. In addition to the plant capacity increase, PAWC has also completed projects improving employee safety or operational efficiency, specifically

including new preliminary treatment to remove solids and protect downstream equipment; upgraded treatment units to remove ammonia and phosphorus and protect water quality, replacement of toxic chlorine gas disinfection process with safer UV disinfection system, and new solids press system for improved dewatering and lower solids disposal costs.

PAWC acquired the McKeesport wastewater system in 2017 from the Municipal Authority of the City of McKeesport ("MACM"). In a portion of the Borough of Dravosburg, the system had been illegally discharging sewage into an old underground mine shaft for years. As a condition of acquiring the system, PADEP required a remedy for the 44 residences illegally discharging their sewage into abandoned mines. PAWC invested $3 million to construct two new sewage systems. The project involved constructing two new sewage pump stations, installing approximately 4,800 feet of sewer main and 2,600 feet of sewer laterals to reroute the sewage to the treatment plant, fully sealing the mine, and rebuilding stormwater piping. In the nearby Port Vue Borough, PAWC identified a longstanding SSO issue caused by a landslide that damaged a sewer line along Romine Avenue. The Company invested approximately $1.6 million to install a new main and a lift station, which remedied the problem and prevented untreated water from entering the Monongahela River.

PAWC purchased the Exeter Township ("Exeter") wastewater system in 2019. At the time of the sale, the system was in disrepair and Exeter was under PADEP order to remedy a long list of deficiencies in its system and its operational procedures. To be specific, from January 2015 through March 2019, PADEP cited Exeter for the following violations:

- six (6) NPDES permit final effluent violations;

- twenty-six (26) discrete SSOs to the surface of the ground and to waters of the Commonwealth;
- one (1) unpermitted discharge of an estimated five (5) million gallons of raw sewage from manholes on the wastewater treatment plant's influent line to Heisters Creek, a tributary to the Schuylkill River and a water of the Commonwealth;
- five (5) unpermitted discharges of raw sewage from the wastewater treatment plant's treatment units to the surface of the ground and the plant's stormwater collection and conveyance system due to operational and maintenance issues;
- two (2) unpermitted discharges of sewage to the surface of the ground and to waters of the Commonwealth, due to power/equipment failure at sewage pumping stations;
- one (1) spill of hauled-in sewage sludge to the wastewater treatment plant's stormwater collection and conveyance system;
- one (1) incident where the wastewater treatment plant failed to disinfect effluent discharge flow to the Schuylkill River, a water of the Commonwealth, for an estimated 24 hours;
- one (1) incident where a contractor with prior Pennsylvania One Call approval excavated and struck a section of the 30-inch main raw influent interceptor to the wastewater treatment plant causing sewage to back up into the excavation; and

- evidence of hydraulic loading in the collection system that necessitated a Corrective Action Plan under the Chapter 94 Municipal Wasteload Management program.

Concurrent with the closing of the transaction, PAWC entered into a COA with PADEP on October 23, 2019 to resolve the deficiencies and bring the system back into compliance. Since acquiring the system, PAWC has been working diligently on the remedial actions identified in the COA and has met every deadline established by PADEP. Since closing of the transaction, PAWC has invested approximately $20 million in capital improvements to the collection system and wastewater treatment plant. Work has included major projects like remedying the issues identified by PADEP in the COA as well as projects that improve environmental compliance, improve system reliability, and expanding piping and pumping capacity to accommodate heavy rains and growth of the community.

Q. Please describe some recent water acquisitions where PAWC successfully addressed long-standing water quality, environmental compliance, system reliability and system safety issues.

A. PAWC acquired the public water system from the Borough of Turbotville in 2019. At the time the system was operating with a rudimentary Supervisory Control and Data Acquisition ("SCADA") system that only worked in local mode and relied on outdated dialer technology for after-hours alarming; old chemical feed pumps not meeting PADEP standards for National Science Foundation ("NSF") Standard 61 certification; outdated water quality analyzers with limited data storage; and a toxic chlorine gas disinfection system that posed a serious safety risk to workers and local community. In the four years following the acquisition, PAWC has made numerous improvements to help ensure that

the plant is producing high quality drinking water that is in compliance with all state and federal regulations. A significant improvement was the installation of a new state-of-the-art SCADA system that is capable of operating the plant and distribution system remotely by local operators as well as operators at the company's nearby Milton Water Treatment Plant; gathers and safely secures all water quality compliance data needed for reporting to PADEP; and has automatic shutdowns and alarms to protect the water quality delivered to customers in the event of a treatment upset. PAWC also replaced all water quality analyzers (chlorine and turbidity) used for compliance purposes with state-of-the-art units and connected them into the SCADA system. The old diaphragm-style non-NSF-61 certified chemical feed pumps were replaced with new reliable peristaltic pumps with valid NSF-61 certification. Finally, the plant's chlorine gas disinfection system, which utilized a gas that is toxic to human health and the environment, was replaced with a safe and reliable system that uses liquid sodium hypochlorite (bleach).

In 2019, PAWC also purchased the public water system of Steelton Borough. This system was suffering from a lack of investment and was facing numerous challenges at the time of sale, including an antiquated control system that was a view-only system and did not allow full operator control; outdated water quality analyzers that were no longer supported by the manufacturer; lack of any corrosion control process to protect against elevated lead and copper concentrations in the water consumed by customers; deteriorating distribution storage tanks; areas of low pressure and insufficient fire flow volumes in the distribution system; disinfection byproduct ("DBP") levels exceeding Maximum Contaminant Levels ("MCLs") under the Safe Drinking Water Act; insufficient filter backwash capability and lack of filter to waste facilities required by PADEP; and numerous

safety deficiencies. Over the last four years, PAWC has made numerous improvements to resolve these deficiencies and ensure that the plant is producing high quality drinking water that is in compliance with all state and federal regulations. The control system was replaced with a new state-of-the-art SCADA system that allows operators to fully control the process, collects and stores all water quality compliance data for reporting, and will alarm and automatically shut the plant down if a treatment upset is detected. The new SCADA system provides full compliance data reports that continuously monitors and records compliance data every 15 minutes. Prior to the new system, the operations staff had to manually calculate disinfection log removal during the highest flow period for the day. The new SCADA system continuously calculates disinfection log removal and provides alarms to let the staff know that they are approaching a regulatory limit. All water quality analyzers were replaced with state-of-the-art units. The new turbidimeters house a SD card that continuously records turbidity data and provides a backup of compliance data that was not possible with the old analyzers. Chlorine and pH analyzers were also updated to provide reliable and accurate log removal calculations and chlorine residual recording. A project to install corrosion control treatment using zinc orthophosphate to coat and protect the inside of the distribution system piping is underway and scheduled for completion in 2024. Both of the 2 MG distribution storage tanks have been completely rehabilitated and repainted. A new booster station was added to the distribution system to remedy the low pressure concerns and increase fire flow volumes. To reduce DBP levels, two new automatic blowoffs have been added to the distribution system to reduce water age. The new booster station will allow the tanks to have better turnover and will also help reduce DBP formation in the system. A project is underway to completely redo the filter

backwash and filter to waste processes. A new backwash tank will be added to provide higher backwash flows and will allow the plant to meet the required bed expansion during a backwash. Currently, the plant cannot achieve the required bed expansion. The filter will also be fitted with an air scour system, which will help make the filters cleaner during a backwash. New filter to waste facilities will allow the plant to comply with regulations and produce higher quality water for customers. Numerous safety upgrades have been completed to make sure the plant is safe for the workers and is compliant with Occupation Safety and Health Administration ("OSHA") regulations. Removable handrails were added to the loading dock. Toe guards were added to all handrailing on filters and clarifiers. Safety gates in the handrail system allow for safe ingress/egress into the filters. The gas chlorine feed room was completely renovated. The gas chlorine system was switched from a pressurized system to a vacuum system. A chlorine leak detection and audible alarm was added along with halogen valves to provide automatic shutdowns to the chlorine system, should a leak be detected. A project is now underway to completely replace the toxic chlorine gas disinfection system with a safe liquid sodium hypochlorite system, greatly improving the safety of the employees and local community.

In each of the water and wastewater systems referenced, the Company has made significant improvements to the systems. Thereby, improving the waters of the State and the environment for all Pennsylvanians.

CONCLUSION

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

Pennsylvania American Water
Total Aggregate Gross Plant Additions

	Estimated 2023 Dec YTD Additions	Actual 2023 Dec YTD Additions
Water Operations	$524,246,981	$567,273,491
Wastewater SSS General Operations	$40,376,611	$41,367,705
Wastewater CSS Operations	79,199,003	93,656,269
Royersford WW Operations	550,000	1,214,937
Upper Pottsgrove WW Operations	107,000	799,538
York WW Operations	8,977,500	4,414,314
Total Wastewater Operations	$129,210,114	$141,452,763
Total Water & Wastewater Operations	$653,457,095	$708,726,254

Pennsylvania-American Water Company - Water Operations

Estimated vs Actual

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 12/31/2022	ESTIMATED ADDITIONS	ESTIMATED ACQUISITION	ESTIMATED RETIREMENTS	ESTIMATED BOOK COST 12/31/2023	ACTUAL ADDITIONS	ACTUAL ACQUISITION	ACTUAL RETIREMENTS	ACTUAL BOOK COST 12/31/2023
1	301.00	Organization	$766,405	$0		$0	$766,405	$0	$0	$0	$766,405
2	302.00	Franchises & Consents	2,404,599	0		0	2,404,599	0	0	0	2,404,599
3	303.00	Miscellaneous Intangible Plant	15,572	444,800		66,660	393,712	0	0	0	15,572
4		Total Intangible Plant	$3,186,576	$444,800	$0	$66,660	$3,564,716	$0	$0	$0	$3,186,576
5	303.00	Land & Land Rights	$22,222,038	$456,000		$52,228	$22,625,810	$384,061	$0	$11,093	$22,595,006
6		Total Land & Land Rights	$22,222,038	$456,000	$0	$52,228	$22,625,810	$384,061	$0	$11,093	$22,595,006
7	303.14	Water Rights - Hibernia	$1,942,823	$0		$0	$1,942,823	$0	$0	$0	$1,942,823
8	303.35	Waste Handling and Treatment Land	155,025	0		0	155,025	0	0	0	155,025
9	303.99	Comprehensive Planning Studies	10,990,375	32,950,766		1,844,428	42,096,713	1,372,248	0	0	12,362,623
10	304.15	Other Water Source Structures	91,004,897	0		0	91,004,897	21,281,060	20,000	1,049,408	111,256,549
11	304.20	Power and Pumping Structures	99,745,687	7,024,293		661,355	106,108,624	3,390,216	48,974	180,248	103,004,629
12	304.30	Purification Buildings	340,264,511	19,923,877		1,794,211	358,394,176	28,255,406	0	1,125,348	367,394,568
13	304.36	Waste Handling Struct. & Improv.	11,896,367	0		0	11,896,367	0	0	0	11,896,367
14	304.61	Office Buildings	47,816,893	1,421,151		212,981	49,025,063	59,300	0	0	47,876,194
15	304.62	Stores, Shop and Garage Buildings	64,186,673	1,603,334		240,284	65,549,723	10,569,795	0	244,736	74,511,731
16	304.63	Miscellaneous Structures and Improvements	19,299,996	0		0	19,299,996	10,014,487	0	682,671	28,631,812
17	305.00	Collecting and Impounding Reservoirs	135,474,936	55,900,366		8,073,589	183,301,714	986,788	0	0	136,461,725
18	306.00	Lake, River and Other Intakes	16,689,721	0		0	16,689,721	1,253,145	0	45,849	17,897,017
19	307.00	Wells and Springs	11,889,909	0		0	11,889,909	497,129	40,000	66,176	12,360,862
20	310.00	Other Power Production Equipment	18,795,047	0		0	18,795,047	4,581,180	49,848	0	23,426,075
21	311.00	Pumping Equipment	97,332,392	16,168,937		2,310,218	111,191,111	14,560,667	229,305	953,968	111,168,396
22	320.00	Purification System	331,054,070	7,952,409		884,428	338,122,052	32,393,603	0	3,228,681	360,218,992
23	320.30	Granular Activated Carbon	11,616,530	25,318,990		3,794,441	33,141,080	6,994,335	12,270	24,604	18,598,531
24	320.37	Waste Handling and Treatment Equipment	15,839,221	0		0	15,839,221	0	0	0	15,839,221
25	330.00	Distribution Reservoirs and Standpipes	208,500,037	58,868,675		6,877,390	260,491,323	7,812,533	179,349	482,903	216,009,015
26	331.00	Mains and Accessories	3,269,894,465	209,997,362		28,486,157	3,451,405,671	262,326,156	265,542	20,391,021	3,512,095,142
27	333.00	Services	683,180,960	0		0	683,180,960	45,583,050	259,745	(4,881,653)	733,905,408
28	334.00	Meters	210,847,927	0		0	210,847,927	34,575,821	6,226	6,985,788	238,444,187
29	335.00	Fire Hydrants	135,231,622	8,255,405		929,510	142,557,517	10,987,392	44,874	(2,151,854)	148,415,742
30	340.00	Office Furniture and Equipment	19,119,507	36,502,908		4,912,166	50,710,249	6,892,094	0	1,214,859	24,796,742
31	340.31	Computer Software	76,661,613	10,337,012		4,061,537	82,937,087	21,863,816	0	7,813,619	90,711,810
32	341.00	Transportation Equipment	81,209,315	8,846,358		1,912,889	88,142,784	18,300,084	0	7,490,180	92,019,219
33	342.00	Stores Equipment	468,033	0		0	468,033	1,758	0	0	469,790
34	343.00	Tools and Work Equipment	40,504,751	6,150,763		135,188	46,520,326	15,774,852	0	64,889	56,214,714
35	344.00	Laboratory Equipment	2,337,745	0		0	2,337,745	261,798	0	203,402	2,396,141
36	345.00	Power Operated Equipment	2,127,698	375,000		56,200	2,446,498	0	0	4,891	2,122,807
37	346.00	Communication Equipment	14,122,627	14,557,226		1,179,063	27,500,790	4,263,823	0	592,871	17,793,579
38	347.00	Miscellaneous Equipment	27,698,362	1,191,348		37,475	28,852,235	880,765	0	75,764	28,503,363
39	348.00	Other Tangible Equipment	795,578	0		0	795,578	(3)	0	0	795,575
40		Total Tangible Plant	$6,098,695,313	$523,346,181	$0	$68,403,509	$6,553,637,985	$565,733,298	$1,156,132	$45,888,369	$6,619,696,375
41		Total Utility Plant In Service	$6,124,103,927	$524,246,981	$0	$68,522,397	$6,579,828,511	$566,117,359	$1,156,132	$45,899,462	$6,645,477,957

Pennsylvania-American Water Company - Wastewater SSS General Operations

Estimated vs Actual

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 12/31/2022	ADDITIONS	RETIREMENTS	ESTIMATED BOOK COST 12/31/2023	ACTUAL ADDITIONS	ACTUAL RETIREMENTS	ACTUAL BOOK COST 12/31/2023
1	352.00	Franchises & Consents	$221,140	$0	$0	$221,140	$0	$0	$221,140
2	353.00	Land & Land Rights	6,043,118	0	0	6,043,118	236	0	6,043,354
3		Total Intangible Plant	$6,264,258	$0	$0	$6,264,258	$236	$0	$6,264,494
4	354.20	Structures And Improvements - Collection	$6,423,992	$295,930	$28,595	$6,691,327	$2,044,331	$44,852	8,423,471
5	354.30	Structures And Improvements - SPP	22,206,952	837,500	63,016	22,981,436	89,392	56,588	22,239,756
6	354.40	Structures And Improvements - TDP	156,179,451	1,300,000	97,816	157,381,635	12,419,633	210,610	168,388,473
7	354.70	Structures And Improvements - General	4,409,295	235,369	11,382	4,633,282	137,230	53,690	4,492,835
8	355.00	Power Generation Equipment	4,962,505	2,461,828	185,236	7,239,098	12,332	16,516	4,958,321
9	360.10	Collection Sewers - Force Mains	50,941,888	5,403,032	406,541	55,938,380	4,290,743	24,377	55,208,254
10	361.10	Collection Sewers - Gravity Mains	189,276,807	9,489,342	714,007	198,052,141	5,224,706	1,308,339	193,193,174
11	361.20	Manholes	32,362,549	409,570	22,844	32,749,275	0	0	32,362,549
12	363.00	Services	50,818,991	1,184,801	59,957	51,943,835	982,021	352,271	51,448,741
13	364.00	Flow Measuring Devices	553,242	43,313	8,774	587,781	0	0	553,242
14	365.00	Flow Measuring Installations	272,564	0	0	272,564	0	0	272,564
15	370.00	Receiving Wells	677,388	0	0	677,388	0	0	677,388
16	371.00	Pumping Equipment	16,020,113	2,512,500	189,048	18,343,565	1,180,957	153,303	17,047,767
17	380.00	Treatment Equipment	79,817,552	12,816,537	964,356	91,669,734	11,127,534	405,054	90,540,032
18	381.00	Plant Sewers	6,584,710	0	0	6,584,710	54,861	1,880	6,637,690
19	382.00	Outfall Sewer Lines	603,465	0	0	603,465	33,315	9,784	626,996
20	389.10	Other Plant And Miscellaneous Equipment - Intangibles	664,467	859,143	0	1,523,610	1,963,432	0	2,627,899
21	390.00	Office Furniture And Equipment	850,486	40,673	0	891,158	208,292	0	1,058,778
22	390.20	Computers & Peripheral	0	0	0	0	0	0	0
23	391.00	Transportation Equipment	1,733,136	0	0	1,733,136	568,758	0	2,301,893
24	392.00	Stores Equipment	107,351	0	0	107,351	0	0	107,351
25	393.00	Tools, Shop And Garage Equipment	1,087,927	291,443	25,017	1,354,354	63,825	0	1,151,752
26	394.00	Laboratory Equipment	567,441	0	62,682	504,759	100,487	114,331	553,597
27	395.00	Power Operated Equipment	433,205	0	0	433,205	148,963	0	582,168
28	396.00	Communication Equipment	2,940,079	1,810,694	136,391	4,614,382	697,353	249,671	3,387,761
29	397.00	Miscellaneous Equipment	1,376,647	384,937	28,995	1,732,588	19,305	0	1,395,952
30	398.00	Other Tangible Plant	14,232	0	0	14,232	0	0	14,232
31		Total Tangible Plant	$631,886,435	$40,376,611	$3,004,656	$669,258,389	$41,367,469	$3,001,267	$670,252,637
32		Total Utility Plant In Service	$638,150,693	$40,376,611	$3,004,656	$675,522,647	$41,367,705	$3,001,267	$676,517,131

Pennsylvania-American Water Company - Royersford WW Operations

Estimated vs Actual

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 12/31/2022	ADDITIONS	RETIREMENTS	ESTIMATED BOOK COST 12/31/2023	ACTUAL ADDITIONS	ACTUAL RETIREMENTS	ACTUAL BOOK COST 12/31/2023
1	353.00	Land & Land Rights	$3,101	$0	$0	$3,101	$0	$0	$3,101
2		Total Intangible Plant	$3,101	$0	$0	$3,101	$0	$0	$3,101
3	354.20	Structures And Improvements - Collection	$0	$0	$0	$0	$0	$0	$0
4	354.30	Structures And Improvements - SPP	627,002	0	0	627,002	0	2,114	624,889
5	354.40	Structures And Improvements - TDP	834,576	25,000	1,927	857,649	0	7,469	827,107
6	354.70	Structures And Improvements - General	363,546	0	0	363,546	270,311	0	633,857
7	355.00	Power Generation Equipment	932,793	25,000	3,800	953,993	0	0	932,793
8	360.10	Collection Sewers - Force Mains	79,236	20,000	1,541	97,695	0	0	79,236
9	361.10	Collection Sewers - Gravity Mains	2,677,569	60,000	3,853	2,733,716	16,260	0	2,693,829
10	361.20	Manholes	106,954	25,000	1,156	130,798	0	0	106,954
11	363.00	Services	99,918	20,000	1,541	118,377	39,761	1,903	137,777
12	364.00	Flow Measuring Devices	45,063	10,000	0	55,063	0	0	45,063
13	365.00	Flow Measuring Installations	0	0	0	0	0	0	0
14	370.00	Receiving Wells	0	0	0	0	0	0	0
15	371.00	Pumping Equipment	441,374	25,000	2,200	464,174	246,731	3,271	684,835
16	380.00	Treatment Equipment	13,968,926	200,000	13,265	14,155,661	107,224	1,668	14,074,481
17	381.00	Plant Sewers	0	0	0	0	0	0	0
18	382.00	Outfall Sewer Lines	0	0	0	0	0	0	0
19	389.10	Other Plant And Miscellaneous Equipment - Intangibles	0	0	0	0	112,677	0	112,677
20	390.00	Office Furniture And Equipment	23,874	35,000	2,771	56,103	-	-	23,874
21	390.20	Computers & Peripheral	0	0	0	0	0	0	0
22	391.00	Transportation Equipment	0	75,000	0	75,000	28,994	0	28,994
23	392.00	Stores Equipment	0	0	0	0	0	0	0
24	393.00	Tools, Shop And Garage Equipment	17,036	0	0	17,036	0	0	17,036
25	394.00	Laboratory Equipment	9,068	5,000	853	13,215	10,175	0	19,243
26	395.00	Power Operated Equipment	0	0	0	0	0	0	0
27	396.00	Communication Equipment	113,708	20,000	1,000	132,708	382,804	0	496,512
28	397.00	Miscellaneous Equipment	2,145	5,000	0	7,145	0	0	2,145
29	398.00	Other Tangible Plant	0	0	0	0	0	0	0
30		Total Tangible Plant	$20,342,788	$550,000	$33,907	$20,858,881	$1,214,937	$16,424	$21,541,300
31		Total Utility Plant In Service	$20,345,889	$550,000	$33,907	$20,861,982	$1,214,937	$16,424	$21,544,401

Pennsylvania-American Water Company - Upper Pottsgrove WW Operations

Estimated vs Actual

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 12/31/2022	ADDITIONS	RETIREMENTS	ESTIMATED BOOK COST 12/31/2023	ACTUAL ADDITIONS	ACTUAL RETIREMENTS	ACTUAL BOOK COST 12/31/2023
1	352.00	Franchises & Consents	$0	$0	$0	$0	$0	$0	$0
2	353.10	Land & Land Rights	3,661,632	0	0	3,661,632	0	0	3,661,632
3		Total Intangible Plant	$3,661,632	$0	$0	$3,661,632	$0	$0	$3,661,632
4	354.20	Structures And Improvements - Collection	$0	$0	$0	$0	$0	$0	$0
5	354.30	Structures And Improvements - SPP	1,685,520	0	0	1,685,520	0	0	1,685,520
6	354.40	Structures And Improvements - TDP	0	0	0	0	0	0	0
7	354.70	Structures And Improvements - General	122,480	0	0	122,480	106,365	0	228,845
8	355.00	Power Generation Equipment	109,527	5,000	424	114,103	0	0	109,527
9	360.10	Collection Sewers - Force Mains	756,805	0	0	756,805	0	0	756,805
10	361.10	Collection Sewers - Gravity Mains	9,488,445	25,000	2,118	9,511,326	109,346	57	9,597,735
11	361.20	Manholes	0	12,000	593	11,407	0	0	0
12	363.00	Services	2,022,553	20,000	847	2,041,705	130,978	0	2,153,531
13	364.00	Flow Measuring Devices	0	0	0	0	0	0	0
14	365.00	Flow Measuring Installations	0	0	0	0	0	0	0
15	370.00	Receiving Wells	0	0	0	0	0	0	0
16	371.00	Pumping Equipment	144,029	0	0	144,029	145,764	40,247	249,546
17	380.00	Treatment Equipment	0	0	0	0	307,084	0	307,084
18	381.00	Plant Sewers	0	0	0	0	0	0	0
19	382.00	Outfall Sewer Lines	0	0	0	0	0	0	0
20	389.10	Other Plant And Miscellaneous Equipment - Intangibles	0	0	0	0	0	0	0
21	390.00	Office Furniture And Equipment	0	0	0	0	0	0	0
22	390.20	Computers & Peripheral	0	0	0	0	0	0	0
23	391.00	Transportation Equipment	0	40,000	0	40,000	0	0	0
24	392.00	Stores Equipment	0	0	0	0	0	0	0
25	393.00	Tools, Shop And Garage Equipment	0	5,000	0	5,000	0	0	0
26	394.00	Laboratory Equipment	0	0	0	0	0	0	0
27	395.00	Power Operated Equipment	0	0	0	0	0	0	0
28	396.00	Communication Equipment	0	0	0	0	0	0	0
29	397.00	Miscellaneous Equipment	0	0	0	0	0	0	0
30	398.00	Other Tangible Plant	0	0	0	0	0	0	0
31		Total Tangible Plant	$14,329,358	$107,000	$3,983	$14,432,375	$799,538	$40,303	$15,088,593
32		Total Utility Plant In Service	$17,990,990	$107,000	$3,983	$18,094,007	$799,538	$40,303	$18,750,225

Pennsylvania-American Water Company - York WW Operations

Estimated vs Actual

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 12/31/2022	ADDITIONS	RETIREMENTS	ESTIMATED BOOK COST 12/31/2023	ACTUAL ADDITIONS	ACTUAL RETIREMENTS	ACTUAL BOOK COST 12/31/2023
1	352.00	Franchises & Consents	$0	$0	$0	$0	$0	$0	$0
2	353.00	Land & Land Rights	5,198,862	0	0	5,198,862	0	0	5,198,862
3		Total Intangible Plant	$5,198,862	$0	$0	$5,198,862	$0	$0	$5,198,862
4	354.20	Structures And Improvements - Collection	$320,168	$0	$0	$320,168	$1,030,868	$0	$1,351,036
5	354.30	Structures And Improvements - SPP	106,379	1,000,000	0	1,106,379	0	0	106,379
6	354.40	Structures And Improvements - TDP	122,160,376	3,750,000	26,643	125,883,733	903,273	97,045	122,966,603
7	354.70	Structures And Improvements - General	5,157	150,000	0	155,157	16,903	0	22,059
8	355.00	Power Generation Equipment	5,976	50,000	0	55,976	0	0	5,976
9	360.10	Collection Sewers - Force Mains	78,399	0	0	78,399	0	0	78,399
10	361.10	Collection Sewers - Gravity Mains	55,278,841	400,000	62,167	55,616,675	45,597	24,637	55,299,802
11	361.20	Manholes	0	100,000	14,210	85,790	0	0	0
12	363.00	Services	7,255,173	75,000	8,881	7,321,292	98,686	(8,912)	7,362,771
13	364.00	Flow Measuring Devices	83,864	0	0	83,864	0	0	83,864
14	365.00	Flow Measuring Installations	0	0	0	0	0	0	0
15	370.00	Receiving Wells	0	0	0	0	0	0	0
16	371.00	Pumping Equipment	199,138	200,000	25,000	374,138	250,921	23,707	426,352
17	380.00	Treatment Equipment	41,006,636	450,000	99,334	41,357,302	456,970	171,177	41,292,429
18	381.00	Plant Sewers	0	0	0	0	0	0	0
19	382.00	Outfall Sewer Lines	0	0	0	0	0	0	0
20	389.10	Other Plant And Miscellaneous Equipment - Intangibles	0	200,000	0	200,000	41,386	0	41,386
21	390.00	Office Furniture And Equipment	159,198	250,000	0	409,198	432,165	0	591,364
22	390.20	Computers & Peripheral	0	0	0	0	0	0	0
23	391.00	Transportation Equipment	1,405,304	295,000	52,398	1,647,907	746,041	0	2,151,345
24	392.00	Stores Equipment	0	0	0	0	0	0	0
25	393.00	Tools, Shop And Garage Equipment	57,053	250,000	0	307,053	24,468	0	81,521
26	394.00	Laboratory Equipment	302,464	150,000	14,026	438,437	31,474	117,409	216,529
27	395.00	Power Operated Equipment	0	0	0	0	0	0	0
28	396.00	Communication Equipment	0	1,657,500	0	1,657,500	435,887	0	435,887
29	397.00	Miscellaneous Equipment	208,925	0	0	208,925	(100,325)	0	108,600
30	398.00	Other Tangible Plant	0	0	0	0	0	0	0
31		Total Tangible Plant	$228,633,052	$8,977,500	$302,659	$237,307,893	$4,414,314	$425,063	$232,622,303
32		Total Utility Plant In Service	$233,831,914	$8,977,500	$302,659	$242,506,755	$4,414,314	$425,063	$237,821,165

Pennsylvania-American Water Company - Wastewater CSS Operations

Estimated vs Actual

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT 12/31/2022	ADDITIONS	RETIREMENTS	ESTIMATED BOOK COST 12/31/2023	ACTUAL ADDITIONS	ACTUAL RETIREMENTS	ACTUAL BOOK COST 12/31/2023
1	352.00	Franchises & Consents	$0	$0	$0	$0	$0	$0	$0
2	353.00	Land & Land Rights	4,463,355	425,000	0	4,888,355	0	0	4,463,355
3		Total Intangible Plant	$4,463,355	$425,000	$0	$4,888,355	$0	$0	$4,463,355
4	354.20	Structures And Improvements - Collection	$6,232,440	$2,426,122	$99,408	$8,559,154	$11,904,175	$13,204	$18,123,411
5	354.30	Structures And Improvements - SPP	20,953,421	3,400,178	222,935	24,130,665	2,027,301	61,030	22,919,692
6	354.40	Structures And Improvements - TDP	126,015,479	28,464,504	2,084,732	152,395,252	352,263	202,730	126,165,012
7	354.70	Structures And Improvements - General	0	0	0	0	0	0	0
8	355.00	Power Generation Equipment	932,654	0	0	932,654	0	0	932,654
9	360.10	Collection Sewers - Force Mains	9,494,734	0	0	9,494,734	5,802,618	364,829	14,932,523
10	361.10	Collection Sewers - Gravity Mains	378,631,623	29,606,268	2,168,354	406,069,537	55,430,875	6,392,529	427,669,970
11	361.20	Manholes	42,198,027	1,803,630	118,187	43,883,470	0	0	42,198,027
12	362.00	Spec Collection Structures	0	0	0	0	0	0	0
13	363.00	Services	13,679,141	4,574,337	318,717	17,934,761	1,490,408	60,953	15,108,595
14	364.00	Flow Measuring Devices	2,089,465	0	0	2,089,465	147,581	0	2,237,046
15	365.00	Flow Measuring Installations	0	0	0	0	0	0	0
16	370.00	Receiving Wells	0	0	0	0	0	0	0
17	371.00	Pumping Equipment	14,781,637	3,791,663	277,700	18,295,599	1,942,587	208,873	16,515,351
18	380.00	Treatment Equipment	75,500,947	3,392,511	248,466	78,644,991	7,467,468	261,418	82,706,997
19	381.00	Plant Sewers	1,576,345	0	0	1,576,345	0	0	1,576,345
20	382.00	Outfall Sewer Lines	189,250	0	0	189,250	393,378	0	582,628
21	389.10	Other Plant And Miscellaneous Equipment - Intangibles	10,741,231	105,000	7,690	10,838,541	(835)	0	10,740,396
22	390.00	Office Furniture And Equipment	2,360,981	0	9,926	2,351,055	875,301	0	3,236,282
23	390.20	Computers & Peripheral	0	0	0	0	0	0	0
24	391.00	Transportation Equipment	7,203,931	179,257	13,129	7,370,059	2,519,682	202,444	9,521,168
25	392.00	Stores Equipment	106,844	0	0	106,844	69,465	0	176,309
26	393.00	Tools, Shop And Garage Equipment	1,924,409	0	4,230	1,920,180	2,457,156	0	4,381,565
27	394.00	Laboratory Equipment	1,285,384	0	0	1,285,384	184,236	14,941	1,454,679
28	395.00	Power Operated Equipment	1,909,398	76,825	5,627	1,980,596	262,853	0	2,172,251
29	396.00	Communication Equipment	2,754,188	227,335	0	2,981,523	57,617	489	2,811,315
30	397.00	Miscellaneous Equipment	2,544,799	726,372	0	3,271,170	272,142	2,176	2,814,764
31	398.00	Other Tangible Plant	0	0	0	0	0	0	0
32		Total Tangible Plant	$723,106,328	$78,774,003	$5,579,101	$796,301,230	$93,656,269	$7,785,617	$808,976,980
33		Total Utility Plant In Service	$727,569,683	$79,199,003	$5,579,101	$801,189,585	$93,656,269	$7,785,617	$813,440,335

Main Extension Evaluation Process

Bona Fide Service Applicants-Tariff Rule 27

SCOPE

This main extension evaluation process applies to the provisions of Pennsylvania American Water Tariff Rule 27.

OBJECTIVE

The objective is to a develop program for the systematic evaluation of main extension requests within the Company's certificated service area, including the process for evaluating the existence of substantial public need based on documented health and safety problems.

EVALUATION PROCESS

A. General

Inquiries for new water service undergo an initial service area determination and preliminary capacity review to ascertain the water system's ability to meet the proposed customer's needs. Service requirements, including customer water demands and fire flow requirements, are obtained during the application process. For projects involving main extensions, a review of prior or pending service requests in the vicinity are reviewed to identify synergies which could result in a more cost-effective approach. Provisions under Section B below will apply for projects which have an identified substantial public need based on documented health and safety problems.

B. Tariff Rule 27.1 F

1. ***Supporting Health and Safety Documentation***
   - 1.1. Upon contact, the New Service Representative (NSR) or Customer Service Representative (CSR) will obtain a general description of the applicant's health and safety concern and request a copy of all supporting water quality testing and/or environmental documentation.
   - 1.2. NSR/CSR will contact the local Water Quality Manager and forward the following information as applicable:
     - 1.2.1. Applicant name/address/phone number
     - 1.2.2. Reason for water service request
     - 1.2.3. Description of health and safety concern (water quality and/or supply)
     - 1.2.4. Analytical documentation, including but not limited to available water quality test results, environmental data, and supply records

2. Health and Safety Assessment

2.1. Water Quality personnel will review all data provided by applicant against current public water supply health and aesthetic drinking water standards.

2.2. Water Quality personnel may also conduct a site investigation and initiate or request supplemental analysis to complete and/or confirm water quality data or supply related concerns as warranted.

3. Laboratory Test Reports and Environmental Data Documentation

3.1. Applicant's health and safety concern(s) should be supported by sound and appropriate analytical data certified by a state accredited laboratory.

3.2. Public health risk will be evaluated in accordance with current primary and secondary drinking water standards established under the regulatory compliance requirements of the Safe Drinking Water Act and all pertinent supply data.

4. Recommendation

The Water Quality Department will confer with Operations and Engineering on the evaluation results. If there is determination to extend the water main pursuant to Tariff Rule 27.1(F) subject to final PaPUC approval, the scope and timeline associated with the initiation and completion of the water main extension project shall be governed under a schedule approved by the Company.

5. Monitoring

The Water Quality & Environmental Compliance department will monitor and evaluate all public water service applications or requests involving potential health and safety situations and ensure terms of the process are maintained.

Water Quality functional leads will oversee and be responsible for applicant data review, initiation of supplemental analytical testing, and recommendations.

6. Reporting

NSR, CSR, and/or Operations personnel receiving a request for water service associated with a health and safety concern of a private water supply should contact the local Water Quality Manager and forward a copy of all available information.

C. Substantial Public Need

The Company will encourage the municipality within the project area to enact a mandatory tap-in ordinance for the area affected by the substantial public health and safety concerns.

D. Company Funding

The provisions of the Company's tariff regarding Main Extensions for Bona Fide Service Applicants will apply. Under Tariff Rule 27.1(F), when a substantial need exists and public health and safety may be compromised by the absence of a public water supply within the Company's customer service territory, the Company, subject to prior PUC approval, may install main extensions and special utility service facilities without the payment of the customer contribution or Contribution in Aid of Construction (CIAC), that would otherwise be required. If the public health and safety concerns have been caused by an entity, any monies that this entity is required to contribute shall be utilized to reduce the Company's investment.

Capital investment decisions are based on prioritization guidelines incorporated within the Company's Asset Investment Strategy and funding availability. Projects within the Company's customer service territory which address high risk health and safety issues for a significant number of customers receive the highest priority, whereas projects that address non-critical situations and/or smaller customer impacts, such as non-mandatory water quality goals, receive a lower prioritizing rating. It is recognized that each individual situation may result in a higher or lower priority for a specific project.

E. Financing

For larger scale projects, the Company may seek external funding, such as PennVest. If such funding is sought, the Company may request the PaPUC to issue an Order requiring the Company to extend service under the provisions of Tariff Rule 27.1 (F).

REFERENCES

Supplement No.78 to Tariff Water-PA P.U.C. No.4, "Main Extensions for Bona Fide Service Applicants" Reference: 27.1(F).

OCA Statement No.4, P.U.C. Direct Testimony of Terry L. Fought, August 5, 2011.

Pennsylvania Code - Chapter 109: § 109.709. Cross-Connection Control Program.

PAWC Exhibit BWA-3R

HANOVER TWP

SMITH TWP

JEFFERSON TWP

CROSS CREEK TWP

INDEPENDENCE TWP

Municipality Boundary

PAWC Certificated Service Territory

Spatial Reference Name: NAD 1983 2011 StatePlane Pennsylvania North FIPS 3701 Ft US

N

PENNSYLVANIA AMERICAN WATER

WE KEEP LIFE FLOWING®

0 1,000 2,000 3,000 4,000 Feet

OCA-32-007_Attachment

TO BE USED FOR REFERENCE ONLY
Although every effort has been made to ensure the accuracy of the information, errors and conditions originating from physical sources to develop the information may be reflected in the data supplied.

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BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Bruce Aiton**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 3-R and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024

Bruce Aiton

Statement No. 4

Gress

PAWC STATEMENT NO. 4

DIRECT TESTIMONY

OF

STACEY D. GRESS

WITH REGARD TO

PENNSYLVANIA-AMERICAN WATER COMPANY'S

CLAIMED RATE BASE, DEPRECIATION AND AMORTIZATION, TAXES OTHER THAN INCOME, ACQUISITIONS IN RATE BASE, ALLOCATION OF COMMON COSTS BETWEEN WATER AND WASTEWATER OPERATIONS, RATE CASE AND REGULATORY EXPENSE, PROPOSED TARIFF CHANGES, AND RATE STRUCTURE AND RATE DESIGN PROPOSAL

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: November 8, 2023

PENNSYLVANIA-AMERICAN WATER COMPANY

DIRECT TESTIMONY OF STACEY D. GRESS

Q. What is your name and business address?

A. My name is Stacey D. Gress, and my business address is 1 Water Street, Camden, New Jersey 08102.

Q. By whom are you employed and in what capacity?

A. I am employed by American Water Works Service Company (the "Service Company") as Director of Rates and Regulatory for Pennsylvania-American Water Company ("PAWC" or the "Company"). The Service Company is a wholly owned subsidiary of American Water Works Company, Inc. ("American Water") that provides services to PAWC and its affiliates.

Q. Please summarize your educational background and professional experience.

A. I received a Master of Business Administration Degree, with a specialization in Finance, from Drexel University in 2007. I also hold a Bachelor of Arts Degree in Economics from Rutgers University, as well as an Associate in Science Degree for Business Administration from Camden County College. In October 2017, I attended the Utility Rate School sponsored by the National Association of Regulatory Utility Commissioners.

Q. What are your duties as Director of Rates and Regulatory?

A. My duties as Director of Rates and Regulatory principally include preparing and presenting rate applications for PAWC. In addition, I am responsible for certain aspects of the financial, budgeting and regulatory functions of the Company.

Q. Have you previously submitted testimony before the Pennsylvania Public Utility Commission (the "Commission")?

A. Yes, I prepared and provided testimony in PAWC's last two base rate cases at Docket Nos. R-2022-3031672 and R-2020-3019369. In addition, I have testified before the West Virginia Public Service Commission on behalf of an American Water subsidiary, West Virginia-American Water.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain the portions of the Company's principal accounting exhibit, Exhibit No. 3-A, that I am sponsoring, which relate to the Company's claims for rate base, depreciation and amortization, taxes other than income, and acquisitions in rate base since its last base rate case. Additionally, my testimony supports the Company's claim for rate case and regulatory expense, as well as the allocation of common costs between water and wastewater operations. I will also describe changes that the Company is proposing to make to its water and wastewater tariffs in this case. Finally, I will discuss the Company's rate structure and rate design proposal.

The Development of the Combined Water and Wastewater Revenue Requirement

Q. Please explain how the Company developed its revenue requirement in this case.

A. The total Company revenue requirement was developed based on five separate revenue requirements, defined as follows:

- Water Operations,
- Wastewater Sanitary Sewer Systems ("SSS") General Operations,
- Butler Area Sewer Authority ("BASA") Wastewater ("WW") Operations,

- Brentwood WW Operations, and
- Wastewater Combined Sewer Systems ("CSS") Operations.

In this case, the Company is distributing a portion of the revenue requirements for its wastewater operations to the revenue requirements of its water operations as shown on Exhibit No. 3-A on the Revenue Requirement Summary. The allocation of a portion of wastewater revenue requirements to water revenue requirements by utilities that provide both forms of service was authorized by amendments to the Public Utility Code made by Act 11 of 2012. Those amendments provide the Commission with a reasonable means of moderating the rate impact of significant investments needed to improve the service, reliability and environmental compliance of acquired wastewater systems. The Commission approved the allocation of a portion of the Company's wastewater revenue requirements to water revenue requirements in the Company's last four base rate proceedings. In the Company's last base rate case, Docket No. R-2022-3031672, the Commission approved a settlement that allocated 33% of the Company's wastewater revenue requirement increase to the water revenue requirement in the rates that went into effect on January 28, 2023.

For the Company's five revenue requirements identified above, the Company has prepared five detailed revenue requirement studies that set forth the Company's claims for rate base, depreciation, operating and maintenance expenses, taxes and pro forma revenues for a historic test year ending June 30, 2023 ("HTY"), a projected future test year ending June 30, 2024 ("FTY"), and a fully projected future test year ending June 30, 2025 ("FPFTY"). In Exhibit No. 3-A, the historic test year data are generally identified by the title or heading "Present Rates at June 30, 2023" and the FTY and FPFTY are generally

identified by the title or heading "Present Rates at June 30, 2024," and "Present Rates at June 30, 2025," respectively.

Q. Why did the Company prepare separate revenue requirements?

A. The Company developed revenue requirements for its base water, wastewater sanitary sewer systems and wastewater combined sewer systems, and also developed individual revenue requirements for wastewater operations in BASA and Brentwood. The Joint Petition for Settlement (the "Settlement"), which was approved by the Commission in the Company's last base rate case, provides that the Company is not required to provide a separate study for each combined stormwater system. The Company has included one Wastewater CSS Operation study for Scranton, McKeesport and Kane wastewater systems, as permitted under the Settlement.[1]

Rate Base

Q. What are the Company's rate base claims in this proceeding?

A. The total Company rate base claim in this proceeding is shown below for each of the five revenue requirements:

Rate Base	**2025 Proposed**
Water Operations	$4,704,067,656
Wastewater SSS General Operations	$649,330,622
BASA WW Operations	$231,536,917
Brentwood WW Operations	$22,053,946
Wastewater CSS Operations	$489,184,280
Total:	**$6,096,173,421**

The calculations of these amounts are shown in Exhibit No. 3-A under the respective rate base sections for each revenue requirement.

[1] Joint Petition for Settlement of Rate Investigation ("Joint Petition") at ¶ 14, Docket No. R-2022-3031672.

Q. What are the elements of the Company's rate base claims?

A. PAWC's rate base claims consist of several elements. The first and largest element is the depreciated original cost of net plant in service. To this amount, three items have been added to each of the rate base claims: (1) materials and supplies; (2) cash working capital; and (3) accrued taxes net of prepaid taxes.

For Water Operations, items four and five described below were added:

(4) the unamortized balance of the Commission-approved[2] utility plant acquisition adjustments associated with the Company's acquisitions of the water assets of the former Pennsylvania Gas & Water Company ("PG&W"), Lake Spangenberg Water Company, the Fernwood Community Water System, and the Olwen Heights Water Service Company, Inc., as well as the unamortized balance of the Commission-approved acquisition transaction and closing costs for the Company's acquisitions of the water assets of the Steelton Borough Authority, Municipal Authority of the Borough of Turbotville, Valley Township, SLIBCO Utilities, and Creekside Homeowner's Association. In addition, the Company is seeking approval for recovery of the utility plant acquisition adjustments and transaction and closing costs associated with its planned acquisitions of the water systems from Farmington Township and Audubon Water Company, which are anticipated to be completed prior to the end of the FPFTY. As referenced in the testimony of Company witness Chris Abruzzo, the purchase price of $5,545,000 for the Farmington acquisition was allocated in the amounts of $2,718,300 for water and $2,826,700 for the wastewater

[2] References in this testimony to Commission authorized balances and amortizations of acquisition adjustments can be found at Docket No. R-2022-3031672, Joint Petition for Settlement of Rate Investigation, Appendix D, approved by Order entered December 8, 2022, unless specifically stated otherwise.

assets. For the Farmington water system, the depreciated original cost was calculated to be $2,502,811, resulting in a proposed utility plant acquisition adjustment ("UPAA") of $215,489. The estimated transaction and closing costs for Farmington are $54,825. For Audubon, the difference in the purchase price and depreciated original cost resulted in a proposed UPAA of $7,639,771. The estimated transaction and closing costs for Audubon are $117,954. The UPAA and acquisition transaction and closing costs are similar to those that I have discussed above and were previously approved by the Commission for other water system acquisitions. Please refer to the rate base sections of Exhibit Nos. 3-A and 3-C for more detail on these acquisition adjustments; and

(5) the unamortized balance of costs incurred by the Company relative to its position as receiver of the Winola Water Company, Docket No. P-2018-3006216.

For the Wastewater SSS General Operations rate base claim, a fourth item was added: the unamortized balance of the Commission-approved utility plant acquisition adjustments associated with the Company's acquisitions of the wastewater assets of the former Clean Treatment Sewage Company and Delaware Sewer Company, as well as the unamortized balance of the Commission-approved acquisition transaction and closing costs for the Company's acquisitions of the wastewater assets of the Borough of New Cumberland, Sadsbury Township, Exeter Township, Delaware Sewer Company, the Borough of Turbotville, Valley Township, Foster Township, the Borough of Royersford, Upper Pottsgrove Township, and the City of York. In addition, the Company is seeking approval for recovery of the estimated acquisition transaction and closing costs associated with the planned acquisitions of wastewater assets of Farmington Township ($56,895) and Sadsbury Township Municipal Authority ("STMA") (Lancaster County) ($91,470),

Docket Nos. A-2023-3042587 and A-2023-3042058, respectively. As discussed in the direct testimony of my colleague, Mr. Abruzzo (PAWC Statement No. 6), the planned acquisitions will be completed prior to the end of the FPFTY. These acquisition transaction and closing costs are similar to the acquisition transaction and closing costs approved by the Commission and previously discussed in my testimony.

For BASA WW Operations, a fourth item was added: the Company is seeking approval for recovery of $1,202,635, the estimated acquisition transaction and closing costs associated with the Company's planned acquisition of the wastewater assets of BASA, Docket No. A-2022-3037047, which will be completed prior to the end of the FPFTY. These acquisition transaction and closing costs are similar to the acquisition transaction and closing costs discussed previously.

For Brentwood WW Operations, a fourth item was added: the Company is seeking approval for recovery of $701,935, the estimated acquisition transaction and closing costs associated with the Company's planned acquisition of the wastewater assets of the Borough of Brentwood, Docket No. A-2021-3024058, which will be completed prior to the end of the FPFTY. These acquisition transaction and closing costs are similar to the acquisition transaction and closing costs discussed previously.

For the Wastewater CSS Operations rate base claim, a fourth item was added: the unamortized balance of the Commission-approved transaction and closing costs associated with the Company's acquisitions of the wastewater assets of the Sewer Authority of the City of Scranton, the Municipal Authority of the City of McKeesport, and the Borough of Kane Authority.

For the calculation of the Water Operations rate base claim, seven items have been deducted: (1) a net offset to cash working capital requirements to reflect the timing of the payment of interest and preferred dividends; (2) unamortized investment tax credits that were generated prior to 1971; (3) a thirteen-month average of extension deposits in suspense; (4) contributions-in-aid-of-construction ("CIAC") and customer advances for construction ("CAC") associated with the Company's acquisition of the water assets of the former Citizens Utilities Water Company of Pennsylvania ("Citizens"); (5) balance of the regulatory liability for the federal income tax savings associated with the 2017 Tax Cuts and Jobs Act ("TCJA") for January 1, 2018 through June 30, 2018 (the "Stub Period") and the unamortized balance of the Negative Deferred Tax Credit reconciliation from January 28, 2021 through January 27, 2023; (6) other deductions (as described below); and (7) accumulated deferred taxes.

For the calculation of the Wastewater SSS General Operations and Wastewater CSS Operations rate base claims, three items have been deducted: (1) a net offset to cash working capital requirements to reflect the timing of the payment of interest and preferred dividends; (2) the balance of the regulatory liability for federal income tax savings associated with the TCJA Stub Period relating to Wastewater SSS General and Scranton WW CSS Operations; and (3) accumulated deferred taxes.

For the calculation of the BASA and Brentwood WW Operations rate base claims, two items have been deducted: (1) a net offset to cash working capital requirements to reflect the timing of the payment of interest and preferred dividends; and (2) accumulated deferred taxes.

Q. Please explain how the depreciated original cost of net plant for the FPFTY was determined.

A. Net plant is the total utility plant in service less CIAC, CAC, and excluded property. Depreciated original cost is the original cost less accrued depreciation. The original cost of net utility plant as of the end of the FPFTY consists of the amount recorded in PAWC's plant accounts at June 30, 2023, plus projected additions, net of retirements, through June 30, 2024 and 2025, respectively, less CIAC and CAC. The original cost of plant in service at June 30, 2023, and the original cost of claimed additions and retirements, shown by detailed plant account, are set forth in Exhibit No. 3-A under the respective rate base sections for each revenue requirement study. Mr. Aiton discusses the more significant plant additions in his direct testimony (PAWC Statement No. 3).

I will address the pending water and wastewater acquisitions that the Company has submitted applications for since its last base rate case. The accrued depreciation at June 30, 2024 and 2025, respectively, related to net plant in service was determined by the Company's depreciation consultant, John J. Spanos (PAWC Statement No. 11), and is shown in Exhibit No. 3-A under the respective rate base sections for each revenue requirement study.

Q. Do the continuing property records, as maintained by the Company and augmented by depreciated original cost studies and fair market value appraisals for acquisitions, accurately reflect additions and retirements to plant in service?

A. Yes, they do. The Company's filing for the future fair market value acquisition of the BASA wastewater assets reflects the net value of the assets at the ratemaking rate base agreed to by the parties in the Joint Petition for Approval of Unanimous Settlement of All

Issues, filed with the Commission on August 14, 2023, Docket No. A-2022-3037047.[3] For the fair market value acquisition of the Brentwood wastewater system, the Company also reflects the net value of the ratemaking rate base reflected in the Company's acquisition application at Docket No. A-2021-3024058.[4] Preliminary depreciated original cost studies were completed and filed with the Commission for the planned acquisitions of Farmington Township Water and Wastewater assets (Docket Nos. A-2023-3042587 and A-2023-3042567). The original cost study will be updated after closing to reflect the original cost and accumulated depreciation as of the closing date. For the planned acquisition of STMA wastewater assets (Docket No. A-2023-3042058), the Company performed an analysis of the original cost and accumulated depreciation of this system, and after closing, will file with the Commission an original cost study to reflect the original cost and accumulated depreciation as of the closing date. For the planned acquisition of Audubon Water Company (Docket No. A-2023-3043194), the Company will not prepare an original cost study, as Audubon Water Company is a Commission-regulated utility, and it is assumed that the original cost and accumulated depreciation of Audubon Water Company's assets have been captured in Audubon Water Company's current rates.

Q. Are the data shown on the Company's continuing property records an accurate basis for developing the original cost of property?

A. Yes, they are.

[3] The Commission is expected to enter a final order in this case at its November 9, 2023 public meeting.
[4] The Commission is expected to enter a final order in this case at its March 14, 2024 public meeting.

Q. Do the Company's rate base claims include the cost of water and wastewater assets that are to be acquired during the pendency of this proceeding, but prior to the end of the FPFTY?

A. Yes, the Company's rate base claims include the cost of water assets to be acquired from Farmington Township and Audubon Water Company, and the wastewater assets to be acquired from BASA, the Borough of Brentwood, Farmington Township and STMA.

Q. Has the Company made any adjustments to its historic test year end CIAC and CAC balances?

A. Yes, adjustments have been made to the balances for Water Operations, Wastewater SSS General Operations, and Wastewater CSS Operations. The June 30, 2023 CIAC balance for Water Operations has been increased to reflect $2,436,273 of additional contributions projected to be received through the end of the FPFTY. In addition, the FTY reflects $2,147,017 of additional contributions associated with the planned acquisition of Farmington Water, and the FPFTY reflects $4,210,372 of additional contributions associated with the planned acquisition of Audubon Water. The CAC balance has been adjusted to reflect $3,789,774 and $8,464,954 of additional advances projected to be received through the FTY and FPFTY, respectively, and decreased for $3,732,642 and $6,535,508 of refunds anticipated to be paid during 2024 and 2025 with respect to customer advances received in prior years.

For the Wastewater SSS General Operations, the June 30, 2023 CIAC balance has been increased to reflect $752,142 of additional contributions projected to be received through the FPFTY. In addition, $925,000 and $1,970,206 of contributions associated with the

planned acquisitions of STMA and Farmington, respectively, have been included for the FTY.

For the Wastewater CSS Operations, the June 30, 2023 CIAC balance has been increased to reflect $132,667 of additional contributions projected to be received through the FPFTY. The Company does not anticipate any changes to the CAC balances for its Wastewater SSS General Operations or Wastewater CSS Operations. In addition, the Company does not anticipate any changes to the CIAC and CAC balances for its remaining operations. Therefore, no adjustments to the June 30, 2023 balances for those operations are required.

These calculations are shown in Exhibit No. 3-A under the respective rate base sections for the revenue requirements of Water Operations, Wastewater SSS General Operations, and Wastewater CSS Operations.

Q. Has the Company excluded from its rate base certain property recorded in its utility plant accounts?

A. Yes. The amount of $1,558,014 has been excluded from the Company's rate base claim for Water Operations as shown in Exhibit No. 3-A under the corresponding rate base section. For the most part, the excluded amount represents the original cost of utility plant in service for which the Company received relocation reimbursement payments from the Commonwealth of Pennsylvania. The remainder of the excluded amount consists of certain allowance for funds used during construction ("AFUDC") accruals that the Company agreed to remove from rate base pursuant to a stipulation approved in the Company's rate proceeding at Docket No. R-00932670.

Q. Please explain the addition to rate base for materials and supplies.

A. In accordance with procedures previously approved by the Commission, the Company's materials and supplies claims were determined by averaging the monthly balances of the materials and supplies account for the thirteen months ended June 30, 2023. The calculations of the materials and supplies claims are shown in Exhibit No. 3-A under the respective rate base sections for each revenue requirement study. The Company's materials and supplies claim for the BASA WW Operations and Brentwood WW Operations were derived as follows: (1) monthly balances of the materials and supplies accounts for PAWC's Wastewater SSS General Operations for the thirteen months ended June 30, 2023 were summed and the total divided by the number of customers in those wastewater districts to determine the average materials and supplies balance per customer; and (2) the average materials and supplies balance per customer was multiplied by the total number of customers served by the water and wastewater systems. The calculation of this adjustment is shown in Exhibit No. 3-A under the respective rate base sections for materials and supplies.

Q. Please explain the Company's claim for cash working capital.

A. The cash working capital requirement is calculated by multiplying the net lag days (revenue lag days less expense lag days) by the average operating expenses per day (total operating expenses / 365 days). All calculations have been made to two decimal places. In accordance with Commission policy, uncollectible accounts expense and amortizations were subtracted from total operating expenses before performing the calculation. The calculation of the gross cash working capital requirement is shown in Exhibit No. 3-A

under the respective rate base sections for cash working capital for each of the Company's revenue requirements.

Q. How were the revenue and expense lags determined?

A. Revenue and expense lags were determined by a lead-lag study. The revenue lag consists of three components: (1) the lag from the midpoint of the service period to the end of the service period, i.e., the meter-read date; (2) the time required for bill preparation and mailing; and (3) the lag in receipt of payment. The first component was calculated as follows: the sum of the number of service days relative to each customer bill in the last quarter of the HTY was calculated. That figure was divided by two to determine the interval from the midpoint to the end of the service period. The average of the service days for the period April through June 2023 was then computed, resulting in a service lag period of 15.30 days.

The second component is billing lag. The billing lag of two days used for this calculation was proposed by a witness for the Commission's Bureau of Investigation and Enforcement and agreed to by the Company in a prior base rate case at Docket No. R-2013-2355276.

The third component, the collection lag, requires a further calculation to determine the average length of time that revenues are outstanding before payment. This calculation was performed as follows: (1) daily accounts receivable balances for the twelve months ended June 30, 2023 were summed and the total divided by the number of days in the same period to determine the average accounts receivable balance per day; (2) the Company's total revenue for the twelve months ended June 30, 2023 was divided by the number of days in the same period to determine the average revenue billed per day; and (3) the average

accounts receivable balance per day was divided by the average revenue billed per day. The result of the division in (3), above, yields the number of days on average that billed revenue was outstanding prior to receipt of payment, which in the study was 32.52 days. This is a standard calculation used by other water utilities in Pennsylvania. Finally, 0.79 days of "Lockbox Collection Lag" was added to the revenue lag, which represents the time between the collection of customer remittances to a post office box and the deposit of those funds into the Company's bank account. The total revenue lag for this study, when the items above are combined, is 50.61 days.

The expense lag was based upon a comprehensive lag study. Using procedures approved by the Commission in prior proceedings and data obtained from the Company's centralized accounts payable system, samples of expense vouchers for each category of expense were analyzed to determine the lag between the receipt of goods or services and the applicable payment due date. A summary of the expense lags by category is shown in Exhibit No. 3-A under the corresponding rate base section. These lag calculations reflect an addition for "Check Float," which represents the average amount of time that it takes for a vendor to deposit a payment from the Company. For the Labor and Service Company calculations, an addition of 0.05 days was included, which has the same purpose as the "Check Float," but is instead calculated by taking a weighted average of direct deposit and check payments to employees. The detailed calculations of the revenue and expense lag days appear in the response to Question No. FR V. 8 of the Commission's Standard Filing Requirements.

Q. Please explain the addition to rate base for accrued and prepaid taxes.

A. This addition to rate base reflects the fact that, on balance, taxes are paid in advance. The lead/lag in payment of Pennsylvania corporate net income tax is based on payments

throughout the test year. The General Assessment tax lead was calculated based upon actual payment dates in 2022, for the tax period of July 1, 2022 through June 30, 2023 and a payment in 2023, for the tax period of July 1, 2023 through June 30, 2024. The lead/lag day calculations for the payment of taxes imposed by the Public Utility Realty Tax Act ("PURTA") and federal income tax were based upon statutory payment schedules. The lag for local property taxes was determined using the regular expense lag calculation, which was discussed above. Payments are made by check, and the average payment was a lead of (23.52) days, adjusted to (13.96) when Check Float was accounted for. The calculations of the lead/lag days for the aforementioned taxes are set forth in Exhibit No. 3-A in the respective rate base sections for each of the Company's revenue requirements. The net lead/lag days for each tax are then applied to the pro forma tax amounts, as shown in the applicable section of Exhibit No. 3-A, to calculate the overall working capital effect which, in this instance, is positive for all operations. Thus, the average net lead in payment of these taxes constitutes an addition to cash working capital requirements and, therefore, is reflected as a rate base addition.

Q. Please explain the addition to rate base for acquisition adjustments.

A. There are two types of acquisition adjustments claimed by the Company in this case. The first type represents utility plant acquisition adjustments. The second type represents acquisition transaction and closing costs. These are further broken down to the unamortized balance of adjustments that were approved in prior base rate cases and adjustments that the Company is seeking approval for in this case. The applicable rate base claims and docket numbers are shown on Exhibit No. 3-A under the rate base section entitled Acquisition Adjustments. Exhibit No. 3-C provides additional support, including

a copy of Appendix E of the Joint Petition for Settlement at Docket No. R-2022-3031672, for those acquisition adjustments approved in the Company's last base rate case. In this case, as discussed above, the Company is seeking approval of the estimated acquisition transaction and closing costs for the planned acquisitions of the Farmington Township water and wastewater systems, the Audubon Water Company water system, the STMA wastewater system, the Borough of Brentwood wastewater system and the BASA wastewater system.

Q. Please describe the adjustments made to the transaction cost balances approved in the last rate case for the Creekside Homeowner's Association water acquisition.

A. The total transaction and closing cost estimates at December 31, 2023 approved by the Commission were reconciled to the actual balance on the Company's books at the time of this filing. This resulted in an increase to the originally authorized balances by $11,512 for Creekside water. Supporting detail for this adjustment can be found in the Company's Exhibit No. 3-A and Exhibit No. 3-C pages for Water Operations.

Q. Please explain other rate base additions for water.

A. The fifth addition to Water Operations, shown in Exhibit No. 3-A in the corresponding rate base section, is the continued amortization of the Company's receivership costs related to Winola Water Company, as approved by the Commission in the Company's last base rate case at Docket No. R-2022-3031672.

Q. Please explain the items that were deducted from rate base for the Company's water and wastewater operations.

A. Three items were deducted from rate base for the Company's water and wastewater operations. The first deduction, which offsets cash working capital requirements, relates to the average net lag in payment of interest on long-term debt and dividends on preferred stock. The deduction was calculated using procedures previously approved by the Commission and is set forth in Exhibit No. 3-A in the corresponding rate base section for each of the Company's revenue requirements.

The second deduction is for the balance of the regulatory liability for the federal income tax savings associated with the TCJA for the Stub Period and the unamortized balance of the Negative Deferred Tax Credit reconciliation from January 28, 2021 through January 27, 2023. This deduction only relates to Water, Wastewater SSS and Wastewater CSS operations.

The third deduction is for accumulated deferred taxes as addressed by Company Witness Melissa Ciullo in her direct testimony, PAWC Statement No. 7.

Q. Please describe the adjustment to the Rate Base deduction for the Negative Deferred Tax Credit.

A. In accordance with PAWC Tariff Water-PA P.U.C. No. 5, page 40 (Negative Surcharge for Deferred Tax Credit), the Company filed, on April 30, 2023, a reconciliation of the difference between the total credits provided to customers for bills rendered from January 1, 2022 through January 27, 2023 in the amount of $11,440,000. The calculated difference of $719,248, plus applicable interest has been added to the unamortized balance approved at Docket No. R-2022-3031672 of $208,073, plus applicable interest, and is included as an addition to rate base offsetting the balance of the regulatory liability for

federal income tax savings associated with the TCJA Stub Period for Water Operations. The Company is seeking approval of this adjustment with an amortization period of two years.

Q. Were additional items deducted from rate base for the Company's water operations?

A. Yes. Four rate base deductions apply only to the Company's water operations. The first item is unamortized investment tax credits generated prior to 1971. These amounts are shown in Exhibit No. 3-A under the respective rate base sections. Investment tax credits accrued in 1971, and thereafter, are amortized to income and are not permitted to be deducted from rate base under the requirements of Section 46(f) of the Internal Revenue Code.

Another item deducted from rate base for water operations, shown in Exhibit No. 3-A under the respective rate base sections, is a thirteen-month average of extension deposits in suspense. The Company requires applicants for water service to advance a portion of the cost to construct main extensions needed to serve them under specified conditions, as more fully set forth in the Company's tariff. At the completion of the project, accounting entries are made to adjust the estimated costs of construction to the actual costs of construction. The difference is recorded in the extension deposit in suspense account until it is either refunded to the party that made the advance, or an additional amount owed is collected. In its final Order at Docket No. R-891208, the Commission agreed with the Office of Consumer Advocate ("OCA") that an average balance of such funds should be reflected in rate base, and the Company has made this adjustment, shown in Exhibit No. 3-A, to comply with that determination.

The third rate base offset for Water Operations comprises CIAC and CAC booked by Citizens prior to its acquisition by PAWC. The Joint Petition for Settlement at Docket No. R-2009-2097323 ("Citizens Joint Petition for Settlement"), as approved by the Commission for ratemaking purposes, provided as follows:

> (i) $14,147,208, or 40%, of the December 31, 2009, balance of the net customer advances for which Citizens retained the refund liability upon the Company's acquisition of Citizens' water utility assets will be deemed deducted from the Company's rate base; (ii) $8,895,830 (100%) of the December 31, 2009 balance of the net contributions in aid of construction the OCA proposed to attribute to PAWC from its acquisition of Citizens' water assets will be deducted from PAWC's rate base; (iii) in future base rate cases, the foregoing balances, adjusted to reflect accumulated amortization, will be deducted for ratemaking purposes until such balances are fully amortized; and (iv) the applicable depreciation rate for PAWC's transmission and distribution mains will be used to calculate the amortization of such balances for ratemaking purposes to offset the portion of depreciation expense on gross plant in service that is related to these advances and contributions.

The adjustments that were made to implement the terms of the Citizens Joint Petition for Settlement, set forth above, are detailed in Exhibit No. 3-A under the rate base section.

The final rate base deduction is for the Commission-approved amortization associated with an equipment discount.

Q. Do the adjustments explained above constitute all of the adjustments necessary to establish the Company's rate base?

A. Yes, they do.

Depreciation And Amortization Expense

Q. Have adjustments been made to the annual depreciation expense recorded on the Company's books at June 30, 2023?

A. Yes. Adjustments to booked amounts were made to a full annual amount of the depreciation accrual for the Company's plant in service as of June 30, 2023 and for plant to be added during 2024 and 2025. The annual accrual was determined largely on a Straight-Line Average Remaining Life basis. The adjustments to reflect the annual accrual for depreciation related to plant in service in 2023, 2024, and 2025 are shown in Exhibit No. 3-A under the respective rate base sections, and, as noted previously, are explained and sponsored by Mr. Spanos.

For Water Operations, a reduction to depreciation was made for CIAC and CAC associated with the Company's acquisition of the water assets from Citizens Joint Petition for Settlement at Docket No. R-2009-2097323.

Additionally, for each of the operational areas, a reduction to depreciation was made for the capitalized portion of depreciation on vehicles.

Q. Please explain the Company's claim for "Amortizations" that appears in Exhibit No. 3-A.

A. The amortization claims for each of the revenue requirements are described as follows and are reflected in Exhibit Nos. 3-A and 3-B under the respective operational sections:

For Water Operations, nine amortization claims are made:

(1) amortization of the UPAA amounts as previously approved by the Commission which include the Commission-approved utility plant acquisition adjustments associated

with the Company's acquisition of the water assets of the former PG&W, Lake Spangenberg Water Company, the Fernwood Community Water System, the Olwen Heights Water Service Company, Inc., Indian Rocks Property Owners Association, North Fayette County Municipal Authority, the Wildcat Park Corporation, the Municipal Authority of the Borough of Turbotville, and Creekside Homeowner's Association, plus the proposed UPAA adjustment for the planned Farmington Township and Audubon Water Company acquisitions. The Company is proposing to extend the amortization period for those amortizations which are currently due to end at December 31, 2025 in order to reflect a more appropriate ongoing annual level of expense in proposed rates. The detail of the amortizations can be found in Exhibit No. 3-A. Additionally, the Company has included the previously Commission approved amortizations of the transaction and closing costs associated with the acquisitions of the Borough of Turbotville, Steelton Borough Authority, Valley Township, SLIBCO Utilities, and Creekside Homeowner's Association, as well as the proposed amortization of the transaction and closing costs associated with the water system acquisitions of Farmington Township and Audubon Water Company as part of this claim;

(2) amortization of the previously Commission-approved equipment discount noted earlier in my testimony;

(3) amortization of SFAS 109 regulatory assets – AFUDC as previously approved by the Commission;

(4) amortization of receivership costs for Winola Water Company, Docket No. R-2022-3031672 as previously discussed in my testimony;

(5) amortization of the TCJA Stub Period and deferred taxes, as previously discussed in my testimony. The Company is proposing a new two-year amortization period for the TCJA Stub Period June 30, 2024 balance, which is currently due to end at December 31, 2025, in order to reflect a more appropriate ongoing annual level of expense in proposed rates. Additionally, as previously discussed in my testimony, the Company has included the two-year amortization of the reconciliation of the negative surcharge for deferred tax credits as required under the PAWC Tariff Water – PA P.U.C. No. 5, page 40. This reconciliation covers the period from January 28, 2021 through January 27, 2023;

(6) Commission-approved amortization of DEP Safe Drinking Water fees, reflecting an updated amortization period of two years on the balance as of June 30, 2024;

(7) post-in-service AFUDC for new plant additions made after the acquisition of Steelton Borough Authority. *See* 66 Pa.C.S. §1329(f), reflecting an updated amortization period of two years on the balance as of June 30, 2024;

(8) deferred depreciation associated with the Steelton acquisition (*see* 66 Pa.C.S. §1329(f)), as approved at Docket No. R-2020-3019369, reflecting an updated amortization period of two years on the balance as of June 30, 2024; and

(9) Commission-approved amortization of the deferred financial impacts authorized in the Commission's September 15, 2021 Order at Docket No. P-2020-3022426 associated with the COVID-19 emergency response. As part of the settlement of the Company's last rate case at Docket No. R-2022-3031672, the Company agreed it would cease the deferral of carrying costs and uncollectible expense as of December 31, 2022. The balance of the deferral at June 30, 2023 reflects a reduction to the deferred settlement balance in the amount of $3,627,490. The Company proposes to amortize the revised

balance of the $1,555,253 liability, as of June 30, 2024, over a period of two years. Company witness Cas Swiz further discusses the COVID-19 emergency response deferral in his testimony (PAWC Statement No. 8).

For Wastewater SSS General Operations, five amortization claims are made:

(1) Commission-approved utility plant acquisition adjustments associated with the Company's acquisition of the wastewater assets of the former Clean Treatment Sewage Company, Delaware Sewer Company, and the Borough of Turbotville, and Foster Township, plus the proposed Negative UPAA, that will be recorded as a regulatory liability, for STMA. For the former Clean Treatment Sewage Company, the Company is proposing a new two-year amortization period, which is currently due to end on December 31, 2025, in order to reflect a more appropriate ongoing annual level of expense in proposed rates. Additionally, the Company has included the previously approved amortizations of the transaction and closing costs associated with the acquisitions of the Borough of New Cumberland, the Borough of Turbotville, Sadsbury Township, Exeter Township, Delaware Sewer Company, Valley Township, Foster Township, the Borough of Royersford, Upper Pottsgrove Township, and City of York. In addition, the Company is proposing a 10-year amortization of the acquisition transaction and closing costs associated with the planned acquisition of the wastewater assets of Farmington Township and STMA;

(2) Commission-approved amortization of post-in-service AFUDC for new plant additions made after the acquisition for Exeter Township. The Company also proposes a new two-year amortization period, similar to what was proposed for the amortization of the Steelton Borough Authority post-in-service AFUDC;

(3) Commission-approved amortization of deferred depreciation associated with the acquisition Exeter Township. The Company also proposes a new two-year amortization period, similar to what was proposed for the amortization of the Steelton Borough Authority deferred depreciation;

(4) Commission-approved amortization of the deferred financial impacts authorized in the Commission's September 15, 2021 Order at Docket No. P-2020-3022426 associated with the COVID-19 emergency response, as described above; and

(5) amortization of the TCJA Stub Period and deferred taxes, as described above.

For BASA WW Operations, the only amortization claim being made is the acquisition transaction and closing costs associated with the Company's planned acquisition of the wastewater assets of the BASA, Docket No. A-2022-3037047. These costs are based on the estimates at the time of the application filing and will be updated with actual costs after closing.

For Brentwood WW Operations, the only amortization claim being made is the acquisition transaction and closing costs associated with the Company's planned acquisition of the wastewater assets of the Borough of Brentwood, Docket No. A-2021-3024058. These costs are based on the estimates at the time of the application filing and will be updated with actual costs after closing.

For Wastewater CSS Operations, four amortization claims are made:

(1) Commission-approved acquisition transaction and closing costs associated with the Company's acquisitions of the wastewater assets of Sewer Authority of the City of

Scranton, the Municipal Authority of the City of McKeesport, and the Borough of Kane Authority;

(2) deferred depreciation associated with the acquisition of the Municipal Authority of the City of McKeesport. The Company proposes a new two-year amortization period, similar to what was proposed for the amortization of the Steelton Borough Authority deferred depreciation; and

(3) Commission-approved amortization of the deferred financial impacts authorized in the Commission's September 15, 2021 Order at Docket No. P-2020-3022426 associated with the COVID-19 emergency response, as described above; and

(4) amortization of the TCJA Stub Period and deferred taxes, as described above.

Q. Please describe the adjustments made to the UPAA approved in the Company's last rate case for the Creekside Homeowner's Association water acquisition and Foster Township wastewater acquisition.

A. The UPAA based on the depreciated original cost ("DOC") studies filed with the Company's acquisition applications, and approved by the Commission, for the Creekside water and Foster wastewater systems were reconciled to the final DOC studies received at the time of closing for each acquisition. This resulted in an increase to the originally authorized Negative UPAA, recorded as a regulatory liability, by $205,184 for Creekside water and a decrease of $13,848 for Foster wastewater. Supporting detail for these adjustments can be found in the Company's Exhibit No. 3-A and Exhibit No. 3-C pages for Water Operations and Wastewater SSS Operations for Creekside and Foster, respectively.

Q. Please describe the proposed claim for the amortization of the balance of the deferred expense related to the Arrearage Management Plan ("AMP").

A. In the proceedings involving the Company's petition for approval of an arrearage management plan ("AMP"),[5] the Further Amended Joint Petition for Full Settlement filed with the Commission on September 11, 2023, states in Paragraph 46.c that "During the period that the AMP is considered a pilot program, the Company will record a regulatory asset or liability for amounts over or under the amount included in rates for recovery or refund in the next base rate case." The AMP has not yet been approved by the Commission; thus, no credits have been given related to the AMP. As a result of expenses claimed in the Company's last base rate case at Docket No. R-2022-3031672, a regulatory liability was recorded in the amount of $3,091,875 through June 30, 2024. The Company proposes to refund the annual amount of $1,545,937 through amortization expense over a period of two years.

Property Taxes and General Assessments

Q. Please explain the adjustments to claims for property taxes.

A. PURTA tax is imposed on certain real property dedicated to utility water service in Pennsylvania based upon the fair market value of such property, as determined by applying per-county common level ratios to the assessed values of the property. In Pennsylvania, property taxes imposed on real property not subject to PURTA are administered at the county level. In every county, the sum of local tax rates (school taxes, municipal taxes and county taxes) is applied to the assessed value of each property. However, each county has

[5] ***See*** Petition of Pennsylvania-American Water Company for Approval of an Arrearage Management Plan, Docket No. P-2021-3028195.

its own system for determining assessed value. The Company's claims for its Water Operations, Wastewater SSS General Operations, and Wastewater CSS Operations were calculated based on the ratio of actual 2022/2023 tax liability to tax base. This ratio was applied to the Company's pro forma claim for property tax eligible utility plant at June 30, 2024 and June 30, 2025. These calculations are detailed in Exhibit No. 3-A, Pennsylvania Property Tax under the section for Taxes, Other Than Income. The Company's claim for its BASA and Brentwood WW operations is included as part of the Acquisition O&M Adjustments in Exhibit No. 3-A, and are described by Company Witness Lori O'Malley (PAWC Statement No. 5).

Q. Please explain the adjustment for General Assessments.

A. The General Assessments are imposed on regulated utilities to provide funding for the Commission and Damage Prevention Committee, the Office of Consumer Advocate, and the Office of Small Business Advocate. The General Assessment rates are applied to a tax base consisting of revenue from water and wastewater service. To calculate pro forma General Assessments, the current assessment rates from the fiscal year July 1, 2023 to June 30, 2024 were applied to a tax base consisting of pro forma sales revenue under present and proposed rates as shown on Exhibit No. 3-A under the respective rate base sections. The Company will update these adjustments with the new General Assessment rates once they are available. Backup for the calculation of these adjustments is provided in the Company's Exhibit No. 3-A under the respective rate base sections.

<u>Rate Case and Regulatory Expense</u>

Q. Please explain the adjustment for regulatory and rate case expense.

A. These adjustments are being made to reflect and normalize the costs related to this rate case and to recover the annual amounts necessary to amortize other regulatory expenses that were incurred by the Company with the Commission's prior approval.

The costs for preparing and litigating this rate filing consist of the costs associated with the Company's consultants and outside legal counsel. Costs for customer communications, mailings, legal notices, administrative fees, and miscellaneous expenses associated with this application are also part of the regulatory expense adjustment. Some of these costs have already been incurred. The Company's claim reflects its total costs, both incurred to date and estimated to be incurred through the completion of this case. PAWC proposes that these costs be normalized over a two-year period, which reflects the average period of time in between the Company's last three base rate filings. Detail of the cost categories included in the projected rate case expense can be found in the Rate Case Expense section of Exhibit No. 3-B.

Q. Please identify the additional claims for regulatory expense the Company is making in this case.

A. The Company is claiming for recovery three other categories of regulatory expense. First, the Company is continuing the ten-year amortization of the costs it incurred for a Customer Class Demand Study performed in accordance with the terms of the Commission-approved settlement of PAWC's rate proceeding at Docket No. R-2011-2232243. The costs of that study were approved for recovery via a ten-year amortization, beginning in January 2018, as part of the Company's 2017 base rate case at Docket No. R-2017-2595853. Second, the Company is continuing the ten-year amortization of the costs incurred for the preparation, filing, litigation and resolution by settlement of the Company's petition at Docket

No. P-2017-2606100 for approval of a plan to replace customer-owned lead service pipes. Those costs were approved for recovery via a ten-year amortization, beginning in January 2021, as part of the Company's 2020 base rate case, Docket No. 2020-3019369. Third, the Company is updating the amortization period for the Commission-approved amortization of the costs associated with performing a stormwater fee feasibility study, which was conducted in order to assess potential recovery and rate methodology options for stormwater costs of combined sewer systems, as required under the approved settlement at Docket No. R-2020-3019369. The Company is proposing to amortize those costs over two years, in order to reflect a more appropriate ongoing annual level of expense in proposed rates.

Q. Has the Company allocated the pro forma rate case and regulatory expense?

A. Yes. The Company uses an allocation factor based on customer counts to apportion the projected rate case and regulatory expense to the individual water and wastewater operations for which separate revenue requirement studies have been provided in Exhibit No. 3-A. The allocation factor will be explained in more detail below. The Rate Case Expense section of Exhibit No. 3-B shows the costs allocated to each separate revenue requirement study from applying this allocation factor.

Allocation of Costs Between Water and Wastewater Operations

Q. Please describe the Company's approach to allocating costs between water and wastewater operations in this rate proceeding.

A. The Company is proposing to allocate costs between water and wastewater operations utilizing the same allocation methodology the Company used in its last base rate case at Docket No. R-2022-3031672.

Q. Please describe the cost categories that fall under the term "common costs".

A. The costs classified as "common costs" include Service Company expenses (including postage and customer accounting costs), insurance other than group, rate case expense and regulatory expense, and the costs associated with the PAWC Corporate Headquarters (Capital Campus) located in Mechanicsburg, Pennsylvania.

Q. What is the methodology used by the Company to allocate common costs between its water and wastewater operations?

A. The Company allocates the above categories based on four different factors, as shown in Schedule SDG-1.

Factor 1 – Customers (for Service Company and Customer Accounting). This factor was calculated based on the number of customers as of June 30, 2023. In allocating costs to PAWC, the Service Company identifies customers that receive both water and wastewater service from the Company. These accounts are not treated as two separate customers in the customer-count used to allocate Service Company costs. Instead, each dual service customer is assigned the value of 1.05 in the count of total Company customers and the value of 0.05 in the count of wastewater customers. PAWC used the same convention in allocating costs between water and wastewater operations. The dual service customers counted in the manner explained above plus wastewater-only customers are summed to arrive at the wastewater customer count used for the customer-based allocation.

Factor 2 – Customers (for Rate Case and Regulatory Expense). This calculation is based on the total number of customers for each water or wastewater system and allows for subsets of allocations based on water and wastewater SSS, water and wastewater SSS and

wastewater CSS customers. The breakdown of this level is necessary, as there are certain rate case expense components which only relate to specific customer types. For example, cost of service and rate design activities are completed for water and wastewater SSS customers, but separately for wastewater CSS customers. The application of this allocation factor is shown in the Rate Case Expense section of Exhibit No. 3-B.

Factor 3 – Customers (for PAWC's Corporate Headquarters (Capital Campus)). This allocation is based on each water or wastewater system's percentage of the Company's total customers as of June 30, 2023.

Factor 4 – Depreciated Cost of Utility Plant in Service (for Insurance Other Than Group). This factor is based on the depreciated original cost of total net utility plant in service as of June 30, 2023 for each water or wastewater system. The percentages of utility plant are applied to the pro forma Insurance Other Than Group expenses claimed by the Company to determine the portion of total expenses allocated to water and wastewater operations. The Company's expense for Insurance Other than Group consists of property, vehicle and general liability, which closely aligns with plant assets.

Proposed Water and Wastewater Tariffs

Q. Please discuss the proposed changes shown in the proposed Water Tariff.

A. The Company is proposing changes to its Water Tariff, which include the following:

1. In the Schedule of Rates, the Company's low-income discounts have been modified to add an additional tiered discount for 151%-200% of FPL, as discussed in the testimony of Charles Rea, (PAWC Statement No. 10). Additionally, the actual discount rate will be reflected in the tariff as opposed to the billed rate.

2. The Company proposes including a new Revenue Decoupling Mechanism ("RDM") as further discussed by Company witnesses Everette and Rea in PAWC Statement Nos. 1 and 10, respectively.
3. The Company proposes including a new Environmental Compliance Investment Charge ("ECIC"), as further discussed by Company witnesses Everette, Aiton, and Swiz in PAWC Statement Nos. 1, 3, and 8, respectively.
4. In Rule 3.2 – Application for Street Service Connection, the Company proposes additional language regarding the installation of additional or replacement connections to clarify that, following the installation of an initial street service connection, the customer will be responsible for the costs of installation of new service connections, including in instances where one property is converted into multiple premises.
5. In Rule 4.1 – Right to Reject, the Company proposes language to explicitly permit the Company to refuse to connect to service lines where (1) a customer-side service line is made of lead, (2) where a customer-side galvanized service line was or is downstream of a lead service line or a service line made of unknown material, or (3) if a customer either refuses or fails to respond to the Company's request to replace a customer-owned lead service pipe through the Company's Lead Service Pipe replacement plan.
6. In Rule 4.9 – Customer Responsibility for Service Pipe, the Company proposes a clarification that the Company may require documentation to establish the existence of repaired leaks.

7. In Rule 12.1 – Termination by Company, the Company proposes to specifically allow for termination pursuant to the terms of an agreement with a non-Company wastewater provider.
8. In Rule 27.1 – General Provisions under Main Extensions for Bona Fide Service Applicants, the Company proposes removing the description of residential service applicant(s) to clarify that a service applicant may be either residential or non-residential.

Q. Please discuss the proposed changes shown in the proposed Wastewater Tariff.

A. The Company is proposing changes to its Wastewater Tariff, which include the following:

1. In the Schedule of Rates, the Company is adding back into Rate Zone 1b-Metered a section identifying Special Rate Charges that apply to bulk wastewater contract customers in the York service territory. In the Company's 2022 rate case, the entirety of the Special Rate Charges section, which would govern in the absence of a valid contract for bulk wastewater customers, was removed because the customers did in fact have valid contracts. It was an oversight that the filing did not instead include a Special Rate Charges section permitting the Company to charge bulk wastewater customers in the York service territory the rates set forth in their respective contracts with the Company. This change corrects that section.
2. In the Schedule of Rates, the Company's low-income discounts have been modified to add an additional tiered discount for 151%-200% of FPL, as discussed in the testimony of Charles Rea, (PAWC Statement No. 10).

3. In the Schedule of Rates, Miscellaneous Fees and Charges, the Company proposes to add "or water usage" on page 14 to correlate to the updated definition for Equivalent Dwelling Unit (or EDU) definition on page 22.
4. In the Schedule of Rates, Miscellaneous Fees and Charges, the Company proposes to delete the references to special capacity charges applicable to McKeesport.
5. In the Schedule of Rates, Miscellaneous Fees and Charges, the Company proposes to correct the Rate Zone 1 Sludge Discharge Fee to replace "Above 12%" with "Above 10%," consistent with the hauler agreement.
6. The Company proposes to include a new RDM as further discussed by Company witnesses Everette and Rea in PAWC Statement Nos. 1 and 10, respectively.
7. The Company proposes to include a new ECIC as further discussed by Company witnesses Everette, Aiton, and Swiz in PAWC Statement Nos. 1, 3, and 8, respectively.
8. In the Rules and Regulations, Section A – Definitions, the Company proposes modifications to the definitions of "Combined Sewer" (No. 12) and "Sanitary Sewer" (No. 73).
9. In the Rules and Regulations, Section A – Definitions, the Company proposes modifications to the calculation described in the definition of "Equivalent Dwelling Units" (or "EDU").
10. In the Rules and Regulations, Section C – Applications for Service, the Company proposes adding language to Section C.1 – Service Application Required.
11. In the Rules and Regulations, Section C – Applications for Service, the Company proposes a new Section C.7, which reflects a change to the tariff consistent with the

pro forma tariff submitted for approval as part of the Company's Application seeking approval of the acquisition of the Brentwood wastewater system at Docket No. A-2021-3024058.

12. In the Rules and Regulations, Section C – Applications for Service, the Company proposes new Sections C.8, C.9 and C.10, adding language regarding Meter Installation, Meter Space and Location, and Meter Removal.

13. In the Rules and Regulations, Section F – Billing and Collection, the Company adds a new Section F.9 Calculation of Winter Average Consumption, proposing to use a winter average consumption to be applied to volume of sewer use for specified meter reads, as discussed by Company Witness Mr. Rea, (PAWC Statement No. 10).

14. In the Rules and Regulations, Section M.E(2) – Main Extensions for Bona Fide Service Applicants, the Company proposes to remove the description of residential service applicant(s) to clarify that a service applicant may be either residential or non-residential.

15. In the Rules and Regulations, Section P – Grinder Pumps for Paint-Elk Wastewater, the Company proposes to add a section applying to Farmington Wastewater.

16. In the Rules and Regulations, Section T.2.1(b)(iii) – Prohibited Discharge Standards, the Company proposes to add clarifying language to describe exceptions to substances such as grease, which may cause obstruction to the flow in the sewer system.

17. In the Rules and Regulations, Section T – Wastewater Control and Industrial Pretreatment Regulations, the Company proposes to correct heading and subpart lettering and numbering on pages 62, 67, and 70.

18. In the Rules and Regulations, Sections T.2.13 – Grease Traps and T.3.7 – Additional Pretreatment Measures, the Company proposes to add language requiring that cleaning and maintenance records for the interceptor or traps must be made available upon Company request.

19. In the Rules and Regulations, Sections T.6.8 – Notice of Violation/Repeat Sampling and Reporting, the Company proposes to add clarifying language that was unintentionally omitted from the section.

20. In Rules and Regulations, Section T.6.13 – Certification Statements, the Company proposes to delete language that applies to Publicly Owned Treatment Works, but not to the Company.

21. In Rules and Regulations, Section T.7 – Fees and Charges, the Company proposes to add language clarifying that the general and specific fees charged in this section are billed on a quarterly basis.

22. In Rules and Regulations, Section T.7.2 – Specific Fees parts (a) and (b), the Company proposes to add defining language for measured pollutant concentrations as part of the industrial loading fee calculation, as well as excess loading fee.

23. In Rules and Regulations, Section U – Industrial Pretreatment Program – Pollutant Removal Costs, the Company proposes to update the BOD5 removal cost price per pound in the Coatesville district consistent with the settlement in the Company's prior base rate case.

24. In Rules and Regulations, Section X – Special Provisions Concerning Trunk Lines in the ALCOSAN Bulk Treatment Service Area, the Company proposes language consistent with the pro forma tariff submitted for approval as part of the Company's Application seeking approval of the acquisition of the Brentwood wastewater system at Docket No. A-2021-3024058.

Q. Has the Company provided a redlined version of the proposed tariffs?

A. Yes, the Company has provided a redlined version of its proposed tariffs showing all changes made relative to its current Water and Wastewater Tariffs, which include the changes to the rules described above, the Company's proposed rate changes, and the consolidation of rate zones, discussed in more detail in the testimony of Charles Rea (PAWC Statement No. 10).

Rate Structure and Rate Design Proposal

Q. Please discuss the Company's rate zones in effect following the last base rate case.

A. A large majority of the Company's customers are now being billed under the same set of rates for metered service. This consolidation represents the continued implementation of the Commission-approved concept of Single Tariff Pricing. Water Rate Zone 2 (Valley), Rate Zone 3 (SLIBCO), Rate Zone 4 (Turbotville), and Rate Zone 5 (Steelton) continue to have separate rate schedules.

Additionally, Wastewater Rate Zone 2 (New Cumberland), Rate Zone 3 (Scranton), Rate Zone 4 (Kane), Rate Zone 5 (Valley), Rate Zone 6 (McKeesport), Rate Zone 7 (York), Rate Zone 8 (Foster), and Rate Zone 9 (Royersford) continue to have separate rate schedules.

Q. Please summarize the rate zones that have been created since the last rate case.

A. Since the last case, no new rate zones have been created. The Company will, upon completion of the planned acquisitions I described previously in my testimony, add an additional two water rate zones for the Farmington and Audubon water acquisitions and an additional four wastewater rate zones for the BASA, STMA, Brentwood and Farmington wastewater system acquisitions.

Q. Has the Company created separate tariff groups for SSS and CSS customers?

A. In the settlement of the Company's last base rate case at Docket No. R-2022-3031672, PAWC committed to creating a separate tariff group for current and future CSS customers. The Company's proposed wastewater tariff reflects the use of Rate Zone 1 for the consolidation rates of SSS customers, using subparts such 1a, 1b, 1c, etc., for those SSS customers who are currently on separate rates, but moving towards consolidation in the future. Rate Zone 2 will be used for the consolidation rates of CSS customers, using subparts such as 2a, 2b, 2c, etc., for those CSS customers who are currently on separate rates, but moving towards consolidation in the future. In addition, the Company created a Rate Zone 3 for Brentwood, which is a collection only system, whose rates will be derived from the cost of service for collection services rather than treatment costs.

Q. Does the Company propose the consolidation of water and wastewater rates in this proceeding?

A. Yes. The Company proposes consolidation of certain water and wastewater rate zones and changes to the current water and wastewater rate structure. Please refer to the direct testimony of Company witness Charles Rea (PAWC Statement No. 10) for a detailed explanation of the Company's proposals.

Q. Did the Company employ any of the authority provided by amendments to the Public Utility Code made by Act 11 of 2012 in developing its rate design in this case?

A. Yes, in this case the Company is proposing to incorporate wastewater revenue requirements into its water revenue requirement. Combining water and wastewater revenue requirements and the resulting rate design are discussed in the direct testimony of Company witness Ashley Everette (PAWC Statement No. 1) and the direct testimony of Company witness Charles Rea (PAWC Statement No. 10).

Q. Please summarize the Company's commitments regarding rate increases for certain prior acquisitions.

A. The Scranton system, acquired by the Company in 2016, is subject to rate increase requirements or limitations. In the Scranton acquisition proceeding, the Commission approved the Amended Asset Purchase Agreement ("APA"), which provided that PAWC would not propose rate increases that would be equal to an amount greater than a 1.9% Compounded Annual Growth Rate ("CAGR") increase in annual revenues over a ten-year period relative to the starting amount of annual revenues. As part of the resolution of the Company's last base rate case, revenues from the Company's Scranton operations were increased by 63.55%. The pro forma revenues at present rates exceed the level of increase PAWC is permitted to propose under the CAGR provision during the ten years following closing of the acquisition. As such, and in compliance with the APA, the Company is not proposing an increase to the wastewater rates of the Scranton system. However, the Company does reflect the roll in of the Distribution System Improvement Charge ("DSIC") at present rate revenues, therefore changing the actual rate being charged to Scranton customers, while the average monthly bill will remain unchanged.

The York wastewater system was acquired by the Company in 2022. Section 6.04 of the York APA provides as follows:

> Buyer shall, subject to PaPUC approval in a future base rate proceeding, maintain base rates for System customers for a minimum period of three (3) years from the Closing Date.

The Foster Township wastewater system was also acquired by the Company in 2022. Section 4.1 of the Foster APA provides as follows:

> After Closing, Buyer will begin charging Seller's current rates (as of the date of this Agreement) as Buyer's base rates (but not other charges, including those discussed below) within Seller's service area (such service area being consistent with Schedule 1), which shall not be increased by the Buyer until after December 31, 2024.

Q. Please summarize the Company's commitments regarding rate increases for the pending acquisitions included in this filing and since the last rate case.

A. The Company expects to close on its acquisitions of the BASA wastewater assets in 2023 and the Brentwood wastewater assets in 2024.

In the BASA application proceedings, a unanimous Settlement was reached and filed with the Commission on August 14, 2023 ("BASA Settlement"). The BASA Settlement (p. 7) provided for the following regarding the proposed rate increase:

> PAWC will propose to move the System to 1.4x the current System rate or PAWC's proposed Rate Zone 1 system-average wastewater rates, whichever is lower, upon the later of (a) the first anniversary of Closing or (b) January 1, 2025.

For the Brentwood acquisition, Section 7.03 of the APA provides as follows:

> The Base Rate shall not be increased until after the second anniversary of the Closing Date.

Q. Please summarize how the Company has complied with the above-referenced BASA Settlement.

A. The Company proposes rates for the BASA system consistent with the revenue increases outlined in the Settlement. Please refer to the testimony of Charles Rea (PAWC Statement No. 10) for detail on the proposed increases.

Q. Please summarize the Company's proposal with respect to the systems for which the Company has agreed to not increase rates for a certain period of time.

A. For Foster, York, BASA, and Brentwood, the Company requests that the Commission permit the Company to implement the proposed changes to rates consistent with the Company's agreements with each of these systems. The Company's pro forma tariff supplement reflects this proposal by showing each system's current rates as continuing to be effective and proposed rates taking effect on the date indicated on the pro forma tariff supplement.

Conclusion

Q. Does this conclude your direct testimony at this time?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)**
	:	**R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Stacey D. Gress**, hereby state that the facts set forth in the pre-marked Statement No. 4 and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: November 8, 2023

Stacey D. Gress

Factor 1: Customers (for Service Company and Customer Accounting)

As of 06/30/23	Total Customers	Dual Water/Wastewater Customers	Wastewater Only Customer Equivalent (5% of Dual Customers)	Wastewater Only	Total Customers For Allocation (Wastewater: D+E)	Allocation Factor
Water Operations	681,707				681,707	95.4%
Wastewater SSS General Operations	55,222	35,697	1,785	19,525	21,310	3.0%
Wastewater CSS Operations	42,363	32,363	1,618	10,000	11,618	1.6%
Total	779,292	68,060	3,403	29,525	714,635	100%

Factor 2: Customers (for Rate Case and Regulatory Expense)

As of 06/30/25	Total Customers	Allocation Factor	Water	WW SSS Only	W & WW SSS Only	WW CSS
Water Operations	688,859	85.5%	100.0%		92.5%	
Wastewater SSS General Operations	56,212	7.0%		100.0%	7.5%	
BASA WW Operations	14,755	1.8%				
Brentwood WW Operations	3,974	0.5%				
Wastewater CSS	42,414	5.3%				100.0%
Total	806,214	100.00%	100%	100%	100%	100%

[1] Includes Audubon & Farmington Water in Water Operations and Farmington WW & Sadsbury in Wastewater SSS General Operations.

Factor 3: Customers (for Pennsylvania-American Corporate Headquarters -Capital Campus)

As of 06/30/23	Total Customers	Allocation Factor
Water Operations	681,707	87.5%
Wastewater SSS General Operations	55,222	7.1%
Wastewater CSS Operations	42,363	5.4%
Total	779,292	100.00%

Factor 4: Depreciated Utility Plant in Service (Insurance Other Than Group)

As of 06/30/23	**Depreciated Utility Plant in Service**	**Percentage**
Water Operations	4,758,924,437	81.1%
Wastewater SSS General Operations	660,270,985	11.3%
Wastewater CSS Operations	451,444,764	7.7%
Total Net Utility Plant in Service	5,870,640,186	100.00%

[1]5% is the percentage used per the Service Company methodology of qualifying a dual service customer. The Massachusetts Formula approach supports that dual service customers be counted as one customer plus 5% of another customer.
The Massachusetts Formula includes three factors: gross property, plant and equipment, direct labor expenses, and gross revenues

Factor 4: Depreciated Utility Plant in Service (Insurance Other Than Group) Schedule SDG-1
Pennsylvania-American Water Company Page 2 of 2

As of June 30, 2023	Water Operations	Wastewater SSS General Operations	Wastewater CSS Operations	Company Total
Non-Depreciable Plant	27,559,070	15,255,948	4,463,355	47,278,373
Depreciable Plant	6,244,774,954	906,492,568	739,866,378	7,891,133,900
Total Utility Plant In Service	6,272,334,024	921,748,516	744,329,733	7,938,412,273
Deduct:				
Contributions In Aid Of Construction	279,323,043	45,689,787	11,746,599	336,759,428
Customer Advances For Construction	61,692,641	833,590	-	62,526,231
Excluded Property	1,558,014	-	-	1,558,014
Sub-Total	342,573,698	46,523,376	11,746,599	400,843,673
Net Utility Plant In Service	5,929,760,326	875,225,140	732,583,134	7,537,568,600
Accumulated Depreciation	1,170,835,888	214,954,155	281,138,370	1,666,928,413
Depreciated Utility Plant In Service	4,758,924,437	660,270,985	451,444,764	5,870,640,186
Percentage of Total	81.1%	11.2%	7.7%	100.0%

PAWC STATEMENT NO. 4-R

REBUTTAL TESTIMONY

OF

STACEY D. GRESS

WITH REGARD TO

PENNSYLVANIA-AMERICAN WATER COMPANY'S

CLAIMED RATE BASE, DEPRECIATION AND AMORTIZATION EXPENSE, RATE CASE AND REGULATORY EXPENSE, AND PROPOSED TARIFF CHANGES AND RATE DESIGN PROPOSAL

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: FEBRUARY 21, 2024

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PENNSYLVANIA-AMERICAN WATER COMPANY

REBUTTAL TESTIMONY OF STACEY D. GRESS

I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q. What is your name and business address?

A. My name is Stacey D. Gress. My business address is 1 Water Street, Camden, NJ 08102.

Q. Have you submitted direct testimony in this proceeding?

A. Yes, I submitted direct testimony on behalf of Pennsylvania-American Water Company ("PAWC" or the "Company") Statement No. 4. My direct testimony contains a description of my background and qualifications.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to certain parts of the testimony of witnesses from the Office of Consumer Advocate ("OCA"), the Pennsylvania Public Utility Commission ("Commission") Bureau of Investigation and Enforcement ("I&E"), and the Office of Small Business Advocate ("OSBA").

Q. How is your testimony organized?

A. First, my rebuttal testimony discusses updates the Company proposes to rate base and then addresses other parties' proposed adjustments to rate base, particularly as it relates to acquisitions. As part of that discussion, I will respond to I&E witness Ethan H. Cline's recommended reporting requirements for fully projected future test year ("FPFTY") plant additions. Next, I respond to other parties' proposed concomitant adjustments to amortization and depreciation expense related to the proposed removal of acquisitions from rate base, as well as the Company's proposed revisions to rate case expense and depreciation expense. Finally, my rebuttal testimony addresses changes to the Company's

proposed water and wastewater tariffs and certain rate design recommendations made by other parties in this case.

Q. Have you prepared any exhibits to accompany your rebuttal testimony?

A. Yes. PAWC Exhibits SDG-1R to SDG-4R were prepared at my direction and under my supervision and are described in my rebuttal testimony.

II. RATE BASE

A. Accumulated Deferred Income Tax and Materials and Supplies

Q. Has the Company revised its claim for the accumulated deferred income taxes ("ADIT") associated with the Audubon Water Company ("AWC") acquisition?

A. Yes. In response to interrogatory OSBA 06-002, the Company recognized that the net book plant of $360,229 should have been utilized to calculate the ADIT instead of the original cost of $9.1 million. Please refer to Exhibit SDG-1R for details on the increase to the water operations deferred taxes of $1,852,196, which results in a $198,110 reduction to the revenue requirement for AWC.

Q. Has the Company revised its claim with respect to materials and supplies for Wastewater CSS Operations?

A. Yes. In reviewing its initial filing, the Company found that there was a discrepancy in the amount included in the revenue requirement model for materials and supplies under the Wastewater CSS revenue requirement. Volume 03- Exhibit 3-A page 217, line 13 reflected $176,374. However, the correct amount is $492,348, which appears on page 220. The Company has revised its revenue requirement model to include the proper amount of $492,348 in Exhibit 3-A Revised, page 217R.

B. Proposed Acquisitions

Q. Please describe the acquisitions that the Company is proposing in this rate case.

A. The Company has proposed the inclusion of two water system acquisitions, Farmington Township ("Farmington") and AWC, as well as four wastewater system acquisitions, Farmington, Sadsbury Township Municipal Authority ("STMA"), Butler Area Sewer Authority ("BASA"), and the Borough of Brentwood ("Brentwood"). Company witness Abruzzo discusses each of these acquisitions in more detail in PAWC Statement Nos. 6 and 6-R.

Q. Do I&E witnesses Cline, Kubas, and Okum, and OCA witness Smith object to including the six acquisitions listed above?

A. Yes. Collectively, these I&E and OCA witnesses recommend that the six acquisitions be excluded from this rate proceeding. Mr. Cline addresses Farmington water and AWC. Mr. Kubas addresses Brentwood, BASA, Farmington wastewater, and STMA. Ms. Okum and Mr. Smith address each acquisition.

Q. Do you agree with I&E and OCA's arguments regarding these acquisitions?

A. No. The disallowances proposed by witnesses Cline, Kubas, Okum, and Smith related to the Company's acquisitions should be rejected. Please refer to Mr. Abruzzo's rebuttal testimony for a further explanation of why the Commission should allow these acquisitions to be included in this proceeding.

Q. Does OSBA witness Higgins propose adjustments to PAWC's proposed rate treatment of the BASA and Brentwood acquisitions if they close and are approved to be included in the rate case?

A. Yes. If the BASA and Brentwood acquisitions do close, Mr. Higgins recommends:

- PAWC should not be permitted to allocate any costs of the BASA acquisition to water customers. Instead, "[t]he burden of funding the rate mitigation for BASA wastewater customers . . . most appropriately rests with PAWC shareholders until such time that BASA rates can be revisited consistent with the BASA settlement." OSBA Statement No. 1 pp. 22-23.

- "[T]he incremental Brentwood revenue requirement that exceeds the targeted increase to Brentwood customers should be absorbed by shareholders rather than shifted to water customers." OSBA Statement No. 1 p. 28.

I am advised by counsel that a similar proposal was rejected by the Commission in PAWC's 2020 base rate case, Docket No. R-2020-3019369. (*See* Opinion and Order entered on February 25, 2021 at 80-83). In that proceeding, the OCA recommended that the Commission require PAWC's shareholders (rather than PAWC's water customers) to pay approximately $16.7 million in revenue requirement relating to four wastewater systems that PAWC acquired pursuant to Section 1329, 66 Pa. C.S. § 1329. The Commission rejected that proposal. According to the Commission, that proposal would have violated PAWC's rights under the Pennsylvania and Federal Constitutions against taking private property without compensation, because it would force shareholders to commit investment capital to furnish safe and reliable service to the customers of the acquired wastewater systems while denying shareholders any compensation for the use of their funds. The Commission further found that, under Section 1329, once a selling utility's rate base is incorporated into the acquiring utility's rate base (i.e., the Company's rate base), that portion of the rate base is no different than any other portion of the Company's rate base and the Company is entitled to earn a reasonable rate of return on the new rate base consistent with standard ratemaking principles. Finally, the Commission stated:

> We also agree with the Company's argument that, in the circumstances, applying Section 1311(c) in conjunction with Section 1329 is in the public interest because otherwise larger, viable public utilities would be discouraged from acquiring

> municipal and wastewater systems and contravene the legislative intent and the Commission's policy of encouraging consolidation and regionalization.

Id. at 82 (note omitted). Mr. Higgins fails to acknowledge this decision, let alone explain why the Commission should reach a different result in this case. I believe the Commission should reach the same result in this case.

Q. Does OSBA witness Higgins recommend any disallowance of rate base or amortization expense with respect to the AWC acquisition?

A. Yes. In his Direct Testimony, Mr. Higgins recommended that the Commission not allow any recovery of amortization expense or rate base related to the AWC acquisition. Mr. Higgins noted that PAWC proposes to acquire the AWC system for $8 million, include the net book value of AWC's assets ($360,229) in rate base, and amortize the remaining $7,639,771 over ten years. Mr. Higgins states that he found the "disparity between the net book value of the Audubon assets and the proposed acquisition price to be of great concern for customers." OSBA Statement No. 1 at 29.

In response to PAWC-OSBA-II-2, Mr. Higgins further clarified his position. PAWC Exhibit SDG-2R. He stated that, if closing were to occur after the issuance of a final unappealable order approving the acquisition, he does not object to placing the net book value (*i.e.,* the original cost less depreciation) of AWC's assets into rate base. However, he continues to object to recovery of any acquisition cost in excess of the net book value of AWC's assets.

Q. Do you agree with Mr. Higgins' proposal?

A. No. There is no statutory basis for disallowing recovery of *any* acquisition costs in excess of the net book value of AWC's assets because there is allegedly too great of a difference between the purchase price and the system's original cost less depreciation. As described in

PAWC St. No. 6 and 6-R by Mr. Abruzzo, PAWC and AWC are unaffiliated entities that negotiated at arm's length, reaching an agreement for the acquisition of the AWC system that will provide numerous public benefits, at a reasonable purchase price that is comparable to (and lower than) the per customer purchase price of several recent acquisitions. Mr. Abruzzo's Direct and Rebuttal Testimony explain in detail that AWC is a small, non-viable public utility. PAWC has demonstrated that it satisfies all of the statutory criteria for a Section 1327 acquisition premium for the AWC system.

C. Concomitant Adjustments to Rate Base

Q. Please summarize I&E witness Okum's and OCA witness Smith's adjustments to cash working capital.

A. Ms. Okum and Mr. Smith recommend adjustments to cash working capital based on adjustments made to the Company's expense claims.

Q. Please summarize I&E witnesses Kubas' and Cline's, and OCA witness Smith's adjustments to acquisition transaction and closing costs.

A. Mr. Kubas, Mr. Cline, and Mr. Smith all recommend the removal of acquisition transaction and closing costs for all 6 acquisitions described in section B above, based on adjustments made to the Company's rate base claim.

Q. Please summarize OCA witness Smith's adjustments to interest synchronization.

A. Mr. Smith recommends an adjustment to synchronized interest in the income tax calculation based on the OCA's rate base and weighted cost of debt adjustments.

Q. Do you agree with I&E and OCA's concomitant adjustments to cash working capital?

A. Partially. While I do agree that an adjustment needs to be made to cash working capital for the changes to labor expense and rate case expense that the Company proposes, I do

not agree with the dollar amount calculated by I&E and OCA's witnesses, since the Company disagrees with most of the I&E and OCA adjustments to expenses. As such, the concomitant adjustments reflected in Exhibit 3-A, pages 31R, 101R, 148R, 181R, and 221R should be adopted instead of the proposed amounts from I&E and OCA.

Q. Do you agree with I&E and OCA's concomitant adjustments to acquisition transaction and closing costs and interest synchronization?

A. No. As explained in my testimony and the testimony of other PAWC witnesses, the Company disagrees with the I&E and OCA adjustments to rate base and the weighted cost of debt. As such, the proposed concomitant adjustments should be rejected and the Company's proposed amounts should be adopted.

D. Reporting Requirements

Q. What is the Company's position on Mr. Cline's proposed reporting requirements with respect to future plant additions?

A. The Company agrees that the parameters proposed by Mr. Cline to update the Summary of Detailed Plant Accounts in Exhibit 3-A no later than December 1, 2025 are reasonable and will provide the Commission with timely and appropriate information regarding projected investments in utility plant during the FPFTY.

III. EXPENSES, INCLUDING DEPRECIATION AND AMORTIZATION

A. Rate Case Expense

Q. Have you revised the Company's claim for rate case expense?

A. Yes. In the supplemental response to OCA 15-010 part b, the Company provided an update to the amount of rate case expense incurred during this proceeding through December 31,

2023. PAWC Exhibit SDG-3R includes an update to OCA 15-010_Supplemental part b which reflects the Company's actual rate case expense incurred through January 31, 2024 in the amount of $1.231 million, compared to an originally claimed total amount of $2.194 million. The Company is increasing its claim for rate case expense due to the need to incur additional expenses in respect to (i) the eight in-person public input hearings held in connection with this proceeding (including costs associated with necessary communications and employee travel-related expenses), and (ii) responding to the voluminous discovery requests (over 2,600 including subparts) and formal complaints (over 100 responses) received by the Company to date, and (iii) addressing all issues raised by the other parties' direct testimony. These changes result in an updated claim for rate case expense of $2,346,140, or a $76,259 increase to the normalized rate case expense amount.

B. Depreciation Expense

Q. Please describe the adjustment that the Company has made to depreciation expense for Water Operations?

A. In response to OCA interrogatory 24-003, the Company identified that Project Number I24-610022 PA Lead Service Line Inventory on page 9 of Exhibit 3-C was incorrectly classified under utility plant account 348 – Other Tangible Equipment. The Company has corrected the classification of this project to utility plant account 340.3 – Computer Software. The revision to the account for the $11,163,718 in the FPFTY results in an increase to depreciation expense of $1,660,367. Please refer to the rebuttal testimony and exhibits of John Spanos for more detail on the impact to the depreciation study. The revision to the depreciation expense also resulted in a change to accumulated depreciation,

increasing the balances by $1,258,893 for the FPFTY. Please refer to PAWC Exhibit 3-A Revised, pages 25R and 66R.

C. Concomitant Adjustments to Expenses

Q. Please summarize I&E witnesses Kubas and Cline, and OCA witness Smith's adjustments to amortization and depreciation expense.

A. As discussed above, I&E and OCA witnesses all propose to exclude from the rate case the acquisitions for wastewater assets of BASA, Brentwood, STMA, and Farmington, and the water systems of Farmington and AWC. Removing these acquisition investments from rate base results in concomitant adjustments to amortization expense as well as depreciation expense.

Q. Do you agree with I&E and OCA's concomitant adjustments to amortization and depreciation expense as it relates to acquisitions?

A. No, I do not. As stated earlier in my testimony and by other PAWC witnesses, the Company does not agree with the I&E and OCA adjustments to exclude these acquisitions from the rate case. As such, the concomitant adjustments should be rejected and the Company's proposed amounts should be adopted.

IV. TARIFF CHANGES AND RATE DESIGN

A. Tariff Changes

Q. Is the Company proposing any revisions to its proposed pro forma water and wastewater tariffs as part of its rebuttal testimony?

A. Yes, the following minor changes to PA P.U.C. Tariff Wastewater No. 16 are reflected in PAWC Exhibit SDG-4R:

1. Page 11.6, remove the language that references a service charge per EDU and replace with service charge "per meter".
2. Page 15, eliminates "Previous Amortization" and "Upcoming Amortization" from Section A of the RDM.
3. Page 31.1, adds language to Section F.9. to clarify that the winter averaging calculation is not applicable to bulk wastewater customers.

The following minor changes to PA P.U.C. Tariff Water No. 5 are reflected in PAWC Exhibit SDG-4R:

1. Page 40, eliminates "Previous Amortization" and "Upcoming Amortization" from Section A of the RDM.
2. Page 62, add in new Section 12.8, as described below.
3. Page 63, move Section 13.1 from prior page.

Q. Please describe OCA witness Barbara R. Alexander's opinion of PAWC's proposed addition to Tariff Rule 12.1(H) in PAWC's proposed water tariff.

A. PAWC's proposed addition to Tariff Rule 12.1(H) authorizes termination of service by the Company, "In accordance with the terms of any agreement with a non-Company wastewater provider for non-payment of wastewater service when due." Ms. Alexander recommends that PAWC's tariff proposal should be rejected due to it being misleading and confusing, and that the Company include a new Section (Ms. Alexander suggests Section 12.3) of the tariff that governs solely the process of PAWC's termination of water service performed pursuant to the Water Services Act and agreements in place between PAWC and the non-utility service provider due to the customer's non-payment of sewer charges owed to the customer's non-utility service provider.

Q. Does the Company agree with Ms. Alexander's proposal to modify Tariff Rule 12.1(H)?

A. As discussed by Company witness Tawana Dean, the Company's internal process for terminating service under the Water Services Act already addresses and mitigates the concerns raised by Ms. Alexander. As a result, the Company largely accepts Ms. Alexander's recommendation that Proposed Tariff Rule 12.1(H) should be withdrawn and replaced by a new Section (the Company will add a Section 12.8) to govern the process by which PAWC's termination of water service is performed pursuant to the Water Services Act and agreements in place between PAWC and a non-utility wastewater provider for non-payment of wastewater service when due. As a point of clarification, PAWC's Proposed Tariff Rule 12.1(H) proposes to allow for termination pursuant to the terms of an agreement with any non-Company wastewater provider (and not simply "municipalities, municipal authorities, cities, boroughs, or townships" as Ms. Alexander suggests). (OCA St. No. 6, at 26).

Ms. Alexander also recommends that, as part of Section 12.8, the tariff section should explain the PAWC-customer's right that once notice is issued by the non-Company wastewater service provider, PAWC cannot go forward with termination if a customer dispute is filed in accordance with the Water Services Act or if the customer produces a medical certification. The Company generally agrees with this recommendation. The Company also agrees that the new Section 12.8 should state the Company will post notice at the customer's premises at the time of shut-off. Ms. Alexander's recommendations reflect the actual practices by PAWC that are already in place and the Company accepts

memorializing these practices in its tariff. The requested revisions, including the removal of proposed Rule 12.1(H), are found in Exhibit SDG-4R.

B. Rate Design

Q. Please describe OCA witness Mierzwa's recommendation for imputed revenues for acquired systems with delayed effective dates.

A. Mr. Mierzwa recommends that if the Commission approves a delayed effective date for the rate zones of York, Foster, BASA and Brentwood, it should also adopt PAWC's rate design proposal and require the Company to impute revenues by calculating the proof of revenues based on the new rates that will become effective after the delay.

Q. Do you agree with Mr. Mierzwa's proposal?

A. Yes. The Company plans to impute any revenues prior to the delayed effective date in accordance with the proof of revenues.

Q. What is Mr. Kubas' position regarding Scranton CSS Wastewater rates?

A. Mr. Kubas proposes higher rates for Zone 3 than the Company proposed in its initial filing, as shown in I&E Exhibit No. 3, Sch. 19. In making his proposal, Mr. Kubas references the Order entered on October 19, 2016 at Docket No. A-2016-2537209 ("Scranton Order") in which the Commission approved PAWC's acquisition of the Scranton Sewer Authority ("SSA").

Q. How do you respond to this proposal?

A. The Company proposed Scranton CSS Wastewater rates consistent with the Scranton Order. Footnote 16 of the Scranton Order states, "The APA also limits the magnitude of increases that *PAWC may propose* for SSA's customers through a multi-year period, but does not restrict any other party's rate case position or bind the Commission in any way."

(Scranton Order, at 70. Emphasis in original). Any increase in rates for Scranton customers directed by the Commission should be just and reasonable and consistent with the concept of gradualism to avoid rate shock.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

PAWC Statement No. 04R
Accumulated Deferred Income Taxes

	Present Rates 6/30/2025	Reference
Deferred Taxes	(1,082,382,243)	Exhibit 3A, Page 43, line 1
As Filed - Deferred Tax Asset	1,776,548	OCA 06-002_Attachment
Remove Audubon	(1,084,158,791)	
Revised - Deferred Tax Liability	(75,648)	OCA 06-002_Attachment
Total	(1,084,234,439)	Exhibit 3A, Page 43R, line 1
Difference	1,852,196	

AUDUBON WATER COMPANY
Asset Detail - Acquisition
Estimated Close 12/31/2024

OSBA 06-002_Attachment
Part a

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
303.20	311.13	Other Source of Supply Land	1980	$ 20,505	n/a	n/a	$ -	$ 20,505	$ -	$ -	$ 20,505
303.20	311.13	Other Source of Supply Land	1998	15,000	n/a	n/a	-	15,000	-	-	15,000
		Total - Account 311.13		$ 35,505			$ -	$ 35,505	$ -	$ -	$ 35,505
311.20	311.2	Power and Pumping Land	1963	$ 6,000	n/a	n/a	$ -	$ 6,000	$ -	$ -	$ 6,000
303.40	311.5	Distribution Reservoir & Standpipe L	1976	$ 546	n/a	n/a	$ -	$ 546	$ -	$ -	$ 546
303.40	311.5	Distribution Reservoir & Standpipe L	1978	467	n/a	n/a	-	467	-	-	467
		Total Account - 311.5		$ 1,013			$ -	$ 1,013	$ -	$ -	$ 1,013
304.20	312.1	Source of Supply Structures	1965	$ 39,947	30	3.33%	$ 39,947	$ -	$ -	$ 39,947	$ -
304.20	312.1	Source of Supply Structures	1979	476	30	3.33%	476	-	-	476	-
304.20	312.1	Source of Supply Structures	1985	382	30	3.33%	382	-	-	382	-
		Total Account - 312.1		$ 40,805			$ 40,805	$ -	$ -	$ 40,805	$ -
307.00	312.13	Springs & Wells	1966	$ 67,127	30	3.33%	$ 67,127	$ -	$ -	$ 67,127	$ -
307.00	312.13	Springs & Wells	1973	6,465	30	3.33%	6,465	-	-	6,465	-
307.00	312.13	Springs & Wells	1974	1,254	30	3.33%	1,254	-	-	1,254	-
307.00	312.13	Springs & Wells	1977	623	30	3.33%	623	-	-	623	-
307.00	312.13	Springs & Wells	1978	10,160	30	3.33%	10,160	-	-	10,160	-
307.00	312.13	Springs & Wells	1979	25,648	30	3.33%	25,648	-	-	25,648	-
307.00	312.13	Springs & Wells	1980	71,673	30	3.33%	71,673	-	-	71,673	-
307.00	312.13	Springs & Wells	1981	6,939	30	3.33%	6,939	-	-	6,939	-
307.00	312.13	Springs & Wells	1982	4,138	30	3.33%	4,138	-	-	4,138	-
307.00	312.13	Springs & Wells	1983	2,219	30	3.33%	2,219	-	-	2,219	-
307.00	312.13	Springs & Wells	1984	6,717	30	3.33%	6,717	-	-	6,717	-
307.00	312.13	Springs & Wells	1985	7,392	30	3.33%	7,392	-	-	7,392	-
307.00	312.13	Springs & Wells	1986	8,719	30	3.33%	8,719	-	-	8,719	-
307.00	312.13	Springs & Wells	1986	10,375	30	3.33%	10,375	-	-	10,375	-
307.00	312.13	Springs & Wells	1987	72,521	30	3.33%	72,521	-	-	72,521	-
307.00	312.13	Springs & Wells	1990	1,473	30	3.33%	1,473	-	-	1,473	-
307.00	312.13	Springs & Wells	1996	13,316	30	3.33%	12,141	1,175	887	13,028	288
307.00	312.13	Springs & Wells	1997	55,583	30	3.33%	48,760	6,823	3,702	52,462	3,121
307.00	312.13	Springs & Wells	1998	37,325	30	3.33%	31,456	5,869	2,486	33,942	3,383
307.00	312.13	Springs & Wells 10/15 Worthing	2006	84,300	50	2.00%	28,672	55,628	3,372	32,044	52,256
307.00	312.13	Springs & Wells VFTP & Wren Road L	2007	3,400	15	6.67%	3,394	6.29	6.29	3,400.00	-
307.00	312.13	Springs & Wells Well #14	2010	230,633	50	2.00%	59,346	171,287	9,225	68,571	162,062
307.00	312.13	Springs & Wells AWC#1	2012	1,183	15	6.67%	851	332	158	1,009	174
307.00	312.13	Springs & Wells AWC#2	2012	28,337	15	6.67%	20,398	7,939	3,780	24,178	4,159
307.00	312.13	Springs & Wells Wells 6&9	2012	10,959	15	6.67%	7,888	3,071	1,462	9,350	1,609
307.00	312.13	Springs & Wells Well#14	2012	5,655	15	6.67%	4,071	1,584	754	4,825	830
307.00	312.13	Springs & Wells Well #15	2012	6,459	15	6.67%	4,649	1,810	862	5,511	948
307.00	312.13	Springs & Wells	2014	7,938	15	6.67%	4,619	3,319	1,059	5,678	2,260
307.00	312.13	Springs & Wells Wells 7&8	2018	20,878	15	6.67%	6,386	14,492	2,785	9,171	11,707
307.00	312.13	Springs & Wells Wells 6&9	2018	1,800	15	6.67%	551	1,249	240	791	1,009
307.00	312.13	Springs & Wells VFCC #2	2019	700	15	6.67%	166	534	93	259	441
307.00	312.13	Springs & Wells	2021	8,070	15	6.67%	807	7,263	1,077	1,884	6,186
		Total Account - 312.13		$ 819,979			$ 537,599	282,380	31,948	569,547	250,432

AUDUBON WATER COMPANY
Asset Detail - Acquisition
Estimated Close 12/31/2024

OSBA 06-002_Attachment
Part a

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
311.20	312.2	Power and Pumping Structure	1966	$ 19,856	40	2.50%	$ 19,856	$ -	$ -	$ 19,856	$ -
311.20	312.2	Power and Pumping Structure	1972	5,235	40	2.50%	5,235	-	-	5,235	-
311.20	312.2	Power and Pumping Structure	1974	2,761	40	2.50%	2,761	-	-	2,761	-
311.20	312.2	Power and Pumping Structure	1977	3,948	40	2.50%	3,948	-	-	3,948	-
311.20	312.2	Power and Pumping Structure	1978	1,782	40	2.50%	1,782	-	-	1,782	-
311.20	312.2	Power and Pumping Structure	1987	3,349	40	2.50%	3,070	279	167	3,238	111
311.20	312.2	Power and Pumping Structure	1997	21,912	40	2.50%	14,418	7,494	1,096	15,513	6,399
		Total - Account 312.2		$ 58,843			$ 51,070	$ 7,773	$ 1,263	$ 52,333	$ 6,510
330.00	312.5	Distribution Reservoirs & Standpipes	1967	$ 10,333	40	2.50%	$ 10,333	$ -	$ -	$ 10,333	$ -
330.00	312.5	Distribution Reservoirs & Standpipes	1976	49,399	40	2.50%	49,399	-	-	49,399	-
330.00	312.5	Distribution Reservoirs & Standpipes	1977	136	40	2.50%	136	-	-	136	-
330.00	312.5	Distribution Reservoirs & Standpipes	1979	6,736	40	2.50%	6,736	-	-	6,736	-
330.00	312.5	Distribution Reservoirs & Standpipes	1981	826	40	2.50%	826	-	-	826	-
330.00	312.5	Distribution Reservoirs & Standpipes	1982	157,868	40	2.50%	157,789	79	79	157,868	-
330.00	312.5	Distribution Reservoirs & Standpipes	1986	144,024	40	2.50%	135,761	8,263	7,201	142,962	1,062
330.00	312.5	Distribution Reservoirs & Standpipes	1987	10,606	40	2.50%	9,722	884	530	10,253	353
330.00	312.5	Distribution Reservoirs & Standpipes	1988	34,053	40	2.50%	30,337	3,716	1,703	32,040	2,013
330.00	312.5	Distribution Reservoirs & Standpipes	1991	2,655	40	2.50%	2,159	496	133	2,292	363
330.00	312.5	Distribution Reservoirs & Standpipes	1996	21,000	40	2.50%	14,362	6,638	1,050	15,412	5,588
330.00	312.5	Distribution Reservoirs & Standpipes	2000	194,349	40	2.50%	112,798	81,551	9,717	122,516	71,833
330.00	312.5	Distribution Reservoirs & Standpipes	2002	1,800	40	2.50%	952	848	90	1,042	758
330.00	312.5	Distribution Reservoirs & Standpipes	2005	89,750	40	2.50%	40,479	49,271	4,488	44,966	44,784
330.00	312.5	Distribution Reservoirs & Standpipes	2021	3,437	40	2.50%	129	3,308	172	301	3,136
		Total - Account 312.5		$ 726,972			$ 571,918	$ 155,054	$ 25,163	$ 597,081	$ 129,891
304.62	312.62	Stores, Shop and Garage Buildings	1967	$ 5,143	30	3.33%	$ 5,143	$ -	$ -	$ 5,143	$ -
304.62	312.62	Stores, Shop and Garage Buildings	1988	1,161	30	3.33%	1,161	-	-	1,161	-
304.62	312.62	Stores, Shop and Garage Buildings	2005	421	30	3.33%	253	168	28	281	140
		Total - Account 312.62		$ 6,725			$ 6,557	$ 168	$ 28	$ 6,585	$ 140
311.20	316	Electric Pumping Equipment	1974	$ 5,101	10	10.00%	5,101	$ -	$ -	$ 5,101	$ -
311.20	316	Electric Pumping Equipment	1977	10,669	10	10.00%	10,669	-	-	10,669	-
311.20	316	Electric Pumping Equipment	1978	19,466	10	10.00%	19,466	-	-	19,466	-
311.20	316	Electric Pumping Equipment	1979	2,217	10	10.00%	2,217	-	-	2,217	-
311.20	316	Electric Pumping Equipment	1981	6,701	10	10.00%	6,701	-	-	6,701	-
311.20	316	Electric Pumping Equipment	1984	1,419	10	10.00%	1,419	-	-	1,419	-
311.20	316	Electric Pumping Equipment	1989	517	10	10.00%	517	-	-	517	-
311.20	316	Electric Pumping Equipment	1990	7,455	10	10.00%	7,455	-	-	7,455	-
311.20	316	Electric Pumping Equipment	1991	3,895	10	10.00%	3,895	-	-	3,895	-
311.20	316	Electric Pumping Equipment	1992	7,222	10	10.00%	7,222	-	-	7,222	-
311.20	316	Electric Pumping Equipment	1993	5,904	10	10.00%	5,904	-	-	5,904	-
311.20	316	Electric Pumping Equipment	1995	1,239	10	10.00%	1,239	-	-	1,239	-
311.20	316	Electric Pumping Equipment	1996	13,105	10	10.00%	13,105	-	-	13,105	-
311.20	316	Electric Pumping Equipment	1997	16,692	10	10.00%	16,692	-	-	16,692	-
311.20	316	Electric Pumping Equipment	1998	15,203	10	10.00%	15,203	-	-	15,203	-
311.20	316	Electric Pumping Equipment	2000	1,885	10	10.00%	1,885	-	-	1,885	-
311.20	316	Electric Pumping Equipment	2001	3,332	10	10.00%	3,332	-	-	3,332	-
311.20	316	Electric Pumping Equipment	2002	9,849	10	10.00%	9,849	-	-	9,849	-
311.20	316	Electric Pumping Equipment	2003	22,660	15	6.67%	22,660	-	-	22,660	-
311.20	316	Electric Pumping Equipment-Genera	2007	47,669	15	6.67%	47,581	88	88	47,669	-
311.20	316	Electric Pumping Equipment-VPTP	2009	14,252	15	6.67%	13,209	1,043	1,043	14,252	-
311.20	316	Electric Pumping Equipment	2011	19,014	15	6.67%	14,999	4,015	2,536	17,536	1,478
311.20	319	Electric Pumping Equipment	2012	907	15	6.67%	653	254	121	774	133
311.20	316	Electric Pumping Equipment - VF Trl	2013	40,000	25	4.00%	15,618	24,382	3,200	18,818	21,182
311.20	316	Electric Pumping Equipment	2014	5,475	15	6.67%	3,186	2,289	730	3,916	1,559
311.20	316	Electric Pumping Equipment	2017	3,300	15	6.67%	1,237	2,063	440	1,677	1,623
311.20	316	Electric Pumping Equipment	2021	1,759	15	6.67%	176	1,583	235	411	1,348
		Total Account 316		$ 286,907			$ 251,191	$ 35,716	$ 8,393	$ 259,584	$ 27,323
311.50	319	Other Power Pumping Equipment	1972	$ 183	10	10.00%	$ 183	$ -	$ -	$ 183	$ -
311.50	319	Other Power Pumping Equipment	1988	352	10	10.00%	352	-	-	352	-
311.50	319	Other Power Pumping Equipment	1990	171	10	10.00%	171	-	-	171	-
311.50	319	Other Power Pumping Equipment	1998	1,537	10	10.00%	1,537	-	-	1,537	-
311.50	319	Other Power Pumping Equipment	1999	3,900	10	10.00%	3,900	-	-	3,900	-
311.50	319	Other Power Pumping Equipment	2004	26,425	15	6.67%	26,425	-	-	26,425	-
		Total - Account 319		$ 32,568			$ 32,568	$ -	$ -	$ 32,568	$ -

AUDUBON WATER COMPANY
Asset Detail - Acquisition
Estimated Close 12/31/2024

OSBA 06-002_Attachment
Part a

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
320.00	320	Purification System	1968	$ 58,309	15	6.67%	$ 58,309	$ -	$ -	$ 58,309	$ -
320.00	320	Purification System	1973	1,136	15	6.67%	1,136	-	-	1,136	-
320.00	320	Purification System	1978	515	15	6.67%	515	-	-	515	-
320.00	320	Purification System	1979	1,133	15	6.67%	1,133	-	-	1,133	-
320.00	320	Purification System	1980	1,409	15	6.67%	1,409	-	-	1,409	-
320.00	320	Purification System	1981	327	15	6.67%	327	-	-	327	-
320.00	320	Purification System	1985	1,865	15	6.67%	1,865	-	-	1,865	-
320.00	320	Purification System	1986	67,713	15	6.67%	67,713	-	-	67,713	-
320.00	320	Purification System	1988	830	15	6.67%	830	-	-	830	-
320.00	320	Purification System	1989	1,050	15	6.67%	1,050	-	-	1,050	-
320.00	320	Purification System	1989	264,491	15	6.67%	264,491	-	-	264,491	-
320.00	320	Purification System	1989	1,074	15	6.67%	1,074	-	-	1,074	-
320.00	320	Purification System	1990	211	15	6.67%	211	-	-	211	-
320.00	320	Purification System	1991	2,178	15	6.67%	2,178	-	-	2,178	-
320.00	320	Purification System	1996	89,850	20	5.00%	89,850	-	-	89,850	-
320.00	320	Purification System	2000	66,295	20	5.00%	66,295	-	-	66,295	-
320.00	320	Purification System	2006	1,605	20	5.00%	1,364	241	161	1,525	80
320.00	320	Purification System	2021	8,175	20	5.00%	613	7,562	818	1,430	6,745
		Total - Account 320		$ 568,166			$ 560,363	$ 7,803	$ 978	$ 561,341	$ 6,825
331.00	322	Mains & Accessories	1969	$ 578,668	60	1.67%	$ 533,385	$ 45,283	$ 19,328	$ 552,712	$ 25,956
331.00	322	Mains & Accessories	1973	40,021	60	1.67%	34,128	5,893	1,337	35,464	4,557
331.00	322	Mains & Accessories	1974	35,067	60	1.67%	29,299	5,768	1,171	30,470	4,597
331.00	322	Mains & Accessories	1975	7,687	60	1.67%	6,291	1,396	257	6,547	1,140
331.00	322	Mains & Accessories	1976	40,120	60	1.67%	32,136	7,984	1,340	33,476	6,644
331.00	322	Mains & Accessories	1977	9,361	60	1.67%	7,337	2,024	313	7,650	1,711
331.00	322	Mains & Accessories	1978	44,947	60	1.67%	34,452	10,495	1,501	35,954	8,993
331.00	322	Mains & Accessories	1979	31,486	60	1.67%	23,591	7,895	1,052	24,642	6,844
331.00	322	Mains & Accessories	1980	72,506	60	1.67%	53,074	19,432	2,422	55,496	17,010
331.00	322	Mains & Accessories	1981	121,315	60	1.67%	86,710	34,605	4,052	90,762	30,553
331.00	322	Mains & Accessories	1982	21,403	60	1.67%	14,929	6,474	715	15,643	5,760
331.00	322	Mains & Accessories	1983	7,284	60	1.67%	4,956	2,328	243	5,199	2,085
331.00	322	Mains & Accessories	1984	11,530	60	1.67%	7,645	3,885	385	8,030	3,500
331.00	322	Mains & Accessories	1985	4,827	60	1.67%	3,116	1,711	161	3,278	1,549
331.00	322	Mains & Accessories	1986	(14,117)		0.00%	(14,117)	-	-	(14,117)	-
331.00	322	Mains & Accessories	1987	6,927	60	1.67%	4,234	2,693	231	4,466	2,461
331.00	322	Mains & Accessories	1990	616	60	1.67%	344	272	21	365	251
331.00	322	Mains & Accessories	1992	193,349	60	1.67%	101,511	91,838	6,458	107,969	85,380
331.00	322	Mains & Accessories	1993	138,501	60	1.67%	70,325	68,176	4,626	74,951	63,550
331.00	322	Mains & Accessories	1993	315,314	60	1.67%	160,104	155,210	10,531	170,636	144,678
331.00	322	Mains & Accessories	1993	113,132	60	1.67%	57,444	55,688	3,779	61,223	51,909
331.00	322	Mains & Accessories	1994	15,694	60	1.67%	7,698	7,996	524	8,222	7,472
331.00	322	Mains & Accessories	1995	148,671	60	1.67%	70,361	78,310	4,966	75,327	73,344
331.00	322	Mains & Accessories	1996	32,825	60	1.67%	14,968	17,857	1,096	16,065	16,760
331.00	322	Mains & Accessories	1997	402,970	60	1.67%	176,810	226,160	13,459	190,269	212,701
331.00	322	Mains & Accessories	1998	362,740	60	1.67%	152,901	209,839	12,116	165,016	197,724
331.00	322	Mains & Accessories	1999	275,858	60	1.67%	111,521	164,337	9,214	120,734	155,124
331.00	322	Mains & Accessories	2000	210,756	60	1.67%	81,567	129,189	7,039	88,606	122,150
331.00	322	Mains & Accessories	2001	237,924	60	1.67%	87,977	149,947	7,947	95,923	142,001
331.00	322	Mains & Accessories	2002	43,289	60	1.67%	15,260	28,029	1,446	16,706	26,583
331.00	322	Mains & Accessories	2003	243,826	60	1.67%	81,748	162,078	8,144	89,891	153,935
331.00	322	Mains & Accessories	2004	76,377	60	1.67%	24,290	52,087	2,551	26,841	49,536
331.00	322	Mains & Accessories	2005	23,907	60	1.67%	7,190	16,717	798	7,989	15,918
331.00	322	Mains & Accessories	2006	120,084	60	1.67%	34,046	86,038	4,011	38,057	82,027
331.00	322	Mains & Accessories	2007	118,409	60	1.67%	31,529	86,880	3,955	35,484	82,925
331.00	322	Mains & Accessories	2008	18,204	60	1.67%	4,533	13,671	608	5,141	13,063
331.00	322	Mains & Accessories	2010	1,365	60	1.67%	293	1,072	46	339	1,026
331.00	322	Mains & Accessories	2012	2,716	60	1.67%	489	2,227	91	580	2,136
331.00	322	Mains & Accessories	2021	70,270	60	1.67%	1,759	68,511	2,347	4,106	66,164
331.00	322	Mains & Accessories	2022	65,558	60	1.67%	547	65,011	2,190	2,737	62,821
		Total - Account 322		$ 4,251,387			$ 2,156,380	$ 2,095,007	$ 142,468	$ 2,298,848	$ 1,952,539

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333.00	323	Services	1972	$ 4,035	60	1.67%	$ 3,510	$ 525	$ 135	$ 3,645	$ 390
333.00	323	Services	1973	5,819	60	1.67%	4,962	857	194	5,157	662
333.00	323	Services	1974	4,976	60	1.67%	4,157	819	166	4,323	653
333.00	323	Services	1976	5,382	60	1.67%	4,311	1,071	180	4,490	892
333.00	323	Services	1977	6,882	60	1.67%	5,393	1,489	230	5,623	1,259
333.00	323	Services	1978	8,591	60	1.67%	6,585	2,006	287	6,872	1,719
333.00	323	Services	1979	4,202	60	1.67%	3,149	1,053	140	3,289	913
333.00	323	Services	1980	19,674	60	1.67%	14,401	5,273	657	15,059	4,615
333.00	323	Services	1981	15,963	60	1.67%	11,409	4,554	533	11,942	4,021
333.00	323	Services	1982	23,356	60	1.67%	16,291	7,065	780	17,071	6,285
333.00	323	Services	1983	11,691	60	1.67%	7,953	3,738	390	8,344	3,347
333.00	323	Services	1984	5,164	60	1.67%	3,424	1,740	172	3,596	1,568
333.00	323	Services	1985	13,021	60	1.67%	8,408	4,613	435	8,843	4,178
333.00	323	Services	1986	458	60	1.67%	288	170	15	304	154
333.00	322	Services	1987	(3,705)		0.00%	(3,705)	-	-	(3,705)	-
333.00	323	Services	1989	1,168	60	1.67%	674	494	39	713	455
333.00	323	Services	1992	160	60	1.67%	84	76	5	89	71
333.00	323	Services	1993	3,305	60	1.67%	1,679	1,626	110	1,789	1,516
333.00	323	Services	1999	91,952	60	1.67%	37,173	54,779	3,071	40,244	51,708
333.00	323	Services	2000	50,129	60	1.67%	19,401	30,728	1,674	21,075	29,054
333.00	323	Services	2003	2,282	60	1.67%	765	1,517	76	841	1,441
333.00	323	Services	2004	9,981	60	1.67%	3,174	6,807	333	3,508	6,473
333.00	323	Services	2005	1,872	60	1.67%	563	1,309	63	625	1,247
333.00	323	Services	2021	3,137	60	1.67%	79	3,058	105	183	2,954
		Total - Account 323		$ 289,495			$ 154,129	$ 135,366	$ 9,793	$ 163,922	$ 125,573

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334.00	324	Meters	1987	$ 206,795	30	3.33%	$ 206,795	-	-	206,795	-
334.00	324	Meters	1989	9,622	30	3.33%	9,622	-	-	9,622	-
334.00	324	Meters	1990	754	30	3.33%	754	-	-	754	-
334.00	324	Meters	1991	4,942	30	3.33%	4,942	-	-	4,942	-
334.00	324	Meters	1992	6,367	30	3.33%	6,363	4	4	6,367	-
334.00	324	Meters	1993	9,164	30	3.33%	9,159	5	5	9,164	-
334.00	324	Meters	1994	7,169	30	3.33%	7,031	138	138	7,169	-
334.00	324	Meters	1995	4,293	30	3.33%	4,063	230	230	4,293	-
334.00	324	Meters	1996	6,870	30	3.33%	6,264	606	458	6,722	148
334.00	324	Meters	1997	8,176	30	3.33%	7,172	1,004	545	7,717	459
334.00	324	Meters	1998	16,129	30	3.33%	13,593	2,536	1,074	14,668	1,461
334.00	324	Meters	1999	24,926	30	3.33%	20,146	4,780	1,660	21,806	3,120
334.00	324	Meters	2000	12,667	30	3.33%	9,801	2,866	844	10,645	2,022
334.00	324	Meters	2001	20,387	30	3.33%	15,071	5,316	1,358	16,429	3,958
334.00	324	Meters	2002	12,604	30	3.33%	8,882	3,722	839	9,722	2,882
334.00	324	Meters	2003	2,752	25	4.00%	2,214	538	220	2,434	318
334.00	324	Meters	2004	6,200	25	4.00%	4,731	1,469	496	5,227	973
334.00	324	Meters	2005	118,657	25	4.00%	85,627	33,030	9,493	95,120	23,537
334.00	324	Meters	2006	34,396	25	4.00%	23,398	10,998	2,752	26,149	8,247
334.00	324	Meters	2007	71,077	25	4.00%	45,406	25,671	5,686	51,092	19,985
334.00	324	Meters	2008	20,468	25	4.00%	12,228	8,240	1,637	13,866	6,602
334.00	324	Meters	2009	125,997	25	4.00%	70,060	55,937	10,080	80,139	45,858
334.00	324	Meters	2010	77,307	25	4.00%	39,786	37,521	6,185	45,970	31,337
334.00	324	Meters	2011	50,187	25	4.00%	23,750	26,437	4,015	27,765	22,422
334.00	324	Meters	2012	73,750	25	4.00%	31,849	41,901	5,900	37,749	36,001
334.00	324	Meters	2013	5,968	25	4.00%	2,330	3,638	477	2,807	3,161
334.00	324	Meters	2014	25,953	25	4.00%	9,059	16,894	2,076	11,135	14,818
334.00	324	Meters	2015	12,237	25	4.00%	3,765	8,472	979	4,744	7,493
334.00	324	Meters	2016	8,411	25	4.00%	2,240	6,171	673	2,913	5,498
334.00	324	Meters	2017	3,493	25	4.00%	785	2,708	279	1,065	2,428
334.00	324	Meters	2021	14,984	25	4.00%	899	14,085	1,199	2,097	12,887
		Total - Account 324		$ 1,002,702			$ 687,785	$ 314,917	$ 59,301	$ 747,086	$ 255,616
335.00	325	Fire Hydrants	1968	$ 18,664	40	2.50%	$ 18,664	$ -	$ -	$ 18,664	$ -
335.00	325	Fire Hydrants	1973	3,430	40	2.50%	3,430	-	-	3,430	-
335.00	325	Fire Hydrants	1974	78	40	2.50%	78	-	-	78	-
335.00	325	Fire Hydrants	1975	1,383	40	2.50%	1,383	-	-	1,383	-
335.00	325	Fire Hydrants	1976	822	40	2.50%	822	-	-	822	-
335.00	325	Fire Hydrants	1977	1,089	40	2.50%	1,089	-	-	1,089	-
335.00	325	Fire Hydrants	1978	6,762	40	2.50%	6,762	-	-	6,762	-
335.00	325	Fire Hydrants	1979	2,040	40	2.50%	2,040	-	-	2,040	-
335.00	325	Fire Hydrants	1980	4,261	40	2.50%	4,261	-	-	4,261	-
335.00	325	Fire Hydrants	1991	798	40	2.50%	649	149	40	689	109
335.00	325	Fire Hydrants	1992	2,192	40	2.50%	1,726	466	110	1,836	356
335.00	325	Fire Hydrants	1993	3,454	40	2.50%	2,630	824	173	2,803	651
335.00	325	Fire Hydrants	1997	4,153	40	2.50%	2,733	1,420	208	2,940	1,213
335.00	325	Fire Hydrants	1999	94,412	40	2.50%	57,238	37,174	4,721	61,959	32,453
335.00	325	Fire Hydrants	2000	27,044	40	2.50%	15,696	11,348	1,352	17,048	9,996
335.00	325	Fire Hydrants	2001	1,429	40	2.50%	793	636	71	864	565
335.00	325	Fire Hydrants	2002	2,701	40	2.50%	1,428	1,273	135	1,563	1,138
335.00	325	Fire Hydrants	2003	3,915	40	2.50%	1,968	1,947	196	2,164	1,751
335.00	325	Fire Hydrants	2004	3,220	40	2.50%	1,536	1,684	161	1,697	1,523
335.00	325	Fire Hydrants	2006	2,736	40	2.50%	1,164	1,572	137	1,301	1,435
335.00	325	Fire Hydrants	2021	763	40	2.50%	29	734	38	67	696
335.00	325	Fire Hydrants	2022	7,189	40	2.50%	90	7,099	359	449	6,740
		Total - Account 325		$ 192,535			$ 126,209	$ 66,326	$ 7,700	$ 133,909	$ 58,626

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340.50	328	Office Furniture & Equipment - Ret 2	2000	$ 58	5	20.00%	$ 58	$ -	$ -	$ 58	$ -
340.50	328	Office Furniture & Equipment	2002	2,585	3	33.33%	2,585	-	-	2,585	-
340.50	328	Office Furniture & Equipment	2003	4,266	5	20.00%	4,266	-	-	4,266	-
340.50	328	Office Furniture & Equipment	2004	776	7	14.29%	776	-	-	776	-
340.50	328	Office Furniture & Equipment	2004	3,125	7	14.29%	3,125	-	-	3,125	-
340.50	328	Office Furniture & Equipment	2013	6,843	7	14.29%	6,830	13	13	6,843	-
		Total - Account 328		$ 17,653			$ 17,640	$ 13	$ 13	$ 17,653	$ -
341.20	329	Transportation Equipment	2000	$ 58,209	5	20.00%	$ 58,209	$ -	$ -	$ 58,209	$ -
341.30				5,276	7	14.29%	5,276	-	-	5,276	-
	329	Atkins Auto Sales Transp. Equip.	2007								
341.30	329	2013 Auto	2013	57,943	7	14.29%	57,827	116	116	57,943	-
341.10	329	2010 F150 Truck	2015	29,864	7	14.29%	28,551	1,313	1,313	29,864	-
341.10	329	2016 GMC Truck	2016	(1,000)	7	14.29%	-	(1,000)	-	-	(1,000)
341.30	329	2018 Auto	2018	62,186	7	14.29%	40,752	21,434	17,773	58,525	3,661
341.10	329	2019 GMC Truck	2019	65,641	7	14.29%	33,311	32,330	18,760	52,071	13,570
341.20	329	Transportation Equipment	2020	145,401	7	14.29%	42,524	102,877	41,556	84,079	61,322
341.20	329	Transportation Equipment	2021	164,921	7	14.29%	65,951	98,970	47,134	113,086	51,835
341.20	329	Transportation Equipment	2022	172,600	7	14.29%	24,104	148,496	49,329	73,433	99,167
		Total - Account 329		$ 761,041			$ 356,505	$ 404,536	$ 175,981	$ 532,485	$ 228,556
343.00	332	Tools and Work Equipment	1996	$ 34,935	15	6.67%	$ 34,935	$ -	$ -	$ 34,935	$ -
343.00	332	Tools and Work Equipment	1998	12,500	15	6.67%	12,500	-	-	12,500	-
343.00	332	Tools and Work Equipment	2006	4,768	15	6.67%	4,768	-	-	4,768	-
343.00	332	Tools and Work Equipment	2012	5,783	15	6.67%	4,163	1,620	771	4,934	849
343.00	332	Tools and Work Equipment	2013	3,100	15	6.67%	2,018	1,082	414	2,431	669
		Total - Account 332		$ 61,086			$ 58,384	$ 2,702	$ 1,185	$ 59,568	$ 1,518
346.00	333	Communication Equipment	1984	$ 2,141	10	10.00%	$ 2,141	$ -	$ -	$ 2,141	$ -
346.00	333	Communication Equipment	1985	51	10	10.00%	51	-	-	51	-
346.00	333	Communication Equipment	1990	705	10	10.00%	705	-	-	705	-
		Total - Account 333		$ 2,897			$ 2,897	$ -	$ -	$ 2,897	$ -
347.00	334	Miscellaneous Equipment	1978	3,700	10	10.00%	$ 3,700	$ -	$ -	$ 3,700	$ -
347.00	334	Miscellaneous Equipment	1987	1,255	10	10.00%	1,255	-	-	1,255	-
347.00	334	Miscellaneous Equipment	1991	248	10	10.00%	248	-	-	248	-
347.00	334	Miscellaneous Equipment	1995	20,000	10	10.00%	20,000	-	-	20,000	-
		Total - Account 334		$ 25,203			$ 25,203	$ -	$ -	$ 25,203	$ -
		Grand Total		$ 9,187,482			$ 5,637,201	$ 3,550,281	$ 464,214	$ 6,101,415	$ 3,086,067

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	Contributions in Aid of Construction:										
303.40	311.13	Other Source of Supply Land	1980	(20,505)	n/a	n/a	$ -	$ (20,505)	$ -	$ -	$ (20,505)
304.20	312.1	Source of Supply Structures	1965	(14,422)	30	3.33%	$ (14,422)	$ -	$ -	$ (14,422)	$ -
307.00	312.13	Springs & Wells	1966	$ (5,605)	30	3.33%	$ (5,605)	$ -	$ -	$ (5,605)	$ -
307.00	312.13	Springs & Wells	1979	(3,359)	30	3.33%	(3,359)	-	-	(3,359)	-
307.00	312.13	Springs & Wells	1980	(70,106)	30	3.33%	(70,106)	-	-	(70,106)	-
307.00	312.13	Springs & Wells	1981	(4,304)	30	3.33%	(4,304)	-	-	(4,304)	-
307.00	312.13	Springs & Wells Well #14	2010	(99,490)	50	2.00%	(16,297)	(83,193)	(3,980)	(20,277)	(79,213)
307.00	312.13	Springs & Wells AWC#1	2012	(1,183)	15	6.67%	(553)	(630)	(158)	(711)	(472)
307.00	312.13	Springs & Wells AWC#2	2012	(28,337)	15	6.67%	(13,249)	(15,088)	(3,780)	(17,029)	(11,308)
307.00	312.13	Springs & Wells Wells 6&9	2012	(10,959)	15	6.67%	(5,124)	(5,835)	(1,462)	(6,586)	(4,373)
307.00	312.13	Springs & Wells Well#14	2012	(5,655)	15	6.67%	(2,644)	(3,011)	(754)	(3,398)	(2,257)
307.00	312.13	Springs & Wells Well #15	2012	(6,459)	15	6.67%	(3,020)	(3,439)	(862)	(3,881)	(2,578)
		Total Account - 312.13		$ (235,457)			$ (124,261)	$ (111,196)	$ (10,996)	$ (135,257)	$ (100,200)
330.00	312.5	Distribution Reservoirs & Standpipes	2000	$ (194,349)	40	2.50%	$ (68,423)	$ (125,926)	$ (9,717)	$ (78,140)	$ (116,209)
311.20	316	Electric Pumping Equipment	1981	$ (4,054)	10	10.00%	$ (4,054)	$ -	$ -	$ (4,054)	$ -
311.20	316	Electric Pumping Equipment	2011	(5,573)	15	6.67%	(2,825)	(2,748)	(743)	(3,568)	(2,005)
		Total Account 316		(9,627)			$ (6,879)	$ (2,748)	$ (743)	$ (7,622)	$ (2,005)
320.00	320	Purification System	1968	$ (1,812)	15	6.67%	$ (1,812)	$ -	$ -	$ (1,812)	$ -
320.00	320	Purification System	1980	(1,230)	15	6.67%	(1,230)	-	-	(1,230)	-
320.00	320	Purification System	2000	(39,153)	20	5.00%	(22,781)	(16,372)	(3,915)	(26,696)	(12,457)
		Total - Account 320		(42,195)			$ (25,823)	$ (16,372)	$ (3,915)	$ (29,738)	$ (12,457)
331.00	322	Mains & Accessories	1969	$ (165,635)	60	1.67%	$ (89,312)	$ (76,323)	$ (5,532)	$ (94,844)	$ (70,791)
331.00	322	Mains & Accessories	1979	(3,484)	60	1.67%	(1,536)	(1,948)	(116)	(1,653)	(1,831)
331.00	322	Mains & Accessories	1980	(33,930)	60	1.67%	(14,630)	(19,300)	(1,133)	(15,764)	(18,166)
331.00	322	Mains & Accessories	1981	(98,744)	60	1.67%	(41,608)	(57,136)	(3,298)	(44,906)	(53,838)
331.00	322	Mains & Accessories	1982	(4,747)	60	1.67%	(1,954)	(2,793)	(159)	(2,112)	(2,635)
331.00	322	Mains & Accessories	1983	(7,020)	60	1.67%	(2,820)	(4,200)	(234)	(3,055)	(3,965)
331.00	322	Mains & Accessories	1985	(113,945)	60	1.67%	(43,537)	(70,408)	(3,806)	(47,343)	(66,602)
331.00	322	Mains & Accessories	1985	(119,839)	60	1.67%	(45,789)	(74,050)	(4,003)	(49,792)	(70,047)
331.00	322	Mains & Accessories	1992	(193,349)	60	1.67%	(60,586)	(132,763)	(6,458)	(67,043)	(126,306)
331.00	322	Mains & Accessories	1993	(138,501)	60	1.67%	(42,039)	(96,462)	(4,626)	(46,665)	(91,836)
331.00	322	Mains & Accessories	1993	(315,314)	60	1.67%	(95,706)	(219,608)	(10,531)	(106,238)	(209,076)
331.00	322	Mains & Accessories	1993	(113,132)	60	1.67%	(34,339)	(78,793)	(3,779)	(38,117)	(75,015)
331.00	322	Mains & Accessories	1995	(148,671)	60	1.67%	(42,206)	(106,465)	(4,966)	(47,172)	(101,499)
331.00	322	Mains & Accessories	1996	(32,825)	60	1.67%	(8,996)	(23,829)	(1,096)	(10,092)	(22,733)
331.00	322	Mains & Accessories	1997	(402,970)	60	1.67%	(106,484)	(296,486)	(13,459)	(119,943)	(283,027)
331.00	322	Mains & Accessories	1998	(389,996)	60	1.67%	(99,226)	(290,770)	(13,026)	(112,252)	(277,744)
331.00	322	Mains & Accessories	1999	(221,290)	60	1.67%	(54,129)	(167,161)	(7,391)	(61,520)	(159,770)
331.00	322	Mains & Accessories	2000	(210,756)	60	1.67%	(49,483)	(161,273)	(7,039)	(56,522)	(154,234)
331.00	322	Mains & Accessories	2001	(196,336)	60	1.67%	(44,169)	(152,167)	(6,558)	(50,727)	(145,609)
331.00	322	Mains & Accessories	2004	(71,147)	60	1.67%	(13,910)	(57,237)	(2,376)	(16,286)	(54,861)
331.00	322	Mains & Accessories	2005	(5,481)	60	1.67%	(1,018)	(4,463)	(183)	(1,201)	(4,280)
331.00	322	Mains & Accessories	2007	(167,502)	60	1.67%	(27,813)	(139,689)	(5,595)	(33,408)	(134,094)
331.00	322	Mains & Accessories	2008	(21,861)	60	1.67%	(3,415)	(18,446)	(730)	(4,145)	(17,716)
331.00	322	Mains & Accessories	2009	(112,527)	60	1.67%	(16,475)	(96,052)	(3,758)	(20,233)	(92,294)
331.00	322	Mains & Accessories	2010	(99,490)	60	1.67%	(13,589)	(85,901)	(3,323)	(16,912)	(82,578)
		Total - Account 322		$ (3,388,492)			$ (954,769)	$ (2,433,723)	$ (113,176)	$ (1,067,945)	$ (2,320,547)

AUDUBON WATER COMPANY
Asset Detail - Acquisition
Estimated Close 12/31/2024

OSBA 06-002_Attachment
Part a

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
333.00	323	Services	1972	$ (3,090)	60	1.67%	$ (1,575)	$ (1,515)	$ (103)	$ (1,678)	$ (1,412)
333.00	323	Services	1973	(929)	60	1.67%	(465)	(464)	(31)	(496)	(433)
333.00	323	Services	1980	(11,865)	60	1.67%	(5,116)	(6,749)	(396)	(5,513)	(6,352)
333.00	323	Services	1981	(13,605)	60	1.67%	(5,733)	(7,872)	(454)	(6,187)	(7,418)
333.00	323	Services	1982	(5,508)	60	1.67%	(2,267)	(3,241)	(184)	(2,451)	(3,057)
333.00	323	Services	1983	(9,267)	60	1.67%	(3,723)	(5,544)	(310)	(4,032)	(5,235)
333.00	323	Services	1999	(73,763)	60	1.67%	(18,043)	(55,720)	(2,464)	(20,507)	(53,256)
333.00	323	Services	2000	(2,329)	60	1.67%	(547)	(1,782)	(78)	(625)	(1,704)
		Total - Account 323		$ (120,356)			$ (37,468)	$ (82,888)	$ (4,020)	$ (41,488)	$ (78,868)
334.23	324	Meters	2011	$ (50,187)	25	4.00%	$ (23,587)	$ (26,600)	$ (4,015)	$ (27,602)	$ (22,585)
334.23	324	Meters	2012	(13,643)	25	4.00%	(5,866)	(7,777)	(1,091)	(6,958)	(6,685)
334.23	324	Meters	2014	(20,398)	25	4.00%	(7,140)	(13,258)	(1,632)	(8,772)	(11,626)
		Total - Account 324		$ (84,228)			$ (36,593)	$ (47,635)	$ (6,738)	$ (43,332)	$ (40,896)
335.00	325	Fire Hydrants	1968	$ (6,328)	40	2.50%	$ (6,328)	$ -	$ -	$ (6,328)	$ -
335.00	325	Fire Hydrants	1999	$ (73,763)	40	2.50%	(43,797)	(29,966)	(3,688)	(47,485)	(26,278)
335.00	325	Fire Hydrants	2000	(20,650)	40	2.50%	(11,745)	(8,905)	(1,033)	(12,777)	(7,873)
		Total - Account 325		$ (100,741)			$ (61,870)	$ (38,871)	$ (4,721)	$ (66,591)	$ (34,150)
		Grand Total		$ (4,210,372)			$ (1,330,508)	$ (2,879,864)	$ (154,026)	$ (1,484,534)	$ (2,725,838)
		Total Plant Net of CIAC		**$ 4,977,110**			**$ 4,306,693**	**$ 670,417**	**$ 310,188**	**$ 4,616,881**	**360,229**

As Originally Filed:

Tax Basis	9,187,482	CIAC is non-taxable and therefore does not reduce tax basis
Yr 1 Tax depreciation rate	2.0%	Assumption is to use the 25 yr life water property depreciation rates. Yr 1 uses half year convention
2024 Tax Depreciation	183,750	
Yr 2 Tax depreciation rate	4.0%	Assumption is to use the 25 yr life water property depreciation rates
2025 Full Yr Tax Depreciation	367,499	
6 months Tax Depreciation through 06/30	183,750	
Cumulative Tax Depreciation	367,499	
Net Tax Basis @ 06/30/2025	8,819,983	
Net Book Basis @ 06/30/2025	360,229	
Difference	8,459,754	
Federal Tax Rate	21.0%	
Federal ADIT @ 06/30/2025	1,776,548	Deferred tax asset

Revised ADIT:

Tax Basis	-	
Yr 1 Tax depreciation rate	2.0%	
2024 Tax Depreciation	-	
Yr 2 Tax depreciation rate	4.0%	
2025 Full Yr Tax Depreciation	-	
6 months Tax Depreciation through 06/30	-	
Cumulative Tax Depreciation	-	
Net Tax Basis @ 06/30/2025	-	
Net Book Basis @ 06/30/2025	360,229	
Difference	(360,229)	
Federal Tax Rate	21.0%	
Federal ADIT @ 06/30/2025	(75,648)	Deferred tax liability

PAWC-OSBA-II-2

Responsible Witness: Kevin C. Higgins

Question:

Reference OSBA Statement No. 1, pp. 29-30, regarding the acquisition of the Audubon Water Company: Please explain why Mr. Higgins believes that PAWC should not be permitted to place the net book value of Audubon's assets into rate base, if closing occurs after the issuance of a final unappealable order approving the acquisition?

Response:

Mr. Higgins interprets the "net book value of Audubon's assets" to mean the original cost less depreciation of Audubon's plant in service, net of contributions in aid of construction. Hypothetically, if closing were to occur after the issuance of a final unappealable order approving the acquisition, Mr. Higgins does not object to placing the net book value of Audubon's assets into rate base. Mr. Higgins' adjustment in this case is directed to the acquisition cost in *excess* of the net book value of Audubon's assets.

Pennsylvania-American Water Company **OCA 15-010 Attachment_Supplemental**
OCA 15-010 part b
Rate Case Expense

Item	Current Filing Description	Company's Claim (3-A)	Actuals as of January 31, 2024	Update to Company's Claim (3-A)
Legal Fees And Expenses				
	Morgan Lewis & Bockius LLP	$1,100,000	$660,657	$1,300,000
	Cozen O'Connor	200,000	23,389	200,000
	Stevens & Lee	50,000		50,000
	K & L Gates LLP		10,709	10,709
Rate Of Return				
	Brattle Group	136,000	59,388	136,000
Depreciation				
	Gannett Fleming	110,000	99,490	110,000
Cost Of Service - Water and WW SSS				
	Gannett Fleming	85,000	35,715	85,000
Cost Of Service and Stormwater - CSS				
	Gannett Fleming	55,000	1,155	55,000
Miscellaneous				
	Printing, Mailing and Postage - Customer Notices	451,622	333,118	358,892
	Transcripts	3,000	370	3,000
	Miscellaneous	3,000	10	3,000
	Public Input Hearings		7,282	34,539
Total		$2,193,622	$1,231,281	$2,346,140

Pennsylvania American Water - 2023 Rate Case
Water and Wastewater
Cost Estimate

		As Filed 2023 Estimate	Revised 2023 Estimate
Legal Fees And Expenses		$1,350,000	$1,560,709
Rate of Return		136,000	136,000
Depreciation		110,000	110,000
Cost of Service Studies		85,000	85,000
Miscellaneous / Customer Notice		457,622	399,431
Total		$2,138,622	$2,291,140
Cost of Service Study and Stormwater (WW CSS)		$55,000	$55,000
Subtotal Company Rate Case Expense		$2,193,622	$2,346,140
Plus 10 year amortization of Demand Study (Approved R-2017-2595853; 10 year amortization period beginning January 2018)	26,709	$267,090	$267,090
Plus 10 year amortization of Lead Service Line Costs (Approved R-2020-3019369; 10 year amortization period beginning January 2021)	25,224	252,241	252,241
Stormwater Fee Feasibility Study annual amortization adjusted for revised balance and amortization period extended 2 years. (Amortize balance 2 years starting 8/1/2024 to end 7/31/2026).	13,813	29,065	29,065
Total Company Regulatory Expense		$2,742,018	$2,894,536

Miscellaneous / Customer Notice

Printing, Mailing and Postage for Customer Notices	$451,622	$358,892
Transcripts	3,000	3,000
Miscellaneous	3,000	3,000
Public Input Hearings		34,539
Total	$457,622	$399,431

Pennsylvania-American Water Company
Water and Wastewater
Allocation of 2023 Rate Case and Regulatory Expense

	Revised 2023 Estimate	Water	Wastewater SSS	BASA WW Operations	Brentwood WW Operations	Wastewater CSS
Legal Fees And Expenses	$1,560,709	$1,333,626	$108,781	$28,561	$7,647	$82,093
Rate of Return	136,000	116,212	9,479	2,489	666	7,154
Depreciation	110,000	93,995	7,667	2,013	539	5,786
Cost Of Service Studies	85,000	72,633	5,925	1,556	417	4,471
Miscellaneous / Customer Notice	399,431	341,314	27,840	7,310	1,957	21,010
Total	$2,291,140	$1,957,779	$159,692	$41,928	$11,227	$120,514
Cost Of Service And Stormwater (WW CSS)	$55,000					$55,000
Total Company Rate Case Expense	$2,346,140	$1,957,779	$159,692	$41,928	$11,227	$175,514
Normalized Over 2 Years	$1,173,070	$978,890	$79,846	$20,964	$5,614	$87,757
Amortization of Demand Study	26,709	22,823	1,862	489	131	1,405
Amortization of Lead Service Line Costs	25,224	25,224				
Amortization of Stormwater Fee Feasibility Study	13,813					13,813
Total Allocation	$1,238,816	$1,026,936	$81,708	$21,453	$5,744	$102,975

Factor 2: Customers						
As of 06/30/25	Total Customers	Allocation Factor	Water	WW SSS Only	W & WW SSS Only	WW CSS
Water Operations	688,859	85.5%	100.0%		92.5%	
Wastewater SSS General Operations	56,212	7.0%		100.0%	7.5%	
BASA WW Operations	14,755	1.8%				
Brentwood WW Operations	3,974	0.5%				
Wastewater CSS	42,414	5.3%				100.0%
Total	806,214	100.00%	100%	100%	100%	100%

Supplement No. 47 to
Tariff Wastewater PA P.U.C. No. 16
Fifth Revised Page 11.6
Canceling Fourth Revised Page 11.6

PENNSYLVANIA-AMERICAN WATER COMPANY

SCHEDULE OF RATES

RATE ZONE 1d – METERED AND UNMETERED (C)

APPLICABILITY

The rates as set forth below will apply in the service territory formerly served by the Butler Area Sewer Authority served under this tariff for service rendered on and after the Effective Date shown at the bottom of this page.

AVAILABILITY

The rates under this schedule are available to all customers classes.

METERED CHARGES (Based on Water Usage or Sewage Flows, determined at PAWC's discretion) (C)

All metered customers shall be subject to a minimum charge per meter.

	Effective [Acquisition Date]	Effective [Later of 1st anniversary of acquisition date or January 1, 2025]	(C)
A. Residential			
Service Charge per Month	N/A	$10.00	**(I)**
Usage Charge per 100 gallons	N/A	$2.0580	**(I)**
B. Non-Residential			
Service Charge per Month	N/A	$50.00	**(I)**
Usage Charge per 100 gallons	N/A	$1.3365	**(I)**
C. Special Rate for VA Hospital			
Service Charge per Month	$0.00	$50.00	**(I)**
Usage Charge per 100 gallons	$0.00	$1.3365	**(I)**

UNMETERED CHARGES

Until [Later of 1st Anniversary of Acquisition Date or January 1, 2025], this charge is a flat rate fee for customers previously billed a flat rate by the Butler Area Sewer Authority. Thereafter, this charge is a flat rate fee for customers not metered for water consumption. (C)

A. Residential			
Flat rate per month, per EDU:	$45.50	$70.00	**(I)**
B. Non-Residential			
Flat rate per month, per EDU:	$45.50	N/A	**(C)**
C. Special Rate for Multi-Family Dwelling Units - Flat Rate per month, per EDU:			
For the first 25 Units or any part thereof	$45.50	N/A	**(C)**
For the next 25 Units or any part thereof	$44.60	N/A	**(C)**
For the next 25 Units or any part thereof	$43.70	N/A	**(C)**
For the next 25 Units or any part thereof	$42.80	N/A	**(C)**
For the next 25 Units or any part thereof	$41.90	N/A	**(C)**
For the next 25 Units or any part thereof	$41.00	N/A	**(C)**
For all Units over 150 or any part thereof	$40.10	N/A	**(C)**

(I) means Increase and **(C)** means Change

[Miscellaneous Fees and Charges moved to prior page] **(C)**

REVENUE DECOUPLING MECHANISM ("RDM") (C)

Applicable to all residential and non-residential customers, exclusive of customers receiving service pursuant to a contract agreement.

Section A – Definitions

For purposes of the RDM only, the terms below are defined to mean:

Effective Period shall mean the period for which the adjustments in Section B are to be billed to customers and shall be the nine-month period April 1 through December 31 after the Filing Month.

Filing Month shall mean the month in which an adjustment is determined by the Company and submitted to the Commission, which shall be on or before January 31 each year.

Fiscal Year shall mean the 12-month period that ended as of the most recent December 31.

Non-Residential Customers shall mean all commercial, industrial, municipal, and Sales for Resale customers not taking service under special contract rates.

Section B - Determination of Adjustment

The Residential Adjustment is calculated as follows:

$$\frac{RESREV - (VC*RESUSE) - (RC*RESCUST)}{RESFC}$$

Where:

RESREV represents the actual dollar amount of revenues billed to residential customers for the identified service classifications, excluding revenues arising from adjustments under this tariff and any other tariff, which were billed for the applicable month.

RESUSE represents the number of 100-gallon units delivered to residential customers by the Company, including the number of 100-gallon units for the applicable month.

RESCUST represents the average number of residential customers for the applicable month.

VC represents the Volumetric Charge ($0.1548 per hundred gallons proposed)

RC represents the Residential Fixed Charge ($87.87 per month proposed)

RESFC represents the number of 100-gallon units expected to be delivered to residential customers by the Company, including the number of 100-gallon units for the applicable Effective Period.

(C) means Change

Supplement No. 47 to
Tariff Wastewater PA P.U.C. No. 16
Second Revised Page 31.1
Canceling First Revised Page 31.1

PENNSYLVANIA-AMERICAN WATER COMPANY

RULES AND REGULATIONS

Section F - Billing and Collection (cont'd)

8. **Termination of Free Service Under Certain Contracts and Other Instruments:** Notwithstanding any contrary provision contained in any deed, grant, contract, franchise, permit, consent or other instrument (other than an instrument expressly set forth in and constituting a part of this tariff) made, executed or delivered between the Company or any predecessor in interest and a Customer of the Company or any predecessor in interest:

   (A) Every person who takes wastewater service shall pay for all wastewater service taken as provided in the applicable schedule of rates set forth herein and subject to the Rules and Regulations of the Company.

   (B) No credit, off-set or other allowance shall be allowed by the Company against any wastewater bill on account of the making, execution, or delivery of, or pursuant to any provisions of, any such instrument.

9. **Calculation of Winter Average Consumption**: **This formula is applicable to residential metered wastewater service customers, excluding bulk wastewater customers, served by the Company, unless exempted on the Schedule of Rates.** (C)

   Definitions:

   Winter Period is defined as the revenue periods of January, February, and March wherein the sewer customer's meter is read and/or estimated and billed by the Company.

   Winter Period Average Usage is defined as the sum of the usage per the actual and/or estimated water meter registration during the Winter Period divided by three.

   Seasonal Period is defined as the revenue periods of April, May, June, July, August, September, October, November, and December wherein the sewer customer's meter is read and/or estimated and billed by the Company.

   Formula Description:

   The volume of sewer use during the Seasonal Period months shall be considered to be equal to the lesser of the Winter Period Average Usage or actual water usage. In the Seasonal Period, the lesser of the Winter Period Average Usage or actual water usage will be billed at the volumetric tariff rates included on the Schedule of Rates for each applicable rate zone.

   For customers who have not been provided service for all three Winter Period months and thus have not established a Winter Period Average Usage, the lesser of actual Seasonal Period usage or 3,000 gallons per month will be used for the Seasonal Period billings until the customer receives bills for all three Winter Period months the following year. The lesser of actual usage or 3,000 gallons will be billed at the volumetric tariff rates included on the Schedule of Rates for each applicable rate zone.

   In the Winter Period, sewer customers will be billed for sewer service based on actual and/or estimated water meter registration and using the volumetric tariff rates included on the Schedule of Rates for each applicable rate zone.

PENNSYLVANIA-AMERICAN WATER COMPANY

REVENUE DECOUPLING MECHANISM ("RDM") (C)

Applicable to all residential customers and all Non-Residential customers, exclusive of customers receiving service pursuant to a contract agreement.

Section A – Definitions

For purposes of the RDM only, the terms below are defined to mean:

Effective Period shall mean the period for which the adjustments in Section B are to be billed to customers and shall be the nine-month period April 1 through December 31 after the Filing Month.

Filing Month shall mean the month in which an adjustment is determined by the Company and submitted to the Commission, which shall be on or before January 31 each year.

Fiscal Year shall mean the 12-month period that ended as of the most recent December 31.

Non-Residential Customers shall mean all commercial, industrial, municipal, and Sales for Resale customers not taking service under special contract rates. Excludes fire service customers.

Section B - Determination of Adjustment

The Residential Adjustment is calculated as follows:

$$\frac{RESREV - (VC*RESUSE) - (RC*RESCUST)}{RESFC}$$

Where:

RESREV represents the actual dollar amount of revenues billed to residential customers for the identified service classifications, excluding revenues arising from adjustments under this tariff and any other tariff, which were billed for the applicable month.

RESUSE represents the number of 100-gallon units delivered to residential customers by the Company, including the number of 100-gallon units for the applicable month.

RESCUST represents the average number of residential customers for the applicable month

VC represents the Volumetric Charge ($0.1033 per hundred gallons proposed)

RC represents the Residential Fixed Charge ($83.18 per month proposed)

RESFC represents the number of 100-gallon units expected to be delivered to residential customers by the Company, including the number of 100-gallon units for the applicable Effective Period.

(C) means Change

Supplement No. 45 to
Tariff Water-PA P.U.C. No. 5
Second Revised Page 62
Canceling First Revised Page 62

RULES AND REGULATIONS

12. Termination and Discontinuance of Water Service (cont'd) **(C)**

12.8 Termination by Company For Non-Payment of Wastewater Service **(C)**

The Company may also terminate service in accordance with the terms of any agreement between the Company and a non-Company wastewater provider for non-payment of wastewater service when due upon prior notice by the non-Company wastewater provider.

Following the issuance of termination notice by the non-Company wastewater provider, the Company will not move forward with termination of water service upon notification to the Company by the non-Company wastewater provider that the customer (1) disputes the termination for non-payment or (2) if the customer produces a medical certification.

Upon termination, the Company will post the termination notice at the customer's premises.

Supplement No. 45 to
Tariff Water-PA P.U.C. No. 5
Second Revised Page 63
Canceling First Revised Page 63

13. Abatements and Refunds [Moved from Prior Page] (C)

13.1 Meter Registration

The quantity of water recorded by the meter shall be accepted as correct by both the Customer and the Company except when the meter has been found to be registering inaccurately or has ceased to register. If a meter is found not to have registered for a period or not to have fully measured the entire flow due to meter interference, the Company shall compute the water used by taking the average of the water used for the nearest meter reading period immediately preceding and the meter reading period immediately following the date when the meter was found to be not registering or interfered with. This amount shall be the amount of water used by the Customer during the billing period in which the meter was found not to have registered. Exceptions may be made only if the facts clearly show that the stated method does not give the correct consumption for the period.

14. Service Continuity

14.1 Regularity of Supply

The Company may, at any time, shut off the water in the mains in case of accident, or for the purpose of making connections, alterations, repairs, changes or for other reasons, and may restrict the use of water to reserve a sufficient supply for public fire service or other emergencies whenever the public welfare may require it. The Company will, so far as circumstances permit, notify Customers to be affected by any interruptions in the water service.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Stacey D. Gress**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 4-R and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024

Stacey D. Gress

Statement No. 5

O'Malley

PAWC STATEMENT NO. 5

DIRECT TESTIMONY
OF
LORI O'MALLEY

WITH REGARD TO

PENNSYLVANIA-AMERICAN WATER COMPANY

LABOR AND LABOR RELATED EXPENSES,

SERVICE COMPANY EXPENSE, PRODUCTION COSTS, ACQUISITION O&M ADJUSTMENTS, OTHER OPERATION AND MAINTENANCE EXPENSES, AND MISCELLANEOUS EXPENSE ADJUSTMENTS

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: November 8, 2023

PENNSYLVANIA-AMERICAN WATER COMPANY

DIRECT TESTIMONY OF LORI O'MALLEY

BACKGROUND

Q. What is your name and business address?

A. My name is Lori O'Malley. My business address is 1 Water Street, Camden, New Jersey 08102.

Q. By whom are you employed and in what capacity?

A. I am employed by American Water Works Service Company, Inc. ("AWWSC" or the "Service Company") as Senior Manager Regulatory Services. The Service Company is a wholly owned subsidiary of American Water Works Company, Inc. ("American Water") that provides services to Pennsylvania-American Water Company ("PAWC", "Pennsylvania-American" or "Company") and its affiliates.

Q. What are your responsibilities as Senior Manager Regulatory Services?

A. My responsibilities include the review, preparation and presentation of regulatory filings and related activities for Pennsylvania-American and West Virginia-American Water Company. In addition, my responsibilities include the preparation of written testimony, exhibits and workpapers in support of rate applications and other regulatory filings, as well as responses to data requests related to filing requirements. In this role, I stay apprised of regulatory developments and policy initiatives that may impact regulated water utilities and support the analysis and coordination of process improvements of rates and regulatory processes and services.

Q. Please summarize your educational background.

A. I received a Bachelor of Science Degree in Business Administration with a specialization in Accounting from Rowan University in 1995. I have also attended the Utility Rate School sponsored by the National Association of Regulatory Utility Commissioners.

Q. Please outline your business experience.

A. I began my employment with the Service Company as an Accountant for the Regional Companies in July 1996. At the time, the Regional Companies included American Water affiliates located in the states of Iowa, Maryland, Michigan, Missouri, Ohio, Tennessee and Virginia. In October 1998, I was promoted to Senior Accountant and then Accounting Supervisor in March 1999. In May 2004, I accepted a position in the Regulatory Services group. From 2004 to today, I have held increasing levels of responsibility as an Intermediate Financial Analyst, Senior Financial Analyst, Principal Regulatory Analyst, and my current position as Senior Manager Regulatory Services.

PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to support and explain the Company's claim for: (1) labor and labor-related expenses; (2) Service Company expenses; (3) production costs; (4) other operation and maintenance ("O&M") expenses; (5) miscellaneous expense adjustments; and (6) acquisition O&M expenses.

Q. What methodology did the Company use in calculating its pro forma expense levels in this case?

A. In this case, the Company is presenting supporting data for a historic test year ended June 30, 2023 ("HTY"), a future test year ending June 30, 2024 ("FTY"), and a fully

projected future test year ("FPFTY") ending June 30, 2025. The Company began with the expenses recorded on its books of account for the HTY and made various adjustments to reflect known and measurable changes that occurred during the HTY. For the FTY and FPFTY, the Company made specific adjustments to certain expenses or categories of expenses based on known and measurable changes (e.g., collective bargaining agreements), projected changes in expenses or, in some cases for expenses that are variable, relied upon historical averages to reflect a normalized level of expense. All adjustments are detailed in PAWC Exhibit Nos. 3-A and 3-B.

Q. Please provide a brief overview of the Company's O&M expense levels.

A. The Company is requesting $314,072,831 in O&M expense for the FPFTY. As Company witness Ashley Everette explains, the Company has managed to keep the rate of increases in O&M expense below that of inflation. This demonstrates that the Company has been successful in controlling its O&M costs per customer over the past decade or so and is continuing to do so. The requested increases in O&M expense over these periods support the Company's efforts to continue providing high quality water and wastewater service in the most cost-effective way to our customers in the long-term.

There are numerous factors that contribute to the increase in operating expenses, including those associated with production costs and employee related expenses discussed by Company witness Jim Runzer, as well as the addition of multiple acquired systems since the last base rate case, as addressed in the testimony of Company witness E. Christopher Abruzzo.

Q. Please explain how the adjustments you describe below apply to the revenue requirement studies set forth in PAWC Exhibit No. 3-A.

A. The adjustments I describe below apply to the expenses reflected in each of the five revenue requirement studies that are set forth in PAWC Exhibit No. 3-A. Because the adjustments apply to the expense claims set forth in each revenue requirement study, I will describe those adjustments generally and not address the specific adjustments reflected in each study.

LABOR AND LABOR RELATED EXPENSES

Q. Please describe PAWC's labor and labor-related expenses.

A. PAWC's labor and labor-related expenses are associated with employees who support PAWC exclusively and, therefore, are on the payroll of PAWC. As Mr. Runzer explains, PAWC's labor force is responsible for the production of high-quality drinking water, operating and maintaining the Company's production and treatment facilities and its distribution and collection systems, monitoring water quality, providing engineering services, and generally supporting the efficient management of all of the Company's operations.

There are three classifications of PAWC employees: collective bargaining unit ("CBU") hourly employees, non-collective bargaining unit ("non-CBU") hourly employees and exempt employees. CBU hourly employees receive base pay, overtime pay, and, in some cases, other compensation (such as shift premiums and meal allowances) and are also eligible for performance pay. Non-CBU hourly employees receive base pay and overtime pay and are eligible for performance pay. Exempt employees receive base pay and are

eligible for performance pay. Therefore, total wages or salaries for each classification of employees includes fixed pay (base pay) and some form(s) of variable pay (e.g. overtime, shift pay and performance pay) for eligible employees.

The labor and labor-related expenses that are discussed in my testimony include:

(1) Salaries and wages (including Annual and Long-Term Performance Pay)

(2) Group Insurance

(3) Other benefits, including:

a. 401k

b. Defined Contribution Plan ("DCP")

c. Pension and Other Post-Employment Benefits ("OPEBs") for certain eligible employees

d. Employee Stock Purchase Plan ("ESPP")

(4) Payroll Taxes

These costs are described further in my testimony below.

Q. Please describe the overall approach the Company has used to calculate labor and labor-related expenses.

A. PAWC's proposed labor and labor-related expenses are reflected in the labor and labor-related sections of Exhibit Nos. 3-A and 3-B. Pro forma labor and labor-related expenses were calculated on a position-by-position basis, based on the Company's HTY actual number of employees, consisting of 1,219 full-time positions and one part-time position. The labor expenses claimed for the FTY and the FPFTY reflect a full complement of employees for each of the Company operations, as set forth in the table below:

PAWC Operations Employee Levels	2023	2024	2025
Water Operations	1,046	1,076	1,076
Wastewater SSS General Operations	76	75.1	75.1
Butler Area Sewer Authority WW Operations	0	33.9	33.9
Brentwood WW Operations	0	1	1
Wastewater CSS Operations	98	99	99
Farmington Water	0	1	1
Farmington WW	0	1	1
Audubon Water	0	7	7
Total Company	1,220	1,294	1,294

The HTY labor hours were annualized and adjusted to a normalized level. These hours were then multiplied by the actual 2023 wage rates by employee position to determine an annualized level of expense. This amount was then adjusted using a historic three-year average (2021-2023) of base pay increases for non-CBU employees. To adjust the level of expense for CBU employees, the most recent collective bargaining agreements ("CBAs") that remain in effect were used to determine costs for each of the FTY and FPFTY. For those bargaining units for which CBAs expired, a historic three-year average (2021-2023) of contract wage increases was used to determine projected costs for the FTY and FPFTY. The Company's FPFTY annualizes the effects of the increases calculated using the methodologies described above. The details of these calculations, by employee position, are set forth in Exhibit No. 3-B.

Some labor and labor-related costs are capitalized and added to the costs of utility plant. Therefore, a capitalization percentage is applied to total labor and labor-related costs to calculate the portion of those costs that are recorded as capital costs. The Company has

calculated capitalization percentages based on the historic three-year average ratio (2021-2023) of direct labor dollars charged to capital to total direct labor costs. The capitalization percentages calculated in that manner are 39.55% for the Company's water operations and 22.14% for its wastewater operations. The complement of those percentages represents the portion of labor and labor-related costs recorded as an expense.

Salaries and Wages

Q. Please describe how the various components of pro forma salaries and wages are calculated.

A. Salary and wage expense has four components: (1) base pay; (2) overtime; (3) shift premium and meal compensation pursuant to the terms of applicable CBAs; and (4) annual and long-term performance compensation for eligible employees. Each component is discussed in further detail below.

Base Pay – Base pay was calculated for the FTY by applying a three-year average (2021-2023) of the historical percentage increases to the annualized HTY wage rates for non-CBU employees. The wage rate projected to be in effect for each month of the FTY is applied to the working hours for each month. Regular working hours total 2,088 for all full-time hourly employees and 2,080 for all full-time non-hourly employees. Wage rates for CBU employees were based on CBAs for each month of the FTY and FPFTY. If wage rates have not been established by CBAs that will be in effect the end of the FPFTY, the wage rates were adjusted using an annual increase percentage equal to the historical three-year average (2021-2023) of contracted increases. Non-CBU employees' wage rates were based on the rates that became effective on March 6, 2023. Those rates were adjusted

through the FPFTY based on a three-year average (2021-2023) of the historical percentage increases and were annualized as of the end of FPFTY.

Overtime – Overtime was calculated by starting with the total HTY overtime hours by position and multiplying those hours by the projected overtime wage rate for each employee position.

Shift Premium – CBU employees' CBAs provide wage premiums for employees working on uncommon shifts or when employees obtain certain licenses or complete certain training. The actual total HTY amounts of shift premiums, licensing and training premiums were determined on a per-employee basis and included in salary and wage expense for the FTY and FPFTY.

Meal Compensation – CBU employees' CBAs provide compensation for meals during extended shifts and, therefore, meal compensation is included in salaries and wage expense. A historical three-year average (2021-2023) of meal compensation was determined on a per-employee basis and included in salary and wage expense for the FTY and FPFTY.

Performance Pay – The last component of labor expense is the annual and long-term performance compensation for eligible employees. Performance pay was calculated on a position-by-position basis for eligible employees based on each position's target percent, or percentage of base salary that is provided if program goals are achieved, under both the Annual Performance Plan ("APP") and Long Term Performance Plan ("LTPP"). The target percentage was multiplied by each eligible employee's pro forma base salary in the FTY and FPFTY, to determine the cost of compensation under the APP and LTPP. In

PAWC Statement No. 2, Mr. Runzer describes the performance pay program in more detail.

Group Insurance

Q. Please describe the components of the Company's group insurance expense.

A. Group insurance includes several insurance coverages that PAWC provides its employees. These can be grouped into two primary categories: (1) basic life, short-term disability, long-term disability and accidental death and disability insurance ("AD&D"); and (2) medical, dental, prescription and vision insurance.

Q. How was the pro forma adjustment for group insurance expense calculated?

A. Costs were calculated for the pro forma adjustment as follows:

- Basic life, short- and long-term disability and AD&D. The starting point is the 2023 premium rates for each position under the applicable insurance plans for CBU and non-CBU positions.

- Medical, dental, and vision insurance. The Company's cost for this category of insurance is net of employee contributions. The total costs and employee contributions vary by plan type (e.g. family, employee, or employee plus spouse). Costs and contributions were calculated using the 2024 plan rates, on a position-by-position basis, taking into account actual employee plan selections.

Once the 2024 cost level was established, a historical three-year average of the change in Company costs for group insurance between 2021 and 2024 was applied to the annualized

amount for 2024 in order to adjust the insurance expense to the level appropriate for the FPFTY.

Q. What steps in general has American Water taken to manage the group insurance benefit costs?

A. Group insurance is obtained for employees of PAWC and its affiliates based on benefit plans administered by American Water. American Water has been proactive in seeking changes that improve how healthcare is delivered in order to control the costs of providing health insurance to its employees. These efforts have included offering high-deductible health plans and a telemedicine option, which lower the overall cost of health insurance programs. For example, instead of an office or urgent care visit, for which providers charge $100 or more, employees have the option to consult with a physician remotely, at a cost to the insurer of $59 per visit. American Water also became a founding member of the Health Transformation Alliance ("HTA") in 2016 to help achieve the goal of providing higher quality care at lower cost by identifying facilities and physicians that have better outcomes, using American Water's purchasing power to keep costs down, and helping every employee become a more engaged consumer. Additionally, by joining the HTA pharmacy coalition, the Company has mitigated cost increases through the pharmacy/prescription drug program, which includes specialty pricing and rebates.

Q. What is HTA and why is it better than the traditional approach to obtaining healthcare coverage for employees?

A. HTA is a cooperative comprising 50 major corporations that have come together to drive change in the healthcare system. In addition to American Water, its members include

American Express Company, JPMorgan Chase, IBM Corporation, Verizon and Marriott International Inc., and many more. Acting on its own, any single HTA member is unlikely to change the trends in healthcare that are driving up costs. By working together, however, HTA members can create more transparency to drive changes in the way healthcare is delivered, and those changes can result in lower prices for prescription medicine and medical services and produce better outcomes, which make health care more affordable. To that end, the HTA has developed value-driven solutions in the areas of data and analytics, pharmacy and medical services and consumer engagement specifically designed to improve patient care and economic value. Lastly, American Water will review current plan options, and when it is possible, add additional services to its plans to drive claims down and lower rates. Because the Company's health and welfare plans are self-funded, when claims are lower, everyone saves. For example, in 2022, American Water added the PrudentRx Copay program in partnership with CVS Caremark. This allows our active employees and retirees to get any specialty medications that are on our Exclusive Specialty Drug List for $0 out-of-pocket cost to the employee and discounts to American Water.

Other Benefits

Q. Please describe the components of other benefits the Company provides and how the costs of those benefits were calculated.

A. Other benefits PAWC provides include savings programs, such as 401k plans, DCP, pension benefits, OPEBs, and the Company's ESPP. The costs of these benefits were

calculated on a position-by-position basis. The calculations of the costs included in the Company's labor-related expense claims are described below.

401k – PAWC incurs 401k expense when it matches employee contributions to 401k retirement accounts. The matching amounts are determined by each employee's benefit group or hire date. For employees whose benefit group falls into an "original" category (including CBU employees hired before 2001 and non-CBU employees hired before 2006), the Company matches 50% of the first 5% of the employee's contribution (for a maximum of 2.5%). For the remaining employees, the Company matches 100% of the first 3%, and 50% of the next 2% of the employee's contributions (for a maximum of 4%). Pro forma 401k costs were calculated for each position based on FTY wages, current employee contribution levels, and the level of match for the benefit group.

DCP – DCP, or Defined Contribution Plan, is a retirement savings program for employees not eligible for the defined benefit pension program. Under the DCP, PAWC contributes an amount equal to 5.25% of an employee's base pay into a retirement account. The pro forma DCP expense was calculated by multiplying the FTY and FPFTY regular time pay of each eligible position by 5.25%.

Pension – Certain Company employees, upon retirement, are eligible for pension benefits under a defined benefit plan. Covered employees include non-CBU employees hired before January 1, 2006, and CBU employees hired before January 1, 2001. Consistent with PAWC's calculation of pension expense in its last base rate case, the Company calculated its pension expense claim in this case in accordance with Financial Account Standards Board Accounting Standards Codification Topic 715 or "ASC 715" (formerly Statement of

Financial Accounting Standards 87). The Company started with the report furnished by its actuary, Willis Towers Watson, that furnished pension costs for 2023 determined in accordance with ASC 715. From that report, the Company identified the service and non-service cost components of its pension costs. The service cost portion was reduced by the capitalization rate of 39.55% described above to determine the portion of total pension costs recorded as an expense.

In addition to the pro forma pension expense determined in the manner described above, the Company's claim reflects a credit for the annual amortization of a deferred pension asset that was created when the Company began using the accrual method of accounting, based on ASC 715, to calculate pension expense for ratemaking purposes in its 2020 base rate case. Prior to the 2020 case, the Company's pension expense claimed for ratemaking purposes had been based on its cash contributions to its pension plan. The amortization of the deferred pension asset is being continued at the level approved in R-2017-2595853. The ten-year amortization began with the effective date of the rates set in that case and, therefore, will expire in 2028.

OPEB – Certain PAWC employees are eligible for OPEBs upon their retirement depending on their employment start date. Only non-CBU employees hired before January 1, 2002, and CBU employees hired before January 1, 2006 are eligible for OPEBs. The investments made to fund OPEBs are divided into three Voluntary Employees Beneficiary Association Plans ("VEBAs"): Post-Retirement Medical Benefits/Bargaining Unit, Post-Retirement Medical Benefits/Non-Bargaining Unit, and Life Insurance

Benefits. In 2016 and 2018, American Water negotiated a cap on benefits in the Non-Bargaining Unit and Bargaining Unit VEBAs, respectively.

OPEB expense is based on the accrual cost recognized under ASC 715, as projected by Willis Towers Watson for 2023. The 39.55% capitalization rate was applied the service cost component that will be charged to capital.

In addition, for active bargaining unit employees covered under American Water's National Benefits Agreement who are not eligible for retiree medical benefits under the OPEB plan, the Company makes an annual contribution of $600 per employee to a separate VEBA plan that is administered by the Utility Workers Union of America. That plan is designed to reimburse eligible participants for certain health care expenses they incur in retirement. A pro forma adjustment to reflect these contributions on behalf of eligible employees of the Company's Water Operations, Wastewater Sanitary Sewer Systems ("SSS"), and Wastewater Combined Sewer System ("CSS") Operations has been made to the Company's OPEB expense claim in this case.

ESPP – ESPP expense is incurred to fund the 15% discount on purchases of American Water stock by employees who are enrolled in the ESPP. This expense was calculated based on the FTY and FPFTY salaries and wages for each employee who participates in the plan. The employees' forecasted base compensation is multiplied by the percentage of base compensation each employee has selected to devote to purchasing American Water stock. That amount was then multiplied by the 15% discount on stock purchases to determine the pro forma expense for the ESPP.

Q. Please describe the Company's payroll tax expense.

A. Payroll tax expense consists of the federal and state taxes the Company pays based on its employee's salaries and wages. The Federal Insurance Contributions Act imposes taxes on employers for Old Age Survivors and Disability Insurance ("OASDI," or more commonly "FICA") and Hospital Insurance (or more commonly "FICA Medicare"). The Company is also required to pay Federal Unemployment Tax ("FUTA") and State Unemployment Tax ("SUTA"). Pro forma payroll taxes were calculated on a position-by-position basis using current 2023 tax rates and pro forma wages for the FTY and FPFTY. The current 6.2% FICA tax rate will apply to wages of up to $160,200 in 2023. The wage ceiling for applying the FICA tax rate is estimated to increase to $168,543 for the FTY and $177,321 for the FPFTY, based on a three-year average (2021-2023) of historical actual increases in the wage ceiling for FICA tax. For the FTY and FPFTY, the Company applied the FICA Medicare tax rate of 1.45% to all wages, applied the SUTA tax rate of 2.18% to the first $10,000 of wages, and applied the FUTA tax rate to the first $7,000 in wages.

SERVICE COMPANY COSTS

Q. What kinds of services does PAWC obtain from the Service Company?

A. The services provided by the Service Company include customer service, water quality testing, environmental compliance, human resources, communications, information technology, finance, accounting, legal, engineering, supply chain, and risk management. As part of the broad range of services summarized above, the Service Company provides a variety of financial and accounting services for Pennsylvania-American that include payroll, human resources data management, utility plant accounting, cash management, general accounting and reporting, accounts payable, and tax accounting. As part of its

customer-service function, the Service Company handles customer calls, billing, and collection activities for PAWC and American Water's other public utility subsidiaries. The customer service function, which is discussed further by Company witness Deborah Degillio, also handles customer inquiries and correspondence and processes service order requests.

In addition, the Service Company provides Field Resource Coordination which is responsible for tracking and dispatching service orders for PAWC's field representatives and distribution crews. The Service Company also operates the Central Laboratory located in Belleville, Illinois, which employs chemists, laboratory technicians, analysts, and support employees to perform water quality testing and research. The Central Laboratory is certified by the United States Environmental Protection Agency, the Commonwealth of Pennsylvania Department of Environmental Protection ("PADEP") and the regulatory agencies of other states in which American Water's subsidiaries provide service. The Central Laboratory owns and uses state-of-the-art water testing equipment to test source water and finished water for all American Water's subsidiaries, including PAWC.

Q. How do Pennsylvania-American's customers benefit from obtaining the services you described from AWWSC?

A. The Service Company provides PAWC access to highly trained professionals who possess expertise in various specialized areas, whose background, experience and training are focused on water and wastewater utility operations and who work exclusively for American Water's subsidiaries. Furthermore, the size of AWWSC and the scope of its operations have enabled it to assemble a uniquely qualified group of professionals who, through

AWWSC, have a platform for sharing their extensive knowledge, expertise, and experience across the American Water system to the benefit of all of American Water's state-regulated utilities and their customers. The Company benefits from getting these services and tapping into the expertise of AWWSC's personnel at cost. The Company also benefits from the size and breadth of American Water, which affords the Company increased purchasing power that it could not obtain on its own, and provides access to discounts on equipment and supplies needed for utility operations, including, for example, pipe, fittings, and water treatment chemicals. In this way, Pennsylvania-American achieves costs savings that it could not obtain if it were a stand-alone water company.

Q. How does the Service Company charge PAWC for its services?

A. The Service Company provides its services to PAWC at cost and issues monthly invoices. Under the Service Company's billing system, costs can be billed as direct charges to a single company or as charges reflecting an allocation among several companies. If the Service Company can identify costs that relate exclusively to PAWC, 100% of those costs are charged directly to Pennsylvania-American. Costs the Service Company incurs in rendering services in common to a group of companies and not exclusive to Pennsylvania-American are charged to each service recipient in the relevant group based on an allocation.

Q. How are Service Company costs allocated to PAWC?

A. Service Company costs are charged to PAWC and its affiliates using Tier One or Tier Two allocation factors. The Tier One allocation factor represents the allocation of costs between regulated and non-regulated companies. The allocation factors are based on cost-causation drivers for a particular service and include operating revenues, net property, plant and

equipment and number of employees. The allocation is calculated using one or an applicable combination of these allocation factors. If a combination of allocation factors is used, each factor is equally weighted in the calculation. The Tier Two allocation factor is used to allocate regulated company costs to the regulated businesses that benefit from a service. Tier Two factors are primarily based on the number of customers served in the immediately preceding calendar year.

Q. What level of Service Company expense is Pennsylvania-American seeking in this case and how was it calculated?

A. The Company is seeking recovery of an expense of Service Company charges of $63.6 million for the FPFTY. The expense is divided into two categories consisting of labor and labor-related expenses and all other expenses. For the labor and labor-related portion, the expenses incurred for the HTY have been adjusted to annualize a base pay increase in March 2023 of 3.2% for non-CBU employees of the Service Company, and annual contract increases of 2.75% for CBU employees of the Service Company. For non-CBU employees, the HTY level of base pay was further adjusted to annualize base pay increases of 3.14% to calculate the base pay for the FTY and FPFTY. The FTY and FPFTY percentage was calculated using a historical three-year average (2021-2023). For CBU employees, the HTY level of base pay was further adjusted to annualize annual contract increases of 2.60% to calculate the base pay for the FTY and FPFTY. Additionally, adjustments were made to eliminate severance expense, to normalize pension and OPEB costs, adjust LTPP based on the latest compensation information, and to reflect the movement of employees between PAWC and the Service Company.

Q. Please explain the adjustment for employee movements between PAWC and AWWSC.

A. Two PAWC positions in Fleet Management and one in Business Development were transferred to the Service Company during the HTY. The difference is reflected as an addition to Service Company expense to annualize the salary and benefits for those employees to reflect a full year of compensation. The three transferred employees are not reflected in PAWC's HTY employee numbers.

Q. What other adjustments were made to Service Company expense?

A. Costs pertaining to lobbying, charitable contributions, penalties, and injuries and damages have been removed and, therefore, are not included in the pro forma expenses reflected in the Company's expense claim in this case. Additional adjustments were made for depreciation, interest associated with capital leases, postage, operating expenses for office space, removal of one-time sales tax refund, and removal of costs related to the Customer Service Centers in Alton, Illinois and Pensacola, Florida. Finally, an adjustment for changes in expense was applied to the FTY and FPFTY non-labor cost items excluding depreciation and capital lease interest. This adjustment was based on a three-year average (2021-2023) change in expense for the non-labor expense accounts.

PRODUCTION COSTS

Purchased Power Expense

Q. Please explain the methodology used to forecast purchased power expense.

A. Purchased power expense is incurred for treating, pumping and delivering water and collecting and treating wastewater. In order to forecast purchased power expense, HTY

expenses were adjusted to remove closed accounts and credit balances, to annualize electricity expense for active accounts, and to reflect known changes in the prices charged by the Company's electricity generation suppliers ("EGSs") and in the rates of the electric distribution companies ("EDCs") that furnish distribution service. Changes experienced during the HTY and projected to occur during the FTY and FPFTY were used to derive the expense levels for those years.

The Company has contracted with multiple EGSs to supply the Company's electric generation. The contract prices that were used to calculate electric expense for the FTY and FPFTY were from contracts that the Company successfully obtained through its competitive energy procurement process described by PAWC witness Jim Runzer in PAWC Statement No. 2. For the distribution and transmission portions of the Company's bills, the applicable EDC's distribution and transmission rates and applicable riders and surcharges/credits in effect as of June 30, 2023, were reflected to determine total purchase power expense. The purchased power adjustments are summarized in Exhibit No. 3-A, and supporting workpapers are provided in Exhibit No. 3-B.

Purchased Water Expense

Q. Please explain the methodology used to forecast purchased water expense.

A. Purchased water expense is composed of two components: contractual usage and diversion rights. The annualized usage levels from all contracted suppliers in the HTY were priced at the applicable supplier's rates effective in the FTY, and those rates were used to annualize purchased water expense for the FTY. For the FPFTY, contractual usage and diversion rights as of the FTY were increased by a three-year average (2021-

2023) change in expense. The purchased water adjustments are summarized in Exhibit No. 3-A and supporting workpapers are provided in Exhibit No. 3-B.

Chemical Expense

Q. Please explain the methodology used to forecast chemical expense.

A. PAWC uses various chemicals for water and wastewater treatment. In order to obtain the best available pricing, the Company participates in American Water's system-wide competitive bidding process and enters into unit-price contracts with the successful bidders for the chemicals needed at its water and wastewater treatment facilities throughout Pennsylvania. Chemical usage levels were adjusted in three respects. First, adjustments were made to eliminate the chemicals that are no longer being used as of June 2023 and to add chemicals the Company will begin using for the first time starting in or after July 2023. Then, usage levels were adjusted based on known and measurable changes that occurred in the HTY or changes that are projected to occur in the FTY and FPFTY.

Contract prices effective on July 1, 2023, were applied to the adjusted levels of chemical usage to project the FTY expense claim. Due to current volatility in the market for chemicals, many vendors have deviated from annual contracts and have moved to quarterly or semi-annual contracts. To determine chemical expense for the FTY and FPFTY, chemical costs were increased by a percentage for each chemical family each year based on input from our suppliers and indexes related to current volatility in the market. Over the last two years, the chemical market has seen unprecedented price increases, driven by many factors such as inflationary increases in commodity and transportation prices, volatile energy prices caused by, among other factors, the conflict in Ukraine, high labor costs, and overall supply pressure within a consolidating chemical market. If the Company enters

into new unit-price chemical contracts before the close of the record in this case, it will update its claims to reflect any material price changes. The adjustments for chemical expenses for all of the Company's water and wastewater systems are summarized in Exhibit No. 3-A, and supporting workpapers are included in Exhibit No. 3-B.

Change in Consumption

Q. Please explain the adjustment necessary to account for changes in customer water consumption.

A. PAWC Exhibit No. 3-A sets forth an adjustment to operating expenses to reflect changes in power and chemical costs due to changes in pro forma water consumption, including the decline in residential and commercial usage discussed in detail by Mr. Rea in PAWC Statement No. 10. The adjustment was calculated by computing the ratio of HTY power and chemical costs to actual HTY consumption. This ratio was then applied to the projected change in consumption between the HTY and FTY, and the FTY and FPFTY. The adjustment was applied to both existing water and wastewater operations. Supporting details are included in Exhibit No. 3-B.

Waste Disposal

Q. Please explain the methodology used to forecast waste disposal expense.

A. The Company's claims for waste disposal expenses are based on the HTY level of expense, increased by a three-year average (2021-2023) change in expense for the FTY and FPFTY. The waste disposal adjustments are summarized in Exhibit No. 3-A. Supporting workpapers are included in Exhibit No. 3-B.

OTHER OPERATION AND MAINTENANCE EXPENSES

Transportation Expense

Q. Please explain the methodology used to forecast transportation expense.

A. Transportation expense includes the fleet management cost per vehicle, costs for fuel, titling and registration fees, maintenance expense, and reimbursement for Company use of personal vehicles. The forecast of the fleet management expense is based on the number of vehicles claimed in FTY and FPFTY. The changes in the number of vehicles from the HTY level are reflected in the forecast of costs for fuel expense, titling and registration fees, and maintenance expense. Additionally, these costs, along with the reimbursement for personal use of Company vehicles, were adjusted by using a three-year average (2021-2023) CPI Transportation Services factor for the FTY and FPFTY (9.21%).[1] A portion of the transportation costs is capitalized and, therefore, excluded from O&M expense. The Company's adjustments to transportation expense are shown in Exhibit No. 3-A. Detailed supporting calculations are provided in Exhibit No. 3-B.

Insurance Other Than Group

Q. Please explain the methodology used to forecast insurance other than group insurance.

A. PAWC incurs costs related to several types of insurance, including Auto Liability, General Liability, Excess Liability and Workers' Compensation. The Company also has other policy coverages such as Directors and Officers Liability, Employment Practices and Cyber Crime policies. The FTY expense represents an increase from the HTY based upon

[1] http://data.bls.gov/timeseries/CUSR0000SAS4?data_tool=XGtable

a number of drivers. The HTY was adjusted using insurance premiums actually incurred, and projected to occur, during the twelve months ending June 30, 2024, adjusted by the five-year average of actual retroactive adjustments. The FTY expenses were then adjusted by applying a five-year average expense increase of 6.53% with exception of claims amounts which were held at 2023 levels to arrive at the FPFTY costs. Next, the new Workers' Compensation premium costs were multiplied by the capitalization rate to eliminate the portion of that cost not charged to operating expenses. The insurance other than group expense for FTY and FPFTY was allocated between water and wastewater operations based on allocation Factor 4 (Depreciated Utility Plant in Service). The development of the capitalization percentage is discussed above in the Labor and Labor Related section. The factors used to allocate common costs between water and wastewater operations are discussed in further detail by Company witnesses Gress (PAWC Statement No. 4). The Company's adjustments to insurance other than group expense are shown in Exhibit No. 3-A. Detailed supporting calculations are provided in Exhibit No. 3-B.

Rent Expense

Q. Please explain the Company's adjustment to rent expense.

A. The Company's specific adjustments to rent expense reflect changes projected to occur in the FTY and FPFTY in current lease agreements for water and combined sewer system operations. The Company's adjustment to rent expense is shown in Exhibit No. 3-A. Detailed supporting calculations are provided in Exhibit No. 3-B.

MISCELLANEOUS EXPENSES

Q. Please explain what is included in the Miscellaneous Expense Adjustment.

A. Exhibit No. 3-A sets forth items that are being adjusted or eliminated from the Company's O&M claim in this proceeding.

First, I will discuss deductions reflected in the Miscellaneous Expense Adjustment. The Company eliminated duplicative expense items such as pension and OPEB that have been included in the development of the Company's claim for the ongoing water expense levels (Exhibit No. 3-A Water Operations). Additionally, donations, lobbying expenses, and fines incurred during the HTY were removed. Costs associated with temporary employees were excluded from the Company's claim because the need for these employees will be significantly reduced by the full-time staffing levels reflected in the salary and wage claim in this case. This part of the adjustment assumes recognition in this proceeding of the requested staffing levels. The Company has reduced per-book severance costs, as well as injuries and damages, to reflect a normalized level that is based on a three-year average (2021-2023). An adjustment to the cost of credit card and e-check transaction fees has been calculated using the projected residential customers as of the FTY and FPFTY.

For Water Operations, the Company removed a one-time cost for legal fees, as well as trade show expenses. In addition, the Company removed the annual level of Industrial Pretreatment Program ("IPP") expenses that are currently being billed to the PAWC Oneida Valley Treatment Plant by the Butler Area Sewer Authority ("BASA"), since these will no longer be expensed once the BASA acquisition is completed. The Company has adjusted per book injuries and damages to reflect a normalized level that is based on a historic three-year average (2021-2023). Additionally, the Company has included an

adjustment in Exhibit No. 3-A to reflect the allocation of a portion of the cost of the Capital Campus in Mechanicsburg from Water Operations to Wastewater SSS General Operations, BASA Wastewater Operations, Brentwood Wastewater Operations, and Wastewater CSS Operations.

Second, the Miscellaneous Expense Adjustment also includes additions to the Company's O&M claim for water operations. The Company added costs associated with the revolving line of credit because the costs were reclassified from interest expense to operating costs.

An adjustment to General Facility Maintenance expense is shown in Exhibit No. 3-A to reflect the projected ongoing level of maintenance expense. For Wastewater SSS General Operations and Wastewater CSS Operations, the Company participates in the Nutrient Credit Trading program facilitated by PADEP. The program provides a cost-efficient way for National Pollutant Discharge Elimination System (NPDES) permittees in the Chesapeake Bay Watershed to meet their effluent cap load limits for nutrients. The need to purchase nutrient credits fluctuates from year to year, therefore the Company has adjusted the per book costs to reflect a normalized level that is based on a historic five-year average (2019-2023).

Finally, and as discussed by Ashley Everette in PAWC Statement No. 1, the Company has included costs related to the Arrearage Management Plan ("AMP") currently pending before the Pennsylvania Public Utility Commission and the H2O Bill Discount Program. The total cost of discounts and arrearage forgiveness is based on the average number of H2O Discount customers in the HTY with arrears multiplied by the annual credits, assuming 100% participation rate. The adjustment also includes monthly and start-

up costs provided by Dollar Energy who will facilitate the AMP and H2O Bill Discount Program.

ACQUISITION O&M EXPENSES

Q. Please explain what is included in the Acquisition O&M Adjustment.

A. The Company made adjustments to annualize the O&M expenses not fully recognized in the HTY for the Company's acquisitions, as follows:

Water Operations: the water assets of Farmington Township (anticipated acquisition in 2024) and Audubon (anticipated acquisition in 2024)

Wastewater SSS General Operations: the wastewater assets of Farmington Township (anticipated acquisition in 2024) and Sadsbury Township (anticipated acquisition in 2024)

BASA Wastewater Operations: the wastewater assets of Butler Area Sewer Authority (anticipated acquisition in 2023)

Brentwood Wastewater Operations: the wastewater assets of Brentwood Borough (anticipated acquisition in 2024)

Details supporting these adjustments are provided in Exhibit No. 3-B.

Q. Does this conclude your direct testimony at this time?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Lori O'Malley**, hereby state that the facts set forth in the pre-marked Statement No. 5 and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: November 8, 2023

Lori O'Malley

PAWC STATEMENT NO. 5-R

REBUTTAL TESTIMONY

OF

LORI O'MALLEY

WITH REGARD TO

PENNSYLVANIA-AMERICAN WATER COMPANY'S

LABOR AND LABOR-RELATED EXPENSES, SERVICE COMPANY EXPENSE, ACQUISITION O&M ADJUSTMENTS, AND OTHER OPERATION AND MAINTENANCE EXPENSES.

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: FEBRUARY 21, 2024

PENNSYLVANIA-AMERICAN WATER COMPANY

REBUTTAL TESTIMONY OF LORI O'MALLEY

Q. Please state your name and business address.

A. My name is Lori O'Malley, and my business address is 1 Water Street, Camden, New Jersey 08102.

Q. By whom are you employed and in what capacity?

A. I am employed by American Water Works Service Company, Inc. ("AWWSC" or the "Service Company") as Senior Manager Regulatory Services. The Service Company is a wholly owned subsidiary of American Water Works Company, Inc. ("American Water") that provides services to Pennsylvania-American Water Company ("PAWC" or the "Company") and its affiliates.

Q. Have you submitted any other testimony in this proceeding?

A. Yes, I submitted PAWC Statement No. 5.

Q. What is the purpose of your rebuttal testimony in this proceeding?

A. I will respond to the direct testimonies of the Office of Consumer Advocate's ("OCA") witness Ralph C. Smith, Bureau of Investigation and Enforcement's ("I&E") witness Vanessa Okum, Office of Small Business Advocate ("OSBA") witness Kevin Higgins, and Pennsylvania-American Water Large Users Group ("PAWLUG") witness Billie LaConte concerning proposed adjustments to the Company's labor and labor related expenses, Service Company expenses, miscellaneous expenses, and acquisition operation and

maintenance ("O&M") adjustments. I also will explain revisions and updates that the Company has made to certain claims.

Q. Have you prepared any exhibits to accompany your rebuttal testimony?

A. Yes. PAWC Exhibits LNO-1R to LNO-6R were prepared by me or under my supervision and are described in my testimony below.

LABOR AND LABOR RELATED EXPENSES

Q. Have you revised the Company's claim for salaries, wages, and related benefits expense?

A. Yes. The Company implemented a merit increase effective January 8, 2024, to non-collective bargaining unit ("non-CBU") hourly employees and exempt employees. The adjustment impacts salaries and wages, performance pay, payroll taxes, 401k, Defined Contribution Plan ("DCP") and Employee Stock Purchase Plan ("ESPP") for Water Operations, Wastewater SSS General Operations and Wastewater CSS Operations. The adjustments, which also reflect the adjustment proposed by the OCA related to a vacancy rate, can be found in the PAWC Exhibit 3-A Revised pages 9R, 50R, 53R, 70R, 114R, 115R, 117R, 133R, 234R, 235R, 237R and 251R. A further breakdown by employee can be found in PAWC Exhibit LNO-1R.

Q. Please summarize Mr. Smith's proposed adjustments to salaries, wages and related benefits.

A. Mr. Smith proposed an adjustment to salaries, wages and related benefits for the Water Operations based on a 1.76% vacancy rate. Mr. Smith reduces the salaries and wages by

$1,045,353 and related payroll taxes by $79,970, and annual performance pay by $85,523 and related payroll tax by $6,543. Additionally, Mr. Smith proposes accompanying adjustments based on the vacancy rate for group insurance by $200,623 and 401K, DCP and ESPP by $72,817, resulting in a total proposed reduction to the Company's claim for salaries, wages, payroll taxes and related benefits by $1,490,829.

Q. Does the Company accept the adjustment proposed by Mr. Smith to the Company's salary and wage expense and related benefits and payroll taxes?

A. Yes. As noted above, this adjustment is reflected in PAWC Exhibit 3-A Revised. Since the Company updated salary and wage expense and related benefits and payroll taxes with the actual 2024 merit increase, the Company's claim was reduced by $1,499,283.

Q. Please describe Ms. Okum's adjustment to annual performance pay.

A. Ms. Okum calculated Water Operations annual performance pay for the fully projected future test year ("FPFTY") by using a percentage of base payroll. Ms. Okum divided the annual performance payout by the base payroll for 2021-2023, and then applied the three-year average percentage to the FPFTY base payroll. Ms. Okum states that the three-year historic average payout factor provides a more reliable and moderate base for the FPFTY allowance because it is based on historic data. Ms. Okum reduces performance pay by $672,285 and related payroll taxes by $52,237.

Q. Do you agree with Ms. Okum's proposed adjustments to performance pay?

A. No. The Company's projection of performance pay should be calculated on an employee level based on the employee's target percentage. If a historical average payout is used, it

should be based on the Company's employees' average actual performance compensation level rather than a percentage of total base payroll expense. For example, from 2020 through 2022, the Company's employees' average actual performance compensation level was one hundred and eight percent (108.5%) of the targeted amount. Consequently, using historical performance compensation levels to set future rates would result in an 8.5% increase to the Company's targeted levels for the FPFTY. The Company continues to believe that its performance pay claim, which is based on employee-specific targeted levels, is reasonable and appropriate.

Q What other adjustments do Mr. Higgins, Mr. Smith and Ms. LaConte recommend for the Company's performance pay costs?

A. Mr. Higgins recommends that the Commission exclude fifty percent (50%) of Annual Performance Plan ("APP") costs and one hundred percent (100%) of Long Term Performance Plan ("LTPP") costs for PAWC and Service Company employees. Including payroll taxes, Mr. Higgins' proposed adjustments would eliminate approximately $10.087 million from the Company's operating expense in this case. OCA witness Smith's proposed adjustments to the Company's LTPP compensation costs for certain Service Company employees would eliminate $1.753 million of PAWC's $4.1 million LTPP claim. PAWLUG witness LaConte recommends that the Commission exclude fifty percent (50%) of APP costs which would eliminate $2 million from the Company's claim. Company witness Runzer (PAWC Statement No. 2-R) explains why the Commission should reject these recommended adjustments to eliminate the Company's APP and LTPP expense.

Q. Please describe Mr. Higgins' proposed adjustments to Employee Stock Purchase Plan ("ESPP") expense?

A. Mr. Higgins recommends that the Commission exclude one hundred percent (100%) of ESPP costs, stating that the shareholders should fund the stock purchase discount provided by the ESPP because it increases payroll costs and "provides no tangible benefit for customers."

Q. Do you agree with Mr. Higgins' adjustments to ESPP expense?

A. No. The Company's ESPP is open to all active, full- or part-time employees of American Water and its subsidiaries, including PAWC, through payroll deductions, and it provides an opportunity to acquire shares of American Water common stock at a 15% discount. Employees who become stockholders of American Water have additional incentive to establish efficiencies. Those efficiencies benefit both the customers and the stockholders.

Q. Have you revised the Company's claim to Pension and OPEB expense?

A. Yes. The Company calculated its pension and OPEB expense claim in accordance with Financial Account Standards Board Accounting Standards Codification Topic 715 or "ASC 715". The expenses have been updated with the reports furnished by its actuary, Willis Towers Watson for 2024. The adjustments can be found in the PAWC Exhibit 3-A Revised pages 51R and 52R. Further support can be found in PAWC Exhibit LNO-2R.

Q. Please describe Ms. Okum's proposed adjustments to Pension and OPEB expense.

A. Ms. Okum recommends a three-year average of historic actuals for both pension and OPEB expense, reducing pension by $3,822,954 and OPEB by $2,343,426.

Q. Do you agree with Ms. Okum's adjustments to Pension and OPEB expense?

A. No. I do not agree with Ms. Okum's adjustments for the same reasons explained by Company witness Swiz (PAWC Statement No. 8-R).

SERVICE COMPANY COSTS

Q. Please describe Mr. Higgins and Mr. Smith's proposed adjustments to Service Company expense regarding performance pay.

A. As discussed above, Mr. Higgins proposes to eliminate 50% of cost recovery for annal performance pay and 100% for long-term performance pay (LTPP). Mr. Smith proposes to eliminate cost recovery for LTPP paid to certain AWWSC employees. As noted above, Company witness Runzer explains why the Commission should reject Mr. Higgins and Mr. Smith's recommended adjustments to eliminate the Company's performance pay expense.

Q. Have you revised the Company's claim for Service Company – Labor and Labor Related Expenses?

A. Yes. The Service Company implemented a merit increase effective January 8, 2024; therefore, the proposed adjustment was updated using the 2024 average increase. The Company also removed Supplemental Executive Retirement Plan ("SERP") costs which were erroneously included in the Company's claim. Finally, the Company made corrections to formula errors within the workpaper found during discovery (OSBA 04-008). The adjustments can be found in the PAWC Exhibit 3-A Revised pages 62R, 125R and 245R. Please refer to PAWC Exhibit LNO-3R for supporting adjustments.

OTHER O&M EXPENSES

Q. Have you adjusted the Company's claim for Miscellaneous Expense related to credit card and e-check transaction fees?

A. Yes. In preparing a response to a discovery request (I&E-RE-59), the Company identified an error in its claim for credit card and e-check transaction fees. The amounts included in the FTY and FPFTY were overstated for Water Operations. The adjustment reduces the Company's original claim for miscellaneous expense by $182,738. The adjustments can be found in PAWC Exhibit 3-A Revised page 64R. Please refer to PAWC Exhibit LNO-4R for supporting calculations.

Q. Have you adjusted the Company's claim for Miscellaneous Expense related to external board members?

A. Yes. As stated in response to a discovery request (OCA 22-003), PAWC eliminated its external board as of December 31, 2023. The adjustment to remove this $123,250 expense can be found in PAWC Exhibit 3-A Revised page 64R. Please refer to PAWC Exhibit LNO-5R for supporting calculations.

Q. Please describe Mr. Smith's Insurance Other Than Group ("IOTG") adjustment to the Company's O&M expense claim.

A. Mr. Smith reduced the Company's claim for IOTG by $306,312 by using the actual percentage change from the historical test year ended June 30, 2023 rather than the five-year average percentage change. Mr. Smith stated that annual percentage change for the 12-month ending periods of June 2019, June 2021 and June 2022 were abnormally high or low compared to the historical test year.

Q. Do you agree with Mr. Smith's recommendation?

A. No. It is common for averages to be used to normalize costs that fluctuate from year to year to forecast them for ratemaking purposes. The Company used a five-year historical average percentage change to smooth out the high and low years. Because the costs fluctuate from year-to-year, the use of the historical test year percentage change is not appropriate. The Company also used a five-year historical average percentage in the prior case (Docket Nos. R-2022-3031672 and R-2022-3031673), and Mr. Smith accepted the adjustment.

Q. Please describe Mr. Colton's adjustments to the Arrearage Management Plan ("AMP") uncollectible expense.

A. First, Mr. Colton calculated the cost of the discounts by adjusting the participation rate of the AMP program from 100% to 11% based on the number of full and timely payments from Bill Discount Program participants from November 2021 through October 2023. Mr. Colton further reduced the Company's expense for this item by a 17.9% write-off rate based on his claim that this expense was already included in uncollectible expense. In total, Mr. Colton reduced the Company's expense claim by $2.1 million.

Q. Do you agree with Mr. Colton's recommendations?

A. No. The Company's claim is consistent with the cost recovery permitted by the Further Amended Joint Petition for Full Settlement of the Arrearage Management Plan.[1] Under the terms of the settlement, the AMP is considered a pilot program for cost recovery purposes, and the Company will record a regulatory asset or liability for amounts over or

1 Commission Order entered December 7, 2023 at Docket No. P-2021-3028195.

under the amount included in rates for recovery or refund in the next base rate case. Thus, if the expense is lower than the Company has projected as assumed by Mr. Colton, the difference will be recorded to a regulatory liability and returned to customers in a future rate case. Mr. Colton's claim that the expense is already included in uncollectible expense is unsubstantiated as it cannot be determined at this time what impact, if any, the AMP will have on uncollectible expense. The AMP Settlement allows the cost of the AMP to be included in rates. The Company disagrees with speculative adjustments about potential offsets related to this program.

ACQUISITION O&M ADJUSTMENTS

Q. Has the Company revised its claim for acquisition O&M adjustments?

A. While preparing the response to discovery (OCA 15-009), the Company found that the Service Company expense amount for the Audubon Water acquisition for June 30, 2024 was incorrect. The adjustment reduces the Company's original claim for acquisition O&M expense by $10,494 for the FTY. The adjustment can be found in PAWC Exhibit 3-A Revised page 63R. Please refer to PAWC Exhibit LNO-6R for supporting calculations.

Q. Please describe Mr. Smith's and Ms. Okum's adjustments to O&M expenses associated with to-be acquired systems.

A. Both Mr. Smith and Ms. Okum eliminated expenses related to the following acquisitions: Butler Area Sewer Authority ("BASA"), Brentwood Wastewater, Audubon Water, Farmington Water, Farmington Wastewater and Sadsbury Wastewater. Company witness Abruzzo (PAWC Statement No. 6-R) explains why the Commission should reject these recommended adjustments to eliminate the Company's acquisition O&M expense.

Q. Does this conclude your rebuttal testimony at this time?

A. Yes, it does.

Pennsylvania-American Water Company
Annualized Salary and Wages

	2024	2025
Water Operations		
Non-Collective Bargaining Unit Salary	$30,845,166	$31,918,493
Collective Bargaining Unit	46,469,973	47,634,477
Non-Collective Bargaining Unit Hourly	17,105,734	17,699,564
Total	$94,420,874	$97,252,534
Wastewater SSS General Operations		
Non-Collective Bargaining Unit Salary	$1,024,381	$1,060,005
Collective Bargaining Unit	1,448,344	1,488,359
Non-Collective Bargaining Unit Hourly	3,240,366	3,352,949
Total	$5,713,091	$5,901,313
Wastewater CSS Operations		
Non-Collective Bargaining Unit Salary	$1,106,165	$1,144,645
Collective Bargaining Unit	6,978,970	7,127,053
Non-Collective Bargaining Unit Hourly	62,686	64,859
Total	$8,147,821	$8,336,557

Pennsylvania-American Water Company - Water Operations
Compensation

							Gross Labor				
					Base Year		Hourly Wage Rate		Regular Time		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
Non-Collective Bargaining Unit Salary											
1	240106	CORP-Field Services	Project Manager	1/18/1999	$68.45		$142,367	$71.19	$73.67	$148,075	$153,234
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001	56.47		117,457	58.73	60.77	122,158	126,402
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994	116.00		241,280	120.65	124.85	250,952	259,688
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998	45.67		95,000	47.50	49.15	98,800	102,232
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993	83.98		174,675	87.35	90.39	181,688	188,011
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997	43.07		89,583	44.80	46.36	93,184	96,429
7	249160	WILK-Watres	Supvr Production	1/11/1988	37.62		78,241	39.12	40.48	81,370	84,198
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993	55.45		115,341	57.68	59.69	119,974	124,155
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990	54.66		113,697	56.85	58.83	118,248	122,366
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987	43.54		90,563	45.29	46.87	94,203	97,490
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983	49.49		102,945	51.48	53.27	107,078	110,802
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998	43.77		91,038	45.52	47.10	94,682	97,968
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998	34.70		72,167	36.09	37.35	75,067	77,688
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992	47.20		98,180	49.09	50.80	102,107	105,664
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986	39.00		81,120	40.56	41.97	84,365	87,298
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997	36.33		75,570	37.79	39.11	78,603	81,349
17	249150	WILK-Other	Sr Supt Production	9/13/1993	52.15		108,478	54.24	56.13	112,819	116,750
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998	68.07		141,583	70.80	73.26	147,264	152,381
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994	54.79		113,960	56.99	58.97	118,539	122,658
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997	51.12		106,338	53.17	55.02	110,594	114,442
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995	42.08		87,524	43.77	45.29	91,042	94,203
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995	42.06		87,493	43.75	45.27	91,000	94,162
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995	38.85		80,813	40.41	41.82	84,053	86,986
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995	69.06		143,639	71.83	74.33	149,406	154,606
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982	45.81		95,294	47.65	49.31	99,112	102,565
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998	51.50		107,130	53.57	55.43	111,426	115,294
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989	64.90		135,000	67.51	69.86	140,421	145,309
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978	46.95		97,657	48.83	50.53	101,566	105,102
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998	48.22		100,295	50.15	51.90	104,312	107,952
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989	95.00		197,600	98.81	102.25	205,525	212,680
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993	69.66		144,892	72.45	74.97	150,696	155,938
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994	52.01		108,173	54.09	55.97	112,507	116,418
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984	43.19		89,826	44.92	46.48	93,434	96,678
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987	88.94		185,000	92.51	95.73	192,421	199,118
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984	53.63		111,551	55.78	57.72	116,022	120,058
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991	103.40		215,072	107.55	111.29	223,704	231,483
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994	50.66		105,370	52.69	54.52	109,595	113,402
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992	48.24		100,332	50.17	51.92	104,354	107,994
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986	42.83		89,088	44.55	46.10	92,664	95,888
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986	72.03		149,824	74.92	77.53	155,834	161,262
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998	46.13		95,947	47.98	49.65	99,798	103,272
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998	68.19		141,831	70.92	73.39	147,514	152,651
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998	44.55		92,673	46.34	47.95	96,387	99,736
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999	48.23		100,319	50.16	51.91	104,333	107,973
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999	56.62		117,762	58.89	60.94	122,491	126,755
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999	45.00		93,600	46.80	48.43	97,344	100,734
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000	82.29		171,164	85.59	88.57	178,027	184,226
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000	41.36		86,030	43.02	44.52	89,482	92,602
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000	41.18		85,651	42.83	44.32	89,086	92,186
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000	41.36		86,026	43.02	44.52	89,482	92,602
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001	67.50		140,400	70.21	72.65	146,037	151,112
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994	55.70		115,866	57.94	59.96	120,515	124,717
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990	42.06		87,494	43.75	45.27	91,000	94,162
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001	55.17		114,763	57.39	59.39	119,371	123,531
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999	52.00		108,150	54.08	55.96	112,486	116,397
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990	54.51		113,383	56.70	58.67	117,936	122,034
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999	64.78		134,740	67.38	69.72	140,150	145,018
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992	97.52		202,840	101.43	104.96	210,974	218,317
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997	96.07		199,823	99.92	103.40	207,834	215,072
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002	68.56		142,604	71.31	73.79	148,325	153,483
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003	58.80		122,299	61.16	63.29	127,213	131,643
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003	39.94		83,075	41.54	42.99	86,403	89,419
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003	50.82		105,708	52.86	54.70	109,949	113,776
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003	43.33		90,123	45.07	46.64	93,746	97,011
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003	38.46		80,000	40.00	41.39	83,200	86,091
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003	56.39		117,300	58.66	60.70	122,013	126,256
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004	46.64		97,008	48.51	50.20	100,901	104,416
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005	59.16		123,054	61.53	63.67	127,982	132,434
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005	50.74		105,538	52.77	54.61	109,762	113,589
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005	51.50		107,130	53.57	55.43	111,426	115,294

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
Non-Collective Bargaining Unit Salary															
1	240106	CORP-Field Services	Project Manager	1/18/1999									$148,075		$153,234
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001									122,158		126,402
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994									250,952		259,688
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998									98,800		102,232
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993									181,688		188,011
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997									93,184		96,429
7	249160	WILK-Watres	Supvr Production	1/11/1988									81,370		84,198
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993									119,974		124,155
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990									118,248		122,366
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987									94,203		97,490
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983									107,078		110,802
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998									94,682		97,968
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998									75,067		77,688
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992									102,107		105,664
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986									84,365		87,298
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997									78,603		81,349
17	249150	WILK-Other	Sr Supt Production	9/13/1993									112,819		116,750
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998									147,264		152,381
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994									118,539		122,658
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997									110,594		114,442
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995									91,042		94,203
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995									91,000		94,162
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995									84,053		86,986
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995									149,406		154,606
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982									99,112		102,565
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998									111,426		115,294
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989									140,421		145,309
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978									101,566		105,102
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998									104,312		107,952
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989									205,525		212,680
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993									150,696		155,938
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994									112,507		116,418
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984									93,434		96,678
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987									192,421		199,118
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984									116,022		120,058
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991									223,704		231,483
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994									109,595		113,402
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992									104,354		107,994
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986									92,664		95,888
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986									155,834		161,262
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998									99,798		103,272
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998									147,514		152,651
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998									96,387		99,736
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999									104,333		107,973
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999									122,491		126,755
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999									97,344		100,734
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000									178,027		184,226
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000									89,482		92,602
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000									89,086		92,186
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000									89,482		92,602
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001									146,037		151,112
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994									120,515		124,717
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990									91,000		94,162
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001									119,371		123,531
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999									112,486		116,397
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990									117,936		122,034
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999									140,150		145,018
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992									210,974		218,317
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997									207,834		215,072
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002									148,325		153,483
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003									127,213		131,643
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003									86,403		89,419
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003									109,949		113,776
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003									93,746		97,011
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003									83,200		86,091
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003									122,013		126,256
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004									100,901		104,416
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005									127,982		132,434
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005									109,762		113,589
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005									111,426		115,294

Pennsylvania-American Water Company - Water Operations
Compensation

						Gross Labor						
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005	52.02		108,200	54.10	55.98	112,528	116,438
72	241151	PITT-Production Haye	Supvr Production	3/16/2005	41.57		86,455	43.23	44.73	89,918	93,038
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005	45.69		95,042	47.53	49.18	98,862	102,294
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005	44.81		93,207	46.61	48.23	96,949	100,318
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005	59.17		123,083	61.55	63.69	128,024	132,475
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005	46.35		96,408	48.21	49.89	100,277	103,771
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005	46.35		96,408	48.21	49.89	100,277	103,771
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005	63.00		131,040	65.53	67.81	136,302	141,045
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005	56.09		116,677	58.34	60.37	121,347	125,570
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006	37.65		78,315	39.16	40.52	81,453	84,282
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006	71.80		149,350	74.68	77.28	155,334	160,742
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006	53.35		110,959	55.48	57.41	115,398	119,413
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006	41.01		85,292	42.65	44.13	88,712	91,790
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006	40.66		84,564	42.29	43.76	87,963	91,021
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006	37.50		78,000	39.00	40.36	81,120	83,949
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006	38.46		80,000	40.00	41.39	83,200	86,091
87	240106	CORP-Field Services	Mgr Opns	1/22/2007	48.62		101,136	50.57	52.33	105,186	108,846
88	249150	WILK-Other	Production Asset Administrator	1/22/2007	42.31		88,000	44.00	45.53	91,520	94,702
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007	51.92		108,000	54.01	55.89	112,341	116,251
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007	36.69		76,321	38.16	39.49	79,373	82,139
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009	56.39		117,300	58.66	60.70	122,013	126,256
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007	55.10		114,600	57.31	59.30	119,205	123,344
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007	46.10		95,887	47.95	49.62	99,736	103,210
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007	54.52		113,400	56.71	58.68	117,957	122,054
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007	58.65		122,000	61.01	63.13	126,901	131,310
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007	48.41		100,689	50.35	52.10	104,728	108,368
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008	67.50		140,400	70.21	72.65	146,037	151,112
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008	39.42		82,002	41.01	42.44	85,301	88,275
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008	58.85		122,400	61.21	63.34	127,317	131,747
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008	61.86		128,671	64.34	66.58	133,827	138,486
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008	42.00		87,358	43.68	45.20	90,854	94,016
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009	40.80		84,864	42.44	43.92	88,275	91,354
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009	42.87		89,169	44.59	46.14	92,747	95,971
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009	45.93		95,544	47.78	49.44	99,382	102,835
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009	71.15		148,000	74.01	76.59	153,941	159,307
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009	106.22		220,933	110.48	114.32	229,798	237,786
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009	47.45		98,705	49.36	51.08	102,669	106,246
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009	40.02		83,239	41.62	43.07	86,570	89,586
109	246501	COAT-Production	Supvr Production	4/12/2010	39.36		81,872	40.94	42.36	85,155	88,109
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010	38.46		80,000	40.00	41.39	83,200	86,091
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010	46.11		95,909	47.96	49.63	99,757	103,230
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010	56.00		116,472	58.24	60.27	121,139	125,362
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010	47.05		97,854	48.93	50.63	101,774	105,310
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011	44.71		93,000	46.50	48.12	96,720	100,090
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011	39.90		83,000	41.50	42.94	86,320	89,315
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011	34.71		72,203	36.10	37.36	75,088	77,709
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011	39.24		81,621	40.81	42.23	84,885	87,838
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011	57.62		119,852	59.93	62.02	124,654	129,002
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012	41.09		85,466	42.74	44.23	88,899	91,998
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012	56.68		117,889	58.95	61.00	122,616	126,880
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012	58.54		121,768	60.89	63.01	126,651	131,061
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012	34.76		72,310	36.16	37.42	75,213	77,834
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013	58.92		122,545	61.28	63.41	127,462	131,893
124	240306	CORP-Field Service	Project Manager	3/4/2013	54.07		112,467	56.24	58.20	116,979	121,056
125	243151	NEWC-New Castle	Supvr Production	4/29/2013	39.92		83,040	41.52	42.96	86,362	89,357
126	247150	MILT-Prod Other	Supvr Production	5/28/2013	38.25		79,565	39.79	41.17	82,763	85,634
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013	39.51		82,182	41.09	42.52	85,467	88,442
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013	38.46		80,000	40.00	41.39	83,200	86,091
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013	78.91		164,141	82.08	84.94	170,726	176,675
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013	49.52		103,000	51.50	53.29	107,120	110,843
131	240114	CORP-Engineering	GIS Manager	3/31/2014	44.70		92,969	46.49	48.11	96,699	100,069
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014	55.77		115,999	58.01	60.03	120,661	124,862
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014	41.80		86,940	43.47	44.98	90,418	93,558
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014	38.94		81,000	40.50	41.91	84,240	87,173
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014	37.02		77,000	38.50	39.84	80,080	82,867
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014	42.90		89,224	44.62	46.17	92,810	96,034
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014	33.24		69,135	34.57	35.77	71,906	74,402
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014	41.68		86,700	43.35	44.86	90,168	93,309
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014	61.16		127,203	63.61	65.82	132,309	136,906
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015	40.81		84,885	42.45	43.93	88,296	91,374
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015	36.95		76,863	38.44	39.78	79,955	82,742

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor										
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005								112,528	116,438		
72	241151	PITT-Production Haye	Supvr Production	3/16/2005								89,918	93,038		
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005								98,862	102,294		
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005								96,949	100,318		
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005								128,024	132,475		
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005								100,277	103,771		
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005								100,277	103,771		
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005								136,302	141,045		
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005								121,347	125,570		
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006								81,453	84,282		
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006								155,334	160,742		
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006								115,398	119,413		
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006								88,712	91,790		
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006								87,963	91,021		
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006								81,120	83,949		
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006								83,200	86,091		
87	240106	CORP-Field Services	Mgr Opns	1/22/2007								105,186	108,846		
88	249150	WILK-Other	Production Asset Administrator	1/22/2007								91,520	94,702		
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007								112,341	116,251		
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007								79,373	82,139		
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009								122,013	126,256		
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007								119,205	123,344		
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007								99,736	103,210		
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007								117,957	122,054		
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007								126,901	131,310		
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007								104,728	108,368		
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008								146,037	151,112		
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008								85,301	88,275		
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008								127,317	131,747		
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008								133,827	138,486		
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008								90,854	94,016		
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009								88,275	91,354		
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009								92,747	95,971		
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009								99,382	102,835		
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009								153,941	159,307		
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009								229,798	237,786		
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009								102,669	106,246		
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009								86,570	89,586		
109	246501	COAT-Production	Supvr Production	4/12/2010								85,155	88,109		
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010								83,200	86,091		
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010								99,757	103,230		
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010								121,139	125,362		
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010								101,774	105,310		
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011								96,720	100,090		
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011								86,320	89,315		
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011								75,088	77,709		
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011								84,885	87,838		
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011								124,654	129,002		
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012								88,899	91,998		
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012								122,616	126,880		
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012								126,651	131,061		
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012								75,213	77,834		
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013								127,462	131,893		
124	240306	CORP-Field Service	Project Manager	3/4/2013								116,979	121,056		
125	243151	NEWC-New Castle	Supvr Production	4/29/2013								86,362	89,357		
126	247150	MILT-Prod Other	Supvr Production	5/28/2013								82,763	85,634		
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013								85,467	88,442		
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013								83,200	86,091		
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013								170,726	176,675		
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013								107,120	110,843		
131	240114	CORP-Engineering	GIS Manager	3/31/2014								96,699	100,069		
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014								120,661	124,862		
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014								90,418	93,558		
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014								84,240	87,173		
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014								80,080	82,867		
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014								92,810	96,034		
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014								71,906	74,402		
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014								90,168	93,309		
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014								132,309	136,906		
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015								88,296	91,374		
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015								79,955	82,742		

Pennsylvania-American Water Company - Water Operations
Compensation

						Gross Labor						
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages		2024	2025	2024	2025
142	240114	CORP-Engineering	GIS Manager	2/2/2015	44.70		92,969		46.49	48.11	96,699	100,069
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015	36.19		75,275		37.64	38.95	78,291	81,016
144	240114	CORP-Engineering	Engineer	6/22/2015	39.19		81,520		40.76	42.18	84,781	87,734
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015	37.84		78,702		39.35	40.72	81,848	84,698
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015	48.56		101,000		50.50	52.26	105,040	108,701
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015	37.50		78,000		39.00	40.36	81,120	83,949
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015	37.63		78,280		39.14	40.50	81,411	84,240
149	243301	BUTL-Production	Supvr Production	12/7/2015	39.79		82,753		41.38	42.82	86,070	89,066
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015	38.00		79,035		39.52	40.90	82,202	85,072
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015	104.24		216,819		108.42	112.19	225,514	233,355
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016	38.55		80,176		40.09	41.49	83,387	86,299
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016	67.66		140,737		70.38	72.83	146,390	151,486
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016	34.15		71,026		35.52	36.76	73,882	76,461
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016	41.68		86,703		43.36	44.87	90,189	93,330
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016	49.54		103,042		51.53	53.32	107,182	110,906
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016	37.33		77,646		38.83	40.18	80,766	83,574
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016	36.21		75,327		37.67	38.98	78,354	81,078
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016	44.00		91,520		45.76	47.35	95,181	98,488
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016	47.36		98,500		49.25	50.96	102,440	105,997
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017	79.33		165,000		82.51	85.38	171,621	177,590
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990	40.28		83,779		41.89	43.35	87,131	90,168
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016	37.74		78,508		39.26	40.63	81,661	84,510
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017	49.90		103,800		51.91	53.72	107,973	111,738
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017	61.92		128,795		64.40	66.64	133,952	138,611
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017	48.08		100,000		50.00	51.74	104,000	107,619
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017	47.27		98,323		49.17	50.88	102,274	105,830
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017	51.92		108,000		54.01	55.89	112,341	116,251
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017	38.50		80,071		40.04	41.43	83,283	86,174
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017	33.00		68,637		34.32	35.51	71,386	73,861
171	240114	CORP-Engineering	Planning Engineer	8/14/2017	40.80		84,854		42.43	43.91	88,254	91,333
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017	61.06		127,000		63.51	65.72	132,101	136,698
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017	46.11		95,910		47.96	49.63	99,757	103,230
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011	41.74		86,822		43.41	44.92	90,293	93,434
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018	47.23		98,230		49.12	50.83	102,170	105,726
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018	50.33		104,682		52.35	54.17	108,888	112,674
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018	50.28		104,580		52.29	54.11	108,763	112,549
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018	39.39		81,927		40.97	42.40	85,218	88,192
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018	46.68		97,092		48.55	50.24	100,984	104,499
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018	47.50		98,800		49.40	51.12	102,752	106,330
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018	40.98		85,237		42.62	44.10	88,650	91,728
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018	47.73		99,271		49.64	51.37	103,251	106,850
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018	37.85		78,733		39.37	40.74	81,890	84,739
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018	37.14		77,250		38.63	39.97	80,350	83,138
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018	61.06		127,000		63.51	65.72	132,101	136,698
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018	37.98		79,000		39.50	40.87	82,160	85,010
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018	44.00		91,520		45.76	47.35	95,181	98,488
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018	39.66		82,484		41.25	42.69	85,800	88,795
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018	33.57		69,828		34.92	36.14	72,634	75,171
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018	38.25		79,560		39.78	41.16	82,742	85,613
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018	45.24		94,099		47.05	48.69	97,864	101,275
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018	40.87		85,000		42.50	43.98	88,400	91,478
193	240114	CORP-Engineering	Staff Engineer	8/27/2018	36.50		75,920		37.96	39.28	78,957	81,702
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018	37.29		77,565		38.79	40.14	80,683	83,491
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018	37.24		77,466		38.74	40.09	80,579	83,387
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018	151.44		315,000		157.52	163.00	327,642	339,040
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018	44.00		91,520		45.76	47.35	95,181	98,488
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018	37.02		76,996		38.50	39.84	80,080	82,867
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018	37.50		78,004		39.01	40.37	81,141	83,970
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018	39.73		82,640		41.32	42.76	85,946	88,941
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018	33.80		70,298		35.15	36.37	73,112	75,650
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019	44.67		92,909		46.46	48.08	96,637	100,006
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019	37.87		78,774		39.39	40.76	81,931	84,781
204	240114	CORP-Engineering	Planning Engineer	2/4/2019	47.73		99,275		49.64	51.37	103,251	106,850
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019	38.53		80,146		40.08	41.47	83,366	86,258
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019	41.42		86,154		43.08	44.58	89,606	92,726
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019	38.43		79,937		39.97	41.36	83,138	86,029
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019	38.26		79,577		39.79	41.17	82,763	85,634
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019	38.46		80,000		40.00	41.39	83,200	86,091
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019	42.45		88,293		44.15	45.69	91,832	95,035
211	240114	CORP-Engineering	Staff Engineer	5/20/2019	37.43		77,850		38.93	40.28	80,974	83,782
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019	40.54		84,323		42.17	43.64	87,714	90,771

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					Gross Labor										
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
142	240114	CORP-Engineering	GIS Manager	2/2/2015									96,699		100,069
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015									78,291		81,016
144	240114	CORP-Engineering	Engineer	6/22/2015									84,781		87,734
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015									81,848		84,698
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015									105,040		108,701
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015									81,120		83,949
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015									81,411		84,240
149	243301	BUTL-Production	Supvr Production	12/7/2015									86,070		89,066
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015									82,202		85,072
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015									225,514		233,355
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016									83,387		86,299
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016									146,390		151,486
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016									73,882		76,461
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016									90,189		93,330
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016									107,182		110,906
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016									80,766		83,574
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016									78,354		81,078
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016									95,181		98,488
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016									102,440		105,997
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017									171,621		177,590
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990									87,131		90,168
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016									81,661		84,510
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017									107,973		111,738
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017									133,952		138,611
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017									104,000		107,619
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017									102,274		105,830
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017									112,341		116,251
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017									83,283		86,174
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017									71,386		73,861
171	240114	CORP-Engineering	Planning Engineer	8/14/2017									88,254		91,333
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017									132,101		136,698
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017									99,757		103,230
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011									90,293		93,434
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018									102,170		105,726
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018									108,888		112,674
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018									108,763		112,549
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018									85,218		88,192
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018									100,984		104,499
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018									102,752		106,330
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018									88,650		91,728
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018									103,251		106,850
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018									81,890		84,739
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018									80,350		83,138
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018									132,101		136,698
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018									82,160		85,010
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018									95,181		98,488
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018									85,800		88,795
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018									72,634		75,171
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018									82,742		85,613
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018									97,864		101,275
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018									88,400		91,478
193	240114	CORP-Engineering	Staff Engineer	8/27/2018									78,957		81,702
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018									80,683		83,491
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018									80,579		83,387
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018									327,642		339,040
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018									95,181		98,488
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018									80,080		82,867
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018									81,141		83,970
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018									85,946		88,941
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018									73,112		75,650
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019									96,637		100,006
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019									81,931		84,781
204	240114	CORP-Engineering	Planning Engineer	2/4/2019									103,251		106,850
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019									83,366		86,258
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019									89,606		92,726
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019									83,138		86,029
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019									82,763		85,634
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019									83,200		86,091
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019									91,832		95,035
211	240114	CORP-Engineering	Staff Engineer	5/20/2019									80,974		83,782
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019									87,714		90,771

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						Gross Labor						
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019	45.51		94,671	47.34	48.99	98,467	101,899
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019	37.50		78,000	39.00	40.36	81,120	83,949
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019	32.50		67,600	33.80	34.98	70,304	72,758
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019	41.35		86,000	43.00	44.50	89,440	92,560
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019	45.67		95,000	47.50	49.15	98,800	102,232
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019	47.62		99,051	49.53	51.25	103,022	106,600
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019	40.97		85,215	42.61	44.09	88,629	91,707
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019	40.62		84,492	42.25	43.72	87,880	90,938
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019	39.92		83,026	41.52	42.96	86,362	89,357
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019	36.00		74,880	37.44	38.74	77,875	80,579
223	240120	CORP-Bus Dev	Vice President of Business Development,	11/4/2019	115.57		240,377	120.20	124.38	250,016	258,710
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019	34.66		72,100	36.05	37.30	74,984	77,584
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020	36.23		75,352	37.68	38.99	78,374	81,099
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020	66.85		139,050	69.53	71.95	144,622	149,656
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020	75.00		156,000	78.01	80.72	162,261	167,898
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020	54.60		113,568	56.79	58.77	118,123	122,242
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020	32.75		68,128	34.07	35.26	70,866	73,341
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020	41.94		87,229	43.62	45.14	90,730	93,891
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020	32.57		67,749	33.88	35.06	70,470	72,925
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020	47.50		98,800	49.40	51.12	102,752	106,330
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020	84.18		175,100	87.56	90.61	182,125	188,469
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020	32.67		67,948	33.98	35.16	70,678	73,133
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020	52.88		110,000	55.01	56.92	114,421	118,394
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020	51.37		106,852	53.43	55.29	111,134	115,003
237	249151	WILK-Brownell	Supvr Production	8/24/2020	36.06		75,000	37.50	38.81	78,000	80,725
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020	52.90		110,028	55.02	56.93	114,442	118,414
239	240114	CORP-Engineering	Engineer	10/12/2020	33.31		69,290	34.65	35.86	72,072	74,589
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997	35.00		72,800	36.40	37.67	75,712	78,354
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020	38.09		79,218	39.61	40.99	82,389	85,259
242	240114	CORP-Engineering	Engineer	1/4/2021	33.31		69,290	34.65	35.86	72,072	74,589
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020	37.16		77,299	38.65	40.00	80,392	83,200
244	241151	PITT-Production Haye	Supvr Production	3/29/2021	39.52		82,202	41.10	42.53	85,488	88,462
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021	79.33		165,000	82.51	85.38	171,621	177,590
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021	54.60		113,568	56.79	58.77	118,123	122,242
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021	35.76		74,376	37.19	38.48	77,355	80,038
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021	43.82		91,141	45.57	47.16	94,786	98,093
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021	37.74		78,507	39.26	40.63	81,661	84,510
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021	41.60		86,528	43.27	44.78	90,002	93,142
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021	38.37		79,799	39.90	41.29	82,992	85,883
252	240114	CORP-Engineering	Engineer	9/13/2021	31.89		66,340	33.17	34.32	68,994	71,386
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021	83.83		174,369	87.19	90.22	181,355	187,658
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021	36.93		76,808	38.41	39.75	79,893	82,680
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022	38.46		80,000	40.00	41.39	83,200	86,091
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022	30.77		64,000	32.00	33.11	66,560	68,869
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022	38.46		80,000	40.00	41.39	83,200	86,091
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022	37.82		78,660	39.33	40.70	81,806	84,656
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	39.19		81,510	40.76	42.18	84,781	87,734
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	40.61		84,460	42.23	43.70	87,838	90,896
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022	33.65		70,000	35.00	36.22	72,800	75,338
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022	54.84		114,070	57.04	59.02	118,643	122,762
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022	44.86		93,300	46.65	48.27	97,032	100,402
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022	52.35		108,885	54.45	56.34	113,256	117,187
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022	38.95		81,012	40.51	41.92	84,261	87,194
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022	47.00		97,760	48.88	50.58	101,670	105,206
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007	33.12		68,890	34.45	35.65	71,656	74,152
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022	35.34		73,500	36.75	38.03	76,440	79,102
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995	34.32		71,386	35.70	36.94	74,256	76,835
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022	36.68		76,293	38.15	39.48	79,352	82,118
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022	32.19		66,950	33.48	34.65	69,638	72,072
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022	38.24		79,541	39.77	41.15	82,722	85,592
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022	40.70		84,660	42.33	43.80	88,046	91,104
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022	41.48		86,275	43.14	44.64	89,731	92,851
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022	42.07		87,500	43.75	45.27	91,000	94,162
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022	40.87		85,000	42.50	43.98	88,400	91,478
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022	39.42		82,000	41.00	42.43	85,280	88,254
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022	36.54		76,000	38.00	39.32	79,040	81,786
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023	40.38		84,000	42.00	43.46	87,360	90,397
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023	36.06		75,000	37.50	38.81	78,000	80,725
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023	36.06		75,000	37.50	38.81	78,000	80,725
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023	57.69		120,000	60.01	62.10	124,821	129,168
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023	45.67		95,000	47.50	49.15	98,800	102,232

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor										
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019									98,467		101,899
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019									81,120		83,949
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019									70,304		72,758
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019									89,440		92,560
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019									98,800		102,232
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019									103,022		106,600
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019									88,629		91,707
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019									87,880		90,938
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019									86,362		89,357
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019									77,875		80,579
223	240120	CORP-Bus Dev	Vice President of Business Development,	11/4/2019									250,016		258,710
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019									74,984		77,584
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020									78,374		81,099
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020									144,622		149,656
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020									162,261		167,898
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020									118,123		122,242
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020									70,866		73,341
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020									90,730		93,891
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020									70,470		72,925
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020									102,752		106,330
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020									182,125		188,469
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020									70,678		73,133
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020									114,421		118,394
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020									111,134		115,003
237	249151	WILK-Brownell	Supvr Production	8/24/2020									78,000		80,725
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020									114,442		118,414
239	240114	CORP-Engineering	Engineer	10/12/2020									72,072		74,589
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997									75,712		78,354
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020									82,389		85,259
242	240114	CORP-Engineering	Engineer	1/4/2021									72,072		74,589
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020									80,392		83,200
244	241151	PITT-Production Haye	Supvr Production	3/29/2021									85,488		88,462
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021									171,621		177,590
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021									118,123		122,242
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021									77,355		80,038
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021									94,786		98,093
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021									81,661		84,510
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021									90,002		93,142
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021									82,992		85,883
252	240114	CORP-Engineering	Engineer	9/13/2021									68,994		71,386
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021									181,355		187,658
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021									79,893		82,680
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022									83,200		86,091
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022									66,560		68,869
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022									83,200		86,091
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022									81,806		84,656
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022									84,781		87,734
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022									87,838		90,896
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022									72,800		75,338
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022									118,643		122,762
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022									97,032		100,402
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022									113,256		117,187
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022									84,261		87,194
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022									101,670		105,206
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007									71,656		74,152
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022									76,440		79,102
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995									74,256		76,835
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022									79,352		82,118
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022									69,638		72,072
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022									82,722		85,592
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022									88,046		91,104
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022									89,731		92,851
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022									91,000		94,162
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022									88,400		91,478
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022									85,280		88,254
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022									79,040		81,786
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023									87,360		90,397
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023									78,000		80,725
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023									78,000		80,725
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023									124,821		129,168
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023									98,800		102,232

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor						
					Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023	48.08		100,000	50.00	51.74	104,000	107,619
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023	42.07		87,500	43.75	45.27	91,000	94,162
286	240114	CORP-Engineering	Engineer	6/26/2023	29.81		62,000	31.00	32.08	64,480	66,726
287	240114	CORP-Engineering	Project Manager	6/26/2023	52.88		110,000	55.01	56.92	114,421	118,394
288	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023				55.76	57.70	115,981	120,016
289	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023				55.76	57.70	115,981	120,016
290	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023				55.76	57.70	115,981	120,016
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023				47.75	49.41	99,320	102,773
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023				47.75	49.41	99,320	102,773
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Filled	12/31/2023				55.76	57.70	115,981	120,016
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023				47.75	49.41	99,320	102,773
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Filled	12/31/2023				47.75	49.41	99,320	102,773
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Filled	12/31/2023				47.75	49.41	99,320	102,773
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Filled	12/31/2023				83.76	86.67	174,221	180,274
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Filled	12/31/2023				68.76	71.15	143,021	147,992
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023				47.75	49.41	99,320	102,773
			Total Non-Collective Bargaining Unit Salary			$0	$28,862,534			$31,396,747	$32,489,267
Collective Bargaining Unit											
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	$35.48	$39,216	$74,082	$36.36	$37.27	$75,920	$77,820
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	35.90	11,108	74,959	36.80	37.72	76,838	78,759
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	35.25	4,152	73,602	36.14	37.04	75,460	77,340
4	241103	PITT-Cust Service	Field Service Representative U537P	3/31/1994	35.34	1,395	73,790	36.22	37.13	75,627	77,527
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	36.37	24,031	75,941	37.27	38.20	77,820	79,762
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987	35.67	60,141	74,479	36.55	37.46	76,316	78,217
7	241103	PITT-Cust Service	Field Service Representative U537P	2/2/1988	35.34	54	73,790	36.22	37.13	75,627	77,527
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	38.16	23,171	79,678	39.10	40.07	81,641	83,666
9	241103	PITT-Cust Service	Field Service Representative U537P	7/5/1983	35.34	-	73,790	36.22	37.13	75,627	77,527
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	2/1/1985	36.33	19,819	75,857	37.23	38.16	77,736	79,678
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	36.37	45,947	75,941	37.27	38.20	77,820	79,762
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991	35.76	8,276	74,667	36.64	37.55	76,504	78,404
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	4/22/1991	36.58	3,037	76,379	37.48	38.41	78,258	80,200
14	241103	PITT-Cust Service	Field Service Representative U537P	5/6/1985	35.34	12,905	73,790	36.22	37.13	75,627	77,527
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	35.66	32,069	74,459	36.37	37.09	75,941	77,445
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	35.58	20,788	74,291	36.30	37.02	75,794	77,298
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	36.64	23,436	76,504	37.70	38.62	78,718	80,639
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	35.74	6,989	74,625	36.80	37.72	76,838	78,759
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	35.83	28,952	74,813	36.55	37.27	76,317	77,820
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	35.31	383	73,727	36.01	36.73	75,189	76,692
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	35.91	17,464	74,980	36.63	37.35	76,484	77,987
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	36.74	10,330	76,713	37.47	38.22	78,237	79,803
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	35.41	9,816	73,936	36.12	36.84	75,419	76,922
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	35.66	12,559	74,458	36.37	37.09	75,941	77,444
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	35.54	1,345	74,208	36.60	37.52	76,421	78,342
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	35.70	12,223	74,535	36.76	37.68	76,748	78,669
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	35.83	13,123	74,813	36.55	37.27	76,317	77,820
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	35.41	260	73,936	36.12	36.84	75,419	76,922
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	35.58	19,114	74,291	36.30	37.02	75,794	77,298
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	35.91	13,635	74,980	36.63	37.35	76,484	77,987
31	243301	BUTL-Production	Operator U537O	5/4/1998	36.74	26,997	76,713	37.47	38.22	78,237	79,803
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	35.81	9,848	74,771	36.52	37.25	76,254	77,778
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	35.56	3,063	74,249	36.27	37.00	75,732	77,256
34	243301	BUTL-Production	Operator U537O	11/2/1984	36.74	20,404	76,713	37.47	38.22	78,237	79,803
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	35.41	979	73,936	36.12	36.84	75,419	76,922
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	35.31	5,485	73,727	36.01	36.73	75,189	76,692
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	35.25	314	73,602	35.95	36.67	75,064	76,567
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	35.91	33,677	74,981	36.63	37.35	76,484	77,987
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	35.66	24,676	74,459	36.37	37.09	75,941	77,444
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	35.58	5,799	74,291	36.30	37.02	75,794	77,298
41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	35.41	117	73,936	36.12	36.84	75,419	76,922
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	36.74	191	76,713	37.47	38.22	78,237	79,803
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	35.58	18,021	74,291	36.30	37.02	75,794	77,298
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	35.83	16,209	74,813	36.55	37.27	76,317	77,820
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	35.56	54	74,250	36.26	36.98	75,711	77,214
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	35.93	4,228	75,022	36.64	37.37	76,505	78,029
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	35.91	21,646	74,980	36.63	37.35	76,484	77,987
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	35.66	1,519	74,458	36.37	37.09	75,941	77,444

Pennsylvania-American Water Company - Water Operations
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					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023									104,000		107,619
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023									91,000		94,162
286	240114	CORP-Engineering	Engineer	6/26/2023									64,480		66,726
287	240114	CORP-Engineering	Project Manager	6/26/2023									114,421		118,394
288	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023									115,981		120,016
289	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023									115,981		120,016
290	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023									115,981		120,016
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023									99,320		102,773
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023									99,320		102,773
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Filled	12/31/2023									115,981		120,016
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023									99,320		102,773
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Filled	12/31/2023									99,320		102,773
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Filled	12/31/2023									99,320		102,773
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Filled	12/31/2023									174,221		180,274
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Filled	12/31/2023									143,021		147,992
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023									99,320		102,773
			Total Non-Collective Bargaining Unit Salary		$0	$0	-	-	-	-	-	$0	$31,396,747	$0	$32,489,267
												Vacancy Rate	1.76%		1.76%
												Vacancy Adjustment	$551,581		$570,774
												Total Non-Collective Bargaining Unit Salary	$30,845,166		$31,918,493
Collective Bargaining Unit																
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	$1,038	$0	-	-	620.7	83.6	-	$40,182	$117,140	$41,182	$120,039
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	37	894	-	-	151.8	40.0	-	11,385	89,154	11,668	91,358
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	-	-	-	-	78.5	-	-	4,256	79,717	4,362	81,702
4	241103	PITT-Cust Service	Field Service Representative U537P	3/31/1994	-	-	-	-	26.0	-	-	1,429	77,056	1,465	78,992
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	60	-	-	-	432.6	3.8	-	24,621	102,501	25,232	105,053
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987	2,283	-	-	-	924.0	145.0	-	61,616	140,215	63,141	143,641
7	241103	PITT-Cust Service	Field Service Representative U537P	2/2/1988	-	-	-	-	1.0	-	-	55	75,682	56	77,584
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	-	783	-	-	269.7	99.3	-	23,738	106,162	24,323	108,772
9	241103	PITT-Cust Service	Field Service Representative U537P	7/5/1983	-	-	-	-	-	-	-	-	75,627	-	77,527
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	2/1/1985	-	-	-	-	351.6	6.7	-	20,306	98,042	20,809	100,487
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	1,044	-	-	-	784.7	39.2	-	47,077	125,940	48,244	129,050
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991	127	-	-	-	152.3	0.5	-	8,478	85,109	8,687	87,218
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	4/22/1991	15	-	-	-	54.8	-	-	3,111	81,384	3,187	83,402
14	241103	PITT-Cust Service	Field Service Representative U537P	5/6/1985	-	-	-	-	242.5	-	-	13,225	88,852	13,556	91,083
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	7,825	-	-	-	402.4	144.2	-	32,702	116,468	33,344	118,614
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	4,652	-	-	-	273.8	84.2	-	21,205	101,651	21,622	103,572
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	1,300	-	-	-	405.3	13.7	-	24,109	104,127	24,694	106,633
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	532	-	-	-	128.5	0.5	-	7,195	84,565	7,373	86,664
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	7,465	-	-	-	400.4	100.6	-	29,529	113,311	30,106	115,391
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	59	-	-	-	7.2	-	-	390	75,638	398	77,149
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	3,189	-	-	-	297.2	18.5	-	17,811	97,484	18,159	99,335
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	243	8	-	-	167.5	14.0	-	10,534	89,022	10,743	90,798
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	1,174	-	-	-	146.5	27.8	-	10,012	86,604	10,210	88,306
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	1,554	-	-	-	198.0	26.3	-	12,807	90,302	13,059	92,057
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	8	-	-	-	21.0	3.0	-	1,385	77,813	1,419	79,769
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	806	-	-	-	211.7	11.0	-	12,583	90,136	12,895	92,370
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	3,511	-	-	-	171.2	53.0	-	13,384	93,212	13,645	94,976
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	-	-	-	-	4.8	-	-	265	75,683	270	77,192
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	5,393	-	-	-	272.7	61.7	-	19,497	100,685	19,880	102,571
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	4,442	-	-	-	199.3	38.8	-	13,906	94,832	14,177	96,606
31	243301	BUTL-Production	Operator U537O	5/4/1998	1,030	414	-	181.3	263.6	54.8	-	27,531	107,212	28,080	109,327
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	1,730	-	-	-	134.3	35.3	-	10,041	88,025	10,240	89,748
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	907	-	-	-	53.0	3.0	-	3,124	79,762	3,186	81,349
34	243301	BUTL-Production	Operator U537O	11/2/1984	123	424	-	178.7	168.5	38.7	-	20,808	99,592	21,223	101,573
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	118	-	-	-	10.3	6.0	-	998	76,534	1,018	78,057
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	1,144	-	-	-	51.4	38.3	-	5,593	81,926	5,703	83,540
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	174	-	-	-	5.8	-	-	320	75,557	326	77,067
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	7,316	-	-	-	491.3	96.9	-	34,347	118,148	35,017	120,321
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	4,184	-	-	-	363.7	70.5	-	25,163	105,288	25,657	107,286
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	2,752	-	-	-	81.0	20.0	-	5,916	84,462	6,032	86,081
41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	-	-	-	-	2.2	-	-	119	75,537	121	77,043
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	-	-	-	-	3.4	-	-	195	78,432	199	80,002
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	4,808	-	-	-	238.2	72.3	-	18,382	98,984	18,743	100,849
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	4,123	-	-	-	205.7	69.8	-	16,531	96,970	16,854	98,797
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	-	-	-	-	1.0	-	-	55	75,766	56	77,271
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	538	-	-	-	46.6	23.4	-	4,311	81,354	4,396	82,963
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	2,003	-	-	-	391.2	5.5	-	22,076	100,563	22,507	102,496
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	-	-	-	-	28.2	-	-	1,549	77,490	1,579	79,023

Pennsylvania-American Water Company - Water Operations
Compensation

							Gross Labor					
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	32.41	30,459	67,672	33.37	34.36	69,677	71,744
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	32.18	10,803	67,192	33.14	34.14	69,196	71,284
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	31.78	42,962	66,357	32.72	33.70	68,320	70,366
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	31.28	26,819	65,313	32.22	33.19	67,275	69,301
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	31.97	32,812	66,753	32.93	33.92	68,758	70,825
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988	32.41	30,240	67,672	33.37	34.36	69,677	71,744
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987	32.22	33,966	67,275	33.18	34.17	69,280	71,347
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	30.92	30,087	64,561	31.84	32.79	66,482	68,466
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	32.41	5,000	67,672	33.37	34.36	69,677	71,744
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	31.78	47,200	66,357	32.72	33.70	68,320	70,366
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	31.97	20,511	66,753	32.93	33.92	68,758	70,825
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	32.16	10,091	67,150	33.12	34.11	69,155	71,222
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	31.78	27,226	66,357	32.72	33.70	68,319	70,366
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	32.18	6,044	67,192	33.14	34.14	69,196	71,284
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	32.18	10,091	67,192	33.14	34.14	69,196	71,284
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	32.18	10,662	67,192	33.14	34.14	69,196	71,284
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	30.92	8,360	64,561	31.84	32.79	66,482	68,466
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	30.92	33,712	64,561	31.84	32.79	66,482	68,466
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	32.41	33,763	67,672	33.37	34.36	69,677	71,744
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	32.18	4,319	67,192	33.14	34.14	69,196	71,284
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	32.18	4,351	67,192	33.14	34.14	69,196	71,284
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	30.92	18,270	64,561	31.84	32.79	66,482	68,466
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	32.18	4,821	67,192	33.14	34.14	69,196	71,284
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	31.78	26,530	66,357	32.72	33.70	68,320	70,366
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	30.67	12,314	64,039	31.59	32.54	65,960	67,944
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	32.22	29,714	67,276	33.18	34.17	69,280	71,347
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	32.18	4,622	67,192	33.14	34.14	69,196	71,284
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	31.97	30,007	66,753	32.93	33.92	68,758	70,825
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	32.18	9,669	67,192	33.14	34.14	69,196	71,284
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	32.41	43,932	67,672	33.37	34.36	69,677	71,744
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	32.18	8,696	67,192	33.14	34.14	69,196	71,284
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986	31.78	18,662	66,357	32.72	33.70	68,320	70,366
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	31.78	30,468	66,357	32.72	33.70	68,320	70,366
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	31.53	1,960	65,835	32.47	33.44	67,797	69,823
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	32.18	13,630	67,192	33.14	34.14	69,196	71,284
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	32.18	15,066	67,192	33.14	34.14	69,196	71,284
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	32.18	14,972	67,192	33.14	34.14	69,196	71,284
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	31.28	17,869	65,313	32.22	33.19	67,275	69,301
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	31.97	25,195	66,753	32.93	33.92	68,758	70,825
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	32.18	13,262	67,192	33.14	34.14	69,196	71,284
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	31.97	44,593	66,753	32.93	33.92	68,758	70,825
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	31.28	167	65,313	32.22	33.19	67,275	69,301
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	30.50	1,606	63,684	31.41	32.36	65,584	67,568
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	32.18	15,951	67,192	33.14	34.14	69,196	71,284
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	31.78	22,425	66,357	32.72	33.70	68,319	70,366
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	31.97	5,391	66,753	32.93	33.92	68,758	70,825
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	30.50	127	63,684	31.41	32.36	65,584	67,568
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	31.78	11,637	66,357	32.72	33.70	68,320	70,366
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	32.22	36,512	67,276	33.18	34.17	69,280	71,347
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	31.28	27,821	65,313	32.22	33.19	67,275	69,301
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	31.78	27,922	66,357	32.72	33.70	68,319	70,366
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	31.53	4,007	65,835	32.47	33.44	67,797	69,823
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	32.18	15,481	67,192	33.14	34.14	69,196	71,284
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	33.25	7,647	69,426	34.00	34.86	70,992	72,788
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	35.65	16,221	74,437	36.45	37.37	76,108	78,029
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	32.49	13	67,839	33.22	34.05	69,363	71,096
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	33.52	1,575	69,990	34.45	35.31	71,932	73,727
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	32.38	4,785	67,609	33.11	33.95	69,134	70,888
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996	33.17	2,742	69,259	34.09	34.94	71,180	72,955
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	33.17	50	69,259	34.09	34.94	71,180	72,955
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	33.17	5,556	69,259	34.09	34.94	71,180	72,955
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	34.95	5,140	72,976	35.74	36.63	74,625	76,483
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	32.49	765	67,839	33.22	34.05	69,363	71,096
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	35.65	10,356	74,437	36.45	37.37	76,108	78,029
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	35.67	10,528	74,479	36.55	37.46	76,316	78,216
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	35.67	35,377	74,479	36.55	37.46	76,316	78,217
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	35.66	3,955	74,458	36.37	37.09	75,941	77,444
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	38.16	26,786	79,678	39.10	40.07	81,641	83,666
117	241103	PITT-Cust Service	Field Service Representative U537P	11/18/1998	35.34	-	73,790	36.22	37.13	75,627	77,527
118	244101	INDI-Production	Operator U537O	8/9/1999	36.74	14,355	76,713	37.47	38.22	78,237	79,803
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	35.66	8,578	74,458	36.38	37.10	75,961	77,465

Pennsylvania-American Water Company - Water Operations
Compensation

								Gross Labor								
								Overtime Hours						2024		2025
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	1,200	-	-	-	498.2	92.7	-	31,354	102,231	32,277	105,221
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	224	682	-	-	201.8	15.4	-	11,123	81,226	11,457	83,647
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	1,760	-	-	-	786.7	81.2	-	44,224	114,303	45,539	117,665
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	1,448	-	-	-	561.5	4.5	-	27,619	96,343	28,445	99,194
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	696	-	-	-	582.6	72.3	-	33,790	103,244	34,798	106,319
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988	1,448	-	-	-	513.2	78.3	-	31,129	102,253	32,046	105,238
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987	1,280	-	-	-	569.0	96.5	-	34,970	105,530	36,006	108,633
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	1,200	-	-	-	521.3	92.2	-	30,976	98,658	31,894	101,560
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	40	-	-	-	91.5	7.8	-	5,147	74,864	5,298	77,082
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	1,584	-	-	-	788.8	145.2	-	48,586	118,489	50,030	121,979
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	1,088	-	-	-	387.3	28.0	-	21,122	90,968	21,753	93,666
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	280	-	-	-	165.8	31.3	-	10,390	79,824	10,698	82,200
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	1,368	-	-	-	516.5	37.8	-	28,026	97,713	28,859	100,593
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	104	13	-	-	86.2	28.3	-	6,223	75,537	6,409	77,811
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	104	20	-	-	150.8	42.3	-	10,390	79,710	10,700	82,109
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	136	463	-	-	208.8	8.0	-	10,978	80,773	11,307	83,190
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	464	-	-	-	153.9	18.6	-	8,606	75,552	8,861	77,791
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	1,352	-	-	-	600.5	90.7	-	34,708	102,542	35,736	105,554
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	1,520	-	-	-	571.3	88.8	-	34,757	105,953	35,781	109,045
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	8	348	-	-	88.9	-	-	4,447	74,000	4,581	76,221
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	8	7	-	-	53.6	26.5	-	4,479	73,691	4,613	75,912
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	688	-	-	-	330.7	45.2	-	18,809	85,979	19,366	88,520
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	88	-	-	-	65.9	24.8	-	4,964	74,248	5,112	76,485
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	1,136	-	-	-	465.5	65.0	-	27,309	96,765	28,121	99,622
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	272	-	-	-	234.2	23.5	-	12,680	78,912	13,059	81,274
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	976	-	-	-	517.7	69.3	-	30,592	100,848	31,498	103,822
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	-	4	-	-	53.2	31.0	-	4,758	73,958	4,900	76,188
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	1,104	-	-	-	557.3	47.7	-	30,901	100,763	31,823	103,752
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	128	10	-	-	140.1	43.7	-	9,954	79,289	10,252	81,675
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	1,040	-	-	-	770.5	95.0	-	45,224	115,941	46,556	119,340
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	96	24	-	-	129.7	36.5	-	8,953	78,269	9,220	80,624
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986	1,016	-	-	-	388.3	-	-	19,210	88,546	19,781	91,163
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	1,080	-	-	-	513.7	90.3	-	31,362	100,761	32,294	103,740
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	40	-	-	-	32.8	6.3	-	2,019	69,856	2,078	71,941
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	824	884	-	-	258.6	16.2	-	14,033	84,938	14,453	87,446
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	632	769	-	-	256.2	40.0	-	15,512	86,109	15,976	88,661
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	256	322	-	-	247.8	45.0	-	15,415	85,190	15,877	87,739
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	1,072	-	-	-	369.7	6.0	-	18,402	86,749	18,951	89,324
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	1,088	-	-	-	457.8	47.7	-	25,946	95,792	26,720	98,633
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	592	711	-	-	262.5	8.0	-	13,655	84,155	14,065	86,653
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	1,696	-	-	-	743.7	134.2	-	45,921	116,375	47,291	119,812
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	-	-	-	-	3.5	-	-	171	67,447	177	69,477
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	88	-	-	-	34.9	-	-	1,653	67,325	1,703	69,359
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	200	10	-	-	194.3	99.7	-	16,422	85,829	16,913	88,407
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	1,064	-	-	-	401.3	49.3	-	23,083	92,467	23,770	95,200
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	152	-	-	-	77.3	25.5	-	5,552	74,461	5,717	76,694
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	-	-	-	-	2.0	-	-	130	65,714	133	67,701
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	616	-	-	-	242.0	-	-	11,978	80,914	12,334	83,316
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	1,360	-	-	-	628.3	91.2	-	37,592	108,232	38,705	111,413
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	1,232	-	-	-	578.0	8.0	-	28,651	97,158	29,507	100,040
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	1,168	-	-	-	518.8	46.8	-	28,742	98,229	29,596	101,130
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	112	-	-	-	65.0	14.5	-	4,126	72,035	4,248	74,183
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	840	910	-	-	301.8	12.7	-	15,940	86,887	16,418	89,453
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	84	-	72.7	-	104.2	-	-	7,819	78,895	8,016	80,887
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	-	-	-	-	278.7	17.0	-	16,583	92,690	16,998	95,027
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	36	-	-	-	0.3	-	-	13	69,412	13	71,146
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	19	-	-	-	24.4	5.0	-	1,618	73,569	1,659	75,405
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	-	-	70.0	-	51.6	-	-	4,893	74,027	5,017	75,904
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996	50	-	-	-	54.8	-	-	2,818	74,048	2,888	75,892
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	-	-	-	-	1.0	-	-	52	71,231	53	73,008
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	100	-	-	-	97.8	9.9	-	5,709	76,989	5,850	78,905
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	-	-	11.5	-	90.0	-	-	5,255	79,880	5,386	81,869
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	-	-	-	-	7.6	6.0	-	782	70,145	802	71,898
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	-	-	-	-	183.0	7.0	-	10,587	86,695	10,852	88,881
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	310	-	-	-	188.3	5.3	-	10,786	87,412	11,053	89,579
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	1,038	-	-	-	640.3	12.3	-	36,243	113,598	37,140	116,395
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	474	-	-	-	46.8	20.0	-	4,033	80,447	4,112	82,030
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	15	829	-	-	349.3	86.7	-	27,441	109,927	28,118	112,628
117	241103	PITT-Cust Service	Field Service Representative U537P	11/18/1998	-	-	-	-	-	-	-	-	75,627	-	77,527
118	244101	INDI-Production	Operator U537O	8/9/1999	243	341	-	114.7	147.7	12.0	-	14,639	93,460	14,930	95,318
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	2,560	-	-	-	152.3	4.7	-	8,749	87,270	8,920	88,944

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						Gross Labor						
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	35.56	13,344	74,250	36.26	36.98	75,711	77,215
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	33.02	4,739	68,946	33.76	34.61	70,491	72,266
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	35.56	4,118	74,249	36.26	36.98	75,711	77,214
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	35.67	24,857	74,479	36.55	37.46	76,316	78,217
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	32.41	4,727	67,672	33.37	34.36	69,677	71,744
125	241103	PITT-Cust Service	Field Service Representative U537P	12/28/2001	35.34	453	73,790	36.22	37.13	75,627	77,527
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	35.41	1,948	73,936	36.12	36.84	75,419	76,922
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	36.74	14,826	76,713	37.47	38.22	78,237	79,803
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	35.58	8,092	74,291	36.30	37.02	75,794	77,298
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	35.56	382	74,251	36.26	36.98	75,712	77,216
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	33.17	448	69,259	34.09	34.94	71,180	72,955
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	35.67	85,289	74,479	36.55	37.46	76,317	78,217
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	36.37	44,274	75,941	37.27	38.20	77,820	79,762
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	30.92	34,853	64,561	31.84	32.79	66,482	68,466
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	36.74	28,973	76,713	37.47	38.22	78,237	79,803
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	35.83	6,782	74,813	36.55	37.27	76,317	77,820
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002	35.60	255	74,333	36.48	37.38	76,170	78,049
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	35.60	57,225	74,333	36.48	37.38	76,171	78,050
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	35.81	7,854	74,772	36.52	37.25	76,254	77,778
139	241103	PITT-Cust Service	Field Service Representative U537P	4/14/2003	35.34	-	73,790	36.22	37.13	75,627	77,527
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	32.18	10,779	67,192	33.14	34.14	69,196	71,284
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	36.37	31,904	75,941	37.27	38.20	77,820	79,762
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	30.92	26,760	64,561	31.84	32.79	66,482	68,466
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	36.37	74,351	75,941	37.27	38.20	77,820	79,762
144	241103	PITT-Cust Service	Field Service Representative U537P	8/29/2003	35.34	6,348	73,790	36.22	37.13	75,627	77,527
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	35.31	1,986	73,727	36.01	36.73	75,189	76,692
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	33.17	1,581	69,259	34.09	34.94	71,180	72,955
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	32.41	19,844	67,672	33.37	34.36	69,677	71,744
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	36.49	12,882	76,191	37.22	37.97	77,715	79,281
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	36.08	26,423	75,335	36.97	37.89	77,193	79,114
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	30.78	5,177	64,269	31.47	32.26	65,709	67,359
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005	35.83	5,445	74,813	36.72	37.64	76,671	78,592
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	35.50	8,678	74,124	36.21	36.94	75,606	77,131
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	33.17	9,014	69,259	34.09	34.94	71,180	72,955
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	35.66	40,040	74,458	36.38	37.10	75,961	77,465
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	35.50	3,854	74,124	36.20	36.92	75,586	77,089
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	35.60	16,575	74,333	36.48	37.38	76,170	78,049
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	33.17	15,800	69,259	34.09	34.94	71,180	72,955
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	35.31	4,858	73,727	36.01	36.73	75,189	76,692
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	35.66	11,498	74,458	36.37	37.09	75,941	77,444
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	30.67	18,513	64,039	31.59	32.54	65,960	67,944
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005	32.16	6,258	67,150	33.12	34.11	69,155	71,222
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	32.49	4,335	67,839	33.22	34.05	69,363	71,096
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	35.56	2,176	74,249	36.27	37.00	75,732	77,256
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	35.30	4,580	73,706	36.18	37.08	75,544	77,423
165	241103	PITT-Cust Service	Field Service Representative U537P	12/19/2005	35.34	7,886	73,790	36.22	37.13	75,627	77,527
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	35.41	427	73,936	36.12	36.84	75,419	76,922
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	36.37	36,153	75,941	37.27	38.20	77,820	79,762
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	36.37	36,486	75,941	37.27	38.20	77,820	79,762
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	35.78	29,128	74,709	36.66	37.57	76,546	78,446
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	35.58	5,642	74,291	36.30	37.02	75,794	77,298
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	36.42	47,431	76,045	37.33	38.26	77,945	79,887
172	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	35.34	856	73,790	36.22	37.13	75,627	77,527
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	30.67	16,991	64,039	31.59	32.54	65,960	67,944
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	30.67	15,445	64,039	31.59	32.54	65,960	67,944
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	36.37	28,848	75,941	37.27	38.20	77,820	79,762
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	35.48	22,458	74,082	36.36	37.27	75,920	77,820
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	35.93	5,568	75,022	36.64	37.37	76,504	78,029
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	35.93	6,121	75,024	36.64	37.37	76,506	78,030
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	35.31	7,277	73,727	36.01	36.73	75,189	76,692
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	30.92	40,400	64,561	31.84	32.79	66,482	68,466
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006	32.16	13,727	67,150	33.12	34.11	69,155	71,222
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	36.37	31,998	75,941	37.27	38.20	77,820	79,762
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	32.41	30,693	67,672	33.37	34.36	69,677	71,744
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	36.74	491	76,713	37.47	38.22	78,237	79,803
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	35.83	12,116	74,813	36.72	37.64	76,671	78,592
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	32.41	9,353	67,672	33.37	34.36	69,677	71,744
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	35.31	2,282	73,727	36.01	36.73	75,189	76,692
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	35.20	8,672	73,498	35.99	36.90	75,147	77,047
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	32.49	25,088	67,839	33.22	34.05	69,363	71,096
190	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	35.34	3,134	73,790	36.22	37.13	75,627	77,527

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	2,161	-	-	-	214.7	25.2	-	13,604	91,477	13,872	93,248
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	156	-	14.9	-	63.7	16.2	-	4,845	75,492	4,966	77,388
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	568	-	-	-	59.7	12.7	-	4,198	80,478	4,281	82,064
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	931	-	-	-	404.9	42.5	-	25,467	102,714	26,097	105,244
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	16	-	-	-	80.5	12.0	-	4,866	74,558	5,009	76,769
125	241103	PITT-Cust Service	Field Service Representative U537P	12/28/2001	-	-	-	-	8.5	-	-	464	76,091	476	78,003
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	289	-	-	-	22.2	10.7	-	1,986	77,694	2,026	79,237
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	-	352	-	160.0	118.0	12.6	-	15,119	93,709	15,421	95,576
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	1,996	-	-	-	125.0	18.7	-	8,254	86,044	8,416	87,710
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	-	-	-	-	3.1	3.0	-	389	76,102	397	77,613
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	-	-	-	-	8.9	-	-	460	71,640	471	73,426
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	3,043	-	-	-	1,338.8	184.8	-	87,381	166,740	89,545	170,804
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	687	-	-	-	563.1	181.9	-	45,362	123,868	46,485	126,934
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	1,448	-	-	-	631.3	86.0	-	35,883	103,813	36,946	106,859
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	522	425	-	173.3	265.5	85.1	-	29,546	108,730	30,135	110,885
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	1,409	-	-	-	104.3	15.6	-	6,917	84,643	7,052	86,281
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002	-	-	-	-	4.8	-	-	261	76,431	267	78,317
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	929	1,356	-	-	784.5	210.0	-	58,630	137,086	60,067	140,402
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	2,319	-	-	-	118.7	19.7	-	8,008	86,581	8,167	88,264
139	241103	PITT-Cust Service	Field Service Representative U537P	4/14/2003	-	357	-	-	-	-	-	-	75,984	-	77,884
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	304	656	-	-	200.5	16.0	-	11,098	81,254	11,431	83,675
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	852	-	-	-	551.3	21.8	-	32,688	111,360	33,497	114,111
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	1,144	-	-	-	519.7	39.7	-	27,550	95,176	28,366	97,976
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	1,949	-	-	-	1,095.0	194.5	-	76,180	155,948	78,069	159,779
144	241103	PITT-Cust Service	Field Service Representative U537P	8/29/2003	15	-	-	-	108.8	8.0	-	6,506	82,148	6,669	84,211
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	351	635	-	-	15.3	16.3	-	2,025	78,200	2,065	79,744
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	6	-	-	-	24.3	5.3	-	1,624	72,810	1,664	74,625
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	912	-	-	-	360.0	33.5	-	20,426	91,015	21,027	93,683
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	822	51	-	16.0	175.3	33.7	-	13,137	91,725	13,400	93,554
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	97	-	-	-	459.0	19.2	-	27,070	104,360	27,739	106,950
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	72	-	20.4	-	83.8	10.5	-	5,292	71,074	5,424	72,855
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005	15	-	-	-	87.3	10.0	-	5,579	82,266	5,718	84,325
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	1,163	-	-	-	130.6	23.3	-	8,850	85,620	9,027	87,321
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	56	-	-	-	125.6	40.5	-	9,262	80,498	9,491	82,502
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	5,108	-	-	-	706.8	26.8	-	40,842	121,912	41,644	124,217
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	1,100	-	-	-	54.5	13.0	-	3,929	80,615	4,007	82,196
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	163	-	-	-	307.8	-	-	16,981	93,315	17,397	95,609
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	256	-	-	-	225.3	67.7	-	16,236	87,672	16,638	89,849
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	605	-	-	-	68.5	16.8	-	4,954	80,748	5,052	82,349
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	1,182	235	-	-	176.3	27.5	-	11,725	89,082	11,955	90,815
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	904	-	-	-	358.5	30.5	-	19,064	85,928	19,632	88,480
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005	8	-	-	-	112.8	11.8	-	6,443	75,606	6,634	77,864
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	204	-	-	-	75.2	10.0	-	4,432	73,999	4,542	75,843
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	119	-	-	-	27.3	9.9	-	2,219	78,070	2,263	79,638
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	88	-	-	-	85.4	-	-	4,693	80,325	4,808	82,320
165	241103	PITT-Cust Service	Field Service Representative U537P	12/19/2005	75	-	-	-	131.0	12.6	-	8,081	83,783	8,282	85,885
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	-	-	-	-	-	6.0	-	436	75,854	445	77,366
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	942	-	-	-	636.9	16.1	-	37,042	115,804	37,961	118,664
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	979	-	-	-	662.8	1.0	-	37,382	116,181	38,309	119,050
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	756	-	-	-	514.8	17.8	-	29,839	107,141	30,574	109,776
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	2,213	-	-	-	81.2	17.9	-	5,755	83,763	5,869	85,380
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	1,700	-	-	-	796.8	49.9	-	48,609	128,255	49,814	131,401
172	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	-	-	-	-	16.0	-	-	878	76,505	899	78,427
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	704	-	-	-	336.8	22.0	-	17,496	84,160	18,018	86,666
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	864	-	-	-	312.2	16.0	-	15,905	82,729	16,380	85,188
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	534	-	-	-	449.5	56.8	-	29,557	107,911	30,290	110,585
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	165	641	-	-	352.6	49.5	-	23,010	99,736	23,582	102,207
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	2,077	-	-	-	73.3	22.0	-	5,677	84,258	5,790	85,895
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	705	-	-	-	81.9	23.0	-	6,241	83,453	6,365	85,100
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	1,496	-	-	-	117.5	13.9	-	7,420	84,104	7,567	85,754
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	1,776	-	-	-	765.2	75.0	-	41,594	109,852	42,827	113,069
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006	712	-	-	-	282.2	-	-	14,133	84,000	14,552	86,486
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	616	-	-	-	451.2	98.3	-	32,784	111,220	33,596	113,974
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	720	-	-	-	526.0	75.5	-	31,595	101,992	32,526	104,990
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	60	-	-	-	4.8	3.0	-	500	78,798	510	80,374
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	30	120	-	-	212.3	8.3	-	12,415	89,236	12,723	91,465
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	176	-	-	-	152.4	28.7	-	9,628	79,480	9,911	81,830
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	237	-	-	-	20.8	16.5	-	2,327	77,752	2,373	79,302
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	216	-	-	-	163.0	-	-	8,865	84,228	9,087	86,350
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	312	-	29.7	-	397.5	71.0	-	25,648	95,324	26,286	97,694
190	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	90	-	-	-	53.6	4.0	-	3,212	78,929	3,292	80,910

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							Gross Labor					
						Base Year		Hourly Wage Rate		Regular Time		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	32.18	4,555	67,192	33.14	34.14	69,196	71,284
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	35.31	2,575	73,727	36.01	36.73	75,189	76,692
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006	35.48	31,677	74,082	36.36	37.27	75,920	77,820
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	35.56	6,182	74,249	36.26	36.98	75,711	77,214
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	35.56	14,676	74,250	36.26	36.98	75,712	77,215
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	32.18	11,807	67,192	33.14	34.14	69,196	71,284
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	35.60	36,079	74,333	36.48	37.38	76,170	78,049
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	36.37	35,354	75,941	37.27	38.20	77,820	79,762
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	35.81	5,310	74,771	36.52	37.25	76,254	77,778
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	35.31	12,870	73,727	36.01	36.73	75,189	76,692
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	30.67	15,659	64,039	31.59	32.54	65,960	67,944
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	30.67	27,101	64,039	31.59	32.54	65,960	67,944
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007	30.67	4,947	64,039	31.59	32.54	65,960	67,944
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	32.41	24,611	67,672	33.37	34.36	69,677	71,744
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	32.16	16,989	67,150	33.12	34.11	69,155	71,222
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	32.16	10,678	67,150	33.12	34.11	69,155	71,222
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	32.95	7,124	68,800	33.86	34.70	70,700	72,454
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	29.91	10,245	62,452	30.73	31.50	64,164	65,772
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	33.17	13,798	69,259	34.09	34.94	71,180	72,955
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	32.41	27,061	67,673	33.37	34.36	69,677	71,744
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	30.67	6,110	64,039	31.59	32.54	65,960	67,944
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	35.30	6,747	73,706	36.18	37.08	75,544	77,423
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	36.37	44,910	75,941	37.27	38.20	77,820	79,762
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	32.49	2,573	67,839	33.22	34.05	69,363	71,096
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	32.49	9,351	67,839	33.22	34.05	69,363	71,096
216	244101	INDI-Production	Operator U537O	8/13/2007	36.74	19,411	76,713	37.47	38.22	78,237	79,803
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	30.67	17,882	64,039	31.59	32.54	65,960	67,944
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	31.28	614	65,313	32.22	33.19	67,275	69,301
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	32.18	10,842	67,192	33.14	34.14	69,196	71,284
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	35.56	2,335	74,249	36.27	37.00	75,732	77,256
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	35.68	30,949	74,499	36.74	37.66	76,713	78,634
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007	35.41	6,277	73,936	36.12	36.84	75,419	76,922
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	33.51	9,832	69,969	34.26	35.13	71,535	73,351
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	35.60	1,684	74,333	36.48	37.38	76,170	78,049
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	30.67	15,646	64,039	31.59	32.54	65,960	67,944
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	35.56	17,153	74,249	36.26	36.98	75,711	77,214
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007	32.41	19,293	67,672	33.37	34.36	69,677	71,744
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	35.78	5,550	74,709	36.66	37.57	76,546	78,446
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	32.16	12,827	67,150	33.12	34.11	69,155	71,222
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008	35.31	18,328	73,727	36.01	36.73	75,189	76,692
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	33.85	16,252	70,679	34.78	35.65	72,621	74,437
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008	35.31	5,465	73,727	36.01	36.73	75,189	76,692
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	32.41	12,932	67,672	33.37	34.36	69,677	71,744
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	32.18	4,752	67,192	33.14	34.14	69,196	71,284
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	35.30	2,967	73,706	36.18	37.08	75,544	77,423
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	33.02	11,590	68,946	33.76	34.61	70,491	72,266
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	35.30	4,180	73,706	36.18	37.08	75,544	77,423
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008	34.32	208	71,660	35.00	35.70	73,080	74,542
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	35.41	801	73,936	36.12	36.84	75,419	76,922
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	35.48	34,258	74,082	36.36	37.27	75,920	77,820
241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	35.83	15,417	74,813	36.72	37.64	76,671	78,592
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	35.67	10,267	74,479	36.55	37.46	76,316	78,217
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	36.07	70,372	75,314	36.97	37.90	77,193	79,135
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	35.25	399	73,602	35.95	36.67	75,064	76,567
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	35.31	8,398	73,727	36.01	36.73	75,189	76,692
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	35.56	14,113	74,249	36.27	37.00	75,732	77,256
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009	35.25	1,214	73,602	35.95	36.67	75,064	76,567
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	35.56	10,356	74,249	36.27	37.00	75,732	77,256
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009	32.18	3,902	67,192	33.14	34.14	69,196	71,284
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	30.78	16,839	64,269	31.47	32.26	65,709	67,359
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	36.07	487	75,314	36.97	37.90	77,193	79,135
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	35.31	6,830	73,727	36.01	36.73	75,189	76,692
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	35.31	6,893	73,727	36.01	36.73	75,189	76,692
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	35.66	21,288	74,458	36.38	37.10	75,961	77,465
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	35.31	13,406	73,727	36.01	36.73	75,189	76,692
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009	34.95	53	72,976	35.65	36.36	74,437	75,920
257	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	35.34	580	73,790	36.22	37.13	75,627	77,527
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	35.81	9,420	74,771	36.52	37.25	76,254	77,778
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	35.56	5,104	74,250	36.26	36.98	75,711	77,215
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	35.56	20,947	74,249	36.26	36.98	75,711	77,214
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	35.31	7,377	73,727	36.01	36.73	75,189	76,692

Pennsylvania-American Water Company - Water Operations
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					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	112	-	-	-	64.5	21.7	-	4,689	73,997	4,829	76,225
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	387	-	-	-	30.2	13.5	-	2,626	78,201	2,678	79,757
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006	1,469	-	-	-	537.3	40.4	-	32,458	109,847	33,265	112,554
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	759	-	-	-	89.8	18.8	-	6,302	82,773	6,426	84,400
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	3,722	-	-	-	194.0	59.0	-	14,962	94,396	15,257	96,194
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	88	11	-	-	208.3	25.7	-	12,156	81,451	12,520	83,903
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	1,412	-	-	-	671.2	-	-	36,965	114,547	37,871	117,333
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	1,056	-	-	-	591.2	39.1	-	36,222	115,098	37,119	117,937
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	2,426	-	-	-	67.0	23.2	-	5,415	84,095	5,522	85,726
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	762	59	-	28.0	176.0	31.4	-	13,124	89,133	13,384	90,897
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	1,024	-	-	-	324.3	10.0	-	16,125	83,109	16,607	85,574
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	1,336	-	-	-	494.6	67.0	-	27,907	95,203	28,739	98,019
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007	-	-	-	-	80.6	19.0	-	5,093	71,053	5,244	73,188
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	600	-	-	-	421.2	61.3	-	25,335	95,612	26,082	98,425
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	872	-	-	-	324.0	19.0	-	17,492	87,519	18,011	90,104
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	760	-	-	-	171.0	37.0	-	10,995	80,910	11,322	83,304
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	113	-	-	-	121.8	16.3	-	7,320	78,132	7,501	80,067
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	38	-	-	-	183.1	32.7	-	10,524	74,726	10,786	76,595
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	6	-	-	-	275.8	-	-	14,178	85,364	14,530	87,491
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	1,224	-	-	-	496.0	42.5	-	27,857	98,758	28,677	101,645
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	368	-	-	-	104.7	20.7	-	6,292	72,620	6,481	74,792
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	225	-	-	-	126.3	-	-	6,914	82,683	7,084	84,733
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	1,594	-	-	-	731.4	64.9	-	46,014	125,429	47,156	128,512
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	132	-	-	-	52.5	-	-	2,630	72,126	2,696	73,924
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	96	-	23.4	-	141.3	25.5	-	9,560	79,019	9,798	80,990
216	244101	INDI-Production	Operator U537O	8/13/2007	646	409	-	168.0	197.7	10.0	-	19,795	99,087	20,190	101,048
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	936	-	-	-	364.5	15.8	-	18,414	85,310	18,964	87,843
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	16	-	-	-	13.0	-	-	633	67,924	652	69,968
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	160	669	-	-	191.9	23.5	-	11,163	81,189	11,498	83,612
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	823	-	-	-	32.9	8.0	-	2,381	78,936	2,429	80,508
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	1,533	-	-	-	528.7	34.2	-	31,862	110,107	32,654	112,820
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007	509	-	-	-	101.2	12.1	-	6,402	82,329	6,528	83,959
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	312	-	-	-	194.5	-	-	10,051	81,898	10,305	83,968
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	15	-	-	-	31.2	-	-	1,725	77,910	1,767	79,831
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	976	-	-	-	337.7	-	-	16,112	83,048	16,593	85,512
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	4,590	-	-	-	279.8	29.3	-	17,488	97,789	17,832	99,637
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007	880	-	-	-	353.2	30.3	-	19,860	90,417	20,445	93,068
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	45	-	-	-	72.3	22.8	-	5,686	82,277	5,826	84,317
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	168	-	-	-	234.0	22.5	-	13,207	82,530	13,599	84,989
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008	2,856	-	-	-	312.2	23.3	-	18,688	96,733	19,059	98,607
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	-	-	-	-	199.8	88.4	-	16,695	89,316	17,110	91,547
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008	2,299	-	-	-	80.0	16.8	-	5,573	83,061	5,684	84,675
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	416	-	-	-	225.0	29.5	-	13,313	83,406	13,706	85,865
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	56	-	-	-	56.3	30.8	-	4,892	74,145	5,039	76,379
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	-	-	-	-	55.8	-	-	3,041	78,585	3,116	80,539
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	288	-	31.3	-	170.0	31.3	-	11,848	82,627	12,144	84,698
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	135	-	-	-	78.4	-	-	4,283	79,962	4,389	81,947
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008	-	-	-	-	4.0	-	-	212	73,292	216	74,758
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	315	-	-	-	5.0	7.5	-	817	76,550	833	78,070
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	1,287	-	-	-	609.9	22.0	-	35,102	112,308	35,974	115,081
241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	29	74	-	-	260.2	18.3	-	15,797	92,571	16,190	94,884
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	60	-	-	-	92.5	73.3	-	10,518	86,895	10,778	89,054
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	1,919	-	-	-	1,081.5	158.5	-	72,117	151,229	73,921	154,975
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	119	-	-	-	7.5	-	-	407	75,589	415	77,101
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	3,256	-	-	-	118.5	29.1	-	8,563	87,008	8,733	88,681
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	1,840	-	-	-	214.0	36.1	-	14,392	91,964	14,679	93,776
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009	59	-	-	-	16.7	4.5	-	1,238	76,361	1,262	77,888
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	2,609	-	-	-	149.4	32.3	-	10,561	88,902	10,772	90,637
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009	64	-	-	-	63.8	12.2	-	4,017	73,278	4,138	75,486
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	552	-	28.2	-	258.5	63.8	-	17,214	83,476	17,644	85,555
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	-	945	-	-	6.4	1.9	-	499	78,637	511	80,591
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	3,962	-	-	-	93.3	25.8	-	6,964	86,115	7,102	87,756
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	2,493	-	-	-	103.3	19.3	-	7,028	84,710	7,167	86,353
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	1,908	-	-	-	356.0	29.3	-	21,715	99,584	22,142	101,514
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	3,374	-	-	-	186.2	48.3	-	13,669	92,232	13,940	94,006
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009	-	-	-	-	1.0	-	-	54	74,492	56	75,975
257	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	-	-	-	-	-	8.0	-	594	76,221	609	78,136
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	1,638	-	-	-	136.3	28.2	-	9,605	87,497	9,795	89,211
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	1,175	-	-	-	78.2	12.5	-	5,204	82,090	5,306	83,696
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	6,408	-	-	-	277.0	84.3	-	21,355	103,475	21,776	105,398
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	1,637	-	-	-	78.8	44.3	-	7,521	84,347	7,670	86,000

Pennsylvania-American Water Company - Water Operations
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							Gross Labor					
						Base Year		Hourly Wage Rate		Regular Time		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	35.31	5,133	73,727	36.01	36.73	75,189	76,692
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	35.31	5,598	73,727	36.01	36.73	75,189	76,692
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	35.56	6,555	74,250	36.26	36.98	75,712	77,215
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	35.31	15,569	73,727	36.01	36.73	75,189	76,692
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	36.42	65,330	76,045	37.33	38.26	77,945	79,887
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	32.18	20,122	67,192	33.14	34.14	69,196	71,284
268	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	35.34	5,973	73,790	36.22	37.13	75,627	77,527
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	32.41	20,708	67,672	33.37	34.36	69,677	71,744
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	35.65	12,423	74,437	36.45	37.37	76,108	78,029
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	35.41	4,391	73,936	36.12	36.84	75,419	76,922
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	36.15	19,854	75,484	37.04	37.96	77,343	79,263
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	35.31	2,717	73,727	36.01	36.73	75,189	76,692
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	35.41	13,126	73,936	36.12	36.84	75,419	76,922
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	35.23	50,564	73,560	36.11	37.02	75,398	77,298
276	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	35.34	4,055	73,790	36.22	37.13	75,627	77,527
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010	35.48	12,260	74,082	36.36	37.27	75,920	77,820
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	35.56	11,140	74,249	36.26	36.98	75,711	77,214
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	32.16	5,678	67,150	33.12	34.11	69,155	71,222
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	35.41	980	73,936	36.12	36.84	75,419	76,922
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	35.50	28,958	74,124	36.21	36.94	75,606	77,131
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	35.41	53,329	73,936	36.12	36.84	75,419	76,922
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	35.56	5,064	74,251	36.26	36.98	75,712	77,216
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	35.31	3,336	73,727	36.01	36.73	75,189	76,692
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	36.08	7,453	75,335	36.97	37.89	77,193	79,114
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	33.17	10,843	69,259	34.09	34.94	71,180	72,955
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	35.31	6,581	73,727	36.01	36.73	75,189	76,692
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	35.50	3,597	74,125	36.20	36.92	75,587	77,090
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	35.31	17,000	73,727	36.01	36.73	75,189	76,692
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	35.31	969	73,727	36.01	36.73	75,189	76,692
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	36.08	10,987	75,335	36.97	37.89	77,193	79,114
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	35.31	1,573	73,727	36.01	36.73	75,189	76,692
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	34.95	29,519	72,976	35.65	36.36	74,437	75,920
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	35.31	32,786	73,727	36.01	36.73	75,189	76,692
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012	32.16	4,825	67,150	33.12	34.11	69,155	71,222
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	36.66	26,543	76,546	37.60	38.57	78,509	80,534
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	30.78	7,239	64,269	31.47	32.26	65,709	67,359
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	35.41	4,745	73,936	36.12	36.84	75,419	76,922
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	34.32	26	71,660	35.00	35.70	73,080	74,542
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	35.90	12,043	74,959	36.80	37.72	76,838	78,759
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013	36.64	25,491	76,504	37.70	38.62	78,718	80,639
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	35.31	4,479	73,727	36.01	36.73	75,189	76,692
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	35.31	12,686	73,727	36.01	36.73	75,189	76,692
304	244101	INDI-Production	Operator U537O	5/13/2013	36.74	24,082	76,713	37.47	38.22	78,237	79,803
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	35.31	12,126	73,727	36.01	36.73	75,189	76,692
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	36.07	12,986	75,314	36.97	37.90	77,193	79,135
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	35.56	3,311	74,250	36.26	36.98	75,711	77,215
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	35.66	1,159	74,458	36.37	37.09	75,941	77,444
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	35.30	32,779	73,706	36.18	37.08	75,544	77,423
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	35.31	11,987	73,727	36.01	36.73	75,189	76,692
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	30.67	9,460	64,039	31.59	32.54	65,960	67,944
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	35.56	3,147	74,249	36.27	37.00	75,732	77,256
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	32.41	22,758	67,672	33.37	34.36	69,677	71,744
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	32.03	315	66,879	32.99	33.98	68,883	70,950
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	36.42	43,861	76,045	37.33	38.26	77,945	79,887
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	30.92	12,220	64,561	31.84	32.79	66,482	68,466
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	32.16	3,891	67,150	33.12	34.11	69,155	71,222
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	32.16	3,422	67,150	33.12	34.11	69,155	71,222
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	30.67	17,482	64,039	31.59	32.54	65,960	67,944
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014	34.32	1,359	71,660	35.00	35.70	73,080	74,542
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	35.65	13,154	74,437	36.45	37.37	76,108	78,029
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	36.74	11,539	76,713	37.47	38.22	78,237	79,803
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	35.31	3,946	73,727	36.01	36.73	75,189	76,692
324	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014	35.34	63	73,790	36.22	37.13	75,627	77,527
325	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	35.34	25,713	73,790	36.22	37.13	75,627	77,527
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	35.31	14,396	73,727	36.01	36.73	75,189	76,692
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	35.30	39,607	73,706	36.18	37.08	75,544	77,423
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	35.30	74,728	73,706	36.18	37.08	75,544	77,423
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	35.30	38,728	73,706	36.18	37.08	75,544	77,423
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	36.74	25,957	76,713	37.47	38.22	78,237	79,803
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	32.16	44,765	67,150	33.12	34.11	69,155	71,222
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	32.18	3,633	67,192	33.14	34.14	69,196	71,284

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	626	-	-	-	81.7	10.8	-	5,234	81,049	5,337	82,656
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	1,090	-	-	-	95.0	7.2	-	5,708	81,986	5,821	83,603
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	801	-	-	-	86.5	26.3	-	6,683	83,196	6,814	84,830
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	3,826	-	-	-	177.1	85.6	-	15,875	94,890	16,189	96,707
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	1,468	-	-	-	998.4	142.3	-	66,952	146,364	68,609	149,964
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	376	410	-	-	363.0	38.2	-	20,718	90,700	21,338	93,409
268	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	37	-	-	-	91.8	15.3	-	6,122	81,786	6,275	83,839
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	592	-	-	-	365.2	43.2	-	21,317	91,586	21,945	94,281
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	-	-	-	-	217.1	10.0	-	12,700	88,807	13,018	91,046
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	1,491	-	-	-	44.2	28.2	-	4,478	81,388	4,567	82,980
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	-	100	-	-	347.4	12.0	-	20,339	97,782	20,841	100,204
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	719	-	-	-	41.5	7.0	-	2,770	78,679	2,825	80,237
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	4,548	-	-	-	184.5	45.5	-	13,387	93,354	13,652	95,122
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	1,301	555	-	-	679.3	202.6	-	51,817	129,070	53,113	132,267
276	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	-	-	-	-	76.0	-	-	4,156	79,783	4,260	81,787
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010	204	-	-	-	152.2	57.5	-	12,562	88,686	12,874	90,899
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	1,969	16	-	8.0	167.2	25.0	-	11,358	89,054	11,582	90,781
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	40	-	-	-	99.4	13.2	-	5,847	75,041	6,020	77,282
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	521	-	-	-	7.7	8.0	-	999	76,938	1,019	78,462
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	4,174	-	-	-	424.6	86.2	-	29,532	109,313	30,123	111,428
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	13,519	-	-	-	724.7	204.2	-	54,390	143,328	55,467	145,908
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	1,136	-	-	-	63.8	22.9	-	5,163	82,011	5,265	83,617
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	802	-	-	-	56.8	4.2	-	3,401	79,392	3,469	80,962
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	30	98	-	-	119.3	13.0	-	7,636	84,958	7,824	87,067
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	425	-	-	-	182.2	25.8	-	11,142	82,747	11,418	84,798
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	2,430	-	-	-	109.9	9.9	-	6,710	84,330	6,843	85,966
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	1,160	-	-	-	54.8	9.0	-	3,667	80,415	3,740	81,990
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	3,005	-	-	-	246.5	53.8	-	17,334	95,528	17,678	97,375
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	296	-	-	-	18.2	-	-	988	76,473	1,008	77,996
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	15	456	-	-	159.0	32.0	-	11,256	88,920	11,534	91,120
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	59	-	-	-	25.5	3.0	-	1,604	76,852	1,636	78,388
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	2,999	-	-	-	453.4	79.1	-	30,105	107,541	30,701	109,619
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	7,714	-	-	-	432.8	135.8	-	33,430	116,333	34,093	118,500
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012	-	-	-	-	94.2	4.0	-	4,968	74,123	5,116	76,338
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	15	690	-	-	370.0	81.8	-	27,218	106,432	27,915	109,154
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	744	-	32.0	-	93.0	30.5	-	7,399	73,853	7,583	75,686
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	1,744	306	-	-	59.6	21.7	-	4,839	82,307	4,934	83,906
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	-	-	-	-	0.5	-	-	27	73,107	27	74,569
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	45	882	-	-	172.5	37.3	-	12,343	90,108	12,650	92,336
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013	1,837	799	-	-	416.0	33.7	-	26,224	107,578	26,860	110,135
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	1,459	-	-	-	51.5	24.3	-	4,567	81,215	4,658	82,809
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	3,298	-	-	-	184.7	39.4	-	12,935	91,422	13,191	93,181
304	244101	INDI-Production	Operator U537O	5/13/2013	852	412	-	184.0	244.0	28.3	-	24,559	104,060	25,048	106,115
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	2,876	-	-	-	189.9	28.2	-	12,365	90,430	12,610	92,179
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	-	-	-	-	238.6	-	-	13,308	90,502	13,641	92,776
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	117	-	-	-	24.2	28.0	-	3,375	79,204	3,442	80,773
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	119	-	-	-	18.2	2.5	-	1,182	77,241	1,205	78,768
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	1,258	-	-	-	594.8	15.0	-	33,591	110,392	34,421	113,102
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	712	-	-	-	162.2	46.3	-	12,222	88,123	12,464	89,868
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	464	-	-	-	203.8	-	-	9,742	76,165	10,032	78,440
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	253	-	-	-	43.3	11.6	-	3,209	79,194	3,274	80,783
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	952	-	-	-	382.2	61.7	-	23,427	94,056	24,117	96,812
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	16	1,383	-	-	6.5	-	-	324	70,606	334	72,683
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	2,271	-	-	-	787.1	8.0	-	44,950	125,166	46,063	128,220
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	648	-	-	-	261.2	-	-	12,580	79,710	12,952	82,066
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	40	-	-	-	69.5	7.8	-	4,006	73,200	4,124	75,386
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	-	-	-	-	56.9	10.0	-	3,524	72,678	3,628	74,850
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	1,128	-	-	-	357.3	15.0	-	18,003	85,091	18,540	87,612
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014	-	-	-	-	26.3	-	-	1,386	74,466	1,414	75,955
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	-	-	-	-	223.3	15.7	-	13,447	89,554	13,784	91,812
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	425	14	-	-	195.8	9.0	-	11,766	90,442	12,000	92,242
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	612	-	-	-	54.3	14.9	-	4,024	79,824	4,104	81,408
324	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014	-	832	-	-	1.2	-	-	64	76,523	66	78,425
325	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	388	128	-	-	334.1	111.3	-	26,350	102,493	27,008	105,051
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	4,037	-	-	-	191.3	58.8	-	14,679	93,905	14,970	95,699
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	266	-	-	-	667.4	56.9	-	40,588	116,398	41,592	119,281
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	2,482	-	-	-	1,306.3	72.3	-	76,580	154,605	78,473	158,378
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	923	-	-	-	703.3	17.5	-	39,687	116,154	40,668	119,014
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	264	452	-	194.7	227.3	60.0	-	26,471	105,424	26,999	107,518
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	1,528	-	-	-	785.5	101.8	-	46,091	116,774	47,460	120,209
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	56	-	-	-	56.5	13.5	-	3,740	72,993	3,852	75,192

Pennsylvania-American Water Company - Water Operations
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						Gross Labor						
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	36.66	29,008	76,546	37.60	38.57	78,509	80,534
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	35.42	28,672	73,957	36.33	37.26	75,857	77,799
335	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015	34.34	3,988	71,702	35.22	36.13	73,539	75,439
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	34.72	27,505	72,495	35.61	36.53	74,354	76,275
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	35.56	2,266	74,249	36.27	37.00	75,732	77,256
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016	35.25	186	73,602	35.95	36.67	75,064	76,567
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	32.16	3,373	67,150	33.12	34.11	69,155	71,222
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	35.56	32,530	74,249	36.27	37.00	75,732	77,256
341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	32.41	29,466	67,672	33.37	34.36	69,677	71,744
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	35.41	830	73,936	36.12	36.84	75,419	76,922
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	35.41	3,762	73,936	36.12	36.84	75,419	76,922
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	35.07	48,960	73,226	35.97	36.90	75,105	77,047
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	34.30	5,067	71,618	35.18	36.08	73,456	75,335
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	30.92	35,361	64,561	31.84	32.79	66,482	68,466
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	35.07	17,899	73,226	35.97	36.90	75,105	77,047
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016	36.49	12,085	76,191	37.22	37.97	77,715	79,281
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	33.02	8,298	68,946	33.76	34.61	70,491	72,266
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	32.95	9,913	68,800	33.86	34.70	70,700	72,454
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012	30.35	3,097	63,371	30.95	31.56	64,624	65,897
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011	30.35	13,960	63,371	30.95	31.56	64,624	65,897
353	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	34.34	4,477	71,702	35.22	36.13	73,539	75,439
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	36.49	18,325	76,191	37.22	37.97	77,715	79,281
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	32.18	5,979	67,192	33.14	34.14	69,196	71,284
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	35.31	7,792	73,727	36.01	36.73	75,189	76,692
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	32.18	7,141	67,192	33.14	34.14	69,196	71,284
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	32.41	33,761	67,672	33.37	34.36	69,677	71,744
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	32.16	20,383	67,150	33.12	34.11	69,155	71,222
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	33.51	11,968	69,969	34.26	35.13	71,535	73,351
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	30.35	1,883	63,371	30.95	31.56	64,624	65,897
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	34.36	8,757	71,744	35.07	35.79	73,226	74,730
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	31.35	16,771	65,459	32.28	33.15	67,401	69,217
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	36.16	22,843	75,502	37.10	38.07	77,465	79,490
365	244601	KANE-Production	Operator U537O	11/6/2017	35.74	4,980	74,625	36.47	37.22	76,149	77,715
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	32.18	15,136	67,192	33.14	34.14	69,196	71,284
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	32.18	16,148	67,192	33.14	34.14	69,196	71,284
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	32.37	909	67,589	33.23	34.11	69,384	71,222
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	33.90	19,134	70,783	34.80	35.72	72,662	74,583
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	33.83	16,789	70,637	34.72	35.64	72,495	74,416
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	34.31	19,536	71,639	35.01	35.73	73,101	74,604
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	35.24	36,463	73,581	36.30	37.22	75,794	77,715
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	34.42	22,921	71,869	35.33	36.26	73,769	75,711
374	241106	PITT-Field Services	Utility Person U537P	2/27/2018	33.30	24,395	69,530	34.18	35.08	71,368	73,247
375	245206	YARD-Field Services	Utility A F473Y	3/26/2018	31.21	8,431	65,166	31.91	32.72	66,628	68,319
376	249160	WILK-Watres	Plant Operator U648S	4/30/2018	32.18	14,628	67,192	33.14	34.14	69,196	71,284
377	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	34.31	5,635	71,639	35.01	35.73	73,101	74,604
378	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	30.92	25,773	64,561	31.84	32.79	66,482	68,466
379	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	31.53	31,109	65,835	32.47	33.44	67,797	69,823
380	246106	MECH-Field Services	Utility A U648R	5/14/2018	30.42	6,053	63,517	31.34	32.19	65,438	67,213
381	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	32.16	13,485	67,150	33.12	34.11	69,155	71,222
382	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	32.16	25,893	67,150	33.12	34.11	69,155	71,222
383	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	33.90	20,037	70,783	34.80	35.72	72,662	74,583
384	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	32.41	4,026	67,672	33.37	34.36	69,677	71,744
385	241106	PITT-Field Services	Utility Person U537P	7/10/2018	33.30	26,232	69,530	34.18	35.08	71,368	73,247
386	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	33.31	11,663	69,551	34.01	34.73	71,013	72,516
387	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	35.66	20,793	74,458	36.60	37.57	76,421	78,446
388	241106	PITT-Field Services	Utility Person U537P	7/24/2018	33.30	16,881	69,530	34.18	35.08	71,368	73,247
389	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	33.41	5,600	69,760	34.12	34.84	71,243	72,746
390	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	33.31	12,265	69,551	34.01	34.73	71,013	72,516
391	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018	29.67	5,346	61,951	30.59	31.44	63,872	65,647
392	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	33.37	11,975	69,677	34.25	35.16	71,514	73,414
393	241103	PITT-Cust Service	Field Service Representative U537P	9/4/2018	33.34	2,215	69,614	34.22	35.13	71,451	73,351
394	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	33.31	11,125	69,551	34.01	34.73	71,013	72,516
395	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	34.49	19,070	72,015	35.22	35.97	73,539	75,105
396	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	33.31	26,514	69,551	34.01	34.73	71,013	72,516
397	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	33.90	16,383	70,783	34.80	35.72	72,662	74,583
398	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	32.16	25,625	67,150	33.12	34.11	69,155	71,222
399	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	32.16	11,926	67,150	33.12	34.11	69,155	71,222
400	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	31.28	22,239	65,313	32.22	33.19	67,275	69,301
401	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	32.18	12,383	67,192	33.14	34.14	69,196	71,284
402	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	32.16	16,897	67,150	33.12	34.11	69,155	71,222
403	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	30.67	30,654	64,039	31.59	32.54	65,960	67,944

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					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	292	692	-	-	425.9	73.5	-	29,747	109,239	30,509	112,027
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	644	-	-	-	509.5	19.7	-	29,403	105,905	30,151	108,594
335	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015	74	844	-	-	77.1	-	-	4,090	78,547	4,195	80,552
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	1,179	-	-	-	509.2	11.6	-	28,205	103,738	28,929	106,383
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	118	-	-	-	30.1	9.0	-	2,310	78,160	2,356	79,730
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016	-	-	-	-	3.5	-	-	190	75,254	194	76,761
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	-	-	-	-	53.6	12.0	-	3,473	72,628	3,576	74,798
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	7,889	-	-	-	436.6	126.3	-	33,174	116,795	33,837	118,982
341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	1,496	-	-	-	575.2	20.0	-	30,333	101,506	31,226	104,466
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	321	-	-	-	8.0	5.5	-	847	76,586	863	78,106
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	31	385	-	-	58.0	9.3	-	3,837	79,672	3,913	81,251
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	2,447	1,524	-	-	899.4	19.3	-	50,209	129,285	51,499	132,517
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	197	-	-	-	97.7	-	-	5,196	78,849	5,328	80,860
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	1,544	-	-	-	651.3	79.3	-	36,406	104,432	37,485	107,494
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	-	-	-	-	293.2	34.0	-	18,356	93,462	18,829	95,876
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016	756	21	-	10.8	156.3	40.4	-	12,325	90,816	12,571	92,629
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	228	-	26.0	-	122.3	20.2	-	8,483	79,202	8,696	81,189
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	113	(2)	-	-	175.0	18.2	-	10,185	80,996	10,436	83,001
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012	15	11	-	-	35.3	24.0	-	3,158	67,808	3,219	69,143
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011	45	101	-	-	209.4	70.8	-	14,233	79,003	14,511	80,554
353	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	-	-	-	-	77.0	7.1	-	4,591	78,131	4,710	80,149
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	120	223	-	128.0	203.9	17.0	-	18,690	96,749	19,065	98,689
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	56	-	-	-	66.1	42.3	-	6,156	75,408	6,339	77,680
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	1,383	-	-	-	126.0	14.9	-	7,946	84,518	8,103	86,179
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	56	15	-	-	119.0	20.7	-	7,352	76,619	7,572	78,927
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	1,344	-	-	-	570.2	89.3	-	34,753	105,774	35,777	108,865
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	248	938	-	-	324.4	71.2	-	20,987	91,327	21,609	94,017
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	372	-	-	-	236.9	-	-	12,235	84,142	12,544	86,267
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	-	-	-	-	23.2	13.4	-	1,920	66,544	1,958	67,855
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	55	-	-	-	148.5	15.0	-	8,936	82,218	9,118	83,903
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	-	-	-	-	197.8	117.3	-	17,265	84,666	17,727	86,944
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	60	843	-	-	299.4	89.4	-	23,433	101,801	24,042	104,435
365	244601	KANE-Production	Operator U537O	11/6/2017	174	-	-	-	83.2	7.0	-	5,082	81,405	5,186	83,075
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	280	1,137	-	-	306.0	4.0	-	15,584	86,197	16,051	88,752
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	256	1,046	-	-	311.0	16.0	-	16,626	87,125	17,125	89,711
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	-	-	-	-	8.0	8.0	-	933	70,317	958	72,179
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	105	692	-	-	276.1	73.0	-	19,638	93,098	20,154	95,534
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	75	92	-	-	287.3	30.8	-	17,227	89,890	17,680	92,264
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	4,607	-	-	-	287.0	67.3	-	19,931	97,640	20,338	99,550
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	1,749	-	-	-	645.8	29.3	-	37,552	115,096	38,497	117,962
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	907	-	-	-	440.8	-	-	23,523	98,199	24,138	100,756
374	241106	PITT-Field Services	Utility Person U537P	2/27/2018	987	-	-	-	465.4	14.8	-	25,035	97,390	25,690	99,924
375	245206	YARD-Field Services	Utility A F473Y	3/26/2018	168	-	79.7	-	126.3	-	-	8,620	75,416	8,838	77,325
376	249160	WILK-Watres	Plant Operator U648S	4/30/2018	240	1,064	-	-	298.3	2.0	-	15,061	85,561	15,513	88,101
377	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	897	-	-	-	105.3	2.5	-	5,749	79,747	5,866	81,367
378	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	528	-	-	-	456.3	71.2	-	26,533	93,543	27,319	96,312
379	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	1,632	-	-	-	582.0	53.5	-	32,030	101,459	32,980	104,435
380	246106	MECH-Field Services	Utility A U648R	5/14/2018	50	-	-	-	114.2	13.3	-	6,235	71,723	6,403	73,666
381	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	936	-	-	-	271.5	4.3	-	13,884	83,974	14,295	86,453
382	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	1,088	-	-	-	449.0	62.8	-	26,660	96,903	27,451	99,761
383	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	59	801	-	-	322.3	51.7	-	20,565	94,087	21,105	96,548
384	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	-	-	-	-	63.8	13.8	-	4,145	73,821	4,267	76,011
385	241106	PITT-Field Services	Utility Person U537P	7/10/2018	1,298	-	-	-	493.8	20.8	-	26,920	99,586	27,624	102,170
386	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	2,190	-	-	-	190.1	31.2	-	11,906	85,109	12,157	86,863
387	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	37	973	-	-	303.1	62.7	-	21,338	98,769	21,901	101,357
388	241106	PITT-Field Services	Utility Person U537P	7/24/2018	467	-	-	-	317.0	13.8	-	17,323	89,158	17,776	91,490
389	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	1,181	305	-	-	99.0	8.8	-	5,718	78,446	5,837	80,069
390	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	2,283	-	-	-	209.2	25.7	-	12,521	85,817	12,783	87,583
391	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018	119	-	-	-	89.1	22.8	-	5,510	69,501	5,663	71,428
392	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	316	-	-	-	159.9	58.0	-	12,288	84,117	12,612	86,341
393	241103	PITT-Cust Service	Field Service Representative U537P	9/4/2018	-	-	-	-	20.3	17.8	-	2,273	73,724	2,333	75,684
394	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	1,269	-	-	104.0	115.6	14.4	-	11,357	83,639	11,596	85,381
395	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	850	403	-	128.0	204.5	42.0	-	19,472	94,264	19,885	96,243
396	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	2,868	-	-	-	366.6	119.7	-	27,066	100,947	27,634	103,019
397	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	75	778	-	-	264.8	41.3	-	16,815	90,330	17,256	92,693
398	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	1,384	-	-	-	483.8	32.7	-	26,385	96,923	27,168	99,773
399	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	688	-	-	-	233.3	9.0	-	12,280	82,122	12,644	84,554
400	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	944	-	-	-	470.3	-	-	22,902	91,122	23,587	93,831
401	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	200	493	-	-	244.5	7.8	-	12,750	82,640	13,133	85,110
402	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	1,096	-	-	-	337.2	8.0	-	17,398	87,649	17,914	90,232
403	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	1,544	-	-	-	560.8	75.5	-	31,567	99,071	32,510	101,997

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							Gross Labor					
						Base Year		Hourly Wage Rate		Regular Time		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
404	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	32.16	15,078	67,150	33.12	34.11	69,155	71,222
405	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	32.16	31,239	67,150	33.12	34.11	69,155	71,222
406	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	32.16	21,922	67,150	33.12	34.11	69,155	71,222
407	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	32.31	5,267	67,463	33.01	33.73	68,925	70,428
408	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	32.31	25,267	67,463	33.01	33.73	68,925	70,428
409	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	32.18	10,588	67,192	33.14	34.14	69,196	71,284
410	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	32.31	41,113	67,463	33.01	33.73	68,925	70,428
411	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	32.18	9,382	67,192	33.14	34.14	69,196	71,284
412	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	32.41	9,426	67,672	33.12	33.84	69,155	70,658
413	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	32.16	20,557	67,150	33.12	34.11	69,155	71,222
414	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	32.31	11,875	67,463	33.01	33.73	68,925	70,428
415	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	32.91	6,696	68,716	33.63	34.35	70,219	71,723
416	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	33.42	69,354	69,781	34.33	35.26	71,681	73,623
417	244601	KANE-Production	Operator U537O	9/9/2019	33.74	4,421	70,449	34.47	35.22	71,973	73,539
418	243151	NEWC-New Castle	Operator U537O	9/23/2019	33.74	30,543	70,449	34.47	35.22	71,973	73,539
419	243301	BUTL-Production	Operator U537O	9/23/2019	33.74	27,469	70,449	34.47	35.22	71,973	73,539
420	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	33.42	27,063	69,781	34.33	35.26	71,681	73,623
421	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	32.66	19,928	68,194	33.38	34.10	69,697	71,201
422	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	32.18	15,173	67,192	33.14	34.14	69,196	71,284
423	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	30.35	11,798	63,371	31.28	32.15	65,313	67,129
424	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	32.16	4,665	67,150	33.12	34.11	69,155	71,222
425	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	32.31	20,870	67,463	33.01	33.73	68,925	70,428
426	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	32.66	10,267	68,194	33.38	34.10	69,697	71,201
427	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	32.18	9,104	67,192	33.14	34.14	69,196	71,284
428	244301	CLAR-Production	Operator U537O	4/27/2020	33.74	17,384	70,449	34.47	35.22	71,973	73,539
429	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	31.28	6,004	65,313	32.22	33.19	67,275	69,301
430	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	34.54	-	72,120	35.48	36.38	74,082	75,961
431	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	33.07	33,656	69,050	33.97	34.90	70,929	72,871
432	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	32.28	17,330	67,401	32.98	33.70	68,862	70,366
433	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	32.41	3,132	67,672	33.12	33.84	69,155	70,658
434	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	31.66	3,632	66,106	32.62	33.61	68,111	70,178
435	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	30.35	2,838	63,371	30.95	31.56	64,624	65,897
436	245206	YARD-Field Services	Utility B F473Y	7/13/2020	25.66	6,176	53,578	26.34	27.01	54,998	56,397
437	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	32.42	34,906	67,693	33.33	34.26	69,593	71,535
438	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	29.68	4,907	61,972	30.64	31.64	63,976	66,064
439	249160	WILK-Watres	Plant Operator U648S	12/15/2020	31.68	12,653	66,148	32.64	33.64	68,152	70,240
440	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	31.91	31,528	66,628	32.87	33.86	68,633	70,700
441	249160	WILK-Watres	Plant Operator U648S	12/21/2020	31.68	8,971	66,148	32.64	33.64	68,152	70,240
442	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	30.35	9,052	63,371	31.28	32.15	65,313	67,129
443	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	30.35	10,849	63,371	31.28	32.15	65,313	67,129
444	245206	YARD-Field Services	Utility B F473Y	3/15/2021	25.66	7,111	53,578	26.34	27.01	54,998	56,397
445	244101	INDI-Production	Operator U537O	3/22/2021	32.74	14,396	68,361	33.47	34.22	69,885	71,451
446	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	31.66	3,554	66,106	32.37	33.09	67,589	69,092
447	243152	NEWC-Ellwood	Operator U537O	4/26/2021	32.74	15,271	68,361	33.47	34.22	69,885	71,451
448	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	31.16	11,682	65,062	32.12	33.11	67,067	69,134
449	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	29.92	10,498	62,473	30.84	31.79	64,394	66,378
450	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	31.31	11,406	65,375	32.01	32.73	66,837	68,340
451	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	31.31	16,408	65,375	32.01	32.73	66,837	68,340
452	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	31.31	12,550	65,375	32.01	32.73	66,837	68,340
453	241106	PITT-Field Services	Utility Person U537P	5/24/2021	31.30	30,414	65,354	32.18	33.08	67,192	69,071
454	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	31.31	6,263	65,375	32.01	32.73	66,837	68,340
455	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	29.67	12,018	61,951	30.59	31.54	63,872	65,856
456	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	32.49	8,386	67,839	33.22	33.97	69,363	70,929
457	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	31.16	8,564	65,062	32.12	33.11	67,067	69,134
458	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	32.49	3,409	67,839	33.22	33.97	69,363	70,929
459	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	29.77	10,623	62,160	30.51	31.36	63,705	65,480
460	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	30.68	16,355	64,060	31.64	32.64	66,064	68,152
461	244506	WARR-Field Services	Utility Person U537O	8/16/2021	30.31	7,465	63,287	31.01	31.73	64,749	66,252
462	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	30.31	12,159	63,287	31.01	31.73	64,749	66,252
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	33.40	15,524	69,739	34.20	35.12	71,410	73,331
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	30.31	2,973	63,287	31.01	31.73	64,749	66,252
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	30.66	19,126	64,018	31.62	32.61	66,023	68,090
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	30.91	21,316	64,540	31.87	32.86	66,545	68,612
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	30.48	609	63,642	31.36	32.27	65,480	67,380
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	29.77	17,721	62,160	30.51	31.36	63,705	65,480
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	30.68	7,093	64,060	31.64	32.64	66,064	68,152
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	27.53	18,121	57,483	28.22	29.01	58,923	60,573
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	29.24	4,815	61,053	29.97	30.80	62,577	64,310
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	31.67	18,310	66,127	32.58	33.51	68,027	69,969
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	32.91	11,612	68,716	33.85	34.82	70,679	72,704
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	29.17	18,900	60,907	30.09	31.04	62,828	64,812

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					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
404	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	664	-	-	-	270.8	29.5	-	15,524	85,343	15,985	87,871
405	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	584	-	-	-	323.7	239.2	-	32,164	101,903	33,118	104,924
406	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	584	-	-	-	301.1	112.2	-	22,571	92,310	23,240	95,046
407	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	161	-	-	48.5	50.8	12.5	-	5,381	74,466	5,497	76,086
408	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	7,464	-	-	-	342.1	131.3	-	25,809	102,199	26,368	104,260
409	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	56	10	-	-	183.1	26.0	-	10,901	80,164	11,228	82,579
410	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	9,665	-	-	-	631.9	157.6	-	41,997	120,587	42,906	123,000
411	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	368	225	-	-	154.0	29.3	-	9,660	79,449	9,950	81,827
412	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	2,804	-	-	-	163.5	21.8	-	9,631	81,589	9,839	83,301
413	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	1,064	-	-	-	399.7	17.5	-	21,166	91,385	21,794	94,080
414	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	1,067	19	-	56.0	167.3	22.1	-	12,130	82,141	12,393	83,907
415	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	1,542	-	-	-	63.3	53.3	-	6,841	78,602	6,986	80,251
416	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	1,767	-	-	-	1,210.0	124.3	-	71,231	144,679	73,150	148,540
417	244601	KANE-Production	Operator U537O	9/9/2019	54	-	-	-	76.3	8.0	-	4,516	76,544	4,614	78,208
418	243151	NEWC-New Castle	Operator U537O	9/23/2019	241	456	-	186.7	326.2	89.6	-	31,201	103,871	31,877	106,114
419	243301	BUTL-Production	Operator U537O	9/23/2019	968	456	-	202.7	305.9	49.3	-	28,061	101,458	28,669	103,632
420	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	585	54	-	-	377.6	119.1	-	27,795	100,115	28,543	102,805
421	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	3,242	-	-	-	327.3	57.2	-	20,364	93,303	20,799	95,242
422	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	328	1,112	-	-	298.8	10.3	-	15,623	86,259	16,092	88,816
423	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	-	-	-	-	209.3	36.3	-	12,157	77,470	12,494	79,623
424	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	-	-	-	-	84.1	9.1	-	4,803	73,958	4,946	76,168
425	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	1,565	31	-	104.0	282.7	44.3	-	21,320	91,840	21,782	93,806
426	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	2,405	158	-	-	127.7	60.0	-	10,491	82,752	10,716	84,480
427	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	168	370	-	-	169.9	13.3	-	9,374	79,109	9,655	81,478
428	244301	CLAR-Production	Operator U537O	4/27/2020	55	177	-	104.0	237.3	13.7	-	17,758	89,964	18,143	91,915
429	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	240	-	-	-	116.7	7.8	-	6,183	73,699	6,368	75,909
430	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	-	-	-	-	-	-	-	-	74,082	-	75,961
431	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	690	1,089	-	-	576.8	73.3	-	34,567	107,276	35,508	110,159
432	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	1,156	221	-	255.8	123.3	15.2	-	17,705	87,944	18,090	89,832
433	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	296	-	-	-	58.3	4.3	-	3,201	72,651	3,270	74,223
434	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	8	305	-	-	69.7	4.7	-	3,741	72,164	3,854	74,344
435	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	-	-	-	-	44.0	13.4	-	2,894	67,517	2,950	68,848
436	245206	YARD-Field Services	Utility B F473Y	7/13/2020	144	-	70.3	-	113.1	-	-	6,340	61,481	6,500	63,041
437	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	1,223	16	-	-	630.8	62.2	-	35,880	106,712	36,876	109,649
438	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	15	-	-	-	79.0	22.5	-	5,064	69,056	5,228	71,307
439	249160	WILK-Watres	Plant Operator U648S	12/15/2020	368	1,092	-	-	248.3	12.0	-	13,033	82,645	13,430	85,130
440	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	1,504	-	-	-	547.2	78.8	-	32,468	102,604	33,436	105,640
441	249160	WILK-Watres	Plant Operator U648S	12/21/2020	176	805	-	-	187.2	-	-	9,240	78,373	9,521	80,742
442	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	44	-	-	-	130.9	49.7	-	9,327	74,683	9,584	76,757
443	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	25	-	-	-	184.2	39.3	-	11,179	76,517	11,488	78,642
444	245206	YARD-Field Services	Utility B F473Y	3/15/2021	228	-	102.5	-	115.7	-	-	7,299	62,525	7,484	64,109
445	244101	INDI-Production	Operator U537O	3/22/2021	600	443	-	144.0	145.2	20.0	-	14,715	85,643	15,043	87,538
446	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	400	389	-	-	57.8	12.4	-	3,633	72,011	3,713	73,594
447	243152	NEWC-Ellwood	Operator U537O	4/26/2021	158	426	-	146.7	160.8	20.0	-	15,610	86,079	15,958	87,994
448	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	824	-	-	-	234.5	9.5	-	12,037	79,928	12,405	82,362
449	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	696	-	-	-	213.8	13.3	-	10,818	75,908	11,147	78,221
450	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	3,470	-	-	-	186.5	41.0	-	11,659	81,966	11,919	83,730
451	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	3,869	231	-	-	284.3	47.3	-	16,773	87,710	17,148	89,589
452	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	2,739	-	-	-	214.0	38.5	-	12,829	82,405	13,115	84,194
453	241106	PITT-Field Services	Utility Person U537P	5/24/2021	1,224	-	-	-	575.0	50.8	-	31,262	99,678	32,130	102,425
454	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	1,245	247	-	-	129.8	2.0	-	6,402	74,731	6,545	76,377
455	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	960	-	-	-	213.3	41.0	-	12,388	77,220	12,770	79,585
456	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	271	101	-	60.0	108.5	10.0	-	8,574	78,309	8,767	80,068
457	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	240	1,219	-	-	148.8	24.5	-	8,825	77,351	9,095	79,688
458	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	52	281	-	16.0	48.4	6.0	-	3,485	73,182	3,563	74,826
459	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	300	-	35.5	-	153.0	45.0	-	10,886	74,891	11,188	76,967
460	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	632	729	-	-	249.3	78.0	-	16,864	84,289	17,393	86,907
461	244506	WARR-Field Services	Utility Person U537O	8/16/2021	705	-	-	-	125.6	28.4	-	7,637	73,090	7,813	74,770
462	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	3,411	315	-	-	246.3	14.6	-	12,438	80,914	12,725	82,704
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	1,944	-	-	-	223.6	63.0	-	15,893	89,247	16,318	91,592
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	232	-	-	-	40.9	18.0	-	3,041	68,022	3,111	69,596
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	832	-	-	-	339.5	55.3	-	19,721	86,576	20,335	89,256
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	944	-	-	-	386.3	53.0	-	21,974	89,463	22,653	92,209
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	52	40	-	-	13.1	-	-	626	66,198	644	68,116
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	648	-	51.0	-	273.5	64.3	-	18,157	82,510	18,658	84,786
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	24	1,519	-	-	137.0	12.0	-	7,314	74,921	7,543	77,238
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	864	-	55.0	-	321.0	58.5	-	18,572	78,359	19,088	80,525
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	624	-	-	-	108.6	-	-	4,934	68,136	5,069	70,004
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	815	-	-	-	364.8	12.1	-	18,830	87,672	19,361	90,146
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	75	710	-	-	200.0	24.5	-	11,940	83,404	12,279	85,768
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	824	-	-	-	368.3	43.8	-	19,489	83,141	20,097	85,733

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						Gross Labor						
						Base Year		Hourly Wage Rate		Regular Time		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	29.64	9,960	61,888	30.57	31.43	63,830	65,626
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	30.85	25,787	64,415	31.73	32.63	66,252	68,132
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	30.31	2,744	63,287	31.01	31.73	64,749	66,252
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	30.41	776	63,496	31.12	31.84	64,979	66,482
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	30.18	6,373	63,016	31.14	32.14	65,020	67,108
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	29.64	2,607	61,888	30.38	31.22	63,433	65,187
481	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	30.59	934	63,872	31.47	32.38	65,709	67,609
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	30.55	11,453	63,788	31.43	32.33	65,626	67,505
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	28.67	3,812	59,863	29.59	30.54	61,784	63,768
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	30.18	16,067	63,016	31.14	32.14	65,020	67,108
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	30.55	25,227	63,788	31.43	32.33	65,626	67,505
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	30.55	15,172	63,788	31.43	32.33	65,626	67,505
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	30.16	5,372	62,974	31.12	32.11	64,979	67,046
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	29.85	8,634	62,327	30.78	31.65	64,269	66,085
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	30.18	9,673	63,016	31.14	32.14	65,020	67,108
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022	31.15	15,225	65,041	32.05	32.97	66,920	68,841
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	30.55	13,982	63,788	31.43	32.33	65,626	67,505
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	30.55	18,631	63,788	31.43	32.33	65,626	67,505
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	30.55	10,047	63,788	31.43	32.33	65,626	67,505
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	32.91	18,859	68,716	33.85	34.82	70,679	72,704
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	29.18	2,407	60,928	30.14	31.14	62,932	65,020
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	27.95	2,131	58,360	28.86	29.70	60,260	62,014
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	29.64	7,955	61,888	30.38	31.22	63,433	65,187
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	30.73	16,914	64,164	31.61	32.52	66,002	67,902
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	31.32	25,803	65,396	32.22	33.15	67,275	69,217
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	29.68	7,996	61,972	30.64	31.64	63,976	66,064
501	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	30.59	6,530	63,872	31.47	32.38	65,709	67,609
502	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	30.59	8,481	63,872	31.47	32.38	65,709	67,609
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	29.66	15,285	61,930	30.62	31.61	63,935	66,002
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	30.73	14,630	64,164	31.61	32.52	66,002	67,902
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	26.78	8,927	55,917	27.47	28.26	57,357	59,007
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	28.51	1,657	59,529	29.26	30.00	61,095	62,640
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	29.66	7,319	61,930	30.62	31.61	63,935	66,002
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	29.31	2,495	61,199	30.01	30.73	62,661	64,164
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	29.66	4,067	61,930	30.62	31.61	63,935	66,002
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	30.62	11,337	63,935	31.50	32.41	65,772	67,672
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	31.67	10,863	66,127	32.58	33.51	68,027	69,969
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	31.67	9,881	66,127	32.58	33.51	68,027	69,969
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	29.31	2,477	61,199	30.01	30.73	62,661	64,164
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	29.31	4,492	61,199	30.01	30.73	62,661	64,164
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	29.64	13,757	61,888	30.57	31.43	63,830	65,626
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	29.31	967	61,199	30.01	30.73	62,661	64,164
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	30.49	3,316	63,663	31.22	31.97	65,187	66,753
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	31.67	7,383	66,127	32.58	33.51	68,027	69,969
519	243301	BUTL-Production	Operator U537O	3/20/2023	30.74	4,058	64,185	31.47	32.22	65,709	67,275
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	30.74	7,558	64,185	31.47	32.22	65,709	67,275
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	29.16	131	60,886	30.12	31.11	62,891	64,958
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	30.62	6,269	63,935	31.50	32.41	65,772	67,672
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	30.74	4,234	64,185	31.47	32.22	65,709	67,275
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	31.15	3,177	65,041	32.05	32.97	66,920	68,841
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	31.15	1,495	65,041	32.05	32.97	66,920	68,841
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	26.78	944	55,917	27.47	28.26	57,357	59,007
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	29.18	2,378	60,928	30.14	31.14	62,932	65,020
528	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	30.59	-	63,872	31.47	32.38	65,709	67,609
529	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	30.59	-	63,872	31.47	32.38	65,709	67,609
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	29.18	-	60,928	30.14	31.14	62,932	65,020
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023	29.31	22	61,199	30.01	30.73	62,661	64,164
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	29.31	-	61,199	30.01	30.73	62,661	64,164
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023	29.41	-	61,408	30.12	30.84	62,891	64,394
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023	31.08	1,787	64,895	31.97	32.89	66,753	68,674
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	29.16	-	60,886	30.12	31.11	62,891	64,958
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023	27.45	-	57,316	28.36	29.20	59,216	60,970
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023		-	-	35.74	36.63	74,625	76,483
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023		-	-	34.47	35.22	71,973	73,539
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023		-	-	31.01	31.73	64,749	66,252
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023		-	-	31.01	31.73	64,749	66,252
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023		-	-	30.01	30.73	62,661	64,164
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023		-	-	31.47	32.22	65,709	67,275
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023		-	-	33.01	33.73	68,925	70,428
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023		-	-	32.05	32.97	66,920	68,841
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023		-	-	31.97	32.89	66,753	68,674

Pennsylvania-American Water Company - Water Operations
Compensation

							Gross Labor									
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	88	-	-	-	176.5	33.3	-	10,268	74,185	10,553	76,266
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	850	409	-	-	442.6	82.0	-	26,515	94,027	27,260	96,651
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	360	42	-	8.0	47.3	4.5	-	2,806	67,957	2,871	69,525
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	150	312	-	-	16.8	-	-	794	66,234	812	67,756
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	376	744	-	-	132.0	6.0	-	6,575	72,715	6,785	75,013
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	480	-	-	-	34.1	17.9	-	2,671	66,584	2,744	68,411
481	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	15	754	-	-	20.3	-	-	961	67,439	988	69,367
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	165	-	-	-	181.3	49.0	-	11,778	77,569	12,111	79,781
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	304	85	-	-	88.1	-	-	3,934	66,106	4,059	68,215
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	288	982	-	-	330.5	17.3	-	16,576	82,866	17,106	85,484
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	1,307	700	-	-	378.0	126.0	-	25,948	93,580	26,685	96,197
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	712	949	-	-	278.9	37.0	-	15,606	82,893	16,049	85,215
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	256	323	-	-	106.1	8.8	-	5,541	71,099	5,716	73,341
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	6	-	-	-	144.3	35.0	-	8,900	73,175	9,149	75,241
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	288	697	-	-	199.0	10.5	-	9,980	75,985	10,299	78,392
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022	60	718	-	-	289.8	26.0	-	15,663	83,361	16,111	85,730
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	773	-	-	-	237.6	48.5	-	14,381	80,779	14,789	83,067
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	473	-	-	-	214.0	142.8	-	19,165	85,264	19,711	87,689
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	994	-	-	-	217.0	-	-	10,333	76,953	10,626	79,125
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	105	738	-	-	298.0	62.0	-	19,396	90,918	19,950	93,497
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	72	211	-	-	55.0	-	-	2,487	65,702	2,569	67,872
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	44	(5)	-	-	30.9	14.8	-	2,200	62,498	2,263	64,316
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	1,308	-	-	-	161.3	12.0	-	8,151	72,893	8,375	74,870
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	510	-	-	-	292.0	55.0	-	17,396	83,908	17,895	86,306
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	525	-	-	-	510.5	27.8	-	26,542	94,343	27,306	97,048
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	32	1,286	-	-	159.8	14.5	-	8,254	73,548	8,522	75,905
501	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	15	752	-	-	141.5	-	-	6,717	73,193	6,910	75,286
502	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	-	724	-	-	184.3	-	-	8,724	75,158	8,976	77,309
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	656	-	-	-	300.5	31.0	-	15,777	80,368	16,285	82,942
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	270	587	-	-	278.8	28.5	-	15,048	81,907	15,480	84,239
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	480	-	23.0	-	176.8	22.0	-	9,156	66,993	9,418	68,905
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	180	-	-	-	38.8	-	-	1,701	62,976	1,744	64,564
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	456	-	-	-	164.5	-	-	7,555	71,946	7,800	74,257
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	858	-	-	-	56.8	-	-	2,555	66,073	2,616	67,638
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	80	-	-	-	88.8	2.0	-	4,199	68,213	4,335	70,416
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	330	-	-	-	225.5	16.0	-	11,663	77,765	12,000	80,002
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	195	292	-	-	207.0	16.3	-	11,175	79,689	11,494	81,950
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	105	-	-	-	183.0	18.8	-	10,165	78,297	10,455	80,529
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	776	-	-	-	31.0	19.0	-	2,536	65,973	2,597	67,537
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	395	36	-	80.0	19.5	12.0	-	4,599	67,691	4,709	69,305
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	6	-	-	-	165.8	107.8	-	14,188	78,025	14,587	80,220
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	301	-	-	-	22.0	-	-	990	63,953	1,014	65,480
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	52	68	-	24.0	52.5	-	-	3,395	68,703	3,477	70,351
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	165	-	-	-	143.8	8.8	-	7,595	75,787	7,812	77,946
519	243301	BUTL-Production	Operator U537O	3/20/2023	-	104	-	64.0	22.0	9.5	-	4,154	69,968	4,253	71,633
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	-	110	-	56.0	73.3	33.0	-	7,738	73,557	7,922	75,308
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	8	-	-	-	3.0	-	-	136	63,034	140	65,106
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	135	96	-	-	113.5	17.3	-	6,450	72,453	6,636	74,539
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	-	72	-	32.0	42.5	17.0	-	4,335	70,116	4,438	71,786
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	-	114	-	-	68.0	-	-	3,269	70,304	3,363	72,318
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	-	114	-	-	32.0	-	-	1,538	68,573	1,583	70,538
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	12	-	-	-	23.5	-	-	968	58,338	996	60,015
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	96	10	-	-	33.0	16.0	-	2,456	65,495	2,538	67,665
528	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	-	76	-	-	-	-	-	-	65,785	-	67,685
529	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	-	48	-	-	-	-	-	-	65,757	-	67,657
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	-	26	-	-	-	-	-	-	62,958	-	65,046
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023	-	-	-	-	0.5	-	-	23	62,683	23	64,187
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	-	-	-	-	-	-	-	-	62,661	-	64,164
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023	-	-	-	-	-	-	-	-	62,891	-	64,394
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023	30	-	-	-	25.0	10.0	-	1,838	68,622	1,891	70,595
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	-	-	-	-	-	-	-	-	62,891	-	64,958
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023	-	-	-	-	-	-	-	-	59,216	-	60,970
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	74,625	-	76,483
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	71,973	-	73,539
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	64,749	-	66,252
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	64,749	-	66,252
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	62,661	-	64,164
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	65,709	-	67,275
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	68,925	-	70,428
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	66,920	-	68,841
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	66,753	-	68,674

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor						
					Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023		-	-	35.48	36.38	74,082	75,961
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023		-	-	30.14	31.14	62,932	65,020
			Total Collective Bargaining Unit			$7,614,195	$37,266,144			$38,950,095	$39,934,441
Non-Collective Bargaining Unit Hourly											
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	$33.57	$1,082	$70,094	$34.92	$36.14	$72,913	$75,460
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	41.76	7,968	87,195	43.43	44.94	90,682	93,835
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	36.36	1,108	75,920	37.82	39.14	78,968	81,724
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	38.59	276	80,576	40.14	41.54	83,812	86,736
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	10/3/1988	32.80	1,269	68,486	34.12	35.31	71,243	73,727
6	246801	LEHP-Production	Plant Operator	2/1/1996	33.62	18,957	70,199	34.97	36.19	73,017	75,565
7	245706	POCO-Field Services	Crew Leader	9/16/1996	33.71	10,815	70,386	35.06	36.28	73,205	75,753
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	32.83	3,910	68,549	34.15	35.34	71,305	73,790
9	245706	POCO-Field Services	Utility Person	7/1/1994	33.22	9,498	69,363	34.55	35.75	72,140	74,646
10	245501	BNGR-Production	Plant Operator	7/23/1990	36.64	15,670	76,504	38.11	39.44	79,574	82,351
11	247406	FRCK-Field Services	Utility Person	4/18/1988	33.29	2,115	69,510	34.62	35.82	72,287	74,792
12	247406	FRCK-Field Services	Utility Person	1/15/1986	34.39	5,436	71,806	35.77	37.01	74,688	77,277
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	30.99	1,836	64,707	32.23	33.35	67,296	69,635
14	246201	HSHY-Production	Plant Operator	9/27/1993	32.45	14,238	67,756	33.75	34.92	70,470	72,913
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	32.01	1,099	66,837	33.29	34.45	69,510	71,932
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	34.85	7,297	72,767	36.25	37.51	75,690	78,321
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	40.45	797	84,460	42.07	43.53	87,842	90,891
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990	31.19	-	65,125	32.44	33.57	67,735	70,094
19	247106	MILT-Field Services	Utility Person	11/16/1998	32.11	9,183	67,046	33.40	34.56	69,739	72,161
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	32.79	4,402	68,466	34.10	35.29	71,201	73,686
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	31.25	-	65,250	32.50	33.63	67,860	70,219
22	246506	COAT-Field Services	Utility Person	1/26/1998	28.60	3,472	59,717	29.75	30.79	62,118	64,290
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	36.26	8,973	75,711	37.71	39.02	78,738	81,474
24	245906	GLEN-Field Services	Utility Person	12/27/1994	35.26	11,890	73,623	36.67	37.95	76,567	79,240
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999	34.13	8,454	71,263	35.50	36.74	74,124	76,713
26	245606	NAZA-Field Services	Utility Person	10/4/1993	33.94	8,871	70,867	35.30	36.53	73,706	76,275
27	245906	GLEN-Field Services	Utility Person	6/20/1983	33.89	5,682	70,762	35.25	36.48	73,602	76,170
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	35.49	14,725	74,103	36.91	38.19	77,068	79,741
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	35.10	12,334	73,289	36.51	37.78	76,233	78,885
30	246401	ROYF-Production	Plant Operator	3/9/1998	35.89	11,263	74,938	37.33	38.63	77,945	80,659
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987	35.99	23,518	75,147	37.43	38.73	78,154	80,868
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	36.13	8,867	75,439	37.58	38.89	78,467	81,202
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	34.24	3,634	71,493	35.61	36.85	74,354	76,943
34	245606	NAZA-Field Services	Utility Person	11/26/2001	34.27	12,945	71,556	35.64	36.88	74,416	77,005
35	246801	LEHP-Production	Utility Person	2/26/1990	33.08	6,027	69,071	34.41	35.61	71,848	74,354
36	246501	COAT-Production	Plant Operator	5/28/2002	33.65	24,752	70,261	35.00	36.22	73,080	75,627
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	34.70	-	72,454	36.09	37.35	75,356	77,987
38	245906	GLEN-Field Services	Utility Person	1/5/2004	33.58	12,214	70,115	34.93	36.15	72,934	75,481
39	245606	NAZA-Field Services	Utility Person	2/16/2004	32.89	8,926	68,674	34.21	35.40	71,430	73,915
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N)	12/1/2004	31.09	200	64,916	32.34	33.47	67,526	69,885
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	31.92	4,941	66,649	33.20	34.36	69,322	71,744
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	33.27	8,048	69,468	34.60	35.80	72,245	74,750
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	32.58	10,042	68,027	33.89	35.07	70,762	73,226
44	245506	BNGR-Field Services	Utility Person	11/7/2005	32.84	6,632	68,570	34.16	35.35	71,326	73,811
45	245401	SUSQ-Production	Plant Operator	5/15/2006	32.18	9,307	67,192	33.47	34.63	69,885	72,307
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006	32.99	10,504	68,883	34.31	35.50	71,639	74,124
47	245606	NAZA-Field Services	Utility Person	12/18/2006	33.14	7,348	69,196	34.47	35.67	71,973	74,479
48	246206	HSHY-Field Services	Utility Person	3/26/2007	33.83	23,671	70,637	35.19	36.41	73,477	76,024
49	247106	MILT-Field Services	Utility Person	5/7/2007	31.51	1,747	65,793	32.77	33.91	68,424	70,804
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	35.20	1,249	73,498	36.61	37.88	76,442	79,093
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	32.87	9,123	68,633	34.19	35.38	71,389	73,873
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007	40.98	38,289	85,566	42.62	44.10	88,991	92,081
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	39.37	10,462	82,205	40.95	42.38	85,504	88,489
54	247201	PHBG-Production	Operations Specialist	6/2/2008	35.13	5,576	73,351	36.54	37.81	76,296	78,947
55	247106	MILT-Field Services	Utility Person	7/21/2008	30.70	3,888	64,102	31.93	33.04	66,670	68,988
56	246501	COAT-Production	Plant Operator	10/6/2008	33.55	12,266	70,052	34.90	36.11	72,871	75,398
57	247701	BOGGS-Production	Plant Operator	5/4/2009	34.41	3,354	71,848	35.79	37.04	74,730	77,340
58	245706	POCO-Field Services	Utility Person	9/28/2009	33.10	14,017	69,113	34.43	35.63	71,890	74,395
59	246506	COAT-Field Services	Utility Person	11/2/2009	33.05	7,764	69,008	34.38	35.58	71,785	74,291
60	247401	FRCK-Production	Operator	1/25/2010	31.70	5,489	66,190	32.97	34.12	68,841	71,243
61	247206	PHBG-Field Services	Utility Person	3/29/2010	33.96	4,948	70,908	35.32	36.55	73,748	76,316
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	36.29	6,375	75,774	37.75	39.06	78,822	81,557
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	37.97	14,229	79,281	39.49	40.86	82,455	85,316

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor											
					Overtime Hours							2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	74,082	-	75,961
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	62,932	-	65,020
			Total Collective Bargaining Unit		$478,833	$62,198	777.2	3,365.8	124,449.8	16,990.3	-	$7,809,834	$47,300,961	$8,010,816	$48,486,288
												Vacancy Rate	1.76%		1.76%
												Vacancy Adjustment	$830,988		$851,812
												Total Collective Bargaining Unit	$46,469,973		$47,634,477
Non-Collective Bargaining Unit Hourly															
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	$0	$0	-	-	21.3	-	-	$1,125	$74,038	$1,164	$76,625
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	-	-	-	-	122.7	-	-	8,276	98,958	8,554	102,388
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	-	-	-	-	20.3	-	-	1,152	80,120	1,192	82,916
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	-	-	-	-	4.7	-	-	287	84,099	296	87,032
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	10/3/1988	-	-	-	-	25.8	-	-	1,320	72,563	1,366	75,094
6	246801	LEHP-Production	Plant Operator	2/1/1996	290	-	-	-	197.3	130.5	-	19,709	93,016	20,388	96,243
7	245706	POCO-Field Services	Crew Leader	9/16/1996	40	-	66.3	-	109.5	42.5	-	11,241	84,487	11,626	87,419
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	50	-	49.3	-	41.8	3.0	-	4,066	75,421	4,206	78,046
9	245706	POCO-Field Services	Utility Person	7/1/1994	20	-	70.3	-	99.8	30.3	-	9,871	82,032	10,208	84,874
10	245501	BNGR-Production	Plant Operator	7/23/1990	70	-	193.7	-	96.1	42.5	-	16,291	95,935	16,854	99,274
11	247406	FRCK-Field Services	Utility Person	4/18/1988	10	-	-	-	36.5	4.0	-	2,198	74,495	2,273	77,075
12	247406	FRCK-Field Services	Utility Person	1/15/1986	80	-	-	-	79.2	18.5	-	5,650	80,418	5,844	83,201
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	-	-	-	-	39.5	-	-	1,910	69,206	1,976	71,611
14	246201	HSHY-Production	Plant Operator	9/27/1993	90	-	157.0	-	107.3	58.7	-	14,804	85,364	15,313	88,316
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	-	-	2.0	-	14.8	4.8	-	1,142	70,651	1,181	73,112
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	-	-	-	-	137.3	-	-	7,586	83,276	7,845	86,166
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	-	-	-	-	13.0	-	-	828	88,670	857	91,747
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990	-	-	-	-	-	-	-	-	67,735	-	70,094
19	247106	MILT-Field Services	Utility Person	11/16/1998	150	-	-	-	145.2	31.7	-	9,545	79,434	9,871	82,183
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	20	-	-	-	45.8	32.0	-	4,576	75,797	4,734	78,439
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	-	-	-	-	-	-	-	-	67,860	-	70,219
22	246506	COAT-Field Services	Utility Person	1/26/1998	10	-	-	-	69.3	7.5	-	3,609	65,737	3,732	68,032
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	60	-	61.7	-	77.4	33.4	-	9,328	88,126	9,648	91,182
24	245906	GLEN-Field Services	Utility Person	12/27/1994	120	-	69.7	-	128.3	34.6	-	12,357	89,044	12,781	92,140
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999	30	-	57.7	-	86.8	28.7	-	8,790	82,944	9,094	85,837
26	245606	NAZA-Field Services	Utility Person	10/4/1993	40	-	86.0	-	88.2	19.5	-	9,221	82,967	9,537	85,852
27	245906	GLEN-Field Services	Utility Person	6/20/1983	20	-	49.0	-	51.0	19.8	-	5,906	79,528	6,109	82,300
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	80	-	176.7	-	92.8	47.5	-	15,309	92,457	15,835	95,656
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	350	143	-	-	143.8	62.8	-	12,816	89,542	13,249	92,627
30	246401	ROYF-Production	Plant Operator	3/9/1998	470	427	-	-	127.3	59.3	-	11,709	90,551	12,111	93,668
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987	40	-	153.7	-	208.7	89.3	-	24,447	102,640	25,285	106,194
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	-	-	-	-	160.4	-	-	9,216	87,683	9,532	90,734
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	100	-	8.7	-	51.3	9.3	-	3,777	78,231	3,907	80,950
34	245606	NAZA-Field Services	Utility Person	11/26/2001	90	-	90.3	-	146.3	31.3	-	13,455	87,962	13,917	91,012
35	246801	LEHP-Production	Utility Person	2/26/1990	50	-	73.3	-	46.9	18.2	-	6,266	78,164	6,482	80,886
36	246501	COAT-Production	Plant Operator	5/28/2002	30	-	-	-	270.0	159.2	-	25,729	98,839	26,611	102,269
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	-	-	-	-	-	-	-	-	75,356	-	77,987
38	245906	GLEN-Field Services	Utility Person	1/5/2004	90	-	88.7	-	129.8	37.4	-	12,697	85,721	13,134	88,705
39	245606	NAZA-Field Services	Utility Person	2/16/2004	40	-	82.3	-	98.6	19.0	-	9,280	80,750	9,599	83,554
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N)	12/1/2004	-	-	-	-	4.3	-	-	208	67,734	215	70,101
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	-	-	-	-	101.1	-	-	5,136	74,457	5,311	77,055
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	-	-	-	-	158.3	-	-	8,364	80,609	8,649	83,400
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	-	394	-	-	138.8	48.0	-	10,440	81,597	10,799	84,420
44	245506	BNGR-Field Services	Utility Person	11/7/2005	20	-	131.7	-	43.5	2.0	-	6,897	78,243	7,136	80,967
45	245401	SUSQ-Production	Plant Operator	5/15/2006	130	-	55.0	-	122.6	22.8	-	9,674	79,690	10,004	82,442
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006	30	-	59.3	-	115.8	41.2	-	10,921	82,590	11,296	85,450
47	245606	NAZA-Field Services	Utility Person	12/18/2006	40	-	86.7	-	57.8	23.1	-	7,640	79,653	7,903	82,422
48	246206	HSHY-Field Services	Utility Person	3/26/2007	100	-	107.0	-	306.0	61.3	-	24,607	98,184	25,447	101,572
49	247106	MILT-Field Services	Utility Person	5/7/2007	50	-	-	-	36.2	-	-	1,815	70,289	1,877	72,731
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	-	-	-	-	23.2	-	-	1,298	77,740	1,342	80,436
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	20	-	66.0	-	87.8	38.3	-	9,485	80,894	9,812	83,705
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007	-	-	-	-	604.7	-	-	39,776	128,767	41,118	133,199
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	-	-	-	-	172.0	-	-	10,869	96,373	11,238	99,728
54	247201	PHBG-Production	Operations Specialist	6/2/2008	120	-	6.0	-	75.7	18.3	-	5,796	82,212	5,995	85,062
55	247106	MILT-Field Services	Utility Person	7/21/2008	30	-	-	-	63.7	14.5	-	4,041	70,741	4,179	73,197
56	246501	COAT-Production	Plant Operator	10/6/2008	100	-	-	-	152.8	65.5	-	12,753	85,724	13,189	88,686
57	247701	BOGGS-Production	Plant Operator	5/4/2009	110	-	3.3	-	46.3	11.3	-	3,485	78,325	3,605	81,054
58	245706	POCO-Field Services	Utility Person	9/28/2009	80	-	74.7	-	153.8	56.7	-	14,573	86,543	15,076	89,551
59	246506	COAT-Field Services	Utility Person	11/2/2009	380	-	20.5	-	117.5	17.5	-	8,073	80,238	8,351	83,022
60	247401	FRCK-Production	Operator	1/25/2010	60	-	-	-	85.4	21.3	-	5,706	74,607	5,902	77,205
61	247206	PHBG-Field Services	Utility Person	3/29/2010	140	-	12.5	-	64.7	17.0	-	5,143	79,032	5,320	81,776
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	-	-	-	-	114.7	-	-	6,627	85,449	6,852	88,409
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	-	-	-	-	230.8	12.0	-	14,792	97,247	15,299	100,615

Pennsylvania-American Water Company - Water Operations
Compensation

						Gross Labor						
						Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	34.31	13,006	71,639	35.69	36.93	74,521	77,110
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	30.03	-	62,703	31.23	32.32	65,208	67,484
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	32.21	8,507	67,254	33.50	34.67	69,948	72,391
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	38.00	20,846	79,344	39.52	40.90	82,518	85,399
68	247206	PHBG-Field Services	Utility Person	11/7/2011	32.74	2,931	68,361	34.05	35.23	71,096	73,560
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	29.05	-	60,656	30.21	31.26	63,078	65,271
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	30.99	1,347	64,707	32.23	33.35	67,296	69,635
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	31.25	-	65,250	32.50	33.63	67,860	70,219
72	249150	WILK-Other	Operations Specialist	3/4/2013	31.00	24	64,728	32.24	33.36	67,317	69,656
73	247306	BRWK-Field Services	Utility Person	4/29/2013	33.57	9,588	70,094	34.92	36.14	72,913	75,460
74	245601	NAZA-Production	Plant Operator	6/27/2013	35.09	42,491	73,268	36.50	37.77	76,212	78,864
75	247301	BRWK-Production	Operator	9/16/2013	34.11	9,121	71,222	35.48	36.71	74,082	76,650
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	32.66	274	68,194	33.97	35.15	70,929	73,393
77	247201	PHBG-Production	Plant Operator	2/2/2015	32.90	8,122	68,695	34.22	35.41	71,451	73,936
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	32.82	18,066	68,528	34.14	35.33	71,284	73,769
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	30.53	4,015	63,747	31.75	32.85	66,294	68,591
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	33.26	15,237	69,447	34.59	35.79	72,224	74,730
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	28.21	-	58,902	29.34	30.36	61,262	63,392
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	34.41	7,785	71,848	35.79	37.04	74,730	77,340
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	29.96	1	62,556	31.16	32.24	65,062	67,317
84	245406	SUSQ-Field Services	Utility Person	12/14/2015	28.30	5,238	59,090	29.43	30.45	61,450	63,580
85	246506	COAT-Field Services	Utility Person	2/3/2016	30.56	45,410	63,809	31.79	32.90	66,378	68,695
86	247103	MILT-Cust Service	Utility Person	3/7/2016	30.55	2,198	63,788	31.78	32.89	66,357	68,674
87	246206	HSHY-Field Services	Utility Person	2/29/2016	34.22	10,617	71,451	35.59	36.83	74,312	76,901
88	246201	HSHY-Production	Plant Operator	2/29/2016	32.45	45,440	67,756	33.75	34.92	70,470	72,913
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	33.02	13,235	68,946	34.34	35.54	71,702	74,208
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016	32.45	468	67,756	33.75	34.92	70,470	72,913
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	49.28	18,198	102,897	51.26	53.04	107,031	110,748
92	246206	HSHY-Field Services	Utility Person	6/13/2016	30.95	6,088	64,624	32.19	33.31	67,213	69,551
93	246206	HSHY-Field Services	Utility Person	7/11/2016	30.43	1,760	63,538	31.65	32.75	66,085	68,382
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	35.09	-	73,268	36.50	37.77	76,212	78,864
95	245306	ABNG-Field Services	Utility Person	10/24/2016	31.01	12,050	64,749	32.25	33.37	67,338	69,677
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	32.96	3,394	68,820	34.28	35.47	71,577	74,061
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	28.38	2	59,257	29.52	30.55	61,638	63,788
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	39.33	19,553	82,121	40.91	42.33	85,420	88,385
99	247306	BRWK-Field Services	Utility Person	1/16/2017	29.66	5,222	61,930	30.85	31.92	64,415	66,649
100	246506	COAT-Field Services	Utility Person	2/13/2017	28.95	12,922	60,448	30.11	31.16	62,870	65,062
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	31.11	308	64,958	32.36	33.49	67,568	69,927
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015	18.11	49	37,814	18.84	19.50	39,338	40,716
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	17.95	330	37,480	18.67	19.32	38,983	40,340
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018	28.84	8,603	60,218	30.00	31.04	62,640	64,812
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	28.60	402	59,717	29.75	30.79	62,118	64,290
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018	31.77	-	66,336	33.04	34.19	68,988	71,389
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	38.02	2,906	79,386	39.54	40.92	82,560	85,441
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	31.67	1,153	66,127	32.94	34.09	68,779	71,180
109	246801	LEHP-Production	Utility Person	7/23/2018	27.41	15,904	57,232	28.51	29.50	59,529	61,596
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	41.59	16,483	86,840	43.26	44.77	90,327	93,480
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	33.06	22,630	69,029	34.39	35.59	71,806	74,312
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	24.29	991	50,718	25.26	26.14	52,743	54,580
113	246501	COAT-Production	Plant Operator	9/24/2018	31.49	18,867	65,751	32.75	33.89	68,382	70,762
114	245906	GLEN-Field Services	Utility Person	10/8/2018	28.66	5,614	59,842	29.81	30.85	62,243	64,415
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	30.01	7,165	62,661	31.21	32.30	65,166	67,442
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	26.01	1,205	54,309	27.05	27.99	56,480	58,443
117	246206	HSHY-Field Services	Utility Person	10/8/2018	28.82	8,074	60,176	29.98	31.02	62,598	64,770
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	33.28	16,348	69,489	34.61	35.81	72,266	74,771
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	31.32	3,503	65,396	32.58	33.71	68,027	70,386
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	31.19	8,773	65,125	32.44	33.57	67,735	70,094
121	246206	HSHY-Field Services	Utility Person	1/14/2019	29.12	9,603	60,803	30.29	31.34	63,246	65,438
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	32.02	1,187	66,858	33.30	34.46	69,530	71,952
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	32.64	1,123	68,152	33.95	35.13	70,888	73,351
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	46.65	33,330	97,405	48.52	50.21	101,310	104,838
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	34.12	-	71,243	35.49	36.73	74,103	76,692
126	248801	TURB-Production	Plant Operator	7/8/2019	30.29	7,564	63,246	31.50	32.60	65,772	68,069
127	240116	CORP-Maint Services	Sr Reliability Engineering Analyst	7/15/2019	49.34	13,795	103,022	51.32	53.11	107,156	110,894
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	32.87	20,522	68,633	34.19	35.38	71,389	73,873
129	241406	STNW-Field Service	Utility Person	12/5/2018	25.55	7,401	53,348	26.57	27.49	55,478	57,399
130	246206	HSHY-Field Services	Utility Person	2/2/2016	28.09	5,683	58,652	29.22	30.24	61,011	63,141
131	241406	STNW-Field Service	Utility Person	3/3/1999	25.55	9,169	53,348	26.57	27.49	55,478	57,399
132	247201	PHBG-Production	Plant Operator	10/21/2019	30.00	9,632	62,640	31.20	32.29	65,146	67,422
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	30.91	1,300	64,540	32.15	33.27	67,129	69,468
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	31.52	692	65,814	32.78	33.92	68,445	70,825

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor											
					Overtime Hours							2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	276	-	-	-	126.1	93.1	-	13,524	88,321	13,989	91,375
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	-	-	-	-	-	-	-	-	65,208	-	67,484
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	160	-	53.3	-	115.3	16.8	-	8,842	78,950	9,146	81,697
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	30	-	-	-	345.4	12.9	-	21,673	104,221	22,423	107,853
68	247206	PHBG-Field Services	Utility Person	11/7/2011	10	-	5.0	-	38.0	13.2	-	3,047	74,153	3,151	76,721
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	-	-	-	-	-	-	-	-	63,078	-	65,271
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	-	4	-	-	14.4	10.7	-	1,400	68,700	1,449	71,087
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	-	-	-	-	-	-	-	-	67,860	-	70,219
72	249150	WILK-Other	Operations Specialist	3/4/2013	-	-	-	-	0.5	-	-	25	67,342	26	69,681
73	247306	BRWK-Field Services	Utility Person	4/29/2013	40	-	14.7	-	137.1	30.8	-	9,968	82,921	10,312	85,813
74	245601	NAZA-Production	Plant Operator	6/27/2013	150	-	215.3	-	377.2	207.8	-	44,178	120,540	45,698	124,712
75	247301	BRWK-Production	Operator	9/16/2013	30	-	15.7	-	119.0	34.6	-	9,482	83,594	9,806	86,487
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	-	-	-	-	5.5	-	-	285	71,214	294	73,688
77	247201	PHBG-Production	Plant Operator	2/2/2015	70	414	5.0	-	55.4	77.9	-	8,444	80,380	8,734	83,155
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	90	-	207.7	-	171.8	39.1	-	18,784	90,158	19,430	93,289
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	-	-	-	-	86.5	-	-	4,174	70,468	4,316	72,907
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	350	-	79.7	-	175.9	53.8	-	15,837	88,411	16,378	91,458
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	-	-	-	-	-	-	-	-	61,262	-	63,392
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	-	-	-	-	147.7	-	-	8,090	82,820	8,367	85,707
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	-	-	-	-	-	-	-	1	65,063	1	67,318
84	245406	SUSQ-Field Services	Utility Person	12/14/2015	80	-	61.0	-	67.8	10.0	-	5,445	66,975	5,631	69,291
85	246506	COAT-Field Services	Utility Person	2/3/2016	2,650	-	151.7	-	742.5	100.8	-	47,214	116,241	48,842	120,187
86	247103	MILT-Cust Service	Utility Person	3/7/2016	-	-	-	-	35.9	8.5	-	2,286	68,642	2,364	71,039
87	246206	HSHY-Field Services	Utility Person	2/29/2016	30	-	-	-	185.5	13.3	-	11,035	85,376	11,412	88,343
88	246201	HSHY-Production	Plant Operator	2/29/2016	40	-	194.3	-	519.5	204.9	-	47,239	117,749	48,857	121,810
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	370	-	6.0	-	179.5	59.0	-	13,754	85,826	14,226	88,804
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016	-	-	-	-	9.5	-	-	487	70,957	503	73,416
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	-	-	-	-	238.3	-	-	18,906	125,937	19,542	130,290
92	246206	HSHY-Field Services	Utility Person	6/13/2016	80	-	24.0	-	94.6	14.1	-	6,328	73,621	6,545	76,177
93	246206	HSHY-Field Services	Utility Person	7/11/2016	-	-	-	-	33.8	3.0	-	1,829	67,914	1,892	70,274
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	-	-	-	-	-	-	-	-	76,212	-	78,864
95	245306	ABNG-Field Services	Utility Person	10/24/2016	100	-	80.7	-	122.7	59.3	-	12,525	79,963	12,954	82,731
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	-	-	42.7	-	28.2	8.5	-	3,529	75,105	3,650	77,711
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	-	-	-	-	-	-	-	2	61,640	2	63,791
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	-	84	-	-	266.7	46.3	-	20,331	105,836	21,031	109,500
99	247306	BRWK-Field Services	Utility Person	1/16/2017	90	-	13.3	-	69.3	28.3	-	5,429	69,934	5,615	72,354
100	246506	COAT-Field Services	Utility Person	2/13/2017	360	-	82.7	-	195.4	32.0	-	13,432	76,662	13,894	79,316
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	-	-	-	-	6.5	-	-	321	67,888	332	70,259
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015	-	-	-	-	1.8	-	-	51	39,389	52	40,768
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	-	-	-	-	12.0	-	-	343	39,326	355	40,695
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018	-	-	-	-	195.3	-	-	8,943	71,583	9,248	74,059
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	-	-	-	-	9.2	-	-	418	62,536	432	64,721
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018	-	-	-	-	-	-	-	-	68,988	-	71,389
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	-	-	-	-	48.5	-	-	3,016	85,576	3,117	88,558
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	-	-	-	-	23.7	-	-	1,198	69,977	1,239	72,419
109	246801	LEHP-Production	Utility Person	7/23/2018	170	-	84.3	-	241.7	62.0	-	16,532	76,231	17,097	78,863
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	-	-	-	-	256.7	-	-	17,126	107,453	17,707	111,187
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	150	-	44.0	-	287.4	99.3	-	23,526	95,482	24,334	98,796
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	-	-	-	-	26.7	-	-	1,030	53,772	1,065	55,645
113	246501	COAT-Production	Plant Operator	9/24/2018	-	-	-	-	272.8	90.5	-	19,610	87,992	20,283	91,046
114	245906	GLEN-Field Services	Utility Person	10/8/2018	30	-	53.3	-	64.8	21.2	-	5,836	68,109	6,036	70,481
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	50	33	-	-	96.8	44.7	-	7,446	72,696	7,702	75,228
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	-	-	-	-	30.3	-	-	1,252	57,732	1,294	59,738
117	246206	HSHY-Field Services	Utility Person	10/8/2018	100	-	32.0	-	128.1	26.3	-	8,395	71,093	8,683	73,553
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	-	-	99.5	-	173.1	61.8	-	16,989	89,255	17,569	92,340
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	-	-	-	-	72.8	-	-	3,641	71,668	3,764	74,151
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	-	-	-	-	183.7	-	-	9,117	76,852	9,428	79,523
121	246206	HSHY-Field Services	Utility Person	1/14/2019	50	-	32.0	-	136.2	44.1	-	9,983	73,278	10,323	75,811
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	-	-	-	-	24.3	-	-	1,234	70,764	1,276	73,229
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	-	-	-	-	22.1	-	-	1,166	72,054	1,206	74,557
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	-	-	-	-	463.3	-	-	34,630	135,939	35,804	140,642
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	-	-	-	-	-	-	-	-	74,103	-	76,692
126	248801	TURB-Production	Plant Operator	7/8/2019	60	-	-	-	58.3	79.9	-	7,864	73,696	8,135	76,264
127	240116	CORP-Maint Services	Sr Reliability Engineering Analyst	7/15/2019	-	-	-	-	181.2	-	-	14,333	121,489	14,820	125,713
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	20	-	278.3	-	222.0	5.0	-	21,342	92,751	22,082	95,975
129	241406	STNW-Field Service	Utility Person	12/5/2018	10	-	170.3	-	79.2	-	-	7,696	63,184	7,962	65,371
130	246206	HSHY-Field Services	Utility Person	2/2/2016	20	-	58.0	-	56.8	28.5	-	5,909	66,941	6,113	69,275
131	241406	STNW-Field Service	Utility Person	3/3/1999	-	-	163.0	-	125.8	3.0	-	9,534	65,012	9,863	67,262
132	247201	PHBG-Production	Plant Operator	10/21/2019	100	441	3.0	-	97.8	83.8	-	10,013	75,700	10,359	78,322
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	-	-	-	-	27.5	-	-	1,351	68,480	1,397	70,865
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	-	-	-	-	14.4	-	-	719	69,163	743	71,568

Pennsylvania-American Water Company - Water Operations
Compensation

								Gross Labor			
						Base Year		Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
135	247206	PHBG-Field Services	Utility Person	1/27/2020	29.75	8,734	62,118	30.94	32.02	64,603	66,858
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	36.78	2,151	76,797	38.25	39.58	79,866	82,643
137	241406	STNW-Field Service	Foreperson	1/8/1990	34.88	5,574	72,829	36.28	37.54	75,753	78,384
138	246406	ROYF-Field Services	Utility Person	3/23/2020	30.87	9,107	64,457	32.11	33.23	67,046	69,384
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	31.24	19,465	65,229	32.49	33.62	67,839	70,199
140	246406	ROYF-Field Services	Utility Person	4/13/2020	30.93	10,621	64,582	32.17	33.29	67,171	69,510
141	247106	MILT-Field Services	Utility Person	4/13/2020	29.69	5,298	61,993	30.88	31.95	64,477	66,712
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	31.22	12,162	65,187	32.47	33.60	67,797	70,157
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	27.20	8,091	56,794	28.29	29.27	59,070	61,116
144	245701	POCO-Production	Plant Operator	4/27/2020	29.97	16,245	62,577	31.17	32.25	65,083	67,338
145	246401	ROYF-Production	Plant Operator	5/4/2020	32.80	9,049	68,486	34.12	35.31	71,243	73,727
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	24.96	513	52,116	25.96	26.86	54,204	56,084
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	36.51	14,057	76,233	37.97	39.29	79,281	82,038
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	26.39	1,786	55,102	27.45	28.41	57,316	59,320
149	240116	CORP-Maint Services	Reliability Engineering Analyst	6/1/2020	43.00	10,170	89,784	44.72	46.28	93,375	96,633
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	28.60	281	59,717	29.75	30.79	62,118	64,290
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	29.16	411	60,886	30.33	31.39	63,329	65,542
152	247106	MILT-Field Services	Utility Person	10/19/2020	29.26	4,671	61,095	30.43	31.49	63,538	65,751
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	41.32	11,465	86,276	42.98	44.48	89,742	92,874
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	29.70	6,408	62,014	30.89	31.96	64,498	66,732
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	28.05	679	58,568	29.17	30.19	60,907	63,037
156	245506	BNGR-Field Services	Utility Person	2/22/2021	27.66	5,574	57,754	28.77	29.77	60,072	62,160
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	25.88	284	54,037	26.92	27.86	56,209	58,172
158	246801	LEHP-Production	Utility Person	4/12/2021	27.58	8,002	57,587	28.69	29.69	59,905	61,993
159	246506	COAT-Field Services	Utility Person	4/13/2021	30.77	13,111	64,248	32.00	33.11	66,816	69,134
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	28.12	13,065	58,715	29.25	30.27	61,074	63,204
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	33.28	9,830	69,489	34.61	35.81	72,266	74,771
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	26.55	7,173	55,436	27.61	28.57	57,650	59,654
163	240114	CORP-Engineering	GIS Analyst	6/1/2021	26.00	-	54,288	27.04	27.98	56,460	58,422
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	30.50	13,647	63,684	31.72	32.82	66,231	68,528
165	247206	PHBG-Field Services	Utility Person	7/6/2021	30.92	3,339	64,561	32.16	33.28	67,150	69,489
166	245906	GLEN-Field Services	Utility Person	7/12/2021	30.12	7,239	62,891	31.33	32.42	65,417	67,693
167	246401	ROYF-Production	Plant Operator	7/19/2021	32.93	8,232	68,758	34.25	35.44	71,514	73,999
168	241106	PITT-Field Services	Operations Specialist	9/7/2021	30.20	-	63,058	31.41	32.50	65,584	67,860
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	32.21	1,078	67,254	33.50	34.67	69,948	72,391
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	31.20	1,498	65,146	32.45	33.58	67,756	70,115
171	240116	CORP-Maint Services	Reliability Engineering Analyst	10/18/2021	37.00	14,241	77,256	38.48	39.82	80,346	83,144
172	246506	COAT-Field Services	Utility Person	11/8/2021	28.06	18,544	58,589	29.19	30.21	60,949	63,078
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	46.35	8,407	96,779	48.21	49.89	100,662	104,170
174	246506	COAT-Field Services	Utility Person	11/9/2021	28.06	11,258	58,589	29.19	30.21	60,949	63,078
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	20.50	1,804	42,804	21.32	22.06	44,516	46,061
176	247106	MILT-Field Services	Utility Person	11/22/2021	28.80	2,779	60,134	29.95	30.99	62,536	64,707
177	246201	HSHY-Production	Plant Operator	1/10/2022	30.50	7,290	63,684	31.72	32.82	66,231	68,528
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	1/10/2022	27.76	2,906	57,963	28.87	29.87	60,281	62,369
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	30.90	116	64,519	32.14	33.26	67,108	69,447
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	28.89	-	60,322	30.05	31.10	62,744	64,937
181	247206	PHBG-Field Services	Utility Person	2/21/2022	29.96	3,398	62,556	31.16	32.24	65,062	67,317
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	2/28/2022	23.77	2,877	49,632	24.72	25.58	51,615	53,411
183	245306	ABNG-Field Services	Utility Person	2/21/2022	27.45	5,799	57,316	28.55	29.54	59,612	61,680
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	29.51	5,854	61,617	30.69	31.76	64,081	66,315
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	20.60	-	43,013	21.43	22.18	44,746	46,312
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	28.98	-	60,510	30.14	31.19	62,932	65,125
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	26.13	-	54,559	27.18	28.13	56,752	58,735
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	27.81	21	58,067	28.93	29.94	60,406	62,515
189	240306	CORP-Field Service	Operations Specialist	4/25/2022	31.93	-	66,670	33.21	34.37	69,342	71,765
190	245306	ABNG-Field Services	Utility Person	5/16/2022	28.25	9,080	58,986	29.38	30.40	61,345	63,475
191	241401	STNW-Production	Plant Operator	6/6/2022	26.55	3,330	55,436	27.61	28.57	57,650	59,654
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	32.80	1,353	68,486	34.12	35.31	71,243	73,727
193	245506	BNGR-Field Services	Utility Person	6/20/2022	30.99	9,309	64,707	32.23	33.35	67,296	69,635
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	6/20/2022	23.12	781	48,275	24.05	24.89	50,216	51,970
195	245401	SUSQ-Production	Plant Operator	6/27/2022	27.89	17,666	58,234	29.01	30.02	60,573	62,682
196	241401	STNW-Production	Plant Operator	7/5/2022	26.55	7,037	55,436	27.61	28.57	57,650	59,654
197	246801	LEHP-Production	Utility Person	7/18/2022	26.86	16,135	56,084	27.94	28.91	58,339	60,364
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/18/2022	23.64	90	49,360	24.59	25.45	51,344	53,140
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	29.40	3,245	61,387	30.58	31.64	63,851	66,064
200	247106	MILT-Field Services	Utility Person	7/18/2022	28.97	7,090	60,489	30.13	31.18	62,911	65,104
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	29.36	8,311	61,304	30.54	31.60	63,768	65,981
202	245501	BNGR-Production	Plant Operator	8/29/2022	27.95	4,904	58,360	29.07	30.08	60,698	62,807
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	27.94	629	58,339	29.06	30.07	60,677	62,786
204	245401	SUSQ-Production	Plant Operator	9/19/2022	27.89	8,539	58,234	29.01	30.02	60,573	62,682
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	28.87	9,121	60,281	30.03	31.08	62,703	64,895

Pennsylvania-American Water Company - Water Operations
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					Gross Labor											
							Overtime Hours						2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
135	247206	PHBG-Field Services	Utility Person	1/27/2020	60	392	-	-	79.5	85.7	-	9,080	74,135	9,394	76,704
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	-	-	-	-	38.2	-	-	2,235	82,101	2,311	84,954
137	241406	STNW-Field Service	Foreperson	1/8/1990	10	-	41.5	-	74.3	3.0	-	5,797	81,560	5,997	84,391
138	246406	ROYF-Field Services	Utility Person	3/23/2020	130	-	65.0	-	118.8	24.3	-	9,469	76,644	9,795	79,310
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	-	-	-	-	408.2	-	-	20,231	88,070	20,923	91,121
140	246406	ROYF-Field Services	Utility Person	4/13/2020	290	-	68.7	-	148.0	24.2	-	11,041	78,502	11,421	81,220
141	247106	MILT-Field Services	Utility Person	4/13/2020	30	88	-	-	60.8	42.5	-	5,508	70,104	5,697	72,527
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	-	-	-	-	254.8	-	-	12,639	80,437	13,071	83,228
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	-	-	-	-	195.0	-	-	8,410	67,479	8,696	69,812
144	245701	POCO-Production	Plant Operator	4/27/2020	140	-	138.7	-	159.4	78.5	-	16,887	82,110	17,465	84,943
145	246401	ROYF-Production	Plant Operator	5/4/2020	10	436	-	-	85.2	72.0	-	9,408	81,096	9,731	83,904
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	-	-	-	-	13.5	-	-	534	54,738	552	56,635
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	-	-	-	-	221.2	23.0	-	14,608	93,890	15,107	97,145
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	-	-	-	-	44.8	-	-	1,857	59,172	1,921	61,241
149	240116	CORP-Maint Services	Reliability Engineering Analyst	6/1/2020	-	-	-	-	154.3	-	-	10,568	103,943	10,929	107,562
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	-	-	-	-	6.5	-	-	292	62,410	303	64,592
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	-	-	-	-	9.2	-	-	427	63,756	441	65,984
152	247106	MILT-Field Services	Utility Person	10/19/2020	140	-	5.0	-	64.3	27.7	-	4,855	68,532	5,021	70,912
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	-	-	-	-	181.1	-	-	11,916	101,658	12,324	105,198
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	-	-	-	-	141.7	-	-	6,660	71,159	6,888	73,620
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	-	-	-	-	15.8	-	-	706	61,613	730	63,767
156	245506	BNGR-Field Services	Utility Person	2/22/2021	80	-	100.3	-	44.2	16.4	-	5,795	65,947	5,994	68,234
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	-	-	-	-	7.3	-	-	296	56,505	306	58,477
158	246801	LEHP-Production	Utility Person	4/12/2021	190	-	51.7	-	91.1	47.8	-	8,317	68,412	8,601	70,784
159	246506	COAT-Field Services	Utility Person	4/13/2021	454	-	51.5	-	216.8	23.1	-	13,631	80,901	14,100	83,688
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	520	-	79.5	-	167.5	63.0	-	13,581	75,175	14,047	77,770
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	290	-	66.5	-	128.3	16.0	-	10,217	82,773	10,567	85,628
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	-	-	-	-	157.5	16.0	-	7,457	65,107	7,715	67,369
163	240114	CORP-Engineering	GIS Analyst	6/1/2021	-	-	-	-	-	-	-	-	56,460	-	58,422
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	40	-	81.0	-	151.8	66.1	-	14,185	80,457	14,670	83,239
165	247206	PHBG-Field Services	Utility Person	7/6/2021	30	-	10.0	-	39.5	18.5	-	3,471	70,651	3,590	73,108
166	245906	GLEN-Field Services	Utility Person	7/12/2021	180	-	43.0	-	97.8	23.6	-	7,525	73,122	7,784	75,657
167	246401	ROYF-Production	Plant Operator	7/19/2021	240	578	-	-	79.9	63.6	-	8,558	80,890	8,852	83,669
168	241106	PITT-Field Services	Operations Specialist	9/7/2021	-	-	-	-	-	-	-	-	65,584	-	67,860
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	-	-	-	-	21.6	-	-	1,120	71,068	1,158	73,549
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	-	-	-	-	32.0	-	-	1,558	69,313	1,612	71,727
171	240116	CORP-Maint Services	Reliability Engineering Analyst	10/18/2021	100	-	90.0	-	124.0	50.5	-	14,799	95,245	15,304	98,549
172	246506	COAT-Field Services	Utility Person	11/8/2021	1,360	-	62.0	-	348.3	31.8	-	19,276	81,585	19,937	84,375
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	-	-	-	-	114.9	-	-	8,727	109,390	9,017	113,187
174	246506	COAT-Field Services	Utility Person	11/9/2021	450	-	32.0	-	190.3	37.0	-	11,700	73,099	12,099	75,628
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	-	-	-	-	57.8	-	-	1,875	46,391	1,939	48,000
176	247106	MILT-Field Services	Utility Person	11/22/2021	30	146	-	-	42.3	16.0	-	2,889	65,600	2,988	67,871
177	246201	HSHY-Production	Plant Operator	1/10/2022	23	-	-	-	100.6	42.6	-	7,578	73,832	7,838	76,389
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	1/10/2022	-	-	-	-	67.8	-	-	3,019	63,299	3,121	65,489
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	-	-	-	-	2.4	-	-	120	67,228	124	69,571
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	-	-	-	-	-	-	-	-	62,744	-	64,937
181	247206	PHBG-Field Services	Utility Person	2/21/2022	140	-	1.0	-	54.5	14.0	-	3,531	68,733	3,651	71,108
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	2/28/2022	-	-	-	-	79.6	-	-	2,990	54,606	3,093	56,504
183	245306	ABNG-Field Services	Utility Person	2/21/2022	170	-	70.0	-	58.8	25.0	-	6,028	65,810	6,234	68,084
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	-	832	-	-	103.0	20.0	-	6,083	70,996	6,292	73,438
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	-	-	-	-	-	-	-	-	44,746	-	46,312
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	-	-	-	-	-	-	-	-	62,932	-	65,125
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	-	-	-	-	-	-	-	-	56,752	-	58,735
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	-	-	-	-	0.5	-	-	22	60,428	22	62,537
189	240306	CORP-Field Service	Operations Specialist	4/25/2022	-	-	-	-	-	-	-	-	69,342	-	71,765
190	245306	ABNG-Field Services	Utility Person	5/16/2022	290	-	75.0	-	103.1	43.5	-	9,438	71,073	9,761	73,526
191	241401	STNW-Production	Plant Operator	6/6/2022	-	-	-	-	72.1	8.0	-	3,461	61,111	3,581	63,235
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	-	-	-	-	27.5	-	-	1,407	72,650	1,457	75,184
193	245506	BNGR-Field Services	Utility Person	6/20/2022	80	-	133.0	-	82.5	20.5	-	9,678	77,055	10,012	79,727
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	6/20/2022	-	-	-	-	22.5	-	-	812	51,029	841	52,811
195	245401	SUSQ-Production	Plant Operator	6/27/2022	40	-	-	-	244.0	132.0	-	18,372	78,985	19,008	81,730
196	241401	STNW-Production	Plant Operator	7/5/2022	-	-	-	-	154.5	16.0	-	7,316	64,966	7,570	67,224
197	246801	LEHP-Production	Utility Person	7/18/2022	740	-	63.0	-	237.0	87.8	-	16,777	75,856	17,353	78,457
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/18/2022	-	-	-	-	2.5	-	-	93	51,437	96	53,236
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	-	-	-	-	12.3	46.0	-	3,375	67,226	3,492	69,557
200	247106	MILT-Field Services	Utility Person	7/18/2022	10	630	-	-	83.5	59.0	-	7,373	70,924	7,628	73,372
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	-	4	-	-	118.5	52.0	-	8,644	72,415	8,942	74,927
202	245501	BNGR-Production	Plant Operator	8/29/2022	-	-	126.0	-	10.3	17.0	-	5,100	65,798	5,277	68,084
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	-	-	-	-	15.0	-	-	654	61,331	677	63,463
204	245401	SUSQ-Production	Plant Operator	9/19/2022	70	-	36.0	-	116.0	46.8	-	8,879	69,522	9,185	71,937
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	-	-	-	-	209.5	-	-	9,485	72,188	9,815	74,710

Pennsylvania-American Water Company - Water Operations
Compensation

					Gross Labor						
					Base Year			Hourly Wage Rate		Regular Time	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Hourly Wage Rate	Total Overtime Pay	Annualized Salaries & Wages	2024	2025	2024	2025
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	30.50	1,487	63,684	31.72	32.82	66,231	68,528
207	245306	ABNG-Field Services	Utility Person	10/10/2022	26.50	2,551	55,332	27.56	28.52	57,545	59,550
208	245306	ABNG-Field Services	Utility Person	10/17/2022	26.50	6,012	55,332	27.56	28.52	57,545	59,550
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	25.50	-	53,244	26.52	27.44	55,374	57,295
210	246406	ROYF-Field Services	Utility Person	11/14/2022	29.00	3,792	60,552	30.16	31.21	62,974	65,166
211	246501	COAT-Production	Plant Operator	11/28/2022	29.75	14,168	62,118	30.94	32.02	64,603	66,858
212	246406	ROYF-Field Services	Utility Person	1/3/2023	30.00	2,925	62,640	31.20	32.29	65,146	67,422
213	245706	POCO-Field Services	Utility Person	1/3/2023	27.00	2,518	56,376	28.08	29.06	58,631	60,677
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	26.50	-	55,332	27.56	28.52	57,545	59,550
215	247306	BRWK-Field Services	Utility Person	3/6/2023	27.50	1,925	57,420	28.60	29.60	59,717	61,805
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	29.25	3,400	61,074	30.42	31.48	63,517	65,730
217	245606	NAZA-Field Services	Utility Person	3/20/2023	29.25	782	61,074	30.42	31.48	63,517	65,730
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023	27.41	-	57,232	28.51	29.50	59,529	61,596
219	245601	NAZA-Production	Plant Operator	6/5/2023	29.00	-	60,552	30.16	31.21	62,974	65,166
220	245106	NORR-Field Services	Utility Person	6/5/2023	30.00	-	62,640	31.20	32.29	65,146	67,422
221	246406	ROYF-Field Services	Utility Person	6/5/2023	28.50	64	59,508	29.64	30.67	61,888	64,039
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	30.00	-	62,640	31.20	32.29	65,146	67,422
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017	23.20	527	24,221	24.13	24.97	25,192	26,069
224	245106	NORR-Field Services	Operations Specialist - To Be Filled	12/31/2023	-	-	-	36.76	38.04	76,755	79,428
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	-	-	-	36.76	38.04	76,755	79,428
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	-	-	-	36.76	38.04	76,755	79,428
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	-	-	-	36.76	38.04	76,755	79,428
228	241103	PITT-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	-	-	-	29.26	30.28	61,095	63,225
229	249103	WILK-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	-	-	-	29.26	30.28	61,095	63,225
230	241103	PITT-Cust Service	Compliance Representative - To Be Filled	12/31/2023	-	-	-	25.75	26.65	53,766	55,645
			Total Non-Collective Bargaining Unit Hourly			$1,627,513	$14,628,737			$15,698,116	$16,244,546

Pennsylvania-American Water Company - Water Operations
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					Gross Labor											
					Overtime Hours							2024		2025	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	1.0x	1.25x	1.5x	2.0x	2.5x	Total Overtime Pay	Annualized Salaries & Wages	Total Overtime Pay	Annualized Salaries & Wages
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	-	-	-	-	32.5	-	-	1,546	67,778	1,600	70,128
207	245306	ABNG-Field Services	Utility Person	10/10/2022	20	-	28.0	-	36.5	6.8	-	2,653	60,218	2,745	62,315
208	245306	ABNG-Field Services	Utility Person	10/17/2022	180	-	39.0	-	97.3	21.0	-	6,253	63,978	6,470	66,200
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	-	-	-	-	-	-	-	-	55,374	-	57,295
210	246406	ROYF-Field Services	Utility Person	11/14/2022	120	-	22.0	-	72.5	-	-	3,943	67,038	4,081	69,367
211	246501	COAT-Production	Plant Operator	11/28/2022	230	-	-	-	252.5	48.8	-	14,735	79,568	15,250	82,337
212	246406	ROYF-Field Services	Utility Person	1/3/2023	60	-	21.0	-	47.0	3.0	-	3,042	68,248	3,148	70,630
213	245706	POCO-Field Services	Utility Person	1/3/2023	40	-	17.0	-	21.5	22.0	-	2,618	61,290	2,710	63,427
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	-	-	-	-	-	-	-	-	57,545	-	59,550
215	247306	BRWK-Field Services	Utility Person	3/6/2023	30	-	4.0	-	40.0	3.0	-	2,002	61,749	2,072	63,907
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	-	22	-	-	61.5	12.0	-	3,536	67,075	3,660	69,412
217	245606	NAZA-Field Services	Utility Person	3/20/2023	10	-	8.0	-	8.5	3.0	-	814	64,341	842	66,582
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023	-	-	-	-	-	-	-	-	59,529	-	61,596
219	245601	NAZA-Production	Plant Operator	6/5/2023	-	-	-	-	-	-	-	-	62,974	-	65,166
220	245106	NORR-Field Services	Utility Person	6/5/2023	-	-	-	-	-	-	-	-	65,146	-	67,422
221	246406	ROYF-Field Services	Utility Person	6/5/2023	-	-	-	-	1.5	-	-	67	61,955	69	64,108
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	-	-	-	-	-	-	-	-	65,146	-	67,422
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017	-	-	-	-	15.0	-	-	547	25,739	566	26,635
224	245106	NORR-Field Services	Operations Specialist - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	76,755	-	79,428
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	76,755	-	79,428
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	76,755	-	79,428
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	76,755	-	79,428
228	241103	PITT-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	61,095	-	63,225
229	249103	WILK-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	61,095	-	63,225
230	241103	PITT-Cust Service	Compliance Representative - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	53,766	-	55,645
			Total Non-Collective Bargaining Unit Hourly		$16,643	$5,069	6,058.83	-	22,007.92	4,994.29	-	$1,691,796	$17,411,623	$1,749,815	$18,016,072
												Vacancy Rate	1.76%		1.76%
												Vacancy Adjustment	$305,889		$316,508
												Total Non-Collective Bargaining Unit Hourly	$17,105,734		$17,699,564

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							Gross Labor				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	2023 Hourly Wage Rate	2023 Total Overtime Pay	2023 Annualized Salaries & Wages	2024 Hourly Wage Rate	2025 Hourly Wage Rate	2024 Base Pay	2025 Base Pay
Non-Collective Bargaining Unit Salary											
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	$43.47	$0	$90,418	$45.21	$46.78	$9,404	$9,730
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	56.92	-	118,398	59.20	61.26	123,136	127,421
3	246701	COWW-Production	Supvr Production	3/6/2000	44.04	-	91,603	45.81	47.40	95,285	98,592
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	46.15	-	95,986	48.00	49.67	99,840	103,314
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	35.10	-	73,008	36.51	37.78	75,941	78,582
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	43.17	-	89,784	44.90	46.46	93,392	96,637
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	37.50	-	78,000	39.00	40.36	81,120	83,949
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	46.14	-	95,976	47.99	49.66	99,819	103,293
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020	41.19	-	85,680	42.84	44.33	89,107	92,206
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	42.52	-	88,434	44.22	45.76	91,978	95,181
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	36.32	-	75,555	37.78	39.09	78,582	81,307
12	249401	YORKWW-Production	Supvr Production	6/24/2013	40.11	-	83,430	41.72	43.17	86,778	89,794
			Total Non-Collective Bargaining Unit Salary			$0	$1,066,272			$1,024,381	$1,060,005
Collective Bargaining Unit											
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/4/2008	$28.24	$6,230	$58,965	$28.94	$29.74	$60,427	$62,097
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	28.24	810	58,965	28.94	29.74	60,427	62,097
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	27.31	1,342	57,023	28.01	28.81	58,485	60,155
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/17/1984	28.24	17,193	58,965	28.94	29.74	60,427	62,097
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	10/26/2009	28.24	8,913	58,965	28.94	29.74	60,427	62,097
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	5/22/2017	28.24	16,055	58,965	28.94	29.74	60,427	62,097
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	25.72	389	53,703	26.42	27.22	55,165	56,835
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	30.24	10,470	63,141	30.94	31.74	64,603	66,273
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	30.24	15,341	63,141	30.94	31.74	64,603	66,273
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	25.72	4,746	53,703	26.42	27.22	55,165	56,835
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/7/2009	28.24	6,225	58,965	28.94	29.74	60,427	62,097
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/20/2018	28.24	1,764	58,965	28.94	29.74	60,427	62,097
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/3/2020	28.24	4,190	58,965	28.94	29.74	60,427	62,097
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	4/24/2017	28.24	3,615	58,965	28.94	29.74	60,427	62,097
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	30.24	17,634	63,141	30.94	31.74	64,603	66,273
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	27.31	298	57,023	28.01	28.81	58,485	60,155
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	27.31	236	57,023	28.01	28.81	58,485	60,155
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	28.24	2,058	58,965	28.94	29.74	60,427	62,097
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	27.31	61	57,023	28.01	28.81	58,485	60,155
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	28.24	678	58,965	28.94	29.74	60,427	62,097
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	25.72	96	53,703	26.42	27.22	55,165	56,835
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	27.31	-	57,023	28.01	28.81	58,485	60,155
			Total Collective Bargaining Unit			$118,344	$1,284,266			$1,316,421	$1,353,170

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							Gross Labor					
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	2023 Hourly Wage Rate	2023 Total Overtime Pay	2023 Annualized Salaries & Wages	2024 Hourly Wage Rate	2025 Hourly Wage Rate	2024 Base Pay	2025 Base Pay
Non-Collective Bargaining Unit Hourly											
1	246701	COWW-Production	Wastewater Operator	9/20/1999	$33.37	$9,317	$69,677	$34.71	$35.92	$72,474	$75,001
2	246706	COWW-Field Services	Utility Person	5/30/1995	30.78	11,212	64,269	32.01	33.12	66,837	69,155
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	35.11	4,273	73,310	36.52	37.79	76,254	78,906
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	34.91	11,643	72,892	36.31	37.57	75,815	78,446
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	36.10	10,496	75,377	37.55	38.86	78,404	81,140
6	246706	COWW-Field Services	Crew Leader	11/10/2003	32.59	7,068	68,048	33.90	35.08	70,783	73,247
7	246901	LPWW-Production	Plant Operator	6/2/2008	33.09	6,130	69,092	34.42	35.62	71,869	74,375
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	35.65	4,059	74,437	37.08	38.37	77,423	80,117
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	35.38	18,930	73,873	36.80	38.08	76,838	79,511
10	242601	CLYWW-Production	Plant Operator	7/31/2008	32.60	4,166	68,069	33.91	35.09	70,804	73,268
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	34.69	13,371	72,433	36.08	37.34	75,335	77,966
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	30.77	8,730	64,248	32.00	33.11	66,816	69,134
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	38.38	11,371	80,137	39.92	41.31	83,353	86,255
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	31.77	9,468	66,336	33.04	34.19	68,988	71,389
15	246706	COWW-Field Services	Utility Person	3/14/2016	29.79	9,101	62,202	30.98	32.06	64,686	66,941
16	246901	LPWW-Production	Plant Operator	9/11/2017	29.98	8,842	62,598	31.18	32.27	65,104	67,380
17	246701	COWW-Production	Wastewater Operator	5/14/2018	32.13	10,847	67,087	33.42	34.58	69,781	72,203
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	28.74	17,904	60,009	29.89	30.93	62,410	64,582
19	248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	10/15/2018	33.06	9,150	69,029	34.39	35.59	71,806	74,312
20	246706	COWW-Field Services	Utility Person	3/25/2019	28.73	11,020	59,988	29.88	30.92	62,389	64,561
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	37.32	2,988	77,924	38.82	40.17	81,056	83,875
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	36.10	2,363	75,377	37.55	38.86	78,404	81,140
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	30.96	7,824	64,644	32.20	33.32	67,234	69,572
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	30.73	10,633	64,164	31.96	33.07	66,732	69,050
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	31.00	13,625	64,728	32.24	33.36	67,317	69,656
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	38.39	9,931	80,158	39.93	41.32	83,374	86,276
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	31.46	8,918	65,688	32.72	33.86	68,319	70,700
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	31.00	10,356	64,728	32.24	33.36	67,317	69,656
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	30.92	8,629	64,561	32.16	33.28	67,150	69,489
30	248706	Nw Cmbrlnd WW FS	Utility Person	9/20/2021	26.86	8,944	56,084	27.94	28.91	58,339	60,364
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021	28.47	7,454	59,445	29.61	30.64	61,826	63,976
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	30.99	7,457	64,707	32.23	33.35	67,296	69,635
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	30.00	3,047	62,640	31.20	32.29	65,146	67,422
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	28.35	2,204	59,195	29.49	30.52	61,575	63,726
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	30.99	3,934	64,707	32.23	33.35	67,296	69,635
36	248706	Nw Cmbrlnd WW FS	Utility Person	9/6/2022	28.92	6,971	60,385	30.08	31.13	62,807	64,999
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	26.86	3,103	56,084	27.94	28.91	58,339	60,364
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	29.50	3,820	61,596	30.68	31.75	64,060	66,294
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	30.00	4,103	62,640	31.20	32.29	65,146	67,422
40	246701	COWW-Production	Wastewater Operator	1/3/2023	32.00	4,572	66,816	33.28	34.44	69,489	71,911
41	248701	Nw Cmbrnlnd WW Prod	Utility Person	2/6/2023	27.25	906	56,898	28.34	29.33	59,174	61,241
42	246706	COWW-Field Services	Utility Person	3/6/2023	28.00	375	58,464	29.12	30.13	60,803	62,911
			Total Non-Collective Bargaining Unit Hourly			$329,254	$2,784,745			$2,896,369	$2,997,199

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Gross Labor Meals	Gross Labor Shift Premium	Overtime Hours 1.0	Overtime Hours 1.25	Overtime Hours 1.5	Overtime Hours 2.0	2024 Total Overtime Pay	2024 Annualized Salaries & Wages	2025 Total Overtime Pay	2025 Annualized Salaries & Wages
Non-Collective Bargaining Unit Salary														
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	$0	$0					$0	$9,404	$0	$9,730
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	-	-					-	123,136	-	127,421
3	246701	COWW-Production	Supvr Production	3/6/2000	-	-					-	95,285	-	98,592
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	-	-					-	99,840	-	103,314
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	-	-					-	75,941	-	78,582
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	-	-					-	93,392	-	96,637
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	-	-					-	81,120	-	83,949
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	-	-					-	99,819	-	103,293
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020	-	-					-	89,107	-	92,206
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	-	-					-	91,978	-	95,181
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	-	-					-	78,582	-	81,307
12	249401	YORKWW-Production	Supvr Production	6/24/2013	-	-					-	86,778	-	89,794
			Total Non-Collective Bargaining Unit Salary		$0	$0	-	-	-	-	$0	$1,024,381	$0	$1,060,005
Collective Bargaining Unit														
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/4/2008	$0	$1,277	-	-	72.25	56.00	$6,385	$68,088	$6,561	$69,935
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	-	13	-	-	19.00	-	830	61,270	853	62,963
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	-	27	-	-	27.13	4.00	1,376	59,888	1,415	61,598
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/17/1984	-	488	-	-	343.88	44.00	17,615	78,530	18,098	80,684
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	10/26/2009	-	156	-	-	158.13	38.00	9,132	69,715	9,383	71,636
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	5/22/2017	-	2,324	-	-	327.50	36.00	16,449	79,200	16,900	81,321
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	-	9	-	-	10.00	-	400	55,574	412	57,256
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	-	244	-	-	175.38	40.00	10,710	75,557	10,984	77,501
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	-	371	-	-	281.50	40.00	15,692	80,665	16,094	82,738
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	-	15	-	-	106.63	12.00	4,875	60,055	5,022	61,872
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/7/2009	-	1,213	-	-	103.88	32.00	6,379	68,018	6,555	69,865
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/20/2018	-	1,306	-	-	9.50	24.00	1,808	63,540	1,858	65,261
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/3/2020	-	1,397	-	-	65.88	24.00	4,293	66,117	4,410	67,905
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	4/24/2017	-	46	-	-	28.88	42.00	3,704	64,177	3,806	65,949
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	-	1,786	-	-	307.75	60.00	18,041	84,430	18,507	86,565
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	-	3	-	-	7.25	-	305	58,794	314	60,473
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	-	3	-	-	5.75	-	242	58,730	249	60,407
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	-	-	-	-	44.50	3.00	2,109	62,535	2,167	64,264
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	-	-	-	-	1.50	-	63	58,548	65	60,220
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	-	43	-	-	16.00	-	695	61,164	714	62,854
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	-	-	-	-	2.50	-	99	55,264	102	56,937
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	-	-	-	-	-	-	-	58,485	-	60,155
			Total Collective Bargaining Unit		$0	$10,721	-	-	2,114.75	455.00	$121,202	$1,448,344	$124,468	$1,488,359

Pennsylvania-American Water Company - Wastewater SSS General Operations
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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	Overtime Hours 1.0	Overtime Hours 1.25	Overtime Hours 1.5	Overtime Hours 2.0	2024 Total Overtime Pay	2024 Annualized Salaries & Wages	2025 Total Overtime Pay	2025 Annualized Salaries & Wages
					Gross Labor								Gross Labor	
Non-Collective Bargaining Unit Hourly														
1	246701	COWW-Production	Wastewater Operator	9/20/1999	$40	$0	108.67	-	57.83	40.58	$9,687	$82,202	$10,022	$85,063
2	246706	COWW-Field Services	Utility Person	5/30/1995	90	-	130.33	-	115.83	28.67	11,656	78,583	12,058	81,302
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	-	-	8.33	-	35.67	28.50	4,441	80,695	4,592	83,497
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	50	-	-	-	146.08	54.75	12,103	87,969	12,517	91,013
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	170	-	98.33	-	79.83	34.50	10,912	89,487	11,288	92,598
6	246706	COWW-Field Services	Crew Leader	11/10/2003	30	-	98.67	-	59.17	13.50	7,349	78,162	7,602	80,879
7	246901	LPWW-Production	Plant Operator	6/2/2008	10	-	-	-	45.17	57.50	6,373	78,252	6,593	80,977
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	-	-	5.67	-	30.67	29.67	4,218	81,641	4,361	84,478
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	-	-	-	-	140.50	155.17	19,670	96,508	20,337	99,848
10	242601	CLYWW-Production	Plant Operator	7/31/2008	20	-	-	-	38.17	33.67	4,329	75,153	4,476	77,764
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	-	-	49.00	-	102.83	87.42	13,897	89,232	14,373	92,339
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	120	-	94.67	-	80.50	32.67	9,075	76,011	9,387	78,641
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	80	-	124.00	-	83.50	21.67	11,821	95,254	12,228	98,563
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	80	-	121.00	-	82.50	25.00	9,843	78,910	10,182	81,650
15	246706	COWW-Field Services	Utility Person	3/14/2016	10	-	92.33	-	113.75	20.00	9,461	74,158	9,788	76,740
16	246901	LPWW-Production	Plant Operator	9/11/2017	50	-	-	-	115.50	58.67	9,191	74,344	9,507	76,937
17	246701	COWW-Production	Wastewater Operator	5/14/2018	40	-	141.33	-	98.83	22.67	11,279	81,100	11,667	83,910
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	90	-	-	-	205.42	150.50	18,605	81,105	19,238	83,910
19	248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	10/15/2018	-	-	120.00	-	77.92	18.67	9,515	81,321	9,844	84,156
20	246706	COWW-Field Services	Utility Person	3/25/2019	30	-	89.67	-	151.58	31.33	11,457	73,876	11,851	76,442
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	-	-	-	-	51.83	-	3,104	84,160	3,209	87,084
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	20	-	-	-	27.92	10.75	2,455	80,880	2,538	83,698
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	40	-	108.00	-	63.33	23.42	8,134	75,408	8,414	78,026
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	190	-	-	-	107.33	90.17	11,053	77,975	11,432	80,672
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	-	-	49.00	-	118.33	103.50	14,163	81,480	14,649	84,304
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	-	-	-	-	169.67	-	10,323	93,697	10,676	96,953
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	150	-	-	-	96.58	68.25	9,272	77,742	9,593	80,443
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	-	-	42.00	-	96.00	71.83	10,765	78,082	11,134	80,790
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	20	-	-	-	72.17	81.33	8,964	76,135	9,268	78,777
30	248706	Nw Cmbrlnd WW FS	Utility Person	9/20/2021	30	-	144.00	-	110.50	11.00	9,302	67,671	9,624	70,018
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021	110	-	56.00	-	72.63	46.75	7,749	69,684	8,015	72,101
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	50	-	99.00	-	65.88	19.13	7,750	75,096	8,014	77,699
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	30	-	37.00	-	33.38	6.50	3,167	68,342	3,276	70,727
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	-	-	-	-	50.50	-	2,290	63,865	2,368	66,094
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	20	-	-	-	17.75	50.00	4,091	71,407	4,233	73,888
36	248706	Nw Cmbrlnd WW FS	Utility Person	9/6/2022	80	-	88.00	-	62.00	29.50	7,249	70,137	7,501	72,581
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	30	-	64.00	-	28.50	4.00	3,227	61,596	3,339	63,733
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	-	-	53.00	-	35.00	12.00	3,973	68,033	4,112	70,406
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	10	-	52.00	-	32.50	18.00	4,267	69,422	4,416	71,847
40	246701	COWW-Production	Wastewater Operator	1/3/2023	40	-	51.00	-	29.25	24.00	4,755	74,284	4,921	76,871
41	248701	Nw Cmbrnlnd WW Prod	Utility Person	2/6/2023	-	-	16.00	-	7.50	3.00	942	60,116	975	62,216
42	246706	COWW-Field Services	Utility Person	3/6/2023	-	-	7.00	-	4.25	-	389	61,192	403	63,314
			Total Non-Collective Bargaining Unit Hourly		$1,730	$0	2,148	-	3,214	1,618	$342,267	$3,240,366	$354,021	$3,352,949

Pennsylvania-American Water Company - Wastewater CSS Operations
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						Gross Labor						
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	2023 Hourly Wage Rate	2023 Total Overtime Pay	2023 Annualized Salaries & Wages	2024 Hourly Wage Rate	2025 Hourly Wage Rate	2024 Base Pay	2025 Base Pay
Non-Collective Bargaining Unit Salary											
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000	$45.98		$95,637	$47.82	$49.48	$99,466	$102,918
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006	37.22		77,407	38.71	40.06	80,517	83,325
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016	32.69		68,000	34.00	35.18	70,720	73,174
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002	56.37		117,249	58.63	60.67	121,950	126,194
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007	37.02		77,000	38.50	39.84	80,080	82,867
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007	40.87		85,000	42.50	43.98	88,400	91,478
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008	40.45		84,140	42.07	43.53	87,506	90,542
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982	44.65		92,880	46.44	48.06	96,595	99,965
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003	49.77		103,526	51.77	53.57	107,682	111,426
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015	42.31		88,000	44.00	45.53	91,520	94,702
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019	45.89		95,455	47.73	49.39	99,278	102,731
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020	38.11		79,275	39.64	41.02	82,451	85,322
			Total Non-Collective Bargaining Unit Salary			$0	$1,063,569			$1,106,165	$1,144,645
Collective Bargaining Unit											
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	$30.35	$21,929	$63,371	$30.95	$31.56	$64,624	$65,897
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006	32.79	47,090	68,466	33.44	34.10	69,823	71,201
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	28.98	12,056	60,510	29.55	30.13	61,700	62,911
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002	30.35	15,995	63,371	30.95	31.56	64,624	65,897
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008	30.35	5,080	63,371	30.95	31.56	64,624	65,897
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016	28.98	22,806	60,510	29.55	30.13	61,700	62,911
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012	28.98	12,788	60,510	29.55	30.13	61,700	62,911
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013	28.98	9,172	60,510	29.55	30.13	61,700	62,911
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990	30.35	6,861	63,371	30.95	31.56	64,624	65,897
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005	30.35	678	63,371	30.95	31.56	64,624	65,897
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008	28.98	17,170	60,510	29.55	30.13	61,700	62,911
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007	28.98	19,527	60,510	29.55	30.13	61,700	62,911
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016	28.98	9,069	60,510	29.55	30.13	61,700	62,911
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009	30.35	31,113	63,371	30.95	31.56	64,624	65,897
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005	32.79	10,702	68,466	33.44	34.10	69,823	71,201
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005	28.98	8,032	60,510	29.55	30.13	61,700	62,911
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	30.35	9,336	63,371	30.95	31.56	64,624	65,897
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008	30.35	47,689	63,371	30.95	31.56	64,624	65,897
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008	30.35	67,928	63,371	30.95	31.56	64,624	65,897
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009	30.35	13,040	63,371	30.95	31.56	64,624	65,897
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005	32.79	28,065	68,466	33.44	34.10	69,823	71,201
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011	30.35	7,539	63,371	30.95	31.56	64,624	65,897
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987	30.35	9,551	63,371	30.95	31.56	64,624	65,897
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997	32.79	61,522	68,466	33.44	34.10	69,823	71,201
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	28.98	5,279	60,510	29.55	30.13	61,700	62,911
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	28.98	10,298	60,510	29.55	30.13	61,700	62,911
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011	28.98	8,575	60,510	29.55	30.13	61,700	62,911
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013	28.98	23,120	60,510	29.55	30.13	61,700	62,911
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012	30.35	16,541	63,371	30.95	31.56	64,624	65,897
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009	28.98	2,836	60,510	29.55	30.13	61,700	62,911
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013	32.79	11,476	68,466	33.44	34.10	69,823	71,201
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992	28.98	53,117	60,510	29.55	30.13	61,700	62,911
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016	30.35	8,894	63,371	30.95	31.56	64,624	65,897
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	28.98	26,671	60,510	29.55	30.13	61,700	62,911
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012	28.98	22	60,510	29.55	30.13	61,700	62,911
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007	28.98	7,271	60,510	29.55	30.13	61,700	62,911
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006	28.98	19,415	60,510	29.55	30.13	61,700	62,911
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997	30.35	1,607	63,371	30.95	31.56	64,624	65,897
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	28.98	15,021	60,510	29.55	30.13	61,700	62,911
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006	30.35	68,486	63,371	30.95	31.56	64,624	65,897
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017	32.79	17,666	68,466	33.44	34.10	69,823	71,201
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008	30.35	13,709	63,371	30.95	31.56	64,624	65,897
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016	30.35	16,614	63,371	30.95	31.56	64,624	65,897
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	28.98	646	60,510	29.55	30.13	61,700	62,911
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005	28.98	12,911	60,510	29.55	30.13	61,700	62,911

Pennsylvania-American Water Company - Wastewater CSS Operations
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					Gross Labor									Gross Labor	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	Overtime Hours 1.0	Overtime Hours 1.25	Overtime Hours 1.5	Overtime Hours 2.0	Overtime Hours 2.5	2024 Total Overtime Pay	2024 Annualized Salaries & Wages	2025 Total Overtime Pay	2025 Annualized Salaries & Wages
Non-Collective Bargaining Unit Salary															
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000									$99,466		$102,918
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006									80,517		83,325
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016									70,720		73,174
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002									121,950		126,194
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007									80,080		82,867
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007									88,400		91,478
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008									87,506		90,542
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982									96,595		99,965
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003									107,682		111,426
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015									91,520		94,702
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019									99,278		102,731
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020									82,451		85,322
			Total Non-Collective Bargaining Unit Salary		$0	$0						$0	$1,106,165	$0	$1,144,645
Collective Bargaining Unit															
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	$285	$647	-	-	415.67	47.00	-	$22,360	$87,915	$22,797	$89,626
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006	30	-	-	-	851.83	76.67	-	48,021	117,873	48,965	120,196
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	-	-	-	-	227.08	36.00	-	12,291	73,991	12,530	75,442
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002	-	-	-	-	168.33	135.00	-	16,309	80,932	16,627	82,525
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008	15	-	-	-	68.58	32.00	-	5,180	69,819	5,282	71,194
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016	225	-	-	-	476.75	32.33	-	23,251	85,176	23,703	86,839
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012	255	298	-	-	279.17	9.33	-	13,037	75,290	13,291	76,755
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013	15	134	-	-	187.42	16.00	-	9,351	71,201	9,532	72,593
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990	-	-	-	-	53.67	72.00	-	6,995	71,619	7,132	73,030
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005	-	-	-	-	14.75	-	-	692	65,315	705	66,602
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008	180	-	-	-	331.00	45.25	-	17,504	79,385	17,845	80,936
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007	15	2,378	-	-	229.17	161.67	-	19,907	84,001	20,294	85,599
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016	75	-	-	-	188.92	13.33	-	9,246	71,021	9,426	72,412
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009	120	3,469	-	-	396.67	210.17	-	31,722	99,935	32,342	101,828
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005	15	-	-	-	188.08	20.67	-	10,912	80,749	11,125	82,341
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005	-	-	-	-	120.50	47.50	-	8,189	69,890	8,349	71,261
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	60	39	-	-	158.67	34.00	-	9,520	74,243	9,707	75,703
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008	-	-	-	-	912.25	98.42	-	48,628	113,252	49,583	115,480
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008	45	-	-	-	1,333.00	114.00	-	69,264	133,933	70,623	136,565
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009	15	-	-	-	239.08	33.33	-	13,295	77,934	13,554	79,467
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005	120	2,501	-	-	310.50	191.50	-	28,617	101,061	29,177	102,999
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011	-	-	-	-	146.50	13.33	-	7,686	72,310	7,837	73,734
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987	-	-	-	-	179.42	21.33	-	9,738	74,361	9,928	75,825
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997	30	-	-	-	1,087.33	117.00	-	62,734	132,587	63,965	135,196
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	-	-	-	-	102.42	13.50	-	5,382	67,082	5,486	68,398
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	15	-	-	-	190.92	33.00	-	10,499	72,214	10,703	73,630
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011	30	-	-	-	179.92	12.00	-	8,743	70,473	8,913	71,855
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013	105	-	-	-	479.00	36.33	-	23,571	85,377	24,030	87,047
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012	15	-	-	-	319.83	30.00	-	16,865	81,504	17,195	83,107
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009	-	6	-	-	58.50	4.67	-	2,891	64,597	2,947	65,864
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013	60	-	-	-	219.00	9.50	-	11,702	81,585	11,932	83,192
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992	915	3,708	-	-	822.17	292.50	-	54,154	120,477	55,208	122,743
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016	-	-	-	-	174.83	14.25	-	9,069	73,692	9,246	75,143
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	270	649	-	-	483.58	94.00	-	27,192	89,811	27,722	91,552
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012	-	-	-	-	0.50	-	-	23	61,723	23	62,934
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007	45	-	-	-	136.92	21.67	-	7,413	69,158	7,557	70,514
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006	-	-	-	-	361.75	61.50	-	19,794	81,495	20,180	83,092
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997	-	-	-	-	35.00	-	-	1,638	66,262	1,670	67,567
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	180	2,814	-	-	220.92	91.33	-	15,314	80,009	15,612	81,518
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006	15	-	-	-	1,297.08	150.00	-	69,833	134,472	71,203	137,115
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017	195	-	-	-	320.83	26.33	-	18,013	88,031	18,366	89,762
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008	60	333	-	-	239.83	44.33	-	13,978	78,995	14,252	80,542
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016	30	-	-	-	342.75	14.00	-	16,939	81,593	17,270	83,197
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	-	-	-	-	4.00	8.00	-	659	62,359	672	63,583
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005	105	2,816	-	-	249.92	33.67	-	13,163	77,785	13,420	79,252

Pennsylvania-American Water Company - Wastewater CSS Operations
Compensation

					Gross Labor							
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	2023 Hourly Wage Rate	2023 Total Overtime Pay	2023 Annualized Salaries & Wages	2024 Hourly Wage Rate	2025 Hourly Wage Rate	2024 Base Pay	2025 Base Pay
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	32.79	53,265	68,466	33.44	34.10	69,823	71,201
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	34.08	5,322	71,159	35.00	35.89	73,080	74,938
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	36.35	20,135	75,899	37.32	38.25	77,924	79,866
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	36.32	889	75,836	37.28	38.21	77,841	79,782
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	35.57	282	74,270	36.53	37.46	76,275	78,216
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	36.31	1,937	75,815	37.27	38.20	77,820	79,762
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	36.35	1,925	75,899	37.32	38.25	77,924	79,866
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	33.36	5,487	69,656	34.24	35.10	71,493	73,289
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	32.28	11,187	67,401	33.14	33.98	69,196	70,950
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	26.10	4,275	54,497	26.80	27.49	55,958	57,399
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	33.36	11,622	69,656	34.24	35.10	71,493	73,289
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	31.78	14,279	66,357	32.64	33.48	68,152	69,906
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	33.36	5,525	69,656	34.24	35.10	71,493	73,289
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	33.97	6,249	70,929	34.89	35.78	72,850	74,709
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	28.78	5,720	60,093	29.54	30.27	61,680	63,204
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	38.46	87	80,304	39.50	40.50	82,476	84,564
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	31.78	14,374	66,357	32.64	33.48	68,152	69,906
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	30.31	91	63,287	31.13	31.92	64,999	66,649
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	36.35	18,228	75,899	37.32	38.25	77,924	79,866
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	36.32	2,004	75,836	37.28	38.21	77,841	79,782
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	30.31	845	63,287	31.13	31.92	64,999	66,649
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	31.78	383	66,357	32.64	33.48	68,152	69,906
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	30.35	20,078	63,371	30.95	31.56	64,624	65,897
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	30.35	21,647	63,371	30.95	31.56	64,624	65,897
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	30.35	24,230	63,371	30.95	31.56	64,624	65,897
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	24.48	5,646	51,114	25.09	25.72	52,388	53,703
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	26.48	6,094	55,290	27.14	27.82	56,668	58,088
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	30.35	9,441	63,371	30.95	31.56	64,624	65,897
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	28.98	20,598	60,510	29.55	30.13	61,700	62,911
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	36.74	1,056	76,713	37.73	38.69	78,780	80,785
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	26.10	1,522	54,497	26.80	27.49	55,958	57,399
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	36.74	1,076	76,713	37.73	38.69	78,780	80,785
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	30.35	21,383	63,371	30.95	31.56	64,624	65,897
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	21.27	4,347	44,412	21.88	22.50	45,685	46,980
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	28.48	10,197	59,466	29.04	29.61	60,636	61,826
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	28.48	15,012	59,466	29.04	29.61	60,636	61,826
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	28.48	7,451	59,466	29.04	29.61	60,636	61,826
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	36.35	14,758	75,899	37.32	38.25	77,924	79,866
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	29.35	1,922	61,283	29.93	30.52	62,494	63,726
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	29.35	1,717	61,283	29.93	30.52	62,494	63,726
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023		-	-	37.32	38.25	77,924	79,866
			Total Collective Bargaining Unit			$1,207,204	$5,472,064			$5,671,238	$5,794,284
Non-Collective Bargaining Unit Hourly											
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	$28.84	$13,318	$60,218	$30.00	$31.04	$62,640	$64,812
			Total Non-Collective Bargaining Unit Hourly			$13,318	$60,218			$62,640	$64,812

Pennsylvania-American Water Company - Wastewater CSS Operations
Compensation

					Gross Labor									Gross Labor		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Meals	Shift Premium	Overtime Hours 1.0	Overtime Hours 1.25	Overtime Hours 1.5	Overtime Hours 2.0	Overtime Hours 2.5	2024 Total Overtime Pay	2024 Annualized Salaries & Wages	2025 Total Overtime Pay	2025 Annualized Salaries & Wages
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	465	1,453	-	-	751.92	243.17	-	54,314	126,055	55,380	128,499
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	-	17	-	-	103.50	-	-	5,465	78,561	5,603	80,558
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	32	3,785	-	-	349.33	8.00	4.00	20,668	102,409	21,180	104,863
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	-	1	-	-	16.17	-	-	912	78,754	935	80,719
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	-	1	-	-	5.17	-	-	289	76,564	296	78,513
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	-	-	-	-	27.33	6.00	-	1,988	79,807	2,037	81,798
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	-	-	-	-	32.42	2.00	-	1,977	79,901	2,025	81,891
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	-	6,174	-	-	108.50	-	-	5,630	83,297	5,770	85,233
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	144	3,074	-	-	229.67	-	-	11,483	83,898	11,773	85,941
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	32	1,066	-	-	83.17	4.00	12.00	4,389	61,446	4,501	62,999
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	-	48	-	-	229.58	1.25	-	11,927	83,468	12,226	85,562
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	56	4,085	-	-	297.17	-	-	14,662	86,955	15,037	89,084
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	-	5,250	-	-	109.33	-	-	5,670	82,413	5,811	84,349
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	-	-	-	-	121.17	-	-	6,417	79,267	6,578	81,287
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	120	3,230	-	-	121.00	8.00	-	5,870	70,900	6,014	72,568
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	-	-	-	-	1.50	-	-	89	82,565	91	84,655
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	152	3,731	-	-	294.17	4.00	-	14,760	86,795	15,138	88,927
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	-	-	-	-	2.00	-	-	94	65,093	96	66,745
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	96	3,925	-	-	325.33	-	4.00	18,711	100,656	19,174	103,061
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	-	-	-	-	36.33	-	-	2,057	79,897	2,107	81,890
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	-	5	-	-	18.50	-	-	868	65,872	890	67,543
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	-	1	-	-	7.92	-	-	393	68,547	403	70,311
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	150	-	-	-	414.83	17.00	-	20,471	85,245	20,872	86,919
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	165	-	-	-	416.25	43.33	-	22,074	86,862	22,507	88,570
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	165	-	-	-	493.33	25.67	-	24,705	89,494	25,188	91,250
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	-	-	-	-	152.33	-	-	5,785	58,173	5,929	59,633
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	-	-	-	-	144.67	5.50	-	6,245	62,913	6,400	64,488
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	15	-	-	-	195.75	8.00	-	9,627	74,266	9,816	75,728
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	540	2,682	-	-	284.75	139.13	-	21,000	85,923	21,409	87,543
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	-	-	-	-	19.00	-	-	1,084	79,865	1,112	81,896
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	16	630	-	-	38.50	-	-	1,562	58,167	1,602	59,648
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	-	-	-	-	19.25	-	-	1,105	79,885	1,132	81,917
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	180	4,142	-	-	234.63	173.50	-	21,802	90,748	22,229	92,448
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	-	-	-	-	135.50	-	-	4,471	50,156	4,597	51,577
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	45	1,519	-	-	161.00	57.00	-	10,396	72,596	10,599	73,989
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	15	1,675	-	-	242.00	80.00	-	15,305	77,631	15,603	79,119
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	90	-	-	-	162.25	9.00	-	7,598	68,323	7,747	69,662
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	48	2,915	-	-	264.00	-	4.00	15,152	96,039	15,530	98,359
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	15	319	-	-	33.00	8.00	-	1,960	64,788	1,999	66,059
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	30	88	-	-	39.00	-	-	1,751	64,362	1,785	65,629
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023	-	-	-	-	-	-	-	-	77,924	-	79,866
			Total Collective Bargaining Unit		$6,111	$69,609	-	-	21,525.21	3,410.96	24.00	$1,232,012	$6,978,970	$1,257,049	$7,127,053
Non-Collective Bargaining Unit Hourly															
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	$0	$0	-	-	1.00	-	-	$46	$62,686	$48	$64,859
			Total Non-Collective Bargaining Unit Hourly		$0	$0	-	-	1.00	-		$46	$62,686	$48	$64,859

Pennsylvania-American Water Company
Annualized Performance Plan

	2024	2025
Water Operations		
Non-Collective Bargaining Unit Salary	$5,442,394	$5,631,763
Collective Bargaining Unit	1,147,995	1,177,016
Non-Collective Bargaining Unit Hourly	1,138,496	1,178,136
Total	$7,728,885	$7,986,916
Wastewater SSS General Operations		
Non-Collective Bargaining Unit Salary	$126,618	$131,024
Collective Bargaining Unit	$39,497	$40,597
Non-Collective Bargaining Unit Hourly	202,744	209,804
Total	$368,859	$381,425
Wastewater CSS Operations		
Non-Collective Bargaining Unit Salary	$142,607	$147,568
Collective Bargaining Unit	170,149	173,823
Non-Collective Bargaining Unit Hourly	4,385	4,537
Total	$317,141	$325,928

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							Performance Pay APP & LTPP	
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
Non-Collective Bargaining Unit Salary								
1	240106	CORP-Field Services	Project Manager	1/18/1999	15%	0%	$22,211	$22,985
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001	15%	0%	18,324	18,960
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994	30%	40%	175,667	181,781
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998	12%	0%	11,856	12,268
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993	20%	10%	54,507	56,403
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997	12%	0%	11,182	11,571
7	249160	WILK-Watres	Supvr Production	1/11/1988	12%	0%	9,764	10,104
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993	15%	0%	17,996	18,623
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990	15%	0%	17,737	18,355
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987	12%	0%	11,304	11,699
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983	15%	0%	16,062	16,620
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998	12%	0%	11,362	11,756
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998	12%	0%	9,008	9,323
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992	12%	0%	12,253	12,680
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986	12%	0%	10,124	10,476
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997	12%	0%	9,432	9,762
17	249150	WILK-Other	Sr Supt Production	9/13/1993	15%	0%	16,923	17,513
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998	20%	0%	29,453	30,476
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994	15%	0%	17,781	18,399
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997	15%	0%	16,589	17,166
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995	12%	0%	10,925	11,304
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995	12%	0%	10,920	11,299
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995	12%	0%	10,086	10,438
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995	20%	0%	29,881	30,921
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982	12%	0%	11,893	12,308
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998	12%	0%	13,371	13,835
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989	20%	0%	28,084	29,062
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978	12%	0%	12,188	12,612
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998	12%	0%	12,517	12,954
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989	20%	15%	71,934	74,438
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993	20%	0%	30,139	31,188
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994	15%	0%	16,876	17,463
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984	12%	0%	11,212	11,601
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987	20%	10%	57,726	59,736
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984	15%	0%	17,403	18,009
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991	20%	15%	78,297	81,019
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994	12%	0%	13,151	13,608
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992	12%	0%	12,522	12,959
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986	12%	0%	11,120	11,507
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986	20%	0%	31,167	32,252
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998	12%	0%	11,976	12,393
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998	20%	0%	29,503	30,530
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998	12%	0%	11,566	11,968
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999	12%	0%	12,520	12,957
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999	15%	0%	18,374	19,013
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999	12%	0%	11,681	12,088
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000	20%	0%	35,605	36,845
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000	12%	0%	10,738	11,112
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000	12%	0%	10,690	11,062

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000	12%	0%	10,738	11,112
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001	20%	0%	29,207	30,222
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994	15%	0%	18,077	18,708
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990	12%	0%	10,920	11,299
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001	15%	0%	17,906	18,530
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999	15%	0%	16,873	17,460
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990	15%	0%	17,690	18,305
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999	20%	0%	28,030	29,004
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992	20%	15%	73,841	76,411
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997	20%	15%	72,742	75,275
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002	20%	0%	29,665	30,697
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003	15%	0%	19,082	19,746
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003	12%	0%	10,368	10,730
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003	15%	0%	16,492	17,066
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003	12%	0%	11,249	11,641
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003	12%	0%	9,984	10,331
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003	15%	0%	18,302	18,938
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004	12%	0%	12,108	12,530
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005	20%	0%	25,596	26,487
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005	12%	0%	13,171	13,631
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005	15%	0%	16,714	17,294
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005	15%	0%	16,879	17,466
72	241151	PITT-Production Haye	Supvr Production	3/16/2005	12%	0%	10,790	11,165
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005	12%	0%	11,863	12,275
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005	12%	0%	11,634	12,038
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005	20%	0%	25,605	26,495
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005	12%	0%	12,033	12,453
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005	12%	0%	12,033	12,453
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005	20%	0%	27,260	28,209
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005	15%	0%	18,202	18,835
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006	12%	0%	9,774	10,114
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006	20%	0%	31,067	32,148
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006	15%	0%	17,310	17,912
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006	12%	0%	10,645	11,015
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006	12%	0%	10,556	10,922
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006	12%	0%	9,734	10,074
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006	12%	0%	9,984	10,331
87	240106	CORP-Field Services	Mgr Opns	1/22/2007	15%	0%	15,778	16,327
88	249150	WILK-Other	Production Asset Administrator	1/22/2007	12%	0%	10,982	11,364
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007	15%	0%	16,851	17,438
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007	12%	0%	9,525	9,857
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009	15%	0%	18,302	18,938
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007	15%	0%	17,881	18,502
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007	12%	0%	11,968	12,385
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007	15%	0%	17,694	18,308
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007	15%	0%	19,035	19,697
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007	15%	0%	15,709	16,255
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008	20%	0%	29,207	30,222
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008	12%	0%	10,236	10,593
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008	15%	0%	19,098	19,762

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008	20%	0%	26,765	27,697
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008	12%	0%	10,903	11,282
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009	12%	0%	10,593	10,962
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009	12%	0%	11,130	11,517
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009	12%	0%	11,926	12,340
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009	20%	0%	30,788	31,861
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009	30%	40%	160,859	166,450
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009	12%	0%	12,320	12,750
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009	12%	0%	10,388	10,750
109	246501	COAT-Production	Supvr Production	4/12/2010	12%	0%	10,219	10,573
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010	12%	0%	9,984	10,331
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010	15%	0%	14,964	15,485
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010	15%	0%	18,171	18,804
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010	12%	0%	12,213	12,637
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011	15%	0%	14,508	15,013
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011	12%	0%	10,358	10,718
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011	12%	0%	9,011	9,325
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011	12%	0%	10,186	10,541
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011	15%	0%	18,698	19,350
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012	12%	0%	10,668	11,040
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012	15%	0%	18,392	19,032
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012	15%	0%	18,998	19,659
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012	12%	0%	9,026	9,340
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013	20%	0%	25,492	26,379
124	240306	CORP-Field Service	Project Manager	3/4/2013	15%	0%	17,547	18,158
125	243151	NEWC-New Castle	Supvr Production	4/29/2013	12%	0%	10,363	10,723
126	247150	MILT-Prod Other	Supvr Production	5/28/2013	12%	0%	9,932	10,276
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013	12%	0%	10,256	10,613
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013	12%	0%	9,984	10,331
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013	20%	0%	34,145	35,335
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013	15%	0%	16,068	16,626
131	240114	CORP-Engineering	GIS Manager	3/31/2014	15%	0%	14,505	15,010
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014	15%	0%	18,099	18,729
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014	12%	0%	10,850	11,227
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014	12%	0%	10,109	10,461
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014	12%	0%	9,610	9,944
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014	12%	0%	11,137	11,524
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014	12%	0%	8,629	8,928
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014	12%	0%	10,820	11,197
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014	20%	0%	26,462	27,381
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015	12%	0%	10,596	10,965
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015	12%	0%	9,595	9,929
142	240114	CORP-Engineering	GIS Manager	2/2/2015	15%	0%	14,505	15,010
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015	12%	0%	9,395	9,722
144	240114	CORP-Engineering	Engineer	6/22/2015	7%	0%	5,935	6,141
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015	12%	0%	9,822	10,164
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015	15%	0%	15,756	16,305
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015	12%	0%	9,734	10,074
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015	12%	0%	9,769	10,109
149	243301	BUTL-Production	Supvr Production	12/7/2015	12%	0%	10,328	10,688

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015	12%	0%	9,864	10,209
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015	20%	15%	78,930	81,674
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016	12%	0%	10,006	10,356
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016	20%	0%	29,278	30,297
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016	12%	0%	8,866	9,175
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016	12%	0%	10,823	11,200
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016	15%	0%	16,077	16,636
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016	12%	0%	9,692	10,029
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016	12%	0%	9,402	9,729
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016	12%	0%	11,422	11,819
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016	12%	0%	12,293	12,720
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017	20%	10%	51,486	53,277
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990	12%	0%	10,456	10,820
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016	12%	0%	9,799	10,141
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017	15%	0%	16,196	16,761
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017	20%	0%	26,790	27,722
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017	12%	0%	12,480	12,914
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017	12%	0%	12,273	12,700
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017	15%	0%	16,851	17,438
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017	12%	0%	9,994	10,341
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017	12%	0%	8,566	8,863
171	240114	CORP-Engineering	Planning Engineer	8/14/2017	12%	0%	10,591	10,960
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017	20%	0%	26,420	27,340
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017	12%	0%	11,971	12,388
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011	15%	0%	13,544	14,015
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018	15%	0%	15,325	15,859
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018	12%	0%	13,067	13,521
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018	12%	0%	13,052	13,506
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018	12%	0%	10,226	10,583
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018	12%	0%	12,118	12,540
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018	15%	0%	15,413	15,949
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018	12%	0%	10,638	11,007
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018	12%	0%	12,390	12,822
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018	12%	0%	9,827	10,169
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018	12%	0%	9,642	9,977
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018	20%	0%	26,420	27,340
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018	12%	0%	9,859	10,201
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018	12%	0%	11,422	11,819
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018	12%	0%	10,296	10,655
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018	12%	0%	8,716	9,021
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018	12%	0%	9,929	10,274
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018	12%	0%	11,744	12,153
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018	12%	0%	10,608	10,977
193	240114	CORP-Engineering	Staff Engineer	8/27/2018	12%	0%	9,475	9,804
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018	12%	0%	9,682	10,019
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018	12%	0%	9,670	10,006
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018	50%	75%	409,552	423,800
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018	12%	0%	11,422	11,819
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018	12%	0%	9,610	9,944
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018	12%	0%	9,737	10,076

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018	12%	0%	10,313	10,673
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018	12%	0%	8,773	9,078
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019	12%	0%	11,596	12,001
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019	12%	0%	9,832	10,174
204	240114	CORP-Engineering	Planning Engineer	2/4/2019	12%	0%	12,390	12,822
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019	12%	0%	10,004	10,351
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019	12%	0%	10,753	11,127
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019	12%	0%	9,977	10,323
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019	12%	0%	9,932	10,276
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019	12%	0%	9,984	10,331
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019	12%	0%	11,020	11,404
211	240114	CORP-Engineering	Staff Engineer	5/20/2019	12%	0%	9,717	10,054
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019	12%	0%	10,526	10,893
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019	12%	0%	11,816	12,228
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019	12%	0%	9,734	10,074
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019	12%	0%	8,436	8,731
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019	12%	0%	10,733	11,107
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019	15%	0%	14,820	15,335
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019	12%	0%	12,363	12,792
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019	12%	0%	10,635	11,005
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019	12%	0%	10,546	10,913
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019	12%	0%	10,363	10,723
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019	12%	0%	9,345	9,670
223	240120	CORP-Bus Dev	Vice President of Business Development,	11/4/2019	30%	30%	150,010	155,226
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019	12%	0%	8,998	9,310
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020	12%	0%	9,405	9,732
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020	20%	0%	28,924	29,931
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020	20%	10%	48,678	50,370
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020	15%	0%	17,718	18,336
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020	12%	0%	8,504	8,801
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020	12%	0%	10,888	11,267
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020	12%	0%	8,456	8,751
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020	12%	0%	12,330	12,760
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020	20%	10%	54,637	56,541
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020	12%	0%	8,481	8,776
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020	15%	0%	17,163	17,759
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020	15%	0%	16,670	17,250
237	249151	WILK-Brownell	Supvr Production	8/24/2020	12%	0%	9,360	9,687
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020	15%	0%	17,166	17,762
239	240114	CORP-Engineering	Engineer	10/12/2020	7%	0%	5,045	5,221
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997	12%	0%	9,085	9,402
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020	12%	0%	9,887	10,231
242	240114	CORP-Engineering	Engineer	1/4/2021	7%	0%	5,045	5,221
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020	12%	0%	9,647	9,984
244	241151	PITT-Production Haye	Supvr Production	3/29/2021	12%	0%	10,259	10,615
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021	20%	10%	51,486	53,277
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021	15%	0%	17,718	18,336
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021	12%	0%	9,283	9,605
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021	12%	0%	11,374	11,771
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021	12%	0%	9,799	10,141

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Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021	12%	0%	10,800	11,177
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021	12%	0%	9,959	10,306
252	240114	CORP-Engineering	Engineer	9/13/2021	7%	0%	4,830	4,997
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021	20%	10%	54,407	56,298
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021	12%	0%	9,587	9,922
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022	12%	0%	9,984	10,331
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022	12%	0%	7,987	8,264
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022	12%	0%	9,984	10,331
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022	12%	0%	9,817	10,159
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	12%	0%	10,174	10,528
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	12%	0%	10,541	10,908
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022	12%	0%	8,736	9,041
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022	15%	0%	17,796	18,414
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022	12%	0%	11,644	12,048
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022	15%	0%	16,988	17,578
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022	12%	0%	10,111	10,463
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022	12%	0%	12,200	12,625
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007	12%	0%	8,599	8,898
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022	12%	0%	9,173	9,492
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995	12%	0%	8,911	9,220
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022	12%	0%	9,522	9,854
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022	12%	0%	8,357	8,649
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022	12%	0%	9,927	10,271
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022	12%	0%	10,566	10,932
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022	12%	0%	10,768	11,142
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022	12%	0%	10,920	11,299
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022	12%	0%	10,608	10,977
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022	12%	0%	10,234	10,591
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022	12%	0%	9,485	9,814
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023	12%	0%	10,483	10,848
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023	12%	0%	9,360	9,687
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023	12%	0%	9,360	9,687
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023	20%	0%	24,964	25,834
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023	12%	0%	11,856	12,268
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023	12%	0%	12,480	12,914
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023	12%	0%	10,920	11,299
286	240114	CORP-Engineering	Engineer	6/26/2023	7%	0%	4,514	4,671
287	240114	CORP-Engineering	Project Manager	6/26/2023	15%	0%	17,163	17,759
288	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	15%	0%	17,397	18,002
289	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	15%	0%	17,397	18,002
290	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	15%	0%	17,397	18,002
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023	12%	0%	11,918	12,333
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023	12%	0%	11,918	12,333
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Filled	12/31/2023	15%	0%	17,397	18,002
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023	12%	0%	11,918	12,333
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Filled	12/31/2023	12%	0%	11,918	12,333
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Filled	12/31/2023	12%	0%	11,918	12,333
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Filled	12/31/2023	20%	10%	52,266	54,082
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Filled	12/31/2023	20%	0%	28,604	29,598

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Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023	12%	0%	11,918	12,333
			Total Non-Collective Bargaining Unit Salary				$5,539,716	$5,732,472
						Vacancy Rate	1.76%	1.76%
						Vacancy Adjustment	$97,322	$100,709
						Total Non-Collective Bargaining Unit Hourly	$5,442,394	$5,631,763
Collective Bargaining Unit								
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	3%	0%	$2,278	$2,335
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	3%	0%	2,305	2,363
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	3%	0%	2,264	2,320
4	241103	PITT-Cust Service	Field Service Representative U537P	3/31/1994	3%	0%	2,269	2,326
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	3%	0%	2,335	2,393
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987	3%	0%	2,289	2,346
7	241103	PITT-Cust Service	Field Service Representative U537P	2/2/1988	3%	0%	2,269	2,326
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	3%	0%	2,449	2,510
9	241103	PITT-Cust Service	Field Service Representative U537P	7/5/1983	3%	0%	2,269	2,326
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	2/1/1985	3%	0%	2,332	2,390
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	3%	0%	2,335	2,393
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991	3%	0%	2,295	2,352
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	4/22/1991	3%	0%	2,348	2,406
14	241103	PITT-Cust Service	Field Service Representative U537P	5/6/1985	3%	0%	2,269	2,326
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	3%	0%	2,278	2,323
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	3%	0%	2,274	2,319
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	3%	0%	2,362	2,419
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	3%	0%	2,305	2,363
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	3%	0%	2,289	2,335
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	3%	0%	2,256	2,301
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	3%	0%	2,295	2,340
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	3%	0%	2,347	2,394
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	3%	0%	2,263	2,308
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	3%	0%	2,278	2,323
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	3%	0%	2,293	2,350
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	3%	0%	2,302	2,360
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	3%	0%	2,290	2,335
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	3%	0%	2,263	2,308
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	3%	0%	2,274	2,319
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	3%	0%	2,295	2,340
31	243301	BUTL-Production	Operator U537O	5/4/1998	3%	0%	2,347	2,394
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	3%	0%	2,288	2,333
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	3%	0%	2,272	2,318
34	243301	BUTL-Production	Operator U537O	11/2/1984	3%	0%	2,347	2,394
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	3%	0%	2,263	2,308
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	3%	0%	2,256	2,301
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	3%	0%	2,252	2,297
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	3%	0%	2,295	2,340
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	3%	0%	2,278	2,323
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	3%	0%	2,274	2,319

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41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	3%	0%	2,263	2,308
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	3%	0%	2,347	2,394
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	3%	0%	2,274	2,319
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	3%	0%	2,290	2,335
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	3%	0%	2,271	2,316
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	3%	0%	2,295	2,341
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	3%	0%	2,295	2,340
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	3%	0%	2,278	2,323
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	3%	0%	2,090	2,152
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	3%	0%	2,076	2,139
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	3%	0%	2,050	2,111
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	3%	0%	2,018	2,079
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	3%	0%	2,063	2,125
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988	3%	0%	2,090	2,152
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987	3%	0%	2,078	2,140
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	3%	0%	1,994	2,054
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	3%	0%	2,090	2,152
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	3%	0%	2,050	2,111
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	3%	0%	2,063	2,125
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	3%	0%	2,075	2,137
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	3%	0%	2,050	2,111
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	3%	0%	2,076	2,139
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	3%	0%	2,076	2,139
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	3%	0%	2,076	2,139
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	3%	0%	1,994	2,054
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	3%	0%	1,994	2,054
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	3%	0%	2,090	2,152
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	3%	0%	2,076	2,139
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	3%	0%	2,076	2,139
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	3%	0%	1,994	2,054
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	3%	0%	2,076	2,139
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	3%	0%	2,050	2,111
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	3%	0%	1,979	2,038
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	3%	0%	2,078	2,140
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	3%	0%	2,076	2,139
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	3%	0%	2,063	2,125
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	3%	0%	2,076	2,139
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	3%	0%	2,090	2,152
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	3%	0%	2,076	2,139
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986	3%	0%	2,050	2,111
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	3%	0%	2,050	2,111
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	3%	0%	2,034	2,095
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	3%	0%	2,076	2,139
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	3%	0%	2,076	2,139
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	3%	0%	2,076	2,139
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	3%	0%	2,018	2,079
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	3%	0%	2,063	2,125
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	3%	0%	2,076	2,139
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	3%	0%	2,063	2,125
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	3%	0%	2,018	2,079

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	3%	0%	1,968	2,027
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	3%	0%	2,076	2,139
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	3%	0%	2,050	2,111
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	3%	0%	2,063	2,125
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	3%	0%	1,968	2,027
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	3%	0%	2,050	2,111
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	3%	0%	2,078	2,140
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	3%	0%	2,018	2,079
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	3%	0%	2,050	2,111
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	3%	0%	2,034	2,095
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	3%	0%	2,076	2,139
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	3%	0%	2,130	2,184
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	3%	0%	2,283	2,341
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	3%	0%	2,081	2,133
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	3%	0%	2,158	2,212
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	3%	0%	2,074	2,127
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996	3%	0%	2,135	2,189
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	3%	0%	2,135	2,189
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	3%	0%	2,135	2,189
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	3%	0%	2,239	2,295
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	3%	0%	2,081	2,133
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	3%	0%	2,283	2,341
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	3%	0%	2,289	2,346
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	3%	0%	2,289	2,346
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	3%	0%	2,278	2,323
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	3%	0%	2,449	2,510
117	241103	PITT-Cust Service	Field Service Representative U537P	11/18/1998	3%	0%	2,269	2,326
118	244101	INDI-Production	Operator U537O	8/9/1999	3%	0%	2,347	2,394
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	3%	0%	2,279	2,324
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	3%	0%	2,271	2,316
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	3%	0%	2,115	2,168
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	3%	0%	2,271	2,316
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	3%	0%	2,289	2,346
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	3%	0%	2,090	2,152
125	241103	PITT-Cust Service	Field Service Representative U537P	12/28/2001	3%	0%	2,269	2,326
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	3%	0%	2,263	2,308
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	3%	0%	2,347	2,394
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	3%	0%	2,274	2,319
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	3%	0%	2,271	2,316
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	3%	0%	2,135	2,189
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	3%	0%	2,289	2,346
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	3%	0%	2,335	2,393
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	3%	0%	1,994	2,054
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	3%	0%	2,347	2,394
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	3%	0%	2,289	2,335
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002	3%	0%	2,285	2,341
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	3%	0%	2,285	2,341
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	3%	0%	2,288	2,333
139	241103	PITT-Cust Service	Field Service Representative U537P	4/14/2003	3%	0%	2,269	2,326
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	3%	0%	2,076	2,139

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	3%	0%	2,335	2,393
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	3%	0%	1,994	2,054
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	3%	0%	2,335	2,393
144	241103	PITT-Cust Service	Field Service Representative U537P	8/29/2003	3%	0%	2,269	2,326
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	3%	0%	2,256	2,301
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	3%	0%	2,135	2,189
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	3%	0%	2,090	2,152
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	3%	0%	2,331	2,378
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	3%	0%	2,316	2,373
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	3%	0%	1,971	2,021
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005	3%	0%	2,300	2,358
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	3%	0%	2,268	2,314
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	3%	0%	2,135	2,189
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	3%	0%	2,279	2,324
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	3%	0%	2,268	2,313
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	3%	0%	2,285	2,341
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	3%	0%	2,135	2,189
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	3%	0%	2,256	2,301
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	3%	0%	2,278	2,323
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	3%	0%	1,979	2,038
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005	3%	0%	2,075	2,137
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	3%	0%	2,081	2,133
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	3%	0%	2,272	2,318
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	3%	0%	2,266	2,323
165	241103	PITT-Cust Service	Field Service Representative U537P	12/19/2005	3%	0%	2,269	2,326
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	3%	0%	2,263	2,308
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	3%	0%	2,335	2,393
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	3%	0%	2,335	2,393
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	3%	0%	2,296	2,353
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	3%	0%	2,274	2,319
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	3%	0%	2,338	2,397
172	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	3%	0%	2,269	2,326
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	3%	0%	1,979	2,038
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	3%	0%	1,979	2,038
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	3%	0%	2,335	2,393
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	3%	0%	2,278	2,335
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	3%	0%	2,295	2,341
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	3%	0%	2,295	2,341
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	3%	0%	2,256	2,301
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	3%	0%	1,994	2,054
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006	3%	0%	2,075	2,137
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	3%	0%	2,335	2,393
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	3%	0%	2,090	2,152
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	3%	0%	2,347	2,394
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	3%	0%	2,300	2,358
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	3%	0%	2,090	2,152
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	3%	0%	2,256	2,301
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	3%	0%	2,254	2,311
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	3%	0%	2,081	2,133
190	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	3%	0%	2,269	2,326

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	3%	0%	2,076	2,139
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	3%	0%	2,256	2,301
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006	3%	0%	2,278	2,335
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	3%	0%	2,271	2,316
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	3%	0%	2,271	2,316
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	3%	0%	2,076	2,139
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	3%	0%	2,285	2,341
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	3%	0%	2,335	2,393
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	3%	0%	2,288	2,333
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	3%	0%	2,256	2,301
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	3%	0%	1,979	2,038
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	3%	0%	1,979	2,038
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007	3%	0%	1,979	2,038
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	3%	0%	2,090	2,152
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	3%	0%	2,075	2,137
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	3%	0%	2,075	2,137
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	3%	0%	2,121	2,174
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	3%	0%	1,925	1,973
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	3%	0%	2,135	2,189
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	3%	0%	2,090	2,152
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	3%	0%	1,979	2,038
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	3%	0%	2,266	2,323
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	3%	0%	2,335	2,393
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	3%	0%	2,081	2,133
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	3%	0%	2,081	2,133
216	244101	INDI-Production	Operator U537O	8/13/2007	3%	0%	2,347	2,394
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	3%	0%	1,979	2,038
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	3%	0%	2,018	2,079
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	3%	0%	2,076	2,139
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	3%	0%	2,272	2,318
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	3%	0%	2,301	2,359
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007	3%	0%	2,263	2,308
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	3%	0%	2,146	2,201
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	3%	0%	2,285	2,341
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	3%	0%	1,979	2,038
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	3%	0%	2,271	2,316
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007	3%	0%	2,090	2,152
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	3%	0%	2,296	2,353
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	3%	0%	2,075	2,137
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008	3%	0%	2,256	2,301
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	3%	0%	2,179	2,233
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008	3%	0%	2,256	2,301
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	3%	0%	2,090	2,152
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	3%	0%	2,076	2,139
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	3%	0%	2,266	2,323
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	3%	0%	2,115	2,168
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	3%	0%	2,266	2,323
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008	3%	0%	2,192	2,236
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	3%	0%	2,263	2,308
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	3%	0%	2,278	2,335

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241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	3%	0%	2,300	2,358
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	3%	0%	2,289	2,346
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	3%	0%	2,316	2,374
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	3%	0%	2,252	2,297
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	3%	0%	2,256	2,301
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	3%	0%	2,272	2,318
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009	3%	0%	2,252	2,297
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	3%	0%	2,272	2,318
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009	3%	0%	2,076	2,139
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	3%	0%	1,971	2,021
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	3%	0%	2,316	2,374
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	3%	0%	2,256	2,301
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	3%	0%	2,256	2,301
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	3%	0%	2,279	2,324
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	3%	0%	2,256	2,301
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009	3%	0%	2,233	2,278
257	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	3%	0%	2,269	2,326
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	3%	0%	2,288	2,333
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	3%	0%	2,271	2,316
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	3%	0%	2,271	2,316
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	3%	0%	2,256	2,301
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	3%	0%	2,256	2,301
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	3%	0%	2,256	2,301
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	3%	0%	2,271	2,316
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	3%	0%	2,256	2,301
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	3%	0%	2,338	2,397
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	3%	0%	2,076	2,139
268	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	3%	0%	2,269	2,326
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	3%	0%	2,090	2,152
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	3%	0%	2,283	2,341
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	3%	0%	2,263	2,308
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	3%	0%	2,320	2,378
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	3%	0%	2,256	2,301
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	3%	0%	2,263	2,308
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	3%	0%	2,262	2,319
276	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	3%	0%	2,269	2,326
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010	3%	0%	2,278	2,335
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	3%	0%	2,271	2,316
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	3%	0%	2,075	2,137
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	3%	0%	2,263	2,308
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	3%	0%	2,268	2,314
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	3%	0%	2,263	2,308
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	3%	0%	2,271	2,316
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	3%	0%	2,256	2,301
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	3%	0%	2,316	2,373
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	3%	0%	2,135	2,189
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	3%	0%	2,256	2,301
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	3%	0%	2,268	2,313
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	3%	0%	2,256	2,301
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	3%	0%	2,256	2,301

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	3%	0%	2,316	2,373
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	3%	0%	2,256	2,301
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	3%	0%	2,233	2,278
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	3%	0%	2,256	2,301
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012	3%	0%	2,075	2,137
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	3%	0%	2,355	2,416
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	3%	0%	1,971	2,021
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	3%	0%	2,263	2,308
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	3%	0%	2,192	2,236
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	3%	0%	2,305	2,363
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013	3%	0%	2,362	2,419
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	3%	0%	2,256	2,301
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	3%	0%	2,256	2,301
304	244101	INDI-Production	Operator U537O	5/13/2013	3%	0%	2,347	2,394
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	3%	0%	2,256	2,301
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	3%	0%	2,316	2,374
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	3%	0%	2,271	2,316
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	3%	0%	2,278	2,323
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	3%	0%	2,266	2,323
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	3%	0%	2,256	2,301
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	3%	0%	1,979	2,038
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	3%	0%	2,272	2,318
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	3%	0%	2,090	2,152
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	3%	0%	2,066	2,129
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	3%	0%	2,338	2,397
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	3%	0%	1,994	2,054
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	3%	0%	2,075	2,137
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	3%	0%	2,075	2,137
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	3%	0%	1,979	2,038
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014	3%	0%	2,192	2,236
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	3%	0%	2,283	2,341
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	3%	0%	2,347	2,394
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	3%	0%	2,256	2,301
324	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014	3%	0%	2,269	2,326
325	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	3%	0%	2,269	2,326
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	3%	0%	2,256	2,301
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	3%	0%	2,266	2,323
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	3%	0%	2,266	2,323
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	3%	0%	2,266	2,323
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	3%	0%	2,347	2,394
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	3%	0%	2,075	2,137
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	3%	0%	2,076	2,139
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	3%	0%	2,355	2,416
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	3%	0%	2,276	2,334
335	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015	3%	0%	2,206	2,263
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	3%	0%	2,231	2,288
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	3%	0%	2,272	2,318
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016	3%	0%	2,252	2,297
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	3%	0%	2,075	2,137
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	3%	0%	2,272	2,318

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341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	3%	0%	2,090	2,152
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	3%	0%	2,263	2,308
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	3%	0%	2,263	2,308
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	3%	0%	2,253	2,311
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	3%	0%	2,204	2,260
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	3%	0%	1,994	2,054
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	3%	0%	2,253	2,311
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016	3%	0%	2,331	2,378
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	3%	0%	2,115	2,168
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	3%	0%	2,121	2,174
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012	3%	0%	1,939	1,977
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011	3%	0%	1,939	1,977
353	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	3%	0%	2,206	2,263
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	3%	0%	2,331	2,378
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	3%	0%	2,076	2,139
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	3%	0%	2,256	2,301
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	3%	0%	2,076	2,139
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	3%	0%	2,090	2,152
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	3%	0%	2,075	2,137
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	3%	0%	2,146	2,201
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	3%	0%	1,939	1,977
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	3%	0%	2,197	2,242
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	3%	0%	2,022	2,077
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	3%	0%	2,324	2,385
365	244601	KANE-Production	Operator U537O	11/6/2017	3%	0%	2,284	2,331
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	3%	0%	2,076	2,139
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	3%	0%	2,076	2,139
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	3%	0%	2,082	2,137
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	3%	0%	2,180	2,238
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	3%	0%	2,175	2,232
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	3%	0%	2,193	2,238
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	3%	0%	2,274	2,331
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	3%	0%	2,213	2,271
374	241106	PITT-Field Services	Utility Person U537P	2/27/2018	3%	0%	2,141	2,197
375	245206	YARD-Field Services	Utility A F473Y	3/26/2018	3%	0%	1,999	2,050
376	249160	WILK-Watres	Plant Operator U648S	4/30/2018	3%	0%	2,076	2,139
377	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	3%	0%	2,193	2,238
378	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	3%	0%	1,994	2,054
379	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	3%	0%	2,034	2,095
380	246106	MECH-Field Services	Utility A U648R	5/14/2018	3%	0%	1,963	2,016
381	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	3%	0%	2,075	2,137
382	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	3%	0%	2,075	2,137
383	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	3%	0%	2,180	2,238
384	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	3%	0%	2,090	2,152
385	241106	PITT-Field Services	Utility Person U537P	7/10/2018	3%	0%	2,141	2,197
386	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	3%	0%	2,130	2,175
387	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	3%	0%	2,293	2,353
388	241106	PITT-Field Services	Utility Person U537P	7/24/2018	3%	0%	2,141	2,197
389	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	3%	0%	2,137	2,182
390	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	3%	0%	2,130	2,175

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391	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018	3%	0%	1,916	1,969
392	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	3%	0%	2,145	2,202
393	241103	PITT-Cust Service	Field Service Representative U537P	9/4/2018	3%	0%	2,144	2,201
394	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	3%	0%	2,130	2,175
395	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	3%	0%	2,206	2,253
396	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	3%	0%	2,130	2,175
397	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	3%	0%	2,180	2,238
398	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	3%	0%	2,075	2,137
399	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	3%	0%	2,075	2,137
400	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	3%	0%	2,018	2,079
401	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	3%	0%	2,076	2,139
402	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	3%	0%	2,075	2,137
403	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	3%	0%	1,979	2,038
404	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	3%	0%	2,075	2,137
405	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	3%	0%	2,075	2,137
406	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	3%	0%	2,075	2,137
407	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	3%	0%	2,068	2,113
408	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	3%	0%	2,068	2,113
409	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	3%	0%	2,076	2,139
410	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	3%	0%	2,068	2,113
411	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	3%	0%	2,076	2,139
412	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	3%	0%	2,075	2,120
413	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	3%	0%	2,075	2,137
414	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	3%	0%	2,068	2,113
415	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	3%	0%	2,107	2,152
416	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	3%	0%	2,150	2,209
417	244601	KANE-Production	Operator U537O	9/9/2019	3%	0%	2,159	2,206
418	243151	NEWC-New Castle	Operator U537O	9/23/2019	3%	0%	2,159	2,206
419	243301	BUTL-Production	Operator U537O	9/23/2019	3%	0%	2,159	2,206
420	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	3%	0%	2,150	2,209
421	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	3%	0%	2,091	2,136
422	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	3%	0%	2,076	2,139
423	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	3%	0%	1,959	2,014
424	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	3%	0%	2,075	2,137
425	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	3%	0%	2,068	2,113
426	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	3%	0%	2,091	2,136
427	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	3%	0%	2,076	2,139
428	244301	CLAR-Production	Operator U537O	4/27/2020	3%	0%	2,159	2,206
429	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	3%	0%	2,018	2,079
430	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	3%	0%	2,222	2,279
431	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	3%	0%	2,128	2,186
432	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	3%	0%	2,066	2,111
433	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	3%	0%	2,075	2,120
434	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	3%	0%	2,043	2,105
435	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	3%	0%	1,939	1,977
436	245206	YARD-Field Services	Utility B F473Y	7/13/2020	3%	0%	1,650	1,692
437	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	3%	0%	2,088	2,146
438	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	3%	0%	1,919	1,982
439	249160	WILK-Watres	Plant Operator U648S	12/15/2020	3%	0%	2,045	2,107
440	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	3%	0%	2,059	2,121

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441	249160	WILK-Watres	Plant Operator U648S	12/21/2020	3%	0%	2,045	2,107
442	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	3%	0%	1,959	2,014
443	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	3%	0%	1,959	2,014
444	245206	YARD-Field Services	Utility B F473Y	3/15/2021	3%	0%	1,650	1,692
445	244101	INDI-Production	Operator U537O	3/22/2021	3%	0%	2,097	2,144
446	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	3%	0%	2,028	2,073
447	243152	NEWC-Ellwood	Operator U537O	4/26/2021	3%	0%	2,097	2,144
448	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	3%	0%	2,012	2,074
449	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	3%	0%	1,932	1,991
450	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	3%	0%	2,005	2,050
451	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	3%	0%	2,005	2,050
452	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	3%	0%	2,005	2,050
453	241106	PITT-Field Services	Utility Person U537P	5/24/2021	3%	0%	2,016	2,072
454	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	3%	0%	2,005	2,050
455	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	3%	0%	1,916	1,976
456	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	3%	0%	2,081	2,128
457	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	3%	0%	2,012	2,074
458	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	3%	0%	2,081	2,128
459	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	3%	0%	1,911	1,964
460	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	3%	0%	1,982	2,045
461	244506	WARR-Field Services	Utility Person U537O	8/16/2021	3%	0%	1,942	1,988
462	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	3%	0%	1,942	1,988
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	3%	0%	2,142	2,200
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	3%	0%	1,942	1,988
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	3%	0%	1,981	2,043
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	3%	0%	1,996	2,058
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	3%	0%	1,964	2,021
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	3%	0%	1,911	1,964
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	3%	0%	1,982	2,045
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	3%	0%	1,768	1,817
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	3%	0%	1,877	1,929
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	3%	0%	2,041	2,099
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	3%	0%	2,120	2,181
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	3%	0%	1,885	1,944
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	3%	0%	1,915	1,969
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	3%	0%	1,988	2,044
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	3%	0%	1,942	1,988
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	3%	0%	1,949	1,994
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	3%	0%	1,951	2,013
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	3%	0%	1,903	1,956
481	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	3%	0%	1,971	2,028
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	3%	0%	1,969	2,025
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	3%	0%	1,854	1,913
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	3%	0%	1,951	2,013
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	3%	0%	1,969	2,025
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	3%	0%	1,969	2,025
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	3%	0%	1,949	2,011
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	3%	0%	1,928	1,983
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	3%	0%	1,951	2,013
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022	3%	0%	2,008	2,065

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							Performance Pay APP & LTPP	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	3%	0%	1,969	2,025
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	3%	0%	1,969	2,025
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	3%	0%	1,969	2,025
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	3%	0%	2,120	2,181
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	3%	0%	1,888	1,951
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	3%	0%	1,808	1,860
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	3%	0%	1,903	1,956
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	3%	0%	1,980	2,037
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	3%	0%	2,018	2,077
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	3%	0%	1,919	1,982
501	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	3%	0%	1,971	2,028
502	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	3%	0%	1,971	2,028
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	3%	0%	1,918	1,980
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	3%	0%	1,980	2,037
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	3%	0%	1,721	1,770
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	3%	0%	1,833	1,879
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	3%	0%	1,918	1,980
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	3%	0%	1,880	1,925
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	3%	0%	1,918	1,980
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	3%	0%	1,973	2,030
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	3%	0%	2,041	2,099
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	3%	0%	2,041	2,099
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	3%	0%	1,880	1,925
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	3%	0%	1,880	1,925
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	3%	0%	1,915	1,969
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	3%	0%	1,880	1,925
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	3%	0%	1,956	2,003
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	3%	0%	2,041	2,099
519	243301	BUTL-Production	Operator U537O	3/20/2023	3%	0%	1,971	2,018
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	3%	0%	1,971	2,018
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	3%	0%	1,887	1,949
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	3%	0%	1,973	2,030
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	3%	0%	1,971	2,018
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	3%	0%	2,008	2,065
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	3%	0%	2,008	2,065
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	3%	0%	1,721	1,770
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	3%	0%	1,888	1,951
528	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	3%	0%	1,971	2,028
529	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	3%	0%	1,971	2,028
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	3%	0%	1,888	1,951
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023	3%	0%	1,880	1,925
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	3%	0%	1,880	1,925
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023	3%	0%	1,887	1,932
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023	3%	0%	2,003	2,060
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	3%	0%	1,887	1,949
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023	3%	0%	1,776	1,829
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023	3%	0%	2,239	2,295
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023	3%	0%	2,159	2,206
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	3%	0%	1,942	1,988
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	3%	0%	1,942	1,988

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Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	3%	0%	1,880	1,925
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023	3%	0%	1,971	2,018
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023	3%	0%	2,068	2,113
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023	3%	0%	2,008	2,065
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023	3%	0%	2,003	2,060
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023	3%	0%	2,222	2,279
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023	3%	0%	1,888	1,951
			Total Collective Bargaining Unit				$1,168,524	$1,198,064
						Vacancy Rate	1.76%	1.76%
						Vacancy Adjustment	$20,529	$21,048
						Total Non-Collective Bargaining Unit Hourly	$1,147,995	$1,177,016
Non-Collective Bargaining Unit Hourly								
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	7%	0%	$5,104	$5,282
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	12%	0%	10,882	11,260
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	7%	0%	5,528	5,721
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	7%	0%	5,867	6,071
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	10/3/1988	7%	0%	4,987	5,161
6	246801	LEHP-Production	Plant Operator	2/1/1996	7%	0%	5,111	5,290
7	245706	POCO-Field Services	Crew Leader	9/16/1996	7%	0%	5,124	5,303
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	7%	0%	4,991	5,165
9	245706	POCO-Field Services	Utility Person	7/1/1994	7%	0%	5,050	5,225
10	245501	BNGR-Production	Plant Operator	7/23/1990	7%	0%	5,570	5,765
11	247406	FRCK-Field Services	Utility Person	4/18/1988	7%	0%	5,060	5,235
12	247406	FRCK-Field Services	Utility Person	1/15/1986	7%	0%	5,228	5,409
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	7%	0%	4,711	4,874
14	246201	HSHY-Production	Plant Operator	9/27/1993	7%	0%	4,933	5,104
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	7%	0%	4,866	5,035
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	7%	0%	5,298	5,482
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	7%	0%	6,149	6,362
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990	7%	0%	4,741	4,907
19	247106	MILT-Field Services	Utility Person	11/16/1998	7%	0%	4,882	5,051
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	7%	0%	4,984	5,158
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	7%	0%	4,750	4,915
22	246506	COAT-Field Services	Utility Person	1/26/1998	7%	0%	4,348	4,500
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	7%	0%	5,512	5,703
24	245906	GLEN-Field Services	Utility Person	12/27/1994	7%	0%	5,360	5,547
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999	7%	0%	5,189	5,370
26	245606	NAZA-Field Services	Utility Person	10/4/1993	7%	0%	5,159	5,339
27	245906	GLEN-Field Services	Utility Person	6/20/1983	7%	0%	5,152	5,332
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	7%	0%	5,395	5,582
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	7%	0%	5,336	5,522
30	246401	ROYF-Production	Plant Operator	3/9/1998	7%	0%	5,456	5,646
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987	7%	0%	5,471	5,661
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	7%	0%	5,493	5,684
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	7%	0%	5,205	5,386
34	245606	NAZA-Field Services	Utility Person	11/26/2001	7%	0%	5,209	5,390
35	246801	LEHP-Production	Utility Person	2/26/1990	7%	0%	5,029	5,205

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
36	246501	COAT-Production	Plant Operator	5/28/2002	7%	0%	5,116	5,294
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	7%	0%	5,275	5,459
38	245906	GLEN-Field Services	Utility Person	1/5/2004	7%	0%	5,105	5,284
39	245606	NAZA-Field Services	Utility Person	2/16/2004	7%	0%	5,000	5,174
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N)	12/1/2004	7%	0%	4,727	4,892
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	7%	0%	4,853	5,022
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	7%	0%	5,057	5,233
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	7%	0%	4,953	5,126
44	245506	BNGR-Field Services	Utility Person	11/7/2005	7%	0%	4,993	5,167
45	245401	SUSQ-Production	Plant Operator	5/15/2006	7%	0%	4,892	5,062
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006	7%	0%	5,015	5,189
47	245606	NAZA-Field Services	Utility Person	12/18/2006	7%	0%	5,038	5,214
48	246206	HSHY-Field Services	Utility Person	3/26/2007	7%	0%	5,143	5,322
49	247106	MILT-Field Services	Utility Person	5/7/2007	7%	0%	4,790	4,956
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	7%	0%	5,351	5,537
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	7%	0%	4,997	5,171
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007	12%	0%	10,679	11,050
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	12%	0%	10,260	10,619
54	247201	PHBG-Production	Operations Specialist	6/2/2008	7%	0%	5,341	5,526
55	247106	MILT-Field Services	Utility Person	7/21/2008	7%	0%	4,667	4,829
56	246501	COAT-Production	Plant Operator	10/6/2008	7%	0%	5,101	5,278
57	247701	BOGGS-Production	Plant Operator	5/4/2009	7%	0%	5,231	5,414
58	245706	POCO-Field Services	Utility Person	9/28/2009	7%	0%	5,032	5,208
59	246506	COAT-Field Services	Utility Person	11/2/2009	7%	0%	5,025	5,200
60	247401	FRCK-Production	Operator	1/25/2010	7%	0%	4,819	4,987
61	247206	PHBG-Field Services	Utility Person	3/29/2010	7%	0%	5,162	5,342
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	7%	0%	5,518	5,709
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	7%	0%	5,772	5,972
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	7%	0%	5,216	5,398
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	7%	0%	4,565	4,724
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	7%	0%	4,896	5,067
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	7%	0%	5,776	5,978
68	247206	PHBG-Field Services	Utility Person	11/7/2011	7%	0%	4,977	5,149
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	7%	0%	4,415	4,569
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	7%	0%	4,711	4,874
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	7%	0%	4,750	4,915
72	249150	WILK-Other	Operations Specialist	3/4/2013	7%	0%	4,712	4,876
73	247306	BRWK-Field Services	Utility Person	4/29/2013	7%	0%	5,104	5,282
74	245601	NAZA-Production	Plant Operator	6/27/2013	7%	0%	5,335	5,520
75	247301	BRWK-Production	Operator	9/16/2013	7%	0%	5,186	5,366
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	7%	0%	4,965	5,138
77	247201	PHBG-Production	Plant Operator	2/2/2015	7%	0%	5,002	5,176
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	7%	0%	4,990	5,164
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	7%	0%	4,641	4,801
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	7%	0%	5,056	5,231
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	7%	0%	4,288	4,437
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	7%	0%	5,231	5,414
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	7%	0%	4,554	4,712
84	245406	SUSQ-Field Services	Utility Person	12/14/2015	7%	0%	4,301	4,451
85	246506	COAT-Field Services	Utility Person	2/3/2016	7%	0%	4,646	4,809

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Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
86	247103	MILT-Cust Service	Utility Person	3/7/2016	7%	0%	4,645	4,807
87	246206	HSHY-Field Services	Utility Person	2/29/2016	7%	0%	5,202	5,383
88	246201	HSHY-Production	Plant Operator	2/29/2016	7%	0%	4,933	5,104
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	7%	0%	5,019	5,195
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016	7%	0%	4,933	5,104
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	12%	0%	12,844	13,290
92	246206	HSHY-Field Services	Utility Person	6/13/2016	7%	0%	4,705	4,869
93	246206	HSHY-Field Services	Utility Person	7/11/2016	7%	0%	4,626	4,787
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	7%	0%	5,335	5,520
95	245306	ABNG-Field Services	Utility Person	10/24/2016	7%	0%	4,714	4,877
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	7%	0%	5,010	5,184
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	7%	0%	4,315	4,465
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	12%	0%	10,250	10,606
99	247306	BRWK-Field Services	Utility Person	1/16/2017	7%	0%	4,509	4,665
100	246506	COAT-Field Services	Utility Person	2/13/2017	7%	0%	4,401	4,554
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	7%	0%	4,730	4,895
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015	7%	0%	2,754	2,850
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	7%	0%	2,729	2,824
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018	7%	0%	4,385	4,537
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	7%	0%	4,348	4,500
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018	7%	0%	4,829	4,997
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	7%	0%	5,779	5,981
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	7%	0%	4,815	4,983
109	246801	LEHP-Production	Utility Person	7/23/2018	7%	0%	4,167	4,312
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	12%	0%	10,839	11,218
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	7%	0%	5,026	5,202
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	7%	0%	3,692	3,821
113	246501	COAT-Production	Plant Operator	9/24/2018	7%	0%	4,787	4,953
114	245906	GLEN-Field Services	Utility Person	10/8/2018	7%	0%	4,357	4,509
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	7%	0%	4,562	4,721
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	7%	0%	3,954	4,091
117	246206	HSHY-Field Services	Utility Person	10/8/2018	7%	0%	4,382	4,534
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	7%	0%	5,059	5,234
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	7%	0%	4,762	4,927
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	7%	0%	4,741	4,907
121	246206	HSHY-Field Services	Utility Person	1/14/2019	7%	0%	4,427	4,581
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	7%	0%	4,867	5,037
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	7%	0%	4,962	5,135
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	12%	0%	12,157	12,581
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	7%	0%	5,187	5,368
126	248801	TURB-Production	Plant Operator	7/8/2019	7%	0%	4,604	4,765
127	240116	CORP-Maint Services	Sr Reliability Engineering Analyst	7/15/2019	12%	0%	12,859	13,307
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	7%	0%	4,997	5,171
129	241406	STNW-Field Service	Utility Person	12/5/2018	7%	0%	3,883	4,018
130	246206	HSHY-Field Services	Utility Person	2/2/2016	7%	0%	4,271	4,420
131	241406	STNW-Field Service	Utility Person	3/3/1999	7%	0%	3,883	4,018
132	247201	PHBG-Production	Plant Operator	10/21/2019	7%	0%	4,560	4,720
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	7%	0%	4,699	4,863
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	7%	0%	4,791	4,958
135	247206	PHBG-Field Services	Utility Person	1/27/2020	7%	0%	4,522	4,680

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							Performance Pay APP & LTPP	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	7%	0%	5,591	5,785
137	241406	STNW-Field Service	Foreperson	1/8/1990	7%	0%	5,303	5,487
138	246406	ROYF-Field Services	Utility Person	3/23/2020	7%	0%	4,693	4,857
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	7%	0%	4,749	4,914
140	246406	ROYF-Field Services	Utility Person	4/13/2020	7%	0%	4,702	4,866
141	247106	MILT-Field Services	Utility Person	4/13/2020	7%	0%	4,513	4,670
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	7%	0%	4,746	4,911
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	7%	0%	4,135	4,278
144	245701	POCO-Production	Plant Operator	4/27/2020	7%	0%	4,556	4,714
145	246401	ROYF-Production	Plant Operator	5/4/2020	7%	0%	4,987	5,161
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	7%	0%	3,794	3,926
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	12%	0%	9,514	9,845
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	7%	0%	4,012	4,152
149	240116	CORP-Maint Services	Reliability Engineering Analyst	6/1/2020	12%	0%	11,205	11,596
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	7%	0%	4,348	4,500
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	7%	0%	4,433	4,588
152	247106	MILT-Field Services	Utility Person	10/19/2020	7%	0%	4,448	4,603
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	12%	0%	10,769	11,145
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	7%	0%	4,515	4,671
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	7%	0%	4,263	4,413
156	245506	BNGR-Field Services	Utility Person	2/22/2021	7%	0%	4,205	4,351
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	7%	0%	3,935	4,072
158	246801	LEHP-Production	Utility Person	4/12/2021	7%	0%	4,193	4,339
159	246506	COAT-Field Services	Utility Person	4/13/2021	7%	0%	4,677	4,839
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	7%	0%	4,275	4,424
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	7%	0%	5,059	5,234
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	7%	0%	4,035	4,176
163	240114	CORP-Engineering	GIS Analyst	6/1/2021	7%	0%	3,952	4,090
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	7%	0%	4,636	4,797
165	247206	PHBG-Field Services	Utility Person	7/6/2021	7%	0%	4,701	4,864
166	245906	GLEN-Field Services	Utility Person	7/12/2021	7%	0%	4,579	4,739
167	246401	ROYF-Production	Plant Operator	7/19/2021	7%	0%	5,006	5,180
168	241106	PITT-Field Services	Operations Specialist	9/7/2021	7%	0%	4,591	4,750
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	7%	0%	4,896	5,067
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	7%	0%	4,743	4,908
171	240116	CORP-Maint Services	Reliability Engineering Analyst	10/18/2021	12%	0%	9,642	9,977
172	246506	COAT-Field Services	Utility Person	11/8/2021	7%	0%	4,266	4,415
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	12%	0%	12,079	12,500
174	246506	COAT-Field Services	Utility Person	11/9/2021	7%	0%	4,266	4,415
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	7%	0%	3,116	3,224
176	247106	MILT-Field Services	Utility Person	11/22/2021	7%	0%	4,377	4,529
177	246201	HSHY-Production	Plant Operator	1/10/2022	7%	0%	4,636	4,797
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	1/10/2022	7%	0%	4,220	4,366
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	7%	0%	4,698	4,861
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	7%	0%	4,392	4,546
181	247206	PHBG-Field Services	Utility Person	2/21/2022	7%	0%	4,554	4,712
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	2/28/2022	7%	0%	3,613	3,739
183	245306	ABNG-Field Services	Utility Person	2/21/2022	7%	0%	4,173	4,318
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	7%	0%	4,486	4,642
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	7%	0%	3,132	3,242

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							Performance Pay APP & LTPP	
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	7%	0%	4,405	4,559
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	7%	0%	3,973	4,111
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	7%	0%	4,228	4,376
189	240306	CORP-Field Service	Operations Specialist	4/25/2022	7%	0%	4,854	5,024
190	245306	ABNG-Field Services	Utility Person	5/16/2022	7%	0%	4,294	4,443
191	241401	STNW-Production	Plant Operator	6/6/2022	7%	0%	4,035	4,176
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	7%	0%	4,987	5,161
193	245506	BNGR-Field Services	Utility Person	6/20/2022	7%	0%	4,711	4,874
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	6/20/2022	7%	0%	3,515	3,638
195	245401	SUSQ-Production	Plant Operator	6/27/2022	7%	0%	4,240	4,388
196	241401	STNW-Production	Plant Operator	7/5/2022	7%	0%	4,035	4,176
197	246801	LEHP-Production	Utility Person	7/18/2022	7%	0%	4,084	4,225
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/18/2022	7%	0%	3,594	3,720
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	7%	0%	4,470	4,625
200	247106	MILT-Field Services	Utility Person	7/18/2022	7%	0%	4,404	4,557
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	7%	0%	4,464	4,619
202	245501	BNGR-Production	Plant Operator	8/29/2022	7%	0%	4,249	4,396
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	7%	0%	4,247	4,395
204	245401	SUSQ-Production	Plant Operator	9/19/2022	7%	0%	4,240	4,388
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	7%	0%	4,389	4,543
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	7%	0%	4,636	4,797
207	245306	ABNG-Field Services	Utility Person	10/10/2022	7%	0%	4,028	4,168
208	245306	ABNG-Field Services	Utility Person	10/17/2022	7%	0%	4,028	4,168
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	7%	0%	3,876	4,011
210	246406	ROYF-Field Services	Utility Person	11/14/2022	7%	0%	4,408	4,562
211	246501	COAT-Production	Plant Operator	11/28/2022	7%	0%	4,522	4,680
212	246406	ROYF-Field Services	Utility Person	1/3/2023	7%	0%	4,560	4,720
213	245706	POCO-Field Services	Utility Person	1/3/2023	7%	0%	4,104	4,247
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	7%	0%	4,028	4,168
215	247306	BRWK-Field Services	Utility Person	3/6/2023	7%	0%	4,180	4,326
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	7%	0%	4,446	4,601
217	245606	NAZA-Field Services	Utility Person	3/20/2023	7%	0%	4,446	4,601
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023	7%	0%	4,167	4,312
219	245601	NAZA-Production	Plant Operator	6/5/2023	7%	0%	4,408	4,562
220	245106	NORR-Field Services	Utility Person	6/5/2023	7%	0%	4,560	4,720
221	246406	ROYF-Field Services	Utility Person	6/5/2023	7%	0%	4,332	4,483
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	7%	0%	4,560	4,720
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017	7%	0%	1,763	1,825
224	245106	NORR-Field Services	Operations Specialist - To Be Filled	12/31/2023	7%	0%	5,373	5,560
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	7%	0%	5,373	5,560
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	7%	0%	5,373	5,560
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	7%	0%	5,373	5,560
228	241103	PITT-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	7%	0%	4,277	4,426
229	249103	WILK-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	7%	0%	4,277	4,426
230	241103	PITT-Cust Service	Compliance Representative - To Be Filled	12/31/2023	7%	0%	3,764	3,895
			Total Non-Collective Bargaining Unit Hourly				$1,158,855	$1,199,204
						Vacancy Rate	1.76%	1.76%
						Vacancy Adjustment	$20,359	$21,068
						Total Non-Collective Bargaining Unit Hourly	$1,138,496	$1,178,136

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							Performance Pay APP & LTPP	
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	APP Pay %	LTPP Pay %	2024 Performance Pay Amount	2025 Performance Pay Amount
Non-Collective Bargaining Unit Salary								
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	12%	0%	$1,128	$1,168
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	15%	0%	18,470	19,113
3	246701	COWW-Production	Supvr Production	3/6/2000	12%	0%	11,434	11,831
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	12%	0%	11,981	12,398
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	12%	0%	9,113	9,430
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	12%	0%	11,207	11,596
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	12%	0%	9,734	10,074
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	12%	0%	11,978	12,395
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020	12%	0%	10,693	11,065
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	12%	0%	11,037	11,422
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	12%	0%	9,430	9,757
12	249401	YORKWW-Production	Supvr Production	6/24/2013	12%	0%	10,413	10,775
			Total Non-Collective Bargaining Unit Salary				$126,618	$131,024
Collective Bargaining Unit								
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/4/2008	3%	0%	$1,813	$1,863
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	3%	0%	1,813	1,863
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	3%	0%	1,755	1,805
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/17/1984	3%	0%	1,813	1,863
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	10/26/2009	3%	0%	1,813	1,863
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	5/22/2017	3%	0%	1,813	1,863
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	3%	0%	1,655	1,705
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	3%	0%	1,938	1,988
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	3%	0%	1,938	1,988
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	3%	0%	1,655	1,705
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/7/2009	3%	0%	1,813	1,863
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/20/2018	3%	0%	1,813	1,863
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/3/2020	3%	0%	1,813	1,863
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	4/24/2017	3%	0%	1,813	1,863
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	3%	0%	1,938	1,988
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3%	0%	1,755	1,805
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3%	0%	1,755	1,805
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	3%	0%	1,813	1,863
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	3%	0%	1,755	1,805
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	3%	0%	1,813	1,863
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	3%	0%	1,655	1,705
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	3%	0%	1,755	1,805
			Total Collective Bargaining Unit				$39,497	$40,597
Non-Collective Bargaining Unit Hourly								
1	246701	COWW-Production	Wastewater Operator	9/20/1999	7%	0%	$5,073	$5,250
2	246706	COWW-Field Services	Utility Person	5/30/1995	7%	0%	4,679	4,841
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	7%	0%	5,338	5,523
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	7%	0%	5,307	5,491
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	7%	0%	5,488	5,680
6	246706	COWW-Field Services	Crew Leader	11/10/2003	7%	0%	4,955	5,127
7	246901	LPWW-Production	Plant Operator	6/2/2008	7%	0%	5,031	5,206
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	7%	0%	5,420	5,608
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	7%	0%	5,379	5,566
10	242601	CLYWW-Production	Plant Operator	7/31/2008	7%	0%	4,956	5,129
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	7%	0%	5,273	5,458
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	7%	0%	4,677	4,839
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	7%	0%	5,835	6,038
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	7%	0%	4,829	4,997
15	246706	COWW-Field Services	Utility Person	3/14/2016	7%	0%	4,528	4,686
16	246901	LPWW-Production	Plant Operator	9/11/2017	7%	0%	4,557	4,717
17	246701	COWW-Production	Wastewater Operator	5/14/2018	7%	0%	4,885	5,054
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	7%	0%	4,369	4,521
19	248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	10/15/2018	7%	0%	5,026	5,202
20	246706	COWW-Field Services	Utility Person	3/25/2019	7%	0%	4,367	4,519
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	7%	0%	5,674	5,871
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	7%	0%	5,488	5,680
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	7%	0%	4,706	4,870

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							Performance Pay APP & LTPP	
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	7%	0%	4,671	4,834
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	7%	0%	4,712	4,876
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	7%	0%	5,836	6,039
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	7%	0%	4,782	4,949
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	7%	0%	4,712	4,876
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	7%	0%	4,701	4,864
30	248706	Nw Cmbrlnd WW FS	Utility Person	9/20/2021	7%	0%	4,084	4,225
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021	7%	0%	4,328	4,478
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	7%	0%	4,711	4,874
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	7%	0%	4,560	4,720
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	7%	0%	4,310	4,461
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	7%	0%	4,711	4,874
36	248706	Nw Cmbrlnd WW FS	Utility Person	9/6/2022	7%	0%	4,396	4,550
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	7%	0%	4,084	4,225
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	7%	0%	4,484	4,641
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	7%	0%	4,560	4,720
40	246701	COWW-Production	Wastewater Operator	1/3/2023	7%	0%	4,864	5,034
41	248701	Nw Cmbrnlnd WW Prod	Utility Person	2/6/2023	7%	0%	4,142	4,287
42	246706	COWW-Field Services	Utility Person	3/6/2023	7%	0%	4,256	4,404
			Total Non-Collective Bargaining Unit Hourly				$202,744	$209,804

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					Performance Pay APP & LTPP			
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
Non-Collective Bargaining Unit Salary								
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000	12%	0%	$11,936	$12,350
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006	12%	0%	9,662	9,999
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016	12%	0%	8,486	8,781
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002	15%	0%	18,293	18,929
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007	12%	0%	9,610	9,944
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007	12%	0%	10,608	10,977
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008	12%	0%	10,501	10,865
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982	12%	0%	11,591	11,996
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003	15%	0%	16,152	16,714
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015	12%	0%	10,982	11,364
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019	15%	0%	14,892	15,410
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020	12%	0%	9,894	10,239
			Total Non-Collective Bargaining Unit Salary				$142,607	$147,568
Collective Bargaining Unit								
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	3%	0%	$1,939	$1,977
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006	3%	0%	2,095	2,136
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	3%	0%	1,851	1,887
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002	3%	0%	1,939	1,977
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008	3%	0%	1,939	1,977
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016	3%	0%	1,851	1,887
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012	3%	0%	1,851	1,887
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013	3%	0%	1,851	1,887
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990	3%	0%	1,939	1,977
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005	3%	0%	1,939	1,977
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008	3%	0%	1,851	1,887
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007	3%	0%	1,851	1,887
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016	3%	0%	1,851	1,887
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009	3%	0%	1,939	1,977
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005	3%	0%	2,095	2,136
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005	3%	0%	1,851	1,887
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	3%	0%	1,939	1,977
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008	3%	0%	1,939	1,977
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008	3%	0%	1,939	1,977
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009	3%	0%	1,939	1,977
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005	3%	0%	2,095	2,136
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011	3%	0%	1,939	1,977
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987	3%	0%	1,939	1,977
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997	3%	0%	2,095	2,136
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	3%	0%	1,851	1,887
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	3%	0%	1,851	1,887
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011	3%	0%	1,851	1,887
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013	3%	0%	1,851	1,887
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012	3%	0%	1,939	1,977
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009	3%	0%	1,851	1,887
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013	3%	0%	2,095	2,136
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992	3%	0%	1,851	1,887
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016	3%	0%	1,939	1,977
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	3%	0%	1,851	1,887
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012	3%	0%	1,851	1,887
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007	3%	0%	1,851	1,887
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006	3%	0%	1,851	1,887
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997	3%	0%	1,939	1,977
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	3%	0%	1,851	1,887
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006	3%	0%	1,939	1,977
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017	3%	0%	2,095	2,136
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008	3%	0%	1,939	1,977
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016	3%	0%	1,939	1,977
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	3%	0%	1,851	1,887
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005	3%	0%	1,851	1,887

Pennsylvania-American Water Company - Wastewater CSS Operations
Compensation

						Performance Pay APP & LTPP			
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**APP Pay %**	**LTPP Pay %**	**2024 Performance Pay Amount**	**2025 Performance Pay Amount**
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	3%	0%	2,095	2,136
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	3%	0%	2,192	2,248
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	3%	0%	2,338	2,396
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	3%	0%	2,335	2,393
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	3%	0%	2,288	2,346
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	3%	0%	2,335	2,393
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	3%	0%	2,338	2,396
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	3%	0%	2,145	2,199
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	3%	0%	2,076	2,129
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	3%	0%	1,679	1,722
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	3%	0%	2,145	2,199
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	3%	0%	2,045	2,097
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	3%	0%	2,145	2,199
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	3%	0%	2,186	2,241
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	3%	0%	1,850	1,896
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	3%	0%	2,474	2,537
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	3%	0%	2,045	2,097
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	3%	0%	1,950	1,999
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	3%	0%	2,338	2,396
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	3%	0%	2,335	2,393
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	3%	0%	1,950	1,999
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	3%	0%	2,045	2,097
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	3%	0%	1,939	1,977
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	3%	0%	1,939	1,977
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	3%	0%	1,939	1,977
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	3%	0%	1,572	1,611
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	3%	0%	1,700	1,743
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	3%	0%	1,939	1,977
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	3%	0%	1,851	1,887
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	3%	0%	2,363	2,424
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	3%	0%	1,679	1,722
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	3%	0%	2,363	2,424
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	3%	0%	1,939	1,977
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	3%	0%	1,371	1,409
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	3%	0%	1,819	1,855
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	3%	0%	1,819	1,855
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	3%	0%	1,819	1,855
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	3%	0%	2,338	2,396
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	3%	0%	1,875	1,912
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	3%	0%	1,875	1,912
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023	3%	0%	2,338	2,396
			Total Collective Bargaining Unit				$170,149	$173,823
Non-Collective Bargaining Unit Hourly								
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	7%	0%	$4,385	$4,537
			Total Non-Collective Bargaining Unit Hourly				$4,385	$4,537

Pennsylvania-American Water Company
Group Insurance

	2024	2025
Water Operations		
Non-Collective Bargaining Unit Salary	$5,733,733	$5,907,571
Collective Bargaining Unit	8,387,908	8,642,217
Non-Collective Bargaining Unit Hourly	3,893,741	4,011,794
Total	$18,015,382	$18,561,583
Wastewater SSS General Operations		
Non-Collective Bargaining Unit Salary	$218,546	$225,172
Collective Bargaining Unit	359,828	370,738
Non-Collective Bargaining Unit Hourly	756,642	779,582
Total	$1,335,016	$1,375,492
Wastewater CSS Operations		
Non-Collective Bargaining Unit Salary	$215,725	$222,266
Collective Bargaining Unit	1,428,956	1,472,280
Non-Collective Bargaining Unit Hourly	9,681	9,974
Total	$1,654,362	$1,704,520

Pennsylvania-American Water Company - Water Operations
Group Insurance

					Gross Group Insurance										
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
Non-Collective Bargaining Unit Salary															
1	240106	CORP-Field Services	Project Manager	1/18/1999	$25,947	$5,277	$31,224	$200,000	$200,000	$413	$48	$370	$45	$26,823	$27,636
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001				183,000	190,000	378	44	305	45	772	796
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994	25,947	5,212	31,159	200,000	200,000	413	48	450	45	26,903	27,718
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998	25,947	5,277	31,224	148,000	153,000	305	36	247	45	26,580	27,386
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993	25,947	5,277	31,224	200,000	200,000	413	48	450	45	26,903	27,718
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997	25,947	5,277	31,224	140,000	145,000	289	34	233	45	26,547	27,352
7	249160	WILK-Watres	Supvr Production	1/11/1988	20,360	4,145	24,504	122,000	126,000	252	29	203	45	20,889	21,523
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993	25,947	5,277	31,224	180,000	186,000	372	43	300	45	26,706	27,516
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990	25,947	5,277	31,224	177,000	184,000	365	42	296	45	26,695	27,505
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987	25,947	5,199	31,146	141,000	146,000	291	34	236	45	26,552	27,357
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983	20,360	4,135	24,494	161,000	166,000	332	39	268	45	21,043	21,681
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998	25,947	5,277	31,224	142,000	147,000	293	34	237	45	26,556	27,361
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998	25,947	5,277	31,224	113,000	117,000	233	27	188	45	26,440	27,241
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992	20,360	4,085	24,444	153,000	158,000	316	37	255	45	21,013	21,650
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986	25,947	5,199	31,146	127,000	131,000	262	30	211	45	26,495	27,299
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997	10,082	1,207	11,289	118,000	122,000	244	28	197	45	10,596	10,917
17	249150	WILK-Other	Sr Supt Production	9/13/1993	20,360	4,145	24,504	169,000	175,000	349	41	282	45	21,076	21,715
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998	25,947	5,277	31,224	200,000	200,000	413	48	368	45	26,821	27,634
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994	25,947	5,277	31,224	178,000	184,000	367	43	296	45	26,698	27,508
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997	25,947	5,277	31,224	166,000	172,000	343	40	276	45	26,651	27,459
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995	25,947	5,199	31,146	137,000	141,000	283	33	228	45	26,535	27,340
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995	9,262	1,884	11,146	137,000	141,000	283	33	228	45	9,851	10,149
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995	20,360	4,145	24,504	126,000	130,000	260	30	210	45	20,905	21,539
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995	10,065	2,080	12,145	200,000	200,000	413	48	374	45	10,944	11,276
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982	20,360	4,145	24,504	149,000	154,000	308	36	248	45	20,996	21,632
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998	21,547	4,324	25,871	167,000	173,000	345	40	279	45	22,255	22,930
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989	20,360	4,145	24,504	200,000	200,000	413	48	351	45	21,217	21,860
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978	20,360	4,145	24,504	152,000	158,000	314	36	254	45	21,009	21,646
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998	25,947	5,277	31,224	156,000	162,000	322	37	261	45	26,612	27,419
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989	143	41	184	200,000	200,000	413	48	450	45	1,099	1,133
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993	9,262	1,862	11,124	200,000	200,000	413	48	377	45	10,145	10,453
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994	20,360	4,145	24,504	169,000	175,000	349	41	281	45	21,075	21,714
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984	20,360	4,145	24,504	140,000	145,000	289	34	234	45	20,961	21,596
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987	20,360	4,095	24,454	200,000	200,000	413	48	450	45	21,316	21,962
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984	25,947	5,212	31,159	174,000	180,000	359	42	290	45	26,683	27,492
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991	25,947	5,212	31,159	200,000	200,000	413	48	450	45	26,903	27,718
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994	10,082	1,207	11,289	164,000	170,000	338	39	274	45	10,779	11,106
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992	9,262	1,884	11,146	157,000	162,000	324	38	261	45	9,930	10,231
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986	20,360	4,145	24,504	139,000	144,000	287	33	232	45	20,957	21,592
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986	21,322	4,326	25,648	200,000	200,000	413	48	390	45	22,218	22,891
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998	20,360	4,145	24,504	150,000	155,000	310	36	249	45	21,000	21,637
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998	25,947	5,277	31,224	200,000	200,000	413	48	369	45	26,821	27,635
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998	25,947	5,277	31,224	145,000	150,000	299	35	241	45	26,567	27,372
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999	21,255	4,317	25,573	156,000	162,000	322	37	261	45	21,921	22,585
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999	25,947	5,277	31,224	184,000	190,000	380	44	306	45	26,722	27,532
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999	21,322	4,336	25,658	146,000	151,000	301	35	243	45	21,947	22,612
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000	22,031	2,607	24,638	200,000	200,000	413	48	445	45	22,982	23,679
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000	25,947	5,277	31,224	134,000	139,000	277	32	224	45	26,524	27,328
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000	21,322	4,281	25,603	134,000	138,000	277	32	223	45	21,899	22,563
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000	9,262	1,857	11,119	134,000	139,000	277	32	224	45	9,840	10,138
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001	25,947	5,277	31,224	200,000	200,000	413	48	365	45	26,818	27,631
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994	25,947	5,212	31,159	181,000	187,000	374	43	301	45	26,710	27,520
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990	20,360	4,145	24,504	137,000	141,000	283	33	228	45	20,948	21,583
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001	25,947	5,277	31,224	179,000	185,000	369	43	298	45	26,703	27,512
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999	25,947	5,277	31,224	169,000	175,000	349	41	281	45	26,662	27,471
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990	9,262	1,884	11,146	177,000	183,000	365	42	295	45	10,010	10,314
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999	25,947	5,277	31,224	200,000	200,000	413	48	350	45	26,803	27,616
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992	20,360	4,145	24,504	200,000	200,000	413	48	450	45	21,316	21,962
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997	25,947	5,277	31,224	200,000	200,000	413	48	450	45	26,903	27,718
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002	25,947	5,277	31,224	200,000	200,000	413	48	371	45	26,823	27,637
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003	25,947	5,277	31,224	191,000	197,000	394	46	318	45	26,750	27,561
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003	20,360	4,145	24,504	130,000	134,000	268	31	216	45	20,920	21,555
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003	20,360	4,085	24,444	165,000	171,000	341	40	275	45	21,060	21,698
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003	25,947	5,277	31,224	141,000	146,000	291	34	234	45	26,551	27,356
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003	25,947	5,277	31,224	125,000	129,000	258	30	208	45	26,488	27,291
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003	25,947	5,199	31,146	183,000	189,000	378	44	305	45	26,718	27,528
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004	25,916	5,203	31,119	151,000	157,000	312	36	252	45	26,561	27,367
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005	25,947	5,277	31,224	192,000	199,000	396	46	320	45	26,754	27,565
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005	25,947	5,212	31,159	165,000	170,000	341	40	274	45	26,646	27,454
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005	25,947	5,212	31,159	167,000	173,000	345	40	279	45	26,655	27,463
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005	25,947	5,277	31,224	169,000	175,000	349	41	281	45	26,662	27,471
72	241151	PITT-Production Haye	Supvr Production	3/16/2005	25,947	5,277	31,224	135,000	140,000	279	32	225	45	26,528	27,332
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005	9,262	1,857	11,119	148,000	153,000	305	36	247	45	9,896	10,196
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005	25,947	5,277	31,224	145,000	150,000	299	35	242	45	26,568	27,374
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005	25,947	5,212	31,159	192,000	199,000	396	46	320	45	26,754	27,565
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005	20,360	4,145	24,504	150,000	156,000	310	36	251	45	21,001	21,638
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005	9,262	1,884	11,146	150,000	156,000	310	36	251	45	9,904	10,204
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005	9,262	1,862	11,124	200,000	200,000	413	48	341	45	10,109	10,416
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005	25,947	5,212	31,159	182,000	188,000	376	44	303	45	26,714	27,524
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006	25,947	5,277	31,224	122,000	126,000	252	29	204	45	26,476	27,279
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006	20,360	4,145	24,504	200,000	200,000	413	48	388	45	21,254	21,898
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006	9,262	1,862	11,124	173,000	179,000	357	42	288	45	9,995	10,298
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006	20,360	4,145	24,504	133,000	138,000	275	32	222	45	20,933	21,568
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006	20,360	4,145	24,504	132,000	137,000	272	32	220	45	20,929	21,563
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006	25,947	5,277	31,224	122,000	126,000	252	29	203	45	26,476	27,278
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006	25,947	5,264	31,211	125,000	129,000	258	30	208	45	26,488	27,291
87	240106	CORP-Field Services	Mgr Opns	1/22/2007	25,947	5,277	31,224	158,000	163,000	326	38	263	45	26,619	27,426
88	249150	WILK-Other	Production Asset Administrator	1/22/2007	25,947	5,277	31,224	137,000	142,000	283	33	229	45	26,536	27,341
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007	21,322	4,336	25,658	169,000	174,000	349	41	281	45	22,037	22,706
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007	25,947	5,277	31,224	119,000	123,000	246	29	198	45	26,464	27,267
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009				183,000	189,000	378	44	305	45	772	795
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007	10,082	1,207	11,289	179,000	185,000	369	43	298	45	10,838	11,166
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007	25,947	5,264	31,211	150,000	155,000	310	36	249	45	26,587	27,393
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007	21,547	4,324	25,871	177,000	183,000	365	42	295	45	22,295	22,971
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007				190,000	197,000	392	46	317	45	800	825
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007	25,947	5,212	31,159	157,000	163,000	324	38	262	45	26,615	27,422

Pennsylvania-American Water Company - Water Operations
Group Insurance

							Gross Group Insurance								
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008				200,000	200,000	413	48	365	45	871	898
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008	9,262	1,884	11,146	128,000	132,000	264	31	213	45	9,816	10,113
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008	25,947	5,212	31,159	191,000	198,000	394	46	318	45	26,750	27,561
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008	25,947	5,277	31,224	200,000	200,000	413	48	335	45	26,787	27,599
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008	25,947	5,277	31,224	136,000	141,000	281	33	227	45	26,532	27,337
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009	20,360	4,145	24,504	132,000	137,000	272	32	221	45	20,930	21,564
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009	25,947	5,212	31,159	139,000	144,000	287	33	232	45	26,544	27,349
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009	25,947	5,277	31,224	149,000	154,000	308	36	248	45	26,584	27,389
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009	25,947	5,199	31,146	200,000	200,000	413	48	385	45	26,837	27,651
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009	25,947	5,277	31,224	200,000	200,000	413	48	450	45	26,903	27,718
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009	25,947	5,277	31,224	154,000	159,000	318	37	257	45	26,603	27,410
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009	25,947	5,277	31,224	130,000	134,000	268	31	216	45	26,508	27,311
109	246501	COAT-Production	Supvr Production	4/12/2010	25,947	5,199	31,146	128,000	132,000	264	31	213	45	26,500	27,303
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010	9,262	1,884	11,146	125,000	129,000	258	30	208	45	9,804	10,101
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010				150,000	155,000	310	36	249	45	640	660
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010	21,322	4,336	25,658	182,000	188,000	376	44	303	45	22,089	22,759
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010	25,947	5,277	31,224	153,000	158,000	316	37	254	45	26,599	27,405
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011	27,645	3,305	30,951	145,000	150,000	299	35	242	45	28,266	29,123
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011	25,947	5,277	31,224	129,000	134,000	266	31	216	45	26,505	27,308
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011	9,840	2,027	11,867	113,000	117,000	233	27	188	45	10,333	10,646
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011	9,262	1,862	11,124	127,000	132,000	262	30	212	45	9,812	10,110
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011	22,957	2,780	25,737	187,000	194,000	386	45	312	45	23,745	24,465
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012	25,947	5,277	31,224	133,000	138,000	275	32	222	45	26,520	27,325
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012	25,947	5,277	31,224	184,000	190,000	380	44	307	45	26,722	27,532
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012	25,947	5,277	31,224	190,000	197,000	392	46	317	45	26,746	27,557
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012	9,262	1,884	11,146	113,000	117,000	233	27	188	45	9,756	10,052
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013	9,262	1,862	11,124	191,000	198,000	394	46	319	45	10,066	10,371
124	240306	CORP-Field Service	Project Manager	3/4/2013	25,947	5,277	31,224	175,000	182,000	361	42	292	45	26,687	27,497
125	243151	NEWC-New Castle	Supvr Production	4/29/2013	20,360	4,085	24,444	130,000	134,000	268	31	216	45	20,920	21,554
126	247150	MILT-Prod Other	Supvr Production	5/28/2013	9,262	1,862	11,124	124,000	128,000	256	30	207	45	9,800	10,097
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013	25,947	5,277	31,224	128,000	133,000	264	31	214	45	26,500	27,304
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013	25,947	5,212	31,159	125,000	129,000	258	30	208	45	26,488	27,291
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013	25,947	5,277	31,224	200,000	200,000	413	48	427	45	26,879	27,694
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013	1,247	304	1,551	161,000	166,000	332	39	268	45	1,931	1,990
131	240114	CORP-Engineering	GIS Manager	3/31/2014	27,378	3,267	30,644	145,000	150,000	299	35	242	45	27,999	28,847
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014	22,031	2,607	24,638	181,000	187,000	374	43	302	45	22,795	23,486
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014	27,645	3,383	31,028	136,000	140,000	281	33	226	45	28,230	29,086
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014	10,082	1,185	11,267	126,000	131,000	260	30	211	45	10,628	10,950
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014	25,947	5,277	31,224	120,000	124,000	248	29	200	45	26,468	27,271
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014	10,031	1,193	11,224	139,000	144,000	287	33	232	45	10,628	10,951
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014	20,360	4,145	24,504	108,000	112,000	223	26	180	45	20,833	21,465
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014	25,947	5,277	31,224	135,000	140,000	279	32	225	45	26,528	27,333
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014	27,645	3,383	31,028	198,000	200,000	409	48	331	45	28,477	29,341
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015				132,000	137,000	272	32	221	45	570	587
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015	25,947	5,277	31,224	120,000	124,000	248	29	200	45	26,468	27,271
142	240114	CORP-Engineering	GIS Manager	2/2/2015				145,000	150,000	299	35	242	45	621	640
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015	9,262	1,857	11,119	117,000	122,000	241	28	196	45	9,773	10,069
144	240114	CORP-Engineering	Engineer	6/22/2015	10,082	1,180	11,262	127,000	132,000	262	30	212	45	10,632	10,954
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015	25,947	5,212	31,159	123,000	127,000	254	30	205	45	26,480	27,283
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015	25,947	5,277	31,224	158,000	163,000	326	38	263	45	26,618	27,425
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015	25,947	5,212	31,159	122,000	126,000	252	29	203	45	26,476	27,278
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015				122,000	126,000	252	29	204	45	530	546
149	243301	BUTL-Production	Supvr Production	12/7/2015	25,947	5,199	31,146	129,000	134,000	266	31	215	45	26,504	27,308
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015	22,957	2,780	25,737	123,000	128,000	254	30	206	45	23,491	24,203
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015	27,645	3,318	30,963	200,000	200,000	413	48	450	45	28,601	29,468
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016	10,082	1,207	11,289	125,000	129,000	258	30	208	45	10,624	10,946
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016	10,082	1,185	11,267	200,000	200,000	413	48	366	45	10,954	11,286
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016	10,082	1,207	11,289	111,000	115,000	229	27	185	45	10,568	10,888
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016	25,947	5,277	31,224	135,000	140,000	279	32	225	45	26,528	27,333
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016	25,947	5,212	31,159	161,000	166,000	332	39	268	45	26,631	27,438
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016	25,947	5,277	31,224	121,000	125,000	250	29	202	45	26,472	27,275
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016	25,947	5,277	31,224	118,000	122,000	244	28	196	45	26,460	27,262
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016	25,947	5,212	31,159	143,000	148,000	295	34	238	45	26,559	27,364
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016	10,741	1,298	12,039	154,000	159,000	318	37	256	45	11,397	11,743
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017	25,947	5,212	31,159	200,000	200,000	413	48	429	45	26,882	27,697
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990	25,947	5,277	31,224	131,000	135,000	270	31	218	45	26,511	27,315
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016	9,262	1,857	11,119	122,000	127,000	252	29	204	45	9,793	10,090
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017	25,947	5,277	31,224	162,000	168,000	334	39	270	45	26,635	27,442
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017	27,645	3,318	30,963	200,000	200,000	413	48	335	45	28,486	29,350
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017	25,947	5,277	31,224	156,000	161,000	322	37	260	45	26,611	27,418
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017	25,947	5,277	31,224	153,000	159,000	316	37	256	45	26,600	27,406
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017	25,947	5,277	31,224	169,000	174,000	349	41	281	45	26,662	27,470
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017	25,947	5,212	31,159	125,000	129,000	258	30	208	45	26,488	27,291
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017	25,947	5,212	31,159	107,000	111,000	221	26	178	45	26,417	27,218
171	240114	CORP-Engineering	Planning Engineer	8/14/2017	25,947	5,277	31,224	132,000	137,000	272	32	221	45	26,517	27,320
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017	25,947	5,277	31,224	198,000	200,000	409	48	330	45	26,778	27,590
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017	21,322	4,336	25,658	150,000	155,000	310	36	249	45	21,962	22,628
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011	22,031	2,657	24,688	135,000	140,000	279	32	226	45	22,613	23,299
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018	25,947	5,277	31,224	153,000	159,000	316	37	255	45	26,600	27,406
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018	1,104	263	1,367	163,000	169,000	336	39	272	45	1,797	1,851
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018	10,082	1,207	11,289	163,000	169,000	336	39	272	45	10,775	11,101
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018	25,947	5,277	31,224	128,000	132,000	264	31	213	45	26,500	27,303
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018	1,247	304	1,551	151,000	157,000	312	36	252	45	1,893	1,950
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018	25,947	5,212	31,159	154,000	159,000	318	37	257	45	26,603	27,410
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018	25,947	5,277	31,224	133,000	138,000	275	32	222	45	26,520	27,324
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018	10,082	1,180	11,262	155,000	160,000	320	37	258	45	10,742	11,068
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018	25,947	5,277	31,224	123,000	127,000	254	30	205	45	26,480	27,283
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018	10,082	1,207	11,289	121,000	125,000	250	29	201	45	10,607	10,929
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018	9,262	1,857	11,119	198,000	200,000	409	48	330	45	10,094	10,400
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018	9,262	1,884	11,146	123,000	128,000	254	30	205	45	9,796	10,093
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018	10,082	1,207	11,289	143,000	148,000	295	34	238	45	10,695	11,019
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018	25,947	5,277	31,224	129,000	133,000	266	31	215	45	26,503	27,307
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018	9,262	1,862	11,124	109,000	113,000	225	26	182	45	9,740	10,036
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018	25,947	5,212	31,159	124,000	128,000	256	30	207	45	26,484	27,287
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018	25,947	5,277	31,224	147,000	152,000	303	35	245	45	26,575	27,381
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018	21,322	4,336	25,658	133,000	137,000	275	32	221	45	21,895	22,558
193	240114	CORP-Engineering	Staff Engineer	8/27/2018	21,656	2,657	24,313	118,000	123,000	244	28	197	45	22,170	22,843

Pennsylvania-American Water Company - Water Operations
Group Insurance

								Gross Group Insurance								
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018	21,322	4,336	25,658	121,000	125,000	250	29	202	45	21,848	22,510
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018	25,947	5,277	31,224	121,000	125,000	250	29	201	45	26,472	27,275
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018	27,645	3,383	31,028	200,000	200,000	413	48	450	45	28,601	29,468
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018	25,947	5,199	31,146	143,000	148,000	295	34	238	45	26,559	27,364
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018	27,645	3,305	30,951	120,000	124,000	248	29	200	45	28,167	29,021
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018	9,262	1,857	11,119	122,000	126,000	252	29	203	45	9,791	10,088
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018	25,947	5,277	31,224	129,000	133,000	266	31	215	45	26,504	27,307
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018	9,262	1,884	11,146	110,000	113,000	227	26	183	45	9,744	10,039
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019	20,360	4,095	24,454	145,000	150,000	299	35	242	45	20,980	21,617
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019	9,262	1,884	11,146	123,000	127,000	254	30	205	45	9,796	10,093
204	240114	CORP-Engineering	Planning Engineer	2/4/2019	445	81	526	155,000	160,000	320	37	258	45	1,105	1,139
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019	25,947	5,277	31,224	125,000	129,000	258	30	208	45	26,488	27,291
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019	10,031	1,170	11,201	134,000	139,000	277	32	224	45	10,609	10,931
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019				125,000	129,000	258	30	208	45	541	557
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019	21,255	4,313	25,568	124,000	128,000	256	30	207	45	21,793	22,454
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019	25,947	5,277	31,224	125,000	129,000	258	30	208	45	26,488	27,291
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019	10,082	1,185	11,267	138,000	143,000	285	33	230	45	10,675	10,998
211	240114	CORP-Engineering	Staff Engineer	5/20/2019	27,645	3,383	31,028	121,000	126,000	250	29	202	45	28,172	29,026
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019	25,617	5,139	30,756	132,000	136,000	272	32	219	45	26,186	26,980
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019	10,082	1,207	11,289	148,000	153,000	305	36	246	45	10,714	11,039
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019	25,947	5,212	31,159	122,000	126,000	252	29	203	45	26,476	27,278
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019	10,082	1,207	11,289	105,000	109,000	217	25	176	45	10,545	10,865
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019	10,082	1,185	11,267	134,000	139,000	277	32	224	45	10,660	10,983
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019	9,211	1,869	11,080	148,000	153,000	305	36	247	45	9,844	10,143
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019	10,082	1,207	11,289	155,000	160,000	320	37	258	45	10,742	11,068
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019	25,947	5,277	31,224	133,000	138,000	275	32	222	45	26,520	27,324
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019	143	41	184	132,000	136,000	272	32	220	45	712	734
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019	20,360	4,145	24,504	130,000	134,000	268	31	216	45	20,920	21,554
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019	20,360	4,095	24,454	117,000	121,000	241	28	195	45	20,869	21,502
223	240120	CORP-Bus Dev	Vice President of Business Development,	11/4/2019	25,947	5,277	31,224	200,000	200,000	413	48	450	45	26,903	27,718
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019	9,262	1,884	11,146	112,000	116,000	231	27	187	45	9,753	10,049
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020				118,000	122,000	244	28	196	45	513	529
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020	25,947	5,277	31,224	200,000	200,000	413	48	362	45	26,814	27,627
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020	25,947	5,277	31,224	200,000	200,000	413	48	406	45	26,858	27,673
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020	20,360	4,145	24,504	177,000	183,000	365	42	295	45	21,108	21,748
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020	9,262	1,884	11,146	106,000	110,000	219	25	177	45	9,729	10,024
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020	21,322	4,326	25,648	136,000	141,000	281	33	227	45	21,907	22,572
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020				106,000	109,000	219	25	176	45	466	480
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020	10,082	1,180	11,262	154,000	159,000	318	37	257	45	10,739	11,064
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020	25,947	5,277	31,224	200,000	200,000	413	48	450	45	26,903	27,718
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020	22,031	2,657	24,688	106,000	110,000	219	25	177	45	22,497	23,179
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020				172,000	178,000	355	41	286	45	728	750
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020	25,947	5,277	31,224	167,000	173,000	345	40	278	45	26,654	27,462
237	249151	WILK-Brownell	Supvr Production	8/24/2020	10,082	1,185	11,267	117,000	121,000	241	28	195	45	10,592	10,913
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020	27,645	3,383	31,028	172,000	178,000	355	41	286	45	28,373	29,233
239	240114	CORP-Engineering	Engineer	10/12/2020	51	15	66	108,000	112,000	223	26	180	45	525	541
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997	20,360	4,145	24,504	114,000	118,000	235	27	189	45	20,857	21,489
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020	25,947	5,212	31,159	124,000	128,000	256	30	206	45	26,483	27,286
242	240114	CORP-Engineering	Engineer	1/4/2021	22,031	2,607	24,638	108,000	112,000	223	26	180	45	22,505	23,187
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020	27,645	3,383	31,028	121,000	125,000	250	29	201	45	28,170	29,024
244	241151	PITT-Production Haye	Supvr Production	3/29/2021	25,947	5,277	31,224	128,000	133,000	264	31	214	45	26,500	27,304
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021	25,947	5,277	31,224	200,000	200,000	413	48	429	45	26,882	27,697
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021	10,082	1,180	11,262	177,000	183,000	365	42	295	45	10,830	11,159
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021	25,947	5,277	31,224	116,000	120,000	239	28	193	45	26,452	27,254
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021	10,065	2,080	12,145	142,000	147,000	293	34	237	45	10,674	10,998
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021	9,262	1,857	11,119	122,000	127,000	252	29	204	45	9,793	10,090
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021	10,082	1,207	11,289	135,000	140,000	279	32	225	45	10,663	10,987
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021	25,947	5,277	31,224	124,000	129,000	256	30	207	45	26,485	27,288
252	240114	CORP-Engineering	Engineer	9/13/2021				103,000	107,000	213	25	172	45	455	469
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021	25,947	5,277	31,224	200,000	200,000	413	48	450	45	26,903	27,718
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021	25,947	5,277	31,224	120,000	124,000	248	29	200	45	26,468	27,270
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022	25,947	5,277	31,224	125,000	129,000	258	30	208	45	26,488	27,291
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022	10,082	1,203	11,285	100,000	103,000	206	24	166	45	10,524	10,843
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022	9,843	1,170	11,014	125,000	129,000	258	30	208	45	10,385	10,700
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022	9,262	1,862	11,124	123,000	127,000	254	30	205	45	9,795	10,092
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	9,262	1,862	11,124	127,000	132,000	262	30	212	45	9,812	10,110
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	27,645	3,383	31,028	132,000	136,000	272	32	220	45	28,214	29,069
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022	22,957	2,780	25,737	109,000	113,000	225	26	182	45	23,435	24,146
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022				178,000	184,000	367	43	297	45	752	775
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022				146,000	151,000	301	35	243	45	624	643
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022	9,262	1,884	11,146	170,000	176,000	351	41	283	45	9,982	10,285
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022	9,262	1,884	11,146	126,000	131,000	260	30	211	45	9,809	10,106
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022	22,031	2,657	24,688	153,000	158,000	316	37	254	45	22,683	23,371
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007	22,957	2,715	25,672	107,000	111,000	221	26	179	45	23,428	24,139
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022	25,947	5,212	31,159	115,000	119,000	237	28	191	45	26,448	27,250
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995	9,262	1,884	11,146	111,000	115,000	229	27	186	45	9,749	10,045
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022	23,707	2,725	26,433	119,000	123,000	246	29	198	45	24,225	24,959
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022				104,000	108,000	215	25	174	45	459	473
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022				124,000	128,000	256	30	207	45	538	554
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022	10,457	1,185	11,642	132,000	137,000	272	32	220	45	11,027	11,361
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022	25,947	5,277	31,224	135,000	139,000	279	32	224	45	26,527	27,331
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022	10,270	1,207	11,477	137,000	141,000	283	33	228	45	10,858	11,187
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022	113	32	145	133,000	137,000	275	32	221	45	685	706
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022	21,255	4,317	25,573	128,000	132,000	264	31	213	45	21,809	22,470
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022	11,072	1,403	12,475	119,000	123,000	246	29	198	45	11,589	11,940
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023				131,000	136,000	270	31	218	45	565	583
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023	27,645	3,383	31,028	117,000	121,000	241	28	195	45	28,155	29,009
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023	20,360	4,145	24,504	117,000	121,000	241	28	195	45	20,869	21,502
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023	9,895	1,185	11,080	187,000	194,000	386	45	312	45	10,683	11,007
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023	9,843	1,170	11,014	148,000	153,000	305	36	247	45	10,477	10,794
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023	20,360	4,095	24,454	156,000	161,000	322	37	260	45	21,024	21,662
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023	27,178	3,288	30,465	137,000	141,000	283	33	228	45	27,766	28,608
286	240114	CORP-Engineering	Engineer	6/26/2023	9,262	1,884	11,146	97,000	100,000	200	23	161	45	9,692	9,986
287	240114	CORP-Engineering	Project Manager	6/26/2023	8,817	1,776	10,594	172,000	178,000	355	41	286	45	9,545	9,834
288	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	19,084	3,621	22,705	174,000	180,000	359	42	290	45	19,820	20,421
289	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	19,084	3,621	22,705	174,000	180,000	359	42	290	45	19,820	20,421
290	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	19,084	3,621	22,705	174,000	180,000	359	42	290	45	19,820	20,421

Pennsylvania-American Water Company - Water Operations
Group Insurance

					Gross Group Insurance										
Line #	**Cost Center**	**Cost Center Name**		**Original Hire Date**	**Medical Dental & Vision**	**Employee Contribution**	**Net Medical Dental Vision**	**2024 Insurance Coverage**	**2025 Insurance Coverage**	**Basic Life**	**AD&D**	**Long Term Disability**	**Short Term Disability**	**2024 Total Gross Group Insurance**	**2025 Total Gross Group Insurance**
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023	19,084	3,621	22,705	149,000	154,000	308	36	248	45	19,721	20,319
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023	19,084	3,621	22,705	149,000	154,000	308	36	248	45	19,721	20,319
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Filled	12/31/2023	19,084	3,621	22,705	174,000	180,000	359	42	290	45	19,820	20,421
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023	19,084	3,621	22,705	149,000	154,000	308	36	248	45	19,721	20,319
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Filled	12/31/2023	19,084	3,621	22,705	149,000	154,000	308	36	248	45	19,721	20,319
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Filled	12/31/2023	19,084	3,621	22,705	149,000	154,000	308	36	248	45	19,721	20,319
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Filled	12/31/2023	19,084	3,621	22,705	200,000	200,000	413	48	436	45	20,025	20,633
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Filled	12/31/2023	19,084	3,621	22,705	200,000	200,000	413	48	358	45	19,947	20,552
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023	19,084	3,621	22,705	149,000	154,000	308	36	248	45	19,721	20,319
			Total Non-Collective Bargaining Unit Salary		$5,642,572	$1,060,716	$6,703,288	$44,704,000	$45,972,000	$92,269	$10,729	$77,168	$13,527	$5,836,265	$6,013,212
													Vacancy Rate	1.76%	1.76%
													Vacancy Adjustment	$102,532	$105,641
												Total Non-Collective Bargaining Unit Salary		$5,733,733	$5,907,571
Collective Bargaining Unit															
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	$8,651	$2,045	$10,696	$95,000	$97,000	$196	$2	$0	$45	$8,895	$9,165
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	8,651	2,045	10,696	96,000	98,000	198	2	-	45	8,897	9,167
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	18,670	3,791	22,461	94,000	97,000	194	2	-	45	18,911	19,485
4	241103	PITT-Cust Service	Field Service Representative U537P	3/31/1994	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	26,402	4,616	31,018	97,000	100,000	200	2	-	45	26,650	27,458
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987	15,320	3,884	19,204	95,000	98,000	196	2	-	45	15,564	16,036
7	241103	PITT-Cust Service	Field Service Representative U537P	2/2/1988	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	18,670	3,736	22,405	102,000	105,000	211	2	-	45	18,928	19,502
9	241103	PITT-Cust Service	Field Service Representative U537P	7/5/1983	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	2/1/1985	18,670	3,791	22,461	97,000	100,000	200	2	-	45	18,918	19,491
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	26,402	4,616	31,018	97,000	100,000	200	2	-	45	26,650	27,458
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991	-	-	-	96,000	98,000	198	2	-	45	246	253
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	4/22/1991	8,651	2,045	10,696	98,000	100,000	202	2	-	45	8,901	9,171
14	241103	PITT-Cust Service	Field Service Representative U537P	5/6/1985	15,320	3,932	19,252	95,000	97,000	196	2	-	45	15,564	16,036
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	26,402	4,553	30,955	95,000	97,000	196	2	-	45	26,646	27,454
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	26,402	4,602	31,004	98,000	101,000	202	2	-	45	26,652	27,460
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	26,402	4,616	31,018	96,000	98,000	198	2	-	45	26,648	27,456
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	27,614	3,218	30,831	94,000	96,000	194	2	-	45	27,855	28,700
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	8,651	2,045	10,696	96,000	97,000	198	2	-	45	8,897	9,167
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	26,402	4,539	30,941	98,000	100,000	202	2	-	45	26,652	27,460
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	18,670	3,791	22,461	94,000	96,000	194	2	-	45	18,911	19,485
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	9,095	2,168	11,263	95,000	97,000	196	2	-	45	9,339	9,622
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	18,670	3,746	22,416	96,000	98,000	198	2	-	45	18,916	19,489
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	26,402	4,553	30,955	96,000	98,000	198	2	-	45	26,648	27,456
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	26,402	4,553	30,955	95,000	97,000	196	2	-	45	26,646	27,454
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	18,670	3,791	22,461	94,000	96,000	194	2	-	45	18,911	19,485
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	18,670	3,746	22,416	96,000	97,000	198	2	-	45	18,916	19,489
31	243301	BUTL-Production	Operator U537O	5/4/1998	1,171	325	1,496	98,000	100,000	202	2	-	45	1,421	1,464
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
34	243301	BUTL-Production	Operator U537O	11/2/1984	18,670	3,736	22,405	98,000	100,000	202	2	-	45	18,920	19,493
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	848	236	1,084	94,000	96,000	194	2	-	45	1,090	1,123
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	9,095	2,158	11,253	96,000	97,000	198	2	-	45	9,341	9,624
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	8,651	2,045	10,696	98,000	100,000	202	2	-	45	8,901	9,171
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	632	175	807	95,000	97,000	196	2	-	45	876	902
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	18,670	3,736	22,405	95,000	97,000	196	2	-	45	18,913	19,487
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	18,670	3,791	22,461	96,000	98,000	198	2	-	45	18,916	19,489
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	8,651	2,045	10,696	96,000	97,000	198	2	-	45	8,897	9,167
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	18,670	3,746	22,416	87,000	90,000	180	2	-	45	18,897	19,470
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	15,320	3,932	19,252	85,000	88,000	175	2	-	45	15,543	16,015
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	26,402	4,616	31,018	84,000	87,000	173	2	-	45	26,623	27,430
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	18,670	3,746	22,416	86,000	89,000	178	2	-	45	18,895	19,468
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988	18,670	3,791	22,461	87,000	90,000	180	2	-	45	18,897	19,470
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987	18,670	3,791	22,461	87,000	89,000	180	2	-	45	18,897	19,470
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	8,651	2,045	10,696	83,000	86,000	171	2	-	45	8,870	9,139
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	18,670	3,791	22,461	87,000	90,000	180	2	-	45	18,897	19,470
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	18,670	3,791	22,461	85,000	88,000	175	2	-	45	18,893	19,466
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	26,402	4,616	31,018	85,000	88,000	175	2	-	45	26,625	27,432
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	26,402	4,553	30,955	86,000	89,000	178	2	-	45	26,627	27,435
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	26,402	4,553	30,955	86,000	89,000	178	2	-	45	26,627	27,435
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	8,651	2,045	10,696	83,000	86,000	171	2	-	45	8,870	9,139
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	8,651	2,045	10,696	83,000	86,000	171	2	-	45	8,870	9,139
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	26,402	4,553	30,955	87,000	90,000	180	2	-	45	26,629	27,437
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	26,402	4,553	30,955	86,000	89,000	178	2	-	45	26,627	27,435
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	18,670	3,746	22,416	86,000	89,000	178	2	-	45	18,895	19,468
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	18,670	3,791	22,461	83,000	86,000	171	2	-	45	18,889	19,461
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	18,670	3,791	22,461	85,000	88,000	175	2	-	45	18,893	19,466
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	18,670	3,791	22,461	82,000	85,000	169	2	-	45	18,887	19,459
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	18,670	3,791	22,461	87,000	89,000	180	2	-	45	18,897	19,470
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	15,320	3,893	19,213	86,000	89,000	178	2	-	45	15,546	16,017
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	8,651	2,045	10,696	87,000	90,000	180	2	-	45	8,878	9,148
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	8,651	2,018	10,669	86,000	89,000	178	2	-	45	8,876	9,145
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986	18,670	3,791	22,461	85,000	88,000	175	2	-	45	18,893	19,466
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	18,670	3,791	22,461	85,000	88,000	175	2	-	45	18,893	19,466
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	15,320	3,932	19,252	85,000	87,000	175	2	-	45	15,543	16,015

Pennsylvania-American Water Company - Water Operations
Group Insurance

								Gross Group Insurance							
Line #	**Cost Center**	**Cost Center Name**		**Original Hire Date**	**Medical Dental & Vision**	**Employee Contribution**	**Net Medical Dental Vision**	**2024 Insurance Coverage**	**2025 Insurance Coverage**	**Basic Life**	**AD&D**	**Long Term Disability**	**Short Term Disability**	**2024 Total Gross Group Insurance**	**2025 Total Gross Group Insurance**
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	8,651	2,018	10,669	86,000	89,000	178	2	-	45	8,876	9,145
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	8,651	2,018	10,669	86,000	89,000	178	2	-	45	8,876	9,145
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	18,670	3,791	22,461	84,000	87,000	173	2	-	45	18,891	19,464
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	9,755	1,110	10,864	86,000	89,000	178	2	-	45	9,980	10,282
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	18,670	3,781	22,451	86,000	89,000	178	2	-	45	18,895	19,468
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	18,670	3,791	22,461	84,000	87,000	173	2	-	45	18,891	19,464
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	26,402	4,616	31,018	82,000	84,000	169	2	-	45	26,619	27,426
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	26,402	4,616	31,018	85,000	88,000	175	2	-	45	26,625	27,432
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	26,402	4,616	31,018	82,000	84,000	169	2	-	45	26,619	27,426
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	18,670	3,791	22,461	85,000	88,000	175	2	-	45	18,893	19,466
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	18,670	3,791	22,461	87,000	89,000	180	2	-	45	18,897	19,470
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	26,402	4,616	31,018	84,000	87,000	173	2	-	45	26,623	27,430
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	18,670	3,791	22,461	85,000	88,000	175	2	-	45	18,893	19,466
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	26,402	4,616	31,018	85,000	87,000	175	2	-	45	26,625	27,432
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	8,651	2,018	10,669	86,000	89,000	178	2	-	45	8,876	9,145
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	18,670	3,791	22,461	89,000	91,000	184	2	-	45	18,901	19,474
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	8,651	2,045	10,696	95,000	98,000	196	2	-	45	8,895	9,165
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	26,402	4,602	31,004	87,000	89,000	180	2	-	45	26,629	27,437
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	8,651	2,045	10,696	90,000	92,000	186	2	-	45	8,885	9,154
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	18,670	3,746	22,416	86,000	89,000	178	2	-	45	18,895	19,468
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996	9,327	1,200	10,527	89,000	91,000	184	2	-	45	9,559	9,849
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	18,670	3,746	22,416	89,000	91,000	184	2	-	45	18,901	19,474
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	15,320	3,932	19,252	89,000	91,000	184	2	-	45	15,552	16,023
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	18,670	3,746	22,416	93,000	96,000	192	2	-	45	18,909	19,483
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	8,651	2,018	10,669	87,000	89,000	180	2	-	45	8,878	9,148
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	8,651	2,045	10,696	95,000	98,000	196	2	-	45	8,895	9,165
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	8,651	2,045	10,696	95,000	98,000	196	2	-	45	8,895	9,165
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	18,670	3,791	22,461	95,000	98,000	196	2	-	45	18,914	19,487
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	26,402	4,553	30,955	95,000	97,000	196	2	-	45	26,646	27,454
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	8,651	2,045	10,696	102,000	105,000	211	2	-	45	8,909	9,179
117	241103	PITT-Cust Service	Field Service Representative U537P	11/18/1998	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
118	244101	INDI-Production	Operator U537O	8/9/1999	8,651	2,023	10,674	98,000	100,000	202	2	-	45	8,901	9,171
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	8,651	2,045	10,696	88,000	90,000	182	2	-	45	8,880	9,150
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	1,171	325	1,496	95,000	98,000	196	2	-	45	1,415	1,457
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	18,670	3,736	22,405	87,000	90,000	180	2	-	45	18,897	19,470
125	241103	PITT-Cust Service	Field Service Representative U537P	12/28/2001	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	26,402	4,553	30,955	94,000	96,000	194	2	-	45	26,644	27,452
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	18,670	3,746	22,416	98,000	100,000	202	2	-	45	18,920	19,493
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	26,402	4,553	30,955	95,000	97,000	196	2	-	45	26,646	27,454
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	9,755	1,110	10,864	95,000	97,000	196	2	-	45	9,998	10,301
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	8,651	2,045	10,696	89,000	91,000	184	2	-	45	8,882	9,152
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	18,670	3,746	22,416	95,000	98,000	196	2	-	45	18,913	19,487
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	15,320	3,932	19,252	97,000	100,000	200	2	-	45	15,568	16,040
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	26,402	4,616	31,018	83,000	86,000	171	2	-	45	26,621	27,428
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	9,755	1,110	10,864	98,000	100,000	202	2	-	45	10,004	10,308
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002	8,651	2,045	10,696	95,000	98,000	196	2	-	45	8,895	9,165
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	8,651	2,045	10,696	95,000	98,000	196	2	-	45	8,895	9,165
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	18,670	3,746	22,416	95,000	97,000	196	2	-	45	18,913	19,487
139	241103	PITT-Cust Service	Field Service Representative U537P	4/14/2003	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	8,651	2,045	10,696	97,000	100,000	200	2	-	45	8,899	9,169
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	26,402	4,553	30,955	83,000	86,000	171	2	-	45	26,621	27,428
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	8,651	2,045	10,696	97,000	100,000	200	2	-	45	8,899	9,169
144	241103	PITT-Cust Service	Field Service Representative U537P	8/29/2003	15,320	3,932	19,252	95,000	97,000	196	2	-	45	15,564	16,036
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	26,360	4,541	30,901	94,000	96,000	194	2	-	45	26,602	27,409
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	26,402	4,616	31,018	89,000	91,000	184	2	-	45	26,633	27,441
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	8,651	2,018	10,669	87,000	90,000	180	2	-	45	8,878	9,148
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	8,974	2,135	11,109	97,000	99,000	200	2	-	45	9,222	9,501
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	18,670	3,791	22,461	96,000	99,000	198	2	-	45	18,916	19,489
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	15,320	3,932	19,252	82,000	84,000	169	2	-	45	15,537	16,008
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005	8,599	2,008	10,607	96,000	98,000	198	2	-	45	8,844	9,113
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	15,320	3,932	19,252	95,000	96,000	196	2	-	45	15,564	16,036
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	26,402	4,616	31,018	89,000	91,000	184	2	-	45	26,633	27,441
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	15,320	3,932	19,252	95,000	97,000	196	2	-	45	15,564	16,036
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	8,651	2,023	10,674	94,000	96,000	194	2	-	45	8,893	9,162
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	8,651	2,023	10,674	95,000	98,000	196	2	-	45	8,895	9,164
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	8,651	2,045	10,696	89,000	91,000	184	2	-	45	8,882	9,152
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	-	-	-	95,000	97,000	196	2	-	45	244	251
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	26,402	4,553	30,955	82,000	85,000	169	2	-	45	26,619	27,426
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005	15,320	3,884	19,204	86,000	89,000	178	2	-	45	15,545	16,017
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	18,670	3,791	22,461	87,000	89,000	180	2	-	45	18,897	19,470
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	26,402	4,539	30,941	95,000	97,000	196	2	-	45	26,646	27,454
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	-	-	-	94,000	97,000	194	2	-	45	242	249
165	241103	PITT-Cust Service	Field Service Representative U537P	12/19/2005	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	15,320	3,932	19,252	94,000	96,000	194	2	-	45	15,562	16,034
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	26,402	4,553	30,955	97,000	100,000	200	2	-	45	26,650	27,458
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	26,402	4,553	30,955	97,000	100,000	200	2	-	45	26,650	27,458
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	26,402	4,616	31,018	96,000	98,000	198	2	-	45	26,648	27,456
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	18,283	3,652	21,936	95,000	97,000	196	2	-	45	18,527	19,089
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	-	-	-	97,000	100,000	200	2	-	45	248	255
172	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	15,320	3,932	19,252	82,000	85,000	169	2	-	45	15,537	16,008
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	8,651	2,045	10,696	82,000	85,000	169	2	-	45	8,868	9,137
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	8,651	2,018	10,669	97,000	100,000	200	2	-	45	8,899	9,169
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	9,702	1,073	10,775	96,000	98,000	198	2	-	45	9,948	10,249
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	26,402	4,616	31,018	96,000	98,000	198	2	-	45	26,648	27,456
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	26,402	4,553	30,955	94,000	96,000	194	2	-	45	26,644	27,452

Pennsylvania-American Water Company - Water Operations
Group Insurance

					Gross Group Insurance										
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	18,670	3,791	22,461	83,000	86,000	171	2	-	45	18,889	19,461
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	18,670	3,791	22,461	97,000	100,000	200	2	-	45	18,918	19,491
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	18,670	3,791	22,461	87,000	90,000	180	2	-	45	18,897	19,470
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	15,320	3,932	19,252	98,000	100,000	202	2	-	45	15,570	16,042
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	8,651	2,040	10,691	96,000	98,000	198	2	-	45	8,897	9,167
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	18,670	3,791	22,461	87,000	90,000	180	2	-	45	18,897	19,470
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	18,670	3,791	22,461	94,000	96,000	194	2	-	45	18,911	19,485
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	8,651	2,045	10,696	87,000	89,000	180	2	-	45	8,878	9,148
190	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	1,019	282	1,301	95,000	97,000	196	2	-	45	1,262	1,301
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	8,651	2,023	10,674	94,000	96,000	194	2	-	45	8,893	9,162
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	15,320	3,884	19,204	95,000	97,000	196	2	-	45	15,564	16,036
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	26,402	4,553	30,955	86,000	89,000	178	2	-	45	26,627	27,435
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	26,402	4,553	30,955	95,000	98,000	196	2	-	45	26,646	27,454
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	8,651	2,040	10,691	97,000	100,000	200	2	-	45	8,899	9,169
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	-	-	-	94,000	96,000	194	2	-	45	242	249
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	8,651	2,045	10,696	82,000	85,000	169	2	-	45	8,868	9,137
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	18,670	3,746	22,416	82,000	85,000	169	2	-	45	18,887	19,459
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007	26,402	4,616	31,018	82,000	85,000	169	2	-	45	26,619	27,426
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	15,320	3,923	19,244	87,000	90,000	180	2	-	45	15,547	16,019
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	26,402	4,553	30,955	88,000	91,000	182	2	-	45	26,631	27,439
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	15,320	3,932	19,252	80,000	82,000	165	2	-	45	15,533	16,004
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	8,651	2,045	10,696	89,000	91,000	184	2	-	45	8,882	9,152
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	8,651	2,023	10,674	87,000	90,000	180	2	-	45	8,878	9,147
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	15,320	3,932	19,252	82,000	85,000	169	2	-	45	15,537	16,008
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	26,402	4,616	31,018	94,000	97,000	194	2	-	45	26,644	27,452
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	-	-	-	97,000	100,000	200	2	-	45	248	255
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	18,670	3,791	22,461	87,000	89,000	180	2	-	45	18,897	19,470
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	26,402	4,616	31,018	87,000	89,000	180	2	-	45	26,629	27,437
216	244101	INDI-Production	Operator U537O	8/13/2007	15,320	3,932	19,252	98,000	100,000	202	2	-	45	15,570	16,042
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	18,670	3,746	22,416	82,000	85,000	169	2	-	45	18,887	19,459
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	26,402	4,616	31,018	84,000	87,000	173	2	-	45	26,623	27,430
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	26,402	4,616	31,018	96,000	98,000	198	2	-	45	26,648	27,456
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007	8,651	2,023	10,674	94,000	96,000	194	2	-	45	8,893	9,162
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	26,402	4,616	31,018	89,000	92,000	184	2	-	45	26,633	27,441
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	26,402	4,616	31,018	95,000	98,000	196	2	-	45	26,646	27,454
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	8,651	2,045	10,696	82,000	85,000	169	2	-	45	8,868	9,137
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007	26,402	4,616	31,018	87,000	90,000	180	2	-	45	26,629	27,437
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	18,670	3,791	22,461	96,000	98,000	198	2	-	45	18,916	19,489
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008	26,402	4,553	30,955	94,000	96,000	194	2	-	45	26,644	27,452
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	8,651	2,045	10,696	91,000	93,000	188	2	-	45	8,887	9,156
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008	8,932	2,084	11,015	94,000	96,000	194	2	-	45	9,173	9,452
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	18,670	3,791	22,461	87,000	90,000	180	2	-	45	18,897	19,470
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	15,320	3,932	19,252	86,000	89,000	178	2	-	45	15,546	16,017
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	26,402	4,553	30,955	94,000	97,000	194	2	-	45	26,644	27,452
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	8,651	2,045	10,696	88,000	90,000	182	2	-	45	8,880	9,150
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	26,402	4,616	31,018	94,000	97,000	194	2	-	45	26,644	27,452
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008	26,402	4,616	31,018	91,000	93,000	188	2	-	45	26,638	27,445
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	26,402	4,616	31,018	96,000	98,000	198	2	-	45	26,648	27,456
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	9,755	1,110	10,864	95,000	98,000	196	2	-	45	9,998	10,301
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	8,651	2,045	10,696	96,000	99,000	198	2	-	45	8,897	9,167
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	9,754	1,088	10,842	94,000	96,000	194	2	-	45	9,996	10,299
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	15,320	3,932	19,252	94,000	96,000	194	2	-	45	15,562	16,034
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	26,402	4,539	30,941	95,000	97,000	196	2	-	45	26,646	27,454
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	15,320	3,932	19,252	95,000	97,000	196	2	-	45	15,564	16,036
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009	15,320	3,932	19,252	86,000	89,000	178	2	-	45	15,546	16,017
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	26,402	4,616	31,018	82,000	84,000	169	2	-	45	26,619	27,426
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	18,670	3,791	22,461	96,000	99,000	198	2	-	45	18,916	19,489
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	8,651	2,018	10,669	94,000	96,000	194	2	-	45	8,893	9,162
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	26,402	4,553	30,955	95,000	97,000	196	2	-	45	26,646	27,454
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009	26,402	4,616	31,018	93,000	95,000	192	2	-	45	26,642	27,449
257	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	15,320	3,932	19,252	95,000	97,000	196	2	-	45	15,564	16,036
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	15,320	3,932	19,252	94,000	96,000	194	2	-	45	15,562	16,034
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	8,651	2,023	10,674	94,000	96,000	194	2	-	45	8,893	9,162
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	-	-	-	94,000	96,000	194	2	-	45	242	249
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	15,320	3,932	19,252	94,000	96,000	194	2	-	45	15,562	16,034
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	15,226	3,905	19,131	97,000	100,000	200	2	-	45	15,474	15,943
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	8,651	2,023	10,674	86,000	89,000	178	2	-	45	8,876	9,145
268	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	18,670	3,791	22,461	95,000	97,000	196	2	-	45	18,914	19,487
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	18,670	3,791	22,461	87,000	90,000	180	2	-	45	18,897	19,470
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	9,755	1,110	10,864	95,000	98,000	196	2	-	45	9,998	10,301
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	8,651	2,018	10,669	94,000	96,000	194	2	-	45	8,893	9,162
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	-	-	-	97,000	99,000	200	2	-	45	248	255
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	-	-	-	94,000	96,000	194	2	-	45	242	249
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	1,171	325	1,496	94,000	96,000	194	2	-	45	1,412	1,455
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	18,670	3,746	22,416	94,000	97,000	194	2	-	45	18,911	19,485
276	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454

Pennsylvania-American Water Company - Water Operations
Group Insurance

								Gross Group Insurance								
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	8,651	2,045	10,696	95,000	97,000	196	2	-	45	8,895	9,165
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	26,402	4,539	30,941	94,000	96,000	194	2	-	45	26,644	27,452
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	26,402	4,616	31,018	95,000	96,000	196	2	-	45	26,646	27,454
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	-	-	-	94,000	96,000	194	2	-	45	242	249
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	-	-	-	96,000	99,000	198	2	-	45	246	253
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	15,320	3,932	19,252	89,000	91,000	184	2	-	45	15,552	16,023
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	404	112	516	94,000	96,000	194	2	-	45	645	665
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	26,402	4,553	30,955	94,000	96,000	194	2	-	45	26,644	27,452
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	-	-	-	94,000	96,000	194	2	-	45	242	249
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	404	112	516	96,000	99,000	198	2	-	45	650	669
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	8,651	2,018	10,669	94,000	96,000	194	2	-	45	8,893	9,162
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	18,670	3,791	22,461	93,000	95,000	192	2	-	45	18,909	19,483
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012	15,320	3,884	19,204	86,000	89,000	178	2	-	45	15,545	16,017
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	15,320	3,932	19,252	98,000	101,000	202	2	-	45	15,570	16,042
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	8,651	2,045	10,696	82,000	84,000	169	2	-	45	8,868	9,137
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	-	-	-	91,000	93,000	188	2	-	45	235	243
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	8,651	2,045	10,696	96,000	98,000	198	2	-	45	8,897	9,167
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013	15,320	3,932	19,252	98,000	101,000	202	2	-	45	15,570	16,042
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	152	43	195	94,000	96,000	194	2	-	45	394	406
304	244101	INDI-Production	Operator U537O	5/13/2013	9,755	1,083	10,838	98,000	100,000	202	2	-	45	10,004	10,308
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	8,651	2,045	10,696	96,000	99,000	198	2	-	45	8,897	9,167
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	18,670	3,736	22,405	95,000	97,000	196	2	-	45	18,913	19,487
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	-	-	-	95,000	97,000	196	2	-	45	244	251
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	26,402	4,553	30,955	94,000	97,000	194	2	-	45	26,644	27,452
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	9,755	1,110	10,864	82,000	85,000	169	2	-	45	9,971	10,274
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	15,320	3,923	19,244	95,000	97,000	196	2	-	45	15,564	16,036
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	26,402	4,539	30,941	87,000	90,000	180	2	-	45	26,629	27,437
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	26,402	4,602	31,004	97,000	100,000	200	2	-	45	26,650	27,458
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	18,670	3,746	22,416	83,000	86,000	171	2	-	45	18,889	19,461
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	26,402	4,616	31,018	82,000	85,000	169	2	-	45	26,619	27,426
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014	8,651	2,045	10,696	91,000	93,000	188	2	-	45	8,887	9,156
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	9,755	1,110	10,864	95,000	98,000	196	2	-	45	9,998	10,301
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	-	-	-	98,000	100,000	202	2	-	45	250	257
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
324	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014	8,651	2,018	10,669	95,000	97,000	196	2	-	45	8,895	9,165
325	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	8,651	2,045	10,696	94,000	96,000	194	2	-	45	8,893	9,162
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	15,320	3,932	19,252	94,000	97,000	194	2	-	45	15,562	16,034
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	26,402	4,616	31,018	94,000	97,000	194	2	-	45	26,644	27,452
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	8,651	2,018	10,669	94,000	97,000	194	2	-	45	8,893	9,162
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	8,651	2,045	10,696	98,000	100,000	202	2	-	45	8,901	9,171
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	-	-	-	86,000	89,000	178	2	-	45	225	232
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	8,651	2,045	10,696	98,000	101,000	202	2	-	45	8,901	9,171
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	8,651	2,040	10,691	95,000	97,000	196	2	-	45	8,895	9,165
335	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015	18,670	3,791	22,461	92,000	94,000	190	2	-	45	18,907	19,481
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	-	-	-	93,000	95,000	192	2	-	45	240	247
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016	8,651	2,018	10,669	94,000	96,000	194	2	-	45	8,893	9,162
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	8,651	2,018	10,669	86,000	89,000	178	2	-	45	8,876	9,145
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	9,702	1,073	10,775	87,000	90,000	180	2	-	45	9,929	10,230
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	26,402	4,602	31,004	94,000	96,000	194	2	-	45	26,644	27,452
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	9,004	1,088	10,092	94,000	96,000	194	2	-	45	9,246	9,526
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	18,670	3,791	22,461	94,000	96,000	194	2	-	45	18,911	19,485
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	26,402	4,553	30,955	92,000	94,000	190	2	-	45	26,640	27,447
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	8,651	2,023	10,674	83,000	86,000	171	2	-	45	8,870	9,139
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	26,402	4,616	31,018	94,000	96,000	194	2	-	45	26,644	27,452
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016	8,651	2,040	10,691	97,000	99,000	200	2	-	45	8,899	9,169
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	-	-	-	88,000	90,000	182	2	-	45	229	236
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	26,402	4,616	31,018	88,000	91,000	182	2	-	45	26,631	27,439
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012	8,651	2,045	10,696	81,000	82,000	167	2	-	45	8,866	9,135
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011	26,402	4,616	31,018	81,000	82,000	167	2	-	45	26,617	27,424
353	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	8,651	2,045	10,696	92,000	94,000	190	2	-	45	8,889	9,158
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	26,402	4,553	30,955	97,000	99,000	200	2	-	45	26,650	27,458
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	18,670	3,791	22,461	86,000	89,000	178	2	-	45	18,895	19,468
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	8,651	2,018	10,669	94,000	96,000	194	2	-	45	8,893	9,162
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	18,670	3,746	22,416	86,000	89,000	178	2	-	45	18,895	19,468
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	26,402	4,616	31,018	87,000	90,000	180	2	-	45	26,629	27,437
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	15,320	3,932	19,252	86,000	89,000	178	2	-	45	15,546	16,017
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	15,320	3,932	19,252	89,000	92,000	184	2	-	45	15,552	16,023
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	26,402	4,616	31,018	81,000	82,000	167	2	-	45	26,617	27,424
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	-	-	-	92,000	93,000	190	2	-	45	238	245
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	8,651	2,045	10,696	84,000	87,000	173	2	-	45	8,872	9,141
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	18,670	3,791	22,461	97,000	99,000	200	2	-	45	18,918	19,491
365	244601	KANE-Production	Operator U537O	11/6/2017	1,171	325	1,496	95,000	97,000	196	2	-	45	1,415	1,457
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	18,670	3,746	22,416	86,000	89,000	178	2	-	45	18,895	19,468
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	18,670	3,791	22,461	87,000	89,000	180	2	-	45	18,897	19,470
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	-	-	-	91,000	93,000	188	2	-	45	235	243
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	15,320	3,932	19,252	91,000	93,000	188	2	-	45	15,556	16,027
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	26,402	4,616	31,018	91,000	93,000	188	2	-	45	26,638	27,445
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	26,402	4,616	31,018	95,000	97,000	196	2	-	45	26,646	27,454
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	8,651	2,023	10,674	92,000	95,000	190	2	-	45	8,889	9,158

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Group Insurance

				Gross Group Insurance											
Line #	Cost Center	Cost Center Name	Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
374	241106	PITT-Field Services	2/27/2018	8,651	2,045	10,696	89,000	92,000	184	2	-	45	8,882	9,152
375	245206	YARD-Field Services	3/26/2018	26,402	4,616	31,018	83,000	85,000	171	2	-	45	26,621	27,428
376	249160	WILK-Watres	4/30/2018	15,320	3,893	19,213	86,000	89,000	178	2	-	45	15,546	16,017
377	243106	NEWC-Field Services	4/30/2018	9,005	1,083	10,088	91,000	93,000	188	2	-	45	9,240	9,520
378	249106	WILK-Field Services	4/23/2018	26,402	4,553	30,955	83,000	86,000	171	2	-	45	26,621	27,428
379	249106	WILK-Field Services	5/1/2018	8,651	2,045	10,696	85,000	87,000	175	2	-	45	8,874	9,143
380	246106	MECH-Field Services	5/14/2018	848	236	1,084	82,000	84,000	169	2	-	45	1,065	1,097
381	249106	WILK-Field Services	5/29/2018	-	-	-	86,000	89,000	178	2	-	45	225	232
382	249106	WILK-Field Services	6/4/2018	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
383	241152	PITT-Production Aldr	7/3/2018	8,651	2,023	10,674	91,000	93,000	188	2	-	45	8,887	9,156
384	249103	WILK-Cust Service	7/9/2018	-	-	-	87,000	90,000	180	2	-	45	227	234
385	241106	PITT-Field Services	7/10/2018	26,402	4,616	31,018	89,000	92,000	184	2	-	45	26,633	27,441
386	243106	NEWC-Field Services	7/2/2018	17,709	1,997	19,706	89,000	91,000	184	2	-	45	17,940	18,484
387	241152	PITT-Production Aldr	7/23/2018	8,651	2,045	10,696	96,000	98,000	198	2	-	45	8,897	9,167
388	241106	PITT-Field Services	7/24/2018	8,651	2,040	10,691	89,000	92,000	184	2	-	45	8,883	9,152
389	243103	NEWC-Cust Service	7/9/2018	8,651	2,040	10,691	89,000	91,000	184	2	-	45	8,883	9,152
390	242306	UNTN-Field Services	7/30/2018	8,651	2,023	10,674	89,000	91,000	184	2	-	45	8,882	9,152
391	246103	MECH-Cust Service	8/7/2018	9,754	1,088	10,842	80,000	82,000	165	2	-	45	9,967	10,269
392	241106	PITT-Field Services	8/27/2018	8,651	2,023	10,674	89,000	92,000	184	2	-	45	8,882	9,152
393	241103	PITT-Cust Service	9/4/2018	8,651	2,045	10,696	89,000	92,000	184	2	-	45	8,882	9,152
394	243106	NEWC-Field Services	10/15/2018	26,402	4,553	30,955	89,000	91,000	184	2	-	45	26,633	27,441
395	243301	BUTL-Production	10/22/2018	26,402	4,616	31,018	92,000	94,000	190	2	-	45	26,640	27,447
396	242206	MONVA-Field Services	10/29/2018	26,402	4,539	30,941	89,000	91,000	184	2	-	45	26,633	27,441
397	241151	PITT-Production Haye	11/5/2018	15,320	3,884	19,204	91,000	93,000	188	2	-	45	15,556	16,027
398	249106	WILK-Field Services	1/14/2019	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
399	249106	WILK-Field Services	1/28/2019	26,402	4,616	31,018	86,000	89,000	178	2	-	45	26,627	27,435
400	249106	WILK-Field Services	2/11/2019	26,402	4,616	31,018	84,000	87,000	173	2	-	45	26,623	27,430
401	249152	WILK-Ceasetown	2/11/2019	9,754	1,088	10,842	86,000	89,000	178	2	-	45	9,980	10,282
402	249106	WILK-Field Services	2/11/2019	9,755	1,083	10,838	86,000	89,000	178	2	-	45	9,980	10,282
403	249106	WILK-Field Services	3/12/2019	53	10	63	82,000	85,000	169	2	-	45	269	278
404	249106	WILK-Field Services	3/13/2019	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
405	249106	WILK-Field Services	3/18/2019	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
406	249106	WILK-Field Services	7/8/2019	8,651	2,023	10,674	86,000	89,000	178	2	-	45	8,876	9,145
407	242106	MCMR-Field Services	7/8/2019	8,651	2,040	10,691	86,000	88,000	178	2	-	45	8,876	9,146
408	242106	MCMR-Field Services	7/9/2019	-	-	-	86,000	88,000	178	2	-	45	225	232
409	249160	WILK-Watres	7/29/2019	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
410	242206	MONVA-Field Services	7/29/2019	26,402	4,616	31,018	86,000	88,000	178	2	-	45	26,627	27,435
411	249151	WILK-Brownell	7/30/2019	9,755	1,110	10,864	86,000	89,000	178	2	-	45	9,980	10,282
412	242103	MCMR-Cust Service	8/5/2019	26,402	4,616	31,018	86,000	88,000	178	2	-	45	26,627	27,435
413	249106	WILK-Field Services	8/6/2019	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
414	243306	BUTL-Field Services	8/5/2019	8,651	2,045	10,696	86,000	88,000	178	2	-	45	8,876	9,145
415	242106	MCMR-Field Services	8/12/2019	9,755	1,110	10,864	88,000	90,000	182	2	-	45	9,984	10,287
416	241106	PITT-Field Services	8/12/2019	26,402	4,616	31,018	90,000	92,000	186	2	-	45	26,636	27,443
417	244601	KANE-Production	9/9/2019	18,670	3,781	22,451	90,000	92,000	186	2	-	45	18,903	19,476
418	243151	NEWC-New Castle	9/23/2019	26,402	4,616	31,018	90,000	92,000	186	2	-	45	26,636	27,443
419	243301	BUTL-Production	9/23/2019	9,755	1,110	10,864	90,000	92,000	186	2	-	45	9,988	10,291
420	241106	PITT-Field Services	10/7/2019	9,755	1,110	10,864	90,000	92,000	186	2	-	45	9,988	10,291
421	242106	MCMR-Field Services	10/21/2019	26,402	4,553	30,955	87,000	89,000	180	2	-	45	26,629	27,437
422	249159	WILK-Nesbitt	11/25/2019	20,410	2,330	22,740	86,000	89,000	178	2	-	45	20,635	21,261
423	246152	MECH-Silver Springs	2/10/2020	9,754	1,088	10,842	82,000	84,000	169	2	-	45	9,971	10,274
424	249103	WILK-Cust Service	3/2/2020	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
425	244306	CLAR-Field Services	3/2/2020	26,402	4,553	30,955	86,000	88,000	178	2	-	45	26,627	27,435
426	242106	MCMR-Field Services	3/17/2020	9,755	1,110	10,864	87,000	89,000	180	2	-	45	9,982	10,284
427	249158	WILK-Lake Scranton	4/13/2020	9,754	1,088	10,842	86,000	89,000	178	2	-	45	9,980	10,282
428	244301	CLAR-Production	4/27/2020	26,402	4,616	31,018	90,000	92,000	186	2	-	45	26,636	27,443
429	249106	WILK-Field Services	4/27/2020	8,651	2,045	10,696	84,000	87,000	173	2	-	45	8,872	9,141
430	240117	CORP-Water Quality	5/18/2020	20,410	2,285	22,695	93,000	95,000	192	2	-	45	20,650	21,276
431	241106	PITT-Field Services	4/27/2020	20,410	2,330	22,740	89,000	91,000	184	2	-	45	20,641	21,267
432	242103	MCMR-Cust Service	5/11/2020	10,522	1,323	11,844	86,000	88,000	178	2	-	45	10,747	11,073
433	242203	MONVAL-Cust Service	6/8/2020	26,402	4,616	31,018	86,000	88,000	178	2	-	45	26,627	27,435
434	249103	WILK-Cust Service	7/13/2020	9,005	1,105	10,110	85,000	88,000	175	2	-	45	9,228	9,508
435	240117	CORP-Water Quality	7/6/2020	8,651	2,018	10,669	81,000	82,000	167	2	-	45	8,866	9,135
436	245206	YARD-Field Services	7/13/2020	15,320	3,932	19,252	69,000	70,000	142	2	-	45	15,510	15,981
437	241106	PITT-Field Services	7/27/2020	8,651	2,045	10,696	87,000	89,000	180	2	-	45	8,878	9,148
438	249152	WILK-Ceasetown	10/26/2020	-	-	-	80,000	83,000	165	2	-	45	213	219
439	249160	WILK-Watres	12/15/2020	26,402	4,602	31,004	85,000	88,000	175	2	-	45	26,625	27,432
440	249106	WILK-Field Services	12/14/2020	26,402	4,616	31,018	86,000	88,000	178	2	-	45	26,627	27,435
441	249160	WILK-Watres	12/21/2020	8,651	2,045	10,696	85,000	88,000	175	2	-	45	8,874	9,143
442	246151	MECH-ProdWestShore	2/1/2021	-	-	-	82,000	84,000	169	2	-	45	217	223
443	246152	MECH-Silver Springs	3/8/2021	8,651	2,045	10,696	82,000	84,000	169	2	-	45	8,868	9,137
444	245206	YARD-Field Services	3/15/2021	18,670	3,791	22,461	69,000	70,000	142	2	-	45	18,860	19,432
445	244101	INDI-Production	3/22/2021	9,755	1,110	10,864	87,000	89,000	180	2	-	45	9,982	10,284
446	242103	MCMR-Cust Service	4/5/2021	9,702	1,095	10,797	84,000	86,000	173	2	-	45	9,923	10,224
447	243152	NEWC-Ellwood	4/26/2021	-	-	-	87,000	89,000	180	2	-	45	227	234
448	249106	WILK-Field Services	4/26/2021	15,320	3,893	19,213	84,000	86,000	173	2	-	45	15,541	16,013
449	249106	WILK-Field Services	5/3/2021	8,651	2,018	10,669	80,000	83,000	165	2	-	45	8,864	9,133
450	242106	MCMR-Field Services	5/3/2021	18,670	3,791	22,461	84,000	85,000	173	2	-	45	18,891	19,464
451	243106	NEWC-Field Services	5/4/2021	8,651	2,023	10,674	84,000	85,000	173	2	-	45	8,872	9,141
452	242306	UNTN-Field Services	5/17/2021	9,755	1,110	10,864	84,000	85,000	173	2	-	45	9,976	10,278
453	241106	PITT-Field Services	5/24/2021	18,670	3,791	22,461	84,000	86,000	173	2	-	45	18,891	19,464
454	243106	NEWC-Field Services	5/24/2021	9,755	1,083	10,838	84,000	85,000	173	2	-	45	9,976	10,278
455	249106	WILK-Field Services	6/7/2021	8,651	2,018	10,669	80,000	82,000	165	2	-	45	8,864	9,133
456	244101	INDI-Production	6/7/2021	26,402	4,616	31,018	87,000	89,000	180	2	-	45	26,629	27,437
457	249106	WILK-Field Services	6/8/2021	-	-	-	84,000	86,000	173	2	-	45	221	228
458	243301	BUTL-Production	6/14/2021	26,402	4,553	30,955	87,000	89,000	180	2	-	45	26,629	27,437
459	245106	NORR-Field Services	7/8/2021	18,670	3,791	22,461	80,000	82,000	165	2	-	45	18,883	19,455
460	249158	WILK-Lake Scranton	8/16/2021	9,005	1,083	10,088	83,000	85,000	171	2	-	45	9,224	9,503
461	244506	WARR-Field Services	8/16/2021	26,402	4,616	31,018	81,000	83,000	167	2	-	45	26,617	27,424
462	242206	MONVA-Field Services	8/16/2021	26,402	4,616	31,018	81,000	83,000	167	2	-	45	26,617	27,424

Pennsylvania-American Water Company - Water Operations
Group Insurance

					Gross Group Insurance										
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	9,754	1,088	10,842	89,000	92,000	184	2	-	45	9,986	10,289
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	20,410	2,330	22,740	81,000	83,000	167	2	-	45	20,625	21,250
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	8,651	2,045	10,696	83,000	85,000	171	2	-	45	8,870	9,139
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	8,651	2,045	10,696	83,000	86,000	171	2	-	45	8,870	9,139
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	8,651	2,045	10,696	82,000	84,000	169	2	-	45	8,868	9,137
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	26,079	4,526	30,605	80,000	82,000	165	2	-	45	26,292	27,089
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	18,670	3,746	22,416	83,000	85,000	171	2	-	45	18,889	19,461
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	8,651	2,045	10,696	74,000	76,000	153	2	-	45	8,852	9,120
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	8,651	2,045	10,696	78,000	80,000	161	2	-	45	8,860	9,128
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	20,410	2,330	22,740	85,000	87,000	175	2	-	45	20,633	21,259
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	9,005	1,083	10,088	88,000	91,000	182	2	-	45	9,234	9,514
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	26,402	4,539	30,941	79,000	81,000	163	2	-	45	26,613	27,420
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	9,983	1,173	11,156	80,000	82,000	165	2	-	45	10,196	10,505
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	9,004	1,088	10,092	83,000	85,000	171	2	-	45	9,223	9,503
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	9,755	1,105	10,860	81,000	83,000	167	2	-	45	9,970	10,272
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	9,755	1,083	10,838	81,000	83,000	167	2	-	45	9,969	10,272
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	9,755	1,110	10,864	81,000	84,000	167	2	-	45	9,969	10,272
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	9,702	1,095	10,797	79,000	81,000	163	2	-	45	9,913	10,213
481	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	8,651	2,045	10,696	82,000	85,000	169	2	-	45	8,868	9,137
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	18,559	3,760	22,320	82,000	84,000	169	2	-	45	18,776	19,345
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	9,755	1,110	10,864	77,000	80,000	159	2	-	45	9,961	10,263
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	8,651	2,045	10,696	81,000	84,000	167	2	-	45	8,866	9,135
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	26,402	4,616	31,018	82,000	84,000	169	2	-	45	26,619	27,426
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	15,320	3,932	19,252	82,000	84,000	169	2	-	45	15,537	16,008
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	8,974	2,087	11,061	81,000	84,000	167	2	-	45	9,189	9,467
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	26,402	4,553	30,955	80,000	83,000	165	2	-	45	26,615	27,422
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	26,402	4,553	30,955	81,000	84,000	167	2	-	45	26,617	27,424
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022	52	15	67	84,000	86,000	173	2	-	45	273	282
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	-	-	-	82,000	84,000	169	2	-	45	217	223
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	26,402	4,616	31,018	82,000	84,000	169	2	-	45	26,619	27,426
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	8,651	2,023	10,674	82,000	84,000	169	2	-	45	8,868	9,137
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	9,755	1,110	10,864	88,000	91,000	182	2	-	45	9,984	10,287
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	8,651	2,045	10,696	79,000	81,000	163	2	-	45	8,862	9,131
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	9,754	1,088	10,842	75,000	78,000	155	2	-	45	9,957	10,259
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	18,670	3,791	22,461	79,000	81,000	163	2	-	45	18,881	19,453
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	26,402	4,616	31,018	83,000	85,000	171	2	-	45	26,621	27,428
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	26,402	4,616	31,018	84,000	87,000	173	2	-	45	26,623	27,430
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	10,130	1,110	11,239	80,000	83,000	165	2	-	45	10,342	10,656
501	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	16,209	1,997	18,206	82,000	85,000	169	2	-	45	16,425	16,923
502	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	8,651	2,023	10,674	82,000	85,000	169	2	-	45	8,868	9,137
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	26,402	4,553	30,955	80,000	83,000	165	2	-	45	26,615	27,422
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	9,942	1,088	11,030	83,000	85,000	171	2	-	45	10,161	10,469
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	25,384	4,334	29,717	72,000	74,000	149	2	-	45	25,580	26,355
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	8,651	2,023	10,674	76,000	78,000	157	2	-	45	8,856	9,124
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	18,226	3,668	21,894	80,000	83,000	165	2	-	45	18,438	18,997
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	26,402	4,616	31,018	78,000	80,000	161	2	-	45	26,611	27,418
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	26,402	4,616	31,018	80,000	83,000	165	2	-	45	26,615	27,422
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	1,171	325	1,496	82,000	85,000	169	2	-	45	1,388	1,430
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	9,755	1,083	10,838	85,000	87,000	175	2	-	45	9,978	10,280
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	15,320	3,932	19,252	85,000	87,000	175	2	-	45	15,543	16,015
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	9,755	1,110	10,864	78,000	80,000	161	2	-	45	9,963	10,265
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	15,320	3,932	19,252	78,000	80,000	161	2	-	45	15,529	16,000
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	9,755	1,110	10,864	80,000	82,000	165	2	-	45	9,967	10,270
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	-	-	-	78,000	80,000	161	2	-	45	209	215
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	17,334	1,997	19,331	81,000	83,000	167	2	-	45	17,548	18,080
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	9,567	1,110	10,677	85,000	87,000	175	2	-	45	9,790	10,087
519	243301	BUTL-Production	Operator U537O	3/20/2023	26,402	4,616	31,018	82,000	84,000	169	2	-	45	26,619	27,426
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	18,670	3,791	22,461	82,000	84,000	169	2	-	45	18,887	19,459
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	18,670	3,791	22,461	79,000	81,000	163	2	-	45	18,881	19,453
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	9,567	1,110	10,677	82,000	85,000	169	2	-	45	9,784	10,081
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	9,567	1,110	10,677	82,000	84,000	169	2	-	45	9,784	10,081
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	-	-	-	84,000	86,000	173	2	-	45	221	228
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	8,651	2,018	10,669	84,000	86,000	173	2	-	45	8,872	9,141
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	9,567	1,088	10,655	72,000	74,000	149	2	-	45	9,763	10,059
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	-	-	-	79,000	81,000	163	2	-	45	211	217
528	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	9,005	1,110	10,114	82,000	85,000	169	2	-	45	9,221	9,501
529	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	9,567	1,088	10,655	82,000	85,000	169	2	-	45	9,784	10,080
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	-	-	-	79,000	81,000	163	2	-	45	211	217
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023	9,005	1,110	10,114	78,000	80,000	161	2	-	45	9,213	9,493
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	26,402	4,616	31,018	78,000	80,000	161	2	-	45	26,611	27,418
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023	15,320	3,932	19,252	79,000	80,000	163	2	-	45	15,531	16,002
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023	15,320	3,893	19,213	83,000	86,000	171	2	-	45	15,539	16,010
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	8,651	2,040	10,691	79,000	81,000	163	2	-	45	8,862	9,131
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023	-	-	-	74,000	76,000	153	2	-	45	200	206
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023	16,575	3,170	19,745	93,000	96,000	192	2	-	45	16,815	17,324
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023	16,575	3,170	19,745	90,000	92,000	186	2	-	45	16,808	17,318
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	16,575	3,170	19,745	81,000	83,000	167	2	-	45	16,790	17,299
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	16,575	3,170	19,745	81,000	83,000	167	2	-	45	16,790	17,299
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	16,575	3,170	19,745	78,000	80,000	161	2	-	45	16,784	17,292
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023	16,575	3,170	19,745	82,000	84,000	169	2	-	45	16,792	17,301
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023	16,575	3,170	19,745	86,000	88,000	178	2	-	45	16,800	17,309
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023	16,575	3,170	19,745	84,000	86,000	173	2	-	45	16,796	17,305
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023	16,575	3,170	19,745	83,000	86,000	171	2	-	45	16,794	17,303
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023	16,575	3,170	19,745	93,000	95,000	192	2	-	45	16,815	17,324
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023	16,575	3,170	19,745	79,000	81,000	163	2	-	45	16,786	17,295
			Total Collective Bargaining Unit		$8,411,420	$1,609,261	$10,020,681	$48,655,000	$49,948,000	$100,424	$1,313	$0	$24,746	$8,537,903	$8,796,760
													Vacancy Rate	1.76%	1.76%
													Vacancy Adjustment	$149,995	$154,542
													Total Collective Bargaining Unit	$8,387,908	$8,642,217

Pennsylvania-American Water Company - Water Operations
Group Insurance

								Gross Group Insurance								
Line #	Cost Center	Cost Center Name		Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
Non-Collective Bargaining Unit Hourly															
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	$9,262	$1,884	$11,146	$109,000	$113,000	$225	$26	$182	$45	$9,741	$10,036
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	25,947	5,277	31,224	136,000	141,000	281	33	227	45	26,532	27,336
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	20,360	4,145	24,504	118,000	123,000	244	28	197	45	20,874	21,507
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	20,360	4,145	24,504	126,000	130,000	260	30	210	45	20,905	21,538
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	10/3/1988	25,947	5,277	31,224	107,000	111,000	221	26	178	45	26,416	27,217
6	246801	LEHP-Production	Plant Operator	2/1/1996	20,360	4,095	24,454	110,000	113,000	227	26	183	45	20,841	21,473
7	245706	POCO-Field Services	Crew Leader	9/16/1996	20,360	4,145	24,504	110,000	114,000	227	26	183	45	20,841	21,473
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	20,360	4,085	24,444	107,000	111,000	221	26	178	45	20,830	21,461
9	245706	POCO-Field Services	Utility Person	7/1/1994	20,360	4,145	24,504	108,000	112,000	223	26	180	45	20,834	21,466
10	245501	BNGR-Production	Plant Operator	7/23/1990	20,360	4,145	24,504	119,000	124,000	246	29	199	45	20,878	21,511
11	247406	FRCK-Field Services	Utility Person	4/18/1988				108,000	112,000	223	26	181	45	475	489
12	247406	FRCK-Field Services	Utility Person	1/15/1986	20,360	4,085	24,444	112,000	116,000	231	27	187	45	20,850	21,482
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	20,360	4,145	24,504	101,000	104,000	208	24	168	45	20,806	21,437
14	246201	HSHY-Production	Plant Operator	9/27/1993	9,262	1,862	11,124	106,000	109,000	219	25	176	45	9,728	10,023
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	20,360	4,145	24,504	104,000	108,000	215	25	174	45	20,818	21,449
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	25,947	5,212	31,159	114,000	117,000	235	27	189	45	26,444	27,245
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	20,360	4,145	24,504	132,000	136,000	272	32	220	45	20,929	21,563
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990	25,947	5,277	31,224	102,000	105,000	211	24	169	45	26,396	27,196
19	247106	MILT-Field Services	Utility Person	11/16/1998	25,947	5,277	31,224	105,000	108,000	217	25	174	45	26,408	27,209
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	25,947	5,277	31,224	107,000	111,000	221	26	178	45	26,416	27,217
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	20,360	4,145	24,504	102,000	105,000	211	24	170	45	20,809	21,440
22	246506	COAT-Field Services	Utility Person	1/26/1998	21,322	4,271	25,593	93,000	96,000	192	22	155	45	21,737	22,396
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	9,262	1,857	11,119	118,000	122,000	244	28	197	45	9,776	10,073
24	245906	GLEN-Field Services	Utility Person	12/27/1994	20,360	4,145	24,504	115,000	119,000	237	28	191	45	20,861	21,494
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999				111,000	115,000	229	27	185	45	486	501
26	245606	NAZA-Field Services	Utility Person	10/4/1993	8,817	1,776	10,594	111,000	114,000	229	27	184	45	9,303	9,585
27	245906	GLEN-Field Services	Utility Person	6/20/1983	20,360	4,145	24,504	110,000	114,000	227	26	184	45	20,842	21,474
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	25,947	5,199	31,146	116,000	120,000	239	28	193	45	26,452	27,254
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	20,360	4,135	24,494	114,000	118,000	235	27	191	45	20,858	21,490
30	246401	ROYF-Production	Plant Operator	3/9/1998	20,360	4,145	24,504	117,000	121,000	241	28	195	45	20,869	21,502
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987	25,947	5,277	31,224	117,000	121,000	241	28	195	45	26,457	27,259
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	9,262	1,884	11,146	118,000	122,000	244	28	196	45	9,776	10,072
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	25,947	5,212	31,159	112,000	115,000	231	27	186	45	26,436	27,237
34	245606	NAZA-Field Services	Utility Person	11/26/2001	25,947	5,277	31,224	112,000	116,000	231	27	186	45	26,436	27,237
35	246801	LEHP-Production	Utility Person	2/26/1990	20,360	4,085	24,444	108,000	112,000	223	26	180	45	20,833	21,465
36	246501	COAT-Production	Plant Operator	5/28/2002	19,431	3,922	23,353	110,000	113,000	227	26	183	45	19,912	20,516
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	9,262	1,884	11,146	113,000	117,000	233	27	188	45	9,756	10,052
38	245906	GLEN-Field Services	Utility Person	1/5/2004	21,322	4,336	25,658	109,000	113,000	225	26	182	45	21,801	22,462
39	245606	NAZA-Field Services	Utility Person	2/16/2004	20,360	4,145	24,504	107,000	111,000	221	26	179	45	20,830	21,461
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N)	12/1/2004	25,947	5,277	31,224	101,000	105,000	208	24	169	45	26,393	27,193
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	20,360	4,145	24,504	104,000	108,000	215	25	173	45	20,818	21,449
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	9,262	1,884	11,146	108,000	112,000	223	26	181	45	9,737	10,032
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	25,947	5,277	31,224	106,000	110,000	219	25	177	45	26,413	27,214
44	245506	BNGR-Field Services	Utility Person	11/7/2005	20,360	4,145	24,504	107,000	111,000	221	26	178	45	20,830	21,461
45	245401	SUSQ-Production	Plant Operator	5/15/2006	9,262	1,857	11,119	105,000	108,000	217	25	175	45	9,724	10,019
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006	25,947	5,277	31,224	107,000	111,000	221	26	179	45	26,417	27,218
47	245606	NAZA-Field Services	Utility Person	12/18/2006	25,947	5,277	31,224	108,000	112,000	223	26	180	45	26,421	27,222
48	246206	HSHY-Field Services	Utility Person	3/26/2007	25,947	5,212	31,159	110,000	114,000	227	26	184	45	26,429	27,230
49	247106	MILT-Field Services	Utility Person	5/7/2007				103,000	106,000	213	25	171	45	454	467
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	25,947	5,264	31,211	115,000	119,000	237	28	191	45	26,448	27,250
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	20,360	4,085	24,444	107,000	111,000	221	26	178	45	20,830	21,461
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007	25,947	5,277	31,224	133,000	138,000	275	32	222	45	26,521	27,325
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	20,360	4,145	24,504	128,000	133,000	264	31	214	45	20,913	21,548
54	247201	PHBG-Production	Operations Specialist	6/2/2008	25,947	5,212	31,159	114,000	118,000	235	27	191	45	26,445	27,247
55	247106	MILT-Field Services	Utility Person	7/21/2008	20,360	4,095	24,454	100,000	103,000	206	24	167	45	20,802	21,433
56	246501	COAT-Production	Plant Operator	10/6/2008	9,262	1,862	11,124	109,000	113,000	225	26	182	45	9,741	10,036
57	247701	BOGGS-Production	Plant Operator	5/4/2009	20,360	4,145	24,504	112,000	116,000	231	27	187	45	20,850	21,482
58	245706	POCO-Field Services	Utility Person	9/28/2009	22,031	2,657	24,688	108,000	112,000	223	26	180	45	22,505	23,187
59	246506	COAT-Field Services	Utility Person	11/2/2009				108,000	111,000	223	26	179	45	474	488
60	247401	FRCK-Production	Operator	1/25/2010	22,957	2,770	25,727	103,000	107,000	213	25	172	45	23,412	24,122
61	247206	PHBG-Field Services	Utility Person	3/29/2010	22,031	2,597	24,628	111,000	114,000	229	27	184	45	22,516	23,199
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	9,262	1,884	11,146	118,000	122,000	244	28	197	45	9,776	10,073
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	21,322	4,336	25,658	124,000	128,000	256	30	206	45	21,859	22,522
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	25,947	5,277	31,224	112,000	116,000	231	27	186	45	26,436	27,238
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	9,262	1,884	11,146	98,000	101,000	202	24	163	45	9,696	9,990
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	9,262	1,857	11,119	105,000	109,000	217	25	175	45	9,724	10,019
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	9,262	1,884	11,146	124,000	128,000	256	30	206	45	9,800	10,097
68	247206	PHBG-Field Services	Utility Person	11/7/2011	20,360	4,145	24,504	107,000	110,000	221	26	178	45	20,829	21,461
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	25,710	5,170	30,879	95,000	98,000	196	23	158	45	26,131	26,924
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	20,360	4,085	24,444	101,000	104,000	208	24	168	45	20,806	21,437
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	9,262	1,884	11,146	102,000	105,000	211	24	170	45	9,712	10,007
72	249150	WILK-Other	Operations Specialist	3/4/2013	9,262	1,862	11,124	101,000	104,000	208	24	168	45	9,709	10,003
73	247306	BRWK-Field Services	Utility Person	4/29/2013	20,360	4,145	24,504	109,000	113,000	225	26	182	45	20,838	21,470
74	245601	NAZA-Production	Plant Operator	6/27/2013	25,947	5,277	31,224	114,000	118,000	235	27	191	45	26,445	27,247
75	247301	BRWK-Production	Operator	9/16/2013	20,360	4,145	24,504	111,000	115,000	229	27	185	45	20,846	21,478
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	20,360	4,145	24,504	106,000	110,000	219	25	177	45	20,826	21,458
77	247201	PHBG-Production	Plant Operator	2/2/2015	25,947	5,277	31,224	107,000	111,000	221	26	179	45	26,417	27,218
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	25,947	5,277	31,224	107,000	111,000	221	26	178	45	26,416	27,217
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	25,947	5,212	31,159	99,000	103,000	204	24	166	45	26,386	27,186
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	20,360	4,085	24,444	108,000	112,000	223	26	181	45	20,834	21,466
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	1,247	304	1,551	92,000	95,000	190	22	153	45	1,658	1,708
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	9,262	1,879	11,142	112,000	116,000	231	27	187	45	9,752	10,048
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	9,262	1,862	11,124	98,000	101,000	202	24	163	45	9,696	9,990
84	245406	SUSQ-Field Services	Utility Person	12/14/2015	25,947	5,277	31,224	92,000	95,000	190	22	154	45	26,357	27,156
85	246506	COAT-Field Services	Utility Person	2/3/2016	25,947	5,277	31,224	100,000	103,000	206	24	166	45	26,388	27,188
86	247103	MILT-Cust Service	Utility Person	3/7/2016	25,947	5,277	31,224	100,000	103,000	206	24	166	45	26,388	27,188
87	246206	HSHY-Field Services	Utility Person	2/29/2016	27,645	3,383	31,028	111,000	115,000	229	27	186	45	28,132	28,985
88	246201	HSHY-Production	Plant Operator	2/29/2016	25,947	5,277	31,224	106,000	109,000	219	25	176	45	26,412	27,213
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	20,360	4,085	24,444	108,000	111,000	223	26	179	45	20,833	21,465
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016				106,000	109,000	219	25	176	45	466	480
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	27,645	3,383	31,028	161,000	166,000	332	39	268	45	28,329	29,188
92	246206	HSHY-Field Services	Utility Person	6/13/2016				101,000	104,000	208	24	168	45	446	459
93	246206	HSHY-Field Services	Utility Person	7/11/2016	394	71	465	99,000	103,000	204	24	165	45	832	858
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	20,360	4,145	24,504	114,000	118,000	235	27	191	45	20,858	21,490
95	245306	ABNG-Field Services	Utility Person	10/24/2016	20,360	4,145	24,504	101,000	105,000	208	24	168	45	20,806	21,437

Pennsylvania-American Water Company - Water Operations
Group Insurance

								Gross Group Insurance								
Line #	**Cost Center**	**Cost Center Name**		**Original Hire Date**	**Medical Dental & Vision**	**Employee Contribution**	**Net Medical Dental Vision**	**2024 Insurance Coverage**	**2025 Insurance Coverage**	**Basic Life**	**AD&D**	**Long Term Disability**	**Short Term Disability**	**2024 Total Gross Group Insurance**	**2025 Total Gross Group Insurance**
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	21,322	4,336	25,658	107,000	111,000	221	26	179	45	21,793	22,453
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	20,360	4,145	24,504	92,000	96,000	190	22	154	45	20,771	21,401
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	9,262	1,884	11,146	128,000	133,000	264	31	214	45	9,816	10,114
99	247306	BRWK-Field Services	Utility Person	1/16/2017	25,947	5,199	31,146	97,000	100,000	200	23	161	45	26,376	27,176
100	246506	COAT-Field Services	Utility Person	2/13/2017	25,947	5,264	31,211	94,000	98,000	194	23	157	45	26,366	27,165
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	1,247	226	1,473	101,000	105,000	208	24	169	45	1,694	1,746
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015	20,360	4,145	24,504	59,000	61,000	122	14	98	45	20,639	21,265
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	19,886	4,032	23,919	58,000	61,000	120	14	97	45	20,163	20,774
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018	1,104	263	1,367	94,000	97,000	194	23	157	45	1,522	1,569
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	10,082	1,180	11,262	93,000	96,000	192	22	155	45	10,497	10,815
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018				103,000	107,000	213	25	172	45	455	469
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	20,360	4,095	24,454	124,000	128,000	256	30	206	45	20,897	21,530
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	9,262	1,884	11,146	103,000	107,000	213	25	172	45	9,717	10,011
109	246801	LEHP-Production	Utility Person	7/23/2018	21,322	4,336	25,658	89,000	92,000	184	21	149	45	21,721	22,380
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	25,947	5,212	31,159	135,000	140,000	279	32	226	45	26,529	27,333
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	10,082	1,180	11,262	108,000	111,000	223	26	180	45	10,556	10,876
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	10,082	1,185	11,267	79,000	82,000	163	19	132	45	10,441	10,758
113	246501	COAT-Production	Plant Operator	9/24/2018	9,262	1,884	11,146	103,000	106,000	213	25	171	45	9,716	10,010
114	245906	GLEN-Field Services	Utility Person	10/8/2018				93,000	97,000	192	22	156	45	415	428
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	22,957	2,780	25,737	98,000	101,000	202	24	163	45	23,391	24,100
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	1,023	196	1,219	85,000	88,000	175	20	141	45	1,405	1,448
117	246206	HSHY-Field Services	Utility Person	10/8/2018	21,457	2,715	24,172	94,000	97,000	194	23	156	45	21,876	22,539
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	21,322	4,336	25,658	108,000	112,000	223	26	181	45	21,797	22,458
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	9,840	2,027	11,867	102,000	106,000	211	24	170	45	10,290	10,602
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	10,660	1,350	12,010	102,000	105,000	211	24	169	45	11,109	11,446
121	246206	HSHY-Field Services	Utility Person	1/14/2019	21,322	4,281	25,603	95,000	98,000	196	23	158	45	21,744	22,404
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	21,281	2,657	23,938	104,000	108,000	215	25	174	45	21,740	22,399
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	25,947	5,277	31,224	106,000	110,000	219	25	177	45	26,413	27,214
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	25,947	5,277	31,224	152,000	157,000	314	36	253	45	26,595	27,402
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	9,211	1,847	11,058	111,000	115,000	229	27	185	45	9,697	9,991
126	248801	TURB-Production	Plant Operator	7/8/2019	20,360	4,095	24,454	99,000	102,000	204	24	164	45	20,797	21,428
127	240116	CORP-Maint Services	Sr Reliability Engineering Analyst	7/15/2019	20,360	4,145	24,504	161,000	166,000	332	39	268	45	21,044	21,682
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	9,262	1,884	11,146	107,000	111,000	221	26	178	45	9,733	10,028
129	241406	STNW-Field Service	Utility Person	12/5/2018	9,262	1,857	11,119	83,000	86,000	171	20	139	45	9,637	9,930
130	246206	HSHY-Field Services	Utility Person	2/2/2016	9,262	1,884	11,146	92,000	95,000	190	22	153	45	9,672	9,965
131	241406	STNW-Field Service	Utility Person	3/3/1999	9,262	1,884	11,146	83,000	86,000	171	20	139	45	9,637	9,930
132	247201	PHBG-Production	Plant Operator	10/21/2019	25,947	5,277	31,224	98,000	101,000	202	24	163	45	26,380	27,180
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	10,082	1,207	11,289	101,000	104,000	208	24	168	45	10,528	10,847
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	10,082	1,207	11,289	103,000	106,000	213	25	171	45	10,536	10,855
135	247206	PHBG-Field Services	Utility Person	1/27/2020	20,360	4,145	24,504	97,000	100,000	200	23	162	45	20,790	21,420
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	25,947	5,277	31,224	120,000	124,000	248	29	200	45	26,468	27,270
137	241406	STNW-Field Service	Foreperson	1/8/1990	25,947	5,212	31,159	114,000	118,000	235	27	189	45	26,444	27,246
138	246406	ROYF-Field Services	Utility Person	3/23/2020	25,947	5,277	31,224	101,000	104,000	208	24	168	45	26,392	27,192
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	27,645	3,383	31,028	102,000	105,000	211	24	170	45	28,095	28,947
140	246406	ROYF-Field Services	Utility Person	4/13/2020	9,262	1,884	11,146	101,000	104,000	208	24	168	45	9,708	10,003
141	247106	MILT-Field Services	Utility Person	4/13/2020	21,322	4,336	25,658	97,000	100,000	200	23	161	45	21,752	22,411
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	10,082	1,207	11,289	102,000	105,000	211	24	169	45	10,532	10,851
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	9,281	1,193	10,474	89,000	92,000	184	21	148	45	9,679	9,972
144	245701	POCO-Production	Plant Operator	4/27/2020	25,947	5,277	31,224	98,000	101,000	202	24	163	45	26,380	27,180
145	246401	ROYF-Production	Plant Operator	5/4/2020	9,262	1,879	11,142	107,000	111,000	221	26	178	45	9,732	10,027
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	25,854	5,182	31,036	81,000	84,000	167	19	136	45	26,221	27,016
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	22,957	2,780	25,737	119,000	123,000	246	29	198	45	23,475	24,186
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	22,957	2,725	25,683	86,000	89,000	178	21	143	45	23,344	24,052
149	240116	CORP-Maint Services	Reliability Engineering Analyst	6/1/2020	9,262	1,884	11,146	140,000	145,000	289	34	233	45	9,864	10,163
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	25,947	5,212	31,159	93,000	96,000	192	22	155	45	26,361	27,161
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	25,916	5,203	31,119	95,000	98,000	196	23	158	45	26,338	27,137
152	247106	MILT-Field Services	Utility Person	10/19/2020	21,322	4,336	25,658	95,000	99,000	196	23	159	45	21,745	22,404
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	22,031	2,657	24,688	135,000	139,000	279	32	224	45	22,612	23,297
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	9,332	1,207	10,539	97,000	100,000	200	23	161	45	9,762	10,058
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	27,502	3,278	30,779	91,000	95,000	188	22	152	45	27,909	28,755
156	245506	BNGR-Field Services	Utility Person	2/22/2021	25,947	5,277	31,224	90,000	93,000	186	22	150	45	26,349	27,148
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	51	15	66	84,000	87,000	173	20	141	45	430	443
158	246801	LEHP-Production	Utility Person	4/12/2021	25,947	5,212	31,159	90,000	93,000	186	22	150	45	26,349	27,148
159	246506	COAT-Field Services	Utility Person	4/13/2021	25,947	5,277	31,224	100,000	104,000	206	24	167	45	26,389	27,189
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	20,360	4,145	24,504	92,000	95,000	190	22	153	45	20,769	21,399
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	25,947	5,277	31,224	108,000	112,000	223	26	181	45	26,421	27,222
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	9,262	1,884	11,146	86,000	89,000	178	21	144	45	9,650	9,942
163	240114	CORP-Engineering	GIS Analyst	6/1/2021				85,000	88,000	175	20	141	45	382	394
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	9,211	1,869	11,080	99,000	103,000	204	24	166	45	9,650	9,943
165	247206	PHBG-Field Services	Utility Person	7/6/2021	9,211	1,847	11,058	101,000	104,000	208	24	168	45	9,657	9,950
166	245906	GLEN-Field Services	Utility Person	7/12/2021	10,082	1,207	11,289	98,000	102,000	202	24	164	45	10,517	10,835
167	246401	ROYF-Production	Plant Operator	7/19/2021	9,262	1,884	11,146	107,000	111,000	221	26	179	45	9,733	10,028
168	241106	PITT-Field Services	Operations Specialist	9/7/2021				98,000	102,000	202	24	164	45	435	448
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	9,840	1,972	11,812	105,000	109,000	217	25	175	45	10,302	10,614
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	21,322	4,336	25,658	102,000	105,000	211	24	169	45	21,772	22,432
171	240116	CORP-Maint Services	Reliability Engineering Analyst	10/18/2021	25,947	5,277	31,224	121,000	125,000	250	29	201	45	26,471	27,274
172	246506	COAT-Field Services	Utility Person	11/8/2021	25,947	5,277	31,224	91,000	95,000	188	22	152	45	26,354	27,153
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	20,360	4,145	24,504	151,000	156,000	312	36	252	45	21,004	21,641
174	246506	COAT-Field Services	Utility Person	11/9/2021	21,322	4,336	25,658	91,000	95,000	188	22	152	45	21,729	22,388
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	9,262	1,884	11,146	67,000	69,000	138	16	111	45	9,573	9,863
176	247106	MILT-Field Services	Utility Person	11/22/2021	25,722	5,224	30,946	94,000	97,000	194	23	156	45	26,140	26,932
177	246201	HSHY-Production	Plant Operator	1/10/2022	9,262	1,879	11,142	99,000	103,000	204	24	166	45	9,701	9,995
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	1/10/2022	20,360	4,095	24,454	90,000	94,000	186	22	151	45	20,763	21,392
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	25,947	5,212	31,159	101,000	104,000	208	24	168	45	26,392	27,192
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	9,262	1,857	11,119	94,000	97,000	194	23	157	45	9,681	9,974
181	247206	PHBG-Field Services	Utility Person	2/21/2022				98,000	101,000	202	24	163	45	434	447
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	2/28/2022	9,262	1,862	11,124	77,000	80,000	159	18	129	45	9,614	9,905
183	245306	ABNG-Field Services	Utility Person	2/21/2022	25,947	5,277	31,224	89,000	93,000	184	21	149	45	26,346	27,145
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	9,332	1,180	10,512	96,000	99,000	198	23	160	45	9,759	10,054
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	51	15	66	67,000	69,000	138	16	112	45	363	374
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	9,262	1,862	11,124	94,000	98,000	194	23	157	45	9,681	9,975
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	27,645	3,383	31,028	85,000	88,000	175	20	142	45	28,028	28,878
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	9,211	1,847	11,058	91,000	94,000	188	22	151	45	9,617	9,909
189	240306	CORP-Field Service	Operations Specialist	4/25/2022				104,000	108,000	215	25	173	45	458	472
190	245306	ABNG-Field Services	Utility Person	5/16/2022	9,332	1,207	10,539	92,000	95,000	190	22	153	45	9,743	10,038
191	241401	STNW-Production	Plant Operator	6/6/2022	10,406	1,170	11,576	86,000	89,000	178	21	144	45	10,793	11,121
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	10,457	1,185	11,642	107,000	111,000	221	26	178	45	10,927	11,258

Pennsylvania-American Water Company - Water Operations
Group Insurance

					Gross Group Insurance										
Line #	**Cost Center**	**Cost Center Name**		**Original Hire Date**	**Medical Dental & Vision**	**Employee Contribution**	**Net Medical Dental Vision**	**2024 Insurance Coverage**	**2025 Insurance Coverage**	**Basic Life**	**AD&D**	**Long Term Disability**	**Short Term Disability**	**2024 Total Gross Group Insurance**	**2025 Total Gross Group Insurance**
193	245506	BNGR-Field Services	Utility Person	6/20/2022	25,947	5,277	31,224	101,000	104,000	208	24	168	45	26,393	27,193
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	6/20/2022				75,000	78,000	155	18	126	45	344	354
195	245401	SUSQ-Production	Plant Operator	6/27/2022	25,947	5,212	31,159	91,000	94,000	188	22	151	45	26,353	27,152
196	241401	STNW-Production	Plant Operator	7/5/2022	10,457	1,203	11,660	86,000	89,000	178	21	144	45	10,844	11,173
197	246801	LEHP-Production	Utility Person	7/18/2022	9,262	1,884	11,146	88,000	91,000	182	21	146	45	9,656	9,949
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/18/2022	25,947	5,277	31,224	77,000	80,000	159	18	128	45	26,298	27,095
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	9,262	1,862	11,124	96,000	99,000	198	23	160	45	9,688	9,982
200	247106	MILT-Field Services	Utility Person	7/18/2022	9,262	1,884	11,146	94,000	98,000	194	23	157	45	9,681	9,975
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	9,262	1,862	11,124	96,000	99,000	198	23	159	45	9,688	9,982
202	245501	BNGR-Production	Plant Operator	8/29/2022	9,262	1,884	11,146	91,000	94,000	188	22	152	45	9,669	9,962
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	10,457	1,207	11,664	91,000	94,000	188	22	152	45	10,864	11,193
204	245401	SUSQ-Production	Plant Operator	9/19/2022	25,947	5,212	31,159	91,000	94,000	188	22	151	45	26,353	27,152
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	9,262	1,857	11,119	94,000	97,000	194	23	157	45	9,681	9,974
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	21,322	4,336	25,658	99,000	103,000	204	24	166	45	21,761	22,421
207	245306	ABNG-Field Services	Utility Person	10/10/2022	20,744	4,171	24,915	86,000	89,000	178	21	144	45	21,132	21,772
208	245306	ABNG-Field Services	Utility Person	10/17/2022	9,262	1,884	11,146	86,000	89,000	178	21	144	45	9,650	9,942
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	22,957	2,780	25,737	83,000	86,000	171	20	138	45	23,332	24,039
210	246406	ROYF-Field Services	Utility Person	11/14/2022	9,262	1,884	11,146	94,000	98,000	194	23	157	45	9,682	9,975
211	246501	COAT-Production	Plant Operator	11/28/2022	20,360	4,145	24,504	97,000	100,000	200	23	162	45	20,790	21,420
212	246406	ROYF-Field Services	Utility Person	1/3/2023	25,947	5,277	31,224	98,000	101,000	202	24	163	45	26,380	27,180
213	245706	POCO-Field Services	Utility Person	1/3/2023	9,262	1,862	11,124	88,000	91,000	182	21	147	45	9,657	9,950
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	20,360	4,145	24,504	86,000	89,000	178	21	144	45	20,747	21,376
215	247306	BRWK-Field Services	Utility Person	3/6/2023	21,322	4,326	25,648	90,000	93,000	186	22	149	45	21,724	22,383
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	25,803	5,236	31,040	95,000	99,000	196	23	159	45	26,226	27,021
217	245606	NAZA-Field Services	Utility Person	3/20/2023	9,895	1,207	11,102	95,000	99,000	196	23	159	45	10,317	10,630
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023				89,000	92,000	184	21	149	45	399	411
219	245601	NAZA-Production	Plant Operator	6/5/2023	9,262	1,884	11,146	94,000	98,000	194	23	157	45	9,682	9,975
220	245106	NORR-Field Services	Utility Person	6/5/2023	9,332	1,207	10,539	98,000	101,000	202	24	163	45	9,766	10,062
221	246406	ROYF-Field Services	Utility Person	6/5/2023	21,322	4,336	25,658	93,000	96,000	192	22	155	45	21,736	22,395
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	9,262	1,862	11,124	98,000	101,000	202	24	163	45	9,696	9,990
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017				38,000	39,000	78	9	63	45	196	202
224	245106	NORR-Field Services	Operations Specialist - To Be Filled	12/31/2023	19,084	3,621	22,705	115,000	119,000	237	28	192	45	19,586	20,180
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	19,084	3,621	22,705	115,000	119,000	237	28	192	45	19,586	20,180
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	19,084	3,621	22,705	115,000	119,000	237	28	192	45	19,586	20,180
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	19,084	3,621	22,705	115,000	119,000	237	28	192	45	19,586	20,180
228	241103	PITT-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	19,084	3,621	22,705	92,000	95,000	190	22	153	45	19,494	20,085
229	249103	WILK-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	19,084	3,621	22,705	92,000	95,000	190	22	153	45	19,494	20,085
230	241103	PITT-Cust Service	Compliance Representative - To Be Filled	12/31/2023	19,084	3,621	22,705	81,000	83,000	167	19	134	45	19,450	20,040
			Total Non-Collective Bargaining Unit Hourly		$3,859,467	$736,320	$4,595,788	$23,547,000	$24,360,000	$48,601	$5,651	$39,245	$10,405	$3,963,370	$4,083,534
													Vacancy Rate	1.76%	1.76%
													Vacancy Adjustment	$69,629	$71,740
													Total Non-Collective Bargaining Unit Hourly	$3,893,741	$4,011,794

Pennsylvania-American Water Company - Wastewater SSS General Operations
Group Insurance

					Gross Group Insurance										
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
Non-Collective Bargaining Unit Salary															
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	$1,008	$119	$1,127	$141,000	$146,000	$29	$3	$24	$5	$1,069	$1,101
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	22,031	2,657	24,688	185,000	191,000	382	44	308	45	22,810	23,502
3	246701	COWW-Production	Supvr Production	3/6/2000	20,360	4,145	24,504	143,000	148,000	295	34	238	45	20,972	21,608
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	20,360	4,085	24,444	150,000	155,000	310	36	250	45	21,000	21,637
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	9,262	1,857	11,119	114,000	118,000	235	27	190	45	9,760	10,056
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	25,947	5,277	31,224	140,000	145,000	289	34	233	45	26,548	27,353
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	25,947	5,277	31,224	122,000	126,000	252	29	203	45	26,476	27,278
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	25,947	5,277	31,224	150,000	155,000	310	36	250	45	26,587	27,393
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020				134,000	138,000	277	32	223	45	577	594
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	20,360	4,145	24,504	138,000	143,000	285	33	230	45	20,953	21,588
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	20,360	4,145	24,504	118,000	122,000	244	28	196	45	20,873	21,506
12	249401	YORKWW-Production	Supvr Production	6/24/2013	20,360	4,145	24,504	130,000	135,000	268	31	217	45	20,921	21,556
			Total Non-Collective Bargaining Unit Salary		$211,939	$41,128	$253,066	$1,665,000	$1,722,000	$3,175	$369	$2,561	$502	$218,546	$225,172
Collective Bargaining Unit															
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/4/2008	$26,402	$4,616	$31,018	$76,000	$78,000	$157	$2	$0	$45	$26,607	$27,413
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	15,320	3,932	19,252	76,000	78,000	157	2	-	45	15,525	15,996
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	8,651	2,045	10,696	73,000	75,000	151	2	-	45	8,849	9,118
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/17/1984	26,402	4,616	31,018	76,000	78,000	157	2	-	45	26,607	27,413
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	10/26/2009	18,670	3,791	22,461	76,000	78,000	157	2	-	45	18,874	19,447
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	5/22/2017	18,670	3,791	22,461	76,000	78,000	157	2	-	45	18,874	19,447
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	15,320	3,932	19,252	69,000	71,000	142	2	-	45	15,510	15,981
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	26,402	4,616	31,018	81,000	83,000	167	2	-	45	26,617	27,424
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	26,402	4,616	31,018	81,000	83,000	167	2	-	45	26,617	27,424
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	27,614	3,218	30,831	69,000	71,000	142	2	-	45	27,804	28,647
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/7/2009	9,754	1,088	10,842	76,000	78,000	157	2	-	45	9,959	10,261
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/20/2018	8,651	2,045	10,696	76,000	78,000	157	2	-	45	8,856	9,124
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/3/2020	8,651	2,045	10,696	76,000	78,000	157	2	-	45	8,856	9,124
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	4/24/2017	8,651	2,045	10,696	76,000	78,000	157	2	-	45	8,856	9,124
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	26,402	4,616	31,018	81,000	83,000	167	2	-	45	26,617	27,424
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	10,130	1,110	11,239	73,000	75,000	151	2	-	45	10,328	10,641
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	18,670	3,791	22,461	73,000	75,000	151	2	-	45	18,868	19,440
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	18,284	3,684	21,968	76,000	78,000	157	2	-	45	18,488	19,049
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	-	-	-	73,000	75,000	151	2	-	45	198	204
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	18,670	3,791	22,461	76,000	78,000	157	2	-	45	18,874	19,447
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	9,004	1,088	10,092	69,000	71,000	142	2	-	45	9,194	9,473
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	8,651	2,045	10,696	73,000	75,000	151	2	-	45	8,849	9,118
			Total Collective Bargaining Unit		$355,373	$66,519	$421,891	$1,651,000	$1,695,000	$3,408	$53	$0	$995	$359,828	$370,738

Pennsylvania-American Water Company - Wastewater SSS General Operations
Group Insurance

					Gross Group Insurance											
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
Non-Collective Bargaining Unit Hourly															
1	246701	COWW-Production	Wastewater Operator	9/20/1999	$9,262	$1,857	$11,119	$109,000	$113,000	$225	$26	$181	$45	$9,740	$10,035
2	246706	COWW-Field Services	Utility Person	5/30/1995	20,360	4,085	24,444	100,000	104,000	206	24	167	45	20,802	21,433
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	25,947	5,277	31,224	114,000	118,000	235	27	191	45	26,445	27,247
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	20,360	4,145	24,504	114,000	118,000	235	27	190	45	20,857	21,489
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	20,360	4,095	24,454	118,000	122,000	244	28	196	45	20,873	21,506
6	246706	COWW-Field Services	Crew Leader	11/10/2003	25,947	5,277	31,224	106,000	110,000	219	25	177	45	26,413	27,214
7	246901	LPWW-Production	Plant Operator	6/2/2008	20,360	4,145	24,504	108,000	112,000	223	26	180	45	20,833	21,465
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	25,947	5,277	31,224	116,000	120,000	239	28	194	45	26,453	27,255
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	20,360	4,085	24,444	115,000	119,000	237	28	192	45	20,862	21,494
10	242601	CLYWW-Production	Plant Operator	7/31/2008	21,322	4,326	25,648	106,000	110,000	219	25	177	45	21,789	22,449
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	25,947	5,277	31,224	113,000	117,000	233	27	188	45	26,440	27,242
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	25,947	5,212	31,159	100,000	104,000	206	24	167	45	26,389	27,189
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	25,947	5,277	31,224	125,000	129,000	258	30	208	45	26,488	27,291
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	9,262	1,857	11,119	103,000	107,000	213	25	172	45	9,717	10,012
15	246706	COWW-Field Services	Utility Person	3/14/2016	9,211	1,847	11,058	97,000	100,000	200	23	162	45	9,642	9,934
16	246901	LPWW-Production	Plant Operator	9/11/2017	25,947	5,277	31,224	98,000	101,000	202	24	163	45	26,380	27,180
17	246701	COWW-Production	Wastewater Operator	5/14/2018	9,262	1,884	11,146	105,000	108,000	217	25	174	45	9,724	10,019
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	9,262	1,884	11,146	94,000	97,000	194	23	156	45	9,680	9,974
19	248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	10/15/2018	20,360	4,145	24,504	108,000	111,000	223	26	180	45	20,833	21,465
20	246706	COWW-Field Services	Utility Person	3/25/2019	21,322	4,281	25,603	94,000	97,000	194	23	156	45	21,740	22,399
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	25,916	5,268	31,184	122,000	126,000	252	29	203	45	26,445	27,247
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	25,947	5,277	31,224	118,000	122,000	244	28	196	45	26,460	27,262
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	143	41	184	101,000	104,000	208	24	168	45	589	607
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	25,947	5,277	31,224	100,000	104,000	206	24	167	45	26,389	27,189
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	27,645	3,305	30,951	101,000	104,000	208	24	168	45	28,091	28,943
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	20,299	4,085	24,385	125,000	129,000	258	30	208	45	20,841	21,473
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	25,803	5,236	31,040	102,000	106,000	211	24	171	45	26,254	27,050
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	1,104	263	1,367	101,000	104,000	208	24	168	45	1,550	1,597
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	25,947	5,277	31,224	101,000	104,000	208	24	168	45	26,392	27,193
30	248706	Nw Cmbrlnd WW FS	Utility Person	9/20/2021	9,281	1,193	10,474	88,000	91,000	182	21	146	45	9,675	9,968
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021				93,000	96,000	192	22	155	45	414	427
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	21,322	4,281	25,603	101,000	104,000	208	24	168	45	21,768	22,428
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	9,262	1,884	11,146	98,000	101,000	202	24	163	45	9,696	9,990
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	21,322	4,336	25,658	92,000	96,000	190	22	154	45	21,733	22,392
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	9,211	1,869	11,080	101,000	104,000	208	24	168	45	9,657	9,950
36	248706	Nw Cmbrlnd WW FS	Utility Person	9/6/2022	20,360	4,145	24,504	94,000	97,000	194	23	157	45	20,778	21,408
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	20,360	4,095	24,454	88,000	91,000	182	21	146	45	20,753	21,383
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	9,262	1,884	11,146	96,000	99,000	198	23	160	45	9,689	9,983
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	25,947	5,277	31,224	98,000	101,000	202	24	163	45	26,380	27,180
40	246701	COWW-Production	Wastewater Operator	1/3/2023	9,262	1,862	11,124	104,000	108,000	215	25	174	45	9,721	10,016
41	248701	Nw Cmbrnlnd WW Prod	Utility Person	2/6/2023	1,247	304	1,551	89,000	92,000	184	21	148	45	1,646	1,696
42	246706	COWW-Field Services	Utility Person	3/6/2023	9,211	1,869	11,080	91,000	94,000	188	22	152	45	9,618	9,910
			Total Non-Collective Bargaining Unit Hourly		$737,485	$146,539	$884,024	$4,347,000	$4,494,000	$8,972	$1,043	$7,241	$1,900	$756,642	$779,582

Pennsylvania-American Water Company - Wastewater CSS Operations
Group Insurance

					Gross Group Insurance										
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
Non-Collective Bargaining Unit Salary															
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000	$25,947	$5,277	$31,224	$149,000	$154,000	$308	$36	$249	$45	$26,584	$27,390
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006	9,262	1,884	11,146	121,000	125,000	250	29	201	45	9,788	10,084
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016	25,947	5,277	31,224	106,000	110,000	219	25	177	45	26,413	27,214
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002				183,000	189,000	378	44	305	45	772	795
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007	21,322	4,336	25,658	120,000	124,000	248	29	200	45	21,844	22,506
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007	1,247	304	1,551	133,000	137,000	275	32	221	45	1,820	1,875
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008	25,947	5,212	31,159	131,000	136,000	270	31	219	45	26,512	27,316
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982	22,031	2,597	24,628	145,000	150,000	299	35	241	45	22,652	23,338
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003	21,322	4,336	25,658	162,000	167,000	334	39	269	45	22,010	22,677
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015	9,262	1,862	11,124	137,000	142,000	283	33	229	45	9,852	10,151
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019	25,947	5,277	31,224	149,000	154,000	308	36	248	45	26,583	27,389
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020	20,360	4,145	24,504	124,000	128,000	256	30	206	45	20,897	21,530
			Total Non-Collective Bargaining Unit Salary		$208,593	$40,507	$249,099	$1,660,000	$1,716,000	$3,426	$398	$2,765	$543	$215,725	$222,266
Collective Bargaining Unit															
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	$26,402	$4,616	$31,018	$81,000	$82,000	$167	$2	$0	$45	$26,617	$27,424
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006	26,402	4,616	31,018	87,000	89,000	180	2	-	45	26,629	27,437
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	26,402	4,539	30,941	77,000	79,000	159	2	-	45	26,609	27,415
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008	15,320	3,932	19,252	81,000	82,000	167	2	-	45	15,535	16,006
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016	-	-	-	77,000	79,000	159	2	-	45	207	213
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012	18,670	3,791	22,461	77,000	79,000	159	2	-	45	18,876	19,449
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013	26,402	4,553	30,955	77,000	79,000	159	2	-	45	26,609	27,415
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990	8,651	2,045	10,696	81,000	82,000	167	2	-	45	8,866	9,135
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005	26,402	4,616	31,018	81,000	82,000	167	2	-	45	26,617	27,424
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008	8,651	2,045	10,696	77,000	79,000	159	2	-	45	8,858	9,126
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007	8,651	2,045	10,696	77,000	79,000	159	2	-	45	8,858	9,126
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016	9,755	1,105	10,860	77,000	79,000	159	2	-	45	9,961	10,263
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009	26,402	4,616	31,018	81,000	82,000	167	2	-	45	26,617	27,424
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005	26,402	4,616	31,018	87,000	89,000	180	2	-	45	26,629	27,437
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005	-	-	-	77,000	79,000	159	2	-	45	207	213
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	26,402	4,616	31,018	81,000	82,000	167	2	-	45	26,617	27,424
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008	8,651	2,045	10,696	81,000	82,000	167	2	-	45	8,866	9,135
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009	-	-	-	81,000	82,000	167	2	-	45	215	221
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005	26,402	4,616	31,018	87,000	89,000	180	2	-	45	26,629	27,437
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011	26,402	4,539	30,941	81,000	82,000	167	2	-	45	26,617	27,424
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997	-	-	-	87,000	89,000	180	2	-	45	227	234
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	26,402	4,539	30,941	77,000	79,000	159	2	-	45	26,609	27,415
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	18,670	3,791	22,461	77,000	79,000	159	2	-	45	18,876	19,449
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011	8,651	2,045	10,696	77,000	79,000	159	2	-	45	8,858	9,126
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013	15,320	3,932	19,252	77,000	79,000	159	2	-	45	15,527	15,998
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009	18,670	3,791	22,461	77,000	79,000	159	2	-	45	18,876	19,449
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013	8,651	2,045	10,696	87,000	89,000	180	2	-	45	8,878	9,148
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992	18,670	3,791	22,461	77,000	79,000	159	2	-	45	18,876	19,449
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	18,670	3,791	22,461	77,000	79,000	159	2	-	45	18,876	19,449
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012	8,651	2,045	10,696	77,000	79,000	159	2	-	45	8,858	9,126
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007	26,402	4,616	31,018	77,000	79,000	159	2	-	45	26,609	27,415
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006	18,670	3,791	22,461	77,000	79,000	159	2	-	45	18,876	19,449
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997	8,651	2,045	10,696	81,000	82,000	167	2	-	45	8,866	9,135
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	8,651	2,045	10,696	77,000	79,000	159	2	-	45	8,858	9,126
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006	-	-	-	81,000	82,000	167	2	-	45	215	221
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017	26,402	4,616	31,018	87,000	89,000	180	2	-	45	26,629	27,437
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008	8,651	2,045	10,696	81,000	82,000	167	2	-	45	8,866	9,135
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016	8,751	2,051	10,802	81,000	82,000	167	2	-	45	8,966	9,238
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	8,651	2,018	10,669	77,000	79,000	159	2	-	45	8,858	9,126
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005	8,651	2,018	10,669	77,000	79,000	159	2	-	45	8,858	9,126
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	-	-	-	87,000	89,000	180	2	-	45	227	234
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	8,651	2,018	10,669	91,000	94,000	188	2	-	45	8,887	9,156
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	18,670	3,791	22,461	97,000	100,000	200	2	-	45	18,918	19,491
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	8,599	2,030	10,628	97,000	100,000	200	2	-	45	8,847	9,115
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	26,402	4,616	31,018	95,000	98,000	196	2	-	45	26,646	27,454
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	26,402	4,616	31,018	97,000	100,000	200	2	-	45	26,650	27,458
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	26,402	4,616	31,018	97,000	100,000	200	2	-	45	26,650	27,458
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	8,651	2,018	10,669	89,000	92,000	184	2	-	45	8,882	9,152
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	8,651	2,045	10,696	86,000	89,000	178	2	-	45	8,876	9,145
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	26,402	4,616	31,018	70,000	72,000	144	2	-	45	26,594	27,401
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	15,320	3,884	19,204	89,000	92,000	184	2	-	45	15,552	16,023
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	26,402	4,616	31,018	85,000	87,000	175	2	-	45	26,625	27,432
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	8,651	2,040	10,691	89,000	92,000	184	2	-	45	8,883	9,152
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	9,755	1,105	10,860	91,000	93,000	188	2	-	45	9,990	10,293
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	8,651	2,045	10,696	77,000	79,000	159	2	-	45	8,858	9,126

Pennsylvania-American Water Company - Wastewater CSS Operations
Group Insurance

					Gross Group Insurance										
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	Medical Dental & Vision	Employee Contribution	Net Medical Dental Vision	2024 Insurance Coverage	2025 Insurance Coverage	Basic Life	AD&D	Long Term Disability	Short Term Disability	2024 Total Gross Group Insurance	2025 Total Gross Group Insurance
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	18,670	3,791	22,461	103,000	106,000	213	2	-	45	18,930	19,504
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	8,651	2,045	10,696	85,000	87,000	175	2	-	45	8,874	9,143
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	8,651	2,018	10,669	81,000	83,000	167	2	-	45	8,866	9,135
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	8,651	2,045	10,696	97,000	100,000	200	2	-	45	8,899	9,169
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	18,670	3,791	22,461	97,000	100,000	200	2	-	45	18,918	19,491
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	8,651	2,045	10,696	81,000	83,000	167	2	-	45	8,866	9,135
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	26,402	4,616	31,018	85,000	87,000	175	2	-	45	26,625	27,432
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	26,402	4,539	30,941	81,000	82,000	167	2	-	45	26,617	27,424
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	848	190	1,038	81,000	82,000	167	2	-	45	1,063	1,095
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	26,402	4,616	31,018	65,000	67,000	134	2	-	45	26,584	27,390
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	18,670	3,791	22,461	71,000	73,000	147	2	-	45	18,864	19,436
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	26,402	4,539	30,941	81,000	82,000	167	2	-	45	26,617	27,424
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	26,402	4,602	31,004	77,000	79,000	159	2	-	45	26,609	27,415
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	18,670	3,791	22,461	98,000	101,000	202	2	-	45	18,920	19,493
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	25,231	4,290	29,522	70,000	72,000	144	2	-	45	25,423	26,194
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	26,402	4,616	31,018	98,000	101,000	202	2	-	45	26,652	27,460
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	18,670	3,791	22,461	81,000	82,000	167	2	-	45	18,885	19,457
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	28,364	3,218	31,581	57,000	59,000	118	2	-	45	28,529	29,394
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	26,402	4,616	31,018	76,000	77,000	157	2	-	45	26,607	27,413
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	26,402	4,616	31,018	76,000	77,000	157	2	-	45	26,607	27,413
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	-	-	-	76,000	77,000	157	2	-	45	205	211
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	15,320	3,932	19,252	97,000	100,000	200	2	-	45	15,568	16,040
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	18,670	3,791	22,461	78,000	80,000	161	2	-	45	18,878	19,451
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	18,226	3,668	21,894	78,000	80,000	161	2	-	45	18,434	18,993
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023	16,575	3,170	19,745	97,000	100,000	200	2	-	45	16,823	17,333
			Total Collective Bargaining Unit		$1,410,242	$270,887	$1,681,129	$7,082,000	$7,245,000	$14,617	$206	$0	$3,891	$1,428,956	$1,472,280
Non-Collective Bargaining Unit Hourly															
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	$9,262	$1,884	$11,146	$94,000	$97,000	$194	$23	$157	$45	$9,681	$9,974
			Total Non-Collective Bargaining Unit Hourly		$9,262	$1,884	$11,146	$94,000	$97,000	$194	$23	$157	$45	$9,681	$9,974

Pennsylvania-American Water Company
401K, DCP, ESPP

		401K		DCP		ESPP	
		2024	2025	2024	2025	2024	2025
Water Operations							
	Non-Collective Bargaining Unit Salary	$991,422	$1,025,920	$1,203,643	$1,245,524	$137,894	$140,800
	Collective Bargaining Unit	1,209,223	1,239,748	1,544,540	1,583,490	97,389	99,118
	Non-Collective Bargaining Unit Hourly	471,311	487,716	663,519	686,615	36,798	37,556
	Total	$2,671,957	$2,753,384	$3,411,703	$3,515,628	$272,080	$277,474
Wastewater SSS General Operations							
	Non-Collective Bargaining Unit Salary	$36,120	$37,376	$43,042	$44,539	$4,049	$4,165
	Collective Bargaining Unit	44,548	45,793	69,112	71,041	1,147	1,147
	Non-Collective Bargaining Unit Hourly	96,099	99,445	143,963	148,975	6,742	6,945
	Total	$176,767	$182,614	$256,117	$264,555	$11,938	$12,257
Wastewater CSS Operations							
	Non-Collective Bargaining Unit Salary	$31,607	$32,707	$52,852	$54,691	$1,314	$1,347
	Collective Bargaining Unit	99,002	101,376	297,740	304,200	10,057	10,217
	Non-Collective Bargaining Unit Hourly	1,879	1,944	3,289	3,403	-	-
	Total	$132,488	$136,027	$353,881	$362,294	$11,371	$11,564

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	Gross Other Benefits 401k, DCP, ESPP 2023 ESPP	2024 ESPP	2025 ESPP
Non-Collective Bargaining Unit Salary															
1	240106	CORP-Field Services	Project Manager	1/18/1999	4.00%	401(k) Match 1-3/100% 4-5/50%	$5,695	$5,923	$6,129	$7,474	$7,774	$8,045	$754	$784	$811
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001	4.00%	401(k) Match 1-3/100% 4-5/50%	4,698	4,886	5,056	6,166	6,413	6,636	-	-	-
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994	2.50%	401(k) Match 50% up to 5%	6,032	6,274	6,492	-	-	-	426	443	458
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998	2.50%	401(k) Match 50% up to 5%	2,375	2,470	2,556	-	-	-	503	523	541
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993	2.50%	401(k) Match 50% up to 5%	4,367	4,542	4,700	-	-	-	2,466	2,565	2,654
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997	2.50%	401(k) Match 50% up to 5%	2,240	2,330	2,411	-	-	-	316	329	340
7	249160	WILK-Watres	Supvr Production	1/11/1988	1.00%	401(k) Match 50% up to 5%	782	814	842	-	-	-	-	-	-
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993	1.50%	401(k) Match 50% up to 5%	1,730	1,800	1,862	-	-	-	-	-	-
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990	2.50%	401(k) Roth Match 50% up to 5%	2,842	2,956	3,059	-	-	-	1,003	1,043	1,080
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987	1.50%	401(k) Match 50% up to 5%	1,358	1,413	1,462	-	-	-	-	-	-
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983	2.50%	401(k) Roth Match 50% up to 5%	2,574	2,677	2,770	-	-	-	-	-	-
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998	2.50%	401(k) Match 50% up to 5%	2,276	2,367	2,449	-	-	-	161	167	173
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998	2.50%	401(k) Roth Match 50% up to 5%	1,804	1,877	1,942	-	-	-	4,409	4,409	4,409
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992	2.50%	401(k) Match 50% up to 5%	2,454	2,553	2,642	-	-	-	1,213	1,261	1,305
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986	2.50%	401(k) Match 50% up to 5%	2,028	2,109	2,182	-	-	-	-	-	-
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997	2.50%	401(k) Match 50% up to 5%	1,889	1,965	2,034	-	-	-	533	555	574
17	249150	WILK-Other	Sr Supt Production	9/13/1993	2.50%	401(k) Match 50% up to 5%	2,712	2,820	2,919	-	-	-	766	796	824
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998	4.00%	401(k) Roth 1-3/100% 4-5/50%	5,663	5,891	6,095	7,433	7,731	8,000	1,749	1,819	1,882
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994	2.50%	401(k) Match 50% up to 5%	2,849	2,963	3,066	-	-	-	1,006	1,046	1,082
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997	2.50%	401(k) Match 50% up to 5%	2,658	2,765	2,861	-	-	-	-	-	-
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995	2.50%	401(k) Match 50% up to 5%	2,188	2,276	2,355	-	-	-	-	-	-
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995	2.50%	401(k) Roth Match 50% up to 5%	2,187	2,275	2,354	-	-	-	-	-	-
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995			-	-	-	-	-	-	-	-	-
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995	4.00%	401(k) Match 1-3/100% 4-5/50%	5,746	5,976	6,184	7,541	7,844	8,117	-	-	-
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982	2.00%	401(k) Match 50% up to 5%	1,906	1,982	2,051	-	-	-	168	175	181
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998	2.50%	401(k) Roth Match 50% up to 5%	2,678	2,786	2,882	-	-	-	567	590	610
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989	2.50%	401(k) Match 50% up to 5%	3,375	3,511	3,633	-	-	-	-	-	-
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978	2.50%	401(k) Match 50% up to 5%	2,441	2,539	2,628	-	-	-	517	538	556
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998	2.50%	401(k) Match 50% up to 5%	2,507	2,608	2,699	-	-	-	-	-	-
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989	2.50%	401(k) Match 50% up to 5%	4,940	5,138	5,317	-	-	-	2,790	2,902	3,003
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993	2.50%	401(k) Match 50% up to 5%	3,622	3,767	3,898	-	-	-	511	532	550
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994	2.50%	401(k) Match 50% up to 5%	2,704	2,813	2,910	-	-	-	-	-	-
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984	2.50%	401(k) Match 50% up to 5%	2,246	2,336	2,417	-	-	-	-	-	-
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987	2.50%	401(k) Match 50% up to 5%	4,625	4,811	4,978	-	-	-	326	340	351
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984	2.50%	401(k) Match 50% up to 5%	2,789	2,901	3,001	-	-	-	984	1,024	1,059
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991	2.50%	401(k) Match 50% up to 5%	5,377	5,593	5,787	-	-	-	-	-	-
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994	2.50%	401(k) Match 50% up to 5%	2,634	2,740	2,835	-	-	-	-	-	-
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992	2.50%	401(k) Match 50% up to 5%	2,508	2,609	2,700	-	-	-	1,771	1,842	1,906
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986	2.50%	401(k) Match 50% up to 5%	2,227	2,317	2,397	-	-	-	-	-	-
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986	2.50%	401(k) Match 50% up to 5%	3,746	3,896	4,032	-	-	-	-	-	-
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998	2.50%	401(k) Match 50% up to 5%	2,399	2,495	2,582	-	-	-	1,016	1,057	1,093
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998	2.50%	401(k) Match 50% up to 5%	3,546	3,688	3,816	-	-	-	1,251	1,302	1,347
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998	2.50%	401(k) Match 50% up to 5%	2,317	2,410	2,493	-	-	-	327	340	352
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999			-	-	-	-	-	-	-	-	-
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999	2.50%	401(k) Roth Match 50% up to 5%	2,944	3,062	3,169	-	-	-	1,835	1,835	1,835
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999			-	-	-	-	-	-	-	-	-
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000	2.50%	401(k) Match 50% up to 5%	4,279	4,451	4,606	-	-	-	-	-	-
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000	2.50%	401(k) Match 50% up to 5%	2,151	2,237	2,315	-	-	-	1,518	1,579	1,634
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000	2.50%	401(k) Match 50% up to 5%	2,141	2,227	2,305	-	-	-	1,209	1,258	1,301
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000			-	-	-	-	-	-	1,376	1,376	1,376
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001			-	-	-	7,371	7,667	7,933	-	-	-
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994	2.50%	401(k) Match 50% up to 5%	2,897	3,013	3,118	-	-	-	409	425	440
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990			-	-	-	4,593	4,778	4,943	344	344	344
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001	2.50%	401(k) Match 50% up to 5%	2,869	2,984	3,088	-	-	-	-	-	-
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999	2.50%	401(k) Match 50% up to 5%	2,704	2,812	2,910	-	-	-	954	993	1,027
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990	2.50%	401(k) Match 50% up to 5%	2,835	2,948	3,051	-	-	-	2,001	2,081	2,154
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999	2.50%	401(k) Match 50% up to 5%	3,369	3,504	3,625	-	-	-	1,902	1,979	2,047
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992	2.50%	401(k) Match 50% up to 5%	5,071	5,274	5,458	-	-	-	-	-	-
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997	2.50%	401(k) Roth Match 50% up to 5%	4,996	5,196	5,377	-	-	-	705	734	759
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002	2.50%	401(k) Match 50% up to 5%	3,565	3,708	3,837	-	-	-	4,129	4,129	4,129
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003	2.50%	401(k) Match 50% up to 5%	3,057	3,180	3,291	-	-	-	1,079	1,122	1,162
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,323	3,456	3,577	4,361	4,536	4,695	440	457	473
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003	2.50%	401(k) Match 50% up to 5%	2,643	2,749	2,844	-	-	-	-	-	-
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003			-	-	-	-	-	-	-	-	-
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,200	3,328	3,444	4,200	4,368	4,520	565	587	608
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003	2.50%	401(k) Match 50% up to 5%	2,933	3,050	3,156	-	-	-	621	646	668
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004	2.50%	401(k) Match 50% up to 5%	2,425	2,523	2,610	-	-	-	-	-	-
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005	2.50%	401(k) Match 50% up to 5%	3,076	3,200	3,311	-	-	-	-	-	-
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005	2.50%	401(k) Match 50% up to 5%	2,638	2,744	2,840	-	-	-	-	-	-
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005	2.50%	401(k) Match 50% up to 5%	2,678	2,786	2,882	-	-	-	567	590	610
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	4,328	4,501	4,658	5,680	5,908	6,113	-	-	-
72	241151	PITT-Production Haye	Supvr Production	3/16/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	3,458	3,597	3,722	4,539	4,721	4,885	1,526	1,587	1,642
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005			-	-	-	-	-	-	-	-	-
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005			-	-	-	4,893	5,090	5,267	-	-	-
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005	2.50%	401(k) Match 50% up to 5%	3,077	3,201	3,312	-	-	-	1,086	1,130	1,169

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005	2.50%	401(k) Match 50% up to 5%	2,410	2,507	2,594	-	-	-	510	531	549
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005	2.50%	401(k) Match 50% up to 5%	2,410	2,507	2,594	-	-	-	-	-	-
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005			-	-	-	-	-	-	-	-	-
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	4,667	4,854	5,023	6,126	6,371	6,592	1,441	1,499	1,551
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006			-	-	-	4,112	4,276	4,425	459	459	459
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	5,974	6,213	6,430	7,841	8,155	8,439	1,318	1,371	1,418
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	4,438	4,616	4,777	5,825	6,058	6,269	196	204	211
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,412	3,548	3,672	4,478	4,657	4,819	-	-	-
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,383	3,519	3,641	4,440	4,618	4,779	-	-	-
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,120	3,245	3,358	4,095	4,259	4,407	-	-	-
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,200	3,328	3,444	4,200	4,368	4,520	424	440	456
87	240106	CORP-Field Services	Mgr Opns	1/22/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	3,034	3,156	3,265	5,310	5,522	5,714	115	115	115
88	249150	WILK-Other	Production Asset Administrator	1/22/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	3,520	3,661	3,788	4,620	4,805	4,972	621	646	668
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007	4.00%	401(k) Roth 1-3/100% 4-5/50%	4,320	4,494	4,650	5,670	5,898	6,103	953	991	1,026
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	2,290	2,381	2,464	4,007	4,167	4,312	-	-	-
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	4,692	4,881	5,050	6,158	6,406	6,628	2,070	2,153	2,228
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	3,438	3,576	3,700	6,017	6,258	6,476	-	-	-
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	2,877	2,992	3,096	5,034	5,236	5,419	-	-	-
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	4,536	4,718	4,882	5,954	6,193	6,408	-	-	-
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007			-	-	-	6,405	6,662	6,894	-	-	-
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	3,021	3,142	3,251	5,286	5,498	5,689	-	-	-
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	5,616	5,841	6,044	7,371	7,667	7,933	-	-	-
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	3,280	3,412	3,531	4,305	4,478	4,634	434	452	467
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	4,896	5,093	5,270	6,426	6,684	6,917	-	-	-
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	5,147	5,353	5,539	6,755	7,026	7,271	-	-	-
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008	3.00%	401(k) Match 1-3/100% 4-5/50%	2,621	2,726	2,820	4,586	4,770	4,936	771	802	830
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	3,395	3,531	3,654	4,455	4,634	4,796	1,498	1,558	1,612
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	3,567	3,710	3,839	4,681	4,869	5,038	-	-	-
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	3,822	3,975	4,113	5,016	5,218	5,399	-	-	-
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009	4.00%	401(k) Roth 1-3/100% 4-5/50%	5,920	6,158	6,372	7,770	8,082	8,364	1,835	1,835	1,835
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009	3.50%	401(k) Match 1-3/100% 4-5/50%	7,733	8,043	8,322	11,599	12,064	12,484	1,949	2,028	2,098
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,948	4,107	4,250	5,182	5,390	5,578	4,428	4,428	4,428
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	3,330	3,463	3,583	4,370	4,545	4,703	-	-	-
109	246501	COAT-Production	Supvr Production	4/12/2010	3.00%	401(k) Match 1-3/100% 4-5/50%	2,456	2,555	2,643	4,298	4,471	4,626	344	344	344
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010			-	-	-	4,200	4,368	4,520	-	-	-
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	3,836	3,990	4,129	5,035	5,237	5,420	-	-	-
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010			-	-	-	6,115	6,360	6,581	411	428	442
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	3,914	4,071	4,212	5,137	5,343	5,529	-	-	-
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011	3.00%	401(k) Match 1-3/100% 4-5/50%	2,790	2,902	3,003	4,883	5,078	5,255	-	-	-
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	3,320	3,453	3,573	4,358	4,532	4,689	1,025	1,066	1,103
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,888	3,004	3,108	3,791	3,942	4,080	637	663	686
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	3,265	3,395	3,514	4,285	4,456	4,612	432	449	465
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011	3.00%	401(k) Match 1-3/100% 4-5/50%	3,596	3,740	3,870	6,292	6,544	6,773	423	440	455
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012	4.00%	401(k) Match 1-3/100% 4-5/50%	3,419	3,556	3,680	4,487	4,667	4,830	-	-	-
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012	4.00%	401(k) Match 1-3/100% 4-5/50%	4,716	4,905	5,075	6,189	6,437	6,661	229	229	229
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012			-	-	-	6,393	6,649	6,881	2,149	2,235	2,313
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012	4.00%	401(k) Match 1-3/100% 4-5/50%	2,892	3,009	3,113	3,796	3,949	4,086	255	265	275
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	4,902	5,098	5,276	6,434	6,692	6,924	649	675	698
124	240306	CORP-Field Service	Project Manager	3/4/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	4,499	4,679	4,842	5,904	6,141	6,355	992	1,032	1,068
125	243151	NEWC-New Castle	Supvr Production	4/29/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	3,322	3,454	3,574	4,360	4,534	4,691	1,465	1,524	1,577
126	247150	MILT-Prod Other	Supvr Production	5/28/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	3,183	3,311	3,425	4,177	4,345	4,496	-	-	-
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013	2.00%	401(k) Match 1-3/100% 4-5/50%	1,644	1,709	1,769	4,315	4,487	4,643	435	452	468
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013	2.00%	401(k) Match 1-3/100% 4-5/50%	1,600	1,664	1,722	4,200	4,368	4,520	-	-	-
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	6,566	6,829	7,067	8,617	8,963	9,275	290	301	312
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013	3.00%	401(k) Match 1-3/100% 4-5/50%	3,090	3,214	3,325	5,408	5,624	5,819	-	-	-
131	240114	CORP-Engineering	GIS Manager	3/31/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,719	3,868	4,003	4,881	5,077	5,254	-	-	-
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	4,640	4,826	4,994	6,090	6,335	6,555	2,047	2,129	2,203
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,478	3,617	3,742	4,564	4,747	4,912	-	-	-
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,240	3,370	3,487	4,253	4,423	4,577	858	892	923
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,080	3,203	3,315	4,043	4,204	4,351	-	-	-
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,569	3,712	3,841	4,684	4,873	5,042	-	-	-
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,765	2,876	2,976	3,630	3,775	3,906	732	761	788
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,468	3,607	3,732	4,552	4,734	4,899	-	-	-
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	5,088	5,292	5,476	6,678	6,946	7,188	2,245	2,335	2,416
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015	3.00%	401(k) Match 1-3/100% 4-5/50%	2,547	2,649	2,741	4,456	4,636	4,797	-	-	-
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015	2.00%	401(k) Match 1-3/100% 4-5/50%	1,537	1,599	1,655	4,035	4,198	4,344	-	-	-
142	240114	CORP-Engineering	GIS Manager	2/2/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,719	3,868	4,003	4,881	5,077	5,254	-	-	-
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,011	3,132	3,241	3,952	4,110	4,253	266	276	286
144	240114	CORP-Engineering	Engineer	6/22/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,261	3,391	3,509	4,280	4,451	4,606	-	-	-
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,148	3,274	3,388	4,132	4,297	4,447	278	289	299
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015	4.00%	401(k) Roth 1-3/100% 4-5/50%	4,040	4,202	4,348	5,303	5,515	5,707	-	-	-
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,120	3,245	3,358	4,095	4,259	4,407	-	-	-
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,131	3,256	3,370	4,110	4,274	4,423	-	-	-
149	243301	BUTL-Production	Supvr Production	12/7/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,310	3,443	3,563	4,345	4,519	4,676	584	608	629
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015	3.00%	401(k) Match 1-3/100% 4-5/50%	2,371	2,466	2,552	4,149	4,316	4,466	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	8,673	9,021	9,334	11,383	11,839	12,251	-	-	-
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,207	3,335	3,452	4,209	4,378	4,531	1,132	1,177	1,218
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	5,629	5,856	6,059	7,389	7,685	7,953	248	258	267
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,841	2,955	3,058	3,729	3,879	4,014	1,376	1,376	1,376
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,468	3,608	3,733	4,552	4,735	4,900	-	-	-
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	4,122	4,287	4,436	5,410	5,627	5,823	-	-	-
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,106	3,231	3,343	4,076	4,240	4,388	-	-	-
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,013	3,134	3,243	3,955	4,114	4,257	266	277	286
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,661	3,807	3,940	4,805	4,997	5,171	229	229	229
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,940	4,098	4,240	5,171	5,378	5,565	-	-	-
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	6,600	6,865	7,104	8,663	9,010	9,323	-	-	-
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990	4.00%	401(k) Match 1-3/100% 4-5/50%	3,351	3,485	3,607	4,398	4,574	4,734	-	-	-
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	3,140	3,266	3,380	4,122	4,287	4,437	-	-	-
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	4,152	4,319	4,470	5,450	5,669	5,866	550	572	592
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	5,152	5,358	5,544	6,762	7,032	7,277	459	459	459
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	4,000	4,160	4,305	5,250	5,460	5,650	529	551	570
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	3,933	4,091	4,233	5,162	5,369	5,556	521	541	560
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	4,320	4,494	4,650	5,670	5,898	6,103	-	-	-
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	3,203	3,331	3,447	4,204	4,372	4,524	141	147	152
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017	3.00%	401(k) Roth 1-3/100% 4-5/50%	2,059	2,142	2,216	3,603	3,748	3,878	92	92	92
171	240114	CORP-Engineering	Planning Engineer	8/14/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	3,394	3,530	3,653	4,455	4,633	4,795	-	-	-
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017	1.00%	401(k) Match 1-3/100% 4-5/50%	1,270	1,321	1,367	6,668	6,935	7,177	4,588	4,588	4,588
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,836	3,990	4,129	5,035	5,237	5,420	-	-	-
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	3,473	3,612	3,737	4,558	4,740	4,905	153	159	165
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,929	4,087	4,229	5,157	5,364	5,551	92	92	92
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018	4.00%	401(k) Roth 1-3/100% 4-5/50%	4,187	4,356	4,507	5,496	5,717	5,915	1,478	1,537	1,591
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	4,183	4,351	4,502	5,490	5,710	5,909	369	384	397
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,277	3,409	3,528	4,301	4,474	4,630	578	602	623
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,884	4,039	4,180	5,097	5,302	5,486	688	688	688
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,952	4,110	4,253	5,187	5,394	5,582	-	-	-
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,409	3,546	3,669	4,475	4,654	4,816	184	184	184
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	3,474	3,614	3,740	5,212	5,421	5,610	-	-	-
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,149	3,276	3,390	4,133	4,299	4,449	-	-	-
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,090	3,214	3,326	4,056	4,218	4,365	-	-	-
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	5,080	5,284	5,468	6,668	6,935	7,177	1,121	1,166	1,206
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,160	3,286	3,400	4,148	4,313	4,463	-	-	-
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,661	3,807	3,940	4,805	4,997	5,171	459	459	459
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	2,887	3,003	3,108	4,330	4,505	4,662	-	-	-
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,793	2,905	3,007	3,666	3,813	3,946	370	385	398
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,182	3,310	3,425	4,177	4,344	4,495	601	601	601
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,764	3,915	4,051	4,940	5,138	5,317	498	518	536
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018			-	-	-	4,463	4,641	4,803	-	-	-
193	240114	CORP-Engineering	Staff Engineer	8/27/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	2,657	2,763	2,860	3,986	4,145	4,289	1,340	1,393	1,442
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,103	3,227	3,340	4,072	4,236	4,383	-	-	-
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,099	3,223	3,335	4,067	4,230	4,378	184	184	184
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018	4.00%	401(k) Roth 1-3/100% 4-5/50%	12,600	13,106	13,562	16,538	17,201	17,800	-	-	-
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,746	2,855	2,955	4,805	4,997	5,171	459	459	459
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,080	3,203	3,315	4,042	4,204	4,351	408	424	439
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,120	3,246	3,359	4,095	4,260	4,408	-	-	-
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,306	3,438	3,558	4,339	4,512	4,669	-	-	-
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	2,460	2,559	2,648	3,691	3,838	3,972	-	-	-
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,716	3,865	4,000	4,878	5,073	5,250	440	440	440
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,151	3,277	3,391	4,136	4,301	4,451	46	46	46
204	240114	CORP-Engineering	Planning Engineer	2/4/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,971	4,130	4,274	5,212	5,421	5,610	964	964	964
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,404	2,501	2,588	4,208	4,377	4,529	-	-	-
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,446	3,584	3,709	4,523	4,704	4,868	918	918	918
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,197	3,326	3,441	4,197	4,365	4,517	-	-	-
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,183	3,311	3,425	4,178	4,345	4,496	-	-	-
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,200	3,328	3,444	4,200	4,368	4,520	229	229	229
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,532	3,673	3,801	4,635	4,821	4,989	-	-	-
211	240114	CORP-Engineering	Staff Engineer	5/20/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,114	3,239	3,351	4,087	4,251	4,399	459	459	459
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,373	3,509	3,631	4,427	4,605	4,765	459	459	459
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,787	3,939	4,076	4,970	5,170	5,350	334	348	360
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,120	3,245	3,358	4,095	4,259	4,407	413	429	444
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,704	2,812	2,910	3,549	3,691	3,820	-	-	-
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,580	2,683	2,777	4,515	4,696	4,859	1,518	1,578	1,633
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,800	3,952	4,089	4,988	5,187	5,367	1,676	1,744	1,804
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,962	4,121	4,264	5,200	5,409	5,597	-	-	-
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,409	3,545	3,668	4,474	4,653	4,815	-	-	-
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,380	3,515	3,638	4,436	4,614	4,774	505	505	505
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,321	3,454	3,574	4,359	4,534	4,691	229	229	229
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,995	3,115	3,223	3,931	4,088	4,230	-	-	-
223	240120	CORP-Bus Dev	Vice President of Business Development	11/4/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	9,615	10,001	10,348	12,620	13,126	13,582	-	-	-
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,884	2,999	3,103	3,785	3,937	4,073	-	-	-
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,014	3,135	3,244	3,956	4,115	4,258	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	Gross Other Benefits 401k, DCP, ESPP 2023 ESPP	2024 ESPP	2025 ESPP
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	5,562	5,785	5,986	7,300	7,593	7,857	459	459	459
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	6,240	6,490	6,716	8,190	8,519	8,815	-	-	-
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020	1.00%	401(k) Roth 1-3/100% 4-5/50%	1,136	1,181	1,222	5,962	6,201	6,418	-	-	-
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	2,044	2,126	2,200	3,577	3,720	3,850	-	-	-
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	2,617	2,722	2,817	4,580	4,763	4,929	-	-	-
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,710	2,819	2,917	3,557	3,700	3,829	229	229	229
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,952	4,110	4,253	5,187	5,394	5,582	-	-	-
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020	2.00%	401(k) Match 1-3/100% 4-5/50%	3,502	3,642	3,769	9,193	9,562	9,895	-	-	-
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,718	2,827	2,925	3,567	3,711	3,839	-	-	-
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	4,400	4,577	4,736	5,775	6,007	6,216	-	-	-
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	3,206	3,334	3,450	5,610	5,835	6,038	-	-	-
237	249151	WILK-Brownell	Supvr Production	8/24/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,000	3,120	3,229	3,938	4,095	4,238	115	115	115
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	4,401	4,578	4,737	5,776	6,008	6,217	1,165	1,212	1,254
239	240114	CORP-Engineering	Engineer	10/12/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,772	2,883	2,984	3,638	3,784	3,916	856	890	921
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997	3.00%	401(k) Roth 1-3/100% 4-5/50%	2,184	2,271	2,351	3,822	3,975	4,114	128	134	138
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,169	3,296	3,410	4,159	4,325	4,476	138	138	138
242	240114	CORP-Engineering	Engineer	1/4/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,772	2,883	2,984	3,638	3,784	3,916	1,147	1,147	1,147
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	2,319	2,412	2,496	4,058	4,221	4,368	682	709	734
244	241151	PITT-Production Haye	Supvr Production	3/29/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,466	2,565	2,654	4,316	4,488	4,644	-	-	-
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021	3.50%	401(k) Match 1-3/100% 4-5/50%	5,775	6,007	6,216	8,663	9,010	9,323	688	688	688
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	4,543	4,725	4,890	5,962	6,201	6,418	2,294	2,294	2,294
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,975	3,094	3,202	3,905	4,061	4,202	-	-	-
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	3,646	3,791	3,924	4,785	4,976	5,150	528	528	528
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,355	2,450	2,535	4,122	4,287	4,437	-	-	-
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	3,461	3,600	3,726	4,543	4,725	4,890	-	-	-
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	3,192	3,320	3,435	4,189	4,357	4,509	229	229	229
252	240114	CORP-Engineering	Engineer	9/13/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,654	2,760	2,855	3,483	3,622	3,748	-	-	-
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	6,975	7,254	7,506	9,154	9,521	9,852	528	528	528
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,072	3,196	3,307	4,032	4,194	4,341	-	-	-
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022			-	-	-	4,200	4,368	4,520	-	-	-
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,920	1,997	2,066	3,360	3,494	3,616	-	-	-
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,400	2,496	2,583	4,200	4,368	4,520	-	-	-
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,360	2,454	2,540	4,130	4,295	4,444	-	-	-
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,260	3,391	3,509	4,279	4,451	4,606	432	449	464
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,378	3,514	3,636	4,434	4,612	4,772	229	229	229
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,100	2,184	2,260	3,675	3,822	3,955	-	-	-
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	4,563	4,746	4,910	5,989	6,229	6,445	1,376	1,376	1,376
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,732	3,881	4,016	4,898	5,094	5,271	165	171	177
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	4,355	4,530	4,687	5,716	5,946	6,152	1,147	1,147	1,147
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,240	3,370	3,488	4,253	4,424	4,578	-	-	-
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,910	4,067	4,208	5,132	5,338	5,523	-	-	-
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,756	2,866	2,966	3,617	3,762	3,893	459	459	459
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,940	3,058	3,164	3,859	4,013	4,153	344	344	344
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995	4.00%	401(k) Match 1-3/100% 4-5/50%	2,855	2,970	3,073	3,748	3,898	4,034	459	459	459
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,052	3,174	3,285	4,005	4,166	4,311	-	-	-
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,678	2,786	2,883	3,515	3,656	3,784	-	-	-
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,182	3,309	3,424	4,176	4,343	4,494	-	-	-
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,386	3,522	3,644	4,445	4,622	4,783	-	-	-
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,451	3,589	3,714	4,529	4,711	4,875	-	-	-
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,500	3,640	3,766	4,594	4,778	4,943	11,471	11,471	11,471
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,400	3,536	3,659	4,463	4,641	4,803	600	624	646
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,460	2,558	2,648	4,305	4,477	4,633	-	-	-
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,280	2,371	2,454	3,990	4,150	4,294	-	-	-
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	3,360	3,494	3,616	4,410	4,586	4,746	-	-	-
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	3,000	3,120	3,229	3,938	4,095	4,238	-	-	-
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	3,000	3,120	3,229	3,938	4,095	4,238	-	-	-
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	3,600	3,745	3,875	6,300	6,553	6,781	-	-	-
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	2,850	2,964	3,067	4,988	5,187	5,367	-	-	-
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023	4.00%	401(k) Roth 1-3/100% 4-5/50%	4,000	4,160	4,305	5,250	5,460	5,650	344	344	344
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	3,500	3,640	3,766	4,594	4,778	4,943	-	-	-
286	240114	CORP-Engineering	Engineer	6/26/2023			-	-	-	3,255	3,385	3,503	-	-	-
287	240114	CORP-Engineering	Project Manager	6/26/2023			-	-	-	5,775	6,007	6,216	-	-	-
288	240114	CORP-Engineering	Sr Project Engineer - To Be Fillec	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	4,011	4,151	-	6,089	6,301	-	-	-
289	240114	CORP-Engineering	Sr Project Engineer - To Be Fillec	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	4,011	4,151	-	6,089	6,301	-	-	-
290	240114	CORP-Engineering	Sr Project Engineer - To Be Fillec	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	4,011	4,151	-	6,089	6,301	-	-	-
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,435	3,554	-	5,214	5,396	-	-	-
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,435	3,554	-	5,214	5,396	-	-	-
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Fillec	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	4,011	4,151	-	6,089	6,301	-	-	-
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,435	3,554	-	5,214	5,396	-	-	-
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Fillec	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,435	3,554	-	5,214	5,396	-	-	-
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Fillec	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,435	3,554	-	5,214	5,396	-	-	-
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Fillec	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	6,025	6,235	-	9,147	9,464	-	-	-
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Fillec	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	4,946	5,118	-	7,509	7,770	-	-	-
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	3,435	3,554	-	5,214	5,396	-	-	-
			Total Non-Collective Bargaining Unit Salary				$924,465	$1,009,151	$1,044,266	$1,108,438	$1,225,167	$1,267,797	$137,082	$140,359	$143,318
						Vacancy Rate	1.76%	1.76%			1.76%	1.76%		1.76%	1.76%
						Vacancy Adjustment	$17,729	$18,346			$21,524	$22,273		$2,466	$2,518
						Total Non-Collective Bargaining Unit Salary	$991,422	$1,025,920			$1,203,643	$1,245,524		$137,894	$140,800

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	Gross Other Benefits 401k, DCP, ESPP 2023 ESPP	2024 ESPP	2025 ESPP
Collective Bargaining Unit															
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	2.00%	401(k) Match 50% up to 5%	$1,482	$1,518	$1,556	$0	$0	$0	$0	$0	$0
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	2.50%	401(k) Match 50% up to 5%	1,874	1,921	1,969	-	-	-	-	-	-
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	1.00%	401(k) Match 50% up to 5%	736	755	773	-	-	-	-	-	-
4	241103	PITT-Cust Service	Field Service Representative U537F	3/31/1994	2.50%	401(k) Match 50% up to 5%	1,845	1,891	1,938	-	-	-	-	-	-
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	2.50%	401(k) Match 50% up to 5%	1,899	1,945	1,994	-	-	-	536	549	563
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987			-	-	-	-	-	-	-	-	-
7	241103	PITT-Cust Service	Field Service Representative U537F	2/2/1988	2.50%	401(k) Match 50% up to 5%	1,845	1,891	1,938	-	-	-	-	-	-
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	2.50%	401(k) Match 50% up to 5%	1,992	2,041	2,092	-	-	-	-	-	-
9	241103	PITT-Cust Service	Field Service Representative U537F	7/5/1983	2.50%	401(k) Match 50% up to 5%	1,845	1,891	1,938	-	-	-	-	-	-
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) L	2/1/1985	2.50%	401(k) Match 50% up to 5%	1,896	1,943	1,992	-	-	-	574	574	574
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	2.50%	401(k) Match 50% up to 5%	1,899	1,945	1,994	-	-	-	-	-	-
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991			-	-	-	-	-	-	132	135	138
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) L	4/22/1991	2.50%	401(k) Match 50% up to 5%	1,909	1,956	2,005	-	-	-	944	967	991
14	241103	PITT-Cust Service	Field Service Representative U537F	5/6/1985	2.50%	401(k) Match 50% up to 5%	1,845	1,891	1,938	-	-	-	-	-	-
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	2.50%	401(k) Match 50% up to 5%	1,861	1,899	1,936	-	-	-	-	-	-
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	2.50%	401(k) Match 50% up to 5%	1,857	1,895	1,932	-	-	-	-	-	-
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	2.50%	401(k) Match 50% up to 5%	1,913	1,968	2,016	-	-	-	405	417	427
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	2.00%	401(k) Match 50% up to 5%	1,493	1,537	1,575	-	-	-	263	271	278
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	2.50%	401(k) Match 50% up to 5%	1,870	1,908	1,945	-	-	-	-	-	-
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	2.50%	401(k) Match 50% up to 5%	1,843	1,880	1,917	-	-	-	-	-	-
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	2.50%	401(k) Match 50% up to 5%	1,875	1,912	1,950	-	-	-	132	135	138
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	2.50%	401(k) Match 50% up to 5%	1,918	1,956	1,995	-	-	-	-	-	-
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	2.50%	401(k) Match 50% up to 5%	1,848	1,885	1,923	-	-	-	-	-	-
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	2.50%	401(k) Match 50% up to 5%	1,861	1,899	1,936	-	-	-	-	-	-
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	2.50%	401(k) Match 50% up to 5%	1,855	1,911	1,959	-	-	-	917	944	968
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	2.50%	401(k) Match 50% up to 5%	1,863	1,919	1,967	-	-	-	658	677	694
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	2.50%	401(k) Match 50% up to 5%	1,870	1,908	1,946	-	-	-	-	-	-
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	2.50%	401(k) Match 50% up to 5%	1,848	1,885	1,923	-	-	-	391	399	407
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	2.50%	401(k) Match 50% up to 5%	1,857	1,895	1,932	-	-	-	-	-	-
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	2.50%	401(k) Match 50% up to 5%	1,875	1,912	1,950	-	-	-	662	675	688
31	243301	BUTL-Production	Operator U537O	5/4/1998	2.50%	401(k) Match 50% up to 5%	1,918	1,956	1,995	-	-	-	-	-	-
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	2.50%	401(k) Match 50% up to 5%	1,869	1,906	1,944	-	-	-	396	404	412
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	2.50%	401(k) Match 50% up to 5%	1,856	1,893	1,931	-	-	-	-	-	-
34	243301	BUTL-Production	Operator U537O	11/2/1984	2.50%	401(k) Match 50% up to 5%	1,918	1,956	1,995	-	-	-	-	-	-
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	2.00%	401(k) Match 50% up to 5%	1,479	1,508	1,538	-	-	-	-	-	-
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	2.50%	401(k) Match 50% up to 5%	1,843	1,880	1,917	-	-	-	-	-	-
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	2.50%	401(k) Match 50% up to 5%	1,840	1,877	1,914	-	-	-	-	-	-
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	2.50%	401(k) Match 50% up to 5%	1,875	1,912	1,950	-	-	-	-	-	-
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	2.50%	401(k) Match 50% up to 5%	1,861	1,899	1,936	-	-	-	-	-	-
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	2.50%	401(k) Match 50% up to 5%	1,857	1,895	1,932	-	-	-	-	-	-
41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	2.50%	401(k) Match 50% up to 5%	1,848	1,885	1,923	-	-	-	391	399	407
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	2.50%	401(k) Match 50% up to 5%	1,918	1,956	1,995	-	-	-	-	-	-
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	2.50%	401(k) Match 50% up to 5%	1,857	1,895	1,932	-	-	-	-	-	-
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	2.50%	401(k) Match 50% up to 5%	1,870	1,908	1,946	-	-	-	-	-	-
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	2.50%	401(k) Match 50% up to 5%	1,856	1,893	1,930	-	-	-	-	-	-
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	2.50%	401(k) Match 50% up to 5%	1,876	1,913	1,951	-	-	-	-	-	-
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	2.50%	401(k) Match 50% up to 5%	1,875	1,912	1,950	-	-	-	-	-	-
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	2.50%	401(k) Match 50% up to 5%	1,861	1,899	1,936	-	-	-	657	670	683
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	2.50%	401(k) Match 50% up to 5%	1,692	1,742	1,794	-	-	-	597	615	633
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	2.50%	401(k) Match 50% up to 5%	1,659	1,708	1,759	-	-	-	234	241	248
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	2.50%	401(k) Match 50% up to 5%	1,633	1,682	1,733	-	-	-	-	-	-
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	2.50%	401(k) Match 50% up to 5%	1,669	1,719	1,771	-	-	-	1,178	1,213	1,250
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988			-	-	-	-	-	-	-	-	-
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987			-	-	-	-	-	-	-	-	-
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	2.50%	401(k) Match 50% up to 5%	1,614	1,662	1,712	-	-	-	342	352	362
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	2.50%	401(k) Match 50% up to 5%	1,692	1,742	1,794	-	-	-	1,194	1,230	1,266
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	2.50%	401(k) Match 50% up to 5%	1,659	1,708	1,759	-	-	-	586	603	621
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	2.50%	401(k) Match 50% up to 5%	1,669	1,719	1,771	-	-	-	-	-	-
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	2.00%	401(k) Match 50% up to 5%	1,343	1,383	1,424	-	-	-	-	-	-
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	2.00%	401(k) Match 50% up to 5%	1,327	1,366	1,407	-	-	-	-	-	-
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	237	244	252
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	2.50%	401(k) Match 50% up to 5%	1,614	1,662	1,712	-	-	-	-	-	-
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	2.50%	401(k) Match 50% up to 5%	1,614	1,662	1,712	-	-	-	1,139	1,173	1,208
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	2.50%	401(k) Match 50% up to 5%	1,692	1,742	1,794	-	-	-	1,194	1,230	1,266
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	2.00%	401(k) Match 50% up to 5%	1,344	1,384	1,426	-	-	-	-	-	-
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	1,067	1,099	1,132
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	2.50%	401(k) Match 50% up to 5%	1,614	1,662	1,712	-	-	-	-	-	-
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	2.50%	401(k) Match 50% up to 5%	1,659	1,708	1,759	-	-	-	-	-	-
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	2.00%	401(k) Match 50% up to 5%	1,281	1,319	1,359	-	-	-	-	-	-
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	2.50%	401(k) Match 50% up to 5%	1,682	1,732	1,784	-	-	-	-	-	-
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

						Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	2.50%	401(k) Match 50% up to 5%	1,669	1,719	1,771	-	-	-	-	-	-
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	2.00%	401(k) Match 50% up to 5%	1,353	1,394	1,435	-	-	-	-	-	-
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986			-	-	-	-	-	-	-	-	-
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	2.50%	401(k) Match 50% up to 5%	1,659	1,708	1,759	-	-	-	-	-	-
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	2.50%	401(k) Match 50% up to 5%	1,646	1,695	1,746	-	-	-	581	598	616
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	237	244	252
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	1.50%	401(k) Match 50% up to 5%	980	1,009	1,040	-	-	-	231	237	245
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	2.50%	401(k) Match 50% up to 5%	1,669	1,719	1,771	-	-	-	353	364	375
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	2.50%	401(k) Match 50% up to 5%	1,680	1,730	1,782	-	-	-	-	-	-
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	2.50%	401(k) Match 50% up to 5%	1,669	1,719	1,771	-	-	-	2,294	2,294	2,294
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	2.50%	401(k) Match 50% up to 5%	1,633	1,682	1,733	-	-	-	-	-	-
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	2.50%	401(k) Match 50% up to 5%	1,592	1,640	1,689	-	-	-	-	-	-
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	2.00%	401(k) Match 50% up to 5%	1,344	1,384	1,426	-	-	-	-	-	-
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	2.50%	401(k) Match 50% up to 5%	1,659	1,708	1,759	-	-	-	-	-	-
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	2.50%	401(k) Match 50% up to 5%	1,669	1,719	1,771	-	-	-	-	-	-
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	2.50%	401(k) Match 50% up to 5%	1,592	1,640	1,689	-	-	-	-	-	-
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	2.50%	401(k) Match 50% up to 5%	1,659	1,708	1,759	-	-	-	-	-	-
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	2.50%	401(k) Match 50% up to 5%	1,682	1,732	1,784	-	-	-	-	-	-
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	2.50%	401(k) Match 50% up to 5%	1,633	1,682	1,733	-	-	-	461	475	489
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	0.50%	401(k) Match 50% up to 5%	332	342	352	-	-	-	-	-	-
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	2.50%	401(k) Match 50% up to 5%	1,646	1,695	1,746	-	-	-	-	-	-
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	2.50%	401(k) Roth Match 50% up to 5%	1,680	1,730	1,782	-	-	-	4,359	4,359	4,359
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	2.50%	401(k) Match 50% up to 5%	1,736	1,775	1,820	-	-	-	-	-	-
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	2.50%	401(k) Match 50% up to 5%	1,861	1,903	1,951	-	-	-	-	-	-
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	2.50%	401(k) Match 50% up to 5%	1,696	1,734	1,777	-	-	-	1,197	1,224	1,255
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	2.50%	401(k) Match 50% up to 5%	1,750	1,798	1,843	-	-	-	247	254	260
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	2.50%	401(k) Match 50% up to 5%	1,690	1,728	1,772	-	-	-	-	-	-
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996			-	-	-	-	-	-	-	-	-
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	2.50%	401(k) Match 50% up to 5%	1,731	1,779	1,824	-	-	-	-	-	-
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	2.50%	401(k) Match 50% up to 5%	1,731	1,779	1,824	-	-	-	-	-	-
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	2.50%	401(k) Match 50% up to 5%	1,824	1,866	1,912	-	-	-	-	-	-
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	2.50%	401(k) Match 50% up to 5%	1,696	1,734	1,777	-	-	-	-	-	-
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	2.50%	401(k) Match 50% up to 5%	1,861	1,903	1,951	-	-	-	-	-	-
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	2.50%	401(k) Match 50% up to 5%	1,862	1,908	1,955	-	-	-	-	-	-
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	2.50%	401(k) Match 50% up to 5%	1,862	1,908	1,955	-	-	-	-	-	-
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	2.50%	401(k) Match 50% up to 5%	1,861	1,899	1,936	-	-	-	-	-	-
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	2.50%	401(k) Match 50% up to 5%	1,992	2,041	2,092	-	-	-	1,265	1,297	1,329
117	241103	PITT-Cust Service	Field Service Representative U537F	11/18/1998	2.50%	401(k) Match 50% up to 5%	1,845	1,891	1,938	-	-	-	1,302	1,335	1,368
118	244101	INDI-Production	Operator U537O	8/9/1999	2.50%	401(k) Match 50% up to 5%	1,918	1,956	1,995	-	-	-	-	-	-
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	2.50%	401(k) Match 50% up to 5%	1,861	1,899	1,937	-	-	-	-	-	-
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	2.50%	401(k) Match 50% up to 5%	1,856	1,893	1,930	-	-	-	393	401	409
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	2.00%	401(k) Match 50% up to 5%	1,379	1,410	1,445	-	-	-	-	-	-
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	2.50%	401(k) Match 50% up to 5%	1,856	1,893	1,930	-	-	-	-	-	-
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	2.50%	401(k) Match 50% up to 5%	1,862	1,908	1,955	-	-	-	-	-	-
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	-	-	-
125	241103	PITT-Cust Service	Field Service Representative U537F	12/28/2001	3.00%	401(k) Match 1-3/100% 4-5/50%	2,214	2,269	2,326	3,874	3,970	4,070	-	-	-
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	1.00%	401(k) Match 50% up to 5%	739	754	769	-	-	-	-	-	-
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	4.00%	401(k) Match 1-3/100% 4-5/50%	3,069	3,129	3,192	4,027	4,107	4,190	-	-	-
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,972	3,032	3,092	3,900	3,979	4,058	918	936	955
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	262	267	273
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	2,770	2,847	2,918	3,636	3,737	3,830	-	-	-
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	2,979	3,053	3,129	3,910	4,007	4,106	4,129	4,129	4,129
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	1,147	1,147	1,147
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,582	2,659	2,739	3,389	3,490	3,594	570	587	604
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	3,069	3,129	3,192	4,027	4,107	4,190	542	552	563
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	2,993	3,053	3,113	3,928	4,007	4,086	-	-	-
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002			-	-	-	3,902	3,999	4,098	-	-	-
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	2,973	3,047	3,122	3,902	3,999	4,098	-	-	-
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	2,991	3,050	3,111	3,926	4,003	4,083	-	-	-
139	241103	PITT-Cust Service	Field Service Representative U537F	4/14/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	1,606	1,606	1,606
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,659	2,739	3,389	3,490	3,594	1,139	1,173	1,208
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	-	-	-
144	241103	PITT-Cust Service	Field Service Representative U537F	8/29/2003	1.00%	401(k) Match 1-3/100% 4-5/50%	738	756	775	3,874	3,970	4,070	-	-	-
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	2,770	2,847	2,918	3,636	3,737	3,830	-	-	-
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	-	-	-
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,048	3,109	3,171	4,000	4,080	4,162	269	274	280
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,013	3,088	3,165	3,955	4,053	4,154	1,606	1,606	1,606
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	3.00%	401(k) Match 1-3/100% 4-5/50%	1,928	1,971	2,021	3,374	3,450	3,536	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005			-	-	-	3,928	4,025	4,126	792	812	832
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,965	3,024	3,085	3,892	3,969	4,049	-	-	-
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,770	2,847	2,918	3,636	3,737	3,830	-	-	-
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	0.50%	401(k) Roth Match 50% up to 5%	372	380	387	3,909	3,988	4,067	-	-	-
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,965	3,023	3,084	3,892	3,968	4,047	-	-	-
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,973	3,047	3,122	3,902	3,999	4,098	-	-	-
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,770	2,847	2,918	3,636	3,737	3,830	-	-	-
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,978	3,038	3,098	3,909	3,987	4,066	-	-	-
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	2.00%	401(k) Match 1-3/100% 4-5/50%	1,281	1,319	1,359	3,362	3,463	3,567	-	-	-
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005			-	-	-	3,525	3,631	3,739	-	-	-
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,714	2,775	2,844	3,562	3,642	3,733	-	-	-
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,029	3,090	3,898	3,976	4,056	-	-	-
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	3.50%	401(k) Match 1-3/100% 4-5/50%	2,580	2,644	2,710	3,870	3,966	4,065	1,301	1,333	1,366
165	241103	PITT-Cust Service	Field Service Representative U537F	12/19/2005			-	-	-	3,874	3,970	4,070	-	-	-
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	-	-	-
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	3.50%	401(k) Match 1-3/100% 4-5/50%	2,658	2,724	2,792	3,987	4,086	4,187	268	275	282
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	134	137	141
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,988	3,062	3,138	3,922	4,019	4,118	-	-	-
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,972	3,032	3,092	3,900	3,979	4,058	-	-	-
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,042	3,118	3,195	3,992	4,092	4,194	-	-	-
172	241103	PITT-Cust Service	Field Service Representative U537F	3/20/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006			-	-	-	3,362	3,463	3,567	339	349	360
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	-	-	-
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	3.00%	401(k) Match 1-3/100% 4-5/50%	2,222	2,278	2,335	3,889	3,986	4,086	459	459	459
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,001	3,060	3,121	3,939	4,016	4,097	-	-	-
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,001	3,060	3,121	3,939	4,017	4,097	-	-	-
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	1,301	1,327	1,353
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,659	2,739	3,389	3,490	3,594	-	-	-
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006			-	-	-	3,525	3,631	3,739	-	-	-
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,188	-	-	-
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	-	-	-
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,069	3,129	3,192	4,027	4,107	4,190	-	-	-
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,993	3,067	3,144	3,928	4,025	4,126	1,320	1,353	1,387
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	239	246	253
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	688	688	688
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	1.00%	401(k) Match 1-3/100% 4-5/50%	735	751	770	3,859	3,945	4,045	-	-	-
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,714	2,775	2,844	3,562	3,642	3,733	599	612	627
190	241103	PITT-Cust Service	Field Service Representative U537F	6/26/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006			-	-	-	3,889	3,986	4,086	-	-	-
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	-	-	-
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	-	-	-
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,973	3,047	3,122	3,902	3,999	4,098	115	115	115
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	459	459	459
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,991	3,050	3,111	3,925	4,003	4,083	132	135	137
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	520	531	541
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007			-	-	-	3,362	3,463	3,567	791	815	839
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	119	123	127
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	2,015	2,075	2,137	3,525	3,631	3,739	-	-	-
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	593	610	628
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,752	2,828	2,898	3,612	3,712	3,804	-	-	-
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,498	2,567	2,631	3,279	3,369	3,453	-	-	-
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,770	2,847	2,918	3,636	3,737	3,830	733	754	772
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	358	369	380
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	1,921	1,979	2,038	3,362	3,463	3,567	-	-	-
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	-	-	-
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	3,038	3,113	3,190	3,987	4,086	4,187	1,340	1,373	1,408
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,714	2,775	2,844	3,562	3,642	3,733	-	-	-
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,714	2,775	2,844	3,562	3,642	3,733	-	-	-
216	244101	INDI-Production	Operator U537O	8/13/2007			-	-	-	4,027	4,107	4,190	-	-	-
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,613	2,691	2,772	3,429	3,532	3,638	231	237	245
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	593	611	629
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	2,227	2,272	2,318	3,898	3,976	4,056	-	-	-
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,980	3,069	3,145	3,911	4,027	4,128	-	-	-
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007			-	-	-	3,882	3,959	4,038	-	-	-
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	2.00%	401(k) Match 1-3/100% 4-5/50%	1,399	1,431	1,467	3,673	3,756	3,851	-	-	-
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	3.00%	401(k) Match 1-3/100% 4-5/50%	2,230	2,285	2,341	3,902	3,999	4,098	-	-	-
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	1,310	1,336	1,363
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007			-	-	-	3,553	3,658	3,767	-	-	-
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,988	3,062	3,138	3,922	4,019	4,118	-	-	-
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	-	-	-
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008			-	-	-	3,871	3,947	4,026	-	-	-
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,827	2,905	2,977	3,711	3,813	3,908	-	-	-
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008			-	-	-	3,871	3,947	4,026	-	-	-
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	1,194	1,230	1,266
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	-	-	-
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,758	2,820	2,891	3,620	3,701	3,794	-	-	-
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	-	-	-
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008			-	-	-	3,762	3,837	3,913	-	-	-
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	391	399	407
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	3.00%	401(k) Match 1-3/100% 4-5/50%	2,222	2,278	2,335	3,889	3,986	4,086	-	-	-
241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,993	3,067	3,144	3,928	4,025	4,126	-	-	-
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,979	3,053	3,129	3,910	4,007	4,106	2,294	2,294	2,294
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	3,013	3,088	3,165	3,954	4,053	4,155	459	459	459
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,944	3,003	3,063	3,864	3,941	4,020	-	-	-
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	3.00%	401(k) Match 1-3/100% 4-5/50%	2,212	2,256	2,301	3,871	3,947	4,026	-	-	-
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,029	3,090	3,898	3,976	4,056	-	-	-
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009			-	-	-	3,864	3,941	4,020	-	-	-
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,029	3,090	3,898	3,976	4,056	-	-	-
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009			-	-	-	3,528	3,633	3,742	-	-	-
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,571	2,628	2,694	3,374	3,450	3,536	-	-	-
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	3,013	3,088	3,165	3,954	4,053	4,155	-	-	-
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	229	229	229
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,978	3,038	3,099	3,909	3,988	4,067	-	-	-
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	260	265	271
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537C	7/21/2009			-	-	-	3,831	3,908	3,986	-	-	-
257	241103	PITT-Cust Service	Field Service Representative U537F	7/27/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,991	3,050	3,111	3,926	4,003	4,083	-	-	-
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	115	115	115
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	262	267	273
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	2.00%	401(k) Match 1-3/100% 4-5/50%	1,475	1,504	1,534	3,871	3,947	4,026	260	265	271
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	-	-	-
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	3,042	3,118	3,195	3,992	4,092	4,194	918	918	918
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	237	244	252
268	241103	PITT-Cust Service	Field Service Representative U537F	3/23/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	358	369	380
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,977	3,044	3,121	3,908	3,996	4,096	-	-	-
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	-	-	-
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	3,019	3,094	3,171	3,963	4,060	4,161	-	-	-
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	130	133	135
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	-	-	-
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,942	3,016	3,092	3,862	3,958	4,058	918	918	918
276	241103	PITT-Cust Service	Field Service Representative U537F	11/15/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010			-	-	-	3,889	3,986	4,086	-	-	-
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	344	344	344
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	711	732	754
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	-	-	-
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,965	3,024	3,085	3,892	3,969	4,049	785	801	817
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	1,305	1,331	1,357
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	-	-	-
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	3,013	3,088	3,165	3,955	4,053	4,154	665	681	698
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,770	2,847	2,918	3,636	3,737	3,830	-	-	-
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,965	3,023	3,084	3,892	3,968	4,047	-	-	-
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	3,013	3,088	3,165	3,955	4,053	4,154	1,064	1,090	1,117
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537C	10/3/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,919	2,977	3,037	3,831	3,908	3,986	1,288	1,314	1,340
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012			-	-	-	3,525	3,631	3,739	-	-	-
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,062	3,140	3,221	4,019	4,122	4,228	675	693	711
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,928	1,971	2,021	3,374	3,450	3,536	-	-	-
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	-	-	-
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,866	2,923	2,982	3,762	3,837	3,913	-	-	-
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,998	3,074	3,150	3,935	4,034	4,135	-	-	-

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							Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013			-	-	-	4,016	4,133	4,234	-	-	-
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
304	244101	INDI-Production	Operator U537O	5/13/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	3,069	3,129	3,192	4,027	4,107	4,190	271	276	282
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	3.00%	401(k) Match 1-3/100% 4-5/50%	2,259	2,316	2,374	3,954	4,053	4,155	-	-	-
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,028	3,089	3,898	3,975	4,054	131	134	136
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,978	3,038	3,098	3,909	3,987	4,066	-	-	-
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	-	-	-
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	339	349	360
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,029	3,090	3,898	3,976	4,056	-	-	-
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	-	-	-
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,675	2,755	2,838	3,511	3,616	3,725	-	-	-
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	3,042	3,118	3,195	3,992	4,092	4,194	671	688	705
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,659	2,739	3,389	3,490	3,594	456	469	483
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	3.50%	401(k) Match 1-3/100% 4-5/50%	2,350	2,420	2,493	3,525	3,631	3,739	-	-	-
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	229	229	229
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014			-	-	-	3,762	3,837	3,913	-	-	-
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	3.50%	401(k) Roth 1-3/100% 4-5/50%	2,605	2,664	2,731	3,908	3,996	4,096	657	672	688
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,069	3,129	3,192	4,027	4,107	4,190	-	-	-
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	2.00%	401(k) Match 1-3/100% 4-5/50%	1,475	1,504	1,534	3,871	3,947	4,026	-	-	-
324	241103	PITT-Cust Service	Field Service Representative U537F	11/25/2014			-	-	-	3,874	3,970	4,070	-	-	-
325	241103	PITT-Cust Service	Field Service Representative U537F	12/8/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,952	3,025	3,101	3,874	3,970	4,070	-	-	-
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	390	398	406
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	229	229	229
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	-	-	-
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,948	3,022	3,097	3,870	3,966	4,065	344	344	344
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,069	3,129	3,192	4,027	4,107	4,190	1,354	1,381	1,408
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	3.50%	401(k) Match 1-3/100% 4-5/50%	2,350	2,420	2,493	3,525	3,631	3,739	-	-	-
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	356	366	377
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	3.00%	401(k) Match 1-3/100% 4-5/50%	2,296	2,355	2,416	4,019	4,122	4,228	270	277	284
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,958	3,034	3,112	3,883	3,982	4,084	653	669	686
335	241103	PITT-Cust Service	Field Service Representative U537F	12/21/2015			-	-	-	3,764	3,861	3,961	-	-	-
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,900	2,974	3,051	3,806	3,904	4,004	512	525	538
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,029	3,090	3,898	3,976	4,056	131	134	136
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016			-	-	-	3,864	3,941	4,020	-	-	-
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	138	138	138
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,970	3,029	3,090	3,898	3,976	4,056	-	-	-
341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	229	229	229
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,957	3,017	3,077	3,882	3,959	4,038	-	-	-
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	3.00%	401(k) Match 1-3/100% 4-5/50%	2,218	2,263	2,308	3,882	3,959	4,038	-	-	-
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,929	3,004	3,082	3,844	3,943	4,045	-	-	-
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,865	2,938	3,013	3,760	3,856	3,955	-	-	-
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,659	2,739	3,389	3,490	3,594	-	-	-
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,929	3,004	3,082	3,844	3,943	4,045	229	229	229
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016			-	-	-	4,000	4,080	4,162	941	960	979
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,758	2,820	2,891	3,620	3,701	3,794	-	-	-
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,752	2,828	2,898	3,612	3,712	3,804	-	-	-
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012			-	-	-	3,327	3,393	3,460	-	-	-
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011			-	-	-	3,327	3,393	3,460	688	688	688
353	241103	PITT-Cust Service	Field Service Representative U537F	1/30/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,868	2,942	3,018	3,764	3,861	3,961	-	-	-
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	4.00%	401(k) Roth 1-3/100% 4-5/50%	3,048	3,109	3,171	4,000	4,080	4,162	1,345	1,371	1,399
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	3.00%	401(k) Match 1-3/100% 4-5/50%	2,016	2,076	2,139	3,528	3,633	3,742	-	-	-
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,949	3,008	3,068	3,871	3,947	4,026	-	-	-
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	3.50%	401(k) Match 1-3/100% 4-5/50%	2,352	2,422	2,495	3,528	3,633	3,742	-	-	-
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,787	2,870	3,553	3,658	3,767	-	-	-
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	-	-	-
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,799	2,861	2,934	3,673	3,756	3,851	-	-	-
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,535	2,585	2,636	3,327	3,393	3,460	224	228	233
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,870	2,929	2,989	3,767	3,844	3,923	-	-	-
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	3.00%	401(k) Match 1-3/100% 4-5/50%	1,964	2,022	2,077	3,437	3,539	3,634	-	-	-
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	3.50%	401(k) Match 1-3/100% 4-5/50%	2,643	2,711	2,782	3,964	4,067	4,173	533	547	561
365	244601	KANE-Production	Operator U537O	11/6/2017			-	-	-	3,918	3,998	4,080	658	672	686
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,704	2,775	2,849	3,548	3,643	3,739	-	-	-
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,831	2,906	2,983	3,716	3,815	3,916	375	385	395
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,825	2,900	2,977	3,708	3,806	3,907	125	128	131
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,866	2,924	2,984	3,761	3,838	3,917	-	-	-
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,943	3,032	3,109	3,863	3,979	4,080	390	401	411
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,875	2,951	3,028	3,773	3,873	3,975	-	-	-
374	241106	PITT-Field Services	Utility Person U537P	2/27/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	2,434	2,498	2,564	3,650	3,747	3,845	-	-	-
375	245206	YARD-Field Services	Utility A F473Y	3/26/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,955	1,999	2,050	3,421	3,498	3,587	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

						Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
376	249160	WILK-Watres	Plant Operator U648S	4/30/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,016	2,076	2,139	3,528	3,633	3,742	-	-	-
377	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,866	2,924	2,984	3,761	3,838	3,917	-	-	-
378	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,937	1,994	2,054	3,389	3,490	3,594	684	704	725
379	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,633	2,712	2,793	3,456	3,559	3,666	115	115	115
380	246106	MECH-Field Services	Utility A U648R	5/14/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,541	2,618	2,689	3,335	3,435	3,529	-	-	-
381	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	2,350	2,420	2,493	3,525	3,631	3,739	275	275	275
382	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	3.00%	401(k) Roth 1-3/100% 4-5/50%	2,015	2,075	2,137	3,525	3,631	3,739	-	-	-
383	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,831	2,906	2,983	3,716	3,815	3,916	574	574	574
384	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	1.00%	401(k) Match 1-3/100% 4-5/50%	677	697	717	3,553	3,658	3,767	-	-	-
385	241106	PITT-Field Services	Utility Person U537P	7/10/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,086	2,141	2,197	3,650	3,747	3,845	-	-	-
386	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,087	2,130	2,175	3,651	3,728	3,807	-	-	-
387	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,978	3,057	3,138	3,909	4,012	4,118	115	115	115
388	241106	PITT-Field Services	Utility Person U537P	7/24/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,086	2,141	2,197	3,650	3,747	3,845	-	-	-
389	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,790	2,850	2,910	3,662	3,740	3,819	739	754	770
390	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,782	2,841	2,901	3,651	3,728	3,807	-	-	-
391	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018			-	-	-	3,252	3,353	3,446	-	-	-
392	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,787	2,861	2,937	3,658	3,754	3,854	-	-	-
393	241103	PITT-Cust Service	Field Service Representative U537F	9/4/2018			-	-	-	3,655	3,751	3,851	-	-	-
394	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,087	2,130	2,175	3,651	3,728	3,807	-	-	-
395	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,881	2,942	3,004	3,781	3,861	3,943	635	649	663
396	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,782	2,841	2,901	3,651	3,728	3,807	491	501	512
397	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,123	2,180	2,238	3,716	3,815	3,916	459	459	459
398	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	-	-	-
399	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	-	-	-
400	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,613	2,691	2,772	3,429	3,532	3,638	1,153	1,187	1,223
401	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
402	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	-	-	-
403	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,638	2,718	3,362	3,463	3,567	-	-	-
404	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,015	2,075	2,137	3,525	3,631	3,739	-	-	-
405	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	593	610	628
406	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	459	459	459
407	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,699	2,757	2,817	3,542	3,619	3,697	-	-	-
408	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,699	2,757	2,817	3,542	3,619	3,697	-	-	-
409	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
410	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,699	2,757	2,817	3,542	3,619	3,697	357	365	373
411	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,016	2,076	2,139	3,528	3,633	3,742	-	-	-
412	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,707	2,766	2,826	3,553	3,631	3,710	-	-	-
413	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	229	229	229
414	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,024	2,068	2,113	3,542	3,619	3,697	-	-	-
415	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,749	2,809	2,869	3,608	3,687	3,765	-	-	-
416	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	3.50%	401(k) Match 1-3/100% 4-5/50%	2,442	2,509	2,577	3,664	3,763	3,865	616	632	650
417	244601	KANE-Production	Operator U537O	9/9/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,818	2,879	2,942	3,699	3,779	3,861	-	-	-
418	243151	NEWC-New Castle	Operator U537O	9/23/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,113	2,159	2,206	3,699	3,779	3,861	-	-	-
419	243301	BUTL-Production	Operator U537O	9/23/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,113	2,159	2,206	3,699	3,779	3,861	-	-	-
420	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,791	2,867	2,945	3,664	3,763	3,865	-	-	-
421	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,728	2,788	2,848	3,580	3,659	3,738	-	-	-
422	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
423	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,901	1,959	2,014	3,327	3,429	3,524	-	-	-
424	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,686	2,766	2,849	3,525	3,631	3,739	-	-	-
425	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,699	2,757	2,817	3,542	3,619	3,697	-	-	-
426	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,728	2,788	2,848	3,580	3,659	3,738	-	-	-
427	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,768	2,851	3,528	3,633	3,742	-	-	-
428	244301	CLAR-Production	Operator U537O	4/27/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,818	2,879	2,942	3,699	3,779	3,861	-	-	-
429	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,613	2,691	2,772	3,429	3,532	3,638	-	-	-
430	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,885	2,963	3,038	3,786	3,889	3,988	-	-	-
431	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,762	2,837	2,915	3,625	3,724	3,826	229	229	229
432	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	2.00%	401(k) Match 1-3/100% 4-5/50%	1,348	1,377	1,407	3,539	3,615	3,694	595	608	621
433	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,707	2,766	2,826	3,553	3,631	3,710	-	-	-
434	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,983	2,043	2,105	3,471	3,576	3,684	-	-	-
435	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,535	2,585	2,636	3,327	3,393	3,460	-	-	-
436	245206	YARD-Field Services	Utility B F473Y	7/13/2020	1.00%	401(k) Match 1-3/100% 4-5/50%	536	550	564	2,813	2,887	2,961	-	-	-
437	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,708	2,784	2,861	3,554	3,654	3,756	-	-	-
438	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,479	2,559	2,643	3,254	3,359	3,468	-	-	-
439	249160	WILK-Watres	Plant Operator U648S	12/15/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,646	2,726	2,810	3,473	3,578	3,688	-	-	-
440	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,665	2,745	2,828	3,498	3,603	3,712	-	-	-
441	249160	WILK-Watres	Plant Operator U648S	12/21/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,646	2,726	2,810	3,473	3,578	3,688	-	-	-
442	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,901	1,959	2,014	3,327	3,429	3,524	-	-	-
443	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,901	1,959	2,014	3,327	3,429	3,524	-	-	-
444	245206	YARD-Field Services	Utility B F473Y	3/15/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,143	2,200	2,256	2,813	2,887	2,961	-	-	-
445	244101	INDI-Production	Operator U537O	3/22/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,734	2,795	2,858	3,589	3,669	3,751	229	229	229
446	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,983	2,028	2,073	3,471	3,548	3,627	-	-	-
447	243152	NEWC-Ellwood	Operator U537O	4/26/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,734	2,795	2,858	3,589	3,669	3,751	241	247	252
448	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,952	2,012	2,074	3,416	3,521	3,630	459	473	488
449	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,499	2,576	2,655	3,280	3,381	3,485	-	-	-
450	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,615	2,673	2,734	3,432	3,509	3,588	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
451	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,615	2,673	2,734	3,432	3,509	3,588	-	-	-
452	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,615	2,673	2,734	3,432	3,509	3,588	-	-	-
453	241106	PITT-Field Services	Utility Person U537P	5/24/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,614	2,688	2,763	3,431	3,528	3,626	-	-	-
454	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,615	2,673	2,734	3,432	3,509	3,588	461	472	482
455	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,478	2,555	2,634	3,252	3,353	3,457	-	-	-
456	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,035	2,081	2,128	3,562	3,642	3,724	-	-	-
457	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,952	2,012	2,074	3,416	3,521	3,630	-	-	-
458	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,714	2,775	2,837	3,562	3,642	3,724	-	-	-
459	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,865	1,911	1,964	3,263	3,345	3,438	-	-	-
460	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,562	2,643	2,726	3,363	3,468	3,578	-	-	-
461	244506	WARR-Field Services	Utility Person U537O	8/16/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,899	1,942	1,988	3,323	3,399	3,478	-	-	-
462	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,899	1,942	1,988	3,323	3,399	3,478	-	-	-
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,790	2,856	2,933	3,661	3,749	3,850	1,231	1,260	1,294
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,899	1,942	1,988	3,323	3,399	3,478	-	-	-
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,561	2,641	2,724	3,361	3,466	3,575	-	-	-
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,662	2,744	3,388	3,494	3,602	-	-	-
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,909	1,964	2,021	3,341	3,438	3,537	-	-	-
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	2.00%	401(k) Roth 1-3/100% 4-5/50%	1,243	1,274	1,310	3,263	3,345	3,438	-	-	-
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	3.50%	401(k) Match 1-3/100% 4-5/50%	2,242	2,312	2,385	3,363	3,468	3,578	-	-	-
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,299	2,357	2,423	3,018	3,093	3,180	-	-	-
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,832	1,877	1,929	3,205	3,285	3,376	-	-	-
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,984	2,041	2,099	3,472	3,571	3,673	-	-	-
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,749	2,827	2,908	3,608	3,711	3,817	229	229	229
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,436	2,513	2,592	3,198	3,298	3,403	-	-	-
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,476	2,553	2,625	3,249	3,351	3,445	-	-	-
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,577	2,650	2,725	3,382	3,478	3,577	-	-	-
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,531	2,590	2,650	3,323	3,399	3,478	459	459	459
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,540	2,599	2,659	3,334	3,411	3,490	-	-	-
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	3.50%	401(k) Match 1-3/100% 4-5/50%	2,206	2,276	2,349	3,308	3,414	3,523	-	-	-
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,857	1,903	1,956	3,249	3,330	3,422	-	-	-
481	241103	PITT-Cust Service	Field Service Representative U537F	3/7/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,555	2,628	2,704	3,353	3,450	3,549	-	-	-
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,552	2,625	2,700	3,349	3,445	3,544	-	-	-
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,395	2,471	2,551	3,143	3,244	3,348	-	-	-
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,890	1,951	2,013	3,308	3,414	3,523	-	-	-
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,552	2,625	2,700	3,349	3,445	3,544	-	-	-
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,552	2,625	2,700	3,349	3,445	3,544	-	-	-
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,519	2,599	2,682	3,306	3,411	3,520	-	-	-
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,870	1,928	1,983	3,272	3,374	3,469	-	-	-
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,521	2,601	2,684	3,308	3,414	3,523	778	803	829
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022			-	-	-	3,415	3,513	3,614	-	-	-
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,552	2,625	2,700	3,349	3,445	3,544	1,126	1,158	1,191
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,552	2,625	2,700	3,349	3,445	3,544	225	232	238
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,914	1,969	2,025	3,349	3,445	3,544	-	-	-
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,749	2,827	2,908	3,608	3,711	3,817	-	-	-
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,828	1,888	1,951	-	3,304	3,414	-	-	-
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	3.00%	401(k) Roth 1-3/100% 4-5/50%	1,751	1,808	1,860	3,064	3,164	3,256	-	-	-
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	2.00%	401(k) Match 1-3/100% 4-5/50%	1,238	1,269	1,304	3,249	3,330	3,422	-	-	-
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,567	2,640	2,716	3,369	3,465	3,565	344	344	344
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,616	2,691	2,769	3,433	3,532	3,634	-	-	-
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,859	1,919	1,982	3,254	3,359	3,468	-	-	-
501	241103	PITT-Cust Service	Field Service Representative U537F	6/29/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,916	1,971	2,028	3,353	3,450	3,549	-	-	-
502	241103	PITT-Cust Service	Field Service Representative U537F	6/28/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,555	2,628	2,704	3,353	3,450	3,549	-	-	-
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,477	2,557	2,640	3,251	3,357	3,465	-	-	-
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,925	1,980	2,037	3,369	3,465	3,565	-	-	-
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,677	1,721	1,770	2,936	3,011	3,098	-	-	-
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,381	2,444	2,506	3,125	3,207	3,289	-	-	-
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,477	2,557	2,640	3,251	3,357	3,465	-	-	-
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,836	1,880	1,925	3,213	3,290	3,369	-	-	-
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,477	2,557	2,640	3,251	3,357	3,465	-	-	-
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,557	2,631	2,707	3,357	3,453	3,553	344	344	344
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,645	2,721	2,799	3,472	3,571	3,673	-	-	-
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,645	2,721	2,799	3,472	3,571	3,673	459	459	459
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,836	1,880	1,925	3,213	3,290	3,369	-	-	-
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	3.00%	401(k) Roth 1-3/100% 4-5/50%	1,836	1,880	1,925	3,213	3,290	3,369	-	-	-
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,476	2,553	2,625	3,249	3,351	3,445	-	-	-
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,448	2,506	2,567	3,213	3,290	3,369	-	-	-
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,910	1,956	2,003	3,342	3,422	3,505	-	-	-
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,984	2,041	2,099	3,472	3,571	3,673	-	-	-
519	243301	BUTL-Production	Operator U537O	3/20/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,567	2,628	2,691	3,370	3,450	3,532	-	-	-
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,926	1,971	2,018	3,370	3,450	3,532	-	-	-
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,827	1,887	1,949	3,197	3,302	3,410	-	-	-
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,918	1,973	2,030	3,357	3,453	3,553	115	115	115
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,567	2,628	2,691	3,370	3,450	3,532	-	-	-
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating)	4/17/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,951	2,008	2,065	3,415	3,513	3,614	-	-	-
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating)	4/17/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,602	2,677	2,754	3,415	3,513	3,614	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	Gross Other Benefits 401k, DCP, ESPP 2023 ESPP	2024 ESPP	2025 ESPP
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,237	2,294	2,360	2,936	3,011	3,098	-	-	-
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,828	1,888	1,951	3,199	3,304	3,414	-	-	-
528	241103	PITT-Cust Service	Field Service Representative U537F	4/17/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,555	2,628	2,704	3,353	3,450	3,549	-	-	-
529	241103	PITT-Cust Service	Field Service Representative U537F	5/1/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,916	1,971	2,028	3,353	3,450	3,549	-	-	-
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	3.50%	401(k) Roth 1-3/100% 4-5/50%	2,132	2,203	2,276	3,199	3,304	3,414	-	-	-
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023			-	-	-	3,213	3,290	3,369	-	-	-
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,448	2,506	2,567	3,213	3,290	3,369	-	-	-
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023			-	-	-	3,224	3,302	3,381	-	-	-
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023			-	-	-	3,407	3,505	3,605	-	-	-
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,435	2,516	2,598	3,197	3,302	3,410	-	-	-
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023			-	-	-	3,009	3,109	3,201	-	-	-
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Fillec	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,554	2,618	-	3,918	4,015	-	-	-
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,464	2,517	-	3,779	3,861	-	-	-
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,216	2,268	-	3,399	3,478	-	-	-
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,216	2,268	-	3,399	3,478	-	-	-
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,145	2,196	-	3,290	3,369	-	-	-
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,249	2,303	-	3,450	3,532	-	-	-
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,359	2,411	-	3,619	3,697	-	-	-
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Fillec	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,291	2,356	-	3,513	3,614	-	-	-
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Fillec	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,285	2,351	-	3,505	3,605	-	-	-
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Fillec	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,536	2,600	-	3,889	3,988	-	-	-
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,154	2,226	-	3,304	3,414	-	-	-
			Total Collective Bargaining Unit				$1,175,772	$1,230,847	$1,261,918	$1,492,278	$1,572,160	$1,611,806	$97,415	$99,130	$100,890
						Vacancy Rate		1.76%	1.76%		1.76%	1.76%		1.76%	1.76%
						Vacancy Adjustment		$21,624	$22,169		$27,620	$28,316		$1,742	$1,772
						Total Collective Bargaining Unit		$1,209,223	$1,239,748		$1,544,540	$1,583,490		$97,389	$99,118
Non-Collective Bargaining Unit Hourly															
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	4.00%	401(k) Match 1-3/100% 4-5/50%	$2,804	$2,917	$3,018	$3,680	$3,828	$3,962	$0	$0	$0
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	2.50%	401(k) Match 50% up to 5%	2,180	2,267	2,346	-	-	-	-	-	-
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	2.50%	401(k) Match 50% up to 5%	1,898	1,974	2,043	-	-	-	1,340	1,394	1,442
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	2.00%	401(k) Match 50% up to 5%	1,612	1,676	1,735	-	-	-	142	148	153
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N	10/3/1988	1.50%	401(k) Match 50% up to 5%	1,027	1,069	1,106	-	-	-	-	-	-
6	246801	LEHP-Production	Plant Operator	2/1/1996	2.50%	401(k) Match 50% up to 5%	1,755	1,825	1,889	-	-	-	-	-	-
7	245706	POCO-Field Services	Crew Leader	9/16/1996	2.50%	401(k) Match 50% up to 5%	1,760	1,830	1,894	-	-	-	-	-	-
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	2.50%	401(k) Match 50% up to 5%	1,714	1,783	1,845	-	-	-	-	-	-
9	245706	POCO-Field Services	Utility Person	7/1/1994	2.50%	401(k) Match 50% up to 5%	1,734	1,804	1,866	-	-	-	-	-	-
10	245501	BNGR-Production	Plant Operator	7/23/1990	2.50%	401(k) Match 50% up to 5%	1,913	1,989	2,059	-	-	-	270	281	291
11	247406	FRCK-Field Services	Utility Person	4/18/1988			-	-	-	-	-	-	-	-	-
12	247406	FRCK-Field Services	Utility Person	1/15/1986			-	-	-	-	-	-	-	-	-
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	2.50%	401(k) Match 50% up to 5%	1,618	1,682	1,741	-	-	-	-	-	-
14	246201	HSHY-Production	Plant Operator	9/27/1993	4.00%	401(k) Match 1-3/100% 4-5/50%	2,710	2,819	2,917	3,557	3,700	3,828	-	-	-
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	4.00%	401(k) Match 1-3/100% 4-5/50%	2,673	2,780	2,877	3,509	3,649	3,776	-	-	-
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	2.50%	401(k) Match 50% up to 5%	1,819	1,892	1,958	-	-	-	257	267	276
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	2.50%	401(k) Match 50% up to 5%	2,111	2,196	2,272	-	-	-	-	-	-
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990			-	-	-	-	-	-	-	-	-
19	247106	MILT-Field Services	Utility Person	11/16/1998			-	-	-	-	-	-	-	-	-
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	2.50%	401(k) Match 50% up to 5%	1,712	1,780	1,842	-	-	-	-	-	-
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	2.50%	401(k) Match 50% up to 5%	1,631	1,697	1,755	-	-	-	2,753	2,753	2,753
22	246506	COAT-Field Services	Utility Person	1/26/1998			-	-	-	3,135	3,261	3,375	-	-	-
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	2.50%	401(k) Match 50% up to 5%	1,893	1,968	2,037	-	-	-	-	-	-
24	245906	GLEN-Field Services	Utility Person	12/27/1994	1.00%	401(k) Match 50% up to 5%	736	766	792	-	-	-	260	270	280
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999	2.50%	401(k) Match 50% up to 5%	1,782	1,853	1,918	-	-	-	-	-	-
26	245606	NAZA-Field Services	Utility Person	10/4/1993	2.50%	401(k) Match 50% up to 5%	1,772	1,843	1,907	-	-	-	-	-	-
27	245906	GLEN-Field Services	Utility Person	6/20/1983			-	-	-	-	-	-	-	-	-
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	1.50%	401(k) Match 50% up to 5%	1,112	1,156	1,196	-	-	-	-	-	-
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	2.50%	401(k) Match 50% up to 5%	1,832	1,906	1,972	-	-	-	-	-	-
30	246401	ROYF-Production	Plant Operator	3/9/1998	2.50%	401(k) Match 50% up to 5%	1,873	1,949	2,016	-	-	-	-	-	-
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987			-	-	-	-	-	-	-	-	-
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	2.50%	401(k) Match 50% up to 5%	1,886	1,962	2,030	-	-	-	-	-	-
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	2.50%	401(k) Match 50% up to 5%	1,787	1,859	1,924	-	-	-	-	-	-
34	245606	NAZA-Field Services	Utility Person	11/26/2001	2.50%	401(k) Match 50% up to 5%	1,789	1,860	1,925	-	-	-	-	-	-
35	246801	LEHP-Production	Utility Person	2/26/1990	2.50%	401(k) Match 50% up to 5%	1,727	1,796	1,859	-	-	-	-	-	-
36	246501	COAT-Production	Plant Operator	5/28/2002			-	-	-	3,689	3,837	3,970	-	-	-
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	2.50%	401(k) Match 50% up to 5%	1,811	1,884	1,950	-	-	-	-	-	-
38	245906	GLEN-Field Services	Utility Person	1/5/2004	1.50%	401(k) Match 50% up to 5%	1,052	1,094	1,132	-	-	-	124	129	133
39	245606	NAZA-Field Services	Utility Person	2/16/2004	2.50%	401(k) Match 50% up to 5%	1,717	1,786	1,848	-	-	-	-	-	-
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N	12/1/2004	2.50%	401(k) Match 50% up to 5%	1,623	1,688	1,747	-	-	-	-	-	-
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	2.50%	401(k) Match 50% up to 5%	1,666	1,733	1,794	-	-	-	-	-	-
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	1.00%	401(k) Match 50% up to 5%	695	722	748	-	-	-	115	115	115

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	3.00%	401(k) Match 1-3/100% 4-5/50%	2,041	2,123	2,197	3,571	3,715	3,844	-	-	-
44	245506	BNGR-Field Services	Utility Person	11/7/2005			-	-	-	-	-	-	-	-	-
45	245401	SUSQ-Production	Plant Operator	5/15/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,688	2,795	2,892	3,528	3,669	3,796	-	-	-
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006			-	-	-	3,616	3,761	3,892	-	-	-
47	245606	NAZA-Field Services	Utility Person	12/18/2006			-	-	-	3,633	3,779	3,910	-	-	-
48	246206	HSHY-Field Services	Utility Person	3/26/2007	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,825	2,939	3,041	3,708	3,858	3,991	1,376	1,376	1,376
49	247106	MILT-Field Services	Utility Person	5/7/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,632	2,737	2,832	3,454	3,592	3,717	-	-	-
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,940	3,058	3,164	3,859	4,013	4,152	1,038	1,079	1,117
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	2,745	2,856	2,955	3,603	3,748	3,878	242	252	261
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007			-	-	-	4,492	4,672	4,834	-	-	-
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	3,288	3,420	3,540	4,316	4,489	4,646	115	115	115
54	247201	PHBG-Production	Operations Specialist	6/2/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,934	3,052	3,158	3,851	4,006	4,145	-	-	-
55	247106	MILT-Field Services	Utility Person	7/21/2008			-	-	-	3,365	3,500	3,622	-	-	-
56	246501	COAT-Production	Plant Operator	10/6/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,802	2,915	3,016	3,678	3,826	3,958	803	803	803
57	247701	BOGGS-Production	Plant Operator	5/4/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,874	2,989	3,094	3,772	3,923	4,060	634	659	682
58	245706	POCO-Field Services	Utility Person	9/28/2009			-	-	-	3,628	3,774	3,906	-	-	-
59	246506	COAT-Field Services	Utility Person	11/2/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,760	2,871	2,972	3,623	3,769	3,900	-	-	-
60	247401	FRCK-Production	Operator	1/25/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,648	2,754	2,850	3,475	3,614	3,740	350	364	377
61	247206	PHBG-Field Services	Utility Person	3/29/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,836	2,950	3,053	3,723	3,872	4,007	-	-	-
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	3,031	3,153	3,262	3,978	4,138	4,282	459	459	459
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	3,171	3,298	3,413	4,162	4,329	4,479	1,399	1,455	1,506
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,866	2,981	3,084	3,761	3,912	4,048	-	-	-
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,508	2,608	2,699	3,292	3,423	3,543	996	1,036	1,072
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,690	2,798	2,896	3,531	3,672	3,801	-	-	-
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	3.00%	401(k) Match 1-3/100% 4-5/50%	2,380	2,476	2,562	4,166	4,332	4,483	-	-	-
68	247206	PHBG-Field Services	Utility Person	11/7/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,734	2,844	2,942	3,589	3,733	3,862	-	-	-
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	3.50%	401(k) Match 1-3/100% 4-5/50%	2,123	2,208	2,284	3,184	3,312	3,427	214	223	230
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,588	2,692	2,785	3,397	3,533	3,656	228	238	246
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,610	2,714	2,809	3,426	3,563	3,687	-	-	-
72	249150	WILK-Other	Operations Specialist	3/4/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,589	2,693	2,786	3,398	3,534	3,657	228	238	246
73	247306	BRWK-Field Services	Utility Person	4/29/2013			-	-	-	3,680	3,828	3,962	371	386	399
74	245601	NAZA-Production	Plant Operator	6/27/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,931	3,048	3,155	3,847	4,001	4,140	-	-	-
75	247301	BRWK-Production	Operator	9/16/2013	4.00%	401(k) Match 1-3/100% 4-5/50%	2,849	2,963	3,066	3,739	3,889	4,024	503	523	541
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	2,728	2,837	2,936	3,580	3,724	3,853	-	-	-
77	247201	PHBG-Production	Plant Operator	2/2/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,748	2,858	2,957	3,606	3,751	3,882	849	883	913
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,741	2,851	2,951	3,598	3,742	3,873	1,209	1,258	1,302
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,550	2,652	2,744	3,347	3,480	3,601	115	115	115
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,778	2,889	2,989	3,646	3,792	3,923	-	-	-
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	3.00%	401(k) Match 1-3/100% 4-5/50%	1,767	1,838	1,902	3,092	3,216	3,328	-	-	-
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,874	2,989	3,094	3,772	3,923	4,060	-	-	-
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,502	2,602	2,693	3,284	3,416	3,534	552	574	594
84	245406	SUSQ-Field Services	Utility Person	12/14/2015			-	-	-	3,102	3,226	3,338	-	-	-
85	246506	COAT-Field Services	Utility Person	2/3/2016			-	-	-	3,350	3,485	3,606	-	-	-
86	247103	MILT-Cust Service	Utility Person	3/7/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,552	2,654	2,747	3,349	3,484	3,605	-	-	-
87	246206	HSHY-Field Services	Utility Person	2/29/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,858	2,972	3,076	3,751	3,901	4,037	-	-	-
88	246201	HSHY-Production	Plant Operator	2/29/2016	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,710	2,819	2,917	3,557	3,700	3,828	2,294	2,294	2,294
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,758	2,868	2,968	3,620	3,764	3,896	-	-	-
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,710	2,819	2,917	3,557	3,700	3,828	120	124	129
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	4,116	4,281	4,430	5,402	5,619	5,814	363	378	391
92	246206	HSHY-Field Services	Utility Person	6/13/2016	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,585	2,689	2,782	3,393	3,529	3,651	459	459	459
93	246206	HSHY-Field Services	Utility Person	7/11/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,542	2,643	2,735	3,336	3,469	3,590	785	816	845
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,931	3,048	3,155	3,847	4,001	4,140	388	403	418
95	245306	ABNG-Field Services	Utility Person	10/24/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,590	2,694	2,787	3,399	3,535	3,658	-	-	-
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,753	2,863	2,962	3,613	3,758	3,888	364	379	392
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,370	2,466	2,552	3,111	3,236	3,349	523	544	563
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	4.00%	401(k) Match 1-3/100% 4-5/50%	3,285	3,417	3,535	4,311	4,485	4,640	-	-	-
99	247306	BRWK-Field Services	Utility Person	1/16/2017	2.00%	401(k) Match 1-3/100% 4-5/50%	1,239	1,288	1,333	3,251	3,382	3,499	-	-	-
100	246506	COAT-Field Services	Utility Person	2/13/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,418	2,515	2,602	3,173	3,301	3,416	-	-	-
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,598	2,703	2,797	3,410	3,547	3,671	-	-	-
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015			-	-	-	1,985	2,065	2,138	-	-	-
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	1,499	1,559	1,614	1,968	2,047	2,118	-	-	-
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018			-	-	-	3,161	3,289	3,403	-	-	-
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	1.00%	401(k) Match 1-3/100% 4-5/50%	597	621	643	3,135	3,261	3,375	-	-	-

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

						Gross Other Benefits 401k, DCP, ESPP						Gross Other Benefits 401k, DCP, ESPP		
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,653	2,760	2,856	3,483	3,622	3,748	-	-	-
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,175	3,302	3,418	4,168	4,334	4,486	-	-	-
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,645	2,751	2,847	3,472	3,611	3,737	-	-	-
109	246801	LEHP-Production	Utility Person	7/23/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,289	2,381	2,464	3,005	3,125	3,234	505	525	543
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	3,474	3,613	3,739	4,559	4,742	4,908	-	-	-
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,761	2,872	2,972	3,624	3,770	3,901	229	229	229
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	1.00%	401(k) Match 1-3/100% 4-5/50%	507	527	546	2,663	2,769	2,865	-	-	-
113	246501	COAT-Production	Plant Operator	9/24/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,973	2,051	2,123	3,452	3,590	3,715	928	965	999
114	245906	GLEN-Field Services	Utility Person	10/8/2018			-	-	-	3,142	3,268	3,382	92	92	92
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,506	2,607	2,698	3,290	3,421	3,541	111	115	119
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,172	2,259	2,338	2,851	2,965	3,068	115	115	115
117	246206	HSHY-Field Services	Utility Person	10/8/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,805	1,878	1,943	3,159	3,286	3,400	229	229	229
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	2,085	2,168	2,243	3,648	3,794	3,925	46	46	46
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,616	2,721	2,815	3,433	3,571	3,695	184	184	184
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	3.50%	401(k) Match 1-3/100% 4-5/50%	2,279	2,371	2,453	3,419	3,556	3,680	-	-	-
121	246206	HSHY-Field Services	Utility Person	1/14/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,432	2,530	2,618	3,192	3,320	3,435	1,073	1,116	1,155
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,674	2,781	2,878	3,510	3,650	3,778	354	368	381
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	2,045	2,127	2,201	3,578	3,722	3,851	23	23	23
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,896	4,052	4,194	5,114	5,319	5,504	459	459	459
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	3.50%	401(k) Match 1-3/100% 4-5/50%	2,493	2,594	2,684	3,740	3,890	4,026	115	115	115
126	248801	TURB-Production	Plant Operator	7/8/2019	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,530	2,631	2,723	3,320	3,453	3,574	1,116	1,161	1,201
127	240116	CORP-Maint Services	Sr Reliability Engineering Analys	7/15/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	3,091	3,215	3,327	5,409	5,626	5,822	-	-	-
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	4.00%	401(k) Match 1-3/100% 4-5/50%	2,745	2,856	2,955	3,603	3,748	3,878	918	918	918
129	241406	STNW-Field Service	Utility Person	12/5/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,600	1,664	1,722	2,801	2,913	3,013	-	-	-
130	246206	HSHY-Field Services	Utility Person	2/2/2016	3.00%	401(k) Match 1-3/100% 4-5/50%	1,760	1,830	1,894	3,079	3,203	3,315	92	92	92
131	241406	STNW-Field Service	Utility Person	3/3/1999	3.00%	401(k) Match 1-3/100% 4-5/50%	1,600	1,664	1,722	2,801	2,913	3,013	-	-	-
132	247201	PHBG-Production	Plant Operator	10/21/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,506	2,606	2,697	3,289	3,420	3,540	442	460	476
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,685	2,779	3,388	3,524	3,647	-	-	-
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,974	2,053	2,125	3,455	3,593	3,718	-	-	-
135	247206	PHBG-Field Services	Utility Person	1/27/2020			-	-	-	3,261	3,392	3,510	-	-	-
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,072	3,195	3,306	4,032	4,193	4,339	-	-	-
137	241406	STNW-Field Service	Foreperson	1/8/1990	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,913	3,030	3,135	3,824	3,977	4,115	459	459	459
138	246406	ROYF-Field Services	Utility Person	3/23/2020	3.00%	401(k) Roth 1-3/100% 4-5/50%	1,934	2,011	2,082	3,384	3,520	3,643	229	229	229
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,609	2,714	2,808	3,425	3,562	3,685	161	161	161
140	246406	ROYF-Field Services	Utility Person	4/13/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,937	2,015	2,085	3,391	3,526	3,649	-	-	-
141	247106	MILT-Field Services	Utility Person	4/13/2020	3.50%	401(k) Match 1-3/100% 4-5/50%	2,170	2,257	2,335	3,255	3,385	3,502	-	-	-
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,607	2,712	2,806	3,422	3,559	3,683	-	-	-
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,704	1,772	1,833	2,982	3,101	3,209	-	-	-
144	245701	POCO-Production	Plant Operator	4/27/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,877	1,952	2,020	3,285	3,417	3,535	-	-	-
145	246401	ROYF-Production	Plant Operator	5/4/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,739	2,850	2,949	3,596	3,740	3,871	688	688	688
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	3.00%	401(k) Roth 1-3/100% 4-5/50%	1,563	1,626	1,683	2,736	2,846	2,944	-	-	-
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	3.50%	401(k) Match 1-3/100% 4-5/50%	2,668	2,775	2,871	4,002	4,162	4,307	229	229	229
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	3.50%	401(k) Match 1-3/100% 4-5/50%	1,929	2,006	2,076	2,893	3,009	3,114	389	405	419
149	240116	CORP-Maint Services	Reliability Engineering Analys	6/1/2020			-	-	-	4,714	4,902	5,073	-	-	-
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	2.00%	401(k) Roth 1-3/100% 4-5/50%	1,194	1,242	1,286	3,135	3,261	3,375	-	-	-
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,435	2,533	2,622	3,197	3,325	3,441	1,074	1,118	1,157
152	247106	MILT-Field Services	Utility Person	10/19/2020	3.50%	401(k) Match 1-3/100% 4-5/50%	2,138	2,224	2,301	3,207	3,336	3,452	-	-	-
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	2,588	2,692	2,786	4,529	4,711	4,876	-	-	-
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	3.00%	401(k) Match 1-3/100% 4-5/50%	1,860	1,935	2,002	3,256	3,386	3,503	-	-	-
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,343	2,436	2,521	3,075	3,198	3,309	46	46	46
156	245506	BNGR-Field Services	Utility Person	2/22/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,310	2,403	2,486	3,032	3,154	3,263	-	-	-
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,161	2,248	2,327	2,837	2,951	3,054	-	-	-
158	246801	LEHP-Production	Utility Person	4/12/2021	3.50%	401(k) Match 1-3/100% 4-5/50%	2,016	2,097	2,170	3,023	3,145	3,255	-	-	-
159	246506	COAT-Field Services	Utility Person	4/13/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,927	2,004	2,074	3,373	3,508	3,630	-	-	-
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,349	2,443	2,528	3,083	3,206	3,318	-	-	-
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,780	2,891	2,991	3,648	3,794	3,925	-	-	-
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,663	1,729	1,790	2,910	3,027	3,132	229	229	229
163	240114	CORP-Engineering	GIS Analyst	6/1/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,172	2,258	2,337	2,850	2,964	3,067	96	100	103
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,547	2,649	2,741	3,343	3,477	3,598	-	-	-
165	247206	PHBG-Field Services	Utility Person	7/6/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,582	2,686	2,780	3,389	3,525	3,648	-	-	-
166	245906	GLEN-Field Services	Utility Person	7/12/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,516	2,617	2,708	3,302	3,434	3,554	115	115	115
167	246401	ROYF-Production	Plant Operator	7/19/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,063	2,145	2,220	3,610	3,754	3,885	-	-	-
168	241106	PITT-Field Services	Operations Specialist	9/7/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,522	2,623	2,714	3,311	3,443	3,563	459	459	459
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,018	2,098	2,172	3,531	3,672	3,801	-	-	-
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,954	2,033	2,103	3,420	3,557	3,681	-	-	-
171	240116	CORP-Maint Services	Reliability Engineering Analys	10/18/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	3,090	3,214	3,326	4,056	4,218	4,365	-	-	-
172	246506	COAT-Field Services	Utility Person	11/8/2021	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,344	2,438	2,523	3,076	3,200	3,312	-	-	-
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,903	3,020	3,125	5,081	5,285	5,469	-	-	-
174	246506	COAT-Field Services	Utility Person	11/9/2021	1.00%	401(k) Match 1-3/100% 4-5/50%	586	609	631	3,076	3,200	3,312	-	-	-
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	3.50%	401(k) Match 1-3/100% 4-5/50%	1,498	1,558	1,612	2,247	2,337	2,418	-	-	-
176	247106	MILT-Field Services	Utility Person	11/22/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,405	2,501	2,588	3,157	3,283	3,397	-	-	-
177	246201	HSHY-Production	Plant Operator	1/10/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,547	2,649	2,741	3,343	3,477	3,598	46	46	46

Pennsylvania-American Water Company - Water Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	Gross Other Benefits 401k, DCP, ESPP 2023 ESPP	2024 ESPP	2025 ESPP
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N	1/10/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,739	1,808	1,871	3,043	3,165	3,274	-	-	-
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,936	2,013	2,083	3,387	3,523	3,646	-	-	-
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,413	2,510	2,597	3,167	3,294	3,409	-	-	-
181	247206	PHBG-Field Services	Utility Person	2/21/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,502	2,602	2,693	3,284	3,416	3,534	1,104	1,148	1,188
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N	2/28/2022	3.50%	401(k) Match 1-3/100% 4-5/50%	1,737	1,807	1,869	2,606	2,710	2,804	175	182	189
183	245306	ABNG-Field Services	Utility Person	2/21/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,719	1,788	1,850	3,009	3,130	3,238	-	-	-
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,465	2,563	2,653	3,235	3,364	3,482	-	-	-
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,290	1,342	1,389	2,258	2,349	2,431	-	-	-
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,420	2,517	2,605	3,177	3,304	3,419	229	229	229
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	2.00%	401(k) Match 1-3/100% 4-5/50%	1,091	1,135	1,175	2,864	2,979	3,084	-	-	-
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,323	2,416	2,501	3,049	3,171	3,282	-	-	-
189	240306	CORP-Field Service	Operations Specialist	4/25/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,667	2,774	2,871	3,500	3,640	3,768	-	-	-
190	245306	ABNG-Field Services	Utility Person	5/16/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,770	1,840	1,904	3,097	3,221	3,332	-	-	-
191	241401	STNW-Production	Plant Operator	6/6/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,663	1,729	1,790	2,910	3,027	3,132	-	-	-
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,055	2,137	2,212	3,596	3,740	3,871	-	-	-
193	245506	BNGR-Field Services	Utility Person	6/20/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,588	2,692	2,785	3,397	3,533	3,656	-	-	-
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N	6/20/2022	3.50%	401(k) Match 1-3/100% 4-5/50%	1,690	1,758	1,819	2,534	2,636	2,728	23	23	23
195	245401	SUSQ-Production	Plant Operator	6/27/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,747	1,817	1,880	3,057	3,180	3,291	-	-	-
196	241401	STNW-Production	Plant Operator	7/5/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,663	1,729	1,790	2,910	3,027	3,132	-	-	-
197	246801	LEHP-Production	Utility Person	7/18/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,243	2,334	2,415	2,944	3,063	3,169	-	-	-
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N	7/18/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,481	1,540	1,594	2,591	2,696	2,790	-	-	-
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,455	2,554	2,643	3,223	3,352	3,468	-	-	-
200	247106	MILT-Field Services	Utility Person	7/18/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,420	2,516	2,604	3,176	3,303	3,418	-	-	-
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,839	1,913	1,979	3,218	3,348	3,464	-	-	-
202	245501	BNGR-Production	Plant Operator	8/29/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,334	2,428	2,512	3,064	3,187	3,297	206	214	222
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,334	2,427	2,511	3,063	3,186	3,296	-	-	-
204	245401	SUSQ-Production	Plant Operator	9/19/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,329	2,423	2,507	3,057	3,180	3,291	-	-	-
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,411	2,508	2,596	3,165	3,292	3,407	-	-	-
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,547	2,649	2,741	3,343	3,477	3,598	-	-	-
207	245306	ABNG-Field Services	Utility Person	10/10/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,213	2,302	2,382	2,905	3,021	3,126	-	-	-
208	245306	ABNG-Field Services	Utility Person	10/17/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,213	2,302	2,382	2,905	3,021	3,126	-	-	-
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,130	2,215	2,292	2,795	2,907	3,008	-	-	-
210	246406	ROYF-Field Services	Utility Person	11/14/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,422	2,519	2,607	3,179	3,306	3,421	-	-	-
211	246501	COAT-Production	Plant Operator	11/28/2022	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,485	2,584	2,674	3,261	3,392	3,510	1,376	1,376	1,376
212	246406	ROYF-Field Services	Utility Person	1/3/2023	3.50%	401(k) Roth 1-3/100% 4-5/50%	2,192	2,280	2,360	3,289	3,420	3,540	-	-	-
213	245706	POCO-Field Services	Utility Person	1/3/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,255	2,345	2,427	2,960	3,078	3,186	-	-	-
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,660	1,726	1,786	2,905	3,021	3,126	-	-	-
215	247306	BRWK-Field Services	Utility Person	3/6/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,297	2,389	2,472	3,015	3,135	3,245	-	-	-
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,832	1,906	1,972	3,206	3,335	3,451	-	-	-
217	245606	NAZA-Field Services	Utility Person	3/20/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,443	2,541	2,629	3,206	3,335	3,451	-	-	-
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,717	1,786	1,848	3,005	3,125	3,234	-	-	-
219	245601	NAZA-Production	Plant Operator	6/5/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,817	1,889	1,955	3,179	3,306	3,421	-	-	-
220	245106	NORR-Field Services	Utility Person	6/5/2023			-	-	-	3,289	3,420	3,540	-	-	-
221	246406	ROYF-Field Services	Utility Person	6/5/2023			-	-	-	3,124	3,249	3,362	-	-	-
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,506	2,606	2,697	3,289	3,420	3,540	-	-	-
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017	3.00%	401(k) Match 1-3/100% 4-5/50%	727	756	782	1,272	1,323	1,369	-	-	-
224	245106	NORR-Field Services	Operations Specialist - To Be Fillec	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	2,654	2,747	-	4,030	4,170	-	-	-
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	2,654	2,747	-	4,030	4,170	-	-	-
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	2,654	2,747	-	4,030	4,170	-	-	-
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	2,654	2,747	-	4,030	4,170	-	-	-
228	241103	PITT-Cust Service	Compliance Analyst - To Be Fillec	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	2,113	2,187	-	3,207	3,319	-	-	-
229	249103	WILK-Cust Service	Compliance Analyst - To Be Fillec	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	2,113	2,187	-	3,207	3,319	-	-	-
230	241103	PITT-Cust Service	Compliance Representative - To Be Fillec	12/31/2023	3.46%	401(k) Match 1-3/100% 4-5/50%	-	1,859	1,924	-	2,823	2,921	-	-	-
			Total Non-Collective Bargaining Unit Hourly				$445,191	$479,740	$496,437	$624,977	$675,385	$698,893	$36,601	$37,456	$38,228
						Vacancy Rate	1.76%	1.76%	1.76%		1.76%	1.76%		1.76%	1.76%
						Vacancy Adjustment	$8,428	$8,721			$11,865	$12,278		$658	$672
						Total Non-Collective Bargaining Unit Hourly	$471,311	$487,716			$663,519	$686,615		$36,798	$37,556

Pennsylvania-American Water Company - Wastewater SSS General Operations
401K and Defined Contribution Plan (DCP) Expense

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	Gross Other Benefits 401k, DCP, ESPP 2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
Non-Collective Bargaining Unit Salary															
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	2.50%	401(k) Match 50% up to 5%	$2,260	$235	$243	$0	$0	$0	$319	$33	$34
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	4.00%	401(k) Match 1-3/100% 4-5/50%	4,736	4,925	5,097	6,216	6,465	6,690	-	-	-
3	246701	COWW-Production	Supvr Production	3/6/2000	2.50%	401(k) Match 50% up to 5%	2,290	2,382	2,465	-	-	-	1,617	1,681	1,740
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	2.50%	401(k) Match 50% up to 5%	2,400	2,496	2,583	-	-	-	339	352	365
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	2,920	3,038	3,143	3,833	3,987	4,126	1,031	1,072	1,109
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	4.00%	401(k) Match 1-3/100% 4-5/50%	3,591	3,736	3,865	4,714	4,903	5,073	-	-	-
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	3,120	3,245	3,358	4,095	4,259	4,407	275	275	275
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,839	3,993	4,132	5,039	5,241	5,423	169	176	182
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,427	3,564	3,688	4,498	4,678	4,841	-	-	-
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	3.00%	401(k) Match 1-3/100% 4-5/50%	2,653	2,759	2,855	4,643	4,829	4,997	-	-	-
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	4.00%	401(k) Match 1-3/100% 4-5/50%	3,022	3,143	3,252	3,967	4,126	4,269	459	459	459
12	249401	YORKWW-Production	Supvr Production	6/24/2013	3.00%	401(k) Match 1-3/100% 4-5/50%	2,503	2,603	2,694	4,380	4,556	4,714	-	-	-
			Total Non-Collective Bargaining Unit Salary				$36,762	$36,120	$37,376	$41,384	$43,042	$44,539	$4,209	$4,049	$4,165
Collective Bargaining Unit															
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	8/4/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	$2,359	$2,417	$2,484	$3,096	$3,172	$3,260	$0	$0	$0
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	3.50%	401(k) Match 1-3/100% 4-5/50%	2,064	2,115	2,173	3,096	3,172	3,260	92	92	92
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,281	2,339	2,406	2,994	3,070	3,158	-	-	-
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	12/17/1984	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	-	-	-
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/26/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	688	688	688
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	5/22/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	367	367	367
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	3.00%	401(k) Match 1-3/100% 4-5/50%	1,611	1,655	1,705	2,819	2,896	2,984	-	-	-
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	3.00%	401(k) Match 1-3/100% 4-5/50%	1,894	1,938	1,988	3,315	3,392	3,479	-	-	-
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	2.00%	401(k) Match 1-3/100% 4-5/50%	1,263	1,292	1,325	3,315	3,392	3,479	-	-	-
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	3.00%	401(k) Match 1-3/100% 4-5/50%	1,611	1,655	1,705	2,819	2,896	2,984	-	-	-
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	12/7/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	-	-	-
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	8/20/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	-	-	-
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	8/3/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	-	-	-
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	4/24/2017	3.00%	401(k) Match 1-3/100% 4-5/50%	1,769	1,813	1,863	3,096	3,172	3,260	-	-	-
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,894	1,938	1,988	3,315	3,392	3,479	-	-	-
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,711	1,755	1,805	2,994	3,070	3,158	-	-	-
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,711	1,755	1,805	2,994	3,070	3,158	-	-	-
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,359	2,417	2,484	3,096	3,172	3,260	-	-	-
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,711	1,755	1,805	2,994	3,070	3,158	-	-	-
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	2.00%	401(k) Roth 1-3/100% 4-5/50%	1,179	1,209	1,242	3,096	3,172	3,260	-	-	-
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,611	1,655	1,705	2,819	2,896	2,984	-	-	-
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,281	2,339	2,406	2,994	3,070	3,158	-	-	-
			Total Collective Bargaining Unit				$43,459	$44,548	$45,793	$67,424	$69,112	$71,041	$1,147	$1,147	$1,147

Pennsylvania-American Water Company - Wastewater SSS General Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP								
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
Non-Collective Bargaining Unit Hourly															
1	246701	COWW-Production	Wastewater Operator	9/20/1999	4.00%	401(k) Match 1-3/100% 4-5/50%	$2,787	$2,899	$3,000	$3,658	$3,805	$3,938	$0	$0	$0
2	246706	COWW-Field Services	Utility Person	5/30/1995			-	-	-	3,374	3,509	3,631	-	-	-
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	4.00%	401(k) Match 1-3/100% 4-5/50%	2,932	3,050	3,156	3,849	4,003	4,143	-	-	-
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	2.50%	401(k) Match 50% up to 5%	1,822	1,895	1,961	-	-	-	-	-	-
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	2.50%	401(k) Match 50% up to 5%	1,884	1,960	2,028	-	-	-	-	-	-
6	246706	COWW-Field Services	Crew Leader	11/10/2003	3.00%	401(k) Match 1-3/100% 4-5/50%	2,041	2,123	2,197	3,573	3,716	3,845	-	-	-
7	246901	LPWW-Production	Plant Operator	6/2/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,764	2,875	2,975	3,627	3,773	3,905	610	634	656
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	3.00%	401(k) Match 1-3/100% 4-5/50%	2,233	2,323	2,403	3,908	4,065	4,206	229	229	229
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,955	3,074	3,180	3,878	4,034	4,174	-	-	-
10	242601	CLYWW-Production	Plant Operator	7/31/2008			-	-	-	3,574	3,717	3,847	-	-	-
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,897	3,013	3,119	3,803	3,955	4,093	1,278	1,329	1,376
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,570	2,673	2,765	3,373	3,508	3,630	-	-	-
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	3,205	3,334	3,450	4,207	4,376	4,528	92	92	92
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	4.00%	401(k) Match 1-3/100% 4-5/50%	2,653	2,760	2,856	3,483	3,622	3,748	-	-	-
15	246706	COWW-Field Services	Utility Person	3/14/2016	3.00%	401(k) Match 1-3/100% 4-5/50%	1,866	1,941	2,008	3,266	3,396	3,514	-	-	-
16	246901	LPWW-Production	Plant Operator	9/11/2017	4.00%	401(k) Match 1-3/100% 4-5/50%	2,504	2,604	2,695	3,286	3,418	3,537	552	574	595
17	246701	COWW-Production	Wastewater Operator	5/14/2018	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,683	2,791	2,888	3,522	3,664	3,791	-	-	-
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,400	2,496	2,583	3,150	3,277	3,391	-	-	-
19	248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	10/15/2018	4.00%	401(k) Match 1-3/100% 4-5/50%	2,761	2,872	2,972	3,624	3,770	3,901	365	380	393
20	246706	COWW-Field Services	Utility Person	3/25/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,400	2,496	2,582	3,149	3,275	3,389	-	-	-
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,117	3,242	3,355	4,091	4,255	4,403	138	143	148
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,015	3,136	3,246	3,957	4,116	4,260	399	415	430
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	3.00%	401(k) Match 1-3/100% 4-5/50%	1,939	2,017	2,087	3,394	3,530	3,653	-	-	-
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	3.50%	401(k) Match 1-3/100% 4-5/50%	2,246	2,336	2,417	3,369	3,503	3,625	566	589	609
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,589	2,693	2,786	3,398	3,534	3,657	1,142	1,188	1,229
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,206	3,335	3,451	4,208	4,377	4,529	-	-	-
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,628	2,733	2,828	3,449	3,587	3,712	-	-	-
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	2,589	2,693	2,786	3,398	3,534	3,657	571	594	615
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	3.00%	401(k) Match 1-3/100% 4-5/50%	1,937	2,015	2,085	3,389	3,525	3,648	229	229	229
30	248706	Nw Cmbrlnd WW FS	Utility Person	9/20/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,243	2,334	2,415	2,944	3,063	3,169	-	-	-
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021	3.00%	401(k) Roth 1-3/100% 4-5/50%	1,783	1,855	1,919	3,121	3,246	3,359	-	-	-
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,941	2,019	2,089	3,397	3,533	3,656	-	-	-
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,879	1,954	2,023	3,289	3,420	3,540	-	-	-
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,368	2,463	2,549	3,108	3,233	3,346	344	344	344
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,941	2,019	2,089	3,397	3,533	3,656	-	-	-
36	248706	Nw Cmbrlnd WW FS	Utility Person	9/6/2022	2.00%	401(k) Match 1-3/100% 4-5/50%	1,208	1,256	1,300	3,170	3,297	3,412	-	-	-
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,683	1,750	1,811	2,944	3,063	3,169	-	-	-
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,464	2,562	2,652	3,234	3,363	3,480	-	-	-
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,879	1,954	2,023	3,289	3,420	3,540	-	-	-
40	246701	COWW-Production	Wastewater Operator	1/3/2023	4.00%	401(k) Match 1-3/100% 4-5/50%	2,673	2,780	2,876	3,508	3,648	3,775	-	-	-
41	248701	Nw Cmbrnlnd WW Prod	Utility Person	2/6/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,707	1,775	1,837	2,987	3,107	3,215	-	-	-
42	246706	COWW-Field Services	Utility Person	3/6/2023			-	-	-	3,069	3,192	3,303	-	-	-
			Total Non-Collective Bargaining Unit Hourly				$92,395	$96,099	$99,445	$138,415	$143,963	$148,975	$6,516	$6,742	$6,945

Pennsylvania-American Water Company - Wastewater CSS Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP								
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
Non-Collective Bargaining Unit Salary															
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000	0.50%	401(k) Match 50% up to 5%	$478	$497	$515	$0	$0	$0	$0	$0	$0
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	3,096	3,221	3,333	4,064	4,227	4,375	229	229	229
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016	4.00%	401(k) Match 1-3/100% 4-5/50%	2,720	2,829	2,927	3,570	3,713	3,842	600	624	646
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002			-	-	-	6,156	6,402	6,625	-	-	-
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007			-	-	-	4,043	4,204	4,351	-	-	-
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007	4.00%	401(k) Match 1-3/100% 4-5/50%	3,400	3,536	3,659	4,463	4,641	4,803	138	138	138
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	3,366	3,500	3,622	4,417	4,594	4,753	-	-	-
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982	4.00%	401(k) Match 1-3/100% 4-5/50%	3,715	3,864	3,999	4,876	5,071	5,248	-	-	-
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003	3.00%	401(k) Match 1-3/100% 4-5/50%	3,106	3,230	3,343	5,435	5,653	5,850	-	-	-
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015	4.00%	401(k) Match 1-3/100% 4-5/50%	3,520	3,661	3,788	4,620	4,805	4,972	311	323	334
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	3,818	3,971	4,109	5,011	5,212	5,393	-	-	-
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020	4.00%	401(k) Match 1-3/100% 4-5/50%	3,171	3,298	3,413	4,162	4,329	4,479	-	-	-
			Total Non-Collective Bargaining Unit Salary				$30,390	$31,607	$32,707	$50,816	$52,852	$54,691	$1,278	$1,314	$1,347
Collective Bargaining Unit															
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009			$0	$0	$0	$3,327	$3,393	$3,460	$783	$798	$814
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006			-	-	-	3,594	3,666	3,738	229	229	229
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005			-	-	-	3,177	3,239	3,303	-	-	-
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002			-	-	-	3,327	3,393	3,460	-	-	-
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008			-	-	-	3,327	3,393	3,460	-	-	-
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016			-	-	-	3,177	3,239	3,303	-	-	-
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012			-	-	-	3,177	3,239	3,303	-	-	-
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013			-	-	-	3,177	3,239	3,303	-	-	-
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990			-	-	-	3,327	3,393	3,460	-	-	-
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005			-	-	-	3,327	3,393	3,460	-	-	-
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008			-	-	-	3,177	3,239	3,303	-	-	-
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007			-	-	-	3,177	3,239	3,303	-	-	-
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016			-	-	-	3,177	3,239	3,303	-	-	-
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009			-	-	-	3,327	3,393	3,460	-	-	-
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005			-	-	-	3,594	3,666	3,738	229	229	229
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005			-	-	-	3,177	3,239	3,303	-	-	-
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009			-	-	-	3,327	3,393	3,460	-	-	-
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008			-	-	-	3,327	3,393	3,460	-	-	-
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008			-	-	-	3,327	3,393	3,460	-	-	-
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009			-	-	-	3,327	3,393	3,460	-	-	-
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005			-	-	-	3,594	3,666	3,738	121	123	126
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011			-	-	-	3,327	3,393	3,460	229	229	229
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987			-	-	-	3,327	3,393	3,460	-	-	-
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997			-	-	-	3,594	3,666	3,738	229	229	229
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005			-	-	-	3,177	3,239	3,303	-	-	-
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006			-	-	-	3,177	3,239	3,303	-	-	-
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011			-	-	-	3,177	3,239	3,303	-	-	-
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013			-	-	-	3,177	3,239	3,303	688	688	688
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012			-	-	-	3,327	3,393	3,460	-	-	-
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009			-	-	-	3,177	3,239	3,303	-	-	-
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013			-	-	-	3,594	3,666	3,738	362	370	377
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992			-	-	-	3,177	3,239	3,303	-	-	-
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016			-	-	-	3,327	3,393	3,460	-	-	-
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006			-	-	-	3,177	3,239	3,303	-	-	-
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012			-	-	-	3,177	3,239	3,303	-	-	-
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007			-	-	-	3,177	3,239	3,303	-	-	-
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006			-	-	-	3,177	3,239	3,303	-	-	-
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997			-	-	-	3,327	3,393	3,460	-	-	-
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006			-	-	-	3,177	3,239	3,303	-	-	-
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006			-	-	-	3,327	3,393	3,460	344	344	344
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017			-	-	-	3,594	3,666	3,738	-	-	-
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008			-	-	-	3,327	3,393	3,460	224	228	233
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016			-	-	-	3,327	3,393	3,460	447	456	465
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006			-	-	-	3,177	3,239	3,303	-	-	-
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005			-	-	-	3,177	3,239	3,303	-	-	-
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	1.00%	401(k) Roth 1-3/100% 4-5/50%	685	698	712	3,594	3,666	3,738	1,208	1,232	1,256
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	4.00%	401(k) Match 1-3/100% 4-5/50%	2,846	2,923	2,998	3,736	3,837	3,934	251	258	264
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	4.00%	401(k) Match 1-3/100% 4-5/50%	3,036	3,117	3,195	3,985	4,091	4,193	229	229	229
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	4.00%	401(k) Match 1-3/100% 4-5/50%	3,033	3,114	3,191	3,981	4,087	4,189	-	-	-
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	4.00%	401(k) Match 1-3/100% 4-5/50%	2,971	3,051	3,129	3,899	4,004	4,106	-	-	-

Pennsylvania-American Water Company - Wastewater CSS Operations
401K and Defined Contribution Plan (DCP) Expense

							Gross Other Benefits 401k, DCP, ESPP								
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	401k % Match	401k Plan	2023 401k	2024 401k	2025 401k	Defined Contribution Plan 2023	Defined Contribution Plan 2024	Defined Contribution Plan 2025	2023 ESPP	2024 ESPP	2025 ESPP
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	4.00%	401(k) Match 1-3/100% 4-5/50%	3,033	3,113	3,190	3,980	4,086	4,187	803	824	845
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	3,036	3,117	3,195	3,985	4,091	4,193	402	413	423
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,786	2,860	2,932	3,657	3,753	3,848	-	-	-
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	4.00%	401(k) Match 1-3/100% 4-5/50%	2,696	2,768	2,838	3,539	3,633	3,725	238	244	250
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	1.00%	401(k) Match 1-3/100% 4-5/50%	545	560	574	2,861	2,938	3,013	-	-	-
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	2,786	2,860	2,932	3,657	3,753	3,848	459	459	459
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	2,654	2,726	2,796	3,484	3,578	3,670	585	601	617
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,786	2,860	2,932	3,657	3,753	3,848	-	-	-
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	3.00%	401(k) Match 1-3/100% 4-5/50%	2,128	2,186	2,241	3,724	3,825	3,922	-	-	-
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	3.00%	401(k) Match 1-3/100% 4-5/50%	1,803	1,850	1,896	3,155	3,238	3,318	-	-	-
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	4.00%	401(k) Match 1-3/100% 4-5/50%	3,212	3,299	3,383	4,216	4,330	4,440	-	-	-
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	4.00%	401(k) Match 1-3/100% 4-5/50%	2,654	2,726	2,796	3,484	3,578	3,670	229	229	229
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,531	2,600	2,666	3,323	3,412	3,499	-	-	-
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	4.00%	401(k) Match 1-3/100% 4-5/50%	3,036	3,117	3,195	3,985	4,091	4,193	938	963	987
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	4.00%	401(k) Match 1-3/100% 4-5/50%	3,033	3,114	3,191	3,981	4,087	4,189	-	-	-
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	4.00%	401(k) Match 1-3/100% 4-5/50%	2,531	2,600	2,666	3,323	3,412	3,499	-	-	-
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	4.00%	401(k) Match 1-3/100% 4-5/50%	2,654	2,726	2,796	3,484	3,578	3,670	-	-	-
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	1.00%	401(k) Match 1-3/100% 4-5/50%	634	646	659	3,327	3,393	3,460	-	-	-
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,535	2,585	2,636	3,327	3,393	3,460	-	-	-
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	4.00%	401(k) Match 1-3/100% 4-5/50%	2,535	2,585	2,636	3,327	3,393	3,460	559	570	581
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,045	2,096	2,148	2,683	2,750	2,819	-	-	-
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	4.00%	401(k) Match 1-3/100% 4-5/50%	2,212	2,267	2,324	2,903	2,975	3,050	-	-	-
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	1,901	1,939	1,977	3,327	3,393	3,460	-	-	-
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	4.00%	401(k) Match 1-3/100% 4-5/50%	2,420	2,468	2,516	3,177	3,239	3,303	107	109	111
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	3.00%	401(k) Match 1-3/100% 4-5/50%	2,301	2,363	2,424	4,027	4,136	4,241	-	-	-
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,635	1,679	1,722	2,861	2,938	3,013	-	-	-
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	2,301	2,363	2,424	4,027	4,136	4,241	-	-	-
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,535	2,585	2,636	3,327	3,393	3,460	-	-	-
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	1,776	1,827	1,879	2,332	2,398	2,466	-	-	-
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	2.00%	401(k) Roth 1-3/100% 4-5/50%	1,189	1,213	1,237	3,122	3,183	3,246	-	-	-
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	1,784	1,819	1,855	3,122	3,183	3,246	-	-	-
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	2,379	2,425	2,473	3,122	3,183	3,246	-	-	-
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	4.00%	401(k) Match 1-3/100% 4-5/50%	3,036	3,117	3,195	3,985	4,091	4,193	-	-	-
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	3.00%	401(k) Match 1-3/100% 4-5/50%	1,838	1,875	1,912	3,217	3,281	3,346	-	-	-
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	4.00%	401(k) Roth 1-3/100% 4-5/50%	2,451	2,500	2,549	3,217	3,281	3,346	-	-	-
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023	3.42%	401(k) Match 1-3/100% 4-5/50%	-	2,667	2,734	-	4,091	4,193	-	-	-
			Total Collective Bargaining Unit				$93,985	$99,002	$101,376	$287,283	$297,740	$304,200	$9,896	$10,057	$10,217
Non-Collective Bargaining Unit Hourly															
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	3.00%	401(k) Match 1-3/100% 4-5/50%	$1,807	$1,879	$1,944	$3,161	$3,289	$3,403	$0	$0	$0
			Total Non-Collective Bargaining Unit Hourly				$1,807	$1,879	$1,944	$3,161	$3,289	$3,403	$0	$0	$0

Pennsylvania-American Water Company
Payroll Taxes

	2024	2025
Water Operations		
Non-Collective Bargaining Unit Salary	$2,694,441	$2,791,329
Collective Bargaining Unit	3,781,658	3,873,008
Non-Collective Bargaining Unit Hourly	1,454,510	1,502,970
Total	$7,930,609	$8,167,307
Wastewater SSS General Operations		
Non-Collective Bargaining Unit Salary	$90,941	$94,003
Collective Bargaining Unit	119,547	122,693
Non-Collective Bargaining Unit Hourly	274,332	283,485
Total	$484,820	$500,181
Wastewater CSS Operations		
Non-Collective Bargaining Unit Salary	$98,655	$101,978
Collective Bargaining Unit	569,297	580,906
Non-Collective Bargaining Unit Hourly	5,391	5,569
Total	$673,343	$688,453

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Salary														
1	240106	CORP-Field Services	Project Manager	1/18/1999	$9,932	$2,374	$218	$42	$12,567	$10,450	$2,469	$218	$42	$13,179
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001	8,375	1,959	218	42	10,594	8,710	2,037	218	42	11,007
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994	9,932	5,948	218	42	16,140	10,450	6,186	218	42	16,896
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998	6,597	1,543	218	42	8,400	6,861	1,605	218	42	8,726
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993	9,932	3,293	218	42	13,485	10,450	3,425	218	42	14,135
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997	6,221	1,455	218	42	7,936	6,471	1,513	218	42	8,244
7	249160	WILK-Watres	Supvr Production	1/11/1988	5,433	1,271	218	42	6,964	5,650	1,321	218	42	7,232
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993	8,224	1,923	218	42	10,407	8,554	2,001	218	42	10,815
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990	8,107	1,896	218	42	10,263	8,431	1,972	218	42	10,663
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987	6,289	1,471	218	42	8,020	6,541	1,530	218	42	8,332
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983	7,340	1,717	218	42	9,317	7,635	1,786	218	42	9,681
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998	6,322	1,478	218	42	8,061	6,575	1,538	218	42	8,373
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998	5,011	1,172	218	42	6,444	5,213	1,219	218	42	6,692
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992	6,818	1,594	218	42	8,672	7,090	1,658	218	42	9,009
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986	5,633	1,317	218	42	7,211	5,858	1,370	218	42	7,489
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997	5,248	1,227	218	42	6,735	5,458	1,277	218	42	6,995
17	249150	WILK-Other	Sr Supt Production	9/13/1993	7,735	1,809	218	42	9,804	8,044	1,881	218	42	10,186
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998	9,932	2,464	218	42	12,656	10,450	2,562	218	42	13,272
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994	8,125	1,900	218	42	10,286	8,452	1,977	218	42	10,689
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997	7,582	1,773	218	42	9,615	7,885	1,844	218	42	9,990
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995	6,078	1,421	218	42	7,759	6,322	1,479	218	42	8,061
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995	6,075	1,421	218	42	7,757	6,319	1,478	218	42	8,057
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995	5,612	1,312	218	42	7,184	5,837	1,365	218	42	7,462
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995	9,932	2,499	218	42	12,692	10,450	2,600	218	42	13,310
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982	6,617	1,548	218	42	8,425	6,882	1,610	218	42	8,752
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998	7,439	1,740	218	42	9,439	7,737	1,810	218	42	9,807
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989	9,932	2,349	218	42	12,542	10,447	2,443	218	42	13,151
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978	6,781	1,586	218	42	8,628	7,053	1,649	218	42	8,963
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998	6,964	1,629	218	42	8,854	7,243	1,694	218	42	9,198
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989	9,932	3,868	218	42	14,061	10,450	4,023	218	42	14,733
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993	9,932	2,521	218	42	12,714	10,450	2,622	218	42	13,332
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994	7,713	1,804	218	42	9,777	8,022	1,876	218	42	10,158
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984	6,238	1,459	218	42	7,957	6,488	1,517	218	42	8,266
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987	9,932	3,487	218	42	13,680	10,450	3,627	218	42	14,337
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984	7,954	1,860	218	42	10,074	8,272	1,935	218	42	10,467
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991	9,932	4,210	218	42	14,403	10,450	4,379	218	42	15,089
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994	7,317	1,711	218	42	9,288	7,610	1,780	218	42	9,650
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992	6,967	1,629	218	42	8,857	7,246	1,695	218	42	9,201
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986	6,186	1,447	218	42	7,893	6,435	1,505	218	42	8,200
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986	9,932	2,607	218	42	12,800	10,450	2,712	218	42	13,422
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998	6,663	1,558	218	42	8,481	6,930	1,621	218	42	8,811
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998	9,932	2,468	218	42	12,661	10,450	2,567	218	42	13,277
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998	6,435	1,505	218	42	8,201	6,693	1,565	218	42	8,519
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999	6,966	1,629	218	42	8,856	7,245	1,694	218	42	9,200
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999	8,396	1,964	218	42	10,620	8,734	2,043	218	42	11,037
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999	6,500	1,520	218	42	8,280	6,760	1,581	218	42	8,601
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000	9,932	2,978	218	42	13,171	10,450	3,098	218	42	13,808
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000	5,974	1,397	218	42	7,631	6,214	1,453	218	42	7,927
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000	5,948	1,391	218	42	7,599	6,186	1,447	218	42	7,893
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000	5,974	1,397	218	42	7,631	6,214	1,453	218	42	7,927
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001	9,932	2,443	218	42	12,636	10,450	2,541	218	42	13,251
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994	8,261	1,932	218	42	10,454	8,593	2,010	218	42	10,863
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990	6,076	1,421	218	42	7,757	6,319	1,478	218	42	8,057
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001	8,183	1,914	218	42	10,357	8,511	1,991	218	42	10,762
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999	7,711	1,803	218	42	9,775	8,020	1,876	218	42	10,156
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990	8,084	1,891	218	42	10,235	8,409	1,967	218	42	10,636
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999	9,932	2,344	218	42	12,537	10,427	2,439	218	42	13,126
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992	9,932	3,971	218	42	14,163	10,450	4,130	218	42	14,840
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997	9,932	3,912	218	42	14,104	10,450	4,068	218	42	14,778
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002	9,932	2,481	218	42	12,674	10,450	2,581	218	42	13,291
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003	8,720	2,039	218	42	11,020	9,070	2,121	218	42	11,452
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003	5,769	1,349	218	42	7,378	6,000	1,403	218	42	7,663
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003	7,537	1,763	218	42	9,560	7,839	1,833	218	42	9,933
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003	6,258	1,464	218	42	7,982	6,510	1,522	218	42	8,292
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003	5,555	1,299	218	42	7,115	5,777	1,351	218	42	7,389
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003	8,363	1,956	218	42	10,580	8,700	2,035	218	42	10,994
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004	6,736	1,575	218	42	8,572	7,007	1,639	218	42	8,906
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005	9,155	2,141	218	42	11,557	9,522	2,227	218	42	12,009
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005	7,329	1,714	218	42	9,303	7,622	1,783	218	42	9,665
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005	7,638	1,786	218	42	9,685	7,945	1,858	218	42	10,063
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005	7,715	1,804	218	42	9,779	8,023	1,876	218	42	10,160
72	241151	PITT-Production Haye	Supvr Production	3/16/2005	6,003	1,404	218	42	7,668	6,244	1,460	218	42	7,965
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005	6,600	1,543	218	42	8,404	6,865	1,606	218	42	8,731
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005	6,472	1,514	218	42	8,246	6,732	1,574	218	42	8,567
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005	9,157	2,142	218	42	11,559	9,525	2,228	218	42	12,013
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005	6,695	1,566	218	42	8,521	6,963	1,628	218	42	8,852
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005	6,695	1,566	218	42	8,521	6,963	1,628	218	42	8,852
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005	9,749	2,280	218	42	12,290	10,141	2,372	218	42	12,773
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005	8,319	1,946	218	42	10,525	8,652	2,023	218	42	10,936
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006	5,438	1,272	218	42	6,970	5,656	1,323	218	42	7,239

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					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
Non-Collective Bargaining Unit Salary									
1	240106	CORP-Field Services	Project Manager	1/18/1999	$10,926	$2,555	$218	$42	$13,741
2	240120	CORP-Bus Dev	Mgr Business Dev	2/26/2001	9,012	2,108	218	42	11,381
3	240105	CORP-Admin & Gen	VP Operations (Mega)	5/3/1994	10,994	6,401	218	42	17,656
4	240305	CORP-Admin & Gen	Sr Supervisor, Operations Trainer	7/6/1998	7,099	1,660	218	42	9,020
5	240305	CORP-Admin & Gen	Dir Operations State	10/25/1993	10,994	3,544	218	42	14,798
6	243103	NEWC-Cust Service	Supvr Field Operations	11/24/1997	6,696	1,566	218	42	8,522
7	249160	WILK-Watres	Supvr Production	1/11/1988	5,847	1,367	218	42	7,474
8	240117	CORP-Water Quality	Manager WQ & Env Compliance	9/15/1993	8,852	2,070	218	42	11,183
9	245705	POCO-Admin & Gen	Sr Supt Opns	3/12/1990	8,725	2,040	218	42	11,026
10	249106	WILK-Field Services	Sr Supvr Operations	10/19/1987	6,770	1,583	218	42	8,613
11	249106	WILK-Field Services	Sr Supt Field Ops	10/17/1983	7,900	1,848	218	42	10,008
12	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/6/1998	6,803	1,591	218	42	8,654
13	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/6/1998	5,395	1,262	218	42	6,917
14	249106	WILK-Field Services	Supvr Field Operations	10/19/1992	7,337	1,716	218	42	9,314
15	249106	WILK-Field Services	Supvr Field Operations	9/2/1986	6,062	1,418	218	42	7,740
16	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	9/2/1997	5,649	1,321	218	42	7,230
17	249150	WILK-Other	Sr Supt Production	9/13/1993	8,324	1,947	218	42	10,531
18	246106	MECH-Field Services	Sr Mgr Operations	5/4/1998	10,994	2,651	218	42	13,906
19	240117	CORP-Water Quality	Manager WQ & Env Compliance	6/13/1994	8,746	2,045	218	42	11,051
20	245305	ABNG-Admin & Gen	Sr Supt Opns	6/16/1997	8,160	1,908	218	42	10,328
21	247106	MILT-Field Services	Sr Supvr Operations	10/16/1995	6,541	1,530	218	42	8,332
22	246106	MECH-Field Services	Supvr Field Operations	4/11/1995	6,539	1,529	218	42	8,328
23	246206	HSHY-Field Services	Supvr Field Operations	5/1/1995	6,040	1,413	218	42	7,713
24	240151	CORP-Cust Serv MECH	Sr. Manager, Customer Compliance	4/10/1995	10,994	2,690	218	42	13,944
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/8/1982	7,122	1,666	218	42	9,048
26	240117	CORP-Water Quality	Environmental Program Lead	2/2/1998	8,006	1,872	218	42	10,139
27	240105	CORP-Admin & Gen	Sr Program Manager, Business Performance	8/14/1989	10,811	2,528	218	42	13,600
28	241106	PITT-Field Services	Supvr Field Operations	10/25/1978	7,298	1,707	218	42	9,265
29	240114	CORP-Engineering	Engineering Project Manager	5/16/1998	7,496	1,753	218	42	9,510
30	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/20/1989	10,994	4,163	218	42	15,417
31	243106	NEWC-Field Services	Sr Mgr Operations	9/1/1993	10,994	2,713	218	42	13,968
32	243106	NEWC-Field Services	Sr Supt Opns	6/1/1994	8,301	1,941	218	42	10,502
33	249106	WILK-Field Services	Supvr Field Operations	8/8/1984	6,713	1,570	218	42	8,544
34	240120	CORP-Bus Dev	Dir Business Development	9/28/1987	10,994	3,753	218	42	15,008
35	249106	WILK-Field Services	Sr Supt Field Ops	2/27/1984	8,560	2,002	218	42	10,822
36	240120	CORP-Bus Dev	Sr Dir, Business Development	3/18/1991	10,994	4,531	218	42	15,786
37	244103	INDI-Cust Service	Sr Supvr Operations	11/16/1994	7,875	1,842	218	42	9,977
38	247201	PHBG-Production	Sr Supvr Operations	12/16/1992	7,499	1,754	218	42	9,513
39	249106	WILK-Field Services	Supvr Field Operations	10/20/1986	6,658	1,557	218	42	8,476
40	245405	SUSQ-Admin & Gen	Sr Mgr Operations	5/19/1986	10,994	2,806	218	42	14,060
41	240306	CORP-Field Service	Supvr Field Operations	9/16/1998	7,171	1,677	218	42	9,109
42	240306	CORP-Field Service	Sr Mgr, Production Assets	10/16/1998	10,994	2,656	218	42	13,910
43	242506	BRWN-Field Services	Sr Supvr Operations	10/26/1998	6,926	1,620	218	42	8,806
44	240306	CORP-Field Service	Supvr Field Operations	8/31/1999	7,498	1,753	218	42	9,511
45	241106	PITT-Field Services	Sr Supt Field Ops	9/8/1999	9,038	2,114	218	42	11,412
46	241103	PITT-Cust Service	Sr Supvr Operations	9/16/1999	6,995	1,636	218	42	8,891
47	240120	CORP-Bus Dev	Mgr Engrg - Project Delivery	5/1/2000	10,994	3,206	218	42	14,460
48	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/20/2000	6,430	1,504	218	42	8,194
49	247206	PHBG-Field Services	Supvr Field Operations	10/2/2000	6,401	1,497	218	42	8,159
50	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/4/2000	6,430	1,504	218	42	8,194
51	241106	PITT-Field Services	Sr Mgr Operations	12/18/2001	10,994	2,629	218	42	13,884
52	245106	NORR-Field Services	Sr Supt Opns	3/14/1994	8,892	2,080	218	42	11,232
53	246506	COAT-Field Services	Supvr Field Operations	6/25/1990	6,539	1,529	218	42	8,328
54	240114	CORP-Engineering	Sr Project Engineer	6/25/2001	8,808	2,060	218	42	11,128
55	240114	CORP-Engineering	Sr Project Engineer	5/3/1999	8,299	1,941	218	42	10,500
56	245906	GLEN-Field Services	Sr Supt Opns	10/15/1990	8,701	2,035	218	42	10,996
57	240114	CORP-Engineering	Mgr Engrg - Project Delivery	8/1/1999	10,789	2,523	218	42	13,573
58	240305	CORP-Admin & Gen	Sr Director Operations (Mega)	3/9/1992	10,994	4,274	218	42	15,528
59	240205	CORP-Admin & Gen	Sr Director Operations (Mega)	11/16/1997	10,994	4,210	218	42	15,464
60	240114	CORP-Engineering	Mgr Engineering	8/19/2002	10,994	2,671	218	42	13,925
61	240120	CORP-Bus Dev	Sr Project Engineer	5/12/2003	9,386	2,195	218	42	11,842
62	242306	UNTN-Field Services	Supvr Field Operations	6/2/2003	6,209	1,452	218	42	7,922
63	242106	MCMR-Field Services	Sr Supt Opns	6/23/2003	8,112	1,897	218	42	10,270
64	240114	CORP-Engineering	Source Water Protection State Lead	6/30/2003	6,736	1,575	218	42	8,572
65	240114	CORP-Engineering	Staff Engineering Project Manager	9/2/2003	5,978	1,398	218	42	7,637
66	240116	CORP-Maint Services	Mgr Maintenance	10/13/2003	9,002	2,105	218	42	11,368
67	245906	GLEN-Field Services	Sr Supvr Operations	1/12/2004	7,251	1,696	218	42	9,207
68	240114	CORP-Engineering	Capital Program Manager	1/10/2005	9,853	2,304	218	42	12,418
69	242101	MCMR-Production	Sr Supvr Operations	2/28/2005	7,888	1,845	218	42	9,993
70	240121	CORP-Com Relations	Mgr Ext Affairs (State)	2/28/2005	8,220	1,923	218	42	10,403
71	247150	MILT-Prod Other	Sr Supt Opns	3/7/2005	8,302	1,942	218	42	10,504
72	241151	PITT-Production Haye	Supvr Production	3/16/2005	6,461	1,511	218	42	8,232
73	240114	CORP-Engineering	Engineering Project Manager	3/21/2005	7,103	1,661	218	42	9,025
74	244606	KANE-Field Services	Sr Supvr Operations	4/11/2005	6,966	1,629	218	42	8,856
75	240114	CORP-Engineering	Mgr Engineering	5/31/2005	9,856	2,305	218	42	12,422
76	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/27/2005	7,206	1,685	218	42	9,151
77	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/18/2005	7,206	1,685	218	42	9,151
78	240121	CORP-Com Relations	Sr Manager, Government and External Affa	8/15/2005	10,494	2,454	218	42	13,208
79	240114	CORP-Engineering	Sr Project Engineer	11/14/2005	8,953	2,094	218	42	11,307
80	249106	WILK-Field Services	Supvr Field Operations	5/1/2006	5,853	1,369	218	42	7,482

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					2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006	9,932	2,599	218	42	12,791	10,450	2,703	218	42	13,413
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006	7,911	1,850	218	42	10,022	8,228	1,924	218	42	10,413
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006	5,923	1,385	218	42	7,568	6,160	1,441	218	42	7,861
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006	5,872	1,373	218	42	7,506	6,108	1,429	218	42	7,797
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006	5,416	1,267	218	42	6,943	5,633	1,317	218	42	7,211
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006	5,555	1,299	218	42	7,115	5,777	1,351	218	42	7,389
87	240106	CORP-Field Services	Mgr Opns	1/22/2007	7,211	1,686	218	42	9,158	7,500	1,754	218	42	9,514
88	249150	WILK-Other	Production Asset Administrator	1/22/2007	6,111	1,429	218	42	7,800	6,355	1,486	218	42	8,102
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007	7,700	1,801	218	42	9,762	8,010	1,873	218	42	10,144
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007	5,300	1,239	218	42	6,800	5,512	1,289	218	42	7,061
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009	8,363	1,956	218	42	10,580	8,700	2,035	218	42	10,994
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007	8,171	1,911	218	42	10,342	8,499	1,988	218	42	10,747
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007	6,658	1,557	218	42	8,476	6,926	1,620	218	42	8,806
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007	8,085	1,891	218	42	10,237	8,410	1,967	218	42	10,638
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007	8,699	2,034	218	42	10,993	9,048	2,116	218	42	11,424
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007	7,179	1,679	218	42	9,118	7,467	1,746	218	42	9,474
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008	9,932	2,443	218	42	12,636	10,450	2,541	218	42	13,251
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008	5,694	1,332	218	42	7,286	5,923	1,385	218	42	7,569
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008	8,727	2,041	218	42	11,028	9,078	2,123	218	42	11,461
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008	9,573	2,239	218	42	12,072	9,957	2,329	218	42	12,546
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008	6,066	1,419	218	42	7,745	6,309	1,475	218	42	8,045
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009	5,893	1,378	218	42	7,532	6,130	1,434	218	42	7,824
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009	6,192	1,448	218	42	7,900	6,440	1,506	218	42	8,207
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009	6,635	1,552	218	42	8,447	6,901	1,614	218	42	8,775
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009	9,932	2,575	218	42	12,768	10,450	2,679	218	42	13,389
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009	9,932	5,446	218	42	15,639	10,450	5,665	218	42	16,375
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009	6,854	1,603	218	42	8,717	7,129	1,667	218	42	9,057
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009	5,780	1,352	218	42	7,392	6,011	1,406	218	42	7,678
109	246501	COAT-Production	Supvr Production	4/12/2010	5,685	1,330	218	42	7,275	5,913	1,383	218	42	7,556
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010	5,555	1,299	218	42	7,115	5,777	1,351	218	42	7,389
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010	6,838	1,599	218	42	8,698	7,113	1,663	218	42	9,036
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010	8,304	1,942	218	42	10,507	8,637	2,020	218	42	10,918
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010	6,795	1,589	218	42	8,644	7,067	1,653	218	42	8,980
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011	6,631	1,551	218	42	8,442	6,896	1,613	218	42	8,769
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011	5,764	1,348	218	42	7,372	5,994	1,402	218	42	7,656
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011	5,014	1,173	218	42	6,447	5,214	1,219	218	42	6,694
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011	5,668	1,326	218	42	7,254	5,894	1,379	218	42	7,533
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011	8,545	1,999	218	42	10,804	8,888	2,079	218	42	11,227
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012	5,935	1,388	218	42	7,583	6,173	1,444	218	42	7,877
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012	8,405	1,966	218	42	10,632	8,742	2,045	218	42	11,047
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012	8,682	2,030	218	42	10,973	9,030	2,112	218	42	11,403
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012	5,021	1,174	218	42	6,456	5,223	1,221	218	42	6,705
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013	9,117	2,132	218	42	11,510	9,483	2,218	218	42	11,961
124	240306	CORP-Field Service	Project Manager	3/4/2013	8,019	1,875	218	42	10,155	8,341	1,951	218	42	10,552
125	243151	NEWC-New Castle	Supvr Production	4/29/2013	5,766	1,349	218	42	7,375	5,997	1,403	218	42	7,660
126	247150	MILT-Prod Other	Supvr Production	5/28/2013	5,525	1,292	218	42	7,077	5,747	1,344	218	42	7,352
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013	5,707	1,335	218	42	7,302	5,935	1,388	218	42	7,583
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013	5,555	1,299	218	42	7,115	5,777	1,351	218	42	7,389
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013	9,932	2,856	218	42	13,049	10,450	2,971	218	42	13,681
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013	7,344	1,718	218	42	9,322	7,638	1,786	218	42	9,684
131	240114	CORP-Engineering	GIS Manager	3/31/2014	6,629	1,550	218	42	8,439	6,895	1,612	218	42	8,767
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014	8,271	1,934	218	42	10,465	8,603	2,012	218	42	10,875
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014	6,037	1,412	218	42	7,709	6,279	1,468	218	42	8,007
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014	5,625	1,315	218	42	7,200	5,850	1,368	218	42	7,478
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014	5,347	1,250	218	42	6,858	5,561	1,301	218	42	7,122
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014	6,196	1,449	218	42	7,905	6,445	1,507	218	42	8,212
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014	4,801	1,123	218	42	6,184	4,993	1,168	218	42	6,421
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014	6,020	1,408	218	42	7,689	6,261	1,464	218	42	7,986
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014	9,464	2,213	218	42	11,938	9,844	2,302	218	42	12,406
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015	5,894	1,379	218	42	7,533	6,131	1,434	218	42	7,826
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015	5,337	1,248	218	42	6,846	5,552	1,298	218	42	7,111
142	240114	CORP-Engineering	GIS Manager	2/2/2015	6,629	1,550	218	42	8,439	6,895	1,612	218	42	8,767
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015	5,227	1,222	218	42	6,710	5,437	1,271	218	42	6,968
144	240114	CORP-Engineering	Engineer	6/22/2015	5,408	1,265	218	42	6,933	5,624	1,315	218	42	7,200
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015	5,465	1,278	218	42	7,003	5,684	1,329	218	42	7,273
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015	7,201	1,684	218	42	9,146	7,489	1,752	218	42	9,501

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					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
81	249106	WILK-Field Services	Sr Mgr Operations	5/22/2006	10,994	2,797	218	42	14,051
82	240114	CORP-Engineering	Sr Project Engineer	5/30/2006	8,514	1,991	218	42	10,766
83	243306	BUTL-Field Services	Supvr Field Operations	6/1/2006	6,374	1,491	218	42	8,125
84	240306	CORP-Field Service	Supvr Field Operations	6/12/2006	6,320	1,478	218	42	8,059
85	246801	LEHP-Production	Supvr Field Operations	10/2/2006	5,829	1,363	218	42	7,453
86	246106	MECH-Field Services	Supvr Field Operations	11/13/2006	5,978	1,398	218	42	7,637
87	240106	CORP-Field Services	Mgr Opns	1/22/2007	7,761	1,815	218	42	9,836
88	249150	WILK-Other	Production Asset Administrator	1/22/2007	6,576	1,538	218	42	8,374
89	246206	HSHY-Field Services	Sr Supt Opns	3/27/2007	8,289	1,938	218	42	10,488
90	241106	PITT-Field Services	Supvr Field Operations	5/7/2007	5,704	1,334	218	42	7,298
91	245106	NORR-Field Services	Sr Supt Opns	8/17/2009	9,002	2,105	218	42	11,368
92	240116	CORP-Maint Services	Principal SCADA Engineer	7/2/2007	8,794	2,057	218	42	11,112
93	246806	LEHP-Field Services	Sr Supvr Operations	7/9/2007	7,167	1,676	218	42	9,103
94	241106	PITT-Field Services	Sr Supt Field Ops	7/23/2007	8,702	2,035	218	42	10,998
95	240114	CORP-Engineering	Sr Project Engineer	8/20/2007	9,362	2,190	218	42	11,812
96	240305	CORP-Admin & Gen	Mgr Operations - EAM	12/3/2007	7,727	1,807	218	42	9,794
97	240205	CORP-Admin & Gen	Sr Mgr Production	6/2/2008	10,994	2,629	218	42	13,884
98	245106	NORR-Field Services	Supvr Field Operations	8/11/2008	6,130	1,434	218	42	7,824
99	243106	NEWC-Field Services	Sr Supt Opns	9/15/2008	9,394	2,197	218	42	11,851
100	240114	CORP-Engineering	Mgr Engrg - Project Delivery	10/27/2008	10,303	2,410	218	42	12,973
101	249103	WILK-Cust Service	Sr Supvr Operations	11/17/2008	6,528	1,527	218	42	8,316
102	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/20/2009	6,344	1,484	218	42	8,087
103	244306	CLAR-Field Services	Sr Supvr Operations	5/18/2009	6,664	1,559	218	42	8,483
104	241151	PITT-Production Haye	Sr Supvr Operations	6/16/2009	7,141	1,670	218	42	9,071
105	245106	NORR-Field Services	Sr Mgr Operations	8/24/2009	10,994	2,772	218	42	14,026
106	240114	CORP-Engineering	VP Engineering (Mega)	8/24/2009	10,994	5,861	218	42	17,116
107	240114	CORP-Engineering	Engineering Project Manager	10/12/2009	7,378	1,725	218	42	9,364
108	249106	WILK-Field Services	Sr Supvr Operations	10/19/2009	6,221	1,455	218	42	7,936
109	246501	COAT-Production	Supvr Production	4/12/2010	6,118	1,431	218	42	7,809
110	243152	NEWC-Ellwood	Supvr Production	5/10/2010	5,978	1,398	218	42	7,637
111	240205	CORP-Admin & Gen	Project Manager Operations	5/3/2010	7,360	1,721	218	42	9,342
112	240117	CORP-Water Quality	Manager, Wastewater Compliance	6/7/2010	8,938	2,090	218	42	11,289
113	246401	ROYF-Production	Sr Supvr Operations	10/4/2010	7,313	1,710	218	42	9,283
114	240106	CORP-Field Services	Major Accounts Manager	1/3/2011	7,136	1,669	218	42	9,066
115	241152	PITT-Production Aldr	Supvr Production	3/14/2011	6,202	1,450	218	42	7,913
116	249106	WILK-Field Services	Supvr Field Operations	8/1/2011	5,396	1,262	218	42	6,918
117	243306	BUTL-Field Services	Sr Supvr Operations	8/29/2011	6,100	1,427	218	42	7,786
118	240116	CORP-Maint Services	Mgr Maintenance	10/24/2011	9,198	2,151	218	42	11,609
119	240113	CORP-Info Systems	Specialist, Technology Field Services	2/6/2012	6,388	1,494	218	42	8,143
120	240114	CORP-Engineering	Sr Project Engineer	6/18/2012	9,047	2,116	218	42	11,423
121	240116	CORP-Maint Services	Mgr Automation & Controls (SCADA)	6/25/2012	9,345	2,185	218	42	11,790
122	240114	CORP-Engineering	Lead Business Operations Analyst	7/3/2012	5,405	1,264	218	42	6,929
123	240114	CORP-Engineering	Sr GIS Manager	2/4/2013	9,813	2,295	218	42	12,368
124	240306	CORP-Field Service	Project Manager	3/4/2013	8,631	2,019	218	42	10,910
125	243151	NEWC-New Castle	Supvr Production	4/29/2013	6,205	1,451	218	42	7,916
126	247150	MILT-Prod Other	Supvr Production	5/28/2013	5,946	1,391	218	42	7,597
127	242106	MCMR-Field Services	Supvr Field Operations	8/19/2013	6,141	1,436	218	42	7,838
128	245506	BNGR-Field Services	Sr Supvr Operations	9/9/2013	5,978	1,398	218	42	7,637
129	240120	CORP-Bus Dev	Sr Mgr Business Dev	11/25/2013	10,994	3,074	218	42	14,328
130	240117	CORP-Water Quality	Sr EAM Project Manager-W&WW	12/2/2013	7,903	1,848	218	42	10,012
131	240114	CORP-Engineering	GIS Manager	3/31/2014	7,135	1,669	218	42	9,064
132	240114	CORP-Engineering	Sr Planning Engineer	5/19/2014	8,903	2,082	218	42	11,245
133	244206	PUNX-Field Services	Sr Supvr Operations	5/27/2014	6,497	1,519	218	42	8,276
134	241152	PITT-Production Aldr	Supvr Production	6/2/2014	6,053	1,416	218	42	7,729
135	241103	PITT-Cust Service	Supvr Field Operations	10/14/2014	5,754	1,346	218	42	7,360
136	244506	WARR-Field Services	Sr Supvr Operations	10/27/2014	6,669	1,560	218	42	8,488
137	249103	WILK-Cust Service	Sr Business Operations Analyst	11/3/2014	5,166	1,208	218	42	6,635
138	240117	CORP-Water Quality	Supvr WQ & Env Compliance	11/3/2014	6,479	1,515	218	42	8,255
139	240114	CORP-Engineering	Mgr Engineering	11/24/2014	10,186	2,382	218	42	12,828
140	247306	BRWK-Field Services	Sr Supvr Operations	1/5/2015	6,345	1,484	218	42	8,089
141	240113	CORP-Info Systems	Specialist, Technology Field Services	1/19/2015	5,746	1,344	218	42	7,350
142	240114	CORP-Engineering	GIS Manager	2/2/2015	7,135	1,669	218	42	9,064
143	249152	WILK-Ceasetown	Supvr Production	4/13/2015	5,626	1,316	218	42	7,202
144	240114	CORP-Engineering	Engineer	6/22/2015	5,820	1,361	218	42	7,442
145	240114	CORP-Engineering	Source Water Protection State Lead	10/26/2015	5,881	1,375	218	42	7,517
146	249106	WILK-Field Services	Sr Supt Field Ops	11/16/2015	7,750	1,813	218	42	9,823

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					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015	5,416	1,267	218	42	6,943	5,633	1,317	218	42	7,211
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015	5,436	1,271	218	42	6,967	5,653	1,322	218	42	7,236
149	243301	BUTL-Production	Supvr Production	12/7/2015	5,746	1,344	218	42	7,351	5,977	1,398	218	42	7,635
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015	5,488	1,284	218	42	7,032	5,708	1,335	218	42	7,303
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015	9,932	4,244	218	42	14,437	10,450	4,414	218	42	15,124
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016	5,567	1,302	218	42	7,130	5,790	1,354	218	42	7,405
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016	9,932	2,449	218	42	12,642	10,450	2,547	218	42	13,257
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016	4,932	1,153	218	42	6,346	5,130	1,200	218	42	6,591
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016	6,021	1,408	218	42	7,689	6,263	1,465	218	42	7,988
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016	7,347	1,718	218	42	9,325	7,642	1,787	218	42	9,690
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016	5,392	1,261	218	42	6,913	5,608	1,312	218	42	7,180
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016	5,231	1,223	218	42	6,714	5,441	1,272	218	42	6,974
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016	6,355	1,486	218	42	8,102	6,609	1,546	218	42	8,415
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016	6,840	1,600	218	42	8,700	7,113	1,664	218	42	9,037
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017	9,932	3,110	218	42	13,303	10,450	3,235	218	42	13,945
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990	5,818	1,361	218	42	7,438	6,050	1,415	218	42	7,726
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016	5,452	1,275	218	42	6,987	5,671	1,326	218	42	7,257
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017	7,401	1,731	218	42	9,392	7,698	1,800	218	42	9,759
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017	9,582	2,241	218	42	12,084	9,966	2,331	218	42	12,557
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017	6,944	1,624	218	42	8,828	7,222	1,689	218	42	9,171
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017	6,828	1,597	218	42	8,685	7,102	1,661	218	42	9,023
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017	7,700	1,801	218	42	9,762	8,010	1,873	218	42	10,144
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017	5,560	1,300	218	42	7,121	5,783	1,353	218	42	7,396
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017	4,766	1,115	218	42	6,141	4,957	1,159	218	42	6,377
171	240114	CORP-Engineering	Planning Engineer	8/14/2017	5,892	1,378	218	42	7,531	6,128	1,433	218	42	7,822
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017	9,449	2,210	218	42	11,919	9,828	2,299	218	42	12,387
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017	6,660	1,558	218	42	8,478	6,927	1,620	218	42	8,808
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011	6,190	1,448	218	42	7,898	6,438	1,506	218	42	8,204
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018	7,004	1,638	218	42	8,902	7,285	1,704	218	42	9,249
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018	7,269	1,700	218	42	9,230	7,561	1,768	218	42	9,590
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018	7,262	1,698	218	42	9,221	7,553	1,766	218	42	9,579
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018	5,689	1,330	218	42	7,280	5,918	1,384	218	42	7,562
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018	6,742	1,577	218	42	8,579	7,012	1,640	218	42	8,913
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018	7,044	1,647	218	42	8,952	7,326	1,713	218	42	9,300
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018	5,919	1,384	218	42	7,563	6,156	1,440	218	42	7,856
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018	6,893	1,612	218	42	8,766	7,170	1,677	218	42	9,107
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018	5,467	1,279	218	42	7,006	5,686	1,330	218	42	7,277
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018	5,364	1,255	218	42	6,879	5,580	1,305	218	42	7,145
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018	9,449	2,210	218	42	11,919	9,828	2,299	218	42	12,387
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018	5,486	1,283	218	42	7,029	5,705	1,334	218	42	7,300
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018	6,355	1,486	218	42	8,102	6,609	1,546	218	42	8,415
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018	5,728	1,340	218	42	7,328	5,958	1,393	218	42	7,612
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018	4,849	1,134	218	42	6,243	5,044	1,180	218	42	6,484
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018	5,525	1,292	218	42	7,077	5,746	1,344	218	42	7,350
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018	6,534	1,528	218	42	8,323	6,796	1,589	218	42	8,645
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018	5,902	1,380	218	42	7,543	6,138	1,436	218	42	7,834
193	240114	CORP-Engineering	Staff Engineer	8/27/2018	5,272	1,233	218	42	6,765	5,483	1,282	218	42	7,025
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018	5,386	1,260	218	42	6,906	5,603	1,310	218	42	7,173
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018	5,379	1,258	218	42	6,898	5,595	1,309	218	42	7,164
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018	9,932	6,851	218	42	17,044	10,450	10,689	218	42	21,399
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018	6,355	1,486	218	42	8,102	6,609	1,546	218	42	8,415
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018	5,347	1,250	218	42	6,857	5,561	1,301	218	42	7,122
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018	5,417	1,267	218	42	6,944	5,634	1,318	218	42	7,212
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018	5,739	1,342	218	42	7,341	5,968	1,396	218	42	7,624
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018	4,881	1,142	218	42	6,283	5,077	1,187	218	42	6,525
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019	6,452	1,509	218	42	8,221	6,710	1,569	218	42	8,540
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019	5,470	1,279	218	42	7,010	5,689	1,331	218	42	7,280
204	240114	CORP-Engineering	Planning Engineer	2/4/2019	6,894	1,612	218	42	8,766	7,170	1,677	218	42	9,107
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019	5,565	1,302	218	42	7,127	5,789	1,354	218	42	7,403

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					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
147	240114	CORP-Engineering	GIS Project Manager	11/23/2015	5,829	1,363	218	42	7,453
148	240117	CORP-Water Quality	Supvr WQ & Env Compliance	12/1/2015	5,850	1,368	218	42	7,478
149	243301	BUTL-Production	Supvr Production	12/7/2015	6,185	1,446	218	42	7,891
150	246103	MECH-Cust Service	Supvr Field Operations	12/21/2015	5,907	1,382	218	42	7,549
151	240120	CORP-Bus Dev	Sr Dir, Business Development	12/28/2015	10,994	4,568	218	42	15,822
152	246206	HSHY-Field Services	Supvr Field Operations	1/11/2016	5,993	1,402	218	42	7,654
153	242106	MCMR-Field Services	Sr Mgr Operations	1/25/2016	10,994	2,636	218	42	13,890
154	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	3/7/2016	5,309	1,242	218	42	6,811
155	245606	NAZA-Field Services	Sr Supvr Operations	3/21/2016	6,481	1,516	218	42	8,257
156	242306	UNTN-Field Services	Sr Supt Field Ops	4/18/2016	7,908	1,849	218	42	10,017
157	249106	WILK-Field Services	Supvr Field Operations	4/18/2016	5,803	1,357	218	42	7,421
158	249106	WILK-Field Services	Supvr Field Operations	6/13/2016	5,630	1,317	218	42	7,207
159	246306	PENN/Wyom-Field Srvc	Sr Supvr Operations	7/5/2016	6,839	1,599	218	42	8,699
160	245203	YARD-Cust Service	Sr Supvr Operations	9/26/2016	7,360	1,721	218	42	9,342
161	240117	CORP-Water Quality	Dir WQ Environ Compliance	1/16/2017	10,994	3,348	218	42	14,602
162	240117	CORP-Water Quality	Supvr WQ & Env Compliance	2/12/1990	6,261	1,464	218	42	7,986
163	249106	WILK-Field Services	Supv Facilities/Inventory	12/19/2016	5,868	1,372	218	42	7,501
164	240114	CORP-Engineering	Sr Project Engineer	1/5/2017	7,967	1,863	218	42	10,090
165	240114	CORP-Engineering	Mgr Engrg - Project Delivery	1/9/2017	10,313	2,412	218	42	12,985
166	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	3/27/2017	7,473	1,748	218	42	9,481
167	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2017	7,349	1,719	218	42	9,328
168	240117	CORP-Water Quality	Manager WQ & Env Compliance	5/22/2017	8,289	1,938	218	42	10,488
169	240117	CORP-Water Quality	Supvr WQ & Env Compliance	6/26/2017	5,984	1,399	218	42	7,644
170	240114	CORP-Engineering	Sr GIS Analyst	6/19/2017	5,129	1,199	218	42	6,589
171	240114	CORP-Engineering	Planning Engineer	8/14/2017	6,342	1,483	218	42	8,086
172	240114	CORP-Engineering	Mgr Engineering	8/28/2017	10,170	2,379	218	42	12,809
173	240106	CORP-Field Services	Program Manager, Operations Training	11/20/2017	7,168	1,676	218	42	9,105
174	240106	CORP-Field Services	Major Accounts Manager	9/12/2011	6,662	1,558	218	42	8,480
175	240114	CORP-Engineering	Sr Project Engineer	1/8/2018	7,538	1,763	218	42	9,562
176	240114	CORP-Engineering	Engineering Project Manager	1/16/2018	7,824	1,830	218	42	9,914
177	240114	CORP-Engineering	Engineering Project Manager	1/22/2018	7,815	1,828	218	42	9,904
178	243106	NEWC-Field Services	Supvr Field Operations	3/5/2018	6,124	1,432	218	42	7,817
179	241152	PITT-Production Aldr	Sr Supvr Operations	3/19/2018	7,256	1,697	218	42	9,214
180	246106	MECH-Field Services	Sr Supt Opns	3/19/2018	7,581	1,773	218	42	9,615
181	240151	CORP-Cust Serv MECH	Supvr Customer Advocacy	4/17/2018	6,370	1,490	218	42	8,120
182	240114	CORP-Engineering	Engineering Project Manager	4/16/2018	7,420	1,735	218	42	9,415
183	240306	CORP-Field Service	Supvr Field Operations	4/30/2018	5,884	1,376	218	42	7,521
184	249106	WILK-Field Services	Supvr Field Operations	6/5/2018	5,773	1,350	218	42	7,384
185	240114	CORP-Engineering	Mgr Engineering	7/9/2018	10,170	2,379	218	42	12,809
186	249103	WILK-Cust Service	Supvr Field Operations	6/18/2018	5,903	1,381	218	42	7,544
187	241106	PITT-Field Services	Sr Supvr Operations	6/18/2018	6,839	1,599	218	42	8,699
188	243106	NEWC-Field Services	Supvr Field Operations	7/3/2018	6,166	1,442	218	42	7,868
189	240114	CORP-Engineering	Sr GIS Analyst	7/2/2018	5,220	1,221	218	42	6,701
190	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/30/2018	5,945	1,390	218	42	7,596
191	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	7/30/2018	7,033	1,645	218	42	8,938
192	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/13/2018	6,352	1,486	218	42	8,098
193	240114	CORP-Engineering	Staff Engineer	8/27/2018	5,673	1,327	218	42	7,261
194	241106	PITT-Field Services	Supvr Field Operations	9/10/2018	5,798	1,356	218	42	7,414
195	249106	WILK-Field Services	Supvr Field Operations	10/29/2018	5,790	1,354	218	42	7,405
196	240105	CORP-Admin & Gen	SVP and President PAAW	11/12/2018	10,994	11,061	218	42	22,315
197	241106	PITT-Field Services	Sr Supvr Operations	11/5/2018	6,839	1,599	218	42	8,699
198	245406	SUSQ-Field Services	Sr Supvr Operations	11/5/2018	5,754	1,346	218	42	7,360
199	240113	CORP-Info Systems	Specialist, Technology Field Services	11/19/2018	5,831	1,364	218	42	7,455
200	242106	MCMR-Field Services	Supvr Field Operations	12/3/2018	6,176	1,444	218	42	7,881
201	240103	CORP-Cust Relations	Supvr Customer Advocacy	12/3/2018	5,253	1,229	218	42	6,742
202	240106	CORP-Field Services	Supvr Field Operations	1/28/2019	6,944	1,624	218	42	8,829
203	249106	WILK-Field Services	Supvr Field Operations	1/14/2019	5,887	1,377	218	42	7,524
204	240114	CORP-Engineering	Planning Engineer	2/4/2019	7,420	1,735	218	42	9,415
205	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	2/11/2019	5,990	1,401	218	42	7,651

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019	5,983	1,399	218	42	7,642	6,222	1,455	218	42	7,938
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019	5,551	1,298	218	42	7,109	5,773	1,350	218	42	7,384
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019	5,526	1,292	218	42	7,078	5,747	1,344	218	42	7,352
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019	5,555	1,299	218	42	7,115	5,777	1,351	218	42	7,389
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019	6,131	1,434	218	42	7,825	6,377	1,491	218	42	8,129
211	240114	CORP-Engineering	Staff Engineer	5/20/2019	5,406	1,264	218	42	6,931	5,623	1,315	218	42	7,198
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019	5,855	1,369	218	42	7,485	6,091	1,424	218	42	7,776
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019	6,574	1,537	218	42	8,372	6,838	1,599	218	42	8,697
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019	5,416	1,267	218	42	6,943	5,633	1,317	218	42	7,211
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019	4,694	1,098	218	42	6,052	4,882	1,142	218	42	6,284
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019	5,972	1,397	218	42	7,629	6,211	1,453	218	42	7,924
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019	6,774	1,584	218	42	8,618	7,044	1,647	218	42	8,952
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019	6,878	1,609	218	42	8,747	7,154	1,673	218	42	9,087
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019	5,917	1,384	218	42	7,562	6,154	1,439	218	42	7,854
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019	5,867	1,372	218	42	7,500	6,102	1,427	218	42	7,790
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019	5,765	1,348	218	42	7,374	5,997	1,403	218	42	7,660
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019	5,200	1,216	218	42	6,676	5,408	1,265	218	42	6,933
223	240120	CORP-Bus Dev	Vice President of Business Development,	11/4/2019	9,932	5,577	218	42	15,769	10,450	5,800	218	42	16,510
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019	5,007	1,171	218	42	6,438	5,207	1,218	218	42	6,685
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020	5,232	1,224	218	42	6,716	5,442	1,273	218	42	6,975
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020	9,932	2,419	218	42	12,612	10,450	2,516	218	42	13,226
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020	9,932	2,941	218	42	13,133	10,450	3,059	218	42	13,769
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020	8,097	1,894	218	42	10,251	8,422	1,970	218	42	10,652
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020	4,731	1,106	218	42	6,098	4,921	1,151	218	42	6,332
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020	6,057	1,417	218	42	7,734	6,300	1,473	218	42	8,034
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020	4,705	1,100	218	42	6,065	4,893	1,144	218	42	6,298
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020	6,861	1,605	218	42	8,726	7,135	1,669	218	42	9,064
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020	9,932	3,301	218	42	13,493	10,450	3,433	218	42	14,143
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020	4,718	1,103	218	42	6,082	4,908	1,148	218	42	6,316
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020	7,843	1,834	218	42	9,938	8,158	1,908	218	42	10,327
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020	7,619	1,782	218	42	9,661	7,924	1,853	218	42	10,037
237	249151	WILK-Brownell	Supvr Production	8/24/2020	5,208	1,218	218	42	6,686	5,416	1,267	218	42	6,943
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020	7,845	1,835	218	42	9,940	8,160	1,908	218	42	10,328
239	240114	CORP-Engineering	Engineer	10/12/2020	4,597	1,075	218	42	5,932	4,781	1,118	218	42	6,160
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997	5,055	1,182	218	42	6,498	5,257	1,230	218	42	6,747
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020	5,501	1,286	218	42	7,048	5,721	1,338	218	42	7,319
242	240114	CORP-Engineering	Engineer	1/4/2021	4,597	1,075	218	42	5,932	4,781	1,118	218	42	6,160
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020	5,368	1,255	218	42	6,883	5,582	1,306	218	42	7,148
244	241151	PITT-Production Haye	Supvr Production	3/29/2021	5,708	1,335	218	42	7,303	5,936	1,388	218	42	7,585
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021	9,932	3,110	218	42	13,303	10,450	3,235	218	42	13,945
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021	8,097	1,894	218	42	10,251	8,422	1,970	218	42	10,652
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021	5,165	1,208	218	42	6,633	5,372	1,256	218	42	6,888
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021	6,329	1,480	218	42	8,069	6,582	1,539	218	42	8,382
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021	5,452	1,275	218	42	6,987	5,671	1,326	218	42	7,257
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021	6,008	1,405	218	42	7,674	6,250	1,462	218	42	7,972
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021	5,541	1,296	218	42	7,098	5,763	1,348	218	42	7,371
252	240114	CORP-Engineering	Engineer	9/13/2021	4,401	1,029	218	42	5,691	4,577	1,070	218	42	5,908
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021	9,932	3,287	218	42	13,480	10,450	3,419	218	42	14,129
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021	5,334	1,247	218	42	6,841	5,548	1,297	218	42	7,106
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022	5,555	1,299	218	42	7,115	5,777	1,351	218	42	7,389
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022	4,444	1,039	218	42	5,744	4,622	1,081	218	42	5,963

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
206	240114	CORP-Engineering	Engineering Project Manager	3/25/2019	6,439	1,506	218	42	8,205
207	240117	CORP-Water Quality	Supvr WQ & Env Compliance	3/25/2019	5,974	1,397	218	42	7,631
208	245305	ABNG-Admin & Gen	Sr Supvr Operations	3/25/2019	5,946	1,391	218	42	7,597
209	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	3/25/2019	5,978	1,398	218	42	7,637
210	240119	CORP-Risk Mgmt	Sr Technical Writer	4/15/2019	6,599	1,543	218	42	8,403
211	240114	CORP-Engineering	Staff Engineer	5/20/2019	5,818	1,361	218	42	7,439
212	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	5/20/2019	6,303	1,474	218	42	8,038
213	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	6/24/2019	7,076	1,655	218	42	8,991
214	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/8/2019	5,829	1,363	218	42	7,453
215	240114	CORP-Engineering	Sr GIS Analyst	7/15/2019	5,052	1,182	218	42	6,494
216	240117	CORP-Water Quality	Supvr WQ & Env Compliance	7/29/2019	6,427	1,503	218	42	8,191
217	249158	WILK-Lake Scranton	Sr Supt Production	7/31/2019	7,289	1,705	218	42	9,254
218	240114	CORP-Engineering	Engineering Project Manager	8/5/2019	7,402	1,731	218	42	9,394
219	241106	PITT-Field Services	Supvr Field Operations	8/12/2019	6,368	1,489	218	42	8,118
220	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	8/26/2019	6,315	1,477	218	42	8,052
221	246406	ROYF-Field Services	Supvr Field Operations	9/23/2019	6,205	1,451	218	42	7,916
222	240114	CORP-Engineering	Sr. Engineering Analyst	10/21/2019	5,595	1,309	218	42	7,164
223	240120	CORP-Bus Dev	Vice President of Business Development,	11/4/2019	10,994	6,002	218	42	17,256
224	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	11/11/2019	5,387	1,260	218	42	6,908
225	247106	MILT-Field Services	Supvr Field Operations	1/27/2020	5,632	1,317	218	42	7,209
226	240121	CORP-Com Relations	Sr Manager, Government and External Affa	1/21/2020	10,994	2,604	218	42	13,858
227	240119	CORP-Risk Mgmt	Dir Health & Safety (Ops)	2/17/2020	10,994	3,165	218	42	14,419
228	241106	PITT-Field Services	Sr Supt Field Ops	4/27/2020	8,716	2,038	218	42	11,015
229	240106	CORP-Field Services	Supervisor Operations Support	5/4/2020	5,093	1,191	218	42	6,544
230	242206	MONVA-Field Services	Sr Supvr Operations	5/11/2020	6,520	1,525	218	42	8,305
231	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/1/2020	5,064	1,184	218	42	6,509
232	240114	CORP-Engineering	Engineering Project Manager	6/8/2020	7,384	1,727	218	42	9,371
233	240120	CORP-Bus Dev	Dir Business Development	6/15/2020	10,994	3,553	218	42	14,807
234	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/15/2020	5,078	1,188	218	42	6,526
235	240119	CORP-Risk Mgmt	Mgr Health and Safety Programs	6/29/2020	8,441	1,974	218	42	10,676
236	240121	CORP-Com Relations	Mgr, Govt Relations	7/13/2020	8,200	1,918	218	42	10,378
237	249151	WILK-Brownell	Supvr Production	8/24/2020	5,606	1,311	218	42	7,177
238	240114	CORP-Engineering	Sr Planning Engineer	9/8/2020	8,443	1,975	218	42	10,678
239	240114	CORP-Engineering	Engineer	10/12/2020	4,948	1,157	218	42	6,366
240	240117	CORP-Water Quality	Supvr WQ & Env Compliance	8/25/1997	5,441	1,272	218	42	6,974
241	241106	PITT-Field Services	Supvr Field Operations	12/14/2020	5,920	1,385	218	42	7,565
242	240114	CORP-Engineering	Engineer	1/4/2021	4,948	1,157	218	42	6,366
243	249106	WILK-Field Services	Supvr Field Operations	12/14/2020	5,777	1,351	218	42	7,389
244	241151	PITT-Production Haye	Supvr Production	3/29/2021	6,143	1,437	218	42	7,840
245	240106	CORP-Field Services	Dir Business Performance	5/24/2021	10,994	3,348	218	42	14,602
246	240121	CORP-Com Relations	Mgr Ext Affairs (State)	5/24/2021	8,716	2,038	218	42	11,015
247	249106	WILK-Field Services	Supvr Field Operations	6/1/2021	5,558	1,300	218	42	7,118
248	245101	NORR-Production	Sr Supervisor Production	6/14/2021	6,812	1,593	218	42	8,665
249	242103	MCMR-Cust Service	Supvr Field Operations	6/14/2021	5,868	1,372	218	42	7,501
250	240113	CORP-Info Systems	Specialist, Technology Field Services	7/12/2021	6,468	1,513	218	42	8,241
251	241106	PITT-Field Services	Supv Facilities/Inventory	7/19/2021	5,964	1,395	218	42	7,619
252	240114	CORP-Engineering	Engineer	9/13/2021	4,736	1,108	218	42	6,104
253	240120	CORP-Bus Dev	Dir Business Development	9/27/2021	10,994	3,537	218	42	14,792
254	246151	MECH-ProdWestShore	Supvr Production	11/22/2021	5,741	1,343	218	42	7,344
255	241106	PITT-Field Services	Supvr Field Operations	1/3/2022	5,978	1,398	218	42	7,637
256	240114	CORP-Engineering	Sr GIS Analyst	1/31/2022	4,782	1,118	218	42	6,161

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

						2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2023 Total Gross Payroll Taxes**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2024 Total Gross Payroll Taxes**
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022	5,555	1,299	218	42	7,115	5,777	1,351	218	42	7,389
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022	5,462	1,277	218	42	7,000	5,681	1,329	218	42	7,270
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	5,660	1,324	218	42	7,244	5,887	1,377	218	42	7,524
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	5,865	1,372	218	42	7,497	6,100	1,427	218	42	7,786
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022	4,861	1,137	218	42	6,258	5,055	1,182	218	42	6,498
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022	8,133	1,902	218	42	10,296	8,459	1,978	218	42	10,698
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022	6,479	1,515	218	42	8,254	6,738	1,576	218	42	8,574
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022	7,764	1,816	218	42	9,840	8,075	1,889	218	42	10,224
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022	5,625	1,316	218	42	7,201	5,851	1,368	218	42	7,480
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022	6,788	1,588	218	42	8,636	7,060	1,651	218	42	8,971
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007	4,784	1,119	218	42	6,163	4,976	1,164	218	42	6,400
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022	5,104	1,194	218	42	6,558	5,308	1,241	218	42	6,810
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995	4,957	1,159	218	42	6,377	5,156	1,206	218	42	6,623
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022	5,298	1,239	218	42	6,797	5,510	1,289	218	42	7,059
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022	4,649	1,087	218	42	5,997	4,836	1,131	218	42	6,227
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022	5,523	1,292	218	42	7,075	5,744	1,343	218	42	7,348
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022	5,879	1,375	218	42	7,514	6,114	1,430	218	42	7,804
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022	5,991	1,401	218	42	7,652	6,231	1,457	218	42	7,949
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022	6,076	1,421	218	42	7,757	6,319	1,478	218	42	8,057
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022	5,902	1,380	218	42	7,543	6,138	1,436	218	42	7,834
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022	5,694	1,332	218	42	7,286	5,922	1,385	218	42	7,567
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022	5,277	1,234	218	42	6,772	5,489	1,284	218	42	7,033
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023	5,833	1,364	218	42	7,457	6,066	1,419	218	42	7,745
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023	5,208	1,218	218	42	6,686	5,416	1,267	218	42	6,943
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023	5,208	1,218	218	42	6,686	5,416	1,267	218	42	6,943
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023	8,928	2,088	218	42	11,276	9,287	2,172	218	42	11,719
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023	6,597	1,543	218	42	8,400	6,861	1,605	218	42	8,726
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023	6,944	1,624	218	42	8,828	7,222	1,689	218	42	9,171
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023	6,076	1,421	218	42	7,757	6,319	1,478	218	42	8,057
286	240114	CORP-Engineering	Engineer	6/26/2023	4,113	962	218	42	5,335	4,278	1,000	218	42	5,538
287	240114	CORP-Engineering	Project Manager	6/26/2023	7,843	1,834	218	42	9,938	8,158	1,908	218	42	10,327
288	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	-	-	-	-	-	8,269	1,934	218	42	10,464
289	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	-	-	-	-	-	8,269	1,934	218	42	10,464
290	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	-	-	-	-	-	8,269	1,934	218	42	10,464
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023	-	-	-	-	-	6,897	1,613	218	42	8,770
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023	-	-	-	-	-	6,897	1,613	218	42	8,770
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Filled	12/31/2023	-	-	-	-	-	8,269	1,934	218	42	10,464
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023	-	-	-	-	-	6,897	1,613	218	42	8,770
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Filled	12/31/2023	-	-	-	-	-	6,897	1,613	218	42	8,770
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Filled	12/31/2023	-	-	-	-	-	6,897	1,613	218	42	8,770
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Filled	12/31/2023	-	-	-	-	-	10,450	3,284	218	42	13,994
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Filled	12/31/2023	-	-	-	-	-	10,450	2,489	218	42	13,199
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023	-	-	-	-	-	6,897	1,613	218	42	8,770
			Total Non-Collective Bargaining Unit Salary		$1,951,705	$489,216	$62,664	$12,054	$2,515,638	$2,129,204	$535,579	$65,284	$12,558	$2,742,624
													Vacancy Rate	1.76%
													Vacancy Adjustment	$48,183
													Total Non-Collective Bargaining Unit Salary	$2,694,441
Collective Bargaining Unit														
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	$7,227	$1,690	$218	$42	$9,177	$7,404	$1,732	$218	$42	$9,396
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	5,533	1,294	218	42	7,088	5,670	1,326	218	42	7,257
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	4,958	1,159	218	42	6,377	5,083	1,189	218	42	6,532
4	241103	PITT-Cust Service	Field Service Representative U537P	3/31/1994	4,799	1,122	218	42	6,181	4,918	1,150	218	42	6,329
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	6,343	1,483	218	42	8,087	6,500	1,520	218	42	8,280
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987	8,627	2,017	218	42	10,904	8,835	2,066	218	42	11,162
7	241103	PITT-Cust Service	Field Service Representative U537P	2/2/1988	4,716	1,103	218	42	6,079	4,833	1,130	218	42	6,224
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	6,573	1,537	218	42	8,371	6,734	1,575	218	42	8,569
9	241103	PITT-Cust Service	Field Service Representative U537P	7/5/1983	4,712	1,102	218	42	6,075	4,830	1,129	218	42	6,219
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	2/1/1985	6,073	1,420	218	42	7,754	6,223	1,455	218	42	7,939
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	7,763	1,816	218	42	9,839	7,953	1,860	218	42	10,073
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991	5,289	1,237	218	42	6,787	5,419	1,267	218	42	6,947
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	4/22/1991	5,067	1,185	218	42	6,512	5,191	1,214	218	42	6,666
14	241103	PITT-Cust Service	Field Service Representative U537P	5/6/1985	5,512	1,289	218	42	7,062	5,650	1,321	218	42	7,231

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
257	242306	UNTN-Field Services	Supvr Field Operations	2/14/2022	5,978	1,398	218	42	7,637
258	240117	CORP-Water Quality	Supvr WQ & Env Compliance	4/11/2022	5,879	1,375	218	42	7,514
259	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	6,092	1,425	218	42	7,777
260	240114	CORP-Engineering	Engineering Project Manager	4/11/2022	6,312	1,476	218	42	8,048
261	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	4/4/2022	5,231	1,223	218	42	6,715
262	240114	CORP-Engineering	Sr Project Engineer	4/18/2022	8,753	2,047	218	42	11,060
263	240119	CORP-Risk Mgmt	Sr Specialist Health & Safety	4/25/2022	6,972	1,631	218	42	8,863
264	240114	CORP-Engineering	Sr Project Engineer	5/2/2022	8,355	1,954	218	42	10,570
265	242106	MCMR-Field Services	Supvr Field Operations	5/17/2022	6,055	1,416	218	42	7,731
266	240114	CORP-Engineering	Engineering Project Manager	5/31/2022	7,306	1,709	218	42	9,274
267	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/11/2007	5,149	1,204	218	42	6,614
268	240113	CORP-Info Systems	Specialist, Technology Field Services	5/31/2022	5,493	1,285	218	42	7,038
269	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	1/9/1995	5,335	1,248	218	42	6,844
270	246152	MECH-Silver Springs	Supvr Production	6/20/2022	5,702	1,334	218	42	7,296
271	240117	CORP-Water Quality	Sr WQ & Env Compliance Specialist	6/13/2022	5,005	1,170	218	42	6,435
272	241106	PITT-Field Services	Supvr Field Operations	6/20/2022	5,944	1,390	218	42	7,594
273	245103	NORR-Cust Service	Supvr Field Operations	7/5/2022	6,326	1,480	218	42	8,066
274	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	7/11/2022	6,448	1,508	218	42	8,216
275	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	10/17/2022	6,539	1,529	218	42	8,328
276	240114	CORP-Engineering	Engineering Project Manager	10/31/2022	6,352	1,486	218	42	8,098
277	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/17/2022	6,128	1,433	218	42	7,822
278	246106	MECH-Field Services	Supvr Field Operations	11/14/2022	5,679	1,328	218	42	7,268
279	240114	CORP-Engineering	Engineering Project Manager	1/3/2023	6,277	1,468	218	42	8,006
280	241106	PITT-Field Services	Supvr Field Operations	1/17/2023	5,606	1,311	218	42	7,177
281	241106	PITT-Field Services	Supvr Field Operations	1/30/2023	5,606	1,311	218	42	7,177
282	240120	CORP-Bus Dev	Sr Mgr Business Dev	3/6/2023	9,610	2,248	218	42	12,118
283	240116	CORP-Maint Services	Sr Eng Automation & Controls (SCADA)	3/27/2023	7,099	1,660	218	42	9,020
284	240119	CORP-Risk Mgmt	Lead Health & Safety Specialist	4/3/2023	7,473	1,748	218	42	9,481
285	240116	CORP-Maint Services	Eng Automation & Controls (SCADA)	5/8/2023	6,539	1,529	218	42	8,328
286	240114	CORP-Engineering	Engineer	6/26/2023	4,427	1,035	218	42	5,722
287	240114	CORP-Engineering	Project Manager	6/26/2023	8,441	1,974	218	42	10,676
288	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	8,557	2,001	218	42	10,819
289	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	8,557	2,001	218	42	10,819
290	240114	CORP-Engineering	Sr Project Engineer - To Be Filled	12/31/2023	8,557	2,001	218	42	10,819
291	246201	HSHY-Production	Sr Supvr Operations - To Be Filled	12/31/2023	7,137	1,669	218	42	9,066
292	242203	MONVAL-Cust Service	Sr Supvr Operations - To Be Filled	12/31/2023	7,137	1,669	218	42	9,066
293	249106	WILK-Field Services	Sr Supt Field Ops - To Be Filled	12/31/2023	8,557	2,001	218	42	10,819
294	245706	POCO-Field Services	Sr Supvr Operations - To Be Filled	12/31/2023	7,137	1,669	218	42	9,066
295	240117	CORP-Water Quality	WQ & Env Compliance Specialist - To Be Filled	12/31/2023	7,137	1,669	218	42	9,066
296	240113	CORP-Info Systems	Specialist, Technology Field Services - To Be Filled	12/31/2023	7,137	1,669	218	42	9,066
297	240121	CORP-Com Relations	Dir Govt Affairs (state) - To Be Filled	12/31/2023	10,994	3,398	218	42	14,652
298	240120	CORP-Bus Dev	Sr Mgr Business Dev - To Be Filled	12/31/2023	10,994	2,575	218	42	13,829
299	240117	CORP-Water Quality	Environmental Program Lead - To Be Filled	12/31/2023	7,137	1,669	218	42	9,066
			Total Non-Collective Bargaining Unit Salary		$2,209,188	$554,215	$65,284	$12,558	$2,841,245
								Vacancy Rate	1.76%
								Vacancy Adjustment	$49,915
							Total Non-Collective Bargaining Unit Salary		$2,791,329
Collective Bargaining Unit									
1	241106	PITT-Field Services	Utility Equipment Operator U537P	8/20/1984	$7,587	$1,774	$218	$42	$9,622
2	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	9/30/1991	5,811	1,359	218	42	7,430
3	241103	PITT-Cust Service	Meter Repair Person U537P, U648S	8/4/1986	5,209	1,218	218	42	6,688
4	241103	PITT-Cust Service	Field Service Representative U537P	3/31/1994	5,042	1,179	218	42	6,481
5	240306	CORP-Field Service	Utility Inspector U537P	3/24/1994	6,662	1,558	218	42	8,480
6	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/21/1987	9,051	2,117	218	42	11,428
7	241103	PITT-Cust Service	Field Service Representative U537P	2/2/1988	4,954	1,159	218	42	6,373
8	241152	PITT-Production Aldr	Operator (Rotating) U537P	5/19/1986	6,900	1,614	218	42	8,773
9	241103	PITT-Cust Service	Field Service Representative U537P	7/5/1983	4,951	1,158	218	42	6,369
10	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	2/1/1985	6,378	1,492	218	42	8,130
11	240306	CORP-Field Service	Utility Inspector U537P	3/20/1984	8,149	1,906	218	42	10,316
12	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	6/4/1991	5,553	1,299	218	42	7,112
13	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	4/22/1991	5,320	1,244	218	42	6,825
14	241103	PITT-Cust Service	Field Service Representative U537P	5/6/1985	5,791	1,354	218	42	7,406

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	7,228	1,691	218	42	9,179	7,362	1,722	218	42	9,344
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	6,322	1,478	218	42	8,060	6,443	1,507	218	42	8,211
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	6,419	1,501	218	42	8,181	6,602	1,544	218	42	8,407
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	5,232	1,224	218	42	6,716	5,386	1,260	218	42	6,906
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	7,035	1,645	218	42	8,941	7,167	1,676	218	42	9,104
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	4,736	1,108	218	42	6,103	4,829	1,129	218	42	6,219
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	6,069	1,419	218	42	7,748	6,186	1,447	218	42	7,893
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	5,555	1,299	218	42	7,114	5,665	1,325	218	42	7,250
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	5,403	1,264	218	42	6,927	5,510	1,289	218	42	7,059
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	5,630	1,317	218	42	7,207	5,740	1,342	218	42	7,343
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	4,823	1,128	218	42	6,211	4,967	1,162	218	42	6,388
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	5,568	1,302	218	42	7,130	5,731	1,340	218	42	7,332
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	5,809	1,359	218	42	7,428	5,921	1,385	218	42	7,566
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	4,738	1,108	218	42	6,106	4,833	1,130	218	42	6,223
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	6,264	1,465	218	42	7,989	6,383	1,493	218	42	8,137
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	5,909	1,382	218	42	7,551	6,022	1,408	218	42	7,691
31	243301	BUTL-Production	Operator U537O	5/4/1998	6,662	1,558	218	42	8,481	6,793	1,589	218	42	8,642
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	5,493	1,285	218	42	7,038	5,599	1,310	218	42	7,169
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	4,988	1,166	218	42	6,414	5,086	1,189	218	42	6,536
34	243301	BUTL-Production	Operator U537O	11/2/1984	6,198	1,449	218	42	7,908	6,320	1,478	218	42	8,059
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	4,790	1,120	218	42	6,170	4,885	1,143	218	42	6,288
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	5,119	1,197	218	42	6,577	5,219	1,221	218	42	6,700
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	4,730	1,106	218	42	6,097	4,824	1,128	218	42	6,213
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	7,330	1,714	218	42	9,304	7,467	1,746	218	42	9,474
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	6,544	1,531	218	42	8,335	6,669	1,560	218	42	8,489
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	5,274	1,234	218	42	6,768	5,378	1,258	218	42	6,896
41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	4,729	1,106	218	42	6,095	4,824	1,128	218	42	6,212
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	4,911	1,148	218	42	6,320	5,008	1,171	218	42	6,440
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	6,160	1,441	218	42	7,861	6,278	1,468	218	42	8,007
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	6,038	1,412	218	42	7,711	6,154	1,439	218	42	7,854
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	4,745	1,110	218	42	6,115	4,838	1,132	218	42	6,230
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	5,086	1,190	218	42	6,536	5,186	1,213	218	42	6,659
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	6,254	1,463	218	42	7,978	6,377	1,491	218	42	8,129
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	4,849	1,134	218	42	6,243	4,946	1,157	218	42	6,363
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	6,284	1,470	218	42	8,014	6,468	1,513	218	42	8,241
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	5,017	1,173	218	42	6,450	5,165	1,208	218	42	6,633
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	7,010	1,640	218	42	8,910	7,214	1,687	218	42	9,161
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	5,923	1,385	218	42	7,569	6,098	1,426	218	42	7,785
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	6,340	1,483	218	42	8,084	6,529	1,527	218	42	8,316
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988	6,286	1,470	218	42	8,017	6,469	1,513	218	42	8,243
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987	6,481	1,516	218	42	8,258	6,672	1,560	218	42	8,492
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	6,063	1,418	218	42	7,741	6,240	1,459	218	42	7,960
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	4,634	1,084	218	42	5,978	4,771	1,116	218	42	6,147
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	7,262	1,698	218	42	9,221	7,473	1,748	218	42	9,482
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	5,602	1,310	218	42	7,173	5,768	1,349	218	42	7,377
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	4,931	1,153	218	42	6,345	5,078	1,188	218	42	6,526
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	6,010	1,406	218	42	7,676	6,185	1,447	218	42	7,892
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	4,673	1,093	218	42	6,026	4,812	1,125	218	42	6,198
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	4,924	1,152	218	42	6,336	5,071	1,186	218	42	6,517
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	4,989	1,167	218	42	6,416	5,137	1,201	218	42	6,598
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	4,670	1,092	218	42	6,022	4,808	1,124	218	42	6,193
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	6,297	1,473	218	42	8,030	6,481	1,516	218	42	8,257
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	6,509	1,522	218	42	8,292	6,699	1,567	218	42	8,526
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	4,581	1,071	218	42	5,912	4,717	1,103	218	42	6,080
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	4,562	1,067	218	42	5,889	4,698	1,099	218	42	6,056
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	5,298	1,239	218	42	6,798	5,454	1,276	218	42	6,990
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	4,595	1,075	218	42	5,930	4,732	1,107	218	42	6,099
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	5,953	1,392	218	42	7,605	6,126	1,433	218	42	7,820
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	4,870	1,139	218	42	6,269	5,015	1,173	218	42	6,449
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	6,199	1,450	218	42	7,909	6,381	1,492	218	42	8,134
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	4,578	1,071	218	42	5,909	4,714	1,102	218	42	6,077
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	6,192	1,448	218	42	7,900	6,375	1,491	218	42	8,127
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	4,899	1,146	218	42	6,305	5,045	1,180	218	42	6,485

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					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
15	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	8/3/1981	7,498	1,754	218	42	9,512
16	242206	MONVA-Field Services	Backhoe Operator U537O	7/22/1986	6,565	1,535	218	42	8,361
17	242501	BRWN-Production	Plant Operator/Maintenance U537BV	10/9/1996	6,761	1,581	218	42	8,603
18	242506	BRWN-Field Services	Subforeperson U537BV	2/3/1994	5,520	1,291	218	42	7,071
19	242206	MONVA-Field Services	Backhoe Operator U537O	9/8/1997	7,299	1,707	218	42	9,266
20	243306	BUTL-Field Services	Utility Person U537O	5/19/1997	4,926	1,152	218	42	6,338
21	242106	MCMR-Field Services	Pipeline Inspector U537O	7/31/1990	6,304	1,474	218	42	8,038
22	244201	PUNX-Production	Operator/Maintenance Person U537O	11/11/1997	5,778	1,351	218	42	7,390
23	242306	UNTN-Field Services	Distribution System Serviceperson U537O	5/11/1987	5,618	1,314	218	42	7,192
24	244103	INDI-Cust Service	General Serviceperson U537O	9/2/1981	5,852	1,369	218	42	7,480
25	242503	BRWN-Cust Service	Utility Person U537BV	6/15/1990	5,091	1,191	218	42	6,542
26	242506	BRWN-Field Services	Utility Person U537BV	6/13/1990	5,873	1,374	218	42	7,507
27	243306	BUTL-Field Services	Backhoe Operator U537O	7/14/1996	6,033	1,411	218	42	7,705
28	243306	BUTL-Field Services	General Serviceperson U537O	10/30/1989	4,929	1,153	218	42	6,342
29	243106	NEWC-Field Services	Backhoe Operator U537O	12/4/1986	6,503	1,521	218	42	8,284
30	242206	MONVA-Field Services	Pipeline Inspector U537O	10/14/1997	6,135	1,435	218	42	7,830
31	243301	BUTL-Production	Operator U537O	5/4/1998	6,927	1,620	218	42	8,807
32	242106	MCMR-Field Services	Subforeperson U537O	6/23/1997	5,709	1,335	218	42	7,305
33	242106	MCMR-Field Services	Subforeperson U537O	8/26/1991	5,187	1,213	218	42	6,661
34	243301	BUTL-Production	Operator U537O	11/2/1984	6,446	1,508	218	42	8,214
35	243306	BUTL-Field Services	General Serviceperson U537O	11/20/1989	4,983	1,165	218	42	6,408
36	242106	MCMR-Field Services	Utility Person U537O	6/1/1991	5,322	1,245	218	42	6,827
37	243103	NEWC-Cust Service	Meter Reader U537O	4/7/1987	4,921	1,151	218	42	6,332
38	243306	BUTL-Field Services	Pipeline Inspector U537O	12/9/1996	7,605	1,779	218	42	9,644
39	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/2/1987	6,796	1,589	218	42	8,645
40	242106	MCMR-Field Services	Backhoe Operator U537O	1/21/1987	5,481	1,282	218	42	7,023
41	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	2/5/1990	4,920	1,151	218	42	6,331
42	242101	MCMR-Production	Operator/Maintenance Person U537O	5/20/1968	5,109	1,195	218	42	6,564
43	242106	MCMR-Field Services	Backhoe Operator U537O	5/6/1985	6,396	1,496	218	42	8,153
44	243306	BUTL-Field Services	Backhoe Operator U537O	8/30/1993	6,270	1,466	218	42	7,997
45	244103	INDI-Cust Service	Utility Person U537O	5/12/1997	4,934	1,154	218	42	6,349
46	242106	MCMR-Field Services	UTILITY PERSON NRW	1/3/1989	5,289	1,237	218	42	6,786
47	243106	NEWC-Field Services	Pipeline Inspector U537O	4/23/1998	6,500	1,520	218	42	8,280
48	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/25/1997	5,043	1,180	218	42	6,483
49	249106	WILK-Field Services	Regulation Crew Leader U648S	4/23/1990	6,657	1,557	218	42	8,474
50	249161	WILK-Huntsville	Plant Operator U648S	7/6/1992	5,319	1,244	218	42	6,823
51	249106	WILK-Field Services	Dump Truck Driver U648S	10/12/1988	7,426	1,737	218	42	9,423
52	249106	WILK-Field Services	Line Location Specialist U648S	3/17/1986	6,279	1,468	218	42	8,008
53	249106	WILK-Field Services	Backhoe Operator U648S	8/9/1982	6,724	1,572	218	42	8,556
54	249106	WILK-Field Services	Regulation Crew Leader U648S	10/3/1988	6,658	1,557	218	42	8,476
55	249106	WILK-Field Services	Backhoe Operator U648S	10/12/1987	6,868	1,606	218	42	8,735
56	249106	WILK-Field Services	Regulation Utility Person U648S	9/25/1989	6,424	1,502	218	42	8,187
57	249103	WILK-Cust Service	Serviceperson U648S	12/10/1984	4,913	1,149	218	42	6,322
58	249106	WILK-Field Services	Dump Truck Driver U648S	8/18/1986	7,694	1,799	218	42	9,753
59	249106	WILK-Field Services	Backhoe Operator U648S	1/8/1979	5,939	1,389	218	42	7,588
60	249106	WILK-Field Services	M/C Technician U648S	1/11/1988	5,229	1,223	218	42	6,712
61	249106	WILK-Field Services	Dump Truck Driver U648S	1/12/1987	6,368	1,489	218	42	8,117
62	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	4/9/1991	4,957	1,159	218	42	6,376
63	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	12/21/1987	5,223	1,222	218	42	6,705
64	249151	WILK-Brownell	Plant Operator U648S	9/9/1997	5,290	1,237	218	42	6,788
65	249106	WILK-Field Services	M/C Utility Person U648S	5/15/1989	4,950	1,158	218	42	6,368
66	249106	WILK-Field Services	M/C Utility Person U648S	8/12/1991	6,672	1,560	218	42	8,492
67	249106	WILK-Field Services	Regulation Crew Leader U648S	8/19/1991	6,894	1,612	218	42	8,767
68	249151	WILK-Brownell	Plant Operator U648S	3/22/1993	4,858	1,136	218	42	6,255
69	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/1989	4,839	1,132	218	42	6,231
70	249106	WILK-Field Services	M/C Utility Person U648S	2/3/1988	5,616	1,313	218	42	7,189
71	249156	WILK-Forest City	Plant Operator U648S	4/24/1995	4,875	1,140	218	42	6,275
72	249106	WILK-Field Services	Dump Truck Driver U648S	4/29/1985	6,307	1,475	218	42	8,043
73	249106	WILK-Field Services	Regulation Utility Person U648S	6/1/1987	5,165	1,208	218	42	6,634
74	249106	WILK-Field Services	Backhoe Operator U648S	11/30/1987	6,570	1,536	218	42	8,366
75	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	1/24/1990	4,856	1,136	218	42	6,252
76	249106	WILK-Field Services	Backhoe Operator U648S	8/23/1988	6,564	1,535	218	42	8,360
77	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	9/11/1991	5,196	1,215	218	42	6,672

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					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	7,110	1,663	218	42	9,033	7,318	1,711	218	42	9,290
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	4,837	1,131	218	42	6,229	4,981	1,165	218	42	6,407
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986	5,458	1,276	218	42	6,994	5,617	1,314	218	42	7,191
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	6,194	1,448	218	42	7,902	6,374	1,491	218	42	8,125
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	4,328	1,012	218	42	5,601	4,457	1,042	218	42	5,760
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	5,242	1,226	218	42	6,728	5,395	1,262	218	42	6,917
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	5,312	1,242	218	42	6,814	5,467	1,279	218	42	7,006
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	5,255	1,229	218	42	6,744	5,410	1,265	218	42	6,936
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	5,345	1,250	218	42	6,856	5,504	1,287	218	42	7,051
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	5,892	1,378	218	42	7,531	6,067	1,419	218	42	7,746
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	5,194	1,215	218	42	6,669	5,346	1,250	218	42	6,857
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	7,133	1,668	218	42	9,061	7,343	1,717	218	42	9,321
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	4,181	978	218	42	5,419	4,307	1,007	218	42	5,574
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	4,172	976	218	42	5,408	4,296	1,005	218	42	5,561
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	5,293	1,238	218	42	6,791	5,450	1,275	218	42	6,985
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	5,694	1,332	218	42	7,286	5,860	1,370	218	42	7,491
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	4,607	1,077	218	42	5,944	4,745	1,110	218	42	6,114
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	4,075	953	218	42	5,288	4,196	981	218	42	5,438
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	4,997	1,169	218	42	6,426	5,144	1,203	218	42	6,607
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	6,644	1,554	218	42	8,459	6,839	1,599	218	42	8,699
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	5,972	1,397	218	42	7,629	6,149	1,438	218	42	7,847
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	6,041	1,413	218	42	7,714	6,217	1,454	218	42	7,932
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	4,460	1,043	218	42	5,763	4,592	1,074	218	42	5,927
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	5,359	1,253	218	42	6,873	5,516	1,290	218	42	7,066
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	4,913	1,149	218	42	6,322	5,024	1,175	218	42	6,459
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	5,759	1,347	218	42	7,367	5,888	1,377	218	42	7,526
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	4,335	1,014	218	42	5,609	4,433	1,037	218	42	5,730
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	4,568	1,068	218	42	5,897	4,695	1,098	218	42	6,053
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	4,614	1,079	218	42	5,954	4,718	1,103	218	42	6,082
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996	4,596	1,075	218	42	5,931	4,723	1,105	218	42	6,088
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	4,426	1,035	218	42	5,721	4,549	1,064	218	42	5,873
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	4,774	1,116	218	42	6,150	4,906	1,147	218	42	6,313
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	4,979	1,164	218	42	6,404	5,091	1,191	218	42	6,542
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	4,380	1,024	218	42	5,664	4,478	1,047	218	42	5,786
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	5,396	1,262	218	42	6,918	5,517	1,290	218	42	7,067
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	5,428	1,269	218	42	6,958	5,561	1,301	218	42	7,122
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	7,014	1,640	218	42	8,915	7,185	1,680	218	42	9,126
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	5,029	1,176	218	42	6,466	5,129	1,200	218	42	6,589
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	6,801	1,591	218	42	8,652	6,967	1,629	218	42	8,857
117	241103	PITT-Cust Service	Field Service Representative U537P	11/18/1998	4,712	1,102	218	42	6,075	4,830	1,129	218	42	6,219
118	244101	INDI-Production	Operator U537O	8/9/1999	5,825	1,362	218	42	7,448	5,940	1,389	218	42	7,590
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	5,445	1,274	218	42	6,979	5,552	1,298	218	42	7,111
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	5,703	1,334	218	42	7,297	5,812	1,359	218	42	7,432
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	4,706	1,101	218	42	6,067	4,812	1,125	218	42	6,197
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	5,032	1,177	218	42	6,469	5,130	1,200	218	42	6,591
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	6,355	1,486	218	42	8,102	6,510	1,523	218	42	8,293
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	4,616	1,079	218	42	5,955	4,752	1,111	218	42	6,124
125	241103	PITT-Cust Service	Field Service Representative U537P	12/28/2001	4,740	1,109	218	42	6,109	4,858	1,136	218	42	6,255
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	4,860	1,137	218	42	6,257	4,957	1,159	218	42	6,377
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	5,840	1,366	218	42	7,466	5,955	1,393	218	42	7,609
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	5,370	1,256	218	42	6,886	5,476	1,281	218	42	7,017
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	4,765	1,114	218	42	6,140	4,859	1,136	218	42	6,256
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	4,451	1,041	218	42	5,752	4,574	1,070	218	42	5,904
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	9,932	2,393	218	42	12,586	10,450	2,451	218	42	13,161
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	7,637	1,786	218	42	9,684	7,825	1,830	218	42	9,915
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	6,374	1,491	218	42	8,124	6,560	1,534	218	42	8,355
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	6,754	1,580	218	42	8,594	6,887	1,611	218	42	8,758
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	5,285	1,236	218	42	6,782	5,390	1,261	218	42	6,911
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002	4,763	1,114	218	42	6,137	4,880	1,141	218	42	6,282
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	8,437	1,973	218	42	10,670	8,641	2,021	218	42	10,922
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	5,406	1,264	218	42	6,930	5,510	1,289	218	42	7,059
139	241103	PITT-Cust Service	Field Service Representative U537P	4/14/2003	4,734	1,107	218	42	6,102	4,852	1,135	218	42	6,247
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	5,019	1,174	218	42	6,453	5,166	1,208	218	42	6,635

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Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
78	249106	WILK-Field Services	M/C Technician U648S	12/3/1990	7,533	1,762	218	42	9,554
79	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/5/1981	5,131	1,200	218	42	6,592
80	249106	WILK-Field Services	Dump Truck Driver U648S	4/14/1986	5,783	1,352	218	42	7,396
81	249106	WILK-Field Services	Dump Truck Driver U648S	6/1/1987	6,563	1,535	218	42	8,358
82	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/1987	4,590	1,074	218	42	5,924
83	249154	WILK-Crystal	Plant Operator U648S	6/2/1992	5,554	1,299	218	42	7,114
84	249160	WILK-Watres	Plant Operator U648S	7/3/1989	5,630	1,317	218	42	7,207
85	249151	WILK-Brownell	Plant Operator U648S	9/14/1992	5,572	1,303	218	42	7,136
86	249106	WILK-Field Services	Line Location Specialist U648S	8/9/1989	5,667	1,325	218	42	7,253
87	249106	WILK-Field Services	Backhoe Operator U648S	7/13/1987	6,247	1,461	218	42	7,968
88	249154	WILK-Crystal	Plant Operator U648S	9/8/1997	5,505	1,287	218	42	7,053
89	249106	WILK-Field Services	Backhoe Operator U648S	3/23/1987	7,560	1,768	218	42	9,589
90	249106	WILK-Field Services	Leak Detection Specialist U648S	9/19/1988	4,436	1,038	218	42	5,734
91	249103	WILK-Cust Service	Meter Reader U648S	5/8/1989	4,426	1,035	218	42	5,721
92	249160	WILK-Watres	Maintenance/Relief Operator U648S	6/25/1990	5,614	1,313	218	42	7,187
93	249106	WILK-Field Services	Dump Truck Driver U648S	8/4/1991	6,033	1,411	218	42	7,705
94	249106	WILK-Field Services	Backhoe Operator U648S	8/10/1987	4,887	1,143	218	42	6,290
95	249103	WILK-Cust Service	Meter Reader U648S	5/26/1992	4,323	1,011	218	42	5,594
96	249106	WILK-Field Services	Dump Truck Driver U648S	1/30/1981	5,296	1,239	218	42	6,795
97	249106	WILK-Field Services	Backhoe Operator U648S	5/20/1987	7,040	1,647	218	42	8,947
98	249106	WILK-Field Services	Line Location Specialist U648S	8/12/1991	6,331	1,481	218	42	8,072
99	249106	WILK-Field Services	Dump Truck Driver U648S	8/10/1987	6,401	1,497	218	42	8,158
100	249106	WILK-Field Services	Leak Detection Specialist U648S	6/28/1989	4,729	1,106	218	42	6,096
101	249154	WILK-Crystal	Plant Operator U648S	6/12/1989	5,679	1,328	218	42	7,267
102	245206	YARD-Field Services	Working Foreperson	8/1/1991	5,150	1,205	218	42	6,615
103	245101	NORR-Production	Plant Operator F473N	8/24/1990	6,037	1,412	218	42	7,709
104	245103	NORR-Cust Service	Serviceperson F473N	7/20/1994	4,543	1,063	218	42	5,866
105	246106	MECH-Field Services	Backhoe Operator U648R	5/5/1997	4,812	1,125	218	42	6,198
106	245203	YARD-Cust Service	Serviceperson F473Y	7/27/1983	4,838	1,131	218	42	6,230
107	246103	MECH-Cust Service	Serviceperson U648R	5/28/1996	4,841	1,132	218	42	6,234
108	246103	MECH-Cust Service	Serviceperson U648R	2/27/1996	4,662	1,090	218	42	6,013
109	246106	MECH-Field Services	Utility A U648R	9/25/1989	5,028	1,176	218	42	6,464
110	245106	NORR-Field Services	Working Foreperson F473N	10/16/1989	5,218	1,220	218	42	6,699
111	245103	NORR-Cust Service	Serviceperson F473N	7/14/1981	4,590	1,073	218	42	5,924
112	245101	NORR-Production	Plant Operator F473N	10/21/1985	5,656	1,323	218	42	7,239
113	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/10/1998	5,699	1,333	218	42	7,293
114	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/11/1998	7,362	1,722	218	42	9,344
115	244206	PUNX-Field Services	Distribution System Serviceperson U537O	12/28/1998	5,230	1,223	218	42	6,713
116	241152	PITT-Production Aldr	Operator (Rotating) U537P	11/16/1998	7,139	1,670	218	42	9,068
117	241103	PITT-Cust Service	Field Service Representative U537P	11/18/1998	4,951	1,158	218	42	6,369
118	244101	INDI-Production	Operator U537O	8/9/1999	6,058	1,417	218	42	7,735
119	242106	MCMR-Field Services	Pipeline Inspector U537O	8/4/1999	5,659	1,323	218	42	7,242
120	244103	INDI-Cust Service	Utility Person U537O	8/31/1999	5,925	1,386	218	42	7,571
121	245106	NORR-Field Services	Utility Person A F473N	9/2/1999	4,932	1,154	218	42	6,346
122	243306	BUTL-Field Services	Utility Person U537O	9/7/1999	5,232	1,224	218	42	6,715
123	241106	PITT-Field Services	Utility Dump Truck Driver U537P	9/15/1999	6,671	1,560	218	42	8,491
124	249103	WILK-Cust Service	Serviceperson U648S	10/18/1999	4,893	1,144	218	42	6,298
125	241103	PITT-Cust Service	Field Service Representative U537P	12/28/2001	4,980	1,165	218	42	6,406
126	244303	CLAR-Cust Service	Distribution System Serviceperson U537O	8/7/2000	5,056	1,182	218	42	6,499
127	243152	NEWC-Ellwood	Operator U537O	3/28/2001	6,074	1,421	218	42	7,755
128	243106	NEWC-Field Services	Backhoe Operator U537O	10/24/2005	5,582	1,305	218	42	7,148
129	244306	CLAR-Field Services	Utility Person U537O	7/9/2001	4,956	1,159	218	42	6,375
130	246106	MECH-Field Services	Utility A U648R	1/21/2002	4,688	1,096	218	42	6,045
131	241106	PITT-Field Services	Utility Dump Truck Driver U537P	3/5/2002	10,735	2,511	218	42	13,506
132	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/18/2002	8,018	1,875	218	42	10,154
133	249106	WILK-Field Services	M/C Utility Person U648S	4/29/2002	6,753	1,579	218	42	8,592
134	243151	NEWC-New Castle	Operator U537O	6/4/2002	7,023	1,643	218	42	8,926
135	244106	INDI-Field Services	Backhoe Operator U537O	6/3/2002	5,494	1,285	218	42	7,039
136	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	11/4/2002	5,001	1,170	218	42	6,431
137	241106	PITT-Field Services	Utility Person U537P	11/12/2002	8,850	2,070	218	42	11,180
138	244406	KITT-Field Services	Subforeperson U537O	11/11/2002	5,617	1,314	218	42	7,191
139	241103	PITT-Cust Service	Field Service Representative U537P	4/14/2003	4,973	1,163	218	42	6,396
140	249152	WILK-Ceasetown	Plant Operator U648S	7/14/2003	5,320	1,244	218	42	6,825

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Payroll Taxes

					2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	6,880	1,609	218	42	8,750	7,049	1,649	218	42	8,958
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	5,853	1,369	218	42	7,482	6,025	1,409	218	42	7,694
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	9,580	2,241	218	42	12,081	9,814	2,295	218	42	12,369
144	241103	PITT-Cust Service	Field Service Representative U537P	8/29/2003	5,107	1,194	218	42	6,561	5,234	1,224	218	42	6,718
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	4,893	1,144	218	42	6,297	4,988	1,167	218	42	6,415
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	4,521	1,057	218	42	5,839	4,647	1,087	218	42	5,994
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	5,608	1,312	218	42	7,180	5,773	1,350	218	42	7,383
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	5,718	1,337	218	42	7,316	5,831	1,364	218	42	7,456
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	6,455	1,510	218	42	8,225	6,614	1,547	218	42	8,421
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	4,430	1,036	218	42	5,726	4,529	1,059	218	42	5,848
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005	5,116	1,196	218	42	6,573	5,243	1,226	218	42	6,730
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	5,344	1,250	218	42	6,854	5,449	265	218	42	5,975
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	4,985	1,166	218	42	6,411	5,123	1,198	218	42	6,582
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	7,554	1,767	218	42	9,581	7,700	1,801	218	42	9,761
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	5,041	1,179	218	42	6,480	5,139	1,202	218	42	6,601
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	5,785	1,353	218	42	7,398	5,927	1,386	218	42	7,574
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	5,418	1,267	218	42	6,946	5,568	1,302	218	42	7,131
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	5,047	1,180	218	42	6,488	5,146	1,204	218	42	6,610
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	5,556	1,299	218	42	7,115	5,664	1,325	218	42	7,249
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	5,293	1,238	218	42	6,792	5,450	1,275	218	42	6,985
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005	4,677	1,094	218	42	6,031	4,816	1,126	218	42	6,203
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	4,614	1,079	218	42	5,953	4,717	1,103	218	42	6,080
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	4,884	1,142	218	42	6,286	4,981	1,165	218	42	6,406
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	4,996	1,168	218	42	6,425	5,121	1,198	218	42	6,579
165	241103	PITT-Cust Service	Field Service Representative U537P	12/19/2005	5,206	1,217	218	42	6,684	5,335	1,248	218	42	6,843
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	4,748	1,110	218	42	6,119	4,843	1,133	218	42	6,236
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	7,149	1,672	218	42	9,082	7,325	1,713	218	42	9,298
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	7,172	1,677	218	42	9,110	7,348	1,718	218	42	9,327
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	6,624	1,549	218	42	8,433	6,785	1,587	218	42	8,632
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	5,231	1,223	218	42	6,715	5,334	1,248	218	42	6,842
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	7,902	1,848	218	42	10,011	8,097	1,894	218	42	10,251
172	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	4,765	1,114	218	42	6,140	4,884	1,142	218	42	6,287
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	5,187	1,213	218	42	6,660	5,341	1,249	218	42	6,850
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	5,101	1,193	218	42	6,554	5,252	1,228	218	42	6,740
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	6,671	1,560	218	42	8,492	6,835	1,599	218	42	8,694
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	6,173	1,444	218	42	7,877	6,325	1,479	218	42	8,064
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	5,265	1,231	218	42	6,757	5,366	1,255	218	42	6,882
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	5,214	1,219	218	42	6,694	5,316	1,243	218	42	6,820
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	5,252	1,228	218	42	6,741	5,354	1,252	218	42	6,867
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	6,738	1,576	218	42	8,574	6,934	1,622	218	42	8,817
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006	5,183	1,212	218	42	6,656	5,337	1,248	218	42	6,845
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	6,872	1,607	218	42	8,739	7,040	1,647	218	42	8,947
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	6,269	1,466	218	42	7,996	6,453	1,509	218	42	8,223
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	4,933	1,154	218	42	6,347	5,031	1,177	218	42	6,468
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	5,538	1,295	218	42	7,094	5,675	1,327	218	42	7,263
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	4,912	1,149	218	42	6,322	5,057	1,183	218	42	6,500
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	4,864	1,138	218	42	6,262	4,961	1,160	218	42	6,381
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	5,245	1,227	218	42	6,731	5,362	1,254	218	42	6,876
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	5,907	1,381	218	42	7,549	6,039	1,412	218	42	7,712
190	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	4,912	1,149	218	42	6,321	5,034	1,177	218	42	6,472
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	4,580	1,071	218	42	5,912	4,717	1,103	218	42	6,080
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	4,892	1,144	218	42	6,296	4,988	1,167	218	42	6,415
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006	6,786	1,587	218	42	8,633	6,952	1,626	218	42	8,838
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	5,172	1,210	218	42	6,642	5,273	1,233	218	42	6,766
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	5,882	1,376	218	42	7,518	5,993	1,402	218	42	7,655
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	5,029	1,176	218	42	6,466	5,179	1,211	218	42	6,650
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	7,071	1,654	218	42	8,985	7,244	1,694	218	42	9,198
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	7,107	1,662	218	42	9,029	7,281	1,703	218	42	9,244
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	5,255	1,229	218	42	6,744	5,356	1,253	218	42	6,869
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	5,557	1,300	218	42	7,117	5,666	1,325	218	42	7,252
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	5,124	1,198	218	42	6,583	5,275	1,234	218	42	6,770
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	5,853	1,369	218	42	7,482	6,025	1,409	218	42	7,695

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					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
141	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/21/2003	7,223	1,689	218	42	9,173
142	249106	WILK-Field Services	M/C Utility Person U648S	8/25/2003	6,202	1,450	218	42	7,913
143	241106	PITT-Field Services	Utility Service Crew Driver U537P	8/28/2003	10,055	2,352	218	42	12,667
144	241103	PITT-Cust Service	Field Service Representative U537P	8/29/2003	5,365	1,255	218	42	6,880
145	242106	MCMR-Field Services	Utility Person U537O	9/10/2003	5,087	1,190	218	42	6,537
146	246106	MECH-Field Services	Utility A U648R	9/15/2003	4,762	1,114	218	42	6,137
147	249106	WILK-Field Services	M/C Crew Leader U648S	9/29/2003	5,942	1,390	218	42	7,592
148	243301	BUTL-Production	Helper/Relief Operator U537O	10/1/2003	5,948	1,391	218	42	7,599
149	241151	PITT-Production Haye	Maintenance Person (Non-Rotating) U537P	10/29/2003	6,778	1,585	218	42	8,624
150	245106	NORR-Field Services	Utility Person B F473N	1/17/2005	4,642	1,086	218	42	5,988
151	241152	PITT-Production Aldr	Maintenance Person (Non-Rotating) U537P	3/15/2005	5,374	1,257	218	42	6,892
152	243152	NEWC-Ellwood	Maintenance Person U537O	4/18/2005	5,557	306	218	42	6,124
153	246106	MECH-Field Services	Utility A U648R	8/8/2005	5,251	1,228	218	42	6,739
154	242306	UNTN-Field Services	Pipeline Inspector U537O	8/15/2005	7,846	1,835	218	42	9,941
155	242203	MONVAL-Cust Service	Meter Reader U537O	8/22/2005	5,240	1,225	218	42	6,725
156	241106	PITT-Field Services	Utility Person U537P	9/19/2005	6,073	1,420	218	42	7,754
157	246106	MECH-Field Services	Utility A U648R	10/10/2005	5,706	1,335	218	42	7,301
158	242206	MONVA-Field Services	Utility Person U537O	10/11/2005	5,248	1,227	218	42	6,736
159	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/25/2005	5,775	1,351	218	42	7,385
160	249106	WILK-Field Services	M/C Utility Person U648S	10/24/2005	5,612	1,313	218	42	7,185
161	249103	WILK-Cust Service	Serviceperson U648S	10/24/2005	4,960	1,160	218	42	6,380
162	245103	NORR-Cust Service	Serviceperson F473N	11/7/2005	4,834	1,131	218	42	6,225
163	244206	PUNX-Field Services	Subforeperson U537O	11/7/2005	5,081	1,188	218	42	6,530
164	241106	PITT-Field Services	Utility Person U537P	12/20/2005	5,248	1,227	218	42	6,735
165	241103	PITT-Cust Service	Field Service Representative U537P	12/19/2005	5,469	1,279	218	42	7,008
166	242103	MCMR-Cust Service	General Serviceperson U537O	12/19/2005	4,940	1,155	218	42	6,355
167	240306	CORP-Field Service	Utility Inspector U537P	12/22/2005	7,506	1,755	218	42	9,521
168	240306	CORP-Field Service	Utility Inspector U537P	12/21/2005	7,529	1,761	218	42	9,551
169	241106	PITT-Field Services	Utility Equipment Operator U537P	1/9/2006	6,952	1,626	218	42	8,838
170	242106	MCMR-Field Services	Backhoe Operator U537O	1/10/2006	5,437	1,272	218	42	6,969
171	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/1/2006	8,295	1,940	218	42	10,496
172	241103	PITT-Cust Service	Field Service Representative U537P	3/20/2006	5,007	1,171	218	42	6,438
173	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	5,500	1,286	218	42	7,046
174	249106	WILK-Field Services	M/C Utility Person U648S	3/27/2006	5,408	1,265	218	42	6,933
175	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/3/2006	7,005	1,638	218	42	8,903
176	241106	PITT-Field Services	Utility Equipment Operator U537P	4/17/2006	6,482	1,516	218	42	8,258
177	242306	UNTN-Field Services	UTILITY PERSON NRW	4/24/2006	5,471	1,279	218	42	7,010
178	242206	MONVA-Field Services	UTILITY PERSON NRW	5/1/2006	5,421	1,268	218	42	6,950
179	242206	MONVA-Field Services	Utility Person U537O	5/2/2006	5,459	1,277	218	42	6,997
180	249106	WILK-Field Services	M/C Utility Person U648S	5/8/2006	7,138	1,669	218	42	9,067
181	249106	WILK-Field Services	M/C Crew Leader U648S	5/8/2006	5,495	1,285	218	42	7,040
182	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/17/2006	7,215	1,687	218	42	9,162
183	249106	WILK-Field Services	M/C Technician U648S	5/22/2006	6,643	1,554	218	42	8,457
184	242101	MCMR-Production	Operator/Maintenance Person U537O	5/23/2006	5,132	1,200	218	42	6,592
185	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/30/2006	5,817	1,360	218	42	7,438
186	249103	WILK-Cust Service	Serviceperson U648S	5/30/2006	5,207	1,218	218	42	6,685
187	244406	KITT-Field Services	Utility Person U537O	6/2/2006	5,059	1,183	218	42	6,503
188	245201	YARD-Production	Plant Foreperson F473Y	5/22/2006	5,497	1,286	218	42	7,043
189	245103	NORR-Cust Service	Serviceperson F473N	6/19/2006	6,189	1,447	218	42	7,897
190	241103	PITT-Cust Service	Field Service Representative U537P	6/26/2006	5,161	1,207	218	42	6,628
191	249151	WILK-Brownell	Maintenance/Relief Operator U648S	7/5/2006	4,859	1,136	218	42	6,255
192	243306	BUTL-Field Services	Utility Person U537O	7/10/2006	5,088	1,190	218	42	6,538
193	241106	PITT-Field Services	Utility Equipment Operator U537P	7/17/2006	7,123	1,666	218	42	9,049
194	244103	INDI-Cust Service	Utility Person U537O	7/24/2006	5,376	1,257	218	42	6,894
195	243306	BUTL-Field Services	Utility Person U537O	11/13/2006	6,108	1,428	218	42	7,796
196	249152	WILK-Ceasetown	Maintenance/Relief Operator U648S	1/22/2007	5,335	1,248	218	42	6,843
197	241106	PITT-Field Services	Utility Person U537P	3/5/2007	7,420	1,735	218	42	9,415
198	241106	PITT-Field Services	Utility Service Crew Driver U537P	3/5/2007	7,460	1,745	218	42	9,466
199	242106	MCMR-Field Services	Subforeperson U537O	3/26/2007	5,460	1,277	218	42	6,997
200	243306	BUTL-Field Services	Utility Person U537O	4/16/2007	5,778	1,351	218	42	7,390
201	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	5,432	1,270	218	42	6,963
202	249106	WILK-Field Services	M/C Utility Person U648S	6/4/2007	6,204	1,451	218	42	7,915

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					2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007	4,396	1,028	218	42	5,685	4,528	1,059	218	42	5,847
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	5,885	1,376	218	42	7,521	6,057	1,417	218	42	7,735
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	5,396	1,262	218	42	6,918	5,555	1,299	218	42	7,114
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	4,997	1,169	218	42	6,426	5,145	1,203	218	42	6,609
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	4,842	1,132	218	42	6,235	4,976	1,164	218	42	6,400
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	4,626	1,082	218	42	5,968	4,752	1,111	218	42	6,124
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	5,279	1,235	218	42	6,774	5,425	1,269	218	42	6,954
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	6,075	1,421	218	42	7,756	6,253	1,462	218	42	7,975
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	4,491	1,050	218	42	5,802	4,625	1,082	218	42	5,967
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	5,139	1,202	218	42	6,601	5,267	1,232	218	42	6,759
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	7,733	1,808	218	42	9,802	7,921	1,853	218	42	10,034
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	4,500	1,052	218	42	5,813	4,601	1,076	218	42	5,937
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	4,918	1,150	218	42	6,328	5,028	1,176	218	42	6,465
216	244101	INDI-Production	Operator U537O	8/13/2007	6,168	1,442	218	42	7,871	6,289	1,471	218	42	8,020
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	5,256	1,229	218	42	6,746	5,412	1,266	218	42	6,938
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	4,210	985	218	42	5,455	4,336	1,014	218	42	5,611
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	5,015	1,173	218	42	6,448	5,162	1,207	218	42	6,630
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	4,937	1,155	218	42	6,352	5,035	1,178	218	42	6,473
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	6,771	1,584	218	42	8,615	6,969	1,630	218	42	8,860
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007	5,142	1,203	218	42	6,605	5,245	1,227	218	42	6,732
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	5,097	1,192	218	42	6,550	5,211	1,219	218	42	6,690
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	4,852	1,135	218	42	6,247	4,972	1,163	218	42	6,395
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	5,120	1,197	218	42	6,578	5,272	1,233	218	42	6,765
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	6,090	1,424	218	42	7,774	6,204	1,451	218	42	7,915
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007	5,572	1,303	218	42	7,136	5,735	1,341	218	42	7,337
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	5,118	1,197	218	42	6,575	5,244	1,226	218	42	6,730
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	5,094	1,191	218	42	6,546	5,245	1,227	218	42	6,733
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008	6,022	1,408	218	42	7,690	6,137	1,435	218	42	7,833
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	5,521	1,291	218	42	7,073	5,673	1,327	218	42	7,260
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008	5,190	1,214	218	42	6,664	5,290	1,237	218	42	6,787
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	5,149	1,204	218	42	6,614	5,301	1,240	218	42	6,801
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	4,589	1,073	218	42	5,923	4,726	1,105	218	42	6,091
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	4,891	1,144	218	42	6,295	5,013	1,172	218	42	6,445
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	5,139	1,202	218	42	6,602	5,254	1,229	218	42	6,743
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	4,974	1,163	218	42	6,398	5,098	1,192	218	42	6,551
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008	4,589	1,073	218	42	5,923	4,680	1,095	218	42	6,035
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	4,791	1,120	218	42	6,171	4,886	1,143	218	42	6,290
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	6,935	1,622	218	42	8,817	7,104	1,661	218	42	9,026
241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	5,740	1,342	218	42	7,342	5,882	1,376	218	42	7,518
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	5,396	1,262	218	42	6,919	5,529	1,293	218	42	7,083
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	9,292	2,173	218	42	11,725	9,520	2,226	218	42	12,007
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	4,732	1,107	218	42	6,099	4,826	1,129	218	42	6,215
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	5,431	1,270	218	42	6,961	5,534	1,294	218	42	7,089
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	5,731	1,340	218	42	7,331	5,843	1,366	218	42	7,469
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009	4,779	1,118	218	42	6,157	4,874	1,140	218	42	6,274
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	5,545	1,297	218	42	7,103	5,653	1,322	218	42	7,235
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009	4,537	1,061	218	42	5,858	4,672	1,093	218	42	6,025
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	5,182	1,212	218	42	6,655	5,298	1,239	218	42	6,797
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	4,898	1,146	218	42	6,304	5,019	1,174	218	42	6,453
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	5,377	1,258	218	42	6,895	5,479	1,281	218	42	7,021
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	5,290	1,237	218	42	6,788	5,392	1,261	218	42	6,913
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	6,193	1,448	218	42	7,902	6,316	1,477	218	42	8,053
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	5,749	1,344	218	42	7,353	5,858	1,370	218	42	7,489
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009	4,664	1,091	218	42	6,015	4,757	1,113	218	42	6,130
257	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	4,748	1,110	218	42	6,119	4,866	1,138	218	42	6,265
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	5,460	1,277	218	42	6,998	5,567	1,302	218	42	7,129
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	5,131	1,200	218	42	6,591	5,230	1,223	218	42	6,714
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	6,438	1,506	218	42	8,203	6,556	1,533	218	42	8,350
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	5,267	1,232	218	42	6,759	5,369	1,256	218	42	6,885
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	5,065	1,185	218	42	6,510	5,165	1,208	218	42	6,633
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	5,123	1,198	218	42	6,581	5,223	1,222	218	42	6,705
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	5,198	1,216	218	42	6,674	5,299	1,239	218	42	6,799
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	5,911	1,382	218	42	7,553	6,023	1,409	218	42	7,692
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	8,998	2,104	218	42	11,362	9,220	2,156	218	42	11,636
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	5,587	1,307	218	42	7,154	5,752	1,345	218	42	7,358
268	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	5,085	1,189	218	42	6,534	5,211	1,219	218	42	6,691
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	5,642	1,320	218	42	7,222	5,808	1,358	218	42	7,427

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					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
203	249106	WILK-Field Services	Regulation Utility Person U648S	6/11/2007	4,664	1,091	218	42	6,015
204	249106	WILK-Field Services	Regulation Crew Leader U648S	6/25/2007	6,236	1,458	218	42	7,955
205	249106	WILK-Field Services	M/C Crew Leader U648S	6/25/2007	5,719	1,338	218	42	7,317
206	249106	WILK-Field Services	M/C Technician U648S	7/2/2007	5,297	1,239	218	42	6,797
207	246106	MECH-Field Services	Utility Person U648R	7/9/2007	5,099	1,192	218	42	6,552
208	246103	MECH-Cust Service	Meter Reader U648R	7/13/2007	4,871	1,139	218	42	6,271
209	246103	MECH-Cust Service	Serviceperson U648R	7/11/2007	5,560	1,300	218	42	7,121
210	249106	WILK-Field Services	M/C Crew Leader U648S	7/16/2007	6,435	1,505	218	42	8,201
211	249106	WILK-Field Services	Regulation Utility Person U648S	7/16/2007	4,763	1,114	218	42	6,138
212	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/24/2007	5,397	1,262	218	42	6,920
213	241106	PITT-Field Services	Utility Service Crew Driver U537P	7/23/2007	8,116	1,898	218	42	10,275
214	245103	NORR-Cust Service	Serviceperson F473N	7/30/2007	4,716	1,103	218	42	6,079
215	245103	NORR-Cust Service	Serviceperson F473N	8/6/2007	5,154	1,205	218	42	6,619
216	244101	INDI-Production	Operator U537O	8/13/2007	6,413	1,500	218	42	8,174
217	249106	WILK-Field Services	M/C Utility Person U648S	8/20/2007	5,573	1,303	218	42	7,136
218	249106	WILK-Field Services	Leak Detection Specialist U648S	9/4/2007	4,467	1,045	218	42	5,772
219	249152	WILK-Ceasetown	Plant Operator U648S	9/4/2007	5,317	1,243	218	42	6,820
220	242306	UNTN-Field Services	Subforeperson U537O	9/4/2007	5,135	1,201	218	42	6,597
221	242506	BRWN-Field Services	Utility Person U537BV	9/5/2007	7,141	1,670	218	42	9,072
222	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	10/1/2007	5,349	1,251	218	42	6,860
223	245201	YARD-Production	Plant Operator F473Y	10/8/2007	5,342	1,249	218	42	6,852
224	241106	PITT-Field Services	Utility Person U537P	10/22/2007	5,095	1,192	218	42	6,547
225	249106	WILK-Field Services	M/C Utility Person U648S	10/22/2007	5,428	1,269	218	42	6,958
226	242206	MONVA-Field Services	Utility Person U537O	11/5/2007	6,321	1,478	218	42	8,060
227	249106	WILK-Field Services	M/C Crew Leader U648S	11/26/2007	5,904	1,381	218	42	7,545
228	241106	PITT-Field Services	Utility Equipment Operator U537P	12/10/2007	5,374	1,257	218	42	6,891
229	249103	WILK-Cust Service	Serviceperson U648S	4/14/2008	5,402	1,263	218	42	6,925
230	243106	NEWC-Field Services	Utility Person U537O	4/28/2008	6,256	1,463	218	42	7,980
231	246151	MECH-ProdWestShore	Plant Operator U648R	5/12/2008	5,814	1,360	218	42	7,434
232	243306	BUTL-Field Services	Utility Person U537O	6/2/2008	5,393	1,261	218	42	6,914
233	249106	WILK-Field Services	Regulation Crew Leader U648S	7/14/2008	5,457	1,276	218	42	6,994
234	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/22/2008	4,868	1,139	218	42	6,267
235	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	7/28/2008	5,137	1,202	218	42	6,599
236	245106	NORR-Field Services	Utility Person A F473N	7/28/2008	5,386	1,260	218	42	6,906
237	241106	PITT-Field Services	Utility Person U537P	8/4/2008	5,225	1,222	218	42	6,707
238	242105	MCMR-Admin & Gen	Distribution Records Clerk U537O	8/18/2008	4,774	1,116	218	42	6,150
239	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	11/10/2008	4,983	1,165	218	42	6,409
240	241106	PITT-Field Services	Utility Equipment Operator U537P	11/11/2008	7,280	1,703	218	42	9,243
241	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/13/2008	6,029	1,410	218	42	7,699
242	241106	PITT-Field Services	Utility Dump Truck Driver U537P	11/17/2008	5,667	1,325	218	42	7,252
243	241106	PITT-Field Services	Utility Inspector U537P	11/18/2008	9,756	2,282	218	42	12,298
244	243306	BUTL-Field Services	Meter Reader U537O	11/18/2008	4,923	1,151	218	42	6,334
245	242106	MCMR-Field Services	Utility Person U537O	1/5/2009	5,641	1,319	218	42	7,220
246	242206	MONVA-Field Services	Subforeperson U537O	3/9/2009	5,958	1,393	218	42	7,611
247	242306	UNTN-Field Services	Meter Reader U537O	3/30/2009	4,972	1,163	218	42	6,395
248	242306	UNTN-Field Services	Subforeperson U537O	4/13/2009	5,763	1,348	218	42	7,371
249	249151	WILK-Brownell	Maintenance/Relief Operator U648S	5/4/2009	4,813	1,126	218	42	6,199
250	245106	NORR-Field Services	Utility Person B F473N	6/30/2009	5,430	1,270	218	42	6,960
251	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/30/2009	5,144	1,203	218	42	6,607
252	242106	MCMR-Field Services	Utility Person U537O	7/6/2009	5,584	1,306	218	42	7,150
253	242106	MCMR-Field Services	Utility Person U537O	7/8/2009	5,497	1,285	218	42	7,042
254	242106	MCMR-Field Services	Pipeline Inspector U537O	7/13/2009	6,438	1,506	218	42	8,204
255	242106	MCMR-Field Services	Utility Person U537O	7/20/2009	5,971	1,396	218	42	7,628
256	242106	MCMR-Field Services	Distribution Systems Records Clerk U537O	7/21/2009	4,852	1,135	218	42	6,247
257	241103	PITT-Cust Service	Field Service Representative U537P	7/27/2009	4,989	1,167	218	42	6,416
258	244306	CLAR-Field Services	Subforeperson U537O	8/3/2009	5,676	1,327	218	42	7,263
259	244406	KITT-Field Services	Utility Person U537O	8/18/2009	5,333	1,247	218	42	6,840
260	242106	MCMR-Field Services	Utility Person U537O	8/17/2009	6,678	1,562	218	42	8,500
261	242306	UNTN-Field Services	Utility Person U537O	9/14/2009	5,475	1,280	218	42	7,015
262	242306	UNTN-Field Services	Utility Person U537O	9/29/2009	5,267	1,232	218	42	6,760
263	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	5,326	1,246	218	42	6,832
264	243306	BUTL-Field Services	Utility Person U537O	10/28/2009	5,403	1,264	218	42	6,927
265	242106	MCMR-Field Services	Utility Person U537O	11/2/2009	6,139	1,436	218	42	7,834
266	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/23/2010	9,446	2,209	218	42	11,916
267	249151	WILK-Brownell	Plant Operator U648S	2/22/2010	5,924	1,385	218	42	7,570
268	241103	PITT-Cust Service	Field Service Representative U537P	3/23/2010	5,342	1,249	218	42	6,852
269	249106	WILK-Field Services	Regulation Crew Leader U648S	3/29/2010	5,979	1,398	218	42	7,637

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					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	5,524	1,292	218	42	7,076	5,648	1,321	218	42	7,229
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	5,086	1,190	218	42	6,536	5,186	1,213	218	42	6,660
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	6,058	1,417	218	42	7,735	6,206	1,451	218	42	7,918
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	4,921	1,151	218	42	6,333	5,018	1,174	218	42	6,452
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	5,817	1,361	218	42	7,438	5,928	1,386	218	42	7,575
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	7,948	1,859	218	42	10,067	8,143	1,904	218	42	10,307
276	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	4,964	1,161	218	42	6,385	5,087	1,190	218	42	6,537
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010	5,504	1,287	218	42	7,051	5,640	1,319	218	42	7,219
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	5,555	1,299	218	42	7,115	5,662	1,324	218	42	7,247
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	4,643	1,086	218	42	5,989	4,781	1,118	218	42	6,160
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	4,815	1,126	218	42	6,201	4,910	1,148	218	42	6,319
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	6,788	1,587	218	42	8,636	6,918	1,618	218	42	8,796
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	8,866	2,074	218	42	11,200	9,027	2,111	218	42	11,398
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	5,126	1,199	218	42	6,585	5,226	1,222	218	42	6,708
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	4,965	1,161	218	42	6,386	5,062	1,184	218	42	6,506
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	5,281	1,235	218	42	6,776	5,411	1,265	218	42	6,937
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	5,121	1,198	218	42	6,580	5,263	1,231	218	42	6,754
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	5,267	1,232	218	42	6,759	5,368	1,255	218	42	6,884
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	5,029	1,176	218	42	6,465	5,126	1,199	218	42	6,586
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	5,949	1,391	218	42	7,600	6,063	1,418	218	42	7,741
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	4,787	1,119	218	42	6,166	4,881	1,142	218	42	6,283
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	5,521	1,291	218	42	7,073	5,657	1,323	218	42	7,240
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	4,809	1,125	218	42	6,195	4,905	1,147	218	42	6,312
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	6,676	1,561	218	42	8,498	6,806	1,592	218	42	8,658
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	7,219	1,688	218	42	9,168	7,353	1,720	218	42	9,332
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012	4,587	1,073	218	42	5,921	4,724	1,105	218	42	6,089
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	6,578	1,538	218	42	8,376	6,745	1,577	218	42	8,583
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	4,599	1,076	218	42	5,935	4,701	1,099	218	42	6,061
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	5,143	1,203	218	42	6,606	5,243	1,226	218	42	6,730
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	4,578	1,071	218	42	5,909	4,669	1,092	218	42	6,021
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	5,591	1,308	218	42	7,159	5,730	1,340	218	42	7,330
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013	6,629	1,550	218	42	8,440	6,816	1,594	218	42	8,671
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	5,076	1,187	218	42	6,524	5,175	1,210	218	42	6,646
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	5,699	1,333	218	42	7,292	5,808	1,358	218	42	7,427
304	244101	INDI-Production	Operator U537O	5/13/2013	6,470	1,513	218	42	8,244	6,597	1,543	218	42	8,400
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	5,638	1,319	218	42	7,217	5,747	1,344	218	42	7,351
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	5,615	1,313	218	42	7,188	5,755	1,346	218	42	7,361
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	4,954	1,159	218	42	6,373	5,051	1,181	218	42	6,493
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	4,834	1,131	218	42	6,225	4,930	1,153	218	42	6,344
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	6,817	1,594	218	42	8,672	6,985	1,634	218	42	8,879
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	5,496	1,285	218	42	7,041	5,604	1,310	218	42	7,174
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	4,705	1,100	218	42	6,065	4,845	1,133	218	42	6,238
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	4,952	1,158	218	42	6,371	5,051	1,181	218	42	6,493
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	5,792	1,354	218	42	7,406	5,961	1,394	218	42	7,615
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	4,377	1,024	218	42	5,661	4,506	1,054	218	42	5,820
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	7,716	1,805	218	42	9,781	7,905	1,849	218	42	10,014
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	4,921	1,151	218	42	6,332	5,066	1,185	218	42	6,511
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	4,532	1,060	218	42	5,852	4,667	1,091	218	42	6,019
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	4,500	1,053	218	42	5,813	4,635	1,084	218	42	5,979
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	5,243	1,226	218	42	6,730	5,398	1,263	218	42	6,921
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014	4,661	1,090	218	42	6,011	4,753	1,112	218	42	6,125
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	5,569	1,302	218	42	7,132	5,694	1,332	218	42	7,286
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	5,641	1,319	218	42	7,221	5,753	1,345	218	42	7,359
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	4,991	1,167	218	42	6,418	5,089	1,190	218	42	6,539
324	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014	4,768	1,115	218	42	6,143	4,885	1,142	218	42	6,288
325	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	6,338	1,482	218	42	8,081	6,495	1,519	218	42	8,275
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	5,851	1,368	218	42	7,480	5,962	1,394	218	42	7,617
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	7,179	1,679	218	42	9,118	7,357	1,721	218	42	9,338
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	9,494	2,220	218	42	11,975	9,726	2,275	218	42	12,261
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	7,165	1,676	218	42	9,101	7,342	1,717	218	42	9,319
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	6,553	1,532	218	42	8,345	6,682	1,563	218	42	8,505
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	7,158	1,674	218	42	9,093	7,369	1,723	218	42	9,352
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	4,520	1,057	218	42	5,837	4,654	1,088	218	42	6,003
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	6,748	1,578	218	42	8,586	6,919	1,618	218	42	8,797
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	6,541	1,530	218	42	8,331	6,707	1,569	218	42	8,536
335	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015	4,883	1,142	218	42	6,285	5,007	1,171	218	42	6,438
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	6,408	1,499	218	42	8,167	6,570	1,537	218	42	8,367
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	4,889	1,143	218	42	6,293	4,987	1,166	218	42	6,413
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016	4,712	1,102	218	42	6,074	4,805	1,124	218	42	6,190
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	4,497	1,052	218	42	5,809	4,632	1,083	218	42	5,975

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					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
270	245101	NORR-Production	Plant Operator F473N	6/21/2010	5,790	1,354	218	42	7,404
271	242103	MCMR-Cust Service	General Serviceperson U537O	10/12/2010	5,288	1,237	218	42	6,785
272	241151	PITT-Production Haye	Maintenance Relief Person U537P	11/1/2010	6,360	1,487	218	42	8,108
273	242206	MONVA-Field Services	Utility Person U537O	11/9/2010	5,117	1,197	218	42	6,574
274	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	11/8/2010	6,041	1,413	218	42	7,714
275	241106	PITT-Field Services	Shop Clerk U537P	11/11/2010	8,344	1,951	218	42	10,556
276	241103	PITT-Cust Service	Field Service Representative U537P	11/15/2010	5,215	1,220	218	42	6,695
277	241106	PITT-Field Services	Utility Equipment Operator U537P	11/15/2010	5,780	1,352	218	42	7,393
278	244103	INDI-Cust Service	Utility Person U537O	11/22/2010	5,772	1,350	218	42	7,382
279	249103	WILK-Cust Service	Serviceperson U648S	12/14/2010	4,924	1,152	218	42	6,336
280	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	1/3/2011	5,008	1,171	218	42	6,439
281	243151	NEWC-New Castle	Maintenance Person U537O	1/10/2011	7,052	1,649	218	42	8,962
282	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	3/14/2011	9,189	2,149	218	42	11,599
283	244206	PUNX-Field Services	Utility Person U537O	3/14/2011	5,328	1,246	218	42	6,834
284	243306	BUTL-Field Services	Utility Person U537O	5/24/2011	5,162	1,207	218	42	6,630
285	241151	PITT-Production Haye	Maintenance Relief Person U537P	5/23/2011	5,545	1,297	218	42	7,103
286	246103	MECH-Cust Service	Serviceperson U648R	8/22/2011	5,393	1,261	218	42	6,915
287	242106	MCMR-Field Services	Utility Person U537O	8/24/2011	5,473	1,280	218	42	7,013
288	242103	MCMR-Cust Service	Meter Reader U537O	9/6/2011	5,227	1,222	218	42	6,710
289	242206	MONVA-Field Services	Utility Person U537O	8/29/2011	6,180	1,445	218	42	7,886
290	242106	MCMR-Field Services	Utility Person U537O	9/7/2011	4,978	1,164	218	42	6,403
291	241152	PITT-Production Aldr	Maintenance Relief Person U537P	9/12/2011	5,797	1,356	218	42	7,413
292	243106	NEWC-Field Services	Utility Person U537O	9/26/2011	5,003	1,170	218	42	6,433
293	242203	MONVAL-Cust Service	Distribution Systems Records Clerk U537O	10/3/2011	6,938	1,623	218	42	8,820
294	242106	MCMR-Field Services	Utility Person U537O	11/7/2011	7,490	1,752	218	42	9,502
295	249103	WILK-Cust Service	Serviceperson U648S	7/3/2012	4,865	1,138	218	42	6,264
296	241151	PITT-Production Haye	Operator (Rotating) U537P	4/28/2014	6,917	1,618	218	42	8,795
297	245106	NORR-Field Services	Utility Person B F473N	12/24/2018	4,818	1,127	218	42	6,205
298	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/4/2013	5,345	1,250	218	42	6,856
299	242105	MCMR-Admin & Gen	Utility Clerk U537O	3/18/2013	4,762	1,114	218	42	6,136
300	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	4/1/2013	5,871	1,373	218	42	7,505
301	242501	BRWN-Production	Plant Operator/Maintenance U537BV	4/15/2013	6,978	1,632	218	42	8,871
302	242106	MCMR-Field Services	Utility Person U537O	5/1/2013	5,277	1,234	218	42	6,771
303	242106	MCMR-Field Services	Utility Person U537O	4/30/2013	5,920	1,384	218	42	7,565
304	244101	INDI-Production	Operator U537O	5/13/2013	6,728	1,573	218	42	8,561
305	244306	CLAR-Field Services	Utility Person U537O	5/15/2013	5,858	1,370	218	42	7,488
306	241106	PITT-Field Services	Utility Service Crew Driver U537P	5/20/2013	5,899	1,380	218	42	7,539
307	244606	KANE-Field Services	Utility Person U537O	5/28/2013	5,152	1,205	218	42	6,617
308	244406	KITT-Field Services	Distribution System Serviceperson U537O	5/28/2013	5,028	1,176	218	42	6,464
309	241106	PITT-Field Services	Utility Person U537P	6/3/2013	7,156	1,674	218	42	9,090
310	242106	MCMR-Field Services	Utility Person U537O	6/3/2013	5,715	1,336	218	42	7,311
311	249106	WILK-Field Services	M/C Utility Person U648S	6/24/2013	4,990	1,167	218	42	6,417
312	244506	WARR-Field Services	Subforeperson U537O	6/26/2013	5,152	1,205	218	42	6,618
313	249106	WILK-Field Services	M/C Crew Leader U648S	7/1/2013	6,136	1,435	218	42	7,831
314	249103	WILK-Cust Service	Meter Repair Person U537P, U648S	7/29/2013	4,638	1,085	218	42	5,983
315	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/6/2013	8,098	1,894	218	42	10,253
316	249106	WILK-Field Services	M/C Utility Person U648S	8/5/2013	5,215	1,220	218	42	6,696
317	249103	WILK-Cust Service	Serviceperson U648S	8/6/2013	4,806	1,124	218	42	6,191
318	249103	WILK-Cust Service	Serviceperson U648S	9/30/2013	4,773	1,116	218	42	6,150
319	249106	WILK-Field Services	M/C Utility Person U648S	10/17/2013	5,558	1,300	218	42	7,119
320	242105	MCMR-Admin & Gen	Materials Clerk U537O	2/3/2014	4,848	1,134	218	42	6,242
321	245101	NORR-Production	Plant Operator F473N	3/17/2014	5,837	1,365	218	42	7,463
322	244201	PUNX-Production	Operator/Maintenance Person U537O	6/23/2014	5,867	1,372	218	42	7,500
323	244506	WARR-Field Services	Utility Person U537O	10/28/2014	5,190	1,214	218	42	6,664
324	241103	PITT-Cust Service	Field Service Representative U537P	11/25/2014	5,007	1,171	218	42	6,438
325	241103	PITT-Cust Service	Field Service Representative U537P	12/8/2014	6,657	1,557	218	42	8,475
326	242306	UNTN-Field Services	Utility Person U537O	12/10/2014	6,076	1,421	218	42	7,757
327	241106	PITT-Field Services	Utility Person U537P	12/16/2014	7,539	1,763	218	42	9,563
328	241106	PITT-Field Services	Utility Person U537P	12/9/2014	9,963	2,330	218	42	12,554
329	241106	PITT-Field Services	Utility Person U537P	12/15/2014	7,523	1,759	218	42	9,543
330	243151	NEWC-New Castle	Operator U537O	11/16/2015	6,815	1,594	218	42	8,669
331	249106	WILK-Field Services	M/C Crew Leader U648S	11/17/2015	7,585	1,774	218	42	9,620
332	249151	WILK-Brownell	Maintenance/Relief Operator U648S	11/18/2015	4,795	1,121	218	42	6,176
333	241151	PITT-Production Haye	Operator (Rotating) U537P	11/16/2015	7,095	1,659	218	42	9,015
334	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	12/21/2015	6,878	1,608	218	42	8,746
335	241103	PITT-Cust Service	Field Service Representative U537P	12/21/2015	5,135	1,201	218	42	6,596
336	241106	PITT-Field Services	Auto Mechanic U537P	2/8/2016	6,738	1,576	218	42	8,574
337	244606	KANE-Field Services	Subforeperson U537O	2/15/2016	5,087	1,190	218	42	6,537
338	242103	MCMR-Cust Service	Meter Reader U537O	2/18/2016	4,902	1,146	218	42	6,308
339	249103	WILK-Cust Service	Serviceperson U648S	2/15/2016	4,770	1,116	218	42	6,146

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					2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	7,248	1,695	218	42	9,203	7,382	1,726	218	42	9,369
341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	6,241	1,460	218	42	7,961	6,423	1,502	218	42	8,185
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	4,793	1,121	218	42	6,174	4,889	1,143	218	42	6,292
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	4,981	1,165	218	42	6,406	5,080	1,188	218	42	6,528
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	7,958	1,861	218	42	10,079	8,155	1,907	218	42	10,323
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	4,900	1,146	218	42	6,306	5,025	1,175	218	42	6,461
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	6,411	1,499	218	42	8,171	6,598	1,543	218	42	8,402
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	5,786	1,353	218	42	7,400	5,934	1,388	218	42	7,583
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016	5,663	1,324	218	42	7,248	5,775	1,351	218	42	7,386
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	4,931	1,153	218	42	6,345	5,042	1,179	218	42	6,481
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	5,015	1,173	218	42	6,448	5,153	1,205	218	42	6,619
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012	4,241	992	218	42	5,493	4,324	1,011	218	42	5,596
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011	4,921	1,151	218	42	6,333	5,018	1,174	218	42	6,452
353	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	4,856	1,136	218	42	6,253	4,981	1,165	218	42	6,406
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	6,023	1,409	218	42	7,692	6,143	1,437	218	42	7,840
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	4,665	1,091	218	42	6,016	4,804	1,124	218	42	6,188
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	5,277	1,234	218	42	6,772	5,380	1,258	218	42	6,899
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	4,738	1,108	218	42	6,106	4,879	1,141	218	42	6,281
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	6,498	1,520	218	42	8,278	6,688	1,564	218	42	8,512
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	5,626	1,316	218	42	7,201	5,791	1,354	218	42	7,406
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	5,233	1,224	218	42	6,718	5,350	1,251	218	42	6,861
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	4,164	974	218	42	5,398	4,246	993	218	42	5,499
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	5,128	1,199	218	42	6,587	5,234	1,224	218	42	6,718
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	5,220	1,221	218	42	6,701	5,375	1,257	218	42	6,892
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	6,294	1,472	218	42	8,026	6,456	1,510	218	42	8,226
365	244601	KANE-Production	Operator U537O	11/6/2017	5,085	1,189	218	42	6,535	5,189	1,213	218	42	6,663
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	5,317	1,244	218	42	6,821	5,473	1,280	218	42	7,013
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	5,373	1,257	218	42	6,890	5,530	1,293	218	42	7,084
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	4,373	1,023	218	42	5,656	4,489	1,050	218	42	5,799
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	5,756	1,346	218	42	7,362	5,907	1,382	218	42	7,549
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	5,562	1,301	218	42	7,123	5,708	1,335	218	42	7,303
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	6,072	1,420	218	42	7,752	6,190	1,448	218	42	7,898
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	7,068	1,653	218	42	8,981	7,277	1,702	218	42	9,239
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	6,067	1,419	218	42	7,746	6,226	1,456	218	42	7,942
374	241106	PITT-Field Services	Utility Person U537P	2/27/2018	6,014	1,406	218	42	7,681	6,171	1,443	218	42	7,874
375	245206	YARD-Field Services	Utility A F473Y	3/26/2018	4,695	1,098	218	42	6,053	4,800	1,123	218	42	6,183
376	249160	WILK-Watres	Plant Operator U648S	4/30/2018	5,279	1,235	218	42	6,774	5,434	1,271	218	42	6,965
377	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	4,980	1,165	218	42	6,405	5,080	1,188	218	42	6,529
378	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	5,754	1,346	218	42	7,359	5,923	1,385	218	42	7,569
379	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	6,234	1,458	218	42	7,952	6,417	1,501	218	42	8,178
380	246106	MECH-Field Services	Utility A U648R	5/14/2018	4,435	1,037	218	42	5,732	4,569	1,068	218	42	5,897
381	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	5,182	1,212	218	42	6,655	5,335	1,248	218	42	6,843
382	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	5,961	1,394	218	42	7,616	6,137	1,435	218	42	7,832
383	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	5,816	1,360	218	42	7,436	5,969	1,396	218	42	7,625
384	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	4,571	1,069	218	42	5,901	4,707	1,101	218	42	6,068
385	241106	PITT-Field Services	Utility Person U537P	7/10/2018	6,147	1,438	218	42	7,845	6,307	1,475	218	42	8,042
386	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	5,300	1,240	218	42	6,800	5,409	1,265	218	42	6,934
387	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	6,107	1,428	218	42	7,795	6,266	1,465	218	42	7,992
388	241106	PITT-Field Services	Utility Person U537P	7/24/2018	5,516	1,290	218	42	7,066	5,661	1,324	218	42	7,245
389	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	4,894	1,145	218	42	6,299	4,996	1,168	218	42	6,425
390	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	5,344	1,250	218	42	6,854	5,453	1,275	218	42	6,988
391	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018	4,295	1,004	218	42	5,560	4,428	1,036	218	42	5,724
392	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	5,212	1,219	218	42	6,691	5,348	1,251	218	42	6,859
393	241103	PITT-Cust Service	Field Service Representative U537P	9/4/2018	4,583	1,072	218	42	5,915	4,704	1,100	218	42	6,064
394	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	5,210	1,218	218	42	6,689	5,318	1,244	218	42	6,822
395	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	5,859	1,370	218	42	7,489	5,981	1,399	218	42	7,640
396	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	6,263	1,465	218	42	7,988	6,391	1,495	218	42	8,146
397	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	5,589	1,307	218	42	7,156	5,736	1,341	218	42	7,337
398	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	5,963	1,395	218	42	7,618	6,138	1,435	218	42	7,834
399	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	5,070	1,186	218	42	6,516	5,220	1,221	218	42	6,701
400	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	5,608	1,312	218	42	7,180	5,775	1,351	218	42	7,386

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					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
340	242206	MONVA-Field Services	Subforeperson U537O	3/1/2016	7,521	1,759	218	42	9,540
341	249106	WILK-Field Services	M/C Crew Leader U648S	3/15/2016	6,610	1,546	218	42	8,417
342	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	3/22/2016	4,986	1,166	218	42	6,412
343	242303	UNTN-Cust Service	Distribution System Serviceperson U537O	3/28/2016	5,181	1,212	218	42	6,653
344	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/13/2016	8,359	1,955	218	42	10,575
345	241106	PITT-Field Services	Utility Fire Hydrant Inspector U537P	4/12/2016	5,153	1,205	218	42	6,619
346	249106	WILK-Field Services	M/C Utility Person U648S	4/19/2016	6,792	1,588	218	42	8,641
347	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/25/2016	6,088	1,424	218	42	7,772
348	243301	BUTL-Production	Helper/Relief Operator U537O	5/16/2016	5,890	1,378	218	42	7,528
349	245106	NORR-Field Services	Utility Person A F473N	6/6/2016	5,168	1,209	218	42	6,637
350	246106	MECH-Field Services	Utility Person U648R	10/24/2016	5,281	1,235	218	42	6,776
351	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/9/2012	4,409	1,031	218	42	5,701
352	240117	CORP-Water Quality	Lab Tech/IPP Compliance	1/31/2011	5,117	1,197	218	42	6,574
353	241103	PITT-Cust Service	Field Service Representative U537P	1/30/2017	5,110	1,195	218	42	6,565
354	243151	NEWC-New Castle	Helper/Relief Operator U537O	2/20/2017	6,266	1,465	218	42	7,992
355	249160	WILK-Watres	Maintenance/Relief Operator U648S	4/3/2017	4,949	1,157	218	42	6,366
356	242206	MONVA-Field Services	Utility Person U537O	4/24/2017	5,486	1,283	218	42	7,029
357	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/24/2017	5,026	1,175	218	42	6,462
358	249106	WILK-Field Services	M/C Crew Leader U648S	5/22/2017	6,883	1,610	218	42	8,753
359	249106	WILK-Field Services	M/C Technician U648S	6/19/2017	5,962	1,394	218	42	7,616
360	245201	YARD-Production	Plant Operator F473Y	6/19/2017	5,485	1,283	218	42	7,028
361	240117	CORP-Water Quality	Laboratory Technician IBOT_229	7/17/2017	4,330	1,013	218	42	5,602
362	243151	NEWC-New Castle	Asst Maintenance Person U537O	7/31/2017	5,341	1,249	218	42	6,850
363	246152	MECH-Silver Springs	Plant Operator U648R	9/11/2017	5,519	1,291	218	42	7,070
364	241152	PITT-Production Aldr	Operator (Rotating) U537P	9/25/2017	6,623	1,549	218	42	8,432
365	244601	KANE-Production	Operator U537O	11/6/2017	5,295	1,238	218	42	6,794
366	249159	WILK-Nesbitt	Plant Operator U648S	12/4/2017	5,635	1,318	218	42	7,214
367	249159	WILK-Nesbitt	Plant Operator U648S	11/28/2017	5,695	1,332	218	42	7,287
368	241106	PITT-Field Services	Garage Attendant	1/8/2018	4,608	1,078	218	42	5,946
369	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	1/30/2018	6,062	1,418	218	42	7,740
370	241151	PITT-Production Haye	Maintenance Relief Person U537P	1/29/2018	5,859	1,370	218	42	7,489
371	243106	NEWC-Field Services	Utility Person U537O	2/5/2018	6,311	1,476	218	42	8,047
372	242506	BRWN-Field Services	Utility Person U537BV	2/12/2018	7,458	1,744	218	42	9,463
373	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	2/27/2018	6,388	1,494	218	42	8,142
374	241106	PITT-Field Services	Utility Person U537P	2/27/2018	6,332	1,481	218	42	8,073
375	245206	YARD-Field Services	Utility A F473Y	3/26/2018	4,921	1,151	218	42	6,333
376	249160	WILK-Watres	Plant Operator U648S	4/30/2018	5,595	1,308	218	42	7,164
377	243106	NEWC-Field Services	Utility Person U537O	4/30/2018	5,184	1,212	218	42	6,656
378	249106	WILK-Field Services	Regulation Utility Person U648S	4/23/2018	6,099	1,426	218	42	7,785
379	249106	WILK-Field Services	Line Location Specialist U648S	5/1/2018	6,605	1,545	218	42	8,410
380	246106	MECH-Field Services	Utility A U648R	5/14/2018	4,692	1,097	218	42	6,050
381	249106	WILK-Field Services	M/C Crew Leader U648S	5/29/2018	5,493	1,285	218	42	7,037
382	249106	WILK-Field Services	M/C Crew Leader U648S	6/4/2018	6,318	1,478	218	42	8,056
383	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating	7/3/2018	6,125	1,432	218	42	7,817
384	249103	WILK-Cust Service	Serviceperson U648S	7/9/2018	4,846	1,133	218	42	6,240
385	241106	PITT-Field Services	Utility Person U537P	7/10/2018	6,471	1,513	218	42	8,244
386	243106	NEWC-Field Services	Utility Person U537O	7/2/2018	5,520	1,291	218	42	7,072
387	241152	PITT-Production Aldr	Operator (Rotating) U537P	7/23/2018	6,430	1,504	218	42	8,194
388	241106	PITT-Field Services	Utility Person U537P	7/24/2018	5,809	1,358	218	42	7,427
389	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	7/9/2018	5,100	1,193	218	42	6,553
390	242306	UNTN-Field Services	Utility Person U537O	7/30/2018	5,565	1,301	218	42	7,127
391	246103	MECH-Cust Service	Serviceperson U648R	8/7/2018	4,551	1,064	218	42	5,875
392	241106	PITT-Field Services	Utility Dump Truck Driver U537P	8/27/2018	5,490	1,284	218	42	7,034
393	241103	PITT-Cust Service	Field Service Representative U537P	9/4/2018	4,829	1,129	218	42	6,219
394	243106	NEWC-Field Services	Utility Person U537O	10/15/2018	5,428	1,270	218	42	6,958
395	243301	BUTL-Production	Helper/Relief Operator U537O	10/22/2018	6,107	1,428	218	42	7,795
396	242206	MONVA-Field Services	Utility Person U537O	10/29/2018	6,522	1,525	218	42	8,308
397	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	11/5/2018	5,886	1,376	218	42	7,523
398	249106	WILK-Field Services	M/C Crew Leader U648S	1/14/2019	6,318	1,478	218	42	8,056
399	249106	WILK-Field Services	M/C Crew Leader U648S	1/28/2019	5,375	1,257	218	42	6,892
400	249106	WILK-Field Services	Line Location Specialist U648S	2/11/2019	5,946	1,391	218	42	7,597

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					2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
401	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	5,102	1,193	218	42	6,555	5,252	1,228	218	42	6,741
402	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	5,404	1,264	218	42	6,928	5,563	1,301	218	42	7,124
403	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	6,086	1,423	218	42	7,769	6,265	1,465	218	42	7,991
404	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	5,264	1,231	218	42	6,756	5,420	1,268	218	42	6,948
405	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	6,261	1,464	218	42	7,986	6,447	1,508	218	42	8,215
406	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	5,684	1,329	218	42	7,273	5,852	1,369	218	42	7,481
407	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	4,645	1,086	218	42	5,991	4,745	1,110	218	42	6,115
408	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	6,338	1,482	218	42	8,080	6,465	1,512	218	42	8,237
409	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	4,951	1,158	218	42	6,370	5,099	1,192	218	42	6,552
410	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	7,456	1,744	218	42	9,461	7,605	1,778	218	42	9,643
411	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	4,909	1,148	218	42	6,318	5,055	1,182	218	42	6,497
412	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	5,080	1,188	218	42	6,528	5,187	1,213	218	42	6,661
413	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	5,629	1,316	218	42	7,205	5,794	1,355	218	42	7,410
414	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	5,112	1,195	218	42	6,568	5,221	1,221	218	42	6,702
415	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	4,899	1,146	218	42	6,305	5,004	1,170	218	42	6,435
416	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	8,866	2,073	218	42	11,199	9,103	2,129	218	42	11,493
417	244601	KANE-Production	Operator U537O	9/9/2019	4,776	1,117	218	42	6,154	4,880	1,141	218	42	6,281
418	243151	NEWC-New Castle	Operator U537O	9/23/2019	6,436	1,505	218	42	8,201	6,574	1,537	218	42	8,372
419	243301	BUTL-Production	Operator U537O	9/23/2019	6,290	1,471	218	42	8,022	6,424	1,502	218	42	8,187
420	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	6,174	1,444	218	42	7,878	6,340	1,483	218	42	8,084
421	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	5,791	1,354	218	42	7,406	5,914	1,383	218	42	7,558
422	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	5,321	1,244	218	42	6,826	5,477	1,281	218	42	7,018
423	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	4,778	1,118	218	42	6,156	4,925	1,152	218	42	6,337
424	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	4,577	1,071	218	42	5,908	4,714	1,102	218	42	6,077
425	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	5,701	1,333	218	42	7,295	5,822	1,362	218	42	7,444
426	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	5,150	1,205	218	42	6,615	5,260	1,230	218	42	6,751
427	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	4,889	1,143	218	42	6,292	5,033	1,177	218	42	6,471
428	244301	CLAR-Production	Operator U537O	4/27/2020	5,591	1,308	218	42	7,159	5,712	1,336	218	42	7,308
429	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	4,558	1,066	218	42	5,884	4,694	1,098	218	42	6,053
430	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	4,606	1,077	218	42	5,943	4,731	1,106	218	42	6,098
431	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	6,607	1,545	218	42	8,412	6,783	1,586	218	42	8,630
432	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	5,464	1,278	218	42	7,002	5,581	1,305	218	42	7,146
433	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	4,534	1,060	218	42	5,855	4,633	1,084	218	42	5,977
434	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	4,466	1,044	218	42	5,771	4,601	1,076	218	42	5,937
435	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	4,223	988	218	42	5,471	4,306	1,007	218	42	5,574
436	245206	YARD-Field Services	Utility B F473Y	7/13/2020	3,813	892	218	42	4,966	3,914	915	218	42	5,090
437	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	6,564	1,535	218	42	8,359	6,746	1,578	218	42	8,584
438	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	4,263	997	218	42	5,520	4,400	1,029	218	42	5,690
439	249160	WILK-Watres	Plant Operator U648S	12/15/2020	5,099	1,193	218	42	6,552	5,251	1,228	218	42	6,739
440	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	6,303	1,474	218	42	8,037	6,489	1,518	218	42	8,267
441	249160	WILK-Watres	Plant Operator U648S	12/21/2020	4,841	1,132	218	42	6,234	4,986	1,166	218	42	6,412
442	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	4,611	1,078	218	42	5,949	4,752	1,111	218	42	6,123
443	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	4,721	1,104	218	42	6,086	4,866	1,138	218	42	6,264
444	245206	YARD-Field Services	Utility B F473Y	3/15/2021	3,876	907	218	42	5,043	3,979	931	218	42	5,170
445	244101	INDI-Production	Operator U537O	3/22/2021	5,323	1,245	218	42	6,828	5,440	1,272	218	42	6,972
446	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	4,491	1,050	218	42	5,801	4,590	1,074	218	42	5,924
447	243152	NEWC-Ellwood	Operator U537O	4/26/2021	5,349	1,251	218	42	6,860	5,467	1,279	218	42	7,006
448	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	4,930	1,153	218	42	6,344	5,080	1,188	218	42	6,529
449	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	4,684	1,095	218	42	6,039	4,826	1,129	218	42	6,215
450	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	5,097	1,192	218	42	6,550	5,206	1,218	218	42	6,684
451	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	5,446	1,274	218	42	6,980	5,562	1,301	218	42	7,124
452	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	5,123	1,198	218	42	6,581	5,233	1,224	218	42	6,718
453	241106	PITT-Field Services	Utility Person U537P	5/24/2021	6,135	1,435	218	42	7,830	6,305	1,475	218	42	8,040
454	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	4,656	1,089	218	42	6,005	4,758	1,113	218	42	6,131
455	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	4,761	1,113	218	42	6,135	4,906	1,147	218	42	6,314
456	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	4,875	1,140	218	42	6,276	4,984	1,166	218	42	6,410
457	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	4,776	1,117	218	42	6,154	4,921	1,151	218	42	6,332
458	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	4,564	1,067	218	42	5,892	4,666	1,091	218	42	6,018
459	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	4,647	1,087	218	42	5,994	4,762	1,114	218	42	6,136
460	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	5,189	1,214	218	42	6,663	5,349	1,251	218	42	6,860
461	244506	WARR-Field Services	Utility Person U537O	8/16/2021	4,548	1,064	218	42	5,872	4,652	1,088	218	42	6,000
462	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	5,026	1,176	218	42	6,462	5,137	1,201	218	42	6,599
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	5,537	1,295	218	42	7,092	5,666	1,325	218	42	7,252
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	4,240	992	218	42	5,492	4,338	1,014	218	42	5,613
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	5,326	1,246	218	42	6,831	5,491	1,284	218	42	7,035
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	5,502	1,287	218	42	7,049	5,670	1,326	218	42	7,257
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	4,108	961	218	42	5,329	4,226	988	218	42	5,475
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	5,108	1,195	218	42	6,563	5,234	1,224	218	42	6,719
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	4,626	1,082	218	42	5,969	4,768	1,115	218	42	6,143

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					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
401	249152	WILK-Ceasetown	Plant Operator U648S	2/11/2019	5,409	1,265	218	42	6,935
402	249106	WILK-Field Services	M/C Crew Leader U648S	2/11/2019	5,727	1,339	218	42	7,327
403	249106	WILK-Field Services	M/C Utility Person U648S	3/12/2019	6,450	1,509	218	42	8,219
404	249106	WILK-Field Services	M/C Crew Leader U648S	3/13/2019	5,580	1,305	218	42	7,146
405	249106	WILK-Field Services	M/C Technician U648S	3/18/2019	6,638	1,552	218	42	8,451
406	249106	WILK-Field Services	M/C Technician U648S	7/8/2019	6,025	1,409	218	42	7,695
407	242106	MCMR-Field Services	Utility Person U537O	7/8/2019	4,848	1,134	218	42	6,243
408	242106	MCMR-Field Services	Utility Person U537O	7/9/2019	6,595	1,542	218	42	8,398
409	249160	WILK-Watres	Maintenance/Relief Operator U648S	7/29/2019	5,253	1,228	218	42	6,741
410	242206	MONVA-Field Services	Utility Person U537O	7/29/2019	7,757	1,814	218	42	9,831
411	249151	WILK-Brownell	Plant Operator U648S	7/30/2019	5,206	1,218	218	42	6,684
412	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	8/5/2019	5,296	1,239	218	42	6,795
413	249106	WILK-Field Services	M/C Crew Leader U648S	8/6/2019	5,965	1,395	218	42	7,621
414	243306	BUTL-Field Services	Utility Person U537O	8/5/2019	5,333	1,247	218	42	6,841
415	242106	MCMR-Field Services	Pipeline Inspector U537O	8/12/2019	5,109	1,195	218	42	6,564
416	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	8/12/2019	9,346	2,186	218	42	11,793
417	244601	KANE-Production	Operator U537O	9/9/2019	4,986	1,166	218	42	6,412
418	243151	NEWC-New Castle	Operator U537O	9/23/2019	6,716	1,571	218	42	8,547
419	243301	BUTL-Production	Operator U537O	9/23/2019	6,562	1,535	218	42	8,357
420	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	10/7/2019	6,511	1,523	218	42	8,294
421	242106	MCMR-Field Services	Pipeline Inspector U537O	10/21/2019	6,037	1,412	218	42	7,710
422	249159	WILK-Nesbitt	Plant Operator U648S	11/25/2019	5,639	1,319	218	42	7,218
423	246152	MECH-Silver Springs	Plant Operator U648R	2/10/2020	5,061	1,184	218	42	6,506
424	249103	WILK-Cust Service	Serviceperson U648S	3/2/2020	4,855	1,135	218	42	6,251
425	244306	CLAR-Field Services	Utility Person U537O	3/2/2020	5,947	1,391	218	42	7,598
426	242106	MCMR-Field Services	Pipeline Inspector U537O	3/17/2020	5,370	1,256	218	42	6,886
427	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	4/13/2020	5,184	1,212	218	42	6,657
428	244301	CLAR-Production	Operator U537O	4/27/2020	5,835	1,365	218	42	7,461
429	249106	WILK-Field Services	Leak Detection Specialist U648S	4/27/2020	4,835	1,131	218	42	6,226
430	240117	CORP-Water Quality	Lab Technician II UWUA 433	5/18/2020	4,851	1,134	218	42	6,246
431	241106	PITT-Field Services	Utility Service Crew Driver U537P	4/27/2020	6,965	1,629	218	42	8,855
432	242103	MCMR-Cust Service	Meter Repairer U537O	5/11/2020	5,700	1,333	218	42	7,294
433	242203	MONVAL-Cust Service	Distribution System Serviceperson U537O	6/8/2020	4,733	1,107	218	42	6,101
434	249103	WILK-Cust Service	Serviceperson U648S	7/13/2020	4,740	1,109	218	42	6,109
435	240117	CORP-Water Quality	Lab Tech/IPP Compliance	7/6/2020	4,391	1,027	218	42	5,678
436	245206	YARD-Field Services	Utility B F473Y	7/13/2020	4,013	939	218	42	5,212
437	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	7/27/2020	6,931	1,621	218	42	8,813
438	249152	WILK-Ceasetown	Plant Operator U648S	10/26/2020	4,544	1,063	218	42	5,867
439	249160	WILK-Watres	Plant Operator U648S	12/15/2020	5,409	1,265	218	42	6,934
440	249106	WILK-Field Services	M/C Crew Leader U648S	12/14/2020	6,681	1,563	218	42	8,504
441	249160	WILK-Watres	Plant Operator U648S	12/21/2020	5,137	1,201	218	42	6,598
442	246151	MECH-ProdWestShore	Plant Operator U648R	2/1/2021	4,884	1,142	218	42	6,286
443	246152	MECH-Silver Springs	Plant Operator U648R	3/8/2021	5,001	1,170	218	42	6,431
444	245206	YARD-Field Services	Utility B F473Y	3/15/2021	4,080	954	218	42	5,294
445	244101	INDI-Production	Operator U537O	3/22/2021	5,560	1,300	218	42	7,121
446	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	4/5/2021	4,691	1,097	218	42	6,049
447	243152	NEWC-Ellwood	Operator U537O	4/26/2021	5,589	1,307	218	42	7,156
448	249106	WILK-Field Services	M/C Crew Leader U648S	4/26/2021	5,235	1,224	218	42	6,720
449	249106	WILK-Field Services	M/C Utility Person U648S	5/3/2021	4,973	1,163	218	42	6,397
450	242106	MCMR-Field Services	Utility Person U537O	5/3/2021	5,318	1,244	218	42	6,823
451	243106	NEWC-Field Services	Utility Person U537O	5/4/2021	5,682	1,329	218	42	7,271
452	242306	UNTN-Field Services	Utility Person U537O	5/17/2021	5,347	1,251	218	42	6,858
453	241106	PITT-Field Services	Utility Person U537P	5/24/2021	6,479	1,515	218	42	8,254
454	243106	NEWC-Field Services	Utility Person U537O	5/24/2021	4,862	1,137	218	42	6,260
455	249106	WILK-Field Services	M/C Utility Person U648S	6/7/2021	5,057	1,183	218	42	6,500
456	244101	INDI-Production	Helper/Relief Operator U537O	6/7/2021	5,096	1,192	218	42	6,548
457	249106	WILK-Field Services	M/C Technician U648S	6/8/2021	5,069	1,186	218	42	6,515
458	243301	BUTL-Production	Helper/Relief Operator U537O	6/14/2021	4,771	1,116	218	42	6,147
459	245106	NORR-Field Services	Utility Person A F473N	7/8/2021	4,894	1,145	218	42	6,299
460	249158	WILK-Lake Scranton	Plant Operator U648S	8/16/2021	5,515	1,290	218	42	7,065
461	244506	WARR-Field Services	Utility Person U537O	8/16/2021	4,759	1,113	218	42	6,132
462	242206	MONVA-Field Services	Utility Person U537O	8/16/2021	5,251	1,228	218	42	6,739
463	245101	NORR-Production	Floating Plant Operator F473N	8/16/2021	5,815	1,360	218	42	7,435
464	244606	KANE-Field Services	Utility Person U537O	8/30/2021	4,438	1,038	218	42	5,736
465	249106	WILK-Field Services	M/C Crew Leader U648S	9/14/2021	5,661	1,324	218	42	7,245
466	249106	WILK-Field Services	M/C Crew Leader U648S	9/13/2021	5,845	1,367	218	42	7,472
467	241106	PITT-Field Services	Shop Clerk U537P	10/25/2021	4,348	1,017	218	42	5,626
468	245106	NORR-Field Services	Utility Person A F473N	11/1/2021	5,378	1,258	218	42	6,897
469	249158	WILK-Lake Scranton	Plant Operator U648S	11/15/2021	4,916	1,150	218	42	6,326

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					2023 Gross Payroll Taxes						2024 Gross Payroll Taxes					
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes		FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes	
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	4,848	1,134	218	42	6,242		4,968	1,162	218	42	6,390	
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	4,236	991	218	42	5,487		4,341	1,015	218	42	5,616	
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	5,409	1,265	218	42	6,934		5,562	1,301	218	42	7,123	
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	5,157	1,206	218	42	6,623		5,302	1,240	218	42	6,803	
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	5,112	1,196	218	42	6,568		5,272	1,233	218	42	6,765	
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	4,575	1,070	218	42	5,905		4,718	1,103	218	42	6,082	
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	5,790	1,354	218	42	7,405		5,953	1,392	218	42	7,605	
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	4,237	991	218	42	5,488		4,334	1,014	218	42	5,608	
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	4,132	966	218	42	5,358		4,227	989	218	42	5,476	
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	4,489	1,050	218	42	5,799		4,629	1,083	218	42	5,972	
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	4,144	969	218	42	5,373		4,246	993	218	42	5,500	
481	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	4,184	979	218	42	5,423		4,303	1,006	218	42	5,570	
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	4,794	1,121	218	42	6,175		4,931	1,153	218	42	6,345	
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	4,083	955	218	42	5,299		4,214	985	218	42	5,459	
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	5,099	1,193	218	42	6,552		5,259	1,230	218	42	6,749	
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	5,762	1,348	218	42	7,370		5,924	1,385	218	42	7,570	
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	5,117	1,197	218	42	6,574		5,261	1,230	218	42	6,752	
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	4,390	1,027	218	42	5,678		4,529	1,059	218	42	5,849	
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	4,516	1,056	218	42	5,832		4,656	1,089	218	42	6,006	
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	4,685	1,096	218	42	6,041		4,832	1,130	218	42	6,222	
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022	5,146	1,203	218	42	6,609		5,293	1,238	218	42	6,791	
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	4,988	1,167	218	42	6,415		5,130	1,200	218	42	6,591	
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	5,258	1,230	218	42	6,748		5,408	1,265	218	42	6,934	
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	4,758	1,113	218	42	6,131		4,893	1,144	218	42	6,298	
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	5,610	1,312	218	42	7,182		5,768	1,349	218	42	7,378	
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	4,058	949	218	42	5,267		4,191	980	218	42	5,431	
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	3,861	903	218	42	5,025		3,987	932	218	42	5,180	
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	4,526	1,059	218	42	5,845		4,637	1,085	218	42	5,982	
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	5,178	1,211	218	42	6,649		5,325	1,245	218	42	6,831	
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	5,809	1,358	218	42	7,427		5,974	1,397	218	42	7,632	
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	4,535	1,061	218	42	5,856		4,679	1,094	218	42	6,034	
501	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	4,531	1,060	218	42	5,851		4,660	1,090	218	42	6,010	
502	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	4,650	1,087	218	42	5,997		4,782	1,118	218	42	6,161	
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	4,943	1,156	218	42	6,360		5,102	1,193	218	42	6,555	
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	5,058	1,183	218	42	6,501		5,201	1,216	218	42	6,678	
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	4,154	972	218	42	5,386		4,260	996	218	42	5,517	
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	3,915	916	218	42	5,091		4,018	940	218	42	5,218	
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	4,437	1,038	218	42	5,735		4,580	1,071	218	42	5,911	
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	4,116	963	218	42	5,339		4,213	985	218	42	5,459	
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	4,212	985	218	42	5,457		4,348	1,017	218	42	5,625	
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	4,806	1,124	218	42	6,191		4,944	1,156	218	42	6,360	
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	4,927	1,152	218	42	6,339		5,067	1,185	218	42	6,513	
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	4,842	1,132	218	42	6,235		4,981	1,165	218	42	6,406	
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	4,110	961	218	42	5,331		4,207	984	218	42	5,451	
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	4,213	985	218	42	5,459		4,313	1,009	218	42	5,583	
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	4,806	1,124	218	42	6,190		4,956	1,159	218	42	6,376	
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	3,987	932	218	42	5,180		4,082	955	218	42	5,297	
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	4,279	1,001	218	42	5,540		4,381	1,025	218	42	5,666	
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	4,691	1,097	218	42	6,048		4,825	1,129	218	42	6,214	
519	243301	BUTL-Production	Operator U537O	3/20/2023	4,357	1,019	218	42	5,636		4,460	1,043	218	42	5,764	
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	4,574	1,070	218	42	5,904		4,683	1,095	218	42	6,038	
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	3,897	911	218	42	5,069		4,025	941	218	42	5,227	
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	4,486	1,049	218	42	5,795		4,614	1,079	218	42	5,954	
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	4,366	1,021	218	42	5,647		4,469	1,045	218	42	5,775	
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	4,358	1,019	218	42	5,637		4,483	1,049	218	42	5,792	
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	4,253	995	218	42	5,508		4,376	1,023	218	42	5,660	
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	3,630	849	218	42	4,739		3,724	871	218	42	4,855	
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	4,045	946	218	42	5,251		4,178	977	218	42	5,415	
528	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	4,084	955	218	42	5,299		4,201	982	218	42	5,444	
529	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	4,082	955	218	42	5,297		4,199	982	218	42	5,442	
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	3,892	910	218	42	5,063		4,020	940	218	42	5,221	
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023	3,910	914	218	42	5,084		4,003	936	218	42	5,199	
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	3,908	914	218	42	5,083		4,002	936	218	42	5,198	
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023	3,922	917	218	42	5,099		4,016	939	218	42	5,216	
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023	4,257	996	218	42	5,513		4,379	1,024	218	42	5,663	
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	3,888	909	218	42	5,058		4,016	939	218	42	5,216	
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023	3,660	856	218	42	4,776		3,781	884	218	42	4,926	
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023	-	-	-	-	-		4,766	1,115	218	42	6,140	
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023	-	-	-	-	-		4,596	1,075	218	42	5,931	
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	-	-	-	-	-		4,135	967	218	42	5,362	
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	-	-	-	-	-		4,135	967	218	42	5,362	
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	-	-	-	-	-		4,002	936	218	42	5,198	
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023	-	-	-	-	-		4,196	981	218	42	5,438	
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023	-	-	-	-	-		4,402	1,029	218	42	5,691	
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023	-	-	-	-	-		4,274	999	218	42	5,533	
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023	-	-	-	-	-		4,263	997	218	42	5,520	
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023	-	-	-	-	-		4,731	1,106	218	42	6,098	
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023	-	-	-	-	-		4,019	940	218	42	5,219	
			Total Collective Bargaining Unit		$2,885,140	$674,821	$117,030	$22,512	$3,699,503		$3,005,078	$701,799	$119,432	$22,974	$3,849,282	
														Vacancy Rate	1.76%	
														Vacancy Adjustment	$67,625	
														Total Collective Bargaining Unit	$3,781,658	

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
470	245106	NORR-Field Services	Utility Person B F473N	11/15/2021	5,105	1,194	218	42	6,560
471	245103	NORR-Cust Service	Serviceperson F473N	11/22/2021	4,460	1,043	218	42	5,763
472	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	11/22/2021	5,719	1,338	218	42	7,317
473	241151	PITT-Production Haye	Operator (Rotating) U537P	12/6/2021	5,453	1,275	218	42	6,988
474	249106	WILK-Field Services	M/C Utility Person U648S	12/13/2021	5,436	1,271	218	42	6,968
475	246151	MECH-ProdWestShore	Maint & Relief U648R	1/24/2022	4,851	1,134	218	42	6,245
476	241106	PITT-Field Services	Utility Person U537P	1/18/2022	6,119	1,431	218	42	7,811
477	244106	INDI-Field Services	Utility Person U537O	2/14/2022	4,434	1,037	218	42	5,731
478	242103	MCMR-Cust Service	Distribution System Serviceperson U537O	2/7/2022	4,324	1,011	218	42	5,596
479	249152	WILK-Ceasetown	Plant Operator U648S	2/22/2022	4,776	1,117	218	42	6,153
480	245101	NORR-Production	Maint&Relief F473N	3/7/2022	4,363	1,020	218	42	5,643
481	241103	PITT-Cust Service	Field Service Representative U537P	3/7/2022	4,426	1,035	218	42	5,722
482	241106	PITT-Field Services	Utility Person U537P	3/8/2022	5,072	1,186	218	42	6,519
483	249106	WILK-Field Services	M/C Utility Person U648S	3/28/2022	4,348	1,017	218	42	5,625
484	249160	WILK-Watres	Plant Operator U648S	3/29/2022	5,425	1,269	218	42	6,954
485	241106	PITT-Field Services	Utility Person U537P	3/28/2022	6,090	1,424	218	42	7,774
486	241106	PITT-Field Services	Utility Person U537P	4/5/2022	5,409	1,265	218	42	6,934
487	249106	WILK-Field Services	M/C Crew Leader U648S	3/29/2022	4,672	1,093	218	42	6,025
488	246152	MECH-Silver Springs	Plant Operator U648R	4/11/2022	4,788	1,120	218	42	6,168
489	249152	WILK-Ceasetown	Plant Operator U648S	4/18/2022	4,985	1,166	218	42	6,411
490	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/11/2022	5,443	1,273	218	42	6,977
491	241106	PITT-Field Services	Utility Person U537P	4/4/2022	5,276	1,234	218	42	6,770
492	241106	PITT-Field Services	Utility Person U537P	4/12/2022	5,562	1,301	218	42	7,123
493	241106	PITT-Field Services	Utility Person U537P	4/26/2022	5,031	1,177	218	42	6,468
494	241151	PITT-Production Haye	Operator (Rotating) U537P	4/25/2022	5,932	1,387	218	42	7,580
495	249152	WILK-Ceasetown	Plant Operator U648S	6/13/2022	4,329	1,012	218	42	5,602
496	246106	MECH-Field Services	Utility Person U648R	5/16/2022	4,103	960	218	42	5,323
497	245101	NORR-Production	Maint&Relief F473N	5/23/2022	4,763	1,114	218	42	6,138
498	241106	PITT-Field Services	Utility Equipment Operator U537P	6/13/2022	5,477	1,281	218	42	7,019
499	241106	PITT-Field Services	Utility Service Crew Driver U537P	6/20/2022	6,146	1,437	218	42	7,843
500	249158	WILK-Lake Scranton	Plant Operator U648S	7/5/2022	4,829	1,129	218	42	6,219
501	241103	PITT-Cust Service	Field Service Representative U537P	6/29/2022	4,793	1,121	218	42	6,175
502	241103	PITT-Cust Service	Field Service Representative U537P	6/28/2022	4,919	1,150	218	42	6,330
503	249106	WILK-Field Services	M/C Crew Leader U648S	8/22/2022	5,265	1,231	218	42	6,757
504	241106	PITT-Field Services	Utility Equipment Operator U537P	9/6/2022	5,349	1,251	218	42	6,860
505	245106	NORR-Field Services	Utility Person B F473N	9/26/2022	4,382	1,025	218	42	5,667
506	245201	YARD-Production	Plant Operator F473Y	10/10/2022	4,119	963	218	42	5,343
507	249106	WILK-Field Services	M/C Technician U648S	10/10/2022	4,727	1,105	218	42	6,093
508	244206	PUNX-Field Services	Utility Person U537O	10/24/2022	4,313	1,009	218	42	5,582
509	249103	WILK-Cust Service	Serviceperson U648S	12/12/2022	4,489	1,050	218	42	5,799
510	241106	PITT-Field Services	Utility Dump Truck Driver U537P	1/3/2023	5,086	1,189	218	42	6,536
511	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/9/2023	5,211	1,219	218	42	6,690
512	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	1/17/2023	5,123	1,198	218	42	6,581
513	242106	MCMR-Field Services	Utility Person U537O	2/14/2023	4,307	1,007	218	42	5,574
514	242106	MCMR-Field Services	Utility Person U537O	2/13/2023	4,416	1,033	218	42	5,709
515	246152	MECH-Silver Springs	Maint & Relief U648R	2/15/2023	5,096	1,192	218	42	6,548
516	242106	MCMR-Field Services	Utility Person U537O	2/20/2023	4,179	977	218	42	5,417
517	243152	NEWC-Ellwood	Helper/Relief Operator U537O	3/6/2023	4,486	1,049	218	42	5,795
518	241106	PITT-Field Services	Utility Compressor Operator/Crew Leader	3/13/2023	4,963	1,161	218	42	6,384
519	243301	BUTL-Production	Operator U537O	3/20/2023	4,566	1,068	218	42	5,895
520	243151	NEWC-New Castle	Operator U537O	3/13/2023	4,794	1,121	218	42	6,176
521	249103	WILK-Cust Service	Serviceperson U648S	4/3/2023	4,157	972	218	42	5,390
522	241106	PITT-Field Services	Utility Dump Truck Driver U537P	4/3/2023	4,747	1,110	218	42	6,118
523	243152	NEWC-Ellwood	Operator U537O	4/10/2023	4,576	1,070	218	42	5,906
524	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	4,612	1,079	218	42	5,951
525	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	4/17/2023	4,501	1,053	218	42	5,814
526	245106	NORR-Field Services	Utility Person B F473N	4/24/2023	3,831	896	218	42	4,987
527	249158	WILK-Lake Scranton	Plant Operator U648S	4/17/2023	4,316	1,009	218	42	5,586
528	241103	PITT-Cust Service	Field Service Representative U537P	4/17/2023	4,322	1,011	218	42	5,593
529	241103	PITT-Cust Service	Field Service Representative U537P	5/1/2023	4,320	1,010	218	42	5,591
530	249160	WILK-Watres	Plant Operator U648S	5/1/2023	4,154	971	218	42	5,386
531	243106	NEWC-Field Services	Utility Person U537O	5/30/2023	4,099	959	218	42	5,318
532	243106	NEWC-Field Services	Utility Person U537O	5/22/2023	4,098	958	218	42	5,316
533	243306	BUTL-Field Services	Distribution System Serviceperson U537O	5/22/2023	4,112	962	218	42	5,334
534	241152	PITT-Production Aldr	Maintenance Relief Person U537P	5/22/2023	4,505	1,054	218	42	5,818
535	249106	WILK-Field Services	M/C Technician U648S	6/5/2023	4,148	970	218	42	5,379
536	246106	MECH-Field Services	Utility Person U648R	6/26/2023	3,894	911	218	42	5,064
537	245101	NORR-Production	Working Maint Foreperson F473N - To Be Filled	12/31/2023	4,884	1,142	218	42	6,287
538	244301	CLAR-Production	Operator U537O - To Be Filled	12/31/2023	4,696	1,098	218	42	6,055
539	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	4,231	989	218	42	5,481
540	244506	WARR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	4,231	989	218	42	5,481
541	242106	MCMR-Field Services	Utility Person U537O - To Be Filled	12/31/2023	4,098	958	218	42	5,316
542	243152	NEWC-Ellwood	Operator U537O - To Be Filled	12/31/2023	4,296	1,005	218	42	5,561
543	244301	CLAR-Production	Maintenance Person U537O - To Be Filled	12/31/2023	4,498	1,052	218	42	5,810
544	241152	PITT-Production Aldr	Assistant Operator/Maintenance (Rotating) - To Be Filled	12/31/2023	4,396	1,028	218	42	5,685
545	241152	PITT-Production Aldr	Maintenance Relief Person - To Be Filled	12/31/2023	4,386	1,026	218	42	5,672
546	240117	CORP-Water Quality	Lab Technician II UWUA 433 - To Be Filled	12/31/2023	4,851	1,134	218	42	6,246
547	249158	WILK-Lake Scranton	Plant Operator U648S - To Be Filled	12/31/2023	4,152	971	218	42	5,384
				Total Collective Bargaining Unit	$3,080,430	$719,430	$119,432	$22,974	$3,942,266
								Vacancy Rate	1.76%
								Vacancy Adjustment	$69,258
								Total Collective Bargaining Unit	$3,873,008

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Hourly														
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	$4,717	$1,103	$218	$42	$6,081	$4,907	$1,148	$218	$42	$6,315
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	6,549	1,532	218	42	8,341	6,810	1,593	218	42	8,663
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	5,105	1,194	218	42	6,559	5,310	1,242	218	42	6,812
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	5,362	1,254	218	42	6,877	5,578	1,305	218	42	7,143
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	10/3/1988	4,622	1,081	218	42	5,963	4,808	1,124	218	42	6,193
6	246801	LEHP-Production	Plant Operator	2/1/1996	5,850	1,368	218	42	7,479	6,084	1,423	218	42	7,767
7	245706	POCO-Field Services	Crew Leader	9/16/1996	5,342	1,249	218	42	6,852	5,556	1,299	218	42	7,116
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	4,793	1,121	218	42	6,174	4,986	1,166	218	42	6,412
9	245706	POCO-Field Services	Utility Person	7/1/1994	5,192	1,214	218	42	6,666	5,399	1,263	218	42	6,922
10	245501	BNGR-Production	Plant Operator	7/23/1990	6,051	1,415	218	42	7,727	6,293	1,472	218	42	8,025
11	247406	FRCK-Field Services	Utility Person	4/18/1988	4,743	1,109	218	42	6,113	4,932	1,154	218	42	6,346
12	247406	FRCK-Field Services	Utility Person	1/15/1986	5,106	1,194	218	42	6,560	5,310	1,242	218	42	6,812
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	4,406	1,031	218	42	5,697	4,583	1,072	218	42	5,915
14	246201	HSHY-Production	Plant Operator	9/27/1993	5,383	1,259	218	42	6,903	5,598	1,309	218	42	7,168
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	4,502	1,053	218	42	5,815	4,682	1,095	218	42	6,037
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	5,280	1,235	218	42	6,775	5,492	1,284	218	42	7,036
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	5,652	1,322	218	42	7,235	5,879	1,375	218	42	7,514
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990	4,320	1,010	218	42	5,591	4,493	1,051	218	42	5,805
19	247106	MILT-Field Services	Utility Person	11/16/1998	5,026	1,176	218	42	6,462	5,228	1,223	218	42	6,711
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	4,816	1,126	218	42	6,203	5,008	1,171	218	42	6,440
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	4,329	1,012	218	42	5,601	4,502	1,053	218	42	5,815
22	246506	COAT-Field Services	Utility Person	1/26/1998	4,177	977	218	42	5,415	4,345	1,016	218	42	5,622
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	5,583	1,306	218	42	7,149	5,806	1,358	218	42	7,424
24	245906	GLEN-Field Services	Utility Person	12/27/1994	5,629	1,316	218	42	7,206	5,853	1,369	218	42	7,482
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999	5,254	1,229	218	42	6,743	5,464	1,278	218	42	7,003
26	245606	NAZA-Field Services	Utility Person	10/4/1993	5,254	1,229	218	42	6,743	5,464	1,278	218	42	7,002
27	245906	GLEN-Field Services	Utility Person	6/20/1983	5,048	1,181	218	42	6,489	5,250	1,228	218	42	6,738
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	5,834	1,364	218	42	7,459	6,067	1,419	218	42	7,746
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	5,657	1,323	218	42	7,241	5,882	1,376	218	42	7,518
30	246401	ROYF-Production	Plant Operator	3/9/1998	5,725	1,339	218	42	7,325	5,952	1,392	218	42	7,605
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987	6,446	1,507	218	42	8,214	6,703	1,568	218	42	8,531
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	5,554	1,299	218	42	7,114	5,777	1,351	218	42	7,388
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	4,974	1,163	218	42	6,398	5,173	1,210	218	42	6,643
34	245606	NAZA-Field Services	Utility Person	11/26/2001	5,555	1,299	218	42	7,115	5,777	1,351	218	42	7,388
35	246801	LEHP-Production	Utility Person	2/26/1990	4,959	1,160	218	42	6,379	5,158	1,206	218	42	6,625
36	246501	COAT-Production	Plant Operator	5/28/2002	6,198	1,449	218	42	7,907	6,445	1,507	218	42	8,213
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	4,807	1,124	218	42	6,191	4,999	1,169	218	42	6,429
38	245906	GLEN-Field Services	Utility Person	1/5/2004	5,414	1,266	218	42	6,941	5,631	1,317	218	42	7,209
39	245606	NAZA-Field Services	Utility Person	2/16/2004	5,112	1,195	218	42	6,568	5,317	1,243	218	42	6,820
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N)	12/1/2004	4,319	1,010	218	42	5,589	4,493	1,051	218	42	5,804
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	4,728	1,106	218	42	6,094	4,917	1,150	218	42	6,328
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	5,107	1,194	218	42	6,562	5,311	1,242	218	42	6,814
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	5,160	1,207	218	42	6,627	5,366	1,255	218	42	6,881
44	245506	BNGR-Field Services	Utility Person	11/7/2005	4,961	1,160	218	42	6,382	5,161	1,207	218	42	6,628
45	245401	SUSQ-Production	Plant Operator	5/15/2006	5,043	1,179	218	42	6,482	5,244	1,226	218	42	6,731
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006	5,223	1,221	218	42	6,705	5,432	1,270	218	42	6,962
47	245606	NAZA-Field Services	Utility Person	12/18/2006	5,049	1,181	218	42	6,490	5,251	1,228	218	42	6,739
48	246206	HSHY-Field Services	Utility Person	3/26/2007	6,160	1,441	218	42	7,861	6,406	1,498	218	42	8,165
49	247106	MILT-Field Services	Utility Person	5/7/2007	4,476	1,047	218	42	5,783	4,655	1,089	218	42	6,004
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	4,953	1,158	218	42	6,372	5,152	1,205	218	42	6,617
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	5,120	1,197	218	42	6,578	5,325	1,245	218	42	6,831
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007	8,316	1,945	218	42	10,521	8,646	2,022	218	42	10,928
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	6,357	1,487	218	42	8,104	6,611	1,546	218	42	8,418
54	247201	PHBG-Production	Operations Specialist	6/2/2008	5,219	1,221	218	42	6,700	5,428	1,270	218	42	6,958
55	247106	MILT-Field Services	Utility Person	7/21/2008	4,495	1,051	218	42	5,807	4,675	1,093	218	42	6,029
56	246501	COAT-Production	Plant Operator	10/6/2008	5,414	1,266	218	42	6,941	5,631	1,317	218	42	7,208
57	247701	BOGGS-Production	Plant Operator	5/4/2009	4,981	1,165	218	42	6,406	5,180	1,212	218	42	6,652
58	245706	POCO-Field Services	Utility Person	9/28/2009	5,459	1,277	218	42	6,996	5,678	1,328	218	42	7,266
59	246506	COAT-Field Services	Utility Person	11/2/2009	5,083	1,189	218	42	6,532	5,286	1,236	218	42	6,783
60	247401	FRCK-Production	Operator	1/25/2010	4,735	1,107	218	42	6,103	4,924	1,152	218	42	6,336
61	247206	PHBG-Field Services	Utility Person	3/29/2010	5,020	1,174	218	42	6,454	5,220	1,221	218	42	6,701
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	5,422	1,268	218	42	6,950	5,640	1,319	218	42	7,219
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	6,142	1,436	218	42	7,838	6,387	1,494	218	42	8,141
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	5,576	1,304	218	42	7,140	5,799	1,356	218	42	7,416
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	4,160	973	218	42	5,393	4,326	1,012	218	42	5,598
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	4,999	1,169	218	42	6,428	5,198	1,216	218	42	6,675
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	6,558	1,534	218	42	8,352	6,820	1,595	218	42	8,675
68	247206	PHBG-Field Services	Utility Person	11/7/2011	4,717	1,103	218	42	6,081	4,906	1,147	218	42	6,314
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	4,024	941	218	42	5,225	4,185	979	218	42	5,424
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	4,376	1,024	218	42	5,660	4,551	1,064	218	42	5,876
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	4,329	1,012	218	42	5,601	4,502	1,053	218	42	5,815
72	249150	WILK-Other	Operations Specialist	3/4/2013	4,296	1,005	218	42	5,560	4,467	1,045	218	42	5,772
73	247306	BRWK-Field Services	Utility Person	4/29/2013	5,247	1,227	218	42	6,734	5,458	1,276	218	42	6,994
74	245601	NAZA-Production	Plant Operator	6/27/2013	7,504	1,755	218	42	9,520	7,804	1,825	218	42	9,890
75	247301	BRWK-Production	Operator	9/16/2013	5,292	1,238	218	42	6,790	5,504	1,287	218	42	7,052

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					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
Non-Collective Bargaining Unit Hourly									
1	242105	MCMR-Admin & Gen	Operations Specialist	3/13/1990	$5,078	$1,188	$218	$42	$6,526
2	240116	CORP-Maint Services	Sr Automation & Controls Tech	12/2/1996	7,046	1,648	218	42	8,954
3	243106	NEWC-Field Services	Operations Specialist	6/26/1989	5,496	1,285	218	42	7,041
4	249103	WILK-Cust Service	Operations Specialist	10/27/1980	5,772	1,350	218	42	7,383
5	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	10/3/1988	4,976	1,164	218	42	6,400
6	246801	LEHP-Production	Plant Operator	2/1/1996	6,295	1,472	218	42	8,028
7	245706	POCO-Field Services	Crew Leader	9/16/1996	5,749	1,344	218	42	7,354
8	245406	SUSQ-Field Services	Utility Person	2/20/1990	5,159	1,207	218	42	6,626
9	245706	POCO-Field Services	Utility Person	7/1/1994	5,586	1,306	218	42	7,153
10	245501	BNGR-Production	Plant Operator	7/23/1990	6,512	1,523	218	42	8,296
11	247406	FRCK-Field Services	Utility Person	4/18/1988	5,103	1,194	218	42	6,557
12	247406	FRCK-Field Services	Utility Person	1/15/1986	5,494	1,285	218	42	7,039
13	247106	MILT-Field Services	Operations Specialist	6/14/1979	4,742	1,109	218	42	6,111
14	246201	HSHY-Production	Plant Operator	9/27/1993	5,792	1,355	218	42	7,407
15	247150	MILT-Prod Other	Maintenance/Relief Operator	2/2/1981	4,845	1,133	218	42	6,239
16	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	1/2/1996	5,682	1,329	218	42	7,271
17	242105	MCMR-Admin & Gen	Operations Specialist	1/23/1989	6,083	1,423	218	42	7,766
18	245305	ABNG-Admin & Gen	Operations Specialist	7/5/1990	4,650	1,088	218	42	5,998
19	247106	MILT-Field Services	Utility Person	11/16/1998	5,408	1,265	218	42	6,934
20	247151	MILT-Prod WD Creek	Plant Operator	12/1/1998	5,183	1,212	218	42	6,656
21	240114	CORP-Engineering	GIS Analyst	8/1/2000	4,658	1,089	218	42	6,008
22	246506	COAT-Field Services	Utility Person	1/26/1998	4,497	1,052	218	42	5,809
23	246306	PENN/Wyom-Field Srvc	Crew Leader	3/1/1997	6,007	1,405	218	42	7,672
24	245906	GLEN-Field Services	Utility Person	12/27/1994	6,057	1,416	218	42	7,733
25	246306	PENN/Wyom-Field Srvc	Utility Person	8/16/1999	5,655	1,323	218	42	7,238
26	245606	NAZA-Field Services	Utility Person	10/4/1993	5,654	1,322	218	42	7,236
27	245906	GLEN-Field Services	Utility Person	6/20/1983	5,433	1,271	218	42	6,964
28	245906	GLEN-Field Services	Crew Leader	10/1/1987	6,277	1,468	218	42	8,005
29	246401	ROYF-Production	Maintenance/Relief Operator	11/1/1989	6,085	1,423	218	42	7,769
30	246401	ROYF-Production	Plant Operator	3/9/1998	6,157	1,440	218	42	7,858
31	245601	NAZA-Production	Lead Plant Operator	5/27/1987	6,935	1,622	218	42	8,817
32	246406	ROYF-Field Services	Operations Specialist	3/3/1998	5,978	1,398	218	42	7,636
33	247203	PHBG-Cust Service	Utility Person	10/29/2001	5,353	1,252	218	42	6,865
34	245606	NAZA-Field Services	Utility Person	11/26/2001	5,977	1,398	218	42	7,635
35	246801	LEHP-Production	Utility Person	2/26/1990	5,338	1,248	218	42	6,846
36	246501	COAT-Production	Plant Operator	5/28/2002	6,669	1,560	218	42	8,489
37	240114	CORP-Engineering	GIS Analyst	10/28/2002	5,174	1,210	218	42	6,644
38	245906	GLEN-Field Services	Utility Person	1/5/2004	5,827	1,363	218	42	7,451
39	245606	NAZA-Field Services	Utility Person	2/16/2004	5,501	1,287	218	42	7,048
40	242105	MCMR-Admin & Gen	Admin Asst - Staff Supp (N)	12/1/2004	4,650	1,087	218	42	5,997
41	240106	CORP-Field Services	Operations Specialist	1/31/2005	5,089	1,190	218	42	6,539
42	240106	CORP-Field Services	Operations Specialist	3/21/2005	5,495	1,285	218	42	7,041
43	247152	MILT-Prod Milton FP	Plant Operator	7/25/2005	5,552	1,298	218	42	7,111
44	245506	BNGR-Field Services	Utility Person	11/7/2005	5,340	1,249	218	42	6,850
45	245401	SUSQ-Production	Plant Operator	5/15/2006	5,425	1,269	218	42	6,954
46	246306	PENN/Wyom-Field Srvc	Utility Person	5/30/2006	5,620	1,314	218	42	7,194
47	245606	NAZA-Field Services	Utility Person	12/18/2006	5,433	1,271	218	42	6,965
48	246206	HSHY-Field Services	Utility Person	3/26/2007	6,627	1,550	218	42	8,438
49	247106	MILT-Field Services	Utility Person	5/7/2007	4,817	1,126	218	42	6,203
50	240106	CORP-Field Services	Operations Specialist	6/18/2007	5,330	1,247	218	42	6,837
51	246306	PENN/Wyom-Field Srvc	Utility Person	7/2/2007	5,510	1,289	218	42	7,059
52	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2007	8,943	2,092	218	42	11,295
53	240116	CORP-Maint Services	Reliability Engineering Analyst	9/4/2007	6,842	1,600	218	42	8,702
54	247201	PHBG-Production	Operations Specialist	6/2/2008	5,616	1,314	218	42	7,190
55	247106	MILT-Field Services	Utility Person	7/21/2008	4,838	1,131	218	42	6,229
56	246501	COAT-Production	Plant Operator	10/6/2008	5,826	1,362	218	42	7,449
57	247701	BOGGS-Production	Plant Operator	5/4/2009	5,361	1,254	218	42	6,875
58	245706	POCO-Field Services	Utility Person	9/28/2009	5,875	1,374	218	42	7,509
59	246506	COAT-Field Services	Utility Person	11/2/2009	5,470	1,279	218	42	7,009
60	247401	FRCK-Production	Operator	1/25/2010	5,096	1,192	218	42	6,548
61	247206	PHBG-Field Services	Utility Person	3/29/2010	5,401	1,263	218	42	6,925
62	241106	PITT-Field Services	Operations Specialist	10/4/2010	5,835	1,365	218	42	7,460
63	240116	CORP-Maint Services	Automation & Controls Technician	12/20/2010	6,608	1,546	218	42	8,414
64	241103	PITT-Cust Service	Operations Specialist	1/3/2011	6,000	1,403	218	42	7,663
65	240306	CORP-Field Service	Exec Asst (N)	9/1/2011	4,477	1,047	218	42	5,784
66	245406	SUSQ-Field Services	Utility Person	9/6/2011	5,379	1,258	218	42	6,898
67	242101	MCMR-Production	Maint Service Specialist	10/4/2011	7,058	1,651	218	42	8,968
68	247206	PHBG-Field Services	Utility Person	11/7/2011	5,076	1,187	218	42	6,523
69	245705	POCO-Admin & Gen	Operations Specialist	7/3/2012	4,330	1,013	218	42	5,603
70	247150	MILT-Prod Other	Maintenance/Relief Operator	1/21/2013	4,710	1,101	218	42	6,071
71	249106	WILK-Field Services	Operations Specialist	2/18/2013	4,658	1,089	218	42	6,008
72	249150	WILK-Other	Operations Specialist	3/4/2013	4,623	1,081	218	42	5,964
73	247306	BRWK-Field Services	Utility Person	4/29/2013	5,648	1,321	218	42	7,229
74	245601	NAZA-Production	Plant Operator	6/27/2013	8,074	1,888	218	42	10,223
75	247301	BRWK-Production	Operator	9/16/2013	5,695	1,332	218	42	7,287

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					2023 Gross Payroll Taxes						2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	4,541	1,062	218	42	5,863	4,723	1,105	218	42	6,088
77	247201	PHBG-Production	Plant Operator	2/2/2015	5,091	1,191	218	42	6,542	5,294	1,238	218	42	6,792
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	5,672	1,326	218	42	7,259	5,899	1,380	218	42	7,539
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	4,478	1,047	218	42	5,785	4,657	1,089	218	42	6,006
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	5,573	1,303	218	42	7,137	5,795	1,355	218	42	7,411
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	3,908	914	218	42	5,082	4,064	950	218	42	5,275
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	5,249	1,228	218	42	6,737	5,459	1,277	218	42	6,996
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	4,150	971	218	42	5,381	4,316	1,009	218	42	5,586
84	245406	SUSQ-Field Services	Utility Person	12/14/2015	4,250	994	218	42	5,504	4,419	1,033	218	42	5,713
85	246506	COAT-Field Services	Utility Person	2/3/2016	7,213	1,687	218	42	9,160	7,495	1,753	218	42	9,508
86	247103	MILT-Cust Service	Utility Person	3/7/2016	4,368	1,022	218	42	5,650	4,544	1,063	218	42	5,867
87	246206	HSHY-Field Services	Utility Person	2/29/2016	5,400	1,263	218	42	6,924	5,616	1,313	218	42	7,190
88	246201	HSHY-Production	Plant Operator	2/29/2016	7,315	1,711	218	42	9,286	7,606	1,779	218	42	9,645
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	5,417	1,267	218	42	6,945	5,632	1,317	218	42	7,210
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016	4,524	1,058	218	42	5,842	4,705	1,100	218	42	6,066
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	8,273	1,935	218	42	10,469	8,604	2,012	218	42	10,877
92	246206	HSHY-Field Services	Utility Person	6/13/2016	4,670	1,092	218	42	6,022	4,856	1,136	218	42	6,252
93	246206	HSHY-Field Services	Utility Person	7/11/2016	4,324	1,011	218	42	5,596	4,498	1,052	218	42	5,810
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	4,861	1,137	218	42	6,258	5,056	1,182	218	42	6,499
95	245306	ABNG-Field Services	Utility Person	10/24/2016	5,049	1,181	218	42	6,490	5,250	1,228	218	42	6,738
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	4,776	1,117	218	42	6,153	4,967	1,162	218	42	6,389
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	3,931	919	218	42	5,111	4,089	956	218	42	5,306
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	6,920	1,618	218	42	8,799	7,197	1,683	218	42	9,141
99	247306	BRWK-Field Services	Utility Person	1/16/2017	4,438	1,038	218	42	5,736	4,615	1,079	218	42	5,955
100	246506	COAT-Field Services	Utility Person	2/13/2017	4,834	1,130	218	42	6,224	5,026	1,175	218	42	6,462
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	4,328	1,012	218	42	5,601	4,502	1,053	218	42	5,816
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015	2,512	587	218	42	3,359	2,613	611	218	42	3,484
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	2,507	586	218	42	3,354	2,607	610	218	42	3,478
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018	4,528	1,059	218	42	5,848	4,710	1,102	218	42	6,072
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	3,987	932	218	42	5,179	4,147	970	218	42	5,377
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018	4,401	1,029	218	42	5,690	4,577	1,070	218	42	5,907
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	5,447	1,274	218	42	6,981	5,664	1,325	218	42	7,249
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	4,458	1,043	218	42	5,761	4,637	1,084	218	42	5,982
109	246801	LEHP-Production	Utility Person	7/23/2018	4,793	1,121	218	42	6,175	4,985	1,166	218	42	6,411
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	7,052	1,649	218	42	8,962	7,334	1,715	218	42	9,310
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	5,992	1,401	218	42	7,653	6,232	1,457	218	42	7,949
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	3,426	801	218	42	4,488	3,563	833	218	42	4,656
113	246501	COAT-Production	Plant Operator	9/24/2018	5,532	1,294	218	42	7,086	5,752	1,345	218	42	7,358
114	245906	GLEN-Field Services	Utility Person	10/8/2018	4,320	1,010	218	42	5,590	4,493	1,051	218	42	5,804
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	4,606	1,077	218	42	5,944	4,790	1,120	218	42	6,171
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	3,678	860	218	42	4,798	3,825	894	218	42	4,979
117	246206	HSHY-Field Services	Utility Person	10/8/2018	4,499	1,052	218	42	5,811	4,679	1,094	218	42	6,034
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	5,623	1,315	218	42	7,199	5,847	1,368	218	42	7,475
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	4,556	1,065	218	42	5,881	4,739	1,108	218	42	6,107
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	4,864	1,138	218	42	6,262	5,059	1,183	218	42	6,502
121	246206	HSHY-Field Services	Utility Person	1/14/2019	4,632	1,083	218	42	5,976	4,818	1,127	218	42	6,205
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	4,509	1,055	218	42	5,824	4,689	1,097	218	42	6,046
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	4,591	1,074	218	42	5,925	4,775	1,117	218	42	6,152
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	8,830	2,065	218	42	11,156	9,182	2,147	218	42	11,590
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	4,726	1,105	218	42	6,092	4,916	1,150	218	42	6,326
126	248801	TURB-Production	Plant Operator	7/8/2019	4,668	1,092	218	42	6,021	4,855	1,135	218	42	6,250
127	240116	CORP-Maint Services	Sr Reliability Engineering Analyst	7/15/2019	8,009	1,873	218	42	10,143	8,330	1,948	218	42	10,538
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	5,827	1,363	218	42	7,450	6,060	1,417	218	42	7,738
129	241406	STNW-Field Service	Utility Person	12/5/2018	3,999	935	218	42	5,194	4,158	972	218	42	5,391
130	246206	HSHY-Field Services	Utility Person	2/2/2016	4,245	993	218	42	5,498	4,415	1,033	218	42	5,708
131	241406	STNW-Field Service	Utility Person	3/3/1999	4,108	961	218	42	5,329	4,271	999	218	42	5,531
132	247201	PHBG-Production	Plant Operator	10/21/2019	4,786	1,119	218	42	6,166	4,976	1,164	218	42	6,400
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	4,362	1,020	218	42	5,643	4,537	1,061	218	42	5,859
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	4,409	1,031	218	42	5,700	4,585	1,072	218	42	5,918
135	247206	PHBG-Field Services	Utility Person	1/27/2020	4,690	1,097	218	42	6,048	4,877	1,141	218	42	6,278
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	5,228	1,223	218	42	6,711	5,437	1,272	218	42	6,969
137	241406	STNW-Field Service	Foreperson	1/8/1990	5,178	1,211	218	42	6,649	5,385	1,260	218	42	6,905
138	246406	ROYF-Field Services	Utility Person	3/23/2020	4,849	1,134	218	42	6,243	5,043	1,179	218	42	6,483
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	5,534	1,294	218	42	7,089	5,755	1,346	218	42	7,361
140	246406	ROYF-Field Services	Utility Person	4/13/2020	4,961	1,160	218	42	6,381	5,159	1,206	218	42	6,625
141	247106	MILT-Field Services	Utility Person	4/13/2020	4,448	1,040	218	42	5,749	4,626	1,082	218	42	5,969
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	5,079	1,188	218	42	6,527	5,281	1,235	218	42	6,777
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	4,269	998	218	42	5,528	4,440	1,038	218	42	5,739
144	245701	POCO-Production	Plant Operator	4/27/2020	5,167	1,208	218	42	6,636	5,373	1,257	218	42	6,890
145	246401	ROYF-Production	Plant Operator	5/4/2020	5,132	1,200	218	42	6,593	5,337	1,248	218	42	6,846
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	3,489	816	218	42	4,566	3,629	849	218	42	4,738
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	6,165	1,442	218	42	7,867	6,411	1,499	218	42	8,171
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	3,766	881	218	42	4,907	3,917	916	218	42	5,094
149	240116	CORP-Maint Services	Reliability Engineering Analyst	6/1/2020	6,865	1,606	218	42	8,731	7,139	1,670	218	42	9,069

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Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
76	240114	CORP-Engineering	Exec Asst (N)	9/29/2014	4,887	1,143	218	42	6,291
77	247201	PHBG-Production	Plant Operator	2/2/2015	5,476	1,281	218	42	7,018
78	246501	COAT-Production	Maintenance/Relief Operator	2/16/2015	6,104	1,428	218	42	7,792
79	240114	CORP-Engineering	Business Operations Analyst	2/3/2015	4,818	1,127	218	42	6,205
80	245306	ABNG-Field Services	Crew Leader	7/20/2015	5,995	1,402	218	42	7,657
81	243106	NEWC-Field Services	Operations Specialist	11/9/2015	4,205	984	218	42	5,449
82	242205	MONVAL-Admin & Gen	Operations Specialist	11/9/2015	5,649	1,321	218	42	7,231
83	241150	PITT-Production Othe	Operations Specialist	11/9/2015	4,466	1,044	218	42	5,771
84	245406	SUSQ-Field Services	Utility Person	12/14/2015	4,572	1,069	218	42	5,902
85	246506	COAT-Field Services	Utility Person	2/3/2016	7,750	1,812	218	42	9,823
86	247103	MILT-Cust Service	Utility Person	3/7/2016	4,702	1,100	218	42	6,063
87	246206	HSHY-Field Services	Utility Person	2/29/2016	5,811	1,359	218	42	7,430
88	246201	HSHY-Production	Plant Operator	2/29/2016	7,869	1,840	218	42	9,969
89	247201	PHBG-Production	Maintenance/Relief Operator	3/7/2016	5,828	1,363	218	42	7,451
90	240121	CORP-Com Relations	Exec Asst (N)	4/11/2016	4,868	1,139	218	42	6,267
91	240116	CORP-Maint Services	Lead Automation & Controls Tech	4/25/2016	8,902	2,082	218	42	11,244
92	246206	HSHY-Field Services	Utility Person	6/13/2016	5,025	1,175	218	42	6,460
93	246206	HSHY-Field Services	Utility Person	7/11/2016	4,654	1,088	218	42	6,002
94	240105	CORP-Admin & Gen	Exec Asst to EMT (N)	10/17/2016	5,232	1,224	218	42	6,716
95	245306	ABNG-Field Services	Utility Person	10/24/2016	5,432	1,270	218	42	6,962
96	246501	COAT-Production	Maintenance/Relief Operator	10/31/2016	5,140	1,202	218	42	6,602
97	249106	WILK-Field Services	Operations Specialist	5/2/2016	4,232	990	218	42	5,482
98	240116	CORP-Maint Services	Sr Automation & Controls Tech	10/20/2014	7,447	1,742	218	42	9,448
99	247306	BRWK-Field Services	Utility Person	1/16/2017	4,775	1,117	218	42	6,152
100	246506	COAT-Field Services	Utility Person	2/13/2017	5,200	1,216	218	42	6,676
101	240103	CORP-Cust Relations	Compliance Analyst	6/26/2017	4,660	1,090	218	42	6,010
102	240106	CORP-Field Services	Admin Support Rep (N)	4/27/2015	2,704	632	218	42	3,597
103	240106	CORP-Field Services	Admin Support Rep (N)	12/2/2009	2,698	631	218	42	3,590
104	241106	PITT-Field Services	Admin Asst - Staff Supp (N)	6/25/2018	4,873	1,140	218	42	6,273
105	240106	CORP-Field Services	Operations Specialist	7/9/2018	4,292	1,004	218	42	5,556
106	240151	CORP-Cust Serv MECH	Compliance Analyst	6/25/2018	4,736	1,108	218	42	6,104
107	246406	ROYF-Field Services	Operations Specialist	7/16/2018	5,861	1,371	218	42	7,493
108	240306	CORP-Field Service	Operations Specialist	7/30/2018	4,799	1,122	218	42	6,182
109	246801	LEHP-Production	Utility Person	7/23/2018	5,157	1,206	218	42	6,623
110	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/30/2018	7,589	1,775	218	42	9,624
111	246501	COAT-Production	Maintenance/Relief Operator	9/10/2018	6,448	1,508	218	42	8,216
112	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	9/10/2018	3,687	862	218	42	4,809
113	246501	COAT-Production	Plant Operator	9/24/2018	5,952	1,392	218	42	7,604
114	245906	GLEN-Field Services	Utility Person	10/8/2018	4,649	1,087	218	42	5,997
115	247150	MILT-Prod Other	Maintenance/Relief Operator	10/29/2018	4,957	1,159	218	42	6,376
116	249106	WILK-Field Services	Storeroom Keeper (N)	10/8/2018	3,957	926	218	42	5,143
117	246206	HSHY-Field Services	Utility Person	10/8/2018	4,841	1,132	218	42	6,234
118	246206	HSHY-Field Services	Operations Specialist	10/8/2018	6,050	1,415	218	42	7,725
119	249106	WILK-Field Services	Operations Specialist	11/5/2018	4,903	1,147	218	42	6,310
120	249106	WILK-Field Services	Construction Inspector	12/17/2018	5,235	1,224	218	42	6,719
121	246206	HSHY-Field Services	Utility Person	1/14/2019	4,984	1,166	218	42	6,410
122	240106	CORP-Field Services	Operations Specialist	3/25/2019	4,852	1,135	218	42	6,248
123	240151	CORP-Cust Serv MECH	Sr Compliance Analyst	5/28/2019	4,941	1,156	218	42	6,357
124	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/28/2019	9,500	2,222	218	42	11,982
125	245106	NORR-Field Services	Operations Specialist	6/10/2019	5,088	1,190	218	42	6,538
126	248801	TURB-Production	Plant Operator	7/8/2019	5,024	1,175	218	42	6,459
127	240116	CORP-Maint Services	Sr Reliability Engineering Analyst	7/15/2019	8,619	2,016	218	42	10,895
128	241401	STNW-Production	Lead Plant Operator	9/1/1994	6,271	1,467	218	42	7,998
129	241406	STNW-Field Service	Utility Person	12/5/2018	4,302	1,006	218	42	5,569
130	246206	HSHY-Field Services	Utility Person	2/2/2016	4,569	1,069	218	42	5,898
131	241406	STNW-Field Service	Utility Person	3/3/1999	4,419	1,034	218	42	5,713
132	247201	PHBG-Production	Plant Operator	10/21/2019	5,149	1,204	218	42	6,613
133	240103	CORP-Cust Relations	Compliance Analyst	11/18/2019	4,695	1,098	218	42	6,054
134	246505	COAT-Admin & Gen	Operations Specialist	1/27/2020	4,745	1,110	218	42	6,115
135	247206	PHBG-Field Services	Utility Person	1/27/2020	5,046	1,180	218	42	6,486
136	246401	ROYF-Production	Maint Service Specialist	3/9/2020	5,626	1,316	218	42	7,202
137	241406	STNW-Field Service	Foreperson	1/8/1990	5,572	1,303	218	42	7,136
138	246406	ROYF-Field Services	Utility Person	3/23/2020	5,218	1,220	218	42	6,699
139	249106	WILK-Field Services	Construction Inspector	4/20/2020	5,954	1,393	218	42	7,607
140	246406	ROYF-Field Services	Utility Person	4/13/2020	5,337	1,248	218	42	6,846
141	247106	MILT-Field Services	Utility Person	4/13/2020	4,786	1,119	218	42	6,166
142	249106	WILK-Field Services	Construction Inspector	4/20/2020	5,465	1,278	218	42	7,003
143	249106	WILK-Field Services	Construction Inspector	4/21/2020	4,594	1,074	218	42	5,928
144	245701	POCO-Production	Plant Operator	4/27/2020	5,559	1,300	218	42	7,119
145	246401	ROYF-Production	Plant Operator	5/4/2020	5,522	1,291	218	42	7,074
146	240151	CORP-Cust Serv MECH	Compliance Analyst	5/4/2020	3,755	878	218	42	4,893
147	240116	CORP-Maint Services	Sr Automation & Controls Tech	5/11/2020	6,633	1,551	218	42	8,445
148	240114	CORP-Engineering	Business Operations Analyst	5/18/2020	4,054	948	218	42	5,263
149	240116	CORP-Maint Services	Reliability Engineering Analyst	6/1/2020	7,388	1,728	218	42	9,376

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Payroll Taxes

Line #	Cost Center	Cost Center Name	Job	Original Hire Date	2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
					FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	3,979	931	218	42	5,170	4,139	968	218	42	5,367
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	4,065	951	218	42	5,276	4,228	989	218	42	5,477
152	247106	MILT-Field Services	Utility Person	10/19/2020	4,351	1,018	218	42	5,629	4,525	1,058	218	42	5,843
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	6,702	1,567	218	42	8,530	6,971	1,630	218	42	8,861
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	4,511	1,055	218	42	5,827	4,692	1,097	218	42	6,049
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	3,928	919	218	42	5,106	4,084	955	218	42	5,300
156	245506	BNGR-Field Services	Utility Person	2/22/2021	4,182	978	218	42	5,420	4,349	1,017	218	42	5,627
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	3,602	843	218	42	4,705	3,747	876	218	42	4,884
158	246801	LEHP-Production	Utility Person	4/12/2021	4,328	1,012	218	42	5,601	4,502	1,053	218	42	5,815
159	246506	COAT-Field Services	Utility Person	4/13/2021	5,103	1,193	218	42	6,557	5,306	1,241	218	42	6,807
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	4,737	1,108	218	42	6,106	4,926	1,152	218	42	6,338
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	5,237	1,225	218	42	6,723	5,446	1,274	218	42	6,979
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	4,122	964	218	42	5,347	4,287	1,003	218	42	5,550
163	240114	CORP-Engineering	GIS Analyst	6/1/2021	3,601	842	218	42	4,704	3,746	876	218	42	4,882
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	5,073	1,187	218	42	6,520	5,276	1,234	218	42	6,770
165	247206	PHBG-Field Services	Utility Person	7/6/2021	4,492	1,051	218	42	5,803	4,672	1,093	218	42	6,025
166	245906	GLEN-Field Services	Utility Person	7/12/2021	4,632	1,083	218	42	5,976	4,817	1,127	218	42	6,205
167	246401	ROYF-Production	Plant Operator	7/19/2021	5,122	1,198	218	42	6,581	5,326	1,245	218	42	6,831
168	241106	PITT-Field Services	Operations Specialist	9/7/2021	4,183	978	218	42	5,422	4,351	1,018	218	42	5,629
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	4,529	1,059	218	42	5,848	4,710	1,101	218	42	6,072
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	4,415	1,032	218	42	5,707	4,591	1,074	218	42	5,926
171	240116	CORP-Maint Services	Reliability Engineering Analyst	10/18/2021	6,254	1,463	218	42	7,977	6,503	1,521	218	42	8,284
172	246506	COAT-Field Services	Utility Person	11/8/2021	5,121	1,198	218	42	6,579	5,323	1,245	218	42	6,828
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	7,241	1,694	218	42	9,195	7,531	1,761	218	42	9,553
174	246506	COAT-Field Services	Utility Person	11/9/2021	4,613	1,079	218	42	5,952	4,797	1,122	218	42	6,179
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	2,951	690	218	42	3,902	3,069	718	218	42	4,048
176	247106	MILT-Field Services	Utility Person	11/22/2021	4,173	976	218	42	5,409	4,339	1,015	218	42	5,614
177	246201	HSHY-Production	Plant Operator	1/10/2022	4,678	1,094	218	42	6,033	4,865	1,138	218	42	6,263
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	1/10/2022	4,025	941	218	42	5,227	4,186	979	218	42	5,426
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	4,287	1,003	218	42	5,550	4,459	1,043	218	42	5,763
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	4,002	936	218	42	5,198	4,162	973	218	42	5,396
181	247206	PHBG-Field Services	Utility Person	2/21/2022	4,369	1,022	218	42	5,652	4,544	1,063	218	42	5,867
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	2/28/2022	3,471	812	218	42	4,543	3,610	844	218	42	4,714
183	245306	ABNG-Field Services	Utility Person	2/21/2022	4,172	976	218	42	5,409	4,339	1,015	218	42	5,614
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	4,502	1,053	218	42	5,815	4,680	1,094	218	42	6,035
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	2,853	667	218	42	3,781	2,968	694	218	42	3,923
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	4,014	939	218	42	5,213	4,175	976	218	42	5,412
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	3,619	846	218	42	4,726	3,765	881	218	42	4,906
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	3,853	901	218	42	5,015	4,009	938	218	42	5,206
189	240306	CORP-Field Service	Operations Specialist	4/25/2022	4,423	1,034	218	42	5,718	4,600	1,076	218	42	5,936
190	245306	ABNG-Field Services	Utility Person	5/16/2022	4,494	1,051	218	42	5,805	4,673	1,093	218	42	6,026
191	241401	STNW-Production	Plant Operator	6/6/2022	3,884	908	218	42	5,053	4,039	945	218	42	5,244
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	4,627	1,082	218	42	5,970	4,813	1,126	218	42	6,200
193	245506	BNGR-Field Services	Utility Person	6/20/2022	4,875	1,140	218	42	6,275	5,069	1,186	218	42	6,515
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	6/20/2022	3,251	760	218	42	4,272	3,382	791	218	42	4,433
195	245401	SUSQ-Production	Plant Operator	6/27/2022	4,961	1,160	218	42	6,382	5,160	1,207	218	42	6,627
196	241401	STNW-Production	Plant Operator	7/5/2022	4,114	962	218	42	5,336	4,278	1,001	218	42	5,539
197	246801	LEHP-Production	Utility Person	7/18/2022	4,767	1,115	218	42	6,142	4,956	1,159	218	42	6,376
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/18/2022	3,280	767	218	42	4,308	3,412	798	218	42	4,470
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	4,274	999	218	42	5,533	4,445	1,040	218	42	5,745
200	247106	MILT-Field Services	Utility Person	7/18/2022	4,492	1,051	218	42	5,803	4,670	1,092	218	42	6,023
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	4,582	1,072	218	42	5,914	4,767	1,115	218	42	6,142
202	245501	BNGR-Production	Plant Operator	8/29/2022	4,176	977	218	42	5,412	4,343	1,016	218	42	5,619
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	3,909	914	218	42	5,084	4,066	951	218	42	5,277
204	245401	SUSQ-Production	Plant Operator	9/19/2022	4,397	1,028	218	42	5,686	4,573	1,070	218	42	5,903
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	4,565	1,068	218	42	5,892	4,748	1,110	218	42	6,118
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	4,317	1,010	218	42	5,587	4,490	1,050	218	42	5,800
207	245306	ABNG-Field Services	Utility Person	10/10/2022	3,830	896	218	42	4,986	3,983	932	218	42	5,175
208	245306	ABNG-Field Services	Utility Person	10/17/2022	4,055	948	218	42	5,263	4,216	986	218	42	5,463
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	3,532	826	218	42	4,619	3,673	859	218	42	4,793
210	246406	ROYF-Field Services	Utility Person	11/14/2022	4,260	996	218	42	5,516	4,430	1,036	218	42	5,726
211	246501	COAT-Production	Plant Operator	11/28/2022	5,014	1,173	218	42	6,446	5,214	1,219	218	42	6,693
212	246406	ROYF-Field Services	Utility Person	1/3/2023	4,341	1,015	218	42	5,616	4,514	1,056	218	42	5,830
213	245706	POCO-Field Services	Utility Person	1/3/2023	3,899	912	218	42	5,071	4,054	948	218	42	5,263
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	3,671	858	218	42	4,790	3,818	893	218	42	4,971
215	247306	BRWK-Field Services	Utility Person	3/6/2023	3,930	919	218	42	5,110	4,088	956	218	42	5,304
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	4,264	997	218	42	5,521	4,434	1,037	218	42	5,732
217	245606	NAZA-Field Services	Utility Person	3/20/2023	4,101	959	218	42	5,320	4,265	997	218	42	5,523
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023	3,797	888	218	42	4,945	3,949	924	218	42	5,133
219	245601	NAZA-Production	Plant Operator	6/5/2023	4,017	939	218	42	5,217	4,178	977	218	42	5,415
220	245106	NORR-Field Services	Utility Person	6/5/2023	4,156	972	218	42	5,388	4,322	1,011	218	42	5,593
221	246406	ROYF-Field Services	Utility Person	6/5/2023	3,952	924	218	42	5,136	4,110	961	218	42	5,331
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	4,156	972	218	42	5,388	4,322	1,011	218	42	5,593
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017	1,639	383	218	42	2,283	1,705	399	218	42	2,364
224	245106	NORR-Field Services	Operations Specialist - To Be Filled	12/31/2023	-	-	-	-	-	5,092	1,191	218	42	6,543
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	-	-	-	-	-	5,092	1,191	218	42	6,543
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	-	-	-	-	-	5,092	1,191	218	42	6,543
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	-	-	-	-	-	5,092	1,191	218	42	6,543
228	241103	PITT-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	-	-	-	-	-	4,053	948	218	42	5,261
229	249103	WILK-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	-	-	-	-	-	4,053	948	218	42	5,261
230	241103	PITT-Cust Service	Compliance Representative - To Be Filled	12/31/2023	-	-	-	-	-	3,567	834	218	42	4,661
			Total Non-Collective Bargaining Unit Hourly		$1,076,298	$251,715	$48,690	$9,366	$1,386,069	$1,151,370	$269,272	$50,218	$9,660	$1,480,520
													Vacancy Rate	1.76%
													Vacancy Adjustment	$26,010
													Total Non-Collective Bargaining Unit Hourly	$1,454,510

Pennsylvania-American Water Company - Water Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	**Cost Center**	**Cost Center Name**	**Job**	**Original Hire Date**	**FICA Withholding**	**FICA Medicare**	**SUTA**	**FUTA**	**2025 Total Gross Payroll Taxes**
150	240103	CORP-Cust Relations	Compliance Analyst	6/1/2020	4,284	1,002	218	42	5,546
151	240103	CORP-Cust Relations	Compliance Analyst	7/20/2020	4,375	1,023	218	42	5,659
152	247106	MILT-Field Services	Utility Person	10/19/2020	4,682	1,095	218	42	6,037
153	242101	MCMR-Production	Sr Maint Service Specialist	12/14/2020	7,213	1,687	218	42	9,161
154	249106	WILK-Field Services	Construction Inspector	12/21/2020	4,854	1,135	218	42	6,250
155	240106	CORP-Field Services	Operations Specialist	2/1/2021	4,227	989	218	42	5,476
156	245506	BNGR-Field Services	Utility Person	2/22/2021	4,500	1,052	218	42	5,813
157	240114	CORP-Engineering	Business Operations Analyst	3/8/2021	3,878	907	218	42	5,045
158	246801	LEHP-Production	Utility Person	4/12/2021	4,658	1,089	218	42	6,007
159	246506	COAT-Field Services	Utility Person	4/13/2021	5,489	1,284	218	42	7,033
160	246806	LEHP-Field Services	Plant Operator	4/12/2021	5,096	1,192	218	42	6,548
161	246406	ROYF-Field Services	Crew Leader	4/26/2021	5,633	1,317	218	42	7,211
162	241401	STNW-Production	Maintenance/Relief Operator	5/17/2021	4,436	1,037	218	42	5,734
163	240114	CORP-Engineering	GIS Analyst	6/1/2021	3,876	906	218	42	5,043
164	246306	PENN/Wyom-Field Srvc	Utility Person	5/24/2021	5,458	1,277	218	42	6,995
165	247206	PHBG-Field Services	Utility Person	7/6/2021	4,834	1,131	218	42	6,225
166	245906	GLEN-Field Services	Utility Person	7/12/2021	4,985	1,166	218	42	6,411
167	246401	ROYF-Production	Plant Operator	7/19/2021	5,509	1,288	218	42	7,057
168	241106	PITT-Field Services	Operations Specialist	9/7/2021	4,502	1,053	218	42	5,815
169	249106	WILK-Field Services	Operations Specialist	9/7/2021	4,874	1,140	218	42	6,274
170	245106	NORR-Field Services	Operations Specialist	10/18/2021	4,751	1,111	218	42	6,123
171	240116	CORP-Maint Services	Reliability Engineering Analyst	10/18/2021	6,729	1,574	218	42	8,563
172	246506	COAT-Field Services	Utility Person	11/8/2021	5,505	1,287	218	42	7,053
173	240116	CORP-Maint Services	Sr Automation & Controls Tech	11/22/2021	7,793	1,822	218	42	9,875
174	246506	COAT-Field Services	Utility Person	11/9/2021	4,963	1,161	218	42	6,384
175	240106	CORP-Field Services	Admin Support Rep (N)	11/22/2021	3,176	743	218	42	4,179
176	247106	MILT-Field Services	Utility Person	11/22/2021	4,489	1,050	218	42	5,799
177	246201	HSHY-Production	Plant Operator	1/10/2022	5,034	1,177	218	42	6,471
178	240106	CORP-Field Services	Admin Asst - Staff Supp (N)	1/10/2022	4,331	1,013	218	42	5,604
179	240106	CORP-Field Services	Operations Specialist	1/31/2022	4,615	1,079	218	42	5,954
180	240114	CORP-Engineering	Engineering Specialist	2/7/2022	4,308	1,008	218	42	5,576
181	247206	PHBG-Field Services	Utility Person	2/21/2022	4,701	1,099	218	42	6,061
182	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	2/28/2022	3,735	874	218	42	4,869
183	245306	ABNG-Field Services	Utility Person	2/21/2022	4,489	1,050	218	42	5,799
184	247152	MILT-Prod Milton FP	Plant Operator	2/28/2022	4,841	1,132	218	42	6,233
185	240151	CORP-Cust Serv MECH	Compliance Representative	3/7/2022	3,072	719	218	42	4,051
186	240114	CORP-Engineering	GIS Analyst	3/21/2022	4,320	1,010	218	42	5,591
187	240114	CORP-Engineering	GIS Analyst	3/7/2022	3,896	911	218	42	5,068
188	240114	CORP-Engineering	GIS Analyst	3/21/2022	4,149	970	218	42	5,379
189	240306	CORP-Field Service	Operations Specialist	4/25/2022	4,761	1,113	218	42	6,135
190	245306	ABNG-Field Services	Utility Person	5/16/2022	4,834	1,131	218	42	6,225
191	241401	STNW-Production	Plant Operator	6/6/2022	4,179	977	218	42	5,417
192	240106	CORP-Field Services	Operations Specialist	6/20/2022	4,981	1,165	218	42	6,407
193	245506	BNGR-Field Services	Utility Person	6/20/2022	5,245	1,227	218	42	6,732
194	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	6/20/2022	3,500	819	218	42	4,579
195	245401	SUSQ-Production	Plant Operator	6/27/2022	5,339	1,249	218	42	6,848
196	241401	STNW-Production	Plant Operator	7/5/2022	4,427	1,035	218	42	5,722
197	246801	LEHP-Production	Utility Person	7/18/2022	5,126	1,199	218	42	6,586
198	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/18/2022	3,531	826	218	42	4,617
199	240117	CORP-Water Quality	WQ & Env Compliance Specialist	7/18/2022	4,599	1,076	218	42	5,935
200	247106	MILT-Field Services	Utility Person	7/18/2022	4,832	1,130	218	42	6,222
201	247152	MILT-Prod Milton FP	Plant Operator	8/8/2022	4,932	1,153	218	42	6,346
202	245501	BNGR-Production	Plant Operator	8/29/2022	4,494	1,051	218	42	5,805
203	246106	MECH-Field Services	Operations Specialist	8/22/2022	4,207	984	218	42	5,451
204	245401	SUSQ-Production	Plant Operator	9/19/2022	4,732	1,107	218	42	6,099
205	249106	WILK-Field Services	Construction Inspector	9/26/2022	4,914	1,149	218	42	6,323
206	240105	CORP-Admin & Gen	Exec Asst (N)	10/10/2022	4,645	1,086	218	42	5,992
207	245306	ABNG-Field Services	Utility Person	10/10/2022	4,122	964	218	42	5,346
208	245306	ABNG-Field Services	Utility Person	10/17/2022	4,363	1,020	218	42	5,644
209	240114	CORP-Engineering	Business Operations Analyst	12/12/2022	3,801	889	218	42	4,950
210	246406	ROYF-Field Services	Utility Person	11/14/2022	4,584	1,072	218	42	5,916
211	246501	COAT-Production	Plant Operator	11/28/2022	5,395	1,262	218	42	6,917
212	246406	ROYF-Field Services	Utility Person	1/3/2023	4,672	1,093	218	42	6,025
213	245706	POCO-Field Services	Utility Person	1/3/2023	4,196	981	218	42	5,437
214	240103	CORP-Cust Relations	Compliance Analyst	3/6/2023	3,951	924	218	42	5,135
215	247306	BRWK-Field Services	Utility Person	3/6/2023	4,230	989	218	42	5,480
216	247152	MILT-Prod Milton FP	Plant Operator	3/6/2023	4,589	1,073	218	42	5,922
217	245606	NAZA-Field Services	Utility Person	3/20/2023	4,413	1,032	218	42	5,706
218	240114	CORP-Engineering	Engineering Specialist	5/8/2023	4,086	956	218	42	5,302
219	245601	NAZA-Production	Plant Operator	6/5/2023	4,323	1,011	218	42	5,595
220	245106	NORR-Field Services	Utility Person	6/5/2023	4,473	1,046	218	42	5,779
221	246406	ROYF-Field Services	Utility Person	6/5/2023	4,253	995	218	42	5,508
222	246306	PENN/Wyom-Field Srvc	Utility Person	6/12/2023	4,473	1,046	218	42	5,779
223	240121	CORP-Com Relations	Community Public Relations Rep	4/17/2017	1,765	413	218	42	2,438
224	245106	NORR-Field Services	Operations Specialist - To Be Filled	12/31/2023	5,269	1,232	218	42	6,762
225	247201	PHBG-Production	Plant Operator - To Be Filled	12/31/2023	5,269	1,232	218	42	6,762
226	245401	SUSQ-Production	Plant Operator - To Be Filled	12/31/2023	5,269	1,232	218	42	6,762
227	246801	LEHP-Production	Utility Person - To Be Filled	12/31/2023	5,269	1,232	218	42	6,762
228	241103	PITT-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	4,194	981	218	42	5,436
229	249103	WILK-Cust Service	Compliance Analyst - To Be Filled	12/31/2023	4,194	981	218	42	5,436
230	241103	PITT-Cust Service	Compliance Representative - To Be Filled	12/31/2023	3,691	863	218	42	4,815
			Total Non-Collective Bargaining Unit Hourly		$1,191,347	$278,622	$50,218	$9,660	$1,529,847
								Vacancy Rate	1.76%
								Vacancy Adjustment	$26,876
								Total Non-Collective Bargaining Unit Hourly	$1,502,970

Pennsylvania-American Water Company - Wastewater SSS General Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Salary														
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	$6,279	$1,468	$218	$42	$8,007	$653	$153	$22	$4	$832
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	8,442	1,974	218	42	10,676	8,780	2,053	218	42	11,093
3	246701	COWW-Production	Supvr Production	3/6/2000	6,361	1,488	218	42	8,109	6,617	1,547	218	42	8,424
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	6,665	1,559	218	42	8,484	6,933	1,621	218	42	8,815
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	5,070	1,186	218	42	6,516	5,273	1,233	218	42	6,767
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	6,235	1,458	218	42	7,953	6,485	1,517	218	42	8,262
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	5,416	1,267	218	42	6,943	5,633	1,317	218	42	7,211
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	6,665	1,559	218	42	8,484	6,931	1,621	218	42	8,813
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020	5,950	1,391	218	42	7,601	6,188	1,447	218	42	7,895
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	6,141	1,436	218	42	7,837	6,387	1,494	218	42	8,141
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	5,247	1,227	218	42	6,734	5,457	1,276	218	42	6,993
12	249401	YORKWW-Production	Supvr Production	6/24/2013	5,793	1,355	218	42	7,409	6,026	1,409	218	42	7,695
			Total Non-Collective Bargaining Unit Salary		$74,262	$17,368	$2,620	$504	$94,754	$71,362	$16,689	$2,424	$466	$90,941
Collective Bargaining Unit														
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/4/2008	$4,231	$989	$218	$42	$5,481	$4,334	$1,014	$218	$42	$5,608
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	3,817	893	218	42	4,969	3,911	915	218	42	5,086
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	3,726	872	218	42	4,858	3,822	894	218	42	4,976
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/17/1984	4,862	1,137	218	42	6,259	4,981	1,165	218	42	6,407
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	10/26/2009	4,328	1,012	218	42	5,600	4,435	1,037	218	42	5,732
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	5/22/2017	4,905	1,147	218	42	6,312	5,023	1,175	218	42	6,458
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	3,454	808	218	42	4,522	3,548	830	218	42	4,638
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	4,696	1,098	218	42	6,055	4,805	1,124	218	42	6,189
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	5,006	1,171	218	42	6,437	5,121	1,198	218	42	6,580
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	3,725	871	218	42	4,856	3,826	895	218	42	4,981
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/7/2009	4,227	988	218	42	5,475	4,330	1,013	218	42	5,602
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/20/2018	3,956	925	218	42	5,141	4,052	948	218	42	5,260
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/3/2020	4,112	962	218	42	5,334	4,212	985	218	42	5,457
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	4/24/2017	3,993	934	218	42	5,187	4,091	957	218	42	5,309
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	5,236	1,225	218	42	6,721	5,355	1,252	218	42	6,867
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3,660	856	218	42	4,777	3,754	878	218	42	4,892
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3,656	855	218	42	4,772	3,750	877	218	42	4,887
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	3,893	910	218	42	5,064	3,990	933	218	42	5,183
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	3,645	853	218	42	4,758	3,739	874	218	42	4,874
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	3,810	891	218	42	4,962	3,905	913	218	42	5,078
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	3,435	803	218	42	4,499	3,529	825	218	42	4,615
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	3,642	852	218	42	4,754	3,735	873	218	42	4,869
			Total Collective Bargaining Unit		90,015	21,052	4,803	924	116,795	92,246	21,574	4,803	924	119,547

Pennsylvania-American Water Company - Wastewater SSS General Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Salary									
1	244701	CLRWW-Production	Sr Supvr Operations (90% allocated to BASA WW Operations)	12/8/1997	$676	$158	$22	$4	$860
2	249405	YORKWW-Admin & Gen	Mgr Opns	7/8/1999	9,085	2,125	218	42	11,470
3	246701	COWW-Production	Supvr Production	3/6/2000	6,846	1,601	218	42	8,708
4	246706	COWW-Field Services	Sr Supvr Operations	10/16/1995	7,174	1,678	218	42	9,112
5	249405	YORKWW-Admin & Gen	Sr Business Operations Analyst	11/9/2015	5,457	1,276	218	42	6,993
6	246051	FRVWW-Production N	Sr Supvr Operations	5/4/1992	6,710	1,569	218	42	8,540
7	249406	YORKWW-Field Service	Supvr Field Operations	11/27/2017	5,829	1,363	218	42	7,453
8	241301	EXTRWW-Production	Sr Supvr Operations	4/22/2019	7,173	1,677	218	42	9,110
9	241306	EXTRWW-Field Service	Supvr Field Operations	3/16/2020	6,403	1,497	218	42	8,161
10	241701	ROYFWW-Production	Supvr Production	9/18/2006	6,609	1,546	218	42	8,415
11	249401	YORKWW-Production	Supvr Field Operations	2/19/1983	5,646	1,320	218	42	7,227
12	249401	YORKWW-Production	Supvr Production	6/24/2013	6,235	1,458	218	42	7,954
			Total Non-Collective Bargaining Unit Salary		$73,844	$17,270	$2,424	$466	$94,003
Collective Bargaining Unit									
1	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/4/2008	$4,451	$1,041	$218	$42	$5,753
2	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	6/17/2019	4,019	940	218	42	5,220
3	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	12/13/2010	3,931	919	218	42	5,111
4	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/17/1984	5,118	1,197	218	42	6,575
5	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	10/26/2009	4,557	1,066	218	42	5,883
6	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	5/22/2017	5,157	1,206	218	42	6,624
7	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	10/20/2014	3,656	855	218	42	4,771
8	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2016	4,928	1,153	218	42	6,341
9	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	9/28/2015	5,253	1,229	218	42	6,742
10	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	7/29/2013	3,942	922	218	42	5,124
11	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	12/7/2009	4,447	1,040	218	42	5,747
12	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/20/2018	4,162	973	218	42	5,395
13	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	8/3/2020	4,326	1,012	218	42	5,598
14	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Operator	4/24/2017	4,204	983	218	42	5,448
15	249401	YORKWW-Production	Wastewater Treatment Plant Operator IBT	6/20/2022	5,490	1,284	218	42	7,035
16	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3,861	903	218	42	5,025
17	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	7/11/2022	3,857	902	218	42	5,020
18	249406	YORKWW-Field Service	Wastewater Collection Operator II IBT 77	8/8/2022	4,100	959	218	42	5,319
19	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	9/26/2022	3,846	899	218	42	5,005
20	249401	YORKWW-Production	Assistant Wastewater Treatment Plant Ope	10/24/2022	4,012	938	218	42	5,211
21	249406	YORKWW-Field Service	Wastewater Collections Operator I IBT 77	4/10/2023	3,636	850	218	42	4,746
22	249401	YORKWW-Production	Wastewater Treatment Plant Maintenance M	4/24/2023	3,842	898	218	42	5,000
			Total Collective Bargaining Unit		94,795	22,170	4,803	924	122,693

Pennsylvania-American Water Company - Wastewater SSS General Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Hourly														
1	246701	COWW-Production	Wastewater Operator	9/20/1999	$5,202	$1,217	$218	$42	$6,679	$5,411	$1,265	$218	$42	$6,937
2	246706	COWW-Field Services	Utility Person	5/30/1995	4,964	1,161	218	42	6,386	5,162	1,207	218	42	6,630
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	5,128	1,199	218	42	6,588	5,334	1,247	218	42	6,842
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	5,561	1,300	218	42	7,121	5,783	1,352	218	42	7,396
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	5,662	1,324	218	42	7,246	5,888	1,377	218	42	7,526
6	246706	COWW-Field Services	Crew Leader	11/10/2003	4,954	1,159	218	42	6,373	5,153	1,205	218	42	6,619
7	246901	LPWW-Production	Plant Operator	6/2/2008	4,964	1,161	218	42	6,386	5,164	1,208	218	42	6,632
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	5,190	1,214	218	42	6,664	5,398	1,262	218	42	6,921
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	6,074	1,421	218	42	7,755	6,317	1,477	218	42	8,055
10	242601	CLYWW-Production	Plant Operator	7/31/2008	4,775	1,117	218	42	6,152	4,967	1,162	218	42	6,389
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	5,634	1,318	218	42	7,212	5,859	1,370	218	42	7,490
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	4,811	1,125	218	42	6,196	5,003	1,170	218	42	6,433
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	6,026	1,409	218	42	7,696	6,268	1,466	218	42	7,994
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	4,993	1,168	218	42	6,421	5,192	1,214	218	42	6,666
15	246706	COWW-Field Services	Utility Person	3/14/2016	4,691	1,097	218	42	6,049	4,879	1,141	218	42	6,280
16	246901	LPWW-Production	Plant Operator	9/11/2017	4,704	1,100	218	42	6,065	4,892	1,144	218	42	6,296
17	246701	COWW-Production	Wastewater Operator	5/14/2018	5,126	1,199	218	42	6,585	5,331	1,247	218	42	6,838
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	5,097	1,192	218	42	6,549	5,299	1,239	218	42	6,799
19	248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	10/15/2018	5,147	1,204	218	42	6,611	5,354	1,252	218	42	6,866
20	246706	COWW-Field Services	Utility Person	3/25/2019	4,665	1,091	218	42	6,016	4,851	1,135	218	42	6,246
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	5,355	1,252	218	42	6,867	5,570	1,303	218	42	7,133
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	5,148	1,204	218	42	6,613	5,355	1,252	218	42	6,867
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	4,776	1,117	218	42	6,153	4,967	1,162	218	42	6,389
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	4,928	1,152	218	42	6,340	5,124	1,198	218	42	6,583
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	5,139	1,202	218	42	6,601	5,344	1,250	218	42	6,854
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	5,933	1,388	218	42	7,581	6,171	1,443	218	42	7,875
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	4,920	1,151	218	42	6,331	5,116	1,197	218	42	6,573
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	4,936	1,154	218	42	6,351	5,133	1,201	218	42	6,594
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	4,819	1,127	218	42	6,207	5,012	1,172	218	42	6,444
30	248706	Nw Cmbrlnd WW FS	Utility Person	9/20/2021	4,277	1,000	218	42	5,538	4,449	1,040	218	42	5,750
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021	4,413	1,032	218	42	5,705	4,589	1,073	218	42	5,922
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	4,758	1,113	218	42	6,131	4,948	1,157	218	42	6,366
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	4,346	1,016	218	42	5,623	4,520	1,057	218	42	5,837
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	4,064	950	218	42	5,274	4,227	989	218	42	5,476
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	4,538	1,061	218	42	5,859	4,719	1,104	218	42	6,083
36	248706	Nw Cmbrlnd WW FS	Utility Person	9/6/2022	4,443	1,039	218	42	5,743	4,621	1,081	218	42	5,962
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	3,915	916	218	42	5,091	4,072	952	218	42	5,285
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	4,323	1,011	218	42	5,595	4,496	1,051	218	42	5,808
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	4,411	1,031	218	42	5,702	4,587	1,073	218	42	5,920
40	246701	COWW-Production	Wastewater Operator	1/3/2023	4,719	1,104	218	42	6,082	4,907	1,148	218	42	6,315
41	248701	Nw Cmbrnlnd WW Prod	Utility Person	2/6/2023	3,831	896	218	42	4,987	3,984	932	218	42	5,176
42	246706	COWW-Field Services	Utility Person	3/6/2023	3,902	912	218	42	5,075	4,058	949	218	42	5,267
			Total Non-Collective Bargaining Unit Hourly		$205,261	$48,005	$9,170	$1,764	$264,200	$213,473	$49,925	$9,170	$1,764	$274,332

Pennsylvania-American Water Company - Wastewater SSS General Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Hourly									
1	246701	COWW-Production	Wastewater Operator	9/20/1999	$5,599	$1,310	$218	$42	$7,169
2	246706	COWW-Field Services	Utility Person	5/30/1995	5,341	1,249	218	42	6,850
3	246701	COWW-Production	Maintenance/Relief Operator	9/9/1996	5,519	1,291	218	42	7,070
4	246901	LPWW-Production	Lead Plant Operator	8/1/1983	5,983	1,399	218	42	7,643
5	245801	POWW-Production	Lead Plant Operator	9/23/1996	6,093	1,425	218	42	7,779
6	246706	COWW-Field Services	Crew Leader	11/10/2003	5,332	1,247	218	42	6,840
7	246901	LPWW-Production	Plant Operator	6/2/2008	5,343	1,250	218	42	6,853
8	246701	COWW-Production	Maintenance/Relief Operator	7/21/2008	5,585	1,306	218	42	7,152
9	242601	CLYWW-Production	Lead Plant Operator	7/31/2008	6,536	1,529	218	42	8,325
10	242601	CLYWW-Production	Plant Operator	7/31/2008	5,139	1,202	218	42	6,602
11	244701	CLRWW-Production	Lead Plant Operator	1/3/2011	6,063	1,418	218	42	7,742
12	245801	POWW-Production	Maintenance/Relief Operator	10/20/2014	5,176	1,210	218	42	6,647
13	246052	FRVWW-Production S	Lead Plant Operator	8/9/2005	6,485	1,517	218	42	8,262
14	246051	FRVWW-Production N	Lead Plant Operator	9/2/2012	5,372	1,256	218	42	6,889
15	246706	COWW-Field Services	Utility Person	3/14/2016	5,048	1,181	218	42	6,489
16	246901	LPWW-Production	Plant Operator	9/11/2017	5,063	1,184	218	42	6,507
17	246701	COWW-Production	Wastewater Operator	5/14/2018	5,516	1,290	218	42	7,066
18	246901	LPWW-Production	Relief Operator, Maintenance	7/23/2018	5,483	1,282	218	42	7,025
19	248701	Nw CmbrnInd WW Prod	Lead Plant Operator	10/15/2018	5,540	1,296	218	42	7,096
20	246706	COWW-Field Services	Utility Person	3/25/2019	5,020	1,174	218	42	6,454
21	241301	EXTRWW-Production	Maint Service Specialist	5/6/2019	5,763	1,348	218	42	7,371
22	241301	EXTRWW-Production	Wastewater Operator	10/24/2019	5,541	1,296	218	42	7,098
23	241306	EXTRWW-Field Service	Utility Person	11/18/2019	5,140	1,202	218	42	6,602
24	241301	EXTRWW-Production	Wastewater Operator	12/2/2019	5,301	1,240	218	42	6,802
25	244701	CLRWW-Production	Wastewater Operator	2/24/2020	5,529	1,293	218	42	7,083
26	241301	EXTRWW-Production	Maint Service Specialist	3/9/2020	6,385	1,493	218	42	8,139
27	241301	EXTRWW-Production	Wastewater Operator	6/8/2020	5,294	1,238	218	42	6,793
28	244701	CLRWW-Production	Wastewater Operator	10/12/2020	5,311	1,242	218	42	6,814
29	241701	ROYFWW-Production	Plant Operator	7/30/2018	5,186	1,213	218	42	6,659
30	248706	Nw CmbrInd WW FS	Utility Person	9/20/2021	4,603	1,077	218	42	5,940
31	245801	POWW-Production	Maintenance/Relief Operator	9/13/2021	4,748	1,110	218	42	6,119
32	241306	EXTRWW-Field Service	Utility Person	10/25/2021	5,120	1,197	218	42	6,577
33	246701	COWW-Production	Maintenance/Relief Operator	11/8/2021	4,678	1,094	218	42	6,032
34	249405	YORKWW-Admin & Gen	Operations Specialist	2/14/2011	4,374	1,023	218	42	5,658
35	241301	EXTRWW-Production	Wastewater Operator	8/22/2022	4,883	1,142	218	42	6,286
36	248706	Nw CmbrInd WW FS	Utility Person	9/6/2022	4,782	1,118	218	42	6,161
37	246006	FRVWW-Field Services	Utility Person	9/19/2022	4,213	985	218	42	5,459
38	241306	EXTRWW-Field Service	Utility Person	10/31/2022	4,653	1,088	218	42	6,001
39	241306	EXTRWW-Field Service	Utility Person	11/21/2022	4,747	1,110	218	42	6,118
40	246701	COWW-Production	Wastewater Operator	1/3/2023	5,078	1,188	218	42	6,526
41	248701	Nw CmbrnInd WW Prod	Utility Person	2/6/2023	4,123	964	218	42	5,348
42	246706	COWW-Field Services	Utility Person	3/6/2023	4,199	982	218	42	5,441
			Total Non-Collective Bargaining Unit Hourly		$220,891	$51,660	$9,170	$1,764	$283,485

Pennsylvania-American Water Company - Wastewater CSS Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Salary														
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000	$6,641	$1,553	$218	$42	$8,454	$6,907	$1,615	$218	$42	$8,783
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006	5,375	1,257	218	42	6,893	5,591	1,308	218	42	7,159
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016	4,722	1,104	218	42	6,087	4,911	1,148	218	42	6,320
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002	8,360	1,955	218	42	10,575	8,695	2,034	218	42	10,989
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007	5,347	1,250	218	42	6,858	5,561	1,301	218	42	7,122
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007	5,902	1,380	218	42	7,543	6,138	1,436	218	42	7,834
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008	5,843	1,366	218	42	7,469	6,076	1,421	218	42	7,758
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982	6,450	1,508	218	42	8,218	6,708	1,569	218	42	8,537
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003	7,381	1,726	218	42	9,368	7,678	1,796	218	42	9,734
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015	6,111	1,429	218	42	7,800	6,355	1,486	218	42	8,102
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019	6,806	1,592	218	42	8,658	7,079	1,655	218	42	8,994
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020	5,505	1,287	218	42	7,053	5,725	1,339	218	42	7,325
			Total Non-Collective Bargaining Unit Salary		$74,442	$17,410	$2,620	$504	$94,976	$77,424	$18,107	$2,620	$504	$98,655
Collective Bargaining Unit														
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	$5,464	$1,278	$218	$42	$7,002	$5,571	$1,303	$218	$42	$7,134
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006	7,294	1,706	218	42	9,260	7,438	1,740	218	42	9,438
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	4,612	1,079	218	42	5,950	4,702	1,100	218	42	6,062
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002	5,039	1,178	218	42	6,477	5,138	1,202	218	42	6,600
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008	4,363	1,020	218	42	5,643	4,449	1,040	218	42	5,750
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016	5,292	1,238	218	42	6,790	5,396	1,262	218	42	6,918
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012	4,691	1,097	218	42	6,049	4,783	1,119	218	42	6,162
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013	4,442	1,039	218	42	5,741	4,529	1,059	218	42	5,849
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990	4,472	1,046	218	42	5,778	4,561	1,067	218	42	5,888
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005	4,089	956	218	42	5,306	4,170	975	218	42	5,405
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008	4,940	1,155	218	42	6,355	5,037	1,178	218	42	6,475
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007	5,223	1,222	218	42	6,705	5,323	1,245	218	42	6,828
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016	4,431	1,036	218	42	5,728	4,518	1,057	218	42	5,835
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009	6,198	1,450	218	42	7,908	6,316	1,477	218	42	8,054
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005	5,037	1,178	218	42	6,475	5,136	1,201	218	42	6,598
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005	4,362	1,020	218	42	5,643	4,448	1,040	218	42	5,749
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	4,632	1,083	218	42	5,975	4,723	1,105	218	42	6,088
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008	7,004	1,638	218	42	8,902	7,142	1,670	218	42	9,072
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008	8,261	1,932	218	42	10,454	8,424	1,970	218	42	10,655
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009	4,856	1,136	218	42	6,252	4,952	1,158	218	42	6,371
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005	6,275	1,467	218	42	8,003	6,396	1,496	218	42	8,152
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011	4,514	1,056	218	42	5,830	4,603	1,077	218	42	5,940
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987	4,639	1,085	218	42	5,984	4,731	1,106	218	42	6,097
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997	8,188	1,915	218	42	10,364	8,350	1,953	218	42	10,564
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	4,191	980	218	42	5,432	4,274	1,000	218	42	5,534
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	4,504	1,053	218	42	5,817	4,592	1,074	218	42	5,926
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011	4,398	1,028	218	42	5,687	4,484	1,049	218	42	5,793
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013	5,304	1,240	218	42	6,805	5,408	1,265	218	42	6,933
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012	5,073	1,187	218	42	6,520	5,173	1,210	218	42	6,644
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009	4,040	945	218	42	5,246	4,120	963	218	42	5,344
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013	5,087	1,190	218	42	6,538	5,188	1,213	218	42	6,662
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992	7,444	1,741	218	42	9,445	7,584	1,774	218	42	9,618
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016	4,598	1,075	218	42	5,934	4,689	1,097	218	42	6,046
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	5,575	1,304	218	42	7,139	5,683	1,329	218	42	7,272
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012	3,866	904	218	42	5,030	3,942	922	218	42	5,124

Pennsylvania-American Water Company - Wastewater CSS Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
Non-Collective Bargaining Unit Salary									
1	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	11/16/2000	$7,147	$1,671	$218	$42	$9,078
2	249206	Scrntn-WW-Fld Svc	Supvr Field Operations	4/17/2006	5,786	1,353	218	42	7,400
3	249200	Scranton WW-BS/OH	Sr Business Operations Analyst	5/31/2016	5,081	1,188	218	42	6,530
4	249200	Scranton WW-BS/OH	Mgr Opns	6/3/2002	8,998	2,104	218	42	11,362
5	249201	Scranton WW-Prod	Supvr Production	8/13/2007	5,754	1,346	218	42	7,360
6	249206	Scrntn-WW-Fld Svc	Sr Supvr Operations	9/4/2007	6,352	1,486	218	42	8,098
7	241206	MCKEWW-Field Service	Supvr Field Operations	12/30/2008	6,287	1,470	218	42	8,018
8	241205	MCKEWW-Admin & Gen	Sr Supvr Operations	9/20/1982	6,942	1,623	218	42	8,825
9	241205	MCKEWW-Admin & Gen	Sr Supt Opns	10/6/2003	7,945	1,858	218	42	10,063
10	241201	MCKEWW-Production	Sr Supvr Operations	10/26/2015	6,576	1,538	218	42	8,374
11	249201	Scranton WW-Prod	Sr Supt Production	7/22/2019	7,325	1,713	218	42	9,298
12	249201	Scranton WW-Prod	Supvr Production	10/19/2020	5,925	1,386	218	42	7,571
			Total Non-Collective Bargaining Unit Salary		$80,117	$18,737	$2,620	$504	$101,978
Collective Bargaining Unit									
1	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	$5,679	$1,328	$218	$42	$7,268
2	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	3/27/2006	7,585	1,774	218	42	9,619
3	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	4,794	1,121	218	42	6,176
4	249206	Scrntn-WW-Fld Svc	CSO/Compliance	11/19/2002	5,239	1,225	218	42	6,725
5	249201	Scranton WW-Prod	Maintenance Mechanic A	9/28/2008	4,537	1,061	218	42	5,858
6	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/7/2016	5,501	1,287	218	42	7,048
7	249201	Scranton WW-Prod	Maintenance Relief Operator	7/9/2012	4,876	1,140	218	42	6,276
8	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/15/2013	4,618	1,080	218	42	5,958
9	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	3/19/1990	4,650	1,088	218	42	5,998
10	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	4/25/2005	4,252	994	218	42	5,507
11	249206	Scrntn-WW-Fld Svc	Equipment Operator B	11/4/2008	5,135	1,201	218	42	6,596
12	249201	Scranton WW-Prod	Maintenance Relief Operator	8/13/2007	5,424	1,269	218	42	6,953
13	249206	Scrntn-WW-Fld Svc	Equipment Operator B	2/22/2016	4,607	1,077	218	42	5,944
14	249201	Scranton WW-Prod	Plant Operator	5/26/2009	6,436	1,505	218	42	8,201
15	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/25/2005	5,238	1,225	218	42	6,723
16	249206	Scrntn-WW-Fld Svc	Asst. Camera	4/25/2005	4,535	1,061	218	42	5,856
17	249201	Scranton WW-Prod	Maintenance Mechanic A	5/26/2009	4,816	1,126	218	42	6,203
18	249206	Scrntn-WW-Fld Svc	Complaint Person/Locator	1/7/2008	7,282	1,703	218	42	9,246
19	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/25/2008	8,590	2,009	218	42	10,859
20	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/17/2009	5,050	1,181	218	42	6,491
21	249201	Scranton WW-Prod	Chief Plant Operator	4/25/2005	6,518	1,524	218	42	8,303
22	249206	Scrntn-WW-Fld Svc	Pump Station Mechanic	1/31/2011	4,694	1,098	218	42	6,052
23	249206	Scrntn-WW-Fld Svc	Camera Truck Operator	9/8/1987	4,824	1,128	218	42	6,212
24	249206	Scrntn-WW-Fld Svc	Crew Chief Collections	9/8/1997	8,515	1,991	218	42	10,766
25	249206	Scrntn-WW-Fld Svc	Equipment Operator B	4/25/2005	4,358	1,019	218	42	5,637
26	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	4,682	1,095	218	42	6,037
27	249206	Scrntn-WW-Fld Svc	Equipment Operator B	1/31/2011	4,572	1,069	218	42	5,902
28	249206	Scrntn-WW-Fld Svc	Equipment Operator B	6/30/2013	5,514	1,290	218	42	7,064
29	249206	Scrntn-WW-Fld Svc	Equipment Operator A	7/9/2012	5,275	1,234	218	42	6,769
30	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	2/17/2009	4,201	982	218	42	5,443
31	249201	Scranton WW-Prod	Fleet Maintenance Chief	3/11/2013	5,290	1,237	218	42	6,788
32	249201	Scranton WW-Prod	Maintenance Relief Operator	11/9/1992	7,727	1,807	218	42	9,795
33	249206	Scrntn-WW-Fld Svc	Equipment Operator A	2/22/2016	4,781	1,118	218	42	6,160
34	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	5,793	1,355	218	42	7,408
35	249201	Scranton WW-Prod	Inventory/Facility Grounds Keeper	7/9/2012	4,019	940	218	42	5,219

Pennsylvania-American Water Company - Wastewater CSS Operations
Payroll Taxes

					2023 Gross Payroll Taxes					2024 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2023 Total Gross Payroll Taxes	FICA Withholding	FICA Medicare	SUTA	FUTA	2024 Total Gross Payroll Taxes
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007	4,318	1,010	218	42	5,588	4,403	1,030	218	42	5,693
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006	5,068	1,185	218	42	6,513	5,167	1,209	218	42	6,636
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997	4,146	970	218	42	5,377	4,228	989	218	42	5,478
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	4,981	1,165	218	42	6,406	5,075	1,187	218	42	6,523
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006	8,294	1,940	218	42	10,494	8,457	1,978	218	42	10,696
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017	5,480	1,282	218	42	7,021	5,588	1,307	218	42	7,155
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008	4,921	1,151	218	42	6,332	5,018	1,174	218	42	6,452
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016	5,079	1,188	218	42	6,527	5,179	1,211	218	42	6,651
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	3,904	913	218	42	5,078	3,981	931	218	42	5,172
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005	4,846	1,133	218	42	6,239	4,937	1,155	218	42	6,352
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	7,794	1,823	218	42	9,877	7,945	1,858	218	42	10,064
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	4,875	1,140	218	42	6,276	5,007	1,171	218	42	6,438
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	6,332	1,481	218	42	8,073	6,494	1,519	218	42	8,274
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	4,898	1,146	218	42	6,304	5,028	1,176	218	42	6,464
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	4,760	1,113	218	42	6,134	4,889	1,143	218	42	6,293
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	4,962	1,160	218	42	6,382	5,093	1,191	218	42	6,544
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	4,966	1,161	218	42	6,388	5,099	1,192	218	42	6,552
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	5,171	1,209	218	42	6,641	5,297	1,239	218	42	6,797
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	5,197	1,216	218	42	6,673	5,330	1,247	218	42	6,837
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	3,813	892	218	42	4,965	3,914	915	218	42	5,089
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	5,172	1,210	218	42	6,642	5,308	1,241	218	42	6,810
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	5,380	1,258	218	42	6,898	5,518	1,291	218	42	7,069
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	5,116	1,197	218	42	6,573	5,243	1,226	218	42	6,729
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	4,917	1,150	218	42	6,327	5,050	1,181	218	42	6,491
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	4,400	1,029	218	42	5,689	4,510	1,055	218	42	5,826
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	5,134	1,201	218	42	6,595	5,272	1,233	218	42	6,766
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	5,369	1,256	218	42	6,886	5,508	1,288	218	42	7,057
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	4,047	947	218	42	5,254	4,157	972	218	42	5,389
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	6,226	1,456	218	42	7,943	6,386	1,493	218	42	8,139
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	4,967	1,162	218	42	6,389	5,098	1,192	218	42	6,551
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	4,094	958	218	42	5,312	4,205	983	218	42	5,449
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	4,261	997	218	42	5,518	4,377	1,024	218	42	5,661
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	5,301	1,240	218	42	6,801	5,405	1,264	218	42	6,930
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	5,399	1,263	218	42	6,922	5,506	1,288	218	42	7,054
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	5,559	1,300	218	42	7,120	5,669	1,326	218	42	7,255
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	3,614	845	218	42	4,720	3,704	866	218	42	4,831
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	3,909	914	218	42	5,083	4,006	937	218	42	5,203
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	4,633	1,084	218	42	5,977	4,725	1,105	218	42	6,090
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	5,341	1,249	218	42	6,850	5,442	1,273	218	42	6,975
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	4,964	1,161	218	42	6,386	5,098	1,192	218	42	6,551
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	3,615	845	218	42	4,720	3,710	868	218	42	4,839
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	4,966	1,161	218	42	6,387	5,099	1,193	218	42	6,552
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	5,641	1,319	218	42	7,220	5,747	1,344	218	42	7,351
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	3,106	726	218	42	4,092	3,195	747	218	42	4,202
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	4,527	1,059	218	42	5,846	4,614	1,079	218	42	5,953
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	4,833	1,130	218	42	6,224	4,926	1,152	218	42	6,338
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	4,265	997	218	42	5,523	4,349	1,017	218	42	5,626
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	5,946	1,391	218	42	7,596	6,099	1,426	218	42	7,786
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	4,053	948	218	42	5,262	4,133	967	218	42	5,360
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	4,027	942	218	42	5,229	4,107	960	218	42	5,327
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023	-	-	-	-	-	4,976	1,164	218	42	6,400
			Total Collective Bargaining Unit		$428,987	$100,328	$18,559	$3,570	$551,443	$443,245	$103,662	$18,777	$3,612	$569,297
Non-Collective Bargaining Unit Hourly														
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	$3,998	$935	$218	$42	$5,193	$4,158	$973	$218	$42	$5,391
			Total Non-Collective Bargaining Unit Hourly		$3,998	$935	$218	$42	$5,193	$4,158	$973	$218	$42	$5,391

Pennsylvania-American Water Company - Wastewater CSS Operations
Payroll Taxes

					2025 Gross Payroll Taxes				
Line #	Cost Center	Cost Center Name	Job	Original Hire Date	FICA Withholding	FICA Medicare	SUTA	FUTA	2025 Total Gross Payroll Taxes
36	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/13/2007	4,489	1,050	218	42	5,799
37	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/29/2006	5,269	1,232	218	42	6,761
38	249201	Scranton WW-Prod	Maintenance Mechanic A	8/4/1997	4,312	1,008	218	42	5,580
39	249201	Scranton WW-Prod	Maintenance Relief Operator	3/27/2006	5,171	1,209	218	42	6,641
40	249206	Scrntn-WW-Fld Svc	CSO/Flow Meter Tech	3/27/2006	8,624	2,017	218	42	10,901
41	249206	Scrntn-WW-Fld Svc	Field Construction Crew Chief	4/17/2017	5,698	1,333	218	42	7,291
42	249201	Scranton WW-Prod	Maintenance Mechanic A	9/8/2008	5,116	1,197	218	42	6,573
43	249206	Scrntn-WW-Fld Svc	Equipment Operator A	4/25/2016	5,281	1,235	218	42	6,776
44	249206	Scrntn-WW-Fld Svc	Equipment Operator B	3/27/2006	4,059	949	218	42	5,269
45	249201	Scranton WW-Prod	Maintenance Relief Operator	7/11/2005	5,031	1,177	218	42	6,468
46	249201	Scranton WW-Prod	Master Electrician	10/1/2007	8,099	1,894	218	42	10,254
47	241206	MCKEWW-Field Service	Collections Service Person U433	4/24/2006	5,134	1,201	218	42	6,595
48	241201	MCKEWW-Production	Operator UWUA 433	2/24/2003	6,650	1,555	218	42	8,466
49	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	8/31/2005	5,153	1,205	218	42	6,618
50	241206	MCKEWW-Field Service	Vactor Truck Driver UWUA 433	2/10/1986	5,013	1,172	218	42	6,446
51	241206	MCKEWW-Field Service	Field Supervisor UWUA 433	4/12/1982	5,220	1,221	218	42	6,701
52	241201	MCKEWW-Production	Operator UWUA 433	9/7/2011	5,226	1,222	218	42	6,708
53	241206	MCKEWW-Field Service	Field Collections UWUA 433	9/12/2011	5,421	1,268	218	42	6,949
54	241201	MCKEWW-Production	Turn Laborer UWUA 433	5/3/1999	5,460	1,277	218	42	6,998
55	241201	MCKEWW-Production	General Laborer UWUA 433	4/30/2012	4,013	938	218	42	5,211
56	241206	MCKEWW-Field Service	Field Collections UWUA 433	5/27/2008	5,441	1,273	218	42	6,974
57	241201	MCKEWW-Production	Turn Laborer UWUA 433	2/2/2009	5,653	1,322	218	42	7,236
58	241206	MCKEWW-Field Service	Field Collections UWUA 433	1/25/2010	5,366	1,255	218	42	6,881
59	241201	MCKEWW-Production	Filter Belt Press Operator UWUA 433	5/5/2008	5,179	1,211	218	42	6,650
60	241201	MCKEWW-Production	Utility Laborer UWUA 433	1/18/2010	4,617	1,080	218	42	5,957
61	241206	MCKEWW-Field Service	Backhoe Operator UWUA 433	7/1/2009	5,406	1,264	218	42	6,931
62	241201	MCKEWW-Production	Turn Laborer UWUA 433	4/30/2012	5,643	1,320	218	42	7,224
63	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	9/6/2011	4,262	997	218	42	5,519
64	241201	MCKEWW-Production	Operator UWUA 433	5/22/2000	6,538	1,529	218	42	8,328
65	241206	MCKEWW-Field Service	Camera Operator UWUA 433	12/22/2008	5,226	1,222	218	42	6,708
66	241206	MCKEWW-Field Service	Line Maintenance Laborer UWUA 433	3/22/2010	4,312	1,008	218	42	5,580
67	241206	MCKEWW-Field Service	Equipment Laborer U433M	9/6/2011	4,489	1,050	218	42	5,800
68	249206	Scrntn-WW-Fld Svc	Equipment Operator A	11/19/2018	5,512	1,289	218	42	7,061
69	249201	Scranton WW-Prod	Vehicle Mechanic	2/11/2019	5,614	1,313	218	42	7,187
70	249206	Scrntn-WW-Fld Svc	Equipment Operator A	3/11/2019	5,780	1,352	218	42	7,392
71	241901	KANEWW-Production	Wastewater Treatment Operator	8/7/2010	3,797	888	218	42	4,945
72	241901	KANEWW-Production	Lead Wastewater Treatment Operator	4/2/2002	4,106	960	218	42	5,327
73	249206	Scrntn-WW-Fld Svc	Equipment Operator A	5/24/2021	4,818	1,127	218	42	6,205
74	249201	Scranton WW-Prod	Maintenance Relief Operator	6/14/2021	5,545	1,297	218	42	7,102
75	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	7/19/2021	5,228	1,223	218	42	6,711
76	241201	MCKEWW-Production	General Laborer UWUA 433	1/3/2022	3,805	890	218	42	4,955
77	241201	MCKEWW-Production	Maintenance Mechanic UWUA 433	3/21/2022	5,229	1,223	218	42	6,712
78	249201	Scranton WW-Prod	Plant Operator	5/2/2022	5,854	1,369	218	42	7,484
79	241901	KANEWW-Production	Wastewater Treatment Operator	6/20/2022	3,285	768	218	42	4,314
80	249206	Scrntn-WW-Fld Svc	Equipment Operator B	7/18/2022	4,702	1,100	218	42	6,062
81	249206	Scrntn-WW-Fld Svc	Asst. Camera	7/25/2022	5,020	1,174	218	42	6,455
82	249206	Scrntn-WW-Fld Svc	Equipment Operator B	8/22/2022	4,434	1,037	218	42	5,731
83	241201	MCKEWW-Production	Operator UWUA 433	10/24/2022	6,247	1,461	218	42	7,968
84	249201	Scranton WW-Prod	Plant Operator	5/1/2023	4,214	986	218	42	5,460
85	249201	Scranton WW-Prod	Plant Operator	5/15/2023	4,188	979	218	42	5,427
86	241201	MCKEWW-Production	Operator UWUA 433 - To Be Filled	12/31/2023	5,100	1,193	218	42	6,553
			Total Collective Bargaining Unit		$452,654	$105,863	$18,777	$3,612	$580,906
Non-Collective Bargaining Unit Hourly									
1	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/8/2022	$4,303	$1,006	$218	$42	$5,569
			Total Non-Collective Bargaining Unit Hourly		$4,303	$1,006	$218	$42	$5,569

Pennsylvania-American Water Company
Other Post Employment Benefits (OPEB)
Pro Forma Adjustment

	6/30/2023 Per Books	Adjustment	6/30/2023 Pro forma Expense
Pro Forma OPEB Cost - Service Costs	$598,455	($73,584)	$524,871
Retiree Medical VEBA	255,008		255,008
Subtotal	853,464	(73,584)	779,879
Capitalization Rate			39.55%
Pro Forma OPEB Cost - Service Costs and Retiree Medical VEBA Capitalized	(383,886)	75,444	(308,442)
Pro Forma OPEB Cost - Non-Service Costs	(7,895,802)	1,623,002	(6,272,800)
OPEB Cost - ASC 715 (FAS 106) and Retiree VEBA Medical	(7,426,224)	1,624,861	(5,801,363)
Total 2023 Pro forma OPEB Expense Adjustment			1,624,861

	6/30/2023 Pro forma Expense	Adjustment	6/30/2024 Pro forma Expense
Pro Forma OPEB Cost - Service Costs	$524,871	$19,912	$544,783
Retiree Medical VEBA	255,008	(26,408)	228,600
Subtotal	779,879	(6,496)	773,383
Capitalization Rate	39.55%		39.55%
Pro Forma OPEB Cost - Service Costs Capitalized	(308,442)	2,569	(305,873)
Pro Forma OPEB Cost - Non-Service Costs	(6,272,800)	(691,447)	(6,964,247)
OPEB Cost - ASC 715 (FAS 106) and Retiree VEBA Medical	(5,801,363)	(695,374)	(6,496,737)
Total 2024 Pro forma OPEB Expense Adjustment			(695,374)

	6/30/2024 Pro forma Expense	Adjustment	6/30/2025 Pro forma Expense
Pro Forma OPEB Cost - Service Costs	$544,783	$0	$544,783
Retiree Medical VEBA	228,600	0	228,600
Subtotal	773,383	0	773,383
Capitalization Rate	39.55%		39.55%
Pro Forma OPEB Cost - Service Costs Capitalized	(305,873)	0	(305,873)
Pro Forma OPEB Cost - Non-Service Costs	(6,964,247)	0	(6,964,247)
OPEB Cost - ASC 715 (FAS 106) and Retiree VEBA Medical	(6,496,737)	0	(6,496,737)
Total 2025 Pro forma OPEB Expense Adjustment			$0

Pennsylvania-American Water Company - Water Operations
Pension

Pension

	Gross Amount	Capital Rate	Capitalized Service Costs	Pro Forma Expense
Pro Forma Pension Cost - Service Costs	$3,311,424	39.55%	$1,309,668	$2,001,756
Pro Forma Pension Cost - Non-Service Costs	927,733			927,733
Pro Forma Pension Cost - ASC 715 (FAS 87) Accrual	$4,239,157			$2,929,489
10 yr amortization of Deferred Pension Liability - PWAC				($1,479,089)
10 yr amortization of Deferred Pension Liability - Service Company				(479,329)
Total 10 yr amortization of Deferred Pension Liability				(1,958,418)
Total Pro Forma Pension Expense				$971,071

Pennsylvania-American Water Company
Summary of Pro Forma Adjustments

											Adjustments											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
Function	**12 months ended 06/30/23**	**Removed one-time items**	**Normalize for merit - Labor and Labor Related [1]**	**SERP Removal**	**Employee Movement**	**4/1/24 Merit Increase - Labor and Related [2]**	**2024 LTPP Adjustment**	**2024 Depreciation and LOP Interest**	**2024 Adjustment for Changes in Expense**	**2024 Pension / OPEB**	**2024 Alton-Pensacola Building Adjustment**	**2024 Evansville Building Adjustment**	**2024 Postage Adjustment**	**2024 Sales Tax Refund Adjustment**	**FTY 12 months ended 06/30/24**	**4/1/25 Merit Increase - Labor and Related [3]**	**2025 LTPP Adjustment**	**2025 Depreciation and LOP Interest**	**2025 Adjustment for Changes in Expense**	**2025 Pension / OPEB Adjustment**	**FPFTY 12 months ended 06/30/25**	**Total Adjustments**
Business Development	$466,615	$0	$8,721	$0	$62,950	$17,485	$0	$0	$4,057	$5,272	$0	$0	$0	$0	$565,101	$16,002	$0	$0	$4,231	$0	$585,335	$118,719
Central Lab	665,400	(218)	8,669	0	0	14,914	0	0	12,635	12,227	0	0	0	0	713,627	13,915	0	0	13,177	0	740,719	75,319
Corp Admin	1,940,320	1,621	(35,197)	0	0	(44,713)	211,261	37,937	(30,055)	(40,991)	0	97,119	0	320,399	2,457,700	(42,948)	242,634	363,386	(13,422)	0	3,007,350	1,067,030
Corporate Security	5,097,346	(11,016)	42,917	0	0	73,838	0	0	139,743	15,454	0	0	0	0	5,358,282	67,343	0	0	145,742	0	5,571,367	474,022
Customer Service Organization (CSO)	15,477,451	(12,067)	144,534	0	0	248,667	0	0	200,104	278,510	(1,098,092)	0	208,402	0	15,447,509	234,561	0	0	208,694	0	15,890,764	413,313
Environmental Leadership	982,534	(7,393)	19,775	0	0	34,023	0	0	5,640	25,316	0	0	0	0	1,059,895	31,654	0	0	5,882	0	1,097,430	114,896
External Affairs & Public Policy	1,277,148	(11,504)	23,870	0	0	41,068	0	0	10,612	25,717	0	0	0	0	1,366,911	38,043	0	0	11,067	0	1,416,021	138,873
Facilities	1,778,638	0	2,437	0	0	4,193	0	0	55,707	0	0	0	0	0	1,840,975	3,794	0	0	58,098	0	1,902,867	124,229
Finance	9,467,772	(111,977)	190,803	0	0	328,279	0	0	52,154	147,909	0	0	0	0	10,074,940	302,115	0	0	54,393	0	10,431,447	963,675
Human Resources	4,621,322	(13,395)	85,156	0	0	146,508	0	0	41,844	40,961	0	0	0	0	4,922,395	133,974	0	0	43,641	0	5,100,010	478,689
Information Technology (IT)	6,388,367	(9,684)	43,137	0	0	74,217	0	0	194,797	3,968	0	0	0	0	6,694,802	67,292	0	0	203,160	0	6,965,253	576,886
Investor Relations	471,002	0	4,755	0	0	8,181	0	0	11,510	0	0	0	0	0	495,448	7,403	0	0	12,004	0	514,855	43,853
Legal	4,773,072	(262,508)	90,815	(31,348)	0	153,219	0	0	21,851	72,938	0	0	0	0	4,818,038	142,645	0	0	22,789	0	4,983,473	210,401
Operations Excellence	1,280,170	(22,353)	20,314	0	0	34,008	0	0	16,789	105,727	0	0	0	0	1,434,655	34,867	0	0	17,509	0	1,487,031	206,861
Regulated Ops	2,476,248	0	48,028	0	0	82,631	27,502	0	18,332	10,932	0	0	0	0	2,663,675	76,088	42,008	0	19,119	0	2,800,890	324,641
Safety	201,127	(675)	3,855	0	0	6,632	0	0	1,544	0	0	0	0	0	212,484	6,001	0	0	1,611	0	220,096	18,969
Supply Chain	958,985	(7,645)	17,894	0	75,298	32,081	0	0	4,174	9,453	0	0	0	0	1,090,240	30,182	0	0	4,353	0	1,124,775	165,790
Total	$58,323,516	($468,813)	$720,484	($31,348)	$138,249	$1,255,232	$238,762	$37,937	$761,437	$713,394	($1,098,092)	$97,119	$208,402	$320,399	$61,216,676	$1,162,930	$284,642	$363,386	$812,049	$0	$63,839,682	$5,516,167

[1] 2023 Merit increase for non-collective bargaining employees was calculated at 3.2% (used actual average merit increase %). For collective bargaining employees, respective contract increases were used calculated at 2.75%

[2] 2024 Merit increase for non-collective bargaining employees was calculated at 3.14% (used a 3 year average 2021-2023). For collective bargaining employees, respective contract increases were used calculated at 2.60%

[3] 2025 Merit increase for non-collective bargaining employees was calculated at 3.14% (used a 3 year average 2021-2023). For collective bargaining employees, respective contract increases were used calculated at 2.60%

Pennsylvania American Water
Credit Card and Echeck transactions
Volumes and Amounts Paid by PA-American for the 12 Months Ending Jun 2023

		Volume			Amount				
Fee Paid	Trans	$1.50	$1.95	$0.45					Invoice
Month	Month	VI/MC/DI	AMEX	E-checks	Credit Card	AMEX	ACH	Total	amount
Jul-22	Jun-22	68,755	722	83,927	$103,133	$1,408	$37,767	$142,308	$142,308
Aug-22	Jul-22	72,170	784	85,469	108,255	1,529	38,461	148,245	148,245
Sep-22	Jul-22	886	11	1,189	1,329	21	535	1,886	1,886
Oct-22	Aug-22	76,495	1,003	92,634	114,743	1,956	41,685	158,384	158,384
Nov-22	Sep-22	74,446	897	84,680	111,669	1,749	38,106	151,524	151,524
Dec-22	Oct-22	78,843	1,032	83,001	118,265	2,012	37,350	157,627	157,627
Jan-23	Nov-22	79,365	1,000	82,766	119,048	1,950	37,245	158,242	158,242
Feb-23	Dec-22	81,558	1,111	84,705	122,337	2,166	38,117	162,621	162,621
Mar-23	Jan-23	77,916	1,122	77,316	116,874	2,188	34,792	153,854	153,854
Apr-23	Feb-23	82,212	1,229	81,022	123,318	2,397	36,460	162,174	162,174
May-23	Mar-23	93,397	1,290	89,708	140,096	2,516	40,369	182,980	182,980
Jun-23	Apr-23	85,763	1,151	77,145	128,645	2,244	34,715	165,604	165,604
		871,806	11,352	923,562	$1,307,709	$22,136	$415,603	$1,745,448	$1,745,448

June 2023 Residential Customers (less dual WW customers)	654,517				
Percentage of Fees per Residential Customer	$2.00	$0.03	$0.63	$2.67	
June 2024 Residential Customers (less dual WW customers)	676,071				$1,802,928
June 2025 Residential Customers (less dual WW customers)	678,241				$1,808,715

	BYR Allocation Factor 1: Customers	Future Allocation Factor 2: Customers	Base Yr	12 Mos Jun 2024	12 Mos Jun 2025
Water Operations	95.39%	85.45%	$1,665,018	$1,540,602	$1,545,547
Wastewater SSS General Operations	2.98%	6.97%	52,049	125,664	126,067
Brentwood WW		0.49%	0	8,834	8,863
BASA WW		1.83%	0	32,994	33,099
Wastewater CSS Operations	1.63%	5.26%	28,381	94,834	95,138
Total	100.00%	100.00%	$1,745,448	$1,802,928	$1,808,715

Adjustment 2023	Adjustment 2024	Adjustment 2025
	($124,416)	$4,945
	73,615	403
	8,834	28
	32,994	106
	66,453	304
$0	$57,480	$5,787

Amount included in Company's claim	$57,480	$5,787
Correct amount	($124,416)	$4,945
Variance	($181,896)	($842)
Total Variance		($182,738)

Pennsylvania-American Water Company - Water Operations
Miscellaneous Expense Adjustment

Removal of Expense
Per Book Amount

Miscellaneous Expenses

	6/30/2023	6/30/2025
Contract Services[1]	$37,844	
Remove IPP Expenses[2]		156,652
Remove Trade Show Expenses	29,000	
Remove External Board Expenses	123,250	
Removal of Expense	$190,094	$156,652

[1]Remove one time credit to Contract Service - Legal

[2]Removal of charges PAWC is currently paying to BASA that will be eliminated when BASA system is acquired.

Pennsylvania-American Water Company - Audubon Water Operations
Acquisition O&M Adjustment

Audubon Water Adjustment

O&M Expenses	Present Rates 2024	Present Rates 2025
Production Costs:		
Fuel & Power	$145,000	$145,000
Chemicals	92,000	92,000
Labor and Labor Related:		
Labor	375,326	387,283
Group Insurance	83,002	85,518
401K	11,952	12,332
DCP	18,143	18,721
Other O&M		
Service Company	251,055	261,549
Contracted Services	160,528	160,528
Insurance Other Than Group	63,196	63,196
Rents	5,622	5,622
General Office	112,431	112,431
Miscellaneous	102,210	102,210
Maintenance	80,746	80,746
Taxes Other Than Income		
Payroll Tax	29,814	30,729
Property Tax		27,709
Total Audubon Water Adjustment	**$1,531,023**	**$1,585,572**

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Lori O'Malley**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 5-R and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024

Lori O'Malley

Statement No. 6
Abruzzo

PAWC STATEMENT NO. 6

DIRECT TESTIMONY
OF
E. CHRISTOPHER ABRUZZO, ESQ.

WITH REGARD TO
PENNSYLVANIA-AMERICAN WATER COMPANY'S ACQUISITIONS

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: November 8, 2023

PENNSYLVANIA-AMERICAN WATER COMPANY

DIRECT TESTIMONY OF E. CHRISTOPHER ABRUZZO, ESQ.

Q. What is your name and business address?

A. My name is E. Christopher Abruzzo, Esq., and my business address is 852 Wesley Drive, Mechanicsburg, PA 17011.

Q. By whom are you employed and in what capacity?

A. I am employed by Pennsylvania-American Water Company ("PAWC" or the "Company") as Senior Director of Business Development.

Q. What are your responsibilities as Senior Director of Business Development?

A. I develop and maintain necessary contacts to stay abreast of new business opportunities. I manage the acquisition from initial contact, responding to Requests for Qualifications, Requests for Proposals, Requests for Bids, preparation of the Application for submission to the Pennsylvania Public Utility Commission ("Commission") and manage the workflows required to close the acquisition. These responsibilities necessitate that I maintain a working knowledge of regulatory and technical developments, new technologies and current trends as they affect the water and wastewater utility industries, and that I be familiar with legislation, regulations and public policy affecting business opportunities.

Q. Please describe your professional education and experience.

A. I received a Bachelor of Science (B.S.) degree in Food Marketing from St. Joseph's University in May of 1988 and my Juris Doctor (J.D.) from the Widener University School of Law in 1992. I was employed as a criminal prosecutor by the Dauphin County District Attorney's Office and the Pennsylvania Office of Attorney General for approximately

20 years. In January 2011, I was appointed deputy chief of staff to Governor Tom Corbett. In that role, I served as the Governor's chief liaison to the Pennsylvania Public Utility Commission and the Pennsylvania Department of Environmental Protection. I held that role for two years before being appointed the acting Secretary of the Pennsylvania Department of Environmental Protection in April of 2013. I was nominated by Governor Corbett and then confirmed by the Senate of Pennsylvania in December of 2013 as Secretary of the Department of Environmental Protection. In 2015, I began my employment with PAWC as the Director of Water Quality and Environmental Compliance. In that capacity, I participated on the due diligence teams associated with numerous acquisitions. I held that role for five years before being promoted to the role of Senior Director of Business Development in September of 2020.

Q. Have you previously testified before the Commission?

A. Yes. I submitted testimony on behalf of PAWC's proposed acquisition of the wastewater collection and treatment system of the Township of Towamencin, Docket No. A-2023-3039900 *et al*. and in the Company's base rate cases at Docket Nos. R-2020-3019369 and R-2017-2595853.

Q. What is the purpose of your direct testimony?

A. I will discuss the water and wastewater system acquisitions that PAWC has included in this base rate case and provide support for the Company's request for acquisition adjustments pursuant to 66 Pa. C.S. § 1327 (relating to acquisition of water and sewer utilities) and 52 Pa. Code § 69.711 (statement of policy regarding small nonviable water and wastewater systems).

ACQUISITIONS INCLUDED IN THIS BASE RATE CASE

Q. What acquisitions are being included for the first time in base rates in this base rate case?

A. PAWC has included the following acquisitions in this base rate case:

(1) Butler Area Sewer Authority (wastewater);

(2) Borough of Brentwood (wastewater);

(3) Sadsbury Township Municipal Authority (wastewater)

(4) Farmington Township (water and wastewater)

(5) Audubon Water Company (water).

At the time of filing this rate case, PAWC provided notice of this rate case to customers of those entities, even though closing on those acquisitions has not yet occurred. PAWC also completed the following water and wastewater acquisitions since it filed its last base rate case: Upper Pottsgrove Township (wastewater), York City Sewer Authority (wastewater), Foster Township (wastewater), and Creekside Homeowners Association (water). However, those acquisitions were reflected in the base rates established by the Commission-approved settlement of PAWC's 2022 base rate case.[1]

Q. Please provide a detailed description of these acquisitions.

A. **Butler Area Sewer Authority ("BASA"):** On August 14, 2023, PAWC filed a unanimous settlement of all issues with all active parties to this acquisition proceeding. Administrative Law Judge Marta Guhl issued a Recommended Decision on September 14th, 2023, recommending that the Commission deny the Joint Petition for Settlement and deny the

[1] *See Pa. Pub.Util.Comm'n. v. Pennsylvania-American Water Company*, Docket Nos. R-2022-3031672 and R-2022-3031673 (Joint Petition for Settlement of Rate Investigation approved by Order entered December 8, 2022), Appendix E (Amortizations).

Application. PAWC and certain other signatories to the Settlement filed Exceptions on September 21, 2023. Reply Exceptions were filed on September 26, 2023. The Commission is expected to enter a final order in this case at its November 9, 2023 public meeting. If the Commission approves the application, as modified by the settlement, the transaction is expected to close shortly after the Commission's order becomes final and unappealable.

As discussed below, PAWC has included this acquisition in the instant base rate case because this proceeding is PAWC's "next" base rate case after the expected closing on the acquisition. If the Commission approves the acquisition, its Order will establish the amount that PAWC is to include in its rate base in its "next" base rate case as a result of the acquisition. Additionally, it is prudent and fair for the Commission to integrate the BASA system into the larger PAWC system, and to address expenses associated with the operation and maintenance of the system, as soon as reasonably possible to avoid regulatory lag. If the Commission disapproves the acquisition, PAWC reserves the right to pursue all available legal remedies.

The BASA system is a regional wastewater service provider, providing wastewater service to the City of Butler, the Township of Butler, and portions of the Townships of Center, Summit, Connoquenessing, and Oakland, as well as the Borough of East Butler. As of June 30, 2023, the BASA system furnished wastewater service to approximately 14,755 customers. It has no bulk service agreements with any contributing municipalities.

The BASA system is a sanitary-only system; there are no combined sewers in the system. The system consists of 224 miles of interceptor sewers, eight miles of force mains, twenty-three pump stations, seven flow equalization tanks, and a wastewater treatment

plant ("WWTP") that has a design and permitted average daily flow capacity of 10.0 million gallons per day ("MGD") and a rated maximum flow capacity of 28.0 MGD. BASA also owns nearly 6,500 manholes.

Public benefits of the transaction include: promotion of the Commission's policy favoring regionalization and consolidation of water/wastewater systems and the General Assembly's policy goals when it enacted Section 1329; Commission regulation of the system, giving BASA's customers access to the Commission, the OCA, the OSBA and I&E; and enhanced customer assistance programs for all of PAWC's customers (including expanded eligibility for hardship grants and a $3,500,000 Company contribution, over five years, to its hardship grant program, which would not be recoverable in rates). PAWC will also make capital improvements to the system to address long-standing environmental issues.

In the settlement, the parties ask the Commission to approve the addition of $228,000,000 to PAWC's rate base, as a result of the acquisition. Including the BASA acquisition in the instant proceeding will significantly reduce regulatory lag, thereby mitigating one factor that hinders municipal acquisitions pursuant to Section 1329.

Borough of Brentwood ("Brentwood"): PAWC's application to acquire the Brentwood wastewater system was finally accepted for filing on September 14, 2023. Consequently, the Commission is required to enter a final decision in the proceeding by March 14, 2024, which is expected to be prior to the close of the record in this proceeding. If the acquisition is approved, the transaction is expected to close shortly thereafter.

As discussed below, PAWC has included this acquisition in the instant base rate case because this proceeding is PAWC's "next" base rate case after closing on the

acquisition. The Commission Order approving the acquisition will establish the amount that PAWC is to include in its rate base in its "next" base rate case as a result of the acquisition. Additionally, it is prudent and fair for the Commission to integrate the Brentwood system into the larger PAWC system, and to address expenses associated with the operation and maintenance of the system, as soon as reasonably possible to avoid regulatory lag.

The Brentwood system is a collection system that collects and ultimately conveys wastewater to the Allegheny County Sanitary Authority ("ALCOSAN") wastewater treatment facility. It serves customers located in the Borough of Brentwood. The Brentwood system is comprised of gravity sewers, manhole structures and service laterals. As of June 30, 2023, the Brentwood system furnished wastewater service to approximately 3,974 customers.

Public benefits of the transaction include: promotion of the Commission's policy favoring regionalization and consolidation of water/wastewater systems and the General Assembly's policy goals when it enacted Section 1329; Commission regulation of the system, giving Brentwood's customers access to the Commission, the OCA, the OSBA and I&E; and enhanced customer service for Brentwood's customers. In addition, PAWC will make capital improvements to the system to address long-standing environmental issues due to excessive inflow and infiltration.

The Commission's decision, which should be entered while the record is still open in this proceeding, will establish the amount that the Company is to include in rate base as a result of the acquisition. The application requests that the amount to be added to PAWC's rate base as a result of the acquisition be $19,364,443 (the purchase price of the system).

Including the Brentwood acquisition in the instant proceeding will significantly reduce regulatory lag, thereby mitigating one factor that hinders municipal acquisitions pursuant to Section 1329.

Sadsbury Township Municipal Authority ("STMA"): Currently pending before the Commission is PAWC's application to acquire the STMA wastewater collection and conveyance system pursuant to 66 Pa. C.S. § 1102. The STMA wastewater system serves approximately 226 residential and 26 commercial customers in Sadsbury Township, Lancaster County. Treatment service is provided by Christiana Borough Authority and the Township of Salisbury. The STMA has no employees and its governing board desires to exit the business of managing a wastewater system.

PAWC filed an application for Commission approval of the STMA acquisition on August 3, 2023 at Docket No. A-2023-3042058. STMA filed a Petition to Intervene, and the Office of Small Business Advocate ("OSBA") and the Office of Consumer Advocate ("OCA") filed protests. The matter is currently pending in the Office of Administrative Law Judge.

Public benefits of the transaction include:

- STMA's customers will receive service from a large, financially sound company with the employees and equipment to ensure that customers receive high quality wastewater service meeting federal and state requirements;
- PAWC's experience in operating wastewater systems will result in efficiencies;
- Other efficiencies will result from economies of scale, due to PAWC's greater purchasing power;
- PAWC offers customer assistance programs, whereas STMA does not; and
- PAWC's customers will benefit from an expanded customer base, allowing the Company to spread costs among a larger number of customers, which helps to stabilize or reduce per-customer costs over the long term.

The purchase price for the system is $990,000. PAWC has performed an analysis of the original cost and accumulated depreciation of the STMA system. After closing, PAWC will file with the Commission an original cost study to reflect the original cost and accumulated depreciation as of the closing date. The depreciated original cost of the assets included in this case is more than the purchase price, therefore, PAWC is proposing to amortize the difference between what was paid and the cost of the assets, thus lowering expenses for the Company's existing customers.

PAWC has included this acquisition in the instant base rate case because the transaction is expected to close no later than the end of the FPFTY. Additionally, it is prudent and fair for the Commission to integrate the STMA system into the larger PAWC system, and to address expenses associated with the operation and maintenance of the system, as soon as reasonably possible to avoid regulatory lag.

Farmington: PAWC filed the application to acquire Farmington Township's wastewater collection, conveyance and treatment system (Docket No. A-2023-3042587) and water distribution system (Docket No. A-2023-3042567) on August 28, 2023, pursuant to 66 Pa. C.S. § 1102. The OSBA filed a Notice of Intervention and OCA filed a Protest. The matter is currently pending in the Office of Administrative Law Judge.

The Farmington Township wastewater system serves approximately 448 customers in Farmington Township, Clarion County. The wastewater treatment plant has an average daily flow of 0.1 MGD. The system consists of the treatment plant, four pumping stations, approximately 340 grinder pumps and 14 miles of collection mains. The water distribution system serves approximately 464 customers in Farmington Township and consists of 16 miles of water mains, 70 water hydrants and one storage tank. Farmington Township

employs one operator who shares responsibility for both the wastewater system and the water distribution system. The township board desires to exit the business of managing both systems.

Public benefits of the acquisition include:

- Farmington Township's residents will receive service from a large, financially sound company with the employees and equipment to ensure that customers receive high quality wastewater and water services meeting federal and state requirements.
- The water distribution system will be folded into the Clarion water system which will create cost-savings.
- PAWC's experience in operating wastewater systems will result in proper adherence to environmental regulations; Farmington is currently operating the wastewater system with an expired NPDES permit.
- Farmington's wastewater plant is projected to be hydraulically overloaded within the next 5 years. PAWC has the necessary capital and expertise to reduce or eliminate the stormwater infiltration and inflow which reduces the potential for overloading.
- Farmington does not have the necessary personnel or financial resources to maintain the water distribution system or wastewater system. Currently, one full-time operator handles all of the maintenance and operations of both systems.
- Other efficiencies will result from economies of scale, due to PAWC's greater purchasing power.
- PAWC offers customer assistance programs, whereas Farmington Township does not.
- PAWC's customers will benefit from an expanded customer base, allowing the Company to spread costs among a larger number of customers, which helps to stabilize or reduce per-customer costs over the long term.
- Farmington will be able to use the proceeds of the sale to retire all debt associated with both systems, thus eliminating a significant burden from the township budget.

The total purchase price for both systems is $5,545,000. The allocation of the purchase price between the water and wastewater systems is shown in PAWC Exhibit No. 3-C. PAWC has filed an original cost study to determine the original cost and accumulated depreciation of the Farmington Township water and wastewater assets. The original cost study will be updated after closing to reflect the original cost and accumulated

depreciation as of the closing date. PAWC will pay slightly more than the depreciated original cost of the assets, therefore PAWC is requesting an acquisition adjustment on the water system pursuant to 66 Pa. C.S. § 1327 (relating to acquisition of water and sewer utilities) and 52 Pa. Code § 69.711 (statement of policy regarding small nonviable water and wastewater systems).

PAWC has included this acquisition in the instant base rate case because the Company anticipates that the transaction will close no later than the end of the FPFTY. Additionally, it is prudent and fair for the Commission to integrate the Farmington systems into the larger PAWC systems, and to address expenses associated with the operation and maintenance of the system, as soon as reasonably possible to avoid regulatory lag.

Audubon Water Company ("AWC"): PAWC filed the application to acquire AWC on September 21, 2023, pursuant to 66 Pa. C.S. § 1102. The AWC system is located in Montgomery County and serves approximately 2,651 residential customers, 167 commercial customers, 90 private fire customers, 29 multi-family dwelling customers, 3 public customers, and 1 public fire customer primarily located within Lower Providence Township. The AWC system consists of two water systems that are not interconnected with each other. The main system supplies the town of Audubon and the second system supplies the Valley Forge Crossing Trailer Park. AWC's primary source of supply is from 15 groundwater wells located within its service area. There are a total of 12 active wells in the main AWC system. An additional three wells are located in the Valley Forge Crossing Trailer Park. The main AWC system consists of five pressure gradients and has six storage tanks, five booster pump stations, 160 fire hydrants and a distribution network

of approximately 40 miles of water mains. There are a total of 13 water treatment facilities associated with the ground water systems for the AWC system.

AWC has 12 full-time employees and one part-time employee. The proposed acquisition of AWC by PAWC will be accomplished by merger; therefore all current AWC employees will become PAWC employees at the time of close.

AWC and American Water Works Company, Inc. ("American Water") entered into a Merger Agreement, pursuant to which all issued and outstanding shares of the capital stock of AWC will be cancelled and converted to the right to receive American Water Common Stock equal to a pro rata portion of the merger consideration identified in the Merger Agreement. The issued and outstanding shares of AWC's capital stock will be surrendered to American Water in exchange for American Water Common Stock in accordance with the Merger Agreement.

Pursuant to the Merger Agreement, AWC will first merge with American Water's AWC Acquisition Company, LLC, with AWC as the surviving corporation; then AWC will merge with PAWC.

At closing, a number of shares of American Water Common Stock equal to the Contingent Escrowed Shares identified in the Merger Agreement (value of $2,000,000) will be held in escrow. The Merger Agreement provides that PAWC will seek distressed utility treatment under 66 Pa. C.S. § 1327(a) for the AWC system in its next rate case. If the Commission grants 1327(a) treatment and some or all of the difference between the depreciated original cost of the assets and the purchase price is approved for inclusion in rate base, American Water will release the Contingent Escrowed Shares to AWC in a corresponding percentage in an amount up to $2,000,000 upon entry of a final, non-

appealable Commission order. If the Commission does not grant the request for 1327(a) treatment, the purchase price for AWC will be $6,000,000 and the Contingent Escrowed Shares will be returned to American Water.

PAWC has included in this case the original cost and accumulated depreciation of the AWC system. As explained in the testimony of PAWC witness Ms. Gress, the Company proposes to amortize the difference between the depreciated original cost and the purchase price over a ten-year period.

Public benefits of the acquisition include:

- AWC's customers will receive service from a large, financially sound company with the employees and equipment to ensure that customers receive high quality water service meeting federal and state requirements.
- The water distribution system can eventually be interconnected to PAWC's Norristown and/or Royersford systems to eliminate the need to draw water from their insufficient and contaminated wells.
- PAWC's experience in operating water systems will result in proper adherence to environmental regulations.
- AWC will have to borrow tens of millions of dollars to remediate the PFAS contaminated wells it currently relies upon for source water.
- If the transaction does not occur, the capital investment needed in this system will significantly increase rates for AWC customers.
- Other efficiencies will result from economies of scale, due to PAWC's greater purchasing power.
- PAWC offers customer assistance programs, whereas AWC does not.
- PAWC's customers will benefit from an expanded customer base, allowing the Company to spread costs among a larger number of customers, which helps to stabilize or reduce per-customer costs over the long term.

PAWC has included this acquisition in the instant base rate case because the Company anticipates that the transaction will close no later than the end of the FPFTY. Additionally, it is prudent and fair for the Commission to integrate the AWC system into

the larger PAWC system, and to address expenses associated with the operation and maintenance of the system, as soon as reasonably possible to avoid regulatory lag.

Q. Please describe any settlement commitments for the BASA acquisition that relate to the instant base rate filing and your understanding of how the filing complies with those commitments.

A. At the outset, it should be noted that, in the settled Section 1329 BASA proceeding discussed above, PAWC, the statutory advocates, and the other parties to the proceeding agreed that PAWC could include $228,000,000 in rate base in this proceeding as a result of the Section 1329 acquisition. Customer notice was provided to the acquired customers and PAWC's legacy customers in the application proceeding. As a result, rate base issues related to the BASA acquisition should not be re-litigated in this proceeding.

On other issues resolved in the BASA proceeding (such as transaction and closing costs, accrual of Allowance for Funds Used During Construction ("AFUDC") for post-acquisition improvements not recovered through the Distribution System Improvement Charge ("DSIC") for book and ratemaking purposes, and deferred depreciation related to post-acquisition improvements not recovered through the DSIC for book and ratemaking purposes), PAWC, the statutory advocates and the other parties to the BASA proceeding only agreed that PAWC could include a claim for those expenses in this proceeding. On those issues, the parties reserved their rights to litigate the reasonableness of those claimed expenses. Nevertheless, I note that Section 1329 expressly permits the recovery of such expenses.

The instant base rate filing also includes a cost-of-service study that removes all costs and revenues associated with the operations of the BASA system, as well as a cost-

of-service study for the BASA system. The instant base rate case also reflects claims for rate recovery of the BASA transaction and closing costs delineated on PAWC Exhibit No. 3-C, as well as PAWC's outside legal fees associated with the BASA acquisition identified on PAWC Exhibit No. 3-C.

In the settlement, PAWC agreed that it would not propose an increase in BASA's base rates if the rates would become effective before the later of: (a) the first anniversary of closing or (b) January 1, 2025. PAWC also agreed that it would propose to move the system to 1.4x the current system rate or PAWC's proposed Rate Zone 1 system-average wastewater rates, whichever is lower, upon the later of (a) the first anniversary of Closing or (b) January 1, 2025. The instant base rate case complies with these provisions by proposing an increase for BASA system customers as discussed in PAWC Statement No. 4, the Direct Testimony of Stacey D. Gress, to take effect on the later of the first anniversary of Closing or January 1, 2025.

In addition, PAWC agreed that, in its first base rate case that includes the BASA system assets, if PAWC proposes a different effective date for new rates for BASA customers beyond the effective date of new rates for other customers, PAWC would calculate its proof of revenue as if the BASA customers were paying proposed rates without any delay to the effective date. PAWC has calculated its proof of revenues in compliance with this agreement.

Q. Will the Company pay any of Brentwood's legal or engineering fees incurred as part of the transaction?

A. Yes. PAWC will reimburse up to $70,000 as reimbursement for engineering and legal fees incurred related to the transaction.

Q. Is the Company seeking to recover the engineering and legal fees reimbursed to Brentwood?

A. Yes. Brentwood's engineering and legal fees are part of the transaction and closing costs of the acquisition and are appropriately included in rate base as a cost of organization of newly acquired service territory. Refer to PAWC Exhibit No. 3-C.

SECTION 1327

Q. What is your understanding of Section 1327?

A. I am advised by counsel that Section 1327 creates a rebuttable presumption that a purchase price in excess of the original cost less depreciation of an acquired system is reasonable and should be included in rate base if certain conditions are met. Those conditions are: (1) the property is used and useful in providing water or wastewater service; (2) the acquired system had 3,300 or fewer customer connections or was not viable; (3) the acquired system was not providing adequate, efficient, safe and reasonable service and facilities; (4) reasonable and prudent investments will be made to provide adequate, efficient, safe and reasonable service and facilities; (5) the acquired entity agrees to the acquisition and the negotiations were conducted at arm's length; (6) the actual purchase price is reasonable; (7) the acquiring public utility is not affiliated with the acquired entity; (8) the rates charged to the acquiring utility's preacquisition customers will not increase unreasonably because of the acquisition; and (9) the excess of the acquisition cost over depreciated original cost will be added to rate base to be amortized over a reasonable period with corresponding reductions in the rate base.

Q. You testified earlier that the Company is requesting that the Commission grant Section 1327 treatment for the AWC system. Please explain why.

A. The system satisfies each of the nine criteria contained in Section 1327:

(1) all of the assets acquired by PAWC are used and useful in the public service;

(2) the AWC system has 2,941 customers as of June 30, 2023, which is fewer than 3,300 customer connections;

(3) the AWC system is struggling to provide adequate, efficient, safe and reasonable service and facilities because the owners of the system are of retirement age and they are no longer able to properly manage and operate the system. During the spring of 2023, AWC's system's wells were barely able to meet water demand. Additional customers are projected to connect in AWC's service area in the near future. With these additional customers, the system's sources of supply will not be sufficient to meet demand. In addition, two of the system's wells were tested and found to have elevated levels of PFAS. As AWC is limited in its sources of supply, AWC will be forced to construct PFAS treatment for these wells. The cost of constructing and operating these treatment units is significant, ranging in the tens of millions of dollars, which will cause a significant financial burden on the system's customers. AWC does not have the ability to spread these costs over a large customer base nor the technical expertise to properly operate these complex treatment units. Complicating matters further, the groundwater in the Audubon area is known or expected to have issues with PFAS. Once the new PFAS regulations take effect, AWC will be required to test all the wells in its system. These other wells will likely be impacted by PFAS and any wells not meeting PFAS limits will need additional treatment, adding to the financial burden placed on the system's customers. In general, issues with groundwater contamination in the area will limit AWC's ability to develop additional sources of supply to meet future demands in its service area;

(4) PAWC will make reasonable and prudent investments to provide adequate, efficient, safe and reasonable service and facilities. These investments include:

- Improvements to provide enhanced safety and security;
- Remote monitoring and data collection systems;
- Distribution system improvements to address reliability, water quantity issues, and to reduce lost water in the system;
- Improvements to the disinfection systems;
- Additional interconnections between the AWC system and PAWC's Royersford and Norristown systems to enhance system reliability, provide adequate supply for periods of high demand, and to address future demands in AWC's certificated service area.

In addition, PAWC is uniquely suited to acquire the AWC system. PAWC already has an interconnection with AWC via a pipeline that travels through the system's service territory. The pipeline connects PAWC's Royersford and Norristown systems, allowing PAWC to supply the AWC system water from either or both of the PAWC systems. After acquisition, PAWC will be able to consolidate the sources of supply and halt using any problematic wells in the AWC system. PAWC has performed PFAS testing on the Royersford and Norristown sources of supply and has not found any impacts from PFAS. This acquisition will provide a cost effective solution to the contamination and demand issues facing the customers of AWC.

(5) AWC agreed to the acquisition and the negotiations were conducted at arm's length;

(6) the purchase price of $8,000,000 (with the Section 1327(a) contingency) is reasonable. A comparison of AWC's purchase price per customer ("PP/C") at a purchase price of $8,000,000 yields a favorable comparison to the average PP/C for PAWC's § 1102 transactions over the last five years. AWC's PP/C of $2,720 ($8,000,000/2,941 customers = $2,720) is almost 20% less than the average § 1102 PP/C during the last five years;

PAWC § 1102 TRANSACTIONS SINCE 2018

Date of Closing	System	Purchase Price	Customers	PP/C
7/24/2019	Turbotville Water	$635,000	330	$1,900
7/24/2019	Turbotville Wastewater	$365,000	318	$1,100
10/27/2022	Foster Township Water	$3,750,000	456	$8,200
6/21/2023	Creekside Water	$171,580	78	$2,200
Average				$3,350

(7) PAWC is not affiliated with AWC;

(8) the rates charged to PAWC's preacquisition customers will not increase unreasonably because of the acquisition. The proposed rate base for this system is $8 million, which represents less than 0.2% of PAWC's $4.7 billion rate base at the end of the FPFTY. The transaction will have a de minimus impact on rates.

(9) the excess of the acquisition cost over depreciated original cost will be added to rate base to be amortized over ten years (a reasonable period) with corresponding reductions in the rate base.

Q. You also testified earlier that the Company is requesting that the Commission grant Section 1327 treatment for the Farmington water system. Please explain why.

A. Again, the water system satisfies each of the nine criteria contained in Section 1327:

(1) all of the assets acquired by PAWC are used and useful in the public service;

(2) the Farmington water system has 464 total customers, which is fewer than 3,300 customer connections;

(3) the Farmington water system is not providing adequate, efficient, safe and reasonable service and facilities. The Farmington water system has an extensive history of recurring violations of the PADEP Safe Drinking Water regulations. The system received 41 Safe Drinking Water violations between 2018 and 2023. As shown below, violations were received every year during this period and the system has shown no signs of improvement.

- 2018 4 violations
- 2019 10 violations
- 2020 7 violations
- 2021 10 violations
- 2022 5 violations
- 2023 5 violations

Violations include persistent failure to collect weekly water samples, including: disinfectant residual samples, disinfectant by-product contaminant samples, and lead and copper samples. The system has also repeatedly failed to collect follow-up disinfectant residual samples even after initial samples showed residual disinfectant concentrations below standards. By failing to collect samples, the Farmington system provided inadequate and unreliable service, exposing customers to the risk of ingesting improperly disinfected water. Proper water sampling is a basic health and safety function performed by water

providers. The failure to properly sample water and provide results to the PADEP is symptomatic of greater operational problems of a system.

The system has also repeatedly failed to issue public notification of its violations as required by PADEP Safe Drinking Water regulations and failed to issue its EPA mandated Consumer Confidence Report (CCR) on a timely basis. By failing to inform the public of critical drinking water alerts and information in a timely manner, the system provided inadequate and unreasonable service by not communicating public health safety concerns.

(4) PAWC will make reasonable and prudent investments to provide adequate, efficient, safe and reasonable service and facilities. These investments include an estimated $1.04 million of capital improvements in the water system, such as:

- Security, safety and SCADA improvements at the interconnection/chemical feed facility and the water storage tank;
- Automatic flushing units to help maintain water quality at dead end mains;
- GIS mapping of system;
- Full meter replacement;
- Purchase new vehicle to replace old, unreliable vehicle;
- Leak logger purchase; and
- Recurring projects (new or relocated mains, capitalized main break repairs, new/replacement hydrants, new/replacement valves, new/replacement services, tools & equipment).

The following improvements will be made in the wastewater system:

- Blower-Effluent Sampling-Aeration Building Improvements (IP);

- Arc Flash, security, and general safety improvements at plant and all lift stations;
- Chemical feed (odor control) systems at Crown and Beer Barn lift stations;
- GIS mapping of system;
- Disinfection chemical feed system and plant process improvements for diffusers, piping, RAS pumps, decant pumps, etc.;
- SCADA installation at plant;
- Purchase new vehicle to replace old unreliable vehicle;
- System wide I/I study; and
- Recurring projects (replacement or relocated mains, capitalized main break repairs, new/replacement manholes, new/replacement services, plant process equipment, tools & equipment).

(5) Farmington agreed to the acquisition and the negotiations were conducted at arm's length;

(6) the allocated purchase price of $2,718,300 for the water system is reasonable. Farmington Township chose not to pursue a fair market value transaction, despite its ability to do so. The purchase price for the water system was based on the depreciated original cost ("DOC") of the assets of the system. The allocated purchase price of $2,718,300 is only 8% higher than the water system's DOC of $2,501,654. Farmington water's PP/C of $5,858 ($2,718,300/464 customers = $5,858) is 38% less than the average PP/C for PAWC's § 1329 transactions during the last five years:

PAWC § 1329 Transactions Since 2018

Date of Closing	System	Purchase Price	Customers	PP/C
11/14/2018	Steelton Water	21,750,000	2325	$9,354
5/28/2018	Exeter Wastewater	$93,500,000	9000	$10,388
9/30/2018	Kane Wastewater	$17,560,000	2006	$8,753
12/10/2019	Royersford Wastewater	$13,000,000	1596	$8,145
12/17/2019	Valley Water	$7,325,000	1459	$5,020
12/17/2019	Valley Wastewater	$13,950,000	1644	$8,485
4/28/2020	Upper Pottsgrove WW	$13,750,000	1428	$9,628
4/6/2021	York Wastewater	$235,000,000	158851	$14,825
Average				$9,324

(7) PAWC is not affiliated with Farmington;

(8) the rates charged to PAWC's preacquisition customers will not increase unreasonably because of the acquisition of the Farmington water system. The proposed rate base for this system is $2,718,300 million, which represents less than 0.1% of PAWC's $4.7 billion rate base at the end of the FPFTY. The transaction will have a de minimus impact on rates.

(9) the excess of the acquisition cost over depreciated original cost will be added to rate base to be amortized over ten years (a reasonable period) with corresponding reductions in the rate base.

SECTION 1329

Q. Please explain your understanding of the Pennsylvania Legislature's intent in enacting Section 1329 of the Code.

A. The General Assembly supported and encouraged the sale of municipal water and wastewater systems at valuation levels higher than traditional original cost measures. Some communities desire to monetize their assets to address other public needs. Due to the age of many municipal systems, however, traditional original cost measures produced very low sales prices, discouraging many transactions. By enabling the sale of municipal assets to public utilities at higher valuations, the General Assembly intended to encourage these transactions. This result also promotes the regionalization and consolidation of water and wastewater systems. The Legislature also intended to improve the maintenance and replacement of public infrastructure, and to promote environmental stewardship by facilitating transfers to public utilities with extensive technical expertise and financial resources.

Q. Please explain the rate-making implications of a Section 1329 proceeding.

A. In a Section 1329 proceeding, the Commission establishes the amount that the acquiring public utility can put into rate base in its next base rate case as a result of the acquisition. In addition, the acquiring utility can include a claim for transaction and closing costs incurred because of the transaction in its next base rate case. The acquiring utility may also accrue AFUDC for post-acquisition improvements not recovered through the DSIC for book and ratemaking purposes and defer depreciation related to post acquisition improvements not recovered through the DSIC for book and ratemaking purposes. Finally,

the selling utility's cost of service is to be incorporated into the revenue requirement of the acquiring public utility during the acquiring company's next base rate case.

Q. What is your understanding of the term "next base rate case," as used in Section 1329?

A. Section 1329(d)(5) states "The selling utility's cost of service shall be incorporated into the revenue requirement of the acquiring public utility as part of the acquiring utility's next base rate case proceeding." My understanding from PAWC counsel is that the statute should be construed using the ordinary definition of "next," which is "in the time, place or order nearest or immediately succeeding." Webster's New Collegiate Dictionary 774 (1977). So, for example, if the BASA acquisition is approved by the Commission on November 9, 2023, and closes in December, 2023, the instant base rate case would be the "next" base rate case because PAWC's 2022 rate case was concluded on December 8, 2022. Therefore, this is the first base rate case in which PAWC should include BASA's assets.

Similarly, for the Brentwood acquisition, if the Commission approves this acquisition in March 2024, and closing occurs shortly thereafter, the "next" base rate case will be the instant rate proceeding – this proceeding is the rate proceeding immediately following the Commission's approval of the acquisition and the Company's closing on the acquisition. Therefore, this is the first base rate case in which PAWC should include Brentwood's assets.

Q. Based on your experience with the implementation of Section 1329 and PAWC's pending Section 1329 acquisitions, why is it important to avoid delay in including Commission-approved Section 1329 rate base additions in rate base?

A. There can be a considerable delay between the date a public utility closes on a Section 1329 acquisition (expending significant capital) and the date that the public utility is able to place the Commission-approved rate base addition for that transaction into rate base. The monetary impact is significant, considering the large investments that public utilities are not able to recover for years. This regulatory lag provides a disincentive for an acquiring utility to engage in Section 1329 acquisitions, which undermines the Legislative intent behind Section 1329. Section 1329 would be ineffective if willing sellers could not find willing buyers, due to the lengthy delay between closing on a transaction and the recovery of those costs. The intended public benefits of acquisitions of municipal water and wastewater systems – including the monetization of municipal assets, regionalization and consolidation of systems, and remediation of environmental problems – are being impeded.

Q. Does the Commission have the ability to address the problem of lag in rate recovery of Section 1329 acquisitions?

A. Yes. The Commission should interpret Section 1329 to permit recovery for Section 1329 acquisitions that close while a base rate case is pending. For example, with respect to the Brentwood acquisition (as discussed above), the Commission should consider the instant base rate proceeding to be the "next base rate case" under Section 1329(c)(1)(i) when rate base for the acquired system can be incorporated into the public utility's rate base. If the Commission does not construe Section 1329 in a way that reduces regulatory lag and does not permit public utilities to take the steps necessary to reduce regulatory lag, public utilities may become less willing to engage in acquisitions or they may file base rate cases more frequently. Neither result advances the public interest and the intent of the Legislature in implementing Section 1329 would be impeded.

CONCLUSION

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes. However, I reserve the right to supplement my testimony as additional issues or facts arise during the course of this proceeding.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)**
	:	**R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **E. Christopher Abruzzo**, hereby state that the facts set forth in the pre-marked Statement No. 6 and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: November 8, 2023

E. Christopher Abruzzo

PAWC STATEMENT NO. 6-R

REBUTTAL TESTIMONY
OF
E. CHRISTOPHER ABRUZZO, ESQ.

WITH REGARD TO
PENNSYLVANIA-AMERICAN WATER COMPANY'S ACQUISITIONS

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: February 21, 2024

PENNSYLVANIA-AMERICAN WATER COMPANY
REBUTTAL TESTIMONY OF E. CHRISTOPHER ABRUZZO, ESQ.

INTRODUCTION

Q. Please state your name and business address for the record.

A. My name is E. Christopher Abruzzo, Esq., and my business address is 852 Wesley Drive, Mechanicsburg, PA 17055.

Q. Are you the same E. Christopher Abruzzo who provided direct testimony in this case?

A. Yes, I am.

Q. What is the purpose of your Rebuttal Testimony?

A. The purpose of my rebuttal testimony is two-fold. First, I will correct and update my Direct Testimony. Second, I will address issues raised by various parties in this case related to acquisitions and the bulk customers of PAWC's[1] York wastewater system.

CORRECTION TO DIRECT TESTIMONY

Q. Please describe the correction you would like to make in your Direct Testimony.

A. On page 9 of my Direct Testimony, I stated that Farmington Township is operating its wastewater system with an expired NPDES Permit. Farmington Township's expired NPDES Permit was renewed on April 27, 2023.

[1] Unless otherwise indicated, all acronyms and capitalized terms used herein have the same meanings as set forth in my Direct Testimony.

UPDATES TO DIRECT TESTIMONY

Q. Please describe the updates you would like to make in your Direct Testimony.

A. In my Direct Testimony, I discussed the acquisitions that PAWC included in this base rate case. I would like to update the status of those acquisition proceedings. Additional updates will be provided as this base rate case proceeds.

Butler Area Sewer Authority ("BASA"): On November 16, 2023, the Commission entered an Opinion and Order that approved PAWC's acquisition of the BASA wastewater system. On December 14, 2023, Center Township and Summit Township (collectively, the "Townships") each filed a Petition for Review with the Commonwealth Court of Pennsylvania ("Commonwealth Court"). PAWC filed an Application to Dismiss the Petitions for Review and for Expedited Consideration, arguing: (a) the only issue properly before the Commonwealth Court is whether the Commission properly found that the Townships waived their arguments by not raising them before the Administrative Law Judge, and (b) the Commission's decision finding that the Townships waived their arguments was clearly correct. Similarly, BASA, the City of Butler and the Township of Butler filed Motions to Quash Appeal for Lack of Issue Preservation.

In an Order issued on February 1, 2024 and modified on February 9, 2024, the Commonwealth Court expedited the case as follows: the Townships are to file their initial advance form brief by February 29; the Commission, PAWC and BASA are to file their advance form briefs within 14 days; and the Townships may file a reply advance form brief within five days. The Townships will then file the reproduced record within ten days, and definite form briefs must be filed within five days. The case will then be submitted to a

panel of judges on the next available list for expedited disposition on the briefs filed without oral argument, unless otherwise ordered. Considering the above schedule, counsel advises that the Commonwealth Court could issue a decision by the end of May, 2024.

If the Commonwealth Court affirms the Commission's decision (which counsel has advised me is likely because the Townships waived their rights to oppose the settlement that was approved by the Commission), PAWC intends to close shortly after the Commonwealth Court's order becomes final and unappealable. Typically, a transaction of this size can be closed within two weeks of final approvals, which would be before the Commission enters its order in this proceeding.

Borough of Brentwood ("Brentwood"): Administrative Law Judge Katrina L. Dunderdale issued a Recommended Decision on January 17, 2024, recommending that PAWC's acquisition of Brentwood's wastewater system be denied. Exceptions and Reply Exceptions have been filed. The Commission must make a decision by March 14, 2024. If the Commission approves the acquisition, PAWC intends to close shortly after the Commission's Order becomes final and unappealable, which would be before the Commission issues its decision in this proceeding.

If the Commission's decision is appealed to Commonwealth Court, a decision is expected in about 12 months. If the Commonwealth Court approves the Transaction, PAWC intends to close shortly after the Commonwealth Court's order becomes final and unappealable. Since a transaction of this size generally can be closed within two weeks of final approval, if the Commonwealth Court approves the Transaction, PAWC is likely to close on the Transaction before the end of the FPFTY.

Sadsbury Township Municipal Authority ("STMA"): During a telephonic status conference on January 16, 2024, the parties informed Administrative Law Judge Katrina L. Dunderdale that they had reached a unanimous settlement. As of the date of this writing, the settlement is expected to be submitted to the Administrative Law Judge during the week of February 19, 2024. If the Commission approves the acquisition, PAWC intends to close on the acquisition as soon as possible after the Commission's order becomes final and unappealable. Considering that the parties have reached a unanimous settlement, an appeal is extremely unlikely. Since a transaction of this size generally can be closed with two weeks of final approval, PAWC is likely to close on the Transaction before the end of the FPFTY.

Farmington Township ("Farmington"): As of the date of this writing, the parties to this case are exchanging informal discovery and attempting to negotiate a settlement. A status conference will be scheduled with Administrative Law Judge Katrina L. Dunderdale. If the parties believe that litigation will be necessary to resolve the case, they will propose a litigation schedule at that time. If the Commission approves the acquisition, PAWC intends to close on the acquisition as soon as possible after the Commission's order becomes final and unappealable, which is likely to be before the end of the FPFTY.

Audubon Water Company ("AWC"): A litigation schedule has been established by which Reply Briefs will be submitted to Administrative Law Judge Katrina L. Dunderdale on or before May 14, 2024. The Administrative Law Judge will then issue a Recommended Decision, which will be reviewed by the Commission. If the Commission approves the

acquisition, PAWC intends to close on the acquisition as soon as possible after the Commission's order becomes final and unappealable, which is likely to be before the end of the FPFTY.

As I stated in my direct testimony, PAWC has claimed an acquisition adjustment pursuant to 66 Pa. C.S. §1327 for the AWC system. On February 13, 2024, PAWC submitted direct testimony demonstrating that AWC is a small, non-viable system and, therefore, PAWC is entitled to full recovery of the acquisition premium under Section 1327. The Commission can take notice of testimony submitted in a case before the Commission. I am personally familiar with and can summarize that testimony because, as I said in my Direct Testimony, I was the Director of Water Quality and Environmental Compliance for PAWC from 2015 until 2020.

That testimony demonstrates that AWC is not providing adequate, efficient, safe and reasonable service. The System currently struggles to meet periods of high demand, despite AWC purchasing supplemental water supply from PAWC. During the spring of 2023, the System's wells were barely able to meet water demand. Additional customers are projected to connect to AWC's System in the near future. Audubon estimates a 50% increase in customers (to approximately 4,412) in the next decade. With these additional customers, the System's sources of supply will not be sufficient to meet demand.

AWC did at one point have sufficient capacity to serve existing plus future demand for water. However, AWC did not continue to invest in developing new sources and maintaining existing sources. Well VFCC No. 4 was a United States Environmental Protection Agency ("EPA") approved groundwater treatment well which was abandoned. Due to elevated levels of total dissolved solids and sulfates, AWC has not been able to

operate Wells AWC No, 3, No. 5, and No 13, and they are not considered available for future operation. Wells AWC 1, AWC 2, AWC 6, AWC 9, AWC 14 and AWC 15 all have diminished capacities. Pending regulations for Perfluoroalkyl and Polyflouroalkyl Substances ("PFAS") required limited testing in the past. However, VFCC No. 1, AWC No. 1 and AWC No. 2 have tested positive for PFAS and perfluorooctane acid ("PFOA"). VFCC No. 2 and VFCC No. 3 are within the same groundwater as VFCC No. 1, therefore, PAWC estimates they will also have the same levels of PFAS and PFOA. With the implementation of the PFAS regulations, AWC will be left in an untenable position of having an inadequate source of supply of water to meet customer needs.

PAWC's testimony shows that PAWC will make reasonable and prudent investments to provide adequate, efficient, safe and reasonable service and facilities, as required by Section 1327(a). If the acquisition is approved, PAWC plans to invest approximately $21.5 million in capital improvements in the AWC system during the first five years of ownership. This amount will fund six additional interconnections (and upgrades on the two existing interconnections) to totally integrate the existing AWC system to PAWC. This will help address the system's issues with an adequate supply of water.

In addition to its issues with supply, AWC has a well-documented history of non-compliance with regulations promulgated under Pennsylvania's Safe Drinking Water Act ("SDWA"), 35 P.S. §§721.1-721.17. A recent web search for SDWA violations in the Pennsylvania Department of Environmental Protection's ("PADEP's") Drinking Water Reporting System produced results showing a total of 957 individual violations in AWC's main system (PWSID #1460055) from 2020 through January 23, 2024, as well as a total of 130 individual violations in the Valley Forge Crossing Trailer Park system (PWSID

#1460035) over the same time period.[2] This totals 1,087 violations over approximately four-years, or the equivalent of 270 violations per year.

The violations cover a broad range of issues that are focused mostly on monitoring and reporting activities, which are some of the most basic and most important functions of a public drinking water utility. The breakdown of violations by type are summarized below:

- Failure to monitor/report routine samples for nitrate/nitrite, radiological, inorganic compounds, synthetic organic compounds and volatile organic compounds (1,027);
- Failure to issue Tier 3 Public Notifications (44);
- Failure to monitor/report for disinfection/disinfection by-product contaminants (5);
- Failure to collect weekly disinfectant residual and/or failure to monitor sufficient number of monthly disinfectant residuals (5);
- Failure to properly collect or analyze Revised Total Coliform Rule routine samples (3);
- Failure to submit Consumer Confidence Report certification by the due date (2); and
- Failure to report Revised Total Coliform Rule sample results or notify PADEP on time (1).

PADEP's Water Supply Inspection Report dated February ("February Inspection Report") cited AWC for the following violations:

- Chronic failure to conduct routine monitoring requirements at Entry Point 101 in 2023. There is no quarterly Synthetic Organic Chemical ("SOC") monitoring data, quarterly Volatile Organic Chemical ("VOC") monitoring data, and no nitrate/nitrite data recorded for the first, second, and third quarters of 2023.
- Chronic failure to conduct routine monitoring requirements at Entry Point 104 in 2023. There is no SOC monitoring data for the first, second, and third quarters of 2023. There is also no annual nitrate and nitrite data for 2021 and 2022. There was also no annual VOC monitoring for the year 2022.

[2] The AWC system consists of two water systems that are not interconnected. The main system supplies the portion of Lower Providence Township known as Audubon, and the second system supplies the Valley Forge Crossing Trailer Park (also located in Lower Providence Township).

- Failure to conduct performance monitoring for Iron, Manganese, and VOCs at Entry Point 101.

- Failure to conduct performance monitoring for Iron and Manganese at Entry Point 102.

- Failure to conduct performance monitoring for Iron and Manganese at Entry Point 104.

- Failure to conduct performance monitoring for Iron and Manganese at Entry Point 111.

- Failure to conduct performance monitoring for Iron and Manganese at Entry Point 108.

In the February Inspection Report, PADEP instructed AWC to conduct make-up monitoring for the missed samples and issue appropriate public notifications to customers on the monitoring and reporting violations. In addition, the February Inspection Report discussed some recent results that exceeded contaminant levels, as described in detail below:

- On 12/13/2023 PADEP was notified of two chloride sample exceedances and one sulfate sample exceedance.
    - The maximum contaminant levels for chloride and sulfate are 250 mg/L.
    - A chloride result of 451 mg/L was detected at Entry Point 108 in a sample collected 12/13/2023.
    - A chloride result of 356 mg/L was detected at Entry Point 109 in a sample collected 12/13/2023.
    - A sulfate result of 448 mg/L was detected at Entry Point 111 in a sample collected 12/13/2023.
- As a result of these exceedances, AWC was instructed to begin quarterly monitoring for these parameters at these locations in order to determine compliance through a calculation of locational running annual average.

A similar inspection report was issued by PADEP for the Valley Forge Crossing Trailer Park System on January 31, 2024 ("January Inspection Report"). The January Inspection Report cites AWC for the following violations:

- Failure to conduct performance monitoring for Iron and Manganese at Entry Point 103.
- Failure to conduct performance monitoring for Iron and Manganese at Entry Point 102.
- Failure to conduct performance monitoring for Iron and Manganese at Entry Point 101.
- The water system does not have an Uninterrupted System Service Plan that contains all of the required elements.

PADEP has issued two Notice of Violation ("NOV") letters to bring enforcement actions against AWC for the above-described deficiencies.

The operational deficiencies highlighted by these violations are concerning and could lead to significant adverse impacts to the health and safety of the System's customers. The failure to conduct routine quarterly and annual entry point monitoring at two well stations means that there is no way for AWC to confirm the safety of the water supplied to customers by these sources during that time period. Regular routine monitoring is required for such sources to detect any increase in contaminants in the source water and allow the water utility to notify customers and take corrective actions to eliminate or mitigate the contaminants. If the utility fails to perform the required routine monitoring, it has no idea what the levels of contaminants are and cannot take actions to protect the customers.

The failure to do the performance monitoring at the eight (8) entry points with treatment means that there is no way for AWC to confirm that the treatment units were operating properly during this time period. In other words, the water utility has installed treatment

processes on these entry points to remove contaminants prior to delivering the treated water to customers, but by not monitoring the effectiveness of the treatment it has no idea on how effectively the contaminants were removed.

Finally, the high levels of chloride and sulfate that were cited by PADEP as exceeding the Secondary Maximum Contaminant Levels ("SMCLs") pose significant risks to the AWC customers. High sulfate levels in drinking water can cause a laxative effect, particularly with infants, and can lead to diarrhea and dehydration. High chloride levels in drinking water not only impart a salty taste but, more importantly, will increase the corrosivity of the water to customer's in-house plumbing and fixtures.

PAWC's testimony shows that PAWC will make reasonable and prudent investments to provide adequate, efficient, safe and reasonable service and facilities, as required by Section 1327(a). PAWC has a dedicated Water Quality and Environmental Compliance department with professionals staffed to ensure that these basic and important functions are performed correctly. PAWC has never been cited by PADEP for chronic failures to monitor and report. PAWC will provide AWC with dedicated staffing and focused attention on water quality, environmental compliance and prompt customer notification. This will go a long way in addressing AWC's issues with monitoring and reporting, and thereby help ensure the health and safety of AWC's customers.

Finally, the testimony introduced in the AWC acquisition proceeding on February 13, 2024 demonstrates that the proposed purchase price of $8,000,000 (including Section 1327(a) contingency) is reasonable. A comparison of AWC's purchase price per customer ("PP/C") at a purchase price of $8,000,000 yields a favorable comparison to the average PP/C for PAWC's Commission-approved Section 1102 transactions over the last

six years. AWC's PP/C of $2,941 ($8,000,000/2,941 customers = $2,720) is almost 19% less than the average Section 1102 PP/C during the last six years.

PAWC § 1102 TRANSACTIONS SINCE 2018

Date of Closing	System	Purchase Price	Customers	PP/C
7/24/2019	Turbotville Water	$635,000	330	$1,900
7/24/2019	Turbotville Wastewater	$365,000	318	$1,100
10/27/2022	Foster Township Wastewater	$3,750,000	456	$8,200
6/21/2023	Creekside Water	$171,580	78	$2,200
Average				**$3,350**

The 1327(a) contingency was carefully negotiated between two unaffiliated parties at arm's length. PAWC strongly believes the Transaction is in the public interest at a purchase price of $8,000,000. Therefore, PAWC asks the Commission to approve recovery of the difference between the $8,000,000 and the depreciated original cost under Section 1327 of the Public Utility Code.

ACQUISITIONS

Q. Please describe OCA witness Smith's objections to including any of the five above-described acquisitions in the instant rate proceeding.

A. Mr. Smith believes that an acquisition should be included in a rate case only if two events occur prior to or at the close of the record: (a) the Commission issues a final, unappealable order approving the acquisition, and (b) there is no uncertainty about whether closing will occur for other reasons. OCA Statement No. 2 at 19. He believes there is "no reasonable

indication" that any of the acquisitions described above will satisfy these two conditions by the close of the record in this proceeding.

Q. Do you agree with Mr. Smith?

A. No. The relevant cut-off date should not be when the record closes. After the record closes, any party can petition to reopen the record to introduce additional evidence. 52 Pa. Code § 5.571(a). Instead, the test should be whether the acquisition is likely to close within the FPFTY.

To give the Commission certainty that closing will occur by the end of the FPFTY, it is not necessary for the Commission to approve an acquisition by the close of the record in the base rate case. Several months can pass between the date the record closes and the date the Commission issues its order in a base rate case. During that time period, the Commission could approve an acquisition (such as the STMA settlement), and the appeal period could expire without any appeals being filed. I see no reason why the Commission should ignore those events. The Commission can certainly take official notice of its own decisions and the fact that an appeal of that decision has or has not been filed.

Similarly, the Commission's order in a base rate case should be able to take official notice of judicial decisions issued after the record closes. For example, if the Commonwealth Court would issue a decision in April 2024 affirming the Commission's decision to approve the BASA acquisition, and no appeal is filed, the Commission should be able to consider those events when making its decision in these rate proceedings.

As I stated in my Direct Testimony, it is prudent and fair for the Commission to integrate these systems into the larger PAWC system, and to address expenses associated

with the operation and maintenance of the system as soon as reasonably possible to avoid regulatory lag. Including these systems in the instant proceeding will significantly reduce regulatory lag, thereby mitigating one factor that hinders acquisitions, particularly acquisitions of municipal systems pursuant to Section 1329. Excluding these systems in the instant proceeding would be one factor that the Company considers in determining when it will file another rate case.

I see no need for Mr. Smith's second criterion – the lack of any uncertainty that the acquisition will close. It is highly unusual for an acquisition that has been approved by the Commission or an appellate court, in a final unappealable order, to fail to close. I am not aware of any recent examples of this happening, and in discovery, neither OSBA witness Higgins, nor I&E witness Okum, nor OCA witness Smith could give any examples. In this case, PAWC has introduced evidence that it intends to close quickly on each acquisition after it is approved, and the applicable appeals period has run. Mr. Smith does not question this evidence. Under these circumstances, I do not see a need for evidence of a "lack of uncertainty" about whether the transaction will close.

Q. Did I&E introduce evidence concerning the five acquisitions described above?

A. Yes. I&E witnesses Okum, Cline and Kubas all opined that none of these acquisitions should be included in this rate case. Much of their testimony was very similar. To avoid redundancy, I will first address their similar arguments. I will then discuss some of the unique points made by each I&E witness.

Witnesses Okum, Cline and Kubas all argued that it is premature to include any of the acquisitions in rates. They noted that each of these acquisitions remains in litigation

before the Commission and none of these acquisitions have closed. Due to what they characterize as "uncertainty surrounding each of these acquisitions," I&E Statement No. 1 at 28, they object to the inclusion of these acquisitions in PAWC's base rates.

As discussed above, the test should be whether the acquisition closes within the FPFTY. At the time the record closes, it is premature to determine whether it is likely that an acquisition will close. As I discussed above, an acquisition could be approved, and the pertinent Commission or court order could become final and unappealable, after the record has closed but before the Commission enters its order in this proceeding. If so, the Commission should take notice of those facts when issuing its order in the base rate case.

Q. Did I&E witness Okum offer any additional arguments as to why the acquisitions should be disallowed?

A. With respect to the BASA and Brentwood acquisitions, Ms. Okum notes that Section 1329(d)(5) states: "The selling utility's cost of service shall be incorporated into the revenue requirement of the acquiring public utility as part of the acquiring utility's next base rate case proceeding." Ms. Okum argues that the "next" base rate case is the first base rate proceeding filed after closing on an acquisition. This view differs from PAWC's interpretation of the statute, which I explained in my Direct Testimony. This statutory construction issue will be addressed in briefs.

Similarly, with respect to the Farmington, Sadsbury and AWC acquisitions, Ms. Okum contends "an acquisition should be included in the first base rate case filed after an acquisition has closed." **PAWC Exhibit ECA-3R.** I disagree. As discussed above, I believe the test should be whether the acquisition is likely to close within the FPFTY. To

give the Commission certainty that the acquisition is likely to close within the FPFTY, it is sufficient that a final, unappealable order approving the acquisition be entered before the Commission enters its order in this base rate case, Ms. Okum's position would encourage utilities to file one rate case after another in order to minimize the regulatory lag in placing acquisitions into rates.

Q. Did I&E witness Cline offer any additional objections as to why the acquisitions should be disallowed?

A. Mr. Cline contends that ratepayers would be harmed if assets that are not used and useful are included in rates. I am not suggesting that assets which are not used and useful should be included in rates. To the contrary, I am arguing that assets that are used and useful in providing service to PAWC's customers by the end of the FPFTY are properly included in rates. Denying recovery of and on such assets is unconstitutional because it compels investors to provide safe, adequate and efficient utility service to customers without compensation.

Mr. Cline demands justification for PAWC's argument that it is prudent and fair to include these acquisitions in rates. He suggests that PAWC must demonstrate that it is in the public interest to include these acquisitions in rates. It is well established that assets that are used and useful before the end of the FPFTY are properly included in rates. No special "public interest" test is necessary or warranted. PAWC included these acquisitions in this rate case because it believes they are likely to be approved before the Commission enters its order in this case, and to close before the end of the FPFTY.

Contrary to Mr. Cline's assertions, PAWC is not asking the Commission to pre-judge the acquisition proceedings in this rate case. It is simply asking the Commission, in its final order, to take official notice of the status of these five acquisition proceedings. If it does, PAWC believes, the Commission will see that each acquisition is likely to close by the end of the FPFTY.

Q. Did I&E witness Kubas offer any additional objections as to why the acquisitions should be disallowed?

A. With respect to the BASA and Brentwood systems, Mr. Kubas recommends excluding these systems from rates as a way to save money for PAWC's water customers because the Company proposes to allocate some of the revenue shortfall from these wastewater systems to water customers. I am advised by counsel that excluding the BASA and/or Brentwood systems as a means of saving money for PAWC's existing water customers would violate PAWC's rights under the Pennsylvania and Federal Constitutions against taking private property without compensation, because it would force shareholders to commit investment capital to furnish safe and reliable service to the customers of the acquired wastewater systems while denying shareholders any compensation for the use of their funds. PAWC is aware of the need to keep utility service affordable, but disagrees with the argument that this objective justifies denying shareholders a reasonable return on their investment.

Mr. Kubas also contends that his proposal should be adopted as a way of keeping PAWC to its "promise" that the BASA and Brentwood acquisitions would have no immediate impact on PAWC's existing customers. Mr. Kubas mischaracterizes PAWC's testimony as a "promise" not to increase rates for existing customers. A fair reading of

PAWC's testimony is that the acquisitions would have no impact on PAWC's existing customers until the first base rate case in which the system's assets were included, when the Commission would set just and reasonable rates. This case is the first base rate case in which the systems' assets are included. PAWC has not broken a "promise" to its existing ratepayers.

In any event, Mr. Kubas is essentially asking this Commission for an equitable remedy – to enforce a "promise." I am advised by counsel that the Commission lacks equitable powers. Moreover, the requested remedy would not be equitable. The testimony referenced by Mr. Kubas was filed long before the base rate case was filed. There is no indication that the witnesses who made those statements knowingly misrepresented what would be in the rate case filing.

Q. Please describe OSBA witness Higgins' objections to including the five above-described acquisitions in the instant base rate proceeding.

A. Mr. Higgins does not propose any adjustments pertaining to the STMA or the Farmington acquisitions, so I assume he has no objection to PAWC's rate claim with regard to those acquisitions.

With respect to the acquisitions of BASA, Brentwood and AWC, Mr. Higgins states that, if any acquisition does not close, all of the costs of the non-closing acquisition should be removed from PAWC's revenue requirement. Unlike Mr. Smith, Mr. Higgins does not require that the Commission approve the acquisition by the close of the record.

If those acquisitions do close, however, Mr. Higgins proposes adjustments to PAWC's proposed rate treatment of each acquisition. My colleague, Ms. Gress, will address these proposed adjustments.

With respect to the AWC acquisition, Mr. Higgins notes that the AWC acquisition is still before the Commission. As discussed above, the relevant test is whether the acquisition is likely to close by the end of the FPFTY. The Commission should consider the status of the AWC case on the date the Commission's order is entered to determine whether it is likely that the acquisition will close by the end of the FPFTY.

BULK CUSTOMERS OF THE YORK WASTEWATER SYSTEM

Q. Please discuss Mr. Kubas' testimony regarding the bulk customers of the wastewater system that PAWC acquired from the York City Sewer Authority (the "York Bulk Customers").

A. PAWC proposed 9.9% increases over a two-year period, resulting in an annual increase of approximately 4.45% per year to the York Bulk Customers. In her Direct Testimony, PAWC Statement No. 12 at 19, PAWC witness Heppenstall testified that the revenues from the York Bulk customers cover the variable costs of bulk treatment service and provide a meaningful contribution to the total fixed costs incurred to furnish wastewater service to retail customers in the Company's WW SSS General Operations. PAWC witness Aiton, PAWC Statement No. 3 at 66-69, explained, among other things, that these modest increases were justified because customers have competitive alternatives to receiving service from PAWC and that the flow from the York Bulk Customers benefits the treatment process. I will discuss the evidence supporting Mr. Aiton's testimony below.

Beginning at page 47 of his Direct Testimony, Mr. Kubas contends that the proposed rates for the York Bulk Customers should increase by 50%. Mr. Kubas contends that PAWC's explanations for its modest proposed rate increases should be rejected as speculative because PAWC did not introduce any evidence to prove them.

Q. Do you agree with Mr. Kubas?

A. No. PAWC has twice before demonstrated that the York Bulk Customers have competitive alternatives and that the flow from the York Bulk Customers benefits the treatment process. First, PAWC demonstrated this when it acquired the York City Sewer Authority System, Docket Nos. A-2021-3024681 *et al.* ("York Acquisition Proceeding").

Second, in PAWC's 2022 rate case, Docket Nos. R-2022-3031672 *et al.*, I&E witness Ethan Cline proposed to increase the rates of the York Bulk Customers by 50% because of the lack of competitive alternatives.[3] He subsequently withdrew that proposal, I&E Statement No. 3-SR at 65, in response to the Rebuttal Testimony of PAWC witness Bernard Grundusky.

Mr. Grundusky's testimony (along with pertinent exhibits) is attached as **PAWC Exhibit ECA-1R_CONFIDENTIAL.** Mr. Grundusky is unavailable to testify in this proceeding because he has retired from PAWC. I&E participated in PAWC's 2022 rate proceeding and in the York Acquisition Proceeding, and, in both cases, I&E had a similar opportunity as it has in this case to develop the record by direct testimony and cross-examination.

[3] OSBA witness Brian Kalcic also argued that the rates for York Bulk Customers should increase due to the lack of evidence of competitive alternatives.

In his testimony, Mr. Grundusky explained and expanded upon the evidence that was introduced in the York Acquisition Proceeding regarding the competitive alternatives available to the York Bulk Customers. He testified that the York Bulk Customers formed the York Area Regional Sewer Authority ("YARSA") to compete for the York System and to explore alternative treatment options. Exhibits to his testimony include testimony from the York Bulk Customers, as well as supporting documents, demonstrating that the York Bulk Customers were planning for competitive alternatives to bulk treatment service from PAWC. He further explained that the York Bulk Customers formed a united block. As a result, the loss of one customer would likely have resulted in the loss of six bulk customers – comprising 54% of the allocated treatment flows. The loss of this large portion of flows would have made the system uneconomic in the absence of extraordinary rate increases.

> Additionally, the bulk flow from surrounding municipalities is essential to the proper functioning of the York treatment [plant]. I am advised by the PAWC Engineering Department and PAWC Operations Department that the bulk flow from the surrounding municipalities contains additional biological oxygen demand (BOD) materials that aid in the consumption and digestion of bacteria in the flow stream.

PAWC Exhibit ECA-1R at 20.

Mr. Kubas does not introduce any evidence to demonstrate that the York Bulk Customers lack competitive alternatives; he simply asserts that PAWC did not demonstrate that these customers in fact have competitive alternatives. This argument should be rejected based on the evidence provided in two previous cases.

At page 52 of his Direct Testimony, Mr. Kubas asserts that PAWC's other customers might be better off if the York Bulk Customers left the system because, after a bulk customer leaves, there would be less need for plant upgrades and/or expansions. I&E

witness Ethan Cline made the same argument in PAWC's 2022 rate case, which Mr. Grundusky rebutted as follows at page 21 (note omitted):

> Mr. Cline's statements ignore the realities of the York System at the time of negotiation of the Bulk Agreements and now (if the agreements are terminated because of a modification by the Commission). As stated above, the loss of one bulk customer by PAWC would likely result in the loss of six bulk customers – comprising 54% of the allocated treatment flows. This result would not be in anyone's long-term interests. Moreover, having the Bulk Customers leave the York System for wastewater treatment service elsewhere would be contrary to the Commission's policy favoring regionalization and consolidation.

Mr. Kubas contends that a customer's sophistication is irrelevant for establishing a rate and that it is irrelevant that the York Bulk Customers are located close together. Mr. Kubas should not have considered these points in isolation; these points are closely related to PAWC's argument that the York Bulk Customers have competitive alternatives to treatment service from PAWC. As Mr. Grundusky testified in 2022, at page 8, the York Bulk Customers:

> . . . are contiguous – which means that they could enter into (and have in some circumstances already entered into) intermunicipal flow agreements to transmit wastewater flow between themselves and to other surrounding municipalities with existing treatment capacity. The intermunicipal agreements could provide for the reconciliation of flows, with treatment services being provided by surrounding municipalities. The Bulk customers are sophisticated, knowledgeable and experienced; therefore, they could have figured out how to get flows to alternative treatment providers.

Mr. Kubas further claims that PAWC's proposed rates should be compared to the customers' cost of using an alternative provider, so that the York Bulk Customers make the maximum contribution to fixed costs. This argument is similar to arguments offered by OSBA's witness in PAWC's 2022 rate proceeding. Mr. Grundusky, at page 18, explained that the Commission has rejected that argument in the past:

> I am advised by counsel that the Commission has long allowed discounts in other regulated industries where there is competition, a need for load retention, or a need for economic development. Specifically, the Commission has permitted discounting by natural gas distribution companies and steam distribution companies, if the standards identified by Mr. Kalcic have been satisfied. So long as the variable costs of providing service to the customer are covered and the customer makes a contribution to shared fixed costs, rate discounting is permitted in order to attract or maintain the customer. The theory is that it is better, and to the benefit of other customers, to have the customer making some contribution toward fixed costs than not to have the customer at all.[4]

Mr. Grundusky further testified at page 21:

> I have learned that "maximizing the revenue that could be received from each customer" is not always realistic or desirable. That was particularly true here, where the municipalities insisted on negotiating a standardized agreement that treated each of them the same. They acted as a block and were represented by the same counsel in negotiations. PAWC simply could not maximize the revenue from every individual customer when negotiating one form of contract and a standardized rate that applied to several bulk customers.

The arguments presented by Mr. Grundusky hold true today and I adopt them as my testimony in this proceeding. In addition, I attach as **PAWC Exhibit ECA-2R** copies of affidavits from the York Bulk Customers verifying that they continue to have competitive alternatives to receiving service from PAWC. For all of the above reasons, Mr. Kubas's proposed adjustment to the rates for the York Bulk Customers should be rejected.

[4] "Mr. Kalcic stated that a discount agreement is appropriate only where the bulk customer has a viable economic alternative throughout the term of the agreement to taking service from the system, the discount is the minimum necessary to maintain the customer, and the rate includes an escalation provision such as one based on a Consumer Price Index." **PAWC Exhibit ECA-1** at 18. The agreements between PAWC and the York Bulk Customers satisfied these standards: "[T]he Bulk Customers had competitive options for bulk service (noting that they negotiated as a block and demanded a uniform rate), the discount was the minimum necessary to maintain the Bulk Customers on the York System (as demonstrated by the extensive arm's length negotiations and PAWC's ability to negotiate a rate higher than some of the Bulk Customers were previously paying), and the Bulk Agreements provide for a CPI escalator (as well as a change in law rate increase provision)." *Id*. at 19.

CONCLUSION

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes. However, I reserve the right to supplement my testimony as new facts and issues arise during the course of this proceeding.

AFFIDAVIT IN SUPPORT OF BULK AGREEMENT WITH PENNSYLVANIA-AMERICAN WATER COMPANY

I, Marcy Krum-Tinsley, on behalf of Spring Garden Township (the "Township"), as the Manager/Secretary/Treasurer of the Township, do hereby solemnly affirm and declare the following:

I am making this Affidavit in support of the current Wastewater Treatment & Conveyance Agreement between the Township and Pennsylvania-American Water Company ("PAWC") dated May 16, 2022 (the "Bulk Agreement").

The Township, along with Manchester Township, West Manchester Township, North York Borough and York Township (the "Municipalities") are currently connected to the wastewater collection, transmission, treatment and disposal system previously owned and operated by the York City Sewer Authority and now owned and operated by PAWC (the "York System").

In 2020, the Municipalities joined together to form the York Area Regional Sewer Authority ("YARSA") for the purpose, among other things, to compete with PAWC for the purchase of the York System and explore alternative wastewater treatment options for their customers, including potential alternative wastewater treatment providers.

Prior to PAWC's acquisition of the York System, the Municipalities' alternatives always included entering into intermunicipal flow agreements to transmit wastewater flow between themselves and to other surrounding municipalities with existing treatment plants based on their contiguous geographic locations. To that end, subject to design and permitting, the Municipalities' alternatives still include (among others):

- Treatment for Manchester Township's wastewater flow by the Dover Township wastewater treatment plant;
- Treatment for York Township's wastewater flow by the Springettsbury wastewater treatment plant;
- Treatment for West Manchester Township's wastewater by Dover Township wastewater treatment plant;
- Rerouting nearly 50% of Manchester Township's wastewater flow from the York System to Springettsbury by installing approximately 600 feet of gravity main;
- The construction of a treatment plant to service Bair Station in West Manchester Township and additional capacity to reverse flows from the York City wastewater treatment plant;
- Treatment for West Manchester Township's wastewater by Jackson Township wastewater treatment plant;
- Utilization of land in the possession of the Township to construct a wastewater treatment plant; and
- Construction of an interceptor pump station in York Township to redirect nearly 95% of York Township's flows from the York City wastewater treatment plant to the Springettsbury wastewater treatment plant.

As part of the acquisition of the York System by PAWC, the Municipalities, through YARSA, were able to negotiate extensively with PAWC in order to establish definitive rates, terms and conditions for treatment for their constituents, which currently represent approximately 54% of treatment flows through the York System.

The standard bulk agreements developed by the Municipalities and PAWC, including the Township's Bulk Agreement, contain a Most Favored Nations clause that essentially provides that no one of the bulk customers would receive a better deal from PAWC than another, and a breach of that covenant would allow the bulk customer to leave the York System and pursue competitive alternatives.

Further, as a result of its extensive arms-length negotiations with PAWC, the Township believes the Consumer Price Index escalator and Change of Law Surcharge, as defined in the Bulk Agreement, are fair, resulting in reasonable increases of rates over time, as agreed to in the Bulk Agreement. The Municipalities, including the Township, recognized that paying higher rates over time was worthwhile for a public utility provider with experience and a track record of good experience – something the Municipalities were not satisfied with from their previous provider. Further, the goal of negotiated rates is to prevent the unnecessary initiation of and investment of funds in alternative planning processes where the alternative is prospectively viable.

If the Pennsylvania Public Utility Commission (the "PUC") modifies the Bulk Agreement or PAWC indicates that it is no longer willing to abide by the terms and conditions of the Bulk Agreement, the Township is prepared to utilize its contractual rights under the Bulk Agreement, and the Township, together with the Municipalities, will explore the alternative treatment options summarized above, including, at a minimum, materially reducing the Municipalities' flow into the York System. One of the primary goals of negotiated contractual rates was to prevent the unnecessary initiation of and investment of funds by the Municipalities in alternative planning and design processes where alternatives are viable as summarized above. The modification of the Bulk Agreement by the PUC will provoke the Municipalities to initiate and invest funds to move as much wastewater flow as possible away from the York System.

I verify that the statements made in this affidavit are true and correct to the best of my personal knowledge or information and belief. I understand that false statements herein are made subject to the penalties of 18 Ca.C.S. relating to unsworn falsification to authorities.

Dated: February 16, 2024

AFFIDAVIT IN SUPPORT OF BULK AGREEMENT WITH PENNSYLVANIA-AMERICAN WATER COMPANY

I, Timothy James on behalf of Manchester Township (the "Township"), as the Manager/Secretary/Treasurer of the Township, do hereby solemnly affirm and declare the following:

I am making this Affidavit in support of the current Wastewater Treatment & Conveyance Agreement between the Township and Pennsylvania-American Water Company ("PAWC") dated May 16, 2022 (the "Bulk Agreement").

The Township, along with West Manchester Township, York Township, North York Borough and Spring Garden Township (the "Municipalities") are currently connected to the wastewater collection, transmission, treatment and disposal system previously owned and operated by the York City Sewer Authority and now owned and operated by PAWC (the "York System").

In 2020, the Municipalities joined together to form the York Area Regional Sewer Authority ("YARSA") for the purpose, among other things, to compete with PAWC for the purchase of the York System and explore alternative wastewater treatment options for their customers, including potential alternative wastewater treatment providers.

Prior to PAWC's acquisition of the York System, the Municipalities' alternatives always included entering into intermunicipal flow agreements to transmit wastewater flow between themselves and to other surrounding municipalities with existing treatment plants based on their contiguous geographic locations. To that end, subject to design and permitting, the Municipalities' alternatives still include (among others):

- Treatment for the Township's wastewater flow by the Dover Township wastewater treatment plant;
- Treatment for York Township's wastewater flow by the Springettsbury wastewater treatment plant;
- Treatment for West Manchester Township's wastewater by Dover Township wastewater treatment plant;
- Rerouting nearly 50% of the Township's wastewater flow from the York System to Springettsbury by installing approximately 600 feet of gravity main;
- The construction of a treatment plant to service Bair Station in West Manchester Township and additional capacity to reverse flows from the York City wastewater treatment plant;
- Treatment for West Manchester Township's wastewater by Jackson Township wastewater treatment plant;
- Utilization of land in the possession of Spring Garden Township to construct a wastewater treatment plant; and
- Construction of an interceptor pump station in York Township to redirect nearly 95% of York Township's flows from the York City wastewater treatment plant to the Springettsbury wastewater treatment plant.

As part of the acquisition of the York System by PAWC, the Municipalities, through YARSA, were able to negotiate extensively with PAWC in order to establish definitive rates, terms and conditions for treatment for their constituents, which currently represent approximately 54% of treatment flows through the York System.

The standard bulk agreements developed by the Municipalities and PAWC, including the Township's Bulk Agreement, contain a Most Favored Nations clause that essentially provides that no one of the bulk customers would receive a better deal from PAWC than another, and a breach of that covenant would allow the bulk customer to leave the York System and pursue competitive alternatives.

Further, as a result of its extensive arms-length negotiations with PAWC, the Township believes the Consumer Price Index escalator and Change of Law Surcharge, as defined in the Bulk Agreement, are fair, resulting in reasonable increases of rates over time, as agreed to in the Bulk Agreement. The Municipalities, including the Township, recognized that paying higher rates over time was worthwhile for a public utility provider with experience and a track record of good experience – something the Municipalities were not satisfied with from their previous provider. Further, the goal of negotiated rates is to prevent the unnecessary initiation of and investment of funds in alternative planning processes where the alternative is prospectively viable.

If the Pennsylvania Public Utility Commission (the "PUC") modifies the Bulk Agreement or PAWC indicates that it is no longer willing to abide by the terms and conditions of the Bulk Agreement, the Township is prepared to utilize its contractual rights under the Bulk Agreement, and the Township, together with the Municipalities, will explore the alternative treatment options summarized above, including, at a minimum, materially reducing the Municipalities' flow into the York System. One of the primary goals of negotiated contractual rates was to prevent the unnecessary initiation of and investment of funds by the Municipalities in alternative planning and design processes where alternatives are viable as summarized above. The modification of the Bulk Agreement by the PUC will provoke the Municipalities to initiate and invest funds to move as much wastewater flow as possible away from the York System.

I verify that the statements made in this affidavit are true and correct to the best of my personal knowledge or information and belief. I understand that false statements herein are made subject to the penalties of 18 Ca.C.S. relating to unsworn falsification to authorities.

Dated: February 16, 2024

AFFIDAVIT IN SUPPORT OF BULK AGREEMENT WITH PENNSYLVANIA-AMERICAN WATER COMPANY

I, Kelly K. Kelch, on behalf of West Manchester Township (the "Township"), as the Manager of the Township, do hereby solemnly affirm and declare the following:

I am making this Affidavit in support of the current Wastewater Treatment & Conveyance Agreement between the Township and Pennsylvania-American Water Company ("PAWC") dated May 16, 2022 (the "Bulk Agreement").

The Township, along with Manchester Township, York Township, North York Borough and Spring Garden Township (the "Municipalities") are currently connected to the wastewater collection, transmission, treatment and disposal system previously owned and operated by the York City Sewer Authority and now owned and operated by PAWC (the "York System").

In 2020, the Municipalities joined together to form the York Area Regional Sewer Authority ("YARSA") for the purpose, among other things, to compete with PAWC for the purchase of the York System and explore alternative wastewater treatment options for their customers, including potential alternative wastewater treatment providers.

Prior to PAWC's acquisition of the York System, the Municipalities' alternatives always included entering into intermunicipal flow agreements to transmit wastewater flow between themselves and to other surrounding municipalities with existing treatment plants based on their contiguous geographic locations. To that end, subject to design and permitting, the Municipalities' alternatives still include (among others):

- Treatment for Manchester Township's wastewater flow by the Dover Township wastewater treatment plant;
- Treatment for York Township's wastewater flow by the Springettsbury wastewater treatment plant;
- Treatment for the Township's wastewater by Dover Township wastewater treatment plant;
- Rerouting nearly 50% of Manchester Township's wastewater flow from the York System to Springettsbury by installing approximately 600 feet of gravity main;
- The construction of a treatment plant to service Bair Station in the Township and additional capacity to reverse flows from the York City wastewater treatment plant;
- Treatment for the Township's wastewater by Jackson Township wastewater treatment plant;
- Utilization of land in the possession of Spring Garden Township to construct a wastewater treatment plant; and
- Construction of an interceptor pump station in York Township to redirect nearly 95% of York Township's flows from the York City wastewater treatment plant to the Springettsbury wastewater treatment plant.

As part of the acquisition of the York System by PAWC, the Municipalities, through YARSA, were able to negotiate extensively with PAWC in order to establish definitive rates, terms and

conditions for treatment for their constituents, which currently represent approximately 54% of treatment flows through the York System.

The standard bulk agreements developed by the Municipalities and PAWC, including the Township's Bulk Agreement, contain a Most Favored Nations clause that essentially provides that no one of the bulk customers would receive a better deal from PAWC than another, and a breach of that covenant would allow the bulk customer to leave the York System and pursue competitive alternatives.

Further, as a result of its extensive arms-length negotiations with PAWC, the Township believes the Consumer Price Index escalator and Change of Law Surcharge, as defined in the Bulk Agreement, are fair, resulting in reasonable increases of rates over time, as agreed to in the Bulk Agreement. The Municipalities, including the Township, recognized that paying higher rates over time was worthwhile for a public utility provider with experience and a track record of good experience – something the Municipalities were not satisfied with from their previous provider. Further, the goal of negotiated rates is to prevent the unnecessary initiation of and investment of funds in alternative planning processes where the alternative is prospectively viable.

If the Pennsylvania Public Utility Commission (the "PUC") modifies the Bulk Agreement or PAWC indicates that it is no longer willing to abide by the terms and conditions of the Bulk Agreement, the Township is prepared to utilize its contractual rights under the Bulk Agreement, and the Township, together with the Municipalities, will explore the alternative treatment options summarized above, including, at a minimum, materially reducing the Municipalities' flow into the York System. One of the primary goals of negotiated contractual rates was to prevent the unnecessary initiation of and investment of funds by the Municipalities in alternative planning and design processes where alternatives are viable as summarized above. The modification of the Bulk Agreement by the PUC will provoke the Municipalities to initiate and invest funds to move as much wastewater flow as possible away from the York System.

I verify that the statements made in this affidavit are true and correct to the best of my personal knowledge or information and belief. I understand that false statements herein are made subject to the penalties of 18 Ca.C.S. relating to unsworn falsification to authorities.

Dated: February 16, 2024

AFFIDAVIT IN SUPPORT OF BULK AGREEMENT WITH PENNSYLVANIA-AMERICAN WATER COMPANY

I, Gary Milbrand, P.E. on behalf of York Township (the "Township"), as the Manager/Secretary of the Township, do hereby solemnly affirm and declare the following:

I am making this Affidavit in support of the current Wastewater Treatment & Conveyance Agreement between the Township and Pennsylvania-American Water Company ("PAWC") dated May 16, 2022 (the "Bulk Agreement").

The Township, along with Manchester Township, West Manchester Township, North York Borough and Spring Garden Township (the "Municipalities") are currently connected to the wastewater collection, transmission, treatment and disposal system previously owned and operated by the York City Sewer Authority and now owned and operated by PAWC (the "York System").

In 2020, the Municipalities joined together to form the York Area Regional Sewer Authority ("YARSA") for the purpose, among other things, to compete with PAWC for the purchase of the York System and explore alternative wastewater treatment options for their customers, including potential alternative wastewater treatment providers.

Prior to PAWC's acquisition of the York System, the Municipalities' alternatives always included entering into intermunicipal flow agreements to transmit wastewater flow between themselves and to other surrounding municipalities with existing treatment plants based on their contiguous geographic locations. To that end, subject to design and permitting, the Municipalities' alternatives still include (among others):

- Treatment for Manchester Township's wastewater flow by the Dover Township wastewater treatment plant;
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- Construction of an interceptor pump station in the Township to redirect nearly 95% of the Township's flows from the York City wastewater treatment plant to the Springettsbury wastewater treatment plant.

As part of the acquisition of the York System by PAWC, the Municipalities, through YARSA, were able to negotiate extensively with PAWC in order to establish definitive rates, terms and conditions for treatment for their constituents, which currently represent approximately 54% of treatment flows through the York System.

The standard bulk agreements developed by the Municipalities and PAWC, including the Township's Bulk Agreement, contain a Most Favored Nations clause that essentially provides that no one of the bulk customers would receive a better deal from PAWC than another, and a breach of that covenant would allow the bulk customer to leave the York System and pursue competitive alternatives.

Further, as a result of its extensive arms-length negotiations with PAWC, the Township believes the Consumer Price Index escalator and Change of Law Surcharge, as defined in the Bulk Agreement, are fair, resulting in reasonable increases of rates over time, as agreed to in the Bulk Agreement. The Municipalities, including the Township, recognized that paying higher rates over time was worthwhile for a public utility provider with experience and a track record of good experience – something the Municipalities were not satisfied with from their previous provider. Further, the goal of negotiated rates is to prevent the unnecessary initiation of and investment of funds in alternative planning processes where the alternative is prospectively viable.

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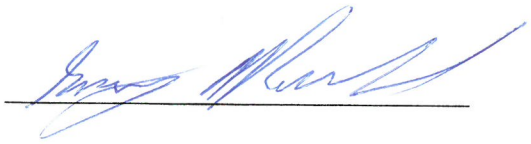
I verify that the statements made in this affidavit are true and correct to the best of my personal knowledge or information and belief. I understand that false statements herein are made subject to the penalties of 18 Ca.C.S. relating to unsworn falsification to authorities.

Dated: February 16, 2024



AFFIDAVIT IN SUPPORT OF BULK AGREEMENT WITH PENNSYLVANIA-AMERICAN WATER COMPANY

I, Dr. David W. Bolton, on behalf of North York Borough (the "Borough"), as the Borough Manager of the Borough, do hereby solemnly affirm and declare the following:

I am making this Affidavit in support of the current Wastewater Treatment & Conveyance Agreement between the Borough and Pennsylvania-American Water Company ("PAWC") dated May 16, 2022 (the "Bulk Agreement").

The Borough, along with Manchester Township, West Manchester Township, Spring Garden Township and York Township (the "Municipalities") are currently connected to the wastewater collection, transmission, treatment and disposal system previously owned and operated by the York City Sewer Authority and now owned and operated by PAWC (the "York System").

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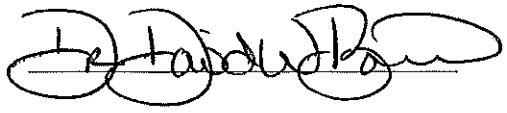
I verify that the statements made in this affidavit are true and correct to the best of my personal knowledge or information and belief. I understand that false statements herein are made subject to the penalties of 18 Ca.C.S. relating to unsworn falsification to authorities.

Dated: February 29 2024



Pennsylvania Public Utility Commission v.
Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 and R-2023-3043190

Responses of the Bureau of Investigation and Enforcement to the Interrogatories of Pennsylvania-American Water Company – Set III
Witness: Vanessa Okum

PAWC-I&E-III-2 Reference I&E Statement No. 1, pp. 6-7, regarding the acquisitions of Audubon Water Company, the Sadsbury Township Municipal Authority wastewater system, and the Farmington Township's water and wastewater systems:

a. Would Ms. Okum agree that an acquisition should be included in rates if the Commission enters a final, unappealable order approving that acquisition before the Commission enters its order in the base rate case?

b. Is Ms. Okum aware of any proposed acquisitions that were approved in a final, unappealable Commission or Court Order, but did not close? If so, please identify those acquisitions.

Response:

a. No. An acquisition should only be included in a base rate case after it has been finalized. In other words, an acquisition should be included in the first base rate case filed after an acquisition has closed.

b. Ms. Okum does not know for certain whether there have been such acquisitions.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	**Docket Nos. R-2023-3043189**
	:	**R-2023-3043190**
Pennsylvania American Water Company	:	

VERIFICATION OF VANESSA OKUM

I, **Vanessa Okum**, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the facts set forth in my foregoing responses are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at any hearing.

This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

Signed in Harrisburg, Pennsylvania, this 14th day of February, 2024.

/s/ Vanessa Okum_____

Vanessa Okum

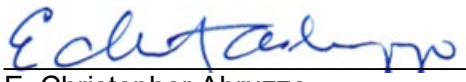
BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)**
	:	**R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **E. Christopher Abruzzo**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 6-R and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024



E. Christopher Abruzzo

Statement No. 7

Ciullo

PAWC STATEMENT NO. 7

DIRECT TESTIMONY
OF
MELISSA CIULLO

WITH REGARD TO
PENNSYLVANIA-AMERICAN WATER COMPANY'S
INCOME TAXES, PENNSYLVANIA STATE TAX RATE CHANGE, CORPORATE ALTERNATIVE MINIMUM TAX

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: November 8, 2023

PENNSYLVANIA-AMERICAN WATER COMPANY

DIRECT TESTIMONY OF MELISSA CIULLO

Q. What is your name and business address?

A. My name is Melissa Ciullo. My business address is 1 Water Street, Camden New Jersey 08102.

Q. By whom are you employed, and in what capacity?

A. I am employed by American Water Works Service Company, Inc. as the Vice President of Tax. I am responsible for management and oversight of the tax function for American Water Works, Inc. ("AWWC"), and its consolidated subsidiaries, including Pennsylvania-American Water Company ("PAWC" or the "Company").

Q. Please summarize your educational background and professional experience.

A. I graduated from Stockton College in 2001 with a Bachelor of Science Degree in Business and a concentration in Accounting. I have a Master of Business Administration Degree in Accounting and International Business from Rutgers University - Camden. I am a Certified Public Accountant in the State of New Jersey. I have 20 years of experience as a tax and accounting professional, including serving utilities with regulated operations in multiple states. For the 12 years before my employment with American Water, I held various positions with progressing responsibilities within the tax departments of utility holding companies Exelon Corporation and PEPCO Holdings Inc. Prior to these roles, I was employed by the international accounting firm KPMG.

Q. Have you previously testified before any regulatory agencies?

A. I previously provided testimony to the Pennsylvania Public Utility Commission, the Hawaii Public Utilities Commission, the Indiana Public Utility Commission, the Missouri Public Service Commission, and the West Virginia Public Service Commission.

Q. What is the purpose of your testimony?

A. My testimony addresses (1) the Company's computation of income tax expense in compliance with Act 40 of 2016 ("Act 40"), which added Section 1301.1 to the Pennsylvania Public Utility Code, (2) a change in Pennsylvania's corporate tax rate enacted in July 2022, and (3) the Corporate Alternative Minimum Tax ("CAMT") adopted as part of the Inflation Reduction Act ("IRA"), which was enacted in August 2022.

Computation of Income Taxes Consistent With Act 40

Q. What changes were made by Act 40?

A. Act 40 became law on June 12, 2016, and became effective on August 11, 2016. Section 1301.1(a) specifies how the Commission is to compute income tax expense for ratemaking purposes. In addition, Section 1301.1(b) states how any incremental internally generated funds produced by the application of Section 1301.1(a) should be used by an affected utility pending the December 31, 2025 "sunset" of Section 1301.1(b).

Q. What does Section 1301.1 direct the Commission to do in calculating income tax expenses for ratemaking purposes?

A. In summary, Section 1301.1(a) provides that current and deferred income taxes of a Pennsylvania utility are to be calculated for ratemaking purposes based only on the income, deductions, and credits of the utility itself. Therefore, the Commission may not calculate a utility's current and deferred income taxes for ratemaking purposes by taking into account

income, deductions (including taxable losses), or credits of the utility's parent or affiliated companies with which it joins in filing a consolidated Federal income tax return. This is generally referred to as a "stand-alone" computation of income tax expense because it reflects income tax expense of the utility "standing alone" and without regard to the taxable income, deductions, or credits of other companies in the same consolidated group.

Q. How does Section 1301.1(a) change prior Commission practice?

A. Section 1301.1(a) terminates the practice of making a "consolidated tax adjustment" ("CTA") when calculating a utility's Federal income taxes for ratemaking purposes in Pennsylvania. As directed by prior decisions of Pennsylvania appellate courts,[1] the Commission, until Act 40 became effective, was required to calculate CTAs employing the "Modified Effective Tax Rate Method," which the Commission described as follows:

> [U]nder the Modified Effective Tax Rate Method, which was approved under *Barasch II, supra*, the consolidated tax savings generated by the non-regulated companies of a corporate group are allocated to the regulated and non-regulated members of the group having positive taxable incomes.[2]

As calculated under the Modified Effective Tax Rate Method, a CTA captured a portion of the tax benefits of deductions – including taxable losses – of unregulated affiliates of public utilities and gave those benefits to the utilities' customers (as lower income tax expense than the utilities would have on a "stand-alone" basis), even though the utilities' customers did not pay the expenses that gave rise to those tax benefits. With the enactment of Act 40, Pennsylvania joined the vast majority of other jurisdictions, including the Federal Energy Regulatory Commission, that do not make CTAs for ratemaking purposes.

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[1] *Barasch v. Pa. P.U.C.*, 493 A.2d 653 (Pa. 1985) ("*Barasch I*"); *Barasch v. Pa. Pub. Util. Comm'n*, 548 A.2d 1310 (Pa. Commw. Ct. 1988) ("*Barasch II*").

[2] *Pa. Pub. Util. Comm'n v. Philadelphia Suburban Water Co*., Docket No. R-00016750, *et al.*, 2002 Pa PUC LEXIS 55, *90-91 (July 18, 2002).

Q. What does Section 1301.1(b) provide?

A. Section 1301.1(b) states as follows:

> If a differential accrues to a public utility resulting from applying the ratemaking methods employed by the commission prior to the effective date of subsection (a) for ratemaking purposes, the differential shall be used as follows:
>
> (1) fifty percent to support reliability or infrastructure related to the rate-base eligible capital investment as determined by the commission; and
>
> (2) fifty percent for general corporate purposes.

As I previously noted, Section 1301.1(c)(1) provides that Section 1301.1(b) will no longer apply after December 31, 2025.

Q. Have you calculated the "differential" in income taxes referenced in Section 1301.1(b)?

A. Yes, the confidential response to Filing Requirement (FR) IV.14 sets forth the computation of a CTA using the Modified Effective Tax Rate Method and data for tax years 2017 through 2021, which are the most recent five years for which tax returns have been filed. The second page of the calculation shows the "differential" in an amount of approximately $2.3 million corresponding to the CTA calculated in the manner I described above. In addition, PAWC witness Ashley E. Everette (PAWC Statement No. 1) addresses the Company's investment of 50% of the differential in a manner that complies with Section 1301.1(b)(1).

Pennsylvania Corporate Tax Rate Change

Q. Please explain the Pennsylvania Corporate Tax Rate Change.

A. On July 8, 2022, House Bill ("H.B.") 1342 was signed into law in Pennsylvania, which incrementally reduces the Commonwealth's corporate net income tax ("CNIT") rate from

9.99% to 4.99% over a period of nine years. The rate change reduction became effective for tax years beginning in 2023, reducing the rate to 8.99%. The CNIT rate will continue to be reduced each year through 2031, when the CNIT rate will be set at 4.99%.

Q. Does the Company's proposed revenue requirement reflect the changes in the CNIT rate determined by H.B. 1342?

A. Yes. As shown in Exhibit No. 3-A, the Company's proposed revenue requirement is calculated using the 7.99% CNIT rate that will be in effect at the end of the FPFTY.

Q. Has the Company remeasured its Accumulated Deferred Income Tax ("ADIT") to account for the rate change?

A. Yes, the Company estimated a remeasurement of the ADIT in the 3rd Quarter of 2022. The ADIT balance will be remeasured annually to account for the reductions in the Company's CNIT rate through 2031.

Q. What is the reason for the annual remeasurement?

A. According to ASU 740, Accounting for Income Taxes, ADIT must be reported on the balance sheet at the rate at which they are expected to settle with the taxing authority. In the case of the declining state tax rate, it is difficult to estimate precisely at which rate the accumulated deferred taxes will settle. Therefore, each year, the Company will remeasure the deferred taxes based on available information at the time of remeasurement.

Q. How much did the Company's Pennsylvania ADIT change as a result of the CNIT rate change?

A. At the time of the remeasurement, the state ADIT was reduced by $159M, and a corresponding regulatory liability was created. These amounts will continue to change (increase or decrease) each year depending on the timing of the settlement of the deferred

income taxes. The excess accumulated ADIT ("EADIT") will not be finalized until the final CNIT rate is set at 4.99% in 2031.

Q. How do you propose to return the Pennsylvania EADIT to customers?

A. The Company proposes to calculate the EADIT for rate-making purposes after each CNIT rate change by multiplying the normalized gross temporary difference balance at the end of the year before the rate change by the incremental change in the tax rate (net of the federal effect of state taxes) for the next year. The resulting EADIT will be amortized over 20 years as an unprotected EADIT, consistent with the treatment of unprotected Federal EADIT. This calculation will be updated each year to reflect changes in the CNIT rate and layered into the EADIT balance which will be returned to customers. See below for an illustrated example.

Year	Tax Rate	Incremental Rate Change	Incremental Rate Change (Net of Federal)	Gross Temporary Difference Balance*	PA EADIT	Amortization - 20 years					
						Year 1	Year 2	Year 3	...Year 20	Year 21	Year 22
Year 0	9.99%			20,000,000							
Year 1	8.99%	1.00%	0.79%	21,000,000	165,900	8,295	8,295	8,295	8,295		
Year 2	8.49%	0.50%	0.40%	21,500,000	87,075		4,354	4,354	4,354	4,354	
Year 3	7.99%	0.50%	0.40%	24,000,000	94,800			4,740	4,740	4,740	4,740
Subtotal						8,295	12,649	17,389	17,389	9,094	4,740

* For Demonstration Purposes Only the GTD continues to increase at a rate quicker than GTD is reduced. The actual direction of movement will depend on each year's activity.

Additionally, as a result of the CNIT rate change, the regulatory asset related to the PA Flow-through tax depreciation will also be remeasured to the reduced tax rate.

Q. How much Pennsylvania EADIT is included in the rate case to be returned to customers?

A. The reductions in the CNIT rate from 9.99% in 2023 to 7.99% at the end of the fully projected future test year ending June 30, 2025 results in Pennsylvania EADIT in the amount of $28,363,055. As discussed earlier in my testimony, the Company proposes to

amortize this amount over 20 years resulting in an annual bill credit of $1,418,153 that will be returned to customers.

Corporate Alternative Minimum Tax

Q. How does the enactment of the IRA impact the Company?

A. The IRA implemented a new CAMT beginning in 2023 that imposes a 15% tax on adjusted financial statement income ("AFSI"), for which applicable corporations will be required to pay the greater of the 15% of adjusted financial statement income or their calculated regular federal tax liability. Based on the current interim Internal Revenue Service guidance and forecasted projections, AWWC and its subsidiaries, including PAWC, will be subject to CAMT beginning with tax year 2024.

Q. Is AWWC an applicable corporation? If so, how was that determined?

A. Beginning with tax year 2024, AWWC is expected to be considered an applicable corporation. AWWC meets the AFSI test, which states that if a corporation's average annual AFSI exceeds $1 billion over the preceding three-year period, then the corporation and its subsidiaries are applicable corporations.

Q. For CAMT purposes, how is AFSI determined?

A. The starting point to calculate AFSI is the net income or loss per the financial statements. The financial statement net income or loss is then adjusted for federal income taxes, book and tax depreciation, pension, and other post-employment benefits. As a result, for purposes of determining AFSI or loss, federal income taxes, accelerated tax depreciation, pension, and other post-employment benefits are exactly the same with respect to the regular federal income tax liability calculation.

Q. Why does AWWC's and PAWC's CAMT exceed the regular tax liability?

A. Under tax law, certain expenditures capitalized for financial statement purposes qualify for accelerated tax deductions, such as tax repairs. These accelerated tax deductions, which lower regular tax, are not included in the AFSI calculation for determining the CAMT liability. Therefore, the regular tax is below the CAMT tax liability.

Q. How is PAWC expected to account for the CAMT in its financial statements?

A. For income tax accounting purposes, a current income tax liability and current income tax expense will be recorded for the CAMT liability but will be equally offset by recording a deferred tax asset and a reduction to deferred income tax expense to reflect the CAMT credit carryforward. As a result, there is no net incremental income tax expense associated with the CAMT; however, a deferred tax asset is established for the minimum tax credit carryforward. Corporations are entitled to a tax credit equal to the amount by which the minimum tax liability exceeds the regular tax liability. This amount can be carried forward indefinitely and used in future years when the regular tax liability exceeds the CAMT liability.

Q. If PAWC is below the $1 billion threshold, why is PAWC subject to CAMT?

A. PAWC is a subsidiary of AWWC. Strictly for purposes of determining if AWWC exceeds the $1 billion threshold in average profits under the AFSI test, AWWC must include all of its subsidiaries, including PAWC, because AWWC is considered a "single employer group" under the applicable tax rules. As previously stated, the CAMT applies to "applicable corporations." If a "single employer group," in the aggregate, exceeds the $1 billion profits threshold, each corporation that is part of that "single employer group" is considered an "applicable corporation" and separately subject to CAMT. In addition, the

applicable tax rules further support recording CAMT at the operating companies. That is illustrated by the fact that if a subsidiary ceases to be a member of an affiliated group of corporations, the departing subsidiary is entitled to its CAMT credit carryforward and can utilize that credit in future tax years when its regular tax exceeds its CAMT liability.

Q. What are the rate-making impacts associated with CAMT?

A. Under the normalization method, for ratemaking purposes, accumulated deferred income taxes are a reduction to the rate base calculation to reflect the lower cost of capital attributable to accelerated tax benefits. However, the CAMT reduces the tax benefits associated with accelerated tax deductions. Therefore, a corresponding deferred tax asset is included as a rate base increase to reflect the appropriate cost of capital.

Conclusion

Q. Does that conclude your direct testimony at this time?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Melissa Ciullo**, hereby state that the facts set forth in the pre-marked Statement No. 7 and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: November 8, 2023

Melissa Ciullo

Melissa Ciullo

Statement No. 8

Swiz

PAWC STATEMENT NO. 8

DIRECT TESTIMONY
OF
J. CAS SWIZ

WITH REGARD TO
PENNSYLVANIA-AMERICAN WATER COMPANY'S
UNCOLLECTIBLE ACCOUNTS EXPENSE ADJUSTMENT; UPDATE TO THE COVID-19 FINANCIAL IMPACT DEFERRAL AMORTIZATION; REQUEST FOR REGULATORY ACCOUNTING AUTHORIZATION TO DEFER DEVIATIONS IN PENSION, OTHER POST-EMPLOYMENT BENEFITS, AND PRODUCTION EXPENSES; AND REQUEST FOR ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: November 8, 2023

PENNSYLVANIA-AMERICAN WATER COMPANY

DIRECT TESTIMONY OF J. CAS SWIZ

Introduction

Q. What is your name and business address?

A. My name is J. Cas Swiz. My business address is 727 Craig Road, St. Louis, Missouri 63141.

Q. By whom are you employed and in what capacity?

A. I am employed by American Water Works Service Company, Inc. ("Service Company") as Senior Director, Enterprise-Wide Regulatory Strategy. Service Company is a wholly owned subsidiary of American Water Works Company, Inc. ("American Water") that provides services to Pennsylvania-American Water Company ("PAWC" or the "Company").

Q. Please summarize your educational background and professional experience.

A. I am a 2001 graduate of the University of Evansville with a Bachelor of Science degree in Accounting, and a 2005 graduate of the University of Southern Indiana with a Master of Business Administration. From 2001 to 2003, I was employed by ExxonMobil Chemical as a Product and Inventory accountant. From 2003 through 2020, I was employed by Vectren Corporation, a CenterPoint Energy Company, in various accounting and regulatory roles. Most recently, I was Director, Regulatory and Rates with responsibility for leading and executing the regulatory strategy of CenterPoint Energy's Indiana and Ohio electric and gas jurisdictions. In November 2020, I was hired by the Service Company within Regulatory Services.

Q. What are your duties as Senior Director, Enterprise-Wide Regulatory Strategy?

A. My primary responsibilities consist of the review and preparation of regulatory filings, proceedings, and related activities for the regulated subsidiaries of American Water. This includes the preparation of written testimony, exhibits, and workpapers in support of regulatory proceedings. In addition, I also review regulatory developments and evaluate alternative strategies that may impact the operations of the American Water regulated utility entities.

Q. Have you previously submitted testimony before the Pennsylvania Public Utility Commission (the "Commission" or "PUC")?

A. Yes, I submitted testimony in the Company's most recent base rate proceeding at Docket Nos. R-2022-3031672 (water) and R-2022-3031673 (wastewater) (the "2022 Base Rate Case").

Q. Have you previously submitted testimony before other regulated jurisdictions?

A. Yes. I testified on behalf of Missouri-American Water Company in its most recent base rate case, Case No. WR-2022-0303. During my employment at Vectren, I submitted testimony before the Indiana Utility Regulatory Commission in various docketed proceedings supporting accounting and rate design requests, most recently in Cause Nos. 45378, 44429, and 44430. In addition, I submitted testimony on behalf of Vectren before the Public Utility Commission of Ohio in various docketed proceedings, most recently in Case Nos. 20-0099-GA-RDR, 20-0101-GA-RDR, and 18-0298-GA-AIR.

Q. What is the purpose of your testimony?

A. First, I will identify and describe PAWC's claim for uncollectible accounts expense as presented in the Company's principal accounting exhibits. Second, I will support the

Company's claim to recover the unamortized balance of the deferred amounts recorded to the regulatory asset account for incremental COVID-19 related financial impacts authorized by the Commission's September 15, 2021 Order at Docket No. P-2020-3022426 ("COVID-19 Deferral Accounting Order") and the PUC's December 8, 2022 Final Order approving the settlement of PAWC's 2022 base rate case ("2022 Rate Case Order"). I will also support the Company's request to defer and record pension, other post-employment benefits ("OPEB"), and production expenses. Finally, I will support the implementation of an Environmental Compliance Investment Charge ("ECIC") pursuant to the alternative ratemaking authority Act 58 of 2018 ("Act 58"), 66 Pa. C.S. § 1330, granted to the Commission to provide timely rate recognition of the Company's sustained investments between rate cases to comply with new and changed government-mandated environmental standards.

Uncollectible Accounts Expense

Q. Please describe the Company's proposed level of uncollectible accounts expense reflected in PAWC's revenue requirement for the fully projected future test year ("FPFTY") ending June 30, 2025.

A. PAWC calculated its claim for uncollectible accounts expense using a two-year historic average ratio of net write-offs as a percentage of sales revenues. As shown in Table 1 below, the uncollectible accounts rate (1.176%) was calculated by using the Company's actual write-off experience for the July 1, 2021 through June 30, 2023 period divided by PAWC's total billed revenues for the same two years.

Table 1

	7/2021-6/2022	7/2022-6/2023	Two-Year Average
Net Write-Off Activity	$ 10,174,929	$ 9,374,665	$ 9,774,797
Total Billed Revenues	$ 775,900,531	$ 886,675,101	$ 831,287,816
Average Write-Off Percentage	**1.311%**	**1.057%**	**1.176%**

Applying the two-year average rate of net write-offs to the FPFTY level of total Company revenues for water and wastewater operations results in an annual level of uncollectible expense reflected in new base rates established at the conclusion of this proceeding, as shown on Exhibit No. 3-A, Calculation of Uncollectible Accounts Expenses.

Q. Why is it reasonable and appropriate to calculate uncollectible expense in this proceeding using the two-year average percentage of net write-offs ended June 30, 2023?

A. Using the two-year average of net write-offs presented in Table 1, as opposed to the Company's historical approach of using a three-year average, eliminates the impacts of the COVID-19 emergency on customer collections activities. In response to the COVID-19 emergency, the Company implemented several measures to help customers deal with the financial impact of the pandemic, including ceasing service terminations for non-payment from March 12, 2020 through March 31, 2021. The Company resumed collections activities on April 1, 2021, at which point the customer account was evaluated for disconnection if payment had not been received within 90 days from the last billing period. Because of this timeline, overdue account balances dating back to March 2020 were not written off until summer 2021.

In addition, PAWC customers have received relief through the Low-Income Household Water Assistance Program ("LIHWAP") administered by the Pennsylvania Department of Human Services to assist with unpaid utility bills. Through June 30, 2023, PAWC customers have received over $7.8 million in funding, which has directly contributed to relieving outstanding arrearages and helping to reduce write-offs.

In sum, the Company used a two-year historic average for the July 2021 to June 2023 period to normalize the rate of uncollectible accounts to pre-pandemic levels and account for the application of LIHWAP funds to reduce unpaid balances. As shown on Table 2 below, PAWC experienced variances in monthly net write-offs in the twelve months ended June 30, 2021 and net write-offs have been trending back up toward pre-pandemic levels since mid-2021.

Table 2[1]

Net Write-Off's	2017	2018	2019	2020	2021	2022	2023
Jan	$ 716,536	$ 685,641	$ 912,390	$ 764,828	$ 349,586	$ 830,013	$ 827,805
Feb	$ 559,995	$ 692,680	$ 618,529	$ 346,622	$ 297,714	$ 747,877	$ 696,968
Mar	$ 662,432	$ 592,584	$ 499,215	$ 606,378	$ 484,338	$ 585,905	$ 642,204
Apr	$ 303,116	$ 332,690	$ 480,307	$ 404,114	$ 305,722	$ 483,219	$ 342,099
May	$ 597,020	$ 600,851	$ 568,274	$ 418,735	$ 424,310	$ 478,710	$ 668,436
Jun	$ 558,589	$ 913,277	$ 472,574	$ 549,243	$ 499,818	$ 778,586	$ 849,341
Jul	$ 591,294	$ 813,965	$ 558,600	$ 410,939	$ 596,656	$ 815,417	
Aug	$ 891,413	$ 910,428	$ 1,099,073	$ 200,884	$ 1,502,577	$ 1,230,674	
Sep	$ 630,558	$ 938,943	$ 822,732	$ 268,270	$ 1,405,223	$ 1,024,491	
Oct	$ 830,307	$ 870,953	$ 831,211	$ 189,356	$ 720,472	$ 663,419	
Nov	$ 638,288	$ 699,334	$ 684,167	$ 359,632	$ 942,686	$ 878,019	
Dec	$ 649,591	$ 720,657	$ 876,692	$ 386,722	$ 1,103,004	$ 735,792	
Annual	**$ 7,629,139**	**$ 8,772,003**	**$ 8,423,765**	**$ 4,905,724**	**$ 8,632,107**	**$ 9,252,122**	**$ 4,026,853**

Q. Have the outstanding arrearages for PAWC's customers stabilized from the significant increases incurred during the COVID-19 emergency?

[1] Table 2 presents net write-offs for 2017 through June 2023. The disconnection moratorium period is highlighted in green.

A. Yes. During the peak of the COVID-19 emergency, PAWC experienced significant increases to its outstanding arrearages, specifically with respect to balances that are more than 150 days overdue. This trend continued even after the expiration of the moratorium on disconnections. However, with LIHWAP funding and collection activities, the aging of PAWC's unpaid balances has returned to pre-COVID-19 levels.

Table 3

Receivables Balance as of June 30					
Aging Category	**2023**	**2022**	**2021**	**2020**	**2019**
Current	$ 46,404,037	$ 36,691,897	$ 34,369,435	$ 32,684,188	$ 37,087,580
31-150 Days	$ 19,890,869	$ 15,913,935	$ 21,197,606	$ 17,994,123	$ 15,855,887
>150 Days	$ 14,747,326	$ 20,551,028	$ 24,722,737	$ 14,067,730	$ 11,733,612
Total	**$ 81,042,232**	**$ 73,156,859**	**$ 80,289,777**	**$ 64,746,041**	**$ 64,677,079**

As shown in Table 3 above, accounts receivable aged over 150 days as of June 30, 2023 represent approximately 18% of the Company's total arrearages, which is in line with the percentage as of June 30, 2019. By comparison, as of June 30, 2021, accounts that were more than 150 days overdue represented over 30% of PAWC's total arrearages.

Q. Does the historic write-off data along with the current status of outstanding accounts receivable support the Company's recommendation to use the two-year average write-off percentage for the determination of the going level of uncollectible expense in this proceeding?

A. Yes, the Company's rate of uncollectible accounts over the past two years properly excludes the impacts of the COVID-19 emergency on customer collections and reflects a reasonable estimation of the going level of bad debt expense.

PAWC's COVID-19 Regulatory Asset

Q. Please summarize the COVID-19 Accounting Deferral Order and the ratemaking treatment authorized by the Commission for PAWC's COVID-19 regulatory asset in the 2022 Base Rate Case.

A. On May 13, 2020, the Commission issued a Secretarial Letter[2] that recognized the additional costs and other financial impacts that the COVID-19 emergency imposed on utilities as essential businesses, including the increased costs directly resulting from the service-termination moratorium established by the Emergency Order issued by PUC Chairman Gladys Brown Dutrieuille on March 13, 2020.[3] The May 2020 Secretarial Letter directed utilities to track incremental COVID-19 related expenses and any government assistance that would offset those expenses and permitted utilities to establish a regulatory asset for bad debt expense attributable to compliance with the Emergency Order.

On October 15, 2020, PAWC filed a Petition at Docket No. P-2020-3022426 requesting PUC approval to defer for accounting purposes specific expenses and revenue losses PAWC incurred in furnishing essential services during the COVID-19 emergency. In the COVID-19 Deferral Accounting Order (pp. 12-13, 30-32, 42, 49-50), the PUC authorized PAWC to record COVID-19 related direct costs and savings as a regulatory asset, along with incremental uncollectible expense and carrying charges on the deferred amounts. The Commission found that the Office of Consumer Advocate's proposal for an uncollectible expense deferral "baseline" clearly conflicted with the Commission's

[2] *COVID-19 Cost Tracking and Creation of Regulatory Asset*, Docket No. M-2020-3019775 (Secretarial Letter issued May 13, 2020) ("May 2020 Secretarial Letter").
[3] *Public Utility Service Termination Moratorium Proclamation of Disaster Emergency-COVID-19*, Docket No. M-2020-3019244 (Emergency Order ratified Mar. 26, 2020) ("Emergency Order").

prescribed approach for calculating deferrals in the May 2020 Secretarial Letter based on all uncollectible expense above the amount currently reflected in PAWC's approved base rates. The PUC also declined to establish a "hard cut-off date" after which no further COVID-19 related amounts could be deferred.

In the 2022 Base Rate Case, PAWC proposed to recover the deferred balance of its COVID-19 regulatory asset accumulated through July 31, 2022 (totaling $3,409,217), with an additional $517,127 of carrying costs calculated on the deferred amounts through January 1, 2023, amortized over three years. The Company also proposed to continue deferring incremental uncollectible expense from and after August 1, 2022 under the existing Commission authorization for possible recovery in PAWC's next base rate case. PAWC had already ceased recording COVID-19 related direct costs and savings in its COVID-19 regulatory asset on February 1, 2022. Under the settlement approved in the 2022 Rate Case Order ("Settlement"), the Company agreed to a December 31, 2022 end date for the deferral of incremental uncollectible expense and carrying costs recorded to the COVID-19 regulatory asset. In the Settlement, the parties also stipulated to (1) the total deferred balance as of July 31, 2022 included in rates ($3,409,217, Appendix H), (2) the total carrying costs calculated on the deferred amounts through January 1, 2023 ($517,127, Appendix H) and (3) the amortization period for the deferred balance (3 years, Appendix D).

Q. When did PAWC begin amortization of the deferred balance in the Company's COVID-19 regulatory asset agreed to in the Settlement?

A. The Company began amortizing the deferred balance of $3,926,344 over three years (i.e., $109,065 per month) on February 1, 2023. In accordance with 2022 Rate Case Order,

PAWC continued to defer incremental uncollectible expense above or below the amounts embedded in the Company's rates from August 1, 2022 through December 31, 2022. The Company did not realize any offsetting COVID-19 related direct savings during that same five-month period.

Q. What is the unamortized deferred balance in the Company's COVID-19 regulatory asset as of June 30, 2023?

A. As of June 30, 2023, PAWC has recorded a net credit balance of $(246,472). That balance reflects five-months of amortization of the net debit balance authorized in the 2022 Rate Case Order (totaling $545,325 through June 2023) and an aggregate credit of $(3,627,491) for uncollectible expense that was below the amount embedded in PAWC's base rates from August 1, 2022 through December 31, 2022, along with the corresponding adjustments to the carrying costs on the deferred net credit balance through January 1, 2023.

Q. Please describe the Company's claim for recovery of its COVID-19 regulatory asset in this proceeding.

A. PAWC projects that the unamortized deferred balance in its COVID-19 regulatory asset as of July 31, 2024, which aligns with the effective date of new base rates approved in this proceeding, will be a net credit of $(1,664,318). The Company proposes to include this projected deferred balance in base rates amortized over two years (24 months), starting on August 1, 2024.

Q. What is the annual level of amortization expense PAWC will include in its revenue requirement in this proceeding?

A. PAWC will include a credit of $(832,159) as annual amortization expense in its revenue requirement in this proceeding, or approximately $(69,347) per month.

Q. Why is the Company proposing to amortize the COVID-19 deferred balance over two years?

A. An amortization period of two years aligns with the typical time between PAWC's base rate cases. It also ensures this credit is appropriately returned to customers in a timely manner.

Q. Is the Company including any additional carrying costs on the deferred balance in its projections?

A. No. In accordance with the 2022 Rate Case Order, PAWC ceased recording carrying costs to its COVID-19 regulatory asset as of December 31, 2022. As noted previously in my testimony, the Company did adjust its claim for reductions to the carrying costs as a result of the credits recorded to the COVID-19 regulatory asset account from August 1, 2022 through December 31, 2022.

Proposed Regulatory and Accounting Treatment

Q. Please describe the Company's request to establish tracker and deferral accounts for pension, OPEB, and production expenses.

A. Historically, PAWC has experienced material variances between the levels of pension, OPEB, and production expenses forecasted for recovery in its base rates and the levels of those expenses it actually incurred. As I explain below, from year-to-year, actual expenses can be lower or higher than the amounts reflected in the Company's base rates. Therefore, the Company is asking for Commission permission to defer and record any amounts above or below the projected level of pension, OPEB, and production expenses into separate regulatory asset or liability accounts through the conclusion of the Company's next rate proceeding. In its next base rate case, the Company will address the ratemaking treatment

of the deferred amounts and any request to continue deferred accounting treatment for pension, OPEB, and production expenses beyond that next base rate proceeding.

Q. Is the Company proposing to recover carrying costs on deferred balances?

A. No. The Company is only proposing to defer any variance between the base level established in this case and the actual level incurred to an asset or liability account.

Q. What is the definition of a regulatory asset according to the National Association of Regulatory Utility Commissioners ("NARUC") Uniform System of Accounts ("USOA") for Class A Water Utilities?

A. "Regulatory Assets and Liabilities" are assets and liabilities that result from rate actions of regulatory agencies. They arise from specific revenues, expenses, gains or losses that would have been included in determination of net income in one period under the general requirements of the Uniform System of Accounts but for it being probable that: 1) such items will be included in a different period(s) for purposes of developing the rates the utility is authorized to charge for its utility services; or 2) in the case of regulatory liabilities, that refunds to customers, not provided for in other accounts, will be required. Regulatory assets and liabilities can also be created in reconciling differences between the requirements of generally accepted accounting principles ("GAAP"), regulatory practice and tax laws.

Q. What is the difference between a tracker mechanism and a rate adjustment clause established under Section 1307 of the Code?

A. Under the mechanism proposed by PAWC, the differences between the pension, OPEB, and production expenses included in the Company's rates and its actual pension, OPEB, and production expenses will be tracked and recorded in deferral accounts. The net balance

in the accounts would represent a deferral – either as a regulatory liability or regulatory asset – that would be credited to, or recovered from, customers in a subsequent base rate case by means of an appropriate amortization. In contrast, a rate adjustment mechanism established under Section 1307 of the Public Utility Code typically involves billing customers a charge calculated to recover a projected annual cost. Annually (or more frequently), the amount billed to customers is reconciled to the utility's actual cost and the difference is either recovered from or refunded to customers through the experience or "E" factor of the formula for the rate adjustment clause. In that way, customer rates are periodically adjusted to reflect changes in actual costs and the reconciliation of prior period over or under-collections.

Under a rate adjustment clause, customer rates are subject to change between base rate cases. Under the deferred accounting mechanism, the Company is proposing for pension, OPEB, and production expenses, variations between projected and actual expenses to be recorded and deferred, but customer rates will not reflect the net impact of those variations until new rates are authorized in a future base rate case.

Pension and OPEB Expense Tracker and Deferral Mechanism

Q. Why is it appropriate that the Company be permitted to record the amount of Pension and OPEB expenses, above or below the amount authorized in rates, to a regulatory asset or liability between base rate cases?

A. Pension and OPEB costs are difficult to predict. Projections of the Company's pension and OPEB costs are calculated by WTW (formerly known as Willis Towers Watson), a national actuarial firm. As discussed by Company witness Lori O'Malley, the pension costs of $22,218 and OPEB costs of $(5,955,515) claimed in PAWC's revenue requirement

for the fully projected future test year ending June 30, 2025 ("FPFTY") are based upon the actuary report provided by WTW for calendar year 2023, calculated in accordance with Accounting Standards Codification Topic 715 ("ASC 715")[4]. Although WTW uses sound, well-established actuarial methods, the pension and OPEB costs that it calculates are subject to material change from year-to-year, as well as within a year, based on a variety of factors that I discuss later in my testimony. As a consequence, pension and OPEB costs exhibit volatility because those costs are a function of variables that are subject to change over time and, therefore, are difficult to forecast.

Q. What are the principal factors that cause pension and OPEB costs to fluctuate from year to year?

A. Pension and OPEB costs calculated in accordance with GAAP[5] can fluctuate from year to year because of changes in economic or demographic variables used to determine those costs that are outside of the Company's control. Actuaries, including the Company's actuary, must make reasonable assumptions to supply the values for those variables, including interest rates, salary increases, inflation, and the performance of the investment markets. In addition, demographic assumptions related to the composition of the population that will receive retirement benefits, the behavior of members of that population (e.g., decisions about when to retire) and the life expectancy of the recipients of retirement benefits all impact the assumptions and variables of the calculation.

[4] The GAAP rules for calculating benefit costs in reporting the income and expense of a business are set forth in Financial Accounting Standards Board Accounting Standards Codification Topic 715, which was formerly Financial Accounting Standard 87.

[5] The GAAP rules for calculating retirement benefit costs in reporting the income and expense of a business are set forth in Financial Accounting Standard Board Accounting Standards Codification Topic 715 ("ASC 715"), which was formerly Financial Accounting Standard 87 ("FAS 87").

Among the primary economic factors that drive fluctuations in retirement costs are: (1) variations between the returns that are projected on the investments made to fund current and future retirement costs and returns actually achieved on those investments; and (2) variations between assumed discount rates and actual discount rates during the period for which costs are being projected. If investment returns and discount rates increase, retirement cost obligations measured at year end become smaller (compared to the prior year end). As a result, current year costs decrease as compared to the prior year. If investment returns and discount rates decrease, retirement cost obligations measured at year end become larger, and current year costs increase as compared to the prior period.

Although demographic assumptions have exhibited less year-to-year volatility than investment returns and discount rates, there have been demographic factors that produced material variations in retirement costs. For example, in 2014, the Society of Actuaries' Retirement Plans Experience Committee released a report that showed a population-wide increase in life expectancy, causing many actuarial experts to reassess their populations and reconsider previous assumptions. Longer life expectancy means that retirement benefits will be paid for a longer period of time in the future, and therefore the current costs to fund those future benefits increased.

The purpose of the Company's request for deferral accounting authorization is to protect both customers and the Company from the variations between forecasted and actual pension and OPEB costs that occur for the reasons I previously explained. This deferral mechanism is symmetrical. Neither customers nor the Company would be required to bear more than the Company's actual costs incurred for pension and OPEB expenses.

Q. Please generally describe how the proposed deferred accounting will work for Pension and OPEB expenses.

A. The Company will track the pension and OPEB expenses included for recovery in its Commission-approved base rates and will also track its actual costs incurred for pension and OPEB expenses. Each month, one-twelfth (1/12) of the amount authorized for recovery in base rates ("base level") will be compared to the Company's actual monthly expense. Actual costs incurred in accordance with ASC 715 guidelines above or below the base level will be credited or debited, as applicable, in separate pension and OPEB deferral accounts on the Company's books. The Company will continue to defer the net balance recorded in those accounts through the end of its next base rate case. In its next base rate case, the Company may seek rate recovery of the net credit or debit balances in the deferral accounts, which will represent either regulatory assets or regulatory liabilities as applicable, amortized to income over an appropriate period as either an increase or decrease, respectively, to pension and OPEB expense.

Q. Has the Company reviewed how the fluctuations in expense from year to year would have impacted the Company and its customers if tracker and deferral mechanisms for pension and OPEB expenses had been in place previously?

A. Yes. Table 4 and Table 5 below lay out by calendar year the authorized level of Pension and OPEB expense and the actual amount of expense recorded. In the variance column, a positive number indicates that the actual expense exceeded the authorized level, and a negative number indicates that the actual amount was lower than the authorized level. Significantly, over the eleven years (2012 through 2022) reflected in Table 4 and Table 5, customers would have realized net benefits (actual costs lower than the rate allowance) in

ten years for pension costs and nine years for OPEB costs. In total, over the eleven years reflected in my analysis, customers would have realized a net benefit of approximately $76 million for a pension deferral and $46 million for an OPEB deferral. In 2021 and 2022 alone, the Company would have recorded a regulatory liability of $(10,647,622) for pension expense and $(13,308,317) for OPEB expense, which would have been deferred and amortized through rates in a subsequent proceeding.

Table 4

	Pension Expense		
	Authorized Expense	Actual Expense	Variance
2012	$ 21,675,744	$ 14,062,463	$ (7,613,281)
2013	$ 21,675,744	$ (3,592,769)	$ (25,268,513)
2014	$ 10,036,329	$ 5,052,844	$ (4,983,485)
2015	$ 9,069,256	$ (1,472,998)	$ (10,542,254)
2016	$ 9,069,256	$ 3,370,585	$ (5,698,671)
2017	$ 9,069,256	$ 3,823,999	$ (5,245,257)
2018	$ 4,722,715	$ 3,330,125	$ (1,392,590)
2019	$ 4,389,352	$ 4,817,385	$ 428,034
2020	$ 4,389,352	$ (419,707)	$ (4,809,059)
2021	$ (36,471)	$ (4,824,802)	$ (4,788,331)
2022	$ (390,013)	$ (6,249,304)	$ (5,859,291)
2023	$ 688,289		

Table 5

	OPEB Expense		
	Authorized Expense	Actual Expense	Variance
2012	$ 4,516,334	$ 5,171,819	$ 655,485
2013	$ 4,516,334	$ 4,544,186	$ 27,852
2014	$ 4,768,889	$ 1,881,025	$ (2,887,864)
2015	$ 4,789,873	$ 3,880,838	$ (909,035)
2016	$ 4,789,873	$ 1,502,220	$ (3,287,653)
2017	$ 4,789,873	$ 872,561	$ (3,917,312)
2018	$ 1,315,566	$ (4,484,797)	$ (5,800,363)
2019	$ 1,049,100	$ (6,535,965)	$ (7,585,066)
2020	$ 1,049,100	$ (7,922,211)	$ (8,971,311)
2021	$ (2,229,277)	$ (9,016,868)	$ (6,787,591)
2022	$ (2,491,160)	$ (9,011,886)	$ (6,520,726)
2023	$ (5,365,458)		

Deferred Accounting Treatment - Production Expense

Q. What is the scope of the "Production Expenses" for which the Company seeks deferral accounting authorization?

A. The Company defines Production Expenses as the costs incurred to provide water and wastewater services to our customers, including purchased water and wastewater treatment (NARUC Account 610 and NARUC Account 710), chemicals (NARUC Account 618 and NARUC Account 718), fuel and power (NARUC Accounts 615-616 and NARUC Accounts 715-716), and waste disposal (NARUC Account 711). As explained by Ms. O'Malley, the Company is requesting $59,989,147 in total Production Expense in its claimed revenue requirement for the FPFTY, broken out as $3,098,544 for Purchased Water and Wastewater Treatment, $21,276,332 for Fuel and Power, $27,485,022 for Chemicals, and $8,129,249 for Waste Disposal. *See* Exhibit 3-A, pp. 54-57, 118-120, 238-240.

Q. Why is PAWC requesting deferred accounting treatment for Production Expenses in this proceeding?

A. Production Expenses are not discretionary and are not driven solely by changes in overall production volumes. The Company's production expenses can materially increase or decrease based on the prices charged by suppliers from whom the Company purchases water, energy, wastewater treatment service, and waste disposal services needed to provide safe and reliable water and wastewater service to customers. As an example, the chemical market has been extremely volatile compared to historical levels, driven by many factors such as impacts from the COVID-19 emergency, global pressures driven by the conflict in Ukraine, inflationary growth in commodity prices, escalation in energy prices, and overall supply and demand pressure within a consolidating chemical market. As a result of the current volatility in the market for chemicals, many vendors have moved from annual contracts to quarterly or semi-annual contracts. While the Company takes rigorous steps to ensure that it obtains the best pricing possible when it purchases chemicals, the market forces that have caused sharp increases in contract pricing in 2022 and 2023 are outside of the control of the Company and many of its suppliers. The Company anticipates that it will continue to see chemical price volatility and uncertainty in 2024 and beyond. Likewise, energy market prices are higher than they have been in many years, and as a result, PAWC's electric generation suppliers have increased contract rates for power supply and are less willing to lock in prices for 12-month terms.

Market conditions impacting production expenses represent an extraordinary combination of circumstances that are expected to continue to produce significant price volatility over the next several years. While the Company actively manages its chemical

and energy use through a capital plan that emphasizes efficiency, it cannot avoid incurring these costs. The accounting deferral for production expenses would protect both the Company's customers and PAWC against this volatility. PAWC believes its production expenses are analogous to gas commodity or electric fuel and transmission costs that the Commission has approved for recovery through automatic adjustment clauses. The only difference here is that the Company seeks to defer increases or decreases to its Production Expenses between rate cases for recovery or refund in a future base rate case rather than implement an automatic rate change currently afforded to our gas and electric counterparts in the Commonwealth.

Q. Please generally describe how the proposed deferred accounting will work for Production Expenses.

A. The Company would maintain separate regulatory asset and liability accounts for each production expense category, including (1) Purchased Water and Wastewater Treatment, (2) Fuel & Power, (3) Chemicals, and (4) Waste Disposal. Beginning the first month after rates are in effect in this proceeding, the Company will record the difference between the expense authorized in this case and the actual expense. The amount approved within this base rate case for all of the Production Expense items will be "unitized" (cost per 1,000 gallons) by taking the total expenses divided by overall water and wastewater usage used to derive rates and charges in this proceeding. This rate will be multiplied by monthly usage to determine the authorized amount collected in the current month, which will be compared to the actual expense for the month. If the actual expense is lower than the authorized amount in rates, a regulatory liability will be set up to record the difference. If the actual expense is higher than the authorized amount in rates, a regulatory asset will be

recorded. At the time of its next rate case, the Company will present the net amount in these accounts for return to the customers (in the case of a net credit amount or regulatory liability) or for collection in rates (in the case of a net debit amount or regulatory asset) over a reasonable amortization period.

Q. Why is PAWC determining the authorized level of Production Expenses using a "unitized" rate?

A. As I noted earlier, Production Expenses are a function of both supplier prices and volumetric production. If sales increase in any period, the Company would expect increases in many of its Production Expenses. By unitizing the amount included in PAWC's base rates, any deviation in sales would be contemplated in the authorized level consistent with the actual expenses.

Q. Would deferred accounting treatment for Production Expenses remove incentives for the Company to reduce costs and improve its efficiency?

A. No. The Company is committed to providing safe and reliable water service to its customers at affordable rates. This request does not change that; it simply ensures that customers only pay for the production expenses incurred, nothing more and nothing less, while allowing the Company to collect the proper revenues to cover production expenses incurred to continue to provide safe and reliable service. This does not grant the Company a "free-pass" to mismanage Production Expenses. Any deferred amounts (and offsets to those amounts) will be subject to detailed ratemaking review to determine prudency and reasonableness when they are claimed by the Company in its next base rate case.

Q. Have fluctuations in Production Expenses from year to year become significant since volatility in market prices for chemicals, fuel and power began in 2022?

A. Yes. Table 6 below lays out by calendar year the authorized level of Production Expense and the actual amount of expense recorded. It is important to note that these figures do not represent unitized values, as we are proposing in this case. The Company did not have the ability to determine unitized values for historic authorized periods. As shown in Table 6, the variance (positive or negative) between the Company's actual Production Expenses and the amount reflected in base rates increased substantially in 2022 in the range of about $7 million to $9 million compared to the prior ten years.

Table 6

	Actual Expense						
	Purchased Water	Fuel and Power	Chemicals	Waste Disposal	Total Production Expense	Authorized Production Expense	Variance
2012	$ 2,802,239	$ 14,559,776	$ 8,780,671	$ 2,407,514	**$ 28,550,200**	**$ 27,933,614**	**$ 616,586**
2013	$ 2,737,819	$ 13,087,089	$ 8,788,867	$ 2,226,585	**$ 26,840,360**	**$ 27,933,614**	**$ (1,093,254)**
2014	$ 2,834,201	$ 13,565,774	$ 8,739,949	$ 2,510,009	**$ 27,649,934**	**$ 27,762,292**	**$ (112,358)**
2015	$ 3,034,120	$ 13,868,975	$ 8,971,534	$ 2,175,025	**$ 28,049,654**	**$ 27,762,292**	**$ 287,362**
2016	$ 3,108,243	$ 14,633,813	$ 9,002,909	$ 2,844,849	**$ 29,589,813**	**$ 27,762,292**	**$ 1,827,521**
2017	$ 2,522,714	$ 15,043,745	$ 9,278,048	$ 3,311,148	**$ 30,155,656**	**$ 27,762,292**	**$ 2,393,364**
2018	$ 2,879,219	$ 15,961,703	$ 11,497,503	$ 4,116,123	**$ 34,454,549**	**$ 31,761,277**	**$ 2,693,272**
2019	$ 2,578,352	$ 15,996,797	$ 11,463,241	$ 4,280,880	**$ 34,319,270**	**$ 31,761,277**	**$ 2,557,993**
2020	$ 2,917,143	$ 14,342,929	$ 11,520,257	$ 5,380,249	**$ 34,160,578**	**$ 31,761,277**	**$ 2,399,301**
2021	$ 3,024,165	$ 15,334,987	$ 12,302,485	$ 5,348,351	**$ 36,009,987**	**$ 35,345,221**	**$ 664,767**
2022	$ 3,275,530	$ 19,203,521	$ 16,777,449	$ 5,910,418	**$ 45,166,918**	**$ 35,631,512**	**$ 9,535,406**

Environmental Compliance Investment Charge

Q. Please generally describe the Company's proposal to implement a new ECIC.

A. PAWC seeks approval to establish an ECIC pursuant to Sections 1307 and 1330(b)(2) of the Public Utility Code. The ECIC is a rate adjustment clause designed to reflect and recover, between rate cases, the costs imposed on the Company to address and comply with continuously evolving government-mandated environmental standards that are beyond the Company's control and difficult to estimate at any single point in time. As Company witness Bruce W. Aiton explains in PAWC Statement No. 3, significant new or changed regulatory requirements under a variety of environmental laws create the need for large

future investments in the Company's assets and can impose substantial operations and maintenance ("O&M") expenses, often in a short time frame, due to expedited compliance deadlines required by law or regulation. Under PAWC's proposal, for inclusion in the ECIC, the costs must be consistent with the set of projects and activities set forth in an annual environmental compliance plan ("Environmental Plan") that is subject to Commission review and approval as I will discuss later in my testimony.

Q. Why is it appropriate to recover Environmental Plan costs through an alternative ratemaking mechanism under the authority granted to the Commission by Act 58?

A. The Company's proposed ECIC will provide a reasonable mechanism for adjusting the Company's rates between base rate cases to ensure full and timely rate recognition of PAWC's investments and measures undertaken to comply with new environmental regulatory mandates in a prudent and efficient manner as they emerge. PAWC has no control over the need for and timing of costs to comply with these new or changed regulatory requirements. The ECIC will also help avoid customer exposure to less frequent but more significant rate increases in a general base rate case by producing smaller, more gradual increases to customer bills driven by new regulations. In addition, permitting PAWC to recover ECIC-eligible capital costs and expenses through an automatic adjustment clause will reduce a major driver of the need for rate relief that would otherwise trigger a base rate case filing.

In sum, the ECIC helps ensure that PAWC receives adequate revenue to maintain safe, reliable, and compliant water and wastewater service that both meets government requirements and advances environmental policy objectives. It is my understanding through discussions with counsel that the Commission may consider the factors outlined

in its Policy Statement at 52 Pa. Code § 69.3302,[6] among any other relevant factors, when evaluating an alternative ratemaking mechanism. To assist the Commission in its review of the proposed ECIC, PAWC Exhibit JCS-1 addresses how each of those factors apply to the ECIC.

Q. Have other jurisdictions approved the use of adjustment clauses for recovery of environmental compliance costs?

A. Yes. As of July 2022, utility commissions in 30 states had approved various forms of environmental compliance riders or similar alternative ratemaking mechanisms.[7] Environmental compliance mechanisms are more prevalent for fully-integrated energy utilities, often for electric utilities with generating assets to comply with Environmental Protection Agency ("EPA") mandates under the Clean Air Act. Utilities in other states have also utilized these recovery mechanisms to address compliance costs as a result of asbestos removal and manufactured gas plant remediation expenditures. In addition, another American Water subsidiary, Indiana-American Water Company, has a System Enhancement Improvement charge that allows for the recovery of environmental compliance costs imposed on the utility by a federal or state agency.

[6] "[T]he proposed policy statement is intended only to give guidance to fixed utilities and interested stakeholders on what is to be considered when investigating alternative ratemaking methodologies in a Section 1308 rate proceeding. While intending to assist utilities and stakeholders, the policy statement does not establish a binding norm, nor does it establish a predicate for the adoption of an alternative rate mechanism by any fixed utility." *Implementation of Act 58 of 2018 Alternative Ratemaking for Utilities*, Docket No. M-2018-3003269 (Implementation Order entered Apr. 25, 2019).

[7] S&P Global Market Intelligence, *Regulatory Focus Topical Special Report – Adjustment Clauses: A state by state overview* (July 18, 2022).

Q. Is PAWC facing a similar regulatory paradigm to fully-integrated electric utilities that are authorized to recover environmental compliance costs through alternative rate mechanisms in other jurisdictions?

A. Yes. As further discussed in Mr. Aiton's Direct Testimony in PAWC Statement No. 3, the EPA issued proposed drinking water regulations for six per- and polyfluoroalkyl substances ("PFAS"), which will establish legally enforceable levels for each of these six PFAS that are known to occur in drinking water. In addition to proposing enforceable limits for these six PFAS, the EPA proposes requirements for the continued monitoring of PFAS, public notification of monitoring results if they exceed defined limits, and the treatment of drinking water to reduce PFAS to required limits. Once the PFAS Rule is finalized, which is expected to occur in the coming months, public water systems will be required to modify their facilities to comply with the Rule within three years. Similarly, the Pennsylvania Department of Environmental Protection has also adopted drinking water standards for PFAS that will require compliance monitoring and the adoption of additional or modified treatment systems, modification of sources, or a combination of actions.

PAWC's compliance with the federal and state PFAS Rules will require significant capital investment, currently estimated at over $1 billion of capital expenditures for all of American Water's thirteen (13) regulated jurisdictions, along with ongoing annual operating expenses estimated at approximately $50 million related to testing and treatment.[8] For PAWC, this estimated capital investment is substantial yet difficult to estimate pending the results of monitoring and completion of certain pilot treatment and

[8] American Water Works Company, Inc. SEC 10-Q, July 26, 2023 (page 33) https://www.sec.gov/ix.xhtml?doc=/Archives/edgar/data/1410636/000141063623000116/awk-20230630.htm

other studies. Company witness Bruce W. Aiton provides a more detailed explanation of the PAWC impacts in PAWC Statement No. 3.

Q. What projects will be eligible for ECIC recovery?

A. ECIC eligible projects will include capital costs and expenses incurred to comply with significant new or changed legal or regulatory requirements imposed or reasonably anticipated to be imposed under applicable Environmental Laws. Applicable Environmental Laws will include, but not be limited to, any statutes, regulations, orders, and other legal mandates relating to protection of the environment, public health and safety, or natural resources, such as the EPA's PFAS Rule.

Q. Will the Environmental Plan be approved by the Commission before the associated costs are eligible for recovery through the ECIC?

A. Yes. PAWC is proposing the following review and approval process for Environmental Plans, which affords due process to interested stakeholders and provides transparency regarding all ECIC eligible projects.

- PAWC will file a copy of its Environmental Plan, detailing the specific projects, estimates, timing, and justification for inclusion within the ECIC.
- The Commission will publish the Environmental Plan in the Pennsylvania Bulletin.
- Answers and/or Comments regarding the Environmental Plan will be due 20 days after Bulletin publication.
- If no Answers or Comments are filed and the Commission chooses not to institute an investigation, the Environmental Plan will be deemed effective 21 days after Bulletin publication.

- If a party files an Answer or Comments regarding the Environmental Plan within 20 days of Pennsylvania Bulletin publication or the Commission institutes an investigation regarding the Environmental Plan, the Commission shall rule on the Environmental Plan no later than 120 days of the date the Environmental Plan was filed at the Commission.
- If only Comments are filed, PAWC will file a revised Plan, Reply Comments, or both 20 days after the Comments are submitted.
- If Answers are filed, the Plan will be assigned to an Administrative Law Judge for a hearing to be held within 65 days of the Plan's filing date.
- Briefs are due 10 days after the hearing.
- PAWC will have 10 days after Briefs are filed to submit a revised Plan, Reply Brief, or both.
- The Administrative Law Judge will certify the Evidentiary Record.
- The Commission will rule on the Environmental Plan within 120 days of the Plan's filing date.

PAWC believes this review process is feasible for the Commission and stakeholders because it is nearly identical to the process followed by the Commission when reviewing electric distribution companies' energy efficiency and conservation plans.[9] In recognition of the urgency of ECIC eligible projects caused by mandatory regulatory compliance deadlines, an expedited review process for the Company's annual Environmental Plan is reasonable.

[9] *See, e.g., Petition of PPL Electric Utilities Corporation for Approval of its Act 129 Phase IV Energy Efficiency and Conservation Plan*, Docket No. M-2020-3020824 (Order entered Mar. 25, 2021), pp. 4-5; *Energy Efficiency and Conservation Program*, Docket No. M-2020-3015228 (Implementation Order entered Jun. 18, 2020), pp. 86-91.

Q. How will the ECIC revenue requirement be calculated?

A. The ECIC will capture the fixed costs of the Environmental Plan capital investments placed in-service after the end of the FPFTY in this case. The fixed costs will include the pre-tax return on the capital investment, the annual depreciation expense associated with the capital investments, incremental operating expenses within the Environmental Plan, and any associated deferrals associated with the capital investments. The fixed costs will be captured quarterly, with the ECIC effective one month after this date, as shown in the table below:

Environmental Plan Plant Additions As of	ECIC Rate Effective Date
March 31	May 1
June 30	August 1
September 30	November 1
December 31	February 1

Q. How will the pre-tax return applied to ECIC eligible projects be calculated?

A. The pre-tax return will be calculated using the state and federal income tax rates, the Company's actual capital structure, and actual costs rates for long-term debt and preferred stock as of the last day for the quarterly period (one-month prior to the ECIC Rate Effective date). The cost of equity will be the equity return rate approved in the Company's last fully litigated base rate proceeding for which a final order was entered, not more than two (2) years prior to the effective date of the ECIC. If more than two (2) years have elapsed between the entry of a such a final order and the effective date of the ECIC, then the equity return rate used in the calculation will be the authorized Distribution System Improvement Charge ("DSIC") Return for Water Utilities calculated by the Commission Staff in the

latest Quarterly Report on the Earnings of Jurisdictional Utilities released by the Commission.

Q. Please describe how the ECIC depreciation expense will be calculated.

A. The ECIC depreciation expense on the original cost of Environmental Plan projects will be calculated by applying the annual accrual rates employed in the Company's last base rate case for the plant accounts in which each retirement unit of Environmental Plan projects is recorded.

Q. Is PAWC requesting authorization to defer any ECIC-related costs until inclusion in the ECIC rider?

A. Yes. Until such point as the Environmental Plan investments and the associated fixed costs are included for recovery in the ECIC, PAWC requests authorization to defer depreciation expense and post-in-service carrying costs ("PISCC") from the period the investment is placed in-service until it is included in the ECIC rates for recovery. The depreciation expense deferred will be calculated consistent with the recoverable depreciation expense in the quarterly revenue requirement. The PISCC will be calculated using the Company's actual after-tax rate of return for the previous ECIC quarter, applied to the net plant value (gross plant less accumulated depreciation) of eligible Environmental Plan investments in-service.

Q. How will these ECIC deferrals be recovered?

A. PAWC will amortize the deferred balances over the remaining life of the investments, with only the annual amortization expense recovered within the ECIC. The Company will not seek a return on these deferred balances.

Q. Please describe the schedule for ECIC rider updates.

A. The ECIC will be updated quarterly, with supporting data for each quarterly update filed with the Commission and served upon the Commission's Bureau of Investigation and Enforcement, Commission's Bureau of Audits, the Office of Consumer Advocate and the Office of Small Business Advocate at least ten (10) days prior to the effective date of the update.

Q. How will the ECIC rider be assessed to customers?

A. The ECIC will be expressed as a percentage carried to two decimal places and will be applied to the total amount billed to each customer for service under the Company's otherwise applicable rates and charges, excluding amounts billed for public fire protection service, the State Tax Adjustment Surcharge ("STAS"), and the DSIC (collectively, "excluded amounts"). One-fourth of the annual fixed costs associated with the Environmental Plan projects will be divided by the Company's projected revenue for sales for water (including all applicable clauses and riders and less the excluded amounts) for the quarterly period during which the charge will be collected. The ECIC shall be applied equally to all customer classes.

Q. Will the ECIC be audited and reconciled?

A. Yes, the ECIC will be subject to audit at intervals determined by the Commission and to reconciliation annually for the twelve (12) months ending December 31 of each year. With respect to reconciliation, the revenue received under the ECIC for the reconciliation period will be compared to the Company's eligible costs for that period, with any difference between revenues and costs recouped from or credited to customers, as appropriate, in accordance with Section 1307(e) over a one-year period commencing on May 1 of each

year. The Company may elect to reconcile the ECIC quarterly, but only upon request and approval by the Commission.

Any over- or under-collection of revenues compared to ECIC eligible costs will be subject to interest, calculated at the residential mortgage lending specified by the Secretary of Banking in accordance with the Loan Interest and Protection Law (41 P.S. § 101, et seq.). Interest will be refunded to or collected from customers in the same manner and any over- or under-recovery collection.

Q. Will the ECIC reset with the implementation of future base rates?

A. Yes. The ECIC will be reset to zero upon application of new base rates to customer billings that provide for prospective recovery of the annual costs that had theretofore been recovered under the ECIC.

Q. Will the ECIC be subject to an earnings evaluation?

A. Yes. The ECIC may be reset to zero if, in any quarter, data filed with the Commission in the Company's then most recent Annual or Quarterly Earnings reports show that the Company will earn a rate of return that would exceed the allowable rate of return used to calculate its fixed costs under the ECIC.

Conclusion

Q. Does this conclude your direct testimony at this time?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **J. Cas Swiz**, hereby state that the facts set forth in the pre-marked Statement No. 8 and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: November 8, 2023

J. Cas Swiz

Pennsylvania-American Water Company
Response to Distribution Rates – Statement of Policy
Proposed Environmental Compliance Investment Charge (ECIC)

52 Pa. Code § 69.3302. Distribution rate considerations.

(a) In determining just and reasonable alternative distribution ratemaking mechanisms and rate designs that promote the purpose and scope of this statement of policy and the objectives of 66 Pa.C.S. § 1330 (relating to alternative ratemaking for utilities), the Commission may consider, among other relevant factors, the following:

(1) How the ratemaking mechanism and rate design align revenues with cost causation principles as to both fixed and variable costs.

The ECIC recovers the costs associated with eligible environmental compliance costs from all customer classes via a percentage applied to the total amount billed. The ECIC is thus applied consistent with PAWC's base rates.

(2) How the ratemaking mechanism and rate design impact the fixed utility's capacity utilization.

This factor is not applicable to water and wastewater utilities.

(3) Whether the ratemaking mechanism and rate design reflect the level of demand associated with the customer's anticipated consumption levels.

See the response to item (1).

(4) How the ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting.

The proposed ECIC will be applied equally to all customer classes and will not affect interclass or intraclass cost shifting.

(5) How the ratemaking mechanism and rate design limit or eliminate disincentives for the promotion of efficiency programs.

The proposed ECIC will not impact efficiency programs or incentives.

(6) How the ratemaking mechanism and rate design impact customer incentives to employ efficiency measures and distributed energy resources.

See the response to item (5).

(7) How the ratemaking mechanism and rate design impact low-income customers and support consumer assistance programs.

The proposed ECIC does not have any specific impacts on low-income customers that do not apply to residential customers (or other customers) generally. Without the ECIC, the same costs for environmental projects would be borne by the same ratepayers effective after the next base rate case. The ECIC will allow for rates to increase as certain environmental projects are undertaken, and thus those increases will be more gradual than if deferred between base rate cases.

(8) How the ratemaking mechanism and rate design impact customer rate stability principles.

The proposed ECIC, updated quarterly and reconciled annually, will provide gradual changes to customer rates and bills as opposed to more significant increases typically experienced in base rate cases.

(9) How weather impacts utility revenue under the ratemaking mechanism and rate design.

The ECIC, like the Company's existing DSIC mechanism, will be reconciled annually whereby actual recoveries are compared to authorized/required recoveries, with any variances recovered from or credited to customers in subsequent ECIC charges. Specific to any weather variability in customer usage, this reconciliation ensures that no more or less than what the Company is required or authorized to recover is actually recovered in rates and charges to customers.

(10) How the ratemaking mechanism and rate design impact the frequency of rate case filings and affect regulatory lag.

The Company's environmental compliance requirements are continuously evolving and is one of the drivers that increases the costs of water and wastewater service and the need for rate relief. As discussed in more detail in PAWC Statement Nos. 3 and 8, the need for and timing of measures to comply with new or changed government mandates under applicable environmental laws are outside of the Company's control. The Company's proposed ECIC will provide a reasonable mechanism for gradually adjusting the Company's rates between base rate cases to ensure full and timely rate recognition of PAWC's investments and related operating costs undertaken to comply with new environmental mandates in a prudent and efficient manner as they emerge. Permitting PAWC to recover ECIC-eligible capital costs and expenses through an automatic adjustment clause will reduce a major driver of the need for rate relief that would otherwise trigger a base rate case filing.

(11) If or how the ratemaking mechanism and rate design interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa.C.S. § 1307 (relating to sliding scale of rates; adjustments), riders such as 66 Pa.C.S. § 2804(9)

(relating to standards for restructuring of electric industry) or system improvement charges, 66 Pa.C.S. § 1353 (relating to distribution system improvement charge).

The Company's proposed ECIC does not interact with other revenue sources. The proposed ECIC excludes assets that are currently eligible for recovery under the existing DSIC mechanism, and will function similar to the DSIC in design, applicability, and recovery. The proposed ECIC will be reset to zero at the implementation of new base rates in future proceedings.

(12) Whether the alternative ratemaking mechanism and rate design include appropriate consumer protections.

The proposed ECIC incorporates consumer protections by:
(1) requiring that costs recoverable through the ECIC be consistent with the set of projects and activities set forth in an annual environmental compliance plan to be filed by the Company and approved by the Commission; and
(2) requiring the audit and reconciliation annually of the ECIC, to ensure that all costs included for recovery are eligible and appropriate, and that customers in total pay no more or less over the course of a year than the authorized level of costs associated with the Environmental Plan.

(13) Whether the alternative ratemaking mechanism and rate design are understandable to consumers.

The Company does not anticipate that there would be any issues related to customer confusion over the proposed ECIC. Infrastructure mechanisms like the ECIC exist today and are not new to the utility industry. The ECIC is separate and distinct from other existing mechanisms. An explanatory bill insert will be included with the first billing, and customers will be notified of changes in the ECIC by including appropriate information on the first bill they receive following any change.

(14) How the ratemaking mechanism and rate design will support improvements in utility reliability.

The proposed ECIC will support improvements in the ability of PAWC to continue providing safe, adequate, and reliable water quantity and quality, while complying with applicable drinking water and environmental regulations. The ECIC will support investment in PAWC's water and wastewater system to address emerging contaminants in a cost-effective manner.

PAWC STATEMENT NO. 8-R

REBUTTAL TESTIMONY
OF
J. CAS SWIZ

WITH REGARD TO

PENNSYLVANIA-AMERICAN WATER COMPANY'S

UNCOLLECTIBLE ACCOUNTS EXPENSE ADJUSTMENT; REQUEST FOR REGULATORY ACCOUNTING AUTHORIZATION TO DEFER DEVIATIONS IN PENSION, OTHER POST-EMPLOYMENT BENEFITS, AND PRODUCTION EXPENSES; AND REQUEST FOR ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: February 21, 2024

PENNSYLVANIA-AMERICAN WATER COMPANY

REBUTTAL TESTIMONY OF J. CAS SWIZ

Introduction

Q. What is your name and business address?

A. My name is J. Cas Swiz. My business address is 250 Cross Pointe Boulevard, Evansville, Indiana 47715.

Q. Have you submitted direct testimony in this proceeding?

A. Yes, I submitted direct testimony on behalf of Pennsylvania-American Water Company ("PAWC" or the "Company") Statement No. 8. My direct testimony contains a description of my background and qualifications.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to (1) respond to certain parts of the direct testimony of Office of Consumer Advocate ("OCA") witness Ralph C. Smith and Roger D. Colton concerning the Company's proposed level of uncollectible accounts expense, (2) respond to certain parts of the direct testimony of various witnesses[1] concerning the Company's request for deferred accounting treatment and regulatory asset authorization for pension, other post-employment benefits ("OPEB"), and production expenses, and (3) respond to certain parts of the direct testimony of various witnesses[2] concerning the Company's proposal to implement an Environmental Compliance Investment Charge

[1] OCA witness Smith; Pennsylvania Public Utility Commission ("Commission") Bureau of Investigation and Enforcement ("I&E") witness Vanessa Okum; Pennsylvania Office of Small Business Advocate ("OSBA") witness Kevin C. Higgins; and Pennsylvania-American Water Large User Group ("PAWLUG") witness Billie S. LaConte.

[2] OCA witnesses Christine Maloni Hoover, Jerome D. Mierzwa, and Colton; I&E witnesses Okum and Ethan H. Cline; OSBA witness Higgins; PAWLUG witness LaConte, and; the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania ("CAUSE-PA") witness Harry S. Geller.

("ECIC") pursuant to the alternative ratemaking authority Section 1330 of the Pennsylvania Public Utility Code ("Code"), 66 Pa. C.S. § 1330, granted to the Commission.

Q. Have you prepared any exhibits to accompany your rebuttal testimony?

A. Yes. Exhibit JCS-1R presents an updated analysis of the authorized level of PAWC's pension and OPEB expense and the actual amount of expense recorded from 2012 through 2023.

PAWC's Uncollectible Accounts Expense

Q. Please describe your understanding of OCA witness Smith's adjustment to PAWC's proposed uncollectible accounts expense.

A. OCA witness Smith recommends that the Company use a three-year historic average ratio of net write-offs, based on the three years ended June 30, 2023, to determine the going level of uncollectible expense in this proceeding. Mr. Smith calculates this three-year average percentage as 1.164%, a 0.12% reduction from the Company's proposal of 1.176%.

Q. Do you agree with OCA witness Smith's adjustment?

A. No. While OCA witness Smith's adjustment would have a minimal impact on the Company's revenue requirement for the fully projected future test year ("FPFTY") ending June 30, 2025, the Company's approach of using a two-year percentage of net write offs ending June 30, 2023 eliminates the impacts of the COVID-19 pandemic from July 1, 2020 through June 20, 2021 on customer collections activities and PAWC revenues. As I explained in my direct testimony, outstanding arrearages for PAWC's customers have stabilized from the significant increases during the peak of the COVID-19 pandemic and the Company's net write-offs have been trending back up toward pre-pandemic levels since

mid-2021. As a result, the Company used a two-year historic average (July 2021 to June 2023) to normalize the rate of uncollectible accounts to pre-pandemic levels and account for the application of Low-Income Household Water Assistance Program funds to reduce unpaid balances.

Q. Is there an alternative view that could be considered?

A. Yes. If the Commission wishes to maintain historical practice and utilize a three-year average rate of net write offs to determine the annual level of uncollectible expense reflected in new base rates, the Company suggests removing the twelve-months ended June 30, 2021 when PAWC experienced significant variations in monthly net write-offs due to the impact of the COVID-19 pandemic. As shown in Table 1 below, using a three-year average for the twelve-months ended June 30, 2019, 2022, and 2023, produces an uncollectible accounts rate of 1.196%, which is 0.02% higher than the Company's proposal of 1.176%.

Table 1

	7/2018-6/2019	7/2021-6/2022	7/2022-6/2023	Three-Year Average
Net Write-Off Activity	$ 8,505,570	$ 10,174,929	$ 9,374,665	$ 9,351,721
Total Billed Revenues	$ 683,968,732	$ 775,900,531	$ 886,675,101	$ 782,181,454
Average Write-Off Percentage	**1.244%**	**1.311%**	**1.057%**	**1.196%**

Q. Did OCA witness Smith make other adjustments to PAWC's proposed uncollectible accounts expense?

A. Yes, consistent with the recommendation of OCA witness Colton, OCA witness Smith proposed an adjustment to reduce uncollectible expense related to the Company's Arrearage Management Plan ("AMP") credits by $2.162 million. PAWC witness Lori O'Malley will address this specific adjustment in her rebuttal testimony.

PAWC's Proposed Regulatory and Accounting Treatment

Q. Did any parties disagree with PAWC's request to establish tracker and deferral accounts for pension, OPEB, and production expenses?

A. Yes. Witnesses on behalf of I&E, the OCA, the OSBA and PAWLUG submitted testimony opposing the Company's proposal based on two primary concerns. First, according to I&E witness Okum and OSBA witness Higgins, deferred accounting treatment is not appropriate for pension, OPEB and production expenses because, in their view, those expenses are normal, expected, and recurring costs. Second, several witnesses assert that deferral accounting authorization could reduce or eliminate PAWC's incentive to control its pension, OPEB and production costs.

Q. Do you agree that pension, OPEB, and production expenses are not appropriate for deferred accounting treatment as several parties suggest?

A. No. The Commission regularly authorizes utilities to defer costs for accounting purposes arising from events that are unanticipated and outside the utility's control to provide the utility an opportunity to claim those costs for recovery in a future rate proceeding. As explained in my direct testimony, the pension and OPEB costs calculated by the Company's actuary are subject to material change based on economic and demographic factors that are outside of the Company's control and thus are within the scope of the Commission's exception to the prohibition against retroactive ratemaking. Similarly, the Company's production expenses can materially increase or decrease based on volatility in the prices charged by suppliers due to market conditions that are outside the control of PAWC and its suppliers. Deferred accounting authorization is a fair way to ensure neither customers nor the Company would be required to bear more than PAWC's actual costs

incurred for pension, OPEB and production expenses. Significantly, as discussed in my direct testimony (pp. 15-17) and revised in Exhibit JCS-1R, from 2012 through 2022 customers would have realized a net benefit of approximately $58 million for a pension deferral and $46 million for an OPEB deferral.

Q. Will deferred accounting authorization remove incentives for PAWC to control pension, OPEB and production costs?

A. No. All deferred net benefits or net liabilities will be subject to review in PAWC's next base rate case to ensure that pension, OPEB and production expenses were prudently incurred. The Company is strongly committed to managing the totality of its expenses, keeping in mind those items that it cannot directly control (pension, OPEB, production), to mitigate operating expenses becoming a driver of future rate increases.

Q. Do you agree that tracker and deferral mechanisms constitute single-issue ratemaking as witnesses for the OCA, OSBA and PAWLUG assert?

A. No. PAWC is requesting approval to defer pension, OPEB and production costs for accounting purposes and is not requesting recovery of these amounts at this time. As noted in my previous answer, the Company's pension, OPEB, and production expenses will still be subject to detailed ratemaking review in the Company's next base rate case. Moreover, natural gas utilities in Pennsylvania (and numerous other states) have the ability to recover the commodity cost of natural gas through automatic rate adjustment clauses. Although statutorily supported, the pass-through and reconcilable nature of these costs acknowledges that there is an inherent deviation in expense that is outside of the Company's primary control, yet required to provide service to customers, which fluctuates dramatically between periods. In addition, electric utilities in Pennsylvania and numerous other states

are afforded the opportunity to adjust rates for variations in purchased power, transmission services, and fuel costs to generate electricity. Although these automatic adjustment clauses are explicitly authorized in Pennsylvania by Section 1307 of the Code and no specific statute applies to PAWC's pension, OPEB, and production cost recovery, the same ratemaking principles that justify natural gas and electric utilities' Section 1307 mechanisms apply to PAWC's recovery of pension, OPEB, and production costs.

Q. I&E witness Okum recommends using a three-year historic average of actual pension and OPEB expenses to establish the going level of expense in the Company's revenue requirement for the FPFTY. Do you agree with this recommendation?

A. No. I&E witness Okum claims that her recommendation "will allow the expense to normalize over time and address PAWC's concern about over-recovery of pension expense without the need for a tracker." I respectfully disagree with this statement. The averaging approach will have no impact on the actual expense incurred, and specifically for pension and OPEB expenses, the use of historical information does not inform how future expenses will be recorded. In other words, past performance is not a guarantee of future performance. As I explained in my direct testimony, the Company's actuary, WTW, prepares a report annually in accordance with Accounting Standards Codification Topic 715 ("ASC 715") that defines the level of expense that will be recorded by PAWC each year. Economic and demographic variables change each year, which makes each annual actuary report unique and independent of what was previously expensed. Going back to rates effective in 2014, a rate allowance calculated using a three-year historic average as Ms. Okum proposes rather than actuarial forecasts would result in *larger* variances between

the annual amount of pension and OPEB expenses reflected in base rates and the actual amounts of those expenses the Company incurs.

Table 2[3]

Pension Expense	Authorized Expense	Actual Expense	Variance
2014	$ 9,069,256	$ 5,052,844	$ (4,016,412)
2015	$ 9,069,256	$ 2,783,485	$ (6,285,771)
2016	$ 9,069,256	$ 3,370,585	$ (5,698,671)
2017	$ 9,069,256	$ 3,823,999	$ (5,245,257)
2018	$ 4,389,352	$ 3,330,125	$ (1,059,226)
2019	$ 4,389,352	$ 4,817,385	$ 428,034
2020	$ 4,389,352	$ (419,707)	$ (4,809,059)
2021	$ (36,471)	$ (4,824,802)	$ (4,788,331)
2022	$ (390,013)	$ (6,249,304)	$ (5,859,291)
2023	$ 688,289	$ (180,960)	$ (869,249)
Total	**$ 49,706,884**	**$ 11,503,650**	**$ (38,203,234)**

Pension Expense - Hypothetical	Hypothetical Average Expense	Actual Expense	Variance
2014	$ 19,065,396	$ 5,052,844	$ (14,012,552)
2015	$ 19,065,396	$ 2,783,485	$ (16,281,911)
2016	$ 19,065,396	$ 3,370,585	$ (15,694,811)
2017	$ 19,065,396	$ 3,823,999	$ (15,241,397)
2018	$ 3,735,638	$ 3,330,125	$ (405,513)
2019	$ 3,735,638	$ 4,817,385	$ 1,081,747
2020	$ 3,735,638	$ (419,707)	$ (4,155,345)
2021	$ 3,971,650	$ (4,824,802)	$ (8,796,452)
2022	$ 3,990,503	$ (6,249,304)	$ (10,239,807)
2023	$ 163,345	$ (180,960)	$ (344,305)
Total	**$ 95,593,996**	**$ 11,503,650**	**$ (84,090,346)**

Additional Variance under Averaging Approach $ (45,887,112)

Table 3[4]

OPEB Expense	Authorized Expense	Actual Expense	Variance
2014	$ 4,789,873	$ 1,881,025	$ (2,908,848)
2015	$ 4,789,873	$ 3,880,838	$ (909,035)
2016	$ 4,789,873	$ 1,542,220	$ (3,247,653)
2017	$ 4,789,873	$ 872,561	$ (3,917,312)
2018	$ 1,049,100	$ (4,484,797)	$ (5,533,897)
2019	$ 1,049,100	$ (6,535,965)	$ (7,585,066)
2020	$ 1,049,100	$ (7,922,211)	$ (8,971,311)
2021	$ (2,229,277)	$ (9,016,868)	$ (6,787,591)
2022	$ (2,491,160)	$ (9,011,886)	$ (6,520,726)
2023	$ (5,365,458)	$ (5,800,231)	$ (434,773)
Total	**$ 12,220,899**	**$ (34,595,313)**	**$ (46,816,212)**

OPEB Expense - Hypothetical	Hypothetical Average Expense	Actual Expense	Variance
2014	$ 6,380,203	$ 1,881,025	$ (4,499,177)
2015	$ 6,380,203	$ 3,880,838	$ (2,499,364)
2016	$ 6,380,203	$ 1,542,220	$ (4,837,983)
2017	$ 6,380,203	$ 872,561	$ (5,507,641)
2018	$ 2,434,694	$ (4,484,797)	$ (6,919,491)
2019	$ 2,434,694	$ (6,535,965)	$ (8,970,660)
2020	$ 2,434,694	$ (7,922,211)	$ (10,356,905)
2021	$ (2,952,403)	$ (9,016,868)	$ (6,064,465)
2022	$ (3,382,734)	$ (9,011,886)	$ (5,629,152)
2023	$ (7,496,408)	$ (5,800,231)	$ 1,696,177
Total	**$ 18,993,349**	**$ (34,595,313)**	**$ (53,588,663)**

Additional Variance under Averaging Approach $ (6,772,451)

The material variances between actual expenses and authorized expense based on a three-year historic average presented in Tables 2 and 3 further demonstrate that there is a need

[3] Hypothetical Average amounts for each period calculated as (1) 2014 – average of 2010-2012 actuals, (2) 2018 - average of 2014-2016 actuals, (3) 2021 – average of 2017-2019 actuals (prorated for rates effective 1/28/2021), and (4) 2023 – average of 2019-2021 actuals (prorated for rates effective 1/28/2023).

[4] Hypothetical Average amounts for each period calculated as (1) 2014 – average of 2010-2012 actuals, (2) 2018 - average of 2014-2016 actuals, (3) 2021 – average of 2017-2019 actuals (prorated for rates effective 1/28/2021), and (4) 2023 – average of 2019-2021 actuals (prorated for rates effective 1/28/2023).

for a deferred accounting mechanism to protect against a substantial under- or over recovery by the Company and corresponding underpayment or overpayment by customers.

Q. Has WTW prepared an updated actuary report for 2024?

A. Yes, as of February 7, 2024, the level of expense that will be recorded by PAWC for calendar year 2024 will be $971,072 for pension expense, and a credit of $(5,951,954) for OPEB expense. Comparing these updated projections to the pension and OPEB allowances for the FPFTY recommended by I&E witness Okum based on a three-year historic average would result in an even larger variance between actual and authorized expense than shown in Tables 3 and 4. Ms. O'Malley discusses the Company's update to its pension and OPEB claims for the FPFTY based on the 2024 actuarial projections.

PAWC's Proposed Environmental Compliance Investment Charge

Q. Please provide a brief summary of the Company's ECIC proposal.

A. Section 1330 of the Code authorizes public utilities to propose, and the Commission to approve "alternative rate mechanisms." One of the alternative rate mechanisms specifically authorized by Section 1330(b)(2) is an automatic adjustment clause like the ECIC. The Company's environmental compliance requirements are continuously evolving and this is one of the drivers that increases the costs of water and wastewater service and the need for rate relief. As I explained in my direct testimony and in the direct testimony of PAWC witness Bruce W. Aiton in PAWC Statement No. 3, the need for and timing of measures to comply with new or changed government mandates under applicable environmental laws are outside of the Company's control. The Company's proposed ECIC will provide a reasonable mechanism for adjusting the Company's rates between base rate cases to support full and timely rate recognition of PAWC's costs to comply with new and

updated environmental regulatory mandates in a prudent and efficient manner as they emerge. The ECIC will also mitigate customer exposure to less frequent but more significant rate increases in a general base rate case by producing much smaller, gradual increases to customer bills. Costs that are recoverable through the ECIC must be consistent with the set of projects and activities set forth in an annual environmental compliance plan ("Environmental Plan") that will be subject to Commission review and approval.

Q. Have any witnesses opposed the Company's proposed ECIC?

A. Yes. While recognizing that compliance with environmental laws and regulations and addressing public health concerns regarding drinking water is important, witnesses on behalf of several parties in this case – I&E, OCA, OSBA, CAUSE-PA, and PAWLUG – recommend denial of the proposed ECIC. In the event the Commission approves the ECIC, a few parties recommend specific provisions or modifications for the ECIC. The arguments against the ECIC fall into the following general categories that I will address in greater detail below.

- Recovery of environmental compliance costs through an automatic rate adjustment mechanism would improperly shift the risk of recovery of those costs that are incurred as part of the Company's obligation to provide and maintain adequate, safe and reliable service to customers;
- The ECIC proposal is premature because PAWC does not have detailed forecasts of the costs that will be requested for recovery through the ECIC at this time to justify alternative ratemaking treatment;
- The proposed ECIC will unfairly impact low-income customers and create intra- and interclass subsidies; and

- The ECIC proposal does not satisfy the 14 factors set forth in the Commission's Policy Statement on alternative ratemaking.

Q. Many parties claim that compliance with environmental regulations is part of PAWC's "normal" responsibilities in providing service to its customers and therefore the ECIC unfairly shifts risks away from the Company to customers. How do you respond to those claims?

A. I agree that the provision of service that complies with environmental regulations to help ensure safe, clean drinking water is a requirement for PAWC. However, emerging regulations or re-interpretations of existing regulations often result in new environmental compliance obligations that disrupt PAWC's five-year plan of construction work and require the Company to undertake additional projects on an expedited basis to comply with those changes that increase the cost of water and wastewater service. For example, the rapidly changing set of drinking water standards and compliance monitoring mandates for per- and polyfluoroalkyl substances ("PFAS") will require additional or modified treatment systems, modification of sources, or a combination of actions on a very short time frame. The impending federal PFAS regulations will require American Water's utilities to spend over $1 billion within three years, which is an unprecedented magnitude of spending for the water and wastewater industry. As discussed by PAWC witness Aiton, for the Company, these new requirements will require investments in the range of $200 million before the end of 2027 based on preliminary estimates. The ECIC will provide the Company a reasonable opportunity to recover the capital costs and expenses incurred after June 30, 2025, to meet the challenges of removing PFAS from drinking water systems across the Commonwealth in an efficient and prudent manner.

Q. Will the ECIC mechanism lessen scrutiny of the Company's environmental compliance costs as several parties suggest?

A. No. If the Company's proposed ECIC is approved, the Commission and all parties will have the opportunity to proactively evaluate PAWC's proposed investments and measures to comply with new environmental mandates *before any costs are incurred*. Whether or not a party is inclined to review the Company's Environmental Plan and focus attention on the associated capital costs and expenses is at the discretion of each party, but the Company expects and welcomes a full and fair review of its Environmental Plan to ensure that the proposed set of projects are prudent and reasonable compliance solutions and any potential cost reductions experienced by the Company are reflected in the ECIC.

Q. OCA witness Mierzwa pointed to debt costs as an example of a PAWC cost that may decline and would not be taken into consideration outside of a general base rate case. Is that an accurate statement?

A. No. Specifically, any changes in PAWC's debt costs would be included in the ECIC. As noted in the ECIC Tariff, the determination of the pre-tax return "will be calculated using the state and federal income tax rates, *the Company's actual capital structure and actual cost rates for long-term debt preferred stock as of the last day for the three-month period ending one month prior to the effective date* of the ECIC and subsequent updates" (emphasis added).

Q. Is it too soon for the Commission to decide on an alternative ratemaking mechanism because PAWC has not presented detailed information about the projects and investments that would be included in an Environmental Plan to address the federal PFAS drinking water standard that is expected to be finalized later this year?

A. Absolutely not. The Public Utility Code requires utilities to propose alternative rate mechanisms as part of a base rate case, so it is entirely timely for the Company to propose the ECIC in this case in advance of the need to file its first Environmental Plan.[5] The Company believes it is prudent, appropriate, and consistent with accepted public utility practice to take proactive steps to address the challenge of PFAS and other emerging issues, without waiting for either regulatory deadlines or legal actions. The ECIC helps ensure that PAWC receives adequate revenue to maintain safe, reliable, and compliant water and wastewater service that both meets government requirements and advances environmental policy objectives.

Q. Is there any valid basis for the concerns expressed by OCA witness Mierzwa about potential for cross-subsidization?

A. No. Mr. Mierzwa raises concerns about interclass cost shifting because the ECIC will be assessed as a flat percentage increase across PAWC's customer base. However, Mr. Mierzwa cites no evidence supporting his assertions that the ECIC will necessarily result in subsidization among customers classes.

I further note that the ECIC is modeled upon the DSIC, with a similar formula and customer safeguards. The Commission-approved DSICs of PAWC and other utilities do not draw a distinction between customer classes in calculating their percentage of billed revenues charged to customers. All customers are charged the same percentage on the theory that the revenue requirement was fairly allocated between customers classes in setting rates in the prior base rate. I do not believe the Commission has found that the DSIC causes cross-subsidization or is discriminatory. The same can be said of the State

[5] 66 Pa.C.S.A. § 1330(b)(1).

Tax Adjustment Surcharge, which is applied uniformly on a percentage basis to all customer classes. The ECIC should not be treated differently.

Q. How do you respond to the generalized assertions that the ECIC will not promote rate stability and could result in customer confusion?

A. The ECIC will promote rate stability through gradual changes to customers rates and bills as opposed to more significant increases typically experienced in base rate cases. Rate adjustment mechanisms for infrastructure investments are not new to the utility industry. There is no reason to think that customers would be more confused about an ECIC surcharge or credit on their bill than they would be for any other rate design element that makes up a part of the customer's bill, including the DSIC. If the ECIC is approved, the Company will distribute an explanatory bill insert to all customers prior to the first bill that includes ECIC surcharges or credits.

Q. OCA witness Colton states that the ECIC is exempt from the Bill Discount Program "BDP" and that BDP participants would not receive a discount on environmental compliance costs. Do you agree with these statements?

A. No. As noted below, for BDP-eligible customers the discount will be applied in a manner that reduces the overall ECIC impact to these customers compared to non-BDP customers. Using purely hypothetical assumptions, a customer who is eligible for a 30% discount on their bill would receive this discount on all charges applied, as the discount would reduce the total bill *before* the proposed ECIC (and current DSIC) is applied. In this instance then, the customer has a lower starting point for application of the ECIC (and DSIC) than an otherwise equal customer would have absent the BDP.

Table 4

	BDP Customer	Non-BDP Customer
Total Customer Bill before DSIC, ECIC, and BDP	$ 100.00	$ 100.00
BDP - 30% Discount	$ (30.00)	$ -
Total Customer Bill after BDP [A]	**$ 70.00**	**$ 100.00**
DSIC - 2.5% of [A]	$ 1.75	$ 2.50
ECIC - 2.5% of [A]	$ 1.75	$ 2.50
Total Customer Bill	**$ 73.50**	**$ 105.00**
BDP - 30% Discount	**$ (31.50)**	

Q. Mr. Cline and Mr. Mierzwa assert that the Company's ECIC proposal does not satisfy the 14 factors of the Commission's alternative ratemaking policy statement. Do you agree?

A. No. The Policy Statement on alternative ratemaking mechanisms lists a number of factors that may be considered when evaluating an alternative ratemaking mechanism such as the ECIC, but it does not prescribe how or the extent to which each factor must be "satisfied."[6] The Company provided a detailed analysis of how the specific factors listed by the Commission apply to the Company's proposed ECIC to aid in the Commission's review and consideration of these factors as it pertains to the ECIC. *See* Exhibit JCS-1.

Q. If the Company were to receive relief through state or federal funding, or through litigation with those entities that have been deemed to have "caused" the environmental issues related to contaminants such as PFAS, would the ECIC address this?

[6] 52 Pa. Code § 69.3302 specifically states the "Commission ***may consider***, among other relevant factors" those listed in section (emphasis added). In addition, the Commission has specifically stated that "the proposed policy statement is intended ***only to give guidance to fixed utilities and interested stakeholders on what is to be considered when investigating alternative ratemaking methodologies*** in a Section 1308 rate proceeding. While intending to assist utilities and stakeholders, ***the policy statement does not establish a binding norm***, nor does it establish a predicate for the adoption of an alternative rate mechanism by any fixed utility." (emphasis added). *See* Docket No. M-2015-2518883, Final Policy Statement Order, p. 6-7 (July 18, 2019), *citing Implementation of Act 58 of 2018 Alternative Ratemaking for Utilities, Implementation Order at Docket No. M-2018-3003269, entered April 25, 2019.*

A. Yes, in a more immediate, direct method than via a base rate case. The Company will ensure that any proceeds received through litigation, or any government funding made available to PAWC, will be properly captured within the ECIC and credited to customers via the proposed revenue requirement. However, current expectations specific to PFAS compliance are that any proceeds or government funding will not sufficiently cover the expenditures required by PAWC to comply.

Q. OCA witness Mierzwa and PAWLUG witness LaConte recommend that the Commission impose an annual percentage cap on ECIC revenue if the Company's proposal is adopted. Do you agree with these recommendations?

A. No, I do not. The Company's existing DSIC does have applicable water and wastewater revenues caps, as referenced by OCA witness Mierzwa; however, the DSIC investments are ongoing and programmatic, with ratable plans. In contrast, the ECIC would have costs and investments that could be similar in magnitude, but greater in scope and potentially over a much shorter time period. As such, the application of rate caps for the ECIC presents challenges as each Environmental Plan could be different. An option that could be considered is a limitation on the Environmental Plan and ECIC recovery that requires a base rate proceeding to be filed within a certain time period. Absent this base rate proceeding, the ECIC would be set to zero.

Conclusion

Q. Does this conclude your rebuttal testimony at this time?

A. Yes, it does.

Table 4 (Direct)

	Pension Expense		
	Authorized Expense	Actual Expense	Variance
2010	$ 12,418,045	$ 16,018,880	$ 3,600,835
2011	$ 13,960,995	$ 27,114,845	$ 13,153,850
2012	$ 21,675,744	$ 14,062,463	$ (7,613,281)
2012	$ 21,675,744	$ 14,062,463	$ (7,613,281)
2013	$ 21,675,744	$ 8,532,367	$ (13,143,377) <--Corrected Actual Expense (see OCA 09-015)
2014	$ 9,069,256	$ 5,052,844	$ (4,016,412) <--Corrected Authorized to adjust proration for rate effective date
2015	$ 9,069,256	$ 2,783,485	$ (6,285,771) <--Corrected Actual Expense (see OCA 09-015)
2016	$ 9,069,256	$ 3,370,585	$ (5,698,671)
2017	$ 9,069,256	$ 3,823,999	$ (5,245,257)
2018	$ 4,389,352	$ 3,330,125	$ (1,059,226) <--Corrected Authorized to adjust proration for rate effective date
2019	$ 4,389,352	$ 4,817,385	$ 428,034
2020	$ 4,389,352	$ (419,707)	$ (4,809,059)
2021	$ (36,471)	$ (4,824,802)	$ (4,788,331)
2022	$ (390,013)	$ (6,249,304)	$ (5,859,291)
2023	$ 688,289	$ (180,960)	$ (869,249)

Table 5 (Direct)

	OPEB Expense		
	Authorized Expense	Actual Expense	Variance
2010	$ 8,458,172	$ 8,141,783	$ (316,389)
2011	$ 7,801,199	$ 5,827,006	$ (1,974,193)
2012	$ 4,516,334	$ 5,171,819	$ 655,485
2012	$ 4,516,334	$ 5,171,819	$ 655,485
2013	$ 4,516,334	$ 4,544,186	$ 27,852
2014	$ 4,789,873	$ 1,881,025	$ (2,908,848) <--Corrected Authorized to adjust proration for rate effective date
2015	$ 4,789,873	$ 3,880,838	$ (909,035)
2016	$ 4,789,873	$ 1,542,220	$ (3,247,653) <--Correct Actual Expense (see OCA 09-016)
2017	$ 4,789,873	$ 872,561	$ (3,917,312)
2018	$ 1,049,100	$ (4,484,797)	$ (5,533,897) <--Corrected Authorized to adjust proration for rate effective date
2019	$ 1,049,100	$ (6,535,965)	$ (7,585,066)
2020	$ 1,049,100	$ (7,922,211)	$ (8,971,311)
2021	$ (2,229,277)	$ (9,016,868)	$ (6,787,591)
2022	$ (2,491,160)	$ (9,011,886)	$ (6,520,726)
2023	$ (5,365,458)	$ (5,800,231)	$ (434,773)

As presented in response to I&E RE-039-D_Attachment

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)**
	:	**R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **J. Cas Swiz**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 8-R and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024

J. Cas Swiz

Statement No. 9
Degillio

PAWC STATEMENT NO. 9

DIRECT TESTIMONY
OF
DEBORAH A. DEGILLIO

DESCRIBING
PENNSYLVANIA-AMERICAN WATER COMPANY'S CUSTOMER SERVICE OBJECTIVES, CUSTOMER SERVICE ORGANIZATION AND CUSTOMER ASSISTANCE PROGRAMS

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: November 8, 2023

PENNSYLVANIA-AMERICAN WATER COMPANY

DIRECT TESTIMONY OF DEBORAH A. DEGILLIO

Q. What is your name and business address?

A. My name is Deborah A. Degillio. My business address is 1 Water Street, Camden NJ.

Q. By whom are you employed and in what capacity?

A. I am employed by American Water Works Service Company, Inc. ("AWWSC" or "Service Company") as Vice President and Chief Customer Officer. I am providing testimony on behalf of Pennsylvania-American Water Company ("PAWC" or the "Company").

Q. Please summarize your educational background and professional experience.

A. I received a Bachelor of Science degree in Finance and Math from the University of Wisconsin at LaCrosse in 1995 and a Master of Business Administration from the Stephen M. Ross School of Business, University of Michigan, with distinction, in 2012. I have been employed by AWWSC since April 2007. I have held various positions in the finance organization, including leading Financial Planning and Treasurer, as well as operational roles including President of New Jersey American Water Company. I became the Chief Customer Officer in March of 2019. Previous to my employment with AWWSC, I was employed by MCR Performance Solutions ("MCR") from 2000 through 2006. MCR is a management consulting company, working with utility clients. Prior to MCR, I worked with other management consulting companies and my focus was with utility clients. I have over twenty-five years of utility experience, mostly in the finance and customer service aspects.

Q. What are your current employment responsibilities?

A. My primary responsibility in my role as Vice President and Chief Customer Officer is to focus on further developing and advancing all aspects of the American Water Works Company, Inc. ("American Water") customer experience strategy. I lead the Company's efforts in building and maintaining programs that leverage technology and advance the overall customer experience in an effort to better understand and address customer concerns. I oversee the Customer Service Organization ("CSO"), which includes over 480 employees and almost 350 third-party, fully dedicated contractors who perform collections and support our inbound call handling team. My team supports all American Water regulated subsidiary utilities, including PAWC.

Q. What is the purpose of your direct testimony?

A. First, I will provide an overview of American Water's customer service function and functions we perform for PAWC customers. Next, I will explain how the CSO uses customer feedback to drive high levels of customer satisfaction. I will also discuss the CSO's efforts in recent years to improve the quality of PAWC's customer service and achieve the Company's customer service performance objectives. Finally, I will discuss the customer assistance programs offered by PAWC to help low-income and payment-troubled customers and enhancements to those programs the Company is proposing in this proceeding.

CUSTOMER SERVICE OVERVIEW

Q. Please describe the CSO and the functions it performs for PAWC customers.

A. The CSO is operated by AWWSC and supports the customer service needs of PAWC and the other American Water utility subsidiaries. The CSO responds to customer inquiries,

maintains customer information systems and the "myWater" customer self-service portal, provides billing and collections services and performs other customer service functions. The CSO's responsibilities include, but are not limited to, the following:

Customer Call Handling

- Establish and maintain customer/account records;
- Address customer inquiries concerning billing, credit and collections, service orders, and other matters;
- Field all inbound phone calls for initial customer queries and, if necessary, forward matters to appropriate parties for resolution;
- Create records of customer interactions in the Company's customer information system, SAP and in the myWater customer portal;
- Assist with payment options, taking payments and assistance programs (e.g., payment plans);
- Process move in and move out requests;
- Forward certain customer inquiries to field operations and water quality team members for resolution;
- Update customers who call to inquire about the status of service orders; and
- Provide assistance to customers with the myWater portal, such as password resets.

Billing

- Generate bills according to billing schedules and authorized tariffs;

- Resolve billing disputes and billing exceptions (out-of-range variances) not requiring field investigations;
- Issue service orders to resolve billing investigations requiring field investigations; and
- Implement and maintain controls to ensure all "active" accounts are billed according to authorized tariff frequencies.

Collections

- Monitor and/or generate and send for printing and distribution all collections-related notices;
- Manage services for customers who call to arrange payments to avoid shut-off notices for delinquent payments and that notify customers if service discontinuance is scheduled;
- Monitor and oversee the process to issue shut-off notices and schedule shut-off for non-payment;
- Maintain records for extended payment plans;
- Process bankruptcy claims; and
- Process refunds.

Operations Support and Field Resource Control Center

- Back-office support for billing exceptions, primarily associated with metering;
- Identify and investigate customer issues related to service orders for 1) zero consumption on active meters, 2) consumption on meters at premises with no active account holder, and 3) certain other meter readings;

- Coordinate and dispatch high priority work (e.g., emergencies, escalations and same-day appointments); and
- Coordinate service alerts.

Other Customer Service Functions

- Management of our customer insights program, including all surveys and customer feedback;
- Implementation of all tariff changes in SAP, including price and rate changes and associated testing of any changes to tariffs;
- Training and quality assurance for the CSO; and
- Support PAWC and its regulated utility affiliates with customer issues management, reporting and other information requests, as well as management of information required for effective handling of customer transactions and requests.

Q. Are there benefits to PAWC to having customer service provided by the comprehensive and centralized CSO?

A. Yes. The advantages include efficiency, consistency, and resiliency. By consolidating the customer service function of American Water's regulated utility operating companies, each operating company enjoys greater economies of scale than would be available to individual, stand-alone company customer service departments. Resources such as equipment, training, monitoring, and supervision can be sourced more efficiently on a consolidated basis, which mitigates the costs ultimately borne by customers. A centralized CSO also ensures consistency of customer service quality and training across jurisdictions

and that each operating company benefits from the lessons learned and best practices developed by the CSO. The use of a centralized, common CSO staff to provide service to multiple operating companies also means that additional staff are available should one company experience a spike in call volumes due to, for example, an increased number of main breaks due to local weather conditions. The geographic diversity of the locations of the customer care agents ("CCAs") that support the CSO creates resiliency, ensuring continued service in case of a severe weather event, work stoppage or other contingency in a single service territory.

Q. How does the CSO ensure that all CCAs comply with Pennsylvania consumer protection regulations and requirements?

A. With a limited exception for agents who work on weekends or overnights when the CSO handles only emergency calls, CCAs do not take calls from PAWC customers until they have completed the three-day Pennsylvania-specific training program. The CSO has a robust quality assurance ("QA") process that is executed by an internal team of professionals who are focusing on agents' adherence with Pennsylvania consumer protection rules and internal processes, as well as improvement opportunities for customer experience and employee training and coaching. We record all inbound calls to our toll-free numbers and utilize customer feedback to prioritize the calls we send to our QA team in an effort to focus on calls with the lowest customer satisfaction. We include coaching and training for our agents in weekly discussions, direct interactions with supervisors and group training tools, which include compliance with Pennsylvania regulations. In 2021, 17% of calls handled by CCAs were from PAWC customers, and in 2022 19% of calls handled by CCAs were from PAWC customers. As of September 30, 2023, over 47% of

CCAs (internal and agency) were certified in Pennsylvania regulations and available to handle those call volumes.

CUSTOMER INSIGHTS AND SATISFACTION DRIVERS

Q. Is customer satisfaction used as a key performance indicator of the CSO's customer service?

A. Yes. The CSO is focused on providing customers with convenient access to information and responsive, personal service to drive high satisfaction ratings. However, customer satisfaction is more than how fast we answer a call. The syndicated J.D. Power U.S. Water Utility Residential Customer Satisfaction Study ("J.D. Power Study") measures satisfaction among residential customers of over 90 water utilities across the United States. The 2023 J.D. Power Study based on 36,833 responses found that residential customer satisfaction is driven by the following six factors: quality and reliability (29%), price/value of service (20%), conservation (15%), billing and payment (14%), communications (15%), and customer service (6%). Only one of thirteen key customer satisfaction indicators identified in the 2023 JD Power Study – first contact resolution – related to call center performance. The other twelve major performance factors involved quality and value of service and conservation. In his direct testimony, Company witness Jim Runzer (PAWC Statement No. 2) discusses those areas outside of the CSO that drive customer satisfaction, for example, the Company's efforts to protect water supplies and improve the impact of operations on the environment, ongoing enhancements to deliver high quality water to PAWC customers, PAWC's conservation initiatives, and how we provide tips to customers to conserve.

The CSO employs a robust feedback process and tools to determine how well we meet – or exceed – customer expectations and to develop customer service performance objectives. PAWC and the CSO leverage multiple sources of customer feedback to monitor overall customer satisfaction and satisfaction with individual service experiences, including targeted surveys taken immediately after phone, field and customer portal interactions and a customer satisfaction survey of all PAWC customers conducted quarterly. This approach allows the Company and the CSO to stay abreast of changing customer expectations and align performance goals to meet those customer needs. For example, in 2022, the Company adopted a performance objective for first contact resolution based on customer feedback that a timely response to their inquiries improves satisfaction and reduces customer effort. CSO leadership regularly engages PAWC leadership regarding customer service performance objectives in an effort to drive higher customer satisfaction for PAWC customers by, among other things, sharing customer feedback data in real time through an online dashboard.

Q. How does the CSO rate with respect to customer satisfaction?

A. I believe the CSO rates quite well. In response to our phone-based and web-based transaction surveys conducted between January 1, 2023 and August 31, 2023, 70% of PAWC customers served by the CSO rated our CCAs' overall performance as excellent or very good, and 94% of PAWC customers rated overall service appointment experience as excellent or very good.

CUSTOMER SERVICE PERFORMANCE OBJECTIVES AND IMPROVEMENT INITIATIVES

Q. Has the CSO increased staffing to facilitate Company performance objectives in answering calls in a timely manner and avoiding a significant abandonment rate?

A. Yes. The CSO experienced an unusually high level of attrition among CCAs available to handle customer calls due to the COVID-19 emergency during the 2020-2022 period. Since the onset of the pandemic, the CSO has added CCAs across the American Water footprint to reduce wait times for customers. As of September 30, 2023, 355 CCAs were available to handle customer calls compared to staffing levels as low as 281 CCAs over 2020 and 2021. This increased complement of trained personnel has improved service levels with CCAs answering 67% of calls within 60 seconds year to date in 2023 (January through August) compared to 45% in 2022 overall. As shown in Table 1 below, the CSO's hiring and recruitment efforts over the past several years has reduced wait times and the call abandonment rate for customers that do not utilize the courtesy call-back feature in the CSO's interactive voice response ("IVR") system.

Table 1

Year	Annual Percentage of Calls Answered in 60 Seconds	First Contact Resolution	Average Speed of Answer (minutes)	Abandonment Rate
2020	67%	N/A	4:43	15%
2021	43%	N/A	10:19	24%
2022	45%	53%	7:50	21%
2023 (January through August)	67%	57%	2:37	9%

As shown in Table 1, the Company has made substantial progress in 2023 toward its performance objectives of answering 80% of calls within 60 seconds and achieving a call abandonment rate of 8%.

Q. Has the CSO implemented enhancements to the Company's myWater customer service portal to help PAWC customers to efficiently manage their accounts online?

A. Yes. Currently, nearly 50% of PAWC customers complete transactions with the Company online. The CSO and PAWC continue to expand options for customers to communicate with the Company and access information about their utility service through online self-service options. The myWater portal allows PAWC customers to effortlessly make payments, view water usage history, check balances and schedule appointments for some service items, 24 hours a day, 7 days a week. Through the portal, customers can also enroll in the Company's free paperless billing program and schedule automatic payments. The CSO continually refines the myWater portal to expand functionality and improve the customer experience. Since the myWater portal was launched in 2020, the CSO has implemented a variety of enhancements, including allowing automatic credit card payments, allowing customers to apply for a leak adjustment online, and improved navigation and scrolling.

Q. Please explain the CSO's efforts to increase paperless billing to increase customer engagement and, ultimately, satisfaction.

A. About 25% of PAWC customers are enrolled in paperless billing today. Increasing adoption of paperless billing is a key CSO initiative to improve customer satisfaction because it provides a convenient way for customers to access, pay and store their bills.

Using the Company's self-service portal to pay bills online reduces the time spent paying that bill, the clutter that comes with paper bills and a customer's carbon footprint. Paperless billing also reduces the Company's postage and paper costs by over $6.75 per bill per year. Postage rates increased twice in 2023 including a five percent increase in January 2023 and another five percent increase in July 2023. Postage rates are forecasted to increase twice a year going forward, so the operational cost savings from paperless billing will only continue to grow.

In 2023, PAWC encouraged customers to learn more about paperless billing and enroll in several communications, including a bill insert to all customers in August 2023, two customer emails in August and October 2023 with approximately 495,000 successful deliveries and three email campaigns where customers could establish a myWater account and enroll in paperless billing with one click. The Company's myWater users also receive a web pop-up every six months to remind them about the paperless billing option. PAWC employs many other tools to encourage customers to consider paperless billing including social media, website assets, on-bill and bill envelope messaging, and new welcome kits. The CSO also has scripting for CCAs to encourage, but not require, new customers to sign up for paperless billing.

Q. Ms. Degillio, what strategies has the CSO pursued in the last two years to maintain high levels of overall customer satisfaction?

A. As stated above, the CSO is always seeking ways to improve the experience of our customers and to perform our services more efficiently. I will highlight a few notable improvements made in the past 24 months based on customer feedback and evolving industry best practices. First, the CSO bolstered quality assurance for call handling.

Previously, we listened to at least ten calls per CCA per month that were randomly selected. The Company's call handling QA process includes reviewing any call where the customer rated the call as poor in the post-transaction survey. This not only allows us to provide better and more timely feedback to our CCAs and supervisors, but we are also able provide prompt and targeted training to ensure overall customer satisfaction with the CCA.

In addition to enhancements to the myWater portal, the CSO has streamlined customer interactions by updating website and IVR content and adding a virtual assistant to answer frequently asked questions and recurring concerns quickly so there is less need to talk to a CCA. The CSO also has pursued technological advancements in recent years to streamline administrative tasks and provide more time for our employees to focus on customer interactions. For example, in 2022, the CSO automated employee time and attendance. Prior to this upgrade, supervisors in both our billing and customer care teams had to engage in a time-consuming manual process to review when employees logged in for work and when breaks were taken to manage attendance.

Q. Are there any recent CSO improvements pertaining to PAWC's commercial and industrial ("C&I") customers that you would like to highlight?

A. Yes. Over the past 24 months, we have made improvements for our C&I customers and residential customers with more than one meter. One example is collective billing, which is where a customer can combine multiple meters into one bill. The same customer can access all of their accounts with a single sign-on to the myWater portal. We also held webcasts for major accounts in 2022 on conservation and diversity, equity, and inclusion. PAWC's major accounts program also now offers personalized service and a single point

of contact for the Company's largest C&I customers to provide value-based solutions and improve their overall customer experience.

COMMITMENT TO CUSTOMER ASSISTANCE

Q. How does PAWC provide assistance to customers who may need help paying their water or wastewater bills?

A. Affordability is critical to PAWC and American Water. Company witness Charles Rea describes how we assess the affordability of water and wastewater service in his direct testimony (PAWC Statement No. 10). PAWC has multiple ways to help customers in need, including low-income customer assistance programs, which I discuss below, budget billing and payment plans.

Q. Please describe the Company's existing low-income customer assistance programs.

A. Under the H2O Program, PAWC offers a range of financial assistance for qualifying water and wastewater customers. The H2O Bill Discount Program ("BDP") provides substantial bill reduction assistance for both water and wastewater customers with annual household incomes at or below 150% of the Federal Poverty Level ("FPL"). Additionally, BDP participants can receive water-saving device kits and educational programming through the H2O Program to help those customers conserve water and potentially lower their water and wastewater bills. BDP participation is "portable," meaning that an otherwise qualified customer will not be removed from the BDP if the customer changes their service address to another location within the Company's service territory.

The H2O Program also provides Hardship Grants for qualifying customers with annual household incomes at or below 200% of the FPL. A customer may receive a Hardship

Grant equal to the customer's total account balance at the time of grant issuance, up to the maximum annual grant amount of $500 for water service and $500 for wastewater service. H2O Hardship Grants are funded through an annual corporate donation (currently $625,000 for water and $125,000 for wastewater) as well as customer and employee donations.

Q. Does the Company perform outreach to customers regarding its low-income assistance programs?

A. Yes. PAWC utilizes a variety of tools and methods to inform its customers about the benefits provided by the H2O Program, including direct customer communication, participation in PUC consumer education events and local community events, and Dollar Energy Fund ("DEF") outreach.

Direct Customer Communications. PAWC combines broad-based communications to all residential PAWC customers with more targeted outreach activities to educate customers about assistance programs. The broader communications strategy includes bill inserts, email campaigns, the New Customer Booklet and social media (e.g., Facebook, Twitter, and YouTube). PAWC customers may also call our toll-free customer service line or visit PAWC's website for information on the benefits available under the H2O Program (with downloadable flyers available in both English and Spanish) and how to contact the Company to apply for the program. PAWC also employs targeted social media, direct mail and in-person outreach in zip codes with higher percentages of low-income customers overall (i.e., household income of 0-150% of FPL) as well as zip codes with higher percentages of customers with a household income of 0-50% of FPL. For example, the Company recently promoted its BDP and Hardship Grants via a direct mailing

to the 32 zip codes with the highest percentages of customers in the 0-150% of FPL range, representing approximately 55,000 customers. PAWC has also partnered with community service organizations such as the Chester County Food Bank and Phillipsburg YMCA to make customer assistance program fact sheets available to food pantry recipients.

PUC Events. The Commission's consumer education events are also an important part of the PAWC's outreach program. For many years, PAWC has been an active participant in the PUC Be Utility Wise ("BUW") consumer education event promoting consumer awareness, utility education, life management skills and financial literacy. The BUW events bring together hundreds of representatives from front-line community-based organizations ("CBOs") and other key stakeholders to engage, educate and help them better understand utility customer assistance programs available in their communities. The event focuses on ways to help low-income households maintain essential services by: (1) sharing tools and resources about customer assistance program and conservation; (2) reviewing information and guidelines about support programs; and (3) exchanging ideas on ways to improve service to at-risk households.

Local Community Events. PAWC also participates in many local events across the state, including utility fairs and senior fairs, to interact directly with customers. These events are held in neighborhood schools, churches, community centers, malls/shopping centers, and other community locations. For example, in the summer months of 2023, PAWC participated in several utility or customer assistance program fairs in the following areas, among others: Lackawanna County, Luzerne County, Coatesville, Port Vue, Duquesne City, Fayette County, Kane Borough, New Castle City, Clarion Borough, and Warren City. The Company has also focused on communicating low-income program

information in Spanish to several of its communities with higher concentrations of Spanish-speaking customers.

DEF Outreach. Finally, DEF provides public education about the Company's H2O Program through public service announcements, press releases, community speaking engagements, networking, and other methods deemed effective in alerting the public about the availability of the Company's low-income assistance programs and how the community can contribute to the Hardship Fund.

Q. Has the Company proposed an arrearage management program ("AMP") for qualifying low-income customers?

A. Yes. In PAWC's 2020 base rate proceeding, the Company agreed that it would present an AMP to the Commission for review and approval no later than six months after a final order in that proceeding. PAWC filed a petition to request approval of its AMP with the Commission on August 25, 2021 at Docket No. P-2021-3028195. The AMP proceeding is ongoing and a Further Amended Joint Petition for Full Settlement was filed on September 11, 2023 ("AMP Settlement"). Under the pending AMP Settlement, a customer is eligible to enroll in the AMP if : (1) they provide documentation establishing a household income is at or below 150% of the FPL, subject to the income-related provisions in the AMP Settlement; (2) they are enrolled or seeking enrollment in the BDP; and (3) they have at least a $150 arrearage balance (inclusive of water and/or wastewater charges), including arrearages that are at least 60 days past due. Customers participating in the AMP will receive $25 of arrearage forgiveness for each in-full payment of current charges plus the $5 co-pay made while the customer is in the program. Participants must recertify their income according to timelines detailed in the AMP Settlement in order to remain in the

program. If the AMP Settlement is approved, the Company will implement the AMP no later than twelve months after the Final Order in the AMP proceeding.

Q. Is the Company planning to make any enhancements to these low-income customer assistance programs?

A. Yes, the Company intends to make enhancements to the BDP, AMP and Hardship Fund to provide additional bill assistance to customers and also align program requirements. For the BDP, as explained in more detail by Mr. Rea in PAWC Statement No. 10, the Company is proposing to expand eligibility to customers with household income at or below 200% of the FPL. If approved by the Commission for the Company's BDP, the Company also intends to offer the AMP to qualifying BDP participants at or below the 200% of the FPL. In addition, the Company is actively working on implementing income verification requirements for the BDP that are consistent with the income verification provisions of the AMP Settlement. Having these requirements up and running will help facilitate the launch of the AMP after Commission consideration and approval of the AMP Settlement.

PAWC also plans to make enhancements to the Hardship Fund in accordance with a settlement that is pending before the Commission in the proceeding related to the Company's proposed acquisition of the Butler Area Sewer Authority's wastewater system assets (the "BASA Settlement").[1] Specifically, if the BASA Settlement is approved by the Commission, PAWC will expand eligibility to customers with household income at or below 250% of the FPL and contribute $3.5 million to the Hardship Fund ($700,000

[1] *See Application of Pennsylvania-American Water Company-Wastewater Section 1329 of the Pennsylvania Public Utility Code, 66 Pa. C.S.§ 1329, for the Acquisition of Butler Area Sewer Authority's Wastewater System Assets*, Docket No. A-2022-3037047 (Joint Petition for Settlement filed Aug. 14, 2023, pp. 26-27).

annually for 5 years) in addition to PAWC's annual $750,000 contribution. This increased funding level is also expected to provide eligible customers with access to Hardship Fund dollars year-round regardless of service status. In other words, if the BASA Settlement is approved, the Company would not likely need to limit Hardship Fund availability during certain months of the year to only customers at risk of service termination or who are already disconnected due to non-payment.

Q. What actions does the Company take with regard to Low-Income Household Water Assistance Program ("LIHWAP") grants?

A. The Company performs targeted customer outreach (e.g., direct mail, e-mail and social media) about the availability of LIHWAP grants and applies awarded grants to customer accounts. In the most recent round of LIHWAP funding, for which the application window closed on August 18, 2023, PAWC has applied over 2,400 grants to customer accounts, totaling approximately $1.11 million. In addition, PAWC is automatically enrolling LIHWAP recipients into its BDP to the extent the customer is not already enrolled.

Q. Have there been any other technology improvements implemented recently to improve customer assistance program delivery?

A. Yes. In 2023, PAWC implemented a customer assistance portal to improve service to our most vulnerable customers. The overall goal of this tool was to automate the processing of pledge information from third-party assistance providers, such as DEF, LIHWAP, non-profits, churches, community groups, etc. Before this tool was implemented, assistance providers needed to directly contact us with questions about customers and outstanding balances. If a pledge was approved, the assistance provider then transmitted the amount

and account information which was manually added to each account to reflect the pledges. This new portal automates both the provision of necessary information to the assistance provider and the loading of the pledge into SAP so that the pledge is reflected in the customer's account. Overall, this portal improves the efficiency of the pledge-related activities of the Company and the CSO and delivers more timely pledges to benefit our customers.

CONCLUSION

Q. Does this conclude your direct testimony at this time?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Deborah A. Degillio**, hereby state that the facts set forth in the pre-marked Statement No. 9 and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: November 8, 2023

Deborah A. Degillio

VOLUME 9

PENNSYLVANIA-AMERICAN WATER COMPANY

2023 GENERAL BASE RATE CASE
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

STATEMENT NO. 10 -DIRECT TESTIMONY OF CHARLES REA

EXHIBITS NO. 10-A THROUGH 10-E AND CBR-1 THROUGH CBR-11 ON PROPOSED RATE DESIGN, WATER AND WASTEWATER SERVICE AFFORDABILITY ANALYSIS, DECLINING USAGE ANALYSIS, REVENUE RATE APPLICATION FOR ALL WATER AND WASTEWATER OPERATIONS, AND PROPOSED REVENUE DECOUPLING MECHANISM

PAWC STATEMENT NO. 10

DIRECT TESTIMONY
OF
CHARLES REA

WITH REGARD TO
PENNSYLVANIA-AMERICAN WATER COMPANY'S

RATE DESIGN PROPOSALS, AFFORDABILITY ANALYSES, LOW-INCOME DISCOUNT TARIFF MODIFICATION PROPOSAL, CUSTOMER USAGE AND DECLINING USE ANALYSES, REVENUE CALCULATIONS AND PROJECTIONS, AND REVENUE DECOUPLING MECHANISM PROPOSAL

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: November 8, 2023

PENNSYLVANIA-AMERICAN WATER COMPANY

DIRECT TESTIMONY OF CHARLES REA

Q. What is your name and business address?

A. My name is Charles B. Rea. My business address is 3409 Research Parkway, Davenport, Iowa 52806.

Q. By whom are you employed and in what capacity?

A. I am employed by American Water Works Service Company, Inc. ("AWWSC" or "Service Company") as Senior Director, Enterprise-Wide Regulatory Pricing & Affordability. I am providing testimony on behalf of Pennsylvania-American Water Company ("PAWC" or the "Company").

Q. Please summarize your educational background and professional experience.

A. I received a Bachelor of Arts degree in Computer Science from the University of Illinois at Springfield in 1986 and a Master's degree in Statistics and Operations Research from Southern Illinois University at Edwardsville in 1990. I have been employed by AWWSC since January 2018. Prior to my employment with AWWSC, I was employed by MidAmerican Energy Company ("MidAmerican") from June 1990 through January 2018. I have over 30 years of utility experience covering a wide range of issues including electric system planning, sales and revenue forecasting, electric load research, marketing, rates, cost of service, and energy efficiency. Most recently, at MidAmerican, I was Director, Energy Efficiency and Regulatory Analytics. In that position I had responsibility for planning, evaluation, and operational management of MidAmerican's energy efficiency and demand response programs in Illinois, Iowa, and South Dakota, as well as direct responsibility for electric and natural gas sales and revenue forecasting, electric peak

demand forecasting, load research, retail pricing of electric and natural gas products, and electric and natural gas cost of service and rate design.

Q. What are your current employment responsibilities?

A. My primary responsibility in my role as Senior Director, Enterprise-Wide Regulatory Pricing & Affordability, is to serve as a subject-matter expert on rate design, revenue issues, and affordability issues. I am responsible for the development and preparation of rate design analyses, as well as presenting cost of service and rate design proposals to our internal and external stakeholders. In addition, I am the Company's subject-matter expert on forecasting and the statistical analysis of customer usage for rate case purposes and I am the Company's subject-matter expert on the analysis of the affordability of the Company's water and wastewater service to its customers.

Q. What is the purpose of your direct testimony?

A. I will sponsor the Company's proposed rate design for both water and wastewater service and will provide calculations and evidence necessary to support the Company's proposed rates. I will also present the Company's affordability analyses for water and wastewater service and PAWC's proposal to expand access to its Bill Discount Program ("BDP"). In addition, I further present the Company's analysis of residential, commercial, and public authorities' water consumption as it relates to the impact of the COVID-19 pandemic on water usage and long-term trends in water usage. I will, further, present the Company's determination of Test Year revenues at Present Rates and Proposed Rates. Finally, I will present the basis and rationale for the Company's proposed Revenue Decoupling Mechanism ("RDM").

Q. Please identify the exhibits you will be sponsoring in this proceeding.

A. I am sponsoring the following Company Exhibits attached to my testimony:

- Exhibit CBR-1 – Water Affordability Analysis
- Exhibit CBR-2 – Wastewater Affordability Analysis
- Exhibit CBR-3 – Proposed Water Rate Design
- Exhibit CBR-4 – Proposed Wastewater Rate Design
- Exhibit CBR-5 – Residential Usage Analysis
- Exhibit CBR-6 – Commercial Usage Analysis
- Exhibit CBR-7 – Municipal Usage Analysis
- Exhibit CBR-8 – RDM Cost Component Calculations
- Exhibit CBR-9 – RDM Projected Results
- Exhibit CBR-10 – RDM Analysis for Docket No. M-2015-2518883
- Exhibit CBR-11 – NARUC Resolution

I also am sponsoring Exhibit Nos. 10-A through 10-E, which set forth the proof of revenues from the application of present and proposed rates for each system.

Q. How is your Direct Testimony organized?

A. My Direct Testimony is organized into the following sections:

- Affordability
- Expansion of Low-Income Programs
- Rate Design
- Wastewater to Water Revenue Requirement Reallocation (Act 11)
- Analysis of PAWC Usage
- Revenue Calculations
- Revenue Decoupling Mechanism

AFFORDABILITY

Introduction

Q. Please describe the concept of affordability.

A. The concept of affordability for water and wastewater service is based on the idea that everyone should have access to drinking water and wastewater service that is (1) safe, meaning it complies with the U.S. Safe Drinking Water Act and regulations promulgated by the U.S. Environmental Protection Agency; (2) reliable, so that it is resilient in the face of floods, droughts, and other climate risks; and (3) affordable.

Q. Why is affordability of water and wastewater service an important issue to the Company?

A. The Company knows that its water and wastewater service is essential, and we know how important it is for that service to remain affordable. Maintaining affordability of service is an important objective for PAWC as discussed in the direct testimony of Ashley Everette in PAWC Statement No. 1 and Deborah Degillio in PAWC Statement No. 9.

Q. How does the Company assess the affordability of its water and wastewater service?

A. The Company assesses the affordability of its water and wastewater service by comparing annual bills for water and wastewater service to household income in the communities that we serve. Such an assessment requires at least two data points – the average monthly or annual bill for water service and some measure of household income for the customer population. For the broader residential customer base, commonly available household income measures are measures of income at different percentiles. Median Household Income ("MHI"), which is household income at a 50th percentile level (50% of households in a given population have incomes greater than the median and 50% of households have

incomes lower than the median), can be measured at a statewide or community level and can be paired with a data set that provides the number of customers served in each community to arrive at a weighted number that represents MHI for the Company's entire service territory.

At a more detailed level, individual household income is considered, and affordability can then be assessed, across a full range of households based on their various income levels and bills for water and/or wastewater service. A variety of household income data is readily and publicly available from the U.S. Census Bureau through the American Community Survey ("ACS") at the state, county, and community levels.

Q. What types of affordability analyses does the Company conduct?

A. The Company conducts two different types of affordability analysis for its water and wastewater service. The first analysis is an Enterprise-Level analysis of affordability, which considers affordability of service at a high level over a multi-year period. The second analysis is a Community-Level analysis of affordability, which takes a deep dive into the affordability of service at the individual customer level under current or proposed rates and current economic conditions.

Q. Has the Company provided an affordability analysis of its water and wastewater service for the proposed rates in this case?

A. Yes. The Company's affordability study for water service is provided in Exhibit CBR-1 and the affordability study for wastewater service is provided in Exhibit CBR-2. Each exhibit contains both the Enterprise-Level Analysis and a Community-Level Analysis for the applicable service.

Enterprise-Level Analysis

Q. Please describe the Company's Enterprise-Level Analysis of affordability of service.

A. The Enterprise-Level Analysis of affordability for water and wastewater service is a historical comparison of average monthly bills for PAWC residential customers to household income for the Company's residential customers. The metric used to describe affordability is the Bill-to-Income ("BTI") Ratio, which is defined as annual water bills divided by estimated annual household income. This view looks at average residential monthly bills for all customers over time compared to MHI for the Company's residential customer base.

Q. What is the purpose of this Enterprise-Level Analysis?

A. The purpose of the Enterprise-Level analysis is to provide a high-level historical perspective on how the affordability of service has been trending over time and how it is expected to continue to trend under proposed rates. Although the Company is proposing to increase customer rates in this proceeding, the important metric to consider is the impact that proposed rates and bills have on customer finances and how those impacts have trended over time and are expected to trend going forward. This metric must consider not only trends in rates and bills but trends in household income. The BTI Ratio proposed by the Company considers all of these factors. The Company's BTI Ratio as presented in the Company's affordability analyses is the appropriate metric to use when looking at the impact of the Company's rates for water and wastewater service on customers.

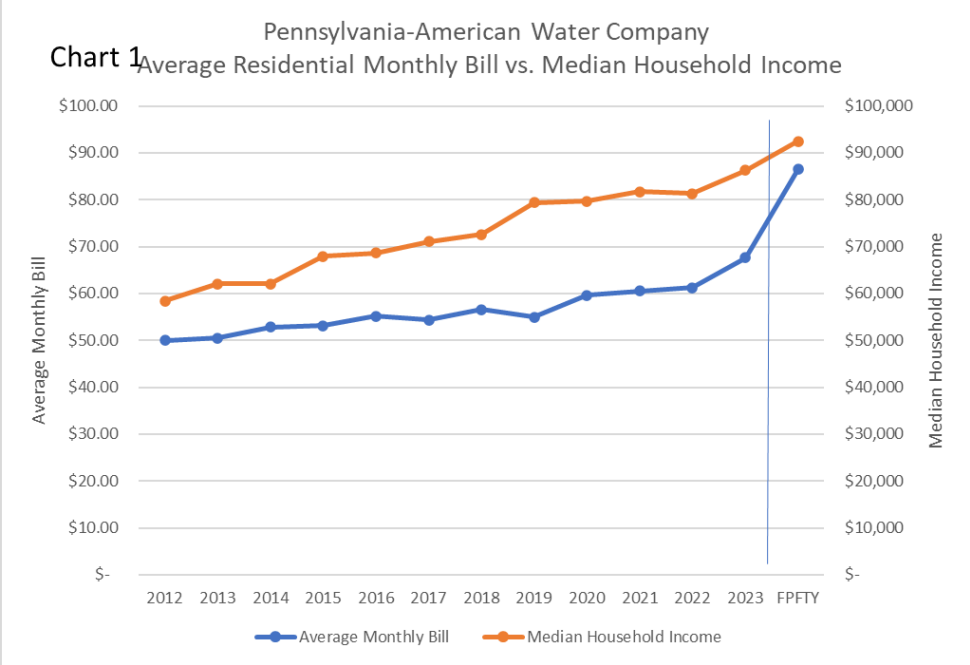
Q. How do you determine MHI for the customers in the Company's service territory?

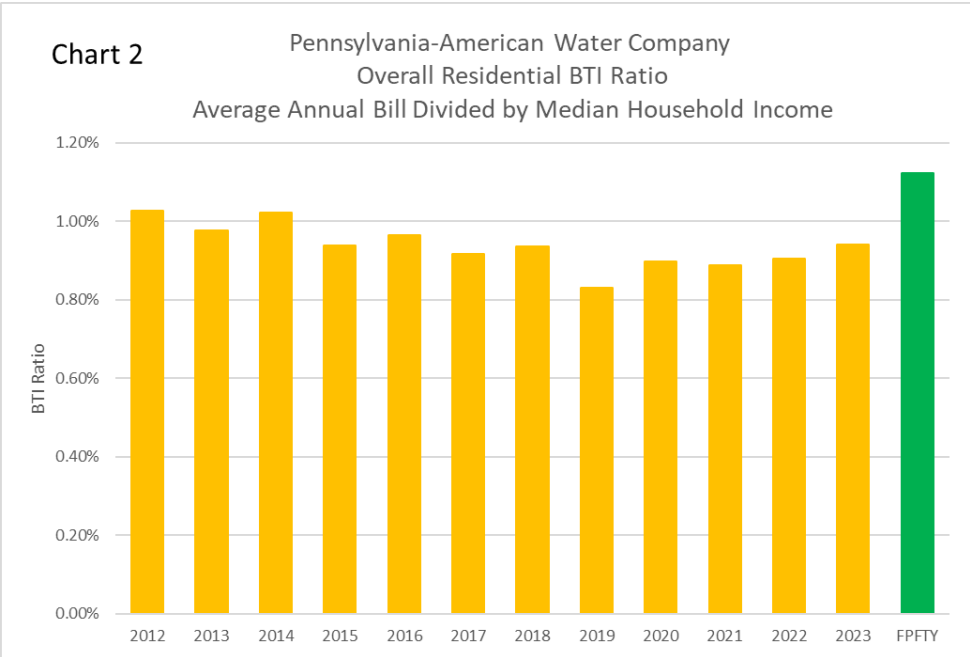
A. The MHI for the Company's service territory is a weighted average of the number of customers the Company serves in each community in the service territory and the median

household income in each of those communities for owner-occupied and single-unit, renter-occupied homes as reported by data in the ACS based on the most recent year's available data (2021 in this proceeding). The relationship between this service territory–specific figure and the MHI for the Commonwealth of Pennsylvania for 2021 (also provided at the community level through the ACS) is then applied to historical MHI data for the Commonwealth of Pennsylvania to arrive at historical MHI data for the PAWC service territory.

Q. What are the results of your Enterprise-Level analysis of affordability for water service?

A. The charts below compare historical average monthly water bills for water service to MHI for PAWC customers from 2012 through 2023 stated in absolute terms and stated in terms of the BTI Ratio, along with estimated average monthly bills under the Company's proposed rates in this case and the estimated MHI for PAWC water customers for the Fully Projected Future Test Year ending June 30, 2025 ("FPFTY"). The data shows that the BTI Ratios for water service for PAWC have held steady from 2012 through 2023 at levels between 0.8% and 1.0% of MHI. The BTI Ratio at the median income level is expected to be 1.12% under the Company's proposed water rates in this case.

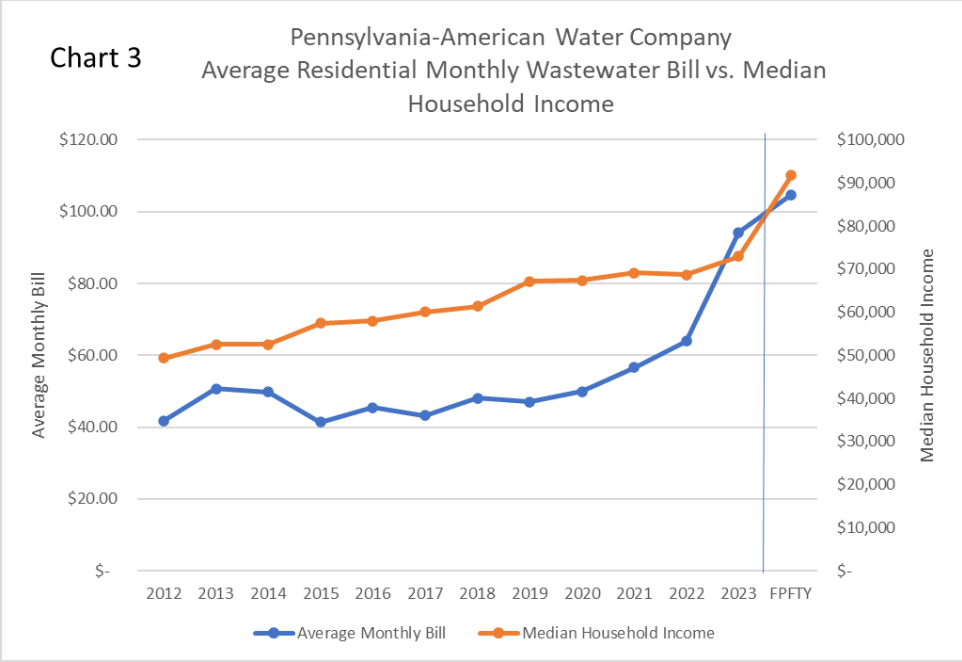


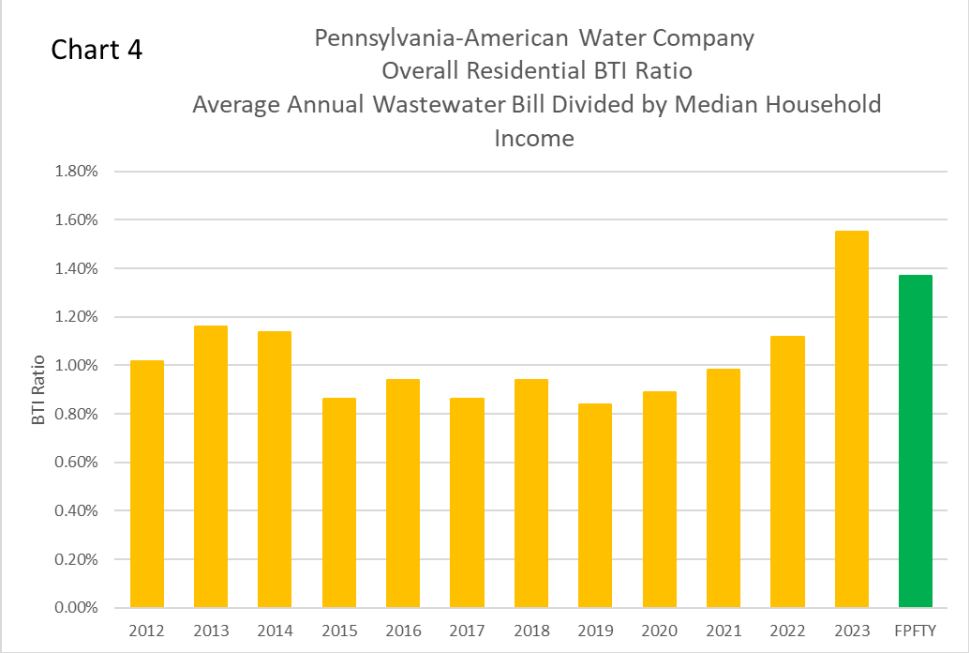


Q. What are the results of your Enterprise-Level analysis of affordability for wastewater service?

A. The charts below compare historical average monthly water bills for wastewater service to MHI for PAWC customers from 2012 through 2023 stated in absolute terms and stated in

terms of the BTI Ratio, along with estimated average monthly bills under the Company's proposed rates in this case and estimated MHI for PAWC customers for the FPFTY. The data shows that the BTI Ratios for wastewater service for PAWC customers have held steady from 2012 through 2022 at levels between 0.9% and 1.2% of MHI and rose to 1.55% in 2023. The BTI Ratio at the median income level is expected to be 1.37% under the Company's proposed wastewater rates in this case.





Q. Is there a generally accepted standard for the affordability of water and wastewater service expressed as a percentage of MHI?

A. There is no definitive standard for affordability as a percentage of MHI. Benchmarks for affordability expressed as a total bill's percentage of MHI is a policy decision. However, bills that are less than 2.0% or 2.5% of MHI for water and 4.0% to 4.5% of MHI for combined water/wastewater are considered "affordable" by some.[1]

Q. In your opinion can the assessment of affordability of service be reduced to basically a yes or no answer?

A. No, the affordability of water or wastewater service will never be that simple. One can generally measure average water bills against any given benchmark and come up with a yes or no answer, but affordability of service is a continuum, and that is what the

[1] Teodoro, Manuel P., "*Measuring Household Affordability for Water and Sewer Utilities*," Journal AWWA (2018), doi:10.5942/jawwa.2018.110.0002.

Company's Community-Level analysis, which I describe next in my Direct Testimony, shows. There will always be customers for whom water service is more affordable than for others depending on demographics and income levels. This is true across all of the communities that PAWC serves, including even the wealthiest communities that the Company serves.

Community-Level Analysis

Q. Please describe the Company's Community-Level Analysis of affordability of service.

A. The Community-Level Analysis takes a deeper dive into the affordability of water and wastewater service at a local level across different customer demographics and proposed rates for each community that the Company serves. For larger communities, the analysis is done at a zip-code level.

Q. What is the purpose of this Community-Level Analysis?

A. The purpose of the Community-Level Analysis is to identify, at an individual customer level, the percentages of household income that bills for water and wastewater service are expected to take up under the Company's proposed rates, and to identify demographic trends either by geographic location or by income level for customers where affordability of service may be an issue based on BTI Ratios measured at the individual customer level.

Q. How is this analysis different from the Enterprise-Level Analysis you previously presented?

A. The Enterprise-Level Analysis and the Community-Level Analysis are two different but complementary views of affordability. As previously stated, the purpose of the Enterprise-Level analysis is to provide a high-level historical perspective on how the affordability of service has been trending over time and how it is expected to continue to trend under

proposed rates. The Community-Level analysis takes a deep dive into the affordability of service at the individual customer level under current or proposed rates and current economic conditions.

Q. Is there academic research that supports the Company's approach to assessing affordability of service at this detailed level?

A. Yes. Cardoso and Wichman[2] outline a framework for assessing affordability of water service that uses the full distribution of household income at the local level rather than MHI or some other static representative level of income and uses varying levels of water usage at the individual household level instead of a static representative level of water usage. While my methodology differs from Cardoso and Wichman in certain areas, the goal remains the same, which is to analyze affordability at the individual customer level and identify customer groups where affordability of service may be an issue.

Q. What information is needed to conduct an analysis of the affordability of service at this detailed level?

A. The following information is used to assess affordability of service at the community and individual customer level:

- The number of customers served in each community.
- The distribution of owner-occupied households and renter-occupied households by income level in each community.

[2] Cardoso, Diego S. and Wichman, Casey J., "*Water Affordability in the United States*," Water Resources Research, vol. 58, issue 12 (2020).

- The percentage of occupied housing units that are owner-occupied households or renter-occupied households that are not in multi-dwelling buildings in each community.
- The average number of persons per household in each community for both owner-occupied and renter-occupied households.
- The distribution of the size of households (one-person, two-person, etc.) for households of different income levels.
- The standard definition of Basic Water Service.
- Current or proposed rate structures.

I will return to the Community-Level Analysis after I discuss the concept of Basic Water Service.

Q. Please describe the concept of Basic Water Service.

A. Basic Water Service is a water usage level that reflects the level of water consumption for basic human services (cooking, cleaning, sanitation, and general health requirements), which is then assumed to be constant from month-to-month and not subject to significant seasonality or weather conditions. This standard can be expressed in terms of gallons per resident per day. This service is different from discretionary seasonal water usage for filling swimming pools, lawn irrigation, etc. This definition of Basic Water Service can be used to customize a level of usage that accurately reflects water service for different sizes of households.

Q. How do you define Basic Water Service for the purposes of your customer-level affordability analysis?

A. For the purpose of the Company's affordability analyses, Basic Water Service is defined to be 40 gallons of water per household member per day. This figure is based on the review of relevant literature on the subject and a review of Company billing data for residential customers in months with minimum levels of discretionary water usage, all of which supports the definition of 40 gallons of water per household member per day.

Q. Why is this definition of Basic Water Service also suitable for wastewater analysis?

A. The definition of Basic Water Service at 40 gallons per household member per day is also suitable for wastewater analysis because wastewater billings, especially in light of the Company's proposal for winter averaging that I describe later in testimony, are based on the same type of service that Basic Water Service is meant to represent, namely water consumption for basic human services (e.g., cooking, cleaning, sanitation, and general health requirements). All of this service effectively is returned through the wastewater collection system and, therefore, the definition of Basic Water Service serves as an appropriate benchmark for analysis of affordability for wastewater service.

Q. Have you benchmarked this definition of Basic Water Service against actual Company residential billing data?

A. Yes. Based on the statistical modeling I described later in my Direct Testimony, current and projected levels of residential use per customer in non-seasonal months is approximately 3,000 gallons per month or less. These values are consistent with the definition of Basic Water Service at 40 gallons of water per household member per day.

Q. What information does your Community-Level Analysis provide?

A. The Company's Community-Level Analysis provides a complete set of demographic information for the Company's customer base in each community and a set of affordability

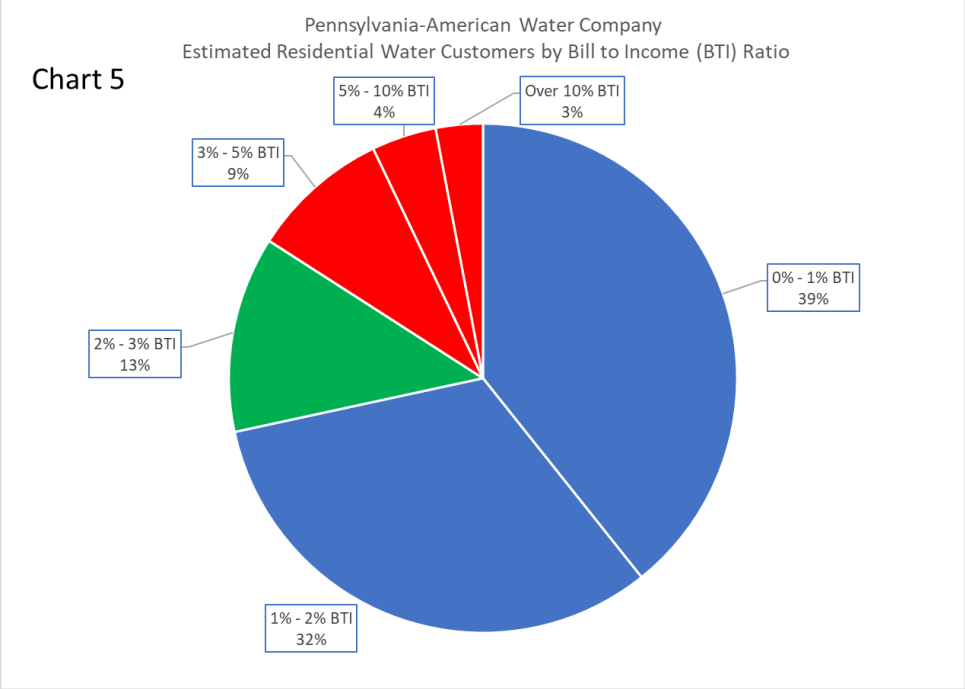
data for its service territory in total and for various cross sections of the Company's customers.

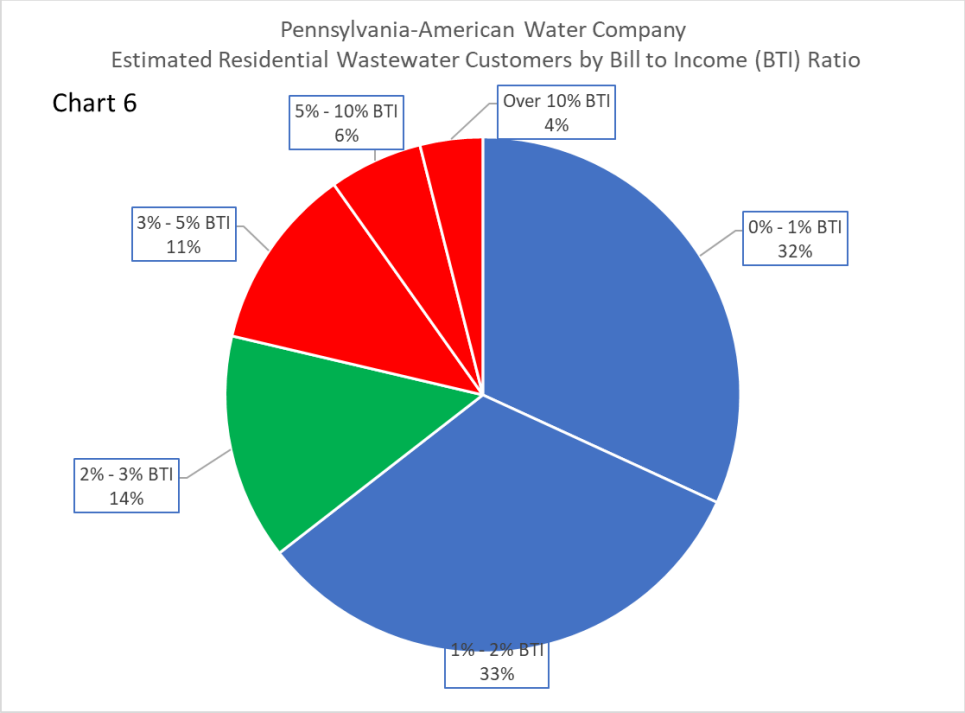
Q. What demographic information does your Community-Level Analysis provide?

A. The demographic information provided by this analysis is primarily economic in nature, although the analysis can be expanded to provide information on various identifiers such as race, languages spoken, etc. The primary demographic (economic) information provided by the analysis is the estimated number of customers at different levels of Federal Poverty Level ("FPL") and at different levels of household income. FPL is a measurement set by the U.S. Department of Health and Human Services of the minimum amount of annual income that is needed for individuals and families to pay for essentials, such as room and board, clothes, and transportation. The FPL takes into account the number of people in a household, their income, and the state in which they live. For Pennsylvania, the FPL guidelines for 2023 are set at $13,590 for a household size of one and $4,720 per year for each additional household member.

Q. What information does your Community-Level Analysis show?

A. Charts 5 and 6 below show, for both water and wastewater service, the relationship between residential customers' bills for Basic Water Service under the Company's proposed rates and level of household income.





These charts show that under the Company's proposed rate structure, the Affordability Index metric (discussed below) for the Company's service territory in total is 71% under proposed rates for water service and 65% under proposed rates for wastewater service,

meaning that 71% of our residential water customers and 65% of our residential wastewater customers can expect to see bills for Basic Water Service to be less than 2% of their household income. The Company estimates that there are approximately 176,900 residential water customers and 38,400 wastewater customers that will see bills for Basic Water Service above 2% of their household income, which is approximately 29% and 35% of the total customer population for water and wastewater service, respectively.

Q. Please describe the Affordability Index.

A. The Affordability Index ("AI") is a metric that reflects the percentage of a group of customers for whom Basic Water Service is expected to be less than a given percentage of annual household income. Consistent with my previous discussion in testimony regarding standards for affordability, the Company uses 2% of household income as the benchmark for this metric, which is at the conservative end of the range of affordability often cited. As an example, if, for a certain group of customers, it is estimated that 80% of those customers will have bills for Basic Water Service less than 2% of annual household income, the AI value for that group of customers is 80%.

The AI metric is designed to reflect the percentage of residential customers in a state, community, or demographic group for whom Basic Water Service is expected to cost 2% or less of annual household income. An AI value of 100% means that all customers within a selected group can expect Basic Water Service at less than 2% of household income. An AI value of 70% means that approximately 70% of customers within a selected group can expect Basic Water Service at less than 2% of household income, and 30% of customers in that group can expect Basic Water Service to cost more than 2% of household income. The AI value is calculated based on modeling of proposed rates and community-

level demographic information that I previously described in my testimony, which assesses affordability across the entire range of customer demographics in each community we serve.

Q. Why do you use 2% of household income as your benchmark for affordability of water or wastewater service?

A. The 2% benchmark is generally consistent with industry standards for affordability at the individual household level and is slightly lower than the 4.5% benchmark for combined water and wastewater service used by Cardoso and Wichman.[3]

Q. Is there a relationship between the data shown in Chart 5 and Chart 6 from the Community-Level Analysis and the data shown in Chart 2 and Chart 4 from the Enterprise-Level Analysis?

A. There is. The data in Chart 2 and Chart 4 shows BTI ratios at the MHI level, which is the 50th percentile household income, meaning that half of all customers have annual household incomes less than the 50th percentile level and half of all households have incomes greater than the 50th percentile level. For the 12-month period ending in June 2025, the BTI Ratio is anticipated to be 1.12% for water and 1.37% for wastewater. The data in Chart 5 and Chart 6 shows the distribution of BTI Ratios for the residential customer base in total, which inherently includes values for the MHI customer, which lies at the bottom of the pie chart (6 o'clock) at the point where half of the customers are to the left and half of the customers are to the right. The bottom point on the pie chart on Chart 5 covers approximately 25% of the 0%-1% BTI Ratio slice, and the bottom point on the pie chart on Chart 6 covers approximately 50% of the 0%-1% BTI Ratio slice. This data is

[3] Cardoso, Diego S. and Wichman, Casey J., *supra* note 2.

consistent with the BTI Ratios at the 50th percentile income level in Charts 2 and 4. Charts 5 and 6 show a range of BTI Ratios for the entire distribution of customers at a single point in time. Charts 2 and 4 show BTI Ratios for the 50th percentile household income level and also provide a historical perspective on how that value has trended over time and is expected to trend forward under the Company's proposed rates.

Q. Is affordability of service uniform across the Company's service territory?

A. No, it is not. While the Company's water and wastewater rates (and therefore bills) are the same for the vast majority of our customers, household income can vary significantly across the Company's service territory. PAWC has a very diverse service territory and serves customers in urban, suburban, and rural communities with household incomes that range from over $100,000 MHI to as low as $30,000 - $50,000 MHI. The Company's affordability analyses provided in Exhibits CBR-1 and CBR-2 provide information on the number of customers served in each community, the MHI for each community, and the BTI Ratios for Basic Water Service in each community.

Q. Do you have information on the Affordability Indices of service by income group?

A. Table 1 below shows AI values for the Company's residential customers by income level for water and wastewater service.

TABLE 1 Affordability Index by Income Level	Water Affordability Index	Wastewater Affordability Index
Above $150k	100%	100%
$100k - $150k	99%	98%
$75k - $100k	93%	87%
$50k - $75k	78%	73%
$35k - $50k	55%	49%
$25k - $35k	39%	34%
$20k - $25k	0%	14%
$15k - $20k	0%	5%
$10k - $15k	0%	1%
$5k - $10k	0%	0%
$0k - $5k	0%	0%

Q. Does your analysis consider customers who rent in multi-family buildings without individual meters?

A. No. The Company's Community-Level Analysis only considers customers that are assumed to be direct customers of the Company, meaning that they are directly responsible for payment of services to the Company. Direct customers are assumed to be owner-occupied households and single-family, renter-occupied households as reported by ACS data.

Q. Why does your Community-Level Analysis only concentrate on customers that are direct customers of the Company?

A. The Company's affordability analysis concentrates on customers that are direct customers of the Company for two reasons:

- The use of an MHI statistic, which best estimates household income for direct customers of the Company, is consistent with the calculation of the average bill, which is also based on direct customers.
- For indirect customers of the Company (e.g., renters in multi-family buildings), it is impossible to know definitively what these households pay in rent for water or wastewater service. Presumably, building owners that receive water and/or wastewater service from PAWC are recovering those costs through rents, but there is no way to know if owners are overcharging or undercharging renters or if they are also charging renters for building water or wastewater service that renters are themselves not actually using.

Q. Will the Company's proposed change in rates have an impact on people who use the Company's service but are not direct customers of the Company?

A. It is impossible to know what the impact of the Company's proposed rates will be on indirect customers of the Company. Rents may increase in part to recover increases in water service costs, but rents increase for many reasons, and the extent to which any increases can be attributable to the Company's proposed rates and the timing of such increases cannot be determined.

Q. How is all of this affordability information useful?

A. Assessing affordability information of water and wastewater service for the entire residential customer population can demonstrate whether customers, in general, are having or would have difficulty paying their water bills under the Company's current or proposed tariff structure. Assessing affordability information of water and wastewater service for lower-income customers can indicate the number of customers that may be having trouble

paying their utility bills, where the customers are in the Company's service territory, and the extent to which those bills may pose challenges for certain customers. This can, in turn, inform decision-makers about the size and scope of efforts that may be needed to help these vulnerable customers better afford water and wastewater service, both in terms of general rate design proposals that can reduce the cost of Basic Water Service for all customers, including lower-income customers, and customer assistance programs that may include customer grants, tariff discounts, levelized billing, and outreach programs.

Q. What conclusions do you draw based on the Company's affordability analyses?

A. There are three conclusions that can be drawn from Company's affordability study:

- The affordability of the Company's water and wastewater service from 2012 through the forecast test period indicates that the way the Company has invested in and managed its water and wastewater systems has indeed been for the long-term benefit of our customers.
- The Company's water and wastewater service has been, is, and is expected to continue to be affordable for the majority of its residential customers, including under the rates proposed in this case.
- There are, however, groups of customers for whom affordability of water and wastewater service may be challenging.

Q. How do the Company's affordability analyses and mitigation strategies enhance the value of the Company's water and wastewater service?

A. All stakeholders (regulators, customers, consumer advocates, community leaders, employees, shareholders, etc.) benefit from a financially sound utility providing safe, reliable, and affordable service to its customers. The Company's analyses provide

important insights into the affordability of its services and can help inform all stakeholders on strategies for improving affordability for customer groups that may be struggling financially.

LOW-INCOME PROGRAMS

Current Program

Q. Please describe the Company's current BPD for water and wastewater service.

A. The Company's current BDP offers three tiers of discounts for both water and wastewater service based on different levels of household income, stated as multiples of FPL. The Company's current discount program is as follows:

TABLE 2 Eligible Customers	Water Service Charge Discount	Water Service Volumetric Discount	Wastewater Total Bill Discount
0% - 50% FPL	80%	80%	80%
51% - 100% FPL	65%	50%	55%
101% - 150% FPL	40%	25%	30%

Q. When was the BDP approved?

A. While the Company's low-income discount programs are well established, the current program offering different discounts for three tiers of household income was approved by the Commission in the Company's last base rate case in Docket No. R-2022-3031672.

Q. How many customers are eligible for the BDP?

A. Based on the affordability analysis provided in this case, the number of eligible customers for the current program by income level is as follows:

TABLE 3

Eligible Customers	Water	Wastewater
0% - 50% FPL	21,906	4,743
51% - 100% FPL	35,081	7,877
101% - 150% FPL	51,176	10,859

Expansion Proposal

Q. Is the Company proposing to make changes to the BDP as a part of this proceeding?

A. Yes. The Company is proposing an expansion of the existing program to include additional customers whose bills for water or wastewater service are likely to exceed 2% of household income.

Q. Please describe how the BDP will be expanded .

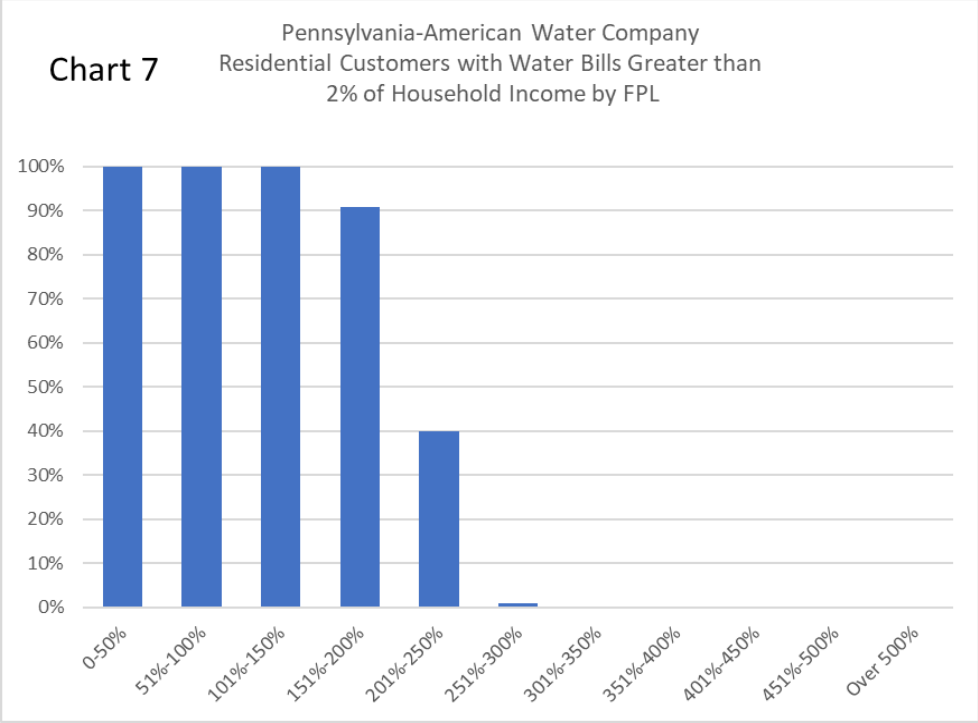
A. The Company is proposing in this case to add a fourth tier of eligibility to the current BDP and expand the program offerings to customers whose household incomes are between 151% and 200% of FPL. For water customers in this fourth tier of eligibility, the Company is proposing to offer discounts of 30% on the 5/8" meter charge and 15% on the volumetric rate. For wastewater customers in this fourth tier of eligibility, the Company is proposing to offer a discount of 20% on the total wastewater bill.

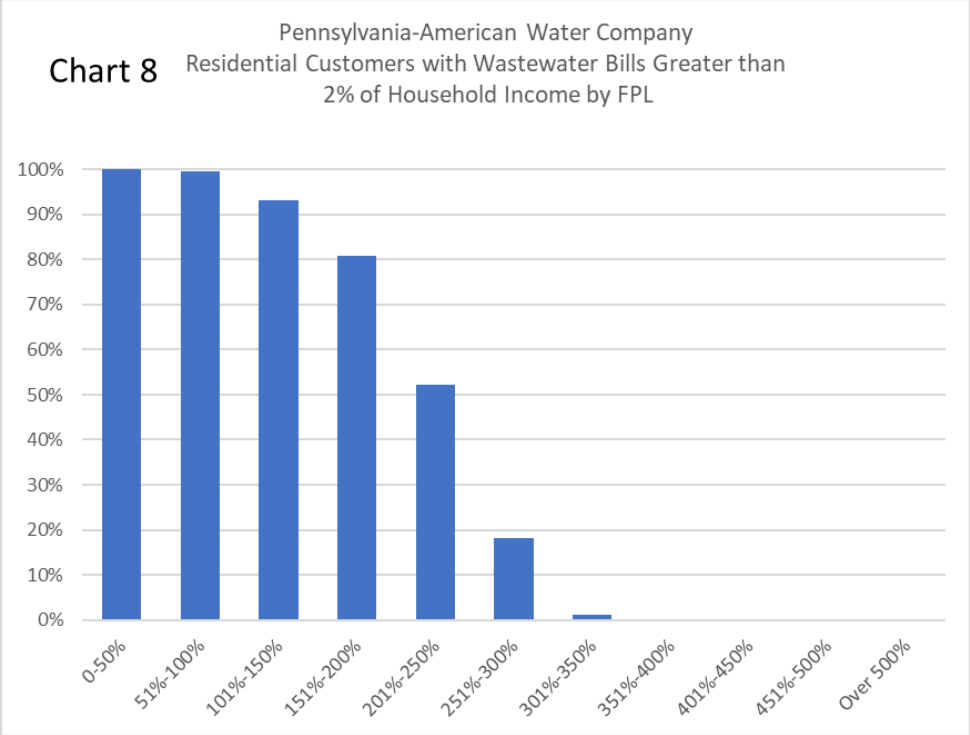
Q. Is the Company proposing any changes to the discounts offered to customers at or below 0-150% of FPL?

A. No. The Company is not proposing any changes to the programs for existing eligible customers. The proposed changes are only intended to expand eligibility to customers at the 151% to 200% FPL level.

Q. Why is the Company proposing to expand the BDP?

A. The Company is proposing to expand the low-income discount tariff to households with annual household income between 151% and 200% to address affordability issues under proposed rates in that demographic. The charts below show the percentage of customers at each interval of annual household income whose water or wastewater bills under the Company's proposed rates are expected to be more than 2% of household income prior to any discounts being offered.





These charts show that a majority of customers with household incomes between 151% and 200% of FPL will have bills for water and/or wastewater service at greater than 2% of household income. These customers are currently not eligible for the Company's low-income discount tariff. The Company's proposal to expand the current low-income discount tariff will increase affordability of service for these customers.

Q. If the BDP is expanded as the Company proposes, how many additional customers would become eligible for the BDP?

A. A substantial number of additional customers would be eligible for the BDP under the Company's proposal. Based on the Company's affordability analyses, the Company estimates that there are 51,252 residential water customers with household incomes between 151% and 200% of FPL, and 10,353 residential wastewater customers with household incomes between 151% and 200% of FPL.

Customer Impacts

Q. What will the impact be to newly participating customers in this program?

A. For newly participating customers with average monthly usage, the Company's proposed discounts in this fourth tier would equate to a bill savings of $16.23 for water (18% of the total bill) and approximately $20.00 per month for wastewater depending on the customer's specific rate and location.

Q. What participation rate is the Company assuming for the newly eligible 151%-200% FPL block?

A. For the purposes of ratemaking, the Company is assuming the same participation rate for the 151% to 200% FPL group that the Company observes in the 101% to 150% FPL group.

Q. Based on the total eligible population of customers and the expected participation rate, what level of additional discounts is the Company assuming in this proceeding?

A. The total associated level of annual discounts offered in this tier is expected to be approximately $3 million for water service and approximately $660,000 for wastewater service.

Q. How will this additional level of discount be recovered?

A. The additional costs associated with the BDP expansion will be recovered in the same manner as existing BDP costs – through residential customer base rates.

Q. What overall impact on affordability of service does the Company expect from the proposed expansion of these low-income discount tariffs?

A. The improvement in the affordability of service for participating customers in the 151% to 200% FPL group is expected to be significant. For water service, more than half of the

customers in the 151% to 200% FPL group whose bills were expected to be more than 2% of household income will now be below that threshold. For wastewater service, approximately one third of the customers in the 151% to 200% FPL group whose bills were expected to be more than 2% of household income will now be below that threshold.

RATE DESIGN

Introduction

Q. Do you sponsor exhibits that provide the Company's complete proposed rate design in this case?

A. Yes. Exhibits CBR-3 and CBR-4 provide the Company's proposed rate design for water and wastewater service in this case, which are based on the current rate design as modified by the proposals discussed below.

Q. Please discuss some of the important guiding principles associated with sound rate design.

A. There are a number of important principles that pricing analysts and policymakers consider when developing appropriate design mechanisms for retail water and wastewater service:

- **Cost Causation**: An important goal of rate design is to develop prices for water and wastewater service to retail customers that are intended to recover the Company's approved revenue requirement and that reflect the cost of providing service to retail customers. Cost of service results inform pricing decisions and guide how rates should be set such that each customer class contributes to the revenue requirement commensurate with their cost to serve. The principle of cost causation, which simply states that customers should pay for the costs that they are

deemed to cause the Company to incur, reflects the use of cost of service results in designing rates.

- **Revenue Stability**: Rates should be designed in a way that provides revenue stability to the utility and that can be reasonably expected to recover the utility's revenue requirement over the long run. Consistent recovery of the approved revenue requirement through well-designed rates helps the utility to prudently manage and invest in the water and wastewater systems, while poor rate design decisions can hamper the utility's ability to make investments, operate, and maintain the water and wastewater systems in a manner consistent with the long-term interest of its customers.
- **Efficiency of Use**: Rates should be designed to encourage the efficient use of water resources by customers. The volumetric charges for water service should appropriately reflect the variable cost of providing water service while also providing customers an appropriate incentive to conserve water and manage their bills. Rates should communicate to customers the full cost of providing water service.
- **Gradualism**: Changes in rate design should be made in a manner that avoids inappropriate levels of rate shock. Rate shock can come both from general increases in revenues that can affect all customers and from changes in rate designs that can cause large increases to specific groups of customers. Drastic changes in rates can cause customer confusion and dissatisfaction and have adverse effects on the utility's ability to provide quality customer service.

- **Avoidance of Discrimination**: Rates should not unduly discriminate between particular customer groups or provide different price signals to similarly situated customers taking similar services from the utility.
- **Simplicity and Feasibility**: Rate designs should be relatively simple, easy to understand, easy to communicate and manage, and should result in bills that are clear and understandable.
- **Affordability**: Development of rate designs that enhance the affordability of service to more vulnerable customers while still adhering to other more established principles of rate design is an important way that utility providers can enhance and maintain the value of service.

Q. How does the Company incorporate these guiding principles in its rate design?

A. Cost causation is the foundation of the Company's rate design. Revenue targets for customer classes, to be recovered through rate design, begin with the results of the Company's cost of service analysis, which allocates revenue requirements to customer class based on cost-causation principles. Cost causation, however, is not the be-all and end-all of rate design. All of the rate design principles I discuss are important; none more so than any other, and it is the consideration and balancing of these principles in total that constitutes the public policy aspect of ratemaking and leads to a determination of just and reasonable rates. Layered on top of cost causation are the other principles that I previously discussed (gradualism, revenue stability, avoidance of discrimination, affordability, for example), which ultimately result in a rate design that is fair to all customer groups and that is just and reasonable.

Water Rate Design

Q. Please describe the Company's current tariff structure for water service.

A. The Company currently offers water service in five different rate zones. These rate zones are as follows:

- Rate Zone 1 - General Statewide Rate
- Rate Zone 2 - Valley
- Rate Zone 3 - SLIBCO
- Rate Zone 4 - Turbotville
- Rate Zone 5 - Steelton

The largest of these rate zones by far is Rate Zone 1, with over 99% of the Company's total water revenue.

Q. Please describe the Company's current rate structures for these tariffs for residential and nonresidential customers in Rate Zone 1.

A. The Rate Zone 1 tariff offers service to all residential and non-residential customer classes through a monthly fixed charge that varies with the size of the meter (identified in PAWC's water tariff as a "service charge") and volumetric rates (identified in PAWC's water tariff as "consumption charges"). There are separate rate structures for each customer class.

- The residential water service charge for most customers is $17.50 per month for a 5/8", ¾", 1" and 1½" meter, and the service charge increases with the size of the meter beginning with 2" meters. A single volumetric rate of $1.6108 per hundred gallons applies to all residential customers.
- The commercial water service charge begins at $18.50 per month for a 5/8" meter, and the service charge increases with the size of the meter beginning with ¾"

meters. A two-block volumetric rate applies to commercial customers of $1.5613 per hundred gallons for the first 16,000 gallons per month and $1.1493 per hundred gallons for usage over 16,000 gallons per month.

- The municipal water service charges are the same as the commercial service charges, but the volumetric rates are different. A two-block volumetric rate applies to municipal customers of $1.6700 per hundred gallons for the first 16,000 gallons per month and $0.9140 per hundred gallons for usage over 16,000 gallons per month.
- The industrial water service charge begins at $28.00 per month for a 5/8" meter, and the service charge increases with the size of the meter beginning with ¾" meters. A three-block volumetric rate applies to industrial customers of $1.4200 per hundred gallons for the first 16,000 gallons per month, $1.0804 per hundred gallons for the next 584,000 gallons of usage per month, and $0.8499 per hundred gallons for usage over 600,000 gallons per month. In addition, the Company offers industrial curtailment rates that are identical to those described above, but with an additional rate step of $0.5110 per hundred gallons for all usage above 15,000,000 gallons per month and the requirement that the customer meet specified requirements to qualify for the rate, such as a minimum monthly purchase volume, a minimum load factor, and on-site water storage for industrial (non-fire protection) use during periods of curtailment.
- The Sales to Other Water Utilities service charge begins at $29.10 per month for a 5/8" meter, and the service charge increases with the size of the meter beginning with ¾" meters. The volumetric rates for Group A service is $0.7950 per hundred

gallons for all water service and the volumetric rate for Group B service is $1.1300 per hundred gallons for all water service.

Q. Does the Company have special rates for larger customers?

A. The Company offers a limited number of special rates designed to retain and attract the load of larger customers in Rate Zone 1 that have competitive alternatives to service from the Company. Currently, the Company has customers that are served on two of those rates: the Demand-Based Industrial Service rate and the Demand-Based Resale Service rate.

Q. Does the Company offer fire protection service?

A. Yes. The Company offers both public and private fire protection service. Public fire protection rates are based on a monthly hydrant fee that varies depending on where in the service territory the service is offered and the vintage of the rates. These rates are subject to the requirement that revenues from fire hydrants can be no more than 25% of the calculated cost of service for public fire service. Private fire service rates are also offered and are generally based on the size of the service line used in providing the service. Service is offered on both a metered and an unmetered service basis.

Q. Please describe the Company's current rate structures in the other pricing zones where water service is offered.

A. In zones other than Rate Zone 1, the Company's rate structures are as follows:

- Rate Zone 2 (Valley): Service in Rate Zone 2 is offered to all customers through a monthly service charge of $28.12 for all customers, and a volumetric charge that provides an allowance for the first 3,400 gallons of monthly usage at no additional

charge, and a volumetric rate of $0.8400 per hundred gallons for all water used above 3,400 gallons per month.[4]

- Rate Zone 3 (SLIBCO): Service in Rate Zone 3 is offered to all customers through service charges that increase with the size of the meter starting at $63.55 for a 5/8" and 2" meter and increasing to $309.90 for an 8" meter. Volumetric rates for all customers start at $1.8940 per hundred gallons for the first 20,000 gallons of usage per month and drop to $1.6780 per hundred gallons for the next 80,000 gallons of usage, and $1.3810 per hundred gallons for all usage above 100,000 gallons per month.
- Rate Zone 4 (Turbotville): Service in Rate Zone 4 is offered to all customers through a monthly service charge that varies with the size of the meter and volumetric rates. Service charges are identical to Rate Zone 1. Volumetric rates are the same as Zone 1, except for the commercial rate, which is $1.0706 per hundred gallons for all commercial usage.
- Rate Zone 5 (Steelton): Service in Rate Zone 5 is offered to all customers through a monthly service charge that varies with the size of the meter and volumetric rates. Volumetric rates are set at $1.6108 per hundred gallons for the first 20,000 gallons of usage per month and $1.2500 per hundred gallons for usage above 20,000 gallons per month. For all customers except for industrial customers, monthly service charges are identical to those for Rate Zone 1. For industrial customers, the

[4] The Company's currently approved tariff includes a step-in rate for Valley. The rates shown here will be effective November 19, 2023.

monthly service charges are $24.83 for 5/8" and ¾" meters and escalate for larger meter sizes above ¾".

Q. Is the Company proposing consolidation of rate zones for water service in this case?

A. Yes. The Company is proposing in this case to move Rate Zone 2 Valley, Rate Zone 3 SLIBCO, Rate Zone 4 Turbotville, and Rate Zone 5 Steelton rates to Rate Zone 1 rates. The Company is also proposing to move Farmington toward consolidation with Rate Zone 1. No changes are proposed for Audubon rates.

Q. Is the Company proposing to change the monthly service charges in this case?

A. Yes. Consistent with the cost-of-service analysis supported by Company witness Connie Heppenstall in PAWC Statement No. 12, the Company is proposing a 5/8" monthly meter service charge of $20.00 per month for residential, commercial, and municipal customers in Rate Zone 1 and in the other rate zones being combined with Rate Zone 1. The Company is proposing to increase meter charges for residential, commercial, and municipal customers for other meter sizes proportionally, except that residential meter charges for ¾", 1", and 1½" meters will all be set at $20.00. No increases are proposed to existing Rate Zone 1 industrial and Other Water Utility ("OWU") meter charges.

Q. Is the Company proposing to change the rate structure associated with its volumetric rates?

A. The only changes in the volumetric rate structure proposed in this case are changes in the steps for volumetric rates necessary to move the rate zones I previously mentioned (Steelton, Valley, and SLIBCO) to Rate Zone 1 rates. No other changes in volumetric rate structures are being proposed.

Q. Are there any other changes the Company is proposing to its water service rate design?

A. The only other change proposed to the Company's water service rate design is an expansion of the low-income discount tariff program, as described earlier in my testimony.

Q. Please describe how the Company is proposing to allocate its proposed revenue increase for water service to each customer class.

A. The Company is proposing in this case to set water service rates based on the cost of service studies sponsored by Ms. Heppenstall, with the exception of the increase to the OWU class, which is capped at 30%, and the remaining OWU allocated revenue requirements allocated to other customer classes based on relative levels of cost of service. In addition, the Company is proposing a reallocation of a portion of its wastewater revenue requirements to its water service customers consistent with Act 11 of 2012, which I describe later in my testimony.

Q. Do you have a schedule that shows the Company's current and proposed rate design for water service?

A. Yes. The Company's proposed rate design in this case for water service is provided in Exhibit CBR-3.

Wastewater Rate Design

Q. Please describe the Company's current tariff structure for wastewater service.

A. The Company provides wastewater service under a variety of different rate schedules and in a variety of different rate zones. The categories of rate zones under which the Company offers wastewater service are as follows:

- Sanitary Sewer Systems ("SSS"):
    - Rate Zone 1: PAWC Statewide
    - Rate Zone 2: New Cumberland
    - Rate Zone 5: Valley
    - Rate Zone 7: York
    - Rate Zone 8: Foster Township
    - Rate Zone 9: Royersford
- Combined Sewer Systems ("CSS"):
    - Rate Zone 3: Scranton
    - Rate Zone 4: Kane
    - Rate Zone 6: McKeesport

Q. Please describe the Company's current rate structures in its SSS rate zones.

A. Rate structures differ for the six rate zones in the SSS group as follows:

- Rate Zone 1 (Statewide Rate): Service in Rate Zone 1 is offered through a single monthly service charge and volumetric rate for all residential and nonresidential service. The monthly service charge is $14.30 for residential customers and $35.00 per month for nonresidential customers. The volumetric rate applies to all metered usage and is $2.8750 per hundred gallons for residential service and $2.1030 per hundred gallons for nonresidential service. Unmetered service is offered to residential customers at $106.00 per month.
- Rate Zone 2 (New Cumberland): Service charges in Rate Zone 2 are identical to service charges in Rate Zone 1, but the volumetric rates for service are slightly

lower. In Rate Zone 2, the volumetric rate is $2.4500 per hundred gallons for residential service and $1.9000 per hundred gallons for nonresidential service.

- Rate Zone 5 (Valley): Rates in Rate Zone 5 are identical to Rate Zone 1.
- Rate Zone 7 (York): Service in York is offered through a single monthly service charge for all customers of $18.00 per month, which includes an allowance of 2,000 gallons, plus a volumetric rate of $0.9370 per 100 gallons for usage over 2,000 gallons per month. The Company's currently approved tariff allows for a second step of rates to be effective May 27, 2025. These rates include a service charge of $18.00 per month for residential customers and $30.00 per month for nonresidential customers. The volumetric rate effective May 27, 2025, consists of a free allowance of 2,000 gallons per month and a volumetric charge for service above the allowance of $2.7375 per hundred gallons for residential customers and $1.6380 per month for nonresidential customers. In addition, bulk service will be offered through a volumetric rate of $0.3750 per hundred gallons for Rate A bulk customers and $0.261 per hundred gallons for Rate B bulk customers.
- Rate Zone 8 (Foster): Rates in Rate Zone 8 consist of a flat rate of $85.00 per equivalent dwelling unit ("EDU") per month until December 31, 2024. The Company's currently approved tariff includes a second step for Foster of a flat rate of $106.00 per EDU per month, which is identical to the flat rate in Rate Zone 1.
- Rate Zone 9 (Royersford): Service in Royersford is offered through a single monthly service charge for all customers of $48.00 per month and a volumetric rate consisting of an allowance for the first 3,000 gallons at no additional charge and a volumetric charge of $0.9400 per hundred gallons for service above the allowance.

In addition, an unmetered service option is available for $50.00 per month to residential customers and $67.00 to nonresidential customers.

Q. Please describe the Company's current rate structures in its CSS rate zones.

A. The rate structures differ for the three rate zones in the CSS group as follows:

- Rate Zone 3 (Scranton): Service in Rate Zone 3 is offered through a single monthly service charge and volumetric rate for all residential and nonresidential service. For residential customers, the monthly service charge is $19.50 and the volumetric rate is $2.3510 per hundred gallons, respectively, at proposed rates. For nonresidential customers, the monthly service charge is $35.00 and the volumetric rate is $1.7270 per hundred gallons. Unmetered service is offered to residential customers at $95.00 per month.
- Rate Zone 4 (Kane): Service in Rate Zone 4 is offered through a monthly service charge structure to all customers at $40.00 per month for customers with a 5/8" water meter and $100.00 per month for customers with water meters larger than 5/8" diameter. Volumetric rates are offered through a stepped rate at $2.10 per hundred gallons for the first 10,000 gallons of metered water usage per month and $1.80 per hundred gallons for all metered water usage above 10,000 gallons per month. Unmetered service is offered to residential customers at $110.00 per month.
- Rate Zone 6 (McKeesport): Service in Rate Zone 6 is offered through a monthly service charge of $14.30 per month for residential accounts and $35.00 per month for nonresidential accounts. A volumetric rate of $2.8750 per hundred gallons applies to residential usage and a volumetric rate of $2.1416 per hundred gallons applies to all non-residential usage. Additionally, there is a bulk service rate in

McKeesport that consists of a $86.00 per month service charge and a volumetric rate of $1.6680 per hundred gallons.

Q. Please describe the proposed rate structures in the other rate zones in this proceeding.

A. The rate structures for the remaining three rate zones not included in the CSS and SSS groups are as follows:

- Brentwood Acquisition: Upon closing, collection service in Brentwood will be offered through a single monthly service charge for all customers of $4.57 per month and a volumetric rate consisting of $0.8910 per hundred gallons of usage. The Company has proposed in the Brentwood acquisition proceeding that, consistent with Brentwood's current practice, PAWC will be the billing agent for charges for treatment from the Allegheny County Sanitary Authority ("ALCOSAN") and such charges will be directly flowed through to Brentwood customers.
- BASA Acquisition: Upon closing, service in the BASA territory will be offered on an unmetered basis only and will be based on EDUs. The EDU rate for the BASA territory will be $45.50 per EDU for most customers.

Q. Is the Company proposing to recover all of the revenue requirements for wastewater service from its wastewater customers?

A. No. The Company is proposing to reallocate a portion of the wastewater revenue requirement calculated in this case to its water service customers under the provisions of Act 11 of 2012 ("Act 11"). I will describe this reallocation and provide support for this reallocation in the next section of my testimony.

Q. Is the Company proposing consolidation of rate zones for wastewater service in this case?

A. Yes. Consistent with the Commission's goal of single-tariff pricing, the Company is proposing to move all CSS customers to a single tariff with a single set of rates, with the exception of the Scranton system, and is proposing to move New Cumberland and Valley to SSS Wastewater Rate Zone 1. The Company is also proposing to set fixed charges to be the same for all wastewater customers unless prohibited by prior agreement and move rates in the SSS group for the York and Royersford system closer to Zone 1 Rates.

Q. What is the Company's proposal for wastewater service rate design and tariff consolidation in this case?

A. The Company's proposal for wastewater service rate design and tariff consolidation in this case includes the following:

- The Company is proposing to set all residential service charges at $20 per month and all non-residential service charges at $50 per month, with the exception of (a) BASA where the residential service charge is proposed at $10 per month, (b) Brentwood where the residential service charge is proposed at $10 per month and the non-residential service charge is proposed at $20 per month, and Scranton.
- No changes are proposed for Scranton rates except for the roll-in of the Distribution System Improvement Charge ("DSIC") mechanism, which results in the same percentage increase to all rate components in Scranton.
- The Company is proposing to merge rates for Kane and McKeesport customers into a single rate design that results in residential bills at average usage levels of approximately $110 per customer, which is approximately $10 higher per customer

than SSS rates, which recognizes the differences in operating systems between CSS and SSS systems. Volumetric rates for non-residential customers for Kane and McKeesport are set at $1.90 per hundred gallons. Port Vue rates are proposed to be merged into McKeesport/Kane rates, but no increase is proposed for McKeesport bulk customers.

- SSS volumetric rates are increased to a level that brings residential bills for average levels of usage for Zone 1 customers to approximately $100 per month, with proportional increases to non-residential volumetric rates. No increases are proposed for large industrial contract customers.
- The Company is proposing to phase-out the allowance for the first 2,000 gallons in York rates by setting the volumetric rates for York at $0.75 per hundred gallons for the first 2,000 gallons for residential customers, and $0.40 per gallon for non-residential customers. Volumetric rates above 2,000 gallons are set equal to Zone 1 rates.
- Royersford volumetric rates are increased to a level that results in residential bills for average usage at approximately $65 per month, which is a $15 increase and is consistent with average bills and increases for York customers. Non-residential volumetric rates in Royersford are increased to $0.75 per hundred gallons.

Q. Is the company proposing any changes to its wastewater rate design in this case?

A. Yes. The Company is proposing to change the way that it determines the volumetric component of bills for residential customers from the method used today, where volumetric charges are based on total metered water usage for the month, to a methodology referred to as winter averaging.

Q. Please describe the concept of winter averaging.

A. Winter averaging is a method for determining volumetric components of wastewater bills that attempts to separate metered water usage that is likely to go through the wastewater system from water usage that is used for outdoor purposes in the summertime (e.g., watering lawns, filling pools, etc.). Under winter averaging, a customer's bill in the winter time is determined by actual metered water usage for the month, and in the summertime the customer's bill is determined by the lesser of actual metered water usage for the month or the average water consumption for that customer in the winter months.

For example, in the winter period, if a customer's metered water use is 4,000 gallons, the customer is billed for 4,000 gallons of water usage on their wastewater bill. In the summer period, if a customer's metered water use is 6,000 gallons and their average winter usage over the previous winter months was 5,000 gallons per month, the customer would only be billed for 5,000 gallons on their wastewater bill. If that customer's metered use was 3,000 gallons and their average winter usage over the previous winter months was 5,000 gallons per month, they would be billed for 3,000 gallons of usage on their wastewater bill.

Q. Is this a common way to design volumetric rates for wastewater service?

A. It is. There are numerous examples of wastewater utilities that bill customers in the summertime based on this winter averaging method. The Company's affiliates in Illinois and New Jersey used this method before determining wastewater bills in the summertime. Illinois-American Water Company, which has a significant wastewater customer base, bills all of its residential customers across the state using this winter averaging methodology. New Jersey-American Water Company, which also has a significant wastewater customer

base, uses this winter averaging methodology in select tariffs in the New Jersey-American Water Company service territory.

Q. How is the Company defining winter months under its winter averaging proposal?

A. The Company is defining the winter months for the winter averaging period to be January, February, and March. These three months are the months for which the baseline usage will be determined for the purposes of billing for the rest of the year.

Q. Is the winter average calculation the same for every customer?

A. No. The winter averaging calculation will be customized to each individual customer. The methodology will be the same for all customers, but the calculations will be done on an individual customer basis so that each individual customer will be billed based on their winter average usage, not the average winter monthly usage for residential customers in total.

Q. What happens in cases where the customer is new or otherwise doesn't have any winter billing history to base a winter average usage on?

A. In cases where the customer is new or there is no winter average billing data upon which to base a calculation, the Company will assume a standard usage level of 3,000 gallons per month for a comparison point for billed summer usage.

Q. Why is the Company proposing to move to a winter average rate design for residential wastewater service?

A. The Company is proposing to move to this winter averaging methodology to more closely align wastewater bills in the summertime with cost-causation rate design principles. Under the current rate structure, customers are charged for wastewater service in the summertime based on metered water usage that is not actually going through the wastewater system.

This winter averaging methodology remedies that inconsistency in the Company's wastewater rate design and better aligns customer usage with the amounts billed.

Q. What effect does this proposed move to winter averaging have on volumetric rates for wastewater service?

A. The effect of this winter average methodology on wastewater volumetric rates is that rates will be slightly higher than they otherwise would have been for the same revenue requirement. Volumetric billing determinants for wastewater service will be slightly lower than they otherwise would have been because usage that would have been included in the summertime, as water that was being used for outdoor purposes will now be excluded from the rate calculation.

Q. Do you have a schedule that shows the Company's current and proposed rate design for wastewater service?

A. Yes. The Company's proposed rate design in this case for water service is provided in Exhibit CBR-4.

Scale-Back Proposal

Q. In the event that the Commission approves a revenue requirement in this proceeding that is less than that proposed by the Company, either for water service or wastewater service or both, what is the Company's proposal for the scale back of its proposed water and wastewater rates?

A. In the event that the Commission approves a revenue requirement that is less than that proposed by the Company, the Company proposes to reduce the revenue requirements for water service and wastewater service, and the proposed amount of reallocation from wastewater to water under Act 11 to be proportional so that the same relative percentages

to the total of water service revenue requirement, wastewater service revenue requirement, and Act 11 reallocation amounts be maintained at proposed levels. The Company believes that the rate design proposed in this case is reasonable and that the levels of rates for water service and wastewater service relative to each other should be maintained as proposed in the event that a lower revenue requirement is approved by the Commission in this case.

REALLOCATION OF WASTEWATER REVENUE REQUIREMENT

Company Proposal

Q. What is the Company's proposal with respect to wastewater revenue requirement reallocation?

A. The Company is proposing to reallocate a portion of the total calculated wastewater revenue requirement shown in Exhibit 3-A to water service customers. This reallocation of wastewater revenue requirement to water customers is provided for in Act 11. Under Act 11, the Commission may, when approving base rates and after providing notice and an opportunity to be heard, authorize utilities to allocate a portion of the wastewater revenue requirement to the combined water and wastewater customer base if in the public interest.

Q. What portion of the wastewater revenue requirement is the Company proposing to reallocate to water customers?

A. The total calculated revenue requirement for wastewater service is $263,574,897. The Company is proposing to recover $192,487,503 of that revenue requirement from wastewater customers under its proposed rates in this case. This is approximately 73% of the total. The remaining $71,087,394 is proposed to be a revenue requirement reduction for wastewater service customers that will be recovered from water service customers.

Q. Please provide a summary of the amounts of PAWC's proposed wastewater revenue requirement that it proposed to be reallocated to water customers, by customer class, pursuant to Act 11.

A. The reallocation of wastewater revenue requirements by water customer class is as follows:

TABLE 4
Wastewater Reallocation to Water Customers by Class

Water Customers by Class	Amount
Residential	$46,505,573
Commercial	$18,320,153
Municipal	$3,939,176
Industrial	$1,635,240
Private Fire	$341,990
Other Revenue	$345,262

Q. Please identify the amounts to be reallocated to water customers under Act 11 by wastewater rate zone category.

A. The reallocation of wastewater revenue requirement by wastewater pricing group is as follows

TABLE 5
Wastewater Reallocation by Wastewater System

Wastewater System	Amount
Group SSS	$31,962,411
Group CSS	$16,007,052
Brentwood	$1,565,232
BASA	$21,552,699

Rationale

Q. What is the guiding principle behind the Company's reallocation proposal?

A. The guiding principle behind the Company's reallocation proposal is to target residential bills for average wastewater usage of approximately $100 per month for customers in the

SSS Zone and $110 per month for customers in the CSS Zone, subject to the other constraints I have already noted. This reallocation also results in residential bills for average water usage of approximately $90 per month, which brings parity to residential bills for water service and wastewater service at average usage levels. This also results in a BTI Ratio for wastewater residential customers that is less than 2023 levels, which in turn helps to manage the affordability of wastewater service and bring a level of parity to the affordability of water and wastewater service.

Q. Why is the Company proposing a reallocation of wastewater revenue requirements to water customers under Act 11 in this case?

A. The Company is proposing a reallocation of wastewater revenue requirements to water customers under Act 11 for three reasons:

- Rate increases in several wastewater zones would be significant if the full revenue requirement proposed for those rate zones were to be implemented. Affordability of wastewater service in those communities would be significantly eroded without an allocation of a portion of those revenue requirements to water customers.
- In the BASA system, the parties in that acquisition proceeding have agreed to propose a 40% increase for BASA customers in the first case in which BASA is included, which leaves a significant gap between revenues at proposed rates and the revenue requirements to serve the BASA system proposed by the Company. After the proposed 40% increase as agreed to in the settlement, there is an approximate $21.5 million shortfall the Company proposes to recover from water customers through the Act 11 reallocation.

- Similar to the BASA system, the Company in the Brentwood acquisition proceeding is targeting an 11% bill increase (inclusive of ALCOSAN charges) for both residential and non-residential customers in the first base rate case in which Brentwood is included, which leaves a gap of approximately $1.6 million between revenues at proposed rates (inclusive of the 11% increase) and the revenue requirements to serve the Brentwood system proposed by the Company, which the Company proposes to recover from water customers through the Act 11 reallocation.
- In the Scranton system, the Company is not permitted to propose increases in rates that would result in annual revenues of $26,272,739, as explained in the direct testimony of Stacey D. Gress (PAWC Statement No. 4). This limitation means that the proposed revenue requirement increase of approximately $16 million for the CSS Group would otherwise have to be recovered from customers in Kane and McKeesport, which would result in significant increases for those customers.

Q. Is it in the public interest in this proceeding to reallocate a portion of the wastewater revenue requirement to water customers?

A. Yes, the proposed reallocation of wastewater revenue requirement to water service customers is appropriate and in the public interest from both a rate design and a policy perspective.

Q. Why is the Company's proposal in the public interest from a rate design perspective?

A. A primary rate design principle that supports the partial reallocation of wastewater cost of service to water customers is the principle of gradualism. The gradualism principle in rate design is based on the idea that changes in rates and rate design should be made in a way

that avoids rate shock. Rate shock can come both from general increases in revenues that can affect all customers, as well as from changes in rate designs that can cause large increases to specific groups of customers. Drastic changes in rates can cause customer confusion and dissatisfaction and have adverse effects on the utility's ability to provide quality customer service. The increases that would be applied to certain communities in the Company's wastewater territory, absent the Company's reallocation proposal, would certainly fall within this concept.

Another important rate design principle is the concept of affordability. As I mentioned previously, it is certainly in the public interest to have affordable water and wastewater service for as many customers as possible. Under the Company's proposed benchmark of 2% of household income at the individual household level, the Company's proposal seeks to maximize the total number of customers for whom water and wastewater service will fall below that threshold.

Q. What are the important policy considerations that support the Company's proposal?

A. From a policy perspective, it is important to note that PAWC is an integrated company that provides both water and wastewater services on a consolidated basis. The Company provides such services through the efforts of both PAWC employees and the resources of the Service Company. This consolidation of functions creates opportunities to capture economies of scale that ultimately will drive down costs to customers, which do not exist where water and wastewater operations are fragmented. It is in the long-term best interest of our customers and the Commonwealth of Pennsylvania to adopt policies that encourage the development of these cost-reducing or mitigating economies of scale. The temporary

reallocation of revenue requirement between water and wastewater systems is an important piece of that equation.

Capital expansion plans often drive the need for utility rate increases. As PAWC witness Bruce Aiton points out in PAWC Statement No. 3, a significant driver of this rate increase request is PAWC's ongoing infrastructure investment plans. In the short term, capital additions in different parts of the Company's water and wastewater systems will exhibit peaks and valleys. This can be especially true in newly acquired systems where upfront investment needs may be more significant than in other systems where the Company has been making more modest, annual investments over a longer period of time. Over time these investment plans will revert to an average long-term investment pattern, and the associated changes in rates will reflect that long-term investment pattern. The initial rate changes in newly acquired systems can be extreme, however, if all of the investments are required to be recovered exclusively from the customers of those systems upfront. A reallocation of a portion of the revenue requirement to a larger customer base can ease the burden on new system customers and further the goal of consolidation and prudent investment in these systems. The long-term benefits of consolidation are already experienced by existing customers, and this proposal allows those benefits to be extended to new customers as well.

Impacts to Customers

Q. What will be the impact of the Company's proposal to reallocate a portion of wastewater revenue requirement to water service customers on the Company's water service bills?

A. Based on the Company's cost of service and proposed customer class revenue allocation in this case, this reallocation results in an increase in residential water volumetric rates of $0.19 per hundred gallons, which would increase the monthly water bill of a Rate Zone 1 residential water customer with an average usage of 3,200 gallons per month by approximately $6.08 per month. In contrast, this reallocation results in lower wastewater residential bills for approximately the same usage level of anywhere from $10 to $90 per month depending on the rate and location of the customer.

QUANTITATIVE STATISTICAL ANALYSIS OF WATER CONSUMPTION

Introduction

Q. Are there revenue adjustments the Company is proposing in this case that require quantitative analysis of water consumption by PAWC's water customers?

A. Yes. I will explain the modeling used to develop the revenue forecasts for residential, commercial and municipal customers, and in the next section, I will discuss the development of the revenue projections for all customer classes (residential, commercial, industrial, municipal, and sales for resale). For residential, commercial, and municipal customers, the Company is proposing adjustments for the normalization of the actual billing determinants for the Historic Test Year ending June 30, 2023 ("HTY"), related to trends in declining use, weather normalization, and the impact of the COVID-19 public health emergency on water consumption for PAWC's water customers. These adjustments require the Company to analyze water consumption and determine (1) if there is a significant and pervasive rate of decline in water use per customer over time; (2) if there are significant relationships between water consumption and weather conditions in the Company's service territory, if weather was different from normal in the HTY period, and

assuming both of those conditions exist, if a weather normalization adjustment to usage is appropriate to reflect normal weather conditions for the Future Test Year ending June 20, 2024 ("FTY"), and the FPFTY; and (3) if the COVID-19 public health emergency has had a significant impact on water consumption for PAWC's customers, to determine if a COVID-19–related adjustment to usage is appropriate for the HTY and FPFTY.

Q. How do you determine the parameters and relationships necessary to analyze declining water use, weather impacts on water consumption, and the impact of COVID-19 on water consumption for PAWC's customers?

A. The parameters and relationships necessary to analyze declining use, weather, and COVID-19 on water consumption for PAWC's customers are estimated through the use of statistical linear regression modeling.

Review of Methodologies

Q. What is a statistical linear regression model?

A. Statistical linear regression modeling is a commonly used type of mathematical predictive analysis. The overall idea of regression modeling is to examine two things: (1) whether a set of independent explanatory variables do a good job of predicting an outcome (dependent) variable, and (2) which independent explanatory variables are significant predictors of the dependent variable, and in what way in particular do they help predict the results of the dependent variable.

There are three major uses for statistical linear regression analysis. These major uses are: (1) determining the predictive power of independent explanatory variables; (2) forecasting the effect that independent variables have on a dependent variable; and (3) trend forecasting. First, the regression analysis can be used to identify the strength of

the effect that independent explanatory variables have on a dependent variable. A typical question is: "What is the strength of the relationship between summer heat, precipitation, and water sales?" Second, the regression analysis can be used to forecast effects or impacts of changes. That is, the regression analysis helps us understand how much the dependent variable changes with a change in one or more of the independent variables. A typical question is: "What volume of water sales can the Company expect to lose for each inch of rainfall above normal in any given period?" Third, regression analysis can predict trends and future values. The regression analysis can be used to get point estimates of future values of the dependent variable based on assumed values for the independent variables. A typical question can be: "Given current trends in water sales, what can we expect water sales to be each month next year assuming normal weather?"

Q. What does a statistical regression model produce?

A. A statistical linear regression analysis is a way of mathematically validating which independent variables have a significant impact on the dependent variable – i.e., the main factor, or the factor you are trying to better understand or predict. A statistical linear regression model produces an equation that describes a historical relationship between a set of independent variables and a single dependent variable that can be used to forecast future values of the dependent variable based on assumed values of the independent variables. An example of such an equation is shown below:

UPCn = a0 + (a1 x RAINn) + (a2 x CDDn) + (a3 x HDDn) +
(a4 x COVIDn) + (a5 x TIMEn)

Where: UPCn = Use per customer in month n
RAINn = Rainfall in month n

		CDDn =	Cooling Degree Days ("CDD") in month n
		HDDn =	Heating Degree Days ("HDD") in month n
		COVIDn =	COVID-19 effect in month n (0% to 100%)
		TIMEn =	Year/Month for month n
	and:	a0 =	constant term
		a1 =	coefficient for RAIN
		a2 =	coefficient for CDD
		a3 =	coefficient for HDD
		a4 =	coefficient for COVID-19 impact per customer
		a5 =	coefficient for TIME (declining use value)

In this example, use per customer is the dependent variable (outcome) and all other variables are independent variables (predictors).

Q. Can statistical linear regression models be used to weather normalize historical water sales for different customer classes?

A. Yes. In the statistical model in the example above, the a1 coefficient for RAIN can be used to estimate the impact of rainfall on use per customer in any given historical period and estimate what the usage per customer would have been if rainfall had been different, especially when actual precipitation was higher or lower than normal. Below is a sample calculation of how weather normalization works with a statistical regression model that uses weather as a strong predictive independent variable that affects the use per customer dependent variable.

IMPACTn = a1 x (ACTUAL RAINn – NORMAL RAINn)

Where: IMPACTn = Weather impact due to abnormal rainfall in period n

ACTUAL RAINn = Actual Rainfall (in inches) in period n

NORMAL RAINn = Average Rainfall (in inches) in period n

If the value of the a1 coefficient for rainfall is -0.30 in this example, actual rainfall for the period is 6 inches and normal rainfall for the period is 4 inches, the weather impact for the period due to higher-than-normal rainfall is a negative 600 gallons per customer, meaning that the Company sold 600 fewer gallons per customer of water than it otherwise would have [-0.30 x (6 – 4) = -0.60]. If there are multiple weather variables in the statistical regression analysis, this calculation is completed separately for each variable and the sum of the calculations is rolled up into a single weather impact. This approach to weather normalization allows an analyst to independently assess the impact of each weather component, and also allows an analyst to state the weather impacts over time both in terms of consumption and in terms of revenues by multiplying the consumption impact by a volumetric price.

Q. Can statistical linear regression models be used to estimate the impacts of COVID-19 on water sales for different customer classes?

A. Yes. In the statistical model example above, the a4 coefficient for COVID-19 is the estimate of the impact of the COVID-19 public health emergency on monthly use per customer. The historical data set contains a variable for each month that indicates the assumed qualitative level impact from COVID-19 in that month. In all months prior to April 2020, that value was set at 0%. From April 2020 on, that value is set at 100% when maximum COVID-19 impacts are observed, or at a level less than 100% where we see

reduced COVID-19 impacts on usage. The coefficient for the COVID-19 impact variable estimates the average monthly use per customer based on the months that have been designated as COVID-19 months. This coefficient can then be used to (1) identify a normal level of usage that is not influenced by the impact of COVID-19, in a manner similar to a normalization calculation that adjusts for the influence on water usage associated with weather conditions that depart from normal, and (2) reflect estimates of future impacts of the COVID-19 public health emergency.

Q. Can these models be used to estimate trends in declining use per customer for different customer classes?

A. Yes. In the same statistical model example represented above, the a5 coefficient for TIME is the estimate of declining use per customer per month. This coefficient measures the rate of decline in use per customer over the historical data set independent of the effect of any other variable in the model. The historical data set contains a variable for each month that is a timestamp that starts at one for the first month in the dataset and increases by one for every month going forward. This acts as a trend variable for both historical periods in the dataset and future forecast periods. The coefficient for this trend variable is applied to future increasing values of the trend which results in decreasing forecasts of use per customer.

Q. How does one assess the accuracy of a statistical linear regression model?

A. A statistical linear regression model produces a set of statistics that can be used to judge the accuracy and fitness of the model. The most common statistics are (1) the "R-Squared" value, which is a statistical measure in a regression model that determines the proportion of variance in the dependent variable that can be explained by the independent variables,

and (2) values and standard deviations for the coefficients, which can be used to determine "t-statistics" and "p-values," which tell how accurately and precisely the different coefficients are being calculated and whether the associated independent variables are strong predictors of the dependent variable.

In the equation described above, the "R-Squared" value is a statistic that measures the percentage of variation from period to period in the dependent variable (water use per customer) that is explained by the mathematical relationship with the independent variables. The R-Squared can range from 0% (no explanatory ability) to 100% (perfect explanatory accuracy). In general, the higher the R-squared, the better the predictive value of the model.

The second major test involves comparisons of the values of each of the model coefficients and their associated standard errors. Because a statistical regression model estimates an explanatory relationship between a dependent variable and a set of independent variables, there will always be some degree of uncertainty around what that explanatory relationship actually is. As a result, each model coefficient has a level of uncertainty around it, and this level of uncertainty is represented by measuring how many standard errors each coefficient is away from zero, which the model also calculates.

Dividing the value of each coefficient by its standard error yields a t-statistic, which can be used to judge the predictive power of the independent variable that the coefficient represents. For example, in the case of the generic statistical model described above, if the value of the a1 coefficient for rainfall is -0.30 and the standard error for that coefficient is 0.05 (meaning that the real value of the coefficient could be anywhere between -0.35 and -0.25 with -0.30 being the most likely value), the value of the t-statistic is -6.0 (-0.30

divided by 0.05 = 6.0). Generally speaking, t-statistic values greater than 2.0 for positive coefficients or less than -2.0 for negative coefficients indicate an acceptable predictive relationship between that independent variable and the dependent variable of interest. The higher the t-statistic value, the greater the confidence we have in the coefficient as a predictor. Values between 2.0 and -2.0 indicate that the predictive power of that independent variable may not be very strong.

Q. Are there other more qualitative ways to determine whether a statistical linear regression model is accurate and produces reasonable results?

A. Yes. There are also several qualitative ways to determine whether a statistical regression model accurately describes the relationship that a chosen set of independent variables has with the dependent variable:

- **Does the model represent reality?** If it is generally known that water consumption is seasonal and is driven in the summertime by heat and precipitation, it is logical to assume that a statistical model that attempts to describe and predict seasonal water consumption would have explanatory variables related to summer heat and precipitation, and those explanatory variables would be shown to have a strong predictive value in the model. Models that attempt to accurately describe the drivers behind water consumption that do not contain statistically significant coefficients for independent variables that are logically known to drive water consumption are likely not strong predictive models.
- **Are the signs of the coefficients for major independent variables correct?** If water consumption increases in the summertime with increasing heat and decreases in the summertime with increasing precipitation, it is logical to expect that the

coefficients for the independent variables that represent summertime heat and summertime precipitation would be positive and negative, respectively.

- **Is the model based on a robust data set?** It is easy for a statistical model with many independent variables and relatively few observations of the dependent variable to accurately explain variation in the dependent variable, but that does not mean that the model has strong predictive power if the data set being analyzed is small in scope. A statistical model that attempts to describe water consumption and that has good predictive explanatory power over multiple years of monthly historical data is very useful and accurate in projecting future trends and in explaining how changes in strong predictive independent variables will affect levels of the dependent variable.
- **Do the impacts on the dependent variable that the model describes make logical sense?** It is possible, outside of a statistical linear regression model, to make ballpark estimates of other facts like the impact of COVID-19 on water consumption and long-term trends in declining use. This can be done with a simple linear plot of annual usage data by year. For example, if a linear plot of annual usage data suggests that there is a downward trend of approximately 1,000 gallons per customer per year, one would expect that a statistical model that is measuring that impact would yield a result that is similar. The same is true when looking at the potential impacts of COVID-19 on water consumption. If a visual examination of data suggests that water use per customer for a commercial class has decreased by 2,000 gallons per customer in 2020 due to the COVID-19 emergency, it is

logical to expect a statistical regression model that attempts to statistically measure that impact to yield estimates consistent with that expectation.

Pennsylvania Modeling and Results

Q. Please describe the statistical linear regression model you are using to analyze water consumption data for PAWC.

A. In this proceeding, we are using multiple regression statistical models to analyze use per customer for the residential and commercial classes that relate the dependent variable (i.e., water use per customer) to a collection of independent variables. The models use 120 months of monthly data beginning in July 2013 through June 2023. Each regression model uses independent variables that can be broken down into four categories to explain monthly use per customer. The four categories are:

- **Weather**: The weather variables used in the models are Cooling Degree Days ("CDDs"), Heating Degree Days ("HDD"), and precipitation. These weather variables are a weighted average of current month and lagged month weather readings taken by the National Oceanic and Atmospheric Administration at Pittsburgh Allegheny County Airport. This weighted average lagged approach is used to account for the differences between billing month sales and calendar month weather. Coefficients from these variables show the impact of weather on monthly use per customer over the 10-year period. Weather variables are modeled as monthly deviations from normal for each month in the data set (actual weather for the month less normal weather for the month for each individual weather variable). Normal weather is calculated for each month of the year based on the weather over the 10-year period that the historical data spans.

- **Time**: The time variable is a trending variable that notes the passage of time in the model and produces a coefficient that estimates the monthly decline in usage per customer over the 10-year model. The time variable captures the range of conservation efforts that have been implemented by customers over time, such as the installation of more water-efficient fixtures and appliances. Time on its own is of no consequence, but it is a powerful variable because it is the medium for capturing the conservation effect.

- **COVID-19 indicator**: The COVID-19 indicator variable is set at 0% for months prior to April 2020, 100% for the months of April 2020 through December 2020, and 40% for the months from January 2021 through June 2023. The effect of this variable in the model is to look specifically for increases or decreases in use per customer for the April 2020 through June 2023 timeframe that may have happened due to systemic changes in the amounts of water customers use as a result of the COVID-19 public health emergency.

- **Monthly indicators**: The monthly indicator variables in the model measure structural monthly and/or seasonal changes in use per customer that cannot be explained by any of the other variables in the model.

Q. What information do these models provide that is useful for developing pro forma adjustments to revenues that you are sponsoring in your testimony?

A. Each model produces a set of weather coefficients that can be used to weather-normalize historical sales for the HTY period, a coefficient that indicates the monthly trend in

declining use per customer for each class, and a coefficient that shows for each class the average use per customer impact associated with changes in usage due to COVID-19.

Q. You mentioned that you have developed models for customer usage relating to the residential, commercial, and municipal classes. Are you also modeling usage for the industrial and sales for resale customer classes?

A. No. The statistical modeling in this case is only for the residential, commercial, and municipal classes. Usage estimates for the industrial and sales for resale classes are developed using a simple multi-year average and are described later in the revenue section of my testimony.

Q. You previously discussed the various statistical tests used for accuracy and predictability. Please discuss the results of these tests for your models and why they are appropriate to use in this proceeding.

A. As shown in Exhibits CBR-5, CBR-6, and CBR-7, the Adjusted R-Squared statistics for the residential usage model is 85%, the Adjusted R-Squared statistic for the commercial usage model is 82%, and the Adjusted R-Squared statistic for the municipal model is 77%. This indicates that in all models, the explanatory variables (weather, COVID-19 impacts, declining use, etc.) strongly explain the variability in use per customer over time. The values of the coefficients, standard errors, and t-statistics for the major explanatory variables in the models are as follows:

TABLE 6

Residential Model Major Explanatory Variables	**Coefficient**	**Standard Error**	**t-Statistic**
Declining Use Trend	-0.0043	0.0004	-10.8213
Precipitation	-0.0333	0.0094	-3.5456
CDD	0.0009	0.0004	2.2482
HDD	0.0004	0.0001	3.0833
COVID-19 Impact	0.2962	0.0498	5.9428

TABLE 7

Commercial Model Major Explanatory Variables	**Coefficient**	**Standard Error**	**t-Statistic**
Declining Use Trend	-0.0180	0.0036	-5.0336
Precipitation	-0.1797	0.0825	-2.1788
CDD	0.0058	0.0037	1.5722
COVID-19 Impact	-2.4496	0.4521	-5.4178

TABLE 8

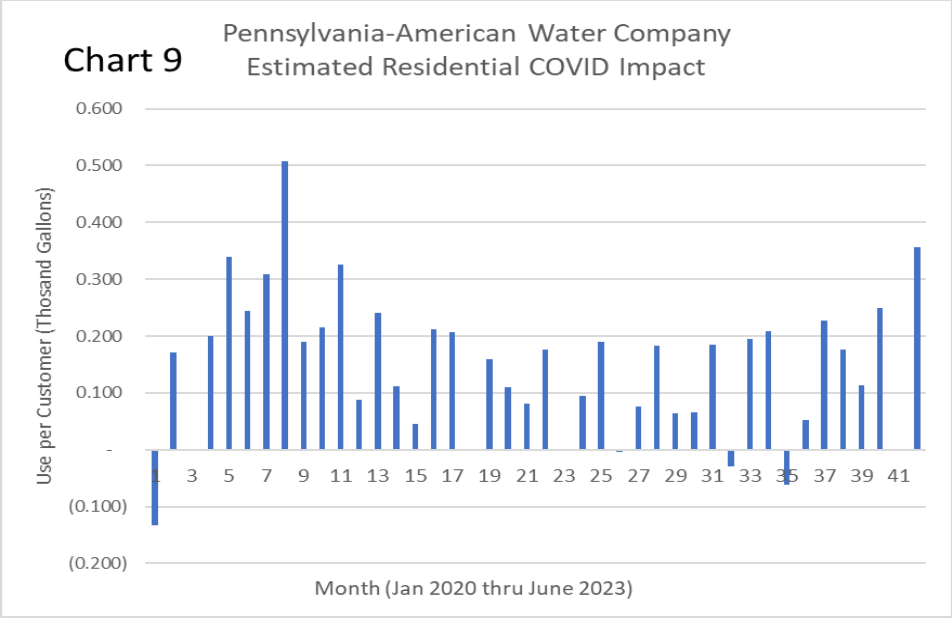
Municipal Model Major Explanatory Variables	Coefficient	Standard Error	t-Statistic
Declining Use Trend	-0.0055	0.0143	-0.3854
Precipitation	-0.8998	0.3143	-2.8626
CDD	0.0225	0.0136	1.6587
COVID-19 Impact	-18.0782	1.8153	-9.9590

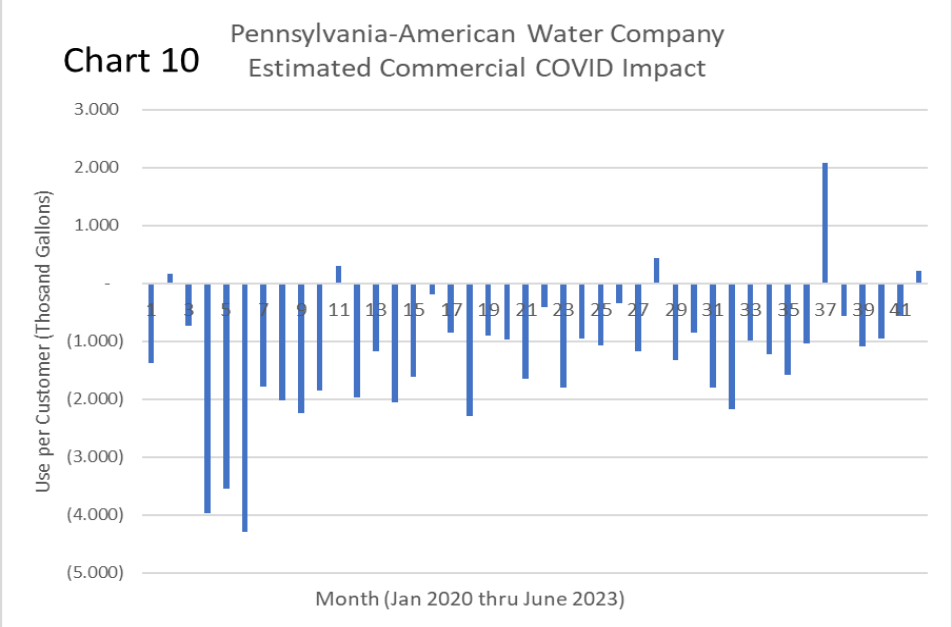
The statistics for the individual explanatory independent variables above show a high degree of explanatory power with all parameters having t-statistics all outside of the +/- 2.00 range apart from the CDD variable for the commercial class, which is marginally not statistically significant, and the trend variable for the municipal class, which is not statistically significant. The signs for the precipitation variables are negative as expected, meaning that more rainfall over a summer period results in less seasonal water usage from our residential customers. The signs for the CDD variable is positive, which indicates that the hotter the weather gets in the summer, the more water customers use, which is expected, and the COVID-19 impact variable indicates that residential usage went up as a result of

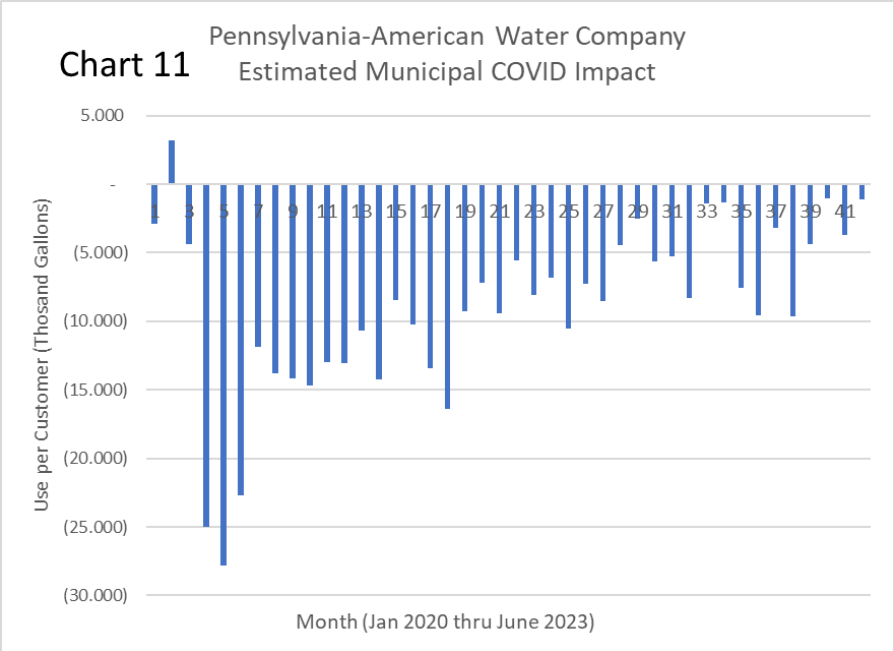
COVID-19 and commercial and municipal usage went down. The sign for the declining use variable for the residential and commercial classes are negative and are statistically significant, which means that there is a pervasive decline in use per customer for residential and commercial customers over the 10-year historical period.

Q. Please describe specifically how you are modeling the effect of the COVID-19 pandemic in your statistical analysis.

A. As stated previously, the COVID-19 indicator variable in each model is set at 0% for months prior to April 2020, 100% for the months of April 2020 through December 2020, and 40% for the months from January 2021 through June 2023. The effect of this variable in the model is to look specifically for increases or decreases in use per customer for April 2020 through June 2023, which may have happened due to systemic changes in the amounts of water customers used as a result of the COVID-19 public health emergency. The charts below show estimated impacts by month on use per customer by class associated with the COVID-19 pandemic as identified by the Company's modeling.







Q. Based on this information, what assumptions are you making going forward regarding the impacts on customer usage related to the COVID-19 pandemic?

A. The Company's forecast of use per customer includes no ongoing impacts related to the COVID-19 pandemic, meaning that forecasted impacts for each of the residential,

commercial, and municipal classes is forecasted to be zero, and usage is expected to revert back to the underlying trend seen before the pandemic.

Declining Usage Discussion

Q. Your regression models show a trend of declining use per customer. What is the amount of declining use your models have identified?

A. The annual amount of declining use identified for residential customers is approximately 610 gallons per year per customer. The annual amount of declining use identified for commercial customers is approximately 2,600 gallons per year per customer. The annual amount of declining use identified for municipal customers is approximately 800 gallons per year per customer.

Q . Why do you believe that declining use is a valid trend for residential and commercial customers that will continue?

A. Consumption patterns for the Company's customers are similar to those for other American Water operating companies, which have experienced a decline in consumption per customer averaging approximately -2.0% per year over the last 10 years. According to the 2010 Water Research Foundation report, "many water utilities across the United States and elsewhere are experiencing declining water sales among households." The report further states: "A pervasive decline in household consumption has been determined at the national and regional levels."[5]

[5] Coomes, Paul et al., *North America Residential Water Usage Trends Since 1992* – Project #4031, p. 1 (Water Research Foundation, 2010).

Q. What is causing the decline in customers' usage?

A. Several factors drive the decline in usage. These factors include the incremental introduction of low-flow fixtures and appliances, new regulations that lead to further reductions in fixture flow rates, conservation programs, and public initiatives that have led to greater consumer water conservation awareness.

Plumbing fixtures such as toilets, showerheads, and faucets available to consumers today are more water-efficient than those fixtures manufactured in the past. Similarly, appliances such as dishwashers and washing machines are also more water efficient. When a customer replaces an older toilet, washing machine, or dishwasher with a new unit, the new unit will almost certainly use less water than the one it replaced. Similarly, the construction of new homes results in the installation of water-efficient fixtures meeting new, more efficient, regulatory standards.

Q. How much water do the new fixtures and appliances save?

A. The Energy Policy Act of 1992 mandated the manufacture of water-efficient toilets, showerheads, and faucet fixtures. For example, a toilet manufactured after 1994 must use no more than 1.6 gallons per flush, compared to a pre-1994 toilet, which typically used from 3.5 to 7 gallons per flush. In fact, toilets using only 1.28 gallons per flush or less are becoming more prevalent in the marketplace. Replacing an old toilet with a new one, therefore, can save from 2 gallons to nearly 6 gallons per flush.

The Energy Independence & Security Act of 2007, which established stringent efficiency standards for dishwashers and washing machines, has further reduced indoor water consumption. Dishwashers manufactured after 2009 and washing machines manufactured after 2010 must use 54% and 30% less water, respectively. All other factors

being equal, a typical residential household in a new home constructed in 2015, with water-efficient toilets, washing machines, dishwashers, and other fixtures, uses approximately 35% less water for indoor purposes than a non-retrofitted home built prior to 1994.

Q. Are there other factors contributing to the continued decline in water consumption patterns?

A. Yes. Programs to raise customer awareness and interest in the benefits of conserving water and energy continue to increase. As awareness of water and energy efficiency increases, customers may decide to replace a fixture or appliance even before it has broken. Additionally, customers may further reduce consumption by changing their household water use habits in other various ways.

Q. Do you expect the trend of declining usage to continue in the future?

A. Yes. Water-efficient fixtures and other drivers such as conservation education and government-mandated standards will continue to drive further efficiency into residential and nonresidential usage per customer. In fact, the trend is well established and continues to affect water usage on the Company's system, as well as most water utilities across the United States. The rate of the continued trend is dependent on the pace of fixture replacement within the Company's footprint, as well as the broadening acceptance of a conservation ethic through customer and business awareness programs, government conservation policy, and similar behavior modification–related programs.

Technology is now available for newer, more water-efficient products that further improve on Energy Policy Act levels, and there has been a growing movement to codify these more stringent specifications. The introduction of progressive code modifications – such as the International Code Council's International Green Construction Code and the

International Association of Plumbing and Mechanical Officials Green Plumbing and Mechanical Code Supplement (2011) – support uniform implementation of increased water efficiency standards. An article in the June 2012 issue of the AWWA Journal titled "Insights into declining single-family residential water demands" recognizes this decline in water consumption: "[r]educed residential demand is a cornerstone of future urban water resource management. Great progress has been made in the last 15 years and the industry appears poised to realize further demand reductions in the future."[6] The trend of declining water consumption based on improved water efficiency has continued over time.

Conclusions

Q. Normalizing historical usage for weather and the COVID-19 emergency, what has the overall trend been for use per customer for the residential, commercial, and municipal classes?

A. The statistical analysis of usage for the residential, commercial, and municipal classes shows that once weather effects and the one-time effects of COVID-19 have been accounted for, there is a significant downward trend in usage for these customer classes. The charts below show use per customer for each class for the 10 years ending June 2023, adjusted for the weather impacts and COVID-19 impacts that I previously described in my testimony.

6 DeOreo, W. and Mayer, P., American Water Works Association Journal, vol. 104, issue 6 (June 2012), http://apps.awwa.org/WaterLibrary/showabstract.aspx?an=JAW_0076117.

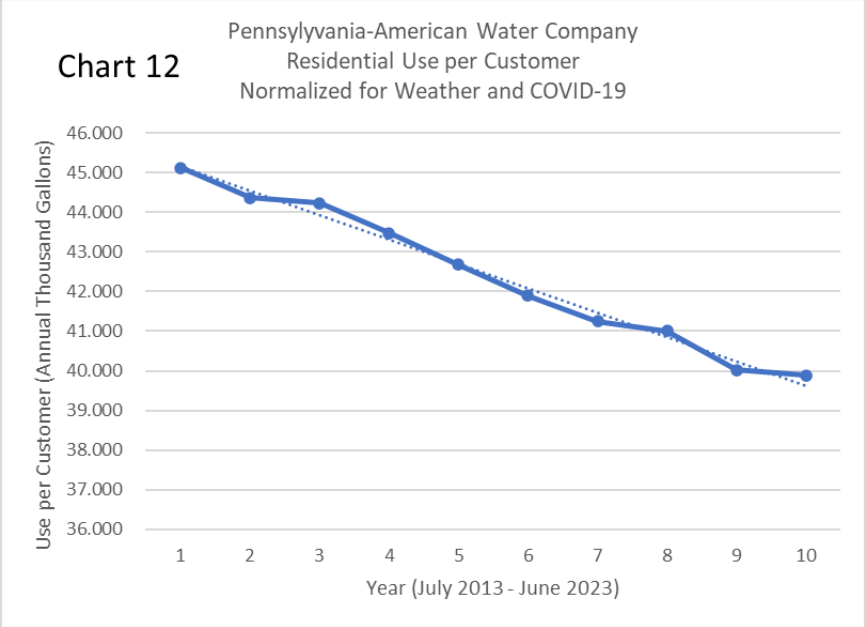


Chart 12
Pennsylyvania-American Water Company
Residential Use per Customer
Normalized for Weather and COVID-19
Use per Customer (Annual Thousand Gallons)
46.000
45.000
44.000
43.000
42.000
41.000
40.000
39.000
38.000
37.000
36.000
1
2
3
4
5
6
7
8
9
10
Year (July 2013 - June 2023)

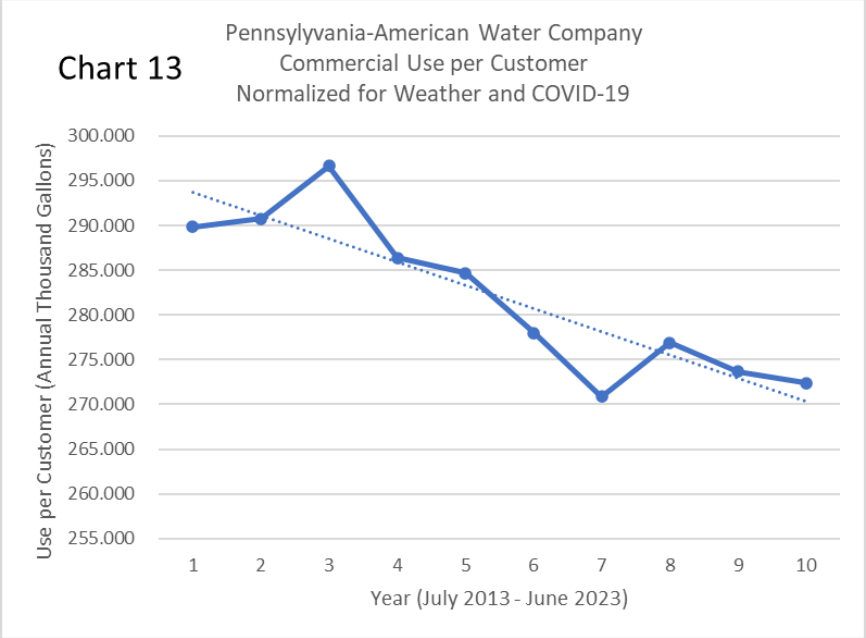
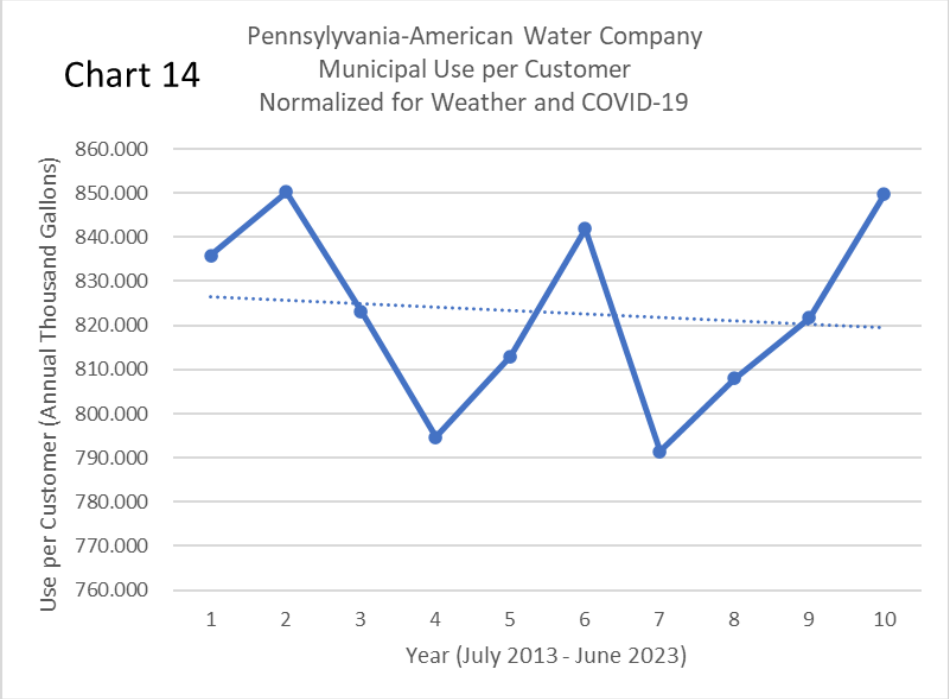


Chart 13
Pennsylyvania-American Water Company
Commercial Use per Customer
Normalized for Weather and COVID-19
Use per Customer (Annual Thousand Gallons)
300.000
295.000
290.000
285.000
280.000
275.000
270.000
265.000
260.000
255.000
1
2
3
4
5
6
7
8
9
10
Year (July 2013 - June 2023)



Q. What conclusions do you draw from this chart and your supporting analysis?

A. The charts and the supporting analysis demonstrate that there has been a significant and pervasive decline in normalized use per customer for the residential, commercial and municipal customers in the PAWC service territory. The Company's modeling normalizes for weather and COVID-19 and shows that there has been a pervasive decline in usage for these classes over the past 10 years. The historical trends in adjusted monthly use per customer for the residential, commercial and municipal classes will continue through the relevant periods going forward.

REVENUE CALCULATIONS

General Calculations

Q. Please explain the development of pro forma revenues as set forth in Exhibit No. 3-A for Water Operations.

A. The process of developing the Company's revenue claim begins with revenues recorded on the Company's books of account at June 30, 2023, to which various adjustments were made. Exhibit No. 3-A shows a summary of the development of pro forma revenues for Water Operations under present and proposed rates for the HTY, FTY, and FPFTY periods.

Additionally, for each of the test years, Exhibit No. 3-A includes a schedule showing operating revenues by customer classification, as well as a schedule showing a summary of the various adjustments made to book operating revenues to arrive at pro forma operating revenues under present rates.

Q. Does Exhibit No. 3-A show a similar development of pro forma revenues for revenue requirements other than for water operations?

A. Yes. The revenue schedules described above are also provided for the five wastewater revenue requirements:

- SSS Systems
- CSS Systems
- Brentford Acquisition
- BASA Acquisition

Q. Please explain the various adjustments to the Company's book revenues that were made to develop pro forma sales and revenues under present and proposed rates for the Company's water and wastewater operations.

A. The following adjustments were made to per book revenues by class:

- Adjustment 2a: TCJA and EADIT Surcharge Adjustment
- Adjustment 2b: Unbilled Revenue Adjustment
- Adjustment 2c: DSIC Annualization Adjustment

- Adjustment 2d: AMP Deferred Revenue Adjustment
- Adjustment 2e: Annualization of Base Year Rate Changes
- Adjustment 2f: Private Fire Adjustment
- Adjustment 2g: Public Fire Adjustment
- Adjustment 2h: Changes in Customers
- Adjustment 2i: Usage Trend Adjustment
- Adjustment 2j: Annualization Adjustment for Valley Water
- Adjustment 2k: Annualization Adjustment for Valley Wastewater
- Adjustment 2l: Shale Gas Commercial Usage Adjustment
- Adjustment 2m: Acquisition Adjustment for Creekside Water
- Adjustment 2n: Annualization Adjustment for Foster Wastewater
- Adjustment 2o: Annualization Adjustment for York Wastewater
- Adjustment 2p: Annualization Adjustment for Upper Pottsgrove Wastewater
- Adjustment 2q: IPP Adjustment
- Adjustment 2r: Rental Income Adjustment
- Adjustment 2s: Intercompany Rental Adjustment
- Adjustment 2t: Usage Data Revenue Adjustment
- Adjustment 2u: Specific Customer Adjustments
- Adjustment 2v: Adjustment for Strattanville Borough
- Adjustment 2w: Annualization Adjustment for Findlay Township
- Adjustment 2x: Acquisition Adjustment for Audubon Water
- Adjustment 2y: Acquisition Adjustment for Farmington Water

- Adjustment 2z: Acquisition Adjustment for Farmington Wastewater
- Adjustment 2za: Acquisition Adjustment for Sadsbury Wastewater
- Adjustment 2zb: Acquisition Adjustment for BASA Wastewater
- Adjustment 2zc: Acquisition Adjustment for Brentwood Wastewater
- Adjustment 2zd: Late Payment Fees

Description of Adjustments

Q. Please describe the TCJA and EADIT Surcharge Adjustment in Schedule 2a.

A. The TCJA and EADIT Surcharge adjustment is made to eliminate booked revenues for the HTY period associated with the TCJA tax credit and EADIT surcharge revenues. The amount of the adjustments for water operations is $6,908,979. The amount of the adjustment for SSS wastewater operations is $48,442. The amount of the adjustment for CSS wastewater operations is $36,990.

Q. Please describe the Unbilled Revenue Adjustment in Schedule 2b.

A. The Unbilled Revenue adjustment is made to eliminate unbilled revenues that were accrued for the HTY period. The amount of the adjustment for water operations is -$9,429,136. The amount of the adjustment for SSS wastewater operations is -$2,746,186. The amount of the adjustment for CSS wastewater operations is -$1,981,963.

Q. Please describe the DSIC Annualization Adjustment in Schedule 2c.

A. The DSIC Annualization adjustment is made to eliminate the DSIC revenues per book for the HTY period, in order to reset the DSIC to zero. The FPFTY pro forma revenue adjustment is to annualize the DSIC revenues for the FPFTY period based on the Company's pro forma level rate of 2.30% for water and 1.08% for wastewater. The adjustments by year and by system are as follows.

TABLE 9 DSIC Adjustments	HTY	FPFTY
Water Operations	-$8,436,657	$17,839,208
SSS Wastewater Operations	-$322,710	$977,043
CSS Wastewater Operations	-$572,047	$833,002
Total	**-$9,331,414**	**$19,649,253**

Q. Please describe the AMP Deferred Revenue Adjustment in Schedule 2d.

A. The AMP Deferred Revenue adjustment is made to remove Arrearage Management Program ("AMP") revenue credits booked in residential revenue accounts for the HTY period. The amount of the adjustments for water operations is $721,875. The amount of the adjustment for CSS wastewater operations is $81,270 and for SSS wastewater operations is $106,230.

Q. Please describe the Base Year Rate Annualization Adjustment in Schedule 2e.

A. This revenue adjustment is made to revenues for the HTY period to reflect the annualization of new base rates for water and wastewater service that took effect on January 28, 2023. The adjustments by customer class and system are as follows:

TABLE 10 Class Adjustments	Water	SSS Wastewater	CSS Wastewater
Residential	$48,328,510	$9,235,949	$12,211,803
Commercial	$17,651,547	$2,343,500	$4,740,927
Industrial	$3,118,375	$399,757	$365,045
Municipal	$764,920	$200,475	$220,091
Sales for Resale	$21,538		
Unmetered Sales	$3,016		
Bulk		$473,272	$2,687,597
Total	**$69,887,906**	**$12,652,954**	**$20,225,463**

Q. Please describe Private Fire Adjustment in Schedule 2f.

A. This adjustment is being made to reflect the annualization of private fire revenues for the HTY, FTY, and FPFTY periods. This revenue adjustment is being made to reflect the annualization of new rates for private fire service that took effect in January of 2023 based upon the number of customers receiving such service as of June 30, 2023. The revenue adjustment for the FTY period includes additional growth in private fire services. The total adjustment is $290,447 for the HTY period and $152,747 for the FTY period.

Q. Please describe the Public Fire Adjustment in Schedule 2g.

A. This adjustment is being made to reflect the annualization of new rates that took effect in January of 2023 for public fire service based on the number of customers and hydrants as of June 30, 2023. The revenue adjustment for the FTY period is from the additional annualized revenues coming from Valley District. The revenue adjustments for the HTY period is $368,867 and the adjustment for the FTY period is $26,309.

Q. Please describe the Customer Change Adjustment in Schedule 2h.

A. This adjustment is being made to reflect expected increases in the number of residential and commercial customers for water and wastewater service exclusive of acquisitions. The historic revenue adjustment reflects the change in revenue associated with the average number of customers for the HTY period. The future and fully forecasted revenue adjustments reflect customer growth in the residential and commercial classes from the HTY period and is estimated based on a two-year historical growth pattern in these customer classes. The revenue adjustments themselves were calculated by applying the average annual consumption per residential and commercial customer to projected

increases in customers for the FTY and FPFTY periods. The total adjustments by class are as follows:

TABLE 11
Customer Growth Adjustment

Water Service	**HTY**	**FTY**	**FPFTY**
Residential	$1,099,437	$932,988	$1,865,976
Commercial	$1,554,148	$698,551	$1,397,102
Total	**$2,653,585**	**$1,631,539**	**$3,263,078**

TABLE 12
Customer Growth Adjustment

SSS Wastewater Service	**HTY**	**FTY**	**FPFTY**
Residential	$131,053	$109,906	$219,811
Commercial	$33,724	$30,352	$60,704
Total	**$164,777**	**$140,258**	**$280,515**

TABLE 13
Customer Growth Adjustment

CSS Wastewater Service	**HTY**	**FTY**	**FPFTY**
Residential	$63,868	$7,407	$14,813
Commercial	$103,860	$81,867	$163,736
Total	**$167,528**	**$89,274**	**$178,549**

Q. Please describe the Usage Trend Adjustment in Schedule 2i.

A. This adjustment is being made to reflect changes in usage for residential, commercial, and municipal customers that I have described previously in testimony. These changes incorporate weather normalization, COVID-19 normalization, and adjustments for trends in declining use that I have previously described. The adjustments apply to both water and wastewater operations. The revenue adjustments are made by multiplying usage adjustments by expected customer counts, breaking out the resulting total adjustments in usage for these classes by rate step, and applying rates to the resulting adjustments in order

to determine the revenue adjustments for the HTY, FTY, and FPFTY periods. The total adjustments by class are as follows:

TABLE 14
Usage Trend Adjustment

Water Service	**HTY**	**FTY**	**FPFTY**
Residential	-$13,769,762	-$7,716,775	-$6,236,951
Commercial	$2,147,538	-$1,646,203	-$1,156,531
Municipal	$1,520,971	-$651,058	-$66,790
Total	**-$10,101,253**	**-$10,014,037**	**-$7,460,272**

TABLE 15
Usage Trend Adjustment

SSS Wastewater Service	**HTY**	**FTY**	**FPFTY**
Residential		-$977,293	-$787,209
Municipal		-$232,359	-$162,064
Commercial		-$42,995	-$4,411
Total		**-$1,252,647**	**-$953,684**

TABLE 16
Usage Trend Adjustment

CSS Wastewater Service	**HTY**	**FTY**	**FPFTY**
Residential		-$799,671	-$644,138
Municipal		-$275,378	-$192,068
Commercial		-$32,847	-$3,370
Total		**-$1,107,896**	**-$839,576**

Q. Please describe the Annualization Adjustment for Valley Water in Schedule 2j.

A. This adjustment is to annualize the water revenues for the Valley Water operating district to reflect the changes in rates that will become effective for Valley Water on November 19, 2023. The total water adjustment for Valley Water for the FTY period is $413,150.

Q. Please describe the Annualization Adjustment for Valley Wastewater in Schedule 2k.

A. This adjustment is to annualize the wastewater revenues for the Valley Wastewater operating district to reflect the changes in rates that will become effective for Valley Wastewater on November 19, 2023. The total water adjustment for Valley Wastewater for the FTY period is $1,426,222.

Q. Please describe the Commercial Shale Gas Adjustment in Schedule 2l.

A. In 2009, the Company began selling water to gas drillers for use in their drilling and hydraulic fracturing operations. The annual usage for this type of operation can fluctuate significantly from year to year, and sales for the HTY period for this service were relatively low compared to previous years. This adjustment normalizes sales for this service assuming a three-year average of sales from the 12-month periods ended June 2021, June 2022, and June 2023. The total amount of the revenue adjustment for the FTY period is $251,438.

Q. Please describe the Acquisition Adjustment for Creekside Water in Schedule 2m.

A. On June 22, 2023, the Company closed on the acquisition of the water utility property of the Creekside Homeowner's Association and began providing direct service to that entity's customers. This adjustment annualizes the water revenues associated with this acquisition. The annualization is based on customer counts and meter counts by customer class as of June 2023. The total water adjustment includes a residential revenue adjustment and a private fire protection revenue adjustment. The revenue adjustments for the HTY period is $74,094. An additional 40 residential customers are expected to be added during the FPFTY period. The annualized revenue expected for the FPFTY period is $33,147.

Q. Please describe the Annualization Adjustment for Foster Wastewater in Schedule 2n.

A. In October 2022, the Company began providing wastewater service to Foster Township customers. The revenue adjustment for the HTY period annualizes revenues to reflect a full 12 months of billing. The revenue adjustment for the FTY period reflects the approved rates in Docket No. R-2022-3013673, which took effect in January of 2023. The revenue adjustment for the HTY period is $364,529. The revenue adjustment for the FTY period is $232,268.

Q. Please describe the Annualization Adjustment for York Wastewater in Schedule 2o.

A. In May 2022, the Company began providing wastewater service to the City of York. The revenue adjustment for the FTY period is to recognize the revenue associated with authorized rates that will take effect after the current rate freeze for York ends on May 27, 2025. The revenue adjustment for the FTY period is $10,507,182.

Q. Please describe the Annualization Adjustment for Upper Pottsgrove Wastewater in Schedule 2p.

A. In July 2022, the Company began providing wastewater service to Upper Pottsgrove. The revenue adjustment for the HTY period annualizes revenues to reflect a full 12 months of billing. The revenue adjustment for the FTY period is $172,272.

Q. Please describe the IPP Adjustment in Schedule 2q.

A. The IPP Surcharge wastewater revenue adjustment is made to account for the change in the Company's IPP surcharge and to reflect all IPP revenues in the Other WW Revenue account. The revenue adjustments by customer class for the HTY period are as follows.

TABLE 17 IPP Adjustments	SSS Wastewater	CSS Wastewater
Residential	$133	$747
Commercial	-$196,322	-$72,555
Industrial	-$337,932	-$119,925
Municipal	-$368	$0
Miscellaneous / Bulk	-$509,478	$0
Other WW Revenue	$1,776,143	$189,674
Total	**$732,176**	**-$2,060**

Q. Please describe the Rental Income Adjustment in Schedule 2r.

A. The Company receives money from cellular phone providers for the lease of space on top of its water towers for the placement of antennas. An adjustment is being made, which represents the difference between revenues that were recorded for the HTY period for cell tower rental income and revenues expected to be recorded as cell tower rental income for the FTY and FPFTY periods. These adjustments are -$71,977 and $7,148, respectively. Additionally, the Company receives money for the rights to land that it owns for tree harvesting. This revenue income is expected to end in 2023. This income adjustment related to timber rights income is -$325,393. The total combined adjustments for the FTY and FPFTY periods are -$397,369 and $7,148, respectively. These adjustments are made only to revenue for water operations.

Q. Please describe the Intercompany Rental Adjustment in Schedule 2s.

A. PAWC charges the AWWSC for Service Company employees that work in PAWC's Stafford Avenue and Mechanicsburg offices. An adjustment is being made, which represents the difference between revenues that were recorded for the HTY period and the revenue that is expected to be recorded as intercompany office rental income in 2024 and

2025 from this agreement. The reduction in revenue is expected to be $228,104. This adjustment is made only to revenue for water operations.

Q. Please describe the Usage Data Revenue Adjustment in Schedule 2t.

A. The Company supplies water usage data to certain municipalities so that these municipalities can bill their residents for sewer service. The Company made an adjustment to 2023 book revenues for the provision of usage data to eliminate revenues from localities no longer using the service. This adjustment for 2023 was to reduce usage data revenue by $4,439. The Company increases these fees annually based on changes in the Consumer Price Index ("CPI"). An adjustment is being made for 2024 and 2025 revenues to reflect a CPI change of 3.81% in those years, which is based on a historical average change in the CPI from June 2017 through June 2023. The adjustment amount for the FTY period is to increase usage data revenue by $16,325. The adjustment amount for the FPFTY period is to increase usage data revenue by $16,947. This adjustment is made only to revenue for water operations.

Q. Please describe the Customer Adjustments in Schedule 2u.

A. The adjustments to revenues in Schedule 2u are for specific and individual Industrial Standby and Resale Standby water customers to account for changes in rates and terms per specific contract agreements and to reflect a full 12 months of billing data of one of the resale contract customers. The total adjustments for the HTY, FTY, and FPFTY periods for water customers are $176,541, $205,121, and $269,192, respectively. The SSS wastewater adjustment for the HTY period is $33,245.

Q. Please describe the Adjustment for Strattanville Borough in Schedule 2v.

A. During the HTY period, the Strattanville Borough customer only received 11 bills. This adjustment is to account for the missing bill, which was billed and posted outside of the HTY period. The total revenue adjustment is $6,200.

Q. Please describe the Annualization Adjustment for Findlay Township in Schedule 2w.

A. Beginning in August 2023, the Company began Sales for Resale service to Findlay Township. The revenue adjustment for the FTY period is to annualize sales from Findlay Township. The adjustment for the FPFTY period is to annualize revenue from the expected rate change that will take place in August 2024 and to also consider the impact of the change in minimum take or pay requirements from a 366-day leap year to a normal 365-day year. The total adjustments for the HTY, FTY, and FPFTY periods are $535,275 and $19,113, respectively.

Q. Please describe the Acquisition Adjustment for Audubon Water in Schedule 2x.

A. In April 2024, the Company anticipates it will close on the acquisition of the water utility property of the Audubon Water System and begin providing service to these customers. This adjustment is based on the Company's estimate of the annualized revenues that will be produced following the closing of this acquisition. Since the Company will be serving Audubon premises directly, no revenue associated with Sales for Resale revenues will be expected from Audubon Water Company. The net adjustment for revenues for the FTY period is $2,965,024.

Q. Please describe the Acquisition Adjustment for Farmington Water in Schedule 2y.

A. In April 2024, the Company anticipates it will close on the acquisition of the water utility property of the Farmington Township Water System and will begin providing service to

these customers. This adjustment is based on the Company's estimate of the annualized revenues that will be produced following the closing of this acquisition. Since the Company will be serving Farmington Township premises directly, no revenue associated with Sales for Resale revenues will be expected from the Farmington Township Water Company. The net adjustment for revenues for the FTY period is $266,371.

Q. Please describe the Acquisition Adjustment for Farmington Wastewater in Schedule 2z.

A. In April 2024, the Company anticipates it will close on the acquisition of the wastewater utility property of the Farmington Township Wastewater System and begin providing service to these customers. This adjustment is based on the Company's estimate of the annualized revenues that will be produced following the closing of this acquisition. The adjustment for revenues for the FTY period is $322,926.

Q. Please describe the Acquisition Adjustment for Sadsbury Wastewater in Schedule 2za.

A. In April 2024, the Company anticipates it will close on the acquisition of the wastewater utility property of the Sadsbury Municipal Township Wastewater System and begin providing service to these customers. This adjustment is based on the Company's estimate of the annualized revenues that will be produced following the closing of this acquisition. The adjustment for revenues for the FTY period is $471,228.

Q. Please describe the Acquisition Adjustment for BASA Wastewater in Schedule 2zb.

A. In December 2023, the Company anticipates it will close on the acquisition of the wastewater utility property of the Butler Area Sewer Authority System and begin providing service to these customers. This adjustment is based on the Company's estimate of the

annualized revenues that will be produced following the closing of this acquisition and annualized DSIC revenues. The adjustment for revenues for the FTY period is $11,720,905. The adjustment for revenues for the FPFTY period is $125,861.

Q. Please describe the Acquisition Adjustment for Brentwood Wastewater in Schedule 2zc.

A. In April 2024, the Company anticipates it will close on the acquisition of the wastewater utility property of the Brentwood Wastewater System and begin providing service to these customers. This adjustment is based on the Company's estimate of the annualized revenues that will be produced following the closing of this acquisition. The adjustment for revenues for the FTY period is $1,824,191.

REVENUE DECOUPLING MECHANISM

Introduction

Q. Is the Company offering a proposal for a revenue decoupling mechanism in this case?

A. Yes. The Company is proposing an RDM for both water and wastewater service.

Q. What is the purpose of the RDM?

A. The RDM is an alternative rate design mechanism whose purpose is to more reliably recover the revenue requirement and associated fixed costs approved by the Commission in this case.

Q. Is recovery of fixed costs a concern for the Company?

A. Yes. Approximately 81% of the Company's water and wastewater service revenues will be collected under volumetric rates under the Company's proposed rate structure in this case, which means that revenues will vary up or down depending on how much water our customers use. At the same time, over 95% of the Company's costs are fixed costs, which

do not vary depending on how much water our customers use. If water sales are less than the levels used to set the Company's water service rates in this proceeding, the Company's revenues will be less than the authorized level in this proceeding and, as a result, the Company's ability to recover the costs that the Commission determines to be prudent will be diminished. Likewise, if revenues exceed the authorized level in this proceeding due to higher than anticipated water sales, the Company will recover more than the authorized level in this proceeding. Given the nature of the Company's fixed costs, the RDM will provide the Company with a better opportunity to recover the revenue requirement and fixed cost authorized in this case as the difference between those amounts and actual revenues will be charged or credited back to customers in the subsequent year.

Q. What are some of the factors that jeopardize the Company's ability to recover its fixed costs of providing service?

A. There are two primary factors that cause revenue volatility and the associated risk in recovering fixed costs from year to year – seasonal weather conditions and the ongoing trend of declining use for residential, commercial, and municipal customers.

Seasonal weather conditions can cause water sales to either increase or decrease from expected going-forward levels, which, in turn, causes revenues to increase or decrease from expected going-forward levels. Cold winters and hot, dry summers tend to increase water sales, and warmer winters and cooler, wetter summers tend to decrease water sales. Weather volatility in either direction causes volatility in revenues.

Continuing trends in declining use per customer in the residential, commercial, and municipal classes also cause volatility in revenues. I have previously testified to both the impact of weather conditions on annual water sales and on the continuing trends in

declining use and the associated impact of declining use on water sales. The Company expects that water consumption per customer will continue to decline over the next several years. Both of these conditions cause declines in revenues and both total consumption on a per customer basis and revenue on a per customer basis are expected to continue to decline well beyond the period of time for which rates are set in this case.

Q. Does the Company have any control over either seasonal weather conditions or the drivers that are causing declining usage?

A. No, it does not.

Q. Are there other factors that can cause the Company's revenue to deviate from expected levels?

A. Yes. The recent COVID-19 pandemic situation is a prime example of an external event that can cause the Company's revenues to vary from expected or approved levels. During the pandemic, the Company saw increased sales volumes for residential customers beyond expected levels due to the COVID-19 pandemic as more people were staying home from work and schools. Over the same period, the Company saw decreases in sales volumes from expected levels in the commercial and municipal classes. These changes in volumes, whether temporary or permanent, cause changes in revenues from expected or authorized levels and increase the Company's revenue volatility. Implementation of a well-structured RDM can stabilize customer bills over time and help avoid over-recovery or under-recovery of fixed costs because of revenue volatility resulting from uncontrollable circumstances.

Q. Does the Company have the ability to significantly change its cost structure in order to compensate for changes in revenues?

A. To some extent, the Company experiences a reduction in variable costs associated with the reduced cost of treating and pumping less water and wastewater. For the most part, however, the Company's ability to reduce its fixed costs during periods when water sales are lower is limited, and it is generally not in the long-term best interests of our customers for the Company to do so. One simple example of this is the number of Company employees. The Company can hardly hire and fire its well-trained workforce based on short-term trends in weather or economic conditions simply to keep expenses in line with revenues. Similarly, although some maintenance may be deferred when revenues are lower, such deferrals merely forestall necessary repairs and could degrade the quality of service provided to PAWC's customers, as well as increase the cost of service over time.

Q. How is a volatile and degrading long-term revenue stream not in the long-term best interests of the Company's customers?

A. The Company is committed to helping customers use water efficiently and providing quality water and wastewater service that is affordable. As I explain below, the Company's ability to reliably recover its revenue requirement and recover its fixed cost of providing service over the long term through rates is an important part of the Company's ability to continue to properly operate, maintain, and invest in its water and wastewater system at a reasonable cost. This ability to prudently manage the PAWC system at a reasonable cost is in the long-term best interests of our customers.

Description of Proposal

Q. Please describe the Company's proposed Revenue Decoupling Mechanism.

A. The Company's proposed RDM is an alternative rate design mechanism that couples traditional rate design with elements of Straight Fixed Variable ("SFV") Pricing. This

mechanism couples the benefits of traditional rate design that I have previously described in my Direct Testimony (including cost causation, affordability, gradualism, and efficiency of use) with the increased revenue stability available to the Company through an SFV rate design. This mechanism compares the revenues collected under the actual Commission-approved rates customers pay with the revenues that would have been collected through an SFV rate design on a forward-looking basis and accrues the differences, which are either credited to customers or collected from customers at a later time. The proposed RDM identifies three cost components as the basis for revenues that would be collected through the SFV rate design that form the basis of the revenue comparisons going forward. These three cost components are:

- **Volumetric Charge (VC):** A charge in dollars per hundred gallons that applies to all water volumes sold to customers.
- **Residential Fixed Charge (RC):** A flat dollar charge per month that applies to all residential customers.
- **Non-Residential Fixed Charge (NC):** A flat dollar amount that applies to all non-residential customers.

Q. What is SFV Pricing?

A. Generally, SFV pricing is a rate design that collects a utility's fixed costs through fixed charges and a utility's variable costs through volumetric charges. For utilities where nearly all of the revenue requirement is fixed cost, SFV pricing can result in monthly charges to customers that are relatively high and volumetric rates that are relatively low. SFV pricing aligns cost recovery with the nature of the costs being recovered, provides a stable and reliable revenue stream for the utility, and satisfies the revenue stability principle of rate

design. On the other hand, SFV pricing is arguably not consistent with generally accepted cost-causation principles at a customer class level because fixed costs between classes vary more than may be reflected in SFV rate components. On its own, SFV pricing also has the potential to reduce incentives to use utility service efficiently and can disadvantage lower-income customers from an affordability perspective if fixed charges are set too high.

Q. How is the Company proposing to determine the cost components of its proposed RDM?

A. The three different cost components are calculated based on the allocated revenue requirements to customer class, the level of production costs identified in the class cost of service studies sponsored by Ms. Heppenstall, and the total volumes of water and wastewater approved in this proceeding that form the basis of the billing determinants for water and wastewater service. The calculation for the different cost components is as follows:

- **Volumetric Charge (VC):** Total Production Costs allocated to eligible customers divided by total volumetric sales associated with eligible customers.
- **Residential Fixed Charge (RC):** Total revenue requirement allocated to residential customers for rate design purposes less the Volumetric Charge multiplied by total volumetric sales associated with residential customers divided by the total number of residential customers in the case.
- **Non-Residential Fixed Charge (NC):** Total revenue requirement allocated to eligible non-residential customers for rate design purposes less the Volumetric Charge multiplied by total volumetric sales associated with eligible non-residential

eligible customers divided by the total number of non-residential customers in the case.

Q. Do you have an exhibit that shows the calculation of these cost components?

A. Yes. Exhibit CBR-8 provides a calculation of the three RDM cost components based on the cost of service studies supported by Company witness Heppenstall.

TABLE 18
Water Service

RDM Cost Components	Amount	Description
Residential Fixed Charge	$83.18	$ per residential customer per month
Nonresidential Fixed Charge	$515.94	$ per nonresidential customer per month
Volumetric Charge	$0.1033	$ per hundred gallons sold

TABLE 19
Wastewater Service

RDM Cost Components	Amount	Description
Residential Fixed Charge	$87.87	$ per residential customer per month
Nonresidential Fixed Charge	$504.66	$ per nonresidential customer per month
Volumetric Charge	$0.1548	$ per hundred gallons sold

Q. Can you provide an example of how the RDM would work on a forward-looking basis?

A. The proposed RDM works by comparing actual revenues recovered from eligible customers in a given month or year to the revenues that would result from applying the RDM cost-components that I described above. If actual revenues are higher than would have been collected under the RDM formula, the difference is credited to customers in the following year. If actual revenues are lower than would have been collected under the RDM formula, the difference is collected from customers in the following year. As I have previously described, the RDM cost components are developed based on Commission-

approved customer counts, sales, production costs, and total revenue requirements. On a monthly basis, the RDM is calculated as follows:

RES Acc = RESREV – (VC * RESUSE) – (RC * RESCUST)

Where: RES Acc = amount of residential revenue to be accrued

RESREV = Total revenue in the month from residential customers, excluding revenues from adjustments

VC = Volumetric Charge

RESUSE = Number of 100-gallon units sold to residential customers

RC = Residential Fixed Charge

RESCUST = Average number of residential customers for the month

NON Acc = NONREV – (VC * NONUSE) – (NC * NRCUST)

Where: NON Acc = amount of non-residential revenue to be accrued

NONREV = Total revenue in the month from non-residential customers, excluding revenues from adjustments

VC = Volumetric Charge

NONUSE = Number of 100-gallon units sold to non-residential customers

NC = Non-Residential Fixed Charge

NRCUST = Average number of non-residential customers for the month

Q. Please describe how the Company proposes to implement the RDM.

A. The Company's proposed RDM will apply to both water and wastewater service, with separate tariffs and separate recovery/credit mechanisms for each service. The

recovery/credit mechanisms are proposed to be volumetric and apply separately for each customer class. Amounts accrued over the course of the year that will be credited to or collected from customers will be applied in the following year to forecasted sales volumes and a volumetric credit or surcharge, as applicable, will be calculated on a dollars per hundred gallons basis.

Q. Are the cost components of the RDM calculation themselves fixed or do they change over time depending on changes in revenue requirements?

A. The cost components of the RDM shown above in Tables 18 and 19 are fixed and will not change until a future rate case with a different set of revenue requirements and calculations for cost components.

Q. What customer classes are included in the Company's proposed RDM?

A. The RDM will apply to all customers in the residential, commercial, industrial, municipal, and sales for resale classes except for those customers taking service under contract rates.

Q. Please describe the specific accounting treatment to be used for the RDM.

A. Each month the Company will compare the actual metered revenues for the applicable customer classes to the calculated authorized revenues under the RDM cost component structure. If actual revenues fall short of the RDM calculation, the difference in revenue will be temporarily deferred to a regulatory asset account. If actual revenues are greater than the RDM calculation, the difference would be temporarily deferred to a regulatory liability account.

Q. Please describe the Company's proposed method for RDM reporting and reconciliation filings with the Commission

A. The Company proposes to make a filing with the Commission on or before January 31 of each year that includes the RDM calculation and support for any annual adjustments to be effective under the RDM tariff. The Commission Staff and other interested parties would have 60 days to review the Company's filing. If either a charge or a credit is in order, the reconciliation amount would be charged from April 1 through December 31 for that calendar year.

Q. How does the Company propose to treat customer growth through acquisitions in the RDM process?

A. Any acquisitions that are completed by the Company that are not already included in this proceeding will not be included in the proposed RDM until such time that they are included in rate base and revenue requirement calculations in a future rate proceeding. For any acquisitions that may occur that are not already included in this case, sales and revenues will be tracked separately and excluded from the calculations used to support charges or credits under the Company's proposed RDM.

Q. How does the Company's RDM design address the concerns you identified earlier regarding cost causation, efficiency, and possible effects on affordability?

A. The RDM, as a modified version of SFV pricing that preserves the traditional elements of rate design that I describe above, lessens the concerns regarding cost causation, efficiency, and affordability that are typically present when applying pure SFV pricing. The RDM cost components continue to reflect cost of service allocation as determined by Company witness Heppenstall, and as discussed below, customers will continue to be incentivized to

reduce usage and increase efficiency, and service will remain affordable with the added benefit of greater stability.

Q. Does the Company's proposed RDM address the same uncertainty regarding volatility production expense cost as the Company's production expense deferral mechanism described by Company witness J. Cas Swiz?

A. No. The RDM and the production expense deferral mechanism solve for different and distinct problems. As described by Mr. Swiz in PAWC Statement No. 8, there is significant volatility in the per unit cost of the Company's production expenses. The Company responsibly manages and mitigates the volatility of these expenses to the extent possible but, ultimately, the per unit costs of the Company's production expenses are subject to market forces beyond the Company's control. Separately, as I describe in my testimony, the Company's ability to fully recover the revenue requirement approved by the Commission will be diminished if water sales are less than the levels used to set the Company's water service rates in this proceeding. Conversely, the Company could potentially recover more than the revenue requirement approved by the Commission if water sales are greater than the levels used to set the Company's water services rates in this proceeding. The production expense deferral mechanism addresses the volatility associated in the per unit cost of production expenses. The RDM addresses the risk, to both the Company and customers, associated with volatility in water sales.

The Company's proposed RDM accounts for changes in the cost of production expenses (i.e., the Total Production Cost) resulting from changes in volumes sold, but does not account for changes in production cost resulting from higher or lower cost of materials on a per unit basis. Therefore, as volumes sold increase or decrease, the RDM will address

changes in Total Production Cost associated with unanticipated volatility in customer usage, but not volatility in the per unit cost of production expenses.

In contrast, the production expense deferral mechanism will consider changes in production cost on a per unit basis but not changes in volumes sold. As Mr. Swiz explains in his Direct Testimony, unitized production costs going forward will be compared to the production cost per unit approved by the Commission in this case and any differences in unitized production cost multiplied by volumes sold are recorded in the deferral accounts. If volumes sold change but the production cost on a per unit basis does not change, nothing will be recorded in the production expense deferral account described by Mr. Swiz. If production costs do change on a per unit basis, those changes will be accounted for in the production expense deferral accounting.

Comparisons to Revenue Stabilization Mechanisms

Q. Did the Company propose a decoupling mechanism in its last base rate case (Docket No. R-2022-3031672)?

A. Yes. The Company filed a proposal for a revenue stabilization mechanism ("RSM") that was not included in the settlement agreement between the parties that was approved by the Commission in that case. I sponsored the proposed RSM in that proceeding.

Q. Are there significant differences between the Company's proposed RDM in this case and the RSM?

A. There are two significant differences between the proposed RDM in this case and the RSM. These differences are listed below:

- The proposed RSM was primarily an accounting tool designed to align the Company's revenues going forward (i.e., beyond the conclusion of that proceeding)

with the level of authorized revenue ultimately approved by the Commission in that proceeding. The RDM is more of a rate design tool than an accounting tool, coupling traditional rate design principles with the revenue stability afforded through SFV pricing. The reliance on rate components in the Company's proposed RDM sets it apart from the RSM.

- The proposed RSM was based on a static revenue requirement to be approved in that case. Under the RSM, revenues would have been compared going forward to that approved static revenue requirement. The proposed RDM in this case is not based on a static revenue requirement. If volumes sold going forward fluctuate up or down, the revenue calculations under the RDM will go up or down accordingly, but only to the extent that changes in volumes sold cause changes in short-term variable costs. Similarly, if there is customer growth or a reduction in customers (exclusive of acquisitions), the revenue calculations under the RDM will increase or decrease accordingly based on the approved level of fixed cost per customer.

Customer Impacts

Q. Do you have an exhibit that shows expected future trends in total water usage and revenues by customer class?

A. Yes. Exhibit CBR-9 shows an analysis of future trends in water revenues at the Company's proposed rates if current trends in declining usage continue. This analysis shows that at proposed rates, water service revenues will be expected to decline by approximately $5.8 million per year assuming no changes in base rates given the current trends in declining usage and customer counts for the residential, commercial, municipal, and industrial classes.

Q. What variability do you expect to see in annual water revenues in the future?

A. An analysis of the historical data shows that in any given year water revenues at the Company's proposed rates in this proceeding can swing from the projected amount by as much as plus or minus approximately $11.1 million. A statistical analysis of the data shows that an 80% confidence upper and lower bound around projected annual water revenues is plus or minus $14.3 million. This means that 80% of the time revenues are expected to be within plus or minus $14.3 million of the forecast, but there is a 10% chance that revenues will be more than $14.3 million above the forecast and a 10% chance that revenues will be less than $14.3 million below the forecast.

Q. Based on this, what do you expect the impact to be of the Company's proposed RDM on customers?

A. If current trends in customer counts and usage continues, the Company expects there to be a gap for residential water service customers of approximately $6.5 million per year between revenues generated under proposed rates and revenues calculated through the RDM calculation and a gap of approximately $3.3 million per year for nonresidential customers. This translates to an expected recovery factor for residential customers of $0.0266 per hundred gallons, or approximately $1.06 per month for 4,000 gallons of usage, and an expected recovery factor of $0.0181 per hundred gallons for commercial customers.

Q. If a customer takes actions to use less water in an attempt to reduce their bill, will the RDM simply take those savings away from customers?

A. No. A customer who takes specific actions to reduce their water consumption will still enjoy the benefits of a lower bill even with implementation of the RDM. If a customer takes actions to reduce their water consumption by 5% per month (4,000 gallons to 3,800

gallons for example), the resulting bill savings for an average use customer without the RDM would be $4.16 per month, well above the amount that the Company estimates an average use customer bill would increase due to implementation of the RDM.

Public Interest

Q. Does Pennsylvania law allow for consideration of alternative ratemaking mechanisms like the RDM?

A. Yes. Section 1330 of the Public Utility Code allows the Commission to approve an application by PAWC to establish various forms of alternative ratemaking mechanisms. One such form of alternative ratemaking, as identified in section 1330(b)(i), is a decoupling mechanism. Section 1330(f) specifically defines a Decoupling Mechanism as follows: "In the case of water and wastewater, a rate mechanism that adjusts or reconciles authorized rates or revenues for differences between sales used to set rates and actual sales, which may include, but not be limited to, adjustments resulting from fluctuations in the number of customers served and other adjustments deemed appropriate by the commission."[7]

Q. Is the Company's proposed RDM consistent with Pennsylvania law?

A. Yes. The Company's proposed RDM is an alternative ratemaking mechanism under Section 1330(b)(i) and specifically considers and addresses differences between sales used to set rates and actual realized sales in the future, and also specifically considers and addresses fluctuations in the numbers of customers served.

Q. What public policy objectives did the Legislature identify when authorizing the Commission to approve the adoption of alternative ratemaking proposals such as the RDM?

[7] 66 Pa.C.S. § 1330(f).

A. The Legislature stated that "It is the policy of the Commonwealth that utility ratemaking should encourage and sustain investment through appropriate cost-recovery mechanisms to enhance the safety, security, reliability or availability of utility infrastructure and be consistent with the efficient consumption of utility service."[8]

Q. In Docket No. M-2015-2518883, the Commission developed a Policy Statement on alternative ratemaking mechanisms that lists a number of factors that may be considered when evaluating an alternative ratemaking mechanism such as an RDM. Do you have an exhibit that contains an analysis of how the specific factors laid out by the Commission at Docket No. M-2015-2518883 apply to the Company's proposed RDM?

A. Yes. To assist the Commission in its review of the RDM, Exhibit CBR-10 contains the Company's detailed analysis of how the specific factors laid out by the Commission at Docket No. M-2015-2518883 apply to the Company's proposed RDM.

Q. How does a properly structured RDM meet these policy objectives and benefit PAWC's customers?

A. It is in the long-term best interests of customers for the Company to be able to reliably recover its fixed costs on an ongoing basis. The authorized water and wastewater revenue requirements approved by the Commission in this case represent the amount of revenue the Commission determines that the Company needs to operate, maintain, and invest in its water and wastewater system in a prudent and efficient manner, the vast majority of which are fixed in the short term. The ability to reliably recover the Company's fixed cost of providing service to customers improves the Company's ability to plan, manage, maintain,

[8] *Id.* § 1330(a)(2).

and invest in the facilities to continue providing safe, reliable, and high-quality water and wastewater service at a reasonable cost to customers, and a properly structured RDM does just that.

Q. What percentage of the Company's proposed revenue requirement in this case represents fixed costs?

A. As I stated previously, over 95% of the Company's costs are fixed costs, which do not vary depending on how much water our customers use, while approximately 81% of the Company's water and wastewater service revenues will be collected under volumetric rates under the Company's proposed rate structure in this case, which means that revenues will vary up or down depending on how much water our customers use. This means that well over half of the Company's fixed costs will be recovered through volume-based revenues which subjects the Company to significant levels of risk related to recovery of fixed costs.

Q. Are there other benefits to customers from the approval of the RDM?

A. Yes. The RDM will reduce the throughput incentive – the Company's financial incentive to sell more water. Under the current rate structure (without an RDM), the more water customers use, the more water the Company sells, the more revenue the Company collects, and the better the Company's financial performance. Currently, from a public policy perspective, any actions taken by the Company or the government (local, state, or Federal) to encourage conservation, no matter how beneficial to society, creates a disconnect between the public policy goal of more efficient use of water resources and the Company's legitimate financial objectives.

This, in turn, allows for a much higher degree of freedom to consider alternative rate designs that can improve affordability and efficiency of use for customers. Freedom

to implement rate designs that can improve affordability and improve price signals to different types of customers can come in the form of lower monthly service charges and higher volumetric rates, which can help lower-income customers and provide a more significant volumetric incentive to use resources more economically. Rate designs that price Basic Water Service differently from seasonal usage can be implemented that can improve affordability across the board for lower-income customers and provide price signals that better reflect cost-causation principles for customers that use more water for seasonal discretionary purposes. Implementing these beneficial alternative rate designs normally could have significant short-term and longer-term impacts on usage and revenues that may be detrimental to the Company's legitimate financial objectives without an RDM mechanism, but the associated financial risk to both the Company and its customers is reduced under the Company's proposed RDM.

Q. Are there other policy concerns among public utility regulators that the RDM addresses?

A. Yes. The National Association of Regulatory Utility Commissioners ("NARUC") has been at the forefront of this issue. At its November 2013 annual meeting, NARUC adopted a resolution that supports consideration of alternative recovery mechanisms for water and wastewater utilities, attached hereto as Exhibit CBR-11. The NARUC resolution recognizes declining use per customer, a shift to non-revenue–producing infrastructure replacement, and that the traditional cost of service model is not well adapted to this new environment. It states, in part:

> WHEREAS, Traditional cost of service ratemaking, which has worked reasonably well in the past for water and wastewater utilities, no longer adequately addresses the challenges of today and tomorrow. Revenue, driven by declining use per customer, is flat to decreasing, while the nature

> of investment (rate base) has shifted largely from plant needed for serving new customers to non-revenue producing infrastructure replacement and compliance with new drinking water standards; and
>
> WHEREAS, The traditional cost of service model is not well adapted to a no/low growth, high investment utility environment and is unlikely to encourage the necessary future investment in infrastructure replacement; and
>
> WHEREAS, Compared to the water and wastewater industry, the electric and natural gas delivery industries have in place a larger number and a greater variety of alternative regulation policies, such as multiyear rate plans and rate stabilization programs, and those set forth in the 2005 Resolution; and
>
> WHEREAS, The U.S. water industry is the most capital intensive sector of regulated utilities and faces critical investment needs that are expected to total $335 billion to $1 trillion over the next quarter century, as noted in the American Society of Civil Engineers 2013 Report Card for America's Infrastructure… .

The NARUC resolution goes on to recommend the adoption of alternative recovery mechanisms, such as the RDM. It states that:

> Alternative regulatory mechanisms can enhance the efficiency and effectiveness of water and wastewater utility regulation by reducing regulatory costs, increasing rates for customers, when necessary, on a more gradual basis; and providing the predictability and regulatory certainty that supports the attraction of debt and equity capital at reasonable costs and maintains that access at all times.

Q. Are alternative regulatory mechanisms such as the RDM recognized in the regulatory community as an effective means of addressing these policy concerns?

A. Yes. Revenue decoupling mechanisms have been adopted in many states as a way to eliminate the throughput incentive, to support energy efficiency initiatives and investment, and to align actual revenue collection with authorized revenue. Clauses similar to the Company's proposal here have been successfully used for some time for water utilities in New York and California and have been more recently adopted for water utilities in

Connecticut, Nevada, Maine and Illinois. In addition, similar revenue stabilizing mechanisms have been approved for gas utilities in 23 states and an additional two states plus the District of Columbia have mechanisms pending, according to the December 2016 report from the American Gas Association entitled "Innovative Rates, Non-Volumetric Rates, and Tracking Mechanisms: Current List."[9] This report also states that Weather Normalization Adjustments are allowed in 22 states. A December 2017 report by the Institute for Electric Innovation lists 32 states and the District of Columbia that have an approved fixed cost recovery mechanism for electric utilities with an additional state pending approval.

Q. Please summarize why adoption of the RDM for the Company and its customers is appropriate.

A. Adoption of the Company's proposed RDM is in the long-term best interest of the Company and its customers. Rate designs that tie a utility's revenue recovery directly to sales volume have prompted concerns in modern utility regulation that because of seasonal variability and declining use per customer, volumetric rates that collect the majority of a Company's fixed cost do not give water utilities a reasonable opportunity to recover the fixed costs associated with providing service to customers. An alternative rate design mechanism that couples elements of SFV pricing with traditional rate designs brings the best of both worlds to both the Company and its customers. Implementing this alternative rate design solution: 1) makes the Company indifferent to selling less water, 2) promotes

[9] An earlier 2013 study by the Brattle Group entitled "Alternative Regulation and Ratemaking Approaches for Water Companies: Supporting the Capital Investment Needs of the 21st Century," prepared for the National Association of Water Companies, (September 30, 2013) found that 27 states for electricity, 30 states for natural gas delivery, and five states for water have these types of mechanisms.

water efficiency and conservation, 3) reduces the adverse impact of weather variability for both the utility and its customers, and 4) reasonably ensures that sufficient revenues for continued investments in the system are available. The result is a better alignment of all stakeholder interests, and the Company respectfully urges the Commission to authorize its proposed RDM.

CONCLUSION

Q. Does this conclude your direct testimony at this time?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Charles Rea**, hereby state that the facts set forth in the pre-marked Statement No. 10 and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: November 8, 2023

Charles Rea

Charles Rea

Pennsylvania-American Water Company
Case No. R-2023-3043189
Water Affordability Summary - Bills for Basic Water Service
Customer Counts as of December 31, 2022

Affordability Target: 2.0%

Income Level	Size	Water Service	Average Income	Customers	Proposed Base Bill	--- Customers by FPL ---										--- Customers by FPL ---			
						0-50%	51%-100%	101%-150%	151%-200%	201%-250%	251%-300%	301%-350%	351%-400%	401%-450%	451%-500%	Over 500%	0-150%	151-300%	301-500%	Over 500%
$0-$5k	1	1,200	$ 3,000	6,834	$ 45.53	6,834	-	-	-	-	-	-	-	-	-	-	6,834	-	-	-
$0-$5k	2	2,400	$ 3,000	3,394	$ 71.09	3,394	-	-	-	-	-	-	-	-	-	-	3,394	-	-	-
$0-$5k	3	3,600	$ 3,000	1,179	$ 96.62	1,179	-	-	-	-	-	-	-	-	-	-	1,179	-	-	-
$0-$5k	4	4,800	$ 3,000	722	$ 122.19	722	-	-	-	-	-	-	-	-	-	-	722	-	-	-
$0-$5k	5	6,000	$ 3,000	341	$ 147.73	341	-	-	-	-	-	-	-	-	-	-	341	-	-	-
$0-$5k	6	7,200	$ 3,000	131	$ 173.50	131	-	-	-	-	-	-	-	-	-	-	131	-	-	-
$0-$5k	7	8,400	$ 3,000	84	$ 199.08	84	-	-	-	-	-	-	-	-	-	-	84	-	-	-
$5-$10k	1	1,200	$ 7,500	6,096	$ 45.54	3,014	3,082	-	-	-	-	-	-	-	-	-	6,096	-	-	-
$5-$10k	2	2,400	$ 7,500	2,213	$ 71.10	2,213	-	-	-	-	-	-	-	-	-	-	2,213	-	-	-
$5-$10k	3	3,600	$ 7,500	778	$ 96.65	778	-	-	-	-	-	-	-	-	-	-	778	-	-	-
$5-$10k	4	4,800	$ 7,500	498	$ 122.23	498	-	-	-	-	-	-	-	-	-	-	498	-	-	-
$5-$10k	5	6,000	$ 7,500	230	$ 147.91	230	-	-	-	-	-	-	-	-	-	-	230	-	-	-
$5-$10k	6	7,200	$ 7,500	70	$ 173.50	70	-	-	-	-	-	-	-	-	-	-	70	-	-	-
$5-$10k	7	8,400	$ 7,500	45	$ 199.08	45	-	-	-	-	-	-	-	-	-	-	45	-	-	-
$10-$15k	1	1,200	$ 12,500	13,579	$ 45.51	-	12,230	1,349	-	-	-	-	-	-	-	-	13,579	-	-	-
$10-$15k	2	2,400	$ 12,500	3,462	$ 71.07	-	3,462	-	-	-	-	-	-	-	-	-	3,462	-	-	-
$10-$15k	3	3,600	$ 12,500	1,152	$ 96.58	530	622	-	-	-	-	-	-	-	-	-	1,152	-	-	-
$10-$15k	4	4,800	$ 12,500	794	$ 122.14	794	-	-	-	-	-	-	-	-	-	-	794	-	-	-
$10-$15k	5	6,000	$ 12,500	282	$ 147.69	282	-	-	-	-	-	-	-	-	-	-	282	-	-	-
$10-$15k	6	7,200	$ 12,500	96	$ 173.50	96	-	-	-	-	-	-	-	-	-	-	96	-	-	-
$10-$15k	7	8,400	$ 12,500	59	$ 199.08	59	-	-	-	-	-	-	-	-	-	-	59	-	-	-
$15-$20k	1	1,200	$ 17,500	13,296	$ 45.49	-	-	13,296	-	-	-	-	-	-	-	-	13,296	-	-	-
$15-$20k	2	2,400	$ 17,500	4,419	$ 71.01	-	4,015	404	-	-	-	-	-	-	-	-	4,419	-	-	-
$15-$20k	3	3,600	$ 17,500	1,524	$ 96.52	-	1,524	-	-	-	-	-	-	-	-	-	1,524	-	-	-
$15-$20k	4	4,800	$ 17,500	992	$ 122.07	-	992	-	-	-	-	-	-	-	-	-	992	-	-	-
$15-$20k	5	6,000	$ 17,500	449	$ 147.49	270	179	-	-	-	-	-	-	-	-	-	449	-	-	-
$15-$20k	6	7,200	$ 17,500	147	$ 172.99	147	-	-	-	-	-	-	-	-	-	-	147	-	-	-
$15-$20k	7	8,400	$ 17,500	91	$ 199.08	91	-	-	-	-	-	-	-	-	-	-	91	-	-	-
$20-$25k	1	1,200	$ 22,500	12,523	$ 45.51	-	-	4,988	7,535	-	-	-	-	-	-	-	4,988	7,535	-	-
$20-$25k	2	2,400	$ 22,500	5,583	$ 71.06	-	-	5,583	-	-	-	-	-	-	-	-	5,583	-	-	-
$20-$25k	3	3,600	$ 22,500	1,972	$ 96.59	-	1,972	-	-	-	-	-	-	-	-	-	1,972	-	-	-
$20-$25k	4	4,800	$ 22,500	1,272	$ 122.13	-	1,272	-	-	-	-	-	-	-	-	-	1,272	-	-	-
$20-$25k	5	6,000	$ 22,500	581	$ 147.69	-	581	-	-	-	-	-	-	-	-	-	581	-	-	-
$20-$25k	6	7,200	$ 22,500	228	$ 173.17	-	228	-	-	-	-	-	-	-	-	-	228	-	-	-
$20-$25k	7	8,400	$ 22,500	148	$ 199.08	104	44	-	-	-	-	-	-	-	-	-	148	-	-	-
$25-$35k	1	1,200	$ 22,500	22,998	$ 45.53	-	-	-	9,198	13,800	-	-	-	-	-	-	-	22,998	-	-
$25-$35k	2	2,400	$ 30,000	14,262	$ 71.10	-	-	7,105	7,157	-	-	-	-	-	-	-	7,105	7,157	-	-
$25-$35k	3	3,600	$ 30,000	4,939	$ 96.65	-	-	4,939	-	-	-	-	-	-	-	-	4,939	-	-	-
$25-$35k	4	4,800	$ 30,000	3,064	$ 122.18	-	1,488	1,576	-	-	-	-	-	-	-	-	3,064	-	-	-
$25-$35k	5	6,000	$ 30,000	1,445	$ 147.74	-	1,445	-	-	-	-	-	-	-	-	-	1,445	-	-	-
$25-$35k	6	7,200	$ 30,000	642	$ 173.38	-	642	-	-	-	-	-	-	-	-	-	642	-	-	-
$25-$35k	7	8,400	$ 30,000	395	$ 198.86	-	395	-	-	-	-	-	-	-	-	-	395	-	-	-
$35-$50k	1	1,200	$ 37,500	25,805	$ 45.51	-	-	-	-	2,570	12,914	10,322	-	-	-	-	-	15,483	10,322	-
$35-$50k	2	2,400	$ 37,500	24,418	$ 71.06	-	-	-	7,320	17,098	-	-	-	-	-	-	-	24,418	-	-
$35-$50k	3	3,600	$ 37,500	8,668	$ 96.59	-	-	1,704	6,964	-	-	-	-	-	-	-	1,704	6,964	-	-
$35-$50k	4	4,800	$ 37,500	5,588	$ 122.13	-	-	3,898	1,690	-	-	-	-	-	-	-	3,898	1,690	-	-
$35-$50k	5	6,000	$ 37,500	2,976	$ 147.68	-	-	2,976	-	-	-	-	-	-	-	-	2,976	-	-	-
$35-$50k	6	7,200	$ 37,500	1,260	$ 173.20	-	453	807	-	-	-	-	-	-	-	-	1,260	-	-	-
$35-$50k	7	8,400	$ 37,500	650	$ 198.68	-	455	195	-	-	-	-	-	-	-	-	650	-	-	-
$50-$75k	1	1,200	$ 62,500	30,501	$ 45.49	-	-	-	-	-	-	-	9,154	9,156	9,152	3,040	-	-	27,461	3,040
$50-$75k	2	2,400	$ 62,500	40,174	$ 71.03	-	-	-	-	-	16,055	16,084	8,035	-	-	-	-	16,055	24,119	-
$50-$75k	3	3,600	$ 62,500	15,860	$ 96.56	-	-	-	-	7,898	7,962	-	-	-	-	-	-	15,860	-	-
$50-$75k	4	4,800	$ 62,500	11,123	$ 122.08	-	-	-	4,446	6,677	-	-	-	-	-	-	-	11,123	-	-

Pennsylvania-American Water Company
Case No. R-2023-3043189
Water Affordability Summary - Bills for Basic Water Service
Customer Counts as of December 31, 2022

Affordability Target: 2.0%

Income Level	Size	Water Service	Average Income	Customers	Proposed Base Bill	--- Customers by FPL --- 0-50%	51%-100%	101%-150%	151%-200%	201%-250%	251%-300%	301%-350%	351%-400%	401%-450%	451%-500%	Over 500%	--- Customers by FPL --- 0-150%	151-300%	301-500%	Over 500%
$50-$75k	5	6,000	$ 62,500	5,692	$ 147.60	-	-	562	4,004	1,126	-	-	-	-	-	-	562	5,130	-	-
$50-$75k	6	7,200	$ 62,500	2,288	$ 173.14	-	-	905	1,383	-	-	-	-	-	-	-	905	1,383	-	-
$50-$75k	7	8,400	$ 62,500	1,239	$ 198.66	-	-	889	350	-	-	-	-	-	-	-	889	350	-	-
$75-$100k	1	1,200	$ 87,500	18,326	$ 45.49	-	-	-	-	-	-	-	-	-	-	18,326	-	-	-	18,326
$75-$100k	2	2,400	$ 87,500	34,762	$ 71.02	-	-	-	-	-	-	-	6,934	10,469	13,908	3,452	-	-	31,311	3,452
$75-$100k	3	3,600	$ 87,500	15,274	$ 96.55	-	-	-	-	-	-	7,609	7,664	-	-	-	-	-	15,274	-
$75-$100k	4	4,800	$ 87,500	11,986	$ 122.08	-	-	-	-	-	7,195	4,791	-	-	-	-	-	7,195	4,791	-
$75-$100k	5	6,000	$ 87,500	5,502	$ 147.59	-	-	-	-	2,788	2,714	-	-	-	-	-	-	5,502	-	-
$75-$100k	6	7,200	$ 87,500	2,226	$ 173.13	-	-	-	440	1,786	-	-	-	-	-	-	-	2,226	-	-
$75-$100k	7	8,400	$ 87,500	1,200	$ 198.65	-	-	-	764	436	-	-	-	-	-	-	-	1,200	-	-
$100-$150k	1	1,200	$ 125,000	16,150	$ 45.48	-	-	-	-	-	-	-	-	-	-	16,150	-	-	-	16,150
$100-$150k	2	2,400	$ 125,000	44,509	$ 71.01	-	-	-	-	-	-	-	-	-	-	44,509	-	-	-	44,509
$100-$150k	3	3,600	$ 125,000	21,600	$ 96.53	-	-	-	-	-	-	-	-	4,320	6,451	10,829	-	-	10,772	10,829
$100-$150k	4	4,800	$ 125,000	19,508	$ 122.06	-	-	-	-	-	-	1,941	5,855	5,862	5,852	-	-	-	19,508	-
$100-$150k	5	6,000	$ 125,000	8,337	$ 147.59	-	-	-	-	-	830	3,305	2,545	1,657	-	-	-	830	7,507	-
$100-$150k	6	7,200	$ 125,000	3,262	$ 173.09	-	-	-	-	-	1,300	1,321	640	-	-	-	-	1,300	1,962	-
$100-$150k	7	8,400	$ 125,000	1,784	$ 198.60	-	-	-	-	517	751	517	-	-	-	-	-	1,268	517	-
Over $150k	1	1,200	$ 200,000	9,851	$ 45.45	-	-	-	-	-	-	-	-	-	-	9,851	-	-	-	9,851
Over $150k	2	2,400	$ 200,000	39,474	$ 70.98	-	-	-	-	-	-	-	-	-	-	39,474	-	-	-	39,474
Over $150k	3	3,600	$ 200,000	21,874	$ 96.50	-	-	-	-	-	-	-	-	-	-	21,874	-	-	-	21,874
Over $150k	4	4,800	$ 200,000	23,133	$ 122.04	-	-	-	-	-	-	-	-	-	-	23,133	-	-	-	23,133
Over $150k	5	6,000	$ 200,000	9,689	$ 147.55	-	-	-	-	-	-	-	-	950	1,949	6,791	-	-	2,898	6,791
Over $150k	6	7,200	$ 200,000	3,418	$ 173.04	-	-	-	-	-	-	-	339	694	715	1,671	-	-	1,748	1,671
Over $150k	7	8,400	$ 200,000	1,967	$ 198.60	-	-	-	-	-	-	180	412	431	548	395	-	-	1,572	395
			Total:	623,083		21,906	35,081	51,176	51,252	54,694	49,721	46,070	41,578	33,538	38,574	199,494	108,163	155,668	159,759	199,494

Pennsylvania-American Water Company
Water Affordability Analysis

Residential Statistics	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	FPFTY
PA Revenue	$ 325,273,489	$ 329,828,076	$ 354,169,945	$ 359,423,318	$ 378,710,296	$ 381,550,172	$ 398,076,489	$ 394,629,629	$ 412,096,481	$ 402,858,625	$ 441,820,109	$ 451,468,780	$ 459,547,021	$ 513,288,585	$ 657,085,231
PA Sales	29,239,212	28,406,724	27,068,544	27,122,889	26,905,414	26,755,046	26,278,710	25,992,477	25,704,331	25,430,774	27,131,981	26,152,319	25,842,896	25,174,831	24,472,073
PA Customers	587,949	588,215	589,738	593,135	597,129	598,469	601,431	604,772	607,073	610,361	617,040	621,942	625,407	632,818	632,818
PA Statewide Median Income	$ 48,314	$ 49,910	$ 51,904	$ 55,156	$ 55,173	$ 60,389	$ 60,979	$ 63,173	$ 64,524	$ 70,582	$ 70,789	$ 72,627	$ 72,210	$ 76,680	$ 82,181
PA Customer Median Income	$ 54,380	$ 56,176	$ 58,421	$ 62,081	$ 62,100	$ 67,971	$ 68,635	$ 71,105	$ 72,625	$ 79,444	$ 79,677	$ 81,746	$ 81,276	$ 86,308	$ 92,500
PA Average Price	$ 11.12	$ 11.61	$ 13.08	$ 13.25	$ 14.08	$ 14.26	$ 15.15	$ 15.18	$ 16.03	$ 15.84	$ 16.28	$ 17.26	$ 17.78	$ 20.39	$ 26.85
PA Average Monthly Bill	$ 46.10	$ 46.73	$ 50.05	$ 50.50	$ 52.85	$ 53.13	$ 55.16	$ 54.38	$ 56.57	$ 55.00	$ 59.67	$ 60.49	$ 61.23	$ 67.59	$ 86.53
PA Average Monthly Use	4.14	4.02	3.82	3.81	3.75	3.73	3.64	3.58	3.53	3.47	3.66	3.50	3.44	3.32	3.22
PA BTI Ratio	1.02%	1.00%	1.03%	0.98%	1.02%	0.94%	0.96%	0.92%	0.93%	0.83%	0.90%	0.89%	0.90%	0.94%	1.12%

Chart 2

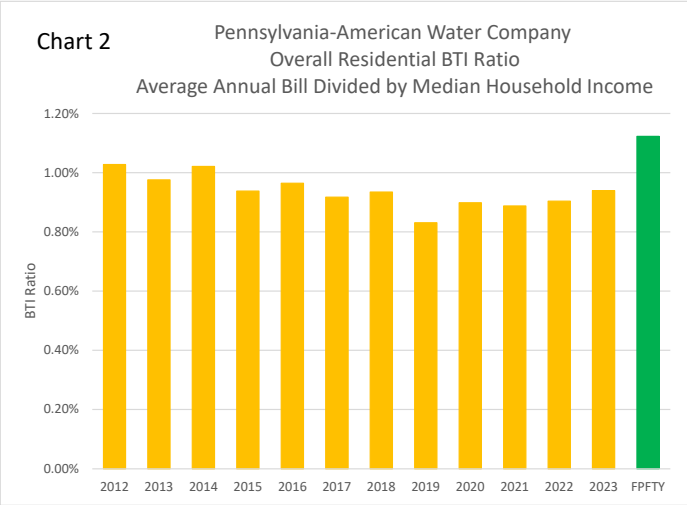
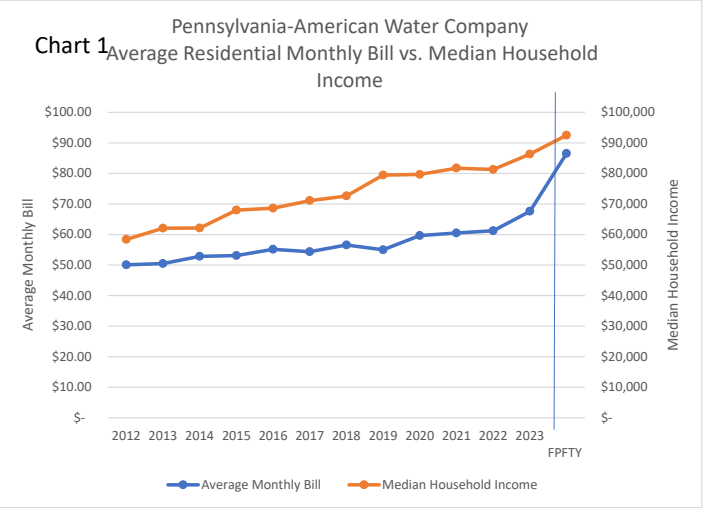


Chart 1



TOTAL COMMUNITIES: 362

City	State	Zip Code	Profit Center	Residential Customers	Analyzer Flag	Analyzed Customers	Rate Zone	PWS Zone	Income Flag	Household Flag	Median Income Total	Median Income Owned	Median Income Rented	Percent Owned	Percent Renter S.F.	Customer Median Income	Residential Customers Owner	Residential Customers Renter
Atlasburg	PA	15004	PA-McMurray	126	1	126	1	1	0	1	$ 52,059	$ 52,059	-	100.0%	0.0%	$ 52,059	126	-
Beaver Falls	PA	15010	PA-NewCastle/Ellwood	1	1	1	1	1	1	1	$ 63,856	$ 80,731	$ 31,692	84.7%	15.3%	$ 73,222	1	0
Bridgeville	PA	15017	PA-Pittsburgh	2,985	1	2,985	1	1	1	1	$ 79,129	$ 94,207	$ 44,384	92.1%	7.9%	$ 90,273	2,749	236
Bridgeville	PA	15017	PA-McMurray	3,518	1	3,518	1	1	1	1	$ 79,129	$ 94,207	$ 44,384	92.1%	7.9%	$ 90,273	3,240	278
Buena Vista	PA	15018	PA-Elizabeth	301	1	301	1	1	0	1	$ 27,358	$ 27,386	-	86.7%	13.3%	$ 23,739	261	40
Bulger	PA	15019	PA-McMurray	329	1	329	1	1	1	1	$ 45,481	$ 54,018	$ 43,077	85.9%	14.1%	$ 52,477	283	46
Burgettstown	PA	15021	PA-McMurray	2,275	1	2,275	1	1	1	1	$ 67,703	$ 79,940	$ 37,188	85.6%	14.4%	$ 73,771	1,947	328
Charleroi	PA	15022	PA-Elizabeth	129	1	129	1	1	1	1	$ 52,905	$ 64,453	$ 26,444	87.9%	12.1%	$ 59,836	113	16
Clairton	PA	15025	PA-Elizabeth	3,902	1	3,902	1	1	1	1	$ 66,221	$ 86,754	$ 32,525	84.0%	16.0%	$ 78,064	3,277	625
Clairton	PA	15025	PA-Pittsburgh	2,344	1	2,344	1	1	1	1	$ 66,221	$ 86,754	$ 32,525	84.0%	16.0%	$ 78,064	1,968	376
Clinton	PA	15026	PA-McMurray	65	1	65	1	1	1	1	$ 89,085	$ 97,250	$ 88,545	86.0%	14.0%	$ 96,027	56	9
Cuddy	PA	15031	PA-McMurray	2	1	2	1	1	0	1	$ 31,500	$ 80,268	-	79.9%	20.1%	$ 64,099	2	0
Cuddy	PA	15031	PA-Pittsburgh	215	1	215	1	1	0	1	$ 31,500	$ 80,268	-	79.9%	20.1%	$ 64,099	172	43
Donora	PA	15033	PA-Elizabeth	66	1	66	1	1	1	1	$ 39,571	$ 60,781	$ 21,757	54.9%	45.1%	$ 43,176	36	30
Dravosburg	PA	15034	PA-Elizabeth	367	1	367	1	1	1	1	$ 35,417	$ 51,875	$ 23,626	68.3%	31.7%	$ 42,918	251	116
Dravosburg	PA	15034	PA-Pittsburgh	225	1	225	1	1	1	1	$ 35,417	$ 51,875	$ 23,626	68.3%	31.7%	$ 42,918	154	71
Elizabeth	PA	15037	PA-Elizabeth	4,079	1	4,079	1	1	1	1	$ 68,201	$ 72,730	$ 52,438	91.7%	8.3%	$ 71,055	3,742	337
Elrama	PA	15038	PA-Elizabeth	166	1	166	1	1	0	1	-	-	-	71.9%	28.1%	$ -	119	47
Glassport	PA	15045	PA-Elizabeth	1,756	1	1,756	1	1	1	1	$ 43,458	$ 48,592	$ 32,260	77.1%	22.9%	$ 44,858	1,355	401
Greenock	PA	15047	PA-Elizabeth	136	1	136	1	1	0	1	$ 38,790	$ 38,790	-	100.0%	0.0%	$ 38,790	136	-
Hookstown	PA	15050	PA-McMurray	45	1	45	1	1	1	1	$ 71,047	$ 72,432	$ 42,250	94.4%	5.6%	$ 70,729	42	3
Joffre	PA	15053	PA-McMurray	96	1	96	1	1	0	1	-	-	-	92.7%	7.3%	$ -	89	7
Langeloth	PA	15054	PA-McMurray	257	1	257	1	1	0	1	$ 34,457	-	-	88.6%	11.4%	$ -	228	29
Lawrence	PA	15055	PA-McMurray	716	1	716	1	1	0	1	$ 65,372	$ 65,405	-	92.9%	7.1%	$ 60,793	666	50
Mc Donald	PA	15057	PA-McMurray	3,207	1	3,207	1	1	1	1	$ 98,523	$ 114,583	$ 30,776	94.4%	5.6%	$ 109,884	3,027	180
Mc Donald	PA	15057	PA-Pittsburgh	1,787	1	1,787	1	1	1	1	$ 98,523	$ 114,583	$ 30,776	94.4%	5.6%	$ 109,884	1,687	100
Midland	PA	15059	PA-McMurray	1	1	1	1	1	1	1	$ 66,111	$ 70,397	$ 49,167	75.0%	25.0%	$ 65,081	1	0
Midway	PA	15060	PA-McMurray	454	1	454	1	1	1	1	$ 57,857	$ 61,771	$ 28,542	98.2%	1.8%	$ 61,169	446	8
Monongahela	PA	15063	PA-Elizabeth	3,836	1	3,836	1	1	1	1	$ 64,020	$ 75,566	$ 30,972	90.9%	9.1%	$ 71,488	3,485	351
Morgan	PA	15064	PA-Pittsburgh	193	1	193	1	1	0	1	$ 71,071	$ 72,054	-	50.4%	49.6%	$ 36,320	97	96
New Eagle	PA	15067	PA-Elizabeth	841	1	841	1	1	1	1	$ 49,397	$ 55,395	$ 38,864	88.5%	11.5%	$ 53,502	745	96
Oakdale	PA	15071	PA-McMurray	28	1	28	1	1	1	1	$ 86,250	$ 99,554	$ 67,156	89.3%	10.7%	$ 96,083	25	3
Oakdale	PA	15071	PA-Pittsburgh	1,151	1	1,151	1	1	1	1	$ 86,250	$ 99,554	$ 67,156	89.3%	10.7%	$ 96,083	1,028	123
Slovan	PA	15078	PA-McMurray	233	1	233	1	1	0	1	$ 68,173	$ 69,087	-	76.5%	23.5%	$ 52,877	178	55
Sturgeon	PA	15082	PA-McMurray	142	1	142	1	1	0	1	-	-	-	100.0%	0.0%	$ -	142	-
Sturgeon	PA	15082	PA-Pittsburgh	1	1	1	1	1	0	1	-	-	-	100.0%	0.0%	$ -	1	-
Sutersville	PA	15083	PA-Elizabeth	20	1	20	1	1	1	1	$ 62,019	$ 62,212	$ 50,000	92.4%	7.6%	$ 61,281	18	2
West Elizabeth	PA	15088	PA-Elizabeth	214	1	214	1	1	1	1	$ 46,705	$ 56,250	$ 27,250	84.1%	15.9%	$ 51,627	180	34
West Newton	PA	15089	PA-Elizabeth	21	1	21	1	1	1	1	$ 54,033	$ 63,750	$ 23,750	88.2%	11.8%	$ 59,026	19	2
Allison Park	PA	15101	PA-Mechanicsburg	1	1	1	1	1	1	1	$ 90,743	$ 115,083	$ 47,172	94.2%	5.8%	$ 111,170	1	0
Bethel Park	PA	15102	PA-Hershey/Palmyra	1	1	1	1	1	1	1	$ 95,479	$ 105,166	$ 53,247	93.0%	7.0%	$ 101,541	1	0
Bethel Park	PA	15102	PA-Pittsburgh	10,897	1	10,897	1	1	1	1	$ 95,479	$ 105,166	$ 53,247	93.0%	7.0%	$ 101,541	10,136	761
Carnegie	PA	15106	PA-Pittsburgh	7,083	1	7,083	1	1	1	1	$ 62,658	$ 78,906	$ 32,160	86.4%	13.6%	$ 72,562	6,122	961
Homestead	PA	15120	PA-Pittsburgh	7,021	1	7,021	1	1	1	1	$ 46,139	$ 60,625	$ 27,382	78.3%	21.7%	$ 53,399	5,495	1,526
West Mifflin	PA	15122	PA-Elizabeth	64	1	64	1	1	1	1	$ 57,705	$ 68,445	$ 34,797	87.8%	12.2%	$ 64,351	56	8
West Mifflin	PA	15122	PA-Pittsburgh	7,397	1	7,397	1	1	1	1	$ 57,705	$ 68,445	$ 34,797	87.8%	12.2%	$ 64,351	6,497	900
South Park	PA	15129	PA-Pittsburgh	3,871	1	3,871	1	1	1	1	$ 82,002	$ 91,227	$ 58,654	91.2%	8.8%	$ 88,370	3,531	340
Mckeesport	PA	15133	PA-Elizabeth	1,160	1	1,160	1	1	1	1	$ 59,541	$ 62,804	$ 54,714	81.1%	18.9%	$ 61,278	941	219
Mckeesport	PA	15135	PA-Elizabeth	1,828	1	1,828	1	1	1	1	$ 75,871	$ 97,452	$ 39,736	88.2%	11.8%	$ 90,623	1,612	216
Presto	PA	15142	PA-Pittsburgh	696	1	696	1	1	1	1	$ 106,786	$ 233,611	$ 70,345	93.1%	6.9%	$ 222,384	648	48
Pittsburgh	PA	15201	PA-McMurray	2	1	2	1	1	1	1	$ 74,983	$ 84,429	$ 65,602	73.8%	26.2%	$ 79,492	1	1
Pittsburgh	PA	15202	PA-Pittsburgh	1	1	1	1	1	1	1	$ 57,551	$ 85,600	$ 40,120	88.9%	11.1%	$ 80,550	1	0
Pittsburgh	PA	15204	PA-Pittsburgh	2,475	1	2,475	1	1	1	1	$ 47,395	$ 53,542	$ 34,035	77.4%	22.6%	$ 49,142	1,917	558
Pittsburgh	PA	15205	PA-Pittsburgh	5,917	1	5,917	1	1	1	1	$ 66,594	$ 86,722	$ 43,750	85.8%	14.2%	$ 80,606	5,075	842
Pittsburgh	PA	15205	PA-Elizabeth	1	1	1	1	1	1	1	$ 66,594	$ 86,722	$ 43,750	85.8%	14.2%	$ 80,606	1	0
Pittsburgh	PA	15207	PA-Pittsburgh	1,464	1	1,464	1	1	1	1	$ 47,709	$ 62,557	$ 22,635	73.4%	26.6%	$ 51,936	1,075	389
Pittsburgh	PA	15210	PA-Pittsburgh	7,733	1	7,733	1	1	1	1	$ 41,065	$ 52,335	$ 29,930	69.3%	30.7%	$ 45,466	5,362	2,371
Pittsburgh	PA	15212	PA-Pittsburgh	1	1	1	1	1	1	1	$ 53,882	$ 76,654	$ 35,389	76.7%	23.3%	$ 67,028	1	0
Pittsburgh	PA	15215	PA-Pittsburgh	2	1	2	1	1	1	1	$ 81,004	$ 99,271	$ 38,880	87.6%	12.4%	$ 91,763	2	0
Pittsburgh	PA	15216	PA-Pittsburgh	8,106	1	8,106	1	1	1	1	$ 66,770	$ 87,933	$ 44,703	84.1%	15.9%	$ 81,070	6,819	1,287
Pittsburgh	PA	15220	PA-Pittsburgh	4,017	1	4,017	1	1	1	1	$ 75,363	$ 80,040	$ 68,181	85.1%	14.9%	$ 78,275	3,419	598
Pittsburgh	PA	15221	PA-Pittsburgh	1	1	1	1	1	1	1	$ 47,025	$ 76,121	$ 33,116	71.4%	28.6%	$ 63,813	1	0
Pittsburgh	PA	15222	PA-Pittsburgh	1	1	1	1	1	1	1	$ 109,426	$ 215,804	$ 100,550	78.8%	21.2%	$ 191,329	1	0
Pittsburgh	PA	15226	PA-Pittsburgh	5,605	1	5,605	1	1	1	1	$ 67,629	$ 73,063	$ 50,724	81.7%	18.3%	$ 68,965	4,577	1,028

TOTAL COMMUNITIES: 362

City	State	Zip Code	Profit Center	Residential Customers	Analyzer Flag	Analyzed Customers	Rate Zone	PWS Zone	Income Flag	Household Flag	Median Income Total	Median Income Owned	Median Income Rented	Percent Owned	Percent Renter S.F.	Customer Median Income	Residential Customers Owner	Residential Customers Renter
Pittsburgh	PA	15227	PA-Pittsburgh	10,899	1	10,899	1	1	1	1	$ 64,827	$ 81,538	$ 32,355	89.4%	10.6%	$ 76,327	9,744	1,155
Pittsburgh	PA	15228	PA-Pittsburgh	5,657	1	5,657	1	1	1	1	$ 116,278	$ 146,049	$ 52,857	90.2%	9.8%	$ 136,896	5,101	556
Pittsburgh	PA	15234	PA-Pittsburgh	5,302	1	5,302	1	1	1	1	$ 69,139	$ 80,918	$ 54,951	93.8%	6.2%	$ 79,296	4,971	331
Pittsburgh	PA	15236	PA-Pittsburgh	11,090	1	11,090	1	1	1	1	$ 72,395	$ 89,067	$ 40,625	94.9%	5.1%	$ 86,585	10,522	568
Pittsburgh	PA	15239	PA-Pittsburgh	1	1	1	1	1	1	1	$ 86,281	$ 95,945	$ 55,082	90.2%	9.8%	$ 91,957	1	0
Pittsburgh	PA	15241	PA-McMurray	677	1	677	1	1	1	1	$ 131,809	$ 144,795	$ 47,951	96.8%	3.2%	$ 141,661	655	22
Pittsburgh	PA	15241	PA-Pittsburgh	6,564	1	6,564	1	1	1	1	$ 131,809	$ 144,795	$ 47,951	96.8%	3.2%	$ 141,661	6,352	212
Pittsburgh	PA	15243	PA-Pittsburgh	4,890	1	4,890	1	1	1	1	$ 98,260	$ 107,313	$ 39,141	96.8%	3.2%	$ 105,105	4,732	158
Washington	PA	15301	PA-McMurray	15,390	1	15,390	1	1	1	1	$ 62,902	$ 75,000	$ 40,520	84.8%	15.2%	$ 69,747	13,045	2,345
Amity	PA	15311	PA-McMurray	1	1	1	1	1	0	1	$ 82,778	$ 87,614	-	98.8%	1.2%	$ 86,521	1	0
Avella	PA	15312	PA-McMurray	670	1	670	1	1	1	1	$ 67,222	$ 78,542	$ 38,482	84.2%	15.8%	$ 72,210	564	106
Bentleyville	PA	15314	PA-Elizabeth	9	1	9	1	1	1	1	$ 54,519	$ 71,591	$ 19,146	87.0%	13.0%	$ 64,750	8	1
Bentleyville	PA	15314	PA-McMurray	102	1	102	1	1	1	1	$ 54,519	$ 71,591	$ 19,146	87.0%	13.0%	$ 64,750	89	13
Canonsburg	PA	15317	PA-McMurray	15,783	1	15,783	1	1	1	1	$ 97,865	$ 108,946	$ 57,200	91.6%	8.4%	$ 104,580	14,451	1,332
Canonsburg	PA	15317	PA-Pittsburgh	4	1	4	1	1	1	1	$ 97,865	$ 108,946	$ 57,200	91.6%	8.4%	$ 104,580	4	0
Cecil	PA	15321	PA-McMurray	744	1	744	1	1	1	1	$ 105,552	$ 77,500	$ 125,889	78.7%	21.3%	$ 87,803	586	158
Cecil	PA	15321	PA-Pittsburgh	7	1	7	1	1	1	1	$ 105,552	$ 77,500	$ 125,889	78.7%	21.3%	$ 87,803	6	1
Claysville	PA	15323	PA-McMurray	634	1	634	1	1	1	1	$ 67,200	$ 75,417	$ 39,821	87.0%	13.0%	$ 70,779	551	83
Prosperity	PA	15329	PA-McMurray	86	1	86	1	1	1	1	$ 69,750	$ 78,250	$ 52,813	89.0%	11.0%	$ 75,444	77	9
Eighty Four	PA	15330	PA-McMurray	1,507	1	1,507	1	1	1	1	$ 92,768	$ 96,788	$ 57,766	92.9%	7.1%	$ 94,034	1,401	106
Finleyville	PA	15332	PA-Elizabeth	1,375	1	1,375	1	1	1	1	$ 63,620	$ 70,191	$ 38,333	93.8%	6.2%	$ 68,203	1,289	86
Finleyville	PA	15332	PA-McMurray	221	1	221	1	1	1	1	$ 63,620	$ 70,191	$ 38,333	93.8%	6.2%	$ 68,203	207	14
Finleyville	PA	15332	PA-Pittsburgh	1,599	1	1,599	1	1	1	1	$ 63,620	$ 70,191	$ 38,333	93.8%	6.2%	$ 68,203	1,499	100
Hickory	PA	15340	PA-McMurray	355	1	355	1	1	1	1	$ 72,500	$ 82,981	$ 24,250	91.5%	8.5%	$ 77,963	325	30
Houston	PA	15342	PA-McMurray	2,161	1	2,161	1	1	1	1	$ 79,208	$ 90,521	$ 21,936	94.3%	5.7%	$ 86,617	2,038	123
Jefferson	PA	15344	PA-Pittsburgh	1	1	1	1	1	1	1	$ 63,333	$ 62,738	$ 103,036	92.4%	7.6%	$ 65,806	1	0
Muse	PA	15350	PA-McMurray	305	1	305	1	1	0	1	$ 59,286	$ 83,077	-	55.6%	44.4%	$ 46,154	169	136
Southview	PA	15361	PA-McMurray	69	1	69	1	1	0	1	-	$ 92,250	-	72.5%	27.5%	$ 66,907	50	19
Strabane	PA	15363	PA-McMurray	361	1	361	1	1	1	1	$ 66,875	$ 85,745	$ 49,118	94.7%	5.3%	$ 83,807	342	19
Venetia	PA	15367	PA-McMurray	2,581	1	2,581	1	1	1	1	$ 157,974	$ 165,588	$ 66,437	96.0%	4.0%	$ 161,599	2,477	104
Venetia	PA	15367	PA-Pittsburgh	790	1	790	1	1	1	1	$ 157,974	$ 165,588	$ 66,437	96.0%	4.0%	$ 161,599	758	32
Westland	PA	15378	PA-McMurray	70	1	70	1	1	0	1	-	-	-	100.0%	0.0%	$ -	70	-
West Middletown	PA	15379	PA-McMurray	53	1	53	1	1	0	1	$ 68,409	$ 68,889	-	80.0%	20.0%	$ 55,111	42	11
Uniontown	PA	15401	PA-Uniontown/Connell	6,345	1	6,345	1	1	1	1	$ 45,269	$ 64,063	$ 23,498	85.9%	14.1%	$ 58,338	5,450	895
Uniontown	PA	15401	PA-Uniontown/Connell	231	1	231	1	1	1	1	$ 45,269	$ 64,063	$ 23,498	85.9%	14.1%	$ 58,338	198	33
Allison	PA	15413	PA-Brownsville	246	1	246	1	1	0	1	-	-	-	66.9%	33.1%	$ -	164	82
Brownsville	PA	15417	PA-Brownsville	2,158	1	2,158	1	1	1	1	$ 52,446	$ 69,032	$ 21,379	80.9%	19.1%	$ 59,951	1,747	411
California	PA	15419	PA-Brownsville	1,026	1	1,026	1	1	1	1	$ 38,706	$ 76,118	$ 30,625	68.6%	31.4%	$ 61,844	704	322
Coal Center	PA	15423	PA-Brownsville	104	1	104	1	1	1	1	$ 51,711	$ 68,529	$ 33,793	80.4%	19.6%	$ 61,711	84	20
Connellsville	PA	15425	PA-Uniontown/Connell	4,193	1	4,193	1	1	1	1	$ 48,397	$ 63,234	$ 20,911	83.9%	16.1%	$ 56,412	3,517	676
Daisytown	PA	15427	PA-Brownsville	247	1	247	1	1	1	1	$ 42,344	$ 64,375	$ 27,569	73.1%	26.9%	$ 54,480	181	66
Dunbar	PA	15431	PA-Uniontown/Connell	94	1	94	1	1	1	1	$ 55,701	$ 57,188	$ 39,967	91.2%	8.8%	$ 55,673	86	8
East Millsboro	PA	15433	PA-Brownsville	2	1	2	1	1	0	1	$ 38,550	$ 40,222	-	100.0%	0.0%	$ 40,222	2	-
Farmington	PA	15437	PA-Farmington	430	1	430	1	1	1	1	$ 68,478	$ 70,188	$ 67,731	84.2%	15.8%	$ 69,800	362	68
Grindstone	PA	15442	PA-Brownsville	302	1	302	1	1	0	1	$ 46,696	$ 48,203	-	79.9%	20.1%	$ 38,518	241	61
Hiller	PA	15444	PA-Brownsville	220	1	220	1	1	0	1	-	-	-	81.3%	18.7%	$ -	179	41
Hopwood	PA	15445	PA-Uniontown/Connell	919	1	919	1	1	1	1	$ 52,143	$ 58,542	$ 39,871	88.5%	11.5%	$ 56,401	814	105
Lemont Furnace	PA	15456	PA-Uniontown/Connell	129	1	129	1	1	1	1	$ 47,262	$ 46,250	$ 50,417	94.8%	5.2%	$ 46,468	122	7
Mc Clellandtown	PA	15458	PA-Uniontown/Connell	22	1	22	1	1	1	1	$ 66,477	$ 82,250	$ 66,243	72.0%	28.0%	$ 77,771	16	6
New Salem	PA	15468	PA-Brownsville	71	1	71	1	1	1	1	$ 67,555	$ 68,593	$ 27,889	91.0%	9.0%	$ 64,947	65	6
Oliver	PA	15472	PA-Uniontown/Connell	95	1	95	1	1	0	1	$ 45,897	-	-	17.4%	82.6%	$ -	17	78
Uledi	PA	15484	PA-Uniontown/Connell	99	1	99	1	1	0	1	$ 86,178	$ 86,178	-	100.0%	0.0%	$ 86,178	99	-
Greensburg	PA	15601	PA-Uniontown/Connell	3	1	3	1	1	1	1	$ 64,278	$ 80,935	$ 31,279	88.7%	11.3%	$ 75,315	3	0
Indiana	PA	15701	PA-Indiana	6,519	1	6,519	1	1	1	1	$ 51,430	$ 74,541	$ 25,662	79.3%	20.7%	$ 64,443	5,172	1,347
Anita	PA	15711	PA-Punxsatawney	143	1	143	1	1	1	1	$ 43,750	$ 47,083	$ 39,479	78.9%	21.1%	$ 45,482	113	30
Big Run	PA	15715	PA-Punxsatawney	258	1	258	1	1	1	1	$ 43,750	$ 37,250	$ 46,500	85.6%	14.4%	$ 38,585	221	37
Punxsutawney	PA	15767	PA-Punxsatawney	2,699	1	2,699	1	1	1	1	$ 46,563	$ 55,534	$ 30,466	84.3%	15.7%	$ 51,599	2,275	424
Walston	PA	15781	PA-Punxsatawney	67	1	67	1	1	0	1	$ 45,938	$ 46,094	-	97.8%	2.2%	$ 45,092	66	1
Worthville	PA	15784	PA-Punxsatawney	1	1	1	1	1	0	1	$ 70,000	$ 73,750	-	90.6%	9.4%	$ 66,836	1	0
Brookville	PA	15825	PA-Punxsatawney	1	1	1	1	1	1	1	$ 58,534	$ 68,233	$ 35,357	87.5%	12.5%	$ 64,129	1	0
Corsica	PA	15829	PA-Clarion	101	1	101	1	1	0	1	$ 64,896	$ 65,909	-	96.4%	3.6%	$ 63,504	97	4
Butler	PA	16001	PA-Butler	13,143	1	13,143	1	1	1	1	$ 57,500	$ 76,719	$ 29,040	86.9%	13.1%	$ 70,462	11,418	1,725
Butler	PA	16002	PA-Butler	1,184	1	1,184	1	1	1	1	$ 69,714	$ 79,015	$ 27,500	95.4%	4.6%	$ 76,637	1,129	55
Cabot	PA	16023	PA-Butler	41	1	41	1	1	1	1	$ 58,155	$ 77,727	$ 28,064	93.8%	6.2%	$ 74,623	38	3

TOTAL COMMUNITIES: 362

City	State	Zip Code	Profit Center	Residential Customers	Analyzer Flag	Analyzed Customers	Rate Zone	PWS Zone	Income Flag	Household Flag	Median Income Total	Median Income Owned	Median Income Rented	Percent Owned	Percent Renter S.F.	Customer Median Income	Residential Customers Owner	Residential Customers Renter
Connoquenessing	PA	16027	PA-Butler	194	1	194	1	1	0	1	$ 54,250	$ 73,295	-	72.8%	27.2%	$ 53,354	141	53
East Butler	PA	16029	PA-Butler	230	1	230	1	1	1	1	$ 49,405	$ 53,750	$ 36,250	88.9%	11.1%	$ 51,806	204	26
Evans City	PA	16033	PA-Butler	378	1	378	1	1	1	1	$ 83,861	$ 93,957	$ 50,750	89.2%	10.8%	$ 89,294	337	41
Harmony	PA	16037	PA-NewCastle/Ellwood	503	1	503	1	1	1	1	$ 83,611	$ 89,348	$ 53,472	90.6%	9.4%	$ 85,960	456	47
Harmony	PA	16037	PA-Butler	152	1	152	1	1	1	1	$ 83,611	$ 89,348	$ 53,472	90.6%	9.4%	$ 85,960	138	14
Lyndora	PA	16045	PA-Butler	478	1	478	1	1	0	1	$ 70,294	$ 72,596	-	68.6%	31.4%	$ 49,785	328	150
Prospect	PA	16052	PA-Butler	6	1	6	1	1	1	1	$ 74,583	$ 79,118	$ 51,797	93.7%	6.3%	$ 77,390	6	0
Renfrew	PA	16053	PA-Butler	939	1	939	1	1	1	1	$ 76,213	$ 76,866	$ 56,319	89.4%	10.6%	$ 74,685	839	100
Saxonburg	PA	16056	PA-Saxonburg	661	1	661	1	1	1	1	$ 64,946	$ 78,603	$ 33,929	88.5%	11.5%	$ 73,445	585	76
Saxonburg	PA	16056	PA-Butler	523	1	523	1	1	1	1	$ 64,946	$ 78,603	$ 33,929	88.5%	11.5%	$ 73,445	463	60
Zelienople	PA	16063	PA-NewCastle/Ellwood	769	1	769	1	1	1	1	$ 68,807	$ 92,188	$ 46,827	82.4%	17.6%	$ 84,220	634	135
New Castle	PA	16101	PA-NewCastle/Ellwood	9,449	1	9,449	1	1	1	1	$ 42,908	$ 55,053	$ 21,516	83.6%	16.4%	$ 49,538	7,895	1,554
New Castle	PA	16102	PA-NewCastle/Ellwood	1,154	1	1,154	1	1	1	1	$ 47,566	$ 61,756	$ 24,004	78.9%	21.1%	$ 53,780	910	244
New Castle	PA	16105	PA-NewCastle/Ellwood	5,445	1	5,445	1	1	1	1	$ 68,573	$ 81,042	$ 31,156	85.7%	14.3%	$ 73,908	4,666	779
Edinburg	PA	16116	PA-NewCastle/Ellwood	157	1	157	1	1	1	1	$ 58,920	$ 60,645	$ 48,824	89.3%	10.7%	$ 59,386	140	17
Ellwood City	PA	16117	PA-NewCastle/Ellwood	5,698	1	5,698	1	1	1	1	$ 61,669	$ 69,342	$ 30,526	88.4%	11.6%	$ 64,837	5,037	661
Fombell	PA	16123	PA-NewCastle/Ellwood	389	1	389	1	1	1	1	$ 91,964	$ 92,321	$ 65,625	92.7%	7.3%	$ 90,378	361	28
Koppel	PA	16136	PA-NewCastle/Ellwood	360	1	360	1	1	1	1	$ 56,786	$ 62,500	$ 30,833	78.8%	21.2%	$ 55,783	284	76
Wampum	PA	16157	PA-NewCastle/Ellwood	199	1	199	1	1	1	1	$ 52,600	$ 66,688	$ 17,464	88.7%	11.3%	$ 61,108	176	23
West Pittsburg	PA	16160	PA-NewCastle/Ellwood	362	1	362	1	1	1	1	$ 36,605	$ 36,957	$ 36,446	67.8%	32.2%	$ 36,793	246	116
Kittanning	PA	16201	PA-Kittanning	1,707	1	1,707	1	1	1	1	$ 60,375	$ 74,069	$ 31,767	88.3%	11.7%	$ 69,099	1,506	201
Clarion	PA	16214	PA-Clarion	2,159	1	2,159	1	1	1	1	$ 47,321	$ 79,957	$ 22,761	77.9%	22.1%	$ 67,338	1,683	476
Knox	PA	16232	PA-Clarion	45	1	45	1	1	1	1	$ 48,558	$ 58,188	$ 36,167	86.6%	13.4%	$ 55,230	39	6
Lucinda	PA	16235	PA-Clarion	123	1	123	1	1	1	1	$ 70,250	$ 71,932	$ 28,750	91.1%	8.9%	$ 68,075	112	11
Lucinda	PA	16235	PA-Coatesville	1	1	1	1	1	1	1	$ 70,250	$ 71,932	$ 28,750	91.1%	8.9%	$ 68,075	1	0
Shippenville	PA	16254	PA-Clarion	337	1	337	1	1	1	1	$ 52,917	$ 57,679	$ 45,833	88.1%	11.9%	$ 56,272	297	40
Sligo	PA	16255	PA-Clarion	341	1	341	1	1	1	1	$ 53,125	$ 73,242	$ 18,974	86.2%	13.8%	$ 65,778	294	47
Strattanville	PA	16258	PA-Clarion	476	1	476	1	1	1	1	$ 47,891	$ 62,500	$ 39,063	82.6%	17.4%	$ 58,417	393	83
Clarendon	PA	16313	PA-Warren	87	1	87	1	1	1	1	$ 50,132	$ 52,981	$ 29,653	87.9%	12.1%	$ 50,162	76	11
Marble	PA	16334	PA-Clarion	28	1	28	1	1	1	1	$ 58,393	$ 73,125	$ 14,153	94.0%	6.0%	$ 69,615	26	2
Warren	PA	16365	PA-Warren	4,827	1	4,827	1	1	1	1	$ 54,740	$ 66,048	$ 32,830	86.9%	13.1%	$ 61,681	4,192	635
Osceola Mills	PA	16666	PA-Philipsburg	1,044	1	1,044	1	1	1	1	$ 42,486	$ 42,428	$ 43,214	93.1%	6.9%	$ 42,482	972	72
Sandy Ridge	PA	16677	PA-Philipsburg	185	1	185	1	1	0	1	-	-	-	78.6%	21.4%	$ -	145	40
Kane	PA	16735	PA-Kane	1,883	1	1,883	1	1	1	1	$ 47,383	$ 52,930	$ 31,176	86.9%	13.1%	$ 50,074	1,636	247
Allport	PA	16821	PA-Philipsburg	145	1	145	1	1	0	1	$ 57,368	$ 57,368	-	100.0%	0.0%	$ 57,368	145	-
Bellefonte	PA	16823	PA-BOGGS	2	1	2	1	1	1	1	$ 68,527	$ 84,930	$ 38,835	88.8%	11.2%	$ 79,788	2	0
Bigler	PA	16825	PA-Philipsburg	59	1	59	1	1	0	1	$ 62,721	$ 62,978	-	88.7%	11.3%	$ 55,868	52	7
Clearfield	PA	16830	PA-Philipsburg	66	1	66	1	1	1	1	$ 49,623	$ 64,495	$ 27,382	87.5%	12.5%	$ 59,856	58	8
Hawk Run	PA	16840	PA-Philipsburg	129	1	129	1	1	0	1	$ 74,732	$ 83,083	-	100.0%	0.0%	$ 83,083	129	-
Howard	PA	16841	PA-BOGGS	4	1	4	1	1	1	1	$ 62,300	$ 64,884	$ 35,000	91.1%	8.9%	$ 62,210	4	0
Howard	PA	16841	PA-Nittany	20	1	20	1	1	1	1	$ 62,300	$ 64,884	$ 35,000	91.1%	8.9%	$ 62,210	18	2
Howard	PA	16841	PA-Nittany	280	1	280	1	1	1	1	$ 62,300	$ 64,884	$ 35,000	91.1%	8.9%	$ 62,210	255	25
Lamar	PA	16848	PA-Nittany	1	1	1	1	1	1	1	$ 47,917	$ 53,500	$ 34,500	88.1%	11.9%	$ 51,238	1	0
Lamar	PA	16848	PA-Nittany	14	1	14	1	1	1	1	$ 47,917	$ 53,500	$ 34,500	88.1%	11.9%	$ 51,238	12	2
Morrisdale	PA	16858	PA-Philipsburg	1,218	1	1,218	1	1	1	1	$ 57,946	$ 66,301	$ 30,494	93.6%	6.4%	$ 64,025	1,141	77
Munson	PA	16860	PA-Philipsburg	2	1	2	1	1	0	1	$ 65,673	$ 65,673	-	100.0%	0.0%	$ 65,673	2	-
Philipsburg	PA	16866	PA-Philipsburg	2,799	1	2,799	1	1	1	1	$ 45,993	$ 63,668	$ 19,484	92.0%	8.0%	$ 60,113	2,574	225
Wallaceton	PA	16876	PA-Philipsburg	120	1	120	1	1	1	1	$ 43,125	$ 47,625	$ 34,375	88.3%	11.7%	$ 46,074	106	14
West Decatur	PA	16878	PA-Philipsburg	643	1	643	1	1	0	1	$ 65,948	$ 70,739	-	89.8%	10.2%	$ 63,527	577	66
Woodland	PA	16881	PA-Philipsburg	825	1	825	1	1	0	1	$ 42,721	$ 41,739	-	91.9%	8.1%	$ 38,369	758	67
Annville	PA	17003	PA-Hershey/Palmyra	1,891	1	1,891	1	1	1	1	$ 78,316	$ 88,908	$ 48,688	90.5%	9.5%	$ 85,087	1,711	180
Campbelltown	PA	17010	PA-Hershey/Palmyra	271	1	271	1	1	0	1	$ 60,771	-	-	32.7%	67.3%	$ -	89	182
Camp Hill	PA	17011	PA-Mechanicsburg	11,182	1	11,182	1	1	1	1	$ 84,471	$ 101,845	$ 55,131	86.2%	13.8%	$ 95,379	9,634	1,548
Carlisle	PA	17013	PA-Hershey/Palmyra	1	1	1	1	1	1	1	$ 62,112	$ 82,432	$ 41,397	81.0%	19.0%	$ 74,647	1	0
Elizabethtown	PA	17022	PA-Hershey/Palmyra	82	1	82	1	1	1	1	$ 73,528	$ 97,624	$ 48,630	88.9%	11.1%	$ 92,205	73	9
Enola	PA	17025	PA-Mechanicsburg	5,627	1	5,627	1	1	1	1	$ 78,552	$ 89,766	$ 53,393	86.9%	13.1%	$ 85,017	4,892	735
Enola	PA	17025	PA-Norristown	1	1	1	1	1	1	1	$ 78,552	$ 89,766	$ 53,393	86.9%	13.1%	$ 85,017	1	0
Hershey	PA	17033	PA-Hershey/Palmyra	3,768	1	3,768	1	1	1	1	$ 66,377	$ 99,229	$ 49,097	76.4%	23.6%	$ 87,410	2,880	888
Hummelstown	PA	17036	PA-Hershey/Palmyra	3,815	1	3,815	1	1	1	1	$ 91,635	$ 113,338	$ 57,122	87.2%	12.8%	$ 106,131	3,326	489
Lebanon	PA	17042	PA-Hershey/Palmyra	100	1	100	1	1	1	1	$ 65,067	$ 79,210	$ 43,870	81.7%	18.3%	$ 72,746	82	18
Lemoyne	PA	17043	PA-Mechanicsburg	1,931	1	1,931	1	1	1	1	$ 64,250	$ 87,672	$ 38,659	88.1%	11.9%	$ 81,820	1,700	231
Mechanicsburg	PA	17050	PA-Mechanicsburg	10,407	1	10,407	1	1	1	1	$ 100,364	$ 116,193	$ 70,982	87.4%	12.6%	$ 110,487	9,093	1,314
Mechanicsburg	PA	17055	PA-Mechanicsburg	1,988	1	1,988	1	1	1	1	$ 81,525	$ 98,874	$ 51,026	87.8%	12.2%	$ 93,048	1,746	242
Middletown	PA	17057	PA-Hershey/Palmyra	2	1	2	1	1	1	1	$ 69,571	$ 79,041	$ 41,918	85.7%	14.3%	$ 73,734	2	0

TOTAL COMMUNITIES: 362

City	State	Zip Code	Profit Center	Residential Customers	Analyzer Flag	Analyzed Customers	Rate Zone	PWS Zone	Income Flag	Household Flag	Median Income Total	Median Income Owned	Median Income Rented	Percent Owned	Percent Renter S.F.	Customer Median Income	Residential Customers Owner	Residential Customers Renter
Myerstown	PA	17067	PA-Mechanicsburg	1	1	1	1	1	1	1	$ 70,631	$ 78,104	$ 39,853	89.4%	10.6%	$ 74,067	1	0
New Cumberland	PA	17070	PA-Mechanicsburg	5,533	1	5,533	1	1	1	1	$ 79,082	$ 91,358	$ 38,446	87.9%	12.1%	$ 84,970	4,865	668
Newport	PA	17074	PA-Mechanicsburg	6	1	6	1	1	1	1	$ 72,235	$ 80,027	$ 39,655	87.6%	12.4%	$ 75,037	5	1
Palmyra	PA	17078	PA-Hershey/Palmyra	6,370	1	6,370	1	1	1	1	$ 71,163	$ 95,752	$ 45,613	82.3%	17.7%	$ 86,871	5,242	1,128
Summerdale	PA	17093	PA-Mechanicsburg	260	1	260	1	1	0	1	$ 66,875	$ 67,011	-	89.9%	10.1%	$ 60,258	234	26
Harrisburg	PA	17101	PA-Steelton W	1	1	1	1	1	0	1	$ 49,524	-	$ 53,627	66.2%	33.8%	$ 18,139	1	0
Harrisburg	PA	17109	PA-Hershey/Palmyra	20	1	20	1	1	1	1	$ 59,454	$ 81,756	$ 40,441	90.6%	9.4%	$ 77,867	18	2
Harrisburg	PA	17111	PA-Hershey/Palmyra	9	1	9	1	1	1	1	$ 76,781	$ 91,645	$ 50,909	88.1%	11.9%	$ 86,779	8	1
Harrisburg	PA	17112	PA-Hershey/Palmyra	2,089	1	2,089	1	1	1	1	$ 89,022	$ 99,717	$ 57,143	92.9%	7.1%	$ 96,698	1,941	148
Harrisburg	PA	17113	PA-Steelton W	2,183	1	2,183	1	1	1	1	$ 51,793	$ 56,238	$ 41,997	74.3%	25.7%	$ 52,580	1,622	561
Etters	PA	17319	PA-Mechanicsburg	576	1	576	1	1	1	1	$ 84,416	$ 89,295	$ 45,422	92.6%	7.4%	$ 86,035	533	43
Gettysburg	PA	17325	PA-Lake Heritage	855	1	855	1	1	1	1	$ 72,137	$ 89,077	$ 42,126	85.6%	14.4%	$ 82,321	732	123
Lewisberry	PA	17339	PA-Mechanicsburg	383	1	383	1	1	1	1	$ 90,625	$ 94,951	$ 63,298	94.6%	5.4%	$ 93,248	362	21
York Haven	PA	17370	PA-Mechanicsburg	41	1	41	1	1	1	1	$ 77,157	$ 79,959	$ 37,574	93.4%	6.6%	$ 77,181	38	3
York Haven	PA	17370	PA-Hershey/Palmyra	1	1	1	1	1	1	1	$ 77,157	$ 79,959	$ 37,574	93.4%	6.6%	$ 77,181	1	0
Christiana	PA	17509	PA-Coatesville	4	1	4	1	1	1	1	$ 73,047	$ 94,107	$ 53,009	76.5%	23.5%	$ 84,437	3	1
Kirkwood	PA	17536	PA-Coatesville	1	1	1	1	1	1	1	$ 70,208	$ 77,000	$ 43,056	88.2%	11.8%	$ 73,010	1	0
Quarryville	PA	17566	PA-Coatesville	9	1	9	1	1	1	1	$ 66,904	$ 78,971	$ 52,674	82.2%	17.8%	$ 74,289	7	2
Mc Ewensville	PA	17749	PA-McEwensville W	100	1	100	1	1	1	1	$ 50,455	$ 65,833	$ 40,179	78.3%	21.7%	$ 60,256	78	22
Mill Hall	PA	17751	PA-Nittany	16	1	16	1	1	1	1	$ 62,159	$ 65,860	$ 40,000	89.7%	10.3%	$ 63,185	14	2
Mill Hall	PA	17751	PA-Nittany	193	1	193	1	1	1	1	$ 62,159	$ 65,860	$ 40,000	89.7%	10.3%	$ 63,185	173	20
Turbotville	PA	17772	PA-Turbotville W	266	1	266	1	1	1	1	$ 75,568	$ 83,281	$ 29,375	93.0%	7.0%	$ 79,486	247	19
Watsontown	PA	17777	PA-McEwensville W	20	1	20	1	1	1	1	$ 53,092	$ 64,229	$ 31,250	88.9%	11.1%	$ 60,560	18	2
Watsontown	PA	17777	PA-Milton	1,335	1	1,335	1	1	1	1	$ 53,092	$ 64,229	$ 31,250	88.9%	11.1%	$ 60,560	1,186	149
Sunbury	PA	17801	PA-Milton	105	1	105	1	1	1	1	$ 48,230	$ 66,837	$ 26,438	81.3%	18.7%	$ 59,291	85	20
Allenwood	PA	17810	PA-Milton	147	1	147	1	1	1	1	$ 62,788	$ 63,438	$ 57,500	85.3%	14.7%	$ 62,568	125	22
Herndon	PA	17830	PA-Milton	1	1	1	1	1	1	1	$ 59,167	$ 67,500	$ 41,500	89.5%	10.5%	$ 64,779	1	0
Lewisburg	PA	17837	PA-Milton	3,633	1	3,633	1	1	1	1	$ 61,791	$ 83,882	$ 30,637	85.2%	14.8%	$ 75,989	3,094	539
Milton	PA	17847	PA-Milton	2,902	1	2,902	1	1	1	1	$ 52,481	$ 69,814	$ 31,646	84.8%	15.2%	$ 63,997	2,460	442
Montandon	PA	17850	PA-Milton	143	1	143	1	1	1	1	$ 44,297	$ 37,981	$ 62,941	84.1%	15.9%	$ 41,955	120	23
New Columbia	PA	17856	PA-Milton	332	1	332	1	1	1	1	$ 67,961	$ 73,472	$ 35,665	94.7%	5.3%	$ 71,455	314	18
Northumberland	PA	17857	PA-Milton	2,310	1	2,310	1	1	1	1	$ 61,752	$ 74,543	$ 31,818	85.9%	14.1%	$ 68,504	1,984	326
West Milton	PA	17886	PA-Milton	266	1	266	1	1	1	1	$ 24,635	$ 63,571	$ 23,942	58.8%	41.2%	$ 47,238	156	110
White Deer	PA	17887	PA-Milton	170	1	170	1	1	0	1	-	-	-	100.0%	0.0%	$ -	170	-
Frackville	PA	17931	PA-Frackville	2,121	1	2,121	1	1	1	1	$ 69,226	$ 74,738	$ 32,500	88.0%	12.0%	$ 69,678	1,867	254
Bangor	PA	18013	PA-Bangor	3,030	1	3,030	1	1	1	1	$ 68,023	$ 80,216	$ 42,903	86.3%	13.7%	$ 75,121	2,616	414
Bangor	PA	18013	PA-Bangor	28	1	28	1	1	1	1	$ 68,023	$ 80,216	$ 42,903	86.3%	13.7%	$ 75,121	24	4
Bethlehem	PA	18018	PA-Elizabeth	1	1	1	1	1	1	1	$ 61,323	$ 87,987	$ 38,845	83.1%	16.9%	$ 79,680	1	0
Easton	PA	18040	PA-Nazareth	59	1	59	1	1	1	1	$ 105,659	$ 111,551	$ 53,440	95.2%	4.8%	$ 108,777	56	3
Easton	PA	18042	PA-Nazareth	1	1	1	1	1	1	1	$ 66,997	$ 85,072	$ 43,048	76.5%	23.5%	$ 75,202	1	0
Easton	PA	18045	PA-Nazareth	1,275	1	1,275	1	1	1	1	$ 101,747	$ 108,062	$ 71,067	93.1%	6.9%	$ 105,521	1,187	88
Nazareth	PA	18064	PA-Nazareth	4,351	1	4,351	1	1	1	1	$ 92,143	$ 106,357	$ 42,782	91.0%	9.0%	$ 100,613	3,958	393
Pen Argyl	PA	18072	PA-Bangor	290	1	290	1	1	1	1	$ 66,548	$ 84,327	$ 37,317	82.4%	17.6%	$ 76,075	239	51
Pen Argyl	PA	18072	PA-Nazareth	1,488	1	1,488	1	1	1	1	$ 66,548	$ 84,327	$ 37,317	82.4%	17.6%	$ 76,075	1,227	261
Stockertown	PA	18083	PA-Nazareth	276	1	276	1	1	1	1	$ 104,107	$ 104,167	$ 104,063	92.7%	7.3%	$ 104,159	256	20
Tatamy	PA	18085	PA-Nazareth	417	1	417	1	1	1	1	$ 62,813	$ 70,375	$ 51,442	90.4%	9.6%	$ 68,559	377	40
Wind Gap	PA	18091	PA-Nazareth	1,227	1	1,227	1	1	1	1	$ 63,770	$ 75,417	$ 49,268	79.5%	20.5%	$ 70,052	975	252
Tamaqua	PA	18252	PA-Frackville	2	1	2	1	1	1	1	$ 59,788	$ 71,654	$ 28,625	85.7%	14.3%	$ 65,481	2	0
Tamaqua	PA	18252	PA-Frackville	25	1	25	1	1	1	1	$ 59,788	$ 71,654	$ 28,625	85.7%	14.3%	$ 65,481	21	4
East Stroudsburg	PA	18301	PA-Lehman Pike	957	1	957	1	1	1	1	$ 79,645	$ 101,809	$ 44,375	81.0%	19.0%	$ 90,909	775	182
East Stroudsburg	PA	18302	PA-Lehman Pike	529	1	529	1	1	1	1	$ 70,669	$ 77,500	$ 49,429	88.3%	11.7%	$ 74,230	467	62
Bushkill	PA	18324	PA-Lehman Pike	3,973	1	3,973	1	1	1	1	$ 64,042	$ 80,708	$ 35,404	85.9%	14.1%	$ 74,300	3,411	562
Dingmans Ferry	PA	18328	PA-Lehman Pike	1,606	1	1,606	1	1	1	1	$ 69,978	$ 74,932	$ 22,168	90.4%	9.6%	$ 69,877	1,452	154
Dingmans Ferry	PA	18328	PA-Lehman Pike	44	1	44	1	1	1	1	$ 69,978	$ 74,932	$ 22,168	90.4%	9.6%	$ 69,877	40	4
Dingmans Ferry	PA	18328	PA-Lehman Pike	76	1	76	1	1	1	1	$ 69,978	$ 74,932	$ 22,168	90.4%	9.6%	$ 69,877	69	7
Marshalls Creek	PA	18335	PA-Lehman Pike	263	1	263	1	1	0	1	$ 102,319	$ 102,444	-	94.3%	5.7%	$ 96,590	248	15
Matamoras	PA	18336	PA-Lehman Pike	7	1	7	1	1	1	1	$ 68,864	$ 81,289	$ 42,950	84.3%	15.7%	$ 75,280	6	1
Milford	PA	18337	PA-Lehman Pike	162	1	162	1	1	1	1	$ 84,144	$ 94,167	$ 41,776	90.4%	9.6%	$ 89,156	147	15
Mountainhome	PA	18342	PA-Lehman Pike	372	1	372	1	1	0	1	-	-	-	100.0%	0.0%	$ -	372	-
Mount Pocono	PA	18344	PA-Pocono	1,092	1	1,092	1	1	1	1	$ 55,547	$ 96,500	$ 22,465	84.0%	16.0%	$ 84,626	917	175
Pocono Summit	PA	18346	PA-Pocono	135	1	135	1	1	0	1	$ 59,500	$ 66,471	-	93.1%	6.9%	$ 61,906	126	9
Pocono Lake	PA	18347	PA-Lehman Pike	4	1	4	1	1	0	1	$ 71,931	$ 71,120	-	85.6%	14.4%	$ 60,854	3	1
Portland	PA	18351	PA-Lehman Pike	1	1	1	1	1	1	1	$ 58,068	$ 49,688	$ 78,958	61.5%	38.5%	$ 60,946	1	0
Saylorsburg	PA	18353	PA-Nazareth	3	1	3	1	1	1	1	$ 78,888	$ 88,299	$ 60,139	92.9%	7.1%	$ 86,300	3	0

TOTAL COMMUNITIES: 362

City	State	Zip Code	Profit Center	Residential Customers	Analyzer Flag	Analyzed Customers	Rate Zone	PWS Zone	Income Flag	Household Flag	Median Income Total	Median Income Owned	Median Income Rented	Percent Owned	Percent Renter S.F.	Customer Median Income	Residential Customers Owner	Residential Customers Renter
Archbald	PA	18403	PA-WB/Scranton	2,859	1	2,859	1	1	1	1	$ 64,402	$ 82,624	$ 29,147	82.1%	17.9%	$ 73,040	2,347	512
Carbondale	PA	18407	PA-WB/Scranton	4,014	1	4,014	1	1	1	1	$ 52,511	$ 62,267	$ 28,318	85.4%	14.6%	$ 57,314	3,428	586
Clarks Summit	PA	18411	PA-Abington	5,057	1	5,057	1	1	1	1	$ 85,669	$ 98,240	$ 61,065	91.0%	9.0%	$ 94,889	4,601	456
Clarks Summit	PA	18411	PA-WB/Scranton	195	1	195	1	1	1	1	$ 85,669	$ 98,240	$ 61,065	91.0%	9.0%	$ 94,889	177	18
Dalton	PA	18414	PA-Abington	1	1	1	1	1	1	1	$ 73,207	$ 80,017	$ 53,370	91.1%	8.9%	$ 77,657	1	0
Dalton	PA	18414	PA-Abington	634	1	634	1	1	1	1	$ 73,207	$ 80,017	$ 53,370	91.1%	8.9%	$ 77,657	578	56
Dalton	PA	18414	PA-WB/Scranton	18	1	18	1	1	1	1	$ 73,207	$ 80,017	$ 53,370	91.1%	8.9%	$ 77,657	16	2
Factoryville	PA	18419	PA-Abington	23	1	23	1	1	1	1	$ 51,140	$ 59,125	$ 37,171	87.7%	12.3%	$ 56,430	20	3
Forest City	PA	18421	PA-WB/Scranton	1,266	1	1,266	1	1	1	1	$ 59,158	$ 69,279	$ 42,900	87.7%	12.3%	$ 66,034	1,110	156
Jermyn	PA	18433	PA-WB/Scranton	1,712	1	1,712	1	1	1	1	$ 69,905	$ 86,964	$ 50,265	89.6%	10.4%	$ 83,138	1,534	178
Jessup	PA	18434	PA-WB/Scranton	1,716	1	1,716	1	1	1	1	$ 52,643	$ 68,929	$ 23,229	84.6%	15.4%	$ 61,901	1,452	264
Lake Ariel	PA	18436	PA-Pocono	606	1	606	1	1	1	1	$ 69,528	$ 71,852	$ 40,597	88.4%	11.6%	$ 68,223	536	70
Moscow	PA	18444	PA-WB/Scranton	177	1	177	1	1	1	1	$ 78,467	$ 86,239	$ 32,955	89.4%	10.6%	$ 80,591	158	19
Olyphant	PA	18447	PA-WB/Scranton	2,783	1	2,783	1	1	1	1	$ 58,128	$ 68,342	$ 36,541	87.2%	12.8%	$ 64,257	2,426	357
Olyphant	PA	18447	PA-Abington	63	1	63	1	1	1	1	$ 58,128	$ 68,342	$ 36,541	87.2%	12.8%	$ 64,257	55	8
Peckville	PA	18452	PA-WB/Scranton	1,894	1	1,894	1	1	1	1	$ 51,964	$ 56,199	$ 33,639	95.8%	4.2%	$ 55,255	1,815	79
Thompson	PA	18465	PA-Susquehanna	88	1	88	1	1	1	1	$ 53,750	$ 57,250	$ 43,750	85.3%	14.7%	$ 55,264	75	13
Tobyhanna	PA	18466	PA-Pocono	6,486	1	6,486	1	1	1	1	$ 66,603	$ 74,271	$ 41,553	78.5%	21.5%	$ 67,236	5,091	1,395
Waverly	PA	18471	PA-Abington	208	1	208	1	1	0	1	$ 109,519	$ 109,135	-	98.1%	1.9%	$ 107,026	204	4
Scranton	PA	18503	PA-WB/Scranton	57	1	57	1	1	1	1	$ 35,699	$ 43,571	$ 35,478	63.2%	36.8%	$ 40,589	36	21
Scranton	PA	18504	PA-WB/Scranton	7,628	1	7,628	1	1	1	1	$ 50,531	$ 68,095	$ 35,984	76.2%	23.8%	$ 60,462	5,815	1,813
Scranton	PA	18505	PA-WB/Scranton	6,194	1	6,194	1	1	1	1	$ 45,030	$ 67,585	$ 30,521	74.9%	25.1%	$ 58,268	4,637	1,557
Moosic	PA	18507	PA-WB/Scranton	2,063	1	2,063	1	1	1	1	$ 65,956	$ 98,393	$ 36,136	82.6%	17.4%	$ 87,543	1,703	360
Moosic	PA	18507	PA-Nazareth	1	1	1	1	1	1	1	$ 65,956	$ 98,393	$ 36,136	82.6%	17.4%	$ 87,543	1	0
Scranton	PA	18508	PA-WB/Scranton	3,477	1	3,477	1	1	1	1	$ 41,461	$ 56,191	$ 31,419	71.1%	28.9%	$ 49,023	2,471	1,006
Scranton	PA	18509	PA-WB/Scranton	3,923	1	3,923	1	1	1	1	$ 47,531	$ 83,664	$ 29,163	77.0%	23.0%	$ 71,139	3,021	902
Scranton	PA	18510	PA-WB/Scranton	3,061	1	3,061	1	1	1	1	$ 43,019	$ 65,820	$ 29,453	74.9%	25.1%	$ 56,700	2,293	768
Scranton	PA	18512	PA-WB/Scranton	4,908	1	4,908	1	1	1	1	$ 56,571	$ 74,601	$ 37,124	84.9%	15.1%	$ 68,953	4,168	740
Taylor	PA	18517	PA-WB/Scranton	1,673	1	1,673	1	1	1	1	$ 63,408	$ 76,151	$ 44,135	90.0%	10.0%	$ 72,965	1,507	166
Old Forge	PA	18518	PA-WB/Scranton	3,516	1	3,516	1	1	1	1	$ 62,615	$ 80,286	$ 39,004	83.8%	16.2%	$ 73,578	2,945	571
Scranton	PA	18519	PA-WB/Scranton	2,238	1	2,238	1	1	1	1	$ 60,328	$ 85,406	$ 32,743	78.7%	21.3%	$ 74,179	1,761	477
Berwick	PA	18603	PA-Berwick	5,130	1	5,130	1	1	1	1	$ 53,900	$ 64,586	$ 28,604	87.8%	12.2%	$ 60,198	4,504	626
Berwick	PA	18603	PA-Philipsburg	46	1	46	1	1	1	1	$ 53,900	$ 64,586	$ 28,604	87.8%	12.2%	$ 60,198	40	6
Dallas	PA	18612	PA-WB/Scranton	24	1	24	1	1	1	1	$ 91,410	$ 108,023	$ 43,227	92.5%	7.5%	$ 103,173	22	2
Glen Lyon	PA	18617	PA-WB/Scranton	650	1	650	1	1	1	1	$ 30,698	$ 40,455	$ 24,091	73.4%	26.6%	$ 36,103	477	173
Hunlock Creek	PA	18621	PA-WB/Scranton	10	1	10	1	1	1	1	$ 65,297	$ 65,966	$ 62,917	93.9%	6.1%	$ 65,780	9	1
Lake Winola	PA	18625	PA-Abington	2	1	2	1	1	0	1	$ 62,083	$ 70,250	-	95.7%	4.3%	$ 67,261	2	0
Nanticoke	PA	18634	PA-WB/Scranton	5,235	1	5,235	1	1	1	1	$ 50,474	$ 59,201	$ 36,210	78.0%	22.0%	$ 54,154	4,086	1,149
Nanticoke	PA	18634	PA-WB/Scranton	1	1	1	1	1	1	1	$ 50,474	$ 59,201	$ 36,210	78.0%	22.0%	$ 54,154	1	0
Nescopeck	PA	18635	PA-Berwick	551	1	551	1	1	1	1	$ 68,750	$ 77,188	$ 47,344	93.1%	6.9%	$ 75,131	513	38
Pittston	PA	18640	PA-WB/Scranton	5,873	1	5,873	1	1	1	1	$ 47,593	$ 70,436	$ 32,901	76.9%	23.1%	$ 61,758	4,515	1,358
Pittston	PA	18641	PA-WB/Scranton	2,604	1	2,604	1	1	1	1	$ 56,155	$ 69,441	$ 35,665	84.6%	15.4%	$ 64,226	2,202	402
Duryea	PA	18642	PA-WB/Scranton	1,804	1	1,804	1	1	1	1	$ 71,939	$ 77,093	$ 29,696	88.3%	11.7%	$ 71,535	1,592	212
Pittston	PA	18643	PA-WB/Scranton	3,915	1	3,915	1	1	1	1	$ 64,947	$ 73,316	$ 45,789	83.0%	17.0%	$ 68,646	3,251	664
Wyoming	PA	18644	PA-WB/Scranton	2,391	1	2,391	1	1	1	1	$ 64,803	$ 81,051	$ 29,949	82.6%	17.4%	$ 72,161	1,975	416
Plymouth	PA	18651	PA-WB/Scranton	3,294	1	3,294	1	1	1	1	$ 42,623	$ 55,239	$ 32,151	70.8%	29.2%	$ 48,499	2,332	962
Plymouth	PA	18651	PA-Norristown	1	1	1	1	1	1	1	$ 42,623	$ 55,239	$ 32,151	70.8%	29.2%	$ 48,499	1	0
Shickshinny	PA	18655	PA-WB/Scranton	446	1	446	1	1	1	1	$ 62,532	$ 65,719	$ 45,156	90.3%	9.7%	$ 63,726	403	43
Wilkes Barre	PA	18701	PA-WB/Scranton	278	1	278	1	1	1	1	$ 30,840	$ 43,553	$ 29,238	58.7%	41.3%	$ 37,636	163	115

TOTAL COMMUNITIES: 362

City	State	Zip Code	Profit Center	Residential Customers	Analyzer Flag	Analyzed Customers	Rate Zone	PWS Zone	Income Flag	Household Flag	Median Income Total	Median Income Owned	Median Income Rented	Percent Owned	Percent Renter S.F.	Customer Median Income	Residential Customers Owner	Residential Customers Renter
Wilkes Barre	PA	18702	PA-WB/Scranton	12,212	1	12,212	1	1	1	1	$ 48,213	$ 69,087	$ 29,680	76.7%	23.3%	$ 59,917	9,370	2,842
Kingston	PA	18704	PA-WB/Scranton	11,600	1	11,600	1	1	1	1	$ 55,843	$ 76,972	$ 34,320	80.7%	19.3%	$ 68,748	9,363	2,237
Wilkes Barre	PA	18705	PA-WB/Scranton	6,095	1	6,095	1	1	1	1	$ 54,891	$ 61,369	$ 46,446	74.4%	25.6%	$ 57,548	4,534	1,561
Wilkes Barre	PA	18706	PA-WB/Scranton	5,792	1	5,792	1	1	1	1	$ 56,024	$ 63,474	$ 39,951	83.9%	16.1%	$ 59,686	4,859	933
Wilkes Barre	PA	18706	PA-Mechanicsburg	1	1	1	1	1	1	1	$ 56,024	$ 63,474	$ 39,951	83.9%	16.1%	$ 59,686	1	0
Mountain Top	PA	18707	PA-WB/Scranton	3,901	1	3,901	1	1	1	1	$ 91,806	$ 96,940	$ 35,629	94.1%	5.9%	$ 93,324	3,671	230
Shavertown	PA	18708	PA-WB/Scranton	516	1	516	1	1	1	1	$ 82,261	$ 93,850	$ 40,459	91.5%	8.5%	$ 89,288	472	44
Shavertown	PA	18708	PA-WB/Scranton	77	1	77	1	1	1	1	$ 82,261	$ 93,850	$ 40,459	91.5%	8.5%	$ 89,288	70	7
Luzerne	PA	18709	PA-WB/Scranton	1,136	1	1,136	1	1	1	1	$ 40,641	$ 45,330	$ 27,058	79.9%	20.1%	$ 41,656	908	228
Montrose	PA	18801	PA-Susquehanna	624	1	624	1	1	1	1	$ 62,679	$ 73,402	$ 35,114	85.0%	15.0%	$ 67,674	531	93
Great Bend	PA	18821	PA-Susquehanna	258	1	258	1	1	1	1	$ 54,671	$ 62,167	$ 35,208	88.5%	11.5%	$ 59,073	228	30
Hallstead	PA	18822	PA-Susquehanna	609	1	609	1	1	1	1	$ 52,228	$ 63,203	$ 25,647	93.8%	6.2%	$ 60,886	571	38
Susquehanna	PA	18847	PA-Susquehanna	571	1	571	1	1	1	1	$ 49,891	$ 55,543	$ 27,500	86.5%	13.5%	$ 51,763	494	77
Newtown	PA	18940	PA-Yardley	523	1	523	1	1	1	1	$ 145,141	$ 163,984	$ 67,591	91.3%	8.7%	$ 155,640	478	45
Washington Crossing	PA	18977	PA-Yardley	32	1	32	1	1	1	1	$ 194,477	$ 199,435	$ 98,281	90.6%	9.4%	$ 189,941	29	3
Clifton Heights	PA	19018	PA-Lehman Pike	1	1	1	1	1	1	1	$ 63,442	$ 80,099	$ 51,126	89.8%	10.2%	$ 77,130	1	0
Media	PA	19063	PA-Royersford	1	1	1	1	1	1	1	$ 107,030	$ 137,951	$ 63,594	90.6%	9.4%	$ 130,950	1	0
Morrisville	PA	19067	PA-Yardley	11,552	1	11,552	1	1	1	1	$ 118,427	$ 136,365	$ 62,871	93.7%	6.3%	$ 131,743	10,826	726
Coatesville	PA	19320	PA-Coatesville	7,752	1	7,752	1	1	1	1	$ 82,158	$ 100,677	$ 44,508	83.0%	17.0%	$ 91,132	6,435	1,317
Downingtown	PA	19335	PA-Coatesville	1,660	1	1,660	1	1	1	1	$ 121,146	$ 142,969	$ 54,379	95.1%	4.9%	$ 138,619	1,578	82
Honey Brook	PA	19344	PA-Coatesville	83	1	83	1	1	1	1	$ 73,064	$ 89,058	$ 47,297	86.1%	13.9%	$ 83,244	71	12
Parkesburg	PA	19365	PA-Coatesville	1,350	1	1,350	1	1	1	1	$ 93,134	$ 106,313	$ 58,542	88.0%	12.0%	$ 100,589	1,188	162
Pomeroy	PA	19367	PA-Coatesville	105	1	105	1	1	0	1	-	-	-	100.0%	0.0%	$ -	105	-
Sadsburyville	PA	19369	PA-Coatesville	46	1	46	1	1	0	1	-	-	-	13.5%	86.5%	$ -	6	40
Thorndale	PA	19372	PA-Coatesville	806	1	806	1	1	1	1	$ 77,798	$ 75,069	$ 94,375	82.0%	18.0%	$ 78,537	661	145
Norristown	PA	19401	PA-Norristown	10,990	1	10,990	1	1	1	1	$ 60,334	$ 87,773	$ 39,485	72.5%	27.5%	$ 74,483	7,965	3,025
Norristown	PA	19403	PA-Norristown	10,835	1	10,835	1	1	1	1	$ 89,224	$ 100,795	$ 65,451	92.4%	7.6%	$ 98,118	10,014	821
Bridgeport	PA	19405	PA-Norristown	1,799	1	1,799	1	1	1	1	$ 73,409	$ 102,880	$ 53,869	67.3%	32.7%	$ 86,856	1,211	588
King Of Prussia	PA	19406	PA-Norristown	815	1	815	1	1	1	1	$ 97,805	$ 111,979	$ 85,006	88.9%	11.1%	$ 108,998	725	90
Blue Bell	PA	19422	PA-Norristown	3,472	1	3,472	1	1	1	1	$ 133,722	$ 156,509	$ 86,746	88.9%	11.1%	$ 148,783	3,087	385
Collegeville	PA	19426	PA-Norristown	1,316	1	1,316	1	1	1	1	$ 135,239	$ 146,396	$ 76,352	95.1%	4.9%	$ 142,993	1,252	64
Collegeville	PA	19426	PA-Royersford	2,844	1	2,844	1	1	1	1	$ 135,239	$ 146,396	$ 76,352	95.1%	4.9%	$ 142,993	2,706	138
Lansdale	PA	19446	PA-Norristown	9	1	9	1	1	1	1	$ 92,541	$ 119,066	$ 59,803	90.6%	9.4%	$ 113,469	8	1
Mont Clare	PA	19453	PA-Royersford	20	1	20	1	1	1	1	$ 69,423	$ 72,396	$ 53,808	73.5%	26.5%	$ 67,479	15	5
North Wales	PA	19454	PA-Norristown	1	1	1	1	1	1	1	$ 101,117	$ 110,954	$ 76,590	94.4%	5.6%	$ 109,042	1	0
Oaks	PA	19456	PA-Royersford	83	1	83	1	1	0	1	$ 129,563	$ 129,563	-	100.0%	0.0%	$ 129,563	83	-
Parker Ford	PA	19457	PA-Royersford	9	1	9	1	1	0	1	-	-	-	100.0%	0.0%	$ -	9	-
Phoenixville	PA	19460	PA-Royersford	3,022	1	3,022	1	1	1	1	$ 107,031	$ 131,070	$ 70,498	87.1%	12.9%	$ 123,285	2,634	388
Norristown	PA	19403	PA-Audubon	2,615	1	2,615	1	1	1	1	$ 89,224	$ 100,795	$ 65,451	92.4%	7.6%	$ 98,118	2,417	198
Plymouth Meeting	PA	19462	PA-Norristown	418	1	418	1	1	1	1	$ 117,587	$ 133,904	$ 70,795	97.0%	3.0%	$ 132,041	406	12
Pottstown	PA	19464	PA-Royersford	257	1	257	1	1	1	1	$ 67,891	$ 89,364	$ 39,153	79.7%	20.3%	$ 79,155	205	52
Pottstown	PA	19465	PA-Royersford	847	1	847	1	1	1	1	$ 94,949	$ 111,231	$ 51,058	93.5%	6.5%	$ 107,292	792	55
Royersford	PA	19468	PA-Royersford	7,428	1	7,428	1	1	1	1	$ 89,661	$ 106,250	$ 54,512	92.9%	7.1%	$ 102,592	6,903	525
Schwenksville	PA	19473	PA-Royersford	391	1	391	1	1	1	1	$ 120,768	$ 125,656	$ 47,344	91.7%	8.3%	$ 119,171	359	32
Schwenksville	PA	19473	PA-Norristown	514	1	514	1	1	1	1	$ 120,768	$ 125,656	$ 47,344	91.7%	8.3%	$ 119,171	471	43
Spring City	PA	19475	PA-Royersford	1,773	1	1,773	1	1	1	1	$ 82,438	$ 120,583	$ 42,380	92.6%	7.4%	$ 114,762	1,641	132
Worcester	PA	19490	PA-Norristown	79	1	79	1	1	0	1	-	-	-	100.0%	0.0%	$ -	79	-
Birdsboro	PA	19508	PA-Glen	650	1	650	1	1	1	1	$ 73,488	$ 83,550	$ 34,496	92.7%	7.3%	$ 79,974	603	47
Douglassville	PA	19518	PA-Glen	2,770	1	2,770	1	1	1	1	$ 103,289	$ 114,427	$ 44,615	92.1%	7.9%	$ 108,883	2,550	220
Fleetwood	PA	19522	PA-Glen	54	1	54	1	1	1	1	$ 85,976	$ 92,963	$ 57,421	92.5%	7.5%	$ 90,305	50	4
Reading	PA	19606	PA-Glen	5,583	1	5,583	1	1	1	1	$ 74,654	$ 86,914	$ 44,879	87.8%	12.2%	$ 81,772	4,900	683
Reading	PA	19606	PA-Penn/Wyomissing	1	1	1	1	1	1	1	$ 74,654	$ 86,914	$ 44,879	87.8%	12.2%	$ 81,772	1	0
Reading	PA	19607	PA-Glen	17	1	17	1	1	1	1	$ 71,606	$ 86,651	$ 53,130	83.5%	16.5%	$ 81,124	14	3
Reading	PA	19608	PA-Penn/Wyomissing	6,027	1	6,027	1	1	1	1	$ 98,750	$ 120,034	$ 47,371	87.3%	12.7%	$ 110,839	5,264	763
Reading	PA	19608	PA-Glen	26	1	26	1	1	1	1	$ 98,750	$ 120,034	$ 47,371	87.3%	12.7%	$ 110,839	23	3
Reading	PA	19609	PA-Penn/Wyomissing	3,256	1	3,256	1	1	1	1	$ 76,938	$ 84,236	$ 41,362	91.4%	8.6%	$ 80,532	2,975	281
Reading	PA	19610	PA-Penn/Wyomissing	2,336	1	2,336	1	1	1	1	$ 83,628	$ 106,307	$ 57,000	91.5%	8.5%	$ 102,113	2,137	199
TOTAL CUSTOMERS				623,758		623,758												

calculated median customer income $ 80,591
analyzed customers 614,875

statewide calculated median household income $ 71,602 PA
ratio 1.1256

TOTAL COMMUNITIES: 362

City	State	Zip Code	Profit Center	Total Persons per Household	Owned Persons per Household	Rented Persons per Household	Total Population	Population Below .50 FPL	Population 0.50 - 1.00 FPL	Population 1.00 - 1.25 FPL	Population 1.25 - 1.50 FPL	Population 1.50 - 1.85 FPL	Population 1.85 - 2.00 FPL	Population Over 2.00 FPL	Total Housing Units	Owned Housing Units	Rented Housing Units
Atlasburg	PA	15004	PA-McMurray	2.65	2.65	-	377	27	8	-	38	-	-	304	142	142	-
Beaver Falls	PA	15010	PA-NewCastle/Ellwood	2.35	2.47	2.08	27,690	2,131	1,427	1,128	675	1,645	884	19,800	11,743	8,263	3,480
Bridgeville	PA	15017	PA-Pittsburgh	2.19	2.37	1.68	16,192	480	461	118	253	577	284	14,019	7,372	5,471	1,901
Bridgeville	PA	15017	PA-McMurray	2.19	2.37	1.68	16,192	480	461	118	253	577	284	14,019	7,372	5,471	1,901
Buena Vista	PA	15018	PA-Elizabeth	2.35	2.40	2.04	1,092	42	92	11	31	59	-	857	465	397	68
Bulger	PA	15019	PA-McMurray	2.16	2.11	2.35	1,429	58	111	31	113	87	23	1,006	679	555	124
Burgettstown	PA	15021	PA-McMurray	2.40	2.49	2.06	6,453	259	210	323	290	279	270	4,822	2,695	2,123	572
Charleroi	PA	15022	PA-Elizabeth	2.40	2.52	2.04	10,299	670	1,235	541	374	474	352	6,653	4,257	3,211	1,046
Clairton	PA	15025	PA-Elizabeth	2.32	2.44	1.99	16,267	778	724	753	696	602	360	12,354	7,017	5,193	1,824
Clairton	PA	15025	PA-Pittsburgh	2.32	2.44	1.99	16,267	778	724	753	696	602	360	12,354	7,017	5,193	1,824
Clinton	PA	15026	PA-McMurray	2.52	2.62	2.23	3,870	103	101	15	122	50	11	3,468	1,553	1,169	384
Cuddy	PA	15031	PA-McMurray	2.14	2.49	1.82	492	65	105	71	32	-	-	219	230	111	119
Cuddy	PA	15031	PA-Pittsburgh	2.14	2.49	1.82	492	65	105	71	32	-	-	219	230	111	119
Donora	PA	15033	PA-Elizabeth	2.00	2.02	1.99	4,494	433	851	354	132	114	52	2,558	2,248	1,011	1,237
Dravosburg	PA	15034	PA-Elizabeth	1.87	2.10	1.65	1,592	41	223	58	165	50	137	918	850	420	430
Dravosburg	PA	15034	PA-Pittsburgh	1.87	2.10	1.65	1,592	41	223	58	165	50	137	918	850	420	430
Elizabeth	PA	15037	PA-Elizabeth	2.37	2.44	1.88	10,195	284	366	237	564	568	189	7,987	4,279	3,756	523
Elrama	PA	15038	PA-Elizabeth	2.69	2.97	2.00	326	-	-	-	-	-	73	253	121	87	34
Glassport	PA	15045	PA-Elizabeth	2.33	2.28	2.45	4,458	225	519	175	335	282	270	2,652	1,897	1,262	635
Greenock	PA	15047	PA-Elizabeth	1.77	1.77	-	227	-	49	-	-	48	-	130	128	128	-
Hookstown	PA	15050	PA-McMurray	2.69	2.62	3.64	2,423	48	208	7	50	233	41	1,836	897	836	61
Joffre	PA	15053	PA-McMurray	1.83	1.76	2.67	75	-	-	-	9	-	-	66	41	38	3
Langeloth	PA	15054	PA-McMurray	2.36	2.37	2.33	557	113	8	66	55	70	-	245	236	178	58
Lawrence	PA	15055	PA-McMurray	1.79	1.70	2.82	1,131	48	10	9	34	61	48	921	631	580	51
Mc Donald	PA	15057	PA-McMurray	2.79	2.91	1.94	17,613	209	400	391	401	653	150	15,409	6,301	5,573	728
Mc Donald	PA	15057	PA-Pittsburgh	2.79	2.91	1.94	17,613	209	400	391	401	653	150	15,409	6,301	5,573	728
Midland	PA	15059	PA-McMurray	2.59	2.74	2.42	4,324	145	497	62	289	523	120	2,688	1,668	892	776
Midway	PA	15060	PA-McMurray	2.52	2.55	2.29	894	69	49	-	3	95	13	665	366	325	41
Monongahela	PA	15063	PA-Elizabeth	2.36	2.51	1.72	10,817	503	305	295	539	569	163	8,443	4,598	3,706	892
Morgan	PA	15064	PA-Pittsburgh	1.77	1.92	1.64	237	11	-	29	-	53	-	144	134	62	72
New Eagle	PA	15067	PA-Elizabeth	2.34	2.38	2.18	2,522	123	74	127	52	235	210	1,701	1,076	866	210
Oakdale	PA	15071	PA-McMurray	2.38	2.52	1.99	11,895	243	525	120	158	383	174	10,292	5,017	3,642	1,375
Oakdale	PA	15071	PA-Pittsburgh	2.38	2.52	1.99	11,895	243	525	120	158	383	174	10,292	5,017	3,642	1,375
Slovan	PA	15078	PA-McMurray	2.82	3.49	1.35	563	21	-	20	-	13	8	501	200	137	63
Sturgeon	PA	15082	PA-McMurray	2.55	4.22	-	196	-	-	-	-	40	-	156	77	37	40
Sturgeon	PA	15082	PA-Pittsburgh	2.55	4.22	-	196	-	-	-	-	40	-	156	77	37	40
Sutersville	PA	15083	PA-Elizabeth	2.10	2.04	2.70	947	14	31	44	52	59	56	691	452	412	40
West Elizabeth	PA	15088	PA-Elizabeth	2.70	2.59	3.00	417	25	58	39	55	15	-	225	159	116	43
West Newton	PA	15089	PA-Elizabeth	2.21	2.33	1.88	6,556	378	447	223	307	461	185	4,555	2,964	2,173	791
Allison Park	PA	15101	PA-Mechanicsburg	2.41	2.69	1.61	25,931	394	564	381	827	556	239	22,970	10,766	7,982	2,784
Bethel Park	PA	15102	PA-Hershey/Palmyra	2.26	2.40	1.65	30,540	624	626	394	448	1,169	389	26,890	13,470	10,977	2,493
Bethel Park	PA	15102	PA-Pittsburgh	2.26	2.40	1.65	30,540	624	626	394	448	1,169	389	26,890	13,470	10,977	2,493
Carnegie	PA	15106	PA-Pittsburgh	2.04	2.16	1.78	19,212	613	794	1,147	945	769	397	14,547	9,375	6,534	2,841
Homestead	PA	15120	PA-Pittsburgh	2.16	2.23	2.05	18,291	1,137	2,041	899	540	1,637	649	11,388	8,449	5,138	3,311
West Mifflin	PA	15122	PA-Elizabeth	2.33	2.30	2.42	19,144	1,560	1,129	1,137	511	1,727	255	12,825	8,237	6,388	1,849
West Mifflin	PA	15122	PA-Pittsburgh	2.33	2.30	2.42	19,144	1,560	1,129	1,137	511	1,727	255	12,825	8,237	6,388	1,849
South Park	PA	15129	PA-Pittsburgh	2.38	2.45	2.12	10,181	227	102	132	119	430	421	8,750	4,287	3,411	876
Mckeesport	PA	15133	PA-Elizabeth	2.16	2.19	2.06	6,078	177	276	360	350	331	116	4,468	2,812	2,138	674
Mckeesport	PA	15135	PA-Elizabeth	2.37	2.61	1.53	4,968	46	146	137	249	51	70	4,269	2,095	1,632	463
Presto	PA	15142	PA-Pittsburgh	1.77	2.09	1.30	1,394	34	-	-	-	-	-	1,360	786	474	312
Pittsburgh	PA	15201	PA-McMurray	1.95	2.05	1.83	12,985	583	825	326	437	747	303	9,764	6,640	3,657	2,983
Pittsburgh	PA	15202	PA-Pittsburgh	1.98	2.44	1.49	19,727	541	1,172	397	727	1,051	555	15,284	9,959	5,092	4,867
Pittsburgh	PA	15204	PA-Pittsburgh	2.28	2.21	2.40	8,124	981	516	653	265	603	258	4,848	3,564	2,331	1,233
Pittsburgh	PA	15205	PA-Pittsburgh	2.15	2.36	1.87	23,373	1,071	1,779	1,162	651	925	498	17,287	10,827	6,189	4,638
Pittsburgh	PA	15205	PA-Elizabeth	2.15	2.36	1.87	23,373	1,071	1,779	1,162	651	925	498	17,287	10,827	6,189	4,638
Pittsburgh	PA	15207	PA-Pittsburgh	2.06	2.05	2.07	9,751	877	1,276	350	373	639	242	5,994	4,729	3,007	1,722
Pittsburgh	PA	15210	PA-Pittsburgh	2.40	2.36	2.45	26,865	2,692	3,743	1,148	2,168	2,614	859	13,641	11,188	5,953	5,235
Pittsburgh	PA	15212	PA-Pittsburgh	1.98	2.12	1.84	28,214	2,654	2,493	1,548	874	1,921	966	17,758	14,176	6,991	7,185
Pittsburgh	PA	15215	PA-Pittsburgh	2.32	2.44	1.97	12,725	310	538	298	467	557	103	10,452	5,532	4,085	1,447
Pittsburgh	PA	15216	PA-Pittsburgh	2.16	2.36	1.82	22,358	829	1,019	1,021	712	741	410	17,626	10,385	6,433	3,952
Pittsburgh	PA	15220	PA-Pittsburgh	2.03	2.17	1.88	17,974	781	552	592	451	659	232	14,707	8,826	4,759	4,067
Pittsburgh	PA	15221	PA-Pittsburgh	1.91	2.12	1.76	29,140	3,256	2,506	1,238	1,244	1,920	957	18,019	15,214	6,522	8,692
Pittsburgh	PA	15222	PA-Pittsburgh	1.43	1.86	1.35	4,411	276	90	152	77	110	27	3,679	3,018	497	2,521
Pittsburgh	PA	15226	PA-Pittsburgh	2.17	2.19	2.14	13,688	503	924	328	216	479	188	11,050	6,253	4,336	1,917

TOTAL COMMUNITIES: 362

City	State	Zip Code	Profit Center	Total Persons per Household	Owned Persons per Household	Rented Persons per Household	Total Population	Population Below .50 FPL	Population 0.50 - 1.00 FPL	Population 1.00 - 1.25 FPL	Population 1.25 - 1.50 FPL	Population 1.50 - 1.85 FPL	Population 1.85 - 2.00 FPL	Population Over 2.00 FPL	Total Housing Units	Owned Housing Units	Rented Housing Units
Pittsburgh	PA	15227	PA-Pittsburgh	2.28	2.37	2.04	29,202	1,787	1,637	959	811	2,080	879	21,049	12,833	9,232	3,601
Pittsburgh	PA	15228	PA-Pittsburgh	2.47	2.70	1.91	18,379	375	605	133	227	377	175	16,487	7,437	5,307	2,130
Pittsburgh	PA	15234	PA-Pittsburgh	2.28	2.45	1.86	13,886	293	614	383	280	974	382	10,960	6,077	4,354	1,723
Pittsburgh	PA	15236	PA-Pittsburgh	2.29	2.38	2.00	30,837	1,059	944	979	897	895	1,028	25,035	13,446	10,277	3,169
Pittsburgh	PA	15239	PA-Pittsburgh	2.55	2.67	1.84	21,147	313	328	143	433	577	629	18,724	8,304	7,036	1,268
Pittsburgh	PA	15241	PA-McMurray	2.66	2.81	1.66	21,598	405	135	229	223	632	84	19,890	8,127	7,056	1,071
Pittsburgh	PA	15241	PA-Pittsburgh	2.66	2.81	1.66	21,598	405	135	229	223	632	84	19,890	8,127	7,056	1,071
Pittsburgh	PA	15243	PA-Pittsburgh	2.31	2.43	1.49	13,418	293	118	214	141	536	152	11,964	5,788	5,078	710
Washington	PA	15301	PA-McMurray	2.25	2.38	1.96	47,286	2,272	2,566	1,682	1,447	2,825	1,558	34,936	20,943	14,478	6,465
Amity	PA	15311	PA-McMurray	2.23	2.26	1.59	1,107	6	10	27	12	40	70	942	492	475	17
Avella	PA	15312	PA-McMurray	2.54	2.49	2.75	3,862	126	348	378	62	237	145	2,566	1,534	1,241	293
Bentleyville	PA	15314	PA-Elizabeth	2.45	2.61	2.03	3,344	325	235	87	84	365	48	2,200	1,360	980	380
Bentleyville	PA	15314	PA-McMurray	2.45	2.61	2.03	3,344	325	235	87	84	365	48	2,200	1,360	980	380
Canonsburg	PA	15317	PA-McMurray	2.46	2.60	1.94	42,023	930	702	655	757	1,429	913	36,637	17,080	13,554	3,526
Canonsburg	PA	15317	PA-Pittsburgh	2.46	2.60	1.94	42,023	930	702	655	757	1,429	913	36,637	17,080	13,554	3,526
Cecil	PA	15321	PA-McMurray	2.67	2.59	2.94	1,854	-	12	23	71	62	-	1,686	695	536	159
Cecil	PA	15321	PA-Pittsburgh	2.67	2.59	2.94	1,854	-	12	23	71	62	-	1,686	695	536	159
Claysville	PA	15323	PA-McMurray	2.45	2.54	2.06	3,895	128	220	121	124	169	72	3,061	1,574	1,295	279
Prosperity	PA	15329	PA-McMurray	2.56	2.61	2.26	1,464	92	17	120	32	22	16	1,165	575	484	91
Eighty Four	PA	15330	PA-McMurray	2.45	2.51	1.86	5,376	128	165	36	137	103	58	4,749	2,197	1,975	222
Finleyville	PA	15332	PA-Elizabeth	2.23	2.31	1.61	8,895	318	253	337	327	279	67	7,314	3,981	3,515	466
Finleyville	PA	15332	PA-McMurray	2.23	2.31	1.61	8,895	318	253	337	327	279	67	7,314	3,981	3,515	466
Finleyville	PA	15332	PA-Pittsburgh	2.23	2.31	1.61	8,895	318	253	337	327	279	67	7,314	3,981	3,515	466
Hickory	PA	15340	PA-McMurray	2.40	2.53	1.19	1,256	58	39	-	139	25	-	995	524	471	53
Houston	PA	15342	PA-McMurray	2.28	2.38	1.70	5,156	185	215	117	88	97	213	4,241	2,267	1,922	345
Jefferson	PA	15344	PA-Pittsburgh	2.35	2.34	2.44	1,398	8	83	6	100	81	42	1,078	596	534	62
Muse	PA	15350	PA-McMurray	2.59	2.71	2.45	571	61	26	22	-	150	18	294	228	120	108
Southview	PA	15361	PA-McMurray	2.42	2.15	3.12	220	-	-	105	-	-	-	115	91	66	25
Strabane	PA	15363	PA-McMurray	2.41	2.42	2.39	754	-	-	11	11	-	30	702	313	179	134
Venetia	PA	15367	PA-McMurray	2.97	3.04	2.04	9,536	68	65	-	44	160	128	9,071	3,212	2,982	230
Venetia	PA	15367	PA-Pittsburgh	2.97	3.04	2.04	9,536	68	65	-	44	160	128	9,071	3,212	2,982	230
Westland	PA	15378	PA-McMurray	2.11	2.11	2.11	38	-	-	-	-	19	-	19	18	9	9
West Middletown	PA	15379	PA-McMurray	2.77	3.17	1.17	83	-	4	24	3	-	-	52	30	24	6
Uniontown	PA	15401	PA-Uniontown/Connell	2.18	2.35	1.79	29,307	2,711	2,658	1,539	1,169	1,879	611	18,740	13,424	9,226	4,198
Uniontown	PA	15401	PA-Uniontown/Connell	2.18	2.35	1.79	29,307	2,711	2,658	1,539	1,169	1,879	611	18,740	13,424	9,226	4,198
Allison	PA	15413	PA-Brownsville	2.27	2.09	2.64	384	-	69	-	-	95	4	216	169	113	56
Brownsville	PA	15417	PA-Brownsville	2.30	2.38	2.11	7,431	959	806	289	364	297	230	4,486	3,246	2,230	1,016
California	PA	15419	PA-Brownsville	1.92	2.43	1.65	2,674	332	335	149	115	227	34	1,482	1,395	479	916
Coal Center	PA	15423	PA-Brownsville	2.78	2.75	2.87	2,137	75	314	185	19	77	106	1,361	768	606	162
Connellsville	PA	15425	PA-Uniontown/Connell	2.26	2.46	1.76	18,335	1,199	1,791	976	980	1,141	614	11,634	8,121	5,750	2,371
Daisytown	PA	15427	PA-Brownsville	2.36	2.34	2.39	938	46	53	95	72	33	28	611	398	291	107
Dunbar	PA	15431	PA-Uniontown/Connell	2.43	2.43	2.40	4,219	160	348	178	158	316	292	2,767	1,791	1,472	319
East Millsboro	PA	15433	PA-Brownsville	1.92	1.92	1.89	700	63	47	-	180	-	-	410	365	328	37
Farmington	PA	15437	PA-Farmington	2.50	2.37	2.74	2,488	644	230	94	52	135	27	1,306	774	496	278
Grindstone	PA	15442	PA-Brownsville	2.09	2.14	1.96	2,008	63	140	85	84	142	86	1,408	966	696	270
Hiller	PA	15444	PA-Brownsville	4.10	4.13	3.97	701	178	-	32	14	-	59	418	171	139	32
Hopwood	PA	15445	PA-Uniontown/Connell	2.23	2.22	2.33	2,768	4	212	151	94	46	71	2,190	1,304	1,127	177
Lemont Furnace	PA	15456	PA-Uniontown/Connell	2.33	2.47	1.67	2,269	83	181	219	314	59	153	1,260	970	798	172
Mc Clellandtown	PA	15458	PA-Uniontown/Connell	2.70	2.85	2.33	2,704	6	57	112	121	257	-	2,151	997	718	279
New Salem	PA	15468	PA-Brownsville	2.43	2.52	2.06	2,628	108	19	159	46	526	20	1,750	1,074	864	210
Oliver	PA	15472	PA-Uniontown/Connell	1.64	2.40	1.48	141	-	21	-	8	-	-	112	86	15	71
Uledi	PA	15484	PA-Uniontown/Connell	3.11	3.11	-	793	-	-	-	-	-	-	793	255	255	-
Greensburg	PA	15601	PA-Uniontown/Connell	2.17	2.33	1.71	53,159	2,224	2,914	1,461	1,866	2,348	980	41,366	24,325	18,116	6,209
Indiana	PA	15701	PA-Indiana	2.23	2.43	1.95	28,331	2,225	2,278	1,366	1,189	1,713	548	19,012	12,702	7,381	5,321
Anita	PA	15711	PA-Punxsatawney	2.32	2.16	2.84	315	18	22	15	14	52	-	194	136	105	31
Big Run	PA	15715	PA-Punxsatawney	2.30	2.30	2.30	485	64	38	27	29	10	22	295	220	166	54
Punxsutawney	PA	15767	PA-Punxsatawney	2.46	2.54	2.26	14,038	1,426	1,186	742	735	1,499	367	8,083	5,716	4,157	1,559
Walston	PA	15781	PA-Punxsatawney	2.04	1.98	5.00	94	-	-	5	-	3	8	78	46	45	1
Worthville	PA	15784	PA-Punxsatawney	1.97	1.83	3.33	63	-	1	9	-	-	3	50	32	29	3
Brookville	PA	15825	PA-Punxsatawney	2.43	2.56	2.04	9,249	566	542	249	504	756	311	6,321	3,811	2,825	986
Corsica	PA	15829	PA-Clarion	2.58	2.58	2.58	1,197	27	73	24	87	140	52	794	465	396	69
Butler	PA	16001	PA-Butler	2.16	2.37	1.72	39,181	1,883	2,566	1,666	1,551	1,899	1,031	28,585	18,074	12,314	5,760
Butler	PA	16002	PA-Butler	2.43	2.47	2.17	15,482	602	566	402	480	1,505	462	11,465	6,348	5,476	872
Cabot	PA	16023	PA-Butler	2.61	3.10	1.45	4,471	136	240	20	345	204	220	3,306	1,700	1,200	500

TOTAL COMMUNITIES: 362

City	State	Zip Code	Profit Center	Total Persons per Household	Owned Persons per Household	Rented Persons per Household	Total Population	Population Below .50 FPL	Population 0.50 - 1.00 FPL	Population 1.00 - 1.25 FPL	Population 1.25 - 1.50 FPL	Population 1.50 - 1.85 FPL	Population 1.85 - 2.00 FPL	Population Over 2.00 FPL	Total Housing Units	Owned Housing Units	Rented Housing Units
Connoquenessing	PA	16027	PA-Butler	2.82	2.99	2.52	432	20	110	-	-	15	2	285	153	99	54
East Butler	PA	16029	PA-Butler	2.46	2.64	1.91	910	33	36	147	78	32	22	562	370	280	90
Evans City	PA	16033	PA-Butler	2.30	2.46	1.70	7,056	74	445	102	280	221	166	5,768	3,065	2,430	635
Harmony	PA	16037	PA-NewCastle/Ellwood	2.57	2.66	2.10	4,706	150	51	74	64	158	78	4,131	1,828	1,544	284
Harmony	PA	16037	PA-Butler	2.57	2.66	2.10	4,706	150	51	74	64	158	78	4,131	1,828	1,544	284
Lyndora	PA	16045	PA-Butler	2.66	2.63	2.73	1,126	148	107	42	32	62	42	693	422	275	147
Prospect	PA	16052	PA-Butler	2.58	2.57	2.72	2,360	6	69	49	27	220	110	1,879	915	844	71
Renfrew	PA	16053	PA-Butler	2.33	2.36	2.11	3,721	6	98	27	23	189	30	3,348	1,599	1,406	193
Saxonburg	PA	16056	PA-Saxonburg	2.14	2.35	1.44	4,194	101	127	57	165	154	156	3,434	1,948	1,494	454
Saxonburg	PA	16056	PA-Butler	2.14	2.35	1.44	4,194	101	127	57	165	154	156	3,434	1,948	1,494	454
Zelienople	PA	16063	PA-NewCastle/Ellwood	2.22	2.48	1.75	8,064	186	149	180	168	160	244	6,977	3,623	2,337	1,286
New Castle	PA	16101	PA-NewCastle/Ellwood	2.26	2.37	2.01	30,451	1,951	3,278	1,713	2,375	2,044	716	18,374	13,390	9,389	4,001
New Castle	PA	16102	PA-NewCastle/Ellwood	2.48	2.58	2.24	5,407	417	366	324	365	319	560	3,056	2,192	1,553	639
New Castle	PA	16105	PA-NewCastle/Ellwood	2.32	2.44	1.91	15,678	556	588	739	459	782	388	12,166	6,763	5,244	1,519
Edinburg	PA	16116	PA-NewCastle/Ellwood	2.45	2.45	2.46	2,661	35	60	120	85	165	45	2,151	1,087	931	156
Ellwood City	PA	16117	PA-NewCastle/Ellwood	2.15	2.24	1.84	15,453	608	665	792	546	993	493	11,356	7,221	5,613	1,608
Fombell	PA	16123	PA-NewCastle/Ellwood	2.80	2.79	2.91	2,711	13	12	51	9	127	24	2,475	968	892	76
Koppel	PA	16136	PA-NewCastle/Ellwood	2.37	2.63	1.72	777	13	34	36	61	118	11	504	328	234	94
Wampum	PA	16157	PA-NewCastle/Ellwood	2.22	2.30	1.96	2,845	59	307	151	97	204	33	1,994	1,292	1,009	283
West Pittsburg	PA	16160	PA-NewCastle/Ellwood	1.93	1.87	2.03	876	26	119	29	12	183	-	507	455	274	181
Kittanning	PA	16201	PA-Kittanning	2.38	2.53	1.95	16,316	644	1,473	989	389	883	982	10,956	6,861	5,085	1,776
Clarion	PA	16214	PA-Clarion	2.47	2.66	2.28	7,887	1,279	657	328	562	427	53	4,581	3,194	1,579	1,615
Knox	PA	16232	PA-Clarion	2.60	2.79	2.08	4,307	253	383	257	287	328	146	2,653	1,655	1,205	450
Lucinda	PA	16235	PA-Clarion	2.39	2.45	1.87	1,253	31	31	9	17	104	33	1,028	521	469	52
Lucinda	PA	16235	PA-Coatesville	2.39	2.45	1.87	1,253	31	31	9	17	104	33	1,028	521	469	52
Shippenville	PA	16254	PA-Clarion	2.50	2.45	2.74	3,379	130	240	207	176	235	64	2,327	1,348	1,098	250
Sligo	PA	16255	PA-Clarion	2.47	2.56	2.19	1,786	93	154	167	75	86	54	1,157	695	533	162
Strattanville	PA	16258	PA-Clarion	2.17	2.30	1.95	1,652	73	129	110	47	127	154	1,012	758	474	284
Clarendon	PA	16313	PA-Warren	2.40	2.44	2.23	1,876	107	231	41	102	179	56	1,160	782	633	149
Marble	PA	16334	PA-Clarion	2.07	2.33	1.07	412	6	36	7	27	19	5	312	199	158	41
Warren	PA	16365	PA-Warren	2.21	2.30	2.02	16,999	855	1,062	672	795	1,344	404	11,867	7,676	5,378	2,298
Osceola Mills	PA	16666	PA-Philipsburg	2.26	2.25	2.42	2,937	118	559	186	86	264	174	1,550	1,301	1,195	106
Sandy Ridge	PA	16677	PA-Philipsburg	2.31	2.55	1.43	323	-	56	23	-	34	-	210	140	110	30
Kane	PA	16735	PA-Kane	2.38	2.58	1.80	5,997	215	446	384	312	414	254	3,972	2,531	1,899	632
Allport	PA	16821	PA-Philipsburg	2.48	2.48	-	228	-	-	66	-	-	-	162	92	92	-
Bellefonte	PA	16823	PA-BOGGS	2.22	2.36	1.86	24,654	527	976	1,066	773	1,483	477	19,352	11,127	7,956	3,171
Bigler	PA	16825	PA-Philipsburg	1.81	1.78	2.07	225	-	-	-	-	72	41	112	124	110	14
Clearfield	PA	16830	PA-Philipsburg	2.37	2.37	2.35	13,082	1,119	1,265	902	657	1,504	133	7,502	5,567	3,696	1,871
Hawk Run	PA	16840	PA-Philipsburg	3.00	3.17	-	387	-	-	-	10	-	11	366	129	119	10
Howard	PA	16841	PA-BOGGS	2.73	2.73	2.77	6,703	169	654	215	376	227	238	4,824	2,450	2,076	374
Howard	PA	16841	PA-Nittany	2.73	2.73	2.77	6,703	169	654	215	376	227	238	4,824	2,450	2,076	374
Howard	PA	16841	PA-Nittany	2.73	2.73	2.77	6,703	169	654	215	376	227	238	4,824	2,450	2,076	374
Lamar	PA	16848	PA-Nittany	2.15	2.07	2.42	211	-	7	18	14	14	13	145	98	74	24
Lamar	PA	16848	PA-Nittany	2.15	2.07	2.42	211	-	7	18	14	14	13	145	98	74	24
Morrisdale	PA	16858	PA-Philipsburg	2.43	2.46	2.30	3,773	144	232	206	64	250	18	2,859	1,561	1,267	294
Munson	PA	16860	PA-Philipsburg	1.33	1.33	-	308	-	9	-	-	20	-	279	231	231	-
Philipsburg	PA	16866	PA-Philipsburg	2.20	2.49	1.60	7,887	481	639	368	358	373	136	5,532	3,588	2,423	1,165
Wallaceton	PA	16876	PA-Philipsburg	2.41	2.12	3.68	246	5	33	28	8	8	7	157	102	83	19
West Decatur	PA	16878	PA-Philipsburg	2.48	2.42	2.97	1,805	50	198	13	69	219	33	1,223	732	643	89
Woodland	PA	16881	PA-Philipsburg	2.38	2.31	2.75	2,402	98	319	45	172	285	-	1,483	1,009	854	155
Annville	PA	17003	PA-Hershey/Palmyra	2.51	2.68	1.91	10,652	319	335	266	271	672	348	8,441	4,231	3,306	925
Campbelltown	PA	17010	PA-Hershey/Palmyra	4.68	3.18	4.99	463	-	62	-	-	321	-	80	99	17	82
Camp Hill	PA	17011	PA-Mechanicsburg	2.45	2.65	2.05	33,584	1,335	1,080	284	1,051	1,231	467	28,136	13,698	9,200	4,498
Carlisle	PA	17013	PA-Hershey/Palmyra	2.28	2.44	2.01	32,159	1,155	2,441	820	971	1,812	1,305	23,655	14,156	8,786	5,370
Elizabethtown	PA	17022	PA-Hershey/Palmyra	2.39	2.67	1.83	28,911	759	1,280	723	307	1,685	269	23,888	12,089	8,049	4,040
Enola	PA	17025	PA-Mechanicsburg	2.31	2.47	1.89	16,614	458	655	136	331	708	531	13,795	7,199	5,194	2,005
Enola	PA	17025	PA-Norristown	2.31	2.47	1.89	16,614	458	655	136	331	708	531	13,795	7,199	5,194	2,005
Hershey	PA	17033	PA-Hershey/Palmyra	2.38	2.58	2.14	17,123	1,036	892	382	287	558	305	13,663	6,314	3,475	2,839
Hummelstown	PA	17036	PA-Hershey/Palmyra	2.41	2.61	1.92	21,531	917	407	174	322	425	140	19,146	9,024	6,481	2,543
Lebanon	PA	17042	PA-Hershey/Palmyra	2.45	2.48	2.40	38,052	2,314	2,336	1,308	1,308	1,933	1,123	27,730	15,485	10,609	4,876
Lemoyne	PA	17043	PA-Mechanicsburg	2.00	2.35	1.54	5,820	178	418	287	254	399	11	4,273	2,904	1,652	1,252
Mechanicsburg	PA	17050	PA-Mechanicsburg	2.56	2.67	2.22	41,564	974	1,152	919	553	2,068	912	34,986	16,241	12,565	3,676
Mechanicsburg	PA	17055	PA-Mechanicsburg	2.22	2.38	1.82	38,355	962	1,227	792	1,473	1,445	997	31,459	17,310	12,348	4,962
Middletown	PA	17057	PA-Hershey/Palmyra	2.35	2.37	2.29	22,787	1,306	1,112	723	1,118	1,130	665	16,733	9,726	6,781	2,945

TOTAL COMMUNITIES: 362

City	State	Zip Code	Profit Center	Total Persons per Household	Owned Persons per Household	Rented Persons per Household	Total Population	Population Below .50 FPL	Population 0.50 - 1.00 FPL	Population 1.00 - 1.25 FPL	Population 1.25 - 1.50 FPL	Population 1.50 - 1.85 FPL	Population 1.85 - 2.00 FPL	Population Over 2.00 FPL	Total Housing Units	Owned Housing Units	Rented Housing Units
Myerstown	PA	17067	PA-Mechanicsburg	2.61	2.74	2.19	15,656	430	700	421	516	1,096	305	12,188	6,007	4,687	1,320
New Cumberland	PA	17070	PA-Mechanicsburg	2.28	2.38	1.93	16,842	476	704	596	487	697	416	13,466	7,393	5,681	1,712
Newport	PA	17074	PA-Mechanicsburg	2.50	2.58	2.26	7,216	354	349	262	275	312	194	5,470	2,913	2,205	708
Palmyra	PA	17078	PA-Hershey/Palmyra	2.51	2.58	2.34	22,693	649	1,116	496	641	1,634	1,201	16,956	9,087	6,193	2,894
Summerdale	PA	17093	PA-Mechanicsburg	2.71	2.48	4.33	1,083	69	-	-	-	75	-	939	399	348	51
Harrisburg	PA	17101	PA-Steelton W	1.17	1.37	1.16	1,983	101	404	122	21	28	31	1,276	1,681	90	1,591
Harrisburg	PA	17109	PA-Hershey/Palmyra	2.34	2.41	2.26	25,283	1,152	2,441	762	1,197	1,681	678	17,372	10,797	5,995	4,802
Harrisburg	PA	17111	PA-Hershey/Palmyra	2.46	2.69	1.99	35,666	1,065	1,036	1,047	1,237	1,884	635	28,762	14,471	9,715	4,756
Harrisburg	PA	17112	PA-Hershey/Palmyra	2.40	2.50	1.93	36,870	633	448	537	228	2,006	1,216	31,802	15,384	12,802	2,582
Harrisburg	PA	17113	PA-Steelton W	2.63	2.68	2.55	10,804	866	631	717	553	1,440	491	6,106	4,086	2,639	1,447
Etters	PA	17319	PA-Mechanicsburg	2.70	2.77	2.20	11,238	201	437	98	147	336	452	9,567	4,172	3,687	485
Gettysburg	PA	17325	PA-Lake Heritage	2.33	2.42	2.10	25,221	736	1,262	450	455	1,612	882	19,824	10,826	7,931	2,895
Lewisberry	PA	17339	PA-Mechanicsburg	2.37	2.48	1.83	6,213	100	90	163	21	435	89	5,315	2,627	2,181	446
York Haven	PA	17370	PA-Mechanicsburg	2.59	2.60	2.44	6,113	143	89	180	160	935	178	4,428	2,365	2,096	269
York Haven	PA	17370	PA-Hershey/Palmyra	2.59	2.60	2.44	6,113	143	89	180	160	935	178	4,428	2,365	2,096	269
Christiana	PA	17509	PA-Coatesville	3.53	3.79	2.86	4,807	213	263	171	164	231	131	3,634	1,359	975	384
Kirkwood	PA	17536	PA-Coatesville	3.29	3.20	3.92	3,536	107	380	239	473	461	4	1,872	1,078	946	132
Quarryville	PA	17566	PA-Coatesville	2.86	3.00	2.53	12,174	581	512	186	416	841	416	9,222	4,284	3,042	1,242
Mc Ewensville	PA	17749	PA-McEwensville W	2.52	2.93	1.96	317	22	5	8	36	18	3	225	126	72	54
Mill Hall	PA	17751	PA-Nittany	2.65	2.70	2.39	7,234	221	606	294	349	601	302	4,861	2,727	2,271	456
Mill Hall	PA	17751	PA-Nittany	2.65	2.70	2.39	7,234	221	606	294	349	601	302	4,861	2,727	2,271	456
Turbotville	PA	17772	PA-Turbotville W	2.47	2.53	2.05	2,380	79	134	42	82	126	89	1,828	963	845	118
Watsontown	PA	17777	PA-McEwensville W	2.54	2.74	1.91	6,747	194	316	241	466	298	212	5,020	2,652	2,021	631
Watsontown	PA	17777	PA-Milton	2.54	2.74	1.91	6,747	194	316	241	466	298	212	5,020	2,652	2,021	631
Sunbury	PA	17801	PA-Milton	2.41	2.53	2.19	15,842	984	1,142	968	609	1,619	670	9,850	6,588	4,249	2,339
Allenwood	PA	17810	PA-Milton	3.26	3.22	3.45	2,490	556	356	59	41	146	125	1,207	644	530	114
Herndon	PA	17830	PA-Milton	2.51	2.52	2.46	2,009	74	72	62	135	125	56	1,485	800	676	124
Lewisburg	PA	17837	PA-Milton	2.20	2.38	1.84	13,871	502	989	462	398	347	504	10,669	6,299	4,223	2,076
Milton	PA	17847	PA-Milton	2.37	2.52	2.10	11,501	565	708	408	486	891	950	7,493	4,853	3,081	1,772
Montandon	PA	17850	PA-Milton	2.31	1.80	3.20	605	13	43	12	17	192	-	328	267	169	98
New Columbia	PA	17856	PA-Milton	2.18	2.07	2.73	2,689	36	259	12	71	65	138	2,108	1,244	1,047	197
Northumberland	PA	17857	PA-Milton	2.30	2.30	2.30	7,548	285	504	330	264	674	180	5,311	3,273	2,503	770
West Milton	PA	17886	PA-Milton	3.45	2.71	4.14	1,319	280	371	64	-	150	8	446	382	184	198
White Deer	PA	17887	PA-Milton	2.80	2.80	-	622	81	130	-	35	-	-	376	222	222	-
Frackville	PA	17931	PA-Frackville	2.58	2.63	2.37	5,015	316	465	194	257	263	151	3,369	1,951	1,565	386
Bangor	PA	18013	PA-Bangor	2.65	2.64	2.68	17,876	488	973	579	1,395	1,644	401	12,396	6,797	5,078	1,719
Bangor	PA	18013	PA-Bangor	2.65	2.64	2.68	17,876	488	973	579	1,395	1,644	401	12,396	6,797	5,078	1,719
Bethlehem	PA	18018	PA-Elizabeth	2.23	2.42	2.02	29,927	1,979	3,012	1,480	1,481	1,539	696	19,740	13,394	6,971	6,423
Easton	PA	18040	PA-Nazareth	2.65	2.64	2.74	17,022	442	224	271	455	779	123	14,728	6,428	5,804	624
Easton	PA	18042	PA-Nazareth	2.52	2.69	2.30	40,239	1,841	3,216	1,922	1,495	2,425	1,606	27,734	15,971	8,861	7,110
Easton	PA	18045	PA-Nazareth	2.48	2.62	1.87	28,817	368	476	620	359	567	233	26,194	11,617	9,398	2,219
Nazareth	PA	18064	PA-Nazareth	2.60	2.79	1.94	26,064	330	1,302	253	556	813	406	22,404	10,018	7,792	2,226
Pen Argyl	PA	18072	PA-Bangor	2.57	2.69	2.24	6,889	276	317	142	226	306	275	5,347	2,679	1,954	725
Pen Argyl	PA	18072	PA-Nazareth	2.57	2.69	2.24	6,889	276	317	142	226	306	275	5,347	2,679	1,954	725
Stockertown	PA	18083	PA-Nazareth	2.72	2.95	1.70	674	16	-	56	7	26	8	561	248	202	46
Tatamy	PA	18085	PA-Nazareth	2.45	2.52	2.25	822	5	26	40	2	61	13	675	336	245	91
Wind Gap	PA	18091	PA-Nazareth	2.55	2.73	2.16	5,624	377	251	147	129	280	95	4,345	2,203	1,511	692
Tamaqua	PA	18252	PA-Frackville	2.41	2.57	2.04	11,152	406	1,223	543	416	671	457	7,436	4,623	3,254	1,369
Tamaqua	PA	18252	PA-Frackville	2.41	2.57	2.04	11,152	406	1,223	543	416	671	457	7,436	4,623	3,254	1,369
East Stroudsburg	PA	18301	PA-Lehman Pike	2.94	2.96	2.88	28,494	1,130	2,316	1,038	890	1,677	447	20,996	9,701	6,792	2,909
East Stroudsburg	PA	18302	PA-Lehman Pike	2.92	2.84	3.41	17,649	712	1,209	532	721	1,234	771	12,470	6,036	5,172	864
Bushkill	PA	18324	PA-Lehman Pike	2.61	2.58	2.79	9,587	495	796	232	676	750	237	6,401	3,668	3,114	554
Dingmans Ferry	PA	18328	PA-Lehman Pike	2.58	2.48	3.34	7,819	833	288	365	403	317	81	5,532	3,041	2,690	351
Dingmans Ferry	PA	18328	PA-Lehman Pike	2.58	2.48	3.34	7,819	833	288	365	403	317	81	5,532	3,041	2,690	351
Dingmans Ferry	PA	18328	PA-Lehman Pike	2.58	2.48	3.34	7,819	833	288	365	403	317	81	5,532	3,041	2,690	351
Marshalls Creek	PA	18335	PA-Lehman Pike	3.37	3.44	2.66	1,472	34	74	-	-	63	-	1,301	437	396	41
Matamoras	PA	18336	PA-Lehman Pike	2.24	2.40	1.92	3,513	88	90	84	105	212	247	2,687	1,578	1,033	545
Milford	PA	18337	PA-Lehman Pike	2.60	2.65	2.40	15,199	347	563	539	642	902	82	12,124	5,837	4,850	987
Mountainhome	PA	18342	PA-Lehman Pike	2.50	2.01	3.74	543	214	18	-	-	-	-	311	217	155	62
Mount Pocono	PA	18344	PA-Pocono	2.82	3.12	2.12	3,616	117	44	235	398	43	89	2,690	1,271	890	381
Pocono Summit	PA	18346	PA-Pocono	2.43	2.45	2.20	2,605	232	114	40	197	8	144	1,870	1,070	990	80
Pocono Lake	PA	18347	PA-Lehman Pike	1.90	1.92	1.75	2,917	267	62	170	12	221	7	2,178	1,538	1,316	222
Portland	PA	18351	PA-Lehman Pike	2.90	2.01	3.79	507	2	123	39	33	-	2	308	175	88	87
Saylorsburg	PA	18353	PA-Nazareth	2.59	2.71	1.87	11,935	524	649	371	893	290	154	9,054	4,608	3,966	642

TOTAL COMMUNITIES: 362

City	State	Zip Code	Profit Center	Total Persons per Household	Owned Persons per Household	Rented Persons per Household	Total Population	Population Below .50 FPL	Population 0.50 - 1.00 FPL	Population 1.00 - 1.25 FPL	Population 1.25 - 1.50 FPL	Population 1.50 - 1.85 FPL	Population 1.85 - 2.00 FPL	Population Over 2.00 FPL	Total Housing Units	Owned Housing Units	Rented Housing Units
Archbald	PA	18403	PA-WB/Scranton	2.44	2.61	1.90	6,825	245	414	310	196	424	258	4,978	2,798	2,125	673
Carbondale	PA	18407	PA-WB/Scranton	2.34	2.34	2.32	14,253	1,389	1,541	450	380	800	463	9,230	6,141	4,098	2,043
Clarks Summit	PA	18411	PA-Abington	2.54	2.69	1.99	22,300	448	1,036	109	518	697	478	19,014	8,762	6,954	1,808
Clarks Summit	PA	18411	PA-WB/Scranton	2.54	2.69	1.99	22,300	448	1,036	109	518	697	478	19,014	8,762	6,954	1,808
Dalton	PA	18414	PA-Abington	2.48	2.48	2.49	5,483	229	165	149	243	276	108	4,313	2,211	1,873	338
Dalton	PA	18414	PA-Abington	2.48	2.48	2.49	5,483	229	165	149	243	276	108	4,313	2,211	1,873	338
Dalton	PA	18414	PA-WB/Scranton	2.48	2.48	2.49	5,483	229	165	149	243	276	108	4,313	2,211	1,873	338
Factoryville	PA	18419	PA-Abington	2.32	2.34	2.22	4,101	187	305	136	269	262	165	2,777	1,770	1,365	405
Forest City	PA	18421	PA-WB/Scranton	2.36	2.32	2.48	4,530	258	310	233	220	321	97	3,091	1,927	1,483	444
Jermyn	PA	18433	PA-WB/Scranton	2.32	2.44	1.80	6,840	198	355	147	137	265	115	5,623	2,940	2,406	534
Jessup	PA	18434	PA-WB/Scranton	2.28	2.29	2.26	3,869	530	170	194	88	194	31	2,662	1,693	1,150	543
Lake Ariel	PA	18436	PA-Pocono	2.69	2.64	3.01	12,690	152	539	667	282	604	432	10,014	4,717	4,134	583
Moscow	PA	18444	PA-WB/Scranton	2.60	2.70	2.17	13,945	716	558	388	549	562	224	10,948	5,364	4,428	936
Olyphant	PA	18447	PA-WB/Scranton	2.36	2.23	2.70	10,299	223	602	655	556	447	181	7,635	4,369	3,155	1,214
Olyphant	PA	18447	PA-Abington	2.36	2.23	2.70	10,299	223	602	655	556	447	181	7,635	4,369	3,155	1,214
Peckville	PA	18452	PA-WB/Scranton	2.12	2.23	1.83	4,860	203	156	94	337	359	148	3,563	2,301	1,694	607
Thompson	PA	18465	PA-Susquehanna	2.45	2.39	2.72	1,199	90	81	66	79	84	29	770	492	400	92
Tobyhanna	PA	18466	PA-Pocono	3.04	3.11	2.85	17,472	1,404	1,390	1,122	352	1,600	401	11,203	5,753	4,206	1,547
Waverly	PA	18471	PA-Abington	2.56	2.56	2.50	529	21	3	22	-	-	-	483	207	203	4
Scranton	PA	18503	PA-WB/Scranton	1.19	1.19	1.19	705	83	100	73	49	50	-	350	577	24	553
Scranton	PA	18504	PA-WB/Scranton	2.41	2.44	2.37	20,430	1,505	1,960	839	887	1,708	711	12,820	8,507	5,134	3,373
Scranton	PA	18505	PA-WB/Scranton	2.54	2.51	2.57	21,214	2,093	2,003	1,848	1,138	1,233	385	12,514	8,360	4,533	3,827
Moosic	PA	18507	PA-WB/Scranton	2.56	2.80	2.03	5,463	132	373	416	154	140	15	4,233	2,132	1,464	668
Moosic	PA	18507	PA-Nazareth	2.56	2.80	2.03	5,463	132	373	416	154	140	15	4,233	2,132	1,464	668
Scranton	PA	18508	PA-WB/Scranton	2.26	2.38	2.16	10,852	950	1,288	739	437	887	570	5,981	4,771	2,225	2,546
Scranton	PA	18509	PA-WB/Scranton	2.31	2.80	1.88	12,519	1,255	1,473	389	536	1,211	618	7,037	5,275	2,460	2,815
Scranton	PA	18510	PA-WB/Scranton	2.26	2.31	2.22	10,849	1,019	1,311	782	562	604	332	6,239	4,822	1,903	2,919
Scranton	PA	18512	PA-WB/Scranton	2.24	2.54	1.63	12,728	490	696	401	493	829	800	9,019	5,678	3,787	1,891
Taylor	PA	18517	PA-WB/Scranton	2.37	2.33	2.46	5,032	424	410	344	-	299	96	3,459	2,139	1,475	664
Old Forge	PA	18518	PA-WB/Scranton	2.30	2.40	2.11	8,433	300	458	204	171	443	150	6,707	3,688	2,443	1,245
Scranton	PA	18519	PA-WB/Scranton	2.29	2.41	2.07	5,226	407	275	150	332	456	51	3,555	2,280	1,443	837
Berwick	PA	18603	PA-Berwick	2.31	2.37	2.16	19,281	1,049	1,827	697	837	1,372	973	12,526	8,364	6,099	2,265
Berwick	PA	18603	PA-Philipsburg	2.31	2.37	2.16	19,281	1,049	1,827	697	837	1,372	973	12,526	8,364	6,099	2,265
Dallas	PA	18612	PA-WB/Scranton	2.41	2.55	1.90	14,902	1,084	348	166	274	375	252	12,403	6,148	4,858	1,290
Glen Lyon	PA	18617	PA-WB/Scranton	2.10	2.30	1.80	1,431	138	116	46	91	112	66	862	696	414	282
Hunlock Creek	PA	18621	PA-WB/Scranton	2.56	2.47	3.51	4,946	92	121	72	127	658	195	3,681	1,950	1,782	168
Lake Winola	PA	18625	PA-Abington	1.89	1.71	2.58	108	12	-	-	-	10	-	86	57	45	12
Nanticoke	PA	18634	PA-WB/Scranton	2.36	2.42	2.27	12,993	1,164	1,250	935	493	805	221	8,125	5,515	3,509	2,006
Nanticoke	PA	18634	PA-WB/Scranton	2.36	2.42	2.27	12,993	1,164	1,250	935	493	805	221	8,125	5,515	3,509	2,006
Nescopeck	PA	18635	PA-Berwick	2.44	2.52	2.03	3,608	40	101	195	121	209	131	2,811	1,487	1,229	258
Pittston	PA	18640	PA-WB/Scranton	2.32	2.43	2.16	15,822	1,200	1,460	420	769	1,169	1,084	9,720	6,839	4,037	2,802
Pittston	PA	18641	PA-WB/Scranton	2.34	2.56	1.89	6,916	159	450	532	163	399	239	4,974	2,955	1,999	956
Duryea	PA	18642	PA-WB/Scranton	2.16	2.27	1.83	3,814	140	163	98	288	117	136	2,872	1,763	1,340	423
Pittston	PA	18643	PA-WB/Scranton	2.21	2.28	2.05	12,574	815	631	320	325	932	223	9,328	5,696	4,092	1,604
Wyoming	PA	18644	PA-WB/Scranton	2.25	2.55	1.49	7,628	149	420	156	150	404	265	6,084	3,425	2,450	975
Plymouth	PA	18651	PA-WB/Scranton	2.31	2.37	2.22	8,794	641	541	1,003	309	584	277	5,439	3,818	2,229	1,589
Plymouth	PA	18651	PA-Norristown	2.31	2.37	2.22	8,794	641	541	1,003	309	584	277	5,439	3,818	2,229	1,589
Shickshinny	PA	18655	PA-WB/Scranton	2.33	2.34	2.25	5,354	213	191	159	225	340	134	4,092	2,318	1,947	371
Wilkes Barre	PA	18701	PA-WB/Scranton	1.46	2.04	1.38	1,663	194	164	153	167	292	31	662	1,051	132	919

TOTAL COMMUNITIES: 362

City	State	Zip Code	Profit Center	Total Persons per Household	Owned Persons per Household	Rented Persons per Household	Total Population	Population Below .50 FPL	Population 0.50 - 1.00 FPL	Population 1.00 - 1.25 FPL	Population 1.25 - 1.50 FPL	Population 1.50 - 1.85 FPL	Population 1.85 - 2.00 FPL	Population Over 2.00 FPL	Total Housing Units	Owned Housing Units	Rented Housing Units
Wilkes Barre	PA	18702	PA-WB/Scranton	2.39	2.47	2.29	40,921	4,486	3,342	2,008	2,569	3,036	1,162	24,318	17,152	9,609	7,543
Kingston	PA	18704	PA-WB/Scranton	2.26	2.39	2.08	30,372	2,502	2,360	1,290	1,628	2,044	728	19,820	13,420	7,883	5,537
Wilkes Barre	PA	18705	PA-WB/Scranton	2.38	2.41	2.33	15,264	755	979	1,296	1,170	614	315	10,135	6,442	4,163	2,279
Wilkes Barre	PA	18706	PA-WB/Scranton	2.34	2.34	2.34	16,014	1,490	1,627	466	905	842	438	10,246	6,792	4,434	2,358
Wilkes Barre	PA	18706	PA-Mechanicsburg	2.34	2.34	2.34	16,014	1,490	1,627	466	905	842	438	10,246	6,792	4,434	2,358
Mountain Top	PA	18707	PA-WB/Scranton	2.67	2.72	2.15	16,016	309	399	217	247	860	344	13,640	6,010	5,457	553
Shavertown	PA	18708	PA-WB/Scranton	2.28	2.36	1.78	8,452	51	339	65	350	314	340	6,993	3,719	3,190	529
Shavertown	PA	18708	PA-WB/Scranton	2.28	2.36	1.78	8,452	51	339	65	350	314	340	6,993	3,719	3,190	529
Luzerne	PA	18709	PA-WB/Scranton	1.92	1.99	1.82	2,825	164	376	100	116	91	137	1,841	1,471	878	593
Montrose	PA	18801	PA-Susquehanna	2.51	2.56	2.34	7,830	437	348	199	377	560	213	5,696	3,140	2,359	781
Great Bend	PA	18821	PA-Susquehanna	2.49	2.50	2.46	1,157	85	54	70	182	91	36	639	465	324	141
Hallstead	PA	18822	PA-Susquehanna	2.40	2.45	2.24	3,153	282	167	268	124	176	108	2,028	1,317	1,004	313
Susquehanna	PA	18847	PA-Susquehanna	2.57	2.53	2.71	5,181	375	493	322	404	508	114	2,965	2,026	1,534	492
Newtown	PA	18940	PA-Yardley	2.56	2.68	1.88	29,473	369	273	102	246	344	327	27,812	11,527	9,772	1,755
Washington Crossing	PA	18977	PA-Yardley	2.61	2.64	2.35	4,595	-	17	39	126	-	-	4,413	1,758	1,593	165
Clifton Heights	PA	19018	PA-Lehman Pike	2.42	2.69	1.94	23,296	862	1,412	1,641	780	1,123	518	16,960	9,603	6,218	3,385
Media	PA	19063	PA-Royersford	2.37	2.72	1.64	36,176	667	665	394	748	741	207	32,754	15,221	10,314	4,907
Morrisville	PA	19067	PA-Yardley	2.57	2.66	2.18	52,467	1,366	1,372	861	876	1,381	652	45,959	20,503	16,527	3,976
Coatesville	PA	19320	PA-Coatesville	2.69	2.65	2.79	54,235	2,646	2,928	2,088	1,316	2,430	1,976	40,851	19,960	14,605	5,355
Downingtown	PA	19335	PA-Coatesville	2.61	2.79	1.88	50,960	606	1,039	1,043	1,133	1,028	822	45,289	19,489	15,607	3,882
Honey Brook	PA	19344	PA-Coatesville	2.59	2.75	2.14	11,807	149	663	212	461	661	352	9,309	4,576	3,339	1,237
Parkesburg	PA	19365	PA-Coatesville	2.76	2.87	2.44	7,554	211	182	254	87	269	276	6,275	2,729	2,042	687
Pomeroy	PA	19367	PA-Coatesville	3.23	3.23	-	71	30	-	-	-	-	-	41	22	22	-
Sadsburyville	PA	19369	PA-Coatesville	1.54	2.00	1.47	80	44	-	-	-	-	-	36	52	7	45
Thorndale	PA	19372	PA-Coatesville	2.98	3.28	2.56	2,578	22	-	30	-	-	-	2,526	865	507	358
Norristown	PA	19401	PA-Norristown	2.45	2.76	2.19	41,810	2,725	3,711	2,895	1,723	2,748	1,558	26,450	16,862	7,629	9,233
Norristown	PA	19403	PA-Norristown	2.33	2.45	2.03	43,368	1,072	1,607	443	1,320	1,251	649	37,026	18,542	13,447	5,095
Bridgeport	PA	19405	PA-Norristown	2.34	2.37	2.32	4,747	435	460	46	16	299	34	3,457	2,022	984	1,038
King Of Prussia	PA	19406	PA-Norristown	2.30	2.58	1.96	28,201	700	371	182	755	1,071	677	24,445	12,322	6,809	5,513
Blue Bell	PA	19422	PA-Norristown	2.57	2.64	2.25	19,743	402	240	208	62	600	261	17,970	7,698	6,239	1,459
Collegeville	PA	19426	PA-Norristown	2.75	2.84	1.99	35,642	542	723	171	371	350	282	33,203	12,968	11,496	1,472
Collegeville	PA	19426	PA-Royersford	2.75	2.84	1.99	35,642	542	723	171	371	350	282	33,203	12,968	11,496	1,472
Lansdale	PA	19446	PA-Norristown	2.52	2.73	2.12	59,428	1,130	2,152	933	1,422	2,111	1,077	50,603	23,608	15,705	7,903
Mont Clare	PA	19453	PA-Royersford	2.01	2.01	2.00	1,448	31	80	60	16	52	16	1,193	722	431	291
North Wales	PA	19454	PA-Norristown	2.47	2.65	1.80	27,608	465	477	709	212	858	393	24,494	11,178	8,791	2,387
Oaks	PA	19456	PA-Royersford	2.34	2.34	-	166	-	-	-	-	-	-	166	71	71	-
Parker Ford	PA	19457	PA-Royersford	2.02	2.02	-	99	-	-	-	23	-	-	76	49	49	-
Phoenixville	PA	19460	PA-Royersford	2.42	2.61	1.97	41,925	1,532	1,529	703	891	1,073	372	35,825	17,208	12,131	5,077
Norristown	PA	19403	PA-Audubon	2.33	2.45	2.03	43,368	1,072	1,607	443	1,320	1,251	649	37,026	18,542	13,447	5,095
Plymouth Meeting	PA	19462	PA-Norristown	2.47	2.64	1.79	15,671	201	306	169	472	315	78	14,130	6,347	5,129	1,218
Pottstown	PA	19464	PA-Royersford	2.57	2.61	2.50	47,728	2,970	2,411	1,600	1,791	3,557	951	34,448	18,586	11,970	6,616
Pottstown	PA	19465	PA-Royersford	2.56	2.66	2.18	18,546	488	479	391	204	733	220	16,031	7,244	5,754	1,490
Royersford	PA	19468	PA-Royersford	2.49	2.61	2.12	26,271	597	944	491	679	584	491	22,485	10,572	7,952	2,620
Schwenksville	PA	19473	PA-Royersford	2.72	2.73	2.64	17,489	347	765	473	321	322	191	15,070	6,424	5,571	853
Schwenksville	PA	19473	PA-Norristown	2.72	2.73	2.64	17,489	347	765	473	321	322	191	15,070	6,424	5,571	853
Spring City	PA	19475	PA-Royersford	2.35	2.62	1.74	11,322	923	542	190	165	226	62	9,214	4,814	3,345	1,469
Worcester	PA	19490	PA-Norristown	2.37	2.37	-	273	-	-	-	-	-	-	273	115	115	-
Birdsboro	PA	19508	PA-Glen	2.52	2.69	1.74	15,315	365	866	298	530	835	382	12,039	6,084	5,011	1,073
Douglassville	PA	19518	PA-Glen	2.81	2.89	2.40	16,267	375	1,259	430	381	312	116	13,394	5,810	4,938	872
Fleetwood	PA	19522	PA-Glen	2.50	2.56	2.19	13,939	365	401	111	349	311	216	12,186	5,560	4,714	846
Reading	PA	19606	PA-Glen	2.59	2.64	2.44	35,710	1,583	1,321	547	963	1,826	769	28,701	13,771	10,790	2,981
Reading	PA	19606	PA-Penn/Wyomissing	2.59	2.64	2.44	35,710	1,583	1,321	547	963	1,826	769	28,701	13,771	10,790	2,981
Reading	PA	19607	PA-Glen	2.40	2.44	2.33	23,101	955	1,376	298	262	1,880	674	17,656	9,592	6,204	3,388
Reading	PA	19608	PA-Penn/Wyomissing	2.70	2.77	2.44	23,335	837	328	744	622	618	255	19,931	8,662	6,847	1,815
Reading	PA	19608	PA-Glen	2.70	2.77	2.44	23,335	837	328	744	622	618	255	19,931	8,662	6,847	1,815
Reading	PA	19609	PA-Penn/Wyomissing	2.61	2.59	2.71	10,744	329	145	319	575	748	219	8,409	4,114	3,479	635
Reading	PA	19610	PA-Penn/Wyomissing	2.22	2.50	1.56	15,089	326	342	203	393	651	315	12,859	6,783	4,765	2,018
TOTAL CUSTOMERS				2.45	Persons per Customer Household		4,248,433	183,162	220,246	132,466	137,061	211,895	99,345	3,264,258			

TOTAL COMMUNITIES: 362

				--- Distribution of Income for Owned Units ---											
City	State	Zip Code	Profit Center	0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Atlasburg	PA	15004	PA-McMurray	0.00%	5.63%	0.00%	0.00%	0.00%	5.63%	19.01%	23.94%	26.06%	19.72%	0.00%	100.00%
Beaver Falls	PA	15010	PA-NewCastle/Ellwood	1.68%	1.54%	1.67%	2.36%	3.84%	6.35%	11.16%	17.77%	15.91%	23.24%	14.49%	100.00%
Bridgeville	PA	15017	PA-Pittsburgh	2.19%	0.57%	2.25%	2.25%	2.25%	4.26%	8.88%	16.47%	14.09%	20.76%	26.03%	100.00%
Bridgeville	PA	15017	PA-McMurray	2.19%	0.57%	2.25%	2.25%	2.25%	4.26%	8.88%	16.47%	14.09%	20.76%	26.03%	100.00%
Buena Vista	PA	15018	PA-Elizabeth	2.02%	2.27%	9.82%	10.58%	6.80%	21.66%	18.39%	6.05%	4.03%	9.32%	9.07%	100.00%
Bulger	PA	15019	PA-McMurray	0.00%	2.34%	3.06%	12.07%	4.14%	19.64%	7.21%	10.45%	17.30%	13.51%	10.27%	100.00%
Burgettstown	PA	15021	PA-McMurray	0.85%	2.26%	1.93%	1.84%	3.77%	5.32%	14.51%	16.34%	15.73%	20.30%	17.15%	100.00%
Charleroi	PA	15022	PA-Elizabeth	1.68%	3.05%	5.20%	4.05%	2.18%	9.37%	13.80%	20.09%	9.69%	15.88%	15.01%	100.00%
Clairton	PA	15025	PA-Elizabeth	1.71%	0.85%	2.06%	3.70%	2.37%	8.57%	9.86%	14.44%	11.92%	16.35%	28.17%	100.00%
Clairton	PA	15025	PA-Pittsburgh	1.71%	0.85%	2.06%	3.70%	2.37%	8.57%	9.86%	14.44%	11.92%	16.35%	28.17%	100.00%
Clinton	PA	15026	PA-McMurray	4.19%	2.40%	1.20%	1.88%	0.43%	8.81%	4.70%	16.60%	11.46%	19.85%	28.49%	100.00%
Cuddy	PA	15031	PA-McMurray	14.41%	0.00%	0.00%	0.00%	0.00%	15.32%	0.00%	16.22%	54.05%	0.00%	0.00%	100.00%
Cuddy	PA	15031	PA-Pittsburgh	14.41%	0.00%	0.00%	0.00%	0.00%	15.32%	0.00%	16.22%	54.05%	0.00%	0.00%	100.00%
Donora	PA	15033	PA-Elizabeth	1.19%	1.19%	1.68%	5.84%	2.27%	10.88%	16.62%	24.83%	23.15%	12.17%	0.20%	100.00%
Dravosburg	PA	15034	PA-Elizabeth	4.05%	1.67%	0.00%	4.52%	1.19%	17.62%	14.52%	24.05%	14.52%	7.86%	10.00%	100.00%
Dravosburg	PA	15034	PA-Pittsburgh	4.05%	1.67%	0.00%	4.52%	1.19%	17.62%	14.52%	24.05%	14.52%	7.86%	10.00%	100.00%
Elizabeth	PA	15037	PA-Elizabeth	2.05%	1.68%	3.46%	2.02%	3.94%	6.74%	9.58%	22.90%	13.63%	17.52%	16.48%	100.00%
Elrama	PA	15038	PA-Elizabeth	0.00%	0.00%	0.00%	0.00%	0.00%	24.14%	0.00%	17.24%	12.64%	45.98%	0.00%	100.00%
Glassport	PA	15045	PA-Elizabeth	1.74%	0.48%	3.49%	10.38%	8.24%	11.17%	17.67%	20.21%	10.06%	12.84%	3.72%	100.00%
Greenock	PA	15047	PA-Elizabeth	0.00%	0.00%	0.00%	0.00%	37.50%	0.00%	37.50%	12.50%	12.50%	0.00%	0.00%	100.00%
Hookstown	PA	15050	PA-McMurray	1.08%	0.00%	0.96%	5.38%	3.11%	8.97%	11.84%	20.81%	12.20%	20.93%	14.71%	100.00%
Joffre	PA	15053	PA-McMurray	0.00%	0.00%	0.00%	23.68%	0.00%	0.00%	36.84%	0.00%	0.00%	18.42%	21.05%	100.00%
Langeloth	PA	15054	PA-McMurray	0.00%	4.49%	0.00%	19.66%	27.53%	0.00%	17.98%	0.00%	21.35%	8.99%	0.00%	100.00%
Lawrence	PA	15055	PA-McMurray	0.00%	0.00%	3.28%	5.86%	6.38%	14.48%	7.93%	19.31%	14.66%	22.93%	5.17%	100.00%
Mc Donald	PA	15057	PA-McMurray	0.57%	1.00%	1.58%	2.31%	2.78%	2.91%	6.73%	16.58%	10.30%	22.45%	32.78%	100.00%
Mc Donald	PA	15057	PA-Pittsburgh	0.57%	1.00%	1.58%	2.31%	2.78%	2.91%	6.73%	16.58%	10.30%	22.45%	32.78%	100.00%
Midland	PA	15059	PA-McMurray	0.00%	2.24%	0.00%	2.91%	5.83%	2.80%	9.75%	37.56%	12.33%	14.24%	12.33%	100.00%
Midway	PA	15060	PA-McMurray	0.00%	0.00%	2.15%	5.85%	0.00%	2.15%	23.38%	22.46%	10.46%	28.92%	4.62%	100.00%
Monongahela	PA	15063	PA-Elizabeth	0.86%	0.78%	1.21%	4.64%	3.78%	7.31%	10.60%	20.48%	16.73%	20.21%	13.38%	100.00%
Morgan	PA	15064	PA-Pittsburgh	0.00%	0.00%	0.00%	0.00%	0.00%	12.90%	0.00%	45.16%	14.52%	14.52%	12.90%	100.00%
New Eagle	PA	15067	PA-Elizabeth	2.54%	0.00%	1.62%	1.50%	6.35%	7.39%	25.40%	23.21%	12.01%	11.09%	8.89%	100.00%
Oakdale	PA	15071	PA-McMurray	1.67%	0.60%	4.45%	2.03%	1.78%	2.33%	6.86%	17.52%	12.88%	20.76%	29.10%	100.00%
Oakdale	PA	15071	PA-Pittsburgh	1.67%	0.60%	4.45%	2.03%	1.78%	2.33%	6.86%	17.52%	12.88%	20.76%	29.10%	100.00%
Slovan	PA	15078	PA-McMurray	0.00%	0.00%	0.00%	0.00%	10.22%	5.11%	17.52%	24.09%	37.23%	5.84%	0.00%	100.00%
Sturgeon	PA	15082	PA-McMurray	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	18.92%	0.00%	0.00%	81.08%	100.00%
Sturgeon	PA	15082	PA-Pittsburgh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	18.92%	0.00%	0.00%	81.08%	100.00%
Sutersville	PA	15083	PA-Elizabeth	0.00%	0.00%	2.67%	5.34%	9.95%	11.41%	8.25%	20.15%	13.59%	20.15%	8.50%	100.00%
West Elizabeth	PA	15088	PA-Elizabeth	4.31%	0.00%	1.72%	1.72%	4.31%	18.10%	15.52%	10.34%	10.34%	31.03%	2.59%	100.00%
West Newton	PA	15089	PA-Elizabeth	1.43%	2.16%	1.06%	5.34%	3.54%	12.24%	10.91%	18.27%	17.30%	20.48%	7.27%	100.00%
Allison Park	PA	15101	PA-Mechanicsburg	0.16%	0.51%	1.69%	0.89%	2.20%	5.15%	5.50%	12.34%	15.10%	20.62%	35.83%	100.00%
Bethel Park	PA	15102	PA-Hershey/Palmyra	2.00%	0.24%	2.31%	2.04%	3.70%	3.73%	9.27%	11.68%	12.30%	27.55%	25.18%	100.00%
Bethel Park	PA	15102	PA-Pittsburgh	2.00%	0.24%	2.31%	2.04%	3.70%	3.73%	9.27%	11.68%	12.30%	27.55%	25.18%	100.00%
Carnegie	PA	15106	PA-Pittsburgh	0.77%	1.01%	2.66%	3.31%	2.62%	6.20%	11.86%	19.02%	17.39%	20.02%	15.15%	100.00%
Homestead	PA	15120	PA-Pittsburgh	1.50%	2.20%	3.95%	3.83%	2.61%	13.08%	12.69%	17.44%	13.49%	17.77%	11.44%	100.00%
West Mifflin	PA	15122	PA-Elizabeth	2.54%	1.22%	2.68%	6.53%	2.97%	9.05%	11.21%	17.44%	17.50%	18.96%	9.91%	100.00%
West Mifflin	PA	15122	PA-Pittsburgh	2.54%	1.22%	2.68%	6.53%	2.97%	9.05%	11.21%	17.44%	17.50%	18.96%	9.91%	100.00%
South Park	PA	15129	PA-Pittsburgh	1.20%	0.00%	0.73%	0.44%	3.02%	5.86%	12.84%	14.25%	13.25%	23.28%	25.12%	100.00%
Mckeesport	PA	15133	PA-Elizabeth	3.13%	0.56%	1.96%	4.82%	5.75%	9.64%	14.03%	22.03%	14.41%	16.70%	6.97%	100.00%
Mckeesport	PA	15135	PA-Elizabeth	0.00%	0.00%	1.10%	8.88%	2.02%	9.25%	6.00%	11.34%	11.46%	28.80%	21.14%	100.00%
Presto	PA	15142	PA-Pittsburgh	7.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.81%	11.18%	8.44%	65.40%	100.00%
Pittsburgh	PA	15201	PA-McMurray	2.00%	1.89%	3.12%	2.98%	3.91%	7.98%	5.33%	17.31%	16.11%	17.06%	22.31%	100.00%
Pittsburgh	PA	15202	PA-Pittsburgh	1.39%	0.45%	2.24%	2.18%	2.85%	7.11%	8.56%	18.22%	15.69%	20.52%	20.78%	100.00%
Pittsburgh	PA	15204	PA-Pittsburgh	0.39%	1.24%	4.93%	5.66%	6.99%	7.38%	21.28%	18.10%	15.27%	11.28%	7.46%	100.00%
Pittsburgh	PA	15205	PA-Pittsburgh	1.16%	0.71%	1.92%	1.70%	1.97%	7.95%	8.08%	17.94%	17.55%	23.64%	17.39%	100.00%
Pittsburgh	PA	15205	PA-Elizabeth	1.16%	0.71%	1.92%	1.70%	1.97%	7.95%	8.08%	17.94%	17.55%	23.64%	17.39%	100.00%
Pittsburgh	PA	15207	PA-Pittsburgh	1.76%	0.90%	7.02%	3.56%	4.89%	10.81%	14.97%	18.92%	13.97%	15.63%	7.58%	100.00%
Pittsburgh	PA	15210	PA-Pittsburgh	1.44%	2.28%	7.49%	4.72%	5.36%	11.02%	15.66%	19.70%	14.41%	12.88%	5.02%	100.00%
Pittsburgh	PA	15212	PA-Pittsburgh	0.56%	1.34%	5.68%	3.59%	3.22%	6.81%	11.30%	16.59%	16.06%	21.79%	13.06%	100.00%
Pittsburgh	PA	15215	PA-Pittsburgh	1.32%	0.54%	1.74%	2.50%	1.69%	5.12%	9.72%	13.66%	14.15%	20.64%	28.94%	100.00%
Pittsburgh	PA	15216	PA-Pittsburgh	2.81%	1.31%	1.37%	3.20%	1.35%	7.20%	9.40%	15.11%	18.51%	21.70%	18.03%	100.00%
Pittsburgh	PA	15220	PA-Pittsburgh	2.63%	1.09%	2.10%	1.22%	1.77%	7.69%	9.56%	20.28%	15.99%	21.90%	15.78%	100.00%
Pittsburgh	PA	15221	PA-Pittsburgh	2.85%	1.93%	1.99%	4.42%	2.45%	6.41%	9.98%	19.03%	13.60%	19.15%	18.18%	100.00%
Pittsburgh	PA	15222	PA-Pittsburgh	1.41%	0.00%	0.00%	2.41%	0.00%	1.41%	0.00%	6.24%	12.07%	6.24%	70.22%	100.00%
Pittsburgh	PA	15226	PA-Pittsburgh	1.98%	1.04%	2.70%	2.63%	4.36%	5.14%	8.90%	25.95%	15.22%	22.05%	10.03%	100.00%

TOTAL COMMUNITIES: 362

				--- Distribution of Income for Owned Units ---											
City	State	Zip Code	Profit Center	0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Pittsburgh	PA	15227	PA-Pittsburgh	1.75%	0.74%	1.94%	1.36%	1.87%	7.97%	11.02%	19.37%	18.85%	23.30%	11.83%	100.00%
Pittsburgh	PA	15228	PA-Pittsburgh	0.66%	0.17%	0.34%	1.43%	0.64%	4.35%	5.58%	7.95%	9.91%	20.61%	48.35%	100.00%
Pittsburgh	PA	15234	PA-Pittsburgh	1.17%	1.36%	1.31%	2.43%	1.15%	7.72%	13.32%	16.63%	14.40%	22.26%	18.26%	100.00%
Pittsburgh	PA	15236	PA-Pittsburgh	0.98%	0.74%	2.80%	1.38%	1.95%	6.36%	10.48%	17.02%	16.45%	25.90%	15.93%	100.00%
Pittsburgh	PA	15239	PA-Pittsburgh	0.64%	1.05%	1.90%	2.19%	1.61%	5.17%	7.21%	15.73%	16.02%	28.30%	20.18%	100.00%
Pittsburgh	PA	15241	PA-McMurray	1.79%	0.58%	0.60%	0.79%	1.06%	4.12%	5.10%	10.22%	9.10%	18.58%	48.06%	100.00%
Pittsburgh	PA	15241	PA-Pittsburgh	1.79%	0.58%	0.60%	0.79%	1.06%	4.12%	5.10%	10.22%	9.10%	18.58%	48.06%	100.00%
Pittsburgh	PA	15243	PA-Pittsburgh	1.73%	0.93%	1.16%	0.73%	2.52%	5.30%	9.57%	13.33%	11.89%	20.40%	32.43%	100.00%
Washington	PA	15301	PA-McMurray	2.10%	1.57%	2.55%	3.49%	1.82%	7.00%	11.13%	20.32%	13.39%	20.22%	16.40%	100.00%
Amity	PA	15311	PA-McMurray	0.00%	0.00%	2.32%	6.32%	1.89%	13.05%	5.26%	17.26%	16.84%	25.05%	12.00%	100.00%
Avella	PA	15312	PA-McMurray	1.21%	1.05%	1.45%	3.46%	3.30%	8.62%	11.52%	17.73%	14.34%	20.87%	16.44%	100.00%
Bentleyville	PA	15314	PA-Elizabeth	3.27%	0.41%	1.22%	2.65%	6.53%	9.08%	10.20%	22.35%	12.45%	22.04%	9.80%	100.00%
Bentleyville	PA	15314	PA-McMurray	3.27%	0.41%	1.22%	2.65%	6.53%	9.08%	10.20%	22.35%	12.45%	22.04%	9.80%	100.00%
Canonsburg	PA	15317	PA-McMurray	1.48%	0.89%	0.96%	0.83%	1.73%	4.00%	6.06%	16.17%	13.35%	19.82%	34.68%	100.00%
Canonsburg	PA	15317	PA-Pittsburgh	1.48%	0.89%	0.96%	0.83%	1.73%	4.00%	6.06%	16.17%	13.35%	19.82%	34.68%	100.00%
Cecil	PA	15321	PA-McMurray	0.00%	0.00%	0.00%	3.36%	3.73%	2.24%	17.72%	22.95%	2.43%	25.56%	22.01%	100.00%
Cecil	PA	15321	PA-Pittsburgh	0.00%	0.00%	0.00%	3.36%	3.73%	2.24%	17.72%	22.95%	2.43%	25.56%	22.01%	100.00%
Claysville	PA	15323	PA-McMurray	0.00%	0.31%	3.32%	3.17%	4.02%	11.04%	9.27%	18.53%	14.83%	17.53%	17.99%	100.00%
Prosperity	PA	15329	PA-McMurray	5.99%	5.58%	0.00%	3.10%	0.41%	8.26%	11.57%	13.02%	18.80%	17.77%	15.50%	100.00%
Eighty Four	PA	15330	PA-McMurray	0.30%	2.89%	1.57%	0.71%	1.52%	7.39%	6.63%	19.34%	12.51%	23.09%	24.05%	100.00%
Finleyville	PA	15332	PA-Elizabeth	2.59%	0.00%	0.77%	8.96%	3.67%	3.50%	14.77%	18.01%	14.91%	20.51%	12.32%	100.00%
Finleyville	PA	15332	PA-McMurray	2.59%	0.00%	0.77%	8.96%	3.67%	3.50%	14.77%	18.01%	14.91%	20.51%	12.32%	100.00%
Finleyville	PA	15332	PA-Pittsburgh	2.59%	0.00%	0.77%	8.96%	3.67%	3.50%	14.77%	18.01%	14.91%	20.51%	12.32%	100.00%
Hickory	PA	15340	PA-McMurray	2.97%	1.91%	4.25%	0.00%	0.00%	2.34%	11.68%	21.87%	9.98%	22.93%	22.08%	100.00%
Houston	PA	15342	PA-McMurray	2.76%	0.16%	0.83%	0.62%	2.39%	5.46%	9.94%	13.37%	21.12%	23.20%	20.14%	100.00%
Jefferson	PA	15344	PA-Pittsburgh	0.37%	0.19%	0.75%	1.87%	8.05%	22.47%	7.12%	17.60%	9.36%	25.09%	7.12%	100.00%
Muse	PA	15350	PA-McMurray	0.00%	0.00%	0.00%	0.00%	4.17%	20.00%	0.00%	23.33%	18.33%	34.17%	0.00%	100.00%
Southview	PA	15361	PA-McMurray	0.00%	0.00%	0.00%	21.21%	0.00%	0.00%	0.00%	0.00%	30.30%	33.33%	15.15%	100.00%
Strabane	PA	15363	PA-McMurray	0.00%	0.00%	0.00%	12.29%	0.00%	10.61%	12.85%	5.59%	38.55%	6.15%	13.97%	100.00%
Venetia	PA	15367	PA-McMurray	0.47%	1.58%	0.37%	0.87%	1.61%	4.49%	4.53%	7.41%	7.51%	14.15%	57.01%	100.00%
Venetia	PA	15367	PA-Pittsburgh	0.47%	1.58%	0.37%	0.87%	1.61%	4.49%	4.53%	7.41%	7.51%	14.15%	57.01%	100.00%
Westland	PA	15378	PA-McMurray	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
West Middletown	PA	15379	PA-McMurray	0.00%	0.00%	12.50%	0.00%	0.00%	4.17%	8.33%	45.83%	4.17%	25.00%	0.00%	100.00%
Uniontown	PA	15401	PA-Uniontown/Connell	1.48%	3.30%	5.02%	4.76%	4.36%	8.92%	12.95%	18.06%	14.17%	17.70%	9.29%	100.00%
Uniontown	PA	15401	PA-Uniontown/Connell	1.48%	3.30%	5.02%	4.76%	4.36%	8.92%	12.95%	18.06%	14.17%	17.70%	9.29%	100.00%
Allison	PA	15413	PA-Brownsville	0.00%	0.00%	0.00%	0.00%	50.44%	20.35%	0.00%	0.00%	13.27%	15.93%	0.00%	100.00%
Brownsville	PA	15417	PA-Brownsville	4.39%	1.26%	7.35%	3.09%	4.04%	5.74%	8.65%	19.78%	18.79%	18.25%	8.65%	100.00%
California	PA	15419	PA-Brownsville	1.25%	0.00%	0.00%	4.59%	3.97%	9.81%	13.78%	14.82%	15.45%	17.12%	19.21%	100.00%
Coal Center	PA	15423	PA-Brownsville	3.30%	0.99%	3.30%	2.97%	2.81%	11.06%	16.34%	16.67%	12.87%	15.68%	14.03%	100.00%
Connellsville	PA	15425	PA-Uniontown/Connell	2.02%	1.63%	4.24%	6.54%	5.43%	7.86%	11.97%	21.18%	13.22%	17.06%	8.85%	100.00%
Daisytown	PA	15427	PA-Brownsville	3.44%	4.12%	4.12%	3.09%	3.44%	15.81%	10.31%	10.65%	19.59%	16.84%	8.59%	100.00%
Dunbar	PA	15431	PA-Uniontown/Connell	1.77%	1.70%	5.03%	5.71%	4.48%	12.98%	11.55%	20.18%	16.92%	13.38%	6.32%	100.00%
East Millsboro	PA	15433	PA-Brownsville	4.57%	4.57%	5.18%	0.00%	16.46%	10.37%	32.32%	13.11%	4.57%	8.84%	0.00%	100.00%
Farmington	PA	15437	PA-Farmington	0.00%	0.00%	6.25%	5.85%	1.61%	14.92%	9.27%	19.56%	15.32%	22.58%	4.64%	100.00%
Grindstone	PA	15442	PA-Brownsville	0.00%	3.74%	6.18%	4.31%	2.44%	9.77%	26.87%	18.53%	15.09%	7.33%	5.75%	100.00%
Hiller	PA	15444	PA-Brownsville	0.00%	0.00%	0.00%	0.00%	33.09%	0.00%	0.00%	10.79%	0.00%	56.12%	0.00%	100.00%
Hopwood	PA	15445	PA-Uniontown/Connell	0.00%	0.00%	7.36%	6.57%	4.08%	9.41%	14.37%	16.77%	12.78%	22.72%	5.94%	100.00%
Lemont Furnace	PA	15456	PA-Uniontown/Connell	1.38%	1.00%	14.79%	4.39%	3.51%	14.79%	12.03%	17.42%	11.78%	15.79%	3.13%	100.00%
Mc Clellandtown	PA	15458	PA-Uniontown/Connell	0.00%	1.39%	5.99%	1.95%	1.95%	9.89%	16.71%	10.86%	15.46%	23.96%	11.84%	100.00%
New Salem	PA	15468	PA-Brownsville	0.00%	0.00%	1.27%	0.00%	2.78%	11.23%	10.19%	44.56%	12.04%	10.19%	7.75%	100.00%
Oliver	PA	15472	PA-Uniontown/Connell	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	40.00%	0.00%	60.00%	0.00%	100.00%
Uledi	PA	15484	PA-Uniontown/Connell	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	23.14%	58.04%	12.94%	5.88%	100.00%
Greensburg	PA	15601	PA-Uniontown/Connell	1.89%	1.44%	1.87%	2.42%	2.01%	7.67%	9.40%	19.00%	16.92%	21.11%	16.26%	100.00%
Indiana	PA	15701	PA-Indiana	1.14%	1.64%	1.79%	2.21%	2.55%	7.29%	12.46%	21.56%	12.04%	22.33%	15.00%	100.00%
Anita	PA	15711	PA-Punxsatawney	0.00%	1.90%	11.43%	13.33%	9.52%	8.57%	5.71%	20.00%	19.05%	10.48%	0.00%	100.00%
Big Run	PA	15715	PA-Punxsatawney	1.20%	6.63%	0.00%	10.24%	17.47%	9.04%	13.25%	13.25%	18.67%	9.04%	1.20%	100.00%
Punxsutawney	PA	15767	PA-Punxsatawney	3.08%	1.56%	6.23%	2.74%	3.92%	11.14%	16.41%	21.24%	14.02%	11.96%	7.70%	100.00%
Walston	PA	15781	PA-Punxsatawney	0.00%	0.00%	0.00%	0.00%	6.67%	35.56%	17.78%	24.44%	8.89%	6.67%	0.00%	100.00%
Worthville	PA	15784	PA-Punxsatawney	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.14%	27.59%	20.69%	24.14%	3.45%	100.00%
Brookville	PA	15825	PA-Punxsatawney	1.81%	1.81%	2.55%	3.58%	2.87%	6.83%	14.55%	20.78%	17.20%	17.24%	10.80%	100.00%
Corsica	PA	15829	PA-Clarion	0.00%	0.00%	4.55%	1.01%	2.53%	8.33%	16.41%	22.98%	15.66%	23.74%	4.80%	100.00%
Butler	PA	16001	PA-Butler	1.61%	0.98%	2.35%	3.13%	3.70%	8.37%	11.47%	17.32%	13.75%	22.80%	14.53%	100.00%
Butler	PA	16002	PA-Butler	3.32%	2.34%	2.83%	1.77%	4.40%	7.03%	6.98%	18.37%	16.65%	19.61%	16.69%	100.00%
Cabot	PA	16023	PA-Butler	2.83%	0.42%	0.00%	2.67%	1.33%	10.83%	8.67%	17.75%	19.58%	22.83%	13.08%	100.00%

TOTAL COMMUNITIES: 362

				--- Distribution of Income for Owned Units ---											
City	State	Zip Code	Profit Center	0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Connoquenessing	PA	16027	PA-Butler	0.00%	5.05%	0.00%	1.01%	6.06%	13.13%	13.13%	19.19%	15.15%	3.03%	24.24%	100.00%
East Butler	PA	16029	PA-Butler	0.71%	2.14%	0.00%	1.07%	2.14%	22.86%	18.93%	18.57%	15.00%	14.29%	4.29%	100.00%
Evans City	PA	16033	PA-Butler	0.74%	0.70%	0.00%	5.47%	2.10%	3.05%	4.98%	20.33%	19.79%	22.47%	20.37%	100.00%
Harmony	PA	16037	PA-NewCastle/Ellwood	0.97%	1.30%	0.00%	0.84%	2.33%	4.40%	14.51%	18.98%	11.46%	17.49%	27.72%	100.00%
Harmony	PA	16037	PA-Butler	0.97%	1.30%	0.00%	0.84%	2.33%	4.40%	14.51%	18.98%	11.46%	17.49%	27.72%	100.00%
Lyndora	PA	16045	PA-Butler	0.00%	3.27%	0.00%	7.64%	0.00%	4.00%	15.27%	24.36%	11.27%	27.64%	6.55%	100.00%
Prospect	PA	16052	PA-Butler	0.36%	2.01%	1.18%	2.61%	2.96%	9.00%	10.43%	19.43%	21.21%	16.59%	14.22%	100.00%
Renfrew	PA	16053	PA-Butler	0.43%	0.00%	3.06%	6.26%	2.06%	6.61%	10.95%	17.07%	24.11%	16.07%	13.37%	100.00%
Saxonburg	PA	16056	PA-Saxonburg	0.40%	1.74%	1.34%	3.15%	3.61%	5.62%	10.58%	21.22%	17.40%	18.21%	16.73%	100.00%
Saxonburg	PA	16056	PA-Butler	0.40%	1.74%	1.34%	3.15%	3.61%	5.62%	10.58%	21.22%	17.40%	18.21%	16.73%	100.00%
Zelienople	PA	16063	PA-NewCastle/Ellwood	2.05%	0.00%	1.41%	0.30%	2.57%	9.41%	6.93%	14.76%	16.94%	21.65%	23.96%	100.00%
New Castle	PA	16101	PA-NewCastle/Ellwood	1.11%	1.31%	3.37%	4.51%	4.68%	13.73%	16.70%	17.94%	16.17%	13.20%	7.31%	100.00%
New Castle	PA	16102	PA-NewCastle/Ellwood	1.67%	0.39%	4.70%	3.93%	7.47%	8.82%	13.91%	23.31%	16.03%	12.43%	7.34%	100.00%
New Castle	PA	16105	PA-NewCastle/Ellwood	1.47%	0.84%	1.47%	2.04%	2.88%	9.86%	12.32%	16.61%	15.98%	18.17%	18.36%	100.00%
Edinburg	PA	16116	PA-NewCastle/Ellwood	0.64%	0.00%	2.69%	6.34%	6.87%	6.23%	19.87%	24.70%	11.49%	18.58%	2.58%	100.00%
Ellwood City	PA	16117	PA-NewCastle/Ellwood	1.00%	1.82%	1.09%	4.81%	5.59%	6.93%	12.20%	20.61%	14.32%	22.11%	9.51%	100.00%
Fombell	PA	16123	PA-NewCastle/Ellwood	0.22%	0.11%	0.56%	0.45%	0.67%	4.37%	11.32%	11.55%	24.89%	21.86%	23.99%	100.00%
Koppel	PA	16136	PA-NewCastle/Ellwood	0.00%	1.71%	1.71%	3.85%	13.25%	4.27%	10.68%	28.63%	20.09%	14.53%	1.28%	100.00%
Wampum	PA	16157	PA-NewCastle/Ellwood	0.30%	1.68%	4.16%	4.06%	3.67%	11.30%	13.68%	17.34%	18.93%	13.78%	11.10%	100.00%
West Pittsburg	PA	16160	PA-NewCastle/Ellwood	6.20%	6.93%	1.09%	7.66%	6.93%	14.60%	18.98%	17.88%	9.85%	8.03%	1.82%	100.00%
Kittanning	PA	16201	PA-Kittanning	1.10%	2.36%	5.03%	2.52%	4.41%	7.32%	9.62%	18.68%	18.13%	18.07%	12.76%	100.00%
Clarion	PA	16214	PA-Clarion	2.60%	0.00%	2.85%	1.52%	4.24%	3.86%	11.02%	19.89%	14.19%	19.95%	19.89%	100.00%
Knox	PA	16232	PA-Clarion	1.66%	1.16%	2.66%	2.82%	4.73%	17.93%	12.78%	17.10%	19.92%	11.87%	7.39%	100.00%
Lucinda	PA	16235	PA-Clarion	1.49%	1.28%	2.77%	2.56%	4.48%	8.96%	9.38%	20.47%	11.09%	30.28%	7.25%	100.00%
Lucinda	PA	16235	PA-Coatesville	1.49%	1.28%	2.77%	2.56%	4.48%	8.96%	9.38%	20.47%	11.09%	30.28%	7.25%	100.00%
Shippenville	PA	16254	PA-Clarion	2.82%	1.00%	3.92%	5.01%	4.74%	13.11%	13.57%	17.12%	11.84%	16.39%	10.47%	100.00%
Sligo	PA	16255	PA-Clarion	2.06%	1.13%	1.88%	4.69%	2.81%	8.26%	16.32%	17.07%	18.01%	17.45%	10.32%	100.00%
Strattanville	PA	16258	PA-Clarion	3.38%	0.00%	1.27%	5.91%	2.32%	12.45%	21.31%	16.88%	9.07%	21.10%	6.33%	100.00%
Clarendon	PA	16313	PA-Warren	0.95%	2.84%	4.11%	4.90%	7.58%	13.90%	13.11%	14.69%	17.54%	16.75%	3.63%	100.00%
Marble	PA	16334	PA-Clarion	1.90%	0.00%	1.27%	4.43%	1.90%	7.59%	14.56%	20.25%	12.66%	27.85%	7.59%	100.00%
Warren	PA	16365	PA-Warren	1.12%	1.32%	2.03%	2.55%	5.71%	11.68%	12.46%	20.55%	15.77%	19.06%	7.77%	100.00%
Osceola Mills	PA	16666	PA-Philipsburg	0.25%	8.12%	5.44%	6.11%	4.27%	12.38%	17.99%	22.09%	6.86%	13.14%	3.35%	100.00%
Sandy Ridge	PA	16677	PA-Philipsburg	0.00%	20.91%	0.00%	20.91%	0.00%	14.55%	0.00%	20.00%	0.00%	16.36%	7.27%	100.00%
Kane	PA	16735	PA-Kane	3.05%	0.74%	4.05%	5.27%	5.42%	8.27%	20.17%	17.06%	15.53%	12.43%	8.00%	100.00%
Allport	PA	16821	PA-Philipsburg	0.00%	0.00%	0.00%	0.00%	0.00%	30.43%	0.00%	33.70%	26.09%	9.78%	0.00%	100.00%
Bellefonte	PA	16823	PA-BOGGS	0.15%	0.57%	0.93%	2.56%	3.05%	7.55%	9.69%	18.58%	17.97%	26.65%	12.29%	100.00%
Bigler	PA	16825	PA-Philipsburg	0.00%	0.00%	0.00%	0.00%	15.45%	0.00%	0.00%	84.55%	0.00%	0.00%	0.00%	100.00%
Clearfield	PA	16830	PA-Philipsburg	1.30%	2.22%	3.46%	6.25%	3.54%	8.60%	11.85%	22.65%	17.23%	14.72%	8.17%	100.00%
Hawk Run	PA	16840	PA-Philipsburg	0.00%	0.00%	0.00%	0.00%	0.00%	9.24%	26.05%	11.76%	28.57%	5.04%	19.33%	100.00%
Howard	PA	16841	PA-BOGGS	0.48%	1.78%	1.59%	3.03%	2.84%	8.09%	13.68%	24.23%	17.24%	16.47%	10.55%	100.00%
Howard	PA	16841	PA-Nittany	0.48%	1.78%	1.59%	3.03%	2.84%	8.09%	13.68%	24.23%	17.24%	16.47%	10.55%	100.00%
Howard	PA	16841	PA-Nittany	0.48%	1.78%	1.59%	3.03%	2.84%	8.09%	13.68%	24.23%	17.24%	16.47%	10.55%	100.00%
Lamar	PA	16848	PA-Nittany	0.00%	0.00%	9.46%	0.00%	6.76%	20.27%	10.81%	31.08%	0.00%	6.76%	14.86%	100.00%
Lamar	PA	16848	PA-Nittany	0.00%	0.00%	9.46%	0.00%	6.76%	20.27%	10.81%	31.08%	0.00%	6.76%	14.86%	100.00%
Morrisdale	PA	16858	PA-Philipsburg	0.87%	1.58%	2.84%	3.95%	2.76%	5.45%	19.34%	25.02%	15.86%	16.57%	5.76%	100.00%
Munson	PA	16860	PA-Philipsburg	0.00%	0.00%	3.90%	0.00%	8.66%	0.00%	21.21%	56.28%	9.96%	0.00%	0.00%	100.00%
Philipsburg	PA	16866	PA-Philipsburg	2.23%	0.66%	4.17%	2.85%	4.62%	5.20%	17.38%	21.91%	15.31%	14.90%	10.77%	100.00%
Wallaceton	PA	16876	PA-Philipsburg	6.02%	0.00%	9.64%	12.05%	3.61%	8.43%	21.69%	14.46%	20.48%	3.61%	0.00%	100.00%
West Decatur	PA	16878	PA-Philipsburg	0.62%	1.09%	3.73%	7.62%	1.40%	4.04%	14.15%	21.15%	23.33%	19.13%	3.73%	100.00%
Woodland	PA	16881	PA-Philipsburg	2.11%	2.46%	9.72%	4.22%	5.62%	15.93%	14.40%	19.44%	13.82%	7.49%	4.80%	100.00%
Annville	PA	17003	PA-Hershey/Palmyra	0.67%	0.70%	1.12%	3.09%	4.72%	5.87%	6.75%	20.57%	13.82%	28.07%	14.64%	100.00%
Campbelltown	PA	17010	PA-Hershey/Palmyra	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%
Camp Hill	PA	17011	PA-Mechanicsburg	0.75%	0.18%	1.05%	1.11%	2.30%	5.50%	8.90%	14.12%	15.25%	24.98%	25.85%	100.00%
Carlisle	PA	17013	PA-Hershey/Palmyra	0.17%	0.11%	0.42%	2.21%	3.56%	7.15%	11.05%	20.59%	16.69%	22.47%	15.58%	100.00%
Elizabethtown	PA	17022	PA-Hershey/Palmyra	0.21%	0.42%	0.27%	1.02%	1.47%	3.95%	9.22%	18.19%	16.56%	29.11%	19.58%	100.00%
Enola	PA	17025	PA-Mechanicsburg	1.04%	0.27%	0.89%	0.90%	0.62%	7.01%	10.86%	15.94%	19.29%	20.12%	23.07%	100.00%
Enola	PA	17025	PA-Norristown	1.04%	0.27%	0.89%	0.90%	0.62%	7.01%	10.86%	15.94%	19.29%	20.12%	23.07%	100.00%
Hershey	PA	17033	PA-Hershey/Palmyra	0.66%	3.17%	1.18%	0.72%	0.92%	5.01%	8.46%	19.48%	10.82%	16.40%	33.18%	100.00%
Hummelstown	PA	17036	PA-Hershey/Palmyra	2.13%	2.13%	0.71%	0.48%	2.38%	2.68%	4.14%	15.26%	12.91%	22.68%	34.50%	100.00%
Lebanon	PA	17042	PA-Hershey/Palmyra	1.32%	0.34%	0.82%	2.22%	2.17%	8.42%	9.79%	21.66%	16.73%	21.81%	14.72%	100.00%
Lemoyne	PA	17043	PA-Mechanicsburg	0.73%	0.42%	0.00%	0.00%	2.06%	3.39%	9.32%	26.69%	16.46%	24.70%	16.22%	100.00%
Mechanicsburg	PA	17050	PA-Mechanicsburg	1.48%	0.11%	0.65%	1.36%	1.14%	4.16%	5.71%	15.72%	12.43%	22.65%	34.59%	100.00%
Mechanicsburg	PA	17055	PA-Mechanicsburg	1.06%	0.87%	0.74%	3.15%	3.40%	4.04%	9.17%	13.66%	14.75%	23.91%	25.24%	100.00%
Middletown	PA	17057	PA-Hershey/Palmyra	3.10%	0.72%	0.96%	3.11%	2.33%	7.18%	10.53%	18.23%	18.36%	16.97%	18.51%	100.00%

TOTAL COMMUNITIES: 362

				--- Distribution of Income for Owned Units ---											
City	State	Zip Code	Profit Center	0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Myerstown	PA	17067	PA-Mechanicsburg	0.36%	0.60%	2.05%	3.03%	2.99%	7.25%	10.48%	19.80%	18.07%	19.67%	15.70%	100.00%
New Cumberland	PA	17070	PA-Mechanicsburg	0.63%	0.99%	0.32%	1.57%	2.09%	6.32%	6.64%	19.75%	15.68%	26.79%	19.22%	100.00%
Newport	PA	17074	PA-Mechanicsburg	1.59%	1.22%	3.49%	1.90%	2.99%	4.35%	9.07%	20.95%	19.59%	20.14%	14.69%	100.00%
Palmyra	PA	17078	PA-Hershey/Palmyra	0.00%	0.39%	1.37%	2.44%	1.95%	5.83%	11.30%	15.28%	14.29%	23.99%	23.16%	100.00%
Summerdale	PA	17093	PA-Mechanicsburg	0.00%	0.00%	0.00%	0.00%	2.87%	0.00%	3.45%	71.55%	11.21%	7.47%	3.45%	100.00%
Harrisburg	PA	17101	PA-Steelton W	0.00%	20.00%	37.78%	0.00%	0.00%	0.00%	42.22%	0.00%	0.00%	0.00%	0.00%	100.00%
Harrisburg	PA	17109	PA-Hershey/Palmyra	1.58%	0.47%	2.04%	0.45%	3.07%	9.69%	10.01%	18.78%	17.05%	24.89%	11.98%	100.00%
Harrisburg	PA	17111	PA-Hershey/Palmyra	1.11%	0.02%	1.26%	1.64%	1.31%	3.77%	10.29%	18.88%	17.73%	25.19%	18.82%	100.00%
Harrisburg	PA	17112	PA-Hershey/Palmyra	1.12%	0.72%	1.41%	1.05%	2.87%	3.48%	8.68%	18.07%	12.65%	26.92%	23.04%	100.00%
Harrisburg	PA	17113	PA-Steelton W	3.45%	1.33%	3.41%	1.89%	4.02%	11.33%	15.84%	23.23%	13.26%	13.98%	8.26%	100.00%
Etters	PA	17319	PA-Mechanicsburg	1.49%	1.60%	0.27%	0.33%	0.98%	4.20%	6.10%	18.55%	25.87%	24.33%	16.27%	100.00%
Gettysburg	PA	17325	PA-Lake Heritage	0.76%	1.10%	2.31%	2.67%	1.46%	6.15%	10.89%	17.02%	12.70%	25.92%	19.01%	100.00%
Lewisberry	PA	17339	PA-Mechanicsburg	1.15%	0.37%	0.64%	2.02%	1.15%	2.06%	10.87%	14.90%	20.91%	24.12%	21.82%	100.00%
York Haven	PA	17370	PA-Mechanicsburg	2.39%	0.62%	0.62%	0.19%	3.15%	6.68%	17.13%	13.41%	16.36%	27.48%	11.98%	100.00%
York Haven	PA	17370	PA-Hershey/Palmyra	2.39%	0.62%	0.62%	0.19%	3.15%	6.68%	17.13%	13.41%	16.36%	27.48%	11.98%	100.00%
Christiana	PA	17509	PA-Coatesville	1.03%	0.00%	4.62%	1.85%	0.82%	2.26%	10.87%	19.79%	10.97%	21.33%	26.46%	100.00%
Kirkwood	PA	17536	PA-Coatesville	0.63%	0.00%	0.32%	0.63%	23.15%	2.64%	10.25%	11.10%	16.38%	20.72%	14.16%	100.00%
Quarryville	PA	17566	PA-Coatesville	1.55%	1.78%	2.01%	2.07%	1.71%	3.02%	12.52%	23.24%	15.19%	20.38%	16.54%	100.00%
Mc Ewensville	PA	17749	PA-McEwensville W	0.00%	0.00%	0.00%	5.56%	6.94%	6.94%	9.72%	29.17%	9.72%	30.56%	1.39%	100.00%
Mill Hall	PA	17751	PA-Nittany	0.84%	0.35%	4.54%	4.62%	5.33%	7.93%	10.83%	24.61%	12.46%	19.46%	9.03%	100.00%
Mill Hall	PA	17751	PA-Nittany	0.84%	0.35%	4.54%	4.62%	5.33%	7.93%	10.83%	24.61%	12.46%	19.46%	9.03%	100.00%
Turbotville	PA	17772	PA-Turbotville W	0.47%	0.83%	2.01%	2.72%	3.91%	7.69%	16.21%	12.19%	10.77%	36.21%	6.98%	100.00%
Watsontown	PA	17777	PA-McEwensville W	0.45%	0.74%	4.60%	3.71%	2.28%	11.97%	15.54%	19.40%	13.11%	15.88%	12.32%	100.00%
Watsontown	PA	17777	PA-Milton	0.45%	0.74%	4.60%	3.71%	2.28%	11.97%	15.54%	19.40%	13.11%	15.88%	12.32%	100.00%
Sunbury	PA	17801	PA-Milton	0.68%	1.25%	2.47%	3.48%	6.52%	6.78%	13.56%	21.61%	16.14%	17.72%	9.79%	100.00%
Allenwood	PA	17810	PA-Milton	0.94%	1.13%	3.02%	9.81%	1.51%	7.92%	17.55%	16.79%	16.23%	18.49%	6.60%	100.00%
Herndon	PA	17830	PA-Milton	0.00%	1.48%	3.40%	1.92%	4.14%	10.36%	13.76%	20.56%	19.08%	15.38%	9.91%	100.00%
Lewisburg	PA	17837	PA-Milton	0.97%	0.66%	0.62%	2.65%	3.41%	9.00%	15.01%	12.36%	13.92%	22.09%	19.30%	100.00%
Milton	PA	17847	PA-Milton	1.56%	1.07%	1.69%	1.82%	8.31%	8.86%	11.17%	19.41%	17.40%	19.57%	9.15%	100.00%
Montandon	PA	17850	PA-Milton	0.00%	0.00%	14.79%	0.00%	7.69%	13.02%	36.09%	10.65%	1.78%	15.98%	0.00%	100.00%
New Columbia	PA	17856	PA-Milton	1.15%	0.00%	6.78%	0.00%	4.01%	1.15%	10.22%	27.22%	13.66%	21.49%	14.33%	100.00%
Northumberland	PA	17857	PA-Milton	1.44%	0.32%	1.12%	2.88%	3.28%	10.23%	11.83%	19.30%	20.78%	17.90%	10.95%	100.00%
West Milton	PA	17886	PA-Milton	0.00%	0.00%	4.89%	4.89%	19.57%	7.07%	10.33%	7.61%	27.17%	11.96%	6.52%	100.00%
White Deer	PA	17887	PA-Milton	0.00%	19.37%	18.92%	15.77%	0.00%	0.00%	0.00%	15.77%	30.18%	0.00%	0.00%	100.00%
Frackville	PA	17931	PA-Frackville	3.71%	1.28%	6.07%	1.73%	3.32%	6.07%	12.33%	15.78%	16.04%	23.39%	10.29%	100.00%
Bangor	PA	18013	PA-Bangor	0.55%	0.81%	1.77%	4.27%	2.03%	6.44%	10.14%	20.48%	15.56%	20.93%	17.01%	100.00%
Bangor	PA	18013	PA-Bangor	0.55%	0.81%	1.77%	4.27%	2.03%	6.44%	10.14%	20.48%	15.56%	20.93%	17.01%	100.00%
Bethlehem	PA	18018	PA-Elizabeth	1.23%	0.62%	2.41%	1.88%	1.25%	5.65%	12.65%	16.38%	13.94%	25.88%	18.10%	100.00%
Easton	PA	18040	PA-Nazareth	1.60%	1.15%	0.62%	0.43%	2.29%	3.36%	6.62%	12.89%	12.84%	21.73%	36.47%	100.00%
Easton	PA	18042	PA-Nazareth	1.07%	0.51%	1.77%	1.81%	1.70%	5.98%	8.52%	22.20%	15.33%	22.90%	18.21%	100.00%
Easton	PA	18045	PA-Nazareth	0.36%	0.84%	0.90%	0.67%	0.90%	4.29%	8.15%	16.25%	12.82%	26.02%	28.79%	100.00%
Nazareth	PA	18064	PA-Nazareth	0.58%	0.69%	1.45%	2.07%	4.20%	3.50%	5.65%	14.30%	13.13%	24.64%	29.80%	100.00%
Pen Argyl	PA	18072	PA-Bangor	0.00%	1.84%	2.61%	1.64%	1.38%	2.87%	14.48%	18.94%	17.91%	20.27%	18.07%	100.00%
Pen Argyl	PA	18072	PA-Nazareth	0.00%	1.84%	2.61%	1.64%	1.38%	2.87%	14.48%	18.94%	17.91%	20.27%	18.07%	100.00%
Stockertown	PA	18083	PA-Nazareth	0.00%	0.00%	0.00%	1.49%	1.98%	4.46%	13.37%	10.89%	14.85%	39.60%	13.37%	100.00%
Tatamy	PA	18085	PA-Nazareth	2.04%	0.41%	2.04%	0.00%	0.00%	6.12%	25.31%	21.22%	11.43%	13.47%	17.96%	100.00%
Wind Gap	PA	18091	PA-Nazareth	2.18%	3.77%	0.53%	4.04%	1.99%	6.15%	13.63%	17.60%	9.79%	18.27%	22.04%	100.00%
Tamaqua	PA	18252	PA-Frackville	0.43%	1.08%	4.24%	3.72%	3.38%	8.36%	10.36%	19.73%	17.61%	14.20%	16.90%	100.00%
Tamaqua	PA	18252	PA-Frackville	0.43%	1.08%	4.24%	3.72%	3.38%	8.36%	10.36%	19.73%	17.61%	14.20%	16.90%	100.00%
East Stroudsburg	PA	18301	PA-Lehman Pike	1.87%	0.00%	0.80%	1.34%	2.34%	4.70%	9.89%	14.44%	13.31%	24.00%	27.31%	100.00%
East Stroudsburg	PA	18302	PA-Lehman Pike	1.31%	1.47%	3.85%	6.88%	2.86%	4.45%	11.52%	17.32%	11.39%	24.71%	14.23%	100.00%
Bushkill	PA	18324	PA-Lehman Pike	1.28%	0.74%	3.60%	4.46%	3.66%	13.74%	5.23%	15.03%	15.35%	28.97%	7.93%	100.00%
Dingmans Ferry	PA	18328	PA-Lehman Pike	1.45%	2.53%	3.83%	2.19%	1.82%	4.13%	8.25%	25.95%	19.33%	15.24%	15.28%	100.00%
Dingmans Ferry	PA	18328	PA-Lehman Pike	1.45%	2.53%	3.83%	2.19%	1.82%	4.13%	8.25%	25.95%	19.33%	15.24%	15.28%	100.00%
Dingmans Ferry	PA	18328	PA-Lehman Pike	1.45%	2.53%	3.83%	2.19%	1.82%	4.13%	8.25%	25.95%	19.33%	15.24%	15.28%	100.00%
Marshalls Creek	PA	18335	PA-Lehman Pike	0.00%	0.00%	0.00%	0.00%	3.28%	2.27%	13.38%	8.84%	0.00%	38.38%	33.84%	100.00%
Matamoras	PA	18336	PA-Lehman Pike	0.00%	0.00%	1.45%	4.55%	3.00%	3.10%	18.88%	14.42%	13.55%	26.33%	14.71%	100.00%
Milford	PA	18337	PA-Lehman Pike	0.16%	0.60%	4.45%	2.93%	3.67%	6.25%	7.07%	12.76%	15.77%	24.02%	22.31%	100.00%
Mountainhome	PA	18342	PA-Lehman Pike	29.03%	0.00%	11.61%	0.00%	0.00%	0.00%	0.00%	0.00%	35.48%	0.00%	23.87%	100.00%
Mount Pocono	PA	18344	PA-Pocono	1.91%	0.00%	0.00%	0.00%	2.58%	3.82%	14.04%	16.74%	11.57%	23.93%	25.39%	100.00%
Pocono Summit	PA	18346	PA-Pocono	8.59%	0.81%	1.41%	3.64%	0.00%	1.72%	24.34%	15.66%	2.83%	27.07%	13.94%	100.00%
Pocono Lake	PA	18347	PA-Lehman Pike	7.75%	0.00%	4.86%	0.00%	7.07%	4.86%	7.07%	33.59%	11.55%	17.02%	6.23%	100.00%
Portland	PA	18351	PA-Lehman Pike	2.27%	0.00%	9.09%	21.59%	0.00%	0.00%	18.18%	23.86%	9.09%	13.64%	2.27%	100.00%
Saylorsburg	PA	18353	PA-Nazareth	1.11%	1.26%	2.19%	4.16%	2.80%	4.94%	13.62%	13.57%	15.43%	20.27%	20.65%	100.00%

TOTAL COMMUNITIES: 362

				--- Distribution of Income for Owned Units ---											
City	State	Zip Code	Profit Center	0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Archbald	PA	18403	PA-WB/Scranton	1.65%	0.75%	1.36%	2.31%	2.45%	4.71%	11.39%	20.24%	18.45%	27.72%	8.99%	100.00%
Carbondale	PA	18407	PA-WB/Scranton	2.51%	1.78%	4.83%	3.42%	4.69%	9.13%	12.40%	20.01%	15.50%	13.35%	12.40%	100.00%
Clarks Summit	PA	18411	PA-Abington	1.42%	0.68%	3.12%	0.86%	2.70%	4.41%	8.94%	13.91%	15.76%	21.92%	26.27%	100.00%
Clarks Summit	PA	18411	PA-WB/Scranton	1.42%	0.68%	3.12%	0.86%	2.70%	4.41%	8.94%	13.91%	15.76%	21.92%	26.27%	100.00%
Dalton	PA	18414	PA-Abington	1.01%	0.48%	2.19%	2.72%	3.68%	5.93%	12.44%	19.49%	18.10%	15.96%	17.99%	100.00%
Dalton	PA	18414	PA-Abington	1.01%	0.48%	2.19%	2.72%	3.68%	5.93%	12.44%	19.49%	18.10%	15.96%	17.99%	100.00%
Dalton	PA	18414	PA-WB/Scranton	1.01%	0.48%	2.19%	2.72%	3.68%	5.93%	12.44%	19.49%	18.10%	15.96%	17.99%	100.00%
Factoryville	PA	18419	PA-Abington	4.84%	1.25%	3.15%	3.59%	8.35%	8.64%	12.45%	17.88%	13.11%	16.19%	10.55%	100.00%
Forest City	PA	18421	PA-WB/Scranton	2.09%	1.42%	2.23%	4.52%	3.64%	11.73%	8.83%	21.85%	12.74%	18.07%	12.88%	100.00%
Jermyn	PA	18433	PA-WB/Scranton	1.04%	1.33%	5.32%	2.54%	3.95%	3.78%	9.23%	17.37%	12.97%	18.74%	23.73%	100.00%
Jessup	PA	18434	PA-WB/Scranton	2.96%	0.00%	0.00%	5.74%	2.78%	9.74%	11.65%	27.04%	24.43%	7.91%	7.74%	100.00%
Lake Ariel	PA	18436	PA-Pocono	2.49%	0.00%	4.38%	3.31%	3.36%	7.52%	9.39%	22.01%	11.15%	26.37%	10.01%	100.00%
Moscow	PA	18444	PA-WB/Scranton	1.56%	0.45%	1.85%	1.81%	4.20%	5.83%	10.32%	16.01%	16.08%	23.83%	18.07%	100.00%
Olyphant	PA	18447	PA-WB/Scranton	0.98%	0.00%	0.86%	5.07%	3.36%	9.35%	17.02%	19.24%	22.98%	12.33%	8.81%	100.00%
Olyphant	PA	18447	PA-Abington	0.98%	0.00%	0.86%	5.07%	3.36%	9.35%	17.02%	19.24%	22.98%	12.33%	8.81%	100.00%
Peckville	PA	18452	PA-WB/Scranton	0.00%	0.00%	3.07%	6.26%	8.56%	15.76%	11.16%	18.18%	13.81%	15.53%	7.67%	100.00%
Thompson	PA	18465	PA-Susquehanna	2.75%	1.75%	2.00%	6.25%	2.75%	11.75%	16.25%	21.25%	11.00%	15.75%	8.50%	100.00%
Tobyhanna	PA	18466	PA-Pocono	0.05%	1.55%	2.92%	2.83%	3.21%	2.35%	15.19%	22.56%	18.85%	16.36%	14.12%	100.00%
Waverly	PA	18471	PA-Abington	10.34%	1.48%	0.00%	6.90%	0.00%	0.00%	1.48%	11.33%	9.85%	27.59%	31.03%	100.00%
Scranton	PA	18503	PA-WB/Scranton	0.00%	0.00%	0.00%	37.50%	0.00%	0.00%	29.17%	33.33%	0.00%	0.00%	0.00%	100.00%
Scranton	PA	18504	PA-WB/Scranton	2.06%	0.68%	3.70%	4.99%	3.37%	11.18%	12.56%	18.23%	15.60%	17.80%	9.82%	100.00%
Scranton	PA	18505	PA-WB/Scranton	3.42%	0.77%	1.15%	3.07%	5.38%	7.88%	17.45%	15.13%	13.35%	20.71%	11.69%	100.00%
Moosic	PA	18507	PA-WB/Scranton	1.09%	0.00%	3.62%	2.19%	4.10%	1.91%	15.23%	8.47%	14.62%	29.37%	19.40%	100.00%
Moosic	PA	18507	PA-Nazareth	1.09%	0.00%	3.62%	2.19%	4.10%	1.91%	15.23%	8.47%	14.62%	29.37%	19.40%	100.00%
Scranton	PA	18508	PA-WB/Scranton	0.67%	2.16%	3.82%	4.00%	5.21%	7.01%	18.02%	26.16%	13.53%	11.78%	7.64%	100.00%
Scranton	PA	18509	PA-WB/Scranton	0.61%	1.63%	2.07%	1.34%	3.33%	5.85%	10.49%	14.92%	18.29%	23.58%	17.89%	100.00%
Scranton	PA	18510	PA-WB/Scranton	1.58%	0.00%	2.84%	1.37%	7.57%	6.20%	10.88%	25.64%	11.88%	22.44%	9.62%	100.00%
Scranton	PA	18512	PA-WB/Scranton	3.06%	0.50%	3.09%	2.43%	4.41%	5.55%	11.38%	19.99%	16.69%	23.98%	8.93%	100.00%
Taylor	PA	18517	PA-WB/Scranton	1.08%	0.00%	5.76%	6.31%	3.46%	2.44%	9.49%	20.27%	13.36%	22.92%	14.92%	100.00%
Old Forge	PA	18518	PA-WB/Scranton	1.39%	0.29%	0.86%	4.83%	3.68%	10.32%	6.92%	16.78%	21.98%	17.03%	15.92%	100.00%
Scranton	PA	18519	PA-WB/Scranton	0.97%	0.62%	1.52%	3.53%	1.73%	4.92%	11.23%	18.92%	24.39%	18.64%	13.51%	100.00%
Berwick	PA	18603	PA-Berwick	1.36%	0.84%	2.98%	3.85%	3.15%	7.46%	16.12%	24.32%	16.30%	16.43%	7.20%	100.00%
Berwick	PA	18603	PA-Philipsburg	1.36%	0.84%	2.98%	3.85%	3.15%	7.46%	16.12%	24.32%	16.30%	16.43%	7.20%	100.00%
Dallas	PA	18612	PA-WB/Scranton	3.09%	1.89%	0.89%	1.67%	1.05%	3.73%	6.73%	15.01%	12.08%	24.78%	29.09%	100.00%
Glen Lyon	PA	18617	PA-WB/Scranton	7.00%	1.45%	8.94%	7.25%	4.83%	18.60%	7.97%	9.42%	8.70%	19.32%	6.52%	100.00%
Hunlock Creek	PA	18621	PA-WB/Scranton	0.79%	0.67%	3.48%	6.29%	1.96%	11.28%	13.24%	18.74%	15.71%	16.78%	11.05%	100.00%
Lake Winola	PA	18625	PA-Abington	0.00%	0.00%	0.00%	0.00%	0.00%	28.89%	0.00%	31.11%	8.89%	31.11%	0.00%	100.00%
Nanticoke	PA	18634	PA-WB/Scranton	3.42%	1.54%	4.42%	4.02%	5.02%	7.07%	15.39%	19.52%	17.58%	13.59%	8.44%	100.00%
Nanticoke	PA	18634	PA-WB/Scranton	3.42%	1.54%	4.42%	4.02%	5.02%	7.07%	15.39%	19.52%	17.58%	13.59%	8.44%	100.00%
Nescopeck	PA	18635	PA-Berwick	0.24%	0.98%	1.71%	4.72%	1.87%	11.96%	10.90%	16.19%	17.74%	24.08%	9.60%	100.00%
Pittston	PA	18640	PA-WB/Scranton	1.51%	1.96%	3.57%	3.02%	4.06%	8.50%	12.46%	17.46%	18.58%	16.97%	11.91%	100.00%
Pittston	PA	18641	PA-WB/Scranton	0.75%	0.20%	1.50%	5.25%	4.50%	7.55%	11.01%	23.51%	23.01%	14.21%	8.50%	100.00%
Duryea	PA	18642	PA-WB/Scranton	0.00%	2.24%	2.09%	0.00%	3.58%	8.58%	10.00%	18.13%	21.87%	19.40%	14.10%	100.00%
Pittston	PA	18643	PA-WB/Scranton	1.05%	1.03%	1.64%	6.11%	0.90%	9.53%	14.52%	16.03%	19.13%	17.77%	12.29%	100.00%
Wyoming	PA	18644	PA-WB/Scranton	0.73%	0.90%	2.86%	2.45%	2.33%	6.41%	8.37%	20.53%	18.12%	21.43%	15.88%	100.00%
Plymouth	PA	18651	PA-WB/Scranton	2.60%	0.45%	8.43%	6.24%	4.04%	12.43%	12.56%	16.82%	12.65%	15.70%	8.08%	100.00%
Plymouth	PA	18651	PA-Norristown	2.60%	0.45%	8.43%	6.24%	4.04%	12.43%	12.56%	16.82%	12.65%	15.70%	8.08%	100.00%
Shickshinny	PA	18655	PA-WB/Scranton	2.21%	0.41%	3.44%	1.75%	5.19%	12.74%	13.35%	15.20%	20.08%	17.62%	8.01%	100.00%
Wilkes Barre	PA	18701	PA-WB/Scranton	0.00%	0.00%	4.55%	0.00%	19.70%	19.70%	14.39%	13.64%	0.00%	23.48%	4.55%	100.00%

TOTAL COMMUNITIES: 362

				--- Distribution of Income for Owned Units ---											
City	State	Zip Code	Profit Center	0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Wilkes Barre	PA	18702	PA-WB/Scranton	2.10%	1.79%	2.42%	3.17%	3.35%	7.57%	14.70%	21.46%	14.58%	17.57%	11.28%	100.00%
Kingston	PA	18704	PA-WB/Scranton	1.45%	1.33%	2.56%	4.03%	2.88%	5.49%	12.23%	18.48%	18.79%	18.44%	14.31%	100.00%
Wilkes Barre	PA	18705	PA-WB/Scranton	3.58%	0.10%	2.76%	7.57%	3.68%	6.61%	14.10%	21.67%	14.70%	15.97%	9.27%	100.00%
Wilkes Barre	PA	18706	PA-WB/Scranton	1.31%	1.24%	4.15%	5.12%	5.55%	12.43%	10.71%	23.57%	16.08%	12.07%	7.78%	100.00%
Wilkes Barre	PA	18706	PA-Mechanicsburg	1.31%	1.24%	4.15%	5.12%	5.55%	12.43%	10.71%	23.57%	16.08%	12.07%	7.78%	100.00%
Mountain Top	PA	18707	PA-WB/Scranton	1.32%	0.48%	1.89%	2.29%	2.27%	3.26%	9.27%	13.25%	17.24%	26.94%	21.79%	100.00%
Shavertown	PA	18708	PA-WB/Scranton	0.63%	1.76%	0.13%	1.50%	5.64%	12.70%	9.87%	9.15%	13.26%	20.44%	24.92%	100.00%
Shavertown	PA	18708	PA-WB/Scranton	0.63%	1.76%	0.13%	1.50%	5.64%	12.70%	9.87%	9.15%	13.26%	20.44%	24.92%	100.00%
Luzerne	PA	18709	PA-WB/Scranton	3.42%	3.30%	3.87%	3.64%	6.15%	8.88%	26.20%	12.53%	11.73%	8.54%	11.73%	100.00%
Montrose	PA	18801	PA-Susquehanna	1.99%	0.68%	1.74%	2.12%	4.66%	8.99%	13.73%	18.23%	15.98%	17.17%	14.71%	100.00%
Great Bend	PA	18821	PA-Susquehanna	2.16%	0.93%	0.62%	3.09%	5.86%	11.42%	12.65%	20.68%	12.35%	22.53%	7.72%	100.00%
Hallstead	PA	18822	PA-Susquehanna	1.00%	0.80%	3.98%	5.08%	7.47%	7.47%	13.15%	19.42%	15.04%	14.74%	11.85%	100.00%
Susquehanna	PA	18847	PA-Susquehanna	1.69%	2.28%	2.48%	7.56%	2.93%	10.50%	15.51%	17.34%	15.06%	13.75%	10.89%	100.00%
Newtown	PA	18940	PA-Yardley	0.50%	0.12%	0.35%	1.57%	0.96%	1.78%	3.53%	8.73%	10.32%	18.41%	53.74%	100.00%
Washington Crossing	PA	18977	PA-Yardley	0.00%	0.00%	1.32%	0.00%	0.00%	5.34%	1.88%	4.46%	6.28%	17.45%	63.28%	100.00%
Clifton Heights	PA	19018	PA-Lehman Pike	1.98%	1.01%	1.14%	2.88%	2.52%	8.25%	14.01%	15.21%	15.87%	20.59%	16.53%	100.00%
Media	PA	19063	PA-Royersford	1.25%	0.28%	0.39%	1.37%	1.19%	3.47%	5.54%	10.55%	10.30%	20.21%	45.46%	100.00%
Morrisville	PA	19067	PA-Yardley	0.69%	1.48%	1.04%	1.81%	1.28%	2.87%	4.70%	10.59%	11.38%	19.80%	44.36%	100.00%
Coatesville	PA	19320	PA-Coatesville	0.73%	0.38%	0.76%	1.43%	1.80%	3.40%	7.39%	18.50%	15.21%	25.14%	25.27%	100.00%
Downingtown	PA	19335	PA-Coatesville	0.30%	0.74%	1.22%	1.13%	0.90%	3.81%	4.21%	8.58%	9.23%	22.37%	47.50%	100.00%
Honey Brook	PA	19344	PA-Coatesville	0.45%	0.75%	2.25%	2.76%	2.82%	2.16%	7.49%	23.27%	12.76%	26.21%	19.11%	100.00%
Parkesburg	PA	19365	PA-Coatesville	0.39%	0.15%	1.57%	1.62%	2.69%	2.06%	5.93%	14.89%	15.48%	29.43%	25.81%	100.00%
Pomeroy	PA	19367	PA-Coatesville	68.18%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	31.82%	0.00%	0.00%	100.00%
Sadsburyville	PA	19369	PA-Coatesville	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
Thorndale	PA	19372	PA-Coatesville	0.00%	0.00%	0.00%	0.00%	0.00%	1.18%	4.93%	43.79%	18.34%	12.43%	19.33%	100.00%
Norristown	PA	19401	PA-Norristown	1.18%	1.11%	2.50%	1.19%	2.03%	7.86%	7.54%	16.56%	21.39%	18.68%	19.95%	100.00%
Norristown	PA	19403	PA-Norristown	1.19%	0.64%	1.93%	2.00%	3.29%	3.62%	7.62%	16.32%	12.95%	22.36%	28.07%	100.00%
Bridgeport	PA	19405	PA-Norristown	4.27%	0.00%	1.73%	0.51%	0.00%	8.13%	5.18%	12.80%	15.35%	29.88%	22.15%	100.00%
King Of Prussia	PA	19406	PA-Norristown	2.25%	0.15%	1.23%	1.13%	1.59%	4.66%	6.55%	13.23%	12.42%	25.83%	30.96%	100.00%
Blue Bell	PA	19422	PA-Norristown	0.22%	0.63%	0.30%	0.40%	1.04%	6.51%	6.44%	10.02%	7.39%	14.86%	52.19%	100.00%
Collegeville	PA	19426	PA-Norristown	0.94%	0.58%	1.40%	0.93%	0.90%	2.78%	4.79%	7.87%	11.42%	19.42%	48.96%	100.00%
Collegeville	PA	19426	PA-Royersford	0.94%	0.58%	1.40%	0.93%	0.90%	2.78%	4.79%	7.87%	11.42%	19.42%	48.96%	100.00%
Lansdale	PA	19446	PA-Norristown	0.48%	0.66%	0.43%	1.53%	1.50%	4.80%	6.75%	11.95%	13.48%	20.73%	37.70%	100.00%
Mont Clare	PA	19453	PA-Royersford	0.00%	0.00%	3.48%	7.89%	3.71%	3.25%	0.93%	30.86%	5.34%	28.07%	16.47%	100.00%
North Wales	PA	19454	PA-Norristown	1.52%	1.06%	1.31%	1.85%	2.72%	4.98%	6.13%	13.02%	10.85%	18.20%	38.35%	100.00%
Oaks	PA	19456	PA-Royersford	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	26.76%	0.00%	0.00%	46.48%	26.76%	100.00%
Parker Ford	PA	19457	PA-Royersford	0.00%	0.00%	0.00%	46.94%	0.00%	0.00%	0.00%	0.00%	46.94%	0.00%	6.12%	100.00%
Phoenixville	PA	19460	PA-Royersford	1.43%	0.49%	0.76%	1.85%	0.68%	3.26%	7.25%	9.69%	9.69%	22.24%	42.63%	100.00%
Norristown	PA	19403	PA-Audubon	1.19%	0.64%	1.93%	2.00%	3.29%	3.62%	7.62%	16.32%	12.95%	22.36%	28.07%	100.00%
Plymouth Meeting	PA	19462	PA-Norristown	0.66%	0.76%	1.95%	1.25%	2.57%	4.60%	6.75%	8.54%	8.97%	20.82%	43.13%	100.00%
Pottstown	PA	19464	PA-Royersford	1.15%	0.28%	1.33%	2.29%	3.37%	6.62%	8.06%	18.06%	17.24%	21.50%	20.09%	100.00%
Pottstown	PA	19465	PA-Royersford	1.48%	1.06%	0.35%	1.37%	1.04%	4.92%	7.16%	12.58%	13.23%	22.14%	34.67%	100.00%
Royersford	PA	19468	PA-Royersford	1.06%	0.29%	0.49%	0.99%	1.27%	4.50%	7.37%	13.46%	18.79%	20.26%	31.53%	100.00%
Schwenksville	PA	19473	PA-Royersford	1.38%	0.22%	1.63%	3.02%	1.42%	4.68%	4.31%	7.43%	8.22%	25.40%	42.29%	100.00%
Schwenksville	PA	19473	PA-Norristown	1.38%	0.22%	1.63%	3.02%	1.42%	4.68%	4.31%	7.43%	8.22%	25.40%	42.29%	100.00%
Spring City	PA	19475	PA-Royersford	0.39%	2.63%	1.67%	2.09%	1.26%	5.68%	3.83%	10.82%	15.13%	15.75%	40.75%	100.00%
Worcester	PA	19490	PA-Norristown	0.00%	0.00%	0.00%	0.00%	0.00%	6.96%	0.00%	0.00%	36.52%	0.00%	56.52%	100.00%
Birdsboro	PA	19508	PA-Glen	0.72%	0.60%	2.16%	3.59%	1.74%	7.02%	10.94%	16.76%	15.41%	27.24%	13.83%	100.00%
Douglassville	PA	19518	PA-Glen	1.88%	0.22%	0.59%	0.45%	3.71%	3.46%	8.57%	12.13%	8.79%	28.86%	31.35%	100.00%
Fleetwood	PA	19522	PA-Glen	1.61%	0.42%	0.68%	0.95%	4.43%	6.43%	8.00%	15.93%	16.27%	24.78%	20.49%	100.00%
Reading	PA	19606	PA-Glen	1.61%	0.88%	1.46%	1.50%	2.09%	8.03%	9.15%	18.10%	14.73%	21.53%	20.92%	100.00%
Reading	PA	19606	PA-Penn/Wyomissing	1.61%	0.88%	1.46%	1.50%	2.09%	8.03%	9.15%	18.10%	14.73%	21.53%	20.92%	100.00%
Reading	PA	19607	PA-Glen	1.68%	0.63%	1.85%	2.84%	1.61%	4.42%	11.46%	17.49%	17.75%	22.39%	17.89%	100.00%
Reading	PA	19608	PA-Penn/Wyomissing	0.91%	0.55%	1.62%	1.93%	0.55%	3.34%	6.43%	11.22%	14.24%	24.33%	34.88%	100.00%
Reading	PA	19608	PA-Glen	0.91%	0.55%	1.62%	1.93%	0.55%	3.34%	6.43%	11.22%	14.24%	24.33%	34.88%	100.00%
Reading	PA	19609	PA-Penn/Wyomissing	2.44%	0.72%	2.96%	1.78%	2.04%	6.50%	5.38%	21.62%	17.13%	22.56%	16.87%	100.00%
Reading	PA	19610	PA-Penn/Wyomissing	0.55%	0.78%	1.97%	1.09%	3.23%	4.32%	10.09%	17.90%	8.73%	19.08%	32.26%	100.00%
TOTAL CUSTOMERS				8,037	5,391	11,965	14,808	15,901	35,869	55,855	92,211	80,144	108,136	106,765	535,082

TOTAL COMMUNITIES: 362

				--- Distribution of Income for Rented Units ---											
City	State	Zip Code	Profit Center	0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Atlasburg	PA	15004	PA-McMurray	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Beaver Falls	PA	15010	PA-NewCastle/Ellwood	6.58%	8.68%	8.53%	6.18%	10.60%	14.28%	15.78%	12.99%	5.63%	5.72%	5.03%	100.00%
Bridgeville	PA	15017	PA-Pittsburgh	1.00%	7.47%	5.10%	4.79%	9.00%	10.15%	18.67%	17.83%	7.68%	14.89%	3.42%	100.00%
Bridgeville	PA	15017	PA-McMurray	1.00%	7.47%	5.10%	4.79%	9.00%	10.15%	18.67%	17.83%	7.68%	14.89%	3.42%	100.00%
Buena Vista	PA	15018	PA-Elizabeth	0.00%	10.29%	13.24%	0.00%	0.00%	29.41%	0.00%	13.24%	0.00%	33.82%	0.00%	100.00%
Bulger	PA	15019	PA-McMurray	6.45%	7.26%	4.84%	10.48%	4.03%	0.00%	51.61%	4.03%	0.00%	6.45%	4.84%	100.00%
Burgettstown	PA	15021	PA-McMurray	0.52%	4.20%	6.12%	16.26%	2.97%	18.71%	19.58%	15.56%	15.03%	1.05%	0.00%	100.00%
Charleroi	PA	15022	PA-Elizabeth	4.78%	10.99%	16.44%	7.55%	7.74%	16.25%	15.11%	16.16%	1.43%	3.25%	0.29%	100.00%
Clairton	PA	15025	PA-Elizabeth	7.24%	4.33%	8.72%	8.33%	5.59%	21.33%	9.65%	17.32%	12.06%	3.45%	1.97%	100.00%
Clairton	PA	15025	PA-Pittsburgh	7.24%	4.33%	8.72%	8.33%	5.59%	21.33%	9.65%	17.32%	12.06%	3.45%	1.97%	100.00%
Clinton	PA	15026	PA-McMurray	0.00%	0.00%	1.30%	9.38%	4.69%	8.33%	6.25%	2.60%	45.31%	9.38%	12.76%	100.00%
Cuddy	PA	15031	PA-McMurray	12.61%	14.29%	38.66%	0.00%	0.00%	15.13%	10.92%	0.00%	8.40%	0.00%	0.00%	100.00%
Cuddy	PA	15031	PA-Pittsburgh	12.61%	14.29%	38.66%	0.00%	0.00%	15.13%	10.92%	0.00%	8.40%	0.00%	0.00%	100.00%
Donora	PA	15033	PA-Elizabeth	7.60%	15.12%	18.51%	4.85%	7.28%	6.55%	17.87%	20.86%	0.00%	0.73%	0.65%	100.00%
Dravosburg	PA	15034	PA-Elizabeth	4.19%	3.49%	13.26%	18.14%	22.56%	7.44%	16.05%	7.67%	3.95%	1.86%	1.40%	100.00%
Dravosburg	PA	15034	PA-Pittsburgh	4.19%	3.49%	13.26%	18.14%	22.56%	7.44%	16.05%	7.67%	3.95%	1.86%	1.40%	100.00%
Elizabeth	PA	15037	PA-Elizabeth	3.44%	0.57%	7.46%	4.02%	7.65%	11.09%	12.05%	30.40%	15.30%	6.69%	1.34%	100.00%
Elrama	PA	15038	PA-Elizabeth	0.00%	0.00%	0.00%	0.00%	0.00%	44.12%	0.00%	55.88%	0.00%	0.00%	0.00%	100.00%
Glassport	PA	15045	PA-Elizabeth	7.24%	0.00%	7.87%	4.88%	12.60%	17.80%	15.28%	13.07%	19.53%	1.73%	0.00%	100.00%
Greenock	PA	15047	PA-Elizabeth	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Hookstown	PA	15050	PA-McMurray	0.00%	0.00%	0.00%	4.92%	31.15%	6.56%	24.59%	16.39%	8.20%	8.20%	0.00%	100.00%
Joffre	PA	15053	PA-McMurray	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Langeloth	PA	15054	PA-McMurray	0.00%	0.00%	13.79%	0.00%	0.00%	39.66%	0.00%	0.00%	0.00%	46.55%	0.00%	100.00%
Lawrence	PA	15055	PA-McMurray	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	50.98%	35.29%	13.73%	0.00%	0.00%	100.00%
Mc Donald	PA	15057	PA-McMurray	1.79%	4.53%	6.04%	4.81%	9.89%	29.26%	15.38%	11.95%	9.07%	6.73%	0.55%	100.00%
Mc Donald	PA	15057	PA-Pittsburgh	1.79%	4.53%	6.04%	4.81%	9.89%	29.26%	15.38%	11.95%	9.07%	6.73%	0.55%	100.00%
Midland	PA	15059	PA-McMurray	1.16%	2.71%	15.85%	8.12%	9.02%	9.41%	4.38%	16.37%	12.24%	15.46%	5.28%	100.00%
Midway	PA	15060	PA-McMurray	0.00%	0.00%	19.51%	0.00%	0.00%	39.02%	26.83%	0.00%	14.63%	0.00%	0.00%	100.00%
Monongahela	PA	15063	PA-Elizabeth	6.17%	1.68%	12.44%	10.65%	2.80%	22.42%	17.71%	17.71%	6.17%	1.57%	0.67%	100.00%
Morgan	PA	15064	PA-Pittsburgh	0.00%	0.00%	0.00%	40.28%	0.00%	0.00%	25.00%	0.00%	19.44%	15.28%	0.00%	100.00%
New Eagle	PA	15067	PA-Elizabeth	0.00%	8.57%	12.38%	1.90%	4.29%	11.43%	36.19%	12.86%	2.38%	6.19%	3.81%	100.00%
Oakdale	PA	15071	PA-McMurray	2.11%	1.16%	10.98%	1.38%	3.20%	10.62%	13.02%	14.11%	13.89%	24.44%	5.09%	100.00%
Oakdale	PA	15071	PA-Pittsburgh	2.11%	1.16%	10.98%	1.38%	3.20%	10.62%	13.02%	14.11%	13.89%	24.44%	5.09%	100.00%
Slovan	PA	15078	PA-McMurray	33.33%	0.00%	31.75%	0.00%	0.00%	0.00%	0.00%	34.92%	0.00%	0.00%	0.00%	100.00%
Sturgeon	PA	15082	PA-McMurray	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Sturgeon	PA	15082	PA-Pittsburgh	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Sutersville	PA	15083	PA-Elizabeth	5.00%	12.50%	5.00%	17.50%	0.00%	0.00%	10.00%	25.00%	17.50%	7.50%	0.00%	100.00%
West Elizabeth	PA	15088	PA-Elizabeth	4.65%	13.95%	4.65%	16.28%	0.00%	30.23%	0.00%	27.91%	2.33%	0.00%	0.00%	100.00%
West Newton	PA	15089	PA-Elizabeth	7.71%	12.14%	8.47%	18.20%	5.82%	7.84%	14.16%	10.75%	3.67%	11.25%	0.00%	100.00%
Allison Park	PA	15101	PA-Mechanicsburg	1.80%	1.19%	3.27%	5.17%	4.78%	9.52%	31.65%	20.51%	6.68%	12.54%	2.91%	100.00%
Bethel Park	PA	15102	PA-Hershey/Palmyra	4.69%	1.64%	1.97%	4.33%	2.89%	17.69%	12.80%	22.38%	7.02%	20.34%	4.25%	100.00%
Bethel Park	PA	15102	PA-Pittsburgh	4.69%	1.64%	1.97%	4.33%	2.89%	17.69%	12.80%	22.38%	7.02%	20.34%	4.25%	100.00%
Carnegie	PA	15106	PA-Pittsburgh	2.46%	1.58%	8.20%	13.16%	10.98%	19.36%	16.37%	9.12%	10.24%	7.22%	1.30%	100.00%
Homestead	PA	15120	PA-Pittsburgh	5.26%	12.41%	9.12%	7.13%	9.09%	20.08%	9.60%	14.47%	5.01%	6.77%	1.06%	100.00%
West Mifflin	PA	15122	PA-Elizabeth	8.33%	10.33%	8.22%	6.27%	3.35%	14.33%	18.66%	9.36%	11.84%	7.41%	1.89%	100.00%
West Mifflin	PA	15122	PA-Pittsburgh	8.33%	10.33%	8.22%	6.27%	3.35%	14.33%	18.66%	9.36%	11.84%	7.41%	1.89%	100.00%
South Park	PA	15129	PA-Pittsburgh	1.26%	2.97%	9.59%	2.74%	3.54%	4.91%	19.63%	24.54%	19.75%	8.22%	2.85%	100.00%
Mckeesport	PA	15133	PA-Elizabeth	2.37%	0.00%	5.64%	2.08%	12.02%	15.73%	6.08%	31.45%	16.02%	6.23%	2.37%	100.00%
Mckeesport	PA	15135	PA-Elizabeth	0.00%	0.00%	5.62%	6.05%	0.00%	0.00%	50.11%	25.92%	6.05%	6.26%	0.00%	100.00%
Presto	PA	15142	PA-Pittsburgh	0.00%	0.00%	0.00%	0.00%	0.00%	20.19%	0.00%	45.83%	16.99%	5.77%	11.22%	100.00%
Pittsburgh	PA	15201	PA-McMurray	2.95%	5.30%	5.43%	1.51%	3.32%	5.63%	13.81%	18.81%	13.34%	15.32%	14.58%	100.00%
Pittsburgh	PA	15202	PA-Pittsburgh	1.42%	3.55%	7.21%	5.73%	8.26%	14.65%	22.56%	19.95%	7.75%	7.31%	1.60%	100.00%
Pittsburgh	PA	15204	PA-Pittsburgh	14.11%	7.95%	13.63%	5.76%	3.08%	7.95%	23.68%	9.33%	11.03%	3.49%	0.00%	100.00%
Pittsburgh	PA	15205	PA-Pittsburgh	6.55%	5.37%	6.21%	5.93%	7.68%	8.73%	13.20%	18.22%	14.83%	8.69%	4.59%	100.00%
Pittsburgh	PA	15205	PA-Elizabeth	6.55%	5.37%	6.21%	5.93%	7.68%	8.73%	13.20%	18.22%	14.83%	8.69%	4.59%	100.00%
Pittsburgh	PA	15207	PA-Pittsburgh	4.82%	16.14%	10.34%	14.29%	8.48%	5.87%	11.85%	10.69%	5.34%	8.30%	3.89%	100.00%
Pittsburgh	PA	15210	PA-Pittsburgh	8.67%	7.14%	9.38%	8.14%	8.27%	16.28%	12.76%	11.73%	7.66%	6.46%	3.51%	100.00%
Pittsburgh	PA	15212	PA-Pittsburgh	9.19%	7.21%	7.91%	6.17%	9.03%	9.91%	12.69%	13.60%	9.91%	7.39%	7.00%	100.00%
Pittsburgh	PA	15215	PA-Pittsburgh	3.18%	1.38%	10.85%	12.09%	5.25%	6.01%	22.39%	12.72%	7.12%	7.19%	11.82%	100.00%
Pittsburgh	PA	15216	PA-Pittsburgh	3.11%	5.79%	5.11%	5.54%	3.92%	12.98%	20.88%	17.13%	12.96%	11.23%	1.34%	100.00%
Pittsburgh	PA	15220	PA-Pittsburgh	2.14%	0.86%	3.88%	4.43%	2.90%	12.71%	10.92%	15.29%	21.17%	19.15%	6.54%	100.00%
Pittsburgh	PA	15221	PA-Pittsburgh	6.39%	10.14%	11.17%	5.09%	8.15%	11.97%	14.90%	16.65%	6.73%	7.26%	1.58%	100.00%
Pittsburgh	PA	15222	PA-Pittsburgh	4.36%	1.90%	2.42%	1.51%	2.46%	6.03%	2.86%	17.02%	11.23%	22.41%	27.81%	100.00%
Pittsburgh	PA	15226	PA-Pittsburgh	3.50%	1.41%	10.07%	4.96%	1.25%	9.96%	16.28%	18.57%	18.57%	10.17%	5.27%	100.00%

TOTAL COMMUNITIES: 362

				--- Distribution of Income for Rented Units ---										
City	State	Zip Code	Profit Center	0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Pittsburgh	PA	15227	PA-Pittsburgh	8.89%	1.42%	14.16%	8.83%	6.91%	13.75%	18.52%	13.77%	3.36%	7.39%	3.00%	100.00%
Pittsburgh	PA	15228	PA-Pittsburgh	4.04%	4.93%	6.24%	5.63%	7.89%	7.56%	12.44%	15.12%	9.62%	20.89%	5.63%	100.00%
Pittsburgh	PA	15234	PA-Pittsburgh	1.51%	0.70%	11.38%	3.13%	7.20%	3.02%	13.76%	30.76%	10.10%	11.84%	6.62%	100.00%
Pittsburgh	PA	15236	PA-Pittsburgh	5.24%	4.95%	4.10%	4.29%	9.62%	17.80%	19.22%	18.62%	8.71%	6.31%	1.14%	100.00%
Pittsburgh	PA	15239	PA-Pittsburgh	5.60%	0.47%	2.29%	5.60%	1.66%	14.51%	17.35%	19.64%	17.98%	13.64%	1.26%	100.00%
Pittsburgh	PA	15241	PA-McMurray	7.84%	0.75%	1.87%	2.99%	7.19%	17.37%	14.75%	9.15%	14.66%	12.98%	10.46%	100.00%
Pittsburgh	PA	15241	PA-Pittsburgh	7.84%	0.75%	1.87%	2.99%	7.19%	17.37%	14.75%	9.15%	14.66%	12.98%	10.46%	100.00%
Pittsburgh	PA	15243	PA-Pittsburgh	4.93%	0.00%	3.24%	6.90%	6.34%	24.65%	14.08%	8.73%	13.66%	5.63%	11.83%	100.00%
Washington	PA	15301	PA-McMurray	3.77%	5.17%	10.50%	4.44%	4.83%	15.44%	15.00%	18.67%	10.35%	7.87%	3.96%	100.00%
Amity	PA	15311	PA-McMurray	17.65%	0.00%	17.65%	0.00%	0.00%	0.00%	0.00%	64.71%	0.00%	0.00%	0.00%	100.00%
Avella	PA	15312	PA-McMurray	0.00%	2.39%	6.83%	1.71%	23.55%	9.90%	34.81%	2.73%	9.90%	4.10%	4.10%	100.00%
Bentleyville	PA	15314	PA-Elizabeth	12.89%	7.63%	18.16%	15.00%	1.84%	6.58%	16.05%	15.53%	4.21%	1.05%	1.05%	100.00%
Bentleyville	PA	15314	PA-McMurray	12.89%	7.63%	18.16%	15.00%	1.84%	6.58%	16.05%	15.53%	4.21%	1.05%	1.05%	100.00%
Canonsburg	PA	15317	PA-McMurray	0.28%	1.25%	3.66%	4.74%	8.00%	11.32%	11.60%	21.55%	11.40%	21.38%	4.82%	100.00%
Canonsburg	PA	15317	PA-Pittsburgh	0.28%	1.25%	3.66%	4.74%	8.00%	11.32%	11.60%	21.55%	11.40%	21.38%	4.82%	100.00%
Cecil	PA	15321	PA-McMurray	0.00%	0.00%	0.00%	0.00%	7.55%	6.29%	0.00%	8.81%	8.81%	60.38%	8.18%	100.00%
Cecil	PA	15321	PA-Pittsburgh	0.00%	0.00%	0.00%	0.00%	7.55%	6.29%	0.00%	8.81%	8.81%	60.38%	8.18%	100.00%
Claysville	PA	15323	PA-McMurray	3.58%	1.08%	12.90%	12.90%	7.89%	7.53%	8.60%	18.64%	11.83%	13.62%	1.43%	100.00%
Prosperity	PA	15329	PA-McMurray	0.00%	0.00%	0.00%	2.20%	18.68%	4.40%	13.19%	34.07%	14.29%	0.00%	13.19%	100.00%
Eighty Four	PA	15330	PA-McMurray	10.36%	3.60%	2.70%	0.00%	0.00%	4.05%	14.41%	39.64%	9.01%	0.00%	16.22%	100.00%
Finleyville	PA	15332	PA-Elizabeth	2.36%	14.38%	3.43%	6.22%	5.58%	17.17%	11.16%	19.31%	13.95%	6.22%	0.21%	100.00%
Finleyville	PA	15332	PA-McMurray	2.36%	14.38%	3.43%	6.22%	5.58%	17.17%	11.16%	19.31%	13.95%	6.22%	0.21%	100.00%
Finleyville	PA	15332	PA-Pittsburgh	2.36%	14.38%	3.43%	6.22%	5.58%	17.17%	11.16%	19.31%	13.95%	6.22%	0.21%	100.00%
Hickory	PA	15340	PA-McMurray	0.00%	0.00%	0.00%	16.98%	47.17%	0.00%	18.87%	16.98%	0.00%	0.00%	0.00%	100.00%
Houston	PA	15342	PA-McMurray	4.06%	12.17%	7.83%	14.49%	16.52%	18.84%	1.16%	9.57%	6.67%	8.70%	0.00%	100.00%
Jefferson	PA	15344	PA-Pittsburgh	0.00%	0.00%	1.61%	16.13%	0.00%	9.68%	4.84%	9.68%	3.23%	37.10%	17.74%	100.00%
Muse	PA	15350	PA-McMurray	37.96%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	30.56%	31.48%	0.00%	0.00%	100.00%
Southview	PA	15361	PA-McMurray	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Strabane	PA	15363	PA-McMurray	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	63.43%	36.57%	0.00%	0.00%	0.00%	100.00%
Venetia	PA	15367	PA-McMurray	0.00%	0.00%	0.00%	0.00%	3.91%	4.35%	6.96%	63.04%	7.83%	13.91%	0.00%	100.00%
Venetia	PA	15367	PA-Pittsburgh	0.00%	0.00%	0.00%	0.00%	3.91%	4.35%	6.96%	63.04%	7.83%	13.91%	0.00%	100.00%
Westland	PA	15378	PA-McMurray	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%
West Middletown	PA	15379	PA-McMurray	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	0.00%	100.00%
Uniontown	PA	15401	PA-Uniontown/Connell	12.70%	9.19%	12.41%	9.00%	10.39%	11.93%	14.13%	13.22%	3.14%	2.86%	1.02%	100.00%
Uniontown	PA	15401	PA-Uniontown/Connell	12.70%	9.19%	12.41%	9.00%	10.39%	11.93%	14.13%	13.22%	3.14%	2.86%	1.02%	100.00%
Allison	PA	15413	PA-Brownsville	0.00%	0.00%	0.00%	0.00%	0.00%	28.57%	0.00%	0.00%	71.43%	0.00%	0.00%	100.00%
Brownsville	PA	15417	PA-Brownsville	16.44%	15.65%	9.84%	6.50%	9.45%	9.94%	7.28%	9.15%	5.71%	5.61%	4.43%	100.00%
California	PA	15419	PA-Brownsville	9.39%	1.75%	19.10%	5.13%	4.59%	19.32%	24.02%	2.62%	9.06%	4.48%	0.55%	100.00%
Coal Center	PA	15423	PA-Brownsville	0.00%	3.70%	2.47%	29.63%	3.09%	19.75%	17.90%	10.49%	6.17%	3.70%	3.09%	100.00%
Connellsville	PA	15425	PA-Uniontown/Connell	3.33%	14.17%	22.35%	7.76%	8.69%	12.06%	13.54%	8.14%	4.68%	3.92%	1.35%	100.00%
Daisytown	PA	15427	PA-Brownsville	0.00%	0.00%	1.87%	11.21%	16.82%	36.45%	12.15%	21.50%	0.00%	0.00%	0.00%	100.00%
Dunbar	PA	15431	PA-Uniontown/Connell	0.00%	1.57%	10.66%	12.85%	7.21%	5.96%	14.73%	20.38%	13.17%	13.48%	0.00%	100.00%
East Millsboro	PA	15433	PA-Brownsville	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Farmington	PA	15437	PA-Farmington	8.99%	0.00%	7.55%	0.00%	0.00%	0.00%	22.66%	32.01%	4.68%	21.22%	2.88%	100.00%
Grindstone	PA	15442	PA-Brownsville	0.00%	19.63%	0.00%	0.00%	11.48%	0.00%	28.89%	0.00%	9.26%	2.96%	27.78%	100.00%
Hiller	PA	15444	PA-Brownsville	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Hopwood	PA	15445	PA-Uniontown/Connell	0.00%	13.56%	3.95%	5.65%	0.00%	0.00%	35.03%	41.81%	0.00%	0.00%	0.00%	100.00%
Lemont Furnace	PA	15456	PA-Uniontown/Connell	7.56%	6.98%	4.07%	0.00%	0.00%	5.23%	25.00%	51.16%	0.00%	0.00%	0.00%	100.00%
Mc Clellandtown	PA	15458	PA-Uniontown/Connell	0.00%	0.00%	0.00%	0.00%	0.00%	17.56%	0.00%	65.23%	8.24%	8.96%	0.00%	100.00%
New Salem	PA	15468	PA-Brownsville	10.48%	0.00%	9.52%	0.00%	23.33%	42.86%	0.00%	0.00%	11.43%	2.38%	0.00%	100.00%
Oliver	PA	15472	PA-Uniontown/Connell	0.00%	29.58%	0.00%	0.00%	11.27%	0.00%	54.93%	0.00%	4.23%	0.00%	0.00%	100.00%
Uledi	PA	15484	PA-Uniontown/Connell	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Greensburg	PA	15601	PA-Uniontown/Connell	5.78%	4.88%	11.61%	12.42%	7.33%	14.54%	16.77%	13.42%	6.02%	4.14%	3.09%	100.00%
Indiana	PA	15701	PA-Indiana	4.49%	8.34%	11.16%	10.45%	14.88%	12.44%	12.78%	11.76%	3.42%	6.80%	3.46%	100.00%
Anita	PA	15711	PA-Punxsatawney	9.68%	9.68%	0.00%	0.00%	0.00%	0.00%	38.71%	29.03%	0.00%	12.90%	0.00%	100.00%
Big Run	PA	15715	PA-Punxsatawney	0.00%	0.00%	9.26%	9.26%	7.41%	7.41%	27.78%	31.48%	7.41%	0.00%	0.00%	100.00%
Punxsutawney	PA	15767	PA-Punxsatawney	6.80%	5.97%	12.12%	10.07%	7.76%	13.73%	19.05%	9.75%	6.22%	6.61%	1.92%	100.00%
Walston	PA	15781	PA-Punxsatawney	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Worthville	PA	15784	PA-Punxsatawney	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	66.67%	0.00%	0.00%	0.00%	0.00%	100.00%
Brookville	PA	15825	PA-Punxsatawney	6.49%	3.55%	10.34%	7.91%	5.27%	15.92%	13.08%	29.41%	5.88%	1.32%	0.81%	100.00%
Corsica	PA	15829	PA-Clarion	1.45%	0.00%	8.70%	11.59%	15.94%	10.14%	5.80%	5.80%	39.13%	1.45%	0.00%	100.00%
Butler	PA	16001	PA-Butler	6.11%	5.66%	16.13%	6.42%	8.02%	15.71%	13.39%	16.53%	7.55%	3.52%	0.95%	100.00%
Butler	PA	16002	PA-Butler	6.54%	9.98%	7.34%	2.52%	3.33%	22.13%	18.00%	16.97%	6.77%	6.42%	0.00%	100.00%
Cabot	PA	16023	PA-Butler	9.40%	2.80%	1.80%	17.60%	3.00%	39.80%	11.20%	7.00%	3.80%	2.20%	1.40%	100.00%

TOTAL COMMUNITIES: 362

				--- Distribution of Income for Rented Units ---										
City	State	Zip Code	Profit Center	0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Connoquenessing	PA	16027	PA-Butler	0.00%	0.00%	44.44%	0.00%	0.00%	0.00%	20.37%	14.81%	7.41%	9.26%	3.70%	100.00%
East Butler	PA	16029	PA-Butler	0.00%	2.22%	18.89%	0.00%	5.56%	22.22%	13.33%	35.56%	0.00%	0.00%	2.22%	100.00%
Evans City	PA	16033	PA-Butler	0.00%	0.47%	9.45%	6.14%	10.24%	12.76%	10.24%	20.63%	24.25%	3.15%	2.68%	100.00%
Harmony	PA	16037	PA-NewCastle/Ellwood	0.35%	14.08%	3.52%	8.80%	0.00%	8.80%	9.15%	17.96%	13.38%	23.24%	0.70%	100.00%
Harmony	PA	16037	PA-Butler	0.35%	14.08%	3.52%	8.80%	0.00%	8.80%	9.15%	17.96%	13.38%	23.24%	0.70%	100.00%
Lyndora	PA	16045	PA-Butler	0.00%	10.20%	10.88%	8.84%	21.09%	4.76%	4.76%	0.00%	0.68%	38.78%	0.00%	100.00%
Prospect	PA	16052	PA-Butler	0.00%	14.08%	0.00%	5.63%	7.04%	7.04%	0.00%	45.07%	9.86%	11.27%	0.00%	100.00%
Renfrew	PA	16053	PA-Butler	0.00%	0.00%	19.17%	0.00%	0.00%	6.22%	19.69%	13.99%	5.70%	31.09%	4.15%	100.00%
Saxonburg	PA	16056	PA-Saxonburg	5.51%	3.08%	7.27%	7.93%	9.91%	16.96%	18.94%	17.62%	4.19%	7.05%	1.54%	100.00%
Saxonburg	PA	16056	PA-Butler	5.51%	3.08%	7.27%	7.93%	9.91%	16.96%	18.94%	17.62%	4.19%	7.05%	1.54%	100.00%
Zelienople	PA	16063	PA-NewCastle/Ellwood	1.48%	3.27%	1.24%	12.99%	0.00%	17.34%	18.27%	23.48%	2.88%	18.35%	0.70%	100.00%
New Castle	PA	16101	PA-NewCastle/Ellwood	6.62%	10.27%	18.85%	9.20%	11.75%	11.15%	12.45%	12.37%	4.02%	2.47%	0.85%	100.00%
New Castle	PA	16102	PA-NewCastle/Ellwood	2.66%	3.29%	14.08%	19.72%	13.93%	13.15%	11.11%	12.36%	4.07%	3.76%	1.88%	100.00%
New Castle	PA	16105	PA-NewCastle/Ellwood	2.44%	5.20%	7.37%	5.27%	15.27%	18.43%	7.44%	14.61%	16.59%	3.55%	3.82%	100.00%
Edinburg	PA	16116	PA-NewCastle/Ellwood	5.13%	0.00%	5.13%	0.00%	0.00%	7.69%	42.31%	6.41%	3.85%	29.49%	0.00%	100.00%
Ellwood City	PA	16117	PA-NewCastle/Ellwood	9.39%	6.78%	6.09%	14.49%	6.34%	12.31%	15.36%	10.76%	5.72%	12.56%	0.19%	100.00%
Fombell	PA	16123	PA-NewCastle/Ellwood	3.95%	7.89%	3.95%	0.00%	1.32%	2.63%	18.42%	15.79%	7.89%	38.16%	0.00%	100.00%
Koppel	PA	16136	PA-NewCastle/Ellwood	3.19%	0.00%	24.47%	7.45%	7.45%	15.96%	8.51%	18.09%	10.64%	0.00%	4.26%	100.00%
Wampum	PA	16157	PA-NewCastle/Ellwood	4.24%	2.83%	30.74%	12.37%	4.95%	15.55%	11.66%	9.89%	4.24%	3.53%	0.00%	100.00%
West Pittsburg	PA	16160	PA-NewCastle/Ellwood	1.66%	1.66%	8.84%	0.00%	9.39%	12.15%	29.83%	28.18%	1.10%	5.52%	1.66%	100.00%
Kittanning	PA	16201	PA-Kittanning	3.72%	5.18%	11.49%	5.86%	12.39%	14.53%	17.74%	16.27%	4.28%	4.22%	4.34%	100.00%
Clarion	PA	16214	PA-Clarion	7.43%	14.98%	11.33%	7.37%	13.93%	10.90%	11.27%	11.52%	8.36%	1.67%	1.24%	100.00%
Knox	PA	16232	PA-Clarion	2.00%	8.00%	19.11%	5.56%	4.44%	7.78%	24.89%	13.33%	9.33%	4.44%	1.11%	100.00%
Lucinda	PA	16235	PA-Clarion	5.77%	0.00%	13.46%	5.77%	0.00%	26.92%	5.77%	13.46%	21.15%	7.69%	0.00%	100.00%
Lucinda	PA	16235	PA-Coatesville	5.77%	0.00%	13.46%	5.77%	0.00%	26.92%	5.77%	13.46%	21.15%	7.69%	0.00%	100.00%
Shippenville	PA	16254	PA-Clarion	2.80%	2.40%	3.20%	10.00%	4.80%	12.00%	22.00%	20.80%	8.00%	12.40%	1.60%	100.00%
Sligo	PA	16255	PA-Clarion	1.23%	0.00%	24.07%	34.57%	5.56%	17.90%	3.70%	2.47%	8.64%	1.85%	0.00%	100.00%
Strattanville	PA	16258	PA-Clarion	0.00%	20.77%	4.23%	12.68%	8.10%	2.46%	16.90%	22.89%	11.62%	0.35%	0.00%	100.00%
Clarendon	PA	16313	PA-Warren	4.03%	0.00%	2.01%	5.37%	22.15%	18.79%	8.05%	24.16%	9.40%	6.04%	0.00%	100.00%
Marble	PA	16334	PA-Clarion	0.00%	0.00%	75.61%	0.00%	0.00%	0.00%	9.76%	14.63%	0.00%	0.00%	0.00%	100.00%
Warren	PA	16365	PA-Warren	6.40%	5.44%	7.44%	5.18%	9.75%	21.24%	16.23%	18.58%	6.92%	1.78%	1.04%	100.00%
Osceola Mills	PA	16666	PA-Philipsburg	3.77%	0.00%	3.77%	3.77%	9.43%	23.58%	31.13%	12.26%	12.26%	0.00%	0.00%	100.00%
Sandy Ridge	PA	16677	PA-Philipsburg	0.00%	0.00%	86.67%	0.00%	0.00%	0.00%	0.00%	0.00%	13.33%	0.00%	0.00%	100.00%
Kane	PA	16735	PA-Kane	0.63%	6.01%	15.03%	9.18%	6.49%	23.42%	14.72%	13.61%	8.07%	1.74%	1.11%	100.00%
Allport	PA	16821	PA-Philipsburg	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bellefonte	PA	16823	PA-BOGGS	1.04%	6.34%	4.92%	10.38%	13.06%	9.97%	18.01%	18.95%	11.10%	5.17%	1.07%	100.00%
Bigler	PA	16825	PA-Philipsburg	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
Clearfield	PA	16830	PA-Philipsburg	6.95%	4.01%	13.84%	9.41%	12.03%	13.90%	16.89%	17.32%	3.79%	1.23%	0.64%	100.00%
Hawk Run	PA	16840	PA-Philipsburg	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Howard	PA	16841	PA-BOGGS	0.80%	0.53%	8.29%	2.14%	7.75%	30.48%	20.05%	9.89%	13.64%	5.61%	0.80%	100.00%
Howard	PA	16841	PA-Nittany	0.80%	0.53%	8.29%	2.14%	7.75%	30.48%	20.05%	9.89%	13.64%	5.61%	0.80%	100.00%
Howard	PA	16841	PA-Nittany	0.80%	0.53%	8.29%	2.14%	7.75%	30.48%	20.05%	9.89%	13.64%	5.61%	0.80%	100.00%
Lamar	PA	16848	PA-Nittany	0.00%	0.00%	0.00%	0.00%	0.00%	54.17%	25.00%	0.00%	20.83%	0.00%	0.00%	100.00%
Lamar	PA	16848	PA-Nittany	0.00%	0.00%	0.00%	0.00%	0.00%	54.17%	25.00%	0.00%	20.83%	0.00%	0.00%	100.00%
Morrisdale	PA	16858	PA-Philipsburg	11.56%	0.00%	1.70%	1.36%	14.29%	44.56%	3.74%	13.95%	0.68%	4.76%	3.40%	100.00%
Munson	PA	16860	PA-Philipsburg	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Philipsburg	PA	16866	PA-Philipsburg	5.15%	6.44%	19.31%	21.03%	9.18%	9.44%	14.94%	5.58%	3.52%	5.15%	0.26%	100.00%
Wallaceton	PA	16876	PA-Philipsburg	0.00%	0.00%	21.05%	0.00%	5.26%	31.58%	10.53%	21.05%	10.53%	0.00%	0.00%	100.00%
West Decatur	PA	16878	PA-Philipsburg	2.25%	1.12%	5.62%	38.20%	5.62%	7.87%	10.11%	25.84%	3.37%	0.00%	0.00%	100.00%
Woodland	PA	16881	PA-Philipsburg	0.00%	0.00%	14.84%	0.00%	0.00%	20.65%	0.00%	16.13%	5.16%	43.23%	0.00%	100.00%
Annville	PA	17003	PA-Hershey/Palmyra	4.32%	3.68%	1.51%	3.89%	8.43%	10.16%	19.14%	13.30%	22.70%	10.70%	2.16%	100.00%
Campbelltown	PA	17010	PA-Hershey/Palmyra	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
Camp Hill	PA	17011	PA-Mechanicsburg	3.33%	5.09%	6.18%	3.51%	4.69%	9.05%	12.16%	20.56%	16.59%	13.67%	5.16%	100.00%
Carlisle	PA	17013	PA-Hershey/Palmyra	3.56%	4.34%	8.77%	7.04%	5.44%	13.52%	17.73%	20.04%	9.22%	7.36%	3.00%	100.00%
Elizabethtown	PA	17022	PA-Hershey/Palmyra	4.08%	5.25%	7.33%	2.38%	6.68%	12.77%	12.50%	31.11%	7.85%	8.69%	1.36%	100.00%
Enola	PA	17025	PA-Mechanicsburg	2.54%	8.73%	0.60%	1.70%	2.29%	14.21%	17.26%	27.13%	16.11%	8.03%	1.40%	100.00%
Enola	PA	17025	PA-Norristown	2.54%	8.73%	0.60%	1.70%	2.29%	14.21%	17.26%	27.13%	16.11%	8.03%	1.40%	100.00%
Hershey	PA	17033	PA-Hershey/Palmyra	5.21%	4.83%	7.12%	6.76%	2.36%	9.30%	15.11%	21.59%	15.53%	6.94%	5.25%	100.00%
Hummelstown	PA	17036	PA-Hershey/Palmyra	2.87%	1.10%	2.08%	4.40%	5.39%	13.17%	14.24%	23.87%	16.52%	6.76%	9.59%	100.00%
Lebanon	PA	17042	PA-Hershey/Palmyra	4.16%	6.38%	4.68%	7.38%	2.99%	11.85%	19.13%	23.85%	10.07%	7.96%	1.54%	100.00%
Lemoyne	PA	17043	PA-Mechanicsburg	2.00%	0.00%	21.65%	7.11%	5.27%	11.42%	22.76%	15.89%	9.03%	1.28%	3.59%	100.00%
Mechanicsburg	PA	17050	PA-Mechanicsburg	6.12%	1.47%	2.56%	4.62%	2.91%	6.96%	14.69%	13.06%	21.57%	18.91%	7.13%	100.00%
Mechanicsburg	PA	17055	PA-Mechanicsburg	2.34%	3.33%	3.20%	9.65%	3.12%	13.99%	11.51%	25.90%	13.99%	7.90%	5.08%	100.00%
Middletown	PA	17057	PA-Hershey/Palmyra	7.16%	7.23%	2.85%	3.43%	11.48%	11.99%	14.09%	16.10%	13.51%	11.24%	0.92%	100.00%

TOTAL COMMUNITIES: 362

				--- Distribution of Income for Rented Units ---										
City	State	Zip Code	Profit Center	0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Myerstown	PA	17067	PA-Mechanicsburg	2.12%	6.36%	7.35%	9.47%	5.23%	11.52%	18.03%	15.76%	20.76%	1.82%	1.59%	100.00%
New Cumberland	PA	17070	PA-Mechanicsburg	5.08%	5.02%	4.38%	10.57%	12.73%	4.91%	19.33%	11.92%	11.51%	10.75%	3.80%	100.00%
Newport	PA	17074	PA-Mechanicsburg	2.68%	5.79%	7.63%	13.28%	3.67%	11.86%	17.37%	11.86%	13.42%	9.32%	3.11%	100.00%
Palmyra	PA	17078	PA-Hershey/Palmyra	5.32%	3.21%	5.91%	5.11%	7.64%	14.62%	13.79%	26.99%	9.30%	6.08%	2.04%	100.00%
Summerdale	PA	17093	PA-Mechanicsburg	45.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	23.53%	0.00%	31.37%	0.00%	100.00%
Harrisburg	PA	17101	PA-Steelton W	2.77%	5.53%	13.70%	1.01%	2.95%	10.43%	11.88%	40.85%	4.53%	4.09%	2.26%	100.00%
Harrisburg	PA	17109	PA-Hershey/Palmyra	5.52%	2.48%	6.60%	5.87%	7.73%	13.27%	17.03%	23.32%	12.35%	4.77%	1.06%	100.00%
Harrisburg	PA	17111	PA-Hershey/Palmyra	5.61%	4.04%	3.34%	5.70%	3.66%	5.99%	20.06%	21.57%	14.87%	11.77%	3.39%	100.00%
Harrisburg	PA	17112	PA-Hershey/Palmyra	6.58%	0.23%	1.08%	1.67%	5.31%	13.32%	15.18%	17.74%	19.75%	16.92%	2.21%	100.00%
Harrisburg	PA	17113	PA-Steelton W	11.06%	4.49%	7.95%	2.56%	6.22%	8.09%	21.01%	10.78%	19.14%	5.04%	3.66%	100.00%
Etters	PA	17319	PA-Mechanicsburg	6.19%	4.12%	10.10%	2.27%	0.00%	15.46%	27.42%	21.03%	6.19%	7.22%	0.00%	100.00%
Gettysburg	PA	17325	PA-Lake Heritage	2.63%	5.04%	6.46%	7.98%	6.67%	12.95%	15.61%	19.07%	13.71%	5.49%	4.39%	100.00%
Lewisberry	PA	17339	PA-Mechanicsburg	9.64%	0.00%	0.00%	2.69%	1.35%	1.57%	19.73%	38.12%	6.50%	15.25%	5.16%	100.00%
York Haven	PA	17370	PA-Mechanicsburg	1.86%	4.83%	10.04%	0.00%	2.60%	12.27%	33.09%	10.78%	2.23%	18.96%	3.35%	100.00%
York Haven	PA	17370	PA-Hershey/Palmyra	1.86%	4.83%	10.04%	0.00%	2.60%	12.27%	33.09%	10.78%	2.23%	18.96%	3.35%	100.00%
Christiana	PA	17509	PA-Coatesville	4.17%	0.78%	1.82%	0.00%	2.86%	16.67%	20.05%	35.68%	11.98%	4.69%	1.30%	100.00%
Kirkwood	PA	17536	PA-Coatesville	11.36%	0.00%	3.79%	0.00%	15.15%	18.18%	18.94%	0.00%	14.39%	14.39%	3.79%	100.00%
Quarryville	PA	17566	PA-Coatesville	3.78%	1.53%	5.80%	2.25%	5.48%	12.96%	10.79%	32.93%	11.92%	9.58%	2.98%	100.00%
Mc Ewensville	PA	17749	PA-McEwensville W	3.70%	0.00%	0.00%	0.00%	7.41%	25.93%	37.04%	16.67%	9.26%	0.00%	0.00%	100.00%
Mill Hall	PA	17751	PA-Nittany	3.51%	6.14%	4.61%	7.02%	5.48%	13.60%	19.30%	17.98%	9.87%	12.50%	0.00%	100.00%
Mill Hall	PA	17751	PA-Nittany	3.51%	6.14%	4.61%	7.02%	5.48%	13.60%	19.30%	17.98%	9.87%	12.50%	0.00%	100.00%
Turbotville	PA	17772	PA-Turbotville W	9.32%	10.17%	5.08%	11.02%	8.47%	12.71%	7.63%	11.86%	8.47%	11.02%	4.24%	100.00%
Watsontown	PA	17777	PA-McEwensville W	0.95%	9.19%	6.50%	11.41%	8.40%	22.66%	13.31%	16.32%	9.51%	1.74%	0.00%	100.00%
Watsontown	PA	17777	PA-Milton	0.95%	9.19%	6.50%	11.41%	8.40%	22.66%	13.31%	16.32%	9.51%	1.74%	0.00%	100.00%
Sunbury	PA	17801	PA-Milton	5.04%	5.94%	18.47%	9.02%	8.08%	13.13%	21.46%	10.18%	5.34%	2.09%	1.24%	100.00%
Allenwood	PA	17810	PA-Milton	1.75%	13.16%	0.00%	0.00%	0.00%	11.40%	17.54%	18.42%	28.07%	9.65%	0.00%	100.00%
Herndon	PA	17830	PA-Milton	0.00%	4.84%	3.23%	5.65%	17.74%	16.13%	14.52%	19.35%	11.29%	7.26%	0.00%	100.00%
Lewisburg	PA	17837	PA-Milton	6.50%	5.30%	9.78%	9.39%	9.49%	14.93%	14.74%	6.07%	8.96%	7.47%	7.37%	100.00%
Milton	PA	17847	PA-Milton	3.33%	4.74%	3.61%	5.08%	8.24%	29.91%	18.40%	14.39%	9.99%	1.52%	0.79%	100.00%
Montandon	PA	17850	PA-Milton	0.00%	0.00%	0.00%	17.35%	0.00%	0.00%	29.59%	17.35%	35.71%	0.00%	0.00%	100.00%
New Columbia	PA	17856	PA-Milton	0.00%	0.00%	13.71%	24.87%	0.00%	5.08%	30.46%	13.20%	4.57%	3.55%	4.57%	100.00%
Northumberland	PA	17857	PA-Milton	5.45%	4.03%	10.00%	13.90%	2.47%	17.01%	24.29%	11.95%	9.22%	1.69%	0.00%	100.00%
West Milton	PA	17886	PA-Milton	0.00%	0.00%	0.00%	4.55%	78.79%	4.04%	3.03%	0.00%	9.60%	0.00%	0.00%	100.00%
White Deer	PA	17887	PA-Milton	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Frackville	PA	17931	PA-Frackville	6.99%	2.85%	6.99%	2.59%	13.21%	20.21%	15.54%	6.99%	8.55%	16.06%	0.00%	100.00%
Bangor	PA	18013	PA-Bangor	3.49%	0.99%	5.64%	10.30%	5.35%	13.61%	16.00%	20.94%	15.53%	5.82%	2.33%	100.00%
Bangor	PA	18013	PA-Bangor	3.49%	0.99%	5.64%	10.30%	5.35%	13.61%	16.00%	20.94%	15.53%	5.82%	2.33%	100.00%
Bethlehem	PA	18018	PA-Elizabeth	3.94%	4.13%	9.28%	8.52%	5.99%	12.00%	14.81%	21.36%	10.37%	6.48%	3.13%	100.00%
Easton	PA	18040	PA-Nazareth	4.65%	0.00%	3.85%	3.85%	2.88%	5.13%	22.60%	33.33%	9.78%	5.29%	8.65%	100.00%
Easton	PA	18042	PA-Nazareth	4.49%	5.96%	6.23%	6.10%	5.88%	11.52%	13.61%	20.32%	13.80%	8.34%	3.74%	100.00%
Easton	PA	18045	PA-Nazareth	1.76%	0.00%	1.26%	7.71%	0.77%	5.72%	15.50%	20.41%	14.47%	21.54%	10.86%	100.00%
Nazareth	PA	18064	PA-Nazareth	0.63%	0.72%	1.35%	17.52%	8.89%	14.56%	9.25%	14.47%	18.55%	9.84%	4.22%	100.00%
Pen Argyl	PA	18072	PA-Bangor	12.28%	1.24%	2.62%	8.14%	3.86%	10.48%	27.86%	20.55%	5.52%	3.86%	3.59%	100.00%
Pen Argyl	PA	18072	PA-Nazareth	12.28%	1.24%	2.62%	8.14%	3.86%	10.48%	27.86%	20.55%	5.52%	3.86%	3.59%	100.00%
Stockertown	PA	18083	PA-Nazareth	0.00%	0.00%	0.00%	10.87%	4.35%	0.00%	23.91%	0.00%	0.00%	60.87%	0.00%	100.00%
Tatamy	PA	18085	PA-Nazareth	0.00%	0.00%	0.00%	0.00%	0.00%	36.26%	5.49%	39.56%	16.48%	2.20%	0.00%	100.00%
Wind Gap	PA	18091	PA-Nazareth	1.01%	2.89%	1.01%	4.34%	4.48%	14.60%	23.41%	20.95%	6.21%	21.10%	0.00%	100.00%
Tamaqua	PA	18252	PA-Frackville	6.43%	3.51%	15.63%	10.01%	11.76%	12.34%	13.88%	10.52%	6.21%	6.28%	3.43%	100.00%
Tamaqua	PA	18252	PA-Frackville	6.43%	3.51%	15.63%	10.01%	11.76%	12.34%	13.88%	10.52%	6.21%	6.28%	3.43%	100.00%
East Stroudsburg	PA	18301	PA-Lehman Pike	4.37%	1.31%	7.94%	6.98%	12.24%	10.83%	12.17%	20.04%	10.48%	9.04%	4.61%	100.00%
East Stroudsburg	PA	18302	PA-Lehman Pike	0.81%	0.00%	1.97%	0.81%	9.84%	6.13%	32.29%	27.08%	13.31%	4.17%	3.59%	100.00%
Bushkill	PA	18324	PA-Lehman Pike	14.26%	17.51%	2.17%	3.43%	7.40%	3.25%	27.62%	9.93%	3.97%	10.47%	0.00%	100.00%
Dingmans Ferry	PA	18328	PA-Lehman Pike	12.54%	0.00%	17.95%	0.00%	35.33%	9.69%	7.41%	17.09%	0.00%	0.00%	0.00%	100.00%
Dingmans Ferry	PA	18328	PA-Lehman Pike	12.54%	0.00%	17.95%	0.00%	35.33%	9.69%	7.41%	17.09%	0.00%	0.00%	0.00%	100.00%
Dingmans Ferry	PA	18328	PA-Lehman Pike	12.54%	0.00%	17.95%	0.00%	35.33%	9.69%	7.41%	17.09%	0.00%	0.00%	0.00%	100.00%
Marshalls Creek	PA	18335	PA-Lehman Pike	19.51%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	41.46%	0.00%	0.00%	39.02%	100.00%
Matamoras	PA	18336	PA-Lehman Pike	6.06%	0.00%	10.09%	11.19%	10.28%	7.16%	11.56%	11.38%	16.88%	10.46%	4.95%	100.00%
Milford	PA	18337	PA-Lehman Pike	5.98%	2.53%	7.90%	5.47%	8.51%	7.60%	19.86%	12.46%	16.31%	8.00%	5.37%	100.00%
Mountainhome	PA	18342	PA-Lehman Pike	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Mount Pocono	PA	18344	PA-Pocono	0.00%	0.00%	7.61%	33.07%	12.60%	25.98%	11.81%	3.94%	0.00%	4.99%	0.00%	100.00%
Pocono Summit	PA	18346	PA-Pocono	0.00%	5.00%	0.00%	37.50%	8.75%	0.00%	0.00%	27.50%	21.25%	0.00%	0.00%	100.00%
Pocono Lake	PA	18347	PA-Lehman Pike	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.31%	0.00%	0.00%	93.69%	0.00%	100.00%
Portland	PA	18351	PA-Lehman Pike	0.00%	0.00%	0.00%	6.90%	6.90%	10.34%	10.34%	11.49%	51.72%	2.30%	0.00%	100.00%
Saylorsburg	PA	18353	PA-Nazareth	4.83%	8.41%	0.00%	0.00%	4.52%	13.24%	7.79%	16.51%	44.70%	0.00%	0.00%	100.00%

TOTAL COMMUNITIES: 362

				--- Distribution of Income for Rented Units ---										
City	State	Zip Code	Profit Center	0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Archbald	PA	18403	PA-WB/Scranton	0.00%	0.00%	23.63%	5.50%	6.09%	23.92%	8.62%	26.89%	1.93%	3.42%	0.00%	100.00%
Carbondale	PA	18407	PA-WB/Scranton	4.45%	5.43%	20.07%	7.73%	9.35%	9.69%	10.18%	14.64%	4.65%	11.70%	2.10%	100.00%
Clarks Summit	PA	18411	PA-Abington	3.82%	1.99%	1.16%	6.31%	4.81%	7.41%	10.67%	27.99%	17.87%	11.67%	6.31%	100.00%
Clarks Summit	PA	18411	PA-WB/Scranton	3.82%	1.99%	1.16%	6.31%	4.81%	7.41%	10.67%	27.99%	17.87%	11.67%	6.31%	100.00%
Dalton	PA	18414	PA-Abington	7.69%	8.28%	1.48%	6.51%	5.62%	5.03%	13.02%	18.64%	17.75%	11.24%	4.73%	100.00%
Dalton	PA	18414	PA-Abington	7.69%	8.28%	1.48%	6.51%	5.62%	5.03%	13.02%	18.64%	17.75%	11.24%	4.73%	100.00%
Dalton	PA	18414	PA-WB/Scranton	7.69%	8.28%	1.48%	6.51%	5.62%	5.03%	13.02%	18.64%	17.75%	11.24%	4.73%	100.00%
Factoryville	PA	18419	PA-Abington	1.48%	2.96%	6.67%	20.49%	6.17%	8.15%	23.70%	12.35%	7.41%	9.14%	1.48%	100.00%
Forest City	PA	18421	PA-WB/Scranton	5.86%	5.63%	6.53%	6.53%	7.66%	10.36%	18.92%	19.37%	7.43%	7.66%	4.05%	100.00%
Jermyn	PA	18433	PA-WB/Scranton	7.12%	1.12%	8.99%	8.24%	6.55%	13.30%	3.37%	33.90%	6.18%	10.30%	0.94%	100.00%
Jessup	PA	18434	PA-WB/Scranton	0.00%	0.00%	32.23%	0.00%	25.60%	15.29%	8.29%	14.18%	4.42%	0.00%	0.00%	100.00%
Lake Ariel	PA	18436	PA-Pocono	0.00%	3.43%	2.92%	10.98%	2.92%	24.53%	18.70%	12.86%	12.01%	7.03%	4.63%	100.00%
Moscow	PA	18444	PA-WB/Scranton	5.13%	5.02%	11.86%	10.04%	3.42%	17.41%	8.97%	13.46%	16.03%	7.48%	1.18%	100.00%
Olyphant	PA	18447	PA-WB/Scranton	1.24%	6.67%	6.84%	10.38%	3.95%	16.56%	8.07%	22.98%	13.43%	9.88%	0.00%	100.00%
Olyphant	PA	18447	PA-Abington	1.24%	6.67%	6.84%	10.38%	3.95%	16.56%	8.07%	22.98%	13.43%	9.88%	0.00%	100.00%
Peckville	PA	18452	PA-WB/Scranton	8.07%	0.00%	3.79%	20.92%	8.07%	13.18%	5.93%	20.43%	9.72%	9.88%	0.00%	100.00%
Thompson	PA	18465	PA-Susquehanna	0.00%	0.00%	16.30%	1.09%	8.70%	6.52%	20.65%	14.13%	18.48%	14.13%	0.00%	100.00%
Tobyhanna	PA	18466	PA-Pocono	4.59%	6.59%	5.62%	9.95%	12.99%	7.56%	15.77%	10.02%	11.05%	14.03%	1.81%	100.00%
Waverly	PA	18471	PA-Abington	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
Scranton	PA	18503	PA-WB/Scranton	8.14%	2.71%	14.47%	12.30%	3.07%	8.14%	13.56%	28.93%	1.63%	7.05%	0.00%	100.00%
Scranton	PA	18504	PA-WB/Scranton	5.34%	2.88%	12.16%	12.48%	4.74%	10.44%	18.32%	23.15%	6.34%	2.70%	1.45%	100.00%
Scranton	PA	18505	PA-WB/Scranton	4.08%	6.45%	13.22%	13.48%	8.47%	10.50%	15.47%	11.63%	8.52%	6.25%	1.93%	100.00%
Moosic	PA	18507	PA-WB/Scranton	8.68%	2.69%	2.40%	28.29%	0.00%	5.69%	23.80%	13.17%	4.64%	0.00%	10.63%	100.00%
Moosic	PA	18507	PA-Nazareth	8.68%	2.69%	2.40%	28.29%	0.00%	5.69%	23.80%	13.17%	4.64%	0.00%	10.63%	100.00%
Scranton	PA	18508	PA-WB/Scranton	5.30%	5.77%	15.28%	7.93%	5.93%	19.84%	15.20%	16.18%	5.85%	2.71%	0.00%	100.00%
Scranton	PA	18509	PA-WB/Scranton	7.82%	3.84%	9.24%	7.99%	10.16%	16.31%	17.62%	16.23%	4.87%	3.73%	2.20%	100.00%
Scranton	PA	18510	PA-WB/Scranton	5.34%	8.19%	11.61%	9.56%	8.19%	16.24%	9.04%	16.79%	8.56%	3.49%	2.98%	100.00%
Scranton	PA	18512	PA-WB/Scranton	1.75%	8.83%	5.82%	4.97%	10.05%	13.06%	25.01%	18.98%	6.29%	5.24%	0.00%	100.00%
Taylor	PA	18517	PA-WB/Scranton	0.00%	14.76%	4.67%	0.00%	7.53%	12.50%	21.39%	16.57%	14.01%	8.58%	0.00%	100.00%
Old Forge	PA	18518	PA-WB/Scranton	4.18%	4.18%	13.73%	6.91%	6.35%	11.33%	16.31%	17.35%	9.80%	6.59%	3.29%	100.00%
Scranton	PA	18519	PA-WB/Scranton	8.72%	5.38%	14.81%	3.11%	6.57%	18.64%	15.65%	13.62%	2.75%	10.75%	0.00%	100.00%
Berwick	PA	18603	PA-Berwick	10.11%	7.59%	11.48%	8.34%	6.67%	14.66%	18.81%	13.60%	6.40%	1.90%	0.44%	100.00%
Berwick	PA	18603	PA-Philipsburg	10.11%	7.59%	11.48%	8.34%	6.67%	14.66%	18.81%	13.60%	6.40%	1.90%	0.44%	100.00%
Dallas	PA	18612	PA-WB/Scranton	8.84%	3.41%	5.27%	11.01%	5.27%	8.14%	16.67%	13.57%	11.78%	2.95%	13.10%	100.00%
Glen Lyon	PA	18617	PA-WB/Scranton	11.70%	7.45%	14.89%	6.03%	15.60%	17.38%	13.48%	2.84%	10.64%	0.00%	0.00%	100.00%
Hunlock Creek	PA	18621	PA-WB/Scranton	2.38%	0.00%	0.00%	0.00%	4.76%	5.95%	19.64%	35.12%	20.24%	0.00%	11.90%	100.00%
Lake Winola	PA	18625	PA-Abington	0.00%	0.00%	0.00%	0.00%	0.00%	83.33%	0.00%	16.67%	0.00%	0.00%	0.00%	100.00%
Nanticoke	PA	18634	PA-WB/Scranton	7.63%	9.82%	10.82%	4.69%	3.74%	11.07%	16.65%	19.39%	9.12%	6.78%	0.30%	100.00%
Nanticoke	PA	18634	PA-WB/Scranton	7.63%	9.82%	10.82%	4.69%	3.74%	11.07%	16.65%	19.39%	9.12%	6.78%	0.30%	100.00%
Nescopeck	PA	18635	PA-Berwick	0.00%	0.00%	5.04%	11.63%	5.81%	9.30%	22.48%	24.81%	13.95%	5.81%	1.16%	100.00%
Pittston	PA	18640	PA-WB/Scranton	7.74%	3.18%	9.03%	5.67%	9.42%	18.88%	20.81%	8.17%	9.71%	6.57%	0.82%	100.00%
Pittston	PA	18641	PA-WB/Scranton	5.54%	0.00%	7.22%	4.18%	6.49%	24.37%	20.92%	12.87%	10.15%	7.64%	0.63%	100.00%
Duryea	PA	18642	PA-WB/Scranton	8.51%	8.98%	9.69%	2.13%	10.64%	11.11%	20.09%	0.00%	11.82%	17.02%	0.00%	100.00%
Pittston	PA	18643	PA-WB/Scranton	6.42%	5.11%	6.42%	1.93%	2.12%	14.90%	18.02%	13.90%	16.52%	9.10%	5.55%	100.00%
Wyoming	PA	18644	PA-WB/Scranton	1.13%	1.33%	11.18%	8.31%	9.54%	29.03%	14.97%	12.62%	7.49%	3.59%	0.82%	100.00%
Plymouth	PA	18651	PA-WB/Scranton	3.65%	7.24%	6.48%	4.09%	7.61%	27.75%	12.90%	16.24%	5.54%	3.71%	4.78%	100.00%
Plymouth	PA	18651	PA-Norristown	3.65%	7.24%	6.48%	4.09%	7.61%	27.75%	12.90%	16.24%	5.54%	3.71%	4.78%	100.00%
Shickshinny	PA	18655	PA-WB/Scranton	10.78%	4.04%	12.13%	4.85%	0.27%	3.50%	19.68%	21.56%	13.75%	8.36%	1.08%	100.00%
Wilkes Barre	PA	18701	PA-WB/Scranton	8.05%	4.79%	5.55%	12.73%	13.49%	12.51%	30.90%	7.40%	3.48%	1.09%	0.00%	100.00%

TOTAL COMMUNITIES: 362

				--- Distribution of Income for Rented Units ---											
City	State	Zip Code	Profit Center	0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Wilkes Barre	PA	18702	PA-WB/Scranton	11.76%	7.53%	9.76%	8.44%	6.73%	16.69%	11.47%	14.95%	7.05%	3.90%	1.71%	100.00%
Kingston	PA	18704	PA-WB/Scranton	7.44%	8.47%	8.56%	4.68%	9.10%	12.59%	16.54%	17.03%	7.17%	6.28%	2.13%	100.00%
Wilkes Barre	PA	18705	PA-WB/Scranton	3.95%	1.36%	3.60%	7.37%	5.31%	11.45%	19.48%	24.31%	17.95%	4.17%	1.05%	100.00%
Wilkes Barre	PA	18706	PA-WB/Scranton	5.77%	7.38%	6.62%	5.94%	10.60%	9.84%	12.93%	11.28%	20.06%	6.15%	3.44%	100.00%
Wilkes Barre	PA	18706	PA-Mechanicsburg	5.77%	7.38%	6.62%	5.94%	10.60%	9.84%	12.93%	11.28%	20.06%	6.15%	3.44%	100.00%
Mountain Top	PA	18707	PA-WB/Scranton	0.00%	1.63%	12.48%	4.52%	15.91%	8.32%	31.83%	12.48%	7.23%	5.24%	0.36%	100.00%
Shavertown	PA	18708	PA-WB/Scranton	0.00%	5.67%	23.44%	7.37%	10.02%	0.00%	22.12%	11.34%	2.84%	12.29%	4.91%	100.00%
Shavertown	PA	18708	PA-WB/Scranton	0.00%	5.67%	23.44%	7.37%	10.02%	0.00%	22.12%	11.34%	2.84%	12.29%	4.91%	100.00%
Luzerne	PA	18709	PA-WB/Scranton	6.91%	10.62%	10.46%	4.55%	8.43%	20.91%	11.30%	13.66%	8.60%	4.55%	0.00%	100.00%
Montrose	PA	18801	PA-Susquehanna	1.92%	1.79%	12.42%	13.06%	2.69%	18.05%	15.62%	12.93%	12.42%	8.58%	0.51%	100.00%
Great Bend	PA	18821	PA-Susquehanna	7.09%	7.80%	10.64%	4.96%	0.00%	19.15%	15.60%	15.60%	14.89%	2.84%	1.42%	100.00%
Hallstead	PA	18822	PA-Susquehanna	9.27%	10.22%	17.89%	7.03%	3.19%	13.10%	18.21%	14.06%	0.96%	6.07%	0.00%	100.00%
Susquehanna	PA	18847	PA-Susquehanna	5.49%	6.71%	9.15%	7.11%	7.72%	25.00%	11.18%	17.28%	5.49%	3.86%	1.02%	100.00%
Newtown	PA	18940	PA-Yardley	7.35%	0.57%	2.62%	3.13%	6.44%	9.57%	5.98%	17.21%	11.17%	16.75%	19.20%	100.00%
Washington Crossing	PA	18977	PA-Yardley	0.00%	0.00%	0.00%	10.91%	0.00%	0.00%	0.00%	13.94%	28.48%	21.82%	24.85%	100.00%
Clifton Heights	PA	19018	PA-Lehman Pike	5.44%	3.01%	6.12%	1.65%	8.89%	9.01%	13.59%	25.20%	9.72%	9.84%	7.53%	100.00%
Media	PA	19063	PA-Royersford	3.46%	1.45%	6.89%	2.34%	3.57%	11.58%	12.82%	18.83%	13.57%	17.34%	8.15%	100.00%
Morrisville	PA	19067	PA-Yardley	5.66%	2.01%	4.20%	3.12%	1.58%	5.86%	14.64%	21.43%	11.72%	20.60%	9.18%	100.00%
Coatesville	PA	19320	PA-Coatesville	2.69%	4.71%	6.76%	7.79%	4.76%	12.01%	14.23%	23.70%	10.27%	7.99%	5.10%	100.00%
Downingtown	PA	19335	PA-Coatesville	1.21%	2.29%	1.85%	2.99%	9.40%	9.92%	17.03%	22.51%	17.98%	9.48%	5.33%	100.00%
Honey Brook	PA	19344	PA-Coatesville	0.65%	4.61%	4.28%	1.94%	0.81%	11.40%	29.43%	28.94%	9.62%	6.39%	1.94%	100.00%
Parkesburg	PA	19365	PA-Coatesville	6.99%	1.89%	7.13%	8.30%	6.55%	8.59%	4.37%	22.71%	10.63%	5.82%	17.03%	100.00%
Pomeroy	PA	19367	PA-Coatesville	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sadsburyville	PA	19369	PA-Coatesville	0.00%	51.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	48.89%	0.00%	0.00%	100.00%
Thorndale	PA	19372	PA-Coatesville	0.00%	0.00%	0.00%	0.00%	0.00%	11.17%	18.72%	11.73%	16.20%	39.39%	2.79%	100.00%
Norristown	PA	19401	PA-Norristown	3.82%	3.42%	7.51%	8.30%	7.53%	15.46%	13.58%	16.65%	12.55%	7.72%	3.47%	100.00%
Norristown	PA	19403	PA-Norristown	2.63%	2.08%	5.18%	3.02%	4.93%	9.97%	10.46%	16.68%	17.27%	13.23%	14.54%	100.00%
Bridgeport	PA	19405	PA-Norristown	4.82%	0.00%	9.34%	2.41%	5.68%	8.57%	14.74%	24.95%	13.29%	9.73%	6.45%	100.00%
King Of Prussia	PA	19406	PA-Norristown	2.41%	0.87%	0.62%	3.23%	3.17%	5.04%	8.92%	18.21%	18.52%	22.49%	16.51%	100.00%
Blue Bell	PA	19422	PA-Norristown	1.44%	3.70%	0.75%	1.30%	4.59%	6.24%	12.75%	13.02%	17.61%	22.76%	15.83%	100.00%
Collegeville	PA	19426	PA-Norristown	0.82%	1.36%	0.68%	0.68%	0.88%	6.52%	13.32%	23.51%	24.25%	14.54%	13.45%	100.00%
Collegeville	PA	19426	PA-Royersford	0.82%	1.36%	0.68%	0.68%	0.88%	6.52%	13.32%	23.51%	24.25%	14.54%	13.45%	100.00%
Lansdale	PA	19446	PA-Norristown	2.90%	1.89%	4.93%	3.73%	5.69%	8.62%	12.88%	21.36%	15.70%	15.56%	6.73%	100.00%
Mont Clare	PA	19453	PA-Royersford	0.00%	0.00%	0.00%	0.00%	0.00%	5.50%	21.31%	38.83%	6.87%	27.49%	0.00%	100.00%
North Wales	PA	19454	PA-Norristown	4.78%	0.00%	4.11%	0.00%	2.39%	9.93%	9.55%	17.09%	20.65%	16.80%	14.70%	100.00%
Oaks	PA	19456	PA-Royersford	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Parker Ford	PA	19457	PA-Royersford	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Phoenixville	PA	19460	PA-Royersford	7.43%	1.52%	3.60%	4.87%	2.58%	8.47%	10.26%	16.60%	17.55%	15.58%	11.54%	100.00%
Norristown	PA	19403	PA-Audubon	2.63%	2.08%	5.18%	3.02%	4.93%	9.97%	10.46%	16.68%	17.27%	13.23%	14.54%	100.00%
Plymouth Meeting	PA	19462	PA-Norristown	4.02%	0.74%	1.72%	0.99%	2.87%	8.13%	15.35%	21.59%	13.30%	17.32%	13.96%	100.00%
Pottstown	PA	19464	PA-Royersford	3.79%	3.26%	8.63%	8.37%	10.70%	9.04%	15.95%	20.00%	9.52%	9.58%	1.15%	100.00%
Pottstown	PA	19465	PA-Royersford	3.22%	2.21%	4.16%	2.68%	4.97%	11.61%	18.93%	19.33%	18.59%	10.87%	3.42%	100.00%
Royersford	PA	19468	PA-Royersford	0.53%	0.73%	5.04%	3.74%	8.17%	4.96%	18.93%	26.30%	17.98%	8.17%	5.46%	100.00%
Schwenksville	PA	19473	PA-Royersford	4.69%	2.93%	1.41%	13.60%	11.61%	8.68%	10.20%	20.16%	8.21%	14.54%	3.99%	100.00%
Schwenksville	PA	19473	PA-Norristown	4.69%	2.93%	1.41%	13.60%	11.61%	8.68%	10.20%	20.16%	8.21%	14.54%	3.99%	100.00%
Spring City	PA	19475	PA-Royersford	12.93%	3.20%	3.95%	12.59%	0.61%	4.97%	20.63%	12.05%	20.69%	4.70%	3.68%	100.00%
Worcester	PA	19490	PA-Norristown	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Birdsboro	PA	19508	PA-Glen	8.01%	0.75%	6.24%	4.19%	4.10%	30.38%	22.55%	8.85%	8.67%	4.57%	1.68%	100.00%
Douglassville	PA	19518	PA-Glen	7.91%	1.72%	10.09%	2.41%	3.78%	17.32%	9.29%	15.71%	24.43%	3.44%	3.90%	100.00%
Fleetwood	PA	19522	PA-Glen	6.97%	5.67%	4.85%	0.95%	2.60%	7.21%	6.62%	28.13%	17.49%	15.25%	4.26%	100.00%
Reading	PA	19606	PA-Glen	4.76%	4.36%	2.95%	4.39%	9.23%	8.79%	19.93%	23.52%	8.49%	8.69%	4.90%	100.00%
Reading	PA	19606	PA-Penn/Wyomissing	4.76%	4.36%	2.95%	4.39%	9.23%	8.79%	19.93%	23.52%	8.49%	8.69%	4.90%	100.00%
Reading	PA	19607	PA-Glen	3.75%	1.21%	6.23%	3.25%	4.87%	12.22%	13.46%	28.13%	11.07%	13.46%	2.36%	100.00%
Reading	PA	19608	PA-Penn/Wyomissing	0.00%	4.79%	0.77%	4.41%	2.59%	18.18%	20.99%	17.36%	20.33%	8.43%	2.15%	100.00%
Reading	PA	19608	PA-Glen	0.00%	4.79%	0.77%	4.41%	2.59%	18.18%	20.99%	17.36%	20.33%	8.43%	2.15%	100.00%
Reading	PA	19609	PA-Penn/Wyomissing	8.50%	2.68%	1.89%	1.73%	5.83%	21.57%	30.08%	8.82%	6.14%	12.44%	0.31%	100.00%
Reading	PA	19610	PA-Penn/Wyomissing	4.36%	1.34%	3.32%	2.13%	10.65%	15.96%	6.19%	20.32%	11.30%	9.76%	14.67%	100.00%
TOTAL CUSTOMERS				4,720	4,615	7,546	6,174	6,478	11,955	13,540	14,747	9,167	7,037	2,698	88,676

Pennsylvania-American Water Company
Case No. R-2023-3043189
Wastewater Affordability Summary - Bills for Basic Water Service
Customer Counts as of December 31, 2022

Affordability Target: 2.0%

Income Level	Size	Water Service	Average Income	Customers	Proposed Base Bill	--- Customers by FPL --- 0-50%	51%-100%	101%-150%	151%-200%	201%-250%	251%-300%	301%-350%	351%-400%	401%-450%	451%-500%	Over 500%	--- Customers by FPL --- 0-150%	151-300%	301-500%	Over 500%
$0-$5k	1	1,200	$ 3,000	1,277	$ 44.94	1,277	-	-	-	-	-	-	-	-	-	-	1,277	-	-	-
$0-$5k	2	2,400	$ 3,000	752	$ 72.65	752	-	-	-	-	-	-	-	-	-	-	752	-	-	-
$0-$5k	3	3,600	$ 3,000	257	$ 101.81	257	-	-	-	-	-	-	-	-	-	-	257	-	-	-
$0-$5k	4	4,800	$ 3,000	154	$ 131.92	154	-	-	-	-	-	-	-	-	-	-	154	-	-	-
$0-$5k	5	6,000	$ 3,000	70	$ 159.70	70	-	-	-	-	-	-	-	-	-	-	70	-	-	-
$0-$5k	6	7,200	$ 3,000	29	$ 190.48	29	-	-	-	-	-	-	-	-	-	-	29	-	-	-
$0-$5k	7	8,400	$ 3,000	20	$ 217.69	20	-	-	-	-	-	-	-	-	-	-	20	-	-	-
$5-$10k	1	1,200	$ 7,500	1,336	$ 50.39	660	676	-	-	-	-	-	-	-	-	-	1,336	-	-	-
$5-$10k	2	2,400	$ 7,500	527	$ 72.26	527	-	-	-	-	-	-	-	-	-	-	527	-	-	-
$5-$10k	3	3,600	$ 7,500	187	$ 101.23	187	-	-	-	-	-	-	-	-	-	-	187	-	-	-
$5-$10k	4	4,800	$ 7,500	121	$ 130.45	121	-	-	-	-	-	-	-	-	-	-	121	-	-	-
$5-$10k	5	6,000	$ 7,500	54	$ 160.28	54	-	-	-	-	-	-	-	-	-	-	54	-	-	-
$5-$10k	6	7,200	$ 7,500	18	$ 192.86	18	-	-	-	-	-	-	-	-	-	-	18	-	-	-
$5-$10k	7	8,400	$ 7,500	15	$ 218.62	15	-	-	-	-	-	-	-	-	-	-	15	-	-	-
$10-$15k	1	1,200	$ 12,500	2,969	$ 45.07	-	2,675	294	-	-	-	-	-	-	-	-	2,969	-	-	-
$10-$15k	2	2,400	$ 12,500	852	$ 72.57	-	852	-	-	-	-	-	-	-	-	-	852	-	-	-
$10-$15k	3	3,600	$ 12,500	293	$ 101.71	137	156	-	-	-	-	-	-	-	-	-	293	-	-	-
$10-$15k	4	4,800	$ 12,500	193	$ 131.15	193	-	-	-	-	-	-	-	-	-	-	193	-	-	-
$10-$15k	5	6,000	$ 12,500	78	$ 160.07	78	-	-	-	-	-	-	-	-	-	-	78	-	-	-
$10-$15k	6	7,200	$ 12,500	27	$ 189.95	27	-	-	-	-	-	-	-	-	-	-	27	-	-	-
$10-$15k	7	8,400	$ 12,500	15	$ 223.45	15	-	-	-	-	-	-	-	-	-	-	15	-	-	-
$15-$20k	1	1,200	$ 17,500	2,619	$ 45.55	-	-	2,619	-	-	-	-	-	-	-	-	2,619	-	-	-
$15-$20k	2	2,400	$ 17,500	985	$ 73.14	-	894	91	-	-	-	-	-	-	-	-	985	-	-	-
$15-$20k	3	3,600	$ 17,500	342	$ 102.43	-	342	-	-	-	-	-	-	-	-	-	342	-	-	-
$15-$20k	4	4,800	$ 17,500	213	$ 131.61	-	213	-	-	-	-	-	-	-	-	-	213	-	-	-
$15-$20k	5	6,000	$ 17,500	110	$ 161.38	68	42	-	-	-	-	-	-	-	-	-	110	-	-	-
$15-$20k	6	7,200	$ 17,500	36	$ 192.23	36	-	-	-	-	-	-	-	-	-	-	36	-	-	-
$15-$20k	7	8,400	$ 17,500	22	$ 221.02	22	-	-	-	-	-	-	-	-	-	-	22	-	-	-
$20-$25k	1	1,200	$ 22,500	2,573	$ 45.02	-	-	1,024	1,549	-	-	-	-	-	-	-	1,024	1,549	-	-
$20-$25k	2	2,400	$ 22,500	1,360	$ 72.44	-	-	1,360	-	-	-	-	-	-	-	-	1,360	-	-	-
$20-$25k	3	3,600	$ 22,500	465	$ 102.02	-	465	-	-	-	-	-	-	-	-	-	465	-	-	-
$20-$25k	4	4,800	$ 22,500	285	$ 130.72	-	285	-	-	-	-	-	-	-	-	-	285	-	-	-
$20-$25k	5	6,000	$ 22,500	135	$ 161.03	-	135	-	-	-	-	-	-	-	-	-	135	-	-	-
$20-$25k	6	7,200	$ 22,500	57	$ 191.12	-	57	-	-	-	-	-	-	-	-	-	57	-	-	-
$20-$25k	7	8,400	$ 22,500	37	$ 219.73	26	11	-	-	-	-	-	-	-	-	-	37	-	-	-
$25-$35k	1	1,200	$ 22,500	4,275	$ 44.15	-	-	-	1,709	2,566	-	-	-	-	-	-	-	4,275	-	-
$25-$35k	2	2,400	$ 30,000	3,099	$ 71.27	-	-	1,545	1,555	-	-	-	-	-	-	-	1,545	1,555	-	-
$25-$35k	3	3,600	$ 30,000	1,060	$ 99.84	-	-	1,060	-	-	-	-	-	-	-	-	1,060	-	-	-
$25-$35k	4	4,800	$ 30,000	657	$ 127.89	-	321	337	-	-	-	-	-	-	-	-	657	-	-	-
$25-$35k	5	6,000	$ 30,000	331	$ 157.83	-	331	-	-	-	-	-	-	-	-	-	331	-	-	-
$25-$35k	6	7,200	$ 30,000	148	$ 187.43	-	148	-	-	-	-	-	-	-	-	-	148	-	-	-
$25-$35k	7	8,400	$ 30,000	82	$ 213.13	-	82	-	-	-	-	-	-	-	-	-	82	-	-	-
$35-$50k	1	1,200	$ 37,500	4,478	$ 44.57	-	-	-	-	447	2,244	1,788	-	-	-	-	-	2,690	1,788	-
$35-$50k	2	2,400	$ 37,500	4,917	$ 72.03	-	-	-	1,473	3,444	-	-	-	-	-	-	-	4,917	-	-
$35-$50k	3	3,600	$ 37,500	1,822	$ 101.20	-	-	358	1,464	-	-	-	-	-	-	-	358	1,464	-	-
$35-$50k	4	4,800	$ 37,500	1,213	$ 130.51	-	-	846	367	-	-	-	-	-	-	-	846	367	-	-
$35-$50k	5	6,000	$ 37,500	651	$ 159.59	-	-	651	-	-	-	-	-	-	-	-	651	-	-	-
$35-$50k	6	7,200	$ 37,500	263	$ 188.14	-	94	169	-	-	-	-	-	-	-	-	263	-	-	-
$35-$50k	7	8,400	$ 37,500	141	$ 216.21	-	99	42	-	-	-	-	-	-	-	-	141	-	-	-
$50-$75k	1	1,200	$ 62,500	4,875	$ 44.51	-	-	-	-	-	-	-	1,462	1,467	1,459	487	-	-	4,388	487
$50-$75k	2	2,400	$ 62,500	7,579	$ 71.97	-	-	-	-	-	3,029	3,037	1,514	-	-	-	-	3,029	4,550	-
$50-$75k	3	3,600	$ 62,500	3,155	$ 101.04	-	-	-	-	1,570	1,586	-	-	-	-	-	-	3,155	-	-
$50-$75k	4	4,800	$ 62,500	2,297	$ 130.26	-	-	-	916	1,381	-	-	-	-	-	-	-	2,297	-	-
$50-$75k	5	6,000	$ 62,500	1,100	$ 158.58	-	-	110	771	219	-	-	-	-	-	-	110	990	-	-
$50-$75k	6	7,200	$ 62,500	448	$ 187.44	-	-	180	268	-	-	-	-	-	-	-	180	268	-	-

Pennsylvania-American Water Company
Case No. R-2023-3043189
Wastewater Affordability Summary - Bills for Basic Water Service
Customer Counts as of December 31, 2022

Affordability Target: 2.0%

Income Level	Size	Water Service	Average Income	Customers	Proposed Base Bill	--- Customers by FPL --- 0-50%	51%-100%	101%-150%	151%-200%	201%-250%	251%-300%	301%-350%	351%-400%	401%-450%	451%-500%	Over 500%	--- Customers by FPL --- 0-150%	151-300%	301-500%	Over 500%
$50-$75k	7	8,400	$ 62,500	242	$ 216.10	-	-	174	68	-	-	-	-	-	-	-	174	68	-	-
$75-$100k	1	1,200	$ 87,500	2,540	$ 46.12	-	-	-	-	-	-	-	-	-	-	2,540	-	-	-	2,540
$75-$100k	2	2,400	$ 87,500	5,680	$ 72.33	-	-	-	-	-	-	-	1,131	1,714	2,269	566	-	-	5,114	566
$75-$100k	3	3,600	$ 87,500	2,614	$ 101.09	-	-	-	-	-	-	1,302	1,313	-	-	-	-	-	2,614	-
$75-$100k	4	4,800	$ 87,500	2,214	$ 130.53	-	-	-	-	-	1,330	884	-	-	-	-	-	1,330	884	-
$75-$100k	5	6,000	$ 87,500	983	$ 158.72	-	-	-	-	498	486	-	-	-	-	-	-	983	-	-
$75-$100k	6	7,200	$ 87,500	391	$ 186.88	-	-	-	77	314	-	-	-	-	-	-	-	391	-	-
$75-$100k	7	8,400	$ 87,500	210	$ 215.42	-	-	-	137	73	-	-	-	-	-	-	-	210	-	-
$100-$150k	1	1,200	$ 125,000	2,147	$ 43.89	-	-	-	-	-	-	-	-	-	-	2,147	-	-	-	2,147
$100-$150k	2	2,400	$ 125,000	7,229	$ 71.76	-	-	-	-	-	-	-	-	-	-	7,229	-	-	-	7,229
$100-$150k	3	3,600	$ 125,000	3,777	$ 100.71	-	-	-	-	-	-	-	-	753	1,129	1,895	-	-	1,883	1,895
$100-$150k	4	4,800	$ 125,000	3,707	$ 130.09	-	-	-	-	-	-	369	1,111	1,117	1,111	-	-	-	3,707	-
$100-$150k	5	6,000	$ 125,000	1,549	$ 158.53	-	-	-	-	-	156	614	471	309	-	-	-	156	1,394	-
$100-$150k	6	7,200	$ 125,000	570	$ 186.38	-	-	-	-	-	230	230	110	-	-	-	-	230	340	-
$100-$150k	7	8,400	$ 125,000	326	$ 215.42	-	-	-	-	91	145	91	-	-	-	-	-	235	91	-
Over $150k	1	1,200	$ 200,000	910	$ 45.34	-	-	-	-	-	-	-	-	-	-	910	-	-	-	910
Over $150k	2	2,400	$ 200,000	4,280	$ 72.13	-	-	-	-	-	-	-	-	-	-	4,280	-	-	-	4,280
Over $150k	3	3,600	$ 200,000	2,633	$ 101.47	-	-	-	-	-	-	-	-	-	-	2,633	-	-	-	2,633
Over $150k	4	4,800	$ 200,000	3,093	$ 131.32	-	-	-	-	-	-	-	-	-	-	3,093	-	-	-	3,093
Over $150k	5	6,000	$ 200,000	1,300	$ 160.33	-	-	-	-	-	-	-	-	129	259	913	-	-	388	913
Over $150k	6	7,200	$ 200,000	444	$ 188.66	-	-	-	-	-	-	-	44	90	98	212	-	-	233	212
Over $150k	7	8,400	$ 200,000	244	$ 217.26	-	-	-	-	-	-	21	51	59	64	49	-	-	195	49
			Total:	108,157		4,743	7,877	10,859	10,353	10,602	9,203	8,334	7,206	5,639	6,389	26,953	23,479	30,159	27,567	26,953

Pennsylvania-American Water Company
Wastewater Affordability Analysis

Residential Statistics	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	FPFTY
PA Revenue	$ 8,192,044	$ 10,187,282	$ 9,577,075	$ 8,246,667	$ 12,492,060	$ 26,477,494	$ 34,582,301	$ 35,161,761	$ 41,862,824	$ 49,621,071	$ 64,432,350	$ 101,838,158	$ 122,293,420
PA Customers	16,325	16,752	16,024	16,617	22,909	51,050	59,964	62,356	69,901	73,136	83,892	90,000	97,360
PA Statewide Median Income	$ 51,904	$ 55,156	$ 55,173	$ 60,389	$ 60,979	$ 63,173	$ 64,524	$ 70,582	$ 70,789	$ 72,627	$ 72,210	$ 76,680	$ 96,449
PA Customer Median Income	$ 49,384	$ 52,478	$ 52,495	$ 57,457	$ 58,019	$ 60,106	$ 61,392	$ 67,156	$ 67,353	$ 69,101	$ 68,705	$ 72,958	$ 91,767
PA Average Monthly Bill	$ 41.82	$ 50.68	$ 49.81	$ 41.36	$ 45.44	$ 43.22	$ 48.06	$ 46.99	$ 49.91	$ 56.54	$ 64.00	$ 94.29	$ 104.67
PA BTI Ratio	1.02%	1.16%	1.14%	0.86%	0.94%	0.86%	0.94%	0.84%	0.89%	0.98%	1.12%	1.55%	1.37%

Chart 4

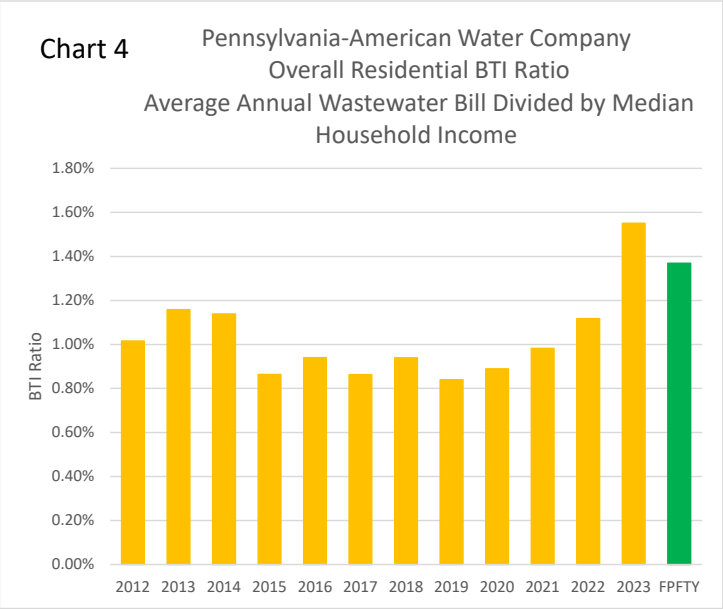
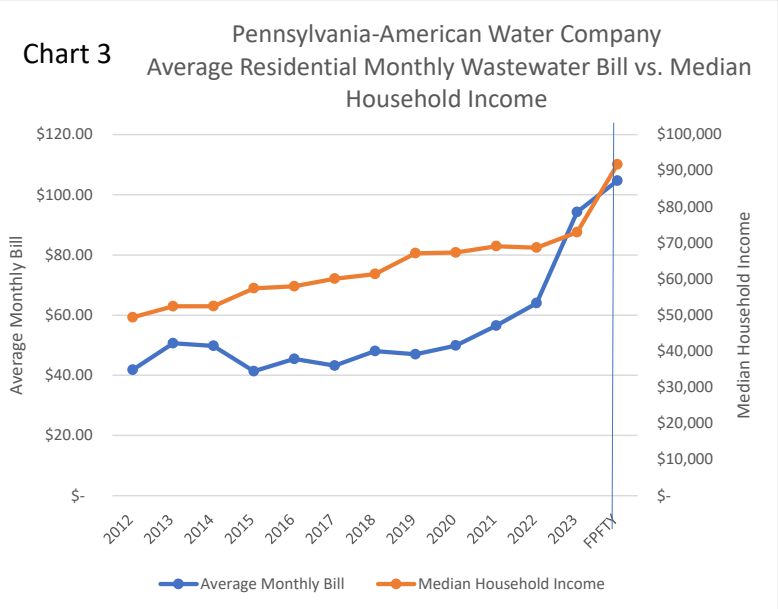


Chart 3



TOTAL COMMUNITIES: 84

City	State	Zip Code	Profit Center	Residential Customers	Analyzer Flag	Analyzed Customers	Rate Zone	PWS Zone	Income Flag	Household Flag	Median Income Total	Median Income Owned	Median Income Rented	Percent Owned	Percent Renter S.F.	Customer Median Income	Residential Customers Owner	Residential Customers Renter
Beaver Falls	PA	15010	PA-Koppel WW	1	1	1	1	1	1	1	$ 63,856	$ 80,731	$ 31,692	84.7%	15.3%	$ 73,222	1	0
Dravosburg	PA	15034	PA-McKeesport WW	552	1	552	1	1	1	1	$ 35,417	$ 51,875	$ 23,626	68.3%	31.7%	$ 42,918	377	175
Duquesne	PA	15110	PA-McKeesport WW	10	1	10	6	1	1	1	$ 37,478	$ 44,323	$ 32,917	65.7%	34.3%	$ 40,413	7	3
Duquesne	PA	15110	PA-McKeesport WW	1,656	1	1,656	1	1	1	1	$ 37,478	$ 44,323	$ 32,917	65.7%	34.3%	$ 40,413	1,088	568
West Mifflin	PA	15122	PA-McKeesport WW	16	1	16	1	1	1	1	$ 57,705	$ 68,445	$ 34,797	87.8%	12.2%	$ 64,351	14	2
Mckeesport	PA	15131	PA-McKeesport WW	9	1	9	7	1	1	1	$ 56,449	$ 77,052	$ 35,716	91.8%	8.2%	$ 73,682	8	1
Mckeesport	PA	15132	PA-McKeesport WW	5,775	1	5,775	6	1	1	1	$ 32,782	$ 46,534	$ 24,438	65.3%	34.7%	$ 38,873	3,773	2,002
Mckeesport	PA	15132	PA-McKeesport WW	29	1	29	7	1	1	1	$ 32,782	$ 46,534	$ 24,438	65.3%	34.7%	$ 38,873	19	10
Mckeesport	PA	15133	PA-McKeesport WW	4	1	4	6	1	1	1	$ 59,541	$ 62,804	$ 54,714	81.1%	18.9%	$ 61,278	3	1
Mckeesport	PA	15133	PA-McKeesport WW	1,618	1	1,618	7	1	1	1	$ 59,541	$ 62,804	$ 54,714	81.1%	18.9%	$ 61,278	1,313	305
Pittsburgh	PA	15227	PA-Brentwood WW	3,702	1	3,702	11	1	1	1	$ 64,827	$ 81,538	$ 32,355	89.4%	10.6%	$ 76,327	3,310	392
Claysville	PA	15323	PA-Claysville WW	442	1	442	1	1	1	1	$ 67,200	$ 75,417	$ 39,821	87.0%	13.0%	$ 70,779	384	58
Farmington	PA	15437	PA-Farmington WW	442	1	442	13	1	1	1	$ 68,478	$ 70,188	$ 67,731	84.2%	15.8%	$ 69,800	372	70
Butler	PA	16001	PA-BASA WW	9,980	1	9,980	12	1	1	1	$ 57,500	$ 76,719	$ 29,040	86.9%	13.1%	$ 70,462	8,670	1,310
Butler	PA	16002	PA-BASA WW	1,425	1	1,425	12	1	1	1	$ 69,714	$ 79,015	$ 27,500	95.4%	4.6%	$ 76,637	1,359	66
East Butler	PA	16029	PA-BASA WW	1,425	1	1,425	12	1	1	1	$ 49,405	$ 53,750	$ 36,250	88.9%	11.1%	$ 51,806	1,267	158
Lyndora	PA	16045	PA-BASA WW	1,425	1	1,425	12	1	0	1	$ 70,294	$ 72,596	-	68.6%	31.4%	$ 49,785	977	448
Koppel	PA	16136	PA-Koppel WW	336	1	336	1	1	1	1	$ 56,786	$ 62,500	$ 30,833	78.8%	21.2%	$ 55,783	265	71
Wampum	PA	16157	PA-Koppel WW	4	1	4	1	1	1	1	$ 52,600	$ 66,688	$ 17,464	88.7%	11.3%	$ 61,108	4	0
Clarion	PA	16214	PA-Clarion WW	1,885	1	1,885	1	1	1	1	$ 47,321	$ 79,957	$ 22,761	77.9%	22.1%	$ 67,338	1,469	416
Shippenville	PA	16254	PA-Clarion WW	204	1	204	1	1	1	1	$ 52,917	$ 57,679	$ 45,833	88.1%	11.9%	$ 56,272	180	24
Shippenville	PA	16254	PA-Paint Elk Twp WW	359	1	359	1	1	1	1	$ 52,917	$ 57,679	$ 45,833	88.1%	11.9%	$ 56,272	316	43
Strattanville	PA	16258	PA-Clarion WW	18	1	18	1	1	1	1	$ 47,891	$ 62,500	$ 39,063	82.6%	17.4%	$ 58,417	15	3
Kane	PA	16735	PA-Kane WW	1,823	1	1,823	4	1	1	1	$ 47,383	$ 52,930	$ 31,176	86.9%	13.1%	$ 50,074	1,584	239
Camp Hill	PA	17011	PA-Fairvew WW	525	1	525	1	1	1	1	$ 84,471	$ 101,845	$ 55,131	86.2%	13.8%	$ 95,379	452	73
Mechanicsburg	PA	17055	PA-Fairvew WW	1	1	1	1	1	1	1	$ 81,525	$ 98,874	$ 51,026	87.8%	12.2%	$ 93,048	1	0
New Cumberland	PA	17070	PA-Fairvew WW	2,222	1	2,222	1	1	1	1	$ 79,082	$ 91,358	$ 38,446	87.9%	12.1%	$ 84,970	1,954	268
New Cumberland	PA	17070	PA-Mechanicsburg	3	1	3	1	1	1	1	$ 79,082	$ 91,358	$ 38,446	87.9%	12.1%	$ 84,970	3	0
New Cumberland	PA	17070	PA-New Cumberland W\	2,817	1	2,817	2	1	1	1	$ 79,082	$ 91,358	$ 38,446	87.9%	12.1%	$ 84,970	2,477	340
Biglerville	PA	17307	PA-Fairvew WW	1	1	1	1	1	1	1	$ 68,910	$ 80,298	$ 32,776	92.8%	7.2%	$ 76,895	1	0
Biglerville	PA	17307	PA-FRANKLIN WW	127	1	127	1	1	1	1	$ 68,910	$ 80,298	$ 32,776	92.8%	7.2%	$ 76,895	118	9
Etters	PA	17319	PA-Fairvew WW	740	1	740	1	1	1	1	$ 84,416	$ 89,295	$ 45,422	92.6%	7.4%	$ 86,035	685	55
Lewisberry	PA	17339	PA-Fairvew WW	429	1	429	1	1	1	1	$ 90,625	$ 94,951	$ 63,298	94.6%	5.4%	$ 93,248	406	23
Orrtanna	PA	17353	PA-FRANKLIN WW	193	1	193	1	1	1	1	$ 76,793	$ 83,798	$ 35,313	84.0%	16.0%	$ 76,059	162	31
York	PA	17401	PA-York WW (future)	4,502	1	4,502	8	1	1	1	$ 33,950	$ 41,644	$ 29,106	56.6%	43.4%	$ 36,204	2,549	1,953
York	PA	17403	PA-York WW (future)	4,785	1	4,785	8	1	1	1	$ 60,840	$ 81,868	$ 31,846	80.3%	19.7%	$ 72,008	3,842	943
York	PA	17404	PA-York WW (future)	2,574	1	2,574	8	1	1	1	$ 67,838	$ 74,892	$ 44,466	84.8%	15.2%	$ 70,261	2,182	392
York	PA	17406	PA-York WW (future)	15	1	15	8	1	1	1	$ 76,153	$ 83,541	$ 57,246	89.2%	10.8%	$ 80,701	13	2
Mc Ewensville	PA	17749	PA-McEwensville WW	2	1	2	1	1	1	1	$ 50,455	$ 65,833	$ 40,179	78.3%	21.7%	$ 60,256	2	0
Mc Ewensville	PA	17749	PA-McEwensville WW	96	1	96	1	1	1	1	$ 50,455	$ 65,833	$ 40,179	78.3%	21.7%	$ 60,256	75	21
Turbotville	PA	17772	PA-Turbotville WW	257	1	257	1	1	1	1	$ 75,568	$ 83,281	$ 29,375	93.0%	7.0%	$ 79,486	239	18
Watsontown	PA	17777	PA-McEwensville WW	21	1	21	1	1	1	1	$ 53,092	$ 64,229	$ 31,250	88.9%	11.1%	$ 60,560	19	2
Drifton	PA	18221	Foster Township WW	1	1	1	9	1	0	1	$ 62,165	$ 66,389	-	72.5%	27.5%	$ 48,121	1	0
Freeland	PA	18224	Foster Township WW	496	1	496	9	1	1	1	$ 50,827	$ 55,712	$ 34,254	79.4%	20.6%	$ 51,296	394	102
East Stroudsburg	PA	18301	PA-Lehman Pike WW	40	1	40	1	1	1	1	$ 79,645	$ 101,809	$ 44,375	81.0%	19.0%	$ 90,909	32	8
East Stroudsburg	PA	18301	PA-Pocono BlueMtn WV	861	1	861	1	1	1	1	$ 79,645	$ 101,809	$ 44,375	81.0%	19.0%	$ 90,909	698	163
East Stroudsburg	PA	18302	PA-Lehman Pike WW	10	1	10	1	1	1	1	$ 70,669	$ 77,500	$ 49,429	88.3%	11.7%	$ 74,230	9	1
East Stroudsburg	PA	18302	PA-Pocono BlueMtn WV	16	1	16	1	1	1	1	$ 70,669	$ 77,500	$ 49,429	88.3%	11.7%	$ 74,230	14	2
East Stroudsburg	PA	18302	PA-Winona Lake WW	39	1	39	1	1	1	1	$ 70,669	$ 77,500	$ 49,429	88.3%	11.7%	$ 74,230	34	5
Bushkill	PA	18324	PA-Lehman Pike WW	2,661	1	2,661	1	1	1	1	$ 64,042	$ 80,708	$ 35,404	85.9%	14.1%	$ 74,300	2,285	376
Bushkill	PA	18324	PA-Winona Lake WW	44	1	44	1	1	1	1	$ 64,042	$ 80,708	$ 35,404	85.9%	14.1%	$ 74,300	38	6
Dingmans Ferry	PA	18328	PA-CLN TRTMT WW	358	1	358	1	1	1	1	$ 69,978	$ 74,932	$ 22,168	90.4%	9.6%	$ 69,877	324	34
Dingmans Ferry	PA	18328	PA-Lehman Pike WW	35	1	35	1	1	1	1	$ 69,978	$ 74,932	$ 22,168	90.4%	9.6%	$ 69,877	32	3
Pocono Summit	PA	18346	PA-Pocono WW	1	1	1	1	1	0	1	$ 59,500	$ 66,471	-	93.1%	6.9%	$ 61,906	1	0
Moscow	PA	18444	PA-Scranton WW	3	1	3	3	1	1	1	$ 78,467	$ 86,239	$ 32,955	89.4%	10.6%	$ 80,591	3	0
Tobyhanna	PA	18466	PA-Pocono WW	3,758	1	3,758	1	1	1	1	$ 66,603	$ 74,271	$ 41,553	78.5%	21.5%	$ 67,236	2,950	808
Scranton	PA	18503	PA-Scranton WW	61	1	61	3	1	1	1	$ 35,699	$ 43,571	$ 35,478	63.2%	36.8%	$ 40,589	39	22
Scranton	PA	18504	PA-Scranton WW	7,216	1	7,216	3	1	1	1	$ 50,531	$ 68,095	$ 35,984	76.2%	23.8%	$ 60,462	5,501	1,715
Scranton	PA	18505	PA-Scranton WW	6,130	1	6,130	3	1	1	1	$ 45,030	$ 67,585	$ 30,521	74.9%	25.1%	$ 58,268	4,589	1,541
Moosic	PA	18507	PA-Scranton WW	2	1	2	3	1	1	1	$ 65,956	$ 98,393	$ 36,136	82.6%	17.4%	$ 87,543	2	0
Scranton	PA	18508	PA-Scranton WW	3,352	1	3,352	3	1	1	1	$ 41,461	$ 56,191	$ 31,419	71.1%	28.9%	$ 49,023	2,382	970
Scranton	PA	18509	PA-Scranton WW	3,888	1	3,888	3	1	1	1	$ 47,531	$ 83,664	$ 29,163	77.0%	23.0%	$ 71,139	2,995	893
Scranton	PA	18510	PA-Scranton WW	2,988	1	2,988	3	1	1	1	$ 43,019	$ 65,820	$ 29,453	74.9%	25.1%	$ 56,700	2,239	749
Scranton	PA	18512	PA-Scranton WW	3,238	1	3,238	3	1	1	1	$ 56,571	$ 74,601	$ 37,124	84.9%	15.1%	$ 68,953	2,750	488
Taylor	PA	18517	PA-Scranton WW	2	1	2	3	1	1	1	$ 63,408	$ 76,151	$ 44,135	90.0%	10.0%	$ 72,965	2	0
Scranton	PA	18519	PA-Scranton WW	1	1	1	3	1	1	1	$ 60,328	$ 85,406	$ 32,743	78.7%	21.3%	$ 74,179	1	0
Kingston	PA	18704	PA-Scranton WW	1	1	1	3	1	1	1	$ 55,843	$ 76,972	$ 34,320	80.7%	19.3%	$ 68,748	1	0
Clifton Heights	PA	19018	PA-Lehman Pike WW	1	1	1	1	1	1	1	$ 63,442	$ 80,099	$ 51,126	89.8%	10.2%	$ 77,130	1	0

TOTAL COMMUNITIES: 84

City	State	Zip Code	Profit Center	Residential Customers	Analyzer Flag	Analyzed Customers	Rate Zone	PWS Zone	Income Flag	Household Flag	Median Income Total	Median Income Owned	Median Income Rented	Percent Owned	Percent Renter S.F.	Customer Median Income	Residential Customers Owner	Residential Customers Renter
Coatesville	PA	19320	PA - Sadsbury WW	953	1	953	1	1	1	1	$ 82,158	$ 100,677	$ 44,508	83.0%	17.0%	$ 91,132	791	162
Coatesville	PA	19320	PA-Coatesville WW	4,996	1	4,996	1	1	1	1	$ 82,158	$ 100,677	$ 44,508	83.0%	17.0%	$ 91,132	4,147	849
Coatesville	PA	19320	PA-Coatesville WW	2,724	1	2,724	5	1	1	1	$ 82,158	$ 100,677	$ 44,508	83.0%	17.0%	$ 91,132	2,261	463
Parkesburg	PA	19365	PA - Sadsbury WW	238	1	238	1	1	1	1	$ 93,134	$ 106,313	$ 58,542	88.0%	12.0%	$ 100,589	209	29
Parkesburg	PA	19365	PA-Coatesville WW	1,141	1	1,141	1	1	1	1	$ 93,134	$ 106,313	$ 58,542	88.0%	12.0%	$ 100,589	1,004	137
Sadsburyville	PA	19369	PA-Sadsbury WW	225	1	225	14	1	0	1	-	-	-	13.5%	86.5%	$ -	30	195
Pottstown	PA	19464	Upper Pottsgrove WW	1,494	1	1,494	1	1	1	1	$ 67,891	$ 89,364	$ 39,153	79.7%	20.3%	$ 79,155	1,190	304
Pottstown	PA	19465	Upper Pottsgrove WW	16	1	16	1	1	1	1	$ 94,949	$ 111,231	$ 51,058	93.5%	6.5%	$ 107,292	15	1
Royersford	PA	19468	Royersford WW	1,276	1	1,276	10	1	1	1	$ 89,661	$ 106,250	$ 54,512	92.9%	7.1%	$ 102,592	1,186	90
Birdsboro	PA	19508	PA-Exeter Twp WW	1,156	1	1,156	1	1	1	1	$ 73,488	$ 83,550	$ 34,496	92.7%	7.3%	$ 79,974	1,072	84
Reading	PA	19601	PA-Exeter Twp WW	1	1	1	1	1	1	1	$ 34,405	$ 52,345	$ 26,409	62.6%	37.4%	$ 42,649	1	0
Reading	PA	19606	PA-Exeter Twp WW	6,393	1	6,393	1	1	1	1	$ 74,654	$ 86,914	$ 44,879	87.8%	12.2%	$ 81,772	5,611	782
Reading	PA	19606	PA-Glen	2	1	2	1	1	1	1	$ 74,654	$ 86,914	$ 44,879	87.8%	12.2%	$ 81,772	2	0
Reading	PA	19607	PA-Exeter Twp WW	26	1	26	1	1	1	1	$ 71,606	$ 86,651	$ 53,130	83.5%	16.5%	$ 81,124	22	4
Reading	PA	19608	PA-Exeter Twp WW	26	1	26	1	1	1	1	$ 98,750	$ 120,034	$ 47,371	87.3%	12.7%	$ 110,839	23	3
Reading	PA	19610	PA-Exeter Twp WW	4	1	4	1	1	1	1	$ 83,628	$ 106,307	$ 57,000	91.5%	8.5%	$ 102,113	4	0
TOTAL CUSTOMERS				108,324		108,324												

calculated median customer income $ 68,126
analyzed customers 106,672

statewide calculated median household income $ 71,602 PA
ratio 0.9515

TOTAL COMMUNITIES: 84

City	State	Zip Code	Profit Center	Total Persons per Household	Owned Persons per Household	Rented Persons per Household	Total Population	Population Below .50 FPL	Population 0.50 - 1.00 FPL	Population 1.00 - 1.25 FPL	Population 1.25 - 1.50 FPL	Population 1.50 - 1.85 FPL	Population 1.85 - 2.00 FPL	Population Over 2.00 FPL	Total Housing Units	Owned Housing Units	Rented Housing Units
Beaver Falls	PA	15010	PA-Koppel WW	2.35	2.47	2.08	27,690	2,131	1,427	1,128	675	1,645	884	19,800	11,743	8,263	3,480
Dravosburg	PA	15034	PA-McKeesport WW	1.87	2.10	1.65	1,592	41	223	58	165	50	137	918	850	420	430
Duquesne	PA	15110	PA-McKeesport WW	2.45	2.26	2.61	5,277	1,045	446	189	582	892	100	2,023	2,138	997	1,141
Duquesne	PA	15110	PA-McKeesport WW	2.45	2.26	2.61	5,277	1,045	446	189	582	892	100	2,023	2,138	997	1,141
West Mifflin	PA	15122	PA-McKeesport WW	2.33	2.30	2.42	19,144	1,560	1,129	1,137	511	1,727	255	12,825	8,237	6,388	1,849
Mckeesport	PA	15131	PA-McKeesport WW	2.06	2.23	1.65	8,108	434	336	112	600	551	124	5,951	3,952	2,805	1,147
Mckeesport	PA	15132	PA-McKeesport WW	2.05	2.23	1.88	18,901	2,115	2,901	909	1,464	2,034	983	8,495	9,155	4,413	4,742
Mckeesport	PA	15132	PA-McKeesport WW	2.05	2.23	1.88	18,901	2,115	2,901	909	1,464	2,034	983	8,495	9,155	4,413	4,742
Mckeesport	PA	15133	PA-McKeesport WW	2.16	2.19	2.06	6,078	177	276	360	350	331	116	4,468	2,812	2,138	674
Mckeesport	PA	15133	PA-McKeesport WW	2.16	2.19	2.06	6,078	177	276	360	350	331	116	4,468	2,812	2,138	674
Pittsburgh	PA	15227	PA-Brentwood WW	2.28	2.37	2.04	29,202	1,787	1,637	959	811	2,080	879	21,049	12,833	9,232	3,601
Claysville	PA	15323	PA-Claysville WW	2.45	2.54	2.06	3,895	128	220	121	124	169	72	3,061	1,574	1,295	279
Farmington	PA	15437	PA-Farmington WW	2.50	2.37	2.74	2,488	644	230	94	52	135	27	1,306	774	496	278
Butler	PA	16001	PA-BASA WW	2.16	2.37	1.72	39,181	1,883	2,566	1,666	1,551	1,899	1,031	28,585	18,074	12,314	5,760
Butler	PA	16002	PA-BASA WW	2.43	2.47	2.17	15,482	602	566	402	480	1,505	462	11,465	6,348	5,476	872
East Butler	PA	16029	PA-BASA WW	2.46	2.64	1.91	910	33	36	147	78	32	22	562	370	280	90
Lyndora	PA	16045	PA-BASA WW	2.66	2.63	2.73	1,126	148	107	42	32	62	42	693	422	275	147
Koppel	PA	16136	PA-Koppel WW	2.37	2.63	1.72	777	13	34	36	61	118	11	504	328	234	94
Wampum	PA	16157	PA-Koppel WW	2.22	2.30	1.96	2,845	59	307	151	97	204	33	1,994	1,292	1,009	283
Clarion	PA	16214	PA-Clarion WW	2.47	2.66	2.28	7,887	1,279	657	328	562	427	53	4,581	3,194	1,579	1,615
Shippenville	PA	16254	PA-Clarion WW	2.50	2.45	2.74	3,379	130	240	207	176	235	64	2,327	1,348	1,098	250
Shippenville	PA	16254	PA-Paint Elk Twp WW	2.50	2.45	2.74	3,379	130	240	207	176	235	64	2,327	1,348	1,098	250
Strattanville	PA	16258	PA-Clarion WW	2.17	2.30	1.95	1,652	73	129	110	47	127	154	1,012	758	474	284
Kane	PA	16735	PA-Kane WW	2.38	2.58	1.80	5,997	215	446	384	312	414	254	3,972	2,531	1,899	632
Camp Hill	PA	17011	PA-Fairvew WW	2.45	2.65	2.05	33,584	1,335	1,080	284	1,051	1,231	467	28,136	13,698	9,200	4,498
Mechanicsburg	PA	17055	PA-Fairvew WW	2.22	2.38	1.82	38,355	962	1,227	792	1,473	1,445	997	31,459	17,310	12,348	4,962
New Cumberland	PA	17070	PA-Fairvew WW	2.28	2.38	1.93	16,842	476	704	596	487	697	416	13,466	7,393	5,681	1,712
New Cumberland	PA	17070	PA-Mechanicsburg	2.28	2.38	1.93	16,842	476	704	596	487	697	416	13,466	7,393	5,681	1,712
New Cumberland	PA	17070	PA-New Cumberland WV	2.28	2.38	1.93	16,842	476	704	596	487	697	416	13,466	7,393	5,681	1,712
Biglerville	PA	17307	PA-Fairvew WW	2.49	2.48	2.52	5,702	278	289	175	174	448	311	4,027	2,277	1,802	475
Biglerville	PA	17307	PA-FRANKLIN WW	2.49	2.48	2.52	5,702	278	289	175	174	448	311	4,027	2,277	1,802	475
Etters	PA	17319	PA-Fairvew WW	2.70	2.77	2.20	11,238	201	437	98	147	336	452	9,567	4,172	3,687	485
Lewisberry	PA	17339	PA-Fairvew WW	2.37	2.48	1.83	6,213	100	90	163	21	435	89	5,315	2,627	2,181	446
Orrtanna	PA	17353	PA-FRANKLIN WW	2.56	2.46	2.95	2,871	187	241	18	114	102	-	2,209	1,121	895	226
York	PA	17401	PA-York WW (future)	2.45	2.02	2.64	18,119	2,918	3,552	1,447	1,332	1,710	1,176	5,984	7,286	2,166	5,120
York	PA	17403	PA-York WW (future)	2.46	2.53	2.35	36,916	2,949	3,368	2,112	1,291	2,340	1,087	23,769	14,963	9,482	5,481
York	PA	17404	PA-York WW (future)	2.55	2.58	2.47	37,532	1,704	1,565	1,467	1,707	1,881	1,068	28,140	14,699	10,543	4,156
York	PA	17406	PA-York WW (future)	2.53	2.55	2.42	23,242	436	866	811	558	724	714	19,133	9,271	7,391	1,880
Mc Ewensville	PA	17749	PA-McEwensville WW	2.52	2.93	1.96	317	22	5	8	36	18	3	225	126	72	54
Mc Ewensville	PA	17749	PA-McEwensville WW	2.52	2.93	1.96	317	22	5	8	36	18	3	225	126	72	54
Turbotville	PA	17772	PA-Turbotville WW	2.47	2.53	2.05	2,380	79	134	42	82	126	89	1,828	963	845	118
Watsontown	PA	17777	PA-McEwensville WW	2.54	2.74	1.91	6,747	194	316	241	466	298	212	5,020	2,652	2,021	631
Drifton	PA	18221	Foster Township WW	2.72	2.21	4.07	406	-	35	-	-	16	-	355	149	108	41
Freeland	PA	18224	Foster Township WW	2.34	2.38	2.25	6,353	344	511	238	785	213	189	4,073	2,711	1,953	758
East Stroudsburg	PA	18301	PA-Lehman Pike WW	2.94	2.96	2.88	28,494	1,130	2,316	1,038	890	1,677	447	20,996	9,701	6,792	2,909
East Stroudsburg	PA	18301	PA-Pocono BlueMtn WV	2.94	2.96	2.88	28,494	1,130	2,316	1,038	890	1,677	447	20,996	9,701	6,792	2,909
East Stroudsburg	PA	18302	PA-Lehman Pike WW	2.92	2.84	3.41	17,649	712	1,209	532	721	1,234	771	12,470	6,036	5,172	864
East Stroudsburg	PA	18302	PA-Pocono BlueMtn WV	2.92	2.84	3.41	17,649	712	1,209	532	721	1,234	771	12,470	6,036	5,172	864
East Stroudsburg	PA	18302	PA-Winona Lake WW	2.92	2.84	3.41	17,649	712	1,209	532	721	1,234	771	12,470	6,036	5,172	864
Bushkill	PA	18324	PA-Lehman Pike WW	2.61	2.58	2.79	9,587	495	796	232	676	750	237	6,401	3,668	3,114	554
Bushkill	PA	18324	PA-Winona Lake WW	2.61	2.58	2.79	9,587	495	796	232	676	750	237	6,401	3,668	3,114	554
Dingmans Ferry	PA	18328	PA-CLN TRTMT WW	2.58	2.48	3.34	7,819	833	288	365	403	317	81	5,532	3,041	2,690	351
Dingmans Ferry	PA	18328	PA-Lehman Pike WW	2.58	2.48	3.34	7,819	833	288	365	403	317	81	5,532	3,041	2,690	351
Pocono Summit	PA	18346	PA-Pocono WW	2.43	2.45	2.20	2,605	232	114	40	197	8	144	1,870	1,070	990	80
Moscow	PA	18444	PA-Scranton WW	2.60	2.70	2.17	13,945	716	558	388	549	562	224	10,948	5,364	4,428	936
Tobyhanna	PA	18466	PA-Pocono WW	3.04	3.11	2.85	17,472	1,404	1,390	1,122	352	1,600	401	11,203	5,753	4,206	1,547
Scranton	PA	18503	PA-Scranton WW	1.19	1.19	1.19	705	83	100	73	49	50	-	350	577	24	553
Scranton	PA	18504	PA-Scranton WW	2.41	2.44	2.37	20,430	1,505	1,960	839	887	1,708	711	12,820	8,507	5,134	3,373
Scranton	PA	18505	PA-Scranton WW	2.54	2.51	2.57	21,214	2,093	2,003	1,848	1,138	1,233	385	12,514	8,360	4,533	3,827
Moosic	PA	18507	PA-Scranton WW	2.56	2.80	2.03	5,463	132	373	416	154	140	15	4,233	2,132	1,464	668
Scranton	PA	18508	PA-Scranton WW	2.26	2.38	2.16	10,852	950	1,288	739	437	887	570	5,981	4,771	2,225	2,546
Scranton	PA	18509	PA-Scranton WW	2.31	2.80	1.88	12,519	1,255	1,473	389	536	1,211	618	7,037	5,275	2,460	2,815
Scranton	PA	18510	PA-Scranton WW	2.26	2.31	2.22	10,849	1,019	1,311	782	562	604	332	6,239	4,822	1,903	2,919
Scranton	PA	18512	PA-Scranton WW	2.24	2.54	1.63	12,728	490	696	401	493	829	800	9,019	5,678	3,787	1,891
Taylor	PA	18517	PA-Scranton WW	2.37	2.33	2.46	5,032	424	410	344	-	299	96	3,459	2,139	1,475	664
Scranton	PA	18519	PA-Scranton WW	2.29	2.41	2.07	5,226	407	275	150	332	456	51	3,555	2,280	1,443	837
Kingston	PA	18704	PA-Scranton WW	2.26	2.39	2.08	30,372	2,502	2,360	1,290	1,628	2,044	728	19,820	13,420	7,883	5,537
Clifton Heights	PA	19018	PA-Lehman Pike WW	2.42	2.69	1.94	23,296	862	1,412	1,641	780	1,123	518	16,960	9,603	6,218	3,385

TOTAL COMMUNITIES: 84

City	State	Zip Code	Profit Center	Total Persons per Household	Owned Persons per Household	Rented Persons per Household	Total Population	Population Below .50 FPL	Population 0.50 - 1.00 FPL	Population 1.00 - 1.25 FPL	Population 1.25 - 1.50 FPL	Population 1.50 - 1.85 FPL	Population 1.85 - 2.00 FPL	Population Over 2.00 FPL	Total Housing Units	Owned Housing Units	Rented Housing Units
Coatesville	PA	19320	PA - Sadsbury WW	2.69	2.65	2.79	54,235	2,646	2,928	2,088	1,316	2,430	1,976	40,851	19,960	14,605	5,355
Coatesville	PA	19320	PA-Coatesville WW	2.69	2.65	2.79	54,235	2,646	2,928	2,088	1,316	2,430	1,976	40,851	19,960	14,605	5,355
Coatesville	PA	19320	PA-Coatesville WW	2.69	2.65	2.79	54,235	2,646	2,928	2,088	1,316	2,430	1,976	40,851	19,960	14,605	5,355
Parkesburg	PA	19365	PA - Sadsbury WW	2.76	2.87	2.44	7,554	211	182	254	87	269	276	6,275	2,729	2,042	687
Parkesburg	PA	19365	PA-Coatesville WW	2.76	2.87	2.44	7,554	211	182	254	87	269	276	6,275	2,729	2,042	687
Sadsburyville	PA	19369	PA-Sadsbury WW	1.54	2.00	1.47	80	44	-	-	-	-	-	36	52	7	45
Pottstown	PA	19464	Upper Pottsgrove WW	2.57	2.61	2.50	47,728	2,970	2,411	1,600	1,791	3,557	951	34,448	18,586	11,970	6,616
Pottstown	PA	19465	Upper Pottsgrove WW	2.56	2.66	2.18	18,546	488	479	391	204	733	220	16,031	7,244	5,754	1,490
Royersford	PA	19468	Royersford WW	2.49	2.61	2.12	26,271	597	944	491	679	584	491	22,485	10,572	7,952	2,620
Birdsboro	PA	19508	PA-Exeter Twp WW	2.52	2.69	1.74	15,315	365	866	298	530	835	382	12,039	6,084	5,011	1,073
Reading	PA	19601	PA-Exeter Twp WW	2.84	3.05	2.70	35,537	5,363	6,425	2,571	2,383	3,347	1,742	13,706	12,390	4,782	7,608
Reading	PA	19606	PA-Exeter Twp WW	2.59	2.64	2.44	35,710	1,583	1,321	547	963	1,826	769	28,701	13,771	10,790	2,981
Reading	PA	19606	PA-Glen	2.59	2.64	2.44	35,710	1,583	1,321	547	963	1,826	769	28,701	13,771	10,790	2,981
Reading	PA	19607	PA-Exeter Twp WW	2.40	2.44	2.33	23,101	955	1,376	298	262	1,880	674	17,656	9,592	6,204	3,388
Reading	PA	19608	PA-Exeter Twp WW	2.70	2.77	2.44	23,335	837	328	744	622	618	255	19,931	8,662	6,847	1,815
Reading	PA	19610	PA-Exeter Twp WW	2.22	2.50	1.56	15,089	326	342	203	393	651	315	12,859	6,783	4,765	2,018
TOTAL CUSTOMERS				2.47	Persons per Customer Household		1,313,456	75,998	85,009	49,862	49,317	77,638	37,866	937,766			

TOTAL COMMUNITIES: 84

City	State	Zip Code	Profit Center	--- Distribution of Income for Owned Units --- 0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Beaver Falls	PA	15010	PA-Koppel WW	1.68%	1.54%	1.67%	2.36%	3.84%	6.35%	11.16%	17.77%	15.91%	23.24%	14.49%	100.00%
Dravosburg	PA	15034	PA-McKeesport WW	4.05%	1.67%	0.00%	4.52%	1.19%	17.62%	14.52%	24.05%	14.52%	7.86%	10.00%	100.00%
Duquesne	PA	15110	PA-McKeesport WW	4.21%	3.31%	3.71%	5.82%	3.71%	13.94%	21.66%	18.76%	8.63%	14.04%	2.21%	100.00%
Duquesne	PA	15110	PA-McKeesport WW	4.21%	3.31%	3.71%	5.82%	3.71%	13.94%	21.66%	18.76%	8.63%	14.04%	2.21%	100.00%
West Mifflin	PA	15122	PA-McKeesport WW	2.54%	1.22%	2.68%	6.53%	2.97%	9.05%	11.21%	17.44%	17.50%	18.96%	9.91%	100.00%
Mckeesport	PA	15131	PA-McKeesport WW	0.04%	3.81%	0.57%	2.03%	2.35%	8.24%	16.26%	14.33%	24.88%	15.29%	12.19%	100.00%
Mckeesport	PA	15132	PA-McKeesport WW	3.20%	2.36%	9.29%	5.73%	4.69%	12.78%	17.18%	14.68%	11.35%	13.39%	5.35%	100.00%
Mckeesport	PA	15132	PA-McKeesport WW	3.20%	2.36%	9.29%	5.73%	4.69%	12.78%	17.18%	14.68%	11.35%	13.39%	5.35%	100.00%
Mckeesport	PA	15133	PA-McKeesport WW	3.13%	0.56%	1.96%	4.82%	5.75%	9.64%	14.03%	22.03%	14.41%	16.70%	6.97%	100.00%
Mckeesport	PA	15133	PA-McKeesport WW	3.13%	0.56%	1.96%	4.82%	5.75%	9.64%	14.03%	22.03%	14.41%	16.70%	6.97%	100.00%
Pittsburgh	PA	15227	PA-Brentwood WW	1.75%	0.74%	1.94%	1.36%	1.87%	7.97%	11.02%	19.37%	18.85%	23.30%	11.83%	100.00%
Claysville	PA	15323	PA-Claysville WW	0.00%	0.31%	3.32%	3.17%	4.02%	11.04%	9.27%	18.53%	14.83%	17.53%	17.99%	100.00%
Farmington	PA	15437	PA-Farmington WW	0.00%	0.00%	6.25%	5.85%	1.61%	14.92%	9.27%	19.56%	15.32%	22.58%	4.64%	100.00%
Butler	PA	16001	PA-BASA WW	1.61%	0.98%	2.35%	3.13%	3.70%	8.37%	11.47%	17.32%	13.75%	22.80%	14.53%	100.00%
Butler	PA	16002	PA-BASA WW	3.32%	2.34%	2.83%	1.77%	4.40%	7.03%	6.98%	18.37%	16.65%	19.61%	16.69%	100.00%
East Butler	PA	16029	PA-BASA WW	0.71%	2.14%	0.00%	1.07%	2.14%	22.86%	18.93%	18.57%	15.00%	14.29%	4.29%	100.00%
Lyndora	PA	16045	PA-BASA WW	0.00%	3.27%	0.00%	7.64%	0.00%	4.00%	15.27%	24.36%	11.27%	27.64%	6.55%	100.00%
Koppel	PA	16136	PA-Koppel WW	0.00%	1.71%	1.71%	3.85%	13.25%	4.27%	10.68%	28.63%	20.09%	14.53%	1.28%	100.00%
Wampum	PA	16157	PA-Koppel WW	0.30%	1.68%	4.16%	4.06%	3.67%	11.30%	13.68%	17.34%	18.93%	13.78%	11.10%	100.00%
Clarion	PA	16214	PA-Clarion WW	2.60%	0.00%	2.85%	1.52%	4.24%	3.86%	11.02%	19.89%	14.19%	19.95%	19.89%	100.00%
Shippenville	PA	16254	PA-Clarion WW	2.82%	1.00%	3.92%	5.01%	4.74%	13.11%	13.57%	17.12%	11.84%	16.39%	10.47%	100.00%
Shippenville	PA	16254	PA-Paint Elk Twp WW	2.82%	1.00%	3.92%	5.01%	4.74%	13.11%	13.57%	17.12%	11.84%	16.39%	10.47%	100.00%
Strattanville	PA	16258	PA-Clarion WW	3.38%	0.00%	1.27%	5.91%	2.32%	12.45%	21.31%	16.88%	9.07%	21.10%	6.33%	100.00%
Kane	PA	16735	PA-Kane WW	3.05%	0.74%	4.05%	5.27%	5.42%	8.27%	20.17%	17.06%	15.53%	12.43%	8.00%	100.00%
Camp Hill	PA	17011	PA-Fairvew WW	0.75%	0.18%	1.05%	1.11%	2.30%	5.50%	8.90%	14.12%	15.25%	24.98%	25.85%	100.00%
Mechanicsburg	PA	17055	PA-Fairvew WW	1.06%	0.87%	0.74%	3.15%	3.40%	4.04%	9.17%	13.66%	14.75%	23.91%	25.24%	100.00%
New Cumberland	PA	17070	PA-Fairvew WW	0.63%	0.99%	0.32%	1.57%	2.09%	6.32%	6.64%	19.75%	15.68%	26.79%	19.22%	100.00%
New Cumberland	PA	17070	PA-Mechanicsburg	0.63%	0.99%	0.32%	1.57%	2.09%	6.32%	6.64%	19.75%	15.68%	26.79%	19.22%	100.00%
New Cumberland	PA	17070	PA-New Cumberland WV	0.63%	0.99%	0.32%	1.57%	2.09%	6.32%	6.64%	19.75%	15.68%	26.79%	19.22%	100.00%
Biglerville	PA	17307	PA-Fairvew WW	0.61%	3.94%	1.00%	0.61%	3.50%	3.88%	13.32%	17.15%	20.20%	23.53%	12.26%	100.00%
Biglerville	PA	17307	PA-FRANKLIN WW	0.61%	3.94%	1.00%	0.61%	3.50%	3.88%	13.32%	17.15%	20.20%	23.53%	12.26%	100.00%
Etters	PA	17319	PA-Fairvew WW	1.49%	1.60%	0.27%	0.33%	0.98%	4.20%	6.10%	18.55%	25.87%	24.33%	16.27%	100.00%
Lewisberry	PA	17339	PA-Fairvew WW	1.15%	0.37%	0.64%	2.02%	1.15%	2.06%	10.87%	14.90%	20.91%	24.12%	21.82%	100.00%
Orrtanna	PA	17353	PA-FRANKLIN WW	0.00%	0.00%	2.01%	2.01%	3.35%	7.37%	11.73%	16.98%	21.68%	14.41%	20.45%	100.00%
York	PA	17401	PA-York WW (future)	1.25%	2.12%	3.60%	4.48%	9.14%	19.53%	18.05%	28.39%	4.25%	7.20%	1.99%	100.00%
York	PA	17403	PA-York WW (future)	1.86%	1.89%	1.76%	3.30%	3.91%	7.16%	9.33%	16.00%	15.08%	22.09%	17.61%	100.00%
York	PA	17404	PA-York WW (future)	2.17%	1.30%	1.49%	1.80%	2.38%	6.64%	13.50%	20.88%	14.95%	19.56%	15.34%	100.00%
York	PA	17406	PA-York WW (future)	1.43%	0.53%	0.70%	3.29%	2.31%	4.76%	10.69%	20.39%	17.81%	16.95%	21.13%	100.00%
Mc Ewensville	PA	17749	PA-McEwensville WW	0.00%	0.00%	0.00%	5.56%	6.94%	6.94%	9.72%	29.17%	9.72%	30.56%	1.39%	100.00%
Mc Ewensville	PA	17749	PA-McEwensville WW	0.00%	0.00%	0.00%	5.56%	6.94%	6.94%	9.72%	29.17%	9.72%	30.56%	1.39%	100.00%
Turbotville	PA	17772	PA-Turbotville WW	0.47%	0.83%	2.01%	2.72%	3.91%	7.69%	16.21%	12.19%	10.77%	36.21%	6.98%	100.00%
Watsontown	PA	17777	PA-McEwensville WW	0.45%	0.74%	4.60%	3.71%	2.28%	11.97%	15.54%	19.40%	13.11%	15.88%	12.32%	100.00%
Drifton	PA	18221	Foster Township WW	0.00%	0.00%	0.00%	0.00%	14.81%	0.00%	9.26%	37.04%	38.89%	0.00%	0.00%	100.00%
Freeland	PA	18224	Foster Township WW	0.00%	3.02%	5.12%	4.86%	3.12%	16.13%	13.01%	20.33%	18.64%	11.88%	3.89%	100.00%
East Stroudsburg	PA	18301	PA-Lehman Pike WW	1.87%	0.00%	0.80%	1.34%	2.34%	4.70%	9.89%	14.44%	13.31%	24.00%	27.31%	100.00%
East Stroudsburg	PA	18301	PA-Pocono BlueMtn WV	1.87%	0.00%	0.80%	1.34%	2.34%	4.70%	9.89%	14.44%	13.31%	24.00%	27.31%	100.00%
East Stroudsburg	PA	18302	PA-Lehman Pike WW	1.31%	1.47%	3.85%	6.88%	2.86%	4.45%	11.52%	17.32%	11.39%	24.71%	14.23%	100.00%
East Stroudsburg	PA	18302	PA-Pocono BlueMtn WV	1.31%	1.47%	3.85%	6.88%	2.86%	4.45%	11.52%	17.32%	11.39%	24.71%	14.23%	100.00%
East Stroudsburg	PA	18302	PA-Winona Lake WW	1.31%	1.47%	3.85%	6.88%	2.86%	4.45%	11.52%	17.32%	11.39%	24.71%	14.23%	100.00%
Bushkill	PA	18324	PA-Lehman Pike WW	1.28%	0.74%	3.60%	4.46%	3.66%	13.74%	5.23%	15.03%	15.35%	28.97%	7.93%	100.00%
Bushkill	PA	18324	PA-Winona Lake WW	1.28%	0.74%	3.60%	4.46%	3.66%	13.74%	5.23%	15.03%	15.35%	28.97%	7.93%	100.00%
Dingmans Ferry	PA	18328	PA-CLN TRTMT WW	1.45%	2.53%	3.83%	2.19%	1.82%	4.13%	8.25%	25.95%	19.33%	15.24%	15.28%	100.00%
Dingmans Ferry	PA	18328	PA-Lehman Pike WW	1.45%	2.53%	3.83%	2.19%	1.82%	4.13%	8.25%	25.95%	19.33%	15.24%	15.28%	100.00%
Pocono Summit	PA	18346	PA-Pocono WW	8.59%	0.81%	1.41%	3.64%	0.00%	1.72%	24.34%	15.66%	2.83%	27.07%	13.94%	100.00%
Moscow	PA	18444	PA-Scranton WW	1.56%	0.45%	1.85%	1.81%	4.20%	5.83%	10.32%	16.01%	16.08%	23.83%	18.07%	100.00%
Tobyhanna	PA	18466	PA-Pocono WW	0.05%	1.55%	2.92%	2.83%	3.21%	2.35%	15.19%	22.56%	18.85%	16.36%	14.12%	100.00%
Scranton	PA	18503	PA-Scranton WW	0.00%	0.00%	0.00%	37.50%	0.00%	0.00%	29.17%	33.33%	0.00%	0.00%	0.00%	100.00%
Scranton	PA	18504	PA-Scranton WW	2.06%	0.68%	3.70%	4.99%	3.37%	11.18%	12.56%	18.23%	15.60%	17.80%	9.82%	100.00%
Scranton	PA	18505	PA-Scranton WW	3.42%	0.77%	1.15%	3.07%	5.38%	7.88%	17.45%	15.13%	13.35%	20.71%	11.69%	100.00%
Moosic	PA	18507	PA-Scranton WW	1.09%	0.00%	3.62%	2.19%	4.10%	1.91%	15.23%	8.47%	14.62%	29.37%	19.40%	100.00%
Scranton	PA	18508	PA-Scranton WW	0.67%	2.16%	3.82%	4.00%	5.21%	7.01%	18.02%	26.16%	13.53%	11.78%	7.64%	100.00%
Scranton	PA	18509	PA-Scranton WW	0.61%	1.63%	2.07%	1.34%	3.33%	5.85%	10.49%	14.92%	18.29%	23.58%	17.89%	100.00%
Scranton	PA	18510	PA-Scranton WW	1.58%	0.00%	2.84%	1.37%	7.57%	6.20%	10.88%	25.64%	11.88%	22.44%	9.62%	100.00%
Scranton	PA	18512	PA-Scranton WW	3.06%	0.50%	3.09%	2.43%	4.41%	5.55%	11.38%	19.99%	16.69%	23.98%	8.93%	100.00%
Taylor	PA	18517	PA-Scranton WW	1.08%	0.00%	5.76%	6.31%	3.46%	2.44%	9.49%	20.27%	13.36%	22.92%	14.92%	100.00%
Scranton	PA	18519	PA-Scranton WW	0.97%	0.62%	1.52%	3.53%	1.73%	4.92%	11.23%	18.92%	24.39%	18.64%	13.51%	100.00%
Kingston	PA	18704	PA-Scranton WW	1.45%	1.33%	2.56%	4.03%	2.88%	5.49%	12.23%	18.48%	18.79%	18.44%	14.31%	100.00%
Clifton Heights	PA	19018	PA-Lehman Pike WW	1.98%	1.01%	1.14%	2.88%	2.52%	8.25%	14.01%	15.21%	15.87%	20.59%	16.53%	100.00%

TOTAL COMMUNITIES: 84

				--- Distribution of Income for Owned Units ---											
City	State	Zip Code	Profit Center	0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Coatesville	PA	19320	PA - Sadsbury WW	0.73%	0.38%	0.76%	1.43%	1.80%	3.40%	7.39%	18.50%	15.21%	25.14%	25.27%	100.00%
Coatesville	PA	19320	PA-Coatesville WW	0.73%	0.38%	0.76%	1.43%	1.80%	3.40%	7.39%	18.50%	15.21%	25.14%	25.27%	100.00%
Coatesville	PA	19320	PA-Coatesville WW	0.73%	0.38%	0.76%	1.43%	1.80%	3.40%	7.39%	18.50%	15.21%	25.14%	25.27%	100.00%
Parkesburg	PA	19365	PA - Sadsbury WW	0.39%	0.15%	1.57%	1.62%	2.69%	2.06%	5.93%	14.89%	15.48%	29.43%	25.81%	100.00%
Parkesburg	PA	19365	PA-Coatesville WW	0.39%	0.15%	1.57%	1.62%	2.69%	2.06%	5.93%	14.89%	15.48%	29.43%	25.81%	100.00%
Sadsburyville	PA	19369	PA-Sadsbury WW	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
Pottstown	PA	19464	Upper Pottsgrove WW	1.15%	0.28%	1.33%	2.29%	3.37%	6.62%	8.06%	18.06%	17.24%	21.50%	20.09%	100.00%
Pottstown	PA	19465	Upper Pottsgrove WW	1.48%	1.06%	0.35%	1.37%	1.04%	4.92%	7.16%	12.58%	13.23%	22.14%	34.67%	100.00%
Royersford	PA	19468	Royersford WW	1.06%	0.29%	0.49%	0.99%	1.27%	4.50%	7.37%	13.46%	18.79%	20.26%	31.53%	100.00%
Birdsboro	PA	19508	PA-Exeter Twp WW	0.72%	0.60%	2.16%	3.59%	1.74%	7.02%	10.94%	16.76%	15.41%	27.24%	13.83%	100.00%
Reading	PA	19601	PA-Exeter Twp WW	2.34%	5.33%	5.27%	3.85%	5.90%	12.67%	11.79%	18.26%	16.33%	10.64%	7.61%	100.00%
Reading	PA	19606	PA-Exeter Twp WW	1.61%	0.88%	1.46%	1.50%	2.09%	8.03%	9.15%	18.10%	14.73%	21.53%	20.92%	100.00%
Reading	PA	19606	PA-Glen	1.61%	0.88%	1.46%	1.50%	2.09%	8.03%	9.15%	18.10%	14.73%	21.53%	20.92%	100.00%
Reading	PA	19607	PA-Exeter Twp WW	1.68%	0.63%	1.85%	2.84%	1.61%	4.42%	11.46%	17.49%	17.75%	22.39%	17.89%	100.00%
Reading	PA	19608	PA-Exeter Twp WW	0.91%	0.55%	1.62%	1.93%	0.55%	3.34%	6.43%	11.22%	14.24%	24.33%	34.88%	100.00%
Reading	PA	19610	PA-Exeter Twp WW	0.55%	0.78%	1.97%	1.09%	3.23%	4.32%	10.09%	17.90%	8.73%	19.08%	32.26%	100.00%
TOTAL CUSTOMERS				1,433	945	2,088	2,524	3,092	6,959	10,200	16,209	12,874	18,040	12,469	86,834

TOTAL COMMUNITIES: 84

City	State	Zip Code	Profit Center	--- Distribution of Income for Rented Units --- 0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Beaver Falls	PA	15010	PA-Koppel WW	6.58%	8.68%	8.53%	6.18%	10.60%	14.28%	15.78%	12.99%	5.63%	5.72%	5.03%	100.00%
Dravosburg	PA	15034	PA-McKeesport WW	4.19%	3.49%	13.26%	18.14%	22.56%	7.44%	16.05%	7.67%	3.95%	1.86%	1.40%	100.00%
Duquesne	PA	15110	PA-McKeesport WW	9.03%	10.43%	13.50%	7.27%	5.00%	8.06%	17.79%	18.40%	8.24%	1.58%	0.70%	100.00%
Duquesne	PA	15110	PA-McKeesport WW	9.03%	10.43%	13.50%	7.27%	5.00%	8.06%	17.79%	18.40%	8.24%	1.58%	0.70%	100.00%
West Mifflin	PA	15122	PA-McKeesport WW	8.33%	10.33%	8.22%	6.27%	3.35%	14.33%	18.66%	9.36%	11.84%	7.41%	1.89%	100.00%
Mckeesport	PA	15131	PA-McKeesport WW	3.66%	8.98%	8.37%	9.94%	2.70%	14.30%	30.51%	8.98%	11.60%	0.96%	0.00%	100.00%
Mckeesport	PA	15132	PA-McKeesport WW	7.47%	6.75%	14.32%	9.87%	12.36%	15.58%	12.63%	14.38%	3.90%	1.41%	1.33%	100.00%
Mckeesport	PA	15132	PA-McKeesport WW	7.47%	6.75%	14.32%	9.87%	12.36%	15.58%	12.63%	14.38%	3.90%	1.41%	1.33%	100.00%
Mckeesport	PA	15133	PA-McKeesport WW	2.37%	0.00%	5.64%	2.08%	12.02%	15.73%	6.08%	31.45%	16.02%	6.23%	2.37%	100.00%
Mckeesport	PA	15133	PA-McKeesport WW	2.37%	0.00%	5.64%	2.08%	12.02%	15.73%	6.08%	31.45%	16.02%	6.23%	2.37%	100.00%
Pittsburgh	PA	15227	PA-Brentwood WW	8.89%	1.42%	14.16%	8.83%	6.91%	13.75%	18.52%	13.77%	3.36%	7.39%	3.00%	100.00%
Claysville	PA	15323	PA-Claysville WW	3.58%	1.08%	12.90%	12.90%	7.89%	7.53%	8.60%	18.64%	11.83%	13.62%	1.43%	100.00%
Farmington	PA	15437	PA-Farmington WW	8.99%	0.00%	7.55%	0.00%	0.00%	0.00%	22.66%	32.01%	4.68%	21.22%	2.88%	100.00%
Butler	PA	16001	PA-BASA WW	6.11%	5.66%	16.13%	6.42%	8.02%	15.71%	13.39%	16.53%	7.55%	3.52%	0.95%	100.00%
Butler	PA	16002	PA-BASA WW	6.54%	9.98%	7.34%	2.52%	3.33%	22.13%	18.00%	16.97%	6.77%	6.42%	0.00%	100.00%
East Butler	PA	16029	PA-BASA WW	0.00%	2.22%	18.89%	0.00%	5.56%	22.22%	13.33%	35.56%	0.00%	0.00%	2.22%	100.00%
Lyndora	PA	16045	PA-BASA WW	0.00%	10.20%	10.88%	8.84%	21.09%	4.76%	4.76%	0.00%	0.68%	38.78%	0.00%	100.00%
Koppel	PA	16136	PA-Koppel WW	3.19%	0.00%	24.47%	7.45%	7.45%	15.96%	8.51%	18.09%	10.64%	0.00%	4.26%	100.00%
Wampum	PA	16157	PA-Koppel WW	4.24%	2.83%	30.74%	12.37%	4.95%	15.55%	11.66%	9.89%	4.24%	3.53%	0.00%	100.00%
Clarion	PA	16214	PA-Clarion WW	7.43%	14.98%	11.33%	7.37%	13.93%	10.90%	11.27%	11.52%	8.36%	1.67%	1.24%	100.00%
Shippenville	PA	16254	PA-Clarion WW	2.80%	2.40%	3.20%	10.00%	4.80%	12.00%	22.00%	20.80%	8.00%	12.40%	1.60%	100.00%
Shippenville	PA	16254	PA-Paint Elk Twp WW	2.80%	2.40%	3.20%	10.00%	4.80%	12.00%	22.00%	20.80%	8.00%	12.40%	1.60%	100.00%
Strattanville	PA	16258	PA-Clarion WW	0.00%	20.77%	4.23%	12.68%	8.10%	2.46%	16.90%	22.89%	11.62%	0.35%	0.00%	100.00%
Kane	PA	16735	PA-Kane WW	0.63%	6.01%	15.03%	9.18%	6.49%	23.42%	14.72%	13.61%	8.07%	1.74%	1.11%	100.00%
Camp Hill	PA	17011	PA-Fairvew WW	3.33%	5.09%	6.18%	3.51%	4.69%	9.05%	12.16%	20.56%	16.59%	13.67%	5.16%	100.00%
Mechanicsburg	PA	17055	PA-Fairvew WW	2.34%	3.33%	3.20%	9.65%	3.12%	13.99%	11.51%	25.90%	13.99%	7.90%	5.08%	100.00%
New Cumberland	PA	17070	PA-Fairvew WW	5.08%	5.02%	4.38%	10.57%	12.73%	4.91%	19.33%	11.92%	11.51%	10.75%	3.80%	100.00%
New Cumberland	PA	17070	PA-Mechanicsburg	5.08%	5.02%	4.38%	10.57%	12.73%	4.91%	19.33%	11.92%	11.51%	10.75%	3.80%	100.00%
New Cumberland	PA	17070	PA-New Cumberland W\	5.08%	5.02%	4.38%	10.57%	12.73%	4.91%	19.33%	11.92%	11.51%	10.75%	3.80%	100.00%
Biglerville	PA	17307	PA-Fairvew WW	2.95%	7.79%	5.89%	2.32%	10.95%	39.58%	6.74%	13.26%	7.79%	1.89%	0.84%	100.00%
Biglerville	PA	17307	PA-FRANKLIN WW	2.95%	7.79%	5.89%	2.32%	10.95%	39.58%	6.74%	13.26%	7.79%	1.89%	0.84%	100.00%
Etters	PA	17319	PA-Fairvew WW	6.19%	4.12%	10.10%	2.27%	0.00%	15.46%	27.42%	21.03%	6.19%	7.22%	0.00%	100.00%
Lewisberry	PA	17339	PA-Fairvew WW	9.64%	0.00%	0.00%	2.69%	1.35%	1.57%	19.73%	38.12%	6.50%	15.25%	5.16%	100.00%
Orrtanna	PA	17353	PA-FRANKLIN WW	15.49%	0.00%	14.16%	7.52%	0.00%	11.95%	17.26%	2.21%	15.04%	16.37%	0.00%	100.00%
York	PA	17401	PA-York WW (future)	4.84%	6.76%	16.00%	7.87%	6.88%	13.89%	16.43%	12.95%	8.20%	4.73%	1.46%	100.00%
York	PA	17403	PA-York WW (future)	4.87%	5.42%	10.71%	8.83%	8.54%	15.44%	14.96%	14.43%	10.80%	3.34%	2.66%	100.00%
York	PA	17404	PA-York WW (future)	6.98%	2.07%	2.43%	5.75%	5.70%	13.55%	18.17%	16.65%	17.18%	8.93%	2.60%	100.00%
York	PA	17406	PA-York WW (future)	0.85%	2.02%	2.29%	3.24%	2.23%	10.05%	18.94%	31.01%	18.78%	9.20%	1.38%	100.00%
Mc Ewensville	PA	17749	PA-McEwensville WW	3.70%	0.00%	0.00%	0.00%	7.41%	25.93%	37.04%	16.67%	9.26%	0.00%	0.00%	100.00%
Mc Ewensville	PA	17749	PA-McEwensville WW	3.70%	0.00%	0.00%	0.00%	7.41%	25.93%	37.04%	16.67%	9.26%	0.00%	0.00%	100.00%
Turbotville	PA	17772	PA-Turbotville WW	9.32%	10.17%	5.08%	11.02%	8.47%	12.71%	7.63%	11.86%	8.47%	11.02%	4.24%	100.00%
Watsontown	PA	17777	PA-McEwensville WW	0.95%	9.19%	6.50%	11.41%	8.40%	22.66%	13.31%	16.32%	9.51%	1.74%	0.00%	100.00%
Drifton	PA	18221	Foster Township WW	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
Freeland	PA	18224	Foster Township WW	9.23%	0.66%	11.74%	12.53%	2.90%	15.17%	7.12%	18.21%	10.29%	12.14%	0.00%	100.00%
East Stroudsburg	PA	18301	PA-Lehman Pike WW	4.37%	1.31%	7.94%	6.98%	12.24%	10.83%	12.17%	20.04%	10.48%	9.04%	4.61%	100.00%
East Stroudsburg	PA	18301	PA-Pocono BlueMtn WV	4.37%	1.31%	7.94%	6.98%	12.24%	10.83%	12.17%	20.04%	10.48%	9.04%	4.61%	100.00%
East Stroudsburg	PA	18302	PA-Lehman Pike WW	0.81%	0.00%	1.97%	0.81%	9.84%	6.13%	32.29%	27.08%	13.31%	4.17%	3.59%	100.00%
East Stroudsburg	PA	18302	PA-Pocono BlueMtn WV	0.81%	0.00%	1.97%	0.81%	9.84%	6.13%	32.29%	27.08%	13.31%	4.17%	3.59%	100.00%
East Stroudsburg	PA	18302	PA-Winona Lake WW	0.81%	0.00%	1.97%	0.81%	9.84%	6.13%	32.29%	27.08%	13.31%	4.17%	3.59%	100.00%
Bushkill	PA	18324	PA-Lehman Pike WW	14.26%	17.51%	2.17%	3.43%	7.40%	3.25%	27.62%	9.93%	3.97%	10.47%	0.00%	100.00%
Bushkill	PA	18324	PA-Winona Lake WW	14.26%	17.51%	2.17%	3.43%	7.40%	3.25%	27.62%	9.93%	3.97%	10.47%	0.00%	100.00%
Dingmans Ferry	PA	18328	PA-CLN TRTMT WW	12.54%	0.00%	17.95%	0.00%	35.33%	9.69%	7.41%	17.09%	0.00%	0.00%	0.00%	100.00%
Dingmans Ferry	PA	18328	PA-Lehman Pike WW	12.54%	0.00%	17.95%	0.00%	35.33%	9.69%	7.41%	17.09%	0.00%	0.00%	0.00%	100.00%
Pocono Summit	PA	18346	PA-Pocono WW	0.00%	5.00%	0.00%	37.50%	8.75%	0.00%	0.00%	27.50%	21.25%	0.00%	0.00%	100.00%
Moscow	PA	18444	PA-Scranton WW	5.13%	5.02%	11.86%	10.04%	3.42%	17.41%	8.97%	13.46%	16.03%	7.48%	1.18%	100.00%
Tobyhanna	PA	18466	PA-Pocono WW	4.59%	6.59%	5.62%	9.95%	12.99%	7.56%	15.77%	10.02%	11.05%	14.03%	1.81%	100.00%
Scranton	PA	18503	PA-Scranton WW	8.14%	2.71%	14.47%	12.30%	3.07%	8.14%	13.56%	28.93%	1.63%	7.05%	0.00%	100.00%
Scranton	PA	18504	PA-Scranton WW	5.34%	2.88%	12.16%	12.48%	4.74%	10.44%	18.32%	23.15%	6.34%	2.70%	1.45%	100.00%
Scranton	PA	18505	PA-Scranton WW	4.08%	6.45%	13.22%	13.48%	8.47%	10.50%	15.47%	11.63%	8.52%	6.25%	1.93%	100.00%
Moosic	PA	18507	PA-Scranton WW	8.68%	2.69%	2.40%	28.29%	0.00%	5.69%	23.80%	13.17%	4.64%	0.00%	10.63%	100.00%
Scranton	PA	18508	PA-Scranton WW	5.30%	5.77%	15.28%	7.93%	5.93%	19.84%	15.20%	16.18%	5.85%	2.71%	0.00%	100.00%
Scranton	PA	18509	PA-Scranton WW	7.82%	3.84%	9.24%	7.99%	10.16%	16.31%	17.62%	16.23%	4.87%	3.73%	2.20%	100.00%
Scranton	PA	18510	PA-Scranton WW	5.34%	8.19%	11.61%	9.56%	8.19%	16.24%	9.04%	16.79%	8.56%	3.49%	2.98%	100.00%
Scranton	PA	18512	PA-Scranton WW	1.75%	8.83%	5.82%	4.97%	10.05%	13.06%	25.01%	18.98%	6.29%	5.24%	0.00%	100.00%
Taylor	PA	18517	PA-Scranton WW	0.00%	14.76%	4.67%	0.00%	7.53%	12.50%	21.39%	16.57%	14.01%	8.58%	0.00%	100.00%
Scranton	PA	18519	PA-Scranton WW	8.72%	5.38%	14.81%	3.11%	6.57%	18.64%	15.65%	13.62%	2.75%	10.75%	0.00%	100.00%
Kingston	PA	18704	PA-Scranton WW	7.44%	8.47%	8.56%	4.68%	9.10%	12.59%	16.54%	17.03%	7.17%	6.28%	2.13%	100.00%
Clifton Heights	PA	19018	PA-Lehman Pike WW	5.44%	3.01%	6.12%	1.65%	8.89%	9.01%	13.59%	25.20%	9.72%	9.84%	7.53%	100.00%

TOTAL COMMUNITIES: 84

City	State	Zip Code	Profit Center	--- Distribution of Income for Rented Units --- 0-5	5-10	10-15	15-20	20-25	25-35	35-50	50-75	75-100	100-150	> 150	Total
Coatesville	PA	19320	PA - Sadsbury WW	2.69%	4.71%	6.76%	7.79%	4.76%	12.01%	14.23%	23.70%	10.27%	7.99%	5.10%	100.00%
Coatesville	PA	19320	PA-Coatesville WW	2.69%	4.71%	6.76%	7.79%	4.76%	12.01%	14.23%	23.70%	10.27%	7.99%	5.10%	100.00%
Coatesville	PA	19320	PA-Coatesville WW	2.69%	4.71%	6.76%	7.79%	4.76%	12.01%	14.23%	23.70%	10.27%	7.99%	5.10%	100.00%
Parkesburg	PA	19365	PA - Sadsbury WW	6.99%	1.89%	7.13%	8.30%	6.55%	8.59%	4.37%	22.71%	10.63%	5.82%	17.03%	100.00%
Parkesburg	PA	19365	PA-Coatesville WW	6.99%	1.89%	7.13%	8.30%	6.55%	8.59%	4.37%	22.71%	10.63%	5.82%	17.03%	100.00%
Sadsburyville	PA	19369	PA-Sadsbury WW	0.00%	51.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	48.89%	0.00%	0.00%	100.00%
Pottstown	PA	19464	Upper Pottsgrove WW	3.79%	3.26%	8.63%	8.37%	10.70%	9.04%	15.95%	20.00%	9.52%	9.58%	1.15%	100.00%
Pottstown	PA	19465	Upper Pottsgrove WW	3.22%	2.21%	4.16%	2.68%	4.97%	11.61%	18.93%	19.33%	18.59%	10.87%	3.42%	100.00%
Royersford	PA	19468	Royersford WW	0.53%	0.73%	5.04%	3.74%	8.17%	4.96%	18.93%	26.30%	17.98%	8.17%	5.46%	100.00%
Birdsboro	PA	19508	PA-Exeter Twp WW	8.01%	0.75%	6.24%	4.19%	4.10%	30.38%	22.55%	8.85%	8.67%	4.57%	1.68%	100.00%
Reading	PA	19601	PA-Exeter Twp WW	9.40%	10.55%	9.92%	7.47%	10.67%	12.47%	12.92%	16.59%	4.13%	4.32%	1.55%	100.00%
Reading	PA	19606	PA-Exeter Twp WW	4.76%	4.36%	2.95%	4.39%	9.23%	8.79%	19.93%	23.52%	8.49%	8.69%	4.90%	100.00%
Reading	PA	19606	PA-Glen	4.76%	4.36%	2.95%	4.39%	9.23%	8.79%	19.93%	23.52%	8.49%	8.69%	4.90%	100.00%
Reading	PA	19607	PA-Exeter Twp WW	3.75%	1.21%	6.23%	3.25%	4.87%	12.22%	13.46%	28.13%	11.07%	13.46%	2.36%	100.00%
Reading	PA	19608	PA-Exeter Twp WW	0.00%	4.79%	0.77%	4.41%	2.59%	18.18%	20.99%	17.36%	20.33%	8.43%	2.15%	100.00%
Reading	PA	19610	PA-Exeter Twp WW	4.36%	1.34%	3.32%	2.13%	10.65%	15.96%	6.19%	20.32%	11.30%	9.76%	14.67%	100.00%
TOTAL CUSTOMERS				1,142	1,332	2,356	1,827	1,840	2,705	3,301	3,503	1,759	1,278	447	21,490

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

Zone 1 - PAWC

Residential	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
3/4 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
1 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
1 1/2 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
2 - Meter	$ 121.80	$ 132.00	$ 10.20	8.4%
3 - Meter	$ 227.20	$ 246.00	$ 18.80	8.3%
4 - Meter	$ 285.10	$ 308.00	$ 22.90	8.0%
6 - Meter	$ 426.80	$ 461.00	$ 34.20	8.0%
8 - Meter	$ 826.30	$ 893.00	$ 66.70	8.1%
Unmetered Service	$ 70.00	$ 90.00	$ 20.00	28.6%
All Usage (per 100 Gallons)	$ 1.6108	$ 2.1319	$ 0.5211	32.4%

Commercial/Municipal	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 18.50	$ 20.00	$ 1.50	8.1%
3/4 - Meter	$ 28.00	$ 30.00	$ 2.00	7.1%
1 - Meter	$ 46.60	$ 50.00	$ 3.40	7.3%
1 1/2 - Meter	$ 76.10	$ 82.00	$ 5.90	7.8%
2 - Meter	$ 121.80	$ 132.00	$ 10.20	8.4%
3 - Meter	$ 227.20	$ 246.00	$ 18.80	8.3%
4 - Meter	$ 285.10	$ 308.00	$ 22.90	8.0%
6 - Meter	$ 426.80	$ 461.00	$ 34.20	8.0%
8 - Meter	$ 826.30	$ 893.00	$ 66.70	8.1%
Commercial - First 16,000 gallons	$ 1.5613	$ 2.0346	$ 0.4733	30.3%
Commercial - Over 16,000 gallons	$ 1.1493	$ 1.5463	$ 0.3970	34.5%
Municipal - First 16,000 gallons	$ 1.6700	$ 1.9984	$ 0.3284	19.7%
Municipal - Over 16,000 gallons	$ 0.9140	$ 1.1091	$ 0.1951	21.3%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

Zone 1 - PAWC Industrial	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 28.00	$ 28.00	$ -	0.0%
3/4 - Meter	$ 42.00	$ 42.00	$ -	0.0%
1 - Meter	$ 70.00	$ 70.00	$ -	0.0%
1 1/2 - Meter	$ 140.00	$ 140.00	$ -	0.0%
2 - Meter	$ 224.00	$ 224.00	$ -	0.0%
3 - Meter	$ 420.00	$ 420.00	$ -	0.0%
4 - Meter	$ 701.00	$ 701.00	$ -	0.0%
6 - Meter	$ 1,401.00	$ 1,401.00	$ -	0.0%
8 - Meter	$ 2,243.00	$ 2,243.00	$ -	0.0%
10 - Meter	$ 3,223.00	$ 3,223.00	$ -	0.0%
12 - Meter	$ 4,625.00	$ 4,625.00	$ -	0.0%
First 16,000 Gallons	$ 1.4200	$ 1.9128	$ 0.4928	34.7%
Next 584,000 Gallons	$ 1.0804	$ 1.4824	$ 0.4020	37.2%
All Over 600,000 Gallons	$ 0.8499	$ 1.1477	$ 0.2978	35.0%
Curtailment				
First 16,000 Gallons	$ 1.4200	$ 1.9128	$ 0.4928	34.7%
Next 584,000 Gallons	$ 1.0804	$ 1.4824	$ 0.4020	37.2%
Next 14,400,000 Gallons	$ 0.8499	$ 1.1477	$ 0.2978	35.0%
All Over 15,000,000 Gallons	$ 0.5110	$ 0.6852	$ 0.1742	34.1%

Sales to Other Utilities	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 29.10	$ 29.10	$ -	0.0%
3/4 - Meter	$ 44.00	$ 44.00	$ -	0.0%
1 - Meter	$ 73.00	$ 73.00	$ -	0.0%
1 1/2 - Meter	$ 145.00	$ 145.00	$ -	0.0%
2 - Meter	$ 232.00	$ 232.00	$ -	0.0%
3 - Meter	$ 436.00	$ 436.00	$ -	0.0%
4 - Meter	$ 726.00	$ 726.00	$ -	0.0%
6 - Meter	$ 1,452.00	$ 1,452.00	$ -	0.0%
8 - Meter	$ 2,325.00	$ 2,325.00	$ -	0.0%
10 - Meter	$ 3,340.00	$ 3,340.00	$ -	0.0%
12 - Meter	$ 4,793.00	$ 4,793.00	$ -	0.0%
All Usage - Group A	$ 0.7950	$ 1.2100	$ 0.4150	52.2%
All Usage - Group B	$ 1.1300	$ 1.7300	$ 0.6000	53.1%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

Zone 1 - PAWC Public Fire	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Hydrants Prior to 1/1/2000	$ 20.30	$ 25.30	$ 5.00	24.6%
Hydrants at 25% of Cost of Service	$ 20.30	$ 25.30	$ 5.00	24.6%
Brandford Township	$ 6.25	$ 6.25	$ -	0.0%
Brownsville Area	$ 20.30	$ 25.30	$ 5.00	24.6%
California Area	$ 20.30	$ 25.30	$ 5.00	24.6%
Reading Area	$ 20.30	$ 25.30	$ 5.00	24.6%
Valley District	$ 20.30	$ 25.30	$ 5.00	24.6%
Audubon District	$ 25.70	$ 25.70	$ -	0.0%

Private Fire	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
1	$ 5.34	$ 6.62	$ 1.28	24.0%
1 1/4	$ 5.34	$ 6.62	$ 1.28	24.0%
1 1/2	$ 7.69	$ 9.53	$ 1.84	23.9%
2	$ 13.68	$ 16.96	$ 3.28	24.0%
3	$ 31.11	$ 38.57	$ 7.46	24.0%
4	$ 54.78	$ 67.91	$ 13.13	24.0%
6	$ 124.47	$ 154.61	$ 30.14	24.2%
8	$ 221.56	$ 274.67	$ 53.11	24.0%
10	$ 346.02	$ 429.08	$ 83.06	24.0%
12	$ 497.88	$ 617.22	$ 119.34	24.0%
Hydrants	$ 26.87	$ 26.90	$ 0.03	0.1%
Metered				
1	$ 43.75	$ 54.25	$ 10.50	24.0%
1 1/4	$ 43.75	$ 54.25	$ 10.50	24.0%
1 1/2	$ 62.48	$ 77.46	$ 14.98	24.0%
2	$ 100.00	$ 123.97	$ 23.97	24.0%
3	$ 187.49	$ 232.43	$ 44.94	24.0%
4	$ 234.36	$ 290.54	$ 56.18	24.0%
6	$ 351.54	$ 435.80	$ 84.26	24.0%
8	$ 539.03	$ 668.24	$ 129.21	24.0%
10	$ 757.77	$ 939.42	$ 181.65	24.0%
12	$ 1,137.06	$ 1,137.06	$ -	0.0%
Hydrants	$ 26.87	$ 26.90	$ 0.03	0.1%
Sprinkler - 1	$ 65.22	$ 80.85	$ 15.63	24.0%
Sprinkler - 2	$ 0.17	$ 0.21	$ 0.04	23.5%
Standpipes	$ 50.71	$ 62.87	$ 12.16	24.0%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

Zone 2 - Valley

Residential	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
3/4 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
1 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
1 1/2 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
2 - Meter	$ 121.80	$ 132.00	$ 10.20	8.4%
3 - Meter	$ 227.20	$ 246.00	$ 18.80	8.3%
4 - Meter	$ 285.10	$ 308.00	$ 22.90	8.0%
6 - Meter	$ 426.80	$ 461.00	$ 34.20	8.0%
8 - Meter	$ 826.30	$ 893.00	$ 66.70	8.1%
First 3,400 gallons	$ 1.1000	$ 2.1319	$ 1.0319	93.8%
Over 3,400 gallons	$ 1.1000	$ 2.1319	$ 1.0319	93.8%

Commercial/Municipal	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 18.50	$ 20.00	$ 1.50	8.1%
3/4 - Meter	$ 28.00	$ 30.00	$ 2.00	7.1%
1 - Meter	$ 46.60	$ 50.00	$ 3.40	7.3%
1 1/2 - Meter	$ 76.10	$ 82.00	$ 5.90	7.8%
2 - Meter	$ 121.80	$ 132.00	$ 10.20	8.4%
3 - Meter	$ 227.20	$ 246.00	$ 18.80	8.3%
4 - Meter	$ 285.10	$ 308.00	$ 22.90	8.0%
6 - Meter	$ 426.80	$ 461.00	$ 34.20	8.0%
8 - Meter	$ 826.30	$ 893.00	$ 66.70	8.1%
Commercial - First 3,400 gallons	$ 1.1000		$ (1.1000)	-100.0%
Commercial - Over 3,400 gallons	$ 1.1000		$ (1.1000)	-100.0%
Commercial - First 16,000 gallons		$ 2.0346	$ 2.0346	0.0%
Commercial - Over 16,000 gallons		$ 1.5463	$ 1.5463	0.0%
Municipal - First 3,400 gallons	$ 1.1000		$ (1.1000)	-100.0%
Municipal - Over 3,400 gallons	$ 1.1000		$ (1.1000)	-100.0%
Municipal - First 16,000 gallons		$ 1.9984	$ 1.9984	0.0%
Municipal - Over 16,000 gallons		$ 1.1091	$ 1.1091	0.0%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

Zone 2 - Valley

Industrial	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 18.50	$ 28.00	$ 9.50	51.4%
3/4 - Meter	$ 28.00	$ 42.00	$ 14.00	50.0%
1 - Meter	$ 46.60	$ 70.00	$ 23.40	50.2%
1 1/2 - Meter	$ 76.10	$ 140.00	$ 63.90	84.0%
2 - Meter	$ 121.80	$ 224.00	$ 102.20	83.9%
3 - Meter	$ 227.20	$ 420.00	$ 192.80	84.9%
4 - Meter	$ 285.10	$ 701.00	$ 415.90	145.9%
6 - Meter	$ 426.80	$ 1,401.00	$ 974.20	228.3%
8 - Meter	$ 826.30	$ 2,243.00	$ 1,416.70	171.5%
Industrial - First 3,400 gallons	$ 1.1000		$ (1.1000)	-100.0%
Industrial - Over 3,400 gallons	$ 1.1000		$ (1.1000)	-100.0%
First 16,000 Gallons		$ 1.9128	$ 1.9128	0.0%
Next 584,000 Gallons		$ 1.4824	$ 1.4824	0.0%
All Over 600,000 Gallons		$ 1.1477	$ 1.1477	0.0%

Zone 3 - SLIBCO

All Charges	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 63.55	$ 20.00	$ (43.55)	-68.5%
3/4 - Meter	$ 63.55	$ 30.00	$ (33.55)	-52.8%
1 - Meter	$ 63.55	$ 50.00	$ (13.55)	-21.3%
1 1/2 - Meter	$ 63.55	$ 82.00	$ 18.45	29.0%
2 - Meter	$ 63.55	$ 132.00	$ 68.45	107.7%
3 - Meter	$ 63.55	$ 246.00	$ 182.45	287.1%
4 - Meter	$ 136.30	$ 308.00	$ 171.70	126.0%
6 - Meter	$ 136.30	$ 461.00	$ 324.70	238.2%
8 - Meter	$ 309.30	$ 893.00	$ 583.70	188.7%
Current Volumetric Rates				
First 20,000 Gallons	$ 1.8940		$ (1.8940)	-100.0%
Next 80,000 Gallons	$ 1.6780		$ (1.6780)	-100.0%
Over 100,000 Gallons	$ 1.3810		$ (1.3810)	-100.0%
Commercial - First 16,000 gallons		$ 2.0346	$ 2.0346	0.0%
Commercial - Over 16,000 gallons		$ 1.5463	$ 1.5463	0.0%
Municipal - First 16,000 gallons		$ 1.9984	$ 1.9984	0.0%
Municipal - Over 16,000 gallons		$ 1.1091	$ 1.1091	0.0%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

Zone 4 - Turbotville

Residential	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
3/4 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
1 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
1 1/2 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
2 - Meter	$ 121.80	$ 132.00	$ 10.20	8.4%
3 - Meter	$ 227.20	$ 246.00	$ 18.80	8.3%
4 - Meter	$ 285.10	$ 308.00	$ 22.90	8.0%
6 - Meter	$ 426.80	$ 461.00	$ 34.20	8.0%
8 - Meter	$ 826.30	$ 893.00	$ 66.70	8.1%
All Usage (per 100 Gallons)	$ 1.6108	$ 2.1319	$ 0.5211	32.4%

Commercial/Municipal	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 18.50	$ 20.00	$ 1.50	8.1%
3/4 - Meter	$ 28.00	$ 30.00	$ 2.00	7.1%
1 - Meter	$ 46.60	$ 50.00	$ 3.40	7.3%
1 1/2 - Meter	$ 76.10	$ 82.00	$ 5.90	7.8%
2 - Meter	$ 121.80	$ 132.00	$ 10.20	8.4%
3 - Meter	$ 227.20	$ 246.00	$ 18.80	8.3%
4 - Meter	$ 285.10	$ 308.00	$ 22.90	8.0%
6 - Meter	$ 426.80	$ 461.00	$ 34.20	8.0%
8 - Meter	$ 826.30	$ 893.00	$ 66.70	8.1%
Commercial Volumetric	$ 1.0706		$ (1.0706)	-100.0%
Commercial First 16,000 Gallons		$ 2.0346	$ 2.0346	0.0%
Commercial Over 16,000 Gallons		$ 1.5463	$ 1.5463	0.0%
Municipal First 16,000 Gallons	$ 1.6700	$ 1.9984	$ 0.3284	19.7%
Municipal Over 16,000 Gallons	$ 0.9861	$ 1.1091	$ 0.1230	12.5%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

Zone 5 - Steelton

Residential	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
3/4 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
1 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
1 1/2 - Meter	$ 17.50	$ 20.00	$ 2.50	14.3%
2 - Meter	$ 121.80	$ 132.00	$ 10.20	8.4%
3 - Meter	$ 227.20	$ 246.00	$ 18.80	8.3%
4 - Meter	$ 285.10	$ 308.00	$ 22.90	8.0%
6 - Meter	$ 426.80	$ 461.00	$ 34.20	8.0%
8 - Meter	$ 826.30	$ 893.00	$ 66.70	8.1%

Commercial / Municipal	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 18.50	$ 20.00	$ 1.50	8.1%
3/4 - Meter	$ 28.00	$ 30.00	$ 2.00	7.1%
1 - Meter	$ 46.60	$ 50.00	$ 3.40	7.3%
1 1/2 - Meter	$ 76.10	$ 82.00	$ 5.90	7.8%
2 - Meter	$ 121.80	$ 132.00	$ 10.20	8.4%
3 - Meter	$ 227.20	$ 246.00	$ 18.80	8.3%
4 - Meter	$ 285.10	$ 308.00	$ 22.90	8.0%
6 - Meter	$ 426.80	$ 461.00	$ 34.20	8.0%
8 - Meter	$ 826.30	$ 893.00	$ 66.70	8.1%

Industrial	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 24.83	$ 28.00	$ 3.17	12.8%
3/4 - Meter	$ 24.83	$ 42.00	$ 17.17	69.2%
1 - Meter	$ 54.38	$ 70.00	$ 15.62	28.7%
1 1/2 - Meter	$ 97.93	$ 140.00	$ 42.07	43.0%
2 - Meter	$ 141.46	$ 224.00	$ 82.54	58.3%
3 - Meter	$ 320.98	$ 420.00	$ 99.02	30.8%
4 - Meter	$ 419.20	$ 701.00	$ 281.80	67.2%
6 - Meter	$ 670.70	$ 1,401.00	$ 730.30	108.9%
8 - Meter	$ 974.35	$ 2,243.00	$ 1,268.65	130.2%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

Zone 5 - Steelton Volumetric Rates	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Current Volumetric Rates				
First 1,700 Gallons	$ 1.6108		$ (1.6108)	---
Next 18,300 Gallons	$ 1.6108		$ (1.6108)	-100.0%
Next 30,000 Gallons	$ 1.2500		$ (1.2500)	-100.0%
Over 50,000 Gallons	$ 1.2500		$ (1.2500)	-100.0%
Residential Usage		$ 2.1319	$ 2.1319	0.0%
Commercial - First 16,000 gallons		$ 2.0346	$ 2.0346	0.0%
Commercial - Over 16,000 gallons		$ 1.5463	$ 1.5463	0.0%
Municipal - First 16,000 gallons		$ 1.9984	$ 1.9984	0.0%
Municipal - Over 16,000 gallons		$ 1.1091	$ 1.1091	0.0%
Industrial - First 16,000 Gallons		$ 1.9128	$ 1.9128	0.0%
Industrial - Next 584,000 Gallons		$ 1.4824	$ 1.4824	0.0%
Industrial - All Over 600,000 Gallons		$ 1.1477	$ 1.1477	0.0%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

Zone X - Audubon

All Classes	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
5/8 - Meter	$ 16.80	$ 16.80	$ -	0.0%
3/4 - Meter	$ 16.80	$ 16.80	$ -	0.0%
1 - Meter	$ 42.80	$ 42.80	$ -	0.0%
1 1/2 - Meter	$ 72.90	$ 72.90	$ -	0.0%
2 - Meter	$ 116.40	$ 116.40	$ -	0.0%
3 - Meter	$ 218.60	$ 218.60	$ -	0.0%
4 - Meter	$ 363.90	$ 363.90	$ -	0.0%
6 - Meter	$ 727.80	$ 727.80	$ -	0.0%
8 - Meter	$ 1,164.60	$ 1,164.60	$ -	0.0%
10 - Meter	$ 1,410.60	$ 1,410.60	$ -	0.0%
12 - Meter	$ 1,935.00	$ 1,935.00	$ -	0.0%
Residential Usage	$ 0.8619	$ 1.1410	$ 0.2791	32.4%
Nonresidential Usage - 1st 100,000 gallons	$ 0.8619	$ 1.1410	$ 0.2791	32.4%
Nonresidential Usage - Over 100,000 gallons	$ 0.5723	$ 1.4160	$ 0.8437	147.4%

Private Fire	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
1	$ 30.80	$ 38.18	$ 7.38	24.0%
4	$ 69.40	$ 86.04	$ 16.64	24.0%
6	$ 102.75	$ 127.38	$ 24.63	24.0%
8	$ 167.00	$ 207.03	$ 40.03	24.0%
10	$ 228.60	$ 283.40	$ 54.80	24.0%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

Zone X - Farmington

All Charges		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Residential/Commercial Service Charge	$	67.50	$	20.00	$	(47.50)	-70.4%
Industrial Service Charge	$	67.50	$	28.00	$	(39.50)	-58.5%
Current Volumetric Rates							
First 5,000 Gallons	$	-			$	-	---
Over 5,000 Gallons	$	1.5000			$	(1.5000)	---
Residential Volumetric Rate			$	2.1319	$	2.1319	---
Commercial Volumetric Rate			$	2.0346	$	2.0346	---
Industrial Volumetric Rate			$	1.9128	$	1.9128	---
Municipal Volumetric Rate			$	1.9984	$	1.9984	---

Pennsylvania-American Water Company
Proposed General Wastewater Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

SSS Rates

Zone 1 - PAWC	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Residential Service Charge	$ 14.30	$ 20.00	$ 5.70	39.9%
Non-Residential Service Charge	$ 35.00	$ 50.00	$ 15.00	42.9%
Residential Usage (per 100 gallons)	$ 2.8750	$ 2.5650	$ (0.3100)	-10.8%
Non-Residential Usage (per 100 gallons)	$ 2.1030	$ 2.0000	$ (0.1030)	-4.9%
Unmetered	$ 106.00	$ 100.00	$ (6.00)	-5.7%
Upper Pottsgrove: Non-Residential Service Charge	$ 63.60	$ 50.00	$ (13.60)	-21.4%
Upper Pottsgrove: Non-Residential Volumetric Charge	$ 0.5653	$ 1.0000	$ 0.4347	76.9%

Zone 2 - New Cumberland	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Residential Service Charge	$ 14.30	$ 20.00	$ 5.70	39.9%
Non-Residential Service Charge	$ 35.00	$ 50.00	$ 15.00	42.9%
Residential Usage (per 100 gallons)	$ 2.4500	$ 2.5650	$ 0.1150	4.7%
Non-Residential Usage (per 100 gallons)	$ 1.9000	$ 2.0000	$ 0.1000	5.3%

Zone 5 - Valley	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Residential Service Charge	$ 14.30	$ 20.00	$ 5.70	39.9%
Residential Usage (per 100 gallons)	$ 2.8750	$ 2.5650	$ (0.3100)	-10.8%
Non-Residential Service Charge	$ 35.00	$ 50.00	$ 15.00	42.9%
Non-Residential Usage (per 100 gallons)	$ 2.1030	$ 2.0000	$ (0.1030)	-4.9%
Unmetered	$ 106.00	$ 100.00	$ (6.00)	-5.7%
Westwood Fire Company				
Service Charge	$ -	$ 50.00	$ 50.00	0.0%
Usage Charge (per 100 gallons)	$ 2.1030	$ 2.0000	$ (0.1030)	-4.9%
Rainbow Washhouse Inc				
Service Charge	$ 75.00	$ 79.50	$ 4.50	6.0%
First 2,000 Gallons	$ -	$ 0.2226	$ 0.2226	0.0%
All Over 2,000 Gallons	$ 0.2100	$ 0.2226	$ 0.0126	6.0%

Pennsylvania-American Water Company
Proposed General Wastewater Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

SSS Rates

Zone 7 - York	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Residential Service Charge	$ 18.00	$ 20.00	$ 2.00	11.1%
Residential First 2,000 Gallons	$ -	$ 0.7500	$ 0.7500	0.0%
Residential All Over 2,000 Gallons	$ 2.7375	$ 2.5650	$ (0.1725)	-6.3%
Non-Residential Service Charge	$ 30.00	$ 50.00	$ 20.00	66.7%
Non-Residential First 2,000 Gallons	$ -	$ 0.4000	$ 0.4000	0.0%
Non-Residential All Over 2,000 Gallons	$ 1.6380	$ 2.0000	$ 0.3620	22.1%
Bulk Rate A (per 100 gallons)	$ 0.3750	$ 0.4123	$ 0.0373	9.9%
Bulk Rate B (per 100 gallons)	$ 0.2490	$ 0.2737	$ 0.0247	9.9%

Zone 8- Foster Township	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Unmetered	$ 106.00	$ 100.00	$ (6.00)	-5.7%
Butler Township per EDU	$ 15.00	$ 25.00	$ 10.00	66.7%

Zone 9 - Royersford	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Residential: Service Charge	$ 48.00	$ 20.00	$ (28.00)	-58.3%
Residential Flat Rate Per EDU	$ 50.00	$ 65.00	$ 15.00	30.0%
Residential: First 3,000 Gallons	$ -	$ 1.4150	$ 1.4150	0.0%
Residential: Over 3,000 Gallons	$ 0.9400	$ 1.4150	$ 0.4750	50.5%
Non-Residential: Service Charge	$ 48.00	$ 50.00	$ 2.00	4.2%
Non-Residential Flat Rtae Per EDU	$ 67.00	$ 80.00	$ 13.00	19.4%
Non-Residential: First 3,000 Gallons	$ -	$ 0.7500	$ 0.7500	0.0%
Non-Residential: Over 3,000 Gallons	$ 0.9400	$ 0.7500	$ (0.1900)	-20.2%

Zone X - Farmington	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Serviec Charge per EDU	$ 53.50		$ (53.50)	-100.0%
Residential Service Charge		$ 20.00	$ 20.00	0.0%
Residential Volumetric Rate		$ 1.3500	$ 1.35	0.0%
Non-Residential Service Charge		$ 50.00	$ 50.00	0.0%
Non-Residential Volumetric Rate		$ 0.7000	$ 0.70	0.0%

Zone X - Sadsbury	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Residential Service Charge	$ 128.33	$ 128.33	$ -	0.0%

Pennsylvania-American Water Company
Proposed General Wastewater Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

CSS Rates

Zone 3 - Scranton	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Residential Service Charge	$ 19.50	$ 19.71	$ 0.21	1.1%
Residential Usage (per 100 gallons)	$ 2.3510	$ 2.3764	$ 0.0254	1.1%
Unmetered Service	$ 95.00	$ 96.03	$ 1.03	1.1%
Non-Residential Service Charge	$ 35.00	$ 35.38	$ 0.38	1.1%
Usage per 100 gallons)	$ 1.7270	$ 1.7457	$ 0.0187	1.1%

Zone 4 - Kane	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Residential 5/8" Service Charge	$ 40.00	$ 20.00	$ (20.00)	-50.0%
Residential Other Meter Sizes	$ 100.00	$ 20.00	$ (80.00)	-80.0%
Residential Unmetered Service	$ 110.00	$ 110.00	$ -	0.0%
Residential: First 10,000 Gallons	$ 2.1000	$ 2.8750	$ 0.7750	36.9%
Residential: Over 10,000 Gallons	$ 1.8000	$ 2.8750	$ 1.0750	59.7%
Non-Residential 5/8" Service Charge	$ 40.00	$ 50.00	$ 10.00	25.0%
Non-Residential Other Meter Sizes	$ 100.00	$ 50.00	$ (50.00)	-50.0%
Non-Residential: First 10,000 Gallons	$ 2.1000	$ 1.9000	$ (0.2000)	-9.5%
Non-Residential: Over 10,000 Gallons	$ 1.8000	$ 1.9000	$ 0.1000	5.6%

Zone 6 - McKeesport / Port Vue	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Residential Service Charge	$ 14.30	$ 20.00	$ 5.70	39.9%
Residential Usage (per 100 gallons)	$ 2.8750	$ 2.8750	$ -	0.0%
McKeesport: Non-Residential Service Charge	$ 35.00	$ 50.00	$ 15.00	42.9%
McKeesport: Non-Residential Usage (per 100 gallons)	$ 2.1416	$ 1.9000	$ (0.2416)	-11.3%
Port Vue: Non-Residential Service Charge	$ 14.30	$ 50.00	$ 35.70	249.7%
Port Vue: Non-Residential Usage (per 100 gallons)	$ 2.8750	$ 1.9000	$ (0.9750)	-33.9%
McKeesport Bulk - Monthly Charge	$ 86.00	$ 86.00	$ -	0.0%
McKeesport Bulk - Quarterly Charge	$ 258.00	$ 258.00	$ -	0.0%
McKeesport Bulk - Usage Charge	$ 1.6680	$ 1.6680	$ -	0.0%

Pennsylvania-American Water Company
Proposed General Wastewater Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons

Other WW Operations Rates

BASA Acquisition	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Unmetered				
Flat Rate Customer Charge	$ 45.50	$ 45.50	$ -	0.0%
Special Rate for Multi-Family Dwelling Units				
For the first 25 Units	$ 45.50	$ 45.50	$ -	0.0%
For the next 25 Unit	$ 44.60	$ 44.60	$ -	0.0%
For the next 25 Unit	$ 43.70	$ 43.70	$ -	0.0%
For the next 25 Unit	$ 42.80	$ 42.80	$ -	0.0%
For the next 25 Unit	$ 41.90	$ 41.90	$ -	0.0%
For the next 25 Unit	$ 41.00	$ 41.00	$ -	0.0%
For all Units over 150	$ 40.10	$ 40.10	$ -	0.0%
Special Rate for VA Hospital		$ 1.3365	$ 1.3365	0.0%
Residential Flat Rate		$ 70.00	$ 70.00	0.0%
Residential Monthly Charge		$ 10.00	$ 10.00	0.0%
Residential Usage Rate		$ 2.0580	$ 2.0580	0.0%
Non-Residential Monthly Charge		$ 50.0000	$ 50.00	0.0%
Non-Residential Usage Rate		$ 1.3365	$ 1.3365	0.0%

Brentwood Acquisition	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Residential				
For Collection Service Provided By the Company				
Service Charge per month	$ 4.57	$ 10.00	$ 5.43	118.8%
Usage Charge per 100 gallons	$ 0.8900	$ 0.9810	$ 0.0910	10.2%
Non-Residential				
For Collection Service Provided By the Company				
Service Charge per month	$ 4.57	$ 20.00	$ 15.43	337.6%
Usage Charge per 100 gallons	$ 0.8900	$ 0.9810	$ 0.0910	10.2%

PENNSYLVANIA RESIDENTIAL MODEL

																		Rain Lag 2	0.1	0.8	1.0 CDD/HDD Lag							
							0.2423	-0.0575	-0.2285	0.0308	-0.0604	0.3825	0.4390	0.3309	0.3422	0.0100	-0.1248		Rain Lag 1	0.7									
Period	Obs	Year	Month	Cust	Sales	UPC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Trend	Rain	CDD	HDD	COVID	Predicted	Actual	Variance	Weather Effect	Billing Adjustments
1	67	2013	7	591888	2372267	4.008	0	0	0	0	0	0	1	0	0	0	0	-119	0.620	-7	0	0.0	4.089	4.008	0.081	-0.027	0
1	68	2013	8	592369	2414428	4.076	0	0	0	0	0	0	0	1	0	0	0	-118	2.038	-26	0	0.0	3.912	4.076	-0.163	-0.091	0
1	69	2013	9	592245	2323869	3.924	0	0	0	0	0	0	0	0	1	0	0	-117	-1.637	-67	0	0.0	4.004	3.924	0.081	-0.007	0
1	70	2013	10	597092	2153860	3.607	0	0	0	0	0	0	0	0	0	1	0	-116	-1.507	-38	0	0.0	3.690	3.607	0.082	0.015	0
1	71	2013	11	596889	2143493	3.591	0	0	0	0	0	0	0	0	0	0	1	-115	0.000	0	0	0.0	3.535	3.591	-0.056	0.000	0
1	72	2013	12	596793	2157024	3.614	0	0	0	0	0	0	0	0	0	0	0	-114	0.000	0	0	0.0	3.656	3.614	0.042	0.000	0
1	73	2014	1	597327	2364109	3.958	1	0	0	0	0	0	0	0	0	0	0	-113	0.000	0	22	0.0	3.903	3.958	-0.055	0.009	0
1	74	2014	2	596962	2283430	3.825	0	1	0	0	0	0	0	0	0	0	0	-112	0.000	0	202	0.0	3.671	3.825	-0.154	0.081	0
1	75	2014	3	597062	2048744.7	3.431	0	0	1	0	0	0	0	0	0	0	0	-111	0.000	0	147	0.0	3.473	3.431	0.042	0.059	0
1	76	2014	4	596881	2190953	3.671	0	0	0	1	0	0	0	0	0	0	0	-110	0.000	0	0	0.0	3.670	3.671	-0.001	0.000	0
1	77	2014	5	596409	2154777.2	3.613	0	0	0	0	1	0	0	0	0	0	0	-109	0.000	0	0	0.0	3.574	3.613	-0.039	0.000	0
1	78	2014	6	596756	2291459.1	3.840	0	0	0	0	0	1	0	0	0	0	0	-108	0.395	13	0	0.0	4.011	3.840	0.171	-0.002	0
2	79	2014	7	597147	2444625.1	4.094	0	0	0	0	0	0	1	0	0	0	0	-107	-1.105	21	0	0.0	4.121	4.094	0.027	0.056	0
2	80	2014	8	597203	2371305.5	3.971	0	0	0	0	0	0	0	1	0	0	0	-106	-0.778	-70	0	0.0	3.915	3.971	-0.056	-0.038	0
2	81	2014	9	597462	2349630.388	3.933	0	0	0	0	0	0	0	0	1	0	0	-105	0.103	-69	0	0.0	3.894	3.933	-0.039	-0.066	0
2	82	2014	10	597524	2164563.3	3.623	0	0	0	0	0	0	0	0	0	1	0	-104	-2.165	-34	0	0.0	3.664	3.623	0.042	0.041	0
2	83	2014	11	597335	2081455.2	3.485	0	0	0	0	0	0	0	0	0	0	1	-103	0.000	0	0	0.0	3.484	3.485	0.000	0.000	0
2	84	2014	12	597479	2159589.6	3.615	0	0	0	0	0	0	0	0	0	0	0	-102	0.000	0	0	0.0	3.605	3.615	-0.010	0.000	0
2	85	2015	1	597621	2254797.7	3.773	1	0	0	0	0	0	0	0	0	0	0	-101	0.000	0	49	0.0	3.862	3.773	0.089	0.019	0
2	86	2015	2	597822	2037072.9	3.407	0	1	0	0	0	0	0	0	0	0	0	-100	0.000	0	135	0.0	3.593	3.407	0.185	0.054	0
2	87	2015	3	598207	2155256.2	3.603	0	0	1	0	0	0	0	0	0	0	0	-99	0.000	0	405	0.0	3.526	3.603	-0.077	0.162	0
2	88	2015	4	598625	2134677.1	3.566	0	0	0	1	0	0	0	0	0	0	0	-98	0.000	0	0	0.0	3.619	3.566	0.053	0.000	0
2	89	2015	5	597986	2155021.6	3.604	0	0	0	0	1	0	0	0	0	0	0	-97	0.000	0	0	0.0	3.523	3.604	-0.081	0.000	0
2	90	2015	6	598123	2374624.6	3.970	0	0	0	0	0	1	0	0	0	0	0	-96	-0.189	42	0	0.0	4.006	3.970	0.036	0.044	0
3	91	2015	7	598212	2282829.1	3.816	0	0	0	0	0	0	1	0	0	0	0	-95	2.799	-11	0	0.0	3.911	3.816	0.095	-0.103	0
3	92	2015	8	598580	2492964.1	4.165	0	0	0	0	0	0	0	1	0	0	0	-94	-1.145	-35	0	0.0	3.908	4.165	-0.257	0.006	0
3	93	2015	9	598960	2360953.9	3.942	0	0	0	0	0	0	0	0	1	0	0	-93	-1.838	-33	0	0.0	3.940	3.942	-0.002	0.031	0
3	94	2015	10	598874	2194453.4	3.664	0	0	0	0	0	0	0	0	0	1	0	-92	0.823	19	0	0.0	3.562	3.664	-0.102	-0.010	0
3	95	2015	11	599240	2069520.2	3.454	0	0	0	0	0	0	0	0	0	0	1	-91	0.000	0	0	0.0	3.433	3.454	-0.020	0.000	0
3	96	2015	12	599380	2258023.8	3.767	0	0	0	0	0	0	0	0	0	0	0	-90	0.000	0	0	0.0	3.554	3.767	-0.214	0.000	0
3	97	2016	1	599524	2151323.784	3.588	1	0	0	0	0	0	0	0	0	0	0	-89	0.000	0	-301	0.0	3.671	3.588	0.083	-0.120	0
3	98	2016	2	600159	1947744.496	3.245	0	1	0	0	0	0	0	0	0	0	0	-88	0.000	0	27	0.0	3.498	3.245	0.253	0.011	0
3	99	2016	3	600642	2031663.028	3.382	0	0	1	0	0	0	0	0	0	0	0	-87	0.000	0	-37	0.0	3.298	3.382	-0.085	-0.015	0
3	100	2016	4	600940	2203103.672	3.666	0	0	0	1	0	0	0	0	0	0	0	-86	0.000	0	0	0.0	3.568	3.666	-0.099	0.000	0
3	101	2016	5	601028	2043971.249	3.401	0	0	0	0	1	0	0	0	0	0	0	-85	0.000	0	0	0.0	3.472	3.401	0.071	0.000	0
3	102	2016	6	601147	2347125.287	3.904	0	0	0	0	0	1	0	0	0	0	0	-84	0.581	-15	0	0.0	3.878	3.904	-0.027	-0.033	0
4	103	2016	7	601359	2543747.454	4.230	0	0	0	0	0	0	1	0	0	0	0	-83	-1.519	19	0	0.0	4.031	4.230	-0.199	0.068	0
4	104	2016	8	602054	2265069.872	3.762	0	0	0	0	0	0	0	1	0	0	0	-82	-0.545	56	0	0.0	3.920	3.762	0.157	0.069	0
4	105	2016	9	602368	2396707.676	3.979	0	0	0	0	0	0	0	0	1	0	0	-81	-0.488	94	0	0.0	3.959	3.979	-0.020	0.102	0
4	106	2016	10	602465	2205626.784	3.661	0	0	0	0	0	0	0	0	0	1	0	-80	-0.176	36	0	0.0	3.560	3.661	-0.101	0.039	0
4	107	2016	11	602625	1965947.32	3.262	0	0	0	0	0	0	0	0	0	0	1	-79	0.000	0	0	0.0	3.382	3.262	0.120	0.000	0
4	108	2016	12	602856	2072586.592	3.438	0	0	0	0	0	0	0	0	0	0	0	-78	0.000	0	0	0.0	3.503	3.438	0.065	0.000	0
4	109	2017	1	603389	2313943.848	3.835	1	0	0	0	0	0	0	0	0	0	0	-77	0.000	0	134	0.0	3.794	3.835	-0.041	0.053	0
4	110	2017	2	603795	2033581.664	3.368	0	1	0	0	0	0	0	0	0	0	0	-76	0.000	0	-168	0.0	3.369	3.368	0.001	-0.067	0
4	111	2017	3	604388	1888417.795	3.125	0	0	1	0	0	0	0	0	0	0	0	-75	0.000	0	-219	0.0	3.174	3.125	0.049	-0.088	0
4	112	2017	4	604497	2176536.685	3.601	0	0	0	1	0	0	0	0	0	0	0	-74	0.000	0	0	0.0	3.516	3.601	-0.084	0.000	0
4	113	2017	5	604466	2035703.715	3.368	0	0	0	0	1	0	0	0	0	0	0	-73	0.000	0	0	0.0	3.421	3.368	0.053	0.000	0
4	114	2017	6	604646	2381864.776	3.939	0	0	0	0	0	1	0	0	0	0	0	-72	1.621	-27	0	0.0	3.781	3.939	-0.158	-0.079	0
5	115	2017	7	604712	2331324.643	3.855	0	0	0	0	0	0	1	0	0	0	0	-71	4.267	-11	0	0.0	3.760	3.855	-0.095	-0.152	0
5	116	2017	8	605210	2115990.532	3.496	0	0	0	0	0	0	0	1	0	0	0	-70	2.781	-27	0	0.0	3.682	3.496	0.186	-0.117	0
5	117	2017	9	605274	2294462.27	3.791	0	0	0	0	0	0	0	0	1	0	0	-69	-0.374	-72	0	0.0	3.753	3.791	-0.038	-0.053	0
5	118	2017	10	605542	2070078.688	3.419	0	0	0	0	0	0	0	0	0	1	0	-68	-1.437	-1	0	0.0	3.517	3.419	0.098	0.047	0
5	119	2017	11	605539	2041047.142	3.371	0	0	0	0	0	0	0	0	0	0	1	-67	0.000	0	0	0.0	3.331	3.371	-0.040	0.000	0
5	120	2017	12	605770	2154097.592	3.556	0	0	0	0	0	0	0	0	0	0	0	-66	0.000	0	0	0.0	3.452	3.556	-0.104	0.000	0
5	121	2018	1	605987	2261764.562	3.732	1	0	0	0	0	0	0	0	0	0	0	-65	0.000	0	201	0.0	3.770	3.732	0.038	0.080	0
5	122	2018	2	606288	2143648.375	3.536	0	1	0	0	0	0	0	0	0	0	0	-64	0.000	0	119	0.0	3.433	3.536	-0.103	0.048	0
5	123	2018	3	606729	1903549.863	3.137	0	0	1	0	0	0	0	0	0	0	0	-63	0.000	0	-148	0.0	3.151	3.137	0.014	-0.059	0
5	124	2018	4	607071	2038091.705	3.357	0	0	0	1	0	0	0	0	0	0	0	-62	0.000	0	0	0.0	3.465	3.357	0.108	0.000	0
5	125	2018	5	606742	2067698.217	3.408	0	0	0	0	1	0	0	0	0	0	0	-61	0.000	0	0	0.0	3.370	3.408	-0.038	0.000	0
5	126	2018	6	606877	2308299.868	3.804	0	0	0	0	0	1	0	0	0	0	0	-60	1.589	44	0	0.0	3.795	3.804	-0.008	-0.013	0
6	127	2018	7	607090	2281036.85	3.757	0	0	0	0	0	0	1	0	0	0	0	-59	2.553	-1	0	0.0	3.775	3.757	0.018	-0.086	0
6	128	2018	8	607391	2164390.391	3.563	0	0	0	0	0	0	0	1	0	0	0	-58	-0.865	5	0	0.0	3.782	3.563	0.218	0.033	0
6	129	2018	9	607368	2273197.033	3.743	0	0	0	0	0	0	0	0	1	0	0	-57	2.426	23	0	0.0	3.696	3.743	-0.047	-0.060	0
6	130	2018	10	607602	2012342.76	3.312	0	0	0	0	0	0	0	0	0	1	0	-56	6.244	52	0	0.0	3.258	3.312	-0.054	-0.161	0
6	131	2018	11	607787	2063613.296	3.395	0	0	0	0	0	0	0	0	0	0	1	-55	0.000	0	0	0.0	3.280	3.395	-0.115	0.000	0
6	132	2018	12	607947	2036896.884	3.350	0	0	0	0	0	0	0	0	0	0	0	-54	0.000	0	0	0.0	3.400	3.350	0.050	0.000	0

PENNSYLVANIA RESIDENTIAL MODEL

																	Rain Lag 2	0.1	0.8	1.0 CDD/HDD Lag							
							0.2423	-0.0575	-0.2285	0.0308	-0.0604	0.3825	0.4390	0.3309	0.3422	0.0100	-0.1248	Rain Lag 1	0.7									
Period	Obs	Year	Month	Cust	Sales	UPC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Trend	Rain	CDD	HDD	COVID	Predicted	Actual	Variance	Weather Effect	Billing Adjustments
6	133	2019	1	608339	2158382.474	3.548	1	0	0	0	0	0	0	0	0	0	0	-53	0.000	0	-85	0.0	3.605	3.548	0.057	-0.034	0
6	134	2019	2	608788	2091241.695	3.435	0	1	0	0	0	0	0	0	0	0	0	-52	0.000	0	40	0.0	3.350	3.435	-0.085	0.016	0
6	135	2019	3	609106	1953107.161	3.207	0	0	1	0	0	0	0	0	0	0	0	-51	0.000	0	-34	0.0	3.146	3.207	-0.061	-0.013	0
6	136	2019	4	609423	1948955.323	3.198	0	0	0	1	0	0	0	0	0	0	0	-50	0.000	0	0	0.0	3.414	3.198	0.216	0.000	0
6	137	2019	5	609341	2028709.413	3.329	0	0	0	0	1	0	0	0	0	0	0	-49	0.000	0	0	0.0	3.319	3.329	-0.011	0.000	0
6	138	2019	6	609185	2278534.405	3.740	0	0	0	0	0	1	0	0	0	0	0	-48	0.444	-5	0	0.0	3.738	3.740	-0.002	-0.019	0
7	139	2019	7	609916	2185038.813	3.583	0	0	0	0	0	0	1	0	0	0	0	-47	-0.257	-47	0	0.0	3.775	3.583	0.193	-0.034	0
7	140	2019	8	610054	2250212.575	3.689	0	0	0	0	0	0	0	1	0	0	0	-46	0.111	-39	0	0.0	3.658	3.689	-0.030	-0.039	0
7	141	2019	9	610572	2269702.85	3.717	0	0	0	0	0	0	0	0	1	0	0	-45	1.328	60	0	0.0	3.715	3.717	-0.003	0.010	0
7	142	2019	10	613052	2024240.462	3.302	0	0	0	0	0	0	0	0	0	1	0	-44	-0.366	25	0	0.0	3.403	3.302	0.101	0.035	0
7	143	2019	11	613091	2075721.616	3.386	0	0	0	0	0	0	0	0	0	0	1	-43	0.000	0	0	0.0	3.229	3.386	-0.157	0.000	0
7	144	2019	12	613460	2023445.433	3.298	0	0	0	0	0	0	0	0	0	0	0	-42	0.000	0	0	0.0	3.349	3.298	0.051	0.000	0
7	145	2020	1	613855	2126416.288	3.464	1	0	0	0	0	0	0	0	0	0	0	-41	0.000	0	25	0.0	3.597	3.464	0.133	0.010	0
7	146	2020	2	614148	2074990.831	3.379	0	1	0	0	0	0	0	0	0	0	0	-40	0.000	0	-187	0.0	3.208	3.379	-0.170	-0.075	0
7	147	2020	3	614940	1912268.056	3.110	0	0	1	0	0	0	0	0	0	0	0	-39	0.000	0	-1	0.0	3.108	3.110	-0.002	0.000	0
7	148	2020	4	615330	2192496.273	3.563	0	0	0	1	0	0	0	0	0	0	0	-38	0.000	0	0	1.0	3.659	3.563	0.096	0.000	0
7	149	2020	5	615811	2220773.046	3.606	0	0	0	0	1	0	0	0	0	0	0	-37	0.000	0	0	1.0	3.564	3.606	-0.042	0.000	0
7	150	2020	6	616730	2461501.714	3.991	0	0	0	0	0	1	0	0	0	0	0	-36	-1.555	-11	0	1.0	4.044	3.991	0.053	0.041	0
8	151	2020	7	617571	2585941.076	4.187	0	0	0	0	0	0	1	0	0	0	0	-35	-2.788	29	0	1.0	4.174	4.187	-0.013	0.119	0
8	152	2020	8	618309	2656757.714	4.297	0	0	0	0	0	0	0	1	0	0	0	-34	-1.204	113	0	1.0	4.085	4.297	-0.212	0.143	0
8	153	2020	9	618810	2393470.405	3.868	0	0	0	0	0	0	0	0	1	0	0	-33	-0.046	26	0	1.0	3.975	3.868	0.107	0.025	0
8	154	2020	10	619258	2204669.138	3.560	0	0	0	0	0	0	0	0	0	1	0	-32	-1.360	-20	0	1.0	3.640	3.560	0.080	0.027	0
8	155	2020	11	619675	2171382.01	3.504	0	0	0	0	0	0	0	0	0	0	1	-31	0.000	0	0	1.0	3.474	3.504	-0.030	0.000	0
8	156	2020	12	620045	2099372.642	3.386	0	0	0	0	0	0	0	0	0	0	0	-30	0.000	0	0	0.4	3.417	3.386	0.031	0.000	0
8	157	2021	1	620477	2361609.245	3.806	1	0	0	0	0	0	0	0	0	0	0	-29	0.000	0	71	0.4	3.683	3.806	-0.123	0.028	0
8	158	2021	2	620790	2061228.746	3.320	0	1	0	0	0	0	0	0	0	0	0	-28	0.000	0	-57	0.4	3.328	3.320	0.007	-0.023	0
8	159	2021	3	621236	1955885.712	3.148	0	0	1	0	0	0	0	0	0	0	0	-27	0.000	0	114	0.4	3.221	3.148	0.073	0.045	0
8	160	2021	4	621730	2191425.456	3.525	0	0	0	1	0	0	0	0	0	0	0	-26	0.000	0	0	0.4	3.431	3.525	-0.094	0.000	0
8	161	2021	5	621545	2127574.737	3.423	0	0	0	0	1	0	0	0	0	0	0	-25	0.000	0	0	0.4	3.335	3.423	-0.088	0.000	0
8	162	2021	6	621725	2287391.767	3.679	0	0	0	0	0	1	0	0	0	0	0	-24	-0.586	6	0	0.4	3.799	3.679	0.120	0.025	0
9	163	2021	7	621798	2404108.244	3.866	0	0	0	0	0	0	1	0	0	0	0	-23	0.920	34	0	0.4	3.826	3.866	-0.040	0.000	0
9	164	2021	8	621924	2291783.799	3.685	0	0	0	0	0	0	0	1	0	0	0	-22	0.384	-7	0	0.4	3.694	3.685	0.009	-0.020	0
9	165	2021	9	621968	2292156.689	3.685	0	0	0	0	0	0	0	0	1	0	0	-21	1.072	42	0	0.4	3.723	3.685	0.037	0.002	0
9	166	2021	10	621994	2109302.624	3.391	0	0	0	0	0	0	0	0	0	1	0	-20	0.880	-23	0	0.4	3.334	3.391	-0.057	-0.050	0
9	167	2021	11	623943	1951149.164	3.127	0	0	0	0	0	0	0	0	0	0	1	-19	0.000	0	0	0.4	3.245	3.127	0.118	0.000	0
9	168	2021	12	624174	2085909.472	3.342	0	0	0	0	0	0	0	0	0	0	0	-18	0.000	0	0	0.4	3.366	3.342	0.024	0.000	0
9	169	2022	1	624389	2253989.045	3.610	1	0	0	0	0	0	0	0	0	0	0	-17	0.000	0	-164	0.4	3.538	3.610	-0.072	-0.066	0
9	170	2022	2	624655	2022714.663	3.238	0	1	0	0	0	0	0	0	0	0	0	-16	0.000	0	152	0.4	3.360	3.238	0.122	0.061	0
9	171	2022	3	625136	1922092.179	3.075	0	0	1	0	0	0	0	0	0	0	0	-15	0.000	0	-19	0.4	3.117	3.075	0.042	-0.007	0
9	172	2022	4	625220	2152755.039	3.443	0	0	0	1	0	0	0	0	0	0	0	-14	0.000	0	0	0.4	3.379	3.443	-0.064	0.000	0
9	173	2022	5	625422	2019483.133	3.229	0	0	0	0	1	0	0	0	0	0	0	-13	0.000	0	0	0.4	3.284	3.229	0.055	0.000	0
9	174	2022	6	625448	2295388.883	3.670	0	0	0	0	0	1	0	0	0	0	0	-12	0.104	4	0	0.4	3.723	3.670	0.053	0.000	0
10	175	2022	7	625369	2478821.003	3.964	0	0	0	0	0	0	1	0	0	0	0	-11	-3.123	21	0	0.4	3.898	3.964	-0.066	0.123	0
10	176	2022	8	625597	2225826.72	3.558	0	0	0	0	0	0	0	1	0	0	0	-10	-0.440	31	0	0.4	3.705	3.558	0.147	0.043	0
10	177	2022	9	625777	2354320.297	3.762	0	0	0	0	0	0	0	0	1	0	0	-9	-0.547	-3	0	0.4	3.685	3.762	-0.077	0.016	0
10	178	2022	10	625932	2153004.29	3.440	0	0	0	0	0	0	0	0	0	1	0	-8	-0.936	-16	0	0.4	3.350	3.440	-0.090	0.017	0
10	179	2022	11	625937	1886199.631	3.013	0	0	0	0	0	0	0	0	0	0	1	-7	0.000	0	0	0.4	3.194	3.013	0.181	0.000	0
10	180	2022	12	625996	2033810.984	3.249	0	0	0	0	0	0	0	0	0	0	0	-6	0.000	0	0	0.4	3.315	3.249	0.066	0.000	0
10	181	2023	1	626438	2306259.591	3.682	1	0	0	0	0	0	0	0	0	0	0	-5	0.000	0	50	0.4	3.573	3.682	-0.109	0.020	0
10	182	2023	2	626788	2006561.121	3.201	0	1	0	0	0	0	0	0	0	0	0	-4	0.000	0	-261	0.4	3.144	3.201	-0.057	-0.105	0
10	183	2023	3	627166	1871830.393	2.985	0	0	1	0	0	0	0	0	0	0	0	-3	0.000	0	-210	0.4	2.989	2.985	0.005	-0.084	0

PENNSYLVANIA RESIDENTIAL MODEL

																		Rain Lag 2	0.1	0.8	1.0 CDD/HDD Lag						
							0.2423	-0.0575	-0.2285	0.0308	-0.0604	0.3825	0.4390	0.3309	0.3422	0.0100	-0.1248	Rain Lag 1	0.7								
Period	Obs	Year	Month	Cust	Sales	UPC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Trend	Rain	CDD	HDD	COVID	Predicted	Actual	Variance	Weather Effect	Billing Adjustments
10	184	2023	4	627185	2170022.691	3.460	0	0	0	1	0	0	0	0	0	0	0	-2	0.000	0	0	0.4	3.328	3.460	-0.132	0.000	0
10	185	2023	5	627516	1953916.148	3.114	0	0	0	0	1	0	0	0	0	0	0	-1	0.000	0	0	0.4	3.233	3.114	0.119	0.000	0
10	186	2023	6	627622	2474960	3.943	0	0	0	0	0	1	0	0	0	0	0	0	-2.406	-50	0	0.4	3.706	3.943	-0.237	0.035	0
11	187	2023	7	627978	2286043.1	3.640	0	0	0	0	0	0	1	0	0	0	0	1	-2.462	-52	0	0.0	3.640				
11	188	2023	8	628284	2201280.809	3.504	0	0	0	0	0	0	0	1	0	0	0	2	-0.320	0	0	0.0	3.504				
11	189	2023	9	628528	2199884.187	3.500	0	0	0	0	0	0	0	0	1	0	0	3	0.000	0	0	0.0	3.500				
11	190	2023	10	628744	1989081.74	3.164	0	0	0	0	0	0	0	0	0	1	0	4	0.000	0	0	0.0	3.164				
11	191	2023	11	629263	1903204.289	3.024	0	0	0	0	0	0	0	0	0	0	1	5	0.000	0	0	0.0	3.024				
11	192	2023	12	629501	1979811.24	3.145	0	0	0	0	0	0	0	0	0	0	0	6	0.000	0	0	0.0	3.145				
11	193	2024	1	629876	2130933.209	3.383	1	0	0	0	0	0	0	0	0	0	0	7	0.000	0	0	0.0	3.383				
11	194	2024	2	630210	1940426.652	3.079	0	1	0	0	0	0	0	0	0	0	0	8	0.000	0	0	0.0	3.079				
11	195	2024	3	630693	1831370.997	2.904	0	0	1	0	0	0	0	0	0	0	0	9	0.000	0	0	0.0	2.904				
11	196	2024	4	630954	1993078.231	3.159	0	0	0	1	0	0	0	0	0	0	0	10	0.000	0	0	0.0	3.159				
11	197	2024	5	631058	1933137.555	3.063	0	0	0	0	1	0	0	0	0	0	0	11	0.000	0	0	0.0	3.063				
11	198	2024	6	631273	2210717.751	3.502	0	0	0	0	0	1	0	0	0	0	0	12	0.000	0	0	0.0	3.502				
12	199	2024	7	631629	2244981.481	3.554	0	0	0	0	0	0	1	0	0	0	0	13	0.000	0	0	0.0	3.554				
12	200	2024	8	631935	2175066.466	3.442	0	0	0	0	0	0	0	1	0	0	0	14	0.000	0	0	0.0	3.442				
12	201	2024	9	632179	2180368.258	3.449	0	0	0	0	0	0	0	0	1	0	0	15	0.000	0	0	0.0	3.449				
12	202	2024	10	632395	1968326.397	3.112	0	0	0	0	0	0	0	0	0	1	0	16	0.000	0	0	0.0	3.112				
12	203	2024	11	632914	1881914.679	2.973	0	0	0	0	0	0	0	0	0	0	1	17	0.000	0	0	0.0	2.973				
12	204	2024	12	633151	1958949.588	3.094	0	0	0	0	0	0	0	0	0	0	0	18	0.000	0	0	0.0	3.094				
12	205	2025	1	633527	2110921.452	3.332	1	0	0	0	0	0	0	0	0	0	0	19	0.000	0	0	0.0	3.332				
12	206	2025	2	633861	1919287.686	3.028	0	1	0	0	0	0	0	0	0	0	0	20	0.000	0	0	0.0	3.028				
12	207	2025	3	634344	1809567.483	2.853	0	0	1	0	0	0	0	0	0	0	0	21	0.000	0	0	0.0	2.853				
12	208	2025	4	634605	1972192.665	3.108	0	0	0	1	0	0	0	0	0	0	0	22	0.000	0	0	0.0	3.108				
12	209	2025	5	634709	1911898.01	3.012	0	0	0	0	1	0	0	0	0	0	0	23	0.000	0	0	0.0	3.012				
12	210	2025	6	634924	2191068.705	3.451	0	0	0	0	0	1	0	0	0	0	0	24	0.000	0	0	0.0	3.451				
13	211	2025	7	635279	2225505.099	3.503	0	0	0	0	0	0	1	0	0	0	0	25	0.000	0	0	0.0	3.503				
13	212	2025	8	635586	2155164.249	3.391	0	0	0	0	0	0	0	1	0	0	0	26	0.000	0	0	0.0	3.391				
13	213	2025	9	635830	2160479.344	3.398	0	0	0	0	0	0	0	0	1	0	0	27	0.000	0	0	0.0	3.398				
13	214	2025	10	636045	1947198.07	3.061	0	0	0	0	0	0	0	0	0	1	0	28	0.000	0	0	0.0	3.061				
13	215	2025	11	636564	1860252.084	2.922	0	0	0	0	0	0	0	0	0	0	1	29	0.000	0	0	0.0	2.922				
13	216	2025	12	636802	1937714.952	3.043	0	0	0	0	0	0	0	0	0	0	0	30	0.000	0	0	0.0	3.043				
13	217	2026	1	637177	2090536.711	3.281	1	0	0	0	0	0	0	0	0	0	0	31	0.000	0	0	0.0	3.281				
13	218	2026	2	637511	1897775.735	2.977	0	1	0	0	0	0	0	0	0	0	0	32	0.000	0	0	0.0	2.977				
13	219	2026	3	637994	1787390.986	2.802	0	0	1	0	0	0	0	0	0	0	0	33	0.000	0	0	0.0	2.802				
13	220	2026	4	638255	1950934.114	3.057	0	0	0	1	0	0	0	0	0	0	0	34	0.000	0	0	0.0	3.057				
13	221	2026	5	638359	1890285.482	2.961	0	0	0	0	1	0	0	0	0	0	0	35	0.000	0	0	0.0	2.961				
13	222	2026	6	638574	2171046.675	3.400	0	0	0	0	0	1	0	0	0	0	0	36	0.000	0	0	0.0	3.400				
14	223	2026	7	638930	2205655.732	3.452	0	0	0	0	0	0	1	0	0	0	0	37	0.000	0	0	0.0	3.452				
14	224	2026	8	639236	2134889.047	3.340	0	0	0	0	0	0	0	1	0	0	0	38	0.000	0	0	0.0	3.340				
14	225	2026	9	639480	2140217.445	3.347	0	0	0	0	0	0	0	0	1	0	0	39	0.000	0	0	0.0	3.347				
14	226	2026	10	639696	1925696.758	3.010	0	0	0	0	0	0	0	0	0	1	0	40	0.000	0	0	0.0	3.010				
14	227	2026	11	640215	1838216.505	2.871	0	0	0	0	0	0	0	0	0	0	1	41	0.000	0	0	0.0	2.871				
14	228	2026	12	640453	1916107.332	2.992	0	0	0	0	0	0	0	0	0	0	0	42	0.000	0	0	0.0	2.992				

REGRESSION MODEL

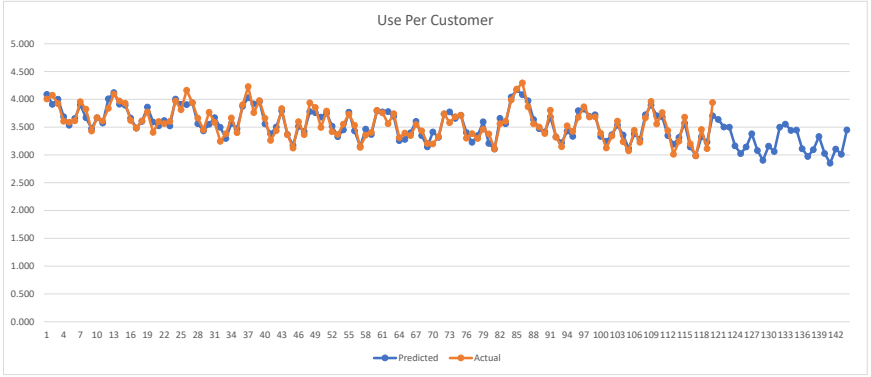
SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.9313
R Square	0.8672
Adjusted R Square	0.8466
Standard Error	0.1098
Observations	120

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	16	8.11	0.5069	42.0491	0.0000
Residual	103	1.24	0.0121		
Total	119	9.35			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*	
Intercept	3.1706	0.0445	71.2377	0.0000	3.0823	3.2589	4.3812	4.8161	
Jan	0.2423	0.0491	4.9347	0.0000	0.1449	0.3397	-0.0904	0.4442	
Feb	-0.0575	0.0491	-1.1713	0.2442	-0.1549	0.0399	-0.5977	-0.0631	
Mar	-0.2285	0.0491	-4.6531	0.0000	-0.3259	-0.1311	-0.5800	-0.0454	
Apr	0.0308	0.0493	0.6253	0.5332	-0.0669	0.1285	-0.4491	0.0880	
May	-0.0604	0.0493	-1.2268	0.2227	-0.1581	0.0373	0.0664	0.6039	
Jun	0.3825	0.0493	7.7655	0.0000	0.2848	0.4802	1.5893	2.1274	
Jul	0.4390	0.0494	8.8837	0.0000	0.3410	0.5370	3.0936	3.6314	
Aug	0.3309	0.0493	6.7142	0.0000	0.2332	0.4287	3.0495	3.5871	
Sep	0.3422	0.0493	6.9486	0.0000	0.2446	0.4399	2.6027	3.1405	
Oct	0.0100	0.0492	0.2035	0.8392	-0.0876	0.1077	1.1906	1.7252	
Nov	-0.1248	0.0492	-2.5363	0.0127	-0.2224	-0.0272	-0.0387	0.4958	
Trend	-0.0043	0.0004	-10.8213	0.0000	-0.0050	-0.0035	-0.0084	-0.0050	-0.613 Annual Decline
Rain	-0.0333	0.0094	-3.5456	0.0006	-0.0519	-0.0147	-0.2999	-0.1944	
CDD	0.0009	0.0004	2.2482	0.0267	0.0001	0.0017	0.0050	0.0095	
HDD	0.0004	0.0001	3.0833	0.0026	0.0001	0.0007	0.0050	0.0095	
COVID	0.2962	0.0498	5.9428	0.0000	0.1974	0.3951	0.2478	0.8078	

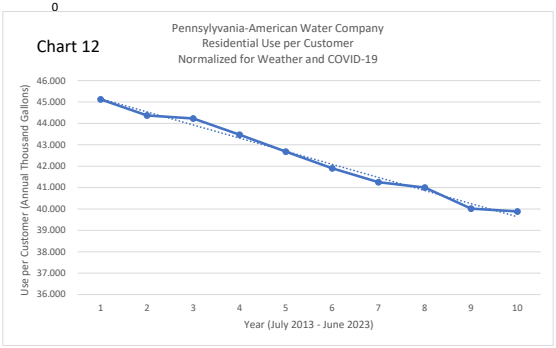


REGRESSION MODEL

SUMMARY OUTPUT

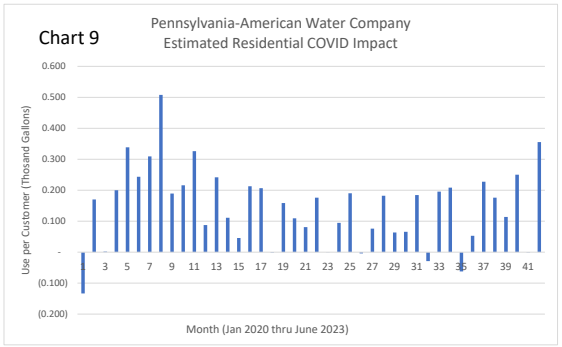
Auto-Correlation:	-0.2742
D-W Statistic	2.4841

Month	Sum. Wea.	Win. Wea.	Period	Actual	Weather	COVID	Normalized
1	0	1	1	45.158	0.036	-	45.122
2	0	1	2	44.642	0.273	-	44.369
3	0	1	3	43.995	(0.233)	-	44.228
4	0	0	4	43.567	0.097	-	43.470
5	0	0	5	42.462	(0.220)	-	42.682
6	1	0	6	41.578	(0.323)	-	41.902
7	1	0	7	42.087	(0.052)	0.889	41.251
8	1	0	8	43.704	0.391	2.310	41.003
9	1	0	9	41.362	(0.080)	1.422	40.020
10	1	0	10	41.370	0.064	1.422	39.885
11	0	0					
12	0	0					



REGRESSION MODEL

SUMMARY OUTPUT



Data	Usage Per Customer
Jan-20	(0.133)
Feb-20	0.170
Mar-20	0.002
Apr-20	0.200
May-20	0.339
Jun-20	0.244
Jul-20	0.309
Aug-20	0.508
Sep-20	0.189
Oct-20	0.216
Nov-20	0.326
Dec-20	0.088
Jan-21	0.242
Feb-21	0.111
Mar-21	0.046
Apr-21	0.213
May-21	0.206
Jun-21	(0.001)
Jul-21	0.159
Aug-21	0.109
Sep-21	0.081
Oct-21	0.176
Nov-21	0.000
Dec-21	0.095
Jan-22	0.190
Feb-22	(0.004)
Mar-22	0.076
Apr-22	0.182
May-22	0.063
Jun-22	0.066
Jul-22	0.184
Aug-22	(0.029)
Sep-22	0.196
Oct-22	0.208
Nov-22	(0.062)
Dec-22	0.053
Jan-23	0.228
Feb-23	0.176
Mar-23	0.114
Apr-23	0.250
May-23	(0.001)
Jun-23	0.356

CUSTOMER DATA

Year	Month	Cust	Growth	Select
2013	7	591888		
2013	8	592369	481	0
2013	9	592245	-124	0
2013	10	597092	4847	0
2013	11	596889	-203	0
2013	12	596793	-96	0
2014	1	597327	534	0
2014	2	596962	-365	0
2014	3	597062	100	0
2014	4	596881	-181	0
2014	5	596409	-472	0
2014	6	596756	347	0
2014	7	597147	391	0
2014	8	597203	56	0
2014	9	597462	259	0
2014	10	597524	62	0
2014	11	597335	-189	0
2014	12	597479	144	0
2015	1	597621	142	0
2015	2	597822	201	0
2015	3	598207	385	0
2015	4	598625	418	0
2015	5	597986	-639	0
2015	6	598123	137	0
2015	7	598212	89	0
2015	8	598580	368	0
2015	9	598960	380	0
2015	10	598874	-86	0
2015	11	599240	366	0
2015	12	599380	140	0
2016	1	599524	144	0
2016	2	600159	635	0
2016	3	600642	483	0
2016	4	600940	298	0
2016	5	601028	88	0
2016	6	601147	119	0
2016	7	601359	212	0
2016	8	602054	695	0
2016	9	602368	314	0

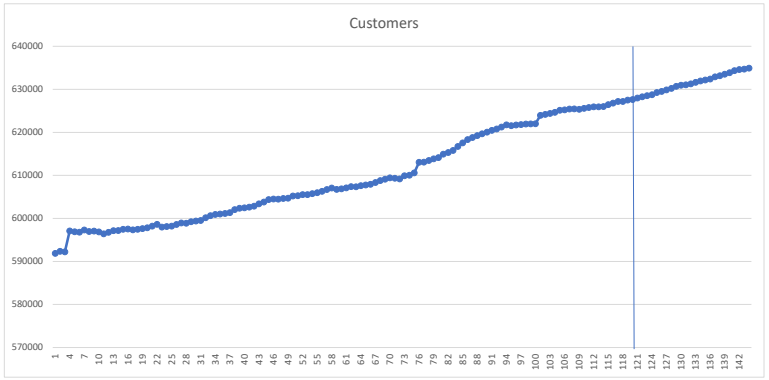
Month	Avg Growth Last 60 Months
1	375
2	334
3	483
4	261
5	104
6	215
7	356
8	306
9	244
10	216
11	519
12	238
	3651

CUSTOMER DATA

Year	Month	Cust	Growth	Select
2016	10	602465	97	0
2016	11	602625	160	0
2016	12	602856	231	0
2017	1	603389	533	0
2017	2	603795	406	0
2017	3	604388	593	0
2017	4	604497	109	0
2017	5	604466	-31	0
2017	6	604646	180	0
2017	7	604712	66	0
2017	8	605210	498	0
2017	9	605274	64	0
2017	10	605542	268	0
2017	11	605539	-3	0
2017	12	605770	231	0
2018	1	605987	217	0
2018	2	606288	301	0
2018	3	606729	441	0
2018	4	607071	342	0
2018	5	606742	-329	0
2018	6	606877	135	0
2018	7	607090	213	1
2018	8	607391	301	1
2018	9	607368	-23	1
2018	10	607602	234	1
2018	11	607787	185	1
2018	12	607947	160	1
2019	1	608339	392	1
2019	2	608788	449	1
2019	3	609106	318	1
2019	4	609423	317	1
2019	5	609341	-82	1
2019	6	609185	-156	1
2019	7	609916	731	1
2019	8	610054	138	1
2019	9	610572	518	1
2019	10	613052	2480	0
2019	11	613091	39	1
2019	12	613460	369	1
2020	1	613855	395	1
2020	2	614148	293	1
2020	3	614940	792	1
2020	4	615330	390	1
2020	5	615811	481	1
2020	6	616730	919	1
2020	7	617571	841	1
2020	8	618309	738	1
2020	9	618810	501	1
2020	10	619258	448	1
2020	11	619675	417	1
2020	12	620045	370	1
2021	1	620477	432	1
2021	2	620790	313	1
2021	3	621236	446	1
2021	4	621730	494	1
2021	5	621545	-185	1
2021	6	621725	180	1
2021	7	621798	73	1
2021	8	621924	126	1
2021	9	621968	44	1
2021	10	621994	26	1
2021	11	623943	1949	1
2021	12	624174	231	1
2022	1	624389	215	1
2022	2	624655	266	1
2022	3	625136	481	1
2022	4	625220	84	1
2022	5	625422	202	1
2022	6	625448	26	1
2022	7	625369	-79	1

CUSTOMER DATA

Year	Month	Cust	Growth	Select
2022	8	625597	228	1
2022	9	625777	180	1
2022	10	625932	155	1
2022	11	625937	5	1
2022	12	625996	59	1
2023	1	626438	442	1
2023	2	626788	350	1
2023	3	627166	378	1
2023	4	627185	19	1
2023	5	627516	331	0
2023	6	627622	106	1
2023	7	627978	356	
2023	8	628284	306	
2023	9	628528	244	
2023	10	628744	216	
2023	11	629263	519	
2023	12	629501	238	
2024	1	629876	375	
2024	2	630210	334	
2024	3	630693	483	
2024	4	630954	261	
2024	5	631058	104	
2024	6	631273	215	
2024	7	631629	356	
2024	8	631935	306	
2024	9	632179	244	
2024	10	632395	216	
2024	11	632914	519	
2024	12	633151	238	
2025	1	633527	375	
2025	2	633861	334	
2025	3	634344	483	
2025	4	634605	261	
2025	5	634709	104	
2025	6	634924	215	
2025	7	635279	356	
2025	8	635586	306	
2025	9	635830	244	
2025	10	636045	216	
2025	11	636564	519	
2025	12	636802	238	
2026	1	637177	375	
2026	2	637511	334	
2026	3	637994	483	
2026	4	638255	261	
2026	5	638359	104	
2026	6	638574	215	
2026	7	638930	356	
2026	8	639236	306	
2026	9	639480	244	
2026	10	639696	216	
2026	11	640215	519	
2026	12	640453	238	



WEATHER DATA

Year	Month	Rain	Rain Lag 1	Rain Lag 2	CDD	CDD Lag 1	HDD	HDD Lag 1					
2013	7	3.573	0.155	-2.031	-15	-6	0	-5	47862	-16195	2013	39420	-65108
2013	8	-2.394	3.573	0.155	-71	-15	7	0	-96818	-54136	2014	-43205	83090
2013	9	-1.592	-2.394	3.573	-50	-71	47	7	47707	-3854	2015	-176753	122207
2013	10	-0.766	-1.592	-2.394	9	-50	18	47	49180	9077	2016	131772	72675
2013	11	0.653	-0.766	-1.592	-2	9	89	18	-33292	0	2017	-104007	-275551
2013	12	0.950	0.653	-0.766	0	-2	22	89	24782	0	2018	48851	-132156
2014	1	-1.105	0.950	0.653	0	0	202	22	-33010	5146	2019	164702	-47566
2014	2	-1.068	-1.105	0.950	0	0	147	202	-92151	48276	2020	19022	179798
2014	3	-1.121	-1.068	-1.105	-1	0	164	147	25022	35052	2021	-8576	5064
2014	4	0.629	-1.121	-1.068	1	-1	-52	164	-599	0	2022	186400	116303
2014	5	0.859	0.629	-1.121	5	1	-19	-52	-23115	0			
2014	6	-1.345	0.859	0.629	43	5	-14	-19	102166	-1058	avg.	25763	5876
2014	7	-1.247	-1.345	0.859	-69	43	9	-14	16235	33393	s.d.	115902	138464
2014	8	1.146	-1.247	-1.345	-76	-69	5	9	-33295	-22583			
2014	9	-2.872	1.146	-1.247	-39	-76	25	5	-23283	-39487			
2014	10	-1.346	-2.872	1.146	-16	-39	13	25	24815	24351			
2014	11	-0.347	-1.346	-2.872	-2	-16	118	13	-192	0			
2014	12	-0.330	-0.347	-1.346	0	-2	49	118	-5797	0			
2015	1	-0.235	-0.330	-0.347	0	0	135	49	53386	11615			
2015	2	-2.078	-0.235	-0.330	0	0	405	135	110773	32294			
2015	3	0.959	-2.078	-0.235	-1	0	144	405	-46222	96968			
2015	4	0.899	0.959	-2.078	-11	-1	-38	144	31498	0			
2015	5	-1.731	0.899	0.959	54	-11	-53	-38	-48270	0			
2015	6	4.665	-1.731	0.899	-6	54	8	-53	21559	26569			
2015	7	-1.467	4.665	-1.731	-32	-6	-2	8	56780	-61628			
2015	8	-2.924	-1.467	4.665	-49	-32	3	-2	-153767	3738			
2015	9	1.778	-2.924	-1.467	31	-49	-21	3	-1257	18528			
2015	10	-0.646	1.778	-2.924	-27	31	46	-21	-61006	-5878			
2015	11	-0.697	-0.646	1.778	2	-27	-222	46	-12231	0			
2015	12	0.450	-0.697	-0.646	0	2	-301	-222	-127997	0			
2016	1	-1.005	0.450	-0.697	0	0	27	-301	49736	-72196			
2016	2	-0.078	-1.005	0.450	0	0	-37	27	151865	6446			
2016	3	-1.071	-0.078	-1.005	-1	0	-232	-37	-50876	-8786			
2016	4	-1.011	-1.071	-0.078	-9	-1	14	-232	-59250	0			
2016	5	1.639	-1.011	-1.071	-22	-9	50	14	42795	0			
2016	6	-2.325	1.639	-1.011	13	-22	-3	50	-16121	-19882			
2016	7	-0.277	-2.325	1.639	44	13	-1	-3	-119553	41044			
2016	8	-0.594	-0.277	-2.325	106	44	-3	-1	94757	41568			
2016	9	-0.222	-0.594	-0.277	46	106	-43	-3	-11846	61142			
2016	10	0.194	-0.222	-0.594	-3	46	-49	-43	-60911	23338			
2016	11	-1.247	0.194	-0.222	3	-3	-82	-49	72180	0			
2016	12	0.650	-1.247	0.194	0	3	134	-82	38997	0			
2017	1	1.025	0.650	-1.247	0	0	-168	134	-24576	32280			
2017	2	-1.598	1.025	0.650	2	0	-219	-168	721	-40698			
2017	3	1.599	-1.598	1.025	3	2	35	-219	29768	-52921			
2017	4	-0.021	1.599	-1.598	10	3	-154	35	-50873	0			
2017	5	0.889	-0.021	1.599	-31	10	30	-154	32121	0			
2017	6	5.005	0.889	-0.021	-11	-31	6	30	-95723	-47540			
2017	7	3.373	5.005	0.889	-12	-11	-2	6	-57639	-91862			
2017	8	-0.404	3.373	5.005	-89	-12	2	-2	112559	-70945			
2017	9	-2.142	-0.404	3.373	-4	-89	20	2	-22713	-32261			
2017	10	0.514	-2.142	-0.404	12	-4	-68	20	59596	28395			
2017	11	1.773	0.514	-2.142	-2	12	9	-68	-23998	0			
2017	12	-1.980	1.773	0.514	0	-2	201	9	-63252	0			
2018	1	0.455	-1.980	1.773	0	0	119	201	22775	48690			
2018	2	3.092	0.455	-1.980	2	0	-148	119	-62187	28864			
2018	3	-0.381	3.092	0.455	-1	2	201	-148	8335	-35863			
2018	4	0.489	-0.381	3.092	1	-1	184	201	65612	0			
2018	5	1.019	0.489	-0.381	55	1	-120	184	-23082	0			
2018	6	4.135	1.019	0.489	-2	55	6	-120	-5102	-8093			
2018	7	-2.217	4.135	1.019	3	-2	-2	6	10754	-52047			
2018	8	1.366	-2.217	4.135	15	3	-3	-2	132594	20231			
2018	9	8.458	1.366	-2.217	57	15	-6	-3	-28541	-36299			
2018	10	0.934	8.458	1.366	33	57	85	-6	-32592	-97639			
2018	11	1.233	0.934	8.458	-2	33	143	85	-70124	0			
2018	12	1.260	1.233	0.934	0	-2	-85	143	30407	0			

WEATHER DATA

Year	Month	Rain	Rain Lag 1	Rain Lag 2	CDD	CDD Lag 1	HDD	HDD Lag 1		
2019	1	-0.245	1.260	1.233	0	0	40	-85	34470	-20600
2019	2	1.352	-0.245	1.260	0	0	-34	40	-51569	9710
2019	3	-1.401	1.352	-0.245	-1	0	102	-34	-37021	-8177
2019	4	0.809	-1.401	1.352	-7	-1	-78	102	131767	0
2019	5	0.609	0.809	-1.401	5	-7	-46	-78	-6462	0
2019	6	-0.315	0.609	0.809	-43	5	12	-46	-1177	-11605
2019	7	-0.487	-0.315	0.609	-66	-43	0	12	117596	-20956
2019	8	2.416	-0.487	-0.315	68	-66	-3	0	-18456	-23816
2019	9	-1.572	2.416	-0.487	29	68	-52	-3	-1630	6275
2019	10	2.464	-1.572	2.416	12	29	-19	-52	62070	21604
2019	11	-0.747	2.464	-1.572	-2	12	142	-19	-96154	0
2019	12	0.300	-0.747	2.464	0	-2	25	142	31268	0
2020	1	0.775	0.300	-0.747	0	0	-187	25	81775	6027
2020	2	0.222	0.775	0.300	0	0	-1	-187	-104601	-46072
2020	3	2.319	0.222	0.775	1	0	-162	-1	-1110	-123
2020	4	1.479	2.319	0.222	-12	1	112	-162	59226	0
2020	5	-1.471	1.479	2.319	-15	-12	108	112	-26103	0
2020	6	-3.365	-1.471	1.479	3	-15	-4	108	32479	25493
2020	7	-1.427	-3.365	-1.471	132	3	-2	-4	-8161	73644
2020	8	0.656	-1.427	-3.365	38	132	-3	-2	-130894	88208
2020	9	-1.812	0.656	-1.427	-20	38	25	-3	66178	15649
2020	10	-0.786	-1.812	0.656	-18	-20	20	25	49706	16972
2020	11	-0.037	-0.786	-1.812	-2	-18	-138	20	-18659	0
2020	12	-0.830	-0.037	-0.786	0	-2	71	-138	19187	0
2021	1	-0.845	-0.830	-0.037	0	0	-57	71	-76339	17530
2021	2	-0.418	-0.845	-0.830	0	0	114	-57	4653	-14230
2021	3	-0.101	-0.418	-0.845	-1	0	-143	114	45091	28256
2021	4	-1.311	-0.101	-0.418	4	-1	6	-143	-58539	0
2021	5	-1.071	-1.311	-0.101	-4	4	83	6	-54684	0
2021	6	1.475	-1.071	-1.311	48	-4	-1	83	74536	15703
2021	7	-0.027	1.475	-1.071	-25	48	-2	-1	-25026	79
2021	8	1.276	-0.027	1.475	61	-25	-3	-2	5654	-12170
2021	9	0.908	1.276	-0.027	-35	61	-23	-3	23289	1285
2021	10	0.584	0.908	1.276	25	-35	-138	-23	-35721	-31389
2021	11	-1.697	0.584	0.908	-2	25	24	-138	73638	0
2021	12	0.910	-1.697	0.584	0	-2	-164	24	14873	0
2022	1	-0.065	0.910	-1.697	0	0	152	-164	-44757	-40910
2022	2	2.072	-0.065	0.910	0	0	-19	152	76437	37999
2022	3	-0.721	2.072	-0.065	-1	0	-94	-19	26444	-4635
2022	4	-0.051	-0.721	2.072	6	-1	66	-94	-39834	0
2022	5	1.509	-0.051	-0.721	1	6	-49	66	34389	0
2022	6	-4.735	1.509	-0.051	16	1	-12	-49	32995	60
2022	7	0.203	-4.735	1.509	39	16	-2	-12	-41215	76886
2022	8	-0.544	0.203	-4.735	0	39	-3	-2	92128	26665
2022	9	-0.932	-0.544	0.203	-13	0	31	-3	-48196	9758
2022	10	-1.146	-0.932	-0.544	-27	-13	88	31	-56200	10481
2022	11	1.113	-1.146	-0.932	7	-27	-86	88	113084	0
2022	12	-1.380	1.113	-1.146	0	7	50	-86	41126	0
2023	1	1.245	-1.380	1.113	0	0	-261	50	-68308	12426
2023	2	-1.498	1.245	-1.380	0	0	-210	-261	-35996	-65608
2023	3	-0.081	-1.498	1.245	-1	0	-11	-210	2992	-52653
2023	4	-1.911	-0.081	-1.498	15	-1	-56	-11	-82500	0
2023	5	-2.251	-1.911	-0.081	-46	15	15	-56	74777	0
2023	6	-3.195	-2.251	-1.911	-65	-46	5	15	-148797	21807
2023	7	0.000	-3.195	-2.251	0	-65	0	5		
2023	8	0.000	0.000	-3.195	0	0	0	0		
2023	9	0.000	0.000	0.000	0	0	0	0		
2023	10	0.000	0.000	0.000	0	0	0	0		
2023	11	0.000	0.000	0.000	0	0	0	0		
2023	12	0.000	0.000	0.000	0	0	0	0		
2024	1	0.000	0.000	0.000	0	0	0	0		
2024	2	0.000	0.000	0.000	0	0	0	0		
2024	3	0.000	0.000	0.000	0	0	0	0		
2024	4	0.000	0.000	0.000	0	0	0	0		
2024	5	0.000	0.000	0.000	0	0	0	0		
2024	6	0.000	0.000	0.000	0	0	0	0		
2024	7	0.000	0.000	0.000	0	0	0	0		

WEATHER DATA

Year	Month	Rain	Rain Lag 1	Rain Lag 2	CDD	CDD Lag 1	HDD	HDD Lag 1
2024	8	0.000	0.000	0.000	0	0	0	0
2024	9	0.000	0.000	0.000	0	0	0	0
2024	10	0.000	0.000	0.000	0	0	0	0
2024	11	0.000	0.000	0.000	0	0	0	0
2024	12	0.000	0.000	0.000	0	0	0	0
2025	1	0.000	0.000	0.000	0	0	0	0
2025	2	0.000	0.000	0.000	0	0	0	0
2025	3	0.000	0.000	0.000	0	0	0	0
2025	4	0.000	0.000	0.000	0	0	0	0
2025	5	0.000	0.000	0.000	0	0	0	0
2025	6	0.000	0.000	0.000	0	0	0	0
2025	7	0.000	0.000	0.000	0	0	0	0
2025	8	0.000	0.000	0.000	0	0	0	0
2025	9	0.000	0.000	0.000	0	0	0	0
2025	10	0.000	0.000	0.000	0	0	0	0
2025	11	0.000	0.000	0.000	0	0	0	0
2025	12	0.000	0.000	0.000	0	0	0	0
2026	1	0.000	0.000	0.000	0	0	0	0
2026	2	0.000	0.000	0.000	0	0	0	0
2026	3	0.000	0.000	0.000	0	0	0	0
2026	4	0.000	0.000	0.000	0	0	0	0
2026	5	0.000	0.000	0.000	0	0	0	0
2026	6	0.000	0.000	0.000	0	0	0	0
2026	7	0.000	0.000	0.000	0	0	0	0
2026	8	0.000	0.000	0.000	0	0	0	0
2026	9	0.000	0.000	0.000	0	0	0	0
2026	10	0.000	0.000	0.000	0	0	0	0
2026	11	0.000	0.000	0.000	0	0	0	0
2026	12	0.000	0.000	0.000	0	0	0	0

PENNSYLVANIA WEATHER DATA

DU Year	Month	Normal	DATE	CAL. CLDD	CAL. PRCP	CAL. HTDD	MODEL CLDD	MODEL PRCP	MODEL HTDD	Rain	Rain Lag	Rain Lag 2	CDD	CDD Lag	HDD	HDD Lag
2008	1	0	2008.01	0	1.890	1057	0	-0.785	-29	-0.785	0.000	0.000	0.000	0.000	-29	0
2008	2	0	2008.02	0	5.060	1012	0	1.682	133	1.682	-0.785	0.000	-0.400	0.000	133	-29
2008	3	0	2008.03	0	4.100	821	-1	0.779	85	0.779	1.682	-0.785	-0.600	-0.400	85	133
2008	4	0	2008.04	7	2.940	330	-5	-0.701	-63	-0.701	0.779	1.682	-4.800	-0.600	-63	85
2008	5	0	2008.05	14	5.380	246	-64	1.129	101	1.129	-0.701	0.779	-64.200	-4.800	101	-63
2008	6	0	2008.06	171	4.750	17	-3	-1.225	-1	-1.225	1.129	-0.701	-2.600	-64.200	-1	101
2008	7	0	2008.07	239	2.480	0	-40	-2.067	-2	-2.067	-1.225	1.129	-39.500	-2.600	-2	-1
2008	8	0	2008.08	163	2.040	2	-84	-2.964	-1	-2.964	-2.067	-1.225	-84.300	-39.500	-1	-2
2008	9	0	2008.09	85	1.690	34	-33	-1.752	-22	-1.752	-2.964	-2.067	-33.200	-84.300	-22	-1
2008	10	0	2008.10	4	1.960	415	-23	-1.956	108	-1.956	-1.752	-2.964	-22.500	-33.200	108	-22
2008	11	0	2008.11	0	2.060	729	-2	-0.447	74	-0.447	-1.956	-1.752	-1.500	-22.500	74	108
2008	12	0	2008.12	0	6.310	987	0	2.980	130	2.980	-0.447	-1.956	0.000	-1.500	130	74
2009	1	0	2009.01	0	3.060	1316	0	0.385	230	0.385	2.980	-0.447	0.000	0.000	230	130
2009	2	0	2009.02	0	1.070	904	0	-2.308	25	-2.308	0.385	2.980	-0.400	0.000	25	230
2009	3	0	2009.03	0	2.070	697	-1	-1.251	-39	-1.251	-2.308	0.385	-0.600	-0.400	-39	25
2009	4	0	2009.04	29	2.920	411	17	-0.721	18	-0.721	-1.251	-2.308	17.200	-0.600	18	-39
2009	5	0	2009.05	45	3.990	154	-33	-0.261	9	-0.261	-0.721	-1.251	-33.200	17.200	9	18
2009	6	0	2009.06	120	3.200	26	-54	-2.775	8	-2.775	-0.261	-0.721	-53.600	-33.200	8	9
2009	7	0	2009.07	142	4.670	5	-137	0.123	3	0.123	-2.775	-0.261	-136.500	-53.600	3	8
2009	8	0	2009.08	224	2.240	7	-23	-2.764	4	-2.764	0.123	-2.775	-23.300	-136.500	4	3
2009	9	0	2009.09	54	1.720	64	-64	-1.722	8	-1.722	-2.764	0.123	-64.200	-23.300	8	4
2009	10	0	2009.10	0	3.240	428	-27	-0.676	121	-0.676	-1.722	-2.764	-26.500	-64.200	121	8
2009	11	0	2009.11	0	1.060	518	-2	-1.447	-137	-1.447	-0.676	-1.722	-1.500	-26.500	-137	121
2009	12	0	2009.12	0	4.100	1044	0	0.770	187	0.770	-1.447	-0.676	0.000	-1.500	187	-137
2010	1	0	2010.01	0	2.340	1194	0	-0.335	108	-0.335	0.770	-1.447	0.000	0.000	108	187
2010	2	0	2010.02	0	1.560	1067	0	-1.818	188	-1.818	-0.335	0.770	-0.400	0.000	188	108
2010	3	0	2010.03	0	2.950	636	-1	-0.371	-100	-0.371	-1.818	-0.335	-0.600	-0.400	-100	188
2010	4	0	2010.04	29	1.360	289	17	-2.281	-104	-2.281	-0.371	-1.818	17.200	-0.600	-104	-100
2010	5	0	2010.05	86	5.610	112	8	1.359	-33	1.359	-2.281	-0.371	7.800	17.200	-33	-104
2010	6	0	2010.06	203	4.460	11	29	-1.515	-7	-1.515	1.359	-2.281	29.400	7.800	-7	-33
2010	7	0	2010.07	332	3.460	3	54	-1.087	1	-1.087	-1.515	1.359	53.500	29.400	1	-7
2010	8	0	2010.08	300	2.060	0	53	-2.944	-3	-2.944	-1.087	-1.515	52.700	53.500	-3	1
2010	9	0	2010.09	101	3.510	54	-17	0.068	-2	0.068	-2.944	-1.087	-17.200	52.700	-2	-3
2010	10	0	2010.10	5	2.400	299	-22	-1.516	-8	-1.516	0.068	-2.944	-21.500	-17.200	-8	-2
2010	11	0	2010.11	0	5.280	643	-2	2.773	-12	2.773	-1.516	0.068	-1.500	-21.500	-12	-8
2010	12	0	2010.12	0	1.170	1202	0	-2.160	345	-2.160	2.773	-1.516	0.000	-1.500	345	-12
2011	1	0	2011.01	0	1.790	1244	0	-0.885	158	-0.885	-2.160	2.773	0.000	0.000	158	345
2011	2	0	2011.02	0	3.030	807	0	-0.348	-73	-0.348	-0.885	-2.160	-0.400	0.000	-73	158
2011	3	0	2011.03	0	3.920	788	-1	0.599	52	0.599	-0.348	-0.885	-0.600	-0.400	52	-73
2011	4	0	2011.04	19	5.780	357	7	2.139	-36	2.139	0.599	-0.348	7.200	-0.600	-36	52
2011	5	0	2011.05	92	4.050	142	14	-0.201	-3	-0.201	2.139	0.599	13.800	7.200	-3	-36
2011	6	0	2011.06	176	1.770	12	2	-4.205	-6	-4.205	-0.201	2.139	2.400	13.800	-6	-3
2011	7	0	2011.07	388	3.930	0	110	-0.617	-2	-0.617	-4.205	-0.201	109.500	2.400	-2	-6
2011	8	0	2011.08	235	4.010	0	-12	-0.994	-3	-0.994	-0.617	-4.205	-12.300	109.500	-3	-2

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DU Year	Month	Normal	DATE	CAL. CLDD	CAL. PRCP	CAL. HTDD	MODEL CLDD	MODEL PRCP	MODEL HTDD	Rain	Rain Lag	Rain Lag 2	CDD	CDD Lag	HDD	HDD Lag
2011	9	0	2011.09	101	4.850	81	-17	1.408	25	1.408	-0.994	-0.617	-17.200	-12.300	25	-3
2011	10	0	2011.10	2	4.050	367	-25	0.134	60	0.134	1.408	-0.994	-24.500	-17.200	60	25
2011	11	0	2011.11	0	3.930	512	-2	1.423	-143	1.423	0.134	1.408	-1.500	-24.500	-143	60
2011	12	0	2011.12	0	3.100	824	0	-0.230	-34	-0.230	1.423	0.134	0.000	-1.500	-34	-143
2012	1	0	2012.01	0	3.110	968	0	0.435	-118	0.435	-0.230	1.423	0.000	0.000	-118	-34
2012	2	0	2012.02	0	1.800	816	0	-1.578	-64	-1.578	0.435	-0.230	-0.400	0.000	-64	-118
2012	3	0	2012.03	9	2.920	419	8	-0.401	-317	-0.401	-1.578	0.435	8.400	-0.400	-317	-64
2012	4	0	2012.04	6	1.640	439	-6	-2.001	46	-2.001	-0.401	-1.578	-5.800	8.400	46	-317
2012	5	0	2012.05	144	2.740	52	66	-1.511	-93	-1.511	-2.001	-0.401	65.800	-5.800	-93	46
2012	6	0	2012.06	206	1.680	22	32	-4.295	4	-4.295	-1.511	-2.001	32.400	65.800	4	-93
2012	7	0	2012.07	381	6.680	0	103	2.133	-2	2.133	-4.295	-1.511	102.500	32.400	-2	4
2012	8	0	2012.08	237	2.860	1	-10	-2.144	-2	-2.144	2.133	-4.295	-10.300	102.500	-2	-2
2012	9	0	2012.09	107	4.640	109	-11	1.198	53	1.198	-2.144	2.133	-11.200	-10.300	53	-2
2012	10	0	2012.10	20	5.000	346	-7	1.084	39	1.084	1.198	-2.144	-6.500	-11.200	39	53
2012	11	0	2012.11	0	0.700	727	-2	-1.807	72	-1.807	1.084	1.198	-1.500	-6.500	72	39
2012	12	0	2012.12	0	4.430	799	0	1.100	-59	1.100	-1.807	1.084	0.000	-1.500	-59	72
2013	1	0	2013.01	0	3.050	995	0	0.375	-91	0.375	1.100	-1.807	0.000	0.000	-91	-59
2013	2	0	2013.02	0	1.900	1005	0	-1.478	126	-1.478	0.375	1.100	-0.400	0.000	126	-91
2013	3	0	2013.03	0	1.920	917	-1	-1.401	181	-1.401	-1.478	0.375	-0.600	-0.400	181	126
2013	4	0	2013.04	21	2.860	366	9	-0.781	-27	-0.781	-1.401	-1.478	9.200	-0.600	-27	181
2013	5	0	2013.05	90	2.220	155	12	-2.031	10	-2.031	-0.781	-1.401	11.800	9.200	10	-27
2013	6	0	2013.06	168	6.130	13	-6	0.155	-5	0.155	-2.031	-0.781	-5.600	11.800	-5	10
2013	7	1	2013.07	264	8.120	2	-15	3.573	0	3.573	0.155	-2.031	-14.500	-5.600	0	-5
2013	8	1	2013.08	176	2.610	10	-71	-2.394	7	-2.394	3.573	0.155	-71.300	-14.500	7	0
2013	9	1	2013.09	68	1.850	103	-50	-1.592	47	-1.592	-2.394	3.573	-50.200	-71.300	47	7
2013	10	1	2013.10	35	3.150	325	9	-0.766	18	-0.766	-1.592	-2.394	8.500	-50.200	18	47
2013	11	1	2013.11	0	3.160	744	-2	0.653	89	0.653	-0.766	-1.592	-1.500	8.500	89	18
2013	12	1	2013.12	0	4.280	879	0	0.950	22	0.950	0.653	-0.766	0.000	-1.500	22	89
2014	1	1	2014.01	0	1.570	1288	0	-1.105	202	-1.105	0.950	0.653	0.000	0.000	202	22
2014	2	1	2014.02	0	2.310	1026	0	-1.068	147	-1.068	-1.105	0.950	-0.400	0.000	147	202
2014	3	1	2014.03	0	2.200	900	-1	-1.121	164	-1.121	-1.068	-1.105	-0.600	-0.400	164	147
2014	4	1	2014.04	13	4.270	341	1	0.629	-52	0.629	-1.121	-1.068	1.200	-0.600	-52	164
2014	5	1	2014.05	83	5.110	126	5	0.859	-19	0.859	0.629	-1.121	4.800	1.200	-19	-52
2014	6	1	2014.06	217	4.630	4	43	-1.345	-14	-1.345	0.859	0.629	43.400	4.800	-14	-19
2014	7	1	2014.07	210	3.300	11	-69	-1.247	9	-1.247	-1.345	0.859	-68.500	43.400	9	-14
2014	8	1	2014.08	171	6.150	8	-76	1.146	5	1.146	-1.247	-1.345	-76.300	-68.500	5	9
2014	9	1	2014.09	79	0.570	81	-39	-2.872	25	-2.872	1.146	-1.247	-39.200	-76.300	25	5
2014	10	1	2014.10	11	2.570	320	-16	-1.346	13	-1.346	-2.872	1.146	-15.500	-39.200	13	25
2014	11	1	2014.11	0	2.160	773	-2	-0.347	118	-0.347	-1.346	-2.872	-1.500	-15.500	118	13
2014	12	1	2014.12	0	3.000	906	0	-0.330	49	-0.330	-0.347	-1.346	0.000	-1.500	49	118
2015	1	1	2015.01	0	2.440	1221	0	-0.235	135	-0.235	-0.330	-0.347	0.000	0.000	135	49
2015	2	1	2015.02	0	1.300	1284	0	-2.078	405	-2.078	-0.235	-0.330	-0.400	0.000	405	135
2015	3	1	2015.03	0	4.280	880	-1	0.959	144	0.959	-2.078	-0.235	-0.600	-0.400	144	405
2015	4	1	2015.04	1	4.540	355	-11	0.899	-38	0.899	0.959	-2.078	-10.800	-0.600	-38	144

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2015	5	1	2015.05	132	2.520	92	54	-1.731	-53	-1.731	0.899	0.959	53.800	-10.800	-53	-38
2015	6	1	2015.06	168	10.640	26	-6	4.665	8	4.665	-1.731	0.899	-5.600	53.800	8	-53
2015	7	1	2015.07	247	3.080	0	-32	-1.467	-2	-1.467	4.665	-1.731	-31.500	-5.600	-2	8
2015	8	1	2015.08	198	2.080	6	-49	-2.924	3	-2.924	-1.467	4.665	-49.300	-31.500	3	-2
2015	9	1	2015.09	149	5.220	35	31	1.778	-21	1.778	-2.924	-1.467	30.800	-49.300	-21	3
2015	10	1	2015.10	0	3.270	353	-27	-0.646	46	-0.646	1.778	-2.924	-26.500	30.800	46	-21
2015	11	1	2015.11	3	1.810	433	2	-0.697	-222	-0.697	-0.646	1.778	1.500	-26.500	-222	46
2015	12	1	2015.12	0	3.780	557	0	0.450	-301	0.450	-0.697	-0.646	0.000	1.500	-301	-222
2016	1	1	2016.01	0	1.670	1113	0	-1.005	27	-1.005	0.450	-0.697	0.000	0.000	27	-301
2016	2	1	2016.02	0	3.300	843	0	-0.078	-37	-0.078	-1.005	0.450	-0.400	0.000	-37	27
2016	3	1	2016.03	0	2.250	504	-1	-1.071	-232	-1.071	-0.078	-1.005	-0.600	-0.400	-232	-37
2016	4	1	2016.04	3	2.630	407	-9	-1.011	14	-1.011	-1.071	-0.078	-8.800	-0.600	14	-232
2016	5	1	2016.05	56	5.890	195	-22	1.639	50	1.639	-1.011	-1.071	-22.200	-8.800	50	14
2016	6	1	2016.06	187	3.650	15	13	-2.325	-3	-2.325	1.639	-1.011	13.400	-22.200	-3	50
2016	7	1	2016.07	322	4.270	1	44	-0.277	-1	-0.277	-2.325	1.639	43.500	13.400	-1	-3
2016	8	1	2016.08	353	4.410	0	106	-0.594	-3	-0.594	-0.277	-2.325	105.700	43.500	-3	-1
2016	9	1	2016.09	164	3.220	13	46	-0.222	-43	-0.222	-0.594	-0.277	45.800	105.700	-43	-3
2016	10	1	2016.10	24	4.110	258	-3	0.194	-49	0.194	-0.222	-0.594	-2.500	45.800	-49	-43
2016	11	1	2016.11	4	1.260	573	3	-1.247	-82	-1.247	0.194	-0.222	2.500	-2.500	-82	-49
2016	12	1	2016.12	0	3.980	991	0	0.650	134	0.650	-1.247	0.194	0.000	2.500	134	-82
2017	1	1	2017.01	0	3.700	918	0	1.025	-168	1.025	0.650	-1.247	0.000	0.000	-168	134
2017	2	1	2017.02	2	1.780	661	2	-1.598	-219	-1.598	1.025	0.650	1.600	0.000	-219	-168
2017	3	1	2017.03	4	4.920	771	3	1.599	35	1.599	-1.598	1.025	3.400	1.600	35	-219
2017	4	1	2017.04	22	3.620	239	10	-0.021	-154	-0.021	1.599	-1.598	10.200	3.400	-154	35
2017	5	1	2017.05	47	5.140	175	-31	0.889	30	0.889	-0.021	1.599	-31.200	10.200	30	-154
2017	6	1	2017.06	163	10.980	24	-11	5.005	6	5.005	0.889	-0.021	-10.600	-31.200	6	30
2017	7	1	2017.07	267	7.920	0	-12	3.373	-2	3.373	5.005	0.889	-11.500	-10.600	-2	6
2017	8	1	2017.08	158	4.600	5	-89	-0.404	2	-0.404	3.373	5.005	-89.300	-11.500	2	-2
2017	9	1	2017.09	114	1.300	76	-4	-2.142	20	-2.142	-0.404	3.373	-4.200	-89.300	20	2
2017	10	1	2017.10	38	4.430	239	12	0.514	-68	0.514	-2.142	-0.404	11.500	-4.200	-68	20
2017	11	1	2017.11	0	4.280	664	-2	1.773	9	1.773	0.514	-2.142	-1.500	11.500	9	-68
2017	12	1	2017.12	0	1.350	1058	0	-1.980	201	-1.980	1.773	0.514	0.000	-1.500	201	9

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2018	1	1	2018.01	0	3.130	1205	0	0.455	119	0.455	-1.980	1.773	0.000	0.000	119	201
2018	2	1	2018.02	2	6.470	732	2	3.092	-148	3.092	0.455	-1.980	1.600	0.000	-148	119
2018	3	1	2018.03	0	2.940	937	-1	-0.381	201	-0.381	3.092	0.455	-0.600	1.600	201	-148
2018	4	1	2018.04	13	4.130	577	1	0.489	184	0.489	-0.381	3.092	1.200	-0.600	184	201
2018	5	1	2018.05	133	5.270	25	55	1.019	-120	1.019	0.489	-0.381	54.800	1.200	-120	184
2018	6	1	2018.06	172	10.110	24	-2	4.135	6	4.135	1.019	0.489	-1.600	54.800	6	-120
2018	7	1	2018.07	281	2.330	0	3	-2.217	-2	-2.217	4.135	1.019	2.500	-1.600	-2	6
2018	8	1	2018.08	262	6.370	0	15	1.366	-3	1.366	-2.217	4.135	14.700	2.500	-3	-2
2018	9	1	2018.09	175	11.900	50	57	8.458	-6	8.458	1.366	-2.217	56.800	14.700	-6	-3
2018	10	1	2018.10	59	4.850	392	33	0.934	85	0.934	8.458	1.366	32.500	56.800	85	-6
2018	11	1	2018.11	0	3.740	798	-2	1.233	143	1.233	0.934	8.458	-1.500	32.500	143	85
2018	12	1	2018.12	0	4.590	773	0	1.260	-85	1.260	1.233	0.934	0.000	-1.500	-85	143
2019	1	1	2019.01	0	2.430	1126	0	-0.245	40	-0.245	1.260	1.233	0.000	0.000	40	-85
2019	2	1	2019.02	0	4.730	846	0	1.352	-34	1.352	-0.245	1.260	-0.400	0.000	-34	40
2019	3	1	2019.03	0	1.920	838	-1	-1.401	102	-1.401	1.352	-0.245	-0.600	-0.400	102	-34
2019	4	1	2019.04	5	4.450	315	-7	0.809	-78	0.809	-1.401	1.352	-6.800	-0.600	-78	102
2019	5	1	2019.05	83	4.860	99	5	0.609	-46	0.609	0.809	-1.401	4.800	-6.800	-46	-78
2019	6	1	2019.06	131	5.660	30	-43	-0.315	12	-0.315	0.609	0.809	-42.600	4.800	12	-46
2019	7	1	2019.07	213	4.060	2	-66	-0.487	0	-0.487	-0.315	0.609	-65.500	-42.600	0	12
2019	8	1	2019.08	315	7.420	0	68	2.416	-3	2.416	-0.487	-0.315	67.700	-65.500	-3	0
2019	9	1	2019.09	147	1.870	4	29	-1.572	-52	-1.572	2.416	-0.487	28.800	67.700	-52	-3
2019	10	1	2019.10	38	6.380	288	12	2.464	-19	2.464	-1.572	2.416	11.500	28.800	-19	-52
2019	11	1	2019.11	0	1.760	797	-2	-0.747	142	-0.747	2.464	-1.572	-1.500	11.500	142	-19
2019	12	1	2019.12	0	3.630	882	0	0.300	25	0.300	-0.747	2.464	0.000	-1.500	25	142
2020	1	1	2020.01	0	3.450	899	0	0.775	-187	0.775	0.300	-0.747	0.000	0.000	-187	25
2020	2	1	2020.02	0	3.600	879	0	0.222	-1	0.222	0.775	0.300	-0.400	0.000	-1	-187
2020	3	1	2020.03	2	5.640	574	1	2.319	-162	2.319	0.222	0.775	1.400	-0.400	-162	-1
2020	4	1	2020.04	0	5.120	505	-12	1.479	112	1.479	2.319	0.222	-11.800	1.400	112	-162
2020	5	1	2020.05	63	2.780	253	-15	-1.471	108	-1.471	1.479	2.319	-15.200	-11.800	108	112
2020	6	1	2020.06	177	2.610	14	3	-3.365	-4	-3.365	-1.471	1.479	3.400	-15.200	-4	108
2020	7	1	2020.07	410	3.120	0	132	-1.427	-2	-1.427	-3.365	-1.471	131.500	3.400	-2	-4
2020	8	1	2020.08	285	5.660	0	38	0.656	-3	0.656	-1.427	-3.365	37.700	131.500	-3	-2
2020	9	1	2020.09	98	1.630	81	-20	-1.812	25	-1.812	0.656	-1.427	-20.200	37.700	25	-3
2020	10	1	2020.10	9	3.130	327	-18	-0.786	20	-0.786	-1.812	0.656	-17.500	-20.200	20	25
2020	11	1	2020.11	0	2.470	517	-2	-0.037	-138	-0.037	-0.786	-1.812	-1.500	-17.500	-138	20
2020	12	1	2020.12	0	2.500	928	0	-0.830	71	-0.830	-0.037	-0.786	0.000	-1.500	71	-138
2021	1	1	2021.01	0	1.830	1029	0	-0.845	-57	-0.845	-0.830	-0.037	0.000	0.000	-57	71
2021	2	1	2021.02	0	2.960	993	0	-0.418	114	-0.418	-0.845	-0.830	-0.400	0.000	114	-57
2021	3	1	2021.03	0	3.220	593	-1	-0.101	-143	-0.101	-0.418	-0.845	-0.600	-0.400	-143	114
2021	4	1	2021.04	16	2.330	399	4	-1.311	6	-1.311	-0.101	-0.418	4.200	-0.600	6	-143
2021	5	1	2021.05	74	3.180	228	-4	-1.071	83	-1.071	-1.311	-0.101	-4.200	4.200	83	6
2021	6	1	2021.06	222	7.450	17	48	1.475	-1	1.475	-1.071	-1.311	48.400	-4.200	-1	83
2021	7	1	2021.07	254	4.520	0	-25	-0.027	-2	-0.027	1.475	-1.071	-24.500	48.400	-2	-1
2021	8	1	2021.08	308	6.280	0	61	1.276	-3	1.276	-0.027	1.475	60.700	-24.500	-3	-2

PENNSYLVANIA WEATHER DATA

DU Year	Month	Normal	DATE	CAL. CLDD	CAL. PRCP	CAL. HTDD	MODEL CLDD	MODEL PRCP	MODEL HTDD	Rain	Rain Lag	Rain Lag 2	CDD	CDD Lag	HDD	HDD Lag
2021	9	1	2021.09	83	4.350	33	-35	0.908	-23	0.908	1.276	-0.027	-35.200	60.700	-23	-3
2021	10	1	2021.10	51	4.500	169	25	0.584	-138	0.584	0.908	1.276	24.500	-35.200	-138	-23
2021	11	1	2021.11	0	0.810	679	-2	-1.697	24	-1.697	0.584	0.908	-1.500	24.500	24	-138
2021	12	1	2021.12	0	4.240	694	0	0.910	-164	0.910	-1.697	0.584	0.000	-1.500	-164	24
2022	1	1	2022.01	0	2.610	1238	0	-0.065	152	-0.065	0.910	-1.697	0.000	0.000	152	-164
2022	2	1	2022.02	0	5.450	861	0	2.072	-19	2.072	-0.065	0.910	-0.400	0.000	-19	152
2022	3	1	2022.03	0	2.600	642	-1	-0.721	-94	-0.721	2.072	-0.065	-0.600	-0.400	-94	-19
2022	4	1	2022.04	18	3.590	459	6	-0.051	66	-0.051	-0.721	2.072	6.200	-0.600	66	-94
2022	5	1	2022.05	79	5.760	96	1	1.509	-49	1.509	-0.051	-0.721	0.800	6.200	-49	66
2022	6	1	2022.06	190	1.240	6	16	-4.735	-12	-4.735	1.509	-0.051	16.400	0.800	-12	-49
2022	7	1	2022.07	317	4.750	0	39	0.203	-2	0.203	-4.735	1.509	38.500	16.400	-2	-12
2022	8	1	2022.08	247	4.460	0	0	-0.544	-3	-0.544	0.203	-4.735	-0.300	38.500	-3	-2
2022	9	1	2022.09	105	2.510	87	-13	-0.932	31	-0.932	-0.544	0.203	-13.200	-0.300	31	-3
2022	10	1	2022.10	0	2.770	395	-27	-1.146	88	-1.146	-0.932	-0.544	-26.500	-13.200	88	31
2022	11	1	2022.11	8	3.620	569	7	1.113	-86	1.113	-1.146	-0.932	6.500	-26.500	-86	88
2022	12	1	2022.12	0	1.950	907	0	-1.380	50	-1.380	1.113	-1.146	0.000	6.500	50	-86
2023	1	1	2023.01	0	3.920	825	0	1.245	-261	1.245	-1.380	1.113	0.000	0.000	-261	50
2023	2	1	2023.02	0	1.880	670	0	-1.498	-210	-1.498	1.245	-1.380	-0.400	0.000	-210	-261
2023	3	1	2023.03	0	3.240	725	-1	-0.081	-11	-0.081	-1.498	1.245	-0.600	-0.400	-11	-210
2023	4	1	2023.04	27	1.730	337	15	-1.911	-56	-1.911	-0.081	-1.498	15.200	-0.600	-56	-11
2023	5	1	2023.05	32	2.000	160	-46	-2.251	15	-2.251	-1.911	-0.081	-46.200	15.200	15	-56
2023	6	1	2023.06	109	2.780	23	-65	-3.195	5	-3.195	-2.251	-1.911	-64.600	-46.200	5	15
2023	7	0	2023.07													
2023	8	0	2023.08													
2023	9	0	2023.09													
2023	10	0	2023.10													
2023	11	0	2023.11													
2023	12	0	2023.12													

Month	NORMAL CAL. CLDD	NORMAL CAL. PRCP	NORMAL CAL. HTDD	Res Flag	Res Flag
1	0	2.675	1086	0	1
2	0	3.378	880	0	1
3	1	3.321	736	0	1
4	12	3.641	393	0	0
5	78	4.251	145	0	0
6	174	5.975	18	1	0
7	279	4.547	2	1	0
8	247	5.004	3	1	0
9	118	3.442	56	1	0
10	27	3.916	307	1	0
11	2	2.507	655	0	0
12	0	3.330	858	0	0
	844	22.884	2702		

Normal Start:	2013.07
Normal End	2023.06
Normal Months	120.00

PENNSYLVANIA SALES-USAGE DATA Not Including Shale Gas

Obs	DU Year	Month	Res Cust	Res Sales	Res Adjust	Com Cust	Com Sales	Com Adjust	OPA Cust	OPA Sales	OPA Adjust	Ind Cust	Ind Sales	Ind Adjust	Resale Cust	Resale Sales	Resale Adjust	Production	Res COVID	Com COVID	OPA COVID
1	2008	1	578987	2652382	0	42370	1054535	0	2293	230990	0	843	357816	0	22	48398	0	6631616	0	0	0
2	2008	2	579235	2345982	0	42342	960424	0	2293	197559	0	843	384249	0	22	45706	0	6131911	0	0	0
3	2008	3	579614	2173053	0	42358	918425	0	2355	189383	0	843	381354	0	21	49794	0	6437546	0	0	0
4	2008	4	580127	2372217	0	42633	1031332	0	2477	211992	0	843	385702	0	20	44869	0	6215398	0	0	0
5	2008	5	580106	2377272	0	42734	1042963	0	2503	194427	0	842	460582	0	20	48884	0	6415951	0	0	0
6	2008	6	580539	2603258	0	42744	1112866	0	2521	224088	0	828	331628	0	20	52940	0	6643926	0	0	0
7	2008	7	580901	2723529	0	42873	1206788	0	2526	242539	0	831	445968	0	20	49241	0	6900382	0	0	0
8	2008	8	582223	2652609	0	42895	1226019	0	2536	230467	0	823	434150	0	20	57678	0	6982442	0	0	0
9	2008	9	582538	2667523	0	42776	1278607	0	2506	266544	0	810	444817	0	20	57308	0	6449154	0	0	0
10	2008	10	582620	2608924	0	42684	1181856	0	2400	262140	0	808	453528	0	20	56547	0	6288745	0	0	0
11	2008	11	582823	2110860	0	42617	920291	0	2335	185250	0	800	350068	0	20	48727	0	6077960	0	0	0
12	2008	12	582800	2454428	0	42589	1055671	0	2323	204200	0	804	336538	0	21	56984	0	6424172	0	0	0
13	2009	1	582785	2544922	0	42552	971953	0	2315	192890	0	800	306883	0	21	43140	0	6647774	0	0	0
14	2009	2	583025	2307932	0	42592	983208	0	2316	187963	0	797	341933	0	21	47727	0	6010903	0	0	0
15	2009	3	583414	2291848	0	42656	1047015	0	2376	195977	0	794	347796	0	21	42909	0	6345921	0	0	0
16	2009	4	583808	2302642	0	42837	979761	0	2484	195859	0	788	324310	0	21	44978	0	6038039	0	0	0
17	2009	5	583529	2284518	0	43022	980840	0	2505	172705	0	771	328163	0	21	52197	0	6364558	0	0	0
18	2009	6	583419	2621962	0	43030	1154195	0	2516	221170	0	758	349717	0	21	57494	0	6229429	0	0	0
19	2009	7	583627	2656779	0	43079	1166278	0	2519	217505	0	745	344799	0	21	46020	0	6543924	0	0	0
20	2009	8	584272	2402500	0	43124	1124622	0	2524	210990	0	734	352846	0	21	55862	0	6538560	0	0	0
21	2009	9	584347	2463035	0	43123	1156482	0	2504	230924	0	728	356164	0	20	48670	0	6248347	0	0	0
22	2009	10	585660	2470712	0	43069	1152311	0	2425	213833	0	740	335439	0	20	53877	0	6206123	0	0	0
23	2009	11	585774	2174790	0	42959	954294	0	2361	189911	0	728	301920	0	20	43605	0	5879757	0	0	0
24	2009	12	585777	2436213	0	42874	1088018	0	2324	189335	0	716	316209	0	20	45847	0	6194813	0	0	0
25	2010	1	585774	2469856	0	42911	951134	0	2327	179823	0	700	305106	0	21	48192	0	6444779	0	0	0
26	2010	2	586358	2286153	0	42923	938611	0	2322	173086	0	706	320624	0	21	42369	0	5725281	0	0	0
27	2010	3	586868	2247645	0	43112	1012084	0	2404	190893	0	692	348259	0	21	49748	0	6209066	0	0	0
28	2010	4	587242	2354074	0	43365	1005599	0	2529	195402	0	689	348733	0	21	42915	0	5926841	0	0	0
29	2010	5	586881	2249638	0	43671	1015483	0	2550	195611	0	674	340308	0	21	43407	0	6187620	0	0	0
30	2010	6	586752	2631401	0	43693	1136425	0	2560	217038	0	654	382515	0	21	47769	0	6203765	0	0	0
31	2010	7	586952	2800080	0	43701	1248292	0	2566	230428	0	653	430937	0	21	51761	0	6913912	0	0	0
32	2010	8	587454	2638351	0	43814	1230538	0	2577	234245	0	645	432784	0	21	51357	0	6761184	0	0	0
33	2010	9	587623	2647376	0	43873	1278440	0	2552	246721	0	633	413505	0	21	51409	0	6395070	0	0	0
34	2010	10	587530	2372625	0	43683	1140391	0	2475	219969	0	625	387036	0	21	44413	0	6103778	0	0	0
35	2010	11	587440	2147926	0	43530	1000427	0	2378	180401	0	622	344908	0	21	41718	0	5828126	0	0	0
36	2010	12	587386	2371303	0	43385	1039150	0	2362	181502	0	618	341460	0	21	53383	0	6318149	0	0	0
37	2011	1	587484	2425037	0	43418	1001877	0	2358	164299	0	618	322510	0	22	47113	0	6465805	0	0	0
38	2011	2	587848	2216258	0	43473	960045	0	2361	163655	0	619	343897	0	22	44013	0	5849485	0	0	0
39	2011	3	588189	2268045	0	43486	994168	0	2405	173241	0	616	356029	0	22	33348	0	6204788	0	0	0
40	2011	4	588540	2178101	0	43672	972402	0	2531	170091	0	616	348628	0	22	62849	0	5867241	0	0	0
41	2011	5	588252	2264481	0	43907	1003179	0	2560	176663	0	616	337072	0	22	38318	0	6215843	0	0	0
42	2011	6	588060	2655332	0	43972	1165958	0	2584	203346	0	617	389572	0	22	52153	0	6330499	0	0	0
43	2011	7	588071	2573253	0	44231	1187348	0	2465	202579	0	531	390917	0	22	51307	0	6891526	0	0	0
44	2011	8	588566	2702485	0	44282	1275601	0	2469	221253	0	532	427654	0	24	56780	0	6443606	0	0	0
45	2011	9	588430	2428060	0	44304	1219229	0	2457	204603	0	532	393004	0	24	44438	0	5927751	0	0	0
46	2011	10	588423	2220599	0	44111	1074957	0	2381	184136	0	534	349589	0	23	47116	0	5987956	0	0	0
47	2011	11	588386	2114682	0	43925	982710	0	2306	170667	0	527	341162	0	23	46021	0	5713879	0	0	0
48	2011	12	588325	2281348	0	43870	1070460	0	2287	159891	0	522	316788	0	23	50425	0	5953578	0	0	0
49	2012	1	588478	2373058	0	43823	991217	0	2275	156467	0	525	301755	0	23	54887	0	6059895	0	0	0
50	2012	2	588917	2139219	0	43845	950543	0	2273	153319	0	525	334179	0	24	46476	0	5530920	0	0	0

PENNSYLVANIA SALES-USAGE DATA Not Including Shale Gas

Obs	DU Year	Month	Res Cust	Res Sales	Res Adjust	Com Cust	Com Sales	Com Adjust	OPA Cust	OPA Sales	OPA Adjust	Ind Cust	Ind Sales	Ind Adjust	Resale Cust	Resale Sales	Resale Adjust	Production	Res COVID	Com COVID	OPA COVID
51	2012	3	589346	2178692	0	44040	1008589	0	2379	155438	0	524	332606	0	23	54709	0	5804740	0	0	0
52	2012	4	589823	2156937	0	44210	998665	0	2439	158829	0	523	359374	0	23	52288	0	5587528	0	0	0
53	2012	5	589334	2311424	0	44393	1066179	0	2463	174726	0	523	345813	0	23	51671	0	6040320	0	0	0
54	2012	6	589419	2549736	0	44452	1173183	0	2473	193956	0	524	351995	0	24	64471	0	6140070	0	0	0
55	2012	7	589443	2773942	0	44516	1293051	0	2475	225565	0	521	366602	0	24	73914	0	6481278	0	0	0
56	2012	8	590100	2449467	0	44583	1255261	0	2475	200785	0	519	385328	0	24	66278	0	6223900	0	0	0
57	2012	9	590129	2416762	0	44549	1246222	0	2465	219678	0	519	389690	0	24	70987	0	5740033	0	0	0
58	2012	10	590545	2204784	0	44462	1174272	0	2384	177588	0	520	330064	0	24	62298	0	5740995	0	0	0
59	2012	11	590508	2170799	0	44339	1060476	0	2286	162920	0	520	311824	0	25	69898	0	5546140	0	0	0
60	2012	12	590808	2227324	0	44302	1001751	0	2271	147316	0	517	269665	0	25	66299	0	5737818	0	0	0
61	2013	1	590977	2332430	0	44221	1026353	0	2271	145747	0	515	307466	0	25	63673	0	6006753	0	0	0
62	2013	2	591470	2170196	0	44227	994205	0	2274	156201	0	515	336955	0	24	63704	0	5444808	0	0	0
63	2013	3	592105	2117255	0	44310	992308	0	2303	148579	0	516	307125	0	24	68006	0	5828003	0	0	0
64	2013	4	592264	2153601	0	44509	993196	0	2440	156419	0	516	325419	0	24	62345	0	5658900	0	0	0
65	2013	5	591781	2262238	0	44697	1062781	0	2455	176010	0	515	359257	0	24	70195	0	6135744	0	0	0
66	2013	6	591733	2505865	0	44728	1169406	0	2463	192267	0	515	320471	0	24	63309	0	6038812	0	0	0
67	2013	7	591888	2372267	0	44780	1167967	0	2465	170229	0	515	365797	0	24	69761	0	6264270	0	0	0
68	2013	8	592369	2414428	0	44820	1212792	0	2464	191285	0	512	383426	0	24	72715	0	6056784	0	0	0
69	2013	9	592245	2323869	0	44760	1228046	0	2464	180458	0	513	424502	0	24	60609	0	5801582	0	0	0
70	2013	10	597092	2153860	0	44973	1094491	0	2406	176954	0	513	308519	0	24	68659	0	5854564	0	0	0
71	2013	11	596889	2143493	0	44816	1001988	0	2302	147394	0	528	302969	0	24	50226	0	5488085	0	0	0
72	2013	12	596793	2157024	0	44800	928260	0	2299	65298	80000	528	116300	160000	24	6126	50000	5825969	0	0	0
73	2014	1	597327	2364109	0	44757	1075158	0	2300	230114	-80000	528	473761	-160000	25	115081	-50000	6322281	0	0	0
74	2014	2	596962	2283430	0	44735	1056146	0	2300	163740	0	528	381299	-50000	24	73370	0	5802555	0	0	0
75	2014	3	597062	2048745	0	44743	1050009	0	2344	159285	0	528	369841	-40000	24	55893	0	6107581	0	0	0
76	2014	4	596881	2190953	0	44826	1035595	0	2421	192262	-30000	529	504466	-140000	24	69313	0	5681926	0	0	0
77	2014	5	596409	2154777	0	44935	1032792	0	2449	132861	30000	528	428443	-40000	24	60641	0	6001100	0	0	0
78	2014	6	596756	2291459	0	44934	1073051	0	2454	183940	0	529	225625	140000	24	58216	0	5951353	0	0	0
79	2014	7	597147	2444625	0	44926	1201938	0	2455	187139	0	528	429447	-30000	24	79139	0	6243420	0	0	0
80	2014	8	597203	2371306	0	44971	1202098	0	2454	182785	0	528	193069	160000	24	64054	0	6147136	0	0	0
81	2014	9	597462	2349630	0	44955	1174634	0	2445	195962	0	528	382440	0	24	66766	0	5920775	0	0	0
82	2014	10	597524	2164563	0	44813	1143875	0	2397	186890	0	525	355703	0	24	58487	0	5835349	0	0	0
83	2014	11	597335	2081455	0	44628	1039125	0	2298	165255	0	524	331209	0	24	63192	0	5576026	0	0	0
84	2014	12	597479	2159590	0	44599	1027776	0	2278	147993	0	525	342136	0	24	57826	0	5819770	0	0	0
85	2015	1	597621	2254798	0	44515	979228	0	2262	140413	0	524	288163	0	24	59803	0	6056894	0	0	0
86	2015	2	597822	2037073	0	44477	958041	0	2260	150902	0	524	348566	0	24	57242	0	5691028	0	0	0
87	2015	3	598207	2155256	0	44543	1039817	0	2322	157555	0	525	328631	0	25	48632	0	6334397	0	0	0
88	2015	4	598625	2134677	0	44714	1053328	0	2412	159030	0	524	287682	0	24	72477	0	5730349	0	0	0
89	2015	5	597986	2155022	0	44854	1040192	0	2423	168230	0	523	331956	0	24	51663	0	6192238	0	0	0
90	2015	6	598123	2374625	0	44904	1149823	0	2424	180068	0	522	348705	0	24	68471	0	5815290	0	0	0
91	2015	7	598212	2282829	0	44963	1189309	0	2439	172289	0	522	360843	0	23	74446	0	6093272	0	0	0
92	2015	8	598580	2492964	0	44962	1285547	0	2444	192705	0	521	369747	0	23	44793	0	6355915	0	0	0
93	2015	9	598960	2360954	0	44944	1378537	0	2444	195650	0	522	407499	0	23	62859	0	5964960	0	0	0
94	2015	10	598874	2194453	0	44830	1138523	0	2381	172193	0	523	338968	0	22	61975	0	5771601	0	0	0
95	2015	11	599240	2069520	0	44667	1023543	0	2274	160003	0	521	324588	0	22	55431	0	5448471	0	0	0
96	2015	12	599380	2258024	0	44603	1110894	0	2254	156651	-10000	520	320615	0	22	62038	0	5617996	0	0	0
97	2016	1	599524	2151324	0	44615	968680	0	2252	154782	-10000	519	284548	0	22	59839	0	5878329	0	0	0
98	2016	2	600159	1947744	0	44655	973578	0	2245	105794	40000	520	238145	20000	22	49258	0	5555033	0	0	0
99	2016	3	600642	2031663	0	44775	1006630	0	2310	152818	-10000	519	371140	-20000	22	55663	0	5708125	0	0	0
100	2016	4	600940	2203104	0	44858	1055770	0	2409	159961	-10000	520	327022	0	22	59323	0	5526353	0	0	0

PENNSYLVANIA SALES-USAGE DATA Not Including Shale Gas

Obs	DU Year	Month	Res Cust	Res Sales	Res Adjust	Com Cust	Com Sales	Com Adjust	OPA Cust	OPA Sales	OPA Adjust	Ind Cust	Ind Sales	Ind Adjust	Resale Cust	Resale Sales	Resale Adjust	Production	Res COVID	Com COVID	OPA COVID
101	2016	5	601028	2043971	0	45003	996008	0	2431	145875	0	520	351260	0	22	50962	0	5865651	0	0	0
102	2016	6	601147	2347125	0	45047	1145373	0	2436	168833	0	520	410648	0	22	59998	0	5961033	0	0	0
103	2016	7	601359	2543747	0	45075	1233279	0	2440	172930	0	521	367622	0	22	70256	0	6220756	0	0	0
104	2016	8	602054	2265070	0	45107	1202830	0	2441	174071	0	521	282117	0	22	62736	0	6156705	0	0	0
105	2016	9	602368	2396708	0	45038	1266264	0	2428	194424	0	522	404821	0	22	67138	0	5852848	0	0	0
106	2016	10	602465	2205627	0	44919	1137202	0	2384	175527	0	522	350877	0	22	58709	0	5710839	0	0	0
107	2016	11	602625	1965947	0	44797	978002	0	2259	145357	0	522	308153	0	22	54741	0	5433605	0	0	0
108	2016	12	602856	2072587	0	44788	984376	0	2259	138989	0	522	276562	0	22	58906	0	5728515	0	0	0
109	2017	1	603389	2313944	0	44757	1026720	0	2234	143333	0	522	309438	0	22	66214	0	5739165	0	0	0
110	2017	2	603795	2033582	0	44737	951842	0	2232	148106	0	522	307520	0	22	56046	0	4988547	0	0	0
111	2017	3	604388	1888418	0	44792	946083	0	2303	127833	0	522	284309	0	22	51404	0	5506276	0	0	0
112	2017	4	604497	2176537	0	45033	1024370	0	2391	132929	0	523	282155	0	22	57841	0	5529878	0	0	0
113	2017	5	604466	2035704	0	45147	1056532	0	2424	159216	0	523	341843	0	22	47322	0	5759405	0	0	0
114	2017	6	604646	2381865	0	45183	1129991	0	2428	172979	0	522	328432	0	22	65138	0	5746987	0	0	0
115	2017	7	604712	2331325	0	45215	1148907	0	2424	173017	0	522	365190	0	22	64021	0	5965476	0	0	0
116	2017	8	605210	2115991	0	45253	1133146	0	2427	172017	0	523	356493	0	22	54737	0	5908649	0	0	0
117	2017	9	605274	2294462	0	45254	1185156	0	2417	177470	0	523	370340	0	22	66547	0	5678537	0	0	0
118	2017	10	605542	2070079	0	45186	1112129	0	2373	164114	0	525	347764	0	22	55117	0	5705670	0	0	0
119	2017	11	605539	2041047	0	45030	989904	0	2240	146403	0	525	272098	0	22	48919	0	5312470	0	0	0
120	2017	12	605770	2154098	0	44995	1050636	0	2225	143072	0	525	338672	0	22	68029	0	5635817	0	0	0
121	2018	1	605987	2261765	0	44995	1023824	0	2218	142275	0	523	290352	0	22	63920	0	6357897	0	0	0
122	2018	2	606288	2143648	0	45017	1039240	0	2219	162647	0	523	334453	0	22	58971	0	5389598	0	0	0
123	2018	3	606729	1903550	0	45026	939563	0	2247	132711	0	522	308866	0	22	46989	0	5868848	0	0	0
124	2018	4	607071	2038092	0	45211	986816	0	2381	135346	0	522	323474	0	22	50101	0	5647760	0	0	0
125	2018	5	606742	2067698	0	45307	919600	0	2399	153806	0	521	318389	0	22	60058	0	6026165	0	0	0
126	2018	6	606877	2308300	0	45315	1246948	0	2401	175766	0	521	377843	0	22	60059	0	5921493	0	0	0
127	2018	7	607090	2281037	0	45329	1154181	0	2400	176090	0	521	356276	0	22	58795	0	6312397	0	0	0
128	2018	8	607391	2164390	0	45357	1145609	0	2398	172395	0	521	370693	0	22	56269	0	6007767	0	0	0
129	2018	9	607368	2273197	0	45319	1210549	0	2391	207208	0	522	376437	0	22	57845	0	5749749	0	0	0
130	2018	10	607602	2012343	0	45159	1078514	0	2340	158181	0	523	382073	0	23	59437	0	5731371	0	0	0
131	2018	11	607787	2063613	0	45035	1024229	0	2244	150619	0	521	306185	0	22	54011	0	5472280	0	0	0
132	2018	12	607947	2036897	0	44989	979257	0	2234	139876	0	523	269540	0	23	62366	0	5733739	0	0	0
133	2019	1	608339	2158382	0	45063	956835	0	2231	141030	0	522	296514	0	22	55756	0	5830681	0	0	0
134	2019	2	608788	2091242	0	45067	978793	0	2232	148737	0	521	294523	0	22	54291	0	5537762	0	0	0
135	2019	3	609106	1953107	0	45113	950982	0	2259	151516	0	521	322251	0	22	57165	0	5834470	0	0	0
136	2019	4	609423	1948955	0	45230	944298	0	2351	166277	0	522	292449	0	22	54847	0	5566284	0	0	0
137	2019	5	609341	2028709	0	45363	1002505	0	2380	152948	0	522	313134	0	22	51023	0	5925671	0	0	0
138	2019	6	609185	2278534	0	45392	1076783	0	2381	168441	0	523	331235	0	22	56415	0	5810436	0	0	0
139	2019	7	609916	2185039	0	45464	1107107	0	2384	160889	0	523	331421	0	22	57814	0	6225171	0	0	0
140	2019	8	610054	2250213	0	45493	1194214	0	2386	187993	0	523	347492	0	23	64476	0	6273923	0	0	0
141	2019	9	610572	2269703	0	45493	1173426	0	2376	190054	0	523	363806	0	22	62909	0	6058410	0	0	0
142	2019	10	613052	2024240	0	45489	1098226	0	2318	164815	0	534	317578	0	22	57221	0	5974121	0	0	0
143	2019	11	613091	2075722	0	45317	1033986	0	2212	144694	0	533	306507	0	23	56045	0	5773307	0	0	0
144	2019	12	613460	2023445	0	45299	989151	0	2198	138263	0	532	314518	0	22	65878	0	5896591	0	0	0
145	2020	1	613855	2126416	0	45311	931230	0	2197	131397	0	531	280100	0	22	58314	0	5866351	0	0	0
146	2020	2	614148	2074991	0	45334	978886	0	2197	154003	0	530	332124	0	22	56644	0	5356535	0	0	0
147	2020	3	614940	1912268	0	45361	920067	0	2277	131943	0	525	310569	0	22	52197	0	5484517	0	0	0
148	2020	4	615330	2192496	0	45484	818423	0	2320	87429	0	528	328264	0	22	52250	0	5255666	1	1	1
149	2020	5	615811	2220773	0	45635	800388	0	2350	79860	0	530	293525	0	23	53057	0	5713103	1	1	1
150	2020	6	616730	2461502	0	45742	910797	0	2366	115467	0	530	322201	0	25	62755	0	5903511	1	1	1

PENNSYLVANIA SALES-USAGE DATA Not Including Shale Gas

Obs	DU Year	Month	Res Cust	Res Sales	Res Adjust	Com Cust	Com Sales	Com Adjust	OPA Cust	OPA Sales	OPA Adjust	Ind Cust	Ind Sales	Ind Adjust	Resale Cust	Resale Sales	Resale Adjust	Production	Res COVID	Com COVID	OPA COVID
151	2020	7	617571	2585941	0	45786	1108774	0	2370	151492	0	529	339776	0	25	62795	0	6478120	1	1	1
152	2020	8	618309	2656758	0	45852	1134650	0	2375	158517	0	532	383558	0	24	65049	0	6318650	1	1	1
153	2020	9	618810	2393470	0	45848	1113708	0	2378	158350	0	534	345805	0	24	73057	0	5845487	1	1	1
154	2020	10	619258	2204669	0	45692	1014772	0	2305	136532	0	534	300435	0	24	55056	0	5785603	1	1	1
155	2020	11	619675	2171382	0	45639	1012584	0	2217	121935	0	533	294749	0	24	63389	0	5506322	1	1	1
156	2020	12	620045	2099373	0	45623	890783	0	2207	88308	20000	535	309933	0	24	49631	0	5674935	0.4	0.4	0.4
157	2021	1	620477	2361609	0	45627	937136	0	2204	114575	0	538	293580	0	24	61174	0	5809751	0.4	0.4	0.4
158	2021	2	620790	2061229	0	45650	874487	0	2208	96119	20000	538	302220	0	24	56570	0	5440902	0.4	0.4	0.4
159	2021	3	621236	1955886	0	45742	878084	0	2260	121501	0	538	317602	0	24	56204	0	5739592	0.4	0.4	0.4
160	2021	4	621730	2191425	0	45835	987900	0	2370	124194	0	540	335374	0	24	58105	0	5568849	0.4	0.4	0.4
161	2021	5	621545	2127575	0	45924	944961	0	2385	121868	0	540	301213	0	25	65739	0	6010022	0.4	0.4	0.4
162	2021	6	621725	2287392	0	46019	1008081	0	2387	133393	0	541	349812	0	24	59784	0	5925707	0.4	0.4	0.4
163	2021	7	621798	2404108	0	45991	1116574	0	2392	152837	0	541	390972	0	24	63946	0	6119891	0.4	0.4	0.4
164	2021	8	621924	2291784	0	45988	1124545	0	2395	162906	0	541	419391	0	24	62359	0	6173604	0.4	0.4	0.4
165	2021	9	621968	2292157	0	45982	1131486	0	2386	169303	0	540	392455	0	24	72746	0	5669430	0.4	0.4	0.4
166	2021	10	621994	2109303	0	45918	1058176	0	2356	155902	0	540	359125	0	24	60583	0	5853852	0.4	0.4	0.4
167	2021	11	623943	1951149	0	45864	911185	0	2285	135092	0	540	333448	0	24	54505	0	5658541	0.4	0.4	0.4
168	2021	12	624174	2085909	0	45796	931391	0	2256	124615	0	543	296746	0	23	59928	0	5754191	0.4	0.4	0.4
169	2022	1	624389	2253989	0	45880	936872	0	2253	117236	0	541	289184	0	19	55105	0	5999115	0.4	0.4	0.4
170	2022	2	624655	2022715	0	45956	949002	0	2254	134166	0	540	389115	0	19	70383	0	5664058	0.4	0.4	0.4
171	2022	3	625136	1922092	0	46052	894488	0	2289	122719	0	541	277011	0	19	54929	0	5914958	0.4	0.4	0.4
172	2022	4	625220	2152755	0	46163	1014196	0	2358	146987	-10000	542	422303	0	19	42616	0	5707681	0.4	0.4	0.4
173	2022	5	625422	2019483	0	46238	915061	0	2384	136222	10000	541	356858	0	19	60456	0	6073985	0.4	0.4	0.4
174	2022	6	625448	2295389	0	46255	1050571	0	2392	174538	-20000	542	391070	0	20	71818	0	6019056	0.4	0.4	0.4
175	2022	7	625369	2478821	0	46237	1097377	0	2394	148763	20000	541	416537	0	20	61129	0	6477895	0.4	0.4	0.4
176	2022	8	625597	2225827	0	46272	1090069	0	2399	166719	0	541	405421	0	20	59329	0	6396990	0.4	0.4	0.4
177	2022	9	625777	2354320	0	46387	1160136	0	2296	180983	0	542	364755	0	20	64301	0	5846157	0.4	0.4	0.4
178	2022	10	625932	2153004	0	46286	1035702	0	2256	163114	0	544	431937	0	20	63315	0	5847689	0.4	0.4	0.4
179	2022	11	625937	1886200	0	46178	918030	0	2186	131500	0	544	348147	0	20	53981	0	5575120	0.4	0.4	0.4
180	2022	12	625996	2033811	0	46149	924307	0	2178	114220	0	543	307221	0	20	48947	0	5953795	0.4	0.4	0.4
181	2023	1	626438	2306260	0	46187	1078803	0	2181	169426	-40000	544	421312	0	20	80884	0	5993570	0.4	0.4	0.4
182	2023	2	626788	2006561	0	46204	934031	0	2181	124447	0	546	358906	0	20	53843	0	5251664	0.4	0.4	0.4
183	2023	3	627166	1871830	0	46267	892054	0	2213	127703	0	545	333962	0	20	70497	0	5639452	0.4	0.4	0.4
184	2023	4	627185	2170023	0	46595	948922	0	2292	140851	0	546	297109	0	20	12022	0	5535413	0.4	0.4	0.4
185	2023	5	627516	1953916	0	46750	959066	0	2302	140785	0	546	367623	0	20	79352	0	6017376	0.4	0.4	0.4
186	2023	6	627622	2474960	0	46726	1113821	0	2303	163114	0	546	424933	0	21	126912	0	6032844	0.4	0.4	0.4
187	2023	7																			
188	2023	8																			
189	2023	9																			
190	2023	10																			
191	2023	11																			
192	2023	12																			

PENNSYLVANIA COMMERCIAL MODEL

																		Rain Lag 2	0.3	0.8	CDD Lag						
																		Rain Lag 1	0.7								
						0.221	-0.249	-0.641	0.321	-0.162	2.557	3.733	4.179	4.839	2.446	0.366	-0.018	-0.180	0.006	-2.450					Weather	Billing
Period	Obs	Year	Month	Cust	Sales	UPC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Trend	Rain	CDD	COVID	Predicted	Actual	Variance	Effect	Adjustments
1	67	2013	7	44780	1167967	26.082	0	0	0	0	0	0	1	0	0	0	0	-119	-0.501	-7	0.00	26.888	26.082	0.806	0.047	0
1	68	2013	8	44820	1212792	27.059	0	0	0	0	0	0	0	1	0	0	0	-118	2.548	-26	0.00	26.661	27.059	-0.398	-0.608	0
1	69	2013	9	44760	1228046	27.436	0	0	0	0	0	0	0	0	1	0	0	-117	-0.604	-67	0.00	27.630	27.436	0.193	-0.281	0
1	70	2013	10	44973	1094491	24.337	0	0	0	0	0	0	0	0	0	1	0	-116	-1.833	-38	0.00	25.605	24.337	1.269	0.106	0
1	71	2013	11	44816	1001988	22.358	0	0	0	0	0	0	0	0	0	0	1	-115	0.000	0	0.00	23.402	22.358	1.044	0.000	0
1	72	2013	12	44800	928260	20.720	0	0	0	0	0	0	0	0	0	0	0	-114	0.000	0	0.00	23.018	20.720	2.298	0.000	0
1	73	2014	1	44757	1075158	24.022	1	0	0	0	0	0	0	0	0	0	0	-113	0.000	0	0.00	23.221	24.022	-0.801	0.000	0
1	74	2014	2	44735	1056146	23.609	0	1	0	0	0	0	0	0	0	0	0	-112	0.000	0	0.00	22.733	23.609	-0.876	0.000	0
1	75	2014	3	44743	1050009	23.468	0	0	1	0	0	0	0	0	0	0	0	-111	0.000	0	0.00	22.323	23.468	-1.145	0.000	0
1	76	2014	4	44826	1035595	23.103	0	0	0	1	0	0	0	0	0	0	0	-110	0.000	0	0.00	23.266	23.103	0.164	0.000	0
1	77	2014	5	44935	1032792	22.984	0	0	0	0	1	0	0	0	0	0	0	-109	0.104	2	0.00	22.758	22.984	-0.226	-0.008	0
1	78	2014	6	44934	1073051	23.881	0	0	0	0	0	1	0	0	0	0	0	-108	0.790	13	0.00	25.397	23.881	1.516	-0.069	0
2	79	2014	7	44926	1201938	26.754	0	0	0	0	0	0	1	0	0	0	0	-107	-0.684	21	0.00	26.870	26.754	0.116	0.245	0
2	80	2014	8	44971	1202098	26.731	0	0	0	0	0	0	0	1	0	0	0	-106	-1.276	-70	0.00	26.874	26.731	0.144	-0.178	0
2	81	2014	9	44955	1174634	26.129	0	0	0	0	0	0	0	0	1	0	0	-105	0.428	-69	0.00	27.217	26.129	1.088	-0.477	0
2	82	2014	10	44813	1143875	25.526	0	0	0	0	0	0	0	0	0	1	0	-104	-1.667	-34	0.00	25.382	25.526	-0.143	0.099	0
2	83	2014	11	44628	1039125	23.284	0	0	0	0	0	0	0	0	0	0	1	-103	0.000	0	0.00	23.185	23.284	-0.099	0.000	0
2	84	2014	12	44599	1027776	23.045	0	0	0	0	0	0	0	0	0	0	0	-102	0.000	0	0.00	22.801	23.045	-0.244	0.000	0
2	85	2015	1	44515	979228	21.998	1	0	0	0	0	0	0	0	0	0	0	-101	0.000	0	0.00	23.005	21.998	1.007	0.000	0
2	86	2015	2	44477	958041	21.540	0	1	0	0	0	0	0	0	0	0	0	-100	0.000	0	0.00	22.516	21.540	0.976	0.000	0
2	87	2015	3	44543	1039817	23.344	0	0	1	0	0	0	0	0	0	0	0	-99	0.000	0	0.00	22.106	23.344	-1.238	0.000	0
2	88	2015	4	44714	1053328	23.557	0	0	0	1	0	0	0	0	0	0	0	-98	0.000	0	0.00	23.050	23.557	-0.507	0.000	0
2	89	2015	5	44854	1040192	23.191	0	0	0	0	1	0	0	0	0	0	0	-97	0.917	2	0.00	22.397	23.191	-0.794	-0.152	0
2	90	2015	6	44904	1149823	25.606	0	0	0	0	0	1	0	0	0	0	0	-96	-0.942	42	0.00	25.662	25.606	0.056	0.413	0
3	91	2015	7	44963	1189309	26.451	0	0	0	0	0	0	1	0	0	0	0	-95	2.746	-11	0.00	25.852	26.451	-0.599	-0.556	0
3	92	2015	8	44962	1285547	28.592	0	0	0	0	0	0	0	1	0	0	0	-94	0.373	-35	0.00	26.565	28.592	-2.027	-0.271	0
3	93	2015	9	44944	1378537	30.672	0	0	0	0	0	0	0	0	1	0	0	-93	-2.487	-33	0.00	27.731	30.672	-2.941	0.253	0
3	94	2015	10	44830	1138523	25.396	0	0	0	0	0	0	0	0	0	1	0	-92	0.367	19	0.00	25.113	25.396	-0.284	0.046	0
3	95	2015	11	44667	1023543	22.915	0	0	0	0	0	0	0	0	0	0	1	-91	0.000	0	0.00	22.969	22.915	0.054	0.000	0
3	96	2015	12	44603	1110894	24.906	0	0	0	0	0	0	0	0	0	0	0	-90	0.000	0	0.00	22.585	24.906	-2.322	0.000	0
3	97	2016	1	44615	968680	21.712	1	0	0	0	0	0	0	0	0	0	0	-89	0.000	0	0.00	22.788	21.712	1.076	0.000	0
3	98	2016	2	44655	973578	21.802	0	1	0	0	0	0	0	0	0	0	0	-88	0.000	0	0.00	22.300	21.802	0.498	0.000	0
3	99	2016	3	44775	1006630	22.482	0	0	1	0	0	0	0	0	0	0	0	-87	0.000	0	0.00	21.890	22.482	-0.592	0.000	0
3	100	2016	4	44858	1055770	23.536	0	0	0	1	0	0	0	0	0	0	0	-86	0.000	0	0.00	22.833	23.536	-0.703	0.000	0
3	101	2016	5	45003	996008	22.132	0	0	0	0	1	0	0	0	0	0	0	-85	-1.029	-11	0.00	22.451	22.132	0.319	0.118	0
3	102	2016	6	45047	1145373	25.426	0	0	0	0	0	1	0	0	0	0	0	-84	0.844	-15	0.00	24.794	25.426	-0.632	-0.239	0
4	103	2016	7	45075	1233279	27.361	0	0	0	0	0	0	1	0	0	0	0	-83	-1.136	19	0.00	26.508	27.361	-0.852	0.317	0
4	104	2016	8	45107	1202830	26.666	0	0	0	0	0	0	0	1	0	0	0	-82	-0.891	56	0.00	27.104	26.666	0.438	0.485	0
4	105	2016	9	45038	1266264	28.115	0	0	0	0	0	0	0	0	1	0	0	-81	-0.499	94	0.00	27.895	28.115	-0.220	0.634	0
4	106	2016	10	44919	1137202	25.317	0	0	0	0	0	0	0	0	0	1	0	-80	-0.334	36	0.00	25.120	25.317	-0.197	0.270	0
4	107	2016	11	44797	978002	21.832	0	0	0	0	0	0	0	0	0	0	1	-79	0.000	0	0.00	22.752	21.832	0.920	0.000	0
4	108	2016	12	44788	984376	21.979	0	0	0	0	0	0	0	0	0	0	0	-78	0.000	0	0.00	22.368	21.979	0.390	0.000	0
4	109	2017	1	44757	1026720	22.940	1	0	0	0	0	0	0	0	0	0	0	-77	0.000	0	0.00	22.571	22.940	-0.368	0.000	0
4	110	2017	2	44737	951842	21.276	0	1	0	0	0	0	0	0	0	0	0	-76	0.000	0	0.00	22.083	21.276	0.807	0.000	0
4	111	2017	3	44792	946083	21.122	0	0	1	0	0	0	0	0	0	0	0	-75	0.000	0	0.00	21.673	21.122	0.552	0.000	0
4	112	2017	4	45033	1024370	22.747	0	0	0	1	0	0	0	0	0	0	0	-74	0.000	0	0.00	22.617	22.747	-0.130	0.000	0
4	113	2017	5	45147	1056532	23.402	0	0	0	0	1	0	0	0	0	0	0	-73	0.465	2	0.00	22.044	23.402	-1.358	-0.072	0
4	114	2017	6	45183	1129991	25.009	0	0	0	0	0	1	0	0	0	0	0	-72	0.616	-27	0.00	24.549	25.009	-0.461	-0.268	0
5	115	2017	7	45215	1148907	25.410	0	0	0	0	0	0	1	0	0	0	0	-71	3.770	-11	0.00	25.235	25.410	-0.175	-0.740	0
5	116	2017	8	45253	1133146	25.040	0	0	0	0	0	0	0	1	0	0	0	-70	3.863	-27	0.00	25.551	25.040	0.511	-0.851	0
5	117	2017	9	45254	1185156	26.189	0	0	0	0	0	0	0	0	1	0	0	-69	0.729	-72	0.00	26.494	26.189	0.305	-0.551	0
5	118	2017	10	45186	1112129	24.612	0	0	0	0	0	0	0	0	0	1	0	-68	-1.621	-1	0.00	24.919	24.612	0.306	0.285	0
5	119	2017	11	45030	989904	21.983	0	0	0	0	0	0	0	0	0	0	1	-67	0.000	0	0.00	22.536	21.983	0.553	0.000	0
5	120	2017	12	44995	1050636	23.350	0	0	0	0	0	0	0	0	0	0	0	-66	0.000	0	0.00	22.152	23.350	-1.198	0.000	0
5	121	2018	1	44995	1023824	22.754	1	0	0	0	0	0	0	0	0	0	0	-65	0.000	0	0.00	22.355	22.754	-0.399	0.000	0
5	122	2018	2	45017	1039240	23.086	0	1	0	0	0	0	0	0	0	0	0	-64	0.000	0	0.00	21.867	23.086	-1.219	0.000	0
5	123	2018	3	45026	939563	20.867	0	0	1	0	0	0	0	0	0	0	0	-63	0.000	0	0.00	21.457	20.867	0.590	0.000	0
5	124	2018	4	45211	986816	21.827	0	0	0	1	0	0	0	0	0	0	0	-62	0.000	0	0.00	22.400	21.827	0.573	0.000	0
5	125	2018	5	45307	919600	20.297	0	0	0	0	1	0	0	0	0	0	0	-61	0.228	12	0.00	21.928	20.297	1.631	0.028	0
5	126	2018	6	45315	1246948	27.517	0	0	0	0	0	1	0	0	0	0	0	-60	0.860	44	0.00	24.698	27.517	-2.819	0.098	0
6	127	2018	7	45329	1154181	25.462	0	0	0	0	0	0	1	0	0	0	0	-59	3.200	-1	0.00	25.179	25.462	-0.283	-0.580	0
6	128	2018	8	45357	1145609	25.258	0	0	0	0	0	0	0	1	0	0	0	-58	-0.311	5	0.00	26.271	25.258	1.013	0.085	0
6	129	2018	9	45319	1210549	26.712	0	0	0	0	0	0	0	0	1	0	0	-57	0.291	23	0.00	26.910	26.712	0.199	0.082	0
6	130	2018	10	45159	1078514	23.883	0	0	0	0	0	0	0	0	0	1	0	-56	6.330	52	0.00	23.581	23.883	-0.301	-0.836	0
6	131	2018	11	45035	1024229	22.743	0	0	0	0	0	0	0	0	0	0	1	-55	0.000	0	0.00	22.319	22.743	-0.424	0.000	0
6	132	2018	12	44989	979257	21.767	0	0	0	0	0	0	0	0	0	0	0	-54	0.000	0	0.00	21.935	21.767	0.168	0.000	0

PENNSYLVANIA COMMERCIAL MODEL

																		Rain Lag 2	0.3	0.8 CDD Lag							
																		Rain Lag 1	0.7								
						0.221	-0.249	-0.641	0.321	-0.162	2.557	3.733	4.179	4.839	2.446	0.366	-0.018	-0.180	0.006	-2.450					Weather	Billing
Period	Obs	Year	Month	Cust	Sales	UPC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Trend	Rain	CDD	COVID	Predicted	Actual	Variance	Effect	Adjustments
6	133	2019	1	45063	956835	21.233	1	0	0	0	0	0	0	0	0	0	0	-53	0.000	0	0.00	22.138	21.233	0.905	0.000	0
6	134	2019	2	45067	978793	21.719	0	1	0	0	0	0	0	0	0	0	0	-52	0.000	0	0.00	21.650	21.719	-0.068	0.000	0
6	135	2019	3	45113	950982	21.080	0	0	1	0	0	0	0	0	0	0	0	-51	0.000	0	0.00	21.240	21.080	0.160	0.000	0
6	136	2019	4	45230	944298	20.878	0	0	0	1	0	0	0	0	0	0	0	-50	0.000	0	0.00	22.184	20.878	1.306	0.000	0
6	137	2019	5	45363	1002505	22.100	0	0	0	0	1	0	0	0	0	0	0	-49	0.146	-4	0.00	21.631	22.100	-0.469	-0.052	0
6	138	2019	6	45392	1076783	23.722	0	0	0	0	0	1	0	0	0	0	0	-48	0.669	-5	0.00	24.236	23.722	0.514	-0.147	0
7	139	2019	7	45464	1107107	24.351	0	0	0	0	0	0	1	0	0	0	0	-47	-0.038	-47	0.00	25.275	24.351	0.923	-0.267	0
7	140	2019	8	45493	1194214	26.250	0	0	0	0	0	0	0	1	0	0	0	-46	-0.435	-39	0.00	25.822	26.250	-0.429	-0.148	0
7	141	2019	9	45493	1173426	25.794	0	0	0	0	0	0	0	0	1	0	0	-45	1.545	60	0.00	26.682	25.794	0.889	0.070	0
7	142	2019	10	45489	1098226	24.143	0	0	0	0	0	0	0	0	0	1	0	-44	-0.376	25	0.00	24.415	24.143	0.272	0.215	0
7	143	2019	11	45317	1033986	22.817	0	0	0	0	0	0	0	0	0	0	1	-43	0.000	0	0.00	22.103	22.817	-0.714	0.000	0
7	144	2019	12	45299	989151	21.836	0	0	0	0	0	0	0	0	0	0	0	-42	0.000	0	0.00	21.719	21.836	-0.117	0.000	0
7	145	2020	1	45311	931230	20.552	1	0	0	0	0	0	0	0	0	0	0	-41	0.000	0	0.00	21.922	20.552	1.370	0.000	0
7	146	2020	2	45334	978886	21.593	0	1	0	0	0	0	0	0	0	0	0	-40	0.000	0	0.00	21.434	21.593	-0.159	0.000	0
7	147	2020	3	45361	920067	20.283	0	0	1	0	0	0	0	0	0	0	0	-39	0.000	0	0.00	21.024	20.283	0.741	0.000	0
7	148	2020	4	45484	818423	17.994	0	0	0	1	0	0	0	0	0	0	0	-38	0.000	0	1.00	19.517	17.994	1.524	0.000	0
7	149	2020	5	45635	800388	17.539	0	0	0	0	1	0	0	0	0	0	0	-37	1.731	-12	1.00	18.634	17.539	1.095	-0.384	0
7	150	2020	6	45742	910797	19.912	0	0	0	0	0	1	0	0	0	0	0	-36	-0.586	-11	1.00	21.756	19.912	1.844	0.039	0
8	151	2020	7	45786	1108774	24.216	0	0	0	0	0	0	1	0	0	0	0	-35	-2.797	29	1.00	23.547	24.216	-0.670	0.671	0
8	152	2020	8	45852	1134650	24.746	0	0	0	0	0	0	0	1	0	0	0	-34	-2.008	113	1.00	24.319	24.746	-0.427	1.016	0
8	153	2020	9	45848	1113708	24.291	0	0	0	0	0	0	0	0	1	0	0	-33	0.031	26	1.00	24.092	24.291	-0.200	0.146	0
8	154	2020	10	45692	1014772	22.209	0	0	0	0	0	0	0	0	0	1	0	-32	-1.072	-20	1.00	21.613	22.209	-0.596	0.078	0
8	155	2020	11	45639	1012584	22.187	0	0	0	0	0	0	0	0	0	0	1	-31	0.000	0	1.00	19.437	22.187	-2.750	0.000	0
8	156	2020	12	45623	890783	19.525	0	0	0	0	0	0	0	0	0	0	0	-30	0.000	0	0.40	20.522	19.525	0.997	0.000	0
8	157	2021	1	45627	937136	20.539	1	0	0	0	0	0	0	0	0	0	0	-29	0.000	0	0.40	20.726	20.539	0.186	0.000	0
8	158	2021	2	45650	874487	19.156	0	1	0	0	0	0	0	0	0	0	0	-28	0.000	0	0.40	20.237	19.156	1.081	0.000	0
8	159	2021	3	45742	878084	19.196	0	0	1	0	0	0	0	0	0	0	0	-27	0.000	0	0.40	19.827	19.196	0.631	0.000	0
8	160	2021	4	45835	987900	21.553	0	0	0	1	0	0	0	0	0	0	0	-26	0.000	0	0.40	20.771	21.553	-0.783	0.000	0
8	161	2021	5	45924	944961	20.577	0	0	0	0	1	0	0	0	0	0	0	-25	-0.948	3	0.40	20.455	20.577	-0.121	0.185	0
8	162	2021	6	46019	1008081	21.906	0	0	0	0	0	1	0	0	0	0	0	-24	-1.143	6	0.40	23.213	21.906	1.307	0.242	0
9	163	2021	7	45991	1116574	24.278	0	0	0	0	0	0	1	0	0	0	0	-23	0.711	34	0.40	24.198	24.278	-0.080	0.069	0
9	164	2021	8	45988	1124545	24.453	0	0	0	0	0	0	0	1	0	0	0	-22	0.424	-7	0.40	24.437	24.453	-0.016	-0.119	0
9	165	2021	9	45982	1131486	24.607	0	0	0	0	0	0	0	0	1	0	0	-21	0.885	42	0.40	25.281	24.607	0.674	0.082	0
9	166	2021	10	45918	1058176	23.045	0	0	0	0	0	0	0	0	0	1	0	-20	1.018	-23	0.40	22.469	23.045	-0.576	-0.318	0
9	167	2021	11	45864	911185	19.867	0	0	0	0	0	0	0	0	0	0	1	-19	0.000	0	0.40	20.690	19.867	0.823	0.000	0
9	168	2021	12	45796	931391	20.338	0	0	0	0	0	0	0	0	0	0	0	-18	0.000	0	0.40	20.306	20.338	-0.032	0.000	0
9	169	2022	1	45880	936872	20.420	1	0	0	0	0	0	0	0	0	0	0	-17	0.000	0	0.40	20.509	20.420	0.089	0.000	0
9	170	2022	2	45956	949002	20.650	0	1	0	0	0	0	0	0	0	0	0	-16	0.000	0	0.40	20.021	20.650	-0.629	0.000	0
9	171	2022	3	46052	894488	19.423	0	0	1	0	0	0	0	0	0	0	0	-15	0.000	0	0.40	19.611	19.423	0.187	0.000	0
9	172	2022	4	46163	1014196	21.970	0	0	0	1	0	0	0	0	0	0	0	-14	0.000	0	0.40	20.554	21.970	-1.416	0.000	0
9	173	2022	5	46238	915061	19.790	0	0	0	0	1	0	0	0	0	0	0	-13	-0.252	5	0.40	20.129	19.790	0.339	0.075	0
9	174	2022	6	46255	1050571	22.713	0	0	0	0	0	1	0	0	0	0	0	-12	1.041	4	0.40	22.590	22.713	-0.123	-0.164	0
10	175	2022	7	46237	1097377	23.734	0	0	0	0	0	0	1	0	0	0	0	-11	-2.862	21	0.40	24.548	23.734	0.814	0.635	0
10	176	2022	8	46272	1090069	23.558	0	0	0	0	0	0	0	1	0	0	0	-10	-1.278	31	0.40	24.748	23.558	1.190	0.408	0
10	177	2022	9	46387	1160136	25.010	0	0	0	0	0	0	0	0	1	0	0	-9	-0.320	-3	0.40	25.023	25.010	0.013	0.041	0
10	178	2022	10	46286	1035702	22.376	0	0	0	0	0	0	0	0	0	1	0	-8	-0.816	-16	0.40	22.625	22.376	0.249	0.054	0
10	179	2022	11	46178	918030	19.880	0	0	0	0	0	0	0	0	0	0	1	-7	0.000	0	0.40	20.473	19.880	0.593	0.000	0
10	180	2022	12	46149	924307	20.029	0	0	0	0	0	0	0	0	0	0	0	-6	0.000	0	0.40	20.089	20.029	0.060	0.000	0
10	181	2023	1	46187	1078803	23.357	1	0	0	0	0	0	0	0	0	0	0	-5	0.000	0	0.40	20.292	23.357	-3.065	0.000	0
10	182	2023	2	46204	934031	20.215	0	1	0	0	0	0	0	0	0	0	0	-4	0.000	0	0.40	19.804	20.215	-0.411	0.000	0
10	183	2023	3	46267	892054	19.281	0	0	1	0	0	0	0	0	0	0	0	-3	0.000	0	0.40	19.394	19.281	0.114	0.000	0

PENNSYLVANIA COMMERCIAL MODEL

																		Rain Lag 2	0.3	0.8 CDD Lag							
							0.221	-0.249	-0.641	0.321	-0.162	2.557	3.733	4.179	4.839	2.446	0.366	-0.018	-0.180	0.006	-2.450					Weather	Billing
Period	Obs	Year	Month	Cust	Sales	UPC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Trend	Rain	CDD	COVID	Predicted	Actual	Variance		Effect	Adjustments
10	184	2023	4	46595	948922	20.365	0	0	0	1	0	0	0	0	0	0	0	-2	0.000	0	0.40	20.338	20.365	-0.028		0.000	0
10	185	2023	5	46750	959066	20.515	0	0	0	0	1	0	0	0	0	0	0	-1	-1.362	3	0.40	20.099	20.515	-0.416		0.262	0
10	186	2023	6	46726	1113821	23.837	0	0	0	0	0	1	0	0	0	0	0	0	-2.149	-50	0.40	22.634	23.837	-1.203		0.096	0
11	187	2023	7	46743	1163840	24.899	0	0	0	0	0	0	1	0	0	0	0	1	-2.912	-52	0.00	24.899					
11	188	2023	8	46774	1182235	25.276	0	0	0	0	0	0	0	1	0	0	0	2	-0.959	0	0.00	25.276					
11	189	2023	9	46787	1204565	25.746	0	0	0	0	0	0	0	0	1	0	0	3	0.000	0	0.00	25.746					
11	190	2023	10	46690	1089484	23.334	0	0	0	0	0	0	0	0	0	1	0	4	0.000	0	0.00	23.334					
11	191	2023	11	46588	989371	21.237	0	0	0	0	0	0	0	0	0	0	1	5	0.000	0	0.00	21.237					
11	192	2023	12	46553	970735	20.852	0	0	0	0	0	0	0	0	0	0	0	6	0.000	0	0.00	20.852					
11	193	2024	1	46595	981095	21.056	1	0	0	0	0	0	0	0	0	0	0	7	0.000	0	0.00	21.056					
11	194	2024	2	46624	958940	20.568	0	1	0	0	0	0	0	0	0	0	0	8	0.000	0	0.00	20.568					
11	195	2024	3	46688	941129	20.158	0	0	1	0	0	0	0	0	0	0	0	9	0.000	0	0.00	20.158					
11	196	2024	4	46843	988427	21.101	0	0	0	1	0	0	0	0	0	0	0	10	0.000	0	0.00	21.101					
11	197	2024	5	46963	967475	20.601	0	0	0	0	1	0	0	0	0	0	0	11	0.000	0	0.00	20.601					
11	198	2024	6	47008	1095332	23.301	0	0	0	0	0	1	0	0	0	0	0	12	0.000	0	0.00	23.301					
12	199	2024	7	47025	1150200	24.459	0	0	0	0	0	0	1	0	0	0	0	13	0.000	0	0.00	24.459					
12	200	2024	8	47056	1171075	24.887	0	0	0	0	0	0	0	1	0	0	0	14	0.000	0	0.00	24.887					
12	201	2024	9	47069	1201638	25.529	0	0	0	0	0	0	0	0	1	0	0	15	0.000	0	0.00	25.529					
12	202	2024	10	46972	1085898	23.118	0	0	0	0	0	0	0	0	0	1	0	16	0.000	0	0.00	23.118					
12	203	2024	11	46870	985216	21.020	0	0	0	0	0	0	0	0	0	0	1	17	0.000	0	0.00	21.020					
12	204	2024	12	46835	966479	20.636	0	0	0	0	0	0	0	0	0	0	0	18	0.000	0	0.00	20.636					
12	205	2025	1	46877	976887	20.839	1	0	0	0	0	0	0	0	0	0	0	19	0.000	0	0.00	20.839					
12	206	2025	2	46906	954588	20.351	0	1	0	0	0	0	0	0	0	0	0	20	0.000	0	0.00	20.351					
12	207	2025	3	46971	936647	19.941	0	0	1	0	0	0	0	0	0	0	0	21	0.000	0	0.00	19.941					
12	208	2025	4	47125	984178	20.884	0	0	0	1	0	0	0	0	0	0	0	22	0.000	0	0.00	20.884					
12	209	2025	5	47246	963059	20.384	0	0	0	0	1	0	0	0	0	0	0	23	0.000	0	0.00	20.384					
12	210	2025	6	47290	1091668	23.084	0	0	0	0	0	1	0	0	0	0	0	24	0.000	0	0.00	23.084					
13	211	2025	7	47307	1146859	24.243	0	0	0	0	0	0	1	0	0	0	0	25	0.000	0	0.00	24.243					
13	212	2025	8	47338	1167848	24.670	0	0	0	0	0	0	0	1	0	0	0	26	0.000	0	0.00	24.670					
13	213	2025	9	47352	1198590	25.313	0	0	0	0	0	0	0	0	1	0	0	27	0.000	0	0.00	25.313					
13	214	2025	10	47255	1082190	22.901	0	0	0	0	0	0	0	0	0	1	0	28	0.000	0	0.00	22.901					
13	215	2025	11	47152	980938	20.804	0	0	0	0	0	0	0	0	0	0	1	29	0.000	0	0.00	20.804					
13	216	2025	12	47117	962100	20.419	0	0	0	0	0	0	0	0	0	0	0	30	0.000	0	0.00	20.419					
13	217	2026	1	47159	972556	20.623	1	0	0	0	0	0	0	0	0	0	0	31	0.000	0	0.00	20.623					
13	218	2026	2	47188	950114	20.135	0	1	0	0	0	0	0	0	0	0	0	32	0.000	0	0.00	20.135					
13	219	2026	3	47253	932043	19.725	0	0	1	0	0	0	0	0	0	0	0	33	0.000	0	0.00	19.725					
13	220	2026	4	47407	979807	20.668	0	0	0	1	0	0	0	0	0	0	0	34	0.000	0	0.00	20.668					
13	221	2026	5	47528	958520	20.168	0	0	0	0	1	0	0	0	0	0	0	35	0.000	0	0.00	20.168					
13	222	2026	6	47573	1087882	22.868	0	0	0	0	0	1	0	0	0	0	0	36	0.000	0	0.00	22.868					
14	223	2026	7	47589	1143396	24.026	0	0	0	0	0	0	1	0	0	0	0	37	0.000	0	0.00	24.026					
14	224	2026	8	47620	1164499	24.454	0	0	0	0	0	0	0	1	0	0	0	38	0.000	0	0.00	24.454					
14	225	2026	9	47634	1195419	25.096	0	0	0	0	0	0	0	0	1	0	0	39	0.000	0	0.00	25.096					
14	226	2026	10	47537	1078359	22.685	0	0	0	0	0	0	0	0	0	1	0	40	0.000	0	0.00	22.685					
14	227	2026	11	47435	976538	20.587	0	0	0	0	0	0	0	0	0	0	1	41	0.000	0	0.00	20.587					
14	228	2026	12	47399	957599	20.203	0	0	0	0	0	0	0	0	0	0	0	42	0.000	0	0.00	20.203					

REGRESSION MODEL

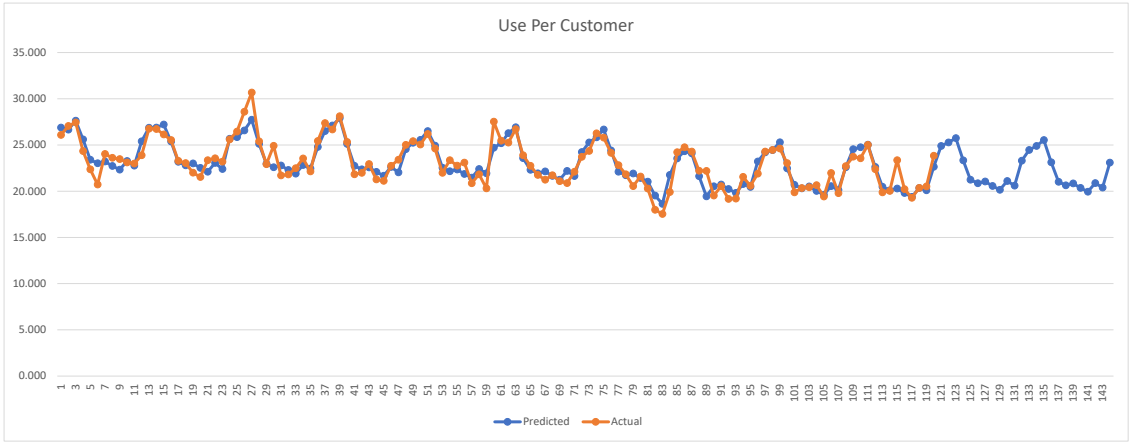
SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.9182
R Square	0.8430
Adjusted R Square	0.8204
Standard Error	1.0229
Observations	120

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	15	584.27	38.9514	37.2281	0.0000
Residual	104	108.81	1.0463		
Total	119	693.09			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*	
Intercept	20.9607	0.4108	51.0220	0.0000	20.1460	21.7754	4.3812	4.8161	
Jan	0.2214	0.4575	0.4840	0.6294	-0.6858	1.1286	-0.0904	0.4442	
Feb	-0.2486	0.4575	-0.5435	0.5880	-1.1559	0.6586	-0.5977	-0.0631	
Mar	-0.6406	0.4576	-1.4001	0.1645	-1.5480	0.2668	-0.5800	-0.0454	
Apr	0.3207	0.4590	0.6987	0.4863	-0.5895	1.2309	-0.4491	0.0880	
May	-0.1616	0.4589	-0.3521	0.7254	-1.0716	0.7484	0.0664	0.6039	
Jun	2.5567	0.4588	5.5723	0.0000	1.6468	3.4666	1.5893	2.1274	
Jul	3.7332	0.4603	8.1106	0.0000	2.8204	4.6460	3.0936	3.6314	
Aug	4.1788	0.4592	9.0998	0.0000	3.2681	5.0894	3.0495	3.5871	
Sep	4.8390	0.4588	10.5475	0.0000	3.9293	5.7488	2.6027	3.1405	
Oct	2.4458	0.4586	5.3334	0.0000	1.5364	3.3552	1.1906	1.7252	
Nov	0.3661	0.4584	0.7987	0.4263	-0.5429	1.2752	-0.0387	0.4958	
Trend	-0.0180	0.0036	-5.0336	0.0000	-0.0252	-0.0109	-0.0084	-0.0050	-2.598 Annual Decline
Rain	-0.1797	0.0825	-2.1788	0.0316	-0.3432	-0.0161	-0.2999	-0.1944	
CDD	0.0058	0.0037	1.5722	0.1190	-0.0015	0.0131	0.0050	0.0095	
COVID	-2.4496	0.4521	-5.4178	0.0000	-3.3463	-1.5530	0.2478	0.8078	



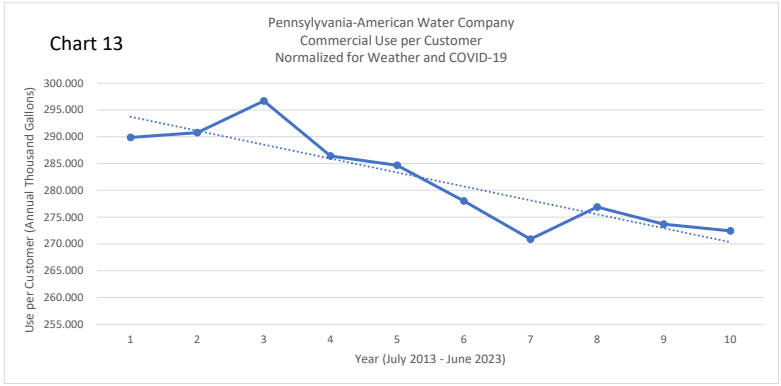
REGRESSION MODEL

SUMMARY OUTPUT

Auto-Correlation:	0.0973
D-W Statistic	1.7881

Month	Weather
1	0
2	0
3	0
4	0
5	1
6	1
7	1
8	1
9	1
10	1
11	0
12	0

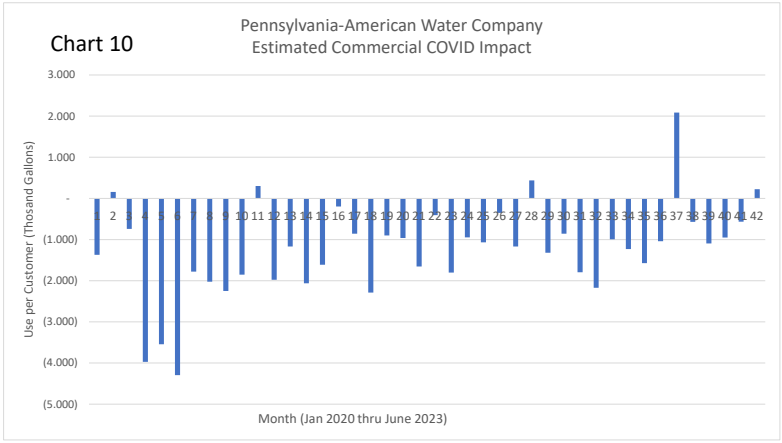
Period	Actual	Weather	COVID	Normalized
1	289.058	(0.813)	-	289.871
2	290.704	(0.050)	-	290.754
3	296.023	(0.648)	-	296.671
4	287.766	1.366	-	286.400
5	282.933	(1.731)	-	284.663
6	276.555	(1.448)	-	278.003
7	263.063	(0.475)	(7.349)	270.886
8	260.102	2.338	(19.107)	276.871
9	261.555	(0.376)	(11.758)	273.689
10	262.157	1.497	(11.758)	272.419



REGRESSION MODEL

SUMMARY OUTPUT

Data	Usage Per Customer
Jan-20	(1.370)
Feb-20	0.159
Mar-20	(0.741)
Apr-20	(3.973)
May-20	(3.544)
Jun-20	(4.294)
Jul-20	(1.780)
Aug-20	(2.023)
Sep-20	(2.250)
Oct-20	(1.853)
Nov-20	0.301
Dec-20	(1.977)
Jan-21	(1.166)
Feb-21	(2.061)
Mar-21	(1.611)
Apr-21	(0.197)
May-21	(0.859)
Jun-21	(2.287)
Jul-21	(0.899)
Aug-21	(0.964)
Sep-21	(1.654)
Oct-21	(0.404)
Nov-21	(1.803)
Dec-21	(0.948)
Jan-22	(1.069)
Feb-22	(0.351)
Mar-22	(1.167)
Apr-22	0.436
May-22	(1.318)
Jun-22	(0.857)
Jul-22	(1.794)
Aug-22	(2.170)
Sep-22	(0.993)
Oct-22	(1.229)
Nov-22	(1.573)
Dec-22	(1.040)
Jan-23	2.085
Feb-23	(0.569)
Mar-23	(1.094)
Apr-23	(0.952)
May-23	(0.564)
Jun-23	0.224



CUSTOMER DATA

Year	Month	Cust	Growth	Select
2013	7	44780		
2013	8	44820	40	0
2013	9	44760	-60	0
2013	10	44973	213	0
2013	11	44816	-157	0
2013	12	44800	-16	0
2014	1	44757	-43	0
2014	2	44735	-22	0
2014	3	44743	8	0
2014	4	44826	83	0
2014	5	44935	109	0
2014	6	44934	-1	0
2014	7	44926	-8	0
2014	8	44971	45	0
2014	9	44955	-16	0
2014	10	44813	-142	0
2014	11	44628	-185	0
2014	12	44599	-29	0
2015	1	44515	-84	0
2015	2	44477	-38	0
2015	3	44543	66	0
2015	4	44714	171	0
2015	5	44854	140	0
2015	6	44904	50	0
2015	7	44963	59	0
2015	8	44962	-1	0
2015	9	44944	-18	0
2015	10	44830	-114	0
2015	11	44667	-163	0
2015	12	44603	-64	0
2016	1	44615	12	0
2016	2	44655	40	0
2016	3	44775	120	0
2016	4	44858	83	0
2016	5	45003	145	0
2016	6	45047	44	0
2016	7	45075	28	0
2016	8	45107	32	0
2016	9	45038	-69	0
2016	10	44919	-119	0
2016	11	44797	-122	0
2016	12	44788	-9	0
2017	1	44757	-31	0
2017	2	44737	-20	0
2017	3	44792	55	0
2017	4	45033	241	0
2017	5	45147	114	0
2017	6	45183	36	0
2017	7	45215	32	0
2017	8	45253	38	0
2017	9	45254	1	0
2017	10	45186	-68	0
2017	11	45030	-156	0
2017	12	44995	-35	0
2018	1	44995	0	0
2018	2	45017	22	0
2018	3	45026	9	0
2018	4	45211	185	0
2018	5	45307	96	0
2018	6	45315	8	0
2018	7	45329	14	1
2018	8	45357	28	1
2018	9	45319	-38	1
2018	10	45159	-160	1
2018	11	45035	-124	1
2018	12	44989	-46	1

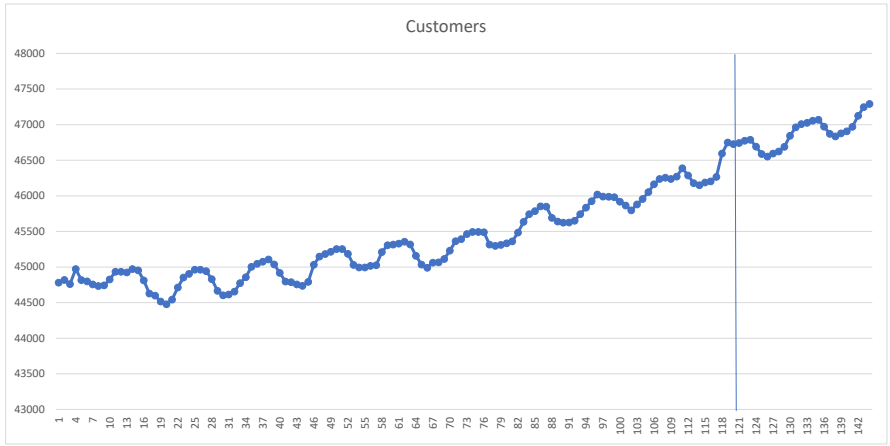
Month	Avg Growth Last 60 Months
1	42
2	29
3	65
4	154
5	121
6	45
7	17
8	31
9	13
10	-97
11	-102
12	-35
	282

CUSTOMER DATA

Year	Month	Cust	Growth	Select
2019	1	45063	74	1
2019	2	45067	4	1
2019	3	45113	46	1
2019	4	45230	117	1
2019	5	45363	133	1
2019	6	45392	29	1
2019	7	45464	72	1
2019	8	45493	29	1
2019	9	45493	0	1
2019	10	45489	-4	1
2019	11	45317	-172	1
2019	12	45299	-18	1
2020	1	45311	12	1
2020	2	45334	23	1
2020	3	45361	27	1
2020	4	45484	123	1
2020	5	45635	151	1
2020	6	45742	107	1
2020	7	45786	44	1
2020	8	45852	66	1
2020	9	45848	-4	1
2020	10	45692	-156	1
2020	11	45639	-53	1
2020	12	45623	-16	1
2021	1	45627	4	1
2021	2	45650	23	1
2021	3	45742	92	1
2021	4	45835	93	1
2021	5	45924	89	1
2021	6	46019	95	1
2021	7	45991	-28	1
2021	8	45988	-3	1
2021	9	45982	-6	1
2021	10	45918	-64	1
2021	11	45864	-54	1
2021	12	45796	-68	1
2022	1	45880	84	1
2022	2	45956	76	1
2022	3	46052	96	1
2022	4	46163	111	1
2022	5	46238	75	1
2022	6	46255	17	1
2022	7	46237	-18	1
2022	8	46272	35	1
2022	9	46387	115	1
2022	10	46286	-101	1
2022	11	46178	-108	1
2022	12	46149	-29	1
2023	1	46187	38	1
2023	2	46204	17	1
2023	3	46267	63	1
2023	4	46595	328	1
2023	5	46750	155	1
2023	6	46726	-24	1
2023	7	46743	17	
2023	8	46774	31	
2023	9	46787	13	
2023	10	46690	-97	
2023	11	46588	-102	
2023	12	46553	-35	
2024	1	46595	42	
2024	2	46624	29	
2024	3	46688	65	
2024	4	46843	154	
2024	5	46963	121	
2024	6	47008	45	
2024	7	47025	17	

CUSTOMER DATA

Year	Month	Cust	Growth	Select
2024	8	47056	31	
2024	9	47069	13	
2024	10	46972	-97	
2024	11	46870	-102	
2024	12	46835	-35	
2025	1	46877	42	
2025	2	46906	29	
2025	3	46971	65	
2025	4	47125	154	
2025	5	47246	121	
2025	6	47290	45	
2025	7	47307	17	
2025	8	47338	31	
2025	9	47352	13	
2025	10	47255	-97	
2025	11	47152	-102	
2025	12	47117	-35	
2026	1	47159	42	
2026	2	47188	29	
2026	3	47253	65	
2026	4	47407	154	
2026	5	47528	121	
2026	6	47573	45	
2026	7	47589	17	
2026	8	47620	31	
2026	9	47634	13	
2026	10	47537	-97	
2026	11	47435	-102	
2026	12	47399	-35	



WEATHER DATA

Year	Month	Rain	Rain Lag 1	Rain Lag 2	CDD	CDD Lag 1					
2013	7	3.573	0.155	-2.031	-15	-6	36088	2109	2013	233676	-32965
2013	8	-2.394	3.573	0.155	-71	-15	-17860	-27249	2014	-22015	-17430
2013	9	-1.592	-2.394	3.573	-50	-71	8660	-12586	2015	-386738	-12001
2013	10	-0.766	-1.592	-2.394	9	-50	57062	4760	2016	19353	71388
2013	11	0.653	-0.766	-1.592	-2	9	46791	0	2017	-29858	-99408
2013	12	0.950	0.653	-0.766	0	-2	102934	0	2018	-57206	-50715
2014	1	-1.105	0.950	0.653	0	0	-35852	0	2019	143724	-14951
2014	2	-1.068	-1.105	0.950	0	0	-39186	0	2020	125440	71846
2014	3	-1.121	-1.068	-1.105	-1	0	-51214	0	2021	141806	6472
2014	4	0.629	-1.121	-1.068	1	-1	7337	0	2022	63447	48537
2014	5	0.859	0.629	-1.121	5	1	-10144	-338			
2014	6	-1.345	0.859	0.629	43	5	68136	-3110	avg.	23163	-2923
2014	7	-1.247	-1.345	0.859	-69	43	5204	11005	s.d.	171385	54551
2014	8	1.146	-1.247	-1.345	-76	-69	6473	-7990			
2014	9	-2.872	1.146	-1.247	-39	-76	48920	-21446			
2014	10	-1.346	-2.872	1.146	-16	-39	-6417	4448			
2014	11	-0.347	-1.346	-2.872	-2	-16	-4408	0			
2014	12	-0.330	-0.347	-1.346	0	-2	-10866	0			
2015	1	-0.235	-0.330	-0.347	0	0	44820	0			
2015	2	-2.078	-0.235	-0.330	0	0	43424	0			
2015	3	0.959	-2.078	-0.235	-1	0	-55130	0			
2015	4	0.899	0.959	-2.078	-11	-1	-22683	0			
2015	5	-1.731	0.899	0.959	54	-11	-35600	-6838			
2015	6	4.665	-1.731	0.899	-6	54	2522	18535			
2015	7	-1.467	4.665	-1.731	-32	-6	-26924	-25001			
2015	8	-2.924	-1.467	4.665	-49	-32	-91132	-12167			
2015	9	1.778	-2.924	-1.467	31	-49	-132180	11393			
2015	10	-0.646	1.778	-2.924	-27	31	-12712	2077			
2015	11	-0.697	-0.646	1.778	2	-27	2407	0			
2015	12	0.450	-0.697	-0.646	0	2	-103550	0			
2016	1	-1.005	0.450	-0.697	0	0	48008	0			
2016	2	-0.078	-1.005	0.450	0	0	22225	0			
2016	3	-1.071	-0.078	-1.005	-1	0	-26510	0			
2016	4	-1.011	-1.071	-0.078	-9	-1	-31519	0			
2016	5	1.639	-1.011	-1.071	-22	-9	14356	5319			
2016	6	-2.325	1.639	-1.011	13	-22	-28484	-10777			
2016	7	-0.277	-2.325	1.639	44	13	-38411	14284			
2016	8	-0.594	-0.277	-2.325	106	44	19759	21883			
2016	9	-0.222	-0.594	-0.277	46	106	-9912	28558			
2016	10	0.194	-0.222	-0.594	-3	46	-8841	12123			
2016	11	-1.247	0.194	-0.222	3	-3	41233	0			
2016	12	0.650	-1.247	0.194	0	3	17448	0			
2017	1	1.025	0.650	-1.247	0	0	-16487	0			
2017	2	-1.598	1.025	0.650	2	0	36103	0			
2017	3	1.599	-1.598	1.025	3	2	24710	0			
2017	4	-0.021	1.599	-1.598	10	3	-5874	0			
2017	5	0.889	-0.021	1.599	-31	10	-61315	-3268			
2017	6	5.005	0.889	-0.021	-11	-31	-20812	-12109			
2017	7	3.373	5.005	0.889	-12	-11	-7906	-33460			
2017	8	-0.404	3.373	5.005	-89	-12	23128	-38519			
2017	9	-2.142	-0.404	3.373	-4	-89	13799	-24930			
2017	10	0.514	-2.142	-0.404	12	-4	13839	12879			
2017	11	1.773	0.514	-2.142	-2	12	24882	0			
2017	12	-1.980	1.773	0.514	0	-2	-53925	0			
2018	1	0.455	-1.980	1.773	0	0	-17962	0			
2018	2	3.092	0.455	-1.980	2	0	-54859	0			
2018	3	-0.381	3.092	0.455	-1	2	26552	0			
2018	4	0.489	-0.381	3.092	1	-1	25916	0			
2018	5	1.019	0.489	-0.381	55	1	73896	1281			
2018	6	4.135	1.019	0.489	-2	55	-127742	4454			
2018	7	-2.217	4.135	1.019	3	-2	-12843	-26269			
2018	8	1.366	-2.217	4.135	15	3	45949	3839			
2018	9	8.458	1.366	-2.217	57	15	8997	3716			
2018	10	0.934	8.458	1.366	33	57	-13607	-37738			
2018	11	1.233	0.934	8.458	-2	33	-19081	0			
2018	12	1.260	1.233	0.934	0	-2	7580	0			

WEATHER DATA

Year	Month	Rain	Rain Lag 1	Rain Lag 2	CDD	CDD Lag 1		
2019	1	-0.245	1.260	1.233	0	0	40790	0
2019	2	1.352	-0.245	1.260	0	0	-3077	0
2019	3	-1.401	1.352	-0.245	-1	0	7232	0
2019	4	0.809	-1.401	1.352	-7	-1	59065	0
2019	5	0.609	0.809	-1.401	5	-7	-21258	-2371
2019	6	-0.315	0.609	0.809	-43	5	23344	-6690
2019	7	-0.487	-0.315	0.609	-66	-43	41982	-12152
2019	8	2.416	-0.487	-0.315	68	-66	-19495	-6711
2019	9	-1.572	2.416	-0.487	29	68	40428	3206
2019	10	2.464	-1.572	2.416	12	29	12393	9766
2019	11	-0.747	2.464	-1.572	-2	12	-32357	0
2019	12	0.300	-0.747	2.464	0	-2	-5322	0
2020	1	0.775	0.300	-0.747	0	0	62074	0
2020	2	0.222	0.775	0.300	0	0	-7205	0
2020	3	2.319	0.222	0.775	1	0	33593	0
2020	4	1.479	2.319	0.222	-12	1	69307	0
2020	5	-1.471	1.479	2.319	-15	-12	49956	-17502
2020	6	-3.365	-1.471	1.479	3	-15	84364	1766
2020	7	-1.427	-3.365	-1.471	132	3	-30657	30727
2020	8	0.656	-1.427	-3.365	38	132	-19571	46576
2020	9	-1.812	0.656	-1.427	-20	38	-9152	6701
2020	10	-0.786	-1.812	0.656	-18	-20	-27250	3579
2020	11	-0.037	-0.786	-1.812	-2	-18	-125519	0
2020	12	-0.830	-0.037	-0.786	0	-2	45500	0
2021	1	-0.845	-0.830	-0.037	0	0	8507	0
2021	2	-0.418	-0.845	-0.830	0	0	49352	0
2021	3	-0.101	-0.418	-0.845	-1	0	28860	0
2021	4	-1.311	-0.101	-0.418	4	-1	-35876	0
2021	5	-1.071	-1.311	-0.101	-4	4	-5571	8494
2021	6	1.475	-1.071	-1.311	48	-4	60144	11140
2021	7	-0.027	1.475	-1.071	-25	48	-3696	3159
2021	8	1.276	-0.027	1.475	61	-25	-730	-5493
2021	9	0.908	1.276	-0.027	-35	61	30984	3778
2021	10	0.584	0.908	1.276	25	-35	-26426	-14607
2021	11	-1.697	0.584	0.908	-2	25	37733	0
2021	12	0.910	-1.697	0.584	0	-2	-1474	0
2022	1	-0.065	0.910	-1.697	0	0	4081	0
2022	2	2.072	-0.065	0.910	0	0	-28922	0
2022	3	-0.721	2.072	-0.065	-1	0	8632	0
2022	4	-0.051	-0.721	2.072	6	-1	-65355	0
2022	5	1.509	-0.051	-0.721	1	6	15657	3469
2022	6	-4.735	1.509	-0.051	16	1	-5679	-7598
2022	7	0.203	-4.735	1.509	39	16	37633	29367
2022	8	-0.544	0.203	-4.735	0	39	55085	18891
2022	9	-0.932	-0.544	0.203	-13	0	607	1890
2022	10	-1.146	-0.932	-0.544	-27	-13	11537	2518
2022	11	1.113	-1.146	-0.932	7	-27	27386	0
2022	12	-1.380	1.113	-1.146	0	7	2785	0
2023	1	1.245	-1.380	1.113	0	0	-141554	0
2023	2	-1.498	1.245	-1.380	0	0	-18990	0
2023	3	-0.081	-1.498	1.245	-1	0	5263	0
2023	4	-1.911	-0.081	-1.498	15	-1	-1290	0
2023	5	-2.251	-1.911	-0.081	-46	15	-19439	12233
2023	6	-3.195	-2.251	-1.911	-65	-46	-56229	4502
2023	7	0.000	-3.195	-2.251	0	-65		
2023	8	0.000	0.000	-3.195	0	0		
2023	9	0.000	0.000	0.000	0	0		
2023	10	0.000	0.000	0.000	0	0		
2023	11	0.000	0.000	0.000	0	0		
2023	12	0.000	0.000	0.000	0	0		
2024	1	0.000	0.000	0.000	0	0		
2024	2	0.000	0.000	0.000	0	0		
2024	3	0.000	0.000	0.000	0	0		
2024	4	0.000	0.000	0.000	0	0		
2024	5	0.000	0.000	0.000	0	0		
2024	6	0.000	0.000	0.000	0	0		
2024	7	0.000	0.000	0.000	0	0		

WEATHER DATA

Year	Month	Rain	Rain Lag 1	Rain Lag 2	CDD	CDD Lag 1
2024	8	0.000	0.000	0.000	0	0
2024	9	0.000	0.000	0.000	0	0
2024	10	0.000	0.000	0.000	0	0
2024	11	0.000	0.000	0.000	0	0
2024	12	0.000	0.000	0.000	0	0
2025	1	0.000	0.000	0.000	0	0
2025	2	0.000	0.000	0.000	0	0
2025	3	0.000	0.000	0.000	0	0
2025	4	0.000	0.000	0.000	0	0
2025	5	0.000	0.000	0.000	0	0
2025	6	0.000	0.000	0.000	0	0
2025	7	0.000	0.000	0.000	0	0
2025	8	0.000	0.000	0.000	0	0
2025	9	0.000	0.000	0.000	0	0
2025	10	0.000	0.000	0.000	0	0
2025	11	0.000	0.000	0.000	0	0
2025	12	0.000	0.000	0.000	0	0
2026	1	0.000	0.000	0.000	0	0
2026	2	0.000	0.000	0.000	0	0
2026	3	0.000	0.000	0.000	0	0
2026	4	0.000	0.000	0.000	0	0
2026	5	0.000	0.000	0.000	0	0
2026	6	0.000	0.000	0.000	0	0
2026	7	0.000	0.000	0.000	0	0
2026	8	0.000	0.000	0.000	0	0
2026	9	0.000	0.000	0.000	0	0
2026	10	0.000	0.000	0.000	0	0
2026	11	0.000	0.000	0.000	0	0
2026	12	0.000	0.000	0.000	0	0

PENNSYLVANIA WEATHER DATA

DU Year	Month	Normal	DATE	CAL. CLDD	CAL. PRCP	CAL. HTDD	MODEL CLDD	MODEL PRCP	MODEL HTDD	Rain	Rain Lag	Rain Lag 2	CDD	CDD Lag	HDD	HDD Lag
2008	1	0	2008.01	0	1.890	1057	0	-0.785	-29	-0.785	0.000	0.000	0.000	0.000	-29	0
2008	2	0	2008.02	0	5.060	1012	0	1.682	133	1.682	-0.785	0.000	-0.400	0.000	133	-29
2008	3	0	2008.03	0	4.100	821	-1	0.779	85	0.779	1.682	-0.785	-0.600	-0.400	85	133
2008	4	0	2008.04	7	2.940	330	-5	-0.701	-63	-0.701	0.779	1.682	-4.800	-0.600	-63	85
2008	5	0	2008.05	14	5.380	246	-64	1.129	101	1.129	-0.701	0.779	-64.200	-4.800	101	-63
2008	6	0	2008.06	171	4.750	17	-3	-1.225	-1	-1.225	1.129	-0.701	-2.600	-64.200	-1	101
2008	7	0	2008.07	239	2.480	0	-40	-2.067	-2	-2.067	-1.225	1.129	-39.500	-2.600	-2	-1
2008	8	0	2008.08	163	2.040	2	-84	-2.964	-1	-2.964	-2.067	-1.225	-84.300	-39.500	-1	-2
2008	9	0	2008.09	85	1.690	34	-33	-1.752	-22	-1.752	-2.964	-2.067	-33.200	-84.300	-22	-1
2008	10	0	2008.10	4	1.960	415	-23	-1.956	108	-1.956	-1.752	-2.964	-22.500	-33.200	108	-22
2008	11	0	2008.11	0	2.060	729	-2	-0.447	74	-0.447	-1.956	-1.752	-1.500	-22.500	74	108
2008	12	0	2008.12	0	6.310	987	0	2.980	130	2.980	-0.447	-1.956	0.000	-1.500	130	74
2009	1	0	2009.01	0	3.060	1316	0	0.385	230	0.385	2.980	-0.447	0.000	0.000	230	130
2009	2	0	2009.02	0	1.070	904	0	-2.308	25	-2.308	0.385	2.980	-0.400	0.000	25	230
2009	3	0	2009.03	0	2.070	697	-1	-1.251	-39	-1.251	-2.308	0.385	-0.600	-0.400	-39	25
2009	4	0	2009.04	29	2.920	411	17	-0.721	18	-0.721	-1.251	-2.308	17.200	-0.600	18	-39
2009	5	0	2009.05	45	3.990	154	-33	-0.261	9	-0.261	-0.721	-1.251	-33.200	17.200	9	18
2009	6	0	2009.06	120	3.200	26	-54	-2.775	8	-2.775	-0.261	-0.721	-53.600	-33.200	8	9
2009	7	0	2009.07	142	4.670	5	-137	0.123	3	0.123	-2.775	-0.261	-136.500	-53.600	3	8
2009	8	0	2009.08	224	2.240	7	-23	-2.764	4	-2.764	0.123	-2.775	-23.300	-136.500	4	3
2009	9	0	2009.09	54	1.720	64	-64	-1.722	8	-1.722	-2.764	0.123	-64.200	-23.300	8	4
2009	10	0	2009.10	0	3.240	428	-27	-0.676	121	-0.676	-1.722	-2.764	-26.500	-64.200	121	8
2009	11	0	2009.11	0	1.060	518	-2	-1.447	-137	-1.447	-0.676	-1.722	-1.500	-26.500	-137	121
2009	12	0	2009.12	0	4.100	1044	0	0.770	187	0.770	-1.447	-0.676	0.000	-1.500	187	-137
2010	1	0	2010.01	0	2.340	1194	0	-0.335	108	-0.335	0.770	-1.447	0.000	0.000	108	187
2010	2	0	2010.02	0	1.560	1067	0	-1.818	188	-1.818	-0.335	0.770	-0.400	0.000	188	108
2010	3	0	2010.03	0	2.950	636	-1	-0.371	-100	-0.371	-1.818	-0.335	-0.600	-0.400	-100	188
2010	4	0	2010.04	29	1.360	289	17	-2.281	-104	-2.281	-0.371	-1.818	17.200	-0.600	-104	-100
2010	5	0	2010.05	86	5.610	112	8	1.359	-33	1.359	-2.281	-0.371	7.800	17.200	-33	-104
2010	6	0	2010.06	203	4.460	11	29	-1.515	-7	-1.515	1.359	-2.281	29.400	7.800	-7	-33
2010	7	0	2010.07	332	3.460	3	54	-1.087	1	-1.087	-1.515	1.359	53.500	29.400	1	-7
2010	8	0	2010.08	300	2.060	0	53	-2.944	-3	-2.944	-1.087	-1.515	52.700	53.500	-3	1
2010	9	0	2010.09	101	3.510	54	-17	0.068	-2	0.068	-2.944	-1.087	-17.200	52.700	-2	-3
2010	10	0	2010.10	5	2.400	299	-22	-1.516	-8	-1.516	0.068	-2.944	-21.500	-17.200	-8	-2
2010	11	0	2010.11	0	5.280	643	-2	2.773	-12	2.773	-1.516	0.068	-1.500	-21.500	-12	-8
2010	12	0	2010.12	0	1.170	1202	0	-2.160	345	-2.160	2.773	-1.516	0.000	-1.500	345	-12
2011	1	0	2011.01	0	1.790	1244	0	-0.885	158	-0.885	-2.160	2.773	0.000	0.000	158	345
2011	2	0	2011.02	0	3.030	807	0	-0.348	-73	-0.348	-0.885	-2.160	-0.400	0.000	-73	158
2011	3	0	2011.03	0	3.920	788	-1	0.599	52	0.599	-0.348	-0.885	-0.600	-0.400	52	-73
2011	4	0	2011.04	19	5.780	357	7	2.139	-36	2.139	0.599	-0.348	7.200	-0.600	-36	52

PENNSYLVANIA WEATHER DATA

DU Year	Month	Normal	DATE	CAL. CLDD	CAL. PRCP	CAL. HTDD	MODEL CLDD	MODEL PRCP	MODEL HTDD	Rain	Rain Lag	Rain Lag 2	CDD	CDD Lag	HDD	HDD Lag
2011	5	0	2011.05	92	4.050	142	14	-0.201	-3	-0.201	2.139	0.599	13.800	7.200	-3	-36
2011	6	0	2011.06	176	1.770	12	2	-4.205	-6	-4.205	-0.201	2.139	2.400	13.800	-6	-3
2011	7	0	2011.07	388	3.930	0	110	-0.617	-2	-0.617	-4.205	-0.201	109.500	2.400	-2	-6
2011	8	0	2011.08	235	4.010	0	-12	-0.994	-3	-0.994	-0.617	-4.205	-12.300	109.500	-3	-2
2011	9	0	2011.09	101	4.850	81	-17	1.408	25	1.408	-0.994	-0.617	-17.200	-12.300	25	-3
2011	10	0	2011.10	2	4.050	367	-25	0.134	60	0.134	1.408	-0.994	-24.500	-17.200	60	25
2011	11	0	2011.11	0	3.930	512	-2	1.423	-143	1.423	0.134	1.408	-1.500	-24.500	-143	60
2011	12	0	2011.12	0	3.100	824	0	-0.230	-34	-0.230	1.423	0.134	0.000	-1.500	-34	-143
2012	1	0	2012.01	0	3.110	968	0	0.435	-118	0.435	-0.230	1.423	0.000	0.000	-118	-34
2012	2	0	2012.02	0	1.800	816	0	-1.578	-64	-1.578	0.435	-0.230	-0.400	0.000	-64	-118
2012	3	0	2012.03	9	2.920	419	8	-0.401	-317	-0.401	-1.578	0.435	8.400	-0.400	-317	-64
2012	4	0	2012.04	6	1.640	439	-6	-2.001	46	-2.001	-0.401	-1.578	-5.800	8.400	46	-317
2012	5	0	2012.05	144	2.740	52	66	-1.511	-93	-1.511	-2.001	-0.401	65.800	-5.800	-93	46
2012	6	0	2012.06	206	1.680	22	32	-4.295	4	-4.295	-1.511	-2.001	32.400	65.800	4	-93
2012	7	0	2012.07	381	6.680	0	103	2.133	-2	2.133	-4.295	-1.511	102.500	32.400	-2	4
2012	8	0	2012.08	237	2.860	1	-10	-2.144	-2	-2.144	2.133	-4.295	-10.300	102.500	-2	-2
2012	9	0	2012.09	107	4.640	109	-11	1.198	53	1.198	-2.144	2.133	-11.200	-10.300	53	-2
2012	10	0	2012.10	20	5.000	346	-7	1.084	39	1.084	1.198	-2.144	-6.500	-11.200	39	53
2012	11	0	2012.11	0	0.700	727	-2	-1.807	72	-1.807	1.084	1.198	-1.500	-6.500	72	39
2012	12	0	2012.12	0	4.430	799	0	1.100	-59	1.100	-1.807	1.084	0.000	-1.500	-59	72
2013	1	0	2013.01	0	3.050	995	0	0.375	-91	0.375	1.100	-1.807	0.000	0.000	-91	-59
2013	2	0	2013.02	0	1.900	1005	0	-1.478	126	-1.478	0.375	1.100	-0.400	0.000	126	-91
2013	3	0	2013.03	0	1.920	917	-1	-1.401	181	-1.401	-1.478	0.375	-0.600	-0.400	181	126
2013	4	0	2013.04	21	2.860	366	9	-0.781	-27	-0.781	-1.401	-1.478	9.200	-0.600	-27	181
2013	5	0	2013.05	90	2.220	155	12	-2.031	10	-2.031	-0.781	-1.401	11.800	9.200	10	-27
2013	6	0	2013.06	168	6.130	13	-6	0.155	-5	0.155	-2.031	-0.781	-5.600	11.800	-5	10
2013	7	1	2013.07	264	8.120	2	-15	3.573	0	3.573	0.155	-2.031	-14.500	-5.600	0	-5
2013	8	1	2013.08	176	2.610	10	-71	-2.394	7	-2.394	3.573	0.155	-71.300	-14.500	7	0
2013	9	1	2013.09	68	1.850	103	-50	-1.592	47	-1.592	-2.394	3.573	-50.200	-71.300	47	7
2013	10	1	2013.10	35	3.150	325	9	-0.766	18	-0.766	-1.592	-2.394	8.500	-50.200	18	47
2013	11	1	2013.11	0	3.160	744	-2	0.653	89	0.653	-0.766	-1.592	-1.500	8.500	89	18
2013	12	1	2013.12	0	4.280	879	0	0.950	22	0.950	0.653	-0.766	0.000	-1.500	22	89
2014	1	1	2014.01	0	1.570	1288	0	-1.105	202	-1.105	0.950	0.653	0.000	0.000	202	22
2014	2	1	2014.02	0	2.310	1026	0	-1.068	147	-1.068	-1.105	0.950	-0.400	0.000	147	202
2014	3	1	2014.03	0	2.200	900	-1	-1.121	164	-1.121	-1.068	-1.105	-0.600	-0.400	164	147
2014	4	1	2014.04	13	4.270	341	1	0.629	-52	0.629	-1.121	-1.068	1.200	-0.600	-52	164
2014	5	1	2014.05	83	5.110	126	5	0.859	-19	0.859	0.629	-1.121	4.800	1.200	-19	-52
2014	6	1	2014.06	217	4.630	4	43	-1.345	-14	-1.345	0.859	0.629	43.400	4.800	-14	-19
2014	7	1	2014.07	210	3.300	11	-69	-1.247	9	-1.247	-1.345	0.859	-68.500	43.400	9	-14
2014	8	1	2014.08	171	6.150	8	-76	1.146	5	1.146	-1.247	-1.345	-76.300	-68.500	5	9

PENNSYLVANIA WEATHER DATA

DU Year	Month	Normal	DATE	CAL. CLDD	CAL. PRCP	CAL. HTDD	MODEL CLDD	MODEL PRCP	MODEL HTDD	Rain	Rain Lag	Rain Lag 2	CDD	CDD Lag	HDD	HDD Lag
2014	9	1	2014.09	79	0.570	81	-39	-2.872	25	-2.872	1.146	-1.247	-39.200	-76.300	25	5
2014	10	1	2014.10	11	2.570	320	-16	-1.346	13	-1.346	-2.872	1.146	-15.500	-39.200	13	25
2014	11	1	2014.11	0	2.160	773	-2	-0.347	118	-0.347	-1.346	-2.872	-1.500	-15.500	118	13
2014	12	1	2014.12	0	3.000	906	0	-0.330	49	-0.330	-0.347	-1.346	0.000	-1.500	49	118
2015	1	1	2015.01	0	2.440	1221	0	-0.235	135	-0.235	-0.330	-0.347	0.000	0.000	135	49
2015	2	1	2015.02	0	1.300	1284	0	-2.078	405	-2.078	-0.235	-0.330	-0.400	0.000	405	135
2015	3	1	2015.03	0	4.280	880	-1	0.959	144	0.959	-2.078	-0.235	-0.600	-0.400	144	405
2015	4	1	2015.04	1	4.540	355	-11	0.899	-38	0.899	0.959	-2.078	-10.800	-0.600	-38	144
2015	5	1	2015.05	132	2.520	92	54	-1.731	-53	-1.731	0.899	0.959	53.800	-10.800	-53	-38
2015	6	1	2015.06	168	10.640	26	-6	4.665	8	4.665	-1.731	0.899	-5.600	53.800	8	-53
2015	7	1	2015.07	247	3.080	0	-32	-1.467	-2	-1.467	4.665	-1.731	-31.500	-5.600	-2	8
2015	8	1	2015.08	198	2.080	6	-49	-2.924	3	-2.924	-1.467	4.665	-49.300	-31.500	3	-2
2015	9	1	2015.09	149	5.220	35	31	1.778	-21	1.778	-2.924	-1.467	30.800	-49.300	-21	3
2015	10	1	2015.10	0	3.270	353	-27	-0.646	46	-0.646	1.778	-2.924	-26.500	30.800	46	-21
2015	11	1	2015.11	3	1.810	433	2	-0.697	-222	-0.697	-0.646	1.778	1.500	-26.500	-222	46
2015	12	1	2015.12	0	3.780	557	0	0.450	-301	0.450	-0.697	-0.646	0.000	1.500	-301	-222
2016	1	1	2016.01	0	1.670	1113	0	-1.005	27	-1.005	0.450	-0.697	0.000	0.000	27	-301
2016	2	1	2016.02	0	3.300	843	0	-0.078	-37	-0.078	-1.005	0.450	-0.400	0.000	-37	27
2016	3	1	2016.03	0	2.250	504	-1	-1.071	-232	-1.071	-0.078	-1.005	-0.600	-0.400	-232	-37
2016	4	1	2016.04	3	2.630	407	-9	-1.011	14	-1.011	-1.071	-0.078	-8.800	-0.600	14	-232
2016	5	1	2016.05	56	5.890	195	-22	1.639	50	1.639	-1.011	-1.071	-22.200	-8.800	50	14
2016	6	1	2016.06	187	3.650	15	13	-2.325	-3	-2.325	1.639	-1.011	13.400	-22.200	-3	50
2016	7	1	2016.07	322	4.270	1	44	-0.277	-1	-0.277	-2.325	1.639	43.500	13.400	-1	-3
2016	8	1	2016.08	353	4.410	0	106	-0.594	-3	-0.594	-0.277	-2.325	105.700	43.500	-3	-1
2016	9	1	2016.09	164	3.220	13	46	-0.222	-43	-0.222	-0.594	-0.277	45.800	105.700	-43	-3
2016	10	1	2016.10	24	4.110	258	-3	0.194	-49	0.194	-0.222	-0.594	-2.500	45.800	-49	-43
2016	11	1	2016.11	4	1.260	573	3	-1.247	-82	-1.247	0.194	-0.222	2.500	-2.500	-82	-49
2016	12	1	2016.12	0	3.980	991	0	0.650	134	0.650	-1.247	0.194	0.000	2.500	134	-82
2017	1	1	2017.01	0	3.700	918	0	1.025	-168	1.025	0.650	-1.247	0.000	0.000	-168	134
2017	2	1	2017.02	2	1.780	661	2	-1.598	-219	-1.598	1.025	0.650	1.600	0.000	-219	-168
2017	3	1	2017.03	4	4.920	771	3	1.599	35	1.599	-1.598	1.025	3.400	1.600	35	-219
2017	4	1	2017.04	22	3.620	239	10	-0.021	-154	-0.021	1.599	-1.598	10.200	3.400	-154	35
2017	5	1	2017.05	47	5.140	175	-31	0.889	30	0.889	-0.021	1.599	-31.200	10.200	30	-154
2017	6	1	2017.06	163	10.980	24	-11	5.005	6	5.005	0.889	-0.021	-10.600	-31.200	6	30
2017	7	1	2017.07	267	7.920	0	-12	3.373	-2	3.373	5.005	0.889	-11.500	-10.600	-2	6
2017	8	1	2017.08	158	4.600	5	-89	-0.404	2	-0.404	3.373	5.005	-89.300	-11.500	2	-2
2017	9	1	2017.09	114	1.300	76	-4	-2.142	20	-2.142	-0.404	3.373	-4.200	-89.300	20	2
2017	10	1	2017.10	38	4.430	239	12	0.514	-68	0.514	-2.142	-0.404	11.500	-4.200	-68	20
2017	11	1	2017.11	0	4.280	664	-2	1.773	9	1.773	0.514	-2.142	-1.500	11.500	9	-68
2017	12	1	2017.12	0	1.350	1058	0	-1.980	201	-1.980	1.773	0.514	0.000	-1.500	201	9

PENNSYLVANIA WEATHER DATA

DU Year	Month	Normal	DATE	CAL. CLDD	CAL. PRCP	CAL. HTDD	MODEL CLDD	MODEL PRCP	MODEL HTDD	Rain	Rain Lag	Rain Lag 2	CDD	CDD Lag	HDD	HDD Lag
2018	1	1	2018.01	0	3.130	1205	0	0.455	119	0.455	-1.980	1.773	0.000	0.000	119	201
2018	2	1	2018.02	2	6.470	732	2	3.092	-148	3.092	0.455	-1.980	1.600	0.000	-148	119
2018	3	1	2018.03	0	2.940	937	-1	-0.381	201	-0.381	3.092	0.455	-0.600	1.600	201	-148
2018	4	1	2018.04	13	4.130	577	1	0.489	184	0.489	-0.381	3.092	1.200	-0.600	184	201
2018	5	1	2018.05	133	5.270	25	55	1.019	-120	1.019	0.489	-0.381	54.800	1.200	-120	184
2018	6	1	2018.06	172	10.110	24	-2	4.135	6	4.135	1.019	0.489	-1.600	54.800	6	-120
2018	7	1	2018.07	281	2.330	0	3	-2.217	-2	-2.217	4.135	1.019	2.500	-1.600	-2	6
2018	8	1	2018.08	262	6.370	0	15	1.366	-3	1.366	-2.217	4.135	14.700	2.500	-3	-2
2018	9	1	2018.09	175	11.900	50	57	8.458	-6	8.458	1.366	-2.217	56.800	14.700	-6	-3
2018	10	1	2018.10	59	4.850	392	33	0.934	85	0.934	8.458	1.366	32.500	56.800	85	-6
2018	11	1	2018.11	0	3.740	798	-2	1.233	143	1.233	0.934	8.458	-1.500	32.500	143	85
2018	12	1	2018.12	0	4.590	773	0	1.260	-85	1.260	1.233	0.934	0.000	-1.500	-85	143
2019	1	1	2019.01	0	2.430	1126	0	-0.245	40	-0.245	1.260	1.233	0.000	0.000	40	-85
2019	2	1	2019.02	0	4.730	846	0	1.352	-34	1.352	-0.245	1.260	-0.400	0.000	-34	40
2019	3	1	2019.03	0	1.920	838	-1	-1.401	102	-1.401	1.352	-0.245	-0.600	-0.400	102	-34
2019	4	1	2019.04	5	4.450	315	-7	0.809	-78	0.809	-1.401	1.352	-6.800	-0.600	-78	102
2019	5	1	2019.05	83	4.860	99	5	0.609	-46	0.609	0.809	-1.401	4.800	-6.800	-46	-78
2019	6	1	2019.06	131	5.660	30	-43	-0.315	12	-0.315	0.609	0.809	-42.600	4.800	12	-46
2019	7	1	2019.07	213	4.060	2	-66	-0.487	0	-0.487	-0.315	0.609	-65.500	-42.600	0	12
2019	8	1	2019.08	315	7.420	0	68	2.416	-3	2.416	-0.487	-0.315	67.700	-65.500	-3	0
2019	9	1	2019.09	147	1.870	4	29	-1.572	-52	-1.572	2.416	-0.487	28.800	67.700	-52	-3
2019	10	1	2019.10	38	6.380	288	12	2.464	-19	2.464	-1.572	2.416	11.500	28.800	-19	-52
2019	11	1	2019.11	0	1.760	797	-2	-0.747	142	-0.747	2.464	-1.572	-1.500	11.500	142	-19
2019	12	1	2019.12	0	3.630	882	0	0.300	25	0.300	-0.747	2.464	0.000	-1.500	25	142
2020	1	1	2020.01	0	3.450	899	0	0.775	-187	0.775	0.300	-0.747	0.000	0.000	-187	25
2020	2	1	2020.02	0	3.600	879	0	0.222	-1	0.222	0.775	0.300	-0.400	0.000	-1	-187
2020	3	1	2020.03	2	5.640	574	1	2.319	-162	2.319	0.222	0.775	1.400	-0.400	-162	-1
2020	4	1	2020.04	0	5.120	505	-12	1.479	112	1.479	2.319	0.222	-11.800	1.400	112	-162
2020	5	1	2020.05	63	2.780	253	-15	-1.471	108	-1.471	1.479	2.319	-15.200	-11.800	108	112
2020	6	1	2020.06	177	2.610	14	3	-3.365	-4	-3.365	-1.471	1.479	3.400	-15.200	-4	108
2020	7	1	2020.07	410	3.120	0	132	-1.427	-2	-1.427	-3.365	-1.471	131.500	3.400	-2	-4
2020	8	1	2020.08	285	5.660	0	38	0.656	-3	0.656	-1.427	-3.365	37.700	131.500	-3	-2
2020	9	1	2020.09	98	1.630	81	-20	-1.812	25	-1.812	0.656	-1.427	-20.200	37.700	25	-3
2020	10	1	2020.10	9	3.130	327	-18	-0.786	20	-0.786	-1.812	0.656	-17.500	-20.200	20	25
2020	11	1	2020.11	0	2.470	517	-2	-0.037	-138	-0.037	-0.786	-1.812	-1.500	-17.500	-138	20
2020	12	1	2020.12	0	2.500	928	0	-0.830	71	-0.830	-0.037	-0.786	0.000	-1.500	71	-138
2021	1	1	2021.01	0	1.830	1029	0	-0.845	-57	-0.845	-0.830	-0.037	0.000	0.000	-57	71
2021	2	1	2021.02	0	2.960	993	0	-0.418	114	-0.418	-0.845	-0.830	-0.400	0.000	114	-57
2021	3	1	2021.03	0	3.220	593	-1	-0.101	-143	-0.101	-0.418	-0.845	-0.600	-0.400	-143	114
2021	4	1	2021.04	16	2.330	399	4	-1.311	6	-1.311	-0.101	-0.418	4.200	-0.600	6	-143

PENNSYLVANIA WEATHER DATA

DU Year	Month	Normal	DATE	CAL. CLDD	CAL. PRCP	CAL. HTDD	MODEL CLDD	MODEL PRCP	MODEL HTDD	Rain	Rain Lag	Rain Lag 2	CDD	CDD Lag	HDD	HDD Lag
2021	5	1	2021.05	74	3.180	228	-4	-1.071	83	-1.071	-1.311	-0.101	-4.200	4.200	83	6
2021	6	1	2021.06	222	7.450	17	48	1.475	-1	1.475	-1.071	-1.311	48.400	-4.200	-1	83
2021	7	1	2021.07	254	4.520	0	-25	-0.027	-2	-0.027	1.475	-1.071	-24.500	48.400	-2	-1
2021	8	1	2021.08	308	6.280	0	61	1.276	-3	1.276	-0.027	1.475	60.700	-24.500	-3	-2
2021	9	1	2021.09	83	4.350	33	-35	0.908	-23	0.908	1.276	-0.027	-35.200	60.700	-23	-3
2021	10	1	2021.10	51	4.500	169	25	0.584	-138	0.584	0.908	1.276	24.500	-35.200	-138	-23
2021	11	1	2021.11	0	0.810	679	-2	-1.697	24	-1.697	0.584	0.908	-1.500	24.500	24	-138
2021	12	1	2021.12	0	4.240	694	0	0.910	-164	0.910	-1.697	0.584	0.000	-1.500	-164	24
2022	1	1	2022.01	0	2.610	1238	0	-0.065	152	-0.065	0.910	-1.697	0.000	0.000	152	-164
2022	2	1	2022.02	0	5.450	861	0	2.072	-19	2.072	-0.065	0.910	-0.400	0.000	-19	152
2022	3	1	2022.03	0	2.600	642	-1	-0.721	-94	-0.721	2.072	-0.065	-0.600	-0.400	-94	-19
2022	4	1	2022.04	18	3.590	459	6	-0.051	66	-0.051	-0.721	2.072	6.200	-0.600	66	-94
2022	5	1	2022.05	79	5.760	96	1	1.509	-49	1.509	-0.051	-0.721	0.800	6.200	-49	66
2022	6	1	2022.06	190	1.240	6	16	-4.735	-12	-4.735	1.509	-0.051	16.400	0.800	-12	-49
2022	7	1	2022.07	317	4.750	0	39	0.203	-2	0.203	-4.735	1.509	38.500	16.400	-2	-12
2022	8	1	2022.08	247	4.460	0	0	-0.544	-3	-0.544	0.203	-4.735	-0.300	38.500	-3	-2
2022	9	1	2022.09	105	2.510	87	-13	-0.932	31	-0.932	-0.544	0.203	-13.200	-0.300	31	-3
2022	10	1	2022.10	0	2.770	395	-27	-1.146	88	-1.146	-0.932	-0.544	-26.500	-13.200	88	31
2022	11	1	2022.11	8	3.620	569	7	1.113	-86	1.113	-1.146	-0.932	6.500	-26.500	-86	88
2022	12	1	2022.12	0	1.950	907	0	-1.380	50	-1.380	1.113	-1.146	0.000	6.500	50	-86
2023	1	1	2023.01	0	3.920	825	0	1.245	-261	1.245	-1.380	1.113	0.000	0.000	-261	50
2023	2	1	2023.02	0	1.880	670	0	-1.498	-210	-1.498	1.245	-1.380	-0.400	0.000	-210	-261
2023	3	1	2023.03	0	3.240	725	-1	-0.081	-11	-0.081	-1.498	1.245	-0.600	-0.400	-11	-210
2023	4	1	2023.04	27	1.730	337	15	-1.911	-56	-1.911	-0.081	-1.498	15.200	-0.600	-56	-11
2023	5	1	2023.05	32	2.000	160	-46	-2.251	15	-2.251	-1.911	-0.081	-46.200	15.200	15	-56
2023	6	1	2023.06	109	2.780	23	-65	-3.195	5	-3.195	-2.251	-1.911	-64.600	-46.200	5	15
2023	7	0	2023.07													
2023	8	0	2023.08													
2023	9	0	2023.09													
2023	10	0	2023.10													
2023	11	0	2023.11													
2023	12	0	2023.12													

	NORMAL	NORMAL	NORMAL
	CAL.	CAL.	CAL.
Month	CLDD	PRCP	HTDD
1	0	2.675	1086
2	0	3.378	880
3	1	3.321	736
4	12	3.641	393
5	78	4.251	145
6	174	5.975	18
7	279	4.547	2
8	247	5.004	3
9	118	3.442	56
10	27	3.916	307
11	2	2.507	655
12	0	3.330	858

Normal Start:	2013.07
Normal End	2023.06
Normal Months	120.00

PENNSYLVANIA SALES-USAGE DATA

Not Including Shale Gas

Obs	DU Year	Month	Res Cust	Res Sales	Res Adjust	Com Cust	Com Sales	Com Adjust	OPA Cust	OPA Sales	OPA Adjust	Ind Cust	Ind Sales	Ind Adjust	Resale Cust	Resale Sales	Resale Adjust	Production	Res COVID	Com COVID	OPA COVID
1	2008	1	578987	2652382	0	42370	1054535	0	2293	230990	0	843	357816	0	22	48398	0	6631616	0	0	0
2	2008	2	579235	2345982	0	42342	960424	0	2293	197559	0	843	384249	0	22	45706	0	6131911	0	0	0
3	2008	3	579614	2173053	0	42358	918425	0	2355	189383	0	843	381354	0	21	49794	0	6437546	0	0	0
4	2008	4	580127	2372217	0	42633	1031332	0	2477	211992	0	843	385702	0	20	44869	0	6215398	0	0	0
5	2008	5	580106	2377272	0	42734	1042963	0	2503	194427	0	842	460582	0	20	48884	0	6415951	0	0	0
6	2008	6	580539	2603258	0	42744	1112866	0	2521	224088	0	828	331628	0	20	52940	0	6643926	0	0	0
7	2008	7	580901	2723529	0	42873	1206788	0	2526	242539	0	831	445968	0	20	49241	0	6900382	0	0	0
8	2008	8	582223	2652609	0	42895	1226019	0	2536	230467	0	823	434150	0	20	57678	0	6982442	0	0	0
9	2008	9	582538	2667523	0	42776	1278607	0	2506	266544	0	810	444817	0	20	57308	0	6449154	0	0	0
10	2008	10	582620	2608924	0	42684	1181856	0	2400	262140	0	808	453528	0	20	56547	0	6288745	0	0	0
11	2008	11	582823	2110860	0	42617	920291	0	2335	185250	0	800	350068	0	20	48727	0	6077960	0	0	0
12	2008	12	582800	2454428	0	42589	1055671	0	2323	204200	0	804	336538	0	21	56984	0	6424172	0	0	0
13	2009	1	582785	2544922	0	42552	971953	0	2315	192890	0	800	306883	0	21	43140	0	6647774	0	0	0
14	2009	2	583025	2307932	0	42592	983208	0	2316	187963	0	797	341933	0	21	47727	0	6010903	0	0	0
15	2009	3	583414	2291848	0	42656	1047015	0	2376	195977	0	794	347796	0	21	42909	0	6345921	0	0	0
16	2009	4	583808	2302642	0	42837	979761	0	2484	195859	0	788	324310	0	21	44978	0	6038039	0	0	0
17	2009	5	583529	2284518	0	43022	980840	0	2505	172705	0	771	328163	0	21	52197	0	6364558	0	0	0
18	2009	6	583419	2621962	0	43030	1154195	0	2516	221170	0	758	349717	0	21	57494	0	6229429	0	0	0
19	2009	7	583627	2656779	0	43079	1166278	0	2519	217505	0	745	344799	0	21	46020	0	6543924	0	0	0
20	2009	8	584272	2402500	0	43124	1124622	0	2524	210990	0	734	352846	0	21	55862	0	6538560	0	0	0
21	2009	9	584347	2463035	0	43123	1156482	0	2504	230924	0	728	356164	0	20	48670	0	6248347	0	0	0
22	2009	10	585660	2470712	0	43069	1152311	0	2425	213833	0	740	335439	0	20	53877	0	6206123	0	0	0
23	2009	11	585774	2174790	0	42959	954294	0	2361	189911	0	728	301920	0	20	43605	0	5879757	0	0	0
24	2009	12	585777	2436213	0	42874	1088018	0	2324	189335	0	716	316209	0	20	45847	0	6194813	0	0	0
25	2010	1	585774	2469856	0	42911	951134	0	2327	179823	0	700	305106	0	21	48192	0	6444779	0	0	0
26	2010	2	586358	2286153	0	42923	938611	0	2322	173086	0	706	320624	0	21	42369	0	5725281	0	0	0
27	2010	3	586868	2247645	0	43112	1012084	0	2404	190893	0	692	348259	0	21	49748	0	6209066	0	0	0
28	2010	4	587242	2354074	0	43365	1005599	0	2529	195402	0	689	348733	0	21	42915	0	5926841	0	0	0
29	2010	5	586881	2249638	0	43671	1015483	0	2550	195611	0	674	340308	0	21	43407	0	6187620	0	0	0
30	2010	6	586752	2631401	0	43693	1136425	0	2560	217038	0	654	382515	0	21	47769	0	6203765	0	0	0
31	2010	7	586952	2800080	0	43701	1248292	0	2566	230428	0	653	430937	0	21	51761	0	6913912	0	0	0
32	2010	8	587454	2638351	0	43814	1230538	0	2577	234245	0	645	432784	0	21	51357	0	6761184	0	0	0
33	2010	9	587623	2647376	0	43873	1278440	0	2552	246721	0	633	413505	0	21	51409	0	6395070	0	0	0
34	2010	10	587530	2372625	0	43683	1140391	0	2475	219969	0	625	387036	0	21	44413	0	6103778	0	0	0
35	2010	11	587440	2147926	0	43530	1000427	0	2378	180401	0	622	344908	0	21	41718	0	5828126	0	0	0
36	2010	12	587386	2371303	0	43385	1039150	0	2362	181502	0	618	341460	0	21	53383	0	6318149	0	0	0
37	2011	1	587484	2425037	0	43418	1001877	0	2358	164299	0	618	322510	0	22	47113	0	6465805	0	0	0
38	2011	2	587848	2216258	0	43473	960045	0	2361	163655	0	619	343897	0	22	44013	0	5849485	0	0	0
39	2011	3	588189	2268045	0	43486	994168	0	2405	173241	0	616	356029	0	22	33348	0	6204788	0	0	0
40	2011	4	588540	2178101	0	43672	972402	0	2531	170091	0	616	348628	0	22	62849	0	5867241	0	0	0
41	2011	5	588252	2264481	0	43907	1003179	0	2560	176663	0	616	337072	0	22	38318	0	6215843	0	0	0
42	2011	6	588060	2655332	0	43972	1165958	0	2584	203346	0	617	389572	0	22	52153	0	6330499	0	0	0
43	2011	7	588071	2573253	0	44231	1187348	0	2465	202579	0	531	390917	0	22	51307	0	6891526	0	0	0
44	2011	8	588566	2702485	0	44282	1275601	0	2469	221253	0	532	427654	0	24	56780	0	6443606	0	0	0
45	2011	9	588430	2428060	0	44304	1219229	0	2457	204603	0	532	393004	0	24	44438	0	5927751	0	0	0
46	2011	10	588423	2220599	0	44111	1074957	0	2381	184136	0	534	349589	0	23	47116	0	5987956	0	0	0
47	2011	11	588386	2114682	0	43925	982710	0	2306	170667	0	527	341162	0	23	46021	0	5713879	0	0	0
48	2011	12	588325	2281348	0	43870	1070460	0	2287	159891	0	522	316788	0	23	50425	0	5953578	0	0	0
49	2012	1	588478	2373058	0	43823	991217	0	2275	156467	0	525	301755	0	23	54887	0	6059895	0	0	0
50	2012	2	588917	2139219	0	43845	950543	0	2273	153319	0	525	334179	0	24	46476	0	5530920	0	0	0
51	2012	3	589346	2178692	0	44040	1008589	0	2379	155438	0	524	332606	0	23	54709	0	5804740	0	0	0
52	2012	4	589823	2156937	0	44210	998665	0	2439	158829	0	523	359374	0	23	52288	0	5587528	0	0	0

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Obs	DU Year	Month	Res Cust	Res Sales	Res Adjust	Com Cust	Com Sales	Com Adjust	OPA Cust	OPA Sales	OPA Adjust	Ind Cust	Ind Sales	Ind Adjust	Resale Cust	Resale Sales	Resale Adjust	Production	Res COVID	Com COVID	OPA COVID
53	2012	5	589334	2311424	0	44393	1066179	0	2463	174726	0	523	345813	0	23	51671	0	6040320	0	0	0
54	2012	6	589419	2549736	0	44452	1173183	0	2473	193956	0	524	351995	0	24	64471	0	6140070	0	0	0
55	2012	7	589443	2773942	0	44516	1293051	0	2475	225565	0	521	366602	0	24	73914	0	6481278	0	0	0
56	2012	8	590100	2449467	0	44583	1255261	0	2475	200785	0	519	385328	0	24	66278	0	6223900	0	0	0
57	2012	9	590129	2416762	0	44549	1246222	0	2465	219678	0	519	389690	0	24	70987	0	5740033	0	0	0
58	2012	10	590545	2204784	0	44462	1174272	0	2384	177588	0	520	330064	0	24	62298	0	5740995	0	0	0
59	2012	11	590508	2170799	0	44339	1060476	0	2286	162920	0	520	311824	0	25	69898	0	5546140	0	0	0
60	2012	12	590808	2227324	0	44302	1001751	0	2271	147316	0	517	269665	0	25	66299	0	5737818	0	0	0
61	2013	1	590977	2332430	0	44221	1026353	0	2271	145747	0	515	307466	0	25	63673	0	6006753	0	0	0
62	2013	2	591470	2170196	0	44227	994205	0	2274	156201	0	515	336955	0	24	63704	0	5444808	0	0	0
63	2013	3	592105	2117255	0	44310	992308	0	2303	148579	0	516	307125	0	24	68006	0	5828003	0	0	0
64	2013	4	592264	2153601	0	44509	993196	0	2440	156419	0	516	325419	0	24	62345	0	5658900	0	0	0
65	2013	5	591781	2262238	0	44697	1062781	0	2455	176010	0	515	359257	0	24	70195	0	6135744	0	0	0
66	2013	6	591733	2505865	0	44728	1169406	0	2463	192267	0	515	320471	0	24	63309	0	6038812	0	0	0
67	2013	7	591888	2372267	0	44780	1167967	0	2465	170229	0	515	365797	0	24	69761	0	6264270	0	0	0
68	2013	8	592369	2414428	0	44820	1212792	0	2464	191285	0	512	383426	0	24	72715	0	6056784	0	0	0
69	2013	9	592245	2323869	0	44760	1228046	0	2464	180458	0	513	424502	0	24	60609	0	5801582	0	0	0
70	2013	10	597092	2153860	0	44973	1094491	0	2406	176954	0	513	308519	0	24	68659	0	5854564	0	0	0
71	2013	11	596889	2143493	0	44816	1001988	0	2302	147394	0	528	302969	0	24	50226	0	5488085	0	0	0
72	2013	12	596793	2157024	0	44800	928260	0	2299	65298	80000	528	116300	160000	24	6126	50000	5825969	0	0	0
73	2014	1	597327	2364109	0	44757	1075158	0	2300	230114	-80000	528	473761	-160000	25	115081	-50000	6322281	0	0	0
74	2014	2	596962	2283430	0	44735	1056146	0	2300	163740	0	528	381299	-50000	24	73370	0	5802555	0	0	0
75	2014	3	597062	2048745	0	44743	1050009	0	2344	159285	0	528	369841	-40000	24	55893	0	6107581	0	0	0
76	2014	4	596881	2190953	0	44826	1035595	0	2421	192262	-30000	529	504466	-140000	24	69313	0	5681926	0	0	0
77	2014	5	596409	2154777	0	44935	1032792	0	2449	132861	30000	528	428443	-40000	24	60641	0	6001100	0	0	0
78	2014	6	596756	2291459	0	44934	1073051	0	2454	183940	0	529	225625	140000	24	58216	0	5951353	0	0	0
79	2014	7	597147	2444625	0	44926	1201938	0	2455	187139	0	528	429447	-30000	24	79139	0	6243420	0	0	0
80	2014	8	597203	2371306	0	44971	1202098	0	2454	182785	0	528	193069	160000	24	64054	0	6147136	0	0	0
81	2014	9	597462	2349630	0	44955	1174634	0	2445	195962	0	528	382440	0	24	66766	0	5920775	0	0	0
82	2014	10	597524	2164563	0	44813	1143875	0	2397	186890	0	525	355703	0	24	58487	0	5835349	0	0	0
83	2014	11	597335	2081455	0	44628	1039125	0	2298	165255	0	524	331209	0	24	63192	0	5576026	0	0	0
84	2014	12	597479	2159590	0	44599	1027776	0	2278	147993	0	525	342136	0	24	57826	0	5819770	0	0	0
85	2015	1	597621	2254798	0	44515	979228	0	2262	140413	0	524	288163	0	24	59803	0	6056894	0	0	0
86	2015	2	597822	2037073	0	44477	958041	0	2260	150902	0	524	348566	0	24	57242	0	5691028	0	0	0
87	2015	3	598207	2155256	0	44543	1039817	0	2322	157555	0	525	328631	0	25	48632	0	6334397	0	0	0
88	2015	4	598625	2134677	0	44714	1053328	0	2412	159030	0	524	287682	0	24	72477	0	5730349	0	0	0
89	2015	5	597986	2155022	0	44854	1040192	0	2423	168230	0	523	331956	0	24	51663	0	6192238	0	0	0
90	2015	6	598123	2374625	0	44904	1149823	0	2424	180068	0	522	348705	0	24	68471	0	5815290	0	0	0
91	2015	7	598212	2282829	0	44963	1189309	0	2439	172289	0	522	360843	0	23	74446	0	6093272	0	0	0
92	2015	8	598580	2492964	0	44962	1285547	0	2444	192705	0	521	369747	0	23	44793	0	6355915	0	0	0
93	2015	9	598960	2360954	0	44944	1378537	0	2444	195650	0	522	407499	0	23	62859	0	5964960	0	0	0
94	2015	10	598874	2194453	0	44830	1138523	0	2381	172193	0	523	338968	0	22	61975	0	5771601	0	0	0
95	2015	11	599240	2069520	0	44667	1023543	0	2274	160003	0	521	324588	0	22	55431	0	5448471	0	0	0
96	2015	12	599380	2258024	0	44603	1110894	0	2254	156651	-10000	520	320615	0	22	62038	0	5617996	0	0	0
97	2016	1	599524	2151324	0	44615	968680	0	2252	154782	-10000	519	284548	0	22	59839	0	5878329	0	0	0
98	2016	2	600159	1947744	0	44655	973578	0	2245	105794	40000	520	238145	20000	22	49258	0	5555033	0	0	0
99	2016	3	600642	2031663	0	44775	1006630	0	2310	152818	-10000	519	371140	-20000	22	55663	0	5708125	0	0	0
100	2016	4	600940	2203104	0	44858	1055770	0	2409	159961	-10000	520	327022	0	22	59323	0	5526353	0	0	0
101	2016	5	601028	2043971	0	45003	996008	0	2431	145875	0	520	351260	0	22	50962	0	5865651	0	0	0
102	2016	6	601147	2347125	0	45047	1145373	0	2436	168833	0	520	410648	0	22	59998	0	5961033	0	0	0
103	2016	7	601359	2543747	0	45075	1233279	0	2440	172930	0	521	367622	0	22	70256	0	6220756	0	0	0
104	2016	8	602054	2265070	0	45107	1202830	0	2441	174071	0	521	282117	0	22	62736	0	6156705	0	0	0

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105	2016	9	602368	2396708	0	45038	1266264	0	2428	194424	0	522	404821	0	22	67138	0	5852848	0	0	0
106	2016	10	602465	2205627	0	44919	1137202	0	2384	175527	0	522	350877	0	22	58709	0	5710839	0	0	0
107	2016	11	602625	1965947	0	44797	978002	0	2259	145357	0	522	308153	0	22	54741	0	5433605	0	0	0
108	2016	12	602856	2072587	0	44788	984376	0	2259	138989	0	522	276562	0	22	58906	0	5728515	0	0	0
109	2017	1	603389	2313944	0	44757	1026720	0	2234	143333	0	522	309438	0	22	66214	0	5739165	0	0	0
110	2017	2	603795	2033582	0	44737	951842	0	2232	148106	0	522	307520	0	22	56046	0	4988547	0	0	0
111	2017	3	604388	1888418	0	44792	946083	0	2303	127833	0	522	284309	0	22	51404	0	5506276	0	0	0
112	2017	4	604497	2176537	0	45033	1024370	0	2391	132929	0	523	282155	0	22	57841	0	5529878	0	0	0
113	2017	5	604466	2035704	0	45147	1056532	0	2424	159216	0	523	341843	0	22	47322	0	5759405	0	0	0
114	2017	6	604646	2381865	0	45183	1129991	0	2428	172979	0	522	328432	0	22	65138	0	5746987	0	0	0
115	2017	7	604712	2331325	0	45215	1148907	0	2424	173017	0	522	365190	0	22	64021	0	5965476	0	0	0
116	2017	8	605210	2115991	0	45253	1133146	0	2427	172017	0	523	356493	0	22	54737	0	5908649	0	0	0
117	2017	9	605274	2294462	0	45254	1185156	0	2417	177470	0	523	370340	0	22	66547	0	5678537	0	0	0
118	2017	10	605542	2070079	0	45186	1112129	0	2373	164114	0	525	347764	0	22	55117	0	5705670	0	0	0
119	2017	11	605539	2041047	0	45030	989904	0	2240	146403	0	525	272098	0	22	48919	0	5312470	0	0	0
120	2017	12	605770	2154098	0	44995	1050636	0	2225	143072	0	525	338672	0	22	68029	0	5635817	0	0	0
121	2018	1	605987	2261765	0	44995	1023824	0	2218	142275	0	523	290352	0	22	63920	0	6357897	0	0	0
122	2018	2	606288	2143648	0	45017	1039240	0	2219	162647	0	523	334453	0	22	58971	0	5389598	0	0	0
123	2018	3	606729	1903550	0	45026	939563	0	2247	132711	0	522	308866	0	22	46989	0	5868848	0	0	0
124	2018	4	607071	2038092	0	45211	986816	0	2381	135346	0	522	323474	0	22	50101	0	5647760	0	0	0
125	2018	5	606742	2067698	0	45307	919600	0	2399	153806	0	521	318389	0	22	60058	0	6026165	0	0	0
126	2018	6	606877	2308300	0	45315	1246948	0	2401	175766	0	521	377843	0	22	60059	0	5921493	0	0	0
127	2018	7	607090	2281037	0	45329	1154181	0	2400	176090	0	521	356276	0	22	58795	0	6312397	0	0	0
128	2018	8	607391	2164390	0	45357	1145609	0	2398	172395	0	521	370693	0	22	56269	0	6007767	0	0	0
129	2018	9	607368	2273197	0	45319	1210549	0	2391	207208	0	522	376437	0	22	57845	0	5749749	0	0	0
130	2018	10	607602	2012343	0	45159	1078514	0	2340	158181	0	523	382073	0	23	59437	0	5731371	0	0	0
131	2018	11	607787	2063613	0	45035	1024229	0	2244	150619	0	521	306185	0	22	54011	0	5472280	0	0	0
132	2018	12	607947	2036897	0	44989	979257	0	2234	139876	0	523	269540	0	23	62366	0	5733739	0	0	0
133	2019	1	608339	2158382	0	45063	956835	0	2231	141030	0	522	296514	0	22	55756	0	5830681	0	0	0
134	2019	2	608788	2091242	0	45067	978793	0	2232	148737	0	521	294523	0	22	54291	0	5537762	0	0	0
135	2019	3	609106	1953107	0	45113	950982	0	2259	151516	0	521	322251	0	22	57165	0	5834470	0	0	0
136	2019	4	609423	1948955	0	45230	944298	0	2351	166277	0	522	292449	0	22	54847	0	5566284	0	0	0
137	2019	5	609341	2028709	0	45363	1002505	0	2380	152948	0	522	313134	0	22	51023	0	5925671	0	0	0
138	2019	6	609185	2278534	0	45392	1076783	0	2381	168441	0	523	331235	0	22	56415	0	5810436	0	0	0
139	2019	7	609916	2185039	0	45464	1107107	0	2384	160889	0	523	331421	0	22	57814	0	6225171	0	0	0
140	2019	8	610054	2250213	0	45493	1194214	0	2386	187993	0	523	347492	0	23	64476	0	6273923	0	0	0
141	2019	9	610572	2269703	0	45493	1173426	0	2376	190054	0	523	363806	0	22	62909	0	6058410	0	0	0
142	2019	10	613052	2024240	0	45489	1098226	0	2318	164815	0	534	317578	0	22	57221	0	5974121	0	0	0
143	2019	11	613091	2075722	0	45317	1033986	0	2212	144694	0	533	306507	0	23	56045	0	5773307	0	0	0
144	2019	12	613460	2023445	0	45299	989151	0	2198	138263	0	532	314518	0	22	65878	0	5896591	0	0	0
145	2020	1	613855	2126416	0	45311	931230	0	2197	131397	0	531	280100	0	22	58314	0	5866351	0	0	0
146	2020	2	614148	2074991	0	45334	978886	0	2197	154003	0	530	332124	0	22	56644	0	5356535	0	0	0
147	2020	3	614940	1912268	0	45361	920067	0	2277	131943	0	525	310569	0	22	52197	0	5484517	0	0	0
148	2020	4	615330	2192496	0	45484	818423	0	2320	87429	0	528	328264	0	22	52250	0	5255666	1	1	1
149	2020	5	615811	2220773	0	45635	800388	0	2350	79860	0	530	293525	0	23	53057	0	5713103	1	1	1
150	2020	6	616730	2461502	0	45742	910797	0	2366	115467	0	530	322201	0	25	62755	0	5903511	1	1	1
151	2020	7	617571	2585941	0	45786	1108774	0	2370	151492	0	529	339776	0	25	62795	0	6478120	1	1	1
152	2020	8	618309	2656758	0	45852	1134650	0	2375	158517	0	532	383558	0	24	65049	0	6318650	1	1	1
153	2020	9	618810	2393470	0	45848	1113708	0	2378	158350	0	534	345805	0	24	73057	0	5845487	1	1	1
154	2020	10	619258	2204669	0	45692	1014772	0	2305	136532	0	534	300435	0	24	55056	0	5785603	1	1	1
155	2020	11	619675	2171382	0	45639	1012584	0	2217	121935	0	533	294749	0	24	63389	0	5506322	1	1	1
156	2020	12	620045	2099373	0	45623	890783	0	2207	88308	20000	535	309933	0	24	49631	0	5674935	0.4	0.4	0.4

PENNSYLVANIA SALES-USAGE DATA Not Including Shale Gas

Obs	DU Year	Month	Res Cust	Res Sales	Res Adjust	Com Cust	Com Sales	Com Adjust	OPA Cust	OPA Sales	OPA Adjust	Ind Cust	Ind Sales	Ind Adjust	Resale Cust	Resale Sales	Resale Adjust	Production	Res COVID	Com COVID	OPA COVID
157	2021	1	620477	2361609	0	45627	937136	0	2204	114575	0	538	293580	0	24	61174	0	5809751	0.4	0.4	0.4
158	2021	2	620790	2061229	0	45650	874487	0	2208	96119	20000	538	302220	0	24	56570	0	5440902	0.4	0.4	0.4
159	2021	3	621236	1955886	0	45742	878084	0	2260	121501	0	538	317602	0	24	56204	0	5739592	0.4	0.4	0.4
160	2021	4	621730	2191425	0	45835	987900	0	2370	124194	0	540	335374	0	24	58105	0	5568849	0.4	0.4	0.4
161	2021	5	621545	2127575	0	45924	944961	0	2385	121868	0	540	301213	0	25	65739	0	6010022	0.4	0.4	0.4
162	2021	6	621725	2287392	0	46019	1008081	0	2387	133393	0	541	349812	0	24	59784	0	5925707	0.4	0.4	0.4
163	2021	7	621798	2404108	0	45991	1116574	0	2392	152837	0	541	390972	0	24	63946	0	6119891	0.4	0.4	0.4
164	2021	8	621924	2291784	0	45988	1124545	0	2395	162906	0	541	419391	0	24	62359	0	6173604	0.4	0.4	0.4
165	2021	9	621968	2292157	0	45982	1131486	0	2386	169303	0	540	392455	0	24	72746	0	5669430	0.4	0.4	0.4
166	2021	10	621994	2109303	0	45918	1058176	0	2356	155902	0	540	359125	0	24	60583	0	5853852	0.4	0.4	0.4
167	2021	11	623943	1951149	0	45864	911185	0	2285	135092	0	540	333448	0	24	54505	0	5658541	0.4	0.4	0.4
168	2021	12	624174	2085909	0	45796	931391	0	2256	124615	0	543	296746	0	23	59928	0	5754191	0.4	0.4	0.4
169	2022	1	624389	2253989	0	45880	936872	0	2253	117236	0	541	289184	0	19	55105	0	5999115	0.4	0.4	0.4
170	2022	2	624655	2022715	0	45956	949002	0	2254	134166	0	540	389115	0	19	70383	0	5664058	0.4	0.4	0.4
171	2022	3	625136	1922092	0	46052	894488	0	2289	122719	0	541	277011	0	19	54929	0	5914958	0.4	0.4	0.4
172	2022	4	625220	2152755	0	46163	1014196	0	2358	146987	-10000	542	422303	0	19	42616	0	5707681	0.4	0.4	0.4
173	2022	5	625422	2019483	0	46238	915061	0	2384	136222	10000	541	356858	0	19	60456	0	6073985	0.4	0.4	0.4
174	2022	6	625448	2295389	0	46255	1050571	0	2392	174538	-20000	542	391070	0	20	71818	0	6019056	0.4	0.4	0.4
175	2022	7	625369	2478821	0	46237	1097377	0	2394	148763	20000	541	416537	0	20	61129	0	6477895	0.4	0.4	0.4
176	2022	8	625597	2225827	0	46272	1090069	0	2399	166719	0	541	405421	0	20	59329	0	6396990	0.4	0.4	0.4
177	2022	9	625777	2354320	0	46387	1160136	0	2296	180983	0	542	364755	0	20	64301	0	5846157	0.4	0.4	0.4
178	2022	10	625932	2153004	0	46286	1035702	0	2256	163114	0	544	431937	0	20	63315	0	5847689	0.4	0.4	0.4
179	2022	11	625937	1886200	0	46178	918030	0	2186	131500	0	544	348147	0	20	53981	0	5575120	0.4	0.4	0.4
180	2022	12	625996	2033811	0	46149	924307	0	2178	114220	0	543	307221	0	20	48947	0	5953795	0.4	0.4	0.4
181	2023	1	626438	2306260	0	46187	1078803	0	2181	169426	-40000	544	421312	0	20	80884	0	5993570	0.4	0.4	0.4
182	2023	2	626788	2006561	0	46204	934031	0	2181	124447	0	546	358906	0	20	53843	0	5251664	0.4	0.4	0.4
183	2023	3	627166	1871830	0	46267	892054	0	2213	127703	0	545	333962	0	20	70497	0	5639452	0.4	0.4	0.4
184	2023	4	627185	2170023	0	46595	948922	0	2292	140851	0	546	297109	0	20	12022	0	5535413	0.4	0.4	0.4
185	2023	5	627516	1953916	0	46750	959066	0	2302	140785	0	546	367623	0	20	79352	0	6017376	0.4	0.4	0.4
186	2023	6	627622	2474960	0	46726	1113821	0	2303	163114	0	546	424933	0	21	126912	0	6032844	0.4	0.4	0.4
187	2023	7																			
188	2023	8																			
189	2023	9																			
190	2023	10																			
191	2023	11																			
192	2023	12																			

PENNSYLVANIA OPA MODEL

																		Rain Lag 2	0.3	0.9 CDD Lag						
							0.505	4.725	0.114	0.498	1.459	9.094	10.756	13.829	17.931	11.244	5.228	Rain Lag 1	0.7							
																		-0.006	-0.900	0.023	-18.078				Weather	Billing
Period	Obs	Year	Month	Cust	Sales	UPC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Trend	Rain	CDD	COVID	Predicted	Actual	Variance	Effect	Adjustments
1	67	2013	7	2465	170229	69.058	0	0	0	0	0	0	1	0	0	0	0	-119	-0.501	-6	0.0	73.689	69.058	4.630	0.305	0
1	68	2013	8	2464	191285	77.632	0	0	0	0	0	0	0	1	0	0	0	-118	2.548	-20	0.0	73.705	77.632	-3.927	-2.747	0
1	69	2013	9	2464	180458	73.238	0	0	0	0	0	0	0	0	1	0	0	-117	-0.604	-69	0.0	79.535	73.238	6.297	-1.014	0
1	70	2013	10	2406	176954	73.547	0	0	0	0	0	0	0	0	0	1	0	-116	-1.833	-44	0.0	74.506	73.547	0.959	0.651	0
1	71	2013	11	2302	147394	64.029	0	0	0	0	0	0	0	0	0	0	1	-115	-1.014	8	0.0	68.915	64.029	4.886	1.081	0
1	72	2013	12	2299	145298	63.201	0	0	0	0	0	0	0	0	0	0	0	-114	0.000	0	0.0	62.600	63.201	-0.600	0.000	80000
1	73	2014	1	2300	150114	65.267	1	0	0	0	0	0	0	0	0	0	0	-113	0.000	0	0.0	63.100	65.267	-2.167	0.000	-80000
1	74	2014	2	2300	163740	71.191	0	1	0	0	0	0	0	0	0	0	0	-112	0.000	0	0.0	67.314	71.191	-3.877	0.000	0
1	75	2014	3	2344	159285	67.954	0	0	1	0	0	0	0	0	0	0	0	-111	0.000	0	0.0	62.697	67.954	-5.257	0.000	0
1	76	2014	4	2421	162262	67.023	0	0	0	1	0	0	0	0	0	0	0	-110	0.000	0	0.0	63.076	67.023	-3.947	0.000	-30000
1	77	2014	5	2449	162861	66.501	0	0	0	0	1	0	0	0	0	0	0	-109	0.104	2	0.0	63.974	66.501	-2.527	-0.058	30000
1	78	2014	6	2454	183940	74.955	0	0	0	0	0	1	0	0	0	0	0	-108	0.790	9	0.0	71.145	74.955	-3.810	-0.516	0
2	79	2014	7	2455	187139	76.228	0	0	0	0	0	0	1	0	0	0	0	-107	-0.684	32	0.0	74.658	76.228	-1.570	1.340	0
2	80	2014	8	2454	182785	74.484	0	0	0	0	0	0	0	1	0	0	0	-106	-1.276	-69	0.0	75.975	74.484	1.490	-0.411	0
2	81	2014	9	2445	195962	80.148	0	0	0	0	0	0	0	0	1	0	0	-105	0.428	-73	0.0	78.463	80.148	-1.685	-2.019	0
2	82	2014	10	2397	186890	77.968	0	0	0	0	0	0	0	0	0	1	0	-104	-1.667	-37	0.0	74.460	77.968	-3.509	0.671	0
2	83	2014	11	2298	165255	71.912	0	0	0	0	0	0	0	0	0	0	1	-103	-1.804	-14	0.0	69.074	71.912	-2.839	1.306	0
2	84	2014	12	2278	147993	64.966	0	0	0	0	0	0	0	0	0	0	0	-102	0.000	0	0.0	62.534	64.966	-2.432	0.000	0
2	85	2015	1	2262	140413	62.075	1	0	0	0	0	0	0	0	0	0	0	-101	0.000	0	0.0	63.033	62.075	0.959	0.000	0
2	86	2015	2	2260	150902	66.771	0	1	0	0	0	0	0	0	0	0	0	-100	0.000	0	0.0	67.248	66.771	0.477	0.000	0
2	87	2015	3	2322	157555	67.853	0	0	1	0	0	0	0	0	0	0	0	-99	0.000	0	0.0	62.631	67.853	-5.222	0.000	0
2	88	2015	4	2412	159030	65.933	0	0	0	1	0	0	0	0	0	0	0	-98	0.000	0	0.0	63.010	65.933	-2.923	0.000	0
2	89	2015	5	2423	168230	69.430	0	0	0	0	1	0	0	0	0	0	0	-97	0.917	-4	0.0	63.043	69.430	-6.387	-0.923	0
2	90	2015	6	2424	180068	74.285	0	0	0	0	0	1	0	0	0	0	0	-96	-0.942	48	0.0	73.520	74.285	-0.766	1.925	0
3	91	2015	7	2439	172289	70.639	0	0	0	0	0	0	1	0	0	0	0	-95	2.746	-8	0.0	70.596	70.639	-0.043	-2.655	0
3	92	2015	8	2444	192705	78.848	0	0	0	0	0	0	0	1	0	0	0	-94	0.373	-33	0.0	75.235	78.848	-3.613	-1.084	0
3	93	2015	9	2444	195650	80.053	0	0	0	0	0	0	0	0	1	0	0	-93	-2.487	-41	0.0	81.725	80.053	1.671	1.309	0
3	94	2015	10	2381	172193	72.319	0	0	0	0	0	0	0	0	0	1	0	-92	0.367	25	0.0	73.956	72.319	1.637	0.234	0
3	95	2015	11	2274	160003	70.362	0	0	0	0	0	0	0	0	0	0	1	-91	0.081	-24	0.0	67.095	70.362	-3.267	-0.606	0
3	96	2015	12	2254	146651	65.063	0	0	0	0	0	0	0	0	0	0	0	-90	0.000	0	0.0	62.468	65.063	-2.595	0.000	-10000
3	97	2016	1	2252	144782	64.290	1	0	0	0	0	0	0	0	0	0	0	-89	0.000	0	0.0	62.967	64.290	-1.323	0.000	-10000
3	98	2016	2	2245	145794	64.942	0	1	0	0	0	0	0	0	0	0	0	-88	0.000	0	0.0	67.182	64.942	2.240	0.000	40000
3	99	2016	3	2310	142818	61.826	0	0	1	0	0	0	0	0	0	0	0	-87	0.000	0	0.0	62.565	61.826	0.739	0.000	-10000
3	100	2016	4	2409	149961	62.250	0	0	0	1	0	0	0	0	0	0	0	-86	0.000	0	0.0	62.944	62.250	0.693	0.000	-10000
3	101	2016	5	2431	145875	60.006	0	0	0	0	1	0	0	0	0	0	0	-85	-1.029	-10	0.0	64.598	60.006	4.592	0.698	0
3	102	2016	6	2436	168833	69.308	0	0	0	0	0	1	0	0	0	0	0	-84	0.844	-19	0.0	70.350	69.308	1.042	-1.179	0
4	103	2016	7	2440	172930	70.873	0	0	0	0	0	0	1	0	0	0	0	-83	-1.136	16	0.0	74.577	70.873	3.703	1.391	0
4	104	2016	8	2441	174071	71.311	0	0	0	0	0	0	0	1	0	0	0	-82	-0.891	50	0.0	78.174	71.311	6.863	1.921	0
4	105	2016	9	2428	194424	80.076	0	0	0	0	0	0	0	0	1	0	0	-81	-0.499	100	0.0	83.043	80.076	2.967	2.693	0
4	106	2016	10	2384	175527	73.627	0	0	0	0	0	0	0	0	0	1	0	-80	-0.334	41	0.0	74.879	73.627	1.252	1.222	0
4	107	2016	11	2259	145357	64.346	0	0	0	0	0	0	0	0	0	0	1	-79	0.069	-2	0.0	67.528	64.346	3.182	-0.107	0
4	108	2016	12	2259	138989	61.527	0	0	0	0	0	0	0	0	0	0	0	-78	0.000	0	0.0	62.402	61.527	0.875	0.000	0
4	109	2017	1	2234	143333	64.160	1	0	0	0	0	0	0	0	0	0	0	-77	0.000	0	0.0	62.901	64.160	-1.259	0.000	0
4	110	2017	2	2232	148106	66.356	0	1	0	0	0	0	0	0	0	0	0	-76	0.000	0	0.0	67.115	66.356	0.760	0.000	0
4	111	2017	3	2303	127833	55.507	0	0	1	0	0	0	0	0	0	0	0	-75	0.000	0	0.0	62.499	55.507	6.992	0.000	0
4	112	2017	4	2391	132929	55.596	0	0	0	1	0	0	0	0	0	0	0	-74	0.000	0	0.0	62.877	55.596	7.281	0.000	0
4	113	2017	5	2424	159216	65.683	0	0	0	0	1	0	0	0	0	0	0	-73	0.465	6	0.0	63.552	65.683	-2.132	-0.282	0
4	114	2017	6	2428	172979	71.243	0	0	0	0	0	1	0	0	0	0	0	-72	0.616	-29	0.0	70.252	71.243	-0.991	-1.210	0
5	115	2017	7	2424	173017	71.377	0	0	0	0	0	0	1	0	0	0	0	-71	3.770	-11	0.0	69.486	71.377	-1.891	-3.633	0
5	116	2017	8	2427	172017	70.877	0	0	0	0	0	0	0	1	0	0	0	-70	3.863	-19	0.0	72.277	70.877	1.401	-3.910	0
5	117	2017	9	2417	177470	73.426	0	0	0	0	0	0	0	0	1	0	0	-69	0.729	-81	0.0	77.809	73.426	4.384	-2.474	0
5	118	2017	10	2373	164114	69.159	0	0	0	0	0	0	0	0	0	1	0	-68	-1.621	-3	0.0	74.989	69.159	5.830	1.399	0
5	119	2017	11	2240	146403	65.358	0	0	0	0	0	0	0	0	0	0	1	-67	-0.283	10	0.0	68.053	65.358	2.695	0.484	0
5	120	2017	12	2225	143072	64.302	0	0	0	0	0	0	0	0	0	0	0	-66	0.000	0	0.0	62.335	64.302	-1.967	0.000	0
5	121	2018	1	2218	142275	64.146	1	0	0	0	0	0	0	0	0	0	0	-65	0.000	0	0.0	62.835	64.146	-1.311	0.000	0
5	122	2018	2	2219	162647	73.297	0	1	0	0	0	0	0	0	0	0	0	-64	0.000	0	0.0	67.049	73.297	-6.248	0.000	0
5	123	2018	3	2247	132711	59.062	0	0	1	0	0	0	0	0	0	0	0	-63	0.000	0	0.0	62.432	59.062	3.371	0.000	0
5	124	2018	4	2381	135346	56.844	0	0	0	1	0	0	0	0	0	0	0	-62	0.000	0	0.0	62.811	56.844	5.967	0.000	0
5	125	2018	5	2399	153806	64.112	0	0	0	0	1	0	0	0	0	0	0	-61	0.228	7	0.0	63.710	64.112	-0.403	-0.058	0
5	126	2018	6	2401	175766	73.206	0	0	0	0	0	1	0	0	0	0	0	-60	0.860	49	0.0	71.729	73.206	-1.477	0.333	0
6	127	2018	7	2400	176090	73.371	0	0	0	0	0	0	1	0	0	0	0	-59	3.200	-1	0.0	70.146	73.371	-3.225	-2.906	0
6	128	2018	8	2398	172395	71.891	0	0	0	0	0	0	0	1	0	0	0	-58	-0.311	4	0.0	76.484	71.891	4.594	0.364	0
6	129	2018	9	2391	207208	86.662	0	0	0	0	0	0	0	0	1	0	0	-57	0.291	19	0.0	80.381	86.662	-6.281	0.164	0
6	130	2018	10	2340	158181	67.599	0	0	0	0	0	0	0	0	0	1	0	-56	6.330	54	0.0	69.051	67.599	1.453	-4.473	0
6	131	2018	11	2244	150619	67.121	0	0	0	0	0	0	0	0	0	0	1	-55	3.191	29	0.0	65.286	67.121	-1.835	-2.217	0
6	132	2018	12	2234	139876	62.612	0	0	0	0	0	0	0	0	0	0	0	-54	0.000	0	0.0	62.269	62.612	-0.343	0.000	0

PENNSYLVANIA OPA MODEL

																		Rain Lag 2	0.3	0.9 CDD Lag						
							0.505	4.725	0.114	0.498	1.459	9.094	10.756	13.829	17.931	11.244	5.228	Rain Lag 1	0.7						Weather	Billing
Period	Obs	Year	Month	Cust	Sales	UPC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Trend	Rain	CDD	COVID	Predicted	Actual	Variance	Effect	Adjustments
6	133	2019	1	2231	141030	63.214	1	0	0	0	0	0	0	0	0	0	0	-53	0.000	0	0.0	62.768	63.214	-0.445	0.000	0
6	134	2019	2	2232	148737	66.638	0	1	0	0	0	0	0	0	0	0	0	-52	0.000	0	0.0	66.983	66.638	0.344	0.000	0
6	135	2019	3	2259	151516	67.072	0	0	1	0	0	0	0	0	0	0	0	-51	0.000	0	0.0	62.366	67.072	-4.706	0.000	0
6	136	2019	4	2351	166277	70.726	0	0	0	1	0	0	0	0	0	0	0	-50	0.000	0	0.0	62.745	70.726	-7.981	0.000	0
6	137	2019	5	2380	152948	64.264	0	0	0	0	1	0	0	0	0	0	0	-49	0.146	-6	0.0	63.443	64.264	-0.821	-0.258	0
6	138	2019	6	2381	168441	70.744	0	0	0	0	0	1	0	0	0	0	0	-48	0.669	0	0.0	70.729	70.744	-0.014	-0.601	0
7	139	2019	7	2384	160889	67.487	0	0	0	0	0	0	1	0	0	0	0	-47	-0.038	-45	0.0	72.010	67.487	4.523	-0.976	0
7	140	2019	8	2386	187993	78.790	0	0	0	0	0	0	0	1	0	0	0	-46	-0.435	-52	0.0	75.272	78.790	-3.518	-0.783	0
7	141	2019	9	2376	190054	79.989	0	0	0	0	0	0	0	0	1	0	0	-45	1.545	64	0.0	80.197	79.989	0.208	0.046	0
7	142	2019	10	2318	164815	71.102	0	0	0	0	0	0	0	0	0	1	0	-44	-0.376	27	0.0	74.405	71.102	3.302	0.947	0
7	143	2019	11	2212	144694	65.413	0	0	0	0	0	0	0	0	0	0	1	-43	1.253	10	0.0	66.538	65.413	1.125	-0.898	0
7	144	2019	12	2198	138263	62.904	0	0	0	0	0	0	0	0	0	0	0	-42	0.000	0	0.0	62.203	62.904	-0.701	0.000	0
7	145	2020	1	2197	131397	59.807	1	0	0	0	0	0	0	0	0	0	0	-41	0.000	0	0.0	62.702	59.807	2.895	0.000	0
7	146	2020	2	2197	154003	70.097	0	1	0	0	0	0	0	0	0	0	0	-40	0.000	0	0.0	66.917	70.097	-3.180	0.000	0
7	147	2020	3	2277	131943	57.946	0	0	1	0	0	0	0	0	0	0	0	-39	0.000	0	0.0	62.300	57.946	4.354	0.000	0
7	148	2020	4	2320	87429	37.685	0	0	0	1	0	0	0	0	0	0	0	-38	0.000	0	1.0	44.600	37.685	6.915	0.000	0
7	149	2020	5	2350	79860	33.983	0	0	0	0	1	0	0	0	0	0	0	-37	1.731	-12	1.0	43.726	33.983	9.743	-1.831	0
7	150	2020	6	2366	115467	48.803	0	0	0	0	0	1	0	0	0	0	0	-36	-0.586	-13	1.0	53.413	48.803	4.610	0.227	0
8	151	2020	7	2370	151492	63.921	0	0	0	0	0	0	1	0	0	0	0	-35	-2.797	16	1.0	57.723	63.921	-6.197	2.881	0
8	152	2020	8	2375	158517	66.744	0	0	0	0	0	0	0	1	0	0	0	-34	-2.008	122	1.0	62.465	66.744	-4.279	4.556	0
8	153	2020	9	2378	158350	66.590	0	0	0	0	0	0	0	0	1	0	0	-33	0.031	32	1.0	62.697	66.590	-3.893	0.690	0
8	154	2020	10	2305	136532	59.233	0	0	0	0	0	0	0	0	0	1	0	-32	-1.072	-20	1.0	55.829	59.233	-3.404	0.516	0
8	155	2020	11	2217	121935	55.000	0	0	0	0	0	0	0	0	0	0	1	-31	-1.094	-16	1.0	49.918	55.000	-5.082	0.626	0
8	156	2020	12	2207	108308	49.075	0	0	0	0	0	0	0	0	0	0	0	-30	0.000	0	0.4	54.905	49.075	5.831	0.000	20000
8	157	2021	1	2204	114575	51.985	1	0	0	0	0	0	0	0	0	0	0	-29	0.000	0	0.4	55.405	51.985	3.420	0.000	0
8	158	2021	2	2208	116119	52.590	0	1	0	0	0	0	0	0	0	0	0	-28	0.000	0	0.4	59.619	52.590	7.029	0.000	20000
8	159	2021	3	2260	121501	53.761	0	0	1	0	0	0	0	0	0	0	0	-27	0.000	0	0.4	55.002	53.761	1.241	0.000	0
8	160	2021	4	2370	124194	52.402	0	0	0	1	0	0	0	0	0	0	0	-26	0.000	0	0.4	55.381	52.402	2.979	0.000	0
8	161	2021	5	2385	121868	51.098	0	0	0	0	1	0	0	0	0	0	0	-25	-0.948	3	0.4	57.266	51.098	6.168	0.929	0
8	162	2021	6	2387	133393	55.883	0	0	0	0	0	1	0	0	0	0	0	-24	-1.143	1	0.4	65.019	55.883	9.136	1.052	0
9	163	2021	7	2392	152837	63.895	0	0	0	0	0	0	1	0	0	0	0	-23	0.711	41	0.4	65.908	63.895	2.013	0.285	0
9	164	2021	8	2395	162906	68.019	0	0	0	0	0	0	0	1	0	0	0	-22	0.424	-16	0.4	67.950	68.019	-0.069	-0.741	0
9	165	2021	9	2386	169303	70.957	0	0	0	0	0	0	0	0	1	0	0	-21	0.885	51	0.4	73.141	70.957	2.184	0.354	0
9	166	2021	10	2356	155902	66.172	0	0	0	0	0	0	0	0	0	1	0	-20	1.018	-29	0.4	64.520	66.172	-1.653	-1.574	0
9	167	2021	11	2285	135092	59.121	0	0	0	0	0	0	0	0	0	0	1	-19	0.681	22	0.4	59.953	59.121	0.832	-0.120	0
9	168	2021	12	2256	124615	55.237	0	0	0	0	0	0	0	0	0	0	0	-18	0.000	0	0.4	54.839	55.237	-0.398	0.000	0
9	169	2022	1	2253	117236	52.035	1	0	0	0	0	0	0	0	0	0	0	-17	0.000	0	0.4	55.338	52.035	3.303	0.000	0
9	170	2022	2	2254	134166	59.524	0	1	0	0	0	0	0	0	0	0	0	-16	0.000	0	0.4	59.553	59.524	0.029	0.000	0
9	171	2022	3	2289	122719	53.613	0	0	1	0	0	0	0	0	0	0	0	-15	0.000	0	0.4	54.936	53.613	1.324	0.000	0

PENNSYLVANIA OPA MODEL

																		Rain Lag 2	0.3	0.9 CDD Lag						
							0.505	4.725	0.114	0.498	1.459	9.094	10.756	13.829	17.931	11.244	5.228	Rain Lag 1	0.7						Weather	Billing
Period	Obs	Year	Month	Cust	Sales	UPC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Trend	Rain	CDD	COVID	Predicted	Actual	Variance	Effect	Adjustments
9	172	2022	4	2358	136987	58.095	0	0	0	1	0	0	0	0	0	0	0	-14	0.000	0	0.4	55.315	58.095	-2.780	0.000	-10000
9	173	2022	5	2384	146222	61.335	0	0	0	0	1	0	0	0	0	0	0	-13	-0.252	6	0.4	56.625	61.335	-4.710	0.354	10000
9	174	2022	6	2392	154538	64.606	0	0	0	0	0	1	0	0	0	0	0	-12	1.041	2	0.4	63.016	64.606	-1.590	-0.884	-20000
10	175	2022	7	2394	168763	70.494	0	0	0	0	0	0	1	0	0	0	0	-11	-2.862	19	0.4	68.550	70.494	-1.944	2.994	20000
10	176	2022	8	2399	166719	69.495	0	0	0	0	0	0	0	1	0	0	0	-10	-1.278	35	0.4	70.554	69.495	1.059	1.929	0
10	177	2022	9	2296	180983	78.825	0	0	0	0	0	0	0	0	1	0	0	-9	-0.320	-2	0.4	72.973	78.825	-5.852	0.252	0
10	178	2022	10	2256	163114	72.302	0	0	0	0	0	0	0	0	0	1	0	-8	-0.816	-15	0.4	66.434	72.302	-5.868	0.407	0
10	179	2022	11	2186	131500	60.156	0	0	0	0	0	0	0	0	0	0	1	-7	-1.082	-23	0.4	60.458	60.156	0.302	0.451	0
10	180	2022	12	2178	114220	52.443	0	0	0	0	0	0	0	0	0	0	0	-6	0.000	0	0.4	54.773	52.443	2.330	0.000	0
10	181	2023	1	2181	129426	59.342	1	0	0	0	0	0	0	0	0	0	0	-5	0.000	0	0.4	55.272	59.342	-4.070	0.000	-40000
10	182	2023	2	2181	124447	57.060	0	1	0	0	0	0	0	0	0	0	0	-4	0.000	0	0.4	59.487	57.060	2.427	0.000	0
10	183	2023	3	2213	127703	57.706	0	0	1	0	0	0	0	0	0	0	0	-3	0.000	0	0.4	54.870	57.706	-2.836	0.000	0
10	184	2023	4	2292	140851	61.453	0	0	0	1	0	0	0	0	0	0	0	-2	0.000	0	0.4	55.248	61.453	-6.205	0.000	0
10	185	2023	5	2302	140785	61.158	0	0	0	0	1	0	0	0	0	0	0	-1	-1.362	9	0.4	57.634	61.158	-3.523	1.429	0
10	186	2023	6	2303	163114	70.827	0	0	0	0	0	1	0	0	0	0	0	0	-2.149	-48	0.4	64.686	70.827	-6.141	0.853	0
11	187	2023	7	2306	170691	74.033	0	0	0	0	0	0	1	0	0	0	0	1	-2.912	-58	0.0	74.033				
11	188	2023	8	2308	176928	76.652	0	0	0	0	0	0	0	1	0	0	0	2	-0.959	0	0.0	76.652				
11	189	2023	9	2283	182380	79.886	0	0	0	0	0	0	0	0	1	0	0	3	0.000	0	0.0	79.886				
11	190	2023	10	2233	163410	73.193	0	0	0	0	0	0	0	0	0	1	0	4	0.000	0	0.0	73.193				
11	191	2023	11	2146	144177	67.171	0	0	0	0	0	0	0	0	0	0	1	5	0.000	0	0.0	67.171				
11	192	2023	12	2132	132064	61.938	0	0	0	0	0	0	0	0	0	0	0	6	0.000	0	0.0	61.938				
11	193	2024	1	2131	133041	62.437	1	0	0	0	0	0	0	0	0	0	0	7	0.000	0	0.0	62.437				
11	194	2024	2	2132	142101	66.652	0	1	0	0	0	0	0	0	0	0	0	8	0.000	0	0.0	66.652				
11	195	2024	3	2177	135063	62.035	0	0	1	0	0	0	0	0	0	0	0	9	0.000	0	0.0	62.035				
11	196	2024	4	2256	140792	62.413	0	0	0	1	0	0	0	0	0	0	0	10	0.000	0	0.0	62.413				
11	197	2024	5	2278	144344	63.370	0	0	0	0	1	0	0	0	0	0	0	11	0.000	0	0.0	63.370				
11	198	2024	6	2283	162118	70.999	0	0	0	0	0	1	0	0	0	0	0	12	0.000	0	0.0	70.999				
12	199	2024	7	2286	166090	72.655	0	0	0	0	0	0	1	0	0	0	0	13	0.000	0	0.0	72.655				
12	200	2024	8	2289	173300	75.723	0	0	0	0	0	0	0	1	0	0	0	14	0.000	0	0.0	75.723				
12	201	2024	9	2263	180664	79.820	0	0	0	0	0	0	0	0	1	0	0	15	0.000	0	0.0	79.820				
12	202	2024	10	2213	161829	73.126	0	0	0	0	0	0	0	0	0	1	0	16	0.000	0	0.0	73.126				
12	203	2024	11	2127	142719	67.105	0	0	0	0	0	0	0	0	0	0	1	17	0.000	0	0.0	67.105				
12	204	2024	12	2113	130710	61.872	0	0	0	0	0	0	0	0	0	0	0	18	0.000	0	0.0	61.872				
12	205	2025	1	2111	131677	62.371	1	0	0	0	0	0	0	0	0	0	0	19	0.000	0	0.0	62.371				
12	206	2025	2	2112	140655	66.585	0	1	0	0	0	0	0	0	0	0	0	20	0.000	0	0.0	66.585				
12	207	2025	3	2158	133704	61.969	0	0	1	0	0	0	0	0	0	0	0	21	0.000	0	0.0	61.969				
12	208	2025	4	2236	139421	62.347	0	0	0	1	0	0	0	0	0	0	0	22	0.000	0	0.0	62.347				
12	209	2025	5	2258	142952	63.304	0	0	0	0	1	0	0	0	0	0	0	23	0.000	0	0.0	63.304				
12	210	2025	6	2264	160577	70.932	0	0	0	0	0	1	0	0	0	0	0	24	0.000	0	0.0	70.932				
13	211	2025	7	2266	164516	72.589	0	0	0	0	0	0	1	0	0	0	0	25	0.000	0	0.0	72.589				
13	212	2025	8	2269	171665	75.657	0	0	0	0	0	0	0	1	0	0	0	26	0.000	0	0.0	75.657				
13	213	2025	9	2244	178951	79.753	0	0	0	0	0	0	0	0	1	0	0	27	0.000	0	0.0	79.753				
13	214	2025	10	2193	160250	73.060	0	0	0	0	0	0	0	0	0	1	0	28	0.000	0	0.0	73.060				
13	215	2025	11	2107	141265	67.039	0	0	0	0	0	0	0	0	0	0	1	29	0.000	0	0.0	67.039				
13	216	2025	12	2093	129359	61.805	0	0	0	0	0	0	0	0	0	0	0	30	0.000	0	0.0	61.805				
13	217	2026	1	2092	130316	62.305	1	0	0	0	0	0	0	0	0	0	0	31	0.000	0	0.0	62.305				
13	218	2026	2	2093	139211	66.519	0	1	0	0	0	0	0	0	0	0	0	32	0.000	0	0.0	66.519				
13	219	2026	3	2138	132347	61.902	0	0	1	0	0	0	0	0	0	0	0	33	0.000	0	0.0	61.902				
13	220	2026	4	2217	138052	62.281	0	0	0	1	0	0	0	0	0	0	0	34	0.000	0	0.0	62.281				
13	221	2026	5	2239	141563	63.237	0	0	0	0	1	0	0	0	0	0	0	35	0.000	0	0.0	63.237				
13	222	2026	6	2244	159038	70.866	0	0	0	0	0	1	0	0	0	0	0	36	0.000	0	0.0	70.866				
14	223	2026	7	2247	162944	72.523	0	0	0	0	0	0	1	0	0	0	0	37	0.000	0	0.0	72.523				
14	224	2026	8	2249	170033	75.591	0	0	0	0	0	0	0	1	0	0	0	38	0.000	0	0.0	75.591				
14	225	2026	9	2224	177240	79.687	0	0	0	0	0	0	0	0	1	0	0	39	0.000	0	0.0	79.687				
14	226	2026	10	2174	158674	72.994	0	0	0	0	0	0	0	0	0	1	0	40	0.000	0	0.0	72.994				
14	227	2026	11	2088	139812	66.973	0	0	0	0	0	0	0	0	0	0	1	41	0.000	0	0.0	66.973				
14	228	2026	12	2073	128010	61.739	0	0	0	0	0	0	0	0	0	0	0	42	0.000	0	0.0	61.739				

REGRESSION MODEL

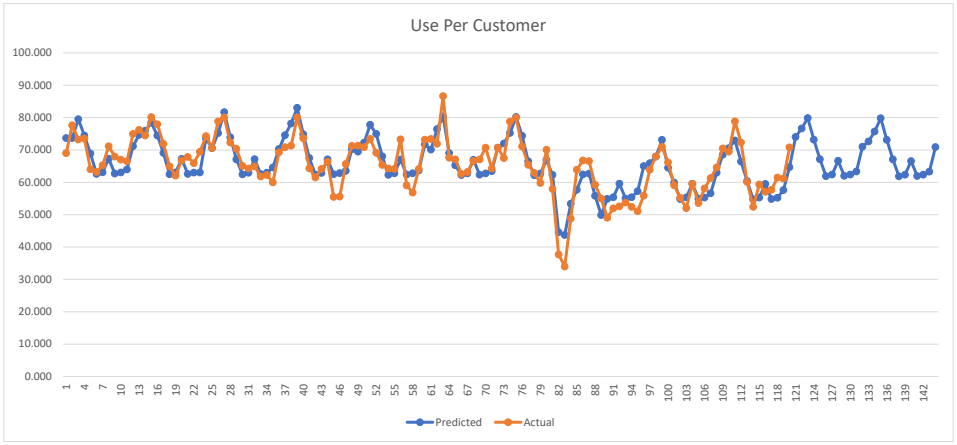
SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.8944
R Square	0.8000
Adjusted R Square	0.7711
Standard Error	4.0639
Observations	120

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	15	6868.14	457.8761	27.7249	0.0000
Residual	104	1717.56	16.5150		
Total	119	8585.70			

	Coefficients	*tandard Erro*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*	
Intercept	61.9711	1.6371	37.8551	0.0000	58.7248	65.2175	4.3812	4.8161	
Jan	0.5047	1.8175	0.2777	0.7818	-3.0995	4.1088	-0.0904	0.4442	
Feb	4.7246	1.8176	2.5993	0.0107	1.1202	8.3291	-0.5977	-0.0631	
Mar	0.1136	1.8179	0.0625	0.9503	-3.4914	3.7186	-0.5800	-0.0454	
Apr	0.4976	1.8237	0.2729	0.7855	-3.1188	4.1140	-0.4491	0.0880	
May	1.4595	1.8233	0.8005	0.4253	-2.1561	5.0751	0.0664	0.6039	
Jun	9.0939	1.8230	4.9885	0.0000	5.4789	12.7089	1.5893	2.1274	
Jul	10.7558	1.8290	5.8806	0.0000	7.1288	14.3829	3.0936	3.6314	
Aug	13.8292	1.8247	7.5790	0.0000	10.2109	17.4476	3.0495	3.5871	
Sep	17.9315	1.8228	9.8371	0.0000	14.3167	21.5462	2.6027	3.1405	
Oct	11.2436	1.8220	6.1710	0.0000	7.6305	14.8567	1.1906	1.7252	
Nov	5.2280	1.8213	2.8705	0.0050	1.6163	8.8397	-0.0387	0.4958	
Trend	-0.0055	0.0143	-0.3854	0.7007	-0.0339	0.0229	-0.0084	-0.0050	-0.795 Annual Decline
Rain	-0.8998	0.3143	-2.8626	0.0051	-1.5232	-0.2765	-0.2999	-0.1944	
CDD	0.0225	0.0136	1.6587	0.1002	-0.0044	0.0494	0.0050	0.0095	
COVID	-18.0782	1.8153	-9.9590	0.0000	-21.6779	-14.4785	0.2478	0.8078	



REGRESSION MODEL

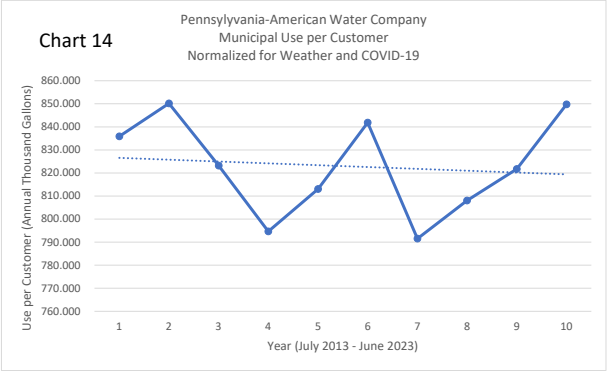
SUMMARY OUTPUT

Auto-Correlation:	0.3493
D-W Statistic	1.2794

Month	Weather
1	0
2	0
3	0
4	0
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	0

Period	Actual	Weather	COVID	Normalized
1	833.595	(2.298)	-	835.893
2	852.055	1.889	-	850.165
3	819.906	(3.285)	-	823.192
4	800.305	5.628	-	794.677
5	805.165	(7.859)	-	813.024
6	831.913	(9.927)	-	841.840
7	734.007	(3.268)	(54.235)	791.509
8	678.282	11.250	(141.010)	808.042
9	732.608	(2.325)	(86.775)	821.709
10	771.261	8.316	(86.775)	849.721

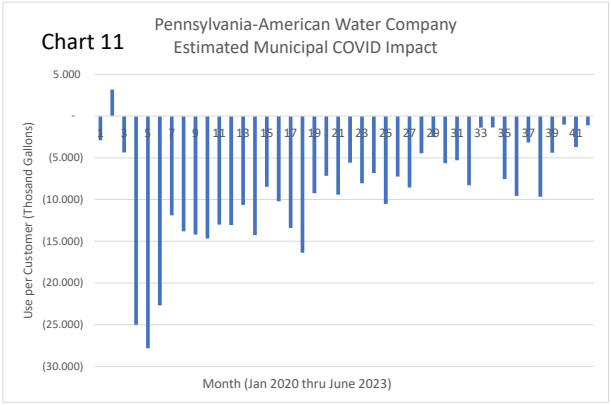
Chart 14



REGRESSION MODEL

SUMMARY OUTPUT

Data	Usage Per Customer
Jan-20	(2.895)
Feb-20	3.180
Mar-20	(4.354)
Apr-20	(24.993)
May-20	(27.821)
Jun-20	(22.688)
Jul-20	(11.881)
Aug-20	(13.799)
Sep-20	(14.185)
Oct-20	(14.674)
Nov-20	(12.997)
Dec-20	(13.062)
Jan-21	(10.651)
Feb-21	(14.260)
Mar-21	(8.472)
Apr-21	(10.210)
May-21	(13.400)
Jun-21	(16.367)
Jul-21	(9.244)
Aug-21	(7.162)
Sep-21	(9.415)
Oct-21	(5.579)
Nov-21	(8.063)
Dec-21	(6.833)
Jan-22	(10.534)
Feb-22	(7.261)
Mar-22	(8.555)
Apr-22	(4.451)
May-22	(2.522)
Jun-22	(5.642)
Jul-22	(5.287)
Aug-22	(8.290)
Sep-22	(1.379)
Oct-22	(1.363)
Nov-22	(7.533)
Dec-22	(9.562)
Jan-23	(3.161)
Feb-23	(9.658)
Mar-23	(4.395)
Apr-23	(1.026)
May-23	(3.708)
Jun-23	(1.091)



CUSTOMER DATA

Year	Month	Cust	Growth	Select
2013	7	2465		
2013	8	2464	-1	0
2013	9	2464	0	0
2013	10	2406	-58	0
2013	11	2302	-104	0
2013	12	2299	-3	0
2014	1	2300	1	0
2014	2	2300	0	0
2014	3	2344	44	0
2014	4	2421	77	0
2014	5	2449	28	0
2014	6	2454	5	0
2014	7	2455	1	0
2014	8	2454	-1	0
2014	9	2445	-9	0
2014	10	2397	-48	0
2014	11	2298	-99	0
2014	12	2278	-20	0
2015	1	2262	-16	0
2015	2	2260	-2	0
2015	3	2322	62	0
2015	4	2412	90	0
2015	5	2423	11	0
2015	6	2424	1	0
2015	7	2439	15	0
2015	8	2444	5	0
2015	9	2444	0	0
2015	10	2381	-63	0
2015	11	2274	-107	0
2015	12	2254	-20	0
2016	1	2252	-2	0
2016	2	2245	-7	0
2016	3	2310	65	0
2016	4	2409	99	0
2016	5	2431	22	0
2016	6	2436	5	0
2016	7	2440	4	0
2016	8	2441	1	0
2016	9	2428	-13	0
2016	10	2384	-44	0
2016	11	2259	-125	0
2016	12	2259	0	0
2017	1	2234	-25	0
2017	2	2232	-2	0
2017	3	2303	71	0
2017	4	2391	88	0
2017	5	2424	33	0
2017	6	2428	4	0
2017	7	2424	-4	0
2017	8	2427	3	0
2017	9	2417	-10	0
2017	10	2373	-44	0
2017	11	2240	-133	0
2017	12	2225	-15	0
2018	1	2218	-7	0
2018	2	2219	1	0
2018	3	2247	28	0
2018	4	2381	134	0
2018	5	2399	18	0
2018	6	2401	2	0
2018	7	2400	-1	1
2018	8	2398	-2	1
2018	9	2391	-7	1
2018	10	2340	-51	1
2018	11	2244	-96	1
2018	12	2234	-10	1

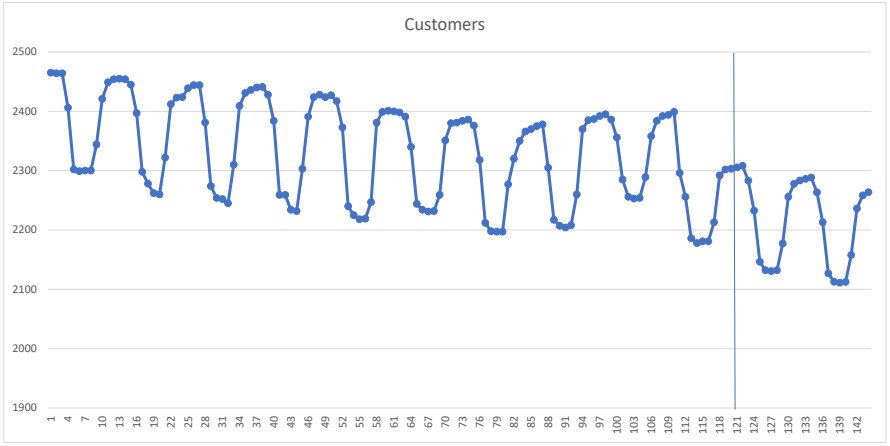
Month	Avg Growth Last 60 Months
1	-1
2	1
3	45
4	79
5	22
6	6
7	3
8	3
9	-25
10	-50
11	-86
12	-14

CUSTOMER DATA

Year	Month	Cust	Growth	Select
2019	1	2231	-3	1
2019	2	2232	1	1
2019	3	2259	27	1
2019	4	2351	92	1
2019	5	2380	29	1
2019	6	2381	1	1
2019	7	2384	3	1
2019	8	2386	2	1
2019	9	2376	-10	1
2019	10	2318	-58	1
2019	11	2212	-106	1
2019	12	2198	-14	1
2020	1	2197	-1	1
2020	2	2197	0	1
2020	3	2277	80	1
2020	4	2320	43	1
2020	5	2350	30	1
2020	6	2366	16	1
2020	7	2370	4	1
2020	8	2375	5	1
2020	9	2378	3	1
2020	10	2305	-73	1
2020	11	2217	-88	1
2020	12	2207	-10	1
2021	1	2204	-3	1
2021	2	2208	4	1
2021	3	2260	52	1
2021	4	2370	110	1
2021	5	2385	15	1
2021	6	2387	2	1
2021	7	2392	5	1
2021	8	2395	3	1
2021	9	2386	-9	1
2021	10	2356	-30	1
2021	11	2285	-71	1
2021	12	2256	-29	1
2022	1	2253	-3	1
2022	2	2254	1	1
2022	3	2289	35	1
2022	4	2358	69	1
2022	5	2384	26	1
2022	6	2392	8	1
2022	7	2394	2	1
2022	8	2399	5	1
2022	9	2296	-103	1
2022	10	2256	-40	1
2022	11	2186	-70	1
2022	12	2178	-8	1
2023	1	2181	3	1
2023	2	2181	0	1
2023	3	2213	32	1
2023	4	2292	79	1
2023	5	2302	10	1
2023	6	2303	1	1
2023	7	2306	3	
2023	8	2308	3	
2023	9	2283	-25	
2023	10	2233	-50	
2023	11	2146	-86	
2023	12	2132	-14	
2024	1	2131	-1	
2024	2	2132	1	
2024	3	2177	45	
2024	4	2256	79	
2024	5	2278	22	
2024	6	2283	6	
2024	7	2286	3	

CUSTOMER DATA

Year	Month	Cust	Growth	Select
2024	8	2289	3	
2024	9	2263	-25	
2024	10	2213	-50	
2024	11	2127	-86	
2024	12	2113	-14	
2025	1	2111	-1	
2025	2	2112	1	
2025	3	2158	45	
2025	4	2236	79	
2025	5	2258	22	
2025	6	2264	6	
2025	7	2266	3	
2025	8	2269	3	
2025	9	2244	-25	
2025	10	2193	-50	
2025	11	2107	-86	
2025	12	2093	-14	
2026	1	2092	-1	
2026	2	2093	1	
2026	3	2138	45	
2026	4	2217	79	
2026	5	2239	22	
2026	6	2244	6	
2026	7	2247	3	
2026	8	2249	3	
2026	9	2224	-25	
2026	10	2174	-50	
2026	11	2088	-86	
2026	12	2073	-14	



WEATHER DATA

Year	Month	Rain	Rain Lag 1	Rain Lag 2	CDD	CDD Lag 1					
2013	7	3.573	0.155	-2.031	-15	-6	11414	751	2013	29432	-4459
2013	8	-2.394	3.573	0.155	-71	-15	-9675	-6767	2014	-76107	545
2013	9	-1.592	-2.394	3.573	-50	-71	15516	-2498	2015	-47492	-4322
2013	10	-0.766	-1.592	-2.394	9	-50	2309	1567	2016	64268	16118
2013	11	0.653	-0.766	-1.592	-2	9	11249	2489	2017	49728	-23493
2013	12	0.950	0.653	-0.766	0	-2	-1380	0	2018	-12728	-20491
2014	1	-1.105	0.950	0.653	0	0	-4985	0	2019	-20123	-5922
2014	2	-1.068	-1.105	0.950	0	0	-8918	0	2020	18782	18102
2014	3	-1.121	-1.068	-1.105	-1	0	-12322	0	2021	76408	496
2014	4	0.629	-1.121	-1.068	1	-1	-9555	0	2022	-34101	13010
2014	5	0.859	0.629	-1.121	5	1	-6189	-143			
2014	6	-1.345	0.859	0.629	43	5	-9350	-1266	avg.	4807	-1041
2014	7	-1.247	-1.345	0.859	-69	43	-3854	3290	s.d.	50780	14110
2014	8	1.146	-1.247	-1.345	-76	-69	3658	-1008			
2014	9	-2.872	1.146	-1.247	-39	-76	-4119	-4936			
2014	10	-1.346	-2.872	1.146	-16	-39	-8411	1608			
2014	11	-0.347	-1.346	-2.872	-2	-16	-6524	3001			
2014	12	-0.330	-0.347	-1.346	0	-2	-5540	0			
2015	1	-0.235	-0.330	-0.347	0	0	2169	0			
2015	2	-2.078	-0.235	-0.330	0	0	1078	0			
2015	3	0.959	-2.078	-0.235	-1	0	-12125	0			
2015	4	0.899	0.959	-2.078	-11	-1	-7050	0			
2015	5	-1.731	0.899	0.959	54	-11	-15476	-2236			
2015	6	4.665	-1.731	0.899	-6	54	-1856	4666			
2015	7	-1.467	4.665	-1.731	-32	-6	-106	-6477			
2015	8	-2.924	-1.467	4.665	-49	-32	-8831	-2650			
2015	9	1.778	-2.924	-1.467	31	-49	4085	3198			
2015	10	-0.646	1.778	-2.924	-27	31	3897	556			
2015	11	-0.697	-0.646	1.778	2	-27	-7429	-1379			
2015	12	0.450	-0.697	-0.646	0	2	-5848	0			
2016	1	-1.005	0.450	-0.697	0	0	-2980	0			
2016	2	-0.078	-1.005	0.450	0	0	5028	0			
2016	3	-1.071	-0.078	-1.005	-1	0	1708	0			
2016	4	-1.011	-1.071	-0.078	-9	-1	1670	0			
2016	5	1.639	-1.011	-1.071	-22	-9	11162	1696			
2016	6	-2.325	1.639	-1.011	13	-22	2539	-2872			
2016	7	-0.277	-2.325	1.639	44	13	9037	3395			
2016	8	-0.594	-0.277	-2.325	106	44	16752	4689			
2016	9	-0.222	-0.594	-0.277	46	106	7204	6538			
2016	10	0.194	-0.222	-0.594	-3	46	2984	2914			
2016	11	-1.247	0.194	-0.222	3	-3	7188	-242			
2016	12	0.650	-1.247	0.194	0	3	1976	0			
2017	1	1.025	0.650	-1.247	0	0	-2812	0			
2017	2	-1.598	1.025	0.650	2	0	1696	0			
2017	3	1.599	-1.598	1.025	3	2	16102	0			
2017	4	-0.021	1.599	-1.598	10	3	17410	0			
2017	5	0.889	-0.021	1.599	-31	10	-5167	-684			
2017	6	5.005	0.889	-0.021	-11	-31	-2406	-2938			
2017	7	3.373	5.005	0.889	-12	-11	-4584	-8807			
2017	8	-0.404	3.373	5.005	-89	-12	3400	-9488			
2017	9	-2.142	-0.404	3.373	-4	-89	10595	-5980			
2017	10	0.514	-2.142	-0.404	12	-4	13836	3320			
2017	11	1.773	0.514	-2.142	-2	12	6036	1084			
2017	12	-1.980	1.773	0.514	0	-2	-4376	0			
2018	1	0.455	-1.980	1.773	0	0	-2908	0			
2018	2	3.092	0.455	-1.980	2	0	-13865	0			
2018	3	-0.381	3.092	0.455	-1	2	7574	0			
2018	4	0.489	-0.381	3.092	1	-1	14207	0			
2018	5	1.019	0.489	-0.381	55	1	-966	-138			
2018	6	4.135	1.019	0.489	-2	55	-3546	798			
2018	7	-2.217	4.135	1.019	3	-2	-7739	-6975			
2018	8	1.366	-2.217	4.135	15	3	11015	873			
2018	9	8.458	1.366	-2.217	57	15	-15017	391			
2018	10	0.934	8.458	1.366	33	57	3399	-10466			
2018	11	1.233	0.934	8.458	-2	33	-4117	-4974			
2018	12	1.260	1.233	0.934	0	-2	-766	0			

WEATHER DATA

Year	Month	Rain	Rain Lag 1	Rain Lag 2	CDD	CDD Lag 1		
2019	1	-0.245	1.260	1.233	0	0	-993	0
2019	2	1.352	-0.245	1.260	0	0	769	0
2019	3	-1.401	1.352	-0.245	-1	0	-10631	0
2019	4	0.809	-1.401	1.352	-7	-1	-18764	0
2019	5	0.609	0.809	-1.401	5	-7	-1954	-615
2019	6	-0.315	0.609	0.809	-43	5	-34	-1430
2019	7	-0.487	-0.315	0.609	-66	-43	10783	-2327
2019	8	2.416	-0.487	-0.315	68	-66	-8395	-1867
2019	9	-1.572	2.416	-0.487	29	68	493	109
2019	10	2.464	-1.572	2.416	12	29	7655	2196
2019	11	-0.747	2.464	-1.572	-2	12	2489	-1987
2019	12	0.300	-0.747	2.464	0	-2	-1541	0
2020	1	0.775	0.300	-0.747	0	0	6360	0
2020	2	0.222	0.775	0.300	0	0	-6987	0
2020	3	2.319	0.222	0.775	1	0	9914	0
2020	4	1.479	2.319	0.222	-12	1	16043	0
2020	5	-1.471	1.479	2.319	-15	-12	22896	-4302
2020	6	-3.365	-1.471	1.479	3	-15	10907	537
2020	7	-1.427	-3.365	-1.471	132	3	-14688	6829
2020	8	0.656	-1.427	-3.365	38	132	-10162	10819
2020	9	-1.812	0.656	-1.427	-20	38	-9257	1641
2020	10	-0.786	-1.812	0.656	-18	-20	-7846	1189
2020	11	-0.037	-0.786	-1.812	-2	-18	-11266	1389
2020	12	-0.830	-0.037	-0.786	0	-2	12868	0
2021	1	-0.845	-0.830	-0.037	0	0	7537	0
2021	2	-0.418	-0.845	-0.830	0	0	15520	0
2021	3	-0.101	-0.418	-0.845	-1	0	2805	0
2021	4	-1.311	-0.101	-0.418	4	-1	7059	0
2021	5	-1.071	-1.311	-0.101	-4	4	14711	2215
2021	6	1.475	-1.071	-1.311	48	-4	21807	2512
2021	7	-0.027	1.475	-1.071	-25	48	4815	682
2021	8	1.276	-0.027	1.475	61	-25	-166	-1774
2021	9	0.908	1.276	-0.027	-35	61	5211	844
2021	10	0.584	0.908	1.276	25	-35	-3893	-3709
2021	11	-1.697	0.584	0.908	-2	25	1900	-274
2021	12	0.910	-1.697	0.584	0	-2	-898	0
2022	1	-0.065	0.910	-1.697	0	0	7441	0
2022	2	2.072	-0.065	0.910	0	0	66	0
2022	3	-0.721	2.072	-0.065	-1	0	3030	0
2022	4	-0.051	-0.721	2.072	6	-1	-6555	0
2022	5	1.509	-0.051	-0.721	1	6	-11228	844
2022	6	-4.735	1.509	-0.051	16	1	-3802	-2114
2022	7	0.203	-4.735	1.509	39	16	-4654	7167
2022	8	-0.544	0.203	-4.735	0	39	2540	4629
2022	9	-0.932	-0.544	0.203	-13	0	-13437	579
2022	10	-1.146	-0.932	-0.544	-27	-13	-13238	918
2022	11	1.113	-1.146	-0.932	7	-27	660	987
2022	12	-1.380	1.113	-1.146	0	7	5075	0
2023	1	1.245	-1.380	1.113	0	0	-8877	0
2023	2	-1.498	1.245	-1.380	0	0	5293	0
2023	3	-0.081	-1.498	1.245	-1	0	-6276	0
2023	4	-1.911	-0.081	-1.498	15	-1	-14222	0
2023	5	-2.251	-1.911	-0.081	-46	15	-8111	3291
2023	6	-3.195	-2.251	-1.911	-65	-46	-14142	1963
2023	7	0.000	-3.195	-2.251	0	-65		
2023	8	0.000	0.000	-3.195	0	0		
2023	9	0.000	0.000	0.000	0	0		
2023	10	0.000	0.000	0.000	0	0		
2023	11	0.000	0.000	0.000	0	0		
2023	12	0.000	0.000	0.000	0	0		
2024	1	0.000	0.000	0.000	0	0		
2024	2	0.000	0.000	0.000	0	0		
2024	3	0.000	0.000	0.000	0	0		
2024	4	0.000	0.000	0.000	0	0		
2024	5	0.000	0.000	0.000	0	0		
2024	6	0.000	0.000	0.000	0	0		
2024	7	0.000	0.000	0.000	0	0		

WEATHER DATA

Year	Month	Rain	Rain Lag 1	Rain Lag 2	CDD	CDD Lag 1
2024	8	0.000	0.000	0.000	0	0
2024	9	0.000	0.000	0.000	0	0
2024	10	0.000	0.000	0.000	0	0
2024	11	0.000	0.000	0.000	0	0
2024	12	0.000	0.000	0.000	0	0
2025	1	0.000	0.000	0.000	0	0
2025	2	0.000	0.000	0.000	0	0
2025	3	0.000	0.000	0.000	0	0
2025	4	0.000	0.000	0.000	0	0
2025	5	0.000	0.000	0.000	0	0
2025	6	0.000	0.000	0.000	0	0
2025	7	0.000	0.000	0.000	0	0
2025	8	0.000	0.000	0.000	0	0
2025	9	0.000	0.000	0.000	0	0
2025	10	0.000	0.000	0.000	0	0
2025	11	0.000	0.000	0.000	0	0
2025	12	0.000	0.000	0.000	0	0
2026	1	0.000	0.000	0.000	0	0
2026	2	0.000	0.000	0.000	0	0
2026	3	0.000	0.000	0.000	0	0
2026	4	0.000	0.000	0.000	0	0
2026	5	0.000	0.000	0.000	0	0
2026	6	0.000	0.000	0.000	0	0
2026	7	0.000	0.000	0.000	0	0
2026	8	0.000	0.000	0.000	0	0
2026	9	0.000	0.000	0.000	0	0
2026	10	0.000	0.000	0.000	0	0
2026	11	0.000	0.000	0.000	0	0
2026	12	0.000	0.000	0.000	0	0

PENNSYLVANIA WEATHER DATA

DU Year	Month	Normal	DATE	CAL. CLDD	CAL. PRCP	CAL. HTDD	MODEL CLDD	MODEL PRCP	MODEL HTDD	Rain	Rain Lag	Rain Lag 2	CDD	CDD Lag	HDD	HDD Lag
2008	1	0	2008.01	0	1.890	1057	0	-0.785	-29	-0.785	0.000	0.000	0.000	0.000	-29	0
2008	2	0	2008.02	0	5.060	1012	0	1.682	133	1.682	-0.785	0.000	-0.400	0.000	133	-29
2008	3	0	2008.03	0	4.100	821	-1	0.779	85	0.779	1.682	-0.785	-0.600	-0.400	85	133
2008	4	0	2008.04	7	2.940	330	-5	-0.701	-63	-0.701	0.779	1.682	-4.800	-0.600	-63	85
2008	5	0	2008.05	14	5.380	246	-64	1.129	101	1.129	-0.701	0.779	-64.200	-4.800	101	-63
2008	6	0	2008.06	171	4.750	17	-3	-1.225	-1	-1.225	1.129	-0.701	-2.600	-64.200	-1	101
2008	7	0	2008.07	239	2.480	0	-40	-2.067	-2	-2.067	-1.225	1.129	-39.500	-2.600	-2	-1
2008	8	0	2008.08	163	2.040	2	-84	-2.964	-1	-2.964	-2.067	-1.225	-84.300	-39.500	-1	-2
2008	9	0	2008.09	85	1.690	34	-33	-1.752	-22	-1.752	-2.964	-2.067	-33.200	-84.300	-22	-1
2008	10	0	2008.10	4	1.960	415	-23	-1.956	108	-1.956	-1.752	-2.964	-22.500	-33.200	108	-22
2008	11	0	2008.11	0	2.060	729	-2	-0.447	74	-0.447	-1.956	-1.752	-1.500	-22.500	74	108
2008	12	0	2008.12	0	6.310	987	0	2.980	130	2.980	-0.447	-1.956	0.000	-1.500	130	74
2009	1	0	2009.01	0	3.060	1316	0	0.385	230	0.385	2.980	-0.447	0.000	0.000	230	130
2009	2	0	2009.02	0	1.070	904	0	-2.308	25	-2.308	0.385	2.980	-0.400	0.000	25	230
2009	3	0	2009.03	0	2.070	697	-1	-1.251	-39	-1.251	-2.308	0.385	-0.600	-0.400	-39	25
2009	4	0	2009.04	29	2.920	411	17	-0.721	18	-0.721	-1.251	-2.308	17.200	-0.600	18	-39
2009	5	0	2009.05	45	3.990	154	-33	-0.261	9	-0.261	-0.721	-1.251	-33.200	17.200	9	18
2009	6	0	2009.06	120	3.200	26	-54	-2.775	8	-2.775	-0.261	-0.721	-53.600	-33.200	8	9
2009	7	0	2009.07	142	4.670	5	-137	0.123	3	0.123	-2.775	-0.261	-136.500	-53.600	3	8
2009	8	0	2009.08	224	2.240	7	-23	-2.764	4	-2.764	0.123	-2.775	-23.300	-136.500	4	3
2009	9	0	2009.09	54	1.720	64	-64	-1.722	8	-1.722	-2.764	0.123	-64.200	-23.300	8	4
2009	10	0	2009.10	0	3.240	428	-27	-0.676	121	-0.676	-1.722	-2.764	-26.500	-64.200	121	8
2009	11	0	2009.11	0	1.060	518	-2	-1.447	-137	-1.447	-0.676	-1.722	-1.500	-26.500	-137	121
2009	12	0	2009.12	0	4.100	1044	0	0.770	187	0.770	-1.447	-0.676	0.000	-1.500	187	-137
2010	1	0	2010.01	0	2.340	1194	0	-0.335	108	-0.335	0.770	-1.447	0.000	0.000	108	187
2010	2	0	2010.02	0	1.560	1067	0	-1.818	188	-1.818	-0.335	0.770	-0.400	0.000	188	108
2010	3	0	2010.03	0	2.950	636	-1	-0.371	-100	-0.371	-1.818	-0.335	-0.600	-0.400	-100	188
2010	4	0	2010.04	29	1.360	289	17	-2.281	-104	-2.281	-0.371	-1.818	17.200	-0.600	-104	-100
2010	5	0	2010.05	86	5.610	112	8	1.359	-33	1.359	-2.281	-0.371	7.800	17.200	-33	-104
2010	6	0	2010.06	203	4.460	11	29	-1.515	-7	-1.515	1.359	-2.281	29.400	7.800	-7	-33
2010	7	0	2010.07	332	3.460	3	54	-1.087	1	-1.087	-1.515	1.359	53.500	29.400	1	-7
2010	8	0	2010.08	300	2.060	0	53	-2.944	-3	-2.944	-1.087	-1.515	52.700	53.500	-3	1
2010	9	0	2010.09	101	3.510	54	-17	0.068	-2	0.068	-2.944	-1.087	-17.200	52.700	-2	-3
2010	10	0	2010.10	5	2.400	299	-22	-1.516	-8	-1.516	0.068	-2.944	-21.500	-17.200	-8	-2
2010	11	0	2010.11	0	5.280	643	-2	2.773	-12	2.773	-1.516	0.068	-1.500	-21.500	-12	-8
2010	12	0	2010.12	0	1.170	1202	0	-2.160	345	-2.160	2.773	-1.516	0.000	-1.500	345	-12
2011	1	0	2011.01	0	1.790	1244	0	-0.885	158	-0.885	-2.160	2.773	0.000	0.000	158	345
2011	2	0	2011.02	0	3.030	807	0	-0.348	-73	-0.348	-0.885	-2.160	-0.400	0.000	-73	158
2011	3	0	2011.03	0	3.920	788	-1	0.599	52	0.599	-0.348	-0.885	-0.600	-0.400	52	-73
2011	4	0	2011.04	19	5.780	357	7	2.139	-36	2.139	0.599	-0.348	7.200	-0.600	-36	52

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DU Year	Month	Normal	DATE	CAL. CLDD	CAL. PRCP	CAL. HTDD	MODEL CLDD	MODEL PRCP	MODEL HTDD	Rain	Rain Lag	Rain Lag 2	CDD	CDD Lag	HDD	HDD Lag
2011	5	0	2011.05	92	4.050	142	14	-0.201	-3	-0.201	2.139	0.599	13.800	7.200	-3	-36
2011	6	0	2011.06	176	1.770	12	2	-4.205	-6	-4.205	-0.201	2.139	2.400	13.800	-6	-3
2011	7	0	2011.07	388	3.930	0	110	-0.617	-2	-0.617	-4.205	-0.201	109.500	2.400	-2	-6
2011	8	0	2011.08	235	4.010	0	-12	-0.994	-3	-0.994	-0.617	-4.205	-12.300	109.500	-3	-2
2011	9	0	2011.09	101	4.850	81	-17	1.408	25	1.408	-0.994	-0.617	-17.200	-12.300	25	-3
2011	10	0	2011.10	2	4.050	367	-25	0.134	60	0.134	1.408	-0.994	-24.500	-17.200	60	25
2011	11	0	2011.11	0	3.930	512	-2	1.423	-143	1.423	0.134	1.408	-1.500	-24.500	-143	60
2011	12	0	2011.12	0	3.100	824	0	-0.230	-34	-0.230	1.423	0.134	0.000	-1.500	-34	-143
2012	1	0	2012.01	0	3.110	968	0	0.435	-118	0.435	-0.230	1.423	0.000	0.000	-118	-34
2012	2	0	2012.02	0	1.800	816	0	-1.578	-64	-1.578	0.435	-0.230	-0.400	0.000	-64	-118
2012	3	0	2012.03	9	2.920	419	8	-0.401	-317	-0.401	-1.578	0.435	8.400	-0.400	-317	-64
2012	4	0	2012.04	6	1.640	439	-6	-2.001	46	-2.001	-0.401	-1.578	-5.800	8.400	46	-317
2012	5	0	2012.05	144	2.740	52	66	-1.511	-93	-1.511	-2.001	-0.401	65.800	-5.800	-93	46
2012	6	0	2012.06	206	1.680	22	32	-4.295	4	-4.295	-1.511	-2.001	32.400	65.800	4	-93
2012	7	0	2012.07	381	6.680	0	103	2.133	-2	2.133	-4.295	-1.511	102.500	32.400	-2	4
2012	8	0	2012.08	237	2.860	1	-10	-2.144	-2	-2.144	2.133	-4.295	-10.300	102.500	-2	-2
2012	9	0	2012.09	107	4.640	109	-11	1.198	53	1.198	-2.144	2.133	-11.200	-10.300	53	-2
2012	10	0	2012.10	20	5.000	346	-7	1.084	39	1.084	1.198	-2.144	-6.500	-11.200	39	53
2012	11	0	2012.11	0	0.700	727	-2	-1.807	72	-1.807	1.084	1.198	-1.500	-6.500	72	39
2012	12	0	2012.12	0	4.430	799	0	1.100	-59	1.100	-1.807	1.084	0.000	-1.500	-59	72
2013	1	0	2013.01	0	3.050	995	0	0.375	-91	0.375	1.100	-1.807	0.000	0.000	-91	-59
2013	2	0	2013.02	0	1.900	1005	0	-1.478	126	-1.478	0.375	1.100	-0.400	0.000	126	-91
2013	3	0	2013.03	0	1.920	917	-1	-1.401	181	-1.401	-1.478	0.375	-0.600	-0.400	181	126
2013	4	0	2013.04	21	2.860	366	9	-0.781	-27	-0.781	-1.401	-1.478	9.200	-0.600	-27	181
2013	5	0	2013.05	90	2.220	155	12	-2.031	10	-2.031	-0.781	-1.401	11.800	9.200	10	-27
2013	6	0	2013.06	168	6.130	13	-6	0.155	-5	0.155	-2.031	-0.781	-5.600	11.800	-5	10
2013	7	1	2013.07	264	8.120	2	-15	3.573	0	3.573	0.155	-2.031	-14.500	-5.600	0	-5
2013	8	1	2013.08	176	2.610	10	-71	-2.394	7	-2.394	3.573	0.155	-71.300	-14.500	7	0
2013	9	1	2013.09	68	1.850	103	-50	-1.592	47	-1.592	-2.394	3.573	-50.200	-71.300	47	7
2013	10	1	2013.10	35	3.150	325	9	-0.766	18	-0.766	-1.592	-2.394	8.500	-50.200	18	47
2013	11	1	2013.11	0	3.160	744	-2	0.653	89	0.653	-0.766	-1.592	-1.500	8.500	89	18
2013	12	1	2013.12	0	4.280	879	0	0.950	22	0.950	0.653	-0.766	0.000	-1.500	22	89
2014	1	1	2014.01	0	1.570	1288	0	-1.105	202	-1.105	0.950	0.653	0.000	0.000	202	22
2014	2	1	2014.02	0	2.310	1026	0	-1.068	147	-1.068	-1.105	0.950	-0.400	0.000	147	202
2014	3	1	2014.03	0	2.200	900	-1	-1.121	164	-1.121	-1.068	-1.105	-0.600	-0.400	164	147
2014	4	1	2014.04	13	4.270	341	1	0.629	-52	0.629	-1.121	-1.068	1.200	-0.600	-52	164
2014	5	1	2014.05	83	5.110	126	5	0.859	-19	0.859	0.629	-1.121	4.800	1.200	-19	-52
2014	6	1	2014.06	217	4.630	4	43	-1.345	-14	-1.345	0.859	0.629	43.400	4.800	-14	-19
2014	7	1	2014.07	210	3.300	11	-69	-1.247	9	-1.247	-1.345	0.859	-68.500	43.400	9	-14
2014	8	1	2014.08	171	6.150	8	-76	1.146	5	1.146	-1.247	-1.345	-76.300	-68.500	5	9

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DU Year	Month	Normal	DATE	CAL. CLDD	CAL. PRCP	CAL. HTDD	MODEL CLDD	MODEL PRCP	MODEL HTDD	Rain	Rain Lag	Rain Lag 2	CDD	CDD Lag	HDD	HDD Lag
2014	9	1	2014.09	79	0.570	81	-39	-2.872	25	-2.872	1.146	-1.247	-39.200	-76.300	25	5
2014	10	1	2014.10	11	2.570	320	-16	-1.346	13	-1.346	-2.872	1.146	-15.500	-39.200	13	25
2014	11	1	2014.11	0	2.160	773	-2	-0.347	118	-0.347	-1.346	-2.872	-1.500	-15.500	118	13
2014	12	1	2014.12	0	3.000	906	0	-0.330	49	-0.330	-0.347	-1.346	0.000	-1.500	49	118
2015	1	1	2015.01	0	2.440	1221	0	-0.235	135	-0.235	-0.330	-0.347	0.000	0.000	135	49
2015	2	1	2015.02	0	1.300	1284	0	-2.078	405	-2.078	-0.235	-0.330	-0.400	0.000	405	135
2015	3	1	2015.03	0	4.280	880	-1	0.959	144	0.959	-2.078	-0.235	-0.600	-0.400	144	405
2015	4	1	2015.04	1	4.540	355	-11	0.899	-38	0.899	0.959	-2.078	-10.800	-0.600	-38	144
2015	5	1	2015.05	132	2.520	92	54	-1.731	-53	-1.731	0.899	0.959	53.800	-10.800	-53	-38
2015	6	1	2015.06	168	10.640	26	-6	4.665	8	4.665	-1.731	0.899	-5.600	53.800	8	-53
2015	7	1	2015.07	247	3.080	0	-32	-1.467	-2	-1.467	4.665	-1.731	-31.500	-5.600	-2	8
2015	8	1	2015.08	198	2.080	6	-49	-2.924	3	-2.924	-1.467	4.665	-49.300	-31.500	3	-2
2015	9	1	2015.09	149	5.220	35	31	1.778	-21	1.778	-2.924	-1.467	30.800	-49.300	-21	3
2015	10	1	2015.10	0	3.270	353	-27	-0.646	46	-0.646	1.778	-2.924	-26.500	30.800	46	-21
2015	11	1	2015.11	3	1.810	433	2	-0.697	-222	-0.697	-0.646	1.778	1.500	-26.500	-222	46
2015	12	1	2015.12	0	3.780	557	0	0.450	-301	0.450	-0.697	-0.646	0.000	1.500	-301	-222
2016	1	1	2016.01	0	1.670	1113	0	-1.005	27	-1.005	0.450	-0.697	0.000	0.000	27	-301
2016	2	1	2016.02	0	3.300	843	0	-0.078	-37	-0.078	-1.005	0.450	-0.400	0.000	-37	27
2016	3	1	2016.03	0	2.250	504	-1	-1.071	-232	-1.071	-0.078	-1.005	-0.600	-0.400	-232	-37
2016	4	1	2016.04	3	2.630	407	-9	-1.011	14	-1.011	-1.071	-0.078	-8.800	-0.600	14	-232
2016	5	1	2016.05	56	5.890	195	-22	1.639	50	1.639	-1.011	-1.071	-22.200	-8.800	50	14
2016	6	1	2016.06	187	3.650	15	13	-2.325	-3	-2.325	1.639	-1.011	13.400	-22.200	-3	50
2016	7	1	2016.07	322	4.270	1	44	-0.277	-1	-0.277	-2.325	1.639	43.500	13.400	-1	-3
2016	8	1	2016.08	353	4.410	0	106	-0.594	-3	-0.594	-0.277	-2.325	105.700	43.500	-3	-1
2016	9	1	2016.09	164	3.220	13	46	-0.222	-43	-0.222	-0.594	-0.277	45.800	105.700	-43	-3
2016	10	1	2016.10	24	4.110	258	-3	0.194	-49	0.194	-0.222	-0.594	-2.500	45.800	-49	-43
2016	11	1	2016.11	4	1.260	573	3	-1.247	-82	-1.247	0.194	-0.222	2.500	-2.500	-82	-49
2016	12	1	2016.12	0	3.980	991	0	0.650	134	0.650	-1.247	0.194	0.000	2.500	134	-82
2017	1	1	2017.01	0	3.700	918	0	1.025	-168	1.025	0.650	-1.247	0.000	0.000	-168	134
2017	2	1	2017.02	2	1.780	661	2	-1.598	-219	-1.598	1.025	0.650	1.600	0.000	-219	-168
2017	3	1	2017.03	4	4.920	771	3	1.599	35	1.599	-1.598	1.025	3.400	1.600	35	-219
2017	4	1	2017.04	22	3.620	239	10	-0.021	-154	-0.021	1.599	-1.598	10.200	3.400	-154	35
2017	5	1	2017.05	47	5.140	175	-31	0.889	30	0.889	-0.021	1.599	-31.200	10.200	30	-154
2017	6	1	2017.06	163	10.980	24	-11	5.005	6	5.005	0.889	-0.021	-10.600	-31.200	6	30
2017	7	1	2017.07	267	7.920	0	-12	3.373	-2	3.373	5.005	0.889	-11.500	-10.600	-2	6
2017	8	1	2017.08	158	4.600	5	-89	-0.404	2	-0.404	3.373	5.005	-89.300	-11.500	2	-2
2017	9	1	2017.09	114	1.300	76	-4	-2.142	20	-2.142	-0.404	3.373	-4.200	-89.300	20	2
2017	10	1	2017.10	38	4.430	239	12	0.514	-68	0.514	-2.142	-0.404	11.500	-4.200	-68	20
2017	11	1	2017.11	0	4.280	664	-2	1.773	9	1.773	0.514	-2.142	-1.500	11.500	9	-68
2017	12	1	2017.12	0	1.350	1058	0	-1.980	201	-1.980	1.773	0.514	0.000	-1.500	201	9

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2018	1	1	2018.01	0	3.130	1205	0	0.455	119	0.455	-1.980	1.773	0.000	0.000	119	201
2018	2	1	2018.02	2	6.470	732	2	3.092	-148	3.092	0.455	-1.980	1.600	0.000	-148	119
2018	3	1	2018.03	0	2.940	937	-1	-0.381	201	-0.381	3.092	0.455	-0.600	1.600	201	-148
2018	4	1	2018.04	13	4.130	577	1	0.489	184	0.489	-0.381	3.092	1.200	-0.600	184	201
2018	5	1	2018.05	133	5.270	25	55	1.019	-120	1.019	0.489	-0.381	54.800	1.200	-120	184
2018	6	1	2018.06	172	10.110	24	-2	4.135	6	4.135	1.019	0.489	-1.600	54.800	6	-120
2018	7	1	2018.07	281	2.330	0	3	-2.217	-2	-2.217	4.135	1.019	2.500	-1.600	-2	6
2018	8	1	2018.08	262	6.370	0	15	1.366	-3	1.366	-2.217	4.135	14.700	2.500	-3	-2
2018	9	1	2018.09	175	11.900	50	57	8.458	-6	8.458	1.366	-2.217	56.800	14.700	-6	-3
2018	10	1	2018.10	59	4.850	392	33	0.934	85	0.934	8.458	1.366	32.500	56.800	85	-6
2018	11	1	2018.11	0	3.740	798	-2	1.233	143	1.233	0.934	8.458	-1.500	32.500	143	85
2018	12	1	2018.12	0	4.590	773	0	1.260	-85	1.260	1.233	0.934	0.000	-1.500	-85	143
2019	1	1	2019.01	0	2.430	1126	0	-0.245	40	-0.245	1.260	1.233	0.000	0.000	40	-85
2019	2	1	2019.02	0	4.730	846	0	1.352	-34	1.352	-0.245	1.260	-0.400	0.000	-34	40
2019	3	1	2019.03	0	1.920	838	-1	-1.401	102	-1.401	1.352	-0.245	-0.600	-0.400	102	-34
2019	4	1	2019.04	5	4.450	315	-7	0.809	-78	0.809	-1.401	1.352	-6.800	-0.600	-78	102
2019	5	1	2019.05	83	4.860	99	5	0.609	-46	0.609	0.809	-1.401	4.800	-6.800	-46	-78
2019	6	1	2019.06	131	5.660	30	-43	-0.315	12	-0.315	0.609	0.809	-42.600	4.800	12	-46
2019	7	1	2019.07	213	4.060	2	-66	-0.487	0	-0.487	-0.315	0.609	-65.500	-42.600	0	12
2019	8	1	2019.08	315	7.420	0	68	2.416	-3	2.416	-0.487	-0.315	67.700	-65.500	-3	0
2019	9	1	2019.09	147	1.870	4	29	-1.572	-52	-1.572	2.416	-0.487	28.800	67.700	-52	-3
2019	10	1	2019.10	38	6.380	288	12	2.464	-19	2.464	-1.572	2.416	11.500	28.800	-19	-52
2019	11	1	2019.11	0	1.760	797	-2	-0.747	142	-0.747	2.464	-1.572	-1.500	11.500	142	-19
2019	12	1	2019.12	0	3.630	882	0	0.300	25	0.300	-0.747	2.464	0.000	-1.500	25	142
2020	1	1	2020.01	0	3.450	899	0	0.775	-187	0.775	0.300	-0.747	0.000	0.000	-187	25
2020	2	1	2020.02	0	3.600	879	0	0.222	-1	0.222	0.775	0.300	-0.400	0.000	-1	-187
2020	3	1	2020.03	2	5.640	574	1	2.319	-162	2.319	0.222	0.775	1.400	-0.400	-162	-1
2020	4	1	2020.04	0	5.120	505	-12	1.479	112	1.479	2.319	0.222	-11.800	1.400	112	-162
2020	5	1	2020.05	63	2.780	253	-15	-1.471	108	-1.471	1.479	2.319	-15.200	-11.800	108	112
2020	6	1	2020.06	177	2.610	14	3	-3.365	-4	-3.365	-1.471	1.479	3.400	-15.200	-4	108
2020	7	1	2020.07	410	3.120	0	132	-1.427	-2	-1.427	-3.365	-1.471	131.500	3.400	-2	-4
2020	8	1	2020.08	285	5.660	0	38	0.656	-3	0.656	-1.427	-3.365	37.700	131.500	-3	-2
2020	9	1	2020.09	98	1.630	81	-20	-1.812	25	-1.812	0.656	-1.427	-20.200	37.700	25	-3
2020	10	1	2020.10	9	3.130	327	-18	-0.786	20	-0.786	-1.812	0.656	-17.500	-20.200	20	25
2020	11	1	2020.11	0	2.470	517	-2	-0.037	-138	-0.037	-0.786	-1.812	-1.500	-17.500	-138	20
2020	12	1	2020.12	0	2.500	928	0	-0.830	71	-0.830	-0.037	-0.786	0.000	-1.500	71	-138
2021	1	1	2021.01	0	1.830	1029	0	-0.845	-57	-0.845	-0.830	-0.037	0.000	0.000	-57	71
2021	2	1	2021.02	0	2.960	993	0	-0.418	114	-0.418	-0.845	-0.830	-0.400	0.000	114	-57
2021	3	1	2021.03	0	3.220	593	-1	-0.101	-143	-0.101	-0.418	-0.845	-0.600	-0.400	-143	114
2021	4	1	2021.04	16	2.330	399	4	-1.311	6	-1.311	-0.101	-0.418	4.200	-0.600	6	-143

PENNSYLVANIA WEATHER DATA

DU Year	Month	Normal	DATE	CAL. CLDD	CAL. PRCP	CAL. HTDD	MODEL CLDD	MODEL PRCP	MODEL HTDD	Rain	Rain Lag	Rain Lag 2	CDD	CDD Lag	HDD	HDD Lag
2021	5	1	2021.05	74	3.180	228	-4	-1.071	83	-1.071	-1.311	-0.101	-4.200	4.200	83	6
2021	6	1	2021.06	222	7.450	17	48	1.475	-1	1.475	-1.071	-1.311	48.400	-4.200	-1	83
2021	7	1	2021.07	254	4.520	0	-25	-0.027	-2	-0.027	1.475	-1.071	-24.500	48.400	-2	-1
2021	8	1	2021.08	308	6.280	0	61	1.276	-3	1.276	-0.027	1.475	60.700	-24.500	-3	-2
2021	9	1	2021.09	83	4.350	33	-35	0.908	-23	0.908	1.276	-0.027	-35.200	60.700	-23	-3
2021	10	1	2021.10	51	4.500	169	25	0.584	-138	0.584	0.908	1.276	24.500	-35.200	-138	-23
2021	11	1	2021.11	0	0.810	679	-2	-1.697	24	-1.697	0.584	0.908	-1.500	24.500	24	-138
2021	12	1	2021.12	0	4.240	694	0	0.910	-164	0.910	-1.697	0.584	0.000	-1.500	-164	24
2022	1	1	2022.01	0	2.610	1238	0	-0.065	152	-0.065	0.910	-1.697	0.000	0.000	152	-164
2022	2	1	2022.02	0	5.450	861	0	2.072	-19	2.072	-0.065	0.910	-0.400	0.000	-19	152
2022	3	1	2022.03	0	2.600	642	-1	-0.721	-94	-0.721	2.072	-0.065	-0.600	-0.400	-94	-19
2022	4	1	2022.04	18	3.590	459	6	-0.051	66	-0.051	-0.721	2.072	6.200	-0.600	66	-94
2022	5	1	2022.05	79	5.760	96	1	1.509	-49	1.509	-0.051	-0.721	0.800	6.200	-49	66
2022	6	1	2022.06	190	1.240	6	16	-4.735	-12	-4.735	1.509	-0.051	16.400	0.800	-12	-49
2022	7	1	2022.07	317	4.750	0	39	0.203	-2	0.203	-4.735	1.509	38.500	16.400	-2	-12
2022	8	1	2022.08	247	4.460	0	0	-0.544	-3	-0.544	0.203	-4.735	-0.300	38.500	-3	-2
2022	9	1	2022.09	105	2.510	87	-13	-0.932	31	-0.932	-0.544	0.203	-13.200	-0.300	31	-3
2022	10	1	2022.10	0	2.770	395	-27	-1.146	88	-1.146	-0.932	-0.544	-26.500	-13.200	88	31
2022	11	1	2022.11	8	3.620	569	7	1.113	-86	1.113	-1.146	-0.932	6.500	-26.500	-86	88
2022	12	1	2022.12	0	1.950	907	0	-1.380	50	-1.380	1.113	-1.146	0.000	6.500	50	-86
2023	1	1	2023.01	0	3.920	825	0	1.245	-261	1.245	-1.380	1.113	0.000	0.000	-261	50
2023	2	1	2023.02	0	1.880	670	0	-1.498	-210	-1.498	1.245	-1.380	-0.400	0.000	-210	-261
2023	3	1	2023.03	0	3.240	725	-1	-0.081	-11	-0.081	-1.498	1.245	-0.600	-0.400	-11	-210
2023	4	1	2023.04	27	1.730	337	15	-1.911	-56	-1.911	-0.081	-1.498	15.200	-0.600	-56	-11
2023	5	1	2023.05	32	2.000	160	-46	-2.251	15	-2.251	-1.911	-0.081	-46.200	15.200	15	-56
2023	6	1	2023.06	109	2.780	23	-65	-3.195	5	-3.195	-2.251	-1.911	-64.600	-46.200	5	15
2023	7	0	2023.07													
2023	8	0	2023.08													
2023	9	0	2023.09													
2023	10	0	2023.10													
2023	11	0	2023.11													
2023	12	0	2023.12													

	NORMAL	NORMAL	NORMAL
	CAL.	CAL.	CAL.
Month	CLDD	PRCP	HTDD
1	0	2.675	1086
2	0	3.378	880
3	1	3.321	736
4	12	3.641	393
5	78	4.251	145
6	174	5.975	18
7	279	4.547	2
8	247	5.004	3
9	118	3.442	56
10	27	3.916	307
11	2	2.507	655
12	0	3.330	858

Normal Start:	2013.07
Normal End	2023.06
Normal Months	120.00

PENNSYLVANIA SALES-USAGE DATA

Not Including Shale Gas

Obs	DU Year	Month	Res Cust	Res Sales	Res Adjust	Com Cust	Com Sales	Com Adjust	OPA Cust	OPA Sales	OPA Adjust	Ind Cust	Ind Sales	Ind Adjust	Resale Cust	Resale Sales	Resale Adjust	Production	Res COVID	Com COVID	OPA COVID
1	2008	1	578987	2652382	0	42370	1054535	0	2293	230990	0	843	357816	0	22	48398	0	6631616	0	0	0
2	2008	2	579235	2345982	0	42342	960424	0	2293	197559	0	843	384249	0	22	45706	0	6131911	0	0	0
3	2008	3	579614	2173053	0	42358	918425	0	2355	189383	0	843	381354	0	21	49794	0	6437546	0	0	0
4	2008	4	580127	2372217	0	42633	1031332	0	2477	211992	0	843	385702	0	20	44869	0	6215398	0	0	0
5	2008	5	580106	2377272	0	42734	1042963	0	2503	194427	0	842	460582	0	20	48884	0	6415951	0	0	0
6	2008	6	580539	2603258	0	42744	1112866	0	2521	224088	0	828	331628	0	20	52940	0	6643926	0	0	0
7	2008	7	580901	2723529	0	42873	1206788	0	2526	242539	0	831	445968	0	20	49241	0	6900382	0	0	0
8	2008	8	582223	2652609	0	42895	1226019	0	2536	230467	0	823	434150	0	20	57678	0	6982442	0	0	0
9	2008	9	582538	2667523	0	42776	1278607	0	2506	266544	0	810	444817	0	20	57308	0	6449154	0	0	0
10	2008	10	582620	2608924	0	42684	1181856	0	2400	262140	0	808	453528	0	20	56547	0	6288745	0	0	0
11	2008	11	582823	2110860	0	42617	920291	0	2335	185250	0	800	350068	0	20	48727	0	6077960	0	0	0
12	2008	12	582800	2454428	0	42589	1055671	0	2323	204200	0	804	336538	0	21	56984	0	6424172	0	0	0
13	2009	1	582785	2544922	0	42552	971953	0	2315	192890	0	800	306883	0	21	43140	0	6647774	0	0	0
14	2009	2	583025	2307932	0	42592	983208	0	2316	187963	0	797	341933	0	21	47727	0	6010903	0	0	0
15	2009	3	583414	2291848	0	42656	1047015	0	2376	195977	0	794	347796	0	21	42909	0	6345921	0	0	0
16	2009	4	583808	2302642	0	42837	979761	0	2484	195859	0	788	324310	0	21	44978	0	6038039	0	0	0
17	2009	5	583529	2284518	0	43022	980840	0	2505	172705	0	771	328163	0	21	52197	0	6364558	0	0	0
18	2009	6	583419	2621962	0	43030	1154195	0	2516	221170	0	758	349717	0	21	57494	0	6229429	0	0	0
19	2009	7	583627	2656779	0	43079	1166278	0	2519	217505	0	745	344799	0	21	46020	0	6543924	0	0	0
20	2009	8	584272	2402500	0	43124	1124622	0	2524	210990	0	734	352846	0	21	55862	0	6538560	0	0	0
21	2009	9	584347	2463035	0	43123	1156482	0	2504	230924	0	728	356164	0	20	48670	0	6248347	0	0	0
22	2009	10	585660	2470712	0	43069	1152311	0	2425	213833	0	740	335439	0	20	53877	0	6206123	0	0	0
23	2009	11	585774	2174790	0	42959	954294	0	2361	189911	0	728	301920	0	20	43605	0	5879757	0	0	0
24	2009	12	585777	2436213	0	42874	1088018	0	2324	189335	0	716	316209	0	20	45847	0	6194813	0	0	0
25	2010	1	585774	2469856	0	42911	951134	0	2327	179823	0	700	305106	0	21	48192	0	6444779	0	0	0
26	2010	2	586358	2286153	0	42923	938611	0	2322	173086	0	706	320624	0	21	42369	0	5725281	0	0	0
27	2010	3	586868	2247645	0	43112	1012084	0	2404	190893	0	692	348259	0	21	49748	0	6209066	0	0	0
28	2010	4	587242	2354074	0	43365	1005599	0	2529	195402	0	689	348733	0	21	42915	0	5926841	0	0	0
29	2010	5	586881	2249638	0	43671	1015483	0	2550	195611	0	674	340308	0	21	43407	0	6187620	0	0	0
30	2010	6	586752	2631401	0	43693	1136425	0	2560	217038	0	654	382515	0	21	47769	0	6203765	0	0	0
31	2010	7	586952	2800080	0	43701	1248292	0	2566	230428	0	653	430937	0	21	51761	0	6913912	0	0	0
32	2010	8	587454	2638351	0	43814	1230538	0	2577	234245	0	645	432784	0	21	51357	0	6761184	0	0	0
33	2010	9	587623	2647376	0	43873	1278440	0	2552	246721	0	633	413505	0	21	51409	0	6395070	0	0	0
34	2010	10	587530	2372625	0	43683	1140391	0	2475	219969	0	625	387036	0	21	44413	0	6103778	0	0	0
35	2010	11	587440	2147926	0	43530	1000427	0	2378	180401	0	622	344908	0	21	41718	0	5828126	0	0	0
36	2010	12	587386	2371303	0	43385	1039150	0	2362	181502	0	618	341460	0	21	53383	0	6318149	0	0	0
37	2011	1	587484	2425037	0	43418	1001877	0	2358	164299	0	618	322510	0	22	47113	0	6465805	0	0	0
38	2011	2	587848	2216258	0	43473	960045	0	2361	163655	0	619	343897	0	22	44013	0	5849485	0	0	0
39	2011	3	588189	2268045	0	43486	994168	0	2405	173241	0	616	356029	0	22	33348	0	6204788	0	0	0
40	2011	4	588540	2178101	0	43672	972402	0	2531	170091	0	616	348628	0	22	62849	0	5867241	0	0	0
41	2011	5	588252	2264481	0	43907	1003179	0	2560	176663	0	616	337072	0	22	38318	0	6215843	0	0	0
42	2011	6	588060	2655332	0	43972	1165958	0	2584	203346	0	617	389572	0	22	52153	0	6330499	0	0	0
43	2011	7	588071	2573253	0	44231	1187348	0	2465	202579	0	531	390917	0	22	51307	0	6891526	0	0	0
44	2011	8	588566	2702485	0	44282	1275601	0	2469	221253	0	532	427654	0	24	56780	0	6443606	0	0	0
45	2011	9	588430	2428060	0	44304	1219229	0	2457	204603	0	532	393004	0	24	44438	0	5927751	0	0	0
46	2011	10	588423	2220599	0	44111	1074957	0	2381	184136	0	534	349589	0	23	47116	0	5987956	0	0	0
47	2011	11	588386	2114682	0	43925	982710	0	2306	170667	0	527	341162	0	23	46021	0	5713879	0	0	0
48	2011	12	588325	2281348	0	43870	1070460	0	2287	159891	0	522	316788	0	23	50425	0	5953578	0	0	0
49	2012	1	588478	2373058	0	43823	991217	0	2275	156467	0	525	301755	0	23	54887	0	6059895	0	0	0
50	2012	2	588917	2139219	0	43845	950543	0	2273	153319	0	525	334179	0	24	46476	0	5530920	0	0	0
51	2012	3	589346	2178692	0	44040	1008589	0	2379	155438	0	524	332606	0	23	54709	0	5804740	0	0	0
52	2012	4	589823	2156937	0	44210	998665	0	2439	158829	0	523	359374	0	23	52288	0	5587528	0	0	0

PENNSYLVANIA SALES-USAGE DATA

Not Including Shale Gas

Obs	DU Year	Month	Res Cust	Res Sales	Res Adjust	Com Cust	Com Sales	Com Adjust	OPA Cust	OPA Sales	OPA Adjust	Ind Cust	Ind Sales	Ind Adjust	Resale Cust	Resale Sales	Resale Adjust	Production	Res COVID	Com COVID	OPA COVID
53	2012	5	589334	2311424	0	44393	1066179	0	2463	174726	0	523	345813	0	23	51671	0	6040320	0	0	0
54	2012	6	589419	2549736	0	44452	1173183	0	2473	193956	0	524	351995	0	24	64471	0	6140070	0	0	0
55	2012	7	589443	2773942	0	44516	1293051	0	2475	225565	0	521	366602	0	24	73914	0	6481278	0	0	0
56	2012	8	590100	2449467	0	44583	1255261	0	2475	200785	0	519	385328	0	24	66278	0	6223900	0	0	0
57	2012	9	590129	2416762	0	44549	1246222	0	2465	219678	0	519	389690	0	24	70987	0	5740033	0	0	0
58	2012	10	590545	2204784	0	44462	1174272	0	2384	177588	0	520	330064	0	24	62298	0	5740995	0	0	0
59	2012	11	590508	2170799	0	44339	1060476	0	2286	162920	0	520	311824	0	25	69898	0	5546140	0	0	0
60	2012	12	590808	2227324	0	44302	1001751	0	2271	147316	0	517	269665	0	25	66299	0	5737818	0	0	0
61	2013	1	590977	2332430	0	44221	1026353	0	2271	145747	0	515	307466	0	25	63673	0	6006753	0	0	0
62	2013	2	591470	2170196	0	44227	994205	0	2274	156201	0	515	336955	0	24	63704	0	5444808	0	0	0
63	2013	3	592105	2117255	0	44310	992308	0	2303	148579	0	516	307125	0	24	68006	0	5828003	0	0	0
64	2013	4	592264	2153601	0	44509	993196	0	2440	156419	0	516	325419	0	24	62345	0	5658900	0	0	0
65	2013	5	591781	2262238	0	44697	1062781	0	2455	176010	0	515	359257	0	24	70195	0	6135744	0	0	0
66	2013	6	591733	2505865	0	44728	1169406	0	2463	192267	0	515	320471	0	24	63309	0	6038812	0	0	0
67	2013	7	591888	2372267	0	44780	1167967	0	2465	170229	0	515	365797	0	24	69761	0	6264270	0	0	0
68	2013	8	592369	2414428	0	44820	1212792	0	2464	191285	0	512	383426	0	24	72715	0	6056784	0	0	0
69	2013	9	592245	2323869	0	44760	1228046	0	2464	180458	0	513	424502	0	24	60609	0	5801582	0	0	0
70	2013	10	597092	2153860	0	44973	1094491	0	2406	176954	0	513	308519	0	24	68659	0	5854564	0	0	0
71	2013	11	596889	2143493	0	44816	1001988	0	2302	147394	0	528	302969	0	24	50226	0	5488085	0	0	0
72	2013	12	596793	2157024	0	44800	928260	0	2299	65298	80000	528	116300	160000	24	6126	50000	5825969	0	0	0
73	2014	1	597327	2364109	0	44757	1075158	0	2300	230114	-80000	528	473761	-160000	25	115081	-50000	6322281	0	0	0
74	2014	2	596962	2283430	0	44735	1056146	0	2300	163740	0	528	381299	-50000	24	73370	0	5802555	0	0	0
75	2014	3	597062	2048745	0	44743	1050009	0	2344	159285	0	528	369841	-40000	24	55893	0	6107581	0	0	0
76	2014	4	596881	2190953	0	44826	1035595	0	2421	192262	-30000	529	504466	-140000	24	69313	0	5681926	0	0	0
77	2014	5	596409	2154777	0	44935	1032792	0	2449	132861	30000	528	428443	-40000	24	60641	0	6001100	0	0	0
78	2014	6	596756	2291459	0	44934	1073051	0	2454	183940	0	529	225625	140000	24	58216	0	5951353	0	0	0
79	2014	7	597147	2444625	0	44926	1201938	0	2455	187139	0	528	429447	-30000	24	79139	0	6243420	0	0	0
80	2014	8	597203	2371306	0	44971	1202098	0	2454	182785	0	528	193069	160000	24	64054	0	6147136	0	0	0
81	2014	9	597462	2349630	0	44955	1174634	0	2445	195962	0	528	382440	0	24	66766	0	5920775	0	0	0
82	2014	10	597524	2164563	0	44813	1143875	0	2397	186890	0	525	355703	0	24	58487	0	5835349	0	0	0
83	2014	11	597335	2081455	0	44628	1039125	0	2298	165255	0	524	331209	0	24	63192	0	5576026	0	0	0
84	2014	12	597479	2159590	0	44599	1027776	0	2278	147993	0	525	342136	0	24	57826	0	5819770	0	0	0
85	2015	1	597621	2254798	0	44515	979228	0	2262	140413	0	524	288163	0	24	59803	0	6056894	0	0	0
86	2015	2	597822	2037073	0	44477	958041	0	2260	150902	0	524	348566	0	24	57242	0	5691028	0	0	0
87	2015	3	598207	2155256	0	44543	1039817	0	2322	157555	0	525	328631	0	25	48632	0	6334397	0	0	0
88	2015	4	598625	2134677	0	44714	1053328	0	2412	159030	0	524	287682	0	24	72477	0	5730349	0	0	0
89	2015	5	597986	2155022	0	44854	1040192	0	2423	168230	0	523	331956	0	24	51663	0	6192238	0	0	0
90	2015	6	598123	2374625	0	44904	1149823	0	2424	180068	0	522	348705	0	24	68471	0	5815290	0	0	0
91	2015	7	598212	2282829	0	44963	1189309	0	2439	172289	0	522	360843	0	23	74446	0	6093272	0	0	0
92	2015	8	598580	2492964	0	44962	1285547	0	2444	192705	0	521	369747	0	23	44793	0	6355915	0	0	0
93	2015	9	598960	2360954	0	44944	1378537	0	2444	195650	0	522	407499	0	23	62859	0	5964960	0	0	0
94	2015	10	598874	2194453	0	44830	1138523	0	2381	172193	0	523	338968	0	22	61975	0	5771601	0	0	0
95	2015	11	599240	2069520	0	44667	1023543	0	2274	160003	0	521	324588	0	22	55431	0	5448471	0	0	0
96	2015	12	599380	2258024	0	44603	1110894	0	2254	156651	-10000	520	320615	0	22	62038	0	5617996	0	0	0
97	2016	1	599524	2151324	0	44615	968680	0	2252	154782	-10000	519	284548	0	22	59839	0	5878329	0	0	0
98	2016	2	600159	1947744	0	44655	973578	0	2245	105794	40000	520	238145	20000	22	49258	0	5555033	0	0	0
99	2016	3	600642	2031663	0	44775	1006630	0	2310	152818	-10000	519	371140	-20000	22	55663	0	5708125	0	0	0
100	2016	4	600940	2203104	0	44858	1055770	0	2409	159961	-10000	520	327022	0	22	59323	0	5526353	0	0	0
101	2016	5	601028	2043971	0	45003	996008	0	2431	145875	0	520	351260	0	22	50962	0	5865651	0	0	0
102	2016	6	601147	2347125	0	45047	1145373	0	2436	168833	0	520	410648	0	22	59998	0	5961033	0	0	0
103	2016	7	601359	2543747	0	45075	1233279	0	2440	172930	0	521	367622	0	22	70256	0	6220756	0	0	0
104	2016	8	602054	2265070	0	45107	1202830	0	2441	174071	0	521	282117	0	22	62736	0	6156705	0	0	0

PENNSYLVANIA SALES-USAGE DATA Not Including Shale Gas

Obs	DU Year	Month	Res Cust	Res Sales	Res Adjust	Com Cust	Com Sales	Com Adjust	OPA Cust	OPA Sales	OPA Adjust	Ind Cust	Ind Sales	Ind Adjust	Resale Cust	Resale Sales	Resale Adjust	Production	Res COVID	Com COVID	OPA COVID
105	2016	9	602368	2396708	0	45038	1266264	0	2428	194424	0	522	404821	0	22	67138	0	5852848	0	0	0
106	2016	10	602465	2205627	0	44919	1137202	0	2384	175527	0	522	350877	0	22	58709	0	5710839	0	0	0
107	2016	11	602625	1965947	0	44797	978002	0	2259	145357	0	522	308153	0	22	54741	0	5433605	0	0	0
108	2016	12	602856	2072587	0	44788	984376	0	2259	138989	0	522	276562	0	22	58906	0	5728515	0	0	0
109	2017	1	603389	2313944	0	44757	1026720	0	2234	143333	0	522	309438	0	22	66214	0	5739165	0	0	0
110	2017	2	603795	2033582	0	44737	951842	0	2232	148106	0	522	307520	0	22	56046	0	4988547	0	0	0
111	2017	3	604388	1888418	0	44792	946083	0	2303	127833	0	522	284309	0	22	51404	0	5506276	0	0	0
112	2017	4	604497	2176537	0	45033	1024370	0	2391	132929	0	523	282155	0	22	57841	0	5529878	0	0	0
113	2017	5	604466	2035704	0	45147	1056532	0	2424	159216	0	523	341843	0	22	47322	0	5759405	0	0	0
114	2017	6	604646	2381865	0	45183	1129991	0	2428	172979	0	522	328432	0	22	65138	0	5746987	0	0	0
115	2017	7	604712	2331325	0	45215	1148907	0	2424	173017	0	522	365190	0	22	64021	0	5965476	0	0	0
116	2017	8	605210	2115991	0	45253	1133146	0	2427	172017	0	523	356493	0	22	54737	0	5908649	0	0	0
117	2017	9	605274	2294462	0	45254	1185156	0	2417	177470	0	523	370340	0	22	66547	0	5678537	0	0	0
118	2017	10	605542	2070079	0	45186	1112129	0	2373	164114	0	525	347764	0	22	55117	0	5705670	0	0	0
119	2017	11	605539	2041047	0	45030	989904	0	2240	146403	0	525	272098	0	22	48919	0	5312470	0	0	0
120	2017	12	605770	2154098	0	44995	1050636	0	2225	143072	0	525	338672	0	22	68029	0	5635817	0	0	0
121	2018	1	605987	2261765	0	44995	1023824	0	2218	142275	0	523	290352	0	22	63920	0	6357897	0	0	0
122	2018	2	606288	2143648	0	45017	1039240	0	2219	162647	0	523	334453	0	22	58971	0	5389598	0	0	0
123	2018	3	606729	1903550	0	45026	939563	0	2247	132711	0	522	308866	0	22	46989	0	5868848	0	0	0
124	2018	4	607071	2038092	0	45211	986816	0	2381	135346	0	522	323474	0	22	50101	0	5647760	0	0	0
125	2018	5	606742	2067698	0	45307	919600	0	2399	153806	0	521	318389	0	22	60058	0	6026165	0	0	0
126	2018	6	606877	2308300	0	45315	1246948	0	2401	175766	0	521	377843	0	22	60059	0	5921493	0	0	0
127	2018	7	607090	2281037	0	45329	1154181	0	2400	176090	0	521	356276	0	22	58795	0	6312397	0	0	0
128	2018	8	607391	2164390	0	45357	1145609	0	2398	172395	0	521	370693	0	22	56269	0	6007767	0	0	0
129	2018	9	607368	2273197	0	45319	1210549	0	2391	207208	0	522	376437	0	22	57845	0	5749749	0	0	0
130	2018	10	607602	2012343	0	45159	1078514	0	2340	158181	0	523	382073	0	23	59437	0	5731371	0	0	0
131	2018	11	607787	2063613	0	45035	1024229	0	2244	150619	0	521	306185	0	22	54011	0	5472280	0	0	0
132	2018	12	607947	2036897	0	44989	979257	0	2234	139876	0	523	269540	0	23	62366	0	5733739	0	0	0
133	2019	1	608339	2158382	0	45063	956835	0	2231	141030	0	522	296514	0	22	55756	0	5830681	0	0	0
134	2019	2	608788	2091242	0	45067	978793	0	2232	148737	0	521	294523	0	22	54291	0	5537762	0	0	0
135	2019	3	609106	1953107	0	45113	950982	0	2259	151516	0	521	322251	0	22	57165	0	5834470	0	0	0
136	2019	4	609423	1948955	0	45230	944298	0	2351	166277	0	522	292449	0	22	54847	0	5566284	0	0	0
137	2019	5	609341	2028709	0	45363	1002505	0	2380	152948	0	522	313134	0	22	51023	0	5925671	0	0	0
138	2019	6	609185	2278534	0	45392	1076783	0	2381	168441	0	523	331235	0	22	56415	0	5810436	0	0	0
139	2019	7	609916	2185039	0	45464	1107107	0	2384	160889	0	523	331421	0	22	57814	0	6225171	0	0	0
140	2019	8	610054	2250213	0	45493	1194214	0	2386	187993	0	523	347492	0	23	64476	0	6273923	0	0	0
141	2019	9	610572	2269703	0	45493	1173426	0	2376	190054	0	523	363806	0	22	62909	0	6058410	0	0	0
142	2019	10	613052	2024240	0	45489	1098226	0	2318	164815	0	534	317578	0	22	57221	0	5974121	0	0	0
143	2019	11	613091	2075722	0	45317	1033986	0	2212	144694	0	533	306507	0	23	56045	0	5773307	0	0	0
144	2019	12	613460	2023445	0	45299	989151	0	2198	138263	0	532	314518	0	22	65878	0	5896591	0	0	0
145	2020	1	613855	2126416	0	45311	931230	0	2197	131397	0	531	280100	0	22	58314	0	5866351	0	0	0
146	2020	2	614148	2074991	0	45334	978886	0	2197	154003	0	530	332124	0	22	56644	0	5356535	0	0	0
147	2020	3	614940	1912268	0	45361	920067	0	2277	131943	0	525	310569	0	22	52197	0	5484517	0	0	0
148	2020	4	615330	2192496	0	45484	818423	0	2320	87429	0	528	328264	0	22	52250	0	5255666	1	1	1
149	2020	5	615811	2220773	0	45635	800388	0	2350	79860	0	530	293525	0	23	53057	0	5713103	1	1	1
150	2020	6	616730	2461502	0	45742	910797	0	2366	115467	0	530	322201	0	25	62755	0	5903511	1	1	1
151	2020	7	617571	2585941	0	45786	1108774	0	2370	151492	0	529	339776	0	25	62795	0	6478120	1	1	1
152	2020	8	618309	2656758	0	45852	1134650	0	2375	158517	0	532	383558	0	24	65049	0	6318650	1	1	1
153	2020	9	618810	2393470	0	45848	1113708	0	2378	158350	0	534	345805	0	24	73057	0	5845487	1	1	1
154	2020	10	619258	2204669	0	45692	1014772	0	2305	136532	0	534	300435	0	24	55056	0	5785603	1	1	1
155	2020	11	619675	2171382	0	45639	1012584	0	2217	121935	0	533	294749	0	24	63389	0	5506322	1	1	1
156	2020	12	620045	2099373	0	45623	890783	0	2207	88308	20000	535	309933	0	24	49631	0	5674935	0.4	0.4	0.4

PENNSYLVANIA SALES-USAGE DATA Not Including Shale Gas

Obs	DU Year	Month	Res Cust	Res Sales	Res Adjust	Com Cust	Com Sales	Com Adjust	OPA Cust	OPA Sales	OPA Adjust	Ind Cust	Ind Sales	Ind Adjust	Resale Cust	Resale Sales	Resale Adjust	Production	Res COVID	Com COVID	OPA COVID
157	2021	1	620477	2361609	0	45627	937136	0	2204	114575	0	538	293580	0	24	61174	0	5809751	0.4	0.4	0.4
158	2021	2	620790	2061229	0	45650	874487	0	2208	96119	20000	538	302220	0	24	56570	0	5440902	0.4	0.4	0.4
159	2021	3	621236	1955886	0	45742	878084	0	2260	121501	0	538	317602	0	24	56204	0	5739592	0.4	0.4	0.4
160	2021	4	621730	2191425	0	45835	987900	0	2370	124194	0	540	335374	0	24	58105	0	5568849	0.4	0.4	0.4
161	2021	5	621545	2127575	0	45924	944961	0	2385	121868	0	540	301213	0	25	65739	0	6010022	0.4	0.4	0.4
162	2021	6	621725	2287392	0	46019	1008081	0	2387	133393	0	541	349812	0	24	59784	0	5925707	0.4	0.4	0.4
163	2021	7	621798	2404108	0	45991	1116574	0	2392	152837	0	541	390972	0	24	63946	0	6119891	0.4	0.4	0.4
164	2021	8	621924	2291784	0	45988	1124545	0	2395	162906	0	541	419391	0	24	62359	0	6173604	0.4	0.4	0.4
165	2021	9	621968	2292157	0	45982	1131486	0	2386	169303	0	540	392455	0	24	72746	0	5669430	0.4	0.4	0.4
166	2021	10	621994	2109303	0	45918	1058176	0	2356	155902	0	540	359125	0	24	60583	0	5853852	0.4	0.4	0.4
167	2021	11	623943	1951149	0	45864	911185	0	2285	135092	0	540	333448	0	24	54505	0	5658541	0.4	0.4	0.4
168	2021	12	624174	2085909	0	45796	931391	0	2256	124615	0	543	296746	0	23	59928	0	5754191	0.4	0.4	0.4
169	2022	1	624389	2253989	0	45880	936872	0	2253	117236	0	541	289184	0	19	55105	0	5999115	0.4	0.4	0.4
170	2022	2	624655	2022715	0	45956	949002	0	2254	134166	0	540	389115	0	19	70383	0	5664058	0.4	0.4	0.4
171	2022	3	625136	1922092	0	46052	894488	0	2289	122719	0	541	277011	0	19	54929	0	5914958	0.4	0.4	0.4
172	2022	4	625220	2152755	0	46163	1014196	0	2358	146987	-10000	542	422303	0	19	42616	0	5707681	0.4	0.4	0.4
173	2022	5	625422	2019483	0	46238	915061	0	2384	136222	10000	541	356858	0	19	60456	0	6073985	0.4	0.4	0.4
174	2022	6	625448	2295389	0	46255	1050571	0	2392	174538	-20000	542	391070	0	20	71818	0	6019056	0.4	0.4	0.4
175	2022	7	625369	2478821	0	46237	1097377	0	2394	148763	20000	541	416537	0	20	61129	0	6477895	0.4	0.4	0.4
176	2022	8	625597	2225827	0	46272	1090069	0	2399	166719	0	541	405421	0	20	59329	0	6396990	0.4	0.4	0.4
177	2022	9	625777	2354320	0	46387	1160136	0	2296	180983	0	542	364755	0	20	64301	0	5846157	0.4	0.4	0.4
178	2022	10	625932	2153004	0	46286	1035702	0	2256	163114	0	544	431937	0	20	63315	0	5847689	0.4	0.4	0.4
179	2022	11	625937	1886200	0	46178	918030	0	2186	131500	0	544	348147	0	20	53981	0	5575120	0.4	0.4	0.4
180	2022	12	625996	2033811	0	46149	924307	0	2178	114220	0	543	307221	0	20	48947	0	5953795	0.4	0.4	0.4
181	2023	1	626438	2306260	0	46187	1078803	0	2181	169426	-40000	544	421312	0	20	80884	0	5993570	0.4	0.4	0.4
182	2023	2	626788	2006561	0	46204	934031	0	2181	124447	0	546	358906	0	20	53843	0	5251664	0.4	0.4	0.4
183	2023	3	627166	1871830	0	46267	892054	0	2213	127703	0	545	333962	0	20	70497	0	5639452	0.4	0.4	0.4
184	2023	4	627185	2170023	0	46595	948922	0	2292	140851	0	546	297109	0	20	12022	0	5535413	0.4	0.4	0.4
185	2023	5	627516	1953916	0	46750	959066	0	2302	140785	0	546	367623	0	20	79352	0	6017376	0.4	0.4	0.4
186	2023	6	627622	2474960	0	46726	1113821	0	2303	163114	0	546	424933	0	21	126912	0	6032844	0.4	0.4	0.4
187	2023	7																			
188	2023	8																			
189	2023	9																			
190	2023	10																			
191	2023	11																			
192	2023	12																			

Pennsylvania-American Water Company
Revenue Decoupling Mechanism Cost Component Calculations

Water Service

Total Allocated Production Cost		$ 44,102,668
Total Usage		426,915,017
Volumetric Charge		$ 0.1033

	Residential	Non-Residential
Revenue	$ 657,085,231	$ 329,288,301
Usage	244,720,725	182,194,292
Customers	632,960	50,146
Variable Revenues	$ 25,280,996	$ 18,821,672
Fixed Revenue	$ 631,804,235	$ 310,466,629
Fixed Charge per Month	$ 83.18	$ 515.94

Wastewater Service

Total Allocated Production Cost		$ 10,966,458
Total Usage		70,850,870
Volumetric Charge		$ 0.1548

	Residential	Non-Residential
Revenue	$ 120,509,001	$ 58,959,807
Usage	41,040,379	29,810,491
Customers	108,262	8,974
Variable Revenues	$ 6,352,323	$ 4,614,135
Fixed Revenue	$ 114,156,678	$ 54,345,672
Fixed Charge per Month	$ 87.87	$ 504.66

Pennsylvania-American Water Company
Revenue Decoupling Mechanism Cost Component Calculations

Water Service

		Total	Residential	Commercial	Industrial	Pub. Auth.	OWU-A	OWU-B	Total	Reference
Source of Supply	Purchased Water	$ 3,099,741	$ 1,762,200	$ 914,845	$ 262,507	$ 133,427	$ 53	$ 949	$ 3,073,981	Water Cost of Service
	Purchased Power	$ 2,955,902	$ 1,680,428	$ 872,393	$ 250,326	$ 127,236	$ 50	$ 905	$ 2,931,337	Water Cost of Service
	Purchased Fuel	$ 67,006	$ 38,093	$ 19,776	$ 5,675	$ 2,884	$ 1	$ 21	$ 66,449	Water Cost of Service
Water Treatment	Purchased Power	$ 12,368,422	$ 7,031,439	$ 3,650,365	$ 1,047,443	$ 532,394	$ 210	$ 3,785	$ 12,265,636	Water Cost of Service
	Chemicals	$ 23,183,305	$ 13,179,693	$ 6,842,224	$ 1,963,322	$ 997,916	$ 393	$ 7,095	$ 22,990,643	Water Cost of Service
	Waste Disposal	$ 2,797,872	$ 1,590,588	$ 825,752	$ 236,943	$ 120,433	$ 47	$ 856	$ 2,774,621	Water Cost of Service
Production Cost	Total	$ 44,472,248	$ 25,282,442	$ 13,125,355	$ 3,766,217	$ 1,914,289	$ 754	$ 13,611	$ 44,102,668	
Revenue			$ 657,085,231	$ 254,604,000	$ 48,143,685	$ 26,209,929	$ 53,666	$ 277,021	$ 986,373,532	Exhibit 10-A Water Operations
Usage			244,720,725	127,063,605	36,459,701	18,531,842	7,251	131,893	426,915,017	Exhibit 10-A Water Operations
Customers			632,960	47,285	549	2,310	1	1	683,106	FR II.09 Average of customer counts for 12-months ended June 2024 and June 2025
			Volumetric Charge (VC):			-			$ 0.1033	
Variable Revenues			$ 25,280,996	$ 13,126,369	$ 3,766,487	$ 1,914,441	$ 749	$ 13,625	$ 44,102,668	
Fixed Revenue			$ 631,804,235	$ 241,477,631	$ 44,377,198	$ 24,295,488	$ 52,917	$ 263,396	$ 942,270,864	
Fixed Charge per Month			$ 83.18	$ 425.57	$ 6,736.07	$ 876.46	$ 4,409.74	$ 21,949.64		
Fixed Charge Revenue			$ 147,703,375	$ 41,188,559	$ 4,113,325	$ 3,973,974	$ 44,892	$ 48,846	$ 197,072,971	Exhibit 10-A Water Operations
Variable Charge Revenue			$ 509,381,856	$ 213,415,441	$ 44,030,360	$ 22,235,955	$ 8,774	$ 228,175	$ 789,300,561	

$ 1,999,839	industrial contract fixed revenue	Exhibit 10-A Water Operations
$ 2,482,260	industrial contract variable revenue	Exhibit 10-A Water Operations
$ 153,596	resale contract fixed revenue	Exhibit 10-A Water Operations
$ 3,162,494	resale contract variable revenue	Exhibit 10-A Water Operations
$ 18,151,353	fire revenue	Exhibit 10-A Water Operations
$ 11,031,091	other	Exhibit 10-A Water Operations
$ 1,023,354,165	total	

Pennsylvania-American Water Company
Revenue Decoupling Mechanism Cost Component Calculations

Wastewater Service - SSS

		Total	Residential	Non-Residential	Large Industrial	Bulk VA/Hosp	Bulk - Contract	Total	Reference
Sewage Treatment	Purchased Power	$ 3,234,166	$ 1,525,959	$ 636,810	$ 39,244	$ 92,452	$ 939,702	$ 3,234,166	SSS Wastewater Cost of Service
	Chemicals	$ 1,810,725	$ 854,345	$ 356,534	$ 21,972	$ 51,761	$ 526,114	$ 1,810,725	SSS Wastewater Cost of Service
	Misc. Operating Expense - Waste Disposal	$ 2,572,562	$ 1,213,798	$ 506,540	$ 31,216	$ 73,539	$ 747,469	$ 2,572,562	SSS Wastewater Cost of Service
Collection	Purchased Power	$ 92,962	$ 66,629	$ 24,238	$ 974	$ 1,121	$ -	$ 92,962	SSS Wastewater Cost of Service
Production Cost	Total	$ 7,710,415	$ 3,660,730	$ 1,524,122	$ 93,405	$ 218,873	$ 2,213,286	$ 7,710,415	
Revenue			$ 60,277,357	$ 20,704,933	$ 1,299,305	$ 2,076,363	$ 9,778,961	$ 94,136,919	Exhibit 10-B WW SSS Operations
Usage			19,261,924	8,923,126	631,588	1,665,419	18,684,743	49,166,800	Exhibit 10-B WW SSS Operations
Customers			52,485	3,616	6	8	1	56,116	FR II.09 Average of customer counts for 12-months ended June 2024 and June 2025
						-			
			Volumetric Charge (VC):					$ 0.1568	
Variable Revenues			$ 3,020,685	$ 1,399,339	$ 99,047	$ 261,174	$ 2,930,171	$ 7,710,415	
Fixed Revenue			$ 57,256,672	$ 19,305,594	$ 1,200,258	$ 1,815,189	$ 6,848,790	$ 86,426,504	
Fixed Charge per Month			$ 90.91	$ 444.91	$ 16,670.26	$ 18,908.22	$ 570,732.51		
Fixed Charge Revenue			$ 12,055,084	$ 3,759,373	$ 364,554	$ 107,144	$ -	$ 16,286,155	Exhibit 10-B WW SSS Operations
Variable Charge Revenue			$ 48,222,273	$ 16,945,560	$ 934,751	$ 1,969,219	$ 9,778,961	$ 77,850,764	

	Customers	Usage	Total Revenue	Fixed Revenue	
commercial	3,423	$ 8,000,281	$ 18,219,315	$ 3,057,425	Exhibit 10-B WW SSS Operations / FRII.09
industrial	28	$ 916,639	$ 2,333,791	$ 856,103	Exhibit 10-B WW SSS Operations / FRII.09
municipal	145	$ 637,795	$ 1,451,132	$ 210,399	Exhibit 10-B WW SSS Operations / FRII.09
bulk	35	$ 20,350,161	$ 9,778,961	$ 107,144	Exhibit 10-B WW SSS Operations / FRII.09
large industrial	6	$ 631,588	$ 1,299,305	$ 364,554	Exhibit 10-B WW SSS Operations / FRII.09
bulk VA/Hosp	8	$ 1,665,419	$ 2,076,363	$ 107,144	Exhibit 10-B WW SSS Operations / FRII.09
Bulk - Contract	1	$ 18,684,743	$ 7,702,598	$ -	Exhibit 10-B WW SSS Operations / FRII.09

Pennsylvania-American Water Company
Revenue Decoupling Mechanism Cost Component Calculations

Wastewater Service - CSS

		Total	Residential	Non-Residential	Industrial	Bulk	CSO Stormwater	Total	Reference
Sewage Treatment	Purchased Power	$ 1,408,498	$ 331,417	$ 203,028	$ 27,658	$ 76,478	$ 769,917	$ 1,408,498	CSS Wastewater Cost of Service
	Chemicals	$ 2,105,466	$ 1,092,714	$ 669,405	$ 91,190	$ 252,156	$ -	$ 2,105,466	CSS Wastewater Cost of Service
	Waste Disposal	$ 1,344,100	$ 697,573	$ 427,339	$ 58,215	$ 160,973	$ -	$ 1,344,100	CSS Wastewater Cost of Service
Collection	Purchased Power	$ 44,450	$ 10,459	$ 6,407	$ 873	$ 2,414	$ 24,297	$ 44,450	CSS Wastewater Cost of Service
Production Cost	Total	$ 4,902,514	$ 2,132,164	$ 1,306,179	$ 177,936	$ 492,021	$ 794,214	$ 4,902,514	
Reallocation			$ 450,637	$ 252,401	$ 40,505	$ 50,671	$ (794,214)	$ -	
Revenue			$ 46,347,480	$ 20,866,852	$ 2,267,854	$ 8,253,737		$ 77,735,923	Exhibit 10-B WW CSS Operations
Usage			15,320,595	10,064,528	1,269,373	4,724,512		31,379,008	Exhibit 10-B WW CSS Operations
Customers			38,394	3,960	35	9		42,398	FR II.09 Average of customer counts for 12-months ended June 2024 and June 2025
			Volumetric Charge (VC):					$ 0.1562	
Variable Revenues			$ 2,393,620	$ 1,572,436	$ 198,321	$ 738,136		$ 4,902,514	
Fixed Revenue			$ 43,953,860	$ 19,294,416	$ 2,069,533	$ 7,515,601		$ 72,833,409	
Fixed Charge per Month			$ 95.40	$ 406.03	$ 4,927.46	$ 69,588.90			
Fixed Charge Revenue			$ 9,385,905	$ 2,984,537	$ 49,762	$ 180,110		$ 12,600,314	Exhibit 10-B WW CSS Operations
Variable Charge Revenue			$ 36,961,575	$ 17,882,315	$ 2,218,092	$ 8,073,627		$ 65,135,609	

Pennsylvania-American Water Company
Revenue Decoupling Mechanism Cost Component Calculations

Wastewater Service - BASA

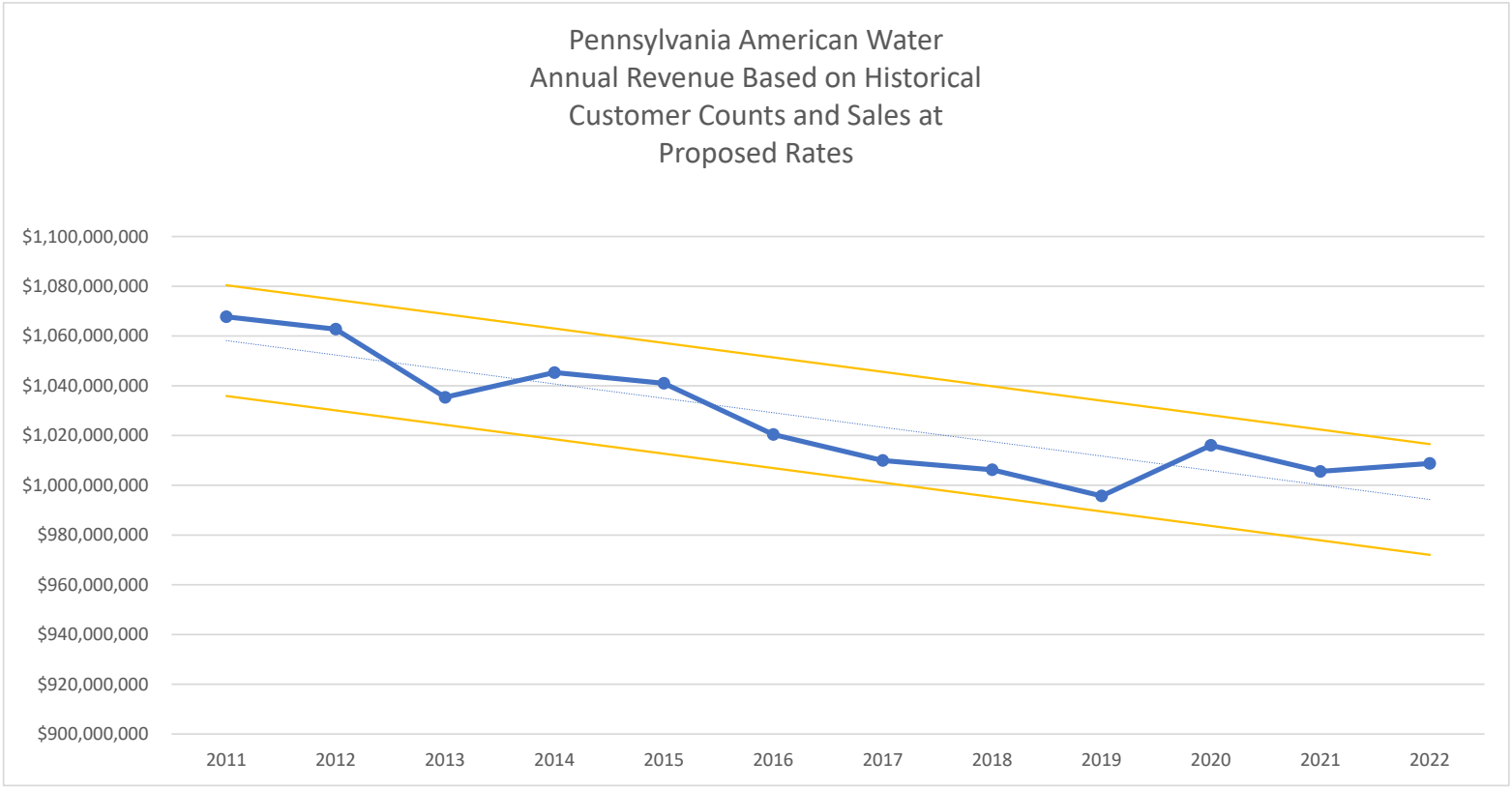
		Total	Residential	Non-Residential	Total	Reference
Sewage Treatment	Purchased Power	$ 368,561	$ 286,926	$ 81,635	$ 368,561	BASA Wastewater Cost of Service
	Chemicals	$ 221,550	$ 172,478	$ 49,072	$ 221,550	BASA Wastewater Cost of Service
	Waste Disposal	$ 59,515	$ 46,333	$ 13,182	$ 59,515	BASA Wastewater Cost of Service
Collection	Purchased Power	$ 10,594	$ 8,544	$ 2,050	$ 10,594	BASA Wastewater Cost of Service
Production Cost	Total	$ 660,220	$ 514,281	$ 145,939	$ 660,220	
Revenue			$ 12,170,706	$ 4,320,902	$ 16,491,608	Exhibit 10-B WW BASA Operations
Usage			5,146,601	2,753,537	7,900,138	Exhibit 10-B WW BASA Operations
Customers			13,688	1,067	14,755	FR II.09 Average of customer counts for 12-months ended June 2024 and June 2025
			Volumetric Charge (VC):		$ 0.0836	
Variable Revenues			$ 430,105	$ 230,115	$ 660,220	
Fixed Revenue			$ 11,740,601	$ 4,090,787	$ 15,831,388	
Fixed Charge per Month			$ 71.48	$ 319.49		
Fixed Charge Revenue			$ 1,701,082	$ 640,800	$ 2,341,882	Exhibit 10-B WW BASA Operations
Variable Charge Revenue			$ 10,469,624	$ 3,680,102	$ 14,149,726	

Pennsylvania-American Water Company
Revenue Decoupling Mechanism Cost Component Calculations

Wastewater Service - Brentwood

		Total	Residential	Non-Residential	Total	Reference
Sewage Treatment	Purchased Power	$ -	$ -	$ -	$ -	Brentwood Wastewater Cost of Service
	Chemicals	$ -	$ -	$ -	$ -	Brentwood Wastewater Cost of Service
	Waste Disposal	$ -	$ -	$ -	$ -	Brentwood Wastewater Cost of Service
Collection	Purchased Power	$ -	$ -	$ -	$ -	Brentwood Wastewater Cost of Service
Production Cost	Total	$ -	$ -	$ -	$ -	
Revenue			$ 1,713,458	$ 469,166	$ 2,182,624	Exhibit 10-B WW Brentwood Operations
Usage			1,311,259	409,996	1,721,255	Exhibit 10-B WW Brentwood Operations
Customers			3,695	279	3,974	FR II.09 Average of customer counts for 12-months ended June 2024 and June 2025
			Volumetric Charge (VC):		$ -	
Variable Revenues			$ -	$ -	$ -	
Fixed Revenue			$ 1,713,458	$ 469,166	$ 2,182,624	
Fixed Charge per Month			$ 38.64	$ 140.13		
Fixed Charge Revenue			$ 439,387	$ 66,960	$ 506,347	Exhibit 10-B WW Brentwood Operations
Variable Charge Revenue			$ 1,274,071	$ 402,206	$ 1,676,277	

Pennsylvania-American Water Company
RDM Analysis
Annual Revenue Volatility at Proposed Rates



Annual Revenue Decline (Forecast):	$	(5,806,896)
Annual Uncertainty:	$	11,128,798 +/- 1 standard deviation above or below the trend line
80/20	$	14,267,119

Total revenue does not include revenue for fire service or Sales for Resale customers and is not adjusted for acquisitions

Pennsylvania-American Water Company
Response to Distribution Rates – Statement of Policy
Proposed Revenue Stabilization Mechanism

52 Pa. Code § 69.3302. Distribution rate considerations.

(a) In determining just and reasonable alternative distribution ratemaking mechanisms and rate designs that promote the purpose and scope of this statement of policy and the objectives of 66 Pa.C.S. § 1330 (relating to alternative ratemaking for utilities), the Commission may consider, among other relevant factors, the following:

(1) How the ratemaking mechanism and rate design align revenues with cost causation principles as to both fixed and variable costs.

The RDM better aligns actual revenue collection with authorized revenues for all customer classes. The RDM specifically treats fixed and variable costs separately by customer class using rate design concepts associated with Straight-Fixed Variable ("SFV") pricing. The RDM is calculated and administered separately for residential and non-residential customer classes and treats fixed cost and variable cost separately so that fixed cost recovery is aligned with approved fixed costs (per customer) and variable cost recovery is aligned with approved variable costs (per hundred gallons of water). The recovery mechanism is on a volumetric basis.

(2) How the ratemaking mechanism and rate design impact the fixed utility's capacity utilization.

The Company's proposed RDM is not expected to impact the fixed utility's capacity utilization.

(3) Whether the ratemaking mechanism and rate design reflect the level of demand associated with the customer's anticipated consumption levels.

The Company's proposed RDM directly reflects changing consumption levels in variable cost recovery. As consumption levels increase, the Company's variable cost recovery increases, but only by the approved level of production cost per unit delivered or billed. The opposite is true whereas consumption levels decrease, the Company's variable cost recovery decreases, but only by the approved level of production cost per unit delivered or billed.

(4) How the ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting.

The proposed RDM would apply to both water and wastewater service with separate tariffs and separate recovery/credit mechanisms for residential and

nonresidential customers. The proposed RDM will not affect interclass or intraclass cost shifting between residential and non-residential customer classes.

(5) How the ratemaking mechanism and rate design limit or eliminate disincentives for the promotion of efficiency programs.

The proposed RDM reduces the throughput incentive, which gives the Company an incentive to collect more revenue when customers increase consumption. By connecting variable cost recovery directly to approved levels of production cost but not to fixed cost, the RDM removes this incentive from the Company and therefore eliminates any disincentives for the promotion of water efficiency efforts.

(6) How the ratemaking mechanism and rate design impact customer incentives to employ efficiency measures and distributed energy resources.

See response to item (5). The proposed mechanism encourages water efficiency by reducing the throughput incentive. In addition, if customers employ efficiency measures, those measures will far outweigh any surcharges that may result from the proposed RDM.

(7) How the ratemaking mechanism and rate design impact low-income customers and support consumer assistance programs.

The proposed RDM does not have any specific impacts on low-income customers that do not apply to residential customers generally. Because the recovery mechanism is volumetric in nature, lower-use low-income customers will not be adversely impacted.

(8) How the ratemaking mechanism and rate design impact customer rate stability principles.

The proposed RDM will, by definition, improve rate stability. In years where revenues are relatively low relative to SFV pricing and fixed costs are under recovered, rates would increase slightly in the next year to bring actual revenues back up. The opposite would be true in years where usage resulted in revenues that were higher than that implied by SFV pricing, which represents a scenario where fixed costs are over-recovered. In higher revenue years, the RDM will reduce rates which would offset higher revenues from the year before and "smooth out" revenues over the longer term.

(9) How weather impacts utility revenue under the ratemaking mechanism and rate design.

Weather will still have an impact on revenues but only to the extent that variable costs are impacted. Under the proposed RDM, volatility of utility revenue and

customer bills would be reduced over the long term. Increases in fixed cost recovery revenue due to abnormal weather variations (*e.g.*, drought conditions) would be returned to customers in the following year, and reductions in fixed cost recovery due to abnormal weather variations (*e.g.*, excessive rainfall) would be collected from customers in the following year.

(10) How the ratemaking mechanism and rate design impact the frequency of rate case filings and affect regulatory lag.

To the extent that future rate cases are driven by lower-than-expected usage, the RDM likely would result in fewer rate cases, or at least rate cases seeking lower rate increases. However, the RDM does not affect future revenue requirements and does not recover fixed costs that are incurred after a rate case that are over and above those approved by the Commission. Therefore, if future rate cases are driven by future investment needs and associated cost recovery, the RDM would not reduce the need for such cases.

(11) If or how the ratemaking mechanism and rate design interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa.C.S. § 1307 (relating to sliding scale of rates; adjustments), riders such as 66 Pa.C.S. § 2804(9) (relating to standards for restructuring of electric industry) or system improvement charges, 66 Pa.C.S. § 1353 (relating to distribution system improvement charge).

The Company's proposed RDM does not interact with other revenue sources.

(12) Whether the alternative ratemaking mechanism and rate design include appropriate consumer protections.

The RDM proposal includes consumer protections through the formal reconciliation process which includes audits and external stakeholder review. Tariff administration of the mechanism will contain consumer protections to make sure that the appropriate levels of revenue are being collected. Customers still can control their bill through controlling usage because the standard rate design still applies.

(13) Whether the alternative ratemaking mechanism and rate design are understandable to consumers.

The Company does not anticipate that there would be any issues related to customer confusion over the proposed RDM. Revenue reconciliation riders are not new to the utility industry. There is no reason to think that customers would be more confused about an RDM surcharge or credit on their bill than they would be for any other rate design element that makes up a part of the customer's bill.

(14) How the ratemaking mechanism and rate design will support improvements in utility reliability.

The proposed RDM will support improvements in utility reliability by permitting the Company to more reliably recover fixed costs that can't be avoided by customers using less water, and will therefore enhance the Company's ability to prudently invest in and manage the business.

Resolution Endorsing Consideration of Alternative Regulation that Supports Capital Investment in the 21st Century for Water and Wastewater Utilities

WHEREAS, Through the *Resolution Supporting Consideration of Regulatory Policies Deemed as "Best Practices"* (2005), the National Association of Regulatory Utility Commissioners (NARUC) has previously recognized the important role of innovative regulatory policies and mechanisms in facilitating the efforts of water and wastewater utilities to address their significant infrastructure investment challenges; *and*

WHEREAS, Traditional cost of service ratemaking, which has worked reasonably well in the past for water and wastewater utilities, no longer adequately addresses the challenges of today and tomorrow. Revenue, driven by declining use per customer, is flat to decreasing, while the nature of investment (rate base) has shifted largely from plant needed for serving new customers to non-revenue producing infrastructure replacement and compliance with new drinking water standards; *and*

WHEREAS, The traditional cost of service model is not well adapted to a no/low growth, high investment utility environment and is unlikely to encourage the necessary future investment in infrastructure replacement; *and*

WHEREAS, Compared to the water and wastewater industry, the electric and natural gas delivery industries have in place a larger number and a greater variety of alternative regulation policies, such as multiyear rate plans and rate stabilization programs, and those set forth in the 2005 Resolution; *and*

WHEREAS, The U.S. water industry is the most capital intensive sector of regulated utilities and faces critical investment needs that are expected to total $335 billion to $1 trillion over the next quarter century, as noted in the *American Society of Civil Engineers 2013 Report Card for America's Infrastructure*; *and*

WHEREAS, Tap water is physically ingested and the quality of the service must be maintained to protect the health and economic well-being of communities across our Nation and comply with current and future regulations covering the control of a number of contaminants from nitrosamines to chromium, at a cost estimated at $42 billion by the EPA as part of their April 2013 Report to Congress; *and*

WHEREAS, Alternative regulatory mechanisms can enhance the efficiency and effectiveness of water and wastewater utility regulation by reducing regulatory costs, increasing rates for customers, when necessary, on a more gradual basis; and providing the predictability and regulatory certainty that supports the attraction of debt and equity capital at reasonable costs and maintains that access at all times; *now, therefore be it*

RESOLVED, That the National Association of Regulatory Utility Commissioners, convened at its 125th Annual Meeting in Orlando, Florida, supports consideration of alternative regulation plans and mechanisms along with and in addition to the policies and mechanisms outlined in the

Resolution Supporting Consideration of Regulatory Policies Deemed as "Best Practices" adopted by the NARUC Board of Directors on July 27, 2005; *and be it further*

RESOLVED, That the Committee on Water stands ready to assist economic regulators with implementation of alternative regulatory approaches that support water companies' capital investment needs of the 21st century.

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Sponsored by the Committee on Water
Recommended by the NARUC Board of Directors November 19, 2013
Adopted by the NARUC Committee of the Whole November 20, 2013.

PENNSYLVANIA-AMERICAN WATER COMPANY -WATER OPERATIONS
SUMMARY OF APPLICATION OF PRESENT RATES AND PROPOSED RATES
12 MONTHS ENDING JUNE 30, 2025

				Industrial		Other Water Utilities			
Rate Zone	Residential	Commercial	Municipal	Industrial	Demand-Base (DIS)	Group A	Group B	Demand Base (DRS)	Total
Present Rate Application									
Zone 1 - Most Areas	$522,999,786	$200,907,426	$22,435,668	$36,410,605	$4,482,099	$51,822	$202,436	$3,316,086	$790,805,928
Zone 2 - Valley	1,043,121	29,411	75,767	1,113					1,149,412
Zone 3 - SLIBCO		91,756							91,756
Zone 4 - Turbotville	204,873	78,140	462						283,475
Zone 5 - Steelton	1,989,568	528,625	28,265	1,162,540					3,708,998
Zone XX - Audubon	1,704,395	1,082,718	16,137						2,803,250
Zone XX - Farmington	348,300	61,560	3,240	6,480					419,580
	$528,290,043	$202,779,636	$22,559,539	$37,580,738	$4,482,099	$51,822	$202,436	$3,316,086	$799,262,399
Private Fire Services									$5,301,032
Public Fire Services									9,519,368
Other Operating Revenues									10,034,383
Total @ Present Rate	**$528,290,043**	**$202,779,636**	**$22,559,539**	**$37,580,738**	**$4,482,099**	**$51,822**	**$202,436**	**$3,316,086**	**$824,117,182**
Proposed Rate Application									
Zone 1 - Most Areas	$650,135,557	$251,893,124	$26,076,480	$46,851,860	$4,482,099	$53,666	$277,021	$3,316,086	$983,085,893
Zone 2 - Valley	1,702,506	38,644	80,459	1,841					1,823,450
Zone 3 - SLIBCO		127,997							127,997
Zone 4 - Turbotville	254,523	109,665	516						364,704
Zone 5 - Steelton	2,497,937	620,944	29,349	1,282,213					4,430,443
Zone XX - Audubon	2,079,612	1,754,433	19,213						3,853,258
Zone XX - Farmington	415,097	59,193	3,912	7,870					486,072
	$657,085,231	$254,604,000	$26,209,929	$48,143,784	$4,482,099	$53,666	$277,021	$3,316,086	$994,171,817
Private Fire Services									$6,304,285
Public Fire Services									11,847,068
Other Operating Revenues									11,031,091
Total @ Proposed Rate	**$657,085,231**	**$254,604,000**	**$26,209,929**	**$48,143,784**	**$4,482,099**	**$53,666**	**$277,021**	**$3,316,086**	**$1,023,354,261**
Change in Revenues	$128,795,188	$51,824,364	$3,650,390	$10,563,046	$0	$1,844	$74,585	$0	$199,237,079
% Change in Revenues	24.38%	25.56%	16.18%	28.11%	0.00%	3.56%	36.84%	0.00%	24.18%

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
YEAR ENDING JUNE 30, 2023, 2024, AND 2025

Residential Class	6/30/2023 Usage (in 100 Gallons)	6/30/2023 Number of Bills	6/30/2023 Annualized Revenues	6/30/2024 Usage (in 100 Gallons)	6/30/2024 Number of Bills	6/30/2024 Proforma Revenues	6/30/2025 Usage (in 100 Gallons)	6/30/2025 Number of Bills	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 1 - Most Areas	249,208,709	7,481,320	$522,362,856	244,766,574	7,494,100	$515,579,067	241,716,468	7,520,140	$11,758,549	$522,999,786	$650,135,557	24.00%
Zone 2 - Valley	616,689	19,625	657,814	616,689	19,625	1,019,668	616,689	19,625	23,453	1,043,121	1,702,506	63.00%
Zone 4 - Turbotville	90,738	3,177	200,266	90,738	3,177	200,266	90,738	3,177	4,607	204,873	254,523	24.00%
Zone 5 - Steelton	952,450	25,908	1,944,835	952,450	25,908	1,944,835	952,450	25,908	44,733	1,989,568	2,497,937	26.00%
Zone XX - Audubon				1,344,380	31,812	1,704,395	1,344,380	31,812	0	1,704,395	2,079,612	22.00%
Zone XX - Farmington				146,750	5,160	348,300	146,750	5,160	0	348,300	415,097	19.00%
Total Residential	250,868,586	7,530,031	$525,165,771	247,770,830	7,579,783	$520,796,531	244,720,725	7,605,823	$11,831,342	$528,290,043	$657,085,231	24.00%

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
YEAR ENDING JUNE 30, 2023, 2024, AND 2025

Rate Zone 1	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	5,872,690	$17.50	$102,772,077	5,887,750	$17.50	$103,035,627	5,900,530	$17.50	$2,374,963	$105,634,240	$20.00	$118,010,602	12.00%
3/4 - Meter	10,260	17.50	179,550	11,244	17.50	196,770	11,244	17.50	4,526	201,296	20.00	224,881	12.00%
1 - Meter	83,487	17.50	1,461,019	83,487	17.50	1,461,019	83,487	17.50	33,603	1,494,622	20.00	1,669,735	12.00%
1 1/2 - Meter	672	17.50	11,768	672	17.50	11,768	672	17.50	271	12,039	20.00	13,449	12.00%
2 - Meter	1,144	121.80	139,315	1,144	121.80	139,315	1,144	121.80	3,204	142,519	132.00	150,982	6.00%
3 - Meter	0	227.20	0	0	227.20	0	0	227.20	0	0	246.00	0	0.00%
4 - Meter	159	285.10	45,363	159	285.10	45,363	159	285.10	1,043	46,406	308.00	49,007	6.00%
6 - Meter	76	426.80	32,473	76	426.80	32,473	76	426.80	747	33,220	461.00	35,075	6.00%
8 - Meter	4	826.30	3,441	4	826.30	3,441	4	826.30	79	3,520	893.00	3,719	6.00%
Subtotal	5,968,493		$104,645,006	5,984,537		$104,925,776	5,997,317		$2,418,436	$107,567,862		$120,157,450	12.00%
Sprinkler Customer Charge													
5/8-METER	1,398,759	$17.50	$24,478,288	1,398,759	$17.50	$24,478,288	1,398,759	$17.50	$563,001	$25,041,289	$20.00	$27,975,187	12.00%
3/4-METER	587	17.50	10,264	587	17.50	10,264	587	17.50	236	10,500	20.00	11,730	12.00%
1-METER	94,581	17.50	1,655,172	94,581	17.50	1,655,172	94,581	17.50	38,069	1,693,241	20.00	1,891,626	12.00%
1.5-METER	1,638	17.50	28,672	1,638	17.50	28,672	1,638	17.50	659	29,331	20.00	32,768	12.00%
2-METER	203	17.50	3,548	203	17.50	3,548	203	17.50	82	3,630	20.00	4,055	12.00%
8-METER	6	17.50	112	6	17.50	112	6	17.50	3	115	20.00	128	11.00%
Subtotal	1,495,775		$26,176,056	1,495,775		$26,176,056	1,495,775		$602,050	$26,778,106		29,915,494	12.00%
Unmetered Customers	1,009	$70.00	$70,636	1,009	$70.00	$70,636	1,009	$70.00	$1,625	$72,261	$90.00	$90,817	26.00%
Usage (in 100 Gallons)													
All Usage	257,369,377	$1.6108	$414,570,592	249,208,709	$1.6108	$401,425,389	244,766,574	$1.6108	$9,068,210	$403,338,207	$2.1319	$521,817,859	29.00%
Low Income:													
Low Income Discount Tier 1			($3,362,130)			($3,271,202)			($74,066)	($3,294,311)		($4,143,045)	
Low Income Discount Tier 2			(3,383,060)			(3,298,181)			(74,764)	(3,325,378)		($4,149,160)	
Low Income Discount Tier 3			(3,753,818)			(3,665,618)			(83,172)	(3,699,361)		($4,585,986)	
Low Income Discount Tier 4												($2,986,152)	
Adjustment (1):													
5/8 - Meter	15,060	$17.50	$263,550	12,780	$17.50	$223,650	25,560	$17.50	$10,288	$457,588	$20.00	$511,200	12.00%
All Usage	518,926	$1.6108	835,887	440,364	$1.6108	709,338	880,728	$1.6108	32,630	1,451,306	$2.1319	$1,877,623	29.00%
Adjustment (2):													
All Usage	(8,712,299)	$1.6108	($14,033,772)	(4,882,499)	$1.6108	(7,864,730)	(3,946,197)	$1.6108	($146,200)	($6,502,733)	$2.1319	($8,412,897)	29.00%
All Usage Low Income Tier 1	(70,563)	(1.2886)	90,928	(39,545)	(1.2886)	50,957	(31,961)	(1.2886)	947	42,132		0	-100.00%
All Usage Low Income Tier 2	(105,387)	(0.8054)	84,879	(59,060)	(0.8054)	47,567	(47,735)	(0.8054)	884	39,329		0	-100.00%
All Usage Low Income Tier 3	(219,022)	(0.4027)	88,200	(122,743)	(0.4027)	49,429	(99,205)	(0.4027)	919	40,869		0	-100.00%
Adjustment (3):													
3/4 - Meter	984	$17.50	$17,220				480	$17.50	$193	$8,593	20.00	$9,600	12.00%
All Usage	32,706	$1.6108	52,682				15,363	$1.6108	569	25,316	$2.1319	32,753	29.00%
RZ 1 Residential Usage	249,208,709			244,766,574			241,716,468						
RZ 1 Residential Revenues			**$522,362,856**			**$515,579,067**			**$11,758,549**	**$522,999,786**		**$650,135,557**	**24.00%**

Note (1) Adjustment to account for the growth (loss) in customers.
Note (2) Adjustment to account for normalization in usage trend including the impact of declining usage
Note (3) Adjustment to add revenues from Creekside Homeowner's Association

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Rate Zone 2 Valley	Billing Determinants	Current Rate	Annualized Annualized Revenue	Billing Determinants	Current Rate	Proforma Annualized Revenue	Billing Determinants	Current Rate	Proforma DSIC Revenues	Proforma Proforma @ Present Rate	Proposed Rate	Proforma Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	19,373	$28.12	$544,768	19,373	$17.50	$339,027	19,373	$17.50	$7,798	$346,825	$20.00	$387,459	12.00%
3/4 - Meter													
1 - Meter	252	28.12	7,086	252	17.50	4,410	252	$17.50	101	4,511	20.00	5,040	12.00%
1 1/2 - Meter													
Subtotal	19,625		$551,854	19,625		$343,437	19,625		$7,899	$351,336		$392,499	
Usage (in 100 Gallons)													
First 3,400 Gal	487,769	$0.0000	$0	487,769	$1.1000	$536,546	487,769	$1.1000	$12,341	$548,887	$2.1319	$1,039,876	89.00%
All Over 3,400 Gal	128,919	0.8400	108,292	128,919	1.1000	141,811	128,919	1.1000	3,262	145,073	2.1319	274,843	89.00%
Subtotal	616,689		$108,292	616,689		$678,357	616,689		$15,603	$693,960		$1,314,719	
Low Income:													
Low Income Discount Tier 1			($1,047)			($1,000)			(23)	($1,023)		($1,670)	
Low Income Discount Tier 2			-			-			0	-		$0	
Low Income Discount Tier 3			(1,285)			(1,126)			(26)	(1,152)		($1,782)	
Low Income Discount Tier 4			-			-						($1,259)	
RZ 2 Residential Usage	616,689			616,689			616,689						
RZ 2 Residential Revenues			**$657,814**			**$1,019,668**			**$23,453**	**$1,043,121**		**$1,702,506**	**63.00%**

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Rate Zone 4 Turbotville	Billing Determinants	Current Rate	Annualized Annualized Revenue	Billing Determinants	Current Rate	Proforma Annualized Revenue	Billing Determinants	Current Rate	Proforma DSIC Revenues	Proforma Proforma @ Present Rate	Proposed Rate	Proforma Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	3,177	$17.50	$55,603	3,177	$17.50	$55,603	3,177	$17.50	$1,279	$56,882	$20.00	$63,546	12.00%
3/4 - Meter	0	17.50	0	0	17.50	0	0	17.50	0	0	20.00	0	0.00%
1 - Meter	0	17.50	0	0	17.50	0	0	17.50	0	0	20.00	0	0.00%
1 1/2 - Meter	0	17.50	0	0	17.50	0	0	17.50	0	0	20.00	0	0.00%
2 - Meter	0	121.80	0	0	121.80	0	0	121.80	0	0	132.00	0	0.00%
3 - Meter	0	227.20	0	0	227.20	0	0	227.20	0	0	246.00	0	0.00%
4 - Meter	0	285.10	0	0	285.10	0	0	285.10	0	0	308.00	0	0.00%
Subtotal	3,177		$55,603	3,177		$55,603	3,177		$1,279	$56,882		$63,546	12.00%
Usage (in 100 Gallons)													
All Usage	90,738	$1.6108	$146,161	90,738	$1.6108	$146,161	90,738	$1.6108	$3,362	$149,523	$2.1319	$193,444	29.00%
Low Income:													
Low Income Discount Tier 1			($610)			($610)			(14)	($624)		($777)	
Low Income Discount Tier 2			-			-			0	-		$0	
Low Income Discount Tier 3			(888)			(888)			(20)	(908)		($1,115)	
Low Income Discount Tier 4												($576)	
RZ 4 Residential Usage	90,738			90,738			90,738						
RZ 4 Residential Revenues			**$200,266**			**$200,266**			**$4,607**	**$204,873**		**$254,523**	**24.00%**

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Rate Zone 5 Steelton	Billing Determinants	Current Rate	Annualized Annualized Revenue	Billing Determinants	Current Rate	Proforma Annualized Revenue	Billing Determinants	Current Rate	Proforma DSIC Revenues	Proforma Proforma @ Present Rate	Proposed Rate	Proforma Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	25,716	$17.50	$450,029	25,716	$17.50	$450,029	25,716	$17.50	$10,351	$460,380	$20.00	$514,319	12.00%
3/4 - Meter	0	17.50	0	0	17.50	0	0	17.50	0	0	20.00	0	0.00%
1 - Meter	180	17.50	3,155	180	17.50	3,155	180	17.50	73	3,228	20.00	3,606	12.00%
1 1/2 - Meter	0	17.50	0	0	17.50	0	0	17.50	0	0	20.00	0	0.00%
2 - Meter	12	121.80	1,462	12	121.80	1,462	12	121.80	34	1,496	132.00	1,584	6.00%
3 - Meter	0	227.20	0	0	227.20	0	0	227.20	0	0	246.00	0	0.00%
4 - Meter	0	285.10	0	0	285.10	0	0	285.10	0	0	308.00	0	0.00%
Subtotal	25,908		$454,646	25,908		$454,646	25,908		$10,458	$465,104		$519,509	12.00%
Usage (in 100 Gallons)													
First 1,700 Gal	375,303	$1.6108	$604,538	375,303	$1.6108	$604,538	375,303	$1.6108	$13,904	$618,442	$2.1319	$800,108	29.00%
Next 18,300 Gal	541,283	1.6108	871,898	541,283	1.6108	871,898	541,283	1.6108	20,054	891,952	2.1319	1,153,960	29.00%
Next 30,000 Gal	23,011	1.2500	28,764	23,011	1.2500	28,764	23,011	1.2500	662	29,426	2.1319	49,057	67.00%
All Over 50,000 Gal	12,854	1.2500	16,067	12,854	1.2500	16,067	12,854	1.2500	370	16,437	2.1319	27,403	67.00%
Subtotal	952,450		$1,521,267	952,450		$1,521,267	952,450		$34,990	$1,556,257		$2,030,528	30.00%
Low Income:													
Low Income Discount Tier 1			($11,047)			($11,047)			(254)	($11,301)		($14,166)	
Low Income Discount Tier 2			(5,902)			(5,902)			(136)	(6,038)		($7,515)	
Low Income Discount Tier 3			(14,129)			(14,129)			(325)	(14,454)		($17,881)	
Low Income Discount Tier 4												($12,539)	
RZ 5 Residential Usage	952,450			952,450			952,450						
RZ 5 Residential Revenues			**$1,944,835**			**$1,944,835**			**$44,733**	**$1,989,568**		**$2,497,937**	**26.00%**

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Rate Zone XX Audubon	Billing Determinants	Current Rate	Annualized Annualized Revenue	Billing Determinants	Current Rate	Proforma Annualized Revenue	Billing Determinants	Current Rate	Proforma DSIC Revenues	Proforma Proforma @ Present Rate	Proposed Rate	Proforma Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter		$16.80	$0	31,380	$16.80	$527,184	31,380	$16.80		$527,184	$16.80	$527,184	0.00%
3/4 - Meter		16.80	0		16.80	0		16.80		0	16.80	0	0.00%
1 - Meter		42.80	0	432	42.80	18,490	432	42.80		18,490	42.80	18,490	0.00%
1 1/2 - Meter		72.90	0		72.90	0		72.90		0	72.90	0	
2 - Meter		116.40	0		116.40	0		116.40		0	116.40	0	
3 - Meter		218.60	0		218.60	0		218.60		0	218.60	0	
4 - Meter		363.90	0		363.90	0		363.90		0	363.90	0	
6 - Meter		727.80	0		727.80	0		727.80		0	727.80	0	
8 - Meter		1,164.60	0		1,164.60	0		1,164.60		0	1,164.60	0	
10 - Meter		1,410.60	0		1,410.60	0		1,410.60		0	1,410.60	0	
Flat Rate		170.92	0	0	170.92	0	0	170.92		0			
Subtotal	0		$0	31,812		$545,674	31,812		$0	$545,674		$545,674	0.00%
Usage (in 100 Gallons)													
All Usage		$0.8619	$0	1,344,380	$0.8619	$1,158,721	1,344,380	$0.8619		$1,158,721	$1.1410	$1,533,938	32.00%
Low Income:													
Low Income Discount Tier 1			$0			$0			0	$0			
Low Income Discount Tier 2			0			0			0	0			
Low Income Discount Tier 3			0			0			0	0			
RZ XX Residential Usage	0			1,344,380			1,344,380						
RZ XX Residential Revenues			**$0**			**$1,704,395**			**$0**	**$1,704,395**		**$2,079,612**	**22.00%**

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Rate Zone XX Farmington	Billing Determinants	Current Rate	Annualized Annualized Revenue	Billing Determinants	Current Rate	Proforma Annualized Revenue	Billing Determinants	Current Rate	Proforma DSIC Revenues	Proforma Proforma @ Present Rate	Proposed Rate	Proforma Proforma @ Proposed Rate	% Percent Change
Customer Charge													
Service Charge per EDU		$67.50	$0	5,160	$67.50	$348,300	5,160	$67.50		$348,300			
Service Charge per Customer							5,112				20.00	$102,240	0.00%
Usage (in 100 Gallons)													
First 5,000 Gallons		$0.0000	$0	146,750	$0.0000	$0	146,750	$0.0000		$0	$2.1319	$312,857	0.00%
All Over 5,000 Gallons		1.5000	0	0	1.5000	0	0	1.5000		0	2.1319	0	0.00%
Low Income:													
Low Income Discount Tier 1						$0				$0			
Low Income Discount Tier 2						0				0			
Low Income Discount Tier 3						0				0			
RZ XX Residential Usage				146,750			146,750						
RZ XX Residential Revenues			**$0**			**$348,300**			**$0**	**$348,300**		**$415,097**	**19.00%**

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Commercial Class	6/30/2023 Usage (in 100 Gallons)	6/30/2023 Number of Bills	6/30/2023 Annualized Revenues	6/30/2024 Usage (in 100 Gallons)	6/30/2024 Number of Bills	6/30/2024 Proforma Revenues	6/30/2025 Usage (in 100 Gallons)	6/30/2025 Number of Bills	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 1 - Most Areas	125,842,666	564,628	$196,846,090	125,349,560	566,683	$196,149,874	125,442,677	570,793	$4,516,980	$200,907,426	$251,893,124	25.00%
Zone 2 - Valley	15,016	84	13,995	15,016	84	28,750	15,016	84	661	29,411	38,644	31.00%
Zone 3 - SLIBCO	40,574	96	89,693	40,574	96	89,693	40,574	96	2,063	91,756	127,997	39.00%
Zone 4 - Turbotville	50,655	620	76,383	50,655	620	76,383	50,655	620	1,757	78,140	109,665	40.00%
Zone 5 - Steelton	300,602	1,930	516,741	300,602	1,930	516,741	300,602	1,930	11,884	528,625	620,944	17.00%
Zone XX - Audubon	0	0	0	1,214,080	2,352	1,082,718	1,214,080	2,352	0	1,082,718	1,754,433	62.00%
Zone XX - Farmington				25,554	912	61,560	25,554	912	0	61,560	59,193	-4.00%
Total Commercial	126,249,513	567,358	$197,542,902	126,970,488	572,677	$198,005,719	127,063,605	576,787	$4,533,345	$202,779,636	$254,604,000	26.00%

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Rate Zone 1 Most Areas	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	347,539	$18.50	$6,429,469	352,111	$18.50	$6,514,051	354,166	$18.50	$150,698	$6,702,767	$20.00	$7,083,318	6.00%
3/4 - Meter	21,009	28.00	588,262	21,009	28.00	588,262	21,009	28.00	13,530	601,792	30.00	630,281	5.00%
1 - Meter	83,049	46.60	3,870,087	83,049	46.60	3,870,087	83,049	46.60	89,012	3,959,099	50.00	4,152,454	5.00%
1 1/2 - Meter	16,305	76.10	1,240,791	16,305	76.10	1,240,791	16,305	76.10	28,538	1,269,329	82.00	1,336,990	5.00%
2 - Meter	46,226	121.80	5,630,369	46,226	121.80	5,630,369	46,226	121.80	129,498	5,759,867	132.00	6,101,878	6.00%
3 - Meter	1,369	227.20	310,986	1,369	227.20	310,986	1,369	227.20	7,153	318,139	246.00	336,719	6.00%
4 - Meter	19,443	285.10	5,543,212	19,443	285.10	5,543,212	19,443	285.10	127,494	5,670,706	308.00	5,988,458	6.00%
6 - Meter	17,805	426.80	7,599,204	17,805	426.80	7,599,204	17,805	426.80	174,782	7,773,986	461.00	8,208,137	6.00%
8 - Meter	6,519	826.30	5,386,573	6,519	826.30	5,386,573	6,519	826.30	123,891	5,510,464	893.00	5,821,384	6.00%
10 - Meter	791	1,196.60	946,887	791	1,196.60	946,887	791	1,196.60	21,778	968,665	1,294.00	1,023,961	6.00%
Subtotal	560,056		$37,545,840	564,628		$37,630,422	566,683		$866,374	$38,534,814		$40,683,580	6.00%
Usage (in 100 Gallons)													
First 16,000 Gal	33,706,360	$1.5613	$52,625,741	35,399,738	$1.5613	$55,269,611	34,993,171	$1.5613	$1,256,601	$55,891,438	$2.0346	$71,197,105	27.00%
All Over 16,000	89,596,122	1.1493	102,972,823	90,442,927	1.1493	103,946,056	90,356,389	1.1493	2,388,472	106,235,070	1.5463	139,718,085	32.00%
Subtotal	123,302,482		$155,598,564	125,842,666		$159,215,667	125,349,560		$3,645,073	$162,126,508		$210,915,190	30.00%
Adjustment (1):													
5/8 - Meter	4,572	$18.50	$84,582	2,055	$18.50	$38,018	4,110	$18.50	$1,749	$77,784	$20.00	$82,200	6.00%
Usage (in 100 Gallons)													
First 16,000 Gal	731,520	$1.5613	$1,142,122	328,800	$1.5613	$513,355	657,600	$1.5613	$23,614	$1,050,325	$2.0346	$1,337,953	27.00%
All Over 16,000	284,907	1.1493	327,444	128,059	1.1493	147,178	256,117	1.1493	6,770	301,126	1.5463	396,034	32.00%
Subtotal	1,016,427		$1,469,566	456,859		$660,533	913,717		$30,384	$1,351,451		$1,733,987	28.00%
Adjustment (2):													
First 16,000 Gal	961,858	$1.5613	$1,501,749	(737,316)	$1.5613	($1,151,171)	(517,997)	$1.5613	($18,601)	($827,350)	$2.0346	($1,053,917)	27.00%
All Over 16,000	561,898	1.1493	645,789	(430,725)	1.1493	(495,032)	(302,603)	1.1493	(7,999)	(355,781)	1.5463	(467,916)	32.00%
Subtotal	1,523,756		$2,147,538	(1,168,041)		($1,646,203)	(820,600)		($26,600)	($1,183,131)		($1,521,833)	29.00%
Adjustment (3):													
First 16,000 Gal				1,948	$1.5613	$3,041							
All Over 16,000				216,128	1.1493	248,396							
Subtotal				218,076		$251,437							
RZ 1 Commercial Usage	125,842,666			125,349,560			125,442,677						
RZ 1 Commercial Revenues			**$196,846,090**			**$196,149,874**			**$4,516,980**	**$200,907,426**		**$251,893,124**	**25.00%**

Note (1) Adjustment to account for the growth (loss) in customers.
Note (2) Adjustment to account for normalization in usage trend including the impact of declining usage.
Note (3) Adjustment to account for the change in usage of shale gas commercial customers

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Rate Zone 2 Valley	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	Proforma 2023 Revenues @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	84	$28.12	$2,362	84	$18.50	$1,554	84	$18.50	$36	$1,590	$20.00	$1,680	6.00%
3/4 - Meter		28.12	0		28.00	0		28.00	0	0	30.00	0	0.00%
1 - Meter		28.12	0		46.60	0		46.60	0	0	50.00	0	0.00%
1 1/2 - Meter	12	28.12	337	12	76.10	913	12	76.10	21	934	82.00	984	5.00%
2 - Meter	24	28.12	675	24	121.80	2,923	24	121.80	67	2,990	132.00	3,168	6.00%
3 - Meter		28.12	0		227.20	0		227.20	0	0	246.00	0	0.00%
4 - Meter	24	28.12	675	24	285.10	6,842	24	285.10	157	6,999	308.00	7,392	6.00%
Subtotal	144		$4,049	144		$12,232	144		281	$12,513		13,224	6.00%
Usage (in 100 Gallons)													
First 3,400 Gal	3,175	$0.0000	$0	3,175	$1.1000	$3,493	3,175	$1.1000	$80	$3,573			
All Over 3,400 Gal	11,841	0.8400	9,946	11,841	1.1000	13,025	11,841	1.1000	300	13,325			
Subtotal	15,016		$9,946	15,016		$16,518	15,016		$380	$16,898			
First 16,000 Gal							4,505	0.30			$2.0346	$9,166	
All Over 16,000 Gal							10,511	0.70			1.5463	16,254	
												$25,420	
RZ 2 Commercial Usage	15,016			15,016			15,016						
RZ 2 Commercial Revenues			**$13,995**			**$28,750**			**$661**	**$29,411**		**$38,644**	**31.00%**

Note (1) Adjustment to annualize Valley Township Water acquired in November 2021.
Note (2) The Company is proposing to convert Service Charge to Meter size charges.

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
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Rate Zone 3 SLIBCO	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	Proforma 2023 Revenues @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
2 - Meter	12	$63.55	$763	12	$63.55	$763	12	$63.55	$18	$781	$132.00	$1,584	103.00%
4 - Meter	12	136.30	1,636	12	136.30	1,636	12	136.30	38	1,674	308.00	3,696	121.00%
6 - Meter	24	136.30	3,271	24	136.30	3,271	24	136.30	75	3,346	461.00	11,064	231.00%
8 - Meter	48	309.30	14,883	48	309.30	14,883	48	309.30	342	15,225	893.00	42,969	182.00%
Subtotal	96		$20,553	96		$20,553	96		$473	$21,026		$59,313	182.00%
Usage (in 100 Gallons)*													
First 20,000 Gal	12,888	$1.8940	$24,410	12,888	$1.8940	$24,410	12,888	$1.8940	$561	$24,971			
Next 80,000 Gal	21,868	1.6780	36,695	21,868	1.6780	36,695	21,868	1.6780	844	37,539			
All Over 100,000 Gal	5,818	1.3810	8,035	5,818	1.3810	8,035	5,818	1.3810	185	8,220			
Subtotal	40,574		$69,140	40,574		$69,140	40,574		$1,590	$70,730			
First 16,000 Gal							12,172	0.30			$2.0346	$24,766	
All Over 16,000 Gal							28,402	0.70			1.5463	43,918	
												68,684	
RZ 3 Commercial Usage	40,574			40,574			40,574						
RZ 3 Commercial Revenues			**$89,693**			**$89,693**			**$2,063**	**$91,756**		**$127,997**	**39.00%**

* All usage rate conversion to two blocks.

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
YEAR ENDING JUNE 30, 2023, 2024, AND 2025

Rate Zone 4 Turbotville	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	Proforma 2023 Revenues @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	504	$18.50	$9,324	504	$18.50	$9,324	504	$18.50	$214	$9,538	$20.00	$10,080	6.00%
3/4 - Meter	0	28.00	0	0	28.00	0	0	28.00	0	0	30.00	0	0.00%
1 - Meter	68	46.60	3,154	68	46.60	3,154	68	46.60	73	3,227	50.00	3,385	5.00%
1 1/2 - Meter	24	76.10	1,826	24	76.10	1,826	24	76.10	42	1,868	82.00	1,968	5.00%
2 - Meter	0	121.80	0	0	121.80	0	0	121.80	0	0	132.00	0	0.00%
3 - Meter	12	227.20	2,726	12	227.20	2,726	12	227.20	63	2,789	246.00	2,952	6.00%
4 - Meter	0	285.10	0	0	285.10	0	0	285.10	0	0	308.00	0	0.00%
6 - Meter	12	426.80	5,122	12	426.80	5,122	12	426.80	118	5,240	461.00	5,532	6.00%
Subtotal	620		$22,152	620		$22,152	620		$510	$22,662		$23,917	6.00%
Usage (in 100 Gallons)													
All Usage	50,655	$1.0706	$54,231	50,655	$1.0706	$54,231	50,655	$1.0706	$1,247	$55,478			
Subtotal	50,655		$54,231	50,655		$54,231	50,655		$1,247	$55,478			
First 16,000 Gal							15,197	0.30			$2.0346	$30,919	
All Over 16,000 Gal							35,459	0.70			$1.5463	54,829	
												85,748	
RZ 4 Commercial Usage	50,655			50,655			50,655						
RZ 4 Commercial Revenues			**$76,383**			**$76,383**			**$1,757**	**$78,140**		**$109,665**	**40.00%**

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
YEAR ENDING JUNE 30, 2023, 2024, AND 2025

Rate Zone 5 Steelton	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	Proforma 2023 Revenues @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	1,227	$18.50	$22,693	1,227	$18.50	$22,693	1,227	$18.50	$522	$23,215	$20.00	$24,533	6.00%
3/4 - Meter	0	28.00	0	0	28.00	0	0	28.00	0	0	30.00	0	0.00%
1 - Meter	405	46.60	18,877	405	46.60	18,877	405	46.60	434	19,311	50.00	20,254	5.00%
1 1/2 - Meter	108	76.10	8,256	108	76.10	8,256	108	76.10	190	8,446	82.00	8,896	5.00%
2 - Meter	60	121.80	7,308	60	121.80	7,308	60	121.80	168	7,476	132.00	7,920	6.00%
3 - Meter	58	227.20	13,178	58	227.20	13,178	58	227.20	303	13,481	246.00	14,268	6.00%
4 - Meter	48	285.10	13,685	48	285.10	13,685	48	285.10	315	14,000	308.00	14,784	6.00%
6 - Meter	0	426.80	0	0	426.80	0	0	426.80	0	0	461.00	0	0.00%
8 - Meter	24	826.30	19,831	24	826.30	19,831	24	826.30	456	20,287	893.00	21,432	6.00%
Subtotal	1,930		$103,828	1,930		$103,828	1,930		$2,388	$106,216		$112,087	6.00%
Usage (in 100 Gallons)													
First 1,700 Gal	22,442	$1.6108	$36,150	22,442	$1.6108	$36,150	22,442	$1.6108	$831	$36,981			
Next 18,300 Gal	80,548	1.6108	129,748	80,548	1.6108	129,748	80,548	1.6108	2,984	132,732			
Next 30,000 Gal	34,120	1.2500	42,650	34,120	1.2500	42,650	34,120	1.2500	981	43,631			
All Over 50,000 Gal	163,492	1.2500	204,365	163,492	1.2500	204,365	163,492	1.2500	4,700	209,065			
Subtotal	300,602		$412,913	300,602		$412,913	300,602		$9,496	$422,409			
First 16,000 Gal							90,181	0.30			$2.0346	$183,482	
All Over 16,000 Gal							210,422	0.70			$1.5463	325,375	
												508,857	
RZ 5 Commercial Usage	300,602			300,602			300,602						
RZ 5 Commercial Revenues			**$516,741**			**$516,741**			**$11,884**	**$528,625**		**$620,944**	**17.00%**

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
YEAR ENDING JUNE 30, 2023, 2024, AND 2025

Rate Zone XX Audubon	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	Proforma 2023 Revenues @ Present Rate	6/30/2025 Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter		$16.80	$0	936	$16.80	$15,725	936	$16.80		$15,725	$16.80	$15,725	0.00%
3/4 - Meter		16.80	0	72	16.80	1,210	72	16.80		1,210	16.80	1,210	0.00%
1 - Meter		42.80	0	180	42.80	7,704	180	42.80		7,704	42.80	7,704	0.00%
1 1/2 - Meter		72.90	0	516	72.90	37,616	516	72.90		37,616	72.90	37,616	0.00%
2 - Meter		116.40	0	468	116.40	54,475	468	116.40		54,475	116.40	54,475	0.00%
3 - Meter		218.60	0	72	218.60	15,739	72	218.60		15,739	218.60	15,739	0.00%
4 - Meter		363.90	0	48	363.90	17,467	48	363.90		17,467	363.90	17,467	0.00%
6 - Meter		727.80		36	727.80	26,201	36	727.80		26,201	727.80	26,201	0.00%
8 - Meter		1,164.60		12	1,164.60	13,975	12	1,164.60		13,975	1,164.60	13,975	0.00%
10 - Meter				12	1,410.60	16,927	12	1,410.60		16,927	1,410.60	16,927	0.00%
Flat Rate				0	170.92	0	0	170.92		0	-	0	0.00%
Subtotal	0		$0	2,352		$207,039	2,352		$0	207,039			
Usage (in 100 Gallons)													
First 100,000 Gal		$0.8619	$0	624,520	$0.8619	$538,274	624,520	$0.8619		$538,274	$1.1410	$712,577	32.00%
All Over 100,000 Gal		0.5723	0	589,560	0.5723	337,405	589,560	0.5723		337,405	1.4160	834,817	147.00%
Subtotal	0		$0	1,214,080		$875,679	1,214,080		$0	$875,679		$1,547,394	
RZ XX Commercial Usage	0			1,214,080			1,214,080						
RZ XX Commercial Revenues			**$0**			**$1,082,718**			**$0**	**$1,082,718**		**$1,754,433**	**62.00%**

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
YEAR ENDING JUNE 30, 2023, 2024, AND 2025

Rate Zone XX Farmington	6/30/2023 Determinants	Current Rate	Annualized 6/30/2023 Revenue	6/30/2024 Determinants	Current Rate	Proforma 6/30/2024 Revenue	6/30/2025 Determinants	Current Rate	Proforma Proforma Revenues	Proforma 6/30/2025 @ Present Rate	Proposed Rate	Proforma 6/30/2025 @ Proposed Rate	% Percent Change
Customer Charge													
Service Charge per EDU		$67.50	$0	912	$67.50	$61,560	912	$67.50		$61,560			
Service Charge per Customer							360				20.00	$7,200	0.00%
Usage (in 100 Gallons)													
First 5,000 Gallons		$0.0000	$0	25,554	$0.0000	$0	25,554	$0.0000		$0	$2.0346	$51,993	0.00%
All Over 5,000 Gallons		1.5000	0	0	1.6700	0	0	1.6700		0	2.0346	0	0.00%
RZ XX Commercial Usage				25,554			25,554						
RZ XX Commercial Revenues			**$0**			**$61,560**			**$0**	**$61,560**		**$59,193**	**-4.00%**

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
YEAR ENDING JUNE 30, 2023, 2024, AND 2025

Industrial Class	6/30/2023 Usage (in 100 Gallons)	6/30/2023 Number of Bills	6/30/2023 Annualized Revenues	6/30/2024 Usage (in 100 Gallons)	6/30/2024 Number of Bills	6/30/2024 Proforma Revenues	6/30/2025 Usage (in 100 Gallons)	6/30/2025 Number of Bills	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 1 - Most Areas	35,600,133	6,615	$35,591,988	35,600,133	6,615	$35,591,988	35,600,133	6,615	$818,617	$36,410,605	$46,851,860	29.00%
Demand Based (DIS)	8,318,938	36	4,209,083	8,318,938	36	4,314,851	8,318,938	36	0	4,482,099	4,482,099	0.00%
												0.00%
Zone 2 - Valley	787	12	655	787	12	1,088	787	12	25	1,113	1,841	65.00%
Zone 5 - Steelton	858,781	132	1,136,403	858,781	132	1,136,403	858,781	132	26,137	1,162,540	1,282,213	10.00%
Zone XX - Farmington				3,588	96	6,480	3,588	96	0	6,480	7,870	21.00%
Total Industrial	44,778,639	6,795	$40,938,129	44,778,639	6,891	$41,050,810	44,778,639	6,891	$844,779	$42,062,837	$52,625,883	25.00%

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
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Rate Zone 1 Most Areas	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	612	$28.00	$17,125	612	$28.00	$17,125	612	$28.00	$394	$17,519	$28.00	$17,125	-2.00%
3/4 - Meter	96	42.00	4,032	96	42.00	4,032	96	42.00	93	4,125	42.00	4,032	-2.00%
1 - Meter	1,032	70.00	72,222	1,032	70.00	72,222	1,032	70.00	1,661	73,883	70.00	72,222	-2.00%
1 1/2 - Meter	495	140.00	69,291	495	140.00	69,291	495	140.00	1,594	70,885	140.00	69,291	-2.00%
2 - Meter	1,937	224.00	433,810	1,937	224.00	433,810	1,937	224.00	9,978	443,788	224.00	433,810	-2.00%
3 - Meter	168	420.00	70,560	168	420.00	70,560	168	420.00	1,623	72,183	420.00	70,560	-2.00%
4 - Meter	772	701.00	540,979	772	701.00	540,979	772	701.00	12,443	553,422	701.00	540,979	-2.00%
6 - Meter	846	1,401.00	1,185,262	846	1,401.00	1,185,262	846	1,401.00	27,261	1,212,523	1,401.00	1,185,262	-2.00%
8 - Meter	526	2,243.00	1,179,390	526	2,243.00	1,179,390	526	2,243.00	27,126	1,206,516	2,243.00	1,179,390	-2.00%
10 - Meter	133	3,223.00	428,659	133	3,223.00	428,659	133	3,223.00	9,859	438,518	3,223.00	428,659	-2.00%
Subtotal	6,615		$4,001,330	6,615		$4,001,330	6,615		$92,032	$4,093,362		$4,001,330	-2.00%
Usage (in 100 Gallons)													
First 16,000 Gal	730,036	$1.4200	$1,036,652	730,036	$1.4200	$1,036,652	730,036	$1.4200	$23,843	$1,060,495	$1.9128	$1,396,414	32.00%
Next 584,000 Gal	8,921,842	1.0804	9,639,158	8,921,842	1.0804	9,639,158	8,921,842	1.0804	221,701	9,860,859	1.4824	13,225,739	34.00%
All over 600,000	20,737,744	0.8499	17,625,009	20,737,744	0.8499	17,625,009	20,737,744	0.8499	405,375	18,030,384	1.1477	23,800,709	32.00%
Subtotal	30,389,623		$28,300,819	30,389,623		$28,300,819	30,389,623		$650,919	$28,951,738		$38,422,862	33.00%
Usage Curtailment (in 100 Gallons)													
First 16,000 Gal	1,920	$1.4200	$2,726	1,920	$1.4200	$2,726	1,920	$1.4200	$63	$2,789	$1.9128	$3,673	32.00%
Next 584,000 Gal	70,081	1.0804	75,716	70,081	1.0804	75,716	70,081	1.0804	1,741	77,457	1.4824	103,888	34.00%
Next 14,400,000 Gal	1,728,000	0.8499	1,468,627	1,728,000	0.8499	1,468,627	1,728,000	0.8499	33,778	1,502,405	1.1477	1,983,226	32.00%
All Over 15,000,000	3,410,509	0.5110	1,742,770	3,410,509	0.5110	1,742,770	3,410,509	0.5110	40,084	1,782,854	0.6852	2,336,881	31.00%
Subtotal	5,210,510		$3,289,839	5,210,510		$3,289,839	5,210,510		$75,666	$3,365,505		$4,427,668	32.00%
Demand Based Industrial Service (DIS)													
DIS-1 Demand													
DIS-1 Commodity													
DIS -2 Commodity	Redacted - Refer to Confidential Volume 6d												
DIS -3 Commodity													
RZ 1 Industrial Usage	43,919,071			43,919,071			43,919,071						
RZ 1 Industrial Revenues			**$39,801,071**			**$39,906,839**			**$818,617**	**$40,892,704**		**$51,333,959**	**26.00%**

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
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Rate Zone 2 Valley	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	12	$28.12	$337	12	$18.50	$222	12	$18.50	$5	$227	$28.00	$336	48.00%
3/4 - Meter													
1 - Meter													
1 1/2 - Meter													
2 - Meter													
3 - Meter													
4 - Meter													
Subtotal	12		$337	12		$222	12		$5	$227		$336	
Usage (in 100 Gallons)													
First 3,400 Gal	408	$0.0000	$0	408	$1.1000	$449	408	$1.1000	$10	$459			
All Over 3,400 Gal	379	0.8400	318	379	1.1000	417	379	1.1000	10	427			
Subtotal	787		$318	787		$866	787		$20	$886			
First 16,000 Gal							787				$1.9128	$1,505	
Next 584,000 Gal											$1.4824		
All over 600,000											$1.1477		
												1,505	
RZ 2 Industrial Usage	787			787			787						
RZ 2 Industrial Revenues			**$655**			**$1,088**			**$25**	**$1,113**		**$1,841**	**65.00%**

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
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Rate Zone 5 Steelton	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	12	$24.83	$298	12	$24.83	$298	12	$24.83	$7	$305	$28.00	$336	10.00%
3/4 - Meter	0	24.83	0	0	24.83	0	0	24.83	0	0	42.00	0	0.00%
1 - Meter	0	54.38	0	0	54.38	0	0	54.38	0	0	70.00	0	0.00%
1 1/2 - Meter	0	97.93	0	0	97.93	0	0	97.93	0	0	140.00	0	0.00%
2 - Meter	36	141.46	5,093	36	141.46	5,093	36	141.46	117	5,210	224.00	8,064	55.00%
3 - Meter	0	320.98	0	0	320.98	0	0	320.98	0	0	420.00	0	0.00%
4 - Meter	36	419.20	15,091	36	419.20	15,091	36	419.20	347	15,438	701.00	25,236	63.00%
6 - Meter	36	670.70	24,145	36	670.70	24,145	36	670.70	555	24,700	1,401.00	50,436	104.00%
8 - Meter	12	974.35	11,692	12	974.35	11,692	12	974.35	269	11,961	2,243.00	26,916	125.00%
Subtotal	132		$56,319	132		$56,319	132		$1,295	$57,614		$110,988	93.00%
Usage (in 100 Gallons)													
First 1,700 Gal	2,104	$1.6108	$3,389	2,104	$1.6108	$3,389	2,104	$1.6108	$78	$3,467			
Next 18,300 Gal	16,212	1.6108	26,114	16,212	1.6108	26,114	16,212	1.6108	601	26,715			
Next 30,000 Gal	22,508	1.2500	28,135	22,508	1.2500	28,135	22,508	1.2500	647	28,782			
All Over 50,000 Gal	817,957	1.2500	1,022,446	817,957	1.2500	1,022,446	817,957	1.2500	23,516	1,045,962			
Subtotal	858,781		$1,080,084	858,781		$1,080,084	858,781		$24,842	$1,104,926			
First 16,000 Gal							17,176	0.02			1.9128	$32,854	
Next 584,000 Gal							515,269	0.60			1.4824	$763,834	
All over 600,000							326,337				1.1477	$374,537	
												1,171,225	
RZ 5 Industrial Usage	858,781			858,781			858,781						
RZ 5 Industrial Revenues			**$1,136,403**			**$1,136,403**			**$26,137**	**$1,162,540**		**$1,282,213**	**10.00%**

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
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Rate Zone XX Farmington	Billing Determinants	Current Rate	Annualized Annualized Revenue	Billing Determinants	Current Rate	Proforma Annualized Revenue	Billing Determinants	Current Rate	Proforma DSIC Revenues	Proforma Proforma @ Present Rate	Proposed Rate	Proforma Proforma @ Proposed Rate	% Percent Change
Customer Charge													
Service Charge per EDU		$67.50	$0	96	$67.50	$6,480	96	$67.50		$6,480			
Service Charge per Customer							36				$ 28.00	$1,008	0.00%
Usage (in 100 Gallons)													
First 5,000 Gallons		$0.0000	$0	3,588	$0.0000	$0	3,588	$0.0000		$0	$1.9128	$6,862	0.00%
All Over 5,000 Gallons		1.5000	0	0	1.5000	0	0	1.5000		0	1.9128	0	0.00%
RZ XX Industrial Usage				3,588			3,588						
RZ XX Industrial Revenues			**$0**			**$6,480**			**$0**	**$6,480**		**$7,870**	**21.00%**

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Municipal Class	6/30/2023 Usage (in 100 Gallons)	6/30/2023 Number of Bills	6/30/2023 Annualized Revenues	6/30/2024 Usage (in 100 Gallons)	6/30/2024 Number of Bills	6/30/2024 Proforma Revenues	6/30/2025 Usage (in 100 Gallons)	6/30/2025 Number of Bills	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 1 - Most Areas	19,179,402	28,468	$22,649,096	18,526,458	28,468	$21,998,039	18,459,474	28,468	$504,419	$22,435,668	$26,076,480	16.00%
Zone 2 - Valley	44,863	48	37,957	44,863	48	74,063	44,863	48	1,704	75,767	80,459	6.00%
Zone 4 - Turbotville	138	12	452	138	12	452	138	12	10	462	516	12.00%
Zone 5 - Steelton	16,347	124	27,630	16,347	124	27,630	16,347	124	635	28,265	29,349	4.00%
Zone XX - Audubon				11,020	36	16,137	11,020	36	0	16,137	19,213	19.00%
Zone XX - Farmington				1,477	48	3,240	1,477	48	0	3,240	3,912	21.00%
Total Municipal	19,240,750	28,652	$22,715,135	18,598,826	28,736	$22,119,561	18,531,842	28,736	$506,768	$22,559,539	$26,209,929	16.00%

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
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Rate Zone 1	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	9,258	$18.50	$171,274	9,258	$18.50	$171,274	9,258	$18.50	$3,939	$175,213	$20.00	$185,161	6.00%
3/4 - Meter	639	28.00	17,892	639	28.00	17,892	639	28.00	412	18,304	30.00	19,170	5.00%
1 - Meter	5,406	46.60	251,919	5,406	46.60	251,919	5,406	46.60	5,794	257,713	50.00	270,299	5.00%
1 1/2 - Meter	1,002	76.10	76,221	1,002	76.10	76,221	1,002	76.10	1,753	77,974	82.00	82,131	5.00%
2 - Meter	6,867	121.80	836,384	6,867	121.80	836,384	6,867	121.80	19,237	855,621	132.00	906,426	6.00%
3 - Meter	324	227.20	73,549	324	227.20	73,549	324	227.20	1,692	75,241	246.00	79,635	6.00%
4 - Meter	1,737	285.10	495,154	1,737	285.10	495,154	1,737	285.10	11,389	506,543	308.00	534,926	6.00%
6 - Meter	2,489	426.80	1,062,346	2,489	426.80	1,062,346	2,489	426.80	24,434	1,086,780	461.00	1,147,473	6.00%
8 - Meter	647	826.30	534,777	647	826.30	534,777	647	826.30	12,300	547,077	893.00	577,945	6.00%
10 - Meter	100	1,196.60	119,660	100	1,196.60	119,660	100	1,196.60	2,752	122,412	1,294.00	129,400	6.00%
Subtotal	28,468		$3,639,176	28,468		$3,639,176	28,468		$83,702	$3,722,878		$3,932,566	6.00%
Usage (in 100 Gallons)													
First 16,000 Gal	1,789,908	$1.6700	$2,989,146	1,957,603	$1.6700	$3,269,197	1,885,820	$1.6700	$72,434	$3,221,754	$1.9984	$3,768,623	17.00%
All Over 16,000	15,864,118	0.9140	14,499,803	17,221,799	0.9140	15,740,724	16,640,637	0.9140	349,819	15,559,362	1.1091	18,456,131	19.00%
Subtotal	17,654,025		$17,488,949	19,179,402		$19,009,921	18,526,458		$422,253	$18,781,116		$22,224,754	18.00%
Adjustment (1):													
First 16,000 Gal	167,695	$1.6700	$280,051	(71,783)	$1.6700	($119,877)	(7,364)	$1.6700	($283)	($12,581)	$1.9984	($14,716)	17.00%
All Over 16,000	1,357,681	0.9140	1,240,920	(581,161)	0.9140	(531,181)	(59,619)	0.9140	(1,253)	(55,745)	1.1091	(66,124)	19.00%
Subtotal	1,525,376		$1,520,971	(652,944)		($651,058)	(66,983)		($1,536)	($68,326)		($80,840)	18.00%
RZ 1 Municipal Usage	19,179,402			18,526,458			18,459,474						
RZ 1 Municipal Revenues			**$22,649,096**			**$21,998,039**			**$504,419**	**$22,435,668**		**$26,076,480**	**16.00%**

Note (1) Adjustment to account for normalization in usage trend including the impact of declining usage.

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Rate Zone 2 Valley	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter		$28.12	$0		$18.50	$0	0	$18.50	$0	$0	$20.00	$0	0.00%
3/4 - Meter		28.12	-		28.00	-	0	28.00	0	0	30.00	0	0.00%
1 - Meter		28.12	-		46.60	-	0	46.60	0	0	50.00	0	0.00%
1 1/2 - Meter		28.12	-		76.10	-	0	76.10	0	0	82.00	0	0.00%
2 - Meter	12	28.12	337	12	121.80	1,462	12	121.80	34	1,496	132.00	1,584	6.00%
3 - Meter		28.12	-		227.20	-	0	227.20	0	0	246.00	0	0.00%
4 - Meter	12	28.12	337	12	285.10	3,421	12	285.10	79	3,500	308.00	3,696	6.00%
6 - Meter		28.12	-		426.80	-	0	426.80	0	0	461.00	0	0.00%
8 - Meter	24	28.12	675	24	826.30	19,831	24	826.30	456	20,287	893.00	21,432	6.00%
Subtotal	48		$1,349	48		$24,714	48		$569	$25,283		$26,712	
Usage (in 100 Gallons)													
First 3,400 Gal	1,282	$0.0000	$0	1,282	$1.1000	$1,410	1,282	$1.1000	$32	$1,442			
All Over 3,400 Gal	43,581	0.8400	36,608	43,581	1.1000	47,939	43,581	1.1000	1,103	49,042			
Subtotal	44,863		$36,608	44,863		$49,349	44,863		$1,135	$50,484			
First 16,000 Gal							4,486	0.10			$1.9984	$8,965	
All Over 16,000							40,377	0.90			$1.1091	44,782	
												$53,747	
RZ 2 Municipal Usage	44,863			44,863			44,863						
RZ 2 Municipal Revenues			**$37,957**			**$74,063**			**$1,704**	**$75,767**		**$80,459**	**6.00%**

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Rate Zone 3 SLIBCO	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter		$63.55	$0	0	$63.55	$0	0	$63.55	$0	$0	$20.00	$0	0.00%
3/4 - Meter		63.55	0	0	63.55	0	0	63.55	0	0	30.00	0	0.00%
1 - Meter		63.55	0	0	63.55	0	0	63.55	0	0	50.00	0	0.00%
1 1/2 - Meter		63.55	0	0	63.55	0	0	63.55	0	0	82.00	0	0.00%
2 - Meter		63.55	0	0	63.55	0	0	63.55	0	0	132.00	0	0.00%
3 - Meter		63.55	0	0	63.55	0	0	63.55	0	0	246.00	0	0.00%
4 - Meter		136.30	0	0	136.30	0	0	136.30	0	0	308.00	0	0.00%
Subtotal	0		$0	0		$0	0		$0	$0		$0	0.00%
Usage (in 100 Gallons) *													
First 20,000 Gal		$1.8940	$0	0	$1.8940	$0	0	$1.8940	$0	$0	$2.1319	$0	0.00%
Next 80,000 Gal		1.67800	0	0	1.67800	0	0	1.89400	0	0	1.54630	0	0.00%
All Over 100,000 Gal		1.38100	0		1.38100	0		1.89400	0	0	0.00000	0	
Subtotal	0		0	0		0	0		$0	$0		0	
RZ 3 Municipal Usage	0			0			0						
RZ 3 Municipal Revenues			**$0**			**$0**			**$0**	**$0**		**$0**	**0.00%**

* All usage rate conversion to two blocks.

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Rate Zone 4 Turbotville	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	12	$18.50	$222	12	$18.50	$222	12	$18.50	$5	$227	$20.00	$240	6.00%
Subtotal	12		$222	12		$222	12		$5	$227		$240	6.00%
Usage (in 100 Gallons)													
First 16,000 Gal	138	$1.6700	$230	138	$1.6700	$230	138	$1.6700	$5	$235	$1.9984	$276	17.00%
All Over 16,000 Gal		$0.9861	0	0	$0.9861	0	0	$0.9861	0	0	$1.1091	0	0.00%
Subtotal	138		$230	138		$230	138		$5	$235		$276	17.00%
RZ 4 Municipal Usage	138			138			138						
RZ 4 Municipal Revenues			**$452**			**$452**			**$10**	**$462**		**$516**	**12.00%**

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Rate Zone 5 Steelton	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter	63	$18.50	$1,166	63	$18.50	$1,166	63	$18.50	$27	$1,193	$20.00	$1,260	6.00%
3/4 - Meter	0	28.00	0	0	28.00	0	0	28.00	0	0	30.00	0	0.00%
1 - Meter	24	46.60	1,118	24	46.60	1,118	24	46.60	26	1,144	50.00	1,200	5.00%
1 1/2 - Meter	12	76.10	913	12	76.10	913	12	76.10	21	934	82.00	984	5.00%
2 - Meter	24	121.80	2,923	24	121.80	2,923	24	121.80	67	2,990	132.00	3,168	6.00%
3 - Meter	1	227.20	227	1	227.20	227	1	227.20	5	232	246.00	246	6.00%
4 - Meter	0	285.10	0	0	285.10	0	0	285.10	0	0	308.00	0	0.00%
Subtotal	124		$6,347	124		$6,347	124		$146	$6,493		$6,858	6.00%
Usage (in 100 Gallons)													
First 1,700 Gal	709	$1.6108	$1,142	709	$1.6108	$1,142	709	$1.6108	$26	$1,168			
Next 18,300 Gal	1,642	1.6108	2,645	1,642	1.6108	2,645	1,642	1.6108	61	2,706			
Next 30,000 Gal	942	1.2500	1,178	942	1.2500	1,178	942	1.2500	27	1,205			
All Over 50,000 Gal	13,054	1.2500	16,318	13,054	1.2500	16,318	13,054	1.2500	375	16,693			
Subtotal	16,347		$21,283	16,347		$21,283	16,347		$489	$21,772			
First 16,000 Gal							4,904	0.30			$1.9984	$9,800	
All Over 16,000 Gal							11,443	0.70			$1.1091	12,691	
												22,491	
RZ 5 Municipal Usage	16,347			16,347			16,347						
RZ 5 Municipal Revenues			**$27,630**			**$27,630**			**$635**	**$28,265**		**$29,349**	**4.00%**

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Rate Zone XX Audubon	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge													
5/8 - Meter		$16.80	$0		$16.80	$0	0	$16.80		$0	$16.80	$0	0.00%
3/4 - Meter		16.80	0		16.80	0	0	16.80		0	16.80	0	0.00%
1 - Meter		42.80	0		42.80	0	0	42.80		0	42.80	0	0.00%
1 1/2 - Meter		72.90	0	12	72.90	875	12	72.90		875	72.90	875	0.00%
2 - Meter		116.40	0	12	116.40	1,397	12	116.40		1,397	116.40	1,397	0.00%
3 - Meter		218.60	0		218.60	0	0	218.60		0	218.60	0	0.00%
4 - Meter		363.90	0	12	363.90	4,367	12	363.90		4,367	363.90	4,367	0.00%
6 - Meter		727.80	0		727.80	0	0	727.80		0	727.80	0	0.00%
8 - Meter		1,164.60	0		1,164.60	0	0	1,164.60		0	1,164.60	0	0.00%
Subtotal	0		$0	36		$6,639	36		$0	$6,639		$6,639	0.00%
Usage (in 100 Gallons)													
First 100,000 Gal		$0.8619	$0	11,020	$0.8619	$9,498	11,020	$0.8619		$9,498	$1.1410	$12,574	32.00%
All Over 100,000 Gal		0.5723	0	0	0.5723	0	0	0.5723		0	1.4160	0	0.00%
Subtotal	0		$0	11,020		$9,498	11,020		$0	$9,498		$12,574	
RZ XX Municipal Usage	0			11,020			11,020						
RZ XX Municipal Revenues			**$0**			**$16,137**			**$0**	**$16,137**		**$19,213**	**19.00%**

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Rate Zone XX Farmington	6/30/2023 Determinants	Current Rate	Annualized 6/30/2023 Revenue	6/30/2024 Determinants	Current Rate	Proforma 6/30/2024 Revenue	6/30/2025 Determinants	Current Rate	Proforma Proforma Revenues	Proforma 6/30/2025 @ Present Rate	Proposed Rate	Proforma 6/30/2025 @ Proposed Rate	% Percent Change
Customer Charge													
Service Charge per EDU		$67.50	$0	48	$67.50	$3,240	48	$67.50		$3,240			
Service Charge per Customer							48				20.00	$960	0.00%
Usage (in 100 Gallons)													
First 5,000 Gallons		$0.0000	$0	1,477	$0.0000	$0	1,477	$0.0000		$0	$1.9984	$2,952	0.00%
All Over 5,000 Gallons		1.5000	0	0	1.5000	0	0	1.5000		0	1.9984	0	0.00%
RZ XX Municipal Usage				1,477			1,477						
RZ XX Municipal Revenues			**$0**			**$3,240**			**$0**	**$3,240**		**$3,912**	**21.00%**

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Other Water Utilities Class	6/30/2023 Usage (in 100 Gallons)	6/30/2023 Number of Bills	6/30/2023 Annualized Revenues	6/30/2024 Usage (in 100 Gallons)	6/30/2024 Number of Bills	6/30/2024 Proforma Revenues	6/30/2025 Usage (in 100 Gallons)	6/30/2025 Number of Bills	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Group A	199,499	59	$220,918	7,251	59	$50,657	7,251	47	$1,165	$51,822	$53,666	4.00%
Group B	131,893	96	203,453	131,893	96	197,885	131,893	72	4,551	202,436	277,021	37.00%
Demand-Based (DRS)	7,479,835	60	2,560,401	9,126,835	60	3,195,027	9,122,335	60	0	3,316,086	3,316,086	0.00%
Total Other Water Utilities	7,811,227	215	$2,984,772	9,265,979	215	$3,443,569	9,261,479	179	$5,716	$3,570,344	$3,646,773	2.00%

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APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
YEAR ENDING JUNE 30, 2023, 2024, AND 2025

Rate Zone 1	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge - Group A													
5/8 - Meter	0	$29.10	$0	0	$29.10	$0	0	$29.10	$0	$0	$29.10	$0	0.00%
3/4 - Meter	0	44.00	0	0	44.00	0	0	44.00	0	0	44.00	0	0.00%
1 - Meter	0	73.00	0	0	73.00	0	0	73.00	0	0	73.00	0	0.00%
1 1/2 - Meter	0	145.00	0	0	145.00	0	0	145.00	0	0	145.00	0	0.00%
2 - Meter	12	232.00	2,784	12	232.00	2,784	12	232.00	64	2,848	232.00	2,784	-2.00%
3 - Meter	0	436.00	0	0	436.00	0	0	436.00	0	0	436.00	0	0.00%
4 - Meter	12	726.00	8,712	12	726.00	8,712	12	726.00	200	8,912	726.00	8,712	-2.00%
6 - Meter	35	1,452.00	50,820	35	1,452.00	50,820	23	1,452.00	768	34,164	1,452.00	33,396	-2.00%
8 - Meter	0	2,325.00	0	0	2,325.00	0	0	2,325.00	0	0	2,325.00	0	0.00%
10 - Meter	0	3,340.00	0	0	3,340.00	0	0	3,340.00	0	0	3,340.00	0	0.00%
Subtotal	59		$62,316	59		$62,316	47		$1,033	$45,925		$44,892	-2.00%
Usage (in 100 Gallons)													
All Usage (Group A)	199,499	$0.7950	$158,602	199,499	$0.7950	$158,602	7,251	$0.7950	$133	$5,898	$1.2100	$8,774	49.00%
Adjustment (1):													
6 - Meter				(12)	$1,452.00	($17,424)							
Usage (in 100 Gallons)				(192,248)	$0.7950	($152,837)							
Total OWU - Group A	**199,499**		**$220,918**	**7,251**		**$50,657**	**7,251**		**$1,165**	**$51,822**		**$53,666**	**4.00%**

Note (1) Adjustment for Farmington Township change from bulk water customer to direct services to customers

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
YEAR ENDING JUNE 30, 2023, 2024, AND 2025

Rate Zone 1	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge - Group B													
5/8 - Meter	0	$29.10	$0	0	$29.10	$0	0	$29.10	$0	$0	$29.10	$0	0.00%
3/4 - Meter	0	44.00	0	0	44.00	0	0	44.00	0	0	44.00	0	0.00%
1 - Meter	0	73.00	0	0	73.00	0	0	73.00	0	0	73.00	0	0.00%
1 1/2 - Meter	0	145.00	0	0	145.00	0	0	145.00	0	0	145.00	0	0.00%
2 - Meter	48	232.00	11,136	48	232.00	11,136	24	232.00	128	5,696	232.00	5,568	-2.00%
3 - Meter	0	436.00	0	0	436.00	0	0	436.00	0	0	436.00	0	0.00%
4 - Meter	36	726.00	25,854	36	726.00	25,854	36	726.00	595	26,449	726.00	25,854	-2.00%
6 - Meter	12	1,452.00	17,424	12	1,452.00	17,424	12	1,452.00	401	17,825	1,452.00	17,424	-2.00%
8 - Meter	0	2,325.00	0	0	2,325.00	0	0	2,325.00	0	0	2,325.00	0	0.00%
10 - Meter	0	3,340.00	0	0	3,340.00	0	0	3,340.00	0	0	3,340.00	0	0.00%
Subtotal	96		$54,414	96		$54,414	72		$1,123	$49,969		$48,846	-2.00%
Usage (in 100 Gallons)													
All Usage (Group B)	131,893	$1.1300	$149,039	131,893	$1.1300	$149,039	131,893	$1.1300	3,428	$152,467	$1.7300	$228,175	50.00%
Adjustment (1):													
2 - Meter				(24)	232.00	($5,568)							
All Usage (Group B)													
Total OWU - Group B	**131,893**		**$203,453**	**131,893**		**$197,885**	**131,893**		**$4,551**	**$202,436**		**$277,021**	**37.00%**

Note (1) Adjustment for Audubon Township change from bulk water customer to direct services to customers

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
YEAR ENDING JUNE 30, 2023, 2024, AND 2025

	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Demand-Based Resale Service (DRS)													
DRS-1 Demand Charge													
DRS-1 Commodity													
DRS -2 Commodity													
DRS -3 Commodity													
DRS -4 Commodity													
DRS-5 Demand Charge													
DRS-5 Commodity													
DRS -6 Commodity													
DRS -7 Demand Charge													
DRS -7 Commodity													
Adjustment (1):													
DRS -7 Demand Charge													
DRS -7 Commodity													
Adjustment (2):													
DRS -8 Commodity													
RZ 1 Other Water Utilities Usag	7,479,835			9,126,835			9,122,335						
Total Demand-Based Service			**$2,560,401**			**$3,195,027**			**$0**	**$3,316,086**		**$3,316,086**	**0.00%**

Redacted - Refer to Confidential Volume 6d

Note (1) Adjustment for adding in June activity that was billed in July 2023
Note (2) Adjustment for new contract account

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER
APPLICATION OF PRESENT AND PROPOSED RATES
PUBLIC FIRE HYDRANTS

Service Area	12 ME June 2023 Billed Number of Hydrants	Current Monthly Rate	Annualized Revenues	12 ME June 2024 Number of Hydrants	Monthly Present Rate	12 ME June 2024 Revenues	12 ME June 2025 Number of Hydrants	Monthly Present Rate	12 ME June 2025 Revenues	Monthly Proposed Rate	Pro Forma Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Hydrants (Most Areas)	38,617	$20.30	$9,407,101	38,617	$20.30	$9,407,101	38,617	$20.30	$9,407,101	$25.30	$11,724,121
Bradford Township	47	6.25	3,525	47	6.25	3,525	47	6.25	3,525	6.25	3,525
Valley District	108	20.30	26,309	108	20.30	26,309	108	20.30	26,309	25.30	32,789
Audubon				212	25.70	65,381	212	25.70	65,381	25.70	65,381
Farmington				70	20.30	17,052	70	20.30	17,052	25.30	21,252
Total Public Fire Revenue	38,772		$9,436,935	39,054		$9,519,368	39,054		$9,519,368		$11,847,068

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
APPLICATION OF PRESENT AND PROPOSED RATES
PRIVATE FIRE SERVICE

Service		2023 Rates			2024 Present Rates			2025 Present Rates		2025 Proposed Rates	
Connection Size	Number	Rate	Revenue	Number	Rate	Revenue	Number	Rate	Revenue	Rate	Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1" or 1 1/4"	388	$5.34	$2,071	480	$5.34	$2,563	480	$5.34	$2,563	$6.62	$3,178
1 1/2"	0	7.69	0	0	7.69	0	0	7.69	0	9.53	0
2"	635	13.68	8,687	780	13.68	10,670	780	13.68	10,670	16.96	13,229
3"	184	31.11	5,724	180	31.11	5,600	180	31.11	5,600	38.57	6,943
4"	3,940	54.78	215,822	3,852	54.78	211,013	3,852	54.78	211,013	67.91	261,589
6"	13,898	124.47	1,729,928	13,824	124.47	1,720,673	13,824	124.47	1,720,673	154.61	2,137,329
8"	7,113	221.56	1,575,890	7,104	221.56	1,573,962	7,104	221.56	1,573,962	274.67	1,951,256
10"	626	346.02	216,599	624	346.02	215,916	624	346.02	215,916	429.08	267,746
12"	232	497.88	115,508	228	497.88	113,517	228	497.88	113,517	617.22	140,726
1" Metered	168	43.75	7,350	180	43.75	7,875	180	43.75	7,875	54.25	9,765
1-1/2" Metered	36	62.48	2,264	36	62.48	2,249	36	62.48	2,249	77.46	2,789
2" Metered	232	100.00	23,189	264	100.00	26,400	264	100.00	26,400	123.97	32,728
3" Metered	50	187.49	9,349	132	187.49	24,749	132	187.49	24,749	232.43	30,681
4" Metered	412	234.36	96,549	660	234.36	154,678	660	234.36	154,678	290.54	191,756
6" Metered	614	351.54	215,999	768	351.54	269,983	768	351.54	269,983	435.80	334,694
8" Metered	189	539.03	101,976	228	539.03	122,899	228	539.03	122,899	668.24	152,359
10" Metered	77	757.77	58,348	96	757.77	72,746	96	757.77	72,746	939.42	90,184
Hydrants	19,683	26.87	528,872	19,740	$26.87	530,414	19,740	$26.87	530,414	$26.90	531,006
Hydrants (Valley)	36	-	0	36	26.87	967	36	26.87	967	26.90	968
Sprinkler first 200	84	65.22	5,478	84	65.22	5,478	84	65.22	5,478	80.85	6,791
Sprinkler over 200	22,020	0.17	3,743	22,020	0.17	3,743	22,020	0.17	3,743	0.21	4,624
Standpipes	120	50.71	6,085	120	50.71	6,085	120	50.71	6,085	62.87	7,544
Audubon											
1" (Unmetered)				588	30.80	18,110	588	30.80	18,110	38.18	22,450
4" Metered				36	69.40	2,498	36	69.40	2,498	86.04	3,097
6" Metered				492	102.75	50,553	492	102.75	50,553	127.38	62,671
8" Metered				168	167.00	28,056	168	167.00	28,056	207.03	34,781
10" Metered				12	228.60	2,743	12	228.60	2,743	283.40	3,401
DSIC @ 2.3%									$116,890		
Total Private Fire	70,737		$4,929,433	72,732		$5,184,142	72,732		$5,301,032		$6,304,285

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS
Miscellaneous & Other Operating Revenues
YEAR ENDING JUNE 30, 2023, 2024, 2025

		Per Books 12 ME JUNE 2023	Adjustments	Adjusted 12 ME JUNE 2023	Adjustments	12 ME JUNE 2024	Adjustments	12 ME JUNE 2025	Proposed 2025
469	Guaranteed Revenues	$0		$0		$0		$0	$0
470	Late Payment Fees	4,419,511	(379,378)	4,040,133	(17,932)	4,022,202	70,192	4,092,394	5,089,103
471	Miscellaneous Services	4,828,286	(4,439)	4,823,847	16,325	4,840,172	16,947	4,857,120	4,857,120
472	Rents From Property	1,186,476		1,186,476	(397,369)	789,106	7,148	796,254	796,254
473	Intercompany Rent	516,719		516,719	(228,104)	288,615	0	288,615	288,615
474	Other Water Revenues	(27)	27	0		0		0	0
	Total Other Revenues	$10,950,965	($383,790)	$10,567,175	($627,080)	$9,940,095	$94,287	$10,034,383	$11,031,091

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

RESIDENTIAL CLASS	6/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	FR II.02e Annualized Revenue Current Rate	Change in Customers FR II.02h	Usage Normalization FR II.02i	Creekside Annualization FR II.02m	Quarryville 12th bill adj FR II.02u	6/30/2023 Revenues Incl All adj
Rate Zone 1 - Most Areas	(a)	(b)	(c)	(d) = (a)*(b)*©	(a)	(e) = (a)*(c)	(f)	(g)	(h)	(i)	j=(a+f+g+h+i)*c
Water Srvice Charge @ Old Rate											
5/8-METER	**812**	$17.00		$13,807							
Winola unmetered	**50**	$33.23		1,661							
3/4-METER	**22**	17.00		382							
1-METER	**1**	17.00		21							
1.5-METER	**0**	17.00		0							
2-METER	**827**	115.20		95,328							
3-METER	**0**	214.90		0							
4-METER	**112**	269.70		30,276							
6-METER	**56**	403.70		22,680							
8-METER	**1**	781.60		1,022							
Water Srvice Charge @ Current Rate											
5/8-METER	**5,871,828**		$17.50	$102,756,988	5,872,690	$102,772,077	15,060				$103,035,627
3/4-METER	**10,238**		17.50	179,158	10,260	179,550			984		196,770
1-METER	**83,486**		17.50	1,460,997	83,487	1,461,019					1,461,019
1.5-METER	**672**		17.50	11,768	672	11,768					11,768
2-METER	**316**		121.80	38,526	1,144	139,315					139,315
3-METER	**0**			0	0	0					0
4-METER	**47**		285.10	13,359	159	45,363					45,363
6-METER	**20**		426.80	8,495	76	32,473					32,473
8-METER	**3**		826.30	2,361	4	3,441					3,441
UnMetered	**647**	$62.78		$40,647							
UnMetered	**362**		$70.00	$25,314	1,009	$70,636					$70,636
Sprinkler											
5/8-METER	**214**	$17.00		$3,645							
3/4-METER	**0**	17.00		0							
1-METER	**2**	17.00		32							
Sprinkler											
5/8-METER	**1,398,545**		$17.50	$24,474,536	1,398,759	$24,478,288					$24,478,288
3/4-METER	**587**		17.50	10,264	587	10,264					10,264
1-METER	**94,579**		17.50	1,655,139	94,581	1,655,172					1,655,172
1.5-METER	**1,638**		17.50	28,672	1,638	28,672					28,672
2-METER	**203**		17.50	3,548	203	3,548					3,548
8-METER	**6**		17.50	112	6	112					112
Usage in Hundred Gallons											
Usage @ 2022 RZ1 Rate	**163,814,790**	$1.3100		$214,597,374							
Usage (Winola)	**101,348**	0.0000		0							
Usage (McEwensville)	**24,759**	0.8983		22,241							
All Usage	**93,428,481**		1.6108	150,494,597	257,369,377	$414,570,592	518,926.44	(8,712,299)	32,706		$401,425,389
	257,369,377										
Low Income (30% Discount - 2022)	**($4,127,205)**			(4,127,205)							
# of Customers											
Low Income (80% Discount) Tier 1	**($1,480,385)**		($14.00)	(1,480,385)	57,540	($805,560)					($805,560)
# of Customers			($1.2886)	0	1,983,990	(2,556,570)		(70,563)			(2,465,641)
Low Income (65% Discount service & 50% Disc	**($1,355,103)**		($11.38)	(1,355,103)	86,412	($983,369)					($983,369)
# of Customers			($0.8054)	0	2,979,502	(2,399,691)		(105,387)			(2,314,812)
Low Income (40% Discount service & 25% Disc	**($1,603,831)**		($7.00)	(1,603,831)	179,736	($1,258,152)					($1,258,152)
# of Customers			($0.4027)	0	6,197,332	(2,495,666)		(219,022)			(2,407,466)

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

RESIDENTIAL CLASS	2024 Rates	FR II.02j Valley Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Findlay Township FR II.02w	Audubon from SFR to reg FR II.02x	Farmington from SFR to reg FR II.02y	Shale Gas Com Usage FR II.02l	Present Rate 6/30/2024 Revenues
Rate Zone 1 - Most Areas	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	s=(a+f+g+h+i+m+n+o+p+q+r)*k
Water Srvice Charge @ Old Rate									
5/8-METER									
Winola unmetered									
3/4-METER									
1-METER									
1.5-METER									
2-METER									
3-METER									
4-METER									
6-METER									
8-METER									
Water Srvice Charge @ Current Rate									
5/8-METER	$17.50		12,780						$103,259,277
3/4-METER	17.50								196,770
1-METER	17.50								1,461,019
1.5-METER	17.50								11,768
2-METER	121.80								139,315
3-METER									0
4-METER	285.10								45,363
6-METER	426.80								32,473
8-METER	826.30								3,441
UnMetered									
UnMetered	$70.00								$70,636
Sprinkler									
5/8-METER									
3/4-METER									
1-METER									
Sprinkler									
5/8-METER	$17.50								$24,478,288
3/4-METER	17.50								10,264
1-METER	17.50								1,655,172
1.5-METER	17.50								28,672
2-METER	17.50								3,548
8-METER	17.50								112
Usage in Hundred Gallons									
Usage @ 2022 RZ1 Rate									
Usage (Winola)									
Usage (McEwensville)									
All Usage	1.6108		440,363.87	(4,882,499)					$394,269,997
Low Income (30% Discount - 2022)									
# of Customers									
Low Income (80% Discount) Tier 1	($14.00)								($805,560)
# of Customers	($1.2886)			(39,545)					(2,414,684)
Low Income (65% Discount service & 50% Disc	($11.38)								($983,369)
# of Customers	($0.81)			(59,060)					(2,267,245)
Low Income (40% Discount service & 25% Disc	($7.00)								($1,258,152)
# of Customers	($0.40)			(122,743)					(2,358,037)

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

RESIDENTIAL CLASS	2025 Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Creekside Annualization FR II.02m	Findlay Township FR II.02w	Present Rate 6/30/2025 Revenues
Rate Zone 1 - Most Areas	(t)	(u)	(v)	(w)	(x)	y=(a+f+g+h+i+m+n+o+p+q+r+t+u+v+w+x)*t
Water Srvice Charge @ Old Rate						
5/8-METER						
Winola unmetered						
3/4-METER						
1-METER						
1.5-METER						
2-METER						
3-METER						
4-METER						
6-METER						
8-METER						
Water Srvice Charge @ Current Rate						
5/8-METER	$17.50	25,560				$103,706,577
3/4-METER	17.50			480		205,170
1-METER	17.50					1,461,019
1.5-METER	17.50					11,768
2-METER	121.80					139,315
3-METER						0
4-METER	285.10					45,363
6-METER	426.80					32,473
8-METER	826.30					3,441
						0
UnMetered						
UnMetered	$70.00					$70,636
Sprinkler						
5/8-METER						
3/4-METER						
1-METER						
Sprinkler						
5/8-METER	$17.50					$24,478,288
3/4-METER	17.50					10,264
1-METER	17.50					1,655,172
1.5-METER	17.50					28,672
2-METER	17.50					3,548
8-METER	17.50					112
Usage in Hundred Gallons						
Usage @ 2022 RZ1 Rate						
Usage (Winola)						
Usage (McEwensville)						
All Usage	1.6108	880,728	(3,946,197)	15,363		$389,356,887
Low Income (30% Discount - 2022)						
# of Customers						
Low Income (80% Discount) Tier 1	($14.00)					($805,560)
# of Customers	($1.2886)		(31,961)			(2,373,499)
Low Income (65% Discount service & 50% Disc	($11.38)					($983,369)
# of Customers	($0.81)		(47,735)			(2,228,800)
Low Income (40% Discount service & 25% Disc	($7.00)			0		($1,258,152)
# of Customers	($0.40)		(99,205)	0		(2,318,087)

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

RESIDENTIAL CLASS	6/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	FR II.02e Annualized Revenue Current Rate	Change in Customers FR II.02h	Usage Normalization FR II.02i	Creekside Annualization FR II.02m	Quarryville 12th bill adj FR II.02u	6/30/2023 Revenues Incl All adj
Rate Zone 2 - Valley Township											
Total Billed Count											
5/8-METER	**19,373**		$28.12	$544,768	19,373	$544,768					$544,768
1-METER	**252**		$28.12	7,086	252	7,086					7,086
Usage in Hundred Gallons											
First 3,400 Gal	**487,769**		$0.0000	$0	487,769	$0					$0
All Over 3,400 Gal	**128,919**		0.8400	108,292	128,919	108,292					108,292
	616,689										
Low Income (30% Discount - 2022)	**($1,235)**			(1,235)							
# of Customers											
Low Income (80% Discount) Tier 1	**($190)**		($22.50)	(190)	24	($540)					($540)
# of Customers			($0.6720)		754	(507)					(507)
Low Income (65% Discount service & 50% Disc	**$0**		($18.28)	0	0	$0					$0
# of Customers			($0.4200)		0	0					0
Low Income (40% Discount service & 25% Disc	**($316)**		($11.25)	(316)	72	($810)					($810)
# of Customers			($0.2100)		2,263	(475)					(475)
Rate Zone 4 - Turbotville											
Total Billed Count											
5/8-METER	**3,177**		$17.50	$55,603	3,177	$55,603					$55,603
3/4-METER	**0**		17.50	0							
1-METER	**0**		17.00	0							
1.5-METER	**0**		17.00	0							
2-METER	**0**		121.80	0							
3-METER	**0**		227.20	0							
4-METER	**0**		285.10	0							
Usage in Hundred Gallons											
All Usage	**55,350**	1.3100		$72,508							
All Usage	**35,388**		1.6108	57,003	90,738	$146,161					$146,161
	90,738										
Low Income (30% Discount - 2022)	**($665)**			(665)							
# of Customers											
Low Income (80% Discount) Tier 1	**($330)**		($14.00)	(330)		($168)					($168)
# of Customers			($1.2886)			(442)					(442)
Low Income (65% Discount service & 50% Disc	**$0**		($11.38)	0		$0					$0
# of Customers			($0.8054)			0					0
Low Income (40% Discount service & 25% Disc	**($300)**		($7.00)	(300)		($336)					($336)
# of Customers			($0.4027)			(552)					(552)

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

RESIDENTIAL CLASS	2024 Rates	FR II.02j Valley Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Findlay Township FR II.02w	Audubon from SFR to reg FR II.02x	Farmington from SFR to reg FR II.02y	Shale Gas Com Usage FR II.02l	Present Rate 6/30/2024 Revenues
Rate Zone 2 - Valley Township									
Total Billed Count									
5/8-METER		$17.50							$339,027
1-METER		$17.50							4,410
Usage in Hundred Gallons									
First 3,400 Gal		$1.1000							$536,546
All Over 3,400 Gal		1.1000							141,811
Low Income (30% Discount - 2022)									
# of Customers									
Low Income (80% Discount) Tier 1		($14.00)							($336)
# of Customers		($0.8800)							(664)
Low Income (65% Discount service & 50% Disc		($11.38)							$0
# of Customers		($0.5500)							0
Low Income (40% Discount service & 25% Disc		($7.00)							($504)
# of Customers		($0.2750)							(622)
Rate Zone 4 - Turbotville									
Total Billed Count									
5/8-METER	$17.50								$55,603
3/4-METER	17.50								
1-METER	17.00								
1.5-METER	17.00								
2-METER	121.80								
3-METER	227.20								
4-METER	285.10								
Usage in Hundred Gallons									
All Usage									
All Usage	1.6108								$146,161
Low Income (30% Discount - 2022)									
# of Customers									
Low Income (80% Discount) Tier 1	($14.00)								($168)
# of Customers	($1.2886)								(442)
Low Income (65% Discount service & 50% Disc	($11.38)								$0
# of Customers	($0.8054)								0
Low Income (40% Discount service & 25% Disc	($7.00)								($336)
# of Customers	($0.4027)								(552)

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

RESIDENTIAL CLASS	2025 Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Creekside Annualization FR II.02m	Findlay Township FR II.02w	Present Rate 6/30/2025 Revenues
Rate Zone 2 - Valley Township						
Total Billed Count						
5/8-METER	$17.50					$339,027
1-METER	$17.50					4,410
Usage in Hundred Gallons						
First 3,400 Gal	$1.1000					$536,546
All Over 3,400 Gal	1.1000					141,811
Low Income (30% Discount - 2022)						
# of Customers						
Low Income (80% Discount) Tier 1	($14.00)					($336)
# of Customers	($0.8800)					(664)
Low Income (65% Discount service & 50% Disc	($11.38)					$0
# of Customers	($0.5500)					0
Low Income (40% Discount service & 25% Disc	($7.00)					($504)
# of Customers	($0.2750)					(622)
Rate Zone 4 - Turbotville						
Total Billed Count						
5/8-METER	$17.50					$55,603
3/4-METER	17.50					0
1-METER	17.00					0
1.5-METER	17.00					0
2-METER	121.80					0
3-METER	227.20					0
4-METER	285.10					0
Usage in Hundred Gallons						
All Usage						
All Usage	1.6108					$146,161
Low Income (30% Discount - 2022)						
# of Customers						
Low Income (80% Discount) Tier 1	($14.00)					($168)
# of Customers	($1.2886)					(442)
Low Income (65% Discount service & 50% Disc	($11.38)					$0
# of Customers	($0.8054)					0
Low Income (40% Discount service & 25% Disc	($7.00)					($336)
# of Customers	($0.4027)					(552)

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

RESIDENTIAL CLASS	6/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	FR II.02e Annualized Revenue Current Rate	Change in Customers FR II.02h	Usage Normalization FR II.02i	Creekside Annualization FR II.02m	Quarryville 12th bill adj FR II.02u	6/30/2023 Revenues Incl All adj
Rate Zone 5 - Steelton											
Total Billed Count											
5/8-METER	**16,844**	$20.69		$348,492							
3/4-METER	**0**	20.69		0							
1-METER	**118**	20.69		2,449							
1.5-METER	**0**	76.10		0							
2-METER	**8**	117.88		928							
3-METER	**0**	227.20		0							
4-METER	**0**	285.10		0							
Total Billed Count											
5/8-METER	**8,872**		$17.50	$155,267	25,716	$450,029					$450,029
3/4-METER	**0**		17.50	0	0	0					0
1-METER	**62**		17.50	1,084	180	3,155					3,155
1.5-METER	**0**		17.50	0	0	0					0
2-METER	**4**		121.80	502	12	1,462					1,462
3-METER	**0**		227.20	0	0	0					0
4-METER	**0**		285.10	0	0	0					0
Usage in Hundred Gallons											
First 1,700 Gal	**245,335**	$0.0000		$0							
First 1,700 Gal	**129,968**		1.6108	209,352	375,303	$604,538					$604,538
Next 18,300 Gal	**360,849**	1.1564		417,286							
Next 18,300 Gal	**180,433**		1.6108	290,642	541,283	871,898					871,898
Next 30,000 Gal	**18,080**	1.2768		23,085							
Next 30,000 Gal	**4,930**		1.2500	6,163	23,011	28,764					28,764
All Over 50,000 Gal	**9,274**	1.1032		10,231							
All Over 50,000 Gal	**3,580**		1.2500	4,475	12,854	16,067					16,067
	952,450										
Low Income (30% Discount - 2022)	**($12,747)**			(12,747)							
# of Customers											
Low Income (80% Discount) Tier 1	**($5,483)**		($14.00)	(5,483)		($2,520)					($2,520)
# of Customers			($1.2886)			(8,527)					(8,527)
Low Income (65% Discount service & 50% Disc	**($3,010)**		($11.38)	(3,010)		($1,638)					($1,638)
# of Customers			($0.8054)			(4,264)					(4,264)
Low Income (40% Discount service & 25% Disc	**($6,129)**		($7.00)	(6,129)		($4,536)					($4,536)
# of Customers			($0.4027)			(9,593)					(9,593)
Rate Zone XX - Audubon Water											
Meter Sizes Single Unit											
5/8-METER											$0
1-METER											0
Flat Rate											0
All Usage											$0
Rate Zone XX - Farmington Water											
Service Charge											
First 5,000 Gallons											
All Over 5,000 Gallons											
AMP Program	**($721,875)**			(721,875)							
RESIDENTIAL REVENUES				**$488,989,363**		**$537,766,197**					**$525,165,772**
TOTAL RESIDENTIAL USAGE	**259,029,253**										
RES CUSTOMER COUNT	**626,450**										
Average Use Per Customer	**34.46**										

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

RESIDENTIAL CLASS	2024 Rates	FR II.02j Valley Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Findlay Township FR II.02w	Audubon from SFR to reg FR II.02x	Farmington from SFR to reg FR II.02y	Shale Gas Com Usage FR II.02l	Present Rate 6/30/2024 Revenues
Rate Zone 5 - Steelton									
Total Billed Count									
5/8-METER									
3/4-METER									
1-METER									
1.5-METER									
2-METER									
3-METER									
4-METER									
Total Billed Count									
5/8-METER	$17.50								$450,029
3/4-METER	17.50								0
1-METER	17.50								3,155
1.5-METER	17.50								0
2-METER	121.80								1,462
3-METER	227.20								0
4-METER	285.10								0
Usage in Hundred Gallons									
First 1,700 Gal									
First 1,700 Gal	1.6108								$604,538
Next 18,300 Gal									
Next 18,300 Gal	1.6108								871,898
Next 30,000 Gal									
Next 30,000 Gal	1.2500								28,764
All Over 50,000 Gal									
All Over 50,000 Gal	1.2500								16,067
Low Income (30% Discount - 2022)									
# of Customers									
Low Income (80% Discount) Tier 1	($14.00)								($2,520)
# of Customers	($1.29)								(8,527)
Low Income (65% Discount service & 50% Disc	($11.38)								($1,638)
# of Customers	($0.81)								(4,264)
Low Income (40% Discount service & 25% Disc	($7.00)								($4,536)
# of Customers	($0.40)								(9,593)
Rate Zone XX - Audubon Water									
Meter Sizes Single Unit									
5/8-METER	$16.80					31,380			$527,184
1-METER	42.80					432			18,490
Flat Rate	170.92					0			0
All Usage	$0.8619					1,344,380			$1,158,721
Rate Zone XX - Farmington Water									
Service Charge	$67.50						5,160		348,300
First 5,000 Gallons	$0.0000						146,750		0
All Over 5,000 Gallons	$1.5000						0		0
AMP Program									
RESIDENTIAL REVENUES									**$520,796,532**
TOTAL RESIDENTIAL USAGE									
RES CUSTOMER COUNT									
Average Use Per Customer									

Pennsylvania American Water Company
Water Bill Analysis Summary
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RESIDENTIAL CLASS	2025 Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Creekside Annualization FR II.02m	Findlay Township FR II.02w	Present Rate 6/30/2025 Revenues
Rate Zone 5 - Steelton						
Total Billed Count						
5/8-METER						
3/4-METER						
1-METER						
1.5-METER						
2-METER						
3-METER						
4-METER						
Total Billed Count						
5/8-METER	$17.50					$450,029
3/4-METER	17.50					0
1-METER	17.50					3,155
1.5-METER	17.50					0
2-METER	121.80					1,462
3-METER	227.20					0
4-METER	285.10					0
Usage in Hundred Gallons						
First 1,700 Gal						
First 1,700 Gal	1.6108					$604,538
Next 18,300 Gal						
Next 18,300 Gal	1.6108					871,898
Next 30,000 Gal						
Next 30,000 Gal	1.2500					28,764
All Over 50,000 Gal						
All Over 50,000 Gal	1.2500					16,067
Low Income (30% Discount - 2022)						
# of Customers						
Low Income (80% Discount) Tier 1	($14.00)					($2,520)
# of Customers	($1.29)					(8,527)
Low Income (65% Discount service & 50% Disc	($11.38)					($1,638)
# of Customers	($0.81)					(4,264)
Low Income (40% Discount service & 25% Disc	($7.00)					($4,536)
# of Customers	($0.40)					(9,593)
Rate Zone XX - Audubon Water						
Meter Sizes Single Unit						
5/8-METER	$16.80					$527,184
1-METER	42.80					18,490
Flat Rate	170.92					0
All Usage	$0.8619					$1,158,721
Rate Zone XX - Farmington Water						
Service Charge	$67.50					348,300
First 5,000 Gallons	$0.0000					0
All Over 5,000 Gallons	$1.5000					0
AMP Program						
RESIDENTIAL REVENUES						**$516,458,702**
TOTAL RESIDENTIAL USAGE						
RES CUSTOMER COUNT						
Average Use Per Customer						

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

COMMERCIAL CLASS	6/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	FR II.02e Annualized Revenue Current Rate	Change in Customers FR II.02h	Usage Normalization FR II.02i	Creekside Annualization FR II.02m	Quarryville 12th bill adj FR II.02u	6/30/2023 Revenues Incl All adj
Rate Zone 1 - Most Areas	(a)				(a)	(e) = (a)*(c)	(f)	(g)	(h)	(i)	j=(a+f+g+h+i)*c
Total Billed Count											
5/8-METER	**219,085**	17.50		$3,833,991							
3/4-METER	**13,332**	26.50		353,289							
1-METER	**52,001**	44.10		2,293,265							
1.5-METER	**10,142**	72.00		730,231							
2-METER	**28,830**	115.20		3,321,185							
3-METER	**877**	214.90		188,476							
4-METER	**12,183**	269.70		3,285,690							
6-METER	**11,077**	403.70		4,471,631							
8-METER	**4,078**	781.60		3,187,451							
10-METER	**505**	1,131.90		571,196							
Total Billed Count											
5/8-METER	**128,454**		$18.50	$2,376,394	347,539	$6,429,469	4,572				$6,514,051
3/4-METER	**7,678**		28.00	214,975	21,009	588,262					588,262
1-METER	**31,048**		46.60	1,446,818	83,049	3,870,087					3,870,087
1.5-METER	**6,163**		76.10	468,978	16,305	1,240,791					1,240,791
2-METER	**17,397**		121.80	2,118,908	46,226	5,630,369					5,630,369
3-METER	**492**		227.20	111,722	1,369	310,986					310,986
4-METER	**7,260**		285.10	2,069,907	19,443	5,543,212					5,543,212
6-METER	**6,728**		426.80	2,871,703	17,805	7,599,204					7,599,204
8-METER	**2,441**		826.30	2,016,831	6,519	5,386,573					5,386,573
10-METER	**287**		1,196.60	343,041	791	946,887					946,887
Usage in Hundred Gallons											
First 16,000 Gal	**21,276,852**	$1.3100		$27,872,676							
McEwensville	**5,097**	0.8983		$4,579							
First 16,000 Gal	**12,424,412**		1.5613	$19,398,234	33,706,360	$52,625,741	731,520.00	961,858			$55,269,611
All Over 16,000	**58,281,353**	0.9643		$56,200,708							
All Over 16,000	**31,314,769**		1.1493	35,990,064	89,596,122	$102,972,823	284,907.23	561,898			103,946,056
	123,302,482										
Rate Zone 2 - Valley Township											
Total Billed Count											
5/8-METER	**92**		$28.12	$2,579	84	$2,362					$2,362
1.5-METER	**12**		28.12	337	12	337					337
2-METER	**24**		28.12	675	24	675					675
4-METER	**24**		28.12	675	24	675					675
Usage in Hundred Gallons											
First 3,400 Gal	**3,175**		$0.0000	$0	3,175	$0					$0
All Over 3,400 Gal	**11,841**		0.8400	9,946	11,841	9,946					9,946
	15,016										

Pennsylvania American Water Company
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COMMERCIAL CLASS	2024 Rates	FR II.02j Valley Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Findlay Township FR II.02w	Audubon from SFR to reg FR II.02x	Farmington from SFR to reg FR II.02y	Shale Gas Com Usage FR II.02l	Present Rate 6/30/2024 Revenues
Rate Zone 1 - Most Areas	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	s=(a+f+g+h+i+m+n+o+p+q+r)*k
Total Billed Count									
5/8-METER									
3/4-METER									
1-METER									
1.5-METER									
2-METER									
3-METER									
4-METER									
6-METER									
8-METER									
10-METER									
Total Billed Count									
5/8-METER	$18.50		2,055						$6,552,069
3/4-METER	28.00								588,262
1-METER	46.60								3,870,087
1.5-METER	76.10								1,240,791
2-METER	121.80								5,630,369
3-METER	227.20								310,986
4-METER	285.10								5,543,212
6-METER	426.80								7,599,204
8-METER	826.30								5,386,573
10-METER	1,196.60								946,887
Usage in Hundred Gallons									
First 16,000 Gal									
McEwensville									
First 16,000 Gal	1.5613		328,800.00	(737,316)				1,948	$54,634,837
All Over 16,000									
All Over 16,000	1.1493		128,058.70	(430,725)				216,128	103,846,598
Rate Zone 2 - Valley Township									
Total Billed Count									
5/8-METER		$18.50							$1,554
1.5-METER		76.10							913
2-METER		121.80							2,923
4-METER		285.10							6,842
Usage in Hundred Gallons									
First 3,400 Gal		$1.1000							$3,493
All Over 3,400 Gal		1.1000							13,025

Pennsylvania American Water Company
Water Bill Analysis Summary
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COMMERCIAL CLASS	2025 Rates	2025 Change in Customers FR II.02h	2025 Usage Trend adj FR II.02i	2025 Creekside Annualization FR II.02m	2024 Findlay Township FR II.02w	Present Rate 6/30/2025 Revenues
Rate Zone 1 - Most Areas	(t)	(u)	(v)	(w)	(x)	y=(a+f+g+h+i+m+n+o+p+q+r+t+u+v+w+x)*t
Total Billed Count						
5/8-METER						
3/4-METER						
1-METER						
1.5-METER						
2-METER						
3-METER						
4-METER						
6-METER						
8-METER						
10-METER						
Total Billed Count						
5/8-METER	$18.50	4,110				$6,628,104
3/4-METER	28.00					588,262
1-METER	46.60					3,870,087
1.5-METER	76.10					1,240,791
2-METER	121.80					5,630,369
3-METER	227.20					310,986
4-METER	285.10					5,543,212
6-METER	426.80					7,599,204
8-METER	826.30					5,386,573
10-METER	1,196.60					946,887
Usage in Hundred Gallons						
First 16,000 Gal						
McEwensville						
First 16,000 Gal	1.5613	657,600.00	(517,997)			$54,852,799
All Over 16,000						
All Over 16,000	1.1493	256,117.39	(302,603)			103,793,172
Rate Zone 2 - Valley Township						
Total Billed Count						
5/8-METER	$18.50					$1,554
1.5-METER	76.10					913
2-METER	121.80					2,923
4-METER	285.10					6,842
Usage in Hundred Gallons						
First 3,400 Gal	$1.1000					$3,493
All Over 3,400 Gal	1.1000					13,025

Pennsylvania American Water Company
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COMMERCIAL CLASS	6/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	FR II.02e Annualized Revenue Current Rate	Change in Customers FR II.02h	Usage Normalization FR II.02i	Creekside Annualization FR II.02m	Quarryville 12th bill adj FR II.02u	6/30/2023 Revenues Incl All adj
Rate Zone 1 - Most Areas	(a)				(a)	(e) = (a)*(c)	(f)	(g)	(h)	(i)	j=(a+f+g+h+i)*c
Rate Zone 3 - SLIBCO											
Total Billed Count											
2-METER	**12**		$63.55	$763	12	$763					$763
4-METER	**12**		136.30	1,636	12	1,636					1,636
6-METER	**24**		136.30	3,271	24	3,271					3,271
8-METER	**48**		309.30	14,883	48	14,883					14,883
Usage in Hundred Gallons											
First 20,000 Gal	**12,888**		$1.8940	$24,410	12,888	$24,410					$24,410
Next 80,000 Gal	**21,868**		1.6780	36,695	21,868	36,695					36,695
All Over 100,000 Gal	**5,818**		1.3810	8,035	5,818	8,035					8,035
	40,574										
		70.2685005									
Rate Zone 4 - Turbotville											
Total Billed Count											
5/8-METER	**304**	$17.50		$5,328							
3/4-METER	**0**			0							
1-METER	**39**	44.10		1,728							
1.5-METER	**15**	72.00		1,044							
2-METER	**0**			0							
3-METER	**7**	214.90		1,558							
4-METER	**0**	349.33		0							
6-METER	**7**	403.70		2,927							
Total Billed Count											
5/8-METER	**200**		$18.50	$3,691	504	$9,324					$9,324
3/4-METER	**0**		28.00	0	0	0					0
1-METER	**29**		46.60	1,328	68	3,154					3,154
1.5-METER	**10**		76.10	723	24	1,826					1,826
2-METER	**0**		121.20	0	0	0					0
3-METER	**5**		227.20	1,079	12	2,726					2,726
4-METER	**0**		285.10	0	0	0					0
6-METER	**5**		426.80	2,027	12	5,122					5,122
Usage in Hundred Gallons											
All Usage	**30,456**	$0.8983		$27,358							
All Usage	**20,199**		$1.0706	$21,625	50,655	$54,231					$54,231

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

COMMERCIAL CLASS	2024 Rates	FR II.02j Valley Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Findlay Township FR II.02w	Audubon from SFR to reg FR II.02x	Farmington from SFR to reg FR II.02y	Shale Gas Com Usage FR II.02l	Present Rate 6/30/2024 Revenues
Rate Zone 1 - Most Areas	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	s=(a+f+g+h+i+m+n+o+p+q+r)*k
Rate Zone 3 - SLIBCO									
Total Billed Count									
2-METER	$63.55								$763
4-METER	136.30								1,636
6-METER	136.30								3,271
8-METER	309.30								14,883
Usage in Hundred Gallons									
First 20,000 Gal	$1.8940								$24,410
Next 80,000 Gal	1.6780								36,695
All Over 100,000 Gal	1.3810								8,035
Rate Zone 4 - Turbotville									
Total Billed Count									
5/8-METER									
3/4-METER									
1-METER									
1.5-METER									
2-METER									
3-METER									
4-METER									
6-METER									
Total Billed Count									
5/8-METER	$18.50								$9,324
3/4-METER	28.00								0
1-METER	46.60								3,154
1.5-METER	76.10								1,826
2-METER	121.20								0
3-METER	227.20								2,726
4-METER	285.10								0
6-METER	426.80								5,122
Usage in Hundred Gallons									
All Usage									
All Usage	$1.0706								$54,231

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

COMMERCIAL CLASS	2025 Rates	2025 Change in Customers FR II.02h	2025 Usage Trend adj FR II.02i	2025 Creekside Annualization FR II.02m	2024 Findlay Township FR II.02w	Present Rate 6/30/2025 Revenues
Rate Zone 1 - Most Areas	(t)	(u)	(v)	(w)	(x)	y=(a+f+g+h+i+m+n+o+p+q+r+t+u+v+w+x)*t
Rate Zone 3 - SLIBCO						
Total Billed Count						
2-METER	$63.55					$763
4-METER	136.30					1,636
6-METER	136.30					3,271
8-METER	309.30					14,883
Usage in Hundred Gallons						
First 20,000 Gal	$1.8940					$24,410
Next 80,000 Gal	1.6780					36,695
All Over 100,000 Gal	1.3810					8,035
Rate Zone 4 - Turbotville						
Total Billed Count						
5/8-METER						
3/4-METER						
1-METER						
1.5-METER						
2-METER						
3-METER						
4-METER						
6-METER						
Total Billed Count						
5/8-METER	$18.50					$9,324
3/4-METER	28.00					0
1-METER	46.60					3,154
1.5-METER	76.10					1,826
2-METER	121.20					0
3-METER	227.20					2,726
4-METER	285.10					0
6-METER	426.80					5,122
Usage in Hundred Gallons						
All Usage						
All Usage	$1.0706					$54,231

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

COMMERCIAL CLASS	6/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	FR II.02e Annualized Revenue Current Rate	Change in Customers FR II.02h	Usage Normalization FR II.02i	Creekside Annualization FR II.02m	Quarryville 12th bill adj FR II.02u	6/30/2023 Revenues Incl All adj
Rate Zone 1 - Most Areas	(a)				(a)	(e) = (a)*(c)	(f)	(g)	(h)	(i)	j=(a+f+g+h+i)*c
Rate Zone 5 - Steelton											
Total Billed Count											
5/8-METER	**800**	$20.69		$16,556							
3/4-METER	**0**	20.69		0							
1-METER	**267**	45.32		12,089							
1.5-METER	**71**	81.61		5,754							
2-METER	**39**	117.88		4,602							
3-METER	**39**	267.48		10,417							
4-METER	**31**	349.33		10,996							
6-METER	**0**			0							
8-METER	**16**	811.96		12,759							
Total Billed Count											
5/8-METER	**426**		$18.50	$7,889	1,227	$22,693					$22,693
3/4-METER	**0**		28.00	0	0	0					0
1-METER	**138**		46.60	6,446	405	18,877					18,877
1.5-METER	**38**		76.10	2,891	108	8,256					8,256
2-METER	**21**		121.80	2,553	60	7,308					7,308
3-METER	**19**		227.20	4,329	58	13,178					13,178
4-METER	**17**		285.10	4,710	48	13,685					13,685
6-METER	**0**		426.80	0	0	0					0
8-METER	**8**		826.30	6,846	24	19,831					19,831
Usage in Hundred Gallons											
First 1,700 Gal	**14,672**	$0.0000		$0							
First 1,700 Gal	**7,770**		$1.6108	12,516	22,442	$36,150					$36,150
Next 18,300 Gal	**53,787**	1.1564		62,199							
Next 18,300 Gal	**26,761**		1.6108	43,107	80,548	129,748					129,748
Next 30,000 Gal	**22,577**	1.2768		28,826							
Next 30,000 Gal	**11,543**		1.2500	14,429	34,120	42,650					42,650
All Over 50,000 Gal	**110,649**	1.1032		122,068							
All Over 50,000 Gal	**52,843**		1.2500	66,054	163,492	204,365					204,365
	300,602										

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

COMMERCIAL CLASS	2024 Rates	FR II.02j Valley Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Findlay Township FR II.02w	Audubon from SFR to reg FR II.02x	Farmington from SFR to reg FR II.02y	Shale Gas Com Usage FR II.02l	Present Rate 6/30/2024 Revenues
Rate Zone 1 - Most Areas	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	s=(a+f+g+h+i+m+n+o+p+q+r)*k
Rate Zone 5 - Steelton									
Total Billed Count									
5/8-METER									
3/4-METER									
1-METER									
1.5-METER									
2-METER									
3-METER									
4-METER									
6-METER									
8-METER									
Total Billed Count									
5/8-METER	$18.50								$22,693
3/4-METER	28.00								0
1-METER	46.60								18,877
1.5-METER	76.10								8,256
2-METER	121.80								7,308
3-METER	227.20								13,178
4-METER	285.10								13,685
6-METER	426.80								0
8-METER	826.30								19,831
Usage in Hundred Gallons									
First 1,700 Gal									
First 1,700 Gal	$1.6108								$36,150
Next 18,300 Gal									
Next 18,300 Gal	1.6108								129,748
Next 30,000 Gal									
Next 30,000 Gal	1.2500								42,650
All Over 50,000 Gal									
All Over 50,000 Gal	1.2500								204,365

Pennsylvania American Water Company
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12 Months Ending June 2023, 2024, 2025

COMMERCIAL CLASS	2025 Rates	2025 Change in Customers FR II.02h	2025 Usage Trend adj FR II.02i	2025 Creekside Annualization FR II.02m	2024 Findlay Township FR II.02w	Present Rate 6/30/2025 Revenues
Rate Zone 1 - Most Areas	(t)	(u)	(v)	(w)	(x)	y=(a+f+g+h+i+m+n+o+p+q+r+t+u+v+w+x)*t
Rate Zone 5 - Steelton						
Total Billed Count						
5/8-METER						
3/4-METER						
1-METER						
1.5-METER						
2-METER						
3-METER						
4-METER						
6-METER						
8-METER						
Total Billed Count						
5/8-METER	$18.50					$22,693
3/4-METER	28.00					0
1-METER	46.60					18,877
1.5-METER	76.10					8,256
2-METER	121.80					7,308
3-METER	227.20					13,178
4-METER	285.10					13,685
6-METER	426.80					0
8-METER	826.30					19,831
Usage in Hundred Gallons						
First 1,700 Gal						
First 1,700 Gal	$1.6108					$36,150
Next 18,300 Gal						
Next 18,300 Gal	1.6108					129,748
Next 30,000 Gal						
Next 30,000 Gal	1.2500					42,650
All Over 50,000 Gal						
All Over 50,000 Gal	1.2500					204,365

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

COMMERCIAL CLASS	6/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	FR II.02e Annualized Revenue Current Rate	Change in Customers FR II.02h	Usage Normalization FR II.02i	Creekside Annualization FR II.02m	Quarryville 12th bill adj FR II.02u	6/30/2023 Revenues Incl All adj
Rate Zone 1 - Most Areas	(a)				(a)	(e) = (a)*(c)	(f)	(g)	(h)	(i)	j=(a+f+g+h+i)*c
Rate Zone XX - Audubon Water											
Audubon Multi-Family											
1"											
1 1/2"											
2"											
3"											
10"											
First 100,000 Gal											
All Over 100,000 Gal											
Audubon Commercial											
5/8"											
3/4"											
1"											
1 1/2"											
2"											
3"											
4"											
6"											
8"											
Flat Rate											
First 100,000 Gal											
All Over 100,000 Gal											
Rate Zone XX - Farmington Water											
Service Charge											
First 5,000 Gallons											
All Over 5,000 Gallons											
COMMERCIAL REVENUES				**$176,374,304**		**$193,841,216**					**$197,542,901**
TOTALCOMMERCIAL USAGE	**123,709,330**										
COM CUSTOMER COUNT	**46,372**										
Average Use Per Customer	**222.32**										

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

COMMERCIAL CLASS	2024 Rates	FR II.02j Valley Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Findlay Township FR II.02w	Audubon from SFR to reg FR II.02x	Farmington from SFR to reg FR II.02y	Shale Gas Com Usage FR II.02l	Present Rate 6/30/2024 Revenues
Rate Zone 1 - Most Areas	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	s=(a+f+g+h+i+m+n+o+p+q+r)*k
Rate Zone XX - Audubon Water									
Audubon Multi-Family									
1"	$42.80					12			$514
1 1/2"	72.90					264			19,246
2"	116.40					36			4,190
3"	218.60					24			5,246
10"	1,410.60					12			16,927
First 100,000 Gal	0.8619					348,000			$299,941
All Over 100,000 Gal	0.5723					589,560			337,405
Audubon Commercial									
5/8"	$16.80					936			$15,725
3/4"	16.80					72			1,210
1"	42.80					168			7,190
1 1/2"	72.90					252			18,371
2"	116.40					432			50,285
3"	218.60					48			10,493
4"	363.90					48			17,467
6"	727.80					36			26,201
8"	1,164.60					12			13,975
Flat Rate	170.92					0			0
First 100,000 Gal	0.8619					276,520			$238,333
All Over 100,000 Gal	0.5723					-			0
Rate Zone XX - Farmington Water									
Service Charge	$67.50						912		$61,560
First 5,000 Gallons	$0.0000						25,554		0
All Over 5,000 Gallons	$1.5000						0		0
COMMERCIAL REVENUES									**$198,005,721**
TOTALCOMMERCIAL USAGE									
COM CUSTOMER COUNT									
Average Use Per Customer									

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

COMMERCIAL CLASS	2025 Rates	2025 Change in Customers FR II.02h	2025 Usage Trend adj FR II.02i	2025 Creekside Annualization FR II.02m	2024 Findlay Township FR II.02w	Present Rate 6/30/2025 Revenues
Rate Zone 1 - Most Areas	(t)	(u)	(v)	(w)	(x)	y=(a+f+g+h+i+m+n+o+p+q+r+t+u+v+w+x)*t
Rate Zone XX - Audubon Water						
Audubon Multi-Family						
1"	$42.80					$514
1 1/2"	72.90					19,246
2"	116.40					4,190
3"	218.60					5,246
10"	1,410.60					16,927
First 100,000 Gal	0.8619					299,941
All Over 100,000 Gal	0.5723					337,405
Audubon Commercial						
5/8"	$16.80					$15,725
3/4"	16.80					1,210
1"	42.80					7,190
1 1/2"	72.90					18,371
2"	116.40					50,285
3"	218.60					10,493
4"	363.90					17,467
6"	727.80					26,201
8"	1,164.60					13,975
Flat Rate	170.92					0
First 100,000 Gal	0.8619					$238,333
All Over 100,000 Gal	0.5723					0
Rate Zone XX - Farmington Water						
Service Charge	$67.50					$61,560
First 5,000 Gallons	$0.0000					0
All Over 5,000 Gallons	$0.0000					0
COMMERCIAL REVENUES						**$198,246,292**
TOTALCOMMERCIAL USAGE						
COM CUSTOMER COUNT						
Average Use Per Customer						

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

INDUSTRIAL CLASS	6/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	FR II.02e Annualized Revenue Current Rate	Change in Customers FR II.02h	Usage Normalization FR II.02i	Creekside Annualization FR II.02m	Quarryville 12th bill adj FR II.02u	6/30/2023 Revenues Incl All adj
Rate Zone 1 - Most Areas	(a)				(a)	(e) = (a)*(c)	(f)	(g)	(h)	(i)	j=(a+f+g+h+i)*c
Total Billed Count											
5/8-METER	**379**	$25.40		$9,623							
3/4-METER	**60**	38.10		2,273							
1-METER	**644**	63.60		40,975							
1.5-METER	**308**	127.10		39,132							
2-METER	**1,210**	203.40		246,046							
3-METER	**105**	381.40		40,167							
4-METER	**480**	635.60		304,840							
6-METER	**530**	1,271.20		673,318							
8-METER	**323**	2,034.30		656,260							
10-METER	**82**	2,923.40		240,975							
12-METER	**0**	4,625.00		0							
Total Billed Count											
5/8-METER	**233**		$28.00	$6,517	612	$17,125					$17,125
3/4-METER	**36**		42.00	1,527	96	4,032					4,032
1-METER	**387**		70.00	27,124	1,032	72,222					72,222
1.5-METER	**187**		140.00	26,187	495	69,291					69,291
2-METER	**727**		224.00	162,845	1,937	433,810					433,810
3-METER	**63**		420.00	26,328	168	70,560					70,560
4-METER	**292**		701.00	204,772	772	540,979					540,979
6-METER	**316**		1,401.00	443,193	846	1,185,262					1,185,262
8-METER	**203**		2,243.00	455,804	526	1,179,390					1,179,390
10-METER	**51**		3,223.00	162,988	133	428,659					428,659
12-METER	**0**		4,625.00	0	0	0					0
Farmington Water											
Farmington First 5000 Gal											
Usage in Hundred Gallons											
First 16,000 Gal	**458,001**	$1.2277		$562,288							
First 16,000 Gal	**272,036**		$1.4200	386,291	730,036	$1,036,652					$1,036,652
Next 584,000 Gal	**5,665,016**	0.9341		5,291,691							
Next 584,000 Gal	**3,256,826**		1.0804	3,518,675	8,921,842	9,639,158					9,639,158
All over 600,001	**13,614,675**	0.7348		10,004,064							
All over 600,000	**7,123,069**		0.8499	6,053,896	20,737,744	17,625,009					17,625,009
	30,389,623										
Usage in Hundred Gallons (Curtailment)											
First 16,000 Gal	**1,195**	$1.2277		$1,467							
First 16,000 Gal	**725**		1.4200	1,030	1,920	$2,726					$2,726
Next 584,000 Gal	**43,618**	0.9341		40,744							
Next 584,000 Gal	**26,463**		1.0804	28,591	70,081	75,716					75,716
Next 14,400,000 Gal	**1,075,500**	0.7348		790,277							
Next 14,400,000 Gal	**652,500**		0.8499	554,560	1,728,000	1,468,627					1,468,627
All Over 15,000,000	**2,323,751**	0.4487		1,042,667							
All Over 15,000,000	**1,086,758**		0.5110	555,333	3,410,509	1,742,770					1,742,770
	5,210,510										
SPECIAL CONTRACTS											
Redacted - Refer to Confidential Volume 6d		Redacted - Refer to Confidential Volume 6d									

Pennsylvania American Water Company
Water Bill Analysis Summary
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INDUSTRIAL CLASS	2024 Rates	FR II.02j Valley Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Findlay Township FR II.02w	Audubon from SFR to reg FR II.02x	Farmington from SFR to reg FR II.02y	Shale Gas Com Usage FR II.02l	Present Rate 6/30/2024 Revenues
Rate Zone 1 - Most Areas	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	s=(a+f+g+h+i+m+n+o+p+q+r)*k
Total Billed Count									
5/8-METER									
3/4-METER									
1-METER									
1.5-METER									
2-METER									
3-METER									
4-METER									
6-METER									
8-METER									
10-METER									
12-METER									
Total Billed Count									
5/8-METER	$28.00								$17,125
3/4-METER	42.00								4,032
1-METER	70.00								72,222
1.5-METER	140.00								69,291
2-METER	224.00								433,810
3-METER	420.00								70,560
4-METER	701.00								540,979
6-METER	1,401.00								1,185,262
8-METER	2,243.00								1,179,390
10-METER	3,223.00								428,659
12-METER	4,625.00								0
Farmington Water	67.50						96		$6,480
Farmington First 5000 Gal	$0.00						3,588		$0
Usage in Hundred Gallons									
First 16,000 Gal									
First 16,000 Gal	$1.4200								$1,036,652
Next 584,000 Gal									
Next 584,000 Gal	1.0804								9,639,158
All over 600,001									
All over 600,000	0.8499								17,625,009
Usage in Hundred Gallons (Curtailment)									
First 16,000 Gal									
First 16,000 Gal	$1.4200								$2,726
Next 584,000 Gal									
Next 584,000 Gal	1.0804								75,716
Next 14,400,000 Gal									
Next 14,400,000 Gal	0.8499								1,468,627
All Over 15,000,000									
All Over 15,000,000	0.5110								1,742,770

SPECIAL CONTRACTS

Redacted - Refer to Confidential Volume 6d	Redacted - Refer to Confidential Volume 6d

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

INDUSTRIAL CLASS	2025 Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Creekside Annualization FR II.02m	Findlay Township FR II.02w	Present Rate 6/30/2025 Revenues
Rate Zone 1 - Most Areas	(t)	(u)	(v)	(w)	(x)	y=(a+f+g+h+i+m+n+o+p+q+r+t+u+v+w+x)*t
Total Billed Count						
5/8-METER						
3/4-METER						
1-METER						
1.5-METER						
2-METER						
3-METER						
4-METER						
6-METER						
8-METER						
10-METER						
12-METER						
Total Billed Count						
5/8-METER	$28.00					$17,125
3/4-METER	42.00					4,032
1-METER	70.00					72,222
1.5-METER	140.00					69,291
2-METER	224.00					433,810
3-METER	420.00					70,560
4-METER	701.00					540,979
6-METER	1,401.00					1,185,262
8-METER	2,243.00					1,179,390
10-METER	3,223.00					428,659
12-METER	4,625.00					0
Farmington Water	$0.00					$0
Farmington First 5000 Gal	$0.00					$0
Usage in Hundred Gallons						
First 16,000 Gal						
First 16,000 Gal	$1.4200					$1,036,652
Next 584,000 Gal						
Next 584,000 Gal	1.0804					9,639,158
All over 600,001						
All over 600,000	0.8499					17,625,009
Usage in Hundred Gallons (Curtailment)						
First 16,000 Gal						
First 16,000 Gal	$1.4200					$2,726
Next 584,000 Gal						
Next 584,000 Gal	1.0804					75,716
Next 14,400,000 Gal						
Next 14,400,000 Gal	0.8499					1,468,627
All Over 15,000,000						
All Over 15,000,000	0.5110					1,742,770
SPECIAL CONTRACTS						
Redacted - Refer to Confidential Volume 6d	Redacted - Refer to Confidential Volume 6d					

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

INDUSTRIAL CLASS	6/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	FR II.02e Annualized Revenue Current Rate	Change in Customers FR II.02h	Usage Normalization FR II.02i	Creekside Annualization FR II.02m	Quarryville 12th bill adj FR II.02u	6/30/2023 Revenues Incl All adj
Rate Zone 2 - Valley Township											
Total Billed Count											
5/8-METER	**12**		$28.12	$337	12	$337					$337
Usage in Hundred Gallons											
First 3,400 Gal	**408**		$0.0000	$0	408	$0					$0
All Over 3,400 Gal	**379**		0.8400	318	379	318					318
	787										
Rate Zone 5 - Steelton											
Total Billed Count											
5/8-METER	**8**	$20.69		$163							
3/4-METER	**0**	20.69		0							
1-METER	**0**	45.32		0							
1.5-METER	**0**	81.61		0							
2-METER	**24**	117.88		2,787							
3-METER	**0**	267.48		0							
4-METER	**23**	349.33		8,166							
6-METER	**24**	558.92		13,205							
8-METER	**8**	811.96		6,394							
Total Billed Count											
5/8-METER	**4**		$24.83	$102	12	$298					$298
3/4-METER	**0**		24.83	0	0	0					0
1-METER	**0**		54.38	0	0	0					0
1.5-METER	**0**		97.93	0	0	0					0
2-METER	**12**		141.46	1,749	36	5,093					5,093
3-METER	**0**		320.98	0	0	0					0
4-METER	**13**		419.20	5,292	36	15,091					15,091
6-METER	**12**		670.70	8,300	36	24,145					24,145
8-METER	**4**		974.35	4,019	12	11,692					11,692
Usage in Hundred Gallons											
First 1,700 Gal	**1,388**	$0.0000		$0							
First 1,700 Gal	**715**		$1.6108	1,152	2,104	$3,389					$3,389
Next 18,300 Gal	**10,924**	1.1564		12,633							
Next 18,300 Gal	**5,288**		1.6108	8,518	16,212	26,114					26,114
Next 30,000 Gal	**15,841**	1.2768		20,226							
Next 30,000 Gal	**6,667**		1.2500	8,333	22,508	28,135					28,135
All Over 50,000 Gal	**560,941**	1.1032		618,830							
All Over 50,000 Gal	**257,016**		1.2500	321,270	817,957	1,022,446					1,022,446
	858,781										
INDUSTRIAL REVENUES				**$37,761,932**		**$40,938,129**					**$40,938,129**
TOTAL INDUSTRIAL USAGE	**44,778,639**										
IND CUSTOMER COUNT	**544**										
Average Use Per Customer	**6,859.47**										

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

INDUSTRIAL CLASS	2024 Rates	FR II.02j Valley Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Findlay Township FR II.02w	Audubon from SFR to reg FR II.02x	Farmington from SFR to reg FR II.02y	Shale Gas Com Usage FR II.02l	Present Rate 6/30/2024 Revenues
Rate Zone 2 - Valley Township									
Total Billed Count									
5/8-METER		$18.50							$222
Usage in Hundred Gallons									
First 3,400 Gal		$1.1000							$449
All Over 3,400 Gal		1.1000							417
Rate Zone 5 - Steelton									
Total Billed Count									
5/8-METER									
3/4-METER									
1-METER									
1.5-METER									
2-METER									
3-METER									
4-METER									
6-METER									
8-METER									
Total Billed Count									
5/8-METER	$24.83								$298
3/4-METER	24.83								0
1-METER	54.38								0
1.5-METER	97.93								0
2-METER	141.46								5,093
3-METER	320.98								0
4-METER	419.20								15,091
6-METER	670.70								24,145
8-METER	974.35								11,692
Usage in Hundred Gallons									
First 1,700 Gal									
First 1,700 Gal	$1.6108								$3,389
Next 18,300 Gal									
Next 18,300 Gal	1.6108								26,114
Next 30,000 Gal									
Next 30,000 Gal	1.2500								28,135
All Over 50,000 Gal									
All Over 50,000 Gal	1.2500								1,022,446
INDUSTRIAL REVENUES									**$41,050,810**
TOTAL INDUSTRIAL USAGE									
IND CUSTOMER COUNT									
Average Use Per Customer									

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

INDUSTRIAL CLASS	2025 Rates	2025 Change in Customers FR II.02h	2025 Usage Trend adj FR II.02i	2025 Creekside Annualization FR II.02m	2024 Findlay Township FR II.02w	Present Rate 6/30/2025 Revenues
Rate Zone 2 - Valley Township						
Total Billed Count						
5/8-METER	$18.50					$222
Usage in Hundred Gallons						
First 3,400 Gal	$1.1000					$449
All Over 3,400 Gal	1.1000					417
Rate Zone 5 - Steelton						
Total Billed Count						
5/8-METER						
3/4-METER						
1-METER						
1.5-METER						
2-METER						
3-METER						
4-METER						
6-METER						
8-METER						
Total Billed Count						
5/8-METER	$24.83					$298
3/4-METER	24.83					0
1-METER	54.38					0
1.5-METER	97.93					0
2-METER	141.46					5,093
3-METER	320.98					0
4-METER	419.20					15,091
6-METER	670.70					24,145
8-METER	974.35					11,692
Usage in Hundred Gallons						
First 1,700 Gal						
First 1,700 Gal	$1.6108					$3,389
Next 18,300 Gal						
Next 18,300 Gal	1.6108					26,114
Next 30,000 Gal						
Next 30,000 Gal	1.2500					28,135
All Over 50,000 Gal						
All Over 50,000 Gal	1.2500					1,022,446
INDUSTRIAL REVENUES						**$41,211,578**
TOTAL INDUSTRIAL USAGE						
IND CUSTOMER COUNT						
Average Use Per Customer						

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

MUNICIPAL CLASS	6/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	FR II.02e Annualized Revenue Current Rate	Change in Customers FR II.02h	Usage Normalization FR II.02i	Creekside Annualization FR II.02m	Quarryville 12th bill adj FR II.02u	6/30/2023 Revenues Incl All adj
Rate Zone 1 - Most Areas	(a)				(a)	(e) = (a)*(c)	(f)	(g)	(h)	(i)	j=(a+f+g+h+i)*c
Total Billed Count											
5/8-METER	**5,892**	$17.50		$103,113							
3/4-METER	**404**	26.50		10,718							
1-METER	**3,420**	44.10		150,802							
1.5-METER	**629**	72.00		45,271							
2-METER	**4,329**	115.20		498,724							
3-METER	**205**	214.90		43,975							
4-METER	**1,099**	269.70		296,269							
6-METER	**1,544**	403.70		623,125							
8-METER	**403**	781.60		315,051							
10-METER	**60**	1,131.90		67,448							
Total Billed Count											
5/8-METER	**3,366**		$18.50	$62,268	9,258	$171,274					$171,274
3/4-METER	**235**		28.00	6,568	639	17,892					17,892
1-METER	**1,986**		46.60	92,568	5,406	251,919					251,919
1.5-METER	**373**		76.10	28,373	1,002	76,221					76,221
2-METER	**2,538**		121.80	309,087	6,867	836,384					836,384
3-METER	**119**		227.20	27,057	324	73,549					73,549
4-METER	**638**		285.10	181,967	1,737	495,154					495,154
6-METER	**946**		426.80	403,566	2,489	1,062,346					1,062,346
8-METER	**244**		826.30	201,708	647	534,777					534,777
10-METER	**40**		1,196.60	48,357	100	119,660					119,660
Usage in Hundred Gallons											
First 16,000 Gal	**1,116,639**	$1.4742		$1,646,150							
McEwensvile	**17**	0.8983		15							
First 16,000 Gal	**82**	1.5613		128							
First 16,000 Gal	**34**	1.3100		44							
First 16,000 Gal	**673,136**		1.6700	1,124,137	1,789,908	$2,989,146		167,695			$3,269,197
All Over 16,000	**10,266,362**	0.8705		8,936,868							
All Over 16,000	**5,597,755**		0.9140	5,116,348	15,864,118	14,499,803		1,357,681			15,740,724
	17,654,025										
Rate Zone 2 - Valley Township											
Total Billed Count											
2-METER	**12**		$28.12	$337	12	$337					$337
4-METER	**12**		28.12	337	12	337					337
8-METER	**24**		28.12	675	24	675					675
Usage in Hundred Gallons											
First 3,400 Gal	**1,282**		$0.0000	$0	1,282	$0					$0
All Over 3,400 Gal	**43,581**		0.8400	36,608	43,581	36,608					36,608
	44,863										
Rate Zone 4 - Turbotville											
Total Billed Count											
5/8-METER	**5**		$18.50	$88	12	$222					$222
Flat Rate	**7**	$17.50		127							
Usage in Hundred Gallons											
All Usage	**116**	$1.4742		$171							
All Usage	**22**		$1.6700	$37	138	$230					$230
	138										

Pennsylvania American Water Company
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MUNICIPAL CLASS	2024 Rates	FR II.02j Valley Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Findlay Township FR II.02w	Audubon from SFR to reg FR II.02x	Farmington from SFR to reg FR II.02y	Shale Gas Com Usage FR II.02l	Present Rate 6/30/2024 Revenues
Rate Zone 1 - Most Areas	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	s=(a+f+g+h+i+m+n+o+p+q+r)*k
Total Billed Count									
5/8-METER									
3/4-METER									
1-METER									
1.5-METER									
2-METER									
3-METER									
4-METER									
6-METER									
8-METER									
10-METER									
Total Billed Count									
5/8-METER	$18.50								$171,274
3/4-METER	28.00								17,892
1-METER	46.60								251,919
1.5-METER	76.10								76,221
2-METER	121.80								836,384
3-METER	227.20								73,549
4-METER	285.10								495,154
6-METER	426.80								1,062,346
8-METER	826.30								534,777
10-METER	1,196.60								119,660
Usage in Hundred Gallons									
First 16,000 Gal									
McEwensvile									
First 16,000 Gal									
First 16,000 Gal									
First 16,000 Gal	1.6700			(71,783)					$3,149,320
All Over 16,000									
All Over 16,000	0.9140			(581,161)					15,209,543
Rate Zone 2 - Valley Township									
Total Billed Count									
2-METER		$121.80							$1,462
4-METER		$285.10							3,421
8-METER		$826.30							19,831
Usage in Hundred Gallons									
First 3,400 Gal		$1.1000							$1,410
All Over 3,400 Gal		1.1000							47,939
Rate Zone 4 - Turbotville									
Total Billed Count									
5/8-METER	$18.50								$222
Flat Rate									
Usage in Hundred Gallons									
All Usage									
All Usage	$1.6700								$230

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

MUNICIPAL CLASS	2025 Rates	2025 Change in Customers FR II.02h	2025 Usage Trend adj FR II.02i	2025 Creekside Annualization FR II.02m	2024 Findlay Township FR II.02w	Present Rate 6/30/2025 Revenues
Rate Zone 1 - Most Areas	(t)	(u)	(v)	(w)	(x)	y=(a+f+g+h+i+m+n+o+p+q+r+t+u+v+w+x)*t
Total Billed Count						
5/8-METER						
3/4-METER						
1-METER						
1.5-METER						
2-METER						
3-METER						
4-METER						
6-METER						
8-METER						
10-METER						
Total Billed Count						
5/8-METER	$18.50					$171,274
3/4-METER	28.00					17,892
1-METER	46.60					251,919
1.5-METER	76.10					76,221
2-METER	121.80					836,384
3-METER	227.20					73,549
4-METER	285.10					495,154
6-METER	426.80					1,062,346
8-METER	826.30					534,777
10-METER	1,196.60					119,660
Usage in Hundred Gallons						
First 16,000 Gal						
McEwensvile						
First 16,000 Gal						
First 16,000 Gal						
First 16,000 Gal	1.6700		(7,364)			$3,137,022
All Over 16,000						
All Over 16,000	0.9140		(59,619)			15,155,050
Rate Zone 2 - Valley Township						
Total Billed Count						
2-METER	$121.80					$1,462
4-METER	$285.10					3,421
8-METER	$826.30					19,831
Usage in Hundred Gallons						
First 3,400 Gal	$1.1000					$1,410
All Over 3,400 Gal	1.1000					47,939
Rate Zone 4 - Turbotville						
Total Billed Count						
5/8-METER	$18.50					$222
Flat Rate						
Usage in Hundred Gallons						
All Usage						
All Usage	$1.6700					230

Pennsylvania American Water Company
Water Bill Analysis Summary
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MUNICIPAL CLASS	6/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	FR II.02e Annualized Revenue Current Rate	Change in Customers FR II.02h	Usage Normalization FR II.02i	Creekside Annualization FR II.02m	Quarryville 12th bill adj FR II.02u	6/30/2023 Revenues Incl All adj
Rate Zone 5 - Steelton											
Total Billed Count											
5/8-METER	**42**	$20.69		$876							
3/4-METER	**0**	20.69		0							
1-METER	**16**	45.32		709							
1.5-METER	**8**	81.61		638							
2-METER	**16**	117.88		1,829							
3-METER	**0**	227.20		0							
4-METER	**0**	285.10		0							
Total Billed Count											
5/8-METER	**21**		$18.50	$382	63	$1,166					$1,166
3/4-METER	**0**		28.00	0	0	0					0
1-METER	**8**		46.60	389	24	1,118					1,118
1.5-METER	**4**		76.10	318	12	913					913
2-METER	**8**		121.80	1,033	24	2,923					2,923
3-METER	**1**		227.20	227	1	227					227
4-METER	**0**		285.10	0	0	0					0
Usage in Hundred Gallons											
First 1,700 Gal	**445**	$0.0000		$0							
First 1,700 Gal	**264**		$1.6108	425	709	$1,142					$1,142
Next 18,300 Gal	**1,236**	1.1564		1,429							
Next 18,300 Gal	**406**		1.6108	654	1,642	2,645					2,645
Next 30,000 Gal	**515**	1.2768		657							
Next 30,000 Gal	**427**		1.2500	534	942	1,178					1,178
All Over 50,000 Gal	**835**	1.1032		921							
All Over 50,000 Gal	**12,219**		1.2500	15,274	13,054	16,318					16,318
	16,347										
Rate Zone XX - Audubon Water											
Meter Sizes Single Unit											
1.5-METER			$0.00								
2-METER			0.00								
4-METER			0.00								
Usage in Hundred Gallons											
First 100,000 Gal			$0.0000								
All Over 100,000 Gal											
Rate Zone XX - Farmington Water											
Service Charge											
First 5000 Gallons											
MUNICIPAL REVENUES				**$20,404,383**		**$21,194,164**					**$22,715,137**
TOTAL MUNICIPAL USAGE	**17,715,373**										
OPA CUSTOMER COUNT	**2,265**										
Average Use Per Customer	**651.76**										

Pennsylvania American Water Company
Water Bill Analysis Summary
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MUNICIPAL CLASS	2024 Rates	FR II.02j Valley Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Findlay Township FR II.02w	Audubon from SFR to reg FR II.02x	Farmington from SFR to reg FR II.02y	Shale Gas Com Usage FR II.02l	Present Rate 6/30/2024 Revenues
Rate Zone 5 - Steelton									
Total Billed Count									
5/8-METER									
3/4-METER									
1-METER									
1.5-METER									
2-METER									
3-METER									
4-METER									
Total Billed Count									
5/8-METER	$18.50								$1,166
3/4-METER	28.00								0
1-METER	46.60								1,118
1.5-METER	76.10								913
2-METER	121.80								2,923
3-METER	227.20								227
4-METER	285.10								0
Usage in Hundred Gallons									
First 1,700 Gal									
First 1,700 Gal	$1.6108								$1,142
Next 18,300 Gal									
Next 18,300 Gal	1.6108								2,645
Next 30,000 Gal									
Next 30,000 Gal	1.2500								1,178
All Over 50,000 Gal									
All Over 50,000 Gal	1.2500								16,318
Rate Zone XX - Audubon Water									
Meter Sizes Single Unit									
1.5-METER	$72.90					12			$875
2-METER	116.40					12			1,397
4-METER	363.90					12			4,367
Usage in Hundred Gallons									
First 100,000 Gal	$0.8619					11,020			$9,498
All Over 100,000 Gal	0.5723					0			0
Rate Zone XX - Farmington Water									
Service Charge	$67.50						48		$3,240
First 5000 Gallons	0.00						1,477		0
MUNICIPAL REVENUES									**$22,119,561**
TOTAL MUNICIPAL USAGE									
OPA CUSTOMER COUNT									
Average Use Per Customer									

Pennsylvania American Water Company
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MUNICIPAL CLASS	2025 Rates	2025 Change in Customers FR II.02h	2025 Usage Trend adj FR II.02i	2025 Creekside Annualization FR II.02m	2024 Findlay Township FR II.02w	Present Rate 6/30/2025 Revenues
Rate Zone 5 - Steelton						
Total Billed Count						
5/8-METER						
3/4-METER						
1-METER						
1.5-METER						
2-METER						
3-METER						
4-METER						
Total Billed Count						
5/8-METER	$18.50					$1,166
3/4-METER	28.00					0
1-METER	46.60					1,118
1.5-METER	76.10					913
2-METER	121.80					2,923
3-METER	227.20					227
4-METER	285.10					0
Usage in Hundred Gallons						
First 1,700 Gal						
First 1,700 Gal	$1.6108					$1,142
Next 18,300 Gal						
Next 18,300 Gal	1.6108					2,645
Next 30,000 Gal						
Next 30,000 Gal	1.2500					1,178
All Over 50,000 Gal						
All Over 50,000 Gal	1.2500					16,318
Rate Zone XX - Audubon Water						
Meter Sizes Single Unit						
1.5-METER	$72.90					$875
2-METER	116.40					1,397
4-METER	363.90					4,367
Usage in Hundred Gallons						
First 100,000 Gal	$0.8619					$9,498
All Over 100,000 Gal	0.5723					0
Rate Zone XX - Farmington Water						
Service Charge	$67.50					$3,240
First 5000 Gallons	0.00					0
MUNICIPAL REVENUES						**$22,052,770**
TOTAL MUNICIPAL USAGE						
OPA CUSTOMER COUNT						
Average Use Per Customer						

Pennsylvania American Water Company
Water Bill Analysis Summary
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OTHER WATER UTILITIES	6/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	FR II.02e Annualized Revenue Current Rate	Change in Customers FR II.02h	Usage Normalization FR II.02i	Creekside Annualization FR II.02m	Quarryville 12th bill adj FR II.02u	6/30/2023 Revenues Incl All adj
Group A	(a)				(a)	(e) = (a)*(c)	(f)	(g)	(h)	(i)	j=(a+f+g+h+i)*c
Total Billed Count											
5/8-METER	**0**	$28.12		$0							
3/4-METER	**0**	38.10		0							
1-METER	**0**	63.60		0							
1.5-METER	**0**	127.10		0							
2-METER	**8**	203.70		1,580							
3-METER	**0**	381.40		0							
4-METER	**7**	636.50		4,668							
6-METER	**22**	1,272.70		27,590							
8-METER	**0**	2,034.30		0							
10-METER	**0**	2,923.40		0							
Total Billed Count											
5/8-METER	**0**		$29.10	$0	0	$0					$0
3/4-METER	**0**		44.00	0	0	0					0
1-METER	**0**		73.00	0	0	0					0
1.5-METER	**0**		145.00	0	0	0					0
2-METER	**4**		232.00	984	12	2,784					2,784
3-METER	**0**		436.00	0	0	0					0
4-METER	**5**		726.00	3,388	12	8,712					8,712
6-METER	**13**		1,452.00	19,343	35	50,820					50,820
8-METER	**0**		2,325.00	0	0	0					0
10-METER	**0**		3,340.00	0	0	0					0
Usage in Hundred Gallons											
All Group A Usage	**133,691**	$0.7219		$96,512							
All Group A Usage	**65,808**		$0.7950	52,317	199,499	$158,602					$158,602
Group B											
Total Billed Count											
5/8-METER	**0**	$28.12		$0							
3/4-METER	**0**	38.10		0							
1-METER	**0**	63.60		0							
1.5-METER	**0**	127.10		0							
2-METER	**29**	203.70		5,869							
3-METER	**0**	381.40		0							
4-METER	**21**	636.50		13,632							
6-METER	**7**	1,272.70		9,079							
8-METER	**0**	2,034.30		0							
10-METER	**0**	2,923.40		0							
Total Billed Count											
5/8-METER	**0**		$29.10	$0	0	$0					$0
3/4-METER	**0**		44.00	0	0	0					0
1-METER	**0**		73.00	0	0	0					0
1.5-METER	**0**		145.00	0	0	0					0
2-METER	**19**		232.00	4,452	48	11,136					11,136
3-METER	**0**		436.00	0	0	0					0
4-METER	**14**		726.00	10,305	36	25,854					25,854
6-METER	**5**		1,452.00	7,066	12	17,424					17,424
8-METER	**0**		2,325.00	0	0	0					0
10-METER	**0**		3,340.00	0	0	0					0
Usage in Hundred Gallons											
All Group B Usage	**131,893**		$1.1300	$149,039	131,893	$149,039					$149,039

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

OTHER WATER UTILITIES	2024 Rates	FR II.02j Valley Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Findlay Township FR II.02w	Audubon from SFR to reg FR II.02x	Farmington from SFR to reg FR II.02y	Shale Gas Com Usage FR II.02l	Present Rate 6/30/2024 Revenues
Group A	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	s=(a+f+g+h+i+m+n+o+p+q+r)*k
Total Billed Count									
5/8-METER									
3/4-METER									
1-METER									
1.5-METER									
2-METER									
3-METER									
4-METER									
6-METER									
8-METER									
10-METER									
Total Billed Count									
5/8-METER	$29.10								$0
3/4-METER	44.00								0
1-METER	73.00								0
1.5-METER	145.00								0
2-METER	232.00								2,784
3-METER	436.00								0
4-METER	726.00								8,712
6-METER	1,452.00						(12)		33,396
8-METER	2,325.00								0
10-METER	3,340.00								0
Usage in Hundred Gallons									
All Group A Usage									
All Group A Usage	$0.7950						(192,248)		$5,765
Group B									
Total Billed Count									
5/8-METER									
3/4-METER									
1-METER									
1.5-METER									
2-METER									
3-METER									
4-METER									
6-METER									
8-METER									
10-METER									
Total Billed Count									
5/8-METER	$29.10								$0
3/4-METER	44.00								0
1-METER	73.00								0
1.5-METER	145.00								0
2-METER	232.00					(24)			5,568
3-METER	436.00								0
4-METER	726.00								25,854
6-METER	1,452.00								17,424
8-METER	2,325.00								0
10-METER	3,340.00								0
Usage in Hundred Gallons									
All Group B Usage	$1.1300								$149,039

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

OTHER WATER UTILITIES	2025 Rates	2025 Change in Customers FR II.02h	2025 Usage Trend adj FR II.02i	2025 Creekside Annualization FR II.02m	2024 Findlay Township FR II.02w	Present Rate 6/30/2025 Revenues
Group A	(t)	(u)	(v)	(w)	(x)	y=(a+f+g+h+i+m+n+o+p+q+r+t+u+v+w+x)*t
Total Billed Count						
5/8-METER						
3/4-METER						
1-METER						
1.5-METER						
2-METER						
3-METER						
4-METER						
6-METER						
8-METER						
10-METER						
Total Billed Count						
5/8-METER	$29.10					$0
3/4-METER	44.00					0
1-METER	73.00					0
1.5-METER	145.00					0
2-METER	232.00					2,784
3-METER	436.00					0
4-METER	726.00					8,712
6-METER	1,452.00					33,396
8-METER	2,325.00					0
10-METER	3,340.00					0
Usage in Hundred Gallons						
All Group A Usage						
All Group A Usage	$0.7950					$5,765
Group B						
Total Billed Count						
5/8-METER						
3/4-METER						
1-METER						
1.5-METER						
2-METER						
3-METER						
4-METER						
6-METER						
8-METER						
10-METER						
Total Billed Count						
5/8-METER	$29.10					$0
3/4-METER	44.00					0
1-METER	73.00					0
1.5-METER	145.00					0
2-METER	232.00					5,568
3-METER	436.00					0
4-METER	726.00					25,854
6-METER	1,452.00					17,424
8-METER	2,325.00					0
10-METER	3,340.00					0
Usage in Hundred Gallons						
All Group B Usage	$1.1300					$149,039

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

OTHER WATER UTILITIES	6/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	FR II.02e Annualized Revenue Current Rate	Change in Customers FR II.02h	Usage Normalization FR II.02i	Creekside Annualization FR II.02m	Quarryville 12th bill adj FR II.02u	6/30/2023 Revenues Incl All adj
SPECIAL CONTRACTS											
Redacted - Refer to Confidential Volume 6d											
Redacted - Refer to Confidential Volume 6d											
OWU REVENUES				$2,881,095		$2,974,845					$2,984,771

TOTAL OWU USAGE	7,803,727
OWU CUSTOMER COUNT	20
Average Use Per Customer	32,380.61
Take or Pay usage	58,625.00
TOTAL OWU METERED USAGE adjusted for Take o	7,745,102

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

OTHER WATER UTILITIES	2024 Rates	FR II.02j Valley Rates	Change in Customers FR II.02h	Usage Trend adj FR II.02i	Findlay Township FR II.02w	Audubon from SFR to reg FR II.02x	Farmington from SFR to reg FR II.02y	Shale Gas Com Usage FR II.02l	Present Rate 6/30/2024 Revenues
SPECIAL CONTRACTS									
Redacted - Refer to Confidential Vo	Redacted - Refer to Confidential Volume 6d								
OWU REVENUES									$3,443,569
TOTAL OWU USAGE									
OWU CUSTOMER COUNT									
Average Use Per Customer									
Take or Pay usage									
TOTAL OWU METERED USAGE adjusted for Take o									

Pennsylvania American Water Company
Water Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

OTHER WATER UTILITIES	**2025 Rates**	2025 **Change in Customers FR II.02h**	2025 **Usage Trend adj FR II.02i**	2025 **Creekside Annualization FR II.02m**	2024 **Findlay Township FR II.02w**	**Present Rate 6/30/2025 Revenues**
SPECIAL CONTRACTS						
Redacted - Refer to Confidential Vo	Redacted - Refer to Confidential Volume 6d					
OWU REVENUES						**$3,564,628**
TOTAL OWU USAGE						
OWU CUSTOMER COUNT						
Average Use Per Customer						
Take or Pay usage						
TOTAL OWU METERED USAGE adjusted for Take o						

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE 1 - PAWC

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$17.90	$20.00	$2.10	11.72%
100		19.55	22.13	2.58	13.20%
500		26.14	30.66	4.52	17.28%
1,000		34.38	41.32	6.94	20.18%
2,000		50.86	62.64	11.78	23.16%
3,000		67.34	83.96	16.62	24.68%
3,201	*	70.65	88.24	17.59	24.90%
3,500		75.58	94.62	19.04	25.19%
4,000		83.82	105.28	21.46	25.60%
5,000		100.29	126.60	26.30	26.22%
6,000		116.77	147.91	31.14	26.67%
7,000		133.25	169.23	35.98	27.00%
8,000		149.73	190.55	40.82	27.26%
9,000		166.21	211.87	45.66	27.47%
10,000		182.69	233.19	50.50	27.64%
11,000		199.17	254.51	55.34	27.79%
12,000		215.64	275.83	60.18	27.91%
13,000		232.12	297.15	65.02	28.01%
14,000		248.60	318.47	69.86	28.10%
15,000		265.08	339.79	74.71	28.18%
16,000		281.56	361.10	79.55	28.25%
17,000		298.04	382.42	84.39	28.31%
18,000		314.52	403.74	89.23	28.37%
19,000		330.99	425.06	94.07	28.42%
20,000		347.47	446.38	98.91	28.46%
21,000		363.95	467.70	103.75	28.51%
22,000		380.43	489.02	108.59	28.54%
23,000		396.91	510.34	113.43	28.58%
24,000		413.39	531.66	118.27	28.61%
25,000		429.86	552.98	123.11	28.64%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 2.30%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE 2 - VALLEY WATER

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$17.90	$20.00	$2.10	11.72%
100		19.03	22.13	3.10	16.31%
500		23.53	30.66	7.13	30.31%
1,000		29.16	41.32	12.16	41.72%
2,000		40.41	62.64	22.23	55.01%
3,000		51.66	83.96	32.30	62.51%
3,201	*	53.92	88.24	34.32	63.64%
3,500		57.29	94.62	37.33	65.16%
4,000		62.91	105.28	42.36	67.33%
5,000		74.17	126.60	52.43	70.69%
6,000		85.42	147.91	62.49	73.16%
7,000		96.67	169.23	72.56	75.06%
8,000		107.93	190.55	82.63	76.56%
9,000		119.18	211.87	92.69	77.77%
10,000		130.43	233.19	102.76	78.78%
11,000		141.69	254.51	112.82	79.63%
12,000		152.94	275.83	122.89	80.35%
13,000		164.19	297.15	132.96	80.98%
14,000		175.44	318.47	143.02	81.52%
15,000		186.70	339.79	153.09	82.00%
16,000		197.95	361.10	163.15	82.42%
17,000		209.20	382.42	173.22	82.80%
18,000		220.46	403.74	183.29	83.14%
19,000		231.71	425.06	193.35	83.45%
20,000		242.96	446.38	203.42	83.72%
21,000		254.22	467.70	213.48	83.98%
22,000		265.47	489.02	223.55	84.21%
23,000		276.72	510.34	233.62	84.42%
24,000		287.97	531.66	243.68	84.62%
25,000		299.23	552.98	253.75	84.80%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 2.30%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE 4 - TURBOTVILLE

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$17.90	$20.00	$2.10	11.72%
100		19.55	22.13	2.58	13.20%
500		26.14	30.66	4.52	17.28%
1,000		34.38	41.32	6.94	20.18%
2,000		50.86	62.64	11.78	23.16%
3,000		67.34	83.96	16.62	24.68%
3,201	*	70.65	88.24	17.59	24.90%
3,500		75.58	94.62	19.04	25.19%
4,000		83.82	105.28	21.46	25.60%
5,000		100.29	126.60	26.30	26.22%
6,000		116.77	147.91	31.14	26.67%
7,000		133.25	169.23	35.98	27.00%
8,000		149.73	190.55	40.82	27.26%
9,000		166.21	211.87	45.66	27.47%
10,000		182.69	233.19	50.50	27.64%
11,000		199.17	254.51	55.34	27.79%
12,000		215.64	275.83	60.18	27.91%
13,000		232.12	297.15	65.02	28.01%
14,000		248.60	318.47	69.86	28.10%
15,000		265.08	339.79	74.71	28.18%
16,000		281.56	361.10	79.55	28.25%
17,000		298.04	382.42	84.39	28.31%
18,000		314.52	403.74	89.23	28.37%
19,000		330.99	425.06	94.07	28.42%
20,000		347.47	446.38	98.91	28.46%
21,000		363.95	467.70	103.75	28.51%
22,000		380.43	489.02	108.59	28.54%
23,000		396.91	510.34	113.43	28.58%
24,000		413.39	531.66	118.27	28.61%
25,000		429.86	552.98	123.11	28.64%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 2.30%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE 5 - STEELTON

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$17.90	$20.00	$2.10	11.72%
100		19.55	22.13	2.58	13.20%
500		26.14	30.66	4.52	17.28%
1,000		34.38	41.32	6.94	20.18%
2,000		50.86	62.64	11.78	23.16%
3,000		67.34	83.96	16.62	24.68%
3,201	*	70.65	88.24	17.59	24.90%
3,500		75.58	94.62	19.04	25.19%
4,000		83.82	105.28	21.46	25.60%
5,000		100.29	126.60	26.30	26.22%
6,000		116.77	147.91	31.14	26.67%
7,000		133.25	169.23	35.98	27.00%
8,000		149.73	190.55	40.82	27.26%
9,000		166.21	211.87	45.66	27.47%
10,000		182.69	233.19	50.50	27.64%
11,000		199.17	254.51	55.34	27.79%
12,000		215.64	275.83	60.18	27.91%
13,000		232.12	297.15	65.02	28.01%
14,000		248.60	318.47	69.86	28.10%
15,000		265.08	339.79	74.71	28.18%
16,000		281.56	361.10	79.55	28.25%
17,000		298.04	382.42	84.39	28.31%
18,000		314.52	403.74	89.23	28.37%
19,000		330.99	425.06	94.07	28.42%
20,000		347.47	446.38	98.91	28.46%
21,000		360.26	467.70	107.44	29.82%
22,000		373.05	489.02	115.97	31.09%
23,000		385.83	510.34	124.50	32.27%
24,000		398.62	531.66	133.03	33.37%
25,000		411.41	552.98	141.57	34.41%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 2.30%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE XX - AUDUBON

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$16.80	$16.80	$0.00	0.00%
100		17.66	17.94	0.28	1.58%
500		21.11	22.51	1.40	6.61%
1,000		25.42	28.21	2.79	10.98%
2,000		34.04	39.62	5.58	16.40%
3,000		42.66	51.03	8.37	19.63%
3,201	*	44.39	53.32	8.93	20.13%
3,500		46.97	56.74	9.77	20.80%
4,000		51.28	62.44	11.16	21.77%
5,000		59.90	73.85	13.96	23.30%
6,000		68.51	85.26	16.75	24.44%
7,000		77.13	96.67	19.54	25.33%
8,000		85.75	108.08	22.33	26.04%
9,000		94.37	119.49	25.12	26.62%
10,000		102.99	130.90	27.91	27.10%
11,000		111.61	142.31	30.70	27.51%
12,000		120.23	153.72	33.49	27.86%
13,000		128.85	165.13	36.28	28.16%
14,000		137.47	176.54	39.07	28.42%
15,000		146.09	187.95	41.87	28.66%
16,000		154.70	199.36	44.66	28.87%
17,000		163.32	210.77	47.45	29.05%
18,000		171.94	222.18	50.24	29.22%
19,000		180.56	233.59	53.03	29.37%
20,000		189.18	245.00	55.82	29.51%
21,000		197.80	256.41	58.61	29.63%
22,000		206.42	267.82	61.40	29.75%
23,000		215.04	279.23	64.19	29.85%
24,000		223.66	290.64	66.98	29.95%
25,000		232.28	302.05	69.78	30.04%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE XX - FARMINGTON

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RESIDENTIAL - MONTHLY
SERVICE CHARGE PER EDU FOR PRESENT & SERVICE CHARGE PER CUSTOMER FOR PROPOSED

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$67.50	$20.00	($47.50)	-70.37%
100		67.50	22.13	(45.37)	-67.21%
500		67.50	30.66	(36.84)	-54.58%
1,000		67.50	41.32	(26.18)	-38.79%
2,000		67.50	62.64	(4.86)	-7.20%
3,000		67.50	83.96	16.46	24.38%
3,201	*	67.50	88.24	20.74	30.73%
3,500		67.50	94.62	27.12	40.17%
4,000		67.50	105.28	37.78	55.96%
5,000		67.50	126.60	59.10	87.55%
6,000		82.50	147.91	65.41	79.29%
7,000		97.50	169.23	71.73	73.57%
8,000		112.50	190.55	78.05	69.38%
9,000		127.50	211.87	84.37	66.17%
10,000		142.50	233.19	90.69	63.64%
11,000		157.50	254.51	97.01	61.59%
12,000		172.50	275.83	103.33	59.90%
13,000		187.50	297.15	109.65	58.48%
14,000		202.50	318.47	115.97	57.27%
15,000		217.50	339.79	122.29	56.22%
16,000		232.50	361.10	128.60	55.31%
17,000		247.50	382.42	134.92	54.51%
18,000		262.50	403.74	141.24	53.81%
19,000		277.50	425.06	147.56	53.18%
20,000		292.50	446.38	153.88	52.61%
21,000		307.50	467.70	160.20	52.10%
22,000		322.50	489.02	166.52	51.63%
23,000		337.50	510.34	172.84	51.21%
24,000		352.50	531.66	179.16	50.82%
25,000		367.50	552.98	185.48	50.47%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE 1 - PAWC

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$18.93	$20.00	$1.07	5.68%
100		20.52	22.03	1.51	7.37%
500		26.91	30.17	3.26	12.12%
1,000		34.90	40.35	5.45	15.61%
2,000		50.87	60.69	9.82	19.31%
3,000		66.84	81.04	14.20	21.24%
3,500		74.83	91.21	16.38	21.89%
4,000		82.81	101.38	18.57	22.42%
5,000		98.79	121.73	22.94	23.23%
6,000		114.76	142.08	27.32	23.80%
7,000		130.73	162.42	31.69	24.24%
8,000		146.70	182.77	36.07	24.58%
9,000		162.67	203.11	40.44	24.86%
10,000		178.65	223.46	44.81	25.09%
16,000		274.48	345.54	71.06	25.89%
20,000		321.51	407.39	85.88	26.71%
21,000		333.27	422.85	89.59	26.88%
22,000		345.02	438.31	93.29	27.04%
22,094	*	346.13	439.77	93.64	27.05%
23,000		356.78	453.78	97.00	27.19%
24,000		368.54	469.24	100.70	27.32%
25,000		380.30	484.70	104.41	27.45%
26,000		392.05	500.17	108.11	27.58%
27,000		403.81	515.63	111.82	27.69%
28,000		415.57	531.09	115.52	27.80%
29,000		427.32	546.56	119.23	27.90%
30,000		439.08	562.02	122.94	28.00%
40,000		556.66	716.65	159.99	28.74%
50,000		674.23	871.28	197.05	29.23%
60,000		791.80	1,025.91	234.11	29.57%
70,000		909.38	1,180.54	271.16	29.82%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 2.3%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE 2 - VALLEY WATER

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$18.93	$20.00	$1.07	5.68%
100		20.05	22.03	1.98	9.89%
500		24.55	30.17	5.62	22.89%
1,000		30.18	40.35	10.17	33.69%
2,000		41.43	60.69	19.26	46.49%
3,000		52.68	81.04	28.35	53.82%
3,500		58.31	91.21	32.90	56.42%
4,000		63.94	101.38	37.45	58.57%
5,000		75.19	121.73	46.54	61.90%
6,000		86.44	142.08	55.63	64.36%
7,000		97.70	162.42	64.73	66.25%
8,000		108.95	182.77	73.82	67.75%
9,000		120.20	203.11	82.91	68.98%
10,000		131.46	223.46	92.00	69.99%
16,000		198.97	345.54	146.56	73.66%
20,000		243.99	407.39	163.40	66.97%
21,000		255.24	422.85	167.61	65.67%
22,000		266.49	438.31	171.82	64.48%
22,094	*	267.55	439.77	172.22	64.37%
23,000		277.74	453.78	176.03	63.38%
24,000		289.00	469.24	180.24	62.37%
25,000		300.25	484.70	184.45	61.43%
26,000		311.50	500.17	188.66	60.57%
27,000		322.76	515.63	192.87	59.76%
28,000		334.01	531.09	197.08	59.01%
29,000		345.26	546.56	201.29	58.30%
30,000		356.52	562.02	205.50	57.64%
40,000		469.05	716.65	247.60	52.79%
50,000		581.58	871.28	289.70	49.81%
60,000		694.11	1,025.91	331.80	47.80%
70,000		806.64	1,180.54	373.90	46.35%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 2.3%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE 3 - SLIBCO

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$65.01	$20.00	($45.01)	-69.24%
100		66.95	22.03	(44.91)	-67.09%
500		74.70	30.17	(44.53)	-59.61%
1,000		84.39	40.35	(44.04)	-52.19%
2,000		103.76	60.69	(43.07)	-41.51%
3,000		123.14	81.04	(42.10)	-34.19%
3,500		132.83	91.21	(41.62)	-31.33%
4,000		142.51	101.38	(41.13)	-28.86%
5,000		161.89	121.73	(40.16)	-24.81%
6,000		181.27	142.08	(39.19)	-21.62%
7,000		200.64	162.42	(38.22)	-19.05%
7,027		201.16	162.97	(38.19)	-18.99%
9,000		239.39	203.11	(36.28)	-15.15%
10,000		258.77	223.46	(35.31)	-13.64%
16,000		375.02	345.54	(29.49)	-7.86%
20,000		452.52	407.39	(45.14)	-9.97%
21,000		469.69	422.85	(46.84)	-9.97%
22,000		486.86	438.31	(48.54)	-9.97%
22,094	*	488.47	439.77	(48.70)	-9.97%
23,000		504.02	453.78	(50.24)	-9.97%
24,000		521.19	469.24	(51.95)	-9.97%
25,000		538.35	484.70	(53.65)	-9.97%
26,000		555.52	500.17	(55.35)	-9.96%
27,000		572.69	515.63	(57.06)	-9.96%
28,000		589.85	531.09	(58.76)	-9.96%
29,000		607.02	546.56	(60.46)	-9.96%
30,000		624.18	562.02	(62.17)	-9.96%
40,000		795.84	716.65	(79.19)	-9.95%
50,000		967.50	871.28	(96.22)	-9.95%
60,000		1,139.16	1,025.91	(113.25)	-9.94%
70,000		1,310.82	1,180.54	(130.28)	-9.94%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 2.3%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE 4 - TURBOTVILLE

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$18.93	$20.00	$1.07	5.68%
100		20.02	22.03	2.01	10.06%
500		24.40	30.17	5.77	23.65%
1,000		29.88	40.35	10.47	35.04%
2,000		40.83	60.69	19.86	48.65%
3,000		51.78	81.04	29.26	56.50%
3,500		57.26	91.21	33.95	59.30%
4,000		62.73	101.38	38.65	61.61%
5,000		73.69	121.73	48.04	65.20%
6,000		84.64	142.08	57.44	67.86%
7,000		95.59	162.42	66.83	69.91%
8,000		106.54	182.77	76.22	71.54%
9,000		117.50	203.11	85.62	72.87%
10,000		128.45	223.46	95.01	73.97%
16,000		194.16	345.54	151.37	77.96%
20,000		237.97	407.39	169.42	71.19%
21,000		248.92	422.85	173.93	69.87%
22,000		259.87	438.31	178.44	68.66%
22,094	*	260.90	439.77	178.86	68.56%
23,000		270.83	453.78	182.95	67.55%
24,000		281.78	469.24	187.46	66.53%
25,000		292.73	484.70	191.97	65.58%
26,000		303.68	500.17	196.48	64.70%
27,000		314.64	515.63	200.99	63.88%
28,000		325.59	531.09	205.50	63.12%
29,000		336.54	546.56	210.01	62.40%
30,000		347.49	562.02	214.53	61.74%
40,000		457.02	716.65	259.63	56.81%
50,000		566.54	871.28	304.74	53.79%
60,000		676.06	1,025.91	349.85	51.75%
70,000		785.58	1,180.54	394.96	50.28%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 2.3%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE 5 - STEELTON

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$18.93	$20.00	$1.07	5.68%
100		20.57	22.03	1.46	7.10%
500		27.16	30.17	3.01	11.07%
1,000		35.40	40.35	4.94	13.96%
2,000		51.88	60.69	8.81	16.98%
3,000		68.36	81.04	12.68	18.54%
3,500		76.60	91.21	14.61	19.07%
4,000		84.84	101.38	16.54	19.50%
5,000		101.32	121.73	20.41	20.15%
6,000		117.80	142.08	24.28	20.61%
7,000		134.27	162.42	28.15	20.96%
8,000		150.75	182.77	32.01	21.24%
9,000		167.23	203.11	35.88	21.46%
10,000		183.71	223.46	39.75	21.64%
16,000		282.58	345.54	62.95	22.28%
20,000		348.50	407.39	58.89	16.90%
21,000		361.28	422.85	61.57	17.04%
22,000		374.07	438.31	64.24	17.17%
22,094	*	375.27	439.77	64.50	17.19%
23,000		386.86	453.78	66.92	17.30%
24,000		399.65	469.24	69.59	17.41%
25,000		412.43	484.70	72.27	17.52%
26,000		425.22	500.17	74.95	17.63%
27,000		438.01	515.63	77.62	17.72%
28,000		450.80	531.09	80.30	17.81%
29,000		463.58	546.56	82.97	17.90%
30,000		476.37	562.02	85.65	17.98%
40,000		604.25	716.65	112.40	18.60%
50,000		732.12	871.28	139.16	19.01%
60,000		860.00	1,025.91	165.91	19.29%
70,000		987.87	1,180.54	192.67	19.50%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 2.3%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE XX - AUDUBON

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$16.80	$16.80	$0.00	0.00%
100		17.66	17.94	0.28	1.58%
500		21.11	22.51	1.40	6.61%
1,000		25.42	28.21	2.79	10.98%
2,000		34.04	39.62	5.58	16.40%
3,000		42.66	51.03	8.37	19.63%
3,500		46.97	56.74	9.77	20.80%
4,000		51.28	62.44	11.16	21.77%
5,000		59.90	73.85	13.96	23.30%
6,000		68.51	85.26	16.75	24.44%
7,000		77.13	96.67	19.54	25.33%
8,000		85.75	108.08	22.33	26.04%
9,000		94.37	119.49	25.12	26.62%
10,000		102.99	130.90	27.91	27.10%
16,000		154.70	199.36	44.66	28.87%
20,000		189.18	245.00	55.82	29.51%
21,000		197.80	256.41	58.61	29.63%
22,000		206.42	267.82	61.40	29.75%
22,094	*	207.23	268.89	61.66	29.76%
23,000		215.04	279.23	64.19	29.85%
24,000		223.66	290.64	66.98	29.95%
25,000		232.28	302.05	69.78	30.04%
26,000		240.89	313.46	72.57	30.12%
27,000		249.51	324.87	75.36	30.20%
28,000		258.13	336.28	78.15	30.27%
29,000		266.75	347.69	80.94	30.34%
30,000		275.37	359.10	83.73	30.41%
40,000		361.56	473.20	111.64	30.88%
50,000		447.75	587.30	139.55	31.17%
60,000		533.94	701.40	167.46	31.36%
70,000		620.13	815.50	195.37	31.50%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE XX - FARMINGTON

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
COMMERCIAL - MONTHLY
SERVICE CHARGE PER EDU FOR PRESENT & SERVICE CHARGE PER CUSTOMER FOR PROPOSED

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$67.50	$20.00	($47.50)	-70.37%
100		67.50	22.03	(45.47)	-67.36%
500		67.50	30.17	(37.33)	-55.30%
1,000		67.50	40.35	(27.15)	-40.23%
2,000		67.50	60.69	(6.81)	-10.09%
3,000		67.50	81.04	13.54	20.06%
3,500		67.50	91.21	23.71	35.13%
4,000		67.50	101.38	33.88	50.20%
5,000		67.50	121.73	54.23	80.34%
6,000		82.50	142.08	59.58	72.21%
7,000		97.50	162.42	64.92	66.59%
7,098	*	98.97	164.42	65.45	66.13%
9,000		127.50	203.11	75.61	59.31%
10,000		142.50	223.46	80.96	56.81%
16,000		232.50	345.54	113.04	48.62%
20,000		292.50	426.92	134.42	45.96%
21,000		307.50	447.27	139.77	45.45%
22,000		322.50	467.61	145.11	45.00%
22,094		323.91	469.52	145.61	44.96%
23,000		337.50	487.96	150.46	44.58%
24,000		352.50	508.30	155.80	44.20%
25,000		367.50	528.65	161.15	43.85%
26,000		382.50	549.00	166.50	43.53%
27,000		397.50	569.34	171.84	43.23%
28,000		412.50	589.69	177.19	42.95%
29,000		427.50	610.03	182.53	42.70%
30,000		442.50	630.38	187.88	42.46%
40,000		592.50	833.84	241.34	40.73%
50,000		742.50	1,037.30	294.80	39.70%
60,000		892.50	1,240.76	348.26	39.02%
70,000		1,042.50	1,444.22	401.72	38.53%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE 1 - PAWC

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
INDUSTRIAL - MONTHLY
2 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$229.15	$224.00	($5.15)	-2.25%
1,000		243.68	243.13	(0.55)	-0.23%
2,000		258.21	262.26	4.05	1.57%
3,000		272.73	281.38	8.65	3.17%
4,000		287.26	300.51	13.25	4.61%
5,000		301.79	319.64	17.86	5.92%
10,000		374.42	415.28	40.86	10.91%
16,000		461.58	530.05	68.47	14.83%
20,000		505.79	589.34	83.56	16.52%
30,000		616.31	737.58	121.27	19.68%
40,000		726.84	885.82	158.99	21.87%
50,000		837.36	1,034.06	196.70	23.49%
60,000		947.89	1,182.30	234.42	24.73%
70,000		1,058.41	1,330.54	272.13	25.71%
80,000		1,168.94	1,478.78	309.85	26.51%
90,000		1,279.46	1,627.02	347.56	27.16%
100,000		1,389.99	1,775.26	385.28	27.72%
200,000		2,495.24	3,257.66	762.43	30.56%
300,000		3,600.49	4,740.06	1,139.58	31.65%
400,000		4,705.73	6,222.46	1,516.73	32.23%
500,000		5,810.98	7,704.86	1,893.88	32.59%
600,000		6,916.23	9,187.26	2,271.03	32.84%
685,947	*	7,663.50	10,173.68	2,510.18	32.76%
700,000		7,785.68	10,334.96	2,549.28	32.74%
800,000		8,655.13	11,482.66	2,827.54	32.67%
900,000		9,524.58	12,630.36	3,105.79	32.61%
1,000,000		10,394.02	13,778.06	3,384.04	32.56%
1,100,000		11,263.47	14,925.76	3,662.29	32.51%
1,200,000		12,132.92	16,073.46	3,940.54	32.48%
1,300,000		13,002.37	17,221.16	4,218.80	32.45%
1,400,000		13,871.81	18,368.86	4,497.05	32.42%
1,500,000		14,741.26	19,516.56	4,775.30	32.39%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 2.30%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE 2 - VALLEY

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
INDUSTRIAL - MONTHLY
2 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$124.60	$224.00	$99.40	79.77%
1,000		135.85	243.13	107.27	78.96%
2,000		147.11	262.26	115.15	78.28%
3,000		158.36	281.38	123.02	77.69%
4,000		169.61	300.51	130.90	77.17%
5,000		180.87	319.64	138.77	76.73%
10,000		237.13	415.28	178.15	75.13%
16,000		304.65	530.05	225.40	73.99%
20,000		349.66	589.34	239.68	68.55%
30,000		462.19	737.58	275.39	59.58%
40,000		574.72	885.82	311.10	54.13%
50,000		687.25	1,034.06	346.81	50.46%
60,000		799.78	1,182.30	382.52	47.83%
70,000		912.31	1,330.54	418.23	45.84%
80,000		1,024.84	1,478.78	453.94	44.29%
90,000		1,137.37	1,627.02	489.65	43.05%
100,000		1,249.90	1,775.26	525.36	42.03%
200,000		2,375.20	3,257.66	882.46	37.15%
300,000		3,500.50	4,740.06	1,239.56	35.41%
400,000		4,625.80	6,222.46	1,596.66	34.52%
500,000		5,751.10	7,704.86	1,953.76	33.97%
600,000		6,876.40	9,187.26	2,310.86	33.61%
685,947	*	7,843.57	10,173.68	2,330.11	29.71%
700,000		8,001.70	10,334.96	2,333.26	29.16%
800,000		9,127.00	11,482.66	2,355.66	25.81%
900,000		10,252.30	12,630.36	2,378.06	23.20%
1,000,000		11,377.60	13,778.06	2,400.46	21.10%
1,100,000		12,502.90	14,925.76	2,422.86	19.38%
1,200,000		13,628.20	16,073.46	2,445.26	17.94%
1,300,000		14,753.50	17,221.16	2,467.66	16.73%
1,400,000		15,878.80	18,368.86	2,490.06	15.68%
1,500,000		17,004.10	19,516.56	2,512.46	14.78%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 2.30%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE 5 - STEELTON

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
INDUSTRIAL - MONTHLY
2 INCH METERS

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$144.71	$224.00	$79.29	54.79%
1,000		161.19	243.13	81.94	50.83%
2,000		177.67	262.26	84.59	47.61%
3,000		194.15	281.38	87.23	44.93%
4,000		210.63	300.51	89.88	42.67%
5,000		227.11	319.64	92.53	40.74%
10,000		309.50	415.28	105.78	34.18%
16,000		408.37	530.05	121.68	29.80%
20,000		474.28	589.34	115.06	24.26%
30,000		602.16	737.58	135.43	22.49%
40,000		730.03	885.82	155.79	21.34%
50,000		857.91	1,034.06	176.16	20.53%
60,000		985.78	1,182.30	196.52	19.94%
70,000		1,113.66	1,330.54	216.89	19.48%
80,000		1,241.53	1,478.78	237.25	19.11%
90,000		1,369.41	1,627.02	257.62	18.81%
100,000		1,497.28	1,775.26	277.98	18.57%
200,000		2,776.03	3,257.66	481.63	17.35%
300,000		4,054.78	4,740.06	685.28	16.90%
400,000		5,333.53	6,222.46	888.93	16.67%
500,000		6,612.28	7,704.86	1,092.58	16.52%
600,000		7,891.03	9,187.26	1,296.23	16.43%
685,947	*	8,990.08	10,173.68	1,183.60	13.17%
700,000		9,169.78	10,334.96	1,165.18	12.71%
800,000		10,448.53	11,482.66	1,034.13	9.90%
900,000		11,727.28	12,630.36	903.08	7.70%
1,000,000		13,006.03	13,778.06	772.03	5.94%
1,100,000		14,284.78	14,925.76	640.98	4.49%
1,200,000		15,563.53	16,073.46	509.93	3.28%
1,300,000		16,842.28	17,221.16	378.88	2.25%
1,400,000		18,121.03	18,368.86	247.83	1.37%
1,500,000		19,399.78	19,516.56	116.78	0.60%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 2.30%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE XX - FARMINGTON

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
INDUSTRIAL - MONTHLY
SERVICE CHARGE PER EDU FOR PRESENT & SERVICE CHARGE PER CUSTOMER FOR PROPOSED

CONSUMPTION GALLONS (1)		BILLS UNDER PRESENT RATES (2)	BILLS UNDER PROPOSED RATES (3)	INCREASE AMOUNT (4)	INCREASE PERCENT (5)
0		$67.50	$28.00	($39.50)	-58.52%
1,000		67.50	47.13	(20.37)	-30.18%
2,000		67.50	66.26	(1.24)	-1.84%
3,000		67.50	85.38	17.88	26.49%
4,000		67.50	104.51	37.01	54.83%
5,000		67.50	123.64	56.14	83.17%
9,965	*	141.98	218.61	76.64	53.98%
16,000		232.50	334.05	101.55	43.68%
20,000		292.50	410.56	118.06	40.36%
30,000		442.50	601.84	159.34	36.01%
40,000		592.50	793.12	200.62	33.86%
50,000		742.50	984.40	241.90	32.58%
60,000		892.50	1,175.68	283.18	31.73%
70,000		1,042.50	1,366.96	324.46	31.12%
80,000		1,192.50	1,558.24	365.74	30.67%
90,000		1,342.50	1,749.52	407.02	30.32%
100,000		1,492.50	1,940.80	448.30	30.04%
200,000		2,992.50	3,853.60	861.10	28.78%
300,000		4,492.50	5,766.40	1,273.90	28.36%
400,000		5,992.50	7,679.20	1,686.70	28.15%
500,000		7,492.50	9,592.00	2,099.50	28.02%
600,000		8,992.50	11,504.80	2,512.30	27.94%
685,947		10,281.71	13,148.80	2,867.09	27.89%
700,000		10,492.50	13,417.60	2,925.10	27.88%
800,000		11,992.50	15,330.40	3,337.90	27.83%
900,000		13,492.50	17,243.20	3,750.70	27.80%
1,000,000		14,992.50	19,156.00	4,163.50	27.77%
1,100,000		16,492.50	21,068.80	4,576.30	27.75%
1,200,000		17,992.50	22,981.60	4,989.10	27.73%
1,300,000		19,492.50	24,894.40	5,401.90	27.71%
1,400,000		20,992.50	26,807.20	5,814.70	27.70%
1,500,000		22,492.50	28,720.00	6,227.50	27.69%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
SUMMARY OF APPLICATION OF PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

Rate Zone	Residential	Commercial	Industrial	Municipal	Bulk	Total Revenues
Present Rate Application						
Zone 1 - Most WW Areas	$39,323,052	$10,183,912	$1,830,201	$931,880	$1,938,536	$54,207,581
Zone 2 - New Cumberland	2,880,248	514,850	0	26,451		3,421,549
Zone 5 - Valley WW	3,729,117	378,045	0	93,482		4,200,644
Zone 7 - York WW	14,076,537	5,221,440	10,087	315,566	7,425,108	27,048,738
Zone 8 - Foster Township	646,340	45,001	493,723	13,646		1,198,710
Zone 9 -Royersford WW	792,301	456,488	17,883	19,208	80,885	1,366,765
Zone XX - Farmington WW	265,788	49,434	5,136	2,568		322,926
Zone XX - Sadsbury WW	348,031	123,197	0	0		471,228
	$62,061,414	$16,972,367	$2,357,030	$1,402,801	$9,444,529	$92,238,141
IPP Surcharge						$1,835,040
Other Revenues						$1,397,685
Total WW SSS	$62,061,414	$16,972,367	$2,357,030	$1,402,801	$9,444,529	$95,470,866
Proposed Rate Application						
Zone 1 - Most WW Areas	$36,383,506	$9,976,867	$1,835,449	$898,416	$1,971,503	$51,065,741
Zone 2 - New Cumberland	3,030,014	580,072	0	29,126		3,639,212
Zone 5 - Valley WW	3,454,856	356,556	0	88,756		3,900,168
Zone 7 - York WW	15,191,887	6,594,717	12,184	391,338	7,702,598	29,892,724
Zone 8 - Foster Township	603,240	42,000	460,800	22,500		1,128,540
Zone 9 -Royersford WW	968,350	481,818	18,047	17,562	104,860	1,590,637
Zone XX - Farmington WW	297,473	64,088	7,311	3,434		372,306
Zone XX - Sadsbury WW	348,031	123,197	0	0		471,228
	$60,277,357	$18,219,315	$2,333,791	$1,451,132	$9,778,961	$92,060,556
IPP Surcharge						$1,835,040
Other Revenues						$1,406,017
Total WW SSS	$60,277,357	$18,219,315	$2,333,791	$1,451,132	$9,778,961	$95,301,613
Change in Revenues	($1,784,057)	$1,246,948	($23,239)	$48,331	$334,432	($169,253)
% Change in Revenues	-2.87%	7.35%	-0.99%	3.45%	3.54%	-0.18%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Residential Class	6/30/2023 Water Usage (in 100 Gallons)	6/30/2023 Annualized Revenues	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 1 - Most WW Areas	10,967,060	$39,740,205	10,774,958	$39,203,742	10,659,306	$420,150	$39,323,052	$36,383,506	-7.48%
Zone 2 - New Cumberland	1,012,280	2,941,268	991,528	2,890,426	974,813	30,774	2,880,248	3,030,014	5.20%
Zone 5 - Valley WW	615,075	2,490,643	602,466	3,718,473	592,309	39,845	3,729,117	3,454,856	-7.35%
Zone 7 - York WW	6,807,190	6,592,965	6,667,643	14,121,627	6,555,238	150,402	14,076,537	15,191,887	7.92%
Zone 8 - Foster Township		512,754		639,434		6,906	646,340	603,240	-6.67%
Zone 9 -Royersford WW	498,716	785,880	488,493	784,748	480,258	8,465	792,301	968,350	22.22%
Zone XX - Farmington WW				265,788			265,788	297,473	11.92%
Zone XX - Sadsbury WW				348,031			348,031	348,031	0.00%
Total Residential	19,900,321	$53,063,715	19,525,088	$61,972,269	19,261,924	$656,542	$62,061,414	$60,277,357	-2.87%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 1 - Most WW Areas	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge Per EDU	350,748	$14.30	$5,015,700	352,068	$14.30	$5,034,576	353,175	$14.30	$54,544	$5,104,950	$20.00	$7,063,505	38.37%
Consumption Charges													
Usage (100 Gallons)	10,928,042	$2.8750	31,418,121	10,967,060	$2.8750	31,530,298	10,774,958	$2.8750	334,562	31,312,567			
Flat (Unmetered)	36,989	$106.00	3,920,785	38,529	$106.00	4,084,025	38,529	$106.00	44,107	4,128,132	$100.00	3,852,854	-6.67%
Low Income:													
Low Income Discount Tier 1			(350,015)			(350,015)			(3,780)	(353,795)		(329,587)	
Low Income Discount Tier 2			(259,147)			(259,147)			(2,799)	(261,946)		(244,021)	
Low Income Discount Tier 3			(299,532)			(299,532)			(3,235)	(302,767)		(282,050)	
Low Income Discount Tier 4												(292,887)	
Adjustment (1):													
Service Charge Per EDU	1,320	$14.30	18,876	1,107	$14.30	15,830	2,214	$14.30	342	32,002	$20.00	44,280	38.37%
Consumption Charges													
Usage (100 Gallons)	39,018	$2.8750	112,177	32,722	$2.8750	94,076	65,444	$2.8750	2,032	190,183			
Adjustment (2):													
Flat (Unmetered)	1,540	$106.00	163,240										
Adjustment (3):													
Usage (100 Gallons)				(224,824)	$2.8750	(646,369)	(181,096)	$2.8750	(5,623)	(526,274)			
Total Usage	10,967,060			10,774,958			10,659,306						
Annualized Winter Usage(4)							10,359,225				$2.5650	26,571,412	
Total Zone 1 Residential			**$39,740,205**			**$39,203,742**			**$420,150**	**$39,323,052**		**$36,383,506**	-7.48%

Note (1) Adjustment to account revenues brought about by customer growth
Note (2) Adjustment to annualized Upper Pottsgrove which started billing August 2022
Note (3) Adjustment to normalize usage
Note (4) Annualized Winter Usage is from average winter usage multiplied by 12

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 2 - New Cumberland	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge Per EDU	33,821	$14.30	$483,634	33,821	$14.30	$483,634	33,821	$14.30	$5,223	$488,857	$20.00	$676,412	38.37%
Consumption Charges													
Usage (100 Gallons)	1,012,280	$2.4500	2,480,085	1,012,280	$2.4500	2,480,085	991,528	$2.4500	26,236	2,455,479			
Low Income:													
Low Income Discount Tier 1			(5,889)			(5,889)			(64)	(5,953)		(6,334)	6.40%
Low Income Discount Tier 2			(5,205)			(5,205)			(56)	(5,261)		(5,599)	6.42%
Low Income Discount Tier 3			(11,357)			(11,357)			(123)	(11,480)		(12,216)	6.41%
Low Income Discount Tier 4												(13,332)	
Adjustment (1):													
Usage (100 Gallons)				(20,752)	$2.4500	(50,842)	(16,715)	$2.4500	(442)	(41,394)			
Total Usage	1,012,280			991,528			974,813						
Annualized Winter Usage(2)	979,571			947,702			932,196				$2.5650	2,391,083	-0.95%
Total Zone 2 Residential			**$2,941,268**			**$2,890,426**			**$30,774**	**$2,880,248**		**$3,030,014**	5.20%

Note (1) Adjustment to normalize usage
Note (2) Annualized Winter Usage is from average winter usage multiplied by 12

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 5 - Valley WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue (1)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	19,577	$59.67	$1,168,135	19,577	$14.30	$279,945	19,577	$14.30	$3,023	$282,968	$20.00	$391,532	38.37%
Consumption Charges													
First 3400 Gallons	486,676	$0.0000	0	615,075	$2.8750	1,768,341	602,466	$2.8750	18,707	1,750,797	$2.5650		
All Over 3400 Gallons	128,398	$1.1200	143,806										
Flat (Unmetered)	16,190	$73.33	1,187,245	16,190	$106.00	1,716,186	16,190	$106.00	18,535	1,734,721	$100.00	1,619,043	-6.67%
Low Income:													
Low Income Discount Tier 1			(2,695)			(2,672)			(29)	(2,701)		(3,794)	
Low Income Discount Tier 2			(968)			(1,399)			(15)	(1,414)		(1,320)	
Low Income Discount Tier 3			(4,880)			(5,677)			(61)	(5,738)		(6,787)	
												(7,394)	
Adjustment (2):													
Usage (100 Gallons)				(12,609)	$2.8750	(36,251)	(10,157)	$2.8750	(315)	(29,516)	$2.5650		
Total Usage	615,075			602,466			592,309						
Annualized Winter Usage(3)							570,595				$2.5650	1,463,576	-14.97%
Total Zone 5 Residential			**$2,490,643**			**$3,718,473**			**$39,845**	**$3,729,117**		**$3,454,856**	-7.35%

Note (1) The annualized revenue for 12 months ending June 2024 is using rates effective 11/19/2023.
Note (2) Adjustment to normalize usage
Note (3) Annualized Winter Usage is from average winter usage multiplied by 12

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 7 - York WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue (1)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	141,871	$18.00	$2,553,686	141,871	$18.00	$2,553,686	141,871	$18.00	$27,580	$2,581,266	$20.00	$2,837,429	9.92%
Consumption Charges													
First 2000 Gallons	2,482,462	$0.0000	0	2,482,462	$0.0000	0	2,431,572	$0.0000	0	0			
All Over 2000 Gallons	4,324,728	$0.9370	4,052,270	4,324,728	$2.7375	11,838,943	4,236,071	$2.7375	125,239	11,721,484			
Low Income:													
Low Income Discount Tier 1			(5,811)			(12,660)			(137)	(12,797)		(13,470)	
Low Income Discount Tier 2			(3,995)			(8,704)			(94)	(8,798)		(9,261)	
Low Income Discount Tier 3			(3,185)			(6,939)			(75)	(7,014)		(7,383)	
												(6,733)	
Adjustment (2):													
First 2000 Gallons				(50,890)	$0.0000	0	(40,992)	$0.0000	0	0			
All Over 2000 Gallons				(88,657)	$2.7375	(242,699)	(71,413)	$2.7375	(2,111)	(197,604)			
Total Usage	6,807,190			6,667,643			6,555,238						
Annualized Winter Usage(3)							2,390,580				$0.7500	1,792,935	0.00%
First 2000 Gallons							4,131,918				$2.5650	10,598,370	-8.03%
All Over 2000 Gallons							6,522,498						
Total Zone 7 Residential			**$6,592,965**			**$14,121,627**			**$150,402**	**$14,076,537**		**$15,191,887**	7.92%

Note (1) The annualized revenue for 12 months ending June 2024 is using authorized rates from Docket No. R-2022-3031673.
Note (2) Adjustment to normalize usage
Note (3) Annualized Winter Usage is from average winter usage multiplied by 12

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 8 - Foster Township	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Flat Rate Per EDU	4,030	$85.00	$342,523	6,036	$106.00	$639,816	6,036	$106.00	$6,910	$646,726	$100.00	$603,600	-6.67%
Low Income:													
Low Income Discount Tier 1			0			0			0	0		0	0.00%
Low Income Discount Tier 2			0			0			0	0		0	0.00%
Low Income Discount Tier 3			(306)			(382)			(4)	(386)		(360)	-6.74%
Low Income Discount Tier 4												0	
Adjustment (1):													
Flat Rate Per EDU	2,006	$85.00	170,537										
Total Zone 8 Residential			**$512,754**			**$639,434**			**$6,906**	**$646,340**		**$603,240**	-6.67%

Note (1) Foster Township was acquired October 2022. Adjustment (1) is to annualized the revenue for full 12 months of billing.
Note (2) The annualized revenue for 12 months ending June 2024 is applying the approved rates in Docket No. R-2022-3031673.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 9 - Royersford WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	15,216	$48.00	$730,375	15,216	$48.00	$730,375	15,216	$48.00	$7,888	$738,263	$20.00	$304,323	-58.78%
Consumption Charges													
First 3000 Gallons	439,975	$0.0000	0	439,975	$0.0000	0	430,956	$0.0000	0	0			
All Over 3000 Gallons	58,741	$0.9400	55,216	58,741	$0.9400	55,216	57,537	$0.9400	584	54,668			
Flat (Unmetered)	108	$50.00	5,400	108	$50.00	5,400	108	$50.00	58	5,458	$65.00	7,020	28.62%
Low Income:													
Low Income Discount Tier 1			(1,982)			(1,982)			(21)	(2,003)		(2,480)	
Low Income Discount Tier 2			(341)			(341)			(4)	(345)		(425)	
Low Income Discount Tier 3			(2,788)			(2,788)			(30)	(2,818)		(3,492)	
Low Income Discount Tier 4												(4,656)	
Adjustment (1):													
First 3000 Gallons				(9,019)	$0.0000	0	(7,265)	$0.0000	0	0			
All Over 3000 Gallons				(1,204)	$0.9400	(1,132)	(970)	$0.9400	(10)	(922)			
Total Usage	498,716			488,493			480,258						
Annualized Winter Usage(2)													
First 3000 Gallons							397,422				$1.4150	562,353	0.00%
All Over 3000 Gallons							74,705				$1.4150	105,707	96.68%
							472,127						
Total Zone 9 Residential			**$785,880**			**$784,748**			**$8,465**	**$792,301**		**$968,350**	22.22%

Note (1) Adjustment to normalize usage
Note (2) Annualized Winter Usage is from average winter usage multiplied by 12

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Zone XX - Farmington WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge Per EDU				4,968	$53.50	$265,788	4,968	$53.50		$265,788	$20.00	$99,360	-62.62%
Annualized Winter Usage				146,750	$0.0000	0	146,750	$0.0000		0	$1.3500	198,113	0.00%
Total Zone XX Residential			**$0**			**$265,788**			**$0**	**$265,788**		**$297,473**	11.92%

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Zone XX - Sadsbury WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Flat Rate Per EDU				2,712	$128.33	$348,031	2,712	$128.33		$348,031	$128.33	$348,031	0.00%
Total Zone XX Residential			**$0**			**$348,031**			**$0**	**$348,031**		**$348,031**	0.00%

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Commercial Class	6/30/2023 Water Usage (in 100 Gallons)	6/30/2023 Annualized Revenues	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 1 - Most WW Areas	4,375,352	$10,230,122	4,319,952	$10,115,507	4,298,941	$108,811	$10,183,912	$9,976,867	-2.03%
Zone 2 - New Cumberland	212,277	520,136	208,933	513,782	206,600	5,501	514,850	580,072	12.67%
Zone 5 - Valley WW	36,022	256,998	35,803	374,326	35,650	4,040	378,045	356,556	-5.68%
Zone 7 - York WW	3,175,535	3,041,701	3,125,504	5,218,857	3,090,610	55,789	5,221,440	6,594,717	26.30%
Zone 8 - Foster Township		35,700		44,520		481	45,001	42,000	-6.67%
Zone 9 -Royersford WW	378,605	458,895	372,640	454,604	368,480	4,877	456,488	481,818	5.55%
Zone XX - Farmington WW				49,434		0	49,434	64,088	29.64%
Zone XX - Sadsbury WW				123,197		0	123,197	123,197	0.00%
Total Commercial	8,177,791	$14,543,552	8,062,832	$16,894,227	8,000,281	$179,499	$16,972,367	$18,219,315	7.35%

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Zone 1 - Most WW Areas	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge Per EDU	23,395	$35.00	$818,830	23,455	$35.00	$820,930	23,509	$35.00	$8,886	$831,706	$50.00	$1,175,457	41.33%
Consumption Charges													
Usage per 100 Gallons:	4,343,407	$2.1030	9,134,184	4,358,444	$2.1030	9,165,809	4,303,044	$2.1030	97,732	9,147,035	$2.0000	8,606,089	-5.91%
Flat Rate (Unmetered)	1,769	$106.00	187,538	1,820	$106.00	192,944	1,820	$106.00	2,084	195,028	$100.00	182,022	-6.67%
Upper Pottsgrove													
Service Charge Per EDU	504	$63.60	32,067	550	$63.60	34,992	550	$63.60	378	35,370	$50.00	27,510	-22.22%
Consumption Charges													
Usage per 100 Gallons:	14,579	$0.5653	8,241	15,818	$0.5653	8,942	15,818	$0.5653	97	9,039	$1.0000	15,818	75.00%
Cleveland-Cliffs													
Service Charge	12	$415.00	4,980	12	$415.00	4,980	12	$415.00	54	5,034	$415.00	4,980	-1.07%
Consumption Charges													
Usage per 100 Gallons:	1,090	$1.4000	1,526	1,090	$1.4000	1,526	1,090	$1.4000	16	1,542	$1.4800	1,613	4.60%
Adjustment (1):													
Service Charge Per EDU	60	$35.00	2,100	54	$35.00	1,890	108	$35.00	41	3,821	$50.00	5,400	41.32%
Consumption Charges													
Usage (100 Gallons)	15,038	$2.1030	31,624	13,534	$2.1030	28,462	27,068	$2.1030	615	57,539	$2.0000	54,136	-5.91%
Adjustment (2):													
Service Charge (Unmetered)	51	$106.00	5,406										
Service Charge (Metered)	46	$63.60	2,926										
Consumption Charges													
Usage per 100 Gallons:	1,239	$0.5653	700										
Adjustment (3):													
Usage (100 Gallons)				(68,934)	$2.1030	(144,968)	(48,079)	$2.1030	(1,092)	(102,202)	$2.0000	(96,158)	-5.91%
Total Zone 1 Commercial			**$10,230,122**			**$10,115,507**			**$108,811**	**$10,183,912**		**$9,976,867**	-2.03%

Note (1) Adjustment to account revenues brought about by customer growth.
Note (2) Adjustment to annualized Upper Pottsgrove which started billing August 2022
Note (3) Adjustment to normalize usage

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Zone 2 - New Cumberland	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge Per EDU	3,337	$35.00	$116,809	3,337	$35.00	$116,809	3,337	$35.00	$1,262	$118,071	$50.00	$166,871	41.33%
Consumption Charges													
Usage per 100 Gallons:	212,277	$1.9000	403,327	212,277	$1.9000	403,327	208,933	$1.9000	4,287	401,260	$2.0000	417,867	4.14%
Adjustment (1):													
Usage (100 Gallons)				(3,344)	$1.9000	(6,354)	(2,333)	$1.9000	(48)	(4,481)	$2.0000	(4,666)	4.13%
Total Zone 2 Commercial			**$520,136**			**$513,782**			**$5,501**	**$514,850**		**$580,072**	12.67%

Note (1) Adjustment to normalize usage

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Zone 5 - Valley WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(1)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	131	$59.67	$7,794	131	$35.00	$4,572	131	$35.00	$49	$4,621	$50.00	$6,531	41.33%
Consumption Charges													
First 3400 Gallons	2,237	$0.0000	0	13,914	$2.1030	29,261	13,695	$2.1030	311	29,112	$2.0000	27,390	-5.92%
All Over 3400 Gallons	11,677	$1.1200	13,078										
Flat Rate (Unmetered)	3,149	$73.33	230,904	3,149	$106.00	333,777	3,149	$106.00	3,605	337,382	$100.00	314,884	-6.67%
Westwood Fire Company													
Service Charge	12	$0.00	0	12	$0.00	0	12	$0.00	0	0	$50.00	600	0.00%
Consumption Charges													
First 3400 Gallons	408	$0.0000	0	890	$2.1030	1,872	890	$2.1030	20	1,892	$2.0000	1,780	-5.92%
All Over 3400 Gallons	482	$0.0000	0										
Rainbow Washhouse													
Service Charge	12	$73.33	880	12	$75.00	900	12	$75.00	10	910	$79.50	954	4.84%
Consumption Charges													
First 2000 Gallons	240	$0.0000	0	240	$0.0000	0	240	$0.0000	0	0	$0.2226	53	0.00%
All Over 2000 Gallons	20,978	$0.2070	4,342	20,978	$0.2100	4,405	20,978	$0.2100	48	4,453	$0.2226	4,670	4.87%
Adjustment (2):													
Usage (100 Gallons)				(219)	$2.1030	(461)	(153)	$2.1030	(3)	(325)	$2.0000	(306)	-5.85%
Total Zone 5 Commercial			**$256,998**			**$374,326**			**$4,040**	**$378,045**		**$356,556**	-5.68%

Note (1) The annualized revenue for 12 months ending June 2024 is using rates effective 11/19/2023.
Note (2) Adjustment to normalize usage

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Zone 7 - York WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	15,107	$18.00	$271,930	15,107	$30.00	$453,217	15,107	$30.00	$4,895	$458,112	$50.00	$755,362	64.89%
Consumption Charges													
First 2000 Gallons	219,536	$0.0000	0	219,536	$0.0000	0	216,077	$0.0000	0	0	$0.4000	86,431	0.00%
All Over 2000 Gallons	2,955,998	$0.9370	2,769,771	2,955,998	$1.6380	4,841,925	2,909,426	$1.6380	51,469	4,817,109	$2.0000	5,818,853	20.80%
Adjustment (2):													
First 2000 Gallons				(3,459)	$0.0000	0	(2,412)	$0.0000	0	0	$0.4000	(965)	0.00%
All Over 2000 Gallons				(46,572)	$1.6380	(76,285)	(32,482)	$1.6380	(575)	(53,781)	$2.0000	(64,964)	20.79%
Total Zone 7 Commercial			**$3,041,701**			**$5,218,857**			**$55,789**	**$5,221,440**		**$6,594,717**	26.30%

Note (1) The annualized revenue for 12 months ending June 2024 is using authorized rates from Docket No. R-2022-3031673.
Note (2) Adjustment to normalize usage

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Zone 8 - Foster Township	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Flat Rate Per EDU	276	$85.00	$23,456	420	$106.00	$44,520	420	$106.00	$481	$45,001	$100.00	$42,000	-6.67%
Adjustment (1):													
Flat Rate Per EDU	144	$85.00	12,244										
Total Zone 8 Commercial			**$35,700**			**$44,520**			**$481**	**$45,001**		**$42,000**	-6.67%

Note (1) Foster Township was acquired October 2022. Adjustment (1) is to annualized the revenue for full 12 months of billing.
Note (2) The annualized revenue for 12 months ending June 2024 is applying the approved rates in Docket No. R-2022-3031673.

Zone 9 - Royersford WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	2,362	$48.00	$113,374	2,362	$48.00	$113,374	2,362	$48.00	$1,224	$114,598	$50.00	$118,098	3.05%
Consumption Charges													
First 3000 Gallons	88,863	$0.0000	0	88,863	$0.0000	0	87,463	$0.0000	0	0	$0.7500	65,598	0.00%
All Over 3000 Gallons	289,741	$0.9400	272,357	289,741	$0.9400	272,357	285,176	$0.9400	2,895	270,961	$0.7500	213,882	-21.07%
Flat Rate (Unmetered)	1,092	$67.00	73,164	1,092	$67.00	73,164	1,092	$67.00	790	73,954	$80.00	87,360	18.13%
Adjustment (1):													
First 3000 Gallons				(1,400)	$0.0000	0	(976)	$0.0000	0	0	$0.7500	(732)	0.00%
All Over 3000 Gallons				(4,565)	$0.9400	(4,291)	(3,184)	$0.9400	(32)	(3,025)	$0.7500	(2,388)	-21.06%
Total Zone 9 Commercial			**$458,895**			**$454,604**			**$4,877**	**$456,488**		**$481,818**	5.55%

Note (1) Adjustment to normalize usage

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Zone XX - Farmington WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge Per EDU				924	$53.50	$49,434	924	$53.50		$49,434	$50.00	$46,200	-6.54%
Annualized Winter Usage				25,554	$0.0000	0	25,554	$0.0000		0	$0.7000	17,888	0.00%
Total Zone XX Commercial			**$0**			**$49,434**			**$0**	**$49,434**		**$64,088**	29.64%

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Zone XX - Sadsbury WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Flat Rate Per EDU				960	$128.33	$123,197	960	$128.33		$123,197	$128.33	$123,197	0.00%
Total Zone XX Commercial			**$0**			**$123,197**			**$0**	**$123,197**		**$123,197**	0.00%

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Industrial Class	6/30/2023 Water Usage (in 100 Gallons)	6/30/2023 Annualized Revenues	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 1 - Most WW Areas	896,360	$1,810,645	896,360	$1,810,645	896,360	$19,556	$1,830,201	$1,835,449	0.29%
Zone 2 - New Cumberland									
Zone 5 - Valley WW									
Zone 7 - York WW	6,092	5,708	6,092	9,979	6,092	108	10,087	12,184	20.79%
Zone 8 - Foster Township		391,680		488,448		5,275	493,723	460,800	-6.67%
Zone 9 -Royersford WW	14,487	17,692	14,487	17,692	14,487	191	17,883	18,047	0.92%
Zone XX - Farmington WW				5,136			5,136	7,311	42.35%
Zone XX - Sadsbury WW									
Total Industrial	916,939	$2,225,725	916,939	$2,331,900	916,939	$25,130	$2,357,030	$2,333,791	-0.99%

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Zone 1 - Most WW Areas	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge Per EDU	108	$35.00	$3,780	108	$35.00	$3,780	108	$35.00	$41	$3,821	$50.00	$5,400	41.32%
Consumption Charges													
Usage per 100 Gallons:	264,772	$2.1030	556,816	264,772	$2.1030	556,816	264,772	$2.1030	6,014	562,830	$2.0000	529,544	-5.91%
Flat Rate (Unmetered)	12	$106.00	1,272	12	$106.00	1,272	12	$106.00	14	1,286	$100.00	1,200	-6.69%
Special Rate:													
Cleveland Cliff Plate													
Service Charge	12	$415.00	4,980	12	$415.00	4,980	12	$415.00	54	5,034	$415.00	4,980	
Usage (100 Gallons)	357,318	$1.4000	500,245	357,318	$1.4000	500,245	357,318	$1.4000	5,403	505,648	$1.4800	528,831	
Special Rate:													
Victory Bewing													
Service Charge	12	$415.00	4,854	12	$415.00	4,854	12	$415.00	52	4,906	$415.00	4,854	
Usage (100 Gallons)	274,270	$1.4000	383,978	274,270	$1.4000	383,978	274,270	$1.4000	4,147	388,125	$1.4800	405,920	
Special Rate (Flat):													
Knouse Foods	12	$8,340.00	100,080	12	$8,340.00	100,080	12	$8,340.00	1,081	101,161	$8,340.00	100,080	
Penn State Special Metals	12	$2,870.00	34,440	12	$2,870.00	34,440	12	$2,870.00	372	34,812	$2,870.00	34,440	
PSC Metals	12	$1,110.00	13,320	12	$1,110.00	13,320	12	$1,110.00	144	13,464	$1,110.00	13,320	
Ipsco Kopper Tubilers	12	$17,240.00	206,880	12	$17,240.00	206,880	12	$17,240.00	2,234	209,114	$17,240.00	206,880	
Total Zone 1 Industrial			**$1,810,645**			**$1,810,645**			**$19,556**	**$1,830,201**		**$1,835,449**	0.29%

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Zone 7 - York WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(1)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Consumption Charges													
Usage per 100 Gallons:	6,092	$0.9370	$5,708	6,092	$1.6380	$9,979	6,092	$1.6380	$108	$10,087	$2.0000	$12,184	20.79%
Total Zone 7 Industrial			**$5,708**			**$9,979**			**$108**	**$10,087**		**$12,184**	20.79%

Note (1) The annualized revenue for 12 months ending June 2024 is using authorized rates from Docket No. R-2022-3031673.

Zone 8 - Foster Township	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Flat Rate Per EDU	2,522	$85.00	$214,381	4,608	$106.00	$488,448	4,608	$106.00	$5,275	$493,723	$100.00	$460,800	-6.67%
Adjustment (1):													
Flat Rate Per EDU	2,086	$85.00	177,299										
Total Zone 8 Commercial			**$391,680**			**$488,448**			**$5,275**	**$493,723**		**$460,800**	-6.67%

Note (1) Foster Township was acquired October 2022. Adjustment (1) is to annualized the revenue for full 12 months of billing.
Note (2) The annualized revenue for 12 months ending June 2024 is applying the approved rates in Docket No. R-2022-3031673.

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APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

Zone 9 - Royersford WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	143	$48.00	$6,879	143	$48.00	$6,879	143	$48.00	$74	$6,953	$50.00	$7,166	3.06%
Consumption Charges													
First 3000 Gallons	2,998	$0.0000	0	2,998	$0.0000	0	2,998	$0.0000	0	0	$0.7500	2,248	0.00%
All Over 3000 Gallons	11,490	$0.9400	10,800	11,490	$0.9400	10,800	11,490	$0.9400	117	10,917	$0.7500	8,617	-21.07%
Flat Rate (Unmetered)	0	$67.00	13	0	$67.00	13	0	$67.00	0	13	$80.00	16	23.08%
Total Zone 9 Industrial			**$17,692**			**$17,692**			**$191**	**$17,883**		**$18,047**	0.92%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

Zone XX - Farmington WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge Per EDU				96	$53.50	$5,136	96	$53.50		$5,136	$50.00	$4,800	-6.54%
Annualized Winter Usage				3,588	$0.0000	0	3,588	$0.0000		0	$0.7000	2,511	0.00%
Total Zone XX Industrial			**$0**			**$5,136**			**$0**	**$5,136**		**$7,311**	42.35%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Municipal Class	6/30/2023 Water Usage (in 100 Gallons)	6/30/2023 Annualized Revenues	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 1 - Most WW Areas	390,360	$952,753	377,064	$924,792	375,700	$9,957	$931,880	$898,416	-3.59%
Zone 2 - New Cumberland	12,012	27,026	11,603	26,249	11,561	282	26,451	29,126	10.11%
Zone 5 - Valley WW	44,863	51,675	43,335	92,814	43,178	998	93,482	88,756	-5.06%
Zone 7 - York WW	195,274	185,648	188,623	313,270	187,941	3,371	315,566	391,338	24.01%
Zone 8 - Foster Township		13,500		13,500		146	13,646	22,500	64.88%
Zone 9 -Royersford WW	20,173	19,632	19,486	19,061	19,416	205	19,208	17,562	-8.57%
Zone XX - Farmington WW				2,568		0	2,568	3,434	33.72%
Zone XX - Sadsbury WW									
Total Municipal	662,681	$1,250,234	640,110	$1,392,254	637,795	$14,959	$1,402,801	$1,451,132	3.45%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 1 - Most WW Areas	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge Per EDU	823	$35.00	$28,806	823	$35.00	$28,806	823	$35.00	$311	$29,117	$50.00	$41,152	41.33%
Consumption Charges													
Usage per 100 Gallons:	390,360	$2.1030	820,927	390,360	$2.1030	820,927	377,064	$2.1030	8,564	801,529	$2.0000	754,128	-5.91%
Flat Rate (Unmetered)	270	$106.00	28,620	270	$106.00	28,620	270	$106.00	309	28,929	$100.00	27,000	-6.67%
Special Rate:													
Strattanville Borough	11	$6,200.00	68,200	12	$6,200.00	74,400	12	$6,200.00	804	75,204	$6,572.00	78,864	4.87%
Adjustment (1):													
Strattanville Borough	1	$6,200.00	6,200										
Adjustment (2):													
Usage (100 Gallons)				(13,296)	$2.1030	(27,961)	(1,364)	$2.1030	(31)	(2,899)	$2.0000	(2,728)	-5.90%
Total Zone 1 Municipal			**$952,753**			**$924,792**			**$9,957**	**$931,880**		**$898,416**	-3.59%

Note (1) Adjustment to reflect 12 months bill for Strattanville Borough
Note (2) Adjustment to normalize usage

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 2 - New Cumberland	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge Per EDU	120	$35.00	$4,203	120	$35.00	$4,203	120	$35.00	$45	$4,248	$50.00	$6,004	41.34%
Consumption Charges													
Usage per 100 Gallons:	12,012	$1.9000	22,823	12,012	$1.9000	22,823	11,603	$1.9000	238	22,284	$2.0000	23,206	4.14%
Adjustment (1):													
Usage (100 Gallons)				(409)	$1.9000	(777)	(42)	$1.9000	(1)	(81)	$2.0000	(84)	3.70%
Total Zone 2 Municipal			**$27,026**			**$26,249**			**$282**	**$26,451**		**$29,126**	10.11%

Note (1) Adjustment to normalize usage

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 5 - Valley WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(1)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	48	$59.67	$2,864	48	$35.00	$1,680	48	$35.00	$18	$1,698	$50.00	$2,400	41.34%
Consumption Charges													
First 3400 Gallons	1,282	$0.0000	0	44,863	$2.1030	94,347	43,335	$2.1030	984	92,118	$2.0000	86,670	-5.91%
All Over 3400 Gallons	43,581	$1.1200	48,811										
Flat Rate (Unmetered)	-	$73.33	0	-	$106.00	0	-	$106.00	0	0	$100.00	0	0.00%
Adjustment (2):													
Usage (100 Gallons)				(1,528)	$2.1030	(3,213)	(157)	$2.1030	(4)	(334)	$2.0000	(314)	-5.99%
Total Zone 5 Municipal			**$51,675**			**$92,814**			**$998**	**$93,482**		**$88,756**	-5.06%

Note (1) The annualized revenue for 12 months ending June 2024 is using rates effective 11/19/2023.
Note (2) Adjustment to normalize usage

Zone 7 - York WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(1)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	542	$18.00	$9,748	542	$30.00	$16,247	542	$30.00	$175	$16,422	$50.00	$27,079	64.89%
Consumption Charges													
First 2000 Gallons	7,547	$0.0000	0	7,547	$0.0000	0	7,290	$0.0000	0	0	$0.4000	2,916	0.00%
All Over 2000 Gallons	187,727	$0.9370	175,900	187,727	$1.6380	307,496	181,333	$1.6380	3,208	300,231	$2.0000	362,665	20.80%
Adjustment (2):													
First 2000 Gallons				(257)	$0.0000	0	(26)	$0.0000	0	0	$0.4000	(10)	0.00%
All Over 2000 Gallons				(6,394)	$1.6380	(10,473)	(656)	$1.6380	(12)	(1,087)	$2.0000	(1,312)	20.70%
Total Zone 7 Municipal			**$185,648**			**$313,270**			**$3,371**	**$315,566**		**$391,338**	24.01%

Note (1) The annualized revenue for 12 months ending June 2024 is using authorized rates from Docket No. R-2022-3031673.
Note (2) Adjustment to normalize usage

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 8 - Foster Township	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Butler Townshhip													
Flat Rate Per EDU	603	$15.00	$9,051	900	$15.00	$13,500	900	$15.00	$146	$13,646	$25.00	$22,500	64.88%
Adjustment (1):													
Flat Rate Per EDU	297	$15.00	4,449										
Total Zone 8 Municipal			**$13,500**			**$13,500**			**$146**	**$13,646**		**$22,500**	64.88%

Note (1) The annualized revenue for 12 months ending June 2024 is applying the approved rates in Docket No. R-2022-3031673.

Zone 9 - Royersford WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	60	$48.00	$2,880	60	$48.00	$2,880	60	$48.00	$31	$2,911	$50.00	$3,000	3.06%
Consumption Charges													
First 3000 Gallons	2,352	$0.0000	0	2,352	$0.0000	0	2,272	$0.0000	0	0	$0.7500	1,704	0.00%
All Over 3000 Gallons	17,821	$0.9400	16,752	17,821	$0.9400	16,752	17,214	$0.9400	175	16,356	$0.7500	12,911	-21.06%
Flat Rate (Unmetered)	-	$67.00	0	-	$67.00	0	-	$67.00	0	0	$80.00	0	0.00%
Adjustment (1):													
First 3000 Gallons				(80)	$0.0000	0	(8)	$0.0000	0	0	$0.7500	(6)	0.00%
All Over 3000 Gallons				(607)	$0.9400	(571)	(62)	$0.9400	(1)	(59)	$0.7500	(47)	-20.34%
Total Zone 9 Municipal			**$19,632**			**$19,061**			**$205**	**$19,208**		**$17,562**	-8.57%

Note (1) Adjustment to normalize usage

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone XX - Farmington WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge Per EDU				48	$53.50	$2,568	48	$53.50		$2,568	$50.00	$2,400	-6.54%
Annualized Winter Usage				1,477	$0.0000	0	1,477	$0.0000		0	$0.7000	1,034	0.00%
Total Zone XX Municipal			**$0**			**$2,568**			**$0**	**$2,568**		**$3,434**	33.72%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BULK WASTEWATER CLASS BILL ANALYSIS

Bulk WW Class	6/30/2023 Water Usage (in 100 Gallons)	6/30/2023 Annualized Revenues	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 1 - Most WW Areas	1,639,475	$1,917,824	1,639,475	$1,917,824	1,639,475	$20,712	$1,938,536	$1,971,503	1.70%
Zone 2 - New Cumberland									
Zone 5 - Valley WW									
Zone 7 - York WW	18,684,743	7,005,759	18,684,743	7,345,773	18,684,743	79,335	7,425,108	7,702,598	3.74%
Zone 8 - Foster Township									
Zone 9 -Royersford WW	25,944	80,021	25,944	80,021	25,944	864	80,885	104,860	29.64%
Total Bulk WW	20,350,161	$9,003,604	20,350,161	$9,343,618	20,350,161	$100,911	$9,444,529	$9,778,961	3.54%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BULK WASTEWATER CLASS BILL ANALYSIS

Zone 1 - Most WW Areas	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	125	$35.00	$4,362	125	$35.00	$4,362	125	$35.00	$47	$4,409	$50.00	$6,232	41.35%
Consumption Charges													
Usage per 100 Gallons:	9,625	$2.1030	20,242	9,625	$2.1030	20,242	9,625	$2.1030	219	20,461	$2.0000	19,250	-5.92%
Special Rate (Caln, West Brandywine, VA Med)													
Service Charge	36	$415.00	14,940	36	$415.00	14,940	36	$415.00	161	15,101	$430.00	15,480	2.51%
Consumption Charges													
Usage per 100 Gallons:	1,167,943	$1.4500	1,693,517	1,167,943	$1.4500	1,693,517	1,167,943	$1.4500	18,290	1,711,807	$1.4900	1,740,235	1.66%
St Lawrence Borough													
Usage per 100 Gallons:	461,907	$0.4000	184,763	461,907	$0.4000	184,763	461,907	$0.4000	1,995	186,758	$0.4120	190,306	1.90%
Total Zone 1 Bulk WW			**1,917,824**			**1,917,824**			**20,712**	**1,938,536**		**1,971,503**	1.70%

Zone 7 - York WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Special Bulk WW Rate													
Consumption Charges													
Usage per 100 Gallons:	18,676,652	$0.3750	$7,003,744	18,676,652	$0.3932	$7,343,660	18,676,652	$0.3932	$79,312	$7,422,972	$0.4123	$7,700,384	3.74%
Usage per 100 Gallons:	8,091	$0.2490	2,015	8,091	$0.2611	2,113	8,091	$0.2611	23	2,136	$0.2737	2,214	3.65%
Total Zone 7 Bulk WW			**$7,005,759**			**$7,345,773**			**$79,335**	**$7,425,108**		**$7,702,598**	3.74%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BULK WASTEWATER CLASS BILL ANALYSIS

Zone 9 - Royersford WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	1,094	$48.00	$52,494	1,094	$48.00	$52,494	1,094	$48.00	$567	$53,061	$50.00	$54,682	3.05%
Consumption Charges													
First 3000 Gallons	24,031	$0.0000	0	24,031	$0.0000	0	24,031	$0.0000	0	0	$0.7500	18,023	0.00%
All Over 3000 Gallons	1,913	$0.9400	1,799	1,913	$0.9400	1,799	1,913	$0.9400	19	1,818	$0.7500	1,435	-21.07%
Flat Rate (Unmetered)	384	$67.00	25,728	384	$67.00	25,728	384	$67.00	278	26,006	$80.00	30,720	18.13%
Total Zone 9 Bulk WW			**$80,021**			**$80,021**			**$864**	**$80,885**		**$104,860**	29.64%

PENNSYLVANIA-AMERICAN WATER COMPANY
MISCELLANEOUS AND OTHER OPERATING REVENUES
WASTEWATER SSS OPERATIONS
TWELVE MONTHS ENDING JUNE 2023, 2024, AND 2025

		Per Books 06/30/2023	Adjustments	Adjusted 06/30/2023	Adjustments	06/30/2024	Adjustments	06/30/2025	Proposed 06/30/2025
523	Other WW Revenues								
	IPP Revenue	$58,897	$1,776,143	$1,835,040	$0	$1,835,040	$0	$1,835,040	$1,835,040
536	Guaranteed Revenues	0		0		0		0	0
532	Late Payment Fees	292,939	109,657	402,597	59,557	462,154	1,528	463,681	472,013
536	Miscellaneous Services	934,004		934,004		934,004		934,004	934,004
472	Rents From Property	0		0		0		0	0
473	Intercompany Rent	0		0		0		0	0
		$1,226,943	$109,657	$1,336,600	$59,557	$1,396,157	$1,528	$1,397,685	$1,406,017
	Total Other Revenues	$1,285,840	$1,885,800	$3,171,640	$59,557	$3,231,197	$1,528	$3,232,725	$3,241,057

Pennsylvania American Water Company
Wastewater Bill Analysis Summary
12 Months Ending December 2021, 2022, 2023

RESIDENTIAL CLASS	12 Mo-Ended 06/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue
	(a)	(b)	(b)	(a) x (b)
Rate Zone 1 - Most WW Areas				
Old Rate (Most Areas)				
Service Charge (Most Areas)	223,841	$11.00		$2,462,256
Service Charge (Sadsbury WW)	(51)	$25.00		(1,272)
Flat Rate (Most Areas)	8,667	$78.41		679,600
Flat Rate (Upper Pottsgrove WW)	10,453	$65.00		679,458
Flat Rate (Exeter WW)	4,307	$77.07		331,931
Usage (100 Gallons)	5,169,385	$1.9494		10,077,199
Usage Charge (Turbotville WW)	52,831	$1.8000		95,096
Usage Charge (Exeter WW)	1,889,986	$1.9107		3,611,197
Current Rate				
Service Charge	126,958		$14.30	$1,815,494
Usage (100 Gallons)	3,815,840		$2.8750	10,970,540
Flat Rate (Unmetered)	13,561		$106.00	1,437,488
Farmington Per EDU			$53.50	
Sadsbury Per EDU			$128.33	
Low Income (30% Discount - 202	($568,288)			($568,288)
Low Income (80% Discount) Tier	($86,807)		($11.44)	($86,807)
# of Customers			($2.3000)	
Low Income (55% Discount) Tier	($63,273)		($7.87)	($63,273)
# of Customers			($1.5813)	
Low Income (30% Discount) Tier	($70,031)		($4.29)	($70,031)
# of Customers			($0.8625)	
Rate Zone 2 - New Cumberland	**Billing Units**			
Old Rate				
Service Charge	22,166	$11.00		$243,823
Usage (100 Gallons)	674,583	$1.2300		829,737
Current Rate				
Service Charge	11,655		$14.30	$166,664
Usage (100 Gallons)	337,697		$2.4500	827,357
Low Income (30% Discount - 202	($11,146)			($11,146)
Low Income (80% Discount) Tier	($981)		($11.44)	($981)
# of Customers			($1.9600)	
Low Income (55% Discount) Tier	($1,489)		($7.87)	($1,489)
# of Customers			($1.3475)	
Low Income (30% Discount) Tier	($2,599)		($4.29)	($2,599)
# of Customers			($0.7350)	

Pennsylvania American Water Company
Wastewater Bill Analysis Summary
12 Months Ending December 2021, 2022, 2023

Rate Zone 5 - Valley WW	Billing Units	Old Rates	Current Rates	Base Year Revenue
Current Rate		(b)	(b)	(a) x (b)
Service Charge	19,577	$59.67		$1,168,135
Unmetered (Flat Rate)	16,190	$73.33		1,187,245
Usage (100 Gallons)				
First 3400 Gallons	486,676	$0.0000		$0
All Over 3400 Gallons	128,398	$1.1200		143,806
Authorized Rate				
Service Charge	0		$14.30	$0
Unmetered (Flat Rate)			$106.00	0
Usage (100 Gallons)				
All Usage	0		$2.8750	$0
Low Income (30% Discount - 202	($4,158)			($4,158)
Low Income (80% Discount) Tier	($550)	($47.74)	($11.44)	($550)
# of Customers	2	($0.90)	($2.30)	
	2	($58.66)	($84.80)	
Low Income (55% Discount) Tier	($282)	($40.33)	($58.30)	($282)
# of Customers	2			
Low Income (30% Discount) Tier	($1,223)	($17.90)	($4.29)	($1,223)
# of Customers	6	($0.34)	($0.86)	
	13	($22.00)	($31.80)	

Rate Zone 7 - York WW	Billing Units			
Current Rate				
Minimum Charge	141,871	$18.00		$2,553,686
Usage (100 Gallons)				
First 2000 Gallons	2,482,462	$0.0000		$0
All Over 2000 Gallons	4,324,728	$0.9370		4,052,270
Authorized Rate				
Minimum Charge	0		$18.00	$0
Usage (100 Gallons)				
First 2000 Gallons	0		$0.0000	$0
All Over 2000 Gallons	0		$2.7375	0
Low Income (30% Discount - 202	($1,661)			($1,661)
Low Income (80% Discount) Tier	($1,060)	($14.40)	($14.40)	($1,060)
# of Customers	13	($0.7496)	($2.1900)	
Low Income (55% Discount) Tier	($884)	($9.90)	($9.90)	($884)
# of Customers	13	($0.5154)	($1.5056)	
Low Income (30% Discount) Tier	($319)	($5.40)	($5.40)	($319)
# of Customers	19	($0.2811)	($0.8213)	

Rate Zone 8 - Foster Township W\	Billing Units			
Flat Rate Per EDU	4,030	$85.00	$106.00	$342,523
Low Income (30% Discount - 202	$0			$0
Low Income (80% Discount) Tier	$0	($68.00)	($84.80)	$0
# of Customers	0			
Low Income (55% Discount) Tier	$0	($46.75)	($58.30)	$0
# of Customers	0			
Low Income (30% Discount) Tier	($26)	($25.50)	($31.80)	($26)
# of Customers	1			

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Rate Zone 9 - Royersford WW	**Billing Units**	**Old Rates**	**Current Rates**	**Base Year Revenue**
Old Rate		(b)	(b)	(a) x (b)
Service Charge	14,289	$30.00		$428,681
Flat (Unmetered)	102	$43.50		4,418
Usage (100 Gallons)				
First 5400 Gal	439,975	$0.0000		$0
All Over 5400 Gal	48,779	$0.5615		27,389
Current Rate				
Service Charge	927		$48.00	$44,486
Flat (Unmetered)	6		$50.00	321
Usage (100 Gallons)				
First 3000 Gal	0		$0.0000	$0
All Over 3000 Gal	9,962		$0.9400	9,364
Low Income (30% Discount - 202	($2,322)			($2,322)
Low Income (80% Discount) Tier	($436)		($38.40)	($436)
# of Customers	4		($0.7520)	
Low Income (55% Discount) Tier	($91)		($26.40)	($91)
# of Customers	1		($0.5170)	
Low Income (30% Discount) Tier	($526)		($14.40)	($526)
# of Customers	15		($0.2820)	
AMP Program	($106,230)			($106,230)
RESIDENTIAL REVENUES				**$43,264,510**
Customer Count	**51,543**			
Water Sales/Flow	**19,861,303**			

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COMMERCIAL CLASS	12 Mo-Ended 06/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue
	(a)	(b)	(b)	(a)*(b)
Rate Zone 1 - Most Areas				
Old Rate (Most Areas)				
Service Charge	15,663	$27.50		$430,734
Flat Rate (Most Areas)	653	$78.41		51,237
Flat Rate (Exeter Old Rate)	144	$77.07		11,079
Usage (100 Gallons)	1,790,923	$1.4374		2,574,272
Usage (Exeter Old Rate)	1,007,400	$1.4361		1,446,727
Current Rate				
Service Charge	7,732		$35.00	$270,623
Usage (100 Gallons)	1,545,084		$2.1030	3,249,312
Flat (Unmetered)	419		$106.00	44,429
Farmington Per EDU			$53.50	
Sadsbury Per EDU			$128.33	
Upper Pottsgrove WW				
OldRate				
Service Charge	318	$39.00		$12,390
Flat Rate (Unmetered)	342	$65.00		22,208
Usage (100 Gallons)	9,808	$0.3467		3,400
Current Rate				
Service Charge	187		$63.60	$11,862
Flat Rate (Unmetered)	211		$106.00	22,390
Usage (100 Gallons)	4,771		$0.5653	2,697
Cleveland-Cliffs (Old Rate)				
OldRate				
Service Charge	8	$275.00		$2,081
Usage (100 Gallons)	441	$0.9300		410
Current Rate				
Service Charge	4		$415.00	$1,840
Usage (100 Gallons)	649		$1.4000	908
Rate Zone 2 - New Cumberland	**Billing Units**			
OldRate				
Service Charge	2,185	$27.50		$60,078
Usage (100 Gallons)	138,172	$1.0400		143,699
Current Rate				
Service Charge	1,153		$35.00	$40,346
Usage (100 Gallons)	74,106		$1.9000	140,801

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Rate Zone 5 - Valley WW	**Billing Units**	**Old Rates**	**Current Rates**	**Base Year Revenue**
Current Rate		(b)	(b)	(a) x (b)
Service Charge	131	$59.67		$7,794
Unmetered (Flat Rate)	3,149	$73.33		230,904
Usage (100 Gallons)				
First 3400 Gallons	2,237	$0.0000		$0
All Over 3400 Gallons	11,677	$1.1200		13,078
Current Rate (Westwood Fire Company)				
Service Charge	12	$0.00		$0
Usage (100 Gallons)				
First 3400 Gallons	408	$0.0000		$0
All Over 3400 Gallons	482	$0.0000		0
Current Rate (Rainbow Washhouse Inc)				
Service Charge	12	$73.33		$880
Usage (100 Gallons)				
First 2000 Gallons	240	$0.0000		$0
All Over 2000 Gallons	20,978	$0.2070		4,342
Authorized Rate				
Service Charge	0		$35.00	$0
Unmetered (Flat Rate)			$106.00	0
Usage (100 Gallons)				
All Usage	0		$2.1030	$0
Authorized Rate (Westwood Fire Company)				
Service Charge	0		$0.00	$0
Usage (100 Gallons)				
All Usage	0		$2.1030	$0
Authorized Rate (Rainbow Washhouse Inc)				
Service Charge	0		$75.00	$0
Usage (100 Gallons)				
First 2000	0		$0.00	$0
All Over 2000 Gallons	0		$0.2100	0
Rate Zone 7 - York WW				
Minimum Charge	15,107	$18.00		$271,930
Usage (100 Gallons)				
First 2000 Gal	219,536	$0.0000		$0
All Over 2000 Gal	2,955,998	$0.9370		2,769,771
Authorized Rate				
Minimum Charge	0		$30.00	$0
Usage (100 Gallons)				
First 2000 Gallons	0		$0.0000	$0
All Over 2000 Gallons	0		$1.6380	0
Rate Zone 8 - Foster Township W	**Billing Units**			
Flat Rate @ Current Rate	276	$85.00		$23,456
Flat Rate @ Authorized Rate			$106.00	$0

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Rate Zone 9 - Royersford WW	**Billing Units**	**Old Rates**	**Current Rates**	**Base Year Revenue**
Old Rate		(b)	(b)	(a) x (b)
Service Charge	2,203	$30.00		$66,080
Flat (Unmetered)	1,024	$43.50		44,544
Usage (100 Gallons)				
First 5400 Gal	83,704	$0.0000		$0
All Over 5400 Gal	267,850	$0.5615		150,398
Current Rate				
Service Charge	159		$48.00	$7,645
Flat (Unmetered)	68		$67.00	4,556
Usage (100 Gallons)				
First 3000 Gal	5,159		$0.0000	$0
All Over 3000 Gal	21,891		$0.9400	20,577
COMMERCIAL REVENUES				**$12,159,478**
Customer Count	**3,314**			
Water Sales/Flow	**8,161,514**			

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INDUSTRIAL CLASS	12 Mo-Ended 06/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue
	(a)	(b)		(a)*(b)
Rate Zone 1				
Old Rate (Exeter)				
Service Charge	69	$27.50		$1,886
Flat Rate	8	$77.07		603
Usage (100 Gallons)	169,267	$1.4361		243,085
Current Rate				
Service Charge	39		$35.00	$1,380
Usage (100 Gallons)	95,505		$2.1030	200,846
Flat Rate (Unmetered)	4		$106.00	443
Farmington Per EDU			$53.50	
Sadsbury Per EDU			$128.33	
Special Rate (Old Rate)				
Cleveland Cliff Plate				
Service Charge	8	$275.00		$2,081
Usage (100 Gallons)	252,729	$0.9300		235,038
Victory Bewing				
Service Charge	8	$275.00		$2,165
Usage (100 Gallons)	181,816	$0.9300		169,089
Knouse Foods	8	$5,558.41		$43,772
Penn State Special Metals	8	$1,912.95		15,064
PSC Metals	8	$740.61		5,832
Koppel Steel	7	$11,492.09		82,086
Special Rate (Current Rate)				
Cleveland Cliff Plate				
Service Charge	4		$415.00	$1,840
Usage (100 Gallons)	104,589		$1.4000	146,424
Victory Bewing				
Service Charge	4		$415.00	$1,714
Usage (100 Gallons)	92,454		$1.4000	129,435
Knouse Foods	4		$8,340.00	$34,403
Penn State Special Metals	4		$2,870.00	11,839
PSC Metals	4		$1,110.00	4,579
Koppel Steel	5		$17,240.00	83,737
Rate Zone 7 - York WW	**Billing Units**			
Usage (100 Gallons)	6,092	$0.9370		$5,708
Authorized Rate				
Usage (100 Gallons)	0		$1.6380	$0
Rate Zone 8 - Foster Township	**Billing Units**			
Flat (Unmetered)	2,522	$85.00		$214,381
			$106.00	

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Rate Zone 9 - Royersford WW	**Billing Units**	**Old Rates**	**Current Rates**	**Base Year Revenue**
Old Rate		(b)	(b)	(a) x (b)
Service Charge	133	$30.00		$3,981
Flat (Unmetered)	0	$43.50		9
Usage (100 Gallons)				
First 5400 Gal	2,795	$0.0000		$0
All Over 5400 Gal	10,728	$0.5615		6,024
Current Rate				
Service Charge	11		$48.00	$509
Flat (Unmetered)	0		$67.00	0
Usage (100 Gallons)				
First 3000 Gal	203		$0.0000	$0
All Over 3000 Gal	761		$0.9400	716
INDUSTRIAL REVENUES				**$1,648,669**
Customer Count	**24**			
Water Sales/Flow	**916,939**			

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MUNICIPAL CLASS	12 Mo-Ended 06/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue
	(a)	(b)		(a)*(b)
Rate Zone 1 - Most Areas				
Old Rate (Most Areas)				
Service Charge	527	$27.50		$14,499
Flat Rate (Most Areas)	160	$78.41		12,562
Flat Rate (Exeter Old Rate)	0	$77.07		0
Usage (100 Gallons)	236,998	$1.4374		340,661
Usage (Exeter Old Rate)	7,745	$1.4361		11,123
Current Rate				
Service Charge	296		$35.00	$10,353
Usage (100 Gallons)	145,616		$2.1030	306,231
Flat (Unmetered)	110		$106.00	11,637
Farmington Per EDU			$53.50	
Sadsbury Per EDU			$128.33	
Strattanville Borough				
Old Rate	7	$4,137.00		$29,893
Current Rate	4		$6,200.00	23,400
Rate Zone 2 - New Cumberland	**Billing Units**			
OldRate				
Service Charge	79	$27.50		$2,161
Usage (100 Gallons)	6,931	$1.0400		7,208
Current Rate				
Service Charge	42		$35.00	$1,453
Usage (100 Gallons)	5,081		$1.9000	9,654
Rate Zone 5 - Valley WW	**Billing Units**			
Current Rate				
Service Charge	48	$59.67		$2,864
Unmetered (Flat Rate)	0	$73.33		0
Usage (100 Gallons)				
First 3400 Gallons	1,282	$0.0000		$0
All Over 3400 Gallons	43,581	$1.1200		48,811
Authorized Rate				
Service Charge	0		$35.00	$0
Unmetered (Flat Rate)			$106.00	0
Usage (100 Gallons)				
All Usage	0		$2.1030	0
Rate Zone 7 - York WW	**Billing Units**			
Minimum Charge	542	$18.00		$9,748
Usage (100 Gallons)				
First 2000 Gal	7,547	$0.0000		$0
All Over 2000 Gal	187,727	$0.9370		175,900
Authorized Rate				
Minimum Charge	0		$30.00	$0
Usage (100 Gallons)				
First 2000 Gallons	0		$0.0000	$0
All Over 2000 Gallons	0		$1.6380	0

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Rate Zone 8 - Foster Township	**Billing Units**	**Old Rates**	**Current Rates**	**Base Year Revenue**
Butler Township		(b)	(b)	(a) x (b)
Flat Rate	603	$15.00		$9,051
			$15.00	
Rate Zone 9 - Royersford WW	**Billing Units**			
Old Rate				
Service Charge	55	$30.00		$1,655
Flat (Unmetered)	0	$43.50		0
Usage (100 Gallons)				
First 5400 Gal	2,031	$0.0000		$0
All Over 5400 Gal	16,569	$0.5615		9,303
Current Rate				
Service Charge	5		$48.00	$231
Flat (Unmetered)	0		$67.00	0
Usage (100 Gallons)				
First 3000 Gal	320		$0.0000	$0
All Over 3000 Gal	1,252		$0.9400	1,177
MUNICIPAL REVENUES				**$1,039,575**
Customer Count	**140**			
Water Sales/Flow	**662,681**			

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BULK WW CLASS	12 Mo-Ended 06/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue
	(a)	(b)		(a)*(b)
Rate Zone 1 - Most Areas				
Caln Township				
Old Rate				
Service Charge	8	$275.00		$2,165
Usage (100 Gallons)	259,588	$0.9639		250,216
Current Rate				
Service Charge	4		$415.00	$1,714
Usage (100 Gallons)	60,435		$1.4500	87,631
West Brandywine Twp				
Old Rate				
Service Charge	8	$275.00		$2,165
Usage (100 Gallons)	408,881	$0.9639		394,121
Current Rate				
Service Charge	4		$415.00	$1,714
Usage (100 Gallons)	210,409		$1.4500	305,093
VA Medical Center				
Old Rate				
Service Charge	8	$275.00		$2,165
Usage (100 Gallons)	167,723	$0.9639		161,668
Current Rate				
Service Charge	4		$415.00	$1,714
Usage (100 Gallons)	60,907		$1.4500	88,315
St. Lawrence Borough				
Old Rate				
Usage (100 Gallons)	461,907	$0.3332		$153,907
Current Rate				
Usage (100 Gallons)	0		$0.4000	$0
Other Bulk Account				
Old Rate				
Service Charge	35	$27.50		$973
Usage (100 Gallons)	3,153	$1.4374		4,532
Current Rate				
Service Charge	89		$35.00	$3,123
Usage (100 Gallons)	6,472		$2.1030	13,611
Rate Zone 7 - York WW	**Billing Units**			
Usage (100 Gallons)	18,676,652	$0.3750	$0.3932	$7,003,744
Usage (100 Gallons)	8,091	0.2490	$0.2610	2,015
Rate Zone 9 - Royersford WW	**Billing Units**			
Old Rate				
Service Charge	1,094	$30.00		$32,809
Flat (Unmetered)	384	$43.50		16,704
Usage (100 Gallons)				
First 5400 Gal	24,031	$0.0000		$0
All Over 5400 Gal	1,913	$0.5615		1,074
Current Rate				
Service Charge	0		$48.00	$0
Flat (Unmetered)	0		$67.00	0
Usage (100 Gallons)				
First 3000 Gal	0		$0.0000	$0
All Over 3000 Gal	0		$0.9400	0
BULK WW REVENUES				**$8,531,173**
Customer Count	**32**			
Water Sales/Flow	**20,350,161**			

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RESIDENTIAL CLASS	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Rate Zone 1 - Most WW Areas																
Old Rate (Most Areas)																
Service Charge (Most Areas)																
Service Charge (Sadsbury WW)																
Flat Rate (Most Areas)																
Flat Rate (Upper Pottsgrove WW)																
Flat Rate (Exeter WW)																
Usage (100 Gallons)																
Usage Charge (Turbotville WW)																
Usage Charge (Exeter WW)																
Current Rate																
Service Charge	350,748	$5,015,700	1,320				$5,034,576	1,107								$5,050,406
Usage (100 Gallons)	10,928,042	31,418,121	39,018				31,530,298	32,722	(224,824)							30,978,005
Flat Rate (Unmetered)	36,989	3,920,785		1,540			4,084,025									4,084,025
Farmington Per EDU														4,968		265,788
Sadsbury Per EDU															2,712	348,031
Low Income (30% Discount - 202																
Low Income (80% Discount) Tier	4,212	($48,185)					($48,185)									($48,185)
# of Customers	131,231	(301,830)					(301,830)									(301,830)
Low Income (55% Discount) Tier	4,536	($35,676)					($35,676)									($35,676)
# of Customers	141,325	(223,471)					(223,471)									(223,471)
Low Income (30% Discount) Tier	9,612	($41,235)					($41,235)									($41,235)
# of Customers	299,475	(258,297)					(258,297)									(258,297)

Rate Zone 2 - New Cumberland	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Old Rate																
Service Charge																
Usage (100 Gallons)																
Current Rate																
Service Charge	33,821	$483,634					$483,634									$483,634
Usage (100 Gallons)	1,012,280	2,480,085					2,480,085		(20,752)							2,429,243
Low Income (30% Discount - 202																
Low Income (80% Discount) Tier	84	($961)					($961)									($961)
# of Customers	2,514	(4,928)					(4,928)									(4,928)
Low Income (55% Discount) Tier	108	($849)					($849)									($849)
# of Customers	3,233	(4,356)					(4,356)									(4,356)
Low Income (30% Discount) Tier	432	($1,853)					($1,853)									($1,853)
# of Customers	12,930	(9,504)					(9,504)									(9,504)

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Rate Zone 5 - Valley WW	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Current Rate																
Service Charge	19,577	$1,168,135					$1,168,135									
Unmetered (Flat Rate)	16,190	1,187,245					1,187,245									
Usage (100 Gallons)																
First 3400 Gallons	486,676	$0					$0									
All Over 3400 Gallons	128,398	143,806					143,806									
Authorized Rate																
Service Charge										$19,577						$279,945
Unmetered (Flat Rate)										16,190						1,716,186
Usage (100 Gallons)																
All Usage									(12,609)	$615,075						$1,732,090
Low Income (30% Discount - 202																
Low Income (80% Discount) Tier	24	($1,146)					($1,146)			$24						($275)
# of Customers	157	(141)					(141)			157						(362)
	24	(1,408)					(1,408)			24						(2,035)
Low Income (55% Discount) Tier	24	($968)					($968)			$24						($1,399)
# of Customers																
Low Income (30% Discount) Tier	72	($1,289)					($1,289)			$72						($309)
# of Customers	472	(159)					(159)			472						(407)
	156	(3,432)					(3,432)			156						(4,961)

Rate Zone 7 - York WW	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Current Rate																
Minimum Charge	141,871	$2,553,686					$2,553,686									
Usage (100 Gallons)																
First 2000 Gallons	2,482,462	$0					$0									
All Over 2000 Gallons	4,324,728	4,052,270					4,052,270									
Authorized Rate																
Minimum Charge											$141,871					$2,553,686
Usage (100 Gallons)																
First 2000 Gallons										($50,890)	$2,482,462					$0
All Over 2000 Gallons										(88,657)	4,324,728					11,596,245
Low Income (30% Discount - 202																
Low Income (80% Discount) Tier	156	($2,246)					($2,246)				$156					($2,246)
# of Customers	4,755	(3,565)					(3,565)				4,755					(10,414)
Low Income (55% Discount) Tier	156	($1,544)					($1,544)				$156					($1,544)
# of Customers	4,755	(2,451)					(2,451)				4,755					(7,160)
Low Income (30% Discount) Tier	228	($1,231)					($1,231)				$228					($1,231)
# of Customers	6,950	(1,954)					(1,954)				6,950					(5,708)

Rate Zone 8 - Foster Township W\	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Flat Rate Per EDU	4,030	$342,523			2,006		$513,060					6,036				$639,816
Low Income (30% Discount - 202																
Low Income (80% Discount) Tier	0	$0					$0					0				$0
# of Customers																
Low Income (55% Discount) Tier	0	$0					$0					0				$0
# of Customers																
Low Income (30% Discount) Tier	12	($306)					($306)					12				($382)
# of Customers																

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Rate Zone 9 - Royersford WW	**Base Year Billing Determinants**	**Annualized Revenue at Current Rate**	**Annualized Customer Growth**	**Annualized Upper Pottsgrove**	**Annualized Foster Township**	**Stratanville Borough Adjustment**	**Annualized 06/30/2023 Revenue**	**Annualized Customer Growth**	**Normalized Usage**	**Annualized Valley Revenue**	**Annualized York Revenue**	**Annualized Foster (New Rate)**	**Findlay Township Sales**	**Acquisition Farmington WW**	**Acquisition Sadsbury WW**	**Annualized 06/30/2024 Revenue**
Old Rate																
Service Charge																
Flat (Unmetered)																
Usage (100 Gallons)																
First 5400 Gal																
All Over 5400 Gal																
Current Rate																
Service Charge	15,216	$730,375					$730,375									$730,375
Flat (Unmetered)	108	5,400					5,400									5,400
Usage (100 Gallons)																
First 3000 Gal	439,975	$0					$0		(9,019)							$0
All Over 3000 Gal	58,741	55,216					55,216		(1,204)							54,084
Low Income (30% Discount - 202																
Low Income (80% Discount) Tier	48	($1,843)					($1,843)									($1,843)
# of Customers	185	(139)					(139)									(139)
Low Income (55% Discount) Tier	12	($317)					($317)									($317)
# of Customers	46	(24)					(24)									(24)
Low Income (30% Discount) Tier	180	($2,592)					($2,592)									($2,592)
# of Customers	695	(196)					(196)									(196)
AMP Program																
RESIDENTIAL REVENUES		**$52,598,885**					**$53,063,715**									**$61,972,270**
Customer Count																
Water Sales/Flow																

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COMMERCIAL CLASS	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Rate Zone 1 - Most Areas																
Old Rate (Most Areas)																
Service Charge																
Flat Rate (Most Areas)																
Flat Rate (Exeter Old Rate)																
Usage (100 Gallons)																
Usage (Exeter Old Rate)																
Current Rate																
Service Charge	23,395	$818,830	60				$820,930	54								$822,820
Usage (100 Gallons)	4,343,407	9,134,184	15,038				9,165,808	13,534	(68,934)							9,049,302
Flat (Unmetered)	1,216	128,932					128,932									128,932
Farmington Per EDU														924		49,434
Sadsbury Per EDU															960	123,197
Upper Pottsgrove WW																
OldRate																
Service Charge																
Flat Rate (Unmetered)																
Usage (100 Gallons)																
Current Rate																
Service Charge	504	$32,067		46			$34,993									$34,993
Flat Rate (Unmetered)	553	58,606		51			64,012									64,012
Usage (100 Gallons)	14,579	8,241		1,239			8,941									8,941
Cleveland-Cliffs (Old Rate)																
OldRate																
Service Charge																
Usage (100 Gallons)																
Current Rate																
Service Charge	12	$4,980					$4,980									$4,980
Usage (100 Gallons)	1,090	1,526					1,526									1,526

Rate Zone 2 - New Cumberland	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
OldRate																
Service Charge																
Usage (100 Gallons)																
Current Rate																
Service Charge	3,337	$116,809					$116,809									$116,809
Usage (100 Gallons)	212,277	403,327					403,327		(3,344)							396,973

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Rate Zone 5 - Valley WW	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Current Rate																
Service Charge	131	$7,794					$7,794									
Unmetered (Flat Rate)	3,149	230,904					230,904									
Usage (100 Gallons)																
First 3400 Gallons	2,237	$0					$0									
All Over 3400 Gallons	11,677	13,078					13,078									
Current Rate (Westwood Fire Com																
Service Charge	12	$0					$0									
Usage (100 Gallons)																
First 3400 Gallons	408	$0					$0									
All Over 3400 Gallons	482	0					0									
Current Rate (Rainbow Washhous																
Service Charge	12	$880					$880									
Usage (100 Gallons)																
First 2000 Gallons	240	$0					$0									
All Over 2000 Gallons	20,978	4,342					4,342									
Authorized Rate																
Service Charge										$131						$4,572
Unmetered (Flat Rate)										3,149						333,777
Usage (100 Gallons)																
All Usage									(219)	$13,914						$28,801
Authorized Rate (Westwood Fire C																
Service Charge										$12						$0
Usage (100 Gallons)																
All Usage										$890						$1,872
Authorized Rate (Rainbow Washh																
Service Charge										$12						$900
Usage (100 Gallons)																
First 2000										$240						$0
All Over 2000 Gallons										20,978						4,405

Rate Zone 7 - York WW	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Minimum Charge	15,107	$271,930					$271,930									
Usage (100 Gallons)																
First 2000 Gal	219,536	$0					$0									
All Over 2000 Gal	2,955,998	2,769,771					2,769,771									
Authorized Rate																
Minimum Charge											$15,107					$453,217
Usage (100 Gallons)																
First 2000 Gallons									(3,459)		$219,536					$0
All Over 2000 Gallons									(46,572)		2,955,998					4,765,640

Rate Zone 8 - Foster Township W	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Flat Rate @ Current Rate	276	$23,456			144		$35,700									
Flat Rate @ Authorized Rate												420				$44,520

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Rate Zone 9 - Royersford WW	**Base Year Billing Determinants**	**Annualized Revenue at Current Rate**	**Annualized Customer Growth**	**Annualized Upper Pottsgrove**	**Annualized Foster Township**	**Stratanville Borough Adjustment**	**Annualized 06/30/2023 Revenue**	**Annualized Customer Growth**	**Normalized Usage**	**Annualized Valley Revenue**	**Annualized York Revenue**	**Annualized Foster (New Rate)**	**Findlay Township Sales**	**Acquisition Farmington WW**	**Acquisition Sadsbury WW**	**Annualized 06/30/2024 Revenue**
Old Rate																
Service Charge																
Flat (Unmetered)																
Usage (100 Gallons)																
First 5400 Gal																
All Over 5400 Gal																
Current Rate																
Service Charge	2,362	$113,374					$113,374									$113,374
Flat (Unmetered)	1,092	73,164					73,164									73,164
Usage (100 Gallons)																
First 3000 Gal	88,863	$0					$0		(1,400)							$0
All Over 3000 Gal	289,741	272,357					272,357		(4,565)							268,066
COMMERCIAL REVENUES		**$14,488,552**					**$14,543,552**									**$16,894,227**
Customer Count																
Water Sales/Flow																

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INDUSTRIAL CLASS	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Rate Zone 1																
Old Rate (Exeter)																
Service Charge																
Flat Rate																
Usage (100 Gallons)																
Current Rate																
Service Charge	108	$3,780					$3,780									$3,780
Usage (100 Gallons)	264,772	556,816					556,816									556,816
Flat Rate (Unmetered)	12	1,272					1,272									1,272
Farmington Per EDU														96		5,136
Sadsbury Per EDU															0	0
Special Rate (Old Rate)																
Cleveland Cliff Plate																
Service Charge																
Usage (100 Gallons)																
Victory Bewing																
Service Charge																
Usage (100 Gallons)																
Knouse Foods																
Penn State Special Metals																
PSC Metals																
Koppel Steel																
Special Rate (Current Rate)																
Cleveland Cliff Plate																
Service Charge	12	$4,980					$4,980									$4,980
Usage (100 Gallons)	357,318	500,245					500,245									500,245
Victory Bewing																
Service Charge	12	$4,854					$4,854									$4,854
Usage (100 Gallons)	274,270	383,978					383,978									383,978
Knouse Foods	12	$100,080					$100,080									$100,080
Penn State Special Metals	12	34,440					34,440									34,440
PSC Metals	12	13,320					13,320									13,320
Koppel Steel	12	206,880					206,880									206,880

Rate Zone 7 - York WW	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Usage (100 Gallons)	6,092	$5,708					$5,708									
Authorized Rate																
Usage (100 Gallons)											$6,092					$9,979

Rate Zone 8 - Foster Township	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Flat (Unmetered)	2,522	$214,381			2,086		$391,680									
												4,608				$488,448

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Rate Zone 9 - Royersford WW	**Base Year Billing Determinants**	**Annualized Revenue at Current Rate**	**Annualized Customer Growth**	**Annualized Upper Pottsgrove**	**Annualized Foster Township**	**Stratanville Borough Adjustment**	**Annualized 06/30/2023 Revenue**	**Annualized Customer Growth**	**Normalized Usage**	**Annualized Valley Revenue**	**Annualized York Revenue**	**Annualized Foster (New Rate)**	**Findlay Township Sales**	**Acquisition Farmington WW**	**Acquisition Sadsbury WW**	**Annualized 06/30/2024 Revenue**
Old Rate																
Service Charge																
Flat (Unmetered)																
Usage (100 Gallons)																
First 5400 Gal																
All Over 5400 Gal																
Current Rate																
Service Charge	143	$6,879					$6,879									$6,879
Flat (Unmetered)	0	13					13									13
Usage (100 Gallons)																
First 3000 Gal	2,998	$0					$0									$0
All Over 3000 Gal	11,490	10,800					10,800									10,800
INDUSTRIAL REVENUES		**$2,048,426**					**$2,225,725**									**$2,331,900**
Customer Count																
Water Sales/Flow																

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MUNICIPAL CLASS	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Rate Zone 1 - Most Areas																
Old Rate (Most Areas)																
Service Charge																
Flat Rate (Most Areas)																
Flat Rate (Exeter Old Rate)																
Usage (100 Gallons)																
Usage (Exeter Old Rate)																
Current Rate																
Service Charge	823	$28,806					$28,806									$28,806
Usage (100 Gallons)	390,360	820,927					820,927		(13,296)							792,966
Flat (Unmetered)	270	28,620					28,620									28,620
Farmington Per EDU														48		2,568
Sadsbury Per EDU															0	0
Strattanville Borough																
Old Rate																
Current Rate	11	$68,200				1	$74,400									$74,400

Rate Zone 2 - New Cumberland	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
OldRate																
Service Charge																
Usage (100 Gallons)																
Current Rate																
Service Charge	120	$4,203					$4,203									$4,203
Usage (100 Gallons)	12,012	22,823					22,823		(409)							22,046

Rate Zone 5 - Valley WW	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Current Rate																
Service Charge	48	$2,864					$2,864									
Unmetered (Flat Rate)	0	0					0									
Usage (100 Gallons)																
First 3400 Gallons	1,282	$0					$0									
All Over 3400 Gallons	43,581	48,811					48,811									
Authorized Rate																
Service Charge										$48						$1,680
Unmetered (Flat Rate)										0						0
Usage (100 Gallons)																
All Usage									(1,528)	$44,863						$91,134

Rate Zone 7 - York WW	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Minimum Charge	542	$9,748					$9,748									
Usage (100 Gallons)																
First 2000 Gal	7,547	$0					$0									
All Over 2000 Gal	187,727	175,900					175,900									
Authorized Rate																
Minimum Charge											$542					$16,247
Usage (100 Gallons)																
First 2000 Gallons									($257)		$7,547					$0
All Over 2000 Gallons									(6,394)		187,727					297,023

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Rate Zone 8 - Foster Township	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Butler Township																
Flat Rate	603	$9,051			297		$13,500									$13,500

Rate Zone 9 - Royersford WW	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Old Rate																
Service Charge																
Flat (Unmetered)																
Usage (100 Gallons)																
First 5400 Gal																
All Over 5400 Gal																
Current Rate																
Service Charge	60	$2,880					$2,880									$2,880
Flat (Unmetered)	0	0					0									0
Usage (100 Gallons)																
First 3000 Gal	2,352	$0					$0		(80)							$0
All Over 3000 Gal	17,821	16,752					16,752		(607)							16,181
MUNICIPAL REVENUES		**$1,239,585**					**$1,250,234**									**$1,392,254**
Customer Count																
Water Sales/Flow																

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BULK WW CLASS	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Rate Zone 1 - Most Areas																
Caln Township																
Old Rate																
Service Charge																
Usage (100 Gallons)																
Current Rate																
Service Charge	12	$4,980					$4,980									$4,980
Usage (100 Gallons)	320,023	464,033					464,033									464,033
West Brandywine Twp																
Old Rate																
Service Charge																
Usage (100 Gallons)																
Current Rate																
Service Charge	12	$4,980					$4,980									$4,980
Usage (100 Gallons)	619,290	897,971					897,971									897,971
VA Medical Center																
Old Rate																
Service Charge																
Usage (100 Gallons)																
Current Rate																
Service Charge	12	$4,980					$4,980									$4,980
Usage (100 Gallons)	228,630	331,514					331,514									331,514
St. Lawrence Borough																
Old Rate																
Usage (100 Gallons)																
Current Rate																
Usage (100 Gallons)	461,907	$184,763					$184,763									$184,763
Other Bulk Account																
Old Rate																
Service Charge																
Usage (100 Gallons)																
Current Rate																
Service Charge	125	$4,362					$4,362									$4,362
Usage (100 Gallons)	9,625	20,242					20,242									20,242

Rate Zone 7 - York WW	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Usage (100 Gallons)	18,676,652	$7,003,744					$7,003,744				18,676,652					$7,343,660
Usage (100 Gallons)	8,091	2,015					2,015				8,091					2,112

Rate Zone 9 - Royersford WW	Base Year Billing Determinants	Annualized Revenue at Current Rate	Annualized Customer Growth	Annualized Upper Pottsgrove	Annualized Foster Township	Stratanville Borough Adjustment	Annualized 06/30/2023 Revenue	Annualized Customer Growth	Normalized Usage	Annualized Valley Revenue	Annualized York Revenue	Annualized Foster (New Rate)	Findlay Township Sales	Acquisition Farmington WW	Acquisition Sadsbury WW	Annualized 06/30/2024 Revenue
Old Rate																
Service Charge																
Flat (Unmetered)																
Usage (100 Gallons)																
First 5400 Gal																
All Over 5400 Gal																
Current Rate																
Service Charge	1,094	$52,494					$52,494									
Flat (Unmetered)	384	25,728					25,728									
Usage (100 Gallons)																
First 3000 Gal	24,031	$0					$0									
All Over 3000 Gal	1,913	1,799					1,799									
BULK WW REVENUES		**$9,003,605**					**$9,003,605**									**$9,263,597**
Customer Count																
Water Sales/Flow																

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RESIDENTIAL CLASS	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Base Revenue	1.08% Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Rate Zone 1 - Most WW Areas					
Old Rate (Most Areas)					
Service Charge (Most Areas)					
Service Charge (Sadsbury WW)					
Flat Rate (Most Areas)					
Flat Rate (Upper Pottsgrove WW)					
Flat Rate (Exeter WW)					
Usage (100 Gallons)					
Usage Charge (Turbotville WW)					
Usage Charge (Exeter WW)					
Current Rate					
Service Charge	2,214		$5,082,066	$54,886	$5,136,952
Usage (100 Gallons)	65,444	(181,096)	30,645,505	330,971	30,976,476
Flat Rate (Unmetered)			4,084,025	44,107	4,128,132
Farmington Per EDU			265,788		265,788
Sadsbury Per EDU			348,031		348,031
Low Income (30% Discount - 202					
Low Income (80% Discount) Tier			($48,185)	($520)	($48,705)
# of Customers			(301,830)	(3,260)	(305,090)
Low Income (55% Discount) Tier			($35,676)	($385)	($36,061)
# of Customers			(223,471)	(2,413)	(225,884)
Low Income (30% Discount) Tier			($41,235)	($445)	($41,680)
# of Customers			(258,297)	(2,790)	(261,087)

Rate Zone 2 - New Cumberland	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Old Rate					
Service Charge					
Usage (100 Gallons)					
Current Rate					
Service Charge			$483,634	$5,223	$488,857
Usage (100 Gallons)		(16,715)	2,388,291	25,794	2,414,085
Low Income (30% Discount - 202					
Low Income (80% Discount) Tier			($961)	($10)	($971)
# of Customers			(4,928)	(53)	(4,981)
Low Income (55% Discount) Tier			($849)	($9)	($858)
# of Customers			(4,356)	(47)	(4,403)
Low Income (30% Discount) Tier			($1,853)	($20)	($1,873)
# of Customers			(9,504)	(103)	(9,607)

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Wastewater Bill Analysis Summary
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Rate Zone 5 - Valley WW	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Current Rate					
Service Charge					
Unmetered (Flat Rate)					
Usage (100 Gallons)					
First 3400 Gallons					
All Over 3400 Gallons					
Authorized Rate					
Service Charge			$279,945	$3,023	$282,968
Unmetered (Flat Rate)			1,716,186	18,535	1,734,721
Usage (100 Gallons)					
All Usage		(10,157)	$1,702,889	$18,391	$1,721,280
Low Income (30% Discount - 202					
Low Income (80% Discount) Tier			($275)	($3)	($278)
# of Customers			(362)	(4)	(366)
			(2,035)	(22)	(2,057)
Low Income (55% Discount) Tier			($1,399)	($15)	($1,414)
# of Customers					
Low Income (30% Discount) Tier			($309)	($3)	($312)
# of Customers			(407)	(4)	(411)
			(4,961)	(54)	(5,015)

Rate Zone 7 - York WW	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Current Rate					
Minimum Charge					
Usage (100 Gallons)					
First 2000 Gallons					
All Over 2000 Gallons					
Authorized Rate					
Minimum Charge			$2,553,686	$27,580	$2,581,266
Usage (100 Gallons)					
First 2000 Gallons		(40,992)	$0	$0	$0
All Over 2000 Gallons		(71,413)	11,400,752	123,128	11,523,880
Low Income (30% Discount - 202					
Low Income (80% Discount) Tier			($2,246)	($24)	($2,270)
# of Customers			(10,414)	(112)	(10,526)
Low Income (55% Discount) Tier			($1,544)	($17)	($1,561)
# of Customers			(7,160)	(77)	(7,237)
Low Income (30% Discount) Tier			($1,231)	($13)	($1,244)
# of Customers			(5,708)	(62)	(5,770)

Rate Zone 8 - Foster Township W\	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Flat Rate Per EDU			$639,816	$6,910	$646,726
Low Income (30% Discount - 202					
Low Income (80% Discount) Tier			$0	$0	$0
# of Customers					
Low Income (55% Discount) Tier			$0	$0	$0
# of Customers					
Low Income (30% Discount) Tier			($382)	($4)	($386)
# of Customers					

Pennsylvania American Water Comp
Wastewater Bill Analysis Summary
12 Months Ending December 2021, 2

Rate Zone 9 - Royersford WW	**Annualized Customer Growth**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Old Rate					
Service Charge					
Flat (Unmetered)					
Usage (100 Gallons)					
First 5400 Gal					
All Over 5400 Gal					
Current Rate					
Service Charge			$730,375	$7,888	$738,263
Flat (Unmetered)			5,400	58	5,458
Usage (100 Gallons)					
First 3000 Gal		(7,265)	$0	$0	$0
All Over 3000 Gal		(970)	53,172	574	53,746
Low Income (30% Discount - 202					
Low Income (80% Discount) Tier			($1,843)	($20)	($1,863)
# of Customers			(139)	(2)	(141)
Low Income (55% Discount) Tier			($317)	($3)	($320)
# of Customers			(24)	0	(24)
Low Income (30% Discount) Tier			($2,592)	($28)	($2,620)
# of Customers			(196)	(2)	(198)
AMP Program					
RESIDENTIAL REVENUES			**$61,404,872**		**$62,061,416**
Customer Count					
Water Sales/Flow					

Pennsylvania American Water Comp
Wastewater Bill Analysis Summary
12 Months Ending December 2021, 2

COMMERCIAL CLASS	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Rate Zone 1 - Most Areas					
Old Rate (Most Areas)					
Service Charge					
Flat Rate (Most Areas)					
Flat Rate (Exeter Old Rate)					
Usage (100 Gallons)					
Usage (Exeter Old Rate)					
Current Rate					
Service Charge	108		$826,600	$8,927	$835,527
Usage (100 Gallons)	27,068	(48,079)	9,005,116	97,255	9,102,371
Flat (Unmetered)			128,932	1,392	130,324
Farmington Per EDU			49,434		49,434
Sadsbury Per EDU			123,197		123,197
Upper Pottsgrove WW					
OldRate					
Service Charge					
Flat Rate (Unmetered)					
Usage (100 Gallons)					
Current Rate					
Service Charge			$34,993	$378	$35,371
Flat Rate (Unmetered)			64,012	691	64,703
Usage (100 Gallons)			8,941	97	9,038
Cleveland-Cliffs (Old Rate)					
OldRate					
Service Charge					
Usage (100 Gallons)					
Current Rate					
Service Charge			$4,980	$54	$5,034
Usage (100 Gallons)			1,526	16	1,542

Rate Zone 2 - New Cumberland	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
OldRate					
Service Charge					
Usage (100 Gallons)					
Current Rate					
Service Charge			$116,809	$1,262	$118,071
Usage (100 Gallons)		(2,333)	392,540	4,239	396,779

Pennsylvania American Water Comp
Wastewater Bill Analysis Summary
12 Months Ending December 2021, 2

Rate Zone 5 - Valley WW	**Annualized Customer Growth**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Current Rate					
Service Charge					
Unmetered (Flat Rate)					
Usage (100 Gallons)					
First 3400 Gallons					
All Over 3400 Gallons					
Current Rate (Westwood Fire Com					
Service Charge					
Usage (100 Gallons)					
First 3400 Gallons					
All Over 3400 Gallons					
Current Rate (Rainbow Washhous					
Service Charge					
Usage (100 Gallons)					
First 2000 Gallons					
All Over 2000 Gallons					
Authorized Rate					
Service Charge			$4,572	$49	$4,621
Unmetered (Flat Rate)			333,777	3,605	337,382
Usage (100 Gallons)					
All Usage		(153)	$28,479	$308	$28,787
Authorized Rate (Westwood Fire C					
Service Charge			$0	$0	$0
Usage (100 Gallons)					
All Usage			$1,872	$20	$1,892
Authorized Rate (Rainbow Washh					
Service Charge			$900	$10	$910
Usage (100 Gallons)					
First 2000			$0	$0	$0
All Over 2000 Gallons			4,405	48	4,453

Rate Zone 7 - York WW	**Annualized Customer Growth**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Minimum Charge					
Usage (100 Gallons)					
First 2000 Gal					
All Over 2000 Gal					
Authorized Rate					
Minimum Charge			$453,217	$4,895	$458,112
Usage (100 Gallons)					
First 2000 Gallons		(2,412)	$0	$0	$0
All Over 2000 Gallons		(32,482)	4,712,434	50,894	4,763,328

Rate Zone 8 - Foster Township WV	**Annualized Customer Growth**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Flat Rate @ Current Rate					
Flat Rate @ Authorized Rate			$44,520	$481	$45,001

Pennsylvania American Water Comp
Wastewater Bill Analysis Summary
12 Months Ending December 2021, 2

Rate Zone 9 - Royersford WW	**Annualized Customer Growth**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Old Rate					
Service Charge					
Flat (Unmetered)					
Usage (100 Gallons)					
First 5400 Gal					
All Over 5400 Gal					
Current Rate					
Service Charge			$113,374	$1,224	$114,598
Flat (Unmetered)			73,164	790	73,954
Usage (100 Gallons)					
First 3000 Gal		(976)	$0	$0	$0
All Over 3000 Gal		(3,184)	265,073	2,863	267,936
COMMERCIAL REVENUES			**$16,792,867**		**$16,972,365**
Customer Count					
Water Sales/Flow					

Pennsylvania American Water Comp
Wastewater Bill Analysis Summary
12 Months Ending December 2021, 2

INDUSTRIAL CLASS	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Rate Zone 1					
Old Rate (Exeter)					
Service Charge					
Flat Rate					
Usage (100 Gallons)					
Current Rate					
Service Charge			$3,780	$41	$3,821
Usage (100 Gallons)			556,816	6,014	562,830
Flat Rate (Unmetered)			1,272	14	1,286
Farmington Per EDU			5,136	55	5,191
Sadsbury Per EDU			0	0	0
Special Rate (Old Rate)					
Cleveland Cliff Plate					
Service Charge					
Usage (100 Gallons)					
Victory Bewing					
Service Charge					
Usage (100 Gallons)					
Knouse Foods					
Penn State Special Metals					
PSC Metals					
Koppel Steel					
Special Rate (Current Rate)					
Cleveland Cliff Plate					
Service Charge			$4,980	$54	$5,034
Usage (100 Gallons)			500,245	5,403	505,648
Victory Bewing					
Service Charge			$4,854	$52	$4,906
Usage (100 Gallons)			383,978	4,147	388,125
Knouse Foods			$100,080	$1,081	$101,161
Penn State Special Metals			34,440	372	34,812
PSC Metals			13,320	144	13,464
Koppel Steel			206,880	2,234	209,114

Rate Zone 7 - York WW	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Usage (100 Gallons)					
Authorized Rate					
Usage (100 Gallons)			$9,979	$108	$10,087

Rate Zone 8 - Foster Township	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Flat (Unmetered)					
			$488,448	$5,275	$493,723

Pennsylvania American Water Comp
Wastewater Bill Analysis Summary
12 Months Ending December 2021, 2

Rate Zone 9 - Royersford WW	**Annualized Customer Growth**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Old Rate					
Service Charge					
Flat (Unmetered)					
Usage (100 Gallons)					
First 5400 Gal					
All Over 5400 Gal					
Current Rate					
Service Charge			$6,879	$74	$6,953
Flat (Unmetered)			13	0	13
Usage (100 Gallons)					
First 3000 Gal			$0	$0	$0
All Over 3000 Gal			10,800	117	10,917
INDUSTRIAL REVENUES			**$2,331,900**		**$2,357,085**
Customer Count					
Water Sales/Flow					

Pennsylvania American Water Comp
Wastewater Bill Analysis Summary
12 Months Ending December 2021, 2

MUNICIPAL CLASS	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Rate Zone 1 - Most Areas					
Old Rate (Most Areas)					
Service Charge					
Flat Rate (Most Areas)					
Flat Rate (Exeter Old Rate)					
Usage (100 Gallons)					
Usage (Exeter Old Rate)					
Current Rate					
Service Charge			$28,806	$311	$29,117
Usage (100 Gallons)		(1,364)	790,098	8,533	798,631
Flat (Unmetered)			28,620	309	28,929
Farmington Per EDU			2,568		2,568
Sadsbury Per EDU			0		0
Strattanville Borough					
Old Rate					
Current Rate			$74,400	$804	$75,204

Rate Zone 2 - New Cumberland	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
OldRate					
Service Charge					
Usage (100 Gallons)					
Current Rate					
Service Charge			$4,203	$45	$4,248
Usage (100 Gallons)		(42)	21,966	237	22,203

Rate Zone 5 - Valley WW	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Current Rate					
Service Charge					
Unmetered (Flat Rate)					
Usage (100 Gallons)					
First 3400 Gallons					
All Over 3400 Gallons					
Authorized Rate					
Service Charge			$1,680	$18	$1,698
Unmetered (Flat Rate)			0	0	0
Usage (100 Gallons)					
All Usage		(157)	$90,804	$981	$91,785

Rate Zone 7 - York WW	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Minimum Charge					
Usage (100 Gallons)					
First 2000 Gal					
All Over 2000 Gal					
Authorized Rate					
Minimum Charge			$16,247	$175	$16,422
Usage (100 Gallons)					
First 2000 Gallons		(26)	$0	$0	$0
All Over 2000 Gallons		(656)	295,948	3,196	299,144

Pennsylvania American Water Comp
Wastewater Bill Analysis Summary
12 Months Ending December 2021, 2

Rate Zone 8 - Foster Township	**Annualized Customer Growth**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Butler Township					
Flat Rate			$13,500	$146	$13,646

Rate Zone 9 - Royersford WW	**Annualized Customer Growth**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Old Rate					
Service Charge					
Flat (Unmetered)					
Usage (100 Gallons)					
First 5400 Gal					
All Over 5400 Gal					
Current Rate					
Service Charge			$2,880	$31	$2,911
Flat (Unmetered)			0	0	0
Usage (100 Gallons)					
First 3000 Gal		(8)	$0	$0	$0
All Over 3000 Gal		(62)	16,123	174	16,297
MUNICIPAL REVENUES			**$1,387,843**		**$1,402,803**
Customer Count					
Water Sales/Flow					

Pennsylvania American Water Comp
Wastewater Bill Analysis Summary
12 Months Ending December 2021, 2

BULK WW CLASS	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Rate Zone 1 - Most Areas					
Caln Township					
Old Rate					
Service Charge					
Usage (100 Gallons)					
Current Rate					
Service Charge			$4,980	$54	$5,034
Usage (100 Gallons)			464,033	5,012	469,045
West Brandywine Twp					
Old Rate					
Service Charge					
Usage (100 Gallons)					
Current Rate					
Service Charge			$4,980	$54	$5,034
Usage (100 Gallons)			897,971	9,698	907,669
VA Medical Center					
Old Rate					
Service Charge					
Usage (100 Gallons)					
Current Rate					
Service Charge			$4,980	$54	$5,034
Usage (100 Gallons)			331,514	3,580	335,094
St. Lawrence Borough					
Old Rate					
Usage (100 Gallons)					
Current Rate					
Usage (100 Gallons)			$184,763	$1,995	$186,758
Other Bulk Account					
Old Rate					
Service Charge					
Usage (100 Gallons)					
Current Rate					
Service Charge			$4,362	$47	$4,409
Usage (100 Gallons)			20,242	219	20,461

Rate Zone 7 - York WW	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Usage (100 Gallons)			$7,343,660	$79,312	$7,422,972
Usage (100 Gallons)			2,112	23	2,135

Rate Zone 9 - Royersford WW	Annualized Customer Growth	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Old Rate					
Service Charge					
Flat (Unmetered)					
Usage (100 Gallons)					
First 5400 Gal					
All Over 5400 Gal					
Current Rate					
Service Charge					
Flat (Unmetered)					
Usage (100 Gallons)					
First 3000 Gal					
All Over 3000 Gal					

BULK WW REVENUES

Customer Count
Water Sales/Flow

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 1 RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$14.45	$20.00	$5.55	38.37%
100		17.36	22.57	5.20	29.98%
500		28.98	32.83	3.84	13.25%
1,000		43.51	45.65	2.14	4.91%
2,000		72.58	71.30	(1.28)	-1.76%
3,000		101.64	96.95	(4.69)	-4.61%
3,122	*	105.18	100.08	(5.10)	-4.85%
3,500		116.17	109.78	(6.39)	-5.50%
4,000		130.70	122.60	(8.10)	-6.19%
5,000		159.76	148.25	(11.51)	-7.20%
6,000		188.82	173.90	(14.92)	-7.90%
7,000		217.88	199.55	(18.33)	-8.41%
8,000		246.94	225.20	(21.74)	-8.80%
9,000		276.00	250.85	(25.15)	-9.11%
10,000		305.06	276.50	(28.56)	-9.36%
11,000		334.12	302.15	(31.97)	-9.57%
12,000		363.18	327.80	(35.38)	-9.74%
13,000		392.24	353.45	(38.79)	-9.89%
14,000		421.30	379.10	(42.20)	-10.02%
15,000		450.36	404.75	(45.61)	-10.13%
16,000		479.42	430.40	(49.02)	-10.23%
17,000		508.48	456.05	(52.43)	-10.31%
18,000		537.54	481.70	(55.84)	-10.39%
19,000		566.60	507.35	(59.25)	-10.46%
20,000		595.66	533.00	(62.66)	-10.52%
21,000		624.72	558.65	(66.07)	-10.58%
22,000		653.79	584.30	(69.49)	-10.63%
23,000		682.85	609.95	(72.90)	-10.68%
24,000		711.91	635.60	(76.31)	-10.72%
25,000		740.97	661.25	(79.72)	-10.76%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 2 NEW CUMBERLAND RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$14.45	$20.00	$5.55	38.37%
100		16.93	22.57	5.63	33.28%
500		26.84	32.83	5.99	22.31%
1,000		39.22	45.65	6.43	16.40%
2,000		63.98	71.30	7.32	11.43%
3,000		88.75	96.95	8.20	9.24%
3,122	*	91.77	100.08	8.31	9.06%
3,500		101.13	109.78	8.64	8.55%
4,000		113.51	122.60	9.09	8.01%
5,000		138.28	148.25	9.97	7.21%
6,000		163.04	173.90	10.86	6.66%
7,000		187.81	199.55	11.74	6.25%
8,000		212.57	225.20	12.63	5.94%
9,000		237.34	250.85	13.51	5.69%
10,000		262.10	276.50	14.40	5.49%
11,000		286.87	302.15	15.28	5.33%
12,000		311.63	327.80	16.17	5.19%
13,000		336.39	353.45	17.06	5.07%
14,000		361.16	379.10	17.94	4.97%
15,000		385.92	404.75	18.83	4.88%
16,000		410.69	430.40	19.71	4.80%
17,000		435.45	456.05	20.60	4.73%
18,000		460.22	481.70	21.48	4.67%
19,000		484.98	507.35	22.37	4.61%
20,000		509.75	533.00	23.25	4.56%
21,000		534.51	558.65	24.14	4.52%
22,000		559.28	584.30	25.02	4.47%
23,000		584.04	609.95	25.91	4.44%
24,000		608.80	635.60	26.80	4.40%
25,000		633.57	661.25	27.68	4.37%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 5 VALLEY WW RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$14.45	$20.00	$5.55	38.37%
100		17.36	22.57	5.20	29.98%
500		28.98	32.83	3.84	13.25%
1,000		43.51	45.65	2.14	4.91%
2,000		72.58	71.30	(1.28)	-1.76%
3,000		101.64	96.95	(4.69)	-4.61%
3,122	*	105.18	100.08	(5.10)	-4.85%
3,500		116.17	109.78	(6.39)	-5.50%
4,000		130.70	122.60	(8.10)	-6.19%
5,000		159.76	148.25	(11.51)	-7.20%
6,000		188.82	173.90	(14.92)	-7.90%
7,000		217.88	199.55	(18.33)	-8.41%
8,000		246.94	225.20	(21.74)	-8.80%
9,000		276.00	250.85	(25.15)	-9.11%
10,000		305.06	276.50	(28.56)	-9.36%
11,000		334.12	302.15	(31.97)	-9.57%
12,000		363.18	327.80	(35.38)	-9.74%
13,000		392.24	353.45	(38.79)	-9.89%
14,000		421.30	379.10	(42.20)	-10.02%
15,000		450.36	404.75	(45.61)	-10.13%
16,000		479.42	430.40	(49.02)	-10.23%
17,000		508.48	456.05	(52.43)	-10.31%
18,000		537.54	481.70	(55.84)	-10.39%
19,000		566.60	507.35	(59.25)	-10.46%
20,000		595.66	533.00	(62.66)	-10.52%
21,000		624.72	558.65	(66.07)	-10.58%
22,000		653.79	584.30	(69.49)	-10.63%
23,000		682.85	609.95	(72.90)	-10.68%
24,000		711.91	635.60	(76.31)	-10.72%
25,000		740.97	661.25	(79.72)	-10.76%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 7 YORK TOWNSHIP RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$18.19	$20.00	$1.81	9.92%
100		18.19	20.75	2.56	14.05%
500		18.19	23.75	5.56	30.53%
1,000		18.19	27.50	9.31	51.15%
2,000		18.19	35.00	16.81	92.37%
3,000		45.87	60.65	14.78	32.24%
3,122	*	49.24	63.78	14.54	29.53%
3,500		59.70	73.48	13.77	23.07%
4,000		73.54	86.30	12.76	17.36%
5,000		101.21	111.95	10.74	10.62%
6,000		128.88	137.60	8.72	6.77%
7,000		156.55	163.25	6.70	4.28%
8,000		184.22	188.90	4.68	2.54%
9,000		211.89	214.55	2.66	1.26%
10,000		239.56	240.20	0.64	0.27%
11,000		267.23	265.85	(1.38)	-0.52%
12,000		294.90	291.50	(3.40)	-1.15%
13,000		322.57	317.15	(5.42)	-1.68%
14,000		350.24	342.80	(7.44)	-2.12%
15,000		377.91	368.45	(9.46)	-2.50%
16,000		405.58	394.10	(11.48)	-2.83%
17,000		433.25	419.75	(13.50)	-3.12%
18,000		460.92	445.40	(15.52)	-3.37%
19,000		488.60	471.05	(17.55)	-3.59%
20,000		516.27	496.70	(19.57)	-3.79%
21,000		543.94	522.35	(21.59)	-3.97%
22,000		571.61	548.00	(23.61)	-4.13%
23,000		599.28	573.65	(25.63)	-4.28%
24,000		626.95	599.30	(27.65)	-4.41%
25,000		654.62	624.95	(29.67)	-4.53%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 8 FOSTER TOWNSHIP RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$107.14	$100.00	($7.14)	-6.67%
100		107.14	100.00	(7.14)	-6.67%
500		107.14	100.00	(7.14)	-6.67%
1,000		107.14	100.00	(7.14)	-6.67%
2,000		107.14	100.00	(7.14)	-6.67%
3,000		107.14	100.00	(7.14)	-6.67%
3,122	*	107.14	100.00	(7.14)	-6.67%
3,500		107.14	100.00	(7.14)	-6.67%
4,000		107.14	100.00	(7.14)	-6.67%
5,000		107.14	100.00	(7.14)	-6.67%
6,000		107.14	100.00	(7.14)	-6.67%
7,000		107.14	100.00	(7.14)	-6.67%
8,000		107.14	100.00	(7.14)	-6.67%
9,000		107.14	100.00	(7.14)	-6.67%
10,000		107.14	100.00	(7.14)	-6.67%
11,000		107.14	100.00	(7.14)	-6.67%
12,000		107.14	100.00	(7.14)	-6.67%
13,000		107.14	100.00	(7.14)	-6.67%
14,000		107.14	100.00	(7.14)	-6.67%
15,000		107.14	100.00	(7.14)	-6.67%
16,000		107.14	100.00	(7.14)	-6.67%
17,000		107.14	100.00	(7.14)	-6.67%
18,000		107.14	100.00	(7.14)	-6.67%
19,000		107.14	100.00	(7.14)	-6.67%
20,000		107.14	100.00	(7.14)	-6.67%
21,000		107.14	100.00	(7.14)	-6.67%
22,000		107.14	100.00	(7.14)	-6.67%
23,000		107.14	100.00	(7.14)	-6.67%
24,000		107.14	100.00	(7.14)	-6.67%
25,000		107.14	100.00	(7.14)	-6.67%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 9 ROYERSFORD TOWNSHIP RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$48.52	$20.00	($28.52)	-58.78%
100		48.52	21.42	(27.10)	-55.86%
500		48.52	27.08	(21.44)	-44.20%
1,000		48.52	34.15	(14.37)	-29.61%
2,000		48.52	48.30	(0.22)	-0.45%
3,000		48.52	62.45	13.93	28.71%
3,122	*	49.68	64.18	14.50	29.19%
3,500		53.27	69.53	16.26	30.52%
4,000		58.02	76.60	18.58	32.02%
5,000		67.52	90.75	23.23	34.40%
6,000		77.02	104.90	27.88	36.19%
7,000		86.52	119.05	32.53	37.59%
8,000		96.03	133.20	37.17	38.71%
9,000		105.53	147.35	41.82	39.63%
10,000		115.03	161.50	46.47	40.40%
11,000		124.53	175.65	51.12	41.05%
12,000		134.03	189.80	55.77	41.61%
13,000		143.53	203.95	60.42	42.09%
14,000		153.04	218.10	65.06	42.52%
15,000		162.54	232.25	69.71	42.89%
16,000		172.04	246.40	74.36	43.22%
17,000		181.54	260.55	79.01	43.52%
18,000		191.04	274.70	83.66	43.79%
19,000		200.54	288.85	88.31	44.03%
20,000		210.04	303.00	92.96	44.26%
21,000		219.55	317.15	97.60	44.46%
22,000		229.05	331.30	102.25	44.64%
23,000		238.55	345.45	106.90	44.81%
24,000		248.05	359.60	111.55	44.97%
25,000		257.55	373.75	116.20	45.12%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE XX FARMINGTON TOWNSHIP RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$53.50	$20.00	($33.50)	-62.62%
100		53.50	21.35	(32.15)	-60.09%
500		53.50	26.75	(26.75)	-50.00%
1,000		53.50	33.50	(20.00)	-37.38%
2,000		53.50	47.00	(6.50)	-12.15%
3,000		53.50	60.50	7.00	13.08%
3,122	*	53.50	62.15	8.65	16.16%
3,500		53.50	67.25	13.75	25.70%
4,000		53.50	74.00	20.50	38.32%
5,000		53.50	87.50	34.00	63.55%
6,000		53.50	101.00	47.50	88.79%
7,000		53.50	114.50	61.00	114.02%
8,000		107.00	128.00	21.00	19.63%
9,000		107.00	141.50	34.50	32.24%
10,000		107.00	155.00	48.00	44.86%
11,000		107.00	168.50	61.50	57.48%
12,000		160.50	182.00	21.50	13.40%
13,000		160.50	195.50	35.00	21.81%
14,000		160.50	209.00	48.50	30.22%
15,000		160.50	222.50	62.00	38.63%
16,000		214.00	236.00	22.00	10.28%
17,000		214.00	249.50	35.50	16.59%
18,000		214.00	263.00	49.00	22.90%
19,000		214.00	276.50	62.50	29.21%
20,000		267.50	290.00	22.50	8.41%
21,000		267.50	303.50	36.00	13.46%
22,000		267.50	317.00	49.50	18.50%
23,000		267.50	330.50	63.00	23.55%
24,000		321.00	344.00	23.00	7.17%
25,000		321.00	357.50	36.50	11.37%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE XX SADSBURY TOWNSHIP RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$128.33	$128.33	$0.00	0.00%
100		128.33	128.33	0.00	0.00%
500		128.33	128.33	0.00	0.00%
1,000		128.33	128.33	0.00	0.00%
2,000		128.33	128.33	0.00	0.00%
3,000		128.33	128.33	0.00	0.00%
3,122	*	128.33	128.33	0.00	0.00%
3,500		128.33	128.33	0.00	0.00%
4,000		128.33	128.33	0.00	0.00%
5,000		128.33	128.33	0.00	0.00%
6,000		128.33	128.33	0.00	0.00%
7,000		128.33	128.33	0.00	0.00%
8,000		128.33	128.33	0.00	0.00%
9,000		128.33	128.33	0.00	0.00%
10,000		128.33	128.33	0.00	0.00%
11,000		128.33	128.33	0.00	0.00%
12,000		128.33	128.33	0.00	0.00%
13,000		128.33	128.33	0.00	0.00%
14,000		128.33	128.33	0.00	0.00%
15,000		128.33	128.33	0.00	0.00%
16,000		128.33	128.33	0.00	0.00%
17,000		128.33	128.33	0.00	0.00%
18,000		128.33	128.33	0.00	0.00%
19,000		128.33	128.33	0.00	0.00%
20,000		128.33	128.33	0.00	0.00%
21,000		128.33	128.33	0.00	0.00%
22,000		128.33	128.33	0.00	0.00%
23,000		128.33	128.33	0.00	0.00%
24,000		128.33	128.33	0.00	0.00%
25,000		128.33	128.33	0.00	0.00%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 1 COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$35.38	$50.00	$14.62	41.33%
100		37.50	52.00	14.50	38.65%
500		46.01	60.00	13.99	30.42%
1,000		56.64	70.00	13.36	23.60%
2,000		77.89	90.00	12.11	15.54%
3,000		99.15	110.00	10.85	10.94%
3,500		109.78	120.00	10.22	9.31%
4,000		120.41	130.00	9.59	7.97%
5,000		141.66	150.00	8.34	5.88%
6,000		162.92	170.00	7.08	4.35%
7,000		184.18	190.00	5.82	3.16%
8,000		205.43	210.00	4.57	2.22%
9,000		226.69	230.00	3.31	1.46%
10,000		247.95	250.00	2.05	0.83%
16,000		375.49	370.00	(5.49)	-1.46%
20,000		460.52	450.00	(10.52)	-2.28%
21,000		481.78	470.00	(11.78)	-2.44%
22,000		503.03	490.00	(13.03)	-2.59%
22,094	*	505.03	491.88	(13.15)	-2.60%
23,000		524.29	510.00	(14.29)	-2.73%
24,000		545.55	530.00	(15.55)	-2.85%
25,000		566.81	550.00	(16.81)	-2.97%
26,000		588.06	570.00	(18.06)	-3.07%
27,000		609.32	590.00	(19.32)	-3.17%
28,000		630.58	610.00	(20.58)	-3.26%
29,000		651.83	630.00	(21.83)	-3.35%
30,000		673.09	650.00	(23.09)	-3.43%
35,000		779.38	750.00	(29.38)	-3.77%
45,000		991.95	950.00	(41.95)	-4.23%
55,000		1,204.52	1,150.00	(54.52)	-4.53%
65,000		1,417.09	1,350.00	(67.09)	-4.73%
75,000		1,629.66	1,550.00	(79.66)	-4.89%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 2 NEW CUMBERLAND COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$35.38	$50.00	$14.62	41.33%
100		37.30	52.00	14.70	39.42%
500		44.98	60.00	15.02	33.39%
1,000		54.58	70.00	15.42	28.24%
2,000		73.79	90.00	16.21	21.97%
3,000		92.99	110.00	17.01	18.29%
3,500		102.60	120.00	17.40	16.96%
4,000		112.20	130.00	17.80	15.87%
5,000		131.40	150.00	18.60	14.15%
6,000		150.61	170.00	19.39	12.87%
7,000		169.81	190.00	20.19	11.89%
8,000		189.02	210.00	20.98	11.10%
9,000		208.22	230.00	21.78	10.46%
10,000		227.43	250.00	22.57	9.92%
16,000		342.66	370.00	27.34	7.98%
20,000		419.48	450.00	30.52	7.28%
21,000		438.69	470.00	31.31	7.14%
22,000		457.89	490.00	32.11	7.01%
22,094	*	459.70	491.88	32.18	7.00%
23,000		477.10	510.00	32.90	6.90%
24,000		496.30	530.00	33.70	6.79%
25,000		515.51	550.00	34.49	6.69%
26,000		534.71	570.00	35.29	6.60%
27,000		553.92	590.00	36.08	6.51%
28,000		573.12	610.00	36.88	6.43%
29,000		592.33	630.00	37.67	6.36%
30,000		611.53	650.00	38.47	6.29%
35,000		707.56	750.00	42.44	6.00%
45,000		899.61	950.00	50.39	5.60%
55,000		1,091.66	1,150.00	58.34	5.34%
65,000		1,283.72	1,350.00	66.28	5.16%
75,000		1,475.77	1,550.00	74.23	5.03%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 5 VALLEY WW RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$35.38	$50.00	$14.62	41.33%
100		37.50	52.00	14.50	38.65%
500		46.01	60.00	13.99	30.42%
1,000		56.64	70.00	13.36	23.60%
2,000		77.89	90.00	12.11	15.54%
3,000		99.15	110.00	10.85	10.94%
3,500		109.78	120.00	10.22	9.31%
4,000		120.41	130.00	9.59	7.97%
5,000		141.66	150.00	8.34	5.88%
6,000		162.92	170.00	7.08	4.35%
7,000		184.18	190.00	5.82	3.16%
8,000		205.43	210.00	4.57	2.22%
9,000		226.69	230.00	3.31	1.46%
10,000		247.95	250.00	2.05	0.83%
16,000		375.49	370.00	(5.49)	-1.46%
20,000		460.52	450.00	(10.52)	-2.28%
21,000		481.78	470.00	(11.78)	-2.44%
22,000		503.03	490.00	(13.03)	-2.59%
22,094	*	505.03	491.88	(13.15)	-2.60%
23,000		524.29	510.00	(14.29)	-2.73%
24,000		545.55	530.00	(15.55)	-2.85%
25,000		566.81	550.00	(16.81)	-2.97%
26,000		588.06	570.00	(18.06)	-3.07%
27,000		609.32	590.00	(19.32)	-3.17%
28,000		630.58	610.00	(20.58)	-3.26%
29,000		651.83	630.00	(21.83)	-3.35%
30,000		673.09	650.00	(23.09)	-3.43%
35,000		779.38	750.00	(29.38)	-3.77%
45,000		991.95	950.00	(41.95)	-4.23%
55,000		1,204.52	1,150.00	(54.52)	-4.53%
65,000		1,417.09	1,350.00	(67.09)	-4.73%
75,000		1,629.66	1,550.00	(79.66)	-4.89%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 7 YORK TOWNSHIP COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$30.32	$50.00	$19.68	64.89%
100		30.32	50.40	20.08	66.20%
500		30.32	52.00	21.68	71.48%
1,000		30.32	54.00	23.68	78.08%
2,000		30.32	58.00	27.68	91.27%
3,000		46.88	78.00	31.12	66.38%
3,500		55.16	88.00	32.84	59.54%
4,000		63.44	98.00	34.56	54.48%
5,000		79.99	118.00	38.01	47.51%
6,000		96.55	138.00	41.45	42.93%
7,000		113.11	158.00	44.89	39.69%
8,000		129.67	178.00	48.33	37.28%
9,000		146.22	198.00	51.78	35.41%
10,000		162.78	218.00	55.22	33.92%
16,000		262.12	338.00	75.88	28.95%
20,000		328.35	418.00	89.65	27.30%
21,000		344.91	438.00	93.09	26.99%
22,000		361.46	458.00	96.54	26.71%
22,094	*	363.02	459.88	96.86	26.68%
23,000		378.02	478.00	99.98	26.45%
24,000		394.58	498.00	103.42	26.21%
25,000		411.13	518.00	106.87	25.99%
26,000		427.69	538.00	110.31	25.79%
27,000		444.25	558.00	113.75	25.61%
28,000		460.80	578.00	117.20	25.43%
29,000		477.36	598.00	120.64	25.27%
30,000		493.92	618.00	124.08	25.12%
35,000		576.70	718.00	141.30	24.50%
45,000		742.27	918.00	175.73	23.67%
55,000		907.84	1,118.00	210.16	23.15%
65,000		1,073.41	1,318.00	244.59	22.79%
75,000		1,238.98	1,518.00	279.02	22.52%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 8 FOSTER TOWNSHIP COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$107.14	$100.00	($7.14)	-6.67%
100		107.14	100.00	(7.14)	-6.67%
500		107.14	100.00	(7.14)	-6.67%
1,000		107.14	100.00	(7.14)	-6.67%
2,000		107.14	100.00	(7.14)	-6.67%
3,000		107.14	100.00	(7.14)	-6.67%
3,500		107.14	100.00	(7.14)	-6.67%
4,000		107.14	100.00	(7.14)	-6.67%
5,000		107.14	100.00	(7.14)	-6.67%
6,000		107.14	100.00	(7.14)	-6.67%
7,000		107.14	100.00	(7.14)	-6.67%
8,000		107.14	100.00	(7.14)	-6.67%
9,000		107.14	100.00	(7.14)	-6.67%
10,000		107.14	100.00	(7.14)	-6.67%
16,000		107.14	100.00	(7.14)	-6.67%
20,000		107.14	100.00	(7.14)	-6.67%
21,000		107.14	100.00	(7.14)	-6.67%
22,000		107.14	100.00	(7.14)	-6.67%
22,094	*	107.14	100.00	(7.14)	-6.67%
23,000		107.14	100.00	(7.14)	-6.67%
24,000		107.14	100.00	(7.14)	-6.67%
25,000		107.14	100.00	(7.14)	-6.67%
26,000		107.14	100.00	(7.14)	-6.67%
27,000		107.14	100.00	(7.14)	-6.67%
28,000		107.14	100.00	(7.14)	-6.67%
29,000		107.14	100.00	(7.14)	-6.67%
30,000		107.14	100.00	(7.14)	-6.67%
35,000		107.14	100.00	(7.14)	-6.67%
45,000		107.14	100.00	(7.14)	-6.67%
55,000		107.14	100.00	(7.14)	-6.67%
65,000		107.14	100.00	(7.14)	-6.67%
75,000		107.14	100.00	(7.14)	-6.67%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 9 ROYERSFORD TOWNSHIP COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$48.52	$50.00	$1.48	3.05%
100		48.52	50.75	2.23	4.60%
500		48.52	53.75	5.23	10.78%
1,000		48.52	57.50	8.98	18.51%
2,000		48.52	65.00	16.48	33.97%
3,000		48.52	72.50	23.98	49.43%
3,500		53.27	76.25	22.98	43.14%
4,000		58.02	80.00	21.98	37.88%
5,000		67.52	87.50	19.98	29.59%
6,000		77.02	95.00	17.98	23.34%
7,000		86.52	102.50	15.98	18.46%
8,000		96.03	110.00	13.97	14.55%
9,000		105.53	117.50	11.97	11.35%
10,000		115.03	125.00	9.97	8.67%
16,000		172.04	170.00	(2.04)	-1.18%
20,000		210.04	200.00	(10.04)	-4.78%
21,000		219.55	207.50	(12.05)	-5.49%
22,000		229.05	215.00	(14.05)	-6.13%
22,094	*	229.94	215.71	(14.24)	-6.19%
23,000		238.55	222.50	(16.05)	-6.73%
24,000		248.05	230.00	(18.05)	-7.28%
25,000		257.55	237.50	(20.05)	-7.79%
26,000		267.05	245.00	(22.05)	-8.26%
27,000		276.55	252.50	(24.05)	-8.70%
28,000		286.06	260.00	(26.06)	-9.11%
29,000		295.56	267.50	(28.06)	-9.49%
30,000		305.06	275.00	(30.06)	-9.85%
35,000		352.57	312.50	(40.07)	-11.36%
45,000		447.58	387.50	(60.08)	-13.42%
55,000		542.60	462.50	(80.10)	-14.76%
65,000		637.61	537.50	(100.11)	-15.70%
75,000		732.63	612.50	(120.13)	-16.40%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE XX FARMINGTON TOWNSHIP COMMERCIAL - MONTHLY
PER EDU

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$53.50	$50.00	($3.50)	-6.54%
100		53.50	50.70	(2.80)	-5.23%
500		53.50	53.50	0.00	0.00%
1,000		53.50	57.00	3.50	6.54%
2,000		53.50	64.00	10.50	19.63%
3,000		53.50	71.00	17.50	32.71%
3,500		53.50	74.50	21.00	39.25%
4,000		53.50	78.00	24.50	45.79%
5,000		53.50	85.00	31.50	58.88%
6,000		53.50	92.00	38.50	71.96%
7,000		53.50	99.00	45.50	85.05%
7,098	*	53.50	99.69	46.19	86.33%
9,000		107.00	113.00	6.00	5.61%
10,000		107.00	120.00	13.00	12.15%
16,000		214.00	162.00	(52.00)	-24.30%
20,000		267.50	190.00	(77.50)	-28.97%
21,000		267.50	197.00	(70.50)	-26.36%
22,000		267.50	204.00	(63.50)	-23.74%
22,094		267.50	204.66	(62.84)	-23.49%
23,000		267.50	211.00	(56.50)	-21.12%
24,000		321.00	218.00	(103.00)	-32.09%
25,000		321.00	225.00	(96.00)	-29.91%
26,000		321.00	232.00	(89.00)	-27.73%
27,000		321.00	239.00	(82.00)	-25.55%
28,000		374.50	246.00	(128.50)	-34.31%
29,000		374.50	253.00	(121.50)	-32.44%
30,000		374.50	260.00	(114.50)	-30.57%
35,000		428.00	295.00	(133.00)	-31.07%
45,000		588.50	365.00	(223.50)	-37.98%
55,000		695.50	435.00	(260.50)	-37.46%
65,000		856.00	505.00	(351.00)	-41.00%
75,000		963.00	575.00	(388.00)	-40.29%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE XX SADSBURY TOWNSHIP COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$128.33	$128.33	$0.00	0.00%
100		128.33	128.33	0.00	0.00%
500		128.33	128.33	0.00	0.00%
1,000		128.33	128.33	0.00	0.00%
2,000		128.33	128.33	0.00	0.00%
3,000		128.33	128.33	0.00	0.00%
3,500		128.33	128.33	0.00	0.00%
4,000		128.33	128.33	0.00	0.00%
5,000		128.33	128.33	0.00	0.00%
6,000		128.33	128.33	0.00	0.00%
7,000		128.33	128.33	0.00	0.00%
8,000		128.33	128.33	0.00	0.00%
9,000		128.33	128.33	0.00	0.00%
10,000		128.33	128.33	0.00	0.00%
16,000		128.33	128.33	0.00	0.00%
20,000		128.33	128.33	0.00	0.00%
21,000		128.33	128.33	0.00	0.00%
22,000		128.33	128.33	0.00	0.00%
22,094	*	128.33	128.33	0.00	0.00%
23,000		128.33	128.33	0.00	0.00%
24,000		128.33	128.33	0.00	0.00%
25,000		128.33	128.33	0.00	0.00%
26,000		128.33	128.33	0.00	0.00%
27,000		128.33	128.33	0.00	0.00%
28,000		128.33	128.33	0.00	0.00%
29,000		128.33	128.33	0.00	0.00%
30,000		128.33	128.33	0.00	0.00%
35,000		128.33	128.33	0.00	0.00%
45,000		128.33	128.33	0.00	0.00%
55,000		128.33	128.33	0.00	0.00%
65,000		128.33	128.33	0.00	0.00%
75,000		128.33	128.33	0.00	0.00%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 1 INDUSTRIAL - MONTHLY
2 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$35.38	$50.00	$14.62	41.33%
1,000		56.64	70.00	13.36	23.60%
2,000		77.89	90.00	12.11	15.54%
3,000		99.15	110.00	10.85	10.94%
4,000		120.41	130.00	9.59	7.97%
5,000		141.66	150.00	8.34	5.88%
10,000		247.95	250.00	2.05	0.83%
16,000		375.49	370.00	(5.49)	-1.46%
20,000		460.52	450.00	(10.52)	-2.28%
30,000		673.09	650.00	(23.09)	-3.43%
40,000		885.66	850.00	(35.66)	-4.03%
50,000		1,098.23	1,050.00	(48.23)	-4.39%
60,000		1,310.81	1,250.00	(60.81)	-4.64%
70,000		1,523.38	1,450.00	(73.38)	-4.82%
80,000		1,735.95	1,650.00	(85.95)	-4.95%
90,000		1,948.52	1,850.00	(98.52)	-5.06%
100,000		2,161.09	2,050.00	(111.09)	-5.14%
200,000		4,286.80	4,050.00	(236.80)	-5.52%
300,000		6,412.52	6,050.00	(362.52)	-5.65%
400,000		8,538.23	8,050.00	(488.23)	-5.72%
500,000		10,663.94	10,050.00	(613.94)	-5.76%
600,000		12,789.65	12,050.00	(739.65)	-5.78%
685,947	*	14,616.64	13,768.94	(847.70)	-5.80%
700,000		14,915.36	14,050.00	(865.36)	-5.80%
800,000		17,041.08	16,050.00	(991.08)	-5.82%
900,000		19,166.79	18,050.00	(1,116.79)	-5.83%
1,000,000		21,292.50	20,050.00	(1,242.50)	-5.84%
1,100,000		23,418.21	22,050.00	(1,368.21)	-5.84%
1,200,000		25,543.93	24,050.00	(1,493.93)	-5.85%
1,300,000		27,669.64	26,050.00	(1,619.64)	-5.85%
1,400,000		29,795.35	28,050.00	(1,745.35)	-5.86%
1,500,000		31,921.06	30,050.00	(1,871.06)	-5.86%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 7 YORK TOWNSHIP INDUSTRIAL - MONTHLY
2 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$0.00	$0.00	$0.00	0.00%
1,000		16.56	20.00	3.44	20.80%
2,000		33.11	40.00	6.89	20.80%
3,000		49.67	60.00	10.33	20.80%
4,000		66.23	80.00	13.77	20.80%
5,000		82.78	100.00	17.22	20.80%
10,000		165.57	200.00	34.43	20.80%
16,000		264.91	320.00	55.09	20.80%
20,000		331.14	400.00	68.86	20.80%
30,000		496.71	600.00	103.29	20.80%
40,000		662.28	800.00	137.72	20.80%
50,000		827.85	1,000.00	172.15	20.80%
60,000		993.41	1,200.00	206.59	20.80%
70,000		1,158.98	1,400.00	241.02	20.80%
80,000		1,324.55	1,600.00	275.45	20.80%
90,000		1,490.12	1,800.00	309.88	20.80%
100,000		1,655.69	2,000.00	344.31	20.80%
200,000		3,311.38	4,000.00	688.62	20.80%
300,000		4,967.07	6,000.00	1,032.93	20.80%
400,000		6,622.76	8,000.00	1,377.24	20.80%
500,000		8,278.45	10,000.00	1,721.55	20.80%
600,000		9,934.14	12,000.00	2,065.86	20.80%
685,947	*	11,357.16	13,718.94	2,361.78	20.80%
700,000		11,589.83	14,000.00	2,410.17	20.80%
800,000		13,245.52	16,000.00	2,754.48	20.80%
900,000		14,901.21	18,000.00	3,098.79	20.80%
1,000,000		16,556.90	20,000.00	3,443.10	20.80%
1,100,000		18,212.59	22,000.00	3,787.41	20.80%
1,200,000		19,868.28	24,000.00	4,131.72	20.80%
1,300,000		21,523.98	26,000.00	4,476.02	20.80%
1,400,000		23,179.67	28,000.00	4,820.33	20.80%
1,500,000		24,835.36	30,000.00	5,164.64	20.80%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 8 FOSTER TOWNSHIP INDUSTRIAL - MONTHLY
PER EDU

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$107.14	$100.00	($7.14)	-6.67%
1,000		107.14	100.00	(7.14)	-6.67%
2,000		107.14	100.00	(7.14)	-6.67%
3,000		107.14	100.00	(7.14)	-6.67%
4,000		107.14	100.00	(7.14)	-6.67%
5,000		107.14	100.00	(7.14)	-6.67%
10,000		107.14	100.00	(7.14)	-6.67%
16,000		107.14	100.00	(7.14)	-6.67%
20,000		107.14	100.00	(7.14)	-6.67%
30,000		107.14	100.00	(7.14)	-6.67%
40,000		107.14	100.00	(7.14)	-6.67%
50,000		107.14	100.00	(7.14)	-6.67%
60,000		107.14	100.00	(7.14)	-6.67%
70,000		107.14	100.00	(7.14)	-6.67%
80,000		107.14	100.00	(7.14)	-6.67%
90,000		107.14	100.00	(7.14)	-6.67%
100,000		107.14	100.00	(7.14)	-6.67%
200,000		107.14	100.00	(7.14)	-6.67%
300,000		107.14	100.00	(7.14)	-6.67%
400,000		107.14	100.00	(7.14)	-6.67%
500,000		107.14	100.00	(7.14)	-6.67%
600,000		107.14	100.00	(7.14)	-6.67%
685,947	*	107.14	100.00	(7.14)	-6.67%
700,000		107.14	100.00	(7.14)	-6.67%
800,000		107.14	100.00	(7.14)	-6.67%
900,000		107.14	100.00	(7.14)	-6.67%
1,000,000		107.14	100.00	(7.14)	-6.67%
1,100,000		107.14	100.00	(7.14)	-6.67%
1,200,000		107.14	100.00	(7.14)	-6.67%
1,300,000		107.14	100.00	(7.14)	-6.67%
1,400,000		107.14	100.00	(7.14)	-6.67%
1,500,000		107.14	100.00	(7.14)	-6.67%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 9 ROYERSFORD TOWNSHIP INDUSTRIAL - MONTHLY
2 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$48.52	$50.00	$1.48	3.05%
1,000		48.52	57.50	8.98	18.51%
2,000		48.52	65.00	16.48	33.97%
3,000		48.52	72.50	23.98	49.43%
4,000		58.02	80.00	21.98	37.88%
5,000		67.52	87.50	19.98	29.59%
10,000		115.03	125.00	9.97	8.67%
16,000		172.04	170.00	(2.04)	-1.18%
20,000		210.04	200.00	(10.04)	-4.78%
30,000		305.06	275.00	(30.06)	-9.85%
40,000		400.07	350.00	(50.07)	-12.52%
50,000		495.09	425.00	(70.09)	-14.16%
60,000		590.11	500.00	(90.11)	-15.27%
70,000		685.12	575.00	(110.12)	-16.07%
80,000		780.14	650.00	(130.14)	-16.68%
90,000		875.15	725.00	(150.15)	-17.16%
100,000		970.17	800.00	(170.17)	-17.54%
200,000		1,920.32	1,550.00	(370.32)	-19.28%
300,000		2,870.47	2,300.00	(570.47)	-19.87%
400,000		3,820.62	3,050.00	(770.62)	-20.17%
500,000		4,770.77	3,800.00	(970.77)	-20.35%
600,000		5,720.93	4,550.00	(1,170.93)	-20.47%
685,947	*	6,537.55	5,194.60	(1,342.95)	-20.54%
700,000		6,671.08	5,300.00	(1,371.08)	-20.55%
800,000		7,621.23	6,050.00	(1,571.23)	-20.62%
900,000		8,571.38	6,800.00	(1,771.38)	-20.67%
1,000,000		9,521.53	7,550.00	(1,971.53)	-20.71%
1,100,000		10,471.69	8,300.00	(2,171.69)	-20.74%
1,200,000		11,421.84	9,050.00	(2,371.84)	-20.77%
1,300,000		12,371.99	9,800.00	(2,571.99)	-20.79%
1,400,000		13,322.14	10,550.00	(2,772.14)	-20.81%
1,500,000		14,272.29	11,300.00	(2,972.29)	-20.83%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE XX FARMINGTON TOWNSHIP COMMERCIAL - MONTHLY
PER EDU

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$53.50	$50.00	($3.50)	-6.54%
1,000		53.50	57.00	3.50	6.54%
2,000		53.50	64.00	10.50	19.63%
3,000		53.50	71.00	17.50	32.71%
4,000		53.50	78.00	24.50	45.79%
5,000		53.50	85.00	31.50	58.88%
9,965	*	53.50	119.76	66.26	123.84%
16,000		53.50	162.00	108.50	202.80%
20,000		53.50	190.00	136.50	255.14%
30,000		53.50	260.00	206.50	385.98%
40,000		53.50	330.00	276.50	516.82%
50,000		53.50	400.00	346.50	647.66%
60,000		53.50	470.00	416.50	778.50%
70,000		53.50	540.00	486.50	909.35%
80,000		53.50	610.00	556.50	1040.19%
90,000		53.50	680.00	626.50	1171.03%
100,000		53.50	750.00	696.50	1301.87%
200,000		53.50	1,450.00	1,396.50	2610.28%
300,000		53.50	2,150.00	2,096.50	3918.69%
400,000		53.50	2,850.00	2,796.50	5227.10%
500,000		53.50	3,550.00	3,496.50	6535.51%
600,000		53.50	4,250.00	4,196.50	7843.93%
685,947		53.50	4,851.63	4,798.13	8968.47%
700,000		53.50	4,950.00	4,896.50	9152.34%
800,000		53.50	5,650.00	5,596.50	10460.75%
900,000		53.50	6,350.00	6,296.50	11769.16%
1,000,000		53.50	7,050.00	6,996.50	13077.57%
1,100,000		53.50	7,750.00	7,696.50	14385.98%
1,200,000		53.50	8,450.00	8,396.50	15694.39%
1,300,000		53.50	9,150.00	9,096.50	17002.80%
1,400,000		53.50	9,850.00	9,796.50	18311.21%
1,500,000		53.50	10,550.00	10,496.50	19619.63%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
SUMMARY OF APPLICATION OF PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

Rate Zone	Residential	Commercial	Industrial	Municipal	Bulk	Total Revenues
Present Rate Application						
Zone 3 - Scranton WW	$33,227,937	$15,900,531	$2,240,339	$488,104	$1,207,931	$53,064,842
Zone 4 - Kane WW	2,108,564	507,998	20,255	115,789	0	2,752,606
Zone 6 - McKeesport WW	10,838,789	3,788,874	8,194	387,658	7,121,888	22,145,403
	$46,175,290	$20,197,403	$2,268,788	$991,551	$8,329,819	$77,962,851
IPP Surcharge						226,040
Other Revenues						447,331
Total WW CSS	$46,175,290	$20,197,403	$2,268,788	$991,551	$8,329,819	$78,636,222
Proposed Rate Application						
Zone 3 - Scranton WW	$33,040,534	$15,901,039	$2,240,403	$488,119	$1,207,944	$52,878,039
Zone 4 - Kane WW	2,096,710	508,322	20,108	116,622	0	2,741,762
Zone 6 - McKeesport WW	11,210,239	3,501,107	7,343	351,645	7,045,793	22,116,127
Total WW CSS	$46,347,482	$19,910,468	$2,267,854	$956,386	$8,253,737	$77,735,927
IPP Surcharge						226,040
Other Revenues						447,326
Total WW CSS	$46,347,482	$19,910,468	$2,267,854	$956,386	$8,253,737	$78,409,294
Change in Revenues	$172,192	($286,935)	($934)	($35,165)	($76,082)	($226,928)
% Change in Revenues	0.37%	-1.42%	-0.04%	-3.55%	-0.91%	-0.29%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Residential Class	6/30/2023 Water Usage (in 100 Gallons)	6/30/2023 Annualized Revenues	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 3 - Scranton WW	11,845,091	$33,781,109	11,616,430	$33,251,074	11,449,159	$355,026	$33,227,937	$33,040,534	-0.56%
Zone 4 - Kane WW	620,849	2,149,350	606,682	2,117,632	593,551	22,528	2,108,564	2,096,710	-0.56%
Zone 6 - McKeesport WW	3,429,733	11,173,055	3,351,122	10,942,545	3,277,885	115,809	10,838,789	11,210,239	3.43%
Total Residential	15,895,672	$47,103,514	15,574,234	$46,311,251	15,320,595	$493,363	$46,175,290	$46,347,482	0.37%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 3 - Scranton WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge Per EDU	350,342	$19.50	$6,831,666	351,314	$19.50	$6,850,620	351,701	$19.50	$74,068	$6,932,234	$19.71	$6,932,024	0.00%
Consumption Charges:													
Usage (in 100 Gallons)	11,809,521	$2.3510	27,764,184	11,845,091	$2.3510	27,847,808	11,616,430	$2.3510	294,950	27,605,176	$2.3764	27,605,284	0.00%
Flat Rate (Unmetered)	132	$95.00	12,540	132	$95.00	12,540	132	$95.00	135	12,675	$96.03	12,676	0.01%
Low Income:													
Low Income Discount Tier 1			(307,149)			(307,149)			(3,317)	(310,466)		(302,374)	-2.61%
Low Income Discount Tier 2			(263,304)			(263,304)			(2,844)	(266,148)		(259,211)	-2.61%
Low Income Discount Tier 3			(359,406)			(359,406)			(3,882)	(363,288)		(353,820)	-2.61%
Low Income Discount Tier 4												(211,798)	0.00%
Adjustment (1):													
Service Charge Per EDU	972	$19.50	18,954	387	$19.50	7,547	774	$19.50	163	15,256	$19.71	15,256	0.00%
Usage (in 100 Gallons)	35,570	$2.3510	83,624	14,162	$2.3510	33,295	28,324	$2.3510	719	67,308	$2.3764	67,309	0.00%
Adjustment (2):													
Usage (in 100 Gallons)				(242,823)	$2.3510	(570,877)	(195,595)	$2.3510	(4,966)	(464,810)	$2.3764	(464,812)	0.00%
Total Zone 3 Residential			**$33,781,109**			**$33,251,074**			**$355,026**	**$33,227,937**		**$33,040,534**	-0.56%

Note (1): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (2): Adjustment from usage normalization

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 4 - Kane WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge (5/8")	21,714	$40.00	$868,564	21,714	$40.00	$868,564	21,663	$40.00	$9,358	$875,882	$20.00	$433,262	-50.53%
Service Charge (Other than 5/8")	12	$100.00	1,200	12	$100.00	1,200	12	$100.00	13	1,213	$20.00	240	-80.21%
Usage (in 100 Gallons)													
First 10,000 Gallons	609,041	$2.1000	1,278,987	609,041	$2.1000	1,278,987	595,117	$2.1000	13,497	1,263,242			
All Over 10,000 Gallons	11,807	$1.8000	21,253	11,807	$1.8000	21,253	11,565	$1.8000	225	21,043			
Flat Rate (Unmetered)	334	$110.00	36,712	334	$110.00	36,712	334	$110.00	396	37,108	$110.00	36,712	-1.07%
Low Income:													
Low Income Discount Tier 1			(18,242)			(18,242)			(197)	(18,439)		(17,966)	-2.57%
Low Income Discount Tier 2			(13,201)			(13,201)			(143)	(13,344)		(13,002)	-2.57%
Low Income Discount Tier 3			(25,923)			(25,923)			(280)	(26,203)		(25,530)	-2.57%
Low Income Discount Tier 4												(15,106)	
Adjustment (1):													
Service Charge	0	$40.00	0	(51)	$40.00	(2,040)	(102)	$40.00	(44)	(4,124)	$20.00	(2,040)	-50.53%
Usage (in 100 Gallons)	0	$2.1000	0	(1,440)	$2.1000	(3,023)	(2,879)	$2.1000	(65)	(6,111)			
Adjustment (2):													
First 10,000 Gallons				(12,485)	$2.1000	(26,219)	(10,057)	$2.1000	(228)	(21,348)			
All Over 10,000 Gallons				(242)	$1.8000	(436)	(195)	$1.8000	(4)	(355)			
Total Usage	620,849			606,682			593,551						
Annualized Winter Usage(3)													
First 10,000 Gallons	609,041			596,556			585,060						
All Over 10,000 Gallons	16,783			7,566			6,293						
	625,825			604,123			591,353						
Winter Average Usage							591,353				$2.8750	1,700,140	35.31%
Total Zone 4 Residential			**$2,149,350**			**$2,117,632**			**$22,528**	**$2,108,564**		**$2,096,710**	-0.56%

Note(1): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (2): Adjustment from usage normalization
Note (3): Annualized Winter Usage is from average winter usage multiplied by 12

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 6 - McKeesport WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	115,814	$14.30	$1,656,146	115,382	$14.30	$1,649,968	115,067	$14.30	$17,771	$1,663,235	$20.00	$2,301,348	38.37%
Consumption Charges:													
Usage (in 100 Gallons)	3,042,640	$2.8750	8,747,591	3,031,255	$2.8750	8,714,859	2,952,645	$2.8750	91,680	8,580,534			
Port Vue:													
Service Charge	182	$14.30	2,597	182	$14.30	2,597	182	$14.30	28	2,625	$20.00	3,633	38.40%
Consumption Charges:													
Usage (in 100 Gallons)	398,478	$2.8750	1,145,623	398,478	$2.8750	1,145,623	398,478	$2.8750	12,373	1,157,996			
Adjustment (1):													
Service Charge	(432)	$14.30	(6,178)	(315)	$14.30	(4,505)	(630)	$14.30	(97)	(9,106)	$20.00	(12,600)	38.37%
Usage (in 100 Gallons)	(11,385)	$2.8750	(32,732)	(8,302)	$2.8750	(23,867)	(16,603)	$2.8750	(516)	(48,250)			
Low Income:													
Low Income Discount Tier 1			(100,035)			(100,035)			(1,080)	(101,115)		(102,516)	1.39%
Low Income Discount Tier 2			(99,605)			(99,605)			(1,076)	(100,681)		(102,074)	1.38%
Low Income Discount Tier 3			(140,352)			(140,352)			(1,516)	(141,868)		(143,832)	1.38%
Low Income Discount Tier 4												(81,102)	
Adjustment (2):													
Usage (in 100 Gallons)				(70,309)	$2.8750	(202,138)	(56,634)	$2.8750	(1,758)	(164,581)			
Total Usage	3,429,733			3,351,122			3,277,885						
Annualized Winter Usage(3)	3,444,808			3,323,695			3,251,263				$2.8750	9,347,381	-1.87%
Total Zone 6 Residential			**$11,173,055**			**$10,942,545**			**$115,809**	**$10,838,789**		**$11,210,239**	3.43%

Note(1): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (2): Adjustment from usage normalization
Note (3): Annualized Winter Usage is from average winter usage multiplied by 12

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

Commercial Class	6/30/2023 Water Usage (in 100 Gallons)	6/30/2023 Annualized Revenues	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 3 - Scranton WW	7,827,713	$15,802,012	7,755,892	$15,685,749	7,772,888	$169,891	$15,900,531	$15,901,039	0.00%
Zone 4 - Kane WW	221,699	513,762	218,206	507,169	215,770	5,427	507,998	508,322	0.00%
Zone 6 - McKeesport WW	1,646,131	3,887,670	1,613,898	3,817,016	1,583,213	40,483	3,788,874	3,501,107	0.00%
Total Commercial	9,695,542	$20,203,444	9,587,996	$20,009,934	9,571,871	$215,801	$20,197,403	$19,910,468	0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

Zone 3 - Scranton WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Proforma Revenues	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge Per EDU	64,956	$35.00	$2,273,473	65,244	$35.00	$2,283,553	65,466	$35.00	$24,746	$2,316,069	$35.38	$2,316,200	0.01%
Consumption Charges													
Usage (in 100 Gallons)	7,760,894	$1.7270	13,403,064	7,827,713	$1.7270	13,518,460	7,755,892	$1.7270	144,660	13,539,086	$1.7457	13,539,461	0.00%
Adjustment (1):													
Service Charge Per EDU	288	$35.00	10,080	222	$35.00	7,770	444	$35.00	168	15,708	$35.38	15,709	0.01%
Usage (in 100 Gallons)	66,818	$1.7270	115,395	51,506	$1.7270	88,950	103,011	$1.7270	1,921	179,822	$1.7457	179,827	0.00%
Adjustment (2):													
Usage (in 100 Gallons)				(123,326)	$1.7270	(212,984)	(86,016)	$1.7270	(1,604)	(150,154)	$1.7457	(150,158)	0.00%
Total Zone 3 Commercial			**$15,802,012**			**$15,685,749**			**$169,891**	**$15,900,531**		**$15,901,039**	0.00%

Note(1): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (2): Adjustment from usage normalization

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

Zone 4 - Kane WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Proforma Revenues	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge (5/8")	1,702	$40.00	$68,076	1,690	$40.00	$67,596	1,690	$40.00	$730	$68,326	$50.00	$84,495	23.66%
Service Charge (Other than 5/8")	277	$100.00	27,729	277	$100.00	27,729	277	$100.00	299	28,028	$50.00	13,864	-50.54%
Usage (in 100 Gallons)													
First 10,000 Gal	65,958	$2.1000	138,512	64,599	$2.1000	135,657	63,581	$2.1000	1,442	134,961	$1.9000	120,803	-10.49%
All Over 10,000 Gal	157,100	$1.8000	282,780	157,100	$1.8000	282,780	154,625	$1.8000	3,006	281,331	$1.9000	293,788	4.43%
Adjustment (1):													
Service Charge	(12)	$40.00	(480)	0	$40.00	0	0	$40.00	0	0	$50.00	0	0.00%
Usage (in 100 Gallons)	(1,359)	$2.1000	(2,855)	0	$2.1000	0	0	$2.1000	0	0	$1.9000	0	0.00%
Adjustment (2):													
Usage (in 100 Gallons)													
First 10,000 Gal				(1,018)	$2.1000	(2,138)	(710)	$2.1000	(16)	(1,507)	$1.9000	(1,349)	-10.48%
All Over 10,000 Gal				(2,475)	$1.8000	(4,455)	(1,726)	$1.8000	(34)	(3,141)	$1.9000	(3,279)	4.39%
Total Zone 4 Commercial			**$513,762**			**$507,169**			**$5,427**	**$507,998**		**$508,322**	0.06%

Note(1): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (2): Adjustment from usage normalization

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

Zone 6 - McKeesport WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Proforma Revenues	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	9,866	$35.00	$345,294	9,818	$35.00	$343,614	9,779	$35.00	$3,696	$345,945	$50.00	$488,926	41.33%
Consumption Charges:													
Usage (in 100 Gallons)	1,631,492	$2.1416	3,494,004	1,623,741	$2.1416	3,477,404	1,591,861	$2.1416	36,819	3,445,949	$1.9000	3,024,536	-12.23%
Port Vue:													
Service Charge	160	$14.30	2,281	160	$14.30	2,281	160	$14.30	25	2,306	$50.00	7,976	245.88%
Consumption Charges:													
Usage (in 100 Gallons)	22,390	$2.8750	64,371	22,390	$2.8750	64,371	22,037	$2.8750	684	64,040	$1.9000	41,870	-34.62%
Adjustment (1):													
Service Charge	(48)	$35.00	(1,680)	(39)	$35.00	(1,365)	(78)	$35.00	(29)	(2,759)	$50.00	(3,900)	41.36%
Usage (in 100 Gallons)	(7,751)	$2.1416	(16,600)	(6,298)	$2.1416	(13,488)	(12,596)	2.1416	(291)	(27,266)	$1.9000	(23,932)	-12.23%
Adjustment (2):													
Usage (in 100 Gallons)				(25,582)	$2.1416	(54,786)	(17,843)	$2.1416	(413)	(38,626)	$1.9000	(33,902)	
Usage (in 100 Gallons) Port Vue				(353)	$2.8750	(1,015)	(246)	$2.8750	(8)	(715)	$1.9000	(467)	
Total Zone 6 Commercial			**$3,887,670**			**$3,817,016**			**$40,483**	**$3,788,874**		**$3,501,107**	-7.60%

Note(1): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (2): Adjustment from usage normalization

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

Industrial Class	6/30/2023 Water Usage (in 100 Gallons)	6/30/2023 Annualized Revenues	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 3 - Scranton WW	1,255,447	$2,216,402	1,255,447	$2,216,402	1,255,447	$23,937	$2,240,339	$2,240,403	0.00%
Zone 4 - Kane WW	10,271	20,038	10,271	20,038	10,271	217	20,255	20,108	0.00%
Zone 6 - McKeesport WW	3,654	8,106	3,654	8,106	3,654	88	8,194	7,343	0.00%
Total Industrial	1,269,373	$2,244,546	1,269,373	$2,244,546	1,269,373	$24,242	$2,268,788	$2,267,854	0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

Zone 3 - Scranton WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Proforma Revenues	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
C. Service Charge Per EDU	1,378	$35.00	$48,245	1,378	$35.00	$48,245	1,378	$35.00	$521	$48,766	$35.38	$48,769	0.01%
C. Consumption Charges													
All Usage (100 Gallons)	1,255,447	$1.7270	2,168,157	1,255,447	$1.7270	2,168,157	1,255,447	$1.7270	23,416	2,191,573	$1.7457	2,191,634	0.00%
Total Zone 3 Industrial			**$2,216,402**			**$2,216,402**			**$23,937**	**$2,240,339**		**2,240,403**	0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

Zone 4 - Kane WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Proforma Revenues	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge (5/8")	0	$40.00	$0	0	$40.00	$0	0	$40.00	$0	$0	$50.00	$0	0.00%
Service Charge (Other than 5/8")	12	$100.00	1,185	12	$100.00	1,185	12	$100.00	13	1,198	$50.00	593	-50.50%
Usage per 100 Gallons:													
First 10,000 Gal	1,218	$2.1000	2,558	1,218	$2.1000	2,558	1,218	$2.1000	28	2,586	$1.9000	2,314	
All Over 10,000 Gal	9,053	$1.8000	16,295	9,053	$1.8000	16,295	9,053	$1.8000	176	16,471	$1.9000	17,201	
Total Zone 4 Industrial			**$20,038**			**$20,038**			**$217**	**$20,255**		**$20,108**	-0.73%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

Zone 6 - McKeesport WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Proforma Revenues	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	8	$35.00	$280	8	$35.00	$280	8	$35.00	$3	$283	$50.00	$400	41.34%
Consumption Charges:													
Usage per 100 Gallons:	3,654	$2.1416	7,826	3,654	$2.1416	7,826	3,654	$2.1416	$85	7,911	$1.9000	6,943	-12.24%
Port Vue:													
Service Charge	0	$14.30	0	0	$14.30	0	0	$14.30	$0	0	$50.00	0	0.00%
Consumption Charges:													
Usage per 100 Gallons:	0	$2.8750	0	0	$2.8750	0	0	$2.8750	$0	0	$1.9000	0	0.00%
Total Zone 6 Industrial			**$8,106**			**$8,106**			**$88**	**$8,194**		**$7,343**	-10.39%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Municipal Class	6/30/2023 Water Usage (in 100 Gallons)	6/30/2023 Annualized Revenues	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 3 - Scranton WW	275,610	$500,765	266,222	$484,552	265,259	$5,215	$488,104	$488,119	0.00%
Zone 4 - Kane WW	60,938	118,743	58,862	114,940	58,649	1,238	115,789	116,622	0.00%
Zone 6 - McKeesport WW	175,334	397,664	169,362	384,833	168,749	4,142	387,658	351,645	0.00%
Total Municipal	511,882	$1,017,172	494,446	$984,325	492,657	$10,595	$991,551	$956,386	0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 3 - Scranton WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
C. Service Charge Per EDU	708	$35.00	$24,787	708	$35.00	$24,787	708	$35.00	$268	$25,055	$35.38	$25,056	0.00%
C. Consumption Charges													
All Usage (100 Gallons)	275,610	$1.7270	475,978	275,610	$1.7270	475,978	266,222	$1.7270	4,965	464,730	$1.7457	464,744	0.00%
Adjustment (1):													
All Usage (100 Gallons)				(9,388)	$1.7270	(16,213)	(963)	$1.7270	(18)	(1,681)	$1.7457	(1,681)	0.00%
Total Zone 3 Municipal			**$500,765**			**$484,552**			**$5,215**	**$488,104**		**$488,119**	0.00%

Note (1): Adjustment from usage normalization

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 4 - Kane WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge (5/8")	54	$40.00	$2,167	54	$40.00	$2,167	54	$40.00	$23	$2,190	$50.00	$2,708	23.65%
Service Charge (Other than 5/8")	50	$100.00	4,962	50	$100.00	4,962	50	$100.00	54	5,016	$50.00	2,481	-50.54%
Consumption Charges													0.00%
First 10,000 Gallons	6,419	$2.1000	13,480	6,419	$2.1000	13,480	6,200	$2.1000	141	13,161	$1.9000	11,780	-10.49%
All Over 10,000 Gallons	54,519	$1.8000	98,134	54,519	$1.8000	98,134	52,662	$1.8000	1,024	95,816	$1.9000	100,058	4.43%
Adjustment (1):													
First 10,000 Gallons				(219)	$2.1000	(460)	(22)	$2.1000	0	(46)	$1.9000	(42)	-8.70%
All Over 10,000 Gallons				(1,857)	$1.8000	(3,343)	(191)	$1.8000	(4)	(348)	$1.9000	(363)	4.31%
Total Zone 4 Municipal			**$118,743**			**$114,940**			**$1,238**	**$115,789**		**$116,622**	0.72%

Note (1): Adjustment from usage normalization

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 6 - McKeesport WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge	584	$35.00	$20,437	584	$35.00	$20,437	584	$35.00	$221	$20,658	$50.00	$29,195	41.33%
Consumption Charges:													
Usage (in 100 Gallons)	173,684	$2.1416	371,961	173,684	$2.1416	371,961	167,768	$2.1416	3,880	363,171	$1.9000	318,759	-12.23%
Port Vue:													
Service Charge	37	$14.30	522	37	$14.30	522	37	$14.30	6	528	$50.00	1,826	245.83%
Consumption Charges:													
Usage (in 100 Gallons)	1,650	$2.8750	4,744	1,650	$2.8750	4,744	1,594	$2.8750	49	4,632	$1.9000	3,029	-34.61%
Adjustment (1):													
Usage (in 100 Gallons)				(5,916)	$2.1416	(12,670)	(607)	$2.1416	(14)	(1,314)	$1.9000	(1,153)	-12.25%
Usage (in 100 Gallons) Port Vue				(56)	$2.8750	(161)	(6)	$2.8750	0	(17)	$1.9000	(11)	-35.29%
Total Zone 6 Municipal			**$397,664**			**$384,833**			**$4,142**	**$387,658**		**$351,645**	-9.29%

Note (1): Adjustment from usage normalization

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BULK WASTEWATER CLASS BILL ANALYSIS

Bulk WW Class	6/30/2023 Water Usage (in 100 Gallons)	6/30/2023 Annualized Revenues	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Zone 3 - Scranton WW	521,607	$1,195,024	521,607	$1,195,024	521,607	$12,907	$1,207,931	$1,207,944	0.00%
Zone 4 - Kane WW	0	0	0	0	0	0	0	0	0.00%
Zone 6 - McKeesport WW	4,202,906	7,045,793	4,202,906	7,045,793	4,202,906	76,095	7,121,888	7,045,793	0.00%
Total Bulk WW	4,724,512	$8,240,817	4,724,512	$8,240,817	4,724,512	$89,002	$8,329,819	$8,253,737	0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BULK WASTEWATER CLASS BILL ANALYSIS

Zone 3 - Scranton WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Bulk (Residential)													
Service Charge	5,354	$19.50	$104,403	5,354	$19.50	$104,403	5,354	$19.50	$1,128	$105,531	$19.71	$105,527	0.00%
Consumption Charges													
All Usage (100 Gallons)	241,973	$2.3510	568,879	241,973	$2.3510	568,879	241,973	$2.3510	6,144	575,023	$2.3764	575,025	0.00%
Bulk (Non-Residential)													
Service Charge	1,109	$35.00	38,815	1,109	$35.00	38,815	1,109	$35.00	419	39,234	$35.38	39,236	0.01%
Consumption Charges													
All Usage (100 Gallons)	279,633	$1.7270	482,927	279,633	$1.7270	482,927	279,633	$1.7270	5,216	488,143	$1.7457	488,156	0.00%
Total Zone 3 Bulk WW			**$1,195,024**			**$1,195,024**			**$12,907**	**$1,207,931**		**$1,207,944**	0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BULK WASTEWATER CLASS BILL ANALYSIS

Zone 4 - Kane WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Service Charge (5/8")	0	$40.00	$0	0	$40.00	$0	0	$40.00	$0	$0	$50.00	$0	0.00%
Service Charge (Other than 5/8")	0	$100.00	0	0	$100.00	0	0	$100.00	0	0	$50.00	0	0.00%
Usage per 100 Gallons:													
First 10,000 Gallons	0	$2.1000	0	0	$2.1000	0	0	$2.1000	0	0	$1.9000	0	0.00%
All Over 10,000 Gallons	0	$1.8000	0	0	$1.8000	0	0	$1.8000	0	0	$1.9000	0	0.00%
Total Zone 4 Bulk WW			**$0**			**$0**			**$0**	**$0**		**$0**	0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BULK WASTEWATER CLASS BILL ANALYSIS

Zone 6 - McKeesport WW	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
Flat Rate Monthly	228	$86.00	$19,608	228	$86.00	$19,608	228	$86.00	$212	$19,820	$86.00	$19,608	-1.07%
Flat Rate Quarterly	61	$258.00	15,738	61	$258.00	15,738	61	$258.00	170	15,908	$258.00	15,738	-1.07%
Consumption Charges:													
Usage per 100 Gallons:	4,202,906	$1.6680	7,010,447	4,202,906	$1.6680	7,010,447	4,202,906	$1.6680	75,713	7,086,160	$1.6680	7,010,447	-1.07%
Total Zone 6 Bulk WW			**$7,045,793**			**$7,045,793**			**$76,095**	**$7,121,888**		**$7,045,793**	-1.07%

PENNSYLVANIA-AMERICAN WATER COMPANY
MISCELLANEOUS AND OTHER OPERATING REVENUES
WASTEWATER CSS OPERATIONS
TWELVE MONTHS ENDING JUNE 2023, 2024, AND 2025

		Per Books 06/30/2023	Adjustments	Adjusted 06/30/2023	Adjustments	06/30/2024	Adjustments	06/30/2025	Proposed 06/30/2025
523	Other WW Revenues								
	IPP Revenue	($624)	$226,664	$226,040	$0	$226,040	$0	$226,040	$226,040
536	Guaranteed Revenues	0		0		0		0	0
532	Late Payment Fees	443,629	(47,454)	396,175	(5,121)	391,055	865	391,919	391,915
536	Miscellaneous Services	55,412		55,412		55,412		55,412	55,412
472	Rents From Property	0		0		0		0	0
473	Intercompany Rent	0		0		0		0	0
		$499,041	($47,454)	$451,587	($5,121)	$446,466	$865	$447,331	$447,326
	Total Other Revenues	$498,417	$179,210	$677,627	($5,121)	$672,506	$865	$673,371	$673,366

Pennsylvania American Water Company
Wastewater CSS Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

RESIDENTIAL CLASS	12 Mo-Ended 06/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	Annualized Revenue Current Rate	Annualized Customer Growth (Loss)	Annualized 06/30/2023 Revenue	Annualized Customer Growth (Loss)	Normalized Usage	Annualized 06/30/2024 Revenue	Annualized Customer Growth (Loss)	Normalized Usage	Annualized 06/30/2025 Revenue	1.08% Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
	(a)	(b)	(b)	(a) x (b)												
Rate Zone 3 Scranton WW																
Old Rate																
Service Charge	350,342	$19.50		$6,831,666												
Usage (100 Gallons)	7,472,307	$1.0600		7,920,646												
Flat (Unmetered)	81	$55.09		4,458												
Current Rate																
Service Charge	0		$19.50	$0	350,342	$6,831,666	972	$6,850,620	387		$6,858,167	774		$6,873,260	$74,231	$6,947,491
Usage (100 Gallons)	4,337,214		$2.3510	10,196,790	11,809,521	27,764,184	35,570	27,847,808	14,162	(242,823)	27,310,226	28,324	(195,595)	26,916,972	290,703	27,207,675
Flat (Unmetered)	51		$95.00	4,852	132	12,540		12,540			12,540			12,540	135	12,675
Low Income (30% Discount - 2022)	($262,375)			(262,375)												
Low Income (80% Discount) Tier 1	($153,707)		($15.60)	(153,707)	3,888	(60,653)		(60,653)			(60,653)			(60,653)	(655)	(61,308)
# of Customers	324		($1.8808)		131,059	(246,496)		(246,496)			(246,496)			(246,496)	(2,662)	(249,158)
Low Income (55% Discount) Tier 2	($124,600)		($10.73)	(124,600)	4,848	(51,995)		(51,995)			(51,995)			(51,995)	(562)	(52,557)
# of Customers	404		($1.2931)		163,419	(211,309)		(211,309)			(211,309)			(211,309)	(2,282)	(213,591)
Low Income (30% Discount) Tier 3	($143,415)		($5.85)	(143,415)	12,132	(70,972)		(70,972)			(70,972)			(70,972)	(766)	(71,738)
# of Customers	1,011		($0.7053)		408,952	(288,434)		(288,434)			(288,434)			(288,434)	(3,115)	(291,549)
Rate Zone 4 Kane WW	**Billing Units**				**Base Year Billing Determinants**	**Annualized Revenue Current Rate**	**Annualized Customer Growth (Loss)**	**Annualized 06/30/2023 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2024 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Old Rate																
Service Charge																
5/8" Meter	13,590	$66.84		$908,338												
> 5/8" Meter	7	$133.69		1,001												
Unmetered	210	$82.49		17,283												
Current Rate																
Service Charge																
5/8" Meter	8,124		$40.00	$324,975	21,714	$868,564	0	$868,564	(51)		$866,524	(102)		$862,444	$9,314	$871,758
> 5/8" Meter	5		$100.00	451	12	1,200		1,200			1,200			1,200	13	1,213
Unmetered	124		$110.00	13,664	334	36,712		36,712			36,712			36,712	396	37,108
Old Rate																
Usage (100 Gallons)																
First 2000 Gal	221,900	$0.0000		$0												
Next 8000 Gal	159,033	$1.0732		170,674												
Next 20000 Gal	5,807	$1.1919		6,921												
All over 30000 Gal	1,447	$1.3008		1,882												
	388,186															
Current Rate																
Usage (100 Gallons)																
First 10,000 Gal	228,109		$2.1000	$479,029	609,041	$1,278,987	0	$1,278,987	(1,440)	(12,485)	$1,249,745	(2,879)	(10,057)	$1,222,579	$13,204	$1,235,783
All Over 10,000 Gal	4,553		$1.8000	8,196	11,807	21,253		21,253		(242)	20,817		(195)	20,466	221	20,687
	232,662															
Low Income (30% Discount - 2022)	($20,080)			($20,080)												
Low Income (80% Discount) Tier 1	($7,778)		($32.00)	($7,778)	228	($7,296)		($7,296)			($7,296)			($7,296)	($79)	($7,375)
# of Customers	19		($1.6800)		6,515	(10,946)		(10,946)			(10,946)			(10,946)	(118)	(11,064)
Low Income (55% Discount) Tier 2	($5,982)		($22.00)	($5,982)	240	($5,280)		($5,280)			($5,280)			($5,280)	($57)	($5,337)
# of Customers	20		($1.1550)		6,858	(7,921)		(7,921)			(7,921)			(7,921)	(86)	(8,007)
Low Income (30% Discount) Tier 3	($10,820)		($12.00)	($10,820)	864	($10,368)		($10,368)			($10,368)			($10,368)	($112)	($10,480)
# of Customers	72		($0.6300)		24,690	(15,555)		(15,555)			(15,555)			(15,555)	(168)	(15,723)

Pennsylvania American Water Company
Wastewater CSS Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

Rate Zone 6 McKeesport	Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	Annualized Revenue Current Rate	Annualized Customer Growth (Loss)	Annualized 06/30/2023 Revenue	Annualized Customer Growth (Loss)	Normalized Usage	Annualized 06/30/2024 Revenue	Annualized Customer Growth (Loss)	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
Old Rate		(b)	(b)	(a) x (b)												
Service Charge	75,920	$11.00		$835,121												
Usage (100 Gallons)	1,918,996	$1.9760		3,791,935												
Current Rate																
Service Charge	39,894		$14.30	$570,489	115,814	$1,656,146	(432)	$1,649,968	(315)		$1,645,464	(630)		$1,636,455	$17,674	$1,654,129
Usage (100 Gallons)	1,123,645		$2.8750	3,230,478	3,042,640	8,747,591	(11,385)	8,714,859	(8,302)	(70,309)	8,488,854	(16,603)	(56,634)	8,278,297	89,406	8,367,703
Old Rate																
Port Vue Qaurterly:																
Service Charge	45	$58.50		$2,656	182	$2,597		$2,597			$2,597			$2,597	$28	$2,625
Usage (100 Gallons)	3,420	$1.5000		5,130	398,478	1,145,623		1,145,623			1,145,623			1,145,623	12,373	1,157,996
Usage (100 Gallons)	395,058	$1.3297		525,308												
Low Income (30% Discount - 2022)	($143,082)															
# of Customers				($143,082)												
Low Income (80% Discount) Tier 1	($42,340)		($11.44)		1,392	($15,924)		($15,924)			($15,924)			($15,924)	($172)	($16,096)
# of Customers	116		($2.3000)	($42,340)	36,570	(84,111)		(84,111)			(84,111)			(84,111)	(908)	(85,019)
Low Income (55% Discount) Tier 2	($40,763)		($7.87)		2,016	($15,856)		($15,856)			($15,856)			($15,856)	($171)	($16,027)
# of Customers	168		($1.5813)	($40,763)	52,964	(83,749)		(83,749)			(83,749)			(83,749)	(904)	(84,653)
Low Income (30% Discount) Tier 3	($62,661)		($4.29)		5,208	($22,342)		($22,342)			($22,342)			($22,342)	($241)	($22,583)
# of Customers	434		($0.8625)	($62,661)	136,823	(118,010)		(118,010)			(118,010)			(118,010)	(1,275)	(119,285)
AMP Program	($81,270)			($81,270)												
RESIDENTIAL REVENUE				**$34,753,070**	**Annualized Res Revenue**	**$47,039,846**		**$47,103,514**			**$46,311,252**			**$45,681,928**		**$46,175,293**
PA WW CSS Res Customer Count	**38,347**															
Water Sales/Flow	**15,871,488**															

Pennsylvania American Water Company
Wastewater CSS Bill Analysis Summary
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COMMERCIAL CLASS	12 Mo-Ended 06/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	Annualized Revenue Current Rate	Annualized Customer Growth (Loss)	Annualized 06/30/2023 Revenue	Annualized Customer Growth (Loss)	Normalized Usage	Annualized 06/30/2024 Revenue	Annualized Customer Growth (Loss)	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
	(a)	(b)	(b)	(a) x (b)												
Rate Zone 3 Scranton WW																
Commercial @ Old Rate																
Service Charge	40,150	$19.50		$782,923												
Usage (100 Gallons)	1,590,398	$1.0600		$1,685,821												
C. Commercial @ Old Rate																
All Over 5000 Gal	3,352,041	$1.0903		$3,654,730												
	4,942,439															
B & C. Commercial @ Current Rate																
Service Charge	24,806		$35.00	$868,225	64,956	$2,273,473	288	$2,283,553	222		$2,291,323	444		$2,306,863	$24,914	$2,331,777
All Usage (100 Gallons)	2,818,456		$1.7270	4,867,473	7,760,894	13,403,064	66,818	13,518,459	51,506	(123,326)	13,394,425	103,011	(86,016)	13,423,776	144,977	13,568,753
Rate Zone 4 Kane WW	**Billing Units**				**Base Year Billing Determinants**	**Annualized Revenue Current Rate**	**Annualized Customer Growth (Loss)**	**Annualized 06/30/2023 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2024 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Service Charge @ Old Rate																
5/8" Meter	1,057	$66.84		$70,641												
> 5/8" Meter	173	$133.69		23,145												
Usage (100 Gallons) @ Old Rate																
First 2000 Gal	15,727	$0.0000		$0												
Next 8000 Gal	25,510	$1.0732		27,377												
Next 20000 Gal	23,620	$1.1919		28,152												
All over 30000 Gal	80,383	$1.3008		104,562												
	145,240															
Service Charge @ Current Rate																
5/8" Meter	645		$40.00	$25,801	1,702	$68,076	(12)	$67,596	0		$67,596	0		$67,596	$730	$68,326
> 5/8" Meter	104		$100.00	10,416	277	27,729		27,729			27,729			27,729	299	28,028
Usage (100 Gallons) @ Current Rate																
First 10,000 Gal	24,721		$2.1000	$51,914	65,958	$138,512	(1,359)	$135,657	0	(1,018)	$133,519	0	(710)	$132,028	$1,426	$133,454
All Over 10,000 Gal	53,097		$1.8000	95,575	157,100	282,780		282,780		(2,475)	278,325		(1,726)	275,218	2,972	278,190
	77,818															
Rate Zone 6 McKeesport	**Billing Units**				**Base Year Billing Determinants**	**Annualized Revenue Current Rate**	**Annualized Customer Growth (Loss)**	**Annualized 06/30/2023 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2024 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Old Rate																
Service Charge	6,440	$27.50		$177,113												
Usage (100 Gallons)	(1,732)	$1.2916		(2,237)												
Usage (100 Gallons)	1,123,014	$1.4570		1,636,232												
Port Vue:																
Service Charge	121	$11.00		$1,328												
Usage (100 Gallons)	15,791	$1.3297		20,997												
Current Rate																
Service Charge	3,425		$35.00	$119,877	9,866	$345,294	(48)	$343,614	(39)		$342,249	(78)		$339,519	$3,667	$343,186
Usage (100 Gallons)	510,210		$2.1416	1,092,666	1,631,492	3,494,004	(7,751)	3,477,404	(6,298)	(25,582)	3,409,130	(12,596)	(17,843)	3,343,942	36,115	3,380,057
Port Vue:																
Service Charge	39		$14.30	$554	160	$2,281		$2,281			$2,281			$2,281	$25	$2,306
Usage (100 Gallons)	6,599		$2.8750	18,973	22,390	64,371		64,371		(353)	63,356		(246)	62,649	677	63,326
COMMERCIAL REVENUES				**$15,362,258**	**Annualized Com Revenue**	**$20,099,584**		**$20,203,444**			**$20,009,933**			**$19,981,601**		**$20,197,403**
Customer Count	**3,794**															
Water Sales/Flow	**9,637,835**															

Pennsylvania American Water Company
Wastewater CSS Bill Analysis Summary
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INDUSTRIAL CLASS	12 Mo-Ended 06/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	Annualized Revenue Current Rate	Annualized Customer Growth (Loss)	Annualized 06/30/2023 Revenue	Annualized Customer Growth (Loss)	Normalized Usage	Annualized 06/30/2024 Revenue	Annualized Customer Growth (Loss)	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
	(a)	(b)	(b)	(a) x (b)												
Rate Zone 3 Scranton WW																
Old Rate																
Service Charge	548	$19.50		$10,677												
Usage (100 Gallons)																
First 5000 Gal	26,850	$1.0600		$28,461												
All Over 5000 Gal	744,652	$1.0903		811,894												
	771,502															
Current Rate																
Service Charge	831		$35.00	$29,081	1,378	$48,245		$48,245			$48,245			$48,245	$521	$48,766
Usage (100 Gallons)	483,945		$1.7270	$835,773	1,255,447	2,168,157		2,168,157			2,168,157			2,168,157	23,416	2,191,573
IPP Surcharge	$140,478			$140,478												
Rate Zone 4 Kane WW	**Billing Units**				**Base Year Billing Determinants**	**Annualized Revenue Current Rate**	**Annualized Customer Growth (Loss)**	**Annualized 06/30/2023 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2024 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Old Rate																
Service Charge																
5/8" Meter	0	$66.84		$0												
> 5/8" Meter	8	$133.69		1,050												
Usage (100 Gallons)																
First 2000 Gal	157	$0.0000		$0												
Next 8000 Gal	628	$1.0732		674												
Next 20000 Gal	1,570	$1.1919		1,871												
All over 30000 Gal	4,246	$1.3008		5,523												
	6,601															
Current Rate																
Service Charge																
5/8" Meter	0		$40.00	$0	0	$0		$0			$0			$0	$0	$0
> 5/8" Meter	4		100.00	400	12	1,185		1,185			1,185			1,185	13	1,198
Usage (100 Gallons)																
First 10,000 Gal	433		$2.1000	$909	1,218	$2,558		$2,558			$2,558			$2,558	$28	$2,586
All Over 10,000 Gal	3,237		$1.8000	5,827	9,053	16,295		16,295			16,295			16,295	176	16,471
	3,670															
Rate Zone 6 McKeesport	**Billing Units**				**Base Year Billing Determinants**	**Annualized Revenue Current Rate**	**Annualized Customer Growth (Loss)**	**Annualized 06/30/2023 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2024 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Old Rate																
Service Charge	6	$27.50		$165												
Usage (100 Gallons)	1,821	$1.4570		2,653												
Current Rate																
Service Charge	2		$35.00	$70	8	$280		$280			$280			$280	$3	$283
Usage (100 Gallons)	1,834		$2.1416	3,927	3,654	7,826		7,826			7,826			7,826	85	7,911
INDUSTRIAL REVENUES				**$1,879,433**	**Annualized Ind Revenue**	**$2,244,546**		**$2,244,546**			**$2,244,546**			**$2,244,546**		**$2,268,788**
Customer Count	**34**															
Water Sales/Flow	**1,269,373**															

Pennsylvania American Water Company
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MUNICIPAL CLASS	12 Mo-Ended 06/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	Annualized Revenue Current Rate	Annualized Customer Growth (Loss)	Annualized 06/30/2023 Revenue	Annualized Customer Growth (Loss)	Normalized Usage	Annualized 06/30/2024 Revenue	Annualized Customer Growth (Loss)	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
	(a)	(b)	(b)	(a) x (b)												
Rate Zone 3 Scranton WW																
Old Rate																
Service Charge	452	$19.50		$8,804												
Usage (100 Gallons)																
First 5000 Gal	26,152	$1.0600		$27,721												
All Over 5000 Gal	129,480	$1.0903		141,172												
	155,632															
Current Rate																
Service Charge	257		$35.00	$8,984	708	$24,787		$24,787			$24,787			$24,787	$268	$25,055
Usage (100 Gallons)	119,978		$1.7270	$207,202	275,610	475,978		475,978		(9,388)	459,765		(963)	458,102	4,948	463,050
Rate Zone 4 Kane WW	**Billing Units**				**Base Year Billing Determinants**	**Annualized Revenue Current Rate**	**Annualized Customer Growth (Loss)**	**Annualized 06/30/2023 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2024 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Old Rate																
Service Charge																
5/8" Meter	34	$66.84		$2,252												
> 5/8" Meter	32	$133.69		4,265												
Usage (100 Gallons)																
First 2000 Gal	1,086	$0.0000		$0												
Next 8000 Gal	3,002	$1.0732		3,222												
Next 20000 Gal	5,426	$1.1919		6,467												
All over 30000 Gal	33,632	$1.3008		43,749												
	43,147															
Current Rate																
Service Charge																
5/8" Meter	20		$40.00	$819	54	$2,167		$2,167			$2,167			$2,167	$23	$2,190
> 5/8" Meter	18		$100.00	1,771	50	4,962		4,962			4,962			4,962	54	5,016
Usage (100 Gallons)																
First 10,000 Gal	2,330		$2.1000	$4,893	6,419	$13,480		$13,480		(219)	$13,020		(22)	$12,974	$140	$13,114
All Over 10,000 Gal	15,461		$1.8000	27,830	54,519	98,134		98,134		(1,857)	94,791		(191)	94,447	1,020	95,467
	17,792															
Rate Zone 6 McKeesport	**Billing Units**				**Base Year Billing Determinants**	**Annualized Revenue Current Rate**	**Annualized Customer Growth (Loss)**	**Annualized 06/30/2023 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2024 Revenue**	**Annualized Customer Growth (Loss)**	**Normalized Usage**	**Annualized 06/30/2025 Revenue**	**Annualized DSIC Revenue**	**Annualized 06/30/2025 Revenue**
Old Rate																
Service Charge	380	$27.50		$10,452												
Usage (100 Gallons)	123,521	$1.4570		179,970												
Port Vue:																
Service Charge	28	$11.00		$312												
Usage (100 Gallons)	1,390	$1.3297		1,848												
Current Rate																
Service Charge	204		$35.00	$7,134	584	$20,437		$20,437			$20,437			$20,437	$221	$20,658
Usage (100 Gallons)	50,163		$2.1416	107,429	173,684	371,961		371,961		(5,916)	359,291		(607)	357,991	3,866	361,857
Port Vue:																
Service Charge	8		$14.30	$116	37	$522		$522			$522			$522	$6	$528
Usage (100 Gallons)	260		$2.8750	748	1,650	4,744		4,744		(56)	4,583		(6)	4,566	49	4,615
MUNICIPAL REVENUES				**$797,160**	**Annualized OPA Revenue**	**$1,017,172**		**$1,017,172**			**$984,325**			**$980,955**		**$991,550**
Customer Count	**118**															
Water Sales/Flow	**511,882**															

Pennsylvania American Water Company
Wastewater CSS Bill Analysis Summary
12 Months Ending June 2023, 2024, 2025

BULK WW CLASS	12 Mo-Ended 06/30/2023 Billing Units	Old Rates	Current Rates	Base Year Revenue	Base Year Billing Determinants	Annualized Revenue Current Rate	Annualized Customer Growth (Loss)	Annualized 06/30/2023 Revenue	Annualized Customer Growth (Loss)	Normalized Usage	Annualized 06/30/2024 Revenue	Annualized Customer Growth (Loss)	Normalized Usage	Annualized 06/30/2025 Revenue	Annualized DSIC Revenue	Annualized 06/30/2025 Revenue
	(a)	(b)	(b)	(a) x (b)												
Rate Zone 3 Scranton WW																
Old Rate																
Bulk Residential																
Service Charge	3,273	$19.50		$63,824												
Usage Charge	154,506	$1.0600		163,776												
Bulk Non-Residential																
Service Charge	706	$19.50		$13,767												
Usage Charge	21,295	$1.0600		22,573												
Usage Charge	187,986	$1.0903		204,961												
Current Rate																
Bulk Residential																
Service Charge	2,081		$19.50	$40,580	5,354	$104,403		$104,403			$104,403			$104,403	$1,128	$105,531
Usage Charge	87,467		$2.3510	205,636	241,973	568,879		568,879			568,879			568,879	6,144	575,023
Bulk Non-Residential																
Service Charge	403		$35.00	$14,105	1,109	$38,815		$38,815			$38,815			$38,815	$419	$39,234
Usage Charge	129,455		$1.7270	223,569	279,633	482,927		482,927			482,927			482,927	5,216	488,143
Credit (Usage Amount)	($73,853)			($73,853)												
Credit (Usage)	(59,103)															
Rate Zone 6 McKeesport	**Billing Units**															
Old Rate																
Flat Rate Monthly	90	$61.10		$5,499												
Flat Rate Quarterly	59	$183.40		10,729												
Usage (100 Gallons)	3,654,999	$1.0190		3,724,444												
Current Rate																
Flat Rate Monthly	138		$86.00	$11,868	228	$19,608		$19,608			$19,608			$19,608	$212	$19,820
Flat Rate Quarterly	3		$258.00	645	61	15,738		15,738			15,738			15,738	170	15,908
Usage (100 Gallons)	547,906		$1.6680	913,908	4,202,906	7,010,447		7,010,447			7,010,447			7,010,447	75,713	7,086,160
BULK WW REVENUES				**$5,546,031**	**Annualized Bulk Revenue**	**$8,240,817**		**$8,240,817**			**$8,240,817**			**$8,240,817**		**$8,329,819**
Customer Count	**9**															
Water Sales/Flow	**4,724,512**															

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
ZONE 3 SCRANTON RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$19.71	$19.71	($0.00)	0.00%
100		22.09	22.09	(0.00)	0.00%
500		31.59	31.59	(0.00)	0.00%
1,000		43.47	43.47	(0.00)	0.00%
2,000		67.24	67.24	(0.00)	0.00%
3,000		91.00	91.00	(0.00)	0.00%
3,201	*	95.78	95.78	(0.00)	0.00%
3,500		102.88	102.88	(0.00)	0.00%
4,000		114.77	114.77	(0.00)	0.00%
5,000		138.53	138.53	(0.00)	0.00%
6,000		162.29	162.29	(0.00)	0.00%
7,000		186.06	186.06	0.00	0.00%
8,000		209.82	209.82	0.00	0.00%
9,000		233.59	233.59	0.00	0.00%
10,000		257.35	257.35	0.00	0.00%
11,000		281.11	281.11	0.00	0.00%
12,000		304.88	304.88	0.00	0.00%
13,000		328.64	328.64	0.00	0.00%
14,000		352.41	352.41	0.00	0.00%
15,000		376.17	376.17	0.00	0.00%
16,000		399.93	399.93	0.00	0.00%
17,000		423.70	423.70	0.00	0.00%
18,000		447.46	447.46	0.00	0.00%
19,000		471.22	471.23	0.00	0.00%
20,000		494.99	494.99	0.00	0.00%
21,000		518.75	518.75	0.00	0.00%
22,000		542.52	542.52	0.00	0.00%
23,000		566.28	566.28	0.00	0.00%
24,000		590.04	590.05	0.00	0.00%
25,000		613.81	613.81	0.00	0.00%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 4 KANE RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$40.43	$20.00	($20.43)	-50.53%
100		42.55	22.88	(19.68)	-46.25%
500		51.05	34.38	(16.67)	-32.66%
1,000		61.66	48.75	(12.91)	-20.94%
2,000		82.89	77.50	(5.39)	-6.50%
3,000		104.11	106.25	2.14	2.05%
3,122	*	106.70	109.76	3.06	2.86%
3,500		114.73	120.63	5.90	5.14%
4,000		125.34	135.00	9.66	7.71%
5,000		146.57	163.75	17.18	11.72%
6,000		167.79	192.50	24.71	14.72%
7,000		189.02	221.25	32.23	17.05%
8,000		210.25	250.00	39.75	18.91%
9,000		231.47	278.75	47.28	20.42%
10,000		252.70	307.50	54.80	21.69%
11,000		270.89	336.25	65.36	24.13%
12,000		289.09	365.00	75.91	26.26%
13,000		307.28	393.75	86.47	28.14%
14,000		325.48	422.50	97.02	29.81%
15,000		343.67	451.25	107.58	31.30%
16,000		361.87	480.00	118.13	32.65%
17,000		380.06	508.75	128.69	33.86%
18,000		398.26	537.50	139.24	34.96%
19,000		416.45	566.25	149.80	35.97%
20,000		434.64	595.00	160.36	36.89%
21,000		452.84	623.75	170.91	37.74%
22,000		471.03	652.50	181.47	38.53%
23,000		489.23	681.25	192.02	39.25%
24,000		507.42	710.00	202.58	39.92%
25,000		525.62	738.75	213.13	40.55%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
ZONE 6 MCKEESPORT RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$14.45	$20.00	$5.55	38.37%
100		17.36	22.88	5.51	31.76%
500		28.98	34.38	5.39	18.60%
1,000		43.51	48.75	5.24	12.03%
2,000		72.58	77.50	4.92	6.79%
3,000		101.64	106.25	4.61	4.54%
3,122	*	105.18	109.76	4.58	4.35%
3,500		116.17	120.63	4.46	3.84%
4,000		130.70	135.00	4.30	3.29%
5,000		159.76	163.75	3.99	2.50%
6,000		188.82	192.50	3.68	1.95%
7,000		217.88	221.25	3.37	1.55%
8,000		246.94	250.00	3.06	1.24%
9,000		276.00	278.75	2.75	1.00%
10,000		305.06	307.50	2.44	0.80%
11,000		334.12	336.25	2.13	0.64%
12,000		363.18	365.00	1.82	0.50%
13,000		392.24	393.75	1.51	0.38%
14,000		421.30	422.50	1.20	0.28%
15,000		450.36	451.25	0.89	0.20%
16,000		479.42	480.00	0.58	0.12%
17,000		508.48	508.75	0.27	0.05%
18,000		537.54	537.50	(0.04)	-0.01%
19,000		566.60	566.25	(0.35)	-0.06%
20,000		595.66	595.00	(0.66)	-0.11%
21,000		624.72	623.75	(0.97)	-0.16%
22,000		653.79	652.50	(1.29)	-0.20%
23,000		682.85	681.25	(1.60)	-0.23%
24,000		711.91	710.00	(1.91)	-0.27%
25,000		740.97	738.75	(2.22)	-0.30%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
ZONE 3 SCRANTON COMMERCIAL (C) - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$35.38	$35.38	$0.00	0.01%
100		37.12	37.13	0.00	0.01%
500		44.11	44.11	0.00	0.01%
1,000		52.83	52.84	0.00	0.00%
2,000		70.29	70.29	0.00	0.00%
3,000		87.75	87.75	0.00	0.00%
3,500		96.48	96.48	0.00	0.00%
4,000		105.20	105.21	0.00	0.00%
5,000		122.66	122.67	0.00	0.00%
6,000		140.12	140.12	0.00	0.00%
7,000		157.57	157.58	0.01	0.00%
8,000		175.03	175.04	0.01	0.00%
9,000		192.49	192.49	0.01	0.00%
10,000		209.94	209.95	0.01	0.00%
16,000		314.68	314.69	0.01	0.00%
20,000		384.51	384.52	0.01	0.00%
21,000		401.96	401.98	0.01	0.00%
22,000		419.42	419.43	0.01	0.00%
22,094	*	421.06	421.07	0.01	0.00%
23,000		436.88	436.89	0.01	0.00%
23,692		448.96	448.97	0.01	0.00%
24,000		454.33	454.35	0.01	0.00%
25,000		471.79	471.81	0.01	0.00%
26,000		489.25	489.26	0.01	0.00%
27,000		506.70	506.72	0.02	0.00%
28,000		524.16	524.18	0.02	0.00%
29,000		541.62	541.63	0.02	0.00%
30,000		559.07	559.09	0.02	0.00%
40,000		733.64	733.66	0.02	0.00%
50,000		908.20	908.23	0.03	0.00%
60,000		1,082.77	1,082.80	0.03	0.00%
70,000		1,257.33	1,257.37	0.04	0.00%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 4 KANE COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$40.43	$50.00	$9.57	23.66%
100		42.55	51.90	9.35	21.96%
500		51.05	59.50	8.45	16.56%
1,000		61.66	69.00	7.34	11.91%
2,000		82.89	88.00	5.11	6.17%
3,000		104.11	107.00	2.89	2.77%
3,500		114.73	116.50	1.77	1.55%
4,000		125.34	126.00	0.66	0.53%
5,000		146.57	145.00	(1.57)	-1.07%
6,000		167.79	164.00	(3.79)	-2.26%
7,000		189.02	183.00	(6.02)	-3.18%
8,000		210.25	202.00	(8.25)	-3.92%
9,000		231.47	221.00	(10.47)	-4.52%
10,000		252.70	240.00	(12.70)	-5.03%
15,000		343.67	335.00	(8.67)	-2.52%
20,000		434.64	430.00	(4.64)	-1.07%
21,000		452.84	449.00	(3.84)	-0.85%
22,000		471.03	468.00	(3.03)	-0.64%
22,094	*	472.74	469.79	(2.96)	-0.63%
23,000		489.23	487.00	(2.23)	-0.46%
23,692		501.82	500.15	(1.67)	-0.33%
24,000		507.42	506.00	(1.42)	-0.28%
25,000		525.62	525.00	(0.62)	-0.12%
26,000		543.81	544.00	0.19	0.03%
27,000		562.00	563.00	1.00	0.18%
28,000		580.20	582.00	1.80	0.31%
29,000		598.39	601.00	2.61	0.44%
30,000		616.59	620.00	3.41	0.55%
40,000		798.53	810.00	11.47	1.44%
50,000		980.48	1,000.00	19.52	1.99%
60,000		1,162.42	1,190.00	27.58	2.37%
70,000		1,344.36	1,380.00	35.64	2.65%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
ZONE 6 MCKEESPORT COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$35.38	$50.00	$14.62	41.33%
100		37.54	51.90	14.36	38.24%
500		46.20	59.50	13.30	28.78%
1,000		57.03	69.00	11.97	21.00%
2,000		78.67	88.00	9.33	11.86%
3,000		100.32	107.00	6.68	6.66%
3,500		111.14	116.50	5.36	4.82%
4,000		121.97	126.00	4.03	3.31%
5,000		143.61	145.00	1.39	0.96%
6,000		165.26	164.00	(1.26)	-0.76%
7,000		186.91	183.00	(3.91)	-2.09%
8,000		208.56	202.00	(6.56)	-3.14%
9,000		230.20	221.00	(9.20)	-4.00%
10,000		251.85	240.00	(11.85)	-4.71%
16,000		381.73	354.00	(27.73)	-7.27%
20,000		468.32	430.00	(38.32)	-8.18%
21,000		489.97	449.00	(40.97)	-8.36%
22,000		511.62	468.00	(43.62)	-8.53%
22,094	*	513.65	469.79	(43.87)	-8.54%
23,000		533.27	487.00	(46.27)	-8.68%
23,692		548.25	500.15	(48.10)	-8.77%
24,000		554.91	506.00	(48.91)	-8.81%
25,000		576.56	525.00	(51.56)	-8.94%
26,000		598.21	544.00	(54.21)	-9.06%
27,000		619.85	563.00	(56.85)	-9.17%
28,000		641.50	582.00	(59.50)	-9.28%
29,000		663.15	601.00	(62.15)	-9.37%
30,000		684.80	620.00	(64.80)	-9.46%
40,000		901.27	810.00	(91.27)	-10.13%
50,000		1,117.74	1,000.00	(117.74)	-10.53%
60,000		1,334.22	1,190.00	(144.22)	-10.81%
70,000		1,550.69	1,380.00	(170.69)	-11.01%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
ZONE 6 PORT VUE COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$14.45	$50.00	$35.55	245.91%
100		17.36	51.90	34.54	198.95%
500		28.98	59.50	30.52	105.28%
1,000		43.51	69.00	25.49	58.57%
2,000		72.58	88.00	15.42	21.25%
3,000		101.64	107.00	5.36	5.28%
3,500		116.17	116.50	0.33	0.29%
4,000		130.70	126.00	(4.70)	-3.59%
5,000		159.76	145.00	(14.76)	-9.24%
6,000		188.82	164.00	(24.82)	-13.14%
7,000		217.88	183.00	(34.88)	-16.01%
8,000		246.94	202.00	(44.94)	-18.20%
9,000		276.00	221.00	(55.00)	-19.93%
10,000		305.06	240.00	(65.06)	-21.33%
16,000		479.42	354.00	(125.42)	-26.16%
20,000		595.66	430.00	(165.66)	-27.81%
21,000		624.72	449.00	(175.72)	-28.13%
22,000		653.79	468.00	(185.79)	-28.42%
22,094	*	656.52	469.79	(186.73)	-28.44%
23,000		682.85	487.00	(195.85)	-28.68%
23,692		702.96	500.15	(202.81)	-28.85%
24,000		711.91	506.00	(205.91)	-28.92%
25,000		740.97	525.00	(215.97)	-29.15%
26,000		770.03	544.00	(226.03)	-29.35%
27,000		799.09	563.00	(236.09)	-29.54%
28,000		828.15	582.00	(246.15)	-29.72%
29,000		857.21	601.00	(256.21)	-29.89%
30,000		886.27	620.00	(266.27)	-30.04%
40,000		1,176.87	810.00	(366.87)	-31.17%
50,000		1,467.48	1,000.00	(467.48)	-31.86%
60,000		1,758.08	1,190.00	(568.08)	-32.31%
70,000		2,048.69	1,380.00	(668.69)	-32.64%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
ZONE 6 MCKEESPORT INDUSTRIAL - MONTHLY
2 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$35.38	$50.00	$14.62	41.33%
1,000		57.03	69.00	11.97	21.00%
2,000		78.67	88.00	9.33	11.86%
3,000		100.32	107.00	6.68	6.66%
4,000		121.97	126.00	4.03	3.31%
5,000		143.61	145.00	1.39	0.96%
10,000		251.85	240.00	(11.85)	-4.71%
16,000		381.73	354.00	(27.73)	-7.27%
20,000		468.32	430.00	(38.32)	-8.18%
30,000		684.80	620.00	(64.80)	-9.46%
40,000		901.27	810.00	(91.27)	-10.13%
50,000		1,117.74	1,000.00	(117.74)	-10.53%
60,000		1,334.22	1,190.00	(144.22)	-10.81%
70,000		1,550.69	1,380.00	(170.69)	-11.01%
80,000		1,767.16	1,570.00	(197.16)	-11.16%
90,000		1,983.63	1,760.00	(223.63)	-11.27%
100,000		2,200.11	1,950.00	(250.11)	-11.37%
200,000		4,364.84	3,850.00	(514.84)	-11.80%
300,000		6,529.57	5,750.00	(779.57)	-11.94%
400,000		8,694.30	7,650.00	(1,044.30)	-12.01%
500,000		10,859.02	9,550.00	(1,309.02)	-12.05%
600,000		13,023.75	11,450.00	(1,573.75)	-12.08%
685,947	*	14,884.27	13,082.99	(1,801.28)	-12.10%
700,000		15,188.48	13,350.00	(1,838.48)	-12.10%
800,000		17,353.21	15,250.00	(2,103.21)	-12.12%
900,000		19,517.94	17,150.00	(2,367.94)	-12.13%
1,000,000		21,682.67	19,050.00	(2,632.67)	-12.14%
1,100,000		23,847.40	20,950.00	(2,897.40)	-12.15%
1,200,000		26,012.13	22,850.00	(3,162.13)	-12.16%
1,300,000		28,176.86	24,750.00	(3,426.86)	-12.16%
1,400,000		30,341.59	26,650.00	(3,691.59)	-12.17%
1,500,000		32,506.32	28,550.00	(3,956.32)	-12.17%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
ZONE 3 SCRANTON INDUSTRIAL (C) - MONTHLY
2 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$35.38	$35.38	$0.00	0.01%
1,000		52.83	52.84	0.00	0.00%
2,000		70.29	70.29	0.00	0.00%
3,000		87.75	87.75	0.00	0.00%
4,000		105.20	105.21	0.00	0.00%
5,000		122.66	122.67	0.00	0.00%
10,000		209.94	209.95	0.01	0.00%
16,000		314.68	314.69	0.01	0.00%
20,000		384.51	384.52	0.01	0.00%
30,000		559.07	559.09	0.02	0.00%
40,000		733.64	733.66	0.02	0.00%
50,000		908.20	908.23	0.03	0.00%
60,000		1,082.77	1,082.80	0.03	0.00%
70,000		1,257.33	1,257.37	0.04	0.00%
80,000		1,431.90	1,431.94	0.04	0.00%
90,000		1,606.46	1,606.51	0.05	0.00%
100,000		1,781.03	1,781.08	0.05	0.00%
200,000		3,526.68	3,526.78	0.10	0.00%
300,000		5,272.33	5,272.48	0.15	0.00%
400,000		7,017.98	7,018.18	0.20	0.00%
500,000		8,763.64	8,763.88	0.24	0.00%
600,000		10,509.29	10,509.58	0.29	0.00%
685,947	*	12,009.62	12,009.96	0.33	0.00%
700,000		12,254.94	12,255.28	0.34	0.00%
800,000		14,000.59	14,000.98	0.39	0.00%
900,000		15,746.24	15,746.68	0.44	0.00%
1,000,000		17,491.89	17,492.38	0.49	0.00%
1,100,000		19,237.55	19,238.08	0.53	0.00%
1,200,000		20,983.20	20,983.78	0.58	0.00%
1,300,000		22,728.85	22,729.48	0.63	0.00%
1,400,000		24,474.50	24,475.18	0.68	0.00%
1,500,000		26,220.15	26,220.88	0.73	0.00%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 4 KANE INDUSTRIAL - MONTHLY
2 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$101.08	$50.00	($51.08)	-50.53%
1,000		122.31	69.00	(53.31)	-43.58%
2,000		143.53	88.00	(55.53)	-38.69%
3,000		164.76	107.00	(57.76)	-35.06%
4,000		185.99	126.00	(59.99)	-32.25%
5,000		207.21	145.00	(62.21)	-30.02%
10,000		313.35	240.00	(73.35)	-23.41%
15,000		404.32	335.00	(69.32)	-17.14%
20,000		495.29	430.00	(65.29)	-13.18%
30,000		677.24	620.00	(57.24)	-8.45%
40,000		859.18	810.00	(49.18)	-5.72%
50,000		1,041.12	1,000.00	(41.12)	-3.95%
60,000		1,223.07	1,190.00	(33.07)	-2.70%
70,000		1,405.01	1,380.00	(25.01)	-1.78%
80,000		1,586.96	1,570.00	(16.96)	-1.07%
90,000		1,768.90	1,760.00	(8.90)	-0.50%
100,000		1,950.84	1,950.00	(0.84)	-0.04%
200,000		3,770.28	3,850.00	79.72	2.11%
300,000		5,589.72	5,750.00	160.28	2.87%
400,000		7,409.16	7,650.00	240.84	3.25%
500,000		9,228.60	9,550.00	321.40	3.48%
600,000		11,048.04	11,450.00	401.96	3.64%
685,947	*	12,611.80	13,082.99	471.19	3.74%
700,000		12,867.48	13,350.00	482.52	3.75%
800,000		14,686.92	15,250.00	563.08	3.83%
900,000		16,506.36	17,150.00	643.64	3.90%
1,000,000		18,325.80	19,050.00	724.20	3.95%
1,100,000		20,145.24	20,950.00	804.76	3.99%
1,200,000		21,964.68	22,850.00	885.32	4.03%
1,300,000		23,784.12	24,750.00	965.88	4.06%
1,400,000		25,603.56	26,650.00	1,046.44	4.09%
1,500,000		27,423.00	28,550.00	1,127.00	4.11%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WW OPERATIONS
SUMMARY OF APPLICATION OF PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

Rate Zone XX: BRENTWOOD WW	Residential	Commercial	Industrial	Municipal	Bulk WW	Total Sales	Late Payments (*)	Total Revenues
Present Rate Application	$1,434,460	$344,866	$0	$35,740		$1,815,067	$9,124	$1,824,191
Proposed Rate Application	1,713,458	428,917	0	40,249		2,182,624	10,972	2,193,596
Change in Revenues	278,998	84,051	0	4,508		367,557	1,848	369,405
% Change in Revenues	19.00%	24.00%	0.00%	13.00%		20.00%	20.00%	20.00%

(*) Utilized the same 0.5027% late payment rate as calculated for PA American Water Company.

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WW OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

All Class	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	6/30/2025 Annualized Revenue	Proposed Rate	Proforma Revenue @ Proposed Rate	% Percent Change
Residential												
Service Charge				44,340	$4.57	$202,634	44,340	$4.57	$202,634	$10.00	$443,400	118.82%
Usage Charge (100 Gal)				1,382,521	$0.8910	1,231,826	1,382,521	$0.8910	1,231,826			
Annualized Winter Average							1,311,259			$0.9810	1,286,345	0.00%
Low Income Discounts- Tier 1											(4,871)	
Low Income Discounts- Tier 2											(4,715)	
Low Income Discounts- Tier 3											(3,741)	
Low Income Discounts- Tier 4											(2,961)	
Commercial												
Service Charge				3,288	$4.57	15,026	3,288	$4.57	15,026	$20.00	65,760	337.64%
Usage Charge (100 Gal)				370,191	$0.8910	329,840	370,191	$0.8910	329,840	$0.9810	363,157	10.10%
Municipal												
Service Charge				60	$4.57	274	60	$4.57	274	$20.00	1,200	337.64%
Usage Charge (100 Gal)				39,805	$0.8910	35,466	39,805	$0.8910	35,466	$0.9810	39,049	10.10%
Other Revenue:												
Late Fees						9,124			9,124		10,972	20.25%
Brentwood WW			**$0**			**$1,824,191**			**$1,824,191**		**$2,193,596**	20.25%

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WW OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RESIDENTIAL - MONTHLY
ALL METER SIZES & INCLUDING ALCOSAN TREATMENT CHARGE

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$12.38	$17.81	$5.43	43.86%
100		14.39	19.91	5.52	38.37%
500		22.41	28.29	5.88	26.24%
1,000		32.44	38.77	6.33	19.51%
2,000		52.50	59.73	7.23	13.77%
3,000		72.56	80.69	8.13	11.20%
3,122	*	75.01	83.25	8.24	10.99%
3,500		82.59	91.17	8.58	10.39%
4,000		92.62	101.65	9.03	9.75%
4,500		102.65	112.13	9.48	9.24%
5,500		122.71	133.09	10.38	8.46%
6,500		142.77	154.05	11.28	7.90%
7,500		162.83	175.01	12.18	7.48%
8,500		182.89	195.97	13.08	7.15%
9,500		202.95	216.93	13.98	6.89%
10,000		212.98	227.41	14.43	6.78%
11,000		233.04	248.37	15.33	6.58%
12,000		253.10	269.33	16.23	6.41%
13,000		273.16	290.29	17.13	6.27%
14,000		293.22	311.25	18.03	6.15%
15,000		313.28	332.21	18.93	6.04%
16,000		333.34	353.17	19.83	5.95%
17,000		353.40	374.13	20.73	5.87%
18,000		373.46	395.09	21.63	5.79%
19,000		393.52	416.05	22.53	5.73%
20,000		413.58	437.01	23.43	5.67%
21,000		433.64	457.97	24.33	5.61%
22,000		453.70	478.93	25.23	5.56%
23,000		473.76	499.89	26.13	5.52%
24,000		493.82	520.85	27.03	5.47%
25,000		513.88	541.81	27.93	5.44%
30,000		614.18	646.61	32.43	5.28%

* Average residential monthly bill.

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WW OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
NON RESIDENTIAL - MONTHLY
ALL METER SIZES & INCLUDING ALCOSAN TREATMENT CHARGE

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$12.38	$27.81	$15.43	124.64%
100		14.39	29.91	15.52	107.88%
500		22.41	38.29	15.88	70.86%
1,000		32.44	48.77	16.33	50.34%
2,000		52.50	69.73	17.23	32.82%
3,000		72.56	90.69	18.13	24.99%
4,000		92.62	111.65	19.03	20.55%
5,000		112.68	132.61	19.93	17.69%
6,000		132.74	153.57	20.83	15.69%
7,000		152.80	174.53	21.73	14.22%
8,000		172.86	195.49	22.63	13.09%
9,000		192.92	216.45	23.53	12.20%
10,000		212.98	237.41	24.43	11.47%
11,000		233.04	258.37	25.33	10.87%
12,000		253.10	279.33	26.23	10.36%
13,000		273.16	300.29	27.13	9.93%
14,000		293.22	321.25	28.03	9.56%
15,000		313.28	342.21	28.93	9.23%
16,000		333.34	363.17	29.83	8.95%
17,000		353.40	384.13	30.73	8.70%
18,000		373.46	405.09	31.63	8.47%
19,000		393.52	426.05	32.53	8.27%
20,000		413.58	447.01	33.43	8.08%
21,000		433.64	467.97	34.33	7.92%
22,000		453.70	488.93	35.23	7.77%
22,094	*	455.59	490.90	35.31	7.75%
23,000		473.76	509.89	36.13	7.63%
24,000		493.82	530.85	37.03	7.50%
25,000		513.88	551.81	37.93	7.38%
30,000		614.18	656.61	42.43	6.91%
40,000		814.78	866.21	51.43	6.31%
50,000		1,015.38	1,075.81	60.43	5.95%

* Average commercial monthly bill.

PENNSYLVANIA-AMERICAN WATER COMPANY
BUTLER AREA SEWER AUTHORITY (BASA)
SUMMARY OF APPLICATION OF PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

Rate Zone XX: Butler Area Sewer Authority (BASA)	Residential	Commercial	Industrial	Municipal	Miscellaneous	Total Sales	Late Payments (*)	Total Revenues
Present Rate Application	$8,694,030	$2,289,268	$427,168	$369,219	$8,500	$11,788,185	$59,216	$11,847,401
Proposed Rate Application	12,170,706	3,256,317	445,807	618,778	8,500	16,500,108	82,903	16,583,011
Change in Revenues	3,476,676	967,049	18,639	249,559		4,711,923	23,687	4,735,610
% Change in Revenues	40.00%	42.00%	4.00%	68.00%		40.00%	40.00%	40.00%

(*) Utilized the same 0.5027% late payment rate as calculated for PA American Water Company.

PENNSYLVANIA-AMERICAN WATER COMPANY
BUTLER AREA SEWER AUTHORITY (BASA)
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

All Class	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Annualized Revenue	Proposed Rate	Proforma Revenue @ Proposed Rate	% Percent Change
Residential													
For the first 25 Units				189,036	$45.50	$8,601,138	189,036	$45.50	$92,892	$8,694,030			
For the next 25 Units					$44.60	0		$44.60		0			
Flat Rate (Unmetered)							144				$70.00	10,080	
Service Charge per EDU							171,072				$10.00	1,710,720	
Annualized Winter Average (1)							5,146,601				$2.06	10,591,704	
Low Income:													
Low Income Discount Tier 1												(38,039)	
Low Income Discount Tier 2												(45,422)	
Low Income Discount Tier 3												(35,105)	
Low Income Discount Tier 4												(23,231)	
Commercial													
For the first 25 Units				49,776	$45.50	2,264,808	49,776	$45.50	24,460	2,289,268			
Service Charge per EDU							12,132				$50.00	606,600	
Usage (2)							1,982,579				$1.34	2,649,717	
Industrial				9,288	$45.50	422,604	9,288	$45.50	4,564	427,168			
Service Charge per EDU							168				$50.00	8,400	
Usage (2)							327,278				$1.34	437,407	
Municipal				8,028	$45.50	365,274	8,028	$45.50	3,945	369,219			
Service Charge per EDU							504				$50.00	25,200	
Usage (2)							352,624				$1.34	471,282	
Special Rate VA Hospital				2,640	$0.00	0							
Service Charge (1)							12				$50.00	600	
Usage (2)							91,056	$0.00	0	0	$1.34	121,696	0.00%
Other WW Revenue													
IPP Surcharge						8,500				8,500		8,500	
Other Revenues													
Late Fees						58,584				59,216		82,903	40.00%
BASA WW Total Revenue			**$0**			**$11,720,908**				**$11,847,401**		**$16,583,011**	39.97%

Note (1) Annualized winter usage is based on average monthly winter usage multiplied by 12.
Note (2) Annual usage including seasonal usage.

PENNSYLVANIA-AMERICAN WATER COMPANY
BUTLER AREA SEWER AUTHORITY (BASA)

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RESIDENTIAL - MONTHLY
1 EDU PER 4000 GALLONS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$45.99	$10.00	($35.99)	-78.26%
100		45.99	12.06	(33.93)	-73.78%
500		45.99	20.29	(25.70)	-55.88%
1,000		45.99	30.58	(15.41)	-33.51%
2,000		45.99	51.16	5.17	11.24%
3,000		45.99	71.74	25.75	55.99%
3,122	*	45.99	74.25	28.26	61.44%
3,500		45.99	82.03	36.04	78.36%
4,000		45.99	92.32	46.33	100.73%
5,000		45.99	112.90	66.91	145.48%
6,000		45.99	133.48	87.49	190.23%
7,000		45.99	154.06	108.07	234.98%
8,000		91.98	174.64	82.66	89.86%
9,000		91.98	195.22	103.24	112.24%
10,000		91.98	215.80	123.82	134.61%
11,000		91.98	236.38	144.40	156.98%
12,000		137.97	256.96	118.99	86.24%
13,000		137.97	277.54	139.57	101.15%
14,000		137.97	298.12	160.15	116.07%
15,000		137.97	318.70	180.73	130.99%
16,000		183.97	339.28	155.31	84.43%
17,000		183.97	359.86	175.89	95.61%
18,000		183.97	380.44	196.47	106.80%
19,000		183.97	401.02	217.05	117.99%
20,000		229.96	421.60	191.64	83.34%
21,000		229.96	442.18	212.22	92.29%
22,000		229.96	462.76	232.80	101.24%
22,561		229.96	474.31	244.35	106.26%
23,000		229.96	483.34	253.38	110.19%
24,000		275.95	503.92	227.97	82.61%
25,000		275.95	524.50	248.55	90.07%
50,000		551.90	1,039.00	487.10	88.26%

* Average residential monthly bill.

PENNSYLVANIA-AMERICAN WATER COMPANY
BUTLER AREA SEWER AUTHORITY (BASA)

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
NON RESIDENTIAL - MONTHLY
1 EDU PER 4000 GALLONS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$45.99	$50.00	$4.01	8.72%
100		45.99	51.34	5.35	11.62%
500		45.99	56.68	10.69	23.25%
1,000		45.99	63.37	17.37	37.78%
2,000		45.99	76.73	30.74	66.84%
3,000		45.99	90.10	44.10	95.90%
4,000		45.99	103.46	57.47	124.96%
5,000		45.99	116.83	70.83	154.01%
6,000		45.99	130.19	84.20	183.07%
7,000		45.99	143.56	97.56	212.13%
8,000		91.98	156.92	64.94	70.60%
9,000		91.98	170.29	78.30	85.13%
10,000		91.98	183.65	91.67	99.66%
11,000		91.98	197.02	105.03	114.19%
12,000		137.97	210.38	72.41	52.48%
13,000		137.97	223.75	85.77	62.16%
14,000		137.97	237.11	99.14	71.85%
15,000		137.97	250.48	112.50	81.54%
16,000		183.97	263.84	79.87	43.42%
17,000		183.97	277.21	93.24	50.68%
18,000		183.97	290.57	106.60	57.95%
19,000		183.97	303.94	119.97	65.21%
20,000		229.96	317.30	87.34	37.98%
21,000		229.96	330.67	100.71	43.79%
22,000		229.96	344.03	114.07	49.61%
22,094	*	229.96	345.29	115.33	50.15%
23,000		229.96	357.40	127.44	55.42%
24,000		275.95	370.76	94.81	34.36%
25,000		275.95	384.13	108.18	39.20%
30,000		321.94	450.95	129.01	40.07%
35,000		367.93	517.78	149.84	40.73%
50,000		551.90	718.25	166.35	30.14%

* Average commercial monthly bill.

PENNSYLVANIA-AMERICAN WATER COMPANY
BUTLER AREA SEWER AUTHORITY (BASA)

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
INDUSTRIAL - MONTHLY
1 EDU PER 4000 GALLONS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$45.99	$50.00	$4.01	8.72%
1,000		45.99	63.37	17.37	37.78%
2,000		45.99	76.73	30.74	66.84%
3,000		45.99	90.10	44.10	95.90%
4,000		45.99	103.46	57.47	124.96%
5,000		45.99	116.83	70.83	154.01%
10,000		91.98	183.65	91.67	99.66%
16,000		183.97	263.84	79.87	43.42%
20,000		229.96	317.30	87.34	37.98%
30,000		321.94	450.95	129.01	40.07%
40,000		459.91	584.60	124.69	27.11%
50,000		551.90	718.25	166.35	30.14%
60,000		689.87	851.90	162.03	23.49%
70,000		781.85	985.55	203.70	26.05%
80,000		919.83	1,119.20	199.37	21.67%
90,000		1,011.81	1,252.85	241.04	23.82%
100,000		1,149.79	1,386.50	236.72	20.59%
200,000		2,299.57	2,723.00	423.43	18.41%
300,000		3,449.36	4,059.50	610.15	17.69%
400,000		4,599.14	5,396.00	796.86	17.33%
500,000		5,748.93	6,732.50	983.58	17.11%
600,000		6,898.71	8,069.00	1,170.29	16.96%
685,947	*	7,864.53	9,217.68	1,353.15	17.21%
700,000		8,048.50	9,405.50	1,357.01	16.86%
800,000		9,198.28	10,742.00	1,543.72	16.78%
900,000		10,348.07	12,078.50	1,730.44	16.72%
1,000,000		11,497.85	13,415.00	1,917.15	16.67%
1,100,000		12,647.64	14,751.50	2,103.87	16.63%
1,200,000		13,797.42	16,088.00	2,290.58	16.60%
1,300,000		14,947.21	17,424.50	2,477.30	16.57%
1,400,000		16,096.99	18,761.00	2,664.01	16.55%
1,500,000		17,246.78	20,097.50	2,850.73	16.53%

* Average Industrial monthly bill.

PAWC STATEMENT NO. 10-R

REBUTTAL TESTIMONY
OF
CHARLES REA

WITH REGARD TO
PENNSYLVANIA-AMERICAN WATER COMPANY'S

RATE DESIGN PROPOSALS, AFFORDABILITY ANALYSES, LOW-INCOME DISCOUNT TARIFF MODIFICATION PROPOSAL, CUSTOMER USAGE AND DECLINING USE ANALYSES, REVENUE CALCULATIONS AND PROJECTIONS, AND REVENUE DECOUPLING MECHANISM PROPOSAL

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: February 21, 2024

PENNSYLVANIA-AMERICAN WATER COMPANY

REBUTTAL TESTIMONY OF CHARLES REA

I. INTRODUCTION

Q. What is your name and business address?

A. My name is Charles B. Rea. My business address is 3409 Research Parkway, Davenport, Iowa 52806.

Q. Are you the same Charles B. Rea that provided direct testimony in this case?

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to address issues raised by various intervenors in this case related to water and wastewater rate design, Pennsylvania-American Water Company's ("Company" or "PAWC") affordability analysis for water and wastewater service, proposed changes to the Company's Bill Discount Program ("BDP"), revenue calculations in this case, and the Company's proposed Revenue Decoupling Mechanism ("RDM"). Specifically, I will be addressing the following witnesses:

- Office of Consumer Advocate ("OCA") Witnesses Christine Maloni Hoover (OCA Statement No. 1), Jerome D. Mierzwa (OCA Statement No. 4), and Roger Colton (OCA Statement No. 5).

- Bureau of Investigation and Enforcement ("I&E") Witnesses Joesph Kubas (I&E Statement No. 3) and Ethan H. Cline (I&E Statement No. 4).

- Pennsylvania-American Water Large Users Group ("PAWLUG") Witness Billie S. LaConte (PAWLUG Statement No. 1).

- Office of Small Business Advocate ("OSBA") Witness Kevin Higgins (OSBA Statement No. 1).

- The Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania ("CAUSE-PA") Witness Harry S. Geller, Esq. (CAUSE-PA Statement No. 1).

- Cleveland Cliffs Steel ("CCS") Witness Richard A. Baudino (CCS Statement No. 1).

- Commission on Economic Opportunity ("CEO") Witness Jennifer Warabak (CEO Statement No. 1).

- City of Scranton ("Scranton") Witness Teri Ooms (C.O.S. Statement No. 2).

I have not attempted to respond to every argument made by the I&E, OCA, OSBA, CCS, CAUSE-PA, PAWLUG, and CEO witnesses. The fact that I may not have responded to any particular argument or statement made by the I&E, OCA, OSBA, CCS, CAUSE-PA, PAWLUG, or CEO witnesses does not indicate my agreement with that argument or statement.

Q. Please identify the exhibits you will be sponsoring in this proceeding.

A. I am sponsoring the following PAWC Exhibits attached to my testimony:

- PAWC Exhibit CBR-10R – Rebuttal RDM Analysis for Docket No. M-2015-2518883

- PAWC Exhibit 10-E – WW BASA Operations Revised

- PAWC Schedule Rea 1

Q. How is your rebuttal testimony organized?

A. My rebuttal testimony is organized into the following sections:

- Affordability
- Bill Discount Program Changes
- Reallocation of Wastewater Revenue Requirement (Act 11)
- Rate Design
  - Scale Back of Rates
  - Water Rate Design
  - Wastewater Rate Design
- Revenue Calculations
- Revenue Decoupling Mechanism

II. AFFORDABILITY

Introduction

Q. Please provide an overview of the Company's affordability analyses that you provided in your direct testimony.

A. PAWC Statement No. 10 – Exhibits CBR-1 (Water Affordability Analysis) and CBR-2 (Wastewater Affordability Analysis) provided a very robust, detailed, and balanced analysis of the affordability of PAWC's water and wastewater service for our customers. These affordability analyses contained two components.

- The Enterprise-Level Analysis provided a long-term view of the overall affordability of the Company's water and wastewater service going back in time to 2012 and looking forward to proposed rates by comparing average residential bills by year for all residential customers to estimated median household income ("MHI") for the Company's customers, which is a high-level measure of household income for PAWC's customers.

- The Community-Level Analysis provided a deeper dive into the affordability of water and wastewater service at the Company's proposed rates in this case by community, and by income levels and household sizes within those communities, using a standard usage level of 40 gallons of water per household member per day.

Q. What do you mean when you refer to the Company's affordability analyses as balanced?

A. The Company's affordability analyses are balanced in the sense that they examine the affordability of water and wastewater service across the entire spectrum of the Company's residential customer population. While ultimately, the focus turns to lower income customers because that is where mitigation strategies for affordability are focused, and the Company's affordability analyses provide a detailed view of affordability for lower household income, it is important to understand the affordability of service across the entire customer spectrum. The Company's affordability analyses do both of these things.

Q. Which partes in this case address the Company's affordability analysis for water and wastewater service?

A. OCA Witness Colton and CAUSE-PA Witness Geller both address the Company's affordability analyses.

Q. How are you addressing these comments in your rebuttal testimony?

A. First, I will address the testimony of OCA Witness Colton in my rebuttal testimony and then I will address the testimony of CAUSE-PA Witness Geller.

Rebuttal of OCA Witness Colton

Q. What observations and criticisms does Mr. Colton raise regarding the Company's Enterprise-Level Analysis of affordability?

A. Mr. Colton raises a number of issues with the Company's Enterprise-Level Analysis:

- Mr. Colton takes issue with the Company's use of MHI in the enterprise level analysis. Mr. Colton, referring to an article that I cite to in my direct testimony (the "Teodoro" article) (*see* OCA Statement No. 5, p. 8), asserts that the Teodoro article's finding that use of MHI has been misapplied in the context of affordability, yielding results that "are inaccurate at best and misleading at worst," cannot be said to support my use of MHI. (OCA Statement No. 5, p. 9:3-20).
- Mr. Colton takes particular issue with our use of Median Household Income of Homeowners ("MHI-HO") in the Enterprise-Level Analysis stating that:
  - Home ownership is becoming increasingly limited to households with higher and higher incomes and it is not true that PAWC customers who are homeowners represent the income trend for PAWC customers as a whole (OCA Statement No. 5, p. 10:19:20).
  - MHI for homeowners is becoming less and less representative of the total population of households in a community (OCA Statement No. 5, p. 10:10-15)
  - The Company's assessment of water affordability entirely, or in large part, on the MHI-HO, has the impact of asserting that as owner-occupied housing in a community becomes increasingly less affordable, water service

becomes increasingly more affordable when measured by bills as a percentage of homeowner income. (OCA Statement No. 5, p. 11:8-13).

- Mr. Colton takes issue with my use of the "median household income in each of PAWC's communities for single-family owner-occupied and single-unit, renter-occupied homes as reported by data in the American Community Survey ("ACS")," stating that the data I cite to do not report median incomes of occupants of single-unit, renter-occupied homes. (OCA Statement No. 5, p. 12:3-13)
- Mr. Colton generally claims that use of MHI is inappropriate because MHI is growing at a faster rate than household income for lower-income customers, both in absolute dollar terms and as a percentage of income associated with the federal poverty level ("FPL"). (OCA Statement No. 5, p. 12:-14).
- Mr. Colton states that the Enterprise-Level Analysis compares non-comparable years and that instead of examining the impact of increasing rates given a uniform consumption from year to year, I apply the annual PAWC rates to a decreasing level of consumption. (OCA Statement No. 5, p. 16:5-9).
- Mr. Colton states that I made technical mistakes in my analysis, asserting that:
  - In nearly ten percent of the calculations where I weighted the homeowner and renter median incomes, I multiplied the percentage of renters by a renter median income even though the renter median income was not reported. As a result, the renter income in those instances was calculated as being $0. (OCA Statement No. 5, p. 17:4-8).
  - I excluded rental multi-family housing since residents of multi-family homes were not likely to have individual meters (and thus be direct

customers of PAWC) but did not exclude the corresponding owner-occupied multi-family housing unit. (OCA Statement No. 5, p. 17:9-12).

- Finally, he states that the reason I excluded multi-family housing does not withstand closer scrutiny. He asserts that while large apartment complexes are likely to be master-metered, structures with two to four housing units are more likely to be individually metered, and by excluding rental households with two to four housing units, I reduce the penetration of rental housing that should have been included in his weighting of renter and homeowner median incomes. He concludes, therefore, that my calculated MHI is systematically artificially high. (OCA Statement No. 5, p. 17:13-18:11).

Q. Why do you use MHI in your Enterprise-Wide Analysis?

A. The Enterprise-Level Analysis uses MHI for two reasons. The first is that MHI is a widely recognized, well understood, and readily available measure of household income in different communities and states. The second is that MHI is consistent in scope with the concept of average monthly bills, which is the second input in the analysis. Average monthly bills encompass all residential customers, not a subset. MHI also encompasses the entire residential customer base, not a subset. It is important in any analysis of affordability that there be consistency in assumptions between bills used in the analysis and household income metrics used in the analysis. This is something that many analyses of affordability of water and wastewater service do not consider. Use of MHI as a measure of total population income brings that consistency to the analysis when paired with average monthly bills.

Q. Why in your direct testimony do you cite publications that discuss 2% of MHI as a standard for affordability of service?

A. The 2% standard that was originally adopted by the U.S. Environmental Protection Agency and the Teodoro article that I cite to in my direct testimony (PAWC Statement No. 10, p. 10) is important because that figure still serves as a general standard of affordability for water and wastewater service. This standard is a commonly used standard for affordability at the individual household income level. (*See also*, PAWC Statement No. 10, p. 18).

Q. Do you agree that use of MHI involves a misapplication of the 2% standard and yields results that "are inaccurate at best and misleading at worst"?

A. I agree that use of the 2% standard at MHI as a single point estimate can be misleading because it may not be representative of affordability generally. That is why the point of the Enterprise-Level Analysis is not to indicate affordability of service at any point in time, but rather to provide a high-level historical perspective on how the affordability of service has been trending over time and how it is expected to continue to trend under proposed rates in this case.

Q. Do you believe that the Company's proposed rates in this case are generally affordable?

A. Yes. I believe that the Company's proposed rate design in this proceeding results in water and wastewater service that is affordable for our customers.

Q. Why do you believe that the Company's proposed rates in this proceeding are affordable?

A. The Company's proposed rates in this proceeding are affordable, not only because the BTI Ratio at MHI falls below the 2% level, but because the Company's proposed rate design in this case, which includes the Bill Discount Program ("BDP"), give virtually every residential customer the opportunity for Basic Water Service for both water and wastewater service at an affordable level (for example, less than 2% of household income for one form of service and 4% of household income for both).

Q. Please explain.

A. There are, and will always be, groups of customers for whom affordability of water and wastewater service may be challenging. The question of affordability is not one of whether that percentage of customers falls below a certain threshold level or whether the BTI ratio at MHI falls below a certain threshold level. The question of affordability instead depends on whether a robust sustainable tariff program, like the BDP, is in place to help customers with affordability issues, gives these customers the opportunity for Basic Water Service at a level deemed to be affordable (2% of household income or less, for example), and whose existence improves the overall affordability of service for all customers as measured by an index like the Affordability Index.

Typically, BDP programs are designed such that discounts offered to customers are built into base rates, and this is the case with PAWC. If rates approach a point where the level of discounts needed to provide lower income customers the opportunity for service at an affordable level are so great that other customers literally cannot afford to carry them

without their own bills becoming unaffordable, it can be said that rates are approaching a "tipping point" where overall affordability of service can no longer be improved through a program like the BDP. This tipping point can represent the threshold of affordability or unaffordability of rates. PAWC is not at that point. In fact, both Mr. Colton and Mr. Geller propose increases to discounts offered under the BDP knowing that the cost of those discounts is recovered from other customers without negatively impacting overall affordability of service. Because rates proposed by the Company in this proceeding are comfortably within the range where the BDP can significantly improve overall affordability of service, I conclude that the Company's overall rate design is in fact affordable.

Q. How do you use MHI for homeowners (MHI-HO) in your Enterprise-Level Analysis?

A. The MHI-HO metric is used in the Enterprise-Level Analysis as an input to the calculation of the multiplier that converts state-level MHI data from the U.S. Census Bureau Table H-8 to estimated MHI data for the Company's residential customer base. The fact of the matter is that the majority of PAWC's residential customers are homeowners. This metric is used in a weighted-average calculation by zip code along with the estimated percentage of PAWC's customers that are homeowners, the estimated percentage of PAWC's customers that rent, reported MHI for rental households, and number of customers by zip code that results in a multiplier that is applied to state-level MHI to yield an estimated MHI for the Company's customers. This estimated multiplier is 1.1256 for water service and 0.9515 for wastewater service, meaning that the Company estimates that MHI for the Company's residential water customers is 112.56% of the total statewide MHI for the

Commonwealth of Pennsylvania as reported by the U.S. Census Bureau, and the MHI for the Company's residential wastewater customers is 95.15% of the total statewide MHI. The differences in these two estimates reflect the differences in socio-economics and household demographics in the Company's water and wastewater service territory.

Q. How do you respond to the criticisms laid out by Mr. Colton regarding MHI-HO?

A. The criticisms that Mr. Colton makes against MHI-HO simply aren't relevant to the calculation I just described. Mr. Colton's criticism regarding incomes of homeowners versus renters over time would only be relevant if these conditions would result in systematic and significant changes in the calculated multipliers over time. Mr. Colton has not made this claim despite having access to the data necessary to investigate this, and in fact, estimates of these multipliers going back over time show that the estimated relationship between statewide MHI and estimated MHI for the Company's customers has held very steady over time.

Q. Do you believe that MHI-HO is reflective of the Company's residential customer population?

A. I do. The table below shows MHI statistics for homeowners and rental households from 2012 to 2022 as reported by the American Community Survey for zip codes that make up the vast majority of the Company's residential customers.

TABLE 1
Selected PAWC Household Statistics

	2012	2022	Increase
MHI – Owner Households	$71,504	$100,122	40%
MHI – Renter Households	$31,686	$46,553	47%

% of Owner Households	72.5%	71.8%	
% of Renter Households	27.5%	28.3%	

The data shows that while MHI has risen by 40% from 2012 to 2022 for homeowners, MHI for renter households has increased by 47% over the same time., which is a higher rate of increase. This result could be expected under Mr. Colton's theories if there was a large shift over time in lower income households being priced out of the housing market and forced to rent instead. However, the increase in the percentage of rental households over the same period is less than one percentage point, which is not a significant increase. This small increase cannot account, on its own, for the faster growth in incomes for rental households than for homeowners. This data indicates that there is not a large external factor related to home ownership that is driving increases in household income for homeowners. The data supports the conclusion that MHI-HO is a valid reflection of income for PAWC's residential customers.

Q. Mr. Colton claims that your use of MHI in each of PAWC's communities for single-family owner-occupied and single-unit, renter-occupied homes, as you have calculated it, is incorrect because the data you cite does not report median incomes of occupants of single-unit, renter-occupied homes. How do you respond?

A. It is true that the ACS does not report MHI for single-unit rented homes separately from other rental households, but there is no reason to believe that incomes in single-unit rented homes are less than for other rental households. If anything, the opposite is more likely to be true. It is generally the case that rental costs for single-family homes are greater than for apartments. If that is true, then it can be inferred that incomes for households that rent

single-family homes is likely higher than for households that rent apartments. This implies that my estimate of household income as it relates to rental households is actually a conservative estimate and understates the actual income levels for these customers.

Q. How do you respond to Mr. Colton's claim that the use of MHI is inappropriate because MHI is growing at a faster rate than household income for lower-income customers and as a percentage of income associated with FPL?

A. I agree that incomes for higher income households are growing at a faster pace than incomes for lower income households, but that does not indicate a weakness in the Company's Enterprise-Level Analysis as I have presented it in my testimony. It simply indicates that the trend in BTI Ratios over time would be slightly higher in an analysis that considers incomes at lower percentile levels.

Q. How do you respond to Mr. Colton's criticism that the Enterprise-Level Analysis compares non-comparable years and, that instead of examining the impact of increasing rates given a uniform consumption from year to year, you apply the annual PAWC rates to a decreasing level of consumption?

A. Any multi-year analysis of affordability must focus on bills, not just rates. This is true because a) customers pay bills, not rates, and b) bills incorporate both rates and usage levels. Usage levels have undeniably declined over the last several years, and declines in usage have a direct impact on rate levels (lower and lower usage results in higher and higher rates for the same revenue requirement). To focus on changes in rates over time without considering changes in usage that help drive those rate changes provides a highly

misleading view of affordability over time. Examining the impact of increasing water rates given a uniform level of consumption from year to year does not reflect reality and is misleading and incorrect. The appropriate analysis considers bills, not rates.

Q. Mr. Colton claims that you made a technical error because there are calculations where you weighted the homeowner and renter median incomes in cases where renter median income was not reported and, as a result, the renter incomes in those instances was calculated as being $0. How do you respond?

A. This claim is factually incorrect. The calculation of the multipliers I described above, which weights homeowner and renter median household incomes, does not include any communities where these incomes were not reported. This exclusion only drops 1.5% of residential customers from the water and wastewater affordability analysis.

Q. Mr. Colton claims that excluding multi-family housing does not "withstand closer scrutiny" because structures with two to four housing units are more likely to be individually metered and, by excluding rental households with two to four housing units, you reduce the penetration of rental housing that should have been included in you weighting of renter and homeowner median incomes, resulting in an artificially high MHI. How do you respond?

A. The Company's assumption in these analyses for who are direct customers of the Company are households that own their homes or households that are in single family rented units. While different assumptions on who are direct customers of the Company would lead to slightly different results in absolute values of BTI Ratios, they would not change the trend.

Q. Is this issue related to the technical error Mr. Colton claims you made by excluding rental multi-family housing, since residents of multi-family homes were not likely to have individual meters, but not owner-occupied multi-family housing units?

A. It is. But my exclusion of rental multi-family housing is not a technical error. This is a reflection of the Company's assumption of what type of households are direct customers of the Company.

Q. Does Mr. Colton provide what he claims to be an improved Enterprise-Level Analysis that allegedly fixes the problems he identifies in your Enterprise-Level Analysis?

A. Yes. Mr. Colton provides two sets of analyses that he states are more appropriate. The first set, which is provided in the tables at pp. 20-21 of OCA Statement No. 5, examines the BTI Ratios at the average income in the First Quintile and Second Quintile given a constant usage over the years. The second analysis, which is provided in Table 3 of OCA Statement No. 5 and is generally described at p. 22-23 of OCA Statement No. 5, determines what income would be needed in order to achieve a BTI Ratio of 2.0% each year and examine the number of zip codes within the PAWC service territory that have those incomes at the average Q1 and average Q2 income level (OCA Statement No. 5, p. 19).

Q. Have you reviewed these analyses?

A. I have.

Q. Do you have any comments on his first set of analyses depicted by the charts at p. 20 and p. 21?

A. Yes. These comparisons, according to Mr. Colton, are comparisons of rates over time assuming constant usage. As I stated previously, this is precisely the wrong way to do a multiyear evaluation of affordability because rates and usage levels are connected. Mr. Colton does not specify in his testimony what level of usage he assumes, how he determines rates historically, or what households his income estimates refer to or how those income estimates were developed, so it is not possible to know if there is any real consistency between his usage estimates or the levels of usage customers in his analysis would be expected to use, which is another important aspect of a robust affordability analysis.

Q. Do you have any comments on his second analysis as provided in his Table 3?

A. The data provided in his Table 3 calculates bills for a static average level of usage and estimates the level of income needed such that bills are 2% of household income, and then goes on to determine the number of zip codes where first quartile or second quartile income is less than that amount. There is no apparent consistency between usage levels in the analysis and the households that are being analyzed. As Mr. Colton points out in his testimony regarding the Company's winter averaging proposal for wastewater rates, lower income customers tend to have lower amounts of usage. That fact needs to be reflected in a proper analysis of the affordability of service for lower-income customers. That reality is reflected in the Company's Community-Level Analysis. It is not reflected in Mr. Colton's analysis.

Q. What observations and criticisms does Mr. Colton raise regarding the Company's Community-Level Analysis of affordability?

A. Mr. Colton raises a number of issues with the Company's Community-Level Analysis:

- Mr. Colton takes issue with the claim that the Company's Community-Level Analysis looks at affordability at the individual customer level and takes issue with my claim that the Community-Level Analysis looks at affordability across different customer demographics. He points out that the only demographics that were considered were household income and household size (OCA Statement No. 5, p. 26:9-21). These critiques are semantics.

- Mr. Colton states the Community-Level Analysis does not consider "affordability at the individual level" in any fashion and does not consider "different customer demographics." He asserts that, instead, the Community-Level Analysis only considers affordability, both at the community level and at the "individual customer level," using only one customer attribute, namely income. (OCA Statement No. 5, p. 27:1-11).

- Mr. Colton appears to take issue with my use of the concept of Basic Water Service.

  - Mr. Colton states that while Company Witness Everette asserts that the Company defines "basic water service" to be the "service that is necessary and reasonable to meet basic household needs for drinking, cooking, sanitation, and general health service that does not include seasonal discretionary water use", the Company's determination of Basic Water Service is not a ground-up calculation and that I made no effort to identify what water is needed for drinking, cooking, sanitation, and general health service, let alone to assess which of those uses are "necessary and reasonable to meet basic household needs." (OCA Statement No. 5, p. 27:12-28:7).

  - Mr. Colton criticizes the Company's definition of Basic Water Service at an individual customer level for not taking into account different aged individuals within the household. (OCA Statement No. 5, p. 28:8-17).

  - Mr. Colton criticizes our use of Basic Water Service and our assertion that affordability based on this definition is at an individual customer level because it does not account for differences in (1) the age of children in a household; (2) the age of adults in a household; (3) the number of children in a household; (4) the number of adults in a household; (5) the income of a household; (6) the size of a housing unit; (7) the owner/renter status of a household; and (8) the housing unit type occupied by a household.

  - Mr. Colton states that the Company concedes that the definition of Basic Water Service at 40 gallons per household member per day is not a measurement of PAWC consumption, but rather is merely an assumption that does not consider things like how many household members are at home at any given time or for how long, or whether that definition would

change during the summer months when school age children are not in school but are instead at home all day. (OCA Statement No. 5, p. 29-20:30-9).

- Mr. Colton states that the definition of Basic Water Service at 40 gallons per customer per day is not consistent with end-use water consumption studies and is not consistent with other research stating that the definition of water consumption per household member per day should be higher than 40 gallons. (OCA Statement No. 5, p. 30-10:32-3).

- Mr. Colton claims that the use of gallons per household member per day results in inconsistencies between the distribution of household size and the distribution of usage seen in bills (OCA Statement No. 5, p. 32:4-34:4).

- Finally, Mr. Colton states that my community affordability testimony considers affordability from only one dimension, the breadth of unaffordability. He states that the community affordability testimony identifies the percentage of residential customers with water bills greater than 2% of household income, as well as the percentage of residential customers with wastewater bills greater than 2% of income by FPL but does not identify by how much – the depth of unaffordability – water and wastewater bills exceed 2% at each Poverty Level. (OCA Statement No. 5, p. 35:1-36:3).

Q. How do you respond to Mr. Colton's criticism of your position that the Company's Community-Level Analysis looks at affordability at the individual customer level?

A. The Company's Community-Level Analysis cannot look at each individual customer in the Company's system to determine whether service is affordable for that particular customer. Attempting to do so would create significant customer data privacy concerns and would be enormously difficult, if not impossible, to complete. Mr. Colton's criticism is one of semantics, not actual substance. My description of the Community-Level Analysis as one

that is done at the individual customer level is simply meant to differentiate that analysis from the Enterprise-Level analysis which is a high-level analysis done at a system level.

Q. Can you comment on Mr. Colton's criticisms of the Company's use of and definition of Basic Water Service?

A. Again, Mr. Colton's criticism here is one of semantics, not substance. The description we have used for Basic Water Service is only a description and is meant to differentiate the type of service we are including in this analysis from seasonal water use, which is discretionary, and which should not be subject to an analysis of affordability. The myriad factors that Mr. Colton outlines in his testimony that might cause an individual customer's water consumption to fluctuate cannot be utilized for any meaningful analysis. While there can be differences of opinion of what the appropriate amount of water usage per household member per day should be in an affordability analysis, there should be no argument that Mr. Colton's usage per household member per day approach to estimating water consumption for the purposes of analyzing affordability is not only inappropriate, but nearly impossible to perform.

Q. How do you respond to Mr. Colton's criticism that the definition of Basic Water Service at 40 gallons per customer per day is not consistent with end-use water consumption studies and is not consistent with other research stating that the definition of water consumption per household member per day should be higher than 40 gallons?

A. As I explain in my direct testimony (PAWC Statement No. 10, p. 14), the Company's estimate of 40 gallons of water per household member is specifically calibrated to non-seasonal consumption patterns for PAWC's customers and is consistent with average non-seasonal use per customer for PAWC's residential population. Literature on the subject that argues for higher amounts are not calibrated to actual usage for PAWC customers and the end-use studies quoted by Mr. Colton are also not calibrated to actual usage for PAWC customers.

Q. How do you respond to Mr. Colton's claims that the use of gallons per household member per day results in inconsistencies between the distribution of household size and the distribution of usage seen in bills?

A. It may be that the relationship between household size and water consumption for PAWC's customers is not perfectly linear, but the level of detail needed to make a meaningful comparison utilizing water consumption versus household size is not reflected in Mr. Colton's analysis, is not easily or readily available, and should not deter from use of water consumption per household member per day as a standard for estimating consumption. It simply stands to reason that households with more people in them will use more water than households with less people in them, and national data on household size versus income shows that lower income households tend to have fewer people in them than higher income households. All of this points to an analytical methodology that estimates water usage for lower income customers based on household sizes for lower income customers.

Q. How do you respond to Mr. Colton's criticism that the Community-Level Analysis considers affordability from only one dimension (i.e., the breadth of unaffordability) but does not identify by how much (i.e., the depth of unaffordability) water and wastewater bills exceed 2% at each Poverty Level?

A. This assertion is simply false. PAWC Statement No. 10 Exhibit CBR-1 and CBR-2 provide enormous levels of detail on the affordability of water and wastewater service across all income groups and also provide data on BTI Ratio for customers at different levels of household income by increments of the FPL. While the Affordability Index is a simple summary metric that describes the estimated percentage of customers with bills less than 2% of annual household income, the data needed to fully analyze the depth and breadth of affordability is completely contained within the affordability analyses provided by the Company.

Q. Does Mr. Colton provide what he claims to be an improved Community-Level Analysis that allegedly fixes the problems he identifies in your Community-Level Analysis?

A. Yes. This analysis is provided in Table 7 of OCA Statement No. 5 and is generally described at p. 36-39 of OCA Statement No. 5.

Q. Have you reviewed this analysis?

A. I have.

Q. Do you have any comments on these analyses?

A. While I do not take issue with any of the data in his analysis at Table 7 of OCA Statement No. 5, I would point out that this analysis is simply a re-summarization of the affordability data already provided by the Company in PAWC Statement No. 10 Exhibit CBR-1 and CBR-2, summarized to highlight points of interest to Mr. Colton and to deemphasize areas that he finds less compelling. There is no new data or analysis here. It is simply a re-summarization of the robust affordability analysis already provided by the Company.

Rebuttal of CAUSE-PA Witness Geller

Q. Mr. Geller states that he disagrees strongly with your methodology and conclusions related to your affordability analyses you provided in your direct testimony. (CAUSE-PA Statement No. 1 p. 37:7-9). What reasons does he provide to support his opinions?

A. Mr. Geller gives the following reasons:

- Mr. Geller states that the affordability analyses rely heavily on the use of MHI which he asserts is not an appropriate standard for which to assess affordability because it masks the extreme levels of unaffordability experienced by the lowest income households. (CAUSE-PA Statement No. 1 p. 37:10-14).

- Mr. Geller expresses concern that the metrics applied in the Company's Affordability Index calculation conceal the true depth and breadth of need amongst PAWC's low-income customers. He states that while my analysis indicates that 0% of water customers and 20% wastewater customers with household income between $0-$25K meet PAWC's Affordability Index, it does not quantify the number of households facing acute unaffordability or the level of unaffordability experienced by each household, and that these non-quantified metrics are key to assessing both the depth and breadth of unaffordability. (CAUSE-PA Statement No. 1 p. 37:15-22).

- Mr. Geller also asserts that PAWC's definition of Basic Water Service is improperly restrictive and not reflective of actual usage rates amongst residential customers. He states that PAWC's definition of Basic Water Service does not account for variations in household size and, in turn, consumption, and does not

account for households with higher usage resulting from inefficiencies or leaks in their systems. (CAUSE-PA Statement No. 1, p. 39:4-13)

Q. How do you respond to Mr. Geller's claim that MHI is not an appropriate standard and that its use masks extreme levels of unaffordability for the lowest income customers?

A. As I stated previously, use of MHI in the Enterprise-Level Analysis is used not to indicate affordability of service at any point in time, but rather to provide a high-level historical perspective on how the affordability of service has been trending over time and how it is expected to continue to trend under proposed rates in this case. The Company's Community-Level Analysis, which does not rely on MHI, is used to address the depth and breadth of affordability issues for lower income customers.

Q. How do you respond to Mr. Geller's claim that the Company's Affordability Index does not assess both the depth and breadth of unaffordability?

A. The definition of the Affordability Index is meant to provide a simple and easy to understand metric that shows the percentage of customers for whom Basic Water Service is less than 2% of household income. It is not meant, on its own, to address an in-depth analysis of lower income affordability issues, although the breadth and depth of affordability issues are generally correlated with each other. As I stated earlier, PAWC Statement No. 10, Exhibit CBR-1 and CBR-2, provide enormous levels of detail on the affordability of water and wastewater service across all income groups and also provide data on BTI Ratio for customers at different levels of household income by increments of FPL.

Q. How do you respond to Mr. Geller's concerns around your definition of Basic Water Service?

A. The Company's definition of Basic Water Service is not restrictive, nor is it meant to be. Basic Water Service reflects usage levels among residential customers. As I stated earlier, the use of 40 gallons per household member per day is tied specifically to overall usage patterns by PAWC's customers. Mr. Geller's claim that PAWC's definition of Basic Water Service does not account for variations in household size is incorrect.

Q. Mr. Geller states that "Despite the assertion that their analysis is reliant on a metric that varies by household size, PAWC's analysis then goes on to apply a static usage threshold of 3,000 gallons/month or less. If PAWC's analysis were utilizing a 40 gallon/household member threshold for basic service as claimed, usage would be closer to 5,000 (4,960) gallons/month for a family of four". (CAUSE-PA Statement No. 1, p. 35:14-17). How do you respond to this assertion?

A. It is not clear what Mr. Gellar means when he says that PAWC's analysis goes on to apply a static usage threshold of 3,000 gallons/month or less, but even a cursory review of statement No. 10 Exhibits CBR-1 and CBR-2 demonstrates that his assertion is incorrect. The referenced exhibits clearly show different total usage levels are assumed for different household sizes, with usage for a four-person household set at 4,800 gallons per month (4 persons x 40 gallons per person x 30 days).

Q. Mr. Geller asserts that you conclude in your testimony that the numbers of customers that will receive bills that exceed broadly accepted affordability standards (what he

labels the affordability gap) is acceptable (CAUSE-PA Statement No. 1 p. 38:1-5). Was that your conclusion?

A. No. This assertion is false. Nowhere in my direct testimony did I say or otherwise imply that the number of customers whose bills are expected to be more than 2% of household income is an acceptable level of unaffordability.

Q. Mr. Geller states that you claim that PAWC's rates have remained consistently low over time, and that contrary to your position, PAWC's rate unaffordability has increased both in depth and breadth in recent years, causing significant hardship for low-income customers (CAUSE-PA Statement No. 1, p. 40:1-10). How do you respond?

A. This assertion is also false. Again, nowhere in my direct testimony do I say or imply that rates have remained consistently low, high, or any other general level over time. Despite the faults I identified in Mr. Colton's proposed Enterprise-Level Analysis, the general trend in that analysis shows that there is not a significant upward trend in BTI ratios at either the first or second quintile income level from 2012 through 2022. The assertion that PAWC's rate unaffordability has increased both in depth and breadth over time is simply not true.

Q. Does Mr. Geller provide his own analysis of affordability for water and wastewater service?

A. He does. This analysis is provided in CAUSE-PA Statement No. 1 Exhibit 1.

Q. Have you reviewed this analysis?

A. I have.

Q. Do you have any comments on Mr. Geller's analysis?

A. CAUSE-PA Exhibit 1 suffers from the same problem as Mr. Colton's analyses, namely that there is no connection between usage levels assumed in the analysis and the levels of usage lower-income customers are actually likely to have. Stated another way, CAUSE-PA Exhibit 1 simply lacks context. This analysis calculates bills for various scenarios of usage level and household income stated in terms of multiples of FPL but provides no context as to which of these scenarios are more or less likely to happen. For example, the analysis provides bill calculations for 5,000 gallons a month for a two-person household at varying levels of income but makes no statement about whether that level of usage for a two-person household is likely or not. Without information on the number of customers that might fall within these various scenarios, there is no way to judge from this analysis the scope or depth of the affordability issue. The Company's affordability analyses provide a much clearer view of the scope and depth of real-world affordability issues.

<u>Conclusions</u>

Q. Both Mr. Colton and Mr. Geller at times allege that the Company's analysis of affordability does not address both the breadth and the depth of affordability issues related to the Company's water and wastewater service. How do you respond to these arguments?

A. This is clearly not true. The affordability analyses provided by the Company assess the affordability of water and wastewater service across all levels of income in every

community the Company serves and reports BTI ratios at every combination of household income, household size, and multiple of FPL. The assertion that the Company's analysis does not address both the breadth and depth of these issues is simply false.

Q. Mr. Colton and Mr. Geller at times accuse the Company of whitewashing issues relating to affordability by claiming that the Company's service is affordable and ignoring the affordability challenges faced by lower-income customers. How do you respond to these assertions?

A. Again, this is simply not true. As I stated in my direct testimony, the purpose of these analyses is to inform decision-makers about the size and scope of efforts that may be needed to help these vulnerable customers better afford water and wastewater service, both in terms of general rate design proposals that can reduce the cost of Basic Water Service for all customers, including lower-income customers, and customer assistance programs such as the Bill Discount Program ("BDP"). This is exactly what the Company is doing with its proactive proposal to expand the BDP.

Q. Do you have any other observations around the testimonies of Mr. Colton and Mr. Geller on the subject of affordability?

A. Yes. Related to the point I just made, and despite the bevy of criticisms leveled against the Company's analyses, Mr. Geller and Mr. Colton both rely on the information provided by the Company's analyses to support their own positions in testimony and support their own proposed changes to the BDP, which I will discuss later. The fact that Mr. Geller and Mr. Colton quote and use information from the Company's affordability analyses serves as a

testament to the robustness and usefulness that the Company's affordability analyses provide.

III. PROPOSED BILL DISCOUNT PROGRAM CHANGES

Q. Please review the Company's proposal for expansion of the BDP.

A. The Company's current BDP is available to customers whose annual household incomes fall between 0% and 150% of FPL with different levels of discounts available to customers within the three tiers of the existing program (0%-50% FPL, 51%-100% FPL, and 101%-150% FPL). The Company's current BDP discount levels are shown in the table below:

TABLE 2 BDP Discount Levels	Water Service Charge Discount	Water Service Volumetric Discount	Wastewater Total Bill Discount
0% - 50% FPL	80%	80%	80%
51% - 100% FPL	65%	50%	55%
101% - 150% FPL	40%	25%	30%

The Company is proposing in this case to add a fourth tier of eligibility to the current BDP and expand the program offerings to customers whose household incomes are between 151% and 200% of FPL. For water customers in this fourth tier of eligibility, the Company is proposing to offer discounts of 30% on the 5/8" meter charge and 15% on the volumetric rate for water service and for wastewater customers in this fourth tier of eligibility, the Company is proposing to offer a discount of 20% on the total wastewater bill. (PAWC Statement No. 10, p. 24 6:12).

Q. Did the Company propose to change the discounts offered to customers in household income tiers already in the BDP?

A. No. The Company has not proposed changes to the existing discount schedule.

Q. Which partes in this case address the Company's proposed changes to the BDP?

A. OCA Wtiness Colton and CAUSE-PA Witness Geller both address the Company's proposed changes to the BDP.

Q. What is OCA Witness Colton's position on the proposed changes to the BDP?

A. Mr. Colton supports the proposed expansion of the BDP to include a fourth tier as defined by PAWC, but with modifications to the discount level and other modifications to discount levels for currently qualifying customers in the BDP, which he states will provide needed improvements in the affordability of service for current qualifying customers based on the Company's rate proposals in this case. I have outlined Mr. Geller's proposed discount levels for currently qualifying customers in the table below:[1]

TABLE 3 OCA Proposed BDP Discount Levels	**Water Service Charge Discount**	**Water Service Volumetric Discount**	**Wastewater Total Bill Discount**
0% - 50% FPL	90%	80%	85%
51% - 100% FPL	75%	65%	73%
101% - 150% FPL	60%	40%	55%
151% - 200% FPL	30%	20%	37%

[1] OCA Statement No. 5 p. 49:3-50:13 and OCA Statement No. 5 Table 10 at p 45.

Q. Does CAUSE-PA Witness Geller support the Company's proposed changes to the BDP?

A. In his words, "yes and no". Mr. Geller's support of the Company's expansion proposal appears to be conditioned on the Company being required to first make certain improvements in the affordability and accessibility of its BDP for currently qualifying customers, including transitioning to a percentage of income payment structure ("PIP") which the Company does not support. (*See* the rebuttal testimony of Tawana Dean, PAWC Statement No. 14-R). Mr. Geller proposes a new set of discount levels for currently qualifying customers in the BDP that he claims will provide needed enhancements in the affordability of the program. I have outlined Mr. Geller's proposed discount levels for currently qualifying customers in the table below:[2]

TABLE 4 CAUSE-PA Proposed BDP Discount Levels	**Water Service Charge Discount**	**Water Service Volumetric Discount**	**Wastewater Total Bill Discount**
0% - 50% FPL	90%	80%	85%
51% - 100% FPL	75%	65%	73%
101% - 150% FPL	60%	40%	55%

I would note that although Mr. Geller does not specify a proposal for discounts at the 151%-200% FPL tier, the discounts for the existing tiers proposed by Mr. Colton and Mr. Geller are identical.

Q. Do you agree with Mr. Colton's and Mr. Geller's proposed changes to the Company's BDP?

[2] CAUSE-PA Statement No. 1, p. 43:16-46:12.

A. While PAWC continues to support its BDP, as proposed by the Company, it does not oppose the modifications recommended by Mr. Colton or Mr. Geller. The proposed discounts to the BDP offered by Mr. Colton and Mr. Geller would provide greater levels of affordability for customers at the lowest end of the income scale. The Company defers to the Commission as to the level of discounts it deems appropriate in this proceeding.

IV. REALLOCATION OF WASTEWATER REVENUE REQUIREMENT

Q. Please review the Company's proposal for reallocating a portion of wastewater revenue requirements under Pennsylvania Act 11.

A. The Company is proposing in this case to reallocate approximately 27% of the filed revenue requirement for wastewater service to water service customers, which is approximately $71 million. The guiding principle behind the Company's reallocation proposal is to target residential bills for average wastewater usage of approximately $100 per month for customers in the SSS Zone and $110 per month for customers in the CSS Zone. This proposed reallocation also results in residential bills for average water usage of approximately $90 per month, which brings parity to residential bills for water service and wastewater service at average usage levels. This also results in a BTI Ratio for wastewater residential customers that is less than 2023 levels, which in turn helps to manage the affordability of wastewater service and bring a level of parity to the affordability of water and wastewater service. (PAWC Statement No. 10, p. 46:8-48:7).

Q. What intervenors in this proceeding address the Act 11 Reallocation of wastewater revenue requirement to water customers?

A. I&E Witness Kubas, OCA Witnesses Mierzwa and Hoover, PAWLUG Witness LaConte, OSBA Witness Higgins, and CCS Witness Baudino all address Act 11 reallocation of wastewater revenue requirement to water customers.

Q. What is I&E Witness Kubas' position on the Company's reallocation proposal?

A. Mr. Kubas argues that the Commission should reject PAWC's proposal to shift $71,087,394 of wastewater revenue requirement from to water customers because: (a) the primary consideration should have been to design wastewater rates to recover cost of providing wastewater service; (ii) the wastewater rates proposed by I&E result in average bills that are reasonable considering all factors, and (iii) the Company's affordability analysis is flawed because it ignores the wastewater rates paid to other entities by PAWC water customers and ignores the benefits that it claims accrue to customers of being acquired by PAWC. Mr. Kubas argues that the BASA and Brentwood Act 11 amounts should be removed completely due to the I&E position that these acquisitions should be removed from the case, which reduces the reallocation to $47,969,463, and that changes should be made in the SSS amount to reduce the reallocation amount to $321,682 and the CSS reallocation amount to $35,835 (I&E Statement No. 3 Exhibit 3, Schedule 1).

Q. What is OCA Witness Hoover's position on the Company's reallocation proposal?

A. Ms. Hoover argues that PAWC's request to shift 94% of the wastewater revenue deficiency ($71M) to water customers, which represents 27% of total wastewater cost of service, is a departure from traditional ratemaking. She recommends utilizing the Bonbright framework for choosing what shift of wastewater to water to be approved and that the

Commission must examine whether similarly situated customers are being treated similarly, which she claims is significant when most of PAWC's customers do not receive PAWC wastewater service (OCA Statement No. 1, pp. 35-39).

Q. What is OCA Witness Mierzwa's position on the Company's reallocation proposal?

A. Mr. Mierzwa argues that assigning 94% of the wastewater revenue requirement increase to water customers is not reasonable. Mr. Mierzwa notes that the Commission recently approved a reallocation proposal in an Aqua proceeding that assigned approximately 20% of the proposed wastewater revenue requirement to water customers. I would note that these two data points are not an apples to apples comparison as the 94% figure represents a percentage of the total increase and the 20% figure Mr. Mierzwa cites for Aqua is a percentage of the total revenue requirement, which is not the same thing. He states that it would be reasonable to shift up to 75% of OCA's calculated SSS revenue requirement increase (approximately $15.2M) and up to 50% of OCA's calculated CSS revenue increase (approximately $3.7M) to water customers (OCA Statement No. 4 pp. 22-28).

Q. What is PAWLUG Witness LaConte's position on the Company's reallocation proposal?

A. Ms. LaConte argues that the proposed wastewater reallocation is too large in light of the small number of PAWC water customers who also receive wastewater service from the Company and because it reflects acquisitions where PAWC has agreed to set insufficient rates. (PAWLUG Statement No. 1, pp. 23-27).

Q. Are there other positions taken by these witnesses that you wish to separately address?

A. Yes. Ms. LaConte and Mr. Baudino generally state in their testimonies that any approved Act 11 revenue requirement should be allocated among water customer classes based on the corresponding wastewater classes that give rise to the revenue shortfall. (PAWLUG Statement No. 1, pp. 23-27 and OSBA Statement No. 1, pp. 33-34). Mr. Baudino's position appears to go one step further, recommending that if the Commission approves a reallocation of wastewater revenue to water service customers, the total wastewater reallocation to the water service customer class should be based on each water service class's proportionate share of total water service cost responsibility, and that the classes to whom these amounts should be allocated are the Residential, Commercial, Industrial, Public, and Private Fire classes (CCS Statement No. 1, pp. 7-8).

Q. What is your position regarding the allocation of Act 11 amounts to water service customer class?

A. In practice, the customer classes around which wastewater rates are developed are not the same as the customer classes used to develop water rates, so there will never be a one to one match where you can cleanly identify Act 11 wastewater amounts by customer class and assign them to the same classes for water service. It is appropriate to match a class for class reallocation as much as possible but there will always be an element of an allocation to water service customers based on cost of service.

Q. How do you respond to the arguments that an Act 11 reallocation as large as the Company is proposing is too large in light of the small number of PAWC water customers who also receive wastewater service from the Company and the fact that most water customers take wastewater service from another supplier?

A. By virtue of its existence, Act 11 contemplates the possibility that most water customers whose rates may be affected by this statute may already take similar services from a different service provider, so the fact that most water customers take wastewater service from another supplier is not an issue. As I stated in my direct testimony, the Company's proposed reallocation results in an increase in residential water volumetric rates of $0.19 per hundred gallons, which would increase the monthly water bill of a Rate Zone 1 residential water customer with an average usage of 3,200 gallons per month by approximately $6.08 per month. In contrast, this reallocation results in lower wastewater residential bills for approximately the same usage level of anywhere from $10 to $90 per month depending on the rate and location of the customer. The Company's proposal seeks to maximize the total number of customers for whom water and wastewater service will fall within the Company's proposed benchmark of 2% of household income at the individual household level.

Q. How do you respond to the arguments that the Act 11 reallocation is unreasonable because it reflects acquisitions where PAWC has agreed to set insufficient rates?

A. Again, by virtue of its existence, Act 11 contemplates the possibility that acquired wastewater systems may not be able to implement sufficient rates necessary to support investment needed in those systems at levels that are affordable for their customers. The

purpose of Act 11 is to alleviate this concern and spread costs for needed improvements in these systems over a larger customer base. Initial rate changes in newly acquired systems are sufficient to carry needed investments if all of the investments are required to be recovered exclusively from the customers of those systems upfront. A reallocation of a portion of the revenue requirement to a larger customer base can ease the burden on new system customers and further the goal of consolidation and prudent investment in these systems. The long-term benefits of consolidation are already experienced by existing customers, and the Company's proposal allows those benefits to be extended to new customers as well. (*See* the rebuttal testimony of Company Witness Runzer, PAWC Statement No. 2-R).

Q. Does the Company continue to support its general approach to its Act 11 reallocation proposal?

A. Yes. The Company continues to support its methodology and reasoning for its proposed reallocation of a portion of wastewater revenue requirements to water customers under Act 11. While ultimate revenue requirements for water service and wastewater service may change from that originally proposed by the Company, the guiding principles for the Company's reallocation are sound and should be followed by the Commission.

V. RATE DESIGN

A. INTRODUCTION

Q. Did other intervenors comment on the Company's rate design in this case?

A. Yes. Comments on the Company's water and wastewater rate design were provided by I&E Witness Cline, OCA Witness Mierzwa, OSBA Witness Higgins, PAWLUG Witness LaConte, CEO Witness Warabak, CCS Witness Baudino, and CAUSE-PA Witness Geller.

Q. How will you be addressing these comments in your rebuttal testimony?

A. I will address comments specific to the Company's water rate design in the water rate design section of my testimony, and I will address comments specific to the Company's wastewater rate design in the wastewater rate design section of my testimony

B. <u>SCALE BACK OF RATES</u>

Q. What is the Company's position on the scale back of rates?

A. The Company's position for scale back of rates is that in the event that the Commission approves a revenue requirement that is less than that proposed by the Company, the Company proposes to reduce the revenue requirements for water service and wastewater service, and the proposed amount of reallocation from wastewater to water under Act 11 to be proportional so that the same relative percentages to the total of water service revenue requirement, wastewater service revenue requirement, and Act 11 reallocation amounts be maintained at proposed levels. The Company believes that the levels of rates for water service and wastewater service relative to each other should be maintained as proposed in the event that a lower revenue requirement is approved by the Commission in this case. (PAWC Statement 10, p. 16:16-17:5).

Q. Do parties in this case have proposals for the scale back of rates in the event that the Pennsylvania Public Utility Commission ("Commission") orders a revenue requirement increase less than what the Company is proposing in this case?

A. Yes. I&E Wtiness Cline, OCA Witness Mierzwa, OSBA Witness Higgins, and PAWLUG Witness LaConte all make proposals regarding the scale back of rates if the Commission orders a revenue requirement increase that is less than what the Company is proposing in this case.

Q. What is I&E Witness Cline's position on the scale back of rates?

A. Mr. Cline states that the first step that must be completed in any scale back is to determine the revenue requirement and scale back for wastewater operations. He asserts that must be set first in order to determine the amount of revenue requirement that must be allocated to water operations. (I&E Statement No. 4, p. 41:20-42:10). Mr. Cline recommends that any scale back to wastewater revenue requirement should be netted against the Act 11 allocation the Commission determines for wastewater operations. (I&E Statement No. 4, p. 42 12:15). For water service, Mr. Cline recommends that both usage rates and customer charges be decreased to produce a revenue level approved by the Commission in the event that a revenue requirement for water service is approved at levels below the Company's recommended amount, but that usage rates for the Rate Zone 2 residential and commercial and the Rate Zone 4 commercial rate classes not be scaled back as long as they remain lower than the usage rates in Rate Zone 1. (I&E Statement No. 4, p. 42:17-44:8).

Q. What is OCA Witness Mierzwa's position on the scale back of rates?

A. Mr. Mierzwa's comments on scale back appear to be confined to water service. Mr. Mierzwa recommends that in the event a lower than requested water revenue requirement increase is authorized by the Commission, that the direct cost of service indicated in his class cost of service study for each customer class which, would exclude the Act 11 allocation, be proportionately scaled back to reflect the actual water revenue increase authorized by the Commission in this proceeding. (OCA Statement No. 4, p. 30:3-15).

Q. What is OSBA Witness Higgins' position on the scale back of rates?

A. Mr. Higgins recommends that if the Commission approves a lower revenue requirement increase than proposed by PAWC, the decrease be applied principally to the water rates. He states that as long as the cost-based wastewater increase associated with the approved revenue requirement is greater than PAWC's proposed wastewater rates, the incremental revenue requirement reduction should not reduce PAWC's proposed wastewater rates, which means that a lower revenue requirement will reduce Act 11 revenues and PAWC's proposed water rates generally. For water service, he recommends scaling each water class's revenues in proportion to each class's share of the total proposed non-Act 11 revenues in his revenue allocation (Schedule KCH-9), which is calculated at PAWC's requested revenue requirement. (OSBA Statement No. 1, p. 36:15–37:10).

Q. What is PAWLUG Witness LaConte's position on the scale back of rates?

A. Ms. LaConte recommends that if the requested revenue requirement by the Company is reduced, the reduction should apply to the Act 11 wastewater allocation first. In addition, she recommends that any decrease that is allocated to industrial and municipal customers

apply to volumetric rates only, and that PAWLUG's proposed increases to the fixed monthly charges for these rate classes remain the same. (PAWLUG Statement No. 1, P. 29:10-30:2).

Q. Do you have any comments on the intervenor's positions on the scale-back of revenue requirements?

A. I do. To begin, I note that Mr. Cline is correct in stating that the first step in any scale back determination is to determine the revenue requirement for wastewater operations and a scale back for wastewater operations, because that must be set first in order to determine the amount of revenue requirement that must be allocated to water operations. Also, I do not object to his proposal that, in the event that a revenue requirement for water service is approved at levels below the Company's recommended amount, there is a reduction of both usage rates and fixed charges, but that usage rates for the Rate Zone 2 residential and commercial and the Rate Zone 4 commercial rate classes not be scaled back as long as they remain lower than the usage rates in Rate Zone 1. I would note that this recommendation is contrary to Ms. LaConte's recommendation that fixed charges not be reduced for industrial and municipal customers. I also do not object to recommendations that any reductions in water service revenue requirements be applied ratably across customer classes.

However, a running theme in all of the scale back proposals is that any reductions in revenue requirements for wastewater service be applied to the Act 11 reallocation amounts first, and the Company does not support that position. If revenue requirement reductions to wastewater customers are first applied to Act 11 amounts, that effectively

becomes a revenue requirement reduction to water service instead. Under these proposals, wastewater rates would only be reduced due to a reduction in wastewater revenue requirement in the event that reduction was greater than a proposed Act 11 reallocation amount. The Company does not support that position and believes that in the event that a reduction in wastewater revenue requirements is ordered by the Commission, reductions in wastewater rates should result from that decision.

Q. Does the Company continue to maintain its position on scale back as outlined in your direct testimony?

A. Yes. The Company's proposal for scale back is designed such that the same relative percentages to the total of water service revenue requirement, wastewater service revenue requirement, and Act 11 reallocation amounts be maintained at proposed levels and that the levels of rates for water service and wastewater service relative to each other should be maintained as proposed in the event that a lower revenue requirement is approved by the Commission in this case. This approach results in a just and reasonable outcome for all customer groups and should be approved by the Commission.

C. WATER RATE DESIGN

Introduction

Q. What intervenors in this proceeding address issues related to water service rate design?

A. I&E Witness Cline, OCA Witness Mierzwa, PAWLUG Witness LaConte, CEO Witness Warabak, OSBA Witness Higgins, and CCS Witness Baudino all address issues related to water service rate design in this case that I will be addressing in my rebuttal testimony.

Class Revenue Allocations

Q. Are there issues related to the allocation of revenue requirements by customer class that you will be addressing in your rebuttal testimony?

A. Yes. OSBA Witness Higgins and CCS Witness Baudino both offer alternative approaches to revenue allocations that I will address. I note that Company Witness Heppenstall generally addresses cost of service in her rebuttal testimony, and it is the Company's position that water service rates should generally be based on cost of service as modified by any Act 11 revenue reallocations to customer class and reallocations of revenue requirements from Public Fire and Other Water Utilities classes.

Q. What are Mr. Higgins and Mr. Baudino's proposals regarding allocation of revenue requirements that you would like to address?

A. Mr. Higgins offers an alternative revenue allocation for water operations that he claims improves alignment with costs that reflects a $5.3M lower increase for the Commercial class and a $5.3M higher increase for the Municipal class than PAWC's proposal (OSBA Statement No. 1, p. 35-37). Mr. Baudino also recommends an alternative approach to revenue allocation that results in a higher increase for the Municipal class and a lower increase for Residential, Commercial, Industrial, and Private Fire classes (CCS Statement No. 1, p. 12). In both of these proposals, the common theme is a higher increase to the

Municipal class than proposed by the Company and the lower increases to other customer classes to compensate.

Q. What is the Company's position regarding a higher increase for Municipal customers and a lower increase for other classes as proposed by Mr. Higgins and Mr. Baudino?

A. The Company is not opposed to higher increases for the Municipal class as proposed by Mr. Higgins and Mr. Baudino with offsetting decreases to other customer classes.

Meter Charges

Q. Please summarize the various parties' positions on monthly meter charges.

A. OCA Witness Mierzwa proposes no changes to the Company's existing monthly meter service charges, leaving the 5/8" meter charge at $17.50 per month. (OCA Statement No. 4, pp. 35-36). CEO Witness Warabak also opposes any increase to the fixed residential customer charge because he claims it will impact a customer's motive and ability to conserve (CEO Statement No. 1, pp. 5-6). Ms. LaConte recommends doubling the Company's proposed meter charges for industrial customers for 6" meter charges and above and decreasing volumetric rates for industrial customers accordingly (PAWLUG statement No. 1, pp. 28-29). She states that these changes will provide a more stable revenue stream to PAWC. Mr. Baudino recommends that the Company's proposal not to increase meter charges for industrial charges be rejected and that meter charges and volumetric charges for industrial customers should be increased by the same percentage amount. (CCS Statement No. 1, pp. 13-14).

I&E Witness Cline proposes a 5/8" meter charge of $19.50 per month and provides an alternative set of monthly meter charges based on that proposal. He does not oppose the Company's proposals for residential customers with meters larger than 1 ½ inch. He states that PAWC's proposals to increase commercial and municipal rate class customer charges are in a reasonable 7-8% increase range and does not recommend adjusting the proposed customer charges for industrial and Other Water Utilities. (I&E Statement No. 4 pp. 30-35).

Q. Does the Company continue to support its proposal for a $20 5/8" meter charge?

A. Yes. Mr. Cline correctly points out that the Company provided two customer cost analyses for the forecast test year in Company Witness Heppenstall's direct testimony (PAWC Ex. 12-A, Appendix A, Attachment RS1j). The results of the Company's first cost analysis reflect a fully allocated customer cost revenue requirement calculation that results in a unit cost and a 5/8" meter charge of $24.63 per month (PAWC Ex. 12-A, Appendix A, Attachments RS1j, p. 1). The second analysis considers an allocation of costs that is restricted to direct customer-related costs only and results in a 5/8" meter charge of $19.31 per month, both of which are higher than the Company's current charge of $17.50 per month (PAWC Ex. 12-A, Appendix A, Attachments RS1j, p. 2).

Both analyses are reasonable methodologies for considering the calculation of a monthly meter service charge, and the results from these analyses represent a window within which a cost-based meter charge can be determined. Choosing the lower amount of $19.31, which is based on costs that are only direct customer-related costs, is an extreme position to take; just as extreme as saying that volumetric rates should only consider costs

that change with the volumes of water sold. It is more appropriate to also consider the fully allocated revenue requirement associated with business functions that are customer related when determining the monthly meter charge. Therefore, the Company's proposal of $20 per month represents a compromise between these two endpoints and errs on the side of the more conservative $19.31 per month calculation.

Q. Do you agree with Ms. LaConte's proposal to artificially double the meter charges for industrial 6" meters and above?

A. I do not. The Company did not propose any changes to meter charges for industrial and Other Water Utilities classes, as these meter charges are already more than double the Company's proposed meter charges for residential and commercial charges for meter sizes of 4" and above. Ms. LaConte's proposal would have these meter charges be more than four times the proposed meter charges for residential and commercial charges with no apparent basis in cost. The differences in meter charges between commercial and industrial charges are already very substantial and there is no cost-basis for further increases.

Q. Do you agree with Mr. Baudino's proposal to increase meter charges for industrial charges for industrial customers at the same percentage as volumetric rates?

A. I do not. As I stated previously, the meter charges are already very substantial and there is no cost-basis for further increases to these charges.

<u>Volumetric Rates</u>

Q. What is I&E Witness Cline's position on volumetric rates for water service.

A. Mr. Cline argues that the Company's proposals to set usage rates in Rate Zone 3 (SLIBCO), residential and municipal usage rates in Rate Zone 4 (Turbotville), and usage rates in Rate Zone 5 (Steelton) to be equal to Rate Zone 1 are generally reasonable but notes that the volumetric rates will need to be increased slightly in light of I&E's reduced customer charge recommendation. Mr. Cline opposes setting Rate Zone 2 (Valley) equal to Rate Zone 1 as it would lead to what he claims are an unreasonable percentage increase and proposes a separate set of usage rates for Rate Zone 2 at I&E Statement No. 4 p. 38 which are approximately 77% of the Company's Rate Zone 1 proposed residential rate and approximately 81% of the Company's proposed Zone 1 commercial rate. He also opposes setting Rate Zone 4 commercial to Rate Zone 1 for similar reasons and recommends usage rates for commercial customers in Rate Zone 4 that are approximately 81% of the Company's proposed Zone 1 commercial rate. (I&E Statement No. 4, pp. 36-41).

Q. What is OCA Witness Mierzwa's position on volumetric rates for water service.

A. Citing gradualism, Mr. Mierzwa recommends that residential volumetric rates in Rate Zone 2 (Valley) usage rate be set at 70% of Rate Zone 1 rates established in this case, and that Rate Zone 1 usage charges should be designed to recover the approved revenue requirement that is not recovered through OCA's recommended customer charge. (OCA Statement No. 4, pp. 36-37)

Q. What is PAWLUG Witness LaConte's position on volumetric rates for water service?

A. As I previously stated Ms. LaConte recommends decreased volumetric rates from those proposed by the Company for industrial customers to match her proposed increases in

meter charges for industrial customers, claiming that these changes will provide a more stable revenue stream to PAWC and reduce the chance that the industrial class will pay more than its cost to serve if sales are higher than projected. (PAWLUG Statement No. 1, pp. 28-29).

Q. What is CCS Witness Baudino's position on volumetric rates for water service?

A. Mr. Baudino recommends that volumetric charges and meter charges for industrial customers should be increased by the same percentage amount. (CCS Statement No. 1, pp. 13-14).

Q. Do you accept Mr. Cline's and Mr. Mierzwa's recommendations for reducing proposed Rate Zone 2 (Valley) rates and Rate Zone 4 (Turbotville) commercial rates?

A. No. The Company believes that the increases for Rate Zone 2 (Valley) and the commercial increases for Rate Zone 4 (Turbotville) are not unreasonable given the relative level of rates currently in place. The Company continues to support full integration of Rate Zone 2 and Rate Zone 4 rates into the Company's single -tariff statewide rate.

Q. Do you accept Ms. LaConte's and Mr. Baudino's proposals regarding industrial volumetric rates?

A. No. I Continue to support the Company's proposal for leaving monthly meter charges for industrial customers unchanged. Volumetric rates for industrial customers should be designed to collect the total revenue allocated to that class less revenues from current industrial meter charges.

Q. In Company Witness Everette's testimony, she discusses an alternative proposal regarding the inclusion of revenue requirements for the Brentwood and BASA acquisitions, which would include a separate set of rates for "Step 1," "Step 2," and "Step 3." "Step 1" would be a set of rates excluding the revenue requirements for BASA and Brentwood, "Step 2" would include revenue requirements for BASA but nor for Brentwood, and "Step 3" would include the revenue requirements for both BASA and Brentwood (PAWC Statement No. 1-R, pp. 5-6). Have you reviewed Ms. Everette's rebuttal testimony regarding this alternative proposal?

A. Yes, I have.

Q. Are you submitting any alternative rate designs for Step 1, Step 2, and Step 3 at this time in your rebuttal testimony?

A. I am not submitting an alternative rate design at this time for Step 1 or Step 2. I note that the Company's filed rate design in this proceeding, based on its proposed revenue requirement, is effectively the Step 3 rate design because it includes both the revenue requirements for BASA and Brentwood and includes a reallocation of wastewater revenue requirements to water service under Act 11 that reflects the inclusion of rates for BASA and Brentwood.

Q. Does the proposal for a Step 1 and Step 2 revenue requirement affect proposed wastewater rates for BASA and Brentwood?

A. No. Because the Company's proposed wastewater rates for BASA and Brentwood are already based on the Company's proposed revenue requirement for those acquisitions, less

an amount of reallocation of revenue requirement to water service under Act 11, those rates would not change based on the exclusion of those revenue requirements from either Step 1 or Step 2. The only thing that would change regarding the Company's proposed wastewater rates is the effective date of the rates and the tariffs associated with those rates.

Q. Does the proposal for a Step 1 and Step 2 revenue requirement affect proposed water service rates?

A. Yes. The proposed water service rates are affected by the exclusion of revenue requirements for BASA and Brentwood because the total reallocation of wastewater revenue requirements to water service under Act 11 would change based on the exclusion of BASA and Brentwood. Under Step 1 rates, the Act 11 reallocation to water service would only be based on reallocated revenue requirements for the SSS and CSS wastewater pricing groups, so water service rates in total would be reduced from the Company's originally proposed levels. Under Step 2 rates, the reallocation of revenue requirements from the BASA system would be included but a reallocation of revenue requirements from the Brentwood system would not be included, so water service rates would increase from Step 1, but still would be at a reduced level from the Company's originally proposed rates. It would only be at Step 3 when the Act 11 reallocation from both the BASA and Brentwood systems would be in place would water service rates be equal to the Company's originally proposed water service rates.

D. WASTEWATER RATE DESIGN

Winter Averaging

Q. Please describe the Company's proposal for wastewater rate design as it relates to the concept of winter averaging.

A. The Company is proposing to change the way that it determines the volumetric component of bills for residential customers from the method used today, where volumetric charges are based on total metered water usage for the month, to a methodology referred to as winter averaging. Winter averaging is a method for determining volumetric components of wastewater bills that attempts to separate metered water usage that is likely to go through the wastewater system from water usage that is used for outdoor purposes in the summertime (e.g., watering lawns, filling pools, etc.). Under winter averaging, a customer's bill in the wintertime is determined by actual metered water usage for the month, and in the summertime, the customer's bill is determined by the lesser of actual metered water usage for the month or the average water consumption for that customer in the winter months. This calculation is done individually for each customer and is a common way that wastewater utilities bill customers for wastewater service. The practical effect of this approach is that customers who use water in the summertime that does not go through the wastewater system will no longer be billed for that usage on their sewer bills, and the volumetric rate for wastewater service will be slightly higher than it otherwise would have been because total billing determinants will be reduced. (PAWC Statement No. 10, p. 43:1-45:14).

Q. Did the Company propose winter averaging for all of its wastewater pricing zone?

A. The Company proposed Winer Averaging for all wastewater customers except for customers in the Scranton district. The Company did not propose winter averaging in the Scranton rate zone because the Company did not propose any changes in Scranton rates.

Q. If the Commission orders a change in rates for Scranton customers, does the Company propose to implement its winter averaging proposal for Scranton rates?

A. Yes. If the Commission orders a change in Scranton rates, the Company proposes that the winter averaging billing methodology would also apply to Scranton, and billing determinants for Scranton rates would change accordingly.

Q. Are there parties that address the Company's proposal for modifying wastewater rates and wastewater billing determinants to account for winter averaging?

A. Yes. I&E Witness Kubas, OCA Witnesses Mierzwa and Colton, and CAUSE-PA Witness Geller all address the Company's proposal regarding Winter Averaging.

Q. What is Mr. Kubas's position on the Company's winter averaging Proposal?

A. Mr. Kubas does not oppose the Company's winter averaging proposal but suggests two conditions. Mr. Kubas states that if the Commission approves the proposal, none of the revenue shortfall from this proposal should be recovered from other wastewater customers or water customers. Secondly, Mr. Kubas recommends that the Commission determine that the proposal is approved initially as a temporary program to permit the resulting revenue impacts to be evaluated in the first rate case following its implementation. (I&E Statement No. 3, p. 55-17:21).

Q. What is Mr. Mierzwa's position on the Company's winter averaging proposal?

A. Mr. Mierzwa opposes the Company's proposal, stating that the difference between winter usage and summer usage in the Company's service territory can be explained by a few extra showers and clothes washing loads per month in the summertime and that this would totally account for the historic difference between Residential winter and summer water usage. Therefore, he posits, it does not necessarily follow that PAWC's Residential customer outdoor water usage during the summer is sufficiently significant to justify adopting winter averaging and the resulting increase in volumetric rates and should be rejected. (OCA Statement No. 4, p.43:1-18).

Q. What is Mr. Colton's position on the Company's winter averaging proposal?

A. Mr. Colton opposes the Company's proposal for winter averaging, but states that should the winter averaging proposal be adopted, it should be made subject to the same low-income discounts that other PAWC volumetric charges are made subject to. In support of his position, Mr. Colton claims the following:

- Mr. Colton testifies that there is not a substantial variability in residential water bills (and thus in residential consumption) between the winter periods and the non-winter periods defined by the Company needed to support the Company's proposal. In support of this, Mr. Colton conducts an analysis of median usage levels by month that he asserts shows a relative lack of variability in bills between summer and non-summer months at the median level. (OCA Statement No. 5 p. 97:14 through p. 99).

- Mr. Colton claims that there are a significant number of residential customers that have usage in the summer but no usage in the winter whom he labels "snowbirds". Mr. Colton claims that usage for these customers in the summer is higher than in the winter, not because this usage is outdoor usage, but that because these customers aren't home during the winter and, therefore, it is incorrect to assume that their summer usage does not go through the wastewater system. (OCA Statement No. 5 p. 97 through p. 101:12)

- Mr. Colton states that the Company's assumption of using a standard usage level of 3,000 gallons per month for new customers with no winter usage history unfairly penalizes new customers as those customers, according to Mr. Colton, are likely to have usage levels lower than 3,000 gallons per month as shown on Table 28 of his direct testimony. (OCA Statement No. 5, p. 101:13-104:12)

- Mr. Colton states that lower-income customers are less likely to be residents of homes with substantial outdoor summer consumption. As a result, low-income customers will be less likely to have their summer wastewater bills capped at a lower level than those bills historically have been and these customers will be called upon to bear the burden of the foregone revenue from having non-water bills capped, with little opportunity to be a recipient of any of the reduced bills. (OCA Statement No. 5, p. 105:4-10).

- Mr. Colton states that customers who have non-winter usage capped at no more than their winter usage have substantial upward variability in their consumption and that customers who would not benefit from the winter averaging process have extremely low usage. He claims that by capping non-winter bills at no more than winter consumption, the Company is redistributing dollars from higher use customers to "chronically" lower use customers which are disproportionately likely to be low-income customers (OCA Statement No. 5 p. 106:9-109:2).

Q. What is Mr. Geller's position on the Company's winter averaging proposal?

A. Mr. Geller opposes the Company's proposal, asserting that the Company's proposal improperly shifts the revenue burden from higher income customers who reside in single-family homes and have the luxury of discretionary water use to customers with lower income, and those that live in smaller homes. He states that lower income customers who cannot afford to engage in higher discretionary water use in non-winter months, and customers residing in smaller homes, should not be penalized for lower water use in non-winter months compared to their higher income counterparts.(CAUSE-PA Statement No. 1, p. 13:18-14:7).

Q. How do you respond to Mr. Kubas' proposals that revenue differences should be recovered from other wastewater customers and that the Commission should approve

this change initially as a temporary program to permit the resulting revenue impacts to be evaluated in the first rate case following its implementation?

A. I agree that revenue differences related to implementation of winter averaging should be recovered from other wastewater customers, and this is in fact the case under the Company's proposal. However, it is not practical to approve this only as a temporary program and examine the results in a future rate case without effectively "shadow billing" (i.e., tracking what customers' bills would be absent utilization of winter averaging) these customers to see what bills would have been without winter averaging. This is because winter averaging involves both a change in rates and a change in billing determinants. The Company does not support a proposal that would require shadow billing of customers for an extended period or approval of this change in rate design as a temporary change.

Q. How do you respond to Mr. Mierzwa's assertion that residential customer outdoor water usage during the summer is not significant enough to justify adopting winter averaging?

A. Usage modeling that I discussed in my direct testimony shows that there are statistically significant levels of water consumption in the summertime that are specifically tied to changes in weather. It is not true that water usage during the summer is not significant enough to justify adopting winter averaging.

Q. How do you respond to the argument that the proposed winter averaging rate design unfairly benefits higher income customers and negatively impacts lower income customers?

A. I concede that the beneficiaries of the Company's winter averaging proposal are likely to be higher income customers because it is these customers that are more likely to have seasonal water usage in the summertime that would no longer be billed for wastewater service. However, cost causation principles clearly indicate that water used by customers that does not enter the wastewater system in the summertime should not be charged for wastewater service. The current system, therefore, has higher income customers subsidizing lower income customers through wastewater rate design. The Company's proposal is to introduce a stronger cost causation element into wastewater rate design and eliminate this subsidy.

Q. How do you respond to Mr. Colton's "snowbird" argument?

A. There will always be a group of customers whose usage patterns may provide advantages under certain rate structures and disadvantages under other rate structures. This is not a reason to leave rate structures in place that have elements that clearly run counter to cost causation principles.

Q. How do you respond to Mr. Colton's argument that the standard 3,000 gallon assumption for new customers with no winter usage history unfairly discriminates against customers that are more likely to be new customers?

A. The Company chose the standard amount of 3,000 gallons per month to be consistent with its definition of Basic Water Service at 40 gallons per household member per day for an average household size of 2.5 persons per household. If it is determined that the most

likely levels of usage for new customers is less than 3,000 gallons per month, the Company is open to proposing a lower standard threshold.

Q. Given these arguments, does the Company continue to support its winter averaging proposal?

A. Yes. Cost causation principles indicate that it is not appropriate to charge customers for wastewater usage in the summertime based on water that does not go through the sewer system. While there is potentially a minimal impact on lower income customers, this impact is dampened through discounts offered through the BDP. The Company continues to believe that the winter averaging methodology I proposed in my direct testimony is the most appropriate way to bill for wastewater services.

SSS Rates

Q. What is Mr. Kubas' position regarding SSS wastewater rates?

A. Mr. Kubas proposes an overall increase of approximately 34% to total SSS wastewater rates after application of Act 11 reallocations (I&E Statement No. 3 Schedule 4) which includes a 50% increase for York rates (Zone 5), a 65% increase for Royersford rates (Zone 9) and 30% - 40% increases in other rate zones. His rate design (I&E Statement No. 3 Schedule 3) features the following:

- $15.00 residential service charge (less than that proposed by the Company)
- $36.70 nonresidential service charge
- $132.00 unmetered service charge per month for residential customers
- $150.00 unmetered service charge per month for nonresidential customers

- $3.740 per hundred gallon residential volumetric charge for Rate Zones 1, 2 (New Cumberland), and 5 (Valley) and the second volumetric block for Rate Zone 7 (York)
- $3.150 per hundred gallon nonresidential volumetric charge for Rate Zones 1, 2 (New Cumberland), and 5 (Valley) and $2.800 for the second volumetric block for Rate Zone 7 (York)
- Volumetric charges for Rate Zone 9 (Royersford) at approximately 50% - 60% of I&E proposed volumetric rates for Rate Zone 1
- Partial elimination of the allowance block for York customers
- 50% increase for York bulk customers
- 45% increase for Flat rate (special) customers in Rate Zone 1
- 40% - 60% increases for Strattanville Borough and St. Lawrence Borough
- 50% increase in volumetric rates for Westwood Fire Company (Valley)
- 80% increase in volumetric rates for Rainbow Warehouse (Valley)

Q. What is Mr. Mierzwa's position regarding SSS wastewater rates?

A. Mr. Mierzwa proposes an overall increase of approximately 5.4% to total SSS wastewater rates after application of Act 11 reallocations (OCA Statement No. 4, p. 39). He disagrees with the Company's proposal to set residential monthly charges at $20.00 per month and proposes to keep these charges at $14.30 per month. He agrees with the Company's proposal to phase-out the allowance for York customers, but appears to be silent on other rate design proposals made by the Company, other than to argue that PAWC's volumetric rate proposals be proportionately adjusted to recover the cost of service approved by the

Commission for each current SSS and CSS customer class, and for SSS and CSS Residential customers, any revenue deficiency resulting from the adoption of his monthly Residential customer charge recommendations. (OCA Statement No. 4, p. 39 and pp. 46-48).

Q. How do you respond to Mr. Mierzwa's proposal for SSS rates?

A. I disagree with Mr. Mierzwa's proposal to leave the residential monthly charge at $14.30. The Company's proposed residential service charge is consistent with the Company's proposed 5/8" meter charge for water service and is generally consistent with the I&E proposal for 5/8" meter charges for water service. The Commission should adopt the Company's proposed $20 service charge for residential service.

Q. Does Mr. Kubas' proposed rate design for SSS customers generally follow your proposed rate design?

A. There are no significant differences in structure between Mr. Cline's proposed redesign for unmetered service customers and the Company's rate design for unmetered service customers, but there are a number of specific areas where I do not agree with Mr. Cline's proposed rate design.

Q. Do you agree with Mr. Kubas' overall levels of increases for SSS customers?

A. I do not agree with these levels of increases. These increases do not adequately balance the tradeoffs in affordability for SSS customers relative to the Company's water service customers and will result in levels of affordability as measured by the BTI Ratios for these

groups that are too high. The Company continues to recommend the rate design for SSS customers as originally proposed.

Q. Do you agree with Mr. Kubas' level of service charges for SSS customers?

A. No. The $15 residential service charge is not consistent with Mr. Cline's proposal for CSS customers or his proposal for 5/8" meter charges for water service customers. The Company continues to support its proposal for $20 residential monthly meter charges.

Q. Do you agree with Mr. Kubas' charges for unmetered service?

A. I do not, but I recognize that the charge for unmetered service is a function of the overall increase applied to SSS customers. The charge for unmetered service should be based roughly on the total bill for an average level of usage for a residential customer under volumetric rates that are approved in this case. This is how the Company's original proposal was developed.

Q. Do you agree with the 50% increase Mr. Kubas proposes for York bulk customers?

A. I do not. Company Witness Abruzzo addresses issues specific to York Bulk customers.

Q. Do you agree with the increases Mr. Kubas proposes for special flat rate customers, Strattanville Borough, St. Lawrence Borough, Westwood Fire Company, and Rainbow Warehouse?

A. No. The overall increase for these customers should be consistent with the overall increase approved by the Commission for the SSS group in total.

Q. Are there any aspects of Mr. Kubas' proposed rate design for SSS customers that you do support?

A. Yes. I agree with Mr. Kubas' proposal to begin elimination of the allowance block for York customers, and I agree with the general level of rates set for York customers compared to Zone 1 rates (apart from Bulk customers which is separately addressed by Company Witness Abruzzo), and the general level of rates set for Rate Zone 9 (Royersford) relative to Zone 1 rates.

CSS Group Rates

Q. What is Mr. Kubas' position regarding CSS wastewater rates?

A. Mr. Kubas proposes an overall increase of approximately 20% to total CSS wastewater rates after application of Act 11 reallocations (I&E Statement No. 3 Schedule 16) which includes a 27% increase for Scranton rates and 5% - 6% increases for Kane and McKeesport. His rate design (I&E Statement No. 3, Schedule 17) features the following:

- $20.00 residential service charge (same as proposed by the Company)
- $40.00 nonresidential service charge
- $2.900 per hundred gallon residential volumetric charge
- $2.580 per hundred gallon nonresidential volumetric charge
- $113.00 unmetered service charge per month
- Full consolidation of McKeesport and Kane rates
- No changes to McKeesport bulk rates

Q. What is Mr. Mierzwa's position regarding CSS wastewater rates?

A. Mr. Mierzwa proposes an overall increase of approximately 4.7% to total CSS wastewater rates after application of Act 11 reallocations (OCA Statement No. 4, p. 39). As with SSS rates, he disagrees with the Company's proposal to set residential monthly charges at $20.00 per month and proposes to keep these charges at $14.30 per month. Mr. Kubas appears to be silent on other specific rate design proposals made by the Company other than to argue that PAWC's volumetric rate proposals be proportionately adjusted to recover the cost of service approved by the Commission for each current SSS and CSS customer class, and for SSS and CSS Residential customers, any revenue deficiency resulting from the adoption of his monthly Residential customer charge recommendations. (OCA Statement No. 4, p. 39 and pp. 46-48).

Q. Do you have any commentary on Mr. Mierzwa's proposal for CSS rates?

A. As with his proposal for SSS Rates, I disagree with Mr. Mierzwa's proposal to leave the residential monthly charge at $14.30. The Company's proposed residential service charge is consistent with the Company's proposed 5/8" meter charge for water service and is generally consistent with the I&E proposal for 5/8" meter charges for water service and their proposal for residential service charges for CSS rates. The Commission should adopt the Company's proposed $20 service charge for residential service for CSS customers.

Q. Does Mr. Kubas' proposed rate design for CSS customers generally follow your proposed rate design?

A. Yes, they do, generally speaking.

Q. Do you agree with the increase Mr. Kubas proposed for Scranton rates?

A. I do not. Company Witness Gress addresses issues related to wastewater rates for the Scranton system.

Acquisitions

Q. What recommendations do Mr. Kubas and Mr. Mierzwa make regarding rates for the Company's proposed acquisitions?

A. Mr. Kubas and Mr. Mierzwa do not address rate design for the Company's proposed acquisitions in this proceeding as I&E and OCA advocate for removal of the proposed acquisitions from the case. Company Witness Abruzzo addresses the Company's proposal regarding acquisitions.

VI. REVENUE CALCULATIONS

Q. What issues related to revenue calculations are you addressing in your rebuttal testimony to in this proceeding?

A. I will be addressing issues related to concomitant adjustments related to acquisitions, and late payment revenues.

Q. What issues do intervenors raise related to concomitant adjustments for acquisitions?

A. OCA Witness Smith and I&E Witnesses Cline both argue for revenue adjustments to the Company's proposed revenues based on OCA and I&E opposition to inclusion of those acquisitions in the case. The revenue reductions are as follows (Smith pp. 49-52, Cline pp. 4-10):

TABLE 5
Acquisition Revenue Adjustments

Adjustments	Amount
AWC – Water	$2,965,024
Farmington - Water	$266,371
Farmington - Wastewater	$322,926
Sadsbury - Wastewater	$471,228

Q. What is your position regarding the revenue adjustments for acquisitions?

A. The Company opposes removal of revenue calculations for acquired service territories and opposes the removal of those acquisitions from the case. Company Witnesses Abruzzo and Everette address the Company's position regarding acquisitions in more detail.

Q. What issues do intervenors raise related to late-payment revenues?

A. I&E Witness Kubas proposes an increase in Other Operating Revenues for the SSS Wastewater Group and the CSS Wastewater Group of $154,448 and $78,775 respectively (Kubas pp. 53-55 and 70-72).

Q. What is your position regarding these proposed increases in late fee revenue?

A. I do not disagree with the method by which Mr. Kubas calculates additions to proposed late fee revenues, but I note that his exact amounts are based on his proposed rates for the SSS and CSS groups, which the Company does not support. Changes in late fee revenues should ultimately be based on changes in proposed rates as ordered by the Commission in this proceeding.

Q. Are there any other issues you wish to comment on related to revenues in your rebuttal testimony?

A. Yes. I am sponsoring PAWC Exhibit 10-E Wastewater BASA Operations_Revised that updates billing determinants for the purposes of setting rates for the BASA acquisition. These changes reflect updated billing determinants for BASA which are based on updated customer counts and usage data most recently provided by BASA after development of the Company's original proposed rate design for BASA.

In addition, in response to I&E RS-30, it was identified that PAWC Exhibit 10-B, page 87 incorrectly labeled the data as "Commercial", instead of "Industrial" and also incorrectly showed all bills under the present rates at $53.50. PAWC Schedule_Rea 1 includes a revised version of Exhibit 10-B page 87 to reflect label the data as "Industrial", as well as the proper bill impact amounts for the various levels of usage under present rates.

VII. REVENUE DECOUPLING MECHANISM

Q. Please describe the Company's proposal for an RDM in this proceeding.

A. The Company's proposed RDM is an alternative rate design mechanism that couples traditional rate design with elements of Straight Fixed Variable ("SFV") Pricing. This mechanism couples the benefits of traditional rate design that I have previously described in my direct testimony (including cost causation, affordability, gradualism, and efficiency of use) with the increased revenue stability available to the Company through an SFV rate design. This mechanism compares the revenues collected under the actual Commission-approved rates customers pay with the revenues that would have been collected through a SFV rate design on a forward-looking basis and accrues the differences, which are either

credited to customers or collected from customers at a later time. The proposed RDM identifies three cost components as the basis for revenues that would be collected through the SFV rate design that form the basis of the revenue comparisons going forward. These three cost components are:

- **Volumetric Charge (VC):** A charge in dollars per hundred gallons that applies to all water volumes sold to customers.
- **Residential Fixed Charge (RC):** A flat dollar charge per month that applies to all residential customers.
- **Non-Residential Fixed Charge (NC):** A flat dollar amount that applies to all non-residential customers.[3]

The RDM is an alternative rate design mechanism whose purpose is to more reliably recover the revenue requirement and associated fixed costs approved by the Commission in this case (PAWC Statement No. 10, p. 86:16-18).

Q. What intervenors address the Company's proposed RDM?

A. I&E Witness Cline, OCA Witnesses Colton, Mierzwa, and Hoover, OSBA Witness Higgins, PAWLUG Witness LaConte, CEO Witness Warabak, CAUSE-PA Witness Geller, and CCS Witness Baudino all address the Company's proposed RDM.

Q. What commentary does I&E Witness Cline have on the Company's proposed RDM?

A. Mr. Cline opposes the RDM because he argues that PAWC has not established a need for revenue stabilization, particularly when proposing a declining usage adjustment and using

[3] PAWC Statement No. 10, p. 89 line 10 through p. 90 line 16.

a FPFTY. He states that the RDM incorporates SFV pricing-based components in calculation of "goal" revenue, which he says has a negative impact on affordability and conservation. He claims that the RDM could result in rate instability and rate confusion, does not align with Section 1330 policy goals and would not reduce need for rate cases (I&E Statement No. 4, pp. 10-24).

Q. What issues does OCA Witness Mierzwa raise regarding the Company's proposed RDM?

A. Mr. Mierzwa opposes the Company's proposed RDM because he claims that the RDM does not satisfy the 14 factors of the Commission's alternative ratemaking policy statement (OCA Statement No. 4, pp. 54-56 and Schedule JDM-6), among other reasons. He claims that the RDM improperly shifts risk away from the Company to customers, provides a disincentive for customer conservation, and is likely to lead to customer confusion.

Q. What is OCA Witness Hoover's position on the Company's proposed RDM?

A. Ms. Hoover opposes the RDM because she argues that the Company has not shown how or why RDM could or would enhance safety, security, reliability or availability of utility infrastructure. She claims that Company Witness Everette's statements that the RDM will improve the Company's ability to provide service meeting the standards of Section 1501 are superficial because (i) Company has credibly shown in its initial filing that it is already meeting the standards of section 1501 regarding its service and facilities. She argues that where the Company is already meeting required standards of Section 1505 and is using the FPFTY, it is not clear how adding guaranteed rate recovery will enhance safety, security,

reliability, or availability of utility infrastructure and that by granting multiple incentives to address same behavior, potentially undermining the regulatory compact by mirroring detrimental effects of monopoly pricing. Additionally, she states that the RDM shifts risk of recovery under traditional ratemaking away from Company to customers by providing guaranteed revenue recovery for the utility, and without any benefit or enhancement of safety, security, reliability, or availability of utility infrastructure. She also states that the Company has not shown how or why the RDM proposal is "consistent with the efficient consumption of utility service[,]" asserting that if sales decrease, the RDM formula will adjust rates to charge customers to make-up for the reduced recovery due to decreased sales, which sends inaccurate price signals for efficient consumption of utility service (OCA Statement No. 1, pp. 44-48).

Q. What is OCA Witness Colton's position on the Company's proposed RDM?

A. Mr. Colton opposes the proposed RDM, asserting that it will disproportionately adversely affect low-income customers, and that actions customers take to reduce water consumption are disproportionally taken by higher income households which will result in low-income customers bearing the costs imposed by the RDM without benefitting from the corresponding savings (OCA Statement No. 5, p. 90).

Q. What is OSBA Witness Higgins' position on the Company's proposed RDM?

A. Mr. Higgins opposes the proposed RDM for a number of reasons. He states that the RDM shifts revenue risks related to changes in consumption for any reason, including economic and weather conditions, from shareholders to customers. He also states that the RDM

formula appears to have an error that would cause the calculation to have the opposite effect of PAWC's stated intent (e.g., if actual revenues exceed the SFV target, the RDM formula will produce a negative result or credit to customers) and PAWC did not clarify this issue in its response to Data Request OSBA 01-17. Mr. Higgins also recommends that if the RDM is adopted, non-residential classes should be excluded. (OSBA Statement No. 1, pp. 38-45).

Q. What is PAWLUG Witness LaConte's position on the Company's proposed RDM?

A. Ms. LaConte opposes the proposed RDM because she claims it would be moving PAWC's risk of recovering costs and meeting earnings targets to its customers. She further argues that the RDM will impact interclass cost shifting between various non-residential customer classes and erode the benefits of conservation. She claims that PAWC already has access to the Distribution System Improvement Charge ("DSIC"), the FPFTY and Act 11 reallocations. She states that if the RDM is approved by the Commission, she recommends an earnings test (for excess earnings) and an annual percentage cap on any increase that may result from changes in the surcharge (PAWLUG Statement No. 1, p. 10-15).

Q. What commentary does CEO Witness Warabak have on the Company's proposed RDM?

A. Mr. Warabak opposes the Company's proposed RDM because he claims it discourages conservation and would effectively guarantee PAWC's recovery of its authorized return (CEO Statement No. 1, p. 5).

Q. What commentary does CAUSE-PA Witness Geller have on the Company's proposed RDM?

A. Mr. Geller opposes the Company's RDM for several reasons. Mr. Geller claims that the proposed RDM disadvantages customers who practice conservation to reduce their monthly bill. He claims that the proposed RDM penalizes low-income customers for any conservation they achieve. Furthermore, he argues that the RDM has no consumer protections, is overly complex, and may not reduce the need for future rate increases. He recommends that the Commission reject the RDM in its entirety but if approved, recommends that PAWC exempt BDP participants from RDM charges. (CAUSE-PA Statement No. 1, p. 15-17).

Q. What is CCS Witness Baudino's position on the Company's proposed RDM?

A. Mr. Baudino opposes the Company's RDM because he claims that PAWC already uses the Distribution System Improvement Charge and the FPFTY to reduce regulatory lag and enhance PAWC's revenue stream between rate proceedings. He also claims the Industrial class should not be included in the RDM as there is no evidence that this class is affected by conservation measures, weather, or declining numbers of customers, and that the proposed RDM would therefore present significant problems with interclass allocations of lost revenues. (CCS Statement No. 1, p. 15-16).

Q. How do you respond to Mr. Baudino's argument that the industrial class should be excluded from the Company's proposed RDM?

A. The Company disagrees that industrial customers should be excluded from the proposed RDM. While it is true that industrial usage is less dependent on weather than other classes, the fact remains that there is volatility in industrial revenues. The fact that this volatility may come from different sources than volatility in revenues for residential and smaller commercial customers does not mean that risk associated with that volatility is any less important to mitigate. The purpose of the RDM is to mitigate risks associated with revenue volatility and industrial customers will benefit from this risk mitigation effort just like other customer classes.

Q. Mr. Cline and Mr. Mierzwa assert that the Company's RDM proposal does not satisfy the 14 factors of the Commission's alternative ratemaking policy statement. Do you agree?

A. No. The Policy Statement on alternative ratemaking mechanisms lists a number of factors that may be considered when evaluating an alternative ratemaking mechanism such as an RDM, but it does not prescribe how or the extent to which each factor must be "satisfied."[4] The Company did provide a detailed analysis of how the specific factors listed by the Commission apply the Company's proposed RDM to aid in the Commission's review and consideration of these factors as it pertains to the RDM. *See* Exhibit CBR-10R, which

[4] 52 Pa. Code § 69.3302 specifically states the "Commission ***may consider***, among other relevant factors" those listed in section (emphasis added). In addition, the Commission has specifically stated that "the proposed policy statement is intended ***only to give guidance to fixed utilities and interested stakeholders on what is to be considered when investigating alternative ratemaking methodologies*** in a Section 1308 rate proceeding. While intending to assist utilities and stakeholders, ***the policy statement does not establish a binding norm***, nor does it establish a predicate for the adoption of an alternative rate mechanism by any fixed utility." (emphasis added). *See* Docket No. M-2015-2518883, Final Policy Statement Order, p. 6-7 (July 18, 2019), *citing Implementation of Act 58 of 2018 Alternative Ratemaking for Utilities, Implementation Order at Docket No. M-2018-3003269 (*April 25, 2019).

respond Mr. Cline's and Mr. Mierzwa's arguments with respect to satisfaction of the 14 factors.

Q. Does the RDM formula have an error that would cause the calculation to have the opposite effect of PAWC's stated intent (e.g., if actual revenues exceed the straight-fixed variable ("SFV") target, the RDM formula will produce a negative result or credit to customers) as Mr. Higgins asserts?

A. No, there is no error. The Company's intent is revenue stability for both the Company and its customers. As I explain in my direct testimony, the Company is proposing a symmetrical mechanism that may result in a surcharge or credit depending on the actual revenues collected in any given year. This ensures that both the Company and its customers benefit from implementation of the RDM.

Q. Mr. Cline argues that, as acknowledged in the seventh edition of the American Water Works Association M1 Manual, there is a tradeoff between revenue stability from a high customer charge, and affordability and conservation from a low customer charge and higher usage rates. He states that SFV pricing strays too far from the concerns of affordability and conservation in the name of revenue stability for the Company (I&E Statement No. 4, p.4:6-11). How do you respond to this argument?

A. I don't disagree. Utilizing SFV pricing to establish rates places more of the revenue requirement into a fixed charge, which does make it more difficult for customers to mitigate their bills by adjusting their consumption. However, that is not what the Company is proposing to do in this proceeding. The Company is not proposing to establish rates based

on SFV pricing. PAWC is maintaining a balance between a limited fixed charge and volumetric charges. The concept of SFV pricing only becomes relevant to determine if the Company was able to collect the revenue requirement authorized in this proceeding as calculated through the RDM formula. If actual revenues are higher than would have been collected under the RDM formula, the difference is credited to customers in the following year. If actual revenues are lower than would have been collected under the RDM formula, the difference is collected from customers in the following year. As such, SFV pricing is being used only to reconcile actual revenues collected with those authorized in this proceeding. This allows for revenue stability without eliminating the customer's ability to benefit from conservation efforts.

Q. How do you respond to the general arguments that the RDM discourages conservation?

A. The proposed RDM does not discourage conservation. Regardless of what the volumetric rate happens to be, customers who use less water will have lower bills. As I stated in my direct testimony, a customer who takes specific actions to reduce their water consumption will still enjoy the benefits of a lower bill even with implementation of the RDM. If a customer takes actions to reduce their water consumption by 5% per month (4,000 gallons to 3,800 gallons for example), the resulting bill savings for an average use customer without the RDM would be $4.16 per month, well above the amount that the Company estimates an average use customer bill would increase due to implementation of the RDM.

Q. How do you respond to the general arguments that the RDM could result in rate instability and rate confusion?

A. The proposed RDM will, almost by definition, improve rate stability. In years where revenues are relatively low compared to the SVF calculation under the RDM, rates will increase slightly in the next year to bring revenues back up. The opposite will be true in years where usage results in revenues that were higher than the SVF calculation. In higher revenue years, the RDM will reduce rates (through one-time credits), which will offset higher revenues from the year before and "smooth out" revenues over the longer term. Regarding rate confusion, I do not believe that the Company's proposed RDM will cause rate confusion for customers. Revenue reconciliation riders are not new to the utility industry. There is no reason to think that customers would be more confused about an RDM surcharge or credit on their bill than they would be for any other rate design element that makes up a part of the customer's bill.

Q. How do you respond to the argument that the RDM improperly shifts revenue risk from the Company to customers?

A. It is false to claim that the RDM shifts revenue risk completely from one party to another. The RDM provides a mechanism that allows a sharing of revenue risk between the Company and its customers, allowing the Company to enjoy the benefits of revenue stability that a SVF rate design affords while affording customers all of the price signals provided through the rate design they currently take service under. There may be times when the RDM is a surcharge and there may be times when the RDM is a credit. Either way, there is "risk" in both directions that prices will be higher or lower than base rates

approved in this proceeding. Approving an RDM in this case does not shift risk in favor of the Company and to the detriment of its customers; it provides revenue and payment stability for both the Company and its customers.

Q. How do you respond to the argument that the RDM negatively impacts affordability and negatively impacts low-income customers?

A. Regarding affordability, I do not expect that any surcharges or credits that result from the Company's RDM will be of the magnitude that overall affordability of service will be significantly affected, and regarding low-income customers specifically, RDM credits or surcharges will be subject to discounts through the Company's BDP, which further dampens the effects on lower income customers.[5]

There is no evidence to suggest that the fundamental dynamics that are causing usage to decline over time for residential customers is more concentrated in higher income households than lower income households. The move toward more efficient appliances, showerheads, toilets, faucet aerators, etc. that use less water over time affects all customers, not just higher income customers, and the replacement of this appliance stock is more commonly due to replacement of equipment and appliances as these appliances fail than from conscious decisions by higher income customers to replace functioning appliances

[5] CAUSE-PA witness Mr. Geller recommends that PAWC exempt BDP participants from RDM charges but doesn't seem to recognize the RDM charge is already discounted for BDP participants. While the RDM does not specifically account for low-income participation, it will be applied after the BDP discount has been applied to the bill. In other words, a customer eligible for the BDP will have the discount applied to all base charges (Service Charge per Month and Consumption Charge) before the RDM would be applied. This will result in a reduced RDM charge (in dollars) compared to the RDM absent the BDP.

with more efficient appliances. This phenomenon affects all customers, not just higher income customers.

It is true that higher income customers tend to use more water for outdoor seasonal purposes and that water usage is dependent on weather which can fluctuate from year-to-year and cause variations in revenue as compared to lower-income customers. There is no evidence, however, to suggest that seasonal use of water is trending upward or downward over time as there is with non-seasonal usage. The end result is that changes in revenues over time come both from fluctuations in weather, which are more attributable to higher income customers, and pervasive declines in consumption, which are attributable to all residential customer groups.

Q. How do you respond to the claims that PAWC doesn't need an RDM because it has access to the DSIC, the FPFTY and other mechanisms that reduce regulatory lag?

A. While the DSIC mechanism helps the Company recover the costs of ongoing system improvements in a timely manner between rate cases, it does not address the well-documented and pervasive decline in consumption that affects revenues or the volatility in revenues that occurs from year to year. These factors affect the Company's ability to continue to prudently operate, manage, and invest in the rest of the business for the long-term benefit of its customers. The DSIC does not address these factors, which are what the Company's proposed RDM is intended to address.

Recognition of the FPFTY allows for the development of more realistic billing determinants for the purpose of setting rates going forward. The use of the forecast test period through which declining use adjustments can be extended further recognizes the

need for the Company to collect its revenue requirement beyond a static level of usage. However, the forecast test period only allows recognition of declining use through the end of the FPFTY. The RDM is necessary to address the pervasive declines in consumption that are expected to occur past the FPFTY and also help to address the fact that forecasts aren't perfect and that fluctuations from forecasted volumetric sales will naturally occur into the future.

Q. How do you respond to the argument that the RDM guarantees that the Company earns its authorized rate of return?

A. The issue of the relationship between ROE and the approval of an RDM is addressed by Company Witness Bulkley (PAWC Statement No. 13-R).

Q. Do you believe that the RDM is overly complex?

A. The RDM is not overly complex. The entire RDM mechanism was laid out in my direct testimony and there are very few moving parts. The only significant calculation in the RDM is a calculation of revenues that would result from SVF pricing based on the revenue requirement and cost components established in this case, which is a relatively simple calculation.

Q. Do you believe that the RDM will negatively impact cross-subsidization of cost between customer classes?

A. I do not. As I have previously testified, any expected level of credit or surcharge in the proposed RDM will be minor compared to the overall level of volumetric rates approved

in this proceeding. Only if volumetric rates in this proceeding are based precisely on cost of service can it be said that an RDM will result in cross subsidization relative to cost of service, and even then, the relative impacts will not be significant.

Q. Do you believe it is necessary to subject a proposed RDM to an earnings test and an annual cap?

A. I do not. The proposed RDM is designed to collect the revenues authorized in this proceeding. Therefore, any surcharge or credit will not deviate beyond the levels already considered and authorized by this Commission. Because the Company is not seeking to collect revenues beyond those authorized in this proceeding, an earning test is not necessary. Further, adding a cap to the amount collected or returned through the RDM undermines the revenue requirement authorized by this Commission to establish rates that are reflective of the Company's cost of service.

Q. Please recap why the Company's proposed RDM should be approved by the Commission.

A. Adoption of the Company's proposed RDM is in the long-term best interest of the Company and its customers. Rate designs that tie a utility's revenue recovery directly to sales volume have prompted concerns in modern utility regulation. Because of seasonal variability and declining use per customer, volumetric rates that collect the majority of a Company's fixed cost do not give water utilities a reasonable opportunity to recover the fixed costs associated with providing service to customers. An alternative rate design mechanism that couples elements of SFV pricing with traditional rate designs brings the

best of both worlds to both the Company and its customers. Implementing this alternative rate design solution: 1) makes the Company indifferent to selling less water, 2) promotes water efficiency and conservation, 3) reduces the adverse impact of weather variability for both the utility and its customers, and 4) reasonably ensures that sufficient revenues for continued investments in the system are available. The result is a better alignment of all stakeholder interests, and the Company respectfully urges the Commission to authorize its proposed RDM.

Q. Does this conclude your rebuttal testimony at this time?

A. Yes, it does.

Pennsylvania-American Water Company
Response to Distribution Rates – Statement of Policy
Proposed Revenue Stabilization Mechanism
Summary of Positions

52 Pa. Code § 69.3302. Distribution rate considerations.

(a) In determining just and reasonable alternative distribution ratemaking mechanisms and rate designs that promote the purpose and scope of this statement of policy and the objectives of 66 Pa.C.S. § 1330 (relating to alternative ratemaking for utilities), the Commission may consider, among other relevant factors, the following:

(1) How the ratemaking mechanism and rate design align revenues with cost causation principles as to both fixed and variable costs.

The RDM better aligns actual revenue collection with authorized revenues for all customer classes. The RDM specifically treats fixed and variable costs separately by customer class using rate design concepts associated with Straight-Fixed Variable ("SFV") pricing. The RDM is calculated and administered separately for residential and non-residential customer classes and treats fixed cost and variable cost separately so that fixed cost recovery is aligned with approved fixed costs (per customer) and variable cost recovery is aligned with approved variable costs (per hundred gallons of water). The recovery mechanism is on a volumetric basis.

Mierzwa: The RDM provides for the recovery of fixed costs on a volumetric basis; therefore, it does not align utility revenues with cost causation principles as to both fixed and variable costs.

Company Response: *As explained in the direct testimony of Charles Rea, PAWC Statement No. 10, the RDM cost components continue to reflect cost of service allocation as determined by the Company, which take into account cost causation principles. Further, although the costs are recovered on a volumetric basis, the surcharge or credit takes into account the Company's fixed costs as part of the RDM calculation.*

(2) How the ratemaking mechanism and rate design impact the fixed utility's capacity utilization.

The Company's proposed RDM is not expected to impact the fixed utility's capacity utilization.

Mierzwa: The proposed RDM is unlikely to impact the fixed utility's capacity utilization.

Company Response: *N/A*

(3) Whether the ratemaking mechanism and rate design reflect the level of demand associated with the customer's anticipated consumption levels.

The Company's proposed RDM directly reflects changing consumption levels in variable cost recovery. As consumption levels increase, the Company's variable cost recovery increases, but only by the approved level of production cost per unit delivered or billed. The opposite is true whereas consumption levels decrease, the Company's variable cost recovery decreases, but only by the approved level of production cost per unit delivered or billed.

Mierzwa: The RDM adjustment or "true-up" mechanism creates the anomaly where customers see rate increases when they reduce consumption and rate decreases when they increase consumption.

Company Response: *It is not clear what Mr. Mierzwa's concern is with the alleged anomaly he cites. This is a symmetrical mechanism that considers and stabilizes the impacts of changing consumption levels for both customers and the Company.*

(4) How the ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting.

The proposed RDM would apply to both water and wastewater service with separate tariffs and separate recovery/credit mechanisms for residential and nonresidential customers. The proposed RDM will not affect interclass or intraclass cost shifting between residential and non-residential customer classes.

Mierzwa: OCA witness Roger Colton explains that, with respect to interclass cost shifting, the RDM could shift revenue within the residential class from customers who are financially able to invest in water conservation measures to low-income customers who are not financially able to make those same investments.

Company Response: *Please see the rebuttal testimony of Charles Rea, PAWC Statement No. 10-R, pp. 74-75.*

(5) How the ratemaking mechanism and rate design limit or eliminate disincentives for the promotion of efficiency programs.

The proposed RDM reduces the throughput incentive, which gives the Company an incentive to collect more revenue when customers increase consumption. By connecting variable cost recovery directly to approved levels of production cost but not to fixed cost, the RDM removes this incentive from the Company and therefore eliminates any disincentives for the promotion of water efficiency efforts.

Mierzwa: The Company has not demonstrated that the lack of an RDM has been a major obstacle for the promotion of water conservation and efficiency. The Company has been able to implement methods to improve water efficiency without an RDM. Moreover, there has been a long-term trend of per-customer declining water consumption (i.e. improved water efficiency use) without an RDM.

Company Response: *While the Company has been able to improve water efficiency in the past, the bulk of these efficiencies have been achieved through supply-side practices (as discussed by Mr. Runzer and Mr. Aiton in their direct testimonies). To encourage additional demand-side strategies beyond those currently employed by the Company, it is critical to reduce the throughput incentive for the Company to sell more water.*

(6) How the ratemaking mechanism and rate design impact customer incentives to employ efficiency measures and distributed energy resources.

See response to item (5). The proposed mechanism encourages water efficiency by reducing the throughput incentive. In addition, if customers employ efficiency measures, those measures will far outweigh any surcharges that may result from the proposed RDM.

Mierzwa: The proposed RDM could provide a disincentive to ratepayers to undertake water conservation efforts because they would be required to pay for water they did not use. Revenue savings to individual customers that would ordinarily be achieved through usage reductions would be offset by surcharges to all customers under the RDM. Hence, if customers save money on their monthly water bill due to efficient consumption, customers will be forced to share their bill savings with the utility. Moreover, with the high and apparently never-ending rate increases that PAWC has implemented and will apparently continue to seek, customers are already incented to conserve water without a new RDM surcharge.

Cline: Q. WILL THE RDM ENCOURAGE WATER EFFICIENCY AND CONSERVATION FROM CUSTOMERS?

A. Not at all. From the perspective of a customer, the RDM will appear as a random surcharge or credit on their bill that is completely removed from their own usage. Specifically, by calculating the RDM based on a total class-wide (or multiple classes in the case of non-residential customers) basis, a single customer, particularly low-usage customers, will have zero ability to affect whether they are assessed an additional surcharge or a credit on their bill in the subsequent year. Therefore, it is the bill based on base charges that would encourage water efficiency and conservation. The only thing the RDM provides customers is the worry that the next year's RDM would erode the savings derived from conservation efforts.

Company Response: *Customers will continue to be encouraged to engage in water efficiency measures. Regardless of what the volumetric rate happens to be, customers who use less water will have lower bills. See the rebuttal testimony of Charles Rea, PAWC Statement No. 10-R, p. 72 for further discussion.*

(7) How the ratemaking mechanism and rate design impact low-income customers and support consumer assistance programs.

The proposed RDM does not have any specific impacts on low-income customers that do not apply to residential customers generally. Because the recovery mechanism is volumetric in nature, lower-use low-income customers will not be adversely impacted.

Mierzwa: OCA witness Colton addresses how the RDM could affirmatively harm low- income customers that do not have the financial means to pursue investments in water conservation measures.

Cline: Q. COULD THE RDM NEGATIVELY IMPACT LOW-INCOME CUSTOMERS?

A. Yes. As I stated above, there are potentially many customers, who cannot themselves enact cost-saving water conservation measures, whose ability to pay may be compromised as their rates increase to address conservation efforts undertaken by more affluent customers or from more low-income customers enrolling in the BDP than was originally anticipated.

Company Response: *Mr. Mierzwa and Mr. Cline have provided no evidence that low-income customers will be harmed or negatively impacted by the RDM. RDM credits or surcharges will be subject to discounts through the Company's BDP because it is applied after the BDP discount is applied to the bill, which further dampens the effects on lower income customers. In other words, a customer eligible for the BDP will have the discount applied to all base charges (Service Charge per Month and Consumption Charge) before the RDM would be applied. This will result in a reduced RDM charge (in dollars) compared to the RDM absent the BDP.*

(8) How the ratemaking mechanism and rate design impact customer rate stability principles.

The proposed RDM will, by definition, improve rate stability. In years where revenues are relatively low relative to SFV pricing and fixed costs are under recovered, rates would increase slightly in the next year to bring actual revenues back up. The opposite would be true in years where usage resulted in revenues that were higher than that implied by SFV pricing, which represents a scenario where fixed costs are over-recovered. In higher revenue years, the RDM will

reduce rates which would offset higher revenues from the year before and "smooth out" revenues over the longer term.

Mierzwa: Under the current regulatory standard in Pennsylvania, base rate cost under and over recoveries are currently not tracked and are not eligible for recovery in future base rate proceedings. The proposed RDM would add another surcharge to customers' bills and would not reduce the frequency of PAWC base rate or DSIC rate filings. Thus, it does not appear that a new RDM surcharge would improve rate stability. In contrast, under traditional cost-of-service ratemaking, if a utility experiences sales reductions and under-recovery, it cannot simply achieve the same result as an RDM true-up by filing another base rate case with adjusted sales forecasts. When a utility files a general rate increase, all relevant information is reviewed to determine just and reasonable rates, not just sales forecasts. Traditional ratemaking produces rate stability.

Cline: Q. COULD THE RDM RESULT IN RATE INSTABILITY AND RATE CONFUSION FOR CUSTOMERS?

A. Yes. As I described above, the Company's proposal to determine the credit or surcharge based on a total class basis result in customers being completely unaware and unable to control or predict whether they will be receiving a surcharge or credit from the RDM for the following year. Additionally, the entire concept of the RDM introduces rate confusion for customers. Essentially, PAWC is telling customers that it will charge one set of rates from January through March, but that in April their rates will be adjusted based on the comparison of their revenues (but not just theirs, the revenue from all of the other customers as well) from the previous year to the revenues generated by some other rate that was not included or mentioned on their bill at all.

Company Response: *As discussed above, the RDM smooths out revenues over the long term, improving rate stability for both the Company and the customer. Further, all else being equal, it would be inefficient to file a rate case for the sole purpose reconciling variations in revenue. As discussed on page 99 of the direct testimony of Charles Rea, PAWC Statement No. 10, "[a]n analysis of the historical data shows that in any given year water revenues at the Company's proposed rates in this proceeding can swing from the projected amount by as much as plus or minus approximately $11.1 million." Alternative regulatory mechanisms such as the RDM have been recognized in the regulatory community as effective means to address policy concerns recognized by NARUC after a recognition that traditional cost of service ratemaking no longer adequately addresses current challenges. See the direct testimony of Charles Rea, PAWC Statement No. 10, pp. 103-105.*

(9) How weather impacts utility revenue under the ratemaking mechanism and rate design.

Weather will still have an impact on revenues but only to the extent that variable costs are impacted. Under the proposed RDM, volatility of utility revenue and customer bills would be reduced over the long term. Increases in fixed cost

recovery revenue due to abnormal weather variations (*e.g.*, drought conditions) would be returned to customers in the following year, and reductions in fixed cost recovery due to abnormal weather variations (*e.g.*, excessive rainfall) would be collected from customers in the following year.

Mierzwa: The RDM adjustment or true-up mechanism creates the anomaly where customers see rate increases when they reduce consumption due to weather variations and rate decreases when they increase consumption due to weather variations.

Company Response: *Again, it is not clear what Mr. Mierzwa's concern is with the alleged anomaly he refers to. This is a symmetrical mechanism that stabilizes the impacts of weather for both customers and the Company.*

(10) How the ratemaking mechanism and rate design impact the frequency of rate case filings and affect regulatory lag.

To the extent that future rate cases are driven by lower-than-expected usage, the RDM likely would result in fewer rate cases, or at least rate cases seeking lower rate increases. However, the RDM does not affect future revenue requirements and does not recover fixed costs that are incurred after a rate case that are over and above those approved by the Commission. Therefore, if future rate cases are driven by future investment needs and associated cost recovery, the RDM would not reduce the need for such cases.

Mierzwa: The RDM will have no impact on the magnitude of base rate increases requested by the Company in the future. The RDM does not affect future revenue requirements and does not recover fixed costs that are incurred after a rate case that are over and above those approved by the Commission. Therefore, if future rate cases are driven by future investment needs and associated cost recovery, the RDM would not reduce the need for such cases.

Company Response: *It is true that there may be various factors that contribute to rate case timing. As noted above, the RDM could result in fewer rate cases, or at least rate cases seeking lower rate increases, to the extent that future rate cases are driven by lower-than-expected usage. See also response to #8 above.*

(11) If or how the ratemaking mechanism and rate design interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa.C.S. § 1307 (relating to sliding scale of rates; adjustments), riders such as 66 Pa.C.S. § 2804(9) (relating to standards for restructuring of electric industry) or system improvement charges, 66 Pa.C.S. § 1353 (relating to distribution system improvement charge).

The Company's proposed RDM does not interact with other revenue sources.

Mierzwa: The RDM will interact with the Company's DSIC because the DSIC is a percentage applied to the total bill and the RDM will impact a customer's total bill.

Company Response: *The RDM and DISC would each be applied to the total bill prior to the application of either surcharge.*

(12) Whether the alternative ratemaking mechanism and rate design include appropriate consumer protections.

The RDM proposal includes consumer protections through the formal reconciliation process which includes audits and external stakeholder review. Tariff administration of the mechanism will contain consumer protections to make sure that the appropriate levels of revenue are being collected. Customers still can control their bill through controlling usage because the standard rate design still applies.

Mierzwa: The proposed RDM does not include appropriate consumer protections and should be rejected for the reasons discussed in my testimony and the testimony of OCA witness Colton.

Company Response: *In addition to the protections previously described, it is also important to specifically note that the RDM is a symmetrical mechanism that may result in a surcharge, or a credit to customers – an additional protection to ensure customers don't only get charged in the event of an under-collection but receive the benefits of an over-collection of revenues.*

(13) Whether the alternative ratemaking mechanism and rate design are understandable to consumers.

The Company does not anticipate that there would be any issues related to customer confusion over the proposed RDM. Revenue reconciliation riders are not new to the utility industry. There is no reason to think that customers would be more confused about an RDM surcharge or credit on their bill than they would be for any other rate design element that makes up a part of the customer's bill.

Mierzwa: PAWC has not provided any evidence that the proposed RDM will be understandable to customers. When combined with the rate changes that occur under PAWC's DSIC and potentially the proposed ECIC, significant customer confusion is likely.

Cline: See response to #8 above.

Company Response: *The Company does not believe that the proposed RDM will cause rate confusion for customers. Revenue reconciliation riders are not new to the utility industry. There is no reason to think that customers would be more confused about an*

RDM surcharge or credit on their bill than they would be for any other rate design element that makes up a part of the customer's bill.

(14) How the ratemaking mechanism and rate design will support improvements in utility reliability.

The proposed RDM will support improvements in utility reliability by permitting the Company to more reliably recover fixed costs that can't be avoided by customers using less water, and will therefore enhance the Company's ability to prudently invest in and manage the business.

Mierzwa: The proposed RDM does not provide a direct incentive to increase the safety and reliability of the PAWC system.

Company Response: *The RDM gives the Company a tool to reliably collect the revenues necessary to invest in the safety and reliability of the system more effectively through more consistent planning and deployment of the most efficient resources.*

PENNSYLVANIA-AMERICAN WATER COMPANY
BUTLER AREA SEWER AUTHORITY (BASA)
SUMMARY OF APPLICATION OF PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

Rate Zone XX: Butler Area Sewer Authority (BASA)	Residential	Commercial	Industrial	Municipal	Miscellaneous	Total Sales	Late Payments (*)	**Total Revenues**
Present Rate Application	$8,756,947	$3,206,520	$330,586	$447,588	$8,500	$12,750,141	$64,052	$12,814,193
Proposed Rate Application								
Change in Revenues								
% Change in Revenues								

(*) Utilized the same 0.5027% late payment rate as calculated for PA American Water Company.

PENNSYLVANIA-AMERICAN WATER COMPANY
BUTLER AREA SEWER AUTHORITY (BASA)
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

All Class	6/30/2023 Billing Determinants	Current Rate	6/30/2023 Annualized Revenue	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Annualized Revenue
Residential										
For the first 25 Units				190,404	$45.50	$8,663,382	190,404	$45.50	$93,565	$8,756,947
For the next 25 Units					44.60	0		44.60		0
Flat Rate (Unmetered)							2,616			
Service Charge							170,940			
Annualized Winter Average (1)							5,216,939			
Low Income:										
Low Income Discount Tier 1										
Low Income Discount Tier 2										
Low Income Discount Tier 3										
Low Income Discount Tier 4										
Commercial										
For the first 25 Units				69,720	$45.50	$3,172,260	69,720	$45.50	$34,260	$3,206,520
Service Charge							14,172			
Usage (2)							2,447,766			
Flat Rate (Unmetered)							264			
Industrial				7,188	$45.50	$327,054	7,188	$45.50	$3,532	$330,586
Service Charge per EDU							156			
Usage (2)							286,071			
Municipal				9,732	$45.50	$442,806	9,732	$45.50	$4,782	$447,588
Service Charge							588			
Usage (3)							373,320			
Flat Rate (Unmetered)							72			
Special Rate VA Hospital:				2,208	$0.00	$0				
Service Charge (1)							24			
Usage (2)							88,150	$0.00	$0	$0
Other WW Revenue										
IPP Surcharge						$8,500				$8,500
Other Revenues										
Late Fees						$63,368				$64,052
BASA WW Total Revenue			**$0**			**$12,677,370**				**$12,814,193**

Note (1) Annualized winter usage is based on average monthly winter usage multiplied by 12.
Note (2) Annual usage including seasonal usage.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE XX FARMINGTON TOWNSHIP INDUSTRIAL - MONTHLY
PER EDU

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$53.50	$50.00	(3.50)	-6.54%
1,000		53.50	57.00	3.50	6.54%
2,000		53.50	64.00	10.50	19.63%
3,000		53.50	71.00	17.50	32.71%
4,000		53.50	78.00	24.50	45.79%
5,000		53.50	85.00	31.50	58.88%
9,965	*	53.50	119.76	66.26	123.84%
16,000		160.50	162.00	1.50	0.93%
20,000		214.00	190.00	(24.00)	-11.21%
30,000		321.00	260.00	(61.00)	-19.00%
40,000		428.00	330.00	(98.00)	-22.90%
50,000		535.00	400.00	(135.00)	-25.23%
60,000		642.00	470.00	(172.00)	-26.79%
70,000		749.00	540.00	(209.00)	-27.90%
80,000		856.00	610.00	(246.00)	-28.74%
90,000		963.00	680.00	(283.00)	-29.39%
100,000		1,070.00	750.00	(320.00)	-29.91%
200,000		2,140.00	1,450.00	(690.00)	-32.24%
300,000		3,210.00	2,150.00	(1,060.00)	-33.02%
400,000		4,280.00	2,850.00	(1,430.00)	-33.41%
500,000		5,350.00	3,550.00	(1,800.00)	-33.64%
600,000		6,420.00	4,250.00	(2,170.00)	-33.80%
685,947		7,329.50	4,851.63	(2,477.87)	-33.81%
700,000		7,490.00	4,950.00	(2,540.00)	-33.91%
800,000		8,560.00	5,650.00	(2,910.00)	-34.00%
900,000		9,630.00	6,350.00	(3,280.00)	-34.06%
1,000,000		10,700.00	7,050.00	(3,650.00)	-34.11%
1,100,000		11,770.00	7,750.00	(4,020.00)	-34.15%
1,200,000		12,840.00	8,450.00	(4,390.00)	-34.19%
1,300,000		13,910.00	9,150.00	(4,760.00)	-34.22%
1,400,000		14,980.00	9,850.00	(5,130.00)	-34.25%
1,500,000		16,050.00	10,550.00	(5,500.00)	-34.27%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
Bill at proposed rate was calculated using DSIC rate @ 0.00%
1 EDU = per 5,000 gallonsor portion thereof

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)**
	:	**R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Charles Rea**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 10-R and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024

Charles Rea

Charles Rea

PAWC STATEMENT NO. 10-SR

SURREBUTTAL TESTIMONY
OF
CHARLES REA

WITH REGARD TO
PENNSYLVANIA-AMERICAN WATER COMPANY'S

REVENUE DECOUPLING MECHANISM PROPOSAL

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: March 4, 2024

PENNSYLVANIA-AMERICAN WATER COMPANY

SURREBUTTAL TESTIMONY OF CHARLES REA

I. INTRODUCTION

Q. What is your name and business address?

A. My name is Charles B. Rea. My business address is 3409 Research Parkway, Davenport, Iowa 52806.

Q. Are you the same Charles B. Rea that provided direct testimony and rebuttal testimony in this case?

A. Yes, I am.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to address an issue raised by Pennsylvania-American Water Large Users Group ("PAWLUG") Witness Billie S. LaConte (PAWLUG Statement No. 1R) related to Pennsylvania-American Water Company's ("Company" or "PAWC") proposed Revenue Stabilization Mechanism ("RDM").

Q. What position does Ms. LaConte take regarding the Company's proposed RDM do you wish to address?

A. Ms. LaConte argues that based on the direct testimony of Cleveland-Cliffs Steel witness Richard A. Baudino, that the Company's proposed RDM should exclude all Municipal class customers as well as Industrial class customers. Ms. LaConte states that because it is Mr. Baudino's position that there is no evidence in this case that the Industrial class is

affected by conservation measures, weather, or declining numbers of customers, the same exclusion should apply to Municipal class customers. She also points out that PAWC's demand study says that "Both the industrial and public [municipal] customer classes are characterized by the concentration of consumption among a small number of very large customers" and states this is another reason for excluding Municipal class customers from the Company's proposed RDM (PAWLUG Statement No. 1R p. 10).

Q. Do you agree with Ms. LaConte's proposal to exclude Municipal class customers from the Company's proposed RDM?

A. I do not. As noted on page 94 of my direct testimony, the RDM should apply to all customers in the Company's residential, commercial, industrial, municipal, and sales for resale classes except for customers taking service under contract rates. As with revenues from all customers, including other non-residential customers such as industrial customers, there is volatility in municipal revenues, some of which comes from changes in weather as Municipal class customers are weather sensitive customers (as shown in Table 8 of my direct testimony). Weather variation is among the sources of revenue risk that the proposed RDM is intended to mitigate. The fact that there are relatively few customers in this class is not relevant when considering that the proposed RDM applies to all non-residential customers not under contract rates. The same is true for all classes of non-residential customers. The purpose of the RDM is to mitigate risks associated with revenue volatility, and Municipal customers will benefit from this risk mitigation effort just like other customer classes.

Q. Does this conclude your surrebuttal testimony at this time?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Charles Rea**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 10-SR and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: March 4, 2024

Charles Rea

Charles Rea

VOLUME 10

PENNSYLVANIA-AMERICAN WATER COMPANY

2023 GENERAL BASE RATE CASE
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

STATEMENT NO. 11 - DIRECT TESTIMONY OF JOHN J. SPANOS

EXHIBIT NO. 11-A - DEPRECIATION STUDY
WATER OPERATIONS
AS OF JUNE 30, 2023

PAWC Statement No. 11

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF
JOHN J. SPANOS

ON BEHALF OF
PENNSYLVANIA-AMERICAN WATER COMPANY

DEPRECIATION

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

November 8, 2023

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

RE: PENNSYLVANIA-AMERICAN WATER COMPANY

DIRECT TESTIMONY OF JOHN J. SPANOS

Q. Please state your name and address.

A. My name is John J. Spanos. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania 17011.

Q. With what firm are you associated?

A. I am associated with the firm of Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming").

Q. How long have you been associated with Gannett Fleming?

A. I have been associated with the firm since June 1986.

Q. What is your position in the firm?

A. I am President.

Q. What is your educational background?

A. I have Bachelor of Science degrees in Industrial Management and Mathematics from Carnegie Mellon University and a Master of Business Administration degree from York College of Pennsylvania.

Q. Are you a member of any professional societies?

A. Yes. I am a member and past President of the Society of Depreciation Professionals. I am also a member of the American Gas Association/Edison Electric Institute Industry Accounting Committee.

Q. Do you hold any special certification as a depreciation expert?

A. Yes. The Society of Depreciation Professionals has established national standards for depreciation professionals. The Society administers an examination to become certified in this field. I passed the certification exam in September 1997 and was recertified in August 2003, February 2008, January 2013, February 2018 and February 2023.

Q. Please outline your experience in the field of depreciation.

A. I have over 37 years of depreciation experience, which includes giving expert testimony in more than 430 cases before 46 regulatory commissions, including the Pennsylvania Public Utility Commission ("Commission"). My participation in the cases where I appeared as an expert witness has included conducting and analyzing depreciation studies for companies, government-owned utilities and other service providers in the electric, gas, water, wastewater and pipeline industries. In addition to the cases in which I submitted testimony, I have supervised over 800 other depreciation or valuation assignments. Please refer to Appendix A for additional information on my qualifications, work history, case experience, and my leadership in the Society of Depreciation Professionals.

Q. What is the purpose of your testimony?

A. I was asked by Pennsylvania-American Water Company ("PAWC" or the "Company") to prepare depreciation studies of the Company's water and wastewater plant in service as of June 30, 2023 and its water and wastewater plant projected to be in service as of June 30, 2024, and June 30, 2025. The

depreciation studies are presented for the total water operations and separately for the four wastewater operations, consisting of the following:

(1) Water Operations

(2) Wastewater Sanitary Sewer System ("SSS") General Operations

(3) Butler Area Sewer Authority ("BASA") Wastewater Operations

(4) Brentwood Wastewater Operations

(5) Wastewater Combined Sewer System ("CSS") Operations

Q. Have you prepared exhibits presenting the results of your studies?

A. Yes, I have prepared a total of thirteen exhibits, consisting of the following:

- **Exhibit Nos. 11-A, 11-D and 11-K** present the results of the depreciation studies for each water and wastewater operation as of June 30, 2023, except BASA Wastewater Operations and Brentwood Wastewater Operations because PAWC will acquire those systems during the future test year ending June 30, 2024, as explained by E. Christopher Abruzzo Esq. in PAWC Statement No.6.
- **Exhibit Nos. 11-B, 11-E, 11-G, 11-I and 11-L** present the results of the depreciation study for each water and wastewater operation as of June 30, 2024.
- **Exhibit Nos. 11-C, 11-F, 11-H, 11-J and 11-M** present the results of the depreciation study for each water and wastewater operation as of June 30, 2025.

In addition, I am responsible for the responses to Depreciation Data Filing Requirements FR VI.1, FR VI.2, FR VI.3, FR VI.4, FR VI.5 and FR VI.6 that are presented as Appendix B to my testimony.

Q. Please describe what is set forth in each of Exhibit Nos. 11-A through 11-M.

A. **Exhibit No. 11-A**, titled "2023 Depreciation Study - Calculated Annual Depreciation Accruals Related to Water Plant as of June 30, 2023," includes the results of the depreciation study related to the assets of the Water Operations as of June 30, 2023. The report also includes the detailed depreciation calculations.

Exhibit No. 11-B, titled "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Water Plant as of June 30, 2024," includes the results of the depreciation study related to the assets of Water Operations estimated as of June 30, 2024. The report also includes explanatory text, statistics related to the estimation of service life, and the detailed depreciation calculations.

Exhibit No. 11-C titled “2025 Depreciation Study – Calculated Annual Depreciation Accruals Related to Water Plant as of June 30, 2025,” includes the results of the depreciation study related to the assets of Water Operations estimated as of June 30, 2025.

Exhibit Nos. 11-D through 11-M pertain to the Company’s wastewater operations and are organized in the same fashion described above for PAWC’s Water Operations except, as I noted before, there is no exhibit presenting the results of a depreciation study for the BASA Wastewater Operations and Brentwood Wastewater Operations as of June 30, 2023 because PAWC will acquire these systems during the future test year ending June 30, 2024.

Q. What was the purpose of your depreciation studies?

A. The purpose of the depreciation studies is to estimate the annual depreciation accruals related to water and wastewater plant in service for ratemaking purposes and, using Commission-approved procedures, to estimate the Company's book reserve as of June 30, 2023, June 30, 2024 and June 30, 2025.

Q. Is the Company's claim for annual depreciation in the current proceeding based on the same method of depreciation used in its most recent rate proceeding in Docket Nos. R-2022-3031672 and R-2022-3031673?

A. Yes, it is. For most plant accounts, the current claim for annual depreciation is based on the straight-line remaining life method of depreciation, which has been used for over thirty-seven years. For Accounts 340.00, 342.00, 343.00, 344.00, 346.00, 347.00 and 348.00 for water assets and Accounts 390, 392, 393.00, 394.00, 396.00, 397.00 and 398.00 for wastewater assets, the claim for annual depreciation is based on the straight- line remaining life method of amortization. That method employs amortization accounting to distribute the unrecovered cost of fixed capital assets over the remaining amortization period selected for each account.

Q. What group procedure is being used in this proceeding for depreciable accounts?

A. The equal life group procedure is used in the current studies for all depreciable accounts and installation years of water and wastewater plant, which is the same procedure that has been used by the Company for many

years with the Commission's approval and, in fact, was used most recently in the Company's last base rate case (Docket Nos. R-2022-3031672 and R-2022-3031673).

Q. Is the Company's claim for accrued depreciation in the current proceeding made on the same basis that has been used for over thirty-eight years?

A. Yes. The current claim for accrued depreciation for water assets is the book reserve brought forward from the book reserves approved by the Commission at Dockets No. R-842621, R-842675 and R-842755. Similarly, for wastewater assets, accrued depreciation is brought forward from a starting point previously approved by the Commission in prior rate proceedings and at the time of each acquisition.

Q. How was the book reserve used in the calculation of annual depreciation?

A. The book reserve was allocated to vintages, by account, to determine original cost less accrued depreciation by vintage. The total annual accrual is the sum of the results of dividing the original costs less accrued depreciation by the vintage composite remaining lives.

Q. How was the book reserve as of June 30, 2024 and June 30, 2025 estimated?

A. The book reserve as of June 30, 2024 and June 30, 2025, by account, was projected by adding estimated accruals, salvage and the amortization of net salvage and subtracting estimated retirements and cost of removal from the book reserve as of June 30, 2023. Annual accruals were calculated based on average yearly or monthly plant balances. For most accounts, salvage

and cost of removal were estimated by: (1) expressing actual salvage and cost of removal as a percent of retirements, by account, for the most recent five-year period; and (2) applying those percentages to the projected retirements by account. The projected book reserve, by account, was allocated to vintages for the purpose of the annual accrual calculation based on calculated accrued depreciation as of June 30, 2024 and June 30, 2025.

Q. Has a service life study of the Company's water and wastewater utility property been performed?

A. Yes. Service life studies were most recently performed in 2022 (based on plant data through 2021) for the Company's water assets and 2020 (based on plant data through 2019) for its wastewater assets. The service life studies were the basis for the service lives and survivor curves I used to calculate annual accruals.

Q. Briefly outline the procedure used in performing the service life studies.

A. The service life studies consisted of assembling and compiling historical data from the records related to the water and wastewater plant of the Company and its predecessors; statistically analyzing such data to obtain historical trends of survivor characteristics; obtaining supplementary information from management and operating personnel concerning Company practices and plans as they relate to plant operations; and interpreting the above data to form judgments of service life characteristics.

Iowa-type survivor curves were used to describe the estimated survivor characteristics of the mass property groups. Individual service lives were used for major individual units of plant, such as reservoirs and buildings housing treatment plants, pump stations, offices and shops. The life span

concept was recognized by coordinating the lives of associated plant installed in subsequent years with the probable retirement date defined by the life estimated for the major unit.

Q. What statistical data were employed in the historical analyses performed for the purpose of estimating service life characteristics?

A. The data consisted of the entries made to record retirements and other transactions related to the water plant during the period 1960-2021 and the wastewater plant during the period 2000-2019. These entries were classified by depreciable group, type of transaction, the year in which the transaction took place, and the year in which the plant was installed. The types of transactions included in the data were plant additions, retirements, transfers, and balances.

Q. What was the source of these data?

A. The data were assembled from Company records related to its utility plant in service.

Q. Were the methods used in the service life study the same as those used in other depreciation studies for water and wastewater plant presented before the Commission?

A. Yes. The methods are the same ones that have been presented previously for the Company and for other water and wastewater companies before the Commission, which have been accepted by the Commission in its past orders for water and wastewater utilities, including PAWC.

Q. Are the factors considered in your estimates of service life presented in Exhibit Nos. 11-B, 11-E, 11-G, 11-I and 11-L?

A. Yes. A discussion of the factors considered in the estimation of service lives is presented in Part III of each of these exhibits.

Q. Please outline the contents of Exhibit Nos. 11-B, 11-E, 11-G, 11-I and 11-L, which include the results of your service life studies for water and wastewater plant.

A. Exhibit No. 11-B is presented in eight parts. Part I, Introduction, discusses the plan of the report and the basis of the study. Part II, Estimation of Survivor Curves, presents descriptions of the considerations and the methods used in the service life studies. Part III, Service Life Considerations, presents the factors and judgments utilized in the average service-life analysis. Part IV, Calculation of Annual and Accrued Depreciation, describes the procedures used in the calculation of group depreciation. Part V, Results of Study, presents a summary by depreciable group of annual depreciation accrual rates and amounts. Part VI, Service Life Statistics, presents the statistical analysis of service life estimates. Part VII, Detailed Depreciation Calculations, presents the detailed tabulations of annual depreciation. Finally, Part VIII, Experienced and Estimated Net Salvage, presents the cost of removal and gross salvage recorded for the period 2019-2023.

Table 1, pages V-5 and V-6, presents the book cost of Water Plant as of June 30, 2024, Customers' Advances for Construction, Contributions in Aid of Construction, and the resulting net original cost used in the depreciation study. Table 2, pages V-7 through V-9, presents the estimated survivor

curve, the net original cost as of June 30, 2024, and the book reserve and calculated annual depreciation for each account or subaccount of Water Plant. Table 3, pages V-10 through V-12, presents the bring-forward to June 30, 2024, of the book depreciation reserve as of June 30, 2023. Table 4, pages V-13 through V-15, sets forth the calculation of the annual accruals used in the bring-forward. Table 5, page V-16, presents the experienced and estimated net salvage during the five-year period, 2019 through 2023.

The section beginning on page VI-2 presents the results of the retirement rate analyses prepared as the historical bases for the service life estimates. The section beginning on page VII-2 presents the depreciation calculations related to original cost. The tabulation on pages VII-3 through VII-6 presents the cumulative depreciated original cost by year installed. The tabulations on pages VII-8 through VII-137 present the calculation of annual depreciation by vintage by account for each depreciable group of water plant. The tabulation on pages VIII-2 through VIII-6 presents the retirements, salvage, and cost of removal by account for each year during the period 2019 through 2023.

Exhibit Nos. 11-E, 11-G, 11-I and 11-L are presented in the same fashion described above for all of the Company's wastewater plant by operating system.

Q. Please outline the contents of Exhibit Nos. 11-C, 11-F, 11-H, 11-J and 11-M.

A. Exhibit No. 11-C includes a description of the results, summaries of the depreciation calculations, and the detailed depreciation calculations as of June 30, 2025. The descriptions and explanations presented in Exhibit No. 11-B are also applicable to the depreciation calculations presented in Exhibit No. 11-C. The graphs and tables related to service lives presented in Exhibit No. 11-B also support the service life estimates used in Exhibit No. 11-C, inasmuch as the estimates are the same for both test years. The summary tables and detailed depreciation calculations as of June 30, 2025, are organized and presented in the same manner as those as of June 30, 2024. Exhibit Nos. 11-F, 11-H, 11-J and 11-M present data and information for all of PAWC's wastewater plant, by operating system, in the same fashion described above.

Q. Please outline the contents of Exhibit Nos. 11-A, 11-D and 11-K.

A. Exhibit No. 11-A includes a description of the results, summaries of the depreciation calculations, and the detailed depreciation calculations as of June 30, 2023. The descriptions and explanations presented in Exhibit No. 11-B are also applicable to the depreciation calculations presented in Exhibit No. 11-A. The graphs and tables related to service lives presented in Exhibit No. 11-B also support the service life estimates used in Exhibit No. 11-A, inasmuch as the estimates are the same for both test years. The summary tables and detailed depreciation calculations as of June 30, 2023 are organized and presented in the same manner as those as of June 30, 2024.

Exhibit Nos. 11-D and 11-K are presented in the same fashion as the Water Operations assets and use the same format for all wastewater plant by operating system, except the BASA Wastewater Operations and Brentwood Wastewater Operations (for the reasons previously explained).

Q. Please use an example to illustrate the manner in which the study is presented in Exhibit Nos. 11-A through 11-M.

A. I will use Account 331, Mains and Accessories, as my example, inasmuch as it is the largest depreciable group of water assets and represents 52 percent of the original cost of depreciable water utility plant as of June 30, 2024.

The retirement rate method was used to analyze the survivor characteristics of this group. The life table for the 1948-2021 experience band is presented on pages VI-112 through VI-116 of Exhibit No. 11-B. The life table, or original survivor curve, is plotted along with the estimated smooth survivor curve, the 90-R2, on page VI-111.

The calculation of the annual depreciation related to the original cost of water plant as of June 30, 2023 is presented on pages II-115 through II-118 of Exhibit No. 11-A. The calculation is based on the 90-R2 survivor curve, the attained age, and the allocated book reserve. The calculation as of June 30, 2024 is presented on pages VII-108 through VII-110 of Exhibit No. 11-B and is based in part on the bring-forward of the book reserve. The calculation as of June 30, 2025 is presented on pages II-109 through II-111 of Exhibit No. 11-C and is based in part on the bring-forward of the book reserve. The tabulations in Exhibit Nos. 11-A, 11-B and 11-C set forth the installation year, the original cost, calculated accrued depreciation, allocated

book reserve, future accruals, remaining life and annual accrual. The totals are brought forward to Table 2 on page I-7 in Exhibit No. 11-A, on page V-8 in Exhibit No. 11-B and on page I-7 in Exhibit No. 11-C. The same process was conducted for the plant of all the wastewater systems.

Q. Do the exhibits exclude the original cost of certain plant?

A. Yes. Certain items of plant, as well as amounts received from customers as advances or contributions, have been excluded from the original cost used in the study. The original cost and a description of the plant excluded are set forth on page I-5 of Exhibit No. 11-B. The net original cost used in the study is developed in Table 1 on pages I-3 and I-4 of Exhibit No. 11-A, on pages V-5 and V-6 of Exhibit No. 11-B and on pages I-3 and I-4 of Exhibit No. 11-C. The same description pertains to all the studies for the Company's wastewater operations.

Q. In what manner is net salvage incorporated in the depreciation calculations?

A. As stated on page IV-7 of Exhibit No. 11-B, no adjustment for net salvage was made to the calculated annual depreciation amounts. The total calculated annual depreciation set forth on page I-7 of Exhibit No. 11-A, on page V-9 of Exhibit No. 11-B and on page I-7 of Exhibit No. 11-C reflects an addition for the amortization of negative net salvage in accordance with the practice of the Commission. The amortization is based on: (1) experience during the period 2018 through 2022 for the calculation as of June 30, 2023; (2) experience during the period 2019 through June 30, 2023, plus estimates for the last six months of year 2023, for the calculation as of June 30, 2024;

and (3) experience during the period 2020 through June 30, 2023, plus estimates for the last six months of 2023 and year 2024, for the calculation as of June 30, 2025. The detail by plant account of regular retirements, salvage, and cost of removal for each year is presented on: (1) pages III-2 through III-6 of Exhibit No. 11-A; (2) pages VIII-2 through VIII-6 of Exhibit No. 11-B; and (3) pages III-2 through III-6 of Exhibit No, 11-C. The totals are brought forward to Table 3 on page I-8 of Exhibit No. 11-A, to Table 5 on page V-16 of Exhibit No. 11-B and to Table 5 on page I-14 of Exhibit No. 11-C, in which the amounts of the five-year amortizations are calculated. The same calculations are presented in all the studies for the Company's wastewater operations.

Q. Do any systems have additional calculations performed?

A. Yes. The BASA Wastewater Operations and Brentwood Wastewater Operations acquisitions will be recorded at the net value of the assets in 2024 determined by the Commission under Section 1329(c) of the Public Utility Code. Therefore, the service lives and survivor curves for each plant account based on the seller's original cost for the acquired property were used to calculate depreciation expense. From that analysis, I derived the accrual rates that were applied to the acquired plant at the approved ratemaking rate base, in order to determine the appropriate level of depreciation expense to include in the Company's revenue requirement.

Q. Does this complete your testimony?

A. Yes, it does.

Appendix A

JOHN SPANOS

DEPRECIATION EXPERIENCE

Q. Please state your name.

A. My name is John J. Spanos.

Q. What is your educational background?

A. I have Bachelor of Science degrees in Industrial Management and Mathematics from Carnegie-Mellon University and a Master of Business Administration from York College.

Q. Do you belong to any professional societies?

A. Yes. I am a member and past President of the Society of Depreciation Professionals and a member of the American Gas Association/Edison Electric Institute Industry Accounting Committee.

Q. Do you hold any special certification as a depreciation expert?

A. Yes. The Society of Depreciation Professionals has established national standards for depreciation professionals. The Society administers an examination to become certified in this field. I passed the certification exam in September 1997 and was recertified in August 2003, February 2008, January 2013, February 2018 and February 2023.

Q. Please outline your experience in the field of depreciation.

A. In June 1986, I was employed by Gannett Fleming Valuation and Rate Consultants, Inc. as a Depreciation Analyst. During the period from June 1986 through December 1995, I helped prepare numerous depreciation and original cost studies for utility companies in various industries. I helped perform depreciation studies for the following telephone companies: United Telephone of Pennsylvania, United Telephone of New Jersey, and Anchorage Telephone Utility. I helped perform depreciation studies for the following companies in

the railroad industry: Union Pacific Railroad, Burlington Northern Railroad, and Wisconsin Central Transportation Corporation.

I helped perform depreciation studies for the following organizations in the electric utility industry: Chugach Electric Association, The Cincinnati Gas and Electric Company (CG&E), The Union Light, Heat and Power Company (ULH&P), Northwest Territories Power Corporation, and the City of Calgary - Electric System.

I helped perform depreciation studies for the following pipeline companies: TransCanada Pipelines Limited, Trans Mountain Pipe Line Company Ltd., Interprovincial Pipe Line Inc., Nova Gas Transmission Limited and Lakehead Pipeline Company.

I helped perform depreciation studies for the following gas utility companies: Columbia Gas of Pennsylvania, Columbia Gas of Maryland, The Peoples Natural Gas Company, T. W. Phillips Gas & Oil Company, CG&E, ULH&P, Lawrenceburg Gas Company and Penn Fuel Gas, Inc.

I helped perform depreciation studies for the following water utility companies: Indiana-American Water Company, Consumers Pennsylvania Water Company and The York Water Company; and depreciation and original cost studies for Philadelphia Suburban Water Company and Pennsylvania-American Water Company.

In each of the above studies, I assembled and analyzed historical and simulated data, performed field reviews, developed preliminary estimates of service life and net salvage, calculated annual depreciation, and prepared reports for submission to state public utility commissions or federal regulatory agencies. I performed these studies under the general direction of William M. Stout, P.E.

In January 1996, I was assigned to the position of Supervisor of Depreciation Studies. In July 1999, I was promoted to the position of Manager, Depreciation and

Valuation Studies. In December 2000, I was promoted to the position as Vice-President of Gannett Fleming Valuation and Rate Consultants, Inc., in April 2012, I was promoted to the position as Senior Vice President of the Valuation and Rate Division of Gannett Fleming Inc. (now doing business as Gannett Fleming Valuation and Rate Consultants, LLC) and in January of 2019, I was promoted to my present position of President of Gannett Fleming Valuation and Rate Consultants, LLC. In my current position I am responsible for conducting all depreciation, valuation and original cost studies, including the preparation of final exhibits and responses to data requests for submission to the appropriate regulatory bodies.

Since January 1996, I have conducted depreciation studies similar to those previously listed including assignments for Pennsylvania-American Water Company; Aqua Pennsylvania; Kentucky-American Water Company; Virginia-American Water Company; Indiana-American Water Company; Iowa-American Water Company; New Jersey-American Water Company; Hampton Water Works Company; Omaha Public Power District; Enbridge Pipe Line Company; Inc.; Columbia Gas of Virginia, Inc.; Virginia Natural Gas Company National Fuel Gas Distribution Corporation - New York and Pennsylvania Divisions; The City of Bethlehem - Bureau of Water; The City of Coatesville Authority; The City of Lancaster - Bureau of Water; Peoples Energy Corporation; The York Water Company; Public Service Company of Colorado; Enbridge Pipelines; Enbridge Gas Distribution, Inc.; Reliant Energy-HLP; Massachusetts-American Water Company; St. Louis County Water Company; Missouri-American Water Company; Chugach Electric Association; Alliant Energy; Oklahoma Gas & Electric Company; Nevada Power Company; Dominion Virginia Power; NUI-Virginia Gas Companies; Pacific Gas & Electric Company; PSI Energy; NUI - Elizabethtown Gas Company; Cinergy Corporation – CG&E; Cinergy

Corporation – ULH&P; Columbia Gas of Kentucky; South Carolina Electric & Gas Company; Idaho Power Company; El Paso Electric Company; Aqua North Carolina; Aqua Ohio; Aqua Texas, Inc.; Aqua Illinois, Inc.; Ameren Missouri; Central Hudson Gas & Electric; Centennial Pipeline Company; CenterPoint Energy-Arkansas; CenterPoint Energy – Oklahoma; CenterPoint Energy – Entex; CenterPoint Energy - Louisiana; NSTAR – Boston Edison Company; Westar Energy, Inc.; United Water Pennsylvania; PPL Electric Utilities; PPL Gas Utilities; Wisconsin Power & Light Company; TransAlaska Pipeline; Avista Corporation; Northwest Natural Gas; Allegheny Energy Supply, Inc.; Public Service Company of North Carolina; South Jersey Gas Company; Duquesne Light Company; MidAmerican Energy Company; Laclede Gas; Duke Energy Company; E.ON U.S. Services Inc.; Elkton Gas Services; Anchorage Water and Wastewater Utility; Kansas City Power and Light; Duke Energy North Carolina; Duke Energy South Carolina; Monongahela Power Company; Potomac Edison Company; Duke Energy Ohio Gas; Duke Energy Kentucky; Duke Energy Indiana; Duke Energy Progress; Northern Indiana Public Service Company; Tennessee- American Water Company; Columbia Gas of Maryland; Maryland-American Water Company; Bonneville Power Administration; NSTAR Electric and Gas Company; EPCOR Distribution, Inc.; B. C. Gas Utility, Ltd; Entergy Arkansas; Entergy Texas; Entergy Mississippi; Entergy Louisiana; Entergy Gulf States Louisiana; the Borough of Hanover; Louisville Gas and Electric Company; Kentucky Utilities Company; Madison Gas and Electric; Central Maine Power; PEPCO; PacifiCorp; Minnesota Energy Resource Group; Jersey Central Power & Light Company; Cheyenne Light, Fuel and Power Company; United Water Arkansas; Central Vermont Public Service Corporation; Green Mountain Power; Portland General Electric Company; Atlantic City Electric; Nicor Gas Company; Black Hills Power; Black Hills Colorado Gas; Black Hills Energy Arkansas, Inc.; Black Hills Kansas

Gas; Black Hills Service Company; Black Hills Utility Holdings; Public Service Company of Oklahoma; City of Dubois; Peoples Gas Light and Coke Company; North Shore Gas Company; Connecticut Light and Power; New York State Electric and Gas Corporation; Rochester Gas and Electric Corporation; Greater Missouri Operations; Tennessee Valley Authority; Omaha Public Power District; Indianapolis Power & Light Company; Vermont Gas Systems, Inc.; Metropolitan Edison; Pennsylvania Electric; West Penn Power; Pennsylvania Power; PHI Service Company - Delmarva Power and Light; Atmos Energy Corporation; Citizens Energy Group; PSE&G Company; Berkshire Gas Company; Alabama Gas Corporation; Mid-Atlantic Interstate Transmission, LLC; SUEZ Water; WEC Energy Group; Rocky Mountain Natural Gas, LLC; Illinois-American Water Company; Northern Illinois Gas Company; Public Service of New Hampshire; FirstEnergy Service Corporation; Northeast Ohio Natural Gas Corporation; Blue Granite Water Company; Spire Missouri, Inc.; Dominion Energy South Carolina, Inc.; South FirstEnergy Operating Companies; Dayton Power and Light Company; Liberty Utilities; East Kentucky Power Cooperative; Bangor Natural Gas; Hanover Borough Municipal Water Works; West Virginia American Water Company; Evergy Metro; Evergy Missouri West; Granite State Electric; Bluegrass Water; The Borough of Ambler; Newtown Artesian Water Company and Connecticut Water Company.

My additional duties include determining final life and salvage estimates, conducting field reviews, presenting recommended depreciation rates to management for its consideration and supporting such rates before regulatory bodies.

Q. Have you submitted testimony to any state utility commission on the subject of utility plant depreciation?

A. Yes. I have submitted testimony to the Pennsylvania Public Utility Commission; the

Commonwealth of Kentucky Public Service Commission; the Public Utilities Commission of Ohio; the Nevada Public Utility Commission; the Public Utilities Board of New Jersey; the Missouri Public Service Commission; the Massachusetts Department of Telecommunications and Energy; the Alberta Energy & Utility Board; the Idaho Public Utility Commission; the Louisiana Public Service Commission; the State Corporation Commission of Kansas; the Oklahoma Corporate Commission; the Public Service Commission of South Carolina; Railroad Commission of Texas – Gas Services Division; the New York Public Service Commission; Illinois Commerce Commission; the Indiana Utility Regulatory Commission; the California Public Utilities Commission; the Federal Energy Regulatory Commission ("FERC"); the Arkansas Public Service Commission; the Public Utility Commission of Texas; Maryland Public Service Commission; Washington Utilities and Transportation Commission; The Tennessee Regulatory Commission; the Regulatory Commission of Alaska; Minnesota Public Utility Commission; Utah Public Service Commission; District of Columbia Public Service Commission; the Mississippi Public Service Commission; Delaware Public Service Commission; Virginia State Corporation Commission; Colorado Public Utility Commission; Oregon Public Utility Commission; South Dakota Public Utilities Commission; Wisconsin Public Service Commission; Wyoming Public Service Commission; the Public Service Commission of West Virginia; Maine Public Utility Commission; Iowa Utility Board; Connecticut Public Utilities Regulatory Authority; New Mexico Public Regulation Commission; Commonwealth of Massachusetts Department of Public Utilities; Rhode Island Public Utilities Commission and the North Carolina Utilities Commission.

Q. Have you had any additional education relating to utility plant depreciation?

A. Yes. I have completed the following courses conducted by Depreciation Programs, Inc.:

"Techniques of Life Analysis," "Techniques of Salvage and Depreciation Analysis," "Forecasting Life and Salvage," "Modeling and Life Analysis Using Simulation," and "Managing a Depreciation Study." I have also completed the "Introduction to Public Utility Accounting" program conducted by the American Gas Association.

Q. Does this conclude your qualification statement?

A. Yes.

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY

	Year	Jurisdiction	Docket No.	Client Utility	Subject
01.	1998	PA PUC	R-00984375	City of Bethlehem – Bureau of Water	Original Cost and Depreciation
02.	1998	PA PUC	R-00984567	City of Lancaster	Original Cost and Depreciation
03.	1999	PA PUC	R-00994605	The York Water Company	Depreciation
04.	2000	D.T.&E.	DTE 00-105	Massachusetts-American Water Company	Depreciation
05.	2001	PA PUC	R-00016114	City of Lancaster	Original Cost and Depreciation
06.	2001	PA PUC	R-00017236	The York Water Company	Depreciation
07.	2001	PA PUC	R-00016339	Pennsylvania-American Water Company	Depreciation
08.	2001	OH PUC	01-1228-GA-AIR	Cinergy Corp – Cincinnati Gas & Elect Company	Depreciation
09.	2001	KY PSC	2001-092	Cinergy Corp – Union Light, Heat & Power Co.	Depreciation
10.	2002	PA PUC	R-00016750	Philadelphia Suburban Water Company	Depreciation
11.	2002	KY PSC	2002-00145	Columbia Gas of Kentucky	Depreciation
12.	2002	NJ BPU	GF02040245	NUI Corporation/Elizabethtown Gas Company	Depreciation
13.	2002	ID PUC	IPC-E-03-7	Idaho Power Company	Depreciation
14.	2003	PA PUC	R-0027975	The York Water Company	Depreciation
15.	2003	IN URC	R-0027975	Cinergy Corp – PSI Energy, Inc.	Depreciation
16.	2003	PA PUC	R-00038304	Pennsylvania-American Water Company	Depreciation
17.	2003	MO PSC	WR-2003-0500	Missouri-American Water Company	Depreciation
18.	2003	FERC	ER03-1274-000	NSTAR-Boston Edison Company	Depreciation
19.	2003	NJ BPU	BPU 03080683	South Jersey Gas Company	Depreciation
20.	2003	NV PUC	03-10001	Nevada Power Company	Depreciation
21.	2003	LA PSC	U-27676	CenterPoint Energy – Arkla	Depreciation
22.	2003	PA PUC	R-00038805	Pennsylvania Suburban Water Company	Depreciation
23.	2004	AB En/Util Bd	1306821	EPCOR Distribution, Inc.	Depreciation
24.	2004	PA PUC	R-00038168	National Fuel Gas Distribution Corp (PA)	Depreciation
25.	2004	PA PUC	R-00049255	PPL Electric Utilities	Depreciation
26.	2004	PA PUC	R-00049165	The York Water Company	Depreciation
27.	2004	OK Corp Cm	PUC 200400187	CenterPoint Energy – Arkla	Depreciation
28.	2004	OH PUC	04-680-El-AIR	Cinergy Corp. – Cincinnati Gas and Electric Company	Depreciation
29.	2004	RR Com of TX	GUD#	CenterPoint Energy – Entex Gas Services Div.	Depreciation
30.	2004	NY PUC	04-G-1047	National Fuel Gas Distribution Gas (NY)	Depreciation
31.	2004	AR PSC	04-121-U	CenterPoint Energy – Arkla	Depreciation
32.	2005	IL CC	05-ICC-06	North Shore Gas Company	Depreciation
33.	2005	IL CC	05-ICC-06	Peoples Gas Light and Coke Company	Depreciation
34.	2005	KY PSC	2005-00042	Union Light Heat & Power	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
35.	2005	IL CC	05-0308	MidAmerican Energy Company	Depreciation
36.	2005	MO PSC	GF-2005	Laclede Gas Company	Depreciation
37.	2005	KS CC	05-WSEE-981-RTS	Westar Energy	Depreciation
38.	2005	RR Com of TX	GUD #	CenterPoint Energy – Entex Gas Services Div.	Depreciation
39.	2005	US District Court	Cause No. 1:99-CV-1693-LJM/VSS	Cinergy Corporation	Accounting
40.	2005	OK CC	PUD 200500151	Oklahoma Gas and Electric Company	Depreciation
41.	2005	MA Dept Tele-com & Ergy	DTE 05-85	NSTAR	Depreciation
42.	2005	NY PUC	05-E-934/05-G-0935	Central Hudson Gas & Electric Company	Depreciation
43.	2005	AK Reg Com	U-04-102	Chugach Electric Association	Depreciation
44.	2005	CA PUC	A05-12-002	Pacific Gas & Electric	Depreciation
45.	2006	PA PUC	R-00051030	Aqua Pennsylvania, Inc.	Depreciation
46.	2006	PA PUC	R-00051178	T.W. Phillips Gas and Oil Company	Depreciation
47.	2006	NC Util Cm.	G-5, Sub522	Pub. Service Company of North Carolina	Depreciation
48.	2006	PA PUC	R-00051167	City of Lancaster	Depreciation
49.	2006	PA PUC	R00061346	Duquesne Light Company	Depreciation
50.	2006	PA PUC	R-00061322	The York Water Company	Depreciation
51.	2006	PA PUC	R-00051298	PPL GAS Utilities	Depreciation
52.	2006	PUC of TX	32093	CenterPoint Energy – Houston Electric	Depreciation
53.	2006	KY PSC	2006-00172	Duke Energy Kentucky	Depreciation
54.	2006	SC PSC		SCANA	Accounting
55.	2006	AK Reg Com	U-06-6	Municipal Light and Power	Depreciation
56.	2006	DE PSC	06-284	Delmarva Power and Light	Depreciation
57.	2006	IN URC	IURC43081	Indiana American Water Company	Depreciation
58.	2006	AK Reg Com	U-06-134	Chugach Electric Association	Depreciation
59.	2006	MO PSC	WR-2007-0216	Missouri American Water Company	Depreciation
60.	2006	FERC	IS05-82-002, et al	TransAlaska Pipeline	Depreciation
61.	2006	PA PUC	R-00061493	National Fuel Gas Distribution Corp. (PA)	Depreciation
62.	2007	NC Util Com.	E-7 SUB 828	Duke Energy Carolinas, LLC	Depreciation
63.	2007	OH PSC	08-709-EL-AIR	Duke Energy Ohio Gas	Depreciation
64.	2007	PA PUC	R-00072155	PPL Electric Utilities Corporation	Depreciation
65.	2007	KY PSC	2007-00143	Kentucky American Water Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
66.	2007	PA PUC	R-00072229	Pennsylvania American Water Company	Depreciation
67.	2007	KY PSC	2007-0008	NiSource – Columbia Gas of Kentucky	Depreciation
68.	2007	NY PSC	07-G-0141	National Fuel Gas Distribution Corp (NY)	Depreciation
69.	2008	AK PSC	U-08-004	Anchorage Water & Wastewater Utility	Depreciation
70.	2008	TN Reg Auth	08-00039	Tennessee-American Water Company	Depreciation
71.	2008	DE PSC	08-96	Artesian Water Company	Depreciation
72.	2008	PA PUC	R-2008-2023067	The York Water Company	Depreciation
73.	2008	KS CC	08-WSEE1-RTS	Westar Energy	Depreciation
74.	2008	IN URC	43526	Northern Indiana Public Service Company	Depreciation
75.	2008	IN URC	43501	Duke Energy Indiana	Depreciation
76.	2008	MD PSC	9159	NiSource – Columbia Gas of Maryland	Depreciation
77.	2008	KY PSC	2008-000251	Kentucky Utilities	Depreciation
78.	2008	KY PSC	2008-000252	Louisville Gas & Electric	Depreciation
79.	2008	PA PUC	2008-20322689	Pennsylvania American Water Co. - Wastewater	Depreciation
80.	2008	NY PSC	08-E887/08-00888	Central Hudson	Depreciation
81.	2008	WV TC	VE-080416/VG-8080417	Avista Corporation	Depreciation
82.	2008	IL CC	ICC-09-166	Peoples Gas, Light and Coke Company	Depreciation
83.	2009	IL CC	ICC-09-167	North Shore Gas Company	Depreciation
84.	2009	DC PSC	1076	Potomac Electric Power Company	Depreciation
85.	2009	KY PSC	2009-00141	NiSource – Columbia Gas of Kentucky	Depreciation
86.	2009	FERC	ER08-1056-002	Entergy Services	Depreciation
87.	2009	PA PUC	R-2009-2097323	Pennsylvania American Water Company	Depreciation
88.	2009	NC Util Cm	E-7, Sub 090	Duke Energy Carolinas, LLC	Depreciation
89.	2009	KY PSC	2009-00202	Duke Energy Kentucky	Depreciation
90.	2009	VA St. CC	PUE-2009-00059	Aqua Virginia, Inc.	Depreciation
91.	2009	PA PUC	2009-2132019	Aqua Pennsylvania, Inc.	Depreciation
92.	2009	MS PSC	Docket No. 2011-UA-183	Entergy Mississippi	Depreciation
93.	2009	AK PSC	09-08-U	Entergy Arkansas	Depreciation
94.	2009	TX PUC	37744	Entergy Texas	Depreciation
95.	2009	TX PUC	37690	El Paso Electric Company	Depreciation
96.	2009	PA PUC	R-2009-2106908	The Borough of Hanover	Depreciation
97.	2009	KS CC	10-KCPE-415-RTS	Kansas City Power & Light	Depreciation
98.	2009	PA PUC	R-2009-	United Water Pennsylvania	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
99.	2009	OH PUC		Aqua Ohio Water Company	Depreciation
100.	2009	WI PSC	3270-DU-103	Madison Gas & Electric Company	Depreciation
101.	2009	MO PSC	WR-2010	Missouri American Water Company	Depreciation
102.	2009	AK Reg Cm	U-09-097	Chugach Electric Association	Depreciation
103.	2010	IN URC	43969	Northern Indiana Public Service Company	Depreciation
104.	2010	WI PSC	6690-DU-104	Wisconsin Public Service Corp.	Depreciation
105.	2010	PA PUC	R-2010-2161694	PPL Electric Utilities Corp.	Depreciation
106.	2010	KY PSC	2010-00036	Kentucky American Water Company	Depreciation
107.	2010	PA PUC	R-2009-2149262	Columbia Gas of Pennsylvania	Depreciation
108.	2010	MO PSC	GR-2010-0171	Laclede Gas Company	Depreciation
109.	2010	SC PSC	2009-489-E	South Carolina Electric & Gas Company	Depreciation
110.	2010	NJ BD OF PU	ER09080664	Atlantic City Electric	Depreciation
111.	2010	VA St. CC	PUE-2010-00001	Virginia American Water Company	Depreciation
112.	2010	PA PUC	R-2010-2157140	The York Water Company	Depreciation
113.	2010	MO PSC	ER-2010-0356	Greater Missouri Operations Company	Depreciation
114.	2010	MO PSC	ER-2010-0355	Kansas City Power and Light	Depreciation
115.	2010	PA PUC	R-2010-2167797	T.W. Phillips Gas and Oil Company	Depreciation
116.	2010	PSC SC	2009-489-E	SCANA – Electric	Depreciation
117.	2010	PA PUC	R-2010-22010702	Peoples Natural Gas, LLC	Depreciation
118.	2010	AK PSC	10-067-U	Oklahoma Gas and Electric Company	Depreciation
119.	2010	IN URC	Cause No. 43894	Northern Indiana Public Serv. Company - NIFL	Depreciation
120.	2010	IN URC	Cause No. 43894	Northern Indiana Public Serv. Co. - Kokomo	Depreciation
121.	2010	PA PUC	R-2010-2166212	Pennsylvania American Water Co. - WW	Depreciation
122.	2010	NC Util Cn.	W-218,SUB310	Aqua North Carolina, Inc.	Depreciation
123.	2011	OH PUC	11-4161-WS-AIR	Ohio American Water Company	Depreciation
124.	2011	MS PSC	EC-123-0082-00	Entergy Mississippi	Depreciation
125.	2011	CO PUC	11AL-387E	Black Hills Colorado	Depreciation
126.	2011	PA PUC	R-2010-2215623	Columbia Gas of Pennsylvania	Depreciation
127.	2011	PA PUC	R-2010-2179103	City of Lancaster – Bureau of Water	Depreciation
128.	2011	IN URC	43114 IGCC 4S	Duke Energy Indiana	Depreciation
129.	2011	FERC	IS11-146-000	Enbridge Pipelines (Southern Lights)	Depreciation
130.	2011	IL CC	11-0217	MidAmerican Energy Corporation	Depreciation
131.	2011	OK CC	201100087	Oklahoma Gas & Electric Company	Depreciation
132.	2011	PA PUC	2011-2232243	Pennsylvania American Water Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
133.	2011	FERC	RP11-___-000	Carolina Gas Transmission	Depreciation
134.	2012	WA UTC	UE-120436/UG-120437	Avista Corporation	Depreciation
135.	2012	AK Reg Cm	U-12-009	Chugach Electric Association	Depreciation
136.	2012	MA PUC	DPU 12-25	Columbia Gas of Massachusetts	Depreciation
137.	2012	TX PUC	40094	El Paso Electric Company	Depreciation
138.	2012	ID PUC	IPC-E-12	Idaho Power Company	Depreciation
139.	2012	PA PUC	R-2012-2290597	PPL Electric Utilities	Depreciation
140.	2012	PA PUC	R-2012-2311725	Borough of Hanover – Bureau of Water	Depreciation
141.	2012	KY PSC	2012-00222	Louisville Gas and Electric Company	Depreciation
142.	2012	KY PSC	2012-00221	Kentucky Utilities Company	Depreciation
143.	2012	PA PUC	R-2012-2285985	Peoples Natural Gas Company	Depreciation
144.	2012	DC PSC	Case 1087	Potomac Electric Power Company	Depreciation
145.	2012	OH PSC	12-1682-EL-AIR	Duke Energy Ohio (Electric)	Depreciation
146.	2012	OH PSC	12-1685-GA-AIR	Duke Energy Ohio (Gas)	Depreciation
147.	2012	PA PUC	R-2012-2310366	City of Lancaster – Sewer Fund	Depreciation
148.	2012	PA PUC	R-2012-2321748	Columbia Gas of Pennsylvania	Depreciation
149.	2012	FERC	ER-12-2681-000	ITC Holdings	Depreciation
150.	2012	MO PSC	ER-2012-0174	Kansas City Power and Light	Depreciation
151.	2012	MO PSC	ER-2012-0175	KCPL Greater Missouri Operations Company	Depreciation
152.	2012	MO PSC	GO-2012-0363	Laclede Gas Company	Depreciation
153.	2012	MN PUC	G007,001/D-12-533	Integrys – MN Energy Resource Group	Depreciation
154.	2012	TX PUC	SOAH 582-14-1051/ TECQ 2013-2007-UCR	Aqua Texas	Depreciation
155.	2012	PA PUC	2012-2336379	York Water Company	Depreciation
156.	2013	NJ BPU	ER12121071	PHI Service Company– Atlantic City Electric	Depreciation
157.	2013	KY PSC	2013-00167	Columbia Gas of Kentucky	Depreciation
158.	2013	VA St CC	2013-00020	Virginia Electric and Power Company	Depreciation
159.	2013	IA Util Bd	2013-0004	MidAmerican Energy Corporation	Depreciation
160.	2013	PA PUC	2013-2355276	Pennsylvania American Water Company	Depreciation
161.	2013	NY PSC	13-E-0030, 13-G-0031, 13-S-0032	Consolidated Edison of New York	Depreciation
162.	2013	PA PUC	2013-2355886	Peoples TWP LLC	Depreciation
163.	2013	TN Reg Auth	12-0504	Tennessee American Water	Depreciation
164.	2013	ME PUC	2013-168	Central Maine Power Company	Depreciation
165.	2013	DC PSC	Case 1103	PHI Service Company – PEPCO	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
166.	2013	WY PSC	2003-ER-13	Cheyenne Light, Fuel and Power Company	Depreciation
167.	2013	FERC	ER13-2428-0000	Kentucky Utilities	Depreciation
168.	2013	FERC	ER13- -0000	MidAmerican Energy Company	Depreciation
169.	2013	FERC	ER13-2410-0000	PPL Utilities	Depreciation
170.	2013	PA PUC	R-2013-2372129	Duquesne Light Company	Depreciation
171.	2013	NJ BPU	ER12111052	Jersey Central Power and Light Company	Depreciation
172.	2013	PA PUC	R-2013-2390244	Bethlehem, City of – Bureau of Water	Depreciation
173.	2013	OK CC	UM 1679	Oklahoma, Public Service Company of	Depreciation
174.	2013	IL CC	13-0500	Nicor Gas Company	Depreciation
175.	2013	WY PSC	20000-427-EA-13	PacifiCorp	Depreciation
176.	2013	UT PSC	13-035-02	PacifiCorp	Depreciation
177.	2013	OR PUC	UM 1647	PacifiCorp	Depreciation
178.	2013	PA PUC	2013-2350509	Dubois, City of	Depreciation
179.	2014	IL CC	14-0224	North Shore Gas Company	Depreciation
180.	2014	FERC	ER14- -0000	Duquesne Light Company	Depreciation
181.	2014	SD PUC	EL14-026	Black Hills Power Company	Depreciation
182.	2014	WY PSC	20002-91-ER-14	Black Hills Power Company	Depreciation
183.	2014	PA PUC	2014-2428304	Borough of Hanover – Municipal Water Works	Depreciation
184.	2014	PA PUC	2014-2406274	Columbia Gas of Pennsylvania	Depreciation
185.	2014	IL CC	14-0225	Peoples Gas Light and Coke Company	Depreciation
186.	2014	MO PSC	ER-2014-0258	Ameren Missouri	Depreciation
187.	2014	KS CC	14-BHCG-502-RTS	Black Hills Service Company	Depreciation
188.	2014	KS CC	14-BHCG-502-RTS	Black Hills Utility Holdings	Depreciation
189.	2014	KS CC	14-BHCG-502-RTS	Black Hills Kansas Gas	Depreciation
190.	2014	PA PUC	2014-2418872	Lancaster, City of – Bureau of Water	Depreciation
191.	2014	WV PSC	14-0701-E-D	First Energy – MonPower/PotomacEdison	Depreciation
192	2014	VA St CC	PUC-2014-00045	Aqua Virginia	Depreciation
193.	2014	VA St CC	PUE-2013	Virginia American Water Company	Depreciation
194.	2014	OK CC	PUD201400229	Oklahoma Gas and Electric Company	Depreciation
195.	2014	OR PUC	UM1679	Portland General Electric	Depreciation
196.	2014	IN URC	Cause No. 44576	Indianapolis Power & Light	Depreciation
197.	2014	MA DPU	DPU. 14-150	NSTAR Gas	Depreciation
198.	2014	CT PURA	14-05-06	Connecticut Light and Power	Depreciation
199.	2014	MO PSC	ER-2014-0370	Kansas City Power & Light	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
200.	2014	KY PSC	2014-00371	Kentucky Utilities Company	Depreciation
201.	2014	KY PSC	2014-00372	Louisville Gas and Electric Company	Depreciation
202.	2015	PA PUC	R-2015-2462723	United Water Pennsylvania Inc.	Depreciation
203.	2015	PA PUC	R-2015-2468056	NiSource - Columbia Gas of Pennsylvania	Depreciation
204.	2015	NY PSC	15-E-0283/15-G-0284	New York State Electric and Gas Corporation	Depreciation
205.	2015	NY PSC	15-E-0285/15-G-0286	Rochester Gas and Electric Corporation	Depreciation
206.	2015	MO PSC	WR-2015-0301/SR-2015-0302	Missouri American Water Company	Depreciation
207.	2015	OK CC	PUD 201500208	Oklahoma, Public Service Company of	Depreciation
208.	2015	WV PSC	15-0676-W-42T	West Virginia American Water Company	Depreciation
209.	2015	PA PUC	2015-2469275	PPL Electric Utilities	Depreciation
210.	2015	IN URC	Cause No. 44688	Northern Indiana Public Service Company	Depreciation
211.	2015	OH PSC	14-1929-EL-RDR	First Energy-Ohio Edison/Cleveland Electric/ Toledo Edison	Depreciation
212.	2015	NM PRC	15-00127-UT	El Paso Electric	Depreciation
213.	2015	TX PUC	PUC-44941; SOAH 473-15-5257	El Paso Electric	Depreciation
214.	2015	WI PSC	3270-DU-104	Madison Gas and Electric Company	Depreciation
215.	2015	OK CC	PUD 201500273	Oklahoma Gas and Electric	Depreciation
216.	2015	KY PSC	Doc. No. 2015-00418	Kentucky American Water Company	Depreciation
217.	2015	NC UC	Doc. No. G-5, Sub 565	Public Service Company of North Carolina	Depreciation
218.	2016	WA UTC	Docket UE-17	Puget Sound Energy	Depreciation
219.	2016	NY PSC	Case No. 16-W-0130	SUEZ Water New York, Inc.	Depreciation
220.	2016	MO PSC	ER-2016-0156	KCPL – Greater Missouri	Depreciation
221.	2016	WI PSC		Wisconsin Public Service Corporation	Depreciation
222.	2016	KY PSC	Case No. 2016-00026	Kentucky Utilities Company	Depreciation
223.	2016	KY PSC	Case No. 2016-00027	Louisville Gas and Electric Company	Depreciation
224.	2016	OH PUC	Case No. 16-0907-WW-AIR	Aqua Ohio	Depreciation
225.	2016	MD PSC	Case 9417	NiSource - Columbia Gas of Maryland	Depreciation
226.	2016	KY PSC	2016-00162	Columbia Gas of Kentucky	Depreciation
227.	2016	DE PSC	16-0649	Delmarva Power and Light Company – Electric	Depreciation
228.	2016	DE PSC	16-0650	Delmarva Power and Light Company – Gas	Depreciation
229.	2016	NY PSC	Case 16-G-0257	National Fuel Gas Distribution Corp – NY Div	Depreciation
230.	2016	PA PUC	R-2016-2537349	Metropolitan Edison Company	Depreciation
231.	2016	PA PUC	R-2016-2537352	Pennsylvania Electric Company	Depreciation
232.	2016	PA PUC	R-2016-2537355	Pennsylvania Power Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
233.	2016	PA PUC	R-2016-2537359	West Penn Power Company	Depreciation
234.	2016	PA PUC	R-2016-2529660	NiSource - Columbia Gas of PA	Depreciation
235.	2016	KY PSC	Case No. 2016-00063	Kentucky Utilities / Louisville Gas & Electric Co	Depreciation
236.	2016	MO PSC	ER-2016-0285	KCPL Missouri	Depreciation
237.	2016	AR PSC	16-052-U	Oklahoma Gas & Electric Co	Depreciation
238.	2016	PSCW	6680-DU-104	Wisconsin Power and Light	Depreciation
239.	2016	ID PUC	IPC-E-16-23	Idaho Power Company	Depreciation
240.	2016	OR PUC	UM1801	Idaho Power Company	Depreciation
241.	2016	ILL CC	16-	MidAmerican Energy Company	Depreciation
242.	2016	KY PSC	Case No. 2016-00370	Kentucky Utilities Company	Depreciation
243.	2016	KY PSC	Case No. 2016-00371	Louisville Gas and Electric Company	Depreciation
244.	2016	IN URC	Cause No. 45029	Indianapolis Power & Light	Depreciation
245.	2016	AL RC	U-16-081	Chugach Electric Association	Depreciation
246.	2017	MA DPU	D.P.U. 17-05	NSTAR Electric Company and Western Massachusetts Electric Company	Depreciation
247.	2017	TX PUC	PUC-26831, SOAH 973-17-2686	El Paso Electric Company	Depreciation
248.	2017	WA UTC	UE-17033 and UG-170034	Puget Sound Energy	Depreciation
249.	2017	OH PUC	Case No. 17-0032-EL-AIR	Duke Energy Ohio	Depreciation
250.	2017	VA SCC	Case No. PUE-2016-00413	Virginia Natural Gas, Inc.	Depreciation
251.	2017	OK CC	Case No. PUD201700151	Public Service Company of Oklahoma	Depreciation
252.	2017	MD PSC	Case No. 9447	Columbia Gas of Maryland	Depreciation
253.	2017	NC UC	Docket No. E-2, Sub 1142	Duke Energy Progress	Depreciation
254.	2017	VA SCC	Case No. PUR-2017-00090	Dominion Virginia Electric and Power Company	Depreciation
255.	2017	FERC	ER17-1162	MidAmerican Energy Company	Depreciation
256.	2017	PA PUC	R-2017-2595853	Pennsylvania American Water Company	Depreciation
257.	2017	OR PUC	UM1809	Portland General Electric	Depreciation
258.	2017	FERC	ER17-217-000	Jersey Central Power & Light	Depreciation
259.	2017	FERC	ER17-211-000	Mid-Atlantic Interstate Transmission, LLC	Depreciation
260.	2017	MN PUC	Docket No. G007/D-17-442	Minnesota Energy Resources Corporation	Depreciation
261.	2017	IL CC	Docket No. 17-0124	Northern Illinois Gas Company	Depreciation
262.	2017	OR PUC	UM1808	Northwest Natural Gas Company	Depreciation
263.	2017	NY PSC	Case No. 17-W-0528	SUEZ Water Owego-Nichols	Depreciation
264.	2017	MO PSC	GR-2017-0215	Laclede Gas Company	Depreciation
265.	2017	MO PSC	GR-2017-0216	Missouri Gas Energy	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
266.	2017	ILL CC	Docket No. 17-0337	Illinois-American Water Company	Depreciation
267.	2017	FERC	Docket No. ER18-22-000	PPL Electric Utilities Corporation	Depreciation
268.	2017	IN URC	Cause No. 44988	Northern Indiana Public Service Company	Depreciation
269.	2017	NJ BPU	BPU Docket No. WR17090985	New Jersey American Water Company, Inc.	Depreciation
270.	2017	RI PUC	Docket No. 4800	SUEZ Water Rhode Island	Depreciation
271.	2017	OK CC	Cause No. PUD 201700496	Oklahoma Gas and Electric Company	Depreciation
272.	2017	NJ BPU	ER18010029 & GR18010030	Public Service Electric and Gas Company	Depreciation
273.	2017	NC Util Com.	Docket No. E-7, SUB 1146	Duke Energy Carolinas, LLC	Depreciation
274.	2017	KY PSC	Case No. 2017-00321	Duke Energy Kentucky, Inc.	Depreciation
275.	2017	MA DPU	D.P.U. 18-40	Berkshire Gas Company	Depreciation
276.	2018	IN IURC	Cause No. 44992	Indiana-American Water Company, Inc.	Depreciation
277.	2018	IN IURC	Cause No. 45029	Indianapolis Power and Light	Depreciation
278.	2018	NC Util Com.	Docket No. W-218, Sub 497	Aqua North Carolina, Inc.	Depreciation
279.	2018	PA PUC	Docket No. R-2018-2647577	NiSource - Columbia Gas of Pennsylvania, Inc.	Depreciation
280.	2018	OR PUC	Docket UM 1933	Avista Corporation	Depreciation
281.	2018	WA UTC	Docket No. UE-108167	Avista Corporation	Depreciation
282.	2018	ID PUC	AVU-E-18-03, AVU-G-18-02	Avista Corporation	Depreciation
283.	2018	IN URC	Cause No. 45039	Citizens Energy Group	Depreciation
284.	2018	FERC	Docket No. ER18-	Duke Energy Progress	Depreciation
285.	2018	PA PUC	Docket No. R-2018-3000124	Duquesne Light Company	Depreciation
286.	2018	MD PSC	Case No. 948	NiSource - Columbia Gas of Maryland	Depreciation
287.	2018	MA DPU	D.P.U. 18-45	NiSource - Columbia Gas of Massachusetts	Depreciation
288.	2018	OH PUC	Case No. 18-0299-GA-ALT	Vectren Energy Delivery of Ohio	Depreciation
289.	2018	PA PUC	Docket No. R-2018-3000834	SUEZ Water Pennsylvania Inc.	Depreciation
290.	2018	MD PSC	Case No. 9847	Maryland-American Water Company	Depreciation
291.	2018	PA PUC	Docket No. R-2018-3000019	The York Water Company	Depreciation
292.	2018	FERC	ER-18-2231-000	Duke Energy Carolinas, LLC	Depreciation
293.	2018	KY PSC	Case No. 2018-00261	Duke Energy Kentucky, Inc.	Depreciation
294.	2018	NJ BPU	BPU Docket No. WR18050593	SUEZ Water New Jersey	Depreciation
295.	2018	WA UTC	Docket No. UE-180778	PacifiCorp	Depreciation
296.	2018	UT PSC	Docket No. 18-035-36	PacifiCorp	Depreciation
297.	2018	OR PUC	Docket No. UM-1968	PacifiCorp	Depreciation
298.	2018	ID PUC	Case No. PAC-E-18-08	PacifiCorp	Depreciation
299.	2018	WY PSC	20000-539-EA-18	PacifiCorp	Depreciation
300.	2018	PA PUC	Docket No. R-2018-3003068	Aqua Pennsylvania, Inc.	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
301.	2018	IL CC	Docket No. 18-1467	Aqua Illinois, Inc.	Depreciation
302.	2018	KY PSC	Case No. 2018-00294	Louisville Gas & Electric Company	Depreciation
303.	2018	KY PSC	Case No. 2018-00295	Kentucky Utilities Company	Depreciation
304.	2018	IN URC	Cause No. 45159	Northern Indiana Public Service Company	Depreciation
305.	2018	VA SCC	Case No. PUR-2019-00175	Virginia American Water Company	Depreciation
306.	2019	PA PUC	Docket No. R-2018-3006818	Peoples Natural Gas Company, LLC	Depreciation
307.	2019	OK CC	Cause No. PUD201800140	Oklahoma Gas and Electric Company	Depreciation
308.	2019	MD PSC	Case No. 9490	FirstEnergy – Potomac Edison	Depreciation
309.	2019	SC PSC	Docket No. 2018-318-E	Duke Energy Progress	Depreciation
310.	2019	SC PSC	Docket No. 2018-319-E	Duke Energy Carolinas	Depreciation
311.	2019	DE PSC	DE 19-057	Public Service of New Hampshire	Depreciation
312.	2019	NY PSC	Case No. 19-W-0168 & 19-W-	SUEZ Water New York	Depreciation
313.	2019	PA PUC	Docket No. R-2019-3006904	Newtown Artesian Water Company	Depreciation
314.	2019	MO PSC	ER-2019-0335	Ameren Missouri	Depreciation
315.	2019	MO PSC	EC-2019-0200	KCP&L Greater Missouri Operations Company	Depreciation
316.	2019	MN DOC	G011/D-19-377	Minnesota Energy Resource Corp.	Depreciation
317.	2019	NY PSC	Case 19-E-0378 & 19-G-0379	New York State Electric and Gas Corporation	Depreciation
318.	2019	NY PSC	Case 19-E-0380 & 19-G-0381	Rochester Gas and Electric Corporation	Depreciation
319.	2019	WA UTC	Docket UE-190529 / UG-190530	Puget Sound Energy	Depreciation
320.	2019	PA PUC	Docket No. R-2019-3010955	City of Lancaster	Depreciation
321.	2019	IURC	Cause No. 45253	Duke Energy Indiana	Depreciation
322.	2019	KY PSC	Case No. 2019-00271	Duke Energy Kentucky, Inc.	Depreciation
323.	2019	OH PUC	Case No. 18-1720-GA-AIR	Northeast Ohio Natural Gas Corp	Depreciation
324.	2019	NC Util. Com.	Docket No. E-2, Sub 1219	Duke Energy Carolinas	Depreciation
325.	2019	FERC	Docket No. ER20-277-000	Jersey Central Power & Light Company	Depreciation
326.	2019	MA DPU	D.P.U. 19-120	NSTAR Gas Company	Depreciation
327.	2019	SC PSC	Docket No. 2019-290-WS	Blue Granite Water Company	Depreciation
328.	2019	NC Util. Com.	Docket No. E-2, Sub 1219	Duke Energy Progress	Depreciation
329.	2019	MD PSC	Case No. 9609	NiSource Columbia Gas of Maryland, Inc.	Depreciation
330.	2020	NJ BPU	Docket No. ER20020146	Jersey Central Power & Light Company	Depreciation
331.	2020	PA PUC	Docket No. R-2020-3018835	NiSource - Columbia Gas of Pennsylvania, Inc.	Depreciation
332.	2020	PA PUC	Docket No. R-2020-3019369	Pennsylvania-American Water Company	Depreciation
333.	2020	PA PUC	Docket No. R-2020-3019371	Pennsylvania-American Water Company	Depreciation
334.	2020	MO PSC	GO-2018-0309, GO-2018-0310	Spire Missouri, Inc.	Depreciation
335.	2020	NM PRC	Case No. 20-00104-UT	El Paso Electric Company	Depreciation
336.	2020	MD PSC	Case No. 9644	Columbia Gas of Maryland, Inc.	Depreciation
337.	2020	MO PSC	GO-2018-0309, GO-2018-0310	Spire Missouri, Inc.	Depreciation
338.	2020	VA St CC	Case No. PUR-2020-00095	Virginia Natural Gas Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
339.	2020	SC PSC	Docket No. 2020-125-E	Dominion Energy South Carolina, Inc.	Depreciation
340.	2020	WV PSC	Case No. 20-0745-G-D	Hope Gas, Inc. d/b/a Dominion Energy West Virginia	Depreciation
341.	2020	VA St CC	Case No. PUR-2020-00106	Aqua Virginia, Inc.	Depreciation
342.	2020	PA PUC	Docket No. R-2020-3020256	City of Bethlehem – Bureau of Water	Depreciation
343.	2020	NE PSC	Docket No. NG-109	Black Hills Nebraska	Depreciation
344.	2020	NY PSC	Case No. 20-E-0428 & 20-G-0429	Central Hudson Gas & Electric Corporation	Depreciation
345.	2020	FERC	ER20-598	Duke Energy Indiana	Depreciation
346.	2020	FERC	ER20-855	Northern Indiana Public Service Company	Depreciation
347.	2020	OR PSC	UE 374	PacifiCorp	Depreciation
348.	2020	MD PSC	Case No. 9490 Phase II	Potomac Edison – Maryland	Depreciation
349.	2020	IN URC	Case No. 45447	Southern Indiana Gas and Electric Company	Depreciation
350.	2020	IN URC	IURC Cause No. 45468	Indiana Gas Company, Inc. d/b/a Vectren Energy Delivery of	Depreciation
351.	2020	KY PSC	Case No. 2020-00349	Kentucky Utilities Company	Depreciation
352.	2020	KY PSC	Case No. 2020-00350	Louisville Gas and Electric Company	Depreciation
353.	2020	FERC	Docket No. ER21- 000	South FirstEnergy Operating Companies	Depreciation
354.	2020	OH PUC	Case Nos 20-1651-EL-AIR, 20-1652-EL-AAM & 20-1653-EL-ATA	Dayton Power and Light Company	Depreciation
355.	2020	OR PSC	UG 388	Northwest Natural Gas Company	Depreciation
356.	2020	MO PSC	Case No. GR-2021-0241	Ameren Missouri Gas	Depreciation
357.	2021	KY PSC	Case No. 2021-00103	East Kentucky Power Cooperative	Depreciation
358.	2021	MPUC	Docket No. 2021-00024	Bangor Natural Gas	Depreciation
359.	2021	PA PUC	Docket No. R-2021-3024296	Columbia Gas of Pennsylvania, Inc.	Depreciation
360.	2021	NC Util. Com.	Doc. No. G-5, Sub 632	Public Service of North Carolina	Depreciation
361.	2021	MO PSC	ER-2021-0240	Ameren Missouri	Depreciation
362.	2021	PA PUC	Docket No. R-2021-3024750	Duquesne Light Company	Depreciation
363.	2021	KS PSC	21-BHCG-418-RTS	Black Hills Kansas Gas	Depreciation
364.	2021	KY PSC	Case No. 2021-00190	Duke Energy Kentucky	Depreciation
365.	2021	OR PSC	Docket UM 2152	Portland General Electric	Depreciation
366.	2021	ILL CC	Docket No. 20-0810	North Shore Gas Company	Depreciation
367.	2021	FERC	ER21-1939-000	Duke Energy Progress	Depreciation
368.	2021	FERC	ER21-1940-000	Duke Energy Carolina	Depreciation
369.	2021	KY PSC	Case No. 2021-00183	NiSource Columbia Gas of Kentucky	Depreciation
370.	2021	MD PSC	Case No. 9664	NiSource Columbia Gas of Maryland	Depreciation
371.	2021	OH PUC	Case No. 21-0596-ST-AIR	Aqua Ohio	Depreciation
372.	2021	PA PUC	Docket No. R-2021-3026116	Hanover Borough Municipal Water Works	Depreciation
373.	2021	OR PSC	UM-2180	Idaho Power Company	Depreciation
374.	2021	ID PUC	Case No. IPC-E-21-18	Idaho Power Company	Depreciation
375.	2021	WPSC	6690-DU-104	Wisconsin Public Service Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
376.	2021	PAPUC	Docket No. R-2021-3026116	Borough of Hanover	Depreciation
377.	2021	OH PUC	Case No. 21-637-GA-AIR; Case No. 21-638-GA-ALT; Case No. 21-639-GA-UNC; Case No. 21-640-GA-AAM	NiSource Columbia Gas of Ohio	Depreciation
378.	2021	TX PUC	Texas PUC Docket No. 52195; SOHA Docket No. 473-21-2606	El Paso Electric	Depreciation
379.	2021	MO PSC	Case No. GR.2021-0108	Spire Missouri	Depreciation
380.	2021	WV PSC	Case No. 21-0215-WS-P	West Virginia American Water Company	Depreciation
381.	2021	FERC	ER21-2736	Duke Energy Carolinas	Depreciation
382.	2021	FERC	ER21-2737	Duke Energy Progress	Depreciation
383.	2021	IN URC	Cause #45621	Northern Indiana Public Service Company	Depreciation
384.	2021	PA PUC	Docket No. R-2021-3026682	City of Lancaster	Depreciation
385.	2021	OH PUC	Case No. 21-887-EL-AIR; Case No. 21-888-EL-ATA; Case No. 889-El-AAM	Duke Energy Ohio	Depreciation
386.	2021	AK PSC	Docket No. 21-097-U	Black Hills Energy Arkansas, Inc.	Depreciation
387.	2021	OK CC	Cause No. PUD202100164	Oklahoma Gas & Electric	Depreciation
388.	2021	FERC	Case ER-22-392-001	El Paso Electric	Depreciation
389.	2021	FERC	Case ER-21-XXX	MidAmerican Electric	Depreciation
390.	2021	PA PUC	Docket Nos. R-2021-3027385, R-2021-3027386	Aqua Pennsylvania, Inc. Aqua Pennsylvania Wastewater, Inc.	Depreciation
391.	2022	FERC	Case ER-22-282-000	El Paso Electric	Depreciation
392.	2022	ILL CC	Docket No. 22-0154	MidAmerican Gas	Depreciation
393.	2022	MO PSC	Case No. ER-2022-0129	Evergy Metro	Depreciation
394.	2022	MO PSC	Case No. ER-2022-0130	Evergy Missouri West	Depreciation
395.	2022	PA PUC	Docket No. R-2022-3031211	NiSource Columbia Gas of Pennsylvania, Inc.	Depreciation
396.	2022	MA DPU	D.P.U. 22-20	The Berkshire Gas Company	Depreciation
397.	2022	PA PUC	R-2022-3031672; R-2022-	Pennsylvania-American Water Company	Depreciation
398.	2022	SD PUC	Docket No. NG22-	MidAmerican Gas	Depreciation
399.	2022	MD PSC	Case No. 9680	NiSource Columbia Gas of Maryland	Depreciation
400.	2022	WYPSC	Docket No. 20003-214-ER-22	Black Hills Energy – Cheyenne Light, Fuel and Power Company	Depreciation
401.	2022	MA DPU	D.P.U. 22.22	NSTAR Electric Company d/b/a Eversource Energy	Depreciation
402.	2022	NC Util Com	Docket No. W-218, Sub 573	Aqua North Carolina, Inc.	Depreciation
403.	2022	OR PUC	UM2213	Northwest Natural Gas	Depreciation
404.	2022	OR PUC	UM2214	Northwest Natural Gas	Depreciation
405.	2022	ME PUC	Docket No. 2022-00152	Central Maine Power	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
406.	2022	SC PSC	Docket No. 2022-254-E	Duke Energy Progress	Depreciation
407.	2022	NC Util Com	Docket No. E-2, SUB 1300	Duke Energy Progress	Depreciation
408.	2022	IN URC	Cause #45772	Northern Indiana Public Service Company	Depreciation
409.	2022	PA PUC	R-2022-3031340	The York Water Company	Depreciation
410.	2022	PA PUC	R-2022-3032806	The York Water Company	Depreciation
411.	2022	PA PUC	R-2022-3031704	Borough of Ambler	Depreciation
412.	2022	MO PSC	ER-2022-0337	Ameren Missouri	Depreciation
413.	2022	OH PUC	Case No. 22-507-GA-AIR	Duke Energy Ohio	Depreciation
414.	2022	PA PUC	R-2022-3035730	National Fuel Gas Distribution Corporation – PA Division	Depreciation
415.	2022	WY PSC	20003-214-ER-22	Cheyenne Light, Fuel and Power Company	Depreciation
416.	2022	NJ BPU	BPU Docket No. ER2303144	Jersey Central Power & Light Company	Depreciation
417.	2022	KY PSC	Case No. 2022-00372	Duke Energy Kentucky	Depreciation
418.	2022	TX PUC	SOAH Docket No. 473-23-04521	Aqua Texas, Inc.	Depreciation
419.	2022	NC Util Com	Docket No. E-7, Sub 1276	Duke Energy Carolinas, LLC	Depreciation
420.	2022	KY PSC	Case No. 2022-00432	Bluegrass Water	Depreciation
421.	2023	ILL CC	Docket No. 23-0069	The Peoples Gas Light and Coke Company	Depreciation
422.	2023	ILL CC	Docket No. 23-0068	North Shore Gas Company	Depreciation
423.	2023	WV PSC	Case No. 23-0030-E-D	Monongahela Power Company and The Potomac Edison Company	Depreciation
424.	2023	ID PUC	AVU-E-23-01; AVU-G-23-01	Avista Corporation	Depreciation
425.	2023	ILL CC	Docket No. 23-0066	Northern Illinois Gas Company d/b/a Nicor Gas Company	Depreciation
426.	2023	SC PSC	Docket No. 2023-70-G	Dominion Energy South Carolina, Inc.	Depreciation
427.	2023	FERC	Docket No. ER23-xxx-00	Duke Energy Ohio, Inc.	Depreciation
428.	2023	WY PSC	Docket No. 30036-78-GR-23	Black Hills Wyoming Gas Company d/b/a Black Hills Energy	Depreciation
429.	2023	PSC MD	Case No. 9695	The Potomac Edison Company	Depreciation
430.	2023	OR PUC	Case No. UM2277	Avista Corporation	Depreciation
431.	2023	FERC	Docket No. ER23-xxx-000	PPL Electric Utilities	Depreciation
432.	2023	OH PUC	Case No. 23-0154-GA-AIR	Northeast Ohio Natural Gas Corporation	Depreciation
433.	2023	DE PSC	PSC Docket No. 23-0601	Artesian Water Company	Depreciation
434.	2023	CO PUC	No. 23AL-0231G	Black Hills Colorado d/b/a Black Hills Energy	Depreciation
435.	2023	NH PUC	Docket No. DE 23-039	Granite State Electric d/b/a Liberty Utilities	Depreciation
436.	2023	MD PSC	Case No. 9701	Columbia Gas of Maryland	Depreciation
437.	2023	NY PSC	Case Nos. 23-E-0418; 23-G-0419	Central Hudson Gas and Electric	Depreciation
438.	2023	FERC	Docket No. ER23-xxx-000	Central Maine Power Company	Depreciation
439.	2023	SD PUC	Docket Number EL23-016	Northwestern Energy	Depreciation
440.	2023	CT PURA	Docket No. 23-08-32	Connecticut Water Company	Depreciation
441.	2023	IN URC	Cause No. 45911	Indianapolis Power & Light	Depreciation

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **John J. Spanos**, hereby state that the facts set forth in the pre-marked Statement No. 11 and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: November 8, 2023

John J. Spanos

Appendix B

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Depreciation Study

FR VI.1

Pennsylvania-American Water Company
VI. Depreciation

1. Provide a description of the depreciation methods used to calculate annual depreciation amounts and depreciation reserves, together with a discussion of the factors which were considered in arriving at estimates of service life and dispersion by account. Supply a comprehensive statement of any changes made in method of depreciation. Provide dates of all field inspections and facilities visited.

Answer:

The depreciation methods utilized in calculating annual and accrued depreciation are discussed in Exhibit No. 11-B in Part IV of the water depreciation study. The calculation of annual and accrued depreciation are discussed in Exhibit Nos. 11-E, 11-G, 11-I and 11-L in Part IV of the wastewater depreciation studies.

Field trips and facilities visited for Pennsylvania-American Water Company water and wastewater systems are presented in Part III. Service Life Considerations, in Exhibit Nos. 11-B, 11-E, 11-G, 11-I and 11-L of those that had recent visits.

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Depreciation Study

FR VI.2

Pennsylvania-American Water Company
VI. Depreciation

2. Set forth, in exhibit form, charts depicting the original and estimated survivor curves and a tabular presentation of the original life table plotted on the chart for each account where the retirement rate method of analysis is utilized.

Answer:

Charts depicting the original and estimated survivor curves and a tabular presentation of the original life table plotted on the chart for each account where the retirement rate method of analysis is utilized is presented in Exhibit No. 11-B in Part VI. Service Life Statistics, of the water depreciation study. The original and estimated survivor curves and a tabular presentation of the original life table plotted on the chart for each account where the retirement rate method of analysis is utilized is presented in Exhibit Nos. 11-E, 11-G, 11-I and 11-L in Part VI. Service Life Statistics, for wastewater depreciation studies.

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Depreciation Study

FR VI.3

Pennsylvania-American Water Company
VI. Depreciation

3. Provide the surviving original cost at historic test year-end by vintage by account and include applicable depreciation reserves and accruals. These calculations should be provided for plant in service as well as other categories of plant, including contributions in aid of construction and customers' advances for construction.

Answer:

The surviving original cost at the end of the historical year June 30, 2023 by vintage by account and the applicable depreciation reserve for utility plant are presented in Exhibit No. 11-A beginning on page II-8, in Exhibit No. 11-D beginning on page II-7, and in Exhibit No. 11-K beginning on page II-6.

The surviving original cost at test year end June 30, 2024, by vintage by account and the applicable depreciation reserve for utility plant are presented in Exhibit No. 11-B beginning on page VII-8, in Exhibit No. 11-E beginning on page VII-7, in Exhibit No. 11-G beginning on page VII-6, in Exhibit No. 11-I beginning on page VII-6, and in Exhibit No. 11-L beginning on page VII-6.

The surviving original cost at test year end June 30, 2025, by vintage by account and the applicable depreciation reserve for utility plant are presented in Exhibit No. 11-C beginning on page II-7, in Exhibit No. 11-F beginning on page II-7, in Exhibit No. 11-H beginning on page II-6, in Exhibit No. 11-J beginning on page II-6, and in Exhibit No. 11-M beginning on page II-6.

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Depreciation Study

FR VI.4

Pennsylvania-American Water Company
VI. Depreciation

4. Provide a comparison of the calculated depreciation reserve used for ratemaking purposes v. the book reserve by account at the end of the test year, if they differ.

Answer:

A comparison of the calculated depreciation reserve v. book reserve by account at June 30, 2023, at June 30, 2024, and at June 30, 2025, are attached as pages FR VI.4 (2) through (20) for all water and wastewater systems by account.

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK DEPRECIATION RESERVE AS OF JUNE 30, 2023

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK DEPRECIATION RESERVE
	(1)	(2)	(3)
DEPRECIABLE PLANT			
303.14	WATER RIGHTS - HIBERNIA	1,942,823	1,942,823
303.35	WASTE HANDLING AND TREATMENT LAND	99,548	131,860
303.99	COMPREHENSIVE PLANNING STUDIES	9,145,491	7,254,665
304.15	OTHER WATER SOURCE STRUCTURES	15,309,490	7,841,590
304.20	POWER AND PUMING STRUCTURES		
	LARGE STRUCTURES	17,219,794	8,229,846
	OTHER STRUCTURES	17,533,987	8,380,009
	TOTAL ACCOUNT 304.2	34,753,781	16,609,855
304.30	PURIFICATION BUILDINGS		
	LARGE STRUCTURES	99,183,411	100,397,397
	OTHER STRUCTURES	13,257,260	13,292,910
	TOTAL ACCOUNT 304.3	112,440,671	113,690,307
304.36	WASTE HANDLING AND TREATMENT STRUCTURES	8,632,820	7,463,436
304.38	WASTE HANDLING AND TREATMENT STRUCTURES PAINTING	327,929	331,573
304.39	PURIFICATION BUILDINGS - TANK PAINTING	111,088	112,323
304.61	OFFICE BUILDINGS		
	LARGE STRUCTURES	6,888,644	6,169,390
	OTHER STRUCTURES	4,356,055	3,901,233
	TOTAL ACCOUNT 304.61	11,244,699	10,070,623
304.62	STORES, SHOP AND GARAGE BUILDINGS		
	LARGE STRUCTURES	11,120,532	15,227,016
	OTHER STRUCTURES	3,073,693	4,208,717
	TOTAL ACCOUNT 304.62	14,194,225	19,435,733
304.63	MISCELLANEOUS STRUCTURES AND IMPROVEMENTS	1,255,286	3,630,315
	TOTAL ACCOUNT 304	198,269,989	179,185,755
305.00	COLLECTING AND IMPOUNDING RESERVOIRS		
	LARGE RESERVOIRS	24,585,414	20,920,002
	OTHER RESERVOIRS	3,612,251	2,979,691
	TOTAL ACCOUNT 305	28,197,665	23,899,693
306.00	LAKE, RIVER AND OTHER INTAKES		
	LARGE RESERVOIRS	6,158,658	4,748,401
	OTHER RESERVOIRS	2,127,280	1,640,159
	TOTAL ACCOUNT 306	8,285,938	6,388,560
307.00	WELLS AND SPRINGS	4,292,670	3,401,063
310.00	POWER GENERATION EQUIPMENT	5,730,174	6,293,958

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK DEPRECIATION RESERVE AS OF JUNE 30, 2023

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK DEPRECIATION RESERVE
	(1)	(2)	(3)
	PUMPING EQUIPMENT		
311.20	ELECTRIC	4,551,210	3,968,076
311.50	OTHER	1,318,570	1,149,625
311.52	SOURCE OF SUPPLY	3,171,140	2,764,830
311.53	WATER TREATMENT	28,946,048	25,237,269
311.54	TRANSMISSION AND DISTRIBUTION	2,628,133	2,291,397
	TOTAL ACCOUNT 311	40,615,101	35,411,197
	PURIFICATION SYSTEM		
320.10	LARGE STRUCTURES		
	LARGE STRUCTURES	88,489,519	85,325,556
	OTHER STRUCTURES	5,437,563	5,243,141
	TOTAL ACCOUNT 320.1	93,927,082	90,568,697
320.18	LARGE STRUCTURES PAINT	103,246	103,246
320.19	LARGE STRUCTURES PAINT	3,172,535	3,059,100
320.20	CHEMICAL TREATMENT	31,738,957	30,603,828
320.29	CHEMICAL TREATMENT PAINT	8,168	8,168
320.30	GRANULAR ACTIVATED CARBON	6,187,381	5,555,240
320.37	WASTE HANDLING AND TREATMENT - EQUIPMENT	9,280,387	10,673,814
	TOTAL ACCOUNT 320	144,417,756	140,572,093
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	41,633,998	39,932,025
330.10	ELEVATED TANKS AND STANDPIPES	2,388,457	2,290,818
330.20	GROUND LEVEL FACILITIES	2,910,124	2,791,160
330.30	BELOW GRADE FACILITIES	165,419	158,657
330.40	CLEARWELL	2,728,695	2,617,148
330.58	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	2,175,252	2,086,329
330.59	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	27,594,504	26,466,456
	TOTAL ACCOUNT 330	79,596,449	76,342,593
331.00	MAINS AND ACCESSORIES	577,672,113	342,396,516
333.00	SERVICES	184,527,160	158,738,784
334.00	METERS AND METER INSTALLATIONS	89,805,421	76,372,916
335.00	FIRE HYDRANTS	31,686,398	19,446,220
340.00	OFFICE FURNITURE AND EQUIPMENT		
	FURNITURE	2,098,804	1,060,253
	COMPUTERS AND PERIPHERAL EQUIPMENT	5,682,329	2,870,542
	COMPUTER SOFTWARE	42,349,147	21,393,515
	COMPUTER SOFTWARE - BUSINESS TRANSFORMATION	1,373,765	693,985
	OTHER OFFICE EQUIPMENT	3,640	1,839
	TOTAL ACCOUNT 340	51,507,685	26,020,134

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK DEPRECIATION RESERVE AS OF JUNE 30, 2023

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK DEPRECIATION RESERVE
	(1)	(2)	(3)
341.00	TRANSPORATION EQUIPMENT		
	NOT CLASSIFIED	1,115	1,555
	LIGHT DUTY TRUCKS	18,179,276	25,350,423
	EQUIPMENT	10,477,214	14,610,142
	AUTOS	1,539,762	1,767,676
	OTHER	4,569,847	6,372,507
	TOTAL ACCOUNT 341	34,767,214	48,102,303
342.00	STORES EQUIPMENT	130,503	67,164
343.00	TOOLS AND WORK EQUIPMENT	11,779,457	9,326,628
344.00	LABORATORY EQUIPMENT	1,007,188	381,654
345.00	POWER OPERATED EQUIPMENT	1,393,061	1,356,764
346.00	COMUNICATION EQUIPMENT		
	EQUIPMENT	375,259	325,497
	NON-TELEPHONE	1,766,586	1,532,326
	REMOTE CONTROL AND INSTRUMENTATION	1,649,672	1,430,915
	TELEPHONE	165,040	143,155
	TOTAL ACCOUNT 346	3,956,557	3,431,893
347.00	MISCELLANEOUS EQUIPMENT	5,573,896	3,893,050
348.00	OTHER TANGIBLE EQUIPMENT	483,442	477,612
	TOTAL DEPRECIABLE PLANT	**1,514,883,699**	**1,170,835,898**

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK DEPRECIATION RESERVE AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK DEPRECIATION RESERVE
	(1)	(2)	(3)
DEPRECIABLE PLANT			
303.14	WATER RIGHTS - HIBERNIA	1,942,823	1,942,823
303.35	WASTE HANDLING AND TREATMENT LAND	102,210	133,178
303.99	COMPREHENSIVE PLANNING STUDIES	9,931,140	9,027,061
304.15	OTHER WATER SOURCE STRUCTURES	17,232,964	8,694,594
304.20	POWER AND PUMING STRUCTURES		
	LARGE STRUCTURES	18,365,883	9,393,614
	OTHER STRUCTURES	17,719,291	9,065,637
	TOTAL ACCOUNT 304.2	36,085,174	18,459,251
304.30	PURIFICATION BUILDINGS		
	LARGE STRUCTURES	105,573,133	106,630,080
	OTHER STRUCTURES	14,054,818	14,186,360
	TOTAL ACCOUNT 304.3	119,627,951	120,816,440
304.36	WASTE HANDLING AND TREATMENT STRUCTURES	9,245,070	8,232,332
304.38	WASTE HANDLING AND TREATMENT STRUCTURES PAINTING	464,439	467,566
304.39	PURIFICATION BUILDINGS - TANK PAINTING	115,225	115,844
304.61	OFFICE BUILDINGS		
	LARGE STRUCTURES	7,550,288	6,804,093
	OTHER STRUCTURES	4,662,999	4,195,737
	TOTAL ACCOUNT 304.61	12,213,287	10,999,830
304.62	STORES, SHOP AND GARAGE BUILDINGS		
	LARGE STRUCTURES	12,607,648	16,666,286
	OTHER STRUCTURES	3,028,327	4,018,892
	TOTAL ACCOUNT 304.62	15,635,975	20,685,178
304.63	MISCELLANEOUS STRUCTURES AND IMPROVEMENTS	1,314,547	3,313,011
	TOTAL ACCOUNT 304	211,934,632	191,784,046
305.00	COLLECTING AND IMPOUNDING RESERVOIRS		
	LARGE RESERVOIRS	26,008,937	22,219,353
	OTHER RESERVOIRS	3,459,226	2,875,666
	TOTAL ACCOUNT 305	29,468,163	25,095,019
306.00	LAKE, RIVER AND OTHER INTAKES		
	LARGE RESERVOIRS	6,359,098	5,020,651
	OTHER RESERVOIRS	2,131,124	1,689,487
	TOTAL ACCOUNT 306	8,490,222	6,710,138
307.00	WELLS AND SPRINGS	4,434,071	3,612,473
310.00	POWER GENERATION EQUIPMENT	5,838,959	5,546,185

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK DEPRECIATION RESERVE AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK DEPRECIATION RESERVE
	(1)	(2)	(3)
	PUMPING EQUIPMENT		
311.20	ELECTRIC	4,844,348	3,183,068
311.50	OTHER	1,672,127	770,023
311.52	SOURCE OF SUPPLY	3,467,240	3,000,408
311.53	WATER TREATMENT	29,586,674	26,577,175
311.54	TRANSMISSION AND DISTRIBUTION	2,764,535	2,497,330
	TOTAL ACCOUNT 311	42,334,924	36,028,004
	PURIFICATION SYSTEM		
320.10	LARGE STRUCTURES		
	LARGE STRUCTURES	90,191,729	84,182,848
	OTHER STRUCTURES	4,120,777	3,846,140
	TOTAL ACCOUNT 320.1	94,312,506	88,028,988
320.18	LARGE STRUCTURES PAINT	103,246	103,246
320.19	LARGE STRUCTURES PAINT	3,235,334	3,139,061
320.20	CHEMICAL TREATMENT	33,332,547	30,308,513
320.29	CHEMICAL TREATMENT PAINT	8,168	8,168
320.30	GRANULAR ACTIVATED CARBON	6,889,279	6,870,691
320.37	WASTE HANDLING AND TREATMENT - EQUIPMENT	9,509,536	10,789,269
	TOTAL ACCOUNT 320	147,390,616	139,247,936
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	43,197,891	42,731,163
330.10	ELEVATED TANKS AND STANDPIPES	2,642,835	2,576,544
330.20	GROUND LEVEL FACILITIES	3,202,967	2,447,602
330.30	BELOW GRADE FACILITIES	179,290	174,867
330.40	CLEARWELL	2,946,485	2,868,151
330.58	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	2,211,744	2,164,662
330.59	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	29,210,004	28,235,459
	TOTAL ACCOUNT 330	83,591,216	81,198,448
331.00	MAINS AND ACCESSORIES	593,557,613	317,168,189
333.00	SERVICES	192,872,715	165,593,656
334.00	METERS AND METER INSTALLATIONS	96,876,371	86,478,411
335.00	FIRE HYDRANTS	33,267,649	20,657,896
340.00	OFFICE FURNITURE AND EQUIPMENT		
	FURNITURE	2,514,714	1,627,429
	COMPUTERS AND PERIPHERAL EQUIPMENT	7,697,701	4,881,170
	COMPUTER SOFTWARE	54,205,498	32,442,490
	COMPUTER SOFTWARE - BUSINESS TRANSFORMATION	999,169	343,459
	OTHER OFFICE EQUIPMENT	4,550	3,049
	TOTAL ACCOUNT 340	65,421,632	39,297,597

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK DEPRECIATION RESERVE AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK DEPRECIATION RESERVE
	(1)	(2)	(3)
341.00	TRANSPORATION EQUIPMENT		
	NOT CLASSIFIED	1,339	1,734
	LIGHT DUTY TRUCKS	22,657,537	28,279,582
	EQUIPMENT	11,399,290	15,100,515
	AUTOS	1,591,472	1,837,721
	OTHER	5,004,536	6,612,942
	TOTAL ACCOUNT 341	40,654,174	51,832,494
342.00	STORES EQUIPMENT	153,969	98,512
343.00	TOOLS AND WORK EQUIPMENT	14,093,359	11,953,618
344.00	LABORATORY EQUIPMENT	1,084,806	624,008
345.00	POWER OPERATED EQUIPMENT	1,443,675	1,449,816
346.00	COMUNICATION EQUIPMENT		
	EQUIPMENT	705,173	671,739
	NON-TELEPHONE	2,355,119	2,158,396
	REMOTE CONTROL AND INSTRUMENTATION	2,028,877	1,864,142
	TELEPHONE	195,334	185,515
	TOTAL ACCOUNT 346	5,284,503	4,879,792
347.00	MISCELLANEOUS EQUIPMENT	6,900,856	5,438,554
348.00	OTHER TANGIBLE EQUIPMENT	515,267	510,231
	TOTAL DEPRECIABLE PLANT	**1,597,585,565**	**1,206,308,085**

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK DEPRECIATION RESERVE AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK DEPRECIATION RESERVE
	(1)	(2)	(3)
DEPRECIABLE PLANT			
303.14	WATER RIGHTS - HIBERNIA	1,942,823	1,942,823
303.35	WASTE HANDLING AND TREATMENT LAND	105,361	134,486
303.99	COMPREHENSIVE PLANNING STUDIES	10,699,631	10,223,405
304.15	OTHER WATER SOURCE STRUCTURES	19,556,707	11,659,067
304.20	POWER AND PUMING STRUCTURES		
	LARGE STRUCTURES	19,504,396	10,740,331
	OTHER STRUCTURES	18,241,386	10,044,840
	TOTAL ACCOUNT 304.2	37,745,782	20,785,171
304.30	PURIFICATION BUILDINGS		
	LARGE STRUCTURES	111,434,377	111,411,219
	OTHER STRUCTURES	13,455,501	13,452,705
	TOTAL ACCOUNT 304.3	124,889,878	124,863,924
304.36	WASTE HANDLING AND TREATMENT STRUCTURES	9,857,422	8,631,394
304.38	WASTE HANDLING AND TREATMENT STRUCTURES PAINTING	600,950	603,418
304.39	PURIFICATION BUILDINGS - TANK PAINTING	119,363	119,360
304.61	OFFICE BUILDINGS		
	LARGE STRUCTURES	8,021,193	7,107,547
	OTHER STRUCTURES	4,959,934	4,394,978
	TOTAL ACCOUNT 304.61	12,981,127	11,502,525
304.62	STORES, SHOP AND GARAGE BUILDINGS		
	LARGE STRUCTURES	14,094,355	18,101,774
	OTHER STRUCTURES	3,288,358	4,223,330
	TOTAL ACCOUNT 304.62	17,382,713	22,325,104
304.63	MISCELLANEOUS STRUCTURES AND IMPROVEMENTS	1,411,348	2,856,281
	TOTAL ACCOUNT 304	224,545,290	203,346,244
305.00	COLLECTING AND IMPOUNDING RESERVOIRS		
	LARGE RESERVOIRS	27,661,886	7,708,843
	OTHER RESERVOIRS	1,459,992	242,940
	TOTAL ACCOUNT 305	29,121,878	7,951,783
306.00	LAKE, RIVER AND OTHER INTAKES		
	LARGE RESERVOIRS	6,529,070	5,242,607
	OTHER RESERVOIRS	2,082,880	1,672,477
	TOTAL ACCOUNT 306	8,611,950	6,915,084
307.00	WELLS AND SPRINGS	4,939,269	4,240,951
310.00	POWER GENERATION EQUIPMENT	6,380,566	6,082,054

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK DEPRECIATION RESERVE AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK DEPRECIATION RESERVE
	(1)	(2)	(3)
	PUMPING EQUIPMENT		
311.20	ELECTRIC	5,281,367	1,928,386
311.50	OTHER	2,152,227	251,890
311.52	SOURCE OF SUPPLY	3,791,172	3,436,500
311.53	WATER TREATMENT	30,210,343	27,854,875
311.54	TRANSMISSION AND DISTRIBUTION	2,892,243	2,696,554
	TOTAL ACCOUNT 311	44,327,352	36,168,205
	PURIFICATION SYSTEM		
320.10	LARGE STRUCTURES		
	LARGE STRUCTURES	94,634,111	88,380,857
	OTHER STRUCTURES	3,726,066	3,479,854
	TOTAL ACCOUNT 320.1	98,360,177	91,860,711
320.18	LARGE STRUCTURES PAINT	103,246	103,246
320.19	LARGE STRUCTURES PAINT	3,298,133	3,220,121
320.20	CHEMICAL TREATMENT	32,638,112	23,764,484
320.29	CHEMICAL TREATMENT PAINT	8,168	8,168
320.30	GRANULAR ACTIVATED CARBON	7,531,745	7,963,693
320.37	WASTE HANDLING AND TREATMENT - EQUIPMENT	9,224,787	10,134,011
	TOTAL ACCOUNT 320	151,164,368	137,054,434
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	44,513,361	43,738,815
330.10	ELEVATED TANKS AND STANDPIPES	3,120,959	2,970,426
330.20	GROUND LEVEL FACILITIES	3,564,278	2,865,778
330.30	BELOW GRADE FACILITIES	193,086	190,827
330.40	CLEARWELL	3,159,144	3,116,599
330.58	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	2,248,235	2,244,150
330.59	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	30,555,941	29,713,492
	TOTAL ACCOUNT 330	87,355,004	84,840,087
331.00	MAINS AND ACCESSORIES	623,925,471	320,293,493
333.00	SERVICES	201,859,476	173,808,467
334.00	METERS AND METER INSTALLATIONS	105,490,025	98,232,397
335.00	FIRE HYDRANTS	35,094,743	22,126,934
340.00	OFFICE FURNITURE AND EQUIPMENT		
	FURNITURE	2,980,598	2,225,292
	COMPUTERS AND PERIPHERAL EQUIPMENT	10,163,055	7,353,689
	COMPUTER SOFTWARE	50,909,155	29,417,612
	COMPUTER SOFTWARE - BUSINESS TRANSFORMATION	168,216	16,573
	OTHER OFFICE EQUIPMENT	5,461	4,261
	TOTAL ACCOUNT 340	64,226,485	39,017,427

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK DEPRECIATION RESERVE AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK DEPRECIATION RESERVE
	(1)	(2)	(3)
341.00	TRANSPORATION EQUIPMENT		
	NOT CLASSIFIED	1,539	1,902
	LIGHT DUTY TRUCKS	27,346,723	32,074,239
	EQUIPMENT	12,408,192	15,866,742
	AUTOS	1,733,535	1,662,086
	OTHER	5,368,149	6,832,146
	TOTAL ACCOUNT 341	46,858,138	56,437,115
342.00	STORES EQUIPMENT	177,459	128,629
343.00	TOOLS AND WORK EQUIPMENT	16,505,924	14,656,979
344.00	LABORATORY EQUIPMENT	1,087,795	727,066
345.00	POWER OPERATED EQUIPMENT	1,476,652	1,506,133
346.00	COMUNICATION EQUIPMENT		
	EQUIPMENT	877,468	898,903
	NON-TELEPHONE	3,061,023	2,888,978
	REMOTE CONTROL AND INSTRUMENTATION	2,478,395	2,361,391
	TELEPHONE	148,457	138,370
	TOTAL ACCOUNT 346	6,565,343	6,287,642
347.00	MISCELLANEOUS EQUIPMENT	8,511,662	7,309,665
348.00	OTHER TANGIBLE EQUIPMENT	1,105,637	936,806
	TOTAL DEPRECIABLE PLANT	**1,682,078,302**	**1,240,368,309**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF JUNE 30, 2023

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
	DEPRECIABLE PLANT		
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	431,613	45,562
354.30	STRUCTURES AND IMPROVEMENTS - SPP	6,981,186	8,246,486
354.40	STRUCTURES AND IMPROVEMENTS - TDP	135,058,224	81,813,715
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	899,419	1,813,015
355.00	POWER GENERATION EQUIPMENT	2,508,211	3,429,449
360.10	COLLECTION SEWERS - FORCE MAINS	8,715,673	4,624,342
361.10	COLLECTION SEWERS - GRAVITY MAINS	74,484,195	48,387,077
361.20	MANHOLES	21,533,970	10,598,056
363.00	SERVICES	31,572,252	24,434,472
364.00	FLOW MEASURING DEVICES	439,076	278,146
365.00	FLOW MEASURING INSTALLATIONS	242,524	219,699
370.00	RECEIVING WELLS	87,356	47,932
371.00	PUMPING EQUIPMENT	4,295,817	2,202,233
380.00	TREATMENT EQUIPMENT	48,946,797	23,479,248
381.00	PLANT SEWERS	1,837,334	1,613,223
382.00	OUTFALL SEWER LINES	250,819	247,981
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	280,281	280,396
390.00	OFFICE FURNITURE AND EQUIPMENT	211,569	127,679
391.00	TRANSPORTATION EQUIPMENT	961,033	790,481
392.00	STORES EQUIPMENT	35,572	35,455
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	335,011	361,985
394.00	LABORATORY EQUIPMENT	349,993	147,330
395.00	POWER OPERATED EQUIPMENT	194,102	226,648
396.00	COMMUNICATION EQUIPMENT	1,166,719	1,192,577
397.00	MISCELLANEOUS EQUIPMENT	203,468	309,606
398.00	OTHER TANGIBLE PLANT	2,277	1,363
	TOTAL DEPRECIABLE PLANT	**342,024,491**	**214,954,156**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
	DEPRECIABLE PLANT		
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	623,528	176,042
354.30	STRUCTURES AND IMPROVEMENTS - SPP	7,251,874	8,716,727
354.40	STRUCTURES AND IMPROVEMENTS - TDP	138,224,577	89,164,962
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	940,758	1,376,318
355.00	POWER GENERATION EQUIPMENT	2,509,383	3,253,556
360.10	COLLECTION SEWERS - FORCE MAINS	9,252,983	5,043,190
361.10	COLLECTION SEWERS - GRAVITY MAINS	76,246,559	51,938,655
361.20	MANHOLES	22,029,285	12,533,389
363.00	SERVICES	32,116,145	25,757,379
364.00	FLOW MEASURING DEVICES	460,139	355,096
365.00	FLOW MEASURING INSTALLATIONS	244,839	232,673
370.00	RECEIVING WELLS	101,936	64,325
371.00	PUMPING EQUIPMENT	4,695,096	2,784,876
380.00	TREATMENT EQUIPMENT	51,959,588	29,034,139
381.00	PLANT SEWERS	1,971,772	1,763,887
382.00	OUTFALL SEWER LINES	262,013	260,812
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	388,518	420,360
390.00	OFFICE FURNITURE AND EQUIPMENT	273,992	201,196
390.20	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS AND PERIPHERAL	2,254	4,509
391.00	TRANSPORTATION EQUIPMENT	1,145,323	1,061,888
392.00	STORES EQUIPMENT	39,866	39,760
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	397,233	429,941
394.00	LABORATORY EQUIPMENT	347,365	233,954
395.00	POWER OPERATED EQUIPMENT	212,952	244,267
396.00	COMMUNICATION EQUIPMENT	1,393,820	1,450,052
397.00	MISCELLANEOUS EQUIPMENT	311,096	419,996
398.00	OTHER TANGIBLE PLANT	2,846	2,226
	TOTAL DEPRECIABLE PLANT	**353,405,740**	**236,964,175**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
	DEPRECIABLE PLANT		
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	837,924	380,112
354.30	STRUCTURES AND IMPROVEMENTS - SPP	7,611,290	9,170,329
354.40	STRUCTURES AND IMPROVEMENTS - TDP	141,616,012	96,268,382
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	1,005,232	673,908
355.00	POWER GENERATION EQUIPMENT	2,680,780	3,456,913
360.10	COLLECTION SEWERS - FORCE MAINS	9,900,099	5,734,022
361.10	COLLECTION SEWERS - GRAVITY MAINS	78,426,909	54,970,487
361.20	MANHOLES	22,634,966	14,433,486
363.00	SERVICES	32,910,052	27,497,792
364.00	FLOW MEASURING DEVICES	478,615	418,708
365.00	FLOW MEASURING INSTALLATIONS	247,635	242,861
370.00	RECEIVING WELLS	116,599	80,585
371.00	PUMPING EQUIPMENT	5,098,635	2,894,563
380.00	TREATMENT EQUIPMENT	54,711,678	33,395,194
381.00	PLANT SEWERS	2,104,812	1,913,233
382.00	OUTFALL SEWER LINES	173,092	98,934
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	480,233	498,651
390.00	OFFICE FURNITURE AND EQUIPMENT	338,257	274,524
390.20	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS AND PERIPHERAL	9,018	13,053
391.00	TRANSPORTATION EQUIPMENT	1,420,354	1,374,586
392.00	STORES EQUIPMENT	44,160	44,068
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	467,585	499,803
394.00	LABORATORY EQUIPMENT	286,378	193,788
395.00	POWER OPERATED EQUIPMENT	186,523	101,924
396.00	COMMUNICATION EQUIPMENT	1,131,244	1,194,139
397.00	MISCELLANEOUS EQUIPMENT	448,068	567,764
398.00	OTHER TANGIBLE PLANT	3,416	2,951
	TOTAL DEPRECIABLE PLANT	**365,369,566**	**256,394,760**

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
	DEPRECIABLE PLANT		
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	69	135
354.30	STRUCTURES AND IMPROVEMENTS - SPP	9,498,187	8,986,667
354.40	STRUCTURES AND IMPROVEMENTS - TDP	6,452,292	7,044,159
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	3,730,540	2,637,296
355.00	POWER GENERATING EQUIPMENT	742,313	652,135
360.10	COLLECTION SEWERS - FORCE MAINS	1,578,908	1,412,550
361.10	COLLECTION SEWERS - GRAVITY MAINS	21,417,436	19,662,798
361.20	MANHOLES	35	78
363.00	SERVICES	5,203,488	4,683,777
364.00	FLOW MEASURING DEVICES	260,700	201,522
371.00	PUMPING EQUIPMENT	2,419,838	1,988,559
380.00	TREATMENT EQUIPMENT	9,148,084	7,240,178
382.00	OUTFALL SEWER LINES	23,165	22,054
390.00	OFFICE FURNITURE AND EQUIPMENT	8,792	6,749
390.20	COMPUTER AND PERIPHERAL EQUIPMENT	70,662	51,503
391.00	TRANSPORTATION EQUIPMENT	479,490	386,529
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	262	539
395.00	POWER OPERATED EQUIPMENT	538,546	526,945
396.00	COMMUNICATION EQUIPMENT	517,458	431,670
397.00	MISCELLANEOUS EQUIPMENT	3,060	3,060
	TOTAL DEPRECIABLE PLANT	**62,093,325**	**55,938,903**

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
	DEPRECIABLE PLANT		
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	55,214	10,466
354.30	STRUCTURES AND IMPROVEMENTS - SPP	10,100,072	9,752,034
354.40	STRUCTURES AND IMPROVEMENTS - TDP	6,586,234	7,202,547
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	3,884,824	3,034,159
355.00	POWER GENERATING EQUIPMENT	769,923	689,571
360.10	COLLECTION SEWERS - FORCE MAINS	1,634,698	1,482,222
361.10	COLLECTION SEWERS - GRAVITY MAINS	21,832,910	19,919,455
361.20	MANHOLES	1,954	1,900
363.00	SERVICES	5,310,456	4,876,016
364.00	FLOW MEASURING DEVICES	264,355	233,538
371.00	PUMPING EQUIPMENT	2,320,173	1,823,320
380.00	TREATMENT EQUIPMENT	9,552,926	7,979,654
382.00	OUTFALL SEWER LINES	23,404	22,618
390.00	OFFICE FURNITURE AND EQUIPMENT	11,994	1,121
390.20	COMPUTER AND PERIPHERAL EQUIPMENT	6,778	3,882
391.00	TRANSPORTATION EQUIPMENT	511,689	469,399
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2,924	4,894
395.00	POWER OPERATED EQUIPMENT	576,479	580,933
396.00	COMMUNICATION EQUIPMENT	141,504	53,284
	TOTAL DEPRECIABLE PLANT	**63,588,511**	**58,141,013**

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
	DEPRECIABLE PLANT		
361.10	COLLECTION SEWERS - GRAVITY MAINS	2,523,505	2,120,652
361.20	MANHOLES	548,661	359,710
363.00	SERVICES	286,796	246,411
390.00	OFFICE FURNITURE AND EQUIPMENT	13	26
391.00	TRANSPORTATION EQUIPMENT	279	509
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	131	263
	TOTAL DEPRECIABLE PLANT	**3,359,385**	**2,727,571**

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
	DEPRECIABLE PLANT		
361.10	COLLECTION SEWERS - GRAVITY MAINS	2,350,505	1,713,845
361.20	MANHOLES	559,647	403,896
363.00	SERVICES	289,940	253,860
390.00	OFFICE FURNITURE AND EQUIPMENT	101	222
391.00	TRANSPORTATION EQUIPMENT	2,165	4,601
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	1,081	2,242
	TOTAL DEPRECIABLE PLANT	**3,203,439**	**2,378,666**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF JUNE 30, 2023

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
	DEPRECIABLE PLANT		
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	601,958	573,427
354.30	STRUCTURES AND IMPROVEMENTS - SPP	6,829,278	7,304,734
354.40	STRUCTURES AND IMPROVEMENTS - TDP	49,366,439	52,990,817
355.00	POWER GENERATING EQUIPMENT	311,456	296,907
360.10	COLLECTION SEWERS - FORCE MAINS	684,738	567,264
361.10	COLLECTION SEWERS - GRAVITY MAINS	153,455,947	150,631,841
361.20	MANHOLES	22,732,877	20,528,009
363.00	SERVICES	6,257,116	5,815,433
364.00	FLOW MEASURING DEVICES	948,932	728,505
371.00	PUMPING EQUIPMENT	4,874,779	4,539,008
380.00	TREATMENT EQUIPMENT	30,783,750	26,850,889
381.00	PLANT SEWERS	786,488	800,718
382.00	OUTFALL SEWER LINES	21,661	50,018
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT	3,217,166	2,553,314
390.00	OFFICE FURNITURE AND EQUIPMENT	584,520	377,432
391.00	TRANSPORTATION EQUIPMENT	3,744,511	3,816,617
392.00	STORES EQUIPMENT	13,590	11,756
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	369,688	334,814
394.00	LABORATORY EQUIPMENT	186,510	149,758
395.00	POWER OPERATED EQUIPMENT	773,253	957,232
396.00	COMMUNICATION EQUIPMENT	868,064	825,358
397.00	MISCELLANEOUS EQUIPMENT	507,226	434,518
	TOTAL DEPRECIABLE PLANT	**287,919,947**	**281,138,370**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
	DEPRECIABLE PLANT		
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	790,743	678,726
354.30	STRUCTURES AND IMPROVEMENTS - SPP	7,168,957	7,754,269
354.40	STRUCTURES AND IMPROVEMENTS - TDP	50,551,095	53,649,066
355.00	POWER GENERATING EQUIPMENT	330,980	315,200
360.10	COLLECTION SEWERS - FORCE MAINS	413,620	336,740
361.10	COLLECTION SEWERS - GRAVITY MAINS	155,993,589	150,264,489
361.20	MANHOLES	22,401,214	20,545,147
363.00	SERVICES	6,341,966	5,504,611
364.00	FLOW MEASURING DEVICES	1,064,786	912,915
371.00	PUMPING EQUIPMENT	5,234,173	4,868,761
380.00	TREATMENT EQUIPMENT	32,323,559	29,306,935
381.00	PLANT SEWERS	812,126	832,403
382.00	OUTFALL SEWER LINES	25,821	54,342
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT	3,758,863	3,198,085
390.00	OFFICE FURNITURE AND EQUIPMENT	714,494	541,121
391.00	TRANSPORTATION EQUIPMENT	4,145,008	4,318,769
392.00	STORES EQUIPMENT	17,864	16,115
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	489,491	482,262
394.00	LABORATORY EQUIPMENT	274,560	250,520
395.00	POWER OPERATED EQUIPMENT	846,842	1,033,646
396.00	COMMUNICATION EQUIPMENT	1,054,042	1,028,735
397.00	MISCELLANEOUS EQUIPMENT	687,363	630,605
	TOTAL DEPRECIABLE PLANT	**295,441,156**	**286,523,462**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
	DEPRECIABLE PLANT		
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	995,164	762,913
354.30	STRUCTURES AND IMPROVEMENTS - SPP	7,509,533	8,184,256
354.40	STRUCTURES AND IMPROVEMENTS - TDP	52,854,321	56,715,396
355.00	POWER GENERATING EQUIPMENT	401,864	357,652
360.10	COLLECTION SEWERS - FORCE MAINS	650,856	62,109
361.10	COLLECTION SEWERS - GRAVITY MAINS	159,679,707	155,183,595
361.20	MANHOLES	21,239,965	19,268,258
363.00	SERVICES	6,401,104	5,203,897
364.00	FLOW MEASURING DEVICES	1,171,611	1,083,679
371.00	PUMPING EQUIPMENT	5,697,182	5,448,964
380.00	TREATMENT EQUIPMENT	33,415,891	31,061,063
381.00	PLANT SEWERS	840,035	863,615
382.00	OUTFALL SEWER LINES	29,945	58,189
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT	4,279,535	3,831,745
390.00	OFFICE FURNITURE AND EQUIPMENT	861,958	721,775
391.00	TRANSPORTATION EQUIPMENT	4,592,667	4,855,626
392.00	STORES EQUIPMENT	22,137	20,471
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	639,273	654,201
394.00	LABORATORY EQUIPMENT	365,488	353,232
395.00	POWER OPERATED EQUIPMENT	916,628	1,106,103
396.00	COMMUNICATION EQUIPMENT	1,243,784	1,230,716
397.00	MISCELLANEOUS EQUIPMENT	883,010	843,210
	TOTAL DEPRECIABLE PLANT	**304,691,658**	**297,870,665**

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Depreciation Study

FR VI.5

Pennsylvania-American Water Company
VI. Depreciation

5. Supply a schedule by account and depreciable group showing the survivor curve and annual accrual rate estimated to be appropriate:

   a. For the purposes of this filing.

   b. For the purposes of the most recent rate increase filing prior to the current proceedings.

Answer:

a. Refer to Table 2 in Exhibit Nos. 11-A through 11-M.

b. Refer to pages FR VI.5 (2) to FR VI.5 (10) for survivor curves and annual accrual rates estimated to be appropriate in the most recent prior water rate filing, and pages FR VI.5 (11) to FR VI.5 (20) for survivor curves and annual accrual rates estimated to be appropriate in the most recent prior wastewater rate filing.

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF DECEMBER 31, 2021

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
INTANGIBLE PLANT									
301.00	ORGANIZATION	NONDEPR.		766,405.12					
302.00	FRANCHISES AND CONSENTS	NONDEPR.		2,404,599.20					
303.00	MISCELLANEOUS INTANGIBLE PLANT	NONDEPR.		15,572.16					
	TOTAL INTANGIBLE PLANT			**3,186,576.48**					
NONDEPRECIABLE PLANT									
303.20	POWER AND PUMPING LAND	NONDEPR.		5,917,006.78					
303.30	PURIFICATION LAND	NONDEPR.		42,401.17					
303.40	TRANSMISSION AND DISTRIBUTION LAND AND RIGHTS OF WAY	NONDEPR.		3,299,940.69					
303.50	DISTRIBUTION RESERVOIRS AND STANDPIPES LAND	NONDEPR.		2,099,979.91					
303.51	TRANSMISSION AND DISTRIBUTION - LAND	NONDEPR.		1,865,772.73					
303.52	TRANSMISSION AND DISTRIBUTION - RIGHTS OF WAY	NONDEPR.		5,342,548.13					
303.61	OFFICE LAND	NONDEPR.		3,232,992.63					
	TOTAL NONDEPRECIABLE PLANT			**21,800,642.04**					
DEPRECIABLE PLANT									
303.14	WATER RIGHTS - HIBERNIA	25-SQ		1,942,822.51	1,942,823	0	0	-	-
303.35	WASTE HANDLING AND TREATMENT LAND	100-R2	*	155,025.17	131,860	23,165	23,165	14.94	1.0
303.99	COMPREHENSIVE PLANNING STUDIES	5-SQ		10,129,413.65	6,211,368	3,918,046	1,725,025	17.03	2.3
304.15	OTHER WATER SOURCE STRUCTURES	60-R1.5		51,463,964.34	7,314,162	44,149,802	1,202,233	2.34	36.7
304.20	POWER AND PUMING STRUCTURES								
	LARGE STRUCTURES	75-R2	*	69,241,749.62	7,820,939	61,420,811	1,794,794	2.59	34.2
	OTHER STRUCTURES	55-R3		48,467,615.43	8,025,727	40,441,888	1,322,490	2.73	30.6
	TOTAL ACCOUNT 304.2			117,709,365.05	15,846,666	101,862,699	3,117,284	2.65	32.7
304.30	PURIFICATION BUILDINGS								
	LARGE STRUCTURES	70-S0.5	*	262,610,503.21	89,321,786	173,288,716	5,935,968	2.26	29.2
	OTHER STRUCTURES	60-R3		46,883,820.97	13,591,474	33,292,347	823,337	1.76	40.4
	TOTAL ACCOUNT 304.3			309,494,324.18	102,913,260	206,581,063	6,759,305	2.18	30.6
304.36	WASTE HANDLING AND TREATMENT STRUCTURES	60-S2.5	*	24,482,786.39	6,315,262	18,167,525	682,980	2.79	26.6
304.38	WASTE HANDLING AND TREATMENT STRUCTURES PAINTING	10-SQ		1,399,108.81	130,717	1,268,392	134,962	9.65	9.4
304.39	PURIFICATION BUILDINGS - TANK PAINTING	10-SQ		119,362.95	111,509	7,854	2,244	1.88	3.5
304.61	OFFICE BUILDINGS								
	LARGE STRUCTURES	55-R1.5	*	30,071,233.12	5,349,912	24,721,322	947,487	3.15	26.1
	OTHER STRUCTURES	50-R3		13,697,563.47	3,445,320	10,252,243	318,171	2.32	32.2
	TOTAL ACCOUNT 304.61			43,768,796.59	8,795,232	34,973,565	1,265,658	2.89	27.6

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF DECEMBER 31, 2021

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
304.62	STORES, SHOP AND GARAGE BUILDINGS								
	LARGE STRUCTURES	55-S0.5	*	58,770,494.91	12,484,976	46,285,520	1,610,332	2.74	28.7
	OTHER STRUCTURES	45-R3		8,145,034.52	4,256,308	3,888,727	119,147	1.46	32.6
	TOTAL ACCOUNT 304.62			66,915,529.43	16,741,284	50,174,247	1,729,479	2.58	29.0
304.63	MISCELLANEOUS STRUCTURES AND IMPROVEMENTS	35-S0.5		3,773,173.42	3,475,076	298,097	13,058	0.35	22.8
	TOTAL ACCOUNT 304			619,126,411.16	161,643,168	457,483,244	14,907,203	2.41	30.7
305.00	COLLECTING AND IMPOUNDING RESERVOIRS								
	LARGE RESERVOIRS	125-R2	*	128,206,927.13	18,359,214	109,847,713	1,815,539	1.42	60.5
	OTHER RESERVOIRS	75-R3		7,575,529.05	2,697,259	4,878,270	217,849	2.88	22.4
	TOTAL ACCOUNT 305			135,782,456.18	21,056,473	114,725,983	2,033,388	1.50	56.4
306.00	LAKE, RIVER AND OTHER INTAKES								
	LARGE RESERVOIRS	55-S1	*	14,077,642.95	4,400,375	9,677,268	340,240	2.42	28.4
	OTHER RESERVOIRS	50-S0.5		4,422,682.49	1,549,085	2,873,597	118,165	2.67	24.3
	TOTAL ACCOUNT 306			18,500,325.44	5,949,460	12,550,865	458,405	2.48	27.4
307.00	WELLS AND SPRINGS	55-S0		10,324,454.26	3,212,772	7,111,682	242,909	2.35	29.3
310.00	POWER GENERATION EQUIPMENT	43-S1		18,647,753.17	5,482,567	13,165,186	497,248	2.67	26.5
	PUMPING EQUIPMENT								
311.20	ELECTRIC	42-S0		24,339,314.33	4,131,568	20,207,746	807,187	3.32	25.0
311.50	OTHER	42-S0		7,424,900.68	643,853	6,781,048	267,141	3.60	25.4
311.52	SOURCE OF SUPPLY	42-S0		12,265,487.62	2,246,552	10,018,936	399,153	3.25	25.1
311.53	WATER TREATMENT	42-S0		48,031,216.20	23,425,226	24,605,990	1,265,876	2.64	19.4
311.54	TRANSMISSION AND DISTRIBUTION	42-S0		6,721,882.58	2,083,153	4,638,730	196,557	2.92	23.6
	TOTAL ACCOUNT 311			98,782,801.41	32,530,352	66,252,450	2,935,914	2.97	22.6
	PURIFICATION SYSTEM								
320.10	LARGE STRUCTURES								
	LARGE STRUCTURES	60-S0.5	*	211,524,980.26	75,009,591	136,515,386	5,089,245	2.41	26.8
	OTHER STRUCTURES	55-R3		17,191,745.81	5,320,786	11,870,960	339,708	1.98	34.9
	TOTAL ACCOUNT 320.1			228,716,726.07	80,330,377	148,386,346	5,428,953	2.37	27.3
320.18	LARGE STRUCTURES PAINT	10-SQ		103,245.73	103,246	0	0	-	-
320.19	LARGE STRUCTURES PAINT	10-SQ		3,522,542.77	3,508,657	13,886	3,967	0.11	3.5
320.20	CHEMICAL TREATMENT	36-R0.5		89,703,244.40	31,374,662	58,328,582	3,158,276	3.52	18.5
320.29	CHEMICAL TREATMENT PAINT	FULLY ACCRUED		8,167.87	8,168	0	0	-	-
320.30	GRANULAR ACTIVATED CARBON	7-L2		9,238,160.63	5,124,218	4,113,943	1,562,798	16.92	2.6
320.37	WASTE HANDLING AND TREATMENT - EQUIPMENT	30-R3		14,959,312.90	10,325,951	4,633,362	255,882	1.71	18.1
	TOTAL ACCOUNT 320			346,251,400.37	130,775,279	215,476,119	10,409,876	3.01	20.7

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF DECEMBER 31, 2021

	DEPRECIABLE GROUP	SURVIVOR CURVE	NET ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	65-S0.5	111,954,088.80	37,063,307	74,890,782	2,034,455	1.82	36.8
330.10	ELEVATED TANKS AND STANDPIPES	65-S0.5	14,159,866.81	1,898,066	12,261,801	291,888	2.06	42.0
330.20	GROUND LEVEL FACILITIES	65-S0.5	18,107,441.78	2,275,414	15,832,028	374,554	2.07	42.3
330.30	BELOW GRADE FACILITIES	65-S0.5	818,707.23	136,023	682,684	16,483	2.01	41.4
330.40	CLEARWELL	65-S0.5	12,806,300.08	2,265,037	10,541,263	255,441	1.99	41.3
330.58	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ	2,286,164.88	2,006,257	279,908	66,682	2.92	4.2
330.59	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ	35,848,470.46	23,137,681	12,710,789	2,671,977	7.45	4.8
	TOTAL ACCOUNT 330		195,981,040.04	68,781,785	127,199,255	5,711,480	2.91	22.3
331.00	MAINS AND ACCESSORIES	110-R2	2,818,971,284.42	314,564,339	2,504,406,945	34,100,213	1.21	73.4
333.00	SERVICES	70-R2.5	624,475,330.93	143,326,352	481,148,979	10,578,834	1.69	45.5
334.00	METERS AND METER INSTALLATIONS	21-L1	193,703,115.13	73,956,736	119,746,379	10,952,329	5.65	10.9
335.00	FIRE HYDRANTS	75-R2.5	118,875,087.54	16,807,173	102,067,915	2,008,405	1.69	50.8
340.00	OFFICE FURNITURE AND EQUIPMENT							
	FURNITURE	20-SQ	5,511,088.15	942,661	4,568,427	315,693	5.73	14.5
	COMPUTERS AND PERIPHERAL EQUIPMENT	5-SQ	8,491,202.23	2,727,234	5,763,968	2,396,001	28.22	2.4
	COMPUTER SOFTWARE	5-SQ	65,812,319.72	18,631,562	47,180,758	17,380,327	26.41	2.7
	COMPUTER SOFTWARE - BUSINESS TRANSFORMATION	10-SQ	37,535,345.18	21,411,333	16,124,012	10,524,771	28.04	1.5
	OTHER OFFICE EQUIPMENT	10-SQ	9,100.95	1,537	7,564	1,009	11.08	7.5
	TOTAL ACCOUNT 340		117,359,056.23	43,714,327	73,644,729	30,617,801	26.09	2.4
341.00	TRANSPORATION EQUIPMENT							
	NOT CLASSIFIED	7-L3	2,587.67	1,005	1,583	336	12.98	4.7
	LIGHT DUTY TRUCKS	7-L3	43,731,243.08	20,445,693	23,285,550	5,242,221	11.99	4.4
	EQUIPMENT	7-L3	17,545,021.52	13,121,246	4,423,776	1,603,616	9.14	2.8
	AUTOS	7-L3	2,345,942.67	2,235,440	110,503	42,199	1.80	2.6
	OTHER	7-L3	7,747,401.58	5,613,839	2,133,563	687,312	8.87	3.1
	TOTAL ACCOUNT 341		71,372,196.52	41,417,223	29,954,975	7,575,684	10.61	4.0
342.00	STORES EQUIPMENT	20-SQ	450,196.89	84,839	365,358	26,938	5.98	13.6
343.00	TOOLS AND WORK EQUIPMENT	20-SQ	34,349,227.60	6,430,087	27,919,141	2,003,910	5.83	13.9
344.00	LABORATORY EQUIPMENT	20-L0.5	2,900,877.04	1,027,763	1,873,114	193,287	6.66	9.7
345.00	POWER OPERATED EQUIPMENT	19-S0.5	2,405,124.09	1,559,848	845,276	119,340	4.96	7.1
346.00	COMUNICATION EQUIPMENT							
	EQUIPMENT	15-SQ	1,319,862.68	190,820	1,129,043	89,046	6.75	12.7
	NON-TELEPHONE	15-SQ	6,252,711.98	1,039,837	5,212,875	423,380	6.77	12.3
	REMOTE CONTROL AND INSTRUMENTATION	10-SQ	3,562,628.46	1,583,679	1,978,949	375,466	10.54	5.3
	TELEPHONE	10-SQ	281,195.25	124,994	156,201	29,764	10.58	5.2
	TOTAL ACCOUNT 346		11,416,398.37	2,939,330	8,477,068	917,656	8.04	9.2
347.00	MISCELLANEOUS EQUIPMENT	25-SQ	20,523,409.94	1,928,340	18,595,070	1,121,267	5.46	16.6
348.00	OTHER TANGIBLE EQUIPMENT	25-SQ	795,577.91	429,153	366,425	32,456	4.08	11.3
	TOTAL DEPRECIABLE PLANT		**5,473,220,785.97**	**1,085,903,417**	**4,387,317,369**	**139,192,733**	**2.54**	
	AMORTIZATION OF NET SALVAGE					**20,362,874**		
	TOTAL UTILITY PLANT IN SERVICE		**5,498,208,004.49**	**1,085,903,417**	**4,387,317,369**	**159,555,607**		

* Life Span Procedure was used. Curve shown is Interim Survivor Curve.

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF DECEMBER 31, 2022

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
INTANGIBLE PLANT									
301.00	ORGANIZATION	NONDEPR.		766,405.12					
302.00	FRANCHISES AND CONSENTS	NONDEPR.		2,404,599.20					
303.00	MISCELLANEOUS INTANGIBLE PLANT	NONDEPR.		15,572.16					
	TOTAL INTANGIBLE PLANT			**3,186,576.48**					
NONDEPRECIABLE PLANT									
303.20	POWER AND PUMPING LAND	NONDEPR.		5,937,006.78					
303.30	PURIFICATION LAND	NONDEPR.		42,401.17					
303.40	TRANSMISSION AND DISTRIBUTION LAND AND RIGHTS OF WAY	NONDEPR.		3,299,940.69					
303.50	DISTRIBUTION RESERVOIRS AND STANDPIPES LAND	NONDEPR.		2,099,979.91					
303.51	TRANSMISSION AND DISTRIBUTION - LAND	NONDEPR.		1,865,772.73					
303.52	TRANSMISSION AND DISTRIBUTION - RIGHTS OF WAY	NONDEPR.		5,342,548.13					
303.61	OFFICE LAND	NONDEPR.		3,472,992.63					
	TOTAL NONDEPRECIABLE PLANT			**22,060,642.04**					
DEPRECIABLE PLANT									
303.14	WATER RIGHTS - HIBERNIA	25-SQ		1,942,822.51	1,942,823	0	0	-	-
303.35	WASTE HANDLING AND TREATMENT LAND	100-R2	*	155,025.17	155,025	0	0	-	-
303.99	COMPREHENSIVE PLANNING STUDIES	5-SQ		10,579,413.65	7,975,338	2,604,076	1,161,128	10.98	2.2
304.15	OTHER WATER SOURCE STRUCTURES	60-R1.5		51,463,964.34	8,888,850	42,575,114	1,134,979	2.21	37.5
304.20	POWER AND PUMING STRUCTURES								
	LARGE STRUCTURES	75-R2	*	69,241,749.62	9,530,768	59,710,982	1,770,341	2.56	33.7
	OTHER STRUCTURES	55-R3		48,910,095.19	9,450,170	39,459,925	1,296,109	2.65	30.4
	TOTAL ACCOUNT 304.2			118,151,844.81	18,980,938	99,170,907	3,066,450	2.60	32.3
304.30	PURIFICATION BUILDINGS								
	LARGE STRUCTURES	70-S0.5	*	279,529,633.27	94,423,471	185,106,161	6,634,616	2.37	27.9
	OTHER STRUCTURES	60-R3		47,488,926.00	13,126,010	34,362,916	842,540	1.77	40.8
	TOTAL ACCOUNT 304.3			327,018,559.27	107,549,481	219,469,077	7,477,156	2.29	29.4
304.36	WASTE HANDLING AND TREATMENT STRUCTURES	60-S2.5	*	24,482,786.39	7,007,069	17,475,718	680,996	2.78	25.7
304.38	WASTE HANDLING AND TREATMENT STRUCTURES PAINTING	10-SQ		1,399,108.81	265,731	1,133,378	135,111	9.66	8.4
304.39	PURIFICATION BUILDINGS - TANK PAINTING	10-SQ		119,362.95	113,753	5,610	2,244	1.88	2.5
304.61	OFFICE BUILDINGS								
	LARGE STRUCTURES	55-R1.5	*	30,071,233.12	6,106,600	23,964,634	930,280	3.09	25.8
	OTHER STRUCTURES	50-R3		15,795,959.43	3,525,262	12,270,697	365,428	2.31	33.6
	TOTAL ACCOUNT 304.61			45,867,192.55	9,631,862	36,235,331	1,295,708	2.82	28.0

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF DECEMBER 31, 2022

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
304.62	STORES, SHOP AND GARAGE BUILDINGS								
	LARGE STRUCTURES	55-S0.5	*	58,770,494.91	14,185,562	44,584,934	1,582,951	2.69	28.2
	OTHER STRUCTURES	45-R3		9,431,900.06	4,074,241	5,357,659	163,488	1.73	32.8
	TOTAL ACCOUNT 304.62			68,202,394.97	18,259,803	49,942,593	1,746,439	2.56	28.6
304.63	MISCELLANEOUS STRUCTURES AND IMPROVEMENTS	35-S0.5		3,773,173.42	3,485,875	287,298	12,839	0.34	22.4
	TOTAL ACCOUNT 304			640,478,387.51	174,183,362	466,295,026	15,551,922	2.43	30.0
305.00	COLLECTING AND IMPOUNDING RESERVOIRS								
	LARGE RESERVOIRS	125-R2	*	128,206,927.13	20,443,884	107,763,044	1,788,778	1.40	60.2
	OTHER RESERVOIRS	75-R3		8,475,529.05	2,915,519	5,560,010	206,829	2.44	26.9
	TOTAL ACCOUNT 305			136,682,456.18	23,359,403	113,323,054	1,995,607	1.46	56.8
306.00	LAKE, RIVER AND OTHER INTAKES								
	LARGE RESERVOIRS	55-S1	*	14,077,642.95	4,725,133	9,352,510	334,491	2.38	28.0
	OTHER RESERVOIRS	50-S0.5		4,878,667.19	1,609,650	3,269,017	129,169	2.65	25.3
	TOTAL ACCOUNT 306			18,956,310.14	6,334,783	12,621,527	463,660	2.45	27.2
307.00	WELLS AND SPRINGS	55-S0		13,388,619.84	3,008,599	10,380,021	338,177	2.53	30.7
310.00	POWER GENERATION EQUIPMENT	43-S1		20,859,764.75	5,557,935	15,301,830	568,968	2.73	26.9
	PUMPING EQUIPMENT								
311.20	ELECTRIC	42-S0		28,764,997.73	4,936,838	23,828,160	952,264	3.31	25.0
311.50	OTHER	42-S0		7,424,900.68	911,149	6,513,752	256,276	3.45	25.4
311.52	SOURCE OF SUPPLY	42-S0		13,846,273.01	2,330,094	11,516,179	460,351	3.32	25.0
311.53	WATER TREATMENT	42-S0		48,579,304.90	24,582,332	23,996,973	1,241,955	2.56	19.3
311.54	TRANSMISSION AND DISTRIBUTION	42-S0		13,311,520.08	1,015,455	12,296,065	497,499	3.74	24.7
	TOTAL ACCOUNT 311			111,926,996.40	33,775,868	78,151,129	3,408,345	3.05	22.9
	PURIFICATION SYSTEM								
320.10	LARGE STRUCTURES								
	LARGE STRUCTURES	60-S0.5	*	233,741,334.67	77,128,004	156,613,328	6,180,184	2.64	25.3
	OTHER STRUCTURES	55-R3		16,561,584.49	4,833,816	11,727,768	336,337	2.03	34.9
	TOTAL ACCOUNT 320.1			250,302,919.16	81,961,820	168,341,096	6,516,521	2.60	25.8
320.18	LARGE STRUCTURES PAINT	10-SQ		103,245.73	103,246	0	0	-	-
320.19	LARGE STRUCTURES PAINT	10-SQ		3,522,542.77	3,512,532	10,011	4,004	0.11	2.5
320.20	CHEMICAL TREATMENT	36-R0.5		106,908,231.80	31,615,346	75,292,886	4,189,844	3.92	18.0
320.29	CHEMICAL TREATMENT PAINT	FULLY ACCRUED		8,167.87	8,168	0	0	-	-
320.30	GRANULAR ACTIVATED CARBON	7-L2		9,238,160.63	6,787,789	2,450,372	956,162	10.35	2.6
320.37	WASTE HANDLING AND TREATMENT - EQUIPMENT	30-R3		14,959,312.90	10,607,334	4,351,979	246,975	1.65	17.6
	TOTAL ACCOUNT 320			385,042,580.86	134,596,235	250,446,344	11,913,506	3.09	21.0

PENNSYLVANIA-AMERICAN WATER COMPANY
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TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF DECEMBER 31, 2022

	DEPRECIABLE GROUP	SURVIVOR CURVE	NET ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	65-S0.5	118,334,757.78	40,194,822	78,139,936	2,105,381	1.78	37.1
330.10	ELEVATED TANKS AND STANDPIPES	65-S0.5	18,159,866.81	2,230,959	15,928,908	376,025	2.07	42.4
330.20	GROUND LEVEL FACILITIES	65-S0.5	18,107,441.78	2,650,238	15,457,204	368,737	2.04	41.9
330.30	BELOW GRADE FACILITIES	65-S0.5	818,707.23	152,479	666,228	16,278	1.99	40.9
330.40	CLEARWELL	65-S0.5	12,806,300.08	2,519,882	10,286,418	252,195	1.97	40.8
330.58	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ	1,482,963.09	1,258,084	224,879	70,565	4.76	3.2
330.59	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ	41,010,970.46	26,000,695	15,010,275	2,531,316	6.17	5.9
	TOTAL ACCOUNT 330		210,721,007.23	75,007,159	135,713,848	5,720,497	2.71	23.7
331.00	MAINS AND ACCESSORIES	110-R2	2,972,470,945.31	320,507,351	2,651,963,594	36,052,282	1.21	73.6
333.00	SERVICES	70-R2.5	647,586,083.09	153,001,000	494,585,083	10,903,069	1.68	45.4
334.00	METERS AND METER INSTALLATIONS	21-L1	210,757,676.65	83,781,344	126,976,333	11,547,691	5.48	11.0
335.00	FIRE HYDRANTS	75-R2.5	127,139,837.10	18,044,077	109,095,760	2,137,601	1.68	51.0
340.00	OFFICE FURNITURE AND EQUIPMENT							
	FURNITURE	20-SQ	5,511,088.15	1,306,807	4,204,281	310,473	5.63	13.5
	COMPUTERS AND PERIPHERAL EQUIPMENT	5-SQ	9,626,127.47	3,446,304	6,179,823	2,141,175	22.24	2.9
	COMPUTER SOFTWARE	5-SQ	56,937,669.71	25,966,048	30,971,622	13,870,334	24.36	2.2
	COMPUTER SOFTWARE - BUSINESS TRANSFORMATION	10-SQ	47,983,383.24	33,401,059	14,582,324	5,502,153	11.47	2.7
	OTHER OFFICE EQUIPMENT	10-SQ	9,100.95	2,545	6,556	1,009	11.08	6.5
	TOTAL ACCOUNT 340		120,067,369.52	64,122,763	55,944,606	21,825,144	18.18	2.6
341.00	TRANSPORATION EQUIPMENT							
	NOT CLASSIFIED	7-L3	2,587.67	1,341	1,247	324	12.52	3.8
	LIGHT DUTY TRUCKS	7-L3	48,159,781.72	25,214,574	22,945,208	5,773,589	11.99	4.0
	EQUIPMENT	7-L3	21,248,210.09	14,300,485	6,947,725	1,966,330	9.25	3.5
	AUTOS	7-L3	2,345,942.67	2,277,667	68,276	26,337	1.12	2.6
	OTHER	7-L3	7,747,401.58	6,301,034	1,446,368	546,143	7.05	2.6
	TOTAL ACCOUNT 341		79,503,923.73	48,095,101	31,408,824	8,312,723	10.46	3.8
342.00	STORES EQUIPMENT	20-SQ	450,196.89	113,771	336,426	26,703	5.93	12.6
343.00	TOOLS AND WORK EQUIPMENT	20-SQ	38,318,950.61	8,570,238	29,748,713	2,198,901	5.74	13.5
344.00	LABORATORY EQUIPMENT	20-L0.5	2,900,877.04	1,228,944	1,671,933	173,092	5.97	9.7
345.00	POWER OPERATED EQUIPMENT	19-S0.5	2,405,124.09	1,680,051	725,073	102,550	4.26	7.1
346.00	COMUNICATION EQUIPMENT							
	EQUIPMENT	15-SQ	1,319,862.68	322,240	997,623	84,310	6.39	11.8
	NON-TELEPHONE	15-SQ	8,503,366.67	1,528,419	6,974,948	572,529	6.73	12.2
	REMOTE CONTROL AND INSTRUMENTATION	10-SQ	7,771,032.15	1,832,553	5,938,479	780,228	10.04	7.6
	TELEPHONE	10-SQ	272,914.20	146,025	126,889	29,297	10.73	4.3
	TOTAL ACCOUNT 346		17,867,175.70	3,829,237	14,037,939	1,466,364	8.21	9.6
347.00	MISCELLANEOUS EQUIPMENT	25-SQ	23,054,106.91	3,142,560	19,911,547	1,209,576	5.25	16.5
348.00	OTHER TANGIBLE EQUIPMENT	25-SQ	795,577.91	461,769	333,809	32,438	4.08	10.3
	TOTAL DEPRECIABLE PLANT		**5,794,051,228.79**	**1,172,474,736**	**4,621,576,495**	**137,109,944**	**2.37**	
	AMORTIZATION OF NET SALVAGE					**22,126,996**		
	TOTAL UTILITY PLANT IN SERVICE		**5,819,298,447.31**	**1,172,474,736**	**4,621,576,495**	**159,236,940**		

* Life Span Procedure was used. Curve shown is Interim Survivor Curve.

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PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF DECEMBER 31, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF DECEMBER 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
INTANGIBLE PLANT									
301.00	ORGANIZATION	NONDEPR.		766,405.12					
302.00	FRANCHISES AND CONSENTS	NONDEPR.		2,404,599.20					
303.00	MISCELLANEOUS INTANGIBLE PLANT	NONDEPR.		15,572.16					
	TOTAL INTANGIBLE PLANT			**3,186,576.48**					
NONDEPRECIABLE PLANT									
303.20	POWER AND PUMPING LAND	NONDEPR.		6,315,146.65					
303.30	PURIFICATION LAND	NONDEPR.		446,173.08					
303.40	TRANSMISSION AND DISTRIBUTION LAND AND RIGHTS OF WAY	NONDEPR.		3,299,940.69					
303.50	DISTRIBUTION RESERVOIRS AND STANDPIPES LAND	NONDEPR.		2,099,979.91					
303.51	TRANSMISSION AND DISTRIBUTION - LAND	NONDEPR.		1,865,772.73					
303.52	TRANSMISSION AND DISTRIBUTION - RIGHTS OF WAY	NONDEPR.		5,342,548.13					
303.61	OFFICE LAND	NONDEPR.		3,472,992.63					
	TOTAL NONDEPRECIABLE PLANT			**22,842,553.82**					
DEPRECIABLE PLANT									
303.14	WATER RIGHTS - HIBERNIA	25-SQ		1,942,822.51	1,942,823	0	0	-	-
303.35	WASTE HANDLING AND TREATMENT LAND	100-R2	*	155,025.17	155,025	0	0	-	-
303.99	COMPREHENSIVE PLANNING STUDIES	5-SQ		11,298,770.79	9,163,560	2,135,211	890,107	7.88	2.4
304.15	OTHER WATER SOURCE STRUCTURES	60-R1.5		51,463,964.34	10,383,011	41,080,953	1,090,805	2.12	37.7
304.20	POWER AND PUMING STRUCTURES								
	LARGE STRUCTURES	75-R2	*	70,436,249.62	11,024,971	59,411,279	1,812,339	2.57	32.8
	OTHER STRUCTURES	55-R3		54,078,532.49	10,342,235	43,736,297	1,379,087	2.55	31.7
	TOTAL ACCOUNT 304.2			124,514,782.11	21,367,206	103,147,576	3,191,426	2.56	32.3
304.30	PURIFICATION BUILDINGS								
	LARGE STRUCTURES	70-S0.5	*	293,404,600.70	99,933,596	193,471,003	7,034,158	2.40	27.5
	OTHER STRUCTURES	60-R3		50,729,573.44	13,646,822	37,082,751	904,979	1.78	41.0
	TOTAL ACCOUNT 304.3			344,134,174.14	113,580,418	230,553,754	7,939,137	2.31	29.0
304.36	WASTE HANDLING AND TREATMENT STRUCTURES	60-S2.5	*	25,496,837.05	7,697,597	17,799,241	710,222	2.79	25.1
304.38	WASTE HANDLING AND TREATMENT STRUCTURES PAINTING	10-SQ		1,399,108.81	400,887	998,222	135,103	9.66	7.4
304.39	PURIFICATION BUILDINGS - TANK PAINTING	10-SQ		119,362.95	115,997	3,366	2,244	1.88	1.5
304.61	OFFICE BUILDINGS								
	LARGE STRUCTURES	55-R1.5	*	30,071,233.12	6,870,151	23,201,083	915,368	3.04	25.3
	OTHER STRUCTURES	50-R3		17,004,129.34	3,737,143	13,266,986	391,066	2.30	33.9
	TOTAL ACCOUNT 304.61			47,075,362.46	10,607,294	36,468,069	1,306,434	2.78	27.9

PENNSYLVANIA-AMERICAN WATER COMPANY
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TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF DECEMBER 31, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF DECEMBER 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
304.62	STORES, SHOP AND GARAGE BUILDINGS								
	LARGE STRUCTURES	55-S0.5	*	58,770,494.91	15,778,197	42,992,299	1,559,568	2.65	27.6
	OTHER STRUCTURES	45-R3		10,794,949.87	4,003,576	6,791,374	205,422	1.90	33.1
	TOTAL ACCOUNT 304.62			69,565,444.78	19,781,773	49,783,673	1,764,990	2.54	28.2
304.63	MISCELLANEOUS STRUCTURES AND IMPROVEMENTS	35-S0.5		3,773,173.42	3,495,886	277,287	12,644	0.34	21.9
	TOTAL ACCOUNT 304			667,542,210.06	187,430,069	480,112,141	16,153,005	2.42	29.7
305.00	COLLECTING AND IMPOUNDING RESERVOIRS								
	LARGE RESERVOIRS	125-R2	*	175,843,094.15	16,699,199	159,143,895	2,732,011	1.55	58.3
	OTHER RESERVOIRS	75-R3		8,666,139.67	128,333	8,537,807	137,221	1.58	62.2
	TOTAL ACCOUNT 305			184,509,233.82	16,827,532	167,681,702	2,869,232	1.56	58.4
306.00	LAKE, RIVER AND OTHER INTAKES								
	LARGE RESERVOIRS	55-S1	*	14,077,642.95	5,072,287	9,005,356	327,479	2.33	27.5
	OTHER RESERVOIRS	50-S0.5		4,878,667.19	1,732,462	3,146,205	125,690	2.58	25.0
	TOTAL ACCOUNT 306			18,956,310.14	6,804,749	12,151,561	453,169	2.39	26.8
307.00	WELLS AND SPRINGS	55-S0		14,474,540.51	3,301,550	11,172,991	361,709	2.50	30.9
310.00	POWER GENERATION EQUIPMENT	43-S1		33,632,562.91	3,602,563	30,030,000	1,019,407	3.03	29.5
	PUMPING EQUIPMENT								
311.20	ELECTRIC	42-S0		29,503,026.00	6,278,556	23,224,470	931,060	3.16	24.9
311.50	OTHER	42-S0		7,424,900.68	1,167,313	6,257,588	247,082	3.33	25.3
311.52	SOURCE OF SUPPLY	42-S0		15,124,095.30	2,618,030	12,506,065	501,115	3.31	25.0
311.53	WATER TREATMENT	42-S0		49,485,169.34	25,640,093	23,845,076	1,236,547	2.50	19.3
311.54	TRANSMISSION AND DISTRIBUTION	42-S0		17,457,786.81	889,452	16,568,335	663,436	3.80	25.0
	TOTAL ACCOUNT 311			118,994,978.13	36,593,444	82,401,534	3,579,240	3.01	23.0
	PURIFICATION SYSTEM								
320.10	LARGE STRUCTURES								
	LARGE STRUCTURES	60-S0.5	*	259,341,704.90	80,694,366	178,647,337	7,331,156	2.83	24.4
	OTHER STRUCTURES	55-R3		18,778,529.32	4,177,558	14,600,971	385,088	2.05	37.9
	TOTAL ACCOUNT 320.1			278,120,234.22	84,871,924	193,248,308	7,716,244	2.77	25.0
320.18	LARGE STRUCTURES PAINT	10-SQ		103,245.73	103,246	0	0	-	-
320.19	LARGE STRUCTURES PAINT	10-SQ		3,522,542.77	3,516,408	6,135	4,089	0.12	1.5
320.20	CHEMICAL TREATMENT	36-R0.5		128,432,781.43	31,620,481	96,812,300	5,395,215	4.20	17.9
320.29	CHEMICAL TREATMENT PAINT	FULLY ACCRUED		8,167.87	8,168	0	0	-	-
320.30	GRANULAR ACTIVATED CARBON	7-L2		9,238,160.63	7,844,087	1,394,074	540,150	5.85	2.6
320.37	WASTE HANDLING AND TREATMENT - EQUIPMENT	30-R3		23,452,205.11	9,288,440	14,163,765	685,372	2.92	20.7
	TOTAL ACCOUNT 320			442,877,337.76	137,252,754	305,624,582	14,341,070	3.24	21.3

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF DECEMBER 31, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE	NET ORIGINAL COST AS OF DECEMBER 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	65-S0.5	128,426,201.28	43,279,898	85,146,303	2,259,913	1.76	37.7
330.10	ELEVATED TANKS AND STANDPIPES	65-S0.5	18,159,866.81	2,606,871	15,552,996	370,422	2.04	42.0
330.20	GROUND LEVEL FACILITIES	65-S0.5	18,107,441.78	3,019,634	15,087,808	363,177	2.01	41.5
330.30	BELOW GRADE FACILITIES	65-S0.5	818,707.23	168,775	649,932	16,004	1.95	40.6
330.40	CLEARWELL	65-S0.5	12,806,300.08	2,772,170	10,034,130	248,876	1.94	40.3
330.58	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ	497,598.08	325,480	172,118	81,721	16.42	2.1
330.59	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ	47,585,970.46	28,685,239	18,900,731	3,045,364	6.40	6.2
	TOTAL ACCOUNT 330		226,402,085.72	80,858,067	145,544,018	6,385,477	2.82	22.8
331.00	MAINS AND ACCESSORIES	110-R2	3,150,142,151.14	325,579,074	2,824,563,077	38,389,000	1.22	73.6
333.00	SERVICES	70-R2.5	678,692,421.45	163,249,988	515,442,433	11,375,511	1.68	45.3
334.00	METERS AND METER INSTALLATIONS	21-L1	242,348,418.46	91,790,821	150,557,597	13,409,312	5.53	11.2
335.00	FIRE HYDRANTS	75-R2.5	134,465,732.09	19,778,768	114,686,964	2,244,624	1.67	51.1
340.00	OFFICE FURNITURE AND EQUIPMENT							
	FURNITURE	20-SQ	5,511,088.15	1,664,168	3,846,920	305,608	5.55	12.6
	COMPUTERS AND PERIPHERAL EQUIPMENT	5-SQ	11,777,505.36	4,665,863	7,111,642	2,399,737	20.38	3.0
	COMPUTER SOFTWARE	5-SQ	52,876,132.43	35,733,306	17,142,826	10,220,209	19.33	1.7
	COMPUTER SOFTWARE - BUSINESS TRANSFORMATION	10-SQ	58,320,395.08	39,700,332	18,620,063	2,079,020	3.56	9.0
	OTHER OFFICE EQUIPMENT	10-SQ	9,100.95	3,553	5,548	1,009	11.08	5.5
	TOTAL ACCOUNT 340		128,494,221.97	81,767,222	46,726,999	15,005,583	11.68	3.1
341.00	TRANSPORATION EQUIPMENT							
	NOT CLASSIFIED	7-L3	2,587.67	1,665	923	300	11.59	3.1
	LIGHT DUTY TRUCKS	7-L3	53,018,290.45	30,326,635	22,691,655	6,218,220	11.73	3.6
	EQUIPMENT	7-L3	25,310,943.97	15,722,712	9,588,232	2,443,390	9.65	3.9
	AUTOS	7-L3	2,345,942.67	2,303,947	41,996	17,072	0.73	2.5
	OTHER	7-L3	7,747,401.58	6,847,226	900,176	392,304	5.06	2.3
	TOTAL ACCOUNT 341		88,425,166.34	55,202,185	33,222,982	9,071,286	10.26	3.7
342.00	STORES EQUIPMENT	20-SQ	450,196.89	142,481	307,716	26,515	5.89	11.6
343.00	TOOLS AND WORK EQUIPMENT	20-SQ	44,334,525.08	10,784,193	33,550,332	2,475,171	5.58	13.6
344.00	LABORATORY EQUIPMENT	20-L0.5	2,900,877.04	1,409,871	1,491,006	155,611	5.36	9.6
345.00	POWER OPERATED EQUIPMENT	19-S0.5	2,723,924.56	1,731,159	992,766	119,118	4.37	8.3
346.00	COMUNICATION EQUIPMENT							
	EQUIPMENT	15-SQ	1,319,862.68	448,775	871,088	79,302	6.01	11.0
	NON-TELEPHONE	15-SQ	8,644,933.36	2,097,327	6,547,606	582,295	6.74	11.2
	REMOTE CONTROL AND INSTRUMENTATION	10-SQ	16,149,119.93	2,613,514	13,535,606	1,647,516	10.20	8.2
	TELEPHONE	10-SQ	272,914.20	175,305	97,609	25,276	9.26	3.9
	TOTAL ACCOUNT 346		26,386,830.17	5,334,921	21,051,909	2,334,389	8.85	9.0
347.00	MISCELLANEOUS EQUIPMENT	25-SQ	24,207,979.77	4,361,280	19,846,700	1,240,504	5.12	16.0
348.00	OTHER TANGIBLE EQUIPMENT	25-SQ	795,577.91	494,385	301,193	32,416	4.07	9.3
	TOTAL DEPRECIABLE PLANT		**6,245,153,900.39**	**1,245,558,484**	**4,999,595,414**	**141,931,456**	**2.27**	
	AMORTIZATION OF NET SALVAGE					**22,762,278**		
	TOTAL UTILITY PLANT IN SERVICE		**6,271,183,030.69**	**1,245,558,484**	**4,999,595,414**	**164,693,734**		

* Life Span Procedure was used. Curve shown is Interim Survivor Curve.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF DECEMBER 31, 2021

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	45-R3	2,922,659.17	43,314	2,879,345	80,477	2.75	35.8
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	17,194,565.51	6,891,894	10,302,671	321,814	1.87	32.0
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	149,090,592.23	74,070,070	75,020,523	2,677,431	1.80	28.0
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	35-S1	3,507,072.89	1,711,335	1,795,738	73,186	2.09	24.5
355.00	POWER GENERATION EQUIPMENT	35-S0.5	4,320,734.91	2,800,154	1,520,581	75,954	1.76	20.0
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	36,014,431.59	3,428,555	32,585,876	626,509	1.74	52.0
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	166,373,356.72	40,726,772	125,646,585	2,533,631	1.52	49.6
361.20	MANHOLES	50-S2.5	28,263,649.44	9,514,794	18,748,856	794,879	2.81	23.6
363.00	SERVICES	47-R3	43,409,706.20	22,659,038	20,750,668	984,742	2.27	21.1
364.00	FLOW MEASURING DEVICES	15-L2.5	530,204.62	164,880	365,325	69,899	13.18	5.2
365.00	FLOW MEASURING INSTALLATIONS	25-S2	272,564.04	201,351	71,213	16,042	5.89	4.4
370.00	RECEIVING WELLS	50-R3	143,419.77	31,139	112,281	3,257	2.27	34.5
371.00	PUMPING EQUIPMENT	30-S0.5	14,741,942.32	1,275,582	13,466,360	747,751	5.07	18.0
380.00	TREATMENT EQUIPMENT	35-S1.5	68,503,716.55	14,693,290	53,810,427	2,636,120	3.85	20.4
381.00	PLANT SEWERS	50-R3	6,183,989.54	1,411,590	4,772,399	142,569	2.31	33.5
382.00	OUTFALL SEWER LINES	50-R3	604,388.91	229,597	374,792	12,957	2.14	28.9
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	20-S2.5	598,404.70	195,658	402,747	33,563	5.61	12.0
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	682,596.03	59,782	622,814	39,455	5.78	15.8
391.00	TRANSPORTATION EQUIPMENT	14-L4	1,627,652.53	497,748	1,129,905	137,073	8.42	8.2
392.00	STORES EQUIPMENT	25-SQ	107,351.44	29,033	78,319	4,299	4.00	18.2
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	872,282.74	291,410	580,873	39,167	4.49	14.8
394.00	LABORATORY EQUIPMENT	15-SQ	536,027.98	262,433	273,595	39,746	7.41	6.9
395.00	POWER OPERATED EQUIPMENT	22-R2	542,370.71	407,298	135,072	11,672	2.15	11.6
396.00	COMMUNICATION EQUIPMENT	15-SQ	2,195,942.61	1,187,094	1,008,849	116,994	5.33	8.6
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	532,484.69	194,183	338,301	24,985	4.69	13.5
398.00	OTHER TANGIBLE PLANT	25-SQ	14,231.50	513	13,719	610	4.29	22.5
	TOTAL DEPRECIABLE PLANT		**549,786,339.34**	**182,978,506**	**366,807,834**	**12,244,782**	**2.23**	
	NONDEPRECIABLE PLANT							
352.10	FRANCHISES		221,139.78					
353.20	LAND AND LAND RIGHTS - COLLECTION		1,857,555.19					
353.30	LAND AND LAND RIGHTS - SPP		203,839.26					
353.40	LAND AND LAND RIGHTS - TDP		3,853,717.18					
	TOTAL NONDEPRECIABLE PLANT		**6,136,251.41**					
	AMORTIZATION OF NET SALVAGE					**1,122,278**		
	TOTAL UTILITY PLANT		**555,922,590.75**	**182,978,506**	**366,807,834**	**13,367,060**		

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF DECEMBER 31, 2022

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	45-R3	3,344,865.40	225,041	3,119,824	89,765	2.68	34.8
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	17,791,611.38	7,310,370	10,481,241	329,089	1.85	31.8
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	152,132,594.45	76,792,614	75,339,980	2,693,442	1.77	28.0
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	35-S1	3,846,816.75	1,926,787	1,920,030	78,724	2.05	24.4
355.00	POWER GENERATION EQUIPMENT	35-S0.5	5,744,996.58	2,925,899	2,819,098	133,625	2.33	21.1
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	40,565,058.59	4,353,791	36,211,268	689,482	1.70	52.5
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	176,291,375.14	43,086,387	133,204,988	2,678,047	1.52	49.7
361.20	MANHOLES	50-S2.5	29,652,321.04	10,655,289	18,997,032	795,462	2.68	23.9
363.00	SERVICES	47-R3	45,439,103.11	23,651,609	21,787,494	1,027,912	2.26	21.2
364.00	FLOW MEASURING DEVICES	15-L2.5	564,962.51	228,085	336,878	62,072	10.99	5.4
365.00	FLOW MEASURING INSTALLATIONS	25-S2	272,564.04	217,405	55,159	13,096	4.80	4.2
370.00	RECEIVING WELLS	50-R3	143,419.77	34,395	109,025	3,235	2.26	33.7
371.00	PUMPING EQUIPMENT	30-S0.5	17,200,567.65	1,925,109	15,275,459	845,290	4.91	18.1
380.00	TREATMENT EQUIPMENT	35-S1.5	76,306,980.94	16,853,533	59,453,448	2,865,004	3.75	20.8
381.00	PLANT SEWERS	50-R3	6,183,989.54	1,554,458	4,629,532	141,595	2.29	32.7
382.00	OUTFALL SEWER LINES	50-R3	604,388.91	242,848	361,541	12,817	2.12	28.2
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	20-S2.5	1,198,404.70	246,460	951,945	65,723	5.48	14.5
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	718,389.99	101,165	617,225	40,787	5.68	15.1
391.00	TRANSPORTATION EQUIPMENT	14-L4	1,627,652.53	637,946	989,707	130,725	8.03	7.6
392.00	STORES EQUIPMENT	25-SQ	107,351.44	33,327	74,024	4,301	4.01	17.2
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	1,034,519.57	318,284	716,236	48,018	4.64	14.9
394.00	LABORATORY EQUIPMENT	15-SQ	481,441.01	241,130	240,311	39,012	8.10	6.2
395.00	POWER OPERATED EQUIPMENT	22-R2	542,370.71	419,369	123,002	11,171	2.06	11.0
396.00	COMMUNICATION EQUIPMENT	15-SQ	3,272,595.36	1,053,027	2,219,568	226,382	6.92	9.8
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	881,510.69	139,211	742,300	54,946	6.23	13.5
398.00	OTHER TANGIBLE PLANT	25-SQ	14,231.50	1,374	12,858	598	4.20	21.5
	TOTAL DEPRECIABLE PLANT		**585,964,083.30**	**195,174,913**	**390,789,173**	**13,080,320**	**2.23**	
	NONDEPRECIABLE PLANT							
352.10	FRANCHISES		221,139.78					
353.20	LAND AND LAND RIGHTS - COLLECTION		1,857,560.19					
353.30	LAND AND LAND RIGHTS - SPP		203,839.26					
353.40	LAND AND LAND RIGHTS - TDP		3,853,717.18					
	TOTAL NONDEPRECIABLE PLANT		**6,136,256.41**					
	AMORTIZATION OF NET SALVAGE					**1,323,361**		
	TOTAL UTILITY PLANT		**592,100,339.71**	**195,174,913**	**390,789,173**	**14,403,681**		

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF DECEMBER 31, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF DECEMBER 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	45-R3	3,612,200.53	297,122	3,315,079	96,348	2.67	34.4
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	18,566,095.31	7,611,923	10,954,172	344,938	1.86	31.8
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	153,334,778.46	79,389,942	73,944,836	2,660,957	1.74	27.8
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	35-S1	4,070,803.79	2,007,181	2,063,623	86,335	2.12	23.9
355.00	POWER GENERATION EQUIPMENT	35-S0.5	8,021,589.23	2,880,147	5,141,442	234,190	2.92	22.0
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	45,561,550.15	4,624,544	40,937,006	773,411	1.70	52.9
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	184,392,031.37	45,103,176	139,288,855	2,792,821	1.51	49.9
361.20	MANHOLES	50-S2.5	30,039,047.08	11,440,838	18,598,209	782,893	2.61	23.8
363.00	SERVICES	47-R3	46,563,946.78	24,671,948	21,891,999	1,023,840	2.20	21.4
364.00	FLOW MEASURING DEVICES	15-L2.5	599,501.42	284,926	314,575	55,186	9.21	5.7
365.00	FLOW MEASURING INSTALLATIONS	25-S2	272,564.04	230,488	42,076	10,482	3.85	4.0
370.00	RECEIVING WELLS	50-R3	143,419.77	37,636	105,784	3,200	2.23	33.1
371.00	PUMPING EQUIPMENT	30-S0.5	19,524,019.44	2,649,119	16,874,900	930,890	4.77	18.1
380.00	TREATMENT EQUIPMENT	35-S1.5	88,159,162.46	18,610,808	69,548,354	3,260,297	3.70	21.3
381.00	PLANT SEWERS	50-R3	6,183,989.54	1,696,089	4,487,901	139,968	2.26	32.1
382.00	OUTFALL SEWER LINES	50-R3	604,388.91	255,857	348,532	12,614	2.09	27.6
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	20-S2.5	2,057,547.56	329,600	1,727,948	112,889	5.49	15.3
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	759,062.66	144,758	614,305	42,424	5.59	14.5
391.00	TRANSPORTATION EQUIPMENT	14-L4	1,627,652.53	771,796	855,857	124,345	7.64	6.9
392.00	STORES EQUIPMENT	25-SQ	107,351.44	37,632	69,719	4,300	4.01	16.2
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	1,300,973.27	344,614	956,359	62,704	4.82	15.3
394.00	LABORATORY EQUIPMENT	15-SQ	418,758.86	210,580	208,179	33,391	7.97	6.2
395.00	POWER OPERATED EQUIPMENT	22-R2	542,370.71	430,952	111,419	10,647	1.96	10.5
396.00	COMMUNICATION EQUIPMENT	15-SQ	4,946,898.15	1,191,435	3,755,463	329,937	6.67	11.4
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	1,237,451.91	169,275	1,068,177	81,253	6.57	13.1
398.00	OTHER TANGIBLE PLANT	25-SQ	14,231.50	2,222	12,010	586	4.12	20.5
	TOTAL DEPRECIABLE PLANT		**622,661,386.87**	**205,424,608**	**417,236,779**	**14,010,846**	**2.25**	
	NONDEPRECIABLE PLANT							
352.10	FRANCHISES		221,139.78					
353.20	LAND AND LAND RIGHTS - COLLECTION		1,857,560.19					
353.30	LAND AND LAND RIGHTS - SPP		203,839.26					
353.40	LAND AND LAND RIGHTS - TDP		3,853,717.18					
	TOTAL NONDEPRECIABLE PLANT		**6,136,256.41**					
	AMORTIZATION OF NET SALVAGE					**1,515,247**		
	TOTAL UTILITY PLANT		**628,797,643.28**	**205,424,608**	**417,236,779**	**15,526,093**		

PENNSYLVANIA-AMERICAN WATER COMPANY
ROYERSFORD WASTEWATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF DECEMBER 31, 2021

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	627,002.28	332,942	294,060	10,190	1.63	28.9
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	787,394.52	573,845	213,550	13,541	1.72	15.8
355.00	POWER GENERATION EQUIPMENT	35-S0.5	932,792.72	323,863	608,930	32,908	3.53	18.5
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	79,235.90	64,298	14,938	1,087	1.37	13.7
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	2,677,568.65	743,554	1,934,015	41,476	1.55	46.6
361.20	MANHOLES	50-S2.5	106,954.15	68,337	38,617	7,081	6.62	5.5
363.00	SERVICES	47-R3	80,889.89	62,868	18,022	1,258	1.56	14.3
364.00	FLOW MEASURING DEVICES	15-L2.5	45,062.56	15,824	29,239	5,601	12.43	5.2
371.00	PUMPING EQUIPMENT	30-S0.5	442,227.42	114,273	327,954	19,669	4.45	16.7
380.00	TREATMENT EQUIPMENT	35-S1.5	13,576,315.69	4,307,440	9,268,876	506,321	3.73	18.3
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	23,874.37	7,737	16,137	1,075	4.50	15.0
394.00	LABORATORY EQUIPMENT	15-SQ	3,278.57	0	3,279	226	6.89	14.5
396.00	COMMUNICATION EQUIPMENT	15-SQ	18,286.98	5,410	12,877	1,275	6.97	10.1
	TOTAL DEPRECIABLE PLANT		**19,400,883.70**	**6,620,391**	**12,780,494**	**641,708**	**3.31**	
	NONDEPRECIABLE PLANT							
353.20	LAND AND LAND RIGHTS - COLLECTION		62.00					
353.30	LAND AND LAND RIGHTS - SPP		39.00					
353.40	LAND AND LAND RIGHTS - TDP		3,000.00					
	TOTAL NONDEPRECIABLE PLANT		**3,101.00**					
	AMORTIZATION OF NET SALVAGE					**304**		
	TOTAL UTILITY PLANT		**19,403,984.70**	**6,620,391**	**12,780,494**	**642,012**		

PENNSYLVANIA-AMERICAN WATER COMPANY
ROYERSFORD WASTEWATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF DECEMBER 31, 2022

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	627,002.28	343,162	283,840	9,906	1.58	28.7
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	791,994.98	587,028	204,967	13,521	1.71	15.2
355.00	POWER GENERATION EQUIPMENT	35-S0.5	950,992.72	355,312	595,681	32,595	3.43	18.3
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	97,637.72	63,912	33,726	1,350	1.38	25.0
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	2,733,573.21	779,457	1,954,116	42,012	1.54	46.5
361.20	MANHOLES	50-S2.5	130,755.52	73,364	57,392	5,922	4.53	9.7
363.00	SERVICES	47-R3	99,291.71	61,524	37,768	1,800	1.81	21.0
364.00	FLOW MEASURING DEVICES	15-L2.5	55,062.56	22,047	33,016	5,543	10.07	6.0
371.00	PUMPING EQUIPMENT	30-S0.5	461,027.42	132,042	328,985	19,930	4.32	16.5
380.00	TREATMENT EQUIPMENT	35-S1.5	13,677,329.34	4,802,814	8,874,515	496,405	3.63	17.9
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	46,874.37	7,329	39,545	2,333	4.98	17.0
394.00	LABORATORY EQUIPMENT	15-SQ	7,783.57	(114)	7,898	559	7.18	14.1
396.00	COMMUNICATION EQUIPMENT	15-SQ	36,786.98	5,829	30,958	2,600	7.07	11.9
	TOTAL DEPRECIABLE PLANT		**19,716,112.38**	**7,233,707**	**12,482,407**	**634,476**	**3.22**	
	NONDEPRECIABLE PLANT							
353.20	LAND AND LAND RIGHTS - COLLECTION		62.00					
353.30	LAND AND LAND RIGHTS - SPP		39.00					
353.40	LAND AND LAND RIGHTS - TDP		3,000.00					
	TOTAL NONDEPRECIABLE PLANT		**3,101.00**					
	AMORTIZATION OF NET SALVAGE					**2,341**		
	TOTAL UTILITY PLANT		**19,719,213.38**	**7,233,707**	**12,482,407**	**636,817**		

PENNSYLVANIA-AMERICAN WATER COMPANY
ROYERSFORD WASTEWATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF DECEMBER 31, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF DECEMBER 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	627,002.28	353,069	273,933	9,618	1.53	28.5
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	815,068.44	598,694	216,374	13,106	1.61	16.5
355.00	POWER GENERATION EQUIPMENT	35-S0.5	972,192.72	384,222	587,971	32,565	3.35	18.1
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	116,096.49	63,750	52,346	1,596	1.37	32.8
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	2,789,720.13	816,252	1,973,468	42,302	1.52	46.7
361.20	MANHOLES	50-S2.5	154,599.60	77,011	77,589	5,757	3.72	13.5
363.00	SERVICES	47-R3	117,750.48	60,942	56,808	2,291	1.95	24.8
364.00	FLOW MEASURING DEVICES	15-L2.5	65,062.56	27,718	37,345	5,575	8.57	6.7
371.00	PUMPING EQUIPMENT	30-S0.5	483,827.42	148,040	335,787	20,534	4.24	16.4
380.00	TREATMENT EQUIPMENT	35-S1.5	13,864,063.96	5,281,797	8,582,267	489,804	3.53	17.5
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	79,103.75	7,093	72,011	4,114	5.20	17.5
391.00	TRANSPORTATION EQUIPMENT	14-L4	75,000.00	669	74,331	5,857	7.81	12.7
394.00	LABORATORY EQUIPMENT	15-SQ	11,930.57	(371)	12,302	897	7.52	13.7
396.00	COMMUNICATION EQUIPMENT	15-SQ	55,786.98	7,598	48,189	3,967	7.11	12.1
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	5,000.00	42	4,958	342	6.84	14.5
	TOTAL DEPRECIABLE PLANT		**20,232,205.38**	**7,826,526**	**12,405,679**	**638,325**	**3.15**	
	NONDEPRECIABLE PLANT							
353.20	LAND AND LAND RIGHTS - COLLECTION		62.00					
353.30	LAND AND LAND RIGHTS - SPP		39.00					
353.40	LAND AND LAND RIGHTS - TDP		3,000.00					
	TOTAL NONDEPRECIABLE PLANT		**3,101.00**					
	AMORTIZATION OF NET SALVAGE					**4,933**		
	TOTAL UTILITY PLANT		**20,235,306.38**	**7,826,526**	**12,405,679**	**643,258**		

PENNSYLVANIA-AMERICAN WATER COMPANY
UPPER POTTSGROVE WASTEWATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF DECEMBER 31, 2022

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	1,412,677.78	377,771	1,034,907	32,755	2.32	31.6
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	2,190,765.35	794,776	1,395,989	46,086	2.10	30.3
355.00	POWER GENERATION EQUIPMENT	35-S0.5	57,802.32	28,291	29,511	1,798	3.11	16.4
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	756,805.00	134,232	622,573	11,972	1.58	52.0
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	7,646,315.95	1,387,180	6,259,136	117,025	1.53	53.5
361.20	MANHOLES	50-S2.5	1,859,330.67	328,887	1,530,443	53,282	2.87	28.7
363.00	SERVICES	47-R3	2,032,146.93	409,691	1,622,456	60,321	2.97	26.9
371.00	PUMPING EQUIPMENT	30-S0.5	470,892.59	125,924	344,969	23,370	4.96	14.8
380.00	TREATMENT EQUIPMENT	35-S1.5	1,460,510.24	529,851	930,660	61,834	4.23	15.1
391.00	TRANSPORTATION EQUIPMENT	14-L4	40,000.00	0	40,000	3,152	7.88	12.7
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	2,500.00	0	2,500	128	5.12	19.5
	TOTAL DEPRECIABLE PLANT		**17,929,746.83**	**4,116,603**	**13,813,144**	**411,723**	**2.30**	
	NONDEPRECIABLE PLANT							
353.10	LAND AND LAND RIGHTS		10,356.37					
	TOTAL NONDEPRECIABLE PLANT		**10,356.37**					
	AMORTIZATION OF NET SALVAGE					**0**		
	TOTAL UTILITY PLANT		**17,940,103.20**	**4,116,603**	**13,813,144**	**411,723**		

PENNSYLVANIA-AMERICAN WATER COMPANY
UPPER POTTSGROVE WASTEWATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF DECEMBER 31, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF DECEMBER 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	1,412,677.78	410,545	1,002,133	31,906	2.26	31.4
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	2,190,765.35	840,782	1,349,983	44,900	2.05	30.1
355.00	POWER GENERATION EQUIPMENT	35-S0.5	62,378.63	29,671	32,707	1,937	3.11	16.9
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	756,805.00	146,190	610,615	11,890	1.57	51.4
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	7,669,197.52	1,502,065	6,167,133	116,231	1.52	53.1
361.20	MANHOLES	50-S2.5	1,870,737.51	381,671	1,489,067	52,995	2.83	28.1
363.00	SERVICES	47-R3	2,051,299.56	469,222	1,582,077	60,028	2.93	26.4
371.00	PUMPING EQUIPMENT	30-S0.5	470,892.59	149,280	321,613	22,359	4.75	14.4
380.00	TREATMENT EQUIPMENT	35-S1.5	1,460,510.24	591,630	868,880	59,385	4.07	14.6
391.00	TRANSPORTATION EQUIPMENT	14-L4	80,000.00	3,283	76,717	6,298	7.87	12.2
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	7,500.00	139	7,361	385	5.13	19.1
	TOTAL DEPRECIABLE PLANT		**18,032,764.18**	**4,524,478**	**13,508,286**	**408,314**	**2.26**	
	NONDEPRECIABLE PLANT							
353.10	LAND AND LAND RIGHTS		10,356.37					
	TOTAL NONDEPRECIABLE PLANT		**10,356.37**					
	AMORTIZATION OF NET SALVAGE					**0**		
	TOTAL UTILITY PLANT		**18,043,120.55**	**4,524,478**	**13,508,286**	**408,314**		

PENNSYLVANIA-AMERICAN WATER COMPANY
YORK WASTEWATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF DECEMBER 31, 2022

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	141,754.43	118,464	23,290	982	0.69	23.7
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	104,271,994.44	38,079,020	66,192,974	2,317,727	2.22	28.6
355.00	POWER GENERATION EQUIPMENT	35-S0.5	40,032.64	13,922	26,111	1,216	3.04	21.5
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	117,592.47	23,576	94,016	1,795	1.53	52.4
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	26,918,123.19	9,365,769	17,552,354	387,612	1.44	45.3
361.20	MANHOLES	50-S2.5	5,422,043.32	2,372,752	3,049,291	236,844	4.37	12.9
363.00	SERVICES	47-R3	2,093,335.53	1,341,152	752,184	62,336	2.98	12.1
364.00	FLOW MEASURING DEVICES	15-L2.5	90,155.20	30,387	59,768	10,591	11.75	5.6
371.00	PUMPING EQUIPMENT	30-S0.5	4,680,696.60	2,044,708	2,635,989	218,826	4.68	12.0
380.00	TREATMENT EQUIPMENT	35-S1.5	30,742,836.96	7,952,834	22,790,003	1,191,988	3.88	19.1
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	60,303.60	34,224	26,079	2,268	3.76	11.5
391.00	TRANSPORTATION EQUIPMENT	14-L4	1,254,829.63	382,120	872,709	77,035	6.14	11.3
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	300,000.00	15,000	285,000	14,615	4.87	19.5
394.00	LABORATORY EQUIPMENT	15-SQ	277,064.98	44,296	232,769	65,468	23.63	3.6
396.00	COMMUNICATION EQUIPMENT	15-SQ	90,000.00	6,000	84,000	5,793	6.44	14.5
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	75,000.00	5,000	70,000	4,828	6.44	14.5
	TOTAL DEPRECIABLE PLANT		**176,575,762.99**	**61,829,225**	**114,746,537**	**4,599,924**	**2.61**	
	NONDEPRECIABLE PLANT							
353.00	LAND AND LAND RIGHTS - LAND		40,501.00					
353.05	LAND AND LAND RIGHTS - EASEMENTS		94,374.54					
	TOTAL NONDEPRECIABLE PLANT		**134,875.54**					
	AMORTIZATION OF NET SALVAGE					**5,601**		
	TOTAL UTILITY PLANT		**176,710,638.53**	**61,829,225**	**114,746,537**	**4,605,525**		

PENNSYLVANIA-AMERICAN WATER COMPANY
YORK WASTEWATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF DECEMBER 31, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF DECEMBER 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	1,141,754.43	119,730	1,022,024	31,109	2.72	32.9
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	107,995,351.50	40,370,610	67,624,742	2,365,293	2.19	28.6
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	35-S1	150,000.00	536	149,464	5,542	3.69	27.0
355.00	POWER GENERATION EQUIPMENT	35-S0.5	90,032.64	15,329	74,704	3,316	3.68	22.5
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	117,592.47	25,375	92,217	1,768	1.50	52.2
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	27,255,956.32	9,676,981	17,578,975	389,828	1.43	45.1
361.20	MANHOLES	50-S2.5	5,507,833.75	2,586,836	2,920,998	209,722	3.81	13.9
363.00	SERVICES	47-R3	2,159,454.55	1,391,904	767,551	59,776	2.77	12.8
364.00	FLOW MEASURING DEVICES	15-L2.5	90,155.20	40,980	49,175	8,754	9.71	5.6
371.00	PUMPING EQUIPMENT	30-S0.5	4,855,696.60	2,229,973	2,625,724	216,593	4.46	12.1
380.00	TREATMENT EQUIPMENT	35-S1.5	31,093,502.96	9,026,526	22,066,977	1,172,835	3.77	18.8
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	20-S2.5	200,000.00	417	199,583	11,327	5.66	17.6
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	310,303.60	36,883	273,421	15,342	4.94	17.8
391.00	TRANSPORTATION EQUIPMENT	14-L4	1,497,431.84	408,631	1,088,801	104,527	6.98	10.4
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	550,000.00	33,161	516,839	27,264	4.96	19.0
394.00	LABORATORY EQUIPMENT	15-SQ	399,031.78	79,622	319,410	54,392	13.63	5.9
396.00	COMMUNICATION EQUIPMENT	15-SQ	1,747,500.00	18,605	1,728,895	119,681	6.85	14.4
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	75,000.00	9,830	65,170	4,827	6.44	13.5
	TOTAL DEPRECIABLE PLANT		**185,236,597.64**	**66,071,929**	**119,164,670**	**4,801,896**	**2.59**	
	NONDEPRECIABLE PLANT							
353.00	LAND AND LAND RIGHTS - LAND		40,501.00					
353.05	LAND AND LAND RIGHTS - EASEMENTS		94,374.54					
	TOTAL NONDEPRECIABLE PLANT		**134,875.54**					
	AMORTIZATION OF NET SALVAGE					**18,375**		
	TOTAL UTILITY PLANT		**185,371,473.18**	**66,071,929**	**119,164,670**	**4,820,271**		

Pennsylvania-American Water Company
Data Requirements of the Pennsylvania Public Utility Commission
Depreciation Study

FR VI.6

Pennsylvania-American Water Company
VI. Depreciation

6. Provide an exhibit showing gross salvage, cost of removal, and net salvage for the five most recent calendar or fiscal years by account.

Answer:

The information is presented on pages III-2 through III-6 of Exhibit No. 11-A for the historic test year, on pages VIII-2 through VIII-6 of Exhibit No. 11-B for the future test year, and on pages III-2 through III-6 of Exhibit No. 11-C for the fully forecasted test year for water assets.

The information is presented in Part III. Experienced Net Salvage of Exhibit Nos. 11-D and 11-K for the historic test year, in Part VIII, Experienced and Estimated Net Salvage of Exhibit Nos. 11-E, 11-G, 11-I and 11-L of the future test year, and in Part III. Experienced and Estimated Net Salvage of Exhibit Nos. 11-F, 11-H, 11-J and 11-M of the fully forecasted test year for wastewater assets.

EXHIBIT NO. 11-A - DEPRECIATION STUDY

WATER OPERATIONS

AS OF JUNE 30, 2023

Exhibit No. 11-A
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

WATER OPERATIONS

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WATER PLANT
AS OF JUNE 30, 2023

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-A
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WATER OPERATIONS

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WATER PLANT
AS OF JUNE 30, 2023

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

October 12, 2023

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to water plant as of June 30, 2023. Summaries of the original cost, annual accruals and the book depreciation reserve are presented in Tables 1 through 3, beginning on page I-3 of the attached report.

A description of the methods and procedures upon which the study was based, as well as support for the service life estimates, is set forth in a companion report "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Water Plant as of June 30, 2024".

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

FREDERICK B. JOHNSTON, JR.
Senior Analyst

JJS:mle

075543.100

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PART I. RESULTS OF STUDY

PENNSYLVANIA-AMERICAN WATER COMPANY

WATER OPERATIONS

DEPRECIATION STUDY

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Table 1 presents the development of net original cost used in the study. The net original cost is the original cost of water plant less advances, contributions and property to be excluded pursuant to Commission audits. The results of the depreciation study are summarized in Table 2, which sets forth the book reserve and the calculated annual depreciation related to net original cost as of June 30, 2023, and the annual amortization of net negative salvage. Table 3 presents the calculation of the amortization of experienced net salvage, by account, based on the five-year period, 2018-2022.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-8. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage, and cost of removal are set forth by account for the years 2018 through 2022, on pages III-2 through III-6.

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2023

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2023		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2023
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
INTANGIBLE PLANT										
301.00	ORGANIZATION	766,405.12								766,405.12
302.00	FRANCHISES AND CONSENTS	2,404,599.20								2,404,599.20
303.00	MISCELLANEOUS INTANGIBLE PLANT	15,572.16								15,572.16
	TOTAL INTANGIBLE PLANT	**3,186,576.48**		**0.00**		**0.00**		**0.00**		**3,186,576.48**
NONDEPRECIABLE PLANT										
303.20	POWER AND PUMPING LAND	6,169,782.02								6,169,782.02
303.30	PURIFICATION LAND	42,401.17								42,401.17
303.40	TRANSMISSION AND DISTRIBUTION LAND AND RIGHTS OF WAY	3,699,278.24				215,927.20				3,483,351.04
303.50	DISTRIBUTION RESERVOIRS AND STANDPIPE LAND	2,107,863.83								2,107,863.83
303.51	TRANSMISSION AND DISTRIBUTION - LAND	1,865,772.73								1,865,772.73
303.52	TRANSMISSION AND DISTRIBUTION - RIGHTS OF WAY	5,338,245.56								5,338,245.56
303.61	OFFICE LAND	3,221,899.78								3,221,899.78
	TOTAL NONDEPRECIABLE PLANT	**22,445,243.33**		**0.00**		**215,927.20**		**0.00**		**22,229,316.13**
DEPRECIABLE PLANT										
303.14	WATER RIGHTS - HIBERNIA	1,942,822.51								1,942,822.51
303.35	WASTE HANDLING AND TREATMENT LAND	155,025.17								155,025.17
303.99	COMPREHENSIVE PLANNING STUDIES	11,052,834.26								11,052,834.26
304.15	OTHER WATER SOURCE STRUCTURES	95,740,074.67								95,740,074.67
304.20	POWER AND PUMPING STRUCTURES	105,806,222.00				1,289,607.60		41310		104,475,304.40
304.30	PURIFICATION BUILDINGS	335,064,166.83				169,605.01		230375		334,664,186.82
304.36	WASTE HANDLING AND TREATMENT STRUCTURE	25,230,121.46								25,230,121.46
304.38	WASTE HANDLING AND TREATMENT STRUCTURES PAINTING	1,403,438.95								1,403,438.95
304.39	PURIFICATION BUILDINGS - TANK PAINTING	119,362.95								119,362.95
304.61	OFFICE BUILDINGS	42,682,006.14				60,000.00		12834		42,609,172.14
304.62	STORES, SHOP AND GARAGE BUILDINGS	68,074,046.37				576.00				68,073,470.37
304.63	MISCELLANEOUS STRUCTURES AND IMPROVEMENTS	6,864,629.49								6,864,629.49
305.00	COLLECTING AND IMPOUNDING RESERVOIRS	135,474,936.47				3,575.00				135,471,361.47
306.00	LAKE, RIVER AND OTHER INTAKES	17,350,909.40				41,551.00				17,309,358.40
307.00	WELLS AND SPRINGS	11,984,294.01				71,610.27				11,912,683.74
310.00	POWER GENERATION EQUIPMENT	19,053,150.70				118,273.00		26561		18,908,316.70
311.20	PUMPING EQUIPMENT - ELECTRIC	18,259,688.55				1,954,569.05		116,716.00		16,188,403.50
311.50	PUMPING EQUIPMENT - OTHER	13,047,342.71								13,047,342.71
311.52	PUMPING EQUIPMENT - SOURCE OF SUPPLY	12,240,259.32								12,240,259.32
311.53	PUMPING EQUIPMENT - WATER TREATMENT	47,853,790.34								47,853,790.34
311.54	PUMPING EQUIPMENT - TRANSMISSION AND DISTRIBUTION	6,707,900.44								6,707,900.44
320.10	PURIFICATION SYSTEM - LARGE STRUCTURES	227,045,025.74				27,162.27		627852		226,390,011.47
320.18	PURIFICATION SYSTEM - LARGE STRUCTURES PAINT	103,245.73								103,245.73
320.19	PURIFICATION SYSTEM - LARGE STRUCTURES PAINT	3,667,945.94								3,667,945.94

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2023

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2023		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2023
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
320.20	PURIFICATION SYSTEM - CHEMICAL TREATMENT	103,200,976.61				42,367.00				103,158,609.61
320.29	PURIFICATION SYSTEM - CHEMICAL TREATMENT PAINT	8,167.87								8,167.87
320.30	GRANULAR ACTIVATED CARBON	12,704,166.27								12,704,166.27
320.37	WASTE HANDLING AND TREATMENT - EQUIPMENT	14,890,092.88								14,890,092.88
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	119,914,862.96				2,905,114.51				117,009,748.45
330.10	ELEVATED TANKS AND STANDPIPES	14,144,856.97								14,144,856.97
330.20	GROUND LEVEL FACILITIES	18,118,307.94								18,118,307.94
330.30	BELOW GRADE FACILITIES	818,707.23								818,707.23
330.40	CLEARWELL	12,806,300.04								12,806,300.04
330.58	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	2,303,924.15								2,303,924.15
330.59	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	41,110,935.19								41,110,935.19
331.00	MAINS AND ACCESSORIES	3,355,224,093.77		48,333,879.26		249,594,762.81		502366		3,056,793,085.70
333.00	SERVICES	705,318,211.59		11,443,825.85		15,529,927.73				678,344,458.01
334.00	METERS AND METER INSTALLATIONS	223,217,608.09				1,824,706.75				221,392,901.34
335.00	FIRE HYDRANTS	141,592,695.69		1,914,936.19		5,469,207.17				134,208,552.33
340.10	OFFICE FURNITURE	7,800,711.97								7,800,711.97
340.20	COMPUTERS AND PERIPHERAL EQUIPMENT	14,520,712.81								14,520,712.81
340.30	COMPUTER SOFTWARE	80,252,425.10								80,252,425.10
340.31	COMPUTER SOFTWARE - ENTERPRISE SOLUTIONS	1,549,193.48								1,549,193.48
340.50	OTHER OFFICE EQUIPMENT	9,454.95				354.00				9,100.95
341.00	NOT CLASSIFIED	2,587.67								2,587.67
341.10	LIGHT DUTY TRUCKS	51,891,848.30								51,891,848.30
341.20	EQUIPMENT	16,793,602.21								16,793,602.21
341.30	AUTOS	1,995,589.81								1,995,589.81
341.40	OTHER	7,584,706.89								7,584,706.89
342.00	STORES EQUIPMENT	469,790.25								469,790.25
343.00	TOOLS AND WORK EQUIPMENT	43,247,014.88				61.00				43,246,953.88
344.00	LABORATORY EQUIPMENT	2,262,021.06								2,262,021.06
345.00	POWER OPERATED EQUIPMENT	2,122,806.77								2,122,806.77
346.00	EQUIPMENT	2,231,368.37								2,231,368.37
346.10	NON-TELEPHONE	8,295,019.71								8,295,019.71
346.19	REMOTE CONTROL AND INSTRUMENTATION	4,021,751.34								4,021,751.34
346.20	TELEPHONE	295,178.57								295,178.57
347.00	MISCELLANEOUS EQUIPMENT	28,263,694.68				4,085.00				28,259,609.68
348.00	OTHER TANGIBLE EQUIPMENT	795,577.91								795,577.91
	TOTAL DEPRECIABLE PLANT	**6,246,702,204.13**		**61,692,641.30**		**279,107,115.17**		**1,558,014.00**		**5,904,344,433.66**
	TOTAL UTILITY PLANT IN SERVICE	**6,272,334,023.94**		**61,692,641.30**		**279,323,042.37**		**1,558,014.00**		**5,929,760,326.27**

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF JUNE 30, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)
INTANGIBLE PLANT									
301.00	ORGANIZATION	NONDEPR.		766,405.12					
302.00	FRANCHISES AND CONSENTS	NONDEPR.		2,404,599.20					
303.00	MISCELLANEOUS INTANGIBLE PLANT	NONDEPR.		15,572.16					
	TOTAL INTANGIBLE PLANT			**3,186,576.48**					
NONDEPRECIABLE PLANT									
303.20	POWER AND PUMPING LAND	NONDEPR.		6,169,782.02					
303.30	PURIFICATION LAND	NONDEPR.		42,401.17					
303.40	TRANSMISSION AND DISTRIBUTION LAND AND RIGHTS OF WAY	NONDEPR.		3,483,351.04					
303.50	DISTRIBUTION RESERVOIRS AND STANDPIPES LAND	NONDEPR.		2,107,863.83					
303.51	TRANSMISSION AND DISTRIBUTION - LAND	NONDEPR.		1,865,772.73					
303.52	TRANSMISSION AND DISTRIBUTION - RIGHTS OF WAY	NONDEPR.		5,338,245.56					
303.61	OFFICE LAND	NONDEPR.		3,221,899.78					
	TOTAL NONDEPRECIABLE PLANT			**22,229,316.13**					
DEPRECIABLE PLANT									
303.14	WATER RIGHTS - HIBERNIA	25-SQ		1,942,822.51	1,942,823	0	0	-	-
303.35	WASTE HANDLING AND TREATMENT LAND	100-R3	*	155,025.17	131,860	23,165	1,322	0.85	17.5
303.99	COMPREHENSIVE PLANNING STUDIES	5-SQ		11,052,834.26	7,254,665	3,798,169	1,710,935	15.48	2.2
304.15	OTHER WATER SOURCE STRUCTURES	50-S0.5		95,740,074.67	7,841,590	87,898,485	2,770,762	2.89	31.7
304.20	POWER AND PUMPING STRUCTURES								
	LARGE STRUCTURES	75-S0.5	*	56,213,745.31	8,229,846	47,983,900	1,598,982	2.84	30.0
	OTHER STRUCTURES	55-R3		48,261,559.09	8,380,009	39,881,550	1,340,992	2.78	29.7
	TOTAL ACCOUNT 304.2			104,475,304.40	16,609,855	87,865,450	2,939,974	2.81	29.9
304.30	PURIFICATION BUILDINGS								
	LARGE STRUCTURES	55-S1	*	284,083,890.05	100,397,397	183,686,493	6,932,737	2.44	26.5
	OTHER STRUCTURES	60-R3		50,580,296.77	13,292,910	37,287,387	915,696	1.81	40.7
	TOTAL ACCOUNT 304.3			334,664,186.82	113,690,307	220,973,880	7,848,433	2.35	28.2
304.36	WASTE HANDLING AND TREATMENT STRUCTURES	55-S1	*	25,230,121.46	7,463,436	17,766,685	764,243	3.03	23.2
304.38	WASTE HANDLING AND TREATMENT STRUCTURES PAINTING	10-SQ		1,403,438.95	331,573	1,071,866	135,951	9.69	7.9
304.39	PURIFICATION BUILDINGS - TANK PAINTING	10-SQ		119,362.95	112,323	7,040	3,520	2.95	2.0
304.61	OFFICE BUILDINGS								
	LARGE STRUCTURES	55-S0	*	26,607,642.45	6,169,390	20,438,253	860,052	3.23	23.8
	OTHER OTHER STRUCTURES	50-R3		16,001,529.69	3,901,233	12,100,297	369,893	2.31	32.7
	TOTAL ACCOUNT 304.61			42,609,172.14	10,070,623	32,538,550	1,229,945	2.89	26.5
304.62	STORES, SHOP AND GARAGE BUILDINGS								
	LARGE STRUCTURES	55-S0.5	*	58,751,831.95	15,227,016	43,524,817	1,457,508	2.48	29.9
	OTHER OTHER STRUCTURES	45-R3		9,321,638.42	4,208,717	5,112,921	152,710	1.64	33.5
	TOTAL ACCOUNT 304.62			68,073,470.37	19,435,733	48,637,738	1,610,218	2.37	30.2
304.63	MISCELLANEOUS STRUCTURES AND IMPROVEMENTS	35-S0.5		6,864,629.49	3,630,315	3,234,314	135,847	1.98	23.8
	TOTAL ACCOUNT 304			679,179,761.25	179,185,755	499,994,008	17,438,893	2.57	28.7

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF JUNE 30, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)
305.00	COLLECTING AND IMPOUNDING RESERVOIRS								
	LARGE RESERVOIRS	130-R2	*	127,895,832.42	20,920,002	106,975,831	1,763,342	1.38	60.7
	OTHER RESERVOIRS	75-R3		7,575,529.05	2,979,691	4,595,838	142,402	1.88	32.3
	TOTAL ACCOUNT 305			135,471,361.47	23,899,693	111,571,669	1,905,744	1.41	58.5
306.00	LAKE, RIVER AND OTHER INTAKES								
	LARGE RESERVOIRS	55-S1.5	*	12,329,112.16	4,748,401	7,580,711	291,984	2.37	26.0
	OTHER RESERVOIRS	50-S0.5		4,980,246.24	1,640,159	3,340,087	130,484	2.62	25.6
	TOTAL ACCOUNT 306			17,309,358.40	6,388,560	10,920,798	422,468	2.44	25.9
307.00	WELLS AND SPRINGS	55-S0		11,912,683.74	3,401,063	8,511,621	286,230	2.40	29.7
310.00	POWER GENERATION EQUIPMENT	45-S0.5		18,908,316.70	6,293,958	12,614,359	473,877	2.51	26.6
	PUMPING EQUIPMENT								
311.20	ELECTRIC	39-S0		16,188,403.50	3,968,076	12,220,328	540,917	3.34	22.6
311.50	OTHER	39-S0		13,047,342.71	1,149,625	11,897,718	502,951	3.85	23.7
311.52	SOURCE OF SUPPLY	39-S0		12,240,259.32	2,764,830	9,475,429	412,901	3.37	22.9
311.53	WATER TREATMENT	39-S0		47,853,790.34	25,237,269	22,616,521	1,337,620	2.80	16.9
311.54	TRANSMISSION AND DISTRIBUTION	39-S0		6,707,900.44	2,291,397	4,416,503	206,173	3.07	21.4
	TOTAL ACCOUNT 311			96,037,696.31	35,411,197	60,626,499	3,000,562	3.12	20.2
	PURIFICATION SYSTEM								
320.10	LARGE STRUCTURES								
	LARGE STRUCTURES	50-S1	*	210,047,725.16	85,325,556	124,722,167	5,259,400	2.50	23.7
	OTHER OTHER STRUCTURES	55-R3		16,342,286.31	5,243,141	11,099,145	319,725	1.96	34.7
	TOTAL ACCOUNT 320.1			226,390,011.47	90,568,697	135,821,312	5,579,125	2.46	24.3
320.18	LARGE STRUCTURES PAINT	10-SQ		103,245.73	103,246	0	0	-	-
320.19	LARGE STRUCTURES PAINT	10-SQ		3,667,945.94	3,059,100	608,846	79,964	2.18	7.6
320.20	CHEMICAL TREATMENT	42-R0.5		103,158,609.61	30,603,828	72,554,782	3,343,377	3.24	21.7
320.29	CHEMICAL TREATMENT PAINT	FULLY ACCRUED		8,167.87	8,168	0	0	-	-
320.30	GRANULAR ACTIVATED CARBON	11-L0.5		12,704,166.27	5,555,240	7,148,926	1,318,973	10.38	5.4
320.37	WASTE HANDLING AND TREATMENT - EQUIPMENT	30-R3		14,890,092.88	10,673,814	4,216,279	243,895	1.64	17.3
	TOTAL ACCOUNT 320			360,922,239.77	140,572,093	220,350,145	10,565,334	2.93	20.9
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	65-S0.5		117,009,748.45	39,932,025	77,077,723	2,101,017	1.80	36.7
330.10	ELEVATED TANKS AND STANDPIPES	65-S0.5		14,144,856.97	2,290,818	11,854,039	285,273	2.02	41.6
330.20	GROUND LEVEL FACILITIES	65-S0.5		18,118,307.94	2,791,160	15,327,148	367,277	2.03	41.7
330.30	BELOW GRADE FACILITIES	65-S0.5		818,707.23	158,657	660,050	16,194	1.98	40.8
330.40	CLEARWELL	65-S0.5		12,806,300.04	2,617,148	10,189,152	251,227	1.96	40.6
330.58	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ		2,303,924.15	2,086,329	217,595	78,333	3.40	2.8
330.59	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ		41,110,935.19	26,466,456	14,644,479	2,642,615	6.43	5.5
	TOTAL ACCOUNT 330			206,312,779.97	76,342,593	129,970,186	5,741,936	2.78	22.6
331.00	MAINS AND ACCESSORIES	90-R2		3,056,793,085.70	342,396,516	2,714,396,570	46,324,768	1.52	58.6
333.00	SERVICES	65-R2.5		678,344,458.01	158,738,784	519,605,674	12,539,036	1.85	41.4
334.00	METERS AND METER INSTALLATIONS	20-L1.5		221,392,901.34	76,372,916	145,019,985	13,764,263	6.22	10.5
335.00	FIRE HYDRANTS	60-R2		134,208,552.33	19,446,220	114,762,332	3,065,466	2.28	37.4

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE	NET ORIGINAL COST AS OF JUNE 30, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
340.00	OFFICE FURNITURE AND EQUIPMENT							
	FURNITURE	20-SQ	7,800,711.97	1,060,253	6,740,459	483,811	6.20	13.9
	COMPUTERS AND PERIPHERAL EQUIPMENT	5-SQ	14,520,712.81	2,870,542	11,650,171	4,124,631	28.41	2.8
	COMPUTER SOFTWARE	5-SQ	80,252,425.10	21,393,515	58,858,910	28,816,507	35.91	2.0
	COMPUTER SOFTWARE - ENTERPRISE SOLUTIONS	10-SQ	1,549,193.48	693,985	855,208	720,949	46.54	1.2
	OTHER OFFICE EQUIPMENT	10-SQ	9,100.95	1,839	7,262	1,210	13.29	6.0
	TOTAL ACCOUNT 340		104,132,144.31	26,020,134	78,112,010	34,147,108	32.79	2.3
341.00	TRANSPORATION EQUIPMENT							
	NOT CLASSIFIED	10-L2.5	2,587.67	1,555	1,033	179	6.92	5.8
	LIGHT DUTY TRUCKS	10-L2.5	51,891,848.30	25,350,423	26,541,425	4,116,259	7.93	6.4
	EQUIPMENT	10-L2.5	16,793,602.21	14,610,142	2,183,460	489,680	2.92	4.5
	AUTOS	10-L2.5	1,995,589.81	1,767,676	227,914	70,144	3.51	3.2
	OTHER	10-L2.5	7,584,706.89	6,372,507	1,212,200	240,622	3.17	5.0
	TOTAL ACCOUNT 341		78,268,334.88	48,102,303	30,166,032	4,916,884	6.28	6.1
342.00	STORES EQUIPMENT	20-SQ	469,790.25	67,164	402,626	29,362	6.25	13.7
343.00	TOOLS AND WORK EQUIPMENT	20-SQ	43,246,953.88	9,326,628	33,920,326	2,447,749	5.66	13.9
344.00	LABORATORY EQUIPMENT	20-SQ	2,262,021.06	381,654	1,880,367	267,187	11.81	7.0
345.00	POWER OPERATED EQUIPMENT	21-S0.5	2,122,806.77	1,356,764	766,043	92,041	4.34	8.3
346.00	COMUNICATION EQUIPMENT							
	EQUIPMENT	15-SQ	2,231,368.37	325,497	1,905,871	154,156	6.91	12.4
	NON-TELEPHONE	15-SQ	8,295,019.71	1,532,326	6,762,694	582,182	7.02	11.6
	REMOTE CONTROL AND INSTRUMENTATION	10-SQ	4,021,751.34	1,430,915	2,590,836	459,462	11.42	5.6
	TELEPHONE	10-SQ	295,178.57	143,155	152,024	41,339	14.00	3.7
	TOTAL ACCOUNT 346		14,843,317.99	3,431,893	11,411,425	1,237,139	8.33	9.2
347.00	MISCELLANEOUS EQUIPMENT	25-SQ	28,259,609.68	3,893,050	24,366,560	1,350,943	4.78	18.0
348.00	OTHER TANGIBLE EQUIPMENT	25-SQ	795,577.91	477,612	317,966	32,481	4.08	9.8
	TOTAL DEPRECIABLE PLANT		**5,904,344,433.66**	**1,170,835,898**	**4,733,508,535**	**161,761,728**	**2.74**	
	AMORTIZATION OF NET SALVAGE					**23,803,004**		
	TOTAL UTILITY PLANT IN SERVICE		**5,929,760,326.27**	**1,170,835,898**	**4,733,508,535**	**185,564,732**		

* Life Span Procedure was used. Curve shown is Interim Survivor Curve.

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 3. AMORTIZATION OF EXPERIENCED NET SALVAGE

	2018		2019		2020		2021		2022			
ACCOUNT	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2) -	(3) +	(4) -	(5) +	(6) -	(7) +	(8) -	(9) +	(10) -	(11) =	(12)*	(13)=(12)/5
303.61					4,483.73		(4,483.73)				0.00	0
303.99				3,062.78							(3,062.78)	(613)
304.15	1,582.30	180,812.86	27,560.73	387,837.75	210.38	577,956.65		666,811.69		850,320.81	(2,634,386.35)	(526,877)
304.20	13,853.00	39,684.28	31,830.10	147,277.43		71,775.96		37,171.02		23,865.76	(274,091.35)	(54,818)
304.30	14,493.83	1,091,908.37	66,260.61	148,391.82		788,178.99		137,849.62		52,542.41	(2,138,116.77)	(427,623)
304.36		43,138.55		546.00							(43,684.55)	(8,737)
304.61			1,864,549.94	1,304,656.48		12,850.31	4,483.73	1,346.07		6,818.30	543,362.51	108,673
304.62	729.22	6,567.28	192,159.79	54,481.40		(8.81)		18,876.94		46,017.09	66,955.11	13,391
304.63		3,068.49	25,209.50	8,030.27		23.48				79,910.95	(65,823.69)	(13,165)
305.00				1,266,548.34		24,577.59		467.17		299,889.33	(1,591,482.43)	(318,296)
306.00				17,003.99		6,896.40		450.15			(24,350.54)	(4,870)
307.00		1,391.04		118,341.25		42,111.55		5,700.51		55,144.80	(222,689.15)	(44,538)
310.00		11,634.03		42,462.99		3,593.30					(57,690.32)	(11,538)
311.00		191,399.40	13,739.63	1,092,490.18		248,120.57		193,743.82		350,411.61	(2,062,425.95)	(412,485)
320.00	512.50	619,426.48	229.83	924,729.91	(214.05)	695,879.64		890,085.40		1,520,577.41	(4,650,170.56)	(930,034)
320.30				423,003.27		76,375.47		1,370.70		299,375.44	(800,124.88)	(160,025)
320.37		29,963.00	23.00	90,807.00							(120,747.00)	(24,149)
330.00	162.78	2,820,506.21		2,686,207.69		1,196,558.00		1,561,680.99		3,396,011.14	(11,660,801.25)	(2,332,160)
331.00	25,598.82	11,746,655.36	13,124.96	21,381,790.52	25,703.04	12,998,210.71	282,490.53	8,196,453.86	111,611.62	13,983,952.63	(67,848,534.11)	(13,569,707)
333.00	(214.01)	1,300,493.65	9,792.38	1,897,743.49		2,528,314.54	1,799.10	2,681,541.01	2,218.42	2,505,397.99	(10,899,894.79)	(2,179,979)
334.00	115,629.32	913,142.15	93,029.52	2,727,391.38	42,569.41	1,486,703.66	331,737.56	1,021,270.85	54,380.07	3,625,834.72	(9,136,996.88)	(1,827,399)
335.00	2,311.49	309,652.61	4,063.03	908,970.88	3,093.12	1,720,769.32	11,562.11	1,074,172.62	6,290.78	1,281,342.15	(5,267,587.05)	(1,053,517)
340.00	8,779.58	30,861.14	10,745.87	122,477.36	613.87	23,848.17	325.05	78,720.20	8,592.94	67,823.74	(294,673.30)	(58,935)
341.00	205,163.90	148,702.02	261,902.01	761,298.60	456,214.35	97,003.97	219,365.56	(16,299.55)	820,242.37	1,127.48	971,055.67	194,211
342.00		245.80		9,682.12		122.40					(10,050.32)	(2,010)
343.00		7,924.48	48,579.17	57,836.24	3,000.00	50,715.40		40,863.25		38,089.15	(143,849.35)	(28,770)
344.00		4,823.99		14,919.23		13,845.30		5,126.37		8,395.86	(47,110.75)	(9,422)
345.00		860.13	12,288.18	15,876.66						590.23	(5,038.84)	(1,008)
346.00	132.58	30,002.27		87,193.50		44,631.89		49,301.95		165,439.94	(376,436.97)	(75,287)
347.00		20,027.66	8,306.50	73,665.55		16,130.65		8,339.46		105,946.50	(215,803.32)	(43,161)
348.00		(29.21)		808.08							(778.87)	(156)
TOTAL	**388,735.31**	**19,552,862.04**	**2,683,394.75**	**36,775,532.16**	**535,673.85**	**22,725,185.11**	**847,279.91**	**16,655,044.10**	**1,003,336.20**	**28,764,825.44**	**(119,015,028.83)**	**(23,803,004)**

* Column (12) equals the summation of Columns (2) through (11).

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1843	72	72			0.0
1850	4,000	4,000			0.0
1861	1,094	1,094			0.0
1868	3,816	2,208	1,608	1,608	0.0
1869	235	138	97	1,705	0.0
1870	8,505	4,936	3,569	5,274	0.0
1871	9,909	8,883	1,026	6,300	0.0
1872	106,289	85,905	20,384	26,684	0.0
1873	9,244	5,342	3,902	30,586	0.0
1874	40,344	23,159	17,185	47,771	0.0
1875	4,224	2,409	1,815	49,586	0.0
1876	9,019	5,611	3,408	52,994	0.0
1877	159	91	68	53,062	0.0
1878	6,503	3,689	2,814	55,876	0.0
1879	4,560	2,607	1,953	57,829	0.0
1880	301	171	130	57,959	0.0
1882	330	289	41	58,000	0.0
1883	98	56	42	58,042	0.0
1884	18,618	17,427	1,191	59,233	0.0
1885	30,240	17,067	13,173	72,406	0.0
1886	41,947	23,656	18,291	90,697	0.0
1887	89,524	68,296	21,228	111,925	0.0
1888	120,510	69,400	51,110	163,035	0.0
1889	519,386	450,613	68,773	231,808	0.0
1890	285,784	158,433	127,351	359,159	0.0
1891	155,391	99,914	55,477	414,636	0.0
1892	264,172	193,608	70,564	485,200	0.0
1893	410,400	251,985	158,415	643,615	0.0
1894	173,722	144,264	29,458	673,073	0.0
1895	21,049	17,642	3,407	676,480	0.0
1896	472,058	264,216	207,842	884,322	0.0
1897	318,760	282,452	36,308	920,630	0.0
1898	86,903	48,137	38,766	959,396	0.0
1899	410,069	226,017	184,052	1,143,448	0.0
1900	1,804,381	1,073,589	730,792	1,874,240	0.0
1901	501,541	309,534	192,007	2,066,247	0.0
1902	233,425	134,242	99,183	2,165,430	0.0
1903	371,548	208,445	163,103	2,328,533	0.0
1904	158,992	91,438	67,554	2,396,087	0.1
1905	552,786	312,283	240,503	2,636,590	0.1
1906	366,950	228,058	138,892	2,775,482	0.1
1907	1,971,183	1,094,843	876,340	3,651,822	0.1
1908	544,206	301,085	243,121	3,894,943	0.1
1909	362,718	204,674	158,044	4,052,987	0.1
1910	543,770	318,912	224,858	4,277,845	0.1

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1911	188,117	115,372	72,745	4,350,590	0.1
1912	327,406	182,563	144,843	4,495,433	0.1
1913	161,056	85,169	75,887	4,571,320	0.1
1914	477,114	250,069	227,045	4,798,365	0.1
1915	515,579	303,496	212,083	5,010,448	0.1
1916	1,165,980	604,106	561,874	5,572,322	0.1
1917	146,847	76,661	70,186	5,642,508	0.1
1918	216,158	137,713	78,445	5,720,953	0.1
1919	221,129	134,481	86,648	5,807,601	0.1
1920	314,283	172,168	142,115	5,949,716	0.1
1921	317,674	187,399	130,275	6,079,991	0.1
1922	281,215	162,531	118,684	6,198,675	0.1
1923	2,486,510	1,436,641	1,049,869	7,248,544	0.2
1924	1,187,883	703,410	484,473	7,733,017	0.2
1925	744,359	368,432	375,927	8,108,944	0.2
1926	1,965,320	968,964	996,356	9,105,300	0.2
1927	260,301	130,436	129,865	9,235,165	0.2
1928	449,856	242,269	207,587	9,442,752	0.2
1929	362,111	217,579	144,532	9,587,284	0.2
1930	278,726	149,909	128,817	9,716,101	0.2
1931	313,244	183,926	129,318	9,845,419	0.2
1932	115,788	57,945	57,843	9,903,262	0.2
1933	48,278	23,627	24,651	9,927,913	0.2
1934	89,860	43,084	46,776	9,974,689	0.2
1935	156,477	75,707	80,770	10,055,459	0.2
1936	122,932	60,175	62,757	10,118,216	0.2
1937	270,681	161,610	109,071	10,227,287	0.2
1938	103,358	52,400	50,958	10,278,245	0.2
1939	216,825	112,054	104,771	10,383,016	0.2
1940	229,178	135,899	93,279	10,476,295	0.2
1941	189,378	106,384	82,994	10,559,289	0.2
1942	156,333	88,440	67,893	10,627,182	0.2
1943	108,428	56,115	52,313	10,679,495	0.2
1944	60,077	31,313	28,764	10,708,259	0.2
1945	458,816	252,019	206,797	10,915,056	0.2
1946	627,550	320,138	307,412	11,222,468	0.2
1947	577,387	331,034	246,353	11,468,821	0.2
1948	741,938	430,140	311,798	11,780,619	0.2
1949	469,260	308,211	161,049	11,941,668	0.3
1950	516,422	321,606	194,816	12,136,484	0.3
1951	1,228,309	758,773	469,536	12,606,020	0.3
1952	1,035,368	631,287	404,081	13,010,101	0.3
1953	2,802,692	1,763,264	1,039,428	14,049,529	0.3
1954	2,442,487	1,305,805	1,136,682	15,186,211	0.3
1955	3,975,732	1,855,277	2,120,455	17,306,666	0.4

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1956	2,522,743	1,264,836	1,257,907	18,564,573	0.4
1957	3,351,658	1,592,360	1,759,298	20,323,871	0.4
1958	4,369,245	2,215,161	2,154,084	22,477,955	0.5
1959	4,108,451	2,072,507	2,035,944	24,513,899	0.5
1960	4,506,669	2,161,815	2,344,854	26,858,753	0.6
1961	5,872,751	2,810,086	3,062,665	29,921,418	0.6
1962	2,806,877	1,434,946	1,371,931	31,293,349	0.7
1963	3,150,588	1,465,423	1,685,165	32,978,514	0.7
1964	7,678,680	3,279,953	4,398,727	37,377,241	0.8
1965	7,243,417	3,594,093	3,649,324	41,026,565	0.9
1966	6,603,505	2,832,384	3,771,121	44,797,686	0.9
1967	8,222,080	3,579,731	4,642,349	49,440,035	1.0
1968	7,725,606	3,238,690	4,486,916	53,926,951	1.1
1969	8,642,420	4,350,250	4,292,170	58,219,121	1.2
1970	5,653,156	2,387,469	3,265,687	61,484,808	1.3
1971	7,959,219	3,303,302	4,655,917	66,140,725	1.4
1972	15,062,198	7,700,071	7,362,127	73,502,852	1.6
1973	27,893,702	16,527,762	11,365,940	84,868,792	1.8
1974	7,796,406	3,178,749	4,617,657	89,486,449	1.9
1975	8,446,772	3,348,034	5,098,738	94,585,187	2.0
1976	17,274,146	8,332,299	8,941,847	103,527,034	2.2
1977	8,480,592	3,132,210	5,348,382	108,875,416	2.3
1978	13,468,952	4,819,719	8,649,233	117,524,649	2.5
1979	13,316,358	4,971,336	8,345,022	125,869,671	2.7
1980	16,490,604	5,623,030	10,867,574	136,737,245	2.9
1981	12,910,098	4,737,035	8,173,063	144,910,308	3.1
1982	15,213,275	7,196,945	8,016,330	152,926,638	3.2
1983	16,279,293	6,001,323	10,277,970	163,204,608	3.4
1984	20,610,314	6,909,154	13,701,160	176,905,768	3.7
1985	35,456,835	13,056,712	22,400,123	199,305,891	4.2
1986	37,932,944	13,396,334	24,536,610	223,842,501	4.7
1987	40,743,979	14,053,533	26,690,446	250,532,947	5.3
1988	61,983,615	23,855,683	38,127,932	288,660,879	6.1
1989	61,885,495	21,948,236	39,937,259	328,598,138	6.9
1990	99,799,778	45,234,998	54,564,780	383,162,918	8.1
1991	59,868,640	28,392,418	31,476,222	414,639,140	8.8
1992	67,117,492	27,450,905	39,666,587	454,305,727	9.6
1993	101,828,821	42,767,067	59,061,754	513,367,481	10.8
1994	60,153,696	17,141,809	43,011,887	556,379,368	11.8
1995	90,150,891	29,759,956	60,390,935	616,770,303	13.0
1996	66,614,294	18,722,528	47,891,766	664,662,069	14.0
1997	94,811,205	33,882,779	60,928,426	725,590,495	15.3
1998	157,754,125	44,519,393	113,234,732	838,825,227	17.7
1999	114,686,969	36,011,828	78,675,141	917,500,368	19.4
2000	89,494,651	22,348,222	67,146,429	984,646,797	20.8

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2001	109,529,023	29,660,600	79,868,423	1,064,515,220	22.5
2002	109,092,365	25,324,832	83,767,533	1,148,282,753	24.3
2003	59,399,992	16,012,320	43,387,672	1,191,670,425	25.2
2004	77,042,033	15,225,460	61,816,573	1,253,486,998	26.5
2005	95,684,391	22,196,549	73,487,842	1,326,974,840	28.0
2006	61,863,074	18,342,339	43,520,735	1,370,495,575	29.0
2007	120,831,408	24,093,359	96,738,049	1,467,233,624	31.0
2008	155,475,080	27,294,388	128,180,692	1,595,414,316	33.7
2009	133,964,806	22,468,416	111,496,390	1,706,910,706	36.1
2010	152,078,496	26,051,118	126,027,378	1,832,938,084	38.7
2011	198,812,134	36,551,157	162,260,977	1,995,199,061	42.2
2012	311,087,656	63,553,952	247,533,704	2,242,732,765	47.4
2013	254,853,558	44,229,563	210,623,995	2,453,356,760	51.8
2014	226,891,141	33,334,849	193,556,292	2,646,913,052	55.9
2015	231,210,939	28,078,409	203,132,530	2,850,045,582	60.2
2016	277,178,961	38,046,959	239,132,002	3,089,177,584	65.3
2017	246,917,922	27,829,755	219,088,167	3,308,265,751	69.9
2018	397,469,250	51,641,286	345,827,964	3,654,093,715	77.2
2019	286,460,838	30,266,749	256,194,089	3,910,287,804	82.6
2020	309,370,633	22,879,260	286,491,373	4,196,779,177	88.7
2021	335,397,218	19,834,149	315,563,069	4,512,342,246	95.3
2022	395,475,381	10,654,389	384,820,992	4,897,163,238	103.5
2023	134,970,537	1,044,658	133,925,879	5,031,089,117	106.3
9999	340,818,760-	43,238,182-	297,580,578-	4,733,508,539	100.0
SUBTOTAL	5,904,344,433	1,170,835,898	4,733,508,535		
NONDEPRECIABLE	25,415,893		25,415,893		
TOTAL	5,929,760,326	1,170,835,898	4,758,924,428		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 303.14 WATER RIGHTS - HIBERNIA

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
1995	1,942,822.51	1,942,823	1,942,823			
	1,942,822.51	1,942,823	1,942,823			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 303.35 WASTE HANDLING AND TREATMENT LAND

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 100-R3						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1991	70,430.00	45,526	60,303	10,127	17.50	579
1992	84,595.17	54,022	71,557	13,038	17.54	743
	155,025.17	99,548	131,860	23,165		1,322

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.5 0.85

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 303.99 COMPREHENSIVE PLANNING STUDIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	210,221.70	210,222	210,222			
2014	668,293.04	668,293	668,293			
2015	145,773.72	145,774	145,774			
2016	5,166,691.39	5,166,691	5,166,691			
2017	370,367.21	370,367	370,367			
2018	950,553.09	950,553	950,553			
2019	393,070.67	314,457	49,516-	442,587	1.00	442,587
2020	1,282,572.43	769,543	121,177-	1,403,749	2.00	701,874
2021	891,896.17	356,758	56,177-	948,073	3.00	316,024
2022	961,088.22	192,218	30,268-	991,356	4.00	247,839
2023	12,306.62	615	97-	12,404	4.75	2,611
	11,052,834.26	9,145,491	7,254,665	3,798,169		1,710,935
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					2.2	15.48

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.15 OTHER WATER SOURCE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S0.5						
NET SALVAGE PERCENT.. 0						
1905	20,000.00	20,000	20,000			
1962	3,046.99	2,528	1,293	1,754	12.53	140
1965	555.68	451	231	325	13.43	24
1966	20,825.96	16,738	8,563	12,263	13.92	881
1967	270.30	216	110	160	13.93	11
1968	13,568.76	10,746	5,497	8,072	14.44	559
1969	631.00	497	254	377	14.49	26
1970	1,609.62	1,254	642	968	15.03	64
1971	11,357.68	8,800	4,502	6,856	15.11	454
1972	19,891.30	15,217	7,785	12,106	15.67	773
1973	102.13	78	40	62	15.79	4
1974	11,058.14	8,290	4,241	6,817	16.36	417
1975	3,360.08	2,500	1,279	2,081	16.52	126
1977	2,198.00	1,598	817	1,381	17.29	80
1978	1,550.08	1,116	571	979	17.50	56
1979	73,467.49	52,044	26,624	46,843	18.11	2,587
1980	50,476.77	35,379	18,099	32,378	18.35	1,764
1981	196,712.02	136,321	69,737	126,975	18.61	6,823
1982	5,146.13	3,524	1,803	3,343	18.88	177
1983	23,321.00	15,765	8,065	15,256	19.17	796
1984	1,022.00	682	349	673	19.48	35
1985	72,193.18	47,460	24,279	47,914	19.80	2,420
1986	65,149.35	41,943	21,457	43,692	20.47	2,134
1987	194.55	123	63	132	20.82	6
1988	5,314.89	3,330	1,704	3,611	20.87	173
1989	138,173.70	85,032	43,500	94,674	21.25	4,455
1990	167,225.90	100,988	51,662	115,564	21.64	5,340
1991	516,329.92	305,667	156,369	359,961	22.05	16,325
1992	304,014.37	176,237	90,157	213,857	22.48	9,513
1993	140,979.07	79,935	40,892	100,087	22.91	4,369
1994	1,280,944.74	713,230	364,864	916,081	23.08	39,692
1995	208,091.31	113,035	57,825	150,266	23.55	6,381
1996	401,536.45	213,577	109,259	292,277	23.76	12,301
1997	28,856.35	14,930	7,638	21,218	24.25	875
1998	262,855.90	132,742	67,906	194,950	24.50	7,957
1999	144,742.69	70,866	36,253	108,490	25.02	4,336
2000	144,747.72	68,914	35,254	109,494	25.31	4,326
2001	9,780.57	4,497	2,301	7,480	25.85	289
2002	750,369.20	334,064	170,896	579,473	26.17	22,143
2003	1,961,187.80	843,311	431,409	1,529,779	26.51	57,706
2004	261,130.29	108,160	55,331	205,799	26.87	7,659

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.15 OTHER WATER SOURCE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S0.5						
NET SALVAGE PERCENT.. 0						
2005	1,012,418.84	402,740	206,028	806,391	27.25	29,592
2006	514,445.56	195,901	100,216	414,230	27.64	14,987
2007	1,590,010.81	577,492	295,425	1,294,586	28.05	46,153
2008	1,262,108.56	435,427	222,750	1,039,359	28.48	36,494
2009	238,305.39	77,735	39,767	198,538	28.92	6,865
2010	11,303,442.33	3,467,896	1,774,059	9,529,383	29.37	324,460
2011	352,312.35	101,466	51,907	300,405	29.67	10,125
2012	361,197.40	96,548	49,391	311,806	30.15	10,342
2013	3,025,003.28	747,176	382,230	2,642,773	30.49	86,677
2014	1,416,573.85	318,729	163,051	1,253,523	31.00	40,436
2015	958,211.19	194,709	99,607	858,604	31.37	27,370
2016	1,939,383.30	350,253	179,178	1,760,205	31.76	55,422
2017	2,060,269.38	323,874	165,683	1,894,586	32.17	58,893
2018	17,548,691.65	2,333,976	1,193,982	16,354,710	32.59	501,832
2019	3,419,500.77	369,306	188,924	3,230,577	33.04	97,778
2020	5,290,840.44	436,494	223,296	5,067,544	33.36	151,905
2021	5,305,572.16	297,112	151,992	5,153,580	33.71	152,880
2022	26,587,987.68	760,416	389,003	26,198,985	33.97	771,239
2023	4,229,810.65	30,455	15,580	4,214,231	34.23	123,115
	95,740,074.67	15,309,490	7,841,590	87,898,485		2,770,762

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.7 2.89

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALLEGHENY RIVER PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2045						
NET SALVAGE PERCENT.. 0						
1962	15,878.73	12,301	5,879	10,000	17.74	564
1970	6,710.06	5,014	2,396	4,314	17.92	241
1995	1,715,454.62	1,008,687	482,081	1,233,374	19.62	62,863
2001	6,191.06	3,255	1,556	4,635	19.84	234
	1,744,234.47	1,029,257	491,912	1,252,322		63,902
BECKS RUN STATION - NEW						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2072						
NET SALVAGE PERCENT.. 0						
2012	23,868,525.21	5,434,863	2,597,481	21,271,044	37.31	570,116
2015	17,442.33	3,042	1,454	15,988	37.87	422
	23,885,967.54	5,437,905	2,598,935	21,287,033		570,538
MILL STREET PUMP STATION AND REGULATOR BYPASS						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	1,277,952.17	759,104	362,798	915,154	22.56	40,565
1994	3,067.93	1,708	816	2,252	23.08	98
2001	15,048.48	7,283	3,481	11,568	23.45	493
2018	27,090.40	4,551	2,175	24,915	24.76	1,006
2021	3,362,441.11	250,166	119,562	3,242,879	24.88	130,341
	4,685,600.09	1,022,812	488,832	4,196,768		172,503

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
GARDNER CREEK PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2043						
NET SALVAGE PERCENT.. 0						
1993	1,121,355.16	703,090	336,027	785,328	17.85	43,996
1994	85,662.97	52,914	25,289	60,374	17.95	3,363
2001	13,088.07	7,141	3,413	9,675	18.32	528
2003	7,900.11	4,124	1,971	5,929	18.31	324
	1,228,006.31	767,269	366,700	861,306		48,211
NORRISTOWN BOOSTER STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2047						
NET SALVAGE PERCENT.. 0						
1997	2,400,581.27	1,323,200	632,397	1,768,185	21.17	83,523
1998	52,044.11	28,234	13,494	38,550	21.08	1,829
2003	1,271.63	613	293	979	21.49	46
2007	10,970.93	4,652	2,223	8,748	21.74	402
2008	97,884.43	39,937	19,087	78,797	21.76	3,621
2012	1,059.31	353	169	891	22.00	40
2013	31,601.32	9,860	4,712	26,889	22.05	1,219
	2,595,413.00	1,406,849	672,375	1,923,038		90,680
MILL ROAD BOOSTER STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2047						
NET SALVAGE PERCENT.. 0						
1997	2,093,461.42	1,153,916	551,491	1,541,971	21.17	72,838
1998	27,010.00	14,653	7,003	20,007	21.08	949
2015	97,145.43	25,724	12,294	84,851	22.21	3,820
	2,217,616.85	1,194,293	570,788	1,646,829		77,607

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CHERRY VALLEY						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2049						
NET SALVAGE PERCENT.. 0						
1999	4,650,691.72	2,388,595	1,141,579	3,509,112	22.73	154,382
2014	95,817.24	26,388	12,612	83,206	23.68	3,514
	4,746,508.96	2,414,983	1,154,191	3,592,318		157,896
CLARION WATER TREATMENT AND TANK						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
2003	2,349,120.19	1,028,915	491,749	1,857,371	25.66	72,384
2004	146,294.31	61,985	29,624	116,670	25.84	4,515
2006	10,710.36	4,242	2,027	8,683	25.92	335
2007	2,583.58	984	470	2,113	26.02	81
	2,508,708.44	1,096,126	523,871	1,984,837		77,315
NORRISTOWN - FOREST AVENUE BOOSTER STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2063						
NET SALVAGE PERCENT.. 0						
2013	1,327,877.66	309,395	147,869	1,180,009	32.92	35,845
	1,327,877.66	309,395	147,869	1,180,009		35,845
SHIRE OAKS RELAY STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2063						
NET SALVAGE PERCENT.. 0						
2013	2,585,737.11	602,477	287,941	2,297,796	32.92	69,799
2014	2,220,406.42	475,611	227,309	1,993,098	33.02	60,360
	4,806,143.53	1,078,088	515,250	4,290,894		130,159

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALDRICH STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2063						
NET SALVAGE PERCENT.. 0						
2007	15,755.78	5,244	2,506	13,250	32.08	413
2013	4,835,261.20	1,126,616	538,443	4,296,818	32.92	130,523
2014	1,472,142.36	315,333	150,707	1,321,435	33.02	40,019
2017	3,006.40	456	218	2,788	33.53	83
	6,326,165.74	1,447,649	691,874	5,634,292		171,038
ELLWOOD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
2005	11,236.00	3,600	1,720	9,516	38.18	249
2019	130,266.72	11,568	5,529	124,738	41.05	3,039
	141,502.72	15,168	7,249	134,254		3,288
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1893	3,249.15	3,249	3,249			
1894	94,841.04	94,841	94,841			
1896	3,182.60	3,183	3,183			
1897	7,107.03	7,107	7,107			
1900	358.00	358	358			
1901	7,495.63	7,496	7,496			
1904	2,021.00	2,021	2,021			
1905	5,507.85	5,508	5,508			
1906	6,449.72	6,450	6,450			
1908	7,657.66	7,658	7,658			
1909	8,663.76	8,664	8,664			
1910	13,836.00	13,836	13,836			
1911	16,065.00	16,065	16,065			
1912	1,348.87	1,349	1,349			
1915	1,154.25	1,154	1,154			
1918	33,974.06	33,974	33,974			
1919	3,620.00	3,620	3,620			
1920	5,563.30	5,563	5,563			

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1921	645.00	645	645			
1922	11,541.92	11,542	11,542			
1923	8,106.40	8,106	8,106			
1924	35,623.67	35,624	35,624			
1925	154.00	154	154			
1926	525.00	525	525			
1927	927.19	927	927			
1928	3,768.38	3,768	3,768			
1929	13,600.23	13,600	13,600			
1930	4,309.44	4,309	4,309			
1931	8,059.98	8,060	8,060			
1932	4,338.00	4,303	2,017	2,321	0.74	2,321
1933	32.82	32	15	18	0.91	18
1934	216.34	214	100	116	1.09	106
1935	2,295.77	2,263	1,061	1,235	1.29	957
1936	1,269.17	1,248	585	684	1.50	456
1937	979.72	961	451	529	1.72	308
1938	3,229.30	3,157	1,480	1,749	1.96	892
1939	3,064.46	2,986	1,400	1,665	2.21	753
1940	267.00	259	121	146	2.47	59
1941	443.03	429	201	242	2.75	88
1942	4,109.17	3,961	1,857	2,252	3.03	743
1943	68.00	65	30	38	3.33	11
1944	653.45	625	293	360	3.64	99
1945	1,436.76	1,378	646	791	3.30	240
1946	473.00	452	212	261	3.65	72
1947	10,135.29	9,629	4,514	5,621	4.00	1,405
1948	71,909.00	67,954	31,857	40,052	4.37	9,165
1949	2,239.14	2,104	986	1,253	4.74	264
1950	515.26	485	227	288	4.52	64
1951	30,741.27	28,774	13,489	17,252	4.92	3,507
1952	12,157.42	11,308	5,301	6,856	5.34	1,284
1953	29,291.37	27,065	12,688	16,603	5.76	2,882
1954	153,376.90	141,812	66,482	86,895	5.63	15,434
1955	109,166.68	100,215	46,981	62,186	6.07	10,245
1956	27,347.64	24,919	11,682	15,666	6.53	2,399
1957	17,149.06	15,619	7,322	9,827	6.46	1,521
1958	14,583.18	13,176	6,177	8,406	6.94	1,211
1959	28,883.94	26,065	12,219	16,665	6.92	2,408
1960	21,287.75	19,044	8,928	12,360	7.42	1,666

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1961	78,692.88	69,769	32,708	45,985	7.93	5,799
1962	774.72	685	321	454	7.97	57
1963	48,815.56	42,762	20,047	28,769	8.49	3,389
1964	387,401.33	338,279	158,586	228,816	8.57	26,700
1965	28,778.30	24,870	11,659	17,119	9.11	1,879
1966	48,962.27	41,863	19,625	29,337	9.67	3,034
1967	98,163.64	83,557	39,172	58,992	9.79	6,026
1968	21,839.15	18,378	8,616	13,224	10.36	1,276
1969	116,318.91	97,359	45,642	70,677	10.52	6,718
1970	47,470.11	39,248	18,400	29,071	11.10	2,619
1971	130,043.91	106,168	49,772	80,272	11.69	6,867
1972	98,769.21	80,092	37,547	61,222	11.89	5,149
1973	59,346.92	47,478	22,258	37,089	12.50	2,967
1974	122,381.06	96,546	45,261	77,120	13.11	5,883
1975	103,900.94	80,793	37,876	66,025	13.73	4,809
1976	48,590.64	37,454	17,558	31,032	13.98	2,220
1977	27,859.09	21,145	9,913	17,946	14.61	1,228
1978	89,718.15	67,019	31,419	58,300	15.24	3,825
1979	73,094.61	53,710	25,179	47,915	15.88	3,017
1980	117,633.55	85,484	40,075	77,559	16.17	4,796
1981	249,656.08	178,254	83,566	166,090	16.82	9,875
1982	194,879.67	136,630	64,052	130,827	17.48	7,484
1983	161,540.95	111,140	52,103	109,438	18.14	6,033
1984	132,167.58	89,173	41,804	90,363	18.80	4,807
1985	954,829.05	634,961	297,671	657,158	19.14	34,334
1986	214,775.45	139,862	65,567	149,208	19.82	7,528
1987	1,118,053.24	712,424	333,985	784,068	20.50	38,247
1988	356,067.30	221,830	103,994	252,073	21.18	11,901
1989	802,971.88	488,689	229,098	573,874	21.87	26,240
1990	1,928,360.33	1,145,446	536,987	1,391,374	22.56	61,674
1991	295,582.63	171,201	80,259	215,323	23.25	9,261
1992	1,853,412.02	1,045,695	490,223	1,363,189	23.95	56,918
1993	1,466,994.16	805,380	377,563	1,089,431	24.64	44,214
1994	244,001.25	130,199	61,037	182,964	25.35	7,218
1995	640,508.68	331,783	155,540	484,968	26.05	18,617
1996	980,949.05	492,633	230,947	750,002	26.76	28,027
1997	725,094.85	352,541	165,272	559,823	27.48	20,372
1998	627,674.57	295,007	138,300	489,375	28.19	17,360
1999	664,291.52	301,323	141,261	523,031	28.91	18,092
2000	1,764,244.19	770,975	361,434	1,402,810	29.63	47,344

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
2001	795,715.62	334,360	156,748	638,967	30.36	21,046
2002	248,483.17	100,188	46,968	201,515	31.08	6,484
2003	4,296,582.59	1,658,481	777,498	3,519,085	31.81	110,628
2004	343,332.69	126,552	59,328	284,005	32.55	8,725
2005	304,512.31	106,884	50,107	254,405	33.28	7,644
2006	3,508,888.09	1,169,162	548,105	2,960,783	34.02	87,031
2007	4,010,156.70	1,264,001	592,565	3,417,591	34.76	98,320
2008	1,161,052.77	344,833	161,658	999,395	35.51	28,144
2009	18,926.38	5,246	2,459	16,467	36.51	451
2010	227,598.24	58,880	27,603	199,995	37.25	5,369
2011	561,794.04	134,831	63,209	498,585	38.00	13,121
2012	570,966.71	126,241	59,182	511,785	38.75	13,207
2013	1,558,069.72	314,730	147,546	1,410,524	39.50	35,709
2014	1,884,291.04	344,260	161,390	1,722,901	40.26	42,794
2015	850,472.81	138,797	65,068	785,405	41.02	19,147
2016	3,076,647.97	439,345	205,966	2,870,682	42.02	68,317
2017	596,714.50	73,396	34,408	562,306	42.78	13,144
2018	1,736,767.27	178,887	83,862	1,652,905	43.54	37,963
2019	142,324.04	11,784	5,524	136,800	44.31	3,087
2020	1,386,162.67	86,912	40,744	1,345,418	44.85	29,998
2021	4,180,261.27	175,571	82,308	4,097,953	45.62	89,828
2022	59,156.99	1,260	591	58,566	45.95	1,275
2023	46,663.68	252	118	46,546	46.05	1,011
9999	1,289,607.60-	468,529-	223,924-	1,065,684-		35,833-
	48,261,559.09	17,533,987	8,380,009	39,881,550		1,340,992
	104,475,304.40	34,753,781	16,609,855	87,865,450		2,939,974

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.9 2.81

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
E.H. ALDRICH PURIFICATION BUILDING						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1961	19,418.30	16,374	16,556	2,862	11.53	248
1962	587.00	494	499	88	11.46	8
1964	398.22	331	335	64	11.92	5
1967	22,777.88	18,751	18,959	3,818	12.03	317
1969	88,648.46	72,284	73,087	15,561	12.23	1,272
1970	9.00	7	7	2	12.36	
1972	2,625.00	2,102	2,125	500	12.69	39
1975	162.19	128	129	33	12.98	3
1976	1,253.00	978	989	264	13.24	20
1979	8,573.73	6,564	6,637	1,937	13.47	144
1980	0.44		0			
1981	5,147.00	3,870	3,913	1,234	13.87	89
1982	183.99	137	139	45	13.95	3
1983	34,159.01	25,278	25,559	8,600	14.05	612
1986	2,413.79	1,742	1,761	652	14.28	46
1987	38,000.00	27,223	27,526	10,474	14.25	735
1989	3,521.45	2,466	2,493	1,028	14.54	71
1995	4,585.62	2,979	3,012	1,574	15.10	104
1996	593,868.61	380,017	384,240	209,628	15.19	13,800
1997	1,174.41	739	747	427	15.32	28
1998	34,779.35	21,476	21,715	13,065	15.49	843
2000	66,447.94	39,583	40,023	26,425	15.61	1,693
2001	7,444.51	4,340	4,388	3,056	15.74	194
2002	369,599.38	211,115	213,461	156,138	15.76	9,907
2003	108,767.55	60,692	61,367	47,401	15.84	2,992
2005	40,107.45	21,225	21,461	18,647	16.01	1,165
2006	577,744.83	296,614	299,910	277,834	16.11	17,246
2007	36,412.64	18,061	18,262	18,151	16.26	1,116
2008	7,024.74	3,361	3,398	3,626	16.35	222
2009	59,229.01	27,281	27,584	31,645	16.40	1,930
2010	2,144.76	945	956	1,189	16.50	72
2011	87,207.23	36,627	37,034	50,173	16.57	3,028
2012	5,665,980.92	2,249,961	2,274,966	3,391,015	16.70	203,055
2013	126,807.08	47,426	47,953	78,854	16.74	4,711
2014	88,273.55	30,746	31,088	57,186	16.84	3,396
2017	1,306,365.52	339,394	343,166	963,200	17.09	56,360
2018	51,403.47	11,591	11,720	39,684	17.17	2,311
	9,463,247.03	3,982,902	4,027,167	5,436,080		327,785

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HAYS MINE FILTER BUILDING						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1906	871.05	871	871			
1924	65,855.77	63,893	64,603	1,253	3.04	412
1928	713.20	684	692	22	4.01	5
1938	1,127.93	1,045	1,057	71	6.74	11
1953	17,140.17	14,878	15,043	2,097	10.65	197
1954	63,503.27	54,772	55,381	8,122	11.00	738
1955	11,789.91	10,102	10,214	1,576	11.37	139
1958	1,894.04	1,588	1,606	288	12.52	23
1961	6,679.68	5,508	5,569	1,110	13.19	84
1962	306.00	252	255	51	13.07	4
1963	541.00	441	446	95	13.53	7
1965	321.42	259	262	60	13.94	4
1966	438.31	352	356	82	13.92	6
1969	941.98	738	746	196	14.97	13
1973	503.00	382	386	117	15.79	7
1975	27,418.68	20,531	20,759	6,659	16.10	414
1976	340.00	252	255	85	16.29	5
1977	1,330.30	979	990	340	16.50	21
1979	6,592.08	4,757	4,810	1,782	16.98	105
1980	1,168.00	834	843	325	17.24	19
1981	249.00	177	179	70	17.17	4
1982	180.14	126	127	53	17.48	3
1984	3,590.63	2,465	2,492	1,098	17.82	62
1985	123,865.79	83,783	84,714	39,152	18.18	2,154
1986	78,714.49	52,715	53,301	25,414	18.25	1,393
1987	835.29	553	559	276	18.35	15
1988	3,086.01	2,009	2,031	1,055	18.76	56
1989	112,676.89	72,406	73,211	39,466	18.91	2,087
1991	168,795.55	105,328	106,499	62,297	19.28	3,231
1995	370.12	217	219	151	19.85	8
1996	13,940.61	7,980	8,069	5,872	20.17	291
1997	41,038.76	23,047	23,303	17,736	20.30	874
2002	76,925.72	38,286	38,712	38,214	21.19	1,803
2003	36,076.00	17,389	17,582	18,494	21.49	861
2005	377,900.56	170,735	172,633	205,268	21.84	9,399
2006	389,936.20	169,700	171,586	218,350	22.06	9,898
2007	94,552.36	39,636	40,077	54,476	22.17	2,457
2008	105,093.21	42,247	42,717	62,377	22.31	2,796

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HAYS MINE FILTER BUILDING						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
2009	71,161.85	27,298	27,601	43,560	22.50	1,936
2010	5,973.99	2,175	2,199	3,775	22.71	166
2011	50,433.38	17,309	17,501	32,932	22.97	1,434
2012	12,866,867.33	4,146,991	4,193,086	8,673,781	23.13	375,001
2013	131,156.68	39,347	39,784	91,372	23.33	3,917
2014	1,581,299.96	438,336	443,208	1,138,092	23.47	48,491
2016	154,511.18	35,043	35,433	119,079	23.86	4,991
2017	1,000,282.18	199,256	201,471	798,811	24.12	33,118
2018	2,210.78	377	381	1,830	24.33	75
2019	96,411.39	13,536	13,686	82,725	24.49	3,378
	17,797,611.84	5,931,585	5,997,507	11,800,105		512,113
NEW HERSHEY TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2067						
NET SALVAGE PERCENT.. 0						
1930	44.14	42	42	2	4.09	
1984	41,078.07	26,754	27,051	14,027	20.88	672
1992	5,084,272.63	2,884,308	2,916,363	2,167,909	23.64	91,705
1995	8,866.38	4,717	4,769	4,097	24.63	166
1996	2,162.87	1,127	1,140	1,023	24.81	41
1999	4,710.26	2,261	2,286	2,424	26.00	93
2001	236,919.02	107,372	108,565	128,354	26.54	4,836
2006	49,418.53	18,483	18,688	30,730	28.45	1,080
2010	7,202.92	2,182	2,206	4,997	29.92	167
2011	65,485.64	18,546	18,752	46,734	30.37	1,539
2012	3,766,871.07	990,310	1,001,316	2,765,555	30.84	89,674
2013	166,659.20	40,498	40,948	125,711	31.15	4,036
2014	237,415.86	52,564	53,148	184,268	31.65	5,822
2015	34,086.88	6,817	6,893	27,194	32.00	850
2016	152,442.65	26,998	27,298	125,145	32.53	3,847
2017	164,504.71	25,367	25,649	138,856	32.91	4,219
2018	24,911.72	3,251	3,287	21,625	33.31	649
2021	2,285,405.95	124,326	125,708	2,159,698	34.76	62,132
2022	278,329.97	7,654	7,739	270,591	35.36	7,652
	12,610,788.47	4,343,577	4,391,850	8,218,938		279,180

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CHINCHILLA WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1893	690.28	690	690			
1910	955.96	956	956			
1921	7,550.49	7,393	7,475	75	2.17	35
1953	44.66	39	39	5	10.65	
1990	3,174,965.67	2,011,658	2,034,033	1,140,933	19.08	59,797
1995	10,224.61	5,983	6,050	4,175	19.85	210
2006	66,480.93	28,933	29,255	37,226	22.06	1,687
2007	1,592.33	668	675	917	22.17	41
2009	1,945.08	746	754	1,191	22.50	53
2013	13,302.91	3,991	4,035	9,268	23.33	397
2017	44.24	9	9	35	24.12	1
2018	2,722.48	464	469	2,253	24.33	93
2023	2,377.48	23	23	2,354	25.26	93
	3,282,897.12	2,061,553	2,084,465	1,198,432		62,407
FALLBROOK WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	2,232,245.42	1,414,351	1,430,069	802,176	19.08	42,043
1991	14,802.97	9,237	9,340	5,463	19.28	283
1992	3,782.38	2,322	2,348	1,435	19.51	74
1994	5,692.25	3,384	3,422	2,271	19.78	115
1997	5,455.32	3,064	3,098	2,357	20.30	116
1998	18,465.92	10,156	10,269	8,197	20.45	401
1999	2,277.11	1,224	1,238	1,040	20.64	50
2003	17,373.38	8,374	8,467	8,906	21.49	414
2006	53,490.76	23,279	23,538	29,953	22.06	1,358
2007	70,346.66	29,489	29,817	40,530	22.17	1,828
2008	47,309.49	19,018	19,229	28,080	22.31	1,259
2009	28,023.69	10,750	10,869	17,154	22.50	762
2010	4,824.82	1,756	1,776	3,049	22.71	134
2012	30,878.01	9,952	10,063	20,815	23.13	900
2014	46,182.39	12,802	12,944	33,238	23.47	1,416

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FALLBROOK WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
2015	54,662.81	13,775	13,928	40,735	23.75	1,715
2016	58,953.74	13,371	13,520	45,434	23.86	1,904
2018	11,872.00	2,024	2,046	9,826	24.33	404
	2,706,639.12	1,588,328	1,605,980	1,100,659		55,176
SCRANTON AREA WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	8,672,635.08	5,494,982	5,556,051	3,116,584	19.08	163,343
1991	150,511.12	93,919	94,963	55,548	19.28	2,881
1992	466.64	286	289	177	19.51	9
1993	60.06	36	36	24	19.50	1
1994	6,187.92	3,679	3,720	2,468	19.78	125
1995	10,098.00	5,909	5,975	4,123	19.85	208
1996	225,291.34	128,957	130,390	94,901	20.17	4,705
1997	6,216.61	3,491	3,530	2,687	20.30	132
1999	25,313.12	13,608	13,759	11,554	20.64	560
2001	546.72	279	282	265	21.10	13
2002	58,250.92	28,991	29,313	28,938	21.19	1,366
2003	52,704.72	25,404	25,686	27,018	21.49	1,257
2004	3,862.28	1,805	1,825	2,037	21.65	94
2005	274,383.89	123,967	125,345	149,039	21.84	6,824
2006	6,859.58	2,985	3,018	3,841	22.06	174
2007	40,511.69	16,983	17,172	23,340	22.17	1,053
2008	21,809.99	8,768	8,865	12,945	22.31	580
2009	1,610.17	618	625	985	22.50	44
2010	8,990.99	3,273	3,309	5,682	22.71	250
2011	109,155.82	37,462	37,878	71,277	22.97	3,103
2012	124,937.89	40,267	40,715	84,223	23.13	3,641
2013	21,316.66	6,395	6,466	14,851	23.33	637
2014	5,310.00	1,472	1,488	3,822	23.47	163
2017	3,575,716.70	712,283	720,199	2,855,518	24.12	118,388
2018	1,029,586.48	175,544	177,495	852,092	24.33	35,022

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SCRANTON AREA WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
2019	17,498.43	2,457	2,484	15,014	24.49	613
2020	31,583.35	3,420	3,458	28,125	24.70	1,139
2022	11,156.40	427	432	10,725	25.11	427
	14,492,572.57	6,937,667	7,014,770	7,477,803		346,752
BROWNELL WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	4,333,381.56	2,745,631	2,776,145	1,557,237	19.08	81,616
1991	88,970.52	55,518	56,135	32,836	19.28	1,703
1992	72.69	45	46	27	19.51	1
1998	3,431.58	1,887	1,908	1,524	20.45	75
1999	152.98	82	83	70	20.64	3
2003	7,790.06	3,755	3,797	3,993	21.49	186
2005	30,165.72	13,629	13,780	16,385	21.84	750
2007	12,234.92	5,129	5,186	7,049	22.17	318
2008	56,670.86	22,782	23,035	33,636	22.31	1,508
2009	66,342.17	25,449	25,732	40,610	22.50	1,805
2010	10,428.23	3,796	3,838	6,590	22.71	290
2011	5,098.68	1,750	1,769	3,329	22.97	145
2012	56,670.09	18,265	18,468	38,202	23.13	1,652
2013	1,247.32	374	378	869	23.33	37
2014	42,913.80	11,896	12,028	30,886	23.47	1,316
2015	10,206.09	2,572	2,601	7,606	23.75	320
2016	8,246.29	1,870	1,891	6,356	23.86	266
2017	7,772.90	1,548	1,565	6,208	24.12	257
2018	7,323.77	1,249	1,263	6,061	24.33	249
2019	648.49	91	92	556	24.49	23
	4,749,768.72	2,917,318	2,949,740	1,800,029		92,520

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NESBITT WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2048						
NET SALVAGE PERCENT.. 0						
1988	6,091,845.49	4,029,756	4,074,542	2,017,303	17.91	112,636
1989	236,127.92	154,144	155,857	80,271	18.08	4,440
1991	9,200.90	5,830	5,895	3,306	18.51	179
1992	3,913.79	2,451	2,478	1,436	18.50	78
1994	2,637.07	1,598	1,616	1,021	18.85	54
1998	19,882.52	11,134	11,258	8,625	19.64	439
1999	5,954.90	3,273	3,309	2,646	19.67	135
2001	3,606.32	1,888	1,909	1,697	20.02	85
2002	777.36	397	401	376	20.15	19
2003	16,530.05	8,199	8,290	8,240	20.32	406
2006	33,459.15	15,016	15,183	18,276	20.88	875
2007	18,344.81	7,925	8,013	10,332	21.04	491
2008	64,101.93	26,538	26,833	37,269	21.23	1,755
2009	26,211.66	10,385	10,500	15,711	21.34	736
2010	1,810.10	682	690	1,121	21.48	52
2012	509,430.90	170,914	172,814	336,617	21.79	15,448
2014	96,480.80	27,873	28,183	68,298	22.15	3,083
2015	14,209.06	3,751	3,793	10,416	22.30	467
2016	100,151.34	23,766	24,030	76,121	22.50	3,383
2022	18,429.84	752	760	17,669	23.51	752
	7,273,105.91	4,506,272	4,556,354	2,716,752		145,513
CRYSTAL LAKE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2052						
NET SALVAGE PERCENT.. 0						
1992	5,023,109.47	3,036,470	3,070,216	1,952,893	20.28	96,296
1993	73,596.13	43,937	44,425	29,171	20.25	1,441
1995	197.94	114	115	83	20.78	4
1999	13,626.50	7,162	7,242	6,385	21.66	295
2004	11,303.55	5,154	5,211	6,092	22.67	269
2006	99,797.96	42,414	42,885	56,913	23.00	2,474
2007	13,173.73	5,375	5,435	7,739	23.22	333
2008	28,589.12	11,150	11,274	17,315	23.46	738
2009	19,356.65	7,181	7,261	12,096	23.74	510
2010	2,858.04	1,007	1,018	1,840	23.90	77
2011	22,252.17	7,397	7,479	14,773	24.10	613

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CRYSTAL LAKE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2052						
NET SALVAGE PERCENT.. 0						
2014	3,545.66	945	956	2,590	24.78	105
2015	2,868.40	695	703	2,166	25.00	87
2016	10,676.66	2,317	2,343	8,334	25.26	330
2018	14,229.77	2,319	2,345	11,885	25.67	463
2020	3,879.66	399	403	3,476	26.15	133
	5,343,061.41	3,174,036	3,209,311	2,133,750		104,168
CEASETOWN WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
1993	8,491,079.67	5,018,228	5,074,000	3,417,080	20.76	164,599
1994	18,958.58	10,996	11,118	7,840	21.00	373
1995	16,043.96	9,119	9,220	6,824	21.26	321
1997	45,655.10	24,928	25,205	20,450	21.62	946
1998	3,202.38	1,713	1,732	1,470	21.73	68
2001	5,100.00	2,524	2,552	2,548	22.44	114
2002	3,150.51	1,515	1,532	1,619	22.67	71
2004	17,119.10	7,741	7,827	9,292	23.02	404
2005	299,398.81	130,418	131,867	167,531	23.32	7,184
2006	93,193.36	39,132	39,567	53,626	23.49	2,283
2007	11,733.64	4,712	4,764	6,969	23.84	292
2008	28,894.84	11,096	11,219	17,676	24.06	735
2009	10,169.23	3,730	3,771	6,398	24.17	265
2010	16,080.19	5,581	5,643	10,437	24.45	427
2011	77,289.61	25,320	25,601	51,688	24.63	2,099
2012	123,725.49	37,971	38,393	85,332	24.84	3,435
2013	2,077.72	592	599	1,479	25.09	59
2014	40,488.30	10,604	10,722	29,766	25.36	1,174
2020	10,209.09	1,026	1,037	9,172	26.85	342
	9,313,569.58	5,346,946	5,406,371	3,907,199		185,191

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WATRES WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
1993	9,042,484.16	5,344,108	5,403,501	3,638,983	20.76	175,288
1994	557,586.68	323,400	326,994	230,592	21.00	10,981
1995	50,819.95	28,886	29,207	21,613	21.26	1,017
1998	1,099.27	588	595	505	21.73	23
2002	1,956.80	941	951	1,005	22.67	44
2003	5,173.10	2,411	2,438	2,735	22.92	119
2005	2,174.91	947	958	1,217	23.32	52
2006	52,855.60	22,194	22,441	30,415	23.49	1,295
2007	1,179.60	474	479	700	23.84	29
2008	34,000.57	13,056	13,201	20,799	24.06	864
2009	5,827.62	2,138	2,162	3,666	24.17	152
2010	15,084.17	5,236	5,294	9,790	24.45	400
2011	95,761.95	31,372	31,721	64,041	24.63	2,600
2013	64,674.64	18,432	18,637	46,038	25.09	1,835
2014	165,655.45	43,385	43,867	121,788	25.36	4,802
2015	9,260.45	2,208	2,233	7,028	25.56	275
2016	8,689.72	1,849	1,870	6,820	25.89	263
2018	716,495.48	114,281	115,551	600,944	26.35	22,806
2019	11,862.12	1,552	1,569	10,293	26.58	387
2020	3,420.65	344	348	3,073	26.85	114
2021	4,578.80	315	319	4,260	27.07	157
	10,850,641.69	5,958,117	6,024,334	4,826,308		223,503
NORRISTOWN						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
1992	4,476.99	2,637	2,666	1,811	21.63	84
1994	3,778.23	2,137	2,161	1,617	22.28	73
1997	5,404,226.75	2,866,402	2,898,258	2,505,968	23.02	108,860
1998	7,937.78	4,108	4,154	3,784	23.31	162
2000	74,588.87	36,713	37,121	37,468	23.73	1,579
2001	2,023,509.89	966,024	976,760	1,046,750	24.08	43,470
2002	58,091.88	26,960	27,260	30,832	24.25	1,271
2003	86,104.25	38,747	39,178	46,927	24.44	1,920
2004	98,144.99	42,516	42,989	55,156	24.86	2,219
2005	140.00	58	59	81	25.10	3

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NORRISTOWN						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
2006	1,204,036.32	483,059	488,428	715,609	25.37	28,207
2007	45,348.29	17,414	17,608	27,741	25.67	1,081
2009	102,333.83	35,674	36,070	66,263	26.16	2,533
2010	13,901.29	4,590	4,641	9,260	26.37	351
2011	28,104.08	8,701	8,798	19,306	26.76	721
2012	365,613.30	105,772	106,948	258,666	27.02	9,573
2013	21,001.51	5,628	5,691	15,311	27.31	561
2014	69.14	17	17	52	27.50	2
2015	67,794.34	15,132	15,300	52,494	27.84	1,886
2016	1,019,886.77	203,467	205,728	814,158	28.09	28,984
2017	61,609.01	10,720	10,839	50,770	28.48	1,783
2018	83,707.68	12,389	12,527	71,181	28.78	2,473
2019	1,119.07	136	138	982	29.00	34
2020	97,321.03	9,022	9,122	88,199	29.36	3,004
2021	3,789,738.42	239,511	242,173	3,547,566	29.65	119,648
2022	181,172.93	5,834	5,899	175,274	30.06	5,831
	14,843,756.64	5,143,368	5,200,530	9,643,227		366,313
HUNTSVILLE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2059						
NET SALVAGE PERCENT.. 0						
1999	5,140,610.11	2,566,193	2,594,713	2,545,898	24.08	105,727
2001	8,125.96	3,826	3,869	4,257	24.73	172
2005	45,477.20	18,664	18,871	26,606	25.86	1,029
2006	30,782.70	12,141	12,276	18,507	26.10	709
2007	7,211.16	2,723	2,753	4,458	26.37	169
2008	59,813.06	21,533	21,772	38,041	26.67	1,426
2009	25,684.93	8,774	8,872	16,813	26.98	623
2010	2,533.46	817	826	1,707	27.32	62
2011	38,290.79	11,625	11,754	26,537	27.53	964
2012	15,722.39	4,445	4,494	11,228	27.91	402
2013	3,295.43	863	873	2,423	28.17	86

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HUNTSVILLE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2059						
NET SALVAGE PERCENT.. 0						
2015	2,369.82	514	520	1,850	28.90	64
2016	9,027.44	1,750	1,769	7,258	29.10	249
2022	35,020.59	1,086	1,098	33,923	31.26	1,085
	5,423,965.04	2,654,954	2,684,460	2,739,505		112,767
NEW CASTLE WATER TREATMENT PLANT - NEW						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2060						
NET SALVAGE PERCENT.. 0						
1948	127.32	113	114	13	9.75	1
2000	2,031,655.46	981,290	992,196	1,039,460	24.62	42,220
2001	3,501,677.38	1,640,886	1,659,122	1,842,555	24.95	73,850
2003	1,504.36	662	669	835	25.45	33
2004	166,573.01	70,577	71,361	95,212	25.84	3,685
2005	19,156.16	7,827	7,914	11,242	26.05	432
2006	285,061.14	111,459	112,698	172,363	26.48	6,509
2007	45,674.49	17,101	17,291	28,383	26.74	1,061
2008	220,753.83	78,809	79,685	141,069	27.02	5,221
2014	30,652.75	7,256	7,337	23,316	29.02	803
2015	149,409.41	32,033	32,389	117,020	29.31	3,992
2018	28,869.57	4,085	4,130	24,739	30.34	815
2019	22,547.59	2,597	2,626	19,922	30.72	649
2021	170,397.42	10,190	10,303	160,094	31.44	5,092
	6,674,059.89	2,964,885	2,997,836	3,676,224		144,363
ROCK RUN FILTRATION PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2051						
NET SALVAGE PERCENT.. 0						
1976	3,032,325.96	2,237,553	2,262,421	769,905	16.69	46,130
1985	5,833.47	3,924	3,968	1,866	18.50	101
1991	23,116.00	14,350	14,509	8,607	19.55	440
1996	6,671.00	3,782	3,824	2,847	20.62	138
2000	142,779.16	73,888	74,709	68,070	21.44	3,175
2002	373,803.03	183,687	185,728	188,075	21.74	8,651

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ROCK RUN FILTRATION PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2051						
NET SALVAGE PERCENT.. 0						
2006	428,360.75	184,238	186,286	242,075	22.53	10,745
2007	15,986.12	6,599	6,672	9,314	22.76	409
2011	13,009,059.10	4,386,655	4,435,407	8,573,652	23.59	363,444
2013	228,674.96	67,459	68,209	160,466	23.90	6,714
2014	32,558.55	8,849	8,947	23,611	24.11	979
2018	3,850.44	641	648	3,202	25.03	128
2019	4,599.43	629	636	3,963	25.24	157
2020	24,494.60	2,587	2,616	21,879	25.41	861
2022	4,742,093.46	176,406	178,367	4,563,727	25.88	176,342
	22,074,206.03	7,351,247	7,432,947	14,641,259		618,414
NAZARETH(BLUE MOUNTAIN) PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2055						
NET SALVAGE PERCENT.. 0						
1951	429.84	374	378	52	10.64	5
1960	45.00	37	37	8	13.34	1
1970	349.00	268	271	78	15.97	5
1975	41,890.00	30,965	31,309	10,581	16.94	625
1976	12,586.04	9,228	9,331	3,255	17.10	190
1977	48,491.99	35,021	35,410	13,082	17.69	740
1978	89.00	64	65	24	17.89	1
1979	1,797.00	1,273	1,287	510	18.11	28
1980	9,400.42	6,589	6,662	2,738	18.35	149
1983	3,194.00	2,159	2,183	1,011	19.17	53
1985	30.00	20	20	10	19.47	1
1988	9,287.67	5,884	5,949	3,338	20.25	165
1989	2,360.00	1,476	1,492	868	20.35	43
1991	4,553.00	2,754	2,785	1,768	20.91	85
1992	72,215.50	42,983	43,461	28,755	21.08	1,364
1995	4,258,824.56	2,396,866	2,423,504	1,835,320	21.75	84,383
1996	7,506.00	4,134	4,180	3,326	22.02	151
1997	7,826.00	4,212	4,259	3,567	22.31	160
1998	541.00	284	287	254	22.62	11
2007	2,222.54	875	885	1,338	24.65	54
2008	360,111.32	135,042	136,543	223,568	25.00	8,943
2009	6,280.49	2,242	2,267	4,014	25.22	159

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CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NAZARETH(BLUE MOUNTAIN) PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2055						
NET SALVAGE PERCENT.. 0						
2011	12,316.24	3,917	3,961	8,356	25.74	325
2013	17,236.87	4,757	4,810	12,427	26.23	474
2021	2,341,064.49	154,042	155,754	2,185,310	28.40	76,948
	7,220,647.97	2,845,466	2,877,090	4,343,558		175,063
CLARION WATER TREATMENT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2063						
NET SALVAGE PERCENT.. 0						
2003	10,342,319.64	4,447,197	4,496,622	5,845,698	26.51	220,509
2004	1,073,637.95	446,741	451,706	621,932	26.66	23,328
2005	51,929.31	20,751	20,982	30,948	27.05	1,144
2008	4,901.24	1,706	1,725	3,176	28.10	113
2009	3,997.32	1,321	1,336	2,662	28.37	94
2010	15,074.97	4,684	4,736	10,339	28.84	358
2012	25,964.22	7,054	7,132	18,832	29.49	639
2013	22,045.21	5,533	5,594	16,451	29.84	551
2015	4,722.08	978	989	3,733	30.61	122
2017	63,675.57	10,239	10,353	53,323	31.31	1,703
2018	7,287.53	991	1,002	6,286	31.76	198
	11,615,555.04	4,947,195	5,002,177	6,613,378		248,759
WEST SHORE REGIONAL TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2066						
NET SALVAGE PERCENT.. 0						
1969	805.94	622	629	177	15.93	11
1983	39,657.10	26,174	26,465	13,192	20.61	640
1987	6,134.90	3,821	3,863	2,271	21.80	104
1991	13,030.67	7,547	7,631	5,400	23.25	232
1997	3,934.06	2,005	2,027	1,907	25.02	76
2001	130,034.30	58,932	59,587	70,447	26.54	2,654
2006	13,390,509.38	5,030,814	5,086,725	8,303,784	28.25	293,939
2007	3,389,546.02	1,214,813	1,228,314	2,161,232	28.64	75,462
2008	20,115.84	6,880	6,956	13,159	28.86	456

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WEST SHORE REGIONAL TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2066						
NET SALVAGE PERCENT.. 0						
2009	21,160.91	6,843	6,919	14,242	29.29	486
2011	68,339.41	19,518	19,735	48,604	30.02	1,619
2013	109,213.87	26,757	27,054	82,160	30.82	2,666
2014	156,113.00	34,844	35,231	120,882	31.32	3,860
2015	8,725.59	1,759	1,779	6,947	31.68	219
2016	67,448.35	12,087	12,221	55,227	32.06	1,723
2017	186,670.82	29,009	29,331	157,339	32.61	4,825
2018	201,042.48	26,437	26,731	174,312	33.02	5,279
2019	35,185.25	3,758	3,800	31,385	33.45	938
2021	2,924,333.11	160,838	162,626	2,761,708	34.36	80,376
2022	1,293,673.16	36,093	36,494	1,257,179	34.84	36,084
	22,065,674.16	6,709,551	6,784,119	15,281,555		511,649
BECK'S RUN PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2072						
NET SALVAGE PERCENT.. 0						
2012	26,304,729.23	6,712,967	6,787,573	19,517,156	32.10	608,011
	26,304,729.23	6,712,967	6,787,573	19,517,156		608,011
ELLWOOD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
1991	15,090.60	8,644	8,740	6,351	23.87	266
2003	1,684.82	691	699	986	28.78	34
2018	34,566,354.68	4,165,246	4,211,538	30,354,817	36.49	831,867
2019	1,001,606.74	97,757	98,843	902,763	36.98	24,412
	35,584,736.84	4,272,338	4,319,820	31,264,917		856,579

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
MONTROSE TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
2018	2,315,435.08	279,010	282,111	2,033,324	36.49	55,723
2019	12,313.10	1,202	1,215	11,098	36.98	300
2020	38,563.16	2,846	2,878	35,686	37.65	948
	2,366,311.34	283,058	286,204	2,080,107		56,971
SILVER SPRINGS FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
2021	7,669,280.13	450,954	455,966	7,213,314	32.01	225,346
	7,669,280.13	450,954	455,966	7,213,314		225,346
YARDLEY - MILL ROAD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
2021	7,119,036.47	449,923	454,923	6,664,113	29.65	224,759
	7,119,036.47	449,923	454,923	6,664,113		224,759
STEELTON WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2043						
NET SALVAGE PERCENT.. 0						
1973	6,525,936.72	5,122,860	5,179,794	1,346,143	13.69	98,330
2010	4,883,592.56	2,044,272	2,066,991	2,816,601	18.06	155,958
2014	8,099.14	2,653	2,682	5,417	18.47	293
2017	1,951,444.94	471,859	477,103	1,474,342	18.81	78,381
2019	2,025.12	352	356	1,669	18.99	88
2020	13,665.38	1,853	1,874	11,792	19.12	617
2022	108,844.66	5,355	5,415	103,430	19.33	5,351
	13,493,608.52	7,649,204	7,734,215	5,759,394		339,018

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WHITE DEER / MILTON WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2062						
NET SALVAGE PERCENT.. 0						
2022	3,744,419.29	110,460	111,688	3,632,731	32.90	110,417
	3,744,419.29	110,460	111,688	3,632,731		110,417
OTHER PURIFICATION STRUCTURES						
SURVIVOR CURVE.. IOWA 60-R3						
NET SALVAGE PERCENT.. 0						
1889	41.21	41	41			
1900	2,285.84	2,286	2,286			
1901	56.00	56	56			
1902	159.81	160	160			
1903	1,923.01	1,923	1,923			
1906	3,057.68	3,058	3,058			
1908	527.18	527	527			
1909	402.93	403	403			
1912	225.80	226	226			
1914	167.07	167	167			
1915	41.89	42	42			
1917	4.78	5	5			
1918	0.15		0			
1923	439.53	440	440			
1924	2,693.29	2,693	2,693			
1928	1,064.43	1,052	1,064	1	1.15	1
1929	3,038.32	2,999	3,032	6	1.24	5
1930	31.26	31	31			
1931	1,166.36	1,137	1,150	17	2.34	7
1934	244.88	238	241	4	2.74	1
1935	341.69	331	335	7	2.91	2
1937	627.00	604	611	16	3.29	5
1940	50.89	48	49	2	4.72	
1941	13.00	12	12	1	4.96	
1943	134.03	125	126	8	5.47	1
1944	251.37	236	239	13	5.03	3
1946	1.00	1	1			
1947	0.28		0			
1948	4.01	4	4			
1949	1,164.45	1,068	1,080	85	6.65	13

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER PURIFICATION STRUCTURES						
SURVIVOR CURVE.. IOWA 60-R3						
NET SALVAGE PERCENT.. 0						
1951	4,026.00	3,652	3,693	333	7.37	45
1952	442.51	402	406	36	7.12	5
1953	1,371.29	1,238	1,252	120	7.52	16
1954	706.13	633	640	66	7.92	8
1955	51.47	46	47	5	8.34	1
1956	47.17	42	42	5	8.76	1
1957	259.31	228	231	29	9.19	3
1958	674.84	592	599	76	9.07	8
1959	61.56	54	55	7	9.53	1
1960	49.71	43	43	6	9.99	1
1961	36.31	31	31	5	10.46	
1962	1,379.73	1,170	1,183	197	10.94	18
1963	625.74	526	532	94	11.43	8
1964	183.99	154	156	28	11.42	2
1965	157.93	131	132	25	11.93	2
1966	658.28	540	546	112	12.44	9
1967	31.14	25	25	6	12.97	
1968	19.47	16	16	3	13.49	
1969	26,214.18	20,809	21,040	5,174	14.03	369
1970	152.63	120	121	31	14.57	2
1971	4,435.82	3,437	3,475	961	15.11	64
1972	1,091,538.03	835,027	844,316	247,222	15.67	15,777
1973	9,354.84	7,063	7,142	2,213	16.23	136
1974	7,994.75	5,954	6,020	1,975	16.79	118
1975	240,965.61	176,965	178,934	62,032	17.36	3,573
1976	37,697.06	27,285	27,589	10,109	17.94	563
1977	1,299.05	932	942	357	18.10	20
1978	10,580.56	7,475	7,558	3,022	18.69	162
1979	2,786.10	1,925	1,946	840	19.69	43
1980	409.67	278	281	129	20.29	6
1981	23,726.70	15,845	16,021	7,705	20.89	369
1982	458,589.11	300,834	304,180	154,409	21.50	7,182
1983	87,384.64	56,276	56,902	30,483	22.11	1,379
1984	31,966.35	20,196	20,421	11,546	22.73	508
1985	592,998.33	367,303	371,389	221,609	23.35	9,491
1986	10,904.41	6,617	6,691	4,214	23.98	176
1987	108,990.11	64,740	65,460	43,530	24.61	1,769
1988	1,261,427.23	732,889	741,042	520,386	25.24	20,618
1989	2,360,392.69	1,340,231	1,355,140	1,005,253	25.88	38,843
1990	944,275.85	523,507	529,330	414,945	26.52	15,646

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER PURIFICATION STRUCTURES						
SURVIVOR CURVE.. IOWA 60-R3						
NET SALVAGE PERCENT.. 0						
1991	1,092,739.58	590,954	597,528	495,212	27.17	18,226
1992	12,816.74	6,754	6,829	5,988	27.82	215
1993	19,605.02	9,999	10,110	9,495	28.82	329
1994	1,104,140.75	547,543	553,634	550,507	29.48	18,674
1995	1,404,014.57	676,173	683,695	720,320	30.14	23,899
1996	407,212.69	190,209	192,325	214,888	30.80	6,977
1997	1,742,402.34	788,263	797,032	945,371	31.47	30,040
1998	631,985.66	276,494	279,570	352,416	32.14	10,965
1999	1,787,399.41	750,708	759,059	1,028,341	33.14	31,030
2000	57,278.05	23,186	23,444	33,834	33.82	1,000
2001	1,578,879.26	614,816	621,655	957,224	34.50	27,746
2002	363,122.03	135,735	137,245	225,877	35.18	6,421
2003	428,459.73	152,532	154,229	274,231	36.18	7,580
2004	116,407.73	39,590	40,030	76,377	36.87	2,072
2005	108,285.28	35,084	35,474	72,811	37.56	1,939
2006	59,120.77	18,191	18,393	40,727	38.25	1,065
2007	274,338.59	79,448	80,332	194,007	39.25	4,943
2008	207,924.19	56,763	57,394	150,530	39.95	3,768
2009	747,730.56	191,569	193,700	554,031	40.64	13,633
2010	706,583.84	169,015	170,895	535,689	41.35	12,955
2011	2,051,623.41	452,998	458,037	1,593,586	42.35	37,629
2012	2,790,886.50	567,945	574,263	2,216,624	43.05	51,490
2013	1,580,445.10	293,963	297,233	1,283,212	43.76	29,324
2014	3,926,729.61	657,335	664,647	3,262,082	44.76	72,879
2015	425,757.02	63,693	64,402	361,356	45.48	7,945
2016	1,508,458.66	198,513	200,721	1,307,737	46.19	28,312
2017	2,256,197.03	255,853	258,699	1,997,498	46.91	42,581
2018	2,240,363.73	212,835	215,203	2,025,161	47.63	42,519
2019	1,913,210.74	145,404	147,021	1,766,189	48.63	36,319
2020	3,447,472.67	198,574	200,783	3,246,690	49.08	66,151
2021	4,269,204.28	164,791	166,624	4,102,580	49.81	82,365
2022	4,144,080.80	80,810	81,709	4,062,372	50.28	80,795
9999	169,605.01-	44,084-	44,574-	125,031-		3,070-
	50,580,296.77	13,146,800	13,292,910	37,287,387		915,696
	334,664,186.82	112,440,671	113,690,307	220,973,880		7,848,433
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					28.2	2.35

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.36 WASTE HANDLING AND TREATMENT STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HAYS MINE TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1991	10,815,702.32	7,406,593	6,403,312	4,412,391	14.73	299,551
1998	68,969.00	42,588	36,819	32,150	15.49	2,076
2000	122,317.58	72,865	62,995	59,323	15.61	3,800
2001	25,833.98	15,061	13,021	12,813	15.74	814
2003	4,063.71	2,268	1,961	2,103	15.84	133
2007	41,023.43	20,348	17,592	23,432	16.26	1,441
2010	77,041.66	33,952	29,353	47,689	16.50	2,890
2012	197,523.29	78,436	67,811	129,712	16.70	7,767
2013	129,535.29	48,446	41,884	87,652	16.74	5,236
2014	18,080.06	6,297	5,444	12,636	16.84	750
2016	167,667.01	48,825	42,211	125,456	17.04	7,362
	11,667,757.33	7,775,679	6,722,402	4,945,355		331,820
YARDLEY - MILL ROAD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
2021	13,562,364.13	857,141	741,034	12,821,330	29.65	432,423
	13,562,364.13	857,141	741,034	12,821,330		432,423
	25,230,121.46	8,632,820	7,463,436	17,766,685		764,243
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.2						3.03

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.38 WASTE HANDLING AND TREATMENT STRUCTURE PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1991	38,331.32	38,331	38,331			
2015	27,627.10	22,102	22,380	5,247	2.00	2,624
2021	1,337,480.53	267,496	270,862	1,066,619	8.00	133,327
	1,403,438.95	327,929	331,573	1,071,866		135,951
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					7.9	9.69

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.39 PURIFICATION BUILDINGS - TANK PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1997	26,564.05	26,564	26,564			
1999	12,732.18	12,732	12,732			
2000	10,588.12	10,588	10,588			
2002	28,101.61	28,102	28,102			
2015	41,376.99	33,102	34,337	7,040	2.00	3,520
	119,362.95	111,088	112,323	7,040		3,520
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..				2.0		2.95

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.61 OFFICE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEW CASTLE OFFICE						
INTERIM SURVIVOR CURVE.. IOWA 55-S0						
PROBABLE RETIREMENT YEAR.. 6-2031						
NET SALVAGE PERCENT.. 0						
1986	1,193,234.40	993,368	889,649	303,585	7.44	40,804
1987	17,605.59	14,577	13,055	4,551	7.48	608
1988	64,279.96	53,095	47,551	16,729	7.37	2,270
1989	21,520.60	17,634	15,793	5,728	7.49	765
1990	47,919.69	39,059	34,981	12,939	7.49	1,728
1991	3,439.19	2,784	2,493	946	7.53	126
1992	3,258.04	2,626	2,352	906	7.46	121
1996	15,197.42	11,900	10,658	4,540	7.48	607
1998	1,013.00	777	696	317	7.57	42
2005	152,175.13	106,827	95,673	56,502	7.64	7,396
2006	239,811.48	165,518	148,236	91,575	7.63	12,002
2008	59,275.49	39,300	35,197	24,079	7.62	3,160
2009	4,369.19	2,826	2,531	1,838	7.65	240
2011	8,577.97	5,229	4,683	3,895	7.69	507
2012	18,670.27	10,987	9,840	8,830	7.69	1,148
2013	103,178.46	58,296	52,209	50,969	7.70	6,619
2014	68,172.08	36,690	32,859	35,313	7.72	4,574
2015	29,091.75	14,802	13,257	15,835	7.72	2,051
2016	107,280.37	50,990	45,666	61,614	7.73	7,971
2017	95,983.57	41,926	37,548	58,435	7.74	7,550
2018	19,655.38	7,705	6,901	12,755	7.76	1,644
2019	680.62	231	207	474	7.76	61
	2,274,389.65	1,677,147	1,502,034	772,356		101,994
WASHINGTON CUSTOMER SERVICE CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0						
PROBABLE RETIREMENT YEAR.. 6-2032						
NET SALVAGE PERCENT.. 0						
1987	1,315,832.88	1,070,562	958,783	357,050	8.25	43,279
1988	2,021.01	1,634	1,463	558	8.29	67
1989	304,487.32	244,321	218,811	85,676	8.37	10,236
1992	15,076.98	11,872	10,632	4,445	8.37	531
1994	2,429.06	1,888	1,691	738	8.31	89
1995	69,619.62	53,607	48,010	21,610	8.36	2,585
1996	8,235.02	6,292	5,635	2,600	8.34	312
1997	109,992.96	83,221	74,532	35,461	8.36	4,242
2001	50,080.02	36,138	32,365	17,715	8.49	2,087

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.61 OFFICE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WASHINGTON CUSTOMER SERVICE CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0						
PROBABLE RETIREMENT YEAR.. 6-2032						
NET SALVAGE PERCENT.. 0						
2002	4,780.74	3,403	3,048	1,733	8.50	204
2003	72,512.60	50,904	45,589	26,924	8.49	3,171
2010	19,835.46	11,965	10,716	9,120	8.55	1,067
2011	62,740.65	36,590	32,770	29,971	8.58	3,493
2013	82,727.62	44,507	39,860	42,868	8.59	4,990
2014	14,536.76	7,431	6,655	7,882	8.61	915
	2,134,908.70	1,664,335	1,490,559	644,350		77,268
CAPITOL DISTRIBUTION CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0						
PROBABLE RETIREMENT YEAR.. 6-2064						
NET SALVAGE PERCENT.. 0						
1989	347,788.60	204,569	183,210	164,579	23.80	6,915
1990	5,101.58	2,946	2,638	2,463	24.14	102
1991	650.26	368	330	321	24.50	13
1996	1,799.05	933	836	963	25.08	38
2001	12,812.78	5,863	5,251	7,562	26.08	290
2002	5,478.58	2,439	2,184	3,294	26.17	126
2003	1,018.77	440	394	625	26.30	24
2006	28,442.30	11,073	9,917	18,525	26.67	695
2007	23,101.69	8,612	7,713	15,389	26.92	572
2008	47,924.90	17,109	15,323	32,602	27.02	1,207
2010	10,983.00	3,555	3,184	7,799	27.16	287
2011	43,527.16	13,267	11,882	31,645	27.37	1,156
2012	124,750.18	35,679	31,954	92,796	27.46	3,379
2013	174,227.60	46,345	41,506	132,722	27.59	4,811
2018	19,709,050.81	2,985,921	2,674,156	17,034,895	28.00	608,389
2019	1,661,686.84	208,043	186,321	1,475,366	27.95	52,786
	22,198,344.10	3,547,162	3,176,797	19,021,547		680,790
OTHER OFFICE BUILDINGS						
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1924	845.00	845	845			
1926	215.00	215	215			

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.61 OFFICE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER OFFICE BUILDINGS						
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1958	13.02	12	11	2	4.44	
1960	48.73	45	40	8	5.03	2
1961	21.19	19	17	4	5.57	1
1963	33,045.39	30,137	26,990	6,056	5.79	1,046
1964	1,079.50	974	872	207	6.36	33
1965	11,957.68	10,750	9,627	2,330	6.52	357
1966	1,125.43	1,007	902	224	6.69	33
1967	48,178.36	42,628	38,176	10,002	7.29	1,372
1968	57,455.89	50,561	45,281	12,175	7.50	1,623
1969	1,273.22	1,114	998	276	7.73	36
1970	11,121.74	9,608	8,605	2,517	8.35	301
1971	9,019.90	7,739	6,931	2,089	8.61	243
1972	61,461.67	52,347	46,880	14,582	8.88	1,642
1973	1,636.52	1,375	1,231	405	9.52	43
1975	6,526.85	5,389	4,826	1,701	10.14	168
1976	45,687.00	37,148	33,268	12,419	10.80	1,150
1977	13,240.50	10,659	9,546	3,695	11.14	332
1979	28,098.53	22,007	19,709	8,390	12.18	689
1980	1.10	1	1			
1981	45,810.00	34,825	31,188	14,622	13.25	1,104
1982	361,045.49	270,892	242,601	118,445	13.64	8,684
1983	32,369.00	23,824	21,336	11,033	14.35	769
1984	902.06	654	586	316	14.76	21
1985	72,985.69	51,864	46,447	26,538	15.48	1,714
1986	351,447.26	245,767	220,100	131,347	15.91	8,256
1987	596,055.80	407,702	365,123	230,933	16.63	13,887
1988	612,729.15	409,609	366,831	245,898	17.36	14,165
1989	449,868.60	295,204	264,374	185,495	17.81	10,415
1990	143,314.05	91,750	82,168	61,146	18.55	3,296
1991	33,727.65	21,046	18,848	14,880	19.28	772
1992	148,265.09	90,545	81,089	67,176	19.76	3,400
1993	12,902.30	7,664	6,864	6,039	20.51	294
1994	325,416.52	187,798	168,185	157,232	21.25	7,399
1995	58,927.46	33,164	29,700	29,227	21.75	1,344
1996	47,370.53	25,836	23,138	24,233	22.50	1,077
1997	35,194.64	18,576	16,636	18,559	23.26	798
1998	15,964.58	8,142	7,292	8,673	24.02	361
1999	61,011.45	30,164	27,014	33,998	24.54	1,385
2000	754,379.80	359,160	321,650	432,729	25.31	17,097
2001	49,302.15	22,561	20,205	29,097	26.08	1,116

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.61 OFFICE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER OFFICE BUILDINGS						
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2002	6,125.14	2,688	2,407	3,718	26.85	138
2003	84,890.14	35,654	31,930	52,960	27.62	1,917
2004	37,729.39	15,197	13,610	24,120	28.17	856
2005	346,446.58	132,828	118,956	227,491	28.95	7,858
2006	226,824.45	82,519	73,901	152,923	29.73	5,144
2007	95,164.77	32,737	29,318	65,847	30.51	2,158
2008	247,019.59	80,034	71,676	175,344	31.30	5,602
2009	101,931.15	30,967	27,733	74,198	32.08	2,313
2010	61,124.75	17,323	15,514	45,611	32.87	1,388
2011	121,514.52	31,934	28,599	92,916	33.66	2,760
2012	183,845.36	44,491	39,845	144,001	34.45	4,180
2013	88,318.55	19,518	17,480	70,839	35.25	2,010
2014	402,537.52	80,427	72,027	330,510	36.05	9,168
2015	12,615.97	2,251	2,016	10,600	36.84	288
2016	1,288,571.53	202,048	180,947	1,107,625	37.64	29,427
2017	539,445.55	72,825	65,219	474,226	38.44	12,337
2018	2,147,974.49	242,721	217,372	1,930,602	39.25	49,187
2019	2,043,505.85	186,368	166,904	1,876,602	39.86	47,080
2020	637,284.25	43,781	39,209	598,076	40.67	14,706
2021	1,240,236.02	57,299	51,315	1,188,921	41.29	28,794
2022	1,607,382.63	37,452	33,541	1,573,842	41.92	37,544
9999	60,000.00-	16,334-	14,629-	45,371-		1,387-
	16,001,529.69	4,356,055	3,901,233	12,100,297		369,893
	42,609,172.14	11,244,699	10,070,623	32,538,550		1,229,945

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.5 2.89

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
UNIONTOWN OPERATIONS CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2066						
NET SALVAGE PERCENT.. 0						
2021	3,787,629.81	228,015	312,214	3,475,416	31.22	111,320
	3,787,629.81	228,015	312,214	3,475,416		111,320
NORRISTOWN OPERATIONS CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2032						
NET SALVAGE PERCENT.. 0						
1987	747,847.92	608,449	747,848			
1988	14,460.80	11,692	14,461			
1990	21,055.84	16,815	21,056			
1991	515.82	409	516			
2000	8,240.40	6,027	8,240			
2001	106,652.86	76,961	106,653			
2011	2,125.81	1,235	2,126			
2014	364,619.49	185,081	336,384	28,235	8.73	3,234
2015	19,376.64	9,270	16,848	2,528	8.72	290
2018	224.06	81	147	77	8.77	9
	1,285,119.64	916,020	1,254,279	30,841		3,533
BETHEL PARK						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2058						
NET SALVAGE PERCENT.. 0						
1958	1,356.00	1,111	1,356			
1965	653,341.28	511,566	653,341			
1967	45,486.00	35,152	45,486			
1969	4,300.00	3,251	4,300			
1970	2,902.00	2,184	2,902			
1972	1,319.97	976	1,320			
1973	9,153.18	6,728	9,153			
1975	40.52	29	41			
1977	1,690.34	1,197	1,690			
1979	3,808.27	2,631	3,734	75	19.69	4
1981	0.16		0			
1985	8,909.55	5,756	8,168	741	20.82	36

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BETHEL PARK						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2058						
NET SALVAGE PERCENT.. 0						
1986	56,270.95	35,811	50,820	5,451	21.14	258
1987	51,879.47	32,497	46,117	5,763	21.47	268
1988	1,675.90	1,038	1,473	203	21.50	9
1989	365,534.82	222,464	315,700	49,834	21.87	2,279
1991	4,610.90	2,715	3,853	758	22.35	34
1992	10,300.00	5,971	8,473	1,827	22.48	81
1993	2,884.28	1,644	2,333	551	22.63	24
1995	1,257.55	690	979	278	23.02	12
1996	53,669.41	28,837	40,923	12,747	23.25	548
1997	47,281.24	24,832	35,239	12,042	23.50	512
1998	41,194.00	21,215	30,106	11,088	23.54	471
2000	47,532.86	23,286	33,045	14,488	23.95	605
2002	3,229.97	1,492	2,117	1,113	24.45	46
2006	123,630.77	49,811	70,687	52,944	25.19	2,102
2007	61,197.63	23,598	33,488	27,710	25.49	1,087
2008	530,439.54	195,732	277,765	252,675	25.65	9,851
2009	415,793.46	146,110	207,346	208,448	25.84	8,067
2010	105,796.74	35,209	49,965	55,831	26.06	2,142
2011	54,411.31	17,107	24,277	30,135	26.17	1,152
2012	393,497.73	116,003	164,621	228,877	26.31	8,699
2013	23,340.26	6,372	9,043	14,298	26.63	537
2014	26,100.06	6,577	9,333	16,767	26.71	628
	3,153,836.12	1,569,592	2,149,196	1,004,640		39,452
BETHEL PARK (NEW)						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2066						
NET SALVAGE PERCENT.. 0						
2018	20,032,537.04	2,814,571	3,853,909	16,178,628	30.59	528,886
2019	6,912,393.38	793,543	1,086,575	5,825,818	30.84	188,905
2021	5,255,848.12	316,402	433,240	4,822,608	31.22	154,472
	32,200,778.54	3,924,516	5,373,724	26,827,055		872,263

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
STAFFORD AVENUE DISTRIBUTION CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2062						
NET SALVAGE PERCENT.. 0						
1997	6,386.52	3,288	4,502	1,884	24.51	77
2012	1,538,069.70	434,812	595,375	942,694	27.91	33,776
2014	16,744,779.33	4,038,841	5,530,266	11,214,514	28.31	396,133
2015	12,394.22	2,707	3,707	8,688	28.63	303
2019	22,838.07	2,741	3,753	19,085	29.33	651
	18,324,467.84	4,482,389	6,137,603	12,186,865		430,940
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
1894	1,470.00	1,470	1,470			
1906	2,277.20	2,277	2,277			
1908	11,029.40	11,029	11,029			
1909	13,507.39	13,507	13,507			
1912	4,321.23	4,321	4,321			
1922	38.02	38	38			
1924	0.63	1	1			
1926	14,835.75	14,836	14,836			
1927	283.00	283	283			
1928	2,177.00	2,177	2,177			
1929	2,405.47	2,405	2,405			
1935	1,480.00	1,480	1,480			
1937	295.00	295	295			
1940	190.00	190	190			
1942	2,556.77	2,557	2,557			
1943	0.07		0			
1945	648.58	649	649			
1947	0.21		0			
1948	524.42	523	524			
1949	260.00	258	260			
1950	368.99	366	369			
1951	871.00	859	871			
1954	10,690.00	10,474	10,690			
1955	141.54	138	142			
1956	6,563.98	6,377	6,564			
1957	2,349.38	2,264	2,349			
1958	1,197.00	1,152	1,197			

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
1959	728.45	699	728			
1960	2,083.92	1,982	2,084			
1961	2,337.30	2,217	2,337			
1962	827.00	782	827			
1963	2,401.75	2,262	2,402			
1964	3,175.28	2,979	3,175			
1965	574.98	534	575			
1966	1,195.17	1,104	1,195			
1967	423.05	389	423			
1968	2,498.10	2,281	2,498			
1969	2,634.23	2,390	2,634			
1970	7,477.75	6,777	7,478			
1971	118.53	107	119			
1972	1,497.86	1,337	1,498			
1973	4,075.51	3,607	4,076			
1974	1,878.67	1,648	1,879			
1976	4,139.68	3,561	4,140			
1977	1,348.58	1,148	1,349			
1978	231.44	195	231			
1980	2,836.34	2,329	2,836			
1981	1,534.25	1,244	1,534			
1982	6,296.00	5,034	6,296			
1983	6,864.02	5,409	6,864			
1984	50,567.72	39,246	50,568			
1985	35,513.76	27,125	35,514			
1986	27,677.97	20,789	27,678			
1987	822.21	607	822			
1988	550,609.05	396,989	549,959	650	13.54	48
1989	67,022.20	47,398	65,662	1,360	14.08	97
1990	977,166.56	677,176	938,110	39,057	14.62	2,671
1991	703,073.68	476,965	660,752	42,321	15.17	2,790
1992	326,380.72	215,509	298,550	27,830	15.95	1,745
1993	10,915.11	7,040	9,753	1,162	16.51	70
1994	68,231.44	42,938	59,483	8,748	17.08	512
1995	6,922.98	4,226	5,854	1,069	17.87	60
1996	89,822.17	53,354	73,913	15,909	18.45	862
1997	117,923.48	68,065	94,292	23,631	19.05	1,240
1998	17,129.33	9,550	13,230	3,899	19.84	197
1999	137,988.42	74,514	103,226	34,762	20.44	1,701
2000	71,946.71	37,398	51,808	20,138	21.25	948

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2001	115,517.13	57,943	80,270	35,247	21.86	1,612
2002	9,450.88	4,545	6,296	3,155	22.67	139
2004	1,409.66	621	860	549	24.10	23
2005	48,851.77	20,576	28,504	20,347	24.74	822
2006	46,209.96	18,461	25,575	20,635	25.55	808
2007	57,133.65	21,665	30,013	27,121	26.19	1,036
2008	30,880.12	11,024	15,272	15,608	27.02	578
2009	16,376.26	5,479	7,590	8,786	27.84	316
2010	3,292.18	1,031	1,428	1,864	28.49	65
2011	204,308.42	59,331	82,193	122,116	29.32	4,165
2012	213,304.25	57,016	78,986	134,318	30.15	4,455
2013	45,748.36	11,163	15,464	30,284	30.98	978
2014	71,517.92	15,834	21,935	49,583	31.65	1,567
2015	518,244.56	102,405	141,864	376,380	32.49	11,584
2016	77,822.77	13,510	18,716	59,107	33.32	1,774
2017	32,855.96	4,928	6,827	26,029	34.00	766
2018	1,430,495.09	179,527	248,704	1,181,792	34.84	33,921
2019	147,569.54	14,875	20,607	126,963	35.68	3,558
2020	440,001.56	33,528	46,447	393,554	36.37	10,821
2021	1,975,016.07	101,121	140,086	1,834,930	37.06	49,512
2022	392,418.76	10,164	14,080	378,338	37.61	10,060
2023	46,416.15	306	424	45,992	37.77	1,218
9999	576.00-	190-	260-	316-		9-
	9,321,638.42	3,073,693	4,208,717	5,112,921		152,710
	68,073,470.37	14,194,225	19,435,733	48,637,738		1,610,218

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.2 2.37

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.63 MISCELLANEOUS STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
1861	1,094.45	1,094	1,094			
1916	1.00	1	1			
1917	1,000.00	1,000	1,000			
1920	883.12	883	883			
1927	163.99	164	164			
1929	714.00	714	714			
1930	5,124.00	5,124	5,124			
1936	1,441.58	1,442	1,442			
1941	691.00	691	691			
1942	573.00	573	573			
1943	45.00	45	45			
1951	1.00	1	1			
1952	502.35	502	502			
1954	1,966.06	1,953	1,966			
1958	1,456.00	1,420	1,456			
1959	140.00	135	140			
1960	1,334.56	1,286	1,335			
1962	187.00	178	187			
1963	1,065.20	1,010	1,065			
1964	435.84	411	436			
1967	434.20	401	434			
1969	4.82	4	5			
1970	260.57	236	261			
1971	482.00	434	482			
1972	581.70	519	582			
1973	25.00	22	25			
1975	2,998.44	2,619	2,998			
1981	144.00	119	144			
1983	1,047.68	847	1,048			
1986	2,001.93	1,555	2,002			
1987	6,790.60	5,207	6,791			
1988	3,235.00	2,457	3,235			
1989	533.50	399	534			
1991	2,526.22	1,827	2,526			
1992	1,500.00	1,070	1,500			
1996	22,317.33	14,763	22,317			
1997	6,757.10	4,375	6,757			
1998	4,559.34	2,884	4,559			
2003	66,511.44	36,581	66,511			
2004	206,480.10	109,847	206,480			
2005	177,018.70	90,811	177,019			

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.63 MISCELLANEOUS STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
2006	64,364.98	31,732	64,365			
2007	264,045.81	125,052	264,046			
2008	330,080.07	149,031	330,080			
2009	26,671.02	11,463	26,671			
2010	149,299.60	60,750	149,300			
2011	1,720.18	658	1,720			
2012	59,772.20	21,369	59,772			
2013	28,815.79	9,567	28,816			
2014	11,822.89	3,597	11,823			
2015	594,767.32	164,156	594,767			
2016	487,214.74	120,050	487,215			
2017	371,165.00	80,172	332,208	38,957	21.78	1,789
2018	771,524.70	141,961	588,242	183,283	22.17	8,267
2019	38.81	6	25	14	22.60	1
2020	9,366.40	1,082	4,483	4,883	22.97	213
2021	76,924.79	6,062	25,119	51,806	23.38	2,216
2022	37,310.55	1,511	6,261	31,050	23.69	1,311
2023	3,054,695.82	31,463	130,373	2,924,323	23.96	122,050
	6,864,629.49	1,255,286	3,630,315	3,234,314		135,847

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.8 1.98

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
DAM NO. 3 (CITIZENS)						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2042						
NET SALVAGE PERCENT.. 0						
1920	42,226.36	36,099	30,597	11,630	17.48	665
1937	48.00	40	34	14	18.17	1
1949	331.00	267	226	105	17.74	6
1961	2,483.15	1,924	1,631	852	18.00	47
1973	1,843.00	1,345	1,140	703	18.49	38
1974	259.00	188	159	100	18.57	5
1978	82,513.54	58,667	49,725	32,789	18.29	1,793
1992	1,385,786.88	867,780	735,510	650,277	18.50	35,150
	1,515,490.93	966,310	819,022	696,469		37,705
SPRUCE RUN IMPOUNDING RESERVOIR						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
1957	3,545.00	2,106	1,785	1,760	45.11	39
1958	937,679.88	554,638	470,098	467,581	44.89	10,416
1962	1,170.00	664	563	607	46.53	13
1964	15,475.00	8,674	7,352	8,123	46.26	176
1965	5,506.28	3,066	2,599	2,908	46.17	63
1967	0.83			1	47.09	
1985	2,905.50	1,270	1,076	1,829	48.96	37
1990	18,419.48	7,416	6,286	12,134	48.97	248
1995	1,423,197.85	514,059	435,705	987,493	49.52	19,941
2021	36,844.32	1,466	1,243	35,602	48.25	738
	2,444,744.14	1,093,359	926,706	1,518,038		31,671
ONEIDA DAM AND RESERVOIR						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
1918	97,835.35	70,882	60,078	37,757	39.93	946
1925	408.75	284	241	168	42.85	4
1930	2,267.00	1,539	1,304	963	43.99	22
1934	1,013.55	677	574	440	44.33	10
1956	775.09	441	374	401	50.65	8

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ONEIDA DAM AND RESERVOIR						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
1978	134.64	61	52	83	55.00	2
1982	245.51	105	89	157	55.15	3
1985	16,193.21	6,584	5,580	10,613	55.46	191
1989	294,046.08	110,973	94,058	199,988	56.09	3,565
2013	8,655,614.25	1,281,031	1,085,772	7,569,842	57.57	131,489
	9,068,533.43	1,472,577	1,248,122	7,820,411		136,240
THORN RUN DAM AND RESERVOIR						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2083						
NET SALVAGE PERCENT.. 0						
1904	361.68	280	237	124	34.85	4
1925	882.00	622	527	355	40.89	9
1928	103.00	71	60	43	41.99	1
1930	285.00	196	166	119	42.14	3
1933	93.00	63	53	40	43.33	1
1936	86.00	58	49	37	42.87	1
1956	941.01	549	465	476	47.94	10
1958	951.00	544	461	490	48.64	10
1983	14,744.19	6,428	5,448	9,296	51.74	180
1984	76,177.36	32,680	27,699	48,479	51.91	934
1987	14,359.75	5,842	4,952	9,408	52.50	179
1989	210,306.30	82,945	70,302	140,004	52.21	2,682
1994	5,117.89	1,811	1,535	3,583	52.97	68
2011	7,667,320.88	1,398,519	1,185,352	6,481,968	53.79	120,505
	7,991,729.06	1,530,608	1,297,308	6,694,421		124,587
GRIFFIN						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
1893	59,431.80	47,902	40,601	18,831	31.29	602
1942	171.57	108	92	80	47.21	2
1943	2,456.07	1,533	1,299	1,157	48.21	24
1983	12,768.00	5,363	4,546	8,222	55.24	149

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
GRIFFIN						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
1984	21,564.86	8,915	7,556	14,009	55.34	253
1985	4,179.31	1,699	1,440	2,739	55.46	49
1989	1,031,668.95	389,352	330,006	701,663	56.09	12,510
1990	13,974.55	5,165	4,378	9,597	56.29	170
1995	2,925.08	966	819	2,106	56.75	37
2001	15,236.40	4,224	3,580	11,656	57.37	203
	1,164,376.59	465,227	394,316	770,061		13,999
LAKE SCRANTON						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
1901	281,262.27	219,610	186,136	95,126	34.25	2,777
1916	2,609.36	1,899	1,610	1,000	40.06	25
1935	239.93	158	134	106	45.33	2
1968	1,279.11	647	548	731	53.70	14
1970	3,211.00	1,600	1,356	1,855	53.38	35
1976	2,210.73	1,018	863	1,348	55.04	24
1977	57.10	26	22	35	55.01	1
1978	36,565.70	16,455	13,947	22,619	55.00	411
1982	276.75	118	100	177	55.15	3
1983	15,120.00	6,350	5,382	9,738	55.24	176
1984	35,225.92	14,562	12,342	22,883	55.34	413
1985	30,307.31	12,323	10,445	19,863	55.46	358
1986	30,933.62	12,361	10,477	20,457	55.59	368
1987	17,143.97	6,727	5,702	11,442	55.74	205
1989	1,665,697.07	628,634	532,816	1,132,881	56.09	20,198
1990	99,790.35	36,883	31,261	68,529	56.29	1,217
1991	7,810.44	2,824	2,394	5,417	56.50	96
1993	173,539.95	59,871	50,745	122,795	56.96	2,156
1994	518.27	174	147	371	57.21	6
1995	0.88			1	56.75	
2001	5,375.23	1,490	1,263	4,112	57.37	72
2018	9,168,862.63	738,093	625,591	8,543,272	57.11	149,593
2019	278,446.50	18,266	15,482	262,965	56.98	4,615
	11,856,484.09	1,780,089	1,508,763	10,347,721		182,765

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WILLIAMS BRIDGE						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2085						
NET SALVAGE PERCENT.. 0						
1892	99,114.45	80,501	68,231	30,884	30.29	1,020
1902	20,137.13	15,594	13,217	6,920	35.25	196
1915	1,350.92	992	841	510	39.06	13
1916	3,362.29	2,482	2,104	1,259	37.93	33
1930	111.28	77	65	46	42.14	1
1942	202.61	130	110	92	45.58	2
1962	40,618.95	22,300	18,901	21,718	50.11	433
1974	16,787.48	8,144	6,903	9,885	52.01	190
1975	78.02	37	31	47	52.00	1
1985	1,916,629.50	793,868	672,864	1,243,765	53.74	23,144
1986	64,940.48	26,671	22,606	42,335	53.09	797
1988	23,272.56	9,204	7,801	15,471	53.50	289
1989	83,219.77	32,256	27,339	55,880	53.72	1,040
1990	5.17	2	2	3	53.96	
1993	1,867.84	667	565	1,303	54.03	24
2001	10,426.96	2,982	2,527	7,899	54.92	144
	2,282,125.41	995,907	844,108	1,438,017		27,327
HOLLISTER						
FULLY ACCRUED						
NET SALVAGE PERCENT.. 0						
1972	1,589,982.17	1,589,982	1,589,982			
1973	3,536.78	3,537	3,537			
1976	958,017.39	958,017	958,017			
1977	25,124.94	25,125	25,125			
1978	33.29	33	33			
1993	1,202.20	1,202	1,202			
	2,577,896.77	2,577,896	2,577,897			

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CHRISTOPHER CHENERY (PIKES CREEK)						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2091						
NET SALVAGE PERCENT.. 0						
1910	236,315.37	176,244	145,381	90,934	38.52	2,361
1916	3,174.05	2,309	1,905	1,269	40.06	32
1929	74,456.00	50,392	41,568	32,888	44.89	733
1930	93,721.44	63,627	52,485	41,236	43.99	937
1933	4,694.45	3,127	2,579	2,115	45.14	47
1935	258.54	171	141	117	45.33	3
1964	36,327.26	19,075	15,735	20,593	53.36	386
1983	2,366.25	975	804	1,562	57.09	27
1984	40,978.64	16,621	13,710	27,268	57.15	477
1986	40,605.19	15,925	13,136	27,469	57.34	479
1987	158.58	61	50	108	57.46	2
1988	5,675.53	2,145	1,769	3,906	57.59	68
1989	619.11	229	189	430	57.74	7
1991	1,085,419.97	385,541	318,027	767,393	58.09	13,210
1993	284,909.12	97,439	80,376	204,533	57.72	3,544
2001	8,126.08	2,217	1,829	6,297	58.65	107
	1,917,805.58	836,098	689,685	1,228,121		22,420
CRYSTAL LAKE						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2064						
NET SALVAGE PERCENT.. 0						
1904	5,092.51	4,121	3,399	1,693	28.06	60
1933	61.83	45	37	25	33.46	1
1951	79,182.32	53,020	43,735	35,447	35.53	998
1953	26,444.91	17,586	14,506	11,938	35.26	339
1954	114.24	75	62	52	36.26	1
1964	1,215,428.80	745,787	615,189	600,240	37.15	16,157
1965	1,783.96	1,097	905	879	36.34	24
1966	264.25	161	133	131	36.46	4
1967	3,530.07	2,135	1,761	1,769	36.59	48
1981	7,623.81	4,003	3,302	4,322	38.00	114
1982	45.13	23	19	26	37.74	1
1987	10,559.42	5,132	4,233	6,326	38.07	166
1989	1,797.68	850	701	1,097	37.94	29

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CRYSTAL LAKE						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2064						
NET SALVAGE PERCENT.. 0						
1990	0.04		0			
1993	184.09	81	67	117	38.03	3
1994	392.40	170	140	252	38.11	7
	1,352,505.46	834,286	688,190	664,315		17,952
GARDNER'S CREEK INTAKE						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2085						
NET SALVAGE PERCENT.. 0						
1900	52,917.29	41,656	34,361	18,556	33.25	558
1929	10,139.00	6,957	5,739	4,400	42.99	102
1985	1,998,924.41	827,954	682,966	1,315,958	53.74	24,487
1986	9,145.11	3,756	3,098	6,047	53.09	114
2001	6,281.95	1,797	1,482	4,800	54.92	87
	2,077,407.76	882,120	727,647	1,349,761		25,348
NESBITT						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2092						
NET SALVAGE PERCENT.. 0						
1900	185,903.19	146,343	120,716	65,187	33.25	1,961
1932	37,406.03	24,849	20,498	16,908	45.99	368
1934	97.08	64	53	44	46.14	1
1946	172,052.80	104,660	86,332	85,720	49.58	1,729
1980	413.30	178	147	266	57.00	5
1981	18,286.47	7,757	6,399	11,888	57.01	209
1984	111,517.46	45,231	37,310	74,207	57.15	1,298
2001	8,137.93	2,202	1,816	6,322	59.30	107
2012	26,922,112.06	4,175,620	3,444,406	23,477,707	59.92	391,818
2018	379,381.18	29,592	24,410	354,971	59.10	6,006
2019	4,641.05	295	243	4,398	58.89	75
	27,839,948.55	4,536,791	3,742,330	24,097,619		403,577

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WATRES						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2088						
NET SALVAGE PERCENT.. 0						
1923	436,199.97	309,702	255,468	180,732	40.85	4,424
1941	3,067.89	1,962	1,618	1,449	46.21	31
1943	445.19	281	232	213	46.58	5
1947	12,218.40	7,429	6,128	6,090	49.00	124
1963	203.31	109	90	113	52.36	2
1976	3,892.59	1,811	1,494	2,399	54.01	44
1992	1,033.37	368	304	730	55.96	13
2000	31,829.26	9,151	7,549	24,281	57.00	426
2008	10,206,443.00	2,128,043	1,755,390	8,451,053	56.94	148,420
2013	10,331.83	1,539	1,269	9,062	57.11	159
	10,705,664.81	2,460,395	2,029,542	8,676,123		153,648
ROCK RUN DAM						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2065						
NET SALVAGE PERCENT.. 0						
1915	181,300.00	140,979	116,291	65,009	30.89	2,105
1985	470,440.45	232,398	191,701	278,739	38.92	7,162
1993	46,068.00	20,040	16,531	29,537	38.97	758
1996	722,840.00	294,702	243,095	479,745	39.23	12,229
2000	383,237.34	141,913	117,062	266,176	39.11	6,806
2008	13,218.88	3,648	3,009	10,210	39.35	259
2013	376,416.70	76,413	63,032	313,385	39.26	7,982
2014	1.01			1	39.31	
2020	40,262.99	2,887	2,381	37,882	38.84	975
	2,233,785.37	912,980	753,103	1,480,682		38,276
CEASETOWN DAM						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2117						
NET SALVAGE PERCENT.. 0						
2017	19,328,737.64	1,461,253	1,205,365	18,123,373	73.37	247,013
	19,328,737.64	1,461,253	1,205,365	18,123,373		247,013

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ELMHURST DAM						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2117						
NET SALVAGE PERCENT.. 0						
2017	23,538,596.83	1,779,518	1,467,898	22,070,699	73.37	300,814
	23,538,596.83	1,779,518	1,467,898	22,070,699		300,814
OTHER COLLECTING AND IMPOUNDING RESERVOIRS						
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1850	4,000.00	4,000	4,000			
1872	58,573.60	58,574	58,574			
1887	41,691.95	41,692	41,692			
1889	363,973.66	363,974	363,974			
1890	919.72	920	920			
1891	28,073.67	28,074	28,074			
1892	72,964.24	72,964	72,964			
1893	21,135.97	21,136	21,136			
1895	7,237.02	7,237	7,237			
1896	4,817.00	4,817	4,817			
1897	231,580.89	231,581	231,581			
1899	4,300.50	4,266	3,295	1,006	1.00	1,006
1900	0.01		0			
1902	19,788.54	19,634	15,163	4,626	0.95	4,626
1903	1,483.70	1,460	1,128	356	1.95	183
1904	6,208.51	6,132	4,736	1,473	1.48	995
1905	1,513.19	1,482	1,145	369	2.48	149
1906	2,848.52	2,800	2,162	686	2.05	335
1907	144,839.78	141,132	108,992	35,848	3.05	11,753
1908	10,658.94	10,419	8,046	2,613	2.65	986
1909	682.66	661	510	172	3.65	47
1911	3,773.26	3,677	2,840	934	2.94	318
1912	31,195.56	30,126	23,265	7,930	3.94	2,013
1914	12,863.21	12,338	9,528	3,335	4.64	719
1915	50,177.33	48,230	37,247	12,931	4.36	2,966
1916	14,900.42	14,349	11,081	3,819	4.11	929
1919	72,456.55	68,573	52,957	19,500	5.89	3,311
1920	740.31	702	542	198	5.70	35
1921	7,313.54	6,938	5,358	1,956	5.53	354
1922	804.62	756	584	221	6.53	34
1924	45,444.52	42,741	33,008	12,437	6.26	1,987

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER COLLECTING AND IMPOUNDING RESERVOIRS						
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1925	923.00	859	663	260	7.26	36
1927	5,568.36	5,185	4,004	1,564	7.09	221
1928	37,821.79	34,853	26,916	10,906	8.09	1,348
1930	1,030.30	949	733	297	8.01	37
1931	4,532.14	4,170	3,220	1,312	8.00	164
1935	94.29	85	66	29	9.09	3
1936	60.81	54	42	19	10.09	2
1937	179.62	161	124	55	10.15	5
1938	1,869.64	1,669	1,289	581	10.24	57
1939	499.89	445	344	156	10.34	15
1940	48.00	42	32	16	11.34	1
1941	417.00	366	283	134	11.46	12
1942	1,528.31	1,337	1,033	496	11.59	43
1943	189.24	165	127	62	11.74	5
1944	0.05		0			
1945	185,387.19	159,062	122,839	62,548	12.91	4,845
1946	18,237.81	15,588	12,038	6,200	13.09	474
1947	42,259.80	35,972	27,780	14,480	13.29	1,090
1948	105,879.92	88,939	68,685	37,195	14.29	2,603
1951	2,586.50	2,142	1,654	932	14.96	62
1953	244.63	199	154	91	16.21	6
1954	556.00	449	347	209	16.47	13
1956	29.00	23	18	11	17.75	1
1957	50,615.23	39,753	30,700	19,915	18.03	1,105
1958	14,936.39	11,553	8,922	6,014	19.03	316
1959	347,652.27	266,997	206,194	141,458	19.33	7,318
1960	322,173.80	245,593	189,664	132,510	19.64	6,747
1961	925.38	694	536	389	20.64	19
1962	7,307.15	5,438	4,200	3,108	20.97	148
1963	2,783.94	2,055	1,587	1,197	21.30	56
1964	109,470.10	79,442	61,351	48,119	22.30	2,158
1965	9,425.31	6,779	5,235	4,190	22.65	185
1966	0.72	1	1			
1967	44,616.61	31,232	24,120	20,497	24.00	854
1968	12,087.29	8,376	6,469	5,619	24.37	231
1971	440.77	293	226	214	26.12	8
1972	134.20	88	68	66	27.12	2
1973	1,903.66	1,228	948	955	27.52	35
1974	85.00	54	42	43	27.92	2
1975	24,477.44	15,274	11,796	12,682	28.92	439

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER COLLECTING AND IMPOUNDING RESERVOIRS						
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1976	4,239.62	2,610	2,016	2,224	29.34	76
1977	50.00	30	23	27	30.34	1
1978	2,561.00	1,521	1,175	1,386	30.76	45
1979	3,329.73	1,949	1,505	1,825	31.19	59
1980	7,781.00	4,450	3,437	4,344	32.19	135
1981	59,662.39	33,578	25,931	33,731	32.63	1,034
1982	9,268.57	5,092	3,932	5,336	33.63	159
1983	32,323.28	17,455	13,480	18,843	34.07	553
1984	12,551.13	6,608	5,103	7,448	35.07	212
1985	12,570.43	6,496	5,017	7,554	35.53	213
1986	79,804.85	40,453	31,241	48,564	35.99	1,349
1987	293,417.83	144,714	111,758	181,659	36.99	4,911
1988	6,093.28	2,943	2,273	3,820	37.46	102
1989	12,607.93	5,916	4,569	8,039	38.46	209
1990	7,641.23	3,505	2,707	4,934	38.94	127
1991	73,420.51	32,657	25,220	48,200	39.94	1,207
1992	549,943.90	238,676	184,322	365,621	40.43	9,043
1993	12,022.99	5,050	3,900	8,123	41.43	196
1994	647.79	265	205	443	41.92	11
1995	436,231.22	172,224	133,004	303,228	42.92	7,065
1996	26,395.17	10,120	7,815	18,580	43.42	428
1997	621,953.13	229,625	177,333	444,621	44.42	10,009
1998	9,060.00	3,239	2,501	6,559	44.93	146
2000	37,724.43	12,494	9,649	28,076	46.44	605
2001	111,242.44	35,242	27,216	84,026	47.44	1,771
2002	125,676.02	38,268	29,553	96,123	47.97	2,004
2003	6,180.00	1,792	1,384	4,796	48.97	98
2006	13,786.00	3,445	2,660	11,126	51.03	218
2007	23,343.75	5,490	4,240	19,104	52.03	367
2014	1,226,437.95	165,569	127,864	1,098,574	57.67	19,049
2016	7,768.42	821	634	7,134	59.23	120
2017	107,398.37	9,795	7,564	99,834	59.79	1,670

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER COLLECTING AND IMPOUNDING RESERVOIRS						
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
2019	385,956.96	23,621	18,242	367,715	61.36	5,993
2020	634,072.79	29,294	22,623	611,450	61.94	9,872
9999	3,575.00-	1,705-	1,406-	2,169-		67-
	7,575,529.05	3,612,251	2,979,691	4,595,838		142,402
	135,471,361.47	28,197,665	23,899,693	111,571,669		1,905,744
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					58.5	1.41

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 306 LAKE, RIVER AND OTHER INTAKES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NORRISTOWN INTAKE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2077						
NET SALVAGE PERCENT.. 0						
1966	6,696.14	5,420	4,179	2,517	13.42	188
1997	4,076,795.17	2,035,136	1,569,115	2,507,680	26.08	96,153
1998	86,320.84	41,866	32,279	54,042	26.55	2,035
2004	37,517.86	14,613	11,267	26,251	29.78	881
2005	48,578.25	18,100	13,955	34,623	30.31	1,142
	4,255,908.26	2,115,135	1,630,795	2,625,113		100,399
MILL ROAD INTAKE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2077						
NET SALVAGE PERCENT.. 0						
1997	5,185,337.03	2,588,520	1,995,781	3,189,556	26.08	122,299
1998	67,078.68	32,533	25,083	41,995	26.55	1,582
2004	51,910.47	20,219	15,589	36,321	29.78	1,220
	5,304,326.18	2,641,272	2,036,453	3,267,873		125,101
SWATARA CREEK INTAKE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2072						
NET SALVAGE PERCENT.. 0						
1992	743,957.01	424,353	327,181	416,776	23.35	17,849
2007	52,227.42	17,799	13,723	38,504	30.95	1,244
2008	24,096.05	7,771	5,992	18,105	31.51	575
2018	210,583.17	25,059	19,321	191,262	37.02	5,166
	1,030,863.65	474,982	366,217	664,647		24,834
ALLEGHENY RIVER PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2070						
NET SALVAGE PERCENT.. 0						
1962	4,167.41	3,457	2,665	1,502	12.53	120
1970	1,783.13	1,389	1,071	712	15.03	47

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 306 LAKE, RIVER AND OTHER INTAKES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALLEGHENY RIVER PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2070						
NET SALVAGE PERCENT.. 0						
1990	18,120.03	10,823	8,345	9,775	22.25	439
1995	1,697,864.04	903,264	696,428	1,001,436	24.63	40,659
1996	16,079.46	8,336	6,427	9,652	25.08	385
	1,738,014.07	927,269	714,936	1,023,078		41,650
OTHER INTAKES						
SURVIVOR CURVE.. IOWA 50-S0.5						
NET SALVAGE PERCENT.. 0						
1871	7,485.00	7,485	7,485			
1876	1,000.00	1,000	1,000			
1884	15,908.00	15,908	15,908			
1896	1,064.36	1,064	1,064			
1899	4,333.00	4,333	4,333			
1900	19,909.00	19,909	19,909			
1901	255.00	255	255			
1903	1,764.21	1,764	1,764			
1905	926.29	926	926			
1906	116.00	116	116			
1907	50.00	50	50			
1908	5,105.59	5,106	5,106			
1909	625.00	625	625			
1914	91.65	92	92			
1915	2,103.77	2,104	2,104			
1916	387.96	388	388			
1920	362.00	362	362			
1924	184.48	184	184			
1934	275.60	265	203	73	3.59	20
1937	1,649.48	1,560	1,192	457	4.91	93
1938	223.95	211	161	63	5.09	12
1948	4,170.00	3,753	2,868	1,302	8.33	156
1954	515.16	451	345	170	9.74	17
1955	1,225.24	1,066	815	411	10.12	41
1959	0.02		0			
1961	195,437.96	163,582	125,015	70,423	12.07	5,835
1962	2,445.04	2,028	1,550	895	12.53	71
1963	0.35		0			
1964	13,102.67	10,745	8,212	4,891	12.94	378

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 306 LAKE, RIVER AND OTHER INTAKES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER INTAKES						
SURVIVOR CURVE.. IOWA 50-S0.5						
NET SALVAGE PERCENT.. 0						
1966	21,261.52	17,088	13,059	8,202	13.92	589
1967	34,966.21	28,001	21,399	13,567	13.93	974
1968	3,309.73	2,621	2,003	1,307	14.44	91
1969	341,369.96	269,136	205,683	135,687	14.49	9,364
1970	242.30	189	144	98	15.03	7
1972	2,403.96	1,839	1,405	999	15.67	64
1973	191,463.70	145,512	111,205	80,259	15.79	5,083
1974	695.59	521	398	297	16.36	18
1976	4,944.00	3,625	2,770	2,174	17.10	127
1979	4,591.44	3,253	2,486	2,105	18.11	116
1980	219.84	154	118	102	18.35	6
1982	0.25		0			
1983	590.00	399	305	285	19.17	15
1984	7,128.71	4,754	3,633	3,496	19.48	179
1985	708.02	465	355	353	19.80	18
1986	5,152.00	3,317	2,535	2,617	20.47	128
1987	373.00	236	180	193	20.82	9
1988	329.26	206	157	172	20.87	8
1989	29,733.17	18,298	13,984	15,749	21.25	741
1991	314,444.17	186,151	142,263	172,181	22.05	7,809
1992	13,345.24	7,736	5,912	7,433	22.48	331
1994	7,175.69	3,995	3,053	4,123	23.08	179
1996	994,262.16	528,848	404,163	590,099	23.76	24,836
1997	75,410.86	39,018	29,819	45,592	24.25	1,880
1998	4,168.18	2,105	1,609	2,559	24.50	104
1999	427,734.05	209,419	160,045	267,689	25.02	10,699
2000	3,236.92	1,541	1,178	2,059	25.31	81
2001	11,542.58	5,307	4,056	7,487	25.85	290
2002	111,458.00	49,621	37,922	73,536	26.17	2,810
2006	200,520.03	76,358	58,355	142,165	27.64	5,143
2007	433,877.13	157,584	120,431	313,446	28.05	11,175
2008	71,901.04	24,806	18,958	52,943	28.48	1,859
2011	35,533.38	10,234	7,821	27,712	29.67	934
2013	63,869.08	15,776	12,057	51,813	30.49	1,699
2014	6,733.23	1,515	1,158	5,575	31.00	180
2017	304,291.25	47,835	36,557	267,734	32.17	8,322
2019	145,315.45	15,694	11,994	133,322	33.04	4,035
2020	65,336.23	5,390	4,119	61,217	33.36	1,835

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 306 LAKE, RIVER AND OTHER INTAKES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER INTAKES						
SURVIVOR CURVE.. IOWA 50-S0.5						
NET SALVAGE PERCENT.. 0						
2021	110,220.53	6,172	4,717	105,504	33.71	3,130
2023	691,222.60	4,977	3,804	687,419	34.23	20,082
9999	41,551.00-	17,748-	13,684-	27,867-		1,089-
	4,980,246.24	2,127,280	1,640,159	3,340,087		130,484
	17,309,358.40	8,285,938	6,388,560	10,920,798		422,468
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					25.9	2.44

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 307 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1900	1,510.00	1,510	1,510			
1901	687.32	687	687			
1904	1,700.99	1,701	1,701			
1905	11,557.00	11,557	11,557			
1907	60.00	60	60			
1908	11.00	11	11			
1910	6,358.00	6,358	6,358			
1912	850.80	851	851			
1913	1,496.00	1,496	1,496			
1914	685.91	686	686			
1915	2,515.00	2,499	1,977	538	0.70	538
1916	1,761.00	1,752	1,386	375	0.53	375
1918	1,184.00	1,169	925	259	1.38	188
1920	62.00	61	48	14	2.26	6
1922	2,819.00	2,733	2,162	657	3.17	207
1923	9,868.00	9,572	7,572	2,296	3.09	743
1924	8,365.00	8,033	6,355	2,010	4.09	491
1926	460.00	437	346	114	5.04	23
1927	1,178.84	1,120	886	293	5.01	58
1930	9.00	8	6	3	6.01	
1934	199.00	184	146	53	7.15	7
1935	1,250.00	1,144	905	345	8.15	42
1937	3,054.88	2,785	2,203	852	8.34	102
1938	241.00	217	172	69	9.34	7
1939	2,545.67	2,288	1,810	736	9.46	78
1940	74.75	67	53	22	9.59	2
1941	830.19	742	587	243	9.74	25
1945	4,321.00	3,775	2,986	1,335	11.29	118
1946	224.36	195	154	70	11.50	6
1948	865.57	740	585	281	12.72	22
1950	108.00	91	72	36	13.21	3
1951	608.00	512	405	203	13.47	15
1953	13,001.00	10,830	8,568	4,433	14.03	316
1954	14,821.28	12,272	9,708	5,113	14.33	357
1955	12,168.00	10,012	7,920	4,248	14.64	290
1956	1,603.07	1,310	1,036	567	14.97	38
1957	449.96	362	286	164	15.97	10
1958	2,594.00	2,074	1,641	953	16.30	58
1959	1,929.11	1,531	1,211	718	16.65	43
1960	46,187.99	36,664	29,005	17,183	16.37	1,050
1961	4,481.46	3,529	2,792	1,689	16.74	101

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 307 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1962	3,009.76	2,350	1,859	1,151	17.12	67
1963	8,669.74	6,710	5,308	3,362	17.52	192
1964	2,122.94	1,628	1,288	835	17.92	47
1965	13,699.16	10,409	8,234	5,465	18.34	298
1966	53,921.28	40,570	32,095	21,826	18.76	1,163
1967	4,217.40	3,141	2,485	1,732	19.19	90
1968	7,127.37	5,253	4,156	2,971	19.63	151
1969	56,597.45	41,565	32,882	23,715	19.53	1,214
1970	4,767.16	3,461	2,738	2,029	19.99	102
1971	31,889.13	22,884	18,103	13,786	20.46	674
1972	101,843.95	72,197	57,114	44,730	20.94	2,136
1973	94,331.88	66,504	52,611	41,721	20.92	1,994
1974	37,615.79	26,173	20,705	16,911	21.42	789
1975	9,107.78	6,252	4,946	4,162	21.93	190
1976	108,404.51	73,878	58,444	49,961	21.97	2,274
1977	20,240.47	13,593	10,753	9,487	22.49	422
1978	169,169.52	112,667	89,130	80,040	22.57	3,546
1979	40,281.48	26,409	20,892	19,389	23.11	839
1980	133,072.52	86,404	68,353	64,720	23.23	2,786
1981	119,430.83	76,245	60,317	59,114	23.79	2,485
1982	294,976.95	186,248	147,339	147,638	23.94	6,167
1983	168,734.75	104,616	82,761	85,974	24.52	3,506
1984	44,363.00	27,163	21,488	22,875	24.69	926
1985	60,868.97	36,777	29,094	31,775	24.89	1,277
1986	60,133.09	35,821	28,338	31,795	25.11	1,266
1987	233,265.74	136,041	107,621	125,645	25.73	4,883
1988	210,413.97	120,778	95,546	114,868	25.98	4,421
1989	66,388.63	37,470	29,642	36,747	26.24	1,400
1990	949,294.53	526,289	416,342	532,953	26.52	20,096
1991	91,173.68	49,598	39,236	51,938	26.82	1,937
1992	222,949.85	118,877	94,042	128,908	27.14	4,750
1993	80,770.05	42,162	33,354	47,416	27.47	1,726
1994	11,331.94	5,784	4,576	6,756	27.82	243
1995	25,861.85	12,890	10,197	15,665	28.18	556
1996	30,321.51	14,818	11,722	18,600	28.25	658
1997	77,313.24	36,786	29,101	48,212	28.64	1,683
1998	24,129.06	11,160	8,829	15,300	29.05	527
1999	40,204.97	18,140	14,350	25,855	29.19	886
2000	889,672.93	390,833	309,184	580,489	29.36	19,771
2001	240,340.60	102,049	80,730	159,611	29.81	5,354
2002	308,055.78	126,796	100,307	207,749	30.02	6,920

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 307 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2003	144,555.07	57,533	45,514	99,041	30.25	3,274
2004	994,772.65	381,794	302,034	692,739	30.50	22,713
2005	2,661.30	982	777	1,884	30.78	61
2006	147,235.79	52,063	41,187	106,049	31.08	3,412
2007	499,567.06	168,654	133,420	366,147	31.39	11,664
2008	314,912.32	101,559	80,342	234,570	31.51	7,444
2009	9,451.61	2,885	2,282	7,170	31.87	225
2010	43,906.18	12,671	10,024	33,882	32.05	1,057
2011	340,253.19	92,277	73,000	267,253	32.25	8,287
2012	51,262.14	12,969	10,260	41,002	32.48	1,262
2013	256,454.44	60,010	47,473	208,981	32.74	6,383
2014	165,507.17	35,452	28,046	137,461	33.02	4,163
2015	1,162,242.35	225,940	178,739	983,503	33.15	29,668
2016	98,238.58	17,054	13,491	84,748	33.32	2,543
2017	31,838.22	4,852	3,838	28,000	33.37	839
2018	97,990.59	12,690	10,039	87,952	33.61	2,617
2019	138,455.24	14,732	11,654	126,801	33.59	3,775
2020	262,341.46	21,486	16,998	245,343	33.63	7,295
2021	168,933.04	9,460	7,484	161,449	33.71	4,789
2022	1,737,464.30	50,386	39,860	1,697,604	33.48	50,705
2023	1,468.95	11	8	1,461	33.42	44
9999	71,610.27-	25,804-	20,444-	51,166-		1,721-
	11,912,683.74	4,292,670	3,401,063	8,511,621		286,230

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.7 2.40

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 310 POWER GENERATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-S0.5						
NET SALVAGE PERCENT.. 0						
1931	3,609.84	3,610	3,610			
1936	2,809.10	2,786	2,809			
1937	4,520.24	4,432	4,520			
1940	2,939.00	2,854	2,939			
1944	1.00	1	1			
1954	8,338.50	7,595	8,338			
1957	1,178.00	1,057	1,161	17	7.53	2
1958	5,336.00	4,752	5,220	116	7.99	15
1959	107.00	95	104	3	8.46	
1963	940.00	812	892	48	9.44	5
1965	6,019.00	5,132	5,638	381	10.03	38
1966	142.00	120	132	10	10.57	1
1967	7,319.00	6,148	6,754	565	10.67	53
1968	23,061.00	19,152	21,040	2,021	11.23	180
1969	45,202.40	37,346	41,028	4,174	11.36	367
1970	206.00	168	185	21	11.94	2
1972	7,872.85	6,344	6,969	904	12.29	74
1973	136.00	108	119	17	12.89	1
1974	52,315.00	41,271	45,340	6,975	13.11	532
1975	38,313.36	29,976	32,931	5,382	13.35	403
1980	25,076.66	18,547	20,376	4,701	15.14	311
1981	585.65	428	470	116	15.47	7
1982	11,137.43	8,037	8,829	2,308	15.82	146
1983	2,509.00	1,796	1,973	536	15.87	34
1991	39,570.00	24,945	27,404	12,166	18.76	649
1992	48,752.04	30,226	33,206	15,546	19.00	818
1993	23,243.53	14,086	15,475	7,769	19.50	398
1994	107,457.50	63,883	70,181	37,276	19.78	1,885
1995	1,076.42	627	689	387	20.08	19
1996	7,932.48	4,498	4,941	2,991	20.62	145
1997	1,040,121.31	576,019	632,809	407,312	20.95	19,442
1998	20,346.13	10,987	12,070	8,276	21.30	389
1999	250,124.14	131,465	144,426	105,698	21.66	4,880
2000	96,600.18	49,324	54,187	42,413	22.05	1,923
2001	3,572.21	1,768	1,942	1,630	22.44	73
2002	235,458.71	113,232	124,396	111,063	22.67	4,899
2003	241,761.04	112,177	123,237	118,524	23.10	5,131
2004	86,744.06	38,731	42,549	44,195	23.55	1,877
2005	261,676.97	112,573	123,672	138,005	23.84	5,789
2006	370,647.36	152,484	167,517	203,130	24.32	8,352
2007	106,124.17	41,770	45,888	60,236	24.65	2,444

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 310 POWER GENERATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-S0.5						
NET SALVAGE PERCENT.. 0						
2008	133,786.35	50,170	55,116	78,670	25.00	3,147
2009	129,823.10	45,983	50,516	79,307	25.53	3,106
2010	97,770.04	32,665	35,885	61,885	25.91	2,388
2011	401,056.23	125,611	137,995	263,061	26.31	9,999
2012	6,230,204.92	1,816,105	1,995,155	4,235,050	26.74	158,379
2013	5,285,686.55	1,427,135	1,567,836	3,717,851	27.04	137,494
2014	619,366.07	152,736	167,794	451,572	27.50	16,421
2015	627,659.41	140,094	153,906	473,753	27.84	17,017
2016	160,719.19	31,838	34,977	125,742	28.34	4,437
2017	266,682.99	46,083	50,626	216,057	28.72	7,523
2018	983,860.91	144,136	158,347	825,514	29.13	28,339
2019	340,229.59	40,555	44,553	295,677	29.56	10,003
2020	278,768.83	25,424	27,931	250,838	29.89	8,392
2021	71,837.35	4,454	4,893	66,944	30.26	2,212
2023	208,255.89	1,666	1,831	206,425	30.81	6,700
9999	118,273.00-	35,843-	39,370-	78,903-		2,964-
	18,908,316.70	5,730,174	6,293,958	12,614,359		473,877

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.6 2.51

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.2 PUMPING EQUIPMENT - ELECTRIC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1957	4,070.65	3,815	3,326	745	4.42	169
1958	77.00	72	63	14	4.44	3
1981	1,612.84	1,240	1,081	532	12.64	42
1990	2,706.53	1,831	1,596	1,111	15.78	70
1991	5,320.12	3,541	3,087	2,233	16.08	139
1992	59,030.18	38,612	33,665	25,365	16.39	1,548
1993	14,692.00	9,432	8,224	6,468	16.73	387
1995	8,427.02	5,191	4,526	3,901	17.45	224
1996	75,209.70	45,487	39,659	35,551	17.64	2,015
1999	2,634.16	1,486	1,296	1,338	18.55	72
2001	39,528.53	21,132	18,424	21,105	19.15	1,102
2002	41,151.91	21,345	18,610	22,542	19.49	1,157
2003	1,012,540.64	508,295	443,169	569,372	19.84	28,698
2004	152,741.77	74,294	64,775	87,967	20.06	4,385
2005	392,735.41	183,800	160,250	232,485	20.46	11,363
2006	2,916,138.48	1,313,720	1,145,397	1,770,741	20.74	85,378
2007	599.66	259	226	374	21.04	18
2008	268,051.60	110,973	96,754	171,298	21.23	8,069
2009	9,243.96	3,637	3,171	6,073	21.59	281
2010	62,220.69	23,215	20,241	41,980	21.84	1,922
2011	102,348.78	36,109	31,482	70,867	22.01	3,220
2012	969,012.94	319,774	278,802	690,211	22.33	30,910
2013	293,934.16	90,238	78,676	215,258	22.57	9,537
2014	4,376,696.57	1,236,854	1,078,379	3,298,318	22.85	144,347
2015	433,156.07	111,581	97,284	335,872	23.06	14,565
2016	545,244.18	126,333	110,146	435,098	23.21	18,746
2017	163,231.18	33,299	29,033	134,198	23.41	5,733
2018	1,667,574.42	291,826	254,435	1,413,139	23.57	59,955
2019	858,668.63	123,992	108,105	750,564	23.70	31,669
2020	2,203,048.55	246,521	214,935	1,988,114	23.81	83,499
2021	1,461,324.22	112,814	98,360	1,362,964	23.91	57,004
9999	1,954,569.05-	549,508-	479,101-	1,475,468-		65,310-
	16,188,403.50	4,551,210	3,968,076	12,220,328		540,917

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.6 3.34

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.5 PUMPING EQUIPMENT - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1989	276.12	190	166	110	15.50	7
1995	501.09	309	269	232	17.45	13
1999	2,678.18	1,510	1,317	1,361	18.55	73
2000	184,223.06	100,844	87,923	96,300	19.02	5,063
2003	3,563.37	1,789	1,560	2,003	19.84	101
2004	19,148.80	9,314	8,121	11,028	20.06	550
2005	105,672.59	49,455	43,118	62,555	20.46	3,057
2006	71,689.73	32,296	28,158	43,532	20.74	2,099
2007	5,931.70	2,562	2,234	3,698	21.04	176
2010	72,266.50	26,963	23,508	48,758	21.84	2,233
2011	135,162.30	47,685	41,575	93,587	22.01	4,252
2012	2,019.10	666	581	1,438	22.33	64
2013	676,635.68	207,727	181,111	495,525	22.57	21,955
2014	8,220.79	2,323	2,025	6,196	22.85	271
2016	10,933.06	2,533	2,208	8,725	23.21	376
2017	4,085.46	833	726	3,359	23.41	143
2018	6,611.16	1,157	1,009	5,602	23.57	238
2019	740,083.93	106,868	93,175	646,909	23.70	27,296
2020	2,731,579.58	305,664	266,501	2,465,079	23.81	103,531
2021	2,593,207.56	200,196	174,545	2,418,663	23.91	101,157
2022	5,307,283.47	213,884	186,480	5,120,803	23.81	215,069
2023	365,569.48	3,802	3,315	362,254	23.79	15,227
	13,047,342.71	1,318,570	1,149,625	11,897,718		502,951

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.7 3.85

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.52 PUMPING EQUIPMENT - SOURCE OF SUPPLY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1995	500.74	308	269	232	17.45	13
1997	242.21	143	125	117	18.05	6
2007	330,048.42	142,581	124,312	205,736	21.04	9,778
2008	138,828.94	57,475	50,111	88,718	21.23	4,179
2009	107,365.12	42,237	36,825	70,540	21.59	3,267
2010	688,046.31	256,710	223,818	464,228	21.84	21,256
2011	743,640.36	262,356	228,741	514,899	22.01	23,394
2012	231,815.95	76,499	66,697	165,119	22.33	7,394
2013	1,332,904.58	409,202	356,772	976,133	22.57	43,249
2014	1,620,507.14	457,955	399,279	1,221,228	22.85	53,445
2015	1,418,234.40	365,337	318,527	1,099,707	23.06	47,689
2016	1,728,182.25	400,420	349,115	1,379,067	23.21	59,417
2017	2,132,558.86	435,042	379,302	1,753,257	23.41	74,894
2018	1,032,127.10	180,622	157,479	874,648	23.57	37,109
2019	347,288.25	50,148	43,723	303,565	23.70	12,809
2020	119,694.64	13,394	11,678	108,017	23.81	4,537
2021	268,274.05	20,711	18,057	250,217	23.91	10,465
	12,240,259.32	3,171,140	2,764,830	9,475,429		412,901

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.9 3.37

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.53 PUMPING EQUIPMENT - WATER TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1910	137.73	138	138			
1917	133.00	133	133			
1919	8,727.40	8,727	8,727			
1928	134.45	134	134			
1929	274.09	274	274			
1930	10.36	10	10			
1931	3,609.84	3,610	3,610			
1937	1,084.39	1,084	1,084			
1939	195.67	196	196			
1941	233.57	234	234			
1942	901.65	902	902			
1944	22.40	22	22			
1945	737.81	737	643	95	0.12	95
1946	36.51	36	31	6	0.52	6
1947	175.93	174	152	24	0.92	24
1948	1,721.87	1,692	1,475	247	1.34	184
1950	257.14	252	220	37	1.63	23
1951	14,946.31	14,528	12,666	2,280	2.07	1,101
1952	33,222.64	32,080	27,967	5,256	2.53	2,077
1953	14,955.45	14,342	12,503	2,452	2.99	820
1954	9,834.27	9,364	8,164	1,670	3.46	483
1955	2,307.03	2,196	1,914	393	3.43	115
1956	984.21	930	811	173	3.92	44
1957	15,384.02	14,418	12,570	2,814	4.42	637
1958	3,367.41	3,152	2,748	619	4.44	139
1959	30,581.95	28,380	24,742	5,840	4.97	1,175
1960	74,885.02	68,879	60,049	14,836	5.49	2,702
1961	172,778.06	158,541	138,217	34,561	5.57	6,205
1962	3,846.01	3,496	3,048	798	6.11	131
1963	22,013.95	19,813	17,273	4,741	6.67	711
1964	33,235.44	29,806	25,985	7,250	6.79	1,068
1965	199,630.46	177,152	154,442	45,188	7.36	6,140
1966	11,660.13	10,302	8,981	2,679	7.52	356
1967	28,880.66	25,392	22,137	6,744	7.69	877
1968	95,521.75	83,008	72,367	23,155	8.29	2,793
1969	336,092.73	290,384	253,158	82,935	8.50	9,757
1970	5,567.23	4,751	4,142	1,425	9.11	156
1971	51,979.05	44,057	38,409	13,570	9.35	1,451
1972	425,080.09	357,705	311,849	113,231	9.61	11,783
1973	5,713,935.55	4,771,136	4,159,496	1,554,440	9.88	157,332
1974	22,852.56	18,924	16,498	6,355	10.17	625

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.53 PUMPING EQUIPMENT - WATER TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1975	113,415.69	92,547	80,683	32,733	10.82	3,025
1976	72,968.72	58,988	51,426	21,543	11.14	1,934
1977	19,388.63	15,519	13,530	5,859	11.47	511
1978	9,787.72	7,752	6,758	3,030	11.82	256
1979	178,767.53	140,011	122,062	56,706	12.18	4,656
1980	150,308.57	116,985	101,988	48,321	12.25	3,945
1981	506,732.79	389,475	339,546	167,187	12.64	13,227
1982	700,388.66	531,245	463,142	237,247	13.05	18,180
1983	235,697.27	176,302	153,701	81,996	13.48	6,083
1984	314,495.98	233,042	203,167	111,329	13.63	8,168
1985	648,586.85	473,209	412,546	236,041	14.08	16,764
1986	416,712.98	299,117	260,771	155,942	14.55	10,718
1987	694,620.55	492,625	429,472	265,149	14.76	17,964
1988	305,870.14	214,109	186,661	119,209	15.00	7,947
1989	629,840.15	432,574	377,120	252,720	15.50	16,305
1990	4,404,508.55	2,979,650	2,597,671	1,806,838	15.78	114,502
1991	1,021,788.90	680,103	592,917	428,872	16.08	26,671
1992	1,175,752.15	769,059	670,469	505,283	16.39	30,829
1993	1,214,390.97	779,639	679,692	534,699	16.73	31,960
1994	343,463.55	216,142	188,433	155,031	17.08	9,077
1995	3,162,140.70	1,947,879	1,698,169	1,463,972	17.45	83,895
1996	1,081,569.17	654,133	570,276	511,293	17.64	28,985
1997	3,450,086.82	2,036,241	1,775,203	1,674,884	18.05	92,791
1998	1,058,295.76	611,166	532,817	525,479	18.29	28,730
1999	3,220,158.30	1,816,169	1,583,344	1,636,814	18.55	88,238
2000	2,461,862.16	1,347,623	1,174,863	1,286,999	19.02	67,666
2001	2,419,398.53	1,293,410	1,127,600	1,291,799	19.15	67,457
2002	1,318,397.32	683,853	596,186	722,211	19.49	37,055
2003	2,250,239.06	1,129,620	984,808	1,265,431	19.84	63,782
2004	383,907.57	186,733	162,795	221,113	20.06	11,023
2005	99,429.78	46,533	40,568	58,862	20.46	2,877
2006	248,585.93	111,988	97,632	150,954	20.74	7,278
2007	1,515,671.60	654,770	570,831	944,841	21.04	44,907
2008	334,620.09	138,533	120,774	213,846	21.23	10,073
2009	188,991.93	74,349	64,818	124,174	21.59	5,751
2010	241,344.53	90,046	78,502	162,843	21.84	7,456
2011	413,172.02	145,767	127,080	286,092	22.01	12,998
2012	466,418.48	153,918	134,186	332,232	22.33	14,878
2013	226,704.84	69,598	60,676	166,029	22.57	7,356
2014	142,593.48	40,297	35,131	107,462	22.85	4,703
2015	387,479.97	99,815	87,019	300,461	23.06	13,030

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.53 PUMPING EQUIPMENT - WATER TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
2016	301,993.38	69,972	61,002	240,991	23.21	10,383
2017	66,657.04	13,598	11,855	54,802	23.41	2,341
2018	902,376.61	157,916	137,671	764,706	23.57	32,444
2019	112,378.15	16,227	14,147	98,231	23.70	4,145
2020	117,333.16	13,130	11,447	105,886	23.81	4,447
2021	477,892.13	36,893	32,163	445,729	23.91	18,642
2022	117,663.33	4,742	4,134	113,529	23.81	4,768
2023	187,006.36	1,945	1,696	185,310	23.79	7,789
	47,853,790.34	28,946,048	25,237,269	22,616,521		1,337,620

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.9 2.80

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.54 PUMPING EQUIPMENT - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1999	50,052.68	28,230	24,613	25,440	18.55	1,371
2000	490,971.15	268,758	234,323	256,648	19.02	13,494
2001	36,531.40	19,530	17,028	19,503	19.15	1,018
2002	538,352.70	279,244	243,465	294,888	19.49	15,130
2003	72,336.08	36,313	31,660	40,676	19.84	2,050
2004	292,005.04	142,031	123,833	168,172	20.06	8,383
2005	16,038.24	7,506	6,544	9,494	20.46	464
2006	189,538.24	85,387	74,447	115,091	20.74	5,549
2007	1,122,692.14	485,003	422,861	699,831	21.04	33,262
2008	693,194.93	286,983	250,212	442,983	21.23	20,866
2009	1,320,313.42	519,411	452,860	867,453	21.59	40,178
2010	294,909.64	110,031	95,933	198,977	21.84	9,111
2011	162,273.18	57,250	49,915	112,358	22.01	5,105
2012	147,718.84	48,747	42,501	105,218	22.33	4,712
2013	258,192.41	79,265	69,109	189,083	22.57	8,378
2015	107,975.32	27,814	24,250	83,725	23.06	3,631
2016	297,660.73	68,968	60,131	237,530	23.21	10,234
2017	157,968.28	32,226	28,097	129,871	23.41	5,548
2018	177,536.81	31,069	27,089	150,448	23.57	6,383
2019	27,912.06	4,031	3,514	24,398	23.70	1,029
2021	3,000.02	232	202	2,798	23.91	117
2022	250,727.13	10,104	8,810	241,917	23.81	10,160
	6,707,900.44	2,628,133	2,291,397	4,416,503		206,173

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.4 3.07

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEW HERSHEY TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2067						
NET SALVAGE PERCENT.. 0						
1992	4,605,057.01	2,755,206	2,656,693	1,948,364	20.81	93,626
1993	236.04	138	133	103	21.28	5
1994	5,203.89	2,988	2,881	2,323	21.51	108
1995	830.13	467	450	380	21.75	17
1996	1,183.76	649	626	558	22.26	25
1998	5,798.79	3,015	2,907	2,892	23.08	125
2001	17,726.99	8,463	8,160	9,567	24.08	397
2008	30,628.68	10,980	10,587	20,041	26.84	747
2009	156,208.55	52,923	51,031	105,178	27.32	3,850
2012	3,190,991.80	888,053	856,300	2,334,691	28.53	81,833
2013	143,928.90	36,846	35,529	108,400	29.06	3,730
2014	144,316.86	33,770	32,563	111,754	29.46	3,793
2021	1,294,711.77	73,799	71,160	1,223,551	33.09	36,976
	9,596,823.17	3,867,297	3,729,021	5,867,802		225,232
BANGOR TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2064						
NET SALVAGE PERCENT.. 0						
1989	2,860,588.15	1,818,762	1,753,732	1,106,856	19.48	56,820
1990	10,623.39	6,626	6,389	4,234	19.91	213
1994	8,028.91	4,633	4,467	3,562	21.25	168
2000	691.60	344	332	360	23.30	15
2007	6,598.67	2,523	2,433	4,166	25.84	161
2008	51,019.15	18,520	17,858	33,161	26.32	1,260
2009	13,787.45	4,748	4,578	9,209	26.65	346
2010	29,160.31	9,477	9,138	20,022	27.00	742
2012	25,731.93	7,274	7,014	18,718	27.91	671
2013	10,033.12	2,619	2,525	7,508	28.31	265
2014	10,972.92	2,617	2,523	8,449	28.74	294
	3,027,235.60	1,878,143	1,810,990	1,216,246		60,955

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
MOSHANNON VALLEY						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2043						
NET SALVAGE PERCENT.. 0						
1988	2,378,740.29	1,681,769	1,621,637	757,104	14.50	52,214
1990	6,544.83	4,514	4,353	2,192	14.85	148
1993	8,633.92	5,724	5,519	3,115	15.25	204
1994	35,338.97	23,059	22,235	13,104	15.44	849
1995	21,272.50	13,640	13,152	8,120	15.67	518
2011	15,381.16	6,220	5,998	9,384	17.67	531
	2,465,911.67	1,734,926	1,672,893	793,019		54,464
NORRISTOWN PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
1997	3,019,786.27	1,664,506	1,604,992	1,414,795	21.17	66,830
1998	64,849.95	35,019	33,767	31,083	21.30	1,459
1999	312,258.00	164,123	158,255	154,003	21.66	7,110
2000	128,124.58	65,715	63,365	64,759	21.84	2,965
2001	405,208.19	201,470	194,266	210,942	22.25	9,481
	3,930,226.99	2,130,833	2,054,645	1,875,582		87,845
NORRISTOWN PLANT NO. 2						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2049						
NET SALVAGE PERCENT.. 0						
1982	316.42	230	222	95	15.50	6
1990	59,105.20	38,814	37,426	21,679	17.25	1,257
1995	1,320,282.91	798,507	769,956	550,327	18.30	30,073
1999	3,573,772.17	1,989,876	1,918,727	1,655,045	19.10	86,652
2004	9,652.67	4,695	4,527	5,126	20.06	256
2006	18,839.86	8,551	8,245	10,595	20.45	518
2010	35,600.00	13,514	13,031	22,569	21.25	1,062
2011	9,238.54	3,315	3,196	6,042	21.44	282
2012	111,639.37	37,578	36,234	75,405	21.68	3,478
2013	126,470.76	39,585	38,170	88,301	21.95	4,023
2014	92,686.99	26,777	25,820	66,867	22.15	3,019

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NORRISTOWN PLANT NO. 2						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2049						
NET SALVAGE PERCENT.. 0						
2018	33,127.07	5,913	5,702	27,425	23.01	1,192
2019	110.86	16	15	95	23.25	4
2021	3,397,278.49	264,988	255,513	3,141,765	23.64	132,900
	8,788,121.31	3,232,359	3,116,785	5,671,336		264,722
SILVER SPRINGS FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
1969	592,011.90	476,333	459,302	132,710	13.11	10,123
1970	0.18		0			
1971	85.00	67	65	20	13.79	1
1972	77.00	60	58	19	13.94	1
1973	159.00	124	120	39	14.10	3
1977	915.82	682	658	258	15.73	16
1982	1,483.91	1,046	1,009	475	17.14	28
1984	2,142.27	1,470	1,417	725	17.82	41
1985	5,679.13	3,841	3,704	1,975	18.18	109
1986	274.00	183	176	98	18.25	5
1989	1,399.32	894	862	537	19.19	28
1990	675,240.20	423,376	408,238	267,002	19.63	13,602
1991	1,328,257.42	820,332	791,001	537,257	19.81	27,120
1992	142.08	86	83	59	20.28	3
1994	3,438.13	1,994	1,923	1,515	21.00	72
1995	41,956.14	23,848	22,995	18,961	21.26	892
2000	21,291.43	10,676	10,294	10,997	22.87	481
2001	8,729.22	4,263	4,111	4,619	23.05	200
2004	27,520.99	12,131	11,697	15,824	24.10	657
2007	0.06		0			
2008	38,004.78	14,081	13,578	24,427	25.49	958
2009	43,188.45	15,176	14,633	28,555	25.84	1,105
2011	1,847,904.99	574,329	553,794	1,294,111	26.61	48,633
2012	4,021.14	1,163	1,121	2,900	27.02	107

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SILVER SPRINGS FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
2013	246,296.50	66,007	63,647	182,650	27.31	6,688
2014	12,654.23	3,098	2,987	9,667	27.76	348
2021	4,157,197.84	254,421	245,324	3,911,874	30.68	127,506
	9,060,071.13	2,709,681	2,612,796	6,447,275		238,727
ONEIDA VALLEY TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2047						
NET SALVAGE PERCENT.. 0						
1972	812,923.54	646,762	623,637	189,287	13.10	14,449
1973	4,215.87	3,331	3,212	1,004	13.29	76
1974	84.31	66	64	21	13.50	2
1982	1,397,906.11	1,020,192	983,715	414,191	15.18	27,285
1983	985.80	714	688	297	15.25	19
1984	1,092.20	784	756	336	15.35	22
1985	1,762.52	1,252	1,207	555	15.48	36
1986	158,342.13	110,729	106,770	51,572	15.91	3,241
1987	5,291.21	3,657	3,526	1,765	16.08	110
1990	9,016.06	6,010	5,795	3,221	16.50	195
1994	11,504.67	7,207	6,949	4,555	17.30	263
1996	206,838.17	125,096	120,623	86,215	17.64	4,887
1997	211,238.37	125,222	120,745	90,494	17.86	5,067
1998	143,526.80	83,604	80,615	62,912	17.92	3,511
2006	3,287.36	1,537	1,482	1,805	19.36	93
2007	4,241.17	1,907	1,839	2,402	19.59	123
2008	44,084.18	19,044	18,363	25,721	19.72	1,304
2009	3,924.36	1,621	1,563	2,361	19.90	119
2012	12.52	4	4	9	20.55	
2013	55,551.77	18,110	17,462	38,089	20.67	1,843
2014	2,179.04	657	634	1,546	20.85	74
	3,078,008.16	2,177,506	2,099,649	978,359		62,719

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
TWO LICK CREEK TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2037						
NET SALVAGE PERCENT.. 0						
1906	1,384.00	1,384	1,384			
1909	3,521.00	3,521	3,521			
1910	203.00	203	203			
1924	1,765.00	1,765	1,765			
1927	135.95	134	129	7	1.09	6
1928	129.00	127	122	7	1.15	6
1935	11.26	11	11			
1958	29.15	26	25	4	8.53	
1963	1,322.35	1,150	1,109	214	8.97	24
1965	229,382.77	198,233	191,126	38,256	9.11	4,199
1966	70.40	61	59	12	9.23	1
1967	2.12	2	2			
1969	304,266.24	257,957	248,709	55,557	9.69	5,733
1972	0.36		0			
1973	0.55			1	10.24	
1977	0.27		0			
1982	1,210,091.45	952,584	918,434	291,658	11.08	26,323
1983	68,041.39	53,344	51,432	16,610	11.02	1,507
1987	17,693.12	13,440	12,958	4,735	11.39	416
1988	20,150.57	15,163	14,619	5,531	11.51	481
1989	76,072.02	56,902	54,862	21,210	11.45	1,852
1990	7,021.40	5,190	5,004	2,017	11.64	173
1992	11,166.13	8,100	7,810	3,357	11.74	286
1994	1,181,000.53	835,676	805,717	375,284	11.98	31,326
1996	5,063.26	3,500	3,375	1,689	12.06	140
1997	1,346.73	917	884	463	12.17	38
2000	1,658.35	1,079	1,040	618	12.34	50
2008	8,355.53	4,499	4,338	4,018	12.86	312
2009	44,551.46	23,140	22,310	22,241	12.95	1,717
2013	396,506.56	170,894	164,767	231,739	13.20	17,556
2014	57.46	23	22	35	13.27	3
	3,590,999.38	2,609,025	2,515,739	1,075,260		92,149

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEW CASTLE FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2060						
NET SALVAGE PERCENT.. 0						
1903	17,503.17	17,503	17,503			
1929	43,855.65	43,286	41,726	2,130	1.24	1,718
1949	14,516.83	13,213	12,737	1,780	7.30	244
1952	53.74	48	46	7	7.74	1
1957	163.91	144	139	25	9.19	3
1959	27,442.45	23,710	22,856	4,587	10.07	456
1961	6.17	5	5	1	10.46	
1968	32.03	26	25	7	12.57	1
1970	511.02	409	394	117	13.23	9
1982	1,666.07	1,175	1,133	533	17.14	31
1985	1,680,738.91	1,143,239	1,102,038	578,701	17.87	32,384
1986	6,291.68	4,214	4,062	2,230	18.25	122
1987	2,974.55	1,960	1,889	1,085	18.64	58
1989	47,324.37	30,250	29,160	18,165	19.19	947
1992	836,312.24	508,143	489,830	346,482	20.02	17,307
1994	1,096.11	639	616	480	20.75	23
1995	3,900.84	2,228	2,148	1,753	21.02	83
1996	23,488.35	13,128	12,655	10,833	21.31	508
1997	20,494.09	11,190	10,787	9,707	21.62	449
1998	42,681.51	22,728	21,909	20,773	21.95	946
1999	151,639.25	78,610	75,777	75,862	22.30	3,402
2000	81,605.90	41,105	39,624	41,982	22.66	1,853
2006	2,632.42	1,079	1,040	1,592	24.49	65
2007	11,560.82	4,513	4,350	7,210	24.98	289
2008	3,214.95	1,196	1,153	2,062	25.32	81
2009	5,543.68	1,964	1,893	3,650	25.53	143
2012	233,587.43	68,348	65,885	167,703	26.59	6,307
2013	57,995.33	15,659	15,095	42,901	27.04	1,587
2014	711,008.00	175,974	169,632	541,376	27.36	19,787
	4,029,841.47	2,225,686	2,146,106	1,883,735		88,804
E.H. ALDRICH STATION						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1961	80,911.88	70,232	67,721	13,191	9.43	1,399
1962	5,350.86	4,602	4,437	913	9.92	92

PENNSYLVANIA-AMERICAN WATER COMPANY
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CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
E.H. ALDRICH STATION						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1963	479.89	412	397	83	9.93	8
1964	977.76	831	801	176	10.44	17
1966	240.00	202	195	45	10.57	4
1969	475,945.97	395,797	381,645	94,301	10.94	8,620
1970	4,015.31	3,320	3,201	814	11.10	73
1972	6,866.34	5,603	5,403	1,464	11.50	127
1975	15,658.45	12,552	12,103	3,555	11.88	299
1976	5,336.00	4,238	4,086	1,250	12.17	103
1979	5,834.00	4,544	4,382	1,452	12.50	116
1980	1,374.20	1,064	1,026	348	12.56	28
1981	8,541.92	6,529	6,296	2,246	12.95	173
1982	296,991.36	225,268	217,213	79,778	13.05	6,113
1983	48,573.14	36,527	35,221	13,352	13.19	1,012
1984	1,323.05	991	956	367	13.08	28
1986	1,829.56	1,340	1,292	537	13.51	40
1987	770.54	560	540	231	13.50	17
1988	1,916.04	1,375	1,326	590	13.78	43
1989	995.67	708	683	313	13.85	23
1990	12,231.45	8,597	8,290	3,942	13.95	283
1991	42,884.78	29,779	28,714	14,171	14.08	1,006
1992	1,006.23	689	664	342	14.25	24
1993	7,180,454.66	4,868,348	4,694,279	2,486,176	14.25	174,468
1994	16,957.32	11,311	10,907	6,051	14.48	418
1995	1,163,518.36	765,595	738,221	425,297	14.55	29,230
1996	136,637.49	88,541	85,375	51,262	14.67	3,494
1997	2,217,941.61	1,418,595	1,367,873	850,069	14.65	58,025
2000	62,308.54	37,690	36,342	25,966	15.02	1,729
2001	339,034.47	200,641	193,467	145,567	15.17	9,596
2006	14,081.71	7,325	7,063	7,019	15.68	448
2007	28,838.76	14,489	13,971	14,868	15.85	938
2012	4,153,926.68	1,672,371	1,612,575	2,541,352	16.32	155,720
2013	2,073,887.49	783,929	755,899	1,317,988	16.46	80,072
2014	191,425.87	67,363	64,954	126,471	16.58	7,628
2017	144,046.69	37,769	36,419	107,628	16.88	6,376
2018	139,569.24	31,752	30,617	108,953	16.98	6,417
2019	272,566.83	51,679	49,831	222,736	17.10	13,025
	19,155,250.12	10,873,158	10,484,385	8,670,865		567,232

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ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HAYS MINE STATION TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1894	9,692.00	9,692	9,692			
1905	584.13	584	584			
1906	38,476.97	38,477	38,477			
1909	54.95	55	55			
1915	149.00	149	149			
1923	28,824.04	28,824	28,824			
1928	1,754.14	1,733	1,671	83	1.15	72
1929	1,618.00	1,597	1,540	78	1.24	63
1930	2,023.01	1,975	1,904	119	2.24	53
1931	37,143.90	36,223	34,920	2,224	2.34	950
1935	498.19	482	465	34	2.91	12
1937	50,237.31	47,957	46,232	4,005	4.09	979
1951	27,630.25	25,066	24,165	3,466	7.37	470
1952	66,350.50	59,828	57,676	8,674	7.74	1,121
1953	143,183.72	128,293	123,679	19,505	8.12	2,402
1954	39,536.75	35,192	33,926	5,610	8.52	658
1955	2,412.48	2,133	2,056	356	8.92	40
1957	565.19	496	478	87	9.19	9
1958	2,118.16	1,845	1,779	340	9.63	35
1959	209.59	181	174	35	10.07	3
1962	233.82	198	191	43	10.94	4
1963	603.47	511	493	111	10.92	10
1967	210.00	173	167	43	12.03	4
1968	3,514.01	2,860	2,757	757	12.57	60
1969	930.65	754	727	204	12.67	16
1971	355.64	285	275	81	12.94	6
1972	2,839.64	2,245	2,164	675	13.52	50
1975	176,525.54	136,419	131,513	45,013	14.11	3,190
1976	22,111.00	16,939	16,330	5,781	14.35	403
1978	0.03		0			
1979	0.08		0			
1980	962.00	711	685	277	15.14	18
1981	410.00	300	289	121	15.47	8
1982	57.40	41	40	18	15.82	1
1983	21,321.18	15,266	14,717	6,604	15.87	416
1985	76,193.86	53,275	51,359	24,835	16.35	1,519
1986	221.00	152	147	74	16.76	4
1987	1,190.45	810	781	410	16.91	24
1989	642,885.43	426,233	410,904	231,981	17.28	13,425

PENNSYLVANIA-AMERICAN WATER COMPANY
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RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HAYS MINE STATION TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	8,727,440.00	5,702,509	5,497,425	3,230,015	17.51	184,467
1991	3,825,446.72	2,460,527	2,372,037	1,453,410	17.75	81,882
1993	8,838.96	5,516	5,318	3,521	18.08	195
1994	5,821.03	3,562	3,434	2,387	18.39	130
1995	6,669.93	4,015	3,871	2,799	18.51	151
1996	4,476.61	2,635	2,540	1,936	18.87	103
1997	76,243.66	44,008	42,425	33,818	19.05	1,775
1998	7,751.49	4,380	4,222	3,529	19.25	183
2001	250,469.04	131,697	126,961	123,508	19.84	6,225
2006	39,725.44	17,829	17,188	22,538	20.88	1,079
2008	67,546.77	27,863	26,861	40,686	21.36	1,905
2009	785.87	309	298	488	21.59	23
2010	29,994.96	11,191	10,789	19,206	21.84	879
2012	11,514,274.26	3,812,376	3,675,268	7,839,006	22.22	352,791
2013	25,957.50	7,995	7,707	18,250	22.47	812
2014	92,604.55	26,253	25,309	67,296	22.75	2,958
2017	198,983.17	40,593	39,133	159,850	23.41	6,828
2018	195,195.65	34,062	32,837	162,359	23.65	6,865
	26,481,853.09	13,415,274	12,935,607	13,546,246		675,276
SUSQUEHANNA FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2070						
NET SALVAGE PERCENT.. 0						
1920	2.00	2	2			
1927	119.00	118	114	5	1.09	5
1929	5,945.58	5,868	5,658	287	1.24	231
1931	5,319.00	5,187	5,002	317	2.34	135
1947	278.00	256	247	31	6.64	5
1954	493.00	439	423	70	8.52	8
1956	179.54	158	152	27	9.34	3
1957	631.36	554	534	97	9.19	11
1963	842.00	707	682	160	11.43	14
1973	26,394.70	20,456	19,725	6,670	14.52	459
1979	391.74	286	276	116	16.24	7
1982	7,848.56	5,503	5,306	2,542	17.48	145
1984	1,071.66	731	705	367	18.14	20

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SUSQUEHANNA FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2070						
NET SALVAGE PERCENT.. 0						
1985	34,553.31	23,241	22,410	12,143	18.50	656
1986	19,163.69	12,692	12,238	6,925	18.87	367
1990	8,393.40	5,207	5,021	3,373	20.19	167
1995	1,937,167.63	1,084,814	1,046,026	891,141	22.00	40,506
1998	37.76	20	19	18	23.31	1
2008	12,798.62	4,531	4,369	8,430	27.37	308
2009	27,067.43	9,057	8,733	18,334	27.84	659
2010	27,009.76	8,532	8,227	18,783	28.15	667
2011	5,393.93	1,592	1,535	3,859	28.65	135
2012	68,345.06	18,720	18,051	50,294	29.16	1,725
2014	10,788.07	2,486	2,397	8,391	30.06	279
	2,200,234.80	1,211,157	1,167,852	1,032,383		46,513
YARDLEY - MILL ROAD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
1997	4,036,898.44	2,225,138	2,145,578	1,891,321	21.17	89,340
1998	636,566.96	343,746	331,455	305,112	21.30	14,325
1999	22,865.33	12,018	11,588	11,277	21.66	521
2001	3,473.57	1,727	1,665	1,808	22.25	81
2007	40,599.49	16,240	15,659	24,940	24.00	1,039
2008	19,404.61	7,393	7,129	12,276	24.37	504
2010	38,695.00	13,280	12,805	25,890	24.88	1,041
2012	12,166.56	3,654	3,523	8,643	25.63	337
2013	106,076.97	29,595	28,537	77,540	25.84	3,001
2014	22,389.82	5,723	5,518	16,871	26.21	644
2021	2,288,196.39	149,190	143,856	2,144,341	28.67	74,794
	7,227,333.14	2,807,704	2,707,314	4,520,019		185,627

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SCRANTON WTP						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	6,068,557.86	3,965,196	3,823,420	2,245,138	17.51	128,220
1991	10,808.16	6,952	6,703	4,105	17.75	231
1992	63.36	40	39	25	18.02	1
1993	1,858.78	1,160	1,119	740	18.08	41
1994	2,129.12	1,303	1,256	873	18.39	47
1995	42,181.67	25,393	24,485	17,697	18.51	956
1998	71.71	41	40	32	19.25	2
1999	13,304.56	7,344	7,081	6,223	19.48	319
2000	35,457.33	19,083	18,401	17,057	19.74	864
2001	1,233.88	649	626	608	19.84	31
2003	779.79	387	373	407	20.32	20
2004	1,532.72	737	711	822	20.53	40
2007	36,939.80	15,899	15,331	21,609	21.17	1,021
2008	184,433.05	76,079	73,359	111,074	21.36	5,200
2009	133,091.40	52,358	50,486	82,605	21.59	3,826
2010	32,619.58	12,170	11,735	20,885	21.84	956
2012	31,903.15	10,563	10,185	21,718	22.22	977
2013	528.32	163	157	371	22.47	17
2014	77,664.18	22,018	21,231	56,433	22.75	2,481
2017	19,208.64	3,919	3,779	15,430	23.41	659
	6,694,367.06	4,221,454	4,070,515	2,623,852		145,909
BROWNELL WTP						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	2,297,805.71	1,501,386	1,447,703	850,102	17.51	48,550
1991	121,464.63	78,126	75,333	46,132	17.75	2,599
1992	1,960.79	1,240	1,196	765	18.02	42
1993	35.91	22	21	15	18.08	1
1995	601.31	362	349	252	18.51	14
1999	5.76	3	3	3	19.48	
2000	2,758.46	1,485	1,432	1,327	19.74	67
2001	375.44	197	190	185	19.84	9
2006	8,629.98	3,873	3,735	4,895	20.88	234
2007	58.48	25	24	34	21.17	2
2009	16,915.26	6,654	6,416	10,499	21.59	486

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BROWNELL WTP						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
2010	7,308.81	2,727	2,629	4,679	21.84	214
2012	119,943.23	39,713	38,293	81,650	22.22	3,675
2013	41,899.64	12,905	12,444	29,456	22.47	1,311
2014	19,329.32	5,480	5,284	14,045	22.75	617
2019	1,090.61	157	151	939	23.86	39
	2,640,183.34	1,654,355	1,595,203	1,044,980		57,860
CHINCHILLA WTP						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1893	14,836.59	14,837	14,837			
1907	187.12	187	187			
1910	1,427.96	1,428	1,428			
1921	42,429.29	42,429	42,429			
1990	1,459,927.15	953,916	917,982	541,946	17.51	30,951
1991	125,225.99	80,545	77,511	47,715	17.75	2,688
1992	1,469.28	929	894	575	18.02	32
1993	650.89	406	391	260	18.08	14
1994	2,419.58	1,481	1,425	994	18.39	54
1995	10,944.29	6,588	6,340	4,604	18.51	249
1997	674.81	390	375	300	19.05	16
1998	244.82	138	133	112	19.25	6
1999	163.20	90	87	77	19.48	4
2001	18,845.86	9,909	9,536	9,310	19.84	469
2005	80,991.72	37,613	36,196	44,796	20.76	2,158
2008	16,964.75	6,998	6,734	10,230	21.36	479
	1,777,403.30	1,157,884	1,116,484	660,919		37,120
NESBITT WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2048						
NET SALVAGE PERCENT.. 0						
1988	3,047,363.02	2,069,159	1,995,176	1,052,187	16.55	63,576
1989	20,213.19	13,539	13,055	7,158	16.76	427

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NESBITT WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2048						
NET SALVAGE PERCENT.. 0						
1990	4,961.45	3,275	3,158	1,804	17.00	106
1991	16,130.80	10,530	10,153	5,977	17.02	351
1992	1,148.36	737	711	438	17.31	25
1993	6,916.77	4,378	4,221	2,695	17.39	155
1994	1,753.58	1,088	1,049	704	17.73	40
1995	17,326.81	10,576	10,198	7,129	17.87	399
1997	1,057.68	621	599	459	18.25	25
1998	3,562.34	2,048	1,975	1,588	18.48	86
1999	52,859.37	29,813	28,747	24,112	18.55	1,300
2000	14,759.96	8,114	7,824	6,936	18.84	368
2001	577.08	310	299	278	18.98	15
2007	20,878.82	9,253	8,922	11,957	20.10	595
2008	8,002.36	3,397	3,276	4,727	20.34	232
2009	39,060.79	15,859	15,292	23,769	20.48	1,161
2010	14,986.30	5,786	5,579	9,407	20.67	455
2012	81,800.26	27,984	26,983	54,817	21.15	2,592
2013	32,118.74	10,246	9,880	22,239	21.35	1,042
2014	28,769.10	8,493	8,189	20,580	21.49	958
2016	562,914.51	136,338	131,463	431,451	21.90	19,701
2018	85,920.60	15,723	15,161	70,760	22.32	3,170
	4,063,081.89	2,387,267	2,301,910	1,761,172		96,779
CRYSTAL LAKE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2052						
NET SALVAGE PERCENT.. 0						
1992	4,751,108.26	2,975,144	2,868,767	1,882,341	18.50	101,748
1993	54,356.78	33,429	32,234	22,123	18.78	1,178
1995	32,030.36	19,013	18,333	13,697	19.17	715
1997	3,078.16	1,753	1,690	1,388	19.66	71
1998	3,543.58	1,976	1,905	1,638	19.84	83
2000	3,463.67	1,832	1,766	1,697	20.48	83
2001	1,211.20	626	604	608	20.55	30
2007	5,025.88	2,115	2,039	2,987	22.02	136
2008	8,813.12	3,543	3,416	5,397	22.31	242
2009	33,412.18	12,770	12,313	21,099	22.63	932
2010	3,395.99	1,232	1,188	2,208	22.84	97

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CRYSTAL LAKE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2052						
NET SALVAGE PERCENT.. 0						
2012	39,565.46	12,665	12,212	27,353	23.36	1,171
2013	53,719.47	16,008	15,436	38,284	23.56	1,625
2014	49,390.50	13,558	13,073	36,317	23.79	1,527
2019	2,864.92	393	379	2,486	25.15	99
	5,044,979.53	3,096,057	2,985,357	2,059,623		109,737
CEASETOWN WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
1993	7,988,456.15	4,888,935	4,714,130	3,274,326	19.02	172,152
1994	44,194.91	26,530	25,581	18,613	19.31	964
1995	116,941.50	68,762	66,303	50,638	19.62	2,581
1997	111,789.69	63,072	60,817	50,973	20.08	2,538
1998	3,366.88	1,860	1,793	1,573	20.25	78
1999	532.85	288	278	255	20.44	12
2000	9,264.78	4,880	4,706	4,559	20.67	221
2001	43,265.97	22,178	21,385	21,881	20.92	1,046
2006	0.33		0			
2007	9,549.60	3,973	3,831	5,719	22.46	255
2008	2,264.03	900	868	1,396	22.74	61
2009	26,199.97	9,904	9,550	16,650	23.04	723
2010	165,181.88	59,267	57,148	108,034	23.23	4,651
2012	34,593.21	10,921	10,530	24,063	23.84	1,009
2013	128,885.26	37,763	36,413	92,473	24.13	3,832
2014	37,093.23	10,015	9,657	27,436	24.33	1,128
2019	8,081.58	1,086	1,047	7,034	25.76	273
	8,729,661.82	5,210,334	5,024,037	3,705,625		191,524
WATRES WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
1993	8,769,938.43	5,367,202	5,175,296	3,594,642	19.02	188,993
1994	463,999.38	278,539	268,580	195,420	19.31	10,120

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WATRES WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
1995	152,290.96	89,547	86,345	65,946	19.62	3,361
1996	1,500.56	867	836	665	19.73	34
1998	91.08	50	48	43	20.25	2
2000	2,132.55	1,123	1,083	1,050	20.67	51
2001	3,188.33	1,634	1,576	1,613	20.92	77
2003	1,537.06	741	715	823	21.49	38
2008	38,154.92	15,167	14,625	23,530	22.74	1,035
2009	16,416.46	6,205	5,983	10,433	23.04	453
2010	6,304.52	2,262	2,181	4,123	23.23	177
2012	36,404.23	11,493	11,082	25,322	23.84	1,062
2013	70,933.95	20,784	20,041	50,893	24.13	2,109
2014	19,921.37	5,379	5,187	14,735	24.33	606
	9,582,813.80	5,800,993	5,593,577	3,989,237		208,118
HUNTSVILLE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2075						
NET SALVAGE PERCENT.. 0						
1999	5,824,071.00	2,921,354	2,816,900	3,007,171	23.85	126,087
2001	40,700.36	19,162	18,477	22,224	24.73	899
2007	10,162.55	3,740	3,606	6,556	27.48	239
2008	6,430.94	2,248	2,168	4,263	27.92	153
2009	20,153.37	6,659	6,421	13,732	28.37	484
2010	6,227.91	1,935	1,866	4,362	28.84	151
2012	14,664.07	3,952	3,811	10,853	29.82	364
2013	49,081.55	12,172	11,737	37,345	30.32	1,232
2014	41,390.35	9,350	9,016	32,375	30.84	1,050
	6,012,882.10	2,980,572	2,874,001	3,138,881		130,659
WEST SHORE REGIONAL TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2081						
NET SALVAGE PERCENT.. 0						
1995	40,740.27	22,586	21,778	18,962	22.51	842
2006	5,492,101.10	2,110,065	2,034,619	3,457,482	27.25	126,880

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WEST SHORE REGIONAL TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2081						
NET SALVAGE PERCENT.. 0						
2008	14,881.08	5,156	4,972	9,909	28.29	350
2009	10,105.34	3,311	3,193	6,913	28.74	241
2011	20,843.84	5,978	5,764	15,080	29.84	505
2012	159,124.19	42,359	40,844	118,280	30.32	3,901
2013	12,202.19	2,977	2,871	9,332	30.98	301
2014	523,557.86	116,387	112,226	411,332	31.49	13,062
2021	1,065,817.06	55,849	53,852	1,011,965	36.17	27,978
	7,339,372.93	2,364,668	2,280,119	5,059,254		174,060
MCMURRAY/SAXONBURG						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
1992	45,446.78	27,473	26,491	18,956	20.28	935
2011	3,266,953.16	1,015,369	979,064	2,287,889	26.61	85,979
2012	3,336.82	965	930	2,406	27.02	89
2018	2,859,613.70	416,074	401,197	2,458,417	29.36	83,734
	6,175,350.46	1,459,881	1,407,682	4,767,668		170,737
ROCK RUN FILTRATION PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
1992	110,697.56	66,917	64,524	46,173	20.28	2,277
2011	4,695,552.85	1,459,378	1,407,198	3,288,355	26.61	123,576
2012	14,769.41	4,273	4,120	10,649	27.02	394
2013	31,104.01	8,336	8,038	23,066	27.31	845
2014	33,548.23	8,213	7,919	25,629	27.76	923
2017	8,769.56	1,505	1,451	7,318	28.97	253
2019	145,941.79	17,280	16,662	129,280	29.78	4,341
	5,040,383.41	1,565,902	1,509,913	3,530,470		132,609

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ELLWOOD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
2018	38,365,682.82	4,968,356	4,790,711	33,574,972	33.61	998,958
2019	840,408.61	87,739	84,602	755,807	34.31	22,029
	39,206,091.43	5,056,095	4,875,313	34,330,778		1,020,987
MONTROSE TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
2018	5,095,728.34	659,897	636,302	4,459,426	33.61	132,682
2019	13,515.72	1,411	1,361	12,155	34.31	354
	5,109,244.06	661,308	637,663	4,471,581		133,036
OTHER LARGE STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1888	4,319.09	4,319	4,319			
1895	2,105.61	2,106	2,106			
1902	3,652.00	3,652	3,652			
1904	4,936.00	4,936	4,936			
1906	10,099.40	10,099	10,099			
1908	2,461.05	2,461	2,461			
1909	472.28	472	472			
1910	3,087.53	3,088	3,088			
1912	26.50	26	27			
1914	30.00	30	30			
1915	47.10	47	47			
1917	1,446.09	1,446	1,446			
1918	297.26	297	297			
1921	1,932.91	1,933	1,933			
1922	0.32		0			
1923	265,311.81	265,312	265,312			
1924	90,322.54	90,323	90,323			
1926	44.00	44	44			
1927	378.43	378	378			
1928	20,047.10	20,047	20,047			

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER LARGE STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1930	3,544.35	3,544	3,544			
1931	4,019.43	4,019	4,019			
1932	16.80	17	17			
1933	212.87	211	203	10	0.91	10
1934	114.24	113	109	6	1.09	6
1937	519.55	509	489	30	1.72	17
1938	275.05	269	259	16	1.96	8
1941	290.96	282	271	20	2.75	7
1942	13.00	13	13			
1944	104.76	100	96	9	3.64	2
1946	1,076.08	1,027	987	89	3.65	24
1947	8,786.40	8,347	8,024	763	4.00	191
1948	183.72	174	167	16	4.37	4
1950	107.70	101	97	11	4.52	2
1951	111,670.85	104,524	100,476	11,195	4.92	2,275
1952	1,270.21	1,181	1,135	135	5.34	25
1953	245,118.99	226,490	217,717	27,402	5.76	4,757
1954	40,806.53	37,730	36,269	4,538	5.63	806
1955	27,213.35	24,982	24,014	3,199	6.07	527
1956	25,003.38	22,783	21,901	3,103	6.53	475
1957	10,398.25	9,471	9,104	1,294	6.46	200
1958	115,609.78	104,453	100,407	15,203	6.94	2,191
1959	41,625.14	37,563	36,108	5,517	6.92	797
1960	8,841.76	7,910	7,604	1,238	7.42	167
1961	214.35	190	183	32	7.93	4
1962	9,138.26	8,083	7,770	1,368	7.97	172
1963	421.99	370	356	66	8.49	8
1964	1,925.43	1,681	1,616	310	8.57	36
1965	9,065.31	7,834	7,531	1,535	9.11	168
1966	2,217.82	1,896	1,823	395	9.67	41
1967	11,280.31	9,602	9,230	2,050	9.79	209
1968	536.42	451	434	103	10.36	10
1969	21,831.35	18,273	17,565	4,266	10.52	406
1970	983.27	813	782	202	11.10	18
1971	1,995.36	1,629	1,566	429	11.69	37
1972	30,857.67	25,022	24,053	6,805	11.89	572
1973	280,635.28	224,508	215,812	64,823	12.50	5,186
1974	147.41	116	112	36	13.11	3
1975	15,305.09	11,901	11,440	3,865	13.73	282
1976	1,757.11	1,354	1,302	456	13.98	33

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER LARGE STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1977	3,419.41	2,595	2,494	925	14.61	63
1978	12,447.17	9,298	8,938	3,509	15.24	230
1979	5,563.62	4,088	3,930	1,634	15.88	103
1980	3,355.01	2,438	2,344	1,011	16.17	63
1981	4,947.04	3,532	3,395	1,552	16.82	92
1982	16,431.01	11,520	11,074	5,357	17.48	306
1983	91,728.98	63,110	60,666	31,063	18.14	1,712
1984	37,576.21	25,353	24,371	13,205	18.80	702
1985	361,182.50	240,186	230,883	130,300	19.14	6,808
1986	392,463.96	255,573	245,674	146,790	19.82	7,406
1987	35,369.70	22,538	21,665	13,705	20.50	669
1988	121,917.08	75,954	73,012	48,905	21.18	2,309
1989	610,557.78	371,585	357,193	253,365	21.87	11,585
1990	378,132.57	224,611	215,911	162,221	22.56	7,191
1991	117,190.70	67,877	65,248	51,943	23.25	2,234
1992	6,360.67	3,589	3,450	2,911	23.95	122
1993	3,913.77	2,149	2,066	1,848	24.64	75
1994	838,787.19	447,577	430,241	408,546	25.35	16,116
1995	83,595.06	43,302	41,625	41,970	26.05	1,611
1996	492,810.81	247,490	237,904	254,907	26.76	9,526
1997	168,967.38	82,152	78,970	89,997	27.48	3,275
1998	1,106.19	520	500	606	28.19	21
1999	23.87	11	11	13	28.91	
2000	2,221.27	971	933	1,288	29.63	43
2001	721.32	303	291	430	30.36	14
2002	774,707.69	312,362	300,263	474,444	31.08	15,265
2003	174,532.44	67,370	64,761	109,772	31.81	3,451
2004	31,501.32	11,611	11,161	20,340	32.55	625
2005	40,669.07	14,275	13,722	26,947	33.28	810
2006	761,367.68	253,688	243,862	517,506	34.02	15,212
2007	347,241.89	109,451	105,212	242,030	34.76	6,963
2008	273,311.47	81,174	78,030	195,282	35.51	5,499
2009	341,171.12	94,573	90,910	250,261	36.51	6,855
2010	1,800.57	466	448	1,353	37.25	36
2011	105,136.85	25,233	24,256	80,881	38.00	2,128
2012	1,261,748.47	278,973	268,168	993,581	38.75	25,641
2013	858,147.43	173,346	166,632	691,516	39.50	17,507
2014	274,340.84	50,122	48,181	226,160	40.26	5,617
2016	163,029.40	23,281	22,379	140,650	42.02	3,347
2017	233,590.08	28,732	27,619	205,971	42.78	4,815

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER LARGE STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
2018	1,129,077.93	116,295	111,791	1,017,287	43.54	23,364
2019	1,945,869.60	161,118	154,877	1,790,992	44.31	40,420
2020	686,748.95	43,059	41,391	645,358	44.85	14,389
2021	1,728,512.91	72,598	69,786	1,658,727	45.62	36,360
9999	27,162.27-	9,038-	8,715-	18,447-		531-
	16,342,286.31	5,437,563	5,243,141	11,099,145		319,725
	226,390,011.47	93,927,082	90,568,697	135,821,312		5,579,125
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					24.3	2.46

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 320.18 PURIFICATION SYSTEM - LARGE STRUCTURES PAINT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1982	50,562.15	50,562	50,562			
1997	52,683.58	52,684	52,684			
	103,245.73	103,246	103,246			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 320.19 PURIFICATION SYSTEM - LARGE STRUCTURES PAINT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1983	72,520.43	72,520	72,520			
1984	121,617.90	121,618	121,618			
1985	126,432.86	126,433	126,433			
1986	103,281.57	103,282	103,282			
1987	104,997.90	104,998	104,998			
1988	44,292.18	44,292	44,292			
1989	6,520.49	6,520	6,520			
1991	1,937.55	1,938	1,938			
1994	36.73	37	37			
1996	174,603.42	174,603	174,603			
1997	243,625.95	243,626	243,626			
1998	175,497.41	175,497	175,497			
1999	471,219.17	471,219	471,219			
2004	475,875.22	475,875	475,875			
2005	604,791.57	604,792	604,792			
2007	198,308.24	198,308	198,308			
2008	114,399.73	114,400	114,400			
2015	11,632.92	9,306	1,344	10,289	2.00	5,144
2021	616,354.70	123,271	17,798	598,557	8.00	74,820
	3,667,945.94	3,172,535	3,059,100	608,846		79,964

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.6 2.18

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.2 PURIFICATION SYSTEM - CHEMICAL TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 42-R0.5						
NET SALVAGE PERCENT.. 0						
1917	978.00	978	978			
1928	456.40	456	456			
1929	45.50	46	46			
1935	33.55	34	34			
1940	8.13	8	8			
1945	29.17	28	27	2	2.65	1
1947	7,302.60	6,937	6,689	614	4.00	154
1949	80.97	76	73	8	4.74	2
1950	204.80	191	184	21	5.12	4
1951	48.93	45	43	6	5.52	1
1953	62.36	57	55	7	6.34	1
1955	10,196.33	9,291	8,959	1,237	6.63	187
1957	562.75	505	487	76	7.53	10
1958	39,891.80	35,524	34,253	5,639	7.99	706
1962	6,154.17	5,331	5,140	1,014	9.42	108
1963	823.57	712	687	137	9.44	15
1964	7,636.81	6,533	6,299	1,338	9.97	134
1965	37,339.44	31,619	30,488	6,851	10.49	653
1966	1,688.98	1,425	1,374	315	10.57	30
1967	688.22	574	553	135	11.11	12
1968	799.21	664	640	159	11.23	14
1969	2,258.71	1,854	1,788	471	11.79	40
1970	8,536.97	6,968	6,719	1,818	11.94	152
1971	15,632.78	12,600	12,149	3,484	12.52	278
1972	32,603.76	26,106	25,172	7,432	12.69	586
1973	256,480.10	202,619	195,372	61,108	13.29	4,598
1974	31,941.16	25,042	24,146	7,795	13.50	577
1975	42,769.93	33,258	32,068	10,702	13.73	779
1976	1,073,863.59	822,687	793,263	280,601	14.35	19,554
1977	28,840.00	21,890	21,107	7,733	14.61	529
1978	51,212.94	38,487	37,110	14,103	14.88	948
1979	19,376.89	14,409	13,894	5,483	15.17	361
1980	60,262.01	44,052	42,476	17,786	15.82	1,124
1981	192,254.16	138,884	133,917	58,337	16.14	3,614
1982	7,527.22	5,370	5,178	2,349	16.47	143
1983	72,692.91	51,176	49,346	23,347	16.82	1,388
1984	292,693.25	203,188	195,921	96,772	17.18	5,633
1985	975,342.46	667,134	643,273	332,069	17.56	18,911
1986	2,015,391.19	1,357,164	1,308,623	706,768	17.95	39,374
1987	719,004.40	476,269	459,235	259,769	18.35	14,156
1988	108,892.48	71,270	68,721	40,171	18.48	2,174

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.2 PURIFICATION SYSTEM - CHEMICAL TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 42-R0.5						
NET SALVAGE PERCENT.. 0						
1989	781,726.82	502,338	484,371	297,356	18.91	15,725
1990	435,976.16	274,796	264,968	171,008	19.36	8,833
1991	703,892.04	434,724	419,176	284,716	19.81	14,372
1992	4,299,099.40	2,612,133	2,518,707	1,780,392	20.02	88,931
1993	99,614.98	59,171	57,055	42,560	20.51	2,075
1994	739,039.18	430,786	415,378	323,661	20.75	15,598
1995	4,638,977.20	2,649,784	2,555,011	2,083,966	21.02	99,142
1996	2,064,870.70	1,148,481	1,107,404	957,467	21.54	44,451
1997	3,330,337.85	1,809,706	1,744,980	1,585,358	21.85	72,556
1998	2,072,021.04	1,098,171	1,058,894	1,013,127	22.17	45,698
1999	7,194,288.92	3,712,253	3,579,480	3,614,809	22.51	160,587
2000	1,257.81	631	608	650	22.87	28
2001	2,457,933.54	1,200,455	1,157,519	1,300,415	23.05	56,417
2002	77,713.84	36,720	35,407	42,307	23.44	1,805
2003	1,964,206.88	899,607	867,431	1,096,776	23.67	46,336
2004	1,987,873.10	880,031	848,556	1,139,317	23.92	47,630
2005	2,175,149.75	927,919	894,731	1,280,419	24.19	52,932
2006	567,328.98	232,435	224,122	343,207	24.49	14,014
2007	2,188,647.43	861,452	830,641	1,358,006	24.65	55,092
2008	1,515,174.45	570,463	550,060	965,114	24.84	38,853
2009	204,255.18	73,205	70,587	133,668	25.06	5,334
2010	540,736.64	184,175	177,588	363,149	25.17	14,428
2011	1,214,021.39	390,429	376,465	837,556	25.31	33,092
2012	1,199,878.83	362,963	349,981	849,898	25.36	33,513
2013	357,629.77	101,209	97,589	260,041	25.34	10,262
2014	520,435.28	136,302	131,427	389,008	25.36	15,339
2015	3,987,083.51	960,090	925,751	3,061,333	25.22	121,385
2016	5,576,675.55	1,214,042	1,170,620	4,406,056	25.15	175,191
2017	2,581,460.05	501,836	483,887	2,097,573	24.86	84,375
2018	389,934.46	66,094	63,730	326,204	24.50	13,314
2019	3,542,077.58	507,226	489,084	3,052,994	23.93	127,580
2020	7,678,861.29	882,301	850,745	6,828,116	23.11	295,462
2021	10,060,465.68	841,055	810,974	9,249,492	21.92	421,966
2022	17,058,416.76	825,627	796,097	16,262,320	19.66	827,178
2023	2,871,305.97	41,921	40,422	2,830,884	16.82	168,305
9999	42,367.00-	13,035-	12,569-	29,798-		1,373-
	103,158,609.61	31,738,957	30,603,828	72,554,782		3,343,377

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.7 3.24

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.29 PURIFICATION SYSTEM - CHEMICAL TREATMENT PAINT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FULLY ACCRUED						
NET SALVAGE PERCENT.. 0						
1985	8,167.87	8,168	8,168			
	8,167.87	8,168	8,168			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.3 GRANULAR ACTIVATED CARBON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 11-L0.5						
NET SALVAGE PERCENT.. 0						
1992	755.89	710	637	119	2.00	60
1994	3,127.19	2,911	2,614	513	2.15	239
1995	22,529.51	20,880	18,747	3,783	2.21	1,712
1996	19,021.10	17,513	15,724	3,297	2.33	1,415
1998	24,638.62	22,360	20,076	4,563	2.55	1,789
1999	9,019.00	8,117	7,288	1,731	2.67	648
2000	295,626.49	263,817	236,864	58,762	2.77	21,214
2001	606,833.55	535,349	480,654	126,180	2.94	42,918
2002	259,574.29	226,764	203,596	55,978	3.04	18,414
2003	38,501.51	33,188	29,797	8,705	3.20	2,720
2007	133,689.45	107,807	96,793	36,896	3.84	9,608
2008	22,525.60	17,773	15,957	6,569	4.01	1,638
2009	290,056.89	223,344	200,526	89,531	4.18	21,419
2010	252,059.62	189,070	169,753	82,307	4.33	19,009
2011	762,598.64	553,647	497,083	265,516	4.53	58,613
2012	400,634.51	280,725	252,044	148,591	4.70	31,615
2013	1,334,285.01	896,640	805,034	529,251	4.88	108,453
2014	648,647.47	415,653	373,187	275,460	5.04	54,655
2015	42,995.05	26,038	23,378	19,617	5.21	3,765
2016	110,250.14	62,435	56,056	54,194	5.36	10,111
2017	448,612.29	234,176	210,251	238,361	5.49	43,417
2018	1,504,916.77	708,063	635,723	869,194	5.63	154,386
2019	1,347,102.38	551,234	494,917	852,185	5.78	147,437
2020	651,913.48	219,043	196,664	455,249	5.93	76,770
2021	768,470.48	190,581	171,110	597,360	6.06	98,574
2022	2,686,287.56	378,767	340,070	2,346,218	6.09	385,257
2023	19,493.78	776	697	18,797	6.03	3,117
	12,704,166.27	6,187,381	5,555,240	7,148,926		1,318,973

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.4 10.38

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.37 WASTE HANDLING AND TREATMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-R3						
NET SALVAGE PERCENT.. 0						
1991	6,216,777.58	5,411,083	6,216,778			
1997	592,975.99	460,980	531,001	61,975	7.44	8,330
1999	1,625,577.08	1,197,725	1,379,655	245,922	8.57	28,696
2000	774,393.70	553,924	638,063	136,331	9.15	14,900
2002	3,162.77	2,119	2,441	722	10.35	70
2003	256,272.33	165,552	190,699	65,573	10.96	5,983
2004	54,091.81	33,504	38,593	15,499	11.67	1,328
2005	13,991.19	8,311	9,573	4,418	12.30	359
2013	15,021.77	5,363	6,178	8,844	18.01	491
2014	585,687.37	189,763	218,587	367,100	18.78	19,547
2015	1,027,405.88	298,359	343,678	683,728	19.55	34,973
2016	3,708,242.13	950,052	1,094,361	2,613,881	20.32	128,636
2017	16,493.28	3,652	4,207	12,286	21.10	582
	14,890,092.88	9,280,387	10,673,814	4,216,279		243,895

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.3 1.64

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
1900	155,293.70	152,809	146,562	8,732	2.00	4,366
1906	5,215.73	5,004	4,799	417	4.95	84
1907	47,398.97	45,636	43,770	3,629	4.48	810
1911	21,166.48	20,150	19,326	1,840	5.65	326
1912	4,869.35	4,594	4,406	463	6.65	70
1922	37,493.82	34,461	33,052	4,442	8.89	500
1923	14,266.34	12,982	12,451	1,815	9.89	184
1924	1,161.00	1,057	1,014	147	9.70	15
1929	2,421.17	2,162	2,074	347	11.26	31
1931	5,400.00	4,769	4,574	826	12.17	68
1933	65.00	57	55	10	13.09	1
1935	289.70	252	242	48	13.01	4
1938	6,799.96	5,838	5,599	1,201	14.01	86
1940	15,697.76	13,290	12,747	2,951	15.04	196
1941	8,321.81	7,029	6,742	1,580	15.09	105
1943	65.00	54	52	13	16.15	1
1949	20,647.24	16,654	15,973	4,674	17.74	263
1950	11,222.42	9,012	8,644	2,578	17.91	144
1951	84,607.38	67,618	64,854	19,753	18.09	1,092
1952	1,055.33	832	798	257	19.09	13
1953	767,149.49	601,445	576,858	190,291	19.29	9,865
1954	172,265.66	134,316	128,825	43,441	19.50	2,228
1955	59,109.20	45,821	43,948	15,161	19.72	769
1956	48,733.30	37,549	36,014	12,719	19.96	637
1957	84,603.91	64,773	62,125	22,479	20.21	1,112
1958	76,375.43	58,084	55,710	20,665	20.47	1,010
1959	167,086.54	126,184	121,026	46,061	20.75	2,220
1960	24,594.73	18,284	17,537	7,058	21.75	325
1961	401,860.35	296,493	284,373	117,487	22.03	5,333
1962	187,270.36	137,082	131,478	55,792	22.33	2,499
1963	15,182.04	11,022	10,571	4,611	22.64	204
1964	45,660.48	32,866	31,522	14,138	22.97	615
1965	56,591.91	40,373	38,723	17,869	23.30	767
1966	395,068.78	279,235	267,820	127,249	23.65	5,381
1967	798,194.72	558,736	535,895	262,300	24.00	10,929
1968	283,136.03	197,771	189,686	93,450	23.74	3,936
1969	84,459.71	58,379	55,993	28,467	24.12	1,180
1970	69,969.80	47,838	45,882	24,088	24.52	982
1971	377,069.90	254,899	244,479	132,591	24.92	5,321
1972	173,525.11	115,932	111,193	62,332	25.34	2,460
1973	3,537,472.80	2,334,732	2,239,290	1,298,183	25.76	50,395

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
1974	695,684.14	453,377	434,843	260,841	26.19	9,960
1975	390,540.59	251,196	240,927	149,614	26.63	5,618
1976	351,039.60	224,385	215,212	135,828	26.53	5,120
1977	206,523.03	130,151	124,831	81,692	26.99	3,027
1978	447,887.40	278,138	266,768	181,119	27.46	6,596
1979	297,675.32	182,058	174,616	123,059	27.94	4,404
1980	1,077.30	649	622	455	28.43	16
1981	53,859.69	32,122	30,809	23,051	28.42	811
1982	890,580.37	522,147	500,802	389,778	28.93	13,473
1983	1,392,338.73	801,987	769,202	623,137	29.44	21,166
1984	32,388.90	18,442	17,688	14,701	29.49	499
1985	1,740,960.68	972,501	932,746	808,215	30.03	26,914
1986	1,636,486.58	896,140	859,506	776,981	30.57	25,416
1987	229,882.37	124,136	119,061	110,821	30.67	3,613
1988	3,064,458.15	1,619,566	1,553,359	1,511,099	31.23	48,386
1989	5,112,176.18	2,659,354	2,550,641	2,561,535	31.36	81,682
1990	6,134,740.75	3,117,675	2,990,226	3,144,515	31.94	98,451
1991	673,096.86	336,010	322,274	350,823	32.10	10,929
1992	1,316,505.21	640,743	614,550	701,955	32.69	21,473
1993	7,655,819.25	3,651,826	3,502,542	4,153,277	32.89	126,278
1994	2,029,447.84	941,664	903,169	1,126,279	33.50	33,620
1995	1,586,740.83	719,746	690,323	896,418	33.73	26,576
1996	3,326,830.45	1,473,121	1,412,901	1,913,929	33.98	56,325
1997	2,282,069.17	979,008	938,987	1,343,082	34.61	38,806
1998	1,217,249.89	508,202	487,427	729,823	34.88	20,924
1999	5,103,799.29	2,070,101	1,985,477	3,118,322	35.17	88,664
2000	3,496,994.15	1,367,325	1,311,430	2,185,564	35.82	61,015
2001	5,035,983.93	1,905,616	1,827,715	3,208,269	36.14	88,773
2002	2,276,354.48	831,780	797,777	1,478,577	36.47	40,542
2003	2,411,912.94	848,993	814,287	1,597,626	36.82	43,390
2004	1,521,508.36	514,574	493,539	1,027,969	37.18	27,648
2005	3,737,956.90	1,211,098	1,161,589	2,576,368	37.56	68,593
2006	2,882,960.94	891,988	855,524	2,027,437	37.95	53,424
2007	1,535,575.60	452,073	433,592	1,101,984	38.35	28,735
2008	236,283.67	65,923	63,228	173,056	38.76	4,465
2009	24,847.54	6,540	6,273	18,575	39.19	474
2010	797,791.47	197,054	188,999	608,792	39.63	15,362
2011	259,432.54	59,773	57,330	202,103	40.08	5,042
2012	224,267.92	47,859	45,903	178,365	40.55	4,399
2013	4,270,664.76	837,050	802,832	3,467,833	41.02	84,540
2014	6,070,680.40	1,087,259	1,042,812	5,027,868	41.25	121,888

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
2015	376,902.04	60,606	58,128	318,774	41.75	7,635
2016	8,407,763.94	1,194,743	1,145,902	7,261,862	42.26	171,838
2017	5,267,135.15	651,018	624,405	4,642,730	42.54	109,138
2018	3,556,318.34	371,635	356,443	3,199,875	42.85	74,676
2019	3,423,573.89	288,950	277,138	3,146,436	43.39	72,515
2020	2,148,630.60	137,942	132,303	2,016,328	43.73	46,109
2021	2,323,540.53	100,842	96,719	2,226,822	44.08	50,518
2022	3,453,764.37	76,328	73,208	3,380,556	44.25	76,397
2023	35,321.52	198	189	35,133	44.39	791
9999	2,905,114.51-	1,033,688-	991,431-	1,913,684-		52,164-
	117,009,748.45	41,633,998	39,932,025	77,077,723		2,101,017

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.7 1.80

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.1 ELEVATED TANKS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
1992	189,738.86	92,346	88,571	101,168	32.69	3,095
1994	0.01					
2007	112,587.14	33,146	31,791	80,796	38.35	2,107
2008	452,291.74	126,189	121,030	331,262	38.76	8,546
2009	610,424.47	160,664	154,096	456,328	39.19	11,644
2010	1,113,481.79	275,030	263,787	849,695	39.63	21,441
2011	1.21			1	40.08	
2012	70,427.57	15,029	14,415	56,013	40.55	1,381
2013	7,305,295.40	1,431,838	1,373,305	5,931,990	41.02	144,612
2014	402,306.06	72,053	69,108	333,198	41.25	8,078
2015	75,692.00	12,171	11,673	64,019	41.75	1,533
2017	22,485.50	2,779	2,665	19,820	42.54	466
2018	41,920.13	4,381	4,202	37,718	42.85	880
2019	3,889.76	328	315	3,575	43.39	82
2021	3,744,315.33	162,503	155,860	3,588,455	44.08	81,408
	14,144,856.97	2,388,457	2,290,818	11,854,039		285,273

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.6 2.02

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.2 GROUND LEVEL FACILITIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
2007	729,975.76	214,905	206,120	523,856	38.35	13,660
2008	37,653.40	10,505	10,076	27,577	38.76	711
2009	21,769.28	5,730	5,496	16,273	39.19	415
2010	13,139.81	3,246	3,113	10,027	39.63	253
2011	261,613.14	60,276	57,812	203,801	40.08	5,085
2012	1,944,284.21	414,910	397,949	1,546,335	40.55	38,134
2013	5,126,495.63	1,004,793	963,717	4,162,779	41.02	101,482
2014	4,119,155.97	737,741	707,583	3,411,573	41.25	82,705
2015	141,079.99	22,686	21,759	119,321	41.75	2,858
2016	1,686,605.76	239,667	229,869	1,456,737	42.26	34,471
2017	150,532.79	18,606	17,845	132,688	42.54	3,119
2018	115,120.43	12,030	11,538	103,582	42.85	2,417
2019	33,498.57	2,827	2,711	30,788	43.39	710
2021	3,737,383.20	162,202	155,572	3,581,811	44.08	81,257
	18,118,307.94	2,910,124	2,791,160	15,327,148		367,277

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.7 2.03

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.3 BELOW GRADE FACILITIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
2007	173,959.09	51,214	49,120	124,839	38.35	3,255
2010	31,397.64	7,755	7,438	23,960	39.63	605
2011	100,934.51	23,255	22,304	78,631	40.08	1,962
2014	280,555.88	50,248	48,194	232,362	41.25	5,633
2016	231,860.11	32,947	31,601	200,259	42.26	4,739
	818,707.23	165,419	158,657	660,050		16,194

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 40.8 1.98

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.4 CLEARWELL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
2012	12,768,982.03	2,724,901	2,613,509	10,155,473	40.55	250,443
2018	32,063.64	3,351	3,214	28,850	42.85	673
2019	5,254.37	443	425	4,829	43.39	111
	12,806,300.04	2,728,695	2,617,148	10,189,152		251,227
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					40.6	1.96

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.58 DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1959	427.00	427	427			
1961	3,005.00	3,005	3,005			
1962	646.00	646	646			
1963	501.00	501	501			
1984	69,262.85	69,263	69,263			
1990	105,687.39	105,687	105,687			
1997	138,050.00	138,050	138,050			
2002	764,914.30	764,914	764,914			
2003	135,772.35	135,772	135,772			
2004	456,940.96	456,941	456,941			
2007	263,798.12	263,798	263,798			
2015	272,106.38	217,685	135,749	136,357	2.00	68,178
2021	92,812.80	18,563	11,576	81,237	8.00	10,155
	2,303,924.15	2,175,252	2,086,329	217,595		78,333

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.8 3.40

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.59 DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1983	7,199.23	7,199	7,199			
1984	26,862.85	26,863	26,863			
1986	31,550.43	31,550	31,550			
1987	14,581.80	14,582	14,582			
1989	37,490.69	37,491	37,491			
1991	39,583.25	39,583	39,583			
1994	44,519.20	44,519	44,519			
1996	176,668.43	176,668	176,668			
1997	1,106,434.97	1,106,435	1,106,435			
1998	243,741.29	243,741	243,741			
1999	465,161.88	465,162	465,162			
2000	103,352.55	103,353	103,353			
2001	1,262,286.55	1,262,287	1,262,287			
2004	736,540.63	736,541	736,541			
2005	2,772,132.56	2,772,133	2,772,133			
2006	1,898,932.85	1,898,933	1,898,933			
2007	1,611,757.81	1,611,758	1,611,758			
2008	1,742,652.76	1,742,653	1,742,653			
2009	387,058.80	387,059	387,059			
2010	7,332.39	7,332	7,332			
2011	1,233,227.05	1,233,227	1,233,227			
2012	3,394,359.12	3,394,359	3,394,359			
2013	1,350,299.88	1,350,300	1,350,300			
2014	772,333.61	695,100	607,006	165,328	1.00	165,328
2015	3,817,936.25	3,054,349	2,667,253	1,150,683	2.00	575,342
2016	800,361.02	560,253	489,249	311,112	3.00	103,704
2017	602,080.95	361,249	315,466	286,615	4.00	71,654
2018	2,787,180.26	1,393,590	1,216,972	1,570,208	5.00	314,042
2019	1,065,127.17	426,051	372,055	693,072	6.00	115,512
2020	3,609,228.96	1,082,769	945,543	2,663,686	7.00	380,527
2021	4,311,190.90	862,238	752,962	3,558,229	8.00	444,779
2022	4,651,769.10	465,177	406,222	4,245,547	9.00	471,727
	41,110,935.19	27,594,504	26,466,456	14,644,479		2,642,615

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.5 6.43

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 331 MAINS AND ACCESSORIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 90-R2						
NET SALVAGE PERCENT.. 0						
1843	72.34	72	72			
1868	3,815.50	3,726	2,208	1,608	3.73	431
1869	235.00	232	138	97	2.25	43
1870	8,505.01	8,328	4,936	3,569	3.25	1,098
1871	2,423.76	2,358	1,398	1,026	4.25	241
1872	47,715.48	46,112	27,331	20,384	5.25	3,883
1873	9,244.21	9,013	5,342	3,902	3.85	1,014
1874	40,344.01	39,073	23,159	17,185	4.85	3,543
1875	4,224.18	4,064	2,409	1,815	5.85	310
1876	8,018.69	7,780	4,611	3,408	4.52	754
1877	159.13	153	91	68	5.52	12
1878	6,503.35	6,224	3,689	2,814	6.52	432
1879	4,559.72	4,399	2,607	1,953	5.25	372
1880	300.77	288	171	130	6.25	21
1882	93.32	89	53	40	6.06	7
1883	98.23	94	56	42	7.06	6
1884	2,710.09	2,562	1,519	1,191	8.06	148
1885	30,240.08	28,795	17,067	13,173	6.93	1,901
1886	41,598.97	39,324	23,308	18,291	7.93	2,307
1887	47,831.62	44,885	26,604	21,228	8.93	2,377
1888	116,191.19	109,801	65,081	51,110	7.86	6,503
1889	154,882.44	145,280	86,110	68,772	8.86	7,762
1890	284,153.79	264,547	156,802	127,352	9.86	12,916
1891	124,805.87	116,968	69,329	55,477	8.85	6,269
1892	88,431.95	82,251	48,752	39,680	9.85	4,028
1893	308,187.16	284,457	168,603	139,584	10.85	12,865
1894	65,538.94	60,873	36,081	29,458	9.89	2,979
1895	7,508.92	6,920	4,102	3,407	10.89	313
1896	461,368.18	427,734	253,526	207,842	9.99	20,805
1897	79,830.18	73,428	43,522	36,308	10.99	3,304
1898	84,431.57	77,044	45,665	38,767	11.99	3,233
1899	401,311.30	368,243	218,264	183,047	11.14	16,432
1900	1,386,114.08	1,261,641	747,797	638,317	12.14	52,580
1901	211,685.63	193,692	114,805	96,881	11.33	8,551
1902	189,647.04	172,105	102,010	87,637	12.33	7,108
1903	348,828.31	313,945	186,081	162,747	13.33	12,209
1904	138,513.31	125,271	74,250	64,263	12.58	5,108
1905	512,613.36	459,712	272,479	240,134	13.58	17,683
1906	295,672.22	266,371	157,883	137,789	12.87	10,706
1907	1,778,349.27	1,588,422	941,486	836,863	13.87	60,336
1908	506,173.79	448,217	265,666	240,508	14.87	16,174

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 331 MAINS AND ACCESSORIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 90-R2						
NET SALVAGE PERCENT.. 0						
1909	333,797.66	296,813	175,926	157,872	14.21	11,110
1910	280,423.48	247,165	146,499	133,924	15.21	8,805
1911	146,488.97	129,613	76,824	69,665	14.58	4,778
1912	282,283.51	247,534	146,718	135,566	15.58	8,701
1913	158,623.04	139,588	82,736	75,887	15.00	5,059
1914	461,950.17	402,821	238,759	223,191	16.00	13,949
1915	275,065.23	240,627	142,624	132,441	15.46	8,567
1916	1,138,589.63	986,816	584,903	553,687	16.46	33,638
1917	141,408.24	121,413	71,964	69,444	17.46	3,977
1918	81,288.96	69,990	41,484	39,805	16.95	2,348
1919	133,473.58	113,826	67,467	66,007	17.95	3,677
1920	262,582.04	224,481	133,054	129,528	17.48	7,410
1921	255,830.21	216,586	128,374	127,456	18.48	6,897
1922	225,911.89	191,664	113,603	112,309	18.05	6,222
1923	1,719,693.35	1,444,542	856,206	863,487	19.05	45,327
1924	932,150.19	784,404	464,930	467,220	18.65	25,052
1925	737,052.64	613,965	363,908	373,145	19.65	18,990
1926	1,945,121.28	1,603,752	950,572	994,549	20.65	48,162
1927	246,955.34	203,886	120,847	126,108	20.28	6,218
1928	378,524.70	309,255	183,301	195,224	21.28	9,174
1929	198,335.85	162,199	96,138	102,198	20.94	4,881
1930	161,597.25	130,748	77,497	84,100	21.94	3,833
1931	236,336.46	191,338	113,409	122,927	21.64	5,681
1932	71,414.12	57,188	33,896	37,518	22.64	1,657
1933	40,977.13	32,823	19,455	21,522	22.36	963
1934	83,027.54	65,766	38,981	44,047	23.36	1,886
1935	144,155.76	114,171	67,671	76,485	23.11	3,310
1936	109,537.53	85,768	50,836	58,702	24.11	2,435
1937	175,012.97	136,965	81,182	93,831	23.89	3,928
1938	81,625.28	63,137	37,422	44,203	24.89	1,776
1939	167,456.58	129,410	76,704	90,753	24.70	3,674
1940	128,533.28	98,148	58,174	70,359	25.70	2,738
1941	120,166.50	91,639	54,316	65,850	25.53	2,579
1942	96,210.33	72,475	42,957	53,253	26.53	2,007
1943	81,102.01	60,989	36,149	44,953	26.38	1,704
1944	43,462.71	32,275	19,130	24,333	27.38	889
1945	239,433.58	175,553	104,053	135,381	28.38	4,770
1946	337,365.23	246,783	146,273	191,092	28.26	6,762
1947	292,602.71	211,259	125,217	167,386	29.26	5,721
1948	287,717.97	207,157	122,786	164,932	29.17	5,654
1949	123,648.46	87,840	52,064	71,584	30.17	2,373

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 331 MAINS AND ACCESSORIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 90-R2						
NET SALVAGE PERCENT.. 0						
1950	193,504.88	137,021	81,215	112,290	30.09	3,732
1951	443,508.68	309,746	183,592	259,917	31.09	8,360
1952	410,891.37	285,898	169,457	241,434	31.04	7,778
1953	1,057,335.33	725,332	429,917	627,418	32.04	19,582
1954	1,389,872.68	949,422	562,739	827,134	32.01	25,840
1955	3,049,018.21	2,052,599	1,216,612	1,832,406	33.01	55,511
1956	1,667,677.16	1,117,344	662,270	1,005,407	33.00	30,467
1957	2,425,088.64	1,600,559	948,680	1,476,409	34.00	43,424
1958	2,171,666.11	1,425,699	845,037	1,326,629	34.01	39,007
1959	2,399,045.56	1,550,743	919,153	1,479,893	35.01	42,271
1960	2,931,453.67	1,883,752	1,116,533	1,814,921	35.04	51,796
1961	3,926,347.46	2,483,022	1,471,731	2,454,616	36.04	68,108
1962	1,481,539.15	930,851	551,732	929,807	36.09	25,764
1963	2,074,852.53	1,282,259	760,018	1,314,835	37.09	35,450
1964	4,989,327.28	3,061,451	1,814,576	3,174,751	37.15	85,458
1965	4,819,300.76	2,907,002	1,723,032	3,096,269	38.15	81,160
1966	4,881,223.09	2,921,412	1,731,573	3,149,650	38.24	82,365
1967	5,838,927.10	3,433,289	2,034,971	3,803,956	39.24	96,941
1968	5,809,488.94	3,386,932	2,007,495	3,801,994	39.34	96,644
1969	4,641,097.84	2,656,564	1,574,592	3,066,506	40.34	76,017
1970	3,889,671.80	2,205,833	1,307,436	2,582,236	40.46	63,822
1971	5,456,617.53	3,036,062	1,799,528	3,657,090	41.46	88,208
1972	8,598,251.64	4,735,917	2,807,062	5,791,190	41.59	139,245
1973	8,551,582.82	4,660,613	2,762,428	5,789,155	41.74	138,696
1974	5,098,347.41	2,723,027	1,613,986	3,484,361	42.74	81,525
1975	6,064,436.46	3,202,022	1,897,895	4,166,541	42.91	97,100
1976	9,879,789.92	5,107,851	3,027,514	6,852,276	43.91	156,053
1977	6,306,043.54	3,219,866	1,908,472	4,397,572	44.09	99,741
1978	10,074,382.16	5,032,154	2,982,647	7,091,735	45.09	157,280
1979	8,933,640.60	4,402,498	2,609,438	6,324,203	45.29	139,638
1980	12,672,580.03	6,103,115	3,617,424	9,055,156	46.29	195,618
1981	8,398,124.46	3,985,750	2,362,425	6,035,699	46.50	129,800
1982	6,174,087.05	2,860,455	1,695,442	4,478,645	47.50	94,287
1983	10,057,637.32	4,586,283	2,718,371	7,339,266	47.72	153,799
1984	15,017,795.17	6,735,481	3,992,239	11,025,556	47.96	229,891
1985	18,921,590.89	8,268,735	4,901,026	14,020,565	48.96	286,368
1986	25,411,102.79	10,906,445	6,464,443	18,946,660	49.21	385,016
1987	26,916,645.52	11,240,391	6,662,379	20,254,267	50.21	403,391
1988	35,532,963.62	14,550,749	8,624,486	26,908,478	50.47	533,158
1989	33,662,242.33	13,505,292	8,004,826	25,657,416	50.75	505,565
1990	34,198,724.98	13,316,984	7,893,212	26,305,513	51.75	508,319

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 331 MAINS AND ACCESSORIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 90-R2						
NET SALVAGE PERCENT.. 0						
1991	21,982,787.32	8,371,045	4,961,667	17,021,120	52.03	327,140
1992	25,679,334.40	9,473,106	5,614,878	20,064,456	53.03	378,360
1993	36,562,355.10	13,162,448	7,801,616	28,760,739	53.33	539,298
1994	40,731,558.56	14,292,704	8,471,539	32,260,020	53.64	601,417
1995	48,836,577.01	16,545,832	9,807,007	39,029,570	54.64	714,304
1996	40,922,277.82	13,479,798	7,989,715	32,932,563	54.97	599,101
1997	35,913,567.57	11,485,159	6,807,457	29,106,111	55.30	526,331
1998	89,857,576.97	27,631,205	16,377,504	73,480,073	56.30	1,305,152
1999	55,158,562.53	16,415,188	9,729,572	45,428,991	56.65	801,924
2000	57,551,318.10	16,546,004	9,807,109	47,744,209	57.00	837,618
2001	64,389,150.49	17,848,673	10,579,224	53,809,926	57.37	937,945
2002	65,904,733.37	17,438,392	10,336,044	55,568,689	58.37	952,008
2003	24,186,567.50	6,143,388	3,641,295	20,545,272	58.74	349,766
2004	62,379,780.99	15,170,763	8,991,980	53,387,801	59.12	903,041
2005	59,717,698.55	13,866,450	8,218,890	51,498,809	59.52	865,235
2006	18,070,649.02	3,993,613	2,367,085	15,703,564	59.92	262,076
2007	78,533,321.92	16,460,584	9,756,479	68,776,843	60.34	1,139,822
2008	98,888,492.39	19,579,921	11,605,366	87,283,126	60.76	1,436,523
2009	91,513,356.49	17,039,787	10,099,783	81,413,573	61.19	1,330,505
2010	95,170,409.51	16,578,685	9,826,480	85,343,930	61.63	1,384,779
2011	117,331,522.21	19,007,707	11,266,204	106,065,318	62.07	1,708,802
2012	108,656,450.47	16,255,005	9,634,629	99,021,821	62.53	1,583,589
2013	143,739,635.98	19,692,330	11,671,993	132,067,643	62.99	2,096,645
2014	133,160,543.09	16,658,384	9,873,719	123,286,824	62.94	1,958,799
2015	167,254,097.23	18,732,459	11,103,060	156,151,037	63.43	2,461,785
2016	174,904,315.68	17,385,489	10,304,687	164,599,629	63.42	2,595,390
2017	117,896,462.53	10,186,254	6,037,573	111,858,890	63.44	1,763,223
2018	154,607,607.22	11,286,355	6,689,622	147,917,985	63.49	2,329,784
2019	164,533,192.73	9,740,365	5,773,287	158,759,906	63.57	2,497,403
2020	182,097,632.77	8,303,652	4,921,722	177,175,911	62.79	2,821,722
2021	128,469,610.32	4,008,252	2,375,762	126,093,848	62.10	2,030,497
2022	197,761,059.05	3,243,281	1,922,350	195,838,709	59.98	3,265,067
2023	74,782,233.08	329,042	195,028	74,587,205	56.57	1,318,494
9999	297,928,642.07-	56,302,492-	33,371,486-	264,557,156-		4,515,018-
	3,056,793,085.70	577,672,113	342,396,516	2,714,396,570		46,324,768

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 58.6 1.52

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 333 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1937	21,877.75	19,944	17,157	4,721	8.34	566
1938	2,030.97	1,847	1,589	442	8.46	52
1939	33,672.51	30,548	26,279	7,394	8.59	861
1940	73,392.60	66,398	57,119	16,274	8.74	1,862
1941	49,510.89	44,659	38,418	11,093	8.91	1,245
1942	48,333.27	43,456	37,383	10,950	9.09	1,205
1943	22,143.02	19,840	17,067	5,076	9.29	546
1944	13,571.14	12,115	10,422	3,149	9.50	331
1945	25,239.97	22,443	19,307	5,933	9.72	610
1946	95,252.24	84,346	72,558	22,694	9.96	2,279
1947	193,545.81	170,630	146,784	46,762	10.21	4,580
1948	260,058.86	228,202	196,310	63,749	10.47	6,089
1949	281,138.50	245,490	211,182	69,956	10.75	6,508
1950	304,499.67	264,519	227,551	76,949	11.03	6,976
1951	396,269.64	339,524	292,074	104,196	12.03	8,661
1952	482,770.96	411,321	353,837	128,934	12.33	10,457
1953	463,347.62	392,455	337,608	125,740	12.64	9,948
1954	505,050.78	425,152	365,735	139,316	12.97	10,741
1955	663,278.99	554,767	477,236	186,043	13.30	13,988
1956	705,221.17	585,898	504,017	201,204	13.65	14,740
1957	681,991.08	562,643	484,011	197,980	14.00	14,141
1958	914,358.22	748,859	644,203	270,155	14.37	18,800
1959	981,814.24	798,019	686,493	295,321	14.74	20,035
1960	990,778.23	798,964	687,306	303,472	15.12	20,071
1961	899,104.39	719,104	618,606	280,498	15.52	18,073
1962	961,959.71	762,834	656,225	305,735	15.92	19,204
1963	838,792.19	659,291	567,153	271,639	16.34	16,624
1964	708,507.12	551,785	474,671	233,836	16.76	13,952
1965	1,053,865.76	812,952	699,339	354,527	17.19	20,624
1966	1,047,438.73	800,034	688,226	359,213	17.63	20,375
1967	1,090,270.82	824,245	709,054	381,217	18.07	21,097
1968	1,244,074.68	930,568	800,518	443,557	18.53	23,937
1969	1,346,218.56	995,932	856,747	489,472	18.99	25,775
1970	1,454,879.74	1,056,388	908,754	546,126	19.99	27,320
1971	1,686,825.28	1,210,466	1,041,299	645,526	20.46	31,551
1972	1,809,652.92	1,282,863	1,103,578	706,075	20.94	33,719
1973	2,374,998.90	1,662,499	1,430,158	944,841	21.43	44,090
1974	1,380,736.03	953,951	820,633	560,103	21.92	25,552
1975	818,773.26	558,076	480,083	338,690	22.42	15,107
1976	1,066,784.48	716,986	616,784	450,000	22.93	19,625
1977	1,469,607.24	973,468	837,422	632,185	23.44	26,970

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 333 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1978	2,015,029.48	1,314,807	1,131,058	883,971	23.97	36,878
1979	3,095,429.62	1,988,504	1,710,603	1,384,827	24.49	56,547
1980	2,780,582.36	1,745,650	1,501,689	1,278,893	25.49	50,172
1981	2,688,171.83	1,659,677	1,427,731	1,260,441	26.03	48,423
1982	2,642,581.86	1,603,519	1,379,421	1,263,161	26.57	47,541
1983	2,979,757.58	1,775,936	1,527,742	1,452,016	27.11	53,560
1984	3,517,346.06	2,057,647	1,770,083	1,747,263	27.67	63,146
1985	3,858,565.52	2,214,045	1,904,624	1,953,942	28.23	69,215
1986	4,654,285.21	2,617,570	2,251,755	2,402,530	28.79	83,450
1987	6,578,079.47	3,623,206	3,116,849	3,461,230	29.36	117,889
1988	7,230,100.75	3,871,719	3,330,631	3,899,470	30.36	128,441
1989	7,654,176.11	4,007,727	3,447,632	4,206,544	30.94	135,958
1990	8,573,938.75	4,385,570	3,772,670	4,801,269	31.52	152,325
1991	6,291,786.52	3,140,860	2,701,913	3,589,874	32.10	111,834
1992	6,602,223.10	3,213,302	2,764,231	3,837,992	32.69	117,406
1993	9,759,821.95	4,626,156	3,979,633	5,780,189	33.29	173,631
1994	7,877,867.02	3,632,484	3,124,830	4,753,037	33.89	140,249
1995	10,837,980.15	4,855,415	4,176,852	6,661,128	34.50	193,076
1996	11,478,299.98	4,989,617	4,292,299	7,186,001	35.11	204,671
1997	10,879,880.79	4,582,606	3,942,169	6,937,712	35.73	194,171
1998	47,695,795.86	19,316,797	16,617,200	31,078,596	36.73	846,137
1999	14,006,518.18	5,479,350	4,713,590	9,292,928	37.35	248,807
2000	14,047,300.06	5,298,642	4,558,136	9,489,164	37.98	249,846
2001	16,500,380.30	5,989,638	5,152,563	11,347,817	38.61	293,909
2002	30,146,179.72	10,508,958	9,040,291	21,105,889	39.24	537,867
2003	3,673,471.49	1,226,939	1,055,470	2,618,001	39.88	65,647
2004	1,874,482.61	598,335	514,715	1,359,768	40.52	33,558
2005	18,971,840.10	5,771,234	4,964,682	14,007,158	41.17	340,227
2006	85,031.35	24,574	21,140	63,891	41.82	1,528
2007	12,559,913.19	3,436,392	2,956,143	9,603,770	42.48	226,077
2008	26,095,779.84	6,732,711	5,791,789	20,303,991	43.14	470,653
2009	23,508,850.30	5,693,844	4,898,107	18,610,743	43.80	424,903
2010	18,212,369.87	4,119,638	3,543,903	14,668,467	44.47	329,851
2011	19,091,229.27	4,009,158	3,448,863	15,642,366	45.14	346,530
2012	21,870,754.66	4,258,236	3,663,131	18,207,624	45.50	400,168
2013	22,829,361.22	4,063,626	3,495,719	19,333,642	46.18	418,658
2014	20,685,433.05	3,332,423	2,866,704	17,818,729	46.87	380,173
2015	21,621,647.78	3,130,815	2,693,271	18,928,377	47.25	400,601
2016	28,175,345.75	3,589,539	3,087,887	25,087,459	47.95	523,200
2017	25,617,232.42	2,828,142	2,432,898	23,184,334	48.35	479,511
2018	24,178,520.03	2,248,602	1,934,351	22,244,169	48.76	456,197

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 333 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
2019	26,753,345.74	2,011,852	1,730,688	25,022,658	49.19	508,694
2020	33,216,512.39	1,903,306	1,637,312	31,579,200	49.36	639,773
2021	30,981,093.18	1,208,263	1,039,404	29,941,689	49.28	607,583
2022	38,278,521.36	769,398	661,871	37,616,650	48.75	771,624
2023	13,202,763.63	69,975	60,196	13,142,568	47.14	278,799
9999	26,992,757.39-	7,342,725-	6,316,551-	20,676,206-		498,955-
	678,344,458.01	184,527,160	158,738,784	519,605,674		12,539,036

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.4 1.85

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 334 METERS AND METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L1.5						
NET SALVAGE PERCENT.. 0						
1973	1,364.57	1,310	1,114	251	2.08	121
1991	666,732.00	576,056	489,893	176,839	5.04	35,087
1992	142,112.23	121,591	103,404	38,708	5.23	7,401
1993	229,230.64	193,929	164,922	64,309	5.46	11,778
1994	193,983.93	162,578	138,261	55,723	5.60	9,951
1995	212,345.95	175,992	149,668	62,678	5.78	10,844
1996	48,984.67	40,074	34,080	14,905	6.00	2,484
1997	1,232,027.37	996,217	847,209	384,818	6.15	62,572
1998	10,720,047.56	8,549,238	7,270,499	3,449,549	6.35	543,236
1999	1,726,118.38	1,354,658	1,152,037	574,081	6.58	87,246
2000	1,737,793.81	1,342,967	1,142,095	595,699	6.76	88,121
2001	3,578,122.51	2,723,667	2,316,279	1,261,844	6.90	182,876
2002	1,886,813.82	1,410,582	1,199,596	687,218	7.09	96,928
2003	237,938.88	174,647	148,524	89,415	7.25	12,333
2004	1,970.47	1,419	1,207	763	7.39	103
2005	2,445,852.28	1,725,793	1,467,660	978,192	7.51	130,252
2006	102,021.65	70,242	59,736	42,286	7.69	5,499
2007	3,173,615.96	2,127,592	1,809,361	1,364,255	7.87	173,349
2008	3,249,152.74	2,115,198	1,798,821	1,450,332	8.04	180,390
2009	7,715,429.89	4,860,721	4,133,686	3,581,744	8.22	435,735
2010	11,228,416.78	6,816,772	5,797,164	5,431,253	8.41	645,809
2011	16,332,148.93	9,485,712	8,066,902	8,265,247	8.66	954,417
2012	13,000,280.85	7,178,755	6,105,004	6,895,277	8.92	773,013
2013	9,232,130.11	4,800,708	4,082,650	5,149,480	9.23	557,907
2014	6,553,012.46	3,172,969	2,698,377	3,854,635	9.59	401,943
2015	12,599,430.63	5,604,227	4,765,984	7,833,447	9.99	784,129
2016	15,182,293.34	6,100,245	5,187,810	9,994,483	10.42	959,163
2017	15,651,772.89	5,559,510	4,727,955	10,923,818	10.89	1,003,105
2018	12,917,295.05	3,946,234	3,355,982	9,561,313	11.37	840,925
2019	17,503,492.28	4,403,879	3,745,176	13,758,316	11.90	1,156,161
2020	10,229,468.43	1,988,609	1,691,166	8,538,302	12.43	686,911
2021	8,074,066.22	1,075,466	914,605	7,159,461	13.02	549,882
2022	20,739,188.35	1,426,856	1,213,436	19,525,752	13.53	1,443,145
2023	14,672,952.46	261,179	222,114	14,450,838	13.83	1,044,891
9999	1,824,706.75-	740,171-	629,461-	1,195,246-		113,444-
	221,392,901.34	89,805,421	76,372,916	145,019,985		13,764,263

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.5 6.22

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 335 FIRE HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
NET SALVAGE PERCENT.. 0						
1882	236.21	236	236			
1886	347.76	348	348			
1889	488.25	488	488			
1890	710.80	711	711			
1891	2,511.34	2,511	2,511			
1892	3,660.98	3,661	3,661			
1893	2,869.27	2,869	2,869			
1894	2,180.37	2,180	2,180			
1895	4,197.12	4,197	4,197			
1896	1,626.15	1,626	1,626			
1897	242.19	242	242			
1898	2,471.82	2,472	2,472			
1899	124.66	125	125			
1900	89.52	90	90			
1901	98.72	99	99			
1902	40.23	40	40			
1903	45.56	46	46			
1904	158.32	158	158			
1905	84.22	84	84			
1906	481.68	482	482			
1907	298.16	298	298			
1908	581.08	581	581			
1909	990.21	990	990			
1910	1,025.36	1,025	1,025			
1911	623.13	516	317	306	23.14	13
1912	2,284.01	2,282	1,400	884	0.11	884
1913	937.10	937	937			
1914	1,325.60	1,315	807	519	0.89	519
1915	1,674.16	1,663	1,020	654	0.70	654
1916	1,194.75	1,189	729	466	0.53	466
1917	1,876.84	1,850	1,135	742	1.53	485
1918	1,577.89	1,557	955	623	1.38	451
1919	2,851.83	2,788	1,710	1,142	2.38	480
1920	1,861.40	1,821	1,117	744	2.26	329
1921	1,972.68	1,932	1,185	788	2.17	363
1922	2,605.87	2,527	1,550	1,056	3.17	333
1923	3,800.53	3,687	2,262	1,539	3.09	498
1924	3,471.65	3,368	2,066	1,406	3.04	462
1925	4,938.45	4,791	2,939	1,999	3.01	664
1926	4,118.60	3,955	2,426	1,693	4.01	422
1927	4,590.73	4,407	2,703	1,888	4.00	472

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 335 FIRE HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
NET SALVAGE PERCENT.. 0						
1928	3,161.98	3,034	1,861	1,301	4.01	324
1929	5,262.51	4,996	3,065	2,198	5.01	439
1930	4,617.78	4,380	2,687	1,931	5.04	383
1931	4,047.14	3,835	2,352	1,695	5.09	333
1932	2,612.90	2,473	1,517	1,096	5.15	213
1933	2,140.41	2,003	1,229	911	6.15	148
1934	4,671.62	4,366	2,678	1,994	6.24	320
1935	5,527.94	5,156	3,163	2,365	6.34	373
1936	7,727.40	7,193	4,412	3,315	6.46	513
1937	10,595.44	9,841	6,036	4,559	6.59	692
1938	5,935.25	5,499	3,373	2,562	6.74	380
1939	9,390.09	8,676	5,322	4,068	6.91	589
1940	7,977.06	7,283	4,467	3,510	7.91	444
1941	5,392.07	4,908	3,011	2,381	8.09	294
1942	1,733.22	1,572	964	769	8.29	93
1943	1,780.31	1,609	987	793	8.50	93
1944	2,009.74	1,810	1,110	900	8.72	103
1945	1,582.21	1,419	870	712	8.96	79
1946	2,830.94	2,529	1,551	1,280	9.21	139
1947	10,081.53	8,964	5,499	4,583	9.47	484
1948	8,775.27	7,766	4,764	4,011	9.75	411
1949	25,232.98	22,220	13,630	11,603	10.03	1,157
1950	5,633.09	4,935	3,027	2,606	10.33	252
1951	31,151.77	27,139	16,647	14,505	10.64	1,363
1952	26,650.55	23,085	14,160	12,491	10.97	1,139
1953	24,001.28	20,665	12,676	11,325	11.30	1,002
1954	30,039.54	25,702	15,766	14,274	11.65	1,225
1955	27,653.84	23,506	14,419	13,235	12.00	1,103
1956	37,637.34	31,773	19,490	18,147	12.37	1,467
1957	52,652.36	44,133	27,071	25,581	12.74	2,008
1958	63,080.20	52,483	32,193	30,887	13.12	2,354
1959	80,716.60	66,640	40,877	39,840	13.52	2,947
1960	82,904.42	67,899	41,649	41,255	13.92	2,964
1961	77,634.73	63,055	38,678	38,957	14.34	2,717
1962	69,033.61	55,586	34,097	34,937	14.76	2,367
1963	95,661.32	76,338	46,826	48,835	15.19	3,215
1964	106,808.62	84,443	51,798	55,011	15.63	3,520
1965	106,111.72	83,085	50,965	55,147	16.07	3,432
1966	108,405.50	84,036	51,548	56,858	16.53	3,440
1967	141,280.04	108,390	66,487	74,793	16.99	4,402
1968	145,224.66	110,226	67,613	77,612	17.46	4,445

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 335 FIRE HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
NET SALVAGE PERCENT.. 0						
1969	151,546.30	114,569	70,277	81,269	17.43	4,663
1970	124,014.73	92,676	56,848	67,167	17.92	3,748
1971	180,870.30	133,555	81,923	98,947	18.42	5,372
1972	183,276.42	133,663	81,989	101,287	18.93	5,351
1973	243,112.54	175,041	107,371	135,742	19.44	6,983
1974	315,542.95	224,193	137,520	178,023	19.97	8,915
1975	309,825.05	217,125	133,185	176,640	20.49	8,621
1976	536,167.67	370,438	227,228	308,940	21.03	14,690
1977	301,870.83	205,514	126,063	175,808	21.57	8,151
1978	462,912.47	310,383	190,390	272,522	22.11	12,326
1979	533,256.30	354,295	217,325	315,931	22.23	14,212
1980	464,154.20	303,371	186,088	278,066	22.79	12,201
1981	326,875.12	210,050	128,845	198,030	23.36	8,477
1982	469,487.34	296,434	181,833	287,654	23.94	12,016
1983	591,926.66	366,995	225,116	366,811	24.52	14,960
1984	561,199.54	341,434	209,436	351,764	25.10	14,015
1985	617,607.61	368,465	226,017	391,591	25.69	15,243
1986	775,600.19	456,286	279,887	495,713	25.89	19,147
1987	839,794.85	483,722	296,716	543,079	26.50	20,494
1988	892,884.90	503,141	308,628	584,257	27.11	21,551
1989	1,117,807.19	615,688	377,664	740,143	27.73	26,691
1990	1,174,730.49	631,888	387,602	787,128	28.35	27,765
1991	985,908.46	517,405	317,377	668,531	28.98	23,069
1992	1,344,447.49	691,853	424,384	920,063	29.24	31,466
1993	1,184,125.03	593,247	363,899	820,226	29.88	27,451
1994	1,573,350.20	766,536	470,195	1,103,155	30.52	36,145
1995	1,707,954.32	808,204	495,754	1,212,200	31.17	38,890
1996	1,617,734.13	746,908	458,155	1,159,579	31.48	36,835
1997	1,745,606.86	780,635	478,843	1,266,764	32.14	39,414
1998	1,623,851.20	702,316	430,802	1,193,049	32.80	36,373
1999	2,070,882.57	869,771	533,520	1,537,363	33.14	46,390
2000	1,231,492.28	498,508	305,786	925,706	33.82	27,372
2001	1,781,689.01	693,790	425,572	1,356,117	34.50	39,308
2002	1,603,413.28	602,723	369,712	1,233,701	34.87	35,380
2003	2,189,703.96	788,293	483,541	1,706,163	35.56	47,980
2004	2,119,385.98	732,884	449,553	1,669,833	35.95	46,449
2005	209,441.35	68,990	42,319	167,122	36.64	4,561
2006	5,687,399.10	1,788,687	1,097,185	4,590,214	37.05	123,892
2007	3,293,335.48	980,097	601,194	2,692,141	37.76	71,296
2008	4,371,421.32	1,232,741	756,166	3,615,255	38.19	94,665
2009	4,579,487.08	1,218,144	747,212	3,832,275	38.63	99,205

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 335 FIRE HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
NET SALVAGE PERCENT.. 0						
2010	4,257,779.65	1,057,207	648,493	3,609,287	39.36	91,699
2011	3,540,055.13	819,877	502,914	3,037,141	39.81	76,291
2012	4,651,603.44	997,769	612,034	4,039,569	40.28	100,287
2013	5,199,983.16	1,024,397	628,367	4,571,616	40.76	112,159
2014	4,658,293.51	838,493	514,334	4,143,960	41.00	101,072
2015	7,727,258.25	1,248,725	765,971	6,961,287	41.50	167,742
2016	7,689,450.25	1,103,436	676,850	7,012,600	41.78	167,846
2017	6,057,277.00	755,948	463,700	5,593,577	42.08	132,927
2018	5,449,875.34	574,962	352,683	5,097,192	42.39	120,245
2019	7,220,530.62	620,966	380,902	6,839,629	42.51	160,895
2020	7,100,727.29	468,648	287,470	6,813,257	42.45	160,501
2021	8,385,237.32	380,690	233,516	8,151,721	42.05	193,858
2022	11,619,856.80	278,877	171,064	11,448,793	40.67	281,505
2023	4,427,043.00	28,333	17,379	4,409,664	38.51	114,507
9999	7,384,143.36-	1,743,383-	1,069,929-	6,314,214-		168,662-
	134,208,552.33	31,686,398	19,446,220	114,762,332		3,065,466
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					37.4	2.28

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.1 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	8,614.50	7,322	3,699	4,916	3.00	1,639
2007	90,026.71	72,021	36,383	53,644	4.00	13,411
2008	76,984.00	57,738	29,168	47,816	5.00	9,563
2010	10,963.48	7,126	3,600	7,363	7.00	1,052
2011	34,863.33	20,918	10,567	24,296	8.00	3,037
2012	104,725.37	57,599	29,097	75,628	9.00	8,403
2013	475,451.73	237,726	120,092	355,360	10.00	35,536
2014	1,427,408.53	642,334	324,488	1,102,921	11.00	100,266
2015	105,224.65	42,090	21,263	83,962	12.00	6,997
2016	154,380.75	54,033	27,296	127,085	13.00	9,776
2017	87,557.93	26,267	13,269	74,289	14.00	5,306
2018	2,016,595.25	504,149	254,681	1,761,914	15.00	117,461
2019	1,190,614.34	238,123	120,292	1,070,322	16.00	66,895
2020	278,241.94	41,736	21,084	257,158	17.00	15,127
2021	419,508.42	41,951	21,192	398,316	18.00	22,129
2022	831,377.33	41,569	20,999	810,378	19.00	42,651
2023	488,173.71	6,102	3,083	485,091	19.75	24,562
	7,800,711.97	2,098,804	1,060,253	6,740,459		483,811

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.9 6.20

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.2 OFFICE FURNITURE AND EQUIPMENT - COMPUTERS AND PERIPHERAL EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2018	1,173,475.88	1,173,476	1,173,476			
2019	1,294,189.39	1,035,352	389,691	904,498	1.00	904,498
2020	2,402,513.20	1,441,508	542,563	1,859,950	2.00	929,975
2021	2,215,572.58	886,229	333,563	1,882,010	3.00	627,337
2022	5,160,104.61	1,032,021	388,438	4,771,667	4.00	1,192,917
2023	2,274,857.15	113,743	42,811	2,232,046	4.75	469,904
	14,520,712.81	5,682,329	2,870,542	11,650,171		4,124,631

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.8 28.41

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.3 OFFICE FURNITURE AND EQUIPMENT - COMPUTER SOFTWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2017	2,324,148.83	2,324,149	2,324,149			
2018	3,797,691.35	3,797,691	3,797,691			
2019	20,014,689.48	16,011,752	6,749,778	13,264,911	1.00	13,264,911
2020	17,145,049.52	10,287,030	4,336,513	12,808,537	2.00	6,404,268
2021	16,784,591.24	6,713,836	2,830,227	13,954,364	3.00	4,651,455
2022	14,702,503.96	2,940,501	1,239,573	13,462,931	4.00	3,365,733
2023	5,483,750.72	274,188	115,584	5,368,167	4.75	1,130,140
	80,252,425.10	42,349,147	21,393,515	58,858,910		28,816,507

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.0 35.91

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.31 OFFICE FURNITURE AND EQUIPMENT - COMPUTER SOFTWARE – ENTERPRISE SOLUTIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	481,376.73	481,377	481,377			
2014	852,486.31	767,238	182,791	669,695	1.00	669,695
2015	58,280.82	46,625	11,108	47,173	2.00	23,586
2018	157,049.62	78,525	18,709	138,341	5.00	27,668
	1,549,193.48	1,373,765	693,985	855,208		720,949

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.2 46.54

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.5 OFFICE FURNITURE AND EQUIPMENT - OTHER OFFICE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	9,454.95	3,782	1,911	7,544	6.00	1,257
9999	354.00-	142-	72-	282-		47-
	9,100.95	3,640	1,839	7,262		1,210

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.0 13.29

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341 TRANSPORTATION EQUIPMENT - NOT CLASSIFIED

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
1986	349.00	349	349			
2020	2,238.67	766	1,206	1,033	5.76	179
	2,587.67	1,115	1,555	1,033		179
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					5.8	6.92

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341.1 TRANSPORTATION EQUIPMENT - LIGHT DUTY TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
2011	13,156.44	10,767	13,156			
2012	1,444,384.62	1,151,897	1,444,385			
2013	4,459,577.12	3,456,172	4,459,577			
2014	49,576.70	37,123	49,577			
2015	868,493.13	620,451	868,493			
2016	1,406,720.42	939,408	1,348,023	58,697	3.48	16,867
2017	26,230.86	15,927	22,855	3,376	3.88	870
2018	2,042,645.52	1,085,666	1,557,899	484,747	4.41	109,920
2019	9,504,347.39	4,204,723	6,033,654	3,470,693	5.04	688,630
2020	8,395,547.43	2,873,796	4,123,813	4,271,734	5.76	741,620
2021	10,800,582.16	2,527,336	3,626,653	7,173,929	6.55	1,095,256
2022	9,759,732.47	1,162,384	1,667,987	8,091,745	7.40	1,093,479
2023	3,120,854.04	93,626	134,351	2,986,503	8.08	369,617
	51,891,848.30	18,179,276	25,350,423	26,541,425		4,116,259

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.4 7.93

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341.2 TRANSPORTATION EQUIPMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
2012	209,536.68	167,106	209,537			
2013	3,042,582.07	2,358,001	3,042,582			
2014	1,011,929.20	757,733	1,011,929			
2015	603,415.74	431,080	603,416			
2016	2,878,515.66	1,922,273	2,769,078	109,438	3.48	31,448
2017	2,354,164.64	1,429,449	2,059,154	295,011	3.88	76,034
2018	5,954,398.21	3,164,763	4,558,912	1,395,486	4.41	316,437
2019	8,314.30	3,678	5,298	3,016	5.04	598
2020	666,086.16	228,001	328,441	337,645	5.76	58,619
2021	64,659.55	15,130	21,795	42,865	6.55	6,544
	16,793,602.21	10,477,214	14,610,142	2,183,460		489,680

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.5 2.92

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341.3 TRANSPORTATION EQUIPMENT - AUTOS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
2010	5,850.22	4,905	5,631	219	2.50	88
2011	9,394.63	7,689	8,827	568	2.66	214
2012	1,833,463.96	1,462,188	1,678,620	154,844	2.79	55,500
2019	146,881.00	64,980	74,598	72,283	5.04	14,342
	1,995,589.81	1,539,762	1,767,676	227,914		70,144
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					3.2	3.51

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341.4 TRANSPORTATION EQUIPMENT - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
1961	374.92	375	375			
1977	403.11	403	403			
1978	265.00	265	265			
1998	8,060.31	7,919	8,060			
1999	1,561.47	1,521	1,561			
2006	4,626.70	4,192	4,627			
2007	18,169.65	16,222	18,170			
2008	92,592.34	81,111	92,592			
2009	25,526.94	21,907	25,527			
2010	53,306.39	44,697	53,306			
2011	81,120.09	66,389	81,120			
2012	318,512.86	254,014	318,513			
2013	1,116,160.77	865,025	1,116,161			
2014	718,980.22	538,372	718,980			
2015	178,690.77	127,657	178,691			
2016	954,565.45	637,459	942,256	12,309	3.48	3,537
2017	120,461.68	73,144	108,117	12,345	3.88	3,182
2018	2,505,965.54	1,331,921	1,968,770	537,196	4.41	121,813
2019	697,759.80	308,689	456,287	241,473	5.04	47,911
2020	473,035.57	161,920	239,341	233,695	5.76	40,572
2021	78,210.92	18,301	27,051	51,160	6.55	7,811
2022	47,744.96	5,686	8,405	39,340	7.40	5,316
2023	88,611.43	2,658	3,929	84,682	8.08	10,480
	7,584,706.89	4,569,847	6,372,507	1,212,200		240,622

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.0 3.17

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 342 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2007	1,009.93	808	416	594	4.00	148
2008	23,325.31	17,494	9,003	14,322	5.00	2,864
2014	61,104.50	27,497	14,152	46,952	11.00	4,268
2016	92,745.16	32,461	16,706	76,039	13.00	5,849
2017	48,514.27	14,554	7,490	41,024	14.00	2,930
2018	57,628.55	14,407	7,415	50,214	15.00	3,348
2019	88,222.86	17,645	9,081	79,142	16.00	4,946
2020	2,304.60	346	178	2,127	17.00	125
2021	12,195.19	1,220	628	11,567	18.00	643
2022	80,982.31	4,049	2,084	78,898	19.00	4,153
2023	1,757.57	22	11	1,747	19.75	88
	469,790.25	130,503	67,164	402,626		29,362

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.7 6.25

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 343 TOOLS AND WORK EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2002	947.22	947	947			
2004	128,429.61	122,008	96,600	31,830	1.00	31,830
2005	225,100.69	202,591	160,402	64,699	2.00	32,350
2006	284,927.96	242,189	191,754	93,174	3.00	31,058
2007	546,753.24	437,403	346,316	200,437	4.00	50,109
2008	241,902.08	181,427	143,646	98,256	5.00	19,651
2009	93,688.77	65,582	51,925	41,764	6.00	6,961
2010	678,599.35	441,090	349,235	329,364	7.00	47,052
2011	1,146,192.08	687,715	544,501	601,691	8.00	75,211
2012	2,320,365.62	1,276,201	1,010,437	1,309,929	9.00	145,548
2013	2,929,204.68	1,464,602	1,159,604	1,769,601	10.00	176,960
2014	1,038,682.01	467,407	370,071	668,611	11.00	60,783
2015	1,783,290.65	713,316	564,771	1,218,520	12.00	101,543
2016	4,209,228.78	1,473,230	1,166,435	3,042,794	13.00	234,061
2017	5,196,885.71	1,559,066	1,234,397	3,962,489	14.00	283,035
2018	2,736,698.84	684,175	541,698	2,195,001	15.00	146,333
2019	1,310,548.63	262,110	207,527	1,103,022	16.00	68,939
2020	4,357,645.66	653,647	517,527	3,840,119	17.00	225,889
2021	4,886,827.60	488,683	386,917	4,499,911	18.00	249,995
2022	6,451,897.64	322,595	255,416	6,196,482	19.00	326,131
2023	2,679,198.06	33,490	26,515	2,652,683	19.75	134,313
9999	61.00-	17-	13-	48-		3-
	43,246,953.88	11,779,457	9,326,628	33,920,326		2,447,749

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.9 5.66

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 344 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1965	7.69	8	8			
1977	53.16	53	53			
1978	90.41	90	90			
1979	2.31	2	2			
1980	12.57	13	13			
1982	543.93	544	544			
1983	179.21	179	179			
1984	922.99	923	923			
1985	1,790.83	1,791	1,791			
1986	2,280.13	2,280	2,280			
1987	13.17	13	13			
1988	2,020.45	2,020	2,020			
1989	1,022.45	1,022	1,022			
1990	1,420.72	1,421	1,421			
1991	1,953.95	1,954	1,954			
1992	822.48	822	822			
1994	1,362.08	1,362	1,362			
1995	922.77	923	923			
1996	1,292.22	1,292	1,292			
1997	49.02	49	49			
1998	748.48	748	748			
1999	2,129.09	2,129	2,129			
2000	1,952.06	1,952	1,952			
2001	165.98	166	166			
2002	8,220.02	8,220	8,220			
2003	2,743.78	2,744	2,744			
2004	103,310.33	98,145	35,143	68,167	1.00	68,167
2005	17,344.50	15,610	5,590	11,754	2.00	5,877
2006	128,711.88	109,405	39,175	89,537	3.00	29,846
2007	103,111.94	82,490	29,538	73,574	4.00	18,394
2008	53,452.75	40,090	14,355	39,098	5.00	7,820
2009	196,304.71	137,413	49,204	147,101	6.00	24,517
2010	107,001.34	69,551	24,905	82,096	7.00	11,728
2011	214,311.99	128,587	46,044	168,268	8.00	21,034
2012	86,552.44	47,604	17,046	69,506	9.00	7,723
2013	30,519.21	15,260	5,464	25,055	10.00	2,506
2014	57,772.94	25,998	9,309	48,464	11.00	4,406
2015	17,712.59	7,085	2,537	15,176	12.00	1,265
2016	44,332.75	15,516	5,556	38,777	13.00	2,983
2017	94,878.08	28,463	10,192	84,686	14.00	6,049
2018	291,357.49	72,839	26,082	265,275	15.00	17,685

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 344 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	152,368.57	30,474	10,912	141,457	16.00	8,841
2020	212,824.35	31,924	11,431	201,393	17.00	11,847
2021	110,412.37	11,041	3,954	106,458	18.00	5,914
2022	116,937.65	5,847	2,094	114,844	19.00	6,044
2023	90,081.23	1,126	403	89,678	19.75	4,541
	2,262,021.06	1,007,188	381,654	1,880,367		267,187
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					7.0	11.81

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 345 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 21-S0.5						
NET SALVAGE PERCENT.. 0						
1951	29.64	30	30			
1967	1,931.23	1,931	1,931			
1968	1,032.10	1,032	1,032			
1969	817.92	818	818			
1970	6,734.16	6,734	6,734			
1972	6,321.41	6,321	6,321			
1975	281.75	282	282			
1977	596.25	596	596			
1978	1,790.00	1,790	1,790			
1980	7,445.82	7,446	7,446			
1982	2,452.73	2,434	2,369	84	0.32	84
1984	1,722.07	1,679	1,634	88	1.00	88
1985	16,792.81	16,208	15,777	1,016	1.37	742
1986	14,013.50	13,429	13,072	942	1.61	585
1987	4,748.59	4,496	4,377	372	2.02	184
1988	10,221.10	9,587	9,332	889	2.31	385
1989	13,115.87	12,174	11,851	1,265	2.63	481
1990	9,498.15	8,714	8,482	1,016	2.97	342
1991	12,096.57	10,993	10,701	1,396	3.21	435
1992	18,034.45	16,157	15,728	2,306	3.60	641
1993	77,817.09	68,868	67,038	10,779	3.90	2,764
1994	152,889.96	133,901	130,343	22,547	4.11	5,486
1995	148,235.10	127,838	124,441	23,794	4.47	5,323
1996	79,553.28	67,660	65,862	13,691	4.75	2,882
1997	41,095.55	34,405	33,491	7,605	5.06	1,503
1998	55,083.04	45,306	44,102	10,981	5.40	2,034
1999	255,047.45	205,670	200,206	54,841	5.76	9,521
2001	45,944.17	35,579	34,634	11,310	6.41	1,764
2002	107,988.70	81,866	79,691	28,298	6.70	4,224
2003	170,236.10	125,975	122,628	47,608	7.03	6,772
2004	19,131.90	13,777	13,411	5,721	7.39	774
2005	33,181.89	23,234	22,617	10,565	7.71	1,370
2006	13,570.69	9,228	8,983	4,588	8.00	574
2007	5,629.80	3,693	3,595	2,035	8.39	243
2008	47,316.03	29,951	29,155	18,161	8.70	2,087
2009	61,841.82	37,575	36,577	25,265	9.04	2,795
2010	16,615.93	9,634	9,378	7,238	9.42	768
2012	21,347.57	11,107	10,812	10,536	10.14	1,039
2013	21,465.79	10,454	10,176	11,290	10.53	1,072
2014	100,707.30	45,500	44,291	56,416	10.92	5,166
2015	5,982.85	2,479	2,413	3,570	11.31	316

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 345 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 21-S0.5						
NET SALVAGE PERCENT.. 0						
2016	126,868.88	47,512	46,250	80,619	11.69	6,896
2017	26,612.95	8,830	8,595	18,018	12.08	1,492
2018	292,687.82	83,562	81,342	211,346	12.51	16,894
2019	13,003.54	3,074	2,992	10,012	12.92	775
2022	53,275.45	3,532	3,438	49,837	14.08	3,540
	2,122,806.77	1,393,061	1,356,764	766,043		92,041

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.3 4.34

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 346 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	258.22	207	180	78	3.00	26
2012	3,640.24	2,669	2,315	1,325	4.00	331
2013	99,778.07	66,519	57,698	42,080	5.00	8,416
2015	17,452.26	9,308	8,074	9,378	7.00	1,340
2016	35,790.32	16,702	14,487	21,303	8.00	2,663
2018	11,496.50	3,832	3,324	8,172	10.00	817
2019	412,414.77	109,979	95,395	317,020	11.00	28,820
2020	299,532.41	59,906	51,962	247,570	12.00	20,631
2021	425,092.22	56,678	49,162	375,930	13.00	28,918
2022	680,468.10	45,367	39,351	641,117	14.00	45,794
2023	245,445.26	4,092	3,549	241,896	14.75	16,400
	2,231,368.37	375,259	325,497	1,905,871		154,156

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.4 6.91

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 346.1 COMMUNICATION EQUIPMENT - NON-TELEPHONE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	3,768.85	3,769	3,769			
2009	94.16	88	76	18	1.00	18
2010	1,083.00	939	814	269	2.00	134
2011	18,194.10	14,555	12,621	5,573	3.00	1,858
2012	39,624.20	29,058	25,196	14,428	4.00	3,607
2013	721,836.04	481,226	417,276	304,560	5.00	60,912
2014	138,898.47	83,339	72,264	66,634	6.00	11,106
2015	3,007.59	1,604	1,391	1,617	7.00	231
2017	75,197.83	30,079	26,082	49,116	9.00	5,457
2018	602,810.61	200,935	174,233	428,578	10.00	42,858
2019	729,975.54	194,663	168,794	561,182	11.00	51,017
2020	1,640,804.93	328,161	284,552	1,356,253	12.00	113,021
2021	2,131,641.07	284,212	246,444	1,885,197	13.00	145,015
2022	1,549,647.04	103,315	89,585	1,460,062	14.00	104,290
2023	638,436.28	10,643	9,229	629,207	14.75	42,658
	8,295,019.71	1,766,586	1,532,326	6,762,694		582,182

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.6 7.02

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 346.19 COMMUNICATION EQUIPMENT - REMOTE CONTROL AND INSTRUMENTATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	76,336.93	76,337	76,337			
2014	96,947.90	87,253	75,121	21,827	1.00	21,827
2015	113,844.36	91,075	78,412	35,432	2.00	17,716
2016	717,219.42	502,054	432,248	284,971	3.00	94,990
2017	318,372.46	191,023	164,463	153,909	4.00	38,477
2018	760,200.33	380,100	327,251	432,949	5.00	86,590
2019	64,999.04	26,000	22,385	42,614	6.00	7,102
2020	535,905.67	160,772	138,418	397,488	7.00	56,784
2021	275,985.00	55,197	47,523	228,462	8.00	28,558
2022	710,843.82	71,084	61,200	649,644	9.00	72,183
2023	351,096.41	8,777	7,557	343,539	9.75	35,235
	4,021,751.34	1,649,672	1,430,915	2,590,836		459,462

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.6 11.42

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 346.20 COMMUNICATION EQUIPMENT - TELEPHONE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	71,723.53	64,551	55,991	15,733	1.00	15,733
2015	11,214.16	8,971	7,781	3,433	2.00	1,716
2016	21,782.06	15,247	13,225	8,557	3.00	2,852
2017	35,766.67	21,460	18,615	17,152	4.00	4,288
2018	66,703.59	33,352	28,929	37,775	5.00	7,555
2020	63,300.51	18,990	16,472	46,829	7.00	6,690
2022	24,688.05	2,469	2,142	22,546	9.00	2,505
	295,178.57	165,040	143,155	152,024		41,339

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.7 14.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 347 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
1998	37,475.05	37,475	37,475			
1999	500.00	480	334	166	1.00	166
2000	11,327.73	10,422	7,258	4,070	2.00	2,035
2001	1,124,164.98	989,265	688,927	435,238	3.00	145,079
2002	237,394.60	199,411	138,870	98,525	4.00	24,631
2003	269,249.53	215,400	150,005	119,245	5.00	23,849
2004	589,851.03	448,287	312,188	277,663	6.00	46,277
2005	409,678.13	294,968	205,416	204,262	7.00	29,180
2006	32,215.49	21,907	15,256	16,959	8.00	2,120
2008	148,764.62	89,259	62,160	86,605	10.00	8,660
2009	15,603.42	8,738	6,085	9,518	11.00	865
2010	25,913.81	13,475	9,384	16,530	12.00	1,378
2011	67,243.18	32,277	22,478	44,765	13.00	3,443
2012	211,006.25	92,843	64,656	146,350	14.00	10,454
2013	1,921,577.23	768,631	535,277	1,386,300	15.00	92,420
2014	304,208.62	109,515	76,267	227,942	16.00	14,246
2015	242,341.45	77,549	54,005	188,336	17.00	11,079
2016	777,191.88	217,614	151,547	625,645	18.00	34,758
2017	546,849.76	131,244	91,399	455,451	19.00	23,971
2018	1,208,042.02	241,608	168,256	1,039,786	20.00	51,989
2019	736,997.02	117,920	82,120	654,877	21.00	31,185
2020	6,298,678.56	755,841	526,369	5,772,310	22.00	262,378
2021	4,955,441.76	396,435	276,078	4,679,364	23.00	203,451
2022	7,440,610.10	297,624	207,267	7,233,343	24.00	301,389
2023	651,368.46	6,514	4,536	646,832	24.75	26,135
9999	4,085.00-	806-	563-	3,522-		195-
	28,259,609.68	5,573,896	3,893,050	24,366,560		1,350,943

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.0 4.78

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 348 OTHER TANGIBLE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2003	5,843.07	4,674	4,618	1,225	5.00	245
2004	20,479.05	15,564	15,376	5,103	6.00	850
2006	12,840.00	8,731	8,626	4,214	8.00	527
2007	694,887.82	444,728	439,365	255,523	9.00	28,391
2015	1,360.35	435	430	930	17.00	55
2019	52,243.29	8,359	8,258	43,985	21.00	2,095
2020	7,924.33	951	939	6,985	22.00	318
	795,577.91	483,442	477,612	317,966		32,481

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.8 4.08

PART III. EXPERIENCED NET SALVAGE

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2018 TRANSACTION YEAR				
303.14		2,459.00		2,459.00-
303.20	3,403.00	2,459.00-		2,459.00
303.99	3,048,679.10			
304.15	418,741.29	180,812.86	1,582.30	179,230.56-
304.20	826,847.57	39,684.28	13,853.00	25,831.28-
304.30	3,343,551.59	1,091,908.37	14,493.83	1,077,414.54-
304.36		43,138.55		43,138.55-
304.61	1,190,125.08			
304.62	212,881.55	6,567.28	729.22	5,838.06-
304.63	97,245.82	3,068.49		3,068.49-
305.00	37,756.93			
306.00	435,005.84			
307.00	135,155.83	1,391.04		1,391.04-
310.00	136,000.96	11,634.03		11,634.03-
311.00	2,605,575.81	191,399.40		191,399.40-
320.00	2,785,622.92	619,426.48	512.50	618,913.98-
320.30	151,056.10			
320.37	139,807.51	29,963.00		29,963.00-
330.00	2,001,901.91	2,820,506.21	162.78	2,820,343.43-
331.00	11,895,753.65	11,746,655.36	25,598.82	11,721,056.54-
333.00	824,179.27	1,300,493.65	214.01-	1,300,707.66-
334.00	23,592,959.23	913,142.15	115,629.32	797,512.83-
335.00	1,170,097.38	309,652.61	2,311.49	307,341.12-
340.00	11,184,047.18	30,861.14	8,779.58	22,081.56-
341.00	2,856,376.65	148,702.02	205,163.90	56,461.88
342.00	1,575.35	245.80		245.80-
343.00	1,655,262.98	7,924.48		7,924.48-
344.00	60,254.06	4,823.99		4,823.99-
345.00	89,513.05	860.13		860.13-
346.00	4,784,239.73	30,002.27	132.58	29,869.69-
347.00	816,838.00	20,027.66		20,027.66-
348.00		29.21-		29.21
	76,500,455.34	19,552,862.04	388,735.31	19,164,126.73-

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TRANSACTION YEAR				
301.00	7,992.94			
303.20	2,860.93			
303.61	802,954.77			
303.99		3,062.78		3,062.78-
304.15	438,188.39	387,837.75	27,560.73	360,277.02-
304.20	711,682.94	147,277.43	31,830.10	115,447.33-
304.30	10,188,998.34	148,391.82	66,260.61	82,131.21-
304.36	36,384.91	546.00		546.00-
304.61	3,543,001.13	1,304,656.48	1,864,549.94	559,893.46
304.62	374,098.54	54,481.40	192,159.79	137,678.39
304.63	48,158.12	8,030.27	25,209.50	17,179.23
305.00	9,293.68	1,266,548.34		1,266,548.34-
306.00	490,056.62	17,003.99		17,003.99-
307.00	1,348,867.50	118,341.25		118,341.25-
310.00	146,073.90	42,462.99		42,462.99-
311.00	4,971,723.99	1,092,490.18	13,739.63	1,078,750.55-
320.00	7,520,341.84	924,729.91	229.83	924,500.08-
320.30	2,975,108.37	423,003.27		423,003.27-
320.37	869,130.34	90,807.00	23.00	90,784.00-
330.00	7,714,591.97	2,686,207.69		2,686,207.69-
331.00	37,950,027.53	21,381,790.52	13,124.96	21,368,665.56-
333.00	7,266,231.40	1,897,743.49	9,792.38	1,887,951.11-
334.00	12,410,016.53	2,727,391.38	93,029.52	2,634,361.86-
335.00	3,216,730.86	908,970.88	4,063.03	904,907.85-
340.00	22,635,487.21	122,477.36	10,745.87	111,731.49-
341.00	1,770,594.69	761,298.60	261,902.01	499,396.59-
342.00	146,389.56	9,682.12		9,682.12-
343.00	3,341,150.75	57,836.24	48,579.17	9,257.07-
344.00	633,161.26	14,919.23		14,919.23-
345.00	276,184.11	15,876.66	12,288.18	3,588.48-
346.00	2,186,921.89	87,193.50		87,193.50-
347.00	1,370,647.26	73,665.55	8,306.50	65,359.05-
348.00		808.08		808.08-
	135,403,052.27	36,775,532.16	2,683,394.75	34,092,137.41-

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
303.61			4,483.73	4,483.73
304.15	549,086.47	577,956.65	210.38	577,746.27-
304.20	8,384.32	71,775.96		71,775.96-
304.30	409,196.21	788,178.99		788,178.99-
304.61	35,517.97	12,850.31		12,850.31-
304.62	72,882.00	8.81-		8.81
304.63		23.48		23.48-
305.00		24,577.59		24,577.59-
306.00	4,621.01	6,896.40		6,896.40-
307.00	44,317.44	42,111.55		42,111.55-
310.00	8,443.54	3,593.30		3,593.30-
311.00	482,184.81	248,120.57		248,120.57-
320.00	1,647,036.23	695,879.64	214.05-	696,093.69-
320.30	146,562.96	76,375.47		76,375.47-
330.00	316,910.67	1,196,558.00		1,196,558.00-
331.00	32,399,513.98	12,998,210.71	25,703.04	12,972,507.67-
333.00	1,279,015.58	2,528,314.54		2,528,314.54-
334.00	4,974,584.57	1,486,703.66	42,569.41	1,444,134.25-
335.00	1,427,031.44	1,720,769.32	3,093.12	1,717,676.20-
340.00	12,731,491.25	23,848.17	613.87	23,234.30-
341.00	203,634.46	97,003.97	456,214.35	359,210.38
342.00	13,022.51	122.40		122.40-
343.00	191,196.62	50,715.40	3,000.00	47,715.40-
344.00	39,028.26	13,845.30		13,845.30-
345.00	681.55			
346.00	950,181.45	44,631.89		44,631.89-
347.00	145,584.81	16,130.65		16,130.65-
348.00	823.15			
	58,080,933.26	22,725,185.11	535,673.85	22,189,511.26-

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2021 TRANSACTION YEAR				
303.20	20,254.74			
303.61			4,483.73-	4,483.73-
304.15	126,490.86	666,811.69		666,811.69-
304.20	2,974.34	37,171.02		37,171.02-
304.30	496,969.98	137,849.62		137,849.62-
304.61		1,346.07	4,483.73	3,137.66
304.62		18,876.94		18,876.94-
305.00	10,586.76	467.17		467.17-
306.00	507.53	450.15		450.15-
307.00	36,953.56	5,700.51		5,700.51-
311.00	270,914.29	193,743.82		193,743.82-
320.00	2,230,482.23	890,085.40		890,085.40-
320.30	33,915.10	1,370.70		1,370.70-
320.37	10,486.03			
330.00	256,778.51	1,561,680.99		1,561,680.99-
331.00	15,748,750.26	8,196,453.86	282,490.53	7,913,963.33-
333.00	7,520,801.90	2,681,541.01	1,799.10	2,679,741.91-
334.00	5,495,660.10	1,021,270.85	331,737.56	689,533.29-
335.00	2,860,930.58	1,074,172.62	11,562.11	1,062,610.51-
340.00	35,664,062.09	78,720.20	325.05	78,395.15-
341.00		16,299.55-	219,365.56	235,665.11
343.00	162,936.71	40,863.25		40,863.25-
344.00		5,126.37		5,126.37-
346.00	738,074.13	49,301.95		49,301.95-
347.00	203,387.56	8,339.46		8,339.46-
348.00	5,662.47			
	71,897,579.73	16,655,044.10	847,279.91	15,807,764.19-

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
304.15	981,518.44	850,320.81		850,320.81-
304.20	545,894.57	23,865.76		23,865.76-
304.30	2,017,524.85	52,542.41		52,542.41-
304.36	662.50			
304.61		6,818.30		6,818.30-
304.62	193,622.53	46,017.09		46,017.09-
304.63	3,204.02	79,910.95		79,910.95-
305.00	228,547.61	299,889.33		299,889.33-
306.00	152,202.89			
307.00	158,236.88	55,144.80		55,144.80-
310.00	4,791.22			
311.00	1,206,205.82	350,411.61		350,411.61-
320.00	3,732,867.80	1,520,577.41		1,520,577.41-
320.30	32,480.56	299,375.44		299,375.44-
320.37	18,895.53			
330.00	287,248.73	3,396,011.14		3,396,011.14-
331.00	19,475,471.04	13,983,952.63	111,611.62	13,872,341.01-
333.00	6,765,263.95	2,505,397.99	2,218.42	2,503,179.57-
334.00	9,009,490.02	3,625,834.72	54,380.07	3,571,454.65-
335.00	1,654,590.34	1,281,342.15	6,290.78	1,275,051.37-
340.00	45,059,382.50	67,823.74	8,592.94	59,230.80-
341.00		1,127.48	820,242.37	819,114.89
342.00	63,146.52			
343.00	237,075.29	38,089.15		38,089.15-
344.00	680,132.13	8,395.86		8,395.86-
345.00	332,927.29	590.23		590.23-
346.00	352,393.47	165,439.94		165,439.94-
347.00	260,681.45	105,946.50		105,946.50-
	93,454,457.95	28,764,825.44	1,003,336.20	27,761,489.24-
TOTAL	435,336,478.55	124,473,448.85	5,458,420.02	119,015,028.83-

VOLUME 11

PENNSYLVANIA-AMERICAN WATER COMPANY

2023 GENERAL BASE RATE CASE
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

EXHIBIT NO. 11-B - DEPRECIATION STUDY

WATER OPERATIONS
AS OF JUNE 30, 2024

Exhibit No. 11-B
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

WATER OPERATIONS

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WATER PLANT
AS OF JUNE 30, 2024

Prepared by:

Exhibit No. 11-B
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WATER OPERATIONS

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WATER PLANT
AS OF JUNE 30, 2024

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC
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gannettfleming.com

October 12, 2023

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to water plant. The results of our study as of June 30, 2024 are presented in the attached report. The results of our study as of June 30, 2023 are presented in our report, "2023 Depreciation Study - Calculated Annual Depreciation Accruals Related to Water Plant as of June 30, 2023." The same methods, procedures and estimates are used in both studies.

The attached report sets forth a description of the methods and procedures upon which the studies were based, the estimates of survivor curves, and the calculated annual depreciation as of June 30, 2024.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

FREDERICK B. JOHNSTON, JR.
Senior Analyst

JJS:mle
075543.100

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PART I. INTRODUCTION

PENNSYLVANIA-AMERICAN WATER COMPANY

WATER OPERATIONS

DEPRECIATION STUDY

PART I. INTRODUCTION

SCOPE

This report presents the results of the depreciation study prepared for Pennsylvania-American Water Company (the Company) as applied to water plant in service as of June 30, 2024. The study results include annual depreciation rates and amounts for regulatory reporting. The regulatory rates and amounts are based on the straight line remaining life method of depreciation. The report also describes the concepts, methods and basic judgments which underlie recommended annual depreciation accrual rates and amounts related to current water plant in service.

PLAN OF REPORT

Part I, Introduction, contains statements with respect to the plan of the report, and the basis of the study. Part II, Estimation of Survivor Curves, presents descriptions of the considerations and the methods used in the service life and net salvage studies. Part III, Service Life Considerations, presents the factors and judgment utilized in the average service life analysis. Part IV, Calculation of Annual and Accrued Depreciation, describes the procedures used in the calculation of group depreciation. Part V, Results of Study, presents a summary by depreciable group of annual depreciation accrual rates and amounts. Part VI, Service Life Statistics, presents the statistical analysis of service life estimates; Part VII, Detailed Depreciation Calculations, presents the detailed tabulations of annual depreciation; and Part VIII, Experienced and Estimated Net Salvage, presents the cost of removal and gross salvage recorded for the period 2019-2023.

BASIS OF THE STUDY

Depreciation

Depreciation, in public utility regulation, is the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among causes to be given consideration are wear and tear, deterioration, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and the requirements of public authorities.

Depreciation, as used in accounting, is a method of distributing fixed capital costs, less net salvage, over a period of time by allocating annual amounts to expense. Each annual amount of such depreciation expense is part of that year's total cost of providing utility service. Normally, the period of time over which the fixed capital cost is allocated to the cost of service is equal to the period of time over which an item renders service, that is, the item's service life. The most prevalent method of allocation is to distribute an equal amount of cost to each year of service life. This method is known as the straight line method of depreciation.

For most accounts, the annual depreciation was calculated by the straight line remaining life method using the equal life group procedure. For certain General Plant accounts, the annual depreciation is based on amortization accounting. Both types of calculations were based on original cost, attained ages of plant in service and the estimated service life characteristics of each depreciable group.

Service Life Estimates

The service life estimates used in the depreciation and amortization calculations were based on informed judgment which incorporated a review of management’s plans,

policies and outlook, a general knowledge of the water utility industry, and comparisons of the service life estimates from our studies of other water utilities. The use of survivor curves to reflect the expected dispersion of retirement provides a consistent method of estimating depreciation for water plant. Iowa type survivor curves were used to depict the estimated survivor curves for the plant accounts not subject to amortization accounting.

The procedure for estimating service lives consisted of compiling historical data for the plant accounts or depreciable groups, analyzing this history through the use of widely accepted techniques, and forecasting the survivor characteristics for each depreciable group on the basis of interpretations of the historical data analyses and the probable future. The combination of the historical experience and estimates of future experience yielded estimated survivor curves from which the average service lives were derived.

The Company's service life estimates used in the depreciation calculation incorporated historical data compiled through December 2021 from the property records of the Company. This represents the last service life study approved. Such data included plant additions, retirements, transfers and other activity. Generally, retirement data for the years through 2021 were used in the actuarial life table computations which were the primary statistical support of the service life estimates.

A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirement was obtained through discussions with operating and management personnel conducted during the course of the service life study. Information regarding plans for the future was incorporated in the interpretation and extrapolation of the statistical analyses.

DEVELOPMENT OF NET ORIGINAL COST

The original cost data used in this study were obtained from the Company's continuing property records and work order system which show in detail the original cost of the property including descriptions, locations and years of installation of property units. The net original cost was developed from the original cost data by deducting customer advances, contributions in aid of construction and excluded property.

The excluded property consists of: (1) a portion of the cost of the White Deer filter plant excluded pursuant to the Commission's Order at R-832511 adopted July 20, 1984 in the amount of $942,914; (2) the cost of utility plant in the Berwick District excluded in compliance with recommendations made by the Commission Bureau of Audits in a continuing property records audit completed in 1989 in the amount of $180,764; and (3) an exclusion to reflect the removal of contractor retention balances from amounts on which an Allowance for Funds Used During Construction was calculated in the amount of $434,336 pursuant to the Commission's Order at R-932670 adopted July 21, 1994.

The development of net original cost by plant account is set forth in Table 1 on pages V-5 and V-6.

PART II. ESTIMATION OF SURVIVOR CURVES

PART II. ESTIMATION OF SURVIVOR CURVES

The calculation of annual depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. The estimation of survivor curves is discussed below and the development of net salvage is discussed in later sections of this report.

SURVIVOR CURVES

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units or by constructing a survivor curve by plotting the number of units which survive at successive ages.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1, the remaining life at age 30 is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval. It is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

This study has incorporated the use of Iowa curves developed from a retirement rate analysis of historical retirement history. A discussion of the concepts of survivor curves and of the development of survivor curves using the retirement rate method is presented below.

Iowa Type Curves

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. There are four families in the Iowa system, labeled in accordance with the location of the modes of the retirements (or the portion of the frequency curve with the highest level of retirements) in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family. A higher number designates a higher mode curve.

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.

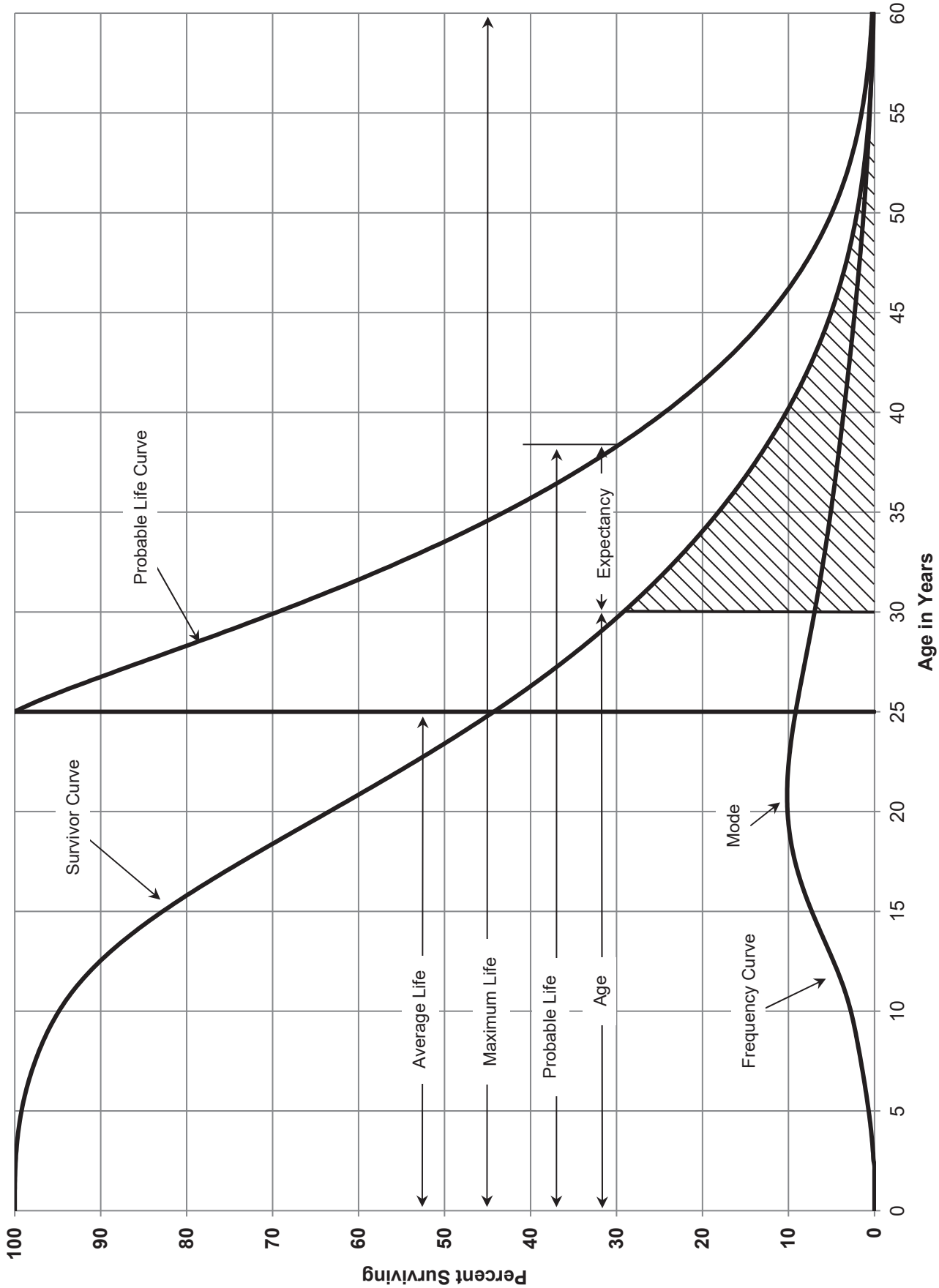

FIGURE 1. TYPICAL SURVIVOR CURVE AND DERIVED CURVES

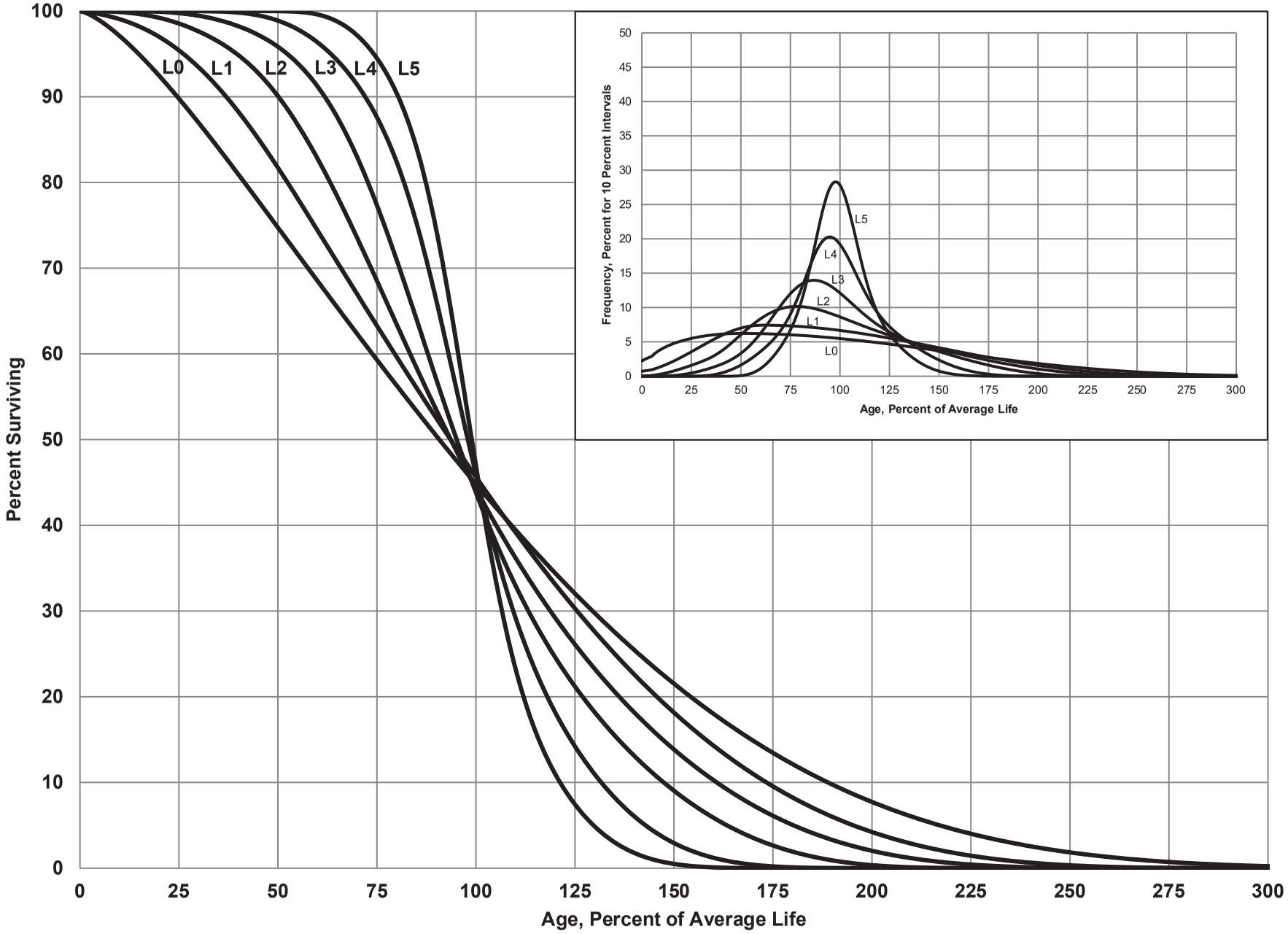

FIGURE 2. LEFT MODAL OR "L" IOWA TYPE SURVIVOR CURVES

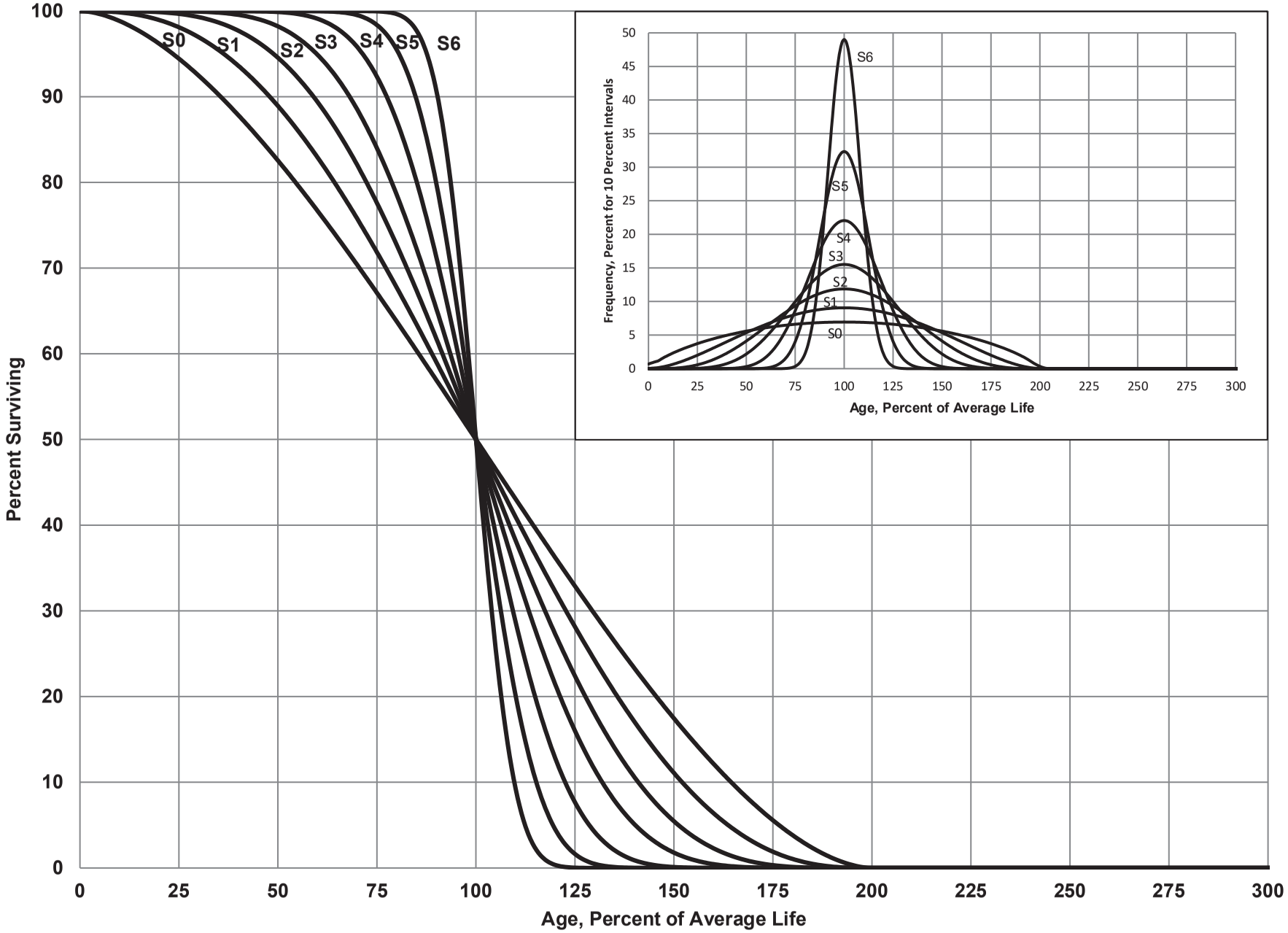

FIGURE 3. SYMMETRICAL OR "S" IOWA TYPE SURVIVOR CURVES

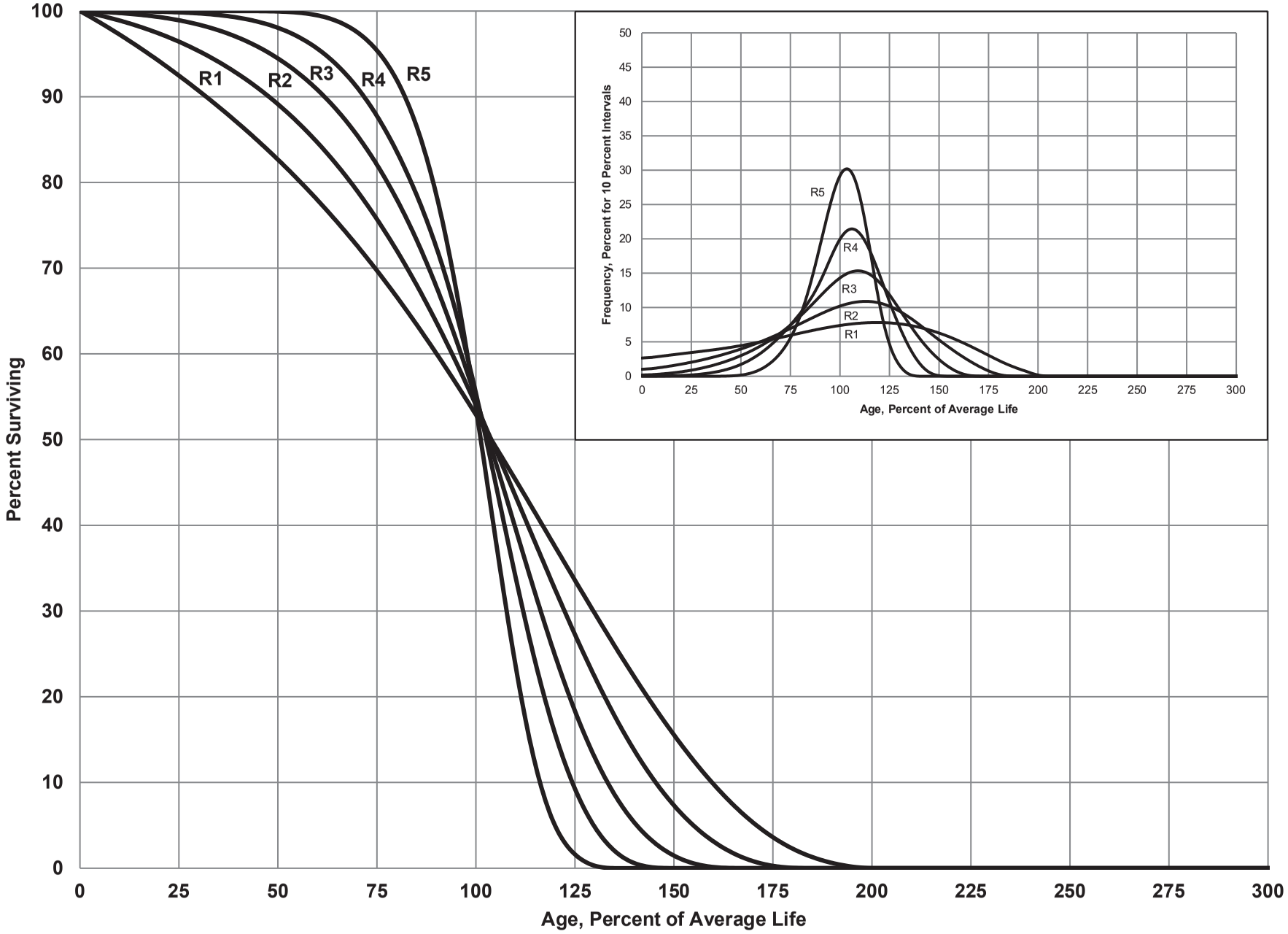

FIGURE 4. RIGHT MODAL OR "R" IOWA TYPE SURVIVOR CURVES

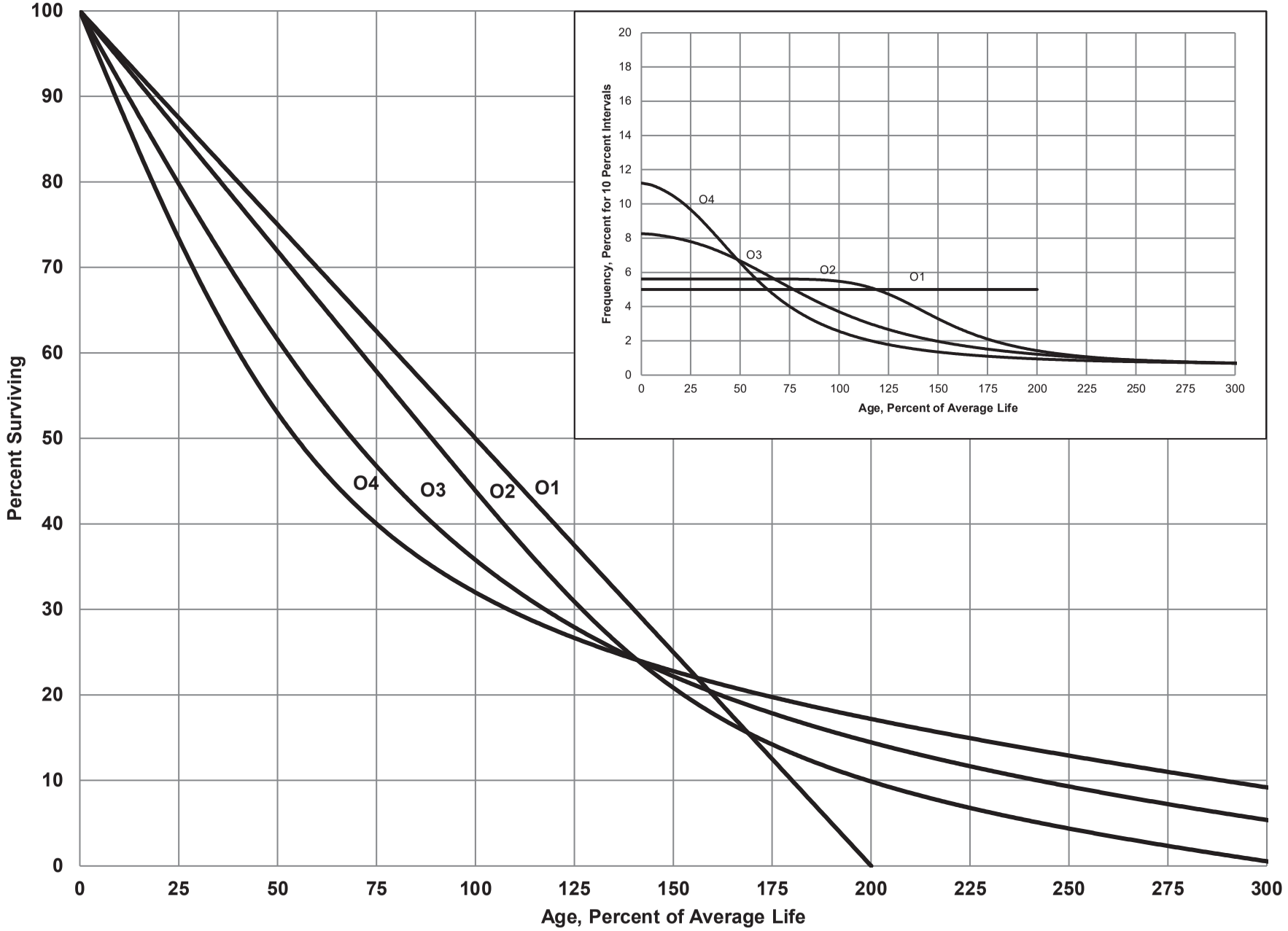

FIGURE 5. ORIGIN MODAL OR "O" IOWA TYPE SURVIVOR CURVES

These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."[1] In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student, submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text and is also explained in several publications including "Statistical Analyses of Industrial Property Retirements,"[2] "Engineering Valuation and Depreciation,"[3] and "Depreciation Systems."[4]

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band. The band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

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[1]Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

[2]Winfrey, Robley, Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

[3]Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.

[4]Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994.

Schedules of Annual Transactions in Plant Records

The property group used to illustrate the retirement rate method is observed for the experience band 2015-2024 for which there were placements during the years 2010-2024. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-11 and II-12. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, $10,000 of the dollars invested in 2010 were retired in 2015. The $10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of $143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2015 retirements of 2010 installations and ending with the 2024 retirements of the 2019 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20.

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024 Placement Band 2010-2024

Year Placed	Retirements, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	10	11	12	13	14	16	23	24	25	26	26	13½-14½
2011	11	12	13	15	16	18	20	21	22	19	44	12½-13½
2012	11	12	13	14	16	17	19	21	22	18	64	11½-12½
2013	8	9	10	11	11	13	14	15	16	17	83	10½-11½
2014	9	10	11	12	13	14	16	17	19	20	93	9½-10½
2015	4	9	10	11	12	13	14	15	16	20	105	8½-9½
2016		5	11	12	13	14	15	16	18	20	113	7½-8½
2017			6	12	13	15	16	17	19	19	124	6½-7½
2018				6	13	15	16	17	19	19	131	5½-6½
2019					7	14	16	17	19	20	143	4½-5½
2020						8	18	20	22	23	146	3½-4½
2021							9	20	22	25	150	2½-3½
2022								11	23	25	151	1½-2½
2023									11	24	153	½-1½
2024										13	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606	

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024 Placement Band 2010-2024

Year Placed	Acquisitions, Transfers and Sales, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	-	-	-	-	-	-	60[a]	-	-	-	-	13½-14½
2011	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2012	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2013	-	-	-	-	-	-	-	(5)[b]	-	-	60	10½-11½
2014	-	-	-	-	-	-	-	6[a]	-	-	-	9½-10½
2015	-	-	-	-	-	-	-	-	-	-	(5)	8½-9½
2016		-	-	-	-	-	-	-	-	-	6	7½-8½
2017			-	-	-	-	-	-	-	-	-	6½-7½
2018				-	-	-	-	(12)[b]	-	-	-	5½-6½
2019					-	-	-	-	22[a]	-	-	4½-5½
2020						-	-	(19)[b]	-	-	10	3½-4½
2021							-	-	-	-	-	2½-3½
2022								-	-	(102)[c]	(121)	1½-2½
2023									-	-	-	½-1½
2024											-	0-½
Total	-	-	-	-	-	-	60	(30)	22	(102)	(50)	

[a] Transfer Affecting Exposures at Beginning of Year
[b] Transfer Affecting Exposures at End of Year
[c] Sale with Continued Use
Parentheses Denote Credit Amount.

In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

Schedule of Plant Exposed to Retirement

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14. The surviving plant at the beginning of each year from 2015 through 2024 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2020 are calculated in the following manner:

Exposures at age 0	= amount of addition	= $750,000
Exposures at age ½	= $750,000 - $ 8,000	= $742,000
Exposures at age 1½	= $742,000 - $18,000	= $724,000
Exposures at age 2½	= $724,000 - $20,000 - $19,000	= $685,000
Exposures at age 3½	= $685,000 - $22,000	= $663,000

SCHEDULE 3. PLANT EXPOSED TO RETIREMENT
JANUARY 1 OF EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024

Placement Band 2010-2024

Year Placed	Exposures, Thousands of Dollars Annual Survivors at the Beginning of the Year 2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total at Beginning of Age Interval	Age Interval
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	255	245	234	222	209	195	239	216	192	167	167	13½-14½
2011	279	268	256	243	228	212	194	174	153	131	323	12½-13½
2012	307	296	284	271	257	241	224	205	184	162	531	11½-12½
2013	338	330	321	311	300	289	276	262	242	226	823	10½-11½
2014	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½
2015	420[a]	416	407	397	386	374	361	347	332	316	1,503	8½-9½
2016		460[a]	455	444	432	419	405	390	374	356	1,952	7½-8½
2017			510[a]	504	492	479	464	448	431	412	2,463	6½-7½
2018				580[a]	574	561	546	530	501	482	3,057	5½-6½
2019					660[a]	653	639	623	628	609	3,789	4½-5½
2020						750[a]	742	724	685	663	4,332	3½-4½
2021							850[a]	841	821	799	4,955	2½-3½
2022								960[a]	949	926	5,719	1½-2½
2023									1,080[a]	1,069	6,579	½-1½
2024										1,220[a]	7,490	0-½
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	

[a]Additions during the year

For the entire experience band 2015-2024, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

255 + 268 + 284 + 311 + 334 + 374 + 405 + 448 + 501 + 609.

Original Life Table

The original life table, illustrated in Schedule 4 on page II-16, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½	=	88.15				
Exposures at age 4½	=	3,789,000				
Retirements from age 4½ to 5½	=	143,000				
Retirement Ratio	=	143,000	÷	3,789,000	=	0.0377
Survivor Ratio	=	1.000	-	0.0377	=	0.9623
Percent surviving at age 5½	=	(88.15)	x	(0.9623)	=	84.83

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

SCHEDULE 4. ORIGINAL LIFE TABLE
CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2015-2024 Placement Band 2010-2024

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	Percent Surviving at Beginning of Age Interval
(1)	(2)	(3)	(4)	(5)	(6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	167	26	0.1557	0.8443	42.24
					35.66
Total	44,780	1,606			

Column 2 from Schedule 3, Column 12, Plant Exposed to Retirement.
Column 3 from Schedule 1, Column 12, Retirements for Each Year.
Column 4 = Column 3 Divided by Column 2.
Column 5 = 1.0000 Minus Column 4.
Column 6 = Column 5 Multiplied by Column 6 as of the Preceding Age Interval.

The original survivor curve is plotted from the original life table (column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

Smoothing the Original Survivor Curve

The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R Iowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group.

FIGURE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

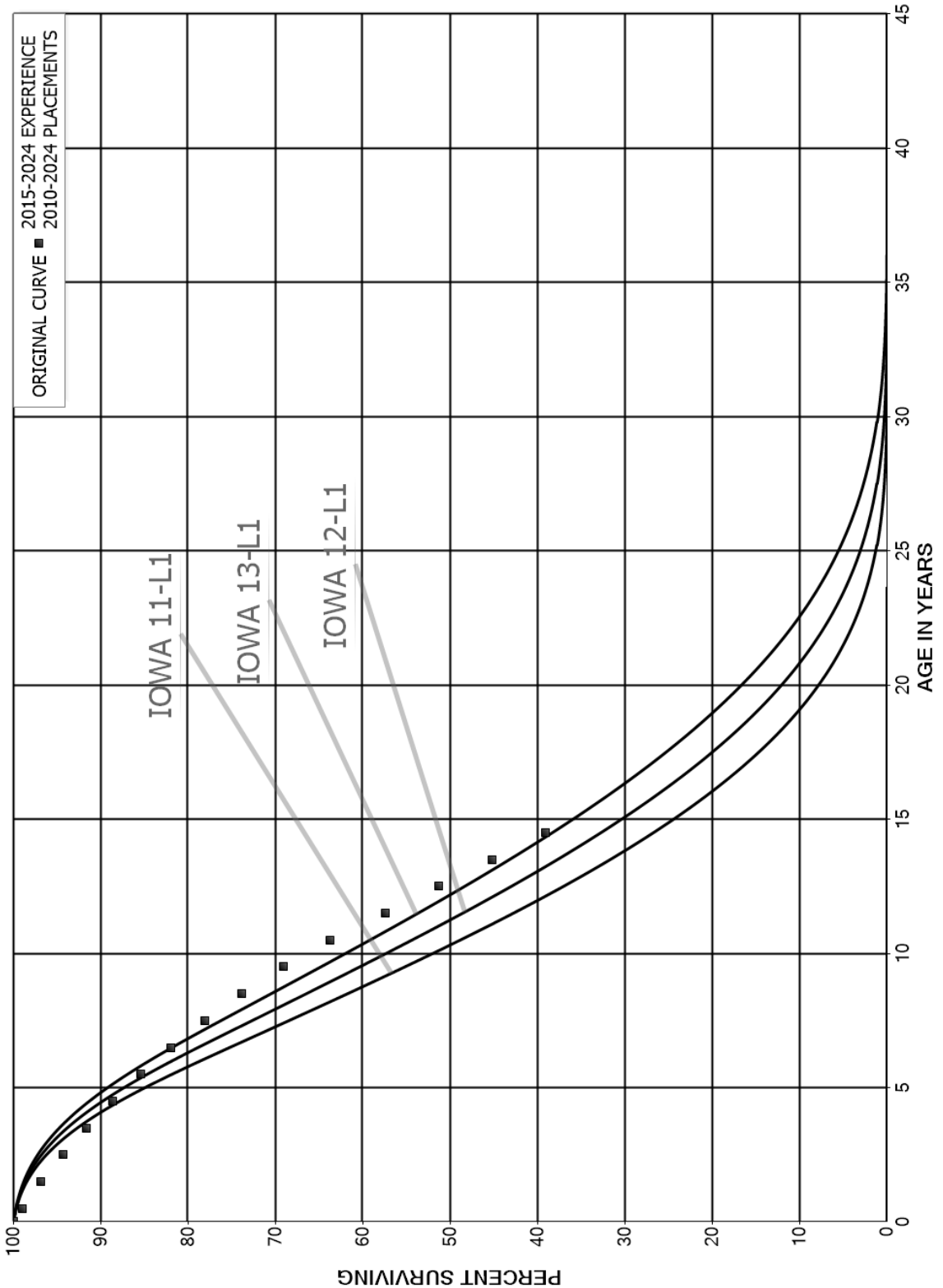


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

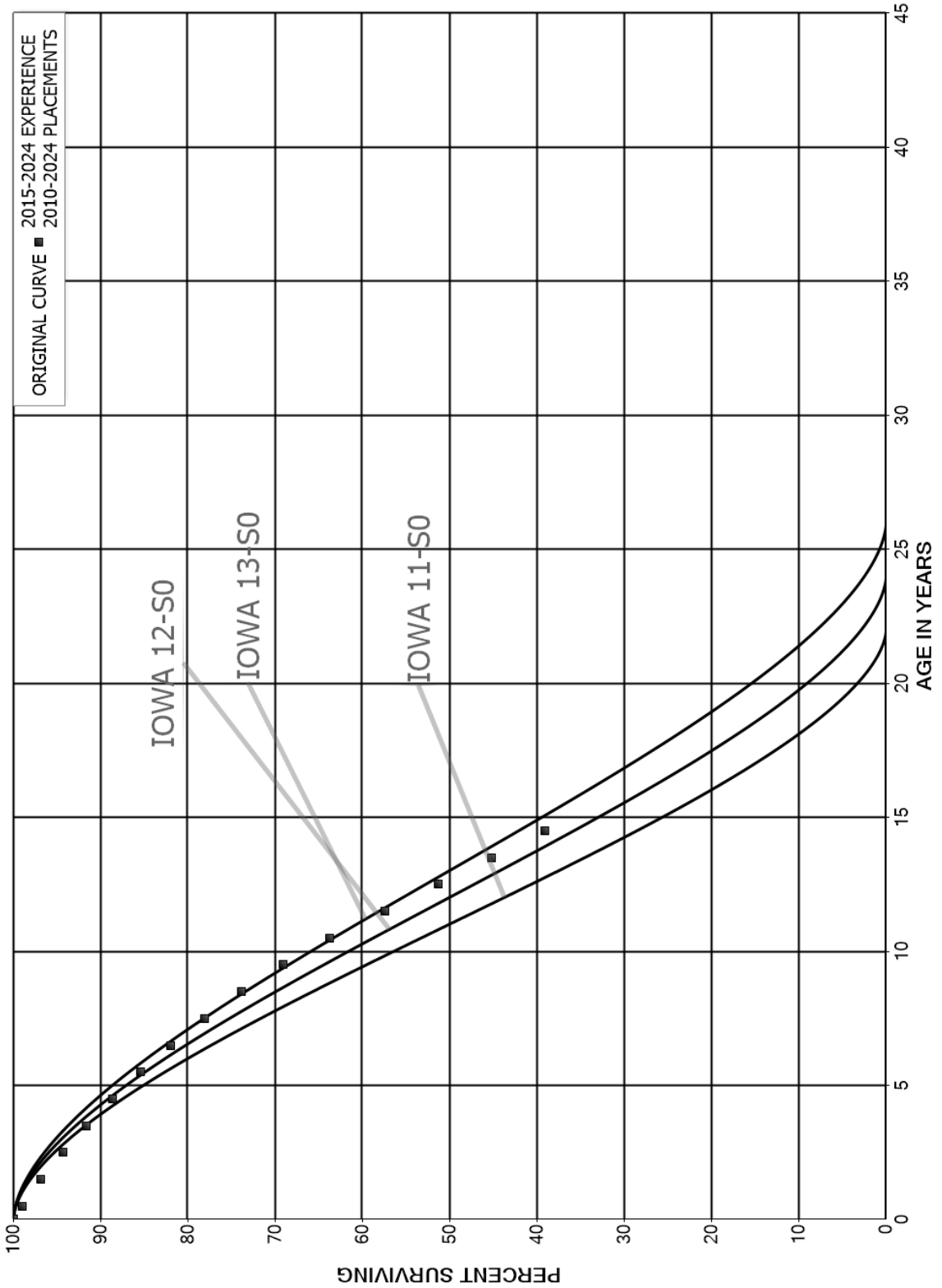


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

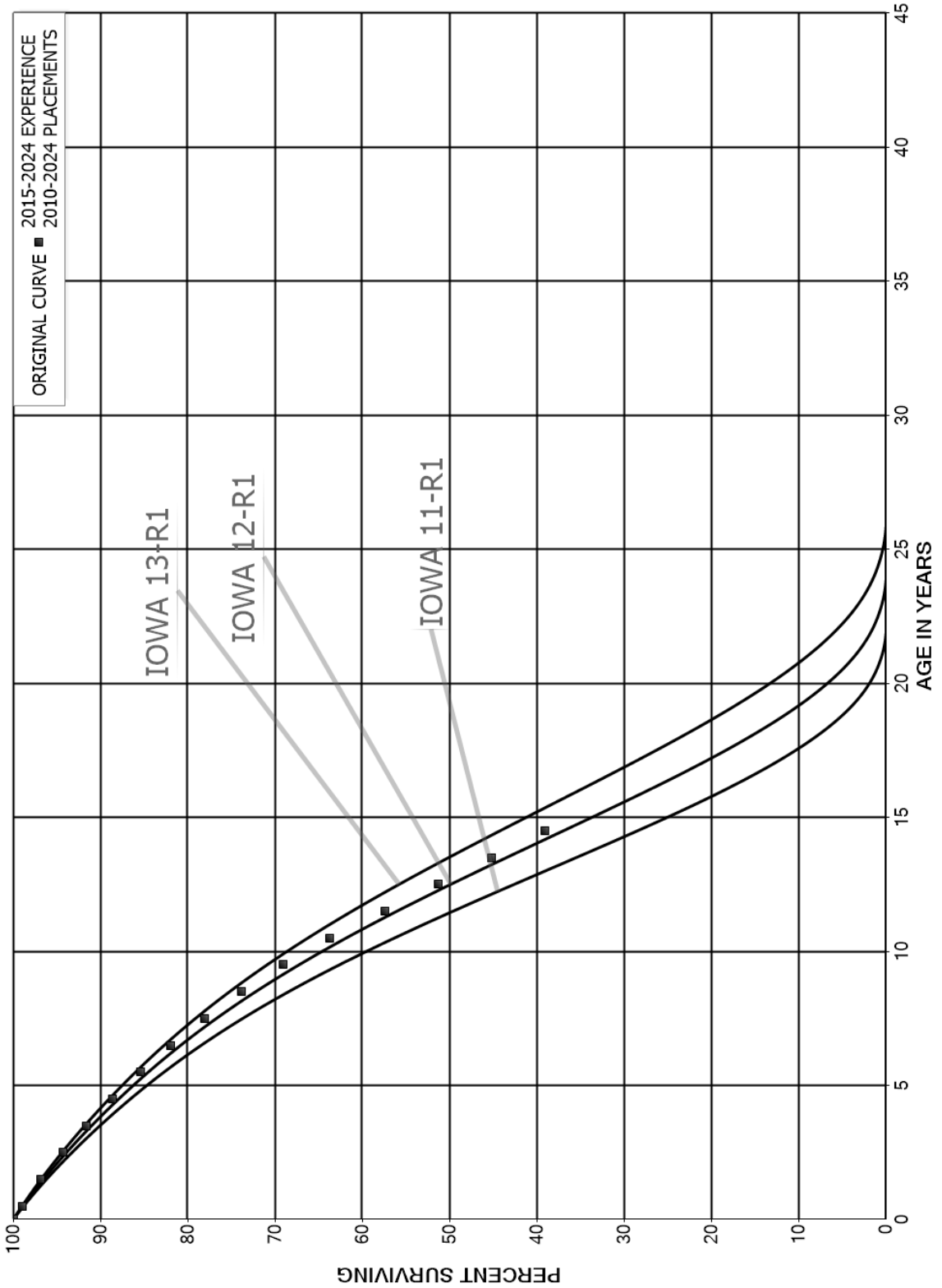
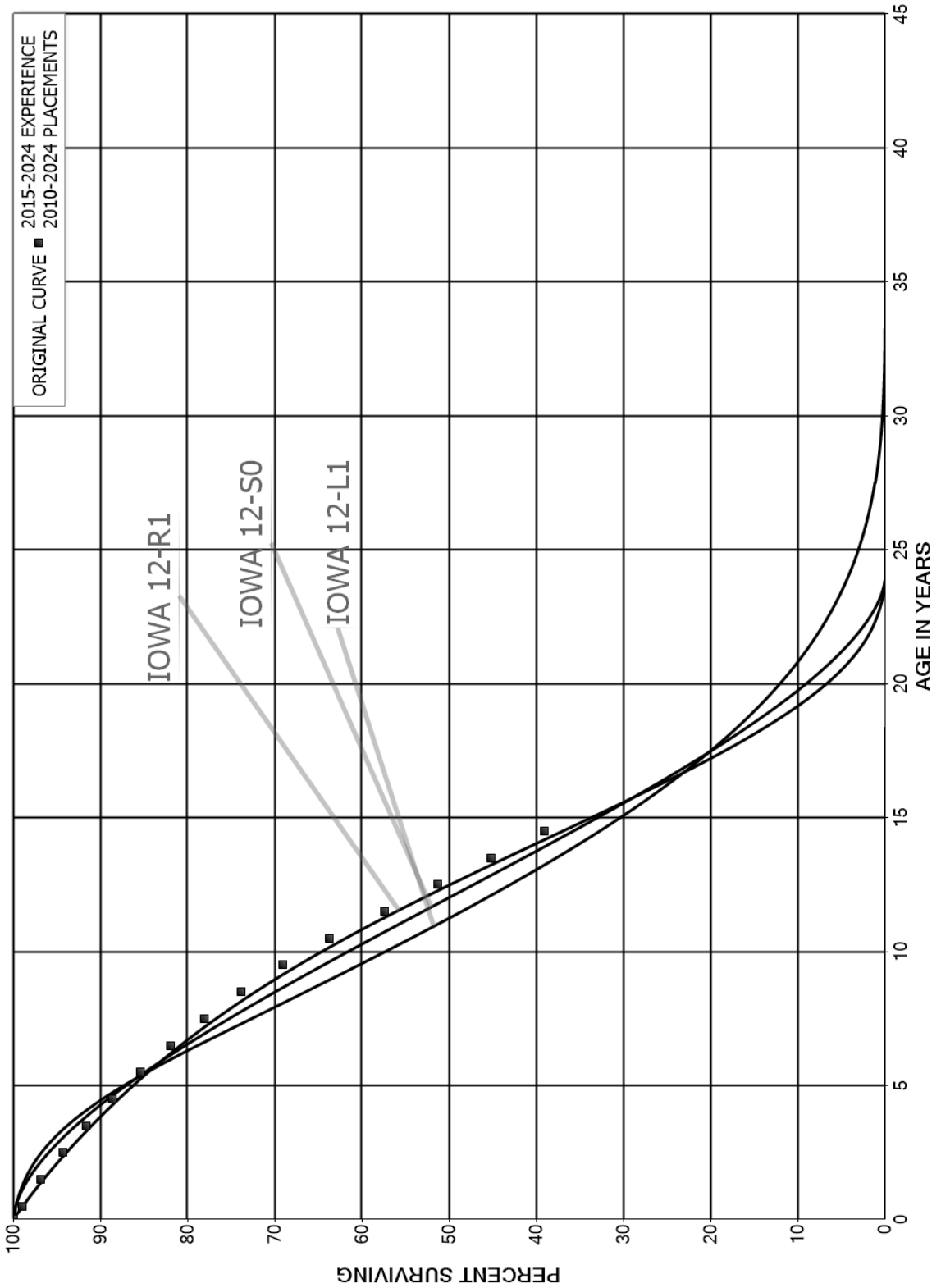


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PART III. SERVICE LIFE CONSIDERATIONS

PART III. SERVICE LIFE CONSIDERATIONS

FIELD TRIPS

In order to be familiar with the operation of the Company and observe representative portions of the plant, field trips are conducted for each service life study. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements are obtained during field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

The following is a list of the locations visited during the past field trips.

January 28, 2020

McKeesport Wastewater Treatment Plant
West Shore Pump Station
28th Street Pump Station
Long Run Pump Station
Dravosburg Wastewater Treatment Plant
Duquesne Wastewater Treatment Plant

August 22, 2012

Capital Operations Center (Mechanicsburg)
Slate Hill Road Tank
Slate Hill Road Booster Station
Westport Booster Station
Silver Springs Water Treatment Plant
Hershey Corporate Office
Hershey Water Treatment Plant (G. C. Smith)
Swatara Creek Raw Water Pump Station
Westford Crossing Booster Station and Tank

August 20, 2012
- Scranton Water Treatment Plant
- Williams Bridge Standpipe
- Oakmont Booster Station
- Mill Street Pump Station
- Nesbitt Dam
- Nesbitt Water Treatment Plant
- Watres Water Treatment Plant
- Mill Creek Standpipes
- Gardner Creek Pump Station

July 28, 2008
- Claysville Water Treatment Plant
- Jack Clutter Dam
- Jack Clutter Pump Station
- Saw Mill Pump House
- School Street Dam
- Claysville Tank

December 20, 2006
- West Shore Regional Treatment Plant

August 19, 2002
- Brownsville Treatment Plant
- E. H. Aldrich Treatment Plant
- Shire Oaks Relay Station and Standpipe
- Hays Mine Treatment Plant
- Beck's Run Raw Water Plant
- New Castle Treatment Plant
- Butler Treatment Plant

August 20, 2002
- Huntsville Treatment Plant
- Huntsville Raw Water Plant
- Brownell Treatment Plant
- Scranton Treatment Plant
- Nesbitt Treatment Plant

July 12-13, 2001
- Norristown Raw Water Plant
- Norristown Treatment Plant
- Swatara Creek Raw Water Plant
- Hershey Treatment Plant

January 14, 1997

Norristown District Office
Dekalb Standpipes and Pump Station
Norristown Treatment Plant
Forest Avenue Booster Station
Providence Road Booster Station
West Norriton Standpipe
Church Road Tank
Yardley Operations Center
Yardley Treatment Plant

December 3, 1996

Capital Operations and Customer Service Center
Yellow Breeches Treatment Plant
Evergreen Road Booster Station
Enola Standpipe
Silver Springs Treatment Plant
New Kingston Booster Station
Slate Hill Standpipe
Old Hershey Treatment Plant
New Hershey Treatment Plant
North Hills Reservoir
Mt. Alem Reservoir
Scranton Treatment Plant
Chinchilla Treatment Plant
Williams Bridge Reservoir
Edella Road Pump Station
Griffin Reservoir
Brownell Treatment Plant
Route 106 Booster Station
Fallbrook Treatment Plant

December 4, 1996

Nesbitt Treatment Plant
Ceasetown Treatment Plant
Hillside Treatment Plant
Crystal Lake Treatment Plant

December 10, 1996

Lawrence Operations Center
New Castle Treatment Plant
McQuisten Standpipe and Booster Station
Neshannock Standpipe
Shenango Booster Station
Butler Treatment Plant
North Butler Booster Station
Lick Hill Standpipe
Indiana Treatment Plant
Pleasant Hills Standpipe and Booster Station
Whitewoods Booster Station
West End Standpipe

December 11, 1996

Cook Lane Distribution Center
Hays Mine Treatment Plant
Beck's Run Raw Water Plant
Mt. Washington Booster Station
E. H. Aldrich Treatment Plant
Shire Oaks Relay Station and Standpipe
Rocky Ridge Standpipes and Booster Station
Bethel Park Distribution Center
Castle Shannon Standpipe

SERVICE LIFE CONSIDERATIONS

The service life estimates were based on judgment which considered a number of factors. The primary factors were the statistical analyses of data, current Company policies and outlook as determined during field reviews of the property and other conversations with management, and the survivor curve estimates from other water companies.

For depreciable groups which consist of numerous similar items of property, the distribution of the lives of the units in the group was judged on the basis of an average survival pattern for the entire group. The judgments for a life span group were made by

estimating the life of the major facility in the group and assigning lives to the related items of property which terminate at the probable retirement date of the major facility.

The life span estimates for structures and equipment in Accounts 303, 304, 305, 306 and 320 were based on the type of construction, attained age and specific plans of management. The following tabulation sets forth the estimated life span for each life span group.

Life Span Group	Life Span
Account 303.35, Waste Handling and Treatment Land	
Sanitary Landfill	50
Account 304.20, Power and Pumping Structures	
Booster Stations	50,60
Account 304.30, Purification Buildings	
Filter Plants	60-80
Tank Painting	10
Waste Handling and Treatment Structures	50
Account 304.61, Office Buildings	
Regional Offices	45
Corporate Office	65
Account 304.62, Stores, Shop and Garage Structures	
Distribution Centers	45, 50
Account 305.00, Collecting and Impounding Reservoirs	
Large Reservoirs	100, 120, 150
Account 306.00, Lake, River and Other Intakes	
Intakes	80

Life Span Group	Life Span
Account 320.10, Purification System - Large Structures	
Filters and Related Structures	55-75
Painting	10

For capitalized painting, the expectation is that there will be very minor retirements prior to the final retirement of the group. A square survivor curve, that is, no dispersion of retirements, was estimated for these groups. For the reservoirs, intakes, structures and filters, the expectation is that there will be retirements prior to the final retirement of the plant. Interim survivor curves were estimated for the plant based on prior studies and judgment. The interim survivor curves are as follows:

Account		Interim Survivor Group
303.35	Waste Handling and Treatment Land	100-R3
304.20	Power and Pumping Structures	75-S0.5
304.30	Purification Buildings	55-S1
304.36	Waste Handling and Treatment Structure	55-S1
304.61	Office Buildings	55-S0
304.62	Stores, Shop and Garage Structures	55-S0.5
305.00	Collecting and Impounding Reservoirs	130-R2
306.00	Lake, River and Other Intakes	55-S1.5
320.10	Purification System - Large Structures	50-S1

The average survivor curves estimated for depreciable groups with numerous similar items were based on statistical analyses, Company policies, and previous estimates made for this and other companies. For 28 of the mass plant accounts and subaccounts for which survivor curves were estimated, the statistical analysis resulted in good indications of the survivor patterns experienced. Generally, the statistical analyses were the primary bases for the estimates for the following accounts:

	Property Group	Survivor Curve
304.15	Other Water Source Structures	50-S0.5
304.63	Miscellaneous Structure and Improvements	35-S0.5
307.00	Wells and Springs	55-S0
310.00	Power Generation Equipment	45-S0.5
311.20 - 311.54	Electric Pumping Equipment	39-S0
320.20	Purification System – Chemical Treatment	42-R0.5
320.30	Granular Activated Carbon	11-L0.5
320.37	Waste Handling and Treatment – Equipment	30-R3
330.00 - 330.40	Distribution Reservoirs and Standpipes	65-S0.5
331.00	Mains and Accessories	90-R2
333.00	Services	65-R2.5
334.00	Meters and Meter Installations	20-L1.5
335.00	Fire Hydrants	60-R2
341.00 - 341.40	Transportation Equipment	10-L2.5
345.00	Power Operated Equipment	21-S0.5

The average survivor curve estimate for Account 334.00, Meters and Meter Installations, is the 20-L1.5 which reflects the Company policy that retirements of installations will be based on the retirement of the meter.

The average survivor curves for the remaining minor depreciable accounts and subaccounts were based on judgment incorporating the size and nature of the property and the previous studies for this and other companies.

The amortization periods selected for general plant Accounts 340.00, 342.00, 343.00, 346.00, 347.00 and 348.00 are discussed in the section, “Amortization of General Plant Accounts.”

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

BOOK RESERVE

The book reserve as of June 30, 2023, is the result of a bringforward of the book reserves established by the Commission for each of the companies that were merged to become Pennsylvania-American Water Company in the following rate orders:

Company	Order Entered	Docket No.
Keystone Water Company	March 29, 1985	R-842755
Riverton Consolidated Water Company	March 21, 1985	R-842675
Western Pennsylvania Water Company	January 24, 1985	R-842621

The book reserve activity subsequent to those dates consists of accruals, retirements, cost of removal, gross salvage and other debits and credits recorded to the book reserve through June 30, 2023. The actual reserve as recorded on the books of Pennsylvania Gas & Water and previously used for ratemaking purposes, was recorded as a credit to the Company's book reserve at the date of acquisition. The projected book reserve as of June 30, 2024, is a bringforward of the June 30, 2023 book reserve based on projected accruals, retirements, cost of removal, gross salvage and other credits.

CALCULATION OF DEPRECIATION

The annual depreciation accruals as of June 30, 2024, are based on the straight line remaining life method and the equal life group procedure. For the purpose of calculating the remaining life accruals as of June 30, 2024 , the book reserve is allocated among vintages in proportion to the calculated accrued depreciation as of June 30, 2024.

Group Depreciation Procedures. A group procedure for depreciation is appropriate when considering more than a single item of property. Normally, the items within a group do not have identical service lives, but have lives that are dispersed over a range of time.

In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

In the equal life group procedure, the property group is subdivided according to service life. That is, each equal life group includes that portion of the property which experiences the life of that specific group. The relative size of each equal life group is determined from the property's life dispersion curve. This procedure eliminates the need to base depreciation on average lives, inasmuch as each group is equivalent to a unit having a single life. The full costs of short-lived units are accrued during their lives, leaving no deferral of accruals required to be added to the annual costs associated with long-lived units. The calculated depreciation for the property group is the summation of the calculated depreciation based on the service life of each equal life group.

Remaining Life Annual Accruals. For the purpose of calculating remaining life accrual rates as of June 30, 2024, the estimated book depreciation reserve for each plant

account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation based on the equal life group procedure follow. The detailed calculations are set forth in the Results of Study section of the report.

Equal Life Group Procedure. In the equal life group procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the composite remaining life for the surviving original cost of that vintage. The composite remaining life is derived by compositing the individual equal life group remaining lives in accordance with the following equation:

$$\text{Composite Remaining Life} = \frac{\sum(\frac{\text{Book Cost}}{\text{Life}} \text{ x Remaining Life})}{\sum \frac{\text{Book Cost}}{\text{Life}}}.$$

The book costs and lives of the several equal life groups which are summed in the foregoing equation are defined by the estimated survivor curve.

Inasmuch as book cost divided by life equals the whole life annual accrual, the foregoing equation reduces to the following form:

$$\text{Composite Remaining Life} = \frac{\sum \text{Whole Life Future Accruals}}{\sum \text{Whole Life Annual Accruals}}$$

or

$$\text{Composite Remaining Life} = \frac{\sum \text{Book Cost - Calc. Reserve}}{\sum \text{Whole Life Annual Accrual}}.$$

The annual accrual rate for each account is equal to the sum of the remaining life annual accruals for all vintages divided by the account's total original cost. The account's "composite remaining life" is calculated by dividing the sum of the future book accruals for all vintages by the sum of the remaining life annual accruals for all vintages.

The calculated accrued depreciation in the equal life group procedure also represents that portion of depreciable cost which will not be allocated to expense through future accruals. However, the calculation is based at the equal life group level rather than the vintage group level and does not require the use of averages. The equal life group accrued depreciation ratio is calculated as follows:

$$Ratio = 1 - \left(\frac{Remaining\ Life}{Service\ Life}\right)$$

Inasmuch as service life minus remaining life equals age, when averages are not employed, the foregoing equation reduces to:

$$Ratio = \left(\frac{Age}{Service\ Life}\right)$$

CALCULATION OF ANNUAL AND ACCRUED AMORTIZATION

Amortization is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. Normally, the distribution of the amount is in equal amounts to each year of the amortization period.

The calculation of annual and accrued amortization requires the selection of an amortization period. The amortization periods used in this report were based on judgment which incorporated a consideration of the period during which the assets will render most

of their service, the amortization period and service lives used by other utilities, and the service life estimates previously used for the asset under depreciation accounting.

Amortization accounting is appropriate for certain General Plant accounts that represent numerous units of property, but a very small portion of depreciable water plant in service. The accounts and their amortization periods are as follows:

Account	Amortization Period, Years
340, Office Furniture and Equipment	
Furniture	20
Computers and Peripheral Equipment	5
Computer Software	5
Computer Software – Enterprise Solutions	10
Other Office Equipment	10
342, Stores Equipment	20
343, Tools and Work Equipment	20
344, Laboratory Equipment	20
346, Communication Equipment	
Equipment	15
Non-Telephone	15
Remote Control and Instrumentation	10
Telephone	10
347, Miscellaneous Equipment	25
348, Other Tangible Equipment	25

The annual amortization amount is determined by dividing the original cost for vintages whose age is less than the amortization period by the period of amortization. The calculated accrued amortization is equal to the original cost multiplied by the ratio of the vintage's age to its amortization period.

NET SALVAGE

Experienced net salvage is incorporated in the results of the study as it was reported on the Company's books and records for the period January 1, 2019 through

June 30, 2023, and estimated for the period July 1, 2023 through December 31, 2023. The calculation of the amortization is shown in Table 5 on page V-16. The amounts of gross salvage and removal cost by account for each year are set forth in the section beginning on page VIII-2.

Net salvage is presented in this manner to determine the amount of net salvage to be amortized to the cost of service for ratemaking purposes. In order to be consistent with this manner of recognizing net salvage, no adjustments for net salvage were made to the annual depreciation calculated for the individual accounts.

PART V. RESULTS OF STUDY

PART V. RESULTS OF STUDY

QUALIFICATION OF RESULTS

The calculated annual and accrued depreciation are the principal results of the study. Continued surveillance and periodic revisions are normally required to maintain continued use of appropriate annual depreciation accrual rates. An assumption that accrual rates can remain unchanged over a long period of time implies a disregard for the inherent variability in service lives and net salvage and for the change of the composition of property in service. The annual accrual rates were calculated in accordance with the straight line remaining life method of depreciation, using the equal life group procedure based on estimates which reflect considerations of current historical evidence and expected future conditions.

The annual depreciation accrual rates are applicable specifically to the water plant in service as of June 30, 2024. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to June 30, 2024, is reasonable for a period of three to five years.

DESCRIPTION OF DETAILED TABULATIONS

Table 1 presents the development of the net original cost used in the study. The results of the depreciation study are summarized in Table 2 which sets forth, by depreciable group, the estimated survivor curve, calculated annual accruals and book reserve related to net original cost and the annual amortization of net salvage. Table 3 presents the bringforward to June 30, 2024 of the book reserve as of June 30, 2023. Table 4 sets forth the calculation of estimated depreciation accruals for the twelve months

ended June 30, 2024. Table 5 presents the amortization of experienced and estimated net salvage, by account, based on the five-year period, 2019-2023. The total amortization amount is incorporated in the total annual accrual in Table 2.

Supporting statistical data for the estimates of average service lives and survivor curves, the annual depreciation calculations, and gross salvage and cost of removal for the years 2019-2023 are presented in three sections.

The section beginning on page VI-2 sets forth, for each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of the original life table plotted on the chart. A cumulative summary, by year installed, for utility plant and the supporting data for the original cost depreciation calculations are presented in the section beginning on page VII-3. The tabulations of experienced and estimated net salvage, by year and account for the five-year period 2019-2023, are presented in the section beginning on page VIII-2.

In the first section, the survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the type curve designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. In cases where only a segment of the estimated curve is used in the depreciation calculation, the numeral used for identification purposes is not a designation of the average life of the group. The titles of the charts indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which were plotted. The experience band indicates the range of years for which the retirements were used to

develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The tables of the calculated annual depreciation related to net original cost are presented in account sequence in the second section and indicate the estimated average survivor curves used in the calculations. The tables set forth, for each installation year, the original cost, calculated accrued depreciation, allocated book reserve, remaining life expectancy, and the calculated annual accrual.

Detailed tabulations setting forth the cost of removal, gross salvage and net salvage amounts, by account and year, are presented in the third section. The net salvage amounts, by account and year, are carried forward to Table 5, which presents the five-year amortization of net salvage.

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2024

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2024		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2024
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
INTANGIBLE PLANT										
301.00	ORGANIZATION	766,405.12								766,405.12
302.00	FRANCHISES AND CONSENTS	2,404,599.20								2,404,599.20
303.00	MISCELLANEOUS INTANGIBLE PLANT	15,572.16								15,572.16
	TOTAL INTANGIBLE PLANT	**3,186,576.48**		**0.00**		**0.00**		**0.00**		**3,186,576.48**
NONDEPRECIABLE PLANT										
303.20	POWER AND PUMPING LAND	6,169,782.02								6,169,782.02
303.30	PURIFICATION LAND	708,155.10								708,155.10
303.40	TRANSMISSION AND DISTRIBUTION LAND AND RIGHTS OF WAY	3,747,278.24				215,927.20				3,531,351.04
303.50	DISTRIBUTION RESERVOIRS AND STANDPIPE LAND	2,107,863.83								2,107,863.83
303.51	TRANSMISSION AND DISTRIBUTION - LAND	1,865,772.73								1,865,772.73
303.52	TRANSMISSION AND DISTRIBUTION - RIGHTS OF WAY	5,338,245.56								5,338,245.56
303.61	OFFICE LAND	3,221,899.78								3,221,899.78
	TOTAL NONDEPRECIABLE PLANT	**23,158,997.26**		**0.00**		**215,927.20**		**0.00**		**22,943,070.06**
DEPRECIABLE PLANT										
303.14	WATER RIGHTS - HIBERNIA	1,942,822.51								1,942,822.51
303.35	WASTE HANDLING AND TREATMENT LAND	155,025.17								155,025.17
303.99	COMPREHENSIVE PLANNING STUDIES	11,838,420.51								11,838,420.51
304.15	OTHER WATER SOURCE STRUCTURES	103,236,517.17								103,236,517.17
304.20	POWER AND PUMPING STRUCTURES	110,347,832.32				1,289,607.60		41,310.00		109,016,914.72
304.30	PURIFICATION BUILDINGS	346,091,210.80				281,872.62		230,375.00		345,578,963.18
304.36	WASTE HANDLING AND TREATMENT STRUCTURE	25,230,121.46								25,230,121.46
304.38	WASTE HANDLING AND TREATMENT STRUCTURES PAINTING	1,403,438.95								1,403,438.95
304.39	PURIFICATION BUILDINGS - TANK PAINTING	119,362.95								119,362.95
304.61	OFFICE BUILDINGS	43,743,584.85				60,000.00		12,834.00		43,670,750.85
304.62	STORES, SHOP AND GARAGE BUILDINGS	70,282,371.83				576.00				70,281,795.83
304.63	MISCELLANEOUS STRUCTURES AND IMPROVEMENTS	8,983,176.16								8,983,176.16
305.00	COLLECTING AND IMPOUNDING RESERVOIRS	138,407,174.63				3,575.00				138,403,599.63
306.00	LAKE, RIVER AND OTHER INTAKES	17,832,896.90				41,551.00				17,791,345.90
307.00	WELLS AND SPRINGS	12,487,787.82				71,610.27				12,416,177.55
310.00	POWER GENERATION EQUIPMENT	25,301,776.49				118,273.00		26,561.00		25,156,942.49
311.20	PUMPING EQUIPMENT - ELECTRIC	25,187,421.80				1,954,569.05		116,716.00		23,116,136.75
311.50	PUMPING EQUIPMENT - OTHER	16,571,799.32								16,571,799.32
311.52	PUMPING EQUIPMENT - SOURCE OF SUPPLY	12,940,570.90								12,940,570.90
311.53	PUMPING EQUIPMENT - WATER TREATMENT	47,853,790.34								47,853,790.34
311.54	PUMPING EQUIPMENT - TRANSMISSION AND DISTRIBUTION	6,707,900.44								6,707,900.44
320.10	PURIFICATION SYSTEM - LARGE STRUCTURES	262,248,495.53				27,162.27		627,852.00		261,593,481.26
320.18	PURIFICATION SYSTEM - LARGE STRUCTURES PAINT	103,245.73								103,245.73
320.19	PURIFICATION SYSTEM - LARGE STRUCTURES PAINT	3,667,945.94								3,667,945.94
320.20	PURIFICATION SYSTEM - CHEMICAL TREATMENT	118,775,922.85				42,367.00				118,733,555.85
320.29	PURIFICATION SYSTEM - CHEMICAL TREATMENT PAINT	8,167.87								8,167.87
320.30	GRANULAR ACTIVATED CARBON	13,459,406.97								13,459,406.97

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2024

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2024		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2024
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
320.37	WASTE HANDLING AND TREATMENT - EQUIPMENT	15,531,581.93								15,531,581.93
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	133,883,627.32				3,115,059.10				130,768,568.22
330.10	ELEVATED TANKS AND STANDPIPES	14,144,856.97								14,144,856.97
330.20	GROUND LEVEL FACILITIES	19,913,409.67								19,913,409.67
330.30	BELOW GRADE FACILITIES	818,707.23								818,707.23
330.40	CLEARWELL	12,806,300.04								12,806,300.04
330.58	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	2,303,924.15								2,303,924.15
330.59	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	45,744,045.26								45,744,045.26
331.00	MAINS AND ACCESSORIES	3,629,756,123.82		48,391,011.36		253,374,712.99		502,366.00		3,327,488,033.47
333.00	SERVICES	746,349,688.27		11,443,825.85		15,827,671.95				719,078,190.47
334.00	METERS AND METER INSTALLATIONS	251,100,503.66				1,872,625.15				249,227,878.51
335.00	FIRE HYDRANTS	152,728,748.00		1,914,936.19		5,535,339.03				145,278,472.78
340.10	OFFICE FURNITURE	8,638,585.84								8,638,585.84
340.20	COMPUTERS AND PERIPHERAL EQUIPMENT	17,320,326.29								17,320,326.29
340.30	COMPUTER SOFTWARE	91,455,720.27								91,455,720.27
340.31	COMPUTER SOFTWARE - ENTERPRISE SOLUTIONS	1,067,816.75								1,067,816.75
340.50	OTHER OFFICE EQUIPMENT	9,454.95				354.00				9,100.95
341.00	NOT CLASSIFIED	2,587.67								2,587.67
341.10	LIGHT DUTY TRUCKS	61,327,985.93								61,327,985.93
341.20	EQUIPMENT	16,793,602.21								16,793,602.21
341.30	AUTOS	1,995,589.81								1,995,589.81
341.40	OTHER	7,584,706.89								7,584,706.89
342.00	STORES EQUIPMENT	469,790.25								469,790.25
343.00	TOOLS AND WORK EQUIPMENT	48,134,497.49				12,841.25				48,121,656.24
344.00	LABORATORY EQUIPMENT	2,229,299.11								2,229,299.11
345.00	POWER OPERATED EQUIPMENT	2,122,806.77								2,122,806.77
346.00	EQUIPMENT	3,768,803.66				56,552.67				3,712,250.99
346.10	NON-TELEPHONE	9,649,123.69								9,649,123.69
346.19	REMOTE CONTROL AND INSTRUMENTATION	4,902,319.79								4,902,319.79
346.20	TELEPHONE	309,958.34								309,958.34
347.00	MISCELLANEOUS EQUIPMENT	36,249,420.69				4,085.00				36,245,335.69
348.00	OTHER TANGIBLE EQUIPMENT	795,577.91								795,577.91
	TOTAL DEPRECIABLE PLANT	**6,764,837,678.84**		**61,749,773.40**		**283,690,404.95**		**1,558,014.00**		**6,417,839,486.49**
	TOTAL UTILITY PLANT IN SERVICE	**6,791,183,252.58**		**61,749,773.40**		**283,906,332.15**		**1,558,014.00**		**6,443,969,133.03**

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF JUNE 30, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)
INTANGIBLE PLANT									
301.00	ORGANIZATION	NONDEPR.		766,405.12					
302.00	FRANCHISES AND CONSENTS	NONDEPR.		2,404,599.20					
303.00	MISCELLANEOUS INTANGIBLE PLANT	NONDEPR.		15,572.16					
	TOTAL INTANGIBLE PLANT			**3,186,576.48**					
NONDEPRECIABLE PLANT									
303.20	POWER AND PUMPING LAND	NONDEPR.		6,169,782.02					
303.30	PURIFICATION LAND	NONDEPR.		708,155.10					
303.40	TRANSMISSION AND DISTRIBUTION LAND AND RIGHTS OF WAY	NONDEPR.		3,531,351.04					
303.50	DISTRIBUTION RESERVOIRS AND STANDPIPES LAND	NONDEPR.		2,107,863.83					
303.51	TRANSMISSION AND DISTRIBUTION - LAND	NONDEPR.		1,865,772.73					
303.52	TRANSMISSION AND DISTRIBUTION - RIGHTS OF WAY	NONDEPR.		5,338,245.56					
303.61	OFFICE LAND	NONDEPR.		3,221,899.78					
	TOTAL NONDEPRECIABLE PLANT			**22,943,070.06**					
DEPRECIABLE PLANT									
303.14	WATER RIGHTS - HIBERNIA	25-SQ		1,942,822.51	1,942,823	0	0	-	-
303.35	WASTE HANDLING AND TREATMENT LAND	100-R3	*	155,025.17	133,178	21,847	1,303	0.84	16.8
303.99	COMPREHENSIVE PLANNING STUDIES	5-SQ		11,838,420.51	9,027,061	2,811,360	1,429,604	12.08	2.0
304.15	OTHER WATER SOURCE STRUCTURES	50-S0.5		103,236,517.17	8,694,594	94,541,923	2,987,555	2.89	31.6
304.20	POWER AND PUMPING STRUCTURES								
	LARGE STRUCTURES	75-S0.5	*	56,459,468.67	9,393,614	47,065,855	1,610,727	2.85	29.2
	OTHER STRUCTURES	55-R3		52,557,446.05	9,065,637	43,491,809	1,400,230	2.66	31.1
	TOTAL ACCOUNT 304.2			109,016,914.72	18,459,251	90,557,664	3,010,957	2.76	30.1
304.30	PURIFICATION BUILDINGS								
	LARGE STRUCTURES	55-S1	*	294,444,269.51	106,630,080	187,814,190	7,280,247	2.47	25.8
	OTHER STRUCTURES	60-R3		51,134,693.67	14,186,360	36,948,334	921,961	1.80	40.1
	TOTAL ACCOUNT 304.3			345,578,963.18	120,816,440	224,762,524	8,202,208	2.37	27.4
304.36	WASTE HANDLING AND TREATMENT STRUCTURES	55-S1	*	25,230,121.46	8,232,332	16,997,789	751,733	2.98	22.6
304.38	WASTE HANDLING AND TREATMENT STRUCTURES PAINTING	10-SQ		1,403,438.95	467,566	935,873	135,908	9.68	6.9
304.39	PURIFICATION BUILDINGS - TANK PAINTING	10-SQ		119,362.95	115,844	3,519	3,519	2.95	1.0
304.61	OFFICE BUILDINGS								
	LARGE STRUCTURES	55-S0	*	27,589,751.28	6,804,093	20,785,658	992,729	3.60	20.9
	OTHER OTHER STRUCTURES	50-R3		16,080,999.57	4,195,737	11,885,263	370,385	2.30	32.1
	TOTAL ACCOUNT 304.61			43,670,750.85	10,999,830	32,670,921	1,363,114	3.12	24.0
304.62	STORES, SHOP AND GARAGE BUILDINGS								
	LARGE STRUCTURES	55-S0.5	*	58,751,831.95	16,666,286	42,085,547	1,434,911	2.44	29.3
	OTHER OTHER STRUCTURES	45-R3		11,529,963.88	4,018,892	7,511,072	221,245	1.92	33.9
	TOTAL ACCOUNT 304.62			70,281,795.83	20,685,178	49,596,619	1,656,156	2.36	29.9
304.63	MISCELLANEOUS STRUCTURES AND IMPROVEMENTS	35-S0.5		8,983,176.16	3,313,011	5,670,165	241,603	2.69	23.5
	TOTAL ACCOUNT 304			707,521,041.27	191,784,046	515,736,997	18,352,753	2.59	28.1

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF JUNE 30, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)
305.00	COLLECTING AND IMPOUNDING RESERVOIRS								
	LARGE RESERVOIRS	130-R2	*	129,635,756.24	22,219,353	107,416,404	1,792,397	1.38	59.9
	OTHER RESERVOIRS	75-R3		8,767,843.39	2,875,666	5,892,177	161,363	1.84	36.5
	TOTAL ACCOUNT 305			138,403,599.63	25,095,019	113,308,581	1,953,760	1.41	58.0
306.00	LAKE, RIVER AND OTHER INTAKES								
	LARGE RESERVOIRS	55-S1.5	*	12,329,112.16	5,020,651	7,308,461	289,212	2.35	25.3
	OTHER RESERVOIRS	50-S0.5		5,462,233.74	1,689,487	3,772,747	142,680	2.61	26.4
	TOTAL ACCOUNT 306			17,791,345.90	6,710,138	11,081,208	431,892	2.43	25.7
307.00	WELLS AND SPRINGS	55-S0		12,416,177.55	3,612,473	8,803,705	294,151	2.37	29.9
310.00	POWER GENERATION EQUIPMENT	45-S0.5		25,156,942.49	5,546,185	19,610,757	708,425	2.82	27.7
	PUMPING EQUIPMENT								
311.20	ELECTRIC	39-S0		23,116,136.75	3,183,068	19,933,069	869,482	3.76	22.9
311.50	OTHER	39-S0		16,571,799.32	770,023	15,801,776	666,390	4.02	23.7
311.52	SOURCE OF SUPPLY	39-S0		12,940,570.90	3,000,408	9,940,163	435,454	3.37	22.8
311.53	WATER TREATMENT	39-S0		47,853,790.34	26,577,175	21,276,615	1,275,910	2.67	16.7
311.54	TRANSMISSION AND DISTRIBUTION	39-S0		6,707,900.44	2,497,330	4,210,570	199,009	2.97	21.2
	TOTAL ACCOUNT 311			107,190,197.75	36,028,004	71,162,193	3,446,245	3.22	20.6
	PURIFICATION SYSTEM								
320.10	LARGE STRUCTURES								
	LARGE STRUCTURES	50-S1	*	245,991,456.85	84,182,848	161,808,607	6,639,257	2.70	24.4
	OTHER OTHER STRUCTURES	55-R3		15,602,024.41	3,846,140	11,755,884	319,366	2.05	36.8
	TOTAL ACCOUNT 320.1			261,593,481.26	88,028,988	173,564,491	6,958,623	2.66	24.9
320.18	LARGE STRUCTURES PAINT	10-SQ		103,245.73	103,246	0	0	-	-
320.19	LARGE STRUCTURES PAINT	10-SQ		3,667,945.94	3,139,061	528,885	80,974	2.21	6.5
320.20	CHEMICAL TREATMENT	42-R0.5		118,733,555.85	30,308,513	88,425,043	4,062,816	3.42	21.8
320.29	CHEMICAL TREATMENT PAINT	FULLY ACCRUED		8,167.87	8,168	0	0	-	-
320.30	GRANULAR ACTIVATED CARBON	11-L0.5		13,459,406.97	6,870,691	6,588,716	1,203,541	8.94	5.5
320.37	WASTE HANDLING AND TREATMENT - EQUIPMENT	30-R3		15,531,581.93	10,789,269	4,742,313	271,461	1.75	17.5
	TOTAL ACCOUNT 320			413,097,385.55	139,247,936	273,849,448	12,577,415	3.04	21.8
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	65-S0.5		130,768,568.22	42,731,163	88,037,405	2,346,480	1.79	37.5
330.10	ELEVATED TANKS AND STANDPIPES	65-S0.5		14,144,856.97	2,576,544	11,568,313	281,257	1.99	41.1
330.20	GROUND LEVEL FACILITIES	65-S0.5		19,913,409.67	2,447,602	17,465,808	419,151	2.10	41.7
330.30	BELOW GRADE FACILITIES	65-S0.5		818,707.23	174,867	643,840	15,945	1.95	40.4
330.40	CLEARWELL	65-S0.5		12,806,300.04	2,868,151	9,938,149	247,909	1.94	40.1
330.58	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ		2,303,924.15	2,164,662	139,262	79,453	3.45	1.8
330.59	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ		45,744,045.26	28,235,459	17,508,586	3,183,288	6.96	5.5
	TOTAL ACCOUNT 330			226,499,811.54	81,198,448	145,301,363	6,573,483	2.90	22.1
331.00	MAINS AND ACCESSORIES	90-R2		3,327,488,033.47	317,168,189	3,010,319,844	50,981,834	1.53	59.0
333.00	SERVICES	65-R2.5		719,078,190.47	165,593,656	553,484,534	13,326,968	1.85	41.5
334.00	METERS AND METER INSTALLATIONS	20-L1.5		249,227,878.51	86,478,411	162,749,468	15,106,859	6.06	10.8
335.00	FIRE HYDRANTS	60-R2		145,278,472.78	20,657,896	124,620,577	3,298,422	2.27	37.8

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE	NET ORIGINAL COST AS OF JUNE 30, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
340.00	OFFICE FURNITURE AND EQUIPMENT							
	FURNITURE	20-SQ	8,638,585.84	1,627,429	7,011,157	519,152	6.01	13.5
	COMPUTERS AND PERIPHERAL EQUIPMENT	5-SQ	17,320,326.29	4,881,170	12,439,156	4,764,289	27.51	2.6
	COMPUTER SOFTWARE	5-SQ	91,455,720.27	32,442,490	59,013,230	28,190,991	30.82	2.1
	COMPUTER SOFTWARE - ENTERPRISE SOLUTIONS	10-SQ	1,067,816.75	343,459	724,358	361,319	33.84	2.0
	OTHER OFFICE EQUIPMENT	10-SQ	9,100.95	3,049	6,052	1,210	13.29	5.0
	TOTAL ACCOUNT 340		118,491,550.10	39,297,597	79,193,953	33,836,961	28.56	2.3
341.00	TRANSPORATION EQUIPMENT							
	NOT CLASSIFIED	10-L2.5	2,587.67	1,734	854	169	6.53	5.1
	LIGHT DUTY TRUCKS	10-L2.5	61,327,985.93	28,279,582	33,048,404	5,419,866	8.84	6.1
	EQUIPMENT	10-L2.5	16,793,602.21	15,100,515	1,693,087	429,555	2.56	3.9
	AUTOS	10-L2.5	1,995,589.81	1,837,721	157,869	50,896	2.55	3.1
	OTHER	10-L2.5	7,584,706.89	6,612,942	971,765	218,934	2.89	4.4
	TOTAL ACCOUNT 341		87,704,472.51	51,832,494	35,871,979	6,119,420	6.98	5.9
342.00	STORES EQUIPMENT	20-SQ	469,790.25	98,512	371,278	29,146	6.20	12.7
343.00	TOOLS AND WORK EQUIPMENT	20-SQ	48,121,656.24	11,953,618	36,168,038	2,664,312	5.54	13.6
344.00	LABORATORY EQUIPMENT	20-SQ	2,229,299.11	624,008	1,605,291	202,752	9.09	7.9
345.00	POWER OPERATED EQUIPMENT	21-S0.5	2,122,806.77	1,449,816	672,991	81,581	3.84	8.2
346.00	COMUNICATION EQUIPMENT							
	EQUIPMENT	15-SQ	3,712,250.99	671,739	3,040,512	243,507	6.56	12.5
	NON-TELEPHONE	15-SQ	9,649,123.69	2,158,396	7,490,728	670,327	6.95	11.2
	REMOTE CONTROL AND INSTRUMENTATION	10-SQ	4,902,319.79	1,864,142	3,038,178	536,905	10.95	5.7
	TELEPHONE	10-SQ	309,958.34	185,515	124,443	27,166	8.76	4.6
	TOTAL ACCOUNT 346		18,573,652.81	4,879,792	13,693,861	1,477,905	7.96	9.3
347.00	MISCELLANEOUS EQUIPMENT	25-SQ	36,245,335.69	5,438,554	30,806,782	1,674,196	4.62	18.4
348.00	OTHER TANGIBLE EQUIPMENT	25-SQ	795,577.91	510,231	285,347	32,464	4.08	8.8
	TOTAL DEPRECIABLE PLANT		**6,417,839,486.49**	**1,206,308,085**	**5,211,531,402**	**174,601,851**	**2.72**	
	AMORTIZATION OF NET SALVAGE					**26,209,026**		
	TOTAL UTILITY PLANT IN SERVICE		**6,443,969,133.03**	**1,206,308,085**	**5,211,531,402**	**200,810,877**		

* Life Span Procedure was used. Curve shown is Interim Survivor Curve.

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2024, OF BOOK RESERVE AS OF JUNE 30, 2023

Account	BOOK RESERVE BALANCE AS OF 06/30/2023	+	PROJECTED DEPRECIATION ACCRUALS	-	PROJECTED RETIREMENTS	-	PROJECTED COST OF REMOVAL	+	PROJECTED SALVAGE	+	ADJUSTMENTS AND ACQUISITIONS	=	PROJECTED BOOK RESERVE BALANCE AS OF 06/30/2024
(1)	(2)		(3)		(4)		(5)		(6)		(7)		(8)
303.14	1,942,823												1,942,823
303.35	131,860		1,318										133,178
303.61			(1,110)								1,110		0
303.99	7,254,665		1,772,396										9,027,061
304.15	7,841,590		3,461,488		1,380,150		1,242,135		13,802				8,694,594
304.20	16,609,855		3,063,237		1,003,174		230,730		20,063				18,459,251
304.30	113,690,307		8,316,559		1,149,942		80,496		11,499		28,512		120,816,440
304.36	7,463,436		768,896										8,232,332
304.38	331,573		135,993										467,566
304.39	112,323		3,521										115,844
304.61	10,070,623		1,136,665		234,487		86,760		114,899		(1,110)		10,999,830
304.62	19,435,733		1,610,420		392,364		66,702		98,091				20,685,178
304.63	3,630,315		169,369		467,955		28,077		9,359				3,313,011
305.00	23,899,693		2,270,488		647,688		427,474						25,095,019
306.00	6,388,560		433,365		106,464		5,323						6,710,138
307.00	3,401,063		337,082		111,214		14,458						3,612,473
310.00	6,293,958		575,328		1,084,889		238,676				464		5,546,185
311.20	3,968,076		1,081,876		1,530,233		336,651						3,183,068
311.50	1,149,625		570,168		778,500		171,270						770,023
311.52	2,764,830		424,297		154,688		34,031						3,000,408
311.53	25,237,269		1,339,906										26,577,175
311.54	2,291,397		205,933										2,497,330
320.10	90,568,697		7,024,676		7,775,923		1,788,462						88,028,988
320.18	103,246												103,246
320.19	3,059,100		79,961										3,139,061
320.20	30,603,828		3,594,653		3,163,130		727,520				682		30,308,513
320.29	8,168												8,168

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2024, OF BOOK RESERVE AS OF JUNE 30, 2023

Account	BOOK RESERVE BALANCE AS OF 06/30/2023	+	PROJECTED DEPRECIATION ACCRUALS	-	PROJECTED RETIREMENTS	-	PROJECTED COST OF REMOVAL	+	PROJECTED SALVAGE	+	ADJUSTMENTS AND ACQUISITIONS	=	PROJECTED BOOK RESERVE BALANCE AS OF 06/30/2024
(1)	(2)		(3)		(4)		(5)		(6)		(7)		(8)
320.30	5,555,240		1,523,977		166,821		41,705						6,870,691
320.37	10,673,814		271,320		141,695		14,170						10,789,269
330.00	39,932,025		4,338,253		864,834		726,461				52,180		42,731,163
330.10	2,290,818		285,726										2,576,544
330.20	2,791,160		386,022		396,511		333,069						2,447,602
330.30	158,657		16,210										174,867
330.40	2,617,148		251,003										2,868,151
330.58	2,086,329		78,333										2,164,662
330.59	26,466,456		2,792,388		1,023,385								28,235,459
331.00	342,396,516		63,053,375		56,063,568		32,516,870				298,736		317,168,189
333.00	158,738,784		15,227,348		6,043,953		2,417,581				89,058		165,593,656
334.00	76,372,916		16,651,371		5,345,570		1,336,392		106,911		29,175		86,478,411
335.00	19,446,220		4,345,024		2,041,116		1,122,614				30,382		20,657,896
340.10	1,060,253		567,176										1,627,429
340.20	2,870,542		3,184,104		1,173,476								4,881,170
340.30	21,393,515		17,170,815		6,121,840								32,442,490
340.31	693,985		130,851		481,377								343,459
340.50	1,839		1,210										3,049
341.00	1,555		179										1,734
341.10	25,350,423		4,263,113		2,084,303		41,686		792,035				28,279,582
341.20	14,610,142		490,373										15,100,515
341.30	1,767,676		70,045										1,837,721
341.40	6,372,507		240,435										6,612,942

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2024, OF BOOK RESERVE AS OF JUNE 30, 2023

Account	BOOK RESERVE BALANCE AS OF 06/30/2023		PROJECTED DEPRECIATION ACCRUALS		PROJECTED RETIREMENTS		PROJECTED COST OF REMOVAL		PROJECTED SALVAGE		ADJUSTMENTS AND ACQUISITIONS		PROJECTED BOOK RESERVE BALANCE AS OF 06/30/2024
(1)	(2)	+	(3)	-	(4)	-	(5)	+	(6)	+	(7)	=	(8)
342.00	67,164		31,348										98,512
343.00	9,326,628		2,615,966		947						11,971		11,953,618
344.00	381,654		275,076		32,722								624,008
345.00	1,356,764		93,052										1,449,816
346.00	325,497		280,128								66,114		671,739
346.10	1,532,326		629,839		3,769								2,158,396
346.19	1,430,915		509,564		76,337								1,864,142
346.20	143,155		42,360										185,515
347.00	3,893,050		1,582,979		37,475								5,438,554
348.00	477,612		32,619										510,231
TOTAL	**1,170,835,898**		**179,808,067**		**102,080,504**		**44,029,313**		**1,166,659**		**607,274**		**1,206,308,085**

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30, 2024

ACCOUNT (1)	NET ORIGINALCOST AS OF 6/30/2023 (2)	NET ORIGINALCOST AS OF 6/30/2024 (3)	ACCRUAL RATE (4)	AVERAGE ACCRUALS (5)=([(2)+(3)]/2)*(4)	AMORTIZATION OF NET SALVAGE (6)	PROJECTED DEPRECIATION ACCRUALS (7)=(5)+(6)
303.14	1,942,822.51	1,942,822.51	-			0
303.35	155,025.17	155,025.17	0.85	1,318		1,318
303.61	3,221,899.78	3,221,899.78			(1,110)	(1,110)
303.99	11,052,834.26	11,838,420.51	15.48	1,771,783	613	1,772,396
304.15	95,740,074.67	103,236,517.17	2.89	2,875,212	586,276	3,461,488
304.20	104,475,304.40	109,016,914.72	2.81	2,999,566	63,671	3,063,237
304.30	334,664,186.82	345,578,963.18	2.35	7,992,857	323,702	8,316,559
304.36	25,230,121.46	25,230,121.46	3.03	764,473	4,423	768,896
304.38	1,403,438.95	1,403,438.95	9.69	135,993		135,993
304.39	119,362.95	119,362.95	2.95	3,521		3,521
304.61	42,609,172.14	43,670,750.85	2.89	1,246,745	(110,080)	1,136,665
304.62	68,073,470.37	70,281,795.83	2.37	1,639,510	(29,090)	1,610,420
304.63	6,864,629.49	8,983,176.16	1.98	156,893	12,476	169,369
305.00	135,471,361.47	138,403,599.63	1.41	1,930,818	339,670	2,270,488
306.00	17,309,358.40	17,791,345.90	2.44	428,229	5,136	433,365
307.00	11,912,683.74	12,416,177.55	2.40	291,946	45,136	337,082
310.00	18,908,316.70	25,156,942.49	2.51	553,019	22,309	575,328
311.20	16,188,403.50	23,116,136.75	3.34	656,386	425,490	1,081,876
311.50	13,047,342.71	16,571,799.32	3.85	570,168		570,168
311.52	12,240,259.32	12,940,570.90	3.37	424,297		424,297
311.53	47,853,790.34	47,853,790.34	2.80	1,339,906		1,339,906
311.54	6,707,900.44	6,707,900.44	3.07	205,933		205,933
320.10	226,390,011.47	261,593,481.26	2.46	6,002,197	1,022,479	7,024,676
320.18	103,245.73	103,245.73	-			0
320.19	3,667,945.94	3,667,945.94	2.18	79,961		79,961
320.20	103,158,609.61	118,733,555.85	3.24	3,594,653		3,594,653
320.29	8,167.87	8,167.87	-			0

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30, 2024

ACCOUNT	NET ORIGINALCOST AS OF 6/30/2023	NET ORIGINALCOST AS OF 6/30/2024	ACCRUAL RATE		AVERAGE ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED DEPRECIATION ACCRUALS
(1)	(2)	(3)	(4)		(5)=([(2)+(3)]/2)*(4)	(6)	(7)=(5)+(6)
320.30	12,704,166.27	13,459,406.97	10.38		1,357,889	166,088	1,523,977
320.37	14,890,092.88	15,531,581.93	1.64		249,458	21,862	271,320
330.00	117,009,748.45	130,768,568.22	1.80		2,230,005	2,108,248	4,338,253
330.10	14,144,856.97	14,144,856.97	2.02		285,726		285,726
330.20	18,118,307.94	19,913,409.67	2.03		386,022		386,022
330.30	818,707.23	818,707.23	1.98		16,210		16,210
330.40	12,806,300.04	12,806,300.04	1.96		251,003		251,003
330.58	2,303,924.15	2,303,924.15	3.40		78,333		78,333
330.59	41,110,935.19	45,744,045.26	6.43		2,792,388		2,792,388
331.00	3,056,793,085.70	3,327,488,033.47	1.52		48,520,537	14,532,838	63,053,375
333.00	678,344,458.01	719,078,190.47	1.85		12,926,159	2,301,189	15,227,348
334.00	221,392,901.34	249,227,878.51	6.22		14,636,306	2,015,065	16,651,371
335.00	134,208,552.33	145,278,472.78	2.28		3,186,152	1,158,872	4,345,024
340.10	7,800,711.97	8,638,585.84	6.20		509,618	57,558	567,176
340.20	14,520,712.81	17,320,326.29	20.00	*	3,184,104		3,184,104
340.30	80,252,425.10	91,455,720.27	20.00	*	17,170,815		17,170,815
340.31	1,549,193.48	1,067,816.75	10.00	*	130,851		130,851
340.50	9,100.95	9,100.95	13.29		1,210		1,210
341.00	2,587.67	2,587.67	6.92		179		179
341.10	51,891,848.30	61,327,985.93	7.93		4,489,166	(226,053)	4,263,113
341.20	16,793,602.21	16,793,602.21	2.92		490,373		490,373
341.30	1,995,589.81	1,995,589.81	3.51		70,045		70,045
341.40	7,584,706.89	7,584,706.89	3.17		240,435		240,435

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30, 2024

ACCOUNT	NET ORIGINALCOST AS OF 6/30/2023	NET ORIGINALCOST AS OF 6/30/2024	ACCRUAL RATE	AVERAGE ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED DEPRECIATION ACCRUALS
(1)	(2)	(3)	(4)	(5)=([(2)+(3)]/2)*(4)	(6)	(7)=(5)+(6)
342.00	469,790.25	469,790.25	6.25	29,362	1,986	31,348
343.00	43,246,953.88	48,121,656.24	5.66	2,585,732	30234	2,615,966
344.00	2,262,021.06	2,229,299.11	11.81	265,212	9,864	275,076
345.00	2,122,806.77	2,122,806.77	4.34	92,130	922	93,052
346.00	2,231,368	3,712,251	6.91	205,352	74,776	280,128
346.10	8,295,020	9,649,124	7.02	629,839		629,839
346.19	4,021,751	4,902,320	11.42	509,564		509,564
346.20	295,179	309,958	14	42,360		42,360
347.00	28,259,610	36,245,336	4.78	1,541,668	41,311	1,582,979
348.00	795,578	795,578	4.08	32,460	159	32,619
TOTAL	**5,907,566,333.44**	**6,421,061,386.27**		**154,802,047**	**25,006,020**	**179,808,067**

* UTILIZING ACCRUAL RATE CONSISTENT WITH AMORTIZATION PERIOD TO MITIGATE ANOMALOUS CALCULATED ACCRUAL RATE.

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

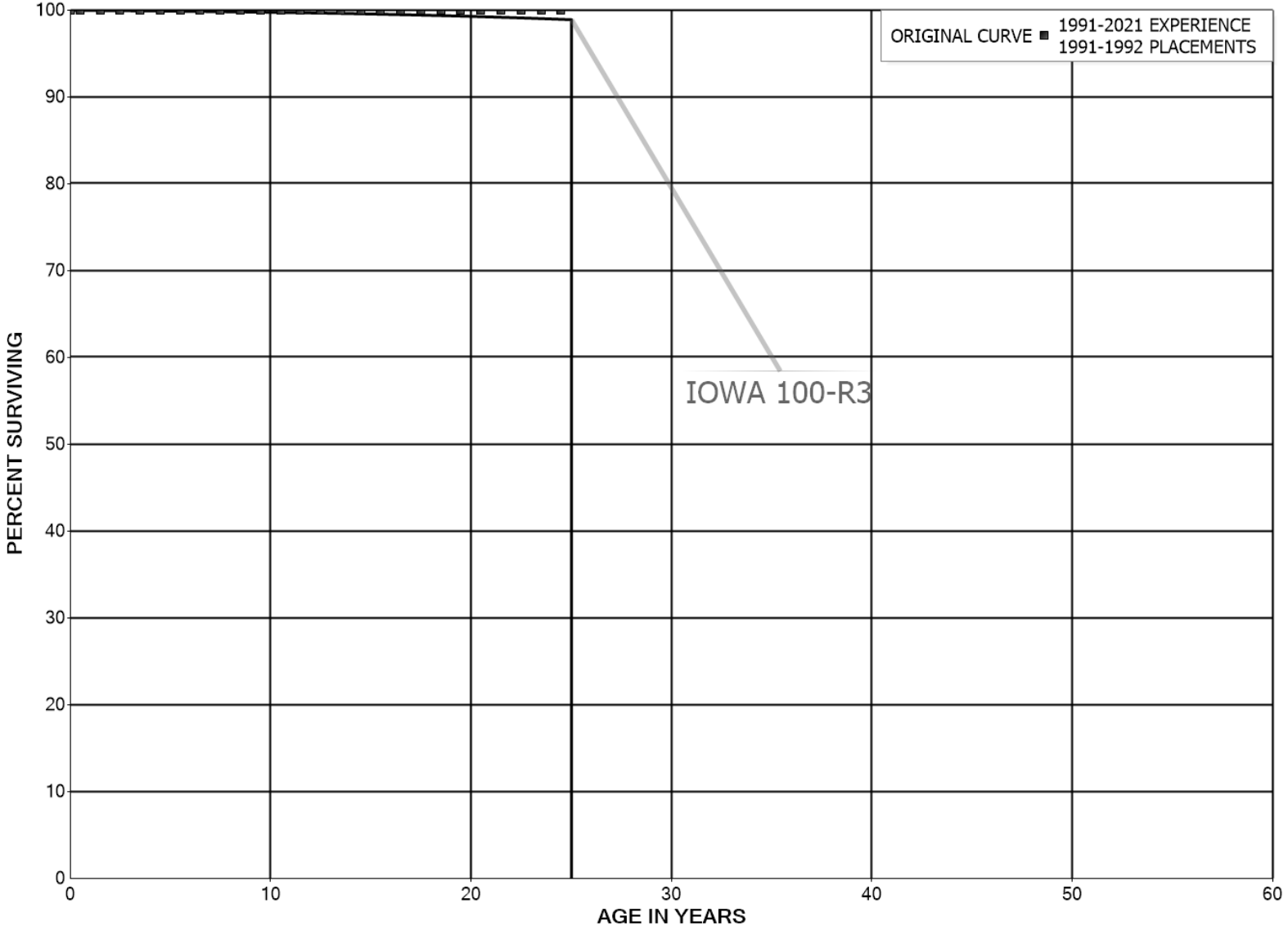
TABLE 5. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

	2019		2020		2021		2022		PROJECTED 2023			
ACCOUNT	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2) -	(3) +	(4) -	(5) +	(6) -	(7) +	(8) -	(9) +	(10) -	(11) =	(12)*	(13)=(12)/5
303.61			4,483.73		(4,483.73)				11,108.00	15.00	11,093.00	2,219
303.99		3,062.78									(3,062.78)	(613)
304.15	27,560.73	387,837.75	210.38	577,956.65		666,811.69		850,320.81	23,546.75	796,762.50	(3,228,371.54)	(645,674)
304.20	31,830.10	147,277.43		71,775.96		37,171.02		23,865.76	10,031.74	124,387.00	(362,615.33)	(72,523)
304.30	66,260.61	148,391.82		788,178.99		137,849.62		52,542.41	5,749.71	43,949.00	(1,098,901.52)	(219,780)
304.36		546.00									(546.00)	(109)
304.61	1,864,549.94	1,304,656.48		12,850.31	4,483.73	1,346.07		6,818.30	57,449.30	43,380.00	557,431.81	111,486
304.62	192,159.79	54,481.40		(8.81)		18,876.94		46,017.09	227,444.49	76,293.00	223,944.66	44,789
304.63	25,209.50	8,030.27		23.48				79,910.95	22,588.56	18,770.50	(58,937.15)	(11,787)
305.00		1,266,548.34		24,577.59		467.17		299,889.33		213,737.00	(1,805,219.43)	(361,044)
306.00		17,003.99		6,896.40		450.15				2,661.50	(27,012.04)	(5,402)
307.00		118,341.25		42,111.55		5,700.51		55,144.80		7,366.00	(228,664.11)	(45,733)
310.00		42,462.99		3,593.30						119,338.00	(165,394.29)	(33,079)
311.00	13,739.63	1,092,490.18		248,120.57		193,743.82		350,411.61		321,442.00	(2,192,468.55)	(438,494)
320.00	229.83	924,729.91	(214.05)	695,879.64		890,085.40		1,520,577.41		1,543,362.00	(5,574,618.58)	(1,114,924)
320.30		423,003.27		76,375.47		1,370.70		299,375.44		60,630.50	(860,755.38)	(172,151)
320.37	23.00	90,807.00								7,085.00	(97,869.00)	(19,574)
330.00		2,686,207.69		1,196,558.00		1,561,680.99		3,396,011.14		581,223.00	(9,421,680.82)	(1,884,336)
331.00	13,124.96	21,381,790.52	25,703.04	12,998,210.71	282,490.53	8,196,453.86	111,611.62	13,983,952.63	12,078.00	21,364,445.00	(77,479,844.57)	(15,495,969)
333.00	9,792.38	1,897,743.49		2,528,314.54	1,799.10	2,681,541.01	2,218.42	2,505,397.99	1,306.00	2,514,107.50	(12,111,988.63)	(2,422,398)
334.00	93,029.52	2,727,391.38	42,569.41	1,486,703.66	331,737.56	1,021,270.85	54,380.07	3,625,834.72	112,369.70	2,786,541.00	(11,013,655.35)	(2,202,731)
335.00	4,063.03	908,970.88	3,093.12	1,720,769.32	11,562.11	1,074,172.62	6,290.78	1,281,342.15	3,425.00	1,364,307.00	(6,321,127.93)	(1,264,226)
340.00	10,745.87	122,477.36	613.87	23,848.17	325.05	78,720.20	8,592.94	67,823.74	26,721.00	35,034.00	(280,904.74)	(56,181)
341.00	261,902.01	761,298.60	456,214.35	97,003.97	219,365.56	(16,299.55)	820,242.37	1,127.48	396,017.48	21,140.00	1,289,471.27	257,894
342.00		9,682.12		122.40							(9,804.52)	(1,961)
343.00	48,579.17	57,836.24	3,000.00	50,715.40		40,863.25		38,089.15	1,447.00	24,009.00	(158,486.87)	(31,697)
344.00		14,919.23		13,845.30		5,126.37		8,395.86		9,236.00	(51,522.76)	(10,305)
345.00	12,288.18	15,876.66						590.23			(4,178.71)	(836)
346.00		87,193.50		44,631.89		49,301.95		165,439.94	42.00	24,794.00	(371,319.28)	(74,264)
347.00	8,306.50	73,665.55		16,130.65		8,339.46		105,946.50	58,690.00	60,221.00	(197,306.66)	(39,461)
348.00		808.08									(808.08)	(162)
TOTAL	**2,683,394.75**	**36,775,532.16**	**535,673.85**	**22,725,185.11**	**847,279.91**	**16,655,044.10**	**1,003,336.20**	**28,764,825.44**	**970,014.73**	**32,164,236.50**	**(131,045,123.88)**	**(26,209,026)**

* Column (12) equals the summation of Columns (2) through (11).

PART VI. SERVICE LIFE STATISTICS

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 303.35 WASTE HANDLING AND TREATMENT LAND
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

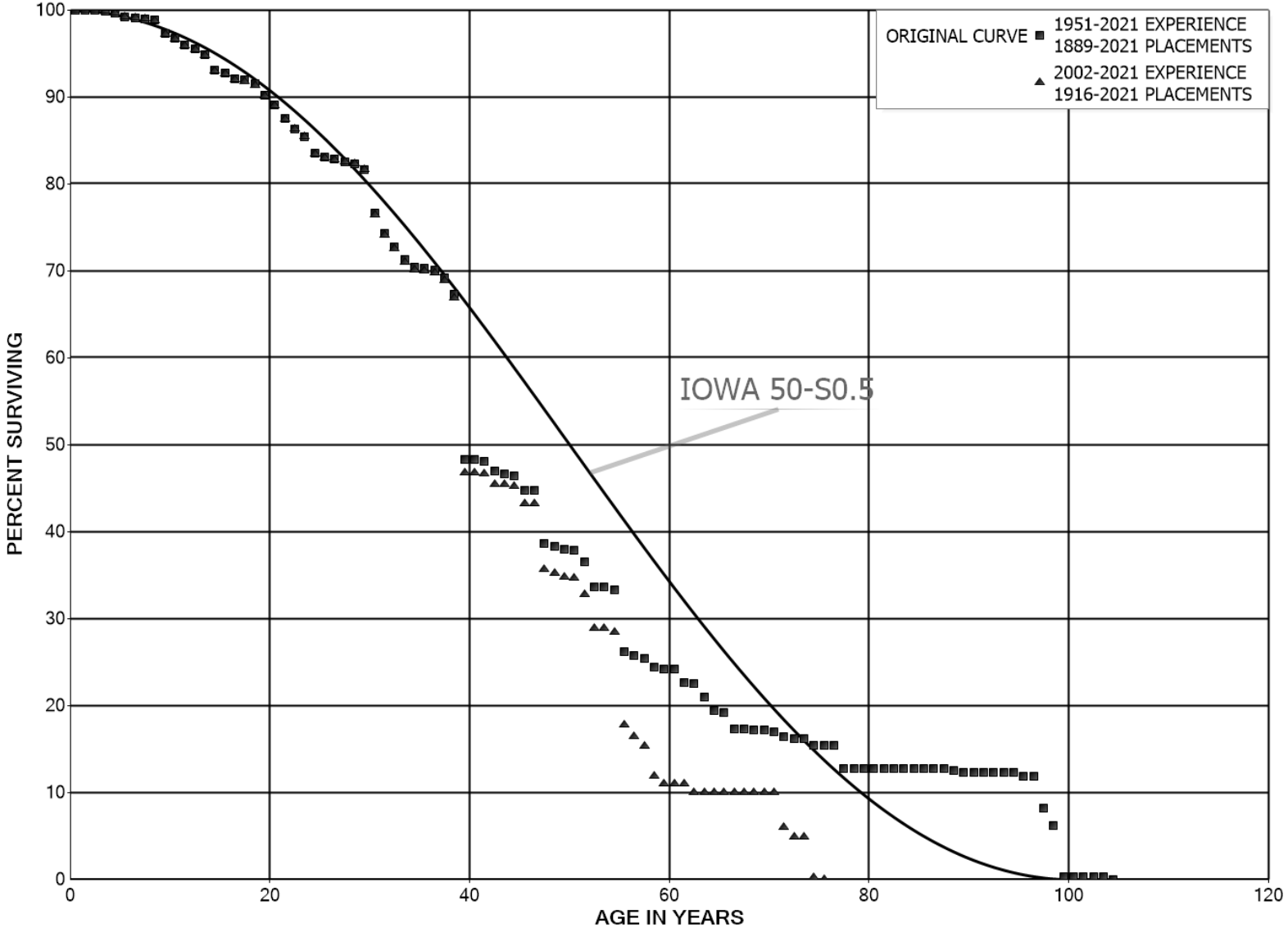
ACCOUNT 303.35 WASTE HANDLING AND TREATMENT LAND

ORIGINAL LIFE TABLE

PLACEMENT BAND 1991-1992 EXPERIENCE BAND 1991-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	155,025		0.0000	1.0000	100.00
0.5	155,025		0.0000	1.0000	100.00
1.5	155,025		0.0000	1.0000	100.00
2.5	155,025		0.0000	1.0000	100.00
3.5	155,025		0.0000	1.0000	100.00
4.5	155,025		0.0000	1.0000	100.00
5.5	155,025		0.0000	1.0000	100.00
6.5	155,025		0.0000	1.0000	100.00
7.5	155,025		0.0000	1.0000	100.00
8.5	155,025		0.0000	1.0000	100.00
9.5	155,025		0.0000	1.0000	100.00
10.5	155,025		0.0000	1.0000	100.00
11.5	155,025		0.0000	1.0000	100.00
12.5	155,025		0.0000	1.0000	100.00
13.5	155,025		0.0000	1.0000	100.00
14.5	155,025		0.0000	1.0000	100.00
15.5	155,025		0.0000	1.0000	100.00
16.5	155,025		0.0000	1.0000	100.00
17.5	155,025		0.0000	1.0000	100.00
18.5	155,025		0.0000	1.0000	100.00
19.5	155,025		0.0000	1.0000	100.00
20.5	155,025		0.0000	1.0000	100.00
21.5	155,025		0.0000	1.0000	100.00
22.5	155,025		0.0000	1.0000	100.00
23.5	155,025		0.0000	1.0000	100.00
24.5	155,025		0.0000	1.0000	100.00
25.5	155,025		0.0000	1.0000	100.00
26.5	155,025		0.0000	1.0000	100.00
27.5	155,025		0.0000	1.0000	100.00
28.5	155,025		0.0000	1.0000	100.00
29.5	70,430		0.0000	1.0000	100.00
30.5					100.00

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 304.15 OTHER WATER SOURCE STRUCTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.15 OTHER WATER SOURCE STRUCTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1889-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	49,663,669	2,098	0.0000	1.0000	100.00
0.5	43,403,049	12,748	0.0003	0.9997	100.00
1.5	38,087,101	26,951	0.0007	0.9993	99.97
2.5	34,635,960	27,675	0.0008	0.9992	99.90
3.5	33,643,583	50,579	0.0015	0.9985	99.82
4.5	31,251,942	139,814	0.0045	0.9955	99.67
5.5	29,571,716	36,625	0.0012	0.9988	99.22
6.5	28,650,208	44,191	0.0015	0.9985	99.10
7.5	28,297,335	42,549	0.0015	0.9985	98.94
8.5	25,175,266	388,113	0.0154	0.9846	98.80
9.5	24,425,373	145,806	0.0060	0.9940	97.27
10.5	24,505,465	195,346	0.0080	0.9920	96.69
11.5	13,009,590	58,599	0.0045	0.9955	95.92
12.5	12,903,001	86,500	0.0067	0.9933	95.49
13.5	11,457,682	219,966	0.0192	0.9808	94.85
14.5	9,650,541	31,654	0.0033	0.9967	93.03
15.5	9,192,156	66,788	0.0073	0.9927	92.72
16.5	8,093,235	13,929	0.0017	0.9983	92.05
17.5	7,898,116	37,836	0.0048	0.9952	91.89
18.5	5,582,476	80,174	0.0144	0.9856	91.45
19.5	4,705,147	57,368	0.0122	0.9878	90.14
20.5	4,791,299	85,411	0.0178	0.9822	89.04
21.5	4,754,450	61,840	0.0130	0.9870	87.45
22.5	4,587,105	48,753	0.0106	0.9894	86.31
23.5	4,296,961	97,910	0.0228	0.9772	85.40
24.5	4,252,945	21,258	0.0050	0.9950	83.45
25.5	3,785,951	10,491	0.0028	0.9972	83.03
26.5	3,565,317	12,657	0.0035	0.9965	82.80
27.5	2,271,715	5,913	0.0026	0.9974	82.51
28.5	2,124,255	17,086	0.0080	0.9920	82.29
29.5	1,827,333	113,416	0.0621	0.9379	81.63
30.5	1,194,031	36,388	0.0305	0.9695	76.57
31.5	1,002,655	19,833	0.0198	0.9802	74.23
32.5	845,833	17,748	0.0210	0.9790	72.76
33.5	842,852	10,268	0.0122	0.9878	71.24
34.5	850,760	1,648	0.0019	0.9981	70.37
35.5	783,971	2,477	0.0032	0.9968	70.23
36.5	688,650	7,825	0.0114	0.9886	70.01
37.5	691,056	19,235	0.0278	0.9722	69.22
38.5	648,934	183,192	0.2823	0.7177	67.29

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.15 OTHER WATER SOURCE STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1889-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	490,312		0.0000	1.0000	48.29
40.5	304,141	1,713	0.0056	0.9944	48.29
41.5	262,431	5,791	0.0221	0.9779	48.02
42.5	176,070	1,131	0.0064	0.9936	46.96
43.5	171,578	1,056	0.0062	0.9938	46.66
44.5	170,336	6,019	0.0353	0.9647	46.37
45.5	163,235	121	0.0007	0.9993	44.73
46.5	162,854	22,036	0.1353	0.8647	44.70
47.5	150,949	1,532	0.0102	0.9898	38.65
48.5	149,315	1,324	0.0089	0.9911	38.26
49.5	128,099	314	0.0025	0.9975	37.92
50.5	115,811	4,191	0.0362	0.9638	37.83
51.5	110,009	8,620	0.0784	0.9216	36.46
52.5	100,759	8	0.0001	0.9999	33.60
53.5	87,182	787	0.0090	0.9910	33.60
54.5	86,925	18,486	0.2127	0.7873	33.30
55.5	49,974	857	0.0172	0.9828	26.22
56.5	46,805	596	0.0127	0.9873	25.77
57.5	46,209	1,864	0.0403	0.9597	25.44
58.5	44,346	490	0.0110	0.9890	24.41
59.5	40,729		0.0000	1.0000	24.14
60.5	40,729	2,498	0.0613	0.9387	24.14
61.5	41,671	232	0.0056	0.9944	22.66
62.5	41,439	2,808	0.0678	0.9322	22.53
63.5	38,631	2,900	0.0751	0.9249	21.01
64.5	35,731	495	0.0139	0.9861	19.43
65.5	35,236	3,440	0.0976	0.9024	19.16
66.5	31,111		0.0000	1.0000	17.29
67.5	29,966	259	0.0086	0.9914	17.29
68.5	29,707		0.0000	1.0000	17.14
69.5	29,707	398	0.0134	0.9866	17.14
70.5	29,309	991	0.0338	0.9662	16.91
71.5	24,337	291	0.0119	0.9881	16.34
72.5	24,046		0.0000	1.0000	16.14
73.5	24,731	1,138	0.0460	0.9540	16.14
74.5	23,593	53	0.0022	0.9978	15.40
75.5	23,540		0.0000	1.0000	15.37
76.5	24,660	4,305	0.1746	0.8254	15.37
77.5	20,355		0.0000	1.0000	12.68
78.5	20,355		0.0000	1.0000	12.68

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.15 OTHER WATER SOURCE STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1889-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	20,753		0.0000	1.0000	12.68
80.5	20,753		0.0000	1.0000	12.68
81.5	20,394		0.0000	1.0000	12.68
82.5	20,394		0.0000	1.0000	12.68
83.5	20,394		0.0000	1.0000	12.68
84.5	20,394		0.0000	1.0000	12.68
85.5	20,394		0.0000	1.0000	12.68
86.5	20,394		0.0000	1.0000	12.68
87.5	20,394	270	0.0132	0.9868	12.68
88.5	20,124	392	0.0195	0.9805	12.52
89.5	19,732		0.0000	1.0000	12.27
90.5	19,732		0.0000	1.0000	12.27
91.5	19,302		0.0000	1.0000	12.27
92.5	19,302		0.0000	1.0000	12.27
93.5	19,302		0.0000	1.0000	12.27
94.5	19,302	728	0.0377	0.9623	12.27
95.5	18,574		0.0000	1.0000	11.81
96.5	18,574	5,741	0.3091	0.6909	11.81
97.5	12,833	3,139	0.2446	0.7554	8.16
98.5	9,694	9,296	0.9589	0.0411	6.16
99.5	398		0.0000	1.0000	0.25
100.5	398		0.0000	1.0000	0.25
101.5	398		0.0000	1.0000	0.25
102.5	398		0.0000	1.0000	0.25
103.5	398	398	1.0000		0.25
104.5					

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.15 OTHER WATER SOURCE STRUCTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1916-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	48,443,159	1,898	0.0000	1.0000	100.00
0.5	41,996,836	12,278	0.0003	0.9997	100.00
1.5	36,912,225	26,951	0.0007	0.9993	99.97
2.5	33,588,558	27,675	0.0008	0.9992	99.89
3.5	32,639,030	47,829	0.0015	0.9985	99.81
4.5	30,259,723	139,814	0.0046	0.9954	99.67
5.5	28,656,303	36,625	0.0013	0.9987	99.20
6.5	27,901,854	43,600	0.0016	0.9984	99.08
7.5	27,573,483	42,181	0.0015	0.9985	98.92
8.5	24,462,759	383,768	0.0157	0.9843	98.77
9.5	23,983,479	145,800	0.0061	0.9939	97.22
10.5	24,086,101	194,014	0.0081	0.9919	96.63
11.5	12,773,236	58,599	0.0046	0.9954	95.85
12.5	12,754,332	86,500	0.0068	0.9932	95.41
13.5	11,311,122	219,966	0.0194	0.9806	94.77
14.5	9,491,103	31,654	0.0033	0.9967	92.92
15.5	9,084,819	66,666	0.0073	0.9927	92.61
16.5	8,045,333	13,603	0.0017	0.9983	91.93
17.5	7,850,456	37,636	0.0048	0.9952	91.78
18.5	5,547,614	78,262	0.0141	0.9859	91.34
19.5	4,681,076	56,239	0.0120	0.9880	90.05
20.5	4,768,357	85,035	0.0178	0.9822	88.97
21.5	4,731,884	60,616	0.0128	0.9872	87.38
22.5	4,566,113	47,282	0.0104	0.9896	86.26
23.5	4,278,655	97,854	0.0229	0.9771	85.37
24.5	4,235,265	21,258	0.0050	0.9950	83.42
25.5	3,768,271	10,067	0.0027	0.9973	83.00
26.5	3,548,061	12,657	0.0036	0.9964	82.78
27.5	2,254,459	5,913	0.0026	0.9974	82.48
28.5	2,106,999	16,936	0.0080	0.9920	82.26
29.5	1,787,446	113,416	0.0635	0.9365	81.60
30.5	1,156,017	36,234	0.0313	0.9687	76.43
31.5	964,088	19,833	0.0206	0.9794	74.03
32.5	807,265	17,595	0.0218	0.9782	72.51
33.5	804,359	10,268	0.0128	0.9872	70.93
34.5	807,589	1,394	0.0017	0.9983	70.02
35.5	741,053	2,402	0.0032	0.9968	69.90
36.5	645,286	7,825	0.0121	0.9879	69.67
37.5	650,007	18,948	0.0292	0.9708	68.83
38.5	607,739	182,950	0.3010	0.6990	66.82

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.15 OTHER WATER SOURCE STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	449,717		0.0000	1.0000	46.71
40.5	265,231	694	0.0026	0.9974	46.71
41.5	225,600	5,791	0.0257	0.9743	46.58
42.5	140,206		0.0000	1.0000	45.39
43.5	136,845	486	0.0036	0.9964	45.39
44.5	134,757	6,019	0.0447	0.9553	45.23
45.5	128,738		0.0000	1.0000	43.21
46.5	125,378	22,036	0.1758	0.8242	43.21
47.5	113,363	1,457	0.0129	0.9871	35.61
48.5	111,804	1,324	0.0118	0.9882	35.16
49.5	90,588	314	0.0035	0.9965	34.74
50.5	78,300	4,191	0.0535	0.9465	34.62
51.5	72,499	8,620	0.1189	0.8811	32.77
52.5	63,248	8	0.0001	0.9999	28.87
53.5	49,958	787	0.0158	0.9842	28.87
54.5	48,900	18,486	0.3780	0.6220	28.41
55.5	11,949	857	0.0717	0.9283	17.67
56.5	8,781	596	0.0679	0.9321	16.40
57.5	8,185	1,864	0.2277	0.7723	15.29
58.5	6,321	490	0.0775	0.9225	11.81
59.5	2,705		0.0000	1.0000	10.89
60.5	2,705		0.0000	1.0000	10.89
61.5	2,705	232	0.0858	0.9142	10.89
62.5	2,473		0.0000	1.0000	9.96
63.5	2,473		0.0000	1.0000	9.96
64.5	2,473		0.0000	1.0000	9.96
65.5	2,473		0.0000	1.0000	9.96
66.5	2,473		0.0000	1.0000	9.96
67.5	2,473		0.0000	1.0000	9.96
68.5	2,473		0.0000	1.0000	9.96
69.5	2,473		0.0000	1.0000	9.96
70.5	2,473	991	0.4008	0.5992	9.96
71.5	1,482	291	0.1962	0.8038	5.97
72.5	1,191		0.0000	1.0000	4.80
73.5	1,191	1,138	0.9555	0.0445	4.80
74.5	53	53	1.0000		0.21
75.5					
76.5	1,120		0.0000		
77.5	1,120		0.0000		
78.5	1,120		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY

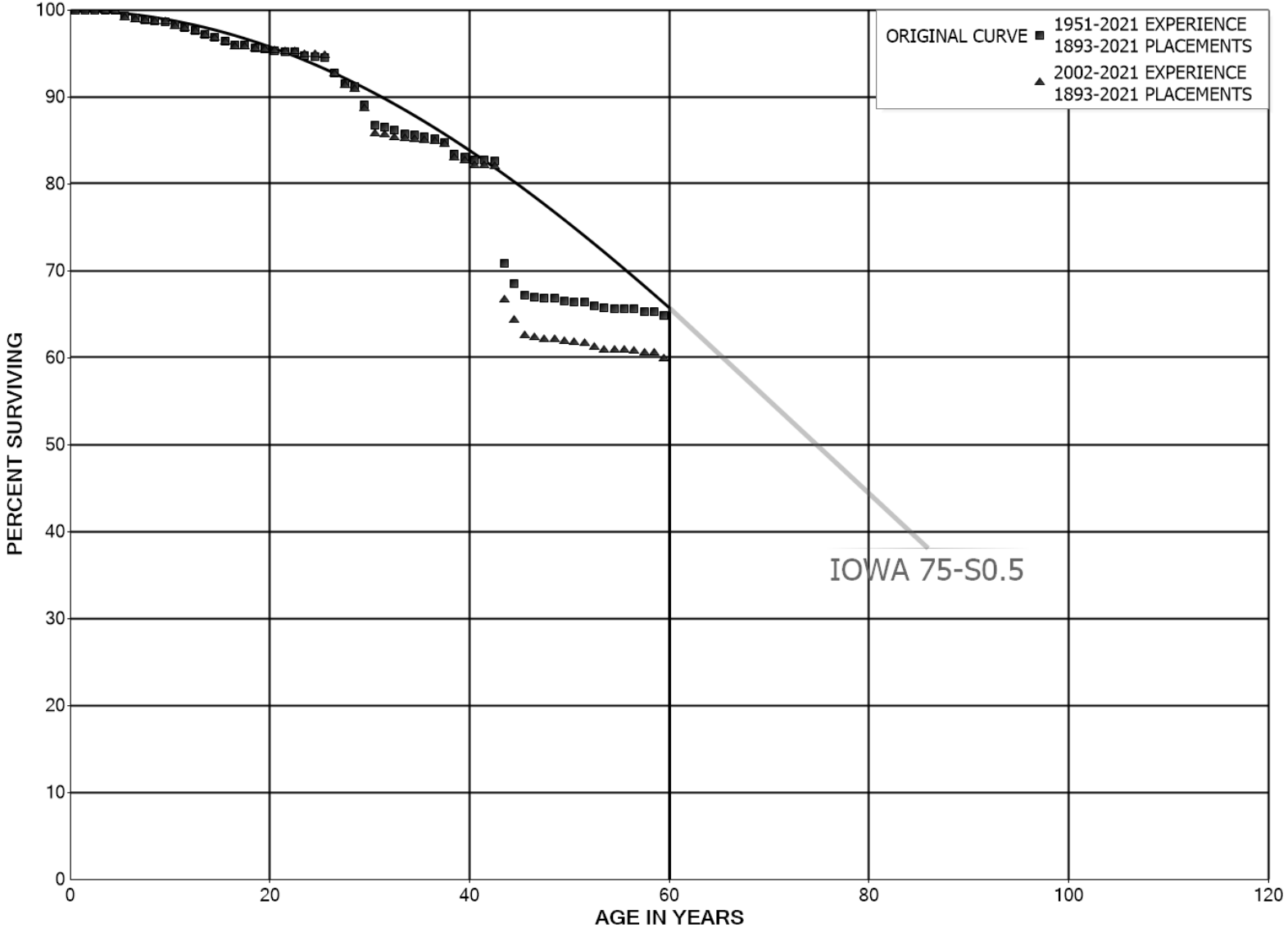
ACCOUNT 304.15 OTHER WATER SOURCE STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	1,120		0.0000		
80.5	19,296		0.0000		
81.5	19,296		0.0000		
82.5	19,296		0.0000		
83.5	19,296		0.0000		
84.5	19,296		0.0000		
85.5	19,694		0.0000		
86.5	19,694		0.0000		
87.5	19,694		0.0000		
88.5	19,694	392	0.0199		
89.5	19,302		0.0000		
90.5	19,302		0.0000		
91.5	19,302		0.0000		
92.5	19,302		0.0000		
93.5	19,302		0.0000		
94.5	19,302	728	0.0377		
95.5	18,574		0.0000		
96.5	18,574	5,741	0.3091		
97.5	12,833	3,139	0.2446		
98.5	9,694	9,296	0.9589		
99.5	398		0.0000		
100.5	398		0.0000		
101.5	398		0.0000		
102.5	398		0.0000		
103.5	398	398	1.0000		
104.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 304.20 POWER AND PUMPING STRUCTURES - LARGE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.20 POWER AND PUMPING STRUCTURES - LARGE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	117,335,365		0.0000	1.0000	100.00
0.5	111,625,126	65,859	0.0006	0.9994	100.00
1.5	111,295,275	4,091	0.0000	1.0000	99.94
2.5	111,549,278	24,786	0.0002	0.9998	99.94
3.5	96,905,259	10,207	0.0001	0.9999	99.92
4.5	96,442,639	612,026	0.0063	0.9937	99.90
5.5	93,463,156	205,051	0.0022	0.9978	99.27
6.5	92,338,474	179,673	0.0019	0.9981	99.05
7.5	86,500,250	81,811	0.0009	0.9991	98.86
8.5	76,460,732	105,746	0.0014	0.9986	98.77
9.5	51,973,397	194,551	0.0037	0.9963	98.63
10.5	51,221,529	166,838	0.0033	0.9967	98.26
11.5	51,068,819	158,389	0.0031	0.9969	97.94
12.5	51,133,077	217,225	0.0042	0.9958	97.64
13.5	49,787,587	185,827	0.0037	0.9963	97.22
14.5	45,444,753	200,028	0.0044	0.9956	96.86
15.5	41,799,976	187,134	0.0045	0.9955	96.43
16.5	41,374,647	36,157	0.0009	0.9991	96.00
17.5	40,914,342	127,481	0.0031	0.9969	95.92
18.5	34,132,130	58,300	0.0017	0.9983	95.62
19.5	33,877,148	65,845	0.0019	0.9981	95.46
20.5	33,003,088	39,228	0.0012	0.9988	95.27
21.5	31,300,564	3,164	0.0001	0.9999	95.16
22.5	26,073,446	100,700	0.0039	0.9961	95.15
23.5	25,292,207	30,835	0.0012	0.9988	94.78
24.5	20,080,236	25,827	0.0013	0.9987	94.66
25.5	19,074,278	370,749	0.0194	0.9806	94.54
26.5	16,384,511	210,146	0.0128	0.9872	92.70
27.5	16,107,140	65,172	0.0040	0.9960	91.52
28.5	13,305,161	297,348	0.0223	0.9777	91.15
29.5	11,222,312	300,448	0.0268	0.9732	89.11
30.5	10,624,674	28,137	0.0026	0.9974	86.72
31.5	7,397,330	28,659	0.0039	0.9961	86.49
32.5	6,424,351	30,234	0.0047	0.9953	86.16
33.5	6,044,409	8,190	0.0014	0.9986	85.75
34.5	4,921,248	12,561	0.0026	0.9974	85.64
35.5	4,754,022	14,106	0.0030	0.9970	85.42
36.5	3,815,106	19,104	0.0050	0.9950	85.16
37.5	3,665,476	56,225	0.0153	0.9847	84.74
38.5	3,445,320	13,726	0.0040	0.9960	83.44

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.20 POWER AND PUMPING STRUCTURES - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	3,273,374	14,321	0.0044	0.9956	83.11
40.5	3,017,595	690	0.0002	0.9998	82.74
41.5	2,915,802	4,435	0.0015	0.9985	82.72
42.5	2,870,131	408,983	0.1425	0.8575	82.60
43.5	2,372,272	76,829	0.0324	0.9676	70.83
44.5	2,323,153	45,486	0.0196	0.9804	68.53
45.5	2,229,207	6,658	0.0030	0.9970	67.19
46.5	2,119,397	4,730	0.0022	0.9978	66.99
47.5	1,998,904	819	0.0004	0.9996	66.84
48.5	1,938,454	8,611	0.0044	0.9956	66.81
49.5	1,841,921	2,138	0.0012	0.9988	66.52
50.5	1,725,105	1,932	0.0011	0.9989	66.44
51.5	1,669,127	9,658	0.0058	0.9942	66.37
52.5	1,556,309	6,918	0.0044	0.9956	65.98
53.5	1,546,653	1,016	0.0007	0.9993	65.69
54.5	1,450,656	17	0.0000	1.0000	65.65
55.5	1,401,677	1,784	0.0013	0.9987	65.64
56.5	1,466,080	5,254	0.0036	0.9964	65.56
57.5	1,076,797	56	0.0001	0.9999	65.33
58.5	1,027,925	7,496	0.0073	0.9927	65.32
59.5	1,004,476	810	0.0008	0.9992	64.85
60.5	925,032	6,653	0.0072	0.9928	64.79
61.5	897,092		0.0000	1.0000	64.33
62.5	872,528	6,954	0.0080	0.9920	64.33
63.5	850,991	521	0.0006	0.9994	63.82
64.5	832,802		0.0000	1.0000	63.78
65.5	805,454		0.0000	1.0000	63.78
66.5	697,347	14,106	0.0202	0.9798	63.78
67.5	529,864		0.0000	1.0000	62.49
68.5	500,573		0.0000	1.0000	62.49
69.5	488,415		0.0000	1.0000	62.49
70.5	457,674		0.0000	1.0000	62.49
71.5	457,159	171	0.0004	0.9996	62.49
72.5	458,144	650	0.0014	0.9986	62.46
73.5	385,585	2,057	0.0053	0.9947	62.37
74.5	373,392	133	0.0004	0.9996	62.04
75.5	369,614		0.0000	1.0000	62.02
76.5	368,177		0.0000	1.0000	62.02
77.5	367,524		0.0000	1.0000	62.02
78.5	367,456		0.0000	1.0000	62.02

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.20 POWER AND PUMPING STRUCTURES - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	363,346		0.0000	1.0000	62.02
80.5	409,196		0.0000	1.0000	62.02
81.5	408,929		0.0000	1.0000	62.02
82.5	405,864		0.0000	1.0000	62.02
83.5	402,635		0.0000	1.0000	62.02
84.5	401,655		0.0000	1.0000	62.02
85.5	400,386		0.0000	1.0000	62.02
86.5	398,090	283	0.0007	0.9993	62.02
87.5	397,591	311	0.0008	0.9992	61.98
88.5	397,247	604	0.0015	0.9985	61.93
89.5	392,305	215	0.0005	0.9995	61.83
90.5	384,030	5,375	0.0140	0.9860	61.80
91.5	374,346		0.0000	1.0000	60.93
92.5	360,746		0.0000	1.0000	60.93
93.5	318,481	40,918	0.1285	0.8715	60.93
94.5	276,636		0.0000	1.0000	53.11
95.5	282,342		0.0000	1.0000	53.11
96.5	282,188		0.0000	1.0000	53.11
97.5	248,779		0.0000	1.0000	53.11
98.5	240,673		0.0000	1.0000	53.11
99.5	229,131		0.0000	1.0000	53.11
100.5	228,486	124	0.0005	0.9995	53.11
101.5	222,799		0.0000	1.0000	53.08
102.5	219,179		0.0000	1.0000	53.08
103.5	185,205		0.0000	1.0000	53.08
104.5	185,205	5,350	0.0289	0.9711	53.08
105.5	179,855		0.0000	1.0000	51.54
106.5	178,700		0.0000	1.0000	51.54
107.5	178,700		0.0000	1.0000	51.54
108.5	178,700		0.0000	1.0000	51.54
109.5	177,351		0.0000	1.0000	51.54
110.5	161,286		0.0000	1.0000	51.54
111.5	147,450		0.0000	1.0000	51.54
112.5	138,787	723	0.0052	0.9948	51.54
113.5	130,406	194	0.0015	0.9985	51.27
114.5	130,212		0.0000	1.0000	51.20
115.5	123,762		0.0000	1.0000	51.20
116.5	118,254		0.0000	1.0000	51.20
117.5	116,233		0.0000	1.0000	51.20
118.5	116,233		0.0000	1.0000	51.20

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.20 POWER AND PUMPING STRUCTURES - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	116,233		0.0000	1.0000	51.20
120.5	108,738		0.0000	1.0000	51.20
121.5	108,380		0.0000	1.0000	51.20
122.5	108,380		0.0000	1.0000	51.20
123.5	108,380		0.0000	1.0000	51.20
124.5	101,273		0.0000	1.0000	51.20
125.5	98,090		0.0000	1.0000	51.20
126.5	98,090		0.0000	1.0000	51.20
127.5	3,249		0.0000	1.0000	51.20
128.5					51.20

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.20 POWER AND PUMPING STRUCTURES - LARGE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	87,364,445		0.0000	1.0000	100.00
0.5	80,643,465	65,821	0.0008	0.9992	100.00
1.5	81,693,487	3,488	0.0000	1.0000	99.92
2.5	87,106,454	24,534	0.0003	0.9997	99.91
3.5	73,308,187	10,207	0.0001	0.9999	99.89
4.5	77,991,804	603,065	0.0077	0.9923	99.87
5.5	75,516,674	200,432	0.0027	0.9973	99.10
6.5	76,696,582	102,317	0.0013	0.9987	98.84
7.5	71,212,001	39,812	0.0006	0.9994	98.70
8.5	63,159,797	43,820	0.0007	0.9993	98.65
9.5	40,486,705	193,628	0.0048	0.9952	98.58
10.5	39,971,738	110,698	0.0028	0.9972	98.11
11.5	43,129,915	141,377	0.0033	0.9967	97.84
12.5	43,891,695	192,162	0.0044	0.9956	97.52
13.5	43,051,366	157,542	0.0037	0.9963	97.09
14.5	40,007,636	195,959	0.0049	0.9951	96.74
15.5	36,835,134	186,055	0.0051	0.9949	96.26
16.5	37,632,922	35,113	0.0009	0.9991	95.78
17.5	37,401,721	52,887	0.0014	0.9986	95.69
18.5	30,851,709	57,249	0.0019	0.9981	95.55
19.5	30,964,777	24,262	0.0008	0.9992	95.37
20.5	30,392,309	29,731	0.0010	0.9990	95.30
21.5	28,792,786		0.0000	1.0000	95.21
22.5	23,570,349	78,238	0.0033	0.9967	95.21
23.5	22,873,709	20,026	0.0009	0.9991	94.89
24.5	17,687,908	9,580	0.0005	0.9995	94.81
25.5	16,743,554	370,749	0.0221	0.9779	94.75
26.5	14,086,504	209,692	0.0149	0.9851	92.66
27.5	13,843,508	60,036	0.0043	0.9957	91.28
28.5	10,974,578	277,673	0.0253	0.9747	90.88
29.5	9,060,904	297,117	0.0328	0.9672	88.58
30.5	9,006,479	5,126	0.0006	0.9994	85.68
31.5	5,881,292	27,350	0.0047	0.9953	85.63
32.5	4,991,961	1,975	0.0004	0.9996	85.23
33.5	4,657,535	7,275	0.0016	0.9984	85.20
34.5	3,643,386	4,564	0.0013	0.9987	85.06
35.5	3,512,119	5,689	0.0016	0.9984	84.96
36.5	2,588,804	9,621	0.0037	0.9963	84.82
37.5	2,839,230	53,267	0.0188	0.9812	84.50
38.5	2,673,469	10,837	0.0041	0.9959	82.92

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.20 POWER AND PUMPING STRUCTURES - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	2,484,406	14,321	0.0058	0.9942	82.58
40.5	2,294,209	690	0.0003	0.9997	82.11
41.5	2,191,331	3,596	0.0016	0.9984	82.08
42.5	2,155,537	403,150	0.1870	0.8130	81.95
43.5	1,685,738	58,604	0.0348	0.9652	66.62
44.5	1,624,017	44,992	0.0277	0.9723	64.30
45.5	1,557,839	5,446	0.0035	0.9965	62.52
46.5	1,558,408	4,730	0.0030	0.9970	62.30
47.5	1,591,347	38	0.0000	1.0000	62.12
48.5	1,567,906	7,829	0.0050	0.9950	62.11
49.5	1,473,465	2,138	0.0015	0.9985	61.80
50.5	1,372,024	1,799	0.0013	0.9987	61.71
51.5	1,331,187	9,164	0.0069	0.9931	61.63
52.5	1,221,102	6,918	0.0057	0.9943	61.21
53.5	1,269,407	231	0.0002	0.9998	60.86
54.5	1,181,148	17	0.0000	1.0000	60.85
55.5	1,132,641	1,739	0.0015	0.9985	60.85
56.5	1,103,560	4,999	0.0045	0.9955	60.76
57.5	711,813	56	0.0001	0.9999	60.48
58.5	663,009	7,496	0.0113	0.9887	60.48
59.5	642,969		0.0000	1.0000	59.79
60.5	564,779	6,653	0.0118	0.9882	59.79
61.5	537,105		0.0000	1.0000	59.09
62.5	511,286	6,954	0.0136	0.9864	59.09
63.5	492,978	521	0.0011	0.9989	58.29
64.5	475,768		0.0000	1.0000	58.22
65.5	449,823		0.0000	1.0000	58.22
66.5	342,952	14,106	0.0411	0.9589	58.22
67.5	175,686		0.0000	1.0000	55.83
68.5	146,427		0.0000	1.0000	55.83
69.5	138,608		0.0000	1.0000	55.83
70.5	115,927		0.0000	1.0000	55.83
71.5	119,721		0.0000	1.0000	55.83
72.5	131,686	59	0.0004	0.9996	55.83
73.5	63,486		0.0000	1.0000	55.80
74.5	54,561	133	0.0024	0.9976	55.80
75.5	54,480		0.0000	1.0000	55.67
76.5	53,197		0.0000	1.0000	55.67
77.5	88,382		0.0000	1.0000	55.67
78.5	99,951		0.0000	1.0000	55.67

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.20 POWER AND PUMPING STRUCTURES - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	107,384		0.0000	1.0000	55.67
80.5	107,586		0.0000	1.0000	55.67
81.5	155,644		0.0000	1.0000	55.67
82.5	156,200		0.0000	1.0000	55.67
83.5	186,945		0.0000	1.0000	55.67
84.5	185,965		0.0000	1.0000	55.67
85.5	184,696		0.0000	1.0000	55.67
86.5	183,554	283	0.0015	0.9985	55.67
87.5	183,055		0.0000	1.0000	55.58
88.5	183,022	604	0.0033	0.9967	55.58
89.5	179,429	215	0.0012	0.9988	55.40
90.5	187,219	5,375	0.0287	0.9713	55.33
91.5	191,371		0.0000	1.0000	53.74
92.5	191,785		0.0000	1.0000	53.74
93.5	195,674	40,918	0.2091	0.7909	53.74
94.5	153,829		0.0000	1.0000	42.51
95.5	159,754		0.0000	1.0000	42.51
96.5	165,831		0.0000	1.0000	42.51
97.5	132,422		0.0000	1.0000	42.51
98.5	124,316		0.0000	1.0000	42.51
99.5	112,774		0.0000	1.0000	42.51
100.5	119,624		0.0000	1.0000	42.51
101.5	114,419		0.0000	1.0000	42.51
102.5	110,799		0.0000	1.0000	42.51
103.5	76,825		0.0000	1.0000	42.51
104.5	83,932	5,350	0.0637	0.9363	42.51
105.5	81,764		0.0000	1.0000	39.80
106.5	80,610		0.0000	1.0000	39.80
107.5	175,451		0.0000	1.0000	39.80
108.5	178,700		0.0000	1.0000	39.80
109.5	177,351		0.0000	1.0000	39.80
110.5	161,286		0.0000	1.0000	39.80
111.5	147,450		0.0000	1.0000	39.80
112.5	138,787	723	0.0052	0.9948	39.80
113.5	130,406	194	0.0015	0.9985	39.59
114.5	130,212		0.0000	1.0000	39.53
115.5	123,762		0.0000	1.0000	39.53
116.5	118,254		0.0000	1.0000	39.53
117.5	116,233		0.0000	1.0000	39.53
118.5	116,233		0.0000	1.0000	39.53

PENNSYLVANIA-AMERICAN WATER COMPANY

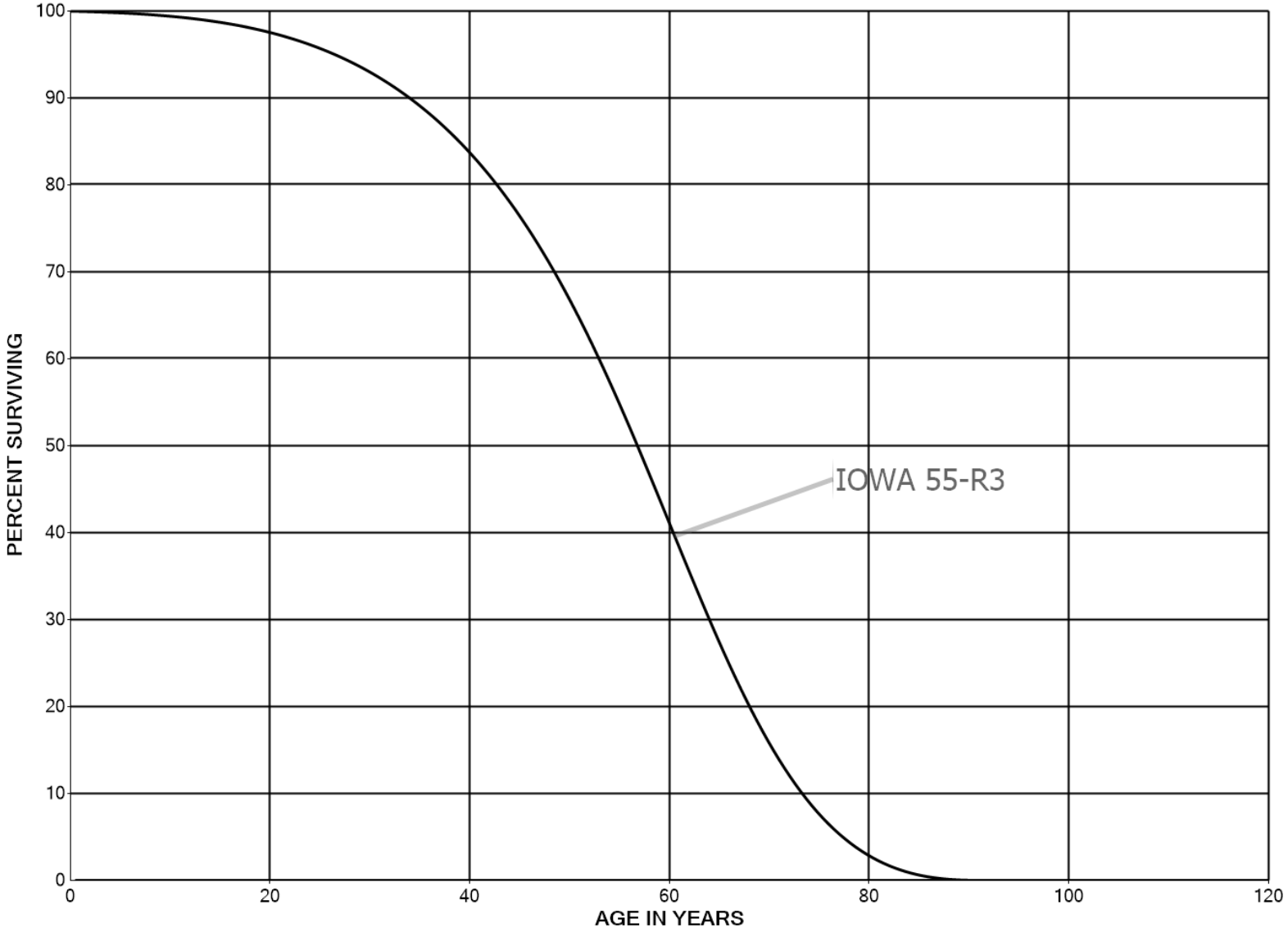
ACCOUNT 304.20 POWER AND PUMPING STRUCTURES - LARGE

ORIGINAL LIFE TABLE, CONT.

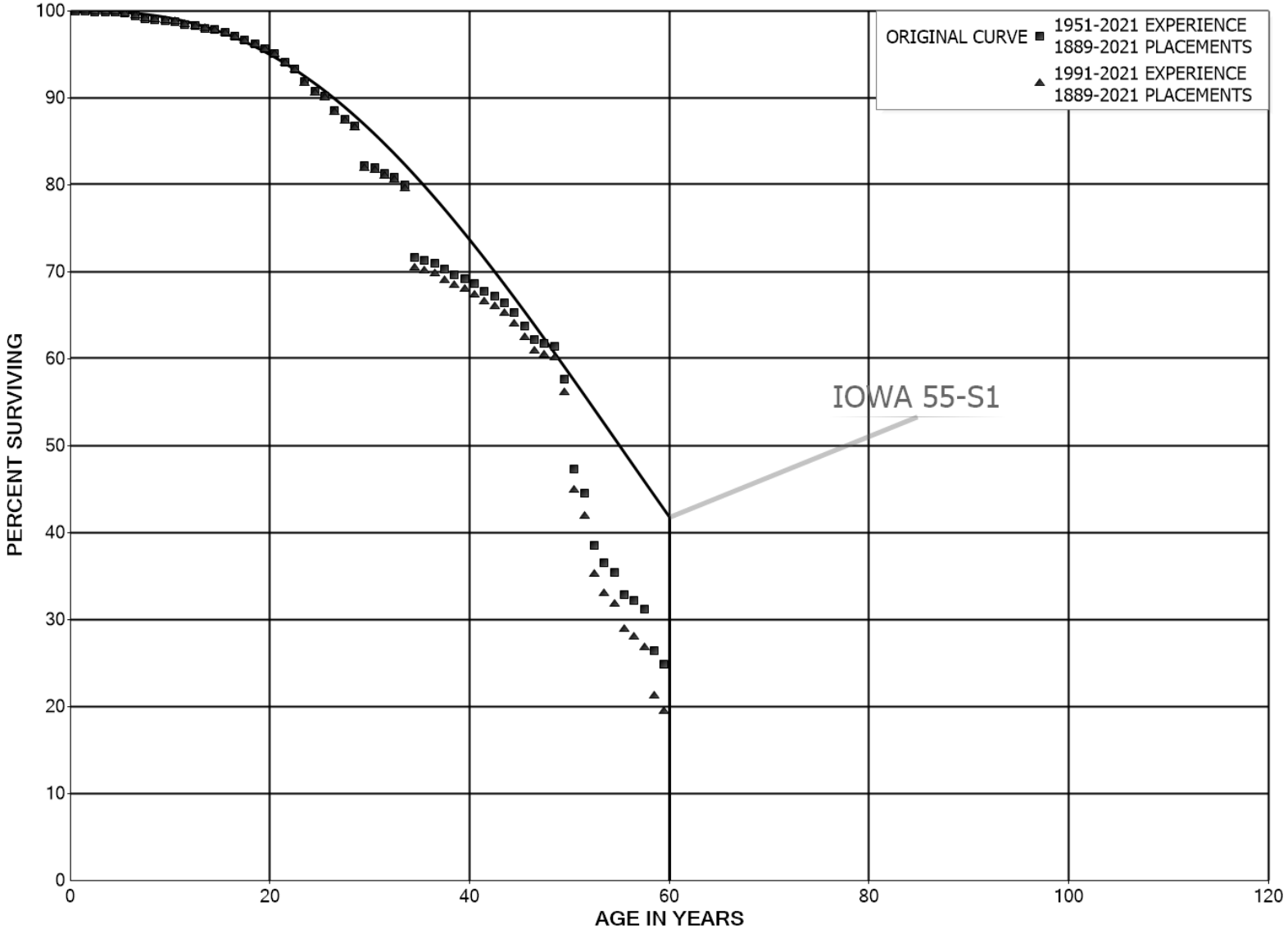
PLACEMENT BAND 1893-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	116,233		0.0000	1.0000	39.53
120.5	108,738		0.0000	1.0000	39.53
121.5	108,380		0.0000	1.0000	39.53
122.5	108,380		0.0000	1.0000	39.53
123.5	108,380		0.0000	1.0000	39.53
124.5	101,273		0.0000	1.0000	39.53
125.5	98,090		0.0000	1.0000	39.53
126.5	98,090		0.0000	1.0000	39.53
127.5	3,249		0.0000	1.0000	39.53
128.5					39.53

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 304.20 POWER AND PUMPING STRUCTURES - OTHER
SMOOTH SURVIVOR CURVE



PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNTS 304.30 AND 304.36 PURIFICATION, WASTE HANDLING AND TREATMENT STRUCTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 304.30 AND 304.36 PURIFICATION, WASTE HANDLING AND TREATMENT STRUCTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1889-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	332,928,816	5,551	0.0000	1.0000	100.00
0.5	293,698,577	20,709	0.0001	0.9999	100.00
1.5	296,519,828	351,612	0.0012	0.9988	99.99
2.5	294,222,893	156,261	0.0005	0.9995	99.87
3.5	263,072,356	70,597	0.0003	0.9997	99.82
4.5	252,396,588	283,954	0.0011	0.9989	99.79
5.5	249,712,958	741,086	0.0030	0.9970	99.68
6.5	252,361,135	704,029	0.0028	0.9972	99.38
7.5	245,098,077	407,787	0.0017	0.9983	99.11
8.5	246,896,500	276,600	0.0011	0.9989	98.94
9.5	193,927,601	177,918	0.0009	0.9991	98.83
10.5	178,112,087	566,031	0.0032	0.9968	98.74
11.5	171,285,147	265,551	0.0016	0.9984	98.43
12.5	170,683,706	495,554	0.0029	0.9971	98.27
13.5	169,392,366	290,269	0.0017	0.9983	97.99
14.5	164,717,787	517,847	0.0031	0.9969	97.82
15.5	147,239,049	669,035	0.0045	0.9955	97.51
16.5	146,327,552	668,331	0.0046	0.9954	97.07
17.5	143,711,794	627,290	0.0044	0.9956	96.63
18.5	131,319,241	752,521	0.0057	0.9943	96.21
19.5	129,322,578	736,344	0.0057	0.9943	95.65
20.5	121,063,733	1,333,428	0.0110	0.9890	95.11
21.5	117,110,515	909,341	0.0078	0.9922	94.06
22.5	108,920,152	1,796,068	0.0165	0.9835	93.33
23.5	106,282,623	1,238,247	0.0117	0.9883	91.79
24.5	100,534,575	576,446	0.0057	0.9943	90.72
25.5	98,587,069	1,880,219	0.0191	0.9809	90.20
26.5	91,094,955	952,596	0.0105	0.9895	88.48
27.5	88,419,719	843,031	0.0095	0.9905	87.56
28.5	69,834,344	3,652,280	0.0523	0.9477	86.72
29.5	54,791,699	147,958	0.0027	0.9973	82.19
30.5	42,215,460	353,628	0.0084	0.9916	81.97
31.5	22,460,034	109,558	0.0049	0.9951	81.28
32.5	19,613,661	221,482	0.0113	0.9887	80.88
33.5	12,011,241	1,255,065	0.1045	0.8955	79.97
34.5	10,549,319	44,265	0.0042	0.9958	71.61
35.5	10,435,921	50,608	0.0048	0.9952	71.31
36.5	9,547,462	96,793	0.0101	0.9899	70.97
37.5	9,401,555	80,827	0.0086	0.9914	70.25
38.5	9,138,780	60,957	0.0067	0.9933	69.64

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 304.30 AND 304.36 PURIFICATION, WASTE HANDLING AND TREATMENT STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1889-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	8,414,284	74,738	0.0089	0.9911	69.18
40.5	8,312,234	97,287	0.0117	0.9883	68.56
41.5	8,195,282	70,203	0.0086	0.9914	67.76
42.5	8,108,263	91,736	0.0113	0.9887	67.18
43.5	8,004,062	141,059	0.0176	0.9824	66.42
44.5	7,847,315	188,147	0.0240	0.9760	65.25
45.5	11,116,656	264,634	0.0238	0.9762	63.69
46.5	10,532,966	76,174	0.0072	0.9928	62.17
47.5	10,449,693	54,046	0.0052	0.9948	61.72
48.5	3,868,878	237,456	0.0614	0.9386	61.40
49.5	2,661,867	479,036	0.1800	0.8200	57.63
50.5	2,161,034	123,891	0.0573	0.9427	47.26
51.5	2,036,632	277,387	0.1362	0.8638	44.55
52.5	1,614,518	83,724	0.0519	0.9481	38.48
53.5	1,273,365	39,426	0.0310	0.9690	36.49
54.5	1,211,130	85,406	0.0705	0.9295	35.36
55.5	1,160,430	25,083	0.0216	0.9784	32.86
56.5	1,140,204	35,919	0.0315	0.9685	32.15
57.5	1,103,861	168,837	0.1530	0.8470	31.14
58.5	933,346	54,474	0.0584	0.9416	26.38
59.5	875,342	39,588	0.0452	0.9548	24.84
60.5	754,765	11,967	0.0159	0.9841	23.72
61.5	639,756	9,404	0.0147	0.9853	23.34
62.5	630,281	2,202	0.0035	0.9965	23.00
63.5	625,510	29,652	0.0474	0.9526	22.92
64.5	596,225	130,311	0.2186	0.7814	21.83
65.5	465,867	17,823	0.0383	0.9617	17.06
66.5	432,319	3,005	0.0070	0.9930	16.41
67.5	365,104	157	0.0004	0.9996	16.29
68.5	346,391	5,237	0.0151	0.9849	16.28
69.5	354,195	4,176	0.0118	0.9882	16.04
70.5	344,470	773	0.0022	0.9978	15.85
71.5	343,696	9,909	0.0288	0.9712	15.81
72.5	335,302	0	0.0000	1.0000	15.36
73.5	335,851	50	0.0001	0.9999	15.36
74.5	335,610		0.0000	1.0000	15.36
75.5	338,781		0.0000	1.0000	15.36
76.5	330,117	17	0.0001	0.9999	15.36
77.5	329,849	4	0.0000	1.0000	15.36
78.5	329,857	840	0.0025	0.9975	15.35

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 304.30 AND 304.36 PURIFICATION, WASTE HANDLING AND TREATMENT STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1889-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	328,959	5,286	0.0161	0.9839	15.32
80.5	333,543	468	0.0014	0.9986	15.07
81.5	359,205	10,519	0.0293	0.9707	15.05
82.5	348,686	17,395	0.0499	0.9501	14.61
83.5	329,662	26,479	0.0803	0.9197	13.88
84.5	322,957	206	0.0006	0.9994	12.76
85.5	322,751	5,951	0.0184	0.9816	12.76
86.5	316,458	173	0.0005	0.9995	12.52
87.5	314,778	700	0.0022	0.9978	12.51
88.5	314,078	1,854	0.0059	0.9941	12.49
89.5	312,224	633	0.0020	0.9980	12.41
90.5	309,739	20,583	0.0665	0.9335	12.39
91.5	288,543	254	0.0009	0.9991	11.56
92.5	285,097	4,842	0.0170	0.9830	11.55
93.5	278,478		0.0000	1.0000	11.36
94.5	278,478	7,611	0.0273	0.9727	11.36
95.5	270,867	3,481	0.0129	0.9871	11.05
96.5	267,386	16,354	0.0612	0.9388	10.91
97.5	209,825	27,595	0.1315	0.8685	10.24
98.5	176,085	1,835	0.0104	0.9896	8.89
99.5	173,956	15,273	0.0878	0.9122	8.80
100.5	151,133	45	0.0003	0.9997	8.03
101.5	151,088	8,751	0.0579	0.9421	8.02
102.5	142,337	743	0.0052	0.9948	7.56
103.5	140,770	9,445	0.0671	0.9329	7.52
104.5	129,726	21,449	0.1653	0.8347	7.02
105.5	108,277	1,762	0.0163	0.9837	5.86
106.5	106,474	112	0.0011	0.9989	5.76
107.5	105,549	22,493	0.2131	0.7869	5.75
108.5	77,019	1,154	0.0150	0.9850	4.53
109.5	75,639		0.0000	1.0000	4.46
110.5	75,639	24,687	0.3264	0.6736	4.46
111.5	49,996		0.0000	1.0000	3.00
112.5	49,593	3,254	0.0656	0.9344	3.00
113.5	45,812		0.0000	1.0000	2.81
114.5	45,812		0.0000	1.0000	2.81
115.5	39,991		0.0000	1.0000	2.81
116.5	39,991	6,556	0.1639	0.8361	2.81
117.5	33,435		0.0000	1.0000	2.35
118.5	31,512		0.0000	1.0000	2.35

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 304.30 AND 304.36 PURIFICATION, WASTE HANDLING AND TREATMENT STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1889-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	18,162	1,414	0.0779	0.9221	2.35
120.5	16,692	43	0.0025	0.9975	2.16
121.5	13,731		0.0000	1.0000	2.16
122.5	13,731		0.0000	1.0000	2.16
123.5	13,731		0.0000	1.0000	2.16
124.5	13,731	760	0.0553	0.9447	2.16
125.5	12,971		0.0000	1.0000	2.04
126.5	12,971		0.0000	1.0000	2.04
127.5	12,971		0.0000	1.0000	2.04
128.5	12,281		0.0000	1.0000	2.04
129.5	12,281	246	0.0200	0.9800	2.04
130.5	12,035		0.0000	1.0000	2.00
131.5	12,035		0.0000	1.0000	2.00
132.5					2.00

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 304.30 AND 304.36 PURIFICATION, WASTE HANDLING AND TREATMENT STRUCTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1889-2021 EXPERIENCE BAND 1991-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	285,152,914	5,551	0.0000	1.0000	100.00
0.5	270,292,847	20,616	0.0001	0.9999	100.00
1.5	276,513,274	351,458	0.0013	0.9987	99.99
2.5	282,291,327	156,182	0.0006	0.9994	99.86
3.5	251,927,252	65,469	0.0003	0.9997	99.81
4.5	241,769,583	280,443	0.0012	0.9988	99.78
5.5	242,433,036	739,048	0.0030	0.9970	99.67
6.5	245,410,618	703,979	0.0029	0.9971	99.36
7.5	238,370,372	405,631	0.0017	0.9983	99.08
8.5	240,800,599	272,668	0.0011	0.9989	98.91
9.5	187,971,679	175,888	0.0009	0.9991	98.80
10.5	172,228,130	564,516	0.0033	0.9967	98.70
11.5	165,549,518	264,651	0.0016	0.9984	98.38
12.5	164,991,208	493,890	0.0030	0.9970	98.22
13.5	163,715,476	286,654	0.0018	0.9982	97.93
14.5	159,079,744	513,197	0.0032	0.9968	97.76
15.5	142,377,877	666,808	0.0047	0.9953	97.44
16.5	141,538,960	645,121	0.0046	0.9954	96.99
17.5	138,973,106	626,490	0.0045	0.9955	96.54
18.5	127,941,621	746,894	0.0058	0.9942	96.11
19.5	126,060,522	736,344	0.0058	0.9942	95.55
20.5	117,811,145	1,331,717	0.0113	0.9887	94.99
21.5	114,895,100	908,867	0.0079	0.9921	93.92
22.5	107,087,329	1,793,000	0.0167	0.9833	93.17
23.5	104,456,372	1,238,247	0.0119	0.9881	91.61
24.5	98,724,326	575,234	0.0058	0.9942	90.53
25.5	96,856,506	1,876,529	0.0194	0.9806	90.00
26.5	89,328,560	952,560	0.0107	0.9893	88.26
27.5	86,610,135	841,615	0.0097	0.9903	87.32
28.5	68,050,573	3,651,804	0.0537	0.9463	86.47
29.5	53,629,304	146,691	0.0027	0.9973	81.83
30.5	41,053,823	349,808	0.0085	0.9915	81.60
31.5	21,338,214	109,257	0.0051	0.9949	80.91
32.5	18,525,962	221,482	0.0120	0.9880	80.49
33.5	10,942,014	1,252,959	0.1145	0.8855	79.53
34.5	9,491,251	43,765	0.0046	0.9954	70.42
35.5	9,687,538	50,608	0.0052	0.9948	70.10
36.5	9,021,276	96,793	0.0107	0.9893	69.73
37.5	9,129,690	80,563	0.0088	0.9912	68.98
38.5	8,870,343	60,866	0.0069	0.9931	68.38

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 304.30 AND 304.36 PURIFICATION, WASTE HANDLING AND TREATMENT STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1889-2021 EXPERIENCE BAND 1991-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	8,181,300	74,633	0.0091	0.9909	67.91
40.5	8,075,732	97,287	0.0120	0.9880	67.29
41.5	7,962,846	70,203	0.0088	0.9912	66.48
42.5	7,879,225	91,736	0.0116	0.9884	65.89
43.5	7,775,650	141,059	0.0181	0.9819	65.12
44.5	7,581,432	188,048	0.0248	0.9752	63.94
45.5	10,850,962	264,634	0.0244	0.9756	62.36
46.5	10,268,837	76,174	0.0074	0.9926	60.84
47.5	10,186,394	54,046	0.0053	0.9947	60.38
48.5	3,587,480	237,456	0.0662	0.9338	60.06
49.5	2,379,821	479,036	0.2013	0.7987	56.09
50.5	1,873,811	123,891	0.0661	0.9339	44.80
51.5	1,749,409	277,387	0.1586	0.8414	41.84
52.5	1,341,813	83,724	0.0624	0.9376	35.20
53.5	1,000,459	39,426	0.0394	0.9606	33.01
54.5	938,224	85,406	0.0910	0.9090	31.71
55.5	848,626	24,951	0.0294	0.9706	28.82
56.5	832,807	35,585	0.0427	0.9573	27.97
57.5	796,797	166,441	0.2089	0.7911	26.78
58.5	628,679	54,474	0.0866	0.9134	21.18
59.5	593,550	39,588	0.0667	0.9333	19.35
60.5	474,621	11,890	0.0251	0.9749	18.06
61.5	348,170	9,404	0.0270	0.9730	17.61
62.5	347,373	2,202	0.0063	0.9937	17.13
63.5	342,602	29,652	0.0866	0.9134	17.02
64.5	313,317	130,311	0.4159	0.5841	15.55
65.5	182,959	17,823	0.0974	0.9026	9.08
66.5	227,906	3,005	0.0132	0.9868	8.20
67.5	217,748	107	0.0005	0.9995	8.09
68.5	199,084	2,134	0.0107	0.9893	8.08
69.5	209,992	4,176	0.0199	0.9801	8.00
70.5	200,266	455	0.0023	0.9977	7.84
71.5	199,811	9,871	0.0494	0.9506	7.82
72.5	192,292	0	0.0000	1.0000	7.43
73.5	194,310	50	0.0003	0.9997	7.43
74.5	194,387		0.0000	1.0000	7.43
75.5	196,449		0.0000	1.0000	7.43
76.5	195,551	17	0.0001	0.9999	7.43
77.5	195,283	4	0.0000	1.0000	7.43
78.5	207,836	840	0.0040	0.9960	7.43

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 304.30 AND 304.36 PURIFICATION, WASTE HANDLING AND TREATMENT STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1889-2021 EXPERIENCE BAND 1991-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	206,938	5,286	0.0255	0.9745	7.40
80.5	214,546	468	0.0022	0.9978	7.21
81.5	240,719	10,519	0.0437	0.9563	7.20
82.5	232,490	17,395	0.0748	0.9252	6.88
83.5	213,465	26,479	0.1240	0.8760	6.37
84.5	244,366	206	0.0008	0.9992	5.58
85.5	244,160	5,951	0.0244	0.9756	5.57
86.5	237,867	173	0.0007	0.9993	5.44
87.5	237,449	700	0.0029	0.9971	5.43
88.5	260,825	1,854	0.0071	0.9929	5.42
89.5	259,677	633	0.0024	0.9976	5.38
90.5	261,524	20,583	0.0787	0.9213	5.37
91.5	240,328	238	0.0010	0.9990	4.94
92.5	236,898	4,776	0.0202	0.9798	4.94
93.5	230,544		0.0000	1.0000	4.84
94.5	230,544	7,611	0.0330	0.9670	4.84
95.5	257,827	3,481	0.0135	0.9865	4.68
96.5	254,345	16,354	0.0643	0.9357	4.62
97.5	196,784	27,595	0.1402	0.8598	4.32
98.5	163,044	1,835	0.0113	0.9887	3.71
99.5	160,915	15,273	0.0949	0.9051	3.67
100.5	138,092	45	0.0003	0.9997	3.32
101.5	151,088	8,751	0.0579	0.9421	3.32
102.5	142,337	743	0.0052	0.9948	3.13
103.5	140,770	9,445	0.0671	0.9329	3.11
104.5	129,726	21,449	0.1653	0.8347	2.90
105.5	108,277	1,762	0.0163	0.9837	2.42
106.5	106,474	112	0.0011	0.9989	2.38
107.5	105,549	22,493	0.2131	0.7869	2.38
108.5	77,019	1,154	0.0150	0.9850	1.87
109.5	75,639		0.0000	1.0000	1.85
110.5	75,639	24,687	0.3264	0.6736	1.85
111.5	49,996		0.0000	1.0000	1.24
112.5	49,593	3,254	0.0656	0.9344	1.24
113.5	45,812		0.0000	1.0000	1.16
114.5	45,812		0.0000	1.0000	1.16
115.5	39,991		0.0000	1.0000	1.16
116.5	39,991	6,556	0.1639	0.8361	1.16
117.5	33,435		0.0000	1.0000	0.97
118.5	31,512		0.0000	1.0000	0.97

PENNSYLVANIA-AMERICAN WATER COMPANY

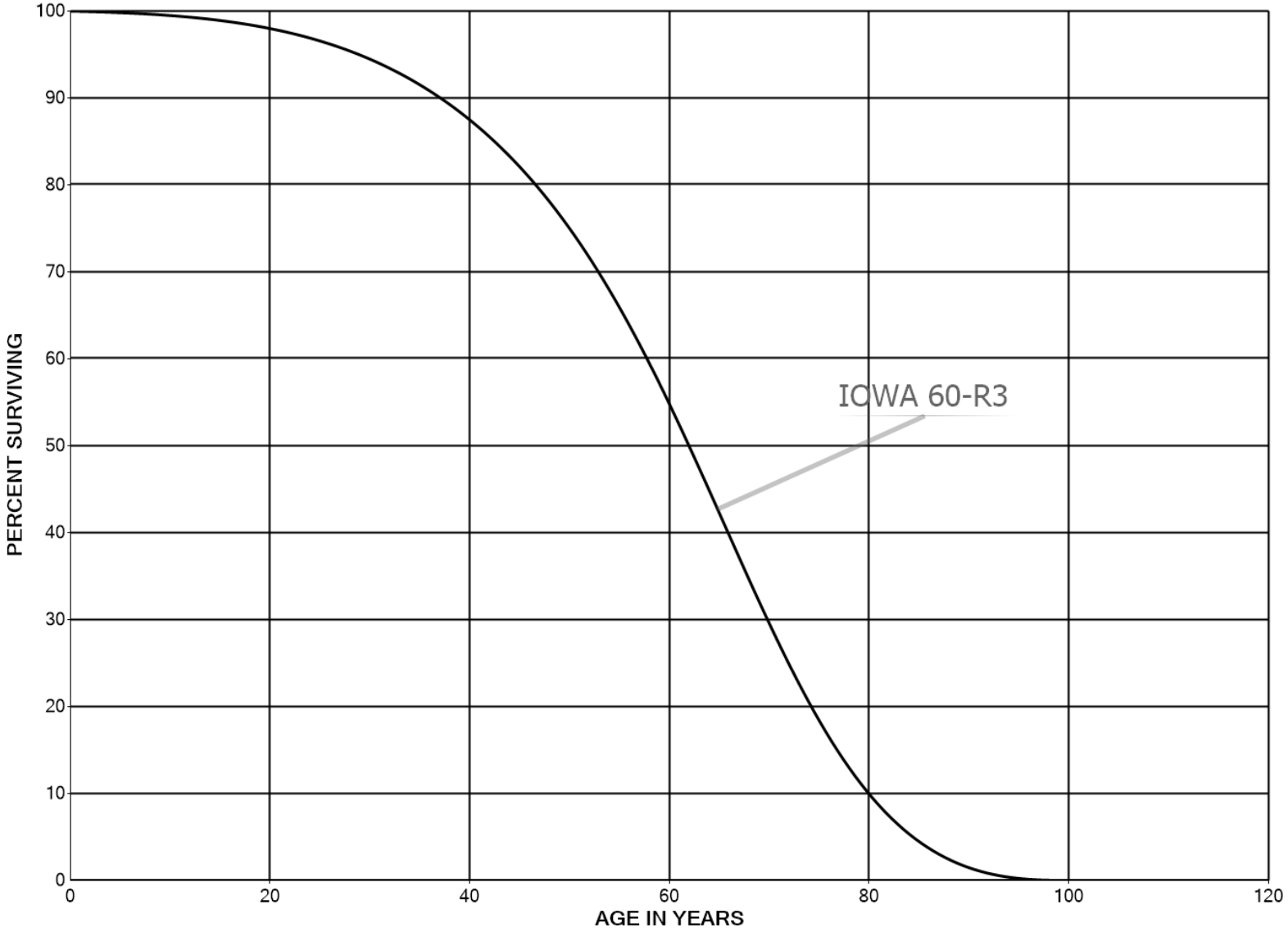
ACCOUNTS 304.30 AND 304.36 PURIFICATION, WASTE HANDLING AND TREATMENT STRUCTURES

ORIGINAL LIFE TABLE, CONT.

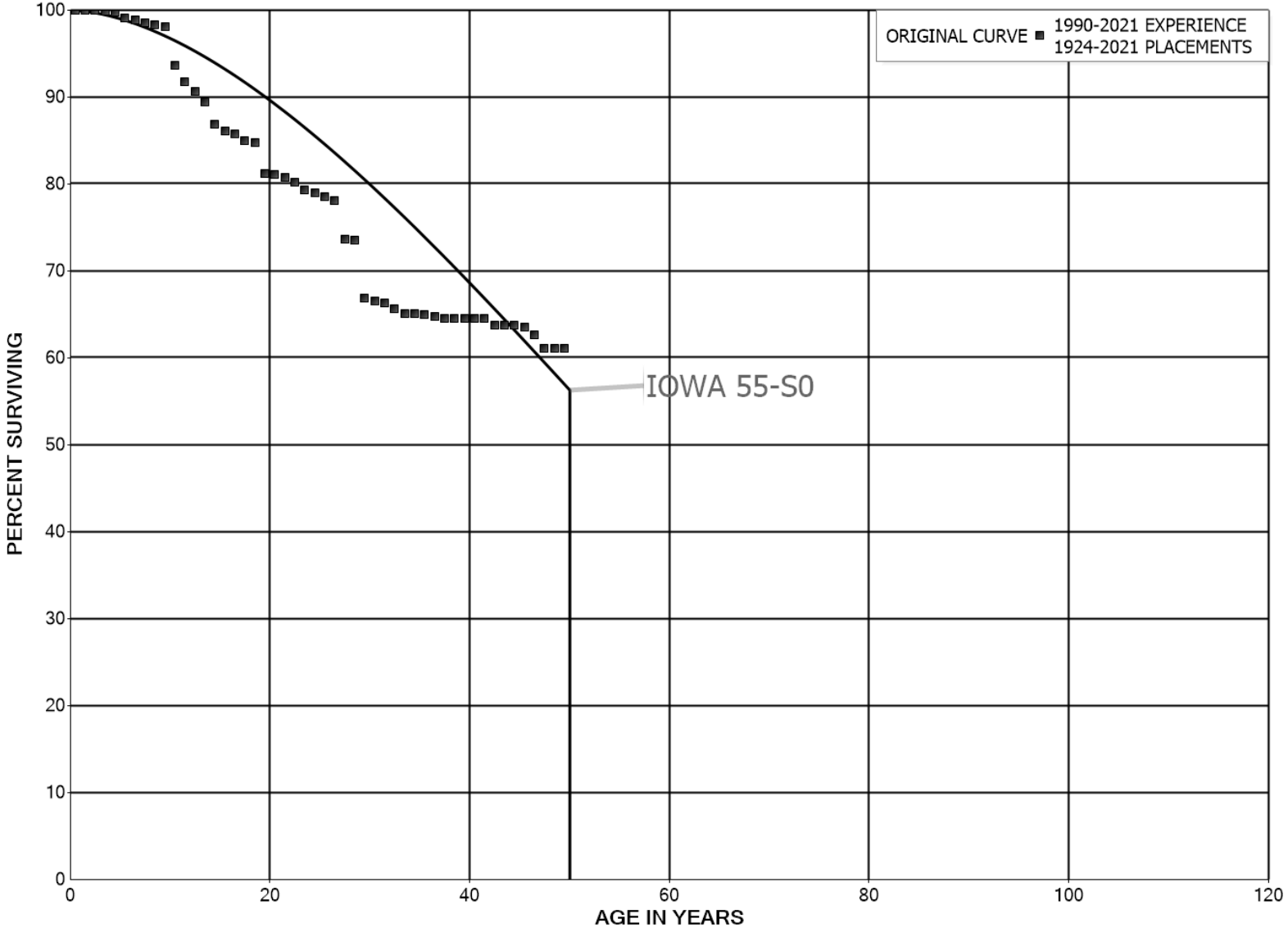
PLACEMENT BAND 1889-2021 EXPERIENCE BAND 1991-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	18,162	1,414	0.0779	0.9221	0.97
120.5	16,692	43	0.0025	0.9975	0.90
121.5	13,731		0.0000	1.0000	0.89
122.5	13,731		0.0000	1.0000	0.89
123.5	13,731		0.0000	1.0000	0.89
124.5	13,731	760	0.0553	0.9447	0.89
125.5	12,971		0.0000	1.0000	0.84
126.5	12,971		0.0000	1.0000	0.84
127.5	12,971		0.0000	1.0000	0.84
128.5	12,281		0.0000	1.0000	0.84
129.5	12,281	246	0.0200	0.9800	0.84
130.5	12,035		0.0000	1.0000	0.83
131.5	12,035		0.0000	1.0000	0.83
132.5					0.83

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 304.30 PURIFICATION BUILDINGS - OTHER
SMOOTH SURVIVOR CURVE



PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 304.61 OFFICE BUILDINGS - LARGE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.61 OFFICE BUILDINGS - LARGE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1924-2021 EXPERIENCE BAND 1990-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	41,380,769		0.0000	1.0000	100.00
0.5	44,088,926	10,320	0.0002	0.9998	100.00
1.5	44,336,093	20,035	0.0005	0.9995	99.98
2.5	43,635,061	39,693	0.0009	0.9991	99.93
3.5	19,990,405	16,310	0.0008	0.9992	99.84
4.5	19,510,096	142,870	0.0073	0.9927	99.76
5.5	17,976,989	39,489	0.0022	0.9978	99.03
6.5	17,687,523	47,849	0.0027	0.9973	98.81
7.5	17,436,133	45,013	0.0026	0.9974	98.54
8.5	16,775,985	32,170	0.0019	0.9981	98.29
9.5	16,438,960	749,138	0.0456	0.9544	98.10
10.5	15,389,301	306,128	0.0199	0.9801	93.63
11.5	15,020,979	189,232	0.0126	0.9874	91.77
12.5	14,615,580	188,079	0.0129	0.9871	90.61
13.5	14,028,620	404,629	0.0288	0.9712	89.45
14.5	13,480,953	132,559	0.0098	0.9902	86.87
15.5	12,854,570	37,582	0.0029	0.9971	86.01
16.5	12,346,428	112,817	0.0091	0.9909	85.76
17.5	12,191,462	36,049	0.0030	0.9970	84.98
18.5	11,963,605	497,820	0.0416	0.9584	84.73
19.5	11,313,475	21,307	0.0019	0.9981	81.20
20.5	10,822,026	45,004	0.0042	0.9958	81.05
21.5	10,140,598	69,086	0.0068	0.9932	80.71
22.5	10,055,189	104,076	0.0104	0.9896	80.16
23.5	9,919,148	49,073	0.0049	0.9951	79.33
24.5	9,719,501	54,012	0.0056	0.9944	78.94
25.5	8,079,015	41,183	0.0051	0.9949	78.50
26.5	7,956,448	453,035	0.0569	0.9431	78.10
27.5	7,160,035	9,823	0.0014	0.9986	73.65
28.5	7,218,804	657,457	0.0911	0.9089	73.55
29.5	6,460,262	28,830	0.0045	0.9955	66.85
30.5	6,374,424	28,761	0.0045	0.9955	66.55
31.5	6,611,457	64,999	0.0098	0.9902	66.25
32.5	5,558,718	44,124	0.0079	0.9921	65.60
33.5	4,836,906		0.0000	1.0000	65.08
34.5	2,859,662	5,354	0.0019	0.9981	65.08
35.5	1,309,626	4,580	0.0035	0.9965	64.96
36.5	1,236,164	3,664	0.0030	0.9970	64.73
37.5	1,231,598	349	0.0003	0.9997	64.54
38.5	1,196,464		0.0000	1.0000	64.52

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.61 OFFICE BUILDINGS - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1924-2021 EXPERIENCE BAND 1990-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	835,418	350	0.0004	0.9996	64.52
40.5	789,258	1	0.0000	1.0000	64.50
41.5	789,157	9,586	0.0121	0.9879	64.50
42.5	749,818		0.0000	1.0000	63.71
43.5	749,818	0	0.0000	1.0000	63.71
44.5	303,227	1,089	0.0036	0.9964	63.71
45.5	256,451	3,391	0.0132	0.9868	63.48
46.5	246,533	6,299	0.0255	0.9745	62.64
47.5	240,234		0.0000	1.0000	61.04
48.5	238,597	68	0.0003	0.9997	61.04
49.5	177,068	89	0.0005	0.9995	61.03
50.5	167,959	2,639	0.0157	0.9843	61.00
51.5	154,198		0.0000	1.0000	60.04
52.5	152,925		0.0000	1.0000	60.04
53.5	95,469		0.0000	1.0000	60.04
54.5	47,291		0.0000	1.0000	60.04
55.5	46,166		0.0000	1.0000	60.04
56.5	34,208		0.0000	1.0000	60.04
57.5	33,128		0.0000	1.0000	60.04
58.5	83		0.0000	1.0000	60.04
59.5	83		0.0000	1.0000	60.04
60.5	62		0.0000	1.0000	60.04
61.5	13		0.0000	1.0000	60.04
62.5	13		0.0000	1.0000	60.04
63.5					60.04
64.5					
65.5					
66.5					
67.5					
68.5					
69.5					
70.5					
71.5					
72.5					
73.5					
74.5					
75.5	215		0.0000		
76.5	215		0.0000		
77.5	1,060		0.0000		
78.5	1,060		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY

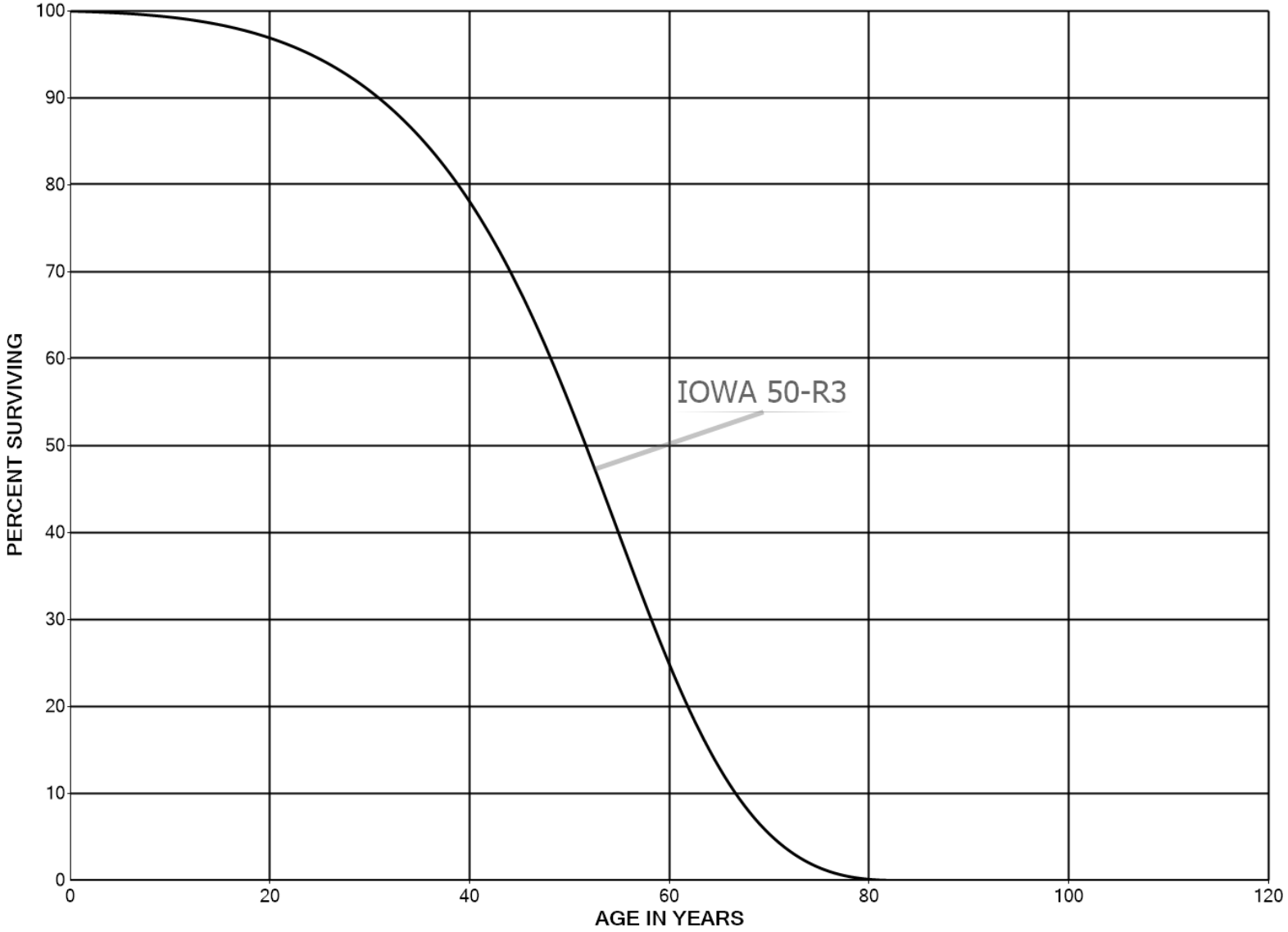
ACCOUNT 304.61 OFFICE BUILDINGS - LARGE

ORIGINAL LIFE TABLE, CONT.

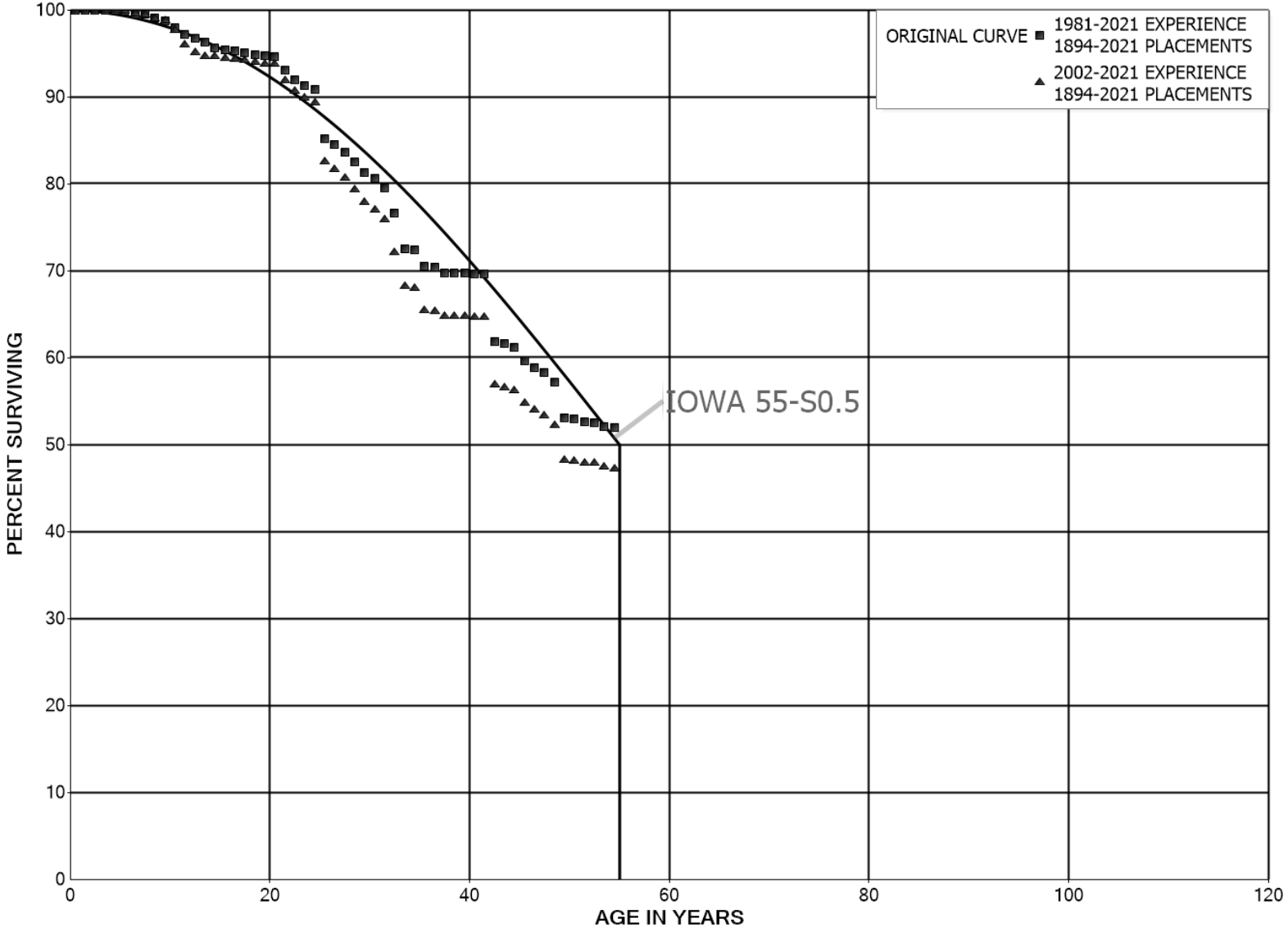
PLACEMENT BAND 1924-2021 EXPERIENCE BAND 1990-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	1,060		0.0000		
80.5	1,060		0.0000		
81.5	1,060		0.0000		
82.5	1,060		0.0000		
83.5	1,060		0.0000		
84.5	1,060		0.0000		
85.5	1,060		0.0000		
86.5	1,060		0.0000		
87.5	1,060		0.0000		
88.5	1,060		0.0000		
89.5	1,060		0.0000		
90.5	1,060		0.0000		
91.5	1,060		0.0000		
92.5	1,060		0.0000		
93.5	1,060		0.0000		
94.5	1,060		0.0000		
95.5	845		0.0000		
96.5	845		0.0000		
97.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 304.61 OFFICE BUILDINGS - OTHER
SMOOTH SURVIVOR CURVE



PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS - LARGE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS - LARGE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1894-2021 EXPERIENCE BAND 1981-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	67,421,568		0.0000	1.0000	100.00
0.5	56,659,968		0.0000	1.0000	100.00
1.5	56,229,314	3,043	0.0001	0.9999	100.00
2.5	49,446,076	20,003	0.0004	0.9996	99.99
3.5	29,550,003	1,568	0.0001	0.9999	99.95
4.5	29,516,959	26,813	0.0009	0.9991	99.95
5.5	29,509,764	95,207	0.0032	0.9968	99.86
6.5	28,783,769	14,716	0.0005	0.9995	99.54
7.5	11,554,449	54,457	0.0047	0.9953	99.48
8.5	11,439,444	37,064	0.0032	0.9968	99.02
9.5	9,261,426	64,328	0.0069	0.9931	98.70
10.5	8,938,054	71,923	0.0080	0.9920	98.01
11.5	8,789,062	49,530	0.0056	0.9944	97.22
12.5	8,314,692	35,256	0.0042	0.9958	96.67
13.5	7,799,964	55,000	0.0071	0.9929	96.26
14.5	7,483,473	18,255	0.0024	0.9976	95.58
15.5	8,241,935	8,698	0.0011	0.9989	95.35
16.5	8,194,269	18,389	0.0022	0.9978	95.25
17.5	8,173,326	14,042	0.0017	0.9983	95.04
18.5	8,189,658	16,250	0.0020	0.9980	94.87
19.5	8,165,500	4,081	0.0005	0.9995	94.69
20.5	7,791,560	129,985	0.0167	0.9833	94.64
21.5	7,533,176	86,183	0.0114	0.9886	93.06
22.5	7,304,477	52,642	0.0072	0.9928	91.99
23.5	7,175,203	34,912	0.0049	0.9951	91.33
24.5	7,002,405	436,090	0.0623	0.9377	90.89
25.5	6,423,021	53,512	0.0083	0.9917	85.23
26.5	6,370,782	64,700	0.0102	0.9898	84.52
27.5	6,237,850	84,950	0.0136	0.9864	83.66
28.5	6,137,096	92,370	0.0151	0.9849	82.52
29.5	5,697,047	48,463	0.0085	0.9915	81.28
30.5	4,945,691	69,484	0.0140	0.9860	80.59
31.5	3,870,165	136,345	0.0352	0.9648	79.45
32.5	3,299,680	176,577	0.0535	0.9465	76.65
33.5	2,357,132	5,075	0.0022	0.9978	72.55
34.5	1,535,995	40,198	0.0262	0.9738	72.40
35.5	1,382,186	3,115	0.0023	0.9977	70.50
36.5	1,226,064	11,342	0.0093	0.9907	70.34
37.5	1,161,638		0.0000	1.0000	69.69
38.5	1,186,370		0.0000	1.0000	69.69

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2021 EXPERIENCE BAND 1981-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,180,303	1,649	0.0014	0.9986	69.69
40.5	1,196,799	523	0.0004	0.9996	69.59
41.5	1,193,440	132,496	0.1110	0.8890	69.56
42.5	1,057,135	4,285	0.0041	0.9959	61.84
43.5	1,052,914	6,789	0.0064	0.9936	61.59
44.5	1,043,086	26,486	0.0254	0.9746	61.19
45.5	980,992	12,526	0.0128	0.9872	59.64
46.5	968,316	10,005	0.0103	0.9897	58.88
47.5	956,432	18,327	0.0192	0.9808	58.27
48.5	924,876	66,504	0.0719	0.9281	57.15
49.5	849,694	1,502	0.0018	0.9982	53.04
50.5	843,974	5,199	0.0062	0.9938	52.95
51.5	841,558	1,750	0.0021	0.9979	52.62
52.5	837,008	6,962	0.0083	0.9917	52.51
53.5	827,830	2,549	0.0031	0.9969	52.08
54.5	794,365	61	0.0001	0.9999	51.92
55.5	774,789	123	0.0002	0.9998	51.91
56.5	121,388	1,782	0.0147	0.9853	51.90
57.5	116,431	426	0.0037	0.9963	51.14
58.5	119,867	55	0.0005	0.9995	50.96
59.5	116,484		0.0000	1.0000	50.93
60.5	114,147	2,747	0.0241	0.9759	50.93
61.5	109,316		0.0000	1.0000	49.71
62.5	108,588		0.0000	1.0000	49.71
63.5	106,035	4,463	0.0421	0.9579	49.71
64.5	99,222		0.0000	1.0000	47.61
65.5	88,130	111	0.0013	0.9987	47.61
66.5	87,878	194	0.0022	0.9978	47.55
67.5	76,994		0.0000	1.0000	47.45
68.5	82,119		0.0000	1.0000	47.45
69.5	82,119		0.0000	1.0000	47.45
70.5	81,248	2,148	0.0264	0.9736	47.45
71.5	90,602	45	0.0005	0.9995	46.20
72.5	104,297	161	0.0015	0.9985	46.17
73.5	103,058		0.0000	1.0000	46.10
74.5	105,335	69	0.0007	0.9993	46.10
75.5	105,265		0.0000	1.0000	46.07
76.5	105,682		0.0000	1.0000	46.07
77.5	105,682		0.0000	1.0000	46.07
78.5	105,682		0.0000	1.0000	46.07

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2021 EXPERIENCE BAND 1981-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	75,941		0.0000	1.0000	46.07
80.5	75,941		0.0000	1.0000	46.07
81.5	75,751		0.0000	1.0000	46.07
82.5	75,751		0.0000	1.0000	46.07
83.5	75,751		0.0000	1.0000	46.07
84.5	75,456	635	0.0084	0.9916	46.07
85.5	74,821	506	0.0068	0.9932	45.68
86.5	74,305		0.0000	1.0000	45.37
87.5	74,305		0.0000	1.0000	45.37
88.5	74,305		0.0000	1.0000	45.37
89.5	74,305	637	0.0086	0.9914	45.37
90.5	73,667		0.0000	1.0000	44.99
91.5	73,667	6,226	0.0845	0.9155	44.99
92.5	54,346	97	0.0018	0.9982	41.18
93.5	90,569		0.0000	1.0000	41.11
94.5	90,286	1,065	0.0118	0.9882	41.11
95.5	74,385		0.0000	1.0000	40.63
96.5	74,385		0.0000	1.0000	40.63
97.5	74,384		0.0000	1.0000	40.63
98.5	74,384		0.0000	1.0000	40.63
99.5	74,346		0.0000	1.0000	40.63
100.5	74,346		0.0000	1.0000	40.63
101.5	74,346	298	0.0040	0.9960	40.63
102.5	74,048		0.0000	1.0000	40.46
103.5	74,048		0.0000	1.0000	40.46
104.5	74,048		0.0000	1.0000	40.46
105.5	74,048		0.0000	1.0000	40.46
106.5	74,048		0.0000	1.0000	40.46
107.5	74,048	38,473	0.5196	0.4804	40.46
108.5	35,575		0.0000	1.0000	19.44
109.5	31,254	2,970	0.0950	0.9050	19.44
110.5	28,284		0.0000	1.0000	17.59
111.5	28,284		0.0000	1.0000	17.59
112.5	14,777		0.0000	1.0000	17.59
113.5	3,747		0.0000	1.0000	17.59
114.5	3,747		0.0000	1.0000	17.59
115.5	1,470		0.0000	1.0000	17.59
116.5	1,470		0.0000	1.0000	17.59
117.5	1,470		0.0000	1.0000	17.59
118.5	1,470		0.0000	1.0000	17.59

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2021 EXPERIENCE BAND 1981-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	1,470		0.0000	1.0000	17.59
120.5	1,470		0.0000	1.0000	17.59
121.5	1,470		0.0000	1.0000	17.59
122.5	1,470		0.0000	1.0000	17.59
123.5	1,470		0.0000	1.0000	17.59
124.5	1,470		0.0000	1.0000	17.59
125.5	1,470		0.0000	1.0000	17.59
126.5	1,470		0.0000	1.0000	17.59
127.5					17.59

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS - LARGE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1894-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	60,384,192		0.0000	1.0000	100.00
0.5	49,892,024		0.0000	1.0000	100.00
1.5	49,581,560	3,043	0.0001	0.9999	100.00
2.5	42,971,994	7,058	0.0002	0.9998	99.99
3.5	23,105,888		0.0000	1.0000	99.98
4.5	23,319,088	26,246	0.0011	0.9989	99.98
5.5	23,505,489	85,323	0.0036	0.9964	99.86
6.5	22,759,903	14,716	0.0006	0.9994	99.50
7.5	5,607,553	29,133	0.0052	0.9948	99.44
8.5	5,514,290	12,967	0.0024	0.9976	98.92
9.5	3,753,521	40,076	0.0107	0.9893	98.69
10.5	4,229,832	70,970	0.0168	0.9832	97.64
11.5	5,205,851	48,663	0.0093	0.9907	96.00
12.5	5,535,654	25,956	0.0047	0.9953	95.10
13.5	5,784,136		0.0000	1.0000	94.65
14.5	6,530,733	16,057	0.0025	0.9975	94.65
15.5	6,739,289	7,088	0.0011	0.9989	94.42
16.5	6,879,228	12,254	0.0018	0.9982	94.32
17.5	6,920,913	14,042	0.0020	0.9980	94.15
18.5	6,919,294	16,250	0.0023	0.9977	93.96
19.5	6,916,745	3,365	0.0005	0.9995	93.74
20.5	6,540,438	129,917	0.0199	0.9801	93.70
21.5	6,286,717	85,192	0.0136	0.9864	91.84
22.5	6,066,137	52,642	0.0087	0.9913	90.59
23.5	5,931,735	34,912	0.0059	0.9941	89.80
24.5	5,736,509	436,090	0.0760	0.9240	89.28
25.5	5,182,902	52,883	0.0102	0.9898	82.49
26.5	5,121,879	62,632	0.0122	0.9878	81.65
27.5	5,007,338	84,799	0.0169	0.9831	80.65
28.5	4,920,649	92,295	0.0188	0.9812	79.28
29.5	4,497,223	47,884	0.0106	0.9894	77.80
30.5	3,743,781	54,153	0.0145	0.9855	76.97
31.5	2,697,956	134,870	0.0500	0.9500	75.85
32.5	2,165,035	117,107	0.0541	0.9459	72.06
33.5	1,339,487	5,075	0.0038	0.9962	68.16
34.5	574,264	20,797	0.0362	0.9638	67.91
35.5	465,349	816	0.0018	0.9982	65.45
36.5	1,163,100	11,342	0.0098	0.9902	65.33
37.5	1,106,523		0.0000	1.0000	64.70
38.5	1,102,061		0.0000	1.0000	64.70

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,096,592	1,649	0.0015	0.9985	64.70
40.5	1,095,900	432	0.0004	0.9996	64.60
41.5	1,098,921	132,496	0.1206	0.8794	64.57
42.5	964,048	4,285	0.0044	0.9956	56.79
43.5	962,207	5,289	0.0055	0.9945	56.53
44.5	960,054	26,486	0.0276	0.9724	56.22
45.5	907,915	12,526	0.0138	0.9862	54.67
46.5	895,545	10,005	0.0112	0.9888	53.92
47.5	894,351	18,327	0.0205	0.9795	53.32
48.5	862,795	66,504	0.0771	0.9229	52.22
49.5	787,614	1,502	0.0019	0.9981	48.20
50.5	782,764	5,199	0.0066	0.9934	48.11
51.5	774,290		0.0000	1.0000	47.79
52.5	767,616	6,962	0.0091	0.9909	47.79
53.5	759,233	2,549	0.0034	0.9966	47.35
54.5	710,903		0.0000	1.0000	47.19
55.5	709,286	123	0.0002	0.9998	47.19
56.5	55,964	1,782	0.0318	0.9682	47.19
57.5	51,008	342	0.0067	0.9933	45.68
58.5	48,498	55	0.0011	0.9989	45.38
59.5	74,900		0.0000	1.0000	45.33
60.5	72,791	2,747	0.0377	0.9623	45.33
61.5	68,151		0.0000	1.0000	43.62
62.5	67,422		0.0000	1.0000	43.62
63.5	64,869	4,463	0.0688	0.9312	43.62
64.5	58,351		0.0000	1.0000	40.61
65.5	47,260	68	0.0014	0.9986	40.61
66.5	48,530	127	0.0026	0.9974	40.56
67.5	37,713		0.0000	1.0000	40.45
68.5	37,713		0.0000	1.0000	40.45
69.5	37,713		0.0000	1.0000	40.45
70.5	36,842	234	0.0063	0.9937	40.45
71.5	33,968	45	0.0013	0.9987	40.19
72.5	46,759	161	0.0034	0.9966	40.14
73.5	47,697		0.0000	1.0000	40.00
74.5	47,979	69	0.0014	0.9986	40.00
75.5	62,819		0.0000	1.0000	39.94
76.5	62,170		0.0000	1.0000	39.94
77.5	62,808		0.0000	1.0000	39.94
78.5	62,808		0.0000	1.0000	39.94

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	39,331		0.0000	1.0000	39.94
80.5	39,331		0.0000	1.0000	39.94
81.5	39,141		0.0000	1.0000	39.94
82.5	39,141		0.0000	1.0000	39.94
83.5	39,141		0.0000	1.0000	39.94
84.5	38,846		0.0000	1.0000	39.94
85.5	38,846		0.0000	1.0000	39.94
86.5	37,366		0.0000	1.0000	39.94
87.5	37,366		0.0000	1.0000	39.94
88.5	37,366		0.0000	1.0000	39.94
89.5	41,986	637	0.0152	0.9848	39.94
90.5	41,348		0.0000	1.0000	39.34
91.5	41,348	6,226	0.1506	0.8494	39.34
92.5	35,534	73	0.0021	0.9979	33.41
93.5	47,284		0.0000	1.0000	33.35
94.5	47,001		0.0000	1.0000	33.35
95.5	72,915		0.0000	1.0000	33.35
96.5	72,915		0.0000	1.0000	33.35
97.5	72,914		0.0000	1.0000	33.35
98.5	72,914		0.0000	1.0000	33.35
99.5	72,876		0.0000	1.0000	33.35
100.5	72,876		0.0000	1.0000	33.35
101.5	72,876	298	0.0041	0.9959	33.35
102.5	72,578		0.0000	1.0000	33.21
103.5	72,578		0.0000	1.0000	33.21
104.5	72,578		0.0000	1.0000	33.21
105.5	72,578		0.0000	1.0000	33.21
106.5	72,578		0.0000	1.0000	33.21
107.5	74,048	38,473	0.5196	0.4804	33.21
108.5	35,575		0.0000	1.0000	15.95
109.5	31,254	2,970	0.0950	0.9050	15.95
110.5	28,284		0.0000	1.0000	14.44
111.5	28,284		0.0000	1.0000	14.44
112.5	14,777		0.0000	1.0000	14.44
113.5	3,747		0.0000	1.0000	14.44
114.5	3,747		0.0000	1.0000	14.44
115.5	1,470		0.0000	1.0000	14.44
116.5	1,470		0.0000	1.0000	14.44
117.5	1,470		0.0000	1.0000	14.44
118.5	1,470		0.0000	1.0000	14.44

PENNSYLVANIA-AMERICAN WATER COMPANY

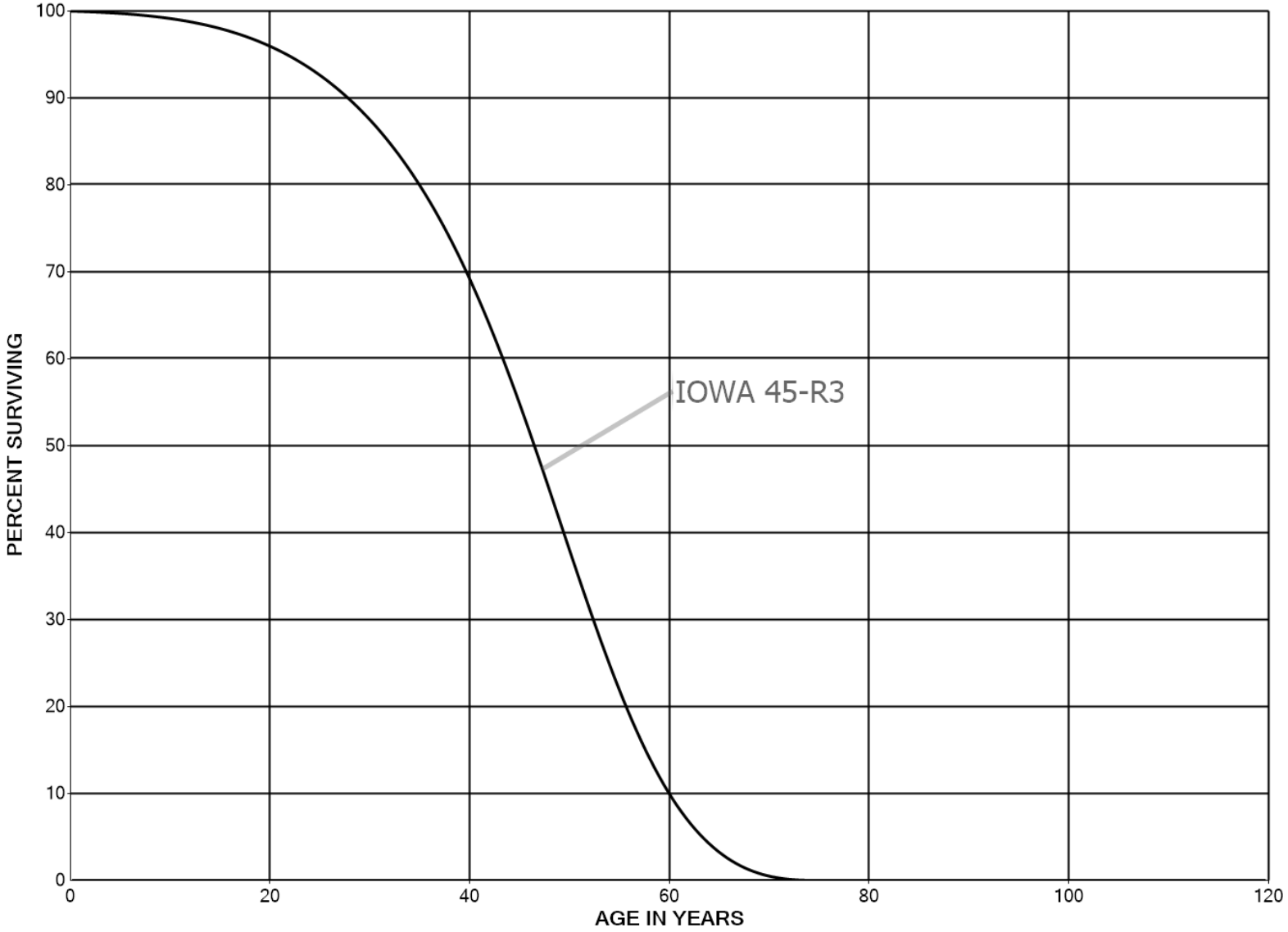
ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS - LARGE

ORIGINAL LIFE TABLE, CONT.

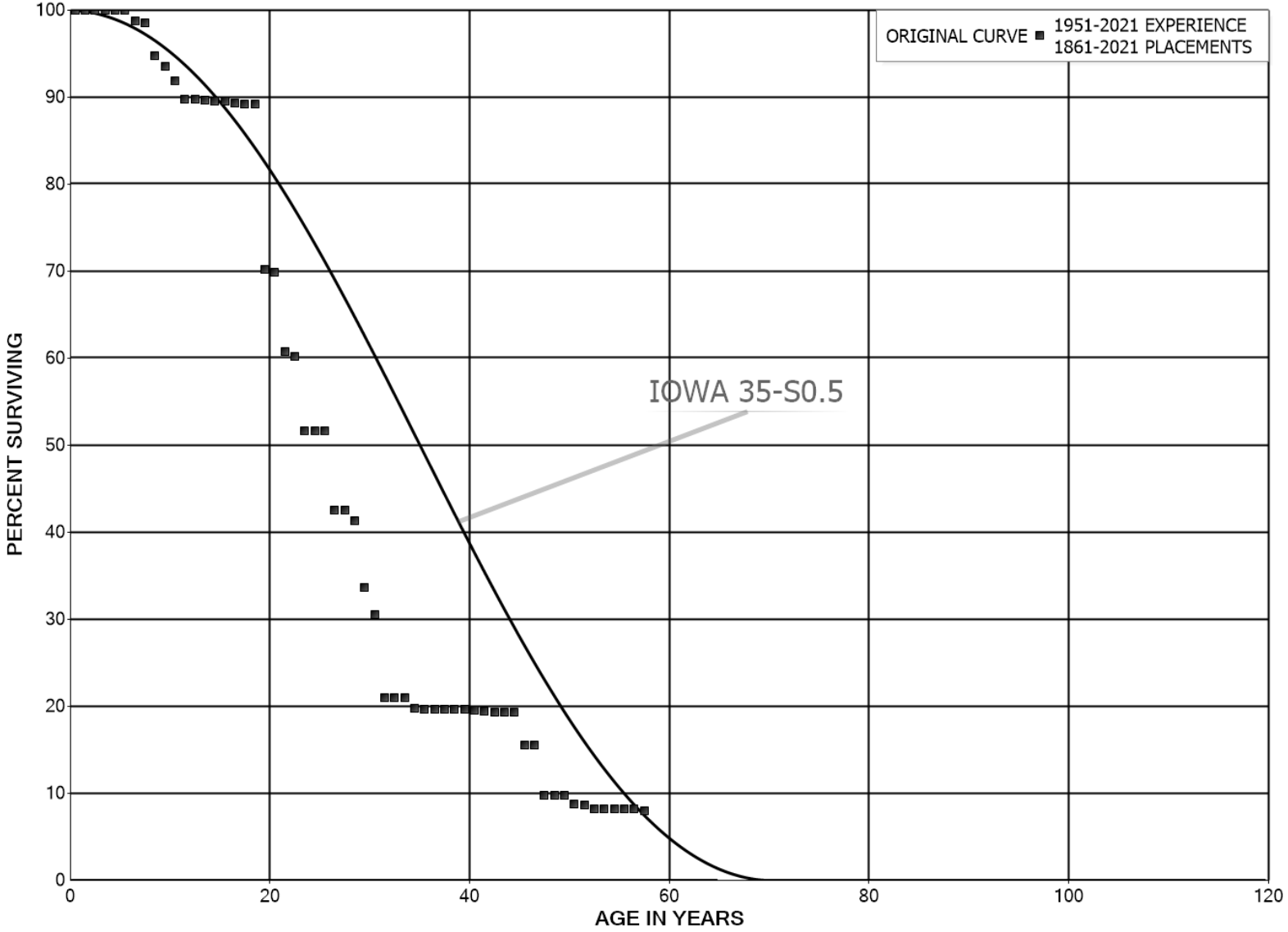
PLACEMENT BAND 1894-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	1,470		0.0000	1.0000	14.44
120.5	1,470		0.0000	1.0000	14.44
121.5	1,470		0.0000	1.0000	14.44
122.5	1,470		0.0000	1.0000	14.44
123.5	1,470		0.0000	1.0000	14.44
124.5	1,470		0.0000	1.0000	14.44
125.5	1,470		0.0000	1.0000	14.44
126.5	1,470		0.0000	1.0000	14.44
127.5					14.44

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 304.62 STORES SHOP AND GARAGE BUILDINGS - OTHER
SMOOTH SURVIVOR CURVE



PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 304.63 MISCELLANEOUS STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.63 MISCELLANEOUS STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1861-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,446,079		0.0000	1.0000	100.00
0.5	4,425,501		0.0000	1.0000	100.00
1.5	4,420,438		0.0000	1.0000	100.00
2.5	4,416,315		0.0000	1.0000	100.00
3.5	3,646,909		0.0000	1.0000	100.00
4.5	3,275,744		0.0000	1.0000	100.00
5.5	2,790,896	34,059	0.0122	0.9878	100.00
6.5	2,049,421	5,276	0.0026	0.9974	98.78
7.5	2,032,100	78,669	0.0387	0.9613	98.53
8.5	1,879,531	24,690	0.0131	0.9869	94.71
9.5	1,796,410	32,173	0.0179	0.9821	93.47
10.5	1,762,519	39,289	0.0223	0.9777	91.79
11.5	1,573,931	683	0.0004	0.9996	89.75
12.5	1,546,577	1,630	0.0011	0.9989	89.71
13.5	1,279,232	839	0.0007	0.9993	89.61
14.5	819,235		0.0000	1.0000	89.55
15.5	754,870	2,210	0.0029	0.9971	89.55
16.5	572,437	700	0.0012	0.9988	89.29
17.5	365,257		0.0000	1.0000	89.18
18.5	298,746	63,771	0.2135	0.7865	89.18
19.5	234,974	932	0.0040	0.9960	70.15
20.5	241,890	31,477	0.1301	0.8699	69.87
21.5	211,127	1,929	0.0091	0.9909	60.78
22.5	209,198	30,027	0.1435	0.8565	60.22
23.5	177,611		0.0000	1.0000	51.58
24.5	167,875		0.0000	1.0000	51.58
25.5	132,928	23,348	0.1756	0.8244	51.58
26.5	109,580		0.0000	1.0000	42.52
27.5	109,580	3,311	0.0302	0.9698	42.52
28.5	106,268	19,520	0.1837	0.8163	41.23
29.5	85,248	8,072	0.0947	0.9053	33.66
30.5	75,533	23,596	0.3124	0.6876	30.47
31.5	51,936		0.0000	1.0000	20.95
32.5	50,970		0.0000	1.0000	20.95
33.5	61,069	3,481	0.0570	0.9430	20.95
34.5	53,844	279	0.0052	0.9948	19.76
35.5	51,563		0.0000	1.0000	19.66
36.5	51,563	2	0.0000	1.0000	19.66
37.5	51,561		0.0000	1.0000	19.66
38.5	50,513		0.0000	1.0000	19.66

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.63 MISCELLANEOUS STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1861-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	50,513	294	0.0058	0.9942	19.66
40.5	50,076	485	0.0097	0.9903	19.54
41.5	49,591	46	0.0009	0.9991	19.35
42.5	49,564	2	0.0000	1.0000	19.33
43.5	51,018		0.0000	1.0000	19.33
44.5	51,018	10,051	0.1970	0.8030	19.33
45.5	40,966		0.0000	1.0000	15.52
46.5	37,968	14,255	0.3755	0.6245	15.52
47.5	23,712		0.0000	1.0000	9.70
48.5	23,687		0.0000	1.0000	9.70
49.5	23,106	2,244	0.0971	0.9029	9.70
50.5	20,379	366	0.0180	0.9820	8.75
51.5	19,752	867	0.0439	0.9561	8.60
52.5	18,804		0.0000	1.0000	8.22
53.5	18,804		0.0000	1.0000	8.22
54.5	18,373		0.0000	1.0000	8.22
55.5	33,451	125	0.0037	0.9963	8.22
56.5	33,327	984	0.0295	0.9705	8.19
57.5	34,858		0.0000	1.0000	7.95
58.5	33,792		0.0000	1.0000	7.95
59.5	33,605		0.0000	1.0000	7.95
60.5	33,605		0.0000	1.0000	7.95
61.5	32,271		0.0000	1.0000	7.95
62.5	32,131	343	0.0107	0.9893	7.95
63.5	30,332		0.0000	1.0000	7.86
64.5	30,333		0.0000	1.0000	7.86
65.5	30,333		0.0000	1.0000	7.86
66.5	30,333	198	0.0065	0.9935	7.86
67.5	28,169		0.0000	1.0000	7.81
68.5	28,169		0.0000	1.0000	7.81
69.5	27,667		0.0000	1.0000	7.81
70.5	27,666		0.0000	1.0000	7.81
71.5	27,666		0.0000	1.0000	7.81
72.5	27,666	15,078	0.5450	0.4550	7.81
73.5	12,588		0.0000	1.0000	3.55
74.5	12,588		0.0000	1.0000	3.55
75.5	13,588		0.0000	1.0000	3.55
76.5	13,588		0.0000	1.0000	3.55
77.5	13,588		0.0000	1.0000	3.55
78.5	13,544		0.0000	1.0000	3.55

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 304.63 MISCELLANEOUS STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1861-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	12,971		0.0000	1.0000	3.55
80.5	12,280		0.0000	1.0000	3.55
81.5	12,280		0.0000	1.0000	3.55
82.5	12,280		0.0000	1.0000	3.55
83.5	12,280		0.0000	1.0000	3.55
84.5	12,280		0.0000	1.0000	3.55
85.5	10,838		0.0000	1.0000	3.55
86.5	10,838	1	0.0001	0.9999	3.55
87.5	10,837		0.0000	1.0000	3.55
88.5	10,837		0.0000	1.0000	3.55
89.5	11,950		0.0000	1.0000	3.55
90.5	11,950		0.0000	1.0000	3.55
91.5	6,826		0.0000	1.0000	3.55
92.5	6,112		0.0000	1.0000	3.55
93.5	6,112		0.0000	1.0000	3.55
94.5	5,948		0.0000	1.0000	3.55
95.5	5,948		0.0000	1.0000	3.55
96.5	5,948		0.0000	1.0000	3.55
97.5	5,948		0.0000	1.0000	3.55
98.5	5,948		0.0000	1.0000	3.55
99.5	5,948		0.0000	1.0000	3.55
100.5	5,948	2,951	0.4961	0.5039	3.55
101.5	2,114		0.0000	1.0000	1.79
102.5	2,114		0.0000	1.0000	1.79
103.5	2,114		0.0000	1.0000	1.79
104.5	1,114		0.0000	1.0000	1.79
105.5	1,113		0.0000	1.0000	1.79
106.5	1,113		0.0000	1.0000	1.79
107.5	1,113		0.0000	1.0000	1.79
108.5	1,113		0.0000	1.0000	1.79
109.5	1,113		0.0000	1.0000	1.79
110.5	1,113		0.0000	1.0000	1.79
111.5	1,113		0.0000	1.0000	1.79
112.5	1,113		0.0000	1.0000	1.79
113.5	1,113		0.0000	1.0000	1.79
114.5	1,113		0.0000	1.0000	1.79
115.5	1,113		0.0000	1.0000	1.79
116.5	1,113		0.0000	1.0000	1.79
117.5	1,113		0.0000	1.0000	1.79
118.5	1,113		0.0000	1.0000	1.79

PENNSYLVANIA-AMERICAN WATER COMPANY

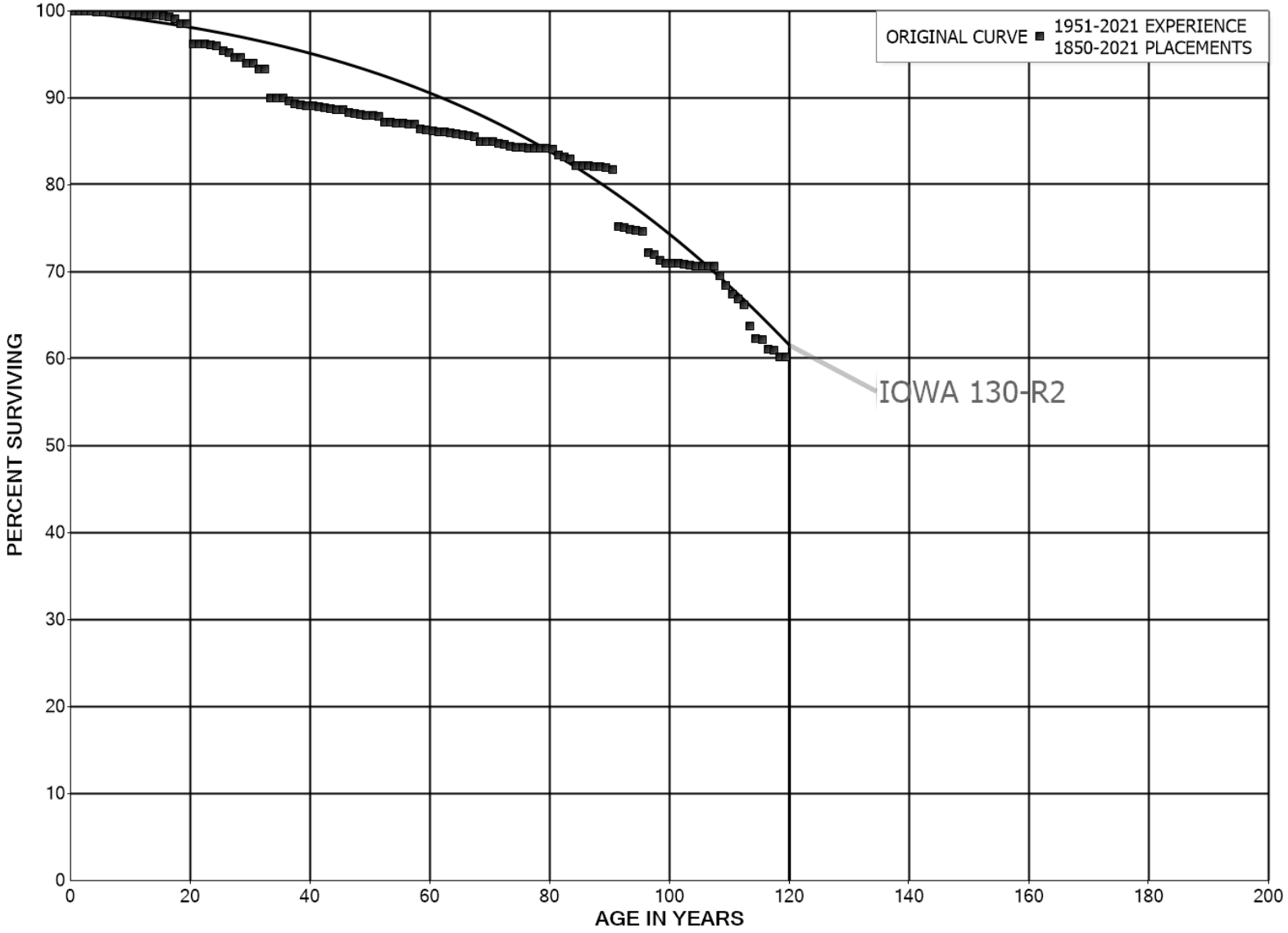
ACCOUNT 304.63 MISCELLANEOUS STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1861-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	1,113		0.0000	1.0000	1.79
120.5	1,113		0.0000	1.0000	1.79
121.5	1,113		0.0000	1.0000	1.79
122.5	1,113		0.0000	1.0000	1.79
123.5	1,113		0.0000	1.0000	1.79
124.5	1,113		0.0000	1.0000	1.79
125.5	1,113		0.0000	1.0000	1.79
126.5	1,113		0.0000	1.0000	1.79
127.5	1,113		0.0000	1.0000	1.79
128.5	1,113		0.0000	1.0000	1.79
129.5	1,113		0.0000	1.0000	1.79
130.5	1,113		0.0000	1.0000	1.79
131.5	1,113		0.0000	1.0000	1.79
132.5	1,113		0.0000	1.0000	1.79
133.5	1,113		0.0000	1.0000	1.79
134.5	1,113		0.0000	1.0000	1.79
135.5	1,113		0.0000	1.0000	1.79
136.5	1,113		0.0000	1.0000	1.79
137.5	1,113		0.0000	1.0000	1.79
138.5	1,113		0.0000	1.0000	1.79
139.5	1,113		0.0000	1.0000	1.79
140.5	1,113		0.0000	1.0000	1.79
141.5	1,113		0.0000	1.0000	1.79
142.5	1,113		0.0000	1.0000	1.79
143.5	1,113		0.0000	1.0000	1.79
144.5	1,113		0.0000	1.0000	1.79
145.5	1,113		0.0000	1.0000	1.79
146.5	1,113		0.0000	1.0000	1.79
147.5	1,113		0.0000	1.0000	1.79
148.5	1,113		0.0000	1.0000	1.79
149.5	1,113		0.0000	1.0000	1.79
150.5	1,113		0.0000	1.0000	1.79
151.5	1,113		0.0000	1.0000	1.79
152.5	1,113		0.0000	1.0000	1.79
153.5	1,113		0.0000	1.0000	1.79
154.5	1,113		0.0000	1.0000	1.79
155.5	1,113	19	0.0167	0.9833	1.79
156.5	1,094		0.0000	1.0000	1.76
157.5	1,094		0.0000	1.0000	1.76
158.5	1,094		0.0000	1.0000	1.76
159.5	1,094		0.0000	1.0000	1.76
160.5					1.76

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 305.00 COLLECTING AND IMPOUNDING RESERVOIRS - LARGE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 305.00 COLLECTING AND IMPOUNDING RESERVOIRS - LARGE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1850-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	135,719,753		0.0000	1.0000	100.00
0.5	136,088,022	16,065	0.0001	0.9999	100.00
1.5	135,347,191	1,429	0.0000	1.0000	99.99
2.5	134,741,783	2,822	0.0000	1.0000	99.99
3.5	125,398,011	197,085	0.0016	0.9984	99.99
4.5	83,337,342	1,930	0.0000	1.0000	99.83
5.5	83,390,336	21,179	0.0003	0.9997	99.83
6.5	83,392,509	65,285	0.0008	0.9992	99.80
7.5	82,257,032	3,124	0.0000	1.0000	99.72
8.5	73,209,476	1,567	0.0000	1.0000	99.72
9.5	46,293,992	56,149	0.0012	0.9988	99.72
10.5	38,650,846	2,948	0.0001	0.9999	99.60
11.5	38,650,267	15,423	0.0004	0.9996	99.59
12.5	38,634,944	2,681	0.0001	0.9999	99.55
13.5	28,416,894	2,637	0.0001	0.9999	99.54
14.5	28,397,889	41,271	0.0015	0.9985	99.53
15.5	28,771,809	34,846	0.0012	0.9988	99.39
16.5	28,740,870	55,106	0.0019	0.9981	99.27
17.5	28,709,297	154,225	0.0054	0.9946	99.08
18.5	28,591,824	8,488	0.0003	0.9997	98.54
19.5	28,472,792	675,333	0.0237	0.9763	98.51
20.5	27,747,204	7,175	0.0003	0.9997	96.18
21.5	27,377,429	8,050	0.0003	0.9997	96.15
22.5	27,369,404	2,438	0.0001	0.9999	96.13
23.5	27,368,968	54,961	0.0020	0.9980	96.12
24.5	23,622,348	122,153	0.0052	0.9948	95.92
25.5	22,753,193	55,995	0.0025	0.9975	95.43
26.5	20,900,401	122,055	0.0058	0.9942	95.19
27.5	21,520,391	16,637	0.0008	0.9992	94.64
28.5	20,994,371	127,586	0.0061	0.9939	94.56
29.5	18,936,969	6,762	0.0004	0.9996	93.99
30.5	17,786,243	128,399	0.0072	0.9928	93.96
31.5	17,617,626	5,968	0.0003	0.9997	93.28
32.5	14,536,957	510,026	0.0351	0.9649	93.25
33.5	13,991,954	428	0.0000	1.0000	89.97
34.5	13,686,288	6,074	0.0004	0.9996	89.97
35.5	13,459,679	47,590	0.0035	0.9965	89.93
36.5	8,942,435	36,787	0.0041	0.9959	89.61
37.5	8,608,258	9,864	0.0011	0.9989	89.24
38.5	8,526,437	5,855	0.0007	0.9993	89.14

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 305.00 COLLECTING AND IMPOUNDING RESERVOIRS - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1850-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	8,521,415	459	0.0001	0.9999	89.08
40.5	8,680,384	16,423	0.0019	0.9981	89.08
41.5	8,651,568	10,214	0.0012	0.9988	88.91
42.5	8,638,531	11,589	0.0013	0.9987	88.80
43.5	8,576,769	3,694	0.0004	0.9996	88.68
44.5	8,604,379		0.0000	1.0000	88.65
45.5	7,667,080	34,857	0.0045	0.9955	88.65
46.5	7,675,836	6,002	0.0008	0.9992	88.24
47.5	7,746,458	5,610	0.0007	0.9993	88.17
48.5	7,773,321	15,756	0.0020	0.9980	88.11
49.5	6,034,758	2,299	0.0004	0.9996	87.93
50.5	6,464,450	828	0.0001	0.9999	87.90
51.5	6,481,299	53,162	0.0082	0.9918	87.89
52.5	6,436,092	2,845	0.0004	0.9996	87.17
53.5	6,959,847	3,608	0.0005	0.9995	87.13
54.5	6,942,895	818	0.0001	0.9999	87.08
55.5	6,967,648	8,589	0.0012	0.9988	87.07
56.5	6,945,142	2,121	0.0003	0.9997	86.96
57.5	5,610,256	36,255	0.0065	0.9935	86.94
58.5	5,778,046	7,424	0.0013	0.9987	86.38
59.5	5,753,442	4,303	0.0007	0.9993	86.26
60.5	5,826,645	10,350	0.0018	0.9982	86.20
61.5	5,523,161	1,681	0.0003	0.9997	86.05
62.5	5,542,775	3,505	0.0006	0.9994	86.02
63.5	4,659,250	9,098	0.0020	0.9980	85.97
64.5	4,596,066	3,980	0.0009	0.9991	85.80
65.5	4,610,611	7,756	0.0017	0.9983	85.72
66.5	4,603,846	1,757	0.0004	0.9996	85.58
67.5	4,639,241	31,582	0.0068	0.9932	85.55
68.5	4,585,726	95	0.0000	1.0000	84.97
69.5	4,583,414	561	0.0001	0.9999	84.96
70.5	4,505,810	13,016	0.0029	0.9971	84.95
71.5	4,492,794	4,619	0.0010	0.9990	84.71
72.5	4,489,447	13,779	0.0031	0.9969	84.62
73.5	4,372,591	2,266	0.0005	0.9995	84.36
74.5	4,323,173	2,158	0.0005	0.9995	84.32
75.5	4,130,819	5,006	0.0012	0.9988	84.28
76.5	3,940,425	1,041	0.0003	0.9997	84.17
77.5	3,939,385		0.0000	1.0000	84.15
78.5	3,990,970		0.0000	1.0000	84.15

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 305.00 COLLECTING AND IMPOUNDING RESERVOIRS - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1850-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	3,949,177	4,999	0.0013	0.9987	84.15
80.5	3,922,929	32,756	0.0083	0.9917	84.04
81.5	3,925,358	9,259	0.0024	0.9976	83.34
82.5	3,915,599	11,296	0.0029	0.9971	83.15
83.5	3,902,434	33,933	0.0087	0.9913	82.91
84.5	3,868,927	1,318	0.0003	0.9997	82.19
85.5	4,048,762		0.0000	1.0000	82.16
86.5	4,043,569	5,571	0.0014	0.9986	82.16
87.5	4,180,315	1,697	0.0004	0.9996	82.04
88.5	4,040,635	1,446	0.0004	0.9996	82.01
89.5	4,027,952	11,187	0.0028	0.9972	81.98
90.5	4,012,233	325,051	0.0810	0.9190	81.75
91.5	3,589,767	2,656	0.0007	0.9993	75.13
92.5	3,505,987	12,298	0.0035	0.9965	75.07
93.5	3,791,978	4,677	0.0012	0.9988	74.81
94.5	3,781,972	7,563	0.0020	0.9980	74.72
95.5	3,702,611	118,973	0.0321	0.9679	74.57
96.5	3,581,424	12,897	0.0036	0.9964	72.17
97.5	3,175,192	26,953	0.0085	0.9915	71.91
98.5	2,793,956	12,840	0.0046	0.9954	71.30
99.5	2,780,311	1,489	0.0005	0.9995	70.98
100.5	2,771,509	428	0.0002	0.9998	70.94
101.5	2,786,545	4,328	0.0016	0.9984	70.93
102.5	2,691,460	4,796	0.0018	0.9982	70.82
103.5	2,649,273	1,706	0.0006	0.9994	70.69
104.5	2,588,332	1,236	0.0005	0.9995	70.64
105.5	2,923,858	1,141	0.0004	0.9996	70.61
106.5	2,329,894	67	0.0000	1.0000	70.58
107.5	2,316,964	35,729	0.0154	0.9846	70.58
108.5	2,281,235	34,986	0.0153	0.9847	69.49
109.5	2,215,054	34,623	0.0156	0.9844	68.43
110.5	2,176,657	16,000	0.0074	0.9926	67.36
111.5	1,924,342	19,410	0.0101	0.9899	66.86
112.5	1,904,249	69,979	0.0367	0.9633	66.19
113.5	1,823,611	42,295	0.0232	0.9768	63.76
114.5	1,636,476	3,416	0.0021	0.9979	62.28
115.5	1,630,212	28,941	0.0178	0.9822	62.15
116.5	1,599,758	1,239	0.0008	0.9992	61.04
117.5	1,586,856	20,165	0.0127	0.9873	61.00
118.5	1,565,078	42	0.0000	1.0000	60.22

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 305.00 COLLECTING AND IMPOUNDING RESERVOIRS - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1850-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	1,525,110		0.0000	1.0000	60.22
120.5	1,243,848	3,272	0.0026	0.9974	60.22
121.5	1,001,755	18,715	0.0187	0.9813	60.06
122.5	978,740	3,140	0.0032	0.9968	58.94
123.5	1,043,777	2,156	0.0021	0.9979	58.75
124.5	810,041	8,505	0.0105	0.9895	58.63
125.5	796,719		0.0000	1.0000	58.01
126.5	789,482	13,853	0.0175	0.9825	58.01
127.5	775,758	4,990	0.0064	0.9936	57.00
128.5	690,200		0.0000	1.0000	56.63
129.5	518,121	5,200	0.0100	0.9900	56.63
130.5	484,847		0.0000	1.0000	56.06
131.5	483,928		0.0000	1.0000	56.06
132.5	119,954		0.0000	1.0000	56.06
133.5	119,954	10,084	0.0841	0.9159	56.06
134.5	68,178		0.0000	1.0000	51.35
135.5	68,178		0.0000	1.0000	51.35
136.5	68,178		0.0000	1.0000	51.35
137.5	68,178		0.0000	1.0000	51.35
138.5	68,178		0.0000	1.0000	51.35
139.5	68,178		0.0000	1.0000	51.35
140.5	68,178		0.0000	1.0000	51.35
141.5	68,178	2,867	0.0420	0.9580	51.35
142.5	65,311		0.0000	1.0000	49.19
143.5	65,311		0.0000	1.0000	49.19
144.5	65,311	6,738	0.1032	0.8968	49.19
145.5	62,574		0.0000	1.0000	44.11
146.5	62,574		0.0000	1.0000	44.11
147.5	62,574		0.0000	1.0000	44.11
148.5	62,574		0.0000	1.0000	44.11
149.5	4,000		0.0000	1.0000	44.11
150.5	4,000		0.0000	1.0000	44.11
151.5	4,000		0.0000	1.0000	44.11
152.5	4,000		0.0000	1.0000	44.11
153.5	4,000		0.0000	1.0000	44.11
154.5	4,000		0.0000	1.0000	44.11
155.5	4,000		0.0000	1.0000	44.11
156.5	4,000		0.0000	1.0000	44.11
157.5	4,000		0.0000	1.0000	44.11
158.5	4,000		0.0000	1.0000	44.11

PENNSYLVANIA-AMERICAN WATER COMPANY

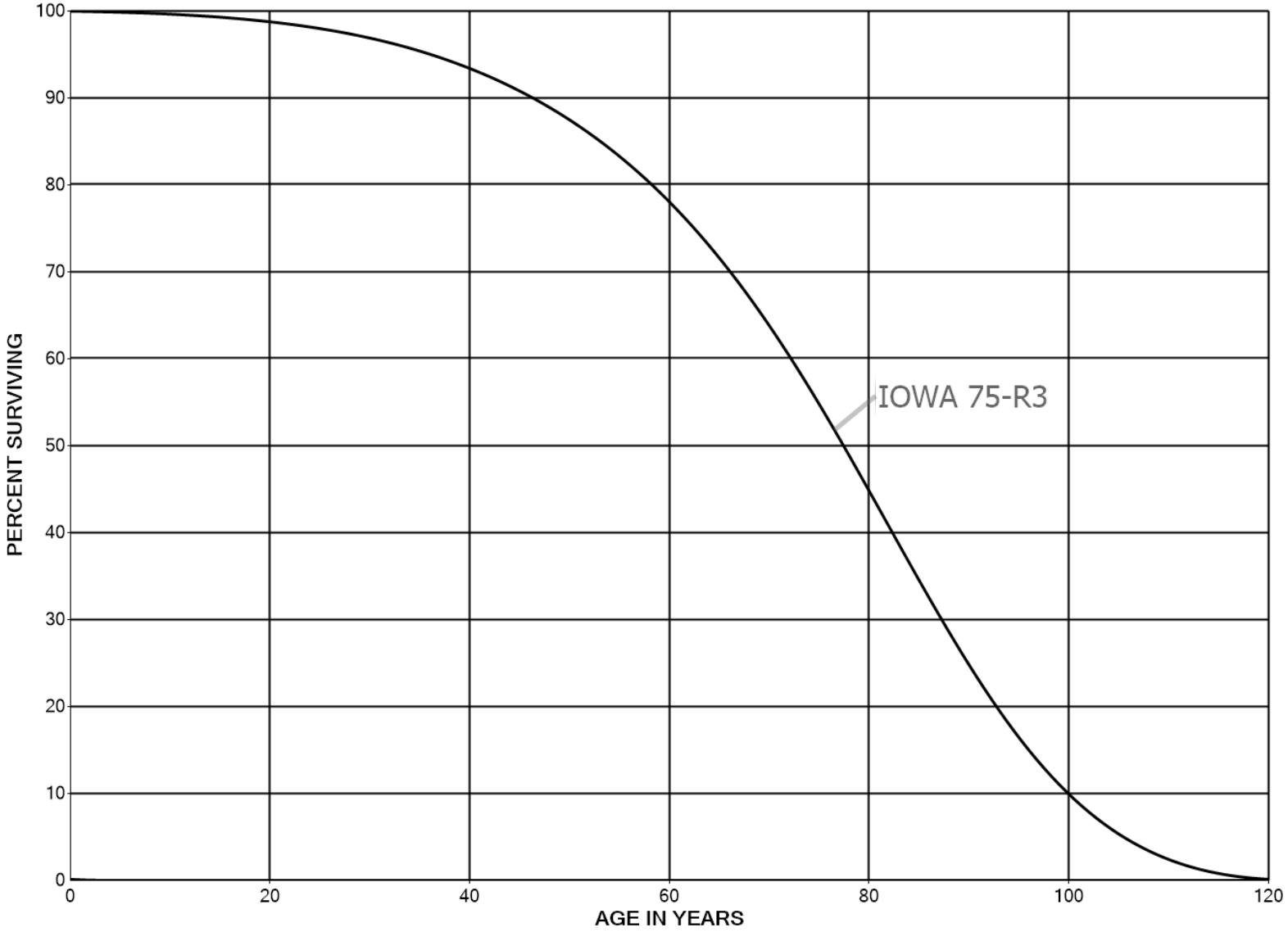
ACCOUNT 305.00 COLLECTING AND IMPOUNDING RESERVOIRS - LARGE

ORIGINAL LIFE TABLE, CONT.

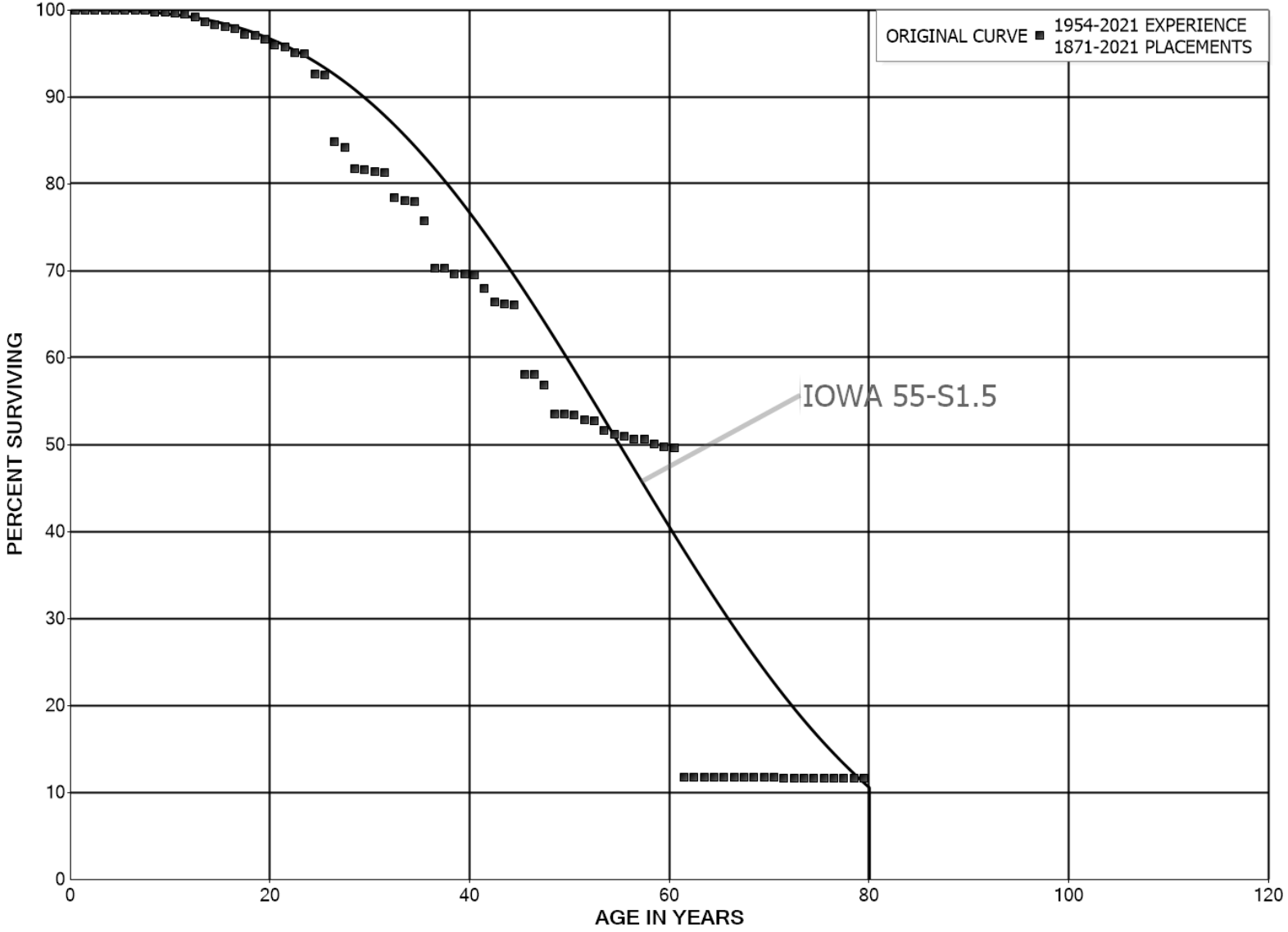
PLACEMENT BAND 1850-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
159.5	4,000		0.0000	1.0000	44.11
160.5	4,000		0.0000	1.0000	44.11
161.5	4,000		0.0000	1.0000	44.11
162.5	4,000		0.0000	1.0000	44.11
163.5	4,000		0.0000	1.0000	44.11
164.5	4,000		0.0000	1.0000	44.11
165.5	4,000		0.0000	1.0000	44.11
166.5	4,000		0.0000	1.0000	44.11
167.5	4,000		0.0000	1.0000	44.11
168.5	4,000		0.0000	1.0000	44.11
169.5	4,000		0.0000	1.0000	44.11
170.5	4,000		0.0000	1.0000	44.11
171.5					44.11

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 305.00 COLLECTING AND IMPOUNDING RESERVOIRS - OTHER
SMOOTH SURVIVOR CURVE



PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 306.00 LAKE, RIVER AND OTHER INTAKES - LARGE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 306.00 LAKE, RIVER AND OTHER INTAKES - LARGE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1871-2021 EXPERIENCE BAND 1954-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	20,168,839		0.0000	1.0000	100.00
0.5	20,276,078		0.0000	1.0000	100.00
1.5	20,687,054		0.0000	1.0000	100.00
2.5	20,476,000	3,225	0.0002	0.9998	100.00
3.5	19,144,770		0.0000	1.0000	99.98
4.5	18,883,916		0.0000	1.0000	99.98
5.5	18,888,086	6,093	0.0003	0.9997	99.98
6.5	18,882,041	5,293	0.0003	0.9997	99.95
7.5	18,870,014	40,377	0.0021	0.9979	99.92
8.5	18,765,768	1,340	0.0001	0.9999	99.71
9.5	18,764,427	16,896	0.0009	0.9991	99.70
10.5	18,711,998	21,266	0.0011	0.9989	99.61
11.5	18,690,732	61,444	0.0033	0.9967	99.50
12.5	18,629,288	106,755	0.0057	0.9943	99.17
13.5	18,426,536	55,128	0.0030	0.9970	98.60
14.5	17,885,303	38,874	0.0022	0.9978	98.31
15.5	17,694,712	42,483	0.0024	0.9976	98.10
16.5	17,556,721	118,486	0.0067	0.9933	97.86
17.5	17,350,052	31,971	0.0018	0.9982	97.20
18.5	17,318,081	78,383	0.0045	0.9955	97.02
19.5	17,128,515	116,084	0.0068	0.9932	96.58
20.5	17,000,888	29,171	0.0017	0.9983	95.93
21.5	16,919,902	127,186	0.0075	0.9925	95.76
22.5	16,364,983	9,147	0.0006	0.9994	95.04
23.5	16,199,197	408,461	0.0252	0.9748	94.99
24.5	6,423,159	7,604	0.0012	0.9988	92.59
25.5	5,405,214	445,328	0.0824	0.9176	92.48
26.5	3,262,021	26,791	0.0082	0.9918	84.87
27.5	3,228,054	93,389	0.0289	0.9711	84.17
28.5	3,134,665	2,633	0.0008	0.9992	81.73
29.5	2,374,914	8,487	0.0036	0.9964	81.66
30.5	2,051,984	867	0.0004	0.9996	81.37
31.5	2,032,996	73,202	0.0360	0.9640	81.34
32.5	1,599,953	7,610	0.0048	0.9952	78.41
33.5	1,592,375	2,976	0.0019	0.9981	78.04
34.5	1,589,026	43,921	0.0276	0.9724	77.89
35.5	1,539,953	110,271	0.0716	0.9284	75.74
36.5	1,428,975	312	0.0002	0.9998	70.31
37.5	1,419,755	14,326	0.0101	0.9899	70.30
38.5	1,406,943	57	0.0000	1.0000	69.59

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 306.00 LAKE, RIVER AND OTHER INTAKES - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1871-2021 EXPERIENCE BAND 1954-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,410,630	2,364	0.0017	0.9983	69.59
40.5	1,408,266	31,586	0.0224	0.9776	69.47
41.5	1,381,174	31,837	0.0231	0.9769	67.91
42.5	1,344,746	2,606	0.0019	0.9981	66.35
43.5	1,342,140	3,412	0.0025	0.9975	66.22
44.5	1,346,050	162,633	0.1208	0.8792	66.05
45.5	1,297,589		0.0000	1.0000	58.07
46.5	1,297,639	28,526	0.0220	0.9780	58.07
47.5	1,268,533	72,504	0.0572	0.9428	56.79
48.5	1,013,821		0.0000	1.0000	53.55
49.5	1,011,292	3,798	0.0038	0.9962	53.55
50.5	1,009,258	10,555	0.0105	0.9895	53.35
51.5	996,677	624	0.0006	0.9994	52.79
52.5	658,579	13,795	0.0209	0.9791	52.75
53.5	656,493	6,486	0.0099	0.9901	51.65
54.5	525,037	1,570	0.0030	0.9970	51.14
55.5	495,510	3,985	0.0080	0.9920	50.99
56.5	491,524		0.0000	1.0000	50.58
57.5	478,422	5,278	0.0110	0.9890	50.58
58.5	473,143	2,709	0.0057	0.9943	50.02
59.5	471,005	896	0.0019	0.9981	49.73
60.5	274,671	209,607	0.7631	0.2369	49.64
61.5	65,121		0.0000	1.0000	11.76
62.5	65,121	13	0.0002	0.9998	11.76
63.5	65,108		0.0000	1.0000	11.76
64.5	65,108		0.0000	1.0000	11.76
65.5	65,108		0.0000	1.0000	11.76
66.5	63,883	48	0.0008	0.9992	11.76
67.5	63,320		0.0000	1.0000	11.75
68.5	63,320		0.0000	1.0000	11.75
69.5	79,228		0.0000	1.0000	11.75
70.5	79,228	1,037	0.0131	0.9869	11.75
71.5	80,296		0.0000	1.0000	11.59
72.5	80,296		0.0000	1.0000	11.59
73.5	76,126	57	0.0007	0.9993	11.59
74.5	76,251		0.0000	1.0000	11.58
75.5	76,251		0.0000	1.0000	11.58
76.5	76,251		0.0000	1.0000	11.58
77.5	77,251		0.0000	1.0000	11.58
78.5	77,251		0.0000	1.0000	11.58

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 306.00 LAKE, RIVER AND OTHER INTAKES - LARGE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1871-2021 EXPERIENCE BAND 1954-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	77,251		0.0000	1.0000	11.58
80.5	77,251		0.0000	1.0000	11.58
81.5	77,251		0.0000	1.0000	11.58
82.5	84,736		0.0000	1.0000	11.58
83.5	84,513		0.0000	1.0000	11.58
84.5	83,549		0.0000	1.0000	11.58
85.5	83,549		0.0000	1.0000	11.58
86.5	83,549	182	0.0022	0.9978	11.58
87.5	83,091	2,572	0.0310	0.9690	11.56
88.5	80,519	19	0.0002	0.9998	11.20
89.5	80,500		0.0000	1.0000	11.20
90.5	80,500		0.0000	1.0000	11.20
91.5	80,500		0.0000	1.0000	11.20
92.5	80,500		0.0000	1.0000	11.20
93.5	81,565		0.0000	1.0000	11.20
94.5	81,565		0.0000	1.0000	11.20
95.5	81,565		0.0000	1.0000	11.20
96.5	81,565	686	0.0084	0.9916	11.20
97.5	80,694		0.0000	1.0000	11.10
98.5	80,694		0.0000	1.0000	11.10
99.5	80,694		0.0000	1.0000	11.10
100.5	80,694		0.0000	1.0000	11.10
101.5	80,332		0.0000	1.0000	11.10
102.5	80,332		0.0000	1.0000	11.10
103.5	80,332		0.0000	1.0000	11.10
104.5	80,332		0.0000	1.0000	11.10
105.5	79,944	1,609	0.0201	0.9799	11.10
106.5	76,232		0.0000	1.0000	10.88
107.5	76,140		0.0000	1.0000	10.88
108.5	76,140	8,310	0.1091	0.8909	10.88
109.5	67,830		0.0000	1.0000	9.69
110.5	67,830		0.0000	1.0000	9.69
111.5	67,830		0.0000	1.0000	9.69
112.5	67,205		0.0000	1.0000	9.69
113.5	62,100		0.0000	1.0000	9.69
114.5	62,050		0.0000	1.0000	9.69
115.5	61,934		0.0000	1.0000	9.69
116.5	61,008		0.0000	1.0000	9.69
117.5	61,008		0.0000	1.0000	9.69
118.5	59,243		0.0000	1.0000	9.69

PENNSYLVANIA-AMERICAN WATER COMPANY

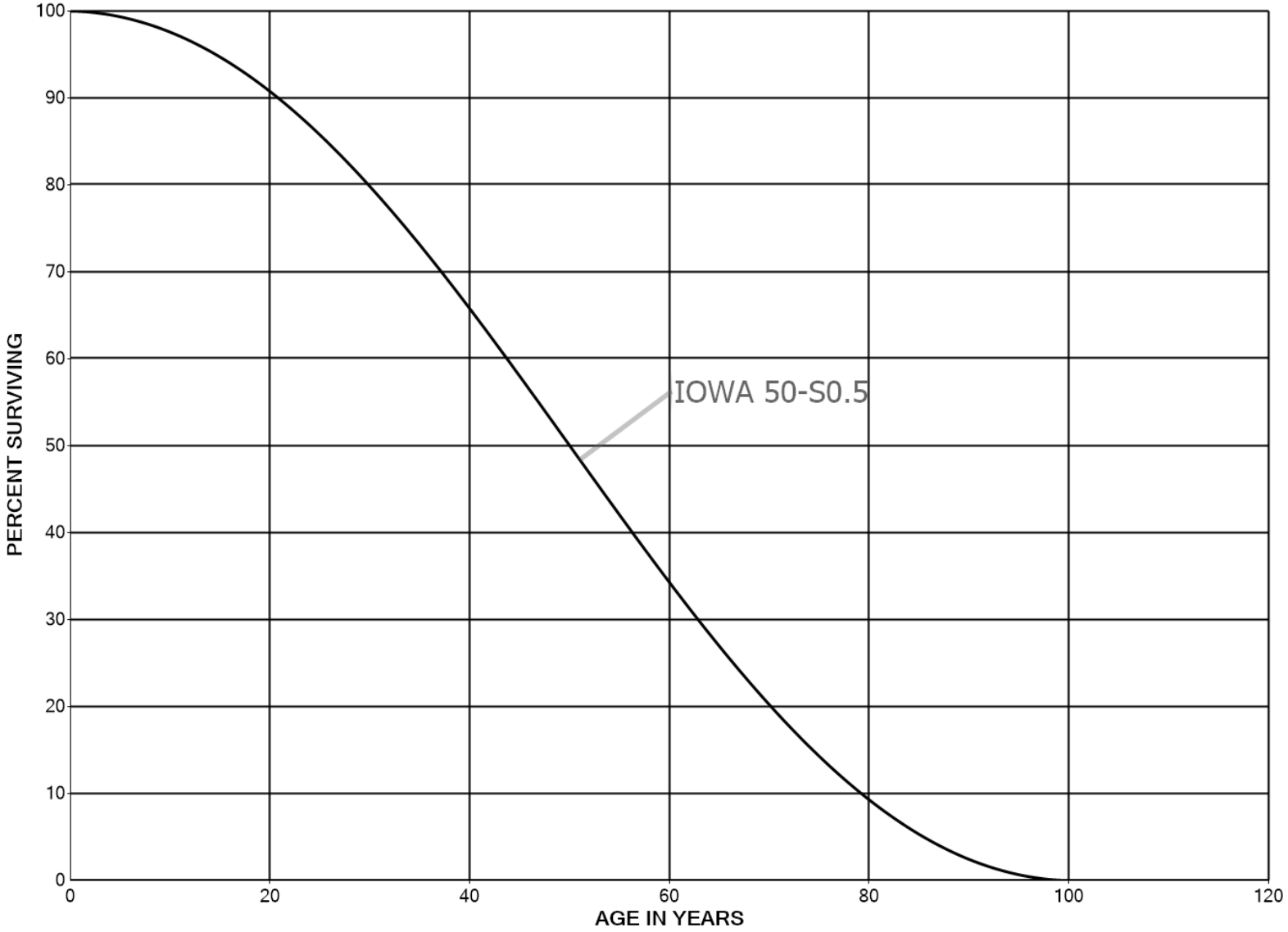
ACCOUNT 306.00 LAKE, RIVER AND OTHER INTAKES - LARGE

ORIGINAL LIFE TABLE, CONT.

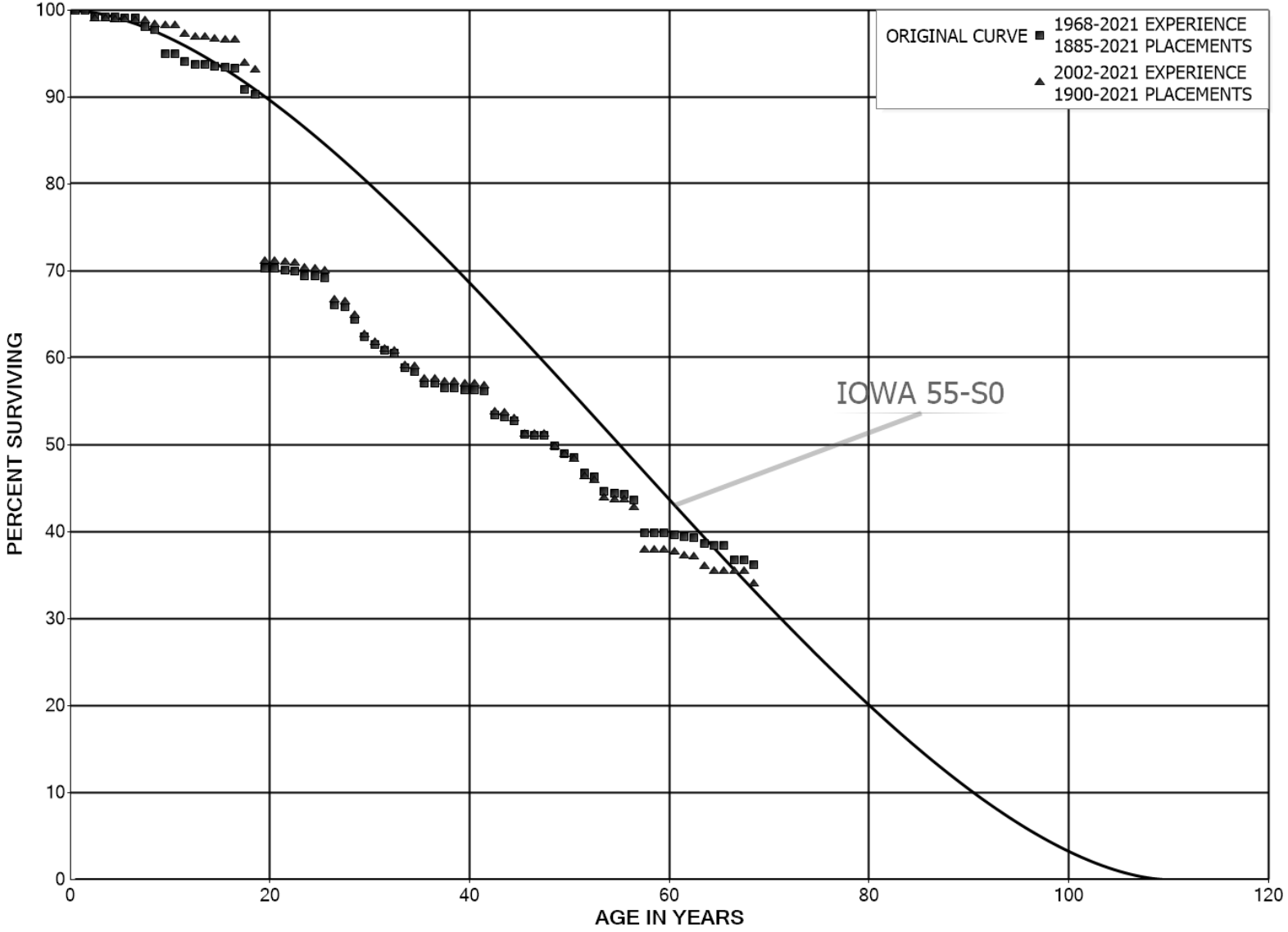
PLACEMENT BAND 1871-2021 EXPERIENCE BAND 1954-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	59,243	7,183	0.1212	0.8788	9.69
120.5	51,805		0.0000	1.0000	8.52
121.5	31,896		0.0000	1.0000	8.52
122.5	27,563		0.0000	1.0000	8.52
123.5	27,563		0.0000	1.0000	8.52
124.5	27,563		0.0000	1.0000	8.52
125.5	26,499		0.0000	1.0000	8.52
126.5	26,499		0.0000	1.0000	8.52
127.5	26,499		0.0000	1.0000	8.52
128.5	26,499		0.0000	1.0000	8.52
129.5	26,499		0.0000	1.0000	8.52
130.5	26,499		0.0000	1.0000	8.52
131.5	26,499		0.0000	1.0000	8.52
132.5	26,499		0.0000	1.0000	8.52
133.5	26,499		0.0000	1.0000	8.52
134.5	26,499		0.0000	1.0000	8.52
135.5	26,499		0.0000	1.0000	8.52
136.5	26,499		0.0000	1.0000	8.52
137.5	10,591		0.0000	1.0000	8.52
138.5	10,591		0.0000	1.0000	8.52
139.5	8,485		0.0000	1.0000	8.52
140.5	8,485		0.0000	1.0000	8.52
141.5	8,485		0.0000	1.0000	8.52
142.5	8,485		0.0000	1.0000	8.52
143.5	8,485		0.0000	1.0000	8.52
144.5	8,485		0.0000	1.0000	8.52
145.5	7,485		0.0000	1.0000	8.52
146.5	7,485		0.0000	1.0000	8.52
147.5	7,485		0.0000	1.0000	8.52
148.5	7,485		0.0000	1.0000	8.52
149.5	7,485		0.0000	1.0000	8.52
150.5					8.52

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 306.00 LAKE, RIVER AND OTHER INTAKES - OTHER
SMOOTH SURVIVOR CURVE



PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 307.00 WELLS AND SPRINGS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 307.00 WELLS AND SPRINGS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1885-2021 EXPERIENCE BAND 1968-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	9,172,229		0.0000	1.0000	100.00
0.5	10,094,106		0.0000	1.0000	100.00
1.5	9,836,566	82,336	0.0084	0.9916	100.00
2.5	9,682,462		0.0000	1.0000	99.16
3.5	9,609,178	2,784	0.0003	0.9997	99.16
4.5	9,859,728	2,565	0.0003	0.9997	99.13
5.5	9,777,671	6,394	0.0007	0.9993	99.11
6.5	8,684,145	86,707	0.0100	0.9900	99.04
7.5	8,462,582	26,920	0.0032	0.9968	98.05
8.5	8,226,200	237,668	0.0289	0.9711	97.74
9.5	8,084,426	371	0.0000	1.0000	94.92
10.5	7,926,142	75,001	0.0095	0.9905	94.91
11.5	7,854,231	23,988	0.0031	0.9969	94.02
12.5	7,947,950		0.0000	1.0000	93.73
13.5	7,794,111	20,808	0.0027	0.9973	93.73
14.5	7,386,926	5,268	0.0007	0.9993	93.48
15.5	7,292,127	9,791	0.0013	0.9987	93.41
16.5	7,338,118	190,516	0.0260	0.9740	93.29
17.5	6,204,965	41,645	0.0067	0.9933	90.86
18.5	6,068,187	1,343,150	0.2213	0.7787	90.26
19.5	4,725,596	2,088	0.0004	0.9996	70.28
20.5	4,550,863	8,989	0.0020	0.9980	70.25
21.5	3,800,415	6,553	0.0017	0.9983	70.11
22.5	3,875,509	29,841	0.0077	0.9923	69.99
23.5	3,916,982	3,589	0.0009	0.9991	69.45
24.5	3,898,300	11,960	0.0031	0.9969	69.38
25.5	3,930,366	176,709	0.0450	0.9550	69.17
26.5	3,744,168	11,794	0.0032	0.9968	66.06
27.5	3,747,294	81,537	0.0218	0.9782	65.85
28.5	3,597,101	115,665	0.0322	0.9678	64.42
29.5	3,358,209	46,883	0.0140	0.9860	62.35
30.5	3,213,923	35,932	0.0112	0.9888	61.48
31.5	2,243,636	11,266	0.0050	0.9950	60.79
32.5	2,268,280	61,723	0.0272	0.9728	60.49
33.5	2,005,134	16,104	0.0080	0.9920	58.84
34.5	1,730,397	37,844	0.0219	0.9781	58.37
35.5	1,758,923	1,478	0.0008	0.9992	57.09
36.5	1,706,181	14,485	0.0085	0.9915	57.04
37.5	1,666,059	264	0.0002	0.9998	56.56
38.5	1,497,060	6,853	0.0046	0.9954	56.55

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 307.00 WELLS AND SPRINGS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1885-2021 EXPERIENCE BAND 1968-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,212,959	76	0.0001	0.9999	56.29
40.5	1,122,606	3,309	0.0029	0.9971	56.29
41.5	1,031,599	50,060	0.0485	0.9515	56.12
42.5	943,459	3,174	0.0034	0.9966	53.40
43.5	778,716	7,858	0.0101	0.9899	53.22
44.5	765,661	22,647	0.0296	0.9704	52.68
45.5	638,025	146	0.0002	0.9998	51.12
46.5	629,142		0.0000	1.0000	51.11
47.5	599,487	15,523	0.0259	0.9741	51.11
48.5	491,620	8,216	0.0167	0.9833	49.79
49.5	381,560	3,500	0.0092	0.9908	48.96
50.5	347,409	13,072	0.0376	0.9624	48.51
51.5	331,131	2,880	0.0087	0.9913	46.68
52.5	268,743	9,365	0.0348	0.9652	46.28
53.5	254,495	1,442	0.0057	0.9943	44.66
54.5	251,697	631	0.0025	0.9975	44.41
55.5	199,888	2,839	0.0142	0.9858	44.30
56.5	183,349	15,909	0.0868	0.9132	43.67
57.5	167,808	55	0.0003	0.9997	39.88
58.5	159,084		0.0000	1.0000	39.87
59.5	157,065	790	0.0050	0.9950	39.87
60.5	153,899	1,261	0.0082	0.9918	39.67
61.5	106,450	148	0.0014	0.9986	39.34
62.5	119,511	1,910	0.0160	0.9840	39.29
63.5	116,668	949	0.0081	0.9919	38.66
64.5	115,269		0.0000	1.0000	38.35
65.5	113,666	4,738	0.0417	0.9583	38.35
66.5	98,739	93	0.0009	0.9991	36.75
67.5	85,335	1,294	0.0152	0.9848	36.71
68.5	71,040		0.0000	1.0000	36.16
69.5	71,040	892	0.0126	0.9874	36.16
70.5	71,539	1,661	0.0232	0.9768	35.70
71.5	69,770		0.0000	1.0000	34.87
72.5	71,311	58	0.0008	0.9992	34.87
73.5	70,388	3,245	0.0461	0.9539	34.84
74.5	67,143	5,323	0.0793	0.9207	33.24
75.5	61,596	277	0.0045	0.9955	30.60
76.5	56,998	53	0.0009	0.9991	30.47
77.5	57,709		0.0000	1.0000	30.44
78.5	57,709		0.0000	1.0000	30.44

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 307.00 WELLS AND SPRINGS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1885-2021 EXPERIENCE BAND 1968-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	57,709	14	0.0002	0.9998	30.44
80.5	56,865	1,043	0.0183	0.9817	30.43
81.5	55,748		0.0000	1.0000	29.87
82.5	54,091	463	0.0086	0.9914	29.87
83.5	54,571		0.0000	1.0000	29.62
84.5	51,516		0.0000	1.0000	29.62
85.5	51,516		0.0000	1.0000	29.62
86.5	50,574	1,072	0.0212	0.9788	29.62
87.5	49,303		0.0000	1.0000	28.99
88.5	49,303	426	0.0086	0.9914	28.99
89.5	48,877		0.0000	1.0000	28.74
90.5	48,877		0.0000	1.0000	28.74
91.5	52,735		0.0000	1.0000	28.74
92.5	52,735	285	0.0054	0.9946	28.74
93.5	52,450	193	0.0037	0.9963	28.58
94.5	51,078		0.0000	1.0000	28.48
95.5	50,618		0.0000	1.0000	28.48
96.5	50,618		0.0000	1.0000	28.48
97.5	43,954		0.0000	1.0000	28.48
98.5	34,086		0.0000	1.0000	28.48
99.5	31,267	66	0.0021	0.9979	28.48
100.5	31,201		0.0000	1.0000	28.42
101.5	31,139	435	0.0140	0.9860	28.42
102.5	30,704		0.0000	1.0000	28.02
103.5	29,520		0.0000	1.0000	28.02
104.5	29,520		0.0000	1.0000	28.02
105.5	27,759		0.0000	1.0000	28.02
106.5	25,244		0.0000	1.0000	28.02
107.5	24,558		0.0000	1.0000	28.02
108.5	23,062		0.0000	1.0000	28.02
109.5	22,211		0.0000	1.0000	28.02
110.5	22,211		0.0000	1.0000	28.02
111.5	15,853	0	0.0000	1.0000	28.02
112.5	15,853	327	0.0206	0.9794	28.02
113.5	15,515		0.0000	1.0000	27.44
114.5	15,455		0.0000	1.0000	27.44
115.5	15,455		0.0000	1.0000	27.44
116.5	3,898		0.0000	1.0000	27.44
117.5	2,197		0.0000	1.0000	27.44
118.5	2,197		0.0000	1.0000	27.44

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 307.00 WELLS AND SPRINGS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1885-2021 EXPERIENCE BAND 1968-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	2,197		0.0000	1.0000	27.44
120.5	1,510		0.0000	1.0000	27.44
121.5					27.44

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 307.00 WELLS AND SPRINGS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1900-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,385,504		0.0000	1.0000	100.00
0.5	5,426,449		0.0000	1.0000	100.00
1.5	7,418,998	82,336	0.0111	0.9889	100.00
2.5	7,275,096		0.0000	1.0000	98.89
3.5	7,187,862	2,784	0.0004	0.9996	98.89
4.5	7,427,287	2,565	0.0003	0.9997	98.85
5.5	7,362,472	4,394	0.0006	0.9994	98.82
6.5	6,297,467	5,293	0.0008	0.9992	98.76
7.5	6,134,501	24,731	0.0040	0.9960	98.68
8.5	5,895,693	6,789	0.0012	0.9988	98.28
9.5	5,953,529	371	0.0001	0.9999	98.16
10.5	5,810,702	56,827	0.0098	0.9902	98.16
11.5	6,663,419	23,988	0.0036	0.9964	97.20
12.5	6,775,394		0.0000	1.0000	96.85
13.5	6,875,471	18,886	0.0027	0.9973	96.85
14.5	6,643,679	5,268	0.0008	0.9992	96.58
15.5	6,666,064	2,517	0.0004	0.9996	96.51
16.5	6,756,323	188,210	0.0279	0.9721	96.47
17.5	5,701,199	40,954	0.0072	0.9928	93.78
18.5	5,669,421	1,343,150	0.2369	0.7631	93.11
19.5	4,312,595	2,088	0.0005	0.9995	71.05
20.5	4,214,826	2,694	0.0006	0.9994	71.02
21.5	3,469,066	5,321	0.0015	0.9985	70.97
22.5	3,510,618	29,841	0.0085	0.9915	70.86
23.5	3,586,025	3,248	0.0009	0.9991	70.26
24.5	3,567,560	11,483	0.0032	0.9968	70.20
25.5	3,640,352	174,996	0.0481	0.9519	69.97
26.5	3,455,871	11,794	0.0034	0.9966	66.61
27.5	3,487,048	81,537	0.0234	0.9766	66.38
28.5	3,363,391	115,665	0.0344	0.9656	64.83
29.5	3,154,534	46,405	0.0147	0.9853	62.60
30.5	3,034,573	33,209	0.0109	0.9891	61.68
31.5	2,067,134	9,115	0.0044	0.9956	61.00
32.5	2,141,828	60,724	0.0284	0.9716	60.73
33.5	1,879,483	3,355	0.0018	0.9982	59.01
34.5	1,614,558	37,844	0.0234	0.9766	58.91
35.5	1,646,956	1,478	0.0009	0.9991	57.52
36.5	1,596,387	7,614	0.0048	0.9952	57.47
37.5	1,564,329	264	0.0002	0.9998	57.20
38.5	1,420,827	6,853	0.0048	0.9952	57.19

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 307.00 WELLS AND SPRINGS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1900-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,131,400	76	0.0001	0.9999	56.91
40.5	1,047,105	3,309	0.0032	0.9968	56.91
41.5	955,639	50,060	0.0524	0.9476	56.73
42.5	868,206	3,174	0.0037	0.9963	53.76
43.5	698,457	7,858	0.0113	0.9887	53.56
44.5	686,573	22,647	0.0330	0.9670	52.96
45.5	557,659	146	0.0003	0.9997	51.21
46.5	560,574		0.0000	1.0000	51.20
47.5	545,727	15,523	0.0284	0.9716	51.20
48.5	450,861	8,216	0.0182	0.9818	49.74
49.5	340,801	3,500	0.0103	0.9897	48.84
50.5	306,020	13,072	0.0427	0.9573	48.33
51.5	287,981	2,880	0.0100	0.9900	46.27
52.5	223,386	9,365	0.0419	0.9581	45.81
53.5	208,193	1,442	0.0069	0.9931	43.89
54.5	203,899		0.0000	1.0000	43.58
55.5	151,435	2,839	0.0187	0.9813	43.58
56.5	139,217	15,909	0.1143	0.8857	42.77
57.5	122,077		0.0000	1.0000	37.88
58.5	113,407		0.0000	1.0000	37.88
59.5	110,398	790	0.0072	0.9928	37.88
60.5	107,456	1,261	0.0117	0.9883	37.61
61.5	60,095	148	0.0025	0.9975	37.17
62.5	61,599	1,910	0.0310	0.9690	37.07
63.5	58,998	949	0.0161	0.9839	35.93
64.5	60,707		0.0000	1.0000	35.35
65.5	59,104		0.0000	1.0000	35.35
66.5	48,186		0.0000	1.0000	35.35
67.5	33,563	1,294	0.0386	0.9614	35.35
68.5	19,268		0.0000	1.0000	33.98
69.5	19,268	892	0.0463	0.9537	33.98
70.5	19,767	1,661	0.0840	0.9160	32.41
71.5	18,007		0.0000	1.0000	29.69
72.5	18,007	58	0.0032	0.9968	29.69
73.5	22,407	3,245	0.1448	0.8552	29.59
74.5	21,996	5,323	0.2420	0.7580	25.31
75.5	16,909	277	0.0164	0.9836	19.18
76.5	12,311	53	0.0043	0.9957	18.87
77.5	20,622		0.0000	1.0000	18.79
78.5	30,490		0.0000	1.0000	18.79

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 307.00 WELLS AND SPRINGS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1900-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	33,309	14	0.0004	0.9996	18.79
80.5	32,465	1,043	0.0321	0.9679	18.78
81.5	31,410		0.0000	1.0000	18.18
82.5	28,864		0.0000	1.0000	18.18
83.5	29,807		0.0000	1.0000	18.18
84.5	26,752		0.0000	1.0000	18.18
85.5	28,513		0.0000	1.0000	18.18
86.5	29,778	1,072	0.0360	0.9640	18.18
87.5	29,452		0.0000	1.0000	17.52
88.5	30,948		0.0000	1.0000	17.52
89.5	32,234		0.0000	1.0000	17.52
90.5	32,234		0.0000	1.0000	17.52
91.5	38,583		0.0000	1.0000	17.52
92.5	38,583	285	0.0074	0.9926	17.52
93.5	38,309	193	0.0050	0.9950	17.39
94.5	36,997		0.0000	1.0000	17.30
95.5	36,537		0.0000	1.0000	17.30
96.5	48,094		0.0000	1.0000	17.30
97.5	41,430		0.0000	1.0000	17.30
98.5	31,562		0.0000	1.0000	17.30
99.5	28,743	66	0.0023	0.9977	17.30
100.5	29,691		0.0000	1.0000	17.26
101.5	31,139	435	0.0140	0.9860	17.26
102.5	30,704		0.0000	1.0000	17.02
103.5	29,520		0.0000	1.0000	17.02
104.5	29,520		0.0000	1.0000	17.02
105.5	27,759		0.0000	1.0000	17.02
106.5	25,244		0.0000	1.0000	17.02
107.5	24,558		0.0000	1.0000	17.02
108.5	23,062		0.0000	1.0000	17.02
109.5	22,211		0.0000	1.0000	17.02
110.5	22,211		0.0000	1.0000	17.02
111.5	15,853	0	0.0000	1.0000	17.02
112.5	15,853	327	0.0206	0.9794	17.02
113.5	15,515		0.0000	1.0000	16.67
114.5	15,455		0.0000	1.0000	16.67
115.5	15,455		0.0000	1.0000	16.67
116.5	3,898		0.0000	1.0000	16.67
117.5	2,197		0.0000	1.0000	16.67
118.5	2,197		0.0000	1.0000	16.67

PENNSYLVANIA-AMERICAN WATER COMPANY

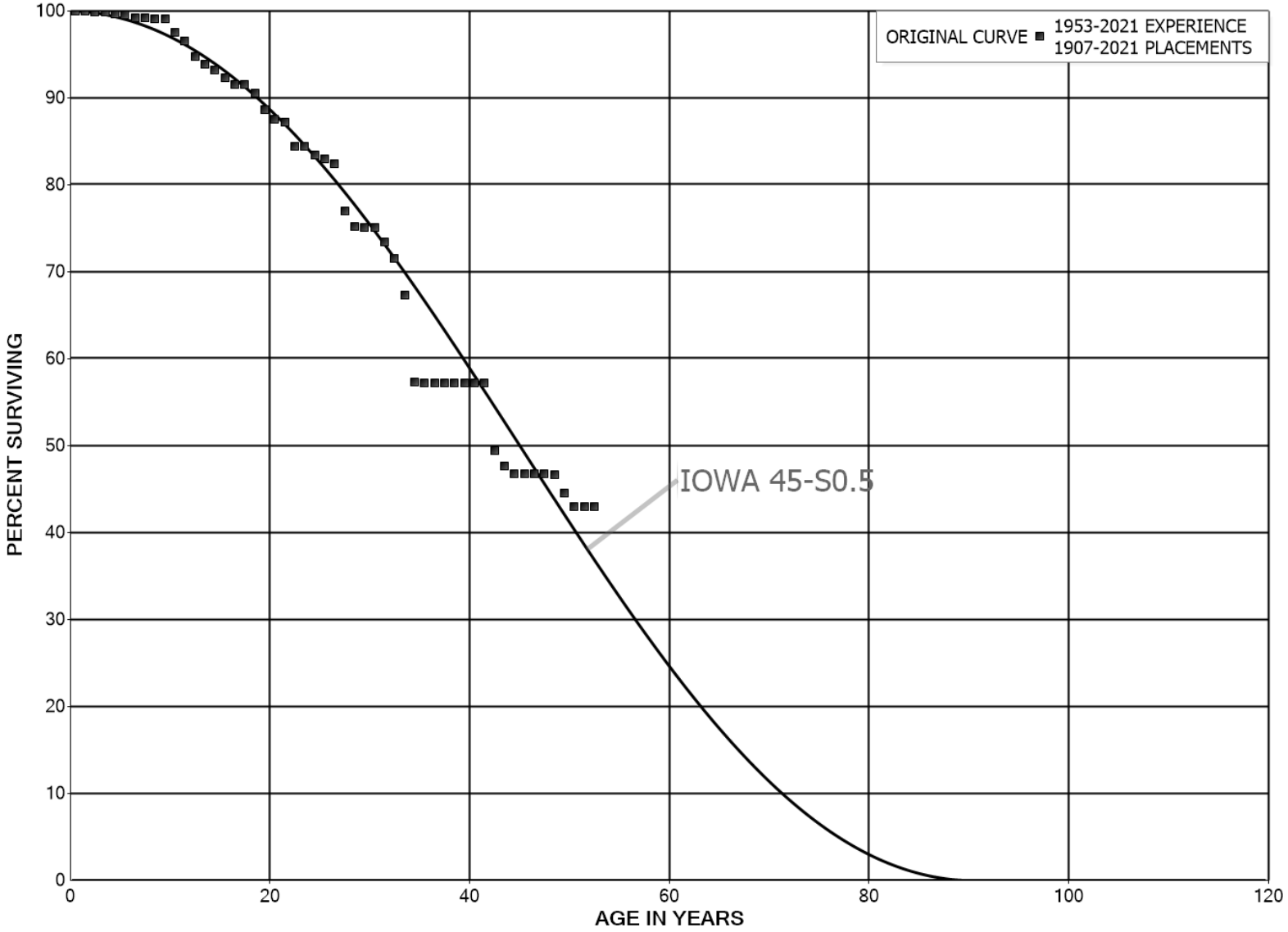
ACCOUNT 307.00 WELLS AND SPRINGS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1900-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	2,197		0.0000	1.0000	16.67
120.5	1,510		0.0000	1.0000	16.67
121.5					16.67

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 310.00 POWER GENERATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 310.00 POWER GENERATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1907-2021 EXPERIENCE BAND 1953-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	19,181,711	2,600	0.0001	0.9999	100.00
0.5	19,207,387	10,729	0.0006	0.9994	99.99
1.5	18,934,275	10,900	0.0006	0.9994	99.93
2.5	18,645,413	5,355	0.0003	0.9997	99.87
3.5	18,185,545	43,858	0.0024	0.9976	99.84
4.5	17,917,919	24,826	0.0014	0.9986	99.60
5.5	17,771,527	52,595	0.0030	0.9970	99.47
6.5	16,981,082	5,673	0.0003	0.9997	99.17
7.5	16,370,078	10,583	0.0006	0.9994	99.14
8.5	10,855,108	7,001	0.0006	0.9994	99.07
9.5	4,617,902	72,317	0.0157	0.9843	99.01
10.5	4,153,098	38,809	0.0093	0.9907	97.46
11.5	4,106,528	78,851	0.0192	0.9808	96.55
12.5	3,900,890	35,118	0.0090	0.9910	94.70
13.5	3,731,986	27,144	0.0073	0.9927	93.84
14.5	3,598,869	33,403	0.0093	0.9907	93.16
15.5	3,203,908	26,626	0.0083	0.9917	92.30
16.5	2,951,056	1,674	0.0006	0.9994	91.53
17.5	2,867,420	31,129	0.0109	0.9891	91.48
18.5	2,598,158	53,677	0.0207	0.9793	90.48
19.5	2,272,721	29,838	0.0131	0.9869	88.61
20.5	2,244,858	5,774	0.0026	0.9974	87.45
21.5	2,161,394	69,159	0.0320	0.9680	87.23
22.5	1,842,219		0.0000	1.0000	84.43
23.5	1,821,873	22,698	0.0125	0.9875	84.43
24.5	759,054	3,752	0.0049	0.9951	83.38
25.5	747,370	5,591	0.0075	0.9925	82.97
26.5	740,702	48,087	0.0649	0.9351	82.35
27.5	605,593	14,729	0.0243	0.9757	77.00
28.5	574,095	208	0.0004	0.9996	75.13
29.5	512,407		0.0000	1.0000	75.10
30.5	472,837	10,813	0.0229	0.9771	75.10
31.5	462,024	11,600	0.0251	0.9749	73.39
32.5	456,177	27,374	0.0600	0.9400	71.54
33.5	428,803	63,863	0.1489	0.8511	67.25
34.5	364,940	165	0.0005	0.9995	57.23
35.5	364,775	13	0.0000	1.0000	57.21
36.5	364,762	283	0.0008	0.9992	57.21
37.5	364,479		0.0000	1.0000	57.16
38.5	374,545		0.0000	1.0000	57.16

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 310.00 POWER GENERATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1907-2021 EXPERIENCE BAND 1953-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	331,206		0.0000	1.0000	57.16
40.5	330,621		0.0000	1.0000	57.16
41.5	305,544	41,460	0.1357	0.8643	57.16
42.5	264,084	9,761	0.0370	0.9630	49.41
43.5	254,323	4,487	0.0176	0.9824	47.58
44.5	249,836		0.0000	1.0000	46.74
45.5	256,086	97	0.0004	0.9996	46.74
46.5	217,676		0.0000	1.0000	46.72
47.5	165,361	336	0.0020	0.9980	46.72
48.5	164,889	7,456	0.0452	0.9548	46.63
49.5	149,560	5,093	0.0341	0.9659	44.52
50.5	144,467		0.0000	1.0000	43.00
51.5	144,261		0.0000	1.0000	43.00
52.5	99,058	257	0.0026	0.9974	43.00
53.5	75,740	7,592	0.1002	0.8998	42.89
54.5	60,829		0.0000	1.0000	38.59
55.5	60,687		0.0000	1.0000	38.59
56.5	54,668	3,792	0.0694	0.9306	38.59
57.5	50,877	1,009	0.0198	0.9802	35.92
58.5	48,927		0.0000	1.0000	35.20
59.5	48,927	18,823	0.3847	0.6153	35.20
60.5	30,104	1,266	0.0420	0.9580	21.66
61.5	28,839		0.0000	1.0000	20.75
62.5	28,732		0.0000	1.0000	20.75
63.5	23,396		0.0000	1.0000	20.75
64.5	22,218		0.0000	1.0000	20.75
65.5	22,218		0.0000	1.0000	20.75
66.5	22,218		0.0000	1.0000	20.75
67.5	13,879		0.0000	1.0000	20.75
68.5	13,879		0.0000	1.0000	20.75
69.5	13,879		0.0000	1.0000	20.75
70.5	13,879		0.0000	1.0000	20.75
71.5	13,879		0.0000	1.0000	20.75
72.5	13,879		0.0000	1.0000	20.75
73.5	13,879		0.0000	1.0000	20.75
74.5	13,879		0.0000	1.0000	20.75
75.5	13,879		0.0000	1.0000	20.75
76.5	13,879		0.0000	1.0000	20.75
77.5	13,878		0.0000	1.0000	20.75
78.5	13,878		0.0000	1.0000	20.75

PENNSYLVANIA-AMERICAN WATER COMPANY

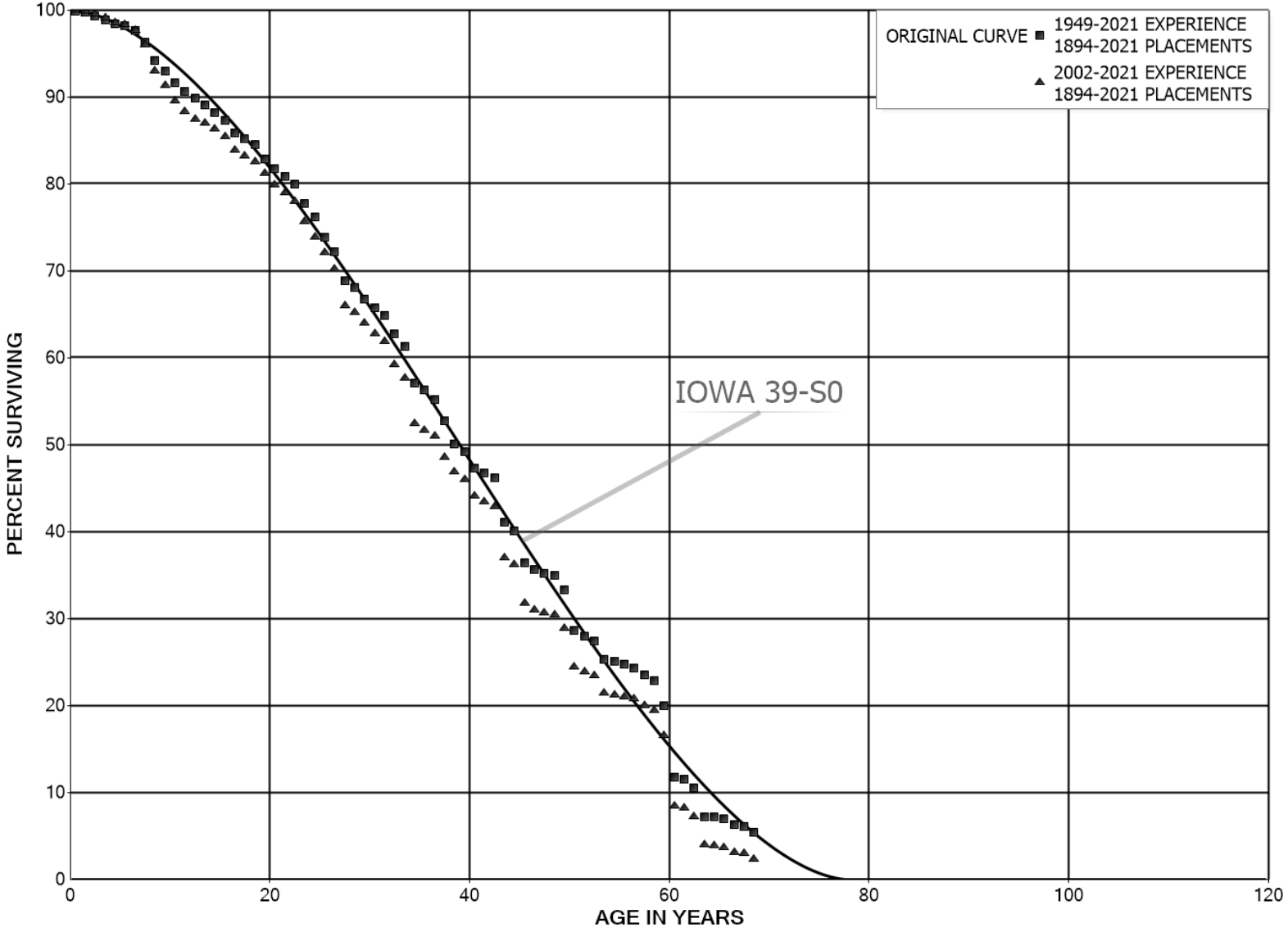
ACCOUNT 310.00 POWER GENERATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1907-2021 EXPERIENCE BAND 1953-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	13,878		0.0000	1.0000	20.75
80.5	13,878		0.0000	1.0000	20.75
81.5	10,939		0.0000	1.0000	20.75
82.5	10,939		0.0000	1.0000	20.75
83.5	10,939		0.0000	1.0000	20.75
84.5	6,419		0.0000	1.0000	20.75
85.5	3,610		0.0000	1.0000	20.75
86.5	3,610		0.0000	1.0000	20.75
87.5	3,610		0.0000	1.0000	20.75
88.5	3,610		0.0000	1.0000	20.75
89.5	3,610		0.0000	1.0000	20.75
90.5					20.75

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNTS 311.20 THROUGH 311.54 PUMPING EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 311.20 THROUGH 311.54 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1894-2021 EXPERIENCE BAND 1949-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	120,320,210	132,610	0.0011	0.9989	100.00
0.5	117,277,416	224,993	0.0019	0.9981	99.89
1.5	112,488,764	421,819	0.0037	0.9963	99.70
2.5	110,023,992	517,147	0.0047	0.9953	99.32
3.5	97,329,316	432,470	0.0044	0.9956	98.86
4.5	93,658,350	275,303	0.0029	0.9971	98.42
5.5	91,622,684	503,061	0.0055	0.9945	98.13
6.5	89,435,044	1,230,084	0.0138	0.9862	97.59
7.5	81,488,129	1,714,843	0.0210	0.9790	96.25
8.5	77,458,107	1,028,937	0.0133	0.9867	94.22
9.5	74,573,196	1,073,460	0.0144	0.9856	92.97
10.5	73,847,799	842,633	0.0114	0.9886	91.63
11.5	71,727,248	635,063	0.0089	0.9911	90.59
12.5	69,346,949	552,750	0.0080	0.9920	89.78
13.5	67,431,334	650,550	0.0096	0.9904	89.07
14.5	64,126,855	669,255	0.0104	0.9896	88.21
15.5	60,026,177	991,061	0.0165	0.9835	87.29
16.5	58,244,552	489,563	0.0084	0.9916	85.85
17.5	56,796,024	447,554	0.0079	0.9921	85.13
18.5	52,981,897	1,003,187	0.0189	0.9811	84.46
19.5	50,145,014	716,491	0.0143	0.9857	82.86
20.5	46,978,966	464,408	0.0099	0.9901	81.67
21.5	43,530,877	523,398	0.0120	0.9880	80.87
22.5	39,144,553	1,048,623	0.0268	0.9732	79.89
23.5	36,788,228	734,045	0.0200	0.9800	77.75
24.5	32,966,295	1,017,510	0.0309	0.9691	76.20
25.5	30,433,608	673,321	0.0221	0.9779	73.85
26.5	26,424,144	1,232,580	0.0466	0.9534	72.22
27.5	24,896,746	278,727	0.0112	0.9888	68.85
28.5	22,507,217	455,060	0.0202	0.9798	68.08
29.5	19,959,199	306,647	0.0154	0.9846	66.70
30.5	18,617,328	231,693	0.0124	0.9876	65.68
31.5	13,950,006	454,292	0.0326	0.9674	64.86
32.5	12,941,419	293,599	0.0227	0.9773	62.75
33.5	12,275,122	859,924	0.0701	0.9299	61.32
34.5	10,722,121	140,284	0.0131	0.9869	57.03
35.5	10,284,954	202,573	0.0197	0.9803	56.28
36.5	9,498,013	420,654	0.0443	0.9557	55.17
37.5	8,824,171	445,150	0.0504	0.9496	52.73
38.5	8,142,683	141,270	0.0173	0.9827	50.07

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 311.20 THROUGH 311.54 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2021 EXPERIENCE BAND 1949-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	7,320,607	282,866	0.0386	0.9614	49.20
40.5	6,537,220	82,726	0.0127	0.9873	47.30
41.5	6,313,578	71,502	0.0113	0.9887	46.70
42.5	6,060,154	671,956	0.1109	0.8891	46.17
43.5	5,559,818	138,694	0.0249	0.9751	41.05
44.5	5,404,277	494,575	0.0915	0.9085	40.03
45.5	10,533,617	223,020	0.0212	0.9788	36.36
46.5	10,210,233	121,631	0.0119	0.9881	35.59
47.5	10,060,180	54,706	0.0054	0.9946	35.17
48.5	4,283,530	207,006	0.0483	0.9517	34.98
49.5	3,661,895	518,378	0.1416	0.8584	33.29
50.5	2,882,456	67,224	0.0233	0.9767	28.58
51.5	2,838,748	56,564	0.0199	0.9801	27.91
52.5	2,538,836	190,086	0.0749	0.9251	27.35
53.5	2,176,937	24,566	0.0113	0.9887	25.31
54.5	2,152,905	29,369	0.0136	0.9864	25.02
55.5	2,109,920	32,151	0.0152	0.9848	24.68
56.5	1,880,848	61,330	0.0326	0.9674	24.30
57.5	1,614,429	49,239	0.0305	0.9695	23.51
58.5	1,545,618	195,923	0.1268	0.8732	22.79
59.5	1,339,365	547,150	0.4085	0.5915	19.90
60.5	826,695	18,912	0.0229	0.9771	11.77
61.5	717,713	65,308	0.0910	0.9090	11.50
62.5	628,190	197,822	0.3149	0.6851	10.46
63.5	444,183	2,394	0.0054	0.9946	7.16
64.5	394,223	11,048	0.0280	0.9720	7.13
65.5	376,317	35,748	0.0950	0.9050	6.93
66.5	337,790	10,075	0.0298	0.9702	6.27
67.5	316,500	34,260	0.1082	0.8918	6.08
68.5	267,221	1,540	0.0058	0.9942	5.42
69.5	230,514	6,081	0.0264	0.9736	5.39
70.5	208,356	8,839	0.0424	0.9576	5.25
71.5	195,982	11,954	0.0610	0.9390	5.03
72.5	204,302	1,735	0.0085	0.9915	4.72
73.5	200,844	1,240	0.0062	0.9938	4.68
74.5	203,074	2,652	0.0131	0.9869	4.65
75.5	200,212	195	0.0010	0.9990	4.59
76.5	199,349	7,004	0.0351	0.9649	4.59
77.5	189,155	673	0.0036	0.9964	4.42
78.5	188,518	465	0.0025	0.9975	4.41

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 311.20 THROUGH 311.54 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2021 EXPERIENCE BAND 1949-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	187,074	1,823	0.0097	0.9903	4.40
80.5	175,998	7,698	0.0437	0.9563	4.36
81.5	164,030	5,803	0.0354	0.9646	4.16
82.5	127,738	23,987	0.1878	0.8122	4.02
83.5	271,027	541	0.0020	0.9980	3.26
84.5	268,845	1,222	0.0045	0.9955	3.26
85.5	266,921	206,666	0.7743	0.2257	3.24
86.5	59,961	473	0.0079	0.9921	0.73
87.5	50,452	8,500	0.1685	0.8315	0.73
88.5	41,759	3,141	0.0752	0.9248	0.60
89.5	34,118	6,126	0.1795	0.8205	0.56
90.5	24,383	1,668	0.0684	0.9316	0.46
91.5	22,180		0.0000	1.0000	0.43
92.5	31,315		0.0000	1.0000	0.43
93.5	30,791		0.0000	1.0000	0.43
94.5	30,222	1,279	0.0423	0.9577	0.43
95.5	28,872		0.0000	1.0000	0.41
96.5	28,641	514	0.0180	0.9820	0.41
97.5	28,127	1,597	0.0568	0.9432	0.40
98.5	26,500		0.0000	1.0000	0.38
99.5	26,500	30	0.0011	0.9989	0.38
100.5	22,701	360	0.0159	0.9841	0.38
101.5	20,651	67	0.0032	0.9968	0.37
102.5	12,556		0.0000	1.0000	0.37
103.5	10,432	565	0.0542	0.9458	0.37
104.5	8,836	461	0.0522	0.9478	0.35
105.5	10,144		0.0000	1.0000	0.33
106.5	16,874	315	0.0187	0.9813	0.33
107.5	16,558	5,628	0.3399	0.6601	0.33
108.5	9,090	6,730	0.7404	0.2596	0.22
109.5	2,360		0.0000	1.0000	0.06
110.5	1,149		0.0000	1.0000	0.06
111.5	3,876		0.0000	1.0000	0.06
112.5	3,375		0.0000	1.0000	0.06
113.5	3,375	3,375	1.0000		0.06
114.5					
115.5					
116.5					
117.5	646		0.0000		
118.5	646		0.0000		
119.5	646	646	1.0000		
120.5					

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 311.20 THROUGH 311.54 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1894-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	72,307,618	12,000	0.0002	0.9998	100.00
0.5	67,119,475	98,591	0.0015	0.9985	99.98
1.5	65,267,999	247,092	0.0038	0.9962	99.84
2.5	67,844,614	271,543	0.0040	0.9960	99.46
3.5	57,534,291	334,759	0.0058	0.9942	99.06
4.5	57,585,100	140,746	0.0024	0.9976	98.48
5.5	56,645,689	331,277	0.0058	0.9942	98.24
6.5	58,322,887	1,034,345	0.0177	0.9823	97.67
7.5	51,187,411	1,603,092	0.0313	0.9687	95.94
8.5	49,549,786	854,910	0.0173	0.9827	92.93
9.5	48,927,499	972,456	0.0199	0.9801	91.33
10.5	48,835,134	694,880	0.0142	0.9858	89.51
11.5	51,266,267	474,988	0.0093	0.9907	88.24
12.5	50,555,051	262,673	0.0052	0.9948	87.42
13.5	49,652,582	414,387	0.0083	0.9917	86.97
14.5	47,411,509	472,326	0.0100	0.9900	86.24
15.5	45,531,327	797,056	0.0175	0.9825	85.38
16.5	46,321,544	398,569	0.0086	0.9914	83.89
17.5	45,304,464	348,388	0.0077	0.9923	83.17
18.5	42,263,127	717,147	0.0170	0.9830	82.53
19.5	40,724,336	647,791	0.0159	0.9841	81.13
20.5	38,220,010	426,648	0.0112	0.9888	79.84
21.5	35,045,119	440,357	0.0126	0.9874	78.95
22.5	31,037,502	952,373	0.0307	0.9693	77.95
23.5	28,878,976	648,421	0.0225	0.9775	75.56
24.5	25,167,923	623,827	0.0248	0.9752	73.86
25.5	23,068,949	581,299	0.0252	0.9748	72.03
26.5	19,255,862	1,158,359	0.0602	0.9398	70.22
27.5	17,835,204	215,245	0.0121	0.9879	65.99
28.5	15,569,007	293,908	0.0189	0.9811	65.20
29.5	13,697,249	272,066	0.0199	0.9801	63.97
30.5	13,021,254	186,159	0.0143	0.9857	62.70
31.5	8,435,117	363,457	0.0431	0.9569	61.80
32.5	8,733,529	218,728	0.0250	0.9750	59.14
33.5	8,306,197	757,101	0.0911	0.9089	57.66
34.5	7,016,216	109,519	0.0156	0.9844	52.40
35.5	6,657,214	78,666	0.0118	0.9882	51.58
36.5	6,363,508	309,781	0.0487	0.9513	50.97
37.5	5,938,330	201,941	0.0340	0.9660	48.49
38.5	5,575,152	107,719	0.0193	0.9807	46.84

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 311.20 THROUGH 311.54 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,785,003	193,382	0.0404	0.9596	45.94
40.5	4,711,680	68,649	0.0146	0.9854	44.08
41.5	4,564,775	58,270	0.0128	0.9872	43.44
42.5	4,335,801	596,755	0.1376	0.8624	42.88
43.5	4,009,516	87,036	0.0217	0.9783	36.98
44.5	3,923,418	484,572	0.1235	0.8765	36.18
45.5	9,094,336	208,204	0.0229	0.9771	31.71
46.5	8,973,849	116,842	0.0130	0.9870	30.99
47.5	9,515,461	51,343	0.0054	0.9946	30.58
48.5	3,769,327	190,717	0.0506	0.9494	30.42
49.5	3,252,602	505,377	0.1554	0.8446	28.88
50.5	2,511,864	60,173	0.0240	0.9760	24.39
51.5	2,490,998	43,447	0.0174	0.9826	23.81
52.5	2,208,928	184,096	0.0833	0.9167	23.39
53.5	1,843,863	21,924	0.0119	0.9881	21.44
54.5	1,865,963	16,499	0.0088	0.9912	21.19
55.5	1,842,148	24,674	0.0134	0.9866	21.00
56.5	1,624,126	57,497	0.0354	0.9646	20.72
57.5	1,364,327	43,900	0.0322	0.9678	19.98
58.5	1,303,331	191,868	0.1472	0.8528	19.34
59.5	1,115,473	546,128	0.4896	0.5104	16.49
60.5	605,187	18,750	0.0310	0.9690	8.42
61.5	500,401	62,034	0.1240	0.8760	8.16
62.5	414,277	187,166	0.4518	0.5482	7.15
63.5	241,117	2,392	0.0099	0.9901	3.92
64.5	192,194	11,048	0.0575	0.9425	3.88
65.5	175,350	25,899	0.1477	0.8523	3.66
66.5	152,218	8,570	0.0563	0.9437	3.12
67.5	137,324	30,661	0.2233	0.7767	2.94
68.5	97,912	1,034	0.0106	0.9894	2.28
69.5	61,788	5,180	0.0838	0.9162	2.26
70.5	71,417	7,966	0.1115	0.8885	2.07
71.5	65,008	11,128	0.1712	0.8288	1.84
72.5	93,412	1,385	0.0148	0.9852	1.52
73.5	134,285	788	0.0059	0.9941	1.50
74.5	138,050	2,652	0.0192	0.9808	1.49
75.5	135,889		0.0000	1.0000	1.46
76.5	137,964	7,004	0.0508	0.9492	1.46
77.5	142,932	673	0.0047	0.9953	1.39
78.5	144,196	465	0.0032	0.9968	1.38

PENNSYLVANIA-AMERICAN WATER COMPANY

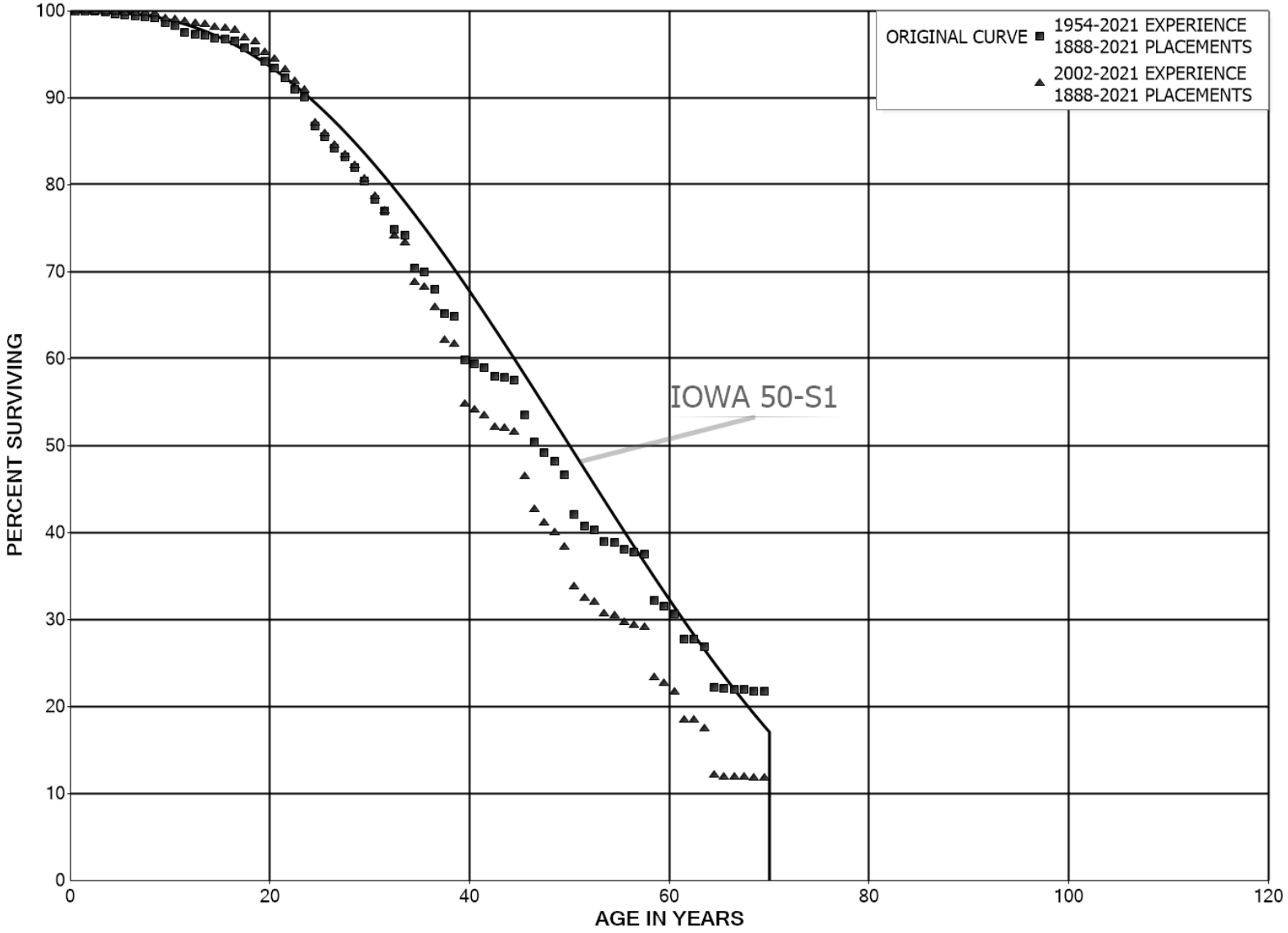
ACCOUNTS 311.20 THROUGH 311.54 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1894-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	147,251	1,823	0.0124	0.9876	1.38
80.5	136,175	7,698	0.0565	0.9435	1.36
81.5	124,732	99	0.0008	0.9992	1.29
82.5	94,679	13,426	0.1418	0.8582	1.28
83.5	249,353	541	0.0022	0.9978	1.10
84.5	247,740	1,068	0.0043	0.9957	1.10
85.5	246,042	206,666	0.8400	0.1600	1.09
86.5	39,314	416	0.0106	0.9894	0.18
87.5	29,861	7,676	0.2571	0.7429	0.17
88.5	22,022	2,719	0.1235	0.8765	0.13
89.5	14,803	6,126	0.4138	0.5862	0.11
90.5	8,837	1,668	0.1888	0.8112	0.07
91.5	9,027		0.0000	1.0000	0.05
92.5	20,093		0.0000	1.0000	0.05
93.5	21,257		0.0000	1.0000	0.05
94.5	21,927	1,279	0.0583	0.9417	0.05
95.5	24,436		0.0000	1.0000	0.05
96.5	24,205		0.0000	1.0000	0.05
97.5	24,205	1,597	0.0660	0.9340	0.05
98.5	24,419		0.0000	1.0000	0.05
99.5	24,419	30	0.0012	0.9988	0.05
100.5	21,831		0.0000	1.0000	0.05
101.5	20,651	67	0.0032	0.9968	0.05
102.5	12,556		0.0000	1.0000	0.05
103.5	10,432	565	0.0542	0.9458	0.05
104.5	8,836	461	0.0522	0.9478	0.04
105.5	10,144		0.0000	1.0000	0.04
106.5	16,874	315	0.0187	0.9813	0.04
107.5	16,558	5,628	0.3399	0.6601	0.04
108.5	9,090	6,730	0.7404	0.2596	0.03
109.5	2,360		0.0000	1.0000	0.01
110.5	1,149		0.0000	1.0000	0.01
111.5	3,876		0.0000	1.0000	0.01
112.5	3,375		0.0000	1.0000	0.01
113.5	3,375	3,375	1.0000		0.01
114.5					
115.5					
116.5					
117.5	646		0.0000		
118.5	646		0.0000		
119.5	646	646	1.0000		
120.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 320.10 PURIFICATION SYSTEM - LARGE STRUCTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 320.10 PURIFICATION SYSTEM - LARGE STRUCTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1888-2021 EXPERIENCE BAND 1954-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	253,190,875		0.0000	1.0000	100.00
0.5	241,449,354	117,154	0.0005	0.9995	100.00
1.5	246,270,607	35,974	0.0001	0.9999	99.95
2.5	243,560,286	162,247	0.0007	0.9993	99.94
3.5	195,926,547	486,509	0.0025	0.9975	99.87
4.5	194,918,614	275,524	0.0014	0.9986	99.62
5.5	195,218,934	115,841	0.0006	0.9994	99.48
6.5	196,526,459	240,667	0.0012	0.9988	99.42
7.5	193,898,801	204,961	0.0011	0.9989	99.30
8.5	189,145,367	1,130,865	0.0060	0.9940	99.20
9.5	167,050,518	597,278	0.0036	0.9964	98.60
10.5	156,638,853	1,210,478	0.0077	0.9923	98.25
11.5	155,011,404	254,630	0.0016	0.9984	97.49
12.5	153,827,283	192,193	0.0012	0.9988	97.33
13.5	152,854,043	516,342	0.0034	0.9966	97.21
14.5	151,644,086	237,850	0.0016	0.9984	96.88
15.5	144,961,928	396,222	0.0027	0.9973	96.73
16.5	146,772,318	1,150,993	0.0078	0.9922	96.46
17.5	145,746,920	692,034	0.0047	0.9953	95.71
18.5	144,941,347	1,621,201	0.0112	0.9888	95.25
19.5	142,447,421	1,207,606	0.0085	0.9915	94.19
20.5	140,233,311	1,727,794	0.0123	0.9877	93.39
21.5	138,097,183	1,912,252	0.0138	0.9862	92.24
22.5	126,336,900	1,184,157	0.0094	0.9906	90.96
23.5	124,238,747	4,633,173	0.0373	0.9627	90.11
24.5	109,488,929	1,618,359	0.0148	0.9852	86.75
25.5	106,929,097	1,604,655	0.0150	0.9850	85.47
26.5	100,297,798	1,157,764	0.0115	0.9885	84.18
27.5	96,642,078	1,399,940	0.0145	0.9855	83.21
28.5	71,088,905	1,377,730	0.0194	0.9806	82.01
29.5	59,314,672	1,597,816	0.0269	0.9731	80.42
30.5	52,176,217	885,745	0.0170	0.9830	78.25
31.5	30,580,142	848,549	0.0277	0.9723	76.92
32.5	25,461,536	223,272	0.0088	0.9912	74.79
33.5	19,636,625	989,767	0.0504	0.9496	74.13
34.5	18,580,718	123,425	0.0066	0.9934	70.40
35.5	17,906,127	503,785	0.0281	0.9719	69.93
36.5	14,992,219	611,032	0.0408	0.9592	67.96
37.5	14,340,956	71,824	0.0050	0.9950	65.19
38.5	14,066,825	1,089,139	0.0774	0.9226	64.86

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 320.10 PURIFICATION SYSTEM - LARGE STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1888-2021 EXPERIENCE BAND 1954-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	10,076,781	71,449	0.0071	0.9929	59.84
40.5	9,991,439	86,947	0.0087	0.9913	59.42
41.5	9,899,283	158,922	0.0161	0.9839	58.90
42.5	9,728,571	21,703	0.0022	0.9978	57.96
43.5	9,707,496	57,975	0.0060	0.9940	57.83
44.5	9,697,570	664,317	0.0685	0.9315	57.48
45.5	9,295,589	540,835	0.0582	0.9418	53.54
46.5	8,547,265	213,977	0.0250	0.9750	50.43
47.5	8,453,945	170,737	0.0202	0.9798	49.17
48.5	8,000,172	262,393	0.0328	0.9672	48.17
49.5	6,889,123	664,377	0.0964	0.9036	46.59
50.5	6,239,813	206,029	0.0330	0.9670	42.10
51.5	6,031,888	69,200	0.0115	0.9885	40.71
52.5	4,557,733	145,764	0.0320	0.9680	40.24
53.5	4,409,339	16,149	0.0037	0.9963	38.96
54.5	4,381,481	84,856	0.0194	0.9806	38.81
55.5	4,294,097	35,544	0.0083	0.9917	38.06
56.5	4,020,269	24,828	0.0062	0.9938	37.75
57.5	3,992,537	567,890	0.1422	0.8578	37.51
58.5	3,501,080	69,677	0.0199	0.9801	32.18
59.5	3,426,372	96,551	0.0282	0.9718	31.54
60.5	3,248,689	311,961	0.0960	0.9040	30.65
61.5	2,928,286	459	0.0002	0.9998	27.70
62.5	2,858,549	89,481	0.0313	0.9687	27.70
63.5	2,649,854	456,715	0.1724	0.8276	26.83
64.5	2,181,381	17,778	0.0081	0.9919	22.21
65.5	2,147,534	4,146	0.0019	0.9981	22.03
66.5	2,113,762	1,700	0.0008	0.9992	21.98
67.5	2,031,223	17,739	0.0087	0.9913	21.97
68.5	1,461,413	5,103	0.0035	0.9965	21.78
69.5	1,447,516	43,876	0.0303	0.9697	21.70
70.5	1,263,827	1,629	0.0013	0.9987	21.04
71.5	1,262,091	6,321	0.0050	0.9950	21.01
72.5	1,240,321	24	0.0000	1.0000	20.91
73.5	1,261,377	6,235	0.0049	0.9951	20.91
74.5	1,240,376	319	0.0003	0.9997	20.81
75.5	1,239,025	4,376	0.0035	0.9965	20.80
76.5	1,234,649	11,531	0.0093	0.9907	20.73
77.5	1,223,013	162	0.0001	0.9999	20.53
78.5	1,222,851	78,736	0.0644	0.9356	20.53

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 320.10 PURIFICATION SYSTEM - LARGE STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1888-2021 EXPERIENCE BAND 1954-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	1,144,102	76	0.0001	0.9999	19.21
80.5	1,145,163	2,107	0.0018	0.9982	19.21
81.5	1,143,055	18,211	0.0159	0.9841	19.17
82.5	1,124,844	72,758	0.0647	0.9353	18.87
83.5	1,051,998	3,225	0.0031	0.9969	17.65
84.5	1,008,415		0.0000	1.0000	17.59
85.5	1,008,415	9,712	0.0096	0.9904	17.59
86.5	998,163	1,888	0.0019	0.9981	17.42
87.5	996,160		0.0000	1.0000	17.39
88.5	995,947	734	0.0007	0.9993	17.39
89.5	995,197	992	0.0010	0.9990	17.38
90.5	947,722	36,014	0.0380	0.9620	17.36
91.5	906,142	317	0.0003	0.9997	16.70
92.5	854,401	16,452	0.0193	0.9807	16.69
93.5	816,019	312	0.0004	0.9996	16.37
94.5	815,073	11,383	0.0140	0.9860	16.37
95.5	803,646	21,585	0.0269	0.9731	16.14
96.5	782,061	6,726	0.0086	0.9914	15.70
97.5	698,609	234	0.0003	0.9997	15.57
98.5	404,240	10,323	0.0255	0.9745	15.56
99.5	393,916	47,573	0.1208	0.8792	15.17
100.5	301,935	5	0.0000	1.0000	13.33
101.5	301,928	2,721	0.0090	0.9910	13.33
102.5	299,207	1,638	0.0055	0.9945	13.21
103.5	297,257	11,990	0.0403	0.9597	13.14
104.5	283,821	62,646	0.2207	0.7793	12.61
105.5	221,175		0.0000	1.0000	9.83
106.5	220,979		0.0000	1.0000	9.83
107.5	220,949	59,977	0.2714	0.7286	9.83
108.5	160,973	35,843	0.2227	0.7773	7.16
109.5	125,103		0.0000	1.0000	5.57
110.5	125,103	1,838	0.0147	0.9853	5.57
111.5	118,547		0.0000	1.0000	5.48
112.5	114,499		0.0000	1.0000	5.48
113.5	112,038		0.0000	1.0000	5.48
114.5	111,850		0.0000	1.0000	5.48
115.5	61,890		0.0000	1.0000	5.48
116.5	61,306		0.0000	1.0000	5.48
117.5	56,370		0.0000	1.0000	5.48
118.5	38,867	417	0.0107	0.9893	5.48

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 320.10 PURIFICATION SYSTEM - LARGE STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1888-2021 EXPERIENCE BAND 1954-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	34,798		0.0000	1.0000	5.43
120.5	34,798	525	0.0151	0.9849	5.43
121.5	34,273		0.0000	1.0000	5.34
122.5	34,273		0.0000	1.0000	5.34
123.5	34,273		0.0000	1.0000	5.34
124.5	34,273		0.0000	1.0000	5.34
125.5	34,273	3,320	0.0969	0.9031	5.34
126.5	28,848		0.0000	1.0000	4.83
127.5	19,156		0.0000	1.0000	4.83
128.5	4,319		0.0000	1.0000	4.83
129.5	4,319		0.0000	1.0000	4.83
130.5	4,319		0.0000	1.0000	4.83
131.5	4,319		0.0000	1.0000	4.83
132.5	4,319		0.0000	1.0000	4.83
133.5					4.83

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 320.10 PURIFICATION SYSTEM - LARGE STRUCTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1888-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	115,598,164		0.0000	1.0000	100.00
0.5	103,059,277	96,617	0.0009	0.9991	100.00
1.5	103,522,014	19,640	0.0002	0.9998	99.91
2.5	110,906,959	69,735	0.0006	0.9994	99.89
3.5	64,256,271	11,918	0.0002	0.9998	99.82
4.5	75,319,321	39,687	0.0005	0.9995	99.81
5.5	76,348,278	6,461	0.0001	0.9999	99.75
6.5	81,859,991	50,048	0.0006	0.9994	99.74
7.5	82,794,310	80,201	0.0010	0.9990	99.68
8.5	103,762,988	559,200	0.0054	0.9946	99.59
9.5	94,448,989	94,112	0.0010	0.9990	99.05
10.5	91,812,950	242,171	0.0026	0.9974	98.95
11.5	116,852,900	179,840	0.0015	0.9985	98.69
12.5	121,526,903	157,831	0.0013	0.9987	98.54
13.5	127,843,659	445,134	0.0035	0.9965	98.41
14.5	127,233,263	120,409	0.0009	0.9991	98.07
15.5	121,735,154	349,511	0.0029	0.9971	97.98
16.5	127,200,916	1,125,610	0.0088	0.9912	97.69
17.5	127,010,340	633,834	0.0050	0.9950	96.83
18.5	127,081,525	1,524,627	0.0120	0.9880	96.35
19.5	128,984,124	1,040,008	0.0081	0.9919	95.19
20.5	127,033,337	1,703,873	0.0134	0.9866	94.42
21.5	125,285,408	1,835,589	0.0147	0.9853	93.16
22.5	113,539,698	1,183,094	0.0104	0.9896	91.79
23.5	111,883,112	4,598,850	0.0411	0.9589	90.84
24.5	97,535,740	1,468,258	0.0151	0.9849	87.10
25.5	95,161,719	1,483,252	0.0156	0.9844	85.79
26.5	90,149,665	1,137,535	0.0126	0.9874	84.45
27.5	86,536,660	1,299,857	0.0150	0.9850	83.39
28.5	61,145,111	1,141,059	0.0187	0.9813	82.14
29.5	50,660,955	1,267,552	0.0250	0.9750	80.60
30.5	43,517,512	877,012	0.0202	0.9798	78.59
31.5	22,001,153	838,150	0.0381	0.9619	77.00
32.5	19,721,357	199,320	0.0101	0.9899	74.07
33.5	14,612,382	915,665	0.0627	0.9373	73.32
34.5	13,676,529	115,931	0.0085	0.9915	68.73
35.5	12,987,803	445,663	0.0343	0.9657	68.14
36.5	10,624,206	607,406	0.0572	0.9428	65.80
37.5	9,992,966	69,136	0.0069	0.9931	62.04
38.5	9,708,803	1,086,486	0.1119	0.8881	61.61

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 320.10 PURIFICATION SYSTEM - LARGE STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1888-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	5,713,042	67,103	0.0117	0.9883	54.72
40.5	6,500,320	80,194	0.0123	0.9877	54.08
41.5	6,429,315	156,739	0.0244	0.9756	53.41
42.5	6,429,032	14,072	0.0022	0.9978	52.11
43.5	6,631,623	57,390	0.0087	0.9913	51.99
44.5	6,598,621	656,286	0.0995	0.9005	51.54
45.5	6,236,366	503,962	0.0808	0.9192	46.42
46.5	5,688,854	211,656	0.0372	0.9628	42.67
47.5	5,655,382	163,131	0.0288	0.9712	41.08
48.5	6,497,556	259,326	0.0399	0.9601	39.89
49.5	5,452,464	644,312	0.1182	0.8818	38.30
50.5	5,047,173	205,993	0.0408	0.9592	33.77
51.5	4,835,853	66,826	0.0138	0.9862	32.40
52.5	3,383,820	145,652	0.0430	0.9570	31.95
53.5	3,235,904	16,149	0.0050	0.9950	30.57
54.5	3,239,784	84,856	0.0262	0.9738	30.42
55.5	3,155,213	35,347	0.0112	0.9888	29.62
56.5	2,881,581	24,807	0.0086	0.9914	29.29
57.5	2,879,190	566,412	0.1967	0.8033	29.04
58.5	2,308,006	68,780	0.0298	0.9702	23.33
59.5	2,224,531	96,108	0.0432	0.9568	22.63
60.5	2,047,583	311,961	0.1524	0.8476	21.65
61.5	1,727,180	459	0.0003	0.9997	18.36
62.5	1,657,443	89,210	0.0538	0.9462	18.35
63.5	1,451,852	447,512	0.3082	0.6918	17.36
64.5	1,057,195	14,156	0.0134	0.9866	12.01
65.5	1,017,857	3,245	0.0032	0.9968	11.85
66.5	1,063,276	1,700	0.0016	0.9984	11.81
67.5	980,859	1,976	0.0020	0.9980	11.79
68.5	429,252		0.0000	1.0000	11.77
69.5	361,594	43,876	0.1213	0.8787	11.77
70.5	265,287	154	0.0006	0.9994	10.34
71.5	271,074	1,063	0.0039	0.9961	10.34
72.5	306,012	24	0.0001	0.9999	10.29
73.5	338,526	213	0.0006	0.9994	10.29
74.5	325,864		0.0000	1.0000	10.29
75.5	324,832	1,218	0.0037	0.9963	10.29
76.5	323,614	11,531	0.0356	0.9644	10.25
77.5	405,058		0.0000	1.0000	9.88
78.5	737,600	78,736	0.1067	0.8933	9.88

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 320.10 PURIFICATION SYSTEM - LARGE STRUCTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1888-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	659,160	76	0.0001	0.9999	8.83
80.5	719,682	2,107	0.0029	0.9971	8.83
81.5	717,576	796	0.0011	0.9989	8.80
82.5	716,780	40,900	0.0571	0.9429	8.79
83.5	698,490	3,225	0.0046	0.9954	8.29
84.5	654,906		0.0000	1.0000	8.25
85.5	654,906	9,712	0.0148	0.9852	8.25
86.5	660,060	888	0.0013	0.9987	8.13
87.5	659,087		0.0000	1.0000	8.12
88.5	658,879	734	0.0011	0.9989	8.12
89.5	658,649	992	0.0015	0.9985	8.11
90.5	611,175	36,014	0.0589	0.9411	8.10
91.5	584,097	317	0.0005	0.9995	7.62
92.5	583,742	16,452	0.0282	0.9718	7.62
93.5	549,659	312	0.0006	0.9994	7.40
94.5	548,900	407	0.0007	0.9993	7.40
95.5	659,775	21,585	0.0327	0.9673	7.39
96.5	672,929	6,726	0.0100	0.9900	7.15
97.5	579,051	234	0.0004	0.9996	7.08
98.5	302,184	10,323	0.0342	0.9658	7.08
99.5	295,513	3,659	0.0124	0.9876	6.83
100.5	247,445	5	0.0000	1.0000	6.75
101.5	247,438	2,721	0.0110	0.9890	6.75
102.5	244,717	1,638	0.0067	0.9933	6.68
103.5	242,767	11,990	0.0494	0.9506	6.63
104.5	229,331	43,371	0.1891	0.8109	6.30
105.5	185,961		0.0000	1.0000	5.11
106.5	188,287		0.0000	1.0000	5.11
107.5	197,949	59,977	0.3030	0.6970	5.11
108.5	153,334	35,843	0.2338	0.7662	3.56
109.5	117,464		0.0000	1.0000	2.73
110.5	117,464	1,838	0.0156	0.9844	2.73
111.5	110,908		0.0000	1.0000	2.69
112.5	106,860		0.0000	1.0000	2.69
113.5	112,038		0.0000	1.0000	2.69
114.5	111,850		0.0000	1.0000	2.69
115.5	61,890		0.0000	1.0000	2.69
116.5	61,306		0.0000	1.0000	2.69
117.5	56,370		0.0000	1.0000	2.69
118.5	38,867	417	0.0107	0.9893	2.69

PENNSYLVANIA-AMERICAN WATER COMPANY

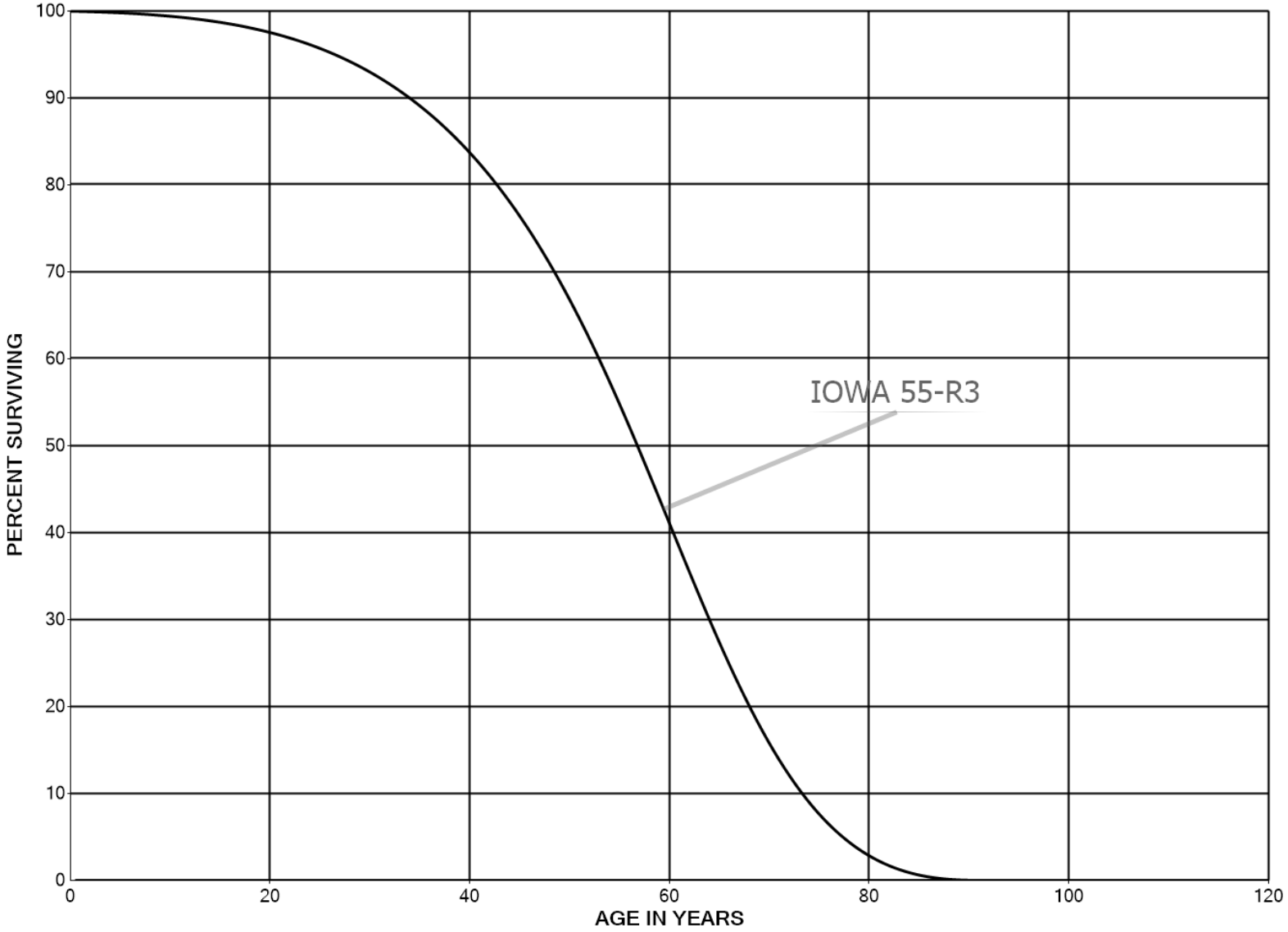
ACCOUNT 320.10 PURIFICATION SYSTEM - LARGE STRUCTURES

ORIGINAL LIFE TABLE, CONT.

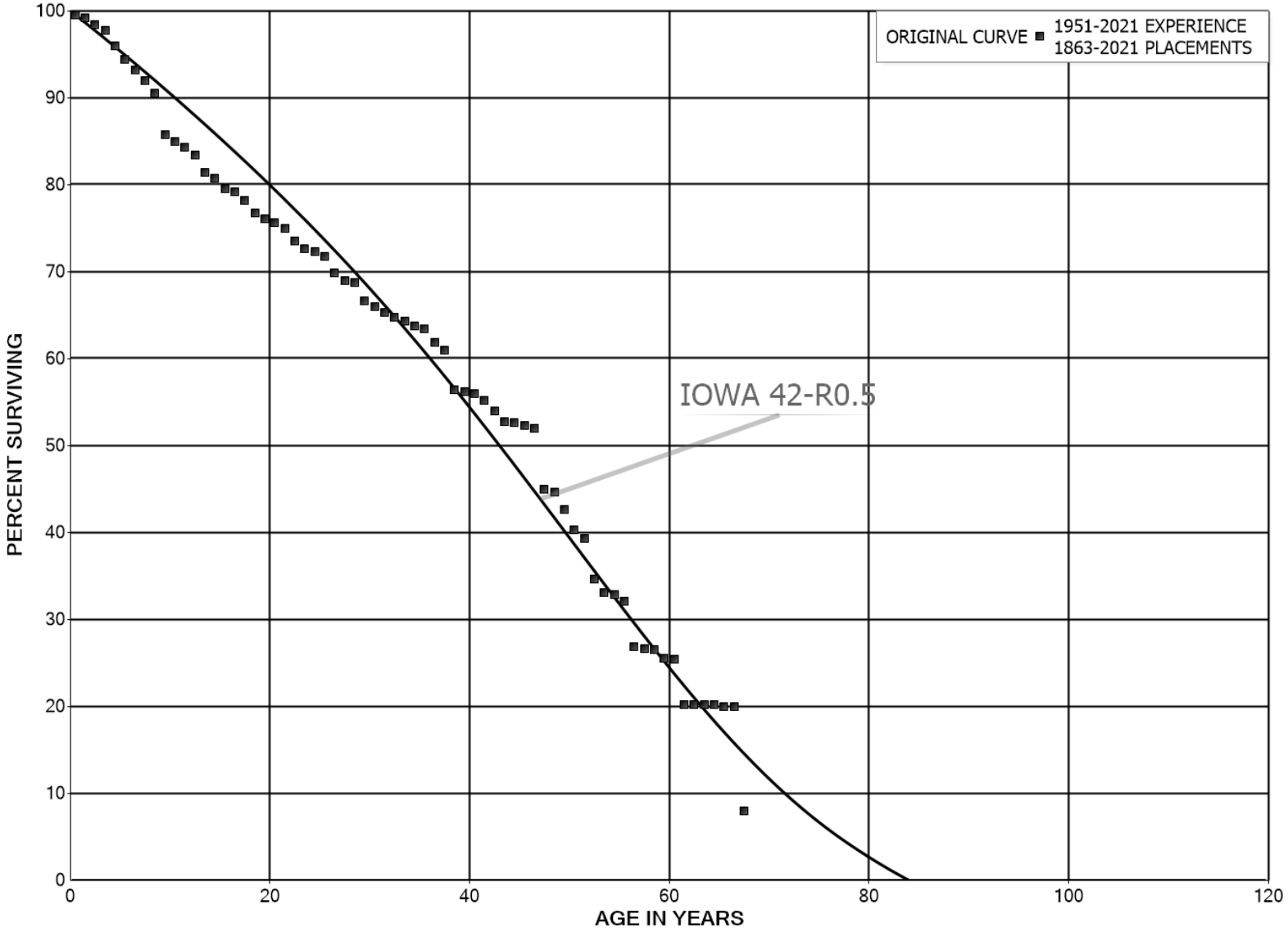
PLACEMENT BAND 1888-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	34,798		0.0000	1.0000	2.66
120.5	34,798	525	0.0151	0.9849	2.66
121.5	34,273		0.0000	1.0000	2.62
122.5	34,273		0.0000	1.0000	2.62
123.5	34,273		0.0000	1.0000	2.62
124.5	34,273		0.0000	1.0000	2.62
125.5	34,273	3,320	0.0969	0.9031	2.62
126.5	28,848		0.0000	1.0000	2.36
127.5	19,156		0.0000	1.0000	2.36
128.5	4,319		0.0000	1.0000	2.36
129.5	4,319		0.0000	1.0000	2.36
130.5	4,319		0.0000	1.0000	2.36
131.5	4,319		0.0000	1.0000	2.36
132.5	4,319		0.0000	1.0000	2.36
133.5					2.36

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 320.10 PURIFICATION SYSTEM - OTHER STRUCTURES
SMOOTH SURVIVOR CURVE



PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 320.20 PURIFICATION SYSTEM - CHEMICAL TREATMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 320.20 PURIFICATION SYSTEM - CHEMICAL TREATMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1863-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	103,300,320	483,202	0.0047	0.9953	100.00
0.5	93,827,307	350,106	0.0037	0.9963	99.53
1.5	85,861,980	634,968	0.0074	0.9926	99.16
2.5	81,945,421	578,549	0.0071	0.9929	98.43
3.5	78,766,953	1,432,156	0.0182	0.9818	97.73
4.5	71,528,004	1,191,921	0.0167	0.9833	95.96
5.5	66,163,292	856,906	0.0130	0.9870	94.36
6.5	63,128,753	778,637	0.0123	0.9877	93.13
7.5	62,113,420	1,015,041	0.0163	0.9837	91.99
8.5	61,052,686	3,243,004	0.0531	0.9469	90.48
9.5	56,083,436	501,779	0.0089	0.9911	85.68
10.5	54,548,958	435,064	0.0080	0.9920	84.91
11.5	53,590,576	516,496	0.0096	0.9904	84.23
12.5	52,949,412	1,273,557	0.0241	0.9759	83.42
13.5	49,983,109	447,350	0.0090	0.9910	81.41
14.5	47,194,515	666,851	0.0141	0.9859	80.69
15.5	45,856,536	241,815	0.0053	0.9947	79.55
16.5	42,363,740	534,870	0.0126	0.9874	79.13
17.5	39,910,976	734,034	0.0184	0.9816	78.13
18.5	37,213,865	314,057	0.0084	0.9916	76.69
19.5	36,828,955	221,224	0.0060	0.9940	76.04
20.5	34,153,619	292,624	0.0086	0.9914	75.59
21.5	33,887,189	625,128	0.0184	0.9816	74.94
22.5	26,124,206	323,295	0.0124	0.9876	73.56
23.5	23,736,229	123,608	0.0052	0.9948	72.65
24.5	21,545,800	173,102	0.0080	0.9920	72.27
25.5	19,348,563	499,767	0.0258	0.9742	71.69
26.5	14,210,948	170,347	0.0120	0.9880	69.84
27.5	13,309,699	54,321	0.0041	0.9959	69.00
28.5	13,209,564	404,411	0.0306	0.9694	68.72
29.5	8,509,727	89,771	0.0105	0.9895	66.61
30.5	7,718,388	76,015	0.0098	0.9902	65.91
31.5	7,221,917	63,247	0.0088	0.9912	65.26
32.5	6,437,774	43,167	0.0067	0.9933	64.69
33.5	6,286,281	55,666	0.0089	0.9911	64.26
34.5	5,515,707	26,556	0.0048	0.9952	63.69
35.5	3,521,045	86,835	0.0247	0.9753	63.38
36.5	2,457,948	33,687	0.0137	0.9863	61.82
37.5	2,159,491	163,128	0.0755	0.9245	60.97
38.5	1,925,310	6,374	0.0033	0.9967	56.36

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 320.20 PURIFICATION SYSTEM - CHEMICAL TREATMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1863-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,912,652	6,932	0.0036	0.9964	56.18
40.5	1,726,135	23,652	0.0137	0.9863	55.97
41.5	1,643,768	36,474	0.0222	0.9778	55.21
42.5	1,592,148	36,651	0.0230	0.9770	53.98
43.5	1,506,595	4,164	0.0028	0.9972	52.74
44.5	1,471,107	7,339	0.0050	0.9950	52.59
45.5	732,579	6,119	0.0084	0.9916	52.33
46.5	688,280	91,378	0.1328	0.8672	51.89
47.5	564,961	4,207	0.0074	0.9926	45.00
48.5	304,470	14,153	0.0465	0.9535	44.67
49.5	368,825	20,193	0.0547	0.9453	42.59
50.5	332,999	8,482	0.0255	0.9745	40.26
51.5	321,906	37,977	0.1180	0.8820	39.24
52.5	281,671	12,802	0.0455	0.9545	34.61
53.5	284,494	1,590	0.0056	0.9944	33.03
54.5	282,216	7,087	0.0251	0.9749	32.85
55.5	273,440	44,777	0.1638	0.8362	32.02
56.5	191,321	818	0.0043	0.9957	26.78
57.5	182,867	1,426	0.0078	0.9922	26.67
58.5	180,617	6,318	0.0350	0.9650	26.46
59.5	168,144	905	0.0054	0.9946	25.53
60.5	167,240	34,275	0.2049	0.7951	25.39
61.5	132,965	158	0.0012	0.9988	20.19
62.5	132,807	124	0.0009	0.9991	20.17
63.5	92,659	92	0.0010	0.9990	20.15
64.5	92,004	765	0.0083	0.9917	20.13
65.5	91,222	51	0.0006	0.9994	19.96
66.5	80,974	48,902	0.6039	0.3961	19.95
67.5	32,072	27	0.0008	0.9992	7.90
68.5	31,983	22	0.0007	0.9993	7.89
69.5	31,961	32	0.0010	0.9990	7.89
70.5	31,880	15,685	0.4920	0.5080	7.88
71.5	15,991	114	0.0071	0.9929	4.00
72.5	15,795	582	0.0368	0.9632	3.98
73.5	16,365	154	0.0094	0.9906	3.83
74.5	8,909		0.0000	1.0000	3.79
75.5	8,909		0.0000	1.0000	3.79
76.5	8,880	394	0.0444	0.9556	3.79
77.5	8,486		0.0000	1.0000	3.62
78.5	8,486	57	0.0067	0.9933	3.62

PENNSYLVANIA-AMERICAN WATER COMPANY

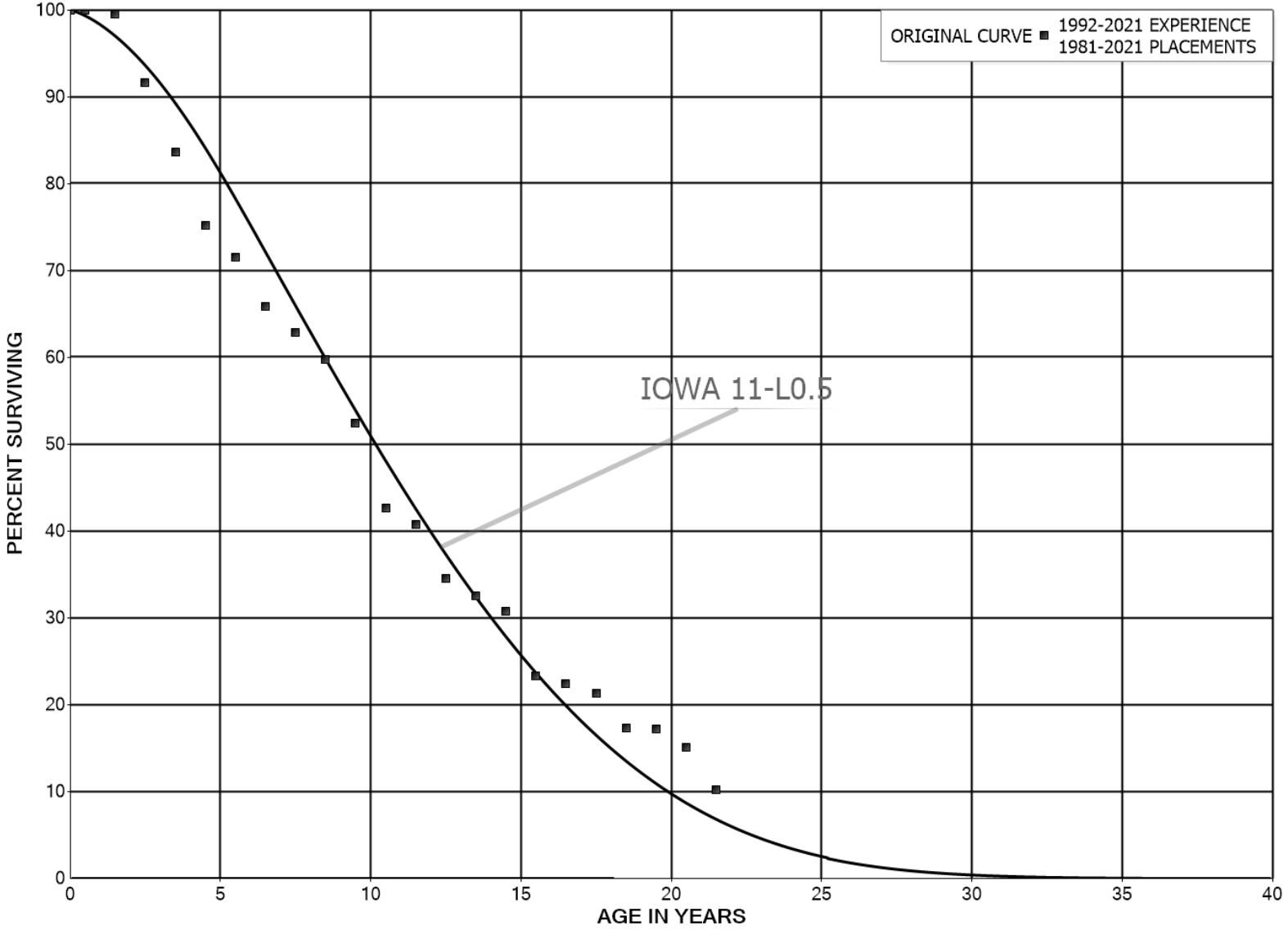
ACCOUNT 320.20 PURIFICATION SYSTEM - CHEMICAL TREATMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1863-2021 EXPERIENCE BAND 1951-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	8,429		0.0000	1.0000	3.60
80.5	8,429	4,740	0.5623	0.4377	3.60
81.5	3,681	1,687	0.4584	0.5416	1.58
82.5	1,994		0.0000	1.0000	0.85
83.5	1,994		0.0000	1.0000	0.85
84.5	4,936		0.0000	1.0000	0.85
85.5	4,936	1,458	0.2954	0.7046	0.85
86.5	3,444		0.0000	1.0000	0.60
87.5	4,337		0.0000	1.0000	0.60
88.5	4,337		0.0000	1.0000	0.60
89.5	4,337		0.0000	1.0000	0.60
90.5	4,337		0.0000	1.0000	0.60
91.5	4,337		0.0000	1.0000	0.60
92.5	4,291		0.0000	1.0000	0.60
93.5	3,835		0.0000	1.0000	0.60
94.5	3,835		0.0000	1.0000	0.60
95.5	3,835		0.0000	1.0000	0.60
96.5	3,835	1,964	0.5121	0.4879	0.60
97.5	1,871		0.0000	1.0000	0.29
98.5	1,871		0.0000	1.0000	0.29
99.5	1,871		0.0000	1.0000	0.29
100.5	1,871		0.0000	1.0000	0.29
101.5	1,871		0.0000	1.0000	0.29
102.5	1,871		0.0000	1.0000	0.29
103.5	1,871		0.0000	1.0000	0.29
104.5	893		0.0000	1.0000	0.29
105.5	893		0.0000	1.0000	0.29
106.5	893		0.0000	1.0000	0.29
107.5	893		0.0000	1.0000	0.29
108.5	893		0.0000	1.0000	0.29
109.5	893		0.0000	1.0000	0.29
110.5	893	893	1.0000		0.29
111.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 320.30 GRANULAR ACTIVATED CARBON
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

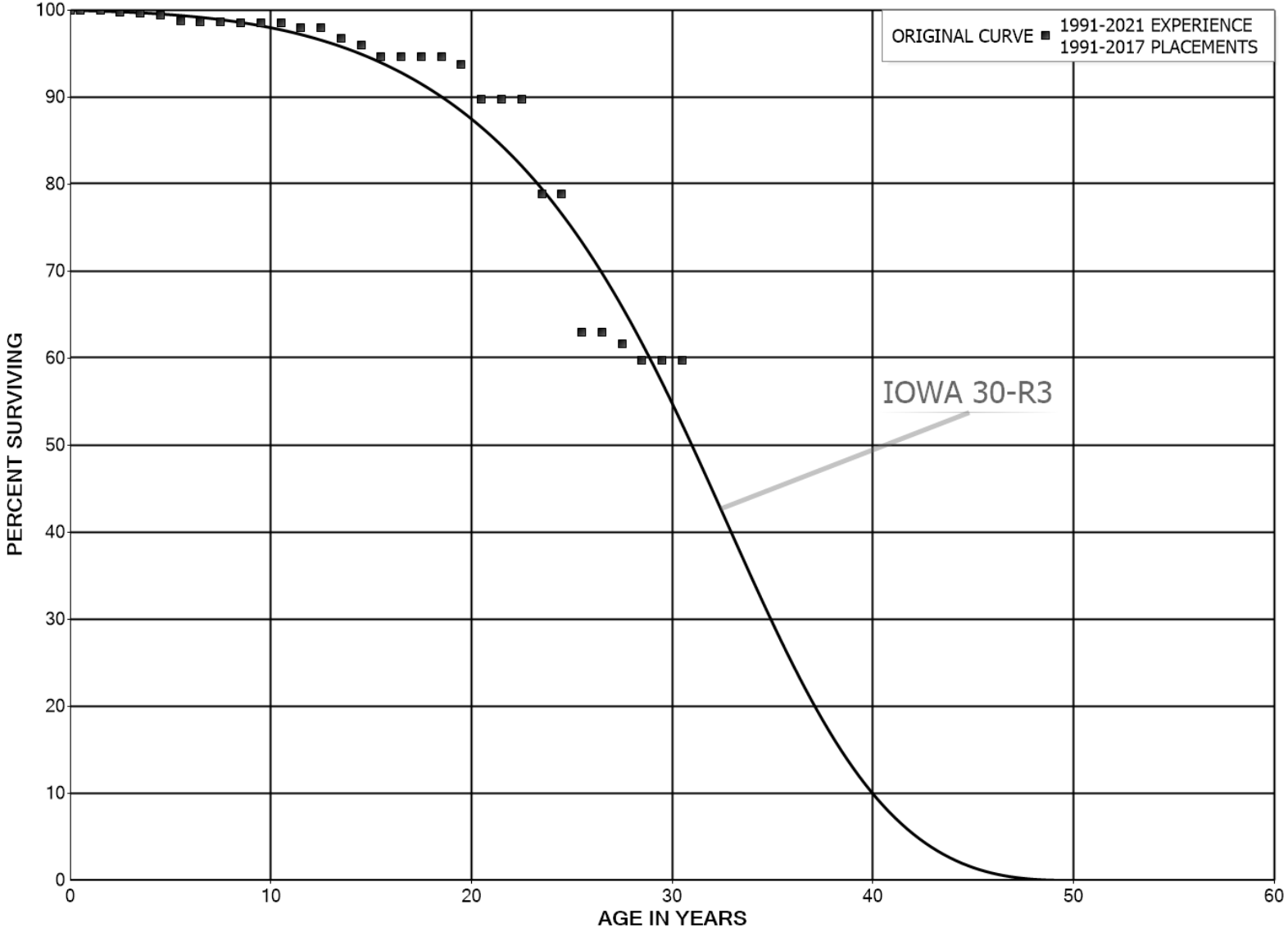
ACCOUNT 320.30 GRANULAR ACTIVATED CARBON

ORIGINAL LIFE TABLE

PLACEMENT BAND 1981-2021 EXPERIENCE BAND 1992-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	21,700,600		0.0000	1.0000	100.00
0.5	22,017,483	111,691	0.0051	0.9949	100.00
1.5	21,413,576	1,701,545	0.0795	0.9205	99.49
2.5	18,190,125	1,584,718	0.0871	0.9129	91.59
3.5	15,426,010	1,562,644	0.1013	0.8987	83.61
4.5	13,414,753	652,180	0.0486	0.9514	75.14
5.5	12,654,411	1,007,165	0.0796	0.9204	71.49
6.5	11,604,251	521,089	0.0449	0.9551	65.80
7.5	10,434,515	510,314	0.0489	0.9511	62.84
8.5	8,589,916	1,059,142	0.1233	0.8767	59.77
9.5	7,130,139	1,331,238	0.1867	0.8133	52.40
10.5	5,036,298	225,835	0.0448	0.9552	42.62
11.5	4,558,403	695,237	0.1525	0.8475	40.70
12.5	3,573,109	208,385	0.0583	0.9417	34.50
13.5	3,342,198	186,217	0.0557	0.9443	32.48
14.5	3,022,291	730,917	0.2418	0.7582	30.67
15.5	2,291,374	82,880	0.0362	0.9638	23.26
16.5	2,208,495	107,296	0.0486	0.9514	22.42
17.5	2,101,198	399,286	0.1900	0.8100	21.33
18.5	1,663,411	13,727	0.0083	0.9917	17.27
19.5	1,390,110	167,045	0.1202	0.8798	17.13
20.5	616,231	201,550	0.3271	0.6729	15.07
21.5	102,381	19,228	0.1878	0.8122	10.14
22.5	74,133	4,061	0.0548	0.9452	8.24
23.5	45,434		0.0000	1.0000	7.79
24.5	45,434		0.0000	1.0000	7.79
25.5	26,413		0.0000	1.0000	7.79
26.5	3,883		0.0000	1.0000	7.79
27.5	756		0.0000	1.0000	7.79
28.5	756		0.0000	1.0000	7.79
29.5					7.79

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 320.37 WASTE HANDLING AND TREATMENT - EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

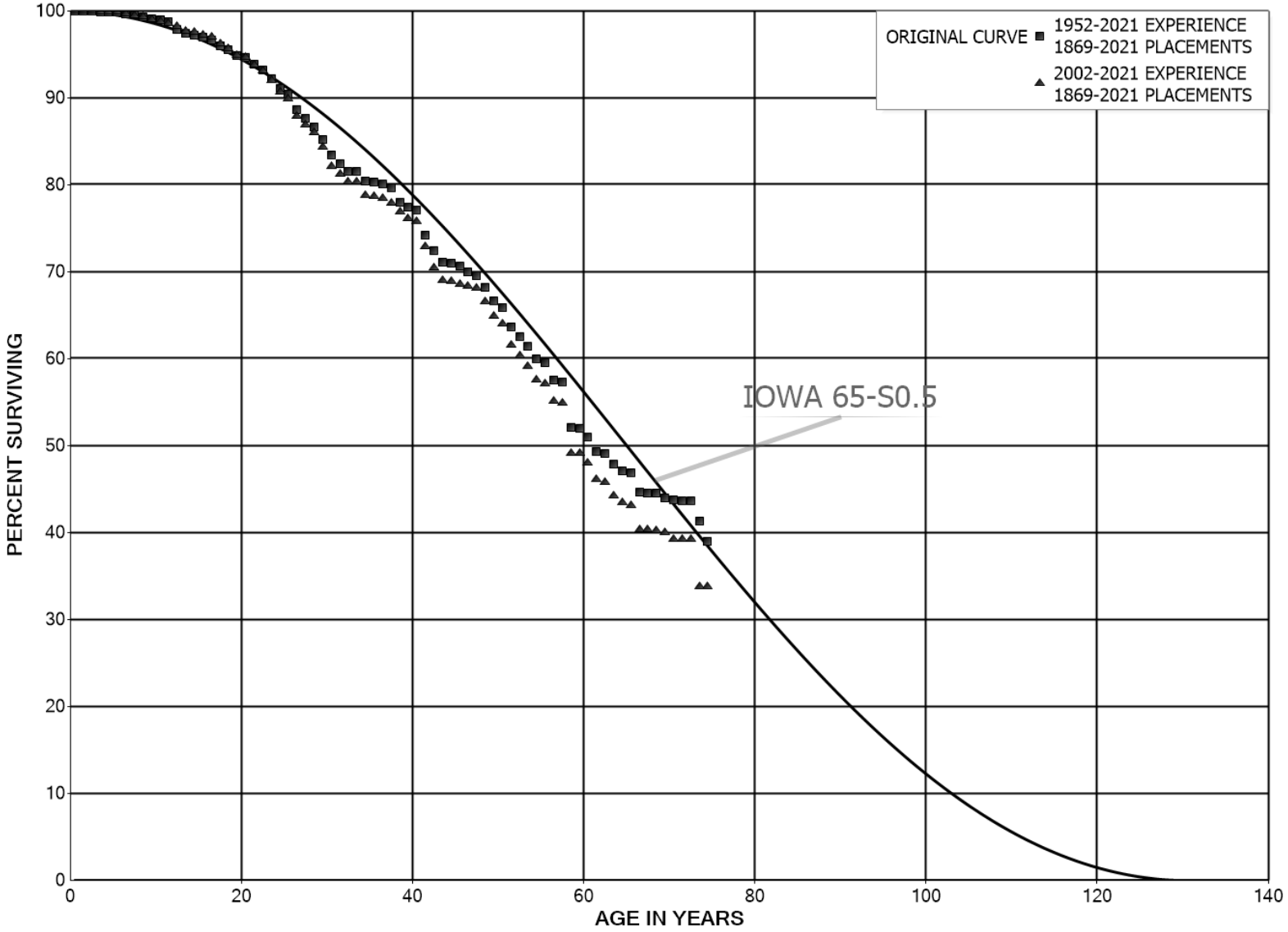
ACCOUNT 320.37 WASTE HANDLING AND TREATMENT - EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1991-2017 EXPERIENCE BAND 1991-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	19,006,097		0.0000	1.0000	100.00
0.5	19,808,345		0.0000	1.0000	100.00
1.5	19,694,391	62,713	0.0032	0.9968	100.00
2.5	19,631,678	13,581	0.0007	0.9993	99.68
3.5	19,618,097	34,040	0.0017	0.9983	99.61
4.5	19,567,564	151,154	0.0077	0.9923	99.44
5.5	15,708,167	3,717	0.0002	0.9998	98.67
6.5	14,677,044	6,570	0.0004	0.9996	98.65
7.5	14,084,787	7,736	0.0005	0.9995	98.60
8.5	14,062,029		0.0000	1.0000	98.55
9.5	14,062,029		0.0000	1.0000	98.55
10.5	14,062,029	79,882	0.0057	0.9943	98.55
11.5	13,982,147		0.0000	1.0000	97.99
12.5	13,982,147	184,934	0.0132	0.9868	97.99
13.5	13,797,213	108,847	0.0079	0.9921	96.69
14.5	13,688,366	189,606	0.0139	0.9861	95.93
15.5	13,498,760		0.0000	1.0000	94.60
16.5	13,484,768		0.0000	1.0000	94.60
17.5	13,430,677		0.0000	1.0000	94.60
18.5	13,174,404	118,008	0.0090	0.9910	94.60
19.5	13,053,234	556,639	0.0426	0.9574	93.76
20.5	12,428,235	5,609	0.0005	0.9995	89.76
21.5	11,650,202		0.0000	1.0000	89.72
22.5	10,023,841	1,215,126	0.1212	0.8788	89.72
23.5	8,808,715		0.0000	1.0000	78.84
24.5	8,215,739	1,661,349	0.2022	0.7978	78.84
25.5	6,554,390	0	0.0000	1.0000	62.90
26.5	6,554,390	131,805	0.0201	0.9799	62.90
27.5	6,422,585	197,294	0.0307	0.9693	61.63
28.5	6,225,291		0.0000	1.0000	59.74
29.5	6,225,291	6,467	0.0010	0.9990	59.74
30.5					59.68

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNTS 330.00 THROUGH 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 330.00 THROUGH 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1869-2021 EXPERIENCE BAND 1952-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	151,158,538		0.0000	1.0000	100.00
0.5	147,108,200	1,440	0.0000	1.0000	100.00
1.5	146,905,510	15,966	0.0001	0.9999	100.00
2.5	143,833,020	163,251	0.0011	0.9989	99.99
3.5	138,065,134	19,694	0.0001	0.9999	99.87
4.5	135,467,511	22,260	0.0002	0.9998	99.86
5.5	128,035,673	249,925	0.0020	0.9980	99.84
6.5	127,874,725	142,468	0.0011	0.9989	99.65
7.5	117,616,664	256,851	0.0022	0.9978	99.54
8.5	101,369,704	257,865	0.0025	0.9975	99.32
9.5	83,586,671	90,699	0.0011	0.9989	99.07
10.5	84,958,888	158,736	0.0019	0.9981	98.96
11.5	84,232,967	782,268	0.0093	0.9907	98.78
12.5	83,739,874	425,163	0.0051	0.9949	97.86
13.5	83,337,975	121,331	0.0015	0.9985	97.36
14.5	80,864,442	261,271	0.0032	0.9968	97.22
15.5	78,234,220	232,161	0.0030	0.9970	96.91
16.5	75,167,946	474,653	0.0063	0.9937	96.62
17.5	73,631,880	395,588	0.0054	0.9946	96.01
18.5	71,667,056	489,386	0.0068	0.9932	95.49
19.5	69,079,608	138,389	0.0020	0.9980	94.84
20.5	64,504,158	518,958	0.0080	0.9920	94.65
21.5	61,530,270	465,431	0.0076	0.9924	93.89
22.5	57,787,857	611,395	0.0106	0.9894	93.18
23.5	54,277,077	659,614	0.0122	0.9878	92.19
24.5	50,719,851	347,854	0.0069	0.9931	91.07
25.5	47,491,537	967,214	0.0204	0.9796	90.45
26.5	45,361,304	532,450	0.0117	0.9883	88.61
27.5	43,290,074	457,114	0.0106	0.9894	87.57
28.5	35,108,755	596,900	0.0170	0.9830	86.64
29.5	33,226,356	684,407	0.0206	0.9794	85.17
30.5	32,015,221	392,966	0.0123	0.9877	83.41
31.5	25,197,090	256,512	0.0102	0.9898	82.39
32.5	20,550,414	11,972	0.0006	0.9994	81.55
33.5	17,222,469	243,582	0.0141	0.9859	81.50
34.5	16,673,217	22,241	0.0013	0.9987	80.35
35.5	15,264,114	38,265	0.0025	0.9975	80.24
36.5	13,462,157	70,866	0.0053	0.9947	80.04
37.5	13,485,359	283,111	0.0210	0.9790	79.62
38.5	11,795,093	87,204	0.0074	0.9926	77.95

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 330.00 THROUGH 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1869-2021 EXPERIENCE BAND 1952-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	10,833,176	46,356	0.0043	0.9957	77.37
40.5	10,800,604	399,000	0.0369	0.9631	77.04
41.5	10,419,456	246,508	0.0237	0.9763	74.20
42.5	10,005,347	189,950	0.0190	0.9810	72.44
43.5	9,309,734	18,582	0.0020	0.9980	71.07
44.5	9,056,550	39,619	0.0044	0.9956	70.92
45.5	11,665,660	109,815	0.0094	0.9906	70.61
46.5	10,782,312	63,950	0.0059	0.9941	69.95
47.5	9,818,642	199,498	0.0203	0.9797	69.53
48.5	6,192,693	134,481	0.0217	0.9783	68.12
49.5	6,075,768	71,398	0.0118	0.9882	66.64
50.5	5,909,465	197,939	0.0335	0.9665	65.86
51.5	5,648,106	101,547	0.0180	0.9820	63.65
52.5	5,181,982	91,167	0.0176	0.9824	62.51
53.5	4,884,124	120,385	0.0246	0.9754	61.41
54.5	3,906,009	25,125	0.0064	0.9936	59.89
55.5	3,499,285	117,402	0.0336	0.9664	59.51
56.5	3,300,985	11,944	0.0036	0.9964	57.51
57.5	3,292,328	303,915	0.0923	0.9077	57.30
58.5	3,038,049	1,929	0.0006	0.9994	52.01
59.5	2,828,970	56,790	0.0201	0.9799	51.98
60.5	2,419,719	76,252	0.0315	0.9685	50.94
61.5	2,311,478	13,578	0.0059	0.9941	49.33
62.5	2,124,838	53,713	0.0253	0.9747	49.04
63.5	1,945,680	29,301	0.0151	0.9849	47.80
64.5	1,830,594	11,598	0.0063	0.9937	47.08
65.5	1,745,860	82,515	0.0473	0.9527	46.79
66.5	1,604,611	1,342	0.0008	0.9992	44.57
67.5	1,425,482	469	0.0003	0.9997	44.54
68.5	661,783	8,778	0.0133	0.9867	44.52
69.5	556,766	3,152	0.0057	0.9943	43.93
70.5	478,810	335	0.0007	0.9993	43.68
71.5	470,036	310	0.0007	0.9993	43.65
72.5	447,676	24,009	0.0536	0.9464	43.62
73.5	423,791	23,450	0.0553	0.9447	41.28
74.5	413,539	707	0.0017	0.9983	39.00
75.5	425,783	5,930	0.0139	0.9861	38.93
76.5	413,819	759	0.0018	0.9982	38.39
77.5	414,221		0.0000	1.0000	38.32
78.5	410,505	5,123	0.0125	0.9875	38.32

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 330.00 THROUGH 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1869-2021 EXPERIENCE BAND 1952-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	405,382	63,993	0.1579	0.8421	37.84
80.5	321,992		0.0000	1.0000	31.87
81.5	291,482		0.0000	1.0000	31.87
82.5	286,555	5,622	0.0196	0.9804	31.87
83.5	274,357	109	0.0004	0.9996	31.24
84.5	274,248	2,977	0.0109	0.9891	31.23
85.5	271,189	3,611	0.0133	0.9867	30.89
86.5	264,442		0.0000	1.0000	30.48
87.5	265,481	12,950	0.0488	0.9512	30.48
88.5	251,378	8,277	0.0329	0.9671	28.99
89.5	234,065	6,912	0.0295	0.9705	28.04
90.5	166,729	543	0.0033	0.9967	27.21
91.5	166,186	53	0.0003	0.9997	27.12
92.5	163,891		0.0000	1.0000	27.11
93.5	163,891	2,516	0.0154	0.9846	27.11
94.5	213,402	2	0.0000	1.0000	26.70
95.5	214,269	239	0.0011	0.9989	26.70
96.5	214,030	1,346	0.0063	0.9937	26.67
97.5	189,664	30	0.0002	0.9998	26.50
98.5	175,368		0.0000	1.0000	26.50
99.5	135,874	1,568	0.0115	0.9885	26.50
100.5	154,559	49	0.0003	0.9997	26.19
101.5	157,073	527	0.0034	0.9966	26.18
102.5	156,546	1,368	0.0087	0.9913	26.09
103.5	155,178	3,280	0.0211	0.9789	25.87
104.5	145,949		0.0000	1.0000	25.32
105.5	130,526	3,204	0.0245	0.9755	25.32
106.5	127,309		0.0000	1.0000	24.70
107.5	127,310	732	0.0057	0.9943	24.70
108.5	126,578	2,253	0.0178	0.9822	24.56
109.5	119,456	16,133	0.1351	0.8649	24.12
110.5	82,156	2,620	0.0319	0.9681	20.86
111.5	79,536	869	0.0109	0.9891	20.20
112.5	77,829		0.0000	1.0000	19.98
113.5	77,829	734	0.0094	0.9906	19.98
114.5	184,990	816	0.0044	0.9956	19.79
115.5	178,959		0.0000	1.0000	19.70
116.5	177,565		0.0000	1.0000	19.70
117.5	177,565		0.0000	1.0000	19.70
118.5	177,565		0.0000	1.0000	19.70

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 330.00 THROUGH 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1869-2021 EXPERIENCE BAND 1952-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	177,565		0.0000	1.0000	19.70
120.5	177,565		0.0000	1.0000	19.70
121.5	22,206		0.0000	1.0000	19.70
122.5	22,206		0.0000	1.0000	19.70
123.5	24,356		0.0000	1.0000	19.70
124.5	24,356		0.0000	1.0000	19.70
125.5	24,356		0.0000	1.0000	19.70
126.5	24,356		0.0000	1.0000	19.70
127.5	24,356	474	0.0194	0.9806	19.70
128.5	23,882		0.0000	1.0000	19.32
129.5	23,882		0.0000	1.0000	19.32
130.5	23,882	3,824	0.1601	0.8399	19.32
131.5	17,403		0.0000	1.0000	16.22
132.5	17,403		0.0000	1.0000	16.22
133.5	17,403		0.0000	1.0000	16.22
134.5	17,403		0.0000	1.0000	16.22
135.5	17,403		0.0000	1.0000	16.22
136.5	17,403	17,403	1.0000		16.22
137.5					

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 330.00 THROUGH 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1869-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	99,641,022		0.0000	1.0000	100.00
0.5	94,655,989		0.0000	1.0000	100.00
1.5	97,229,531	5,468	0.0001	0.9999	100.00
2.5	98,979,980	149,333	0.0015	0.9985	99.99
3.5	93,409,417	15,492	0.0002	0.9998	99.84
4.5	92,347,234	15,251	0.0002	0.9998	99.83
5.5	85,828,370	187,270	0.0022	0.9978	99.81
6.5	86,703,195	136,713	0.0016	0.9984	99.59
7.5	77,703,576	145,822	0.0019	0.9981	99.44
8.5	67,437,246	235,450	0.0035	0.9965	99.25
9.5	50,715,241	75,736	0.0015	0.9985	98.90
10.5	52,033,866	108,142	0.0021	0.9979	98.75
11.5	57,496,296	229,483	0.0040	0.9960	98.55
12.5	61,989,320	346,174	0.0056	0.9944	98.16
13.5	66,229,864	78,026	0.0012	0.9988	97.61
14.5	64,659,944	185,607	0.0029	0.9971	97.49
15.5	64,188,490	205,887	0.0032	0.9968	97.21
16.5	62,636,748	455,674	0.0073	0.9927	96.90
17.5	60,953,815	359,365	0.0059	0.9941	96.20
18.5	60,757,828	472,947	0.0078	0.9922	95.63
19.5	59,392,052	136,075	0.0023	0.9977	94.88
20.5	54,695,177	516,297	0.0094	0.9906	94.67
21.5	51,987,532	403,332	0.0078	0.9922	93.77
22.5	48,417,970	582,077	0.0120	0.9880	93.05
23.5	45,486,201	655,098	0.0144	0.9856	91.93
24.5	42,259,698	334,216	0.0079	0.9921	90.60
25.5	39,129,635	906,785	0.0232	0.9768	89.89
26.5	37,318,017	400,308	0.0107	0.9893	87.80
27.5	35,714,923	376,167	0.0105	0.9895	86.86
28.5	28,426,306	556,687	0.0196	0.9804	85.95
29.5	26,681,692	679,099	0.0255	0.9745	84.26
30.5	25,784,290	297,528	0.0115	0.9885	82.12
31.5	19,140,449	201,512	0.0105	0.9895	81.17
32.5	14,712,592	6,250	0.0004	0.9996	80.32
33.5	11,657,224	233,916	0.0201	0.9799	80.28
34.5	11,984,135	5,242	0.0004	0.9996	78.67
35.5	10,846,573	37,605	0.0035	0.9965	78.64
36.5	9,485,810	65,864	0.0069	0.9931	78.37
37.5	9,701,540	118,696	0.0122	0.9878	77.82
38.5	8,175,928	79,944	0.0098	0.9902	76.87

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 330.00 THROUGH 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1869-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	7,219,858	41,314	0.0057	0.9943	76.12
40.5	7,530,690	287,858	0.0382	0.9618	75.68
41.5	7,271,283	241,599	0.0332	0.9668	72.79
42.5	7,332,737	148,828	0.0203	0.9797	70.37
43.5	7,076,407	16,153	0.0023	0.9977	68.94
44.5	6,991,343	30,460	0.0044	0.9956	68.78
45.5	9,582,947	32,093	0.0033	0.9967	68.49
46.5	8,865,219	27,863	0.0031	0.9969	68.26
47.5	8,089,024	187,840	0.0232	0.9768	68.04
48.5	5,311,554	132,954	0.0250	0.9750	66.46
49.5	5,224,503	65,884	0.0126	0.9874	64.80
50.5	5,206,363	197,939	0.0380	0.9620	63.98
51.5	4,965,332	101,547	0.0205	0.9795	61.55
52.5	4,546,694	89,479	0.0197	0.9803	60.29
53.5	4,298,801	119,769	0.0279	0.9721	59.10
54.5	3,323,756	22,300	0.0067	0.9933	57.46
55.5	2,944,259	105,724	0.0359	0.9641	57.07
56.5	2,756,330	11,921	0.0043	0.9957	55.02
57.5	2,752,243	287,421	0.1044	0.8956	54.78
58.5	2,498,100	1,765	0.0007	0.9993	49.06
59.5	2,312,003	52,926	0.0229	0.9771	49.03
60.5	1,920,674	75,488	0.0393	0.9607	47.91
61.5	1,829,218	13,578	0.0074	0.9926	46.02
62.5	1,643,278	53,713	0.0327	0.9673	45.68
63.5	1,467,636	24,847	0.0169	0.9831	44.19
64.5	1,360,398	11,567	0.0085	0.9915	43.44
65.5	1,275,698	82,315	0.0645	0.9355	43.07
66.5	1,140,509	1,328	0.0012	0.9988	40.29
67.5	962,388	460	0.0005	0.9995	40.24
68.5	198,494	1,519	0.0077	0.9923	40.23
69.5	173,101	3,152	0.0182	0.9818	39.92
70.5	111,779		0.0000	1.0000	39.19
71.5	119,351		0.0000	1.0000	39.19
72.5	111,561	15,401	0.1381	0.8619	39.19
73.5	100,199	108	0.0011	0.9989	33.78
74.5	96,696		0.0000	1.0000	33.74
75.5	109,728		0.0000	1.0000	33.74
76.5	111,265	759	0.0068	0.9932	33.74
77.5	116,028		0.0000	1.0000	33.51
78.5	127,872	535	0.0042	0.9958	33.51

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 330.00 THROUGH 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1869-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	173,921	1,003	0.0058	0.9942	33.37
80.5	208,544		0.0000	1.0000	33.18
81.5	180,271		0.0000	1.0000	33.18
82.5	168,432	5,580	0.0331	0.9669	33.18
83.5	156,463		0.0000	1.0000	32.08
84.5	156,463	377	0.0024	0.9976	32.08
85.5	156,005	3,611	0.0231	0.9769	32.00
86.5	149,257		0.0000	1.0000	31.26
87.5	157,629	12,950	0.0822	0.9178	31.26
88.5	143,525	8,277	0.0577	0.9423	28.70
89.5	133,609		0.0000	1.0000	27.04
90.5	78,603	543	0.0069	0.9931	27.04
91.5	79,423	53	0.0007	0.9993	26.85
92.5	77,128		0.0000	1.0000	26.84
93.5	77,128	2,516	0.0326	0.9674	26.84
94.5	132,588	2	0.0000	1.0000	25.96
95.5	154,142	239	0.0015	0.9985	25.96
96.5	154,225	1,083	0.0070	0.9930	25.92
97.5	163,011	30	0.0002	0.9998	25.74
98.5	148,715		0.0000	1.0000	25.73
99.5	109,221	1,568	0.0144	0.9856	25.73
100.5	127,906	49	0.0004	0.9996	25.36
101.5	130,420	527	0.0040	0.9960	25.35
102.5	130,731	1,368	0.0105	0.9895	25.25
103.5	129,363	3,280	0.0254	0.9746	24.99
104.5	120,134		0.0000	1.0000	24.35
105.5	104,711	1,054	0.0101	0.9899	24.35
106.5	105,038		0.0000	1.0000	24.11
107.5	105,039	732	0.0070	0.9930	24.11
108.5	104,307	2,253	0.0216	0.9784	23.94
109.5	97,185	16,133	0.1660	0.8340	23.42
110.5	59,885	2,620	0.0438	0.9562	19.53
111.5	57,330	869	0.0152	0.9848	18.68
112.5	56,097		0.0000	1.0000	18.40
113.5	57,771	734	0.0127	0.9873	18.40
114.5	164,932	816	0.0049	0.9951	18.16
115.5	158,901		0.0000	1.0000	18.07
116.5	157,507		0.0000	1.0000	18.07
117.5	157,507		0.0000	1.0000	18.07
118.5	157,507		0.0000	1.0000	18.07

PENNSYLVANIA-AMERICAN WATER COMPANY

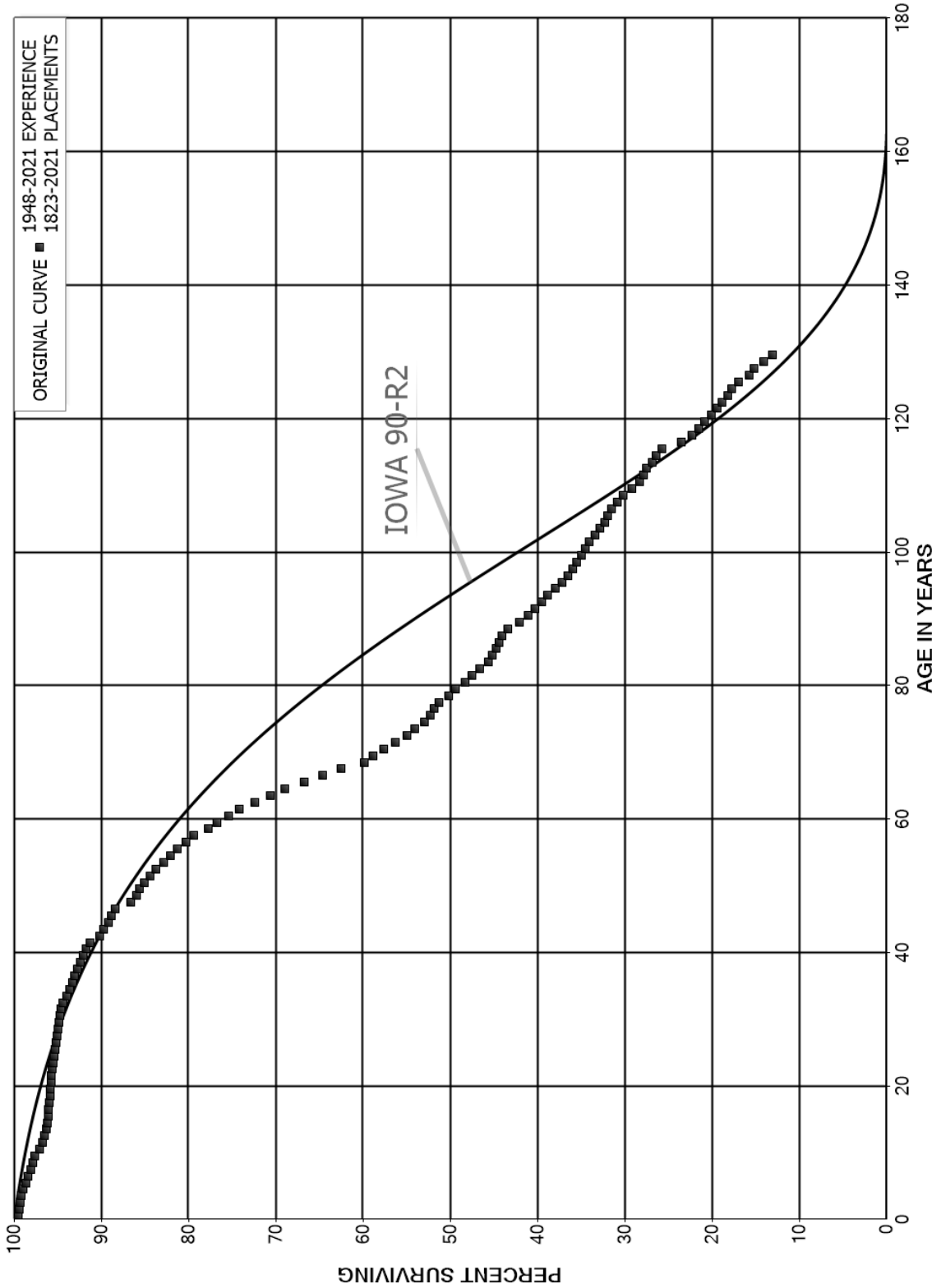
ACCOUNTS 330.00 THROUGH 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1869-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	157,507		0.0000	1.0000	18.07
120.5	157,507		0.0000	1.0000	18.07
121.5	4,803		0.0000	1.0000	18.07
122.5	4,803		0.0000	1.0000	18.07
123.5	6,953		0.0000	1.0000	18.07
124.5	24,356		0.0000	1.0000	18.07
125.5	24,356		0.0000	1.0000	18.07
126.5	24,356		0.0000	1.0000	18.07
127.5	24,356	474	0.0194	0.9806	18.07
128.5	23,882		0.0000	1.0000	17.72
129.5	23,882		0.0000	1.0000	17.72
130.5	23,882	3,824	0.1601	0.8399	17.72
131.5	17,403		0.0000	1.0000	14.88
132.5	17,403		0.0000	1.0000	14.88
133.5	17,403		0.0000	1.0000	14.88
134.5	17,403		0.0000	1.0000	14.88
135.5	17,403		0.0000	1.0000	14.88
136.5	17,403	17,403	1.0000		14.88
137.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 331.00 MAINS AND ACCESSORIES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 331.00 MAINS AND ACCESSORIES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1823-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,830,500,711	13,876,948	0.0049	0.9951	100.00
0.5	2,905,593,378	4,791,175	0.0016	0.9984	99.51
1.5	2,726,564,484	1,912,101	0.0007	0.9993	99.35
2.5	2,577,067,995	3,736,435	0.0014	0.9986	99.28
3.5	2,426,816,038	4,714,266	0.0019	0.9981	99.13
4.5	2,312,199,658	6,478,648	0.0028	0.9972	98.94
5.5	2,139,694,861	5,450,193	0.0025	0.9975	98.66
6.5	1,970,306,587	6,100,067	0.0031	0.9969	98.41
7.5	1,832,050,635	5,490,811	0.0030	0.9970	98.11
8.5	1,691,937,464	4,081,654	0.0024	0.9976	97.81
9.5	1,586,321,163	8,127,681	0.0051	0.9949	97.58
10.5	1,465,708,006	4,847,093	0.0033	0.9967	97.08
11.5	1,370,054,575	2,838,644	0.0021	0.9979	96.76
12.5	1,286,637,254	4,236,002	0.0033	0.9967	96.55
13.5	1,186,526,785	722,965	0.0006	0.9994	96.24
14.5	1,112,527,446	805,547	0.0007	0.9993	96.18
15.5	1,100,482,232	919,962	0.0008	0.9992	96.11
16.5	1,042,388,404	576,782	0.0006	0.9994	96.03
17.5	984,734,869	973,722	0.0010	0.9990	95.98
18.5	961,853,603	615,340	0.0006	0.9994	95.88
19.5	899,392,786	591,934	0.0007	0.9993	95.82
20.5	837,077,416	392,939	0.0005	0.9995	95.76
21.5	781,442,050	743,695	0.0010	0.9990	95.71
22.5	729,516,001	618,023	0.0008	0.9992	95.62
23.5	642,513,806	1,000,545	0.0016	0.9984	95.54
24.5	609,523,354	690,757	0.0011	0.9989	95.39
25.5	572,780,863	596,529	0.0010	0.9990	95.28
26.5	526,153,595	478,612	0.0009	0.9991	95.18
27.5	486,783,190	616,264	0.0013	0.9987	95.10
28.5	453,854,573	609,671	0.0013	0.9987	94.98
29.5	428,994,459	546,943	0.0013	0.9987	94.85
30.5	408,775,258	463,290	0.0011	0.9989	94.73
31.5	375,053,418	701,748	0.0019	0.9981	94.62
32.5	343,742,336	1,667,496	0.0049	0.9951	94.44
33.5	308,101,916	1,328,848	0.0043	0.9957	93.98
34.5	281,101,135	826,293	0.0029	0.9971	93.58
35.5	256,267,407	510,343	0.0020	0.9980	93.30
36.5	238,201,664	1,042,249	0.0044	0.9956	93.12
37.5	223,402,374	746,754	0.0033	0.9967	92.71
38.5	213,368,128	891,057	0.0042	0.9958	92.40

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 331.00 MAINS AND ACCESSORIES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1823-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	207,573,250	755,750	0.0036	0.9964	92.02
40.5	200,029,641	949,972	0.0047	0.9953	91.68
41.5	187,615,550	2,140,562	0.0114	0.9886	91.24
42.5	182,450,399	867,687	0.0048	0.9952	90.20
43.5	172,004,473	1,208,826	0.0070	0.9930	89.77
44.5	165,193,975	653,666	0.0040	0.9960	89.14
45.5	156,449,812	776,511	0.0050	0.9950	88.79
46.5	149,962,208	2,957,216	0.0197	0.9803	88.35
47.5	144,816,169	1,072,431	0.0074	0.9926	86.61
48.5	136,113,366	571,276	0.0042	0.9958	85.97
49.5	127,020,669	820,715	0.0065	0.9935	85.61
50.5	120,971,729	938,176	0.0078	0.9922	85.05
51.5	116,716,844	939,932	0.0081	0.9919	84.39
52.5	111,718,384	1,204,677	0.0108	0.9892	83.71
53.5	104,839,363	938,753	0.0090	0.9910	82.81
54.5	98,264,455	931,160	0.0095	0.9905	82.07
55.5	92,922,247	1,122,469	0.0121	0.9879	81.29
56.5	87,071,649	936,608	0.0108	0.9892	80.31
57.5	81,745,500	1,735,871	0.0212	0.9788	79.45
58.5	78,190,348	1,050,827	0.0134	0.9866	77.76
59.5	76,150,906	1,325,202	0.0174	0.9826	76.71
60.5	71,107,824	1,173,802	0.0165	0.9835	75.38
61.5	66,992,762	1,567,863	0.0234	0.9766	74.13
62.5	63,239,566	1,583,872	0.0250	0.9750	72.40
63.5	59,268,490	1,410,438	0.0238	0.9762	70.59
64.5	55,073,042	1,773,948	0.0322	0.9678	68.91
65.5	51,576,384	1,595,922	0.0309	0.9691	66.69
66.5	46,232,913	1,506,355	0.0326	0.9674	64.62
67.5	43,204,547	1,843,355	0.0427	0.9573	62.52
68.5	40,042,003	669,685	0.0167	0.9833	59.85
69.5	38,927,658	801,636	0.0206	0.9794	58.85
70.5	37,637,571	860,538	0.0229	0.9771	57.64
71.5	36,559,251	886,140	0.0242	0.9758	56.32
72.5	35,769,880	590,133	0.0165	0.9835	54.95
73.5	35,207,640	718,447	0.0204	0.9796	54.05
74.5	34,308,793	402,129	0.0117	0.9883	52.95
75.5	33,785,833	301,078	0.0089	0.9911	52.32
76.5	33,414,301	387,863	0.0116	0.9884	51.86
77.5	33,009,519	663,832	0.0201	0.9799	51.26
78.5	32,267,506	499,012	0.0155	0.9845	50.23

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 331.00 MAINS AND ACCESSORIES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1823-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	31,678,856	771,945	0.0244	0.9756	49.45
80.5	30,779,452	506,269	0.0164	0.9836	48.24
81.5	30,145,459	536,632	0.0178	0.9822	47.45
82.5	29,409,888	617,982	0.0210	0.9790	46.61
83.5	28,731,246	280,020	0.0097	0.9903	45.63
84.5	28,259,285	264,298	0.0094	0.9906	45.18
85.5	28,233,244	225,891	0.0080	0.9920	44.76
86.5	27,828,817	201,115	0.0072	0.9928	44.40
87.5	27,603,582	450,997	0.0163	0.9837	44.08
88.5	27,142,254	804,641	0.0296	0.9704	43.36
89.5	26,284,366	604,572	0.0230	0.9770	42.07
90.5	25,439,808	529,088	0.0208	0.9792	41.11
91.5	24,744,080	476,040	0.0192	0.9808	40.25
92.5	25,637,607	447,724	0.0175	0.9825	39.48
93.5	24,814,708	517,269	0.0208	0.9792	38.79
94.5	24,077,160	504,168	0.0209	0.9791	37.98
95.5	21,626,267	402,873	0.0186	0.9814	37.18
96.5	20,466,552	297,671	0.0145	0.9855	36.49
97.5	19,956,784	268,865	0.0135	0.9865	35.96
98.5	18,009,678	274,817	0.0153	0.9847	35.48
99.5	17,520,831	202,283	0.0115	0.9885	34.93
100.5	17,044,384	232,328	0.0136	0.9864	34.53
101.5	16,605,465	341,615	0.0206	0.9794	34.06
102.5	17,168,022	280,958	0.0164	0.9836	33.36
103.5	16,806,596	262,795	0.0156	0.9844	32.81
104.5	16,405,313	192,095	0.0117	0.9883	32.30
105.5	15,064,522	200,807	0.0133	0.9867	31.92
106.5	14,643,668	305,678	0.0209	0.9791	31.50
107.5	13,817,120	316,961	0.0229	0.9771	30.84
108.5	13,316,311	416,971	0.0313	0.9687	30.13
109.5	12,607,437	387,292	0.0307	0.9693	29.19
110.5	12,090,628	183,285	0.0152	0.9848	28.29
111.5	12,954,870	156,037	0.0120	0.9880	27.86
112.5	12,458,360	330,201	0.0265	0.9735	27.53
113.5	11,616,087	167,735	0.0144	0.9856	26.80
114.5	9,656,519	242,096	0.0251	0.9749	26.41
115.5	9,106,369	803,045	0.0882	0.9118	25.75
116.5	7,775,595	380,138	0.0489	0.9511	23.48
117.5	7,130,928	268,496	0.0377	0.9623	22.33
118.5	6,494,153	199,329	0.0307	0.9693	21.49

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 331.00 MAINS AND ACCESSORIES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1823-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	6,083,249	212,542	0.0349	0.9651	20.83
120.5	5,612,933	210,756	0.0375	0.9625	20.10
121.5	3,989,176	99,663	0.0250	0.9750	19.35
122.5	3,256,826	120,533	0.0370	0.9630	18.86
123.5	3,054,957	77,359	0.0253	0.9747	18.17
124.5	2,893,594	133,205	0.0460	0.9540	17.71
125.5	2,274,013	163,881	0.0721	0.9279	16.89
126.5	2,100,244	70,059	0.0334	0.9666	15.67
127.5	1,975,000	141,912	0.0719	0.9281	15.15
128.5	1,513,828	106,991	0.0707	0.9293	14.06
129.5	1,303,406	86,613	0.0665	0.9335	13.07
130.5	1,087,075	48,002	0.0442	0.9558	12.20
131.5	725,331	40,131	0.0553	0.9447	11.66
132.5	528,873	19,676	0.0372	0.9628	11.02
133.5	384,314	40,330	0.1049	0.8951	10.61
134.5	289,708	4,614	0.0159	0.9841	9.49
135.5	242,119	1,695	0.0070	0.9930	9.34
136.5	204,069	646	0.0032	0.9968	9.28
137.5	200,712	10,354	0.0516	0.9484	9.25
138.5	190,260	4,339	0.0228	0.9772	8.77
139.5	185,828	8,465	0.0456	0.9544	8.57
140.5	176,812	3,908	0.0221	0.9779	8.18
141.5	172,640	814	0.0047	0.9953	8.00
142.5	167,624	179	0.0011	0.9989	7.96
143.5	160,942	5,597	0.0348	0.9652	7.95
144.5	155,185	227	0.0015	0.9985	7.68
145.5	146,725	5,174	0.0353	0.9647	7.66
146.5	137,291	2,406	0.0175	0.9825	7.39
147.5	92,275	17,526	0.1899	0.8101	7.27
148.5	64,847	1,542	0.0238	0.9762	5.89
149.5	15,231	32	0.0021	0.9979	5.75
150.5	12,556		0.0000	1.0000	5.73
151.5	4,123		0.0000	1.0000	5.73
152.5	3,888		0.0000	1.0000	5.73
153.5	72		0.0000	1.0000	5.73
154.5	72		0.0000	1.0000	5.73
155.5	72		0.0000	1.0000	5.73
156.5	72		0.0000	1.0000	5.73
157.5	72		0.0000	1.0000	5.73
158.5	72		0.0000	1.0000	5.73

PENNSYLVANIA-AMERICAN WATER COMPANY

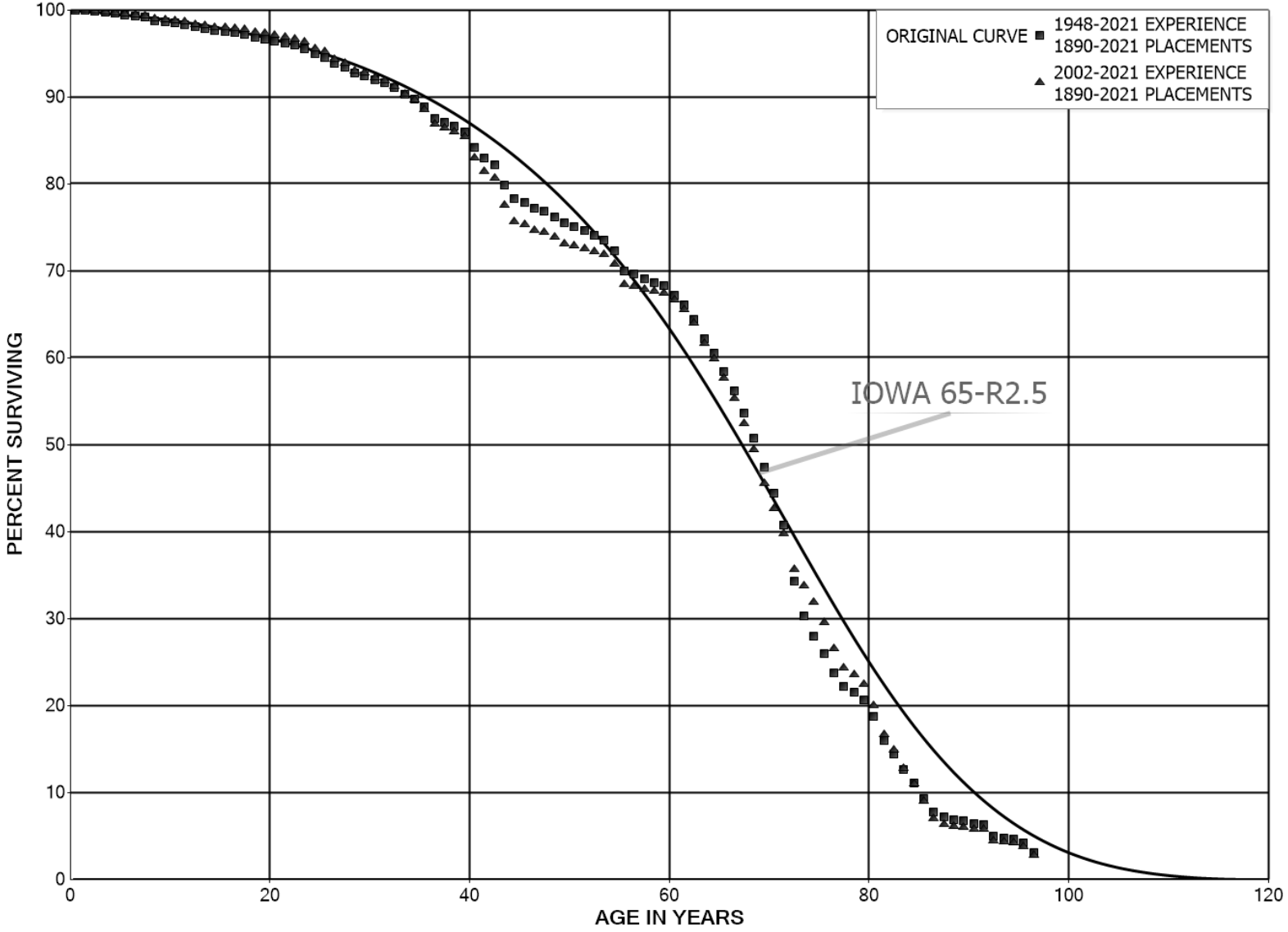
ACCOUNT 331.00 MAINS AND ACCESSORIES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1823-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
159.5	72		0.0000	1.0000	5.73
160.5	72		0.0000	1.0000	5.73
161.5	72		0.0000	1.0000	5.73
162.5	72		0.0000	1.0000	5.73
163.5	72		0.0000	1.0000	5.73
164.5	72		0.0000	1.0000	5.73
165.5	72		0.0000	1.0000	5.73
166.5	72		0.0000	1.0000	5.73
167.5	72		0.0000	1.0000	5.73
168.5	72		0.0000	1.0000	5.73
169.5	72		0.0000	1.0000	5.73
170.5	72		0.0000	1.0000	5.73
171.5	226	153	0.6794	0.3206	5.73
172.5	72		0.0000	1.0000	1.84
173.5	72		0.0000	1.0000	1.84
174.5	72		0.0000	1.0000	1.84
175.5	72		0.0000	1.0000	1.84
176.5	72		0.0000	1.0000	1.84
177.5	72		0.0000	1.0000	1.84
178.5					1.84

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 333.00 SERVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 333.00 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	648,157,956	75,207	0.0001	0.9999	100.00
0.5	633,845,071	386,414	0.0006	0.9994	99.99
1.5	603,561,029	776,086	0.0013	0.9987	99.93
2.5	578,709,479	640,173	0.0011	0.9989	99.80
3.5	555,290,029	705,734	0.0013	0.9987	99.69
4.5	530,651,101	726,348	0.0014	0.9986	99.56
5.5	503,563,396	926,666	0.0018	0.9982	99.43
6.5	481,212,145	582,661	0.0012	0.9988	99.24
7.5	461,112,148	1,619,187	0.0035	0.9965	99.12
8.5	438,109,082	645,964	0.0015	0.9985	98.77
9.5	416,866,758	674,731	0.0016	0.9984	98.63
10.5	398,265,742	605,850	0.0015	0.9985	98.47
11.5	379,864,016	1,073,016	0.0028	0.9972	98.32
12.5	355,804,597	598,457	0.0017	0.9983	98.04
13.5	328,968,939	742,195	0.0023	0.9977	97.88
14.5	314,786,836	477,910	0.0015	0.9985	97.66
15.5	315,317,603	506,788	0.0016	0.9984	97.51
16.5	296,503,155	623,017	0.0021	0.9979	97.35
17.5	294,619,400	974,880	0.0033	0.9967	97.15
18.5	290,605,150	617,617	0.0021	0.9979	96.82
19.5	260,889,455	639,351	0.0025	0.9975	96.62
20.5	243,727,091	564,687	0.0023	0.9977	96.38
21.5	229,476,246	568,644	0.0025	0.9975	96.16
22.5	215,515,049	903,714	0.0042	0.9958	95.92
23.5	167,561,788	1,080,709	0.0064	0.9936	95.52
24.5	156,383,046	624,371	0.0040	0.9960	94.90
25.5	145,013,796	1,067,145	0.0074	0.9926	94.52
26.5	133,678,521	547,879	0.0041	0.9959	93.83
27.5	125,947,449	1,016,780	0.0081	0.9919	93.44
28.5	115,599,642	361,796	0.0031	0.9969	92.69
29.5	108,666,118	545,967	0.0050	0.9950	92.40
30.5	102,090,777	374,613	0.0037	0.9963	91.93
31.5	93,439,506	577,796	0.0062	0.9938	91.60
32.5	85,711,844	700,475	0.0082	0.9918	91.03
33.5	78,124,870	516,291	0.0066	0.9934	90.29
34.5	71,342,647	675,371	0.0095	0.9905	89.69
35.5	66,356,120	960,389	0.0145	0.9855	88.84
36.5	61,814,633	329,136	0.0053	0.9947	87.56
37.5	58,164,604	287,294	0.0049	0.9951	87.09
38.5	54,932,398	422,397	0.0077	0.9923	86.66

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 333.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	51,888,637	1,088,377	0.0210	0.9790	85.99
40.5	48,201,579	726,553	0.0151	0.9849	84.19
41.5	44,729,015	389,384	0.0087	0.9913	82.92
42.5	41,397,915	1,181,755	0.0285	0.9715	82.20
43.5	38,347,627	746,659	0.0195	0.9805	79.85
44.5	36,131,864	216,826	0.0060	0.9940	78.30
45.5	34,785,505	270,595	0.0078	0.9922	77.83
46.5	33,721,640	165,614	0.0049	0.9951	77.22
47.5	32,197,731	259,416	0.0081	0.9919	76.84
48.5	29,715,371	290,537	0.0098	0.9902	76.22
49.5	27,762,840	136,535	0.0049	0.9951	75.48
50.5	25,963,042	173,627	0.0067	0.9933	75.11
51.5	24,346,039	177,285	0.0073	0.9927	74.60
52.5	22,834,535	170,342	0.0075	0.9925	74.06
53.5	21,434,149	356,832	0.0166	0.9834	73.51
54.5	20,093,617	632,840	0.0315	0.9685	72.29
55.5	18,516,503	113,127	0.0061	0.9939	70.01
56.5	17,354,733	124,755	0.0072	0.9928	69.58
57.5	16,520,669	107,054	0.0065	0.9935	69.08
58.5	15,565,189	86,665	0.0056	0.9944	68.63
59.5	14,528,444	221,552	0.0152	0.9848	68.25
60.5	13,407,058	231,502	0.0173	0.9827	67.21
61.5	12,177,820	296,048	0.0243	0.9757	66.05
62.5	10,889,395	382,095	0.0351	0.9649	64.44
63.5	9,563,283	261,513	0.0273	0.9727	62.18
64.5	8,592,430	291,042	0.0339	0.9661	60.48
65.5	7,581,255	286,839	0.0378	0.9622	58.43
66.5	6,625,456	312,203	0.0471	0.9529	56.22
67.5	5,819,588	306,311	0.0526	0.9474	53.57
68.5	5,021,656	335,932	0.0669	0.9331	50.75
69.5	4,136,198	258,725	0.0626	0.9374	47.36
70.5	3,462,516	290,167	0.0838	0.9162	44.40
71.5	2,883,597	456,514	0.1583	0.8417	40.68
72.5	2,145,637	246,156	0.1147	0.8853	34.24
73.5	1,646,959	128,555	0.0781	0.9219	30.31
74.5	1,331,926	95,346	0.0716	0.9284	27.94
75.5	1,144,779	96,232	0.0841	0.9159	25.94
76.5	1,025,322	68,190	0.0665	0.9335	23.76
77.5	945,563	27,831	0.0294	0.9706	22.18
78.5	900,929	36,681	0.0407	0.9593	21.53

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 333.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	815,470	77,749	0.0953	0.9047	20.65
80.5	687,693	102,124	0.1485	0.8515	18.68
81.5	512,715	47,977	0.0936	0.9064	15.91
82.5	428,423	52,220	0.1219	0.8781	14.42
83.5	374,172	48,807	0.1304	0.8696	12.66
84.5	292,578	44,503	0.1521	0.8479	11.01
85.5	258,752	44,423	0.1717	0.8283	9.34
86.5	214,329	16,697	0.0779	0.9221	7.73
87.5	199,933	7,438	0.0372	0.9628	7.13
88.5	193,079	5,071	0.0263	0.9737	6.87
89.5	188,008	6,632	0.0353	0.9647	6.68
90.5	181,376	3,968	0.0219	0.9781	6.45
91.5	177,572	37,090	0.2089	0.7911	6.31
92.5	140,482	6,621	0.0471	0.9529	4.99
93.5	133,861	3,603	0.0269	0.9731	4.76
94.5	130,555	12,329	0.0944	0.9056	4.63
95.5	118,226	30,479	0.2578	0.7422	4.19
96.5	87,747	12,173	0.1387	0.8613	3.11
97.5	85,048	16,432	0.1932	0.8068	2.68
98.5	68,616	15,945	0.2324	0.7676	2.16
99.5	52,672	3,801	0.0722	0.9278	1.66
100.5	48,870	14,250	0.2916	0.7084	1.54
101.5	34,620	15,624	0.4513	0.5487	1.09
102.5	18,996	4,642	0.2444	0.7556	0.60
103.5	14,354	5,641	0.3930	0.6070	0.45
104.5	8,713	3,613	0.4147	0.5853	0.27
105.5	5,099	1,515	0.2971	0.7029	0.16
106.5	3,584	1,285	0.3585	0.6415	0.11
107.5	2,299	726	0.3156	0.6844	0.07
108.5	1,574	487	0.3093	0.6907	0.05
109.5	1,087	583	0.5359	0.4641	0.03
110.5	504	23	0.0457	0.9543	0.02
111.5	481	106	0.2204	0.7796	0.02
112.5	375	44	0.1167	0.8833	0.01
113.5	332	42	0.1264	0.8736	0.01
114.5	290	10	0.0361	0.9639	0.01
115.5	279	229	0.8212	0.1788	0.01
116.5	50	42	0.8333	0.1667	0.00
117.5	8		0.0000	1.0000	0.00
118.5	8		0.0000	1.0000	0.00

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 333.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	8		0.0000	1.0000	0.00
120.5	8		0.0000	1.0000	0.00
121.5	8		0.0000	1.0000	0.00
122.5	8		0.0000	1.0000	0.00
123.5	8		0.0000	1.0000	0.00
124.5	8		0.0000	1.0000	0.00
125.5	8		0.0000	1.0000	0.00
126.5	8	0	0.0012	0.9988	0.00
127.5	8		0.0000	1.0000	0.00
128.5	8	8	1.0000		0.00
129.5					

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 333.00 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	413,121,752	15,980	0.0000	1.0000	100.00
0.5	401,837,181	106,259	0.0003	0.9997	100.00
1.5	385,283,509	441,283	0.0011	0.9989	99.97
2.5	373,467,803	355,745	0.0010	0.9990	99.86
3.5	398,581,107	434,312	0.0011	0.9989	99.76
4.5	383,339,602	428,391	0.0011	0.9989	99.65
5.5	366,660,233	555,727	0.0015	0.9985	99.54
6.5	354,197,273	272,990	0.0008	0.9992	99.39
7.5	341,527,821	1,345,599	0.0039	0.9961	99.31
8.5	327,084,189	371,314	0.0011	0.9989	98.92
9.5	311,993,201	393,794	0.0013	0.9987	98.81
10.5	298,965,717	364,870	0.0012	0.9988	98.68
11.5	288,463,180	800,680	0.0028	0.9972	98.56
12.5	272,094,847	297,223	0.0011	0.9989	98.29
13.5	252,476,865	488,232	0.0019	0.9981	98.18
14.5	244,863,897	192,603	0.0008	0.9992	97.99
15.5	249,870,848	229,192	0.0009	0.9991	97.92
16.5	234,713,666	357,686	0.0015	0.9985	97.83
17.5	236,003,494	713,221	0.0030	0.9970	97.68
18.5	234,808,754	352,629	0.0015	0.9985	97.38
19.5	207,785,095	375,813	0.0018	0.9982	97.24
20.5	193,377,654	376,461	0.0019	0.9981	97.06
21.5	181,938,651	386,025	0.0021	0.9979	96.87
22.5	170,838,518	736,572	0.0043	0.9957	96.67
23.5	125,448,696	943,733	0.0075	0.9925	96.25
24.5	117,062,950	483,409	0.0041	0.9959	95.52
25.5	107,884,018	959,447	0.0089	0.9911	95.13
26.5	98,087,004	421,122	0.0043	0.9957	94.28
27.5	92,080,928	891,608	0.0097	0.9903	93.88
28.5	84,224,699	266,076	0.0032	0.9968	92.97
29.5	79,420,495	445,516	0.0056	0.9944	92.68
30.5	74,599,018	279,790	0.0038	0.9962	92.16
31.5	67,516,907	483,146	0.0072	0.9928	91.81
32.5	61,214,811	604,530	0.0099	0.9901	91.15
33.5	55,006,692	406,446	0.0074	0.9926	90.25
34.5	49,463,166	575,784	0.0116	0.9884	89.59
35.5	45,662,795	858,027	0.0188	0.9812	88.54
36.5	42,326,703	231,933	0.0055	0.9945	86.88
37.5	39,756,633	181,583	0.0046	0.9954	86.40
38.5	37,484,882	289,280	0.0077	0.9923	86.01

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 333.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	35,542,875	990,805	0.0279	0.9721	85.35
40.5	32,936,975	624,797	0.0190	0.9810	82.97
41.5	30,661,572	295,338	0.0096	0.9904	81.39
42.5	28,522,417	1,091,916	0.0383	0.9617	80.61
43.5	26,492,626	661,126	0.0250	0.9750	77.52
44.5	25,290,866	114,139	0.0045	0.9955	75.59
45.5	25,020,630	195,334	0.0078	0.9922	75.25
46.5	24,934,256	90,964	0.0036	0.9964	74.66
47.5	24,318,981	189,057	0.0078	0.9922	74.39
48.5	22,670,264	229,125	0.0101	0.9899	73.81
49.5	21,520,639	70,006	0.0033	0.9967	73.06
50.5	20,463,754	87,270	0.0043	0.9957	72.83
51.5	19,444,583	90,989	0.0047	0.9953	72.51
52.5	18,510,040	86,325	0.0047	0.9953	72.18
53.5	17,615,944	282,021	0.0160	0.9840	71.84
54.5	16,662,129	553,045	0.0332	0.9668	70.69
55.5	15,322,567	44,092	0.0029	0.9971	68.34
56.5	14,304,034	60,582	0.0042	0.9958	68.15
57.5	13,574,144	55,783	0.0041	0.9959	67.86
58.5	12,702,052	39,199	0.0031	0.9969	67.58
59.5	11,797,492	124,028	0.0105	0.9895	67.37
60.5	10,896,713	191,065	0.0175	0.9825	66.66
61.5	9,844,696	234,447	0.0238	0.9762	65.49
62.5	8,762,536	324,351	0.0370	0.9630	63.93
63.5	7,625,943	212,525	0.0279	0.9721	61.57
64.5	6,828,920	250,636	0.0367	0.9633	59.85
65.5	5,969,117	240,530	0.0403	0.9597	57.65
66.5	5,138,079	269,982	0.0525	0.9475	55.33
67.5	4,441,118	257,825	0.0581	0.9419	52.42
68.5	3,684,334	286,985	0.0779	0.9221	49.38
69.5	2,881,213	184,573	0.0641	0.9359	45.53
70.5	2,338,653	156,820	0.0671	0.9329	42.62
71.5	1,941,930	200,908	0.1035	0.8965	39.76
72.5	1,484,351	78,415	0.0528	0.9472	35.65
73.5	1,222,237	68,768	0.0563	0.9437	33.76
74.5	1,056,188	77,877	0.0737	0.9263	31.86
75.5	884,540	91,753	0.1037	0.8963	29.51
76.5	788,290	64,027	0.0812	0.9188	26.45
77.5	742,394	25,966	0.0350	0.9650	24.30
78.5	772,443	34,292	0.0444	0.9556	23.45

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 333.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	703,294	76,783	0.1092	0.8908	22.41
80.5	590,557	99,665	0.1688	0.8312	19.97
81.5	433,051	46,790	0.1080	0.8920	16.60
82.5	355,282	48,781	0.1373	0.8627	14.80
83.5	305,993	44,906	0.1468	0.8532	12.77
84.5	234,817	43,109	0.1836	0.8164	10.90
85.5	196,138	43,371	0.2211	0.7789	8.90
86.5	168,296	15,371	0.0913	0.9087	6.93
87.5	158,571	5,726	0.0361	0.9639	6.30
88.5	157,798	2,952	0.0187	0.9813	6.07
89.5	160,516	5,488	0.0342	0.9658	5.96
90.5	159,380	1,805	0.0113	0.9887	5.75
91.5	160,832	36,027	0.2240	0.7760	5.69
92.5	126,866	5,042	0.0397	0.9603	4.41
93.5	123,090	3,254	0.0264	0.9736	4.24
94.5	120,172	11,724	0.0976	0.9024	4.13
95.5	109,259	29,895	0.2736	0.7264	3.72
96.5	80,994	11,792	0.1456	0.8544	2.70
97.5	72,654	16,213	0.2232	0.7768	2.31
98.5	67,850	15,920	0.2346	0.7654	1.79
99.5	51,930	3,710	0.0714	0.9286	1.37
100.5	48,220	14,094	0.2923	0.7077	1.28
101.5	34,313	15,624	0.4553	0.5447	0.90
102.5	18,689	4,642	0.2484	0.7516	0.49
103.5	14,047	5,641	0.4016	0.5984	0.37
104.5	8,406	3,613	0.4298	0.5702	0.22
105.5	4,793	1,515	0.3161	0.6839	0.13
106.5	3,278	1,285	0.3920	0.6080	0.09
107.5	1,993	726	0.3641	0.6359	0.05
108.5	1,267	487	0.3842	0.6158	0.03
109.5	780	583	0.7465	0.2535	0.02
110.5	198	23	0.1165	0.8835	0.01
111.5	481	106	0.2204	0.7796	0.00
112.5	375	44	0.1167	0.8833	0.00
113.5	332	42	0.1264	0.8736	0.00
114.5	290	10	0.0361	0.9639	0.00
115.5	279	229	0.8212	0.1788	0.00
116.5	50	42	0.8333	0.1667	0.00
117.5	8		0.0000	1.0000	0.00
118.5	8		0.0000	1.0000	0.00

PENNSYLVANIA-AMERICAN WATER COMPANY

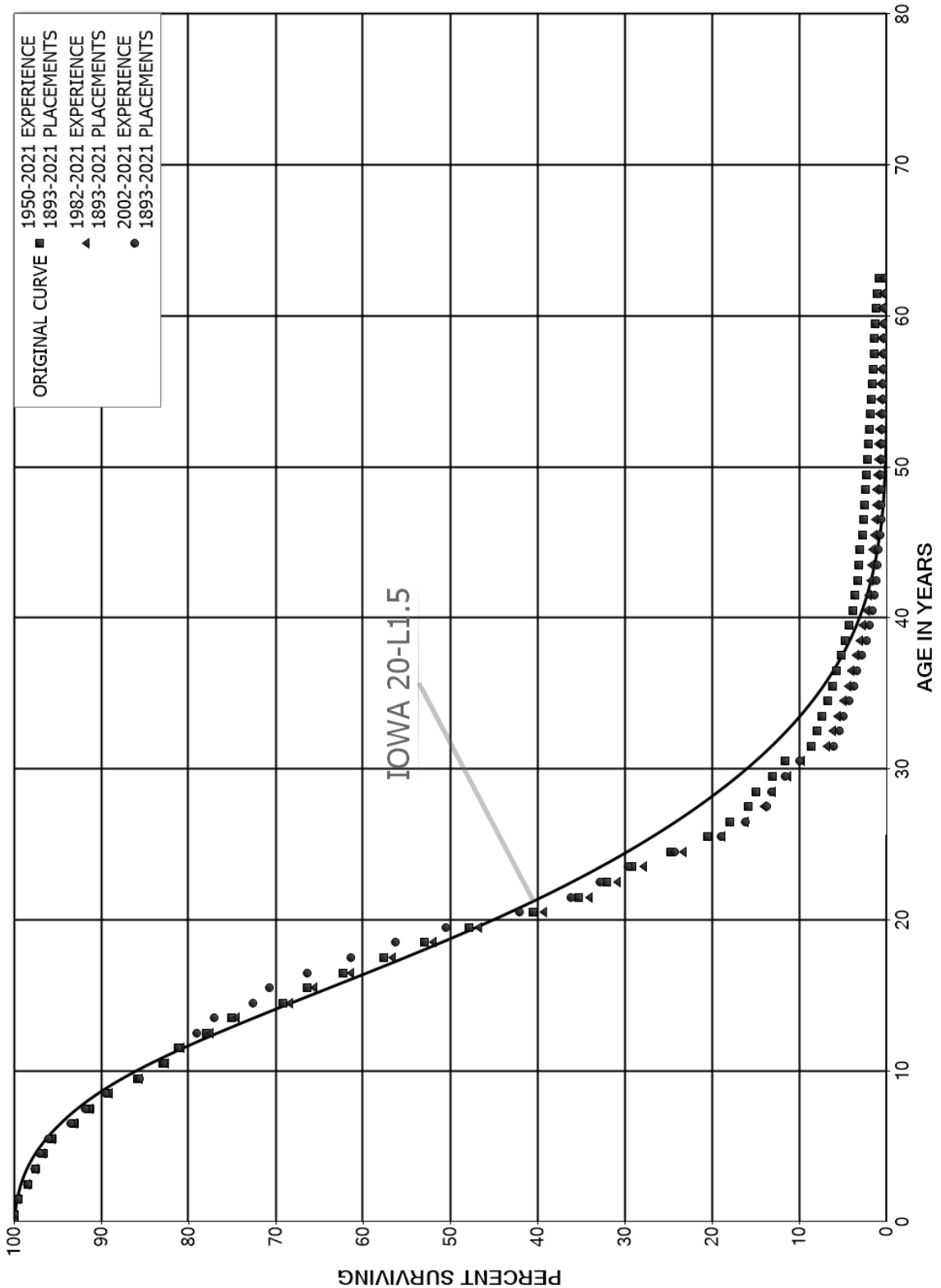
ACCOUNT 333.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1890-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	8		0.0000	1.0000	0.00
120.5	8		0.0000	1.0000	0.00
121.5	8		0.0000	1.0000	0.00
122.5	8		0.0000	1.0000	0.00
123.5	8		0.0000	1.0000	0.00
124.5	8		0.0000	1.0000	0.00
125.5	8		0.0000	1.0000	0.00
126.5	8	0	0.0012	0.9988	0.00
127.5	8		0.0000	1.0000	0.00
128.5	8	8	1.0000		0.00
129.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 334.00 METERS AND METER INSTALLATIONS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 334.00 METERS AND METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 1950-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	310,766,720	149,279	0.0005	0.9995	100.00
0.5	308,908,043	1,351,959	0.0044	0.9956	99.95
1.5	297,599,959	3,222,890	0.0108	0.9892	99.51
2.5	276,480,284	2,537,333	0.0092	0.9908	98.44
3.5	261,443,990	2,391,910	0.0091	0.9909	97.53
4.5	243,772,582	2,641,538	0.0108	0.9892	96.64
5.5	226,231,742	5,968,257	0.0264	0.9736	95.59
6.5	208,383,950	3,898,280	0.0187	0.9813	93.07
7.5	198,348,618	4,636,970	0.0234	0.9766	91.33
8.5	184,837,779	6,916,307	0.0374	0.9626	89.20
9.5	165,058,924	5,617,870	0.0340	0.9660	85.86
10.5	142,656,573	3,074,720	0.0216	0.9784	82.94
11.5	127,609,771	5,048,412	0.0396	0.9604	81.15
12.5	113,370,766	4,233,066	0.0373	0.9627	77.94
13.5	103,657,399	8,153,535	0.0787	0.9213	75.03
14.5	92,436,342	3,671,501	0.0397	0.9603	69.13
15.5	88,866,582	5,464,837	0.0615	0.9385	66.38
16.5	81,124,165	6,113,628	0.0754	0.9246	62.30
17.5	75,358,025	6,110,801	0.0811	0.9189	57.60
18.5	69,062,521	6,650,798	0.0963	0.9037	52.93
19.5	60,128,198	9,256,058	0.1539	0.8461	47.84
20.5	46,978,188	6,065,384	0.1291	0.8709	40.47
21.5	38,541,899	3,468,252	0.0900	0.9100	35.25
22.5	33,462,811	3,066,812	0.0916	0.9084	32.07
23.5	19,793,497	2,983,966	0.1508	0.8492	29.13
24.5	15,640,047	2,684,850	0.1717	0.8283	24.74
25.5	13,004,785	1,616,113	0.1243	0.8757	20.50
26.5	11,288,807	1,346,234	0.1193	0.8807	17.95
27.5	9,845,492	550,443	0.0559	0.9441	15.81
28.5	9,125,229	1,122,305	0.1230	0.8770	14.92
29.5	7,896,502	909,781	0.1152	0.8848	13.09
30.5	6,378,731	1,615,865	0.2533	0.7467	11.58
31.5	4,793,475	401,939	0.0839	0.9161	8.65
32.5	4,434,674	320,186	0.0722	0.9278	7.92
33.5	4,133,230	377,230	0.0913	0.9087	7.35
34.5	3,782,749	315,473	0.0834	0.9166	6.68
35.5	3,488,784	225,273	0.0646	0.9354	6.12
36.5	3,385,176	316,718	0.0936	0.9064	5.73
37.5	3,089,294	303,455	0.0982	0.9018	5.19
38.5	2,815,233	237,153	0.0842	0.9158	4.68

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 334.00 METERS AND METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 1950-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	2,589,573	258,552	0.0998	0.9002	4.29
40.5	2,358,822	175,480	0.0744	0.9256	3.86
41.5	2,243,016	162,474	0.0724	0.9276	3.57
42.5	2,083,893	90,521	0.0434	0.9566	3.31
43.5	1,997,630	88,253	0.0442	0.9558	3.17
44.5	1,911,938	189,495	0.0991	0.9009	3.03
45.5	1,755,570	73,318	0.0418	0.9582	2.73
46.5	1,690,928	82,839	0.0490	0.9510	2.61
47.5	1,613,858	55,519	0.0344	0.9656	2.49
48.5	1,531,576	79,593	0.0520	0.9480	2.40
49.5	1,460,826	78,565	0.0538	0.9462	2.28
50.5	1,382,879	79,001	0.0571	0.9429	2.15
51.5	1,304,174	52,384	0.0402	0.9598	2.03
52.5	1,252,160	104,471	0.0834	0.9166	1.95
53.5	1,147,832	59,089	0.0515	0.9485	1.79
54.5	1,088,770	50,085	0.0460	0.9540	1.69
55.5	1,038,761	64,528	0.0621	0.9379	1.62
56.5	974,725	61,705	0.0633	0.9367	1.52
57.5	913,037	50,214	0.0550	0.9450	1.42
58.5	862,823	60,683	0.0703	0.9297	1.34
59.5	802,170	58,142	0.0725	0.9275	1.25
60.5	744,067	76,975	0.1035	0.8965	1.16
61.5	667,055	97,611	0.1463	0.8537	1.04
62.5	569,445	75,741	0.1330	0.8670	0.89
63.5	493,704	55,578	0.1126	0.8874	0.77
64.5	437,941	64,788	0.1479	0.8521	0.68
65.5	373,251	55,471	0.1486	0.8514	0.58
66.5	317,759	37,477	0.1179	0.8821	0.49
67.5	280,151	26,879	0.0959	0.9041	0.44
68.5	253,204	31,766	0.1255	0.8745	0.39
69.5	221,186	26,781	0.1211	0.8789	0.34
70.5	194,021	30,621	0.1578	0.8422	0.30
71.5	163,063	37,102	0.2275	0.7725	0.26
72.5	126,077	23,369	0.1854	0.8146	0.20
73.5	103,282	20,223	0.1958	0.8042	0.16
74.5	83,083	14,577	0.1754	0.8246	0.13
75.5	68,507	9,409	0.1373	0.8627	0.11
76.5	59,109	12,690	0.2147	0.7853	0.09
77.5	46,831	12,997	0.2775	0.7225	0.07
78.5	33,834	4,993	0.1476	0.8524	0.05

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 334.00 METERS AND METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 1950-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	28,841	4,904	0.1700	0.8300	0.04
80.5	23,887	4,479	0.1875	0.8125	0.04
81.5	19,365	3,256	0.1681	0.8319	0.03
82.5	16,123	3,193	0.1980	0.8020	0.02
83.5	12,931	3,201	0.2475	0.7525	0.02
84.5	9,697	961	0.0991	0.9009	0.02
85.5	8,712	266	0.0306	0.9694	0.01
86.5	8,463	516	0.0610	0.9390	0.01
87.5	7,947	101	0.0127	0.9873	0.01
88.5	7,846	717	0.0914	0.9086	0.01
89.5	7,128	195	0.0273	0.9727	0.01
90.5	6,934	53	0.0077	0.9923	0.01
91.5	7,279	103	0.0141	0.9859	0.01
92.5	7,176	276	0.0384	0.9616	0.01
93.5	6,900	356	0.0516	0.9484	0.01
94.5	6,544	31	0.0048	0.9952	0.01
95.5	6,513	134	0.0206	0.9794	0.01
96.5	6,379	256	0.0401	0.9599	0.01
97.5	6,123	462	0.0754	0.9246	0.01
98.5	5,661	413	0.0730	0.9270	0.01
99.5	5,248	546	0.1041	0.8959	0.01
100.5	4,702	108	0.0230	0.9770	0.01
101.5	4,593	399	0.0869	0.9131	0.01
102.5	4,194	503	0.1198	0.8802	0.01
103.5	3,692	217	0.0588	0.9412	0.01
104.5	3,475	342	0.0986	0.9014	0.01
105.5	3,132		0.0000	1.0000	0.00
106.5	3,132	288	0.0921	0.9079	0.00
107.5	2,844	455	0.1601	0.8399	0.00
108.5	2,389	176	0.0737	0.9263	0.00
109.5	2,212	119	0.0539	0.9461	0.00
110.5	2,093	1,814	0.8667	0.1333	0.00
111.5	279	65	0.2328	0.7672	0.00
112.5	214	116	0.5419	0.4581	0.00
113.5	98	4	0.0361	0.9639	0.00
114.5	95	45	0.4746	0.5254	0.00
115.5	50	33	0.6740	0.3260	0.00
116.5	16	2	0.0957	0.9043	0.00
117.5	15	15	1.0000		0.00
118.5					

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 334.00 METERS AND METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 1982-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	301,243,651	141,141	0.0005	0.9995	100.00
0.5	300,214,378	1,335,138	0.0044	0.9956	99.95
1.5	289,611,544	3,215,892	0.0111	0.9889	99.51
2.5	269,040,908	2,527,593	0.0094	0.9906	98.40
3.5	254,467,290	2,381,051	0.0094	0.9906	97.48
4.5	237,262,761	2,634,236	0.0111	0.9889	96.57
5.5	220,147,230	5,959,425	0.0271	0.9729	95.49
6.5	202,674,746	3,889,416	0.0192	0.9808	92.91
7.5	192,900,649	4,630,183	0.0240	0.9760	91.13
8.5	179,626,803	6,906,634	0.0384	0.9616	88.94
9.5	160,144,140	5,611,331	0.0350	0.9650	85.52
10.5	138,002,643	3,065,326	0.0222	0.9778	82.52
11.5	123,149,794	5,040,163	0.0409	0.9591	80.69
12.5	109,262,867	4,227,128	0.0387	0.9613	77.39
13.5	99,815,879	8,142,590	0.0816	0.9184	74.39
14.5	88,791,893	3,663,844	0.0413	0.9587	68.33
15.5	85,494,483	5,457,882	0.0638	0.9362	65.51
16.5	78,339,149	6,104,197	0.0779	0.9221	61.32
17.5	72,810,733	6,103,282	0.0838	0.9162	56.55
18.5	66,651,442	6,635,031	0.0995	0.9005	51.81
19.5	57,895,493	9,245,847	0.1597	0.8403	46.65
20.5	44,839,566	6,054,321	0.1350	0.8650	39.20
21.5	36,494,881	3,461,199	0.0948	0.9052	33.91
22.5	31,536,368	3,060,126	0.0970	0.9030	30.69
23.5	17,972,779	2,976,035	0.1656	0.8344	27.71
24.5	13,978,888	2,677,564	0.1915	0.8085	23.12
25.5	11,469,092	1,608,405	0.1402	0.8598	18.69
26.5	9,858,616	1,335,700	0.1355	0.8645	16.07
27.5	8,535,728	546,238	0.0640	0.9360	13.90
28.5	7,918,897	1,117,857	0.1412	0.8588	13.01
29.5	6,731,399	905,671	0.1345	0.8655	11.17
30.5	5,286,067	1,611,898	0.3049	0.6951	9.67
31.5	3,754,747	395,911	0.1054	0.8946	6.72
32.5	3,427,379	315,065	0.0919	0.9081	6.01
33.5	3,173,091	371,632	0.1171	0.8829	5.46
34.5	2,844,212	311,873	0.1097	0.8903	4.82
35.5	2,575,906	220,637	0.0857	0.9143	4.29
36.5	2,470,079	311,968	0.1263	0.8737	3.92
37.5	2,168,190	297,162	0.1371	0.8629	3.43
38.5	1,881,752	230,476	0.1225	0.8775	2.96

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 334.00 METERS AND METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 1982-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,668,273	249,374	0.1495	0.8505	2.60
40.5	1,482,237	168,034	0.1134	0.8866	2.21
41.5	1,353,673	157,450	0.1163	0.8837	1.96
42.5	1,223,139	83,617	0.0684	0.9316	1.73
43.5	1,157,366	81,788	0.0707	0.9293	1.61
44.5	1,095,724	185,064	0.1689	0.8311	1.50
45.5	960,734	64,843	0.0675	0.9325	1.24
46.5	918,041	75,837	0.0826	0.9174	1.16
47.5	869,269	30,483	0.0351	0.9649	1.06
48.5	825,167	54,473	0.0660	0.9340	1.03
49.5	784,828	69,056	0.0880	0.9120	0.96
50.5	744,049	54,356	0.0731	0.9269	0.88
51.5	722,906	43,972	0.0608	0.9392	0.81
52.5	734,007	82,515	0.1124	0.8876	0.76
53.5	696,958	48,318	0.0693	0.9307	0.68
54.5	693,940	42,933	0.0619	0.9381	0.63
55.5	680,524	57,022	0.0838	0.9162	0.59
56.5	657,745	55,162	0.0839	0.9161	0.54
57.5	640,912	45,202	0.0705	0.9295	0.50
58.5	636,933	58,676	0.0921	0.9079	0.46
59.5	611,544	55,364	0.0905	0.9095	0.42
60.5	570,522	73,373	0.1286	0.8714	0.38
61.5	519,726	94,541	0.1819	0.8181	0.33
62.5	435,823	71,201	0.1634	0.8366	0.27
63.5	372,765	51,119	0.1371	0.8629	0.23
64.5	338,295	61,677	0.1823	0.8177	0.20
65.5	291,004	53,111	0.1825	0.8175	0.16
66.5	251,218	34,677	0.1380	0.8620	0.13
67.5	228,952	24,701	0.1079	0.8921	0.11
68.5	214,292	30,112	0.1405	0.8595	0.10
69.5	192,990	25,833	0.1339	0.8661	0.09
70.5	179,574	30,066	0.1674	0.8326	0.07
71.5	153,789	36,789	0.2392	0.7608	0.06
72.5	118,301	22,950	0.1940	0.8060	0.05
73.5	97,586	20,026	0.2052	0.7948	0.04
74.5	77,826	14,571	0.1872	0.8128	0.03
75.5	64,350	9,299	0.1445	0.8555	0.02
76.5	55,499	12,503	0.2253	0.7747	0.02
77.5	43,473	12,864	0.2959	0.7041	0.02
78.5	30,672	4,961	0.1617	0.8383	0.01

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 334.00 METERS AND METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 1982-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	26,017	4,904	0.1885	0.8115	0.01
80.5	21,092	4,479	0.2123	0.7877	0.01
81.5	18,985	3,247	0.1710	0.8290	0.01
82.5	15,752	3,193	0.2027	0.7973	0.01
83.5	12,560	3,188	0.2538	0.7462	0.00
84.5	9,356	961	0.1027	0.8973	0.00
85.5	8,372	240	0.0287	0.9713	0.00
86.5	8,148	485	0.0595	0.9405	0.00
87.5	7,663	101	0.0131	0.9869	0.00
88.5	7,846	717	0.0914	0.9086	0.00
89.5	7,128	195	0.0273	0.9727	0.00
90.5	6,934	53	0.0077	0.9923	0.00
91.5	7,279	103	0.0141	0.9859	0.00
92.5	7,176	276	0.0384	0.9616	0.00
93.5	6,900	356	0.0516	0.9484	0.00
94.5	6,544	31	0.0048	0.9952	0.00
95.5	6,513	134	0.0206	0.9794	0.00
96.5	6,379	256	0.0401	0.9599	0.00
97.5	6,123	462	0.0754	0.9246	0.00
98.5	5,661	413	0.0730	0.9270	0.00
99.5	5,248	546	0.1041	0.8959	0.00
100.5	4,702	108	0.0230	0.9770	0.00
101.5	4,593	399	0.0869	0.9131	0.00
102.5	4,194	503	0.1198	0.8802	0.00
103.5	3,692	217	0.0588	0.9412	0.00
104.5	3,475	342	0.0986	0.9014	0.00
105.5	3,132		0.0000	1.0000	0.00
106.5	3,132	288	0.0921	0.9079	0.00
107.5	2,844	455	0.1601	0.8399	0.00
108.5	2,389	176	0.0737	0.9263	0.00
109.5	2,212	119	0.0539	0.9461	0.00
110.5	2,093	1,814	0.8667	0.1333	0.00
111.5	279	65	0.2328	0.7672	0.00
112.5	214	116	0.5419	0.4581	0.00
113.5	98	4	0.0361	0.9639	0.00
114.5	95	45	0.4746	0.5254	0.00
115.5	50	33	0.6740	0.3260	0.00
116.5	16	2	0.0957	0.9043	0.00
117.5	15	15	1.0000		0.00
118.5					

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 334.00 METERS AND METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	208,955,906	101,461	0.0005	0.9995	100.00
0.5	207,554,808	981,632	0.0047	0.9953	99.95
1.5	202,014,232	2,095,799	0.0104	0.9896	99.48
2.5	189,122,036	1,641,865	0.0087	0.9913	98.45
3.5	194,014,092	1,056,711	0.0054	0.9946	97.59
4.5	184,288,996	1,861,494	0.0101	0.9899	97.06
5.5	172,315,468	4,566,321	0.0265	0.9735	96.08
6.5	159,166,303	2,859,766	0.0180	0.9820	93.53
7.5	152,263,046	3,929,585	0.0258	0.9742	91.85
8.5	142,800,122	6,188,027	0.0433	0.9567	89.48
9.5	126,719,951	4,063,986	0.0321	0.9679	85.61
10.5	110,627,916	2,245,712	0.0203	0.9797	82.86
11.5	99,192,548	2,629,101	0.0265	0.9735	81.18
12.5	91,840,942	2,337,131	0.0254	0.9746	79.03
13.5	87,465,650	5,032,948	0.0575	0.9425	77.02
14.5	80,827,760	2,015,900	0.0249	0.9751	72.58
15.5	79,117,449	4,843,391	0.0612	0.9388	70.77
16.5	72,231,636	5,543,606	0.0767	0.9233	66.44
17.5	67,238,595	5,558,790	0.0827	0.9173	61.34
18.5	61,659,079	6,284,076	0.1019	0.8981	56.27
19.5	53,211,229	8,920,590	0.1676	0.8324	50.54
20.5	40,517,295	5,670,305	0.1399	0.8601	42.06
21.5	32,636,067	3,042,265	0.0932	0.9068	36.18
22.5	28,043,735	2,700,129	0.0963	0.9037	32.80
23.5	14,840,502	2,674,054	0.1802	0.8198	29.65
24.5	11,058,978	2,415,772	0.2184	0.7816	24.30
25.5	8,772,346	1,316,860	0.1501	0.8499	19.00
26.5	7,335,194	1,104,167	0.1505	0.8495	16.14
27.5	6,127,466	251,106	0.0410	0.9590	13.71
28.5	5,739,204	653,484	0.1139	0.8861	13.15
29.5	4,987,283	706,117	0.1416	0.8584	11.65
30.5	3,707,993	1,454,844	0.3924	0.6076	10.00
31.5	2,276,410	251,475	0.1105	0.8895	6.08
32.5	2,051,568	190,840	0.0930	0.9070	5.41
33.5	1,888,198	235,293	0.1246	0.8754	4.90
34.5	1,674,987	214,280	0.1279	0.8721	4.29
35.5	1,477,289	140,063	0.0948	0.9052	3.74
36.5	1,395,007	228,390	0.1637	0.8363	3.39
37.5	1,194,538	217,246	0.1819	0.8181	2.83
38.5	1,003,454	157,257	0.1567	0.8433	2.32

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 334.00 METERS AND METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	885,108	152,473	0.1723	0.8277	1.96
40.5	763,515	108,109	0.1416	0.8584	1.62
41.5	770,058	121,720	0.1581	0.8419	1.39
42.5	679,606	58,432	0.0860	0.9140	1.17
43.5	641,600	56,446	0.0880	0.9120	1.07
44.5	624,402	166,420	0.2665	0.7335	0.98
45.5	551,925	40,115	0.0727	0.9273	0.72
46.5	556,499	52,974	0.0952	0.9048	0.66
47.5	534,141	4,609	0.0086	0.9914	0.60
48.5	525,127	25,668	0.0489	0.9511	0.59
49.5	522,204	31,496	0.0603	0.9397	0.57
50.5	499,601	23,045	0.0461	0.9539	0.53
51.5	478,788	14,556	0.0304	0.9696	0.51
52.5	467,168	53,716	0.1150	0.8850	0.49
53.5	420,240	23,265	0.0554	0.9446	0.44
54.5	398,577	24,937	0.0626	0.9374	0.41
55.5	378,829	34,239	0.0904	0.9096	0.39
56.5	346,310	29,932	0.0864	0.9136	0.35
57.5	316,831	22,145	0.0699	0.9301	0.32
58.5	294,859	29,834	0.1012	0.8988	0.30
59.5	266,134	23,682	0.0890	0.9110	0.27
60.5	243,662	38,783	0.1592	0.8408	0.24
61.5	205,446	64,948	0.3161	0.6839	0.21
62.5	140,711	38,791	0.2757	0.7243	0.14
63.5	102,222	26,439	0.2586	0.7414	0.10
64.5	76,189	23,747	0.3117	0.6883	0.08
65.5	52,952	18,964	0.3581	0.6419	0.05
66.5	34,014	8,892	0.2614	0.7386	0.03
67.5	25,454	1,948	0.0765	0.9235	0.02
68.5	23,537	2,935	0.1247	0.8753	0.02
69.5	20,823	6,787	0.3259	0.6741	0.02
70.5	14,265	1,590	0.1114	0.8886	0.01
71.5	13,040	5,190	0.3980	0.6020	0.01
72.5	7,850	1,720	0.2191	0.7809	0.01
73.5	6,940	436	0.0628	0.9372	0.01
74.5	6,531	174	0.0266	0.9734	0.01
75.5	6,453	1,201	0.1862	0.8138	0.01
76.5	5,437	1,211	0.2226	0.7774	0.00
77.5	4,480	566	0.1263	0.8737	0.00
78.5	3,914	213	0.0545	0.9455	0.00

PENNSYLVANIA-AMERICAN WATER COMPANY

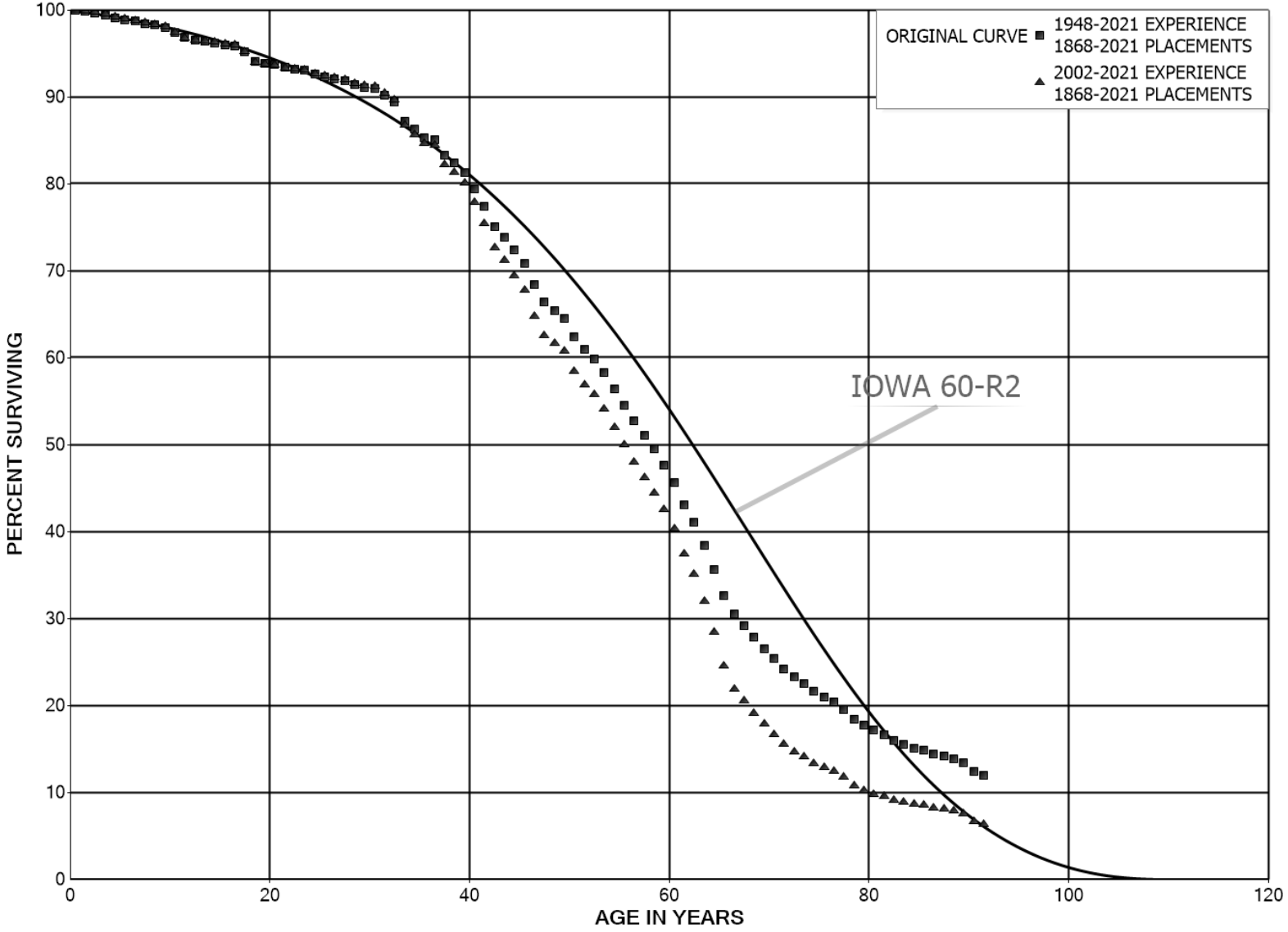
ACCOUNT 334.00 METERS AND METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1893-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	3,804	957	0.2516	0.7484	0.00
80.5	3,103	405	0.1306	0.8694	0.00
81.5	2,761	788	0.2855	0.7145	0.00
82.5	2,386	26	0.0109	0.9891	0.00
83.5	2,693	240	0.0890	0.9110	0.00
84.5	2,561	30	0.0118	0.9882	0.00
85.5	2,899	222	0.0765	0.9235	0.00
86.5	3,180	229	0.0720	0.9280	0.00
87.5	3,168	86	0.0272	0.9728	0.00
88.5	3,424		0.0000	1.0000	0.00
89.5	3,424	156	0.0455	0.9545	0.00
90.5	3,557	27	0.0075	0.9925	0.00
91.5	4,339	96	0.0222	0.9778	0.00
92.5	4,326	186	0.0429	0.9571	0.00
93.5	4,260	253	0.0594	0.9406	0.00
94.5	4,059		0.0000	1.0000	0.00
95.5	4,124	103	0.0250	0.9750	0.00
96.5	4,137	256	0.0619	0.9381	0.00
97.5	3,884	462	0.1188	0.8812	0.00
98.5	3,468	413	0.1192	0.8808	0.00
99.5	3,088	333	0.1078	0.8922	0.00
100.5	2,757	108	0.0393	0.9607	0.00
101.5	4,562	368	0.0807	0.9193	0.00
102.5	4,194	503	0.1198	0.8802	0.00
103.5	3,692	217	0.0588	0.9412	0.00
104.5	3,475	342	0.0986	0.9014	0.00
105.5	3,132		0.0000	1.0000	0.00
106.5	3,132	288	0.0921	0.9079	0.00
107.5	2,844	455	0.1601	0.8399	0.00
108.5	2,389	176	0.0737	0.9263	0.00
109.5	2,212	119	0.0539	0.9461	0.00
110.5	2,093	1,814	0.8667	0.1333	0.00
111.5	279	65	0.2328	0.7672	0.00
112.5	214	116	0.5419	0.4581	0.00
113.5	98	4	0.0361	0.9639	0.00
114.5	95	45	0.4746	0.5254	0.00
115.5	50	33	0.6740	0.3260	0.00
116.5	16	2	0.0957	0.9043	0.00
117.5	15	15	1.0000		0.00
118.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 335.00 FIRE HYDRANTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 335.00 FIRE HYDRANTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1868-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	126,978,538	91,991	0.0007	0.9993	100.00
0.5	119,915,541	141,640	0.0012	0.9988	99.93
1.5	113,363,715	175,408	0.0015	0.9985	99.81
2.5	106,255,442	241,523	0.0023	0.9977	99.66
3.5	100,137,902	357,575	0.0036	0.9964	99.43
4.5	94,692,908	183,079	0.0019	0.9981	99.07
5.5	92,268,795	185,762	0.0020	0.9980	98.88
6.5	84,422,685	214,499	0.0025	0.9975	98.68
7.5	77,007,748	134,144	0.0017	0.9983	98.43
8.5	73,353,935	201,586	0.0027	0.9973	98.26
9.5	67,506,132	422,376	0.0063	0.9937	97.99
10.5	63,495,916	384,341	0.0061	0.9939	97.38
11.5	59,131,020	163,177	0.0028	0.9972	96.79
12.5	54,915,766	77,262	0.0014	0.9986	96.52
13.5	48,887,516	92,382	0.0019	0.9981	96.39
14.5	45,484,250	110,932	0.0024	0.9976	96.20
15.5	39,955,604	65,734	0.0016	0.9984	95.97
16.5	39,744,409	275,153	0.0069	0.9931	95.81
17.5	37,703,211	421,995	0.0112	0.9888	95.15
18.5	35,226,801	88,056	0.0025	0.9975	94.08
19.5	33,589,536	56,597	0.0017	0.9983	93.85
20.5	31,695,818	105,784	0.0033	0.9967	93.69
21.5	30,424,437	51,532	0.0017	0.9983	93.38
22.5	28,561,440	55,115	0.0019	0.9981	93.22
23.5	27,027,621	125,099	0.0046	0.9954	93.04
24.5	25,240,052	78,837	0.0031	0.9969	92.61
25.5	23,644,029	60,205	0.0025	0.9975	92.32
26.5	21,912,441	60,965	0.0028	0.9972	92.08
27.5	20,393,153	98,678	0.0048	0.9952	91.83
28.5	19,203,082	59,119	0.0031	0.9969	91.38
29.5	17,810,523	33,151	0.0019	0.9981	91.10
30.5	16,902,551	136,102	0.0081	0.9919	90.93
31.5	15,581,063	131,370	0.0084	0.9916	90.20
32.5	14,602,261	364,558	0.0250	0.9750	89.44
33.5	13,387,036	143,756	0.0107	0.9893	87.21
34.5	12,387,783	134,581	0.0109	0.9891	86.27
35.5	11,498,531	43,007	0.0037	0.9963	85.33
36.5	10,835,604	225,886	0.0208	0.9792	85.01
37.5	10,078,664	101,078	0.0100	0.9900	83.24
38.5	9,441,700	127,787	0.0135	0.9865	82.41

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 335.00 FIRE HYDRANTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1868-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	8,855,711	202,592	0.0229	0.9771	81.29
40.5	8,337,478	217,006	0.0260	0.9740	79.43
41.5	7,669,107	226,149	0.0295	0.9705	77.36
42.5	7,295,176	119,294	0.0164	0.9836	75.08
43.5	6,735,516	137,741	0.0204	0.9796	73.85
44.5	6,308,009	131,345	0.0208	0.9792	72.34
45.5	5,676,935	195,531	0.0344	0.9656	70.84
46.5	5,173,101	154,495	0.0299	0.9701	68.40
47.5	4,738,480	66,884	0.0141	0.9859	66.36
48.5	4,434,649	60,067	0.0135	0.9865	65.42
49.5	4,202,194	136,532	0.0325	0.9675	64.53
50.5	3,891,787	93,515	0.0240	0.9760	62.44
51.5	3,670,662	64,916	0.0177	0.9823	60.94
52.5	3,464,717	90,758	0.0262	0.9738	59.86
53.5	3,231,863	107,226	0.0332	0.9668	58.29
54.5	2,996,821	98,596	0.0329	0.9671	56.36
55.5	2,812,790	90,157	0.0321	0.9679	54.50
56.5	2,622,201	81,532	0.0311	0.9689	52.76
57.5	2,467,557	80,161	0.0325	0.9675	51.11
58.5	2,284,974	83,987	0.0368	0.9632	49.45
59.5	2,129,604	92,469	0.0434	0.9566	47.64
60.5	1,956,935	105,557	0.0539	0.9461	45.57
61.5	1,775,609	83,720	0.0471	0.9529	43.11
62.5	1,610,697	103,384	0.0642	0.9358	41.08
63.5	1,439,558	107,124	0.0744	0.9256	38.44
64.5	1,256,635	105,556	0.0840	0.9160	35.58
65.5	1,082,936	68,759	0.0635	0.9365	32.59
66.5	987,812	44,436	0.0450	0.9550	30.52
67.5	914,389	42,436	0.0464	0.9536	29.15
68.5	848,894	38,720	0.0456	0.9544	27.80
69.5	782,338	34,612	0.0442	0.9558	26.53
70.5	711,346	31,968	0.0449	0.9551	25.36
71.5	672,761	25,662	0.0381	0.9619	24.22
72.5	620,362	22,255	0.0359	0.9641	23.29
73.5	588,886	22,773	0.0387	0.9613	22.46
74.5	556,354	17,102	0.0307	0.9693	21.59
75.5	536,359	13,772	0.0257	0.9743	20.92
76.5	520,232	23,488	0.0451	0.9549	20.39
77.5	492,808	26,068	0.0529	0.9471	19.47
78.5	465,350	17,838	0.0383	0.9617	18.44

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 335.00 FIRE HYDRANTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1868-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	453,502	15,155	0.0334	0.9666	17.73
80.5	432,236	11,896	0.0275	0.9725	17.14
81.5	411,350	16,202	0.0394	0.9606	16.67
82.5	386,466	11,962	0.0310	0.9690	16.01
83.5	364,393	9,412	0.0258	0.9742	15.51
84.5	340,813	6,375	0.0187	0.9813	15.11
85.5	329,688	10,528	0.0319	0.9681	14.83
86.5	310,532	5,027	0.0162	0.9838	14.36
87.5	298,654	7,275	0.0244	0.9756	14.12
88.5	293,385	8,978	0.0306	0.9694	13.78
89.5	279,291	19,042	0.0682	0.9318	13.36
90.5	250,061	11,037	0.0441	0.9559	12.45
91.5	239,352	8,764	0.0366	0.9634	11.90
92.5	221,697	4,855	0.0219	0.9781	11.46
93.5	213,108	5,623	0.0264	0.9736	11.21
94.5	198,244	8,253	0.0416	0.9584	10.92
95.5	185,098	5,907	0.0319	0.9681	10.46
96.5	167,875	4,297	0.0256	0.9744	10.13
97.5	164,588	7,572	0.0460	0.9540	9.87
98.5	152,283	4,890	0.0321	0.9679	9.41
99.5	142,377	5,561	0.0391	0.9609	9.11
100.5	136,978	3,497	0.0255	0.9745	8.76
101.5	131,294	9,139	0.0696	0.9304	8.53
102.5	120,263	5,737	0.0477	0.9523	7.94
103.5	114,692	3,871	0.0337	0.9663	7.56
104.5	109,368	8,232	0.0753	0.9247	7.31
105.5	100,548	3,695	0.0367	0.9633	6.76
106.5	95,334	7,642	0.0802	0.9198	6.51
107.5	87,603	6,044	0.0690	0.9310	5.99
108.5	81,222	4,961	0.0611	0.9389	5.57
109.5	74,282	8,464	0.1139	0.8861	5.23
110.5	66,822	4,197	0.0628	0.9372	4.64
111.5	65,066	3,075	0.0473	0.9527	4.34
112.5	66,845	5,581	0.0835	0.9165	4.14
113.5	61,856	7,543	0.1219	0.8781	3.79
114.5	51,993	5,991	0.1152	0.8848	3.33
115.5	46,246	1,931	0.0418	0.9582	2.95
116.5	44,431	2,766	0.0623	0.9377	2.82
117.5	40,666	1,212	0.0298	0.9702	2.65
118.5	50,809	791	0.0156	0.9844	2.57

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 335.00 FIRE HYDRANTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1868-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	49,648	753	0.0152	0.9848	2.53
120.5	49,213	594	0.0121	0.9879	2.49
121.5	48,502	76	0.0016	0.9984	2.46
122.5	47,962	125	0.0026	0.9974	2.46
123.5	34,643	1,065	0.0308	0.9692	2.45
124.5	33,327	348	0.0104	0.9896	2.38
125.5	30,937	62	0.0020	0.9980	2.35
126.5	26,617		0.0000	1.0000	2.35
127.5	24,436		0.0000	1.0000	2.35
128.5	21,567		0.0000	1.0000	2.35
129.5	17,344	898	0.0518	0.9482	2.35
130.5	13,525	174	0.0129	0.9871	2.22
131.5	11,361		0.0000	1.0000	2.20
132.5	10,003	236	0.0236	0.9764	2.20
133.5	8,947		0.0000	1.0000	2.14
134.5	8,947		0.0000	1.0000	2.14
135.5	8,599		0.0000	1.0000	2.14
136.5	8,599		0.0000	1.0000	2.14
137.5	8,599		0.0000	1.0000	2.14
138.5	7,841		0.0000	1.0000	2.14
139.5	7,605	72	0.0095	0.9905	2.14
140.5	7,533		0.0000	1.0000	2.12
141.5	7,533	139	0.0185	0.9815	2.12
142.5	7,393		0.0000	1.0000	2.08
143.5					2.08

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 335.00 FIRE HYDRANTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1868-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	96,523,814	74,627	0.0008	0.9992	100.00
0.5	90,127,494	72,283	0.0008	0.9992	99.92
1.5	84,939,943	106,103	0.0012	0.9988	99.84
2.5	79,464,995	175,555	0.0022	0.9978	99.72
3.5	76,405,915	288,843	0.0038	0.9962	99.50
4.5	72,132,064	136,564	0.0019	0.9981	99.12
5.5	70,765,797	145,848	0.0021	0.9979	98.93
6.5	64,499,515	154,425	0.0024	0.9976	98.73
7.5	58,368,086	91,861	0.0016	0.9984	98.49
8.5	55,641,210	136,570	0.0025	0.9975	98.34
9.5	50,744,194	372,036	0.0073	0.9927	98.10
10.5	47,758,277	325,333	0.0068	0.9932	97.38
11.5	44,363,089	118,526	0.0027	0.9973	96.71
12.5	41,165,205	25,331	0.0006	0.9994	96.46
13.5	36,365,793	40,531	0.0011	0.9989	96.40
14.5	33,801,128	74,392	0.0022	0.9978	96.29
15.5	28,954,074	21,824	0.0008	0.9992	96.08
16.5	29,404,616	238,052	0.0081	0.9919	96.00
17.5	27,922,133	384,748	0.0138	0.9862	95.23
18.5	26,034,058	58,829	0.0023	0.9977	93.92
19.5	24,977,683	17,585	0.0007	0.9993	93.70
20.5	23,460,612	80,396	0.0034	0.9966	93.64
21.5	22,757,574	29,853	0.0013	0.9987	93.32
22.5	21,371,619	37,337	0.0017	0.9983	93.19
23.5	20,470,738	93,134	0.0045	0.9955	93.03
24.5	19,071,262	46,985	0.0025	0.9975	92.61
25.5	17,735,451	39,891	0.0022	0.9978	92.38
26.5	16,459,140	36,145	0.0022	0.9978	92.17
27.5	15,298,357	71,870	0.0047	0.9953	91.97
28.5	14,345,291	34,980	0.0024	0.9976	91.54
29.5	13,329,229	12,409	0.0009	0.9991	91.31
30.5	12,654,882	111,093	0.0088	0.9912	91.23
31.5	11,555,783	110,035	0.0095	0.9905	90.43
32.5	10,863,162	344,855	0.0317	0.9683	89.57
33.5	9,877,369	125,856	0.0127	0.9873	86.72
34.5	9,070,232	110,725	0.0122	0.9878	85.62
35.5	8,359,086	15,191	0.0018	0.9982	84.57
36.5	7,912,173	207,150	0.0262	0.9738	84.42
37.5	7,331,170	79,754	0.0109	0.9891	82.21
38.5	6,867,462	105,757	0.0154	0.9846	81.32

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 335.00 FIRE HYDRANTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1868-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	6,427,057	175,909	0.0274	0.9726	80.06
40.5	6,050,945	193,139	0.0319	0.9681	77.87
41.5	5,553,537	205,833	0.0371	0.9629	75.39
42.5	5,333,226	102,772	0.0193	0.9807	72.59
43.5	4,913,361	123,462	0.0251	0.9749	71.19
44.5	4,632,693	114,388	0.0247	0.9753	69.40
45.5	4,165,068	181,034	0.0435	0.9565	67.69
46.5	3,794,066	133,972	0.0353	0.9647	64.75
47.5	3,443,405	48,653	0.0141	0.9859	62.46
48.5	3,237,220	45,805	0.0141	0.9859	61.58
49.5	3,073,786	117,148	0.0381	0.9619	60.71
50.5	2,849,624	78,063	0.0274	0.9726	58.39
51.5	2,673,016	50,620	0.0189	0.9811	56.80
52.5	2,532,301	74,600	0.0295	0.9705	55.72
53.5	2,349,808	92,859	0.0395	0.9605	54.08
54.5	2,155,381	83,340	0.0387	0.9613	51.94
55.5	1,990,271	76,705	0.0385	0.9615	49.93
56.5	1,824,901	68,621	0.0376	0.9624	48.01
57.5	1,689,119	66,669	0.0395	0.9605	46.20
58.5	1,525,636	65,105	0.0427	0.9573	44.38
59.5	1,398,288	73,613	0.0526	0.9474	42.49
60.5	1,274,103	89,613	0.0703	0.9297	40.25
61.5	1,120,010	71,147	0.0635	0.9365	37.42
62.5	979,487	86,650	0.0885	0.9115	35.04
63.5	836,629	93,384	0.1116	0.8884	31.94
64.5	688,237	93,932	0.1365	0.8635	28.38
65.5	538,137	57,703	0.1072	0.8928	24.50
66.5	469,030	29,934	0.0638	0.9362	21.88
67.5	418,732	27,830	0.0665	0.9335	20.48
68.5	371,683	24,289	0.0654	0.9346	19.12
69.5	325,621	23,465	0.0721	0.9279	17.87
70.5	279,873	18,802	0.0672	0.9328	16.58
71.5	271,866	14,057	0.0517	0.9483	15.47
72.5	251,390	9,524	0.0379	0.9621	14.67
73.5	254,195	14,274	0.0562	0.9438	14.11
74.5	248,633	9,276	0.0373	0.9627	13.32
75.5	255,874	7,859	0.0307	0.9693	12.82
76.5	262,916	15,297	0.0582	0.9418	12.43
77.5	252,694	21,779	0.0862	0.9138	11.71
78.5	235,363	11,775	0.0500	0.9500	10.70

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 335.00 FIRE HYDRANTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1868-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	232,923	9,286	0.0399	0.9601	10.16
80.5	224,058	6,394	0.0285	0.9715	9.76
81.5	214,752	9,817	0.0457	0.9543	9.48
82.5	202,633	5,135	0.0253	0.9747	9.04
83.5	191,041	5,421	0.0284	0.9716	8.82
84.5	177,968	2,255	0.0127	0.9873	8.57
85.5	168,583	5,859	0.0348	0.9652	8.46
86.5	163,466	2,188	0.0134	0.9866	8.16
87.5	157,788	4,943	0.0313	0.9687	8.05
88.5	157,618	5,871	0.0372	0.9628	7.80
89.5	150,721	16,974	0.1126	0.8874	7.51
90.5	126,080	7,260	0.0576	0.9424	6.66
91.5	123,614	6,909	0.0559	0.9441	6.28
92.5	110,284	2,746	0.0249	0.9751	5.93
93.5	108,301	3,198	0.0295	0.9705	5.78
94.5	99,000	6,467	0.0653	0.9347	5.61
95.5	90,498	4,165	0.0460	0.9540	5.25
96.5	78,656	3,206	0.0408	0.9592	5.00
97.5	73,603	5,459	0.0742	0.9258	4.80
98.5	70,774	2,427	0.0343	0.9657	4.44
99.5	67,200	4,868	0.0724	0.9276	4.29
100.5	62,909	2,975	0.0473	0.9527	3.98
101.5	65,653	7,893	0.1202	0.8798	3.79
102.5	62,880	3,910	0.0622	0.9378	3.34
103.5	63,290	3,046	0.0481	0.9519	3.13
104.5	61,112	8,207	0.1343	0.8657	2.98
105.5	54,689	3,647	0.0667	0.9333	2.58
106.5	55,780	7,612	0.1365	0.8635	2.41
107.5	52,482	5,934	0.1131	0.8869	2.08
108.5	50,465	4,797	0.0951	0.9049	1.84
109.5	49,200	8,291	0.1685	0.8315	1.67
110.5	46,121	4,024	0.0873	0.9127	1.39
111.5	46,752	2,846	0.0609	0.9391	1.27
112.5	49,866	5,420	0.1087	0.8913	1.19
113.5	45,040	7,261	0.1612	0.8388	1.06
114.5	36,540	5,899	0.1614	0.8386	0.89
115.5	31,843	1,840	0.0578	0.9422	0.75
116.5	30,416	2,766	0.0909	0.9091	0.70
117.5	26,651	1,212	0.0455	0.9545	0.64
118.5	36,793	791	0.0215	0.9785	0.61

PENNSYLVANIA-AMERICAN WATER COMPANY

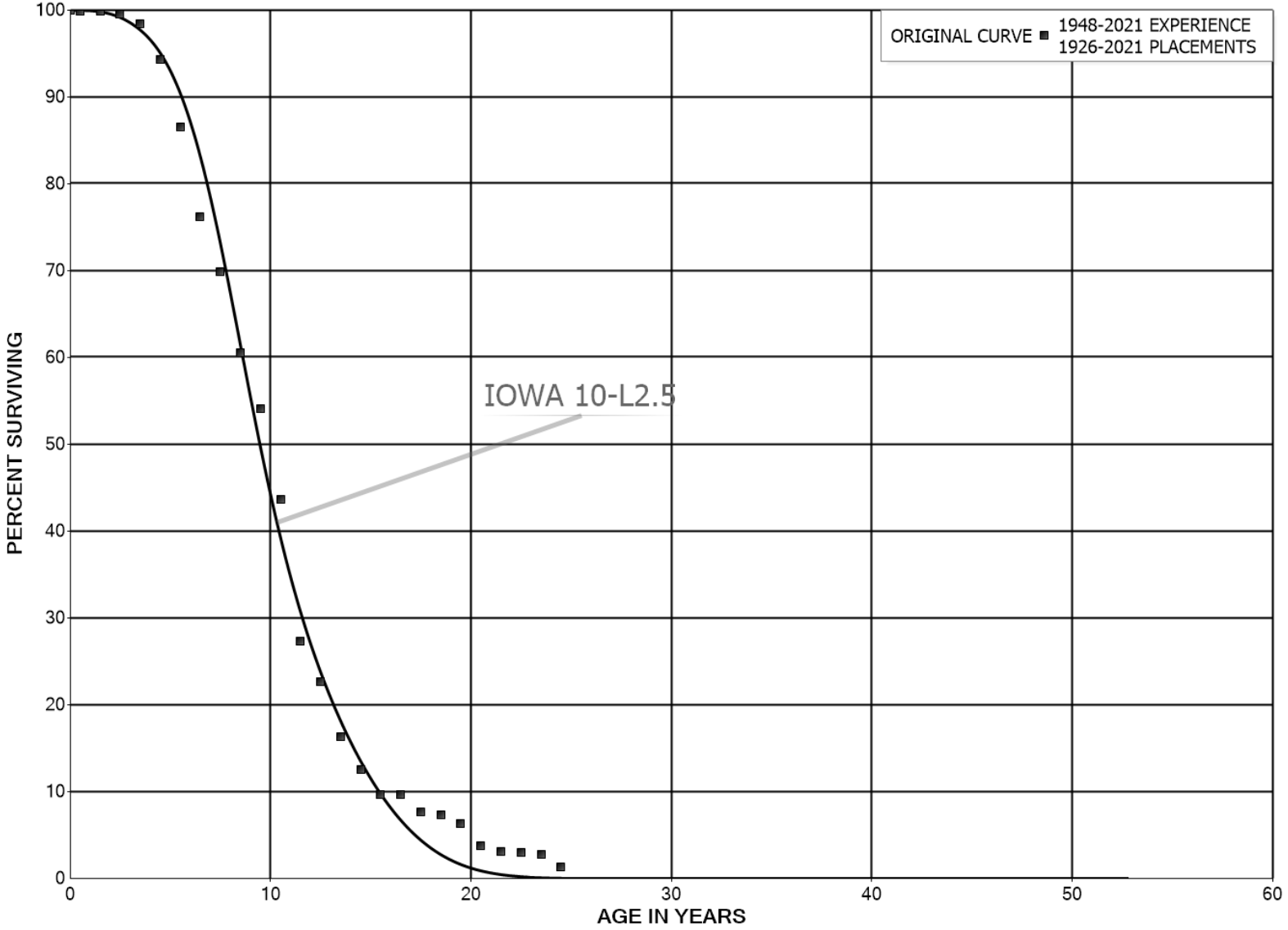
ACCOUNT 335.00 FIRE HYDRANTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1868-2021 EXPERIENCE BAND 2002-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	36,453	753	0.0207	0.9793	0.60
120.5	36,776	594	0.0162	0.9838	0.58
121.5	37,518	76	0.0020	0.9980	0.57
122.5	37,848	125	0.0033	0.9967	0.57
123.5	25,348	1,065	0.0420	0.9580	0.57
124.5	24,033	348	0.0145	0.9855	0.55
125.5	21,643	62	0.0029	0.9971	0.54
126.5	17,844		0.0000	1.0000	0.54
127.5	15,838		0.0000	1.0000	0.54
128.5	13,726		0.0000	1.0000	0.54
129.5	9,739	898	0.0922	0.9078	0.54
130.5	5,920	174	0.0294	0.9706	0.49
131.5	3,756		0.0000	1.0000	0.47
132.5	2,398	236	0.0985	0.9015	0.47
133.5	8,947		0.0000	1.0000	0.43
134.5	8,947		0.0000	1.0000	0.43
135.5	8,599		0.0000	1.0000	0.43
136.5	8,599		0.0000	1.0000	0.43
137.5	8,599		0.0000	1.0000	0.43
138.5	7,841		0.0000	1.0000	0.43
139.5	7,605	72	0.0095	0.9905	0.43
140.5	7,533		0.0000	1.0000	0.42
141.5	7,533	139	0.0185	0.9815	0.42
142.5	7,393		0.0000	1.0000	0.42
143.5					0.42

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNTS 341.00 THROUGH 341.40 TRANSPORTATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNTS 341.00 THROUGH 341.40 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1926-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	86,237,168	95,788	0.0011	0.9989	100.00
0.5	75,837,759	66,343	0.0009	0.9991	99.89
1.5	63,655,878	183,524	0.0029	0.9971	99.80
2.5	53,530,439	586,720	0.0110	0.9890	99.51
3.5	42,985,121	1,817,172	0.0423	0.9577	98.42
4.5	38,708,282	3,169,915	0.0819	0.9181	94.26
5.5	30,321,753	3,637,425	0.1200	0.8800	86.54
6.5	22,970,497	1,910,064	0.0832	0.9168	76.16
7.5	19,633,147	2,629,729	0.1339	0.8661	69.83
8.5	7,780,761	822,954	0.1058	0.8942	60.48
9.5	1,304,253	253,396	0.1943	0.8057	54.08
10.5	1,048,512	392,896	0.3747	0.6253	43.57
11.5	694,002	118,525	0.1708	0.8292	27.24
12.5	620,169	174,087	0.2807	0.7193	22.59
13.5	367,022	84,729	0.2309	0.7691	16.25
14.5	276,541	63,402	0.2293	0.7707	12.50
15.5	213,978	176	0.0008	0.9992	9.63
16.5	209,941	44,995	0.2143	0.7857	9.63
17.5	210,042	6,365	0.0303	0.9697	7.56
18.5	201,231	30,236	0.1503	0.8497	7.33
19.5	169,916	67,838	0.3992	0.6008	6.23
20.5	88,038	15,872	0.1803	0.8197	3.74
21.5	66,888	3,859	0.0577	0.9423	3.07
22.5	64,049	2,851	0.0445	0.9555	2.89
23.5	53,119	27,796	0.5233	0.4767	2.76
24.5	25,296	227	0.0090	0.9910	1.32
25.5	24,855	736	0.0296	0.9704	1.31
26.5	18,516	489	0.0264	0.9736	1.27
27.5	8,842	208	0.0235	0.9765	1.23
28.5	7,305	753	0.1031	0.8969	1.20
29.5	6,551	1,444	0.2204	0.7796	1.08
30.5	5,107	2,509	0.4912	0.5088	0.84
31.5	3,819	385	0.1007	0.8993	0.43
32.5	3,435	416	0.1210	0.8790	0.39
33.5	3,284	1,802	0.5488	0.4512	0.34
34.5	2,461		0.0000	1.0000	0.15
35.5	2,863	0	0.0001	0.9999	0.15
36.5	2,862	361	0.1261	0.8739	0.15
37.5	2,477	1,141	0.4608	0.5392	0.13
38.5	2,093		0.0000	1.0000	0.07

PENNSYLVANIA-AMERICAN WATER COMPANY

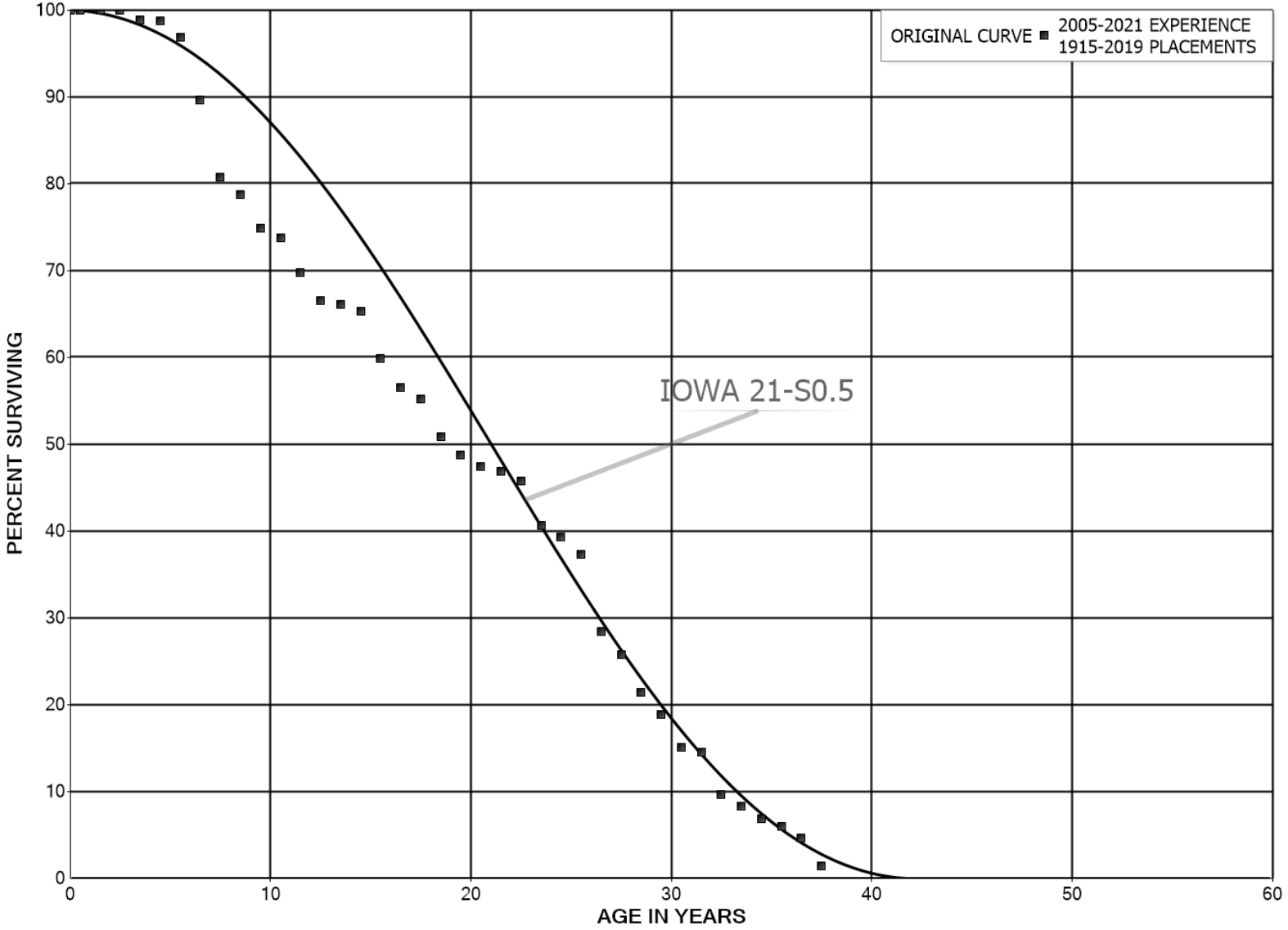
ACCOUNTS 341.00 THROUGH 341.40 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2021 EXPERIENCE BAND 1948-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	2,093		0.0000	1.0000	0.07
40.5	2,093	910	0.4347	0.5653	0.07
41.5	1,183	215	0.1814	0.8186	0.04
42.5	969		0.0000	1.0000	0.03
43.5	704		0.0000	1.0000	0.03
44.5	300	70	0.2330	0.7670	0.03
45.5	230	0	0.0021	0.9979	0.03
46.5	316		0.0000	1.0000	0.03
47.5	316	83	0.2628	0.7372	0.03
48.5	233	147	0.6313	0.3687	0.02
49.5	86		0.0000	1.0000	0.01
50.5	461		0.0000	1.0000	0.01
51.5	461	86	0.1863	0.8137	0.01
52.5	375		0.0000	1.0000	0.01
53.5	375		0.0000	1.0000	0.01
54.5	375		0.0000	1.0000	0.01
55.5	375		0.0000	1.0000	0.01
56.5	375		0.0000	1.0000	0.01
57.5	434		0.0000	1.0000	0.01
58.5	434		0.0000	1.0000	0.01
59.5	434	59	0.1354	0.8646	0.01
60.5					0.00

PENNSYLVANIA-AMERICAN WATER COMPANY
ACCOUNT 345.00 POWER OPERATED EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 345.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2005-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	691,863		0.0000	1.0000	100.00
0.5	691,863		0.0000	1.0000	100.00
1.5	691,863		0.0000	1.0000	100.00
2.5	743,841	8,745	0.0118	0.9882	100.00
3.5	556,740	706	0.0013	0.9987	98.82
4.5	541,866	10,408	0.0192	0.9808	98.70
5.5	422,842	31,583	0.0747	0.9253	96.80
6.5	462,606	45,560	0.0985	0.9015	89.57
7.5	418,801	10,319	0.0246	0.9754	80.75
8.5	945,356	46,810	0.0495	0.9505	78.76
9.5	1,019,462	15,318	0.0150	0.9850	74.86
10.5	1,066,883	58,565	0.0549	0.9451	73.74
11.5	992,538	44,817	0.0452	0.9548	69.69
12.5	1,153,004	8,964	0.0078	0.9922	66.54
13.5	1,245,503	13,290	0.0107	0.9893	66.03
14.5	1,367,201	115,439	0.0844	0.9156	65.32
15.5	1,521,570	83,229	0.0547	0.9453	59.81
16.5	1,561,480	37,199	0.0238	0.9762	56.53
17.5	1,692,038	134,334	0.0794	0.9206	55.19
18.5	1,134,626	47,664	0.0420	0.9580	50.81
19.5	1,007,421	26,016	0.0258	0.9742	48.67
20.5	1,004,001	11,756	0.0117	0.9883	47.41
21.5	1,015,417	25,216	0.0248	0.9752	46.86
22.5	810,438	89,420	0.1103	0.8897	45.70
23.5	876,119	30,643	0.0350	0.9650	40.65
24.5	858,679	42,532	0.0495	0.9505	39.23
25.5	801,253	191,689	0.2392	0.7608	37.29
26.5	546,370	51,093	0.0935	0.9065	28.37
27.5	398,503	66,935	0.1680	0.8320	25.72
28.5	257,892	30,352	0.1177	0.8823	21.40
29.5	233,903	47,196	0.2018	0.7982	18.88
30.5	205,545	8,065	0.0392	0.9608	15.07
31.5	203,861	67,920	0.3332	0.6668	14.48
32.5	135,996	19,192	0.1411	0.8589	9.65
33.5	114,483	20,434	0.1785	0.8215	8.29
34.5	157,689	20,122	0.1276	0.8724	6.81
35.5	126,364	29,131	0.2305	0.7695	5.94
36.5	88,248	61,502	0.6969	0.3031	4.57
37.5	29,461	4,760	0.1616	0.8384	1.39
38.5	42,998	7,552	0.1756	0.8244	1.16

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 345.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2005-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	39,845	4,583	0.1150	0.8850	0.96
40.5	37,470	16,093	0.4295	0.5705	0.85
41.5	32,093	1,713	0.0534	0.9466	0.48
42.5	36,218	2,208	0.0610	0.9390	0.46
43.5	38,281	9,085	0.2373	0.7627	0.43
44.5	32,170	5,020	0.1561	0.8439	0.33
45.5	30,385	7,166	0.2359	0.7641	0.28
46.5	23,460	1,937	0.0826	0.9174	0.21
47.5	26,785	3,235	0.1208	0.8792	0.19
48.5	23,836	1,403	0.0589	0.9411	0.17
49.5	16,929	5,310	0.3137	0.6863	0.16
50.5	15,523	286	0.0184	0.9816	0.11
51.5	9,400	817	0.0869	0.9131	0.11
52.5	7,765	3,904	0.5027	0.4973	0.10
53.5	4,018	898	0.2235	0.7765	0.05
54.5	1,189		0.0000	1.0000	0.04
55.5	1,431	1,189	0.8311	0.1689	0.04
56.5	260		0.0000	1.0000	0.01
57.5	1,446	242	0.1670	0.8330	0.01
58.5	1,827	18	0.0101	0.9899	0.01
59.5	2,080	1,186	0.5704	0.4296	0.01
60.5	6,005	623	0.1037	0.8963	0.00
61.5	6,311	270	0.0429	0.9571	0.00
62.5	6,408	5,083	0.7932	0.2068	0.00
63.5	1,605	929	0.5785	0.4215	0.00
64.5	967	367	0.3794	0.6206	0.00
65.5	796	148	0.1859	0.8141	0.00
66.5	1,224	291	0.2373	0.7627	0.00
67.5	934	196	0.2094	0.7906	0.00
68.5	778	709	0.9104	0.0896	0.00
69.5	70		0.0000	1.0000	0.00
70.5	177	13	0.0726	0.9274	0.00
71.5	212	7	0.0346	0.9654	0.00
72.5	409	137	0.3351	0.6649	0.00
73.5	272	20	0.0729	0.9271	0.00
74.5	371	205	0.5529	0.4471	0.00
75.5	166		0.0000	1.0000	0.00
76.5	1,089	118	0.1087	0.8913	0.00
77.5	970		0.0000	1.0000	0.00
78.5	970	970	1.0000		0.00

PENNSYLVANIA-AMERICAN WATER COMPANY

ACCOUNT 345.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2005-2021

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5					
80.5					
81.5	153		0.0000		
82.5	153		0.0000		
83.5	153	153	1.0000		
84.5					
85.5					
86.5					
87.5	186		0.0000		
88.5	186		0.0000		
89.5	753	186	0.2473		
90.5	833		0.0000		
91.5	833	567	0.6804		
92.5	266	266	1.0000		
93.5					
94.5					
95.5					
96.5	31		0.0000		
97.5	31		0.0000		
98.5	31	31	1.0000		
99.5					

PART VII. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1887	30,941	30,941			0.0
1889	285,487	285,487			0.0
1890	735	735			0.0
1891	22,814	22,814			0.0
1892	159,257	129,185	30,072	30,072	0.0
1893	92,598	74,253	18,345	48,417	0.0
1895	6,156	6,156		48,417	0.0
1896	4,135	4,135		48,417	0.0
1897	200,367	200,367		48,417	0.0
1899	3,772	3,772		48,417	0.0
1900	313,791	244,532	69,259	117,676	0.0
1901	281,318	188,512	92,806	210,482	0.0
1902	37,918	27,362	10,556	221,038	0.0
1903	3,250	2,968	282	221,320	0.0
1904	11,603	8,565	3,038	224,358	0.0
1905	7,379	7,084	295	224,653	0.0
1906	11,607	10,836	771	225,424	0.0
1907	173,829	142,729	31,100	256,524	0.0
1908	11,007	8,806	2,201	258,725	0.0
1909	4,801	4,661	140	258,865	0.0
1910	244,119	155,377	88,742	347,607	0.0
1911	22,674	20,707	1,967	349,574	0.0
1912	34,150	27,367	6,783	356,357	0.0
1913	1,275	1,275		356,357	0.0
1914	12,760	9,995	2,765	359,122	0.0
1915	233,201	158,356	74,845	433,967	0.0
1916	24,904	17,833	7,071	441,038	0.0
1917	138	138		441,038	0.0
1918	98,899	61,760	37,139	478,177	0.0
1919	76,760	60,315	16,445	494,622	0.0
1920	43,294	31,907	11,387	506,009	0.0
1921	56,879	55,073	1,806	507,815	0.0
1922	38,575	34,602	3,973	511,788	0.0
1923	459,177	275,798	183,379	695,167	0.0
1924	57,397	44,698	12,699	707,866	0.0
1925	2,169	1,435	734	708,600	0.0
1926	631	537	94	708,694	0.0
1927	6,677	5,021	1,656	710,350	0.0
1928	37,950	28,440	9,510	719,860	0.0
1929	86,017	53,085	32,932	752,792	0.0
1930	97,469	55,750	41,719	794,511	0.0
1931	19,607	17,291	2,316	796,827	0.0
1932	37,406	20,851	16,555	813,382	0.0
1933	4,911	2,769	2,142	815,524	0.0
1934	1,801	1,206	595	816,119	0.0

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1935	2,411	1,825	586	816,705	0.0
1936	145	91	54	816,759	0.0
1937	17,589	13,960	3,629	820,388	0.0
1938	11,110	9,138	1,972	822,360	0.0
1939	27,187	21,121	6,066	828,426	0.0
1940	69,768	55,257	14,511	842,937	0.0
1941	50,300	38,788	11,512	854,449	0.0
1942	40,369	31,264	9,105	863,554	0.0
1943	23,486	16,457	7,029	870,583	0.0
1944	24,239	13,882	10,357	880,940	0.0
1945	309,564	184,247	125,317	1,006,257	0.0
1946	444,184	228,866	215,318	1,221,575	0.0
1947	392,029	226,381	165,648	1,387,223	0.0
1948	549,416	328,722	220,694	1,607,917	0.0
1949	344,948	229,248	115,700	1,723,617	0.0
1950	410,238	256,218	154,020	1,877,637	0.0
1951	880,438	520,159	360,279	2,237,916	0.0
1952	785,922	463,715	322,207	2,560,123	0.0
1953	2,091,099	1,255,600	835,499	3,395,622	0.1
1954	1,949,805	997,710	952,095	4,347,717	0.1
1955	3,278,355	1,451,217	1,827,138	6,174,855	0.1
1956	2,115,079	1,011,407	1,103,672	7,278,527	0.1
1957	2,860,835	1,302,754	1,558,081	8,836,608	0.2
1958	3,770,451	1,812,091	1,958,360	10,794,968	0.2
1959	3,578,551	1,750,740	1,827,811	12,622,779	0.2
1960	3,993,415	1,851,362	2,142,053	14,764,832	0.3
1961	5,254,240	2,456,283	2,797,957	17,562,789	0.3
1962	2,513,049	1,253,667	1,259,382	18,822,171	0.4
1963	2,822,301	1,268,307	1,553,994	20,376,165	0.4
1964	7,020,714	2,898,950	4,121,764	24,497,929	0.5
1965	6,614,092	3,198,740	3,415,352	27,913,281	0.5
1966	6,016,277	2,469,703	3,546,574	31,459,855	0.6
1967	7,560,509	3,188,266	4,372,243	35,832,098	0.7
1968	7,093,071	2,827,594	4,265,477	40,097,575	0.8
1969	8,065,266	3,967,462	4,097,804	44,195,379	0.8
1970	5,247,688	2,129,163	3,118,525	47,313,904	0.9
1971	7,434,873	2,988,604	4,446,269	51,760,173	1.0
1972	14,312,900	7,199,310	7,113,590	58,873,763	1.1
1973	26,762,591	16,031,919	10,730,672	69,604,435	1.3
1974	7,325,495	2,888,423	4,437,072	74,041,507	1.4
1975	7,960,100	3,011,368	4,948,732	78,990,239	1.5
1976	16,508,257	7,811,683	8,696,574	87,686,813	1.7
1977	8,085,085	2,854,997	5,230,088	92,916,901	1.8
1978	12,879,932	4,431,736	8,448,196	101,365,097	1.9
1979	12,773,572	4,608,407	8,165,165	109,530,262	2.1

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1980	15,818,453	5,165,927	10,652,526	120,182,788	2.3
1981	12,435,943	4,425,783	8,010,160	128,192,948	2.5
1982	14,857,929	7,001,787	7,856,142	136,049,090	2.6
1983	15,771,122	5,680,895	10,090,227	146,139,317	2.8
1984	19,961,689	6,399,674	13,562,015	159,701,332	3.1
1985	32,582,819	11,343,269	21,239,550	180,940,882	3.5
1986	36,769,935	12,512,948	24,256,987	205,197,869	3.9
1987	39,671,394	13,348,500	26,322,894	231,520,763	4.4
1988	60,831,946	23,050,230	37,781,716	269,302,479	5.2
1989	60,604,326	21,122,110	39,482,216	308,784,695	5.9
1990	98,019,405	44,511,739	53,507,666	362,292,361	7.0
1991	58,754,821	27,922,598	30,832,223	393,124,584	7.5
1992	65,265,005	26,425,754	38,839,251	431,963,835	8.3
1993	100,903,977	42,416,869	58,487,108	490,450,943	9.4
1994	59,079,476	16,365,403	42,714,073	533,165,016	10.2
1995	88,974,414	29,142,696	59,831,718	592,996,734	11.4
1996	65,365,813	17,928,676	47,437,137	640,433,871	12.3
1997	92,436,083	32,708,976	59,727,107	700,160,978	13.4
1998	155,223,853	43,661,653	111,562,200	811,723,178	15.6
1999	113,152,245	35,425,730	77,726,515	889,449,693	17.1
2000	88,248,272	21,885,669	66,362,603	955,812,296	18.3
2001	108,271,290	29,420,520	78,850,770	1,034,663,066	19.9
2002	107,994,515	25,103,273	82,891,242	1,117,554,308	21.4
2003	58,703,120	16,112,702	42,590,418	1,160,144,726	22.3
2004	79,848,730	15,682,209	64,166,521	1,224,311,247	23.5
2005	94,697,125	21,913,266	72,783,859	1,297,095,106	24.9
2006	61,132,725	18,383,793	42,748,932	1,339,844,038	25.7
2007	119,804,545	24,070,854	95,733,691	1,435,577,729	27.5
2008	155,238,429	27,410,518	127,827,911	1,563,405,640	30.0
2009	133,712,647	22,736,413	110,976,234	1,674,381,874	32.1
2010	150,661,674	26,516,633	124,145,041	1,798,526,915	34.5
2011	197,205,572	37,654,591	159,550,981	1,958,077,896	37.6
2012	309,090,115	66,294,321	242,795,794	2,200,873,690	42.2
2013	251,923,784	44,245,858	207,677,926	2,408,551,616	46.2
2014	225,499,812	35,413,505	190,086,307	2,598,637,923	49.9
2015	229,882,173	29,426,586	200,455,587	2,799,093,510	53.7
2016	275,762,999	40,144,768	235,618,231	3,034,711,741	58.2
2017	243,737,404	28,470,431	215,266,973	3,249,978,714	62.4
2018	390,968,341	52,495,365	338,472,976	3,588,451,690	68.9
2019	285,272,228	48,245,532	237,026,696	3,825,478,386	73.4
2020	308,213,819	28,756,159	279,457,660	4,104,936,046	78.8
2021	334,497,086	28,211,431	306,285,655	4,411,221,701	84.6
2022	394,311,525	20,154,608	374,156,917	4,785,378,618	91.8

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2023	500,656,324	14,122,410	486,533,914	5,271,912,532	101.2
2024	247,851,218	1,226,686	246,624,532	5,518,537,064	105.9
9999	345,459,182-	38,453,522-	307,005,660-	5,211,531,404	100.0
SUBTOTAL	6,417,839,486	1,206,308,085	5,211,531,402		
NONDEPRECIABLE	26,129,647		26,129,647		
TOTAL	6,443,969,133	1,206,308,085	5,237,661,049		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 303.14 WATER RIGHTS - HIBERNIA

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
1995	1,942,822.51	1,942,823	1,942,823			
	1,942,822.51	1,942,823	1,942,823			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 303.35 WASTE HANDLING AND TREATMENT LAND

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 100-R3						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1991	70,430.00	46,716	60,870	9,560	16.75	571
1992	84,595.17	55,494	72,308	12,287	16.78	732
	155,025.17	102,210	133,178	21,847		1,303

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.8 0.84

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 303.99 COMPREHENSIVE PLANNING STUDIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	210,221.70	210,222	210,222			
2014	668,293.04	668,293	668,293			
2015	145,773.72	145,774	145,774			
2016	5,166,691.39	5,166,691	5,166,691			
2017	370,367.21	370,367	370,367			
2018	950,553.09	950,553	950,553			
2019	393,070.67	393,071	393,071			
2020	1,282,572.43	1,026,058	568,230	714,342	1.00	714,342
2021	891,896.17	535,138	296,359	595,537	2.00	297,768
2022	961,088.22	384,435	212,899	748,189	3.00	249,396
2023	270,955.62	54,191	30,011	240,945	4.00	60,236
2024	526,937.25	26,347	14,591	512,346	4.75	107,862
	11,838,420.51	9,931,140	9,027,061	2,811,360		1,429,604

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.0 12.08

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.15 OTHER WATER SOURCE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S0.5						
NET SALVAGE PERCENT.. 0						
1971	5,295.76	4,126	2,082	3,214	15.03	214
1972	11,972.26	9,276	4,680	7,292	15.11	483
1973	68.13	52	26	42	15.67	3
1974	7,902.51	6,006	3,030	4,873	15.79	309
1975	2,520.25	1,889	953	1,567	16.36	96
1977	1,758.72	1,289	650	1,109	17.10	65
1978	1,268.42	922	465	803	17.29	46
1979	61,270.92	44,115	22,257	39,014	17.50	2,229
1980	42,766.17	30,296	15,285	27,481	18.11	1,517
1981	168,925.47	118,400	59,737	109,188	18.35	5,950
1982	4,471.79	3,099	1,564	2,908	18.61	156
1983	20,471.43	14,017	7,072	13,399	18.88	710
1984	905.41	612	309	596	19.17	31
1985	64,477.55	43,000	21,695	42,783	19.48	2,196
1986	58,614.41	38,533	19,441	39,173	19.80	1,978
1987	176.21	113	57	119	20.47	6
1988	4,842.81	3,068	1,548	3,295	20.82	158
1989	126,606.85	79,319	40,019	86,588	20.87	4,149
1990	154,011.25	94,779	47,819	106,192	21.25	4,997
1991	477,795.20	288,541	145,578	332,217	21.64	15,352
1992	282,572.05	167,283	84,400	198,172	22.05	8,987
1993	131,576.44	76,275	38,483	93,093	22.48	4,141
1994	1,200,156.56	680,489	343,329	856,828	22.91	37,400
1995	195,677.28	108,953	54,970	140,707	23.08	6,096
1996	378,882.75	205,809	103,837	275,046	23.55	11,679
1997	27,317.05	14,530	7,331	19,986	23.76	841
1998	249,604.75	129,145	65,158	184,447	24.25	7,606
1999	137,849.87	69,614	35,123	102,727	24.50	4,193
2000	138,243.48	67,684	34,149	104,094	25.02	4,160
2001	9,366.14	4,459	2,250	7,116	25.31	281
2002	720,428.11	331,253	167,128	553,300	25.85	21,404
2003	1,887,605.30	840,362	423,990	1,463,615	26.17	55,927
2004	251,929.43	108,330	54,656	197,273	26.51	7,441
2005	979,012.97	405,507	204,592	774,421	26.87	28,821
2006	498,569.77	198,331	100,064	398,506	27.25	14,624
2007	1,544,270.54	588,058	296,695	1,247,576	27.64	45,137
2008	1,228,357.69	446,140	225,092	1,003,266	28.05	35,767
2009	232,399.56	80,178	40,452	191,948	28.48	6,740
2010	11,045,194.85	3,602,943	1,817,803	9,227,392	28.92	319,066
2011	344,914.89	105,820	53,390	291,525	29.37	9,926
2012	354,275.86	102,031	51,478	302,798	29.67	10,206

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.15 OTHER WATER SOURCE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S0.5						
NET SALVAGE PERCENT.. 0						
2013	2,972,390.07	794,520	400,861	2,571,529	30.15	85,291
2014	1,394,379.46	344,412	173,767	1,220,612	30.49	40,033
2015	944,830.82	212,587	107,257	837,574	31.00	27,019
2016	1,915,458.04	389,221	196,375	1,719,083	31.37	54,800
2017	2,038,199.08	368,099	185,718	1,852,481	31.76	58,327
2018	17,387,931.03	2,733,383	1,379,081	16,008,850	32.17	497,633
2019	3,393,373.20	451,319	227,705	3,165,668	32.59	97,136
2020	5,258,299.61	567,896	286,522	4,971,778	33.04	150,478
2021	5,280,515.11	435,642	219,796	5,060,719	33.36	151,700
2022	26,500,934.64	1,484,052	748,753	25,752,182	33.71	763,933
2023	11,350,323.92	324,619	163,781	11,186,543	33.97	329,307
2024	1,745,555.33	12,568	6,341	1,739,214	34.23	50,810
	103,236,517.17	17,232,964	8,694,594	94,541,923		2,987,555

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.6 2.89

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALLEGHENY RIVER PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2045						
NET SALVAGE PERCENT.. 0						
1962	15,878.73	12,503	6,394	9,485	16.74	567
1970	6,710.06	5,073	2,594	4,116	17.43	236
1995	1,715,454.62	1,039,737	531,710	1,183,745	18.85	62,798
2001	6,191.06	3,389	1,733	4,458	19.02	234
	1,744,234.47	1,060,702	542,431	1,201,803		63,835
BECKS RUN STATION - NEW						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2072						
NET SALVAGE PERCENT.. 0						
2012	23,868,525.21	5,900,299	3,017,348	20,851,177	36.54	570,640
2015	17,442.33	3,406	1,742	15,701	37.08	423
	23,885,967.54	5,903,705	3,019,090	20,866,878		571,063
MILL STREET PUMP STATION AND REGULATOR BYPASS						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	1,277,952.17	777,762	397,739	880,213	21.87	40,248
1994	3,067.93	1,758	899	2,169	22.36	97
2001	15,048.48	7,580	3,876	11,172	22.66	493
2018	27,090.40	5,445	2,785	24,306	23.85	1,019
2021	3,362,441.11	373,231	190,866	3,171,575	24.03	131,984
	4,685,600.09	1,165,776	596,165	4,089,435		173,841

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
GARDNER CREEK PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2043						
NET SALVAGE PERCENT.. 0						
1993	1,121,355.16	723,050	369,760	751,595	17.08	44,004
1994	85,662.97	54,482	27,861	57,801	17.17	3,366
2001	13,088.07	7,435	3,802	9,286	17.49	531
2003	7,900.11	4,313	2,206	5,694	17.46	326
	1,228,006.31	789,280	403,629	824,377		48,227
NORRISTOWN BOOSTER STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2047						
NET SALVAGE PERCENT.. 0						
1997	2,400,581.27	1,367,611	699,382	1,701,200	20.39	83,433
1998	52,044.11	29,228	14,947	37,097	20.30	1,827
2003	1,271.63	641	328	944	20.67	46
2007	10,970.93	4,924	2,518	8,453	20.88	405
2008	97,884.43	42,443	21,705	76,180	20.90	3,645
2012	1,059.31	383	196	863	21.22	41
2013	31,601.32	10,776	5,511	26,091	21.26	1,227
	2,595,413.00	1,456,006	744,586	1,850,827		90,624
MILL ROAD BOOSTER STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2047						
NET SALVAGE PERCENT.. 0						
1997	2,093,461.42	1,192,645	609,905	1,483,556	20.39	72,759
1998	27,010.00	15,169	7,757	19,253	20.30	948
2015	97,145.43	28,852	14,755	82,391	21.30	3,868
	2,217,616.85	1,236,666	632,417	1,585,200		77,575

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CHERRY VALLEY						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2049						
NET SALVAGE PERCENT.. 0						
1999	4,596,861.48	2,447,829	1,253,271	3,343,590	21.95	152,328
2014	95,401.19	29,002	14,849	80,552	22.89	3,519
2023	299,969.65	12,359	6,328	293,642	23.27	12,619
	4,992,232.32	2,489,190	1,274,448	3,717,784		168,466
CLARION WATER TREATMENT AND TANK						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
2003	2,349,120.19	1,075,427	549,961	1,799,159	24.87	72,343
2004	146,294.31	64,955	33,217	113,077	25.05	4,514
2006	10,710.36	4,453	2,277	8,433	25.29	333
2007	2,583.58	1,037	530	2,053	25.37	81
	2,508,708.44	1,145,872	585,986	1,922,722		77,271
NORRISTOWN - FOREST AVENUE BOOSTER STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2063						
NET SALVAGE PERCENT.. 0						
2013	1,327,877.66	337,414	172,550	1,155,328	32.29	35,780
	1,327,877.66	337,414	172,550	1,155,328		35,780
SHIRE OAKS RELAY STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2063						
NET SALVAGE PERCENT.. 0						
2013	2,585,737.11	657,036	336,001	2,249,736	32.29	69,673
2014	2,220,406.42	524,016	267,976	1,952,430	32.37	60,316
	4,806,143.53	1,181,052	603,977	4,202,167		129,989

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALDRICH STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2063						
NET SALVAGE PERCENT.. 0						
2007	15,755.78	5,518	2,822	12,934	31.54	410
2013	4,835,261.20	1,228,640	628,313	4,206,948	32.29	130,286
2014	1,472,142.36	347,426	177,670	1,294,472	32.37	39,990
2017	3,006.40	528	270	2,736	32.84	83
	6,326,165.74	1,582,112	809,075	5,517,091		170,769
ELLWOOD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
2005	11,236.00	3,779	1,932	9,304	37.50	248
2019	130,266.72	14,329	7,328	122,939	40.45	3,039
	141,502.72	18,108	9,260	132,243		3,287
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1947	3,907.21	3,731	1,909	1,998	3.65	547
1948	34,857.57	33,115	16,942	17,915	4.00	4,479
1949	1,245.06	1,177	602	643	4.37	147
1950	315.23	296	151	164	4.74	35
1951	20,174.43	18,998	9,720	10,455	4.52	2,313
1952	8,416.76	7,878	4,031	4,386	4.92	891
1953	21,145.85	19,668	10,063	11,083	5.34	2,075
1954	114,463.18	105,764	54,112	60,352	5.76	10,478
1955	83,661.63	77,354	39,576	44,085	5.63	7,830
1956	21,440.78	19,683	10,070	11,370	6.07	1,873
1957	13,703.73	12,487	6,389	7,315	6.53	1,120
1958	11,844.36	10,788	5,519	6,325	6.46	979
1959	23,793.30	21,497	10,998	12,795	6.94	1,844
1960	17,757.18	16,024	8,198	9,559	6.92	1,381
1961	66,390.34	59,393	30,387	36,003	7.42	4,852
1962	660.46	586	300	361	7.93	46
1963	42,023.95	37,170	19,017	23,007	7.97	2,887
1964	336,572.54	294,838	150,847	185,726	8.49	21,876

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1965	25,220.31	22,022	11,267	13,953	8.57	1,628
1966	43,274.70	37,398	19,134	24,141	9.11	2,650
1967	87,469.99	74,787	38,263	49,207	9.67	5,089
1968	19,612.64	16,694	8,541	11,072	9.79	1,131
1969	105,244.90	88,564	45,312	59,933	10.36	5,785
1970	43,259.23	36,208	18,525	24,734	10.52	2,351
1971	119,319.46	98,653	50,473	68,846	11.10	6,202
1972	91,213.25	74,466	38,099	53,115	11.69	4,544
1973	55,144.16	44,716	22,878	32,266	11.89	2,714
1974	114,375.38	91,500	46,814	67,562	12.50	5,405
1975	97,636.17	77,025	39,408	58,228	13.11	4,441
1976	45,894.11	35,687	18,258	27,636	13.73	2,013
1977	26,438.23	20,379	10,426	16,012	13.98	1,145
1978	85,518.22	64,908	33,209	52,310	14.61	3,580
1979	69,957.24	52,258	26,737	43,221	15.24	2,836
1980	113,008.04	83,038	42,484	70,524	15.88	4,441
1981	240,668.38	174,894	89,480	151,188	16.17	9,350
1982	188,459.14	134,560	68,844	119,615	16.82	7,111
1983	156,671.33	109,842	56,198	100,473	17.48	5,748
1984	128,523.94	88,424	45,240	83,284	18.14	4,591
1985	930,763.41	627,986	321,294	609,470	18.80	32,419
1986	209,820.26	139,530	71,387	138,433	19.14	7,233
1987	1,094,432.07	712,694	364,632	729,800	19.82	36,821
1988	349,175.71	222,495	113,834	235,342	20.50	11,480
1989	788,728.20	491,378	251,401	537,327	21.18	25,370
1990	1,896,997.53	1,154,513	590,678	1,306,320	21.87	59,731
1991	291,173.61	172,957	88,489	202,684	22.56	8,984
1992	1,828,051.95	1,058,808	541,713	1,286,339	23.25	55,326
1993	1,448,580.49	817,289	418,146	1,030,435	23.95	43,024
1994	241,193.84	132,415	67,747	173,447	24.64	7,039
1995	633,758.34	338,173	173,018	460,740	25.35	18,175
1996	971,474.09	503,224	257,462	714,012	26.05	27,409
1997	718,681.06	360,922	184,657	534,024	26.76	19,956
1998	622,595.02	302,706	154,872	467,723	27.48	17,020
1999	659,379.04	309,908	158,557	500,822	28.19	17,766
2000	1,752,339.16	794,861	406,671	1,345,668	28.91	46,547
2001	790,823.89	345,590	176,813	614,011	29.63	20,723
2002	247,094.05	103,829	53,122	193,973	30.36	6,389
2003	4,274,783.39	1,723,593	881,834	3,392,950	31.08	109,168
2004	341,756.67	131,918	67,493	274,264	31.81	8,622

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
2005	303,251.04	111,778	57,188	246,063	32.55	7,560
2006	3,495,789.64	1,227,022	627,775	2,868,014	33.28	86,178
2007	3,996,701.58	1,331,701	681,332	3,315,370	34.02	97,454
2008	1,157,561.06	364,863	186,673	970,888	34.76	27,931
2009	18,875.52	5,606	2,868	16,007	35.51	451
2010	227,053.33	62,939	32,201	194,852	36.51	5,337
2011	560,599.69	145,027	74,199	486,400	37.25	13,058
2012	569,892.52	136,774	69,977	499,915	38.00	13,156
2013	1,555,485.09	343,918	175,957	1,379,528	38.75	35,601
2014	1,881,548.58	380,073	194,455	1,687,094	39.50	42,711
2015	849,391.18	155,184	79,396	769,995	40.26	19,126
2016	3,073,237.06	501,552	256,607	2,816,630	41.02	68,665
2017	596,140.23	85,129	43,554	552,586	42.02	13,151
2018	1,735,322.71	213,445	109,204	1,626,119	42.78	38,011
2019	142,222.18	14,649	7,495	134,727	43.54	3,094
2020	1,385,313.31	114,704	58,685	1,326,628	44.31	29,940
2021	4,178,079.38	261,966	134,028	4,044,051	44.85	90,168
2022	59,130.81	2,483	1,270	57,860	45.62	1,268
2023	3,486,153.50	74,255	37,991	3,448,163	45.95	75,042
2024	1,804,421.08	9,744	4,985	1,799,436	46.05	39,076
9999	1,289,607.60-	434,780-	222,444-	1,067,163-		34,358-
	52,557,446.05	17,719,291	9,065,637	43,491,809		1,400,230
	109,016,914.72	36,085,174	18,459,251	90,557,664		3,010,957

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.1 2.76

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
E.H. ALDRICH PURIFICATION BUILDING						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1961	9,809.75	8,343	8,444	1,366	11.07	123
1962	341.82	290	293	48	10.99	4
1964	272.24	229	232	40	11.43	3
1967	17,574.31	14,625	14,801	2,773	11.49	241
1969	71,713.90	59,164	59,877	11,837	11.67	1,014
1970	7.42	6	6	1	11.79	
1972	2,227.31	1,807	1,829	399	12.10	33
1975	142.12	114	115	27	12.35	2
1976	1,107.34	877	888	220	12.61	17
1979	7,739.19	6,025	6,098	1,642	12.80	128
1980	0.40		0			
1981	4,699.03	3,597	3,640	1,059	13.18	80
1982	168.83	128	130	39	13.25	3
1983	31,491.15	23,757	24,043	7,448	13.35	558
1986	2,252.88	1,661	1,681	572	13.55	42
1987	35,595.63	25,946	26,259	9,337	13.76	679
1989	3,320.72	2,383	2,412	909	13.78	66
1995	4,396.22	2,932	2,967	1,429	14.48	99
1996	570,688.75	375,513	380,038	190,651	14.55	13,103
1997	1,131.14	736	745	386	14.49	27
1998	33,571.77	21,473	21,732	11,840	14.65	808
2000	64,409.30	39,882	40,363	24,047	14.76	1,629
2001	7,230.48	4,390	4,443	2,788	14.88	187
2002	359,666.75	213,642	216,216	143,450	15.04	9,538
2003	106,042.88	61,685	62,428	43,615	15.10	2,888
2005	39,243.19	21,772	22,034	17,209	15.25	1,128
2006	566,266.66	305,784	309,469	256,798	15.33	16,751
2007	35,748.83	18,779	19,005	16,744	15.36	1,090
2008	6,907.87	3,515	3,557	3,351	15.45	217
2009	58,335.33	28,613	28,958	29,378	15.58	1,886
2010	2,115.62	998	1,010	1,106	15.67	71
2011	86,149.68	38,974	39,444	46,706	15.74	2,967
2012	5,605,255.56	2,421,470	2,450,649	3,154,607	15.78	199,912
2013	125,620.26	51,404	52,023	73,597	15.88	4,635
2014	87,562.40	33,712	34,118	53,444	15.97	3,347

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
E.H. ALDRICH PURIFICATION BUILDING						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
2017	1,300,442.34	393,254	397,993	902,450	16.15	55,879
2018	51,222.80	13,830	13,997	37,226	16.22	2,295
2023	899,737.78	51,105	51,721	848,017	16.61	51,055
	10,200,209.65	4,252,415	4,303,657	5,896,553		372,505
HAYS MINE FILTER BUILDING						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1928	321.93	309	313	9	4.00	2
1938	931.66	865	876	56	6.59	8
1953	15,796.62	13,683	13,853	1,944	10.97	177
1954	58,728.00	50,976	51,608	7,120	10.65	669
1955	10,938.73	9,435	9,552	1,387	11.00	126
1958	1,772.53	1,497	1,516	257	12.12	21
1961	6,297.05	5,237	5,302	995	12.76	78
1962	289.11	240	243	46	12.63	4
1963	512.21	422	427	85	13.07	7
1965	305.51	249	252	53	13.46	4
1966	417.37	336	340	77	13.94	6
1969	901.54	714	723	179	14.44	12
1973	484.26	373	378	107	15.23	7
1975	26,467.73	20,102	20,351	6,117	15.52	394
1976	328.63	248	251	78	15.69	5
1977	1,287.38	962	974	313	15.89	20
1979	6,394.46	4,690	4,748	1,646	16.35	101
1980	1,134.27	823	833	301	16.61	18
1981	242.07	174	176	66	16.88	4
1982	175.32	124	126	50	17.17	3
1984	3,501.73	2,437	2,467	1,035	17.47	59
1985	120,919.27	83,471	84,505	36,414	17.50	2,081
1986	76,916.75	52,319	52,967	23,950	17.87	1,340
1987	816.99	550	557	260	17.95	14
1988	3,021.20	2,012	2,037	984	18.05	55
1989	110,411.01	72,650	73,550	36,861	18.19	2,026
1991	165,693.03	106,077	107,391	58,302	18.55	3,143
1995	364.53	219	222	143	19.31	7

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HAYS MINE FILTER BUILDING						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1996	13,740.76	8,080	8,180	5,561	19.62	283
1997	40,481.83	23,390	23,680	16,802	19.73	852
2002	76,160.05	39,375	39,863	36,297	20.55	1,766
2003	35,741.53	18,014	18,237	17,504	20.67	847
2005	374,896.12	177,363	179,560	195,336	21.16	9,231
2006	387,084.88	177,672	179,873	207,212	21.22	9,765
2007	93,919.82	41,513	42,027	51,893	21.46	2,418
2008	104,453.85	44,456	45,007	59,447	21.59	2,753
2009	70,770.81	28,874	29,232	41,539	21.76	1,909
2010	5,944.57	2,314	2,343	3,602	21.97	164
2011	50,212.79	18,604	18,834	31,378	22.09	1,420
2012	12,817,408.31	4,475,839	4,531,291	8,286,117	22.36	370,578
2013	130,719.11	42,994	43,527	87,192	22.44	3,886
2014	1,576,788.77	482,497	488,475	1,088,314	22.68	47,986
2016	154,207.24	39,724	40,216	113,991	23.06	4,943
2017	998,711.74	231,402	234,269	764,443	23.21	32,936
2018	2,208.11	450	456	1,753	23.41	75
2019	96,326.39	16,857	17,066	79,261	23.57	3,363
2023	2,116,911.01	83,618	84,654	2,032,257	24.32	83,563
	19,762,058.58	6,384,230	6,463,326	13,298,733		589,129
NEW HERSHEY TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2067						
NET SALVAGE PERCENT.. 0						
1930	44.14	42	42	2	4.04	
1984	41,078.07	27,112	27,362	13,716	20.61	666
1992	5,084,272.63	2,944,811	2,971,933	2,112,339	23.25	90,853
1995	8,866.38	4,834	4,879	3,988	24.19	165
1996	2,162.87	1,157	1,168	995	24.36	41
1999	4,710.26	2,332	2,353	2,357	25.51	92
2001	236,919.02	111,162	112,186	124,733	26.02	4,794
2006	49,418.53	19,392	19,571	29,848	27.87	1,071
2010	7,202.92	2,329	2,350	4,852	29.29	166
2011	65,485.64	19,921	20,104	45,381	29.74	1,526
2012	3,766,871.07	1,075,818	1,085,726	2,681,145	30.02	89,312
2013	166,659.20	44,181	44,588	122,071	30.49	4,004

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEW HERSHEY TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2067						
NET SALVAGE PERCENT.. 0						
2014	237,415.86	58,167	58,703	178,713	30.82	5,799
2015	34,086.88	7,608	7,678	26,409	31.32	843
2016	152,442.65	30,732	31,015	121,428	31.68	3,833
2017	164,504.71	29,479	29,751	134,754	32.06	4,203
2018	24,911.72	3,871	3,907	21,005	32.61	644
2021	2,285,405.95	185,804	187,515	2,097,891	33.90	61,885
2022	278,329.97	15,308	15,449	262,881	34.36	7,651
	12,610,788.47	4,584,060	4,626,280	7,984,508		277,548
CHINCHILLA WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1893	690.28	690	690			
1910	955.96	956	956			
1921	7,550.49	7,388	7,456	94	2.26	42
1953	44.66	39	39	5	10.97	
1990	3,174,965.67	2,061,823	2,080,849	1,094,117	18.36	59,592
1995	10,224.61	6,138	6,195	4,030	19.31	209
2006	66,480.93	30,515	30,797	35,684	21.22	1,682
2007	1,592.33	704	710	882	21.46	41
2009	1,945.08	794	801	1,144	21.76	53
2013	13,302.91	4,375	4,415	8,888	22.44	396
2017	44.24	10	10	34	23.21	1
2018	2,722.48	555	560	2,162	23.41	92
2023	2,377.48	94	95	2,283	24.32	94
	3,282,897.12	2,114,081	2,133,574	1,149,323		62,202
FALLBROOK WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	2,232,245.42	1,449,620	1,462,972	769,274	18.36	41,899
1991	14,802.97	9,477	9,564	5,239	18.55	282
1992	3,782.38	2,384	2,406	1,376	18.76	73

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FALLBROOK WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1994	5,692.25	3,467	3,499	2,193	19.26	114
1997	5,455.32	3,152	3,181	2,274	19.73	115
1998	18,465.92	10,466	10,562	7,904	19.87	398
1999	2,277.11	1,264	1,276	1,001	20.05	50
2003	17,373.38	8,756	8,837	8,537	20.67	413
2006	53,490.76	24,552	24,778	28,713	21.22	1,353
2007	70,346.66	31,093	31,379	38,967	21.46	1,816
2008	47,309.49	20,135	20,320	26,989	21.59	1,250
2009	28,023.69	11,434	11,539	16,484	21.76	758
2010	4,824.82	1,878	1,895	2,930	21.97	133
2012	30,878.01	10,783	10,882	19,996	22.36	894
2014	46,182.39	14,132	14,262	31,920	22.68	1,407
2015	54,662.81	15,448	15,590	39,073	22.85	1,710
2016	58,953.74	15,186	15,326	43,628	23.06	1,892
2018	11,872.00	2,422	2,444	9,428	23.41	403
	2,706,639.12	1,635,649	1,650,714	1,055,925		54,960
SCRANTON AREA WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	8,468,598.33	5,499,508	5,559,386	2,909,213	18.36	158,454
1991	147,129.90	94,193	95,219	51,911	18.55	2,798
1992	456.64	288	291	166	18.76	9
1993	58.83	36	36	22	19.00	1
1994	6,067.68	3,695	3,735	2,332	19.26	121
1995	9,911.69	5,950	6,015	3,897	19.31	202
1996	221,350.91	130,154	131,571	89,780	19.62	4,576
1997	6,113.66	3,532	3,570	2,543	19.73	129
1999	24,939.65	13,842	13,993	10,947	20.05	546
2001	539.61	285	288	252	20.48	12
2002	57,542.98	29,750	30,074	27,469	20.55	1,337
2003	52,107.61	26,262	26,548	25,560	20.67	1,237
2004	3,821.64	1,865	1,885	1,936	20.98	92
2005	271,712.93	128,547	129,947	141,766	21.16	6,700
2006	6,798.09	3,120	3,154	3,644	21.22	172
2007	40,179.95	17,760	17,953	22,227	21.46	1,036

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CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SCRANTON AREA WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
2008	21,647.39	9,213	9,313	12,334	21.59	571
2009	1,599.31	653	660	939	21.76	43
2010	8,936.56	3,478	3,516	5,421	21.97	247
2011	108,567.89	40,224	40,662	67,906	22.09	3,074
2012	124,345.67	43,422	43,895	80,451	22.36	3,598
2013	21,229.16	6,982	7,058	14,171	22.44	632
2014	5,291.32	1,619	1,637	3,655	22.68	161
2017	3,568,740.04	826,877	835,880	2,732,860	23.21	117,745
2018	1,028,041.66	209,720	212,003	816,038	23.41	34,859
2019	17,479.33	3,059	3,092	14,387	23.57	610
2020	31,559.87	4,545	4,594	26,965	23.78	1,134
2022	11,153.91	854	863	10,291	24.11	427
2023	1,252,772.46	49,485	50,024	1,202,749	24.32	49,455
	15,518,694.67	7,158,918	7,236,863	8,281,832		389,978
BROWNELL WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	4,333,381.56	2,814,098	2,840,016	1,493,365	18.36	81,338
1991	88,970.52	56,959	57,484	31,487	18.55	1,697
1992	72.69	46	46	26	18.76	1
1998	3,431.58	1,945	1,963	1,469	19.87	74
1999	152.98	85	86	67	20.05	3
2003	7,790.06	3,926	3,962	3,828	20.67	185
2005	30,165.72	14,271	14,402	15,763	21.16	745
2007	12,234.92	5,408	5,458	6,777	21.46	316
2008	56,670.86	24,119	24,341	32,330	21.59	1,497
2009	66,342.17	27,068	27,317	39,025	21.76	1,793
2010	10,428.23	4,059	4,096	6,332	21.97	288
2011	5,098.68	1,889	1,906	3,192	22.09	144
2012	56,670.09	19,789	19,971	36,699	22.36	1,641
2013	1,247.32	410	414	834	22.44	37
2014	42,913.80	13,132	13,253	29,661	22.68	1,308
2015	10,206.09	2,884	2,911	7,296	22.85	319
2016	8,246.29	2,124	2,144	6,103	23.06	265

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BROWNELL WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
2017	7,772.90	1,801	1,818	5,955	23.21	257
2018	7,323.77	1,494	1,508	5,816	23.41	248
2019	648.49	113	114	534	23.57	23
	4,749,768.72	2,995,620	3,023,210	1,726,559		92,179
NESBITT WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2048						
NET SALVAGE PERCENT.. 0						
1988	6,091,845.49	4,122,961	4,160,934	1,930,912	17.19	112,328
1989	236,127.92	157,852	159,306	76,822	17.36	4,425
1991	9,200.90	5,982	6,037	3,164	17.76	178
1992	3,913.79	2,505	2,528	1,386	18.00	77
1994	2,637.07	1,638	1,653	984	18.31	54
1998	19,882.52	11,528	11,634	8,248	18.84	438
1999	5,954.90	3,379	3,410	2,545	19.05	134
2001	3,606.32	1,958	1,976	1,630	19.37	84
2002	777.36	412	416	362	19.49	19
2003	16,530.05	8,539	8,618	7,912	19.65	403
2006	33,459.15	15,840	15,986	17,473	20.02	873
2007	18,344.81	8,358	8,435	9,910	20.31	488
2008	64,101.93	28,205	28,465	35,637	20.36	1,750
2009	26,211.66	11,048	11,150	15,062	20.59	732
2010	1,810.10	730	737	1,073	20.72	52
2012	509,430.90	185,229	186,935	322,496	21.00	15,357
2014	96,480.80	30,777	31,060	65,420	21.35	3,064
2015	14,209.06	4,195	4,234	9,975	21.49	464
2016	100,151.34	27,081	27,330	72,821	21.59	3,373
2022	18,429.84	1,500	1,514	16,916	22.57	749
	7,273,105.91	4,629,717	4,672,357	2,600,749		145,042

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CRYSTAL LAKE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2052						
NET SALVAGE PERCENT.. 0						
1992	5,023,109.47	3,118,346	3,147,066	1,876,043	19.55	95,961
1993	73,596.13	44,945	45,359	28,237	19.76	1,429
1995	197.94	117	118	80	20.26	4
1999	13,626.50	7,426	7,494	6,132	20.87	294
2004	11,303.55	5,380	5,430	5,874	22.02	267
2006	99,797.96	44,550	44,960	54,838	22.32	2,457
2007	13,173.73	5,666	5,718	7,456	22.53	331
2008	28,589.12	11,802	11,911	16,678	22.76	733
2009	19,356.65	7,665	7,736	11,621	22.88	508
2010	2,858.04	1,076	1,086	1,772	23.17	76
2011	22,252.17	7,955	8,028	14,224	23.36	609
2014	3,545.66	1,046	1,056	2,490	23.90	104
2015	2,868.40	780	787	2,081	24.11	86
2016	10,676.66	2,639	2,663	8,013	24.36	329
2018	14,229.77	2,775	2,801	11,429	24.77	461
2020	3,879.66	531	536	3,344	25.24	132
	5,343,061.41	3,262,699	3,292,749	2,050,312		103,781
CEASETOWN WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
1993	8,491,079.67	5,132,858	5,180,132	3,310,948	20.28	163,262
1994	18,958.58	11,318	11,422	7,536	20.25	372
1995	16,043.96	9,399	9,486	6,558	20.50	320
1997	45,655.10	25,640	25,876	19,779	21.08	938
1998	3,202.38	1,765	1,781	1,421	21.17	67
2001	5,100.00	2,616	2,640	2,460	21.84	113
2002	3,150.51	1,573	1,587	1,563	22.05	71
2004	17,119.10	8,080	8,154	8,965	22.37	401
2005	299,398.81	136,526	137,783	161,615	22.67	7,129
2006	93,193.36	41,098	41,477	51,717	22.82	2,266
2007	11,733.64	4,987	5,033	6,701	23.00	291
2008	28,894.84	11,789	11,898	16,997	23.22	732
2009	10,169.23	3,966	4,003	6,167	23.46	263
2010	16,080.19	5,966	6,021	10,059	23.74	424
2011	77,289.61	27,229	27,480	49,810	23.90	2,084

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RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CEASETOWN WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
2012	123,725.49	41,126	41,505	82,221	24.10	3,412
2013	2,077.72	647	653	1,425	24.34	59
2014	40,488.30	11,701	11,809	28,680	24.60	1,166
2020	10,209.09	1,364	1,377	8,833	25.94	341
	9,313,569.58	5,479,648	5,530,116	3,783,454		183,711
WATRES WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
1993	9,042,484.16	5,466,182	5,516,526	3,525,958	20.28	173,864
1994	557,586.68	332,879	335,945	221,642	20.25	10,945
1995	50,819.95	29,770	30,044	20,776	20.50	1,013
1998	1,099.27	606	612	488	21.17	23
2002	1,956.80	977	986	971	22.05	44
2003	5,173.10	2,509	2,532	2,641	22.29	118
2005	2,174.91	992	1,001	1,174	22.67	52
2006	52,855.60	23,309	23,524	29,332	22.82	1,285
2007	1,179.60	501	506	674	23.00	29
2008	34,000.57	13,872	14,000	20,001	23.22	861
2009	5,827.62	2,273	2,294	3,534	23.46	151
2010	15,084.17	5,596	5,648	9,437	23.74	398
2011	95,761.95	33,737	34,048	61,714	23.90	2,582
2013	64,674.64	20,133	20,318	44,356	24.34	1,822
2014	165,655.45	47,874	48,315	117,341	24.60	4,770
2015	9,260.45	2,467	2,490	6,771	24.78	273
2016	8,689.72	2,106	2,125	6,564	25.00	263
2018	716,495.48	136,707	137,966	578,529	25.45	22,732
2019	11,862.12	1,934	1,952	9,910	25.67	386
2020	3,420.65	457	461	2,959	25.94	114
2021	4,578.80	471	475	4,103	26.15	157
	10,850,641.69	6,125,352	6,181,767	4,668,875		221,882

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NORRISTOWN						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
1992	4,476.99	2,693	2,719	1,758	21.19	83
1994	3,778.23	2,199	2,221	1,558	21.55	72
1997	5,404,226.75	2,947,465	2,976,348	2,427,879	22.50	107,906
1998	7,937.78	4,251	4,293	3,645	22.54	162
2000	74,588.87	37,951	38,323	36,266	23.17	1,565
2001	2,023,509.89	1,005,280	1,015,131	1,008,379	23.30	43,278
2002	58,091.88	27,989	28,263	29,829	23.66	1,261
2003	86,104.25	40,323	40,718	45,386	23.84	1,904
2004	98,144.99	44,558	44,995	53,150	24.05	2,210
2005	140.00	61	62	78	24.48	3
2006	1,204,036.32	507,140	512,110	691,927	24.74	27,968
2007	45,348.29	18,425	18,606	26,743	24.84	1,077
2009	102,333.83	37,915	38,287	64,047	25.49	2,513
2010	13,901.29	4,904	4,952	8,949	25.68	348
2011	28,104.08	9,390	9,482	18,622	25.91	719
2012	365,613.30	114,949	116,075	249,538	26.17	9,535
2013	21,001.51	6,168	6,228	14,773	26.45	559
2014	69.14	19	19	50	26.76	2
2015	67,794.34	16,962	17,128	50,666	26.97	1,879
2016	1,019,886.77	230,902	233,165	786,722	27.34	28,775
2017	61,609.01	12,464	12,586	49,023	27.60	1,776
2018	83,707.68	14,816	14,961	68,746	27.90	2,464
2019	1,119.07	168	170	949	28.22	34
2020	97,321.03	11,990	12,107	85,214	28.47	2,993
2021	3,789,738.42	358,130	361,639	3,428,099	28.75	119,238
2022	181,172.93	11,668	11,782	169,391	29.06	5,829
2023	400,000.00	13,160	13,289	386,711	29.40	13,153
	15,243,756.64	5,481,940	5,535,659	9,708,098		377,306
HUNTSVILLE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2059						
NET SALVAGE PERCENT.. 0						
1999	5,140,610.11	2,647,414	2,671,797	2,468,814	23.54	104,877
2001	8,125.96	3,962	3,998	4,127	24.17	171
2005	45,477.20	19,528	19,708	25,769	25.25	1,021
2006	30,782.70	12,744	12,861	17,921	25.48	703

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HUNTSVILLE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2059						
NET SALVAGE PERCENT.. 0						
2007	7,211.16	2,869	2,895	4,316	25.74	168
2008	59,813.06	22,777	22,987	36,826	26.02	1,415
2009	25,684.93	9,324	9,410	16,275	26.32	618
2010	2,533.46	876	884	1,649	26.49	62
2011	38,290.79	12,494	12,609	25,682	26.84	957
2012	15,722.39	4,811	4,855	10,867	27.22	399
2013	3,295.43	942	951	2,345	27.46	85
2015	2,369.82	576	581	1,789	28.04	64
2016	9,027.44	1,986	2,004	7,023	28.36	248
2022	35,020.59	2,171	2,191	32,830	30.26	1,085
	5,423,965.04	2,742,474	2,767,732	2,656,233		111,873
NEW CASTLE WATER TREATMENT PLANT - NEW						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2060						
NET SALVAGE PERCENT.. 0						
1948	127.32	113	114	13	9.47	1
2000	2,031,655.46	1,014,202	1,023,543	1,008,113	24.08	41,865
2001	3,501,677.38	1,699,364	1,715,015	1,786,662	24.39	73,254
2003	1,504.36	689	695	809	24.87	33
2004	166,573.01	73,625	74,303	92,270	25.25	3,654
2005	19,156.16	8,189	8,264	10,892	25.44	428
2006	285,061.14	116,989	118,066	166,995	25.86	6,458
2007	45,674.49	18,014	18,180	27,495	26.10	1,053
2008	220,753.83	83,357	84,125	136,629	26.37	5,181
2014	30,652.75	8,031	8,105	22,548	28.17	800
2015	149,409.41	35,903	36,234	113,176	28.45	3,978
2018	28,869.57	4,885	4,930	23,940	29.46	813
2019	22,547.59	3,236	3,266	19,282	29.84	646
2021	170,397.42	15,234	15,374	155,023	30.56	5,073
	6,674,059.89	3,081,831	3,110,215	3,563,845		143,237

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ROCK RUN FILTRATION PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2051						
NET SALVAGE PERCENT.. 0						
1976	3,032,325.96	2,270,606	2,291,519	740,807	16.10	46,013
1985	5,833.47	4,004	4,041	1,793	17.82	101
1991	23,116.00	14,646	14,781	8,335	19.08	437
1996	6,671.00	3,904	3,940	2,731	19.85	138
2000	142,779.16	76,758	77,465	65,314	20.64	3,164
2002	373,803.03	190,789	192,546	181,257	21.10	8,590
2006	428,360.75	193,533	195,315	233,045	21.84	10,671
2007	15,986.12	6,957	7,021	8,965	22.06	406
2011	13,009,059.10	4,735,298	4,778,911	8,230,148	22.71	362,402
2013	228,674.96	73,702	74,381	154,294	23.13	6,671
2014	32,558.55	9,768	9,858	22,701	23.33	973
2018	3,850.44	767	774	3,076	24.12	128
2019	4,599.43	784	791	3,808	24.33	157
2020	24,494.60	3,439	3,471	21,024	24.49	858
2022	4,742,093.46	352,812	356,061	4,386,032	24.88	176,287
	22,074,206.03	7,937,767	8,010,875	14,063,331		616,996
NAZARETH(BLUE MOUNTAIN) PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2055						
NET SALVAGE PERCENT.. 0						
1951	429.84	377	380	49	10.33	5
1960	45.00	37	37	8	12.92	1
1970	349.00	271	273	76	15.44	5
1975	41,890.00	31,200	31,487	10,403	16.79	620
1976	12,586.04	9,304	9,390	3,196	16.94	189
1977	48,491.99	35,554	35,881	12,611	17.10	737
1978	89.00	65	66	23	17.29	1
1979	1,797.00	1,294	1,306	491	17.50	28
1980	9,400.42	6,701	6,763	2,638	17.73	149
1983	3,194.00	2,200	2,220	974	18.52	53
1985	30.00	20	20	10	19.14	1
1988	9,287.67	6,018	6,073	3,214	19.56	164
1989	2,360.00	1,503	1,517	843	19.95	42
1991	4,553.00	2,810	2,836	1,717	20.48	84
1992	72,215.50	43,907	44,311	27,904	20.63	1,353
1995	4,258,824.56	2,457,768	2,480,404	1,778,420	21.25	83,690

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NAZARETH(BLUE MOUNTAIN) PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2055						
NET SALVAGE PERCENT.. 0						
1996	7,506.00	4,245	4,284	3,222	21.50	150
1997	7,826.00	4,332	4,372	3,454	21.78	159
1998	541.00	294	297	244	21.85	11
2007	2,222.54	922	930	1,292	23.98	54
2008	360,111.32	142,892	144,208	215,903	24.32	8,878
2009	6,280.49	2,383	2,405	3,876	24.53	158
2011	12,316.24	4,211	4,250	8,066	25.02	322
2013	17,236.87	5,195	5,243	11,994	25.50	470
2021	2,341,064.49	230,361	232,483	2,108,582	27.49	76,704
	7,220,647.97	2,993,864	3,021,438	4,199,210		174,028
CLARION WATER TREATMENT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2063						
NET SALVAGE PERCENT.. 0						
2003	10,342,319.64	4,647,838	4,713,239	5,629,080	25.73	218,775
2004	1,073,637.95	465,959	472,516	601,122	26.08	23,049
2005	51,929.31	21,706	22,011	29,918	26.45	1,131
2008	4,901.24	1,804	1,829	3,072	27.48	112
2009	3,997.32	1,403	1,423	2,575	27.74	93
2010	15,074.97	5,023	5,094	9,981	28.02	356
2012	25,964.22	7,633	7,740	18,224	28.82	632
2013	22,045.21	6,038	6,123	15,922	29.16	546
2015	4,722.08	1,096	1,111	3,611	29.76	121
2017	63,675.57	11,856	12,023	51,653	30.59	1,689
2018	7,287.53	1,185	1,202	6,086	30.90	197
2023	3,480,136.91	102,664	104,109	3,376,028	32.90	102,615
	15,095,691.95	5,274,205	5,348,420	9,747,272		349,316
WEST SHORE REGIONAL TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2066						
NET SALVAGE PERCENT.. 0						
1969	805.94	625	631	175	15.92	11
1983	39,657.10	26,665	26,911	12,747	19.98	638

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WEST SHORE REGIONAL TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2066						
NET SALVAGE PERCENT.. 0						
1987	6,134.90	3,882	3,918	2,217	21.48	103
1991	13,030.67	7,740	7,811	5,219	22.56	231
1997	3,934.06	2,061	2,080	1,854	24.55	76
2001	130,034.30	61,311	61,876	68,159	25.78	2,644
2006	13,390,509.38	5,278,539	5,327,155	8,063,355	27.66	291,517
2007	3,389,546.02	1,279,215	1,290,997	2,098,549	28.05	74,815
2008	20,115.84	7,274	7,341	12,775	28.25	452
2009	21,160.91	7,269	7,336	13,825	28.67	482
2011	68,339.41	20,967	21,160	47,179	29.37	1,606
2013	109,213.87	29,193	29,462	79,752	30.15	2,645
2014	156,113.00	38,560	38,915	117,198	30.49	3,844
2015	8,725.59	1,963	1,981	6,745	31.00	218
2016	67,448.35	13,706	13,832	53,616	31.37	1,709
2017	186,670.82	33,713	34,023	152,647	31.76	4,806
2018	201,042.48	31,604	31,895	169,147	32.17	5,258
2019	35,185.25	4,680	4,723	30,462	32.59	935
2021	2,924,333.11	240,380	242,594	2,681,739	33.50	80,052
2022	1,293,673.16	71,928	72,590	1,221,083	33.97	35,946
	22,065,674.16	7,161,275	7,227,231	14,838,443		507,988
BECK'S RUN PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2072						
NET SALVAGE PERCENT.. 0						
2012	26,304,729.23	7,291,671	7,358,828	18,945,901	31.29	605,494
	26,304,729.23	7,291,671	7,358,828	18,945,901		605,494

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ELLWOOD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
1991	15,090.60	8,814	8,895	6,195	23.50	264
2003	1,684.82	718	725	960	28.26	34
2018	34,566,354.68	4,977,555	5,023,398	29,542,956	35.67	828,230
2019	1,001,606.74	121,695	122,816	878,791	36.15	24,310
	35,584,736.84	5,108,782	5,155,834	30,428,903		852,838
MONTROSE TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
2018	2,315,435.08	333,423	336,493	1,978,942	35.67	55,479
2019	12,313.10	1,496	1,510	10,803	36.15	299
2020	38,563.16	3,779	3,814	34,749	36.82	944
	2,366,311.34	338,698	341,817	2,024,494		56,722
SILVER SPRINGS FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
2021	7,669,280.13	676,431	682,661	6,986,619	31.01	225,302
	7,669,280.13	676,431	682,661	6,986,619		225,302
YARDLEY - MILL ROAD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
2021	7,119,036.47	672,749	678,945	6,440,091	28.75	224,003
	7,119,036.47	672,749	678,945	6,440,091		224,003

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
STEELTON WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2043						
NET SALVAGE PERCENT.. 0						
1973	6,453,439.54	5,134,356	5,177,730	1,275,709	13.10	97,382
2010	4,876,442.37	2,191,473	2,209,986	2,666,456	17.15	155,478
2014	8,092.41	2,938	2,963	5,130	17.55	292
2017	1,950,570.71	548,891	553,528	1,397,043	17.88	78,134
2019	2,024.63	439	443	1,582	18.04	88
2020	13,663.11	2,470	2,491	11,172	18.12	617
2022	108,839.25	10,710	10,800	98,039	18.33	5,349
2024	445,147.74	5,965	6,015	439,132	18.48	23,763
	13,858,219.76	7,897,242	7,963,957	5,894,263		361,103
WHITE DEER / MILTON WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2062						
NET SALVAGE PERCENT.. 0						
2022	3,744,419.29	220,172	235,292	3,509,127	32.01	109,626
2023	2,388,099.85	71,643	76,563	2,311,537	32.33	71,498
	6,132,519.14	291,815	311,855	5,820,664		181,124
OTHER PURIFICATION STRUCTURES						
SURVIVOR CURVE.. IOWA 60-R3						
NET SALVAGE PERCENT.. 0						
1889	41.21	41	41			
1900	2,285.84	2,286	2,286			
1901	56.00	56	56			
1902	159.81	160	160			
1903	1,923.01	1,923	1,923			
1906	3,057.68	3,058	3,058			
1908	527.18	527	527			
1909	402.93	403	403			
1912	225.80	226	226			
1914	167.07	167	167			
1915	41.89	42	42			
1917	4.78	5	5			
1918	0.15		0			
1923	439.53	440	440			

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OTHER PURIFICATION STRUCTURES						
SURVIVOR CURVE.. IOWA 60-R3						
NET SALVAGE PERCENT.. 0						
1924	2,693.29	2,693	2,693			
1928	1,064.43	1,053	1,063	2	1.09	2
1929	3,038.32	3,002	3,030	8	1.15	7
1930	31.26	31	31			
1931	1,166.36	1,139	1,150	17	2.24	8
1934	244.88	238	240	5	2.59	2
1935	341.69	331	334	8	2.74	3
1937	627.00	605	611	16	3.09	5
1940	50.89	48	48	2	4.50	
1941	13.00	12	12	1	4.72	
1943	134.03	126	127	7	5.21	1
1944	251.37	235	237	14	5.47	3
1946	1.00	1	1			
1947	0.28		0			
1948	4.01	4	4			
1949	1,164.45	1,074	1,084	80	6.30	13
1951	4,026.00	3,674	3,708	318	7.00	45
1952	442.51	401	405	38	7.37	5
1953	1,371.29	1,246	1,258	114	7.12	16
1954	706.13	638	644	62	7.52	8
1955	51.47	46	46	5	7.92	1
1956	47.17	42	42	5	8.34	1
1957	259.31	229	231	28	8.76	3
1958	674.84	592	598	77	9.19	8
1959	61.56	54	55	7	9.07	1
1960	49.71	43	43	6	9.53	1
1961	36.31	31	31	5	9.99	1
1962	1,379.73	1,180	1,191	189	10.46	18
1963	625.74	531	536	90	10.94	8
1964	183.99	155	156	28	11.43	2
1965	157.93	132	133	25	11.42	2
1966	658.28	546	551	107	11.93	9
1967	31.14	26	26	5	12.44	
1968	19.47	16	16	3	12.97	
1969	26,214.18	21,050	21,247	4,967	13.49	368
1970	152.63	121	122	30	14.03	2
1971	4,435.82	3,479	3,512	924	14.57	63
1972	1,091,538.03	845,724	853,646	237,892	15.11	15,744
1973	9,354.84	7,156	7,223	2,132	15.67	136
1974	7,994.75	6,036	6,093	1,902	16.23	117

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER PURIFICATION STRUCTURES						
SURVIVOR CURVE.. IOWA 60-R3						
NET SALVAGE PERCENT.. 0						
1975	240,965.61	179,471	181,152	59,813	16.79	3,562
1976	37,697.06	27,685	27,944	9,753	17.36	562
1977	1,299.05	940	949	350	17.94	20
1978	10,580.56	7,593	7,664	2,916	18.10	161
1979	2,786.10	1,968	1,986	800	18.69	43
1980	409.67	283	286	124	19.69	6
1981	23,726.70	16,120	16,271	7,456	20.29	367
1982	458,589.11	306,246	309,115	149,474	20.89	7,155
1983	87,384.64	57,324	57,861	29,524	21.50	1,373
1984	31,966.35	20,586	20,779	11,188	22.11	506
1985	592,998.33	374,656	378,165	214,833	22.73	9,452
1986	10,904.41	6,754	6,817	4,087	23.35	175
1987	108,990.11	66,135	66,755	42,236	23.98	1,761
1988	1,261,427.23	749,288	756,307	505,120	24.61	20,525
1989	2,360,392.69	1,371,388	1,384,234	976,159	25.24	38,675
1990	944,275.85	536,160	541,182	403,094	25.88	15,576
1991	1,092,739.58	605,815	611,490	481,250	26.52	18,147
1992	12,816.74	6,931	6,996	5,821	27.17	214
1993	19,605.02	10,332	10,429	9,176	27.82	330
1994	1,104,140.75	563,112	568,387	535,754	28.82	18,590
1995	1,404,014.57	696,251	702,773	701,242	29.48	23,787
1996	407,212.69	196,114	197,951	209,262	30.14	6,943
1997	1,742,402.34	813,876	821,500	920,903	30.80	29,899
1998	631,985.66	285,910	288,588	343,397	31.47	10,912
1999	1,787,399.41	781,987	789,312	998,087	32.14	31,054
2000	57,278.05	24,057	24,282	32,996	33.14	996
2001	1,578,879.26	639,130	645,117	933,762	33.82	27,610
2002	363,122.03	141,400	142,725	220,398	34.50	6,388
2003	428,459.73	160,158	161,658	266,801	35.18	7,584
2004	338,781.39	120,606	121,736	217,046	36.18	5,999
2005	108,285.28	36,828	37,173	71,112	36.87	1,929
2006	59,120.77	19,155	19,334	39,786	37.56	1,059
2007	274,338.59	84,414	85,205	189,134	38.25	4,945
2008	207,924.19	60,215	60,779	147,145	39.25	3,749
2009	747,730.56	204,130	206,042	541,688	39.95	13,559
2010	706,583.84	181,027	182,723	523,861	40.64	12,890
2011	2,051,623.41	490,748	495,345	1,556,278	41.35	37,637
2012	2,790,886.50	616,228	622,000	2,168,886	42.35	51,213
2013	1,580,445.10	321,621	324,634	1,255,811	43.05	29,171
2014	3,926,729.61	730,372	737,214	3,189,516	43.76	72,887

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER PURIFICATION STRUCTURES						
SURVIVOR CURVE.. IOWA 60-R3						
NET SALVAGE PERCENT.. 0						
2015	425,757.02	71,272	71,940	353,817	44.76	7,905
2016	1,508,458.66	225,665	227,779	1,280,680	45.48	28,159
2017	2,256,197.03	296,916	299,697	1,956,500	46.19	42,358
2018	2,240,363.73	254,057	256,437	1,983,927	46.91	42,292
2019	1,913,210.74	181,755	183,458	1,729,753	47.63	36,316
2020	3,447,472.67	262,008	264,462	3,183,010	48.63	65,454
2021	4,269,204.28	245,906	248,209	4,020,995	49.08	81,927
2022	4,144,080.80	159,962	161,460	3,982,620	49.81	79,956
2023	444,290.85	8,664	8,745	435,546	50.28	8,662
9999	281,872.62-	77,475-	78,200-	203,673-		5,082-
	51,134,693.67	14,054,818	14,186,360	36,948,334		921,961
	345,578,963.18	119,627,951	120,816,440	224,762,524		8,202,208
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					27.4	2.37

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.36 WASTE HANDLING AND TREATMENT STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HAYS MINE TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1991	10,815,702.32	7,566,665	6,737,786	4,077,917	14.17	287,785
1998	68,969.00	44,113	39,281	29,688	14.65	2,026
2000	122,317.58	75,739	67,442	54,875	14.76	3,718
2001	25,833.98	15,686	13,968	11,866	14.88	797
2003	4,063.71	2,364	2,105	1,959	15.10	130
2007	41,023.43	21,550	19,189	21,834	15.36	1,421
2010	77,041.66	36,348	32,366	44,675	15.67	2,851
2012	197,523.29	85,330	75,983	121,541	15.78	7,702
2013	129,535.29	53,006	47,200	82,336	15.88	5,185
2014	18,080.06	6,961	6,198	11,882	15.97	744
2016	167,667.01	55,665	49,567	118,100	16.10	7,335
	11,667,757.33	7,963,427	7,091,085	4,576,672		319,694
YARDLEY - MILL ROAD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
2021	13,562,364.13	1,281,643	1,141,247	12,421,117	28.75	432,039
	13,562,364.13	1,281,643	1,141,247	12,421,117		432,039
	25,230,121.46	9,245,070	8,232,332	16,997,789		751,733
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					22.6	2.98

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.38 WASTE HANDLING AND TREATMENT STRUCTURE PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1991	38,331.32	38,331	38,331			
2015	27,627.10	24,864	25,046	2,581	1.00	2,581
2021	1,337,480.53	401,244	404,189	933,292	7.00	133,327
	1,403,438.95	464,439	467,566	935,873		135,908

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.9 9.68

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.39 PURIFICATION BUILDINGS - TANK PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1997	26,564.05	26,564	26,564			
1999	12,732.18	12,732	12,732			
2000	10,588.12	10,588	10,588			
2002	28,101.61	28,102	28,102			
2015	41,376.99	37,239	37,858	3,519	1.00	3,519
	119,362.95	115,225	115,844	3,519		3,519

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.0 2.95

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.61 OFFICE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEW CASTLE OFFICE						
INTERIM SURVIVOR CURVE.. IOWA 55-S0						
PROBABLE RETIREMENT YEAR.. 6-2031						
NET SALVAGE PERCENT.. 0						
1986	1,150,324.60	983,528	887,210	263,115	6.44	40,856
1987	16,994.88	14,463	13,047	3,948	6.48	609
1988	62,128.27	52,561	47,414	14,715	6.55	2,247
1989	20,825.27	17,566	15,846	4,980	6.49	767
1990	46,425.19	38,830	35,027	11,398	6.65	1,714
1991	3,335.65	2,785	2,512	823	6.53	126
1992	3,163.35	2,622	2,365	798	6.61	121
1996	14,814.55	11,988	10,814	4,001	6.60	606
1998	989.28	787	710	279	6.68	42
2005	149,478.73	110,480	99,661	49,818	6.71	7,424
2006	235,746.18	171,859	155,029	80,718	6.69	12,065
2008	58,361.48	41,086	37,062	21,299	6.73	3,165
2009	4,305.16	2,971	2,680	1,625	6.74	241
2011	8,465.32	5,568	5,023	3,443	6.76	509
2012	18,439.71	11,794	10,639	7,801	6.76	1,154
2013	101,984.42	63,159	56,974	45,011	6.76	6,658
2014	67,436.20	40,192	36,256	31,180	6.78	4,599
2015	28,801.82	16,408	14,801	14,001	6.80	2,059
2016	106,298.27	57,486	51,856	54,442	6.79	8,018
2017	95,186.10	48,240	43,516	51,670	6.81	7,587
2018	19,509.68	9,142	8,247	11,263	6.80	1,656
2019	676.19	286	258	418	6.82	61
2023	263,128.00	33,549	30,264	232,864	6.84	34,044
2024	72,930.05	2,567	2,316	70,614	6.85	10,309
	2,549,748.35	1,739,917	1,569,525	980,223		146,637
WASHINGTON CUSTOMER SERVICE CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0						
PROBABLE RETIREMENT YEAR.. 6-2032						
NET SALVAGE PERCENT.. 0						
1987	1,203,127.17	1,001,603	905,250	297,877	7.44	40,037
1988	1,858.44	1,539	1,391	467	7.48	62
1989	281,428.67	232,460	210,098	71,331	7.37	9,679
1992	14,113.15	11,426	10,327	3,786	7.53	503
1994	2,289.38	1,834	1,658	632	7.45	85
1995	65,817.15	52,298	47,267	18,550	7.50	2,473
1996	7,807.45	6,165	5,572	2,236	7.46	300

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.61 OFFICE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WASHINGTON CUSTOMER SERVICE CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0						
PROBABLE RETIREMENT YEAR.. 6-2032						
NET SALVAGE PERCENT.. 0						
1997	104,560.69	81,871	73,995	30,566	7.48	4,086
2001	48,048.55	36,137	32,661	15,388	7.58	2,030
2002	4,596.11	3,418	3,089	1,507	7.59	199
2003	69,847.82	51,338	46,399	23,448	7.57	3,097
2010	19,334.13	12,505	11,302	8,032	7.65	1,050
2011	61,248.66	38,538	34,831	26,418	7.66	3,449
2013	81,006.48	47,672	43,086	37,920	7.69	4,931
2014	14,255.72	8,054	7,279	6,977	7.70	906
2023	616,528.00	70,223	63,468	553,060	7.78	71,087
2024	245,791.26	7,644	6,909	238,883	7.78	30,705
	2,841,658.83	1,664,725	1,504,581	1,337,078		174,679
CAPITOL DISTRIBUTION CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0						
PROBABLE RETIREMENT YEAR.. 6-2064						
NET SALVAGE PERCENT.. 0						
1989	347,788.60	208,151	187,281	160,508	23.48	6,836
1990	5,101.58	3,001	2,700	2,401	23.80	101
1991	650.26	378	340	310	23.82	13
1996	1,799.05	952	857	943	24.91	38
2001	12,812.78	6,071	5,462	7,350	25.54	288
2002	5,478.58	2,519	2,266	3,212	25.85	124
2003	1,018.77	456	410	608	25.95	23
2006	28,442.30	11,570	10,410	18,032	26.25	687
2007	23,101.69	9,033	8,127	14,974	26.48	565
2008	47,924.90	18,020	16,213	31,712	26.55	1,194
2010	10,983.00	3,767	3,389	7,594	26.82	283
2011	43,527.16	14,146	12,728	30,799	27.00	1,141
2012	124,750.18	38,323	34,481	90,270	27.06	3,336
2013	174,227.60	50,212	45,178	129,050	27.17	4,750
2018	19,709,050.81	3,523,978	3,170,650	16,538,401	27.56	600,087
2019	1,661,686.84	255,069	229,495	1,432,192	27.57	51,947
	22,198,344.10	4,145,646	3,729,987	18,468,357		671,413

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.61 OFFICE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER OFFICE BUILDINGS						
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1924	782.54	783	783			
1926	201.65	202	202			
1958	12.85	12	11	2	4.42	
1960	48.14	45	40	8	4.97	2
1961	20.95	19	17	4	5.03	1
1963	32,701.09	29,921	26,922	5,779	5.67	1,019
1964	1,068.79	975	877	192	5.79	33
1965	11,845.27	10,693	9,621	2,224	6.36	350
1966	1,115.37	1,003	902	213	6.52	33
1967	47,768.10	42,748	38,463	9,305	6.69	1,391
1968	56,989.90	50,425	45,371	11,619	7.29	1,594
1969	1,263.39	1,112	1,001	263	7.50	35
1970	11,040.41	9,658	8,690	2,350	7.73	304
1971	8,957.07	7,738	6,962	1,995	8.35	239
1972	61,053.89	52,384	47,134	13,920	8.61	1,617
1973	1,626.18	1,385	1,246	380	8.88	43
1975	6,489.70	5,406	4,864	1,626	9.82	166
1976	45,439.48	37,515	33,755	11,685	10.14	1,152
1977	13,172.24	10,710	9,637	3,536	10.80	327
1979	27,967.97	22,276	20,043	7,925	11.50	689
1980	1.10	1	1			
1981	45,618.28	35,309	31,770	13,848	12.56	1,103
1982	359,610.33	273,376	245,976	113,634	13.25	8,576
1983	32,246.86	24,195	21,770	10,477	13.64	768
1984	898.85	662	596	303	14.35	21
1985	72,739.68	52,765	47,477	25,263	14.76	1,712
1986	350,324.54	248,941	223,990	126,334	15.48	8,161
1987	594,252.42	415,561	373,910	220,342	15.91	13,849
1988	610,975.64	417,907	376,021	234,954	16.63	14,128
1989	448,659.77	299,929	269,868	178,792	17.36	10,299
1990	142,950.10	93,804	84,402	58,548	17.81	3,287
1991	33,646.76	21,541	19,382	14,265	18.55	769
1992	147,929.56	92,308	83,056	64,873	19.28	3,365
1993	12,874.85	7,863	7,075	5,800	19.76	294
1994	324,768.06	192,912	173,577	151,191	20.51	7,372
1995	58,816.94	33,943	30,541	28,276	21.25	1,331
1996	47,286.99	26,613	23,946	23,341	21.75	1,073
1997	35,136.33	19,163	17,242	17,894	22.50	795
1998	15,939.89	8,413	7,570	8,370	23.26	360
1999	60,923.33	31,071	27,957	32,966	24.02	1,372

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.61 OFFICE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER OFFICE BUILDINGS						
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2000	753,359.29	372,461	335,130	418,229	24.54	17,043
2001	49,239.75	23,443	21,093	28,146	25.31	1,112
2002	6,117.89	2,800	2,519	3,599	26.08	138
2003	84,797.19	37,217	33,487	51,310	26.85	1,911
2004	37,690.93	15,830	14,243	23,448	27.62	849
2005	346,117.62	139,416	125,443	220,675	28.17	7,834
2006	226,624.08	86,888	78,179	148,445	28.95	5,128
2007	95,086.75	34,593	31,126	63,961	29.73	2,151
2008	246,833.49	84,911	76,401	170,433	30.51	5,586
2009	101,859.98	33,003	29,695	72,165	31.30	2,306
2010	61,085.24	18,558	16,698	44,387	32.08	1,384
2011	121,441.93	34,417	30,967	90,474	32.87	2,752
2012	183,744.40	48,288	43,448	140,296	33.66	4,168
2013	88,274.20	21,362	19,221	69,053	34.45	2,004
2014	402,351.40	88,920	80,008	322,344	35.25	9,145
2015	12,610.61	2,520	2,267	10,343	36.05	287
2016	1,288,069.09	229,792	206,761	1,081,309	36.84	29,351
2017	539,254.36	84,555	76,080	463,174	37.64	12,305
2018	2,147,281.67	289,883	260,829	1,886,453	38.44	49,075
2019	2,042,903.87	230,848	207,711	1,835,193	39.25	46,757
2020	637,113.04	58,105	52,281	584,832	39.86	14,672
2021	1,239,932.86	85,183	76,645	1,163,288	40.67	28,603
2022	1,607,030.17	74,245	66,804	1,540,227	41.29	37,303
2023	74,689.44	1,740	1,566	73,124	41.92	1,744
2024	22,325.06	132	119	22,206	41.95	529
9999	60,000.00-	17,398-	15,655-	44,345-		1,382-
	16,080,999.57	4,662,999	4,195,737	11,885,263		370,385
	43,670,750.85	12,213,287	10,999,830	32,670,921		1,363,114

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.0 3.12

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
UNIONTOWN OPERATIONS CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2066						
NET SALVAGE PERCENT.. 0						
2021	3,787,629.81	337,478	446,118	3,341,512	30.67	108,951
	3,787,629.81	337,478	446,118	3,341,512		108,951
NORRISTOWN OPERATIONS CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2032						
NET SALVAGE PERCENT.. 0						
1987	747,847.92	622,583	747,848			
1988	14,460.80	11,974	14,461			
1990	21,055.84	17,253	21,056			
1991	515.82	420	516			
2000	8,240.40	6,269	8,240			
2001	106,652.86	80,214	106,653			
2011	2,125.81	1,332	2,126			
2014	364,619.49	205,281	344,982	19,637	7.76	2,531
2015	19,376.64	10,394	17,467	1,909	7.78	245
2018	224.06	97	163	61	7.83	8
	1,285,119.64	955,817	1,263,512	21,608		2,784
BETHEL PARK						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2058						
NET SALVAGE PERCENT.. 0						
1958	1,356.00	1,119	1,356			
1965	653,341.28	516,532	653,341			
1967	45,486.00	35,261	45,486			
1969	4,300.00	3,287	4,300			
1970	2,902.00	2,210	2,902			
1972	1,319.97	988	1,320			
1973	9,153.18	6,769	9,144	9	17.97	1
1975	40.52	30	41			
1977	1,690.34	1,208	1,632	58	18.79	3
1979	3,808.27	2,673	3,611	197	19.10	10
1981	0.16		0			
1985	8,909.55	5,838	7,886	1,023	20.52	50

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BETHEL PARK						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2058						
NET SALVAGE PERCENT.. 0						
1986	56,270.95	36,351	49,105	7,166	20.82	344
1987	51,879.47	33,208	44,859	7,020	20.80	338
1988	1,675.90	1,056	1,427	249	21.14	12
1989	365,534.82	227,728	307,629	57,906	21.18	2,734
1991	4,610.90	2,785	3,762	849	21.64	39
1992	10,300.00	6,098	8,238	2,062	22.05	94
1993	2,884.28	1,681	2,271	613	22.19	28
1995	1,257.55	707	955	302	22.55	13
1996	53,669.41	29,604	39,991	13,679	22.76	601
1997	47,281.24	25,532	34,490	12,791	23.00	556
1998	41,194.00	21,849	29,515	11,679	23.02	507
2000	47,532.86	23,957	32,363	15,170	23.62	642
2002	3,229.97	1,549	2,092	1,137	23.87	48
2006	123,630.77	52,073	70,343	53,287	24.74	2,154
2007	61,197.63	24,865	33,589	27,608	24.84	1,111
2008	530,439.54	207,084	279,742	250,698	24.98	10,036
2009	415,793.46	155,299	209,787	206,006	25.16	8,188
2010	105,796.74	37,621	50,821	54,976	25.37	2,167
2011	54,411.31	18,320	24,748	29,664	25.61	1,158
2012	393,497.73	125,132	169,036	224,462	25.74	8,720
2013	23,340.26	6,958	9,399	13,941	25.90	538
2014	26,100.06	7,230	9,767	16,333	26.10	626
	3,153,836.12	1,622,602	2,144,948	1,008,888		40,718
BETHEL PARK (NEW)						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2066						
NET SALVAGE PERCENT.. 0						
2018	20,032,537.04	3,329,408	4,401,207	15,631,330	30.10	519,313
2019	6,912,393.38	978,104	1,292,974	5,619,419	30.34	185,215
2021	5,255,848.12	468,296	619,049	4,636,799	30.67	151,184
	32,200,778.54	4,775,808	6,313,230	25,887,549		855,712

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
STAFFORD AVENUE DISTRIBUTION CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2062						
NET SALVAGE PERCENT.. 0						
1997	6,386.52	3,380	4,468	1,918	24.02	80
2012	1,538,069.70	468,804	619,721	918,349	27.37	33,553
2014	16,744,779.33	4,437,367	5,865,839	10,878,940	27.74	392,175
2015	12,394.22	3,012	3,982	8,413	28.04	300
2019	22,838.07	3,380	4,468	18,370	28.78	638
	18,324,467.84	4,915,943	6,498,478	11,825,990		426,746
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
1969	3.18	3	3			
1970	1,164.98	1,057	1,165			
1971	36.32	33	36			
1972	634.88	571	635			
1973	2,089.97	1,865	2,090			
1974	1,091.06	966	1,091			
1976	2,792.33	2,426	2,792			
1977	953.93	820	954			
1978	169.91	145	170			
1980	2,201.05	1,830	2,201			
1981	1,217.40	1,000	1,217			
1982	5,097.51	4,132	5,098			
1983	5,662.30	4,527	5,662			
1984	42,453.44	33,453	42,453			
1985	30,313.11	23,526	30,313			
1986	23,996.49	18,329	23,996			
1987	723.36	543	722	2	12.26	
1988	491,063.35	362,405	481,661	9,402	12.78	736
1989	60,532.18	43,644	58,006	2,526	13.54	187
1990	892,796.35	631,386	839,155	53,641	14.08	3,810
1991	649,148.20	449,860	597,895	51,253	14.62	3,506
1992	304,212.94	206,378	274,290	29,922	15.17	1,972
1993	10,260.26	6,775	9,004	1,256	15.95	79
1994	64,622.20	41,681	55,397	9,225	16.51	559
1995	6,600.47	4,154	5,521	1,080	17.08	63
1996	86,138.81	52,579	69,881	16,258	17.87	910
1997	113,666.60	67,518	89,736	23,931	18.45	1,297

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
1998	16,584.74	9,573	12,723	3,862	19.05	203
1999	134,121.79	74,773	99,378	34,743	19.84	1,751
2000	70,168.39	37,891	50,360	19,809	20.44	969
2001	112,996.79	58,736	78,064	34,933	21.25	1,644
2002	9,268.80	4,649	6,179	3,090	21.86	141
2004	1,388.50	641	852	537	23.29	23
2005	48,205.36	21,249	28,241	19,964	24.10	828
2006	45,672.04	19,237	25,567	20,105	24.74	813
2007	56,550.01	22,592	30,026	26,524	25.55	1,038
2008	30,604.24	11,605	15,424	15,180	26.19	580
2009	16,248.78	5,801	7,710	8,539	27.02	316
2010	3,269.94	1,094	1,454	1,816	27.84	65
2011	203,116.68	63,636	84,577	118,540	28.49	4,161
2012	212,235.52	61,633	81,914	130,321	29.32	4,445
2013	45,552.60	12,176	16,183	29,370	30.15	974
2014	71,258.20	17,387	23,109	48,150	30.98	1,554
2015	516,657.84	114,388	152,029	364,628	31.65	11,521
2016	77,623.31	15,338	20,385	57,238	32.49	1,762
2017	32,786.00	5,692	7,565	25,221	33.32	757
2018	1,427,984.55	214,198	284,684	1,143,301	34.00	33,626
2019	147,357.90	18,493	24,578	122,779	34.84	3,524
2020	439,490.52	44,301	58,879	380,611	35.68	10,667
2021	1,973,176.14	150,356	199,833	1,773,343	36.37	48,758
2022	392,128.53	20,077	26,684	365,445	37.06	9,861
2023	2,274,105.83	58,899	78,281	2,195,825	37.61	58,384
2024	372,344.30	2,457	3,266	369,079	37.77	9,772
9999	576.00-	151-	200-	376-		11-
	11,529,963.88	3,028,327	4,018,892	7,511,072		221,245
	70,281,795.83	15,635,975	20,685,178	49,596,619		1,656,156

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.9 2.36

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.63 MISCELLANEOUS STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
2003	47,284.82	26,910	47,285			
2004	155,061.85	85,284	155,062			
2005	138,417.60	73,638	138,418			
2006	51,980.20	26,666	51,980			
2007	218,926.74	107,931	218,927			
2008	279,819.82	132,523	279,820			
2009	23,042.95	10,404	23,043			
2010	131,146.25	56,367	131,146			
2011	1,533.34	624	1,533			
2012	53,985.00	20,665	53,985			
2013	26,338.34	9,416	26,338			
2014	10,925.07	3,627	10,374	551	20.12	27
2015	555,189.93	168,889	483,043	72,147	20.59	3,504
2016	459,090.59	126,709	362,403	96,688	20.99	4,606
2017	352,844.15	86,941	248,662	104,182	21.41	4,866
2018	739,556.55	159,744	456,887	282,670	21.78	12,978
2019	37.50	7	20	18	22.17	1
2020	9,116.56	1,371	3,921	5,196	22.60	230
2021	75,400.32	8,709	24,909	50,491	22.97	2,198
2022	36,813.68	2,901	8,297	28,517	23.38	1,220
2023	4,879,788.19	197,631	565,250	4,314,538	23.69	182,125
2024	736,876.71	7,590	21,708	715,169	23.96	29,848
	8,983,176.16	1,314,547	3,313,011	5,670,165		241,603

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.5 2.69

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
DAM NO. 3 (CITIZENS)						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2042						
NET SALVAGE PERCENT.. 0						
1920	42,226.36	36,450	31,025	11,201	16.48	680
1937	48.00	40	34	14	17.17	1
1949	331.00	271	231	100	16.74	6
1961	2,483.15	1,955	1,664	819	17.00	48
1973	1,843.00	1,372	1,168	675	17.49	39
1974	259.00	192	163	96	17.57	5
1978	82,513.54	59,591	50,722	31,792	17.69	1,797
1992	1,385,786.88	895,773	762,449	623,338	17.50	35,619
	1,515,490.93	995,644	847,455	668,036		38,195
SPRUCE RUN IMPOUNDING RESERVOIR						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
1957	3,545.00	2,138	1,820	1,725	44.11	39
1958	937,679.88	556,982	474,082	463,598	45.11	10,277
1962	1,170.00	675	575	595	45.53	13
1964	15,475.00	8,821	7,508	7,967	45.26	176
1965	5,506.28	3,119	2,655	2,852	45.17	63
1967	0.83			1	46.09	
1985	2,905.50	1,303	1,109	1,796	47.96	37
1990	18,419.48	7,640	6,503	11,917	47.97	248
1995	1,423,197.85	532,418	453,174	970,024	48.52	19,992
2021	36,844.32	2,166	1,844	35,001	48.02	729
	2,444,744.14	1,115,262	949,269	1,495,475		31,574
ONEIDA DAM AND RESERVOIR						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
1918	97,835.35	71,557	60,907	36,929	38.93	949
1925	408.75	287	244	164	41.85	4
1930	2,267.00	1,556	1,324	943	42.99	22
1934	1,013.55	675	575	439	45.14	10
1956	775.09	448	381	394	49.65	8

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ONEIDA DAM AND RESERVOIR						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
1978	134.64	62	53	82	54.00	2
1982	245.51	106	90	155	55.09	3
1985	16,193.21	6,694	5,698	10,496	55.34	190
1989	294,046.08	113,208	96,358	197,688	55.91	3,536
2013	8,655,614.25	1,399,613	1,191,298	7,464,316	57.03	130,884
	9,068,533.43	1,594,206	1,356,928	7,711,605		135,608
THORN RUN DAM AND RESERVOIR						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2083						
NET SALVAGE PERCENT.. 0						
1904	361.68	282	240	122	33.85	4
1925	882.00	629	535	347	39.89	9
1928	103.00	72	61	42	40.99	1
1930	285.00	198	169	116	41.14	3
1933	93.00	63	54	39	42.33	1
1936	86.00	58	49	37	43.58	1
1956	941.01	557	474	467	46.94	10
1958	951.00	552	470	481	47.64	10
1983	14,744.19	6,589	5,608	9,136	50.74	180
1984	76,177.36	33,518	28,529	47,648	50.91	936
1987	14,359.75	6,004	5,110	9,249	51.50	180
1989	210,306.30	84,648	72,049	138,257	51.96	2,661
1994	5,117.89	1,873	1,594	3,524	51.97	68
2011	7,667,320.88	1,515,063	1,289,564	6,377,756	52.79	120,814
	7,991,729.06	1,650,106	1,404,508	6,587,221		124,878
GRIFFIN						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
1893	59,431.80	48,271	41,086	18,345	30.29	606
1942	171.57	110	94	78	46.21	2
1943	2,456.07	1,552	1,321	1,135	47.21	24
1983	12,768.00	5,444	4,634	8,134	55.15	147

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
GRIFFIN						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
1984	21,564.86	9,057	7,709	13,856	55.24	251
1985	4,179.31	1,728	1,471	2,709	55.34	49
1989	1,031,668.95	397,193	338,076	693,593	55.91	12,406
1990	13,974.55	5,274	4,489	9,486	56.09	169
1995	2,925.08	992	844	2,081	56.47	37
2001	15,236.40	4,380	3,728	11,508	57.00	202
	1,164,376.59	474,001	403,452	760,925		13,893
LAKE SCRANTON						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
1901	281,262.27	221,410	188,456	92,806	33.25	2,791
1916	2,609.36	1,916	1,631	979	39.06	25
1935	239.93	160	136	104	44.33	2
1968	1,279.11	659	561	718	52.70	14
1970	3,211.00	1,630	1,387	1,824	52.38	35
1976	2,210.73	1,040	885	1,326	54.04	25
1977	57.10	27	23	34	54.01	1
1978	36,565.70	16,820	14,317	22,249	54.00	412
1982	276.75	120	102	175	55.09	3
1983	15,120.00	6,447	5,487	9,633	55.15	175
1984	35,225.92	14,795	12,593	22,633	55.24	410
1985	30,307.31	12,529	10,664	19,643	55.34	355
1986	30,933.62	12,578	10,706	20,228	55.46	365
1987	17,143.97	6,851	5,831	11,313	55.59	204
1989	1,665,697.07	641,293	545,844	1,119,853	55.91	20,030
1990	99,790.35	37,661	32,056	67,735	56.09	1,208
1991	7,810.44	2,913	2,479	5,331	55.50	96
1993	173,539.95	61,867	52,659	120,881	55.96	2,160
1994	518.27	180	153	365	56.21	6
1995	0.88			1	56.47	
2001	5,375.23	1,545	1,315	4,060	57.00	71
2018	9,168,862.63	880,211	749,202	8,419,660	56.50	149,021
2019	278,446.50	22,693	19,315	259,131	56.35	4,599
	11,856,484.09	1,945,345	1,655,804	10,200,680		182,008

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WILLIAMS BRIDGE						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2085						
NET SALVAGE PERCENT.. 0						
1892	99,114.45	81,115	69,042	30,072	29.29	1,027
1902	20,137.13	15,723	13,383	6,754	34.25	197
1915	1,350.92	1,001	852	499	38.06	13
1916	3,362.29	2,469	2,102	1,261	39.06	32
1930	111.28	76	65	47	42.99	1
1942	202.61	131	112	91	44.58	2
1962	40,618.95	22,665	19,292	21,327	49.11	434
1974	16,787.48	8,310	7,073	9,714	51.01	190
1975	78.02	38	32	46	51.00	1
1985	1,916,629.50	814,759	693,492	1,223,137	52.74	23,192
1986	64,940.48	27,145	23,105	41,836	52.91	791
1988	23,272.56	9,383	7,986	15,286	53.29	287
1989	83,219.77	33,205	28,263	54,957	52.72	1,042
1990	5.17	2	2	3	52.96	
1993	1,867.84	683	581	1,286	53.75	24
2001	10,426.96	3,118	2,654	7,773	53.92	144
	2,282,125.41	1,019,823	868,035	1,414,090		27,377
HOLLISTER						
FULLY ACCRUED						
NET SALVAGE PERCENT.. 0						
1972	1,589,982.17	1,589,982	1,589,982			
1973	3,536.78	3,537	3,537			
1976	958,017.39	958,017	958,017			
1977	25,124.94	25,125	25,125			
1978	33.29	33	33			
1993	1,202.20	1,202	1,202			
	2,577,896.77	2,577,896	2,577,897			

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CHRISTOPHER CHENERY (PIKES CREEK)						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2091						
NET SALVAGE PERCENT.. 0						
1910	236,315.37	177,804	147,573	88,742	37.52	2,365
1916	3,174.05	2,331	1,935	1,239	39.06	32
1929	74,456.00	50,928	42,269	32,187	43.89	733
1930	93,721.44	64,312	53,377	40,344	42.99	938
1933	4,694.45	3,161	2,624	2,071	44.14	47
1935	258.54	170	141	117	46.14	3
1964	36,327.26	19,399	16,101	20,227	52.36	386
1983	2,366.25	999	829	1,537	56.09	27
1984	40,978.64	17,047	14,149	26,830	56.15	478
1986	40,605.19	16,356	13,575	27,030	56.34	480
1987	158.58	63	52	106	56.46	2
1988	5,675.53	2,207	1,832	3,844	56.59	68
1989	619.11	236	196	423	56.74	7
1991	1,085,419.97	397,589	329,989	755,430	57.09	13,232
1993	284,909.12	99,804	82,835	202,074	57.50	3,514
2001	8,126.08	2,299	1,908	6,218	58.30	107
	1,917,805.58	854,705	709,385	1,208,421		22,419
CRYSTAL LAKE						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2064						
NET SALVAGE PERCENT.. 0						
1904	5,092.51	4,094	3,398	1,695	29.25	58
1933	61.83	46	38	24	32.46	1
1951	79,182.32	53,757	44,617	34,565	34.53	1,001
1953	26,444.91	17,649	14,648	11,797	35.38	333
1954	114.24	76	63	51	35.26	1
1964	1,215,428.80	758,428	629,478	585,951	36.15	16,209
1965	1,783.96	1,105	917	867	36.24	24
1966	264.25	162	134	130	36.34	4
1967	3,530.07	2,153	1,787	1,743	36.46	48
1981	7,623.81	4,098	3,401	4,223	37.00	114
1982	45.13	24	20	25	36.74	1
1987	10,559.42	5,274	4,377	6,182	37.07	167
1989	1,797.68	868	720	1,077	37.46	29

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CRYSTAL LAKE						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2064						
NET SALVAGE PERCENT.. 0						
1990	0.04		0			
1993	184.09	83	69	115	37.49	3
1994	392.40	174	144	248	37.57	7
	1,352,505.46	847,991	703,813	648,692		18,000
GARDNER'S CREEK INTAKE						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2085						
NET SALVAGE PERCENT.. 0						
1985	1,682,780.31	715,350	601,170	1,081,610	52.74	20,508
1986	7,810.81	3,265	2,744	5,067	52.91	96
2001	6,053.07	1,810	1,521	4,532	53.92	84
2023	2,120,687.39	40,505	34,040	2,086,648	51.36	40,628
	3,817,331.58	760,930	639,475	3,177,857		61,316
NESBITT						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2092						
NET SALVAGE PERCENT.. 0						
1900	185,903.19	145,228	120,536	65,367	34.73	1,882
1932	37,406.03	25,122	20,851	16,555	44.99	368
1934	97.08	65	54	43	45.14	1
1946	172,052.80	106,019	87,993	84,059	48.58	1,730
1980	413.30	182	151	262	56.00	5
1981	18,286.47	7,942	6,592	11,695	56.01	209
1984	111,517.46	45,945	38,133	73,384	57.09	1,285
2001	8,137.93	2,284	1,896	6,242	58.97	106
2012	26,922,112.06	4,522,915	3,753,915	23,168,197	59.43	389,840
2018	379,381.18	35,282	29,283	350,098	58.52	5,983
2019	4,641.05	367	305	4,336	58.29	74
	27,839,948.55	4,891,351	4,059,708	23,780,241		401,483

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WATRES						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2088						
NET SALVAGE PERCENT.. 0						
1923	436,199.97	308,393	255,959	180,241	41.86	4,306
1941	3,067.89	1,961	1,628	1,440	46.87	31
1943	445.19	281	233	212	47.21	4
1947	12,218.40	7,527	6,247	5,971	48.00	124
1963	203.31	110	91	112	51.36	2
1976	3,892.59	1,850	1,535	2,357	53.01	44
1992	1,033.37	380	315	718	54.96	13
2000	31,829.26	9,549	7,925	23,904	56.00	427
2008	10,206,443.00	2,253,583	1,870,422	8,336,021	56.46	147,645
2013	10,331.83	1,682	1,396	8,936	56.57	158
	10,705,664.81	2,585,316	2,145,753	8,559,912		152,754
ROCK RUN DAM						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2065						
NET SALVAGE PERCENT.. 0						
1915	181,300.00	142,284	118,092	63,208	29.89	2,115
1985	470,440.45	238,513	197,960	272,480	37.92	7,186
1993	46,068.00	20,565	17,068	29,000	38.44	754
1996	722,840.00	305,617	253,655	469,185	38.23	12,273
2000	383,237.34	147,163	122,142	261,096	38.50	6,782
2008	13,218.88	3,870	3,212	10,007	38.64	259
2013	376,416.70	83,640	69,419	306,997	38.50	7,974
2014	1.01			1	38.54	
2020	40,262.99	3,817	3,168	37,095	38.19	971
	2,233,785.37	945,469	784,717	1,449,068		38,314
CEASETOWN DAM						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2117						
NET SALVAGE PERCENT.. 0						
2017	19,328,737.64	1,691,265	1,403,711	17,925,027	73.00	245,548
	19,328,737.64	1,691,265	1,403,711	17,925,027		245,548

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ELMHURST DAM						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2117						
NET SALVAGE PERCENT.. 0						
2017	23,538,596.83	2,059,627	1,709,443	21,829,154	73.00	299,030
	23,538,596.83	2,059,627	1,709,443	21,829,154		299,030
OTHER COLLECTING AND IMPOUNDING RESERVOIRS						
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1887	30,941.47	30,941	30,941			
1889	285,445.97	285,446	285,446			
1890	735.23	735	735			
1891	22,813.53	22,814	22,814			
1892	60,142.59	60,143	60,143			
1893	17,639.61	17,640	17,640			
1895	6,156.43	6,156	6,156			
1896	4,134.61	4,135	4,135			
1897	200,366.80	200,367	200,367			
1899	3,771.76	3,772	3,772			
1900	0.01		0			
1902	17,621.35	17,413	13,819	3,802	1.46	2,604
1903	1,327.34	1,317	1,045	282	0.95	282
1904	5,578.06	5,489	4,356	1,222	1.95	627
1905	1,364.96	1,348	1,070	295	1.48	199
1906	2,579.09	2,526	2,005	574	2.48	231
1907	131,601.85	129,338	102,643	28,959	2.05	14,126
1908	9,712.40	9,464	7,511	2,202	3.05	722
1909	624.01	610	484	140	2.65	53
1911	3,470.24	3,372	2,676	794	3.28	242
1912	28,773.05	28,036	22,249	6,524	2.94	2,219
1914	11,929.50	11,548	9,165	2,765	3.64	760
1915	46,646.58	44,743	35,508	11,138	4.64	2,400
1916	13,887.25	13,348	10,593	3,294	4.36	756
1919	68,032.30	65,005	51,588	16,444	4.89	3,363
1920	696.74	659	523	174	5.89	30
1921	6,898.84	6,537	5,188	1,711	5.70	300
1922	760.63	722	573	188	5.53	34
1924	43,146.42	40,558	32,187	10,960	6.38	1,718
1925	878.15	826	656	223	6.26	36
1927	5,319.01	4,953	3,931	1,388	7.17	194

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER COLLECTING AND IMPOUNDING RESERVOIRS						
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1928	36,197.12	33,707	26,750	9,447	7.09	1,332
1930	989.66	912	724	266	8.04	33
1931	4,361.01	4,015	3,186	1,175	8.01	147
1935	91.31	83	66	25	9.04	3
1936	58.98	53	42	17	9.09	2
1937	174.45	156	124	51	10.09	5
1938	1,818.32	1,626	1,290	528	10.15	52
1939	486.80	434	344	142	10.24	14
1940	46.80	42	33	13	10.34	1
1941	407.06	358	284	123	11.34	11
1942	1,493.59	1,310	1,040	454	11.46	40
1943	185.15	162	129	57	11.59	5
1944	0.05		0			
1945	181,750.40	156,505	124,203	57,548	12.74	4,517
1946	17,896.87	15,356	12,187	5,710	12.91	442
1947	41,506.98	35,476	28,154	13,353	13.09	1,020
1948	104,082.62	88,595	70,309	33,774	13.29	2,541
1951	2,548.64	2,121	1,683	865	14.72	59
1953	241.38	197	156	85	15.96	5
1954	548.95	446	354	195	16.21	12
1956	28.67	23	18	10	17.47	1
1957	50,060.09	39,578	31,409	18,651	17.75	1,051
1958	14,780.46	11,609	9,213	5,568	18.03	309
1959	344,189.83	266,231	211,281	132,909	19.03	6,984
1960	319,112.40	245,078	194,494	124,618	19.33	6,447
1961	916.99	699	555	362	19.64	18
1962	7,243.92	5,434	4,312	2,931	20.64	142
1963	2,760.95	2,055	1,631	1,130	20.97	54
1964	108,608.82	80,153	63,609	44,999	21.30	2,113
1965	9,354.70	6,789	5,388	3,967	22.30	178
1966	0.71	1	1			
1967	44,312.01	31,572	25,056	19,256	23.00	837
1968	12,008.52	8,406	6,671	5,338	24.00	222
1971	438.28	295	234	204	25.74	8
1972	133.48	89	71	63	26.12	2
1973	1,893.89	1,236	981	913	27.12	34
1974	84.58	55	44	41	27.52	1
1975	24,363.20	15,519	12,316	12,047	27.92	431
1976	4,220.76	2,634	2,090	2,130	28.92	74
1977	49.79	31	25	25	29.34	1

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
OTHER COLLECTING AND IMPOUNDING RESERVOIRS						
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1978	2,550.68	1,537	1,220	1,331	30.34	44
1979	3,316.99	1,970	1,563	1,754	30.76	57
1980	7,752.67	4,537	3,601	4,152	31.19	133
1981	59,455.77	34,003	26,985	32,471	32.19	1,009
1982	9,238.05	5,199	4,126	5,112	32.63	157
1983	32,222.14	17,703	14,049	18,173	33.63	540
1984	12,513.83	6,757	5,362	7,151	34.07	210
1985	12,535.03	6,600	5,238	7,297	35.07	208
1986	79,592.49	41,133	32,643	46,949	35.53	1,321
1987	292,677.69	148,358	117,737	174,941	35.99	4,861
1988	6,078.72	2,998	2,379	3,700	36.99	100
1989	12,579.41	6,076	4,822	7,757	37.46	207
1990	7,624.88	3,578	2,840	4,785	38.46	124
1991	73,271.99	33,610	26,673	46,599	38.94	1,197
1992	548,894.67	244,148	193,756	355,139	39.94	8,892
1993	12,001.44	5,209	4,134	7,868	40.43	195
1994	646.70	272	216	431	41.43	10
1995	435,536.58	178,091	141,333	294,203	41.92	7,018
1996	26,355.60	10,405	8,257	18,098	42.92	422
1997	621,076.25	238,121	188,973	432,103	43.42	9,952
1998	9,048.00	3,341	2,651	6,397	44.42	144
2000	37,680.73	12,932	10,263	27,418	45.93	597
2001	111,121.69	36,804	29,208	81,914	46.44	1,764
2002	125,548.33	39,774	31,565	93,984	47.44	1,981
2003	6,174.13	1,880	1,492	4,682	47.97	98
2006	13,775.37	3,620	2,873	10,903	50.49	216
2007	23,327.11	5,829	4,626	18,701	51.03	366
2014	1,225,930.27	183,890	145,935	1,079,995	56.67	19,058
2016	7,765.69	938	744	7,021	58.23	121
2017	107,363.71	11,348	9,006	98,358	59.23	1,661
2019	385,852.24	29,325	23,272	362,580	60.79	5,964
2020	633,915.37	38,796	30,789	603,127	61.36	9,829
2023	1,455,550.20	22,852	18,135	1,437,415	62.69	22,929
9999	3,575.00-	1,410-	1,172-	2,403-		66-
	8,767,843.39	3,459,226	2,875,666	5,892,177		161,363
	138,403,599.63	29,468,163	25,095,019	113,308,581		1,953,760

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 58.0 1.41

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 306 LAKE, RIVER AND OTHER INTAKES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NORRISTOWN INTAKE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2077						
NET SALVAGE PERCENT.. 0						
1966	6,696.14	5,437	4,293	2,404	13.43	179
1997	4,076,795.17	2,102,403	1,659,894	2,416,901	25.36	95,304
1998	86,320.84	43,091	34,021	52,300	26.08	2,005
2004	37,517.86	15,232	12,026	25,492	29.26	871
2005	48,578.25	18,921	14,939	33,640	29.78	1,130
	4,255,908.26	2,185,084	1,725,173	2,530,735		99,489
MILL ROAD INTAKE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2077						
NET SALVAGE PERCENT.. 0						
1997	5,185,337.03	2,674,078	2,111,245	3,074,092	25.36	121,218
1998	67,078.68	33,486	26,438	40,641	26.08	1,558
2004	51,910.47	21,076	16,640	35,270	29.26	1,205
	5,304,326.18	2,728,640	2,154,323	3,150,003		123,981
SWATARA CREEK INTAKE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2072						
NET SALVAGE PERCENT.. 0						
1992	743,957.01	433,281	342,085	401,872	22.95	17,511
2007	52,227.42	18,823	14,861	37,366	30.17	1,239
2008	24,096.05	8,250	6,514	17,582	30.73	572
2018	210,583.17	29,945	23,642	186,941	36.19	5,166
	1,030,863.65	490,299	387,102	643,762		24,488
ALLEGHENY RIVER PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2070						
NET SALVAGE PERCENT.. 0						
1962	4,167.41	3,488	2,754	1,414	12.07	117
1970	1,783.13	1,406	1,110	673	14.49	46

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 306 LAKE, RIVER AND OTHER INTAKES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALLEGHENY RIVER PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2070						
NET SALVAGE PERCENT.. 0						
1990	18,120.03	11,028	8,707	9,413	21.87	430
1995	1,697,864.04	930,599	734,729	963,135	23.91	40,282
1996	16,079.46	8,554	6,754	9,326	24.63	379
	1,738,014.07	955,075	754,053	983,961		41,254
OTHER INTAKES						
SURVIVOR CURVE.. IOWA 50-S0.5						
NET SALVAGE PERCENT.. 0						
1908	759.70	760	760			
1909	253.38	253	253			
1914	70.12	70	70			
1915	1,662.50	1,662	1,663			
1916	314.56	315	315			
1920	312.36	312	312			
1924	164.60	165	165			
1934	256.57	247	196	61	3.46	18
1937	1,547.28	1,467	1,162	385	4.74	81
1938	210.53	199	158	53	4.91	11
1948	3,987.37	3,606	2,857	1,130	8.03	141
1954	496.13	438	347	149	9.37	16
1955	1,181.20	1,035	820	361	9.74	37
1959	0.02		0			
1961	189,470.41	159,951	126,749	62,721	11.63	5,393
1962	2,372.36	1,986	1,574	799	12.07	66
1963	0.34		0			
1964	12,733.66	10,467	8,294	4,439	12.99	342
1966	20,694.22	16,804	13,316	7,378	13.43	549
1967	34,058.19	27,373	21,691	12,367	13.92	888
1968	3,226.08	2,583	2,047	1,179	13.93	85
1969	332,975.01	263,716	208,975	124,000	14.44	8,587
1970	236.50	186	147	89	14.49	6
1972	2,349.52	1,820	1,442	907	15.11	60
1973	187,248.66	143,245	113,511	73,738	15.67	4,706
1974	680.70	517	410	271	15.79	17
1976	4,844.02	3,604	2,856	1,988	16.52	120
1979	4,506.34	3,245	2,571	1,935	17.50	111
1980	215.89	153	121	95	18.11	5

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 306 LAKE, RIVER AND OTHER INTAKES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER INTAKES						
SURVIVOR CURVE.. IOWA 50-S0.5						
NET SALVAGE PERCENT.. 0						
1982	0.25		0			
1983	580.32	397	315	266	18.88	14
1984	7,015.37	4,742	3,758	3,258	19.17	170
1985	697.11	465	368	329	19.48	17
1986	5,075.19	3,336	2,644	2,432	19.80	123
1987	367.62	237	188	180	20.47	9
1988	324.67	206	163	161	20.82	8
1989	29,332.33	18,377	14,562	14,770	20.87	708
1991	310,499.35	187,511	148,589	161,911	21.64	7,482
1992	13,183.74	7,805	6,185	6,999	22.05	317
1994	7,095.31	4,023	3,188	3,907	22.91	171
1996	983,966.70	534,491	423,544	560,422	23.55	23,797
1997	74,663.52	39,714	31,470	43,193	23.76	1,818
1998	4,128.58	2,136	1,693	2,436	24.25	100
1999	423,842.83	214,041	169,612	254,231	24.50	10,377
2000	3,208.83	1,571	1,245	1,964	25.02	78
2001	11,447.10	5,450	4,319	7,128	25.31	282
2002	110,579.30	50,844	40,290	70,289	25.85	2,719
2006	199,247.82	79,261	62,808	136,439	27.25	5,007
2007	431,293.05	164,236	130,145	301,148	27.64	10,895
2008	71,499.34	25,969	20,579	50,921	28.05	1,815
2011	35,373.40	10,853	8,600	26,773	29.37	912
2013	63,624.81	17,007	13,477	50,148	30.15	1,663
2014	6,709.90	1,657	1,313	5,397	30.49	177
2017	303,537.81	54,819	43,440	260,098	31.76	8,189
2019	145,050.14	19,292	15,287	129,763	32.59	3,982
2020	65,237.43	7,046	5,583	59,654	33.04	1,806
2021	110,092.02	9,083	7,198	102,894	33.36	3,084
2023	1,279,282.68	36,587	28,992	1,250,290	33.97	36,806
9999	41,551.00-	16,211-	12,852-	28,699-		1,085-
	5,462,233.74	2,131,124	1,689,487	3,772,747		142,680
	17,791,345.90	8,490,222	6,710,138	11,081,208		431,892

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.7 2.43

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 307 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1904	570.89	571	571			
1905	6,014.15	6,014	6,014			
1907	41.31	41	41			
1908	8.11	8	8			
1910	5,079.08	5,079	5,079			
1912	712.53	713	713			
1913	1,274.86	1,275	1,275			
1914	593.02	593	593			
1915	2,199.02	2,199	2,199			
1916	1,555.99	1,546	1,258	298	0.70	298
1918	1,063.27	1,048	853	210	1.53	137
1920	56.40	55	45	11	2.38	5
1922	2,590.57	2,510	2,043	548	3.26	168
1923	9,106.97	8,830	7,188	1,919	3.17	605
1924	7,750.29	7,518	6,120	1,630	3.09	528
1926	429.13	412	335	94	4.04	23
1927	1,103.11	1,049	854	249	5.04	49
1930	8.49	8	8			
1934	189.20	175	142	47	7.09	7
1935	1,190.47	1,102	897	293	7.15	41
1937	2,918.63	2,666	2,170	749	8.24	91
1938	230.58	210	171	60	8.34	7
1939	2,439.04	2,198	1,789	650	9.34	70
1940	71.71	64	52	20	9.46	2
1941	797.42	715	582	215	9.59	22
1945	4,168.74	3,656	2,976	1,193	11.09	108
1946	216.66	189	154	63	11.29	6
1948	837.41	719	585	252	12.50	20
1950	104.66	89	72	33	12.96	3
1951	589.68	499	406	184	13.21	14
1953	12,628.25	10,580	8,612	4,016	13.75	292
1954	14,406.49	12,001	9,769	4,637	14.03	331
1955	11,835.60	9,800	7,977	3,859	14.33	269
1956	1,560.32	1,284	1,045	515	14.64	35
1957	438.24	358	291	147	14.97	10
1958	2,528.00	2,036	1,657	871	15.97	55
1959	1,881.16	1,504	1,224	657	16.30	40
1960	45,065.94	35,764	29,113	15,953	16.65	958
1961	4,375.07	3,473	2,827	1,548	16.37	95
1962	2,939.92	2,315	1,884	1,056	16.74	63
1963	8,473.06	6,616	5,386	3,087	17.12	180

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 307 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

SURVIVOR CURVE.. IOWA 55-S0
NET SALVAGE PERCENT.. 0

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
1964	2,075.85	1,607	1,308	768	17.52	44
1965	13,402.07	10,279	8,367	5,035	17.92	281
1966	52,777.83	40,101	32,643	20,135	18.34	1,098
1967	4,129.93	3,107	2,529	1,601	18.76	85
1968	6,982.81	5,201	4,234	2,749	19.19	143
1969	55,474.76	40,885	33,281	22,194	19.63	1,131
1970	4,674.66	3,433	2,795	1,880	19.53	96
1971	31,284.05	22,715	18,490	12,794	19.99	640
1972	99,953.72	71,727	58,387	41,567	20.46	2,032
1973	92,619.20	65,658	53,447	39,172	20.94	1,871
1974	36,948.07	26,048	21,204	15,744	20.92	753
1975	8,949.64	6,227	5,069	3,881	21.42	181
1976	106,563.59	73,145	59,542	47,022	21.93	2,144
1977	19,904.47	13,565	11,042	8,862	21.97	403
1978	166,422.96	111,770	90,983	75,440	22.49	3,354
1979	39,642.15	26,402	21,492	18,150	22.57	804
1980	131,008.39	85,889	69,915	61,093	23.11	2,644
1981	117,619.63	76,370	62,167	55,453	23.23	2,387
1982	290,606.82	185,523	151,020	139,587	23.79	5,867
1983	166,292.53	104,997	85,470	80,823	23.94	3,376
1984	43,735.54	27,116	22,073	21,663	24.52	883
1985	60,028.75	36,756	29,920	30,109	24.69	1,219
1986	59,322.55	35,843	29,177	30,146	24.89	1,211
1987	230,195.41	137,127	111,624	118,571	25.11	4,722
1988	207,714.49	121,139	98,610	109,104	25.73	4,240
1989	65,557.47	37,630	30,632	34,925	25.98	1,344
1990	937,704.31	529,240	430,812	506,892	26.24	19,318
1991	90,089.78	49,946	40,657	49,433	26.52	1,864
1992	220,366.40	119,879	97,584	122,782	26.82	4,578
1993	79,858.93	42,581	34,662	45,197	27.14	1,665
1994	11,207.63	5,850	4,762	6,446	27.47	235
1995	25,585.76	13,059	10,630	14,956	27.82	538
1996	30,007.12	14,956	12,174	17,833	28.18	633
1997	76,534.97	37,403	30,447	46,088	28.25	1,631
1998	23,893.16	11,368	9,254	14,639	28.64	511
1999	39,824.39	18,419	14,993	24,831	29.05	855
2000	881,514.14	397,739	323,768	557,746	29.19	19,107
2001	238,205.91	104,644	85,182	153,024	29.36	5,212
2002	305,417.48	129,680	105,562	199,855	29.81	6,704
2003	143,359.09	59,007	48,033	95,326	30.02	3,175
2004	986,835.88	392,761	319,716	667,120	30.25	22,054

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 307 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2005	2,640.92	1,014	825	1,816	30.50	60
2006	146,151.26	53,930	43,900	102,251	30.78	3,322
2007	496,040.74	175,400	142,779	353,262	31.08	11,366
2008	312,790.55	105,598	85,959	226,832	31.39	7,226
2009	9,390.78	3,029	2,466	6,925	31.51	220
2010	43,637.87	13,318	10,841	32,797	31.87	1,029
2011	338,285.41	97,629	79,472	258,813	32.05	8,075
2012	50,981.83	13,826	11,255	39,727	32.25	1,232
2013	255,142.11	64,551	52,546	202,596	32.48	6,238
2014	164,716.57	38,544	31,376	133,341	32.74	4,073
2015	1,157,081.80	247,847	201,752	955,330	33.02	28,932
2016	97,840.63	19,020	15,483	82,358	33.15	2,484
2017	31,720.83	5,507	4,483	27,238	33.32	817
2018	97,666.40	14,884	12,116	85,550	33.37	2,564
2019	138,057.93	17,879	14,554	123,504	33.61	3,675
2020	261,697.76	27,845	22,666	239,032	33.59	7,116
2021	168,596.74	13,808	11,240	157,357	33.63	4,679
2022	1,734,941.79	97,157	79,088	1,655,854	33.71	49,121
2023	464,148.99	13,460	10,957	453,192	33.48	13,536
2024	151,921.18	1,124	915	151,006	33.42	4,518
9999	71,610.27-	25,573-	20,835-	50,775-		1,697-
	12,416,177.55	4,434,071	3,612,473	8,803,705		294,151

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.9 2.37

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 310 POWER GENERATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-S0.5						
NET SALVAGE PERCENT.. 0						
1991	30,503.15	19,629	18,645	11,858	18.28	649
1992	38,884.85	24,513	23,284	15,601	18.76	832
1993	19,000.40	11,780	11,189	7,811	19.00	411
1994	89,645.34	54,325	51,601	38,044	19.50	1,951
1995	913.54	543	516	398	19.78	20
1996	6,832.08	3,979	3,779	3,053	20.08	152
1997	907,397.19	514,494	488,697	418,700	20.62	20,306
1998	17,951.56	9,942	9,443	8,509	20.95	406
1999	222,917.62	120,376	114,340	108,578	21.30	5,098
2000	86,874.40	45,661	43,371	43,503	21.66	2,008
2001	3,238.97	1,654	1,571	1,668	22.05	76
2002	215,094.77	106,472	101,133	113,962	22.44	5,079
2003	222,373.58	106,939	101,577	120,797	22.67	5,328
2004	80,295.99	37,257	35,389	44,907	23.10	1,944
2005	243,659.44	108,794	103,339	140,320	23.55	5,958
2006	347,035.56	149,295	141,809	205,227	23.84	8,609
2007	99,879.48	41,090	39,030	60,849	24.32	2,502
2008	126,530.31	49,802	47,305	79,225	24.65	3,214
2009	123,351.00	46,257	43,938	79,413	25.00	3,177
2010	93,304.96	33,049	31,392	61,913	25.53	2,425
2011	384,347.17	128,410	121,971	262,376	25.91	10,126
2012	5,994,607.60	1,877,511	1,783,370	4,211,238	26.31	160,062
2013	5,105,380.81	1,488,219	1,413,598	3,691,783	26.74	138,062
2014	600,450.24	162,122	153,993	446,457	27.04	16,511
2015	610,655.53	150,588	143,037	467,619	27.50	17,004
2016	156,901.17	35,020	33,264	123,637	27.84	4,441
2017	261,208.99	51,746	49,151	212,058	28.34	7,483
2018	966,738.66	167,052	158,676	808,063	28.72	28,136
2019	339,533.98	49,742	47,248	292,286	29.13	10,034
2020	275,567.95	32,848	31,201	244,367	29.56	8,267
2021	71,214.00	6,495	6,169	65,045	29.89	2,176
2023	7,195,905.50	228,110	216,673	6,979,232	30.55	228,453
2024	337,019.70	2,696	2,561	334,459	30.81	10,856
9999	118,273.00-	27,451-	26,075-	92,198-		3,331-
	25,156,942.49	5,838,959	5,546,185	19,610,757		708,425

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 27.7 2.82

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.2 PUMPING EQUIPMENT - ELECTRIC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1996	1,986.54	1,224	804	1,183	17.45	68
1999	1,667.46	963	633	1,034	18.29	57
2001	29,624.39	16,216	10,655	18,969	19.02	997
2002	32,312.49	17,274	11,350	20,962	19.15	1,095
2003	823,047.38	426,915	280,512	542,535	19.49	27,837
2004	127,527.73	64,019	42,065	85,463	19.84	4,308
2005	334,999.93	162,944	107,065	227,935	20.06	11,363
2006	2,531,499.43	1,184,742	778,457	1,753,042	20.46	85,681
2007	528.28	238	156	372	20.74	18
2008	239,127.06	103,303	67,877	171,250	21.04	8,139
2009	8,336.75	3,451	2,268	6,069	21.23	286
2010	56,654.53	22,288	14,645	42,010	21.59	1,946
2011	93,992.47	35,069	23,043	70,949	21.84	3,249
2012	896,791.04	316,388	207,889	688,902	22.01	31,300
2013	273,952.70	90,404	59,402	214,551	22.33	9,608
2014	4,105,892.32	1,260,509	828,240	3,277,652	22.57	145,222
2015	408,848.58	115,541	75,918	332,931	22.85	14,570
2016	517,643.96	133,345	87,617	430,027	23.06	18,648
2017	155,837.01	36,107	23,725	132,112	23.21	5,692
2018	1,600,755.27	326,554	214,568	1,386,187	23.41	59,213
2019	828,751.94	145,032	95,296	733,456	23.57	31,118
2020	2,138,053.49	308,735	202,860	1,935,193	23.70	81,654
2021	1,420,909.87	159,000	104,474	1,316,436	23.81	55,289
2023	7,889,658.69	317,953	208,917	7,680,742	23.81	322,585
2024	552,306.49	5,744	3,774	548,532	23.79	23,057
9999	1,954,569.05-	409,610-	269,142-	1,685,427-		73,518-
	23,116,136.75	4,844,348	3,183,068	19,933,069		869,482

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.9 3.76

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.5 PUMPING EQUIPMENT - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
2003	1,094.21	568	262	832	19.49	43
2004	10,226.07	5,133	2,364	7,862	19.84	396
2005	67,426.58	32,796	15,103	52,324	20.06	2,608
2006	50,644.62	23,702	10,915	39,730	20.46	1,942
2007	4,477.17	2,017	929	3,548	20.74	171
2010	60,812.96	23,924	11,017	49,796	21.59	2,306
2011	116,254.80	43,375	19,974	96,281	21.84	4,408
2012	1,768.38	624	287	1,481	22.01	67
2013	601,789.53	198,591	91,452	510,338	22.33	22,854
2014	7,409.40	2,275	1,048	6,361	22.57	282
2016	10,076.92	2,596	1,195	8,882	23.06	385
2017	3,802.48	881	406	3,396	23.21	146
2018	6,209.84	1,267	583	5,627	23.41	240
2019	701,297.74	122,727	56,516	644,782	23.57	27,356
2020	2,610,961.01	377,023	173,621	2,437,340	23.70	102,841
2021	2,500,679.42	279,826	128,861	2,371,818	23.81	99,614
2022	5,166,351.34	398,842	183,669	4,982,682	23.91	208,393
2023	3,598,493.65	145,019	66,783	3,531,711	23.81	148,329
2024	1,052,023.20	10,941	5,038	1,046,985	23.79	44,009
	16,571,799.32	1,672,127	770,023	15,801,776		666,390

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.7 4.02

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.52 PUMPING EQUIPMENT - SOURCE OF SUPPLY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1995	418.45	263	228	190	17.08	11
1997	234.53	142	123	112	17.64	6
2007	323,270.08	145,633	126,025	197,245	20.74	9,510
2008	136,117.27	58,803	50,886	85,231	21.04	4,051
2009	105,375.04	43,625	37,751	67,624	21.23	3,185
2010	675,975.27	265,929	230,124	445,851	21.59	20,651
2011	731,330.15	272,859	236,121	495,209	21.84	22,674
2012	228,208.41	80,512	69,672	158,536	22.01	7,203
2013	1,313,491.14	433,452	375,092	938,399	22.33	42,024
2014	1,598,537.47	490,751	424,676	1,173,861	22.57	52,010
2015	1,400,457.07	395,769	342,482	1,057,975	22.85	46,301
2016	1,708,322.35	440,064	380,813	1,327,509	23.06	57,568
2017	2,110,336.21	488,965	423,130	1,687,206	23.21	72,693
2018	1,022,515.03	208,593	180,508	842,007	23.41	35,968
2019	344,455.58	60,280	52,164	292,292	23.57	12,401
2020	118,864.55	17,164	14,853	104,012	23.70	4,389
2021	268,054.92	29,995	25,956	242,099	23.81	10,168
2023	854,607.38	34,441	29,804	824,803	23.81	34,641
	12,940,570.90	3,467,240	3,000,408	9,940,163		435,454

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.8 3.37

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.53 PUMPING EQUIPMENT - WATER TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1910	137.73	138	138			
1917	133.00	133	133			
1919	8,727.40	8,727	8,727			
1928	134.45	134	134			
1929	274.09	274	274			
1930	10.36	10	10			
1931	3,609.84	3,610	3,610			
1937	1,084.39	1,084	1,084			
1939	195.67	196	196			
1941	233.57	234	234			
1942	901.65	902	902			
1944	22.40	22	22			
1945	737.81	738	738			
1946	36.51	36	32	5	0.12	5
1947	175.93	175	157	19	0.52	19
1948	1,721.87	1,701	1,528	194	0.92	194
1950	257.14	253	227	30	1.19	25
1951	14,946.31	14,620	13,132	1,814	1.63	1,113
1952	33,222.64	32,292	29,006	4,217	2.07	2,037
1953	14,955.45	14,441	12,971	1,984	2.53	784
1954	9,834.27	9,431	8,471	1,363	2.99	456
1955	2,307.03	2,197	1,973	334	3.46	97
1956	984.21	937	842	142	3.43	41
1957	15,384.02	14,533	13,054	2,330	3.92	594
1958	3,367.41	3,156	2,835	532	4.42	120
1959	30,581.95	28,625	25,712	4,870	4.44	1,097
1960	74,885.02	69,493	62,420	12,465	4.97	2,508
1961	172,778.06	158,921	142,747	30,031	5.49	5,470
1962	3,846.01	3,529	3,170	676	5.57	121
1963	22,013.95	20,008	17,972	4,042	6.11	662
1964	33,235.44	29,912	26,868	6,367	6.67	955
1965	199,630.46	179,029	160,809	38,821	6.79	5,717
1966	11,660.13	10,347	9,294	2,366	7.36	321
1967	28,880.66	25,516	22,919	5,962	7.52	793
1968	95,521.75	83,983	75,436	20,086	7.69	2,612
1969	336,092.73	292,065	262,340	73,753	8.29	8,897
1970	5,567.23	4,810	4,320	1,247	8.50	147
1971	51,979.05	44,354	39,840	12,139	9.11	1,332
1972	425,080.09	360,298	323,629	101,451	9.35	10,850
1973	5,713,935.55	4,808,277	4,318,920	1,395,016	9.61	145,163
1974	22,852.56	19,082	17,140	5,713	9.88	578

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.53 PUMPING EQUIPMENT - WATER TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1975	113,415.69	93,920	84,361	29,055	10.17	2,857
1976	72,968.72	59,542	53,482	19,487	10.82	1,801
1977	19,388.63	15,674	14,079	5,310	11.14	477
1978	9,787.72	7,834	7,037	2,751	11.47	240
1979	178,767.53	141,584	127,174	51,594	11.82	4,365
1980	150,308.57	117,722	105,741	44,568	12.18	3,659
1981	506,732.79	394,390	354,251	152,482	12.25	12,448
1982	700,388.66	538,319	483,532	216,857	12.64	17,156
1983	235,697.27	178,776	160,581	75,116	13.05	5,756
1984	314,495.98	235,243	211,301	103,195	13.48	7,655
1985	648,586.85	480,603	431,690	216,897	13.63	15,913
1986	416,712.98	304,034	273,091	143,622	14.08	10,200
1987	694,620.55	498,599	447,855	246,766	14.55	16,960
1988	305,870.14	216,923	194,846	111,024	14.76	7,522
1989	629,840.15	440,888	396,017	233,823	15.00	15,588
1990	4,404,508.55	3,025,016	2,717,149	1,687,360	15.50	108,862
1991	1,021,788.90	691,240	620,890	400,899	15.78	25,406
1992	1,175,752.15	782,581	702,935	472,817	16.08	29,404
1993	1,214,390.97	794,333	713,491	500,900	16.39	30,561
1994	343,463.55	220,504	198,063	145,401	16.73	8,691
1995	3,162,140.70	1,989,935	1,787,412	1,374,729	17.08	80,488
1996	1,081,569.17	666,247	598,441	483,128	17.45	27,686
1997	3,450,086.82	2,086,613	1,874,251	1,575,836	17.64	89,333
1998	1,058,295.76	624,606	561,037	497,259	18.05	27,549
1999	3,220,158.30	1,859,641	1,670,378	1,549,780	18.29	84,734
2000	2,461,862.16	1,388,490	1,247,178	1,214,684	18.55	65,482
2001	2,419,398.53	1,324,379	1,189,592	1,229,807	19.02	64,659
2002	1,318,397.32	704,815	633,083	685,314	19.15	35,787
2003	2,250,239.06	1,167,199	1,048,409	1,201,830	19.49	61,664
2004	383,907.57	192,722	173,108	210,800	19.84	10,625
2005	99,429.78	48,363	43,441	55,989	20.06	2,791
2006	248,585.93	116,338	104,498	144,088	20.46	7,042
2007	1,515,671.60	682,810	613,318	902,354	20.74	43,508
2008	334,620.09	144,556	129,844	204,776	21.04	9,733
2009	188,991.93	78,243	70,280	118,712	21.23	5,592
2010	241,344.53	94,945	85,282	156,063	21.59	7,228
2011	413,172.02	154,154	138,465	274,707	21.84	12,578
2012	466,418.48	164,552	147,805	318,613	22.01	14,476
2013	226,704.84	74,813	67,199	159,506	22.33	7,143
2014	142,593.48	43,776	39,321	103,272	22.57	4,576
2015	387,479.97	109,502	98,358	289,122	22.85	12,653

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.53 PUMPING EQUIPMENT - WATER TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
2016	301,993.38	77,793	69,876	232,117	23.06	10,066
2017	66,657.04	15,444	13,872	52,785	23.21	2,274
2018	902,376.61	184,085	165,350	737,027	23.41	31,483
2019	112,378.15	19,666	17,664	94,714	23.57	4,018
2020	117,333.16	16,943	15,219	102,114	23.70	4,309
2021	477,892.13	53,476	48,033	429,859	23.81	18,054
2022	117,663.33	9,084	8,160	109,503	23.91	4,580
2023	187,006.36	7,536	6,769	180,237	23.81	7,570
	47,853,790.34	29,586,674	26,577,175	21,276,615		1,275,910

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.7 2.67

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.54 PUMPING EQUIPMENT - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1999	50,052.68	28,905	26,111	23,942	18.29	1,309
2000	490,971.15	276,908	250,144	240,827	18.55	12,983
2001	36,531.40	19,997	18,064	18,467	19.02	971
2002	538,352.70	287,803	259,986	278,367	19.15	14,536
2003	72,336.08	37,521	33,894	38,442	19.49	1,972
2004	292,005.04	146,587	132,419	159,586	19.84	8,044
2005	16,038.24	7,801	7,047	8,991	20.06	448
2006	189,538.24	88,704	80,130	109,408	20.46	5,347
2007	1,122,692.14	505,773	456,888	665,804	20.74	32,102
2008	693,194.93	299,460	270,516	422,679	21.04	20,089
2009	1,320,313.42	546,610	493,777	826,536	21.23	38,932
2010	294,909.64	116,017	104,803	190,107	21.59	8,805
2011	162,273.18	60,544	54,692	107,581	21.84	4,926
2012	147,718.84	52,115	47,078	100,641	22.01	4,573
2013	258,192.41	85,203	76,968	181,224	22.33	8,116
2015	107,975.32	30,514	27,565	80,410	22.85	3,519
2016	297,660.73	76,677	69,266	228,395	23.06	9,904
2017	157,968.28	36,601	33,063	124,905	23.21	5,382
2018	177,536.81	36,218	32,717	144,820	23.41	6,186
2019	27,912.06	4,885	4,413	23,499	23.57	997
2021	3,000.02	336	304	2,696	23.81	113
2022	250,727.13	19,356	17,485	233,242	23.91	9,755
	6,707,900.44	2,764,535	2,497,330	4,210,570		199,009

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.2 2.97

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEW HERSHEY TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2067						
NET SALVAGE PERCENT.. 0						
1992	4,605,057.01	2,814,611	2,624,392	1,980,665	20.36	97,282
1993	236.04	141	131	105	20.81	5
1994	5,203.89	3,060	2,853	2,351	21.02	112
1995	830.13	477	445	385	21.51	18
1996	1,183.76	666	621	563	21.75	26
1998	5,798.79	3,106	2,896	2,903	22.54	129
2001	17,726.99	8,766	8,174	9,553	23.51	406
2008	30,628.68	11,614	10,829	19,800	26.19	756
2009	156,208.55	56,235	52,434	103,774	26.67	3,891
2012	3,190,991.80	961,127	896,171	2,294,820	27.84	82,429
2013	143,928.90	40,214	37,496	106,433	28.37	3,752
2014	144,316.86	37,234	34,718	109,599	28.76	3,811
2021	1,294,711.77	110,309	102,854	1,191,858	32.21	37,003
	9,596,823.17	4,047,560	3,774,015	5,822,808		229,620
BANGOR TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2064						
NET SALVAGE PERCENT.. 0						
1989	2,860,588.15	1,852,231	1,727,052	1,133,536	19.05	59,503
1990	10,623.39	6,754	6,298	4,326	19.48	222
1994	8,028.91	4,745	4,424	3,605	20.76	174
2000	691.60	355	331	361	22.73	16
2007	6,598.67	2,647	2,468	4,131	25.37	163
2008	51,019.15	19,591	18,267	32,752	25.67	1,276
2009	13,787.45	5,046	4,705	9,082	25.98	350
2010	29,160.31	10,084	9,402	19,758	26.49	746
2012	25,731.93	7,874	7,342	18,390	27.22	676
2013	10,033.12	2,858	2,665	7,368	27.61	267
2014	10,972.92	2,886	2,691	8,282	28.02	296
	3,027,235.60	1,915,071	1,785,645	1,241,591		63,689

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
MOSHANNON VALLEY						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2043						
NET SALVAGE PERCENT.. 0						
1988	2,378,740.29	1,712,693	1,596,944	781,796	14.00	55,843
1990	6,544.83	4,606	4,295	2,250	14.31	157
1993	8,633.92	5,862	5,466	3,168	14.66	216
1994	35,338.97	23,642	22,044	13,295	14.84	896
1995	21,272.50	14,065	13,114	8,158	14.86	549
2011	15,381.16	6,698	6,245	9,136	16.85	542
	2,465,911.67	1,767,566	1,648,109	817,803		58,203
NORRISTOWN PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
1997	2,338,801.36	1,326,100	1,261,238	1,077,563	20.62	52,258
1998	51,785.42	28,813	27,404	24,382	20.73	1,176
1999	255,574.30	138,649	131,867	123,707	21.08	5,868
2000	107,104.92	56,551	53,785	53,320	21.45	2,486
2001	344,886.61	177,686	168,995	175,892	21.64	8,128
2023	4,600,022.57	155,941	148,314	4,451,709	28.50	156,200
	7,698,175.18	1,883,740	1,791,603	5,906,572		226,116
NORRISTOWN PLANT NO. 2						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2049						
NET SALVAGE PERCENT.. 0						
1982	316.42	233	217	99	15.14	7
1990	59,105.20	39,589	36,913	22,192	16.76	1,324
1995	1,320,282.91	819,368	763,993	556,290	17.73	31,376
1999	3,573,772.17	2,054,919	1,916,042	1,657,730	18.48	89,704
2004	9,652.67	4,904	4,573	5,080	19.37	262
2006	18,839.86	8,987	8,380	10,460	19.74	530
2010	35,600.00	14,454	13,477	22,123	20.48	1,080
2011	9,238.54	3,567	3,326	5,913	20.67	286
2012	111,639.37	40,726	37,974	73,666	20.89	3,526
2013	126,470.76	43,266	40,342	86,129	21.15	4,072
2014	92,686.99	29,567	27,569	65,118	21.35	3,050

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NORRISTOWN PLANT NO. 2						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2049						
NET SALVAGE PERCENT.. 0						
2018	33,127.07	7,076	6,598	26,529	22.09	1,201
2019	110.86	20	19	92	22.32	4
2021	3,397,278.49	396,462	369,668	3,027,610	22.71	133,316
	8,788,121.31	3,463,138	3,229,090	5,559,031		269,738
SILVER SPRINGS FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
1969	592,011.90	481,898	449,330	142,682	12.57	11,351
1970	0.18		0			
1971	85.00	68	63	22	13.23	2
1972	77.00	61	57	20	13.79	1
1973	159.00	125	117	42	13.94	3
1977	915.82	693	646	270	15.11	18
1982	1,483.91	1,060	988	496	16.82	29
1984	2,142.27	1,491	1,390	752	17.47	43
1985	5,679.13	3,898	3,635	2,045	17.82	115
1986	274.00	186	173	101	17.87	6
1989	1,399.32	911	849	550	18.76	29
1990	675,240.20	431,614	402,444	272,796	19.19	14,216
1991	1,328,257.42	832,817	776,533	551,724	19.63	28,106
1992	142.08	88	82	60	19.81	3
1994	3,438.13	2,042	1,904	1,534	20.51	75
1995	41,956.14	24,456	22,803	19,153	20.75	923
2000	21,291.43	11,037	10,291	11,000	22.30	493
2001	8,729.22	4,397	4,100	4,629	22.66	204
2004	27,520.99	12,605	11,753	15,768	23.67	666
2007	0.06		0			
2008	38,004.78	14,837	13,834	24,171	24.98	968
2009	43,188.45	16,066	14,980	28,208	25.32	1,114
2011	1,847,904.99	617,385	575,660	1,272,245	25.91	49,102
2012	4,021.14	1,259	1,174	2,847	26.31	108

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SILVER SPRINGS FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
2013	246,296.50	72,066	67,196	179,101	26.59	6,736
2014	12,654.23	3,417	3,186	9,468	27.04	350
2021	4,157,197.84	380,384	354,677	3,802,521	29.79	127,644
	9,060,071.13	2,914,861	2,717,867	6,342,204		242,305
ONEIDA VALLEY TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2047						
NET SALVAGE PERCENT.. 0						
1972	812,923.54	655,216	610,935	201,989	12.52	16,133
1973	4,215.87	3,376	3,148	1,068	12.69	84
1974	84.31	67	62	22	12.89	2
1982	1,397,906.11	1,039,203	968,971	428,935	14.50	29,582
1983	985.80	723	674	312	14.87	21
1984	1,092.20	795	741	351	14.95	23
1985	1,762.52	1,272	1,186	576	15.05	38
1986	158,342.13	113,120	105,475	52,867	15.19	3,480
1987	5,291.21	3,739	3,486	1,805	15.36	118
1990	9,016.06	6,131	5,717	3,299	16.00	206
1994	11,504.67	7,386	6,887	4,618	16.73	276
1996	206,838.17	128,571	119,882	86,956	17.05	5,100
1997	211,238.37	128,898	120,187	91,052	17.25	5,278
1998	143,526.80	86,202	80,376	63,151	17.29	3,652
2006	3,287.36	1,615	1,506	1,782	18.63	96
2007	4,241.17	2,012	1,876	2,365	18.84	126
2008	44,084.18	20,173	18,810	25,275	18.97	1,332
2009	3,924.36	1,719	1,603	2,322	19.25	121
2012	12.52	5	5	8	19.75	
2013	55,551.77	19,799	18,461	37,091	19.86	1,868
2014	2,179.04	726	677	1,502	20.03	75
	3,078,008.16	2,220,748	2,070,664	1,007,344		67,611

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
TWO LICK CREEK TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2037						
NET SALVAGE PERCENT.. 0						
1906	1,384.00	1,384	1,384			
1909	3,521.00	3,521	3,521			
1910	203.00	203	203			
1924	1,765.00	1,765	1,765			
1927	135.95	135	126	10	1.04	10
1928	129.00	128	119	10	1.09	9
1935	11.26	11	11			
1958	29.15	26	24	5	8.07	1
1963	1,322.35	1,162	1,083	239	8.44	28
1965	229,382.77	200,297	186,726	42,657	8.57	4,977
1966	70.40	61	57	14	8.67	2
1967	2.12	2	2			
1969	304,266.24	261,060	243,371	60,895	9.10	6,692
1972	0.36		0			
1973	0.55			1	9.61	
1977	0.27		0			
1982	1,210,091.45	970,735	904,961	305,131	10.36	29,453
1983	68,041.39	54,399	50,713	17,328	10.28	1,686
1987	17,693.12	13,748	12,816	4,877	10.62	459
1988	20,150.57	15,524	14,472	5,678	10.73	529
1989	76,072.02	58,043	54,110	21,962	10.87	2,020
1990	7,021.40	5,324	4,963	2,058	10.84	190
1992	11,166.13	8,290	7,728	3,438	11.10	310
1994	1,181,000.53	860,949	802,614	378,387	11.15	33,936
1996	5,063.26	3,601	3,357	1,706	11.37	150
1997	1,346.73	949	885	462	11.31	41
2000	1,658.35	1,118	1,042	616	11.59	53
2008	8,355.53	4,773	4,450	3,906	12.01	325
2009	44,551.46	24,659	22,988	21,563	12.10	1,782
2013	396,506.56	187,111	174,433	222,074	12.31	18,040
2014	57.46	26	24	33	12.37	3
	3,590,999.38	2,679,004	2,497,950	1,093,049		100,696

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEW CASTLE FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2060						
NET SALVAGE PERCENT.. 0						
2006	1,121.21	480	409	712	24.02	30
2007	7,111.84	2,926	2,492	4,620	24.32	190
2008	2,174.83	856	729	1,446	24.65	59
2009	4,017.89	1,507	1,284	2,734	25.00	109
2012	192,646.24	60,799	51,784	140,863	26.02	5,414
2013	49,243.83	14,517	12,364	36,879	26.31	1,402
2014	619,092.68	169,012	143,951	475,142	26.63	17,842
2023	5,977,804.78	191,888	163,434	5,814,370	30.15	192,848
2024	11,471,721.39	92,921	79,142	11,392,579	30.52	373,282
	18,324,934.69	534,906	455,589	17,869,346		591,176
E.H. ALDRICH STATION						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1961	80,911.88	70,345	65,591	15,321	9.46	1,620
1962	5,350.86	4,645	4,331	1,020	9.43	108
1963	479.89	416	388	92	9.42	10
1964	977.76	839	782	195	9.93	20
1966	240.00	205	191	49	10.03	5
1969	475,945.97	397,891	371,000	104,946	10.79	9,726
1970	4,015.31	3,339	3,113	902	10.94	82
1972	6,866.34	5,677	5,293	1,573	10.89	144
1975	15,658.45	12,660	11,804	3,854	11.61	332
1976	5,336.00	4,303	4,012	1,324	11.52	115
1979	5,834.00	4,594	4,284	1,550	12.14	128
1980	1,374.20	1,076	1,003	371	12.18	30
1981	8,541.92	6,648	6,199	2,343	12.25	191
1982	296,991.36	229,515	214,004	82,988	12.35	6,720
1983	48,573.14	37,241	34,724	13,849	12.48	1,110
1984	1,323.05	1,006	938	385	12.63	30
1986	1,829.56	1,370	1,277	552	12.76	43
1987	770.54	570	531	239	13.00	18
1988	1,916.04	1,407	1,312	604	13.02	46
1989	995.67	725	676	320	13.08	24
1990	12,231.45	8,775	8,182	4,049	13.39	302
1991	42,884.78	30,568	28,502	14,383	13.30	1,081

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ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
E.H. ALDRICH STATION						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1992	1,006.23	708	660	346	13.45	26
1993	7,180,454.66	4,986,108	4,649,133	2,531,321	13.64	185,581
1994	16,957.32	11,650	10,863	6,095	13.67	446
1995	1,163,518.36	789,564	736,203	427,315	13.74	31,100
1996	136,637.49	91,438	85,258	51,379	13.84	3,712
1997	2,217,941.61	1,461,180	1,362,430	855,512	13.98	61,195
2000	62,308.54	39,030	36,392	25,916	14.31	1,811
2001	339,034.47	208,201	194,130	144,904	14.45	10,028
2006	14,081.71	7,706	7,185	6,897	14.89	463
2007	28,838.76	15,296	14,262	14,577	15.05	969
2012	4,153,926.68	1,814,435	1,691,811	2,462,116	15.47	159,154
2013	2,073,887.49	857,760	799,790	1,274,097	15.60	81,673
2014	191,425.87	74,656	69,611	121,815	15.64	7,789
2017	144,046.69	43,963	40,992	103,055	15.94	6,465
2018	139,569.24	38,019	35,450	104,120	16.03	6,495
2019	272,566.83	64,462	60,105	212,461	16.14	13,164
	19,155,250.12	11,327,991	10,562,415	8,592,835		591,956
HAYS MINE STATION TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1955	107.82	96	90	18	8.52	2
1957	258.72	227	213	46	9.34	5
1958	1,158.59	1,017	953	206	9.19	22
1959	128.38	112	105	23	9.63	2
1962	171.37	147	138	34	10.46	3
1963	458.14	388	364	95	10.94	9
1967	174.17	144	135	39	11.97	3
1968	2,957.71	2,435	2,282	676	12.03	56
1969	793.44	650	609	184	12.11	15
1971	309.75	250	234	76	12.79	6
1972	2,495.48	1,998	1,872	623	12.94	48
1975	158,587.60	123,556	115,770	42,818	13.89	3,083
1976	19,986.33	15,445	14,472	5,515	14.11	391
1978	0.03		0			
1979	0.07		0			

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CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HAYS MINE STATION TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1980	887.23	664	622	265	14.82	18
1981	379.72	281	263	116	15.14	8
1982	53.37	39	37	17	15.47	1
1983	19,897.82	14,440	13,530	6,368	15.50	411
1985	71,588.69	50,814	47,612	23,977	15.95	1,503
1986	208.29	146	137	71	16.05	4
1987	1,125.31	779	730	395	16.48	24
1989	611,053.53	412,767	386,755	224,298	16.81	13,343
1990	8,316,564.36	5,542,158	5,192,904	3,123,660	17.02	183,529
1991	3,654,314.50	2,399,788	2,248,559	1,405,756	17.25	81,493
1993	8,482.60	5,417	5,076	3,407	17.54	194
1994	5,598.51	3,510	3,289	2,310	17.85	129
1995	6,428.41	3,971	3,721	2,708	17.95	151
1996	4,323.25	2,615	2,450	1,873	18.30	102
1997	73,776.97	43,824	41,062	32,715	18.45	1,773
1998	7,514.96	4,377	4,101	3,414	18.64	183
2001	244,128.51	133,074	124,688	119,441	19.19	6,224
2006	39,030.27	18,336	17,181	21,850	20.31	1,076
2008	66,556.89	29,072	27,240	39,317	20.63	1,906
2009	775.44	325	305	471	20.84	23
2010	29,636.81	11,825	11,080	18,557	21.09	880
2012	11,405,876.06	4,092,428	3,834,533	7,571,343	21.44	353,141
2013	25,744.17	8,665	8,119	17,625	21.68	813
2014	91,949.66	28,780	26,966	64,983	21.95	2,961
2017	198,195.09	46,893	43,938	154,257	22.59	6,829
2018	194,596.62	40,632	38,071	156,525	22.74	6,883
2023	6,719,061.79	270,106	253,085	6,465,977	23.88	270,770
	31,985,336.43	13,312,191	12,473,288	19,512,048		938,017
SUSQUEHANNA FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2070						
NET SALVAGE PERCENT.. 0						
1920	2.00	2	2			
1927	119.00	118	110	9	1.04	9
1929	5,945.58	5,874	5,477	469	1.15	408
1931	5,319.00	5,194	4,843	476	2.24	212

PENNSYLVANIA-AMERICAN WATER COMPANY
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CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SUSQUEHANNA FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2070						
NET SALVAGE PERCENT.. 0						
1947	278.00	257	240	38	6.33	6
1954	493.00	442	412	81	8.12	10
1956	179.54	159	148	31	8.92	3
1957	631.36	554	517	115	9.34	12
1963	842.00	714	666	176	10.94	16
1973	26,394.70	20,730	19,329	7,066	13.94	507
1979	391.74	289	269	122	15.98	8
1982	7,848.56	5,571	5,194	2,654	17.17	155
1984	1,071.66	742	692	380	17.80	21
1985	34,553.31	23,583	21,989	12,564	18.14	693
1986	19,163.69	12,889	12,018	7,146	18.50	386
1990	8,393.40	5,308	4,949	3,444	19.76	174
1995	1,937,167.63	1,106,704	1,031,910	905,258	21.76	41,602
1998	37.76	20	19	19	22.78	1
2008	12,798.62	4,792	4,468	8,330	26.74	312
2009	27,067.43	9,622	8,972	18,096	27.19	666
2010	27,009.76	9,075	8,462	18,548	27.67	670
2011	5,393.93	1,711	1,595	3,799	27.98	136
2012	68,345.06	20,257	18,888	49,457	28.49	1,736
2014	10,788.07	2,740	2,555	8,233	29.37	280
	2,200,234.80	1,237,347	1,153,724	1,046,511		48,023
YARDLEY - MILL ROAD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
1997	4,036,898.44	2,288,921	2,134,229	1,902,669	20.62	92,273
1998	636,566.96	354,186	330,249	306,318	20.73	14,777
1999	22,865.33	12,404	11,566	11,300	21.08	536
2001	3,473.57	1,790	1,669	1,805	21.64	83
2007	40,599.49	17,117	15,960	24,639	23.32	1,057
2008	19,404.61	7,824	7,295	12,109	23.68	511
2010	38,695.00	14,139	13,183	25,512	24.31	1,049
2012	12,166.56	3,957	3,690	8,477	24.90	340

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CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
YARDLEY - MILL ROAD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
2013	106,076.97	32,322	30,138	75,939	25.10	3,025
2014	22,389.82	6,314	5,887	16,503	25.46	648
2021	2,288,196.39	223,099	208,021	2,080,175	27.77	74,907
	7,227,333.14	2,962,073	2,761,888	4,465,445		189,206
SCRANTON WTP						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	6,068,557.86	4,044,087	3,770,776	2,297,781	17.02	135,005
1991	10,808.16	7,098	6,618	4,190	17.25	243
1992	63.36	41	38	25	17.50	1
1993	1,858.78	1,187	1,107	752	17.54	43
1994	2,129.12	1,335	1,245	884	17.85	50
1995	42,181.67	26,056	24,295	17,887	17.95	996
1998	71.71	42	39	33	18.64	2
1999	13,304.56	7,584	7,071	6,233	18.86	330
2000	35,457.33	19,743	18,409	17,049	19.10	893
2001	1,233.88	673	628	606	19.19	32
2003	779.79	403	376	404	19.65	21
2004	1,532.72	769	717	816	19.84	41
2007	36,939.80	16,767	15,634	21,306	20.45	1,042
2008	184,433.05	80,560	75,116	109,318	20.63	5,299
2009	133,091.40	55,699	51,935	81,157	20.84	3,894
2010	32,619.58	13,015	12,135	20,484	21.09	971
2012	31,903.15	11,447	10,673	21,230	21.44	990
2013	528.32	178	166	362	21.68	17
2014	77,664.18	24,309	22,666	54,998	21.95	2,506
2017	19,208.64	4,545	4,238	14,971	22.59	663
	6,694,367.06	4,315,538	4,023,882	2,670,485		153,039

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RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BROWNELL WTP						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	2,297,805.71	1,531,258	1,427,772	870,034	17.02	51,118
1991	121,464.63	79,766	74,375	47,089	17.25	2,730
1992	1,960.79	1,267	1,181	779	17.50	45
1993	35.91	23	21	14	17.54	1
1995	601.31	371	346	255	17.95	14
1999	5.76	3	3	3	18.86	
2000	2,758.46	1,536	1,432	1,326	19.10	69
2001	375.44	205	191	184	19.19	10
2006	8,629.98	4,054	3,780	4,850	20.31	239
2007	58.48	27	25	33	20.45	2
2009	16,915.26	7,079	6,601	10,315	20.84	495
2010	7,308.81	2,916	2,719	4,590	21.09	218
2012	119,943.23	43,036	40,128	79,816	21.44	3,723
2013	41,899.64	14,103	13,150	28,750	21.68	1,326
2014	19,329.32	6,050	5,641	13,688	21.95	624
2019	1,090.61	195	182	909	23.01	40
	2,640,183.34	1,691,889	1,577,547	1,062,636		60,654
CHINCHILLA WTP						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1893	14,836.59	14,837	14,837			
1907	187.12	187	187			
1910	1,427.96	1,428	1,428			
1921	42,429.29	42,429	42,429			
1990	1,459,927.15	972,895	903,695	556,232	17.02	32,681
1991	125,225.99	82,236	76,387	48,839	17.25	2,831
1992	1,469.28	950	882	587	17.50	34
1993	650.89	416	386	264	17.54	15
1994	2,419.58	1,517	1,409	1,010	17.85	57
1995	10,944.29	6,760	6,279	4,665	17.95	260
1997	674.81	401	372	302	18.45	16
1998	244.82	143	133	112	18.64	6
1999	163.20	93	86	77	18.86	4

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CHINCHILLA WTP						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
2001	18,845.86	10,273	9,542	9,304	19.19	485
2005	80,991.72	39,394	36,592	44,400	20.06	2,213
2008	16,964.75	7,410	6,883	10,082	20.63	489
	1,777,403.30	1,181,369	1,101,529	675,874		39,091
NESBITT WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2048						
NET SALVAGE PERCENT.. 0						
1988	3,047,363.02	2,106,337	1,963,985	1,083,378	16.08	67,374
1989	20,213.19	13,796	12,864	7,350	16.28	451
1990	4,961.45	3,357	3,130	1,831	16.25	113
1991	16,130.80	10,753	10,026	6,105	16.50	370
1992	1,148.36	753	702	446	16.78	27
1993	6,916.77	4,481	4,178	2,739	16.85	163
1994	1,753.58	1,115	1,040	714	17.17	42
1995	17,326.81	10,854	10,120	7,206	17.30	417
1997	1,057.68	640	597	461	17.64	26
1998	3,562.34	2,112	1,969	1,593	17.86	89
1999	52,859.37	30,791	28,710	24,149	17.92	1,348
2000	14,759.96	8,395	7,828	6,932	18.19	381
2001	577.08	321	299	278	18.32	15
2007	20,878.82	9,761	9,101	11,777	19.36	608
2008	8,002.36	3,598	3,355	4,648	19.59	237
2009	39,060.79	16,874	15,734	23,327	19.72	1,183
2010	14,986.30	6,189	5,771	9,216	19.90	463
2012	81,800.26	30,332	28,282	53,518	20.36	2,629
2013	32,118.74	11,200	10,443	21,676	20.55	1,055
2014	28,769.10	9,379	8,745	20,024	20.67	969
2016	562,914.51	154,914	144,444	418,470	21.07	19,861
2018	85,920.60	18,817	17,545	68,375	21.40	3,195
	4,063,081.89	2,454,769	2,288,869	1,774,213		101,016

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CRYSTAL LAKE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2052						
NET SALVAGE PERCENT.. 0						
1992	4,751,108.26	3,040,709	2,835,210	1,915,898	18.00	106,439
1993	54,356.78	34,207	31,895	22,462	18.26	1,230
1995	32,030.36	19,506	18,188	13,843	18.62	743
1997	3,078.16	1,803	1,681	1,397	19.08	73
1998	3,543.58	2,027	1,890	1,654	19.45	85
2000	3,463.67	1,895	1,767	1,697	19.86	85
2001	1,211.20	646	602	609	20.10	30
2007	5,025.88	2,221	2,071	2,955	21.46	138
2008	8,813.12	3,751	3,497	5,316	21.59	246
2009	33,412.18	13,582	12,664	20,748	21.90	947
2010	3,395.99	1,317	1,228	2,168	22.10	98
2012	39,565.46	13,721	12,794	26,772	22.60	1,185
2013	53,719.47	17,491	16,309	37,411	22.78	1,642
2014	49,390.50	14,965	13,954	35,437	23.00	1,541
2019	2,864.92	490	457	2,408	24.24	99
	5,044,979.53	3,168,331	2,954,207	2,090,773		114,581
CEASETOWN WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
1993	7,988,456.15	5,002,371	4,664,297	3,324,159	18.50	179,684
1994	44,194.91	27,180	25,343	18,852	18.78	1,004
1995	116,941.50	70,539	65,772	51,170	19.08	2,682
1997	111,789.69	64,894	60,508	51,281	19.51	2,628
1998	3,366.88	1,917	1,787	1,579	19.66	80
1999	532.85	297	277	256	19.84	13
2000	9,264.78	5,025	4,685	4,579	20.25	226
2001	43,265.97	22,888	21,341	21,925	20.48	1,071
2006	0.33		0			
2007	9,549.60	4,188	3,905	5,645	21.76	259
2008	2,264.03	953	889	1,375	22.02	62
2009	26,199.97	10,532	9,820	16,380	22.31	734
2010	165,181.88	63,133	58,866	106,316	22.63	4,698
2012	34,593.21	11,831	11,031	23,562	23.09	1,020

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CEASETOWN WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
2013	128,885.26	41,256	38,468	90,418	23.36	3,871
2014	37,093.23	11,054	10,307	26,786	23.56	1,137
2019	8,081.58	1,354	1,262	6,819	24.85	274
	8,729,661.82	5,339,412	4,978,560	3,751,102		199,443
WATRES WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
1993	8,769,938.43	5,491,735	5,120,589	3,649,350	18.50	197,262
1994	463,999.38	285,360	266,075	197,925	18.78	10,539
1995	152,290.96	91,862	85,654	66,637	19.08	3,493
1996	1,500.56	891	831	670	19.17	35
1998	91.08	52	48	43	19.66	2
2000	2,132.55	1,157	1,079	1,054	20.25	52
2001	3,188.33	1,687	1,573	1,615	20.48	79
2003	1,537.06	771	719	818	20.84	39
2008	38,154.92	16,056	14,971	23,184	22.02	1,053
2009	16,416.46	6,599	6,153	10,263	22.31	460
2010	6,304.52	2,410	2,247	4,057	22.63	179
2012	36,404.23	12,450	11,609	24,796	23.09	1,074
2013	70,933.95	22,706	21,171	49,762	23.36	2,130
2014	19,921.37	5,937	5,536	14,386	23.56	611
	9,582,813.80	5,939,673	5,538,254	4,044,560		217,008
HUNTSVILLE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2075						
NET SALVAGE PERCENT.. 0						
1999	5,824,071.00	2,999,397	2,796,690	3,027,381	23.54	128,606
2001	40,700.36	19,845	18,504	22,197	24.17	918
2007	10,162.55	3,939	3,673	6,490	26.86	242
2008	6,430.94	2,377	2,216	4,215	27.29	154
2009	20,153.37	7,074	6,596	13,557	27.74	489
2010	6,227.91	2,066	1,926	4,302	28.19	153

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HUNTSVILLE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2075						
NET SALVAGE PERCENT.. 0						
2012	14,664.07	4,258	3,970	10,694	29.32	365
2013	49,081.55	13,227	12,333	36,748	29.82	1,232
2014	41,390.35	10,265	9,571	31,819	30.32	1,049
	6,012,882.10	3,062,448	2,855,480	3,157,402		133,208
WEST SHORE REGIONAL TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2081						
NET SALVAGE PERCENT.. 0						
1995	40,740.27	23,157	21,592	19,148	22.02	870
2006	5,492,101.10	2,204,529	2,055,541	3,436,560	26.84	128,039
2008	14,881.08	5,452	5,084	9,798	27.67	354
2009	10,105.34	3,502	3,265	6,840	28.29	242
2011	20,843.84	6,422	5,988	14,856	29.19	509
2012	159,124.19	45,637	42,553	116,571	29.84	3,907
2013	12,202.19	3,248	3,028	9,174	30.32	303
2014	523,557.86	128,272	119,603	403,955	30.82	13,107
2021	1,065,817.06	83,453	77,813	988,004	35.31	27,981
	7,339,372.93	2,503,672	2,334,467	5,004,906		175,312
MCMURRAY/SAXONBURG						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
1992	45,446.78	28,068	26,171	19,276	19.81	973
2011	3,266,953.16	1,091,489	1,017,723	2,249,230	25.91	86,809
2012	3,336.82	1,045	974	2,362	26.31	90
2018	2,859,613.70	495,857	462,346	2,397,268	28.60	83,821
	6,175,350.46	1,616,459	1,507,214	4,668,136		171,693

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ROCK RUN FILTRATION PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
1992	83,844.40	51,782	48,561	35,283	19.81	1,781
2011	4,500,958.20	1,503,770	1,410,240	3,090,718	25.91	119,287
2012	14,226.50	4,456	4,179	10,048	26.31	382
2013	30,099.87	8,807	8,259	21,841	26.59	821
2014	32,609.09	8,804	8,256	24,353	27.04	901
2017	8,626.95	1,715	1,608	7,019	28.21	249
2019	144,547.37	21,248	19,926	124,621	29.01	4,296
2023	1,246,425.00	39,387	36,937	1,209,488	30.65	39,461
	6,061,337.38	1,639,969	1,537,968	4,523,369		167,178
ELLWOOD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
2018	38,365,682.82	5,915,988	5,516,171	32,849,512	32.91	998,162
2019	840,408.61	109,253	101,869	738,539	33.46	22,072
	39,206,091.43	6,025,241	5,618,040	33,588,051		1,020,234
MONTROSE TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
2018	4,704,312.56	725,405	688,905	4,015,408	32.91	122,012
2019	12,721.29	1,654	1,571	11,151	33.46	333
2023	2,170,110.56	58,159	55,233	2,114,878	36.31	58,245
	6,887,144.41	785,218	745,708	6,141,436		180,590

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
STEELTON WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2043						
NET SALVAGE PERCENT.. 0						
2023	1,443,761.07	74,931	86,291	1,357,470	18.27	74,300
	1,443,761.07	74,931	86,291	1,357,470		74,300
BUTLER WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2082						
NET SALVAGE PERCENT.. 0						
2023	3,683,107.12	97,234	86,768	3,596,340	36.88	97,515
2024	4,451,484.43	29,380	26,217	4,425,267	37.49	118,039
	8,134,591.55	126,614	112,985	8,021,607		215,554
OTHER LARGE STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1973	12,835.72	10,408	9,714	3,121	11.89	262
1974	31.01	25	23	8	12.50	1
1975	5,400.06	4,260	3,976	1,424	13.11	109
1976	809.04	629	587	222	13.73	16
1977	1,845.45	1,422	1,327	518	13.98	37
1978	7,492.94	5,687	5,308	2,185	14.61	150
1979	3,619.17	2,704	2,524	1,095	15.24	72
1980	2,309.57	1,697	1,584	726	15.88	46
1981	3,552.33	2,581	2,409	1,143	16.17	71
1982	12,208.67	8,717	8,136	4,073	16.82	242
1983	70,161.15	49,190	45,912	24,250	17.48	1,387
1984	29,473.73	20,278	18,927	10,547	18.14	581
1985	289,720.24	195,474	182,446	107,274	18.80	5,706
1986	321,454.58	213,767	199,520	121,934	19.14	6,371
1987	29,549.19	19,242	17,960	11,590	19.82	585
1988	103,757.14	66,114	61,708	42,049	20.50	2,051
1989	528,658.99	329,355	307,405	221,254	21.18	10,446
1990	332,721.36	202,494	188,998	143,723	21.87	6,572
1991	104,660.61	62,168	58,025	46,636	22.56	2,067
1992	5,758.04	3,335	3,113	2,645	23.25	114
1993	3,586.70	2,024	1,889	1,698	23.95	71

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER LARGE STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1994	777,228.62	426,699	398,261	378,968	24.64	15,380
1995	78,218.73	41,738	38,956	39,262	25.35	1,549
1996	465,091.95	240,918	224,862	240,230	26.05	9,222
1997	160,669.12	80,688	75,310	85,359	26.76	3,190
1998	1,058.84	515	481	578	27.48	21
1999	22.98	11	10	13	28.19	
2000	2,148.74	975	910	1,239	28.91	43
2001	700.73	306	286	415	29.63	14
2002	755,392.47	317,416	296,261	459,131	30.36	15,123
2003	170,720.96	68,835	64,247	106,474	31.08	3,426
2004	30,898.66	11,927	11,132	19,767	31.81	621
2005	39,987.78	14,739	13,757	26,231	32.55	806
2006	750,241.51	263,335	245,785	504,457	33.28	15,158
2007	342,812.22	114,225	106,612	236,200	34.02	6,943
2008	270,275.99	85,191	79,513	190,763	34.76	5,488
2009	337,883.93	100,352	93,664	244,220	35.51	6,877
2010	1,785.62	495	462	1,324	36.51	36
2011	104,386.95	27,005	25,205	79,182	37.25	2,126
2012	1,254,054.81	300,973	280,914	973,141	38.00	25,609
2013	853,701.71	188,753	176,173	677,529	38.75	17,485
2014	273,144.87	55,175	51,498	221,647	39.50	5,611
2016	162,534.74	26,526	24,758	137,777	41.02	3,359
2017	233,005.75	33,273	31,055	201,950	42.02	4,806
2018	1,126,776.77	138,594	129,357	997,420	42.78	23,315
2019	1,942,664.24	200,094	186,758	1,755,906	43.54	40,329
2020	685,842.27	56,788	53,003	632,839	44.31	14,282
2021	1,726,703.59	108,264	101,049	1,625,655	44.85	36,246
2023	1,008,019.89	21,471	20,040	987,980	45.95	21,501
2024	203,606.55	1,099	1,026	202,581	46.05	4,399
9999	27,162.27-	7,174-	6,696-	20,466-		556-
	15,602,024.41	4,120,777	3,846,140	11,755,884		319,366
	261,593,481.26	94,312,506	88,028,988	173,564,491		6,958,623

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.9 2.66

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.18 PURIFICATION SYSTEM - LARGE STRUCTURES PAINT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1982	50,562.15	50,562	50,562			
1997	52,683.58	52,684	52,684			
	103,245.73	103,246	103,246			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.19 PURIFICATION SYSTEM - LARGE STRUCTURES PAINT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1983	72,520.43	72,520	72,520			
1984	121,617.90	121,618	121,618			
1985	126,432.86	126,433	126,433			
1986	103,281.57	103,282	103,282			
1987	104,997.90	104,998	104,998			
1988	44,292.18	44,292	44,292			
1989	6,520.49	6,520	6,520			
1991	1,937.55	1,938	1,938			
1994	36.73	37	37			
1996	174,603.42	174,603	174,603			
1997	243,625.95	243,626	243,626			
1998	175,497.41	175,497	175,497			
1999	471,219.17	471,219	471,219			
2004	475,875.22	475,875	475,875			
2005	604,791.57	604,792	604,792			
2007	198,308.24	198,308	198,308			
2008	114,399.73	114,400	114,400			
2015	11,632.92	10,470	5,311	6,322	1.00	6,322
2021	616,354.70	184,906	93,792	522,563	7.00	74,652
	3,667,945.94	3,235,334	3,139,061	528,885		80,974

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.5 2.21

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.2 PURIFICATION SYSTEM - CHEMICAL TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 42-R0.5						
NET SALVAGE PERCENT.. 0						
1969	767.21	637	579	188	11.23	17
1970	5,549.41	4,555	4,142	1,407	11.79	119
1971	11,408.30	9,311	8,466	2,942	11.94	246
1972	25,314.42	20,403	18,552	6,762	12.52	540
1973	206,918.03	165,679	150,648	56,270	12.69	4,434
1974	26,470.06	20,911	19,014	7,456	13.29	561
1975	36,156.11	28,346	25,774	10,382	13.50	769
1976	922,430.54	717,282	652,208	270,223	13.73	19,681
1977	25,093.94	19,224	17,480	7,614	14.35	531
1978	45,059.66	34,200	31,097	13,963	14.61	956
1979	17,210.32	12,934	11,761	5,449	14.88	366
1980	53,977.53	40,138	36,497	17,481	15.17	1,152
1981	173,487.27	126,819	115,314	58,173	15.82	3,677
1982	6,838.36	4,940	4,492	2,346	16.14	145
1983	66,442.94	47,400	43,100	23,343	16.47	1,417
1984	269,020.46	189,390	172,208	96,812	16.82	5,756
1985	901,047.23	625,507	568,759	332,288	17.18	19,342
1986	1,870,645.69	1,279,522	1,163,440	707,206	17.56	40,274
1987	670,283.00	451,369	410,419	259,864	17.95	14,477
1988	101,924.44	67,515	61,390	40,534	18.35	2,209
1989	734,466.79	480,709	437,098	297,369	18.48	16,091
1990	411,058.61	264,146	240,182	170,877	18.91	9,036
1991	665,843.45	419,681	381,606	284,237	19.36	14,682
1992	4,079,232.30	2,519,334	2,290,772	1,788,460	19.81	90,281
1993	94,792.45	57,596	52,371	42,421	20.02	2,119
1994	705,164.01	418,867	380,866	324,298	20.51	15,812
1995	4,437,549.06	2,586,647	2,351,978	2,085,571	20.75	100,509
1996	1,979,916.91	1,130,929	1,028,327	951,590	21.02	45,271
1997	3,200,448.55	1,780,089	1,618,594	1,581,855	21.54	73,438
1998	1,995,380.66	1,084,290	985,920	1,009,461	21.85	46,200
1999	6,941,824.92	3,679,167	3,345,381	3,596,444	22.17	162,221
2000	1,215.90	627	570	646	22.51	29
2001	2,380,155.65	1,193,410	1,085,140	1,295,016	22.87	56,625
2002	75,375.59	36,813	33,473	41,903	23.05	1,818
2003	1,907,999.18	901,530	819,740	1,088,259	23.44	46,427
2004	1,933,682.87	885,627	805,280	1,128,403	23.67	47,672
2005	2,118,644.77	937,924	852,833	1,265,812	23.92	52,919
2006	553,257.74	236,020	214,608	338,650	24.19	14,000
2007	2,136,778.49	875,438	796,015	1,340,763	24.49	54,747
2008	1,480,797.87	582,842	529,965	950,833	24.65	38,573
2009	199,812.98	75,230	68,405	131,408	24.84	5,290

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.2 PURIFICATION SYSTEM - CHEMICAL TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 42-R0.5						
NET SALVAGE PERCENT.. 0						
2010	529,442.39	189,752	172,537	356,905	25.06	14,242
2011	1,189,627.78	405,187	368,427	821,201	25.17	32,626
2012	1,176,644.56	378,409	344,079	832,566	25.31	32,895
2013	350,943.56	106,160	96,529	254,415	25.36	10,032
2014	511,027.55	144,621	131,501	379,527	25.34	14,977
2015	3,917,280.14	1,025,936	932,860	2,984,420	25.36	117,682
2016	5,482,058.47	1,320,080	1,200,318	4,281,740	25.22	169,776
2017	2,540,856.55	553,144	502,961	2,037,896	25.15	81,030
2018	388,363.87	75,498	68,649	319,715	24.86	12,861
2019	3,487,265.56	591,092	537,466	2,949,800	24.50	120,400
2020	7,563,641.87	1,083,114	984,850	6,578,792	23.93	274,918
2021	9,914,030.08	1,139,122	1,035,777	8,878,253	23.11	384,174
2022	16,817,602.03	1,405,952	1,278,399	15,539,203	21.92	708,905
2023	17,762,862.37	859,723	781,726	16,981,136	19.66	863,740
2024	3,674,832.40	53,653	48,785	3,626,047	16.82	215,579
9999	42,367.00-	11,894-	10,815-	31,552-		1,450-
	118,733,555.85	33,332,547	30,308,513	88,425,043		4,062,816

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.8 3.42

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.29 PURIFICATION SYSTEM - CHEMICAL TREATMENT PAINT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FULLY ACCRUED						
NET SALVAGE PERCENT.. 0						
1985	8,167.87	8,168	8,168			
	8,167.87	8,168	8,168			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.3 GRANULAR ACTIVATED CARBON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 11-L0.5						
NET SALVAGE PERCENT.. 0						
1992	704.99	666	664	41	1.90	22
1994	3,024.48	2,831	2,823	201	2.05	98
1995	21,806.69	20,300	20,245	1,562	2.15	727
1996	18,425.10	17,076	17,030	1,395	2.21	631
1998	23,902.70	21,876	21,817	2,086	2.41	866
1999	8,756.06	7,946	7,925	831	2.55	326
2000	287,215.84	258,494	257,797	29,419	2.67	11,018
2001	589,990.64	526,508	525,087	64,904	2.77	23,431
2002	252,547.34	222,797	222,196	30,351	2.94	10,323
2003	37,485.53	32,747	32,659	4,827	3.04	1,588
2007	130,623.29	107,477	107,187	23,436	3.66	6,403
2008	22,032.18	17,767	17,719	4,313	3.84	1,123
2009	284,017.07	224,089	223,484	60,533	4.01	15,096
2010	247,094.87	190,263	189,750	57,345	4.18	13,719
2011	748,462.34	561,422	559,907	188,555	4.33	43,546
2012	393,673.77	285,807	285,036	108,638	4.53	23,982
2013	1,312,659.12	919,780	917,298	395,361	4.70	84,119
2014	638,888.09	429,333	428,175	210,713	4.88	43,179
2015	42,397.65	27,168	27,095	15,303	5.04	3,036
2016	108,845.47	65,917	65,739	43,106	5.21	8,274
2017	443,400.79	251,098	250,420	192,981	5.36	36,004
2018	1,489,096.16	777,308	775,211	713,885	5.49	130,034
2019	1,334,417.06	627,843	626,149	708,268	5.63	125,802
2020	646,492.56	264,545	263,831	382,662	5.78	66,204
2021	762,957.18	256,354	255,662	507,295	5.93	85,547
2022	2,670,366.07	662,251	660,465	2,009,901	6.06	331,667
2023	713,429.16	100,594	100,322	613,107	6.09	100,674
2024	226,694.77	9,022	8,998	217,697	6.03	36,102
	13,459,406.97	6,889,279	6,870,691	6,588,716		1,203,541

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.5 8.94

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.37 WASTE HANDLING AND TREATMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-R3						
NET SALVAGE PERCENT.. 0						
1991	6,109,372.10	5,382,968	6,107,374	1,998	4.45	449
1997	587,014.54	465,972	528,680	58,335	7.01	8,322
1999	1,611,966.38	1,221,065	1,385,388	226,578	8.00	28,322
2000	768,487.33	566,221	642,419	126,068	8.57	14,710
2002	3,142.89	2,178	2,471	672	9.75	69
2003	254,814.79	170,700	193,672	61,143	10.35	5,908
2004	53,813.63	34,764	39,442	14,372	10.96	1,311
2005	13,926.29	8,626	9,787	4,139	11.67	355
2013	14,994.50	5,839	6,625	8,370	17.25	485
2014	584,758.03	208,759	236,852	347,906	18.01	19,317
2015	1,025,983.26	332,419	377,154	648,829	18.78	34,549
2016	3,703,780.80	1,075,578	1,220,322	2,483,459	19.55	127,031
2017	16,476.12	4,221	4,789	11,687	20.32	575
2023	783,051.27	30,226	34,294	748,757	24.91	30,058
	15,531,581.93	9,509,536	10,789,269	4,742,313		271,461

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.5 1.75

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
1900	125,601.75	123,039	121,710	3,892	2.58	1,509
1906	4,586.50	4,438	4,390	196	3.95	50
1907	41,998.46	40,293	39,858	2,140	4.95	432
1911	19,203.47	18,228	18,031	1,172	6.05	194
1912	4,438.17	4,225	4,179	259	5.65	46
1922	35,223.66	32,335	31,986	3,238	9.11	355
1923	13,430.50	12,344	12,211	1,220	8.89	137
1924	1,095.09	997	986	109	9.89	11
1929	2,302.94	2,057	2,035	268	11.38	24
1931	5,150.81	4,551	4,502	649	12.26	53
1933	62.16	55	54	8	12.09	1
1935	277.71	242	239	39	13.04	3
1938	6,539.43	5,624	5,563	976	14.00	70
1940	15,126.12	12,833	12,694	2,432	15.01	162
1941	8,026.43	6,795	6,722	1,304	15.04	87
1943	62.80	52	51	12	16.09	1
1949	20,044.22	16,236	16,061	3,983	17.59	226
1950	10,902.31	8,794	8,699	2,203	17.74	124
1951	82,251.59	66,048	65,334	16,918	17.91	945
1952	1,026.63	820	811	216	18.09	12
1953	746,781.72	588,539	582,180	164,602	19.09	8,622
1954	167,798.68	131,554	130,133	37,666	19.29	1,953
1955	57,612.66	44,921	44,436	13,177	19.50	676
1956	47,528.35	36,844	36,446	11,082	19.72	562
1957	82,561.32	63,613	62,926	19,635	19.96	984
1958	74,574.93	57,095	56,478	18,097	20.21	895
1959	163,240.30	124,144	122,803	40,437	20.47	1,975
1960	24,042.03	18,157	17,961	6,081	20.75	293
1961	393,042.37	292,188	289,031	104,011	21.75	4,782
1962	183,259.87	135,209	133,748	49,512	22.03	2,247
1963	14,864.59	10,881	10,763	4,102	22.33	184
1964	44,728.99	32,473	32,122	12,607	22.64	557
1965	55,464.80	39,924	39,493	15,972	22.97	695
1966	387,395.34	276,368	273,382	114,013	23.30	4,893
1967	783,061.40	553,468	547,488	235,573	23.65	9,961
1968	277,903.38	194,532	192,430	85,473	24.00	3,561
1969	82,936.37	57,931	57,305	25,631	23.74	1,080
1970	68,740.33	47,513	47,000	21,740	24.12	901
1971	370,605.42	253,383	250,645	119,960	24.52	4,892
1972	170,628.60	115,345	114,099	56,530	24.92	2,268
1973	3,479,882.47	2,324,909	2,299,790	1,180,092	25.34	46,570

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
1974	684,663.77	451,878	446,996	237,668	25.76	9,226
1975	384,509.49	250,585	247,878	136,631	26.19	5,217
1976	345,768.47	222,398	219,995	125,773	26.63	4,723
1977	203,501.52	130,078	128,673	74,829	26.53	2,821
1978	441,520.79	278,246	275,240	166,281	26.99	6,161
1979	293,555.20	182,298	180,328	113,227	27.46	4,123
1980	1,062.83	650	643	420	27.94	15
1981	53,155.58	32,000	31,654	21,502	28.43	756
1982	879,289.35	524,408	518,742	360,547	28.42	12,686
1983	1,375,177.79	806,267	797,556	577,622	28.93	19,966
1984	32,002.17	18,433	18,234	13,768	29.44	468
1985	1,720,771.84	979,807	969,221	751,551	29.49	25,485
1986	1,618,124.10	903,884	894,118	724,006	30.03	24,109
1987	227,380.05	124,513	123,168	104,212	30.57	3,409
1988	3,032,224.36	1,637,401	1,619,710	1,412,514	30.67	46,055
1989	5,060,078.85	2,674,252	2,645,358	2,414,721	31.23	77,321
1990	6,074,418.55	3,159,913	3,125,772	2,948,647	31.36	94,026
1991	666,694.00	338,814	335,153	331,541	31.94	10,380
1992	1,304,442.24	651,178	644,142	660,300	32.10	20,570
1993	7,588,070.55	3,693,114	3,653,212	3,934,859	32.69	120,369
1994	2,012,181.59	959,811	949,441	1,062,741	32.89	32,312
1995	1,573,728.28	730,210	722,320	851,408	33.50	25,415
1996	3,300,657.67	1,497,178	1,481,002	1,819,656	33.73	53,948
1997	2,264,802.31	1,002,854	992,019	1,272,783	33.98	37,457
1998	1,208,436.55	518,419	512,818	695,619	34.61	20,099
1999	5,068,350.98	2,116,037	2,093,174	2,975,177	34.88	85,298
2000	3,473,818.77	1,408,981	1,393,758	2,080,061	35.17	59,143
2001	5,004,066.13	1,956,590	1,935,450	3,068,616	35.82	85,668
2002	2,262,634.10	856,181	846,930	1,415,704	36.14	39,173
2003	2,398,060.29	876,251	866,784	1,531,276	36.47	41,987
2004	1,924,790.65	677,526	670,206	1,254,585	36.82	34,073
2005	3,718,661.37	1,257,651	1,244,063	2,474,598	37.18	66,557
2006	2,868,930.75	929,534	919,491	1,949,440	37.56	51,902
2007	1,528,521.91	472,925	467,815	1,060,707	37.95	27,950
2008	235,266.32	69,262	68,514	166,752	38.35	4,348
2009	24,747.21	6,904	6,829	17,918	38.76	462
2010	794,793.85	209,190	206,930	587,864	39.19	15,000
2011	258,525.81	63,856	63,166	195,360	39.63	4,930
2012	223,545.34	51,505	50,949	172,596	40.08	4,306
2013	4,258,004.06	908,658	898,840	3,359,164	40.55	82,840
2014	6,054,296.74	1,186,642	1,173,821	4,880,476	41.02	118,978

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
2015	375,980.08	67,338	66,610	309,370	41.25	7,500
2016	8,389,377.46	1,349,012	1,334,436	7,054,941	41.75	168,981
2017	5,256,927.21	747,009	738,938	4,517,989	42.26	106,909
2018	3,550,330.22	438,821	434,080	3,116,250	42.54	73,255
2019	3,418,655.84	357,250	353,390	3,065,266	42.85	71,535
2020	2,146,087.42	181,130	179,173	1,966,914	43.39	45,331
2021	2,321,376.36	149,032	147,422	2,173,954	43.73	49,713
2022	3,451,456.29	149,793	148,174	3,303,282	44.08	74,938
2023	7,957,346.43	175,857	173,957	7,783,389	44.25	175,896
2024	6,498,853.16	36,394	36,001	6,462,852	44.39	145,593
9999	3,115,059.10-	1,029,024-	1,017,906-	2,097,153-		55,896-
	130,768,568.22	43,197,891	42,731,163	88,037,405		2,346,480

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.5 1.79

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.1 ELEVATED TANKS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
1992	189,738.86	94,718	92,342	97,397	32.10	3,034
1994	0.01					
2007	112,587.14	34,834	33,960	78,627	37.95	2,072
2008	452,291.74	133,155	129,815	322,477	38.35	8,409
2009	610,424.47	170,308	166,036	444,388	38.76	11,465
2010	1,113,481.79	293,068	285,717	827,765	39.19	21,122
2011	1.21			1	39.63	
2012	70,427.57	16,227	15,820	54,608	40.08	1,362
2013	7,305,295.40	1,558,950	1,519,847	5,785,448	40.55	142,674
2014	402,306.06	78,852	76,874	325,432	41.02	7,933
2015	75,692.00	13,556	13,216	62,476	41.25	1,515
2017	22,485.50	3,195	3,115	19,370	42.26	458
2018	41,920.13	5,181	5,051	36,869	42.54	867
2019	3,889.76	406	396	3,494	42.85	82
2021	3,744,315.33	240,385	234,355	3,509,960	43.73	80,264
	14,144,856.97	2,642,835	2,576,544	11,568,313		281,257

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.1 1.99

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.2 GROUND LEVEL FACILITIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
2007	697,456.92	215,793	164,902	532,555	37.95	14,033
2008	36,106.35	10,630	8,123	27,983	38.35	730
2009	20,943.90	5,843	4,465	16,479	38.76	425
2010	12,681.91	3,338	2,551	10,131	39.19	259
2011	253,273.91	62,559	47,806	205,468	39.63	5,185
2012	1,887,852.66	434,961	332,383	1,555,470	40.08	38,809
2013	4,991,972.34	1,065,287	814,057	4,177,915	40.55	103,031
2014	4,022,161.01	788,344	602,426	3,419,735	41.02	83,368
2015	138,124.29	24,738	18,904	119,220	41.25	2,890
2016	1,655,575.61	266,217	203,434	1,452,142	41.75	34,782
2017	148,132.48	21,050	16,086	132,046	42.26	3,125
2018	113,557.83	14,036	10,726	102,832	42.54	2,417
2019	33,122.12	3,461	2,645	30,477	42.85	711
2021	3,711,782.17	238,296	182,098	3,529,684	43.73	80,715
2023	2,190,666.17	48,414	36,996	2,153,670	44.25	48,671
	19,913,409.67	3,202,967	2,447,602	17,465,808		419,151

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.7 2.10

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.3 BELOW GRADE FACILITIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
2007	173,959.09	53,823	52,495	121,464	37.95	3,201
2010	31,397.64	8,264	8,060	23,338	39.19	596
2011	100,934.51	24,931	24,316	76,619	39.63	1,933
2014	280,555.88	54,989	53,633	226,923	41.02	5,532
2016	231,860.11	37,283	36,363	195,497	41.75	4,683
	818,707.23	179,290	174,867	643,840		15,945

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 40.4 1.95

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.4 CLEARWELL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
2012	12,768,982.03	2,941,973	2,863,759	9,905,223	40.08	247,136
2018	32,063.64	3,963	3,858	28,206	42.54	663
2019	5,254.37	549	534	4,720	42.85	110
	12,806,300.04	2,946,485	2,868,151	9,938,149		247,909
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					40.1	1.94

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.58 DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1959	427.00	427	427			
1961	3,005.00	3,005	3,005			
1962	646.00	646	646			
1963	501.00	501	501			
1984	69,262.85	69,263	69,263			
1990	105,687.39	105,687	105,687			
1997	138,050.00	138,050	138,050			
2002	764,914.30	764,914	764,914			
2003	135,772.35	135,772	135,772			
2004	456,940.96	456,941	456,941			
2007	263,798.12	263,798	263,798			
2015	272,106.38	244,896	202,621	69,485	1.00	69,485
2021	92,812.80	27,844	23,037	69,776	7.00	9,968
	2,303,924.15	2,211,744	2,164,662	139,262		79,453

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.8 3.45

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.59 DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1997	461,505.72	461,506	461,506			
1998	243,741.29	243,741	243,741			
1999	465,161.88	465,162	465,162			
2000	103,352.55	103,353	103,353			
2001	1,262,286.55	1,262,287	1,262,287			
2004	736,540.63	736,541	736,541			
2005	2,772,132.56	2,772,133	2,772,133			
2006	1,898,932.85	1,898,933	1,898,933			
2007	1,611,757.81	1,611,758	1,611,758			
2008	1,742,652.76	1,742,653	1,742,653			
2009	387,058.80	387,059	387,059			
2010	7,332.39	7,332	7,332			
2011	1,233,227.05	1,233,227	1,233,227			
2012	3,394,359.12	3,394,359	3,394,359			
2013	1,350,299.88	1,350,300	1,350,300			
2014	772,333.61	772,334	772,334			
2015	3,817,936.25	3,436,143	3,125,140	692,796	1.00	692,796
2016	800,361.02	640,289	582,337	218,024	2.00	109,012
2017	602,080.95	421,457	383,311	218,770	3.00	72,923
2018	2,787,180.26	1,672,308	1,520,948	1,266,232	4.00	316,558
2019	1,065,127.17	532,564	484,362	580,765	5.00	116,153
2020	3,609,228.96	1,443,692	1,313,024	2,296,205	6.00	382,701
2021	4,311,190.90	1,293,357	1,176,296	3,134,895	7.00	447,842
2022	4,651,769.10	930,354	846,148	3,805,621	8.00	475,703
2023	3,410,000.00	341,000	310,136	3,099,864	9.00	344,429
2024	2,246,495.20	56,162	51,079	2,195,416	9.75	225,171
	45,744,045.26	29,210,004	28,235,459	17,508,586		3,183,288

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.5 6.96

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 331 MAINS AND ACCESSORIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 90-R2						
NET SALVAGE PERCENT.. 0						
1943	2,704.67	2,037	1,088	1,617	26.53	61
1944	13,097.40	9,849	5,263	7,834	26.38	297
1945	102,456.81	76,084	40,656	61,801	27.38	2,257
1946	175,967.79	129,020	68,942	107,026	28.38	3,771
1947	173,828.45	127,156	67,946	105,882	28.26	3,747
1948	186,623.62	134,742	72,000	114,624	29.26	3,917
1949	85,297.32	61,414	32,817	52,480	29.17	1,799
1950	139,973.84	99,437	53,134	86,840	30.17	2,878
1951	333,358.76	236,051	126,134	207,225	30.09	6,887
1952	318,361.15	222,343	118,809	199,552	31.09	6,419
1953	838,928.49	583,726	311,915	527,013	31.04	16,979
1954	1,125,054.71	771,788	412,406	712,649	32.04	22,242
1955	2,511,083.91	1,715,321	916,584	1,594,500	32.01	49,813
1956	1,393,681.31	938,226	501,342	892,339	33.01	27,032
1957	2,051,316.08	1,374,382	734,403	1,316,913	33.00	39,906
1958	1,856,977.03	1,225,605	654,903	1,202,074	34.00	35,355
1959	2,071,747.60	1,360,102	726,772	1,344,976	34.01	39,546
1960	2,553,990.80	1,650,900	882,160	1,671,831	35.01	47,753
1961	3,447,306.05	2,215,239	1,183,715	2,263,591	35.04	64,600
1962	1,310,331.61	828,654	442,792	867,540	36.04	24,072
1963	1,847,820.33	1,160,986	620,374	1,227,446	36.09	34,011
1964	4,472,158.58	2,763,794	1,476,836	2,995,323	37.09	80,758
1965	4,345,334.21	2,666,297	1,424,739	2,920,595	37.15	78,616
1966	4,426,372.96	2,669,988	1,426,711	2,999,662	38.15	78,628
1967	5,323,951.08	3,186,385	1,702,648	3,621,303	38.24	94,699
1968	5,324,691.56	3,130,919	1,673,010	3,651,682	39.24	93,060
1969	4,274,541.75	2,492,058	1,331,634	2,942,908	39.34	74,807
1970	3,599,365.68	2,060,277	1,100,911	2,498,455	40.34	61,935
1971	5,072,102.65	2,876,389	1,537,002	3,535,101	40.46	87,373
1972	8,026,511.46	4,465,951	2,386,386	5,640,125	41.46	136,038
1973	8,015,284.46	4,414,819	2,359,064	5,656,220	41.59	136,000
1974	4,797,096.41	2,614,418	1,397,017	3,400,079	41.74	81,459
1975	5,727,012.37	3,058,797	1,634,472	4,092,540	42.74	95,754
1976	9,362,426.98	4,943,361	2,641,491	6,720,936	42.91	156,629
1977	5,995,593.08	3,099,722	1,656,340	4,339,253	43.91	98,822
1978	9,608,196.09	4,905,945	2,621,497	6,986,699	44.09	158,464
1979	8,545,192.34	4,268,324	2,280,784	6,264,408	45.09	138,931
1980	12,155,004.16	5,989,986	3,200,756	8,954,248	45.29	197,709
1981	8,076,431.77	3,889,610	2,078,418	5,998,014	46.29	129,575
1982	5,952,132.53	2,824,882	1,509,479	4,442,654	46.50	95,541
1983	9,718,355.76	4,502,514	2,405,924	7,312,432	47.50	153,946

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 331 MAINS AND ACCESSORIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 90-R2						
NET SALVAGE PERCENT.. 0						
1984	14,542,504.57	6,631,382	3,543,487	10,999,018	47.72	230,491
1985	18,360,814.72	8,234,825	4,400,288	13,960,527	47.96	291,087
1986	24,704,827.57	10,796,010	5,768,860	18,935,968	48.96	386,764
1987	26,215,078.73	11,251,512	6,012,258	20,202,821	49.21	410,543
1988	34,664,565.55	14,475,923	7,735,226	26,929,340	50.21	536,334
1989	32,892,370.61	13,469,426	7,197,403	25,694,968	50.47	509,114
1990	33,465,335.93	13,426,293	7,174,355	26,290,981	50.75	518,049
1991	21,540,752.83	8,387,969	4,482,121	17,058,632	51.75	329,635
1992	25,195,237.70	9,594,347	5,126,750	20,068,488	52.03	385,710
1993	35,917,393.99	13,249,927	7,080,114	28,837,280	53.03	543,792
1994	40,057,764.44	14,420,795	7,705,768	32,351,996	53.33	606,638
1995	48,078,965.77	16,870,909	9,014,990	39,063,976	53.64	728,262
1996	40,327,118.45	13,662,828	7,300,748	33,026,370	54.64	604,436
1997	35,424,784.16	11,668,924	6,235,303	29,189,481	54.97	531,007
1998	88,710,612.66	28,369,654	15,159,357	73,551,256	55.30	1,330,041
1999	54,498,269.87	16,758,218	8,954,773	45,543,497	56.30	808,943
2000	56,905,566.72	16,935,097	9,049,288	47,856,279	56.65	844,771
2001	63,713,140.69	18,317,528	9,787,992	53,925,149	57.00	946,055
2002	65,255,945.47	18,088,948	9,665,850	55,590,095	57.37	968,975
2003	23,963,343.18	6,340,701	3,388,161	20,575,182	58.37	352,496
2004	63,914,460.64	16,234,273	8,674,802	55,239,659	58.74	940,410
2005	59,234,926.76	14,405,934	7,697,827	51,537,100	59.12	871,737
2006	17,933,774.24	4,164,222	2,225,157	15,708,617	59.52	263,922
2007	77,976,170.46	17,232,734	9,208,331	68,767,839	59.92	1,147,661
2008	98,977,767.84	20,745,740	11,085,510	87,892,258	60.34	1,456,617
2009	91,598,465.16	18,136,496	9,691,257	81,907,208	60.76	1,348,045
2010	94,618,509.70	17,617,967	9,414,181	85,204,329	61.19	1,392,455
2011	116,695,272.29	20,328,316	10,862,459	105,832,813	61.63	1,717,229
2012	108,106,394.88	17,513,236	9,358,218	98,748,177	62.07	1,590,916
2013	143,061,357.99	21,401,979	11,436,172	131,625,186	62.53	2,104,993
2014	132,573,984.41	18,162,636	9,705,225	122,868,759	62.99	1,950,607
2015	166,566,824.26	20,837,510	11,134,547	155,432,277	62.94	2,469,531
2016	174,235,241.31	19,514,347	10,427,514	163,807,727	63.43	2,582,496
2017	117,477,223.79	11,677,236	6,239,744	111,237,480	63.42	1,753,981
2018	154,095,900.87	13,313,886	7,114,290	146,981,611	63.44	2,316,860
2019	164,026,784.26	11,973,955	6,398,297	157,628,487	63.49	2,482,729
2020	181,577,714.58	10,749,401	5,743,955	175,833,760	63.57	2,765,986
2021	128,129,808.55	5,842,719	3,122,063	125,007,746	62.79	1,990,886
2022	197,275,951.36	6,155,010	3,288,937	193,987,014	62.10	3,123,784

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 331 MAINS AND ACCESSORIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 90-R2						
NET SALVAGE PERCENT.. 0						
2023	242,850,344.48	3,982,746	2,128,185	240,722,159	59.98	4,013,374
2024	158,534,822.77	697,553	372,738	158,162,085	56.57	2,795,865
9999	301,765,724.35-	53,828,997-	28,763,586-	273,002,138-		4,623,479-
	3,327,488,033.47	593,557,613	317,168,189	3,010,319,844		50,981,834
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					59.0	1.53

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 333 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1937	11,189.17	10,221	8,775	2,414	8.24	293
1938	1,379.73	1,258	1,080	300	8.34	36
1939	24,065.96	21,888	18,792	5,274	8.46	623
1940	54,472.93	49,418	42,429	12,044	8.59	1,402
1941	37,754.81	34,157	29,326	8,429	8.74	964
1942	37,599.18	33,914	29,117	8,482	8.91	952
1943	17,498.45	15,733	13,508	3,990	9.09	439
1944	10,867.45	9,737	8,360	2,507	9.29	270
1945	20,450.33	18,256	15,674	4,776	9.50	503
1946	78,011.91	69,368	59,557	18,455	9.72	1,899
1947	160,113.73	141,781	121,728	38,386	9.96	3,854
1948	217,174.68	191,461	164,382	52,793	10.21	5,171
1949	236,865.98	207,850	178,453	58,413	10.47	5,579
1950	258,684.52	225,883	193,935	64,750	10.75	6,023
1951	339,266.81	294,721	253,037	86,230	11.03	7,818
1952	416,326.67	356,709	306,258	110,069	12.03	9,150
1953	402,286.11	342,748	294,271	108,015	12.33	8,760
1954	441,278.57	373,763	320,900	120,379	12.64	9,524
1955	582,991.99	490,763	421,352	161,640	12.97	12,463
1956	623,370.64	521,387	447,644	175,727	13.30	13,213
1957	606,101.08	503,549	432,329	173,772	13.65	12,731
1958	816,856.57	673,907	578,593	238,264	14.00	17,019
1959	881,543.54	721,984	619,870	261,674	14.37	18,210
1960	893,995.33	726,639	623,866	270,129	14.74	18,326
1961	815,207.96	657,384	564,407	250,801	15.12	16,587
1962	876,352.82	700,907	601,774	274,579	15.52	17,692
1963	767,728.99	608,809	522,702	245,027	15.92	15,391
1964	651,471.95	512,057	439,634	211,838	16.34	12,964
1965	973,415.54	758,096	650,874	322,542	16.76	19,245
1966	971,766.41	749,621	643,598	328,168	17.19	19,091
1967	1,015,877.66	775,927	666,183	349,695	17.63	19,835
1968	1,164,057.70	880,028	755,561	408,497	18.07	22,606
1969	1,264,755.01	946,037	812,234	452,521	18.53	24,421
1970	1,372,198.57	1,015,153	871,574	500,625	18.99	26,363
1971	1,596,946.61	1,159,543	995,542	601,405	19.99	30,085
1972	1,719,386.98	1,233,832	1,059,324	660,063	20.46	32,261
1973	2,264,250.62	1,605,127	1,378,105	886,146	20.94	42,318
1974	1,320,618.21	924,433	793,685	526,933	21.43	24,589
1975	785,520.68	542,716	465,957	319,564	21.92	14,579
1976	1,026,407.40	699,599	600,651	425,756	22.42	18,990
1977	1,417,803.73	952,906	818,131	599,673	22.93	26,152

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 333 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1978	1,948,910.90	1,290,959	1,108,371	840,540	23.44	35,859
1979	3,000,915.38	1,958,097	1,681,152	1,319,763	23.97	55,059
1980	2,701,592.73	1,735,503	1,490,041	1,211,552	24.49	49,471
1981	2,617,127.61	1,643,033	1,410,650	1,206,478	25.49	47,331
1982	2,577,601.85	1,591,411	1,366,329	1,211,273	26.03	46,534
1983	2,911,572.97	1,766,742	1,516,862	1,394,711	26.57	52,492
1984	3,442,425.97	2,051,686	1,761,505	1,680,921	27.11	62,004
1985	3,782,036.61	2,212,491	1,899,566	1,882,471	27.67	68,033
1986	4,568,299.89	2,621,290	2,250,546	2,317,754	28.23	82,103
1987	6,464,837.23	3,635,824	3,121,589	3,343,248	28.79	116,125
1988	7,114,076.93	3,918,434	3,364,228	3,749,849	29.36	127,720
1989	7,539,640.40	4,037,477	3,466,434	4,073,206	30.36	134,164
1990	8,454,268.84	4,426,655	3,800,569	4,653,700	30.94	150,410
1991	6,209,857.82	3,176,342	2,727,094	3,482,764	31.52	110,494
1992	6,522,002.57	3,255,784	2,795,300	3,726,703	32.10	116,097
1993	9,649,158.97	4,696,246	4,032,030	5,617,129	32.69	171,830
1994	7,794,512.03	3,694,599	3,172,051	4,622,461	33.29	138,854
1995	10,730,976.44	4,948,053	4,248,222	6,482,754	33.89	191,288
1996	11,372,572.95	5,094,913	4,374,311	6,998,262	34.50	202,848
1997	10,786,407.66	4,688,851	4,025,681	6,760,727	35.11	192,558
1998	47,313,714.35	19,928,536	17,109,933	30,203,781	35.73	845,334
1999	13,901,935.09	5,630,284	4,833,962	9,067,973	36.73	246,882
2000	13,949,578.90	5,457,075	4,685,251	9,264,328	37.35	248,041
2001	16,393,489.18	6,183,624	5,309,040	11,084,449	37.98	291,850
2002	29,964,415.49	10,877,083	9,338,677	20,625,738	38.61	534,207
2003	3,652,869.03	1,273,390	1,093,287	2,559,582	39.24	65,229
2004	2,380,774.39	795,179	682,712	1,698,062	39.88	42,579
2005	18,879,936.43	6,026,476	5,174,118	13,705,818	40.52	338,248
2006	84,648.90	25,750	22,108	62,541	41.17	1,519
2007	12,507,493.92	3,614,666	3,103,424	9,404,070	41.82	224,870
2008	26,084,784.65	7,136,797	6,127,400	19,957,385	42.48	469,807
2009	23,485,953.49	6,059,376	5,202,365	18,283,588	43.14	423,820
2010	18,151,871.63	4,396,383	3,774,578	14,377,294	43.80	328,249
2011	19,032,528.94	4,305,158	3,696,256	15,336,273	44.47	344,868
2012	21,808,546.76	4,579,795	3,932,049	17,876,498	45.14	396,023
2013	22,769,328.68	4,433,188	3,806,178	18,963,151	45.50	416,773
2014	20,635,169.77	3,673,060	3,153,559	17,481,611	46.18	378,554
2015	21,573,125.73	3,475,431	2,983,881	18,589,245	46.87	396,613
2016	28,116,982.03	4,071,339	3,495,507	24,621,475	47.25	521,089
2017	25,568,269.75	3,257,398	2,796,686	22,771,584	47.95	474,903
2018	24,135,900.46	2,664,603	2,287,733	21,848,167	48.35	451,875

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 333 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
2019	26,709,872.62	2,484,018	2,132,690	24,577,183	48.76	504,044
2020	33,166,771.61	2,494,141	2,141,381	31,025,391	49.19	630,726
2021	30,938,359.74	1,772,768	1,522,035	29,416,325	49.36	595,955
2022	38,229,892.99	1,490,966	1,280,091	36,949,802	49.28	749,793
2023	38,295,205.06	769,734	660,866	37,634,339	48.75	771,986
2024	21,274,563.76	112,755	96,807	21,177,757	47.14	449,252
9999	27,290,501.61-	7,319,918-	6,284,621-	21,005,881-		505,786-
	719,078,190.47	192,872,715	165,593,656	553,484,534		13,326,968

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.5 1.85

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 334 METERS AND METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L1.5						
NET SALVAGE PERCENT.. 0						
1991	607,109.64	528,914	472,144	134,966	4.88	27,657
1992	129,998.00	112,318	100,263	29,735	5.04	5,900
1993	210,300.51	179,933	160,620	49,681	5.23	9,499
1994	178,447.28	150,966	134,762	43,685	5.46	8,001
1995	195,835.42	164,130	146,514	49,321	5.60	8,807
1996	45,283.68	37,531	33,503	11,781	5.78	2,038
1997	1,141,514.80	933,873	833,638	307,877	6.00	51,313
1998	9,954,061.51	8,048,854	7,184,952	2,769,110	6.15	450,262
1999	1,606,196.71	1,280,942	1,143,456	462,741	6.35	72,873
2000	1,620,518.57	1,271,783	1,135,280	485,239	6.58	73,745
2001	3,343,938.13	2,584,195	2,306,828	1,037,110	6.76	153,419
2002	1,767,390.83	1,345,338	1,200,940	566,451	6.90	82,094
2003	223,428.42	167,035	149,107	74,321	7.09	10,483
2004	85,283.56	62,598	55,879	29,405	7.25	4,056
2005	2,309,448.99	1,663,034	1,484,537	824,912	7.39	111,625
2006	96,633.25	68,184	60,866	35,767	7.51	4,763
2007	3,016,129.19	2,076,605	1,853,718	1,162,411	7.69	151,159
2008	3,113,007.23	2,086,960	1,862,962	1,250,045	7.87	158,837
2009	7,396,834.47	4,815,339	4,298,498	3,098,336	8.04	385,365
2010	10,792,873.05	6,799,510	6,069,703	4,723,170	8.22	574,595
2011	15,764,703.38	9,570,751	8,543,500	7,221,203	8.41	858,645
2012	12,603,466.55	7,320,093	6,534,411	6,069,056	8.66	700,815
2013	8,988,878.05	4,963,658	4,430,897	4,557,981	8.92	510,984
2014	6,406,139.73	3,331,193	2,973,649	3,432,491	9.23	371,884
2015	12,361,337.00	5,985,359	5,342,937	7,018,400	9.59	731,846
2016	14,940,978.54	6,645,747	5,932,444	9,008,535	9.99	901,755
2017	15,444,401.93	6,205,561	5,539,504	9,904,898	10.42	950,566
2018	12,778,206.38	4,538,819	4,051,657	8,726,549	10.89	801,336
2019	17,355,498.06	5,302,105	4,733,018	12,622,480	11.37	1,110,157
2020	10,164,363.61	2,557,354	2,282,867	7,881,497	11.90	662,311
2021	8,037,368.41	1,562,464	1,394,761	6,642,607	12.43	534,401
2022	20,676,078.31	2,754,054	2,458,455	18,217,623	13.02	1,399,203
2023	32,141,432.01	2,211,331	1,973,984	30,167,448	13.53	2,229,671
2024	15,603,418.46	277,741	247,931	15,355,487	13.83	1,110,303
9999	1,872,625.15-	727,901-	649,774-	1,222,851-		113,509-
	249,227,878.51	96,876,371	86,478,411	162,749,468		15,106,859

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.8 6.06

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 335 FIRE HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
NET SALVAGE PERCENT.. 0						
1951	3,633.71	3,183	1,977	1,657	10.33	160
1952	8,125.18	7,079	4,396	3,729	10.64	350
1953	10,474.17	9,073	5,634	4,840	10.97	441
1954	15,882.87	13,675	8,492	7,391	11.30	654
1955	16,582.99	14,188	8,810	7,773	11.65	667
1956	24,541.46	20,860	12,953	11,588	12.00	966
1957	36,575.66	30,877	19,173	17,403	12.37	1,407
1958	45,887.48	38,463	23,884	22,003	12.74	1,727
1959	60,956.61	50,716	31,493	29,464	13.12	2,246
1960	64,423.68	53,188	33,028	31,396	13.52	2,322
1961	61,813.62	50,625	31,436	30,378	13.92	2,182
1962	56,028.32	45,506	28,257	27,771	14.34	1,937
1963	78,969.32	63,586	39,484	39,485	14.76	2,675
1964	89,394.64	71,337	44,297	45,098	15.19	2,969
1965	89,946.67	71,112	44,158	45,789	15.63	2,930
1966	92,872.93	72,720	45,156	47,717	16.07	2,969
1967	122,270.54	94,784	58,857	63,414	16.53	3,836
1968	126,787.94	97,272	60,402	66,386	16.99	3,907
1969	133,440.53	101,281	62,892	70,549	17.46	4,041
1970	110,025.72	83,179	51,651	58,375	17.43	3,349
1971	161,669.56	120,816	75,022	86,648	17.92	4,835
1972	164,915.52	121,774	75,617	89,299	18.42	4,848
1973	220,211.81	160,600	99,726	120,486	18.93	6,365
1974	287,555.37	207,040	128,564	158,991	19.44	8,179
1975	284,015.29	201,793	125,305	158,710	19.97	7,947
1976	494,203.10	346,338	215,062	279,141	20.49	13,623
1977	279,714.81	193,255	120,004	159,711	21.03	7,594
1978	431,061.46	293,467	182,231	248,830	21.57	11,536
1979	498,899.58	334,512	207,719	291,181	22.11	13,170
1980	436,178.84	289,797	179,952	256,227	22.23	11,526
1981	308,450.79	201,603	125,188	183,263	22.79	8,041
1982	444,778.66	285,815	177,480	267,299	23.36	11,443
1983	562,823.17	355,367	220,669	342,154	23.94	14,292
1984	535,477.11	331,996	206,156	329,321	24.52	13,431
1985	591,183.01	359,676	223,345	367,838	25.10	14,655
1986	744,703.08	444,290	275,887	468,816	25.69	18,249
1987	808,585.51	475,691	295,385	513,201	25.89	19,822
1988	862,016.22	496,521	308,320	553,696	26.50	20,894
1989	1,081,771.37	609,578	378,524	703,247	27.11	25,941
1990	1,139,519.85	627,648	389,745	749,775	27.73	27,038
1991	958,359.39	515,502	320,106	638,253	28.35	22,513

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 335 FIRE HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
NET SALVAGE PERCENT.. 0						
1992	1,309,529.46	687,241	426,750	882,779	28.98	30,462
1993	1,155,457.37	594,598	369,222	786,235	29.24	26,889
1994	1,537,949.62	770,513	478,458	1,059,492	29.88	35,458
1995	1,672,133.09	814,663	505,874	1,166,259	30.52	38,213
1996	1,586,200.54	750,590	466,087	1,120,114	31.17	35,936
1997	1,713,889.34	791,303	491,368	1,222,521	31.48	38,835
1998	1,596,426.86	713,922	443,317	1,153,110	32.14	35,878
1999	2,038,281.53	881,557	547,412	1,490,870	32.80	45,453
2000	1,213,471.23	509,658	316,477	896,994	33.14	27,067
2001	1,757,387.63	711,391	441,746	1,315,642	33.82	38,901
2002	1,583,084.48	616,453	382,793	1,200,291	34.50	34,791
2003	2,163,833.13	813,385	505,080	1,658,753	34.87	47,570
2004	2,199,749.97	791,910	491,745	1,708,005	35.56	48,032
2005	207,298.97	71,684	44,513	162,786	35.95	4,528
2006	5,633,346.06	1,855,624	1,152,269	4,481,077	36.64	122,300
2007	3,264,196.60	1,026,590	637,472	2,626,725	37.05	70,897
2008	4,370,117.88	1,300,547	807,588	3,562,530	37.76	94,347
2009	4,620,516.28	1,302,986	809,103	3,811,413	38.19	99,801
2010	4,227,582.36	1,124,537	698,293	3,529,289	38.63	91,361
2011	3,516,725.68	873,203	542,224	2,974,502	39.36	75,572
2012	4,623,185.99	1,070,730	664,881	3,958,305	39.81	99,430
2013	5,170,505.19	1,109,073	688,690	4,481,815	40.28	111,267
2014	4,633,843.16	912,867	566,854	4,066,989	40.76	99,779
2015	7,689,683.07	1,384,143	859,498	6,830,185	41.00	166,590
2016	7,654,881.99	1,237,029	768,146	6,886,736	41.50	165,945
2017	6,032,096.20	865,606	537,507	5,494,589	41.78	131,512
2018	5,428,965.97	677,535	420,723	5,008,243	42.08	119,017
2019	7,194,967.63	759,069	471,352	6,723,616	42.39	158,613
2020	7,077,571.64	608,671	377,961	6,699,611	42.51	157,601
2021	8,360,064.65	551,764	342,624	8,017,441	42.45	188,868
2022	11,587,794.98	526,086	326,678	11,261,117	42.05	267,803
2023	10,901,626.21	261,639	162,468	10,739,158	40.67	264,056
2024	6,461,655.70	41,355	25,679	6,435,977	38.51	167,125
9999	7,450,275.22-	1,706,056-	1,059,393-	6,390,882-		169,152-
	145,278,472.78	33,267,649	20,657,896	124,620,577		3,298,422

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.8 2.27

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.1 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	8,614.50	7,753	5,017	3,598	2.00	1,799
2007	90,026.71	76,523	49,523	40,504	3.00	13,501
2008	76,984.00	61,587	39,857	37,127	4.00	9,282
2010	10,963.48	7,674	4,966	5,997	6.00	1,000
2011	34,863.33	22,661	14,665	20,198	7.00	2,885
2012	104,725.37	62,835	40,664	64,061	8.00	8,008
2013	475,451.73	261,498	169,232	306,220	9.00	34,024
2014	1,427,408.53	713,704	461,883	965,526	10.00	96,553
2015	105,224.65	47,351	30,644	74,581	11.00	6,780
2016	154,380.75	61,752	39,964	114,417	12.00	9,535
2017	87,557.93	30,645	19,832	67,726	13.00	5,210
2018	2,016,595.25	604,979	391,520	1,625,075	14.00	116,077
2019	1,190,614.34	297,654	192,631	997,983	15.00	66,532
2020	278,241.94	55,648	36,013	242,229	16.00	15,139
2021	419,508.42	62,926	40,723	378,785	17.00	22,281
2022	831,377.33	83,138	53,804	777,573	18.00	43,198
2023	1,061,597.55	53,080	34,351	1,027,247	19.00	54,066
2024	264,450.03	3,306	2,140	262,310	19.75	13,282
	8,638,585.84	2,514,714	1,627,429	7,011,157		519,152

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.5 6.01

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.2 OFFICE FURNITURE AND EQUIPMENT - COMPUTERS AND PERIPHERAL EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	1,294,189.39	1,294,189	1,294,189			
2020	2,402,513.20	1,922,011	1,076,631	1,325,882	1.00	1,325,882
2021	2,215,572.58	1,329,344	744,643	1,470,930	2.00	735,465
2022	5,160,104.61	2,064,042	1,156,190	4,003,915	3.00	1,334,638
2023	5,171,450.83	1,034,290	579,366	4,592,085	4.00	1,148,021
2024	1,076,495.68	53,825	30,151	1,046,345	4.75	220,283
	17,320,326.29	7,697,701	4,881,170	12,439,156		4,764,289

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.6 27.51

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.3 OFFICE FURNITURE AND EQUIPMENT - COMPUTER SOFTWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	20,014,689.48	20,014,689	20,014,689			
2020	17,145,049.52	13,716,040	4,985,557	12,159,493	1.00	12,159,493
2021	16,784,591.24	10,070,755	3,660,555	13,124,036	2.00	6,562,018
2022	14,702,503.96	5,881,002	2,137,648	12,564,856	3.00	4,188,285
2023	22,550,450.41	4,510,090	1,639,344	20,911,106	4.00	5,227,776
2024	258,435.66	12,922	4,697	253,739	4.75	53,419
	91,455,720.27	54,205,498	32,442,490	59,013,230		28,190,991

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.1 30.82

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.31 OFFICE FURNITURE AND EQUIPMENT - COMPUTER SOFTWARE – ENTERPRISE SOLUTIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	852,486.31	852,486	852,486			
2015	58,280.82	52,453	182,025-	240,306	1.00	240,306
2018	157,049.62	94,230	327,002-	484,052	4.00	121,013
	1,067,816.75	999,169	343,459	724,358		361,319

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.0 33.84

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.5 OFFICE FURNITURE AND EQUIPMENT - OTHER OFFICE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	9,454.95	4,727	3,168	6,287	5.00	1,257
9999	354.00-	177-	119-	235-		47-
	9,100.95	4,550	3,049	6,052		1,210

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.0 13.29

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341 TRANSPORTATION EQUIPMENT - NOT CLASSIFIED

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
1986	349.00	349	349			
2020	2,238.67	990	1,385	854	5.04	169
	2,587.67	1,339	1,734	854		169
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					5.1	6.53

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341.1 TRANSPORTATION EQUIPMENT - LIGHT DUTY TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
2011	7,364.68	6,175	7,365			
2012	1,167,181.47	955,221	1,167,181			
2013	3,643,909.19	2,906,018	3,630,495	13,414	2.79	4,808
2014	41,357.52	32,052	40,043	1,315	2.90	453
2015	747,062.90	559,401	698,861	48,202	3.02	15,961
2016	1,254,457.80	896,185	1,119,606	134,852	3.20	42,141
2017	24,218.48	16,173	20,205	4,013	3.48	1,153
2018	1,940,015.55	1,177,977	1,471,649	468,367	3.88	120,713
2019	9,212,793.61	4,896,600	6,117,333	3,095,461	4.41	701,919
2020	8,245,635.66	3,647,869	4,557,290	3,688,346	5.04	731,815
2021	10,691,536.11	3,659,713	4,572,087	6,119,449	5.76	1,062,404
2022	9,715,510.40	2,273,429	2,840,200	6,875,310	6.55	1,049,666
2023	13,373,912.74	1,592,833	1,989,930	11,383,983	7.40	1,538,376
2024	1,263,029.82	37,891	47,337	1,215,693	8.08	150,457
	61,327,985.93	22,657,537	28,279,582	33,048,404		5,419,866

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.1 8.84

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341.2 TRANSPORTATION EQUIPMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
2012	209,536.68	171,485	209,537			
2013	3,042,582.07	2,426,459	3,042,582			
2014	1,011,929.20	784,245	1,011,929			
2015	603,415.74	451,838	603,416			
2016	2,878,515.66	2,056,412	2,781,578	96,938	3.20	30,293
2017	2,354,164.64	1,572,111	2,126,495	227,670	3.48	65,422
2018	5,954,398.21	3,615,511	4,890,472	1,063,926	3.88	274,208
2019	8,314.30	4,419	5,977	2,337	4.41	530
2020	666,086.16	294,677	398,591	267,495	5.04	53,074
2021	64,659.55	22,133	29,938	34,722	5.76	6,028
	16,793,602.21	11,399,290	15,100,515	1,693,087		429,555

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.9 2.56

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341.3 TRANSPORTATION EQUIPMENT - AUTOS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
2010	5,850.22	5,021	5,798	52	2.31	23
2011	9,394.63	7,877	9,096	299	2.50	120
2012	1,833,463.96	1,500,507	1,732,681	100,783	2.66	37,888
2019	146,881.00	78,067	90,146	56,735	4.41	12,865
	1,995,589.81	1,591,472	1,837,721	157,869		50,896

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.1 2.55

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341.4 TRANSPORTATION EQUIPMENT - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
1961	374.92	375	375			
1977	403.11	403	403			
1978	265.00	265	265			
1998	8,060.31	7,985	8,060			
1999	1,561.47	1,534	1,561			
2006	4,626.70	4,256	4,627			
2007	18,169.65	16,464	18,170			
2008	92,592.34	82,666	92,592			
2009	25,526.94	22,362	25,527			
2010	53,306.39	45,748	53,306			
2011	81,120.09	68,019	81,120			
2012	318,512.86	260,671	318,513			
2013	1,116,160.77	890,138	1,116,161			
2014	718,980.22	557,210	718,980			
2015	178,690.77	133,804	178,691			
2016	954,565.45	681,942	935,263	19,302	3.20	6,032
2017	120,461.68	80,444	110,326	10,136	3.48	2,913
2018	2,505,965.54	1,521,622	2,086,858	419,108	3.88	108,018
2019	697,759.80	370,859	508,622	189,138	4.41	42,888
2020	473,035.57	209,271	287,009	186,027	5.04	36,910
2021	78,210.92	26,772	36,717	41,494	5.76	7,204
2022	47,744.96	11,172	15,322	32,423	6.55	4,950
2023	88,611.43	10,554	14,474	74,137	7.40	10,019
	7,584,706.89	5,004,536	6,612,942	971,765		218,934

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.4 2.89

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 342 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2007	1,009.93	858	549	461	3.00	154
2008	23,325.31	18,660	11,939	11,386	4.00	2,846
2014	61,104.50	30,552	19,548	41,556	10.00	4,156
2016	92,745.16	37,098	23,736	69,009	12.00	5,751
2017	48,514.27	16,980	10,864	37,650	13.00	2,896
2018	57,628.55	17,289	11,062	46,567	14.00	3,326
2019	88,222.86	22,056	14,111	74,112	15.00	4,941
2020	2,304.60	461	295	2,010	16.00	126
2021	12,195.19	1,829	1,170	11,025	17.00	649
2022	80,982.31	8,098	5,182	75,800	18.00	4,211
2023	1,757.57	88	56	1,702	19.00	90
	469,790.25	153,969	98,512	371,278		29,146

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.7 6.20

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 343 TOOLS AND WORK EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2004	153,483.10	153,483	153,483			
2005	225,100.69	213,846	181,021	44,080	1.00	44,080
2006	284,927.96	256,435	217,073	67,855	2.00	33,928
2007	546,753.24	464,740	393,404	153,349	3.00	51,116
2008	241,902.08	193,522	163,817	78,085	4.00	19,521
2009	93,688.77	70,267	59,481	34,208	5.00	6,842
2010	678,599.35	475,020	402,106	276,493	6.00	46,082
2011	1,146,192.08	745,025	630,666	515,526	7.00	73,647
2012	2,320,365.62	1,392,219	1,178,517	1,141,849	8.00	142,731
2013	2,929,204.68	1,611,063	1,363,769	1,565,436	9.00	173,937
2014	1,038,682.01	519,341	439,623	599,059	10.00	59,906
2015	1,783,290.65	802,481	679,302	1,103,989	11.00	100,363
2016	4,209,228.78	1,683,692	1,425,250	2,783,979	12.00	231,998
2017	5,196,885.71	1,818,910	1,539,712	3,657,174	13.00	281,321
2018	2,736,698.84	821,010	694,987	2,041,712	14.00	145,837
2019	1,310,548.63	327,637	277,346	1,033,203	15.00	68,880
2020	4,357,645.66	871,529	737,751	3,619,895	16.00	226,243
2021	4,886,827.60	733,024	620,507	4,266,321	17.00	250,960
2022	6,451,897.64	645,190	546,155	5,905,743	18.00	328,097
2023	5,450,785.28	272,539	230,705	5,220,080	19.00	274,741
2024	2,091,789.12	26,147	22,133	2,069,656	19.75	104,793
9999	12,841.25-	3,761-	3,190-	9,651-		711-
	48,121,656.24	14,093,359	11,953,618	36,168,038		2,664,312

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.6 5.54

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 344 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2004	103,310.33	103,310	103,310			
2005	17,344.50	16,477	8,741	8,604	1.00	8,604
2006	128,711.88	115,841	61,455	67,257	2.00	33,628
2007	103,111.94	87,645	46,497	56,615	3.00	18,872
2008	53,452.75	42,762	22,686	30,767	4.00	7,692
2009	196,304.71	147,229	78,107	118,198	5.00	23,640
2010	107,001.34	74,901	39,736	67,265	6.00	11,211
2011	214,311.99	139,303	73,902	140,410	7.00	20,059
2012	86,552.44	51,931	27,550	59,002	8.00	7,375
2013	30,519.21	16,786	8,905	21,614	9.00	2,402
2014	57,772.94	28,886	15,325	42,448	10.00	4,245
2015	17,712.59	7,971	4,229	13,484	11.00	1,226
2016	44,332.75	17,733	9,408	34,925	12.00	2,910
2017	94,878.08	33,207	17,617	77,261	13.00	5,943
2018	291,357.49	87,407	46,371	244,986	14.00	17,499
2019	152,368.57	38,092	20,208	132,161	15.00	8,811
2020	212,824.35	42,565	22,581	190,243	16.00	11,890
2021	110,412.37	16,562	8,787	101,625	17.00	5,978
2022	116,937.65	11,694	6,204	110,734	18.00	6,152
2023	90,081.23	4,504	2,389	87,692	19.00	4,615
	2,229,299.11	1,084,806	624,008	1,605,291		202,752

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.9 9.09

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 345 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 21-S0.5						
NET SALVAGE PERCENT.. 0						
1951	29.64	30	30			
1967	1,931.23	1,931	1,931			
1968	1,032.10	1,032	1,032			
1969	817.92	818	818			
1970	6,734.16	6,734	6,734			
1972	6,321.41	6,321	6,321			
1975	281.75	282	282			
1977	596.25	596	596			
1978	1,790.00	1,790	1,790			
1980	7,445.82	7,446	7,446			
1982	2,452.73	2,452	2,453			
1984	1,722.07	1,695	1,702	20	0.65	20
1985	16,792.81	16,373	16,444	349	1.00	349
1986	14,013.50	13,526	13,585	428	1.37	312
1987	4,748.59	4,551	4,571	178	1.61	111
1988	10,221.10	9,677	9,719	502	2.02	249
1989	13,115.87	12,303	12,356	760	2.31	329
1990	9,498.15	8,816	8,854	644	2.63	245
1991	12,096.57	11,097	11,145	952	2.97	321
1992	18,034.45	16,390	16,461	1,573	3.21	490
1993	77,817.09	69,716	70,019	7,798	3.60	2,166
1994	152,889.96	135,308	135,896	16,994	3.90	4,357
1995	148,235.10	129,824	130,388	17,847	4.11	4,342
1996	79,553.28	68,607	68,905	10,648	4.47	2,382
1997	41,095.55	34,952	35,104	5,992	4.75	1,261
1998	55,083.04	46,116	46,316	8,767	5.06	1,733
1999	255,047.45	209,777	210,688	44,359	5.40	8,215
2001	45,944.17	36,351	36,509	9,435	6.07	1,554
2002	107,988.70	83,626	83,989	24,000	6.41	3,744
2003	170,236.10	129,056	129,616	40,620	6.70	6,063
2004	19,131.90	14,158	14,219	4,913	7.03	699
2005	33,181.89	23,894	23,998	9,184	7.39	1,243
2006	13,570.69	9,502	9,543	4,028	7.71	522
2007	5,629.80	3,828	3,845	1,785	8.00	223
2008	47,316.03	31,039	31,174	16,142	8.39	1,924
2009	61,841.82	39,146	39,316	22,526	8.70	2,589
2010	16,615.93	10,096	10,140	6,476	9.04	716
2012	21,347.57	11,758	11,809	9,539	9.79	974
2013	21,465.79	11,169	11,217	10,249	10.14	1,011
2014	100,707.30	49,044	49,257	51,450	10.53	4,886
2015	5,982.85	2,703	2,715	3,268	10.92	299

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 345 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 21-S0.5						
NET SALVAGE PERCENT.. 0						
2016	126,868.88	52,574	52,802	74,067	11.31	6,549
2017	26,612.95	9,967	10,010	16,603	11.69	1,420
2018	292,687.82	97,114	97,535	195,153	12.08	16,155
2019	13,003.54	3,713	3,729	9,275	12.51	741
2022	53,275.45	6,777	6,807	46,468	13.72	3,387
	2,122,806.77	1,443,675	1,449,816	672,991		81,581

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.2 3.84

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 346 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2004	117,227.07	117,227	117,227			
2011	258.22	224	211	47	2.00	24
2012	3,640.24	2,912	2,747	893	3.00	298
2013	103,009.53	75,540	71,257	31,753	4.00	7,938
2015	17,452.26	10,471	9,877	7,575	6.00	1,262
2016	35,790.32	19,088	18,006	17,784	7.00	2,541
2018	11,496.50	4,599	4,338	7,158	9.00	795
2019	417,135.37	139,044	131,161	285,974	10.00	28,597
2020	299,532.41	79,876	75,347	224,185	11.00	20,380
2021	425,092.22	85,018	80,198	344,894	12.00	28,741
2022	680,468.10	90,727	85,583	594,885	13.00	45,760
2023	1,271,106.48	84,745	79,941	1,191,165	14.00	85,083
2024	386,594.94	6,445	6,080	380,515	14.75	25,798
9999	56,552.67-	10,743-	10,234-	46,319-		3,710-
	3,712,250.99	705,173	671,739	3,040,512		243,507

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.5 6.56

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 346.1 COMMUNICATION EQUIPMENT - NON-TELEPHONE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2009	94.16	94	94			
2010	1,083.00	1,011	927	156	1.00	156
2011	18,194.10	15,768	14,451	3,743	2.00	1,872
2012	39,624.20	31,699	29,051	10,573	3.00	3,524
2013	721,836.04	529,344	485,126	236,710	4.00	59,178
2014	138,898.47	92,599	84,864	54,034	5.00	10,807
2015	3,007.59	1,805	1,654	1,354	6.00	226
2017	75,197.83	35,093	32,162	43,036	8.00	5,380
2018	602,810.61	241,124	220,982	381,829	9.00	42,425
2019	729,975.54	243,323	222,997	506,979	10.00	50,698
2020	1,640,804.93	437,553	401,003	1,239,802	11.00	112,709
2021	2,131,641.07	426,328	390,715	1,740,926	12.00	145,077
2022	1,549,647.04	206,614	189,355	1,360,292	13.00	104,638
2023	1,189,705.48	79,318	72,692	1,117,013	14.00	79,787
2024	806,603.63	13,446	12,323	794,281	14.75	53,850
	9,649,123.69	2,355,119	2,158,396	7,490,728		670,327

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.2 6.95

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 346.19 COMMUNICATION EQUIPMENT - REMOTE CONTROL AND INSTRUMENTATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	96,947.90	96,948	96,948			
2015	113,844.36	102,460	93,723	20,121	1.00	20,121
2016	717,219.42	573,776	524,850	192,369	2.00	96,184
2017	318,372.46	222,861	203,858	114,514	3.00	38,171
2018	760,200.33	456,120	417,227	342,973	4.00	85,743
2019	64,999.04	32,500	29,729	35,270	5.00	7,054
2020	535,905.67	214,362	196,083	339,823	6.00	56,637
2021	275,985.00	82,796	75,736	200,249	7.00	28,607
2022	710,843.82	142,169	130,046	580,798	8.00	72,600
2023	962,468.57	96,247	88,041	874,428	9.00	97,159
2024	345,533.22	8,638	7,901	337,632	9.75	34,629
	4,902,319.79	2,028,877	1,864,142	3,038,178		536,905

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.7 10.95

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 346.20 COMMUNICATION EQUIPMENT - TELEPHONE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	71,723.53	71,724	71,724			
2015	11,214.16	10,093	9,291	1,923	1.00	1,923
2016	21,782.06	17,426	16,042	5,740	2.00	2,870
2017	35,766.67	25,037	23,048	12,719	3.00	4,240
2018	66,703.59	40,022	36,843	29,861	4.00	7,465
2020	63,300.51	25,320	23,309	39,992	6.00	6,665
2022	24,688.05	4,938	4,546	20,142	8.00	2,518
2023	5,387.96	539	496	4,892	9.00	544
2024	9,391.81	235	216	9,176	9.75	941
	309,958.34	195,334	185,515	124,443		27,166

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.6 8.76

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 347 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
1999	500.00	500	500			
2000	11,327.73	10,875	8,570	2,758	1.00	2,758
2001	1,124,164.98	1,034,232	815,061	309,104	2.00	154,552
2002	237,394.60	208,907	164,636	72,759	3.00	24,253
2003	269,249.53	226,170	178,241	91,009	4.00	22,752
2004	589,851.03	471,881	371,881	217,970	5.00	43,594
2005	409,678.13	311,355	245,374	164,304	6.00	27,384
2006	32,215.49	23,195	18,280	13,935	7.00	1,991
2008	148,764.62	95,209	75,033	73,732	9.00	8,192
2009	15,603.42	9,362	7,378	8,225	10.00	822
2010	25,913.81	14,512	11,437	14,477	11.00	1,316
2011	67,243.18	34,966	27,556	39,687	12.00	3,307
2012	211,006.25	101,283	79,819	131,187	13.00	10,091
2013	1,921,577.23	845,494	666,319	1,255,258	14.00	89,661
2014	304,208.62	121,683	95,896	208,313	15.00	13,888
2015	242,341.45	87,243	68,755	173,586	16.00	10,849
2016	777,191.88	248,701	195,997	581,195	17.00	34,188
2017	546,849.76	153,118	120,670	426,180	18.00	23,677
2018	1,208,042.02	289,930	228,489	979,553	19.00	51,555
2019	736,997.02	147,399	116,163	620,834	20.00	31,042
2020	6,298,678.56	1,007,789	794,221	5,504,458	21.00	262,117
2021	4,955,441.76	594,653	468,636	4,486,806	22.00	203,946
2022	7,440,610.10	595,249	469,106	6,971,504	23.00	303,109
2023	6,039,423.36	241,577	190,382	5,849,041	24.00	243,710
2024	2,635,146.16	26,351	20,767	2,614,379	24.75	105,631
9999	4,085.00-	778-	613-	3,472-		189-
	36,245,335.69	6,900,856	5,438,554	30,806,782		1,674,196

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.4 4.62

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 348 OTHER TANGIBLE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2003	5,843.07	4,908	4,860	983	4.00	246
2004	20,479.05	16,383	16,223	4,256	5.00	851
2006	12,840.00	9,245	9,155	3,685	7.00	526
2007	694,887.82	472,524	467,905	226,983	8.00	28,373
2015	1,360.35	490	485	875	16.00	55
2019	52,243.29	10,449	10,347	41,896	20.00	2,095
2020	7,924.33	1,268	1,256	6,668	21.00	318
	795,577.91	515,267	510,231	285,347		32,464

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.8 4.08

PART VIII. EXPERIENCED AND ESTIMATED NET SALVAGE

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TRANSACTION YEAR				
301.00	7,992.94			
303.20	2,860.93			
303.61	802,954.77			
303.99		3,062.78		3,062.78-
304.15	438,188.39	387,837.75	27,560.73	360,277.02-
304.20	711,682.94	147,277.43	31,830.10	115,447.33-
304.30	10,188,998.34	148,391.82	66,260.61	82,131.21-
304.36	36,384.91	546.00		546.00-
304.61	3,543,001.13	1,304,656.48	1,864,549.94	559,893.46
304.62	374,098.54	54,481.40	192,159.79	137,678.39
304.63	48,158.12	8,030.27	25,209.50	17,179.23
305.00	9,293.68	1,266,548.34		1,266,548.34-
306.00	490,056.62	17,003.99		17,003.99-
307.00	1,348,867.50	118,341.25		118,341.25-
310.00	146,073.90	42,462.99		42,462.99-
311.00	4,971,723.99	1,092,490.18	13,739.63	1,078,750.55-
320.00	7,520,341.84	924,729.91	229.83	924,500.08-
320.30	2,975,108.37	423,003.27		423,003.27-
320.37	869,130.34	90,807.00	23.00	90,784.00-
330.00	7,714,591.97	2,686,207.69		2,686,207.69-
331.00	37,950,027.53	21,381,790.52	13,124.96	21,368,665.56-
333.00	7,266,231.40	1,897,743.49	9,792.38	1,887,951.11-
334.00	12,410,016.53	2,727,391.38	93,029.52	2,634,361.86-
335.00	3,216,730.86	908,970.88	4,063.03	904,907.85-
340.00	22,635,487.21	122,477.36	10,745.87	111,731.49-
341.00	1,770,594.69	761,298.60	261,902.01	499,396.59-
342.00	146,389.56	9,682.12		9,682.12-
343.00	3,341,150.75	57,836.24	48,579.17	9,257.07-
344.00	633,161.26	14,919.23		14,919.23-
345.00	276,184.11	15,876.66	12,288.18	3,588.48-
346.00	2,186,921.89	87,193.50		87,193.50-
347.00	1,370,647.26	73,665.55	8,306.50	65,359.05-
348.00		808.08		808.08-
	135,403,052.27	36,775,532.16	2,683,394.75	34,092,137.41-

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
303.61			4,483.73	4,483.73
304.15	549,086.47	577,956.65	210.38	577,746.27-
304.20	8,384.32	71,775.96		71,775.96-
304.30	409,196.21	788,178.99		788,178.99-
304.61	35,517.97	12,850.31		12,850.31-
304.62	72,882.00	8.81-		8.81
304.63		23.48		23.48-
305.00		24,577.59		24,577.59-
306.00	4,621.01	6,896.40		6,896.40-
307.00	44,317.44	42,111.55		42,111.55-
310.00	8,443.54	3,593.30		3,593.30-
311.00	482,184.81	248,120.57		248,120.57-
320.00	1,647,036.23	695,879.64	214.05-	696,093.69-
320.30	146,562.96	76,375.47		76,375.47-
330.00	316,910.67	1,196,558.00		1,196,558.00-
331.00	32,399,513.98	12,998,210.71	25,703.04	12,972,507.67-
333.00	1,279,015.58	2,528,314.54		2,528,314.54-
334.00	4,974,584.57	1,486,703.66	42,569.41	1,444,134.25-
335.00	1,427,031.44	1,720,769.32	3,093.12	1,717,676.20-
340.00	12,731,491.25	23,848.17	613.87	23,234.30-
341.00	203,634.46	97,003.97	456,214.35	359,210.38
342.00	13,022.51	122.40		122.40-
343.00	191,196.62	50,715.40	3,000.00	47,715.40-
344.00	39,028.26	13,845.30		13,845.30-
345.00	681.55			
346.00	950,181.45	44,631.89		44,631.89-
347.00	145,584.81	16,130.65		16,130.65-
348.00	823.15			
	58,080,933.26	22,725,185.11	535,673.85	22,189,511.26-

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2021 TRANSACTION YEAR				
303.20	20,254.74			
303.61			4,483.73-	4,483.73-
304.15	126,490.86	666,811.69		666,811.69-
304.20	2,974.34	37,171.02		37,171.02-
304.30	496,969.98	137,849.62		137,849.62-
304.61		1,346.07	4,483.73	3,137.66
304.62		18,876.94		18,876.94-
305.00	10,586.76	467.17		467.17-
306.00	507.53	450.15		450.15-
307.00	36,953.56	5,700.51		5,700.51-
311.00	270,914.29	193,743.82		193,743.82-
320.00	2,230,482.23	890,085.40		890,085.40-
320.30	33,915.10	1,370.70		1,370.70-
320.37	10,486.03			
330.00	256,778.51	1,561,680.99		1,561,680.99-
331.00	15,748,750.26	8,196,453.86	282,490.53	7,913,963.33-
333.00	7,520,801.90	2,681,541.01	1,799.10	2,679,741.91-
334.00	5,495,660.10	1,021,270.85	331,737.56	689,533.29-
335.00	2,860,930.58	1,074,172.62	11,562.11	1,062,610.51-
340.00	35,664,062.09	78,720.20	325.05	78,395.15-
341.00		16,299.55-	219,365.56	235,665.11
343.00	162,936.71	40,863.25		40,863.25-
344.00		5,126.37		5,126.37-
346.00	738,074.13	49,301.95		49,301.95-
347.00	203,387.56	8,339.46		8,339.46-
348.00	5,662.47			
	71,897,579.73	16,655,044.10	847,279.91	15,807,764.19-

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
304.15	981,518.44	850,320.81		850,320.81-
304.20	545,894.57	23,865.76		23,865.76-
304.30	2,017,524.85	52,542.41		52,542.41-
304.36	662.50			
304.61		6,818.30		6,818.30-
304.62	193,622.53	46,017.09		46,017.09-
304.63	3,204.02	79,910.95		79,910.95-
305.00	228,547.61	299,889.33		299,889.33-
306.00	152,202.89			
307.00	158,236.88	55,144.80		55,144.80-
310.00	4,791.22			
311.00	1,206,205.82	350,411.61		350,411.61-
320.00	3,732,867.80	1,520,577.41		1,520,577.41-
320.30	32,480.56	299,375.44		299,375.44-
320.37	18,895.53			
330.00	287,248.73	3,396,011.14		3,396,011.14-
331.00	19,475,471.04	13,983,952.63	111,611.62	13,872,341.01-
333.00	6,765,263.95	2,505,397.99	2,218.42	2,503,179.57-
334.00	9,009,490.02	3,625,834.72	54,380.07	3,571,454.65-
335.00	1,654,590.34	1,281,342.15	6,290.78	1,275,051.37-
340.00	45,059,382.50	67,823.74	8,592.94	59,230.80-
341.00		1,127.48	820,242.37	819,114.89
342.00	63,146.52			
343.00	237,075.29	38,089.15		38,089.15-
344.00	680,132.13	8,395.86		8,395.86-
345.00	332,927.29	590.23		590.23-
346.00	352,393.47	165,439.94		165,439.94-
347.00	260,681.45	105,946.50		105,946.50-
	93,454,457.95	28,764,825.44	1,003,336.20	27,761,489.24-

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2023 TRANSACTION YEAR				
303.61		15.00	11,108.00	11,093.00
304.15	1,380,150.46	796,762.50	23,546.75	773,215.75-
304.20	1,003,174.19	124,387.00	10,031.74	114,355.26-
304.30	1,149,941.81	43,949.00	5,749.71	38,199.29-
304.61	234,486.94	43,380.00	57,449.30	14,069.30
304.62	392,363.88	76,293.00	227,444.49	151,151.49
304.63	467,955.43	18,770.50	22,588.56	3,818.06
305.00	647,687.81	213,737.00		213,737.00-
306.00	106,463.87	2,661.50		2,661.50-
307.00	111,214.30	7,366.00		7,366.00-
310.00	1,084,889.03	119,338.00		119,338.00-
311.00	2,463,421.79	321,442.00		321,442.00-
320.00	10,939,053.43	1,543,362.00		1,543,362.00-
320.30	166,821.44	60,630.50		60,630.50-
320.37	141,695.39	7,085.00		7,085.00-
330.00	2,284,730.54	581,223.00		581,223.00-
331.00	56,063,568.39	21,364,445.00	12,078.00	21,352,367.00-
333.00	6,043,953.42	2,514,107.50	1,306.00	2,512,801.50-
334.00	5,345,569.99	2,786,541.00	112,369.70	2,674,171.30-
335.00	2,041,116.22	1,364,307.00	3,425.00	1,360,882.00-
340.00	7,776,692.79	35,034.00	26,721.00	8,313.00-
341.00	2,084,302.52	21,140.00	396,017.48	374,877.48
343.00	947.22	24,009.00	1,447.00	22,562.00-
344.00	32,721.95	9,236.00		9,236.00-
346.00	80,105.78			
347.00	37,475.05	24,794.00	42.00	24,752.00-
348.00		60,221.00	58,690.00	1,531.00-
	102,080,503.64	32,164,236.50	970,014.73	31,194,221.77-
TOTAL	460,916,526.85	137,084,823.31	6,039,699.44	131,045,123.87-

VOLUME 12

PENNSYLVANIA-AMERICAN WATER COMPANY

2023 GENERAL BASE RATE CASE
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

EXHIBIT NO. 11-C
DEPRECIATION STUDY

WATER OPERATIONS
AS OF JUNE 30, 2025

Exhibit No. 11-C
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

WATER OPERATIONS

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WATER PLANT
AS OF JUNE 30, 2025

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-C
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WATER OPERATIONS

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WATER PLANT
AS OF JUNE 30, 2025

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

October 12, 2023

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention: Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to water plant as of June 30, 2025. The results of our study as of June 30, 2024 are presented in our report titled "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Water Plant as of June 30, 2024". The same methods, procedures and estimates are used in both studies.

Summaries of the original cost, annual accruals, book depreciation reserve and amortization of net salvage are presented in Tables 1 through 5, beginning on page I-3 of the attached report.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

FREDERICK B. JOHNSTON, JR.
Senior Analyst

JJS:mle

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PART I. RESULTS OF STUDY

PENNSYLVANIA-AMERICAN WATER COMPANY

WATER OPERATIONS

DEPRECIATION STUDY

RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Tables 1 through 5 presented on pages 3 through 14 summarize the results of the depreciation study as of June 30, 2025. Table 1 sets forth the development of the net original cost by account as of June 30, 2025. Table 2 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of June 30, 2025, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 3 presents the bringforward of the book reserve to June 30, 2025. Table 4 sets forth the calculation of the depreciation accruals for the twelve months ended June 30, 2025. Table 5 presents the annual amortization of experienced and estimated net salvage based on the period 2012 through 2024.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-7. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2020 through 2024, beginning on pages III-2 through III-6.

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2025

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2025		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2025
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
INTANGIBLE PLANT										
301.00	ORGANIZATION	766,405.12								766,405.12
302.00	FRANCHISES AND CONSENTS	2,404,599.20								2,404,599.20
303.00	MISCELLANEOUS INTANGIBLE PLANT	15,572.16								15,572.16
	TOTAL INTANGIBLE PLANT	**3,186,576.48**		**0.00**		**0.00**		**0.00**		**3,186,576.48**
NONDEPRECIABLE PLANT										
303.20	POWER AND PUMPING LAND	6,211,287.02								6,211,287.02
303.30	PURIFICATION LAND	2,621,561.64								2,621,561.64
303.40	TRANSMISSION AND DISTRIBUTION LAND AND RIGHTS OF WAY	3,727,786.24				215,927.20				3,511,859.04
303.50	DISTRIBUTION RESERVOIRS AND STANDPIPE LAND	2,107,863.83								2,107,863.83
303.51	TRANSMISSION AND DISTRIBUTION - LAND	1,865,772.73								1,865,772.73
303.52	TRANSMISSION AND DISTRIBUTION - RIGHTS OF WAY	5,338,245.56								5,338,245.56
303.61	OFFICE LAND	3,221,899.78								3,221,899.78
	TOTAL NONDEPRECIABLE PLANT	**25,094,416.80**		**0.00**		**215,927.20**		**0.00**		**24,878,489.60**
DEPRECIABLE PLANT										
303.14	WATER RIGHTS - HIBERNIA	1,942,822.51								1,942,822.51
303.35	WASTE HANDLING AND TREATMENT LAND	155,025.17								155,025.17
303.99	COMPREHENSIVE PLANNING STUDIES	13,338,478.83								13,338,478.83
304.15	OTHER WATER SOURCE STRUCTURES	105,718,516.03								105,718,516.03
304.20	POWER AND PUMPING STRUCTURES	113,100,997.62				1,304,029.60		41,310.00		111,755,658.02
304.30	PURIFICATION BUILDINGS	365,272,906.58				281,872.62		230,375.00		364,760,658.96
304.36	WASTE HANDLING AND TREATMENT STRUCTURE	26,629,042.76								26,629,042.76
304.38	WASTE HANDLING AND TREATMENT STRUCTURES PAINTING	1,403,438.95								1,403,438.95
304.39	PURIFICATION BUILDINGS - TANK PAINTING	119,362.95								119,362.95
304.61	OFFICE BUILDINGS	46,637,432.47				60,000.00		12,834.00		46,564,598.47
304.62	STORES, SHOP AND GARAGE BUILDINGS	74,799,687.69				576.00				74,799,111.69
304.63	MISCELLANEOUS STRUCTURES AND IMPROVEMENTS	11,514,247.71								11,514,247.71
305.00	COLLECTING AND IMPOUNDING RESERVOIRS	198,449,569.35				3,575.00				198,445,994.35
306.00	LAKE, RIVER AND OTHER INTAKES	18,714,217.32				41,551.00				18,672,666.32
307.00	WELLS AND SPRINGS	17,165,371.95				307,067.27				16,858,304.68
310.00	POWER GENERATION EQUIPMENT	26,016,825.01				118,273.00		26,561.00		25,871,991.01
311.20	PUMPING EQUIPMENT - ELECTRIC	43,165,496.66				1,964,196.05		116,716.00		41,084,584.61
311.50	PUMPING EQUIPMENT - OTHER	20,857,210.96								20,857,210.96
311.52	PUMPING EQUIPMENT - SOURCE OF SUPPLY	12,940,570.90								12,940,570.90
311.53	PUMPING EQUIPMENT - WATER TREATMENT	47,853,790.34								47,853,790.34
311.54	PUMPING EQUIPMENT - TRANSMISSION AND DISTRIBUTION	6,707,900.44								6,707,900.44

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2025

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2025		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2025
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
320.10	PURIFICATION SYSTEM - LARGE STRUCTURES	279,076,665.13				69,357.27		627,852.00		278,379,455.86
320.18	PURIFICATION SYSTEM - LARGE STRUCTURES PAINT	103,245.73								103,245.73
320.19	PURIFICATION SYSTEM - LARGE STRUCTURES PAINT	3,667,945.94								3,667,945.94
320.20	PURIFICATION SYSTEM - CHEMICAL TREATMENT	159,783,347.00				42,367.00				159,740,980.00
320.29	PURIFICATION SYSTEM - CHEMICAL TREATMENT PAINT	8,167.87								8,167.87
320.30	GRANULAR ACTIVATED CARBON	14,370,730.58								14,370,730.58
320.37	WASTE HANDLING AND TREATMENT - EQUIPMENT	19,048,869.77								19,048,869.77
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	151,911,705.31				3,309,408.10				148,602,297.21
330.10	ELEVATED TANKS AND STANDPIPES	24,572,432.37								24,572,432.37
330.20	GROUND LEVEL FACILITIES	19,913,409.67								19,913,409.67
330.30	BELOW GRADE FACILITIES	818,707.23								818,707.23
330.40	CLEARWELL	12,806,300.04								12,806,300.04
330.58	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	2,303,924.15								2,303,924.15
330.59	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	53,585,998.63								53,585,998.63
331.00	MAINS AND ACCESSORIES	3,843,036,451.13		50,320,457.46		259,199,478.11		502,366.00		3,533,014,149.56
333.00	SERVICES	786,228,313.01		11,443,825.85		15,948,027.95				758,836,459.21
334.00	METERS AND METER INSTALLATIONS	277,333,013.97				1,956,853.15				275,376,160.82
335.00	FIRE HYDRANTS	163,733,934.22		1,914,936.19		5,636,080.03				156,182,918.00
340.10	OFFICE FURNITURE	9,765,026.15								9,765,026.15
340.20	COMPUTERS AND PERIPHERAL EQUIPMENT	20,929,590.90								20,929,590.90
340.30	COMPUTER SOFTWARE	84,090,848.28								84,090,848.28
340.31	COMPUTER SOFTWARE - ENTERPRISE SOLUTIONS	215,330.44								215,330.44
340.50	OTHER OFFICE EQUIPMENT	9,454.95				354.00				9,100.95
341.00	NOT CLASSIFIED	2,587.67								2,587.67
341.10	LIGHT DUTY TRUCKS	75,542,986.69								75,542,986.69
341.20	EQUIPMENT	17,334,733.21								17,334,733.21
341.30	AUTOS	2,120,994.81								2,120,994.81
341.40	OTHER	7,584,706.89								7,584,706.89
342.00	STORES EQUIPMENT	469,790.25								469,790.25
343.00	TOOLS AND WORK EQUIPMENT	53,899,121.52				12,841.25				53,886,280.27
344.00	LABORATORY EQUIPMENT	2,125,988.78								2,125,988.78
345.00	POWER OPERATED EQUIPMENT	2,242,714.26								2,242,714.26
346.00	EQUIPMENT	4,894,351.60				56,552.67				4,837,798.93
346.10	NON-TELEPHONE	11,538,536.76								11,538,536.76
346.19	REMOTE CONTROL AND INSTRUMENTATION	5,985,571.87								5,985,571.87
346.20	TELEPHONE	259,216.96								259,216.96
347.00	MISCELLANEOUS EQUIPMENT	43,814,485.74				4,085.00				43,810,400.74
348.00	OTHER TANGIBLE EQUIPMENT	14,759,295.79								14,759,295.79
	TOTAL DEPRECIABLE PLANT	**7,322,391,407.47**		**63,679,219.50**		**290,316,545.07**		**1,558,014.00**		**6,966,837,628.90**
	TOTAL UTILITY PLANT IN SERVICE	**7,350,672,400.75**		**63,679,219.50**		**290,532,472.27**		**1,558,014.00**		**6,994,902,694.98**

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF JUNE 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
INTANGIBLE PLANT									
301.00	ORGANIZATION	NONDEPR.		766,405.12					
302.00	FRANCHISES AND CONSENTS	NONDEPR.		2,404,599.20					
303.00	MISCELLANEOUS INTANGIBLE PLANT	NONDEPR.		15,572.16					
	TOTAL INTANGIBLE PLANT			**3,186,576.48**					
NONDEPRECIABLE PLANT									
303.20	POWER AND PUMPING LAND	NONDEPR.		6,211,287.02					
303.30	PURIFICATION LAND	NONDEPR.		2,621,561.64					
303.40	TRANSMISSION AND DISTRIBUTION LAND AND RIGHTS OF WAY	NONDEPR.		3,511,859.04					
303.50	DISTRIBUTION RESERVOIRS AND STANDPIPES LAND	NONDEPR.		2,107,863.83					
303.51	TRANSMISSION AND DISTRIBUTION - LAND	NONDEPR.		1,865,772.73					
303.52	TRANSMISSION AND DISTRIBUTION - RIGHTS OF WAY	NONDEPR.		5,338,245.56					
303.61	OFFICE LAND	NONDEPR.		3,221,899.78					
	TOTAL NONDEPRECIABLE PLANT			**24,878,489.60**					
DEPRECIABLE PLANT									
303.14	WATER RIGHTS - HIBERNIA	25-SQ		1,942,822.51	1,942,823	0	0	-	-
303.35	WASTE HANDLING AND TREATMENT LAND	100-R3	*	155,025.17	134,486	20,539	1,303	0.84	15.8
303.99	COMPREHENSIVE PLANNING STUDIES	5-SQ		13,338,478.83	10,223,405	3,115,074	1,176,824	8.82	2.6
304.15	OTHER WATER SOURCE STRUCTURES	50-S0.5		105,718,516.03	11,659,067	94,059,449	2,995,935	2.83	31.4
304.20	POWER AND PUMPING STRUCTURES								
	LARGE STRUCTURES	75-S0.5	*	56,459,468.67	10,740,331	45,719,138	1,602,716	2.84	28.5
	OTHER STRUCTURES	55-R3		55,296,189.35	10,044,840	45,251,349	1,428,896	2.58	31.7
	TOTAL ACCOUNT 304.2			111,755,658.02	20,785,171	90,970,487	3,031,612	2.71	30.0
304.30	PURIFICATION BUILDINGS								
	LARGE STRUCTURES	55-S1	*	299,956,857.25	111,411,219	188,545,640	7,483,884	2.49	25.2
	OTHER STRUCTURES	60-R3		64,803,801.71	13,452,705	51,351,097	1,200,386	1.85	42.8
	TOTAL ACCOUNT 304.3			364,760,658.96	124,863,924	239,896,737	8,684,270	2.38	27.6
304.36	WASTE HANDLING AND TREATMENT STRUCTURES	55-S1	*	26,629,042.76	8,631,394	17,997,648	815,227	3.06	22.1
304.38	WASTE HANDLING AND TREATMENT STRUCTURES PAINTING	10-SQ		1,403,438.95	603,418	800,021	133,337	9.50	6.0
304.39	PURIFICATION BUILDINGS - TANK PAINTING	10-SQ		119,362.95	119,360	3	0	-	-
304.61	OFFICE BUILDINGS								
	LARGE STRUCTURES	55-S0	*	30,363,147.68	7,107,547	23,255,601	1,529,855	5.04	15.2
	OTHER OTHER STRUCTURES	50-R3		16,201,450.79	4,394,978	11,806,473	376,592	2.32	31.4
	TOTAL ACCOUNT 304.61			46,564,598.47	11,502,525	35,062,074	1,906,447	4.09	18.4
304.62	STORES, SHOP AND GARAGE BUILDINGS								
	LARGE STRUCTURES	55-S0.5	*	62,301,831.95	18,101,774	44,200,059	1,518,872	2.44	29.1
	OTHER OTHER STRUCTURES	45-R3		12,497,279.74	4,223,330	8,273,950	246,966	1.98	33.5
	TOTAL ACCOUNT 304.62			74,799,111.69	22,325,104	52,474,009	1,765,838	2.36	29.7
304.63	MISCELLANEOUS STRUCTURES AND IMPROVEMENTS	35-S0.5		11,514,247.71	2,856,281	8,657,967	371,972	3.23	23.3
	TOTAL ACCOUNT 304			743,264,635.54	203,346,244	539,918,395	19,704,638	2.65	27.4

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF JUNE 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
305.00	COLLECTING AND IMPOUNDING RESERVOIRS								
	LARGE RESERVOIRS	130-R2	*	190,471,458.05	7,708,843	182,762,616	3,125,193	1.64	58.5
	OTHER RESERVOIRS	75-R3		7,974,536.30	242,940	7,731,596	147,982	1.86	52.2
	TOTAL ACCOUNT 305			198,445,994.35	7,951,783	190,494,212	3,273,175	1.65	58.2
306.00	LAKE, RIVER AND OTHER INTAKES								
	LARGE RESERVOIRS	55-S1.5	*	12,329,112.16	5,242,607	7,086,505	285,812	2.32	24.8
	OTHER RESERVOIRS	50-S0.5		6,343,554.16	1,672,477	4,671,077	167,187	2.64	27.9
	TOTAL ACCOUNT 306			18,672,666.32	6,915,084	11,757,582	452,999	2.43	26.0
307.00	WELLS AND SPRINGS	55-S0		16,858,304.68	4,240,951	12,617,354	409,292	2.43	30.8
310.00	POWER GENERATION EQUIPMENT	45-S0.5		25,871,991.01	6,082,054	19,789,937	720,780	2.79	27.5
	PUMPING EQUIPMENT								
311.20	ELECTRIC	39-S0		41,084,584.61	1,928,386	39,156,199	1,682,807	4.10	23.3
311.50	OTHER	39-S0		20,857,210.96	251,890	20,605,321	869,380	4.17	23.7
311.52	SOURCE OF SUPPLY	39-S0		12,940,570.90	3,436,500	9,504,071	420,058	3.25	22.6
311.53	WATER TREATMENT	39-S0		47,853,790.34	27,854,875	19,998,915	1,216,638	2.54	16.4
311.54	TRANSMISSION AND DISTRIBUTION	39-S0		6,707,900.44	2,696,554	4,011,346	191,739	2.86	20.9
	TOTAL ACCOUNT 311			129,444,057.25	36,168,205	93,275,852	4,380,622	3.38	21.3
	PURIFICATION SYSTEM								
320.10	LARGE STRUCTURES								
	LARGE STRUCTURES	50-S1	*	257,232,388.91	88,380,857	168,851,531	7,115,931	2.77	23.7
	OTHER OTHER STRUCTURES	55-R3		21,147,066.95	3,479,854	17,667,213	439,184	2.08	40.2
	TOTAL ACCOUNT 320.1			278,379,455.86	91,860,711	186,518,744	7,555,115	2.71	24.7
320.18	LARGE STRUCTURES PAINT	10-SQ		103,245.73	103,246	0	0	-	-
320.19	LARGE STRUCTURES PAINT	10-SQ		3,667,945.94	3,220,121	447,825	74,638	2.03	6.0
320.20	CHEMICAL TREATMENT	42-R0.5		159,740,980.00	23,764,484	135,976,496	6,625,402	4.15	20.5
320.29	CHEMICAL TREATMENT PAINT	FULLY ACCRUED		8,167.87	8,168	0	0	-	-
320.30	GRANULAR ACTIVATED CARBON	11-L0.5		14,370,730.58	7,963,693	6,407,038	1,160,194	8.07	5.5
320.37	WASTE HANDLING AND TREATMENT - EQUIPMENT	30-R3		19,048,869.77	10,134,011	8,914,859	471,474	2.48	18.9
	TOTAL ACCOUNT 320			475,319,395.75	137,054,434	338,264,962	15,886,823	3.34	21.3
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	65-S0.5		148,602,297.21	43,738,815	104,863,482	2,738,085	1.84	38.3
330.10	ELEVATED TANKS AND STANDPIPES	65-S0.5		24,572,432.37	2,970,426	21,602,006	510,622	2.08	42.3
330.20	GROUND LEVEL FACILITIES	65-S0.5		19,913,409.67	2,865,778	17,047,632	413,105	2.07	41.3
330.30	BELOW GRADE FACILITIES	65-S0.5		818,707.23	190,827	627,880	15,727	1.92	39.9
330.40	CLEARWELL	65-S0.5		12,806,300.04	3,116,599	9,689,701	244,452	1.91	39.6
330.58	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ		2,303,924.15	2,244,150	59,774	9,962	0.43	6.0
330.59	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ		53,585,998.63	29,713,492	23,872,507	3,559,119	6.64	6.7
	TOTAL ACCOUNT 330			262,603,069.30	84,840,087	177,762,982	7,491,072	2.85	23.7
331.00	MAINS AND ACCESSORIES	90-R2		3,533,014,149.56	320,293,493	3,212,720,657	54,371,951	1.54	59.1
333.00	SERVICES	65-R2.5		758,836,459.21	173,808,467	585,027,992	14,059,475	1.85	41.6
334.00	METERS AND METER INSTALLATIONS	20-L1.5		275,376,160.82	98,232,397	177,143,764	16,251,857	5.90	10.9
335.00	FIRE HYDRANTS	60-R2		156,182,918.00	22,126,934	134,055,984	3,532,857	2.26	37.9

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE	NET ORIGINAL COST AS OF JUNE 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
340.00	OFFICE FURNITURE AND EQUIPMENT							
	FURNITURE	20-SQ	9,765,026.15	2,225,292	7,539,734	571,595	5.85	13.2
	COMPUTERS AND PERIPHERAL EQUIPMENT	5-SQ	20,929,590.90	7,353,689	13,575,902	5,229,815	24.99	2.6
	COMPUTER SOFTWARE	5-SQ	84,090,848.28	29,417,612	54,673,236	27,053,786	32.17	2.0
	COMPUTER SOFTWARE - ENTERPRISE SOLUTIONS	10-SQ	215,330.44	16,573	198,757	66,253	30.77	3.0
	OTHER OFFICE EQUIPMENT	10-SQ	9,100.95	4,261	4,840	1,210	13.29	4.0
	TOTAL ACCOUNT 340		115,009,896.72	39,017,427	75,992,469	32,922,659	28.63	2.3
341.00	TRANSPORATION EQUIPMENT							
	NOT CLASSIFIED	10-L2.5	2,587.67	1,902	686	156	6.03	4.4
	LIGHT DUTY TRUCKS	10-L2.5	75,542,986.69	32,074,239	43,468,748	7,193,168	9.52	6.0
	EQUIPMENT	10-L2.5	17,334,733.21	15,866,742	1,467,991	394,498	2.28	3.7
	AUTOS	10-L2.5	2,120,994.81	1,662,086	458,909	172,283	8.12	2.7
	OTHER	10-L2.5	7,584,706.89	6,832,146	752,561	190,108	2.51	4.0
	TOTAL ACCOUNT 341		102,586,009.27	56,437,115	46,148,895	7,950,213	7.75	5.8
342.00	STORES EQUIPMENT	20-SQ	469,790.25	128,629	341,161	29,150	6.20	11.7
343.00	TOOLS AND WORK EQUIPMENT	20-SQ	53,886,280.27	14,656,979	39,229,301	2,923,285	5.42	13.4
344.00	LABORATORY EQUIPMENT	20-SQ	2,125,988.78	727,066	1,398,923	207,010	9.74	6.8
345.00	POWER OPERATED EQUIPMENT	21-S0.5	2,242,714.26	1,506,133	736,581	83,224	3.71	8.9
346.00	COMUNICATION EQUIPMENT							
	EQUIPMENT	15-SQ	4,837,798.93	898,903	3,938,896	319,993	6.61	12.3
	NON-TELEPHONE	15-SQ	11,538,536.76	2,888,978	8,649,559	796,120	6.90	10.9
	REMOTE CONTROL AND INSTRUMENTATION	10-SQ	5,985,571.87	2,361,391	3,624,181	641,528	10.72	5.6
	TELEPHONE	10-SQ	259,216.96	138,370	120,847	29,007	11.19	4.2
	TOTAL ACCOUNT 346		22,621,124.52	6,287,642	16,333,483	1,786,648	7.90	9.1
347.00	MISCELLANEOUS EQUIPMENT	25-SQ	43,810,400.74	7,309,665	36,500,736	2,007,334	4.58	18.2
348.00	OTHER TANGIBLE EQUIPMENT	25-SQ	14,759,295.79	936,806	13,822,490	606,125	4.11	22.8
	TOTAL DEPRECIABLE PLANT		**6,966,837,628.90**	**1,240,368,309**	**5,726,469,325**	**190,229,316**	**2.73**	
	AMORTIZATION OF NET SALVAGE					**26,487,385**		
	TOTAL UTILITY PLANT IN SERVICE		**6,994,902,694.98**	**1,240,368,309**	**5,726,469,325**	**216,716,701**		

* Life Span Procedure was used. Curve shown is Interim Survivor Curve.

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2025, OF BOOK RESERVE AS OF JUNE 30, 2024

Account	BOOK RESERVE BALANCE AS OF 06/30/2024		PROJECTED DEPRECIATION ACCRUALS		PROJECTED RETIREMENTS		PROJECTED COST OF REMOVAL		PROJECTED SALVAGE		ADJUSTMENTS AND ACQUISITIONS		PROJECTED BOOK RESERVE BALANCE AS OF 06/30/2025
(1)	(2)	+	(3)	-	(4)	-	(5)	+	(6)	+	(7)	=	(8)
303.14	1,942,823												1,942,823
303.35	133,178		1,308										134,486
303.61	0												0
303.99	9,027,061		1,493,958		161,747		135,867						10,223,405
304.15	8,694,594		3,686,544		396,007		356,407		3,960		26,383		11,659,067
304.20	18,459,251		3,091,762		676,177		155,521		13,523		52,333		20,785,171
304.30	120,816,440		8,557,248		4,254,496		297,813		42,545				124,863,924
304.36	8,232,332		753,652		351,079		3,511						8,631,394
304.38	467,566		135,852										603,418
304.39	115,844		3,516										119,360
304.61	10,999,830		1,353,942		967,325		357,910		473,988				11,502,525
304.62	20,685,178		1,633,341								6,585		22,325,104
304.63	3,313,011		291,896		719,831		43,191		14,396				2,856,281
305.00	25,095,019		2,897,832		15,068,472		4,972,596						7,951,783
306.00	6,710,138		437,185		221,180		11,059						6,915,084
307.00	3,612,473		366,481		152,473		19,820				434,290		4,240,951
310.00	5,546,185		754,799		179,451		39,479						6,082,054
311.20	3,183,068		1,337,373		2,331,161		512,856				251,962		1,928,386
311.50	770,023		751,416		1,067,308		234,809				32,568		251,890
311.52	3,000,408		436,092										3,436,500
311.53	26,577,175		1,277,700										27,854,875
311.54	2,497,330		199,224										2,696,554
320.10	88,028,988		8,254,620		3,595,851		827,046						91,860,711
320.18	103,246												103,246
320.19	3,139,061		81,060										3,220,121
320.20	30,308,513		4,388,722		9,320,612		2,143,742				531,603		23,764,484
320.29	8,168												8,168

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2025, OF BOOK RESERVE AS OF JUNE 30, 2024

Account	BOOK RESERVE BALANCE AS OF 06/30/2024	+	PROJECTED DEPRECIATION ACCRUALS	-	PROJECTED RETIREMENTS	-	PROJECTED COST OF REMOVAL	+	PROJECTED SALVAGE	+	ADJUSTMENTS AND ACQUISITIONS	=	PROJECTED BOOK RESERVE BALANCE AS OF 06/30/2025
(1)	(2)		(3)		(4)		(5)		(6)		(7)		(8)
320.30	6,870,691		1,378,894		228,711		57,181						7,963,693
320.37	10,789,269		315,726		882,712		88,272						10,134,011
330.00	42,731,163		4,058,731		1,940,228		1,629,792				518,941		43,738,815
330.10	2,576,544		393,882										2,970,426
330.20	2,447,602		418,176										2,865,778
330.30	174,867		15,960										190,827
330.40	2,868,151		248,448										3,116,599
330.58	2,164,662		79,488										2,244,150
330.59	28,235,459		3,446,079		1,968,046								29,713,492
331.00	317,168,189		67,709,848		41,655,347		24,160,100				1,230,903		320,293,493
333.00	165,593,656		16,098,050		5,718,338		2,287,335				122,434		173,808,467
334.00	86,478,411		17,907,074		5,574,665		1,393,669		111,492		703,754		98,232,397
335.00	20,657,896		4,698,134		2,126,718		1,169,696				67,318		22,126,934
340.10	1,627,429		597,863										2,225,292
340.20	4,881,170		3,766,708		1,294,189								7,353,689
340.30	32,442,490		17,454,811		20,014,689						(465,000)		29,417,612
340.31	343,459		60,600		852,486						465,000		16,573
340.50	3,049		1,212		17,653						17,653		4,261
341.00	1,734		168										1,902
341.10	28,279,582		5,630,712		3,543,734		70,874		1,346,618		431,935		32,074,239
341.20	15,100,515		437,420								328,807		15,866,742
341.30	1,837,721		52,621								(228,256)		1,662,086
341.40	6,612,942		219,204										6,832,146

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2025, OF BOOK RESERVE AS OF JUNE 30, 2024

Account	BOOK RESERVE BALANCE AS OF 06/30/2024		PROJECTED DEPRECIATION ACCRUALS	-	PROJECTED RETIREMENTS	-	PROJECTED COST OF REMOVAL	+	PROJECTED SALVAGE	+	ADJUSTMENTS AND ACQUISITIONS	=	PROJECTED BOOK RESERVE BALANCE AS OF 06/30/2025
(1)	(2)	+	(3)	-	(4)	-	(5)	+	(6)	+	(7)	=	(8)
342.00	98,512		30,117										128,629
343.00	11,953,618		2,844,711		200,918						59,568		14,656,979
344.00	624,008		206,368		103,310								727,066
345.00	1,449,816		86,409		30,092		602		602				1,506,133
346.00	671,739		344,391		120,124						2,897		898,903
346.10	2,158,396		730,676		94								2,888,978
346.19	1,864,142		594,197		96,948								2,361,391
346.20	185,515		24,579		71,724								138,370
347.00	5,438,554		1,871,611		25,703						25,203		7,309,665
348.00	510,231		426,575										936,806
TOTAL	**1,206,308,085**		**194,334,966**		**125,929,599**		**40,969,148**		**2,007,124**		**4,616,882**		**1,240,368,309**

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30,2025

ACCOUNT (1)	NET ORIGINALCOST AS OF 6/30/2024 (2)	NET ORIGINALCOST AS OF 6/30/2025 (3)	ACCRUAL RATE (4)	AVERAGE ACCRUALS (5)**	AMORTIZATION OF NET SALVAGE (6)	PROJECTED DEPRECIATION ACCRUALS (7)=(5)+(6)
303.14	1,942,822.51	1,942,822.51	-			0
303.35	155,025.17	155,025.17	0.84	1,308		1,308
303.61	3,221,899.78	3,221,899.78				0
303.99	11,838,420.51	13,338,478.83	12.08	1,493,651	307	1,493,958
304.15	103,236,517.17	105,718,516.03	2.89	2,988,698	697,846	3,686,544
304.20	109,016,914.72	111,755,658.02	2.76	3,018,144	73,618	3,091,762
304.30	345,578,963.18	364,760,658.96	2.37	8,332,622	224,626	8,557,248
304.36	25,230,121.46	26,629,042.76	2.98	753,597	55	753,652
304.38	1,403,438.95	1,403,438.95	9.68	135,852		135,852
304.39	119,362.95	119,362.95	2.95	3,516		3,516
304.61	43,670,750.85	46,564,598.47	3.12	1,419,037	(65,095)	1,353,942
304.62	70,281,795.83	74,799,111.69	2.36	1,665,932	(32,591)	1,633,341
304.63	8,983,176.16	11,514,247.71	2.69	275,650	16,246	291,896
305.00	138,403,599.63	198,445,994.35	1.41	2,263,047	634,785	2,897,832
306.00	17,791,345.90	18,672,666.32	2.43	433,217	3,968	437,185
307.00	12,416,177.55	16,858,304.68	2.37	330,678	35,803	366,481
310.00	25,156,942.49	25,871,991.01	2.82	713,370	41,429	754,799
311.20	23,116,136.75	41,084,584.61	3.76	958,419	378,954	1,337,373
311.50	16,571,799.32	20,857,210.96	4.02	751,416		751,416
311.52	12,940,570.90	12,940,570.90	3.37	436,092		436,092
311.53	47,853,790.34	47,853,790.34	2.67	1,277,700		1,277,700
311.54	6,707,900.44	6,707,900.44	2.97	199,224		199,224
320.10	261,593,481.26	278,379,455.86	2.66	7,031,328	1,223,292	8,254,620
320.18	103,245.73	103,245.73	-			
320.19	3,667,945.94	3,667,945.94	2.21	81,060		81,060
320.20	118,733,555.85	159,740,980.00	3.42	4,388,722		4,388,722
320.29	8,167.87	8,167.87	-			

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30,2025

ACCOUNT (1)	NET ORIGINALCOST AS OF 6/30/2024 (2)	NET ORIGINALCOST AS OF 6/30/2025 (3)	ACCRUAL RATE (4)		AVERAGE ACCRUALS (5)**	AMORTIZATION OF NET SALVAGE (6)	PROJECTED DEPRECIATION ACCRUALS (7)=(5)+(6)
320.30	13,459,406.97	14,370,730.58	8.94		1,243,549	135,345	1,378,894
320.37	15,531,581.93	19,048,869.77	1.75		297,801	17,925	315,726
330.00	130,768,568.22	148,602,297.21	1.79		2,358,826	1,699,905	4,058,731
330.10	14,144,856.97	24,572,432.37	1.99		393,882		393,882
330.20	19,913,409.67	19,913,409.67	2.10		418,176		418,176
330.30	818,707.23	818,707.23	1.95		15,960		15,960
330.40	12,806,300.04	12,806,300.04	1.94		248,448		248,448
330.58	2,303,924.15	2,303,924.15	3.45		79,488		79,488
330.59	45,744,045.26	53,585,998.63	6.96		3,446,079		3,446,079
331.00	3,327,488,033.47	3,533,014,149.56	1.53		51,918,017	15,791,831	67,709,848
333.00	719,078,190.47	758,836,459.21	1.85		13,633,883	2,464,167	16,098,050
334.00	249,227,878.51	275,376,160.82	6.06		15,845,804	2,061,270	17,907,074
335.00	145,278,472.78	156,182,918.00	2.27		3,407,391	1,290,743	4,698,134
340.10	8,638,585.84	9,765,026.15	6.01		552,855	45,008	597,863
340.20	17,320,326.29	20,929,590.90	20.00	*	3,766,708		3,766,708
340.30	91,455,720.27	84,090,848.28	20.00	*	17,454,811		17,454,811
340.31	1,067,816.75	215,330.44	10.00	*	60,600		60,600
340.50	9,100.95	9,100.95	13.29		1,212		1,212
341.00	2,587.67	2,587.67	6.53		168		168
341.10	61,327,985.93	75,542,986.69	8.84		6,050,991	(420,279)	5,630,712
341.20	16,793,602.21	17,334,733.21	2.56		437,420		437,420
341.30	1,995,589.81	2,120,994.81	2.55		52,621		52,621
341.40	7,584,706.89	7,584,706.89	2.89		219,204		219,204

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30,2025

ACCOUNT	NET ORIGINALCOST AS OF 6/30/2024	NET ORIGINALCOST AS OF 6/30/2025	ACCRUAL RATE	AVERAGE ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED DEPRECIATION ACCRUALS
(1)	(2)	(3)	(4)	(5)**	(6)	(7)=(5)+(6)
342.00	469,790.25	469,790.25	6.20	29,124	993	30,117
343.00	48,121,656.24	53,886,280.27	5.54	2,813,939	30772	2,844,711
344.00	2,229,299.11	2,125,988.78	9.09	197,555.00	8,813.00	206,368
345.00	2,122,806.77	2,242,714.26	3.84	85,932.00	477.00	86,409
346.00	3,712,250.99	4,837,798.93	6.56	278,846.00	65,545.00	344,391
346.10	9,649,123.69	11,538,536.76	6.95	730,676.00		730,676
346.19	4,902,319.79	5,985,571.87	10.95	594,197.00		594,197
346.20	309,958.34	259,216.96	8.76	24,579.00		24,579
347.00	36,245,335.69	43,810,400.74	4.62	1,838,685.00	32,926.00	1,871,611
348.00	795,577.91	14,759,295.79	4.08	426,494.00	81.00	426,575
TOTAL	**6,421,061,386.27**	**6,970,059,528.68**		**167,876,201**	**26,458,765**	**194,334,966**

* UTILIZING ACCRUAL RATE CONSISTENT WITH AMORTIZATION PERIOD TO MITIGATE ANOMALOUS CALCULATED ACCRUAL RATE.
** ANNUAL ACRUAL DEVELOPED BASED ON MONTHLY AVERAGES.

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 5. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

ACCOUNT	2020 GROSS SALVAGE	2020 COST OF REMOVAL	2021 GROSS SALVAGE	2021 COST OF REMOVAL	2022 GROSS SALVAGE	2022 COST OF REMOVAL	PROJECTED 2023 GROSS SALVAGE	PROJECTED 2023 COST OF REMOVAL	PROJECTED 2024 GROSS SALVAGE	PROJECTED 2024 COST OF REMOVAL	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2)	- (3)	+ (4)	- (5)	+ (6)	- (7)	+ (8)	- (9)	+ (10)	- (11)	= (12)*	(13)=(12)/5
303.61	4,483.73		(4,483.73)				11,108.00	15.00	(11,108.00)	(15.00)	0.00	0
304.15	210.38	577,956.65		666,811.69		850,320.81	23,546.75	796,762.50	9,909.75	891,900.50	(3,750,085.27)	(750,017)
304.20		71,775.96		37,171.02		23,865.76	10,031.74	124,387.00	12,037.74	138,436.00	(373,566.26)	(74,713)
304.30		788,178.99		137,849.62		52,542.41	5,749.71	43,949.00	20,624.71	151,215.00	(1,147,360.60)	(229,472)
304.61		12,850.31	4,483.73	1,346.07		6,818.30	57,449.30	43,380.00	356,667.30	271,779.00	82,426.65	16,485
304.62		(8.81)		18,876.94		46,017.09	227,444.49	76,293.00	49,045.49	33,351.00	101,960.76	20,392
304.63		23.48				79,910.95	22,588.56	18,770.50	12,788.56	40,197.50	(103,525.31)	(20,705)
305.00		24,577.59		467.17		299,889.33		213,737.00		3,210,544.00	(3,749,215.09)	(749,843)
306.00		6,896.40		450.15				2,661.50		2,661.50	(12,669.55)	(2,534)
307.00		42,111.55		5,700.51		55,144.80		7,366.00		19,044.00	(129,366.86)	(25,873)
310.00		3,593.30						119,338.00		125,958.00	(248,889.30)	(49,778)
311.00		248,120.57		193,743.82		350,411.61		321,442.00		483,349.00	(1,597,067.00)	(319,413)
320.00	(214.05)	695,879.64		890,085.40		1,520,577.41		1,543,362.00		2,008,180.00	(6,658,298.50)	(1,331,660)
320.30		76,375.47		1,370.70		299,375.44		60,630.50		54,937.50	(492,689.61)	(98,538)
320.37								7,085.00		74,292.00	(81,377.00)	(16,275)
330.00		1,196,558.00		1,561,680.99		3,396,011.14		581,223.00		529,765.00	(7,265,238.13)	(1,453,048)
331.00	25,703.04	12,998,210.71	282,490.53	8,196,453.86	111,611.62	13,983,952.63	12,078.00	21,364,445.00		24,327,288.00	(80,438,467.01)	(16,087,693)
333.00		2,528,314.54	1,799.10	2,681,541.01	2,218.42	2,505,397.99	1,306.00	2,514,107.50		2,305,642.50	(12,529,680.02)	(2,505,936)
334.00	42,569.41	1,486,703.66	331,737.56	1,021,270.85	54,380.07	3,625,834.72	112,369.70	2,786,541.00	96,903.70	1,316,654.00	(9,599,043.79)	(1,919,809)
335.00	3,093.12	1,720,769.32	11,562.11	1,074,172.62	6,290.78	1,281,342.15	3,425.00	1,364,307.00		1,170,078.00	(6,586,298.08)	(1,317,260)
340.00	613.87	23,848.17	325.05	78,720.20	8,592.94	67,823.74	26,721.00	35,034.00			(169,173.25)	(33,835)
341.00	456,214.35	97,003.97	219,365.56	(16,299.55)	820,242.37	1,127.48	396,017.48	21,140.00	1,187,508.48	63,058.00	2,913,318.34	582,664
342.00		122.40									(122.40)	(24)
343.00	3,000.00	50,715.40		40,863.25		38,089.15	1,447.00	24,009.00			(149,229.80)	(29,846)
344.00		13,845.30		5,126.37		8,395.86		9,236.00			(36,603.53)	(7,321)
345.00						590.23			602.00	602.00	(590.23)	(118)
346.00		44,631.89		49,301.95		165,439.94	42.00	24,794.00			(284,125.78)	(56,825)
347.00		16,130.65		8,339.46		105,946.50	58,690.00	60,221.00			(131,947.61)	(26,390)
TOTAL	**535,673.85**	**22,725,185.11**	**847,279.91**	**16,655,044.10**	**1,003,336.20**	**28,764,825.44**	**970,014.73**	**32,164,236.50**	**1,734,979.73**	**37,218,917.50**	**(132,436,924.23)**	**(26,487,385)**

* Column (12) equals the summation of Columns (2) through (11).

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1892	99,114	21,957	77,157	77,157	0.0
1893	15,527	15,527		77,157	0.0
1900	185,903	24,361	161,542	238,699	0.0
1901	281,262	59,995	221,267	459,966	0.0
1902	20,137	4,328	15,809	475,775	0.0
1904	5,454	764	4,690	480,465	0.0
1906	1,384	1,384		480,465	0.0
1907	187	187		480,465	0.0
1909	3,521	3,521		480,465	0.0
1910	239,040	32,571	206,469	686,934	0.0
1915	1,351	276	1,075	688,009	0.0
1916	9,146	1,600	7,546	695,555	0.0
1917	133	133		695,555	0.0
1918	98,047	19,617	78,430	773,985	0.0
1919	8,727	8,727		773,985	0.0
1920	42,261	10,077	32,184	806,169	0.0
1921	49,980	49,888	92	806,261	0.0
1922	1,862	1,564	298	806,559	0.0
1923	443,111	57,573	385,538	1,192,097	0.0
1924	8,528	7,504	1,024	1,193,121	0.0
1925	1,291	253	1,038	1,194,159	0.0
1926	530	468	62	1,194,221	0.0
1927	1,189	1,025	164	1,194,385	0.0
1928	688	585	103	1,194,488	0.0
1929	81,772	15,290	66,482	1,260,970	0.0
1930	96,403	11,189	85,214	1,346,184	0.0
1931	12,412	11,569	843	1,347,027	0.0
1932	37,406	4,226	33,180	1,380,207	0.0
1933	4,896	591	4,305	1,384,512	0.0
1934	1,282	334	948	1,385,460	0.0
1935	1,820	1,141	679	1,386,139	0.0
1936	86	16	70	1,386,209	0.0
1937	9,281	7,551	1,730	1,387,939	0.0
1938	7,699	6,521	1,178	1,389,117	0.0
1939	20,576	16,188	4,388	1,393,505	0.0
1940	55,182	44,008	11,174	1,404,679	0.0
1941	40,708	30,146	10,562	1,415,241	0.0
1942	31,041	24,258	6,783	1,422,024	0.0
1943	14,608	11,049	3,559	1,425,583	0.0
1944	8,881	6,880	2,001	1,427,584	0.0
1945	21,519	16,708	4,811	1,432,395	0.0
1946	237,157	67,917	169,240	1,601,635	0.0
1947	176,515	115,640	60,875	1,662,510	0.0
1948	258,660	170,125	88,535	1,751,045	0.0
1949	261,716	183,358	78,358	1,829,403	0.0

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1950	311,320	205,318	106,002	1,935,405	0.0
1951	681,964	385,158	296,806	2,232,211	0.0
1952	614,372	381,721	232,651	2,464,862	0.0
1953	1,724,104	1,064,597	659,507	3,124,369	0.1
1954	1,534,882	812,413	722,469	3,846,838	0.1
1955	2,571,800	1,143,563	1,428,237	5,275,075	0.1
1956	1,721,234	834,605	886,629	6,161,704	0.1
1957	2,312,531	1,047,487	1,265,044	7,426,748	0.1
1958	3,303,753	1,280,846	2,022,907	9,449,655	0.2
1959	2,758,709	1,321,474	1,437,235	10,886,890	0.2
1960	3,157,641	1,437,154	1,720,487	12,607,377	0.2
1961	4,541,182	2,128,336	2,412,846	15,020,223	0.3
1962	2,220,695	1,104,862	1,115,833	16,136,056	0.3
1963	2,485,224	1,118,488	1,366,736	17,502,792	0.3
1964	6,227,601	2,049,320	4,178,281	21,681,073	0.4
1965	6,037,150	2,956,807	3,080,343	24,761,416	0.4
1966	5,496,491	2,277,726	3,218,765	27,980,181	0.5
1967	6,831,724	2,862,056	3,969,668	31,949,849	0.6
1968	6,523,819	2,613,530	3,910,289	35,860,138	0.6
1969	7,936,876	3,807,593	4,129,283	39,989,421	0.7
1970	4,821,448	1,959,173	2,862,275	42,851,696	0.7
1971	6,860,586	2,758,959	4,101,627	46,953,323	0.8
1972	12,612,671	6,198,409	6,414,262	53,367,585	0.9
1973	25,715,710	15,687,306	10,028,404	63,395,989	1.1
1974	6,883,112	2,697,934	4,185,178	67,581,167	1.2
1975	7,329,050	2,715,303	4,613,747	72,194,914	1.3
1976	14,970,146	6,935,057	8,035,089	80,230,003	1.4
1977	7,653,704	2,695,991	4,957,713	85,187,716	1.5
1978	12,261,610	4,140,292	8,121,318	93,309,034	1.6
1979	12,233,587	4,439,811	7,793,776	101,102,810	1.8
1980	15,218,814	4,949,639	10,269,175	111,371,985	1.9
1981	11,916,885	4,211,975	7,704,910	119,076,895	2.1
1982	14,539,654	6,958,321	7,581,333	126,658,228	2.2
1983	15,078,566	5,420,297	9,658,269	136,316,497	2.4
1984	19,007,056	5,928,465	13,078,591	149,395,088	2.6
1985	30,826,382	9,411,883	21,414,499	170,809,587	3.0
1986	34,220,903	10,967,692	23,253,211	194,062,798	3.4
1987	38,695,398	13,008,185	25,687,213	219,750,011	3.8
1988	59,380,368	22,711,925	36,668,443	256,418,454	4.5
1989	58,028,589	19,773,262	38,255,327	294,673,781	5.1
1990	96,221,081	44,327,414	51,893,667	346,567,448	6.1
1991	56,938,006	26,571,877	30,366,129	376,933,577	6.6
1992	63,956,618	25,187,621	38,768,997	415,702,574	7.3
1993	100,161,459	42,777,570	57,383,889	473,086,463	8.3
1994	57,803,981	16,080,592	41,723,389	514,809,852	9.0

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1995	87,378,856	28,160,937	59,217,919	574,027,771	10.0
1996	64,204,638	17,479,227	46,725,411	620,753,182	10.8
1997	90,954,154	32,131,110	58,823,044	679,576,226	11.9
1998	152,733,933	43,278,725	109,455,208	789,031,434	13.8
1999	111,325,880	34,681,739	76,644,141	865,675,575	15.1
2000	87,444,349	21,926,751	65,517,598	931,193,173	16.3
2001	105,984,643	28,635,602	77,349,041	1,008,542,214	17.6
2002	106,847,951	25,416,272	81,431,679	1,089,973,893	19.0
2003	58,016,026	16,256,508	41,759,518	1,131,733,411	19.8
2004	78,588,867	15,141,440	63,447,427	1,195,180,838	20.9
2005	93,739,431	22,083,852	71,655,579	1,266,836,417	22.1
2006	60,076,372	18,428,518	41,647,854	1,308,484,271	22.8
2007	118,861,073	24,511,140	94,349,933	1,402,834,204	24.5
2008	153,996,830	26,432,689	127,564,141	1,530,398,345	26.7
2009	132,701,795	23,514,116	109,187,679	1,639,586,024	28.6
2010	149,639,927	27,908,628	121,731,299	1,761,317,323	30.8
2011	195,748,534	38,405,368	157,343,166	1,918,660,489	33.5
2012	307,097,816	66,244,474	240,853,342	2,159,513,831	37.7
2013	249,559,623	44,717,660	204,841,963	2,364,355,794	41.3
2014	222,737,974	36,043,436	186,694,538	2,551,050,332	44.5
2015	228,398,985	31,802,233	196,596,752	2,747,647,084	48.0
2016	274,095,507	42,580,424	231,515,083	2,979,162,167	52.0
2017	242,784,414	28,750,109	214,034,305	3,193,196,472	55.8
2018	389,599,195	58,747,012	330,852,183	3,524,048,655	61.5
2019	262,193,473	30,138,356	232,055,117	3,756,103,772	65.6
2020	306,708,775	46,875,155	259,833,620	4,015,937,392	70.1
2021	332,981,405	36,407,862	296,573,543	4,312,510,935	75.3
2022	393,023,621	29,377,103	363,646,518	4,676,157,453	81.7
2023	498,748,101	26,505,675	472,242,426	5,148,399,879	89.9
2024	501,320,792	12,526,784	488,794,008	5,637,193,887	98.4
2025	408,133,002	2,476,032	405,656,970	6,042,850,857	105.5
9999	354,014,768-	37,633,228-	316,381,540-	5,726,469,317	100.0
SUBTOTAL	6,966,837,629	1,240,368,309	5,726,469,325		
NONDEPRECIABLE	28,065,066		28,065,066		
TOTAL	6,994,902,695	1,240,368,309	5,754,534,391		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 303.14 WATER RIGHTS - HIBERNIA

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
1995	1,942,822.51	1,942,823	1,942,823			
	1,942,822.51	1,942,823	1,942,823			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 303.35 WASTE HANDLING AND TREATMENT LAND

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 100-R3						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1991	70,430.00	48,132	61,437	8,993	15.75	571
1992	84,595.17	57,229	73,049	11,546	15.78	732
	155,025.17	105,361	134,486	20,539		1,303

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.8 0.84

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 303.99 COMPREHENSIVE PLANNING STUDIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	48,474.73	48,475	48,475			
2014	668,293.04	668,293	668,293			
2015	145,773.72	145,774	145,774			
2016	5,166,691.39	5,166,691	5,166,691			
2017	370,367.21	370,367	370,367			
2018	950,553.09	950,553	950,553			
2019	393,070.67	393,071	393,071			
2020	1,282,572.43	1,282,572	1,282,572			
2021	891,896.17	713,517	510,513	381,383	1.00	381,383
2022	961,088.22	576,653	412,588	548,500	2.00	274,250
2023	270,955.62	108,382	77,546	193,410	3.00	64,470
2024	1,105,641.84	221,128	158,215	947,427	4.00	236,857
2025	1,083,100.70	54,155	38,747	1,044,354	4.75	219,864
	13,338,478.83	10,699,631	10,223,405	3,115,074		1,176,824

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.6 8.82

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.15 OTHER WATER SOURCE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S0.5						
NET SALVAGE PERCENT.. 0						
1965	39,947.00	32,836	19,576	20,371	12.99	1,568
1971	5,072.70	3,999	2,384	2,689	14.49	186
1972	11,584.14	9,025	5,380	6,204	15.03	413
1973	65.99	51	30	36	15.11	2
1974	7,661.59	5,861	3,494	4,168	15.67	266
1975	2,445.75	1,859	1,108	1,338	15.79	85
1977	1,709.86	1,272	758	952	16.52	58
1978	1,234.26	905	540	694	17.10	41
1979	60,148.04	43,716	26,062	34,086	17.29	1,971
1980	41,684.95	30,013	17,893	23,792	17.50	1,360
1981	164,788.79	116,736	69,594	95,195	18.11	5,256
1982	4,365.75	3,060	1,824	2,542	18.35	139
1983	20,001.54	13,861	8,263	11,739	18.61	631
1984	885.30	606	361	524	18.88	28
1985	63,474.28	42,909	25,581	37,893	19.17	1,977
1986	57,397.06	38,278	22,820	34,577	19.48	1,775
1987	172.67	114	68	105	19.80	5
1988	4,748.93	3,057	1,822	2,927	20.47	143
1989	124,237.54	78,717	46,929	77,309	20.82	3,713
1990	151,230.67	94,746	56,484	94,747	20.87	4,540
1991	469,478.44	288,917	172,243	297,235	21.25	13,988
1992	277,833.30	167,784	100,027	177,806	21.64	8,217
1993	129,452.24	76,636	45,688	83,764	22.05	3,799
1994	1,181,519.46	684,927	408,331	773,188	22.48	34,394
1995	192,757.11	109,293	65,157	127,600	22.91	5,570
1996	373,454.32	207,939	123,966	249,488	23.08	10,810
1997	26,941.69	14,635	8,725	18,217	23.55	774
1998	246,319.21	131,017	78,108	168,211	23.76	7,080
1999	136,113.81	70,425	41,985	94,129	24.25	3,882
2000	136,580.00	68,973	41,119	95,461	24.50	3,896
2001	9,258.62	4,533	2,702	6,557	25.02	262
2002	712,549.97	339,245	202,247	510,303	25.31	20,162
2003	1,867,977.92	858,896	512,046	1,355,932	25.85	52,454
2004	249,443.28	111,052	66,206	183,237	26.17	7,002
2005	969,864.41	417,042	248,627	721,237	26.51	27,206
2006	494,169.77	204,685	122,027	372,143	26.87	13,850
2007	1,531,426.55	609,201	363,186	1,168,241	27.25	42,871
2008	1,218,756.34	464,102	276,682	942,074	27.64	34,084
2009	230,697.81	83,789	49,952	180,746	28.05	6,444
2010	10,969,693.61	3,784,544	2,256,221	8,713,473	28.48	305,951
2011	342,722.66	111,796	66,649	276,074	28.92	9,546

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.15 OTHER WATER SOURCE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S0.5						
NET SALVAGE PERCENT.. 0						
2012	352,191.69	108,052	64,417	287,775	29.37	9,798
2013	2,956,288.71	851,411	507,583	2,448,706	29.67	82,531
2014	1,387,466.35	370,870	221,101	1,166,365	30.15	38,685
2015	940,573.68	232,322	138,503	802,071	30.49	26,306
2016	1,907,681.06	429,228	255,892	1,651,789	31.00	53,284
2017	2,030,818.17	412,662	246,016	1,784,802	31.37	56,895
2018	17,332,487.83	3,130,247	1,866,151	15,466,337	31.76	486,975
2019	3,384,002.03	531,965	317,140	3,066,862	32.17	95,333
2020	5,245,999.51	697,718	415,957	4,830,043	32.59	148,206
2021	5,270,378.45	569,201	339,339	4,931,039	33.04	149,245
2022	26,461,201.25	2,183,049	1,301,462	25,159,739	33.36	754,189
2023	11,338,169.67	634,938	378,529	10,959,641	33.71	325,115
2024	1,916,158.81	54,802	32,671	1,883,488	33.97	55,446
2025	2,665,231.49	19,190	11,441	2,653,790	34.23	77,528
	105,718,516.03	19,556,707	11,659,067	94,059,449		2,995,935

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.4 2.83

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALLEGHENY RIVER PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2045						
NET SALVAGE PERCENT.. 0						
1962	15,878.73	12,605	6,941	8,938	16.37	546
1970	6,710.06	5,167	2,845	3,865	16.43	235
1995	1,715,454.62	1,075,590	592,287	1,123,168	17.85	62,923
2001	6,191.06	3,521	1,939	4,252	18.19	234
	1,744,234.47	1,096,883	604,012	1,140,222		63,938
BECKS RUN STATION - NEW						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2072						
NET SALVAGE PERCENT.. 0						
2012	23,868,525.21	6,329,933	3,485,654	20,382,871	36.02	565,876
2015	17,442.33	3,750	2,065	15,377	36.51	421
	23,885,967.54	6,333,683	3,487,719	20,398,249		566,297
MILL STREET PUMP STATION AND REGULATOR BYPASS						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	1,277,952.17	796,164	438,417	839,535	21.18	39,638
1994	3,067.93	1,817	1,001	2,067	21.36	97
2001	15,048.48	7,873	4,335	10,713	21.87	490
2018	27,090.40	6,315	3,477	23,613	23.03	1,025
2021	3,362,441.11	494,951	272,551	3,089,891	23.17	133,357
	4,685,600.09	1,307,120	719,781	3,965,819		174,607

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
GARDNER CREEK PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2043						
NET SALVAGE PERCENT.. 0						
1993	1,121,355.16	742,786	409,024	712,331	16.31	43,674
1994	85,662.97	56,032	30,855	54,808	16.39	3,344
2001	13,088.07	7,727	4,255	8,833	16.65	531
2003	7,900.11	4,501	2,479	5,422	16.61	326
	1,228,006.31	811,046	446,612	781,394		47,875
NORRISTOWN BOOSTER STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2047						
NET SALVAGE PERCENT.. 0						
1997	2,400,581.27	1,411,542	777,283	1,623,299	19.62	82,737
1998	52,044.11	30,212	16,637	35,408	19.51	1,815
2003	1,271.63	669	368	903	19.84	46
2007	10,970.93	5,194	2,860	8,111	20.02	405
2008	97,884.43	44,763	24,649	73,235	20.17	3,631
2012	1,059.31	413	227	832	20.33	41
2013	31,601.32	11,718	6,453	25,149	20.36	1,235
	2,595,413.00	1,504,511	828,477	1,766,936		89,910
MILL ROAD BOOSTER STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2047						
NET SALVAGE PERCENT.. 0						
1997	2,093,461.42	1,230,955	677,840	1,415,622	19.62	72,152
1998	27,010.00	15,679	8,634	18,376	19.51	942
2015	97,145.43	31,864	17,546	79,599	20.49	3,885
	2,217,616.85	1,278,498	704,020	1,513,597		76,979

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CHERRY VALLEY						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2049						
NET SALVAGE PERCENT.. 0						
1999	4,596,861.48	2,533,790	1,395,262	3,201,599	21.17	151,233
2014	95,401.19	31,797	17,509	77,892	22.00	3,541
2023	299,969.65	24,538	13,512	286,458	22.45	12,760
	4,992,232.32	2,590,125	1,426,284	3,565,948		167,534
CLARION WATER TREATMENT AND TANK						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
2003	2,349,120.19	1,116,302	614,705	1,734,415	24.30	71,375
2004	146,294.31	67,895	37,387	108,907	24.25	4,491
2006	10,710.36	4,680	2,577	8,133	24.48	332
2007	2,583.58	1,093	602	1,982	24.55	81
	2,508,708.44	1,189,970	655,271	1,853,437		76,279
NORRISTOWN - FOREST AVENUE BOOSTER STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2063						
NET SALVAGE PERCENT.. 0						
2013	1,327,877.66	366,494	201,814	1,126,064	31.48	35,771
	1,327,877.66	366,494	201,814	1,126,064		35,771
SHIRE OAKS RELAY STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2063						
NET SALVAGE PERCENT.. 0						
2013	2,585,737.11	713,663	392,987	2,192,750	31.48	69,655
2014	2,220,406.42	571,533	314,722	1,905,685	31.74	60,040
	4,806,143.53	1,285,196	707,709	4,098,435		129,695

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALDRICH STATION						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2063						
NET SALVAGE PERCENT.. 0						
2007	15,755.78	5,814	3,202	12,554	30.78	408
2013	4,835,261.20	1,334,532	734,877	4,100,385	31.48	130,254
2014	1,472,142.36	378,929	208,662	1,263,480	31.74	39,807
2017	3,006.40	601	331	2,675	32.00	84
	6,326,165.74	1,719,876	947,071	5,379,095		170,553
ELLWOOD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 75-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
2005	11,236.00	3,955	2,178	9,058	36.82	246
2019	130,266.72	17,039	9,383	120,884	39.87	3,032
	141,502.72	20,994	11,561	129,942		3,278
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1948	4,468.99	4,267	2,350	2,119	3.65	581
1949	358.12	340	187	171	4.00	43
1950	127.79	121	67	61	4.37	14
1951	9,982.81	9,382	5,166	4,816	4.74	1,016
1952	4,734.93	4,459	2,455	2,280	4.52	504
1953	13,018.12	12,185	6,710	6,308	4.92	1,282
1954	75,555.06	70,274	38,697	36,858	5.34	6,902
1955	58,216.49	53,792	29,621	28,595	5.76	4,964
1956	15,546.37	14,374	7,915	7,631	5.63	1,355
1957	10,267.57	9,426	5,191	5,077	6.07	836
1958	9,113.89	8,305	4,573	4,541	6.53	695
1959	18,700.21	17,032	9,379	9,321	6.46	1,443
1960	14,216.48	12,845	7,073	7,143	6.94	1,029
1961	54,015.77	48,744	26,841	27,174	6.92	3,927
1962	544.97	488	269	276	7.42	37
1963	35,113.06	31,131	17,143	17,970	7.93	2,266
1964	284,448.02	251,594	138,543	145,905	7.97	18,307
1965	21,539.54	18,869	10,390	11,149	8.49	1,313

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1966	57,170.93	49,922	27,490	29,681	8.57	3,463
1967	76,144.63	65,804	36,236	39,909	9.11	4,381
1968	17,228.65	14,730	8,111	9,117	9.67	943
1969	93,256.48	79,380	43,712	49,545	9.79	5,061
1970	38,650.86	32,525	17,910	20,741	10.36	2,002
1971	107,458.13	89,942	49,528	57,930	10.52	5,507
1972	88,004.36	72,762	40,067	47,937	11.10	4,319
1973	50,403.03	41,149	22,659	27,744	11.69	2,373
1974	108,027.38	87,599	48,237	59,790	11.89	5,029
1975	90,448.74	72,359	39,845	50,603	12.50	4,048
1976	42,777.68	33,747	18,583	24,194	13.11	1,845
1977	28,733.34	22,343	12,303	16,430	13.73	1,197
1978	82,386.44	63,503	34,969	47,418	13.98	3,392
1979	66,272.36	50,301	27,699	38,574	14.61	2,640
1980	107,555.46	80,344	44,242	63,313	15.24	4,154
1981	230,041.46	169,034	93,081	136,961	15.88	8,625
1982	180,850.24	131,424	72,370	108,480	16.17	6,709
1983	150,891.28	107,736	59,326	91,565	16.82	5,444
1984	124,193.03	87,072	47,947	76,246	17.48	4,362
1985	902,134.91	620,669	341,779	560,356	18.14	30,891
1986	203,935.92	137,596	75,769	128,167	18.80	6,817
1987	1,069,747.50	711,382	391,731	678,016	19.14	35,424
1988	341,004.01	222,062	122,281	218,723	19.82	11,035
1989	771,857.07	491,827	270,830	501,027	20.50	24,440
1990	1,859,893.50	1,158,714	638,060	1,221,834	21.18	57,688
1991	285,963.68	174,037	95,836	190,128	21.87	8,694
1992	1,798,159.75	1,068,107	588,166	1,209,994	22.56	53,634
1993	1,426,914.92	826,469	455,105	971,810	23.25	41,798
1994	237,890.67	134,218	73,909	163,982	23.95	6,847
1995	625,810.96	343,570	189,191	436,620	24.64	17,720
1996	960,321.46	512,428	282,175	678,147	25.35	26,751
1997	733,043.15	379,716	209,095	523,948	26.05	20,113
1998	616,613.75	309,663	170,520	446,094	26.76	16,670
1999	653,606.19	317,783	174,991	478,615	27.48	17,417
2000	1,738,336.17	817,018	449,901	1,288,435	28.19	45,705
2001	785,063.54	356,105	196,094	588,970	28.91	20,373
2002	245,456.04	107,264	59,066	186,390	29.63	6,291
2003	4,249,039.88	1,785,447	983,178	3,265,862	30.36	107,571
2004	339,890.70	137,044	75,465	264,426	31.08	8,508
2005	301,754.84	116,477	64,139	237,615	31.81	7,470

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.2 POWER AND PUMPING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
2006	3,480,254.61	1,282,822	706,401	2,773,853	32.55	85,218
2007	3,980,711.32	1,397,230	769,402	3,211,310	33.28	96,494
2008	1,153,403.10	384,314	211,627	941,776	34.02	27,683
2009	18,814.82	5,930	3,265	15,549	34.76	447
2010	226,401.68	67,241	37,027	189,375	35.51	5,333
2011	559,168.40	155,001	85,353	473,815	36.51	12,978
2012	568,606.09	147,098	81,001	487,605	37.25	13,090
2013	1,552,385.53	372,573	205,162	1,347,224	38.00	35,453
2014	1,878,247.84	415,281	228,680	1,649,568	38.75	42,569
2015	848,084.36	171,313	94,336	753,749	39.50	19,082
2016	3,069,106.80	560,726	308,771	2,760,336	40.26	68,563
2017	595,443.35	97,176	53,511	541,932	41.02	13,211
2018	1,733,566.98	247,553	136,318	1,597,249	42.02	38,012
2019	142,098.65	17,478	9,624	132,474	42.78	3,097
2020	1,384,280.55	142,581	78,514	1,305,767	43.54	29,990
2021	4,175,419.84	345,725	190,378	3,985,042	44.31	89,935
2022	59,098.84	3,705	2,040	57,059	44.85	1,272
2023	3,484,560.77	146,352	80,591	3,403,970	45.62	74,616
2024	2,303,728.88	49,069	27,020	2,276,708	45.95	49,548
2025	2,869,935.26	15,498	8,534	2,861,401	46.05	62,137
9999	1,304,029.60-	430,180-	236,884-	1,067,146-		33,697-
	55,296,189.35	18,241,386	10,044,840	45,251,349		1,428,896
	111,755,658.02	37,745,782	20,785,171	90,970,487		3,031,612

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.0 2.71

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
E.H. ALDRICH PURIFICATION BUILDING						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1972	86.76	71	71	16	11.52	1
1975	71.86	58	58	14	12.11	1
1976	646.40	519	519	128	11.98	11
1979	5,589.48	4,397	4,396	1,193	12.48	96
1980	0.30		0			
1981	3,646.32	2,840	2,839	807	12.50	65
1982	134.42	104	104	30	12.56	2
1983	25,631.05	19,700	19,696	5,935	12.64	470
1986	1,924.52	1,449	1,449	476	12.81	37
1987	30,784.01	22,928	22,923	7,861	13.02	604
1989	2,931.41	2,142	2,142	790	13.26	60
1995	4,049.53	2,782	2,781	1,268	13.67	93
1996	528,486.21	358,631	358,556	169,930	13.74	12,368
1997	1,052.71	704	704	349	13.84	25
1998	31,389.85	20,764	20,760	10,630	13.82	769
2000	60,739.48	38,873	38,865	21,875	14.06	1,556
2001	6,845.33	4,304	4,303	2,542	14.17	179
2002	341,788.26	211,464	211,420	130,368	14.17	9,200
2003	101,130.88	61,407	61,394	39,737	14.23	2,792
2005	37,675.96	21,927	21,922	15,754	14.36	1,097
2006	545,359.53	309,819	309,755	235,605	14.44	16,316
2007	34,532.48	19,083	19,079	15,453	14.57	1,061
2008	6,692.22	3,595	3,594	3,098	14.65	211
2009	56,673.57	29,561	29,555	27,119	14.67	1,849
2010	2,060.89	1,039	1,039	1,022	14.76	69
2011	84,138.85	40,875	40,867	43,272	14.82	2,920
2012	5,488,363.98	2,554,285	2,553,754	2,934,610	14.93	196,558
2013	123,297.92	54,892	54,881	68,417	14.95	4,576
2014	86,143.23	36,387	36,379	49,764	15.04	3,309
2017	1,287,591.24	442,931	442,839	844,752	15.26	55,357
2018	50,813.39	15,935	15,932	34,882	15.32	2,277
2023	898,866.19	102,111	102,090	796,776	15.61	51,043
2025	473,939.72	7,393	7,391	466,548	15.73	29,660
	10,323,077.95	4,392,970	4,392,057	5,931,021		394,632

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HAYS MINE FILTER BUILDING						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1928	321.93	312	312	10	3.00	3
1938	931.66	867	867	65	6.46	10
1953	15,796.62	13,762	13,759	2,037	10.64	191
1954	58,728.00	51,287	51,276	7,452	10.30	723
1955	10,938.73	9,495	9,493	1,446	10.65	136
1958	1,772.53	1,508	1,508	265	11.74	23
1961	6,297.05	5,279	5,278	1,019	12.34	83
1962	289.11	240	240	49	12.76	4
1963	512.21	426	426	86	12.63	7
1965	305.51	251	251	55	12.99	4
1966	417.37	340	340	77	13.46	6
1969	901.54	722	722	180	13.93	13
1973	484.26	378	378	106	14.67	7
1975	26,467.73	20,248	20,244	6,224	15.36	405
1976	328.63	250	250	79	15.52	5
1977	1,287.38	970	970	318	15.69	20
1979	6,394.46	4,736	4,735	1,659	16.11	103
1980	1,134.27	837	837	297	15.98	19
1981	242.07	177	177	65	16.24	4
1982	175.32	127	127	48	16.52	3
1984	3,501.73	2,484	2,483	1,018	16.80	61
1985	120,919.27	84,643	84,625	36,294	17.14	2,118
1986	76,916.75	53,396	53,385	23,532	17.18	1,370
1987	816.99	562	562	255	17.25	15
1988	3,021.20	2,046	2,046	976	17.64	55
1989	110,411.01	73,931	73,916	36,495	17.76	2,055
1991	165,693.03	108,164	108,142	57,552	18.08	3,183
1995	364.53	224	224	141	18.78	8
1996	13,740.76	8,328	8,326	5,414	18.85	287
1997	40,481.83	24,143	24,138	16,344	18.95	862
2002	76,160.05	40,814	40,806	35,355	19.92	1,775
2003	35,741.53	18,714	18,710	17,031	20.02	851
2005	374,896.12	185,948	185,909	188,987	20.32	9,301
2006	387,084.88	186,072	186,033	201,052	20.53	9,793
2007	93,919.82	43,616	43,607	50,313	20.76	2,424
2008	104,453.85	46,879	46,869	57,585	20.88	2,758
2009	70,770.81	30,573	30,567	40,204	21.04	1,911
2010	5,944.57	2,461	2,460	3,484	21.23	164
2011	50,212.79	19,894	19,890	30,323	21.34	1,421

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HAYS MINE FILTER BUILDING						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
2012	12,817,408.31	4,832,163	4,831,159	7,986,249	21.48	371,799
2013	130,719.11	46,588	46,578	84,141	21.67	3,883
2014	1,576,788.77	529,013	528,903	1,047,886	21.79	48,090
2016	154,207.24	44,550	44,541	109,666	22.15	4,951
2017	998,711.74	263,660	263,605	735,107	22.30	32,964
2018	2,208.11	524	524	1,684	22.50	75
2019	96,326.39	20,171	20,167	76,160	22.65	3,362
2023	2,116,911.01	166,813	166,778	1,950,133	23.38	83,410
	19,762,058.58	6,948,586	6,947,142	12,814,917		590,715
NEW HERSHEY TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2067						
NET SALVAGE PERCENT.. 0						
1984	39,855.02	26,799	26,793	13,062	19.98	654
1992	4,981,510.20	2,959,017	2,958,402	2,023,108	22.56	89,677
1995	8,711.33	4,887	4,886	3,825	23.48	163
1996	2,126.93	1,166	1,166	961	23.91	40
1999	4,643.87	2,367	2,367	2,277	25.02	91
2001	233,960.66	113,424	113,400	120,560	25.50	4,728
2006	48,986.16	20,104	20,100	28,886	27.30	1,058
2010	7,159.27	2,459	2,458	4,701	28.67	164
2011	65,129.74	21,154	21,150	43,980	29.10	1,511
2012	3,748,675.94	1,150,094	1,149,855	2,598,821	29.37	88,486
2013	165,952.14	47,595	47,585	118,367	29.84	3,967
2014	236,542.01	63,228	63,215	173,327	30.15	5,749
2015	33,979.51	8,393	8,391	25,588	30.49	839
2016	152,039.07	34,209	34,202	117,837	31.00	3,801
2017	164,146.78	33,355	33,348	130,799	31.37	4,170
2018	24,868.41	4,491	4,490	20,378	31.76	642
2021	2,283,885.03	246,660	246,609	2,037,276	33.04	61,661
2022	278,217.77	22,870	22,865	255,353	33.50	7,622
2025	649,997.97	4,680	4,679	645,319	34.71	18,592
	13,130,387.81	4,766,952	4,765,961	8,364,427		293,615

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CHINCHILLA WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1893	690.28	690	690			
1910	955.96	956	956			
1921	7,550.49	7,460	7,458	92	1.26	73
1953	44.66	39	39	6	10.64	1
1990	3,174,965.67	2,100,240	2,099,803	1,075,163	17.91	60,031
1995	10,224.61	6,288	6,287	3,938	18.78	210
2006	66,480.93	31,957	31,950	34,531	20.53	1,682
2007	1,592.33	739	739	853	20.76	41
2009	1,945.08	840	840	1,105	21.04	53
2013	13,302.91	4,741	4,740	8,563	21.67	395
2017	44.24	12	12	32	22.30	1
2018	2,722.48	646	646	2,077	22.50	92
2023	2,377.48	187	187	2,191	23.38	94
	3,282,897.12	2,154,795	2,154,347	1,128,550		62,673
FALLBROOK WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	2,232,245.42	1,476,630	1,476,323	755,922	17.91	42,207
1991	14,802.97	9,663	9,661	5,142	18.08	284
1992	3,782.38	2,434	2,433	1,349	18.28	74
1994	5,692.25	3,564	3,563	2,129	18.50	115
1997	5,455.32	3,254	3,253	2,202	18.95	116
1998	18,465.92	10,769	10,767	7,699	19.30	399
1999	2,277.11	1,303	1,303	974	19.45	50
2003	17,373.38	9,097	9,095	8,278	20.02	413
2006	53,490.76	25,713	25,708	27,783	20.53	1,353
2007	70,346.66	32,669	32,662	37,684	20.76	1,815
2008	47,309.49	21,232	21,228	26,082	20.88	1,249
2009	28,023.69	12,106	12,103	15,920	21.04	757
2010	4,824.82	1,997	1,997	2,828	21.23	133
2012	30,878.01	11,641	11,639	19,239	21.48	896
2014	46,182.39	15,494	15,491	30,692	21.79	1,409

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FALLBROOK WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
2015	54,662.81	17,055	17,051	37,611	22.05	1,706
2016	58,953.74	17,032	17,028	41,925	22.15	1,893
2018	11,872.00	2,817	2,816	9,056	22.50	402
	2,706,639.12	1,674,470	1,674,122	1,032,517		55,271
SCRANTON AREA WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	8,468,598.33	5,601,978	5,600,814	2,867,785	17.91	160,122
1991	147,129.90	96,046	96,026	51,104	18.08	2,827
1992	456.64	294	294	163	18.28	9
1993	58.83	37	37	22	18.51	1
1994	6,067.68	3,800	3,799	2,268	18.50	123
1995	9,911.69	6,096	6,095	3,817	18.78	203
1996	221,350.91	134,161	134,133	87,218	18.85	4,627
1997	6,113.66	3,646	3,645	2,468	18.95	130
1999	24,939.65	14,265	14,262	10,678	19.45	549
2001	539.61	297	297	243	19.67	12
2002	57,542.98	30,837	30,831	26,712	19.92	1,341
2003	52,107.61	27,284	27,278	24,829	20.02	1,240
2004	3,821.64	1,950	1,950	1,872	20.15	93
2005	271,712.93	134,770	134,742	136,971	20.32	6,741
2006	6,798.09	3,268	3,267	3,531	20.53	172
2007	40,179.95	18,660	18,656	21,524	20.76	1,037
2008	21,647.39	9,715	9,713	11,934	20.88	572
2009	1,599.31	691	691	908	21.04	43
2010	8,936.56	3,700	3,699	5,237	21.23	247
2011	108,567.89	43,015	43,006	65,562	21.34	3,072
2012	124,345.67	46,878	46,868	77,477	21.48	3,607
2013	21,229.16	7,566	7,564	13,665	21.67	631
2014	5,291.32	1,775	1,775	3,517	21.79	161
2017	3,568,740.04	942,147	941,951	2,626,789	22.30	117,793
2018	1,028,041.66	243,954	243,903	784,138	22.50	34,851
2019	17,479.33	3,660	3,659	13,820	22.65	610

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SCRANTON AREA WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
2020	31,559.87	5,665	5,664	25,896	22.86	1,133
2022	11,153.91	1,278	1,278	9,876	23.18	426
2023	1,252,772.46	98,718	98,697	1,154,075	23.38	49,362
	15,518,694.67	7,486,151	7,484,595	8,034,100		391,735
BROWNELL WTP						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	4,333,381.56	2,866,532	2,865,937	1,467,445	17.91	81,934
1991	88,970.52	58,080	58,068	30,903	18.08	1,709
1992	72.69	47	47	26	18.28	1
1998	3,431.58	2,001	2,001	1,431	19.30	74
1999	152.98	88	88	65	19.45	3
2003	7,790.06	4,079	4,078	3,712	20.02	185
2005	30,165.72	14,962	14,959	15,207	20.32	748
2007	12,234.92	5,682	5,681	6,554	20.76	316
2008	56,670.86	25,434	25,429	31,242	20.88	1,496
2009	66,342.17	28,660	28,654	37,688	21.04	1,791
2010	10,428.23	4,317	4,316	6,112	21.23	288
2011	5,098.68	2,020	2,020	3,079	21.34	144
2012	56,670.09	21,365	21,361	35,310	21.48	1,644
2013	1,247.32	445	445	802	21.67	37
2014	42,913.80	14,398	14,395	28,519	21.79	1,309
2015	10,206.09	3,184	3,183	7,023	22.05	319
2016	8,246.29	2,382	2,382	5,865	22.15	265
2017	7,772.90	2,052	2,052	5,721	22.30	257
2018	7,323.77	1,738	1,738	5,586	22.50	248
2019	648.49	136	136	513	22.65	23
	4,749,768.72	3,057,602	3,056,967	1,692,802		92,791

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NESBITT WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2048						
NET SALVAGE PERCENT.. 0						
1988	6,091,845.49	4,192,408	4,191,536	1,900,309	16.76	113,384
1989	236,127.92	160,661	160,628	75,500	16.91	4,465
1991	9,200.90	6,100	6,099	3,102	17.28	180
1992	3,913.79	2,570	2,569	1,344	17.25	78
1994	2,637.07	1,684	1,684	953	17.54	54
1998	19,882.52	11,864	11,862	8,021	18.25	440
1999	5,954.90	3,499	3,498	2,457	18.25	135
2001	3,606.32	2,034	2,034	1,573	18.55	85
2002	777.36	427	427	350	18.84	19
2003	16,530.05	8,873	8,871	7,659	18.98	404
2006	33,459.15	16,592	16,589	16,871	19.31	874
2007	18,344.81	8,817	8,815	9,530	19.45	490
2008	64,101.93	29,750	29,744	34,358	19.63	1,750
2009	26,211.66	11,743	11,741	14,471	19.71	734
2010	1,810.10	779	779	1,031	19.84	52
2012	509,430.90	199,340	199,299	310,132	20.22	15,338
2014	96,480.80	33,749	33,742	62,739	20.45	3,068
2015	14,209.06	4,646	4,645	9,564	20.58	465
2016	100,151.34	30,286	30,280	69,872	20.76	3,366
2022	18,429.84	2,245	2,245	16,185	21.63	748
	7,273,105.91	4,728,067	4,727,084	2,546,022		146,129
CRYSTAL LAKE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2052						
NET SALVAGE PERCENT.. 0						
1992	5,023,109.47	3,182,642	3,181,980	1,841,129	19.08	96,495
1993	73,596.13	45,924	45,914	27,682	19.28	1,436
1995	197.94	120	120	78	19.50	4
1999	13,626.50	7,653	7,651	5,975	20.30	294
2004	11,303.55	5,626	5,625	5,679	21.19	268
2006	99,797.96	46,646	46,636	53,162	21.65	2,456
2007	13,173.73	5,952	5,951	7,223	21.84	331
2008	28,589.12	12,442	12,439	16,150	22.06	732
2009	19,356.65	8,114	8,112	11,244	22.17	507
2010	2,858.04	1,149	1,149	1,709	22.31	77
2011	22,252.17	8,536	8,534	13,718	22.50	610

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CRYSTAL LAKE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2052						
NET SALVAGE PERCENT.. 0						
2014	3,545.66	1,143	1,143	2,403	23.13	104
2015	2,868.40	861	861	2,008	23.33	86
2016	10,676.66	2,960	2,959	7,717	23.47	329
2018	14,229.77	3,227	3,226	11,003	23.86	461
2020	3,879.66	661	661	3,219	24.33	132
	5,343,061.41	3,333,656	3,332,963	2,010,098		104,322
CEASETOWN WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
1993	8,491,079.67	5,271,262	5,270,167	3,220,913	19.55	164,753
1994	18,958.58	11,578	11,576	7,383	19.76	374
1995	16,043.96	9,626	9,624	6,420	20.00	321
1997	45,655.10	26,462	26,457	19,199	20.31	945
1998	3,202.38	1,816	1,816	1,387	20.62	67
2001	5,100.00	2,705	2,704	2,396	21.25	113
2002	3,150.51	1,630	1,630	1,521	21.44	71
2004	17,119.10	8,412	8,410	8,709	21.74	401
2005	299,398.81	142,514	142,484	156,914	22.02	7,126
2006	93,193.36	43,027	43,018	50,175	22.15	2,265
2007	11,733.64	5,238	5,237	6,497	22.32	291
2008	28,894.84	12,428	12,425	16,469	22.53	731
2009	10,169.23	4,198	4,197	5,972	22.76	262
2010	16,080.19	6,368	6,367	9,714	22.88	425
2011	77,289.61	29,107	29,101	48,189	23.17	2,080
2012	123,725.49	44,232	44,223	79,503	23.36	3,403
2013	2,077.72	701	701	1,377	23.59	58
2014	40,488.30	12,827	12,824	27,664	23.72	1,166
2020	10,209.09	1,700	1,700	8,509	25.03	340
	9,313,569.58	5,635,831	5,634,660	3,678,910		185,192

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WATRES WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
1993	9,042,484.16	5,613,574	5,612,408	3,430,076	19.55	175,451
1994	557,586.68	340,518	340,447	217,139	19.76	10,989
1995	50,819.95	30,492	30,486	20,334	20.00	1,017
1998	1,099.27	623	623	476	20.62	23
2002	1,956.80	1,013	1,013	944	21.44	44
2003	5,173.10	2,618	2,617	2,556	21.48	119
2005	2,174.91	1,035	1,035	1,140	22.02	52
2006	52,855.60	24,403	24,398	28,458	22.15	1,285
2007	1,179.60	527	527	653	22.32	29
2008	34,000.57	14,624	14,621	19,380	22.53	860
2009	5,827.62	2,406	2,406	3,422	22.76	150
2010	15,084.17	5,973	5,972	9,112	22.88	398
2011	95,761.95	36,064	36,057	59,705	23.17	2,577
2013	64,674.64	21,808	21,803	42,871	23.59	1,817
2014	165,655.45	52,480	52,469	113,186	23.72	4,772
2015	9,260.45	2,732	2,731	6,529	23.90	273
2016	8,689.72	2,362	2,362	6,328	24.11	262
2018	716,495.48	158,990	158,957	557,539	24.55	22,710
2019	11,862.12	2,313	2,313	9,550	24.77	386
2020	3,420.65	570	570	2,851	25.03	114
2021	4,578.80	626	626	3,953	25.24	157
	10,850,641.69	6,315,751	6,314,439	4,536,203		223,485
NORRISTOWN						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
1992	4,476.99	2,748	2,747	1,730	20.76	83
1994	3,778.23	2,249	2,249	1,530	21.08	73
1997	5,404,226.75	3,041,499	3,040,867	2,363,360	21.75	108,660
1998	7,937.78	4,372	4,371	3,567	22.02	162
2000	74,588.87	39,159	39,151	35,438	22.62	1,567
2001	2,023,509.89	1,039,275	1,039,059	984,451	22.73	43,311
2002	58,091.88	28,994	28,988	29,104	23.08	1,261
2003	86,104.25	41,864	41,855	44,249	23.25	1,903
2004	98,144.99	46,374	46,364	51,781	23.44	2,209
2005	140.00	64	64	76	23.67	3

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NORRISTOWN						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
2006	1,204,036.32	533,027	532,916	671,120	23.92	28,057
2007	45,348.29	19,346	19,342	26,006	24.19	1,075
2009	102,333.83	40,279	40,271	62,063	24.65	2,518
2010	13,901.29	5,213	5,212	8,689	25.00	348
2011	28,104.08	10,033	10,031	18,073	25.22	717
2012	365,613.30	123,577	123,551	242,062	25.46	9,508
2013	21,001.51	6,678	6,677	14,325	25.74	557
2014	69.14	21	21	48	26.04	2
2015	67,794.34	18,711	18,707	49,087	26.23	1,871
2016	1,019,886.77	258,847	258,793	761,094	26.46	28,764
2017	61,609.01	14,195	14,192	47,417	26.72	1,775
2018	83,707.68	17,227	17,223	66,484	27.01	2,461
2019	1,119.07	201	201	918	27.33	34
2020	97,321.03	14,939	14,936	82,385	27.57	2,988
2021	3,789,738.42	475,991	475,892	3,313,846	27.85	118,989
2022	181,172.93	17,447	17,443	163,730	28.15	5,816
2023	400,000.00	26,320	26,315	373,685	28.40	13,158
	15,243,756.64	5,828,650	5,827,439	9,416,318		377,870
HUNTSVILLE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2059						
NET SALVAGE PERCENT.. 0						
1999	5,140,610.11	2,726,580	2,726,013	2,414,597	23.02	104,891
2001	8,125.96	4,115	4,114	4,012	23.39	172
2005	45,477.20	20,465	20,461	25,016	24.44	1,024
2006	30,782.70	13,335	13,332	17,450	24.86	702
2007	7,211.16	3,011	3,010	4,201	25.10	167
2008	59,813.06	23,997	23,992	35,821	25.37	1,412
2009	25,684.93	9,863	9,861	15,824	25.67	616
2010	2,533.46	931	931	1,603	25.82	62
2011	38,290.79	13,348	13,345	24,946	26.16	954
2012	15,722.39	5,192	5,191	10,531	26.37	399
2013	3,295.43	1,020	1,020	2,276	26.76	85

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HUNTSVILLE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2059						
NET SALVAGE PERCENT.. 0						
2015	2,369.82	635	635	1,735	27.31	64
2016	9,027.44	2,226	2,226	6,802	27.50	247
2022	35,020.59	3,246	3,245	31,775	29.36	1,082
	5,423,965.04	2,827,964	2,827,376	2,596,589		111,877
NEW CASTLE WATER TREATMENT PLANT - NEW						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2060						
NET SALVAGE PERCENT.. 0						
2000	1,819,768.35	937,181	936,986	882,782	23.54	37,501
2001	3,164,959.51	1,587,544	1,587,214	1,577,745	23.85	66,153
2003	1,380.93	656	656	725	24.30	30
2004	153,962.49	70,807	70,792	83,170	24.66	3,373
2005	17,819.80	7,948	7,946	9,873	24.84	397
2006	266,771.62	114,552	114,528	152,243	25.25	6,029
2007	42,986.27	17,796	17,792	25,194	25.48	989
2008	208,868.44	83,088	83,071	125,798	25.74	4,887
2014	29,796.67	8,522	8,520	21,276	27.46	775
2015	145,791.46	38,635	38,627	107,164	27.74	3,863
2018	28,464.70	5,579	5,578	22,887	28.71	797
2019	22,300.06	3,827	3,826	18,474	28.97	638
2021	169,427.15	20,128	20,124	149,303	29.67	5,032
2025	2,999,913.33	23,999	23,994	2,975,919	30.90	96,308
	9,072,210.78	2,920,262	2,919,655	6,152,556		226,772
ROCK RUN FILTRATION PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2051						
NET SALVAGE PERCENT.. 0						
1976	3,032,325.96	2,303,052	2,302,574	729,752	15.52	47,020
1985	5,833.47	4,060	4,059	1,774	17.47	102
1991	23,116.00	15,012	15,009	8,107	18.36	442
1996	6,671.00	4,005	4,004	2,667	19.31	138
2000	142,779.16	79,242	79,226	63,554	20.05	3,170
2002	373,803.03	197,742	197,701	176,102	20.48	8,599

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ROCK RUN FILTRATION PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2051						
NET SALVAGE PERCENT.. 0						
2006	428,360.75	202,657	202,615	225,746	21.16	10,669
2007	15,986.12	7,338	7,336	8,650	21.22	408
2011	13,009,059.10	5,063,126	5,062,074	7,946,985	21.97	361,720
2013	228,674.96	79,853	79,836	148,839	22.36	6,656
2014	32,558.55	10,709	10,707	21,852	22.44	974
2018	3,850.44	892	892	2,959	23.21	127
2019	4,599.43	938	938	3,662	23.41	156
2020	24,494.60	4,287	4,286	20,208	23.57	857
2022	4,742,093.46	527,795	527,685	4,214,408	23.95	175,967
	22,074,206.03	8,500,708	8,498,942	13,575,264		617,005
NAZARETH(BLUE MOUNTAIN) PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2055						
NET SALVAGE PERCENT.. 0						
1951	429.84	379	379	51	10.03	5
1960	45.00	38	38	7	12.52	1
1970	349.00	274	274	75	14.93	5
1975	41,890.00	31,627	31,620	10,270	16.23	633
1976	12,586.04	9,436	9,434	3,152	16.36	193
1977	48,491.99	35,845	35,838	12,654	16.94	747
1978	89.00	65	65	24	17.10	1
1979	1,797.00	1,306	1,306	491	17.29	28
1980	9,400.42	6,768	6,767	2,634	17.50	151
1983	3,194.00	2,227	2,227	967	18.24	53
1985	30.00	21	21	9	18.48	
1988	9,287.67	6,117	6,116	3,172	19.18	165
1989	2,360.00	1,529	1,529	831	19.56	42
1991	4,553.00	2,879	2,878	1,675	19.76	85
1992	72,215.50	44,802	44,793	27,423	20.19	1,358
1995	4,258,824.56	2,516,965	2,516,442	1,742,383	20.76	83,930
1996	7,506.00	4,353	4,352	3,154	21.00	150
1997	7,826.00	4,448	4,447	3,379	21.26	159
1998	541.00	302	302	239	21.31	11
2007	2,222.54	968	968	1,255	23.32	54
2008	360,111.32	151,211	151,180	208,932	23.49	8,895
2009	6,280.49	2,522	2,521	3,759	23.84	158

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NAZARETH(BLUE MOUNTAIN) PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2055						
NET SALVAGE PERCENT.. 0						
2011	12,316.24	4,518	4,517	7,799	24.17	323
2013	17,236.87	5,647	5,646	11,591	24.63	471
2021	2,341,064.49	306,211	306,147	2,034,917	26.58	76,558
	7,220,647.97	3,140,458	3,139,805	4,080,843		174,176
CLARION WATER TREATMENT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2063						
NET SALVAGE PERCENT.. 0						
2003	10,342,319.64	4,823,658	4,822,655	5,519,664	25.17	219,295
2004	1,073,637.95	484,748	484,647	588,991	25.51	23,089
2005	51,929.31	22,641	22,636	29,293	25.87	1,132
2008	4,901.24	1,900	1,900	3,002	26.86	112
2009	3,997.32	1,484	1,484	2,514	27.10	93
2010	15,074.97	5,337	5,336	9,739	27.37	356
2012	25,964.22	8,236	8,234	17,730	27.98	634
2013	22,045.21	6,561	6,560	15,486	28.32	547
2015	4,722.08	1,209	1,209	3,513	29.06	121
2017	63,675.57	13,499	13,496	50,179	29.74	1,687
2018	7,287.53	1,377	1,377	5,911	30.04	197
2023	3,480,136.91	204,632	204,589	3,275,547	32.01	102,329
	15,095,691.95	5,575,282	5,574,123	9,521,569		349,592
WEST SHORE REGIONAL TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2066						
NET SALVAGE PERCENT.. 0						
1969	657.98	516	516	142	15.43	9
1983	37,158.59	25,283	25,278	11,881	19.73	602
1987	5,815.95	3,757	3,756	2,060	20.82	99
1991	12,473.19	7,549	7,547	4,926	22.18	222
1997	3,811.05	2,049	2,049	1,762	24.08	73
2001	126,824.96	61,789	61,776	65,049	25.26	2,575
2006	13,157,980.68	5,425,035	5,423,908	7,734,073	27.08	285,601
2007	3,335,257.81	1,326,766	1,326,490	2,008,768	27.25	73,716

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WEST SHORE REGIONAL TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2066						
NET SALVAGE PERCENT.. 0						
2008	19,820.53	7,548	7,546	12,274	27.64	444
2009	20,877.72	7,583	7,581	13,296	28.05	474
2011	67,592.59	22,143	22,138	45,454	28.74	1,582
2013	108,276.06	31,313	31,306	76,970	29.49	2,610
2014	154,942.54	41,757	41,748	113,194	29.82	3,796
2015	8,669.28	2,159	2,159	6,511	30.16	216
2016	67,082.34	15,275	15,272	51,811	30.53	1,697
2017	185,833.08	38,207	38,199	147,634	30.91	4,776
2018	200,316.62	36,598	36,590	163,726	31.31	5,229
2019	35,086.90	5,579	5,578	29,509	31.74	930
2021	2,920,238.53	318,890	318,824	2,601,415	32.63	79,725
2022	1,292,565.87	107,412	107,390	1,185,176	33.10	35,806
2024	1,517,331.90	43,396	43,387	1,473,945	33.97	43,390
	23,278,614.17	7,530,604	7,529,039	15,749,575		543,572
BECK'S RUN PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2072						
NET SALVAGE PERCENT.. 0						
2012	26,304,729.23	7,830,918	7,829,291	18,475,438	30.67	602,394
	26,304,729.23	7,830,918	7,829,291	18,475,438		602,394
ELLWOOD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
1991	15,090.60	8,979	8,977	6,113	23.14	264
2003	1,684.82	745	745	940	27.75	34
2018	34,566,354.68	5,782,951	5,781,749	28,784,606	34.84	826,194
2019	1,001,606.74	144,832	144,802	856,805	35.49	24,142
	35,584,736.84	5,937,507	5,936,273	29,648,464		850,634

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
MONTROSE TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
2018	2,177,079.01	364,225	364,149	1,812,930	34.84	52,036
2019	11,727.99	1,696	1,696	10,032	35.49	283
2020	37,167.60	4,534	4,533	32,635	35.98	907
2024	699,905.29	17,708	17,704	682,201	38.53	17,706
	2,925,879.89	388,163	388,082	2,537,798		70,932
SILVER SPRINGS FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
2021	7,669,280.13	898,840	898,653	6,770,627	30.13	224,714
	7,669,280.13	898,840	898,653	6,770,627		224,714
YARDLEY - MILL ROAD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
2021	6,943,609.02	872,117	871,936	6,071,673	27.85	218,013
2025	874,888.10	7,524	7,522	867,366	28.90	30,013
	7,818,497.12	879,641	879,458	6,939,039		248,026
STEELTON WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2043						
NET SALVAGE PERCENT.. 0						
1973	6,453,439.54	5,201,472	5,200,391	1,253,048	12.52	100,084
2010	4,876,442.37	2,333,378	2,332,893	2,543,549	16.35	155,569
2014	8,092.41	3,213	3,212	4,880	16.70	292
2017	1,950,570.71	625,743	625,613	1,324,958	16.94	78,215
2019	2,024.63	526	526	1,499	17.09	88

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
STEELTON WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2043						
NET SALVAGE PERCENT.. 0						
2020	13,663.11	3,081	3,080	10,583	17.17	616
2022	108,839.25	16,032	16,029	92,811	17.37	5,343
2024	445,147.74	24,038	24,033	421,115	17.52	24,036
	13,858,219.76	8,207,483	8,205,778	5,652,442		364,243
WHITE DEER / MILTON WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2062						
NET SALVAGE PERCENT.. 0						
2022	3,744,419.29	330,258	330,190	3,414,230	31.01	110,101
2023	2,388,099.85	142,808	142,778	2,245,321	31.44	71,416
	6,132,519.14	473,066	472,968	5,659,551		181,517
OTHER PURIFICATION STRUCTURES						
SURVIVOR CURVE.. IOWA 60-R3						
NET SALVAGE PERCENT.. 0						
1972	172,087.42	134,985	134,957	37,130	14.57	2,548
1973	2,895.47	2,243	2,243	653	15.11	43
1974	3,416.29	2,613	2,612	804	15.67	51
1975	124,331.18	93,870	93,850	30,481	16.23	1,878
1976	21,995.09	16,382	16,379	5,616	16.79	334
1977	825.68	606	606	220	17.36	13
1978	7,156.97	5,180	5,179	1,978	17.94	110
1979	1,975.17	1,417	1,417	558	18.10	31
1980	301.29	213	213	88	18.69	5
1981	17,978.34	12,419	12,416	5,562	19.69	282
1982	356,401.48	242,139	242,089	114,313	20.29	5,634
1983	69,448.51	46,378	46,368	23,080	20.89	1,105
1984	25,923.53	17,006	17,002	8,921	21.50	415
1985	490,138.72	315,649	315,583	174,555	22.11	7,895
1986	9,175.69	5,797	5,796	3,380	22.73	149
1987	93,270.23	57,772	57,760	35,510	23.35	1,521
1988	1,096,719.52	665,489	665,351	431,369	23.98	17,989
1989	2,082,775.99	1,237,169	1,236,912	845,864	24.61	34,371
1990	844,725.42	490,785	490,683	354,042	25.24	14,027

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER PURIFICATION STRUCTURES						
SURVIVOR CURVE.. IOWA 60-R3						
NET SALVAGE PERCENT.. 0						
1991	989,950.58	562,094	561,977	427,973	25.88	16,537
1992	11,745.50	6,512	6,511	5,235	26.52	197
1993	18,154.31	9,818	9,816	8,338	27.17	307
1994	1,032,022.50	543,876	543,763	488,260	27.82	17,551
1995	1,323,257.83	674,861	674,721	648,537	28.82	22,503
1996	386,631.07	191,730	191,690	194,941	29.48	6,613
1997	1,665,036.10	801,881	801,714	863,322	30.14	28,644
1998	607,338.22	283,688	283,629	323,709	30.80	10,510
1999	1,726,152.35	780,911	780,749	945,404	31.47	30,041
2000	55,552.45	24,304	24,299	31,254	32.14	972
2001	1,537,024.42	645,550	645,416	891,609	33.14	26,904
2002	354,645.11	143,560	143,530	211,115	33.82	6,242
2003	419,646.84	163,410	163,376	256,271	34.50	7,428
2004	332,640.81	124,341	124,315	208,326	35.18	5,922
2005	106,556.39	37,934	37,926	68,630	36.18	1,897
2006	58,290.16	19,824	19,820	38,470	36.87	1,043
2007	270,953.72	87,789	87,771	183,183	37.56	4,877
2008	205,677.73	63,287	63,274	142,404	38.25	3,723
2009	740,672.33	214,499	214,454	526,218	39.25	13,407
2010	700,778.20	191,312	191,272	509,506	39.95	12,754
2011	2,037,013.32	521,883	521,775	1,515,239	40.64	37,284
2012	2,773,745.51	663,480	663,342	2,110,403	41.35	51,038
2013	1,572,118.44	347,124	347,052	1,225,067	42.35	28,927
2014	3,909,086.86	795,499	795,334	3,113,753	43.05	72,329
2015	424,136.10	78,889	78,873	345,263	43.76	7,890
2016	1,503,625.35	251,707	251,655	1,251,971	44.76	27,971
2017	2,250,157.22	336,624	336,554	1,913,603	45.48	42,076
2018	2,235,391.89	294,178	294,117	1,941,275	46.19	42,028
2019	1,909,722.12	216,562	216,517	1,693,205	46.91	36,095
2020	3,442,354.07	327,024	326,956	3,115,398	47.63	65,408
2021	4,264,085.40	324,070	324,003	3,940,083	48.63	81,022
2022	4,140,107.32	238,470	238,420	3,901,687	49.08	79,496
2023	443,953.80	17,137	17,133	426,820	49.81	8,569

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.3 PURIFICATION BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER PURIFICATION STRUCTURES						
SURVIVOR CURVE.. IOWA 60-R3						
NET SALVAGE PERCENT.. 0						
2024	6,966,038.74	135,838	135,810	6,830,229	50.28	135,844
2025	9,249,869.58	46,249	46,239	9,203,630	50.25	183,157
9999	281,872.62-	58,526-	58,514-	223,359-		5,221-
	64,803,801.71	13,455,501	13,452,705	51,351,097		1,200,386
	364,760,658.96	124,889,878	124,863,924	239,896,737		8,684,270
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					27.6	2.38

PENNSYLVANIA-AMERICAN WATER COMPANY
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ACCOUNT 304.36 WASTE HANDLING AND TREATMENT STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HAYS MINE TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1991	10,815,702.32	7,759,185	6,794,127	4,021,575	13.39	300,342
1998	68,969.00	45,623	39,949	29,020	13.82	2,100
2000	122,317.58	78,283	68,546	53,771	14.06	3,824
2001	25,833.98	16,244	14,224	11,610	14.17	819
2003	4,063.71	2,467	2,160	1,904	14.23	134
2007	41,023.43	22,670	19,850	21,173	14.57	1,453
2010	77,041.66	38,829	34,000	43,042	14.76	2,916
2012	197,523.29	91,927	80,493	117,030	14.93	7,839
2013	129,535.29	57,669	50,496	79,039	14.95	5,287
2014	18,080.06	7,637	6,687	11,393	15.04	758
2016	167,667.01	62,473	54,703	112,964	15.15	7,456
	11,667,757.33	8,183,007	7,165,236	4,502,521		332,928
YARDLEY - MILL ROAD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 55-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
2021	13,211,523.57	1,659,367	1,452,982	11,758,542	27.85	422,210
2025	1,749,761.86	15,048	13,176	1,736,585	28.90	60,089
	14,961,285.43	1,674,415	1,466,158	13,495,127		482,299
	26,629,042.76	9,857,422	8,631,394	17,997,648		815,227
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.1 3.06						

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.38 WASTE HANDLING AND TREATMENT STRUCTURE PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1991	38,331.32	38,331	38,331			
2015	27,627.10	27,627	27,627			
2021	1,337,480.53	534,992	537,460	800,021	6.00	133,337
	1,403,438.95	600,950	603,418	800,021		133,337

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.0 9.50

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.39 PURIFICATION BUILDINGS - TANK PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1997	26,564.05	26,564	26,564			
1999	12,732.18	12,732	12,732			
2000	10,588.12	10,588	10,588			
2002	28,101.61	28,102	28,102			
2015	41,376.99	41,377	41,374		3	
	119,362.95	119,363	119,360		3	

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.61 OFFICE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEW CASTLE OFFICE						
INTERIM SURVIVOR CURVE.. IOWA 55-S0						
PROBABLE RETIREMENT YEAR.. 6-2031						
NET SALVAGE PERCENT.. 0						
1986	318,195.43	277,976	246,313	71,882	5.64	12,745
1987	8,272.40	7,199	6,379	1,893	5.67	334
1988	37,599.72	32,554	28,846	8,754	5.74	1,525
1989	14,177.96	12,250	10,855	3,323	5.67	586
1990	34,032.13	29,302	25,964	8,068	5.65	1,428
1991	2,572.71	2,204	1,953	620	5.68	109
1992	2,532.12	2,156	1,910	622	5.76	108
1996	12,895.85	10,771	9,544	3,352	5.72	586
1998	881.61	726	643	238	5.79	41
2005	139,676.14	108,389	96,043	43,633	5.77	7,562
2006	221,273.24	169,429	150,130	71,143	5.81	12,245
2008	55,218.52	41,210	36,516	18,703	5.78	3,236
2009	4,088.08	3,002	2,660	1,428	5.79	247
2011	8,092.17	5,721	5,069	3,023	5.80	521
2012	17,681.58	12,206	10,816	6,866	5.83	1,178
2013	98,083.12	66,030	58,509	39,574	5.83	6,788
2014	65,043.79	42,500	37,659	27,385	5.84	4,689
2015	27,858.26	17,579	15,577	12,282	5.85	2,099
2016	103,100.72	62,448	55,335	47,766	5.86	8,151
2017	92,575.97	53,472	47,381	45,195	5.85	7,726
2018	19,026.75	10,349	9,170	9,857	5.87	1,679
2019	661.28	334	296	365	5.88	62
2023	260,525.87	66,017	58,497	202,028	5.89	34,300
2024	2,911,785.05	422,209	374,118	2,537,667	5.90	430,113
2025	867,294.28	35,212	31,201	836,093	5.90	141,711
	5,323,144.75	1,491,245	1,321,386	4,001,759		679,769
WASHINGTON CUSTOMER SERVICE CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0						
PROBABLE RETIREMENT YEAR.. 6-2032						
NET SALVAGE PERCENT.. 0						
1987	1,203,127.17	1,028,674	911,504	291,623	6.44	45,283
1988	1,858.44	1,582	1,402	457	6.48	71
1989	281,428.67	238,089	210,970	70,459	6.55	10,757
1992	14,113.15	11,783	10,441	3,672	6.53	562
1994	2,289.38	1,888	1,673	616	6.59	93
1995	65,817.15	53,904	47,764	18,053	6.63	2,723

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.61 OFFICE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WASHINGTON CUSTOMER SERVICE CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0						
PROBABLE RETIREMENT YEAR.. 6-2032						
NET SALVAGE PERCENT.. 0						
1996	7,807.45	6,362	5,637	2,170	6.59	329
1997	104,560.69	84,611	74,973	29,587	6.60	4,483
2001	48,048.55	37,593	33,311	14,738	6.67	2,210
2002	4,596.11	3,562	3,156	1,440	6.67	216
2003	69,847.82	53,629	47,520	22,327	6.65	3,357
2010	19,334.13	13,341	11,821	7,513	6.74	1,115
2011	61,248.66	41,331	36,623	24,625	6.75	3,648
2013	81,006.48	51,812	45,910	35,096	6.76	5,192
2014	14,255.72	8,829	7,823	6,432	6.76	951
2023	616,528.00	139,459	123,574	492,954	6.84	72,069
2024	245,791.26	31,338	27,768	218,023	6.84	31,875
	2,841,658.83	1,807,787	1,601,873	1,239,786		184,934
CAPITOL DISTRIBUTION CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0						
PROBABLE RETIREMENT YEAR.. 6-2064						
NET SALVAGE PERCENT.. 0						
1989	347,788.60	211,595	187,493	160,295	23.17	6,918
1990	5,101.58	3,053	2,705	2,396	23.48	102
1991	650.26	385	341	309	23.47	13
1996	1,799.05	976	865	934	24.48	38
2001	12,812.78	6,242	5,531	7,282	25.26	288
2002	5,478.58	2,608	2,311	3,168	25.31	125
2003	1,018.77	473	419	600	25.39	24
2006	28,442.30	12,051	10,678	17,764	25.84	687
2007	23,101.69	9,439	8,364	14,738	26.05	566
2008	47,924.90	18,902	16,749	31,176	26.10	1,194
2010	10,983.00	3,987	3,533	7,450	26.32	283
2011	43,527.16	15,052	13,338	30,190	26.49	1,140
2012	124,750.18	41,030	36,357	88,394	26.53	3,332
2013	174,227.60	53,941	47,797	126,431	26.76	4,725
2018	19,709,050.81	4,042,326	3,581,889	16,127,162	27.13	594,440
2019	1,661,686.84	300,101	265,918	1,395,769	27.22	51,277
	22,198,344.10	4,722,161	4,184,288	18,014,056		665,152

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.61 OFFICE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER OFFICE BUILDINGS						
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1924	648.06	648	648			
1926	173.36	173	173			
1958	12.46	12	12			
1960	46.85	44	39	8	4.44	2
1961	20.42	19	17	4	4.97	1
1963	31,971.02	29,337	25,995	5,976	5.57	1,073
1964	1,046.25	957	848	198	5.67	35
1965	11,611.21	10,589	9,383	2,229	5.79	385
1966	1,094.56	988	875	219	6.36	34
1967	46,930.24	42,190	37,384	9,547	6.52	1,464
1968	56,048.82	50,158	44,444	11,605	6.69	1,735
1969	1,243.71	1,100	975	269	7.29	37
1970	10,878.97	9,573	8,482	2,397	7.50	320
1971	8,833.19	7,727	6,847	1,986	7.73	257
1972	60,261.47	52,060	46,129	14,132	8.35	1,692
1973	1,606.24	1,378	1,221	385	8.61	45
1975	6,419.09	5,392	4,778	1,641	9.52	172
1976	44,971.81	37,462	33,194	11,778	9.82	1,199
1977	13,045.03	10,770	9,543	3,502	10.14	345
1979	27,727.45	22,321	19,778	7,949	11.14	714
1980	1.09	1	1			
1981	45,268.64	35,454	31,415	13,854	12.18	1,137
1982	357,018.18	276,332	244,851	112,167	12.56	8,930
1983	32,026.76	24,347	21,573	10,453	13.25	789
1984	893.10	670	594	299	13.64	22
1985	72,299.75	53,213	47,151	25,149	14.35	1,753
1986	348,333.92	252,681	223,895	124,439	14.76	8,431
1987	591,073.67	420,017	372,167	218,906	15.48	14,141
1988	607,895.24	425,101	376,672	231,223	15.91	14,533
1989	446,542.29	305,435	270,639	175,903	16.63	10,577
1990	142,313.17	95,136	84,298	58,015	17.36	3,342
1991	33,506.83	21,987	19,482	14,025	17.81	787
1992	147,350.55	94,334	83,587	63,763	18.55	3,437
1993	12,827.68	8,004	7,092	5,736	19.28	298
1994	323,655.50	197,656	175,138	148,517	19.76	7,516
1995	58,627.79	34,825	30,858	27,770	20.51	1,354
1996	47,145.81	27,208	24,108	23,037	21.25	1,084
1997	35,037.87	19,719	17,473	17,565	21.75	808
1998	15,898.46	8,671	7,683	8,215	22.50	365
1999	60,775.53	32,077	28,423	32,353	23.26	1,391

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.61 OFFICE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER OFFICE BUILDINGS						
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2000	751,659.19	383,346	339,674	411,985	24.02	17,152
2001	49,136.87	24,293	21,525	27,611	24.54	1,125
2002	6,105.96	2,907	2,576	3,530	25.31	139
2003	84,645.46	38,734	34,321	50,324	26.08	1,930
2004	37,628.15	16,515	14,634	22,995	26.85	856
2005	345,587.23	145,147	128,611	216,976	27.62	7,856
2006	226,303.57	91,155	80,770	145,533	28.17	5,166
2007	94,962.66	36,409	32,261	62,701	28.95	2,166
2008	246,539.03	89,691	79,473	167,066	29.73	5,619
2009	101,747.66	35,001	31,014	70,734	30.51	2,318
2010	61,024.09	19,772	17,520	43,505	31.30	1,390
2011	121,330.10	36,860	32,661	88,669	32.08	2,764
2012	183,590.31	52,029	46,102	137,489	32.87	4,183
2013	88,206.83	23,181	20,540	67,667	33.66	2,010
2014	402,070.81	97,301	86,216	315,855	34.45	9,169
2015	12,602.70	2,785	2,468	10,135	35.25	288
2016	1,287,330.78	257,209	227,907	1,059,424	36.05	29,388
2017	538,977.16	96,154	85,200	453,777	36.84	12,318
2018	2,146,281.83	336,537	298,198	1,848,084	37.64	49,099
2019	2,042,048.03	275,676	244,270	1,797,778	38.44	46,768
2020	636,874.31	71,967	63,768	573,106	39.25	14,601
2021	1,239,513.27	113,044	100,166	1,139,348	39.86	28,584
2022	1,606,550.10	110,370	97,796	1,508,754	40.67	37,097
2023	74,669.36	3,450	3,057	71,612	41.29	1,734
2024	113,909.66	2,654	2,352	111,558	41.92	2,661
2025	59,073.63	349	309	58,764	41.95	1,401
9999	60,000.00-	18,368-	16,276-	43,724-		1,395-
	16,201,450.79	4,959,934	4,394,978	11,806,473		376,592
	46,564,598.47	12,981,127	11,502,525	35,062,074		1,906,447

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.4 4.09

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
UNIONTOWN OPERATIONS CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2066						
NET SALVAGE PERCENT.. 0						
2021	3,787,629.81	443,910	570,126	3,217,504	30.13	106,787
	3,787,629.81	443,910	570,126	3,217,504		106,787
NORRISTOWN OPERATIONS CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2032						
NET SALVAGE PERCENT.. 0						
1987	747,847.92	639,410	747,848			
1988	14,460.80	12,306	14,461			
1990	21,055.84	17,761	21,056			
1991	515.82	433	516			
2000	8,240.40	6,510	8,240			
2001	106,652.86	83,445	106,653			
2011	2,125.81	1,432	2,126			
2014	364,619.49	225,007	362,064	2,556	6.83	374
2015	19,376.64	11,510	18,521	856	6.84	125
2018	224.06	113	182	42	6.87	6
	1,285,119.64	997,927	1,281,666	3,454		505
BETHEL PARK						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2058						
NET SALVAGE PERCENT.. 0						
1958	1,356.00	1,127	1,356			
1965	653,341.28	517,446	653,341			
1967	45,486.00	35,616	45,486			
1969	4,300.00	3,323	4,300			
1970	2,902.00	2,219	2,873	29	16.94	2
1972	1,319.97	993	1,286	34	17.42	2
1973	9,153.18	6,854	8,874	279	17.44	16
1975	40.52	30	39	2	18.03	
1977	1,690.34	1,225	1,586	104	18.23	6
1979	3,808.27	2,698	3,493	315	18.94	17
1981	0.16		0			
1985	8,909.55	5,952	7,706	1,203	19.88	61

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BETHEL PARK						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2058						
NET SALVAGE PERCENT.. 0						
1986	56,270.95	37,088	48,019	8,252	20.17	409
1987	51,879.47	33,711	43,646	8,233	20.48	402
1988	1,675.90	1,073	1,389	287	20.80	14
1989	365,534.82	231,603	299,861	65,673	20.82	3,154
1991	4,610.90	2,838	3,674	936	21.25	44
1992	10,300.00	6,254	8,097	2,203	21.35	103
1993	2,884.28	1,717	2,223	661	21.76	30
1995	1,257.55	724	937	320	22.08	14
1996	53,669.41	30,350	39,295	14,375	22.28	645
1997	47,281.24	26,213	33,939	13,343	22.51	593
1998	41,194.00	22,467	29,089	12,105	22.50	538
2000	47,532.86	24,717	32,002	15,531	23.08	673
2002	3,229.97	1,605	2,078	1,152	23.30	49
2006	123,630.77	54,496	70,557	53,074	24.10	2,202
2007	61,197.63	26,107	33,801	27,396	24.19	1,133
2008	530,439.54	217,321	281,370	249,069	24.49	10,170
2009	415,793.46	163,656	211,889	203,905	24.65	8,272
2010	105,796.74	39,832	51,571	54,225	24.84	2,183
2011	54,411.31	19,577	25,347	29,065	24.91	1,167
2012	393,497.73	134,025	173,525	219,973	25.17	8,739
2013	23,340.26	7,506	9,718	13,622	25.31	538
2014	26,100.06	7,867	10,186	15,914	25.50	624
	3,153,836.12	1,668,230	2,142,554	1,011,282		41,800
BETHEL PARK (NEW)						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2066						
NET SALVAGE PERCENT.. 0						
2018	20,032,537.04	3,842,241	4,934,697	15,097,840	29.50	511,791
2019	6,912,393.38	1,161,282	1,491,467	5,420,926	29.71	182,461
2021	5,255,848.12	615,985	791,127	4,464,721	30.13	148,182
	32,200,778.54	5,619,508	7,217,291	24,983,488		842,434

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
STAFFORD AVENUE DISTRIBUTION CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2062						
NET SALVAGE PERCENT.. 0						
1997	6,386.52	3,469	4,455	1,931	23.55	82
2012	1,538,069.70	501,872	644,568	893,501	26.84	33,290
2014	16,744,779.33	4,825,845	6,197,968	10,546,811	27.17	388,179
2015	12,394.22	3,309	4,250	8,144	27.45	297
2019	22,838.07	4,015	5,157	17,681	28.13	629
	18,324,467.84	5,338,510	6,856,398	11,468,070		422,477
SUSQUEHANNA OPERATIONS CENTER						
INTERIM SURVIVOR CURVE.. IOWA 55-S0.5						
PROBABLE RETIREMENT YEAR.. 6-2075						
NET SALVAGE PERCENT.. 0						
2025	3,550,000.00	26,270	33,739	3,516,261	33.53	104,869
	3,550,000.00	26,270	33,739	3,516,261		104,869
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
1967	5,143.00	4,773	5,143			
1969	3.18	3	3			
1970	1,164.98	1,064	1,165			
1971	36.32	33	36			
1972	634.88	575	635			
1973	2,089.97	1,880	2,090			
1974	1,091.06	974	1,091			
1976	2,792.33	2,449	2,792			
1977	953.93	829	954			
1978	169.91	146	170			
1980	2,201.05	1,852	2,201			
1981	1,217.40	1,012	1,217			
1982	5,097.51	4,187	5,098			
1983	5,662.30	4,590	5,662			
1984	42,453.44	33,942	42,453			
1985	30,313.11	23,887	30,313			
1986	23,996.49	18,624	23,946	51	11.25	5
1987	723.36	553	711	12	11.75	1

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
1988	492,224.35	369,710	475,353	16,872	12.26	1,376
1989	60,532.18	44,673	57,438	3,094	12.78	242
1990	892,796.35	643,706	827,642	65,155	13.54	4,812
1991	649,148.20	459,078	590,257	58,891	14.08	4,183
1992	304,212.94	210,820	271,061	33,152	14.62	2,268
1993	10,260.26	6,961	8,950	1,310	15.17	86
1994	64,622.20	42,670	54,863	9,759	15.95	612
1995	6,600.47	4,257	5,473	1,127	16.51	68
1996	86,138.81	54,207	69,696	16,442	17.08	963
1997	113,666.60	69,382	89,208	24,459	17.87	1,369
1998	16,584.74	9,851	12,666	3,919	18.45	212
1999	134,121.79	77,415	99,536	34,586	19.05	1,816
2000	70,168.39	39,119	50,297	19,871	19.84	1,002
2001	112,996.79	61,018	78,454	34,543	20.44	1,690
2002	9,268.80	4,818	6,195	3,074	21.25	145
2004	1,388.50	668	859	530	22.67	23
2005	48,626.36	22,465	28,884	19,742	23.29	848
2006	45,672.04	20,132	25,885	19,787	24.10	821
2007	56,550.01	23,819	30,625	25,925	24.74	1,048
2008	30,604.24	12,226	15,720	14,885	25.55	583
2009	16,248.78	6,162	7,923	8,326	26.19	318
2010	3,269.94	1,167	1,500	1,769	27.02	65
2011	203,116.68	67,963	87,383	115,734	27.84	4,157
2012	212,235.52	66,493	85,493	126,743	28.49	4,449
2013	45,552.60	13,228	17,008	28,545	29.32	974
2014	71,258.20	19,047	24,490	46,769	30.15	1,551
2015	516,657.84	126,065	162,087	354,570	30.98	11,445
2016	77,623.31	17,186	22,097	55,527	31.65	1,754
2017	32,786.00	6,479	8,330	24,456	32.49	753
2018	1,427,984.55	247,898	318,734	1,109,251	33.32	33,291
2019	147,357.90	22,104	28,420	118,938	34.00	3,498
2020	439,490.52	55,156	70,917	368,574	34.84	10,579
2021	1,973,176.14	198,896	255,729	1,717,447	35.68	48,135
2022	392,128.53	29,880	38,418	353,710	36.37	9,725
2023	2,274,105.83	116,434	149,704	2,124,401	37.06	57,323

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.62 STORES, SHOP AND GARAGE BUILDINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER STRUCTURES						
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2024	372,344.30	9,644	12,400	359,945	37.61	9,570
2025	960,590.86	6,340	8,152	952,439	37.77	25,217
9999	576.00-	152-	195-	381-		11-
	12,497,279.74	3,288,358	4,223,330	8,273,950		246,966
	74,799,111.69	17,382,713	22,325,104	52,474,009		1,765,838
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					29.7	2.36

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 304.63 MISCELLANEOUS STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
2003	3,376.30	1,976	3,376			
2004	54,200.10	30,845	54,200			
2005	69,786.41	38,383	69,786			
2006	31,271.70	16,637	31,272			
2007	146,479.19	75,144	146,479			
2008	201,289.42	99,236	201,289			
2009	17,478.70	8,278	16,928	551	17.78	31
2010	103,632.31	46,790	95,682	7,950	18.22	436
2011	1,252.06	538	1,100	152	18.57	8
2012	45,296.95	18,431	37,690	7,607	18.95	401
2013	22,615.23	8,657	17,703	4,912	19.35	254
2014	9,569.99	3,421	6,996	2,574	19.77	130
2015	494,972.25	164,331	336,045	158,927	20.12	7,899
2016	415,804.73	126,488	258,658	157,147	20.59	7,632
2017	324,181.53	89,474	182,968	141,214	20.99	6,728
2018	688,458.06	169,636	346,893	341,565	21.41	15,954
2019	35.34	8	16	19	21.78	1
2020	8,688.55	1,599	3,270	5,419	22.17	244
2021	72,626.32	10,923	22,337	50,289	22.60	2,225
2022	35,813.05	4,136	8,458	27,355	22.97	1,191
2023	4,791,461.81	377,567	772,096	4,019,366	23.38	171,915
2024	2,579,409.47	104,466	213,625	2,365,784	23.69	99,864
2025	1,396,548.24	14,384	29,414	1,367,134	23.96	57,059
	11,514,247.71	1,411,348	2,856,281	8,657,967		371,972

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.3 3.23

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
DAM NO. 3 (CITIZENS)						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2042						
NET SALVAGE PERCENT.. 0						
1920	42,226.36	36,800	10,048	32,178	15.48	2,079
1937	48.00	41	11	37	16.17	2
1949	331.00	272	74	257	16.59	15
1961	2,483.15	1,971	538	1,945	16.65	117
1973	1,843.00	1,399	382	1,461	16.49	89
1974	259.00	195	53	206	16.57	12
1978	82,513.54	60,887	16,625	65,888	16.69	3,948
1992	1,385,786.88	919,192	250,987	1,134,799	16.75	67,749
	1,515,490.93	1,020,757	278,720	1,236,771		74,011
SPRUCE RUN IMPOUNDING RESERVOIR						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
1957	3,545.00	2,145	586	2,959	44.36	67
1958	937,679.88	565,421	154,389	783,291	44.11	17,758
1962	1,170.00	686	187	983	44.53	22
1964	15,475.00	8,968	2,449	13,026	44.26	294
1965	5,506.28	3,139	857	4,649	45.26	103
1967	0.83			1	45.09	
1985	2,905.50	1,337	365	2,540	46.96	54
1990	18,419.48	7,801	2,130	16,289	47.64	342
1995	1,423,197.85	550,778	150,391	1,272,807	47.52	26,785
2021	36,844.32	2,859	781	36,064	47.55	758
	2,444,744.14	1,143,134	312,135	2,132,609		46,183
ONEIDA DAM AND RESERVOIR						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
1918	97,835.35	71,185	19,437	78,398	40.06	1,957
1925	408.75	290	79	330	40.85	8
1930	2,267.00	1,572	429	1,838	41.99	44
1934	1,013.55	683	186	827	44.14	19
1956	775.09	449	123	652	50.05	13

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ONEIDA DAM AND RESERVOIR						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
1978	134.64	63	17	117	53.00	2
1982	245.51	109	30	216	54.09	4
1985	16,193.21	6,866	1,875	14,318	54.34	263
1989	294,046.08	116,442	31,795	262,251	54.91	4,776
2013	8,655,614.25	1,516,464	414,073	8,241,541	56.49	145,894
	9,068,533.43	1,714,123	468,044	8,600,489		152,980
THORN RUN DAM AND RESERVOIR						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2083						
NET SALVAGE PERCENT.. 0						
1904	361.68	284	78	284	32.85	9
1925	882.00	635	173	709	38.89	18
1928	103.00	73	20	83	39.99	2
1930	285.00	200	55	230	40.14	6
1933	93.00	64	17	76	41.33	2
1936	86.00	58	16	70	42.58	2
1956	941.01	565	154	787	45.94	17
1958	951.00	561	153	798	46.64	17
1983	14,744.19	6,688	1,826	12,918	50.59	255
1984	76,177.36	34,044	9,296	66,882	50.74	1,318
1987	14,359.75	6,166	1,684	12,676	50.50	251
1989	210,306.30	87,067	23,774	186,532	50.96	3,660
1994	5,117.89	1,920	524	4,594	51.64	89
2011	7,667,320.88	1,620,872	442,582	7,224,739	52.23	138,325
	7,991,729.06	1,759,197	480,352	7,511,377		143,971
GRIFFIN						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
2024	10,175,150.83	188,240	51,399	10,123,752	53.05	190,834
	10,175,150.83	188,240	51,399	10,123,752		190,834

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
LAKE SCRANTON						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2089						
NET SALVAGE PERCENT.. 0						
1901	281,262.27	219,722	59,995	221,267	34.73	6,371
1916	2,609.36	1,934	528	2,081	38.06	55
1935	239.93	162	44	196	43.33	5
1968	1,279.11	671	183	1,096	51.70	21
1970	3,211.00	1,642	448	2,763	52.53	53
1976	2,210.73	1,062	290	1,921	53.04	36
1977	57.10	27	7	50	53.01	1
1978	36,565.70	17,186	4,693	31,873	53.00	601
1982	276.75	123	34	243	54.09	4
1983	15,120.00	6,604	1,803	13,317	54.15	246
1984	35,225.92	15,165	4,141	31,085	54.24	573
1985	30,307.31	12,850	3,509	26,799	54.34	493
1986	30,933.62	12,909	3,525	27,409	54.46	503
1987	17,143.97	7,036	1,921	15,223	54.59	279
1989	1,665,697.07	659,616	180,109	1,485,588	54.91	27,055
1990	99,790.35	38,769	10,586	89,204	55.09	1,619
1991	7,810.44	2,974	812	6,998	55.29	127
1993	173,539.95	63,863	17,438	156,102	54.96	2,840
1994	518.27	186	51	467	55.21	8
1995	0.88			1	55.47	
2001	5,375.23	1,613	440	4,935	56.00	88
2018	9,168,862.63	1,014,076	276,895	8,891,967	56.29	157,967
2019	278,446.50	26,898	7,345	271,102	56.11	4,832
	11,856,484.09	2,105,088	574,798	11,281,686		203,777
WILLIAMS BRIDGE						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2085						
NET SALVAGE PERCENT.. 0						
1892	99,114.45	80,412	21,957	77,158	30.93	2,495
1902	20,137.13	15,852	4,328	15,809	33.25	475
1915	1,350.92	1,010	276	1,075	37.06	29
1916	3,362.29	2,492	680	2,682	38.06	70
1930	111.28	77	21	90	41.99	2
1942	202.61	131	36	167	45.21	4
1962	40,618.95	23,031	6,289	34,330	48.11	714
1974	16,787.48	8,476	2,314	14,473	50.01	289

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WILLIAMS BRIDGE						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2085						
NET SALVAGE PERCENT.. 0						
1975	78.02	39	11	67	51.01	1
1985	1,916,629.50	835,650	228,176	1,688,454	51.74	32,633
1986	64,940.48	27,859	7,607	57,334	51.91	1,104
1988	23,272.56	9,644	2,633	20,639	52.29	395
1989	83,219.77	33,854	9,244	73,976	52.50	1,409
1990	5.17	2	1	5	52.72	
1993	1,867.84	705	193	1,675	52.75	32
2001	10,426.96	3,228	881	9,546	53.52	178
	2,282,125.41	1,042,462	284,646	1,997,479		39,830
HOLLISTER						
FULLY ACCRUED						
NET SALVAGE PERCENT.. 0						
1972	1,589,982.17	1,589,982	1,589,982			
1973	3,536.78	3,537	3,537			
1976	958,017.39	958,017	958,017			
1977	25,124.94	25,125	25,125			
1978	33.29	33	33			
1993	1,202.20	1,202	1,202			
	2,577,896.77	2,577,896	2,577,897			
CHRISTOPHER CHENERY (PIKES CREEK)						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2091						
NET SALVAGE PERCENT.. 0						
1910	236,315.37	179,363	29,846	206,470	36.52	5,654
1916	3,174.05	2,353	392	2,783	38.06	73
1929	74,456.00	51,464	8,564	65,892	42.89	1,536
1930	93,721.44	64,105	10,667	83,054	43.89	1,892
1933	4,694.45	3,153	525	4,170	44.99	93
1935	258.54	172	29	230	45.14	5
1964	36,327.26	19,500	3,245	33,082	52.64	628
1983	2,366.25	1,024	170	2,196	55.09	40
1984	40,978.64	17,473	2,907	38,071	55.15	690
1986	40,605.19	16,786	2,793	37,812	55.34	683

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CHRISTOPHER CHENERY (PIKES CREEK)						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2091						
NET SALVAGE PERCENT.. 0						
1987	158.58	64	11	148	55.46	3
1988	5,675.53	2,268	377	5,298	55.59	95
1989	619.11	243	40	579	55.74	10
1991	1,085,419.97	409,637	68,163	1,017,257	56.09	18,136
1993	284,909.12	103,023	17,143	267,766	56.50	4,739
2001	8,126.08	2,399	399	7,727	57.30	135
	1,917,805.58	873,027	145,271	1,772,535		34,412
CRYSTAL LAKE						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2064						
NET SALVAGE PERCENT.. 0						
1904	5,092.51	4,128	687	4,406	28.25	156
1933	61.83	46	8	54	31.46	2
1951	79,182.32	54,493	9,068	70,115	33.53	2,091
1953	26,444.91	17,898	2,978	23,467	34.38	683
1954	114.24	77	13	101	34.26	3
1964	1,215,428.80	771,068	128,305	1,087,124	35.15	30,928
1965	1,783.96	1,124	187	1,597	35.24	45
1966	264.25	165	27	237	35.34	7
1967	3,530.07	2,191	365	3,165	35.46	89
1981	7,623.81	4,193	698	6,926	36.00	192
1982	45.13	24	4	41	36.37	1
1987	10,559.42	5,417	901	9,658	36.07	268
1989	1,797.68	893	149	1,649	36.46	45
1990	0.04		0			
1993	184.09	86	14	170	36.49	5
1994	392.40	180	30	362	36.57	10
	1,352,505.46	861,983	143,433	1,209,072		34,525

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
GARDNER'S CREEK INTAKE						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2085						
NET SALVAGE PERCENT.. 0						
1985	1,682,780.31	733,692	122,085	1,560,695	51.74	30,164
1986	7,810.81	3,351	558	7,253	51.91	140
2001	6,053.07	1,874	312	5,741	53.52	107
2023	2,120,687.39	78,890	13,127	2,107,560	51.76	40,718
	3,817,331.58	817,807	136,082	3,681,250		71,129
NESBITT						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2092						
NET SALVAGE PERCENT.. 0						
1900	185,903.19	146,399	24,361	161,543	33.73	4,789
1932	37,406.03	25,395	4,226	33,180	43.99	754
1934	97.08	65	11	86	44.14	2
1946	172,052.80	107,378	17,868	154,185	47.58	3,241
1980	413.30	186	31	382	55.00	7
1981	18,286.47	8,046	1,339	16,948	56.00	303
1984	111,517.46	47,094	7,836	103,681	56.09	1,848
2001	8,137.93	2,383	397	7,741	57.97	134
2012	26,922,112.06	4,899,824	815,325	26,106,787	58.43	446,805
2018	379,381.18	40,632	6,761	372,620	58.36	6,385
2019	4,641.05	434	72	4,569	58.10	79
	27,839,948.55	5,277,836	878,226	26,961,723		464,347
WATRES						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2088						
NET SALVAGE PERCENT.. 0						
1923	436,199.97	311,447	51,824	384,376	40.86	9,407
1941	3,067.89	1,984	330	2,738	45.87	60
1943	445.19	285	47	398	46.21	9
1947	12,218.40	7,624	1,269	10,950	47.00	233
1963	203.31	112	19	185	50.36	4
1976	3,892.59	1,869	311	3,582	53.04	68
1992	1,033.37	389	65	969	54.72	18

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WATRES						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2088						
NET SALVAGE PERCENT.. 0						
2000	31,829.26	9,947	1,655	30,174	55.00	549
2008	10,206,443.00	2,394,432	398,431	9,808,012	55.46	176,848
2013	10,331.83	1,835	305	10,026	55.57	180
	10,705,664.81	2,729,924	454,256	10,251,409		187,376
ROCK RUN DAM						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2065						
NET SALVAGE PERCENT.. 0						
1985	396,616.99	206,241	34,318	362,299	36.92	9,813
1993	42,384.84	19,531	3,250	39,135	37.44	1,045
1996	679,077.89	297,368	49,482	629,596	37.23	16,911
2000	367,446.25	146,978	24,457	342,989	37.50	9,146
2008	12,969.21	4,035	671	12,298	37.64	327
2013	372,069.37	89,743	14,933	357,136	37.75	9,461
2014	1.00			1	37.78	
2020	40,037.56	4,724	786	39,251	37.37	1,050
2025	1,621,550.64	11,351	1,889	1,619,662	35.34	45,831
	3,532,153.75	779,971	129,786	3,402,368		93,584
CEASETOWN DAM						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2117						
NET SALVAGE PERCENT.. 0						
2017	19,328,737.64	1,917,411	319,055	19,009,683	72.65	261,661
	19,328,737.64	1,917,411	319,055	19,009,683		261,661

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ELMHURST DAM						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2117						
NET SALVAGE PERCENT.. 0						
2017	23,538,596.83	2,335,029	388,547	23,150,050	72.65	318,652
	23,538,596.83	2,335,029	388,547	23,150,050		318,652
DUNMORE DAME						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2105						
NET SALVAGE PERCENT.. 0						
2024	16,228,901.36	256,417	42,668	16,186,233	62.29	259,853
	16,228,901.36	256,417	42,668	16,186,233		259,853
LAKE MONTROSE DAM						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2105						
NET SALVAGE PERCENT.. 0						
2024	3,889,821.02	61,459	10,227	3,879,594	62.29	62,283
	3,889,821.02	61,459	10,227	3,879,594		62,283
STONY GARDEN DAM						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2105						
NET SALVAGE PERCENT.. 0						
2024	6,696,201.41	105,800	17,605	6,678,596	62.29	107,218
	6,696,201.41	105,800	17,605	6,678,596		107,218

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CURTIS DAM						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2105						
NET SALVAGE PERCENT.. 0						
2025	13,182,635.73	55,367	9,213	13,173,423	59.27	222,261
	13,182,635.73	55,367	9,213	13,173,423		222,261
MAPLE LAKE						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2125						
NET SALVAGE PERCENT.. 0						
2025	5,540,999.79	20,502	3,412	5,537,588	67.32	82,258
	5,540,999.79	20,502	3,412	5,537,588		82,258
MARSHWOOD DAM						
INTERIM SURVIVOR CURVE.. IOWA 130-R2						
PROBABLE RETIREMENT YEAR.. 6-2125						
NET SALVAGE PERCENT.. 0						
2025	4,987,999.88	18,456	3,071	4,984,929	67.32	74,048
	4,987,999.88	18,456	3,071	4,984,929		74,048
OTHER COLLECTING AND IMPOUNDING RESERVOIRS						
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1964	1,882.22	1,401	233	1,649	20.97	79
1965	1,598.43	1,180	196	1,402	21.30	66
1966	0.23		0			
1967	18,961.64	13,637	2,269	16,692	22.65	737
1968	6,185.00	4,407	733	5,452	23.00	237
1971	295.54	203	34	262	24.74	11
1972	94.49	64	11	84	25.74	3
1973	1,392.23	927	154	1,238	26.12	47
1974	64.05	42	7	57	27.12	2
1975	18,893.88	12,187	2,028	16,866	27.52	613
1976	3,344.35	2,130	354	2,990	27.92	107
1977	40.20	25	4	36	28.92	1
1978	2,094.09	1,289	214	1,880	29.34	64

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER COLLECTING AND IMPOUNDING RESERVOIRS						
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1979	2,765.75	1,667	277	2,488	30.34	82
1980	6,561.47	3,898	649	5,913	30.76	192
1981	51,031.67	29,864	4,969	46,062	31.19	1,477
1982	8,033.83	4,595	765	7,269	32.19	226
1983	28,376.78	15,970	2,657	25,719	32.63	788
1984	11,152.18	6,127	1,020	10,133	33.63	301
1985	11,295.69	6,100	1,015	10,281	34.07	302
1986	72,470.71	38,156	6,349	66,122	35.07	1,885
1987	269,057.62	139,049	23,137	245,920	35.53	6,921
1988	5,637.47	2,858	476	5,162	35.99	143
1989	11,760.35	5,800	965	10,795	36.99	292
1990	7,181.12	3,468	577	6,604	37.46	176
1991	69,461.44	32,591	5,423	64,038	38.46	1,665
1992	523,414.72	240,090	39,950	483,464	38.94	12,416
1993	11,505.05	5,117	851	10,654	39.94	267
1994	622.89	270	45	578	40.43	14
1995	421,232.45	176,918	29,439	391,794	41.43	9,457
1996	25,583.31	10,461	1,741	23,843	41.92	569
1997	604,861.70	238,799	39,736	565,126	42.92	13,167
1998	8,837.17	3,388	564	8,273	43.42	191
2000	36,978.65	13,220	2,200	34,779	44.93	774
2001	109,275.10	37,503	6,240	103,035	45.93	2,243
2002	123,682.57	40,964	6,816	116,866	46.44	2,516
2003	6,092.11	1,930	321	5,771	47.44	122
2006	13,646.16	3,785	630	13,016	49.49	263
2007	23,132.88	6,079	1,012	22,121	50.49	438
2014	1,221,965.78	200,280	33,326	1,188,640	56.11	21,184
2016	7,747.39	1,046	174	7,573	57.67	131
2017	107,149.16	12,944	2,154	104,995	58.23	1,803
2019	385,308.62	35,140	5,847	379,461	59.79	6,347
2020	633,177.12	48,121	8,007	625,170	60.79	10,284
2023	1,454,623.40	45,093	7,503	1,447,120	62.52	23,147

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 305 COLLECTING AND IMPOUNDING RESERVOIRS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER COLLECTING AND IMPOUNDING RESERVOIRS						
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
2024	450,000.00	7,065	1,176	448,824	62.69	7,159
2025	1,199,642.64	4,799	799	1,198,844	62.64	19,139
9999	3,575.00-	655-	109-	3,466-		66-
	7,974,536.30	1,459,992	242,940	7,731,596		147,982
	198,445,994.35	29,121,878	7,951,783	190,494,212		3,273,175
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					58.2	1.65

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 306 LAKE, RIVER AND OTHER INTAKES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NORRISTOWN INTAKE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2077						
NET SALVAGE PERCENT.. 0						
1966	6,696.14	5,492	4,410	2,286	12.94	177
1997	4,076,795.17	2,157,440	1,732,346	2,344,449	24.91	94,117
1998	86,320.84	44,516	35,745	50,576	25.36	1,994
2004	37,517.86	15,915	12,779	24,739	28.50	868
2005	48,578.25	19,820	15,915	32,664	29.02	1,126
	4,255,908.26	2,243,183	1,801,195	2,454,713		98,282
MILL ROAD INTAKE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2077						
NET SALVAGE PERCENT.. 0						
1997	5,185,337.03	2,744,080	2,203,397	2,981,940	24.91	119,709
1998	67,078.68	34,592	27,776	39,303	25.36	1,550
2004	51,910.47	22,020	17,681	34,229	28.50	1,201
	5,304,326.18	2,800,692	2,248,854	3,055,472		122,460
SWATARA CREEK INTAKE						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2072						
NET SALVAGE PERCENT.. 0						
1992	743,957.01	444,366	356,810	387,147	22.25	17,400
2007	52,227.42	19,836	15,928	36,300	29.39	1,235
2008	24,096.05	8,725	7,006	17,090	29.95	571
2018	210,583.17	34,788	27,934	182,650	35.37	5,164
	1,030,863.65	507,715	407,677	623,187		24,370
ALLEGHENY RIVER PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2070						
NET SALVAGE PERCENT.. 0						
1962	4,167.41	3,518	2,825	1,343	11.63	115
1970	1,783.13	1,422	1,142	641	13.97	46

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 306 LAKE, RIVER AND OTHER INTAKES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ALLEGHENY RIVER PUMP STATION						
INTERIM SURVIVOR CURVE.. IOWA 55-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2070						
NET SALVAGE PERCENT.. 0						
1990	18,120.03	11,225	9,013	9,107	21.50	424
1995	1,697,864.04	952,502	764,825	933,039	23.48	39,738
1996	16,079.46	8,813	7,077	9,003	23.91	377
	1,738,014.07	977,480	784,881	953,133		40,700
OTHER INTAKES						
SURVIVOR CURVE.. IOWA 50-S0.5						
NET SALVAGE PERCENT.. 0						
1961	140,771.62	118,924	95,492	45,280	11.76	3,850
1962	1,832.37	1,547	1,242	590	11.63	51
1963	0.27		0			
1964	10,372.02	8,605	6,910	3,463	12.53	276
1966	17,456.27	14,316	11,495	5,961	12.94	461
1967	29,123.72	23,648	18,988	10,135	13.43	755
1968	2,791.27	2,243	1,801	990	13.92	71
1969	291,057.55	233,079	187,154	103,904	13.93	7,459
1970	208.60	165	132	76	14.44	5
1972	2,103.77	1,639	1,316	788	15.03	52
1973	168,745.29	130,744	104,983	63,763	15.11	4,220
1974	617.05	472	379	238	15.67	15
1976	4,436.34	3,326	2,671	1,766	16.36	108
1979	4,179.23	3,037	2,439	1,741	17.29	101
1980	200.95	145	116	85	17.50	5
1982	0.23		0			
1983	545.35	378	304	242	18.61	13
1984	6,611.31	4,527	3,635	2,976	18.88	158
1985	658.71	445	357	301	19.17	16
1986	4,807.86	3,206	2,574	2,234	19.48	115
1987	349.10	229	184	165	19.80	8
1988	309.02	199	160	149	20.47	7
1989	27,979.96	17,728	14,235	13,745	20.82	660
1991	297,404.10	183,022	146,960	150,444	21.25	7,080
1992	12,652.16	7,641	6,135	6,517	21.64	301
1994	6,834.10	3,962	3,181	3,653	22.48	162
1996	950,961.27	529,495	425,165	525,796	23.08	22,781
1997	72,275.96	39,260	31,524	40,752	23.55	1,730
1998	4,002.82	2,129	1,710	2,293	23.76	97

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 306 LAKE, RIVER AND OTHER INTAKES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER INTAKES						
SURVIVOR CURVE.. IOWA 50-S0.5						
NET SALVAGE PERCENT.. 0						
1999	411,555.49	212,939	170,982	240,573	24.25	9,921
2000	3,120.39	1,576	1,265	1,855	24.50	76
2001	11,147.53	5,458	4,383	6,765	25.02	270
2002	107,835.37	51,340	41,224	66,611	25.31	2,632
2006	195,324.79	80,904	64,963	130,362	26.87	4,852
2007	423,321.85	168,397	135,217	288,105	27.25	10,573
2008	70,262.37	26,756	21,484	48,778	27.64	1,765
2011	34,882.42	11,379	9,137	25,745	28.92	890
2013	62,878.91	18,109	14,541	48,338	29.67	1,629
2014	6,638.26	1,774	1,424	5,214	30.15	173
2017	301,216.38	61,207	49,147	252,069	31.37	8,035
2019	144,216.82	22,671	18,204	126,013	32.17	3,917
2020	64,922.75	8,635	6,934	57,989	32.59	1,779
2021	109,660.49	11,843	9,509	100,151	33.04	3,031
2023	1,276,568.62	71,488	57,402	1,219,166	33.71	36,166
2025	1,102,264.45	7,936	6,372	1,095,892	34.23	32,016
9999	41,551.00-	13,643-	10,955-	30,596-		1,095-
	6,343,554.16	2,082,880	1,672,477	4,671,077		167,187
	18,672,666.32	8,611,950	6,915,084	11,757,582		452,999
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					26.0	2.43

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 307 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1918	211.51	210	180	32	0.53	32
1920	32.88	32	27	6	1.38	4
1922	1,862.28	1,822	1,564	298	2.26	132
1923	6,910.70	6,696	5,749	1,162	3.26	356
1924	6,115.00	5,929	5,091	1,024	3.17	323
1926	356.83	343	295	62	4.09	15
1927	934.01	897	770	164	4.04	41
1930	7.48	7	7			
1934	171.78	159	137	35	7.04	5
1935	1,086.97	1,008	865	222	7.09	31
1937	2,690.55	2,462	2,114	577	8.15	71
1938	213.44	195	167	46	8.24	6
1939	2,266.18	2,066	1,774	492	8.34	59
1940	66.85	60	52	15	9.34	2
1941	745.75	670	575	171	9.46	18
1945	3,939.39	3,467	2,977	962	10.91	88
1946	205.18	180	155	50	11.09	5
1948	796.14	693	595	201	11.50	17
1950	99.85	85	73	27	12.72	2
1951	563.46	480	412	151	12.96	12
1953	12,101.65	10,194	8,753	3,349	13.47	249
1954	13,824.26	11,582	9,945	3,879	13.75	282
1955	11,371.80	9,473	8,134	3,238	14.03	231
1956	1,501.00	1,243	1,067	434	14.33	30
1957	422.07	347	298	124	14.64	8
1958	2,437.40	1,992	1,710	727	14.97	49
1959	1,815.65	1,462	1,255	561	15.97	35
1960	43,540.11	34,810	29,889	13,651	16.30	837
1961	4,231.03	3,358	2,883	1,348	16.65	81
1962	2,845.77	2,259	1,940	906	16.37	55
1963	8,209.02	6,464	5,550	2,659	16.74	159
1964	2,012.88	1,572	1,350	663	17.12	39
1965	13,006.25	10,067	8,644	4,362	17.52	249
1966	118,386.62	90,803	77,965	40,422	17.92	2,256
1967	4,014.20	3,050	2,619	1,395	18.34	76
1968	6,792.15	5,110	4,388	2,404	18.76	128
1969	53,998.57	40,218	34,532	19,467	19.19	1,014
1970	4,553.41	3,356	2,882	1,671	19.63	85
1971	30,492.95	22,394	19,228	11,265	19.53	577
1972	97,489.21	70,787	60,779	36,710	19.99	1,836
1973	96,857.34	69,505	59,678	37,179	20.46	1,817

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 307 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1974	37,335.73	26,467	22,725	14,611	20.94	698
1975	8,744.97	6,165	5,293	3,452	20.92	165
1976	104,186.57	72,493	62,244	41,943	21.42	1,958
1977	20,094.39	13,793	11,843	8,251	21.93	376
1978	173,050.82	117,934	101,260	71,791	21.97	3,268
1979	64,469.51	43,298	37,176	27,294	22.49	1,214
1980	200,036.34	133,224	114,389	85,647	22.57	3,795
1981	122,242.41	80,142	68,811	53,431	23.11	2,312
1982	289,163.35	187,754	161,209	127,954	23.23	5,508
1983	165,396.84	105,589	90,661	74,736	23.79	3,141
1984	49,653.75	31,351	26,919	22,735	23.94	950
1985	66,351.80	41,138	35,322	31,030	24.52	1,265
1986	77,387.12	47,384	40,685	36,702	24.69	1,487
1987	298,823.43	180,549	155,023	143,800	24.89	5,777
1988	204,291.64	121,697	104,491	99,801	25.11	3,975
1989	64,505.11	37,619	32,300	32,205	25.73	1,252
1990	924,518.06	530,673	455,646	468,872	25.98	18,047
1991	88,718.63	50,073	42,994	45,725	26.24	1,743
1992	217,102.89	120,362	103,345	113,758	26.52	4,290
1993	78,708.89	42,818	36,764	41,945	26.82	1,564
1994	11,050.69	5,892	5,059	5,992	27.14	221
1995	25,237.57	13,174	11,311	13,927	27.47	507
1996	42,926.46	21,910	18,812	24,114	27.82	867
1997	131,135.84	65,358	56,118	75,018	28.18	2,662
1998	60,920.71	29,772	25,563	35,358	28.25	1,252
1999	39,344.10	18,720	16,073	23,271	28.64	813
2000	871,219.45	402,939	345,971	525,248	29.05	18,081
2001	235,513.97	106,264	91,240	144,274	29.19	4,943
2002	302,080.90	132,704	113,942	188,139	29.36	6,408
2003	141,846.79	60,228	51,713	90,134	29.81	3,024
2004	976,795.90	402,049	345,207	631,589	30.02	21,039
2005	2,615.05	1,041	894	1,721	30.25	57
2006	229,076.13	87,919	75,489	153,587	30.50	5,036
2007	494,961.15	182,641	156,819	338,142	30.78	10,986
2008	310,084.81	109,646	94,144	215,941	31.08	6,948
2009	9,313.14	3,144	2,699	6,614	31.39	211
2010	273,926.96	88,341	75,851	198,076	31.51	6,286
2011	335,751.48	102,471	87,984	247,767	31.87	7,774
2012	103,213.63	29,787	25,576	77,638	32.05	2,422
2013	253,438.68	68,733	59,015	194,424	32.25	6,029
2014	171,622.43	43,420	37,281	134,341	32.48	4,136

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 307 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2015	1,150,316.08	269,174	231,118	919,198	32.74	28,076
2016	97,310.54	20,844	17,897	79,414	33.02	2,405
2017	31,562.98	6,136	5,269	26,294	33.15	793
2018	119,903.08	20,815	17,872	102,031	33.32	3,062
2019	138,202.40	21,062	18,084	120,118	33.37	3,600
2020	260,775.42	33,770	28,996	231,779	33.61	6,896
2021	176,161.65	18,744	16,094	160,068	33.59	4,765
2022	1,730,729.11	141,747	121,707	1,609,022	33.63	47,845
2023	463,312.01	25,945	22,277	441,035	33.71	13,083
2024	2,130,718.96	61,791	53,055	2,077,664	33.48	62,057
2025	2,030,342.06	15,025	12,900	2,017,442	33.42	60,366
9999	307,067.27-	89,967-	77,247-	229,820-		7,455-
	16,858,304.68	4,939,269	4,240,951	12,617,354		409,292

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.8 2.43

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 310 POWER GENERATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-S0.5						
NET SALVAGE PERCENT.. 0						
1991	29,624.74	19,339	18,434	11,191	18.08	619
1992	37,859.85	24,363	23,223	14,637	18.28	801
1993	18,519.60	11,675	11,129	7,391	18.76	394
1994	87,470.29	54,232	51,695	35,775	19.00	1,883
1995	892.29	541	516	376	19.50	19
1996	6,679.92	3,971	3,785	2,895	19.78	146
1997	888,063.22	517,208	493,011	395,052	20.08	19,674
1998	17,585.78	9,971	9,505	8,081	20.62	392
1999	218,586.49	121,053	115,390	103,196	20.95	4,926
2000	85,264.13	46,043	43,889	41,375	21.30	1,942
2001	3,181.81	1,672	1,594	1,588	21.66	73
2002	211,488.89	107,986	102,934	108,555	22.05	4,923
2003	218,832.90	108,322	103,254	115,579	22.44	5,151
2004	79,086.05	38,032	36,253	42,833	22.67	1,889
2005	240,188.65	111,448	106,234	133,955	23.10	5,799
2006	342,369.24	152,868	145,716	196,653	23.55	8,350
2007	98,618.68	42,426	40,441	58,178	23.84	2,440
2008	125,030.40	51,438	49,031	75,999	24.32	3,125
2009	121,984.05	48,013	45,767	76,217	24.65	3,092
2010	92,342.71	34,629	33,009	59,334	25.00	2,373
2011	380,663.89	134,831	128,523	252,141	25.53	9,876
2012	5,941,652.42	1,985,106	1,892,233	4,049,419	25.91	156,288
2013	5,063,934.65	1,586,024	1,511,822	3,552,113	26.31	135,010
2014	595,993.77	173,732	165,604	430,390	26.74	16,095
2015	606,562.12	163,772	156,110	450,452	27.04	16,659
2016	155,954.12	38,458	36,659	119,295	27.50	4,338
2017	259,808.39	57,989	55,276	204,532	27.84	7,347
2018	962,199.51	190,612	181,694	780,506	28.34	27,541
2019	338,154.19	58,433	55,699	282,455	28.72	9,835
2020	274,628.44	40,233	38,351	236,277	29.13	8,111
2021	71,015.44	8,465	8,069	62,946	29.56	2,129
2023	7,184,941.38	445,466	424,625	6,760,316	30.26	223,408
2024	486,724.02	15,429	14,707	472,017	30.55	15,451
2025	744,361.98	5,955	5,676	738,686	30.81	23,976
9999	118,273.00-	29,169-	27,804-	90,469-		3,295-
	25,871,991.01	6,380,566	6,082,054	19,789,937		720,780

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 27.5 2.79

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.2 PUMPING EQUIPMENT - ELECTRIC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1974	5,101.00	4,292	1,567	3,534	9.61	368
1977	10,669.00	8,706	3,179	7,490	10.82	692
1978	19,466.00	15,736	5,746	13,720	11.14	1,232
1979	2,217.00	1,774	648	1,569	11.47	137
1981	6,701.00	5,248	1,916	4,785	12.18	393
1984	1,419.00	1,076	393	1,026	13.05	79
1989	517.00	367	134	383	14.76	26
1990	7,455.00	5,218	1,905	5,550	15.00	370
1991	3,895.00	2,675	977	2,918	15.50	188
1992	7,222.00	4,886	1,784	5,438	15.78	345
1993	5,904.00	3,930	1,435	4,469	16.08	278
1995	1,239.00	795	290	949	16.73	57
1996	13,105.00	8,247	3,011	10,094	17.08	591
1997	16,692.00	10,282	3,754	12,938	17.45	741
1998	15,203.00	9,195	3,357	11,846	17.64	672
2000	1,885.00	1,089	398	1,487	18.29	81
2001	5,337.36	3,010	1,099	4,238	18.55	228
2002	22,701.88	12,427	4,537	18,165	19.02	955
2003	479,719.73	256,458	93,641	386,079	19.15	20,161
2004	83,004.13	43,054	15,720	67,284	19.49	3,452
2005	239,380.84	120,169	43,877	195,504	19.84	9,854
2006	1,924,073.80	935,869	341,714	1,582,360	20.06	78,881
2007	48,088.57	22,505	8,217	39,872	20.46	1,949
2008	196,294.60	88,431	32,289	164,006	20.74	7,908
2009	21,274.46	9,191	3,356	17,918	21.04	852
2010	48,727.39	20,173	7,366	41,361	21.23	1,948
2011	101,261.13	39,836	14,545	86,716	21.59	4,016
2012	797,172.34	297,425	108,599	688,573	21.84	31,528
2013	286,327.26	101,016	36,884	249,443	22.01	11,333
2014	3,738,404.06	1,233,673	450,451	3,287,953	22.33	147,244
2015	375,402.26	115,248	42,081	333,321	22.57	14,768
2016	479,581.04	135,530	49,486	430,095	22.85	18,823
2017	148,878.38	38,351	14,003	134,875	23.06	5,849
2018	1,507,043.12	349,182	127,497	1,379,546	23.21	59,438
2019	786,050.73	160,354	58,550	727,501	23.41	31,077
2020	2,042,635.14	357,461	130,520	1,912,115	23.57	81,125
2021	1,369,116.58	197,700	72,186	1,296,931	23.70	54,723
2023	7,710,442.21	595,246	217,342	7,493,100	23.91	313,388

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.2 PUMPING EQUIPMENT - ELECTRIC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
2024	3,499,580.71	141,033	51,496	3,448,085	23.81	144,817
2025	17,019,592.94	177,004	64,630	16,954,963	23.79	712,693
9999	1,964,196.05-	252,495-	92,194-	1,872,002-		80,453-
	41,084,584.61	5,281,367	1,928,386	39,156,199		1,682,807

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.3 4.10

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.5 PUMPING EQUIPMENT - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1972	183.00	156	18	165	9.11	18
1988	352.00	253	30	322	14.55	22
1990	171.00	120	14	157	15.00	10
1998	1,537.00	930	109	1,428	17.64	81
1999	3,900.00	2,302	269	3,631	18.05	201
2004	26,425.00	13,707	1,604	24,821	19.49	1,274
2007	523.49	245	29	494	20.46	24
2010	42,801.97	17,720	2,074	40,728	21.23	1,918
2011	87,690.57	34,497	4,037	83,654	21.59	3,875
2012	1,400.39	522	61	1,339	21.84	61
2013	494,171.91	174,344	20,405	473,767	22.01	21,525
2014	6,259.19	2,066	242	6,017	22.33	269
2016	8,878.46	2,509	294	8,584	22.85	376
2017	3,405.78	877	103	3,303	23.06	143
2018	5,643.17	1,308	153	5,490	23.21	237
2019	645,714.64	131,726	15,417	630,298	23.41	26,924
2020	2,433,564.16	425,874	49,843	2,383,721	23.57	101,134
2021	2,358,264.69	340,533	39,855	2,318,410	23.70	97,823
2022	4,929,380.00	551,598	64,557	4,864,823	23.81	204,318
2023	3,475,717.59	268,325	31,404	3,444,314	23.91	144,053
2024	3,905,362.31	157,386	18,419	3,886,943	23.81	163,248
2025	2,425,864.64	25,229	2,953	2,422,912	23.79	101,846
	20,857,210.96	2,152,227	251,890	20,605,321		869,380

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.7 4.17

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.52 PUMPING EQUIPMENT - SOURCE OF SUPPLY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1995	418.45	269	244	174	16.73	10
1997	234.53	144	131	104	17.45	6
2007	323,270.08	151,290	137,136	186,134	20.46	9,097
2008	136,117.27	61,321	55,584	80,533	20.74	3,883
2009	105,375.04	45,522	41,263	64,112	21.04	3,047
2010	675,975.27	279,854	253,673	422,302	21.23	19,892
2011	731,330.15	287,705	260,790	470,540	21.59	21,794
2012	228,208.41	85,145	77,180	151,028	21.84	6,915
2013	1,313,491.14	463,400	420,048	893,443	22.01	40,593
2014	1,598,537.47	527,517	478,167	1,120,370	22.33	50,173
2015	1,400,457.07	429,940	389,718	1,010,739	22.57	44,782
2016	1,708,322.35	482,772	437,608	1,270,714	22.85	55,611
2017	2,110,336.21	543,623	492,766	1,617,570	23.06	70,146
2018	1,022,515.03	236,917	214,752	807,763	23.21	34,802
2019	344,455.58	70,269	63,695	280,761	23.41	11,993
2020	118,864.55	20,801	18,855	100,010	23.57	4,243
2021	268,054.92	38,707	35,086	232,969	23.70	9,830
2023	854,607.38	65,976	59,804	794,803	23.91	33,241
	12,940,570.90	3,791,172	3,436,500	9,504,071		420,058

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.6 3.25

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.53 PUMPING EQUIPMENT - WATER TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1910	137.73	138	138			
1917	133.00	133	133			
1919	8,727.40	8,727	8,727			
1928	134.45	134	134			
1929	274.09	274	274			
1930	10.36	10	10			
1931	3,609.84	3,610	3,610			
1937	1,084.39	1,084	1,084			
1939	195.67	196	196			
1941	233.57	234	234			
1942	901.65	902	902			
1944	22.40	22	22			
1945	737.81	738	738			
1946	36.51	37	37			
1947	175.93	176	176			
1948	1,721.87	1,710	1,577	145	0.52	145
1950	257.14	253	233	24	1.34	18
1951	14,946.31	14,710	13,562	1,384	1.19	1,163
1952	33,222.64	32,498	29,963	3,260	1.63	2,000
1953	14,955.45	14,537	13,403	1,552	2.07	750
1954	9,834.27	9,496	8,755	1,079	2.53	426
1955	2,307.03	2,212	2,039	268	2.99	90
1956	984.21	937	864	120	3.46	35
1957	15,384.02	14,646	13,503	1,881	3.43	548
1958	3,367.41	3,181	2,933	434	3.92	111
1959	30,581.95	28,661	26,425	4,157	4.42	940
1960	74,885.02	70,092	64,624	10,261	4.44	2,311
1961	172,778.06	160,338	147,830	24,948	4.97	5,020
1962	3,846.01	3,538	3,262	584	5.49	106
1963	22,013.95	20,200	18,624	3,390	5.57	609
1964	33,235.44	30,208	27,851	5,384	6.11	881
1965	199,630.46	179,667	165,651	33,979	6.67	5,094
1966	11,660.13	10,457	9,641	2,019	6.79	297
1967	28,880.66	25,629	23,630	5,251	7.36	713
1968	95,521.75	84,393	77,809	17,713	7.52	2,355
1969	336,092.73	295,493	272,441	63,652	7.69	8,277
1970	5,567.23	4,838	4,461	1,106	8.29	133
1971	51,979.05	44,910	41,407	10,572	8.50	1,244
1972	425,080.09	362,721	334,425	90,655	9.11	9,951
1973	5,713,935.55	4,843,132	4,465,313	1,248,623	9.35	133,543
1974	22,852.56	19,230	17,730	5,123	9.61	533

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.53 PUMPING EQUIPMENT - WATER TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1975	113,415.69	94,702	87,314	26,102	9.88	2,642
1976	72,968.72	60,425	55,711	17,258	10.17	1,697
1977	19,388.63	15,821	14,587	4,802	10.82	444
1978	9,787.72	7,912	7,295	2,493	11.14	224
1979	178,767.53	143,086	131,924	46,844	11.47	4,084
1980	150,308.57	119,044	109,757	40,552	11.82	3,431
1981	506,732.79	396,873	365,912	140,821	12.18	11,562
1982	700,388.66	545,112	502,587	197,802	12.25	16,147
1983	235,697.27	181,157	167,025	68,672	12.64	5,433
1984	314,495.98	238,545	219,936	94,560	13.05	7,246
1985	648,586.85	485,143	447,296	201,291	13.48	14,933
1986	416,712.98	308,784	284,695	132,018	13.63	9,686
1987	694,620.55	506,795	467,259	227,362	14.08	16,148
1988	305,870.14	219,554	202,426	103,444	14.55	7,110
1989	629,840.15	446,683	411,837	218,003	14.76	14,770
1990	4,404,508.55	3,083,156	2,842,635	1,561,874	15.00	104,125
1991	1,021,788.90	701,765	647,019	374,770	15.50	24,179
1992	1,175,752.15	795,396	733,346	442,406	15.78	28,036
1993	1,214,390.97	808,299	745,243	469,148	16.08	29,176
1994	343,463.55	224,660	207,134	136,330	16.39	8,318
1995	3,162,140.70	2,030,094	1,871,724	1,290,417	16.73	77,132
1996	1,081,569.17	680,631	627,534	454,035	17.08	26,583
1997	3,450,086.82	2,125,253	1,959,459	1,490,628	17.45	85,423
1998	1,058,295.76	640,057	590,125	468,171	17.64	26,540
1999	3,220,158.30	1,900,537	1,752,274	1,467,884	18.05	81,323
2000	2,461,862.16	1,421,725	1,310,815	1,151,047	18.29	62,933
2001	2,419,398.53	1,364,541	1,258,091	1,161,308	18.55	62,604
2002	1,318,397.32	721,691	665,391	653,006	19.02	34,333
2003	2,250,239.06	1,202,978	1,109,132	1,141,107	19.15	59,588
2004	383,907.57	199,133	183,598	200,310	19.49	10,278
2005	99,429.78	49,914	46,020	53,410	19.84	2,692
2006	248,585.93	120,912	111,480	137,106	20.06	6,835
2007	1,515,671.60	709,334	653,998	861,674	20.46	42,115
2008	334,620.09	150,746	138,986	195,634	20.74	9,433
2009	188,991.93	81,645	75,276	113,716	21.04	5,405
2010	241,344.53	99,917	92,122	149,223	21.23	7,029
2011	413,172.02	162,542	149,862	263,310	21.59	12,196
2012	466,418.48	174,021	160,446	305,972	21.84	14,010
2013	226,704.84	79,981	73,742	152,963	22.01	6,950
2014	142,593.48	47,056	43,385	99,208	22.33	4,443
2015	387,479.97	118,956	109,676	277,804	22.57	12,309

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.53 PUMPING EQUIPMENT - WATER TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
2016	301,993.38	85,343	78,685	223,308	22.85	9,773
2017	66,657.04	17,171	15,831	50,826	23.06	2,204
2018	902,376.61	209,081	192,771	709,606	23.21	30,573
2019	112,378.15	22,925	21,137	91,241	23.41	3,898
2020	117,333.16	20,533	18,931	98,402	23.57	4,175
2021	477,892.13	69,008	63,624	414,268	23.70	17,480
2022	117,663.33	13,167	12,140	105,523	23.81	4,432
2023	187,006.36	14,437	13,311	173,695	23.91	7,265
	47,853,790.34	30,210,343	27,854,875	19,998,915		1,216,638

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.4 2.54

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 311.54 PUMPING EQUIPMENT - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 39-S0						
NET SALVAGE PERCENT.. 0						
1999	50,052.68	29,541	27,542	22,511	18.05	1,247
2000	490,971.15	283,536	264,352	226,619	18.29	12,390
2001	36,531.40	20,604	19,210	17,321	18.55	934
2002	538,352.70	294,694	274,755	263,598	19.02	13,859
2003	72,336.08	38,671	36,055	36,281	19.15	1,895
2004	292,005.04	151,463	141,215	150,790	19.49	7,737
2005	16,038.24	8,051	7,506	8,532	19.84	430
2006	189,538.24	92,191	85,953	103,585	20.06	5,164
2007	1,122,692.14	525,420	489,870	632,822	20.46	30,930
2008	693,194.93	312,284	291,155	402,040	20.74	19,385
2009	1,320,313.42	570,375	531,784	788,529	21.04	37,478
2010	294,909.64	122,093	113,832	181,078	21.23	8,529
2011	162,273.18	63,838	59,519	102,754	21.59	4,759
2012	147,718.84	55,114	51,385	96,334	21.84	4,411
2013	258,192.41	91,090	84,927	173,265	22.01	7,872
2015	107,975.32	33,148	30,905	77,070	22.57	3,415
2016	297,660.73	84,119	78,427	219,234	22.85	9,594
2017	157,968.28	40,693	37,940	120,028	23.06	5,205
2018	177,536.81	41,135	38,352	139,185	23.21	5,997
2019	27,912.06	5,694	5,309	22,603	23.41	966
2021	3,000.02	433	404	2,596	23.70	110
2022	250,727.13	28,056	26,157	224,570	23.81	9,432
	6,707,900.44	2,892,243	2,696,554	4,011,346		191,739

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.9 2.86

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEW HERSHEY TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2067						
NET SALVAGE PERCENT.. 0						
1992	4,605,057.01	2,872,174	2,682,386	1,922,671	19.91	96,568
1993	236.04	144	134	102	20.36	5
1994	5,203.89	3,130	2,923	2,281	20.55	111
1995	830.13	488	456	374	21.02	18
1996	1,183.76	683	638	546	21.25	26
1998	5,798.79	3,194	2,983	2,816	22.02	128
2001	17,726.99	9,019	8,423	9,304	23.17	402
2008	30,628.68	12,184	11,379	19,250	25.74	748
2009	156,208.55	59,484	55,553	100,655	26.02	3,868
2012	3,190,991.80	1,028,776	960,796	2,230,195	27.32	81,632
2013	143,928.90	43,524	40,648	103,281	27.68	3,731
2014	144,316.86	40,640	37,955	106,362	28.06	3,791
2021	1,294,711.77	146,561	136,877	1,157,835	31.34	36,944
	9,596,823.17	4,220,001	3,941,151	5,655,672		227,972
BANGOR TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2064						
NET SALVAGE PERCENT.. 0						
1989	2,860,588.15	1,884,555	1,760,027	1,100,561	18.64	59,043
1990	10,623.39	6,879	6,424	4,199	19.05	220
1994	8,028.91	4,853	4,532	3,497	20.28	172
2000	691.60	365	341	351	22.39	16
2007	6,598.67	2,779	2,595	4,003	24.74	162
2008	51,019.15	20,642	19,278	31,741	25.02	1,269
2009	13,787.45	5,316	4,965	8,823	25.49	346
2010	29,160.31	10,716	10,008	19,152	25.82	742
2012	25,731.93	8,463	7,904	17,828	26.53	672
2013	10,033.12	3,094	2,890	7,144	26.91	265
2014	10,972.92	3,150	2,942	8,031	27.31	294
	3,027,235.60	1,950,812	1,821,906	1,205,330		63,201

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
MOSHANNON VALLEY						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2043						
NET SALVAGE PERCENT.. 0						
1988	2,378,740.29	1,742,665	1,627,513	751,227	13.51	55,605
1990	6,544.83	4,696	4,386	2,159	13.78	157
1993	8,633.92	5,995	5,599	3,035	14.08	216
1994	35,338.97	24,211	22,611	12,728	14.25	893
1995	21,272.50	14,423	13,470	7,803	14.25	548
2011	15,381.16	7,171	6,697	8,684	16.03	542
	2,465,911.67	1,799,161	1,680,276	785,636		57,961
NORRISTOWN PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
1997	2,183,940.01	1,271,927	1,187,880	996,060	20.08	49,605
1998	48,570.53	27,671	25,843	22,728	20.39	1,115
1999	240,701.03	134,552	125,661	115,040	20.51	5,609
2000	101,268.00	55,191	51,544	49,724	20.87	2,383
2001	327,308.36	174,390	162,867	164,442	21.05	7,812
2023	4,595,785.73	310,675	290,146	4,305,640	27.59	156,058
2025	999,985.12	8,800	8,219	991,767	28.16	35,219
	8,497,558.78	1,983,206	1,852,159	6,645,400		257,801
NORRISTOWN PLANT NO. 2						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2049						
NET SALVAGE PERCENT.. 0						
1982	316.42	235	219	97	14.80	7
1990	59,105.20	40,339	37,673	21,432	16.28	1,316
1995	1,320,282.91	839,700	784,214	536,069	17.17	31,221
1999	3,573,772.17	2,118,532	1,978,543	1,595,229	17.86	89,319
2004	9,652.67	5,108	4,770	4,882	18.68	261
2006	18,839.86	9,414	8,792	10,048	19.02	528
2010	35,600.00	15,379	14,363	21,237	19.72	1,077
2011	9,238.54	3,816	3,564	5,675	19.90	285
2012	111,639.37	43,830	40,934	70,706	20.11	3,516
2013	126,470.76	46,895	43,796	82,675	20.36	4,061

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NORRISTOWN PLANT NO. 2						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2049						
NET SALVAGE PERCENT.. 0						
2014	92,686.99	32,320	30,184	62,503	20.55	3,042
2018	33,127.07	8,209	7,667	25,461	21.25	1,198
2019	110.86	24	22	88	21.40	4
2021	3,397,278.49	527,258	492,418	2,904,861	21.77	133,434
	8,788,121.31	3,691,059	3,447,160	5,340,961		269,269
SILVER SPRINGS FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
1969	592,011.90	484,029	452,045	139,967	12.49	11,206
1970	0.18		0			
1971	85.00	68	64	21	13.11	2
1972	77.00	62	58	19	13.23	1
1973	159.00	126	118	41	13.79	3
1977	915.82	699	653	263	14.89	18
1982	1,483.91	1,072	1,001	483	16.52	29
1984	2,142.27	1,511	1,411	731	17.14	43
1985	5,679.13	3,975	3,712	1,967	17.14	115
1986	274.00	189	177	97	17.50	6
1989	1,399.32	927	866	534	18.35	29
1990	675,240.20	439,581	410,534	264,706	18.76	14,110
1991	1,328,257.42	849,022	792,920	535,337	19.19	27,897
1992	142.08	90	84	58	19.36	3
1994	3,438.13	2,089	1,951	1,487	20.02	74
1995	41,956.14	25,048	23,393	18,563	20.25	917
2000	21,291.43	11,391	10,638	10,653	21.73	490
2001	8,729.22	4,546	4,246	4,484	22.08	203
2004	27,520.99	13,119	12,252	15,269	23.05	662
2007	0.06		0			
2008	38,004.78	15,635	14,602	23,403	24.32	962
2009	43,188.45	16,999	15,876	27,313	24.65	1,108
2011	1,847,904.99	659,702	616,110	1,231,795	25.22	48,842
2012	4,021.14	1,354	1,265	2,757	25.61	108

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SILVER SPRINGS FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
2013	246,296.50	77,731	72,595	173,702	26.02	6,676
2014	12,654.23	3,730	3,484	9,171	26.31	349
2021	4,157,197.84	505,515	472,111	3,685,086	28.89	127,556
	9,060,071.13	3,118,210	2,912,164	6,147,907		241,409
ONEIDA VALLEY TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2047						
NET SALVAGE PERCENT.. 0						
1972	812,923.54	659,200	615,641	197,282	12.36	15,961
1973	4,215.87	3,398	3,173	1,042	12.52	83
1974	84.31	68	64	21	12.69	2
1982	1,397,906.11	1,051,924	982,415	415,492	14.14	29,384
1983	985.80	737	688	297	14.18	21
1984	1,092.20	806	753	339	14.56	23
1985	1,762.52	1,290	1,205	558	14.64	38
1986	158,342.13	114,861	107,271	51,071	14.76	3,460
1987	5,291.21	3,800	3,549	1,742	14.91	117
1990	9,016.06	6,248	5,835	3,181	15.51	205
1994	11,504.67	7,561	7,061	4,443	16.17	275
1996	206,838.17	131,963	123,243	83,595	16.45	5,082
1997	211,238.37	132,489	123,734	87,504	16.64	5,259
1998	143,526.80	88,743	82,879	60,648	16.67	3,638
2006	3,287.36	1,693	1,581	1,706	17.90	95
2007	4,241.17	2,115	1,975	2,266	18.10	125
2008	44,084.18	21,209	19,808	24,277	18.34	1,324
2009	3,924.36	1,821	1,701	2,224	18.48	120
2012	12.52	5	5	8	18.85	
2013	55,551.77	21,465	20,047	35,505	19.06	1,863
2014	2,179.04	793	741	1,438	19.21	75
	3,078,008.16	2,252,189	2,103,368	974,640		67,150

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
TWO LICK CREEK TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2037						
NET SALVAGE PERCENT.. 0						
1906	1,384.00	1,384	1,384			
1909	3,521.00	3,521	3,521			
1910	203.00	203	203			
1924	1,765.00	1,765	1,765			
1927	135.95	136	136			
1928	129.00	128	120	9	1.04	9
1935	11.26	11	11			
1958	29.15	26	24	5	7.63	1
1963	1,322.35	1,172	1,094	228	7.93	29
1965	229,382.77	200,939	187,627	41,756	8.49	4,918
1966	70.40	61	57	13	8.57	2
1967	2.12	2	2			
1969	304,266.24	264,103	246,607	57,660	8.52	6,768
1972	0.36		0			
1973	0.55			1	8.98	
1977	0.27		0			
1982	1,210,091.45	988,645	923,149	286,942	9.63	29,797
1983	68,041.39	55,154	51,500	16,541	9.81	1,686
1987	17,693.12	13,985	13,059	4,635	10.08	460
1988	20,150.57	15,881	14,829	5,322	9.95	535
1989	76,072.02	59,427	55,490	20,582	10.08	2,042
1990	7,021.40	5,431	5,071	1,950	10.25	190
1992	11,166.13	8,512	7,948	3,218	10.29	313
1994	1,181,000.53	882,325	823,873	357,128	10.49	34,045
1996	5,063.26	3,715	3,469	1,594	10.53	151
1997	1,346.73	977	912	434	10.61	41
2000	1,658.35	1,161	1,084	574	10.71	54
2008	8,355.53	5,043	4,709	3,647	11.17	326
2009	44,551.46	26,232	24,494	20,057	11.17	1,796
2013	396,506.56	203,646	190,155	206,352	11.36	18,165
2014	57.46	28	26	31	11.42	3
	3,590,999.38	2,743,613	2,562,320	1,028,679		101,331

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEW CASTLE FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2060						
NET SALVAGE PERCENT.. 0						
2012	301.57	102	95	206	25.31	8
2013	9,677.38	3,089	2,885	6,792	25.59	265
2014	238,533.24	71,107	66,408	172,125	25.90	6,646
2023	5,750,843.24	368,054	343,734	5,407,110	29.25	184,858
2024	11,325,848.33	369,223	344,825	10,981,023	29.67	370,105
2025	4,996,649.02	41,472	38,732	4,957,917	29.96	165,485
	22,321,852.78	853,047	796,679	21,525,174		727,367
E.H. ALDRICH STATION						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1961	65,606.51	57,524	53,723	11,884	8.99	1,322
1962	4,435.82	3,884	3,627	808	8.94	90
1963	403.51	350	327	77	9.43	8
1964	832.83	721	673	159	9.42	17
1966	208.73	179	167	42	9.97	4
1969	424,020.94	358,552	334,860	89,161	10.23	8,716
1970	3,600.49	3,030	2,830	771	10.36	74
1972	6,229.13	5,183	4,841	1,389	10.69	130
1975	14,408.33	11,815	11,034	3,374	10.98	307
1976	4,930.16	4,010	3,745	1,185	11.24	105
1979	5,449.17	4,362	4,074	1,375	11.47	120
1980	1,287.66	1,026	958	329	11.50	29
1981	8,028.21	6,358	5,938	2,090	11.56	181
1982	279,937.54	219,079	204,603	75,335	11.95	6,304
1983	45,908.25	35,671	33,314	12,594	12.05	1,045
1984	1,253.72	972	908	346	11.91	29
1986	1,742.11	1,325	1,237	505	12.28	41
1987	735.37	556	519	216	12.25	18
1988	1,832.57	1,370	1,279	553	12.50	44
1989	954.29	708	661	293	12.54	23
1990	11,746.58	8,634	8,063	3,683	12.62	292
1991	41,265.01	30,024	28,040	13,225	12.73	1,039
1992	970.03	698	652	318	12.87	25
1993	6,934,651.95	4,948,568	4,621,575	2,313,077	12.84	180,146
1994	16,405.51	11,545	10,782	5,623	13.05	431

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
E.H. ALDRICH STATION						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2041						
NET SALVAGE PERCENT.. 0						
1995	1,127,547.25	784,773	732,917	394,631	13.10	30,125
1996	132,634.13	91,159	85,135	47,499	13.19	3,601
1997	2,156,360.03	1,461,150	1,364,600	791,760	13.32	59,441
2000	60,852.83	39,402	36,798	24,054	13.61	1,767
2001	331,596.01	211,691	197,703	133,893	13.59	9,852
2006	13,864.40	7,955	7,429	6,435	14.11	456
2007	28,428.45	15,914	14,862	13,566	14.15	959
2012	4,118,076.59	1,937,967	1,809,910	2,308,167	14.62	157,877
2013	2,058,061.73	923,658	862,624	1,195,437	14.74	81,102
2014	190,158.24	81,160	75,797	114,361	14.77	7,743
2017	143,475.96	49,815	46,523	96,953	15.04	6,446
2018	139,123.52	44,019	41,110	98,013	15.12	6,482
2019	271,899.35	77,002	71,914	199,986	15.19	13,166
2025	2,523,929.05	39,626	37,008	2,486,921	15.65	158,909
	21,172,851.96	11,481,435	10,722,762	10,450,090		738,466
HAYS MINE STATION TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1957	1.93	2	2			
1958	901.16	791	739	162	9.34	17
1959	102.28	90	84	18	9.19	2
1962	143.73	124	116	28	9.99	3
1963	389.35	333	311	78	10.46	7
1967	153.79	128	120	34	11.44	3
1968	2,631.38	2,190	2,045	586	11.49	51
1969	710.54	585	546	164	12.03	14
1971	280.67	229	214	67	12.23	5
1972	2,272.78	1,831	1,710	563	12.79	44
1975	146,388.29	115,647	108,005	38,383	13.29	2,888
1976	18,520.19	14,520	13,561	4,960	13.50	367
1978	0.03		0			
1979	0.07		0			
1980	833.19	630	588	245	14.52	17
1981	357.61	267	249	108	14.82	7
1982	50.40	37	35	16	14.80	1

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
HAYS MINE STATION TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1983	18,840.14	13,848	12,933	5,907	15.14	390
1985	68,113.65	49,042	45,801	22,312	15.56	1,434
1986	198.63	142	133	66	15.64	4
1987	1,075.46	760	710	366	15.76	23
1989	586,385.70	403,199	376,556	209,829	16.36	12,826
1990	7,996,264.72	5,429,464	5,070,695	2,925,570	16.55	176,772
1991	3,520,183.43	2,357,819	2,202,018	1,318,165	16.76	78,649
1993	8,200.33	5,353	4,999	3,201	17.02	188
1994	5,421.33	3,479	3,249	2,172	17.31	125
1995	6,235.18	3,947	3,686	2,549	17.39	147
1996	4,200.01	2,607	2,435	1,765	17.73	100
1997	71,783.45	43,817	40,922	30,862	17.87	1,727
1998	7,323.12	4,389	4,099	3,224	18.05	179
2001	238,913.98	134,747	125,843	113,071	18.55	6,095
2006	38,443.72	18,918	17,668	20,776	19.61	1,059
2008	65,712.44	30,274	28,274	37,439	19.90	1,881
2009	766.45	340	318	449	20.10	22
2010	29,326.64	12,449	11,626	17,700	20.34	870
2012	11,310,167.56	4,366,856	4,078,302	7,231,866	20.67	349,873
2013	25,553.54	9,322	8,706	16,848	20.89	807
2014	91,355.65	31,253	29,188	62,168	21.15	2,939
2017	197,433.24	53,228	49,711	147,722	21.67	6,817
2018	193,994.43	46,985	43,880	150,114	21.90	6,855
2023	6,716,630.69	538,674	503,079	6,213,551	22.94	270,861
2025	3,036,104.08	32,183	30,056	3,006,048	23.33	128,849
	34,412,364.96	13,730,499	12,823,212	21,589,153		1,052,918
SUSQUEHANNA FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2070						
NET SALVAGE PERCENT.. 0						
1920	2.00	2	2			
1927	119.00	119	119			
1929	5,945.58	5,879	5,490	455	1.09	417
1931	5,319.00	5,250	4,903	416	1.24	335
1947	278.00	258	241	37	6.03	6
1954	493.00	445	416	77	7.74	10

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SUSQUEHANNA FILTER PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2070						
NET SALVAGE PERCENT.. 0						
1956	179.54	160	149	30	8.52	4
1957	631.36	558	521	110	8.92	12
1963	842.00	720	672	170	10.46	16
1973	26,394.70	20,862	19,483	6,911	13.79	501
1979	391.74	292	273	119	15.73	8
1982	7,848.56	5,670	5,295	2,553	16.52	155
1984	1,071.66	751	701	370	17.48	21
1985	34,553.31	23,911	22,331	12,222	17.80	687
1986	19,163.69	13,079	12,215	6,949	18.14	383
1990	8,393.40	5,405	5,048	3,346	19.35	173
1995	1,937,167.63	1,133,243	1,058,353	878,814	21.28	41,298
1998	37.76	21	20	18	22.26	1
2008	12,798.62	5,048	4,714	8,084	26.10	310
2009	27,067.43	10,177	9,504	17,563	26.55	662
2010	27,009.76	9,642	9,005	18,005	27.02	666
2011	5,393.93	1,820	1,700	3,694	27.49	134
2012	68,345.06	21,768	20,329	48,016	27.82	1,726
2014	10,788.07	2,979	2,782	8,006	28.84	278
	2,200,234.80	1,268,059	1,184,268	1,015,967		47,803
YARDLEY - MILL ROAD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. 0						
1997	4,036,898.44	2,351,090	2,195,734	1,841,165	20.08	91,691
1998	636,566.96	362,652	338,689	297,878	20.39	14,609
1999	22,865.33	12,782	11,937	10,928	20.51	533
2001	3,473.57	1,851	1,729	1,745	21.05	83
2007	40,599.49	17,904	16,721	23,879	22.82	1,046
2008	19,404.61	8,247	7,702	11,703	23.00	509
2010	38,695.00	15,033	14,040	24,655	23.61	1,044
2012	12,166.56	4,255	3,974	8,193	24.17	339
2013	106,076.97	34,878	32,573	73,504	24.50	3,000
2014	22,389.82	6,896	6,440	15,949	24.71	645
2021	2,288,196.39	296,550	276,954	2,011,242	26.86	74,879
	7,227,333.14	3,112,138	2,906,493	4,320,840		188,378

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SCRANTON WTP						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	6,068,557.86	4,120,551	3,848,272	2,220,286	16.55	134,156
1991	10,808.16	7,239	6,761	4,048	16.76	242
1992	63.36	42	39	24	17.00	1
1993	1,858.78	1,213	1,133	726	17.02	43
1994	2,129.12	1,366	1,276	853	17.31	49
1995	42,181.67	26,701	24,937	17,245	17.39	992
1998	71.71	43	40	32	18.05	2
1999	13,304.56	7,818	7,301	6,003	18.25	329
2000	35,457.33	20,388	19,041	16,417	18.48	888
2001	1,233.88	696	650	584	18.55	31
2003	779.79	419	391	388	18.98	20
2004	1,532.72	801	748	785	19.16	41
2007	36,939.80	17,620	16,456	20,484	19.74	1,038
2008	184,433.05	84,968	79,353	105,080	19.90	5,280
2009	133,091.40	58,986	55,088	78,003	20.10	3,881
2010	32,619.58	13,847	12,932	19,688	20.34	968
2012	31,903.15	12,318	11,504	20,399	20.67	987
2013	528.32	193	180	348	20.89	17
2014	77,664.18	26,569	24,813	52,851	21.15	2,499
2017	19,208.64	5,179	4,837	14,372	21.67	663
	6,694,367.06	4,406,957	4,115,753	2,578,614		152,127
BROWNELL WTP						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1990	2,297,805.71	1,560,210	1,457,114	840,691	16.55	50,797
1991	121,464.63	81,357	75,981	45,484	16.76	2,714
1992	1,960.79	1,294	1,208	752	17.00	44
1993	35.91	23	21	14	17.02	1
1995	601.31	381	356	245	17.39	14
1999	5.76	3	3	3	18.25	
2000	2,758.46	1,586	1,481	1,277	18.48	69
2001	375.44	212	198	177	18.55	10
2006	8,629.98	4,247	3,966	4,664	19.61	238
2007	58.48	28	26	32	19.74	2

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BROWNELL WTP						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
2009	16,915.26	7,497	7,002	9,914	20.10	493
2010	7,308.81	3,103	2,898	4,411	20.34	217
2012	119,943.23	46,310	43,250	76,693	20.67	3,710
2013	41,899.64	15,285	14,275	27,625	20.89	1,322
2014	19,329.32	6,613	6,176	13,153	21.15	622
2019	1,090.61	233	218	873	22.09	40
	2,640,183.34	1,728,382	1,614,174	1,026,009		60,293
CHINCHILLA WTP						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2050						
NET SALVAGE PERCENT.. 0						
1893	14,836.59	14,837	14,837			
1907	187.12	187	187			
1910	1,427.96	1,428	1,428			
1921	42,429.29	42,429	42,429			
1990	1,459,927.15	991,291	922,421	537,506	16.55	32,478
1991	125,225.99	83,876	78,049	47,177	16.76	2,815
1992	1,469.28	970	903	567	17.00	33
1993	650.89	425	395	255	17.02	15
1994	2,419.58	1,553	1,445	974	17.31	56
1995	10,944.29	6,928	6,447	4,498	17.39	259
1997	674.81	412	383	291	17.87	16
1998	244.82	147	137	108	18.05	6
1999	163.20	96	89	74	18.25	4
2001	18,845.86	10,629	9,891	8,955	18.55	483
2005	80,991.72	41,144	38,286	42,706	19.37	2,205
2008	16,964.75	7,816	7,273	9,692	19.90	487
	1,777,403.30	1,204,168	1,124,599	652,804		38,857

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YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NESBITT WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2048						
NET SALVAGE PERCENT.. 0						
1988	3,047,363.02	2,153,571	2,011,267	1,036,096	15.36	67,454
1989	20,213.19	14,117	13,184	7,029	15.55	452
1990	4,961.45	3,421	3,195	1,767	15.76	112
1991	16,130.80	10,969	10,244	5,887	16.00	368
1992	1,148.36	769	718	430	16.26	26
1993	6,916.77	4,582	4,279	2,638	16.31	162
1994	1,753.58	1,142	1,067	687	16.62	41
1995	17,326.81	11,124	10,389	6,938	16.73	415
1997	1,057.68	657	614	444	17.05	26
1998	3,562.34	2,174	2,030	1,532	17.25	89
1999	52,859.37	31,747	29,649	23,210	17.29	1,342
2000	14,759.96	8,671	8,098	6,662	17.55	380
2001	577.08	332	310	267	17.67	15
2007	20,878.82	10,260	9,582	11,297	18.63	606
2008	8,002.36	3,796	3,545	4,457	18.84	237
2009	39,060.79	17,874	16,693	22,368	18.97	1,179
2010	14,986.30	6,564	6,130	8,856	19.25	460
2012	81,800.26	32,646	30,489	51,311	19.57	2,622
2013	32,118.74	12,141	11,339	20,780	19.75	1,052
2014	28,769.10	10,253	9,575	19,194	19.86	966
2016	562,914.51	173,265	161,816	401,099	20.24	19,817
2018	85,920.60	21,832	20,389	65,531	20.55	3,189
	4,063,081.89	2,531,907	2,364,603	1,698,479		101,010
CRYSTAL LAKE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2052						
NET SALVAGE PERCENT.. 0						
1992	4,751,108.26	3,104,374	2,899,242	1,851,866	17.51	105,760
1993	54,356.78	34,962	32,652	21,705	17.75	1,223
1995	32,030.36	19,987	18,666	13,364	18.08	739
1997	3,078.16	1,853	1,731	1,348	18.51	73
1998	3,543.58	2,086	1,948	1,595	18.87	85
2000	3,463.67	1,957	1,828	1,636	19.25	85
2001	1,211.20	669	625	586	19.48	30
2007	5,025.88	2,334	2,180	2,846	20.76	137
2008	8,813.12	3,955	3,694	5,119	20.88	245

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CRYSTAL LAKE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2052						
NET SALVAGE PERCENT.. 0						
2009	33,412.18	14,381	13,431	19,981	21.17	944
2010	3,395.99	1,401	1,308	2,088	21.36	98
2012	39,565.46	14,762	13,787	25,779	21.84	1,180
2013	53,719.47	18,952	17,700	36,020	22.01	1,637
2014	49,390.50	16,353	15,272	34,118	22.22	1,535
2019	2,864.92	584	545	2,320	23.41	99
	5,044,979.53	3,238,610	3,024,608	2,020,372		113,870
CEASETOWN WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
1993	7,988,456.15	5,112,612	4,774,780	3,213,676	18.00	178,538
1994	44,194.91	27,812	25,974	18,221	18.26	998
1995	116,941.50	72,270	67,495	49,447	18.54	2,667
1997	111,789.69	66,671	62,266	49,524	18.95	2,613
1998	3,366.88	1,973	1,843	1,524	19.08	80
1999	532.85	305	285	248	19.45	13
2000	9,264.78	5,188	4,845	4,420	19.64	225
2001	43,265.97	23,675	22,111	21,155	19.86	1,065
2006	0.33		0			
2007	9,549.60	4,383	4,093	5,456	21.22	257
2008	2,264.03	1,001	935	1,329	21.46	62
2009	26,199.97	11,151	10,414	15,786	21.59	731
2010	165,181.88	67,146	62,709	102,473	21.90	4,679
2012	34,593.21	12,727	11,886	22,707	22.34	1,016
2013	128,885.26	44,697	41,743	87,142	22.60	3,856
2014	37,093.23	12,078	11,280	25,813	22.78	1,133
2019	8,081.58	1,615	1,508	6,573	24.03	274
	8,729,661.82	5,465,304	5,104,167	3,625,495		198,207

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WATRES WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2053						
NET SALVAGE PERCENT.. 0						
1993	8,769,938.43	5,612,761	5,241,880	3,528,058	18.00	196,003
1994	463,999.38	291,995	272,701	191,299	18.26	10,476
1995	152,290.96	94,116	87,897	64,394	18.54	3,473
1996	1,500.56	914	854	647	18.62	35
1998	91.08	53	49	42	19.08	2
2000	2,132.55	1,194	1,115	1,017	19.64	52
2001	3,188.33	1,745	1,630	1,559	19.86	78
2003	1,537.06	801	748	789	20.19	39
2008	38,154.92	16,864	15,750	22,405	21.46	1,044
2009	16,416.46	6,987	6,525	9,891	21.59	458
2010	6,304.52	2,563	2,394	3,911	21.90	179
2012	36,404.23	13,393	12,508	23,896	22.34	1,070
2013	70,933.95	24,600	22,974	47,959	22.60	2,122
2014	19,921.37	6,486	6,057	13,864	22.78	609
	9,582,813.80	6,074,472	5,673,082	3,909,732		215,640
HUNTSVILLE WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2075						
NET SALVAGE PERCENT.. 0						
1999	5,824,071.00	3,089,087	2,884,966	2,939,105	23.02	127,676
2001	40,700.36	20,415	19,066	21,634	23.85	907
2007	10,162.55	4,134	3,861	6,302	26.25	240
2008	6,430.94	2,493	2,328	4,103	26.86	153
2009	20,153.37	7,449	6,957	13,197	27.29	484
2010	6,227.91	2,186	2,042	4,186	27.74	151
2012	14,664.07	4,575	4,273	10,391	28.67	362
2013	49,081.55	14,312	13,366	35,715	29.15	1,225
2014	41,390.35	11,200	10,460	30,930	29.65	1,043
	6,012,882.10	3,155,851	2,947,318	3,065,564		132,241

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WEST SHORE REGIONAL TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2081						
NET SALVAGE PERCENT.. 0						
1995	40,740.27	23,711	22,144	18,596	21.55	863
2006	5,492,101.10	2,306,133	2,153,748	3,338,353	26.25	127,175
2008	14,881.08	5,717	5,339	9,542	27.25	350
2009	10,105.34	3,703	3,458	6,647	27.67	240
2011	20,843.84	6,828	6,377	14,467	28.74	503
2012	159,124.19	49,026	45,786	113,338	29.19	3,883
2013	12,202.19	3,514	3,282	8,920	29.67	301
2014	523,557.86	139,371	130,162	393,396	30.32	12,975
2021	1,065,817.06	110,845	103,521	962,296	34.46	27,925
	7,339,372.93	2,648,848	2,473,817	4,865,556		174,215
MCMURRAY/SAXONBURG						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
1992	45,446.78	28,645	26,752	18,695	19.36	966
2011	3,266,953.16	1,166,302	1,089,235	2,177,718	25.22	86,349
2012	3,336.82	1,124	1,050	2,287	25.61	89
2018	2,859,613.70	576,498	538,404	2,321,210	27.72	83,738
	6,175,350.46	1,772,569	1,655,441	4,519,909		171,142
ROCK RUN FILTRATION PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
1992	83,844.40	52,847	49,355	34,489	19.36	1,781
2011	4,500,958.20	1,606,842	1,500,665	3,000,293	25.22	118,965
2012	14,226.50	4,790	4,473	9,753	25.61	381
2013	30,099.87	9,500	8,872	21,228	26.02	816
2014	32,609.09	9,613	8,978	23,631	26.31	898
2017	8,626.95	1,953	1,824	6,803	27.34	249

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
ROCK RUN FILTRATION PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2061						
NET SALVAGE PERCENT.. 0						
2019	144,547.37	25,411	23,732	120,815	28.13	4,295
2023	1,246,425.00	78,525	73,336	1,173,089	29.75	39,432
2025	2,000,000.00	16,200	15,130	1,984,870	30.52	65,035
	8,061,337.38	1,805,681	1,686,365	6,374,972		231,852
ELLWOOD TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
2018	38,365,682.82	6,848,274	6,395,751	31,969,931	32.22	992,239
2019	840,408.61	130,095	121,499	718,910	32.76	21,945
	39,206,091.43	6,978,369	6,517,250	32,688,841		1,014,184
MONTROSE TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2078						
NET SALVAGE PERCENT.. 0						
2018	4,704,312.56	839,720	784,233	3,920,079	32.22	121,666
2019	12,721.29	1,969	1,839	10,882	32.76	332
2023	2,170,110.56	116,318	108,632	2,061,479	35.31	58,382
	6,887,144.41	958,007	894,704	5,992,440		180,380
STEELTON WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2043						
NET SALVAGE PERCENT.. 0						
2023	1,443,761.07	149,862	139,959	1,303,802	17.27	75,495
	1,443,761.07	149,862	139,959	1,303,802		75,495

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BUTLER WATER TREATMENT PLANT						
INTERIM SURVIVOR CURVE.. IOWA 50-S1						
PROBABLE RETIREMENT YEAR.. 6-2082						
NET SALVAGE PERCENT.. 0						
2023	3,683,107.12	193,731	180,930	3,502,177	36.02	97,229
2024	4,451,484.43	117,964	110,169	4,341,315	36.74	118,163
	8,134,591.55	311,695	291,099	7,843,493		215,392
OTHER LARGE STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1983	4,598.17	3,283	3,066	1,532	16.82	91
1984	6,970.48	4,887	4,564	2,406	17.48	138
1985	108,771.54	74,835	69,890	38,882	18.14	2,143
1986	154,227.74	104,057	97,181	57,047	18.80	3,034
1987	16,473.83	10,955	10,231	6,243	19.14	326
1988	63,901.34	41,613	38,863	25,038	19.82	1,263
1989	349,221.76	222,524	207,820	141,402	20.50	6,898
1990	231,603.63	144,289	134,755	96,849	21.18	4,573
1991	75,963.09	46,231	43,176	32,787	21.87	1,499
1992	4,330.58	2,572	2,402	1,929	22.56	86
1993	2,784.69	1,613	1,506	1,278	23.25	55
1994	621,264.86	350,518	327,356	293,908	23.95	12,272
1995	64,247.28	35,272	32,941	31,306	24.64	1,271
1996	391,740.79	209,033	195,220	196,520	25.35	7,752
1997	138,477.91	71,732	66,992	71,486	26.05	2,744
1998	931.76	468	437	495	26.76	18
1999	20.60	10	9	11	27.48	
2000	1,957.86	920	859	1,099	28.19	39
2001	647.58	294	275	373	28.91	13
2002	706,624.21	308,795	288,390	418,234	29.63	14,115
2003	161,355.80	67,802	63,322	98,034	30.36	3,229
2004	29,459.51	11,878	11,093	18,366	31.08	591
2005	38,405.49	14,825	13,845	24,560	31.81	772
2006	724,982.38	267,229	249,571	475,411	32.55	14,606
2007	332,980.36	116,876	109,153	223,827	33.28	6,726
2008	263,668.60	87,854	82,049	181,620	34.02	5,339
2009	330,844.66	104,282	97,391	233,453	34.76	6,716
2010	1,753.96	521	487	1,267	35.51	36
2011	102,816.57	28,501	26,618	76,199	36.51	2,087
2012	1,238,112.54	320,300	299,135	938,977	37.25	25,207

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.1 PURIFICATION SYSTEM - LARGE STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER LARGE STRUCTURES						
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
2013	844,581.32	202,700	189,306	655,275	38.00	17,244
2014	270,709.11	59,854	55,899	214,810	38.75	5,543
2016	161,550.58	29,515	27,565	133,986	40.26	3,328
2017	231,859.08	37,839	35,339	196,520	41.02	4,791
2018	1,122,318.55	160,267	149,677	972,642	42.02	23,147
2019	1,936,557.05	238,197	222,457	1,714,100	42.78	40,068
2020	684,150.79	70,468	65,812	618,339	43.54	14,202
2021	1,723,408.48	142,698	133,269	1,590,140	44.31	35,887
2023	1,006,919.92	42,291	39,496	967,423	45.62	21,206
2024	3,920,556.97	83,508	77,990	3,842,567	45.95	83,625
2025	3,144,672.80	16,981	15,859	3,128,814	46.05	67,944
9999	69,357.27-	12,221-	11,413-	57,944-		1,440-
	21,147,066.95	3,726,066	3,479,854	17,667,213		439,184
	278,379,455.86	98,360,177	91,860,711	186,518,744		7,555,115
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					24.7	2.71

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.18 PURIFICATION SYSTEM - LARGE STRUCTURES PAINT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1982	50,562.15	50,562	50,562			
1997	52,683.58	52,684	52,684			
	103,245.73	103,246	103,246			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.19 PURIFICATION SYSTEM - LARGE STRUCTURES PAINT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1983	72,520.43	72,520	72,520			
1984	121,617.90	121,618	121,618			
1985	126,432.86	126,433	126,433			
1986	103,281.57	103,282	103,282			
1987	104,997.90	104,998	104,998			
1988	44,292.18	44,292	44,292			
1989	6,520.49	6,520	6,520			
1991	1,937.55	1,938	1,938			
1994	36.73	37	37			
1996	174,603.42	174,603	174,603			
1997	243,625.95	243,626	243,626			
1998	175,497.41	175,497	175,497			
1999	471,219.17	471,219	471,219			
2004	475,875.22	475,875	475,875			
2005	604,791.57	604,792	604,792			
2007	198,308.24	198,308	198,308			
2008	114,399.73	114,400	114,400			
2015	11,632.92	11,633	11,633			
2021	616,354.70	246,542	168,530	447,825	6.00	74,638
	3,667,945.94	3,298,133	3,220,121	447,825		74,638

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.0 2.03

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.2 PURIFICATION SYSTEM - CHEMICAL TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 42-R0.5						
NET SALVAGE PERCENT.. 0						
1968	58,309.00	49,189	35,816	22,493	10.57	2,128
1973	1,136.00	916	667	469	12.52	37
1978	515.00	395	288	227	14.35	16
1979	1,133.00	860	626	507	14.61	35
1980	1,409.00	1,059	771	638	14.88	43
1981	327.00	243	177	150	15.17	10
1985	311,748.52	219,471	159,801	151,948	16.82	9,034
1986	1,164,999.72	808,743	588,862	576,138	17.18	33,535
1987	462,622.46	316,434	230,402	232,220	17.56	13,224
1988	76,885.37	51,775	37,698	39,187	17.95	2,183
1989	841,151.31	557,179	405,694	435,457	18.35	23,731
1990	332,454.04	217,591	158,433	174,021	18.48	9,417
1991	553,781.09	355,860	259,109	294,672	18.91	15,583
1992	3,446,655.12	2,172,427	1,581,789	1,864,866	19.36	96,326
1993	81,414.69	50,282	36,611	44,804	19.81	2,262
1994	614,146.29	373,155	271,702	342,444	20.02	17,105
1995	3,911,796.03	2,323,607	1,691,866	2,219,930	20.51	108,236
1996	1,853,856.81	1,080,613	786,817	1,067,040	20.75	51,424
1997	2,878,539.71	1,644,222	1,197,192	1,681,348	21.02	79,988
1998	1,809,959.36	1,006,699	732,998	1,076,961	21.54	49,998
1999	6,345,087.50	3,447,921	2,510,503	3,834,584	21.85	175,496
2000	67,414.12	35,729	26,015	41,399	22.17	1,867
2001	2,204,570.39	1,137,558	828,279	1,376,291	22.51	61,141
2002	70,218.45	35,208	25,636	44,582	22.87	1,949
2003	1,786,843.81	872,695	635,427	1,151,417	23.05	49,953
2004	1,819,655.41	859,787	626,029	1,193,626	23.44	50,923
2005	2,002,545.93	917,166	667,808	1,334,738	23.67	56,389
2006	526,670.33	233,157	169,766	356,904	23.92	14,921
2007	2,035,443.29	868,320	632,242	1,403,201	24.19	58,007
2008	1,415,369.46	579,877	422,220	993,149	24.49	40,553
2009	191,577.13	75,405	54,904	136,673	24.65	5,545
2010	509,054.15	191,659	139,551	369,503	24.84	14,875
2011	1,146,748.26	410,995	299,254	847,494	25.06	33,819
2012	1,136,860.27	387,215	281,939	854,921	25.17	33,966
2013	339,784.34	109,275	79,565	260,219	25.31	10,281
2014	495,703.91	149,950	109,182	386,522	25.36	15,241
2015	3,806,143.49	1,077,139	784,287	3,021,856	25.34	119,252
2016	5,334,413.96	1,397,083	1,017,245	4,317,169	25.36	170,235
2017	2,475,679.43	596,144	434,065	2,041,614	25.22	80,952
2018	378,846.52	82,475	60,052	318,795	25.15	12,676
2019	3,405,429.28	662,015	482,027	2,923,402	24.86	117,595

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.2 PURIFICATION SYSTEM - CHEMICAL TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 42-R0.5						
NET SALVAGE PERCENT.. 0						
2020	7,393,497.77	1,253,198	912,479	6,481,019	24.50	264,531
2021	9,708,401.08	1,390,243	1,012,265	8,696,136	23.93	363,399
2022	16,469,878.90	1,892,389	1,377,887	15,091,992	23.11	653,050
2023	17,410,670.86	1,455,532	1,059,803	16,350,868	21.92	745,934
2024	15,547,771.83	752,512	547,920	14,999,852	19.66	762,963
2025	37,356,227.61	545,401	397,118	36,959,110	16.82	2,197,331
9999	42,367.00-	8,656-	6,303-	36,064-		1,757-
	159,740,980.00	32,638,112	23,764,484	135,976,496		6,625,402

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.5 4.15

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.29 PURIFICATION SYSTEM - CHEMICAL TREATMENT PAINT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FULLY ACCRUED						
NET SALVAGE PERCENT.. 0						
1985	8,167.87	8,168	8,168			
	8,167.87	8,168	8,168			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.3 GRANULAR ACTIVATED CARBON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 11-L0.5						
NET SALVAGE PERCENT.. 0						
1992	587.90	559	588			
1994	2,896.64	2,721	2,877	20	2.00	10
1995	20,908.20	19,570	20,692	216	2.05	105
1996	17,685.21	16,463	17,407	278	2.15	129
1998	22,991.90	21,169	22,383	609	2.33	261
1999	8,431.15	7,716	8,159	272	2.41	113
2000	276,838.38	251,231	265,639	11,199	2.55	4,392
2001	569,241.97	512,318	541,700	27,542	2.67	10,315
2002	243,905.13	217,661	230,144	13,761	2.77	4,968
2003	36,237.68	31,969	33,802	2,436	2.94	829
2007	126,746.15	106,087	112,171	14,575	3.51	4,152
2008	21,400.84	17,609	18,619	2,782	3.66	760
2009	276,204.26	222,731	235,505	40,699	3.84	10,599
2010	240,605.20	189,838	200,725	39,880	4.01	9,945
2011	729,803.42	561,949	594,177	135,626	4.18	32,446
2012	384,414.78	288,350	304,887	79,528	4.33	18,367
2013	1,283,707.69	931,972	985,421	298,287	4.53	65,847
2014	625,768.38	438,476	463,623	162,145	4.70	34,499
2015	41,591.21	27,949	29,552	12,039	4.88	2,467
2016	106,939.75	68,527	72,457	34,483	5.04	6,842
2017	436,302.23	264,225	279,379	156,923	5.21	30,120
2018	1,467,472.65	831,030	878,690	588,783	5.36	109,848
2019	1,317,000.07	687,474	726,901	590,099	5.49	107,486
2020	638,980.41	300,640	317,882	321,098	5.63	57,033
2021	755,179.12	309,019	326,742	428,437	5.78	74,124
2022	2,647,016.04	889,397	940,405	1,706,611	5.93	287,793
2023	708,307.90	175,660	185,734	522,574	6.06	86,233
2024	841,555.53	118,659	125,464	716,092	6.09	117,585
2025	522,010.79	20,776	21,968	500,043	6.03	82,926
	14,370,730.58	7,531,745	7,963,693	6,407,038		1,160,194

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.5 8.07

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 320.37 WASTE HANDLING AND TREATMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-R3						
NET SALVAGE PERCENT.. 0						
1991	5,386,080.62	4,797,921	5,270,819	115,262	4.17	27,641
1997	554,507.65	450,260	494,639	59,869	6.48	9,239
1999	1,543,930.31	1,200,251	1,318,552	225,378	7.44	30,293
2000	740,153.90	560,667	615,928	124,226	8.00	15,528
2002	3,054.48	2,185	2,400	654	9.15	71
2003	248,537.71	172,237	189,213	59,325	9.75	6,085
2004	52,652.08	35,272	38,749	13,903	10.35	1,343
2005	13,662.87	8,826	9,696	3,967	10.96	362
2013	14,903.89	6,278	6,897	8,007	16.49	486
2014	581,757.71	226,536	248,864	332,894	17.25	19,298
2015	1,021,552.10	364,694	400,639	620,913	18.01	34,476
2016	3,690,373.58	1,195,681	1,313,531	2,376,843	18.78	126,562
2017	16,426.52	4,770	5,240	11,187	19.55	572
2023	782,414.32	59,620	65,496	716,918	24.25	29,564
2024	3,350,000.00	129,310	142,056	3,207,944	24.91	128,781
2025	1,048,862.03	10,279	11,292	1,037,570	25.20	41,173
	19,048,869.77	9,224,787	10,134,011	8,914,859		471,474

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.9 2.48

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
1929	1,096.36	979	962	134	11.53	12
1931	3,482.91	3,110	3,056	427	11.26	38
1933	47.02	42	41	6	12.17	
1935	223.36	195	192	31	13.09	2
1938	5,549.30	4,780	4,697	852	14.01	61
1940	13,136.81	11,278	11,082	2,055	14.01	147
1941	7,036.25	5,970	5,866	1,170	15.01	78
1943	55.91	47	46	10	15.09	1
1949	18,409.84	14,971	14,710	3,700	17.46	212
1950	10,051.26	8,142	8,000	2,051	17.59	117
1951	76,096.87	61,380	60,312	15,785	17.74	890
1952	952.91	765	752	201	17.91	11
1953	695,264.87	555,656	545,987	149,278	18.09	8,252
1954	156,667.71	123,470	121,322	35,346	19.09	1,852
1955	53,934.62	42,285	41,549	12,386	19.29	642
1956	44,605.87	34,779	34,174	10,432	19.50	535
1957	77,668.18	60,208	59,160	18,508	19.72	939
1958	70,312.18	54,176	53,233	17,079	19.96	856
1959	154,235.49	118,083	116,028	38,207	20.21	1,890
1960	22,761.47	17,310	17,009	5,752	20.47	281
1961	372,818.92	281,553	276,654	96,165	20.75	4,634
1962	174,146.75	129,461	127,208	46,939	21.75	2,158
1963	14,149.93	10,440	10,258	3,892	22.03	177
1964	42,649.09	31,219	30,676	11,973	22.33	536
1965	52,969.60	38,456	37,787	15,183	22.64	671
1966	370,529.85	266,707	262,066	108,464	22.97	4,722
1967	760,395.76	542,466	533,027	227,369	23.30	9,758
1968	266,565.29	188,408	185,130	81,435	23.65	3,443
1969	79,659.93	55,762	54,792	24,868	24.00	1,036
1970	66,110.41	46,178	45,374	20,736	23.74	873
1971	356,872.59	246,670	242,378	114,495	24.12	4,747
1972	164,504.48	112,472	110,515	53,989	24.52	2,202
1973	3,358,901.26	2,270,617	2,231,108	1,127,793	24.92	45,257
1974	661,607.33	442,020	434,329	227,278	25.34	8,969
1975	371,967.27	245,498	241,226	130,741	25.76	5,075
1976	384,243.50	250,411	246,054	138,190	26.19	5,276
1977	197,410.90	126,975	124,766	72,645	26.63	2,728
1978	428,438.88	273,858	269,093	159,346	26.53	6,006
1979	291,869.92	183,936	180,735	111,135	26.99	4,118
1980	1,033.31	642	631	402	27.46	15
1981	52,552.93	32,141	31,582	20,971	27.94	751

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
1982	1,014,291.22	610,603	599,978	414,313	28.43	14,573
1983	1,340,585.40	799,525	785,613	554,972	28.42	19,528
1984	31,223.74	18,306	17,987	13,237	28.93	458
1985	1,680,311.91	967,860	951,019	729,293	29.44	24,772
1986	1,725,386.13	982,435	965,340	760,046	29.49	25,773
1987	232,997.26	130,152	127,887	105,110	30.03	3,500
1988	3,002,056.00	1,643,926	1,615,321	1,386,735	30.57	45,363
1989	4,956,679.96	2,676,607	2,630,033	2,326,647	30.67	75,861
1990	5,954,731.25	3,147,075	3,092,315	2,862,416	31.23	91,656
1991	656,690.55	341,610	335,666	321,025	31.36	10,237
1992	1,280,592.51	650,797	639,473	641,120	31.94	20,073
1993	7,454,573.65	3,721,323	3,656,571	3,798,003	32.10	118,318
1994	1,978,146.64	962,764	946,012	1,032,135	32.69	31,573
1995	1,548,158.60	738,472	725,622	822,537	32.89	25,009
1996	3,270,192.86	1,517,369	1,490,966	1,779,227	33.50	53,111
1997	2,230,949.22	1,011,959	994,351	1,236,598	33.73	36,662
1998	1,191,140.03	527,437	518,259	672,881	33.98	19,802
1999	4,998,972.15	2,144,559	2,107,243	2,891,729	34.61	83,552
2000	3,622,751.22	1,512,499	1,486,181	2,136,570	34.88	61,255
2001	4,941,673.18	2,004,343	1,969,467	2,972,206	35.17	84,510
2002	2,237,572.24	874,891	859,668	1,377,904	35.82	38,467
2003	2,370,999.42	897,186	881,575	1,489,424	36.14	41,213
2004	1,904,185.06	695,789	683,682	1,220,503	36.47	33,466
2005	3,770,723.63	1,327,295	1,304,200	2,466,524	36.82	66,989
2006	2,841,468.37	960,985	944,264	1,897,204	37.18	51,028
2007	1,514,737.58	490,775	482,235	1,032,503	37.56	27,489
2008	233,273.19	72,175	70,919	162,354	37.95	4,278
2009	24,550.88	7,228	7,102	17,449	38.35	455
2010	788,910.07	220,106	216,276	572,634	38.76	14,774
2011	256,747.12	67,576	66,400	190,347	39.19	4,857
2012	222,122.43	54,864	53,909	168,213	39.63	4,245
2013	4,233,060.05	975,297	958,327	3,274,733	40.08	81,705
2014	6,021,853.53	1,285,064	1,262,704	4,759,150	40.55	117,365
2015	374,150.17	73,333	72,057	302,093	41.02	7,365
2016	8,352,606.94	1,495,952	1,469,922	6,882,685	41.25	166,853
2017	5,236,391.73	842,012	827,361	4,409,031	41.75	105,606
2018	3,538,127.91	502,768	494,020	3,044,108	42.26	72,033
2019	3,408,488.61	421,289	413,958	2,994,531	42.54	70,393
2020	2,140,686.47	223,702	219,810	1,920,876	42.85	44,828
2021	2,320,024.41	195,810	192,403	2,127,621	43.39	49,035
2022	3,445,902.14	221,227	217,377	3,228,525	43.73	73,829

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
2023	7,948,214.82	344,953	338,951	7,609,264	44.08	172,624
2024	6,494,581.58	143,530	141,032	6,353,550	44.25	143,583
2025	19,239,236.39	107,740	105,866	19,133,370	44.39	431,029
9999	3,309,408.10-	991,323-	974,074-	2,335,334-		60,978-
	148,602,297.21	44,513,361	43,738,815	104,863,482		2,738,085
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					38.3	1.84

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.1 ELEVATED TANKS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
1992	189,738.86	96,425	91,774	97,965	31.94	3,067
1994	0.01					
2007	112,587.14	36,478	34,719	77,868	37.56	2,073
2008	452,291.74	139,939	133,189	319,103	37.95	8,409
2009	610,424.47	179,709	171,041	439,383	38.35	11,457
2010	1,113,481.79	310,661	295,677	817,805	38.76	21,099
2011	1.21			1	39.19	
2012	70,427.57	17,396	16,557	53,871	39.63	1,359
2013	7,305,295.40	1,683,140	1,601,957	5,703,338	40.08	142,299
2014	402,306.06	85,852	81,711	320,595	40.55	7,906
2015	75,692.00	14,836	14,120	61,572	41.02	1,501
2017	22,485.50	3,616	3,442	19,044	41.75	456
2018	41,920.13	5,957	5,670	36,250	42.26	858
2019	3,889.76	481	458	3,432	42.54	81
2021	3,744,315.33	316,020	300,777	3,443,538	43.39	79,362
2024	10,427,575.40	230,449	219,334	10,208,241	44.25	230,695
	24,572,432.37	3,120,959	2,970,426	21,602,006		510,622

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 42.3 2.08

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.2 GROUND LEVEL FACILITIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
2007	697,456.92	225,976	181,691	515,766	37.56	13,732
2008	36,106.35	11,171	8,982	27,124	37.95	715
2009	20,943.90	6,166	4,958	15,986	38.35	417
2010	12,681.91	3,538	2,845	9,837	38.76	254
2011	253,273.91	66,662	53,598	199,676	39.19	5,095
2012	1,887,852.66	466,300	374,918	1,512,935	39.63	38,177
2013	4,991,972.34	1,150,150	924,752	4,067,220	40.08	101,478
2014	4,022,161.01	858,329	690,120	3,332,041	40.55	82,171
2015	138,124.29	27,072	21,767	116,357	41.02	2,837
2016	1,655,575.61	296,514	238,405	1,417,171	41.25	34,356
2017	148,132.48	23,820	19,152	128,980	41.75	3,089
2018	113,557.83	16,137	12,975	100,583	42.26	2,380
2019	33,122.12	4,094	3,292	29,830	42.54	701
2021	3,711,782.17	313,274	251,880	3,459,902	43.39	79,740
2023	2,190,666.17	95,075	76,443	2,114,223	44.08	47,963
	19,913,409.67	3,564,278	2,865,778	17,047,632		413,105

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.3 2.07

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.3 BELOW GRADE FACILITIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
2007	173,959.09	56,363	55,704	118,255	37.56	3,148
2010	31,397.64	8,760	8,657	22,741	38.76	587
2011	100,934.51	26,566	26,255	74,680	39.19	1,906
2014	280,555.88	59,871	59,171	221,385	40.55	5,460
2016	231,860.11	41,526	41,040	190,820	41.25	4,626
	818,707.23	193,086	190,827	627,880		15,727

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 39.9 1.92

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.4 CLEARWELL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-S0.5						
NET SALVAGE PERCENT.. 0						
2012	12,768,982.03	3,153,939	3,111,464	9,657,518	39.63	243,692
2018	32,063.64	4,556	4,495	27,569	42.26	652
2019	5,254.37	649	640	4,614	42.54	108
	12,806,300.04	3,159,144	3,116,599	9,689,701		244,452
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					39.6	1.91

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.58 DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
1959	427.00	427	427			
1961	3,005.00	3,005	3,005			
1962	646.00	646	646			
1963	501.00	501	501			
1984	69,262.85	69,263	69,263			
1990	105,687.39	105,687	105,687			
1997	138,050.00	138,050	138,050			
2002	764,914.30	764,914	764,914			
2003	135,772.35	135,772	135,772			
2004	456,940.96	456,941	456,941			
2007	263,798.12	263,798	263,798			
2015	272,106.38	272,106	272,106			
2021	92,812.80	37,125	33,040	59,773	6.00	9,962
	2,303,924.15	2,248,235	2,244,150	59,774		9,962

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.0 0.43

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 330.59 DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2001	568,001.02	568,001	568,001			
2004	736,540.63	736,541	736,541			
2005	2,772,132.56	2,772,133	2,772,133			
2006	1,898,932.85	1,898,933	1,898,933			
2007	1,611,757.81	1,611,758	1,611,758			
2008	1,742,652.76	1,742,653	1,742,653			
2009	387,058.80	387,059	387,059			
2010	7,332.39	7,332	7,332			
2011	1,233,227.05	1,233,227	1,233,227			
2012	3,394,359.12	3,394,359	3,394,359			
2013	1,350,299.88	1,350,300	1,350,300			
2014	772,333.61	772,334	772,334			
2015	3,817,936.25	3,817,936	3,817,936			
2016	800,361.02	720,325	661,199	139,162	1.00	139,162
2017	602,080.95	481,665	442,128	159,953	2.00	79,976
2018	2,787,180.26	1,951,026	1,790,880	996,300	3.00	332,100
2019	1,065,127.17	639,076	586,619	478,508	4.00	119,627
2020	3,609,228.96	1,804,614	1,656,486	1,952,743	5.00	390,549
2021	4,311,190.90	1,724,476	1,582,926	2,728,265	6.00	454,711
2022	4,651,769.10	1,395,531	1,280,981	3,370,788	7.00	481,541
2023	3,410,000.00	682,000	626,019	2,783,981	8.00	347,998
2024	7,510,000.34	751,000	689,356	6,820,644	9.00	757,849
2025	4,546,495.20	113,662	104,332	4,442,163	9.75	455,606
	53,585,998.63	30,555,941	29,713,492	23,872,507		3,559,119

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.7 6.64

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 331 MAINS AND ACCESSORIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 90-R2						
NET SALVAGE PERCENT.. 0						
1947	29,517.43	21,642	11,110	18,407	28.38	649
1948	67,933.88	49,694	25,511	42,423	28.26	1,501
1949	40,626.80	29,333	15,058	25,569	29.26	874
1950	78,548.93	56,555	29,033	49,516	29.17	1,697
1951	207,263.22	147,240	75,586	131,677	30.17	4,365
1952	212,974.47	150,807	77,417	135,557	30.09	4,505
1953	594,084.12	414,908	212,994	381,090	31.09	12,258
1954	830,900.37	578,140	296,789	534,111	31.04	17,207
1955	1,916,260.20	1,314,554	674,829	1,241,431	32.04	38,746
1956	1,093,539.90	746,997	383,473	710,067	32.01	22,183
1957	1,645,504.57	1,107,754	568,668	1,076,837	33.01	32,622
1958	1,516,468.53	1,016,034	521,583	994,886	33.00	30,148
1959	1,719,236.61	1,134,696	582,499	1,136,738	34.00	33,433
1960	2,148,136.20	1,410,251	723,955	1,424,181	34.01	41,875
1961	2,932,208.54	1,895,380	972,997	1,959,212	35.01	55,961
1962	1,126,437.33	723,849	371,589	754,848	35.04	21,542
1963	1,603,440.92	1,014,016	520,547	1,082,894	36.04	30,047
1964	3,912,172.65	2,458,018	1,261,829	2,650,344	36.09	73,437
1965	3,831,545.13	2,367,895	1,215,564	2,615,981	37.09	70,531
1966	3,931,596.35	2,412,428	1,238,425	2,693,171	37.15	72,495
1967	4,759,662.12	2,871,028	1,473,848	3,285,814	38.15	86,129
1968	4,791,349.43	2,867,623	1,472,100	3,319,249	38.24	86,800
1969	4,448,378.68	2,615,647	1,342,748	3,105,631	39.24	79,145
1970	3,276,726.73	1,910,332	980,673	2,296,054	39.34	58,364
1971	4,642,881.20	2,657,585	1,364,277	3,278,604	40.34	81,274
1972	7,385,560.93	4,188,352	2,150,100	5,235,461	40.46	129,398
1973	7,451,205.49	4,145,851	2,128,282	5,322,923	41.46	128,387
1974	4,491,506.46	2,473,922	1,269,993	3,221,513	41.59	77,459
1975	5,351,757.90	2,916,708	1,497,298	3,854,460	41.74	92,345
1976	8,813,407.27	4,707,241	2,416,472	6,396,935	42.74	149,671
1977	5,650,240.76	2,983,327	1,531,497	4,118,744	42.91	95,986
1978	9,118,980.83	4,714,513	2,420,205	6,698,776	43.91	152,557
1979	8,130,716.67	4,151,544	2,131,204	5,999,513	44.09	136,074
1980	11,632,262.28	5,810,315	2,982,738	8,649,524	45.09	191,828
1981	7,826,695.24	3,856,995	1,979,997	5,846,698	45.29	129,095
1982	5,717,307.92	2,753,455	1,413,492	4,303,816	46.29	92,975
1983	9,333,697.65	4,429,773	2,274,034	7,059,664	46.50	151,821
1984	14,004,458.34	6,488,266	3,330,765	10,673,693	47.50	224,709
1985	17,716,274.72	8,078,621	4,147,178	13,569,097	47.72	284,348
1986	23,873,102.06	10,707,086	5,496,506	18,376,596	47.96	383,165
1987	25,409,610.93	11,104,000	5,700,263	19,709,348	48.96	402,560

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 331 MAINS AND ACCESSORIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 90-R2						
NET SALVAGE PERCENT.. 0						
1988	33,659,859.71	14,446,812	7,416,302	26,243,558	49.21	533,297
1989	32,000,977.62	13,363,608	6,860,237	25,140,741	50.21	500,712
1990	32,616,990.56	13,356,658	6,856,669	25,760,322	50.47	510,409
1991	21,029,754.79	8,437,138	4,331,223	16,698,532	50.75	329,035
1992	24,829,995.60	9,668,800	4,963,499	19,866,497	51.75	383,894
1993	35,738,939.92	13,609,388	6,986,409	28,752,531	52.03	552,614
1994	39,295,937.55	14,496,271	7,441,692	31,854,246	53.03	600,683
1995	47,355,738.80	17,048,066	8,751,662	38,604,077	53.33	723,872
1996	39,675,281.16	13,922,056	7,146,918	32,528,363	53.64	606,420
1997	35,265,079.26	11,947,809	6,133,434	29,131,645	54.64	533,156
1998	87,757,205.21	28,907,223	14,839,586	72,917,619	54.97	1,326,498
1999	54,017,072.22	17,274,660	8,867,984	45,149,088	55.30	816,439
2000	56,376,547.29	17,335,788	8,899,364	47,477,183	56.30	843,289
2001	63,177,700.05	18,801,684	9,651,885	53,525,815	56.65	944,851
2002	64,557,630.17	18,560,319	9,527,980	55,029,650	57.00	965,432
2003	23,952,279.77	6,639,572	3,408,439	20,543,841	57.37	358,094
2004	63,356,485.20	16,764,126	8,605,901	54,750,584	58.37	937,992
2005	58,708,577.55	14,911,979	7,655,097	51,053,481	58.74	869,143
2006	17,897,970.51	4,352,786	2,234,512	15,663,459	59.12	264,943
2007	77,462,721.54	17,986,844	9,233,585	68,229,137	59.52	1,146,323
2008	98,245,864.05	21,712,336	11,146,075	87,099,789	59.92	1,453,601
2009	90,949,449.61	19,063,005	9,786,035	81,163,415	60.34	1,345,101
2010	93,995,431.68	18,611,095	9,554,046	84,441,386	60.76	1,389,753
2011	115,976,047.62	21,594,740	11,085,707	104,890,341	61.19	1,714,175
2012	107,486,990.66	18,724,234	9,612,126	97,874,865	61.63	1,588,104
2013	142,295,529.37	23,051,876	11,833,731	130,461,798	62.07	2,101,849
2014	131,912,503.31	19,734,110	10,130,548	121,781,955	62.53	1,947,576
2015	165,792,198.44	22,713,531	11,660,040	154,132,158	62.99	2,446,931
2016	173,482,775.19	21,702,695	11,141,126	162,341,649	62.94	2,579,308
2017	117,005,504.38	13,104,616	6,727,283	110,278,221	63.43	1,738,581
2018	153,520,444.86	15,259,932	7,833,719	145,686,726	63.42	2,297,173
2019	163,459,196.82	14,122,875	7,250,009	156,209,188	63.44	2,462,314
2020	180,995,217.31	13,212,651	6,782,743	174,212,474	63.49	2,743,936
2021	127,818,811.77	7,566,874	3,884,471	123,934,341	63.57	1,949,573
2022	196,798,973.93	8,974,033	4,606,839	192,192,135	62.79	3,060,872
2023	242,233,242.74	7,557,677	3,879,750	238,353,493	62.10	3,838,220

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 331 MAINS AND ACCESSORIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 90-R2						
NET SALVAGE PERCENT.. 0						
2024	230,693,675.35	3,783,376	1,942,205	228,751,470	59.98	3,813,796
2025	177,875,303.80	782,651	401,775	177,473,529	56.57	3,137,238
9999	309,519,935.57-	54,660,798-	28,060,239-	281,459,697-		4,763,412-
	3,533,014,149.56	623,925,471	320,293,493	3,212,720,657		54,371,951
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					59.1	1.54

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 333 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1937	5,458.28	5,043	4,342	1,116	7.24	154
1938	1,004.32	917	790	214	8.24	26
1939	18,113.81	16,513	14,218	3,896	8.34	467
1940	41,978.31	38,179	32,874	9,104	8.46	1,076
1941	29,624.72	26,876	23,141	6,484	8.59	755
1942	29,936.61	27,084	23,320	6,617	8.74	757
1943	14,106.68	12,724	10,956	3,151	8.91	354
1944	8,858.87	7,965	6,858	2,001	9.09	220
1945	16,841.80	15,090	12,993	3,849	9.29	414
1946	64,862.64	57,903	49,857	15,006	9.50	1,580
1947	134,325.26	119,442	102,844	31,481	9.72	3,239
1948	183,738.93	162,701	140,092	43,647	9.96	4,382
1949	201,989.89	178,074	153,328	48,662	10.21	4,766
1950	222,235.23	195,011	167,912	54,323	10.47	5,188
1951	293,487.18	256,273	220,661	72,826	10.75	6,775
1952	362,487.04	314,892	271,134	91,353	11.03	8,282
1953	352,393.94	301,931	259,974	92,420	12.03	7,682
1954	388,765.16	331,228	285,200	103,565	12.33	8,399
1955	516,403.62	437,394	376,612	139,792	12.64	11,059
1956	555,032.79	467,227	402,300	152,733	12.97	11,776
1957	542,313.85	453,591	390,559	151,755	13.30	11,410
1958	734,392.01	610,133	525,347	209,045	13.65	15,315
1959	796,317.50	656,962	565,669	230,648	14.00	16,475
1960	811,314.32	664,466	572,130	239,184	14.37	16,645
1961	743,187.12	604,062	520,120	223,067	14.74	15,133
1962	802,513.27	647,147	557,217	245,296	15.12	16,223
1963	706,145.46	564,775	486,292	219,853	15.52	14,166
1964	601,812.58	477,237	410,919	190,894	15.92	11,991
1965	903,038.19	709,788	611,154	291,884	16.34	17,863
1966	905,254.84	705,012	607,041	298,214	16.76	17,793
1967	950,178.03	732,967	631,112	319,066	17.19	18,561
1968	1,093,052.50	834,873	718,856	374,196	17.63	21,225
1969	1,192,117.91	901,241	776,002	416,116	18.07	23,028
1970	1,298,120.62	970,994	836,062	462,059	18.53	24,936
1971	1,516,032.93	1,121,561	965,705	550,328	18.99	28,980
1972	1,641,771.32	1,192,090	1,026,434	615,337	19.99	30,782
1973	2,169,417.49	1,556,774	1,340,440	828,977	20.46	40,517
1974	1,270,717.24	900,811	775,632	495,085	20.94	23,643
1975	755,033.64	528,524	455,079	299,955	21.43	13,997
1976	994,605.80	687,173	591,681	402,925	21.92	18,382
1977	1,376,771.22	938,407	808,003	568,768	22.42	25,369

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 333 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
1978	1,896,085.86	1,274,359	1,097,270	798,816	22.93	34,837
1979	2,916,959.87	1,932,194	1,663,690	1,253,270	23.44	53,467
1980	2,647,292.17	1,727,358	1,487,319	1,159,973	23.97	48,393
1981	2,566,296.73	1,648,589	1,419,496	1,146,801	24.49	46,827
1982	2,539,634.52	1,594,383	1,372,823	1,166,812	25.49	45,775
1983	2,858,682.04	1,764,950	1,519,687	1,338,995	26.03	51,440
1984	3,376,379.87	2,048,787	1,764,081	1,612,299	26.57	60,681
1985	3,722,073.40	2,218,356	1,910,086	1,811,987	27.11	66,838
1986	4,486,489.61	2,624,596	2,259,874	2,226,616	27.67	80,470
1987	6,352,447.83	3,645,035	3,138,510	3,213,938	28.23	113,848
1988	7,002,388.74	3,938,143	3,390,887	3,611,502	28.79	125,443
1989	7,430,233.33	4,092,573	3,523,856	3,906,377	29.36	133,051
1990	8,338,412.48	4,465,220	3,844,719	4,493,693	30.36	148,014
1991	6,130,364.28	3,209,859	2,763,807	3,366,557	30.94	108,809
1992	6,444,142.57	3,296,179	2,838,132	3,606,011	31.52	114,404
1993	9,544,551.39	4,764,640	4,102,531	5,442,020	32.10	169,533
1994	7,713,017.30	3,753,926	3,232,269	4,480,748	32.69	137,068
1995	10,626,091.65	5,036,767	4,336,842	6,289,250	33.29	188,923
1996	11,268,675.21	5,195,986	4,473,936	6,794,739	33.89	200,494
1997	10,694,318.91	4,791,055	4,125,275	6,569,044	34.50	190,407
1998	46,936,336.78	20,403,226	17,567,931	29,368,406	35.11	836,468
1999	13,890,330.15	5,850,607	5,037,589	8,852,741	35.73	247,768
2000	13,902,701.18	5,630,594	4,848,149	9,054,552	36.73	246,517
2001	16,287,108.95	6,371,517	5,486,112	10,800,997	37.35	289,183
2002	29,783,060.93	11,234,171	9,673,036	20,110,025	37.98	529,490
2003	3,634,541.83	1,319,339	1,136,000	2,498,542	38.61	64,712
2004	2,378,241.00	829,055	713,847	1,664,394	39.24	42,416
2005	18,789,402.02	6,275,660	5,403,575	13,385,827	39.88	335,653
2006	84,263.35	26,897	23,159	61,104	40.52	1,508
2007	12,454,511.98	3,788,663	3,262,179	9,192,333	41.17	223,277
2008	25,982,140.75	7,508,839	6,465,388	19,516,753	41.82	466,685
2009	23,400,146.97	6,402,280	5,512,600	17,887,547	42.48	421,082
2010	18,090,300.85	4,667,298	4,018,716	14,071,585	43.14	326,184
2011	18,972,628.52	4,595,171	3,956,612	15,016,017	43.80	342,831
2012	21,744,894.95	4,918,695	4,235,178	17,509,717	44.47	393,742
2013	22,707,737.85	4,768,625	4,105,962	18,601,776	45.14	412,091
2014	20,583,464.87	4,007,601	3,450,692	17,132,773	45.50	376,544
2015	21,523,077.83	3,831,108	3,298,726	18,224,352	46.18	394,637
2016	28,056,618.72	4,519,921	3,891,819	24,164,800	46.87	515,571
2017	25,517,499.74	3,694,934	3,181,475	22,336,025	47.25	472,720
2018	24,091,589.46	3,069,268	2,642,753	21,448,836	47.95	447,317

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 333 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. 0						
2019	26,664,555.15	2,943,767	2,534,692	24,129,863	48.35	499,066
2020	33,114,786.41	3,079,675	2,651,714	30,463,072	48.76	624,755
2021	30,896,716.23	2,323,433	2,000,561	28,896,155	49.19	587,440
2022	38,178,813.67	2,187,646	1,883,644	36,295,170	49.36	735,315
2023	38,247,980.86	1,491,671	1,284,384	36,963,597	49.28	750,073
2024	40,864,138.50	821,369	707,229	40,156,910	48.75	823,731
2025	25,669,436.64	136,048	117,142	25,552,295	47.14	542,051
9999	27,410,857.61-	7,291,612-	6,278,347-	21,132,511-		507,859-
	758,836,459.21	201,859,476	173,808,467	585,027,992		14,059,475

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.6 1.85

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 334 METERS AND METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L1.5						
NET SALVAGE PERCENT.. 0						
1987	206,795.00	187,025	174,158	32,637	4.02	8,119
1989	9,622.00	8,591	8,000	1,622	4.32	375
1990	754.00	668	622	132	4.53	29
1991	555,959.30	489,578	455,895	100,064	4.61	21,706
1992	125,350.24	109,205	101,692	23,658	4.88	4,848
1993	202,203.16	174,704	162,685	39,518	5.04	7,841
1994	171,411.23	146,659	136,569	34,842	5.23	6,662
1995	184,992.45	156,504	145,737	39,255	5.46	7,190
1996	48,752.08	40,859	38,048	10,704	5.60	1,911
1997	1,066,287.33	883,739	822,938	243,349	5.78	42,102
1998	9,262,484.89	7,577,639	7,056,304	2,206,181	6.00	367,697
1999	1,520,003.21	1,229,075	1,144,516	375,487	6.15	61,055
2000	1,524,162.17	1,215,519	1,131,892	392,270	6.35	61,775
2001	3,145,832.88	2,468,850	2,298,995	846,838	6.58	128,699
2002	1,668,072.81	1,289,087	1,200,399	467,674	6.76	69,183
2003	212,508.13	161,761	150,632	61,876	6.90	8,968
2004	86,460.20	64,638	60,191	26,269	7.09	3,705
2005	2,297,808.85	1,686,592	1,570,556	727,253	7.25	100,311
2006	125,838.20	90,616	84,382	41,456	7.39	5,610
2007	2,934,017.14	2,070,242	1,927,811	1,006,206	7.51	133,982
2008	2,985,183.12	2,055,299	1,913,896	1,071,287	7.69	139,309
2009	7,195,309.77	4,823,736	4,491,867	2,703,443	7.87	343,512
2010	10,430,289.88	6,790,119	6,322,964	4,107,326	8.04	510,861
2011	15,231,305.85	9,595,723	8,935,545	6,295,761	8.22	765,908
2012	12,260,144.35	7,443,134	6,931,052	5,329,092	8.41	633,661
2013	8,734,131.59	5,072,784	4,723,781	4,010,351	8.66	463,089
2014	6,271,842.78	3,463,312	3,225,039	3,046,804	8.92	341,570
2015	12,110,399.58	6,297,408	5,864,151	6,246,249	9.23	676,733
2016	14,680,507.89	7,108,302	6,619,256	8,061,252	9.59	840,589
2017	15,213,405.02	6,766,923	6,301,364	8,912,041	9.99	892,096
2018	12,616,253.12	5,069,211	4,720,453	7,895,800	10.42	757,754
2019	17,176,724.90	6,101,173	5,681,417	11,495,308	10.89	1,055,584
2020	10,082,108.56	3,080,084	2,868,177	7,213,932	11.37	634,471
2021	8,003,336.48	2,013,639	1,875,102	6,128,234	11.90	514,978
2022	20,585,833.35	4,001,886	3,726,560	16,859,273	12.43	1,356,337
2023	32,047,146.52	4,268,680	3,974,998	28,072,149	13.02	2,156,079

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 334 METERS AND METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L1.5						
NET SALVAGE PERCENT.. 0						
2024	27,676,086.66	1,904,115	1,773,114	25,902,973	13.53	1,914,484
2025	18,683,689.28	332,570	309,689	18,374,000	13.83	1,328,561
9999	1,956,853.15-	749,624-	698,050-	1,258,803-		115,487-
	275,376,160.82	105,490,025	98,232,397	177,143,764		16,251,857
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					10.9	5.90

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 335 FIRE HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
NET SALVAGE PERCENT.. 0						
1955	2,367.87	2,039	1,286	1,082	11.30	96
1956	8,128.56	6,955	4,385	3,744	11.65	321
1957	16,792.56	14,274	9,000	7,793	12.00	649
1958	24,959.58	21,071	13,285	11,675	12.37	944
1959	37,292.18	31,258	19,708	17,584	12.74	1,380
1960	42,695.87	35,523	22,397	20,299	13.12	1,547
1961	43,383.87	35,818	22,583	20,801	13.52	1,539
1962	41,178.88	33,726	21,264	19,915	13.92	1,431
1963	60,006.92	48,738	30,729	29,278	14.34	2,042
1964	69,906.12	56,288	35,489	34,417	14.76	2,332
1965	71,944.80	57,412	36,198	35,747	15.19	2,353
1966	75,684.72	59,836	37,726	37,959	15.63	2,429
1967	101,298.90	79,317	50,009	51,290	16.07	3,192
1968	125,090.22	96,970	61,139	63,951	16.53	3,869
1969	113,424.81	87,020	54,865	58,560	16.99	3,447
1970	94,526.89	71,746	45,235	49,292	17.46	2,823
1971	140,265.93	106,041	66,858	73,408	17.43	4,212
1972	144,403.83	107,913	68,038	76,366	17.92	4,261
1973	197,831.58	146,079	92,102	105,730	18.42	5,740
1974	255,983.23	186,689	117,706	138,277	18.93	7,305
1975	255,978.00	184,304	116,202	139,776	19.44	7,190
1976	446,958.94	317,564	200,221	246,738	19.97	12,355
1977	255,278.34	178,899	112,794	142,484	20.49	6,954
1978	400,922.08	276,997	174,644	226,278	21.03	10,760
1979	460,955.13	313,818	197,860	263,095	21.57	12,197
1980	407,721.51	273,377	172,362	235,360	22.11	10,645
1981	286,826.11	190,567	120,151	166,675	22.23	7,498
1982	415,657.37	271,674	171,288	244,369	22.79	10,723
1983	528,446.37	339,580	214,102	314,344	23.36	13,457
1984	504,978.31	318,843	201,028	303,950	23.94	12,696
1985	559,831.44	347,095	218,840	340,991	24.52	13,907
1986	707,928.76	430,704	271,555	436,374	25.10	17,385
1987	771,439.53	460,241	290,178	481,262	25.69	18,733
1988	825,206.10	485,469	306,084	519,122	25.89	20,051
1989	1,038,803.44	598,351	377,255	661,548	26.50	24,964
1990	1,097,521.09	618,453	389,929	707,592	27.11	26,101
1991	926,322.27	510,218	321,688	604,634	27.73	21,804
1992	1,270,073.13	683,172	430,734	839,339	28.35	29,606
1993	1,124,799.79	590,295	372,176	752,624	28.98	25,970
1994	1,495,764.71	769,721	485,302	1,010,463	29.24	34,558
1995	1,629,622.58	816,441	514,759	1,114,864	29.88	37,311

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 335 FIRE HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2						
NET SALVAGE PERCENT.. 0						
1996	1,548,724.47	754,539	475,730	1,072,994	30.52	35,157
1997	1,680,485.34	795,206	501,371	1,179,114	31.17	37,828
1998	1,563,950.73	722,076	455,263	1,108,688	31.48	35,219
1999	2,094,178.28	936,517	590,466	1,503,712	32.14	46,786
2000	1,219,260.12	527,330	332,477	886,783	32.80	27,036
2001	1,730,201.94	726,685	458,169	1,272,033	33.14	38,384
2002	1,561,887.59	632,252	398,629	1,163,259	33.82	34,396
2003	2,137,410.19	832,308	524,763	1,612,647	34.50	46,743
2004	2,174,333.05	817,332	515,321	1,659,012	34.87	47,577
2005	204,797.14	73,727	46,484	158,313	35.56	4,452
2006	5,572,895.91	1,927,107	1,215,024	4,357,872	35.95	121,220
2007	3,230,288.35	1,064,057	670,879	2,559,409	36.64	69,853
2008	4,327,967.86	1,361,146	858,191	3,469,777	37.05	93,651
2009	4,579,195.89	1,362,769	859,214	3,719,982	37.76	98,516
2010	4,192,567.87	1,182,304	745,433	3,447,135	38.19	90,263
2011	3,489,696.35	928,259	585,259	2,904,437	38.63	75,186
2012	4,590,360.90	1,139,787	718,626	3,871,735	39.36	98,367
2013	5,136,478.79	1,189,608	750,038	4,386,441	39.81	110,184
2014	4,605,656.04	987,913	622,871	3,982,785	40.28	98,877
2015	7,646,472.85	1,506,355	949,744	6,696,729	40.76	164,297
2016	7,615,104.64	1,370,719	864,226	6,750,879	41.00	164,656
2017	6,003,249.29	970,125	611,655	5,391,594	41.50	129,918
2018	5,404,991.52	775,616	489,019	4,915,973	41.78	117,663
2019	7,165,743.75	894,285	563,839	6,601,905	42.08	156,889
2020	7,051,128.81	743,894	469,019	6,582,110	42.39	155,275
2021	8,332,100.71	716,561	451,786	7,880,315	42.51	185,376
2022	11,558,527.81	762,863	480,979	11,077,549	42.45	260,955
2023	10,870,130.17	493,504	311,150	10,558,980	42.05	251,105
2024	12,055,893.06	289,341	182,427	11,873,466	40.67	291,947
2025	7,312,052.48	46,797	29,505	7,282,547	38.51	189,108
9999	7,551,016.22-	1,696,735-	1,069,777-	6,481,239-		170,804-
	156,182,918.00	35,094,743	22,126,934	134,055,984		3,532,857

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.9 2.26

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.1 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	8,614.50	8,184	6,110	2,504	1.00	2,504
2007	90,026.71	81,024	60,492	29,535	2.00	14,768
2008	76,984.00	65,436	48,854	28,130	3.00	9,377
2010	10,963.48	8,223	6,139	4,824	5.00	965
2011	34,863.33	24,404	18,220	16,643	6.00	2,774
2012	104,725.37	68,071	50,821	53,904	7.00	7,701
2013	475,451.73	285,271	212,981	262,471	8.00	32,809
2014	1,427,408.53	785,075	586,131	841,278	9.00	93,475
2015	105,224.65	52,612	39,280	65,945	10.00	6,594
2016	154,380.75	69,471	51,867	102,514	11.00	9,319
2017	87,557.93	35,023	26,148	61,410	12.00	5,118
2018	2,016,595.25	705,808	526,951	1,489,644	13.00	114,588
2019	1,190,614.34	357,184	266,671	923,943	14.00	65,996
2020	278,241.94	69,560	51,933	226,309	15.00	15,087
2021	419,508.42	83,902	62,641	356,867	16.00	22,304
2022	831,377.33	124,707	93,105	738,272	17.00	43,428
2023	1,061,597.55	106,160	79,258	982,340	18.00	54,574
2024	882,572.15	44,129	32,946	849,626	19.00	44,717
2025	508,318.19	6,354	4,744	503,574	19.75	25,497
	9,765,026.15	2,980,598	2,225,292	7,539,734		571,595

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.2 5.85

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.2 OFFICE FURNITURE AND EQUIPMENT - COMPUTERS AND PERIPHERAL EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2020	2,402,513.20	2,402,513	2,402,513			
2021	2,215,572.58	1,772,458	1,130,817	1,084,756	1.00	1,084,756
2022	5,160,104.61	3,096,063	1,975,268	3,184,837	2.00	1,592,418
2023	5,171,450.83	2,068,580	1,319,741	3,851,710	3.00	1,283,903
2024	3,496,289.00	699,258	446,122	3,050,167	4.00	762,542
2025	2,483,660.68	124,183	79,228	2,404,433	4.75	506,196
	20,929,590.90	10,163,055	7,353,689	13,575,902		5,229,815

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.6 24.99

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.3 OFFICE FURNITURE AND EQUIPMENT - COMPUTER SOFTWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2020	17,145,049.52	17,145,050	17,145,050			
2021	16,784,591.24	13,427,673	4,880,685	11,903,906	1.00	11,903,906
2022	14,702,503.96	8,821,502	3,206,436	11,496,068	2.00	5,748,034
2023	22,550,450.41	9,020,180	3,278,651	19,271,799	3.00	6,423,933
2024	12,328,917.49	2,465,783	896,261	11,432,656	4.00	2,858,164
2025	579,335.66	28,967	10,529	568,807	4.75	119,749
	84,090,848.28	50,909,155	29,417,612	54,673,236		27,053,786

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.0 32.17

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.31 OFFICE FURNITURE AND EQUIPMENT - COMPUTER SOFTWARE – ENTERPRISE SOLUTIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2015	58,280.82	58,281	58,281			
2018	157,049.62	109,935	41,708-	198,758	3.00	66,253
	215,330.44	168,216	16,573	198,757		66,253

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.0 30.77

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.5 OFFICE FURNITURE AND EQUIPMENT - OTHER OFFICE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	9,454.95	5,673	4,426	5,029	4.00	1,257
9999	354.00-	212-	165-	189-		47-
	9,100.95	5,461	4,261	4,840		1,210

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.0 13.29

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341 TRANSPORTATION EQUIPMENT - NOT CLASSIFIED

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
1986	349.00	349	349			
2020	2,238.67	1,190	1,553	686	4.41	156
	2,587.67	1,539	1,902	686		156
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					4.4	6.03

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341.1 TRANSPORTATION EQUIPMENT - LIGHT DUTY TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
2011	4,883.28	4,191	4,883			
2012	884,692.90	741,815	870,056	14,637	2.50	5,855
2013	2,809,322.81	2,299,150	2,696,614	112,709	2.66	42,372
2014	32,190.62	25,672	30,110	2,081	2.79	746
2015	617,377.23	478,467	561,182	56,195	2.90	19,378
2016	1,006,932.63	753,991	884,337	122,596	3.02	40,595
2017	20,193.94	14,427	16,921	3,273	3.20	1,023
2018	1,695,738.64	1,132,414	1,328,179	367,560	3.48	105,621
2019	8,495,746.12	5,158,617	6,050,410	2,445,336	3.88	630,241
2020	7,819,588.71	4,156,111	4,874,596	2,944,993	4.41	667,799
2021	10,384,859.96	4,594,262	5,388,492	4,996,368	5.04	991,343
2022	9,566,929.71	3,274,760	3,840,882	5,726,048	5.76	994,106
2023	13,280,946.27	3,107,741	3,644,990	9,635,956	6.55	1,471,138
2024	11,643,076.52	1,386,690	1,626,414	10,016,663	7.40	1,353,603
2025	7,280,507.35	218,415	256,173	7,024,334	8.08	869,348
	75,542,986.69	27,346,723	32,074,239	43,468,748		7,193,168

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.0 9.52

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341.2 TRANSPORTATION EQUIPMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
2000	58,209.00	57,190	58,209			
2012	209,536.68	175,697	209,537			
2013	3,042,582.07	2,490,049	3,042,582			
2014	1,011,929.20	807,014	1,011,929			
2015	603,415.74	467,647	603,416			
2016	2,878,515.66	2,155,433	2,803,933	74,583	3.02	24,696
2017	2,354,164.64	1,681,815	2,187,818	166,347	3.20	51,983
2018	5,954,398.21	3,976,347	5,172,700	781,698	3.48	224,626
2019	8,314.30	5,048	6,567	1,747	3.88	450
2020	811,487.16	431,305	561,071	250,416	4.41	56,784
2021	229,580.55	101,566	132,124	97,457	5.04	19,337
2022	172,600.00	59,081	76,856	95,744	5.76	16,622
	17,334,733.21	12,408,192	15,866,742	1,467,991		394,498

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.7 2.28

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341.3 TRANSPORTATION EQUIPMENT - AUTOS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
2007	5,276.00	4,853	4,653	623	1.57	397
2010	5,850.22	5,125	4,914	936	2.12	442
2011	9,394.63	8,062	7,730	1,665	2.31	721
2012	1,833,463.96	1,537,360	1,473,996	359,468	2.50	143,787
2013	57,943.00	47,421	45,466	12,477	2.66	4,691
2018	62,186.00	41,528	39,817	22,369	3.48	6,428
2019	146,881.00	89,186	85,510	61,371	3.88	15,817
	2,120,994.81	1,733,535	1,662,086	458,909		172,283

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.7 8.12

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 341.4 TRANSPORTATION EQUIPMENT - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L2.5						
NET SALVAGE PERCENT.. 0						
1961	374.92	375	375			
1977	403.11	403	403			
1978	265.00	265	265			
1998	8,060.31	8,030	8,060			
1999	1,561.47	1,547	1,561			
2006	4,626.70	4,307	4,627			
2007	18,169.65	16,712	18,170			
2008	92,592.34	83,898	92,592			
2009	25,526.94	22,790	25,527			
2010	53,306.39	46,696	53,306			
2011	81,120.09	69,617	81,120			
2012	318,512.86	267,073	318,513			
2013	1,116,160.77	913,466	1,116,161			
2014	718,980.22	573,387	718,980			
2015	178,690.77	138,485	178,691			
2016	954,565.45	714,779	935,064	19,501	3.02	6,457
2017	120,461.68	86,058	112,580	7,882	3.20	2,463
2018	2,505,965.54	1,673,484	2,189,228	316,738	3.48	91,017
2019	697,759.80	423,680	554,252	143,508	3.88	36,987
2020	473,035.57	251,418	328,902	144,134	4.41	32,683
2021	78,210.92	34,601	45,264	32,947	5.04	6,537
2022	47,744.96	16,343	21,380	26,365	5.76	4,577
2023	88,611.43	20,735	27,125	61,486	6.55	9,387
	7,584,706.89	5,368,149	6,832,146	752,561		190,108

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.0 2.51

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 342 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2007	1,009.93	909	659	351	2.00	176
2008	23,325.31	19,827	14,371	8,954	3.00	2,985
2014	61,104.50	33,607	24,360	36,744	9.00	4,083
2016	92,745.16	41,735	30,251	62,494	11.00	5,681
2017	48,514.27	19,406	14,066	34,448	12.00	2,871
2018	57,628.55	20,170	14,620	43,009	13.00	3,308
2019	88,222.86	26,467	19,184	69,039	14.00	4,931
2020	2,304.60	576	418	1,887	15.00	126
2021	12,195.19	2,439	1,768	10,427	16.00	652
2022	80,982.31	12,147	8,804	72,178	17.00	4,246
2023	1,757.57	176	128	1,630	18.00	91
	469,790.25	177,459	128,629	341,161		29,150

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.7 6.20

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 343 TOOLS AND WORK EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	225,100.69	225,101	225,101			
2006	289,695.96	275,211	243,957	45,739	1.00	45,739
2007	546,753.24	492,078	436,195	110,558	2.00	55,279
2008	241,902.08	205,617	182,266	59,636	3.00	19,879
2009	93,688.77	74,951	66,439	27,250	4.00	6,812
2010	678,599.35	508,950	451,151	227,448	5.00	45,490
2011	1,146,192.08	802,334	711,217	434,975	6.00	72,496
2012	2,326,148.62	1,511,997	1,340,286	985,863	7.00	140,838
2013	2,932,304.68	1,759,383	1,559,578	1,372,727	8.00	171,591
2014	1,038,682.01	571,275	506,398	532,284	9.00	59,143
2015	1,783,290.65	891,645	790,385	992,906	10.00	99,291
2016	4,209,228.78	1,894,153	1,679,043	2,530,186	11.00	230,017
2017	5,196,885.71	2,078,754	1,842,679	3,354,207	12.00	279,517
2018	2,736,698.84	957,845	849,067	1,887,632	13.00	145,202
2019	1,310,548.63	393,165	348,515	962,034	14.00	68,717
2020	4,357,645.66	1,089,411	965,691	3,391,955	15.00	226,130
2021	4,886,827.60	977,366	866,371	4,020,457	16.00	251,279
2022	6,451,897.64	967,785	857,878	5,594,020	17.00	329,060
2023	5,450,785.28	545,079	483,177	4,967,608	18.00	275,978
2024	5,008,109.57	250,405	221,967	4,786,143	19.00	251,902
2025	2,988,135.68	37,352	33,110	2,955,026	19.75	149,622
9999	12,841.25-	3,933-	3,492-	9,349-		697-
	53,886,280.27	16,505,924	14,656,979	39,229,301		2,923,285

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.4 5.42

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 344 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	17,344.50	17,344	17,344			
2006	128,711.88	122,276	81,070	47,642	1.00	47,642
2007	103,111.94	92,801	61,528	41,584	2.00	20,792
2008	53,452.75	45,435	30,124	23,329	3.00	7,776
2009	196,304.71	157,044	104,122	92,183	4.00	23,046
2010	107,001.34	80,251	53,207	53,794	5.00	10,759
2011	214,311.99	150,018	99,464	114,848	6.00	19,141
2012	86,552.44	56,259	37,301	49,251	7.00	7,036
2013	30,519.21	18,312	12,141	18,378	8.00	2,297
2014	57,772.94	31,775	21,067	36,706	9.00	4,078
2015	17,712.59	8,856	5,872	11,841	10.00	1,184
2016	44,332.75	19,950	13,227	31,106	11.00	2,828
2017	94,878.08	37,951	25,162	69,716	12.00	5,810
2018	291,357.49	101,975	67,611	223,746	13.00	17,211
2019	152,368.57	45,711	30,307	122,062	14.00	8,719
2020	212,824.35	53,206	35,276	177,548	15.00	11,837
2021	110,412.37	22,082	14,641	95,771	16.00	5,986
2022	116,937.65	17,541	11,630	105,308	17.00	6,195
2023	90,081.23	9,008	5,972	84,109	18.00	4,673
	2,125,988.78	1,087,795	727,066	1,398,923		207,010

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.8 9.74

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 345 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 21-S0.5						
NET SALVAGE PERCENT.. 0						
1951	11.79	12	12			
1967	1,818.65	1,819	1,819			
1968	974.20	974	974			
1969	773.74	774	774			
1970	6,383.68	6,384	6,384			
1972	6,015.59	6,016	6,016			
1975	269.51	270	270			
1977	572.13	572	572			
1978	1,720.11	1,720	1,720			
1980	7,174.98	7,175	7,175			
1982	2,369.64	2,370	2,370			
1984	1,667.77	1,655	1,668			
1985	16,282.08	16,022	16,282			
1986	13,602.62	13,263	13,534	69	1.00	69
1987	4,614.41	4,454	4,545	69	1.37	50
1988	9,942.81	9,528	9,722	221	1.61	137
1989	12,771.91	12,092	12,339	433	2.02	214
1990	9,258.46	8,684	8,861	397	2.31	172
1991	11,802.92	10,955	11,179	624	2.63	237
1992	17,613.47	16,159	16,489	1,124	2.97	378
1993	76,071.48	69,134	70,545	5,526	3.21	1,721
1994	149,598.97	134,026	136,762	12,837	3.60	3,566
1995	145,174.36	128,479	131,102	14,072	3.90	3,608
1996	77,978.61	68,294	69,688	8,291	4.11	2,017
1997	40,316.50	34,769	35,479	4,838	4.47	1,082
1998	54,085.17	45,999	46,938	7,147	4.75	1,505
1999	250,633.33	209,830	214,113	36,520	5.06	7,217
2001	45,220.95	36,466	37,210	8,011	5.76	1,391
2002	106,373.89	84,163	85,881	20,493	6.07	3,376
2003	167,818.19	129,958	132,611	35,207	6.41	5,493
2004	18,874.25	14,309	14,601	4,273	6.70	638
2005	32,759.09	24,242	24,737	8,022	7.03	1,141
2006	13,407.81	9,655	9,852	3,556	7.39	481
2007	5,566.17	3,897	3,977	1,589	7.71	206
2008	46,813.86	31,833	32,483	14,331	8.00	1,791
2009	61,227.65	40,165	40,985	20,243	8.39	2,413
2010	16,462.41	10,421	10,634	5,828	8.70	670
2012	21,178.12	12,279	12,530	8,648	9.42	918
2013	21,309.16	11,737	11,976	9,333	9.79	953
2014	100,037.58	52,050	53,112	46,926	10.14	4,628
2015	5,946.73	2,896	2,955	2,992	10.53	284

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 345 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 21-S0.5						
NET SALVAGE PERCENT.. 0						
2016	126,179.43	57,008	58,171	68,008	10.92	6,228
2017	26,484.33	10,975	11,199	15,285	11.31	1,351
2018	291,449.34	109,148	111,376	180,073	11.69	15,404
2019	12,955.96	4,299	4,387	8,569	12.08	709
2022	53,171.30	9,778	9,977	43,194	13.31	3,245
2024	149,979.15	9,944	10,147	139,832	14.08	9,931
	2,242,714.26	1,476,652	1,506,133	736,581		83,224
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					8.9	3.71

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 346 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	258.22	241	247	11	1.00	11
2012	3,640.24	3,155	3,232	408	2.00	204
2013	103,009.53	82,408	84,421	18,589	3.00	6,196
2015	17,452.26	11,635	11,919	5,533	5.00	1,107
2016	35,790.32	21,474	21,999	13,791	6.00	2,298
2018	11,496.50	5,365	5,496	6,000	8.00	750
2019	417,135.37	166,854	170,930	246,205	9.00	27,356
2020	299,532.41	99,843	102,282	197,250	10.00	19,725
2021	425,092.22	113,359	116,128	308,964	11.00	28,088
2022	680,468.10	136,094	139,419	541,049	12.00	45,087
2023	1,271,106.48	169,477	173,617	1,097,489	13.00	84,422
2024	1,013,175.01	67,548	69,198	943,977	14.00	67,427
2025	616,194.94	10,272	10,523	605,672	14.75	41,063
9999	56,552.67-	10,257-	10,508-	46,045-		3,741-
	4,837,798.93	877,468	898,903	3,938,896		319,993

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.3 6.61

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 346.1 COMMUNICATION EQUIPMENT - NON-TELEPHONE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2010	1,083.00	1,083	1,083			
2011	18,194.10	16,981	16,026	2,168	1.00	2,168
2012	39,624.20	34,341	32,410	7,214	2.00	3,607
2013	721,836.04	577,469	545,001	176,835	3.00	58,945
2014	138,898.47	101,858	96,131	42,767	4.00	10,692
2015	3,007.59	2,005	1,892	1,116	5.00	223
2017	75,197.83	40,105	37,850	37,348	7.00	5,335
2018	602,810.61	281,314	265,497	337,314	8.00	42,164
2019	729,975.54	291,990	275,573	454,403	9.00	50,489
2020	1,640,804.93	546,930	516,179	1,124,626	10.00	112,463
2021	2,131,641.07	568,445	536,484	1,595,157	11.00	145,014
2022	1,549,647.04	309,929	292,504	1,257,143	12.00	104,762
2023	1,189,705.48	158,623	149,704	1,040,001	13.00	80,000
2024	1,700,121.50	113,347	106,974	1,593,148	14.00	113,796
2025	995,989.36	16,603	15,670	980,319	14.75	66,462
	11,538,536.76	3,061,023	2,888,978	8,649,559		796,120

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.9 6.90

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 346.19 COMMUNICATION EQUIPMENT - REMOTE CONTROL AND INSTRUMENTATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2015	113,844.36	113,844	113,844			
2016	717,219.42	645,497	613,556	103,663	1.00	103,663
2017	318,372.46	254,698	242,095	76,277	2.00	38,138
2018	760,200.33	532,140	505,808	254,392	3.00	84,797
2019	64,999.04	38,999	37,069	27,930	4.00	6,982
2020	535,905.67	267,953	254,694	281,212	5.00	56,242
2021	275,985.00	110,394	104,932	171,053	6.00	28,509
2022	710,843.82	213,253	202,701	508,143	7.00	72,592
2023	962,468.57	192,494	182,969	779,500	8.00	97,438
2024	946,399.98	94,640	89,957	856,443	9.00	95,160
2025	579,333.22	14,483	13,766	565,567	9.75	58,007
	5,985,571.87	2,478,395	2,361,391	3,624,181		641,528

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.6 10.72

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 346.20 COMMUNICATION EQUIPMENT - TELEPHONE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2015	11,214.16	11,214	11,214			
2016	21,782.06	19,604	18,163	3,619	1.00	3,619
2017	35,766.67	28,613	26,510	9,257	2.00	4,628
2018	66,703.59	46,693	43,261	23,443	3.00	7,814
2020	63,300.51	31,650	29,324	33,977	5.00	6,795
2022	24,688.05	7,406	6,862	17,826	7.00	2,547
2023	5,387.96	1,078	999	4,389	8.00	549
2024	19,196.43	1,920	1,779	17,417	9.00	1,935
2025	11,177.53	279	258	10,920	9.75	1,120
	259,216.96	148,457	138,370	120,847		29,007

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.2 11.19

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 347 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2000	11,327.73	11,328	11,328			
2001	1,124,164.98	1,079,198	926,593	197,572	1.00	197,572
2002	237,394.60	218,403	187,520	49,875	2.00	24,938
2003	269,249.53	236,940	203,435	65,815	3.00	21,938
2004	589,851.03	495,475	425,412	164,439	4.00	41,110
2005	409,678.13	327,743	281,398	128,280	5.00	25,656
2006	32,215.49	24,484	21,022	11,193	6.00	1,866
2008	148,764.62	101,160	86,855	61,910	8.00	7,739
2009	15,603.42	9,986	8,574	7,029	9.00	781
2010	25,913.81	15,548	13,349	12,565	10.00	1,256
2011	67,243.18	37,656	32,331	34,912	11.00	3,174
2012	211,006.25	109,723	94,208	116,798	12.00	9,733
2013	1,921,577.23	922,357	791,930	1,129,647	13.00	86,896
2014	304,208.62	133,852	114,925	189,284	14.00	13,520
2015	242,341.45	96,937	83,230	159,111	15.00	10,607
2016	777,191.88	279,789	240,225	536,967	16.00	33,560
2017	546,849.76	174,992	150,247	396,603	17.00	23,330
2018	1,208,042.02	338,252	290,421	917,621	18.00	50,979
2019	736,997.02	176,879	151,867	585,130	19.00	30,796
2020	6,298,678.56	1,259,736	1,081,602	5,217,077	20.00	260,854
2021	4,955,441.76	792,871	680,755	4,274,687	21.00	203,557
2022	7,440,610.10	892,873	766,616	6,673,994	22.00	303,363
2023	6,039,423.36	483,154	414,833	5,624,590	23.00	244,547
2024	6,370,415.69	254,817	218,784	6,151,632	24.00	256,318
2025	3,830,295.52	38,303	32,887	3,797,409	24.75	153,431
9999	4,085.00-	794-	682-	3,403-		187-
	43,810,400.74	8,511,662	7,309,665	36,500,736		2,007,334

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.2 4.58

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 348 OTHER TANGIBLE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2003	5,843.07	5,142	4,357	1,486	3.00	495
2004	20,479.05	17,202	14,575	5,904	4.00	1,476
2006	12,840.00	9,758	8,268	4,572	6.00	762
2007	694,887.82	500,319	423,920	270,968	7.00	38,710
2015	1,360.35	544	461	899	15.00	60
2019	52,243.29	12,538	10,623	41,620	19.00	2,191
2020	7,924.33	1,585	1,343	6,581	20.00	329
2024	13,963,717.88	558,549	473,259	13,490,459	24.00	562,102
	14,759,295.79	1,105,637	936,806	13,822,490		606,125

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.8 4.11

PART III. EXPERIENCED AND ESTIMATED NET SALVAGE

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
303.61			4,483.73	4,483.73
304.15	549,086.47	577,956.65	210.38	577,746.27-
304.20	8,384.32	71,775.96		71,775.96-
304.30	409,196.21	788,178.99		788,178.99-
304.61	35,517.97	12,850.31		12,850.31-
304.62	72,882.00	8.81-		8.81
304.63		23.48		23.48-
305.00		24,577.59		24,577.59-
306.00	4,621.01	6,896.40		6,896.40-
307.00	44,317.44	42,111.55		42,111.55-
310.00	8,443.54	3,593.30		3,593.30-
311.00	482,184.81	248,120.57		248,120.57-
320.00	1,647,036.23	695,879.64	214.05-	696,093.69-
320.30	146,562.96	76,375.47		76,375.47-
330.00	316,910.67	1,196,558.00		1,196,558.00-
331.00	32,399,513.98	12,998,210.71	25,703.04	12,972,507.67-
333.00	1,279,015.58	2,528,314.54		2,528,314.54-
334.00	4,974,584.57	1,486,703.66	42,569.41	1,444,134.25-
335.00	1,427,031.44	1,720,769.32	3,093.12	1,717,676.20-
340.00	12,731,491.25	23,848.17	613.87	23,234.30-
341.00	203,634.46	97,003.97	456,214.35	359,210.38
342.00	13,022.51	122.40		122.40-
343.00	191,196.62	50,715.40	3,000.00	47,715.40-
344.00	39,028.26	13,845.30		13,845.30-
345.00	681.55			
346.00	950,181.45	44,631.89		44,631.89-
347.00	145,584.81	16,130.65		16,130.65-
348.00	823.15			
	58,080,933.26	22,725,185.11	535,673.85	22,189,511.26-

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2021 TRANSACTION YEAR				
303.20	20,254.74			
303.61			4,483.73-	4,483.73-
304.15	126,490.86	666,811.69		666,811.69-
304.20	2,974.34	37,171.02		37,171.02-
304.30	496,969.98	137,849.62		137,849.62-
304.61		1,346.07	4,483.73	3,137.66
304.62		18,876.94		18,876.94-
305.00	10,586.76	467.17		467.17-
306.00	507.53	450.15		450.15-
307.00	36,953.56	5,700.51		5,700.51-
311.00	270,914.29	193,743.82		193,743.82-
320.00	2,230,482.23	890,085.40		890,085.40-
320.30	33,915.10	1,370.70		1,370.70-
320.37	10,486.03			
330.00	256,778.51	1,561,680.99		1,561,680.99-
331.00	15,748,750.26	8,196,453.86	282,490.53	7,913,963.33-
333.00	7,520,801.90	2,681,541.01	1,799.10	2,679,741.91-
334.00	5,495,660.10	1,021,270.85	331,737.56	689,533.29-
335.00	2,860,930.58	1,074,172.62	11,562.11	1,062,610.51-
340.00	35,664,062.09	78,720.20	325.05	78,395.15-
341.00		16,299.55-	219,365.56	235,665.11
343.00	162,936.71	40,863.25		40,863.25-
344.00		5,126.37		5,126.37-
346.00	738,074.13	49,301.95		49,301.95-
347.00	203,387.56	8,339.46		8,339.46-
348.00	5,662.47			
	71,897,579.73	16,655,044.10	847,279.91	15,807,764.19-

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
304.15	981,518.44	850,320.81		850,320.81-
304.20	545,894.57	23,865.76		23,865.76-
304.30	2,017,524.85	52,542.41		52,542.41-
304.36	662.50			
304.61		6,818.30		6,818.30-
304.62	193,622.53	46,017.09		46,017.09-
304.63	3,204.02	79,910.95		79,910.95-
305.00	228,547.61	299,889.33		299,889.33-
306.00	152,202.89			
307.00	158,236.88	55,144.80		55,144.80-
310.00	4,791.22			
311.00	1,206,205.82	350,411.61		350,411.61-
320.00	3,732,867.80	1,520,577.41		1,520,577.41-
320.30	32,480.56	299,375.44		299,375.44-
320.37	18,895.53			
330.00	287,248.73	3,396,011.14		3,396,011.14-
331.00	19,475,471.04	13,983,952.63	111,611.62	13,872,341.01-
333.00	6,765,263.95	2,505,397.99	2,218.42	2,503,179.57-
334.00	9,009,490.02	3,625,834.72	54,380.07	3,571,454.65-
335.00	1,654,590.34	1,281,342.15	6,290.78	1,275,051.37-
340.00	45,059,382.50	67,823.74	8,592.94	59,230.80-
341.00		1,127.48	820,242.37	819,114.89
342.00	63,146.52			
343.00	237,075.29	38,089.15		38,089.15-
344.00	680,132.13	8,395.86		8,395.86-
345.00	332,927.29	590.23		590.23-
346.00	352,393.47	165,439.94		165,439.94-
347.00	260,681.45	105,946.50		105,946.50-
	93,454,457.95	28,764,825.44	1,003,336.20	27,761,489.24-

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2023 TRANSACTION YEAR				
303.61		15.00	11,108.00	11,093.00
304.15	1,380,150.46	796,762.50	23,546.75	773,215.75-
304.20	1,003,174.19	124,387.00	10,031.74	114,355.26-
304.30	1,149,941.81	43,949.00	5,749.71	38,199.29-
304.61	234,486.94	43,380.00	57,449.30	14,069.30
304.62	392,363.88	76,293.00	227,444.49	151,151.49
304.63	467,955.43	18,770.50	22,588.56	3,818.06
305.00	647,687.81	213,737.00		213,737.00-
306.00	106,463.87	2,661.50		2,661.50-
307.00	111,214.30	7,366.00		7,366.00-
310.00	1,084,889.03	119,338.00		119,338.00-
311.00	2,463,421.79	321,442.00		321,442.00-
320.00	10,939,053.43	1,543,362.00		1,543,362.00-
320.30	166,821.44	60,630.50		60,630.50-
320.37	141,695.39	7,085.00		7,085.00-
330.00	2,284,730.54	581,223.00		581,223.00-
331.00	56,063,568.39	21,364,445.00	12,078.00	21,352,367.00-
333.00	6,043,953.42	2,514,107.50	1,306.00	2,512,801.50-
334.00	5,345,569.99	2,786,541.00	112,369.70	2,674,171.30-
335.00	2,041,116.22	1,364,307.00	3,425.00	1,360,882.00-
340.00	7,776,692.79	35,034.00	26,721.00	8,313.00-
341.00	2,084,302.52	21,140.00	396,017.48	374,877.48
343.00	947.22	24,009.00	1,447.00	22,562.00-
344.00	32,721.95	9,236.00		9,236.00-
346.00	80,105.78			
347.00	37,475.05	24,794.00	42.00	24,752.00-
348.00		60,221.00	58,690.00	1,531.00-
	102,080,503.64	32,164,236.50	970,014.73	31,194,221.77-

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2024 TRANSACTION YEAR				
303.61		15.00-	11,108.00-	11,093.00-
303.99	161,747.00			
304.15	396,007.00	891,900.50	9,909.75	881,990.75-
304.20	676,177.00	138,436.00	12,037.74	126,398.26-
304.30	4,254,496.00	151,215.00	20,624.71	130,590.29-
304.36	351,079.00			
304.61	967,325.00	271,779.00	356,667.30	84,888.30
304.62		33,351.00	49,045.49	15,694.49
304.63	719,831.00	40,197.50	12,788.56	27,408.94-
305.00	15,068,472.00	3,210,544.00		3,210,544.00-
306.00	221,180.00	2,661.50		2,661.50-
307.00	152,473.00	19,044.00		19,044.00-
310.00	179,451.00	125,958.00		125,958.00-
311.00	3,398,469.00	483,349.00		483,349.00-
320.00	12,916,463.00	2,008,180.00		2,008,180.00-
320.30	228,711.00	54,937.50		54,937.50-
320.37	882,712.00	74,292.00		74,292.00-
330.00	3,908,274.00	529,765.00		529,765.00-
331.00	41,655,347.00	24,327,288.00		24,327,288.00-
333.00	5,718,338.00	2,305,642.50		2,305,642.50-
334.00	5,574,665.00	1,316,654.00	96,903.70	1,219,750.30-
335.00	2,126,718.00	1,170,078.00		1,170,078.00-
340.00	22,179,017.00			
341.00	3,543,734.00	63,058.00	1,187,508.48	1,124,450.48
343.00	200,918.00			
344.00	103,310.00			
345.00	30,092.00	602.00	602.00	
346.00	288,890.00			
347.00	25,703.00			
	125,929,599.00	37,218,917.50	1,734,979.73	35,483,937.77-
TOTAL	451,443,073.58	137,528,208.65	5,091,284.42	132,436,924.23-

VOLUME 13

PENNSYLVANIA-AMERICAN WATER COMPANY

2023 GENERAL BASE RATE CASE
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

EXHIBITS NO. 11-D, 11-E, 11-F
DEPRECIATION STUDY

WASTEWATER SSS GENERAL OPERATIONS
AS OF JUNE 30, 2023, 2024, 2025

EXHIBIT NO. 11-D - DEPRECIATION STUDY

WASTEWATER SSS GENERAL OPERATIONS

AS OF JUNE 30, 2023

Exhibit No. 11-D
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

WASTEWATER SSS GENERAL OPERATIONS

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2023

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-D
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WASTEWATER SSS GENERAL OPERATIONS

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2023

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

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October 12, 2023

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant as of June 30, 2023. Summaries of the original cost, annual accruals and the book depreciation reserve are presented in Tables 1 through 3, beginning on page I-3 of the attached report.

A description of the methods and procedures upon which the study was based, as well as support for the service life estimates, is set forth in a companion report "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of June 30, 2024".

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

FREDERICK B. JOHNSTON, JR.
Senior Analyst

JJS:mle

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PART I. RESULTS OF STUDY

PENNSYLVANIA-AMERICAN WATER COMPANY

WASTEWATER SSS GENERAL OPERATIONS

DEPRECIATION STUDY

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Table 1 presents the development of net original cost used in the study. The net original cost is the original cost of wastewater plant less advances and contributions. The results of the depreciation study are summarized in Table 2, which sets forth the book reserve and the calculated annual depreciation related to net original cost as of June 30, 2023, and the annual amortization of net negative salvage. Table 3 presents the calculation of the amortization of experienced net salvage, by account, based on the five-year period, 2018 through 2022.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-6. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage, and cost of removal are set forth by account for the years 2018 through 2022, on pages III-2 through III-5.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2023

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2023		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2023
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
DEPRECIABLE PLANT										
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	8,479,164.99								8,479,164.99
354.30	STRUCTURES AND IMPROVEMENTS - SPP	24,871,672.73				2,734,528.70				22,137,144.03
354.40	STRUCTURES AND IMPROVEMENTS - TDP	279,877,250.99				1,853,012.73				278,024,238.26
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	4,565,732.11								4,565,732.11
355.00	POWER GENERATING EQUIPMENT	6,013,488.59				144,517.16				5,868,971.43
360.10	COLLECTION SEWERS - FORCE MAINS	53,705,956.04				11,251,126.61				42,454,829.43
361.10	COLLECTION SEWERS - GRAVITY MAINS	244,560,609.25				16,139,879.94				228,420,729.31
361.20	MANHOLES	46,127,843.16				4,387,312.76				41,740,530.40
363.00	SERVICES	60,710,596.23				6,703,782.96				54,006,813.27
364.00	FLOW MEASURING DEVICES	673,701.43				14,726.81				658,974.62
365.00	FLOW MEASURING INSTALLATIONS	272,564.04								272,564.04
370.00	RECEIVING WELLS	677,388.38								677,388.38
371.00	PUMPING EQUIPMENT	17,248,171.00				66,626.22				17,181,544.78
380.00	TREATMENT EQUIPMENT	135,952,509.55				2,200,080.47				133,752,429.08
381.00	PLANT SEWERS	6,608,601.61				30,192.33				6,578,409.28
382.00	OUTFALL SEWER LINES	603,464.81								603,464.81
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	2,477,449.88								2,477,449.88
390.00	OFFICE FURNITURE AND EQUIPMENT	1,266,542.71								1,266,542.71
391.00	TRANSPORTATION EQUIPMENT	3,747,275.07								3,747,275.07
392.00	STORES EQUIPMENT	107,351.44								107,351.44
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	1,200,526.19								1,200,526.19
394.00	LABORATORY EQUIPMENT	705,529.59								705,529.59
395.00	POWER OPERATED EQUIPMENT	571,397.06				10,000.00				561,397.06
396.00	COMMUNICATION EQUIPMENT	3,257,338.04								3,257,338.04
397.00	MISCELLANEOUS EQUIPMENT	1,490,600.87				29,000.00				1,461,600.87
398.00	OTHER TANGIBLE PLANT	14,231.50								14,231.50
TOTAL DEPRECIABLE PLANT		**905,786,957.26**		**0.00**		**45,564,786.69**		**0.00**		**860,222,170.57**
TOTAL NONDEPRECIABLE PLANT										
352.00	FRANCHISES	221,139.78								221,139.78
353.20	STRUCTURES AND IMPROVEMENTS - SPP	3,611,014.00								3,611,014.00
353.30	STRUCTURES AND IMPROVEMENTS - TDP	254,944.62								254,944.62
353.40	POWER GENERATING EQUIPMENT	11,040,870.25				125,000.00				10,915,870.25
TOTAL NONDEPRECIABLE PLANT		**15,127,968.65**		**0.00**		**125,000.00**		**0.00**		**15,002,968.65**
TOTAL UTILITY PLANT		**920,914,925.91**		**0.00**		**45,689,786.69**		**0.00**		**875,225,139.22**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF JUNE 30, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF JUNE 30, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	45-R3	8,479,164.99	45,562	8,433,603	229,852	2.71	36.7
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	22,137,144.03	8,246,486	13,890,658	438,757	1.98	31.7
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	278,024,238.26	81,813,715	196,210,524	7,316,907	2.63	26.8
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	35-S1	4,565,732.11	1,813,015	2,752,717	112,972	2.47	24.4
355.00	POWER GENERATING EQUIPMENT	35-S0.5	5,868,971.43	3,429,449	2,439,523	126,620	2.16	19.3
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	42,454,829.43	4,624,342	37,830,488	728,279	1.72	51.9
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	228,420,729.31	48,387,077	180,033,652	3,851,652	1.69	46.7
361.20	MANHOLES	50-S2.5	41,740,530.40	10,598,056	31,142,474	2,106,512	5.05	14.8
363.00	SERVICES	47-R3	54,006,813.27	24,434,472	29,572,342	1,802,159	3.34	16.4
364.00	FLOW MEASURING DEVICES	15-L2.5	658,974.62	278,146	380,829	76,896	11.67	5.0
365.00	FLOW MEASURING INSTALLATIONS	25-S2	272,564.04	219,699	52,865	12,972	4.76	4.1
370.00	RECEIVING WELLS	50-R3	677,388.38	47,932	629,457	16,395	2.42	38.4
371.00	PUMPING EQUIPMENT	30-S0.5	17,181,544.78	2,202,233	14,979,312	852,150	4.96	17.6
380.00	TREATMENT EQUIPMENT	35-S1.5	133,752,429.08	23,479,248	110,273,181	5,915,173	4.42	18.6
381.00	PLANT SEWERS	50-R3	6,578,409.28	1,613,223	4,965,186	150,565	2.29	33.0
382.00	OUTFALL SEWER LINES	50-R3	603,464.81	247,981	355,484	12,744	2.11	27.9
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	20-S2.5	2,477,449.88	280,396	2,197,054	135,100	5.45	16.3
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	1,266,542.71	127,679	1,138,863	71,282	5.63	16.0
391.00	TRANSPORTATION EQUIPMENT	14-L4	3,747,275.07	790,481	2,956,794	311,164	8.30	9.5
392.00	STORES EQUIPMENT	25-SQ	107,351.44	35,455	71,896	4,302	4.01	16.7
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	1,200,526.19	361,985	838,541	55,905	4.66	15.0
394.00	LABORATORY EQUIPMENT	15-SQ	705,529.59	147,330	558,200	113,283	16.06	4.9
395.00	POWER OPERATED EQUIPMENT	22-R2	561,397.06	226,648	334,749	26,080	4.65	12.8
396.00	COMMUNICATION EQUIPMENT	15-SQ	3,257,338.04	1,192,577	2,064,761	202,677	6.22	10.2
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	1,461,600.87	309,606	1,151,994	85,941	5.88	13.4
398.00	OTHER TANGIBLE PLANT	25-SQ	14,231.50	1,363	12,869	613	4.31	21.0
	TOTAL DEPRECIABLE PLANT		**860,222,170.57**	**214,954,156**	**645,268,016**	**24,756,952**	**2.88**	
	NONDEPRECIABLE PLANT							
352.00	FRANCHISES		221,139.78					
353.20	LAND AND LAND RIGHTS - COLLECTION		3,611,014.00					
353.30	LAND AND LAND RIGHTS - SPP		254,944.62					
353.40	LAND AND LAND RIGHTS - TDP		10,915,870.25					
	TOTAL NONDEPRECIABLE PLANT		**15,002,968.65**					
	AMORTIZATION OF NET SALVAGE					**1,288,971**		
	TOTAL UTILITY PLANT		**875,225,139.22**	**214,954,156**	**645,268,016**	**26,045,923**		

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 3. AMORTIZATION OF EXPERIENCED NET SALVAGE

ACCOUNT	2018 GROSS SALVAGE	2018 COST OF REMOVAL	2019 GROSS SALVAGE	2019 COST OF REMOVAL	2020 GROSS SALVAGE	2020 COST OF REMOVAL	2021 GROSS SALVAGE	2021 COST OF REMOVAL	2022 GROSS SALVAGE	2022 COST OF REMOVAL	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)*	(13)=(12)/5
354.20		2,367.05		27,531.06		122,315.77					(152,213.88)	(30,443)
354.30		87.11		61,135.00				20,176.30		65,248.65	(146,647.06)	(29,329)
354.40		(18,538.55)		1,985.51				28,995.08		5,052.37	(17,494.41)	(3,499)
354.70		36,099.53		18,075.18		246.65		11,677.96		34,027.64	(100,126.96)	(20,025)
355.00		4,538.63		9,730.05		23,920.78		1,253.37		333.24	(39,776.07)	(7,955)
360.10		85,350.18		245,202.29		186,669.20		147,595.80		169,252.01	(834,069.48)	(166,814)
361.10		345,943.14		1,038,558.77		323,715.46		245,041.20		251,743.85	(2,205,002.42)	(441,000)
361.20				109,567.01		34,151.69		20,315.71		58,813.67	(222,848.08)	(44,570)
363.00		48,455.35		150,830.30		76,222.67	159.00	105,836.92		91,479.25	(472,665.49)	(94,533)
364.00				239.58							(239.58)	(48)
371.00		(18,884.54)		141,438.05		273,771.37		206,559.57		53,057.74	(655,942.19)	(131,188)
380.00		12,304.03		214,843.19		652,150.29		269,030.45		336,246.38	(1,484,574.34)	(296,915)
381.00								90.22			(90.22)	(18)
382.00		980.65									(980.65)	(196)
389.10		(3,678.20)		5,681.56							(2,003.36)	(401)
390.00		93.95						3,619.09		3,738.83	(7,451.87)	(1,490)
391.00		9,708.42		6,028.96		10.19			27,472.80		11,725.23	2,345
393.00				1,931.40		5,643.88				855.08	(8,430.36)	(1,686)
394.00		117.59		5,593.49		1,075.22		1,113.04		2,855.31	(10,754.65)	(2,151)
395.00				2,048.24						645.90	(2,694.14)	(539)
396.00				1,897.96		52,578.21		4,528.34		2,348.88	(61,353.39)	(12,271)
397.00		6,019.17		5,512.61	1,369.21	9,909.72	87.00	4,676.57		5,312.99	(29,974.85)	(5,995)
398.00				1,251.49							(1,251.49)	(250)
TOTAL	**0.00**	**510,963.51**	**0.00**	**2,049,081.70**	**1,369.21**	**1,762,381.10**	**246.00**	**1,070,509.62**	**27,472.80**	**1,081,011.79**	**(6,444,859.71)**	**(1,288,971)**

* Column (12) equals the summation of Columns (2) through (11).

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1912	28,032	26,479	1,553	1,553	0.0
1915	74,556	44,463	30,093	31,646	0.0
1916	188,373	117,765	70,608	102,254	0.0
1917	59,222	51,795	7,427	109,681	0.0
1919	10,272	8,323	1,949	111,630	0.0
1920	122,709	72,254	50,455	162,085	0.0
1921	5,218	4,935	283	162,368	0.0
1922	7,761	5,390	2,371	164,739	0.0
1924	15,269	14,457	812	165,551	0.0
1925	675,541	550,929	124,612	290,163	0.0
1926	522,804	407,213	115,591	405,754	0.1
1927	132,061	108,280	23,781	429,535	0.1
1928	67,988	50,618	17,370	446,905	0.1
1929	18,987	11,205	7,782	454,687	0.1
1930	551,110	381,330	169,780	624,467	0.1
1931	228,348	170,048	58,300	682,767	0.1
1932	84,670	67,525	17,145	699,912	0.1
1933	21,154	13,032	8,122	708,034	0.1
1934	25,700	19,168	6,532	714,566	0.1
1935	1,256,020	733,067	522,953	1,237,519	0.2
1936	643,425	424,253	219,172	1,456,691	0.2
1937	193,098	133,802	59,296	1,515,987	0.2
1938	194,749	136,075	58,674	1,574,661	0.2
1939	219,489	141,218	78,271	1,652,932	0.3
1940	70,312	45,377	24,935	1,677,867	0.3
1941	17,742	11,058	6,684	1,684,551	0.3
1942	145,002	95,916	49,086	1,733,637	0.3
1943	7,856,394	5,691,039	2,165,355	3,898,992	0.6
1944	32,287	23,574	8,713	3,907,705	0.6
1945	62,803	35,002	27,801	3,935,506	0.6
1946	249,497	136,826	112,671	4,048,177	0.6
1947	119,074	67,510	51,564	4,099,741	0.6
1948	19,056	10,023	9,033	4,108,774	0.6
1949	14,967	8,036	6,931	4,115,705	0.6
1950	124,989	64,086	60,903	4,176,608	0.6
1951	931,459	911,385	20,074	4,196,682	0.7
1952	19,814	10,195	9,619	4,206,301	0.7
1953	1,570,588	867,198	703,390	4,909,691	0.8
1954	4,566,445	2,296,571	2,269,874	7,179,565	1.1
1955	254,102	128,674	125,428	7,304,993	1.1
1956	129,575	65,267	64,308	7,369,301	1.1
1957	1,361,667	697,543	664,124	8,033,425	1.2
1958	209,164	129,081	80,083	8,113,508	1.3
1961	483,408	229,422	253,986	8,367,494	1.3
1962	111,470	53,700	57,770	8,425,264	1.3

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1963	1,737,376	812,725	924,651	9,349,915	1.4
1965	602,379	278,303	324,076	9,673,991	1.5
1966	35,783,648	17,747,319	18,036,329	27,710,320	4.3
1967	24,165,949	10,901,639	13,264,310	40,974,630	6.4
1968	488,920	221,555	267,365	41,241,995	6.4
1969	722,739	309,846	412,893	41,654,888	6.5
1970	1,341,100	661,812	679,288	42,334,176	6.6
1971	31,098	15,225	15,873	42,350,049	6.6
1972	7,955,115	3,322,394	4,632,721	46,982,770	7.3
1973	167,578	61,425	106,153	47,088,923	7.3
1974	1,640,324	563,452	1,076,872	48,165,795	7.5
1975	7,267,573	3,161,386	4,106,187	52,271,982	8.1
1976	1,315,348	470,820	844,528	53,116,510	8.2
1977	719,568	257,506	462,062	53,578,572	8.3
1978	20,895,233	8,413,858	12,481,375	66,059,947	10.2
1979	239,548	93,637	145,911	66,205,858	10.3
1980	5,485,529	2,186,115	3,299,414	69,505,272	10.8
1981	15,393,158	5,990,964	9,402,194	78,907,466	12.2
1982	141,020	64,215	76,805	78,984,271	12.2
1983	25,928,701	8,687,857	17,240,844	96,225,115	14.9
1984	4,504,365	1,607,681	2,896,684	99,121,799	15.4
1985	6,983,074	2,693,343	4,289,731	103,411,530	16.0
1986	2,872,502	1,074,859	1,797,643	105,209,173	16.3
1987	2,423,277	938,123	1,485,154	106,694,327	16.5
1988	20,228,357	6,975,285	13,253,072	119,947,399	18.6
1989	11,622,172	4,036,925	7,585,247	127,532,646	19.8
1990	20,542,012	7,245,861	13,296,151	140,828,797	21.8
1991	34,822,531	11,757,311	23,065,220	163,894,017	25.4
1992	59,924,521	19,212,688	40,711,833	204,605,850	31.7
1993	14,656,099	5,299,280	9,356,819	213,962,669	33.2
1994	1,557,732	498,837	1,058,895	215,021,564	33.3
1995	20,623,334	6,347,587	14,275,747	229,297,311	35.5
1996	1,666,876	481,389	1,185,487	230,482,798	35.7
1997	7,039,156	1,787,859	5,251,297	235,734,095	36.5
1998	8,550,666	2,529,944	6,020,722	241,754,817	37.5
1999	5,616,294	1,583,135	4,033,159	245,787,976	38.1
2000	11,694,349	3,116,598	8,577,751	254,365,727	39.4
2001	7,731,549	1,959,378	5,772,171	260,137,898	40.3
2002	3,904,190	894,741	3,009,449	263,147,347	40.8
2003	8,183,868	1,969,234	6,214,634	269,361,981	41.7
2004	7,382,829	1,780,107	5,602,722	274,964,703	42.6
2005	16,925,520	3,620,794	13,304,726	288,269,429	44.7
2006	8,179,660	1,886,397	6,293,263	294,562,692	45.6
2007	10,990,126	1,879,213	9,110,913	303,673,605	47.1
2008	25,621,580	5,561,581	20,059,999	323,733,604	50.2

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2009	59,394,628	13,402,500	45,992,128	369,725,732	57.3
2010	54,478,014	10,424,396	44,053,618	413,779,350	64.1
2011	28,949,877	5,006,043	23,943,834	437,723,184	67.8
2012	11,171,390	1,828,667	9,342,723	447,065,907	69.3
2013	10,279,403	1,511,984	8,767,419	455,833,326	70.6
2014	46,103,755	6,314,847	39,788,908	495,622,234	76.8
2015	18,962,230	2,467,982	16,494,248	512,116,482	79.4
2016	12,777,248	1,165,400	11,611,848	523,728,330	81.2
2017	24,690,795	1,742,598	22,948,197	546,676,527	84.7
2018	13,048,360	1,308,748	11,739,612	558,416,139	86.5
2019	26,615,369	1,565,003	25,050,366	583,466,505	90.4
2020	22,417,019	1,203,405	21,213,614	604,680,119	93.7
2021	25,611,589	833,808	24,777,781	629,457,900	97.5
2022	38,985,857	845,484	38,140,374	667,598,273	103.5
2023	13,121,670	77,764	13,043,906	680,642,178	105.5
9999	46,349,947-	10,975,783-	35,374,164-	645,268,014	100.0
SUBTOTAL	860,222,171	214,954,156	645,268,016		
NONDEPRECIABLE	15,002,968		15,002,968		
TOTAL	875,225,139	214,954,156	660,270,984		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2007	5,708.78	2,165	229	5,480	26.19	209
2008	111,043.49	39,643	4,185	106,858	27.02	3,955
2009	158,630.86	53,078	5,603	153,028	27.84	5,497
2011	8,586.64	2,494	263	8,324	29.32	284
2013	101,201.33	24,693	2,607	98,594	30.98	3,183
2014	14,766.25	3,269	345	14,421	31.65	456
2015	41,897.14	8,279	874	41,023	32.49	1,263
2016	36,654.91	6,363	672	35,983	33.32	1,080
2017	197,636.56	29,645	3,129	194,508	34.00	5,721
2018	185,763.69	23,313	2,461	183,303	34.84	5,261
2019	271,022.14	27,319	2,884	268,138	35.68	7,515
2020	444,301.66	33,856	3,574	440,728	36.37	12,118
2021	1,233,847.63	63,173	6,669	1,227,179	37.06	33,113
2022	3,985,191.47	103,216	10,895	3,974,296	37.61	105,671
2023	1,682,912.44	11,107	1,172	1,681,740	37.77	44,526
	8,479,164.99	431,613	45,562	8,433,603		229,852

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.7 2.71

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1935	16,444.43	15,050	16,444			
1958	63,683.83	50,915	60,152	3,532	16.30	217
1976	26,258.22	17,895	21,141	5,117	21.97	233
1978	11,146.44	7,424	8,771	2,375	22.57	105
1980	109,629.29	71,182	84,095	25,534	23.23	1,099
1982	12,204.98	7,706	9,104	3,101	23.94	130
1983	86,589.73	53,686	63,425	23,165	24.52	945
1984	29,556.43	18,097	21,380	8,176	24.69	331
1985	109,617.31	66,231	78,246	31,371	24.89	1,260
1986	110,140.47	65,611	77,514	32,626	25.11	1,299
1987	29,681.60	17,310	20,450	9,232	25.73	359
1988	230,555.18	132,339	156,347	74,208	25.98	2,856
1989	253,789.18	143,239	169,225	84,564	26.24	3,223
1990	195,083.34	108,154	127,775	67,308	26.52	2,538
1991	285,470.50	155,296	183,469	102,002	26.82	3,803
1992	76,688.69	40,890	48,308	28,381	27.14	1,046
1993	2,172,966.53	1,134,289	1,340,066	832,901	27.47	30,320
1994	41,573.85	21,219	25,068	16,506	27.82	593
1996	24,175.73	11,815	13,958	10,218	28.25	362
1997	208,448.09	99,180	117,173	91,275	28.64	3,187
1998	429,870.49	198,815	234,883	194,987	29.05	6,712
1999	305,065.23	137,645	162,616	142,449	29.19	4,880
2000	237,524.37	104,344	123,274	114,250	29.36	3,891
2001	179,000.00	76,003	89,791	89,209	29.81	2,993
2002	9,723.14	4,002	4,728	4,995	30.02	166
2003	271,071.10	107,886	127,458	143,613	30.25	4,748
2004	1,143,084.50	438,716	518,306	624,778	30.50	20,485
2005	428,604.11	158,155	186,847	241,757	30.78	7,854
2006	928,740.33	328,403	387,980	540,760	31.08	17,399
2007	516,608.48	174,407	206,047	310,561	31.39	9,894
2008	1,959,895.68	632,066	746,732	1,213,164	31.51	38,501
2009	2,933,040.76	895,164	1,057,560	1,875,481	31.87	58,848
2010	2,451,233.54	707,426	835,763	1,615,471	32.05	50,405
2011	298,754.41	81,022	95,721	203,033	32.25	6,296
2012	37,883.52	9,585	11,324	26,560	32.48	818
2013	181,693.78	42,516	50,229	131,465	32.74	4,015
2014	4,038,886.37	865,129	1,022,076	3,016,810	33.02	91,363
2015	1,545,002.12	300,348	354,835	1,190,167	33.15	35,902
2016	544,942.14	94,602	111,764	433,178	33.32	13,001
2017	463,399.48	70,622	83,434	379,965	33.37	11,386
2018	388,079.03	50,256	59,373	328,706	33.61	9,780

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2019	1,004,042.79	106,830	126,211	877,832	33.59	26,134
2020	87,458.80	7,163	8,463	78,996	33.63	2,349
2021	128,856.38	7,216	8,525	120,331	33.71	3,570
2022	265,508.36	7,700	9,097	256,411	33.48	7,659
9999	2,734,528.70-	862,363-	1,018,662-	1,715,867-		54,198-
	22,137,144.03	6,981,186	8,246,486	13,890,658		438,757
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					31.7	1.98

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1916	175,472.68	174,613	105,775	69,698	0.53	69,698
1932	602.40	559	339	263	7.04	37
1935	564,423.15	516,560	312,915	251,508	8.15	30,860
1946	484.94	422	256	229	11.50	20
1954	3,945,835.14	3,267,151	1,979,130	1,966,705	14.33	137,244
1957	137,083.79	110,380	66,864	70,220	15.97	4,397
1961	346,385.67	272,744	165,219	181,167	16.74	10,822
1963	1,573,909.30	1,218,206	737,948	835,961	17.52	47,715
1965	53,759.86	40,847	24,744	29,016	18.34	1,582
1967	24,003,838.66	17,878,059	10,829,925	13,173,914	19.19	686,499
1968	361,924.73	266,739	161,581	200,344	19.63	10,206
1969	221,599.62	162,743	98,584	123,016	19.53	6,299
1973	38,481.00	27,129	16,434	22,047	20.92	1,054
1975	419,410.21	287,883	174,390	245,020	21.93	11,173
1976	17,438.45	11,884	7,199	10,239	21.97	466
1978	20,502,042.62	13,654,360	8,271,350	12,230,693	22.57	541,900
1981	12,789,541.84	8,164,844	4,945,987	7,843,555	23.79	329,700
1984	693,417.71	424,580	257,196	436,222	24.69	17,668
1985	133,860.33	80,878	48,993	84,867	24.89	3,410
1986	416,595.46	248,166	150,331	266,264	25.11	10,604
1988	15,069,660.19	8,649,985	5,239,869	9,829,791	25.98	378,360
1989	7,357,194.15	4,152,400	2,515,384	4,841,810	26.24	184,520
1990	6,479,888.32	3,592,450	2,176,185	4,303,703	26.52	162,281
1991	31,895,650.39	17,351,234	10,510,792	21,384,858	26.82	797,347
1992	52,490,038.28	27,987,688	16,953,997	35,536,041	27.14	1,309,360
1993	401,002.87	209,323	126,801	274,202	27.47	9,982
1994	16,680.06	8,514	5,157	11,523	27.82	414
1995	124,581.42	62,091	37,613	86,968	28.18	3,086
1996	647,409.73	316,389	191,658	455,752	28.25	16,133
1997	274,432.07	130,575	79,098	195,334	28.64	6,820
1998	599,628.40	277,328	167,996	431,632	29.05	14,858
1999	234,102.55	105,627	63,985	170,118	29.19	5,828
2000	6,483,934.82	2,848,393	1,725,460	4,758,475	29.36	162,073
2001	2,266,355.22	962,294	582,925	1,683,430	29.81	56,472
2002	879,550.45	362,023	219,301	660,249	30.02	21,994
2003	1,983,806.66	789,555	478,286	1,505,521	30.25	49,769
2004	203,091.82	77,947	47,218	155,874	30.50	5,111
2005	887,279.57	327,406	198,331	688,949	30.78	22,383
2006	1,012,988.84	358,193	216,981	796,008	31.08	25,612
2007	46,539.86	15,712	9,518	37,022	31.39	1,179
2008	2,853,651.92	920,303	557,488	2,296,164	31.51	72,871

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2009	17,731,630.97	5,411,694	3,278,222	14,453,409	31.87	453,511
2010	20,536,198.92	5,926,747	3,590,223	16,945,976	32.05	528,736
2011	16,125,548.83	4,373,249	2,649,167	13,476,382	32.25	417,872
2012	3,496,681.74	884,660	535,897	2,960,785	32.48	91,157
2013	231,088.74	54,075	32,757	198,332	32.74	6,058
2014	10,279,133.56	2,201,790	1,333,770	8,945,364	33.02	270,907
2015	149,213.17	29,007	17,571	131,642	33.15	3,971
2016	453,213.66	78,678	47,661	405,553	33.32	12,171
2017	990,597.57	150,967	91,451	899,147	33.37	26,945
2018	275,973.16	35,739	21,649	254,324	33.61	7,567
2019	206,079.04	21,927	13,283	192,796	33.59	5,740
2020	2,230,611.63	182,687	110,666	2,119,946	33.63	63,037
2021	2,299,804.80	128,789	78,016	2,221,789	33.71	65,909
2022	5,454,129.36	158,170	95,814	5,358,315	33.48	160,045
2023	813,770.69	6,022	3,647	810,124	33.42	24,241
9999	1,853,012.73-	900,154-	545,282-	1,307,730-		48,767-
	278,024,238.26	135,058,224	81,813,715	196,210,524		7,316,907

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.8 2.63

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
NET SALVAGE PERCENT.. 0						
1939	3,508.43	3,508	3,508			
1972	450.26	409	450			
1984	11,260.27	9,178	11,260			
1992	13,845.31	10,129	13,845			
1993	16,941.89	12,198	16,942			
1994	29,220.00	20,591	29,220			
1997	5,855.00	3,882	5,855			
2003	3,759.70	2,113	3,760			
2007	1,139.15	547	1,129	10	17.33	1
2008	354,558.47	162,211	334,772	19,786	17.79	1,112
2009	51,447.64	22,328	46,081	5,367	18.26	294
2010	38,934.54	15,944	32,905	6,030	18.75	322
2011	7,105.08	2,728	5,630	1,475	19.25	77
2012	28,465.52	10,176	21,001	7,465	19.77	378
2013	25,257.86	8,335	17,202	8,056	20.30	397
2014	413,665.01	124,720	257,398	156,267	20.85	7,495
2015	1,021,769.08	277,104	571,890	449,879	21.50	20,925
2016	9,177.69	2,210	4,561	4,617	22.07	209
2017	131,543.68	27,466	56,685	74,859	22.74	3,292
2018	372,536.26	65,566	135,315	237,221	23.41	10,133
2019	84,483.65	12,030	24,828	59,656	24.09	2,476
2020	174,920.13	18,839	38,880	136,040	24.86	5,472
2021	645,467.93	46,603	96,180	549,288	25.70	21,373
2022	1,059,042.73	38,443	79,339	979,704	26.55	36,900
2023	52,851.03	481	992	51,859	27.22	1,905
9999	8,525.80	1,680	3,387	5,139		211
	4,565,732.11	899,419	1,813,015	2,752,717		112,972

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.4 2.47

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 355.00 POWER GENERATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
1980	5,976.33	4,985	5,976			
1983	14,573.73	11,776	14,574			
1987	19,246.40	14,758	19,246			
1989	49,338.78	36,905	49,339			
1990	26,650.73	19,612	26,651			
1992	59,866.38	42,685	58,442	1,424	12.48	114
1993	267,544.17	187,816	257,146	10,398	12.74	816
1994	20,325.00	13,969	19,125	1,200	13.19	91
1997	30,447.00	19,711	26,987	3,460	14.16	244
1998	74,281.11	46,983	64,326	9,955	14.53	685
1999	54,144.46	33,396	45,724	8,420	14.91	565
2000	115,244.22	69,446	95,081	20,163	15.17	1,329
2001	38,477.83	22,517	30,829	7,649	15.59	491
2002	56,915.93	32,391	44,348	12,568	15.90	790
2005	68,295.28	35,035	47,968	20,327	17.09	1,189
2007	12,208.69	5,782	7,916	4,293	17.78	241
2008	1,263,581.59	570,507	781,101	482,481	18.22	26,481
2009	2,526,515.89	1,085,897	1,486,741	1,039,775	18.57	55,992
2010	20,681.36	8,415	11,521	9,160	18.95	483
2011	62,203.16	23,811	32,600	29,603	19.35	1,530
2012	81,422.26	29,108	39,853	41,569	19.77	2,103
2013	26,762.41	8,885	12,165	14,597	20.12	725
2014	609,411.88	185,383	253,814	355,598	20.59	17,270
2015	90,933.42	25,098	34,363	56,570	20.99	2,695
2016	10,498.31	2,587	3,542	6,956	21.41	325
2017	13,046.73	2,818	3,858	9,189	21.78	422
2018	4,307.88	793	1,086	3,222	22.17	145
2019	9,195.02	1,383	1,894	7,301	22.60	323
2020	160,993.90	18,595	25,459	135,535	22.97	5,901
2022	220,398.74	8,926	12,220	208,179	23.69	8,788
9999	144,517.16-	61,762-	84,446-	60,071-		3,118-
	5,868,971.43	2,508,211	3,429,449	2,439,523		126,620

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.3 2.16

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1935	46,716.55	42,344	22,467	24,250	9.09	2,668
1957	7,035.53	5,526	2,932	4,104	18.03	228
1958	32,519.35	25,154	13,346	19,173	19.03	1,008
1965	13,337.78	9,593	5,090	8,248	22.65	364
1972	82,114.26	53,604	28,441	53,673	27.12	1,979
1973	125,694.50	81,073	43,016	82,678	27.52	3,004
1974	1,503,776.46	957,906	508,244	995,532	27.92	35,657
1975	849,779.52	530,262	281,345	568,435	28.92	19,655
1976	971,420.09	598,103	317,340	654,080	29.34	22,293
1977	458,850.00	276,503	146,706	312,144	30.34	10,288
1978	270,355.19	160,591	85,206	185,149	30.76	6,019
1979	73,749.33	43,158	22,899	50,850	31.19	1,630
1980	153,505.40	87,790	46,579	106,926	32.19	3,322
1981	160,944.25	90,579	48,059	112,885	32.63	3,460
1982	49,998.70	27,469	14,574	35,425	33.63	1,053
1983	192,381.70	103,886	55,120	137,262	34.07	4,029
1985	309,939.29	160,177	84,986	224,953	35.53	6,331
1986	64,235.29	32,561	17,276	46,959	35.99	1,305
1987	225,949.78	111,438	59,127	166,823	36.99	4,510
1988	489,155.66	236,262	125,355	363,801	37.46	9,712
1989	92,110.83	43,218	22,931	69,180	38.46	1,799
1990	94,085.10	43,157	22,898	71,187	38.94	1,828
1991	75,459.60	33,564	17,808	57,652	39.94	1,443
1992	34,682.29	15,052	7,986	26,696	40.43	660
1993	585,692.44	245,991	130,517	455,175	41.43	10,987
1994	287,028.44	117,366	62,272	224,756	41.92	5,362
1995	933,614.65	368,591	195,566	738,049	42.92	17,196
1996	132,298.94	50,723	26,912	105,387	43.42	2,427
1997	1,678,151.28	619,573	328,732	1,349,419	44.42	30,379
1998	525,641.24	187,917	99,705	425,936	44.93	9,480
1999	402,468.56	138,127	73,287	329,182	45.93	7,167
2000	489,230.36	162,033	85,971	403,259	46.44	8,683
2001	874,205.20	276,948	146,942	727,263	47.44	15,330
2002	556,204.52	169,364	89,861	466,344	47.97	9,722
2003	410,588.41	119,071	63,176	347,412	48.97	7,094
2004	2,412,532.77	669,237	355,082	2,057,451	49.49	41,573
2005	655,722.60	172,324	91,431	564,292	50.49	11,176
2006	1,981,527.29	495,184	262,734	1,718,793	51.03	33,682
2007	1,276,591.81	300,254	159,308	1,117,284	52.03	21,474
2008	3,804,768.86	838,952	445,130	3,359,639	53.03	63,354
2009	535,945.98	111,048	58,920	477,026	53.57	8,905

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
2010	760,840.68	146,386	77,669	683,172	54.57	12,519
2013	306,529.32	45,979	24,395	282,134	56.67	4,979
2014	4,405,978.64	594,807	315,592	4,090,387	57.67	70,927
2015	2,390,999.91	288,833	153,248	2,237,752	58.23	38,430
2016	3,136,411.58	331,519	175,897	2,960,515	59.23	49,983
2017	3,493,507.23	318,608	169,046	3,324,461	59.79	55,602
2018	1,048,285.61	79,670	42,271	1,006,015	60.79	16,549
2019	4,282,229.06	262,072	139,050	4,143,179	61.36	67,522
2020	2,934,951.16	135,595	71,944	2,863,007	61.94	46,222
2021	3,149,014.86	97,619	51,794	3,097,221	62.52	49,540
2022	2,005,591.01	31,488	16,707	1,988,884	62.69	31,726
2023	2,498,983.37	9,996	5,304	2,493,679	62.64	39,810
9999	11,878,502.80-	2,438,572-	1,293,852-	10,584,651-		203,766-
	42,454,829.43	8,715,673	4,624,342	37,830,488		728,279

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 51.9 1.72

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1912	3,869.28	3,565	2,316	1,553	9.48	164
1915	74,556.50	68,443	44,463	30,094	9.65	3,119
1916	2,264.32	2,084	1,354	910	9.28	98
1917	18,213.24	16,603	10,786	7,427	10.28	722
1919	4,729.87	4,280	2,780	1,950	10.94	178
1920	122,709.20	111,224	72,254	50,455	10.64	4,742
1921	692.58	629	409	284	10.36	27
1922	5,699.88	5,124	3,329	2,371	11.36	209
1924	1,957.59	1,764	1,146	812	10.89	75
1925	138,403.05	123,428	80,182	58,221	11.89	4,897
1926	113,284.49	101,095	65,674	47,610	11.70	4,069
1927	21,652.70	19,124	12,424	9,229	12.70	727
1928	16,934.55	14,962	9,720	7,215	12.53	576
1929	18,270.37	16,144	10,488	7,782	12.38	629
1930	270,770.24	236,707	153,772	116,998	13.38	8,744
1931	54,151.30	47,328	30,746	23,405	13.26	1,765
1932	24,015.69	20,980	13,629	10,387	13.17	789
1933	14,232.60	12,297	7,988	6,245	14.17	441
1934	3,907.37	3,373	2,191	1,716	14.09	122
1935	482,558.63	411,912	267,590	214,969	15.09	14,246
1936	356,940.02	304,327	197,700	159,240	15.04	10,588
1937	55,326.44	47,105	30,601	24,725	15.01	1,647
1938	50,807.56	42,755	27,775	23,033	16.01	1,439
1939	61,927.87	52,019	33,793	28,135	16.00	1,758
1940	18,414.47	15,437	10,028	8,386	16.01	524
1941	8,087.28	6,698	4,351	3,736	17.01	220
1942	32,564.04	26,904	17,478	15,086	17.04	885
1943	2,181,156.84	1,797,273	1,167,560	1,013,597	17.09	59,309
1944	3,914.21	3,185	2,069	1,845	18.09	102
1945	39,141.40	31,752	20,627	18,514	18.15	1,020
1946	127,317.34	101,956	66,234	61,083	19.15	3,190
1947	23,247.89	18,552	12,052	11,196	19.24	582
1948	4,853.93	3,859	2,507	2,347	19.34	121
1949	2,909.04	2,282	1,482	1,427	20.34	70
1950	64,255.76	50,190	32,605	31,651	20.46	1,547
1951	9,357.18	7,276	4,727	4,630	20.59	225
1952	3,101.48	2,378	1,545	1,556	21.59	72
1953	419,902.85	320,386	208,132	211,771	21.74	9,741
1954	209,709.65	157,723	102,461	107,249	22.74	4,716
1955	85,941.59	64,284	41,761	44,181	22.91	1,928
1956	36,536.86	27,172	17,652	18,885	23.09	818

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1957	966,456.90	708,026	459,954	506,503	24.09	21,025
1958	41,596.91	30,283	19,673	21,924	24.29	903
1961	44,879.38	31,721	20,607	24,272	25.72	944
1962	45,642.03	31,739	20,619	25,023	26.72	936
1963	30,105.33	20,773	13,495	16,610	26.96	616
1965	319,829.73	215,181	139,788	180,042	28.21	6,382
1966	21,592,285.96	14,399,896	9,354,586	12,237,700	28.47	429,845
1968	34,420.00	22,339	14,512	19,908	29.75	669
1969	401,852.73	256,061	166,345	235,508	30.75	7,659
1970	781,349.79	492,797	320,135	461,215	31.03	14,864
1971	7,126.07	4,447	2,889	4,237	31.33	135
1972	6,228,452.78	3,811,813	2,476,263	3,752,190	32.33	116,059
1974	112,985.01	66,989	43,518	69,467	33.64	2,065
1975	3,714,031.13	2,174,937	1,412,902	2,301,129	33.97	67,740
1976	246,041.90	141,080	91,650	154,392	34.97	4,415
1977	161,159.15	91,184	59,236	101,923	35.30	2,887
1978	78,508.62	43,808	28,459	50,050	35.65	1,404
1979	86,228.75	47,046	30,562	55,667	36.65	1,519
1980	3,223,142.22	1,732,439	1,125,442	2,097,700	37.00	56,695
1982	19,290.42	9,965	6,474	12,816	38.37	334
1983	24,537,500.26	12,465,050	8,097,654	16,439,846	38.74	424,364
1984	2,803,782.15	1,388,713	902,148	1,901,634	39.74	47,852
1985	3,490,753.96	1,697,903	1,103,007	2,387,747	40.12	59,515
1986	1,042,054.14	493,517	320,603	721,451	41.12	17,545
1987	1,007,322.58	467,801	303,897	703,426	41.52	16,942
1988	2,979,493.48	1,345,241	873,907	2,105,586	42.52	49,520
1989	2,341,591.92	1,034,984	672,355	1,669,237	42.92	38,892
1990	6,027,373.24	2,605,633	1,692,694	4,334,679	43.34	100,016
1992	5,295,818.59	2,167,049	1,407,777	3,888,042	44.76	86,864
1993	6,538,894.74	2,589,402	1,682,150	4,856,745	45.76	106,135
1994	594,962.59	229,477	149,075	445,888	46.19	9,653
1995	10,247,152.66	3,844,732	2,497,648	7,749,505	46.63	166,191
1996	418,494.03	151,411	98,361	320,133	47.63	6,721
1997	3,304,189.93	1,159,771	753,421	2,550,769	48.07	53,064
1998	2,273,457.10	772,975	502,147	1,771,310	48.53	36,499
1999	2,097,803.63	684,723	444,816	1,652,988	49.53	33,373
2000	2,783,873.73	877,199	569,854	2,214,020	49.99	44,289
2001	1,796,577.63	541,488	351,766	1,444,812	50.99	28,335
2002	1,493,974.65	432,954	281,259	1,212,716	51.46	23,566
2003	2,136,820.89	594,036	385,903	1,750,918	51.94	33,710
2004	1,184,085.08	312,717	203,150	980,935	52.94	18,529

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
2005	7,388,029.67	1,861,783	1,209,468	6,178,562	53.43	115,638
2006	1,921,244.91	460,522	299,168	1,622,077	53.92	30,083
2007	6,292,793.38	1,429,723	928,789	5,364,004	54.42	98,567
2008	8,356,892.16	1,780,018	1,156,351	7,200,541	55.42	129,927
2009	7,871,427.50	1,575,860	1,023,724	6,847,704	55.93	122,433
2010	5,170,927.25	967,998	628,839	4,542,088	56.44	80,476
2011	3,149,642.79	548,038	356,021	2,793,622	56.97	49,037
2012	2,049,295.02	329,117	213,804	1,835,491	57.49	31,927
2013	4,152,674.44	610,443	396,561	3,756,113	58.03	64,727
2014	12,136,614.16	1,616,597	1,050,188	11,086,426	58.57	189,285
2015	5,354,324.14	638,235	414,616	4,939,708	59.11	83,568
2016	5,949,427.37	624,690	405,817	5,543,610	59.67	92,904
2017	15,526,038.73	1,406,659	913,806	14,612,233	60.23	242,607
2018	3,120,012.54	238,681	155,054	2,964,959	60.36	49,121
2019	12,913,705.52	795,484	516,769	12,396,937	60.94	203,429
2020	3,382,457.68	159,314	103,495	3,278,963	60.69	54,028
2021	5,274,018.02	168,769	109,637	5,164,381	60.50	85,362
2022	4,454,853.07	73,505	47,751	4,407,102	59.61	73,932
2023	2,508,328.07	10,786	7,007	2,501,321	57.55	43,463
9999	16,271,626.05-	5,305,906-	3,446,870-	12,824,756-		274,374-
	228,420,729.31	74,484,195	48,387,077	180,033,652		3,851,652

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 46.7 1.69

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1912	1,572.72	1,573	1,573			
1916	1,911.68	1,912	1,912			
1917	11,474.98	11,475	11,475			
1921	3,790.15	3,790	3,790			
1924	2,735.16	2,735	2,735			
1925	130,561.92	130,510	64,171	66,391	0.04	66,391
1926	133,622.37	133,502	65,642	67,980	0.09	67,980
1927	28,585.36	28,540	14,033	14,552	0.15	14,552
1928	19,749.81	19,513	9,594	10,156	1.15	8,831
1930	102,431.77	100,977	49,650	52,782	1.34	39,390
1931	67,628.80	66,574	32,734	34,895	1.46	23,901
1932	12,566.11	12,350	6,072	6,494	1.59	4,084
1933	3,626.04	3,557	1,749	1,877	1.74	1,079
1934	9,285.87	9,091	4,470	4,816	1.91	2,521
1935	62,008.89	60,570	29,782	32,227	2.09	15,420
1936	115,058.29	112,113	55,126	59,932	2.29	26,171
1937	66,205.54	64,339	31,635	34,571	2.50	13,828
1938	68,078.15	65,968	32,436	35,642	2.72	13,104
1939	95,491.18	92,244	45,356	50,135	2.96	16,938
1940	31,426.02	30,257	14,877	16,549	3.21	5,155
1941	5,580.70	5,354	2,633	2,948	3.47	850
1942	64,632.82	62,300	30,633	34,000	3.03	11,221
1943	2,181,478.24	2,094,219	1,029,720	1,151,758	3.33	345,873
1944	12,957.82	12,386	6,090	6,868	3.64	1,887
1945	11,217.09	10,674	5,248	5,969	3.97	1,504
1946	69,934.23	66,235	32,568	37,366	4.30	8,690
1947	54,472.68	51,749	25,445	29,028	4.00	7,257
1948	10,708.15	10,119	4,975	5,733	4.37	1,312
1949	8,292.42	7,793	3,832	4,460	4.74	941
1950	46,927.54	43,849	21,560	25,368	5.12	4,955
1951	24,689.71	23,110	11,363	13,327	4.92	2,709
1952	12,799.58	11,905	5,854	6,946	5.34	1,301
1953	625,274.35	582,130	286,231	339,043	5.19	65,326
1954	300,399.77	277,750	136,569	163,831	5.63	29,100
1955	126,303.26	116,805	57,433	68,870	5.53	12,454
1956	70,764.47	64,955	31,938	38,826	5.99	6,482
1957	35,807.16	32,849	16,152	19,655	5.94	3,309
1958	55,429.01	50,440	24,801	30,628	6.43	4,763
1961	80,479.17	72,351	35,575	44,904	6.97	6,442
1962	48,649.72	43,327	21,304	27,346	7.49	3,651
1963	46,793.72	41,553	20,431	26,363	7.57	3,483

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1965	73,070.90	64,419	31,675	41,396	7.79	5,314
1966	4,622,443.35	4,031,233	1,982,143	2,640,300	8.36	315,825
1968	35,388.05	30,558	15,025	20,363	8.69	2,343
1969	84,594.90	72,633	35,713	48,882	8.89	5,499
1970	147,368.99	124,969	61,447	85,922	9.50	9,044
1971	13,739.30	11,574	5,691	8,048	9.73	827
1972	1,038,848.07	868,893	427,232	611,616	9.98	61,284
1974	13,998.60	11,524	5,666	8,333	10.52	792
1975	599,973.89	489,579	240,724	359,250	10.82	33,202
1977	42,780.69	34,242	16,837	25,944	11.47	2,262
1979	34,431.77	26,815	13,185	21,247	12.50	1,700
1980	1,193,863.10	918,916	451,828	742,035	12.87	57,656
1983	809,610.51	599,112	294,581	515,030	14.05	36,657
1984	134,019.84	97,741	48,059	85,961	14.48	5,937
1985	768,564.12	551,983	271,408	497,156	14.91	33,344
1986	205,518.24	145,240	71,414	134,104	15.36	8,731
1987	236,554.49	163,506	80,395	156,159	16.08	9,711
1988	295,673.19	200,762	98,714	196,959	16.55	11,901
1989	21,431.94	14,282	7,022	14,410	17.02	847
1990	1,674,480.37	1,094,105	537,967	1,136,513	17.51	64,907
1992	572,844.23	356,939	175,506	397,338	18.75	21,191
1993	358,744.07	218,475	107,423	251,321	19.26	13,049
1994	240,277.70	142,148	69,894	170,384	20.02	8,511
1995	2,835,618.70	1,635,585	804,211	2,031,408	20.54	98,900
1996	176,864.14	98,849	48,604	128,260	21.31	6,019
1997	1,036,369.93	560,469	275,581	760,789	22.08	34,456
1998	436,827.22	229,334	112,763	324,064	22.62	14,326
1999	572,929.58	290,132	142,657	430,273	23.39	18,396
2000	534,225.82	260,489	128,081	406,145	24.17	16,804
2001	386,599.26	181,160	89,076	297,523	24.95	11,925
2002	417,410.92	187,584	92,234	325,177	25.73	12,638
2003	631,044.62	271,349	133,421	497,624	26.51	18,771
2004	604,016.76	247,888	121,886	482,131	27.30	17,660
2005	2,284,646.16	888,270	436,759	1,847,887	28.30	65,296
2006	171,037.75	63,096	31,024	140,014	29.08	4,815
2007	2,053,375.92	716,218	352,162	1,701,214	29.87	56,954
2008	2,372,131.15	775,687	381,402	1,990,729	30.87	64,487
2009	238,824.56	73,224	36,004	202,821	31.66	6,406
2010	783,441.59	223,046	109,671	673,771	32.66	20,630
2011	1,314,648.76	347,067	170,652	1,143,997	33.45	34,200
2012	96,983.02	23,470	11,540	85,443	34.45	2,480

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
2013	1,061,797.09	233,595	114,858	946,939	35.45	26,712
2014	2,194,357.17	434,483	213,634	1,980,723	36.45	54,341
2015	5,519,178.30	971,375	477,621	5,041,557	37.45	134,621
2016	283,133.88	43,801	21,537	261,597	38.25	6,839
2017	406,388.58	53,887	26,496	379,893	39.25	9,679
2018	185,761.31	20,527	10,093	175,668	40.25	4,364
2019	153,157.12	13,539	6,657	146,500	41.25	3,552
2020	389,420.66	25,819	12,695	376,726	42.25	8,917
2021	198,658.46	8,781	4,317	194,341	43.25	4,493
2022	703,119.93	15,539	7,641	695,479	44.25	15,717
2023	6,252.07	34	16	6,236	45.00	139
9999	4,387,312.76-	2,263,418-	1,113,953-	3,273,360-		221,414-
	41,740,530.40	21,533,970	10,598,056	31,142,474		2,106,512

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.8 5.05

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1912	22,589.57	22,590	22,590			
1916	8,724.19	8,724	8,724			
1917	29,533.87	29,534	29,534			
1919	5,542.61	5,543	5,543			
1921	735.56	736	736			
1922	2,061.14	2,061	2,061			
1924	10,576.28	10,576	10,576			
1925	406,575.78	406,576	406,576			
1926	275,896.64	275,897	275,897			
1927	81,823.31	81,823	81,823			
1928	31,303.91	31,304	31,304			
1929	717.00	717	717			
1930	177,907.55	177,908	177,908			
1931	106,567.72	106,568	106,568			
1932	47,485.32	47,485	47,485			
1933	3,294.89	3,295	3,295			
1934	12,506.52	12,507	12,507			
1935	83,868.66	83,869	83,869			
1936	171,427.07	171,427	171,427			
1937	71,566.46	71,566	71,566			
1938	75,863.59	75,864	75,864			
1939	58,561.23	58,561	58,561			
1940	20,471.70	20,472	20,472			
1941	4,074.41	4,074	4,074			
1942	47,804.75	47,805	47,805			
1943	3,493,758.53	3,493,759	3,493,759			
1944	15,414.58	15,415	15,415			
1945	12,444.98	12,425	9,127	3,318	0.12	3,318
1946	51,760.96	51,414	37,768	13,993	0.52	13,993
1947	41,353.68	40,857	30,013	11,341	0.92	11,341
1948	3,494.17	3,459	2,541	953	0.76	953
1949	3,765.73	3,706	2,722	1,044	1.19	877
1950	13,805.72	13,505	9,921	3,885	1.63	2,383
1951	7,539.28	7,382	5,423	2,116	1.53	1,383
1952	3,913.23	3,806	2,796	1,117	1.99	561
1953	525,410.70	507,547	372,835	152,576	2.46	62,023
1954	110,500.49	106,743	78,411	32,089	2.43	13,205
1955	41,856.73	40,132	29,480	12,377	2.92	4,239
1956	22,273.98	21,341	15,677	6,597	2.93	2,252
1957	193,104.07	184,801	135,751	57,353	2.97	19,311
1958	15,935.24	15,123	11,109	4,826	3.49	1,383

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1961	11,663.58	10,919	8,021	3,643	4.23	861
1962	17,177.97	16,032	11,777	5,401	4.36	1,239
1963	7,650.64	7,115	5,227	2,424	4.52	536
1965	58,981.00	54,050	39,704	19,277	5.29	3,644
1966	9,568,918.57	8,726,854	6,410,590	3,158,329	5.50	574,242
1968	12,368.97	11,157	8,196	4,173	5.98	698
1969	12,546.57	11,247	8,262	4,285	6.24	687
1970	382,020.04	340,151	249,869	132,151	6.52	20,269
1971	10,232.80	9,046	6,645	3,588	6.82	526
1972	605,250.06	530,925	390,008	215,242	7.14	30,146
1973	2,456.22	2,137	1,570	886	7.47	119
1974	9,563.95	8,201	6,024	3,540	8.14	435
1975	1,680,201.42	1,427,499	1,048,615	631,586	8.50	74,304
1976	54,189.63	45,590	33,490	20,700	8.87	2,334
1977	56,778.47	47,274	34,727	22,051	9.25	2,384
1978	33,180.60	27,324	20,072	13,109	9.64	1,360
1979	45,138.57	36,743	26,991	18,148	10.05	1,806
1980	799,412.49	642,808	472,195	327,217	10.48	31,223
1981	72,360.52	57,136	41,971	30,390	11.19	2,716
1982	59,525.72	46,371	34,063	25,463	11.63	2,189
1983	288,044.64	221,218	162,503	125,542	12.08	10,393
1984	250,999.93	189,907	139,502	111,498	12.55	8,884
1985	1,693,355.21	1,254,776	921,736	771,619	13.28	58,104
1986	226,760.23	165,286	121,416	105,344	13.76	7,656
1987	759,749.71	544,285	399,822	359,928	14.25	25,258
1988	329,311.48	230,518	169,334	159,977	15.00	10,665
1989	311,615.14	214,017	157,213	154,402	15.50	9,961
1990	3,463,154.40	2,319,967	1,704,206	1,758,948	16.26	108,176
1991	79,126.91	51,907	38,130	40,997	16.78	2,443
1992	459,275.48	293,293	215,448	243,827	17.54	13,901
1993	754,574.85	470,855	345,882	408,693	18.08	22,605
1994	250,014.08	152,259	111,847	138,167	18.62	7,420
1995	6,475,030.72	3,825,448	2,810,105	3,664,926	19.39	189,011
1996	129,486.81	74,118	54,446	75,041	20.17	3,720
1997	437,673.46	243,522	178,887	258,786	20.73	12,484
1998	401,410.66	215,758	158,492	242,919	21.51	11,293
1999	277,325.07	144,431	106,096	171,229	22.08	7,755
2000	1,039,266.17	521,088	382,782	656,484	22.87	28,705
2001	363,172.65	175,776	129,122	234,051	23.45	9,981
2002	362,565.21	168,267	123,606	238,959	24.25	9,854
2003	584,302.97	259,431	190,573	393,730	25.05	15,718

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
2004	952,452.23	405,364	297,773	654,679	25.64	25,534
2005	2,840,211.69	1,150,286	844,979	1,995,233	26.44	75,463
2006	1,024,086.05	393,454	289,024	735,062	27.25	26,975
2007	699,608.98	254,098	186,656	512,953	28.05	18,287
2008	2,451,007.73	841,921	618,460	1,832,548	28.67	63,919
2009	2,444,550.13	787,145	578,223	1,866,327	29.48	63,308
2010	962,723.77	289,106	212,372	750,352	30.29	24,772
2011	235,577.57	65,585	48,178	187,400	31.10	6,026
2012	244,628.25	62,698	46,057	198,571	31.92	6,221
2013	568,674.86	133,639	98,169	470,506	32.55	14,455
2014	646,789.81	137,378	100,915	545,875	33.37	16,358
2015	1,284,189.77	243,482	178,857	1,105,333	34.19	32,329
2016	681,502.92	113,538	83,403	598,100	35.02	17,079
2017	2,247,855.84	322,343	236,788	2,011,068	35.84	56,112
2018	784,805.88	94,177	69,181	715,625	36.67	19,515
2019	447,976.33	43,364	31,854	416,122	37.32	11,150
2020	656,066.41	47,827	35,133	620,933	38.15	16,276
2021	754,771.37	36,984	27,168	727,603	38.82	18,743
2022	1,265,931.98	31,395	23,062	1,242,870	39.32	31,609
2023	838,359.47	5,282	3,880	834,479	39.43	21,164
9999	6,774,603.14-	3,960,417-	3,065,055-	3,709,548-		226,063-
	54,006,813.27	31,572,252	24,434,472	29,572,342		1,802,159

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.4 3.34

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 364.00 FLOW MEASURING DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2.5						
NET SALVAGE PERCENT.. 0						
1989	7,979.00	7,650	4,846	3,133	1.46	2,146
1990	3,478.54	3,317	2,101	1,378	1.60	861
1991	8,740.98	8,307	5,262	3,479	1.67	2,083
1992	6,784.52	6,394	4,050	2,735	1.89	1,447
1999	51,368.90	45,739	28,975	22,394	2.95	7,591
2001	7,764.93	6,748	4,275	3,490	3.32	1,051
2002	4,455.38	3,817	2,418	2,037	3.51	580
2004	2,628.68	2,183	1,383	1,246	3.88	321
2005	8,722.16	7,128	4,515	4,207	4.03	1,044
2006	15,631.29	12,543	7,946	7,685	4.19	1,834
2007	9,030.61	7,123	4,512	4,519	4.28	1,056
2008	29,418.95	22,770	14,424	14,995	4.38	3,424
2009	92,082.61	69,743	44,181	47,902	4.48	10,692
2010	29,477.55	21,728	13,764	15,714	4.64	3,387
2011	53,822.99	38,430	24,345	29,478	4.81	6,128
2013	26,874.75	17,442	11,049	15,826	5.41	2,925
2014	152,277.99	92,509	58,603	93,675	5.81	16,123
2015	112,570.79	62,860	39,821	72,750	6.33	11,493
2016	5,515.89	2,776	1,759	3,757	6.91	544
2018	1,269.20	478	303	966	8.28	117
2020	30,025.23	7,026	4,450	25,575	9.82	2,604
2021	13,780.49	2,177	1,379	12,401	10.66	1,163
9999	14,726.81-	9,812-	6,215-	8,512-		1,718-
	658,974.62	439,076	278,146	380,829		76,896

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.0 11.67

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-S2						
NET SALVAGE PERCENT.. 0						
1970	30,360.76	30,361	30,361			
1991	227,265.28	203,630	181,723	45,542	3.71	12,275
2009	14,938.00	8,533	7,615	7,323	10.51	697
	272,564.04	242,524	219,699	52,865		12,972
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					4.1	4.76

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 370.00 RECEIVING WELLS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2007	6,261.10	2,154	1,182	5,079	30.51	166
2009	92,112.20	27,984	15,355	76,757	32.08	2,393
2013	33,467.05	7,396	4,058	29,409	35.25	834
2017	1,547.02	209	115	1,432	38.44	37
2019	544,001.01	49,613	27,222	516,779	39.86	12,965
	677,388.38	87,356	47,932	629,457		16,395

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 38.4 2.42

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0.5						
NET SALVAGE PERCENT.. 0						
1968	44,818.41	43,384	22,241	22,577	1.82	12,405
1985	508.69	429	220	289	7.05	41
1986	70,932.97	59,314	30,407	40,526	7.25	5,590
1989	4,752.26	3,813	1,955	2,797	8.37	334
1992	112,975.50	86,856	44,526	68,450	9.32	7,344
1993	200,011.41	151,809	77,824	122,187	9.53	12,821
1994	19,130.99	14,258	7,309	11,822	9.91	1,193
1996	56,678.77	40,707	20,868	35,811	10.59	3,382
1997	43,544.85	30,682	15,729	27,816	10.90	2,552
1998	68,611.64	47,342	24,270	44,342	11.23	3,949
1999	542,406.50	365,799	187,525	354,882	11.59	30,620
2001	15,000.00	9,636	4,940	10,060	12.25	821
2002	417.20	261	134	283	12.56	23
2003	120,731.71	73,163	37,507	83,225	13.00	6,402
2004	163,146.82	95,783	49,103	114,044	13.36	8,536
2005	99,949.30	56,851	29,144	70,805	13.65	5,187
2006	66,325.64	36,307	18,613	47,713	14.06	3,394
2007	6,031.45	3,175	1,628	4,403	14.40	306
2008	735,447.73	370,666	190,020	545,428	14.76	36,953
2009	599,115.88	287,695	147,486	451,630	15.15	29,811
2010	573,007.33	260,718	133,656	439,351	15.57	28,218
2011	65,408.03	28,099	14,405	51,003	15.93	3,202
2012	51,866.03	20,881	10,705	41,161	16.32	2,522
2013	60,261.59	22,538	11,554	48,708	16.74	2,910
2014	1,687,126.24	581,552	298,130	1,388,996	17.11	81,180
2015	231,880.48	72,718	37,279	194,601	17.51	11,114
2016	615,209.84	172,689	88,528	526,682	17.94	29,358
2017	401,872.92	99,102	50,804	351,069	18.33	19,153
2018	478,004.65	100,620	51,582	426,423	18.75	22,743
2019	3,987,162.58	688,982	353,204	3,633,959	19.15	189,763
2020	2,189,241.45	290,950	149,154	2,040,087	19.57	104,246
2021	645,423.04	58,863	30,176	615,247	19.93	30,870
2022	2,781,095.89	130,712	67,009	2,714,087	20.28	133,831
2023	510,073.21	6,121	3,138	506,935	20.54	24,680
9999	66,626.22-	16,658-	8,540-	58,086-		3,304-
	17,181,544.78	4,295,817	2,202,233	14,979,312		852,150

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.6 4.96

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
1951	889,872.35	889,872	889,872			
1957	10,040.14	9,873	4,642	5,398	1.11	4,863
1963	78,917.20	75,761	35,624	43,293	2.50	17,317
1965	83,399.24	79,329	37,302	46,097	2.98	15,469
1967	162,110.25	152,513	71,714	90,396	3.52	25,681
1969	2,145.15	2,004	942	1,203	3.80	317
1973	946.11	861	405	541	4.95	109
1981	2,370,310.92	2,030,882	954,947	1,415,364	7.02	201,619
1984	581,328.63	485,177	228,136	353,193	7.73	45,691
1985	476,475.05	392,901	184,747	291,728	8.08	36,105
1986	729,639.26	593,926	279,272	450,367	8.45	53,298
1987	144,303.20	116,366	54,717	89,586	8.64	10,369
1988	834,507.53	663,016	311,759	522,749	9.05	57,762
1989	1,182,368.41	928,632	436,655	745,713	9.29	80,271
1990	2,547,386.07	1,967,092	924,952	1,622,434	9.74	166,574
1991	2,228,886.39	1,697,520	798,196	1,430,690	10.02	142,783
1992	801,701.61	601,437	282,803	518,899	10.32	50,281
1993	3,157,249.77	2,330,050	1,095,619	2,061,631	10.65	193,580
1994	58,519.34	42,257	19,870	38,649	11.16	3,463
1995	7,336.00	5,197	2,444	4,892	11.53	424
1996	81,467.87	56,531	26,582	54,886	11.91	4,608
1997	20,044.11	13,602	6,396	13,648	12.31	1,109
1998	3,740,938.21	2,478,372	1,165,362	2,575,576	12.74	202,165
1999	1,078,679.72	696,396	327,454	751,226	13.17	57,041
2000	5,188.88	3,270	1,538	3,651	13.50	270
2001	1,782,034.68	1,089,892	512,481	1,269,554	13.97	90,877
2002	117,583.55	69,633	32,742	84,842	14.46	5,867
2003	2,041,741.80	1,167,876	549,150	1,492,592	14.97	99,706
2004	716,094.49	394,568	185,531	530,563	15.48	34,274
2005	2,244,375.24	1,187,723	558,482	1,685,893	16.01	105,302
2006	694,642.10	351,906	165,471	529,171	16.56	31,955
2007	56,165.28	27,139	12,761	43,404	17.11	2,537
2008	1,000,480.15	459,220	215,931	784,549	17.68	44,375
2009	18,998,815.52	8,245,486	3,877,133	15,121,683	18.26	828,132
2010	21,412,844.27	8,740,723	4,109,999	17,302,845	18.85	917,923
2011	7,085,169.53	2,695,198	1,267,316	5,817,854	19.55	297,588
2012	4,830,556.84	1,705,670	802,028	4,028,529	20.15	199,927
2013	3,065,020.04	993,066	466,952	2,598,068	20.86	124,548
2014	8,900,047.96	2,619,284	1,231,621	7,668,427	21.58	355,349
2015	1,060,123.88	279,873	131,600	928,524	22.30	41,638
2016	569,051.98	132,646	62,372	506,680	23.03	22,001

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
2017	662,164.15	133,492	62,770	599,394	23.76	25,227
2018	4,975,791.82	840,909	395,406	4,580,386	24.59	186,270
2019	1,908,147.55	259,508	122,024	1,786,124	25.41	70,292
2020	8,605,139.55	882,887	415,144	8,189,996	26.24	312,119
2021	10,553,982.21	724,003	340,435	10,213,547	27.15	376,190
2022	12,426,524.78	427,472	201,003	12,225,522	28.07	435,537
2023	965,127.64	8,300	3,903	961,225	28.82	33,353
9999	2,192,957.34-	802,514-	384,957-	1,808,000-		96,983-
	133,752,429.08	48,946,797	23,479,248	110,273,181		5,915,173

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.6 4.42

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 381.00 PLANT SEWERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2008	294,411.86	95,389	83,754	210,658	31.30	6,730
2009	4,434,866.70	1,347,313	1,182,973	3,251,894	32.08	101,368
2010	1,187,964.50	336,669	295,603	892,362	32.87	27,148
2011	6,597.06	1,734	1,522	5,075	33.66	151
2012	1,684.33	408	358	1,326	34.45	38
2014	234,044.45	46,762	41,059	192,985	36.05	5,353
2015	6,136.63	1,095	961	5,176	36.84	140
2016	45,239.43	7,094	6,229	39,010	37.64	1,036
2021	1,641.43	76	67	1,574	41.29	38
2022	396,015.22	9,227	8,102	387,913	41.92	9,254
9999	30,192.33-	8,433-	7,405-	22,787-		691-
	6,578,409.28	1,837,334	1,613,223	4,965,186		150,565

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.0 2.29

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1957	12,139.53	11,377	11,248	892	4.42	202
1975	4,177.28	3,449	3,410	767	10.14	76
1993	202,475.94	120,271	118,910	83,566	20.51	4,074
2004	1,695.94	683	675	1,021	28.17	36
2005	9,240.93	3,543	3,503	5,738	28.95	198
2006	201,117.58	73,167	72,339	128,779	29.73	4,332
2009	26,051.26	7,914	7,825	18,226	32.08	568
2010	27,827.93	7,886	7,797	20,031	32.87	609
2014	100,305.10	20,041	19,814	80,491	36.05	2,233
2017	18,433.32	2,488	2,460	15,973	38.44	416
	603,464.81	250,819	247,981	355,484		12,744

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 27.9 2.11

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S2.5						
NET SALVAGE PERCENT.. 0						
2010	273,149.74	176,127	176,199	96,951	7.16	13,541
2013	8,814.50	4,619	4,621	4,194	9.08	462
2018	39,036.86	10,696	10,700	28,337	13.25	2,139
2019	268,065.51	58,974	58,999	209,067	14.18	14,744
2022	91,911.93	5,074	5,076	86,836	17.12	5,072
2023	1,796,471.34	24,791	24,801	1,771,670	17.87	99,142
	2,477,449.88	280,281	280,396	2,197,054		135,100

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.3 5.45

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	3,529.23	2,647	1,597	1,932	5.00	386
2009	52,251.63	36,576	22,073	30,179	6.00	5,030
2010	7,240.80	4,707	2,841	4,400	7.00	629
2011	2,249.52	1,350	815	1,435	8.00	179
2012	30,582.71	16,820	10,151	20,432	9.00	2,270
2013	52,070.05	26,035	15,712	36,358	10.00	3,636
2014	34,888.89	15,700	9,475	25,414	11.00	2,310
2015	27,346.34	10,939	6,601	20,745	12.00	1,729
2016	33,090.02	11,582	6,990	26,100	13.00	2,008
2017	28,119.56	8,436	5,091	23,029	14.00	1,645
2018	10,405.16	2,601	1,570	8,835	15.00	589
2019	20,626.43	4,125	2,489	18,137	16.00	1,134
2020	74,563.91	11,185	6,750	67,814	17.00	3,989
2021	360,930.38	36,093	21,781	339,149	18.00	18,842
2022	431,088.92	21,554	13,008	418,081	19.00	22,004
2023	97,559.16	1,219	735	96,824	19.75	4,902
	1,266,542.71	211,569	127,679	1,138,863		71,282

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.0 5.63

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L4						
NET SALVAGE PERCENT.. 0						
1986	6,625.93	6,626	6,626			
1987	468.88	469	469			
1990	30,431.59	30,432	30,432			
1991	21,931.10	21,931	21,931			
2000	5,861.06	5,621	4,557	1,304	0.98	1,304
2001	22,361.85	21,253	17,231	5,131	1.15	4,462
2002	5,389.24	5,070	4,110	1,279	1.32	969
2005	3,310.52	2,997	2,430	881	1.88	469
2006	73,113.90	65,254	52,904	20,210	2.05	9,859
2011	149,228.96	119,622	96,981	52,248	2.97	17,592
2012	73,865.31	56,226	45,584	28,281	3.45	8,197
2013	62,726.96	44,536	36,107	26,620	4.08	6,525
2014	3,075.33	2,007	1,627	1,448	4.79	302
2016	2,423.80	1,267	1,027	1,397	6.39	219
2017	8,526.46	3,852	3,123	5,403	7.28	742
2018	927,895.26	351,208	284,736	643,159	8.21	78,338
2019	299,081.56	90,682	73,519	225,563	9.19	24,544
2020	26,190.18	5,956	4,829	21,361	10.19	2,096
2022	1,422,366.36	107,815	87,409	1,334,957	12.19	109,512
2023	573,917.31	10,904	8,840	565,077	12.94	43,669
9999	28,483.51	7,305	6,009	22,475		2,365
	3,747,275.07	961,033	790,481	2,956,794		311,164

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.5 8.30

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 392.00 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2012	58,391.33	25,692	25,608	32,783	14.00	2,342
2017	2,199.71	528	526	1,674	19.00	88
2018	46,760.40	9,352	9,321	37,439	20.00	1,872
	107,351.44	35,572	35,455	71,896		4,302

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.7 4.01

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 393.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	7,132.96	6,420	6,937	196	2.00	98
2006	85,717.68	72,860	78,726	6,992	3.00	2,331
2007	5,060.13	4,048	4,374	686	4.00	172
2008	2,776.47	2,082	2,250	526	5.00	105
2009	378.54	265	286	93	6.00	16
2010	61,467.53	39,954	43,171	18,297	7.00	2,614
2012	58,472.38	32,160	34,749	23,723	9.00	2,636
2013	28,453.57	14,227	15,373	13,081	10.00	1,308
2014	40,133.99	18,060	19,514	20,620	11.00	1,875
2015	62,657.78	25,063	27,081	35,577	12.00	2,965
2016	105,803.20	37,031	40,013	65,790	13.00	5,061
2017	7,458.66	2,238	2,418	5,041	14.00	360
2018	94,551.82	23,638	25,541	69,011	15.00	4,601
2019	14,014.13	2,803	3,029	10,985	16.00	687
2020	193,729.12	29,059	31,399	162,330	17.00	9,549
2021	102,950.07	10,295	11,124	91,826	18.00	5,101
2022	284,959.55	14,248	15,395	269,565	19.00	14,188
2023	44,808.61	560	605	44,204	19.75	2,238
	1,200,526.19	335,011	361,985	838,541		55,905

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.0 4.66

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 394.00 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2007	552.01	552	552			
2008	26,269.80	26,270	26,270			
2009	63,768.04	59,517	22,193	41,575	1.00	41,575
2010	31,269.93	27,101	10,106	21,164	2.00	10,582
2011	16,841.59	13,473	5,024	11,818	3.00	3,939
2012	13,442.75	9,858	3,676	9,767	4.00	2,442
2013	5,917.50	3,945	1,471	4,446	5.00	889
2014	112,033.68	67,220	25,066	86,968	6.00	14,495
2015	43,434.75	23,165	8,638	34,797	7.00	4,971
2016	123,948.53	57,843	21,569	102,380	8.00	12,798
2017	48,566.17	19,426	7,244	41,322	9.00	4,591
2018	43,803.48	14,601	5,445	38,358	10.00	3,836
2019	57,097.59	15,226	5,677	51,421	11.00	4,675
2020	32,405.64	6,481	2,417	29,989	12.00	2,499
2021	17,137.92	2,285	852	16,286	13.00	1,253
2022	37,565.86	2,505	934	36,632	14.00	2,617
2023	31,474.35	525	196	31,278	14.75	2,121
	705,529.59	349,993	147,330	558,200		113,283

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.9 16.06

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 22-R2						
NET SALVAGE PERCENT.. 0						
2011	345,636.00	184,984	216,001	129,635	10.42	12,441
2015	3,257.24	1,261	1,472	1,785	12.66	141
2018	19,634.12	5,095	5,950	13,684	14.27	959
2022	64,677.17	3,939	4,599	60,078	15.42	3,896
2023	138,192.53	2,280	2,663	135,530	14.88	9,108
9999	10,000.00-	3,457-	4,037-	5,963-		465-
	561,397.06	194,102	226,648	334,749		26,080

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.8 4.65

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	3,487.00	3,487	3,487			
2007	2,450.35	2,450	2,450			
2008	1,714.38	1,714	1,714			
2009	521,963.46	487,164	498,032	23,931	1.00	23,931
2010	144,621.29	125,339	128,135	16,486	2.00	8,243
2011	7,975.30	6,380	6,522	1,453	3.00	484
2012	3,344.78	2,453	2,508	837	4.00	209
2013	263,689.84	175,794	179,716	83,974	5.00	16,795
2014	98,016.16	58,810	60,122	37,894	6.00	6,316
2015	13,210.61	7,046	7,203	6,008	7.00	858
2016	172,002.57	80,268	82,059	89,944	8.00	11,243
2017	13,811.63	5,525	5,648	8,164	9.00	907
2018	12,412.19	4,137	4,229	8,183	10.00	818
2019	7,055.35	1,881	1,923	5,132	11.00	467
2020	674,118.03	134,824	137,833	536,285	12.00	44,690
2021	39,621.14	5,283	5,401	34,220	13.00	2,632
2022	852,798.77	56,856	58,124	794,675	14.00	56,762
2023	424,395.88	7,075	7,233	417,163	14.75	28,282
9999	649.31	233	238	411		40
	3,257,338.04	1,166,719	1,192,577	2,064,761		202,677

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.2 6.22

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 397.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2009	6,270.00	5,852	6,270			
2010	4,161.94	3,607	4,162			
2011	14,880.36	11,904	14,880			
2012	13,823.71	10,137	13,824			
2013	16,427.62	10,952	16,428			
2014	2,202.56	1,322	2,084	119	6.00	20
2015	4,104.14	2,189	3,451	653	7.00	93
2017	28,080.87	11,232	17,706	10,375	9.00	1,153
2018	33,269.93	11,090	17,482	15,788	10.00	1,579
2019	123,994.70	33,066	52,124	71,871	11.00	6,534
2020	130,423.87	26,085	41,120	89,304	12.00	7,442
2021	191,683.21	25,557	40,287	151,396	13.00	11,646
2022	783,085.43	52,208	82,299	700,786	14.00	50,056
2023	138,192.53	2,304	3,632	134,561	14.75	9,123
9999	29,000.00-	4,037-	6,143-	22,857-		1,705-
	1,461,600.87	203,468	309,606	1,151,994		85,941

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.4 5.88

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 398.00 OTHER TANGIBLE PLANT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	14,231.50	2,277	1,363	12,869	21.00	613
	14,231.50	2,277	1,363	12,869		613

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.0 4.31

PART III. EXPERIENCED NET SALVAGE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2018 TRANSACTION YEAR				
354.20	416.47	2,367.05		2,367.05-
354.30	573,594.97	87.11		87.11-
354.40	744,885.32	18,538.55-		18,538.55
354.70		36,099.53		36,099.53-
355.00	422,792.78	4,538.63		4,538.63-
360.10	276,235.14	85,350.18		85,350.18-
361.10	2,339,080.10	345,943.14		345,943.14-
361.20	13,749.21			
363.00	56,288.53	48,455.35		48,455.35-
364.00	31,450.72			
371.00	113,724.18	18,884.54-		18,884.54
380.00	1,203,983.11	12,304.03		12,304.03-
382.00	5.76	980.65		980.65-
389.10		3,678.20-		3,678.20
390.00	5,925.73	93.95		93.95-
391.00	79,247.81	9,708.42		9,708.42-
393.00	17,334.55			
394.00	28,673.47	117.59		117.59-
396.00	3,064.59			
397.00		6,019.17		6,019.17-
	5,910,452.44	510,963.51		510,963.51-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TRANSACTION YEAR				
354.20	3,076.09	27,531.06		27,531.06-
354.30		61,135.00		61,135.00-
354.40	913,340.30	1,985.51		1,985.51-
354.70	3,125.06	18,075.18		18,075.18-
355.00		9,730.05		9,730.05-
360.10	55,943.69	245,202.29		245,202.29-
361.10	352,132.81	1,038,558.77		1,038,558.77-
361.20	1,170.55	109,567.01		109,567.01-
363.00	5,384.61	150,830.30		150,830.30-
364.00	3,202.68	239.58		239.58-
370.00	1,108.89			
371.00	5,188.39	141,438.05		141,438.05-
380.00	36,603.24	214,843.19		214,843.19-
381.00	2,120.40			
389.10		5,681.56		5,681.56-
390.00	67,403.59			
391.00		6,028.96		6,028.96-
393.00	60,983.28	1,931.40		1,931.40-
394.00	26,823.05	5,593.49		5,593.49-
395.00		2,048.24		2,048.24-
396.00	48,155.78	1,897.96		1,897.96-
397.00	141,002.08	5,512.61		5,512.61-
398.00		1,251.49		1,251.49-
	1,726,764.49	2,049,081.70		2,049,081.70-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
354.20	3,007.76	122,315.77		122,315.77-
354.30	39,414.10			
354.40	120,604.23			
354.70	6,910.37	246.65		246.65-
355.00		23,920.78		23,920.78-
360.10	40,213.82	186,669.20		186,669.20-
361.10	361,924.39	323,715.46		323,715.46-
361.20	22,020.95	34,151.69		34,151.69-
363.00	128,735.68	76,222.67		76,222.67-
371.00	144,361.10	273,771.37		273,771.37-
380.00	92,274.49	652,150.29		652,150.29-
391.00	31,332.59	10.19		10.19-
393.00		5,643.88		5,643.88-
394.00	10,122.79	1,075.22		1,075.22-
395.00	7,833.15			
396.00	234,211.01	52,578.21		52,578.21-
397.00		9,909.72	1,369.21	8,540.51-
	1,242,966.43	1,762,381.10	1,369.21	1,761,011.89-
2021 TRANSACTION YEAR				
354.30	7,989.66	20,176.30		20,176.30-
354.40	11,481.83	28,995.08		28,995.08-
354.70	2,875.51	11,677.96		11,677.96-
355.00		1,253.37		1,253.37-
360.10	11,013.00	147,595.80		147,595.80-
361.10	796,849.84	245,041.20		245,041.20-
361.20	83,125.55	20,315.71		20,315.71-
363.00	414,022.10	105,836.92	159.00	105,677.92-
364.00	6,151.40			
371.00	16,177.71	206,559.57		206,559.57-
380.00	231,513.16	269,030.45		269,030.45-
381.00		90.22		90.22-
390.00		3,619.09		3,619.09-
394.00	1,401.00	1,113.04		1,113.04-
396.00		4,528.34		4,528.34-
397.00	20,048.36	4,676.57	87.00	4,589.57-
	1,602,649.12	1,070,509.62	246.00	1,070,263.62-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
354.20	15,702.45			
354.30	26,680.07	65,248.65		65,248.65-
354.40	199,172.52	5,052.37		5,052.37-
354.70	28,082.13	34,027.64		34,027.64-
355.00	96,801.74	333.24		333.24-
360.10	325,168.00	169,252.01		169,252.01-
361.10	599,713.73	251,743.85		251,743.85-
361.20	26,444.42	58,813.67		58,813.67-
363.00	61,602.50	91,479.25		91,479.25-
364.00	9,014.72			
371.00	187,895.88	53,057.74		53,057.74-
380.00	631,925.26	336,246.38		336,246.38-
390.00		3,738.83		3,738.83-
391.00			27,472.80	27,472.80
393.00	16,369.00	855.08		855.08-
394.00	54,586.97	2,855.31		2,855.31-
395.00		645.90		645.90-
396.00	239,917.65	2,348.88		2,348.88-
397.00	86,974.00	5,312.99		5,312.99-
	2,606,051.04	1,081,011.79	27,472.80	1,053,538.99-
TOTAL	13,088,883.52	6,473,947.72	29,088.01	6,444,859.71-

EXHIBIT NO. 11-E - DEPRECIATION STUDY

WASTEWATER SSS GENERAL OPERATIONS

AS OF JUNE 30, 2024

Exhibit No. 11-E
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

WASTEWATER SSS GENERAL OPERATIONS

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2024

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-E
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WASTEWATER SSS GENERAL OPERATIONS

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2024

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

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October 12, 2023

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant. The results of our study as of June 30, 2024 are presented in the attached report. The results of our study as of June 30, 2023 are presented in our report, "2023 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of June 30, 2023." The same methods, procedures and estimates are used in both studies.

The attached report sets forth a description of the methods and procedures upon which the studies were based, the estimates of survivor curves, and the calculated annual depreciation as of June 30, 2024.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

FREDERICK B. JOHNSTON, JR.
Senior Analyst

JJS:mle

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PART I. INTRODUCTION

PENNSYLVANIA-AMERICAN WATER COMPANY

WASTEWATER SSS GENERAL OPERATIONS

DEPRECIATION STUDY

PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study for Pennsylvania-American Water Company to determine the annual depreciation accrual rates and amounts applicable to the original cost of wastewater plant as of June 30, 2024. The rates and amounts are based on the straight line remaining life method of depreciation. This report also describes the concepts, methods and judgments which underlie the recommended annual depreciation accrual rates related to wastewater plant in service as of June 30, 2024.

Part I, Introduction, contains statements with respect to the basis of the study and the development of net original cost. Part II, Estimation of Survivor Curves, presents descriptions of the considerations and methods used in the service life study. Part III, Service Life Considerations, presents the results of the average service life analysis. Part IV, Calculation of Annual and Accrued Depreciation, describes the procedures used in the calculation of group depreciation. Part V, Results of Study, presents summaries by depreciable group of annual depreciation accrual rates and amounts, as well as composite remaining lives. Part VI, Service Life Statistics, presents the statistical analysis of service life estimates, Part VII, Detailed Depreciation Calculations, presents the detailed tabulations of annual depreciation and Part VIII, Experienced and Estimated Net Salvage, presents the cost of removal and gross salvage recorded for the period 2019-

2023.

BASIS OF THE STUDY

The purpose of the depreciation study was to determine the annual depreciation accruals applicable to the original cost of wastewater plant in service as of June 30, 2024. For most accounts, the straight line remaining life method using attained ages, the book depreciation reserve and estimated survivor curves, was the basis for the calculation of annual depreciation. For certain accounts, the annual and accrued amortization amounts were based on the age of the property and the selected amortization period.

The survivor curve estimates were based on judgment which incorporated (1) analyses of historical data related to wastewater property for all Pennsylvania-American Water Company Wastewater Operations; (2) consideration of the character, use and location of the property; (3) probable future events and management plans; and (4) a general knowledge of wastewater property lives. The use of Iowa type survivor curves is a generally-accepted method of estimating average service life when the actual lives of individual property units are dispersed.

DEVELOPMENT OF NET ORIGINAL COST

The original cost data used in this study were obtained from the Company's continuing property records and work order system which show in detail the original cost of the property including descriptions, locations and years of installation of property units. The net original cost was developed from the original cost data by deducting contributions in aid of construction. The development of net original cost by plant account is set forth in Table 1 on page V-4.

PART II. ESTIMATION OF SURVIVOR CURVES

PART II. ESTIMATION OF SURVIVOR CURVES

The calculation of annual depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. The estimation of survivor curves is discussed below and the development of net salvage is discussed in later sections of this report.

SURVIVOR CURVES

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units or by constructing a survivor curve by plotting the number of units which survive at successive ages.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1, the remaining life at age 30 is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval. It is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

This study has incorporated the use of Iowa curves developed from a retirement rate analysis of historical retirement history. A discussion of the concepts of survivor curves and of the development of survivor curves using the retirement rate method is presented below.

Iowa Type Curves

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. There are four families in the Iowa system, labeled in accordance with the location of the modes of the retirements (or the portion of the frequency curve with the highest level of retirements) in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family. A higher number designates a higher mode curve.

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.

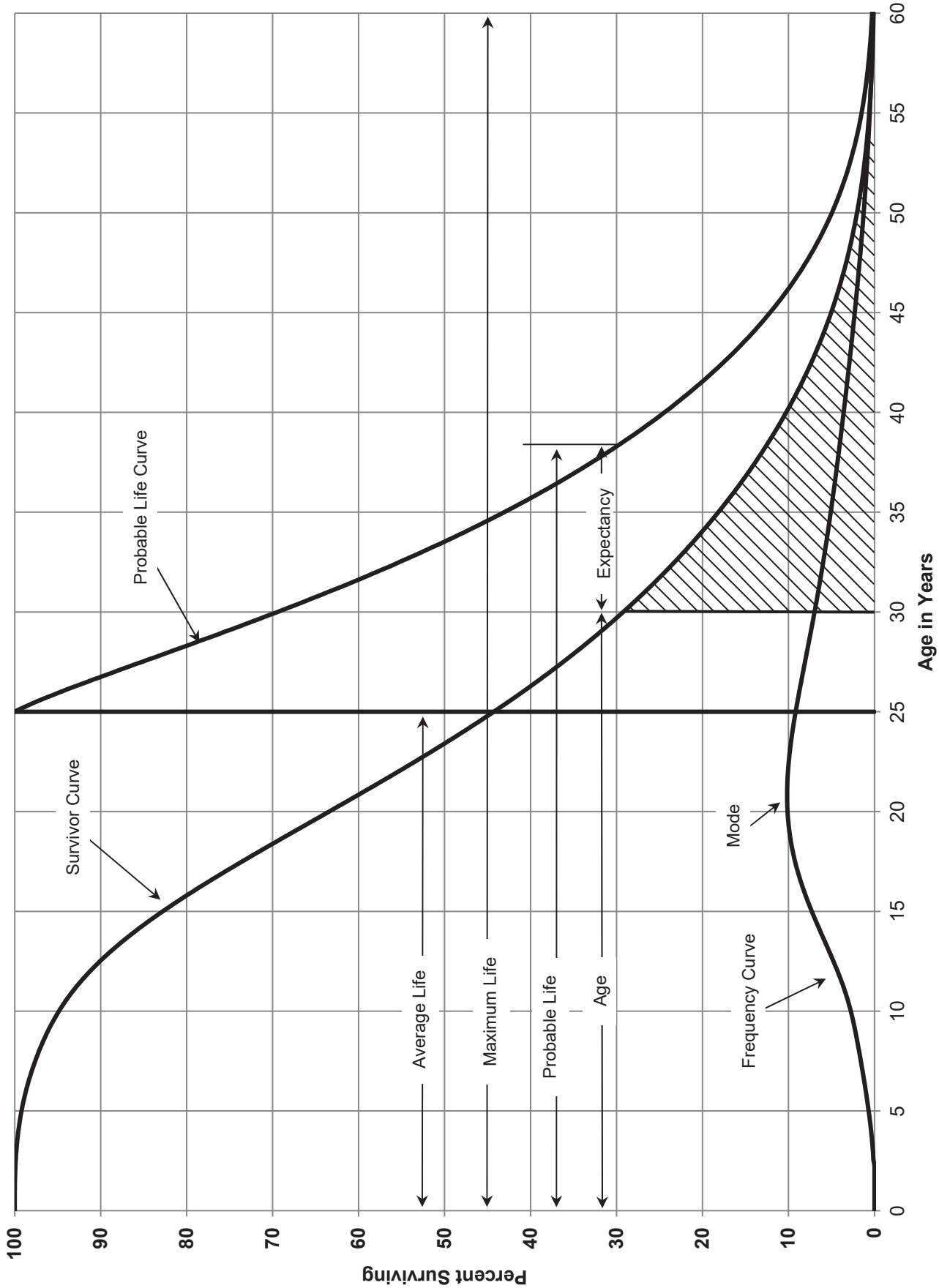


FIGURE 1. TYPICAL SURVIVOR CURVE AND DERIVED CURVES

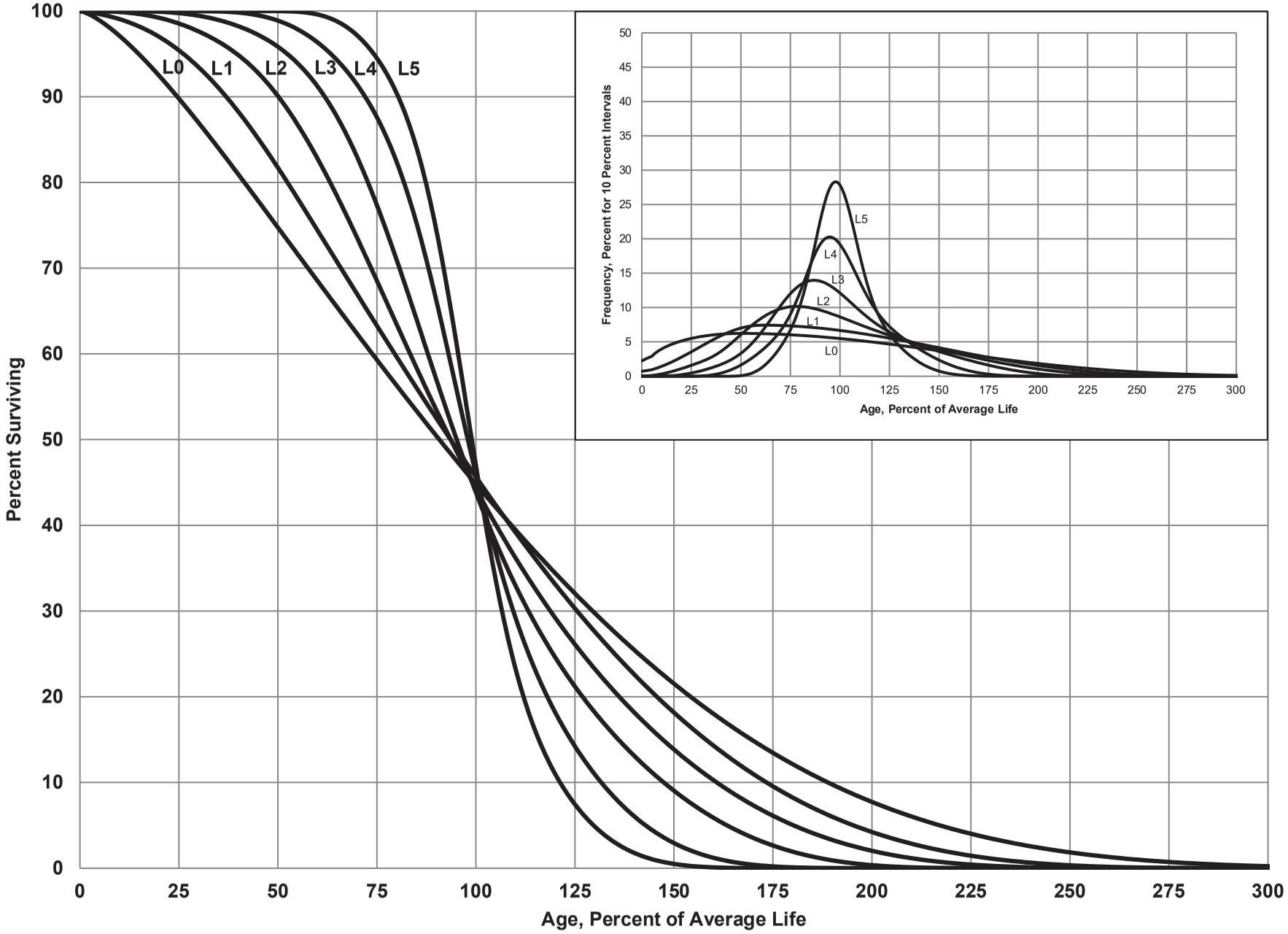


FIGURE 2.. LEFT MODAL OR "L" IOWA TYPE SURVIVOR CURVES

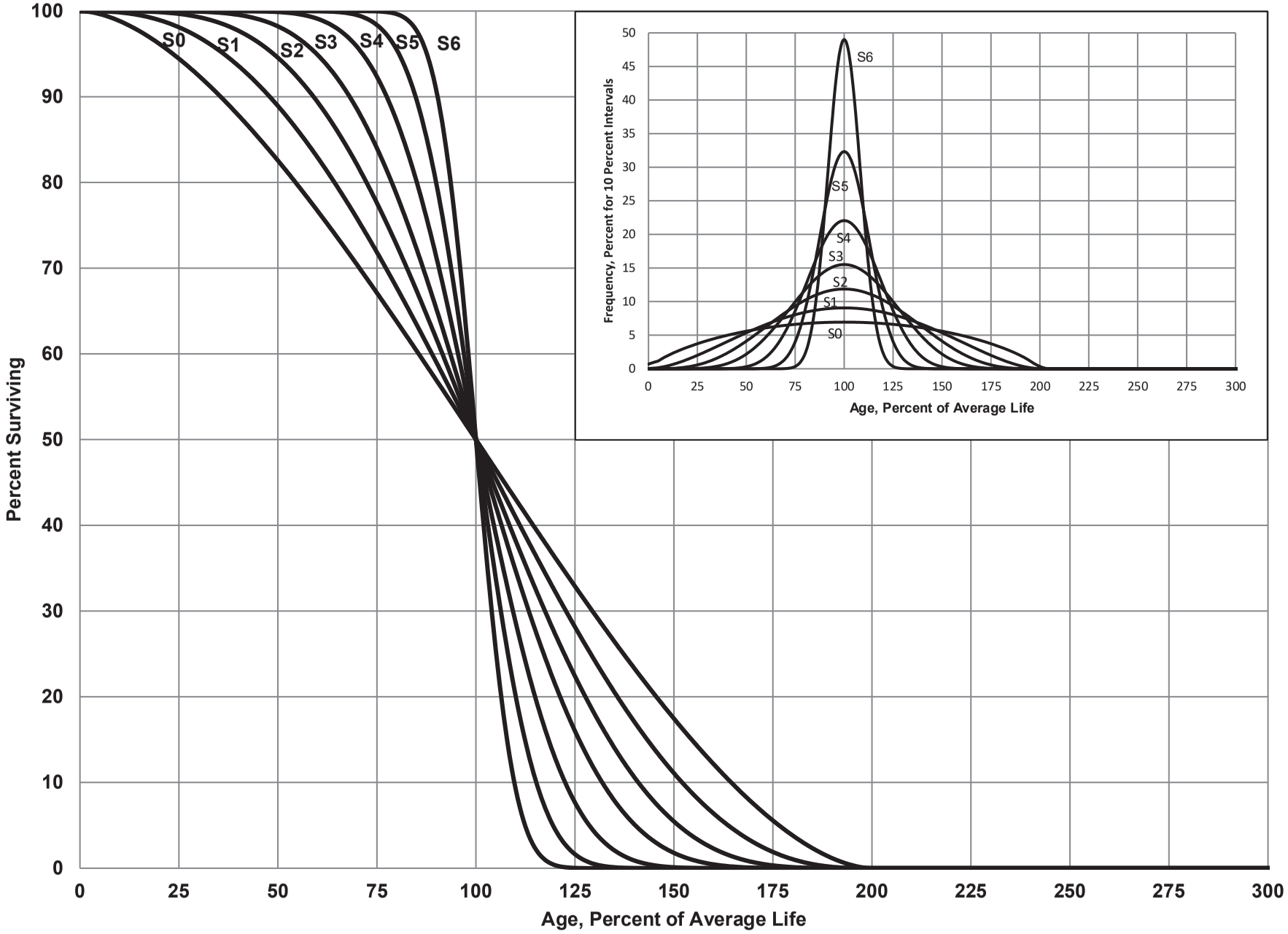


FIGURE 3.. SYMMETRICAL OR "S" IOWA TYPE SURVIVOR CURVES

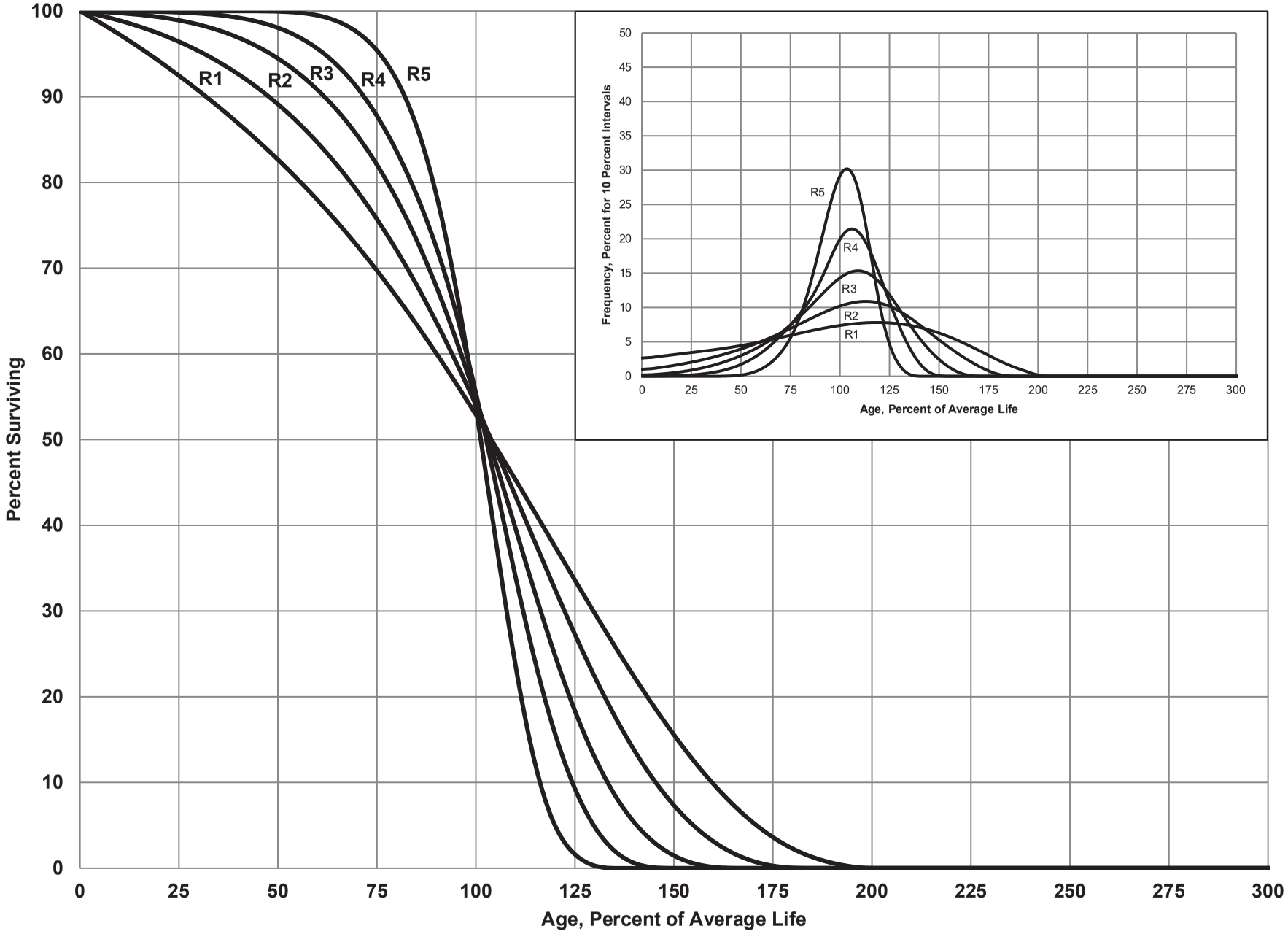


FIGURE 4.. RIGHT MODAL OR "R" IOWA TYPE SURVIVOR CURVES

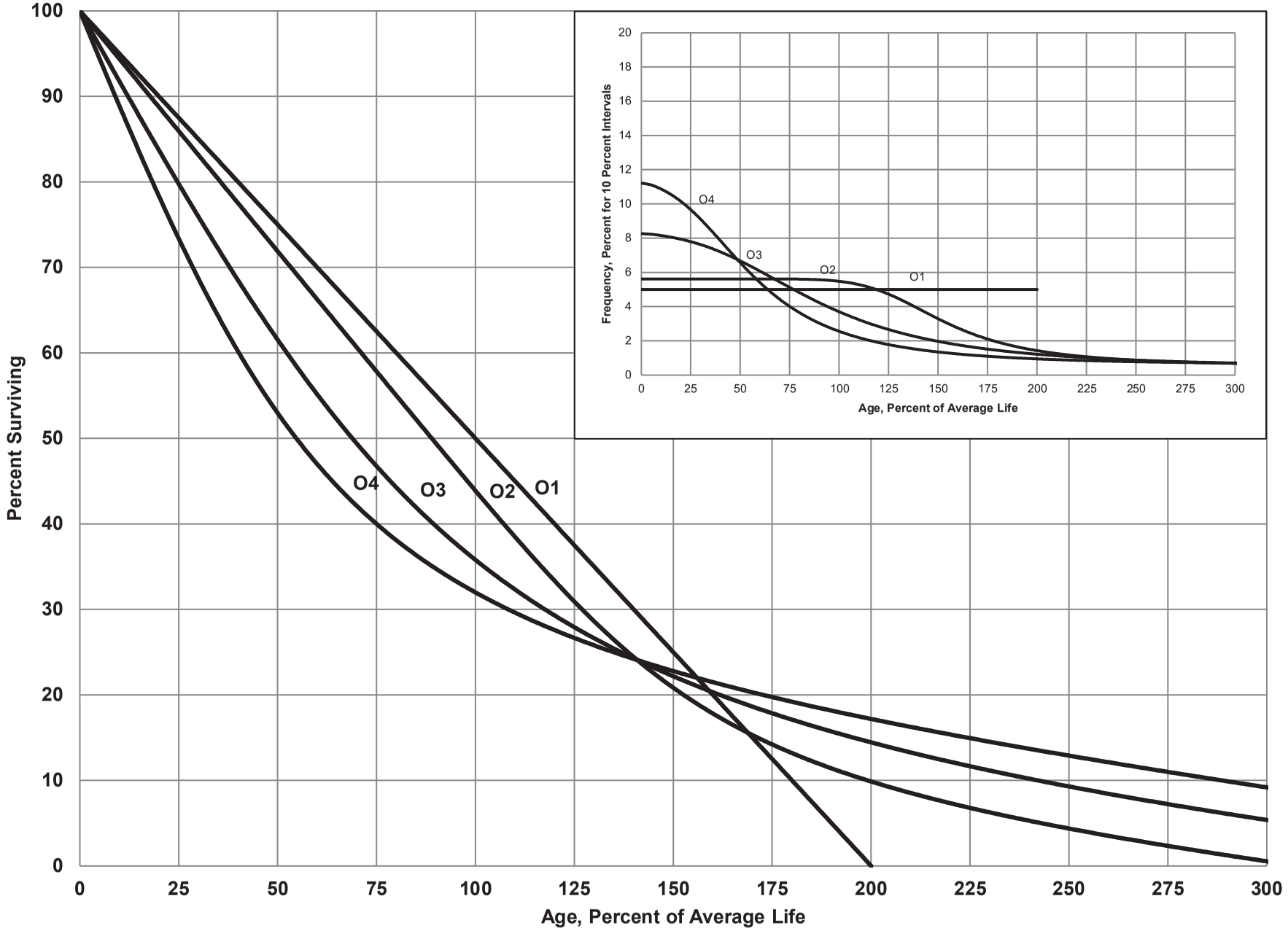


FIGURE 5. ORIGIN MODAL OR "O" IOWA TYPE SURVIVOR CURVES

These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."[1] In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student, submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text and is also explained in several publications including "Statistical Analyses of Industrial Property Retirements,"[2] "Engineering Valuation and Depreciation,"[3] and "Depreciation Systems."[4]

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band. The band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

[1]Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

[2]Winfrey, Robley, Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

[3]Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.

[4]Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994.

Schedules of Annual Transactions in Plant Records

The property group used to illustrate the retirement rate method is observed for the experience band 2015-2024 for which there were placements during the years 2010-2024. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-11 and II-12. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, $10,000 of the dollars invested in 2010 were retired in 2015. The $10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of $143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2015 retirements of 2010 installations and ending with the 2024 retirements of the 2019 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

$$10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20.$$

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024

Placement Band 2010-2024

Year Placed	Retirements, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	10	11	12	13	14	16	23	24	25	26	26	13½-14½
2011	11	12	13	15	16	18	20	21	22	19	44	12½-13½
2012	11	12	13	14	16	17	19	21	22	18	64	11½-12½
2013	8	9	10	11	11	13	14	15	16	17	83	10½-11½
2014	9	10	11	12	13	14	16	17	19	20	93	9½-10½
2015	4	9	10	11	12	13	14	15	16	20	105	8½-9½
2016		5	11	12	13	14	15	16	18	20	113	7½-8½
2017			6	12	13	15	16	17	19	19	124	6½-7½
2018				6	13	15	16	17	19	19	131	5½-6½
2019					7	14	16	17	19	20	143	4½-5½
2020						8	18	20	22	23	146	3½-4½
2021							9	20	22	25	150	2½-3½
2022								11	23	25	151	1½-2½
2023									11	24	153	½-1½
2024										13	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606	

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024 Placement Band 2010-2024

Year Placed	Acquisitions, Transfers and Sales, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	-	-	-	-	-	-	60[a]	-	-	-	-	13½-14½
2011	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2012	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2013	-	-	-	-	-	-	-	(5)[b]	-	-	60	10½-11½
2014	-	-	-	-	-	-	-	6[a]	-	-	-	9½-10½
2015	-	-	-	-	-	-	-	-	-	-	(5)	8½-9½
2016		-	-	-	-	-	-	-	-	-	6	7½-8½
2017			-	-	-	-	-	-	-	-	-	6½-7½
2018				-	-	-	-	(12)[b]	-	-	-	5½-6½
2019					-	-	-	-	22[a]	-	-	4½-5½
2020						-	-	(19)[b]	-	-	10	3½-4½
2021							-	-	-	-	-	2½-3½
2022								-	-	(102)[c]	(121)	1½-2½
2023									-	-	-	½-1½
2024											-	0-½
Total	-	-	-	-	-	-	60	(30)	22	(102)	(50)	

[a] Transfer Affecting Exposures at Beginning of Year
[b] Transfer Affecting Exposures at End of Year
[c] Sale with Continued Use
Parentheses Denote Credit Amount.

In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

Schedule of Plant Exposed to Retirement

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14. The surviving plant at the beginning of each year from 2015 through 2024 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2020 are calculated in the following manner:

Exposures at age 0	= amount of addition	= $750,000
Exposures at age ½	= $750,000 - $ 8,000	= $742,000
Exposures at age 1½	= $742,000 - $18,000	= $724,000
Exposures at age 2½	= $724,000 - $20,000 - $19,000	= $685,000
Exposures at age 3½	= $685,000 - $22,000	= $663,000

SCHEDULE 3. PLANT EXPOSED TO RETIREMENT
JANUARY 1 OF EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024 Placement Band 2010-2024

Year Placed	Exposures, Thousands of Dollars — Annual Survivors at the Beginning of the Year										Total at Beginning of Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	255	245	234	222	209	195	239	216	192	167	167	13½-14½
2011	279	268	256	243	228	212	194	174	153	131	323	12½-13½
2012	307	296	284	271	257	241	224	205	184	162	531	11½-12½
2013	338	330	321	311	300	289	276	262	242	226	823	10½-11½
2014	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½
2015	420[a]	416	407	397	386	374	361	347	332	316	1,503	8½-9½
2016		460[a]	455	444	432	419	405	390	374	356	1,952	7½-8½
2017			510[a]	504	492	479	464	448	431	412	2,463	6½-7½
2018				580[a]	574	561	546	530	501	482	3,057	5½-6½
2019					660[a]	653	639	623	628	609	3,789	4½-5½
2020						750[a]	742	724	685	663	4,332	3½-4½
2021							850[a]	841	821	799	4,955	2½-3½
2022								960[a]	949	926	5,719	1½-2½
2023									1,080[a]	1,069	6,579	½-1½
2024										1,220[a]	7,490	0-½
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	

[a]Additions during the year

For the entire experience band 2015-2024, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

255 + 268 + 284 + 311 + 334 + 374 + 405 + 448 + 501 + 609.

Original Life Table

The original life table, illustrated in Schedule 4 on page II-16, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½	=	88.15				
Exposures at age 4½	=	3,789,000				
Retirements from age 4½ to 5½	=	143,000				
Retirement Ratio	=	143,000	÷	3,789,000	=	0.0377
Survivor Ratio	=	1.000	-	0.0377	=	0.9623
Percent surviving at age 5½	=	(88.15)	x	(0.9623)	=	84.83

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

SCHEDULE 4. ORIGINAL LIFE TABLE
CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2015-2024 Placement Band 2010-2024

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	Percent Surviving at Beginning of Age Interval
(1)	(2)	(3)	(4)	(5)	(6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	167	26	0.1557	0.8443	42.24
					35.66
Total	44,780	1,606			

Column 2 from Schedule 3, Column 12, Plant Exposed to Retirement.
Column 3 from Schedule 1, Column 12, Retirements for Each Year.
Column 4 = Column 3 Divided by Column 2.
Column 5 = 1.0000 Minus Column 4.
Column 6 = Column 5 Multiplied by Column 6 as of the Preceding Age Interval.

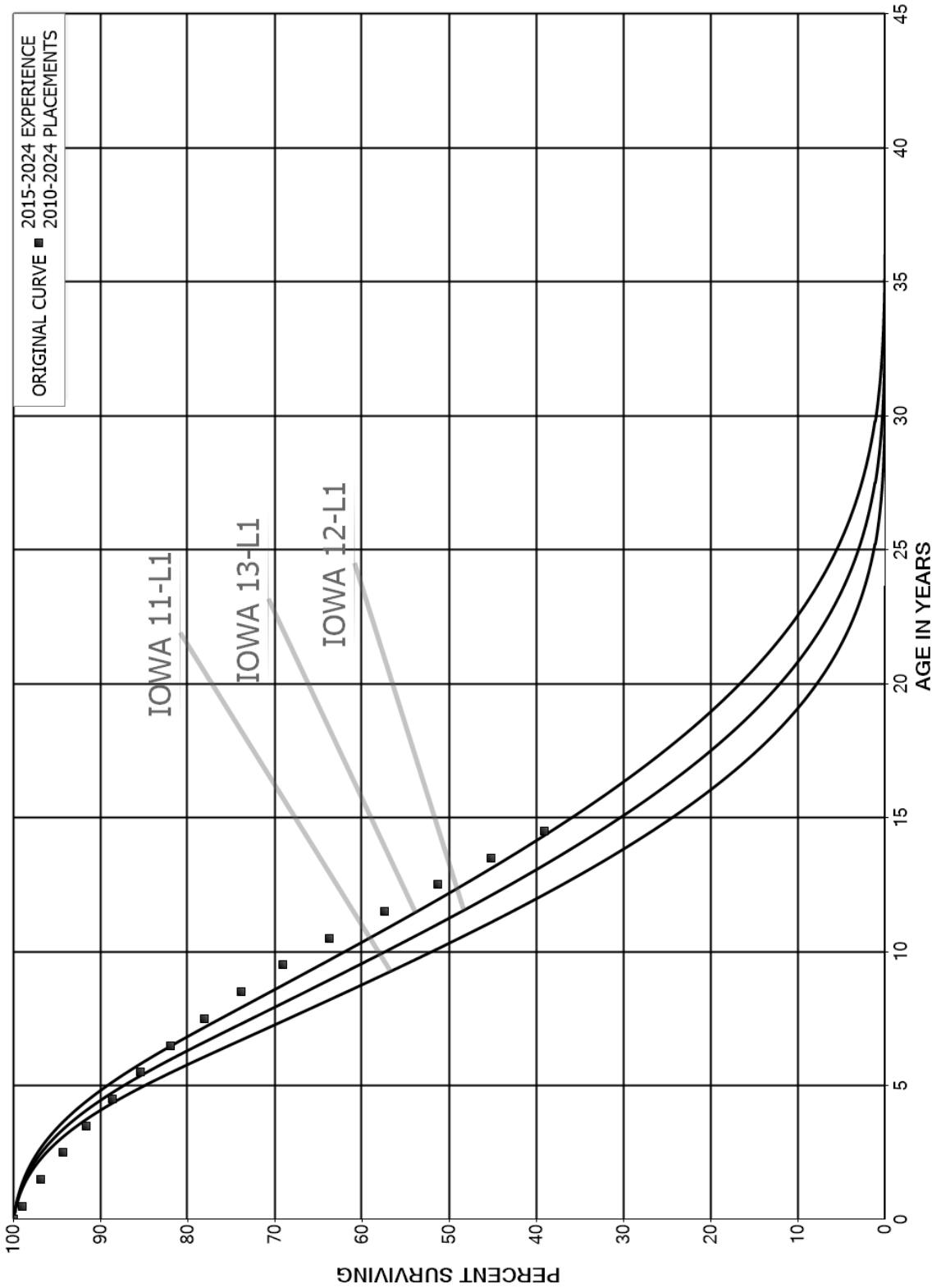
The original survivor curve is plotted from the original life table (column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

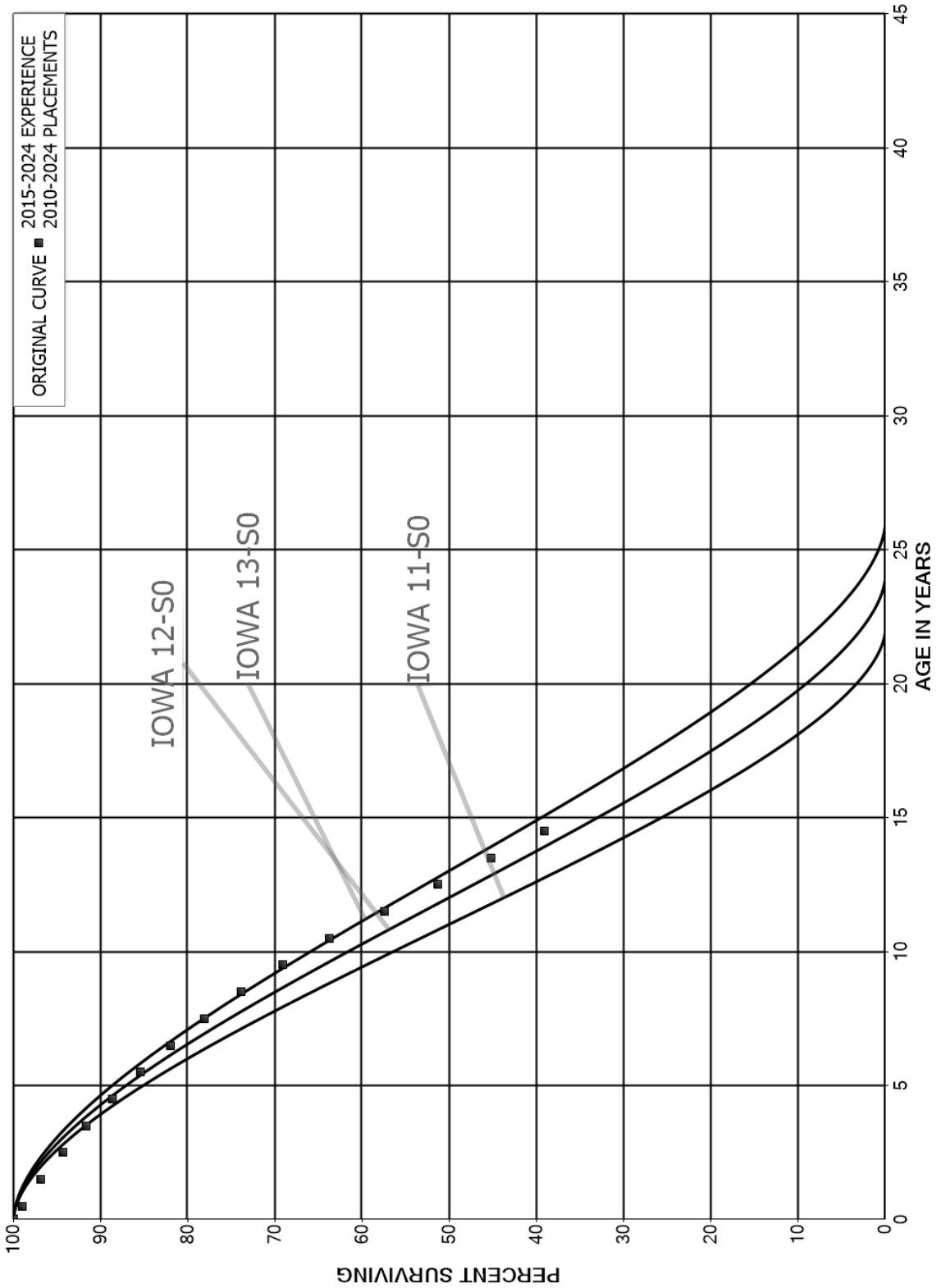
Smoothing the Original Survivor Curve

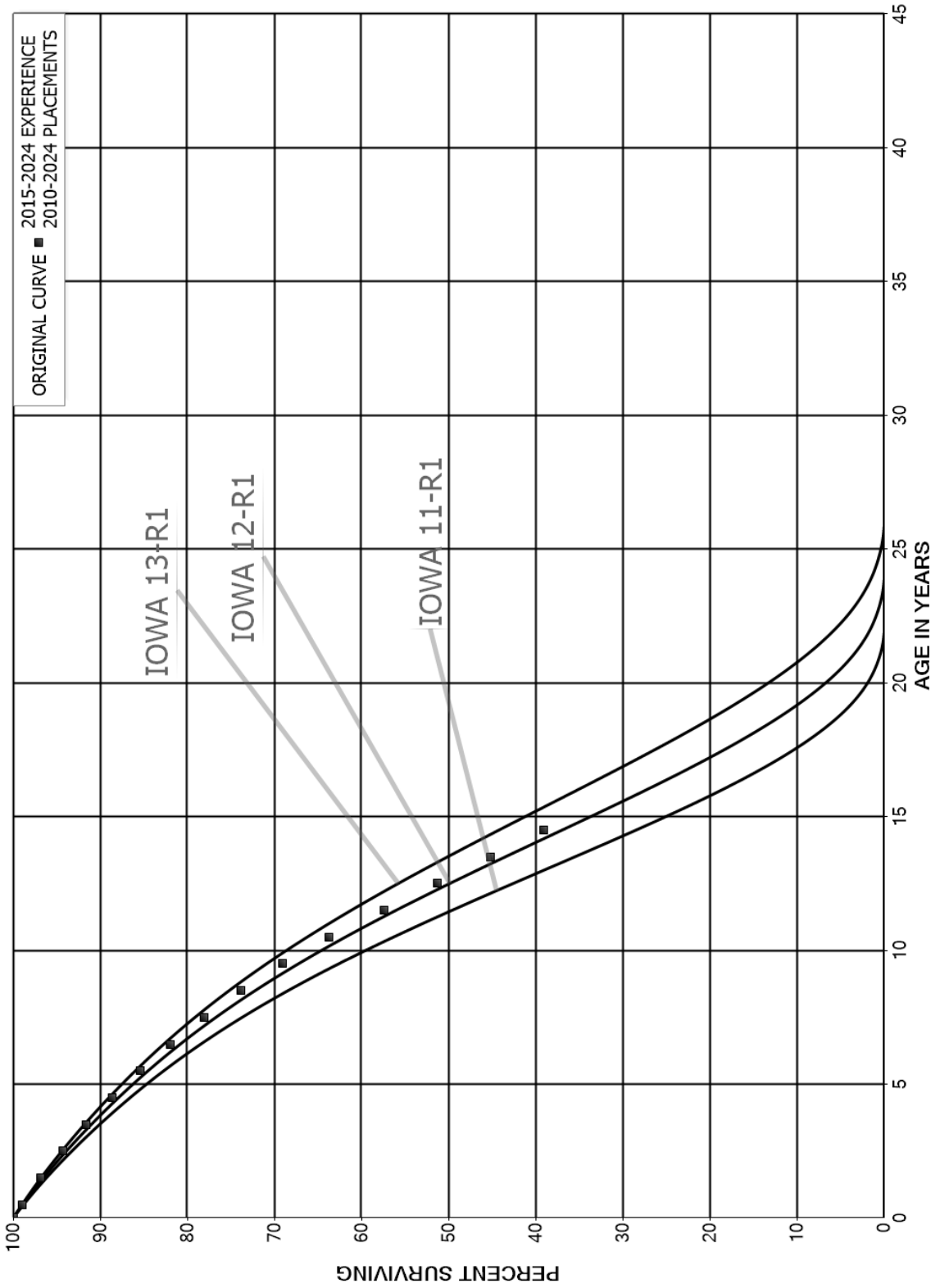
The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

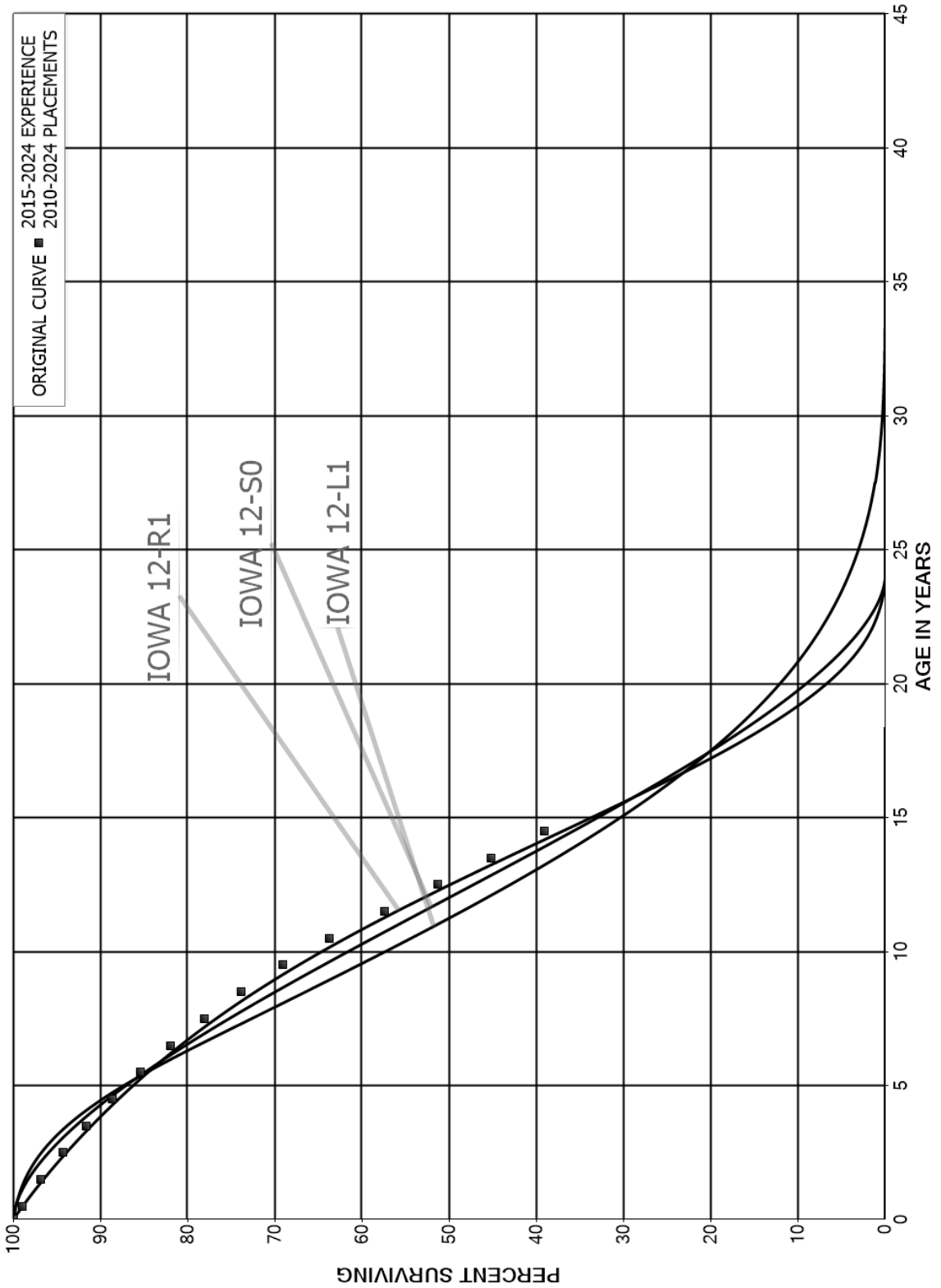
The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R Iowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group.


ORIGINAL CURVE ■ 2015-2024 EXPERIENCE
2010-2024 PLACEMENTS
IOWA 11-L1
IOWA 13-L1
IOWA 12-L1
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0
0
5
10
15
20
25
30
35
40
45


ORIGINAL CURVE ■ 2015-2024 EXPERIENCE
2010-2024 PLACEMENTS
IOWA 12-S0
IOWA 13-S0
IOWA 11-S0
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0
0
5
10
15
20
25
30
35
40
45


ORIGINAL CURVE ■ 2015-2024 EXPERIENCE
2010-2024 PLACEMENTS
IOWA 13-R1
IOWA 12-R1
IOWA 11-R1
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0
0
5
10
15
20
25
30
35
40
45


ORIGINAL CURVE ■ 2015-2024 EXPERIENCE
2010-2024 PLACEMENTS
IOWA 12-R1
IOWA 12-S0
IOWA 12-L1
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0
0
5
10
15
20
25
30
35
40
45

PART III. SERVICE LIFE CONSIDERATIONS

PART III. SERVICE LIFE CONSIDERATIONS

FIELD TRIPS

In order to be familiar with the operation of the Company and observe representative portions of the plant, field trips are conducted for each study. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements are obtained during field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

The following is a list of the locations visited during our recent field trips.

September 14, 2016
- Blue Mountain Lake Wastewater Plant
- Winona Lake Lift Station
- Saw Creek Wastewater Plant
- Marcel Lake Wastewater Plant
- Pocono Wastewater Plant

September 6, 2016
- Clarion Wastewater Plant
- Paint Elk Wastewater Plant
- Shippensville Wastewater Plant

September 1, 2016
- Franklin Wastewater Plant
- Hamilton Ban Pump Station
- Franklin Sand Mound Facility
- Fairview North Wastewater Plant
- South Fairview Wastewater Plant

March 16, 2010
- Coatesville Wastewater Plant
- Lehman Pike Wastewater Plant
- Winona Lake Lift Station

July 28, 2008
- Claysville Treatment Plant

Judgments. The survivor curve estimates were based on judgment which considered factors including statistical analyses of retirements, Company policies and outlook as determined during discussions with management, and survivor curve estimates from previous studies of the predecessor wastewater systems, as well as other wastewater companies. For depreciable groups which consist of numerous similar items of property, the distribution of the lives of the units in the group was judged on the basis of an average survival pattern for the entire group.

Account 363.00, Services, is used to illustrate the manner in which the study was conducted for the accounts in the preceding list. Aged plant accounting data have been compiled for the years through 2019. These data have been coded according to account or property group, type of transaction, year in which the transaction took place, and year in which the utility plant was placed in service. The retirements, other plant transactions and plant additions were analyzed by the retirement rate method.

The survivor curve estimate for this account is the 47-R3 and is based on the statistical indication for the period 1999-2019. The 47-R3 is a good fit of the significant portion of the original survivor curve as set forth on page VI-25, is consistent with management outlook for a continuation of the historical experience and is within the typical service life range of 40 to 55 years for services.

The amortization periods selected for general plant Accounts 390.00, 392.00, 393.00, 394.00, 396.00, 397.00 and 398.00 are discussed in the section, “Amortization of General Plant Accounts.”

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

BOOK RESERVE

The book reserve as of June 30, 2023, is the result of a bringforward of the book reserves established by the Commission for all Wastewater SSS Operations systems. The projected book reserve as of June 30, 2024, is a bringforward of the June 30, 2023 book reserve based on projected accruals, retirements, cost of removal, gross salvage and other credits.

GROUP DEPRECIATION PROCEDURES

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally the items within a group do not have identical service lives but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group. In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

Single Unit of Property

The calculation of straight line depreciation for a single unit of property is straightforward. For example, if a $1,000 unit of property attains an age of four years and has a life expectancy of six years, the annual accrual over the total life is:

$$\frac{\$1,000}{(4 + 6)} = \$100 \text{ per year.}$$

The accrued depreciation is:

$$\$1,000 \left(1 - \frac{6}{10}\right) = \$400.$$

Remaining Life Annual Accruals

For the purpose of calculating remaining life accruals as of June 30, 2024, the depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation follow. The detailed calculations as of June 30, 2024, are set forth in the Results of Study section of the report.

Equal Life Group Procedure

In the equal life group procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the composite remaining life for the surviving original cost of that vintage. The composite remaining life is derived by compositing the individual equal life group remaining lives in accordance with the following equation:

$$\text{Composite Remaining Life} = \frac{\sum\left(\frac{\text{Book Cost}}{\text{Life}} \text{ x Remaining Life}\right)}{\sum \frac{\text{Book Cost}}{\text{Life}}}.$$

The book costs and lives of the several equal life groups which are summed in the foregoing equation are defined by the estimated survivor curve.

Inasmuch as book cost divided by life equals the whole life annual accrual, the foregoing equation reduces to the following form:

$$\text{Composite Remaining Life} = \frac{\sum \text{Whole Life Future Accruals}}{\sum \text{Whole Life Annual Accruals}}$$

or

$$\text{Composite Remaining Life} = \frac{\sum \text{Book Cost - Calc. Reserve}}{\sum \text{Whole Life Annual Accrual}}.$$

The annual accrual rate for each account is equal to the sum of the remaining life annual accruals for all vintages divided by the account's total original cost. The account's "composite remaining life" is calculated by dividing the sum of the future book accruals for all vintages by the sum of the remaining life annual accruals for all vintages.

The calculated accrued depreciation in the equal life group procedure also represents that portion of depreciable cost which will not be allocated to expense through future accruals. However, the calculation is based at the equal life group level rather than the vintage group level and does not require the use of averages. The equal life group accrued depreciation ratio is calculated as follows:

$$Ratio = 1 - \left(\frac{Remaining\ Life}{Service\ Life}\right)$$

Inasmuch as service life minus remaining life equals age, when averages are not employed, the foregoing equation reduces to:

$$Ratio = \left(\frac{Age}{Service\ Life}\right)$$

AMORTIZATION OF GENERAL PLANT ACCOUNTS

In order to use a more efficient and cost effective accounting process for equipment recorded in general plant Accounts 390.00, 392.00, 393.00, 394.00, 396.00, 397.00 and 398.00, amounts capitalized in these accounts are amortized rather than depreciated. Amortization as defined in the Uniform System of Accounts is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized.

The primary reasons for the amortization of certain general plant accounts are that the effort required to unitize additions, periodically inventory equipment and determine amounts to be retired for equipment recorded in these accounts is disproportionate to the original cost of the equipment when compared to other wastewater plant accounts.

Accounting for such equipment using an amortization concept consists of capitalization of amounts to these accounts based on the same criteria as used previously under depreciation accounting, amortization of the asset over a fixed period, retirement of the equipment at the end of the amortization period and recognition of any net salvage related to disposition of equipment in these accounts as a gain or loss. For equipment in these accounts that was placed in service prior to implementation of amortization accounting, the net book value by vintage amortized over the remaining amortization period specified for each account and the original cost will be retired at the end of this period.

The amortization periods selected for each account or subaccount are based on a review of the existing depreciation rates for the accounts, typical service lives used for

each type of equipment and a consideration of the period during which it is anticipated that most of the benefit of the equipment will be realized. The amortization periods are as follows:

Account Number	Description	Amortization Period, Years
390.00	Office Furniture and Equipment	20
390.20	Computers and Peripheral	5
392.00	Stores Equipment	25
393.00	Tools, Shop and Garage Equipment	20
394.00	Laboratory Equipment	15
396.00	Communication Equipment	15
397.00	Miscellaneous Equipment	15
398.00	Other Tangible Plant	25

NET SALVAGE

Experienced net salvage is incorporated in the results of the study as it was reported on the Company's books and records for the period January 1, 2019 through June 30, 2023, and estimated for the period July 1, 2023 through December 31, 2023. The calculation of the amortization is shown in Table 5 on page V-8. The amounts of salvage and removal cost by account for each year are set forth in the section beginning on page VIII-2.

Net salvage is presented in this manner to determine the amount of net salvage to be amortized to the cost of service for ratemaking purposes. In order to be consistent with this manner of recognizing net salvage, no adjustments for net salvage were made to the annual depreciation calculated for the individual accounts.

PART V. RESULTS OF STUDY

PART V. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Table 1 presents the development of the net original cost used in the study. The results of the depreciation study are summarized in Table 2 which sets forth, by depreciable group, the estimated survivor curve, calculated annual accruals and book reserve related to net original cost and the annual amortization of net salvage. Table 3 presents the bringforward to June 30, 2024 of the book reserve as of June 30, 2023. Table 4 sets forth the calculation of estimated depreciation accruals for the twelve months ended June 30, 2024. Table 5 presents the amortization of experienced and estimated net salvage, by account, based on the five-year period, 2019-2023. The total amortization amount is incorporated in the total annual accrual in Table 2.

DESCRIPTION OF DETAILED TABULATIONS

Supporting statistical data for the estimates of average service lives and survivor curves, the annual depreciation calculations, and gross salvage and cost of removal for the years 2019-2023 are presented in three sections.

The section beginning on page VI-2 sets forth, for each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of the original life table plotted on the chart. A cumulative summary, by year installed, for utility plant and the supporting data for the original cost depreciation calculations are presented in the section beginning on page VII-3. The tabulations of experienced and estimated net salvage, by year and account for the five-year period 2019-2023, are presented in the section beginning on

page VIII-2.

In the first section, the survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the type curve designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. In cases where only a segment of the estimated curve is used in the depreciation calculation, the numeral used for identification purposes is not a designation of the average life of the group. The titles of the charts indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which were plotted. The experience band indicates the range of years for which the retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The tables of the calculated annual depreciation related to net original cost are presented in account sequence in the second section and indicate the estimated average survivor curves used in the calculations. The tables set forth, for each installation year, the original cost, calculated accrued depreciation, allocated book reserve, remaining life expectancy, and the calculated annual accrual.

Detailed tabulations setting forth the cost of removal, gross salvage and net salvage amounts, by account and year, are presented in the third section. The net salvage amounts, by account and year, are carried forward to Table 5, which presents the five-year amortization of net salvage.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2024

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2024		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2024
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
DEPRECIABLE PLANT										
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	9,024,450.07								9,024,450.07
354.30	STRUCTURES AND IMPROVEMENTS - SPP	25,222,556.75				3,077,062.72				22,145,494.03
354.40	STRUCTURES AND IMPROVEMENTS - TDP	280,547,114.80				2,375,147.51				278,171,967.29
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	5,798,402.29								5,798,402.29
355.00	POWER GENERATING EQUIPMENT	7,397,397.32				144,517.16				7,252,880.16
360.10	COLLECTION SEWERS - FORCE MAINS	59,885,680.44		627,376.41		11,251,126.61				48,007,177.42
361.10	COLLECTION SEWERS - GRAVITY MAINS	252,939,837.25		133,423.53		17,767,408.10				235,039,005.62
361.20	MANHOLES	47,705,980.33				4,553,264.84				43,152,715.49
363.00	SERVICES	63,399,073.80		72,789.60		6,881,426.36				56,444,857.84
364.00	FLOW MEASURING DEVICES	673,701.43				14,726.81				658,974.62
365.00	FLOW MEASURING INSTALLATIONS	272,564.04								272,564.04
370.00	RECEIVING WELLS	677,388.38								677,388.38
371.00	PUMPING EQUIPMENT	18,749,782.71				315,245.20				18,434,537.51
380.00	TREATMENT EQUIPMENT	157,191,247.46				2,720,254.13				154,470,993.33
381.00	PLANT SEWERS	6,608,601.61				30,192.33				6,578,409.28
382.00	OUTFALL SEWER LINES	603,464.81								603,464.81
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	2,630,632.88								2,630,632.88
390.00	OFFICE FURNITURE AND EQUIPMENT	1,291,592.71								1,291,592.71
390.20	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS AND PERIPHERAL	45,090.00								45,090.00
391.00	TRANSPORTATION EQUIPMENT	4,095,346.93								4,095,346.93
392.00	STORES EQUIPMENT	107,351.44								107,351.44
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	1,434,297.35				600.00				1,433,697.35
394.00	LABORATORY EQUIPMENT	728,154.04				42,162.45				685,991.59
395.00	POWER OPERATED EQUIPMENT	605,377.19				10,000.00				595,377.19
396.00	COMMUNICATION EQUIPMENT	4,774,493.85								4,774,493.85
397.00	MISCELLANEOUS EQUIPMENT	2,138,739.98				29,000.00				2,109,739.98
398.00	OTHER TANGIBLE PLANT	14,231.50								14,231.50
TOTAL DEPRECIABLE PLANT		**954,562,551.36**		**833,589.54**		**49,212,134.22**		**0.00**		**904,516,827.60**
NONDEPRECIABLE PLANT										
352.00	FRANCHISES	221,139.78								221,139.78
353.20	LAND AND LAND RIGHTS - COLLECTION	3,611,014.00								3,611,014.00
353.30	LAND AND LAND RIGHTS - SPP	953,050.62								953,050.62
353.40	LAND AND LAND RIGHTS - TDP	11,062,535.99				125,000.00				10,937,535.99
TOTAL NONDEPRECIABLE PLANT		**15,847,740.39**		**0.00**		**125,000.00**		**0.00**		**15,722,740.39**
TOTAL UTILITY PLANT		**970,410,291.75**		**833,589.54**		**49,337,134.22**		**0.00**		**920,239,567.99**

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF JUNE 30, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	45-R3	9,024,450.07	176,042	8,848,408	243,682	2.70	36.3
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	22,145,494.03	8,716,727	13,428,767	426,359	1.93	31.5
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	278,171,967.29	89,164,962	189,007,005	7,102,130	2.55	26.6
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	35-S1	5,798,402.29	1,376,318	4,422,084	181,459	3.13	24.4
355.00	POWER GENERATING EQUIPMENT	35-S0.5	7,252,880.16	3,253,556	3,999,324	194,006	2.67	20.6
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	48,007,177.42	5,043,190	42,963,987	814,671	1.70	52.7
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	235,039,005.62	51,938,655	183,100,351	3,902,626	1.66	46.9
361.20	MANHOLES	50-S2.5	43,152,715.49	12,533,389	30,619,326	1,991,551	4.62	15.4
363.00	SERVICES	47-R3	56,444,857.84	25,757,379	30,687,479	1,795,672	3.18	17.1
364.00	FLOW MEASURING DEVICES	15-L2.5	658,974.62	355,096	303,879	63,595	9.65	4.8
365.00	FLOW MEASURING INSTALLATIONS	25-S2	272,564.04	232,673	39,891	10,201	3.74	3.9
370.00	RECEIVING WELLS	50-R3	677,388.38	64,325	613,063	16,235	2.40	37.8
371.00	PUMPING EQUIPMENT	30-S0.5	18,434,537.51	2,784,876	15,649,662	879,026	4.77	17.8
380.00	TREATMENT EQUIPMENT	35-S1.5	154,470,993.33	29,034,139	125,436,854	6,434,720	4.17	19.5
381.00	PLANT SEWERS	50-R3	6,578,409.28	1,763,887	4,814,522	149,503	2.27	32.2
382.00	OUTFALL SEWER LINES	50-R3	603,464.81	260,812	342,653	12,604	2.09	27.2
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	20-S2.5	2,630,632.88	420,360	2,210,273	139,770	5.31	15.8
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	1,291,592.71	201,196	1,090,397	71,793	5.56	15.2
390.20	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS AND PERIPHERAL	5-SQ	45,090.00	4,509	40,581	8,543	18.95	4.8
391.00	TRANSPORTATION EQUIPMENT	14-L4	4,095,346.93	1,061,888	3,033,459	320,037	7.81	9.5
392.00	STORES EQUIPMENT	25-SQ	107,351.44	39,760	67,591	4,301	4.01	15.7
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	1,433,697.35	429,941	1,003,756	65,560	4.57	15.3
394.00	LABORATORY EQUIPMENT	15-SQ	685,991.59	233,954	452,038	70,819	10.32	6.4
395.00	POWER OPERATED EQUIPMENT	22-R2	595,377.19	244,267	351,110	27,211	4.57	12.9
396.00	COMMUNICATION EQUIPMENT	15-SQ	4,774,493.85	1,450,052	3,324,442	267,620	5.61	12.4
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	2,109,739.98	419,996	1,689,744	128,214	6.08	13.2
398.00	OTHER TANGIBLE PLANT	25-SQ	14,231.50	2,226	12,006	600	4.22	20.0
	TOTAL DEPRECIABLE PLANT		**904,516,827.60**	**236,964,175**	**667,552,652**	**25,322,508**	**2.80**	
	NONDEPRECIABLE PLANT							
352.00	FRANCHISES		221,139.78					
353.20	LAND AND LAND RIGHTS - COLLECTION		3,611,014.00					
353.30	LAND AND LAND RIGHTS - SPP		953,050.62					
353.40	LAND AND LAND RIGHTS - TDP		10,937,535.99					
	TOTAL NONDEPRECIABLE PLANT		**15,722,740.39**					
	AMORTIZATION OF NET SALVAGE					**1,562,777**		
	TOTAL UTILITY PLANT		**920,239,567.99**	**236,964,175**	**667,552,652**	**26,885,285**		

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2024, OF BOOK RESERVE AS OF JUNE 30, 2023

ACCOUNT	BOOK RESERVE BALANCE AS OF 6/30/2023		PROJECTED DEPRECIATION ACCRUALS		PROJECTED RETIREMENTS		PROJECTED COST OF REMOVAL		PROJECTED SALVAGE		ACQUISITIONS		PROJECTED BOOK RESERVE BALANCE AS OF 6/30/2024
(1)	(2)	+	(3)	-	(4)	-	(5)	+	(6)	+	(7)	=	(8)
354.20	45,562		276,913		119,051		27,382						176,042
354.30	8,246,486		469,218								1,023		8,716,727
354.40	81,813,715		7,320,849								30,398		89,164,962
354.70	1,813,015		160,766		269,127		328,335						1,376,318
355.00	3,429,449		150,426		302,147		24,172						3,253,556
360.10	4,624,342		963,375		684,258		403,712				543,444		5,043,190
361.10	48,387,077		4,391,137		1,046,813		523,407				730,661		51,938,655
361.20	10,598,056		2,196,599		193,412		146,993				79,139		12,533,389
363.00	24,434,472		1,955,629		390,177		277,026				34,481		25,757,379
364.00	278,146		76,950										355,096
365.00	219,699		12,974										232,673
370.00	47,932		16,393										64,325
371.00	2,202,233		1,028,938		268,894		188,226				10,824		2,784,876
380.00	23,479,248		6,685,770		847,634		288,196				4,951		29,034,139
381.00	1,613,223		150,664										1,763,887
382.00	247,981		12,831										260,812
389.10	280,396		139,964										420,360
390.00	127,679		73,517										201,196
390.20	0		4,509										4,509
391.00	790,481		321,779		67,942		9,512		16,986		10,097		1,061,888
392.00	35,455		4,305										39,760
393.00	361,985		63,187								4,769		429,941
394.00	147,330		113,446		26,822								233,954
395.00	226,648		27,560		7,419		2,522						244,267
396.00	1,192,577		262,061		7,652						3,065		1,450,052
397.00	309,606		110,390										419,996
398.00	1,363		863										2,226
TOTAL	**214,954,156**		**26,991,013**		**4,231,348**		**2,219,482**		**16,986**		**1,452,853**		**236,964,175**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30, 2024

ACCOUNT	NET ORIGINALCOST AS OF 6/30/2023	NET ORIGINALCOST AS OF 6/30/2024	ACCRUAL RATE	AVERAGE ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED DEPRECIATION ACCRUALS
(1)	(2)	(3)	(4)	(5)=([(2)+(3)]/2)*(4)	(6)	(7)=(5)+(6)
354.20	8,479,164.99	9,024,450.07	2.71	237,174	39,739	276,913
354.30	22,137,144.03	22,145,494.03	1.98	438,398	30,820	469,218
354.40	278,024,238.26	278,171,967.29	2.63	7,313,980	6,869	7,320,849
354.70	4,565,732.11	5,798,402.29	2.47	127,997	32,769	160,766
355.00	5,868,971.43	7,252,880.16	2.16	141,716	8,710	150,426
360.10	42,454,829.43	48,007,177.42	1.72	777,973	185,402	963,375
361.10	228,420,729.31	235,039,005.62	1.69	3,916,235	474,902	4,391,137
361.20	41,740,530.40	43,152,715.49	5.05	2,143,554	53,045	2,196,599
363.00	54,006,813.27	56,444,857.84	3.34	1,844,543	111,086	1,955,629
364.00	658,974.62	658,974.62	11.67	76,902	48	76,950
365.00	272,564.04	272,564.04	4.76	12,974		12,974
370.00	677,388.38	677,388.38	2.42	16,393		16,393
371.00	17,181,544.78	18,434,537.51	4.96	883,279	145,659	1,028,938
380.00	133,752,429.08	154,470,993.33	4.42	6,369,738	316,032	6,685,770
381.00	6,578,409.28	6,578,409.28	2.29	150,646	18	150,664
382.00	603,464.81	603,464.81	2.11	12,733	98	12,831
389.10	2,477,449.88	2,630,632.88	5.45	139,195	769	139,964
390.00	1,266,542.71	1,291,592.71	5.63	72,012	1,505	73,517
390.20	0.00	45,090.00	20.00	4,509		4,509
391.00	3,747,275.07	4,095,346.93	8.30	325,469	(3,690)	321,779
392.00	107,351.44	107,351.44	4.01	4,305		4,305
393.00	1,200,526.19	1,433,697.35	4.66	61,377	1,810	63,187
394.00	705,529.59	685,991.59	16.06	111,739	1,707	113,446
395.00	561,397.06	595,377.19	4.65	26,895	665	27,560
396.00	3,257,338.04	4,774,493.85	6.22	249,790	12,271	262,061
397.00	1,461,600.87	2,109,739.98	5.88	104,997	5,393	110,390
398.00	14,231.50	14,231.50	4.31	613	250	863
TOTAL	**860,222,170.57**	**904,516,827.60**		**25,565,136**	**1,425,877**	**26,991,013**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

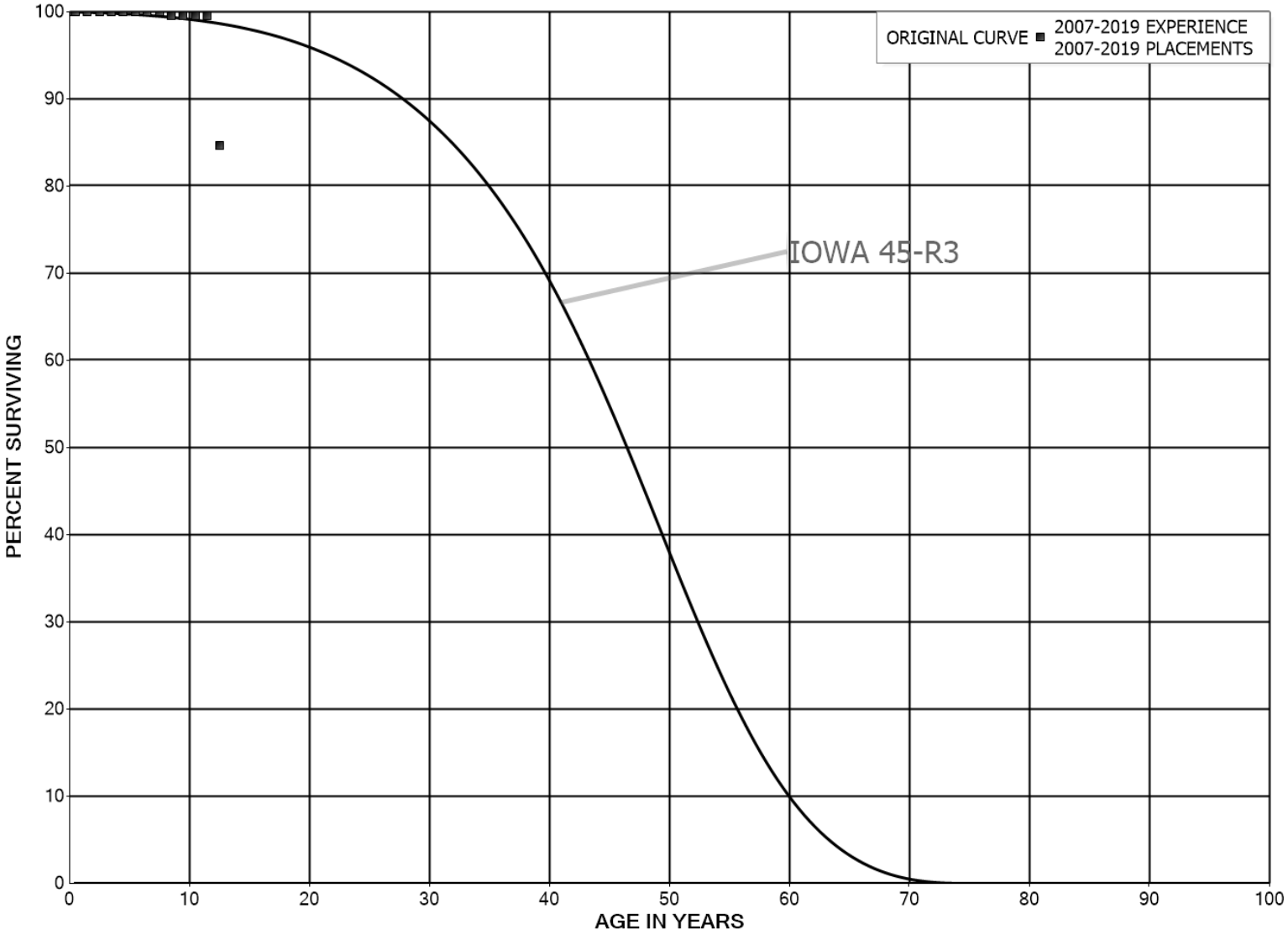
TABLE 5. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

	2019		2020		2021		2022		PROJECTED 2023			
ACCOUNT	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2) -	(3) +	(4) -	(5) +	(6) -	(7) +	(8) -	(9) +	(10) -	(11) =	(12)*	(13)=(12)/5
354.20		27,531.06		122,315.77						95,322.37	(245,169.20)	(49,034)
354.30		61,135.00				20,176.30		65,248.65		14,994.65	(161,554.60)	(32,311)
354.40		1,985.51				28,995.08		5,052.37		15,159.82	(51,192.78)	(10,239)
354.70		18,075.18		246.65		11,677.96		34,027.64		163,536.33	(227,563.76)	(45,513)
355.00		9,730.05		23,920.78		1,253.37		333.24		12,086.00	(47,323.44)	(9,465)
360.10		245,202.29		186,669.20		147,595.80		169,252.01		271,225.09	(1,019,944.39)	(203,989)
361.10		1,038,558.77		323,715.46		245,041.20		251,743.85	6,350.46	691,307.65	(2,544,016.47)	(508,803)
361.20		109,567.01		34,151.69		20,315.71		58,813.67	737.54	85,486.72	(307,597.26)	(61,519)
363.00		150,830.30		76,222.67	159.00	105,836.92		91,479.25		213,986.21	(638,196.35)	(127,639)
364.00		239.58									(239.58)	(48)
371.00		141,438.05		273,771.37		206,559.57		53,057.74		125,823.03	(800,649.76)	(160,130)
380.00		214,843.19		652,150.29		269,030.45		336,246.38		203,471.67	(1,675,741.98)	(335,148)
381.00						90.22					(90.22)	(18)
389.10		5,681.56									(5,681.56)	(1,136)
390.00						3,619.09		3,738.83		242.71	(7,600.63)	(1,520)
391.00		6,028.96		10.19			27,472.80		8,493.00	4,756.00	25,170.65	5,034
393.00		1,931.40		5,643.88				855.08		1,237.81	(9,668.17)	(1,934)
394.00		5,593.49		1,075.22		1,113.04		2,855.31		(4,325.75)	(6,311.31)	(1,262)
395.00		2,048.24						645.90		1,261.00	(3,955.14)	(791)
396.00		1,897.96		52,578.21		4,528.34		2,348.88			(61,353.39)	(12,271)
397.00		5,512.61	1,369.21	9,909.72	87.00	4,676.57		5,312.99			(23,955.68)	(4,791)
398.00		1,251.49									(1,251.49)	(250)
TOTAL	0.00	2,049,081.70	1,369.21	1,762,381.10	246.00	1,070,509.62	27,472.80	1,081,011.79	15,581.00	1,895,571.31	(7,813,886.51)	(1,562,777)

* Column (12) equals the summation of Columns (2) through (11).

PART VI. SERVICE LIFE STATISTICS

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

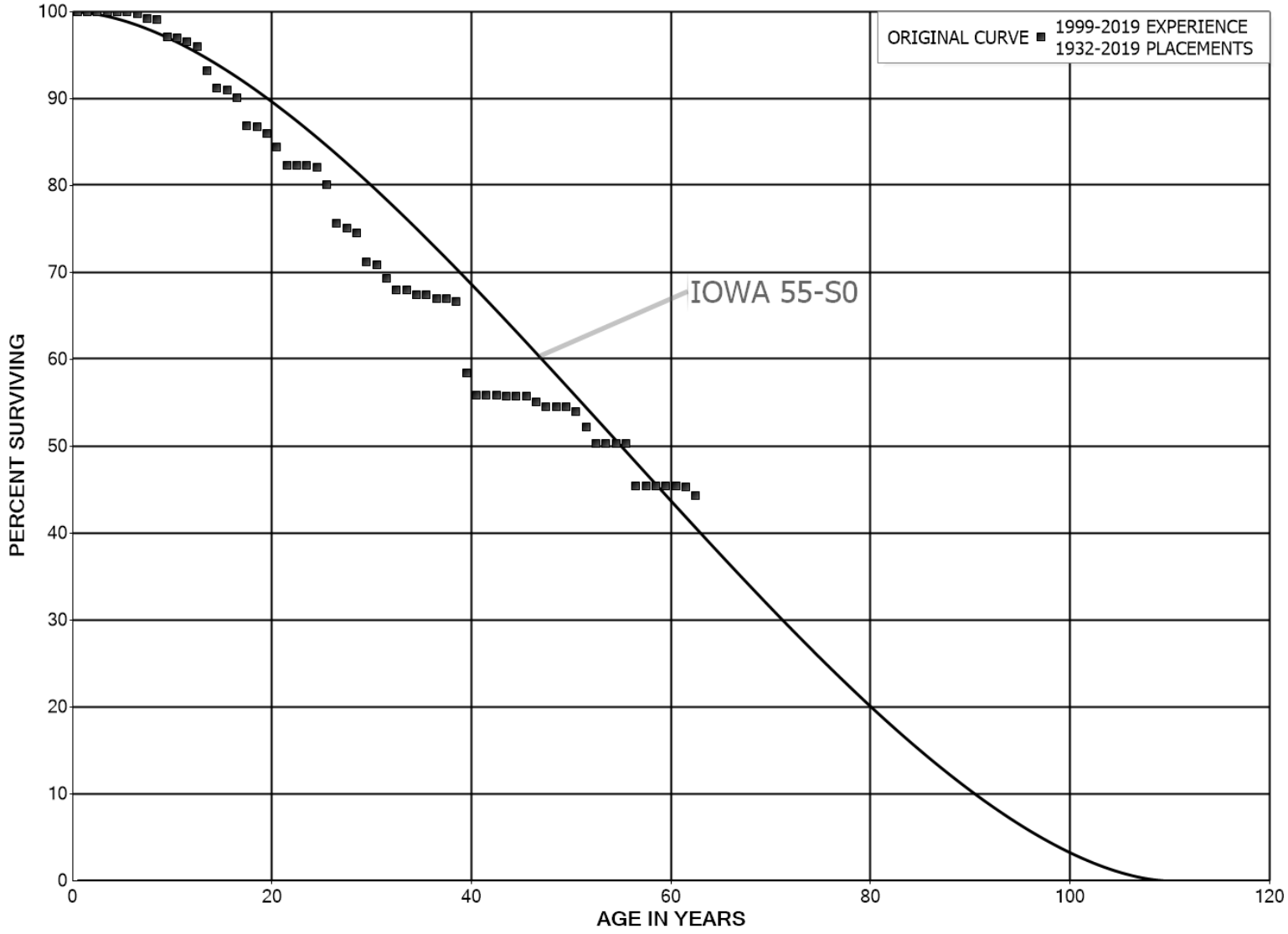
ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

ORIGINAL LIFE TABLE

PLACEMENT BAND 2007-2019 EXPERIENCE BAND 2007-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,844,636		0.0000	1.0000	100.00
0.5	3,478,774		0.0000	1.0000	100.00
1.5	1,864,154		0.0000	1.0000	100.00
2.5	516,452	0	0.0000	1.0000	100.00
3.5	479,797		0.0000	1.0000	100.00
4.5	437,900	416	0.0010	0.9990	100.00
5.5	422,717		0.0000	1.0000	99.90
6.5	321,516		0.0000	1.0000	99.90
7.5	321,516	1,408	0.0044	0.9956	99.90
8.5	311,522		0.0000	1.0000	99.47
9.5	311,522		0.0000	1.0000	99.47
10.5	134,415		0.0000	1.0000	99.47
11.5	20,659	3,076	0.1489	0.8511	99.47
12.5					84.66

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE

PLACEMENT BAND 1932-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	70,500,767		0.0000	1.0000	100.00
0.5	76,131,665		0.0000	1.0000	100.00
1.5	80,233,751	6,642	0.0001	0.9999	100.00
2.5	105,447,960		0.0000	1.0000	99.99
3.5	85,605,007	28,836	0.0003	0.9997	99.99
4.5	79,002,174	4,425	0.0001	0.9999	99.96
5.5	46,624,214	105,422	0.0023	0.9977	99.95
6.5	51,444,895	277,564	0.0054	0.9946	99.73
7.5	50,906,335	75,090	0.0015	0.9985	99.19
8.5	50,793,050	1,027,715	0.0202	0.9798	99.04
9.5	34,780,266	28,544	0.0008	0.9992	97.04
10.5	15,695,508	65,025	0.0041	0.9959	96.96
11.5	15,618,899	88,716	0.0057	0.9943	96.56
12.5	20,002,643	601,564	0.0301	0.9699	96.01
13.5	17,169,269	353,428	0.0206	0.9794	93.12
14.5	16,203,968	41,247	0.0025	0.9975	91.20
15.5	16,204,082	163,309	0.0101	0.9899	90.97
16.5	13,585,539	481,677	0.0355	0.9645	90.06
17.5	12,995,837	17,548	0.0014	0.9986	86.86
18.5	12,210,208	114,143	0.0093	0.9907	86.74
19.5	7,393,964	134,551	0.0182	0.9818	85.93
20.5	6,513,761	157,405	0.0242	0.9758	84.37
21.5	6,711,244	2,801	0.0004	0.9996	82.33
22.5	7,374,817	1,543	0.0002	0.9998	82.30
23.5	6,783,698	15,823	0.0023	0.9977	82.28
24.5	6,921,413	166,617	0.0241	0.9759	82.09
25.5	6,763,696	380,532	0.0563	0.9437	80.11
26.5	5,899,041	38,147	0.0065	0.9935	75.60
27.5	4,281,769	34,820	0.0081	0.9919	75.12
28.5	3,967,252	175,318	0.0442	0.9558	74.50
29.5	4,051,668	21,732	0.0054	0.9946	71.21
30.5	5,300,696	114,682	0.0216	0.9784	70.83
31.5	4,027,463	76,382	0.0190	0.9810	69.30
32.5	2,813,504	2,190	0.0008	0.9992	67.98
33.5	2,649,698	20,846	0.0079	0.9921	67.93
34.5	1,122,954		0.0000	1.0000	67.40
35.5	398,615	2,457	0.0062	0.9938	67.40
36.5	369,394		0.0000	1.0000	66.98
37.5	339,885	1,942	0.0057	0.9943	66.98
38.5	249,055	30,753	0.1235	0.8765	66.60

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1932-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	877,505	37,754	0.0430	0.9570	58.37
40.5	1,351,121		0.0000	1.0000	55.86
41.5	19,298,436	4,893	0.0003	0.9997	55.86
42.5	19,293,543	30,808	0.0016	0.9984	55.85
43.5	32,745,779		0.0000	1.0000	55.76
44.5	14,343,608	10,968	0.0008	0.9992	55.76
45.5	14,332,640	153,806	0.0107	0.9893	55.72
46.5	14,199,715	156,087	0.0110	0.9890	55.12
47.5	552,598		0.0000	1.0000	54.51
48.5	1,223,925		0.0000	1.0000	54.51
49.5	1,265,936	12,500	0.0099	0.9901	54.51
50.5	1,284,936	43,517	0.0339	0.9661	53.98
51.5	570,093	20,853	0.0366	0.9634	52.15
52.5	524,823		0.0000	1.0000	50.24
53.5	524,823		0.0000	1.0000	50.24
54.5	447,474		0.0000	1.0000	50.24
55.5	447,474	42,843	0.0957	0.9043	50.24
56.5	13,313,486	1,903	0.0001	0.9999	45.43
57.5	13,311,583		0.0000	1.0000	45.42
58.5	13,049,341	13	0.0000	1.0000	45.42
59.5	140,486		0.0000	1.0000	45.42
60.5	140,486	363	0.0026	0.9974	45.42
61.5	140,123	3,040	0.0217	0.9783	45.31
62.5					44.32
63.5					
64.5					
65.5					
66.5					
67.5					
68.5	39,928		0.0000		
69.5	39,928		0.0000		
70.5	39,928		0.0000		
71.5	39,928		0.0000		
72.5	40,428		0.0000		
73.5	39,928		0.0000		
74.5	39,928		0.0000		
75.5	39,928		0.0000		
76.5	602		0.0000		
77.5	602		0.0000		
78.5	602		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

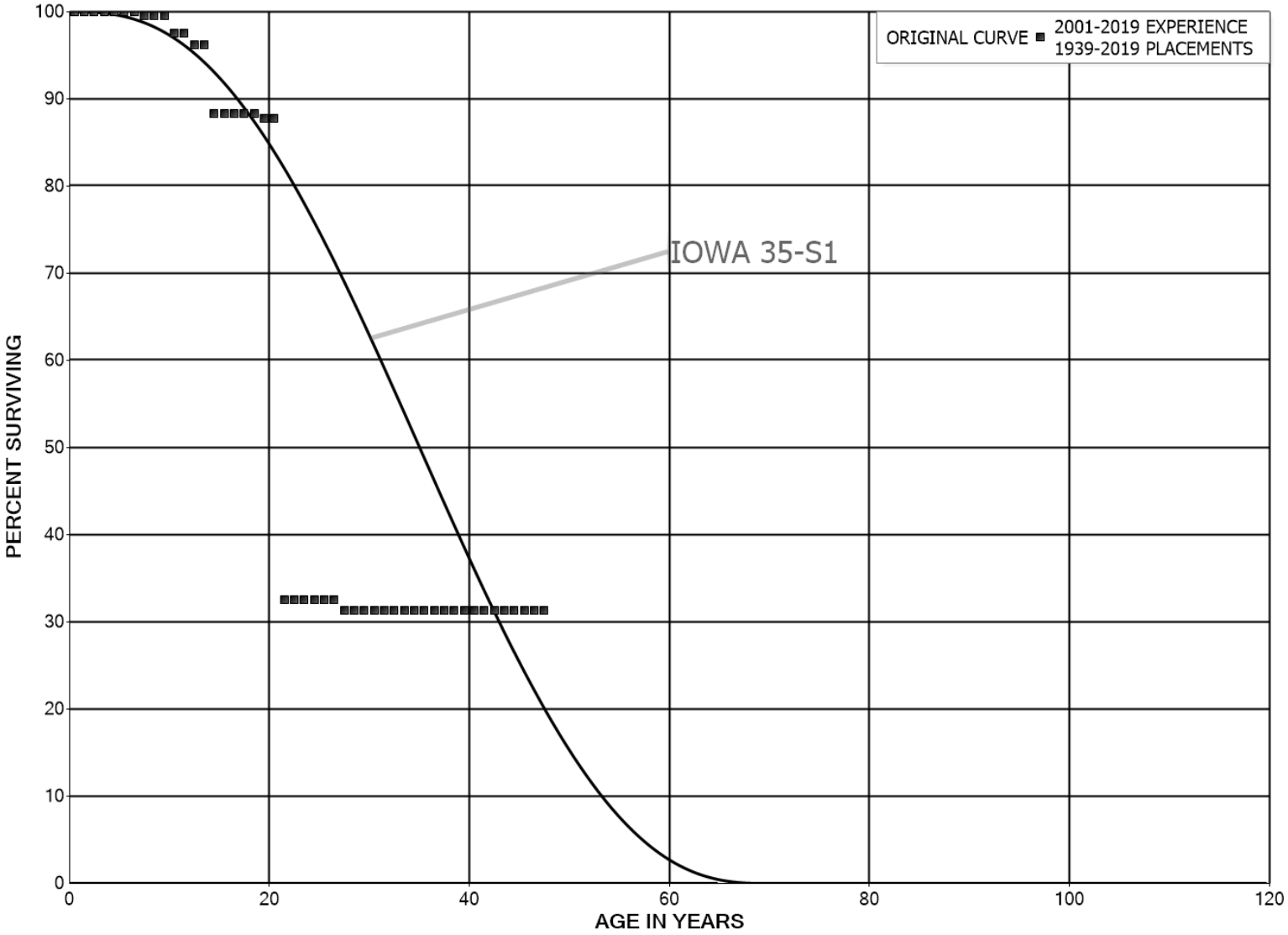
ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1932-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	602		0.0000		
80.5	602		0.0000		
81.5	602		0.0000		
82.5	602		0.0000		
83.5	602		0.0000		
84.5	602		0.0000		
85.5	602		0.0000		
86.5	602		0.0000		
87.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,331,347		0.0000	1.0000	100.00
0.5	2,248,872	400	0.0002	0.9998	100.00
1.5	2,139,519		0.0000	1.0000	99.98
2.5	2,007,976		0.0000	1.0000	99.98
3.5	1,998,798		0.0000	1.0000	99.98
4.5	978,189		0.0000	1.0000	99.98
5.5	566,034		0.0000	1.0000	99.98
6.5	540,776	2,524	0.0047	0.9953	99.98
7.5	668,631		0.0000	1.0000	99.52
8.5	661,526		0.0000	1.0000	99.52
9.5	622,592	12,303	0.0198	0.9802	99.52
10.5	529,371	373	0.0007	0.9993	97.55
11.5	209,362	2,752	0.0131	0.9869	97.48
12.5	204,311		0.0000	1.0000	96.20
13.5	220,425	18,073	0.0820	0.9180	96.20
14.5	208,207		0.0000	1.0000	88.31
15.5	208,207		0.0000	1.0000	88.31
16.5	165,317		0.0000	1.0000	88.31
17.5	193,471		0.0000	1.0000	88.31
18.5	210,457	1,510	0.0072	0.9928	88.31
19.5	223,914		0.0000	1.0000	87.68
20.5	223,914	140,772	0.6287	0.3713	87.68
21.5	67,028		0.0000	1.0000	32.56
22.5	73,481		0.0000	1.0000	32.56
23.5	73,481		0.0000	1.0000	32.56
24.5	73,481		0.0000	1.0000	32.56
25.5	44,261		0.0000	1.0000	32.56
26.5	27,275	1,047	0.0384	0.9616	32.56
27.5	11,260		0.0000	1.0000	31.31
28.5	11,260		0.0000	1.0000	31.31
29.5	11,260		0.0000	1.0000	31.31
30.5	11,260		0.0000	1.0000	31.31
31.5	11,260		0.0000	1.0000	31.31
32.5	11,260		0.0000	1.0000	31.31
33.5	11,260		0.0000	1.0000	31.31
34.5	11,260		0.0000	1.0000	31.31
35.5	450		0.0000	1.0000	31.31
36.5	450		0.0000	1.0000	31.31
37.5	450		0.0000	1.0000	31.31
38.5	450		0.0000	1.0000	31.31

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	450		0.0000	1.0000	31.31
40.5	450		0.0000	1.0000	31.31
41.5	450		0.0000	1.0000	31.31
42.5	450		0.0000	1.0000	31.31
43.5	450		0.0000	1.0000	31.31
44.5	450		0.0000	1.0000	31.31
45.5	450		0.0000	1.0000	31.31
46.5	450		0.0000	1.0000	31.31
47.5					31.31
48.5					
49.5					
50.5					
51.5					
52.5					
53.5					
54.5					
55.5					
56.5					
57.5					
58.5					
59.5					
60.5					
61.5					
62.5					
63.5					
64.5					
65.5					
66.5					
67.5					
68.5	3,802		0.0000		
69.5	3,802		0.0000		
70.5	3,802	283	0.0744		
71.5	3,519		0.0000		
72.5	3,519		0.0000		
73.5	3,519		0.0000		
74.5	3,519		0.0000		
75.5	3,519		0.0000		
76.5	3,519		0.0000		
77.5	3,519		0.0000		
78.5	3,519		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

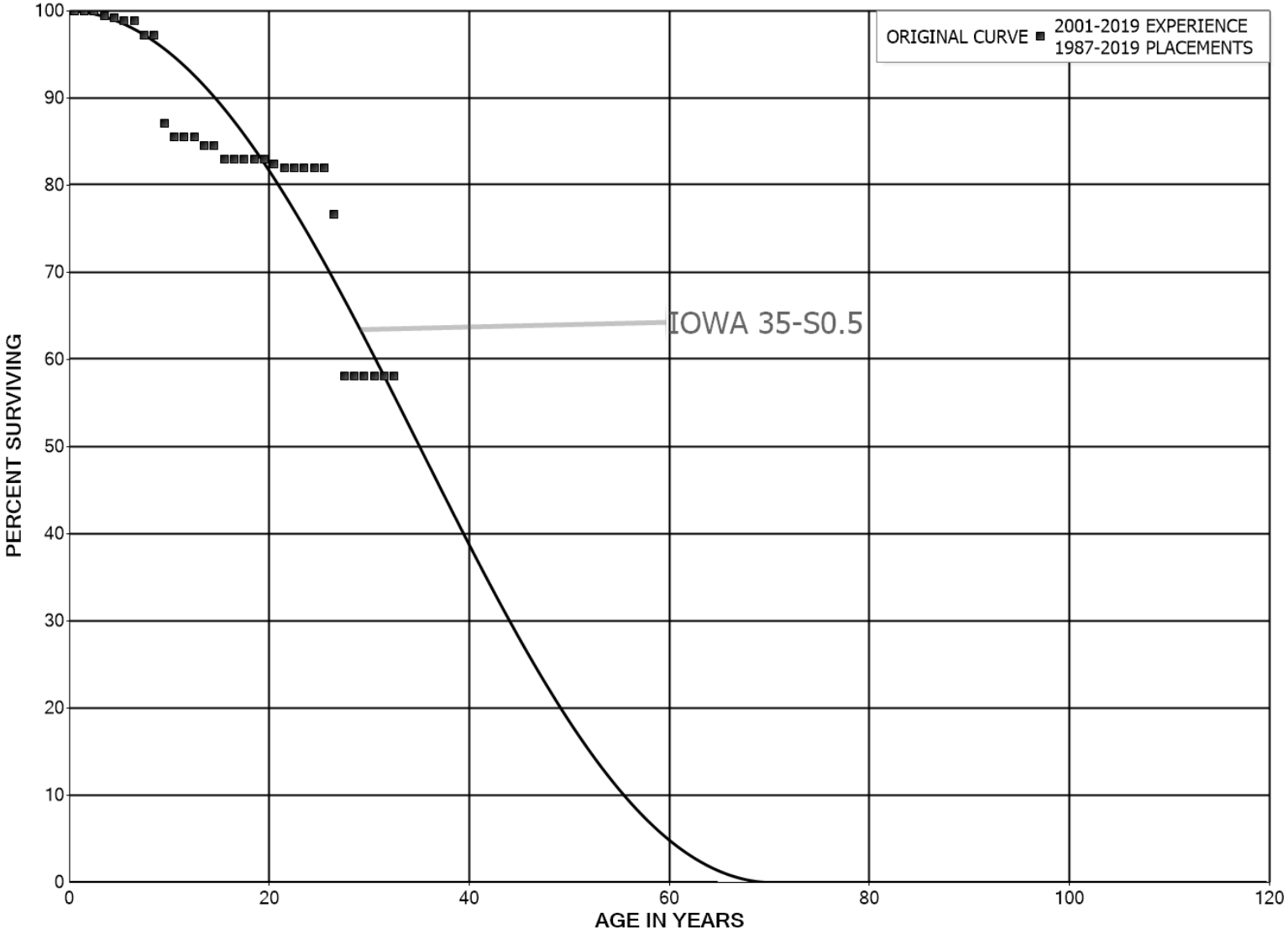
ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	3,519		0.0000		
80.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 355.00 POWER GENERATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

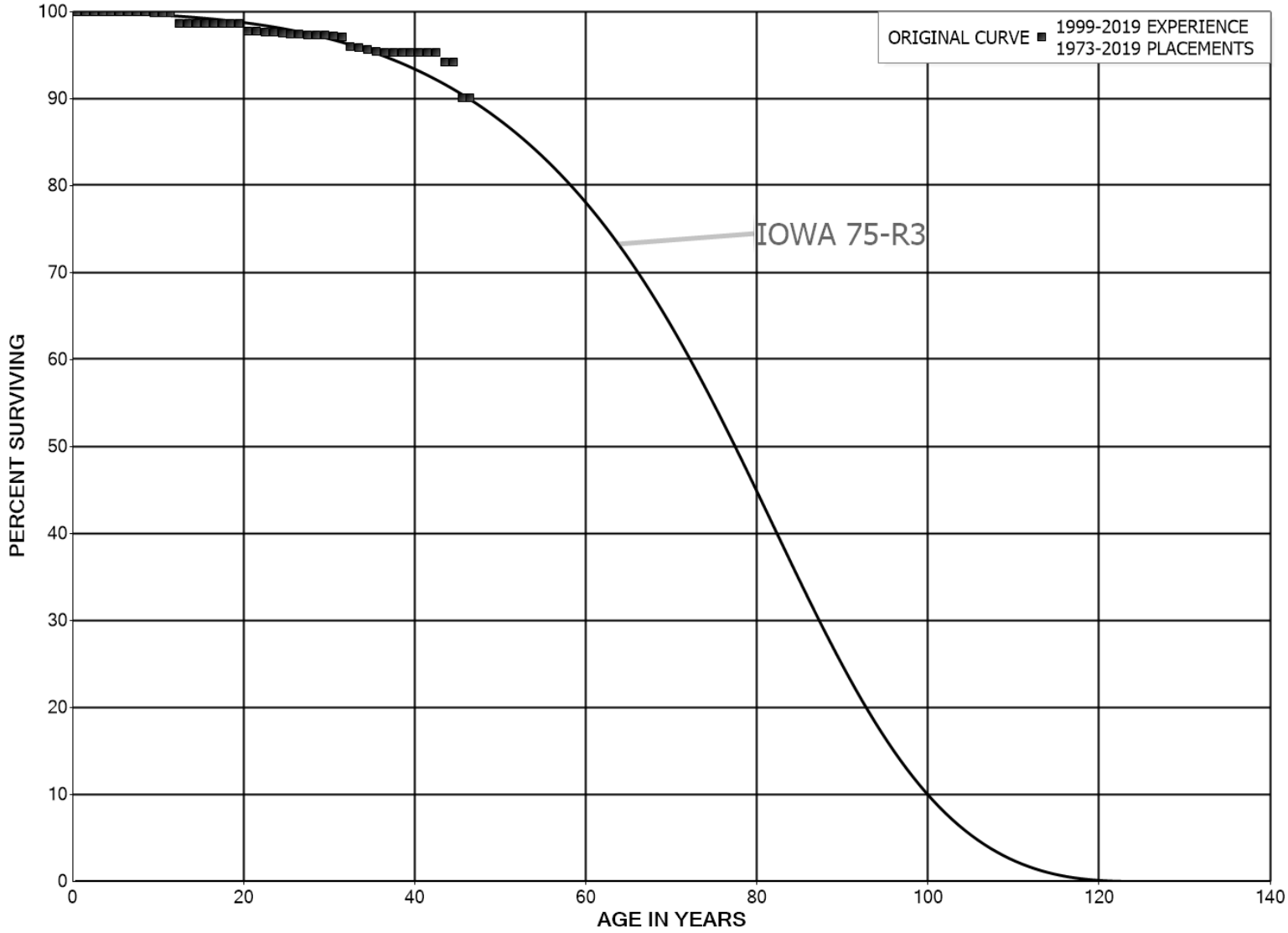
ACCOUNT 355.00 POWER GENERATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1987-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,656,122		0.0000	1.0000	100.00
0.5	3,685,338		0.0000	1.0000	100.00
1.5	4,385,880		0.0000	1.0000	100.00
2.5	4,494,639	26,926	0.0060	0.9940	100.00
3.5	4,479,665	10,161	0.0023	0.9977	99.40
4.5	4,398,000	14,523	0.0033	0.9967	99.18
5.5	3,773,674	1,387	0.0004	0.9996	98.85
6.5	3,828,658	61,470	0.0161	0.9839	98.81
7.5	3,336,361		0.0000	1.0000	97.23
8.5	3,321,984	347,576	0.1046	0.8954	97.23
9.5	2,953,727	51,388	0.0174	0.9826	87.05
10.5	328,249		0.0000	1.0000	85.54
11.5	144,528		0.0000	1.0000	85.54
12.5	267,555	3,097	0.0116	0.9884	85.54
13.5	327,093		0.0000	1.0000	84.55
14.5	278,538	5,336	0.0192	0.9808	84.55
15.5	281,064		0.0000	1.0000	82.93
16.5	293,645		0.0000	1.0000	82.93
17.5	241,944		0.0000	1.0000	82.93
18.5	203,466		0.0000	1.0000	82.93
19.5	203,466	1,204	0.0059	0.9941	82.93
20.5	202,262	1,103	0.0055	0.9945	82.44
21.5	432,455		0.0000	1.0000	81.99
22.5	402,008		0.0000	1.0000	81.99
23.5	402,008		0.0000	1.0000	81.99
24.5	402,008		0.0000	1.0000	81.99
25.5	402,978	26,388	0.0655	0.9345	81.99
26.5	174,978	42,310	0.2418	0.7582	76.62
27.5	89,880		0.0000	1.0000	58.09
28.5	68,585		0.0000	1.0000	58.09
29.5	68,585		0.0000	1.0000	58.09
30.5	19,246		0.0000	1.0000	58.09
31.5	19,246		0.0000	1.0000	58.09
32.5					58.09

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	31,766,704	19	0.0000	1.0000	100.00
0.5	28,215,316	26	0.0000	1.0000	100.00
1.5	35,558,986	33	0.0000	1.0000	100.00
2.5	23,783,577	70	0.0000	1.0000	100.00
3.5	21,373,939	350	0.0000	1.0000	100.00
4.5	18,774,036	315	0.0000	1.0000	100.00
5.5	14,425,014	397	0.0000	1.0000	100.00
6.5	14,188,090	1,611	0.0001	0.9999	99.99
7.5	14,122,868	1,747	0.0001	0.9999	99.98
8.5	13,850,582	16,747	0.0012	0.9988	99.97
9.5	13,465,099	64	0.0000	1.0000	99.85
10.5	13,318,392	82	0.0000	1.0000	99.85
11.5	10,748,868	127,626	0.0119	0.9881	99.85
12.5	9,661,386		0.0000	1.0000	98.66
13.5	7,868,737	3,291	0.0004	0.9996	98.66
14.5	7,779,655	99	0.0000	1.0000	98.62
15.5	5,905,707	9	0.0000	1.0000	98.62
16.5	5,774,986	949	0.0002	0.9998	98.62
17.5	5,344,267	1,253	0.0002	0.9998	98.60
18.5	4,614,847	826	0.0002	0.9998	98.58
19.5	4,197,905	37,017	0.0088	0.9912	98.56
20.5	3,986,776	70	0.0000	1.0000	97.69
21.5	4,475,797	1,897	0.0004	0.9996	97.69
22.5	3,907,599	569	0.0001	0.9999	97.65
23.5	4,900,347	3,932	0.0008	0.9992	97.64
24.5	6,419,851	13,411	0.0021	0.9979	97.56
25.5	6,580,720	788	0.0001	0.9999	97.35
26.5	6,033,834	1,095	0.0002	0.9998	97.34
27.5	6,011,515	2,049	0.0003	0.9997	97.32
28.5	5,991,855	3,135	0.0005	0.9995	97.29
29.5	6,011,945	3,365	0.0006	0.9994	97.24
30.5	5,911,879	4,784	0.0008	0.9992	97.19
31.5	5,517,306	65,876	0.0119	0.9881	97.11
32.5	5,225,480	4,106	0.0008	0.9992	95.95
33.5	5,192,765	13,636	0.0026	0.9974	95.87
34.5	4,869,190	12,733	0.0026	0.9974	95.62
35.5	4,856,457	2,869	0.0006	0.9994	95.37
36.5	4,661,206	15	0.0000	1.0000	95.31
37.5	4,607,713		0.0000	1.0000	95.31
38.5	4,446,768	1,883	0.0004	0.9996	95.31

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

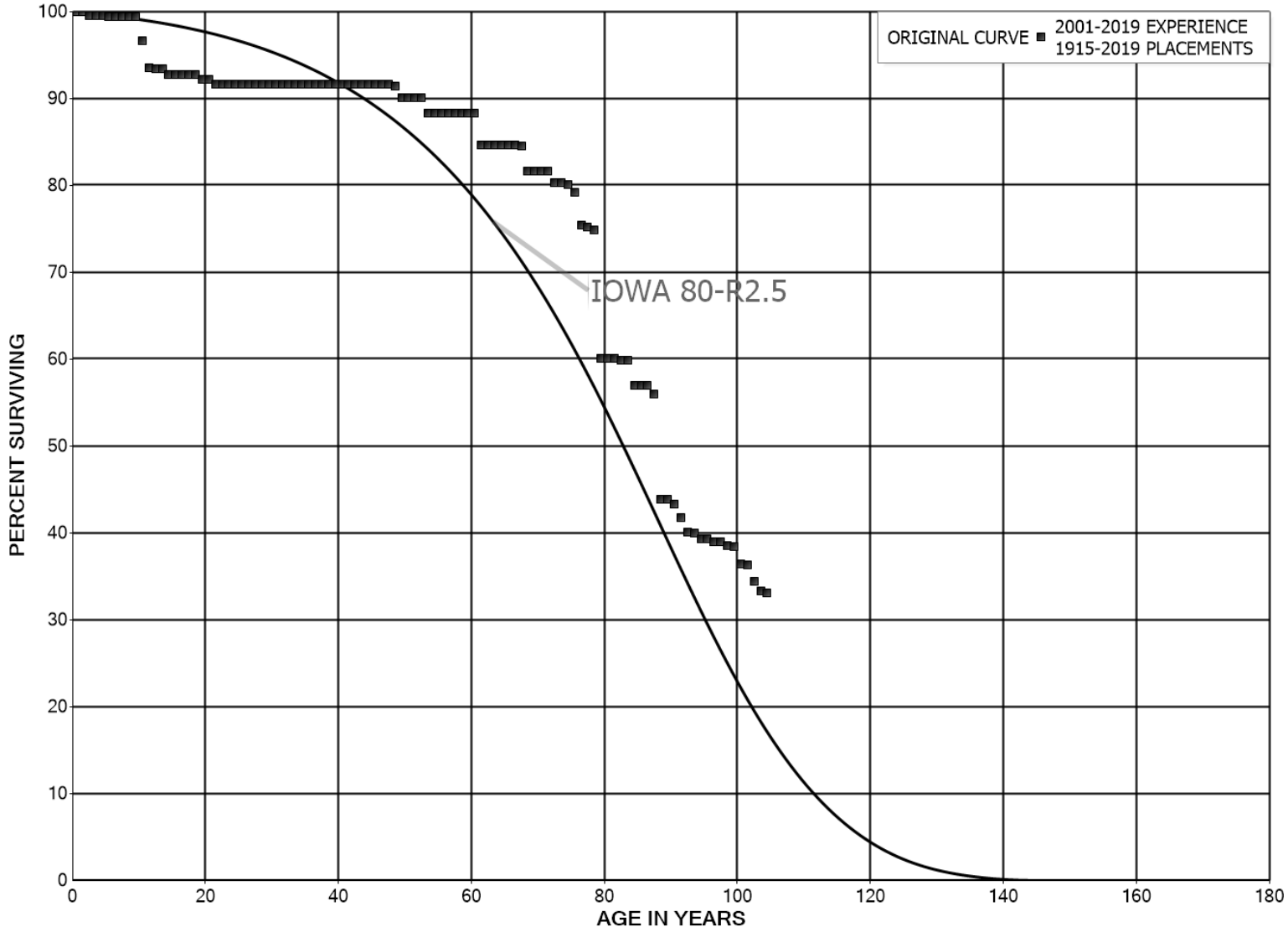
ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1973-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,369,779	82	0.0000	1.0000	95.27
40.5	4,295,948	6	0.0000	1.0000	95.27
41.5	4,025,587	0	0.0000	1.0000	95.27
42.5	3,566,737	42,283	0.0119	0.9881	95.27
43.5	2,553,034		0.0000	1.0000	94.14
44.5	1,703,254	73,783	0.0433	0.9567	94.14
45.5	125,695		0.0000	1.0000	90.06
46.5					90.06

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	123,698,865	1,489	0.0000	1.0000	100.00
0.5	80,968,134	1,744	0.0000	1.0000	100.00
1.5	71,427,735	349,743	0.0049	0.9951	100.00
2.5	61,491,291		0.0000	1.0000	99.51
3.5	47,985,505		0.0000	1.0000	99.51
4.5	43,496,282	26,093	0.0006	0.9994	99.51
5.5	34,622,702	11,064	0.0003	0.9997	99.45
6.5	36,236,717	10,556	0.0003	0.9997	99.42
7.5	44,473,440	0	0.0000	1.0000	99.39
8.5	44,403,805	13,334	0.0003	0.9997	99.39
9.5	42,579,956	1,180,167	0.0277	0.9723	99.36
10.5	27,257,562	886,763	0.0325	0.9675	96.60
11.5	23,041,413	10,064	0.0004	0.9996	93.46
12.5	15,696,984	13,300	0.0008	0.9992	93.42
13.5	13,197,516	82,522	0.0063	0.9937	93.34
14.5	9,898,866	187	0.0000	1.0000	92.76
15.5	8,175,329	367	0.0000	1.0000	92.75
16.5	11,005,722	1,374	0.0001	0.9999	92.75
17.5	22,668,123		0.0000	1.0000	92.74
18.5	22,367,436	144,378	0.0065	0.9935	92.74
19.5	21,841,271		0.0000	1.0000	92.14
20.5	10,429,000	56,430	0.0054	0.9946	92.14
21.5	13,494,984		0.0000	1.0000	91.64
22.5	12,095,717		0.0000	1.0000	91.64
23.5	13,846,891		0.0000	1.0000	91.64
24.5	14,182,481		0.0000	1.0000	91.64
25.5	19,071,002		0.0000	1.0000	91.64
26.5	16,170,692		0.0000	1.0000	91.64
27.5	36,060,280		0.0000	1.0000	91.64
28.5	35,923,542		0.0000	1.0000	91.64
29.5	33,683,971		0.0000	1.0000	91.64
30.5	8,391,683	866	0.0001	0.9999	91.64
31.5	8,167,272	21	0.0000	1.0000	91.63
32.5	8,027,418		0.0000	1.0000	91.63
33.5	7,266,714		0.0000	1.0000	91.63
34.5	5,540,059		0.0000	1.0000	91.63
35.5	3,406,034		0.0000	1.0000	91.63
36.5	3,951,146		0.0000	1.0000	91.63
37.5	4,287,296		0.0000	1.0000	91.63
38.5	4,273,219		0.0000	1.0000	91.63

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,243,666		0.0000	1.0000	91.63
40.5	41,503,891	5,447	0.0001	0.9999	91.63
41.5	41,043,016	49	0.0000	1.0000	91.62
42.5	41,341,828		0.0000	1.0000	91.62
43.5	20,516,395		0.0000	1.0000	91.62
44.5	17,262,745	4,573	0.0003	0.9997	91.62
45.5	17,447,879		0.0000	1.0000	91.60
46.5	16,922,111	1,617	0.0001	0.9999	91.60
47.5	1,493,981	2,878	0.0019	0.9981	91.59
48.5	1,491,103	21,283	0.0143	0.9857	91.41
49.5	995,707	187	0.0002	0.9998	90.11
50.5	1,249,631		0.0000	1.0000	90.09
51.5	1,214,773		0.0000	1.0000	90.09
52.5	1,253,366	24,618	0.0196	0.9804	90.09
53.5	28,374,663		0.0000	1.0000	88.32
54.5	38,998,170		0.0000	1.0000	88.32
55.5	39,986,553		0.0000	1.0000	88.32
56.5	13,005,874		0.0000	1.0000	88.32
57.5	59,432,346		0.0000	1.0000	88.32
58.5	60,820,282	557	0.0000	1.0000	88.32
59.5	59,761,303	747	0.0000	1.0000	88.32
60.5	2,094,297	87,761	0.0419	0.9581	88.32
61.5	22,663,762	8	0.0000	1.0000	84.62
62.5	21,213,491	61	0.0000	1.0000	84.62
63.5	21,215,934	289	0.0000	1.0000	84.62
64.5	46,353		0.0000	1.0000	84.62
65.5	1,102,303		0.0000	1.0000	84.62
66.5	1,102,303	1,673	0.0015	0.9985	84.62
67.5	1,100,630	37,140	0.0337	0.9663	84.49
68.5	1,259,440		0.0000	1.0000	81.64
69.5	290,689		0.0000	1.0000	81.64
70.5	962,463	168	0.0002	0.9998	81.64
71.5	962,295	15,230	0.0158	0.9842	81.62
72.5	1,042,298	993	0.0010	0.9990	80.33
73.5	946,072	2,053	0.0022	0.9978	80.25
74.5	683,176	7,508	0.0110	0.9890	80.08
75.5	675,668	32,767	0.0485	0.9515	79.20
76.5	642,901	1,310	0.0020	0.9980	75.36
77.5	1,531,686	8,017	0.0052	0.9948	75.20
78.5	1,523,669	299,242	0.1964	0.8036	74.81

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

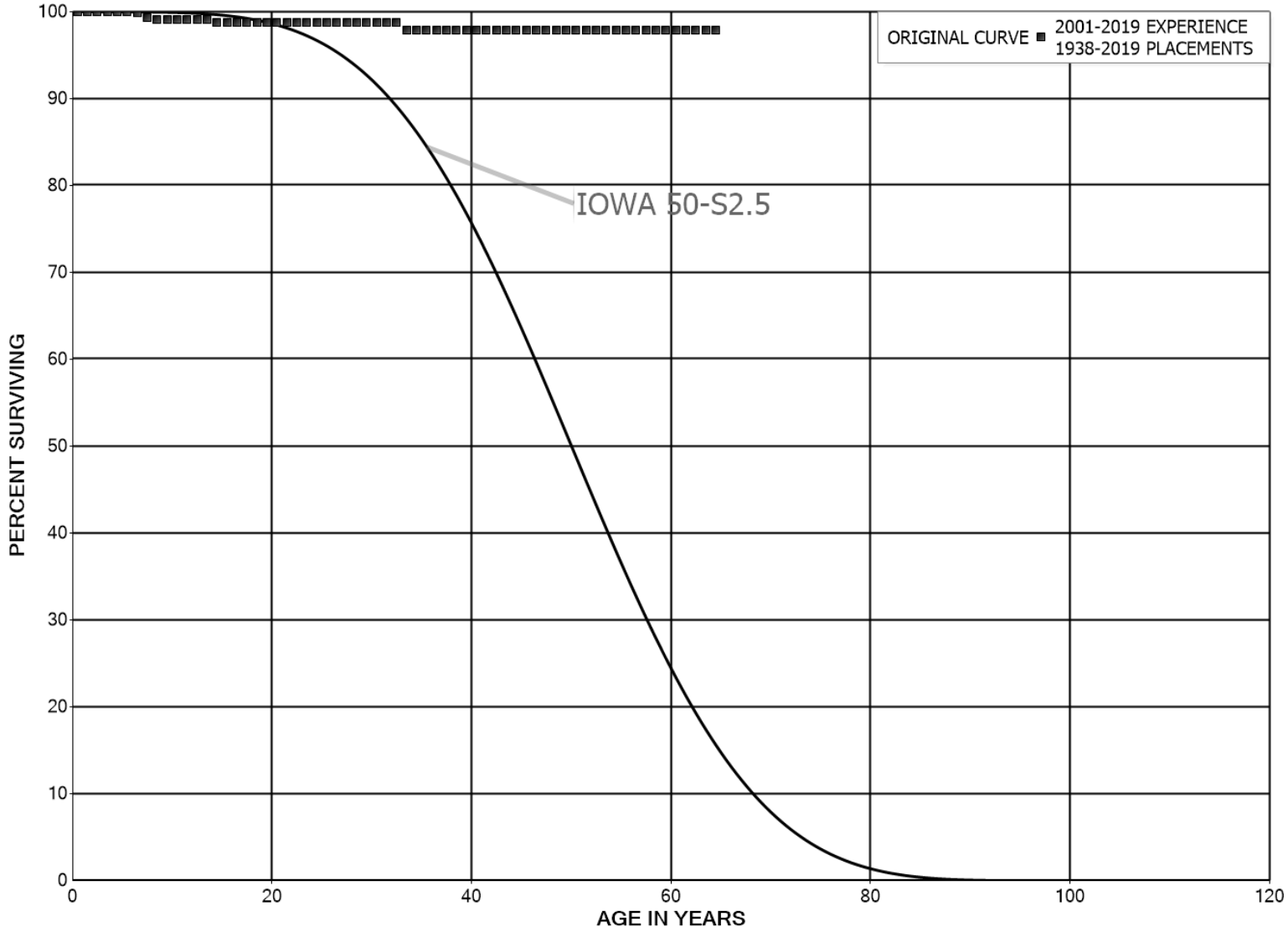
ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	1,224,427	291	0.0002	0.9998	60.12
80.5	1,522,508		0.0000	1.0000	60.10
81.5	632,413	2,303	0.0036	0.9964	60.10
82.5	648,868		0.0000	1.0000	59.89
83.5	648,868	31,252	0.0482	0.9518	59.89
84.5	601,981	10	0.0000	1.0000	57.00
85.5	722,814		0.0000	1.0000	57.00
86.5	722,814	13,485	0.0187	0.9813	57.00
87.5	709,329	153,014	0.2157	0.7843	55.94
88.5	556,315	264	0.0005	0.9995	43.87
89.5	329,027	4,352	0.0132	0.9868	43.85
90.5	306,175	11,276	0.0368	0.9632	43.27
91.5	294,898	11,132	0.0377	0.9623	41.68
92.5	283,767	1,273	0.0045	0.9955	40.10
93.5	282,494	4,366	0.0155	0.9845	39.92
94.5	278,128	221	0.0008	0.9992	39.31
95.5	277,906	1,967	0.0071	0.9929	39.27
96.5	275,939	42	0.0002	0.9998	39.00
97.5	3,804,626	42,906	0.0113	0.9887	38.99
98.5	3,761,720	15,091	0.0040	0.9960	38.55
99.5	3,616,599	191,754	0.0530	0.9470	38.40
100.5	3,424,846	6,012	0.0018	0.9982	36.36
101.5	96,405	5,167	0.0536	0.9464	36.30
102.5	91,238	2,967	0.0325	0.9675	34.35
103.5	88,271	309	0.0035	0.9965	33.23
104.5					33.12

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 361.20 MANHOLES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1938-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	14,379,651		0.0000	1.0000	100.00
0.5	10,176,887		0.0000	1.0000	100.00
1.5	10,661,285	0	0.0000	1.0000	100.00
2.5	11,952,425		0.0000	1.0000	100.00
3.5	12,083,028	911	0.0001	0.9999	100.00
4.5	7,585,455		0.0000	1.0000	99.99
5.5	5,573,639	6,667	0.0012	0.9988	99.99
6.5	4,589,383	27,566	0.0060	0.9940	99.87
7.5	4,569,090	10,961	0.0024	0.9976	99.27
8.5	5,066,097		0.0000	1.0000	99.03
9.5	5,304,644		0.0000	1.0000	99.03
10.5	5,838,060		0.0000	1.0000	99.03
11.5	5,353,439		0.0000	1.0000	99.03
12.5	4,555,554		0.0000	1.0000	99.03
13.5	4,114,028	12,188	0.0030	0.9970	99.03
14.5	2,635,311		0.0000	1.0000	98.74
15.5	2,105,291	0	0.0000	1.0000	98.74
16.5	2,247,105	472	0.0002	0.9998	98.74
17.5	2,934,821		0.0000	1.0000	98.72
18.5	2,849,242		0.0000	1.0000	98.72
19.5	2,782,656		0.0000	1.0000	98.72
20.5	2,425,509	0	0.0000	1.0000	98.72
21.5	1,772,096		0.0000	1.0000	98.72
22.5	970,343		0.0000	1.0000	98.72
23.5	1,299,611		0.0000	1.0000	98.72
24.5	1,741,110		0.0000	1.0000	98.72
25.5	2,636,710		0.0000	1.0000	98.72
26.5	3,361,749		0.0000	1.0000	98.72
27.5	3,450,899		0.0000	1.0000	98.72
28.5	3,240,536		0.0000	1.0000	98.72
29.5	2,574,979		0.0000	1.0000	98.72
30.5	1,538,799		0.0000	1.0000	98.72
31.5	1,635,548		0.0000	1.0000	98.72
32.5	1,551,747	13,277	0.0086	0.9914	98.72
33.5	1,328,056		0.0000	1.0000	97.88
34.5	1,038,030		0.0000	1.0000	97.88
35.5	1,093,592		0.0000	1.0000	97.88
36.5	1,326,879		0.0000	1.0000	97.88
37.5	1,450,927		0.0000	1.0000	97.88
38.5	1,304,196		0.0000	1.0000	97.88

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1938-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	994,944		0.0000	1.0000	97.88
40.5	2,263,935		0.0000	1.0000	97.88
41.5	2,043,826		0.0000	1.0000	97.88
42.5	2,216,232		0.0000	1.0000	97.88
43.5	2,406,018		0.0000	1.0000	97.88
44.5	2,040,304		0.0000	1.0000	97.88
45.5	2,008,665		0.0000	1.0000	97.88
46.5	1,708,150		0.0000	1.0000	97.88
47.5	301,817		0.0000	1.0000	97.88
48.5	301,817		0.0000	1.0000	97.88
49.5	170,327		0.0000	1.0000	97.88
50.5	201,568		0.0000	1.0000	97.88
51.5	166,180		0.0000	1.0000	97.88
52.5	172,781		0.0000	1.0000	97.88
53.5	1,995,623		0.0000	1.0000	97.88
54.5	1,827,036		0.0000	1.0000	97.88
55.5	1,951,871		0.0000	1.0000	97.88
56.5	131,436		0.0000	1.0000	97.88
57.5	10,950,272		0.0000	1.0000	97.88
58.5	10,950,272		0.0000	1.0000	97.88
59.5	10,825,437		0.0000	1.0000	97.88
60.5	89,564		0.0000	1.0000	97.88
61.5	89,564		0.0000	1.0000	97.88
62.5	89,564		0.0000	1.0000	97.88
63.5	89,564		0.0000	1.0000	97.88
64.5					97.88
65.5	100,437		0.0000		
66.5	100,437		0.0000		
67.5	123,426		0.0000		
68.5	167,059	22,989	0.1376		
69.5	43,633		0.0000		
70.5	84,331		0.0000		
71.5	84,331		0.0000		
72.5	90,699		0.0000		
73.5	84,331		0.0000		
74.5	43,633		0.0000		
75.5	43,633		0.0000		
76.5	43,633		0.0000		
77.5	306,691		0.0000		
78.5	306,691		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

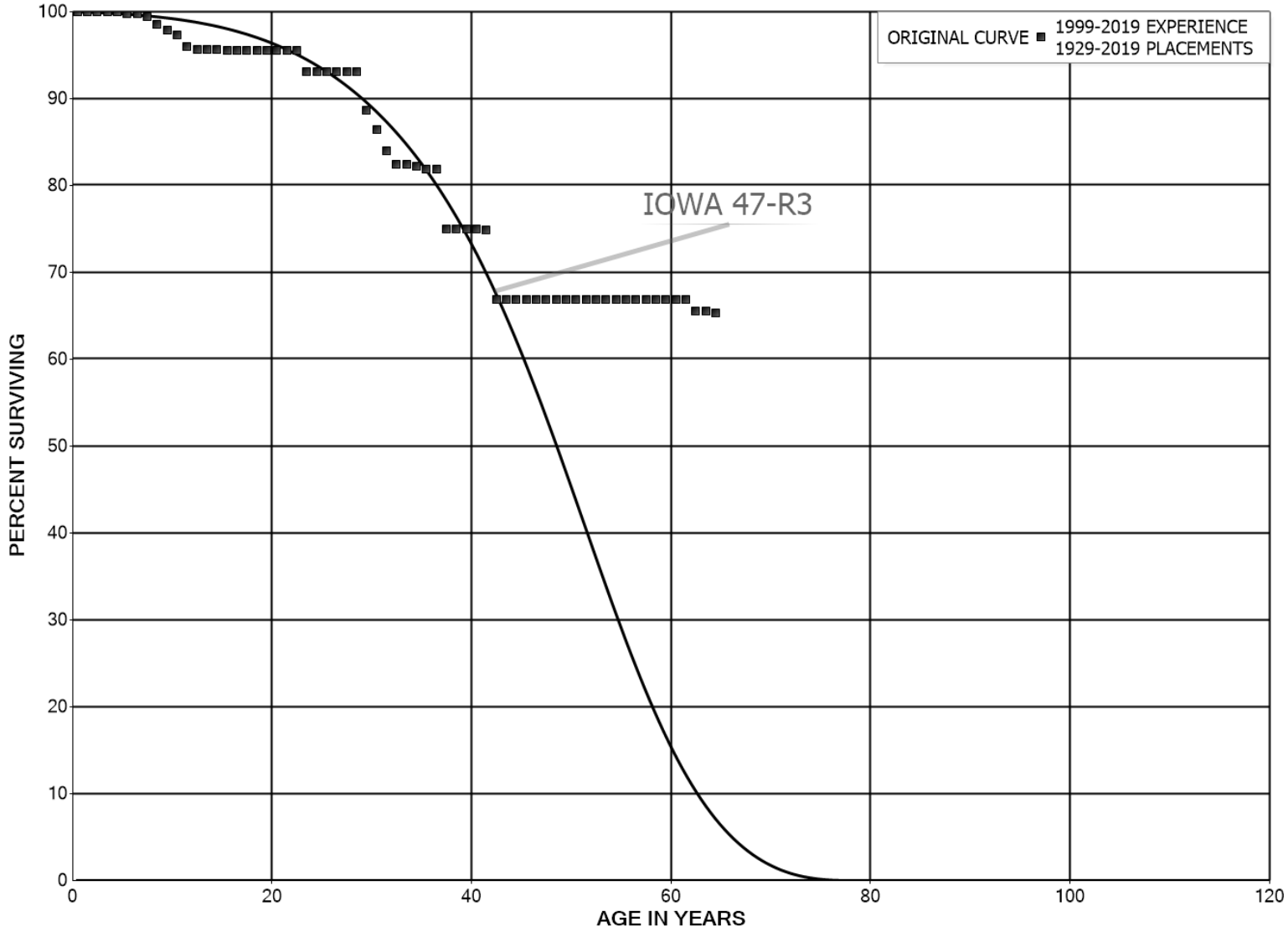
ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1938-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	306,691	1,171	0.0038		
80.5	263,058		0.0000		
81.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 363.00 SERVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1929-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	10,615,796	0	0.0000	1.0000	100.00
0.5	10,038,138	0	0.0000	1.0000	100.00
1.5	9,510,472	60	0.0000	1.0000	100.00
2.5	8,790,677	5,668	0.0006	0.9994	100.00
3.5	8,679,530	421	0.0000	1.0000	99.93
4.5	7,932,683	12,635	0.0016	0.9984	99.93
5.5	6,966,530	2,890	0.0004	0.9996	99.77
6.5	8,411,000	31,963	0.0038	0.9962	99.73
7.5	8,278,555	65,894	0.0080	0.9920	99.35
8.5	8,313,922	64,649	0.0078	0.9922	98.56
9.5	8,351,147	42,617	0.0051	0.9949	97.79
10.5	6,470,010	87,729	0.0136	0.9864	97.29
11.5	6,246,021	19,892	0.0032	0.9968	95.98
12.5	5,858,877	0	0.0000	1.0000	95.67
13.5	4,698,450	4,942	0.0011	0.9989	95.67
14.5	4,095,435	871	0.0002	0.9998	95.57
15.5	3,284,377		0.0000	1.0000	95.55
16.5	3,511,888	0	0.0000	1.0000	95.55
17.5	3,953,464	0	0.0000	1.0000	95.55
18.5	3,909,166	55	0.0000	1.0000	95.55
19.5	3,630,733		0.0000	1.0000	95.55
20.5	3,925,137		0.0000	1.0000	95.55
21.5	3,646,749		0.0000	1.0000	95.55
22.5	3,395,484	87,997	0.0259	0.9741	95.55
23.5	3,780,922		0.0000	1.0000	93.07
24.5	4,115,954	497	0.0001	0.9999	93.07
25.5	5,003,579		0.0000	1.0000	93.06
26.5	5,176,777		0.0000	1.0000	93.06
27.5	4,635,070		0.0000	1.0000	93.06
28.5	4,421,930	209,578	0.0474	0.9526	93.06
29.5	3,596,999	92,585	0.0257	0.9743	88.65
30.5	2,947,708	80,733	0.0274	0.9726	86.37
31.5	2,783,645	51,927	0.0187	0.9813	84.00
32.5	2,491,265	1,241	0.0005	0.9995	82.43
33.5	2,228,511	4,871	0.0022	0.9978	82.39
34.5	1,965,612	8,461	0.0043	0.9957	82.21
35.5	1,925,423	503	0.0003	0.9997	81.86
36.5	1,973,278	167,021	0.0846	0.9154	81.84
37.5	1,839,375	192	0.0001	0.9999	74.91
38.5	1,657,395		0.0000	1.0000	74.90

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,207,182		0.0000	1.0000	74.90
40.5	1,197,802	385	0.0003	0.9997	74.90
41.5	1,022,673	110,064	0.1076	0.8924	74.88
42.5	886,687		0.0000	1.0000	66.82
43.5	1,408,938		0.0000	1.0000	66.82
44.5	900,914		0.0000	1.0000	66.82
45.5	855,938		0.0000	1.0000	66.82
46.5	736,586		0.0000	1.0000	66.82
47.5	156,414		0.0000	1.0000	66.82
48.5	155,860		0.0000	1.0000	66.82
49.5	82,277		0.0000	1.0000	66.82
50.5	145,022		0.0000	1.0000	66.82
51.5	132,653		0.0000	1.0000	66.82
52.5	134,754	0	0.0000	1.0000	66.82
53.5	137,757		0.0000	1.0000	66.82
54.5	20,119		0.0000	1.0000	66.82
55.5	100,869		0.0000	1.0000	66.82
56.5	100,869		0.0000	1.0000	66.82
57.5	97,866		0.0000	1.0000	66.82
58.5	256,316		0.0000	1.0000	66.82
59.5	180,162	20	0.0001	0.9999	66.82
60.5	228,822		0.0000	1.0000	66.81
61.5	228,822	4,595	0.0201	0.9799	66.81
62.5	50,781		0.0000	1.0000	65.47
63.5	50,781	162	0.0032	0.9968	65.47
64.5					65.26
65.5	60,144		0.0000		
66.5	60,144		0.0000		
67.5	60,144		0.0000		
68.5	70,211		0.0000		
69.5	13,932	819	0.0588		
70.5	36,101		0.0000		
71.5	36,101	4,521	0.1252		
72.5	31,580	1,251	0.0396		
73.5	30,329	442	0.0146		
74.5	6,899	644	0.0933		
75.5	6,255		0.0000		
76.5	6,255		0.0000		
77.5	151,010		0.0000		
78.5	151,010		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

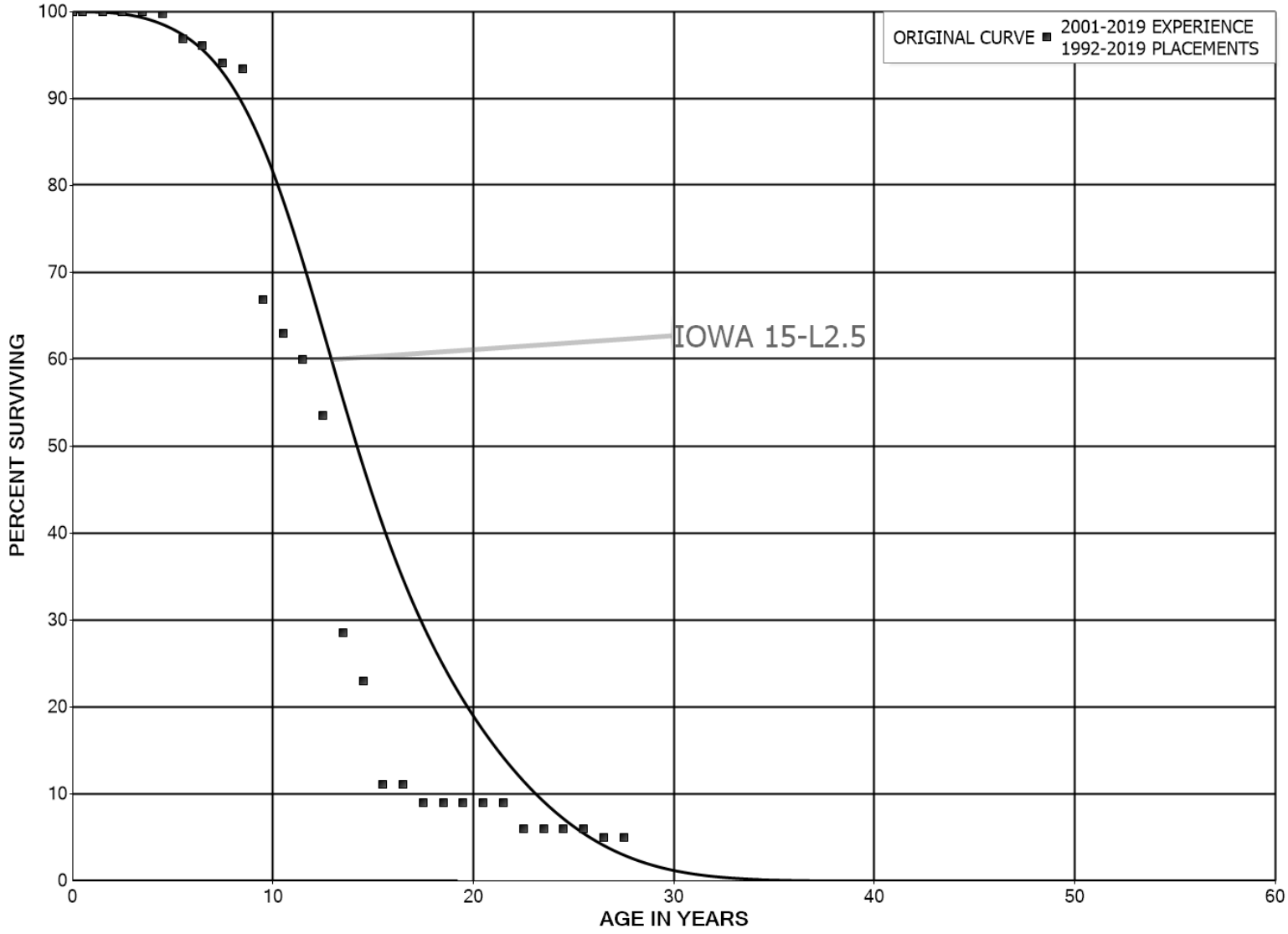
ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	151,010		0.0000		
80.5	144,755	1,628	0.0112		
81.5					
82.5	717		0.0000		
83.5	717		0.0000		
84.5	717		0.0000		
85.5	717		0.0000		
86.5	717		0.0000		
87.5	717		0.0000		
88.5	717		0.0000		
89.5	717		0.0000		
90.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 364.00 FLOW MEASURING DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

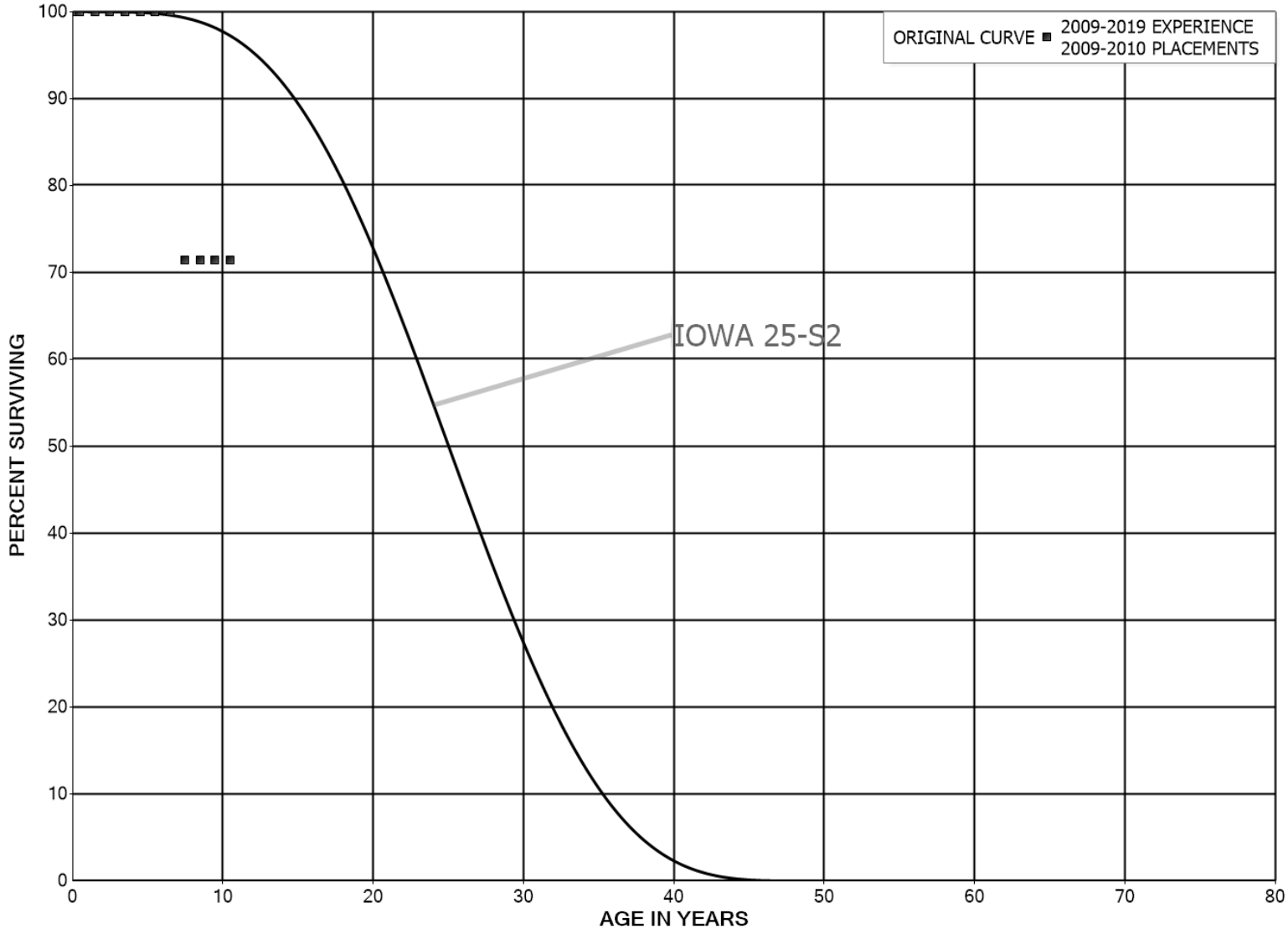
ACCOUNT 364.00 FLOW MEASURING DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1992-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,359,184		0.0000	1.0000	100.00
0.5	993,961		0.0000	1.0000	100.00
1.5	1,007,023		0.0000	1.0000	100.00
2.5	1,088,761		0.0000	1.0000	100.00
3.5	829,368	2,564	0.0031	0.9969	100.00
4.5	790,917	22,463	0.0284	0.9716	99.69
5.5	745,466	5,882	0.0079	0.9921	96.86
6.5	575,156	12,254	0.0213	0.9787	96.10
7.5	576,785	4,337	0.0075	0.9925	94.05
8.5	639,652	181,670	0.2840	0.7160	93.34
9.5	332,968	19,182	0.0576	0.9424	66.83
10.5	221,704	10,816	0.0488	0.9512	62.98
11.5	90,287	9,617	0.1065	0.8935	59.91
12.5	71,639	33,466	0.4671	0.5329	53.53
13.5	31,704	6,133	0.1934	0.8066	28.52
14.5	16,849	8,739	0.5187	0.4813	23.00
15.5	16,281		0.0000	1.0000	11.07
16.5	16,281	3,203	0.1967	0.8033	11.07
17.5	13,078		0.0000	1.0000	8.90
18.5	13,078		0.0000	1.0000	8.90
19.5	13,078		0.0000	1.0000	8.90
20.5	13,078		0.0000	1.0000	8.90
21.5	13,078	4,272	0.3266	0.6734	8.90
22.5	8,806		0.0000	1.0000	5.99
23.5	8,806		0.0000	1.0000	5.99
24.5	8,806		0.0000	1.0000	5.99
25.5	8,806	1,522	0.1728	0.8272	5.99
26.5	7,285		0.0000	1.0000	4.95
27.5					4.95

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

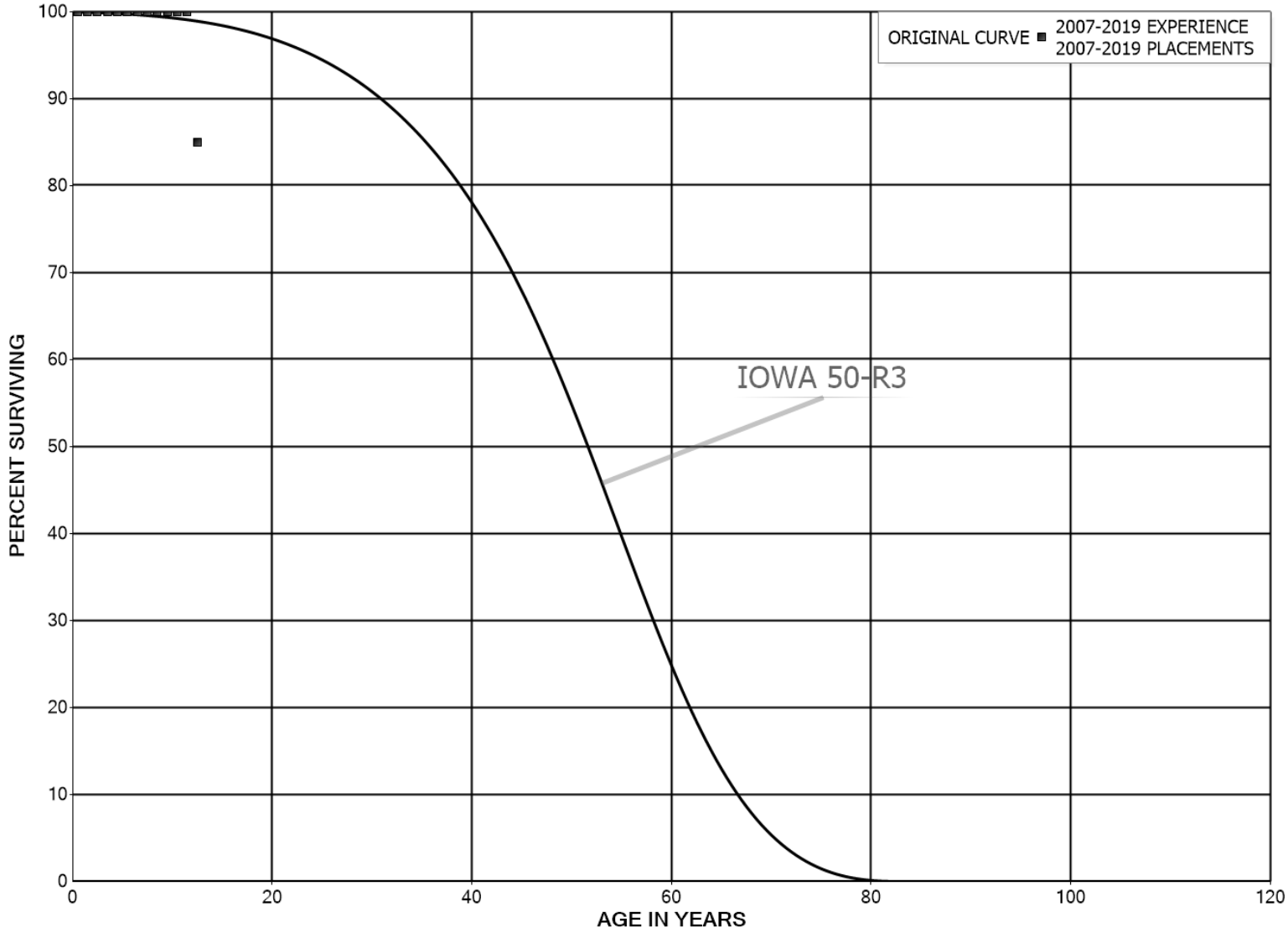
ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2009-2010 EXPERIENCE BAND 2009-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	20,918		0.0000	1.0000	100.00
0.5	20,918		0.0000	1.0000	100.00
1.5	20,918		0.0000	1.0000	100.00
2.5	20,918		0.0000	1.0000	100.00
3.5	20,918		0.0000	1.0000	100.00
4.5	20,918		0.0000	1.0000	100.00
5.5	20,918		0.0000	1.0000	100.00
6.5	20,918	5,980	0.2859	0.7141	100.00
7.5	14,938		0.0000	1.0000	71.41
8.5	14,938		0.0000	1.0000	71.41
9.5	14,938		0.0000	1.0000	71.41
10.5					71.41

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 370.00 RECEIVING WELLS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

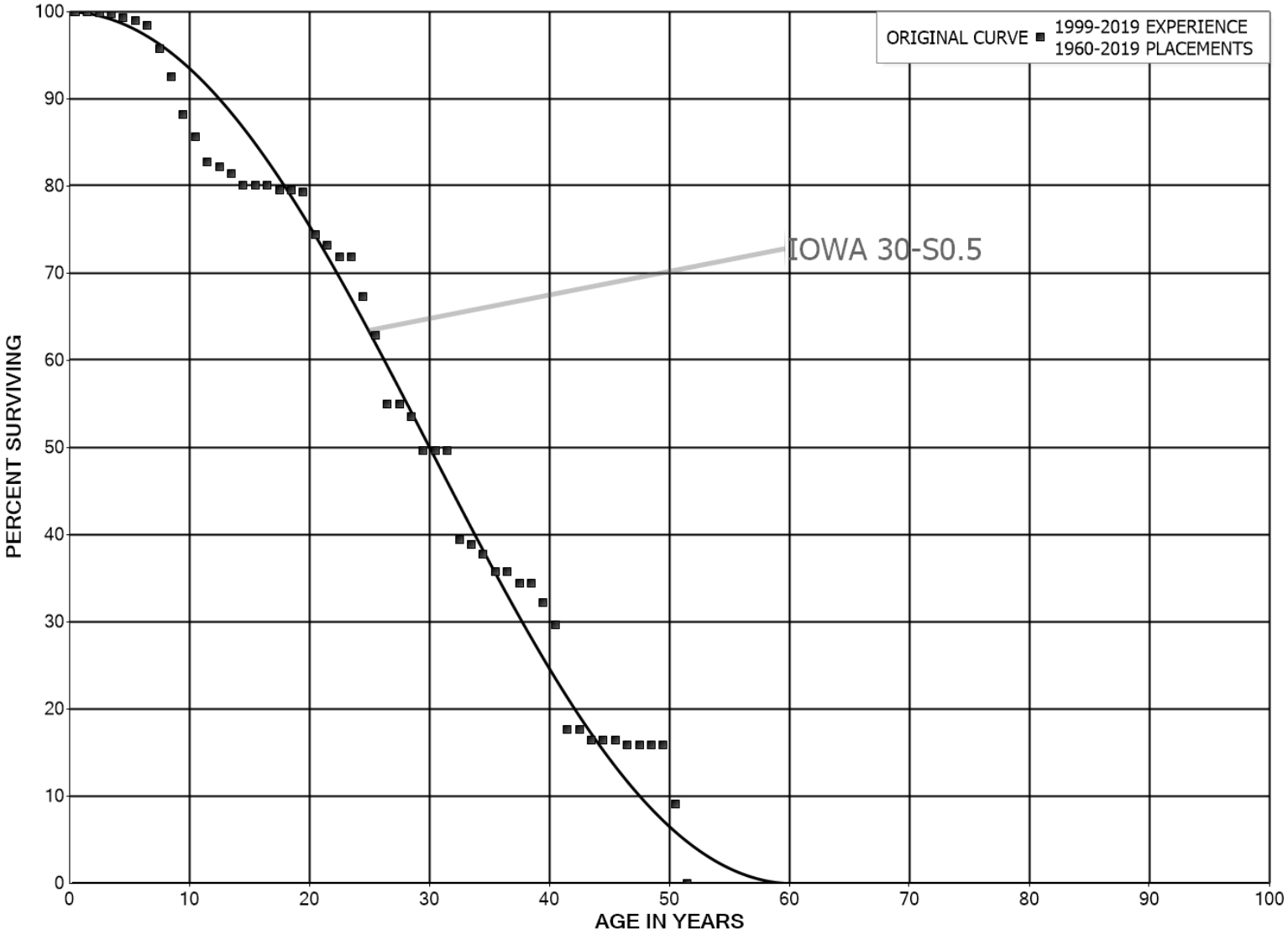
ACCOUNT 370.00 RECEIVING WELLS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2007-2019 EXPERIENCE BAND 2007-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	121,180		0.0000	1.0000	100.00
0.5	111,148		0.0000	1.0000	100.00
1.5	111,148		0.0000	1.0000	100.00
2.5	132,949		0.0000	1.0000	100.00
3.5	132,949		0.0000	1.0000	100.00
4.5	132,949		0.0000	1.0000	100.00
5.5	132,949		0.0000	1.0000	100.00
6.5	99,482		0.0000	1.0000	100.00
7.5	99,482		0.0000	1.0000	100.00
8.5	99,482		0.0000	1.0000	100.00
9.5	99,482		0.0000	1.0000	100.00
10.5	7,370		0.0000	1.0000	100.00
11.5	7,370	1,109	0.1505	0.8495	100.00
12.5					84.95

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 371.00 PUMPING EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1960-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	13,928,914		0.0000	1.0000	100.00
0.5	8,653,630	5,419	0.0006	0.9994	100.00
1.5	11,021,964	12,306	0.0011	0.9989	99.94
2.5	10,781,219	12,096	0.0011	0.9989	99.83
3.5	9,453,412	44,345	0.0047	0.9953	99.71
4.5	6,817,321	23,246	0.0034	0.9966	99.25
5.5	5,785,361	27,560	0.0048	0.9952	98.91
6.5	5,413,591	148,677	0.0275	0.9725	98.44
7.5	3,768,518	126,794	0.0336	0.9664	95.73
8.5	3,446,810	160,001	0.0464	0.9536	92.51
9.5	2,549,487	73,710	0.0289	0.9711	88.22
10.5	1,455,129	50,056	0.0344	0.9656	85.67
11.5	1,043,502	7,445	0.0071	0.9929	82.72
12.5	1,137,255	10,025	0.0088	0.9912	82.13
13.5	837,345	14,096	0.0168	0.9832	81.41
14.5	784,395		0.0000	1.0000	80.04
15.5	677,887		0.0000	1.0000	80.04
16.5	534,434	3,610	0.0068	0.9932	80.04
17.5	610,401	101	0.0002	0.9998	79.50
18.5	664,971	1,413	0.0021	0.9979	79.48
19.5	663,558	41,426	0.0624	0.9376	79.31
20.5	588,736	9,514	0.0162	0.9838	74.36
21.5	638,927	11,409	0.0179	0.9821	73.16
22.5	599,786		0.0000	1.0000	71.85
23.5	517,501	33,177	0.0641	0.9359	71.85
24.5	484,324	31,555	0.0652	0.9348	67.25
25.5	497,723	62,415	0.1254	0.8746	62.87
26.5	428,133		0.0000	1.0000	54.98
27.5	312,603	8,673	0.0277	0.9723	54.98
28.5	241,647	17,595	0.0728	0.9272	53.46
29.5	235,281		0.0000	1.0000	49.56
30.5	280,168		0.0000	1.0000	49.56
31.5	280,168	57,666	0.2058	0.7942	49.56
32.5	222,502	2,887	0.0130	0.9870	39.36
33.5	140,599	3,932	0.0280	0.9720	38.85
34.5	136,159	7,170	0.0527	0.9473	37.77
35.5	183,946		0.0000	1.0000	35.78
36.5	183,946	7,008	0.0381	0.9619	35.78
37.5	176,938		0.0000	1.0000	34.41
38.5	127,299	8,408	0.0660	0.9340	34.41

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

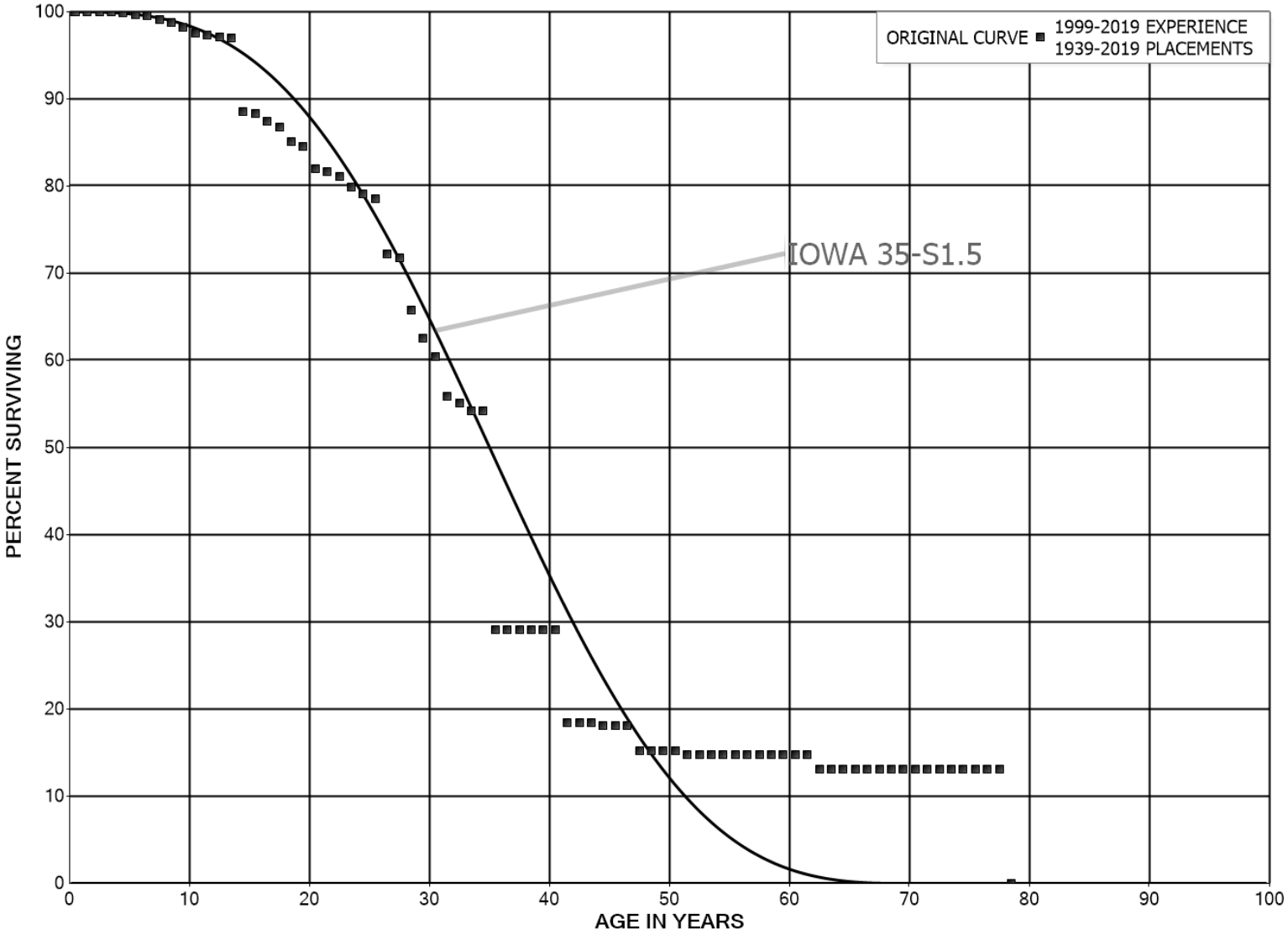
ACCOUNT 371.00 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1960-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	128,004	9,910	0.0774	0.9226	32.14
40.5	140,361	56,891	0.4053	0.5947	29.65
41.5	83,470		0.0000	1.0000	17.63
42.5	83,470	6,122	0.0733	0.9267	17.63
43.5	28,842		0.0000	1.0000	16.34
44.5	28,842		0.0000	1.0000	16.34
45.5	28,842	860	0.0298	0.9702	16.34
46.5	27,983		0.0000	1.0000	15.85
47.5	21,408		0.0000	1.0000	15.85
48.5	5,141		0.0000	1.0000	15.85
49.5	5,141	2,187	0.4255	0.5745	15.85
50.5	2,953	2,953	1.0000		9.11
51.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 380.00 TREATMENT EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	52,484,979		0.0000	1.0000	100.00
0.5	52,338,297		0.0000	1.0000	100.00
1.5	64,377,580	1,853	0.0000	1.0000	100.00
2.5	61,280,085	2,456	0.0000	1.0000	100.00
3.5	56,645,719	97,216	0.0017	0.9983	99.99
4.5	44,542,853	95,360	0.0021	0.9979	99.82
5.5	39,192,994	29,279	0.0007	0.9993	99.61
6.5	37,993,990	195,343	0.0051	0.9949	99.53
7.5	37,038,634	104,008	0.0028	0.9972	99.02
8.5	38,046,057	237,211	0.0062	0.9938	98.74
9.5	28,856,102	179,693	0.0062	0.9938	98.13
10.5	11,015,164	26,343	0.0024	0.9976	97.52
11.5	15,100,040	30,352	0.0020	0.9980	97.28
12.5	16,280,292	28,816	0.0018	0.9982	97.09
13.5	16,807,417	1,468,058	0.0873	0.9127	96.92
14.5	14,676,816	22,218	0.0015	0.9985	88.45
15.5	11,808,330	121,942	0.0103	0.9897	88.32
16.5	11,627,778	92,492	0.0080	0.9920	87.41
17.5	12,550,432	231,211	0.0184	0.9816	86.71
18.5	10,724,551	78,054	0.0073	0.9927	85.11
19.5	10,812,422	322,982	0.0299	0.9701	84.49
20.5	9,468,414	37,906	0.0040	0.9960	81.97
21.5	9,609,732	62,020	0.0065	0.9935	81.64
22.5	9,543,450	153,592	0.0161	0.9839	81.11
23.5	9,334,263	87,607	0.0094	0.9906	79.81
24.5	9,070,811	59,133	0.0065	0.9935	79.06
25.5	8,792,217	707,485	0.0805	0.9195	78.54
26.5	4,703,706	32,521	0.0069	0.9931	72.22
27.5	4,778,474	397,707	0.0832	0.9168	71.72
28.5	6,059,797	298,086	0.0492	0.9508	65.75
29.5	6,184,153	215,062	0.0348	0.9652	62.52
30.5	5,152,304	387,965	0.0753	0.9247	60.35
31.5	5,356,247	72,674	0.0136	0.9864	55.80
32.5	3,421,800	52,448	0.0153	0.9847	55.05
33.5	2,753,091		0.0000	1.0000	54.20
34.5	2,272,767	1,055,181	0.4643	0.5357	54.20
35.5	635,826		0.0000	1.0000	29.04
36.5	779,480		0.0000	1.0000	29.04
37.5	801,627		0.0000	1.0000	29.04
38.5	778,140		0.0000	1.0000	29.04

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

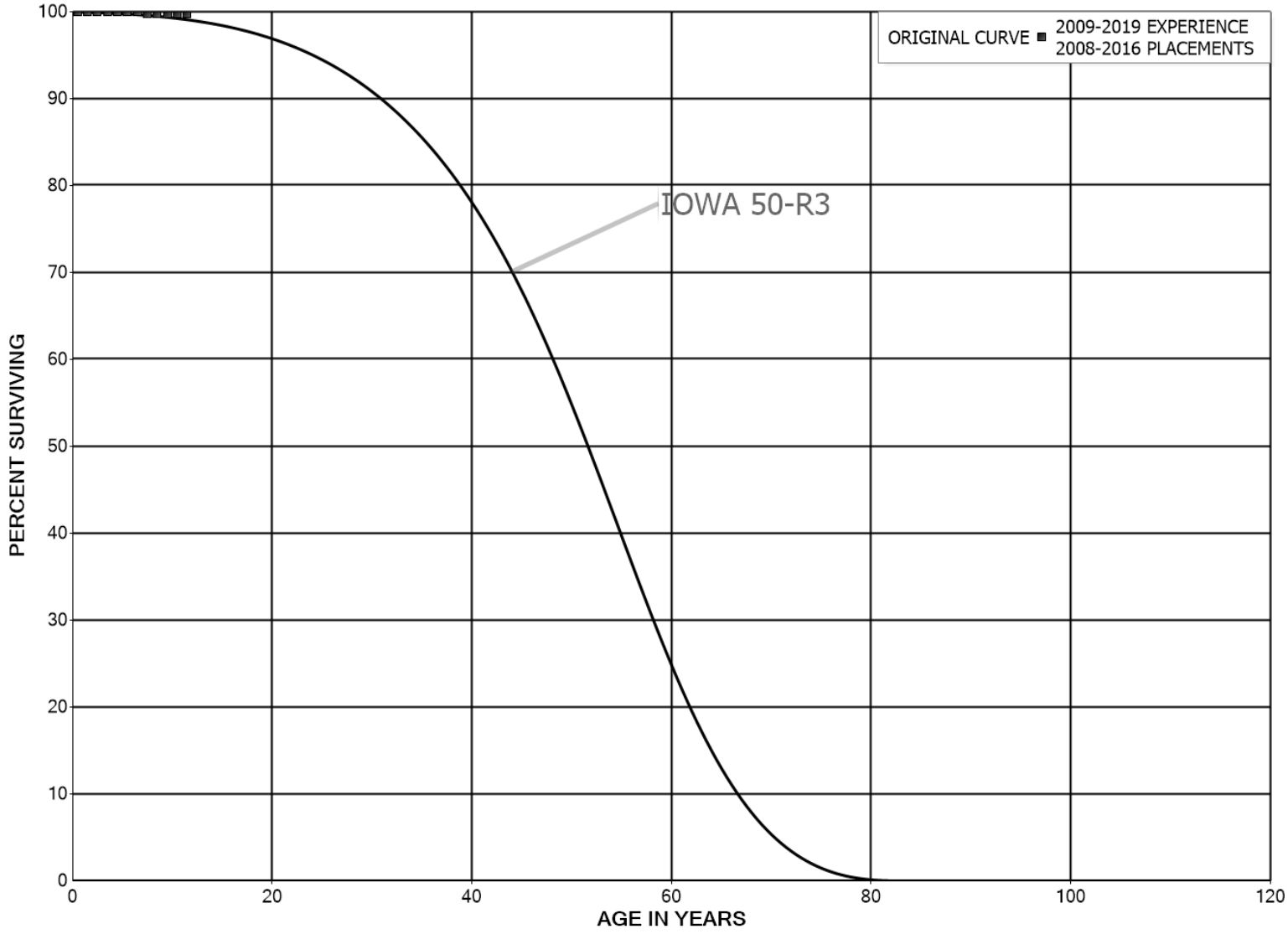
ACCOUNT 380.00 TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	778,140	411	0.0005	0.9995	29.04
40.5	777,730	285,407	0.3670	0.6330	29.02
41.5	15,823,498		0.0000	1.0000	18.37
42.5	15,823,498		0.0000	1.0000	18.37
43.5	15,823,498	268,317	0.0170	0.9830	18.37
44.5	515,644		0.0000	1.0000	18.06
45.5	515,644		0.0000	1.0000	18.06
46.5	371,038	60,316	0.1626	0.8374	18.06
47.5	288,575		0.0000	1.0000	15.12
48.5	288,575		0.0000	1.0000	15.12
49.5	288,575		0.0000	1.0000	15.12
50.5	288,575	6,818	0.0236	0.9764	15.12
51.5	281,757	315	0.0011	0.9989	14.77
52.5	107,182		0.0000	1.0000	14.75
53.5	107,182	462	0.0043	0.9957	14.75
54.5	23,321		0.0000	1.0000	14.69
55.5	23,321		0.0000	1.0000	14.69
56.5	298,010		0.0000	1.0000	14.69
57.5	298,010		0.0000	1.0000	14.69
58.5	298,010		0.0000	1.0000	14.69
59.5	25,215		0.0000	1.0000	14.69
60.5	25,215		0.0000	1.0000	14.69
61.5	25,215	2,761	0.1095	0.8905	14.69
62.5	1,894		0.0000	1.0000	13.08
63.5	1,894		0.0000	1.0000	13.08
64.5	1,894		0.0000	1.0000	13.08
65.5	1,894		0.0000	1.0000	13.08
66.5	1,894		0.0000	1.0000	13.08
67.5	1,894		0.0000	1.0000	13.08
68.5	1,894		0.0000	1.0000	13.08
69.5	1,894		0.0000	1.0000	13.08
70.5	1,894		0.0000	1.0000	13.08
71.5	1,894		0.0000	1.0000	13.08
72.5	1,894		0.0000	1.0000	13.08
73.5	1,894		0.0000	1.0000	13.08
74.5	1,894		0.0000	1.0000	13.08
75.5	1,894		0.0000	1.0000	13.08
76.5	1,894		0.0000	1.0000	13.08
77.5	1,894	1,894	1.0000		13.08
78.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 381.00 PLANT SEWERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

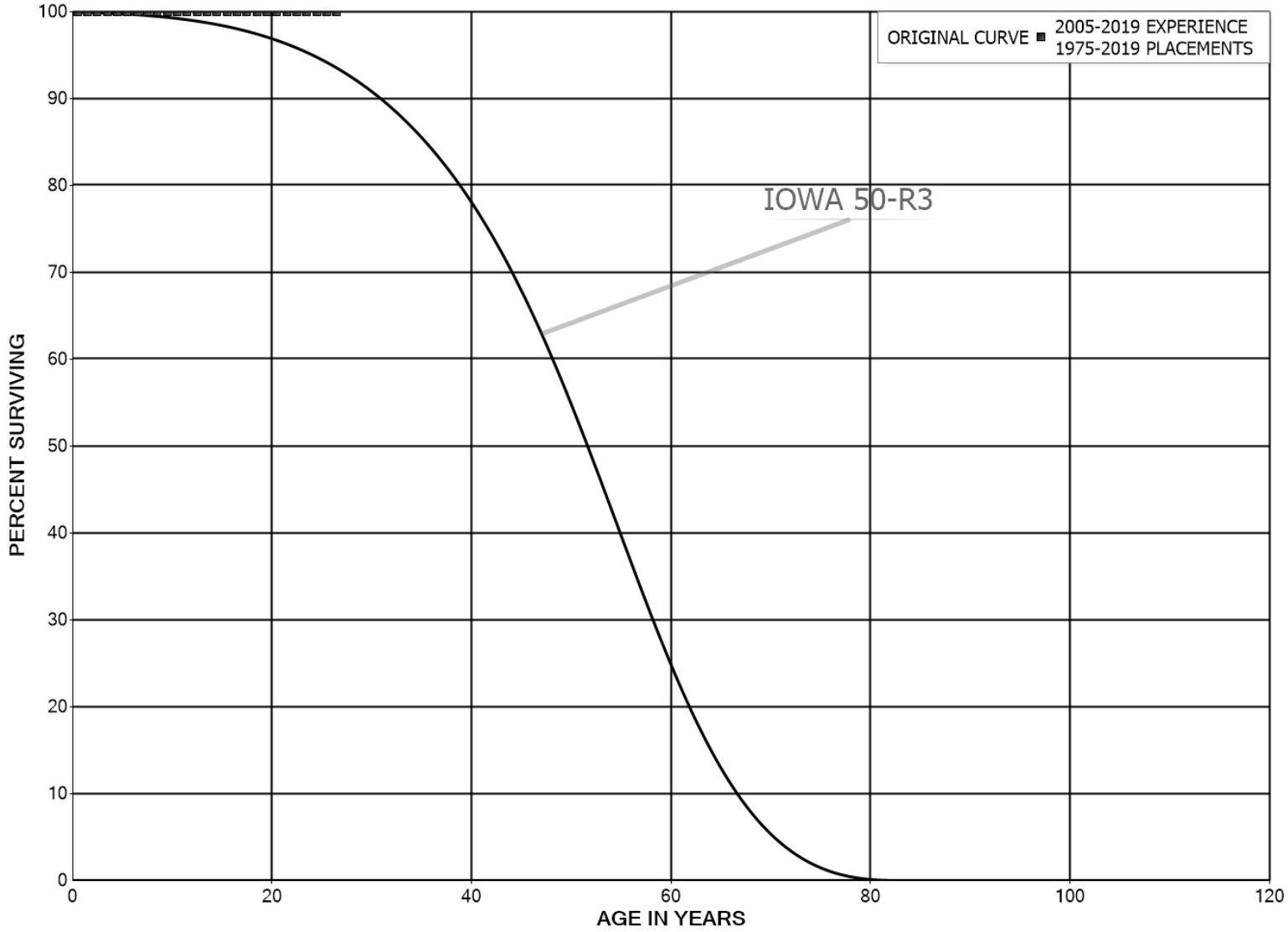
ACCOUNT 381.00 PLANT SEWERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2008-2016 EXPERIENCE BAND 2009-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,524,134		0.0000	1.0000	100.00
0.5	6,227,961		0.0000	1.0000	100.00
1.5	6,227,961		0.0000	1.0000	100.00
2.5	6,227,961		0.0000	1.0000	100.00
3.5	6,182,721		0.0000	1.0000	100.00
4.5	6,175,263		0.0000	1.0000	100.00
5.5	5,940,945		0.0000	1.0000	100.00
6.5	5,940,945	13,300	0.0022	0.9978	100.00
7.5	5,925,961	2,120	0.0004	0.9996	99.78
8.5	5,917,243		0.0000	1.0000	99.74
9.5	4,729,279		0.0000	1.0000	99.74
10.5	294,412		0.0000	1.0000	99.74
11.5					99.74

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 382.00 OUTFALL SEWER LINES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1975-2019 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,700,716		0.0000	1.0000	100.00
0.5	1,605,061		0.0000	1.0000	100.00
1.5	360,675		0.0000	1.0000	100.00
2.5	355,425		0.0000	1.0000	100.00
3.5	355,425		0.0000	1.0000	100.00
4.5	355,425		0.0000	1.0000	100.00
5.5	255,003		0.0000	1.0000	100.00
6.5	264,243		0.0000	1.0000	100.00
7.5	265,939		0.0000	1.0000	100.00
8.5	265,939		0.0000	1.0000	100.00
9.5	238,111		0.0000	1.0000	100.00
10.5	212,060		0.0000	1.0000	100.00
11.5	244,789	6	0.0000	1.0000	100.00
12.5	244,783		0.0000	1.0000	100.00
13.5	43,666		0.0000	1.0000	100.00
14.5	34,425		0.0000	1.0000	100.00
15.5	32,729		0.0000	1.0000	100.00
16.5	32,729		0.0000	1.0000	100.00
17.5	32,729		0.0000	1.0000	100.00
18.5	32,729		0.0000	1.0000	100.00
19.5	32,729		0.0000	1.0000	100.00
20.5	32,729		0.0000	1.0000	100.00
21.5	202,476		0.0000	1.0000	100.00
22.5	202,476		0.0000	1.0000	100.00
23.5	202,476		0.0000	1.0000	100.00
24.5	202,476		0.0000	1.0000	100.00
25.5	202,476		0.0000	1.0000	100.00
26.5					100.00
27.5					
28.5					
29.5					
30.5					
31.5					
32.5					
33.5					
34.5					
35.5					
36.5	4,984		0.0000		
37.5	4,984		0.0000		
38.5	4,984		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

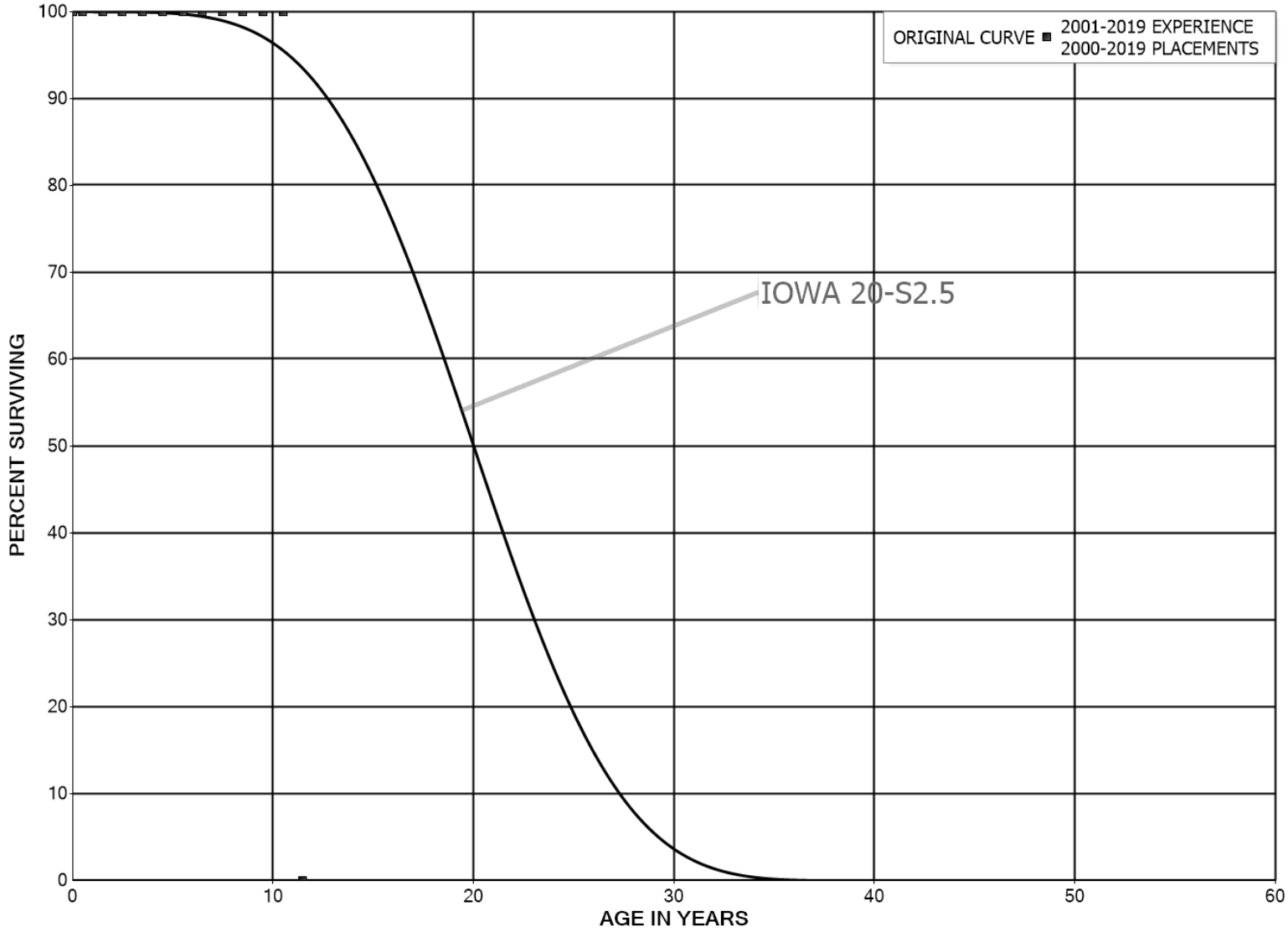
ACCOUNT 382.00 OUTFALL SEWER LINES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1975-2019 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,984		0.0000		
40.5	4,984		0.0000		
41.5	4,984		0.0000		
42.5	4,984		0.0000		
43.5	4,984		0.0000		
44.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

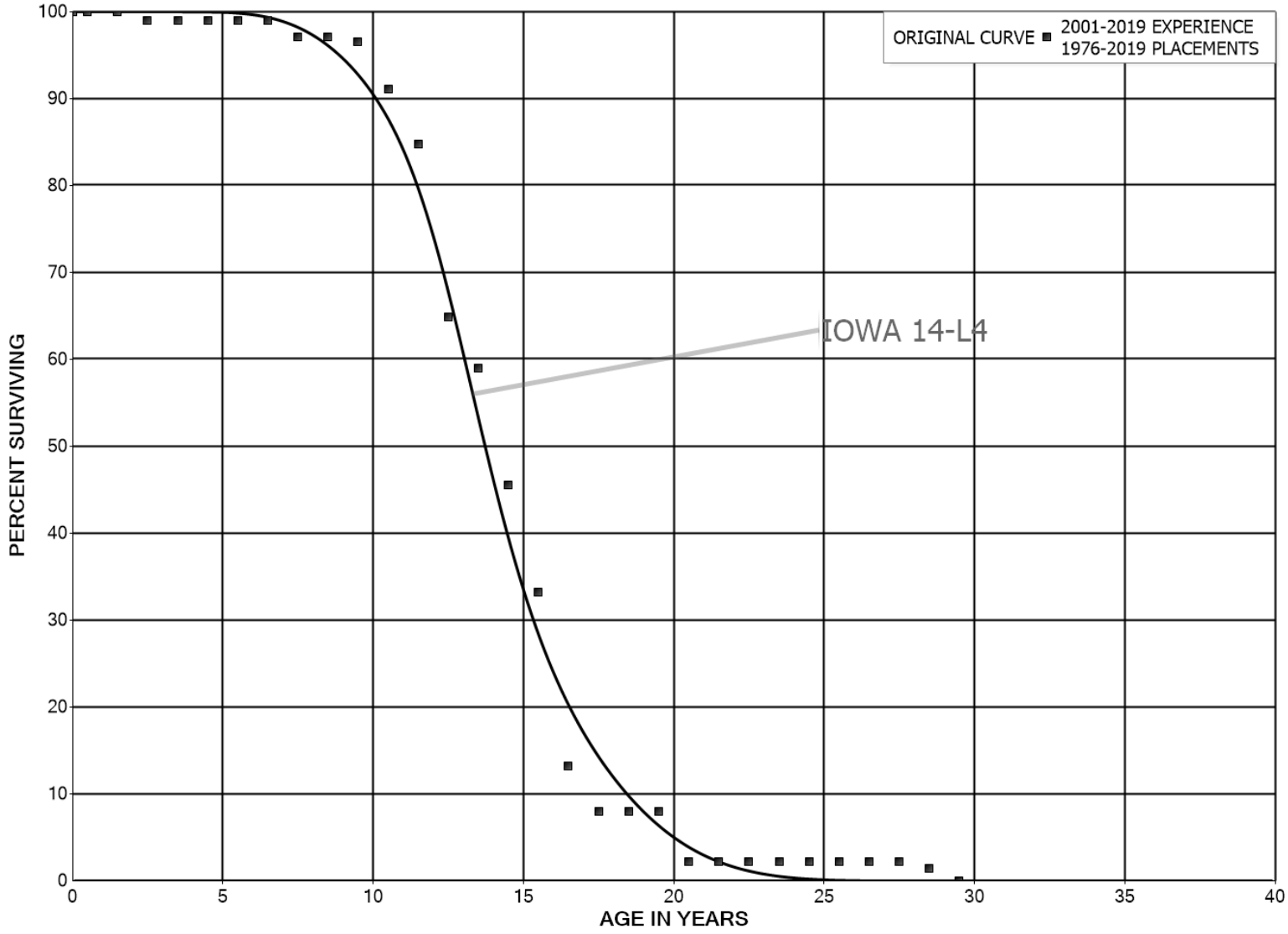
ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 2000-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	737,756		0.0000	1.0000	100.00
0.5	437,340		0.0000	1.0000	100.00
1.5	405,165		0.0000	1.0000	100.00
2.5	4,547,918		0.0000	1.0000	100.00
3.5	4,547,918		0.0000	1.0000	100.00
4.5	4,547,918	2,997	0.0007	0.9993	100.00
5.5	4,544,921		0.0000	1.0000	99.93
6.5	393,353		0.0000	1.0000	99.93
7.5	393,353		0.0000	1.0000	99.93
8.5	281,642		0.0000	1.0000	99.93
9.5	8,492		0.0000	1.0000	99.93
10.5	8,492	8,492	1.0000		99.93
11.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 391.00 TRANSPORTATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

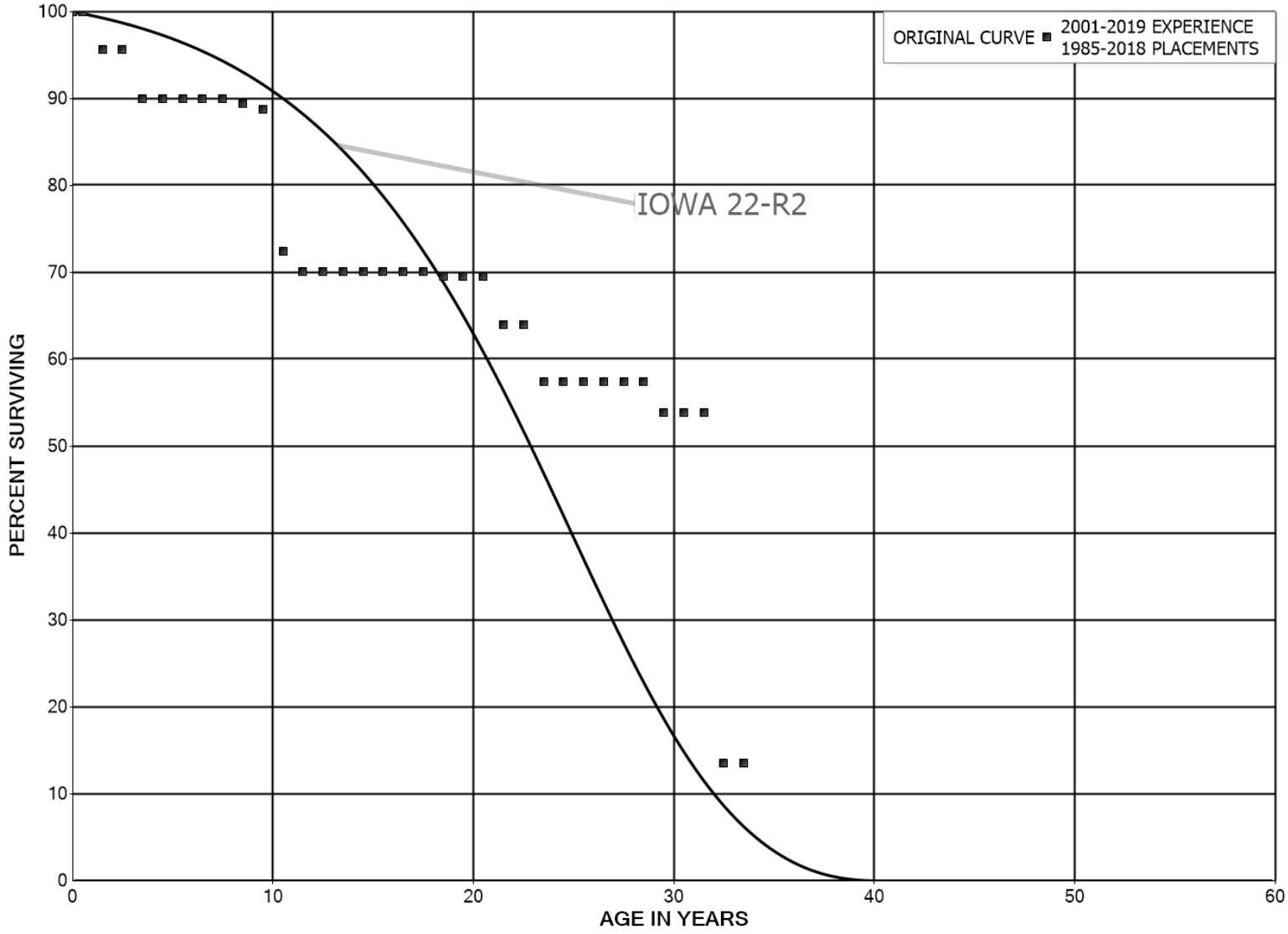
ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1976-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,168,919		0.0000	1.0000	100.00
0.5	3,692,372		0.0000	1.0000	100.00
1.5	1,458,511	14,523	0.0100	0.9900	100.00
2.5	2,332,879		0.0000	1.0000	99.00
3.5	2,514,168		0.0000	1.0000	99.00
4.5	1,930,107		0.0000	1.0000	99.00
5.5	1,664,209		0.0000	1.0000	99.00
6.5	1,677,203	32,676	0.0195	0.9805	99.00
7.5	1,535,566		0.0000	1.0000	97.08
8.5	1,373,777	8,793	0.0064	0.9936	97.08
9.5	1,545,830	87,008	0.0563	0.9437	96.45
10.5	879,899	61,030	0.0694	0.9306	91.03
11.5	743,329	174,600	0.2349	0.7651	84.71
12.5	440,822	40,215	0.0912	0.9088	64.81
13.5	348,542	79,500	0.2281	0.7719	58.90
14.5	276,542	75,000	0.2712	0.7288	45.47
15.5	195,354	117,872	0.6034	0.3966	33.14
16.5	51,900	20,700	0.3988	0.6012	13.14
17.5	31,200		0.0000	1.0000	7.90
18.5	32,855		0.0000	1.0000	7.90
19.5	32,855	23,700	0.7214	0.2786	7.90
20.5	9,155		0.0000	1.0000	2.20
21.5	9,155		0.0000	1.0000	2.20
22.5	9,155		0.0000	1.0000	2.20
23.5	9,155		0.0000	1.0000	2.20
24.5	14,155		0.0000	1.0000	2.20
25.5	14,155		0.0000	1.0000	2.20
26.5	14,155		0.0000	1.0000	2.20
27.5	14,155	5,000	0.3532	0.6468	2.20
28.5	9,155	9,155	1.0000		1.42
29.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 395.00 POWER OPERATED EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1985-2018 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	192,967		0.0000	1.0000	100.00
0.5	192,967	8,551	0.0443	0.9557	100.00
1.5	127,706		0.0000	1.0000	95.57
2.5	255,380	14,864	0.0582	0.9418	95.57
3.5	324,176		0.0000	1.0000	90.01
4.5	885,603		0.0000	1.0000	90.01
5.5	967,489		0.0000	1.0000	90.01
6.5	1,410,131		0.0000	1.0000	90.01
7.5	1,250,710	8,033	0.0064	0.9936	90.01
8.5	871,073	6,988	0.0080	0.9920	89.43
9.5	536,633	98,717	0.1840	0.8160	88.71
10.5	191,853	6,125	0.0319	0.9681	72.39
11.5	137,458		0.0000	1.0000	70.08
12.5	190,308		0.0000	1.0000	70.08
13.5	169,091		0.0000	1.0000	70.08
14.5	169,091		0.0000	1.0000	70.08
15.5	169,587		0.0000	1.0000	70.08
16.5	190,470		0.0000	1.0000	70.08
17.5	117,685	875	0.0074	0.9926	70.08
18.5	116,810		0.0000	1.0000	69.56
19.5	116,810		0.0000	1.0000	69.56
20.5	124,335	9,999	0.0804	0.9196	69.56
21.5	124,336		0.0000	1.0000	63.97
22.5	124,336	12,782	0.1028	0.8972	63.97
23.5	111,554		0.0000	1.0000	57.39
24.5	111,554		0.0000	1.0000	57.39
25.5	111,554		0.0000	1.0000	57.39
26.5	18,021		0.0000	1.0000	57.39
27.5	8,021		0.0000	1.0000	57.39
28.5	8,021	496	0.0618	0.9382	57.39
29.5	30,053		0.0000	1.0000	53.84
30.5	30,053		0.0000	1.0000	53.84
31.5	30,053	22,528	0.7496	0.2504	53.84
32.5	7,525		0.0000	1.0000	13.48
33.5					13.48

PART VII. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1912	24,763	23,569	1,194	1,194	0.0
1915	68,404	43,172	25,232	26,426	0.0
1916	187,287	123,502	63,785	90,211	0.0
1917	54,574	48,305	6,269	96,480	0.0
1919	9,463	7,808	1,655	98,135	0.0
1920	113,918	70,213	43,705	141,840	0.0
1921	4,934	4,688	246	142,086	0.0
1922	7,219	5,192	2,027	144,113	0.0
1924	14,292	13,582	710	144,823	0.0
1925	634,270	530,189	104,081	248,904	0.0
1926	492,712	395,637	97,075	345,979	0.1
1927	124,585	104,743	19,842	365,821	0.1
1928	64,398	49,829	14,569	380,390	0.1
1929	17,943	11,068	6,875	387,265	0.1
1930	523,227	377,870	145,357	532,622	0.1
1931	217,548	168,113	49,435	582,057	0.1
1932	80,655	65,842	14,813	596,870	0.1
1933	20,192	13,159	7,033	603,903	0.1
1934	24,638	19,133	5,505	609,408	0.1
1935	1,182,218	738,231	443,987	1,053,395	0.2
1936	617,399	424,825	192,574	1,245,969	0.2
1937	185,964	135,086	50,878	1,296,847	0.2
1938	187,856	137,783	50,073	1,346,920	0.2
1939	208,798	141,702	67,096	1,414,016	0.2
1940	68,072	46,703	21,369	1,435,385	0.2
1941	17,178	11,371	5,807	1,441,192	0.2
1942	140,753	98,411	42,342	1,483,534	0.2
1943	7,627,763	5,743,191	1,884,572	3,368,106	0.5
1944	31,418	24,008	7,410	3,375,516	0.5
1945	61,057	39,122	21,935	3,397,451	0.5
1946	243,028	144,394	98,634	3,496,085	0.5
1947	116,269	71,884	44,385	3,540,470	0.5
1948	18,629	10,831	7,798	3,548,268	0.5
1949	14,648	8,710	5,938	3,554,206	0.5
1950	122,296	68,363	53,933	3,608,139	0.5
1951	824,396	806,930	17,466	3,625,605	0.5
1952	19,448	11,193	8,255	3,633,860	0.5
1953	1,541,962	926,158	615,804	4,249,664	0.6
1954	4,555,596	2,464,336	2,091,260	6,340,924	0.9
1955	249,856	139,188	110,668	6,451,592	1.0
1956	127,529	71,124	56,405	6,507,997	1.0
1957	1,338,015	730,377	607,638	7,115,635	1.1
1958	196,948	131,560	65,388	7,181,023	1.1
1961	481,683	247,889	233,794	7,414,817	1.1
1962	110,113	58,504	51,609	7,466,426	1.1

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1963	1,730,645	874,622	856,023	8,322,449	1.2
1965	589,309	295,840	293,469	8,615,918	1.3
1966	35,411,356	18,767,261	16,644,095	25,260,013	3.8
1967	24,155,832	11,729,742	12,426,090	37,686,103	5.6
1968	445,830	216,407	229,423	37,915,526	5.7
1969	717,934	332,171	385,763	38,301,289	5.7
1970	1,329,837	699,314	630,523	38,931,812	5.8
1971	30,867	16,575	14,292	38,946,104	5.8
1972	7,881,227	3,554,590	4,326,637	43,272,741	6.5
1973	154,110	59,653	94,457	43,367,198	6.5
1974	1,490,620	535,512	955,108	44,322,306	6.6
1975	7,148,975	3,330,183	3,818,792	48,141,098	7.2
1976	1,231,337	464,582	766,755	48,907,853	7.3
1977	682,356	260,687	421,669	49,329,522	7.4
1978	20,875,291	9,024,807	11,850,484	61,180,006	9.2
1979	233,848	98,718	135,130	61,315,136	9.2
1980	5,443,057	2,348,406	3,094,651	64,409,787	9.6
1981	15,302,080	6,540,893	8,761,187	73,170,974	11.0
1982	138,197	66,831	71,366	73,242,340	11.0
1983	25,781,328	9,234,501	16,546,827	89,789,167	13.5
1984	4,460,376	1,730,334	2,730,042	92,519,209	13.9
1985	6,933,435	2,905,362	4,028,073	96,547,282	14.5
1986	2,832,343	1,172,571	1,659,772	98,207,054	14.7
1987	2,400,485	1,003,022	1,397,463	99,604,517	14.9
1988	20,180,495	7,556,950	12,623,545	112,228,062	16.8
1989	11,572,623	4,370,042	7,202,581	119,430,643	17.9
1990	20,427,359	7,899,134	12,528,225	131,958,868	19.8
1991	34,763,287	12,797,406	21,965,881	153,924,749	23.1
1992	59,858,159	20,856,109	39,002,050	192,926,799	28.9
1993	14,499,881	5,687,623	8,812,258	201,739,057	30.2
1994	1,516,721	507,053	1,009,668	202,748,725	30.4
1995	20,564,067	6,915,082	13,648,985	216,397,710	32.4
1996	1,659,320	528,838	1,130,482	217,528,192	32.6
1997	7,000,178	1,940,655	5,059,523	222,587,715	33.3
1998	8,480,491	2,850,359	5,630,132	228,217,847	34.2
1999	5,564,367	1,765,341	3,799,026	232,016,873	34.8
2000	11,670,954	3,384,507	8,286,447	240,303,320	36.0
2001	7,693,368	2,192,968	5,500,400	245,803,720	36.8
2002	3,890,068	979,675	2,910,393	248,714,113	37.3
2003	8,154,088	2,227,130	5,926,958	254,641,071	38.1
2004	7,354,190	1,958,249	5,395,941	260,037,012	39.0
2005	16,882,264	4,080,114	12,802,150	272,839,162	40.9
2006	8,142,225	2,064,727	6,077,498	278,916,660	41.8
2007	10,968,694	2,104,452	8,864,242	287,780,902	43.1
2008	25,441,561	5,927,958	19,513,603	307,294,505	46.0

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2009	59,167,369	15,152,088	44,015,281	351,309,786	52.6
2010	54,371,982	12,178,336	42,193,646	393,503,432	58.9
2011	28,906,394	5,815,588	23,090,806	416,594,238	62.4
2012	11,147,896	2,168,727	8,979,169	425,573,407	63.8
2013	10,257,736	1,805,293	8,452,443	434,025,850	65.0
2014	45,998,633	7,353,045	38,645,588	472,671,438	70.8
2015	18,889,436	2,716,311	16,173,125	488,844,563	73.2
2016	12,756,766	1,409,908	11,346,858	500,191,421	74.9
2017	24,654,389	2,107,567	22,546,822	522,738,243	78.3
2018	13,016,971	1,671,678	11,345,293	534,083,536	80.0
2019	26,561,016	2,082,512	24,478,504	558,562,040	83.7
2020	22,381,403	1,732,092	20,649,311	579,211,350	86.8
2021	25,567,425	1,328,585	24,238,840	603,450,189	90.4
2022	38,908,405	1,786,715	37,121,690	640,571,878	96.0
2023	13,153,995	338,297	12,815,698	653,387,575	97.9
2024	52,163,786	289,117	51,874,669	705,262,243	105.6
9999	50,045,724-	12,336,128-	37,709,596-	667,552,647	100.0
SUBTOTAL	904,516,828	236,964,175	667,552,652		
NONDEPRECIABLE	15,722,740		15,722,740		
TOTAL	920,239,568	236,964,175	683,275,392		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2007	5,346.24	2,136	603	4,743	25.55	186
2008	104,775.02	39,731	11,217	93,558	26.19	3,572
2009	150,278.10	53,649	15,147	135,131	27.02	5,001
2011	8,194.52	2,567	725	7,470	28.49	262
2013	97,229.19	25,989	7,338	89,891	30.15	2,981
2014	14,231.97	3,473	981	13,251	30.98	428
2015	40,506.87	8,968	2,532	37,975	31.65	1,200
2016	35,547.28	7,024	1,983	33,564	32.49	1,033
2017	192,249.97	33,375	9,423	182,827	33.32	5,487
2018	181,259.63	27,189	7,676	173,584	34.00	5,105
2019	265,281.00	33,293	9,400	255,881	34.84	7,344
2020	436,305.63	43,980	12,417	423,889	35.68	11,880
2021	1,215,821.90	92,646	26,157	1,189,665	36.37	32,710
2022	3,941,884.43	201,824	56,980	3,884,904	37.06	104,827
2023	1,671,969.88	43,304	12,226	1,659,744	37.61	44,130
2024	663,568.44	4,380	1,237	662,331	37.77	17,536
	9,024,450.07	623,528	176,042	8,848,408		243,682

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.3 2.70

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1935	16,444.43	15,221	16,444			
1958	63,683.83	51,278	61,647	2,037	15.97	128
1976	26,258.22	18,024	21,669	4,589	21.93	209
1978	11,146.44	7,486	9,000	2,146	22.49	95
1980	109,629.29	71,873	86,407	23,222	23.11	1,005
1982	12,204.98	7,792	9,368	2,837	23.79	119
1983	86,589.73	54,673	65,729	20,861	23.94	871
1984	29,556.43	18,325	22,031	7,525	24.52	307
1985	109,617.31	67,119	80,692	28,925	24.69	1,172
1986	110,140.47	66,547	80,004	30,136	24.89	1,211
1987	29,681.60	17,681	21,256	8,426	25.11	336
1988	230,555.18	134,460	161,651	68,904	25.73	2,678
1989	253,789.18	145,675	175,134	78,655	25.98	3,028
1990	195,083.34	110,105	132,371	62,712	26.24	2,390
1991	285,470.50	158,265	190,269	95,202	26.52	3,590
1992	76,688.69	41,719	50,155	26,534	26.82	989
1993	2,172,966.53	1,158,626	1,392,925	780,042	27.14	28,741
1994	41,573.85	21,702	26,091	15,483	27.47	564
1996	24,175.73	12,049	14,486	9,690	28.18	344
1997	208,448.09	101,869	122,469	85,979	28.25	3,044
1998	429,870.49	204,532	245,893	183,977	28.64	6,424
1999	305,065.23	141,093	169,625	135,440	29.05	4,662
2000	237,524.37	107,171	128,843	108,681	29.19	3,723
2001	179,000.00	78,635	94,537	84,463	29.36	2,877
2002	9,723.14	4,128	4,963	4,760	29.81	160
2003	271,071.10	111,573	134,135	136,936	30.02	4,561
2004	1,143,084.50	454,948	546,948	596,136	30.25	19,707
2005	428,604.11	164,498	197,763	230,841	30.50	7,569
2006	928,740.33	342,705	412,007	516,733	30.78	16,788
2007	516,608.48	182,673	219,613	296,995	31.08	9,556
2008	1,959,895.68	661,661	795,463	1,164,433	31.39	37,096
2009	2,933,040.76	945,906	1,137,188	1,795,853	31.51	56,993
2010	2,451,233.54	748,116	899,401	1,551,833	31.87	48,693
2011	298,754.41	86,221	103,657	195,097	32.05	6,087
2012	37,883.52	10,274	12,352	25,532	32.25	792
2013	181,693.78	45,969	55,265	126,429	32.48	3,893
2014	4,038,886.37	945,099	1,136,217	2,902,669	32.74	88,658
2015	1,545,002.12	330,939	397,861	1,147,141	33.02	34,741
2016	544,942.14	105,937	127,360	417,582	33.15	12,597
2017	463,399.48	80,446	96,714	366,685	33.32	11,005
2018	388,079.03	59,143	71,103	316,976	33.37	9,499

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2019	1,004,042.79	130,024	156,317	847,726	33.61	25,222
2020	87,458.80	9,306	11,188	76,271	33.59	2,271
2021	128,856.38	10,553	12,687	116,169	33.63	3,454
2022	265,508.36	14,868	17,875	247,633	33.71	7,346
2024	350,884.02	2,597	3,122	347,762	33.42	10,406
9999	3,077,062.72-	1,007,630-	1,211,168-	1,865,895-		59,242-
	22,145,494.03	7,251,874	8,716,727	13,428,767		426,359

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.5 1.93

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1916	175,472.68	174,350	112,469	63,004	0.70	63,004
1932	602.40	565	364	238	6.04	39
1935	564,423.15	522,430	337,006	227,417	7.15	31,807
1946	484.94	424	274	211	11.29	19
1954	3,945,835.14	3,286,881	2,120,279	1,825,556	14.03	130,118
1957	137,083.79	112,052	72,282	64,802	14.97	4,329
1961	346,385.67	274,961	177,370	169,016	16.37	10,325
1963	1,573,909.30	1,228,908	792,736	781,173	17.12	45,629
1965	53,759.86	41,234	26,599	27,161	17.92	1,516
1967	24,003,838.66	18,060,488	11,650,335	12,353,504	18.76	658,502
1968	361,924.73	269,562	173,887	188,038	19.19	9,799
1969	221,599.62	163,319	105,353	116,247	19.63	5,922
1973	38,481.00	27,279	17,597	20,884	20.94	997
1975	419,410.21	291,826	188,249	231,161	21.42	10,792
1976	17,438.45	11,970	7,722	9,716	21.93	443
1978	20,502,042.62	13,769,172	8,882,123	11,619,920	22.49	516,671
1981	12,789,541.84	8,304,250	5,356,848	7,432,694	23.23	319,961
1984	693,417.71	429,919	277,329	416,089	24.52	16,969
1985	133,860.33	81,963	52,872	80,988	24.69	3,280
1986	416,595.46	251,707	162,369	254,226	24.89	10,214
1988	15,069,660.19	8,788,626	5,669,307	9,400,353	25.73	365,346
1989	7,357,194.15	4,223,029	2,724,163	4,633,031	25.98	178,331
1990	6,479,888.32	3,657,249	2,359,193	4,120,695	26.24	157,039
1991	31,895,650.39	17,682,949	11,406,795	20,488,855	26.52	772,581
1992	52,490,038.28	28,554,581	18,419,793	34,070,245	26.82	1,270,330
1993	401,002.87	213,815	137,926	263,077	27.14	9,693
1994	16,680.06	8,707	5,617	11,063	27.47	403
1995	124,581.42	63,586	41,018	83,563	27.82	3,004
1996	647,409.73	322,669	208,145	439,265	28.18	15,588
1997	274,432.07	134,115	86,514	187,918	28.25	6,652
1998	599,628.40	285,303	184,041	415,587	28.64	14,511
1999	234,102.55	108,272	69,843	164,260	29.05	5,654
2000	6,483,934.82	2,925,551	1,887,194	4,596,741	29.19	157,477
2001	2,266,355.22	995,610	642,241	1,624,114	29.36	55,317
2002	879,550.45	373,457	240,907	638,643	29.81	21,424
2003	1,983,806.66	816,535	526,725	1,457,082	30.02	48,537
2004	203,091.82	80,831	52,142	150,950	30.25	4,990
2005	887,279.57	340,538	219,672	667,608	30.50	21,889
2006	1,012,988.84	373,793	241,124	771,865	30.78	25,077
2007	46,539.86	16,456	10,615	35,925	31.08	1,156
2008	2,853,651.92	963,393	621,459	2,232,193	31.39	71,112

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2009	17,731,630.97	5,718,451	3,688,819	14,042,812	31.51	445,662
2010	20,536,198.92	6,267,648	4,043,092	16,493,107	31.87	517,512
2011	16,125,548.83	4,653,833	3,002,063	13,123,486	32.05	409,469
2012	3,496,681.74	948,300	611,723	2,884,959	32.25	89,456
2013	231,088.74	58,465	37,714	193,375	32.48	5,954
2014	10,279,133.56	2,405,317	1,551,605	8,727,529	32.74	266,571
2015	149,213.17	31,961	20,617	128,596	33.02	3,894
2016	453,213.66	88,105	56,834	396,380	33.15	11,957
2017	990,597.57	171,968	110,932	879,666	33.32	26,401
2018	275,973.16	42,058	27,130	248,843	33.37	7,457
2019	206,079.04	26,687	17,215	188,864	33.61	5,619
2020	2,230,611.63	237,337	153,100	2,077,512	33.59	61,849
2021	2,299,804.80	188,354	121,502	2,178,303	33.63	64,773
2022	5,454,129.36	305,431	197,026	5,257,103	33.71	155,951
2023	813,770.69	23,599	15,223	798,548	33.48	23,851
2024	669,863.81	4,957	3,198	666,666	33.42	19,948
9999	2,375,147.51-	1,180,219-	761,328-	1,613,820-		60,641-
	278,171,967.29	138,224,577	89,164,962	189,007,005		7,102,130

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.6 2.55

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
NET SALVAGE PERCENT.. 0						
1997	2,771.10	1,878	2,747	24	12.84	2
2003	3,126.14	1,818	2,660	466	15.10	31
2007	1,013.59	510	746	268	16.78	16
2008	318,975.84	153,108	223,995	94,981	17.33	5,481
2009	46,734.14	21,381	31,280	15,454	17.79	869
2010	35,672.63	15,482	22,650	13,023	18.26	713
2011	6,560.31	2,686	3,930	2,630	18.75	140
2012	26,468.33	10,164	14,870	11,598	19.25	602
2013	23,638.15	8,451	12,364	11,274	19.77	570
2014	389,479.98	128,528	188,035	201,445	20.30	9,923
2015	967,505.73	291,703	426,758	540,748	20.85	25,935
2016	8,737.44	2,370	3,467	5,270	21.50	245
2017	125,890.35	30,314	44,349	81,541	22.07	3,695
2018	358,365.82	74,827	109,471	248,895	22.74	10,945
2019	81,687.53	14,377	21,033	60,655	23.41	2,591
2020	170,015.01	24,210	35,419	134,596	24.09	5,587
2021	630,793.80	67,936	99,390	531,404	24.86	21,376
2022	1,041,114.18	75,168	109,970	931,144	25.70	36,231
2023	60,753.25	2,205	3,226	57,527	26.55	2,167
2024	1,499,098.97	13,642	19,958	1,479,141	27.22	54,340
	5,798,402.29	940,758	1,376,318	4,422,084		181,459

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.4 3.13

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 355.00 POWER GENERATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
1983	7,661.78	6,251	7,662			
1987	14,669.95	11,399	14,670			
1989	39,917.68	30,317	39,314	604	11.08	55
1990	22,032.71	16,480	21,371	662	11.45	58
1992	51,174.79	37,010	47,994	3,181	12.25	260
1993	231,768.68	165,251	214,293	17,476	12.48	1,400
1994	17,812.36	12,504	16,215	1,597	12.74	125
1997	27,435.07	18,148	23,534	3,901	13.82	282
1998	67,435.96	43,658	56,615	10,821	14.16	764
1999	49,494.79	31,305	40,595	8,900	14.53	613
2000	106,013.94	65,389	84,795	21,219	14.91	1,423
2001	35,603.68	21,455	27,822	7,782	15.17	513
2002	52,951.29	30,987	40,183	12,768	15.59	819
2005	64,454.53	34,290	44,466	19,989	16.71	1,196
2007	11,617.83	5,728	7,428	4,190	17.48	240
2008	1,207,046.93	571,657	741,310	465,737	17.78	26,194
2009	2,422,346.20	1,093,689	1,418,266	1,004,080	18.22	55,109
2010	19,898.22	8,552	11,090	8,808	18.57	474
2011	60,050.37	24,434	31,685	28,365	18.95	1,497
2012	78,858.46	30,187	39,146	39,712	19.35	2,052
2013	26,001.32	9,295	12,054	13,947	19.77	705
2014	593,857.00	197,161	255,673	338,184	20.12	16,808
2015	88,873.32	27,035	35,058	53,815	20.59	2,614
2016	10,289.16	2,840	3,683	6,606	20.99	315
2017	12,822.02	3,159	4,097	8,725	21.41	408
2018	4,244.75	917	1,189	3,056	21.78	140
2019	9,083.50	1,671	2,167	6,916	22.17	312
2020	159,429.52	23,978	31,094	128,336	22.60	5,679
2022	219,278.43	17,279	22,407	196,871	23.38	8,420
2024	1,685,273.08	17,358	22,509	1,662,764	23.96	69,397
9999	144,517.16-	50,001-	64,829-	79,688-		3,866-
	7,252,880.16	2,509,383	3,253,556	3,999,324		194,006

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.6 2.67

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1957	4,031.05	3,187	1,737	2,294	17.75	129
1958	21,951.85	17,241	9,397	12,555	18.03	696
1965	10,916.40	7,922	4,318	6,598	22.30	296
1972	72,688.36	48,381	26,369	46,319	26.12	1,773
1973	112,288.98	73,302	39,952	72,337	27.12	2,667
1974	1,355,096.52	874,037	476,380	878,717	27.52	31,930
1975	772,049.67	491,796	268,046	504,004	27.92	18,052
1976	889,469.04	555,029	302,510	586,959	28.92	20,296
1977	423,238.78	260,588	142,029	281,210	29.34	9,585
1978	251,094.10	151,309	82,469	168,625	30.34	5,558
1979	68,941.57	40,951	22,320	46,622	30.76	1,516
1980	144,357.98	84,478	46,043	98,315	31.19	3,152
1981	152,190.65	87,038	47,439	104,752	32.19	3,254
1982	47,523.46	26,746	14,577	32,946	32.63	1,010
1983	183,721.29	100,936	55,014	128,707	33.63	3,827
1985	298,405.27	157,110	85,630	212,775	35.07	6,067
1986	62,069.67	32,078	17,484	44,586	35.53	1,255
1987	219,027.51	111,025	60,512	158,516	35.99	4,404
1988	475,535.56	234,534	127,829	347,707	36.99	9,400
1989	89,784.05	43,366	23,636	66,148	37.46	1,766
1990	91,927.01	43,132	23,508	68,419	38.46	1,779
1991	73,884.40	33,891	18,472	55,412	38.94	1,423
1992	34,023.26	15,134	8,249	25,774	39.94	645
1993	575,593.94	249,808	136,154	439,440	40.43	10,869
1994	282,518.45	118,658	64,673	217,845	41.43	5,258
1995	920,244.55	376,288	205,090	715,155	41.92	17,060
1996	130,576.33	51,552	28,098	102,478	42.92	2,388
1997	1,658,281.17	635,785	346,524	1,311,757	43.42	30,211
1998	519,973.08	191,974	104,632	415,341	44.42	9,350
1999	398,520.30	142,471	77,651	320,869	44.93	7,142
2000	484,887.58	166,413	90,701	394,187	45.93	8,582
2001	867,160.55	287,204	156,536	710,625	46.44	15,302
2002	552,142.54	174,919	95,337	456,806	47.44	9,629
2003	407,883.56	124,201	67,694	340,190	47.97	7,092
2004	2,398,222.18	695,484	379,062	2,019,160	48.97	41,233
2005	652,219.95	180,926	98,611	553,609	49.49	11,186
2006	1,972,022.81	518,248	282,463	1,689,560	50.49	33,463
2007	1,271,138.62	317,658	173,134	1,098,005	51.03	21,517
2008	3,790,255.87	891,468	485,880	3,304,376	52.03	63,509
2009	534,126.37	117,775	64,191	469,935	53.03	8,862
2010	758,557.09	157,173	85,665	672,892	53.57	12,561

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
2013	305,903.39	50,138	27,327	278,576	56.11	4,965
2014	4,398,177.35	659,727	359,573	4,038,604	56.67	71,265
2015	2,387,317.77	322,288	175,658	2,211,660	57.67	38,350
2016	3,132,230.15	378,373	206,226	2,926,004	58.23	50,249
2017	3,489,511.16	368,841	201,031	3,288,480	59.23	55,521
2018	1,047,261.82	95,510	52,056	995,206	59.79	16,645
2019	4,278,661.48	325,178	177,233	4,101,428	60.79	67,469
2020	2,932,877.58	179,492	97,829	2,835,049	61.36	46,204
2021	3,147,156.12	145,399	79,247	3,067,909	61.94	49,530
2022	2,004,598.14	62,143	33,870	1,970,728	62.52	31,522
2023	2,497,953.08	39,218	21,375	2,476,578	62.69	39,505
2024	6,235,490.81	24,942	13,594	6,221,897	62.64	99,328
9999	11,878,502.80-	2,289,482-	1,247,845-	10,630,658-		201,576-
	48,007,177.42	9,252,983	5,043,190	42,963,987		814,671

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 52.7 1.70

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1912	3,256.51	3,027	2,062	1,195	8.48	141
1915	68,404.41	63,377	43,172	25,232	8.65	2,917
1916	2,083.05	1,912	1,302	781	9.65	81
1917	16,797.94	15,457	10,529	6,269	9.28	676
1919	4,380.79	4,002	2,726	1,655	9.94	166
1920	113,918.31	103,073	70,213	43,705	10.94	3,995
1921	644.29	584	398	246	10.64	23
1922	5,312.52	4,823	3,285	2,028	10.36	196
1924	1,832.47	1,649	1,123	709	11.11	64
1925	129,789.97	116,928	79,651	50,139	10.89	4,604
1926	106,447.90	94,930	64,666	41,782	11.89	3,514
1927	20,387.47	18,194	12,394	7,993	11.70	683
1928	15,976.10	14,110	9,612	6,364	12.70	501
1929	17,267.15	15,256	10,392	6,875	12.53	549
1930	256,403.72	226,558	154,330	102,074	12.38	8,245
1931	51,376.32	44,913	30,594	20,782	13.38	1,553
1932	22,826.14	19,950	13,590	9,236	13.26	697
1933	13,552.12	11,839	8,065	5,487	13.17	417
1934	3,727.34	3,220	2,193	1,534	14.17	108
1935	461,143.79	398,105	271,187	189,957	14.09	13,482
1936	341,681.98	291,660	198,677	143,005	15.09	9,477
1937	53,052.17	45,232	30,812	22,240	15.04	1,479
1938	48,800.21	41,548	28,302	20,498	15.01	1,366
1939	59,577.84	50,135	34,152	25,426	16.01	1,588
1940	17,743.98	14,905	10,153	7,591	16.00	474
1941	7,804.79	6,543	4,457	3,348	16.01	209
1942	31,473.25	26,066	17,756	13,717	17.01	806
1943	2,111,221.06	1,744,291	1,188,200	923,021	17.04	54,168
1944	3,794.05	3,126	2,129	1,665	17.09	97
1945	37,990.82	30,913	21,058	16,933	18.09	936
1946	123,735.85	100,375	68,375	55,361	18.15	3,050
1947	22,623.72	18,117	12,341	10,283	19.15	537
1948	4,729.27	3,774	2,571	2,158	19.24	112
1949	2,837.59	2,256	1,537	1,301	19.34	67
1950	62,749.44	49,221	33,529	29,220	20.34	1,437
1951	9,147.87	7,145	4,867	4,281	20.46	209
1952	3,035.16	2,360	1,608	1,427	20.59	69
1953	411,320.63	315,401	214,849	196,472	21.59	9,100
1954	205,629.54	156,895	106,876	98,754	21.74	4,543
1955	84,344.18	63,435	43,212	41,132	22.74	1,809
1956	35,887.75	26,844	18,286	17,602	22.91	768

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1957	950,068.49	706,566	481,308	468,760	23.09	20,301
1958	40,925.03	29,982	20,424	20,501	24.09	851
1961	44,247.99	31,500	21,458	22,790	25.50	894
1962	45,028.93	31,826	21,680	23,349	25.72	908
1963	29,718.47	20,666	14,078	15,640	26.72	585
1965	316,088.01	214,466	146,093	169,995	27.96	6,080
1966	21,350,495.09	14,364,613	9,785,079	11,565,416	28.21	409,976
1968	34,067.67	22,321	15,205	18,863	29.47	640
1969	397,926.17	258,254	175,921	222,005	29.75	7,462
1970	774,037.50	493,217	335,976	438,062	30.75	14,246
1971	7,062.19	4,454	3,034	4,028	31.03	130
1972	6,175,242.13	3,853,351	2,624,877	3,550,365	31.33	113,322
1974	112,099.72	67,820	46,199	65,901	32.64	2,019
1975	3,686,188.01	2,185,541	1,488,776	2,197,412	33.64	65,321
1976	244,282.89	143,052	97,446	146,837	33.97	4,323
1977	160,055.07	91,776	62,517	97,538	34.97	2,789
1978	77,993.24	44,129	30,060	47,933	35.30	1,358
1979	85,688.55	47,814	32,571	53,118	35.65	1,490
1980	3,203,841.75	1,748,016	1,190,737	2,013,105	36.65	54,928
1982	19,184.41	10,072	6,861	12,323	38.00	324
1983	24,409,185.27	12,609,785	8,589,702	15,819,483	38.37	412,288
1984	2,789,739.07	1,417,187	965,378	1,824,361	38.74	47,092
1985	3,474,011.15	1,720,678	1,172,114	2,301,897	39.74	57,924
1986	1,037,282.08	504,534	343,685	693,597	40.12	17,288
1987	1,002,924.70	474,985	323,557	679,368	41.12	16,522
1988	2,967,042.71	1,377,895	938,613	2,028,430	41.52	48,854
1989	2,332,228.23	1,053,001	717,297	1,614,931	42.52	37,981
1990	6,004,444.42	2,653,964	1,807,863	4,196,581	42.92	97,777
1992	5,277,416.41	2,212,293	1,506,999	3,770,417	44.34	85,034
1993	6,517,201.33	2,666,839	1,816,633	4,700,568	44.76	105,017
1994	593,087.11	234,862	159,986	433,101	45.76	9,465
1995	10,216,282.82	3,940,420	2,684,188	7,532,095	46.19	163,068
1996	417,289.48	156,567	106,652	310,637	46.63	6,662
1997	3,295,145.66	1,192,184	812,108	2,483,038	47.63	52,132
1998	2,267,533.43	795,904	542,165	1,725,368	48.07	35,893
1999	2,092,584.96	711,479	484,655	1,607,930	48.53	33,133
2000	2,777,263.62	906,499	617,501	2,159,763	49.53	43,605
2001	1,792,537.71	564,829	384,758	1,407,780	49.99	28,161
2002	1,490,770.24	449,318	306,072	1,184,698	50.99	23,234
2003	2,132,449.17	617,984	420,967	1,711,482	51.46	33,258
2004	1,181,781.50	328,535	223,796	957,986	51.94	18,444

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
2005	7,374,397.52	1,947,578	1,326,677	6,047,721	52.94	114,237
2006	1,917,865.82	483,302	329,222	1,588,644	53.43	29,733
2007	6,282,245.89	1,505,854	1,025,778	5,256,468	53.92	97,486
2008	8,343,628.54	1,895,672	1,291,319	7,052,310	54.42	129,590
2009	7,859,550.84	1,674,084	1,140,375	6,719,176	55.42	121,241
2010	5,163,496.19	1,033,732	704,172	4,459,324	55.93	79,730
2011	3,145,337.79	588,807	401,091	2,744,247	56.44	48,622
2012	2,046,647.82	356,117	242,585	1,804,063	56.97	31,667
2013	4,147,567.70	666,099	453,742	3,693,826	57.49	64,252
2014	12,122,409.98	1,781,994	1,213,883	10,908,527	58.03	187,981
2015	5,348,387.67	712,405	485,286	4,863,102	58.57	83,031
2016	5,943,177.39	708,427	482,576	5,460,601	59.11	92,380
2017	15,510,521.06	1,628,605	1,109,395	14,401,126	59.67	241,346
2018	3,117,046.72	282,404	192,372	2,924,675	60.23	48,558
2019	12,902,125.39	987,013	672,346	12,229,779	60.36	202,614
2020	3,379,574.97	208,182	141,812	3,237,763	60.94	53,130
2021	5,269,744.35	248,205	169,076	5,100,668	60.69	84,045
2022	4,451,430.64	142,446	97,033	4,354,398	60.50	71,974
2023	2,508,184.34	41,385	28,191	2,479,993	59.61	41,604
2024	9,289,345.27	39,944	27,210	9,262,135	57.55	160,941
9999	17,900,832.11-	5,807,023-	3,955,706-	13,945,126-		297,228-
	235,039,005.62	76,246,559	51,938,655	183,100,351		3,902,626

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 46.9 1.66

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1912	1,448.15	1,448	1,448			
1916	1,809.50	1,810	1,810			
1917	10,876.76	10,877	10,877			
1921	3,611.27	3,611	3,611			
1924	2,615.87	2,616	2,616			
1925	125,017.80	125,005	71,076	53,942	0.01	53,942
1926	128,099.24	128,048	72,806	55,293	0.04	55,293
1927	27,434.26	27,410	15,585	11,849	0.09	11,849
1928	18,976.11	18,946	10,772	8,204	0.15	8,204
1930	98,638.87	97,357	55,355	43,284	1.24	34,906
1931	65,195.24	64,269	36,542	28,653	1.34	21,383
1932	12,126.83	11,938	6,788	5,339	1.46	3,657
1933	3,502.94	3,443	1,958	1,545	1.59	972
1934	8,979.77	8,809	5,009	3,971	1.74	2,282
1935	60,025.43	58,765	33,413	26,612	1.91	13,933
1936	111,488.98	108,902	61,920	49,569	2.09	23,717
1937	64,214.46	62,571	35,577	28,637	2.29	12,505
1938	66,094.12	64,230	36,520	29,574	2.50	11,830
1939	92,795.51	89,919	51,126	41,670	2.72	15,320
1940	30,567.10	29,528	16,789	13,778	2.96	4,655
1941	5,433.14	5,231	2,974	2,459	3.21	766
1942	62,980.82	60,424	34,356	28,625	3.47	8,249
1943	2,127,585.77	2,050,780	1,166,035	961,551	3.03	317,344
1944	12,648.57	12,143	6,904	5,745	3.33	1,725
1945	10,958.62	10,475	5,956	5,003	3.64	1,374
1946	68,379.23	65,070	36,998	31,381	3.97	7,905
1947	53,304.60	50,485	28,705	24,600	4.30	5,721
1948	10,486.93	9,963	5,665	4,822	4.00	1,206
1949	8,127.68	7,681	4,367	3,761	4.37	861
1950	46,030.38	43,259	24,596	21,434	4.74	4,522
1951	24,235.78	22,646	12,876	11,360	5.12	2,219
1952	12,573.43	11,769	6,692	5,881	4.92	1,195
1953	614,665.54	571,700	325,058	289,608	5.34	54,234
1954	295,509.16	275,119	156,428	139,081	5.19	26,798
1955	124,331.75	114,957	65,362	58,970	5.63	10,474
1956	69,709.53	64,467	36,655	33,055	5.53	5,977
1957	35,296.31	32,398	18,421	16,875	5.99	2,817
1958	54,672.86	50,157	28,518	26,155	5.94	4,403
1961	79,524.73	71,644	40,735	38,790	6.93	5,597
1962	48,100.16	43,242	24,587	23,513	6.97	3,373
1963	46,292.44	41,228	23,441	22,851	7.49	3,051

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1965	72,365.33	64,043	36,414	35,951	7.67	4,687
1966	4,580,119.66	4,037,833	2,295,837	2,284,283	7.79	293,233
1968	35,097.77	30,465	17,322	17,776	8.52	2,086
1969	83,939.34	72,482	41,212	42,727	8.69	4,917
1970	146,294.94	125,609	71,419	74,876	8.89	8,422
1971	13,645.19	11,571	6,579	7,066	9.50	744
1972	1,032,153.40	869,486	494,374	537,779	9.73	55,270
1974	13,919.10	11,553	6,569	7,350	10.24	718
1975	596,782.75	491,272	279,328	317,455	10.52	30,176
1977	42,582.58	34,424	19,573	23,010	11.14	2,066
1979	34,294.18	27,007	15,356	18,938	12.14	1,560
1980	1,189,433.34	926,331	526,694	662,739	12.50	53,019
1983	807,234.02	605,668	344,372	462,862	13.64	33,934
1984	133,658.01	98,907	56,237	77,421	14.05	5,510
1985	766,671.56	559,134	317,913	448,759	14.48	30,992
1986	205,054.25	147,270	83,735	121,319	14.91	8,137
1987	236,066.03	166,828	94,855	141,211	15.36	9,193
1988	295,116.23	203,984	115,981	179,135	16.08	11,140
1989	21,395.21	14,527	8,260	13,135	16.55	794
1990	1,671,876.62	1,114,139	633,479	1,038,398	17.02	61,010
1992	572,125.34	364,329	207,151	364,974	18.25	19,999
1993	358,339.59	223,281	126,953	231,387	18.75	12,341
1994	240,035.05	146,181	83,116	156,919	19.26	8,147
1995	2,833,063.04	1,676,040	952,965	1,880,098	20.02	93,911
1996	176,722.47	101,934	57,958	118,764	20.54	5,782
1997	1,035,635.27	578,817	329,104	706,531	21.31	33,155
1998	436,554.47	236,089	134,236	302,318	22.08	13,692
1999	572,619.26	300,625	170,930	401,689	22.62	17,758
2000	533,974.48	270,405	153,747	380,227	23.39	16,256
2001	386,441.40	188,429	107,137	279,304	24.17	11,556
2002	417,264.18	195,530	111,175	306,089	24.95	12,268
2003	630,855.34	283,506	161,196	469,659	25.73	18,253
2004	603,862.74	259,661	147,638	456,225	26.51	17,210
2005	2,284,155.71	937,418	532,998	1,751,158	27.30	64,145
2006	171,007.46	66,488	37,804	133,203	28.30	4,707
2007	2,053,079.10	757,381	430,633	1,622,446	29.08	55,793
2008	2,371,851.59	827,302	470,388	1,901,464	29.87	63,658
2009	238,801.93	78,088	44,399	194,403	30.87	6,297
2010	783,382.82	240,185	136,565	646,818	31.66	20,430
2011	1,314,572.12	374,259	212,797	1,101,775	32.66	33,735
2012	96,978.72	25,602	14,557	82,422	33.45	2,464

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
2013	1,061,762.46	256,947	146,095	915,667	34.45	26,580
2014	2,194,306.76	482,747	274,481	1,919,826	35.45	54,156
2015	5,519,090.10	1,092,780	621,334	4,897,756	36.45	134,369
2016	283,130.85	49,831	28,333	254,798	37.45	6,804
2017	406,385.86	62,868	35,746	370,640	38.25	9,690
2018	185,760.58	24,632	14,005	171,756	39.25	4,376
2019	153,156.79	16,924	9,623	143,534	40.25	3,566
2020	389,420.31	34,425	19,573	369,847	41.25	8,966
2021	198,658.38	13,171	7,489	191,169	42.25	4,525
2022	703,119.93	31,078	17,670	685,450	43.25	15,849
2023	6,252.07	138	78	6,174	44.25	140
2024	1,771,549.01	9,744	5,541	1,766,008	45.00	39,245
9999	4,553,264.84-	2,324,423-	1,322,462-	3,230,803-		210,139-
	43,152,715.49	22,029,285	12,533,389	30,619,326		1,991,551

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.4 4.62

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1912	20,058.78	20,059	20,059			
1916	7,921.46	7,921	7,921			
1917	26,899.05	26,899	26,899			
1919	5,082.16	5,082	5,082			
1921	678.73	679	679			
1922	1,906.95	1,907	1,907			
1924	9,843.22	9,843	9,843			
1925	379,461.75	379,462	379,462			
1926	258,164.88	258,165	258,165			
1927	76,763.70	76,764	76,764			
1928	29,445.44	29,445	29,445			
1929	676.15	676	676			
1930	168,184.63	168,185	168,185			
1931	100,976.94	100,977	100,977			
1932	45,099.94	45,100	45,100			
1933	3,136.48	3,136	3,136			
1934	11,931.32	11,931	11,931			
1935	80,181.12	80,181	80,181			
1936	164,228.44	164,228	164,228			
1937	68,697.39	68,697	68,697			
1938	72,961.30	72,961	72,961			
1939	56,424.18	56,424	56,424			
1940	19,760.71	19,761	19,761			
1941	3,939.62	3,940	3,940			
1942	46,298.60	46,299	46,299			
1943	3,388,955.78	3,388,956	3,388,956			
1944	14,974.94	14,975	14,975			
1945	12,108.05	12,108	12,108			
1946	50,428.14	50,347	38,747	11,681	0.12	11,681
1947	40,341.11	40,071	30,838	9,503	0.52	9,503
1948	3,412.83	3,372	2,595	818	0.92	818
1949	3,682.67	3,646	2,806	877	0.76	877
1950	13,516.60	13,303	10,238	3,279	1.19	2,755
1951	7,389.23	7,228	5,563	1,826	1.63	1,120
1952	3,839.21	3,759	2,893	946	1.53	618
1953	515,975.68	501,890	386,251	129,725	1.99	65,188
1954	108,622.26	104,929	80,753	27,869	2.46	11,329
1955	41,180.53	39,780	30,614	10,567	2.43	4,349
1956	21,931.95	21,028	16,183	5,749	2.92	1,969
1957	190,285.25	182,312	140,306	49,979	2.93	17,058
1958	15,714.87	15,039	11,574	4,141	2.97	1,394

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1961	11,525.10	10,819	8,326	3,199	4.11	778
1962	16,984.03	15,900	12,237	4,747	4.23	1,122
1963	7,568.89	7,064	5,436	2,133	4.36	489
1965	58,410.06	53,761	41,374	17,036	5.10	3,340
1966	9,480,740.79	8,688,151	6,686,345	2,794,396	5.29	528,241
1968	12,266.27	11,128	8,564	3,702	5.73	646
1969	12,447.37	11,228	8,641	3,806	5.98	636
1970	379,143.89	339,865	261,558	117,586	6.24	18,844
1971	10,159.44	9,046	6,962	3,197	6.52	490
1972	601,143.54	531,411	408,970	192,174	6.82	28,178
1973	2,440.36	2,141	1,648	792	7.14	111
1974	9,505.14	8,269	6,364	3,141	7.47	420
1975	1,670,367.15	1,432,340	1,102,320	568,047	8.14	69,785
1976	53,888.58	45,784	35,235	18,654	8.50	2,195
1977	56,479.57	47,516	36,568	19,912	8.87	2,245
1978	33,014.45	27,488	21,155	11,859	9.25	1,282
1979	44,923.65	36,995	28,471	16,453	9.64	1,707
1980	795,794.54	647,777	498,525	297,270	10.05	29,579
1981	72,051.21	57,936	44,587	27,464	10.48	2,621
1982	59,284.36	46,811	36,025	23,259	11.19	2,079
1983	286,935.97	223,523	172,022	114,914	11.63	9,881
1984	250,083.37	192,064	147,811	102,272	12.08	8,466
1985	1,687,504.43	1,276,766	982,591	704,913	12.55	56,168
1986	226,021.91	167,482	128,893	97,129	13.28	7,314
1987	757,407.04	552,074	424,873	332,534	13.76	24,167
1988	328,350.50	235,230	181,031	147,320	14.25	10,338
1989	310,755.21	217,529	167,409	143,346	15.00	9,556
1990	3,454,175.91	2,372,328	1,825,728	1,628,448	15.50	105,061
1991	78,933.67	52,878	40,695	38,239	16.26	2,352
1992	458,217.18	300,590	231,332	226,885	16.78	13,521
1993	752,935.72	480,825	370,040	382,896	17.54	21,830
1994	249,503.24	155,690	119,818	129,685	18.08	7,173
1995	6,462,674.70	3,935,769	3,028,942	3,433,733	18.62	184,411
1996	129,254.48	76,364	58,769	70,485	19.39	3,635
1997	436,935.87	250,102	192,477	244,459	20.17	12,120
1998	400,775.88	222,992	171,613	229,163	20.73	11,055
1999	276,916.30	148,843	114,549	162,367	21.51	7,548
2000	1,037,837.31	540,506	415,970	621,867	22.08	28,164
2001	362,705.56	181,861	139,959	222,747	22.87	9,740
2002	362,129.45	175,271	134,887	227,242	23.45	9,690
2003	583,647.70	270,871	208,461	375,187	24.25	15,472

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
2004	951,466.54	422,451	325,115	626,352	25.05	25,004
2005	2,837,474.33	1,207,629	929,383	1,908,091	25.64	74,419
2006	1,023,167.98	414,383	318,906	704,262	26.44	26,636
2007	699,026.39	268,566	206,687	492,339	27.25	18,067
2008	2,449,123.81	889,522	684,570	1,764,554	28.05	62,907
2009	2,442,819.88	839,109	645,773	1,797,047	28.67	62,680
2010	962,093.16	309,794	238,415	723,678	29.48	24,548
2011	235,434.98	70,701	54,411	181,024	30.29	5,976
2012	244,491.60	68,066	52,383	192,109	31.10	6,177
2013	568,385.47	145,677	112,112	456,273	31.92	14,294
2014	646,487.22	151,924	116,920	529,567	32.55	16,269
2015	1,283,637.73	272,645	209,826	1,073,812	33.37	32,179
2016	681,234.20	129,162	99,402	581,832	34.19	17,018
2017	2,247,047.77	374,358	288,104	1,958,944	35.02	55,938
2018	784,550.21	112,505	86,583	697,967	35.84	19,475
2019	447,843.10	53,741	41,359	406,484	36.67	11,085
2020	655,888.52	63,490	48,862	607,027	37.32	16,265
2021	754,585.25	55,009	42,334	712,251	38.15	18,670
2022	1,265,651.78	62,017	47,728	1,217,924	38.82	31,374
2023	840,160.31	20,836	16,035	824,125	39.32	20,959
2024	3,005,581.24	18,935	14,572	2,991,009	39.43	75,856
9999	6,954,215.46-	3,956,828-	3,173,404-	3,780,811-		221,233-
	56,444,857.84	32,116,145	25,757,379	30,687,479		1,795,672

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.1 3.18

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 364.00 FLOW MEASURING DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2.5						
NET SALVAGE PERCENT.. 0						
1989	7,979.00	7,708	5,948	2,031	1.23	1,651
1990	3,478.54	3,335	2,574	905	1.46	620
1991	8,740.98	8,336	6,433	2,308	1.60	1,442
1992	6,784.52	6,448	4,976	1,809	1.67	1,083
1999	51,368.90	46,232	35,678	15,691	2.78	5,644
2001	7,764.93	6,840	5,279	2,486	3.11	799
2002	4,455.38	3,872	2,988	1,467	3.32	442
2004	2,628.68	2,219	1,712	917	3.70	248
2005	8,722.16	7,242	5,589	3,133	3.88	807
2006	15,631.29	12,774	9,858	5,773	4.03	1,433
2007	9,030.61	7,246	5,592	3,439	4.19	821
2008	29,418.95	23,206	17,908	11,511	4.28	2,689
2009	92,082.61	71,272	55,002	37,081	4.38	8,466
2010	29,477.55	22,326	17,229	12,249	4.48	2,734
2011	53,822.99	39,673	30,616	23,207	4.64	5,002
2013	26,874.75	18,388	14,190	12,685	5.08	2,497
2014	152,277.99	98,828	76,267	76,011	5.41	14,050
2015	112,570.79	68,387	52,776	59,795	5.81	10,292
2016	5,515.89	3,080	2,377	3,139	6.33	496
2018	1,269.20	561	433	836	7.57	110
2020	30,025.23	9,224	7,118	22,907	9.02	2,540
2021	13,780.49	3,225	2,489	11,291	9.82	1,150
9999	14,726.81-	10,283-	7,936-	6,791-		1,421-
	658,974.62	460,139	355,096	303,879		63,595

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.8 9.65

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-S2						
NET SALVAGE PERCENT.. 0						
1970	30,360.76	30,361	30,361			
1991	227,265.28	205,493	193,837	33,428	3.50	9,551
2009	14,938.00	8,985	8,475	6,463	9.94	650
	272,564.04	244,839	232,673	39,891		10,201
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					3.9	3.74

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 370.00 RECEIVING WELLS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2007	6,261.10	2,278	1,437	4,824	29.73	162
2009	92,112.20	29,844	18,833	73,279	31.30	2,341
2013	33,467.05	8,099	5,111	28,356	34.45	823
2017	1,547.02	243	153	1,394	37.64	37
2019	544,001.01	61,472	38,791	505,210	39.25	12,872
	677,388.38	101,936	64,325	613,063		16,235

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.8 2.40

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0.5						
NET SALVAGE PERCENT.. 0						
1968	2,473.19	2,410	1,429	1,044	1.47	710
1985	457.59	391	232	226	6.66	34
1986	64,229.66	54,184	32,139	32,091	7.05	4,552
1989	4,375.25	3,568	2,116	2,259	7.92	285
1992	105,394.63	82,292	48,811	56,584	8.98	6,301
1993	187,305.40	144,000	85,413	101,892	9.32	10,933
1994	17,980.54	13,647	8,095	9,886	9.53	1,037
1996	53,624.25	39,339	23,334	30,290	10.17	2,978
1997	41,324.40	29,679	17,604	23,720	10.59	2,240
1998	65,302.38	46,012	27,292	38,010	10.90	3,487
1999	517,683.18	357,201	211,872	305,811	11.23	27,232
2001	14,390.90	9,466	5,615	8,776	11.97	733
2002	401.24	258	153	248	12.25	20
2003	116,385.74	72,834	43,201	73,185	12.56	5,827
2004	157,630.64	95,524	56,660	100,971	13.00	7,767
2005	96,781.66	56,821	33,703	63,079	13.36	4,721
2006	64,359.93	36,608	21,714	42,646	13.65	3,124
2007	5,864.69	3,210	1,904	3,961	14.06	282
2008	716,544.68	377,189	223,728	492,817	14.40	34,223
2009	584,840.86	294,760	174,836	410,005	14.76	27,778
2010	560,414.29	269,111	159,622	400,792	15.15	26,455
2011	64,086.62	29,159	17,296	46,791	15.57	3,005
2012	50,909.78	21,871	12,973	37,937	15.93	2,381
2013	59,251.87	23,855	14,149	45,103	16.32	2,764
2014	1,661,705.37	621,478	368,627	1,293,078	16.74	77,245
2015	228,756.80	78,852	46,771	181,986	17.11	10,636
2016	607,911.15	190,641	113,078	494,833	17.51	28,260
2017	397,715.97	111,639	66,218	331,498	17.94	18,478
2018	473,787.54	116,836	69,301	404,487	18.33	22,067
2019	3,957,756.01	833,108	494,154	3,463,602	18.75	184,725
2020	2,176,244.20	376,055	223,055	1,953,189	19.15	101,994
2021	642,483.58	85,386	50,646	591,838	19.57	30,242
2022	2,772,269.86	252,831	149,966	2,622,304	19.93	131,576
2023	509,167.79	23,931	14,194	494,974	20.28	24,407
2024	1,769,971.07	21,240	12,599	1,757,372	20.54	85,559
9999	315,245.20-	80,290-	47,624-	267,621-		15,032-
	18,434,537.51	4,695,096	2,784,876	15,649,662		879,026

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.8 4.77

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
1951	783,623.58	783,624	783,624			
1957	9,110.88	9,034	4,988	4,123	0.57	4,123
1963	73,156.24	70,508	38,931	34,225	2.29	14,945
1965	77,769.44	74,332	41,042	36,727	2.73	13,453
1967	151,993.43	143,816	79,407	72,586	3.24	22,403
1969	2,021.43	1,890	1,044	977	3.82	256
1973	899.70	826	456	444	4.56	97
1981	2,288,296.08	1,977,774	1,092,019	1,196,277	6.75	177,226
1984	563,920.94	473,694	261,548	302,373	7.62	39,681
1985	462,907.84	386,343	213,318	249,590	7.73	32,288
1986	709,908.07	585,390	323,221	386,687	8.08	47,857
1987	140,602.01	114,450	63,193	77,409	8.45	9,161
1988	814,235.06	656,599	362,538	451,697	8.64	52,280
1989	1,155,205.34	917,811	506,765	648,440	9.05	71,651
1990	2,492,131.73	1,957,320	1,080,726	1,411,406	9.29	151,927
1991	2,183,340.59	1,685,976	930,904	1,252,437	9.74	128,587
1992	786,296.34	598,843	330,649	455,647	10.02	45,474
1993	3,100,291.21	2,325,838	1,284,201	1,816,090	10.32	175,978
1994	57,530.30	42,457	23,442	34,088	10.65	3,201
1995	7,220.11	5,214	2,879	4,341	11.16	389
1996	80,267.86	56,862	31,396	48,872	11.53	4,239
1997	19,769.54	13,718	7,574	12,196	11.91	1,024
1998	3,693,416.61	2,506,353	1,383,872	2,309,545	12.31	187,615
1999	1,066,011.18	706,232	389,943	676,068	12.74	53,067
2000	5,132.72	3,314	1,830	3,303	13.17	251
2001	1,764,324.66	1,111,877	613,918	1,150,407	13.50	85,215
2002	116,515.57	71,261	39,346	77,170	13.97	5,524
2003	2,024,862.42	1,199,124	662,091	1,362,771	14.46	94,244
2004	710,725.91	406,535	224,467	486,259	14.97	32,482
2005	2,229,191.16	1,228,284	678,192	1,550,999	15.48	100,194
2006	690,423.97	365,372	201,739	488,685	16.01	30,524
2007	55,860.97	28,299	15,625	40,236	16.56	2,430
2008	995,674.82	481,110	265,643	730,032	17.11	42,667
2009	18,918,516.36	8,683,599	4,794,612	14,123,904	17.68	798,863
2010	21,333,854.26	9,258,893	5,112,258	16,221,596	18.26	888,368
2011	7,062,567.99	2,882,940	1,591,803	5,470,765	18.85	290,226
2012	4,817,373.50	1,832,529	1,011,823	3,805,550	19.55	194,657
2013	3,057,964.62	1,079,767	596,189	2,461,776	20.15	122,173
2014	8,883,017.64	2,878,098	1,589,129	7,293,889	20.86	349,659
2015	1,058,463.98	311,506	171,997	886,467	21.58	41,078
2016	568,338.47	150,041	82,844	485,494	22.30	21,771

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
2017	661,517.16	154,200	85,141	576,376	23.03	25,027
2018	4,972,136.42	1,002,383	553,462	4,418,674	23.76	185,971
2019	1,907,143.85	322,307	177,960	1,729,184	24.59	70,321
2020	8,602,120.26	1,169,888	645,949	7,956,171	25.41	313,112
2021	10,551,774.97	1,082,612	597,760	9,954,015	26.24	379,345
2022	12,425,261.33	852,373	470,634	11,954,627	27.15	440,318
2023	972,220.86	33,444	18,466	953,755	28.07	33,978
2024	22,086,338.08	189,943	104,876	21,981,462	28.82	762,716
9999	2,720,254.13-	915,015-	511,295-	2,208,959-		113,316-
	154,470,993.33	51,959,588	29,034,139	125,436,854		6,434,720
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					19.5	4.17

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 381.00 PLANT SEWERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2008	294,411.86	101,278	90,600	203,812	30.51	6,680
2009	4,434,866.70	1,436,897	1,285,404	3,149,463	31.30	100,622
2010	1,187,964.50	360,904	322,854	865,110	32.08	26,967
2011	6,597.06	1,870	1,673	4,924	32.87	150
2012	1,684.33	443	396	1,288	33.66	38
2014	234,044.45	51,724	46,271	187,773	35.25	5,327
2015	6,136.63	1,226	1,097	5,040	36.05	140
2016	45,239.43	8,071	7,220	38,019	36.84	1,032
2021	1,641.43	113	101	1,540	40.67	38
2022	396,015.22	18,296	16,367	379,648	41.29	9,195
9999	30,192.33-	9,050-	8,096-	22,096-		686-
	6,578,409.28	1,971,772	1,763,887	4,814,522		149,503

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 32.2 2.27

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1957	12,139.53	11,387	11,335	805	4.43	182
1975	4,177.28	3,480	3,464	713	9.82	73
1993	202,475.94	123,652	123,085	79,391	19.76	4,018
2004	1,695.94	712	709	987	27.62	36
2005	9,240.93	3,722	3,705	5,536	28.17	197
2006	201,117.58	77,108	76,754	124,364	28.95	4,296
2009	26,051.26	8,441	8,402	17,649	31.30	564
2010	27,827.93	8,454	8,415	19,413	32.08	605
2014	100,305.10	22,167	22,066	78,239	35.25	2,220
2017	18,433.32	2,890	2,877	15,556	37.64	413
	603,464.81	262,013	260,812	342,653		12,604

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 27.2 2.09

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S2.5						
NET SALVAGE PERCENT.. 0						
2010	273,149.74	185,851	201,083	72,067	6.58	10,952
2013	8,814.50	5,003	5,413	3,402	8.38	406
2018	39,036.86	12,788	13,836	25,201	12.32	2,046
2019	268,065.51	73,450	79,470	188,596	13.25	14,234
2022	91,911.93	10,147	10,979	80,933	16.12	5,021
2023	1,796,471.34	99,165	107,292	1,689,179	17.12	98,667
2024	153,183.00	2,114	2,287	150,896	17.87	8,444
	2,630,632.88	388,518	420,360	2,210,273		139,770

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.8 5.31

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	3,529.23	2,823	2,073	1,456	4.00	364
2009	52,251.63	39,189	28,777	23,475	5.00	4,695
2010	7,240.80	5,069	3,722	3,519	6.00	586
2011	2,249.52	1,462	1,074	1,176	7.00	168
2012	30,582.71	18,350	13,475	17,108	8.00	2,138
2013	52,070.05	28,639	21,030	31,040	9.00	3,449
2014	34,888.89	17,444	12,809	22,080	10.00	2,208
2015	27,346.34	12,306	9,036	18,310	11.00	1,665
2016	33,090.02	13,236	9,719	23,371	12.00	1,948
2017	28,119.56	9,842	7,227	20,893	13.00	1,607
2018	10,405.16	3,122	2,293	8,112	14.00	579
2019	20,626.43	5,157	3,787	16,839	15.00	1,123
2020	74,563.91	14,913	10,951	63,613	16.00	3,976
2021	360,930.38	54,140	39,756	321,174	17.00	18,893
2022	431,088.92	43,109	31,655	399,434	18.00	22,191
2023	97,559.16	4,878	3,582	93,977	19.00	4,946
2024	25,050.00	313	230	24,820	19.75	1,257
	1,291,592.71	273,992	201,196	1,090,397		71,793

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.2 5.56

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 390.20 OFFICE FURNITURE AND EQUIPMENT - COMPUTERS AND PERIPHERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE NET SALVAGE PERCENT.. 0						
2024	45,090.00	2,254	4,509	40,581	4.75	8,543
	45,090.00	2,254	4,509	40,581		8,543

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.8 18.95

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L4						
NET SALVAGE PERCENT.. 0						
1986	1,041.07	1,041	1,041			
1987	105.99	106	106			
1990	12,320.62	12,321	12,321			
1991	10,001.22	10,001	10,001			
2000	4,385.16	4,241	3,926	459	0.81	459
2001	17,083.74	16,385	15,166	1,918	0.98	1,918
2002	4,164.33	3,958	3,664	500	1.15	435
2005	2,609.91	2,400	2,222	388	1.66	234
2006	59,181.62	53,583	49,598	9,584	1.88	5,098
2011	143,535.04	119,421	110,539	32,996	2.62	12,594
2012	71,860.04	57,603	53,319	18,541	2.97	6,243
2013	61,534.02	46,840	43,356	18,178	3.45	5,269
2014	3,036.59	2,156	1,996	1,041	4.08	255
2016	2,414.49	1,426	1,320	1,094	5.55	197
2017	8,513.22	4,452	4,121	4,392	6.39	687
2018	927,519.47	419,053	387,887	539,632	7.28	74,125
2019	299,068.81	113,198	104,779	194,290	8.21	23,665
2020	26,190.17	7,941	7,350	18,840	9.19	2,050
2022	1,422,366.36	215,631	199,594	1,222,772	11.19	109,274
2023	602,400.82	45,662	42,266	560,135	12.19	45,950
2024	416,014.24	7,904	7,316	408,698	12.94	31,584
	4,095,346.93	1,145,323	1,061,888	3,033,459		320,037

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.5 7.81

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 392.00 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2012	58,391.33	28,028	27,953	30,438	13.00	2,341
2017	2,199.71	616	614	1,586	18.00	88
2018	46,760.40	11,222	11,193	35,567	19.00	1,872
	107,351.44	39,866	39,760	67,591		4,301

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.7 4.01

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 393.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	7,132.96	6,776	7,133			
2006	85,717.68	77,146	83,538	2,180	2.00	1,090
2007	5,060.13	4,301	4,657	403	3.00	134
2008	2,776.47	2,221	2,405	371	4.00	93
2009	378.54	284	308	71	5.00	14
2010	61,467.53	43,027	46,592	14,876	6.00	2,479
2012	58,472.38	35,083	37,990	20,482	8.00	2,560
2013	28,453.57	15,649	16,946	11,508	9.00	1,279
2014	40,133.99	20,067	21,730	18,404	10.00	1,840
2015	62,657.78	28,196	30,532	32,126	11.00	2,921
2016	105,803.20	42,321	45,827	59,976	12.00	4,998
2017	7,458.66	2,611	2,827	4,632	13.00	356
2018	94,551.82	28,366	30,716	63,836	14.00	4,560
2019	14,014.13	3,504	3,794	10,220	15.00	681
2020	193,729.12	38,746	41,956	151,773	16.00	9,486
2021	102,950.07	15,443	16,723	86,227	17.00	5,072
2022	284,959.55	28,496	30,857	254,103	18.00	14,117
2023	44,808.61	2,240	2,426	42,383	19.00	2,231
2024	233,771.16	2,922	3,164	230,607	19.75	11,676
9999	600.00-	166-	180-	420-		27-
	1,433,697.35	397,233	429,941	1,003,756		65,560

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.3 4.57

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 394.00 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2009	63,768.04	63,768	63,768			
2010	31,269.93	29,185	17,664	13,606	1.00	13,606
2011	16,841.59	14,596	8,834	8,008	2.00	4,004
2012	13,442.75	10,754	6,509	6,934	3.00	2,311
2013	5,917.50	4,339	2,626	3,292	4.00	823
2014	112,033.68	74,689	45,205	66,829	5.00	13,366
2015	43,434.75	26,061	15,773	27,662	6.00	4,610
2016	123,948.53	66,105	40,009	83,940	7.00	11,991
2017	48,566.17	22,664	13,717	34,849	8.00	4,356
2018	43,803.48	17,521	10,604	33,199	9.00	3,689
2019	57,097.59	19,032	11,519	45,579	10.00	4,558
2020	32,405.64	8,642	5,231	27,175	11.00	2,470
2021	17,137.92	3,428	2,075	15,063	12.00	1,255
2022	37,565.86	5,009	3,031	34,535	13.00	2,657
2023	31,474.35	2,098	1,270	30,204	14.00	2,157
2024	49,446.26	824	498	48,948	14.75	3,319
9999	42,162.45-	21,350-	14,379-	27,783-		4,353-
	685,991.59	347,365	233,954	452,038		70,819

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.4 10.32

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 22-R2						
NET SALVAGE PERCENT.. 0						
2011	339,384.06	192,804	221,156	118,228	9.88	11,966
2015	3,220.04	1,374	1,576	1,644	12.10	136
2018	19,477.25	5,913	6,783	12,694	13.76	923
2022	64,365.65	7,376	8,461	55,905	15.45	3,618
2023	137,610.04	8,380	9,612	127,998	15.42	8,301
2024	41,320.15	682	782	40,538	14.88	2,724
9999	10,000.00-	3,577-	4,103-	5,897-		457-
	595,377.19	212,952	244,267	351,110		27,211

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.9 4.57

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2009	521,963.46	521,963	521,963			
2010	144,621.29	134,979	143,685	936	1.00	936
2011	7,975.30	6,912	7,358	617	2.00	308
2012	3,344.78	2,676	2,849	496	3.00	165
2013	263,689.84	193,372	205,844	57,846	4.00	14,462
2014	98,016.16	65,344	69,558	28,458	5.00	5,692
2015	13,210.61	7,926	8,437	4,774	6.00	796
2016	172,002.57	91,734	97,650	74,353	7.00	10,622
2017	13,811.63	6,445	6,861	6,951	8.00	869
2018	12,412.19	4,965	5,285	7,127	9.00	792
2019	7,055.35	2,352	2,504	4,551	10.00	455
2020	674,118.03	179,767	191,361	482,757	11.00	43,887
2021	39,621.14	7,924	8,435	31,186	12.00	2,599
2022	852,798.77	113,704	121,038	731,761	13.00	56,289
2023	425,045.19	28,338	30,166	394,879	14.00	28,206
2024	1,524,807.54	25,419	27,058	1,497,750	14.75	101,542
	4,774,493.85	1,393,820	1,450,052	3,324,442		267,620

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.4 5.61

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 397.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2009	6,270.00	6,270	6,270			
2010	4,161.94	3,884	4,162			
2011	14,880.36	12,896	14,880			
2012	13,823.71	11,059	13,824			
2013	16,427.62	12,047	16,428			
2014	2,202.56	1,468	2,019	184	5.00	37
2015	4,104.14	2,462	3,386	718	6.00	120
2017	28,080.87	13,104	18,020	10,061	8.00	1,258
2018	33,269.93	13,308	18,300	14,970	9.00	1,663
2019	123,994.70	41,331	56,835	67,160	10.00	6,716
2020	130,423.87	34,780	47,827	82,597	11.00	7,509
2021	191,683.21	38,337	52,718	138,965	12.00	11,580
2022	783,085.43	104,409	143,574	639,511	13.00	49,193
2023	138,192.53	9,213	12,669	125,524	14.00	8,966
2024	648,139.11	10,804	14,857	633,282	14.75	42,934
9999	29,000.00-	4,276-	5,773-	23,227-		1,762-
	2,109,739.98	311,096	419,996	1,689,744		128,214

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.2 6.08

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 398.00 OTHER TANGIBLE PLANT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	14,231.50	2,846	2,226	12,006	20.00	600
	14,231.50	2,846	2,226	12,006		600

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.0 4.22

PART VIII. EXPERIENCED AND ESTIMATED NET SALVAGE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TRANSACTION YEAR				
354.20	3,076.09	27,531.06		27,531.06-
354.30		61,135.00		61,135.00-
354.40	913,340.30	1,985.51		1,985.51-
354.70	3,125.06	18,075.18		18,075.18-
355.00		9,730.05		9,730.05-
360.10	55,943.69	245,202.29		245,202.29-
361.10	352,132.81	1,038,558.77		1,038,558.77-
361.20	1,170.55	109,567.01		109,567.01-
363.00	5,384.61	150,830.30		150,830.30-
364.00	3,202.68	239.58		239.58-
370.00	1,108.89			
371.00	5,188.39	141,438.05		141,438.05-
380.00	36,603.24	214,843.19		214,843.19-
381.00	2,120.40			
389.10		5,681.56		5,681.56-
390.00	67,403.59			
391.00		6,028.96		6,028.96-
393.00	60,983.28	1,931.40		1,931.40-
394.00	26,823.05	5,593.49		5,593.49-
395.00		2,048.24		2,048.24-
396.00	48,155.78	1,897.96		1,897.96-
397.00	141,002.08	5,512.61		5,512.61-
398.00		1,251.49		1,251.49-
	1,726,764.49	2,049,081.70		2,049,081.70-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
354.20	3,007.76	122,315.77		122,315.77-
354.30	39,414.10			
354.40	120,604.23			
354.70	6,910.37	246.65		246.65-
355.00		23,920.78		23,920.78-
360.10	40,213.82	186,669.20		186,669.20-
361.10	361,924.39	323,715.46		323,715.46-
361.20	22,020.95	34,151.69		34,151.69-
363.00	128,735.68	76,222.67		76,222.67-
371.00	144,361.10	273,771.37		273,771.37-
380.00	92,274.49	652,150.29		652,150.29-
391.00	31,332.59	10.19		10.19-
393.00		5,643.88		5,643.88-
394.00	10,122.79	1,075.22		1,075.22-
395.00	7,833.15			
396.00	234,211.01	52,578.21		52,578.21-
397.00		9,909.72	1,369.21	8,540.51-
	1,242,966.43	1,762,381.10	1,369.21	1,761,011.89-
2021 TRANSACTION YEAR				
354.30	7,989.66	20,176.30		20,176.30-
354.40	11,481.83	28,995.08		28,995.08-
354.70	2,875.51	11,677.96		11,677.96-
355.00		1,253.37		1,253.37-
360.10	11,013.00	147,595.80		147,595.80-
361.10	796,849.84	245,041.20		245,041.20-
361.20	83,125.55	20,315.71		20,315.71-
363.00	414,022.10	105,836.92	159.00	105,677.92-
364.00	6,151.40			
371.00	16,177.71	206,559.57		206,559.57-
380.00	231,513.16	269,030.45		269,030.45-
381.00		90.22		90.22-
390.00		3,619.09		3,619.09-
394.00	1,401.00	1,113.04		1,113.04-
396.00		4,528.34		4,528.34-
397.00	20,048.36	4,676.57	87.00	4,589.57-
	1,602,649.12	1,070,509.62	246.00	1,070,263.62-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
354.20	15,702.45			
354.30	26,680.07	65,248.65		65,248.65-
354.40	199,172.52	5,052.37		5,052.37-
354.70	28,082.13	34,027.64		34,027.64-
355.00	96,801.74	333.24		333.24-
360.10	325,168.00	169,252.01		169,252.01-
361.10	599,713.73	251,743.85		251,743.85-
361.20	26,444.42	58,813.67		58,813.67-
363.00	61,602.50	91,479.25		91,479.25-
364.00	9,014.72			
371.00	187,895.88	53,057.74		53,057.74-
380.00	631,925.26	336,246.38		336,246.38-
390.00		3,738.83		3,738.83-
391.00			27,472.80	27,472.80
393.00	16,369.00	855.08		855.08-
394.00	54,586.97	2,855.31		2,855.31-
395.00		645.90		645.90-
396.00	239,917.65	2,348.88		2,348.88-
397.00	86,974.00	5,312.99		5,312.99-
	2,606,051.04	1,081,011.79	27,472.80	1,053,538.99-
2023 TRANSACTION YEAR				
354.20	119,051.43	95,322.37		95,322.37-
354.30		14,994.65		14,994.65-
354.40		15,159.82		15,159.82-
354.70	269,127.42	163,536.33		163,536.33-
355.00	302,147.14	12,086.00		12,086.00-
360.10	684,257.99	271,225.09		271,225.09-
361.10	1,046,813.01	691,307.65	6,350.46	684,957.19-
361.20	193,411.84	85,486.72	737.54	84,749.18-
363.00	390,176.93	213,986.21		213,986.21-
371.00	268,893.70	125,823.03		125,823.03-
380.00	847,634.18	203,471.67		203,471.67-
390.00		242.71		242.71-
391.00	67,942.38	4,756.00	8,493.00	3,737.00
393.00		1,237.81		1,237.81-
394.00	26,821.81	4,325.75-		4,325.75
395.00	7,418.83	1,261.00		1,261.00-
396.00	7,651.73			
	4,231,348.39	1,895,571.31	15,581.00	1,879,990.31-
TOTAL	11,409,779.47	7,858,555.52	44,669.01	7,813,886.51-

EXHIBIT NO. 11-F - DEPRECIATION STUDY

WASTEWATER SSS GENERAL OPERATIONS

AS OF JUNE 30, 2025

Exhibit No. 11-F
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

WASTEWATER SSS GENERAL OPERATIONS

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2025

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-F
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WASTEWATER SSS GENERAL OPERATIONS

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2025

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

October 12, 2023

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant as of June 30, 2025. The results of our study as of June 30, 2024 are presented in our report titled "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of June 30, 2024". The same methods, procedures and estimates are used in both studies.

Summaries of the original cost, annual accruals, book depreciation reserve and amortization of net salvage are presented in Tables 1 through 5, beginning on page I-3 of the attached report.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

FREDERICK B. JOHNSTON, JR.
Senior Analyst

JJS:mle

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PART I. RESULTS OF STUDY

PENNSYLVANIA-AMERICAN WATER COMPANY

WASTEWATER SSS GENERAL OPERATIONS

DEPRECIATION STUDY

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Tables 1 through 5 presented on pages I-3 through I-7 summarize the results of the depreciation study as of June 30, 2025. Table 1 sets forth the development of the net original cost by account as of June 30, 2025. Table 2 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of June 30, 2025, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 3 presents the bringforward of the book reserve to June 30, 2025. Table 4 sets forth the calculation of the depreciation accruals for the twelve months ended June 30, 2025. Table 5 presents the annual amortization of experienced and estimated net salvage based on the period 2020 through 2024.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-6. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2020 through 2024, beginning on pages III-2 through III-4.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2025

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2025		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2025
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
DEPRECIABLE PLANT										
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	9,638,072.04								9,638,072.04
354.30	STRUCTURES AND IMPROVEMENTS - SPP	25,222,556.75				3,077,062.72				22,145,494.03
354.40	STRUCTURES AND IMPROVEMENTS - TDP	280,547,114.80				2,375,147.51				278,171,967.29
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	9,518,398.04								9,518,398.04
355.00	POWER GENERATING EQUIPMENT	7,397,397.32				144,517.16				7,252,880.16
360.10	COLLECTION SEWERS - FORCE MAINS	61,667,644.47		627,376.41		11,251,126.61				49,789,141.45
361.10	COLLECTION SEWERS - GRAVITY MAINS	259,958,966.10		133,423.53		18,519,549.78				241,305,992.79
361.20	MANHOLES	48,680,735.54				4,553,264.84				44,127,470.70
363.00	SERVICES	64,815,060.52		72,789.60		6,881,426.36				57,860,844.56
364.00	FLOW MEASURING DEVICES	673,701.43				14,726.81				658,974.62
365.00	FLOW MEASURING INSTALLATIONS	272,564.04								272,564.04
370.00	RECEIVING WELLS	677,388.38								677,388.38
371.00	PUMPING EQUIPMENT	23,206,705.57				315,245.20				22,891,460.37
380.00	TREATMENT EQUIPMENT	173,784,473.28				2,720,254.13				171,064,219.15
381.00	PLANT SEWERS	6,608,601.61				30,192.33				6,578,409.28
382.00	OUTFALL SEWER LINES	2,522,078.78								2,522,078.78
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	3,770,083.44								3,770,083.44
390.00	OFFICE FURNITURE AND EQUIPMENT	1,291,592.71								1,291,592.71
390.20	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS AND PERIPHERAL	45,090.00								45,090.00
391.00	TRANSPORTATION EQUIPMENT	4,109,746.59								4,109,746.59
392.00	STORES EQUIPMENT	107,351.44								107,351.44
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	1,560,163.77				600.00				1,559,563.77
394.00	LABORATORY EQUIPMENT	626,283.77				42,162.45				584,121.32
395.00	POWER OPERATED EQUIPMENT	1,616,793.05				10,000.00				1,606,793.05
396.00	COMMUNICATION EQUIPMENT	4,330,583.93								4,330,583.93
397.00	MISCELLANEOUS EQUIPMENT	2,863,406.51				29,000.00				2,834,406.51
398.00	OTHER TANGIBLE PLANT	14,231.50								14,231.50
TOTAL DEPRECIABLE PLANT		**995,526,785.38**		**833,589.54**		**49,964,275.90**		**0.00**		**944,728,919.94**
NONDEPRECIABLE PLANT										
352.00	FRANCHISES	221,139.78								221,139.78
353.20	LAND AND LAND RIGHTS - COLLECTION	3,611,014.00								3,611,014.00
353.30	LAND AND LAND RIGHTS - SPP	953,050.62								953,050.62
353.40	LAND AND LAND RIGHTS - TDP	11,062,535.99				125,000.00				10,937,535.99
TOTAL NONDEPRECIABLE PLANT		**15,847,740.39**		**0.00**		**125,000.00**		**0.00**		**15,722,740.39**
TOTAL UTILITY PLANT		**1,011,374,525.77**		**833,589.54**		**50,089,275.90**		**0.00**		**960,451,660.33**

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF JUNE 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	45-R3	9,638,072.04	380,112	9,257,960	258,264	2.68	35.8
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	22,145,494.03	9,170,329	12,975,165	415,073	1.87	31.3
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	278,171,967.29	96,268,382	181,903,585	6,843,074	2.46	26.6
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	35-S1	9,518,398.04	673,908	8,844,490	353,457	3.71	25.0
355.00	POWER GENERATING EQUIPMENT	35-S0.5	7,252,880.16	3,456,913	3,795,967	187,100	2.58	20.3
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	49,789,141.45	5,734,022	44,055,119	838,439	1.68	52.5
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	241,305,992.79	54,970,487	186,335,506	3,964,341	1.64	47.0
361.20	MANHOLES	50-S2.5	44,127,470.70	14,433,486	29,693,985	1,789,417	4.06	16.6
363.00	SERVICES	47-R3	57,860,844.56	27,497,792	30,363,053	1,734,139	3.00	17.5
364.00	FLOW MEASURING DEVICES	15-L2.5	658,974.62	418,708	240,267	51,836	7.87	4.6
365.00	FLOW MEASURING INSTALLATIONS	25-S2	272,564.04	242,861	29,703	8,174	3.00	3.6
370.00	RECEIVING WELLS	50-R3	677,388.38	80,585	596,803	16,143	2.38	37.0
371.00	PUMPING EQUIPMENT	30-S0.5	22,891,460.37	2,894,563	19,996,897	1,099,655	4.80	18.2
380.00	TREATMENT EQUIPMENT	35-S1.5	171,064,219.15	33,395,194	137,669,025	6,876,677	4.02	20.0
381.00	PLANT SEWERS	50-R3	6,578,409.28	1,913,233	4,665,176	148,448	2.26	31.4
382.00	OUTFALL SEWER LINES	50-R3	2,522,078.78	98,934	2,423,145	61,464	2.44	39.4
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	20-S2.5	3,770,083.44	498,651	3,271,432	204,555	5.43	16.0
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	1,291,592.71	274,524	1,017,069	71,406	5.53	14.2
390.20	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS AND PERIPHERAL	5-SQ	45,090.00	13,053	32,037	8,009	17.76	4.0
391.00	TRANSPORTATION EQUIPMENT	14-L4	4,109,746.59	1,374,586	2,735,161	311,781	7.59	8.8
392.00	STORES EQUIPMENT	25-SQ	107,351.44	44,068	63,283	4,301	4.01	14.7
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	1,559,563.77	499,803	1,059,761	70,326	4.51	15.1
394.00	LABORATORY EQUIPMENT	15-SQ	584,121.32	193,788	390,333	57,988	9.93	6.7
395.00	POWER OPERATED EQUIPMENT	22-R2	1,606,793.05	101,924	1,504,869	106,761	6.64	14.1
396.00	COMMUNICATION EQUIPMENT	15-SQ	4,330,583.93	1,194,139	3,136,445	268,380	6.20	11.7
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	2,834,406.51	567,764	2,266,643	175,185	6.18	12.9
398.00	MISCELLANEOUS EQUIPMENT	25-SQ	14,231.50	2,951	11,280	594	4.17	19.0
	TOTAL DEPRECIABLE PLANT		**944,728,919.94**	**256,394,760**	**688,334,159**	**25,924,987**	**2.74**	
	NONDEPRECIABLE PLANT							
352.00	FRANCHISES		221,139.78					
353.20	LAND AND LAND RIGHTS - COLLECTION		3,611,014.00					
353.30	LAND AND LAND RIGHTS - SPP		953,050.62					
353.40	LAND AND LAND RIGHTS - TDP		10,937,535.99					
	TOTAL NONDEPRECIABLE PLANT		**15,722,740.39**					
	AMORTIZATION OF NET SALVAGE					**1,584,386**		
	TOTAL UTILITY PLANT		**960,451,660.33**	**256,394,760**	**688,334,159**	**27,509,373**		

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2025, OF BOOK RESERVE AS OF JUNE 30, 2024

ACCOUNT	BOOK RESERVE BALANCE AS OF 6/30/2024	+	PROJECTED DEPRECIATION ACCRUALS	-	PROJECTED RETIREMENTS	-	PROJECTED COST OF REMOVAL	+	PROJECTED SALVAGE	+	ACQUISITIONS	=	PROJECTED BOOK RESERVE BALANCE AS OF 6/30/2025
(1)	(2)		(3)		(4)		(5)		(6)		(7)		(8)
354.20	176,042		300,575		78,459		18,046						380,112
354.30	8,716,727		453,602										9,170,329
354.40	89,164,962		7,103,420										96,268,382
354.70	1,376,318		353,519		475,644		580,285						673,908
355.00	3,253,556		203,357										3,456,913
360.10	5,043,190		1,033,571		215,559		127,180						5,734,022
361.10	51,938,655		4,359,250		884,945		442,473						54,970,487
361.20	12,533,389		2,076,679		100,331		76,251						14,433,486
363.00	25,757,379		1,946,875		120,738		85,724						27,497,792
364.00	355,096		63,612										418,708
365.00	232,673		10,188										242,861
370.00	64,325		16,260										80,585
371.00	2,784,876		1,078,464		569,869		398,908						2,894,563
380.00	29,034,139		6,989,875		1,961,807		667,013						33,395,194
381.00	1,763,887		149,346										1,913,233
382.00	260,812		19,508		181,386								98,934
389.10	420,360		168,984		90,693								498,651
390.00	201,196		73,328										274,524
390.20	4,509		8,544										13,053
391.00	1,061,888		314,337		1,841		258		460				1,374,586
392.00	39,760		4,308										44,068
393.00	429,941		69,862										499,803
394.00	233,954		65,764		105,930								193,788
395.00	244,267		30,947		129,321		43,969						101,924
396.00	1,450,052		266,050		521,963								1,194,139
397.00	419,996		154,038		6,270								567,764
398.00	2,226		725										2,951
TOTAL	**236,964,175**		**27,314,988**		**5,444,755**		**2,440,107**		**460**		**0**		**256,394,760**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

ACCOUNT	NET ORIGINALCOST AS OF 6/30/2024	NET ORIGINALCOST AS OF 6/30/2025	ACCRUAL RATE	AVERAGE ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED DEPRECIATION ACCRUALS
(1)	(2)	(3)	(4)	(5)=([(2)+(3)]/2)*(4)	(6)	(7)=(5)+(6)
354.20	9,024,450.07	9,638,072.04	2.70	251,849	48,726	300,575
354.30	22,145,494.03	22,145,494.03	1.93	427,404	26,198	453,602
354.40	278,171,967.29	278,171,967.29	2.55	7,093,380	10,040	7,103,420
354.70	5,798,402.29	9,518,398.04	3.13	243,355	110,164	353,519
355.00	7,252,880.16	7,252,880.16	2.67	193,656	9,701	203,357
360.10	48,007,177.42	49,789,141.45	1.70	828,654	204,917	1,033,571
361.10	235,039,005.62	241,305,992.79	1.66	3,921,012	438,238	4,359,250
361.20	43,152,715.49	44,127,470.70	4.62	2,014,766	61,913	2,076,679
363.00	56,444,857.84	57,860,844.56	3.18	1,816,160	130,715	1,946,875
364.00	658,974.62	658,974.62	9.65	63,588	24	63,612
365.00	272,564.04	272,564.04	3.74	10,188		10,188
370.00	677,388.38	677,388.38	2.40	16,260		16,260
371.00	18,434,537.51	22,891,460.37	4.77	915,069	163,395	1,078,464
380.00	154,470,993.33	171,064,219.15	4.17	6,636,131	353,744	6,989,875
381.00	6,578,409.28	6,578,409.28	2.27	149,328	18	149,346
382.00	603,464.81	2,522,078.78	2.09	19,508		19,508
389.10	2,630,632.88	3,770,083.44	5.31	168,416	568	168,984
390.00	1,291,592.71	1,291,592.71	5.56	71,808	1,520	73,328
390.20	45,090.00	45,090.00	18.95	8,544		8,544
391.00	4,095,346.93	4,109,746.59	7.81	320,356	(6,019)	314,337
392.00	107,351.44	107,351.44	4.01	4,308		4,308
393.00	1,433,697.35	1,559,563.77	4.57	68,121	1,741	69,862
394.00	685,991.59	584,121.32	10.32	65,061	703	65,764
395.00	595,377.19	1,606,793.05	4.57	30,112	835	30,947
396.00	4,774,493.85	4,330,583.93	5.61	253,969	12,081	266,050
397.00	2,109,739.98	2,834,406.51	6.08	149,798	4,240	154,038
398.00	14,231.50	14,231.50	4.22	600	125	725
TOTAL	**904,516,827.60**	**944,728,919.94**		**25,741,401**	**1,573,587**	**27,314,988**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 5. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

	2020		2021		2022		PROJECTED 2023		PROJECTED 2024			
ACCOUNT	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2) -	(3) +	(4) -	(5) +	(6) -	(7) +	(8) -	(9) +	(10) -	(11) =	(12)*	(13)=(12)/5
354.20		122,315.77						95,322.37		24,447.00	(242,085.14)	(48,417)
354.30				20,176.30		65,248.65		14,994.65			(100,419.60)	(20,084)
354.40				28,995.08		5,052.37		15,159.82			(49,207.27)	(9,841)
354.70		246.65		11,677.96		34,027.64		163,536.33		664,581.00	(874,069.58)	(174,814)
355.00		23,920.78		1,253.37		333.24		12,086.00		12,086.00	(49,679.39)	(9,936)
360.10		186,669.20		147,595.80		169,252.01		271,225.09		254,476.00	(1,029,218.10)	(205,844)
361.10		323,715.46		245,041.20		251,743.85	6,350.46	691,307.65		332,904.00	(1,838,361.70)	(367,672)
361.20		34,151.69		20,315.71		58,813.67	737.54	85,486.72		113,499.00	(311,529.25)	(62,306)
363.00		76,222.67	159.00	105,836.92		91,479.25		213,986.21		181,583.00	(668,949.05)	(133,790)
371.00		273,771.37		206,559.57		53,057.74		125,823.03		174,084.00	(833,295.71)	(166,659)
380.00		652,150.29		269,030.45		336,246.38		203,471.67		400,801.00	(1,861,699.79)	(372,340)
381.00				90.22							(90.22)	(18)
390.00				3,619.09		3,738.83		242.71			(7,600.63)	(1,520)
391.00		10.19			27,472.80		8,493.00	4,756.00	8,712.00	4,894.00	35,017.61	7,004
393.00		5,643.88				855.08		1,237.81			(7,736.77)	(1,547)
394.00		1,075.22		1,113.04		2,855.31		(4,325.75)			(717.82)	(144)
395.00						645.90		1,261.00		2,484.00	(4,390.90)	(878)
396.00		52,578.21		4,528.34		2,348.88					(59,455.43)	(11,891)
397.00	1,369.21	9,909.72	87.00	4,676.57		5,312.99					(18,443.07)	(3,689)
TOTAL	**1,369.21**	**1,762,381.10**	**246.00**	**1,070,509.62**	**27,472.80**	**1,081,011.79**	**15,581.00**	**1,895,571.31**	**8,712.00**	**2,165,839.00**	**(7,921,931.81)**	**(1,584,386)**

* Column (12) equals the summation of Columns (2) through (11).

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1912	23,905	22,859	1,046	1,046	0.0
1915	63,945	41,413	22,532	23,578	0.0
1916	186,930	186,246	684	24,262	0.0
1917	52,663	47,044	5,619	29,881	0.0
1919	9,109	7,619	1,490	31,371	0.0
1920	107,440	68,792	38,648	70,019	0.0
1921	4,793	4,570	223	70,242	0.0
1922	6,902	5,068	1,834	72,076	0.0
1924	13,979	13,335	644	72,720	0.0
1925	619,168	573,596	45,572	118,292	0.0
1926	480,944	397,940	83,004	201,296	0.0
1927	121,952	104,875	17,077	218,373	0.0
1928	62,880	50,384	12,496	230,869	0.0
1929	17,196	10,900	6,296	237,165	0.0
1930	508,508	378,962	129,546	366,711	0.1
1931	212,989	170,391	42,598	409,309	0.1
1932	79,018	65,858	13,160	422,469	0.1
1933	19,590	13,247	6,343	428,812	0.1
1934	24,215	19,511	4,704	433,516	0.1
1935	1,164,522	757,721	406,801	840,317	0.1
1936	602,599	430,711	171,888	1,012,205	0.1
1937	182,569	137,983	44,586	1,056,791	0.2
1938	184,645	140,842	43,803	1,100,594	0.2
1939	205,132	146,873	58,259	1,158,853	0.2
1940	66,953	48,311	18,642	1,177,495	0.2
1941	16,857	11,668	5,189	1,182,684	0.2
1942	138,704	101,955	36,749	1,219,433	0.2
1943	7,521,080	5,838,144	1,682,936	2,902,369	0.4
1944	31,054	24,658	6,396	2,908,765	0.4
1945	59,971	40,067	19,904	2,928,669	0.4
1946	239,175	160,454	78,721	3,007,390	0.4
1947	114,921	76,845	38,076	3,045,466	0.4
1948	18,398	11,570	6,828	3,052,294	0.4
1949	14,485	9,339	5,146	3,057,440	0.4
1950	120,599	72,456	48,143	3,105,583	0.5
1951	378,936	363,730	15,206	3,120,789	0.5
1952	19,259	12,055	7,204	3,127,993	0.5
1953	1,527,113	989,692	537,421	3,665,414	0.5
1954	4,549,345	2,613,027	1,936,318	5,601,732	0.8
1955	247,392	149,447	97,945	5,699,677	0.8
1956	126,374	76,362	50,012	5,749,689	0.8
1957	1,309,028	741,258	567,770	6,317,459	0.9
1958	194,079	136,778	57,301	6,374,760	0.9
1961	480,646	263,190	217,456	6,592,216	1.0
1962	109,277	62,458	46,819	6,639,035	1.0

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1963	1,717,472	924,176	793,296	7,432,331	1.1
1965	573,184	306,962	266,222	7,698,553	1.1
1966	35,162,310	19,663,166	15,499,144	23,197,697	3.4
1967	24,134,919	12,466,615	11,668,304	34,866,001	5.1
1968	442,883	229,194	213,689	35,079,690	5.1
1969	714,077	349,638	364,439	35,444,129	5.1
1970	1,322,191	735,701	586,490	36,030,619	5.2
1971	30,739	17,902	12,837	36,043,456	5.2
1972	7,829,571	3,724,224	4,105,347	40,148,803	5.8
1973	150,497	62,888	87,609	40,236,412	5.8
1974	1,450,397	559,329	891,068	41,127,480	6.0
1975	7,095,134	3,522,095	3,573,039	44,700,519	6.5
1976	1,207,432	488,409	719,023	45,419,542	6.6
1977	671,371	275,508	395,863	45,815,405	6.7
1978	20,869,367	9,642,907	11,226,460	57,041,865	8.3
1979	231,848	105,001	126,847	57,168,712	8.3
1980	5,420,147	2,506,918	2,913,229	60,081,941	8.7
1981	15,140,972	6,922,847	8,218,125	68,300,066	9.9
1982	137,244	70,746	66,498	68,366,564	9.9
1983	25,666,331	9,647,173	16,019,158	84,385,722	12.3
1984	4,414,092	1,820,420	2,593,672	86,979,394	12.6
1985	6,885,002	3,092,690	3,792,312	90,771,706	13.2
1986	2,747,680	1,218,170	1,529,510	92,301,216	13.4
1987	2,385,773	1,069,960	1,315,813	93,617,029	13.6
1988	20,124,684	8,093,261	12,031,423	105,648,452	15.3
1989	11,508,993	4,652,817	6,856,176	112,504,628	16.3
1990	20,292,701	8,444,621	11,848,080	124,352,708	18.1
1991	34,673,132	13,708,452	20,964,680	145,317,388	21.1
1992	59,787,713	22,356,869	37,430,844	182,748,232	26.5
1993	14,186,402	5,862,255	8,324,147	191,072,379	27.8
1994	1,507,669	544,951	962,718	192,035,097	27.9
1995	20,523,443	7,454,548	13,068,895	205,103,992	29.8
1996	1,647,037	566,250	1,080,787	206,184,779	30.0
1997	6,973,632	2,095,044	4,878,588	211,063,367	30.7
1998	8,368,809	3,080,240	5,288,569	216,351,936	31.4
1999	5,472,527	1,865,270	3,607,257	219,959,193	32.0
2000	11,661,943	3,652,029	8,009,914	227,969,107	33.1
2001	7,648,428	2,383,716	5,264,712	233,233,819	33.9
2002	3,882,643	1,070,309	2,812,334	236,046,153	34.3
2003	8,100,623	2,430,435	5,670,188	241,716,341	35.1
2004	7,320,602	2,120,542	5,200,060	246,916,401	35.9
2005	16,826,556	4,491,207	12,335,349	259,251,750	37.7
2006	8,102,404	2,201,080	5,901,324	265,153,074	38.5
2007	10,953,737	2,320,003	8,633,734	273,786,808	39.8
2008	25,260,896	6,279,671	18,981,225	292,768,033	42.5

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2009	58,341,423	16,062,607	42,278,816	335,046,849	48.7
2010	54,044,989	13,547,246	40,497,743	375,544,592	54.6
2011	28,719,833	6,371,487	22,348,346	397,892,938	57.8
2012	11,109,930	2,462,707	8,647,223	406,540,161	59.1
2013	10,227,421	2,056,013	8,171,408	414,711,569	60.2
2014	45,833,494	8,204,402	37,629,092	452,340,661	65.7
2015	18,757,913	2,862,665	15,895,248	468,235,909	68.0
2016	12,728,549	1,620,625	11,107,924	479,343,833	69.6
2017	24,610,982	2,450,091	22,160,891	501,504,724	72.9
2018	12,961,095	1,956,470	11,004,625	512,509,349	74.5
2019	26,462,039	2,489,226	23,972,813	536,482,162	77.9
2020	22,322,930	2,220,320	20,102,610	556,584,772	80.9
2021	25,504,692	1,802,731	23,701,961	580,286,733	84.3
2022	38,802,008	2,701,056	36,100,951	616,387,685	89.5
2023	13,133,513	675,790	12,457,723	628,845,409	91.4
2024	52,118,390	1,148,265	50,970,125	679,815,535	98.8
2025	46,383,138	252,829	46,130,309	725,945,845	105.5
9999	50,797,865-	13,186,183-	37,611,682-	688,334,163	100.0
SUBTOTAL	944,728,920	256,394,760	688,334,159		
NONDEPRECIABLE	15,722,740		15,722,740		
TOTAL	960,451,660	256,394,760	704,056,899		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2007	5,169.65	2,177	988	4,182	24.74	169
2008	101,791.81	40,666	18,448	83,344	25.55	3,262
2009	146,224.27	55,448	25,153	121,071	26.19	4,623
2011	7,997.20	2,676	1,214	6,783	27.84	244
2013	95,162.30	27,635	12,536	82,626	29.32	2,818
2014	13,949.47	3,729	1,692	12,257	30.15	407
2015	39,759.29	9,701	4,401	35,358	30.98	1,141
2016	34,942.26	7,736	3,509	31,433	31.65	993
2017	189,251.01	37,396	16,964	172,287	32.49	5,303
2018	178,699.71	31,022	14,073	164,627	33.32	4,941
2019	261,934.02	39,290	17,823	244,111	34.00	7,180
2020	431,482.74	54,151	24,565	406,918	34.84	11,680
2021	1,204,411.76	121,405	55,073	1,149,339	35.68	32,212
2022	3,911,788.24	298,078	135,218	3,776,570	36.37	103,838
2023	1,662,523.52	85,121	38,614	1,623,910	37.06	43,818
2024	661,321.93	17,128	7,770	653,552	37.61	17,377
2025	691,662.86	4,565	2,071	689,592	37.77	18,258
	9,638,072.04	837,924	380,112	9,257,960		258,264

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.8 2.68

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1935	16,444.43	15,244	16,444			
1958	63,683.83	52,055	62,729	955	14.97	64
1976	26,258.22	18,270	22,016	4,242	21.42	198
1978	11,146.44	7,596	9,154	1,992	21.97	91
1980	109,629.29	73,013	87,985	21,644	22.57	959
1982	12,204.98	7,925	9,550	2,655	23.23	114
1983	86,589.73	55,279	66,614	19,976	23.79	840
1984	29,556.43	18,662	22,489	7,067	23.94	295
1985	109,617.31	67,963	81,899	27,718	24.52	1,130
1986	110,140.47	67,439	81,268	28,872	24.69	1,169
1987	29,681.60	17,934	21,611	8,071	24.89	324
1988	230,555.18	137,342	165,505	65,050	25.11	2,591
1989	253,789.18	148,010	178,360	75,429	25.73	2,932
1990	195,083.34	111,978	134,940	60,143	25.98	2,315
1991	285,470.50	161,120	194,158	91,312	26.24	3,480
1992	76,688.69	42,516	51,234	25,455	26.52	960
1993	2,172,966.53	1,182,094	1,424,488	748,479	26.82	27,907
1994	41,573.85	22,167	26,712	14,862	27.14	548
1996	24,175.73	12,339	14,869	9,307	27.82	335
1997	208,448.09	103,891	125,194	83,254	28.18	2,954
1998	429,870.49	210,078	253,155	176,715	28.25	6,255
1999	305,065.23	145,150	174,914	130,151	28.64	4,544
2000	237,524.37	109,855	132,381	105,143	29.05	3,619
2001	179,000.00	80,765	97,326	81,674	29.19	2,798
2002	9,723.14	4,271	5,147	4,576	29.36	156
2003	271,071.10	115,097	138,698	132,373	29.81	4,441
2004	1,143,084.50	470,494	566,971	576,114	30.02	19,191
2005	428,604.11	170,584	205,563	223,041	30.25	7,373
2006	928,740.33	356,451	429,543	499,197	30.50	16,367
2007	516,608.48	190,629	229,718	286,890	30.78	9,321
2008	1,959,895.68	693,019	835,126	1,124,770	31.08	36,190
2009	2,933,040.76	990,195	1,193,239	1,739,802	31.39	55,425
2010	2,451,233.54	790,523	952,624	1,498,610	31.51	47,560
2011	298,754.41	91,180	109,877	188,877	31.87	5,926
2012	37,883.52	10,933	13,175	24,709	32.05	771
2013	181,693.78	49,275	59,379	122,315	32.25	3,793
2014	4,038,886.37	1,021,838	1,231,371	2,807,515	32.48	86,438
2015	1,545,002.12	361,530	435,663	1,109,339	32.74	33,883
2016	544,942.14	116,727	140,662	404,280	33.02	12,243
2017	463,399.48	90,085	108,557	354,842	33.15	10,704
2018	388,079.03	67,371	81,186	306,893	33.32	9,210

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2019	1,004,042.79	153,016	184,393	819,650	33.37	24,562
2020	87,458.80	11,326	13,649	73,810	33.61	2,196
2021	128,856.38	13,710	16,521	112,335	33.59	3,344
2022	265,508.36	21,745	26,204	239,304	33.63	7,116
2024	350,884.02	10,176	12,263	338,621	33.48	10,114
9999	3,077,062.72-	1,057,570-	1,274,195-	1,802,868-		57,673-
	22,145,494.03	7,611,290	9,170,329	12,975,165		415,073

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.3 1.87

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1916	175,472.68	175,473	175,473			
1932	602.40	566	385	217	6.01	36
1935	564,423.15	523,220	355,471	208,952	7.09	29,471
1946	484.94	425	289	196	11.09	18
1954	3,945,835.14	3,305,821	2,245,944	1,699,891	13.75	123,628
1957	137,083.79	112,793	76,631	60,453	14.64	4,129
1961	346,385.67	274,892	186,759	159,627	16.65	9,587
1963	1,573,909.30	1,239,296	841,966	731,943	16.74	43,724
1965	53,759.86	41,610	28,269	25,491	17.52	1,455
1967	24,003,838.66	18,238,117	12,390,807	11,613,032	18.34	633,208
1968	361,924.73	272,312	185,006	176,919	18.76	9,431
1969	221,599.62	165,047	112,131	109,469	19.19	5,704
1973	38,481.00	27,614	18,761	19,720	20.46	964
1975	419,410.21	295,684	200,885	218,525	20.92	10,446
1976	17,438.45	12,134	8,244	9,194	21.42	429
1978	20,502,042.62	13,972,142	9,492,543	11,009,500	21.97	501,115
1981	12,789,541.84	8,384,824	5,696,571	7,092,971	23.11	306,922
1984	693,417.71	437,824	297,454	395,964	23.94	16,540
1985	133,860.33	82,993	56,385	77,475	24.52	3,160
1986	416,595.46	255,081	173,300	243,295	24.69	9,854
1988	15,069,660.19	8,976,997	6,098,888	8,970,772	25.11	357,259
1989	7,357,194.15	4,290,716	2,915,072	4,442,122	25.73	172,644
1990	6,479,888.32	3,719,456	2,526,964	3,952,924	25.98	152,153
1991	31,895,650.39	18,001,905	12,230,326	19,665,324	26.24	749,441
1992	52,490,038.28	29,100,477	19,770,593	32,719,445	26.52	1,233,765
1993	401,002.87	218,146	148,206	252,797	26.82	9,426
1994	16,680.06	8,894	6,043	10,637	27.14	392
1995	124,581.42	65,032	44,182	80,399	27.47	2,927
1996	647,409.73	330,438	224,496	422,914	27.82	15,202
1997	274,432.07	136,777	92,925	181,507	28.18	6,441
1998	599,628.40	293,038	199,087	400,541	28.25	14,178
1999	234,102.55	111,386	75,675	158,428	28.64	5,532
2000	6,483,934.82	2,998,820	2,037,370	4,446,565	29.05	153,066
2001	2,266,355.22	1,022,579	694,731	1,571,624	29.19	53,841
2002	879,550.45	386,387	262,508	617,042	29.36	21,016
2003	1,983,806.66	842,324	572,267	1,411,540	29.81	47,351
2004	203,091.82	83,593	56,792	146,300	30.02	4,873
2005	887,279.57	353,137	239,918	647,362	30.25	21,400
2006	1,012,988.84	388,785	264,137	748,852	30.50	24,553
2007	46,539.86	17,173	11,667	34,873	30.78	1,133
2008	2,853,651.92	1,009,051	685,540	2,168,112	31.08	69,759

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2009	17,731,630.97	5,986,199	4,066,968	13,664,663	31.39	435,319
2010	20,536,198.92	6,622,924	4,499,553	16,036,646	31.51	508,938
2011	16,125,548.83	4,921,518	3,343,634	12,781,915	31.87	401,064
2012	3,496,681.74	1,009,142	685,602	2,811,080	32.05	87,709
2013	231,088.74	62,671	42,578	188,511	32.25	5,845
2014	10,279,133.56	2,600,621	1,766,837	8,512,297	32.48	262,078
2015	149,213.17	34,916	23,722	125,491	32.74	3,833
2016	453,213.66	97,078	65,954	387,260	33.02	11,728
2017	990,597.57	192,572	130,832	859,766	33.15	25,936
2018	275,973.16	47,909	32,549	243,424	33.32	7,306
2019	206,079.04	31,406	21,337	184,742	33.37	5,536
2020	2,230,611.63	288,864	196,251	2,034,361	33.61	60,528
2021	2,299,804.80	244,699	166,246	2,133,559	33.59	63,518
2022	5,454,129.36	446,693	303,479	5,150,650	33.63	153,156
2023	813,770.69	45,571	30,960	782,811	33.71	23,222
2024	669,863.81	19,426	13,198	656,666	33.48	19,614
9999	2,375,147.51-	1,209,176-	821,979-	1,553,169-		58,429-
	278,171,967.29	141,616,012	96,268,382	181,903,585		6,843,074

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.6 2.46

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
NET SALVAGE PERCENT.. 0						
2007	333.76	175	117	217	16.36	13
2008	214,143.86	107,757	72,240	141,904	16.78	8,457
2009	34,126.07	16,381	10,982	23,144	17.33	1,335
2010	27,574.99	12,616	8,458	19,117	17.79	1,075
2011	5,284.68	2,294	1,538	3,747	18.26	205
2012	22,003.27	9,010	6,040	15,963	18.75	851
2013	20,146.98	7,736	5,186	14,961	19.25	777
2014	338,806.02	121,123	81,201	257,605	19.77	13,030
2015	856,211.28	282,550	189,422	666,789	20.30	32,847
2016	7,847.74	2,366	1,586	6,262	20.85	300
2017	114,557.62	31,068	20,828	93,730	21.50	4,360
2018	329,974.54	79,458	53,269	276,706	22.07	12,538
2019	76,037.97	15,877	10,644	65,394	22.74	2,876
2020	159,897.83	28,142	18,866	141,032	23.41	6,024
2021	599,233.09	85,331	57,206	542,027	24.09	22,500
2022	999,098.32	107,603	72,137	926,961	24.86	37,287
2023	58,927.95	4,255	2,853	56,075	25.70	2,182
2024	1,471,967.81	53,432	35,821	1,436,147	26.55	54,092
2025	4,182,224.26	38,058	25,514	4,156,710	27.22	152,708
	9,518,398.04	1,005,232	673,908	8,844,490		353,457

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.0 3.71

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 355.00 POWER GENERATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
1983	7,661.78	6,307	7,662			
1987	14,669.95	11,539	14,670			
1989	39,917.68	30,609	39,479	439	10.95	40
1990	22,032.71	16,734	21,583	450	11.08	41
1992	51,174.79	37,660	48,573	2,602	11.84	220
1993	231,768.68	167,615	216,184	15,585	12.25	1,272
1994	17,812.36	12,700	16,380	1,432	12.48	115
1997	27,435.07	18,513	23,877	3,558	13.49	264
1998	67,435.96	44,609	57,535	9,901	13.82	716
1999	49,494.79	32,043	41,328	8,167	14.16	577
2000	106,013.94	67,054	86,484	19,530	14.53	1,344
2001	35,603.68	21,960	28,323	7,281	14.91	488
2002	52,951.29	31,908	41,154	11,797	15.17	778
2005	64,454.53	35,450	45,722	18,733	16.36	1,145
2007	11,617.83	5,960	7,687	3,931	17.09	230
2008	1,207,046.93	595,074	767,508	439,539	17.48	25,145
2009	2,422,346.20	1,147,223	1,479,652	942,694	17.78	53,020
2010	19,898.22	8,984	11,587	8,311	18.22	456
2011	60,050.37	25,810	33,289	26,761	18.57	1,441
2012	78,858.46	32,088	41,386	37,472	18.95	1,977
2013	26,001.32	9,953	12,837	13,164	19.35	680
2014	593,857.00	212,304	273,823	320,034	19.77	16,188
2015	88,873.32	29,506	38,056	50,817	20.12	2,526
2016	10,289.16	3,130	4,037	6,252	20.59	304
2017	12,822.02	3,539	4,565	8,257	20.99	393
2018	4,244.75	1,046	1,349	2,896	21.41	135
2019	9,083.50	1,962	2,531	6,552	21.78	301
2020	159,429.52	29,335	37,835	121,595	22.17	5,485
2022	219,278.43	25,327	32,666	186,612	22.97	8,124
2024	1,685,273.08	68,254	88,032	1,597,241	23.69	67,423
9999	144,517.16-	53,416-	68,881-	75,636-		3,728-
	7,252,880.16	2,680,780	3,456,913	3,795,967		187,100

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.3 2.58

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1957	3,579.42	2,848	1,650	1,929	17.47	110
1958	20,071.44	15,868	9,191	10,880	17.75	613
1965	10,311.27	7,610	4,408	5,903	21.30	277
1972	70,235.62	47,276	27,382	42,854	25.74	1,665
1973	108,773.77	72,400	41,933	66,841	26.12	2,559
1974	1,315,676.88	858,874	497,450	818,227	27.12	30,171
1975	751,182.96	484,513	280,624	470,559	27.52	17,099
1976	867,165.36	552,384	319,934	547,231	27.92	19,600
1977	413,403.84	257,964	149,410	263,994	28.92	9,128
1978	245,672.20	151,260	87,608	158,064	29.34	5,387
1979	67,557.97	40,710	23,579	43,979	30.34	1,450
1980	141,668.03	84,151	48,739	92,929	30.76	3,021
1981	149,561.65	87,523	50,692	98,870	31.19	3,170
1982	46,759.72	26,742	15,489	31,271	32.19	971
1983	180,973.76	101,852	58,991	121,983	32.63	3,738
1985	294,555.66	159,060	92,126	202,430	34.07	5,942
1986	61,323.91	32,287	18,700	42,624	35.07	1,215
1987	216,576.51	111,927	64,827	151,750	35.53	4,271
1988	470,582.92	238,538	138,158	332,425	35.99	9,237
1989	88,916.86	43,854	25,400	63,517	36.99	1,717
1990	91,100.20	44,001	25,485	65,615	37.46	1,752
1991	73,265.81	34,376	19,910	53,356	38.46	1,387
1992	33,758.34	15,485	8,969	24,789	38.94	637
1993	571,446.67	254,179	147,217	424,230	39.94	10,622
1994	280,626.69	121,792	70,541	210,086	40.43	5,196
1995	914,523.03	384,100	222,466	692,057	41.43	16,704
1996	129,823.31	53,085	30,746	99,077	41.92	2,363
1997	1,649,470.38	651,211	377,174	1,272,296	42.92	29,643
1998	517,415.89	198,377	114,898	402,518	43.42	9,270
1999	396,708.64	146,465	84,831	311,878	44.42	7,021
2000	482,853.01	172,620	99,979	382,874	44.93	8,522
2001	863,826.65	296,465	171,709	692,118	45.93	15,069
2002	550,189.91	182,223	105,541	444,649	46.44	9,575
2003	406,558.38	128,798	74,598	331,960	47.44	6,997
2004	2,391,077.86	728,083	421,697	1,969,381	47.97	41,054
2005	650,452.12	188,631	109,253	541,199	48.97	11,052
2006	1,967,144.52	545,686	316,055	1,651,090	49.49	33,362
2007	1,268,271.82	333,302	193,045	1,075,227	50.49	21,296
2008	3,782,480.31	945,242	547,473	3,235,007	51.03	63,394
2009	533,137.79	125,394	72,627	460,511	52.03	8,851
2010	757,287.54	166,982	96,714	660,574	53.03	12,457

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
2013	305,530.95	54,629	31,640	273,891	55.11	4,970
2014	4,393,387.15	720,076	417,060	3,976,327	56.11	70,867
2015	2,384,992.75	357,749	207,204	2,177,789	56.67	38,429
2016	3,129,510.60	422,484	244,698	2,884,813	57.67	50,023
2017	3,486,834.27	421,210	243,960	3,242,874	58.23	55,691
2018	1,046,552.06	110,621	64,070	982,482	59.23	16,588
2019	4,276,098.90	389,980	225,872	4,050,227	59.79	67,741
2020	2,931,330.99	222,781	129,032	2,802,299	60.79	46,098
2021	3,145,708.63	192,517	111,504	3,034,205	61.36	49,449
2022	2,003,795.17	92,575	53,618	1,950,177	61.94	31,485
2023	2,497,081.06	77,410	44,835	2,452,246	62.52	39,223
2024	6,233,601.64	97,868	56,684	6,176,918	62.69	98,531
2025	1,997,251.46	7,989	4,627	1,992,624	62.64	31,811
9999	11,878,502.80-	2,361,928-	1,368,001-	10,510,502-		200,032-
	49,789,141.45	9,900,099	5,734,022	44,055,119		838,439

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 52.5 1.68

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1912	2,984.98	2,766	1,939	1,046	8.95	117
1915	63,944.53	59,085	41,413	22,532	9.05	2,490
1916	1,950.89	1,807	1,267	684	8.65	79
1917	15,761.61	14,469	10,142	5,620	9.65	582
1919	4,125.10	3,760	2,635	1,490	10.28	145
1920	107,439.98	98,146	68,792	38,648	9.94	3,888
1921	608.72	551	386	223	10.94	20
1922	5,027.96	4,557	3,194	1,834	10.64	172
1924	1,740.18	1,564	1,096	644	11.36	57
1925	123,444.42	111,100	77,872	45,572	11.11	4,102
1926	101,411.50	91,362	64,037	37,374	10.89	3,432
1927	19,454.49	17,350	12,161	7,293	11.89	613
1928	15,269.36	13,626	9,551	5,718	11.70	489
1929	16,529.15	14,599	10,233	6,296	12.70	496
1930	245,815.52	217,178	152,223	93,593	12.53	7,470
1931	49,329.70	43,588	30,551	18,779	12.38	1,517
1932	21,949.51	19,188	13,449	8,501	13.38	635
1933	13,050.61	11,406	7,995	5,056	13.26	381
1934	3,594.50	3,140	2,201	1,394	13.17	106
1935	445,331.01	384,766	269,688	175,643	14.17	12,395
1936	330,414.57	285,247	199,933	130,482	14.09	9,261
1937	51,370.27	43,850	30,735	20,635	15.09	1,367
1938	47,313.45	40,339	28,274	19,039	15.04	1,266
1939	57,834.20	49,240	34,513	23,321	15.01	1,554
1940	17,245.85	14,512	10,172	7,074	16.01	442
1941	7,594.66	6,380	4,472	3,123	16.00	195
1942	30,660.27	25,703	18,016	12,644	16.01	790
1943	2,058,912.82	1,705,192	1,195,192	863,721	17.01	50,777
1944	3,703.90	3,060	2,145	1,559	17.04	91
1945	37,126.45	30,592	21,442	15,684	17.09	918
1946	121,041.65	98,492	69,034	52,008	18.09	2,875
1947	22,151.64	17,969	12,595	9,557	18.15	527
1948	4,634.71	3,711	2,601	2,034	19.15	106
1949	2,783.23	2,221	1,557	1,226	19.24	64
1950	61,598.70	48,971	34,324	27,275	19.34	1,410
1951	8,987.54	7,050	4,941	4,047	20.34	199
1952	2,984.20	2,331	1,634	1,350	20.46	66
1953	404,703.53	314,697	220,575	184,129	20.59	8,943
1954	202,459.92	155,246	108,814	93,646	21.59	4,337
1955	83,098.99	63,405	44,441	38,658	21.74	1,778
1956	35,381.76	26,611	18,652	16,730	22.74	736

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1957	937,230.11	701,048	491,374	445,856	22.91	19,461
1958	40,394.93	30,042	21,057	19,338	23.09	838
1961	43,744.87	31,356	21,978	21,767	25.29	861
1962	44,537.92	31,707	22,224	22,314	25.50	875
1963	29,407.62	20,785	14,568	14,840	25.72	577
1965	313,044.52	216,001	151,398	161,647	26.96	5,996
1966	21,153,926.18	14,352,939	10,060,170	11,093,756	27.96	396,772
1968	33,778.95	22,527	15,789	17,990	28.47	632
1969	394,688.84	258,600	181,256	213,433	29.47	7,242
1970	767,992.08	498,427	349,354	418,638	29.75	14,072
1971	7,009.39	4,466	3,130	3,879	30.75	126
1972	6,130,985.81	3,866,813	2,710,302	3,420,684	31.03	110,238
1974	111,359.00	68,152	47,769	63,590	32.33	1,967
1975	3,662,800.71	2,215,994	1,553,220	2,109,581	32.64	64,632
1976	242,798.30	143,955	100,900	141,898	33.64	4,218
1977	159,123.39	93,183	65,313	93,810	33.97	2,762
1978	77,557.35	44,471	31,170	46,387	34.97	1,326
1979	85,228.79	48,222	33,799	51,430	35.30	1,457
1980	3,187,340.53	1,778,536	1,246,600	1,940,741	35.65	54,439
1982	19,093.85	10,263	7,193	11,901	37.00	322
1983	24,298,609.69	12,756,770	8,941,394	15,357,216	38.00	404,137
1984	2,777,613.60	1,434,915	1,005,752	1,771,862	38.37	46,178
1985	3,459,525.77	1,757,439	1,231,813	2,227,713	38.74	57,504
1986	1,033,137.57	511,713	358,667	674,471	39.74	16,972
1987	999,098.45	485,961	340,617	658,481	40.12	16,413
1988	2,956,188.74	1,400,051	981,315	1,974,874	41.12	48,027
1989	2,324,049.34	1,079,289	756,488	1,567,561	41.52	37,754
1990	5,984,262.59	2,701,895	1,893,795	4,090,468	42.52	96,201
1992	5,261,222.17	2,274,426	1,594,176	3,667,046	43.34	84,611
1993	6,498,044.00	2,723,980	1,909,275	4,588,769	44.34	103,491
1994	591,417.56	242,008	169,627	421,791	44.76	9,423
1995	10,188,747.35	4,034,744	2,828,007	7,360,740	45.76	160,855
1996	416,212.91	160,533	112,520	303,693	46.19	6,575
1997	3,287,050.10	1,233,301	864,437	2,422,613	46.63	51,954
1998	2,262,207.05	818,467	573,675	1,688,532	47.63	35,451
1999	2,087,882.80	732,847	513,662	1,574,221	48.07	32,749
2000	2,771,294.87	942,240	660,429	2,110,866	48.53	43,496
2001	1,788,854.10	583,882	409,251	1,379,603	49.53	27,854
2002	1,487,853.94	468,823	328,604	1,159,250	49.99	23,190
2003	2,128,468.85	641,521	449,651	1,678,818	50.99	32,924
2004	1,179,673.40	341,869	239,621	940,052	51.46	18,268

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
2005	7,361,829.35	2,046,589	1,434,482	5,927,347	51.94	114,119
2006	1,914,743.70	505,684	354,441	1,560,303	52.94	29,473
2007	6,272,511.82	1,580,673	1,107,915	5,164,597	53.43	96,661
2008	8,331,317.99	1,997,017	1,399,736	6,931,582	53.92	128,553
2009	7,848,479.16	1,783,174	1,249,851	6,598,628	54.42	121,254
2010	5,156,552.92	1,098,346	769,846	4,386,707	55.42	79,154
2011	3,141,301.43	628,889	440,797	2,700,504	55.93	48,284
2012	2,044,148.07	382,665	268,215	1,775,933	56.44	31,466
2013	4,142,752.99	720,839	505,246	3,637,507	56.97	63,850
2014	12,108,985.68	1,944,703	1,363,069	10,745,917	57.49	186,918
2015	5,342,738.51	785,383	550,486	4,792,253	58.03	82,582
2016	5,937,191.33	790,834	554,306	5,382,885	58.57	91,905
2017	15,495,647.19	1,847,081	1,294,644	14,201,003	59.11	240,247
2018	3,114,211.10	326,992	229,193	2,885,018	59.67	48,350
2019	12,890,936.75	1,167,919	818,610	12,072,327	60.23	200,437
2020	3,376,781.52	258,324	181,063	3,195,719	60.36	52,944
2021	5,265,592.52	324,360	227,348	5,038,245	60.94	82,676
2022	4,448,090.65	209,505	146,845	4,301,246	60.69	70,872
2023	2,506,402.09	80,205	56,217	2,450,185	60.50	40,499
2024	9,283,056.36	153,170	107,359	9,175,697	59.61	153,929
2025	7,901,471.43	33,976	23,815	7,877,656	57.55	136,884
9999	18,652,973.79-	6,062,407-	4,249,224-	14,403,750-		306,444-
	241,305,992.79	78,426,909	54,970,487	186,335,506		3,964,341

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 47.0 1.64

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1912	1,387.12	1,387	1,387			
1916	1,756.12	1,756	1,756			
1917	10,563.77	10,564	10,564			
1921	3,517.44	3,517	3,517			
1924	2,553.12	2,553	2,553			
1925	122,099.64	122,100	122,100			
1926	125,190.79	125,178	79,562	45,629	0.01	45,629
1927	26,828.60	26,818	17,045	9,784	0.04	9,784
1928	18,568.92	18,552	11,792	6,777	0.09	6,777
1930	96,641.72	95,482	60,688	35,954	1.15	31,264
1931	63,913.80	63,083	40,095	23,819	1.24	19,209
1932	11,895.54	11,727	7,454	4,442	1.34	3,315
1933	3,438.14	3,385	2,151	1,287	1.46	882
1934	8,818.73	8,667	5,509	3,310	1.59	2,082
1935	58,982.28	57,862	36,777	22,205	1.74	12,761
1936	109,612.43	107,311	68,206	41,406	1.91	21,679
1937	63,168.56	61,703	39,218	23,951	2.09	11,460
1938	65,052.93	63,388	40,289	24,764	2.29	10,814
1939	91,381.97	88,805	56,444	34,938	2.50	13,975
1940	30,117.10	29,183	18,549	11,568	2.72	4,253
1941	5,355.88	5,174	3,289	2,067	2.96	698
1942	62,116.26	59,806	38,012	24,104	3.21	7,509
1943	2,099,408.14	2,014,172	1,280,193	819,215	3.47	236,085
1944	12,487.05	12,036	7,650	4,837	3.03	1,596
1945	10,823.77	10,391	6,604	4,220	3.33	1,267
1946	67,568.97	64,589	41,052	26,517	3.64	7,285
1947	52,696.75	50,146	31,872	20,825	3.97	5,246
1948	10,371.93	9,823	6,243	4,129	4.30	960
1949	8,042.02	7,640	4,856	3,186	4.00	796
1950	45,564.52	43,058	27,367	18,198	4.37	4,164
1951	24,000.40	22,556	14,336	9,664	4.74	2,039
1952	12,456.34	11,639	7,398	5,058	5.12	988
1953	609,180.96	570,193	362,411	246,770	4.92	50,157
1954	292,984.75	272,505	173,202	119,783	5.34	22,431
1955	123,315.75	114,807	72,971	50,345	5.19	9,700
1956	69,165.08	63,950	40,646	28,519	5.63	5,066
1957	35,033.05	32,399	20,593	14,440	5.53	2,611
1958	54,283.80	49,827	31,670	22,614	5.99	3,775
1961	79,035.97	71,828	45,653	33,383	6.42	5,200
1962	47,819.40	43,080	27,381	20,438	6.93	2,949
1963	46,036.19	41,387	26,305	19,731	6.97	2,831

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1965	72,005.35	63,941	40,640	31,365	7.57	4,143
1966	4,558,556.40	4,034,322	2,564,186	1,994,370	7.67	260,022
1968	34,950.27	30,480	19,373	15,577	8.36	1,863
1969	83,606.64	72,571	46,126	37,481	8.52	4,399
1970	145,748.72	125,854	79,992	65,757	8.69	7,567
1971	13,597.26	11,675	7,421	6,176	8.89	695
1972	1,028,747.21	872,378	554,477	474,270	9.50	49,923
1974	13,878.72	11,608	7,378	6,501	9.98	651
1975	595,162.81	493,985	313,973	281,190	10.24	27,460
1977	42,481.85	34,665	22,033	20,449	10.82	1,890
1979	34,223.93	27,393	17,411	16,813	11.47	1,466
1980	1,187,171.73	934,898	594,214	592,958	12.14	48,843
1983	806,019.83	612,736	389,451	416,569	13.25	31,439
1984	133,472.78	100,145	63,651	69,822	13.64	5,119
1985	765,694.71	566,614	360,136	405,559	14.05	28,865
1986	204,814.59	149,371	94,939	109,876	14.48	7,588
1987	235,813.73	169,361	107,645	128,169	14.91	8,596
1988	294,829.02	208,356	132,430	162,399	15.36	10,573
1989	21,376.24	14,775	9,391	11,985	16.08	745
1990	1,670,529.84	1,134,290	720,946	949,584	16.55	57,377
1992	571,748.09	373,580	237,445	334,303	17.51	19,092
1993	358,126.79	228,055	144,950	213,177	18.25	11,681
1994	239,907.10	149,486	95,012	144,895	18.75	7,728
1995	2,831,712.23	1,724,513	1,096,088	1,735,624	19.26	90,115
1996	176,647.38	104,505	66,423	110,224	20.02	5,506
1997	1,035,244.73	597,129	379,531	655,714	20.54	31,924
1998	436,408.69	243,909	155,027	281,382	21.31	13,204
1999	572,451.45	309,582	196,768	375,683	22.08	17,015
2000	533,837.84	280,265	178,134	355,704	22.62	15,725
2001	386,355.17	195,650	124,354	262,001	23.39	11,201
2002	417,183.62	203,419	129,292	287,892	24.17	11,911
2003	630,750.62	295,570	187,862	442,889	24.95	17,751
2004	603,777.24	271,337	172,460	431,317	25.73	16,763
2005	2,283,882.05	982,069	624,196	1,659,686	26.51	62,606
2006	170,990.27	70,174	44,602	126,388	27.30	4,630
2007	2,052,907.66	798,170	507,311	1,545,597	28.30	54,615
2008	2,371,688.80	874,916	556,090	1,815,599	29.08	62,435
2009	238,788.65	83,289	52,938	185,851	29.87	6,222
2010	783,347.93	256,155	162,810	620,538	30.87	20,102
2011	1,314,526.08	403,034	256,165	1,058,361	31.66	33,429
2012	96,976.09	27,609	17,548	79,428	32.66	2,432

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
2013	1,061,740.92	280,300	178,157	883,584	33.45	26,415
2014	2,194,273.98	531,014	337,509	1,856,765	34.45	53,897
2015	5,519,030.82	1,214,187	771,728	4,747,303	35.45	133,915
2016	283,128.74	56,059	35,631	247,498	36.45	6,790
2017	406,383.89	71,524	45,460	360,924	37.45	9,637
2018	185,760.01	28,737	18,265	167,495	38.25	4,379
2019	153,156.51	20,309	12,908	140,249	39.25	3,573
2020	389,419.95	43,031	27,350	362,070	40.25	8,996
2021	198,658.28	17,561	11,162	187,496	41.25	4,545
2022	703,119.83	46,617	29,629	673,491	42.25	15,941
2023	6,252.07	276	175	6,077	43.25	141
2024	1,771,549.01	39,151	24,884	1,746,665	44.25	39,473
2025	1,075,085.72	5,913	3,759	1,071,327	45.00	23,807
9999	4,553,264.84-	2,335,574-	1,489,310-	3,063,955-		184,640-
	44,127,470.70	22,634,966	14,433,486	29,693,985		1,789,417

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.6 4.06

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1912	19,533.14	19,533	19,533			
1916	7,749.99	7,750	7,750			
1917	26,337.97	26,338	26,338			
1919	4,983.78	4,984	4,984			
1921	666.57	667	667			
1922	1,874.06	1,874	1,874			
1924	9,685.90	9,686	9,686			
1925	373,623.52	373,624	373,624			
1926	254,341.48	254,341	254,341			
1927	75,669.41	75,669	75,669			
1928	29,041.41	29,041	29,041			
1929	667.22	667	667			
1930	166,051.08	166,051	166,051			
1931	99,745.25	99,745	99,745			
1932	44,570.39	44,570	44,570			
1933	3,101.03	3,101	3,101			
1934	11,801.49	11,801	11,801			
1935	79,341.08	79,341	79,341			
1936	162,571.78	162,572	162,572			
1937	68,030.11	68,030	68,030			
1938	72,278.83	72,279	72,279			
1939	55,915.89	55,916	55,916			
1940	19,589.65	19,590	19,590			
1941	3,906.81	3,907	3,907			
1942	45,927.14	45,927	45,927			
1943	3,362,758.89	3,362,759	3,362,759			
1944	14,863.40	14,863	14,863			
1945	12,021.15	12,021	12,021			
1946	50,079.36	50,079	50,079			
1947	40,072.22	40,008	32,378	7,694	0.12	7,694
1948	3,390.91	3,368	2,726	665	0.52	665
1949	3,659.87	3,616	2,926	734	0.92	734
1950	13,436.14	13,302	10,765	2,671	0.76	2,671
1951	7,346.89	7,231	5,852	1,495	1.19	1,256
1952	3,818.01	3,735	3,023	795	1.63	488
1953	513,228.64	502,553	406,706	106,523	1.53	69,623
1954	108,064.85	105,115	85,067	22,998	1.99	11,557
1955	40,976.85	39,584	32,035	8,942	2.46	3,635
1956	21,827.40	21,085	17,064	4,763	2.43	1,960
1957	189,411.13	181,607	146,971	42,440	2.92	14,534
1958	15,645.31	14,990	12,131	3,514	2.93	1,199

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1961	11,479.67	10,874	8,800	2,680	3.57	751
1962	16,919.55	15,882	12,853	4,067	4.11	990
1963	7,541.22	7,060	5,714	1,827	4.23	432
1965	58,212.16	54,137	43,812	14,400	4.52	3,186
1966	9,449,827.83	8,697,622	7,038,810	2,411,018	5.10	472,749
1968	12,229.26	11,153	9,026	3,203	5.50	582
1969	12,411.25	11,259	9,112	3,299	5.73	576
1970	378,089.26	341,037	275,994	102,095	5.98	17,073
1971	10,132.33	9,083	7,351	2,781	6.24	446
1972	599,602.42	533,886	432,063	167,539	6.52	25,696
1973	2,434.35	2,152	1,742	692	6.82	101
1974	9,482.67	8,318	6,732	2,751	7.14	385
1975	1,666,577.45	1,449,922	1,173,393	493,184	7.47	66,022
1976	53,771.29	46,109	37,315	16,456	8.14	2,022
1977	56,361.68	47,885	38,752	17,610	8.50	2,072
1978	32,948.40	27,719	22,432	10,516	8.87	1,186
1979	44,837.53	37,332	30,212	14,626	9.25	1,581
1980	794,337.80	654,137	529,380	264,958	9.64	27,485
1981	71,925.21	58,547	47,381	24,544	10.05	2,442
1982	59,185.15	47,591	38,514	20,671	10.48	1,972
1983	286,476.69	226,202	183,061	103,416	11.19	9,242
1984	249,700.69	194,517	157,419	92,282	11.63	7,935
1985	1,685,037.00	1,294,108	1,047,295	637,742	12.08	52,793
1986	225,706.28	170,769	138,200	87,506	12.55	6,973
1987	756,397.42	560,490	453,593	302,804	13.28	22,802
1988	327,932.96	239,030	193,442	134,491	13.76	9,774
1989	310,378.42	222,355	179,947	130,431	14.25	9,153
1990	3,450,197.84	2,415,138	1,954,523	1,495,675	15.00	99,712
1991	78,847.31	54,152	43,824	35,023	15.50	2,260
1992	457,739.92	306,640	248,158	209,582	16.26	12,889
1993	752,189.59	493,436	399,328	352,862	16.78	21,029
1994	249,268.16	159,183	128,824	120,444	17.54	6,867
1995	6,456,888.46	4,029,098	3,260,668	3,196,220	18.08	176,782
1996	129,144.58	78,649	63,649	65,496	18.62	3,518
1997	436,583.33	257,933	208,740	227,843	19.39	11,751
1998	400,469.22	229,229	185,510	214,959	20.17	10,657
1999	276,715.50	153,965	124,601	152,114	20.73	7,338
2000	1,037,127.10	557,456	451,138	585,989	21.51	27,243
2001	362,471.34	188,775	152,772	209,699	22.08	9,497
2002	361,908.24	181,461	146,853	215,055	22.87	9,403
2003	583,310.68	282,322	228,477	354,834	23.45	15,132

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
2004	950,947.58	441,335	357,163	593,785	24.25	24,486
2005	2,836,013.66	1,259,190	1,019,037	1,816,977	25.05	72,534
2006	1,022,671.22	435,249	352,238	670,433	25.64	26,148
2007	698,706.56	282,976	229,007	469,700	26.44	17,765
2008	2,448,068.77	940,548	761,166	1,686,903	27.25	61,905
2009	2,441,829.65	886,873	717,729	1,724,101	28.05	61,465
2010	961,728.09	330,354	267,349	694,379	28.67	24,220
2011	235,351.34	75,783	61,330	174,021	29.48	5,903
2012	244,410.05	73,396	59,398	185,012	30.29	6,108
2013	568,207.65	158,189	128,019	440,189	31.10	14,154
2014	646,297.70	165,646	134,054	512,244	31.92	16,048
2015	1,283,285.42	301,572	244,056	1,039,229	32.55	31,927
2016	681,059.30	144,657	117,068	563,991	33.37	16,901
2017	2,246,508.70	425,938	344,703	1,901,806	34.19	55,625
2018	784,374.53	130,677	105,754	678,621	35.02	19,378
2019	447,749.55	64,207	51,961	395,789	35.84	11,043
2020	655,761.38	78,691	63,683	592,078	36.67	16,146
2021	754,449.70	73,031	59,103	695,347	37.32	18,632
2022	1,265,440.35	92,251	74,657	1,190,783	38.15	31,213
2023	840,029.87	41,161	33,311	806,719	38.82	20,781
2024	3,005,148.08	74,528	60,313	2,944,835	39.32	74,894
2025	1,536,617.66	9,681	7,835	1,528,783	39.43	38,772
9999	6,954,215.46-	3,955,414-	3,304,922-	3,649,293-		208,424-
	57,860,844.56	32,910,052	27,497,792	30,363,053		1,734,139

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.5 3.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 364.00 FLOW MEASURING DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2.5						
NET SALVAGE PERCENT.. 0						
1989	7,979.00	7,756	6,785	1,194	1.04	1,148
1990	3,478.54	3,360	2,939	540	1.23	439
1991	8,740.98	8,381	7,332	1,409	1.46	965
1992	6,784.52	6,470	5,660	1,125	1.60	703
1999	51,368.90	46,746	40,895	10,474	2.57	4,075
2001	7,764.93	6,914	6,049	1,716	2.95	582
2002	4,455.38	3,925	3,434	1,021	3.11	328
2004	2,628.68	2,252	1,970	659	3.51	188
2005	8,722.16	7,362	6,441	2,281	3.70	616
2006	15,631.29	12,979	11,354	4,277	3.88	1,102
2007	9,030.61	7,380	6,456	2,575	4.03	639
2008	29,418.95	23,606	20,651	8,768	4.19	2,093
2009	92,082.61	72,635	63,544	28,539	4.28	6,668
2010	29,477.55	22,816	19,960	9,518	4.38	2,173
2011	53,822.99	40,766	35,663	18,160	4.48	4,054
2013	26,874.75	19,189	16,787	10,088	4.81	2,097
2014	152,277.99	104,189	91,148	61,130	5.08	12,033
2015	112,570.79	73,058	63,914	48,657	5.41	8,994
2016	5,515.89	3,351	2,932	2,584	5.81	445
2018	1,269.20	639	559	710	6.91	103
2020	30,025.23	11,304	9,889	20,136	8.28	2,432
2021	13,780.49	4,233	3,703	10,077	9.02	1,117
9999	14,726.81-	10,696-	9,357-	5,370-		1,158-
	658,974.62	478,615	418,708	240,267		51,836

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.6 7.87

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. IOWA 25-S2						
NET SALVAGE PERCENT.. 0						
1970	30,360.76	30,361	30,361			
1991	227,265.28	207,857	203,290	23,975	3.17	7,563
2009	14,938.00	9,417	9,210	5,728	9.38	611
	272,564.04	247,635	242,861	29,703		8,174
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					3.6	3.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 370.00 RECEIVING WELLS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2007	6,261.10	2,401	1,659	4,602	28.95	159
2009	92,112.20	31,687	21,900	70,212	30.51	2,301
2013	33,467.05	8,795	6,079	27,388	33.66	814
2017	1,547.02	276	191	1,356	36.84	37
2019	544,001.01	73,440	50,756	493,245	38.44	12,832
	677,388.38	116,599	80,585	596,803		16,143

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.0 2.38

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0.5						
NET SALVAGE PERCENT.. 0						
1986	23,248.20	19,856	11,273	11,975	6.66	1,798
1989	2,955.38	2,436	1,383	1,572	7.67	205
1992	82,459.97	65,308	37,076	45,384	8.67	5,235
1993	150,731.21	117,691	66,815	83,916	8.98	9,345
1994	14,804.52	11,382	6,462	8,343	9.32	895
1996	45,741.24	34,091	19,354	26,387	9.91	2,663
1997	35,746.89	26,224	14,888	20,859	10.17	2,051
1998	57,184.51	41,070	23,316	33,869	10.59	3,198
1999	458,262.22	322,892	183,310	274,952	10.90	25,225
2001	12,975.25	8,751	4,968	8,007	11.59	691
2002	364.64	240	136	229	11.97	19
2003	106,536.72	68,439	38,854	67,683	12.25	5,525
2004	145,255.21	90,901	51,606	93,649	12.56	7,456
2005	89,734.94	54,379	30,872	58,863	13.00	4,528
2006	60,017.32	35,236	20,004	40,013	13.36	2,995
2007	5,498.42	3,128	1,776	3,722	13.65	273
2008	675,193.22	369,601	209,827	465,366	14.06	33,099
2009	553,721.79	291,479	165,476	388,246	14.40	26,962
2010	532,996.01	268,630	152,505	380,491	14.76	25,779
2011	61,213.49	29,395	16,688	44,525	15.15	2,939
2012	48,827.52	22,217	12,613	36,215	15.57	2,326
2013	57,051.85	24,509	13,914	43,138	15.93	2,708
2014	1,606,038.22	646,591	367,078	1,238,960	16.32	75,917
2015	221,894.55	82,989	47,114	174,781	16.74	10,441
2016	591,731.90	203,970	115,796	475,936	17.11	27,816
2017	388,432.32	121,812	69,154	319,278	17.51	18,234
2018	464,227.87	130,309	73,978	390,250	17.94	21,753
2019	3,890,015.67	959,278	544,595	3,345,421	18.33	182,511
2020	2,145,433.63	451,614	256,387	1,889,047	18.75	100,749
2021	635,229.73	109,768	62,317	572,913	19.15	29,917
2022	2,748,609.32	365,290	207,380	2,541,229	19.57	129,853
2023	506,181.12	46,164	26,208	479,973	19.93	24,083
2024	1,764,279.12	82,921	47,075	1,717,204	20.28	84,675
2025	5,024,111.60	60,289	34,227	4,989,885	20.54	242,935
9999	315,245.20-	70,215-	39,862-	275,383-		15,144-
	22,891,460.37	5,098,635	2,894,563	19,996,897		1,099,655

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.2 4.80

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
1951	338,601.17	338,601	338,601			
1957	6,690.96	6,643	4,039	2,652	0.49	2,652
1963	60,577.37	58,590	35,623	24,954	2.10	11,883
1965	65,850.38	63,216	38,435	27,415	2.50	10,966
1967	131,080.44	124,684	75,808	55,272	2.98	18,548
1969	1,770.51	1,666	1,013	758	3.52	215
1973	808.18	744	452	356	4.50	79
1981	2,129,942.82	1,855,606	1,128,203	1,001,740	6.51	153,877
1984	530,330.69	450,092	273,655	256,676	7.31	35,113
1985	436,711.49	366,838	223,036	213,675	7.62	28,041
1986	671,769.88	560,659	340,879	330,891	7.73	42,806
1987	133,438.08	110,033	66,900	66,538	8.08	8,235
1988	774,935.16	630,797	383,523	391,412	8.45	46,321
1989	1,102,436.70	889,005	540,512	561,925	8.64	65,038
1990	2,384,544.52	1,894,521	1,151,863	1,232,682	9.05	136,208
1991	2,094,397.91	1,644,940	1,000,119	1,094,279	9.29	117,791
1992	756,098.03	583,859	354,985	401,113	9.74	41,182
1993	2,988,367.45	2,275,941	1,383,765	1,604,602	10.02	160,140
1994	55,578.72	41,695	25,350	30,229	10.32	2,929
1995	6,990.68	5,159	3,137	3,854	10.65	362
1996	77,882.53	56,239	34,193	43,690	11.16	3,915
1997	19,221.20	13,616	8,278	10,943	11.53	949
1998	3,598,188.73	2,496,783	1,518,037	2,080,152	11.91	174,656
1999	1,040,474.71	706,066	429,286	611,189	12.31	49,650
2000	5,019.13	3,325	2,022	2,997	12.74	235
2001	1,728,292.61	1,115,786	678,395	1,049,898	13.17	79,719
2002	114,329.31	72,050	43,806	70,523	13.50	5,224
2003	1,990,120.05	1,217,157	740,028	1,250,092	13.97	89,484
2004	699,591.75	414,298	251,892	447,700	14.46	30,961
2005	2,197,612.35	1,257,034	764,273	1,433,339	14.97	95,747
2006	681,578.71	375,550	228,333	453,246	15.48	29,279
2007	55,219.50	29,222	17,767	37,452	16.01	2,339
2008	985,479.73	499,244	303,539	681,941	16.56	41,180
2009	18,746,686.68	9,058,399	5,507,480	13,239,207	17.11	773,770
2010	21,164,100.69	9,714,322	5,906,279	15,257,822	17.68	862,999
2011	7,013,443.52	3,043,834	1,850,642	5,162,802	18.26	282,738
2012	4,788,551.86	1,954,687	1,188,444	3,600,108	18.85	190,987
2013	3,042,327.54	1,157,301	703,636	2,338,692	19.55	119,626
2014	8,844,730.26	3,123,074	1,898,819	6,945,911	20.15	344,710
2015	1,054,687.41	341,719	207,764	846,923	20.86	40,600
2016	566,677.92	166,773	101,397	465,281	21.58	21,561

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
2017	659,986.90	174,237	105,936	554,051	22.30	24,845
2018	4,963,163.56	1,156,913	703,400	4,259,764	23.03	184,966
2019	1,904,573.57	383,962	233,448	1,671,126	23.76	70,334
2020	8,593,865.68	1,452,363	883,032	7,710,834	24.59	313,576
2021	10,545,002.03	1,434,120	871,941	9,673,061	25.41	380,679
2022	12,420,598.98	1,274,353	774,802	11,645,797	26.24	443,818
2023	972,040.80	66,682	40,542	931,499	27.15	34,309
2024	22,085,135.03	759,729	461,913	21,623,222	28.07	770,332
2025	18,554,969.40	159,573	97,020	18,457,949	28.82	640,456
9999	2,720,254.13-	870,022-	531,048-	2,189,206-		109,353-
	171,064,219.15	54,711,678	33,395,194	137,669,025		6,876,677

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.0 4.02

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 381.00 PLANT SEWERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2008	294,411.86	107,107	97,358	197,054	29.73	6,628
2009	4,434,866.70	1,525,594	1,386,735	3,048,132	30.51	99,906
2010	1,187,964.50	384,900	349,867	838,098	31.30	26,776
2011	6,597.06	2,004	1,822	4,775	32.08	149
2012	1,684.33	477	434	1,250	32.87	38
2014	234,044.45	56,639	51,483	182,561	34.45	5,299
2015	6,136.63	1,356	1,233	4,904	35.25	139
2016	45,239.43	9,039	8,216	37,023	36.05	1,027
2021	1,641.43	150	136	1,505	39.86	38
2022	396,015.22	27,206	24,730	371,285	40.67	9,129
9999	30,192.33-	9,660-	8,781-	21,411-		681-
	6,578,409.28	2,104,812	1,913,233	4,665,176		148,448

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.4 2.26

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1993	61,758.21	38,537	22,027	39,731	19.28	2,061
2004	1,473.76	647	370	1,104	26.85	41
2005	8,238.06	3,460	1,978	6,260	27.62	227
2006	183,176.25	73,783	42,171	141,005	28.17	5,006
2009	24,781.51	8,525	4,873	19,909	30.51	653
2010	26,717.70	8,657	4,948	21,770	31.30	696
2014	98,514.27	23,840	13,626	84,888	34.45	2,464
2017	18,264.54	3,258	1,862	16,403	36.84	445
2025	2,099,154.48	12,385	7,079	2,092,075	41.95	49,871
	2,522,078.78	173,092	98,934	2,423,145		61,464

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 39.4 2.44

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S2.5						
NET SALVAGE PERCENT.. 0						
2010	192,418.71	136,810	142,057	50,362	6.10	8,256
2013	7,285.98	4,424	4,594	2,692	7.76	347
2018	37,630.79	14,277	14,825	22,806	11.45	1,992
2019	262,241.29	85,910	89,205	173,036	12.32	14,045
2022	91,716.32	15,161	15,742	75,974	15.15	5,015
2023	1,795,473.75	198,220	205,822	1,589,652	16.12	98,614
2024	153,173.50	8,455	8,779	144,394	17.12	8,434
2025	1,230,143.10	16,976	17,627	1,212,516	17.87	67,852
	3,770,083.44	480,233	498,651	3,271,432		204,555

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.0 5.43

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	3,529.23	3,000	2,435	1,094	3.00	365
2009	52,251.63	41,801	33,925	18,327	4.00	4,582
2010	7,240.80	5,431	4,408	2,833	5.00	567
2011	2,249.52	1,575	1,278	972	6.00	162
2012	30,582.71	19,879	16,133	14,450	7.00	2,064
2013	52,070.05	31,242	25,356	26,714	8.00	3,339
2014	34,888.89	19,189	15,573	19,316	9.00	2,146
2015	27,346.34	13,673	11,097	16,249	10.00	1,625
2016	33,090.02	14,891	12,085	21,005	11.00	1,910
2017	28,119.56	11,248	9,129	18,991	12.00	1,583
2018	10,405.16	3,642	2,956	7,449	13.00	573
2019	20,626.43	6,188	5,022	15,604	14.00	1,115
2020	74,563.91	18,641	15,129	59,435	15.00	3,962
2021	360,930.38	72,186	58,585	302,345	16.00	18,897
2022	431,088.92	64,663	52,479	378,610	17.00	22,271
2023	97,559.16	9,756	7,918	89,641	18.00	4,980
2024	25,050.00	1,252	1,016	24,034	19.00	1,265
	1,291,592.71	338,257	274,524	1,017,069		71,406

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.2 5.53

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 390.20 OFFICE FURNITURE AND EQUIPMENT - COMPUTERS AND PERIPHERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2024	45,090.00	9,018	13,053	32,037	4.00	8,009
	45,090.00	9,018	13,053	32,037		8,009

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.0 17.76

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L4						
NET SALVAGE PERCENT.. 0						
1986	943.57	944	944			
1987	96.87	97	97			
1990	11,582.84	11,583	11,583			
1991	9,493.37	9,493	9,493			
2000	4,338.17	4,230	4,092	246	0.64	246
2001	16,929.51	16,374	15,838	1,092	0.81	1,092
2002	4,132.74	3,964	3,834	299	0.98	299
2005	2,599.71	2,418	2,339	261	1.51	173
2006	59,003.61	54,260	52,484	6,520	1.66	3,928
2011	143,484.17	122,335	118,331	25,153	2.42	10,394
2012	71,847.31	59,777	57,820	14,027	2.62	5,354
2013	61,529.80	49,322	47,708	13,822	2.97	4,654
2014	3,036.53	2,311	2,235	802	3.45	232
2016	2,414.49	1,575	1,523	891	4.79	186
2017	8,513.22	5,026	4,861	3,652	5.55	658
2018	927,519.47	485,000	469,125	458,394	6.39	71,736
2019	299,068.81	135,119	130,696	168,373	7.28	23,128
2020	26,190.17	9,913	9,589	16,601	8.21	2,022
2022	1,422,366.36	323,446	312,859	1,109,507	10.19	108,882
2023	602,400.82	91,324	88,334	514,067	11.19	45,940
2024	416,014.24	31,534	30,502	385,512	12.19	31,625
2025	16,240.81	309	299	15,942	12.94	1,232
	4,109,746.59	1,420,354	1,374,586	2,735,161		311,781

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.8 7.59

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 392.00 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2012	58,391.33	30,363	30,300	28,091	12.00	2,341
2017	2,199.71	704	703	1,497	17.00	88
2018	46,760.40	13,093	13,065	33,695	18.00	1,872
	107,351.44	44,160	44,068	63,283		4,301

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.7 4.01

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 393.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	7,132.96	7,133	7,133			
2006	85,717.68	81,432	85,718			
2007	5,060.13	4,554	4,890	170	2.00	85
2008	2,776.47	2,360	2,534	242	3.00	81
2009	378.54	303	325	54	4.00	14
2010	61,467.53	46,101	49,498	11,970	5.00	2,394
2012	58,472.38	38,007	40,808	17,664	7.00	2,523
2013	28,453.57	17,072	18,330	10,124	8.00	1,266
2014	40,133.99	22,074	23,701	16,433	9.00	1,826
2015	62,657.78	31,329	33,638	29,020	10.00	2,902
2016	105,803.20	47,611	51,119	54,684	11.00	4,971
2017	7,458.66	2,983	3,203	4,256	12.00	355
2018	94,551.82	33,093	35,532	59,020	13.00	4,540
2019	14,014.13	4,204	4,514	9,500	14.00	679
2020	193,729.12	48,432	52,001	141,728	15.00	9,449
2021	102,950.07	20,590	22,107	80,843	16.00	5,053
2022	284,959.55	42,744	45,894	239,066	17.00	14,063
2023	44,808.61	4,481	4,811	39,998	18.00	2,222
2024	233,771.16	11,689	12,550	221,221	19.00	11,643
2025	125,866.42	1,573	1,689	124,177	19.75	6,287
9999	600.00-	180-	192-	408-		27-
	1,559,563.77	467,585	499,803	1,059,761		70,326

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.1 4.51

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 394.00 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	5,949.07	5,552	3,757	2,192	1.00	2,192
2012	13,442.75	11,650	7,883	5,560	2.00	2,780
2013	5,917.50	4,734	3,203	2,714	3.00	905
2014	112,033.68	82,158	55,595	56,439	4.00	14,110
2015	43,434.75	28,957	19,595	23,840	5.00	4,768
2016	123,948.53	74,369	50,325	73,624	6.00	12,271
2017	48,566.17	25,902	17,528	31,038	7.00	4,434
2018	43,803.48	20,442	13,833	29,970	8.00	3,746
2019	57,097.59	22,839	15,455	41,643	9.00	4,627
2020	32,405.64	10,802	7,309	25,097	10.00	2,510
2021	17,137.92	4,570	3,092	14,046	11.00	1,277
2022	37,565.86	7,513	5,084	32,482	12.00	2,707
2023	31,474.35	4,196	2,840	28,634	13.00	2,203
2024	49,446.26	3,297	2,231	47,215	14.00	3,372
2025	4,060.22	68	46	4,014	14.75	272
9999	42,162.45-	20,671-	13,988-	28,174-		4,186-
	584,121.32	286,378	193,788	390,333		57,988

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.7 9.93

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 22-R2						
NET SALVAGE PERCENT.. 0						
2011	221,403.26	132,975	72,663	148,740	9.31	15,976
2015	2,763.34	1,282	701	2,062	11.55	179
2018	18,212.48	6,311	3,449	14,763	13.20	1,118
2022	62,954.27	10,387	5,676	57,278	15.18	3,773
2023	135,350.83	15,511	8,476	126,875	15.45	8,212
2024	40,819.47	2,486	1,358	39,461	15.42	2,559
2025	1,135,289.40	18,732	10,235	1,125,054	14.88	75,608
9999	10,000.00-	1,161-	634-	9,366-		664-
	1,606,793.05	186,523	101,924	1,504,869		106,761

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.1 6.64

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2010	144,621.29	144,621	144,621			
2011	7,975.30	7,444	7,919	56	1.00	56
2012	3,344.78	2,899	3,084	261	2.00	130
2013	263,689.84	210,952	224,400	39,290	3.00	13,097
2014	98,016.16	71,878	76,460	21,556	4.00	5,389
2015	13,210.61	8,807	9,368	3,843	5.00	769
2016	172,002.57	103,202	109,781	62,222	6.00	10,370
2017	13,811.63	7,366	7,836	5,976	7.00	854
2018	12,412.19	5,792	6,161	6,251	8.00	781
2019	7,055.35	2,822	3,002	4,053	9.00	450
2020	674,118.03	224,704	239,028	435,090	10.00	43,509
2021	39,621.14	10,566	11,240	28,381	11.00	2,580
2022	852,798.77	170,560	181,432	671,367	12.00	55,947
2023	425,045.19	56,671	60,284	364,761	13.00	28,059
2024	1,524,807.54	101,659	108,139	1,416,669	14.00	101,191
2025	78,053.54	1,301	1,384	76,670	14.75	5,198
	4,330,583.93	1,131,244	1,194,139	3,136,445		268,380

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.7 6.20

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 397.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2010	4,161.94	4,162	4,162			
2011	14,880.36	13,888	14,880			
2012	13,823.71	11,981	13,824			
2013	16,427.62	13,142	16,428			
2014	2,202.56	1,615	2,068	135	4.00	34
2015	4,104.14	2,736	3,503	601	5.00	120
2017	28,080.87	14,976	19,175	8,906	7.00	1,272
2018	33,269.93	15,526	19,879	13,391	8.00	1,674
2019	123,994.70	49,598	63,503	60,492	9.00	6,721
2020	130,423.87	43,474	55,662	74,762	10.00	7,476
2021	191,683.21	51,116	65,447	126,236	11.00	11,476
2022	783,085.43	156,617	200,525	582,560	12.00	48,547
2023	138,192.53	18,425	23,590	114,603	13.00	8,816
2024	648,139.11	43,211	55,325	592,814	14.00	42,344
2025	730,936.53	12,185	15,602	715,335	14.75	48,497
9999	29,000.00-	4,584-	5,809-	23,191-		1,792-
	2,834,406.51	448,068	567,764	2,266,643		175,185

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.9 6.18

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 398.00 OTHER TANGIBLE PLANT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	14,231.50	3,416	2,951	11,280	19.00	594
	14,231.50	3,416	2,951	11,280		594

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.0 4.17

PART III. EXPERIENCED AND ESTIMATED NET SALVAGE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
354.20	3,007.76	122,315.77		122,315.77-
354.30	39,414.10			
354.40	120,604.23			
354.70	6,910.37	246.65		246.65-
355.00		23,920.78		23,920.78-
360.10	40,213.82	186,669.20		186,669.20-
361.10	361,924.39	323,715.46		323,715.46-
361.20	22,020.95	34,151.69		34,151.69-
363.00	128,735.68	76,222.67		76,222.67-
371.00	144,361.10	273,771.37		273,771.37-
380.00	92,274.49	652,150.29		652,150.29-
391.00	31,332.59	10.19		10.19-
393.00		5,643.88		5,643.88-
394.00	10,122.79	1,075.22		1,075.22-
395.00	7,833.15			
396.00	234,211.01	52,578.21		52,578.21-
397.00		9,909.72	1,369.21	8,540.51-
	1,242,966.43	1,762,381.10	1,369.21	1,761,011.89-
2021 TRANSACTION YEAR				
354.30	7,989.66	20,176.30		20,176.30-
354.40	11,481.83	28,995.08		28,995.08-
354.70	2,875.51	11,677.96		11,677.96-
355.00		1,253.37		1,253.37-
360.10	11,013.00	147,595.80		147,595.80-
361.10	796,849.84	245,041.20		245,041.20-
361.20	83,125.55	20,315.71		20,315.71-
363.00	414,022.10	105,836.92	159.00	105,677.92-
364.00	6,151.40			
371.00	16,177.71	206,559.57		206,559.57-
380.00	231,513.16	269,030.45		269,030.45-
381.00		90.22		90.22-
390.00		3,619.09		3,619.09-
394.00	1,401.00	1,113.04		1,113.04-
396.00		4,528.34		4,528.34-
397.00	20,048.36	4,676.57	87.00	4,589.57-
	1,602,649.12	1,070,509.62	246.00	1,070,263.62-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
354.20	15,702.45			
354.30	26,680.07	65,248.65		65,248.65-
354.40	199,172.52	5,052.37		5,052.37-
354.70	28,082.13	34,027.64		34,027.64-
355.00	96,801.74	333.24		333.24-
360.10	325,168.00	169,252.01		169,252.01-
361.10	599,713.73	251,743.85		251,743.85-
361.20	26,444.42	58,813.67		58,813.67-
363.00	61,602.50	91,479.25		91,479.25-
364.00	9,014.72			
371.00	187,895.88	53,057.74		53,057.74-
380.00	631,925.26	336,246.38		336,246.38-
390.00		3,738.83		3,738.83-
391.00			27,472.80	27,472.80
393.00	16,369.00	855.08		855.08-
394.00	54,586.97	2,855.31		2,855.31-
395.00		645.90		645.90-
396.00	239,917.65	2,348.88		2,348.88-
397.00	86,974.00	5,312.99		5,312.99-
	2,606,051.04	1,081,011.79	27,472.80	1,053,538.99-
2023 TRANSACTION YEAR				
354.20	119,051.43	95,322.37		95,322.37-
354.30		14,994.65		14,994.65-
354.40		15,159.82		15,159.82-
354.70	269,127.42	163,536.33		163,536.33-
355.00	302,147.14	12,086.00		12,086.00-
360.10	684,257.99	271,225.09		271,225.09-
361.10	1,046,813.01	691,307.65	6,350.46	684,957.19-
361.20	193,411.84	85,486.72	737.54	84,749.18-
363.00	390,176.93	213,986.21		213,986.21-
371.00	268,893.70	125,823.03		125,823.03-
380.00	847,634.18	203,471.67		203,471.67-
390.00		242.71		242.71-
391.00	67,942.38	4,756.00	8,493.00	3,737.00
393.00		1,237.81		1,237.81-
394.00	26,821.81	4,325.75-		4,325.75
395.00	7,418.83	1,261.00		1,261.00-
396.00	7,651.73			
	4,231,348.39	1,895,571.31	15,581.00	1,879,990.31-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2024 TRANSACTION YEAR				
354.20	78,458.60	24,447.00		24,447.00-
354.70	475,644.03	664,581.00		664,581.00-
355.00		12,086.00		12,086.00-
360.10	215,558.67	254,476.00		254,476.00-
361.10	884,944.68	332,904.00		332,904.00-
361.20	100,330.51	113,499.00		113,499.00-
363.00	120,738.00	181,583.00		181,583.00-
371.00	569,868.62	174,084.00		174,084.00-
380.00	1,961,807.04	400,801.00		400,801.00-
382.00	181,386.03			
389.10	90,693.02			
391.00	1,841.15	4,894.00	8,712.00	3,818.00
394.00	105,930.49			
395.00	129,321.10	2,484.00		2,484.00-
396.00	521,963.46			
397.00	6,270.00			
	5,444,755.40	2,165,839.00	8,712.00	2,157,127.00-
TOTAL	15,127,770.38	7,975,312.82	53,381.01	7,921,931.81-

VOLUME 14

PENNSYLVANIA-AMERICAN WATER COMPANY

2023 GENERAL BASE RATE CASE
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

EXHIBITS NO. 11-G, 11-H, 11-I, 11-J
DEPRECIATION STUDY

BASA WASTEWATER OPERATIONS
BRENTWOOD WASTEWATER OPERATIONS
AS OF JUNE 30, 2024, 2025

EXHIBIT NO. 11-G - DEPRECIATION STUDY

BASA WASTEWATER OPERATIONS

AS OF JUNE 30, 2024

Exhibit No. 11-G
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

BASA WASTEWATER OPERATIONS

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2024

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-G
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

BASA WASTEWATER OPERATIONS

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2024

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

October 12, 2023

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant. The results of our study as of June 30, 2024 are presented in the attached report. The results of our study as of June 30, 2025 are presented in our report, "2025 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of June 30, 2025." The same methods, procedures and estimates are used in both studies.

The attached report sets forth a description of the methods and procedures upon which the studies were based, the estimates of survivor curves, and the calculated annual depreciation as of June 30, 2024.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

FREDERICK B. JOHNSTON, JR.
Senior Analyst

JJS:mle

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PART I. INTRODUCTION

PENNSYLVANIA-AMERICAN WATER COMPANY

BASA WASTEWATER OPERATIONS

DEPRECIATION STUDY

PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study for Pennsylvania-American Water Company to determine the annual depreciation accrual rates and amounts applicable to the original cost of wastewater plant as of June 30, 2024. The rates and amounts are based on the straight line remaining life method of depreciation. This report also describes the concepts, methods and judgments which underlie the recommended annual depreciation accrual rates related to wastewater plant in service as of June 30, 2024.

Part I, Introduction, contains statements with respect to the basis of the study and the development of net original cost. Part II, Estimation of Survivor Curves, presents descriptions of the considerations and methods used in the service life study. Part III, Service Life Considerations, presents the results of the average service life analysis. Part IV, Calculation of Annual and Accrued Depreciation, describes the procedures used in the calculation of group depreciation. Part V, Results of Study, presents summaries by depreciable group of annual depreciation accrual rates and amounts, as well as composite remaining lives. Part VI, Service Life Statistics, presents the statistical analysis of service life estimates and Part VII, Detailed Depreciation Calculations, presents the detailed tabulations of annual depreciation.

BASIS OF THE STUDY

The purpose of the depreciation study was to determine the annual depreciation accruals applicable to the original cost of wastewater plant in service as of June 30, 2024. For most accounts, the straight line remaining life method using attained ages, the book depreciation reserve and estimated survivor curves, was the basis for the calculation of annual depreciation. For certain accounts, the annual and accrued amortization amounts were based on the age of the property and the selected amortization period.

The survivor curve estimates were based on judgment which incorporated (1) analyses of historical data related to wastewater property for all Pennsylvania-American Water Company Wastewater Operations; (2) consideration of the character, use and location of the property; (3) probable future events and management plans; and (4) a general knowledge of wastewater property lives. The use of Iowa type survivor curves is a generally-accepted method of estimating average service life when the actual lives of individual property units are dispersed.

DEVELOPMENT OF NET ORIGINAL COST

The original cost data used in this study were obtained from the Company's continuing property records and work order system which show in detail the original cost of the property including descriptions, locations and years of installation of property units. The net original cost was developed from the original cost data by deducting contributions in aid of construction. The development of net original cost by plant account is set forth in Table 1 on page V-4.

PART II. ESTIMATION OF SURVIVOR CURVES

PART II. ESTIMATION OF SURVIVOR CURVES

The calculation of annual depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. The estimation of survivor curves is discussed below and the development of net salvage is discussed in later sections of this report.

SURVIVOR CURVES

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units or by constructing a survivor curve by plotting the number of units which survive at successive ages.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1, the remaining life at age 30 is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval. It is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

This study has incorporated the use of Iowa curves developed from a retirement rate analysis of historical retirement history. A discussion of the concepts of survivor curves and of the development of survivor curves using the retirement rate method is presented below.

Iowa Type Curves

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. There are four families in the Iowa system, labeled in accordance with the location of the modes of the retirements (or the portion of the frequency curve with the highest level of retirements) in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family. A higher number designates a higher mode curve.

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.

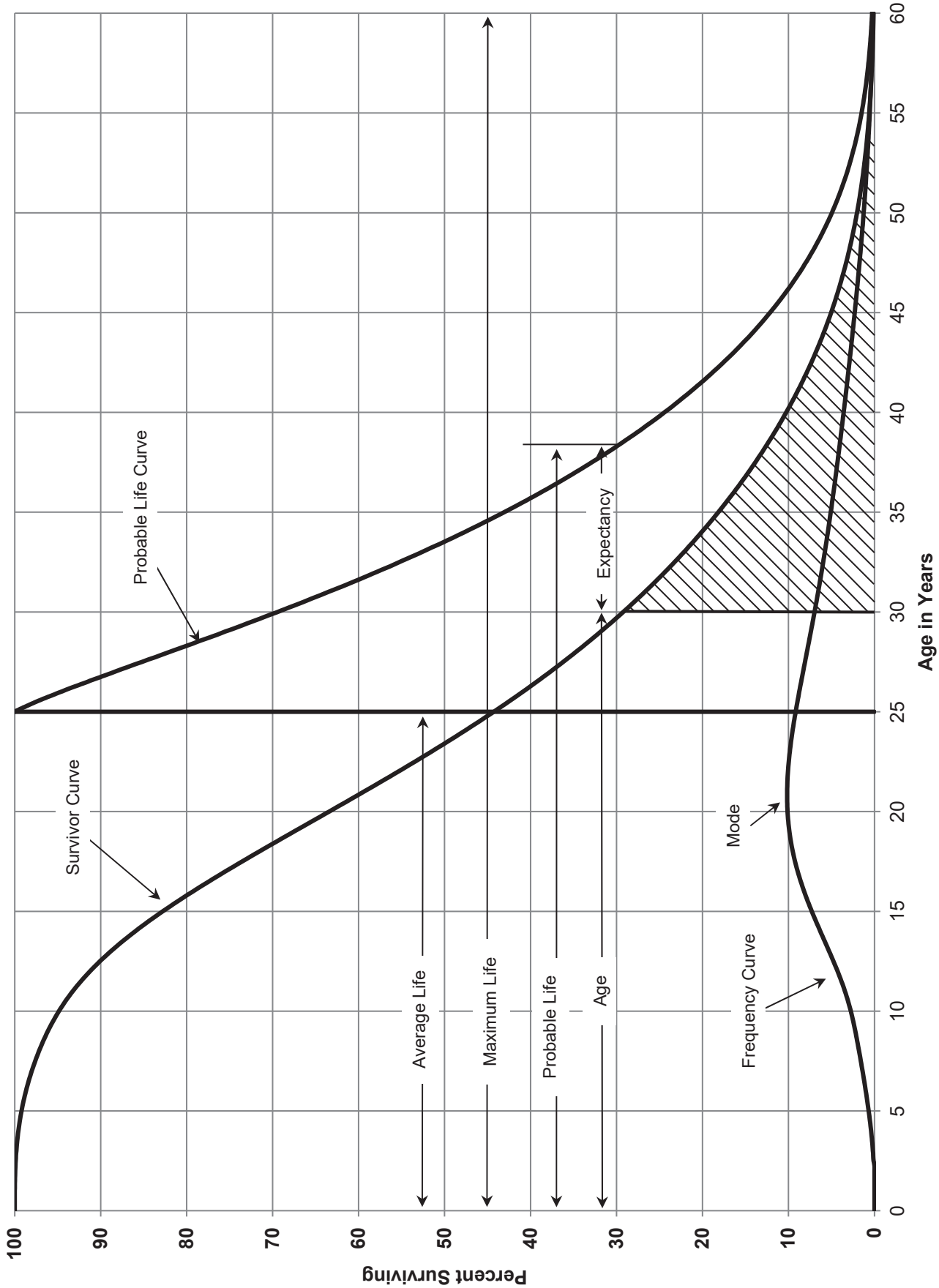


FIGURE 1. TYPICAL SURVIVOR CURVE AND DERIVED CURVES

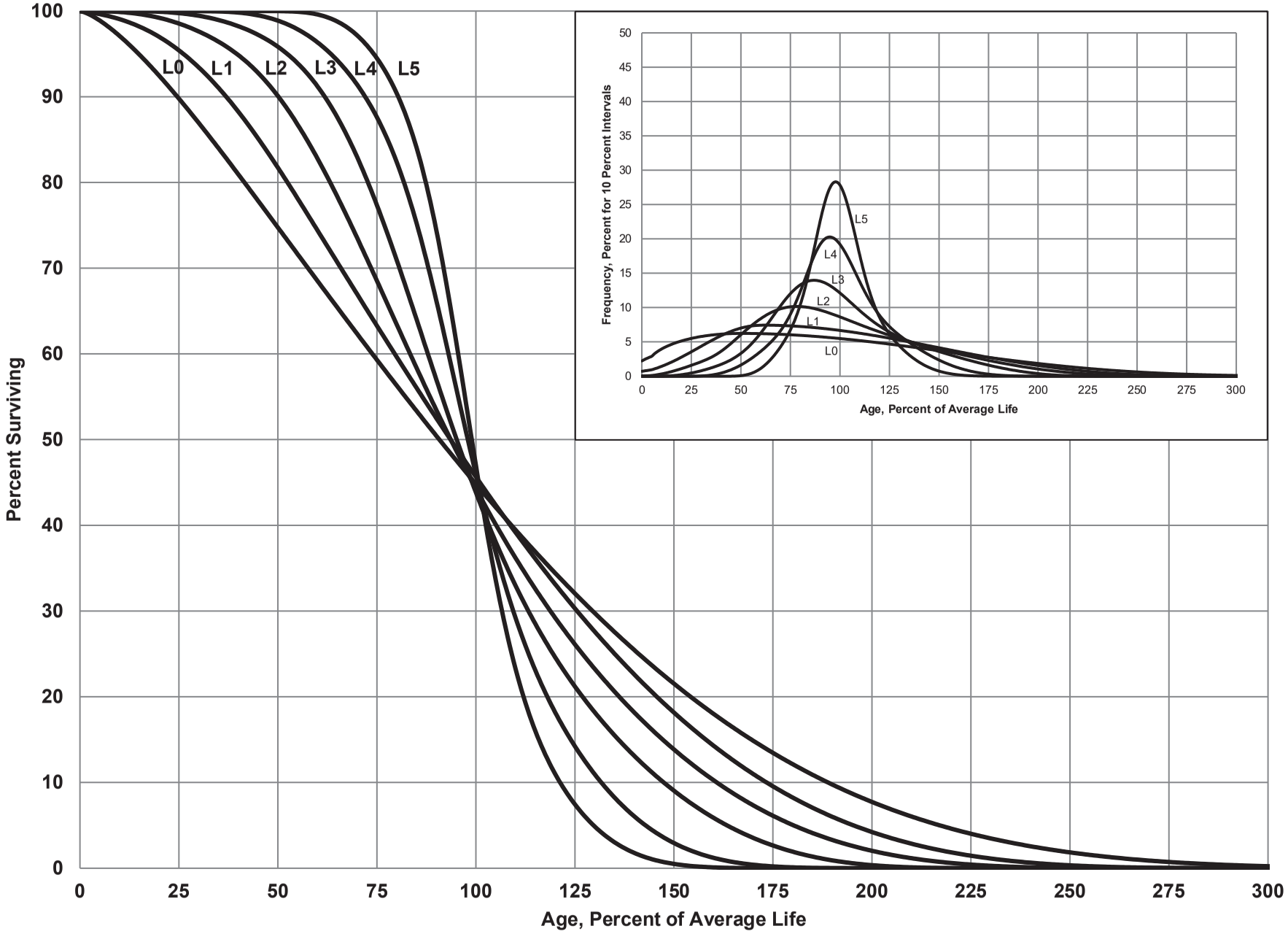


FIGURE 2.. LEFT MODAL OR "L" IOWA TYPE SURVIVOR CURVES

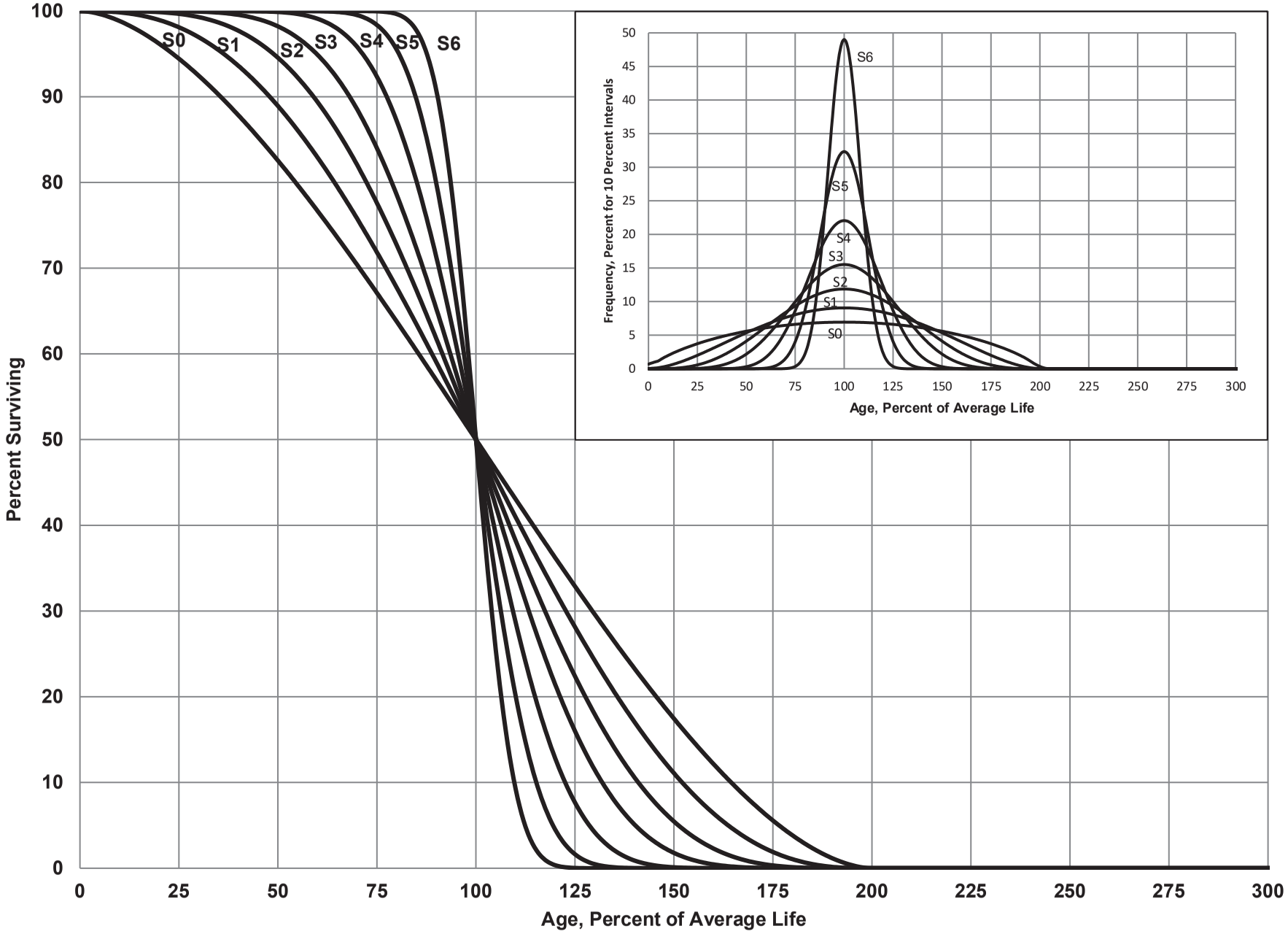


FIGURE 3.. SYMMETRICAL OR "S" IOWA TYPE SURVIVOR CURVES

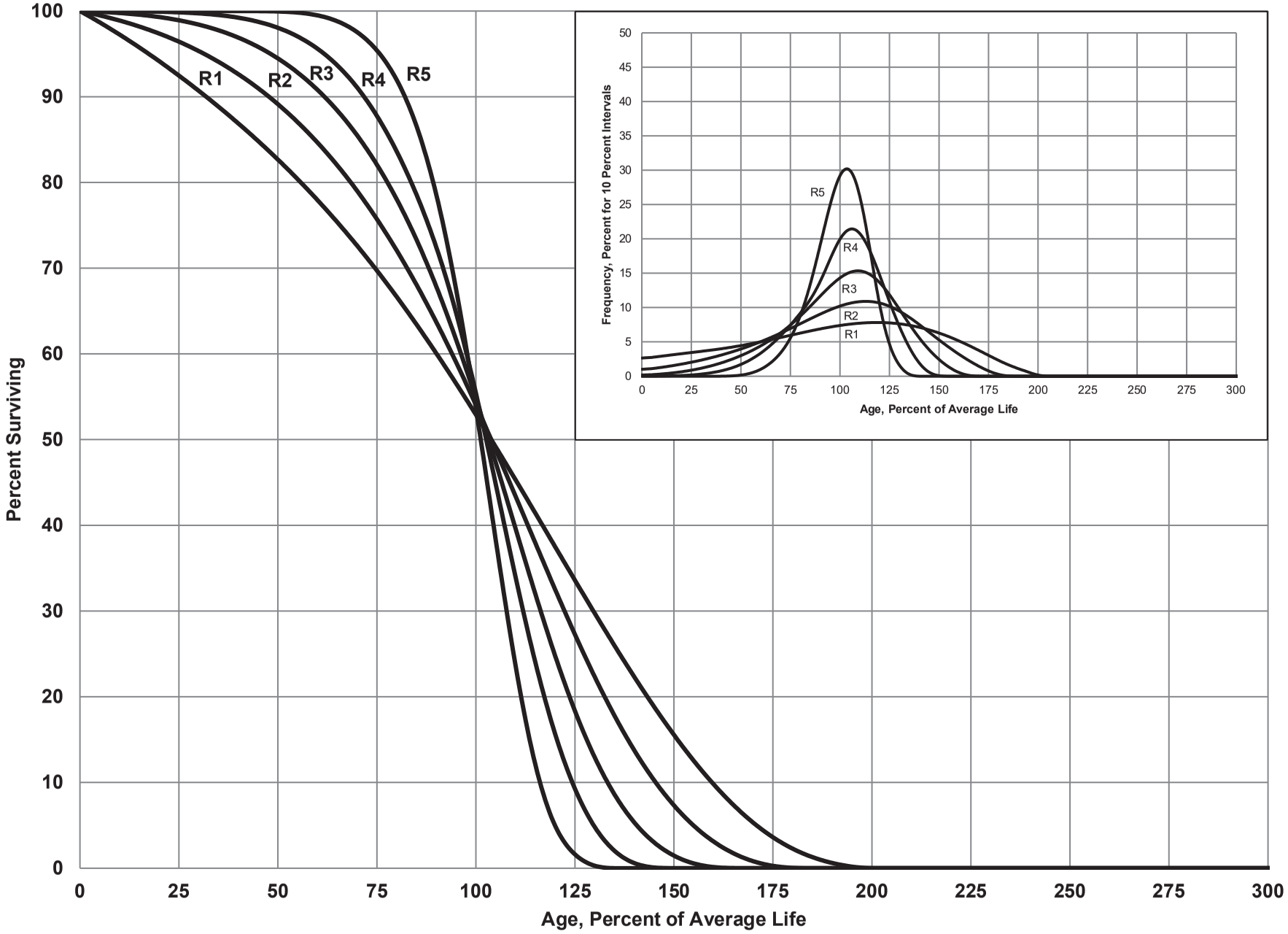


FIGURE 4.. RIGHT MODAL OR "R" IOWA TYPE SURVIVOR CURVES

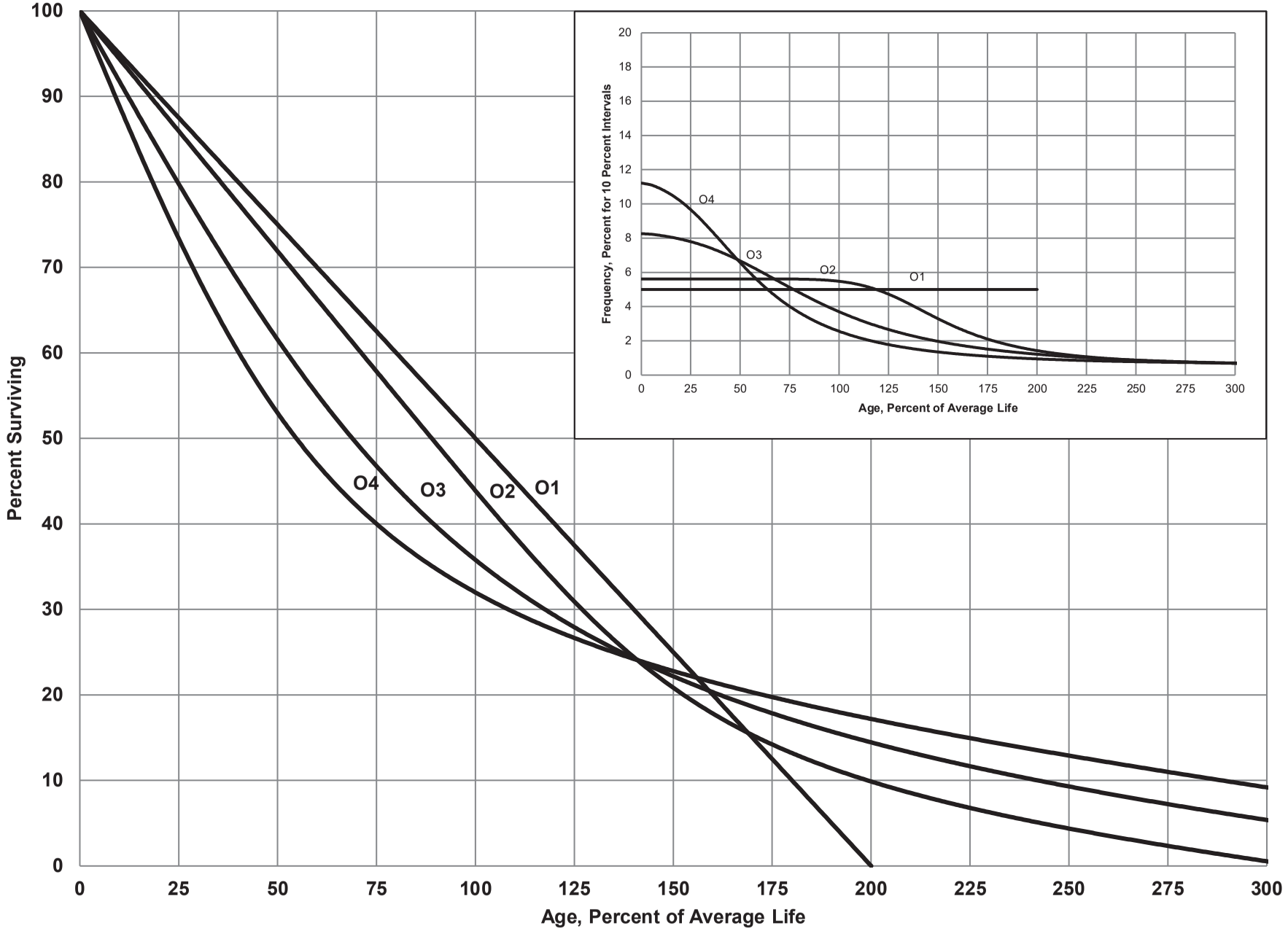


FIGURE 5. ORIGIN MODAL OR "O" IOWA TYPE SURVIVOR CURVES

These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."[1] In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student, submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text and is also explained in several publications including "Statistical Analyses of Industrial Property Retirements,"[2] "Engineering Valuation and Depreciation,"[3] and "Depreciation Systems."[4]

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band. The band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

---

[1]Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

[2]Winfrey, Robley, Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

[3]Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.

[4]Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994.

Schedules of Annual Transactions in Plant Records

The property group used to illustrate the retirement rate method is observed for the experience band 2015-2024 for which there were placements during the years 2010-2024. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-11 and II-12. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, $10,000 of the dollars invested in 2010 were retired in 2015. The $10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of $143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2015 retirements of 2010 installations and ending with the 2024 retirements of the 2019 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20.

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024

Placement Band 2010-2024

Year Placed	Retirements, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	10	11	12	13	14	16	23	24	25	26	26	13½-14½
2011	11	12	13	15	16	18	20	21	22	19	44	12½-13½
2012	11	12	13	14	16	17	19	21	22	18	64	11½-12½
2013	8	9	10	11	11	13	14	15	16	17	83	10½-11½
2014	9	10	11	12	13	14	16	17	19	20	93	9½-10½
2015	4	9	10	11	12	13	14	15	16	20	105	8½-9½
2016		5	11	12	13	14	15	16	18	20	113	7½-8½
2017			6	12	13	15	16	17	19	19	124	6½-7½
2018				6	13	15	16	17	19	19	131	5½-6½
2019					7	14	16	17	19	20	143	4½-5½
2020						8	18	20	22	23	146	3½-4½
2021							9	20	22	25	150	2½-3½
2022								11	23	25	151	1½-2½
2023									11	24	153	½-1½
2024										13	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606	

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024 Placement Band 2010-2024

Year Placed	Acquisitions, Transfers and Sales, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	-	-	-	-	-	-	60[a]	-	-	-	-	13½-14½
2011	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2012	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2013	-	-	-	-	-	-	-	(5)[b]	-	-	60	10½-11½
2014	-	-	-	-	-	-	-	6[a]	-	-	-	9½-10½
2015	-	-	-	-	-	-	-	-	-	-	(5)	8½-9½
2016		-	-	-	-	-	-	-	-	-	6	7½-8½
2017			-	-	-	-	-	-	-	-	-	6½-7½
2018				-	-	-	-	(12)[b]	-	-	-	5½-6½
2019					-	-	-	-	22[a]	-	-	4½-5½
2020						-	-	(19)[b]	-	-	10	3½-4½
2021							-	-	-	-	-	2½-3½
2022								-	-	(102)[c]	(121)	1½-2½
2023									-	-	-	½-1½
2024											-	0-½
Total	-	-	-	-	-	-	60	(30)	22	(102)	(50)	

[a] Transfer Affecting Exposures at Beginning of Year
[b] Transfer Affecting Exposures at End of Year
[c] Sale with Continued Use
Parentheses Denote Credit Amount.

In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

Schedule of Plant Exposed to Retirement

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14. The surviving plant at the beginning of each year from 2015 through 2024 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2020 are calculated in the following manner:

Exposures at age 0	= amount of addition	= $750,000
Exposures at age ½	= $750,000 - $ 8,000	= $742,000
Exposures at age 1½	= $742,000 - $18,000	= $724,000
Exposures at age 2½	= $724,000 - $20,000 - $19,000	= $685,000
Exposures at age 3½	= $685,000 - $22,000	= $663,000

SCHEDULE 3. PLANT EXPOSED TO RETIREMENT
JANUARY 1 OF EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024

Placement Band 2010-2024

Year Placed	Exposures, Thousands of Dollars — Annual Survivors at the Beginning of the Year										Total at Beginning of Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	255	245	234	222	209	195	239	216	192	167	167	13½-14½
2011	279	268	256	243	228	212	194	174	153	131	323	12½-13½
2012	307	296	284	271	257	241	224	205	184	162	531	11½-12½
2013	338	330	321	311	300	289	276	262	242	226	823	10½-11½
2014	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½
2015	420[a]	416	407	397	386	374	361	347	332	316	1,503	8½-9½
2016		460[a]	455	444	432	419	405	390	374	356	1,952	7½-8½
2017			510[a]	504	492	479	464	448	431	412	2,463	6½-7½
2018				580[a]	574	561	546	530	501	482	3,057	5½-6½
2019					660[a]	653	639	623	628	609	3,789	4½-5½
2020						750[a]	742	724	685	663	4,332	3½-4½
2021							850[a]	841	821	799	4,955	2½-3½
2022								960[a]	949	926	5,719	1½-2½
2023									1,080[a]	1,069	6,579	½-1½
2024										1,220[a]	7,490	0-½
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	

[a]Additions during the year

For the entire experience band 2015-2024, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

255 + 268 + 284 + 311 + 334 + 374 + 405 + 448 + 501 + 609.

Original Life Table

The original life table, illustrated in Schedule 4 on page II-16, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½	=	88.15				
Exposures at age 4½	=	3,789,000				
Retirements from age 4½ to 5½	=	143,000				
Retirement Ratio	=	143,000	÷	3,789,000	=	0.0377
Survivor Ratio	=	1.000	-	0.0377	=	0.9623
Percent surviving at age 5½	=	(88.15)	x	(0.9623)	=	84.83

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

SCHEDULE 4. ORIGINAL LIFE TABLE
CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2015-2024 Placement Band 2010-2024

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	Percent Surviving at Beginning of Age Interval
(1)	(2)	(3)	(4)	(5)	(6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	167	26	0.1557	0.8443	42.24
					35.66
Total	44,780	1,606			

Column 2 from Schedule 3, Column 12, Plant Exposed to Retirement.
Column 3 from Schedule 1, Column 12, Retirements for Each Year.
Column 4 = Column 3 Divided by Column 2.
Column 5 = 1.0000 Minus Column 4.
Column 6 = Column 5 Multiplied by Column 6 as of the Preceding Age Interval.

The original survivor curve is plotted from the original life table (column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

Smoothing the Original Survivor Curve

The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R Iowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group.

FIGURE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

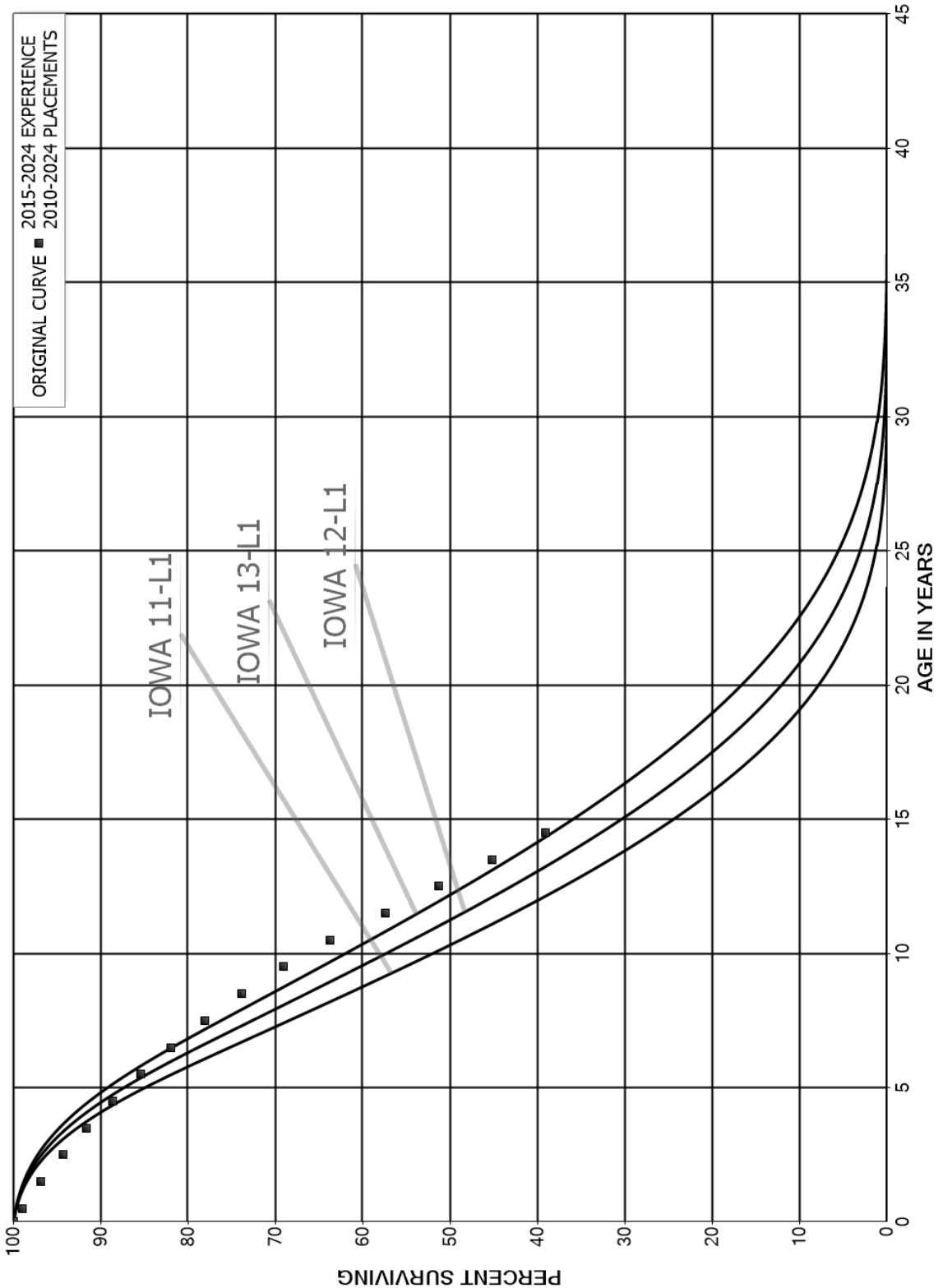


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

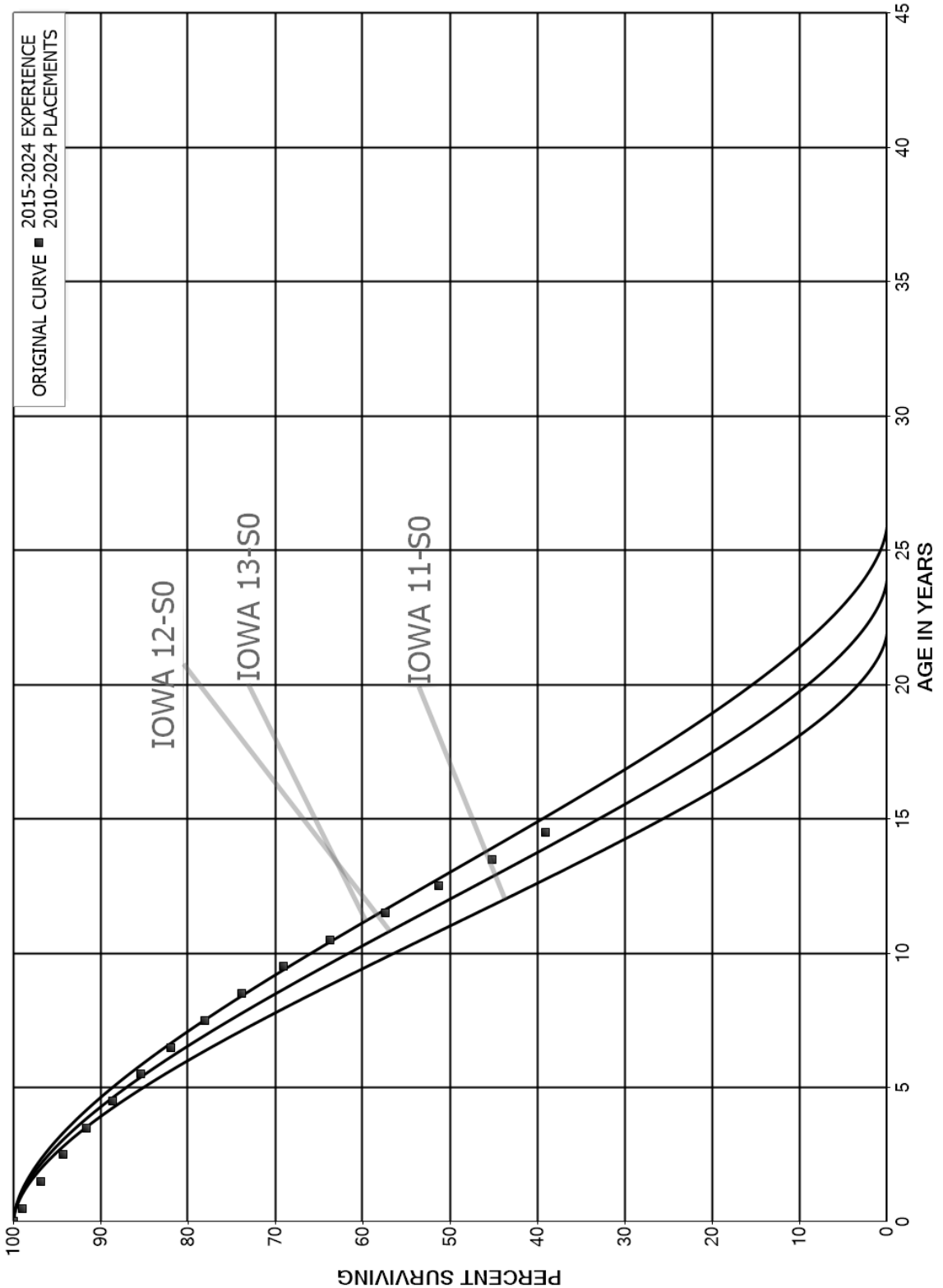


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

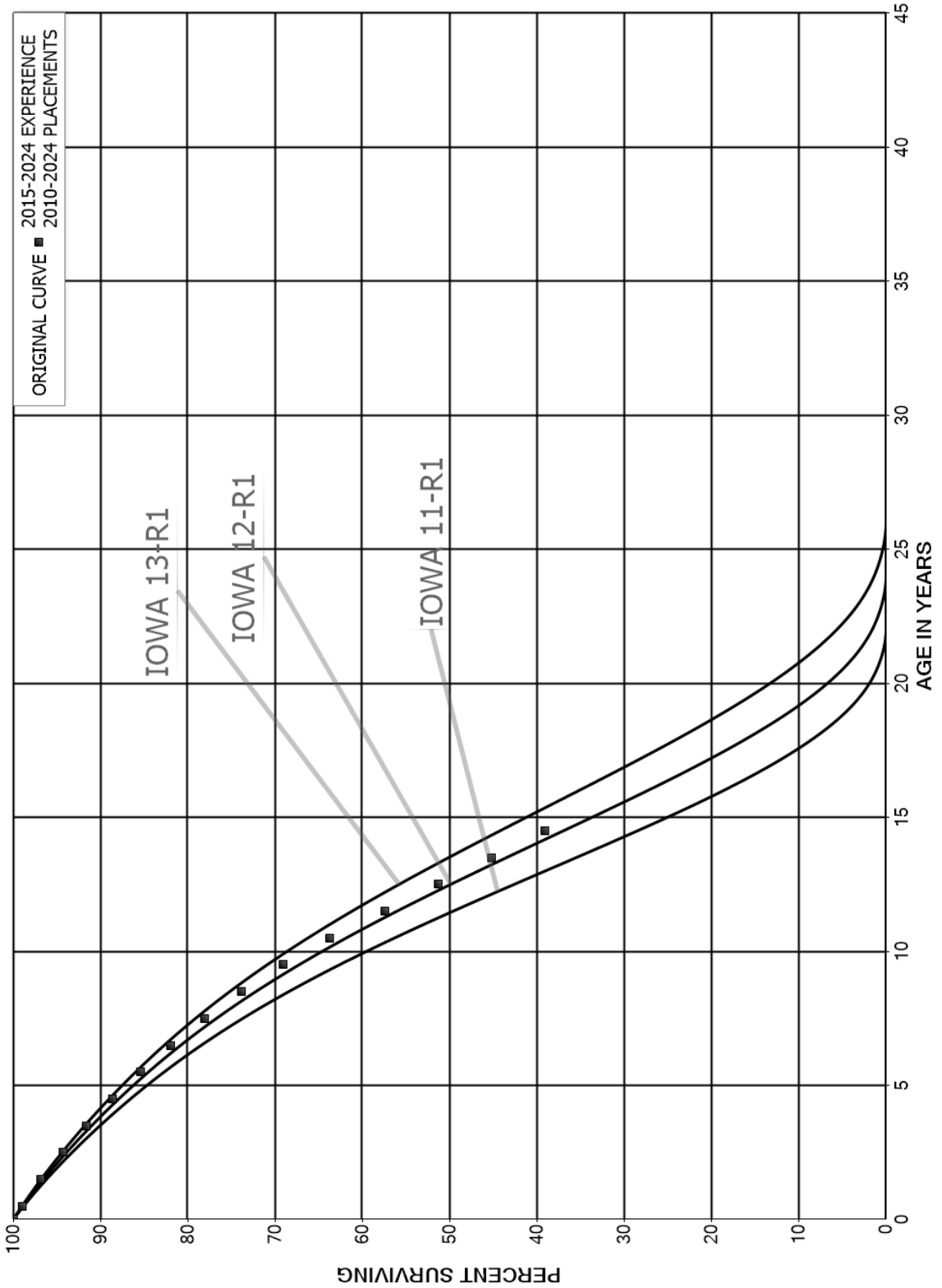
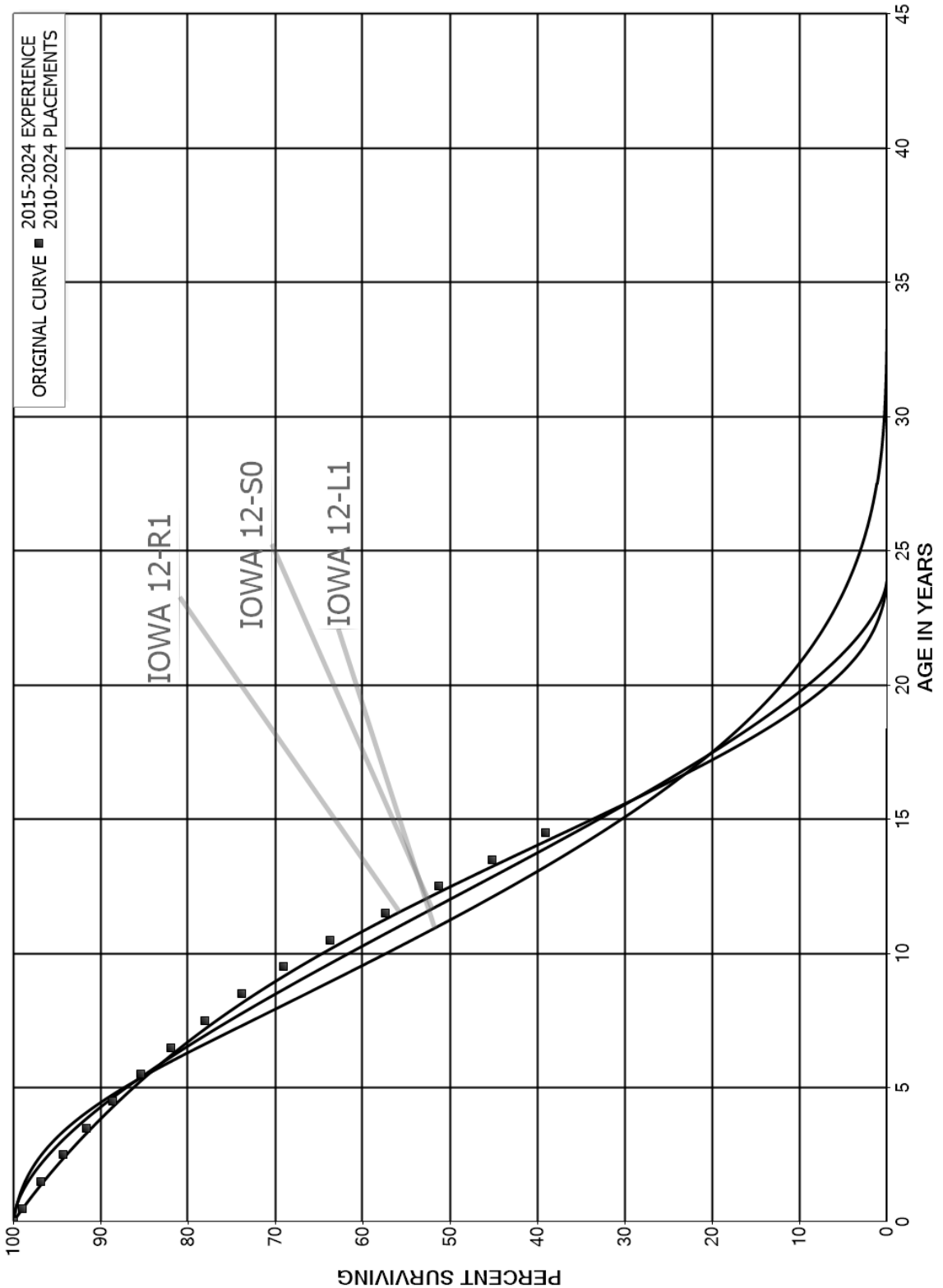


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PART III. SERVICE LIFE CONSIDERATIONS

PART III. SERVICE LIFE CONSIDERATIONS

JUDGMENTS

The survivor curve estimates were based on judgment which considered factors including statistical analyses of retirements, Company policies and outlook as determined during discussions with management, and survivor curve estimates from previous studies of other Pennsylvania-American wastewater systems. For depreciable groups which consist of numerous similar items of property, the distribution of the lives of the units in the group was judged on the basis of an average survival pattern for the entire group.

The amortization periods selected for general plant amortization accounts are discussed in the section, “Amortization of General Plant Accounts.”

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

BOOK RESERVE

The book reserve as of June 30, 2023, is the result of a bringforward of the book reserves established by the Commission for the BASA wastewater operation at the time of acquisition during the fourth quarter of 2023. The projected book reserve as of June 30, 2024, is a bringforward of the June 30, 2023 book reserve based on projected accruals, retirements, cost of removal, salvage and other credits.

GROUP DEPRECIATION PROCEDURES

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally the items within a group do not have identical service lives but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group. In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

Single Unit of Property

The calculation of straight line depreciation for a single unit of property is straightforward. For example, if a $1,000 unit of property attains an age of four years and has a life expectancy of six years, the annual accrual over the total life is:

$$\frac{\$1{,}000}{(4 + 6)} = \$100 \text{ per year.}$$

The accrued depreciation is:

$$\$1{,}000\left(1 - \frac{6}{10}\right) = \$400.$$

Remaining Life Annual Accruals

For the purpose of calculating remaining life accruals as of June 30, 2024, the depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation follow. The detailed calculations as of June 30, 2024, are set forth in the Results of Study section of the report.

Average Service Life Procedure

In the average service life procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the average remaining life of the vintage. The average remaining life is a directly weighted average derived from the estimated future survivor curve in accordance with the average service life procedure.

The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which would not be allocated to expense through future depreciation accruals if current forecasts of life characteristics

are used as the basis for such accruals. The accrued depreciation calculation consists of applying an appropriate ratio to the surviving original cost of each vintage of each account based upon the attained age and service life. The straight line accrued depreciation ratios are calculated as follows for the average service life procedure:

$$Ratio = 1 - \frac{Average\ Remaining\ Life}{Average\ Service\ Life}.$$

AMORTIZATION OF GENERAL PLANT ACCOUNTS

In order to use a more efficient and cost effective accounting process for equipment recorded in general plant Accounts 390, 393, 396 and 397; amounts capitalized in these accounts are amortized rather than depreciated. Amortization as defined in the Uniform System of Accounts is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized.

The primary reasons for the amortization of certain general plant accounts is that the effort required to unitize additions, periodically inventory equipment and determine amounts to be retired for equipment recorded in these accounts is disproportionate to the original cost of the equipment when compared to other wastewater plant accounts.

Accounting for such equipment using an amortization concept consists of capitalization of amounts to these accounts based on the same criteria as used previously under depreciation accounting, amortization of the asset over a fixed period, retirement of the equipment at the end of the amortization period and recognition of any net salvage related to disposition of equipment in these accounts as a gain or loss. For equipment in

these accounts that was placed in service prior to implementation of amortization accounting, the net book value by vintage amortized over the remaining amortization period specified for each account and the original cost will be retired at the end of this period.

The amortization periods selected for each account or subaccount are based on a review of the existing depreciation rates for the accounts, typical service lives used for each type of equipment and a consideration of the period during which it is anticipated that most of the benefit of the equipment will be realized. The amortization periods are as follows:

Account Number	Description	Amortization Period, Years
390.00	Office Furniture and Equipment	20
390.20	Computer and Peripheral Equipment	5
393.00	Tools, Shop and Garage Equipment	20
396.00	Communication Equipment	15
397.00	Miscellaneous Equipment	15

PART V. RESULTS OF STUDY

PART V. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Table 1 presents the development of the net original cost used in the study. The results of the depreciation study are summarized in Table 2 which sets forth, by depreciable group, the estimated survivor curve, calculated annual accruals and book reserve related to net original cost and the annual amortization of net salvage. Table 3 presents the bringforward to June 30, 2024 of the book reserve as of June 30, 2023. Table 4 sets forth the calculation of estimated depreciation accruals for the twelve months ended June 30, 2024. The total amortization amount is incorporated in the total annual accrual in Table 2.

DESCRIPTION OF DETAILED TABULATIONS

Supporting statistical data for the estimates of average service lives and survivor curves, the annual depreciation calculations, and gross salvage and cost of removal for the years 2019-2023 are presented in three sections.

The section beginning on page VI-2 sets forth, for each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of the original life table plotted on the chart. A cumulative summary, by year installed, for utility plant and the supporting data for the original cost depreciation calculations are presented in the section beginning on page VII-3.

In the first section, the survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the type curve designation. The numeral used is the average life

derived from the entire curve from 100 percent to zero percent surviving. In cases where only a segment of the estimated curve is used in the depreciation calculation, the numeral used for identification purposes is not a designation of the average life of the group. The titles of the charts indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which were plotted. The experience band indicates the range of years for which the retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The tables of the calculated annual depreciation related to net original cost are presented in account sequence in the second section and indicate the estimated average survivor curves used in the calculations. The tables set forth, for each installation year, the original cost, calculated accrued depreciation, allocated book reserve, remaining life expectancy, and the calculated annual accrual.

Detailed tabulations setting forth the cost of removal, gross salvage and net salvage amounts, by account and year, are presented in the third section.

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2024

DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2024	- CUSTOMER ADVANCES	- CONTRIBUTIONS IN AID OF CONSTRUCTION	- EXCLUDED PROPERTY	= NET ORIGINAL COST AS OF JUNE 30, 2024
(1)	(2)	(3)	(4)	(5)	(6)
DEPRECIABLE PLANT					
354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION	10,500.00				10,500.00
354.30 STRUCTURES AND IMPROVEMENTS - SPP	34,072,469.32				34,072,469.32
354.40 STRUCTURES AND IMPROVEMENTS - TDP	11,154,235.89				11,154,235.89
354.70 STRUCTURES AND IMPROVEMENTS - GENERAL	7,355,375.51				7,355,375.51
355.00 POWER GENERATION EQUIPMENT	1,741,655.08				1,741,655.08
360.10 COLLECTION SEWERS - FORCE MAINS	4,583,561.31				4,583,561.31
361.10 COLLECTION SEWERS - GRAVITY MAINS	51,159,715.70				51,159,715.70
361.20 MANHOLES	6,300.00				6,300.00
363.00 SERVICES	8,621,985.33				8,621,985.33
364.00 FLOW MEASURING DEVICES	300,000.00				300,000.00
371.00 PUMPING EQUIPMENT	4,507,503.80				4,507,503.80
380.00 TREATMENT EQUIPMENT	18,864,065.79				18,864,065.79
382.00 OUTFALL SEWER LINES	25,662.14				25,662.14
390.00 OFFICE FURNITURE AND EQUIPMENT	55,805.80				55,805.80
390.20 COMPUTER AND PERIPHERAL EQUIPMENT	73,363.00				73,363.00
391.00 TRANSPORTATION EQUIPMENT	793,535.36				793,535.36
393.00 TOOLS, SHOP AND GARAGE EQUIPMENT	21,000.00				21,000.00
395.00 POWER OPERATED EQUIPMENT	1,134,169.60				1,134,169.60
396.00 COMMUNICATION EQUIPMENT	947,927.35				947,927.35
397.00 MISCELLANEOUS EQUIPMENT	3,059.83				3,059.83
TOTAL DEPRECIABLE PLANT	**145,431,890.81**	**0.00**	**0.00**	**0.00**	**145,431,890.81**
NONDEPRECIABLE PLANT					
353.40 LAND AND LAND RIGHTS - TDP	592,540.92				592,540.92
TOTAL NONDEPRECIABLE PLANT	**592,540.92**	**0.00**	**0.00**	**0.00**	**592,540.92**
TOTAL PLANT	**146,024,431.73**	**0.00**	**0.00**	**0.00**	**146,024,431.73**

PENNSYLVANIA AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF JUNE 30, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE	FMV PLANT	FMV RESERVE	CALCULATED EXPENSE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)	(9)	(10)	(11)=((9)-(10))*(7)
	DEPRECIABLE PLANT										
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	45-R3	10,500.00	135	10,365	274	2.61	37.8	10,500.00	135	271
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	34,072,469.32	8,986,667	25,085,802	785,262	2.30	31.9	70,070,584.51	31,906,045	877,784
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	11,154,235.89	7,044,159	4,110,077	158,754	1.42	25.9	43,619,182.20	29,258,359	203,924
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	35-S1	7,355,375.51	2,637,296	4,718,080	386,701	5.26	12.2	29,449,971.24	19,467,018	525,103
355.00	POWER GENERATION EQUIPMENT	35-S0.5	1,741,655.08	652,135	1,089,520	58,777	3.37	18.5	2,240,593.15	906,176	44,970
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	4,583,561.31	1,412,550	3,171,011	69,880	1.52	45.4	14,570,539.52	6,371,975	124,618
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	51,159,715.70	19,662,798	31,496,918	723,318	1.41	43.5	207,550,574.55	109,625,887	1,380,738
361.20	MANHOLES	50-S2.5	6,300.00	78	6,222	138	2.19	45.1	6,300.00	78	136
363.00	SERVICES	47-R3	8,621,985.33	4,683,777	3,938,208	229,445	2.66	17.2	44,413,477.48	32,945,368	305,052
364.00	FLOW MEASURING DEVICES	15-L2.5	300,000.00	201,522	98,478	32,023	10.67	3.1	655,213.52	441,134	22,842
371.00	PUMPING EQUIPMENT	30-S0.5	4,507,503.80	1,988,559	2,518,945	190,817	4.23	13.2	15,351,718.40	9,051,764	266,488
380.00	TREATMENT EQUIPMENT	35-S1.5	18,864,065.79	7,240,178	11,623,888	740,213	3.92	15.7	53,050,122.74	28,813,666	950,069
382.00	OUTFALL SEWER LINES	50-R3	25,662.14	22,054	3,608	567	2.21	6.4	492,092.57	418,519	1,626
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	55,805.80	6,749	49,057	2,914	5.22	16.8	55,021.72	6,401	2,538
390.20	COMPUTER AND PERIPHERAL EQUIPMENT	5-SQ	73,363.00	51,503	21,860	16,926	23.07	1.3	57,287.98	42,264	3,466
391.00	TRANSPORTATION EQUIPMENT	14-L4	793,535.36	386,529	407,006	85,371	10.76	4.8	847,086.83	428,177	45,075
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	21,000.00	539	20,461	1,036	4.93	19.8	21,000.00	539	1,009
395.00	POWER OPERATED EQUIPMENT	22-R2	1,134,169.60	526,945	607,225	53,959	4.76	11.3	1,383,392.33	708,174	32,140
396.00	COMMUNICATION EQUIPMENT	15-SQ	947,927.35	431,670	516,257	42,778	4.51	12.1	916,682.03	415,789	22,590
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	3,059.83	3,060	0	0	-	-	4,868.94	4,245	0
	TOTAL DEPRECIABLE PLANT		**145,431,890.81**	**55,938,903**	**89,492,988**	**3,579,153**	**2.46**		**484,766,209.71**	**270,811,713**	**4,810,439**
	NONDEPRECIABLE PLANT										
353.40	LAND AND LAND RIGHTS - TDP		592,540.92						13,335,927.13		
	TOTAL NONDEPRECIABLE PLANT		**592,540.92**						**13,335,927.13**		
	AMORTIZATION OF NET SALVAGE					**0**					
	TOTAL UTILITY PLANT		**146,024,431.73**	**55,938,903**	**89,492,988**	**3,579,153**			**498,102,136.84**		

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2024, OF BOOK RESERVE AS OF JUNE 30, 2023

ACCOUNT	BOOK RESERVE BALANCE AS OF 6/30/2023		PROJECTED DEPRECIATION ACCRUALS		PROJECTED RETIREMENTS		PROJECTED COST OF REMOVAL		PROJECTED SALVAGE		ACQUISITIONS AND ADJUSTMENTS		PROJECTED BOOK RESERVE BALANCE AS OF 6/30/2024
(1)	(2)	+	(3)	-	(4)	-	(5)	+	(6)	+	(7)	=	(8)
354.20	0		135										135
354.30	0		352,650								8,634,017		8,986,667
354.40	0		105,408								6,938,751		7,044,159
354.70	0		90,839								2,546,457		2,637,296
355.00	0		29,521		5,683						628,297		652,135
360.10	0		35,981								1,376,569		1,412,550
361.10	0		347,886		75,181		47,364				19,437,457		19,662,798
361.20	0		78										78
363.00	0		104,326		1,137		1,807				4,582,395		4,683,777
364.00	0		13,050								188,472		201,522
371.00	0		90,601								1,897,958		1,988,559
380.00	0		335,780								6,904,398		7,240,178
382.00	0		241								21,813		22,054
390.00	0		1,588								5,161		6,749
390.20	0		7,336								44,167		51,503
391.00	0		27,456		1,137		193				360,403		386,529
393.00	0		539										539
395.00	0		22,286								504,659		526,945
396.00	0		32,514								399,156		431,670
397.00	0		106								2,954		3,060
TOTAL	**0**		**1,598,321**		**83,138**		**49,365**		**0**		**54,473,084**		**55,938,903**

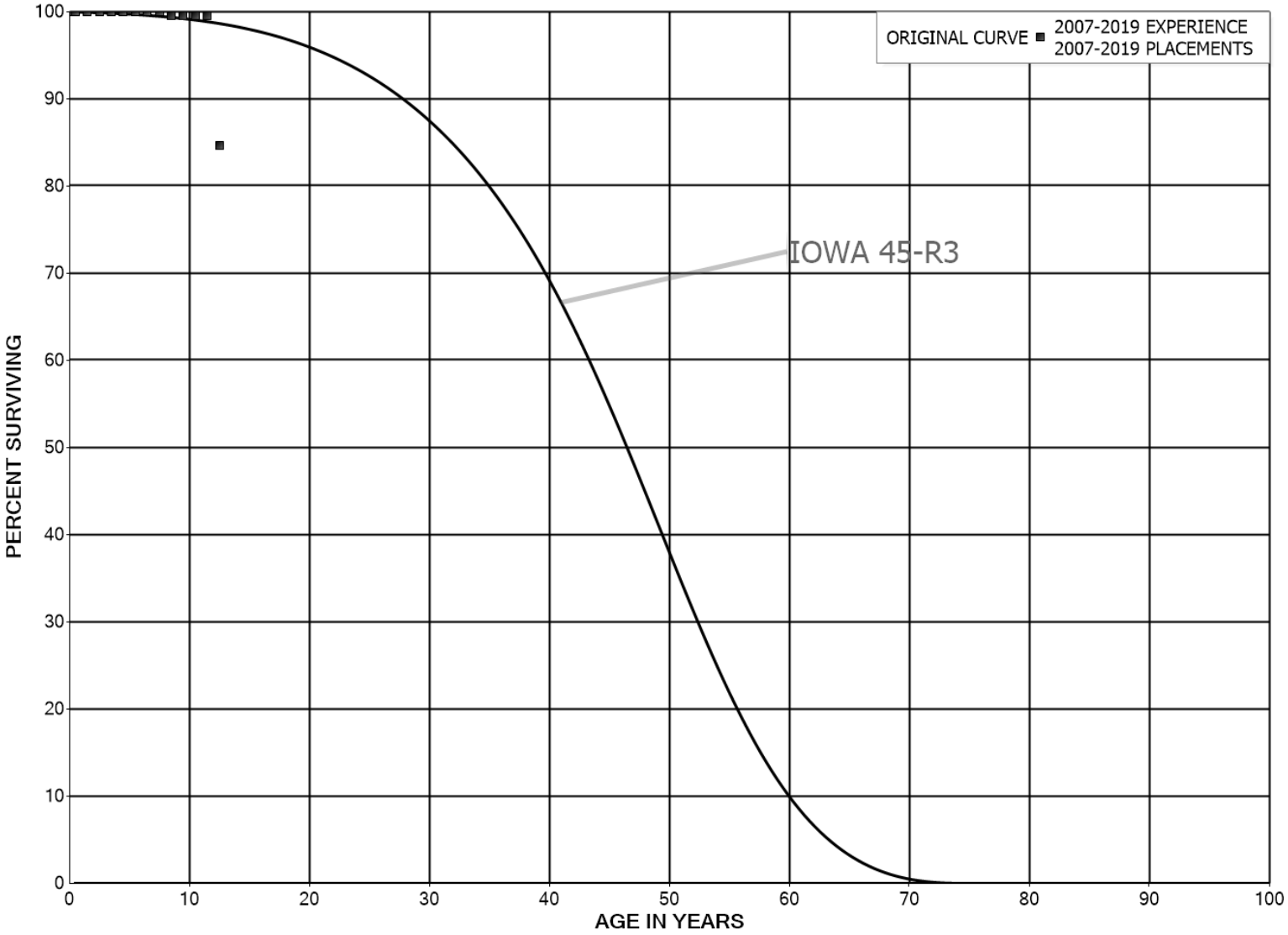
PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30, 2024

ACCOUNT	NET ORIGINALCOST AS OF 6/30/2023	NET ORIGINALCOST AS OF 6/30/2024	ACCRUAL RATE	AVERAGE ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED DEPRECIATION ACCRUALS
(1)	(2)	(3)	(4)	(5)=([(2)+(3)]/2)*(4)	(6)	(7)=(5)+(6)
354.20	0.00	10,500.00	2.57	135		135
354.30	0.00	34,072,469.32	2.07	352,650		352,650
354.40	0.00	11,154,235.89	1.89	105,408		105,408
354.70	0.00	7,355,375.51	2.47	90,839		90,839
355.00	0.00	1,741,655.08	3.39	29,521		29,521
360.10	0.00	4,583,561.31	1.57	35,981		35,981
361.10	0.00	51,159,715.70	1.36	347,886		347,886
361.20	0.00	6,300.00	2.47	78		78
363.00	0.00	8,621,985.33	2.42	104,326		104,326
364.00	0.00	300,000.00	8.70	13,050		13,050
371.00	0.00	4,507,503.80	4.02	90,601		90,601
380.00	0.00	18,864,065.79	3.56	335,780		335,780
382.00	0.00	25,662.14	1.88	241		241
390.00	0.00	55,805.80	5.69	1,588		1,588
390.20	0.00	73,363.00	20.00	7,336		7,336
391.00	0.00	793,535.36	6.92	27,456		27,456
393.00	0.00	21,000.00	5.13	539		539
395.00	0.00	1,134,169.60	3.93	22,286		22,286
396.00	0.00	947,927.35	6.86	32,514		32,514
397.00	0.00	3,059.83	6.90	106		106
TOTAL	**0.00**	**145,431,890.81**		**1,598,321**	**0**	**1,598,321**

PART VI. SERVICE LIFE STATISTICS

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

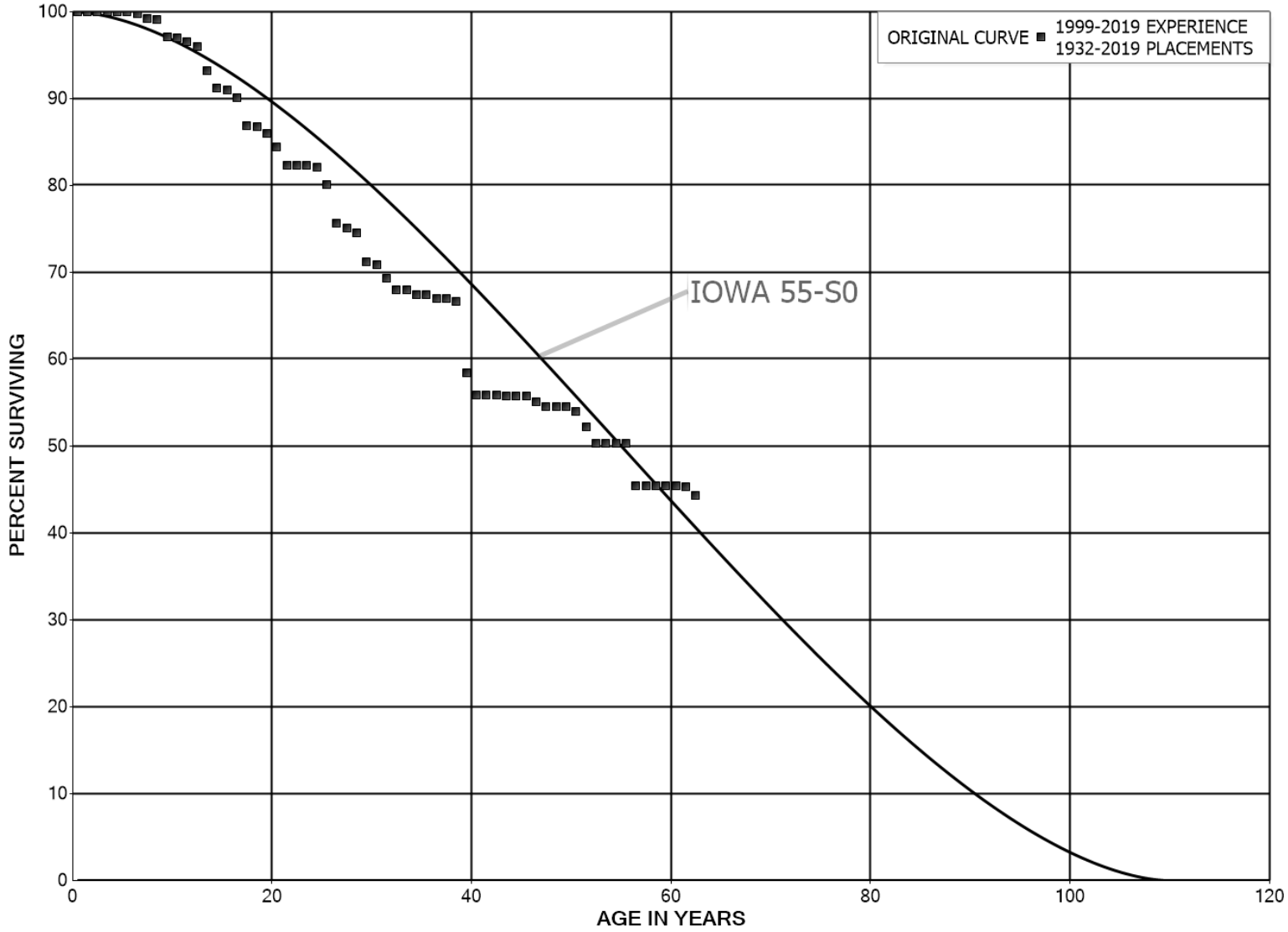
ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

ORIGINAL LIFE TABLE

PLACEMENT BAND 2007-2019 EXPERIENCE BAND 2007-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,844,636		0.0000	1.0000	100.00
0.5	3,478,774		0.0000	1.0000	100.00
1.5	1,864,154		0.0000	1.0000	100.00
2.5	516,452	0	0.0000	1.0000	100.00
3.5	479,797		0.0000	1.0000	100.00
4.5	437,900	416	0.0010	0.9990	100.00
5.5	422,717		0.0000	1.0000	99.90
6.5	321,516		0.0000	1.0000	99.90
7.5	321,516	1,408	0.0044	0.9956	99.90
8.5	311,522		0.0000	1.0000	99.47
9.5	311,522		0.0000	1.0000	99.47
10.5	134,415		0.0000	1.0000	99.47
11.5	20,659	3,076	0.1489	0.8511	99.47
12.5					84.66

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE

PLACEMENT BAND 1932-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	70,500,767		0.0000	1.0000	100.00
0.5	76,131,665		0.0000	1.0000	100.00
1.5	80,233,751	6,642	0.0001	0.9999	100.00
2.5	105,447,960		0.0000	1.0000	99.99
3.5	85,605,007	28,836	0.0003	0.9997	99.99
4.5	79,002,174	4,425	0.0001	0.9999	99.96
5.5	46,624,214	105,422	0.0023	0.9977	99.95
6.5	51,444,895	277,564	0.0054	0.9946	99.73
7.5	50,906,335	75,090	0.0015	0.9985	99.19
8.5	50,793,050	1,027,715	0.0202	0.9798	99.04
9.5	34,780,266	28,544	0.0008	0.9992	97.04
10.5	15,695,508	65,025	0.0041	0.9959	96.96
11.5	15,618,899	88,716	0.0057	0.9943	96.56
12.5	20,002,643	601,564	0.0301	0.9699	96.01
13.5	17,169,269	353,428	0.0206	0.9794	93.12
14.5	16,203,968	41,247	0.0025	0.9975	91.20
15.5	16,204,082	163,309	0.0101	0.9899	90.97
16.5	13,585,539	481,677	0.0355	0.9645	90.06
17.5	12,995,837	17,548	0.0014	0.9986	86.86
18.5	12,210,208	114,143	0.0093	0.9907	86.74
19.5	7,393,964	134,551	0.0182	0.9818	85.93
20.5	6,513,761	157,405	0.0242	0.9758	84.37
21.5	6,711,244	2,801	0.0004	0.9996	82.33
22.5	7,374,817	1,543	0.0002	0.9998	82.30
23.5	6,783,698	15,823	0.0023	0.9977	82.28
24.5	6,921,413	166,617	0.0241	0.9759	82.09
25.5	6,763,696	380,532	0.0563	0.9437	80.11
26.5	5,899,041	38,147	0.0065	0.9935	75.60
27.5	4,281,769	34,820	0.0081	0.9919	75.12
28.5	3,967,252	175,318	0.0442	0.9558	74.50
29.5	4,051,668	21,732	0.0054	0.9946	71.21
30.5	5,300,696	114,682	0.0216	0.9784	70.83
31.5	4,027,463	76,382	0.0190	0.9810	69.30
32.5	2,813,504	2,190	0.0008	0.9992	67.98
33.5	2,649,698	20,846	0.0079	0.9921	67.93
34.5	1,122,954		0.0000	1.0000	67.40
35.5	398,615	2,457	0.0062	0.9938	67.40
36.5	369,394		0.0000	1.0000	66.98
37.5	339,885	1,942	0.0057	0.9943	66.98
38.5	249,055	30,753	0.1235	0.8765	66.60

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1932-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	877,505	37,754	0.0430	0.9570	58.37
40.5	1,351,121		0.0000	1.0000	55.86
41.5	19,298,436	4,893	0.0003	0.9997	55.86
42.5	19,293,543	30,808	0.0016	0.9984	55.85
43.5	32,745,779		0.0000	1.0000	55.76
44.5	14,343,608	10,968	0.0008	0.9992	55.76
45.5	14,332,640	153,806	0.0107	0.9893	55.72
46.5	14,199,715	156,087	0.0110	0.9890	55.12
47.5	552,598		0.0000	1.0000	54.51
48.5	1,223,925		0.0000	1.0000	54.51
49.5	1,265,936	12,500	0.0099	0.9901	54.51
50.5	1,284,936	43,517	0.0339	0.9661	53.98
51.5	570,093	20,853	0.0366	0.9634	52.15
52.5	524,823		0.0000	1.0000	50.24
53.5	524,823		0.0000	1.0000	50.24
54.5	447,474		0.0000	1.0000	50.24
55.5	447,474	42,843	0.0957	0.9043	50.24
56.5	13,313,486	1,903	0.0001	0.9999	45.43
57.5	13,311,583		0.0000	1.0000	45.42
58.5	13,049,341	13	0.0000	1.0000	45.42
59.5	140,486		0.0000	1.0000	45.42
60.5	140,486	363	0.0026	0.9974	45.42
61.5	140,123	3,040	0.0217	0.9783	45.31
62.5					44.32
63.5					
64.5					
65.5					
66.5					
67.5					
68.5	39,928		0.0000		
69.5	39,928		0.0000		
70.5	39,928		0.0000		
71.5	39,928		0.0000		
72.5	40,428		0.0000		
73.5	39,928		0.0000		
74.5	39,928		0.0000		
75.5	39,928		0.0000		
76.5	602		0.0000		
77.5	602		0.0000		
78.5	602		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

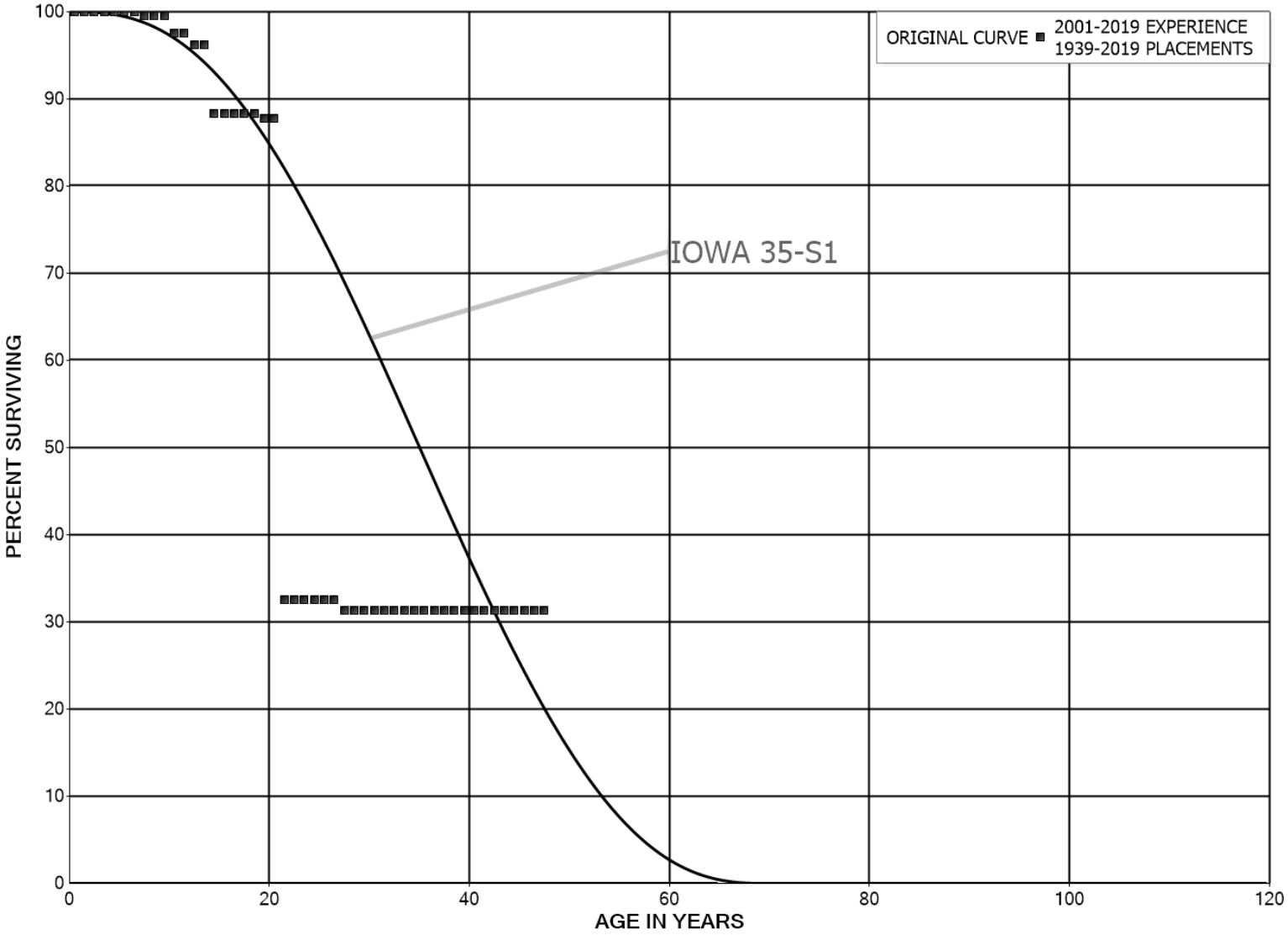
ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1932-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	602		0.0000		
80.5	602		0.0000		
81.5	602		0.0000		
82.5	602		0.0000		
83.5	602		0.0000		
84.5	602		0.0000		
85.5	602		0.0000		
86.5	602		0.0000		
87.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,331,347		0.0000	1.0000	100.00
0.5	2,248,872	400	0.0002	0.9998	100.00
1.5	2,139,519		0.0000	1.0000	99.98
2.5	2,007,976		0.0000	1.0000	99.98
3.5	1,998,798		0.0000	1.0000	99.98
4.5	978,189		0.0000	1.0000	99.98
5.5	566,034		0.0000	1.0000	99.98
6.5	540,776	2,524	0.0047	0.9953	99.98
7.5	668,631		0.0000	1.0000	99.52
8.5	661,526		0.0000	1.0000	99.52
9.5	622,592	12,303	0.0198	0.9802	99.52
10.5	529,371	373	0.0007	0.9993	97.55
11.5	209,362	2,752	0.0131	0.9869	97.48
12.5	204,311		0.0000	1.0000	96.20
13.5	220,425	18,073	0.0820	0.9180	96.20
14.5	208,207		0.0000	1.0000	88.31
15.5	208,207		0.0000	1.0000	88.31
16.5	165,317		0.0000	1.0000	88.31
17.5	193,471		0.0000	1.0000	88.31
18.5	210,457	1,510	0.0072	0.9928	88.31
19.5	223,914		0.0000	1.0000	87.68
20.5	223,914	140,772	0.6287	0.3713	87.68
21.5	67,028		0.0000	1.0000	32.56
22.5	73,481		0.0000	1.0000	32.56
23.5	73,481		0.0000	1.0000	32.56
24.5	73,481		0.0000	1.0000	32.56
25.5	44,261		0.0000	1.0000	32.56
26.5	27,275	1,047	0.0384	0.9616	32.56
27.5	11,260		0.0000	1.0000	31.31
28.5	11,260		0.0000	1.0000	31.31
29.5	11,260		0.0000	1.0000	31.31
30.5	11,260		0.0000	1.0000	31.31
31.5	11,260		0.0000	1.0000	31.31
32.5	11,260		0.0000	1.0000	31.31
33.5	11,260		0.0000	1.0000	31.31
34.5	11,260		0.0000	1.0000	31.31
35.5	450		0.0000	1.0000	31.31
36.5	450		0.0000	1.0000	31.31
37.5	450		0.0000	1.0000	31.31
38.5	450		0.0000	1.0000	31.31

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	450		0.0000	1.0000	31.31
40.5	450		0.0000	1.0000	31.31
41.5	450		0.0000	1.0000	31.31
42.5	450		0.0000	1.0000	31.31
43.5	450		0.0000	1.0000	31.31
44.5	450		0.0000	1.0000	31.31
45.5	450		0.0000	1.0000	31.31
46.5	450		0.0000	1.0000	31.31
47.5					31.31
48.5					
49.5					
50.5					
51.5					
52.5					
53.5					
54.5					
55.5					
56.5					
57.5					
58.5					
59.5					
60.5					
61.5					
62.5					
63.5					
64.5					
65.5					
66.5					
67.5					
68.5	3,802		0.0000		
69.5	3,802		0.0000		
70.5	3,802	283	0.0744		
71.5	3,519		0.0000		
72.5	3,519		0.0000		
73.5	3,519		0.0000		
74.5	3,519		0.0000		
75.5	3,519		0.0000		
76.5	3,519		0.0000		
77.5	3,519		0.0000		
78.5	3,519		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

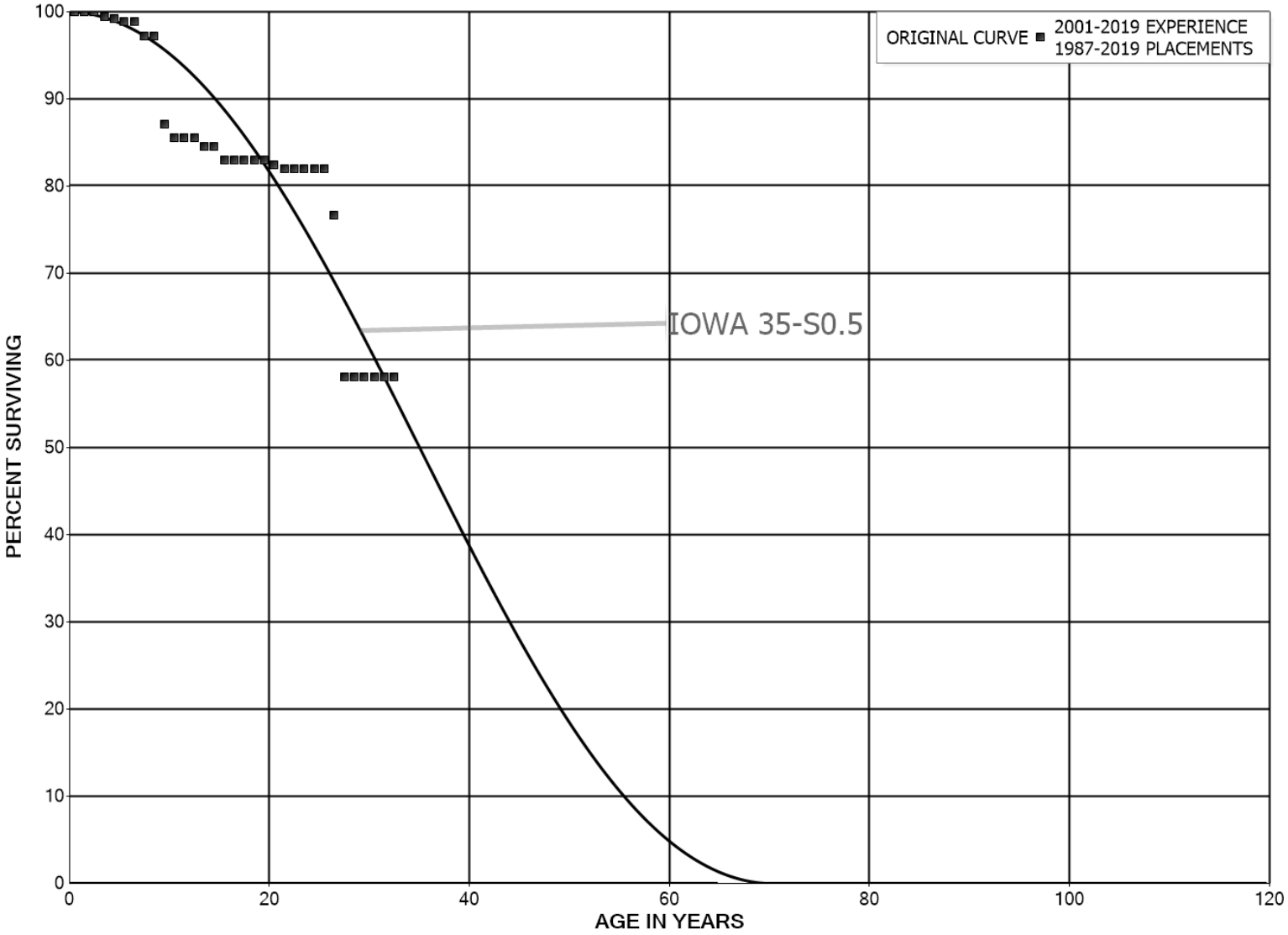
ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	3,519		0.0000		
80.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 355.00 POWER GENERATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

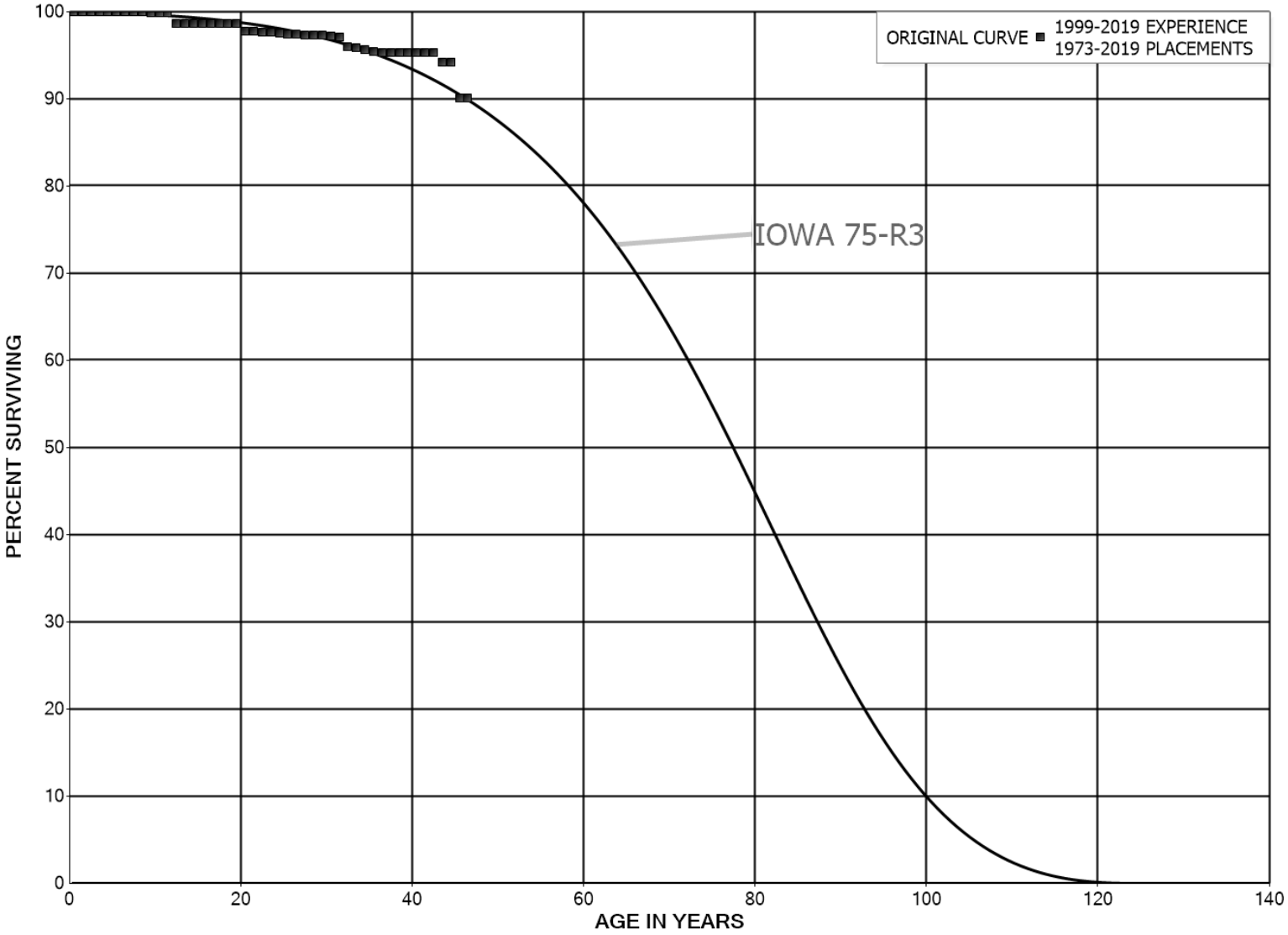
ACCOUNT 355.00 POWER GENERATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1987-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,656,122		0.0000	1.0000	100.00
0.5	3,685,338		0.0000	1.0000	100.00
1.5	4,385,880		0.0000	1.0000	100.00
2.5	4,494,639	26,926	0.0060	0.9940	100.00
3.5	4,479,665	10,161	0.0023	0.9977	99.40
4.5	4,398,000	14,523	0.0033	0.9967	99.18
5.5	3,773,674	1,387	0.0004	0.9996	98.85
6.5	3,828,658	61,470	0.0161	0.9839	98.81
7.5	3,336,361		0.0000	1.0000	97.23
8.5	3,321,984	347,576	0.1046	0.8954	97.23
9.5	2,953,727	51,388	0.0174	0.9826	87.05
10.5	328,249		0.0000	1.0000	85.54
11.5	144,528		0.0000	1.0000	85.54
12.5	267,555	3,097	0.0116	0.9884	85.54
13.5	327,093		0.0000	1.0000	84.55
14.5	278,538	5,336	0.0192	0.9808	84.55
15.5	281,064		0.0000	1.0000	82.93
16.5	293,645		0.0000	1.0000	82.93
17.5	241,944		0.0000	1.0000	82.93
18.5	203,466		0.0000	1.0000	82.93
19.5	203,466	1,204	0.0059	0.9941	82.93
20.5	202,262	1,103	0.0055	0.9945	82.44
21.5	432,455		0.0000	1.0000	81.99
22.5	402,008		0.0000	1.0000	81.99
23.5	402,008		0.0000	1.0000	81.99
24.5	402,008		0.0000	1.0000	81.99
25.5	402,978	26,388	0.0655	0.9345	81.99
26.5	174,978	42,310	0.2418	0.7582	76.62
27.5	89,880		0.0000	1.0000	58.09
28.5	68,585		0.0000	1.0000	58.09
29.5	68,585		0.0000	1.0000	58.09
30.5	19,246		0.0000	1.0000	58.09
31.5	19,246		0.0000	1.0000	58.09
32.5					58.09

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	31,766,704	19	0.0000	1.0000	100.00
0.5	28,215,316	26	0.0000	1.0000	100.00
1.5	35,558,986	33	0.0000	1.0000	100.00
2.5	23,783,577	70	0.0000	1.0000	100.00
3.5	21,373,939	350	0.0000	1.0000	100.00
4.5	18,774,036	315	0.0000	1.0000	100.00
5.5	14,425,014	397	0.0000	1.0000	100.00
6.5	14,188,090	1,611	0.0001	0.9999	99.99
7.5	14,122,868	1,747	0.0001	0.9999	99.98
8.5	13,850,582	16,747	0.0012	0.9988	99.97
9.5	13,465,099	64	0.0000	1.0000	99.85
10.5	13,318,392	82	0.0000	1.0000	99.85
11.5	10,748,868	127,626	0.0119	0.9881	99.85
12.5	9,661,386		0.0000	1.0000	98.66
13.5	7,868,737	3,291	0.0004	0.9996	98.66
14.5	7,779,655	99	0.0000	1.0000	98.62
15.5	5,905,707	9	0.0000	1.0000	98.62
16.5	5,774,986	949	0.0002	0.9998	98.62
17.5	5,344,267	1,253	0.0002	0.9998	98.60
18.5	4,614,847	826	0.0002	0.9998	98.58
19.5	4,197,905	37,017	0.0088	0.9912	98.56
20.5	3,986,776	70	0.0000	1.0000	97.69
21.5	4,475,797	1,897	0.0004	0.9996	97.69
22.5	3,907,599	569	0.0001	0.9999	97.65
23.5	4,900,347	3,932	0.0008	0.9992	97.64
24.5	6,419,851	13,411	0.0021	0.9979	97.56
25.5	6,580,720	788	0.0001	0.9999	97.35
26.5	6,033,834	1,095	0.0002	0.9998	97.34
27.5	6,011,515	2,049	0.0003	0.9997	97.32
28.5	5,991,855	3,135	0.0005	0.9995	97.29
29.5	6,011,945	3,365	0.0006	0.9994	97.24
30.5	5,911,879	4,784	0.0008	0.9992	97.19
31.5	5,517,306	65,876	0.0119	0.9881	97.11
32.5	5,225,480	4,106	0.0008	0.9992	95.95
33.5	5,192,765	13,636	0.0026	0.9974	95.87
34.5	4,869,190	12,733	0.0026	0.9974	95.62
35.5	4,856,457	2,869	0.0006	0.9994	95.37
36.5	4,661,206	15	0.0000	1.0000	95.31
37.5	4,607,713		0.0000	1.0000	95.31
38.5	4,446,768	1,883	0.0004	0.9996	95.31

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

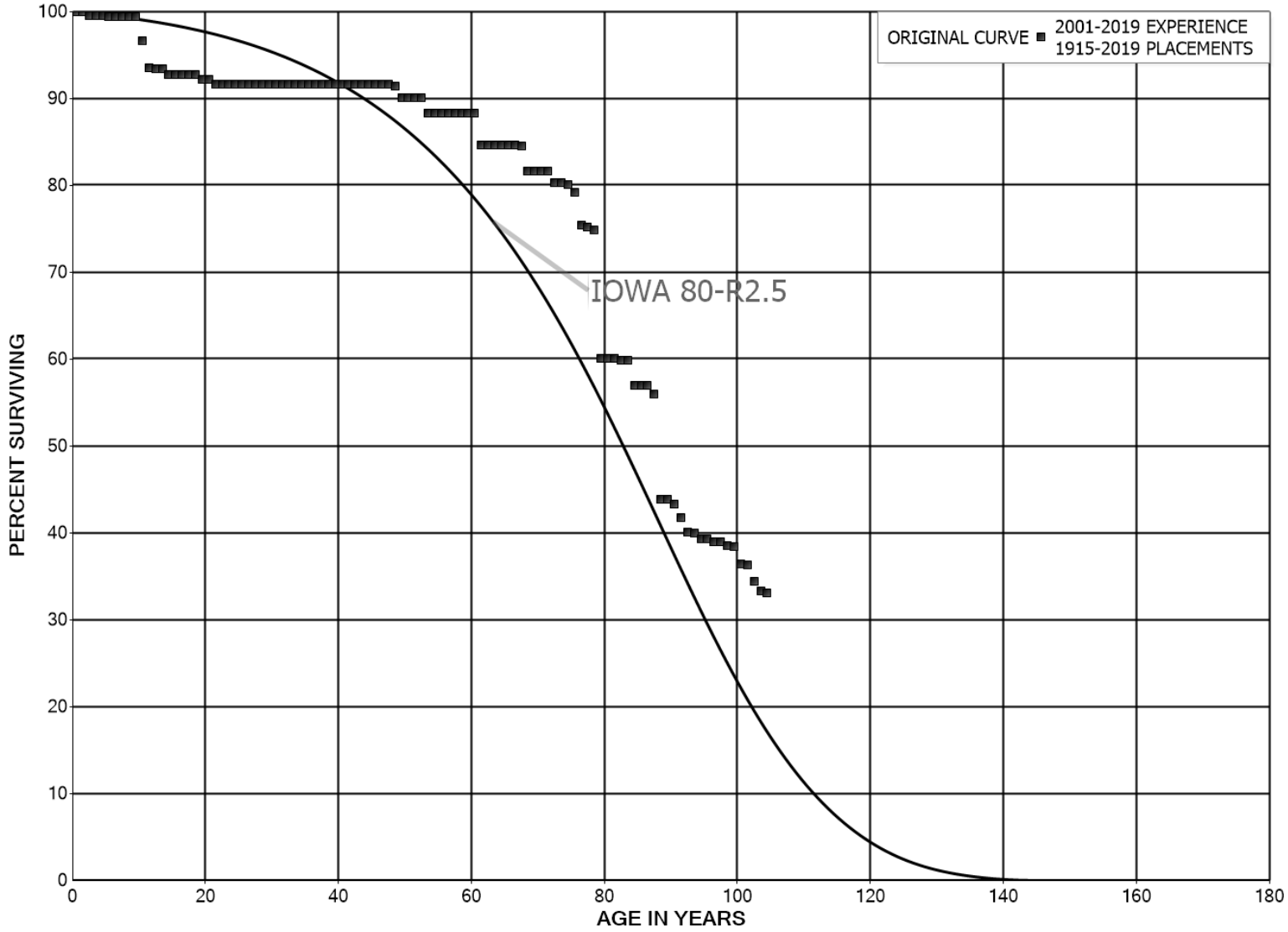
ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1973-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,369,779	82	0.0000	1.0000	95.27
40.5	4,295,948	6	0.0000	1.0000	95.27
41.5	4,025,587	0	0.0000	1.0000	95.27
42.5	3,566,737	42,283	0.0119	0.9881	95.27
43.5	2,553,034		0.0000	1.0000	94.14
44.5	1,703,254	73,783	0.0433	0.9567	94.14
45.5	125,695		0.0000	1.0000	90.06
46.5					90.06

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	123,698,865	1,489	0.0000	1.0000	100.00
0.5	80,968,134	1,744	0.0000	1.0000	100.00
1.5	71,427,735	349,743	0.0049	0.9951	100.00
2.5	61,491,291		0.0000	1.0000	99.51
3.5	47,985,505		0.0000	1.0000	99.51
4.5	43,496,282	26,093	0.0006	0.9994	99.51
5.5	34,622,702	11,064	0.0003	0.9997	99.45
6.5	36,236,717	10,556	0.0003	0.9997	99.42
7.5	44,473,440	0	0.0000	1.0000	99.39
8.5	44,403,805	13,334	0.0003	0.9997	99.39
9.5	42,579,956	1,180,167	0.0277	0.9723	99.36
10.5	27,257,562	886,763	0.0325	0.9675	96.60
11.5	23,041,413	10,064	0.0004	0.9996	93.46
12.5	15,696,984	13,300	0.0008	0.9992	93.42
13.5	13,197,516	82,522	0.0063	0.9937	93.34
14.5	9,898,866	187	0.0000	1.0000	92.76
15.5	8,175,329	367	0.0000	1.0000	92.75
16.5	11,005,722	1,374	0.0001	0.9999	92.75
17.5	22,668,123		0.0000	1.0000	92.74
18.5	22,367,436	144,378	0.0065	0.9935	92.74
19.5	21,841,271		0.0000	1.0000	92.14
20.5	10,429,000	56,430	0.0054	0.9946	92.14
21.5	13,494,984		0.0000	1.0000	91.64
22.5	12,095,717		0.0000	1.0000	91.64
23.5	13,846,891		0.0000	1.0000	91.64
24.5	14,182,481		0.0000	1.0000	91.64
25.5	19,071,002		0.0000	1.0000	91.64
26.5	16,170,692		0.0000	1.0000	91.64
27.5	36,060,280		0.0000	1.0000	91.64
28.5	35,923,542		0.0000	1.0000	91.64
29.5	33,683,971		0.0000	1.0000	91.64
30.5	8,391,683	866	0.0001	0.9999	91.64
31.5	8,167,272	21	0.0000	1.0000	91.63
32.5	8,027,418		0.0000	1.0000	91.63
33.5	7,266,714		0.0000	1.0000	91.63
34.5	5,540,059		0.0000	1.0000	91.63
35.5	3,406,034		0.0000	1.0000	91.63
36.5	3,951,146		0.0000	1.0000	91.63
37.5	4,287,296		0.0000	1.0000	91.63
38.5	4,273,219		0.0000	1.0000	91.63

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,243,666		0.0000	1.0000	91.63
40.5	41,503,891	5,447	0.0001	0.9999	91.63
41.5	41,043,016	49	0.0000	1.0000	91.62
42.5	41,341,828		0.0000	1.0000	91.62
43.5	20,516,395		0.0000	1.0000	91.62
44.5	17,262,745	4,573	0.0003	0.9997	91.62
45.5	17,447,879		0.0000	1.0000	91.60
46.5	16,922,111	1,617	0.0001	0.9999	91.60
47.5	1,493,981	2,878	0.0019	0.9981	91.59
48.5	1,491,103	21,283	0.0143	0.9857	91.41
49.5	995,707	187	0.0002	0.9998	90.11
50.5	1,249,631		0.0000	1.0000	90.09
51.5	1,214,773		0.0000	1.0000	90.09
52.5	1,253,366	24,618	0.0196	0.9804	90.09
53.5	28,374,663		0.0000	1.0000	88.32
54.5	38,998,170		0.0000	1.0000	88.32
55.5	39,986,553		0.0000	1.0000	88.32
56.5	13,005,874		0.0000	1.0000	88.32
57.5	59,432,346		0.0000	1.0000	88.32
58.5	60,820,282	557	0.0000	1.0000	88.32
59.5	59,761,303	747	0.0000	1.0000	88.32
60.5	2,094,297	87,761	0.0419	0.9581	88.32
61.5	22,663,762	8	0.0000	1.0000	84.62
62.5	21,213,491	61	0.0000	1.0000	84.62
63.5	21,215,934	289	0.0000	1.0000	84.62
64.5	46,353		0.0000	1.0000	84.62
65.5	1,102,303		0.0000	1.0000	84.62
66.5	1,102,303	1,673	0.0015	0.9985	84.62
67.5	1,100,630	37,140	0.0337	0.9663	84.49
68.5	1,259,440		0.0000	1.0000	81.64
69.5	290,689		0.0000	1.0000	81.64
70.5	962,463	168	0.0002	0.9998	81.64
71.5	962,295	15,230	0.0158	0.9842	81.62
72.5	1,042,298	993	0.0010	0.9990	80.33
73.5	946,072	2,053	0.0022	0.9978	80.25
74.5	683,176	7,508	0.0110	0.9890	80.08
75.5	675,668	32,767	0.0485	0.9515	79.20
76.5	642,901	1,310	0.0020	0.9980	75.36
77.5	1,531,686	8,017	0.0052	0.9948	75.20
78.5	1,523,669	299,242	0.1964	0.8036	74.81

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

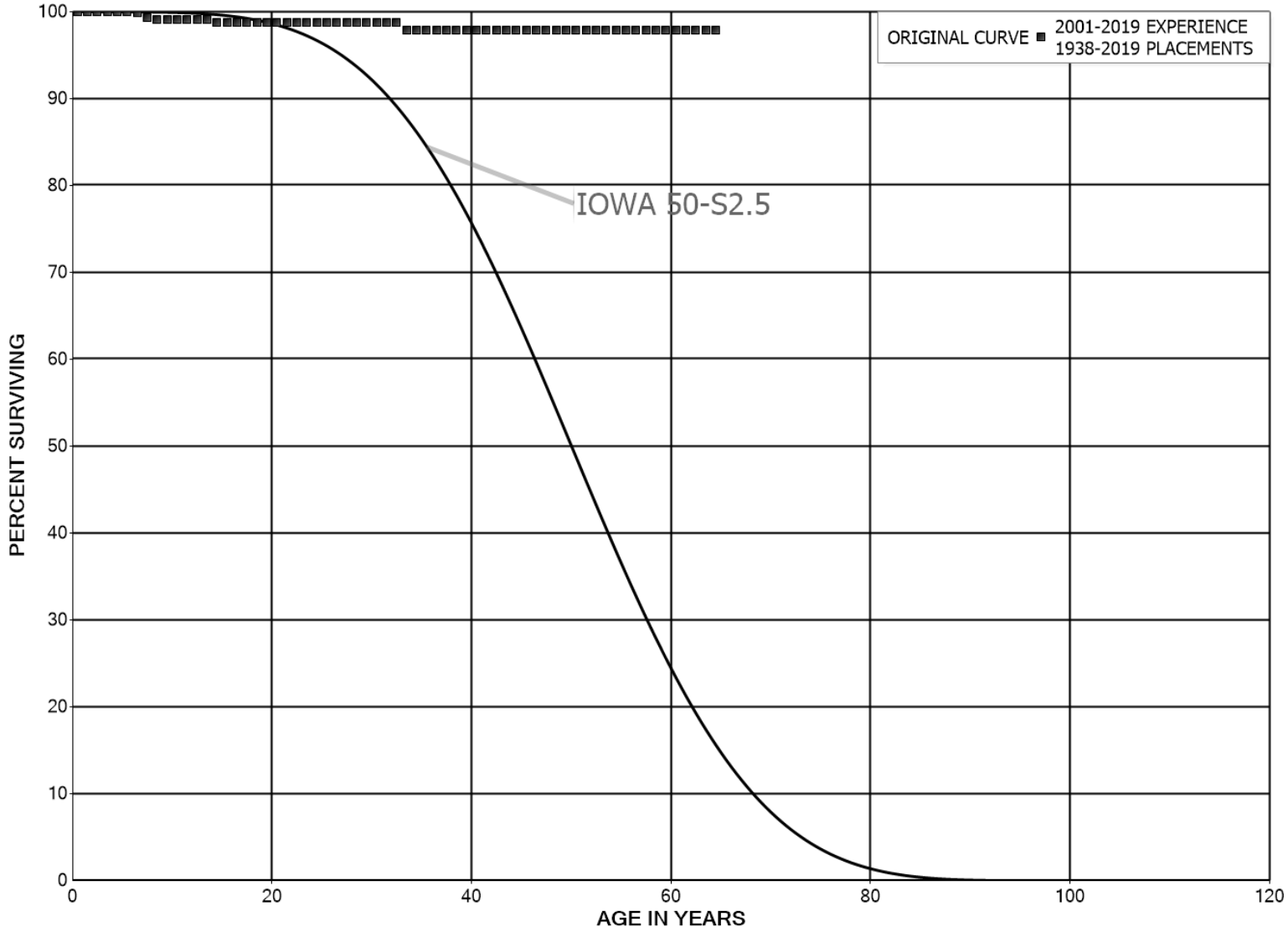
ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	1,224,427	291	0.0002	0.9998	60.12
80.5	1,522,508		0.0000	1.0000	60.10
81.5	632,413	2,303	0.0036	0.9964	60.10
82.5	648,868		0.0000	1.0000	59.89
83.5	648,868	31,252	0.0482	0.9518	59.89
84.5	601,981	10	0.0000	1.0000	57.00
85.5	722,814		0.0000	1.0000	57.00
86.5	722,814	13,485	0.0187	0.9813	57.00
87.5	709,329	153,014	0.2157	0.7843	55.94
88.5	556,315	264	0.0005	0.9995	43.87
89.5	329,027	4,352	0.0132	0.9868	43.85
90.5	306,175	11,276	0.0368	0.9632	43.27
91.5	294,898	11,132	0.0377	0.9623	41.68
92.5	283,767	1,273	0.0045	0.9955	40.10
93.5	282,494	4,366	0.0155	0.9845	39.92
94.5	278,128	221	0.0008	0.9992	39.31
95.5	277,906	1,967	0.0071	0.9929	39.27
96.5	275,939	42	0.0002	0.9998	39.00
97.5	3,804,626	42,906	0.0113	0.9887	38.99
98.5	3,761,720	15,091	0.0040	0.9960	38.55
99.5	3,616,599	191,754	0.0530	0.9470	38.40
100.5	3,424,846	6,012	0.0018	0.9982	36.36
101.5	96,405	5,167	0.0536	0.9464	36.30
102.5	91,238	2,967	0.0325	0.9675	34.35
103.5	88,271	309	0.0035	0.9965	33.23
104.5					33.12

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 361.20 MANHOLES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1938-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	14,379,651		0.0000	1.0000	100.00
0.5	10,176,887		0.0000	1.0000	100.00
1.5	10,661,285	0	0.0000	1.0000	100.00
2.5	11,952,425		0.0000	1.0000	100.00
3.5	12,083,028	911	0.0001	0.9999	100.00
4.5	7,585,455		0.0000	1.0000	99.99
5.5	5,573,639	6,667	0.0012	0.9988	99.99
6.5	4,589,383	27,566	0.0060	0.9940	99.87
7.5	4,569,090	10,961	0.0024	0.9976	99.27
8.5	5,066,097		0.0000	1.0000	99.03
9.5	5,304,644		0.0000	1.0000	99.03
10.5	5,838,060		0.0000	1.0000	99.03
11.5	5,353,439		0.0000	1.0000	99.03
12.5	4,555,554		0.0000	1.0000	99.03
13.5	4,114,028	12,188	0.0030	0.9970	99.03
14.5	2,635,311		0.0000	1.0000	98.74
15.5	2,105,291	0	0.0000	1.0000	98.74
16.5	2,247,105	472	0.0002	0.9998	98.74
17.5	2,934,821		0.0000	1.0000	98.72
18.5	2,849,242		0.0000	1.0000	98.72
19.5	2,782,656		0.0000	1.0000	98.72
20.5	2,425,509	0	0.0000	1.0000	98.72
21.5	1,772,096		0.0000	1.0000	98.72
22.5	970,343		0.0000	1.0000	98.72
23.5	1,299,611		0.0000	1.0000	98.72
24.5	1,741,110		0.0000	1.0000	98.72
25.5	2,636,710		0.0000	1.0000	98.72
26.5	3,361,749		0.0000	1.0000	98.72
27.5	3,450,899		0.0000	1.0000	98.72
28.5	3,240,536		0.0000	1.0000	98.72
29.5	2,574,979		0.0000	1.0000	98.72
30.5	1,538,799		0.0000	1.0000	98.72
31.5	1,635,548		0.0000	1.0000	98.72
32.5	1,551,747	13,277	0.0086	0.9914	98.72
33.5	1,328,056		0.0000	1.0000	97.88
34.5	1,038,030		0.0000	1.0000	97.88
35.5	1,093,592		0.0000	1.0000	97.88
36.5	1,326,879		0.0000	1.0000	97.88
37.5	1,450,927		0.0000	1.0000	97.88
38.5	1,304,196		0.0000	1.0000	97.88

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1938-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	994,944		0.0000	1.0000	97.88
40.5	2,263,935		0.0000	1.0000	97.88
41.5	2,043,826		0.0000	1.0000	97.88
42.5	2,216,232		0.0000	1.0000	97.88
43.5	2,406,018		0.0000	1.0000	97.88
44.5	2,040,304		0.0000	1.0000	97.88
45.5	2,008,665		0.0000	1.0000	97.88
46.5	1,708,150		0.0000	1.0000	97.88
47.5	301,817		0.0000	1.0000	97.88
48.5	301,817		0.0000	1.0000	97.88
49.5	170,327		0.0000	1.0000	97.88
50.5	201,568		0.0000	1.0000	97.88
51.5	166,180		0.0000	1.0000	97.88
52.5	172,781		0.0000	1.0000	97.88
53.5	1,995,623		0.0000	1.0000	97.88
54.5	1,827,036		0.0000	1.0000	97.88
55.5	1,951,871		0.0000	1.0000	97.88
56.5	131,436		0.0000	1.0000	97.88
57.5	10,950,272		0.0000	1.0000	97.88
58.5	10,950,272		0.0000	1.0000	97.88
59.5	10,825,437		0.0000	1.0000	97.88
60.5	89,564		0.0000	1.0000	97.88
61.5	89,564		0.0000	1.0000	97.88
62.5	89,564		0.0000	1.0000	97.88
63.5	89,564		0.0000	1.0000	97.88
64.5					97.88
65.5	100,437		0.0000		
66.5	100,437		0.0000		
67.5	123,426		0.0000		
68.5	167,059	22,989	0.1376		
69.5	43,633		0.0000		
70.5	84,331		0.0000		
71.5	84,331		0.0000		
72.5	90,699		0.0000		
73.5	84,331		0.0000		
74.5	43,633		0.0000		
75.5	43,633		0.0000		
76.5	43,633		0.0000		
77.5	306,691		0.0000		
78.5	306,691		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

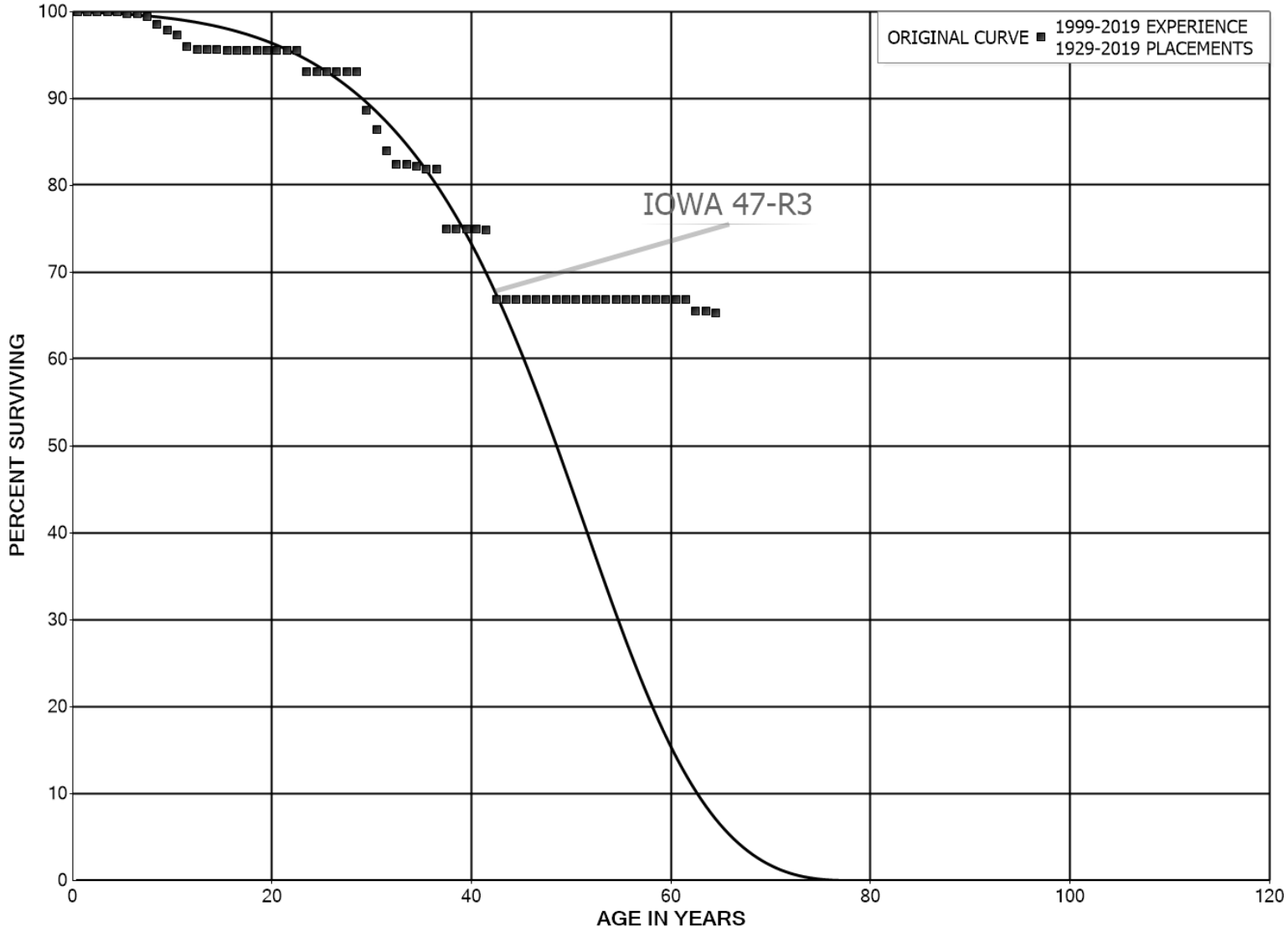
ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1938-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	306,691	1,171	0.0038		
80.5	263,058		0.0000		
81.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 363.00 SERVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1929-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	10,615,796	0	0.0000	1.0000	100.00
0.5	10,038,138	0	0.0000	1.0000	100.00
1.5	9,510,472	60	0.0000	1.0000	100.00
2.5	8,790,677	5,668	0.0006	0.9994	100.00
3.5	8,679,530	421	0.0000	1.0000	99.93
4.5	7,932,683	12,635	0.0016	0.9984	99.93
5.5	6,966,530	2,890	0.0004	0.9996	99.77
6.5	8,411,000	31,963	0.0038	0.9962	99.73
7.5	8,278,555	65,894	0.0080	0.9920	99.35
8.5	8,313,922	64,649	0.0078	0.9922	98.56
9.5	8,351,147	42,617	0.0051	0.9949	97.79
10.5	6,470,010	87,729	0.0136	0.9864	97.29
11.5	6,246,021	19,892	0.0032	0.9968	95.98
12.5	5,858,877	0	0.0000	1.0000	95.67
13.5	4,698,450	4,942	0.0011	0.9989	95.67
14.5	4,095,435	871	0.0002	0.9998	95.57
15.5	3,284,377		0.0000	1.0000	95.55
16.5	3,511,888	0	0.0000	1.0000	95.55
17.5	3,953,464	0	0.0000	1.0000	95.55
18.5	3,909,166	55	0.0000	1.0000	95.55
19.5	3,630,733		0.0000	1.0000	95.55
20.5	3,925,137		0.0000	1.0000	95.55
21.5	3,646,749		0.0000	1.0000	95.55
22.5	3,395,484	87,997	0.0259	0.9741	95.55
23.5	3,780,922		0.0000	1.0000	93.07
24.5	4,115,954	497	0.0001	0.9999	93.07
25.5	5,003,579		0.0000	1.0000	93.06
26.5	5,176,777		0.0000	1.0000	93.06
27.5	4,635,070		0.0000	1.0000	93.06
28.5	4,421,930	209,578	0.0474	0.9526	93.06
29.5	3,596,999	92,585	0.0257	0.9743	88.65
30.5	2,947,708	80,733	0.0274	0.9726	86.37
31.5	2,783,645	51,927	0.0187	0.9813	84.00
32.5	2,491,265	1,241	0.0005	0.9995	82.43
33.5	2,228,511	4,871	0.0022	0.9978	82.39
34.5	1,965,612	8,461	0.0043	0.9957	82.21
35.5	1,925,423	503	0.0003	0.9997	81.86
36.5	1,973,278	167,021	0.0846	0.9154	81.84
37.5	1,839,375	192	0.0001	0.9999	74.91
38.5	1,657,395		0.0000	1.0000	74.90

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,207,182		0.0000	1.0000	74.90
40.5	1,197,802	385	0.0003	0.9997	74.90
41.5	1,022,673	110,064	0.1076	0.8924	74.88
42.5	886,687		0.0000	1.0000	66.82
43.5	1,408,938		0.0000	1.0000	66.82
44.5	900,914		0.0000	1.0000	66.82
45.5	855,938		0.0000	1.0000	66.82
46.5	736,586		0.0000	1.0000	66.82
47.5	156,414		0.0000	1.0000	66.82
48.5	155,860		0.0000	1.0000	66.82
49.5	82,277		0.0000	1.0000	66.82
50.5	145,022		0.0000	1.0000	66.82
51.5	132,653		0.0000	1.0000	66.82
52.5	134,754	0	0.0000	1.0000	66.82
53.5	137,757		0.0000	1.0000	66.82
54.5	20,119		0.0000	1.0000	66.82
55.5	100,869		0.0000	1.0000	66.82
56.5	100,869		0.0000	1.0000	66.82
57.5	97,866		0.0000	1.0000	66.82
58.5	256,316		0.0000	1.0000	66.82
59.5	180,162	20	0.0001	0.9999	66.82
60.5	228,822		0.0000	1.0000	66.81
61.5	228,822	4,595	0.0201	0.9799	66.81
62.5	50,781		0.0000	1.0000	65.47
63.5	50,781	162	0.0032	0.9968	65.47
64.5					65.26
65.5	60,144		0.0000		
66.5	60,144		0.0000		
67.5	60,144		0.0000		
68.5	70,211		0.0000		
69.5	13,932	819	0.0588		
70.5	36,101		0.0000		
71.5	36,101	4,521	0.1252		
72.5	31,580	1,251	0.0396		
73.5	30,329	442	0.0146		
74.5	6,899	644	0.0933		
75.5	6,255		0.0000		
76.5	6,255		0.0000		
77.5	151,010		0.0000		
78.5	151,010		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

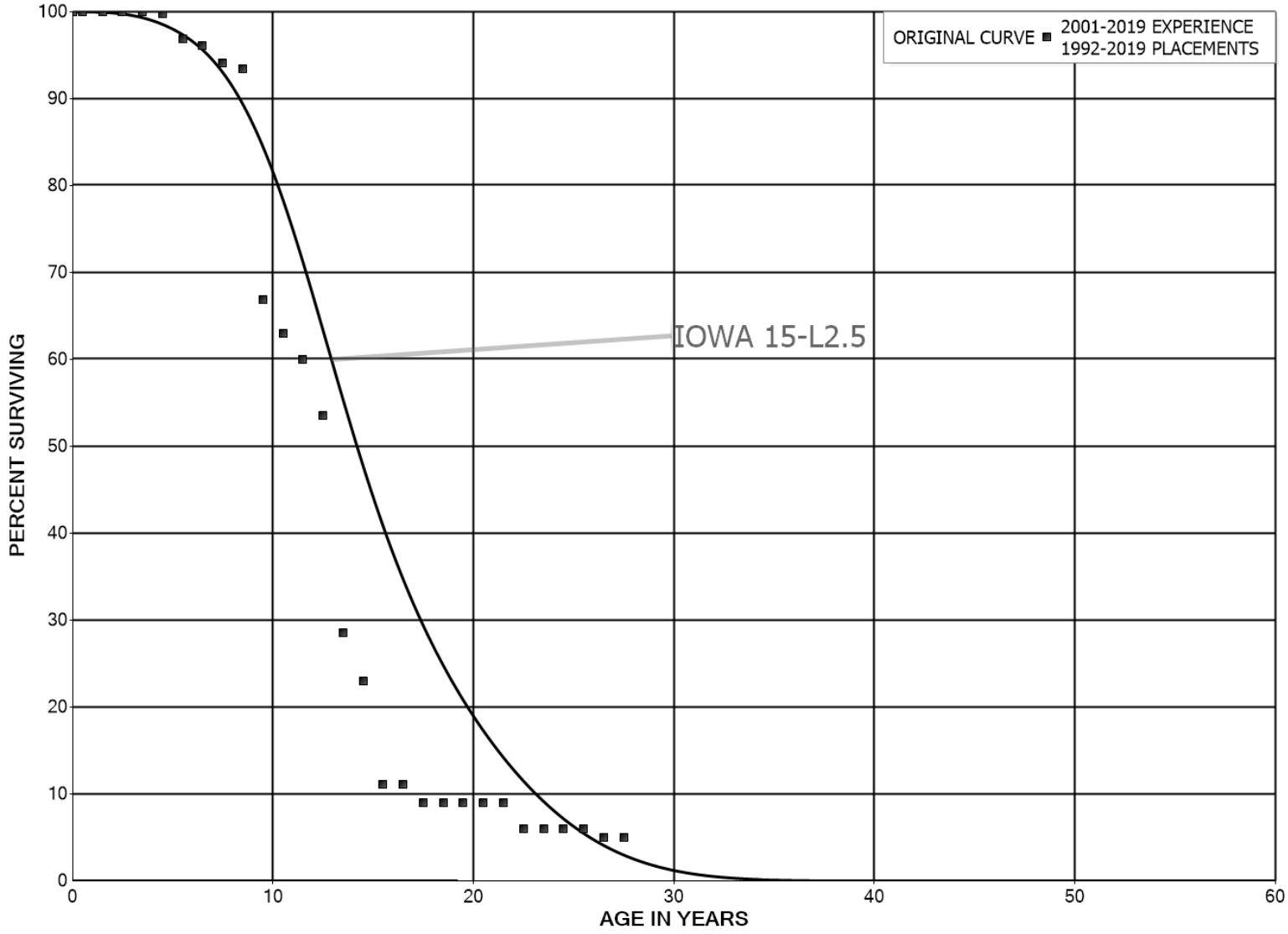
ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	151,010		0.0000		
80.5	144,755	1,628	0.0112		
81.5					
82.5	717		0.0000		
83.5	717		0.0000		
84.5	717		0.0000		
85.5	717		0.0000		
86.5	717		0.0000		
87.5	717		0.0000		
88.5	717		0.0000		
89.5	717		0.0000		
90.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 364.00 FLOW MEASURING DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

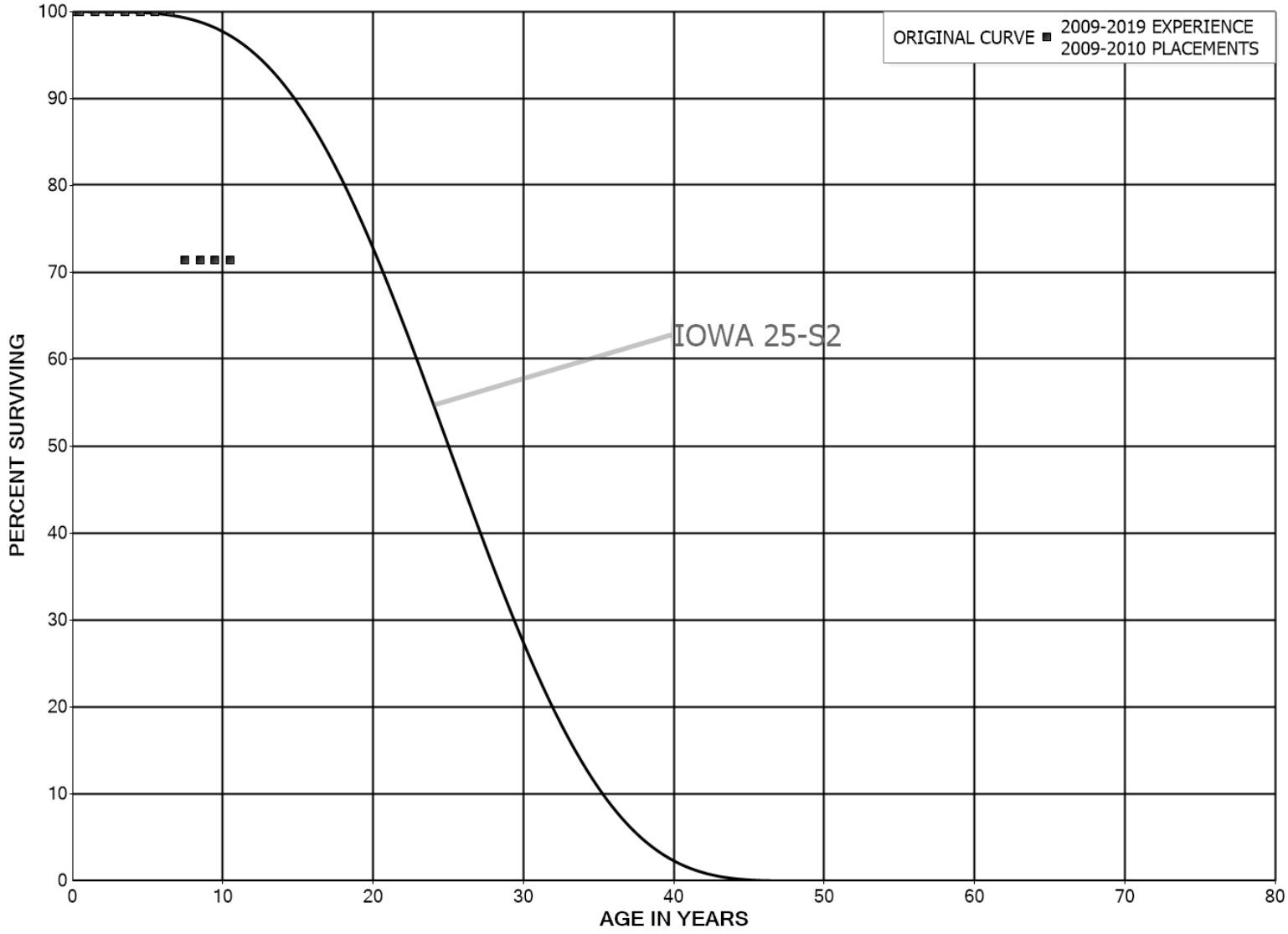
ACCOUNT 364.00 FLOW MEASURING DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1992-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,359,184		0.0000	1.0000	100.00
0.5	993,961		0.0000	1.0000	100.00
1.5	1,007,023		0.0000	1.0000	100.00
2.5	1,088,761		0.0000	1.0000	100.00
3.5	829,368	2,564	0.0031	0.9969	100.00
4.5	790,917	22,463	0.0284	0.9716	99.69
5.5	745,466	5,882	0.0079	0.9921	96.86
6.5	575,156	12,254	0.0213	0.9787	96.10
7.5	576,785	4,337	0.0075	0.9925	94.05
8.5	639,652	181,670	0.2840	0.7160	93.34
9.5	332,968	19,182	0.0576	0.9424	66.83
10.5	221,704	10,816	0.0488	0.9512	62.98
11.5	90,287	9,617	0.1065	0.8935	59.91
12.5	71,639	33,466	0.4671	0.5329	53.53
13.5	31,704	6,133	0.1934	0.8066	28.52
14.5	16,849	8,739	0.5187	0.4813	23.00
15.5	16,281		0.0000	1.0000	11.07
16.5	16,281	3,203	0.1967	0.8033	11.07
17.5	13,078		0.0000	1.0000	8.90
18.5	13,078		0.0000	1.0000	8.90
19.5	13,078		0.0000	1.0000	8.90
20.5	13,078		0.0000	1.0000	8.90
21.5	13,078	4,272	0.3266	0.6734	8.90
22.5	8,806		0.0000	1.0000	5.99
23.5	8,806		0.0000	1.0000	5.99
24.5	8,806		0.0000	1.0000	5.99
25.5	8,806	1,522	0.1728	0.8272	5.99
26.5	7,285		0.0000	1.0000	4.95
27.5					4.95

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

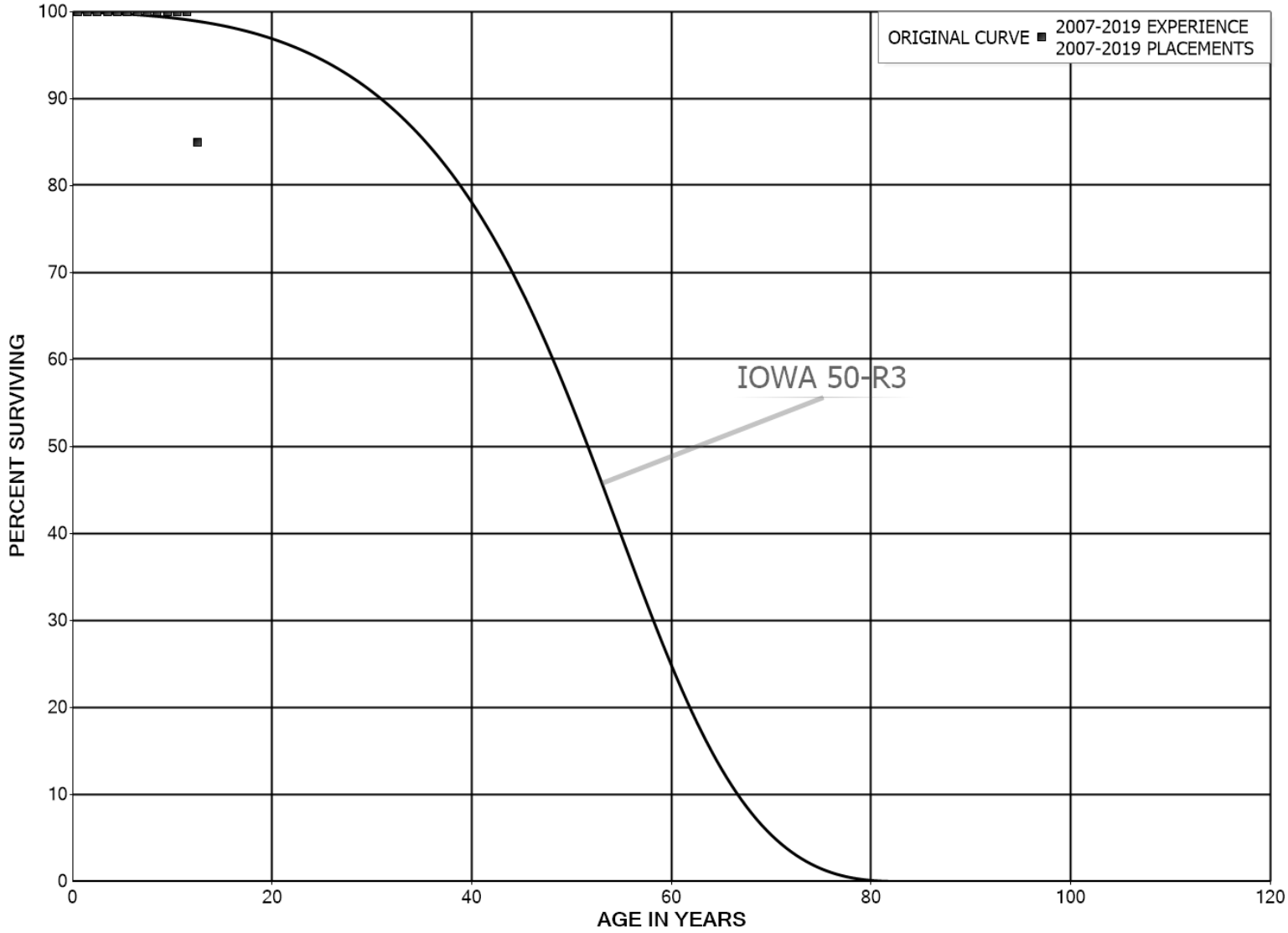
ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2009-2010 EXPERIENCE BAND 2009-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	20,918		0.0000	1.0000	100.00
0.5	20,918		0.0000	1.0000	100.00
1.5	20,918		0.0000	1.0000	100.00
2.5	20,918		0.0000	1.0000	100.00
3.5	20,918		0.0000	1.0000	100.00
4.5	20,918		0.0000	1.0000	100.00
5.5	20,918		0.0000	1.0000	100.00
6.5	20,918	5,980	0.2859	0.7141	100.00
7.5	14,938		0.0000	1.0000	71.41
8.5	14,938		0.0000	1.0000	71.41
9.5	14,938		0.0000	1.0000	71.41
10.5					71.41

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 370.00 RECEIVING WELLS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

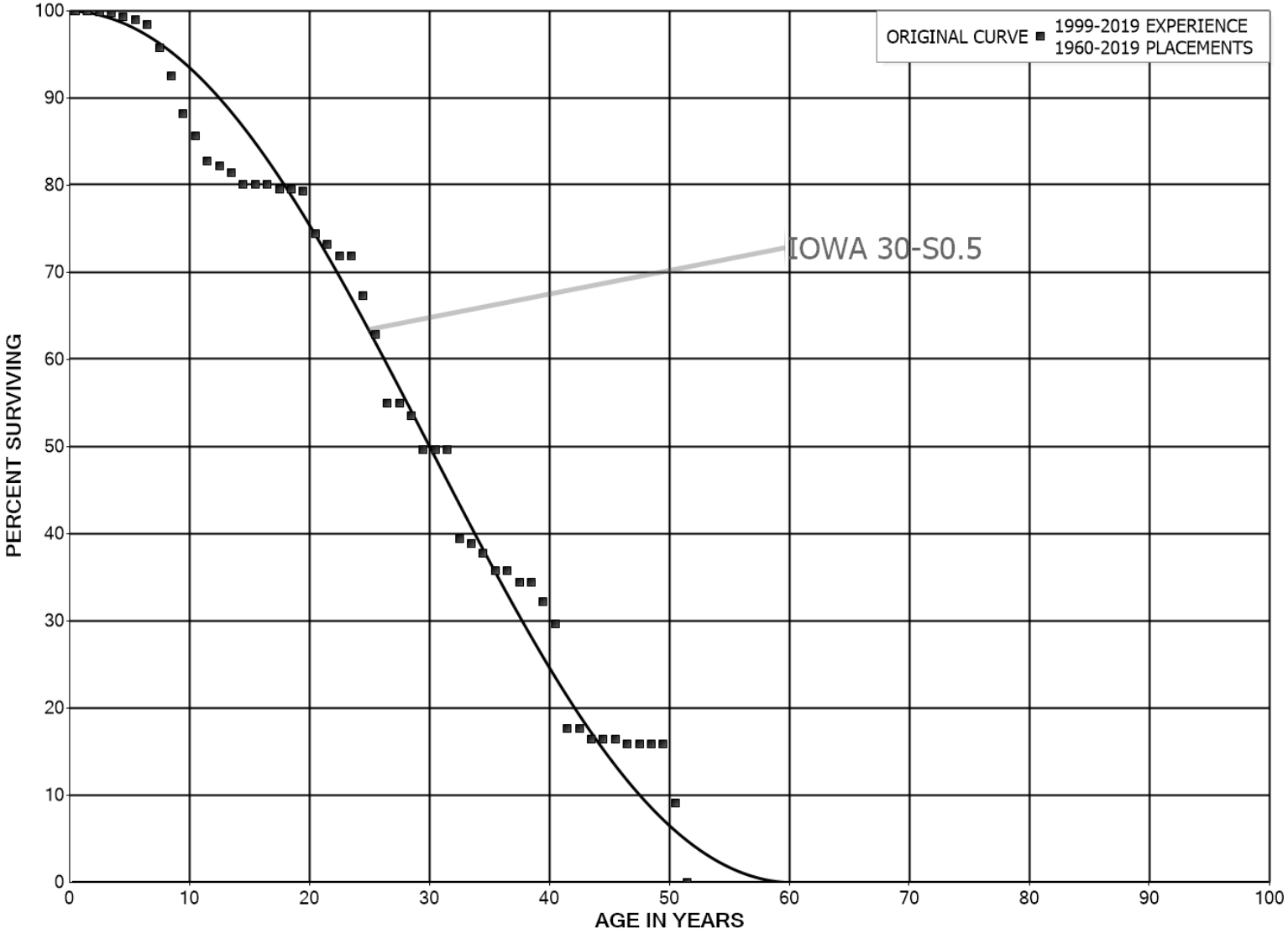
ACCOUNT 370.00 RECEIVING WELLS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2007-2019 EXPERIENCE BAND 2007-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	121,180		0.0000	1.0000	100.00
0.5	111,148		0.0000	1.0000	100.00
1.5	111,148		0.0000	1.0000	100.00
2.5	132,949		0.0000	1.0000	100.00
3.5	132,949		0.0000	1.0000	100.00
4.5	132,949		0.0000	1.0000	100.00
5.5	132,949		0.0000	1.0000	100.00
6.5	99,482		0.0000	1.0000	100.00
7.5	99,482		0.0000	1.0000	100.00
8.5	99,482		0.0000	1.0000	100.00
9.5	99,482		0.0000	1.0000	100.00
10.5	7,370		0.0000	1.0000	100.00
11.5	7,370	1,109	0.1505	0.8495	100.00
12.5					84.95

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 371.00 PUMPING EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1960-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	13,928,914		0.0000	1.0000	100.00
0.5	8,653,630	5,419	0.0006	0.9994	100.00
1.5	11,021,964	12,306	0.0011	0.9989	99.94
2.5	10,781,219	12,096	0.0011	0.9989	99.83
3.5	9,453,412	44,345	0.0047	0.9953	99.71
4.5	6,817,321	23,246	0.0034	0.9966	99.25
5.5	5,785,361	27,560	0.0048	0.9952	98.91
6.5	5,413,591	148,677	0.0275	0.9725	98.44
7.5	3,768,518	126,794	0.0336	0.9664	95.73
8.5	3,446,810	160,001	0.0464	0.9536	92.51
9.5	2,549,487	73,710	0.0289	0.9711	88.22
10.5	1,455,129	50,056	0.0344	0.9656	85.67
11.5	1,043,502	7,445	0.0071	0.9929	82.72
12.5	1,137,255	10,025	0.0088	0.9912	82.13
13.5	837,345	14,096	0.0168	0.9832	81.41
14.5	784,395		0.0000	1.0000	80.04
15.5	677,887		0.0000	1.0000	80.04
16.5	534,434	3,610	0.0068	0.9932	80.04
17.5	610,401	101	0.0002	0.9998	79.50
18.5	664,971	1,413	0.0021	0.9979	79.48
19.5	663,558	41,426	0.0624	0.9376	79.31
20.5	588,736	9,514	0.0162	0.9838	74.36
21.5	638,927	11,409	0.0179	0.9821	73.16
22.5	599,786		0.0000	1.0000	71.85
23.5	517,501	33,177	0.0641	0.9359	71.85
24.5	484,324	31,555	0.0652	0.9348	67.25
25.5	497,723	62,415	0.1254	0.8746	62.87
26.5	428,133		0.0000	1.0000	54.98
27.5	312,603	8,673	0.0277	0.9723	54.98
28.5	241,647	17,595	0.0728	0.9272	53.46
29.5	235,281		0.0000	1.0000	49.56
30.5	280,168		0.0000	1.0000	49.56
31.5	280,168	57,666	0.2058	0.7942	49.56
32.5	222,502	2,887	0.0130	0.9870	39.36
33.5	140,599	3,932	0.0280	0.9720	38.85
34.5	136,159	7,170	0.0527	0.9473	37.77
35.5	183,946		0.0000	1.0000	35.78
36.5	183,946	7,008	0.0381	0.9619	35.78
37.5	176,938		0.0000	1.0000	34.41
38.5	127,299	8,408	0.0660	0.9340	34.41

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

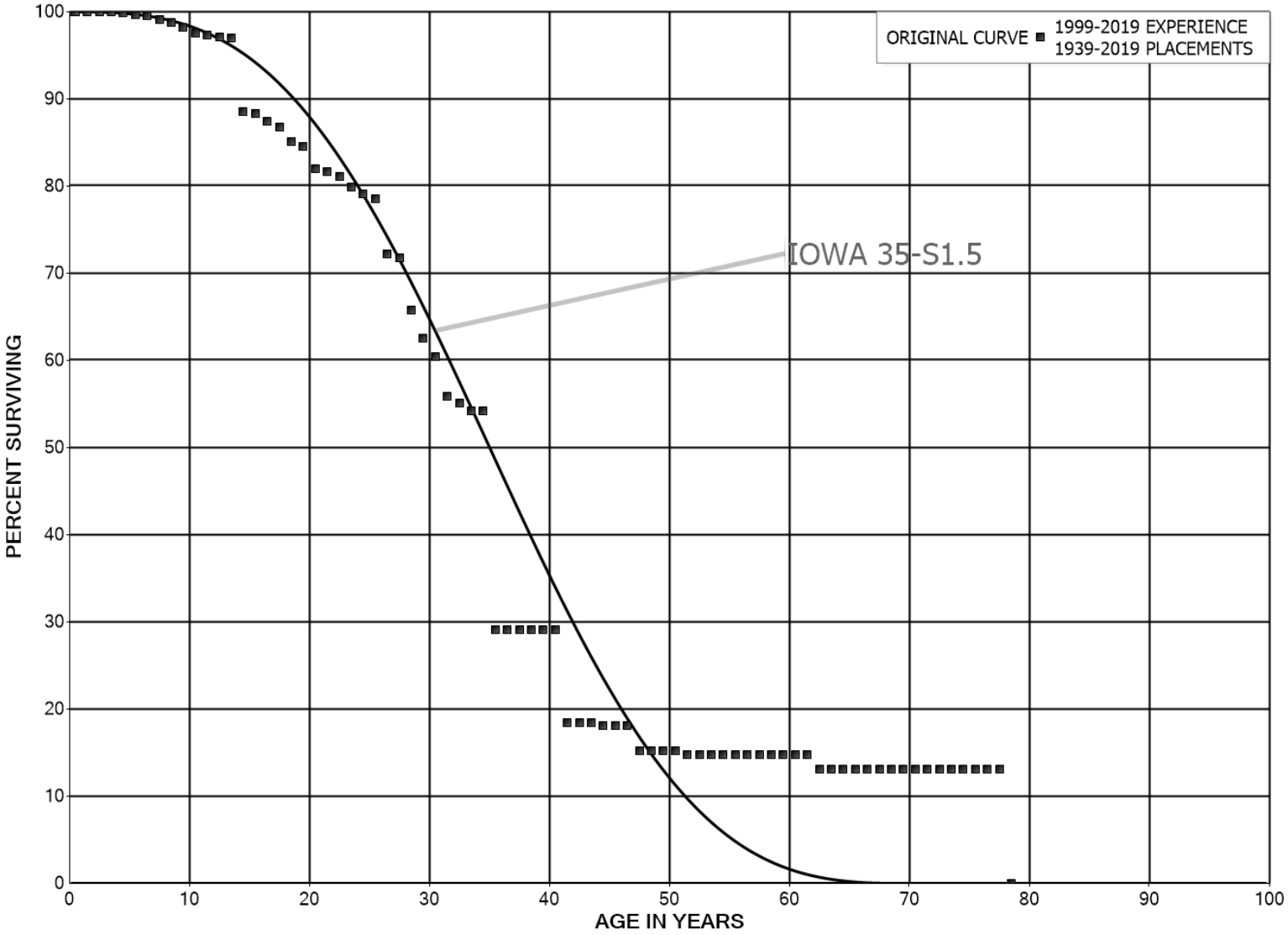
ACCOUNT 371.00 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1960-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	128,004	9,910	0.0774	0.9226	32.14
40.5	140,361	56,891	0.4053	0.5947	29.65
41.5	83,470		0.0000	1.0000	17.63
42.5	83,470	6,122	0.0733	0.9267	17.63
43.5	28,842		0.0000	1.0000	16.34
44.5	28,842		0.0000	1.0000	16.34
45.5	28,842	860	0.0298	0.9702	16.34
46.5	27,983		0.0000	1.0000	15.85
47.5	21,408		0.0000	1.0000	15.85
48.5	5,141		0.0000	1.0000	15.85
49.5	5,141	2,187	0.4255	0.5745	15.85
50.5	2,953	2,953	1.0000		9.11
51.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 380.00 TREATMENT EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	52,484,979		0.0000	1.0000	100.00
0.5	52,338,297		0.0000	1.0000	100.00
1.5	64,377,580	1,853	0.0000	1.0000	100.00
2.5	61,280,085	2,456	0.0000	1.0000	100.00
3.5	56,645,719	97,216	0.0017	0.9983	99.99
4.5	44,542,853	95,360	0.0021	0.9979	99.82
5.5	39,192,994	29,279	0.0007	0.9993	99.61
6.5	37,993,990	195,343	0.0051	0.9949	99.53
7.5	37,038,634	104,008	0.0028	0.9972	99.02
8.5	38,046,057	237,211	0.0062	0.9938	98.74
9.5	28,856,102	179,693	0.0062	0.9938	98.13
10.5	11,015,164	26,343	0.0024	0.9976	97.52
11.5	15,100,040	30,352	0.0020	0.9980	97.28
12.5	16,280,292	28,816	0.0018	0.9982	97.09
13.5	16,807,417	1,468,058	0.0873	0.9127	96.92
14.5	14,676,816	22,218	0.0015	0.9985	88.45
15.5	11,808,330	121,942	0.0103	0.9897	88.32
16.5	11,627,778	92,492	0.0080	0.9920	87.41
17.5	12,550,432	231,211	0.0184	0.9816	86.71
18.5	10,724,551	78,054	0.0073	0.9927	85.11
19.5	10,812,422	322,982	0.0299	0.9701	84.49
20.5	9,468,414	37,906	0.0040	0.9960	81.97
21.5	9,609,732	62,020	0.0065	0.9935	81.64
22.5	9,543,450	153,592	0.0161	0.9839	81.11
23.5	9,334,263	87,607	0.0094	0.9906	79.81
24.5	9,070,811	59,133	0.0065	0.9935	79.06
25.5	8,792,217	707,485	0.0805	0.9195	78.54
26.5	4,703,706	32,521	0.0069	0.9931	72.22
27.5	4,778,474	397,707	0.0832	0.9168	71.72
28.5	6,059,797	298,086	0.0492	0.9508	65.75
29.5	6,184,153	215,062	0.0348	0.9652	62.52
30.5	5,152,304	387,965	0.0753	0.9247	60.35
31.5	5,356,247	72,674	0.0136	0.9864	55.80
32.5	3,421,800	52,448	0.0153	0.9847	55.05
33.5	2,753,091		0.0000	1.0000	54.20
34.5	2,272,767	1,055,181	0.4643	0.5357	54.20
35.5	635,826		0.0000	1.0000	29.04
36.5	779,480		0.0000	1.0000	29.04
37.5	801,627		0.0000	1.0000	29.04
38.5	778,140		0.0000	1.0000	29.04

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

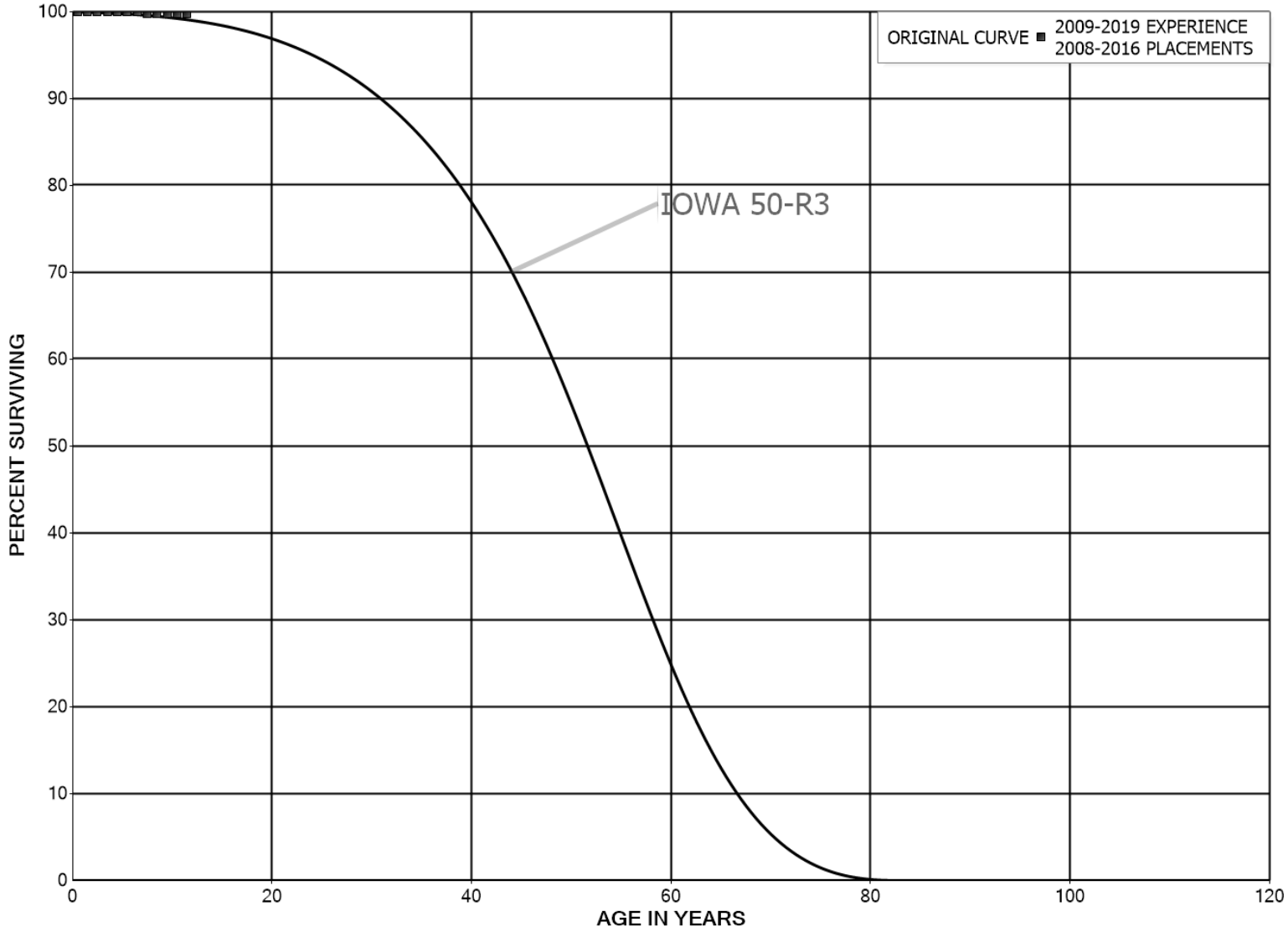
ACCOUNT 380.00 TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	778,140	411	0.0005	0.9995	29.04
40.5	777,730	285,407	0.3670	0.6330	29.02
41.5	15,823,498		0.0000	1.0000	18.37
42.5	15,823,498		0.0000	1.0000	18.37
43.5	15,823,498	268,317	0.0170	0.9830	18.37
44.5	515,644		0.0000	1.0000	18.06
45.5	515,644		0.0000	1.0000	18.06
46.5	371,038	60,316	0.1626	0.8374	18.06
47.5	288,575		0.0000	1.0000	15.12
48.5	288,575		0.0000	1.0000	15.12
49.5	288,575		0.0000	1.0000	15.12
50.5	288,575	6,818	0.0236	0.9764	15.12
51.5	281,757	315	0.0011	0.9989	14.77
52.5	107,182		0.0000	1.0000	14.75
53.5	107,182	462	0.0043	0.9957	14.75
54.5	23,321		0.0000	1.0000	14.69
55.5	23,321		0.0000	1.0000	14.69
56.5	298,010		0.0000	1.0000	14.69
57.5	298,010		0.0000	1.0000	14.69
58.5	298,010		0.0000	1.0000	14.69
59.5	25,215		0.0000	1.0000	14.69
60.5	25,215		0.0000	1.0000	14.69
61.5	25,215	2,761	0.1095	0.8905	14.69
62.5	1,894		0.0000	1.0000	13.08
63.5	1,894		0.0000	1.0000	13.08
64.5	1,894		0.0000	1.0000	13.08
65.5	1,894		0.0000	1.0000	13.08
66.5	1,894		0.0000	1.0000	13.08
67.5	1,894		0.0000	1.0000	13.08
68.5	1,894		0.0000	1.0000	13.08
69.5	1,894		0.0000	1.0000	13.08
70.5	1,894		0.0000	1.0000	13.08
71.5	1,894		0.0000	1.0000	13.08
72.5	1,894		0.0000	1.0000	13.08
73.5	1,894		0.0000	1.0000	13.08
74.5	1,894		0.0000	1.0000	13.08
75.5	1,894		0.0000	1.0000	13.08
76.5	1,894		0.0000	1.0000	13.08
77.5	1,894	1,894	1.0000		13.08
78.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 381.00 PLANT SEWERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

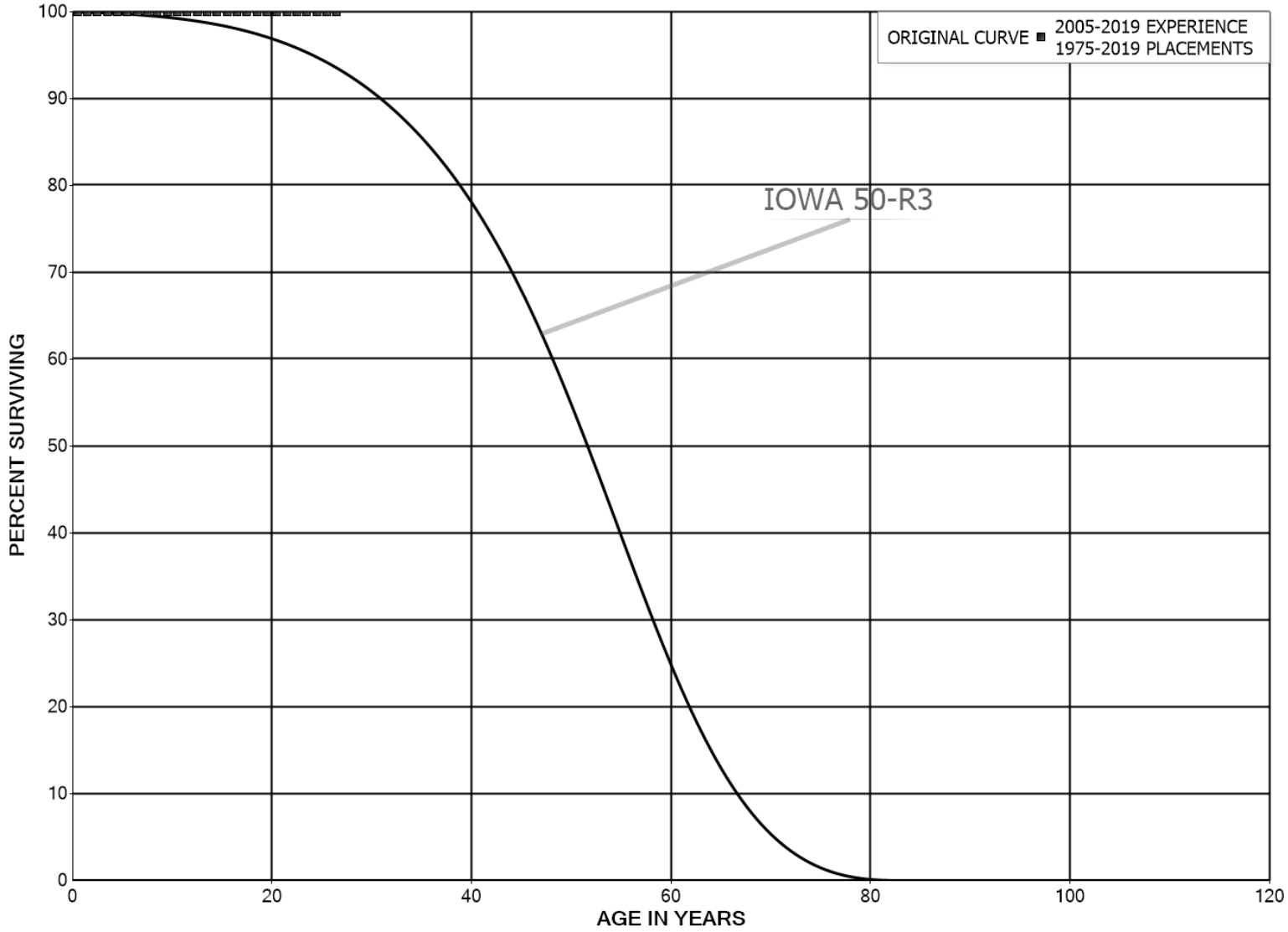
ACCOUNT 381.00 PLANT SEWERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2008-2016 EXPERIENCE BAND 2009-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,524,134		0.0000	1.0000	100.00
0.5	6,227,961		0.0000	1.0000	100.00
1.5	6,227,961		0.0000	1.0000	100.00
2.5	6,227,961		0.0000	1.0000	100.00
3.5	6,182,721		0.0000	1.0000	100.00
4.5	6,175,263		0.0000	1.0000	100.00
5.5	5,940,945		0.0000	1.0000	100.00
6.5	5,940,945	13,300	0.0022	0.9978	100.00
7.5	5,925,961	2,120	0.0004	0.9996	99.78
8.5	5,917,243		0.0000	1.0000	99.74
9.5	4,729,279		0.0000	1.0000	99.74
10.5	294,412		0.0000	1.0000	99.74
11.5					99.74

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 382.00 OUTFALL SEWER LINES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1975-2019 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,700,716		0.0000	1.0000	100.00
0.5	1,605,061		0.0000	1.0000	100.00
1.5	360,675		0.0000	1.0000	100.00
2.5	355,425		0.0000	1.0000	100.00
3.5	355,425		0.0000	1.0000	100.00
4.5	355,425		0.0000	1.0000	100.00
5.5	255,003		0.0000	1.0000	100.00
6.5	264,243		0.0000	1.0000	100.00
7.5	265,939		0.0000	1.0000	100.00
8.5	265,939		0.0000	1.0000	100.00
9.5	238,111		0.0000	1.0000	100.00
10.5	212,060		0.0000	1.0000	100.00
11.5	244,789	6	0.0000	1.0000	100.00
12.5	244,783		0.0000	1.0000	100.00
13.5	43,666		0.0000	1.0000	100.00
14.5	34,425		0.0000	1.0000	100.00
15.5	32,729		0.0000	1.0000	100.00
16.5	32,729		0.0000	1.0000	100.00
17.5	32,729		0.0000	1.0000	100.00
18.5	32,729		0.0000	1.0000	100.00
19.5	32,729		0.0000	1.0000	100.00
20.5	32,729		0.0000	1.0000	100.00
21.5	202,476		0.0000	1.0000	100.00
22.5	202,476		0.0000	1.0000	100.00
23.5	202,476		0.0000	1.0000	100.00
24.5	202,476		0.0000	1.0000	100.00
25.5	202,476		0.0000	1.0000	100.00
26.5					100.00
27.5					
28.5					
29.5					
30.5					
31.5					
32.5					
33.5					
34.5					
35.5					
36.5	4,984		0.0000		
37.5	4,984		0.0000		
38.5	4,984		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

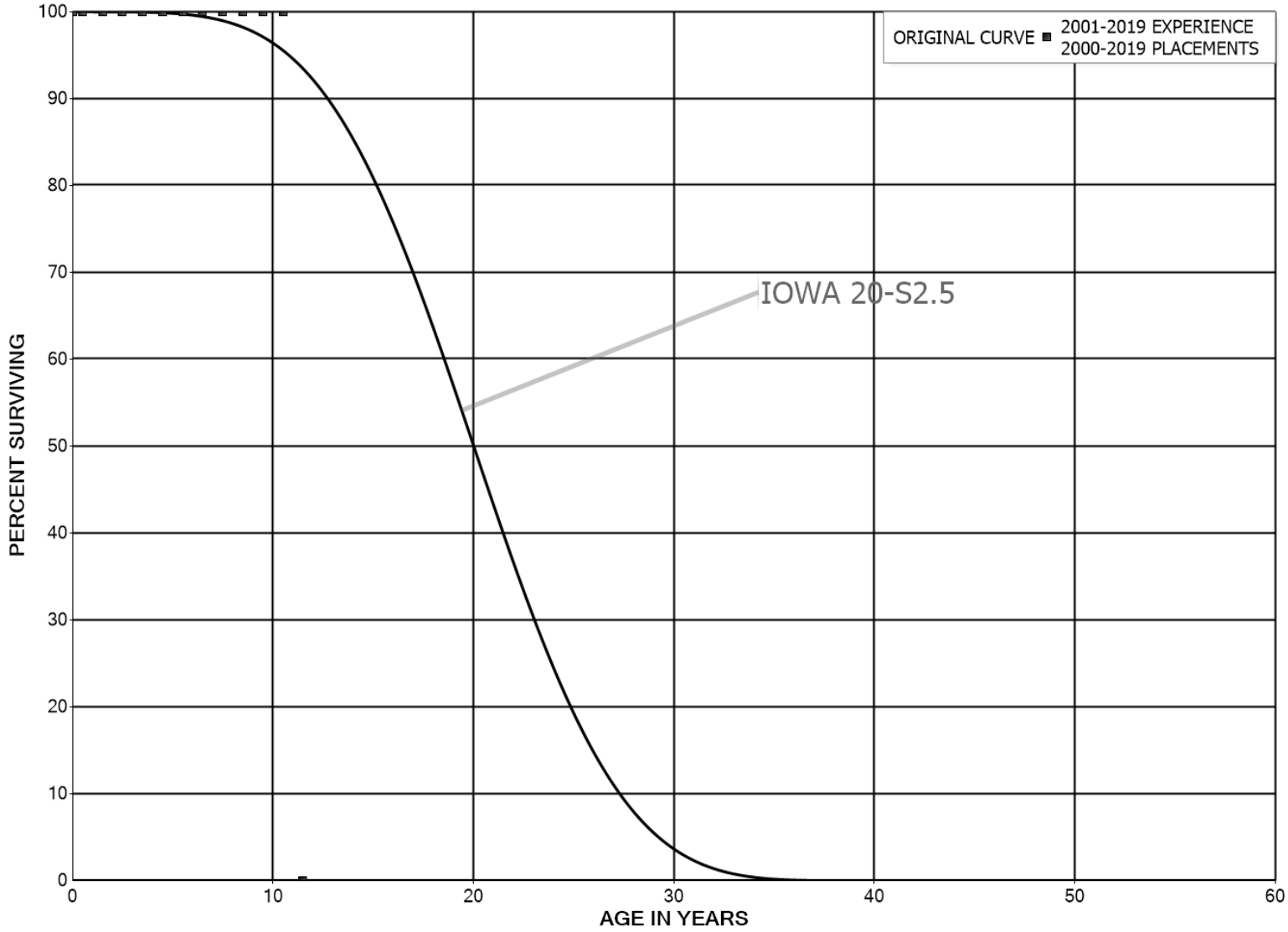
ACCOUNT 382.00 OUTFALL SEWER LINES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1975-2019 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,984		0.0000		
40.5	4,984		0.0000		
41.5	4,984		0.0000		
42.5	4,984		0.0000		
43.5	4,984		0.0000		
44.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

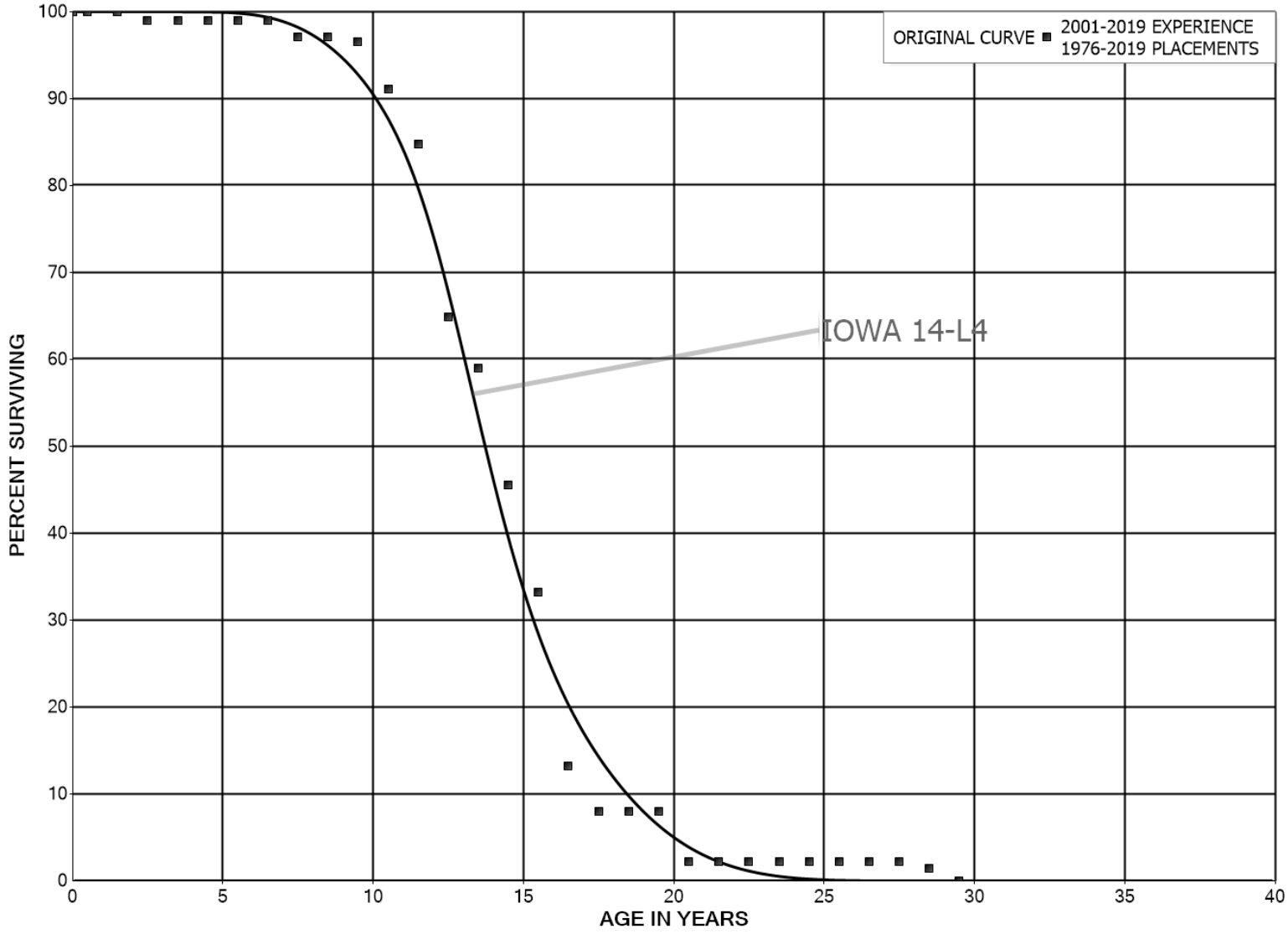
ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 2000-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	737,756		0.0000	1.0000	100.00
0.5	437,340		0.0000	1.0000	100.00
1.5	405,165		0.0000	1.0000	100.00
2.5	4,547,918		0.0000	1.0000	100.00
3.5	4,547,918		0.0000	1.0000	100.00
4.5	4,547,918	2,997	0.0007	0.9993	100.00
5.5	4,544,921		0.0000	1.0000	99.93
6.5	393,353		0.0000	1.0000	99.93
7.5	393,353		0.0000	1.0000	99.93
8.5	281,642		0.0000	1.0000	99.93
9.5	8,492		0.0000	1.0000	99.93
10.5	8,492	8,492	1.0000		99.93
11.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 391.00 TRANSPORTATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

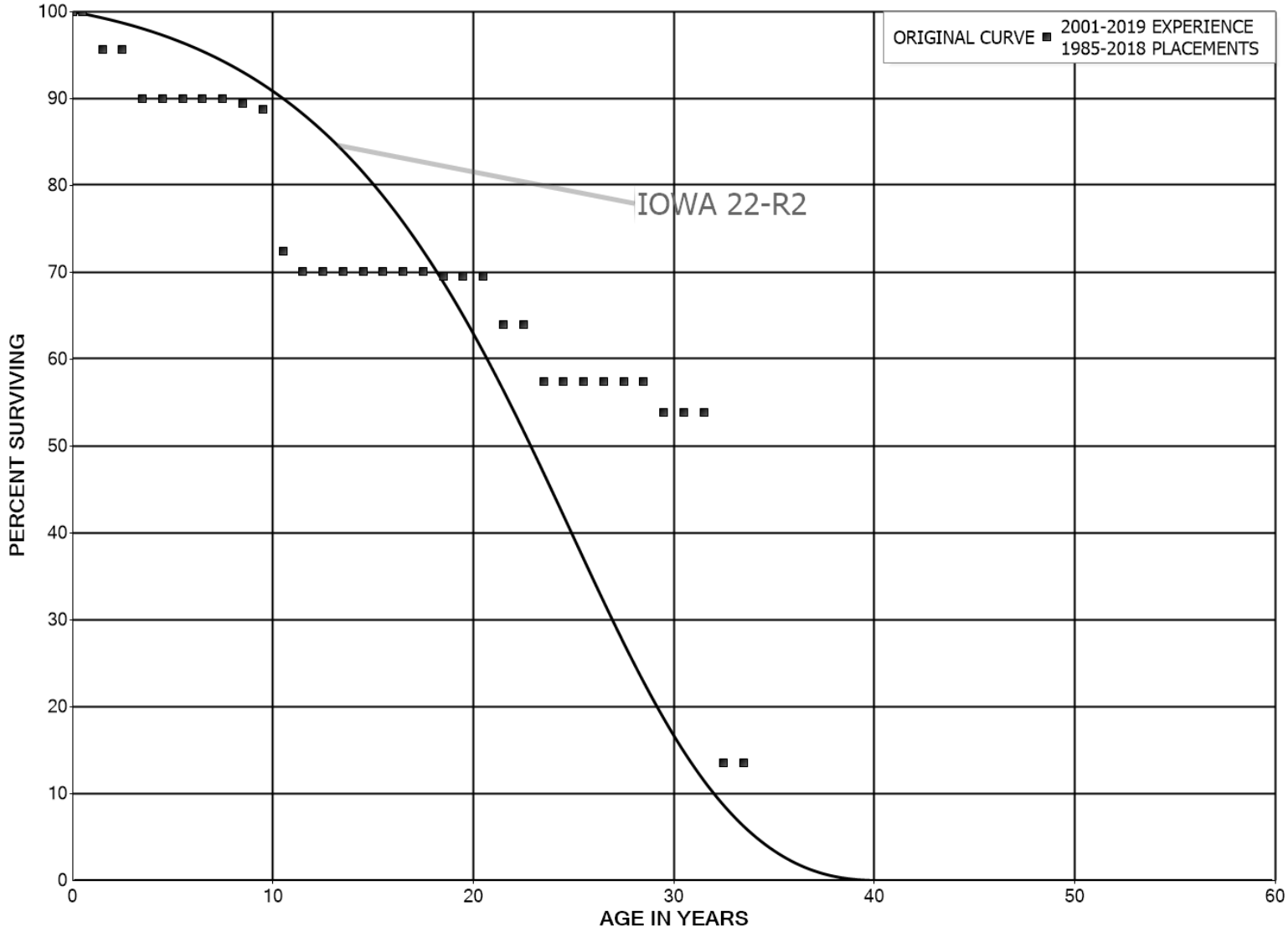
ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1976-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,168,919		0.0000	1.0000	100.00
0.5	3,692,372		0.0000	1.0000	100.00
1.5	1,458,511	14,523	0.0100	0.9900	100.00
2.5	2,332,879		0.0000	1.0000	99.00
3.5	2,514,168		0.0000	1.0000	99.00
4.5	1,930,107		0.0000	1.0000	99.00
5.5	1,664,209		0.0000	1.0000	99.00
6.5	1,677,203	32,676	0.0195	0.9805	99.00
7.5	1,535,566		0.0000	1.0000	97.08
8.5	1,373,777	8,793	0.0064	0.9936	97.08
9.5	1,545,830	87,008	0.0563	0.9437	96.45
10.5	879,899	61,030	0.0694	0.9306	91.03
11.5	743,329	174,600	0.2349	0.7651	84.71
12.5	440,822	40,215	0.0912	0.9088	64.81
13.5	348,542	79,500	0.2281	0.7719	58.90
14.5	276,542	75,000	0.2712	0.7288	45.47
15.5	195,354	117,872	0.6034	0.3966	33.14
16.5	51,900	20,700	0.3988	0.6012	13.14
17.5	31,200		0.0000	1.0000	7.90
18.5	32,855		0.0000	1.0000	7.90
19.5	32,855	23,700	0.7214	0.2786	7.90
20.5	9,155		0.0000	1.0000	2.20
21.5	9,155		0.0000	1.0000	2.20
22.5	9,155		0.0000	1.0000	2.20
23.5	9,155		0.0000	1.0000	2.20
24.5	14,155		0.0000	1.0000	2.20
25.5	14,155		0.0000	1.0000	2.20
26.5	14,155		0.0000	1.0000	2.20
27.5	14,155	5,000	0.3532	0.6468	2.20
28.5	9,155	9,155	1.0000		1.42
29.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 395.00 POWER OPERATED EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1985-2018 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	192,967		0.0000	1.0000	100.00
0.5	192,967	8,551	0.0443	0.9557	100.00
1.5	127,706		0.0000	1.0000	95.57
2.5	255,380	14,864	0.0582	0.9418	95.57
3.5	324,176		0.0000	1.0000	90.01
4.5	885,603		0.0000	1.0000	90.01
5.5	967,489		0.0000	1.0000	90.01
6.5	1,410,131		0.0000	1.0000	90.01
7.5	1,250,710	8,033	0.0064	0.9936	90.01
8.5	871,073	6,988	0.0080	0.9920	89.43
9.5	536,633	98,717	0.1840	0.8160	88.71
10.5	191,853	6,125	0.0319	0.9681	72.39
11.5	137,458		0.0000	1.0000	70.08
12.5	190,308		0.0000	1.0000	70.08
13.5	169,091		0.0000	1.0000	70.08
14.5	169,091		0.0000	1.0000	70.08
15.5	169,587		0.0000	1.0000	70.08
16.5	190,470		0.0000	1.0000	70.08
17.5	117,685	875	0.0074	0.9926	70.08
18.5	116,810		0.0000	1.0000	69.56
19.5	116,810		0.0000	1.0000	69.56
20.5	124,335	9,999	0.0804	0.9196	69.56
21.5	124,336		0.0000	1.0000	63.97
22.5	124,336	12,782	0.1028	0.8972	63.97
23.5	111,554		0.0000	1.0000	57.39
24.5	111,554		0.0000	1.0000	57.39
25.5	111,554		0.0000	1.0000	57.39
26.5	18,021		0.0000	1.0000	57.39
27.5	8,021		0.0000	1.0000	57.39
28.5	8,021	496	0.0618	0.9382	57.39
29.5	30,053		0.0000	1.0000	53.84
30.5	30,053		0.0000	1.0000	53.84
31.5	30,053	22,528	0.7496	0.2504	53.84
32.5	7,525		0.0000	1.0000	13.48
33.5					13.48

PART VII. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1928	319,718	259,241	60,477	60,477	0.1
1930	60,321	60,321		60,477	0.1
1935	382,687	315,892	66,795	127,272	0.1
1945	436,981	343,950	93,031	220,303	0.2
1954	396,552	282,731	113,821	334,124	0.4
1955	1,307,360	938,980	368,380	702,504	0.8
1960	2,135,413	1,469,726	665,687	1,368,191	1.5
1963	341,724	218,167	123,557	1,491,748	1.7
1964	1,186,323	795,000	391,323	1,883,071	2.1
1965	952,764	646,365	306,399	2,189,470	2.4
1966	147,882	105,516	42,366	2,231,836	2.5
1967	137,035	84,342	52,693	2,284,529	2.6
1969	80,339	61,419	18,920	2,303,449	2.6
1970	702,659	429,362	273,297	2,576,746	2.9
1972	153,924	94,409	59,515	2,636,261	2.9
1973	34,398	20,106	14,292	2,650,553	3.0
1974	1,245	691	554	2,651,107	3.0
1979	8,804,379	4,553,003	4,251,376	6,902,483	7.7
1980	21,607,943	11,959,391	9,648,552	16,551,035	18.5
1981	1,802,743	1,201,658	601,085	17,152,120	19.2
1982	15,981,876	10,934,649	5,047,227	22,199,347	24.8
1985	54,785	25,051	29,734	22,229,081	24.8
1986	57,609	26,451	31,158	22,260,239	24.9
1991	251,326	137,993	113,333	22,373,572	25.0
1992	400,364	220,031	180,333	22,553,905	25.2
1993	2,607,339	1,439,952	1,167,387	23,721,292	26.5
1994	545,296	236,293	309,003	24,030,295	26.9
1995	66,114	36,839	29,275	24,059,570	26.9
1997	336,814	210,270	126,544	24,186,114	27.0
1998	358,366	192,468	165,898	24,352,012	27.2
1999	1,082,479	618,019	464,460	24,816,472	27.7
2000	799,766	382,909	416,857	25,233,329	28.2
2001	618,758	315,624	303,134	25,536,463	28.5
2002	894,001	296,678	597,323	26,133,786	29.2
2003	992,715	337,661	655,054	26,788,840	29.9
2004	910,655	241,662	668,993	27,457,833	30.7
2005	753,331	524,567	228,764	27,686,597	30.9
2006	304,882	74,996	229,886	27,916,483	31.2
2007	5,946,528	1,340,994	4,605,534	32,522,017	36.3
2008	218,122	49,562	168,560	32,690,577	36.5
2009	389,143	113,127	276,016	32,966,593	36.8
2010	861,432	229,793	631,639	33,598,232	37.5
2011	3,468,945	1,193,045	2,275,900	35,874,132	40.1
2012	6,907,806	1,429,446	5,478,360	41,352,492	46.2
2013	27,099,410	6,508,874	20,590,536	61,943,028	69.2

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2014	14,237,324	2,929,774	11,307,550	73,250,578	81.9
2015	261,230	69,975	191,255	73,441,833	82.1
2016	1,878,260	321,893	1,556,367	74,998,200	83.8
2017	178,822	45,348	133,474	75,131,674	84.0
2018	1,755,047	259,331	1,495,716	76,627,390	85.6
2019	7,059,054	943,395	6,115,659	82,743,049	92.5
2020	477,536	35,565	441,971	83,185,020	93.0
2021	3,027,441	233,991	2,793,450	85,978,470	96.1
2022	2,736,099	133,114	2,602,985	88,581,455	99.0
2023	81,582	4,967	76,615	88,658,070	99.1
2024	839,243	4,326	834,917	89,492,987	100.0
SUBTOTAL	145,431,891	55,938,903	89,492,988		
NONDEPRECIABLE	592,541		592,541		
TOTAL	146,024,432	55,938,903	90,085,529		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2024	10,500.00	69	135	10,365	37.77	274
	10,500.00	69	135	10,365		274
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					37.8	2.61

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1964	201,601.33	156,039	147,636	53,965	17.52	3,080
1969	14,751.42	10,872	10,286	4,465	19.63	227
1972	3,829.13	2,748	2,600	1,229	20.46	60
1979	248,506.95	165,506	156,593	91,914	22.57	4,072
1980	1,658,239.95	1,087,142	1,028,595	629,645	23.11	27,246
1981	956,225.00	620,877	587,440	368,785	23.23	15,875
1992	339,486.90	184,681	174,735	164,752	26.82	6,143
1999	82,172.10	38,005	35,958	46,214	29.05	1,591
2005	46,874.02	17,990	17,021	29,853	30.50	979
2010	413,427.90	126,178	119,383	294,045	31.87	9,226
2012	85,918.80	23,301	22,046	63,873	32.25	1,981
2013	19,981,305.32	5,055,270	4,783,021	15,198,284	32.48	467,927
2014	7,334,929.35	1,716,373	1,623,938	5,710,991	32.74	174,435
2016	527,211.50	102,490	96,971	430,240	33.15	12,979
2018	713,150.65	108,684	102,831	610,320	33.37	18,289
2022	1,464,839.00	82,031	77,613	1,387,226	33.71	41,152
	34,072,469.32	9,498,187	8,986,667	25,085,802		785,262

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.9 2.30

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1982	9,241,348.09	5,899,677	6,440,853	2,800,495	23.79	117,717
1993	318,021.19	169,569	185,123	132,898	27.14	4,897
1995	66,113.50	33,744	36,839	29,274	27.82	1,052
2007	103,418.50	36,569	39,924	63,494	31.08	2,043
2011	713,354.63	205,874	224,759	488,596	32.05	15,245
2016	194,345.00	37,781	41,247	153,098	33.15	4,618
2017	142,304.45	24,704	26,970	115,334	33.32	3,461
2019	317,761.10	41,150	44,924	272,837	33.61	8,118
2022	57,569.43	3,224	3,520	54,049	33.71	1,603
	11,154,235.89	6,452,292	7,044,159	4,110,077		158,754

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.9 1.42

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
NET SALVAGE PERCENT.. 0						
1964	231,540.50	222,279	157,140	74,400	2.50	29,760
1965	856,105.48	818,266	578,471	277,634	2.73	101,697
1966	68,822.22	65,065	45,998	22,824	3.35	6,813
1982	947,151.33	799,585	565,264	381,887	7.75	49,276
1994	158,949.55	114,444	80,906	78,044	11.67	6,688
2003	445,625.00	259,220	183,255	262,370	15.10	17,375
2007	20,981.75	10,558	7,464	13,518	16.78	806
2011	875,562.85	358,543	253,471	622,092	18.75	33,178
2012	624,318.68	239,738	169,482	454,837	19.25	23,628
2013	1,864,142.52	666,431	471,132	1,393,011	19.77	70,461
2015	106,662.50	32,159	22,735	83,928	20.85	4,025
2016	119,387.28	32,378	22,889	96,498	21.50	4,488
2020	8,152.35	1,161	821	7,331	24.09	304
2021	1,027,973.50	110,713	78,268	949,706	24.86	38,202
	7,355,375.51	3,730,540	2,637,296	4,718,080		386,701

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.2 5.26

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 355.00 POWER GENERATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
1999	25,590.73	16,186	14,220	11,371	14.53	783
2000	81,172.37	50,067	43,985	37,187	14.91	2,494
2001	520,598.71	313,713	275,602	244,997	15.17	16,150
2005	54,284.00	28,879	25,371	28,913	16.71	1,730
2010	19,490.68	8,377	7,359	12,132	18.57	653
2013	759,121.58	271,386	238,417	520,705	19.77	26,338
2014	48,194.28	16,001	14,057	34,137	20.12	1,697
2016	82,088.08	22,656	19,904	62,184	20.99	2,963
2018	31,007.43	6,698	5,884	25,123	21.78	1,153
2021	67,610.97	7,809	6,861	60,750	22.97	2,645
2024	52,496.25	541	475	52,021	23.96	2,171
	1,741,655.08	742,313	652,135	1,089,520		58,777

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.5 3.37

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1964	4,600.00	3,395	3,037	1,563	21.30	73
1969	9,998.04	6,929	6,199	3,799	24.37	156
1972	35,042.92	23,325	20,867	14,176	26.12	543
1979	467,472.84	277,679	248,422	219,051	30.76	7,121
1980	1,451,956.04	849,685	760,160	691,796	31.19	22,180
2005	68,212.54	18,922	16,928	51,285	49.49	1,036
2010	35,546.50	7,365	6,589	28,958	53.57	541
2013	2,234,372.95	366,214	327,630	1,906,743	56.11	33,982
2016	71,505.28	8,638	7,728	63,777	58.23	1,095
2018	172,854.20	15,764	14,103	158,751	59.79	2,655
2022	32,000.00	992	887	31,113	62.52	498
	4,583,561.31	1,578,908	1,412,550	3,171,011		69,880

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 45.4 1.52

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1928	319,718.15	282,375	259,241	60,477	12.70	4,762
1935	322,015.91	277,996	255,221	66,795	14.09	4,741
1945	367,766.35	299,251	274,735	93,031	18.09	5,143
1954	366,619.85	279,731	256,814	109,806	21.74	5,051
1955	1,100,545.47	827,720	759,908	340,637	22.74	14,980
1960	1,797,785.22	1,288,652	1,183,078	614,707	25.29	24,306
1963	341,724.17	237,635	218,167	123,557	26.72	4,624
1964	713,161.17	492,081	451,767	261,394	26.96	9,696
1965	63,004.82	42,749	39,247	23,758	27.96	850
1967	134,888.41	89,957	82,587	52,301	28.47	1,837
1970	618,854.55	394,334	362,028	256,827	30.75	8,352
1972	90,767.82	56,639	51,999	38,769	31.33	1,237
1973	30,927.55	18,928	17,377	13,551	32.33	419
1974	1,245.16	753	691	554	32.64	17
1979	8,068,833.06	4,502,409	4,133,546	3,935,287	35.65	110,387
1980	14,540,449.62	7,933,269	7,283,331	7,257,119	36.65	198,011
1985	54,161.27	26,826	24,628	29,533	39.74	743
1986	54,274.49	26,399	24,236	30,038	40.12	749
1991	78,110.87	33,767	31,001	47,110	43.34	1,087
1993	585,837.70	239,725	220,085	365,753	44.76	8,171
1994	310,084.40	122,793	112,733	197,351	45.76	4,313
1997	143,715.52	51,996	47,736	95,980	47.63	2,015
1999	57,482.76	19,544	17,943	39,540	48.53	815
2000	224,506.01	73,279	67,276	157,230	49.53	3,174
2001	50,435.30	15,892	14,590	35,845	49.99	717
2002	580,213.90	174,876	160,549	419,665	50.99	8,230
2003	488,065.06	141,441	129,853	358,212	51.46	6,961
2004	853,912.17	237,388	217,940	635,972	51.94	12,244
2005	114,141.33	30,145	27,675	86,466	52.94	1,633
2006	270,996.73	68,291	62,696	208,301	53.43	3,899
2007	5,722,585.90	1,371,704	1,259,327	4,463,259	53.92	82,776
2008	183,372.59	41,662	38,249	145,124	54.42	2,667
2009	219,952.56	46,850	43,012	176,941	55.42	3,193
2010	264,012.09	52,855	48,525	215,487	55.93	3,853
2011	358,357.74	67,085	61,589	296,769	56.44	5,258
2012	4,285,360.01	745,653	684,565	3,600,795	56.97	63,205
2013	355,041.41	57,020	52,349	302,692	57.49	5,265
2014	3,806,649.90	559,578	513,734	3,292,916	58.03	56,745
2015	54,757.22	7,294	6,696	48,061	58.57	821
2016	601,304.10	71,675	65,803	535,501	59.11	9,059
2018	467,571.11	42,362	38,891	428,680	60.23	7,117

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
2019	155,589.62	11,903	10,928	144,662	60.36	2,397
2020	194,673.17	11,992	11,010	183,663	60.94	3,014
2021	437,568.74	20,609	18,920	418,649	60.69	6,898
2022	603,827.35	19,322	17,739	586,088	60.50	9,687
2024	704,847.40	3,031	2,783	702,064	57.55	12,199
	51,159,715.70	21,417,436	19,662,798	31,496,918		723,318
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					43.5	1.41

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
2024	6,300.00	35	78	6,222	45.00	138
	6,300.00	35	78	6,222		138

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 45.1 2.19

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1930	60,320.59	60,321	60,321			
1935	60,671.26	60,671	60,671			
1945	69,214.80	69,215	69,215			
1954	29,932.47	28,915	25,917	4,015	2.46	1,632
1955	206,814.79	199,783	179,072	27,743	2.43	11,417
1960	337,627.30	319,801	286,648	50,979	3.57	14,280
1965	7,991.41	7,355	6,593	1,398	5.10	274
1967	2,146.45	1,958	1,755	391	5.50	71
1969	54,989.02	49,600	44,458	10,531	5.98	1,761
1970	83,804.37	75,122	67,334	16,470	6.24	2,639
1972	1,039.81	919	824	216	6.82	32
1973	3,470.78	3,045	2,729	742	7.14	104
1979	19,565.85	16,112	14,442	5,124	9.64	532
1980	3,957,296.96	3,221,240	2,887,305	1,069,992	10.05	106,467
1985	623.71	472	423	201	12.55	16
1986	3,334.56	2,471	2,215	1,120	13.28	84
1991	5,411.33	3,625	3,249	2,162	16.26	133
1993	59,414.33	37,942	34,009	25,405	17.54	1,448
1994	76,261.89	47,587	42,654	33,608	18.08	1,859
1997	9,433.38	5,400	4,840	4,593	20.17	228
1999	13,746.64	7,389	6,623	7,124	21.51	331
2000	57,536.76	29,965	26,859	30,678	22.08	1,389
2001	36,327.06	18,214	16,326	20,001	22.87	875
2002	313,787.45	151,873	136,129	177,658	23.45	7,576
2003	59,024.85	27,393	24,553	34,472	24.25	1,422
2004	45,158.00	20,050	17,971	27,187	25.05	1,085
2005	30,023.69	12,778	11,453	18,571	25.64	724
2006	33,884.97	13,723	12,300	21,585	26.44	816
2007	99,542.16	38,244	34,279	65,263	27.25	2,395
2008	34,749.26	12,621	11,313	23,436	28.05	836
2009	56,488.15	19,404	17,392	39,096	28.67	1,364
2010	26,605.16	8,567	7,679	18,926	29.48	642
2011	69,550.94	20,886	18,721	50,830	30.29	1,678
2012	1,678,761.80	467,367	418,917	1,259,845	31.10	40,509
2014	361,593.72	84,975	76,166	285,428	32.55	8,769
2016	53,544.40	10,152	9,100	44,444	34.19	1,300
2018	19,716.32	2,827	2,534	17,182	35.84	479
2019	129,753.11	15,570	13,956	115,797	36.67	3,158
2020	43,759.51	4,236	3,797	39,963	37.32	1,071

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
2021	264,791.96	19,303	17,301	247,491	38.15	6,487
2022	128,524.77	6,298	5,645	122,880	38.82	3,165
2024	15,749.59	99	89	15,661	39.43	397
	8,621,985.33	5,203,488	4,683,777	3,938,208		229,445

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.2 2.66

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 364.00 FLOW MEASURING DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2.5						
NET SALVAGE PERCENT.. 0						
1999	250,000.00	225,000	173,926	76,074	2.78	27,365
2012	50,000.00	35,700	27,596	22,404	4.81	4,658
	300,000.00	260,700	201,522	98,478		32,023
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					3.1	10.67

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0.5						
NET SALVAGE PERCENT.. 0						
1964	35,420.00	35,420	35,420			
1969	600.49	581	476	124	1.82	68
1972	23,244.69	22,120	18,119	5,126	2.64	1,942
1981	846,517.53	749,845	614,218	232,300	5.54	41,931
1999	653,486.35	450,906	369,349	284,137	11.23	25,302
2004	11,585.10	7,021	5,751	5,834	13.00	449
2005	26,346.02	15,468	12,670	13,676	13.36	1,024
2009	91,043.85	45,886	37,586	53,458	14.76	3,622
2010	102,350.00	49,148	40,258	62,092	15.15	4,098
2011	299,133.39	136,106	111,488	187,645	15.57	12,052
2013	1,893,561.53	762,348	624,460	1,269,102	16.32	77,764
2015	36,474.55	12,573	10,299	26,176	17.11	1,530
2016	203,895.00	63,941	52,376	151,519	17.51	8,653
2018	241,716.20	59,607	48,825	192,891	18.33	10,523
2019	42,129.10	8,868	7,264	34,865	18.75	1,859
	4,507,503.80	2,419,838	1,988,559	2,518,945		190,817

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.2 4.23

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
1966	79,060.20	75,202	59,518	19,542	2.98	6,558
1982	5,793,376.21	4,963,765	3,928,532	1,864,844	7.02	265,647
1991	164,744.00	127,215	100,683	64,061	9.74	6,577
1992	32,985.00	25,121	19,882	13,103	10.02	1,308
1993	1,564,790.95	1,173,906	929,079	635,712	10.32	61,600
1998	358,366.45	243,187	192,468	165,898	12.31	13,477
2000	365,592.13	236,026	186,801	178,791	13.17	13,576
2011	721,737.70	294,613	233,169	488,569	18.85	25,919
2014	2,635,000.00	853,740	675,686	1,959,314	20.86	93,927
2016	24,150.00	6,376	5,046	19,104	22.30	857
2018	16,100.00	3,246	2,569	13,531	23.76	569
2019	6,360,680.00	1,074,955	850,765	5,509,915	24.59	224,071
2020	192,835.45	26,226	20,756	172,079	25.41	6,772
2021	189,913.00	19,485	15,421	174,492	26.24	6,650
2022	364,734.70	25,021	19,803	344,932	27.15	12,705
	18,864,065.79	9,148,084	7,240,178	11,623,888		740,213

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.7 3.92

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1965	25,662.14	23,165	22,054	3,608	6.36	567
	25,662.14	23,165	22,054	3,608		567
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					6.4	2.21

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	8,298.00	2,074	1,592	6,706	15.00	447
2021	43,027.80	6,454	4,954	38,074	17.00	2,240
2022	2,380.00	238	183	2,197	18.00	122
2024	2,100.00	26	20	2,080	19.75	105
	55,805.80	8,792	6,749	49,057		2,914

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.8 5.22

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 390.20 COMPUTER AND PERIPHERAL EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	21,241.00	21,241	21,241			
2013	11,865.00	11,865	11,865			
2015	6,536.00	6,536	6,536			
2016	829.00	829	829			
2017	5,160.00	5,160	5,160			
2018	18,779.00	18,779	18,779			
2019	1,054.00	1,054	1,054			
2020	4,235.00	3,388	9,100-	13,335	1.00	13,335
2021	1,721.00	1,033	2,774-	4,495	2.00	2,248
2022	1,943.00	777	2,087-	4,030	3.00	1,343
	73,363.00	70,662	51,503	21,860		16,926

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.3 23.07

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L4						
NET SALVAGE PERCENT.. 0						
2009	21,658.55	18,778	15,137	6,522	2.30	2,836
2011	354,414.38	294,873	237,705	116,709	2.62	44,545
2012	87,935.02	70,489	56,823	31,112	2.97	10,475
2014	25,842.43	18,348	14,791	11,051	4.08	2,709
2017	31,357.98	16,397	13,218	18,140	6.39	2,839
2018	43,015.00	19,434	15,666	27,349	7.28	3,757
2019	35,000.00	13,248	10,680	24,320	8.21	2,962
2020	33,881.00	10,273	8,281	25,600	9.19	2,786
2022	80,281.00	12,171	9,811	70,470	11.19	6,298
2023	69,650.00	5,279	4,256	65,394	12.19	5,365
2024	10,500.00	200	161	10,339	12.94	799
	793,535.36	479,490	386,529	407,006		85,371

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.8 10.76

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 393.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2024	21,000.00	262	539	20,461	19.75	1,036
	21,000.00	262	539	20,461		1,036

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.8 4.93

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 22-R2						
NET SALVAGE PERCENT.. 0						
1992	27,892.00	25,973	25,414	2,478	2.36	1,050
1993	79,275.00	73,234	71,656	7,619	2.56	2,976
1997	183,665.00	161,166	157,694	25,971	3.77	6,889
2000	70,959.00	59,265	57,988	12,971	4.74	2,736
2001	11,397.00	9,306	9,106	2,291	5.17	443
2011	55,592.00	31,582	30,902	24,690	9.88	2,499
2012	95,512.00	51,118	50,017	45,495	10.42	4,366
2014	25,114.00	11,653	11,402	13,712	11.55	1,187
2015	56,800.00	24,231	23,709	33,091	12.10	2,735
2018	31,137.00	9,453	9,249	21,888	13.76	1,591
2019	8,789.00	2,281	2,232	6,557	14.27	459
2021	476,106.00	78,557	76,865	399,241	15.18	26,300
2023	11,931.60	727	711	11,221	15.42	728
	1,134,169.60	538,546	526,945	607,225		53,959

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.3 4.76

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	413,449.15	413,449	413,449			
2021	518,728.20	103,746	18,175	500,553	12.00	41,713
2024	15,750.00	263	46	15,704	14.75	1,065
	947,927.35	517,458	431,670	516,257		42,778

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.1 4.51

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 397.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
1991	3,059.83	3,060	3,060			
	3,059.83	3,060	3,060			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

EXHIBIT NO. 11-H - DEPRECIATION STUDY

BASA WASTEWATER OPERATIONS

AS OF JUNE 30, 2025

Exhibit No. 11-H
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

BASA WASTEWATER OPERATIONS

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF JUNE 30, 2025

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-H
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

BASA WASTEWATER OPERATIONS

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2025

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
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October 12, 2023

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention: Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant as of June 30, 2025. The results of our study as of June 30, 2024 are presented in our report titled "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of June 30, 2024". The same methods, procedures and estimates are used in both studies.

Summaries of the original cost, annual accruals, book depreciation reserve and amortization of net salvage are presented in Tables 1 through 5, beginning on page I-3 of the attached report.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

FREDERICK B. JOHNSTON, JR.
Senior Analyst

JJS:mle

075543.100

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PART I. RESULTS OF STUDY

PENNSYLVANIA-AMERICAN WATER COMPANY

BASA WASTEWATER OPERATIONS

DEPRECIATION STUDY

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Tables 1 through 5 presented on pages I-3 through I-7 summarize the results of the depreciation study as of June 30, 2025. Table 1 sets forth the development of the net original cost by account as of June 30, 2025. Table 2 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of June 30, 2025, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 3 presents the bringforward of the book reserve to June 30, 2025. Table 4 sets forth the calculation of the depreciation accruals for the twelve months ended June 30, 2025. Table 5 presents the annual amortization of experienced and estimated net salvage based on the period 2020 through 2024.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-6. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2020 through 2024 on page III-2.

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2025

DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2025	- CUSTOMER ADVANCES	- CONTRIBUTIONS IN AID OF CONSTRUCTION	- EXCLUDED PROPERTY	= NET ORIGINAL COST AS OF JUNE 30, 2025
(1)	(2)	(3)	(4)	(5)	(6)
DEPRECIABLE PLANT					
354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION	8,325,000.00				8,325,000.00
354.30 STRUCTURES AND IMPROVEMENTS - SPP	34,206,010.97				34,206,010.97
354.40 STRUCTURES AND IMPROVEMENTS - TDP	11,154,235.89				11,154,235.89
354.70 STRUCTURES AND IMPROVEMENTS - GENERAL	7,705,375.51				7,705,375.51
355.00 POWER GENERATION EQUIPMENT	1,950,870.32				1,950,870.32
360.10 COLLECTION SEWERS - FORCE MAINS	4,583,561.31				4,583,561.31
361.10 COLLECTION SEWERS - GRAVITY MAINS	53,769,146.70				53,769,146.70
361.20 MANHOLES	330,000.00				330,000.00
363.00 SERVICES	8,778,429.06				8,778,429.06
364.00 FLOW MEASURING DEVICES	300,000.00				300,000.00
371.00 PUMPING EQUIPMENT	6,844,482.75				6,844,482.75
380.00 TREATMENT EQUIPMENT	18,864,065.79				18,864,065.79
382.00 OUTFALL SEWER LINES	25,662.14				25,662.14
390.00 OFFICE FURNITURE AND EQUIPMENT	88,705.80				88,705.80
390.20 COMPUTER AND PERIPHERAL EQUIPMENT	7,899.00				7,899.00
391.00 TRANSPORTATION EQUIPMENT	830,927.00				830,927.00
393.00 TOOLS, SHOP AND GARAGE EQUIPMENT	150,000.00				150,000.00
395.00 POWER OPERATED EQUIPMENT	1,134,169.60				1,134,169.60
396.00 COMMUNICATION EQUIPMENT	646,228.20				646,228.20
TOTAL DEPRECIABLE PLANT	**159,694,770.04**	**0.00**	**0.00**	**0.00**	**159,694,770.04**
NONDEPRECIABLE PLANT					
353.40 LAND AND LAND RIGHTS - TDP	592,540.92				592,540.92
TOTAL NONDEPRECIABLE PLANT	**592,540.92**	**0.00**	**0.00**	**0.00**	**592,540.92**
TOTAL PLANT	**160,287,310.96**	**0.00**	**0.00**	**0.00**	**160,287,310.96**

PENNSYLVANIA AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF JUNE 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE	FMV PLANT	FMV RESERVE	CALCULATED EXPENSE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)	(9)	(10)	(11)=((9)-(10))*(7)
	DEPRECIABLE PLANT										
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	45-R3	8,325,000.00	10,466	8,314,534	220,137	2.64	37.8	8,325,000.00	10,466	219,504
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	34,206,010.97	9,752,034	24,453,977	770,585	2.25	31.7	70,204,126.16	32,671,412	844,486
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	11,154,235.89	7,202,547	3,951,689	155,478	1.39	25.4	43,619,182.20	29,416,747	197,414
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	35-S1	7,705,375.51	3,034,159	4,671,217	363,566	4.72	12.8	29,799,971.24	19,863,881	468,983
355.00	POWER GENERATION EQUIPMENT	35-S0.5	1,950,870.32	689,571	1,261,299	66,195	3.39	19.1	2,449,808.39	943,612	51,060
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	4,583,561.31	1,482,222	3,101,339	69,279	1.51	44.8	14,570,539.52	6,441,647	122,746
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	53,769,146.70	19,919,455	33,849,692	771,959	1.44	43.8	210,160,005.55	109,882,544	1,443,995
361.20	MANHOLES	50-S2.5	330,000.00	1,900	328,100	7,293	2.21	45.0	330,000.00	1,900	7,251
363.00	SERVICES	47-R3	8,778,429.06	4,876,016	3,902,413	223,527	2.55	17.5	44,569,921.21	33,137,607	291,524
364.00	FLOW MEASURING DEVICES	15-L2.5	300,000.00	233,538	66,462	22,833	7.61	2.9	655,213.52	473,150	13,855
371.00	PUMPING EQUIPMENT	30-S0.5	6,844,482.75	1,823,320	5,021,163	313,184	4.58	16.0	17,688,697.35	8,886,525	403,139
380.00	TREATMENT EQUIPMENT	35-S1.5	18,864,065.79	7,979,654	10,884,412	701,555	3.72	15.5	53,050,122.74	29,553,142	874,088
382.00	OUTFALL SEWER LINES	50-R3	25,662.14	22,618	3,044	526	2.05	5.8	492,092.57	419,083	1,497
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	88,705.80	1,121	87,585	5,127	5.78	17.1	87,921.72	773	5,037
390.20	COMPUTER AND PERIPHERAL EQUIPMENT	5-SQ	7,899.00	3,882	4,017	2,964	37.52	1.4			0
391.00	TRANSPORTATION EQUIPMENT	14-L4	830,927.00	469,399	361,528	70,298	8.46	5.1	884,478.47	511,047	31,592
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	150,000.00	4,894	145,106	7,386	4.92	19.6	150,000.00	4,894	7,139
395.00	POWER OPERATED EQUIPMENT	22-R2	1,134,169.60	580,933	553,237	49,118	4.33	11.3	1,383,392.33	762,162	26,899
396.00	COMMUNICATION EQUIPMENT	15-SQ	646,228.20	53,284	592,944	51,039	7.90	11.6	614,982.88	37,403	45,629
	TOTAL DEPRECIABLE PLANT		**159,694,770.04**	**58,141,013**	**101,553,758**	**3,872,049**	**2.42**		**499,035,455.85**	**273,017,995**	**5,055,838**
	NONDEPRECIABLE PLANT										
353.40	LAND AND LAND RIGHTS - TDP		592,540.92						13,335,927.13		
	TOTAL NONDEPRECIABLE PLANT		**592,540.92**						**13,335,927.13**		
	AMORTIZATION OF NET SALVAGE					**38,675**					
	TOTAL UTILITY PLANT		**160,287,310.96**	**58,141,013**	**101,553,758**	**3,910,724**			**512,371,382.98**		

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2025, OF BOOK RESERVE AS OF JUNE 30, 2024

ACCOUNT	BOOK RESERVE BALANCE AS OF 6/30/2024		PROJECTED DEPRECIATION ACCRUALS		PROJECTED RETIREMENTS		PROJECTED COST OF REMOVAL		PROJECTED SALVAGE		ACQUISITIONS AND ADJUSTMENTS		PROJECTED BOOK RESERVE BALANCE AS OF 6/30/2025
(1)	(2)	+	(3)	-	(4)	-	(5)	+	(6)	+	(7)	=	(8)
354.20	135		10,331										10,466
354.30	8,986,667		783,800		16,458		1,975						9,752,034
354.40	7,044,159		158,388										7,202,547
354.70	2,637,296		396,863										3,034,159
355.00	652,135		63,221		25,785								689,571
360.10	1,412,550		69,672										1,482,222
361.10	19,662,798		762,883		310,569		195,657						19,919,455
361.20	78		1,822										1,900
363.00	4,683,777		231,879		15,306		24,334						4,876,016
364.00	201,522		32,016										233,538
371.00	1,988,559		194,787		288,021		72,005						1,823,320
380.00	7,240,178		739,476										7,979,654
382.00	22,054		564										22,618
390.00	6,749		3,472								(9,100)		1,121
390.20	51,503		8,743		65,464						9,100		3,882
391.00	386,529		88,262		4,608		784						469,399
393.00	539		4,355										4,894
395.00	526,945		53,988										580,933
396.00	431,670		35,063		413,449								53,284
397.00	3,060				3,060								0
TOTAL	**55,938,903**		**3,639,585**		**1,142,721**		**294,755**		**0**		**0**		**58,141,013**

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

ACCOUNT	NET ORIGINALCOST AS OF 6/30/2024	NET ORIGINALCOST AS OF 6/30/2025	ACCRUAL RATE	AVERAGE ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED DEPRECIATION ACCRUALS
(1)	(2)	(3)	(4)	(5)*	(6)	(7)=(5)+(6)
354.20	10,500.00	8,325,000.00	2.61	10,331		10,331
354.30	34,072,469.32	34,206,010.97	2.30	783,800		783,800
354.40	11,154,235.89	11,154,235.89	1.42	158,388		158,388
354.70	7,355,375.51	7,705,375.51	5.26	396,863		396,863
355.00	1,741,655.08	1,950,870.32	3.37	63,221		63,221
360.10	4,583,561.31	4,583,561.31	1.52	69,672		69,672
361.10	51,159,715.70	53,769,146.70	1.41	744,566	18,317	762,883
361.20	6,300.00	330,000.00	2.19	1,822		1,822
363.00	8,621,985.33	8,778,429.06	2.66	230,942	937	231,879
364.00	300,000.00	300,000.00	10.67	32,016		32,016
371.00	4,507,503.80	6,844,482.75	4.23	194,787		194,787
380.00	18,864,065.79	18,864,065.79	3.92	739,476		739,476
382.00	25,662.14	25,662.14	2.21	564		564
390.00	55,805.80	88,705.80	5.22	3,472		3,472
390.20	73,363.00	7,899.00	23.07	8,743		8,743
391.00	793,535.36	830,927.00	10.76	88,178	84	88,262
393.00	21,000.00	150,000.00	4.93	4,355		4,355
395.00	1,134,169.60	1,134,169.60	4.76	53,988		53,988
396.00	947,927.35	646,228.20	4.51	35,063		35,063
397.00	3,059.83	0.00	0.00			0
TOTAL	**145,431,890.81**	**159,694,770.04**		**3,620,247**	**19,338**	**3,639,585**

* ANNUAL ACRUAL DEVELOPED BASED ON MONTHLY AVERAGES.

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

TABLE 5. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

	2020		2021		2022		2023		PROJECTED 2024			
ACCOUNT	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2)	- (3) +	(4)	- (5) +	(6)	- (7) +	(8)	- (9) +	(10)	- (11) =	(12)*	(13)=(12)/5
361.10										183,169.00	(183,169.00)	(36,634)
363.00										9,363.00	(9,363.00)	(1,873)
391.00										838.00	(838.00)	(168)
TOTAL	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**193,370.00**	**(193,370.00)**	**(38,675)**

* Column (12) equals the summation of Columns (2) through (11).

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1928	300,633	244,771	55,862	55,862	0.1
1930	59,408	59,408		55,862	0.1
1935	366,771	301,805	64,966	120,828	0.1
1945	424,842	336,427	88,415	209,243	0.2
1954	388,732	277,628	111,104	320,347	0.3
1955	1,284,263	932,664	351,599	671,946	0.7
1960	2,105,530	1,467,150	638,380	1,310,326	1.3
1963	337,033	217,338	119,695	1,430,021	1.4
1964	1,141,293	775,721	365,572	1,795,593	1.8
1965	951,945	710,459	241,486	2,037,079	2.0
1966	147,882	114,497	33,385	2,070,464	2.0
1967	135,489	83,649	51,840	2,122,304	2.1
1969	79,539	62,446	17,093	2,139,397	2.1
1970	696,224	431,745	264,479	2,403,876	2.4
1972	136,674	81,815	54,859	2,458,735	2.4
1973	34,119	20,254	13,865	2,472,600	2.4
1974	1,235	690	545	2,473,145	2.4
1979	8,750,352	4,568,777	4,181,575	6,654,720	6.6
1980	21,505,272	12,178,793	9,326,479	15,981,199	15.7
1981	1,659,827	1,099,248	560,579	16,541,778	16.3
1982	15,981,876	11,374,302	4,607,574	21,149,352	20.8
1985	54,509	25,412	29,097	21,178,449	20.9
1986	57,340	26,712	30,628	21,209,077	20.9
1991	247,957	142,855	105,102	21,314,179	21.0
1992	400,057	229,273	170,784	21,484,963	21.2
1993	2,605,216	1,517,965	1,087,251	22,572,214	22.2
1994	544,175	250,724	293,451	22,865,665	22.5
1995	66,114	37,740	28,374	22,894,039	22.5
1997	336,388	218,948	117,440	23,011,479	22.7
1998	358,366	207,717	150,649	23,162,128	22.8
1999	1,046,983	621,190	425,793	23,587,921	23.2
2000	797,161	405,698	391,463	23,979,384	23.6
2001	606,437	322,748	283,689	24,263,073	23.9
2002	892,469	310,316	582,153	24,845,226	24.5
2003	991,621	368,320	623,301	25,468,527	25.1
2004	908,410	249,952	658,458	26,126,985	25.7
2005	337,622	115,348	222,274	26,349,259	25.9
2006	304,359	78,368	225,991	26,575,250	26.2
2007	5,936,326	1,400,565	4,535,761	31,111,011	30.6
2008	217,796	52,246	165,550	31,276,561	30.8
2009	385,838	118,043	267,795	31,544,356	31.1
2010	857,904	242,631	615,273	32,159,629	31.7
2011	3,436,496	1,300,649	2,135,847	34,295,476	33.8
2012	6,900,640	1,569,604	5,331,036	39,626,512	39.0
2013	27,032,648	7,091,581	19,941,067	59,567,579	58.7

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2014	14,228,862	3,256,034	10,972,828	70,540,407	69.5
2015	254,034	71,930	182,104	70,722,511	69.6
2016	1,872,945	357,341	1,515,604	72,238,115	71.1
2017	173,656	47,233	126,423	72,364,538	71.3
2018	1,732,706	277,991	1,454,715	73,819,253	72.7
2019	7,057,421	1,179,476	5,877,945	79,697,198	78.5
2020	477,352	62,722	414,630	80,111,828	78.9
2021	3,026,776	347,993	2,678,783	82,790,611	81.5
2022	2,735,331	204,688	2,530,643	85,321,254	84.0
2023	81,582	12,432	69,150	85,390,404	84.1
2024	838,670	19,760	818,910	86,209,314	84.9
2025	15,403,664	59,221	15,344,443	101,553,757	100.0
SUBTOTAL	159,694,770	58,141,013	101,553,758		
NONDEPRECIABLE	592,541		592,541		
TOTAL	160,287,311	58,141,013	102,146,299		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2024	10,500.00	338	64	10,436	37.51	278
2025	8,314,500.00	54,876	10,402	8,304,098	37.77	219,860
	8,325,000.00	55,214	10,466	8,314,534		220,138
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					37.8	2.64

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1964	201,314.62	157,186	151,770	49,545	17.12	2,894
1969	14,731.65	10,972	10,594	4,138	19.19	216
1972	3,824.23	2,777	2,681	1,143	19.99	57
1979	248,220.27	166,705	160,961	87,259	22.49	3,880
1980	1,656,360.55	1,103,136	1,065,123	591,238	22.57	26,196
1981	955,167.46	626,208	604,629	350,538	23.11	15,168
1992	339,180.33	188,042	181,562	157,618	26.52	5,943
1999	82,110.97	39,068	37,722	44,389	28.64	1,550
2005	46,844.86	18,644	18,002	28,843	30.25	953
2010	413,223.00	133,264	128,672	284,551	31.51	9,030
2012	85,880.38	24,785	23,931	61,949	32.05	1,933
2013	19,972,763.82	5,416,614	5,229,963	14,742,801	32.25	457,141
2014	7,331,831.86	1,854,953	1,791,033	5,540,799	32.48	170,591
2016	527,024.34	112,889	108,999	418,025	33.02	12,660
2018	712,953.31	123,769	119,504	593,449	33.32	17,811
2022	1,464,585.25	119,950	115,816	1,348,769	33.63	40,106
2025	149,994.07	1,110	1,072	148,922	33.42	4,456
	34,206,010.97	10,100,072	9,752,034	24,453,977		770,585

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.7 2.25

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1982	9,241,348.09	6,000,407	6,561,901	2,679,447	23.23	115,344
1993	318,021.19	173,004	189,193	128,828	26.82	4,803
1995	66,113.50	34,511	37,740	28,374	27.47	1,033
2007	103,418.50	38,161	41,732	61,686	30.78	2,004
2011	713,354.63	217,716	238,089	475,266	31.87	14,913
2016	194,345.00	41,629	45,524	148,821	33.02	4,507
2017	142,304.45	27,664	30,253	112,051	33.15	3,380
2019	317,761.10	48,427	52,959	264,802	33.37	7,935
2022	57,569.43	4,715	5,156	52,413	33.63	1,559
	11,154,235.89	6,586,234	7,202,547	3,951,689		155,478

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.4 1.39

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
NET SALVAGE PERCENT.. 0						
1964	231,540.50	223,159	174,294	57,246	2.29	24,998
1965	856,105.48	821,861	641,897	214,208	2.50	85,683
1966	68,822.22	65,780	51,376	17,446	2.73	6,390
1982	947,151.33	806,405	629,825	317,326	7.51	42,254
1994	158,949.55	116,287	90,823	68,127	11.37	5,992
2003	445,625.00	266,662	208,271	237,354	14.76	16,081
2007	20,981.75	10,990	8,584	12,398	16.36	758
2011	875,562.85	379,994	296,786	578,777	18.26	31,696
2012	624,318.68	255,658	199,676	424,643	18.75	22,648
2013	1,864,142.52	715,831	559,085	1,305,058	19.25	67,795
2015	106,662.50	35,199	27,491	79,172	20.30	3,900
2016	119,387.28	35,995	28,113	91,274	20.85	4,378
2020	8,152.35	1,435	1,121	7,031	23.41	300
2021	1,027,973.50	146,383	114,329	913,644	24.09	37,926
2025	350,000.00	3,185	2,488	347,512	27.22	12,767
	7,705,375.51	3,884,824	3,034,159	4,671,217		363,566

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.8 4.72

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 355.00 POWER GENERATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
1999	24,919.15	16,133	14,449	10,470	14.16	739
2000	79,174.56	50,078	44,852	34,323	14.53	2,362
2001	508,424.49	313,596	280,868	227,556	14.91	15,262
2005	53,265.49	29,296	26,239	27,026	16.36	1,652
2010	19,227.77	8,681	7,775	11,453	18.22	629
2013	751,097.18	287,520	257,513	493,584	19.35	25,508
2014	47,730.87	17,064	15,283	32,448	19.77	1,641
2016	81,446.70	24,776	22,190	59,257	20.59	2,878
2018	30,819.84	7,594	6,802	24,018	21.41	1,122
2021	67,371.02	10,133	9,075	58,296	22.60	2,579
2024	52,439.27	2,632	2,357	50,082	23.63	2,119
2025	234,953.98	2,420	2,168	232,786	23.96	9,716
	1,950,870.32	769,923	689,571	1,261,299		66,207

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.1 3.39

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1964	4,600.00	3,423	3,104	1,496	20.97	71
1969	9,998.04	6,999	6,346	3,652	24.00	152
1972	35,042.92	23,587	21,387	13,656	25.74	531
1979	467,472.84	281,699	255,424	212,049	30.34	6,989
1980	1,451,956.04	862,462	782,016	669,940	30.76	21,780
2005	68,212.54	19,782	17,937	50,276	48.97	1,027
2010	35,546.50	7,838	7,107	28,440	53.03	536
2013	2,234,372.95	399,506	362,242	1,872,131	55.11	33,971
2016	71,505.28	9,653	8,752	62,753	57.67	1,088
2018	172,854.20	18,271	16,567	156,287	59.23	2,639
2022	32,000.00	1,478	1,340	30,660	61.94	495
	4,583,561.31	1,634,698	1,482,222	3,101,339		69,279

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 44.8 1.51

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1928	300,632.54	268,284	244,771	55,862	11.70	4,775
1935	306,849.09	265,118	241,883	64,966	14.17	4,585
1945	356,202.43	293,511	267,787	88,415	17.09	5,173
1954	358,975.74	275,263	251,139	107,837	21.59	4,995
1955	1,078,616.96	822,985	750,858	327,759	21.74	15,076
1960	1,769,473.52	1,288,177	1,175,280	594,194	24.29	24,462
1963	337,032.79	238,215	217,338	119,695	25.72	4,654
1964	703,838.25	489,449	446,553	257,285	26.72	9,629
1965	62,216.92	42,930	39,168	23,049	26.96	855
1967	133,350.30	89,718	81,855	51,495	28.21	1,825
1970	612,681.79	397,630	362,781	249,901	29.75	8,400
1972	89,941.72	56,726	51,754	38,188	31.03	1,231
1973	30,657.95	19,131	17,454	13,204	31.33	421
1974	1,234.80	756	690	545	32.33	17
1979	8,015,134.91	4,534,963	4,137,515	3,877,620	35.30	109,848
1980	14,447,741.26	8,061,840	7,355,294	7,092,447	35.65	198,947
1985	53,886.58	27,374	24,975	28,912	38.74	746
1986	54,010.92	26,752	24,407	29,604	39.74	745
1991	77,808.53	34,391	31,377	46,432	42.92	1,082
1993	583,778.97	244,720	223,273	360,506	44.34	8,130
1994	309,042.68	126,460	115,377	193,666	44.76	4,327
1997	143,297.46	53,765	49,053	94,244	46.63	2,021
1999	57,331.40	20,123	18,359	38,972	48.07	811
2000	223,941.87	76,140	69,467	154,475	48.53	3,183
2001	50,314.35	16,423	14,984	35,330	49.53	713
2002	578,890.71	182,408	166,422	412,469	49.99	8,251
2003	487,008.25	146,784	133,920	353,088	50.99	6,925
2004	852,148.71	246,953	225,310	626,839	51.46	12,181
2005	113,916.57	31,669	28,893	85,024	51.94	1,637
2006	270,491.79	71,437	65,176	205,316	52.94	3,878
2007	5,712,432.40	1,439,533	1,313,371	4,399,061	53.43	82,333
2008	183,062.56	43,880	40,034	143,029	53.92	2,653
2009	219,599.40	49,893	45,520	174,079	54.42	3,199
2010	263,610.47	56,149	51,228	212,382	55.42	3,832
2011	357,838.60	71,639	65,361	292,478	55.93	5,229
2012	4,279,449.52	801,113	730,903	3,548,547	56.44	62,873
2013	354,578.68	61,697	56,290	298,289	56.97	5,236
2014	3,801,933.89	610,591	557,078	3,244,856	57.49	56,442
2015	54,692.67	8,040	7,335	47,358	58.03	816
2016	600,631.50	80,004	72,992	527,640	58.57	9,009
2018	467,100.69	49,046	44,748	422,353	59.67	7,078

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
2019	155,440.76	14,083	12,849	142,592	60.23	2,367
2020	194,497.33	14,879	13,575	180,922	60.36	2,997
2021	437,193.60	26,931	24,571	412,623	60.94	6,771
2022	603,335.21	28,417	25,926	577,409	60.69	9,514
2024	704,333.14	14,368	13,109	691,224	60.10	11,501
2025	2,918,966.52	12,552	11,452	2,907,515	57.55	50,522
	53,769,146.70	21,832,910	19,919,455	33,849,692		771,895
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					43.9	1.44

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
2024	6,300.00	174	169	6,131	44.00	139
2025	323,700.00	1,780	1,731	321,969	45.00	7,155
	330,000.00	1,954	1,900	328,100		7,294

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 45.0 2.21

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1930	59,407.74	59,408	59,408			
1935	59,922.30	59,922	59,922			
1945	68,639.57	68,640	68,640			
1954	29,756.64	28,944	26,489	3,268	1.99	1,642
1955	205,645.71	198,654	181,806	23,840	2.46	9,691
1960	336,056.90	318,918	291,870	44,187	3.49	12,661
1965	7,960.83	7,404	6,776	1,185	4.52	262
1967	2,138.86	1,960	1,794	345	5.29	65
1969	54,809.63	49,723	45,506	9,304	5.73	1,624
1970	83,541.86	75,355	68,964	14,578	5.98	2,438
1972	1,036.81	923	845	192	6.52	29
1973	3,461.20	3,060	2,800	661	6.82	97
1979	19,524.08	16,256	14,877	4,647	9.25	502
1980	3,949,214.43	3,252,178	2,976,360	972,854	9.64	100,918
1985	622.70	478	437	186	12.08	15
1986	3,329.39	2,519	2,305	1,024	12.55	82
1991	5,404.79	3,712	3,397	2,008	15.50	130
1993	59,349.46	38,933	35,631	23,718	16.78	1,413
1994	76,182.84	48,650	44,524	31,659	17.54	1,805
1997	9,425.05	5,568	5,096	4,329	19.39	223
1999	13,735.76	7,643	6,995	6,741	20.73	325
2000	57,493.71	30,903	28,282	29,212	21.51	1,358
2001	36,301.38	18,906	17,303	18,998	22.08	860
2002	313,578.12	157,228	143,894	169,684	22.87	7,420
2003	58,987.86	28,550	26,129	32,859	23.45	1,401
2004	45,131.32	20,945	19,169	25,962	24.25	1,071
2005	30,006.98	13,323	12,193	17,814	25.05	711
2006	33,867.22	14,414	13,192	20,675	25.64	806
2007	99,493.11	40,295	36,878	62,615	26.44	2,368
2008	34,733.17	13,344	12,212	22,521	27.25	826
2009	56,463.59	20,508	18,769	37,695	28.05	1,344
2010	26,594.31	9,135	8,360	18,234	28.67	636
2011	69,524.36	22,387	20,488	49,036	29.48	1,663
2012	1,678,160.94	503,952	461,211	1,216,950	30.29	40,177
2014	361,480.55	92,647	84,790	276,691	31.92	8,668
2016	53,529.80	11,370	10,406	43,124	33.37	1,292
2018	19,711.68	3,284	3,005	16,707	35.02	477
2019	129,724.72	18,603	17,025	112,700	35.84	3,145
2020	43,750.61	5,250	4,805	38,946	36.67	1,062
2021	264,741.98	25,627	23,454	241,288	37.32	6,465

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
2022	128,502.28	9,368	8,573	119,929	38.15	3,144
2024	15,747.23	487	446	15,301	39.23	390
2025	171,737.59	1,082	990	170,748	39.43	4,330
	8,778,429.06	5,310,456	4,876,016	3,902,413		223,536
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					17.5	2.55

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 364.00 FLOW MEASURING DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2.5						
NET SALVAGE PERCENT.. 0						
1999	250,000.00	227,500	200,979	49,021	2.57	19,074
2012	50,000.00	36,855	32,559	17,441	4.64	3,759
	300,000.00	264,355	233,538	66,462		22,833
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					2.9	7.61

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0.5						
NET SALVAGE PERCENT.. 0						
1972	6,828.67	6,551	5,148	1,681	2.25	747
1981	704,659.48	629,402	494,619	210,040	5.26	39,932
1999	618,885.82	436,067	342,686	276,200	10.90	25,339
2004	11,130.01	6,965	5,473	5,657	12.56	450
2005	25,375.16	15,377	12,084	13,291	13.00	1,022
2009	88,500.26	46,587	36,611	51,889	14.40	3,603
2010	99,702.01	50,250	39,489	60,213	14.76	4,079
2011	291,998.96	140,218	110,191	181,808	15.15	12,001
2013	1,855,692.74	797,206	626,488	1,229,205	15.93	77,163
2015	35,878.86	13,419	10,545	25,334	16.74	1,513
2016	200,925.54	69,259	54,428	146,498	17.11	8,562
2018	239,016.24	67,092	52,725	186,291	17.94	10,384
2019	41,727.42	10,290	8,086	33,641	18.33	1,835
2025	2,624,161.58	31,490	24,747	2,599,415	20.54	126,554
	6,844,482.75	2,320,173	1,823,320	5,021,163		313,184

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.0 4.58

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
1966	79,060.20	75,566	63,121	15,939	2.73	5,838
1982	5,793,376.21	5,007,215	4,182,576	1,610,800	6.75	238,637
1991	164,744.00	129,390	108,081	56,663	9.29	6,099
1992	32,985.00	25,471	21,276	11,709	9.74	1,202
1993	1,564,790.95	1,191,745	995,477	569,314	10.02	56,818
1998	358,366.45	248,670	207,717	150,649	11.91	12,649
2000	365,592.13	242,205	202,316	163,276	12.74	12,816
2011	721,737.70	313,234	261,647	460,091	18.26	25,197
2014	2,635,000.00	930,418	777,187	1,857,813	20.15	92,199
2016	24,150.00	7,107	5,937	18,213	21.58	844
2018	16,100.00	3,753	3,135	12,965	23.03	563
2019	6,360,680.00	1,282,313	1,071,129	5,289,551	23.76	222,624
2020	192,835.45	32,589	27,222	165,613	24.59	6,735
2021	189,913.00	25,828	21,574	168,339	25.41	6,625
2022	364,734.70	37,422	31,259	333,476	26.24	12,709
	18,864,065.79	9,552,926	7,979,654	10,884,412		701,555

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.5 3.72

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1965	25,662.14	23,404	22,618	3,044	5.79	526
	25,662.14	23,404	22,618	3,044		526
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					5.8	2.05

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	8,298.00	2,489	233	8,065	14.00	576
2021	43,027.80	8,606	804	42,224	16.00	2,639
2022	2,380.00	357	33	2,347	17.00	138
2024	2,100.00	131	12	2,088	18.75	111
2025	32,900.00	411	39	32,861	19.75	1,664
	88,705.80	11,994	1,121	87,585		5,128

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.1 5.78

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 390.20 COMPUTER AND PERIPHERAL EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2020	4,235.00	4,235	4,235			
2021	1,721.00	1,377	191-	1,912	1.00	1,912
2022	1,943.00	1,166	162-	2,105	2.00	1,052
	7,899.00	6,778	3,882	4,017		2,964
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..				1.4		37.52

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L4						
NET SALVAGE PERCENT.. 0						
2009	21,274.39	18,687	17,143	4,131	2.21	1,869
2011	350,886.92	299,166	274,440	76,447	2.42	31,590
2012	87,318.15	72,649	66,645	20,673	2.62	7,890
2014	25,770.64	19,617	17,996	7,775	3.45	2,254
2017	31,351.49	18,510	16,980	14,371	5.55	2,589
2018	43,013.45	22,492	20,633	22,380	6.39	3,502
2019	34,999.96	15,813	14,506	20,494	7.28	2,815
2020	33,881.00	12,824	11,764	22,117	8.21	2,694
2022	80,281.00	18,256	16,747	63,534	10.19	6,235
2023	69,650.00	11,882	10,900	58,750	10.94	5,370
2024	10,500.00	995	913	9,587	11.94	803
2025	42,000.00	798	732	41,268	12.94	3,189
	830,927.00	511,689	469,399	361,528		70,800

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.1 8.52

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 393.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2024	21,000.00	1,312	2,196	18,804	18.75	1,003
2025	129,000.00	1,612	2,698	126,302	19.75	6,395
	150,000.00	2,924	4,894	145,106		7,398

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.6 4.93

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 22-R2						
NET SALVAGE PERCENT.. 0						
1992	27,892.00	26,232	26,435	1,457	2.09	697
1993	79,275.00	73,821	74,391	4,884	2.36	2,069
1997	183,665.00	163,535	164,799	18,866	3.45	5,468
2000	70,959.00	60,315	60,781	10,178	4.41	2,308
2001	11,397.00	9,519	9,593	1,804	4.74	381
2011	55,592.00	33,389	33,647	21,945	9.31	2,357
2012	95,512.00	54,260	54,679	40,833	9.88	4,133
2014	25,114.00	12,570	12,667	12,447	10.98	1,134
2015	56,800.00	26,355	26,559	30,241	11.55	2,618
2018	31,137.00	10,789	10,872	20,265	13.20	1,535
2019	8,789.00	2,668	2,689	6,100	13.76	443
2021	476,106.00	101,506	102,289	373,817	14.76	25,326
2023	11,931.60	1,520	1,532	10,400	15.42	674
	1,134,169.60	576,479	580,933	553,237		49,143

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.3 4.33

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2021	518,728.20	138,329	52,088	466,640	11.00	42,422
2024	15,750.00	1,312	494	15,256	13.75	1,110
2025	111,750.00	1,863	702	111,048	14.75	7,529
	646,228.20	141,504	53,284	592,944		51,061

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.6 7.90

PART III. EXPERIENCED AND ESTIMATED NET SALVAGE

PENNSYLVANIA-AMERICAN WATER COMPANY
BASA WASTEWATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2024 TRANSACTION YEAR				
354.30	16,458.35			
355.00	25,784.76			
361.10	310,569.00	183,169.00		183,169.00-
363.00	15,306.27	9,363.00		9,363.00-
371.00	288,021.05			
391.00	4,608.36	838.00		838.00-
396.00	413,449.15			
	1,074,196.94	193,370.00		193,370.00-
TOTAL	1,074,196.94	193,370.00		193,370.00-

EXHIBIT NO. 11-I - DEPRECIATION STUDY

BRENTWOOD WASTEWATER OPERATIONS

AS OF JUNE 30, 2024

Exhibit No. 11-I
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

BRENTWOOD WASTEWATER OPERATIONS

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2024

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-I
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

BRENTWOOD WASTEWATER OPERATIONS

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF JUNE 30, 2024

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
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gannettfleming.com

October 12, 2023

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant. The results of our study as of June 30, 2024 are presented in the attached report. The results of our study as of June 30, 2025 are presented in our report, "2025 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of June 30, 2025." The same methods, procedures and estimates are used in both studies.

The attached report sets forth a description of the methods and procedures upon which the studies were based, the estimates of survivor curves, and the calculated annual depreciation as of June 30, 2024.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

FREDERICK B. JOHNSTON, JR.
Senior Analyst

JJS:mle

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PART I. INTRODUCTION

PENNSYLVANIA-AMERICAN WATER COMPANY

BRENTWOOD WASTEWATER OPERATIONS

DEPRECIATION STUDY

PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study for Pennsylvania-American Water Company to determine the annual depreciation accrual rates and amounts applicable to the original cost of wastewater plant as of June 30, 2024. The rates and amounts are based on the straight line remaining life method of depreciation. This report also describes the concepts, methods and judgments which underlie the recommended annual depreciation accrual rates related to wastewater plant in service as of June 30, 2024.

Part I, Introduction, contains statements with respect to the basis of the study and the development of net original cost. Part II, Estimation of Survivor Curves, presents descriptions of the considerations and methods used in the service life study. Part III, Service Life Considerations, presents the results of the average service life analysis. Part IV, Calculation of Annual and Accrued Depreciation, describes the procedures used in the calculation of group depreciation. Part V, Results of Study, presents summaries by depreciable group of annual depreciation accrual rates and amounts, as well as composite remaining lives. Part VI, Service Life Statistics, presents the statistical analysis of service life estimates and Part VII, Detailed Depreciation Calculations, presents the detailed tabulations of annual depreciation.

BASIS OF THE STUDY

The purpose of the depreciation study was to determine the annual depreciation accruals applicable to the original cost of wastewater plant in service as of June 30, 2024. For most accounts, the straight line remaining life method using attained ages, the book depreciation reserve and estimated survivor curves, was the basis for the calculation of annual depreciation. For certain accounts, the annual and accrued amortization amounts were based on the age of the property and the selected amortization period.

The survivor curve estimates were based on judgment which incorporated (1) analyses of historical data related to wastewater property for all Pennsylvania-American Water Company Wastewater Operations; (2) consideration of the character, use and location of the property; (3) probable future events and management plans; and (4) a general knowledge of wastewater property lives. The use of Iowa type survivor curves is a generally-accepted method of estimating average service life when the actual lives of individual property units are dispersed.

DEVELOPMENT OF NET ORIGINAL COST

The original cost data used in this study were obtained from the Company's continuing property records and work order system which show in detail the original cost of the property including descriptions, locations and years of installation of property units. The net original cost was developed from the original cost data by deducting contributions in aid of construction. The development of net original cost by plant account is set forth in Table 1 on page V-4.

PART II. ESTIMATION OF SURVIVOR CURVES

PART II. ESTIMATION OF SURVIVOR CURVES

The calculation of annual depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. The estimation of survivor curves is discussed below and the development of net salvage is discussed in later sections of this report.

SURVIVOR CURVES

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units or by constructing a survivor curve by plotting the number of units which survive at successive ages.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1, the remaining life at age 30 is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval. It is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

This study has incorporated the use of Iowa curves developed from a retirement rate analysis of historical retirement history. A discussion of the concepts of survivor curves and of the development of survivor curves using the retirement rate method is presented below.

Iowa Type Curves

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. There are four families in the Iowa system, labeled in accordance with the location of the modes of the retirements (or the portion of the frequency curve with the highest level of retirements) in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family. A higher number designates a higher mode curve.

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.

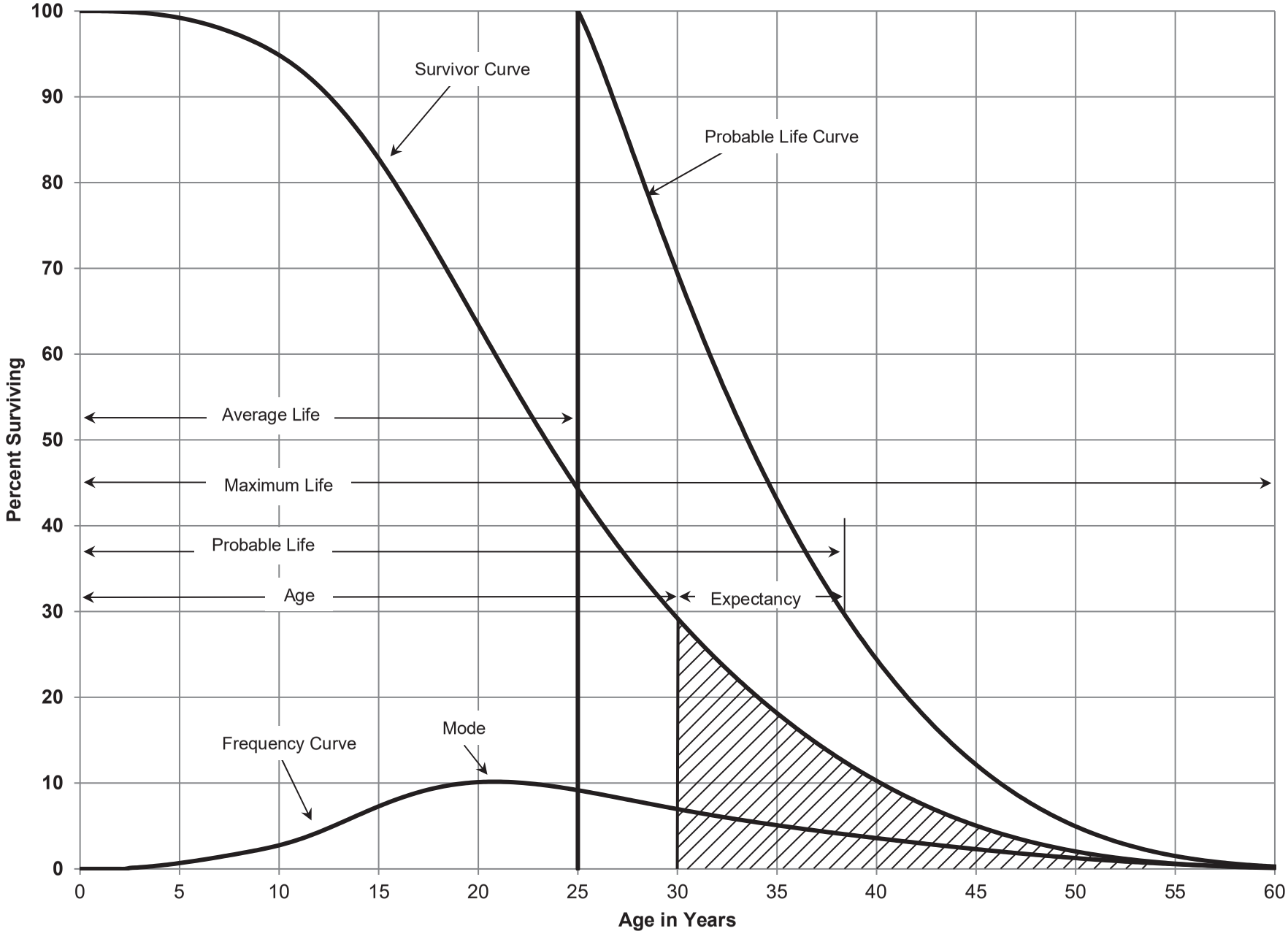

FIGURE 1. TYPICAL SURVIVOR CURVE AND DERIVED CURVES

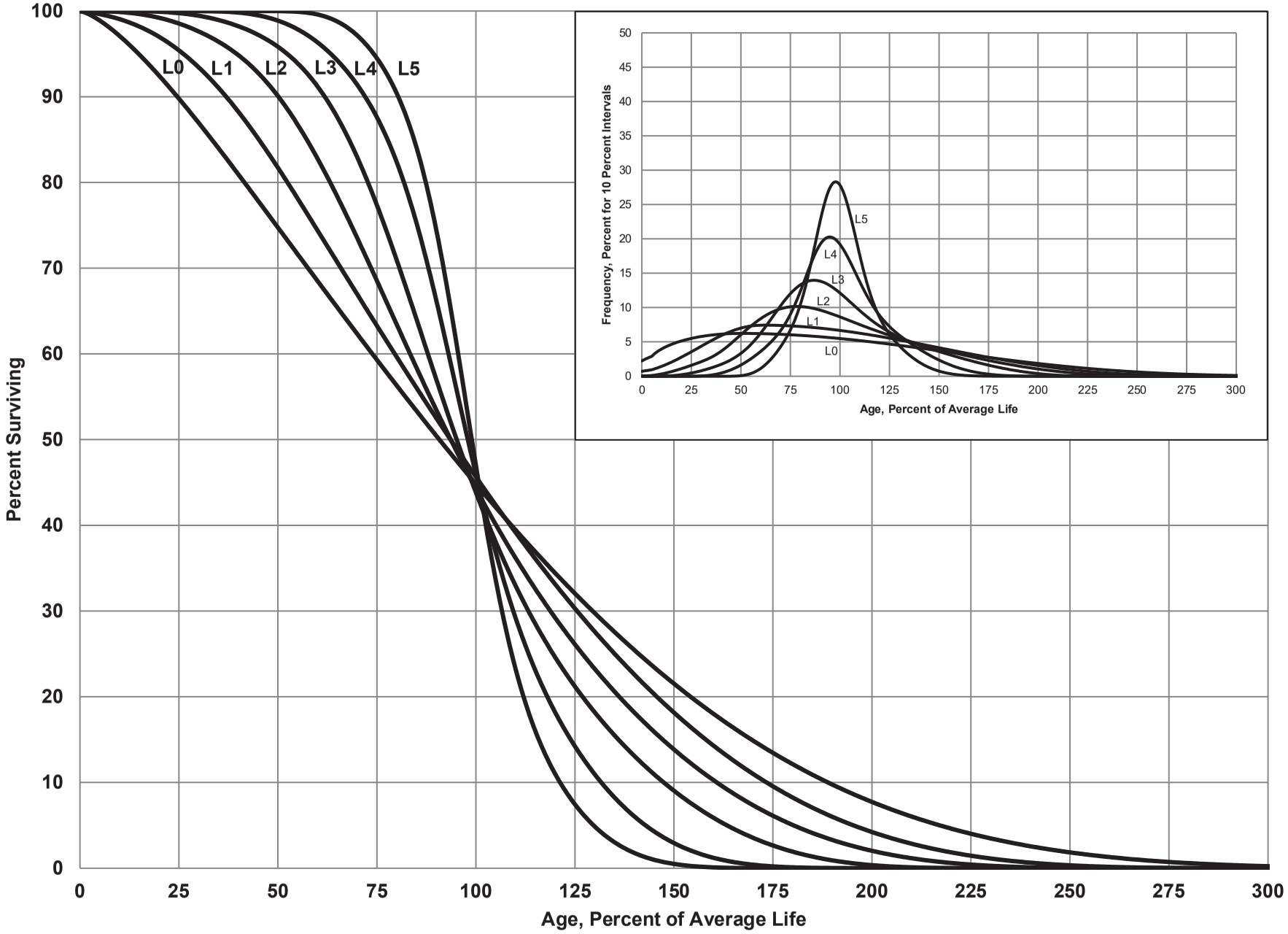

FIGURE 2.. LEFT MODAL OR "L" IOWA TYPE SURVIVOR CURVES

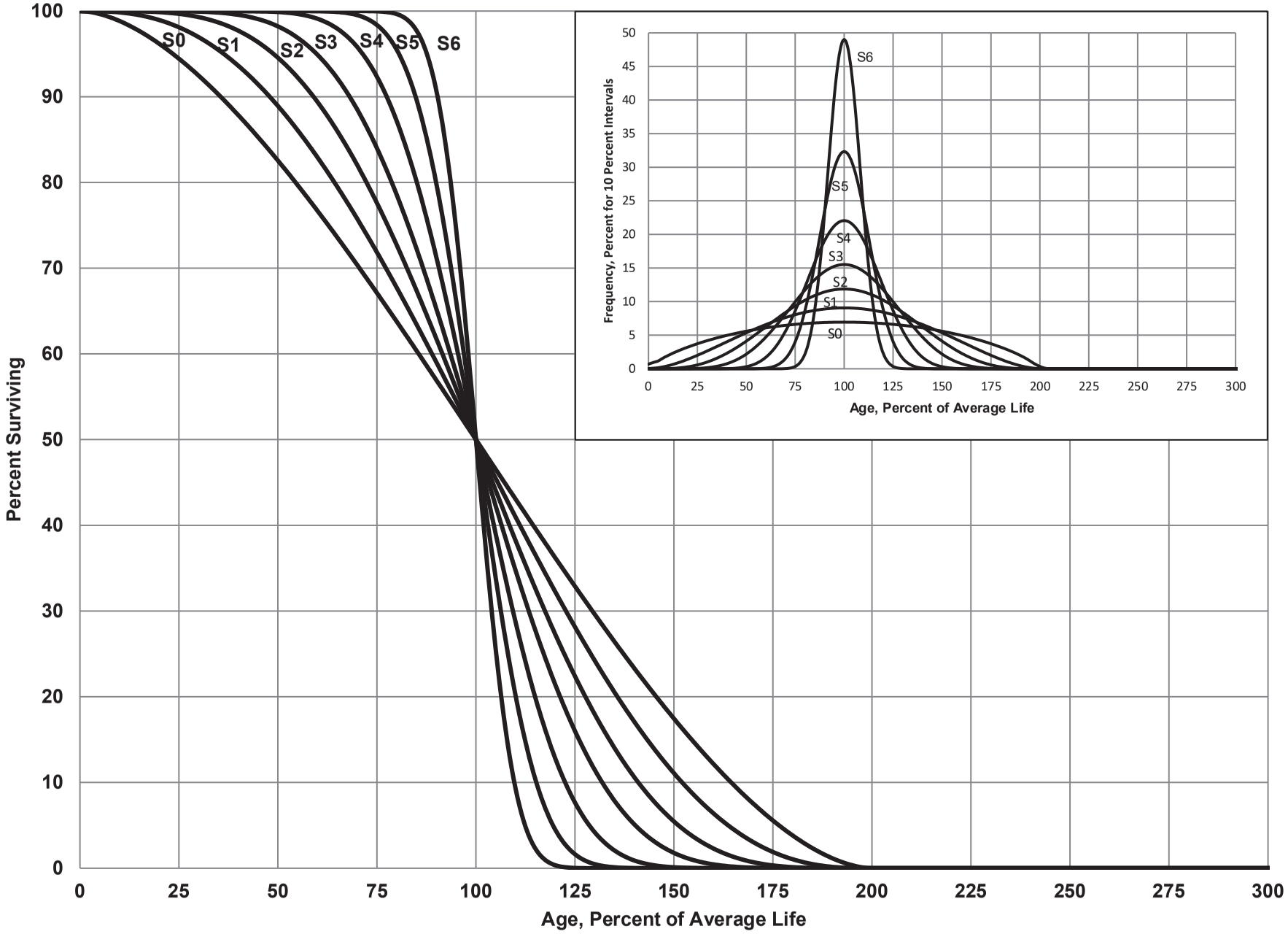

FIGURE 3.. SYMMETRICAL OR "S" IOWA TYPE SURVIVOR CURVES

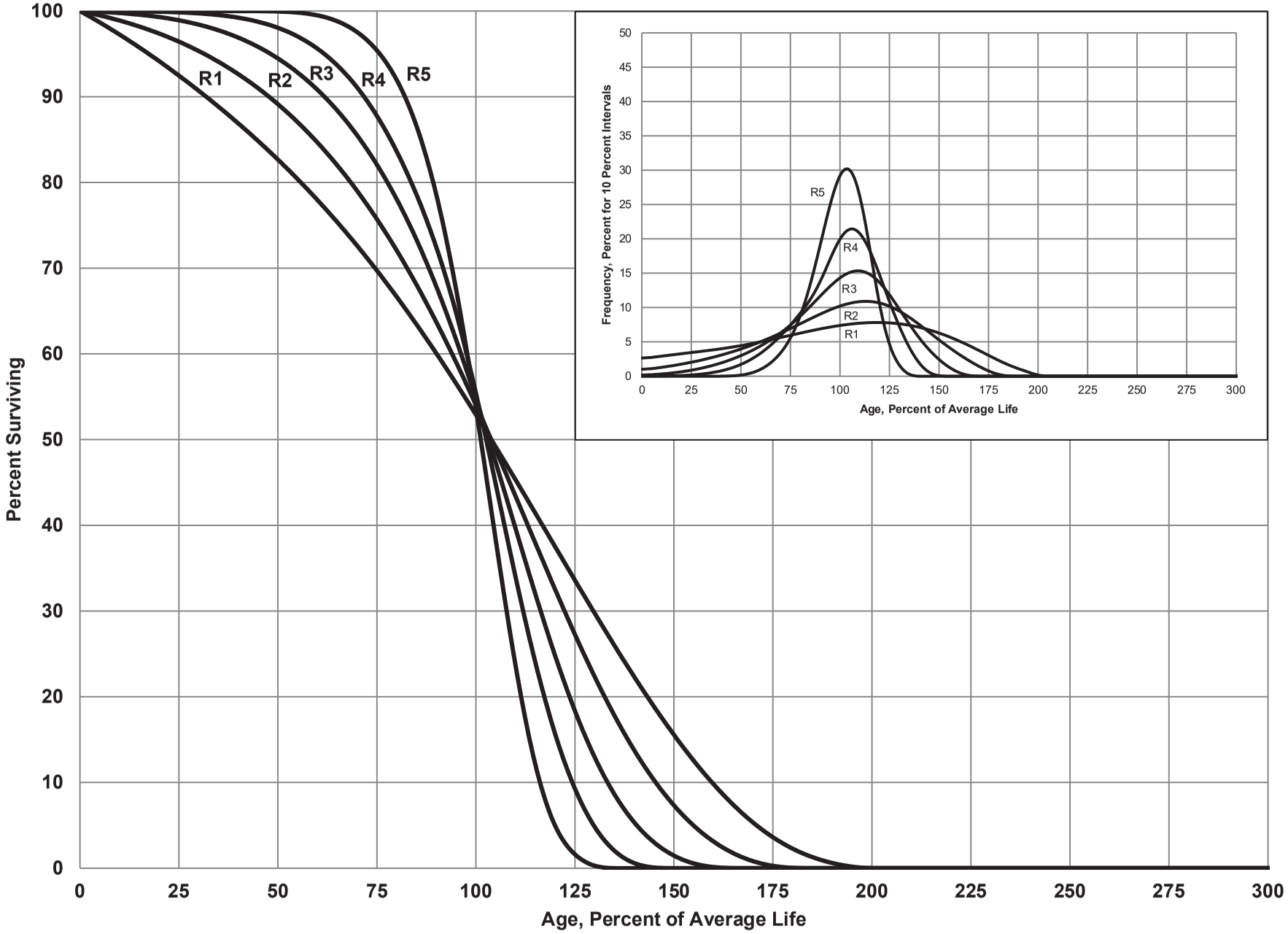

FIGURE 4.. RIGHT MODAL OR "R" IOWA TYPE SURVIVOR CURVES

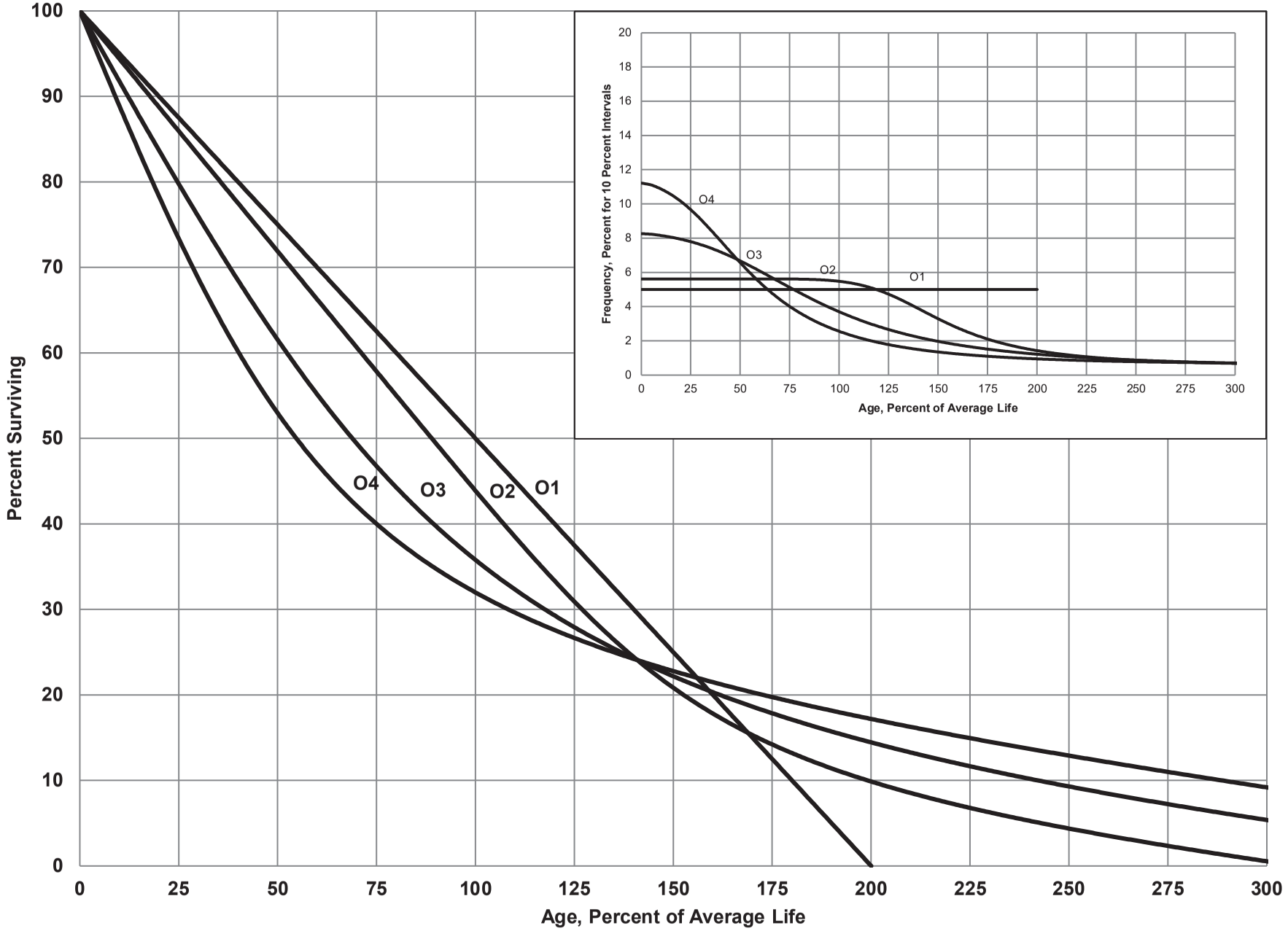

FIGURE 5. ORIGIN MODAL OR "O" IOWA TYPE SURVIVOR CURVES

These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."[1] In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student, submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text and is also explained in several publications including "Statistical Analyses of Industrial Property Retirements,"[2] "Engineering Valuation and Depreciation,"[3] and "Depreciation Systems."[4]

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band. The band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

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[1]Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

[2]Winfrey, Robley, Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

[3]Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.

[4]Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994.

Schedules of Annual Transactions in Plant Records

The property group used to illustrate the retirement rate method is observed for the experience band 2015-2024 for which there were placements during the years 2010-2024. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-11 and II-12. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, $10,000 of the dollars invested in 2010 were retired in 2015. The $10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of $143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2015 retirements of 2010 installations and ending with the 2024 retirements of the 2019 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20.

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024

Placement Band 2010-2024

Year Placed	Retirements, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	10	11	12	13	14	16	23	24	25	26	26	13½-14½
2011	11	12	13	15	16	18	20	21	22	19	44	12½-13½
2012	11	12	13	14	16	17	19	21	22	18	64	11½-12½
2013	8	9	10	11	11	13	14	15	16	17	83	10½-11½
2014	9	10	11	12	13	14	16	17	19	20	93	9½-10½
2015	4	9	10	11	12	13	14	15	16	20	105	8½-9½
2016		5	11	12	13	14	15	16	18	20	113	7½-8½
2017			6	12	13	15	16	17	19	19	124	6½-7½
2018				6	13	15	16	17	19	19	131	5½-6½
2019					7	14	16	17	19	20	143	4½-5½
2020						8	18	20	22	23	146	3½-4½
2021							9	20	22	25	150	2½-3½
2022								11	23	25	151	1½-2½
2023									11	24	153	½-1½
2024										13	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606	

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024 Placement Band 2010-2024

Year Placed	Acquisitions, Transfers and Sales, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	-	-	-	-	-	-	60[a]	-	-	-	-	13½-14½
2011	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2012	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2013	-	-	-	-	-	-	-	(5)[b]	-	-	60	10½-11½
2014	-	-	-	-	-	-	-	6[a]	-	-	-	9½-10½
2015	-	-	-	-	-	-	-	-	-	-	(5)	8½-9½
2016		-	-	-	-	-	-	-	-	-	6	7½-8½
2017			-	-	-	-	-	-	-	-	-	6½-7½
2018				-	-	-	-	(12)[b]	-	-	-	5½-6½
2019					-	-	-	-	22[a]	-	-	4½-5½
2020						-	-	(19)[b]	-	-	10	3½-4½
2021							-	-	-	-	-	2½-3½
2022								-	-	(102)[c]	(121)	1½-2½
2023									-	-	-	½-1½
2024											-	0-½
Total	-	-	-	-	-	-	60	(30)	22	(102)	(50)	

[a] Transfer Affecting Exposures at Beginning of Year
[b] Transfer Affecting Exposures at End of Year
[c] Sale with Continued Use
Parentheses Denote Credit Amount.

In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

Schedule of Plant Exposed to Retirement

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14. The surviving plant at the beginning of each year from 2015 through 2024 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2020 are calculated in the following manner:

Exposures at age 0	= amount of addition	= $750,000
Exposures at age ½	= $750,000 - $ 8,000	= $742,000
Exposures at age 1½	= $742,000 - $18,000	= $724,000
Exposures at age 2½	= $724,000 - $20,000 - $19,000	= $685,000
Exposures at age 3½	= $685,000 - $22,000	= $663,000

SCHEDULE 3. PLANT EXPOSED TO RETIREMENT
JANUARY 1 OF EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024

Placement Band 2010-2024

Year Placed	Exposures, Thousands of Dollars — Annual Survivors at the Beginning of the Year										Total at Beginning of Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	255	245	234	222	209	195	239	216	192	167	167	13½-14½
2011	279	268	256	243	228	212	194	174	153	131	323	12½-13½
2012	307	296	284	271	257	241	224	205	184	162	531	11½-12½
2013	338	330	321	311	300	289	276	262	242	226	823	10½-11½
2014	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½
2015	420[a]	416	407	397	386	374	361	347	332	316	1,503	8½-9½
2016		460[a]	455	444	432	419	405	390	374	356	1,952	7½-8½
2017			510[a]	504	492	479	464	448	431	412	2,463	6½-7½
2018				580[a]	574	561	546	530	501	482	3,057	5½-6½
2019					660[a]	653	639	623	628	609	3,789	4½-5½
2020						750[a]	742	724	685	663	4,332	3½-4½
2021							850[a]	841	821	799	4,955	2½-3½
2022								960[a]	949	926	5,719	1½-2½
2023									1,080[a]	1,069	6,579	½-1½
2024										1,220[a]	7,490	0-½
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	

[a]Additions during the year

For the entire experience band 2015-2024, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

255 + 268 + 284 + 311 + 334 + 374 + 405 + 448 + 501 + 609.

Original Life Table

The original life table, illustrated in Schedule 4 on page II-16, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½	=	88.15				
Exposures at age 4½	=	3,789,000				
Retirements from age 4½ to 5½	=	143,000				
Retirement Ratio	=	143,000	÷	3,789,000	=	0.0377
Survivor Ratio	=	1.000	-	0.0377	=	0.9623
Percent surviving at age 5½	=	(88.15)	x	(0.9623)	=	84.83

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

SCHEDULE 4. ORIGINAL LIFE TABLE
CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2015-2024 Placement Band 2010-2024

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	Percent Surviving at Beginning of Age Interval
(1)	(2)	(3)	(4)	(5)	(6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	167	26	0.1557	0.8443	42.24
					35.66
Total	44,780	1,606			

Column 2 from Schedule 3, Column 12, Plant Exposed to Retirement.
Column 3 from Schedule 1, Column 12, Retirements for Each Year.
Column 4 = Column 3 Divided by Column 2.
Column 5 = 1.0000 Minus Column 4.
Column 6 = Column 5 Multiplied by Column 6 as of the Preceding Age Interval.

The original survivor curve is plotted from the original life table (column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

Smoothing the Original Survivor Curve

The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R Iowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group.

FIGURE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

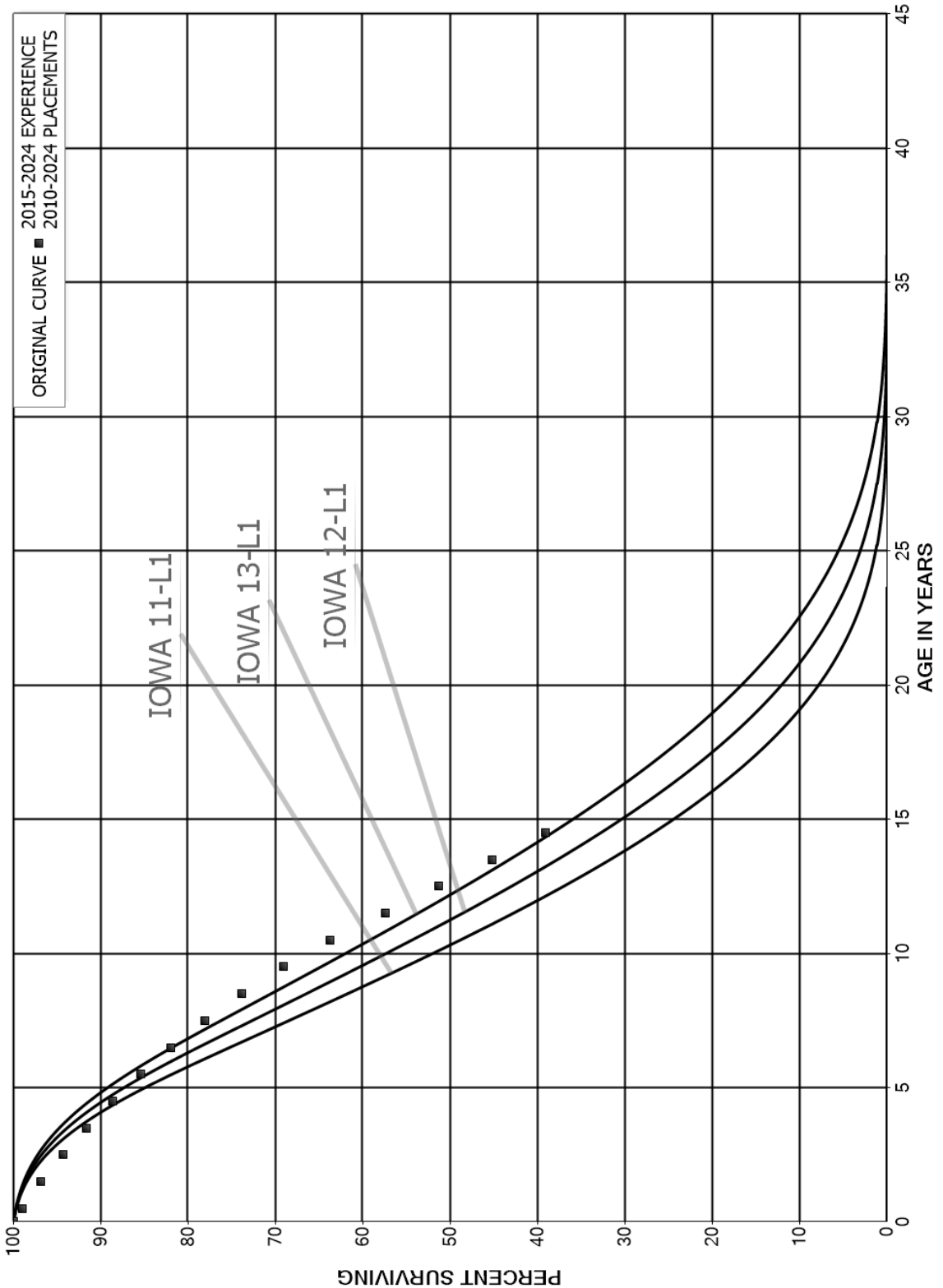


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

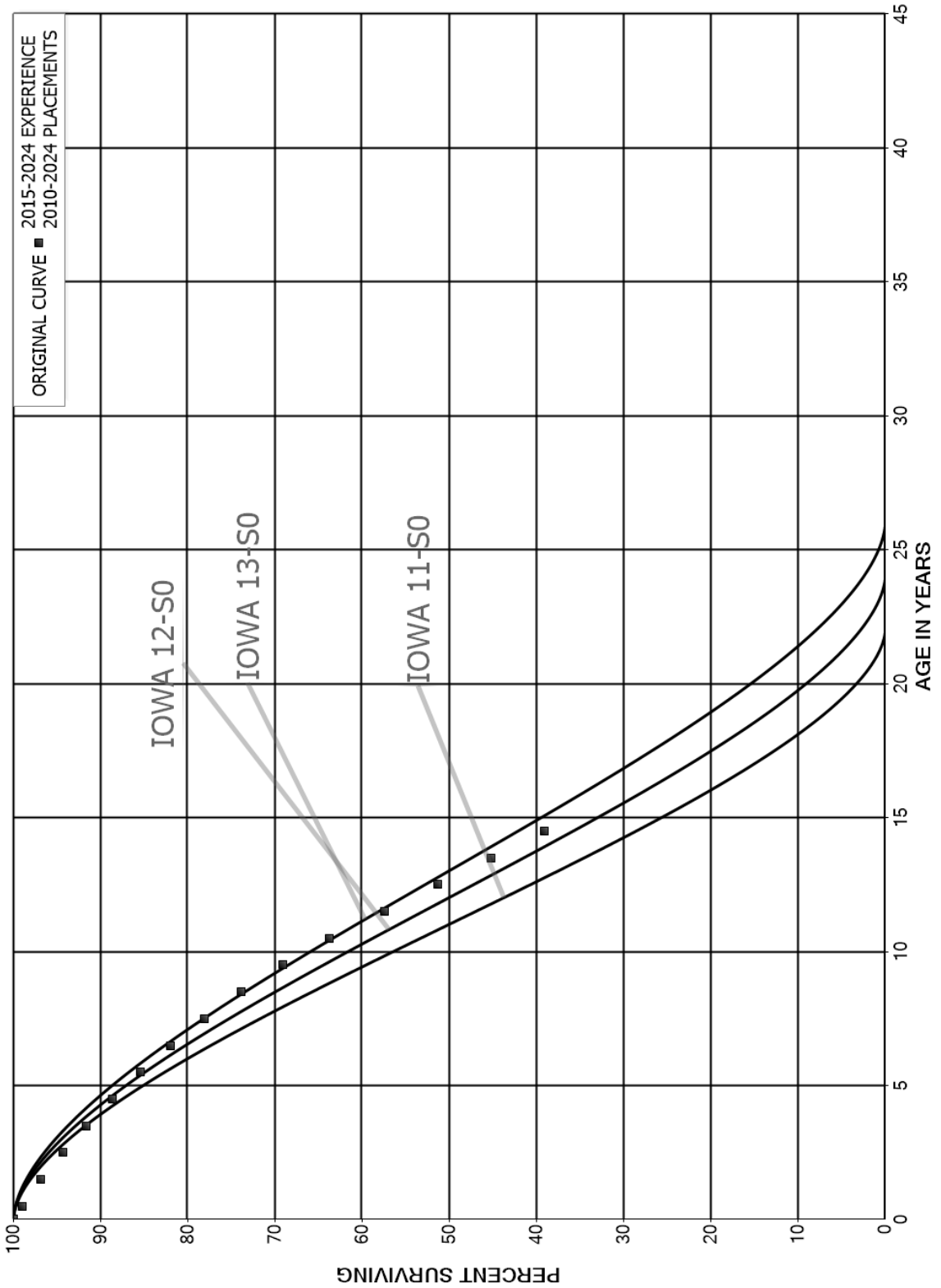


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

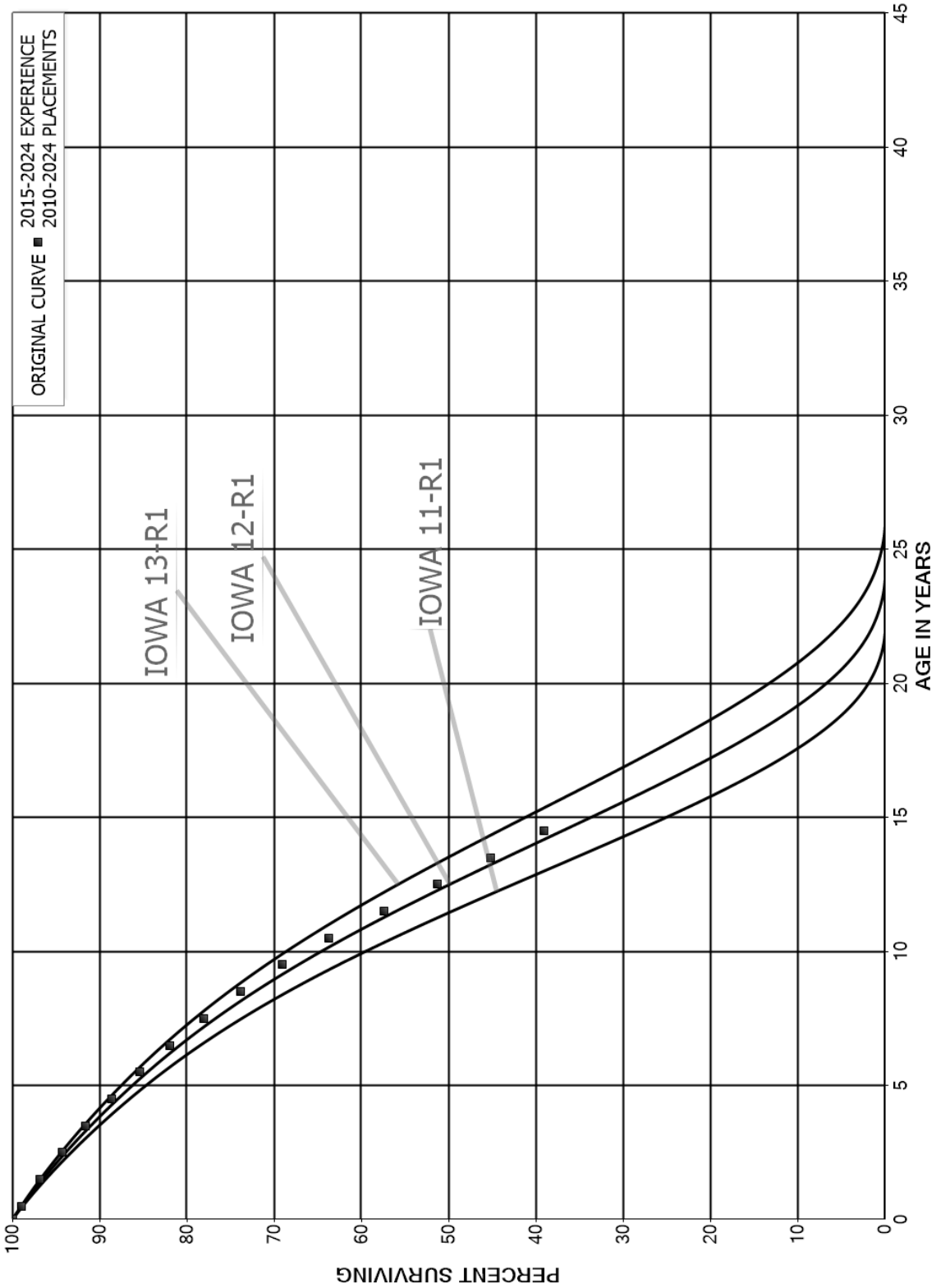
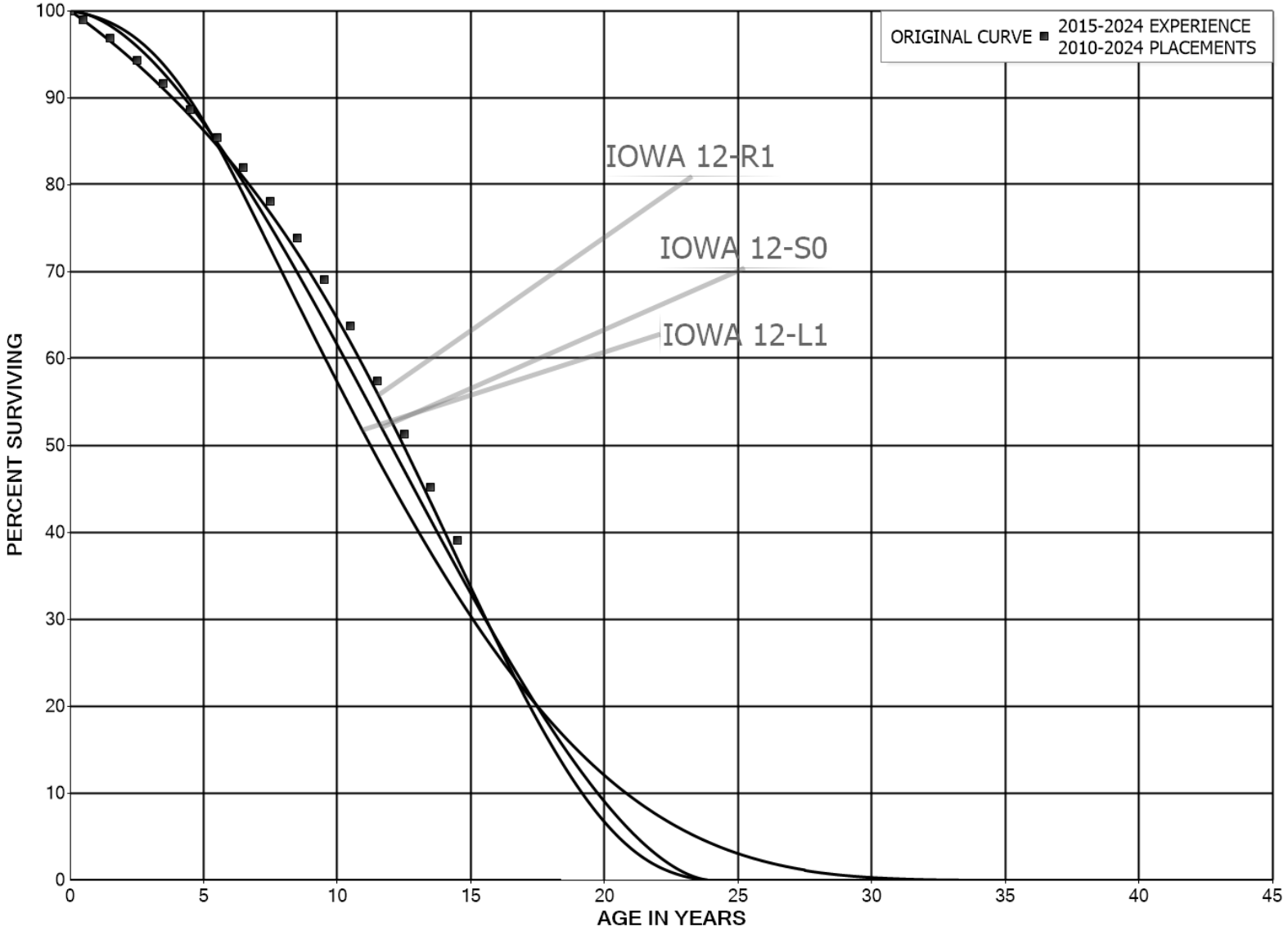


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PART III. SERVICE LIFE CONSIDERATIONS

PART III. SERVICE LIFE CONSIDERATIONS

JUDGMENTS

The survivor curve estimates were based on judgment which considered factors including statistical analyses of retirements, Company policies and outlook as determined during discussions with management, and survivor curve estimates from previous studies of other Pennsylvania-American wastewater systems. For depreciable groups which consist of numerous similar items of property, the distribution of the lives of the units in the group was judged on the basis of an average survival pattern for the entire group.

The amortization periods selected for general plant Accounts 390 and 393 are discussed in the section, “Amortization of General Plant Accounts.”

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

BOOK RESERVE

The book reserve as of June 30, 2023, is the result of a bringforward of the book reserves established by the Commission for the Brentwood wastewater operation at the time of acquisition during the first quarter of 2024. The projected book reserve as of June 30, 2024, is a bringforward of the June 30, 2023 book reserve based on projected accruals, retirements, cost of removal, salvage and other credits.

GROUP DEPRECIATION PROCEDURES

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally the items within a group do not have identical service lives but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group. In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

Single Unit of Property

The calculation of straight line depreciation for a single unit of property is straightforward. For example, if a $1,000 unit of property attains an age of four years and has a life expectancy of six years, the annual accrual over the total life is:

$$\frac{\$1{,}000}{(4 + 6)} = \$100 \text{ per year.}$$

The accrued depreciation is:

$$\$1{,}000\left(1 - \frac{6}{10}\right) = \$400.$$

Remaining Life Annual Accruals

For the purpose of calculating remaining life accruals as of June 30, 2024, the depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation follow. The detailed calculations as of June 30, 2024, are set forth in the Results of Study section of the report.

Average Service Life Procedure

In the average service life procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the average remaining life of the vintage. The average remaining life is a directly weighted average derived from the estimated future survivor curve in accordance with the average service life procedure.

The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which would not be allocated to expense through future depreciation accruals if current forecasts of life characteristics

are used as the basis for such accruals. The accrued depreciation calculation consists of applying an appropriate ratio to the surviving original cost of each vintage of each account based upon the attained age and service life. The straight line accrued depreciation ratios are calculated as follows for the average service life procedure:

$$Ratio = 1 - \frac{Average\ Remaining\ Life}{Average\ Service\ Life}.$$

AMORTIZATION OF GENERAL PLANT ACCOUNTS

In order to use a more efficient and cost effective accounting process for equipment recorded in general plant Accounts 390 and 393, amounts capitalized in these accounts are amortized rather than depreciated. Amortization as defined in the Uniform System of Accounts is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized.

The primary reasons for the amortization of certain general plant accounts is that the effort required to unitize additions, periodically inventory equipment and determine amounts to be retired for equipment recorded in these accounts is disproportionate to the original cost of the equipment when compared to other wastewater plant accounts.

Accounting for such equipment using an amortization concept consists of capitalization of amounts to these accounts based on the same criteria as used previously under depreciation accounting, amortization of the asset over a fixed period, retirement of the equipment at the end of the amortization period and recognition of any net salvage related to disposition of equipment in these accounts as a gain or loss.

For equipment in these accounts that was placed in service prior to implementation of amortization accounting, the net book value by vintage is amortized over the remaining amortization period specified for each account and the original cost will be retired at the end of this period.

The amortization periods selected for each account or subaccount are based on a review of the existing depreciation rates for the accounts, typical service lives used for each type of equipment and a consideration of the period during which it is anticipated that most of the benefit of the equipment will be realized. The amortization periods are as follows:

Account Number	Description	Amortization Period, Years
390.00	Office Furniture and Equipment	20
393.00	Tools, Shop and Garage Equipment	20

PART V. RESULTS OF STUDY

PART V. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Table 1 presents the development of the net original cost used in the study. The results of the depreciation study are summarized in Table 2 which sets forth, by depreciable group, the estimated survivor curve, calculated annual accruals and book reserve related to net original cost and the annual amortization of net salvage. Table 3 presents the bringforward to June 30, 2024 of the book reserve as of June 30, 2023. Table 4 sets forth the calculation of estimated depreciation accruals for the twelve months ended June 30, 2024.

DESCRIPTION OF DETAILED TABULATIONS

Supporting statistical data for the estimates of average service lives and survivor curves and the annual depreciation calculations are presented in two sections.

The section beginning on page VI-2 sets forth, for each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of the original life table plotted on the chart. A cumulative summary, by year installed, for utility plant and the supporting data for the original cost depreciation calculations are presented in the section beginning on page VII-3.

In the first section, the survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the type curve designation. The numeral used is the average life

derived from the entire curve from 100 percent to zero percent surviving. In cases where only a segment of the estimated curve is used in the depreciation calculation, the numeral used for identification purposes is not a designation of the average life of the group. The titles of the charts indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which were plotted. The experience band indicates the range of years for which the retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The tables of the calculated annual depreciation related to net original cost are presented in account sequence in the second section and indicate the estimated average survivor curves used in the calculations. The tables set forth, for each installation year, the original cost, calculated accrued depreciation, allocated book reserve, remaining life expectancy, and the calculated annual accrual.

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2024

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2024		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2024
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
DEPRECIABLE PLANT										
353.20	LAND AND LAND RIGHTS - COLLECTION	36.00								36.00
361.10	COLLECTION SEWERS - GRAVITY MAINS	8,120,630.40								8,120,630.40
361.20	MANHOLES	1,512,306.05								1,512,306.05
363.00	SERVICES	488,708.30								488,708.30
390.00	OFFICE FURNITURE AND EQUIPMENT	1,050.00								1,050.00
391.00	TRANSPORTATION EQUIPMENT	14,700.00								14,700.00
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	10,500.00								10,500.00
TOTAL DEPRECIABLE PLANT		**10,147,930.75**		**0.00**		**0.00**		**0.00**		**10,147,930.75**

PENNSYLVANIA AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF JUNE 30, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE	FMV PLANT	FMV RESERVE	CALCULATED EXPENSE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)	(9)	(10)	(11)=((9)-(10))*(7)
	DEPRECIABLE PLANT										
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	8,120,630.40	2,120,652	5,999,978	126,169	1.55	47.6	33,836,977.20	17,615,329	251,436
361.20	MANHOLES	50-S2.5	1,512,306.05	359,710	1,152,596	65,840	4.35	17.5	4,450,344.13	2,634,261	79,000
363.00	SERVICES	47-R3	488,708.30	246,411	242,297	15,743	3.22	15.4	8,134,112.13	6,705,851	45,990
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	1,050.00	26	1,024	52	4.95	19.7	1,050.00	26	51
391.00	TRANSPORTATION EQUIPMENT	14-L4	14,700.00	509	14,191	1,097	7.46	12.9	14,700.00	509	1,059
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	10,500.00	263	10,237	518	4.93	19.8	10,500.00	263	505
	TOTAL DEPRECIABLE PLANT		**10,147,894.75**	**2,727,571**	**7,420,323**	**209,419**	**2.06**		**46,447,683.46**	**26,956,239**	**378,041**
	NONDEPRECIABLE PLANT										
353.20	LAND AND LAND RIGHTS - COLLECTION		36.00						32,371.20		
	TOTAL NONDEPRECIABLE PLANT		**36.00**						**32,371.20**		
	AMORTIZATION OF NET SALVAGE					**0**					
	TOTAL UTILITY PLANT		**10,147,930.75**	**2,727,571**	**7,420,323**	**209,419**			**46,480,054.66**		

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2024, OF BOOK RESERVE AS OF JUNE 30, 2023

ACCOUNT	BOOK RESERVE BALANCE AS OF 6/30/2023		PROJECTED DEPRECIATION ACCRUALS		PROJECTED RETIREMENTS		PROJECTED COST OF REMOVAL		PROJECTED SALVAGE		ACQUISITIONS AND ADJUSTMENTS		PROJECTED BOOK RESERVE BALANCE AS OF 6/30/2024
(1)	(2)	+	(3)	-	(4)	-	(5)	+	(6)	+	(7)	=	(8)
361.10	0		55,220		17,510		11,032				2,093,974		2,120,652
361.20	0		18,677		3,182		1,018				345,233		359,710
363.00	0		5,913		578		920				241,996		246,411
390.00	0		26										26
391.00	0		509										509
393.00	0		263										263
394.00	0												-
395.00	0												-
396.00	0												-
397.00	0												-
TOTAL	**0**		**80,608**		**21,271**		**12,969**		**0**		**2,681,203**		**2,727,571**

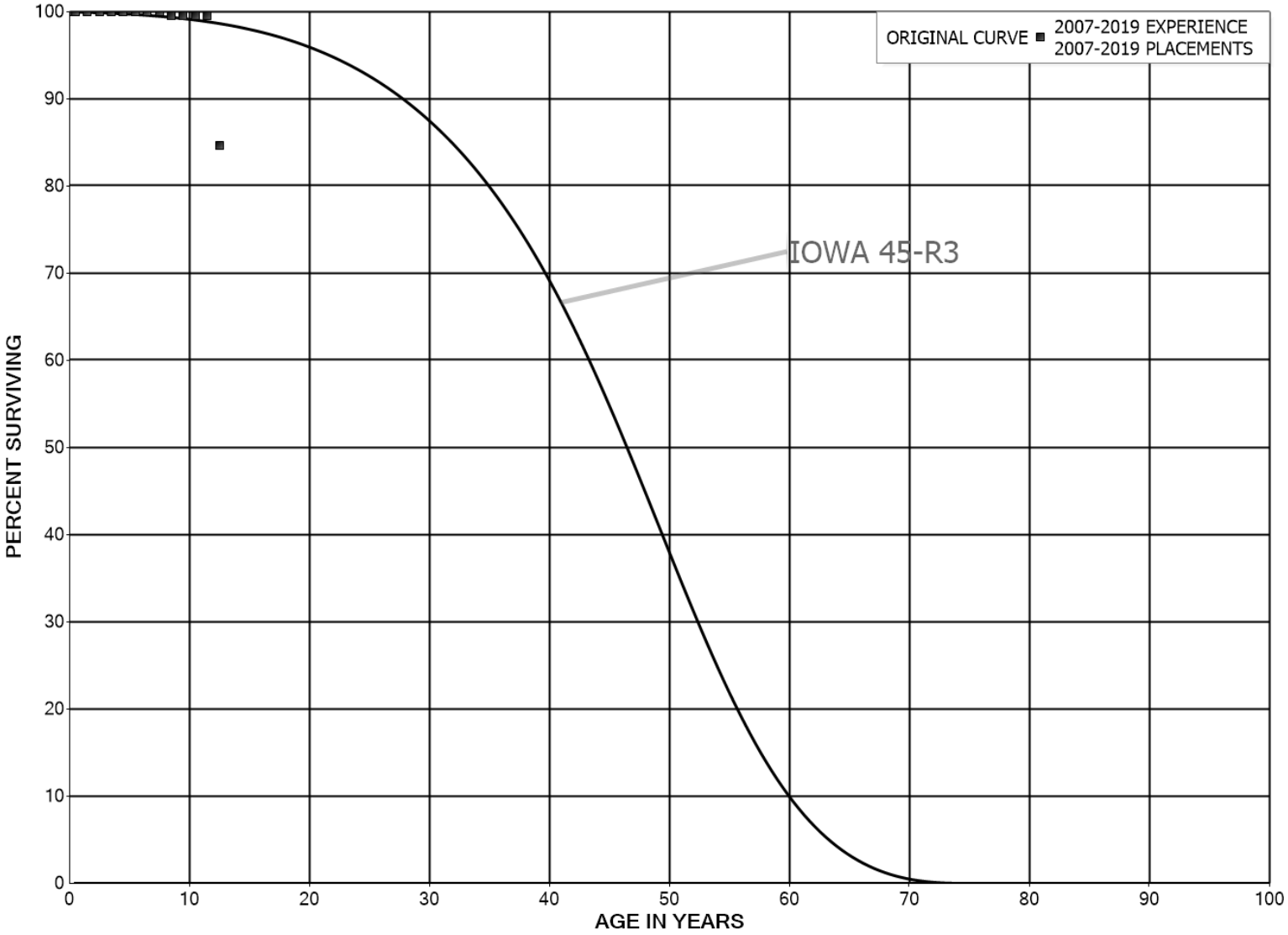
PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30, 2024

ACCOUNT (1)	NET ORIGINALCOST AS OF 6/30/2023 (2)	NET ORIGINALCOST AS OF 6/30/2024 (3)	ACCRUAL RATE (4)	AVERAGE ACCRUALS (5)=([(2)+(3)]/2)*(4)	AMORTIZATION OF NET SALVAGE (6)	PROJECTED DEPRECIATION ACCRUALS (7)=(5)+(6)
361.10	0.00	8,120,630.40	1.36	55,220		55,220
361.20	0.00	1,512,306.05	2.47	18,677		18,677
363.00	0.00	488,708.30	2.42	5,913		5,913
390.00	0.00	1,050.00	5.00	26		26
391.00	0.00	14,700.00	6.92	509		509
393.00	0.00	10,500.00	5.00	263		263
TOTAL	**0.00**	**10,147,894.75**		**80,608**	**0**	**80,608**

PART VI. SERVICE LIFE STATISTICS

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

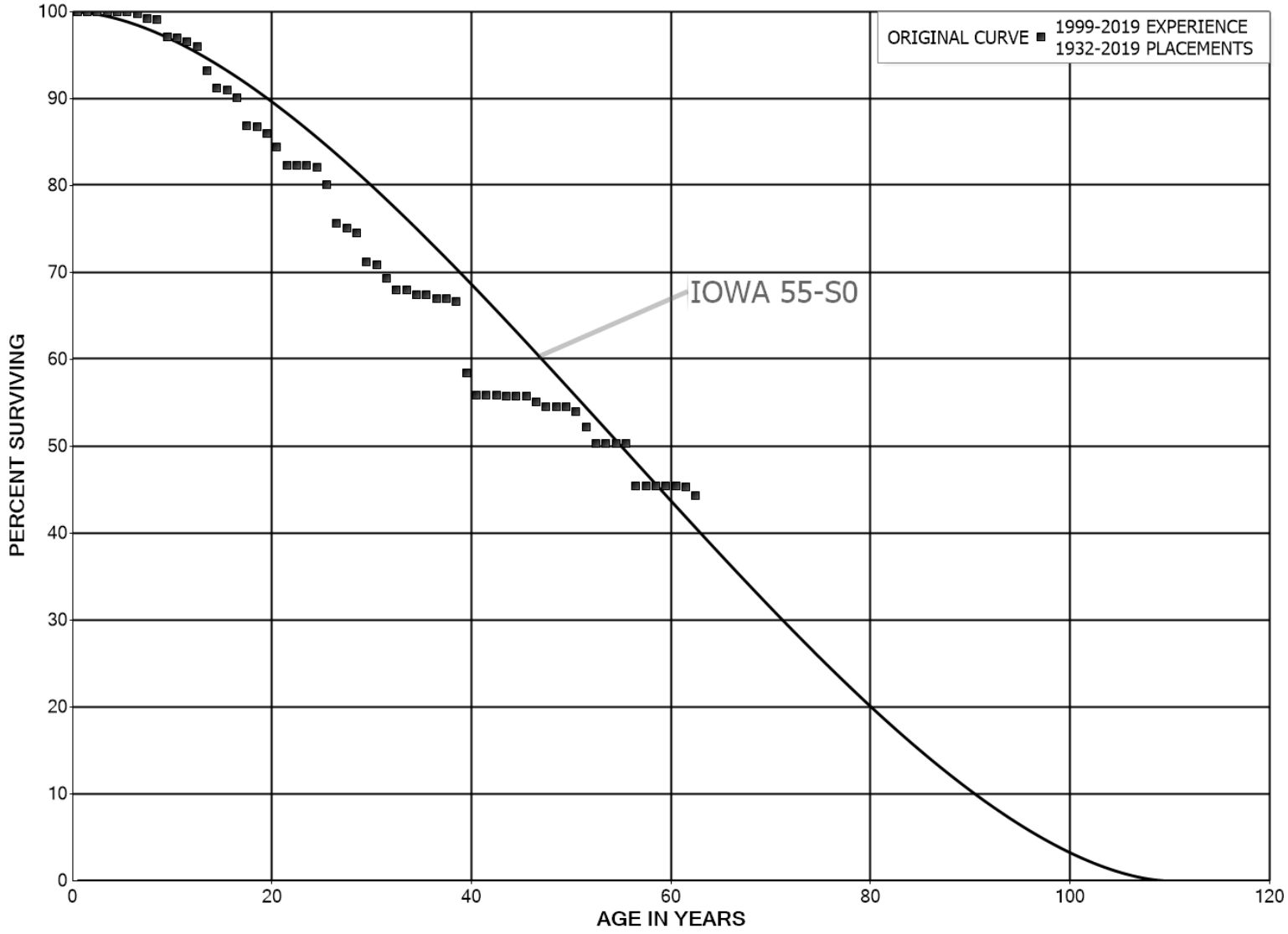
ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

ORIGINAL LIFE TABLE

PLACEMENT BAND 2007-2019 EXPERIENCE BAND 2007-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,844,636		0.0000	1.0000	100.00
0.5	3,478,774		0.0000	1.0000	100.00
1.5	1,864,154		0.0000	1.0000	100.00
2.5	516,452	0	0.0000	1.0000	100.00
3.5	479,797		0.0000	1.0000	100.00
4.5	437,900	416	0.0010	0.9990	100.00
5.5	422,717		0.0000	1.0000	99.90
6.5	321,516		0.0000	1.0000	99.90
7.5	321,516	1,408	0.0044	0.9956	99.90
8.5	311,522		0.0000	1.0000	99.47
9.5	311,522		0.0000	1.0000	99.47
10.5	134,415		0.0000	1.0000	99.47
11.5	20,659	3,076	0.1489	0.8511	99.47
12.5					84.66

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE

PLACEMENT BAND 1932-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	70,500,767		0.0000	1.0000	100.00
0.5	76,131,665		0.0000	1.0000	100.00
1.5	80,233,751	6,642	0.0001	0.9999	100.00
2.5	105,447,960		0.0000	1.0000	99.99
3.5	85,605,007	28,836	0.0003	0.9997	99.99
4.5	79,002,174	4,425	0.0001	0.9999	99.96
5.5	46,624,214	105,422	0.0023	0.9977	99.95
6.5	51,444,895	277,564	0.0054	0.9946	99.73
7.5	50,906,335	75,090	0.0015	0.9985	99.19
8.5	50,793,050	1,027,715	0.0202	0.9798	99.04
9.5	34,780,266	28,544	0.0008	0.9992	97.04
10.5	15,695,508	65,025	0.0041	0.9959	96.96
11.5	15,618,899	88,716	0.0057	0.9943	96.56
12.5	20,002,643	601,564	0.0301	0.9699	96.01
13.5	17,169,269	353,428	0.0206	0.9794	93.12
14.5	16,203,968	41,247	0.0025	0.9975	91.20
15.5	16,204,082	163,309	0.0101	0.9899	90.97
16.5	13,585,539	481,677	0.0355	0.9645	90.06
17.5	12,995,837	17,548	0.0014	0.9986	86.86
18.5	12,210,208	114,143	0.0093	0.9907	86.74
19.5	7,393,964	134,551	0.0182	0.9818	85.93
20.5	6,513,761	157,405	0.0242	0.9758	84.37
21.5	6,711,244	2,801	0.0004	0.9996	82.33
22.5	7,374,817	1,543	0.0002	0.9998	82.30
23.5	6,783,698	15,823	0.0023	0.9977	82.28
24.5	6,921,413	166,617	0.0241	0.9759	82.09
25.5	6,763,696	380,532	0.0563	0.9437	80.11
26.5	5,899,041	38,147	0.0065	0.9935	75.60
27.5	4,281,769	34,820	0.0081	0.9919	75.12
28.5	3,967,252	175,318	0.0442	0.9558	74.50
29.5	4,051,668	21,732	0.0054	0.9946	71.21
30.5	5,300,696	114,682	0.0216	0.9784	70.83
31.5	4,027,463	76,382	0.0190	0.9810	69.30
32.5	2,813,504	2,190	0.0008	0.9992	67.98
33.5	2,649,698	20,846	0.0079	0.9921	67.93
34.5	1,122,954		0.0000	1.0000	67.40
35.5	398,615	2,457	0.0062	0.9938	67.40
36.5	369,394		0.0000	1.0000	66.98
37.5	339,885	1,942	0.0057	0.9943	66.98
38.5	249,055	30,753	0.1235	0.8765	66.60

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1932-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	877,505	37,754	0.0430	0.9570	58.37
40.5	1,351,121		0.0000	1.0000	55.86
41.5	19,298,436	4,893	0.0003	0.9997	55.86
42.5	19,293,543	30,808	0.0016	0.9984	55.85
43.5	32,745,779		0.0000	1.0000	55.76
44.5	14,343,608	10,968	0.0008	0.9992	55.76
45.5	14,332,640	153,806	0.0107	0.9893	55.72
46.5	14,199,715	156,087	0.0110	0.9890	55.12
47.5	552,598		0.0000	1.0000	54.51
48.5	1,223,925		0.0000	1.0000	54.51
49.5	1,265,936	12,500	0.0099	0.9901	54.51
50.5	1,284,936	43,517	0.0339	0.9661	53.98
51.5	570,093	20,853	0.0366	0.9634	52.15
52.5	524,823		0.0000	1.0000	50.24
53.5	524,823		0.0000	1.0000	50.24
54.5	447,474		0.0000	1.0000	50.24
55.5	447,474	42,843	0.0957	0.9043	50.24
56.5	13,313,486	1,903	0.0001	0.9999	45.43
57.5	13,311,583		0.0000	1.0000	45.42
58.5	13,049,341	13	0.0000	1.0000	45.42
59.5	140,486		0.0000	1.0000	45.42
60.5	140,486	363	0.0026	0.9974	45.42
61.5	140,123	3,040	0.0217	0.9783	45.31
62.5					44.32
63.5					
64.5					
65.5					
66.5					
67.5					
68.5	39,928		0.0000		
69.5	39,928		0.0000		
70.5	39,928		0.0000		
71.5	39,928		0.0000		
72.5	40,428		0.0000		
73.5	39,928		0.0000		
74.5	39,928		0.0000		
75.5	39,928		0.0000		
76.5	602		0.0000		
77.5	602		0.0000		
78.5	602		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

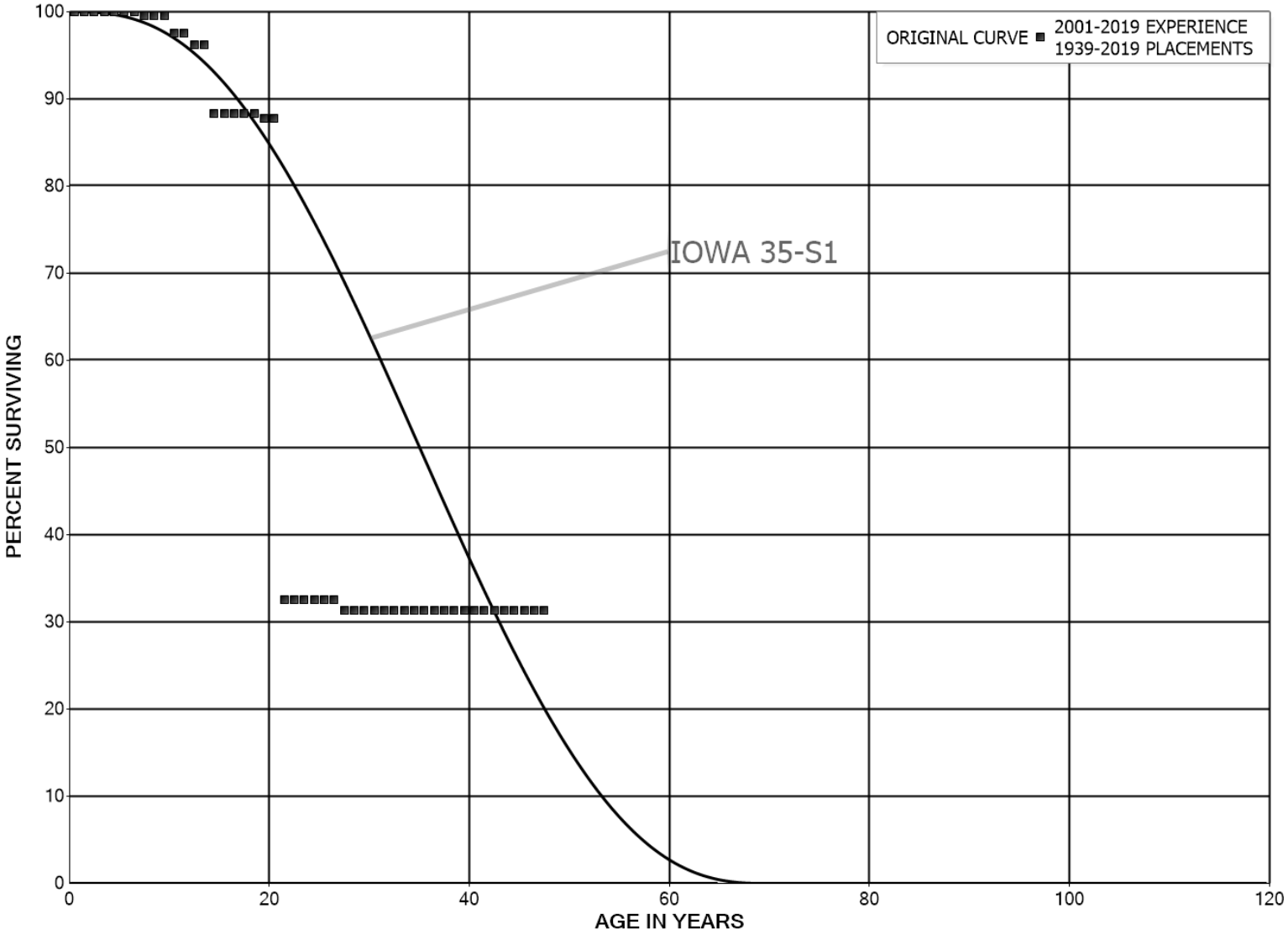
ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1932-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	602		0.0000		
80.5	602		0.0000		
81.5	602		0.0000		
82.5	602		0.0000		
83.5	602		0.0000		
84.5	602		0.0000		
85.5	602		0.0000		
86.5	602		0.0000		
87.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,331,347		0.0000	1.0000	100.00
0.5	2,248,872	400	0.0002	0.9998	100.00
1.5	2,139,519		0.0000	1.0000	99.98
2.5	2,007,976		0.0000	1.0000	99.98
3.5	1,998,798		0.0000	1.0000	99.98
4.5	978,189		0.0000	1.0000	99.98
5.5	566,034		0.0000	1.0000	99.98
6.5	540,776	2,524	0.0047	0.9953	99.98
7.5	668,631		0.0000	1.0000	99.52
8.5	661,526		0.0000	1.0000	99.52
9.5	622,592	12,303	0.0198	0.9802	99.52
10.5	529,371	373	0.0007	0.9993	97.55
11.5	209,362	2,752	0.0131	0.9869	97.48
12.5	204,311		0.0000	1.0000	96.20
13.5	220,425	18,073	0.0820	0.9180	96.20
14.5	208,207		0.0000	1.0000	88.31
15.5	208,207		0.0000	1.0000	88.31
16.5	165,317		0.0000	1.0000	88.31
17.5	193,471		0.0000	1.0000	88.31
18.5	210,457	1,510	0.0072	0.9928	88.31
19.5	223,914		0.0000	1.0000	87.68
20.5	223,914	140,772	0.6287	0.3713	87.68
21.5	67,028		0.0000	1.0000	32.56
22.5	73,481		0.0000	1.0000	32.56
23.5	73,481		0.0000	1.0000	32.56
24.5	73,481		0.0000	1.0000	32.56
25.5	44,261		0.0000	1.0000	32.56
26.5	27,275	1,047	0.0384	0.9616	32.56
27.5	11,260		0.0000	1.0000	31.31
28.5	11,260		0.0000	1.0000	31.31
29.5	11,260		0.0000	1.0000	31.31
30.5	11,260		0.0000	1.0000	31.31
31.5	11,260		0.0000	1.0000	31.31
32.5	11,260		0.0000	1.0000	31.31
33.5	11,260		0.0000	1.0000	31.31
34.5	11,260		0.0000	1.0000	31.31
35.5	450		0.0000	1.0000	31.31
36.5	450		0.0000	1.0000	31.31
37.5	450		0.0000	1.0000	31.31
38.5	450		0.0000	1.0000	31.31

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	450		0.0000	1.0000	31.31
40.5	450		0.0000	1.0000	31.31
41.5	450		0.0000	1.0000	31.31
42.5	450		0.0000	1.0000	31.31
43.5	450		0.0000	1.0000	31.31
44.5	450		0.0000	1.0000	31.31
45.5	450		0.0000	1.0000	31.31
46.5	450		0.0000	1.0000	31.31
47.5					31.31
48.5					
49.5					
50.5					
51.5					
52.5					
53.5					
54.5					
55.5					
56.5					
57.5					
58.5					
59.5					
60.5					
61.5					
62.5					
63.5					
64.5					
65.5					
66.5					
67.5					
68.5	3,802		0.0000		
69.5	3,802		0.0000		
70.5	3,802	283	0.0744		
71.5	3,519		0.0000		
72.5	3,519		0.0000		
73.5	3,519		0.0000		
74.5	3,519		0.0000		
75.5	3,519		0.0000		
76.5	3,519		0.0000		
77.5	3,519		0.0000		
78.5	3,519		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

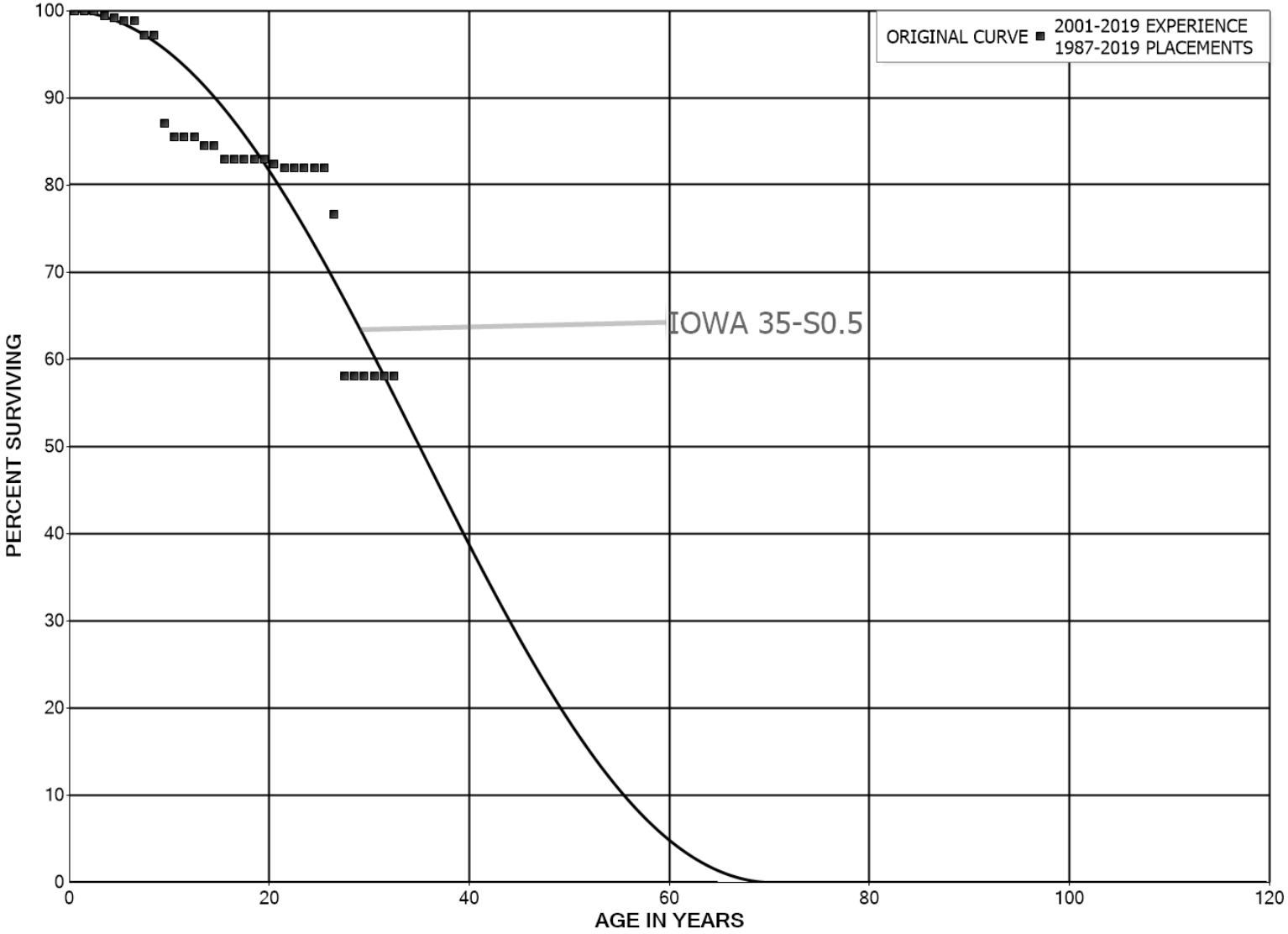
ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	3,519		0.0000		
80.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 355.00 POWER GENERATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

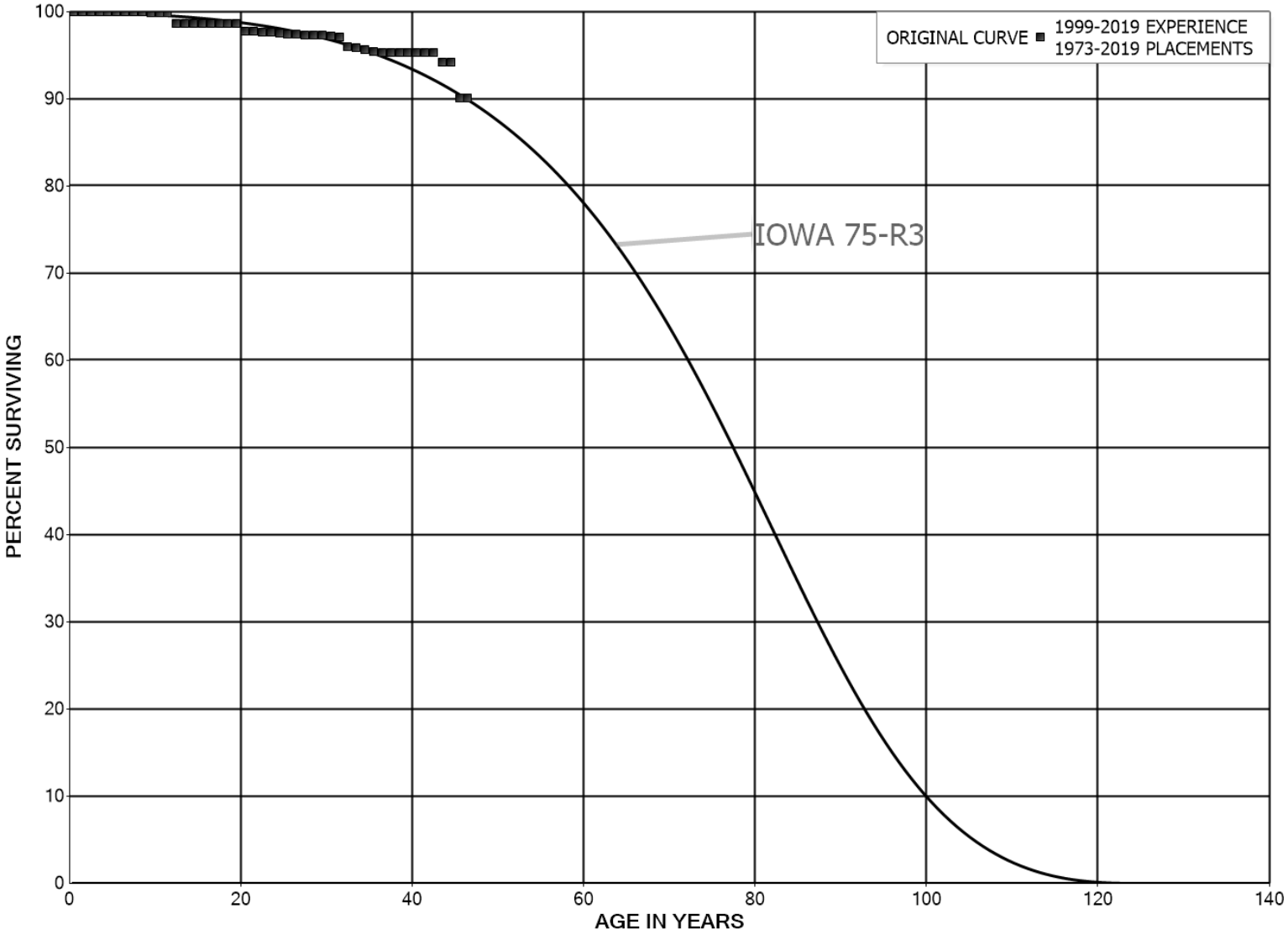
ACCOUNT 355.00 POWER GENERATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1987-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,656,122		0.0000	1.0000	100.00
0.5	3,685,338		0.0000	1.0000	100.00
1.5	4,385,880		0.0000	1.0000	100.00
2.5	4,494,639	26,926	0.0060	0.9940	100.00
3.5	4,479,665	10,161	0.0023	0.9977	99.40
4.5	4,398,000	14,523	0.0033	0.9967	99.18
5.5	3,773,674	1,387	0.0004	0.9996	98.85
6.5	3,828,658	61,470	0.0161	0.9839	98.81
7.5	3,336,361		0.0000	1.0000	97.23
8.5	3,321,984	347,576	0.1046	0.8954	97.23
9.5	2,953,727	51,388	0.0174	0.9826	87.05
10.5	328,249		0.0000	1.0000	85.54
11.5	144,528		0.0000	1.0000	85.54
12.5	267,555	3,097	0.0116	0.9884	85.54
13.5	327,093		0.0000	1.0000	84.55
14.5	278,538	5,336	0.0192	0.9808	84.55
15.5	281,064		0.0000	1.0000	82.93
16.5	293,645		0.0000	1.0000	82.93
17.5	241,944		0.0000	1.0000	82.93
18.5	203,466		0.0000	1.0000	82.93
19.5	203,466	1,204	0.0059	0.9941	82.93
20.5	202,262	1,103	0.0055	0.9945	82.44
21.5	432,455		0.0000	1.0000	81.99
22.5	402,008		0.0000	1.0000	81.99
23.5	402,008		0.0000	1.0000	81.99
24.5	402,008		0.0000	1.0000	81.99
25.5	402,978	26,388	0.0655	0.9345	81.99
26.5	174,978	42,310	0.2418	0.7582	76.62
27.5	89,880		0.0000	1.0000	58.09
28.5	68,585		0.0000	1.0000	58.09
29.5	68,585		0.0000	1.0000	58.09
30.5	19,246		0.0000	1.0000	58.09
31.5	19,246		0.0000	1.0000	58.09
32.5					58.09

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	31,766,704	19	0.0000	1.0000	100.00
0.5	28,215,316	26	0.0000	1.0000	100.00
1.5	35,558,986	33	0.0000	1.0000	100.00
2.5	23,783,577	70	0.0000	1.0000	100.00
3.5	21,373,939	350	0.0000	1.0000	100.00
4.5	18,774,036	315	0.0000	1.0000	100.00
5.5	14,425,014	397	0.0000	1.0000	100.00
6.5	14,188,090	1,611	0.0001	0.9999	99.99
7.5	14,122,868	1,747	0.0001	0.9999	99.98
8.5	13,850,582	16,747	0.0012	0.9988	99.97
9.5	13,465,099	64	0.0000	1.0000	99.85
10.5	13,318,392	82	0.0000	1.0000	99.85
11.5	10,748,868	127,626	0.0119	0.9881	99.85
12.5	9,661,386		0.0000	1.0000	98.66
13.5	7,868,737	3,291	0.0004	0.9996	98.66
14.5	7,779,655	99	0.0000	1.0000	98.62
15.5	5,905,707	9	0.0000	1.0000	98.62
16.5	5,774,986	949	0.0002	0.9998	98.62
17.5	5,344,267	1,253	0.0002	0.9998	98.60
18.5	4,614,847	826	0.0002	0.9998	98.58
19.5	4,197,905	37,017	0.0088	0.9912	98.56
20.5	3,986,776	70	0.0000	1.0000	97.69
21.5	4,475,797	1,897	0.0004	0.9996	97.69
22.5	3,907,599	569	0.0001	0.9999	97.65
23.5	4,900,347	3,932	0.0008	0.9992	97.64
24.5	6,419,851	13,411	0.0021	0.9979	97.56
25.5	6,580,720	788	0.0001	0.9999	97.35
26.5	6,033,834	1,095	0.0002	0.9998	97.34
27.5	6,011,515	2,049	0.0003	0.9997	97.32
28.5	5,991,855	3,135	0.0005	0.9995	97.29
29.5	6,011,945	3,365	0.0006	0.9994	97.24
30.5	5,911,879	4,784	0.0008	0.9992	97.19
31.5	5,517,306	65,876	0.0119	0.9881	97.11
32.5	5,225,480	4,106	0.0008	0.9992	95.95
33.5	5,192,765	13,636	0.0026	0.9974	95.87
34.5	4,869,190	12,733	0.0026	0.9974	95.62
35.5	4,856,457	2,869	0.0006	0.9994	95.37
36.5	4,661,206	15	0.0000	1.0000	95.31
37.5	4,607,713		0.0000	1.0000	95.31
38.5	4,446,768	1,883	0.0004	0.9996	95.31

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

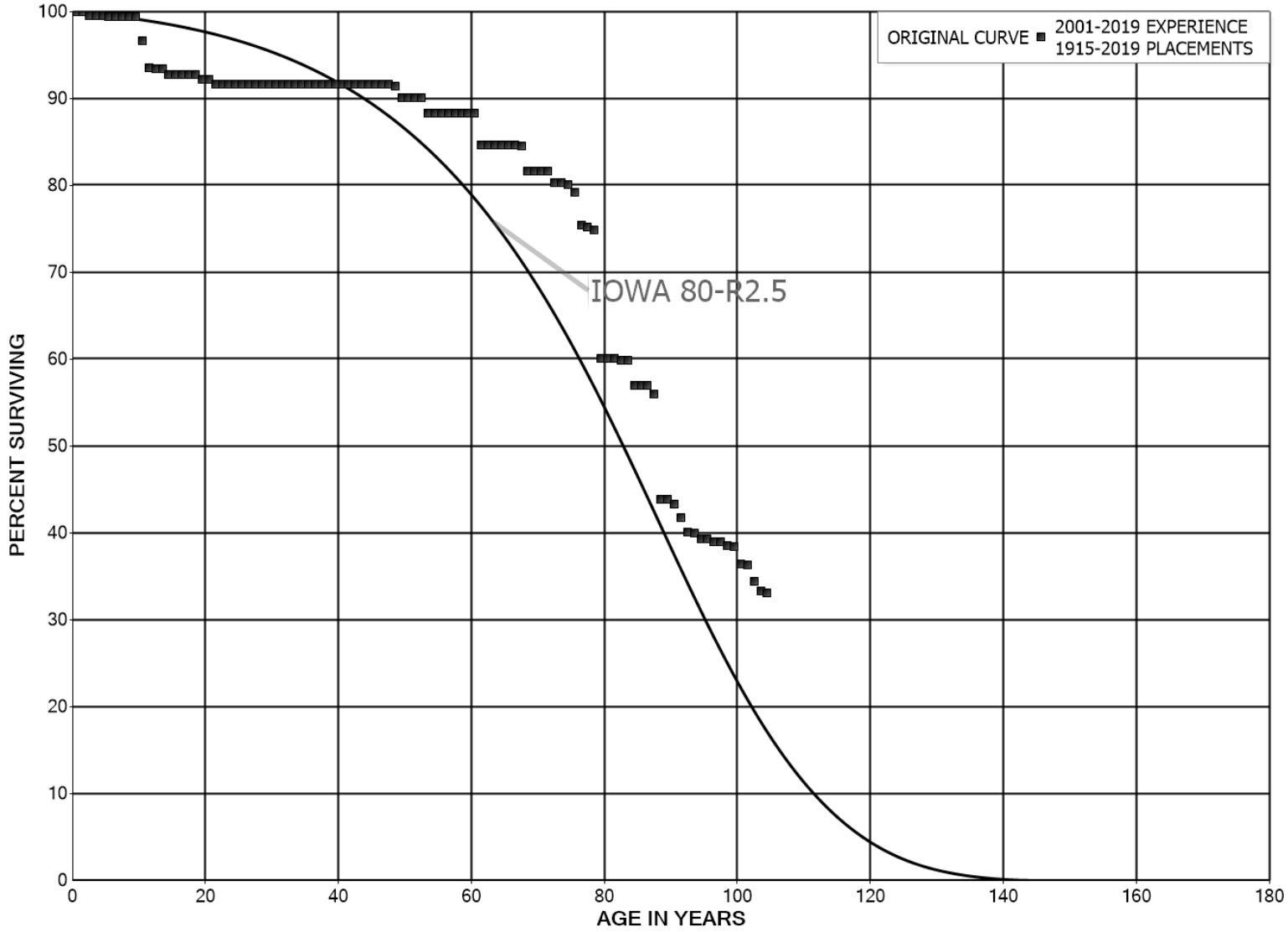
ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1973-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,369,779	82	0.0000	1.0000	95.27
40.5	4,295,948	6	0.0000	1.0000	95.27
41.5	4,025,587	0	0.0000	1.0000	95.27
42.5	3,566,737	42,283	0.0119	0.9881	95.27
43.5	2,553,034		0.0000	1.0000	94.14
44.5	1,703,254	73,783	0.0433	0.9567	94.14
45.5	125,695		0.0000	1.0000	90.06
46.5					90.06

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	123,698,865	1,489	0.0000	1.0000	100.00
0.5	80,968,134	1,744	0.0000	1.0000	100.00
1.5	71,427,735	349,743	0.0049	0.9951	100.00
2.5	61,491,291		0.0000	1.0000	99.51
3.5	47,985,505		0.0000	1.0000	99.51
4.5	43,496,282	26,093	0.0006	0.9994	99.51
5.5	34,622,702	11,064	0.0003	0.9997	99.45
6.5	36,236,717	10,556	0.0003	0.9997	99.42
7.5	44,473,440	0	0.0000	1.0000	99.39
8.5	44,403,805	13,334	0.0003	0.9997	99.39
9.5	42,579,956	1,180,167	0.0277	0.9723	99.36
10.5	27,257,562	886,763	0.0325	0.9675	96.60
11.5	23,041,413	10,064	0.0004	0.9996	93.46
12.5	15,696,984	13,300	0.0008	0.9992	93.42
13.5	13,197,516	82,522	0.0063	0.9937	93.34
14.5	9,898,866	187	0.0000	1.0000	92.76
15.5	8,175,329	367	0.0000	1.0000	92.75
16.5	11,005,722	1,374	0.0001	0.9999	92.75
17.5	22,668,123		0.0000	1.0000	92.74
18.5	22,367,436	144,378	0.0065	0.9935	92.74
19.5	21,841,271		0.0000	1.0000	92.14
20.5	10,429,000	56,430	0.0054	0.9946	92.14
21.5	13,494,984		0.0000	1.0000	91.64
22.5	12,095,717		0.0000	1.0000	91.64
23.5	13,846,891		0.0000	1.0000	91.64
24.5	14,182,481		0.0000	1.0000	91.64
25.5	19,071,002		0.0000	1.0000	91.64
26.5	16,170,692		0.0000	1.0000	91.64
27.5	36,060,280		0.0000	1.0000	91.64
28.5	35,923,542		0.0000	1.0000	91.64
29.5	33,683,971		0.0000	1.0000	91.64
30.5	8,391,683	866	0.0001	0.9999	91.64
31.5	8,167,272	21	0.0000	1.0000	91.63
32.5	8,027,418		0.0000	1.0000	91.63
33.5	7,266,714		0.0000	1.0000	91.63
34.5	5,540,059		0.0000	1.0000	91.63
35.5	3,406,034		0.0000	1.0000	91.63
36.5	3,951,146		0.0000	1.0000	91.63
37.5	4,287,296		0.0000	1.0000	91.63
38.5	4,273,219		0.0000	1.0000	91.63

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,243,666		0.0000	1.0000	91.63
40.5	41,503,891	5,447	0.0001	0.9999	91.63
41.5	41,043,016	49	0.0000	1.0000	91.62
42.5	41,341,828		0.0000	1.0000	91.62
43.5	20,516,395		0.0000	1.0000	91.62
44.5	17,262,745	4,573	0.0003	0.9997	91.62
45.5	17,447,879		0.0000	1.0000	91.60
46.5	16,922,111	1,617	0.0001	0.9999	91.60
47.5	1,493,981	2,878	0.0019	0.9981	91.59
48.5	1,491,103	21,283	0.0143	0.9857	91.41
49.5	995,707	187	0.0002	0.9998	90.11
50.5	1,249,631		0.0000	1.0000	90.09
51.5	1,214,773		0.0000	1.0000	90.09
52.5	1,253,366	24,618	0.0196	0.9804	90.09
53.5	28,374,663		0.0000	1.0000	88.32
54.5	38,998,170		0.0000	1.0000	88.32
55.5	39,986,553		0.0000	1.0000	88.32
56.5	13,005,874		0.0000	1.0000	88.32
57.5	59,432,346		0.0000	1.0000	88.32
58.5	60,820,282	557	0.0000	1.0000	88.32
59.5	59,761,303	747	0.0000	1.0000	88.32
60.5	2,094,297	87,761	0.0419	0.9581	88.32
61.5	22,663,762	8	0.0000	1.0000	84.62
62.5	21,213,491	61	0.0000	1.0000	84.62
63.5	21,215,934	289	0.0000	1.0000	84.62
64.5	46,353		0.0000	1.0000	84.62
65.5	1,102,303		0.0000	1.0000	84.62
66.5	1,102,303	1,673	0.0015	0.9985	84.62
67.5	1,100,630	37,140	0.0337	0.9663	84.49
68.5	1,259,440		0.0000	1.0000	81.64
69.5	290,689		0.0000	1.0000	81.64
70.5	962,463	168	0.0002	0.9998	81.64
71.5	962,295	15,230	0.0158	0.9842	81.62
72.5	1,042,298	993	0.0010	0.9990	80.33
73.5	946,072	2,053	0.0022	0.9978	80.25
74.5	683,176	7,508	0.0110	0.9890	80.08
75.5	675,668	32,767	0.0485	0.9515	79.20
76.5	642,901	1,310	0.0020	0.9980	75.36
77.5	1,531,686	8,017	0.0052	0.9948	75.20
78.5	1,523,669	299,242	0.1964	0.8036	74.81

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

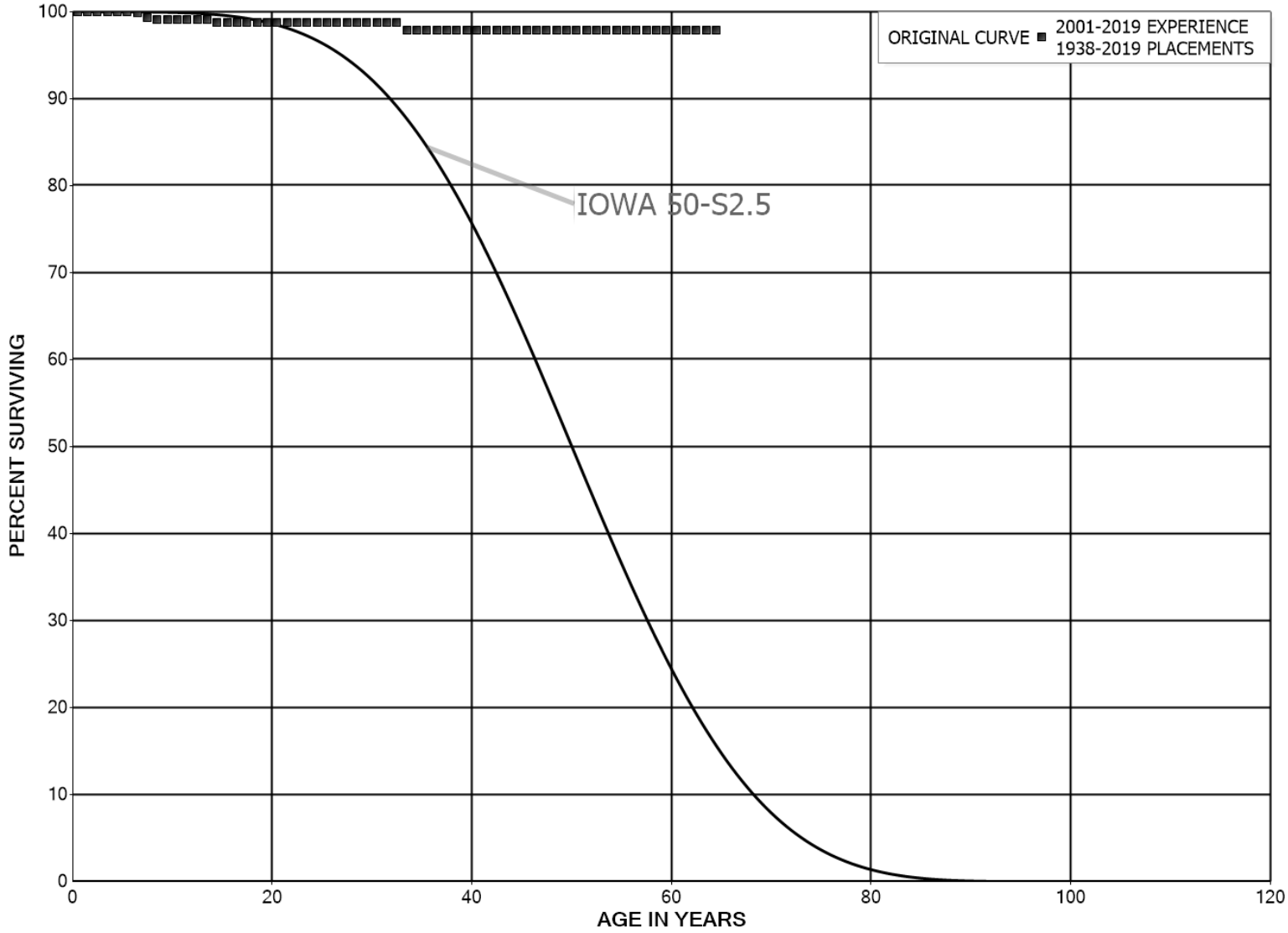
ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	1,224,427	291	0.0002	0.9998	60.12
80.5	1,522,508		0.0000	1.0000	60.10
81.5	632,413	2,303	0.0036	0.9964	60.10
82.5	648,868		0.0000	1.0000	59.89
83.5	648,868	31,252	0.0482	0.9518	59.89
84.5	601,981	10	0.0000	1.0000	57.00
85.5	722,814		0.0000	1.0000	57.00
86.5	722,814	13,485	0.0187	0.9813	57.00
87.5	709,329	153,014	0.2157	0.7843	55.94
88.5	556,315	264	0.0005	0.9995	43.87
89.5	329,027	4,352	0.0132	0.9868	43.85
90.5	306,175	11,276	0.0368	0.9632	43.27
91.5	294,898	11,132	0.0377	0.9623	41.68
92.5	283,767	1,273	0.0045	0.9955	40.10
93.5	282,494	4,366	0.0155	0.9845	39.92
94.5	278,128	221	0.0008	0.9992	39.31
95.5	277,906	1,967	0.0071	0.9929	39.27
96.5	275,939	42	0.0002	0.9998	39.00
97.5	3,804,626	42,906	0.0113	0.9887	38.99
98.5	3,761,720	15,091	0.0040	0.9960	38.55
99.5	3,616,599	191,754	0.0530	0.9470	38.40
100.5	3,424,846	6,012	0.0018	0.9982	36.36
101.5	96,405	5,167	0.0536	0.9464	36.30
102.5	91,238	2,967	0.0325	0.9675	34.35
103.5	88,271	309	0.0035	0.9965	33.23
104.5					33.12

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 361.20 MANHOLES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1938-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	14,379,651		0.0000	1.0000	100.00
0.5	10,176,887		0.0000	1.0000	100.00
1.5	10,661,285	0	0.0000	1.0000	100.00
2.5	11,952,425		0.0000	1.0000	100.00
3.5	12,083,028	911	0.0001	0.9999	100.00
4.5	7,585,455		0.0000	1.0000	99.99
5.5	5,573,639	6,667	0.0012	0.9988	99.99
6.5	4,589,383	27,566	0.0060	0.9940	99.87
7.5	4,569,090	10,961	0.0024	0.9976	99.27
8.5	5,066,097		0.0000	1.0000	99.03
9.5	5,304,644		0.0000	1.0000	99.03
10.5	5,838,060		0.0000	1.0000	99.03
11.5	5,353,439		0.0000	1.0000	99.03
12.5	4,555,554		0.0000	1.0000	99.03
13.5	4,114,028	12,188	0.0030	0.9970	99.03
14.5	2,635,311		0.0000	1.0000	98.74
15.5	2,105,291	0	0.0000	1.0000	98.74
16.5	2,247,105	472	0.0002	0.9998	98.74
17.5	2,934,821		0.0000	1.0000	98.72
18.5	2,849,242		0.0000	1.0000	98.72
19.5	2,782,656		0.0000	1.0000	98.72
20.5	2,425,509	0	0.0000	1.0000	98.72
21.5	1,772,096		0.0000	1.0000	98.72
22.5	970,343		0.0000	1.0000	98.72
23.5	1,299,611		0.0000	1.0000	98.72
24.5	1,741,110		0.0000	1.0000	98.72
25.5	2,636,710		0.0000	1.0000	98.72
26.5	3,361,749		0.0000	1.0000	98.72
27.5	3,450,899		0.0000	1.0000	98.72
28.5	3,240,536		0.0000	1.0000	98.72
29.5	2,574,979		0.0000	1.0000	98.72
30.5	1,538,799		0.0000	1.0000	98.72
31.5	1,635,548		0.0000	1.0000	98.72
32.5	1,551,747	13,277	0.0086	0.9914	98.72
33.5	1,328,056		0.0000	1.0000	97.88
34.5	1,038,030		0.0000	1.0000	97.88
35.5	1,093,592		0.0000	1.0000	97.88
36.5	1,326,879		0.0000	1.0000	97.88
37.5	1,450,927		0.0000	1.0000	97.88
38.5	1,304,196		0.0000	1.0000	97.88

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1938-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	994,944		0.0000	1.0000	97.88
40.5	2,263,935		0.0000	1.0000	97.88
41.5	2,043,826		0.0000	1.0000	97.88
42.5	2,216,232		0.0000	1.0000	97.88
43.5	2,406,018		0.0000	1.0000	97.88
44.5	2,040,304		0.0000	1.0000	97.88
45.5	2,008,665		0.0000	1.0000	97.88
46.5	1,708,150		0.0000	1.0000	97.88
47.5	301,817		0.0000	1.0000	97.88
48.5	301,817		0.0000	1.0000	97.88
49.5	170,327		0.0000	1.0000	97.88
50.5	201,568		0.0000	1.0000	97.88
51.5	166,180		0.0000	1.0000	97.88
52.5	172,781		0.0000	1.0000	97.88
53.5	1,995,623		0.0000	1.0000	97.88
54.5	1,827,036		0.0000	1.0000	97.88
55.5	1,951,871		0.0000	1.0000	97.88
56.5	131,436		0.0000	1.0000	97.88
57.5	10,950,272		0.0000	1.0000	97.88
58.5	10,950,272		0.0000	1.0000	97.88
59.5	10,825,437		0.0000	1.0000	97.88
60.5	89,564		0.0000	1.0000	97.88
61.5	89,564		0.0000	1.0000	97.88
62.5	89,564		0.0000	1.0000	97.88
63.5	89,564		0.0000	1.0000	97.88
64.5					97.88
65.5	100,437		0.0000		
66.5	100,437		0.0000		
67.5	123,426		0.0000		
68.5	167,059	22,989	0.1376		
69.5	43,633		0.0000		
70.5	84,331		0.0000		
71.5	84,331		0.0000		
72.5	90,699		0.0000		
73.5	84,331		0.0000		
74.5	43,633		0.0000		
75.5	43,633		0.0000		
76.5	43,633		0.0000		
77.5	306,691		0.0000		
78.5	306,691		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

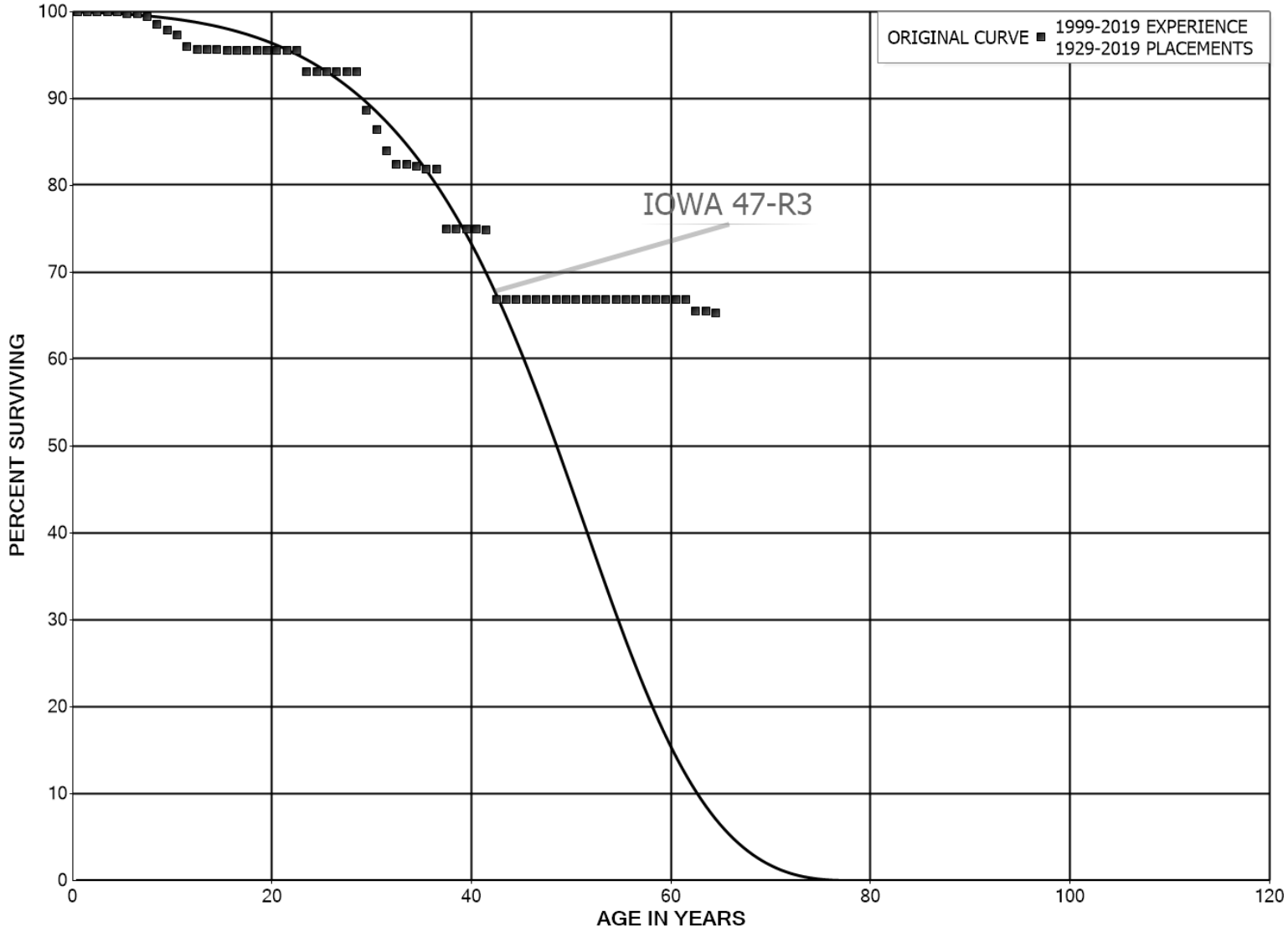
ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1938-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	306,691	1,171	0.0038		
80.5	263,058		0.0000		
81.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 363.00 SERVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1929-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	10,615,796	0	0.0000	1.0000	100.00
0.5	10,038,138	0	0.0000	1.0000	100.00
1.5	9,510,472	60	0.0000	1.0000	100.00
2.5	8,790,677	5,668	0.0006	0.9994	100.00
3.5	8,679,530	421	0.0000	1.0000	99.93
4.5	7,932,683	12,635	0.0016	0.9984	99.93
5.5	6,966,530	2,890	0.0004	0.9996	99.77
6.5	8,411,000	31,963	0.0038	0.9962	99.73
7.5	8,278,555	65,894	0.0080	0.9920	99.35
8.5	8,313,922	64,649	0.0078	0.9922	98.56
9.5	8,351,147	42,617	0.0051	0.9949	97.79
10.5	6,470,010	87,729	0.0136	0.9864	97.29
11.5	6,246,021	19,892	0.0032	0.9968	95.98
12.5	5,858,877	0	0.0000	1.0000	95.67
13.5	4,698,450	4,942	0.0011	0.9989	95.67
14.5	4,095,435	871	0.0002	0.9998	95.57
15.5	3,284,377		0.0000	1.0000	95.55
16.5	3,511,888	0	0.0000	1.0000	95.55
17.5	3,953,464	0	0.0000	1.0000	95.55
18.5	3,909,166	55	0.0000	1.0000	95.55
19.5	3,630,733		0.0000	1.0000	95.55
20.5	3,925,137		0.0000	1.0000	95.55
21.5	3,646,749		0.0000	1.0000	95.55
22.5	3,395,484	87,997	0.0259	0.9741	95.55
23.5	3,780,922		0.0000	1.0000	93.07
24.5	4,115,954	497	0.0001	0.9999	93.07
25.5	5,003,579		0.0000	1.0000	93.06
26.5	5,176,777		0.0000	1.0000	93.06
27.5	4,635,070		0.0000	1.0000	93.06
28.5	4,421,930	209,578	0.0474	0.9526	93.06
29.5	3,596,999	92,585	0.0257	0.9743	88.65
30.5	2,947,708	80,733	0.0274	0.9726	86.37
31.5	2,783,645	51,927	0.0187	0.9813	84.00
32.5	2,491,265	1,241	0.0005	0.9995	82.43
33.5	2,228,511	4,871	0.0022	0.9978	82.39
34.5	1,965,612	8,461	0.0043	0.9957	82.21
35.5	1,925,423	503	0.0003	0.9997	81.86
36.5	1,973,278	167,021	0.0846	0.9154	81.84
37.5	1,839,375	192	0.0001	0.9999	74.91
38.5	1,657,395		0.0000	1.0000	74.90

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,207,182		0.0000	1.0000	74.90
40.5	1,197,802	385	0.0003	0.9997	74.90
41.5	1,022,673	110,064	0.1076	0.8924	74.88
42.5	886,687		0.0000	1.0000	66.82
43.5	1,408,938		0.0000	1.0000	66.82
44.5	900,914		0.0000	1.0000	66.82
45.5	855,938		0.0000	1.0000	66.82
46.5	736,586		0.0000	1.0000	66.82
47.5	156,414		0.0000	1.0000	66.82
48.5	155,860		0.0000	1.0000	66.82
49.5	82,277		0.0000	1.0000	66.82
50.5	145,022		0.0000	1.0000	66.82
51.5	132,653		0.0000	1.0000	66.82
52.5	134,754	0	0.0000	1.0000	66.82
53.5	137,757		0.0000	1.0000	66.82
54.5	20,119		0.0000	1.0000	66.82
55.5	100,869		0.0000	1.0000	66.82
56.5	100,869		0.0000	1.0000	66.82
57.5	97,866		0.0000	1.0000	66.82
58.5	256,316		0.0000	1.0000	66.82
59.5	180,162	20	0.0001	0.9999	66.82
60.5	228,822		0.0000	1.0000	66.81
61.5	228,822	4,595	0.0201	0.9799	66.81
62.5	50,781		0.0000	1.0000	65.47
63.5	50,781	162	0.0032	0.9968	65.47
64.5					65.26
65.5	60,144		0.0000		
66.5	60,144		0.0000		
67.5	60,144		0.0000		
68.5	70,211		0.0000		
69.5	13,932	819	0.0588		
70.5	36,101		0.0000		
71.5	36,101	4,521	0.1252		
72.5	31,580	1,251	0.0396		
73.5	30,329	442	0.0146		
74.5	6,899	644	0.0933		
75.5	6,255		0.0000		
76.5	6,255		0.0000		
77.5	151,010		0.0000		
78.5	151,010		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

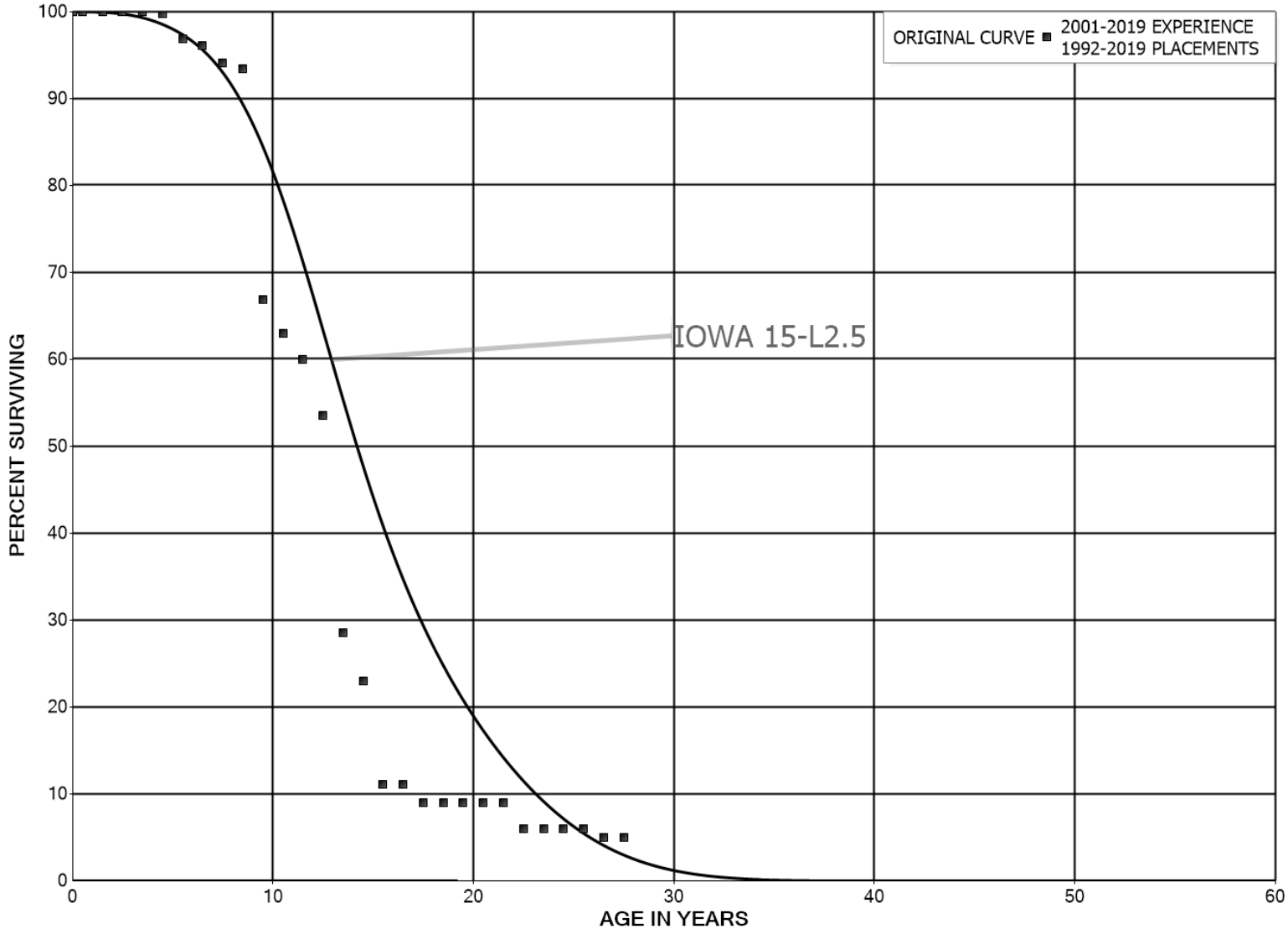
ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	151,010		0.0000		
80.5	144,755	1,628	0.0112		
81.5					
82.5	717		0.0000		
83.5	717		0.0000		
84.5	717		0.0000		
85.5	717		0.0000		
86.5	717		0.0000		
87.5	717		0.0000		
88.5	717		0.0000		
89.5	717		0.0000		
90.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 364.00 FLOW MEASURING DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

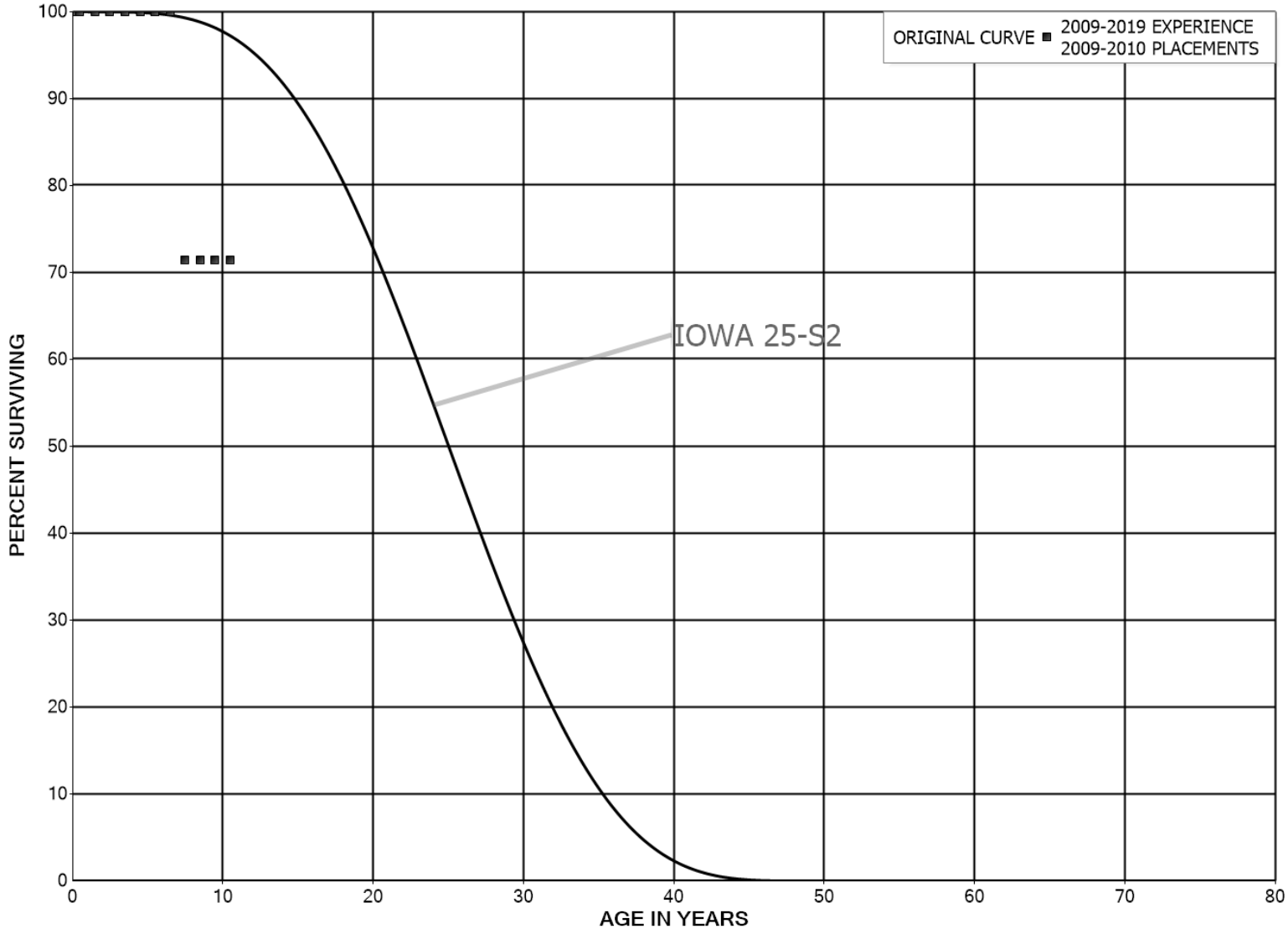
ACCOUNT 364.00 FLOW MEASURING DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1992-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,359,184		0.0000	1.0000	100.00
0.5	993,961		0.0000	1.0000	100.00
1.5	1,007,023		0.0000	1.0000	100.00
2.5	1,088,761		0.0000	1.0000	100.00
3.5	829,368	2,564	0.0031	0.9969	100.00
4.5	790,917	22,463	0.0284	0.9716	99.69
5.5	745,466	5,882	0.0079	0.9921	96.86
6.5	575,156	12,254	0.0213	0.9787	96.10
7.5	576,785	4,337	0.0075	0.9925	94.05
8.5	639,652	181,670	0.2840	0.7160	93.34
9.5	332,968	19,182	0.0576	0.9424	66.83
10.5	221,704	10,816	0.0488	0.9512	62.98
11.5	90,287	9,617	0.1065	0.8935	59.91
12.5	71,639	33,466	0.4671	0.5329	53.53
13.5	31,704	6,133	0.1934	0.8066	28.52
14.5	16,849	8,739	0.5187	0.4813	23.00
15.5	16,281		0.0000	1.0000	11.07
16.5	16,281	3,203	0.1967	0.8033	11.07
17.5	13,078		0.0000	1.0000	8.90
18.5	13,078		0.0000	1.0000	8.90
19.5	13,078		0.0000	1.0000	8.90
20.5	13,078		0.0000	1.0000	8.90
21.5	13,078	4,272	0.3266	0.6734	8.90
22.5	8,806		0.0000	1.0000	5.99
23.5	8,806		0.0000	1.0000	5.99
24.5	8,806		0.0000	1.0000	5.99
25.5	8,806	1,522	0.1728	0.8272	5.99
26.5	7,285		0.0000	1.0000	4.95
27.5					4.95

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

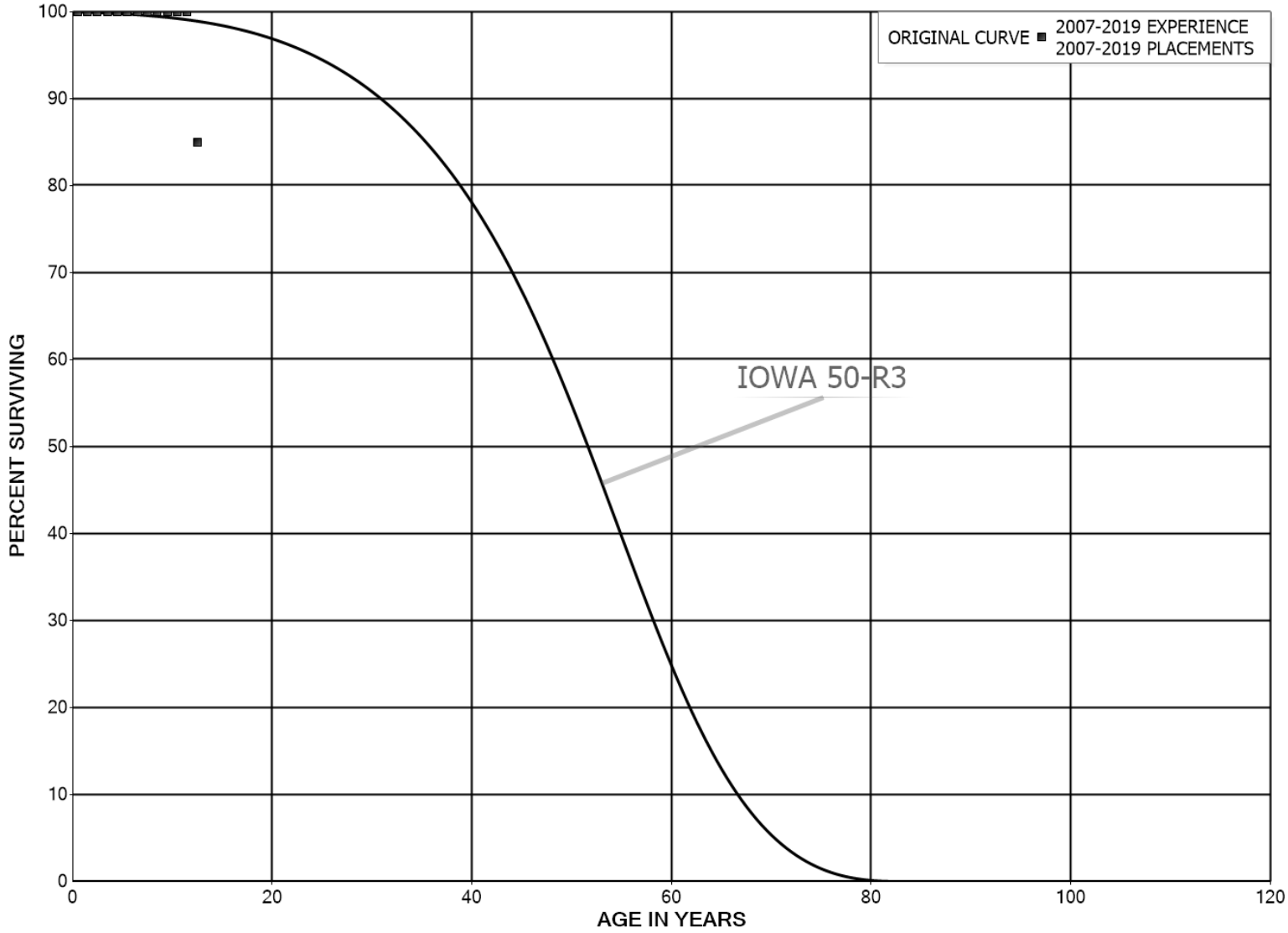
ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2009-2010 EXPERIENCE BAND 2009-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	20,918		0.0000	1.0000	100.00
0.5	20,918		0.0000	1.0000	100.00
1.5	20,918		0.0000	1.0000	100.00
2.5	20,918		0.0000	1.0000	100.00
3.5	20,918		0.0000	1.0000	100.00
4.5	20,918		0.0000	1.0000	100.00
5.5	20,918		0.0000	1.0000	100.00
6.5	20,918	5,980	0.2859	0.7141	100.00
7.5	14,938		0.0000	1.0000	71.41
8.5	14,938		0.0000	1.0000	71.41
9.5	14,938		0.0000	1.0000	71.41
10.5					71.41

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 370.00 RECEIVING WELLS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

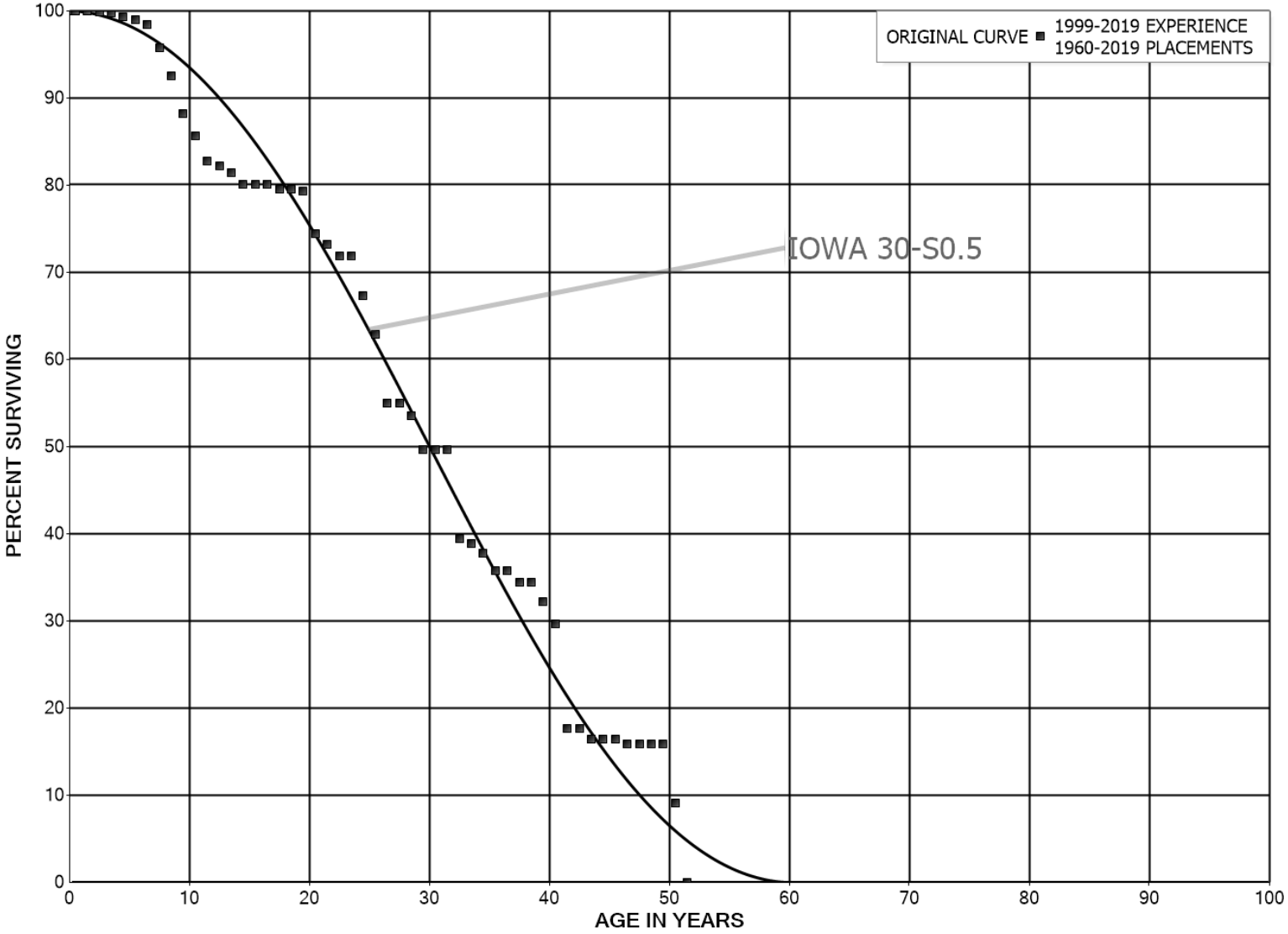
ACCOUNT 370.00 RECEIVING WELLS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2007-2019 EXPERIENCE BAND 2007-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	121,180		0.0000	1.0000	100.00
0.5	111,148		0.0000	1.0000	100.00
1.5	111,148		0.0000	1.0000	100.00
2.5	132,949		0.0000	1.0000	100.00
3.5	132,949		0.0000	1.0000	100.00
4.5	132,949		0.0000	1.0000	100.00
5.5	132,949		0.0000	1.0000	100.00
6.5	99,482		0.0000	1.0000	100.00
7.5	99,482		0.0000	1.0000	100.00
8.5	99,482		0.0000	1.0000	100.00
9.5	99,482		0.0000	1.0000	100.00
10.5	7,370		0.0000	1.0000	100.00
11.5	7,370	1,109	0.1505	0.8495	100.00
12.5					84.95

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 371.00 PUMPING EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1960-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	13,928,914		0.0000	1.0000	100.00
0.5	8,653,630	5,419	0.0006	0.9994	100.00
1.5	11,021,964	12,306	0.0011	0.9989	99.94
2.5	10,781,219	12,096	0.0011	0.9989	99.83
3.5	9,453,412	44,345	0.0047	0.9953	99.71
4.5	6,817,321	23,246	0.0034	0.9966	99.25
5.5	5,785,361	27,560	0.0048	0.9952	98.91
6.5	5,413,591	148,677	0.0275	0.9725	98.44
7.5	3,768,518	126,794	0.0336	0.9664	95.73
8.5	3,446,810	160,001	0.0464	0.9536	92.51
9.5	2,549,487	73,710	0.0289	0.9711	88.22
10.5	1,455,129	50,056	0.0344	0.9656	85.67
11.5	1,043,502	7,445	0.0071	0.9929	82.72
12.5	1,137,255	10,025	0.0088	0.9912	82.13
13.5	837,345	14,096	0.0168	0.9832	81.41
14.5	784,395		0.0000	1.0000	80.04
15.5	677,887		0.0000	1.0000	80.04
16.5	534,434	3,610	0.0068	0.9932	80.04
17.5	610,401	101	0.0002	0.9998	79.50
18.5	664,971	1,413	0.0021	0.9979	79.48
19.5	663,558	41,426	0.0624	0.9376	79.31
20.5	588,736	9,514	0.0162	0.9838	74.36
21.5	638,927	11,409	0.0179	0.9821	73.16
22.5	599,786		0.0000	1.0000	71.85
23.5	517,501	33,177	0.0641	0.9359	71.85
24.5	484,324	31,555	0.0652	0.9348	67.25
25.5	497,723	62,415	0.1254	0.8746	62.87
26.5	428,133		0.0000	1.0000	54.98
27.5	312,603	8,673	0.0277	0.9723	54.98
28.5	241,647	17,595	0.0728	0.9272	53.46
29.5	235,281		0.0000	1.0000	49.56
30.5	280,168		0.0000	1.0000	49.56
31.5	280,168	57,666	0.2058	0.7942	49.56
32.5	222,502	2,887	0.0130	0.9870	39.36
33.5	140,599	3,932	0.0280	0.9720	38.85
34.5	136,159	7,170	0.0527	0.9473	37.77
35.5	183,946		0.0000	1.0000	35.78
36.5	183,946	7,008	0.0381	0.9619	35.78
37.5	176,938		0.0000	1.0000	34.41
38.5	127,299	8,408	0.0660	0.9340	34.41

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

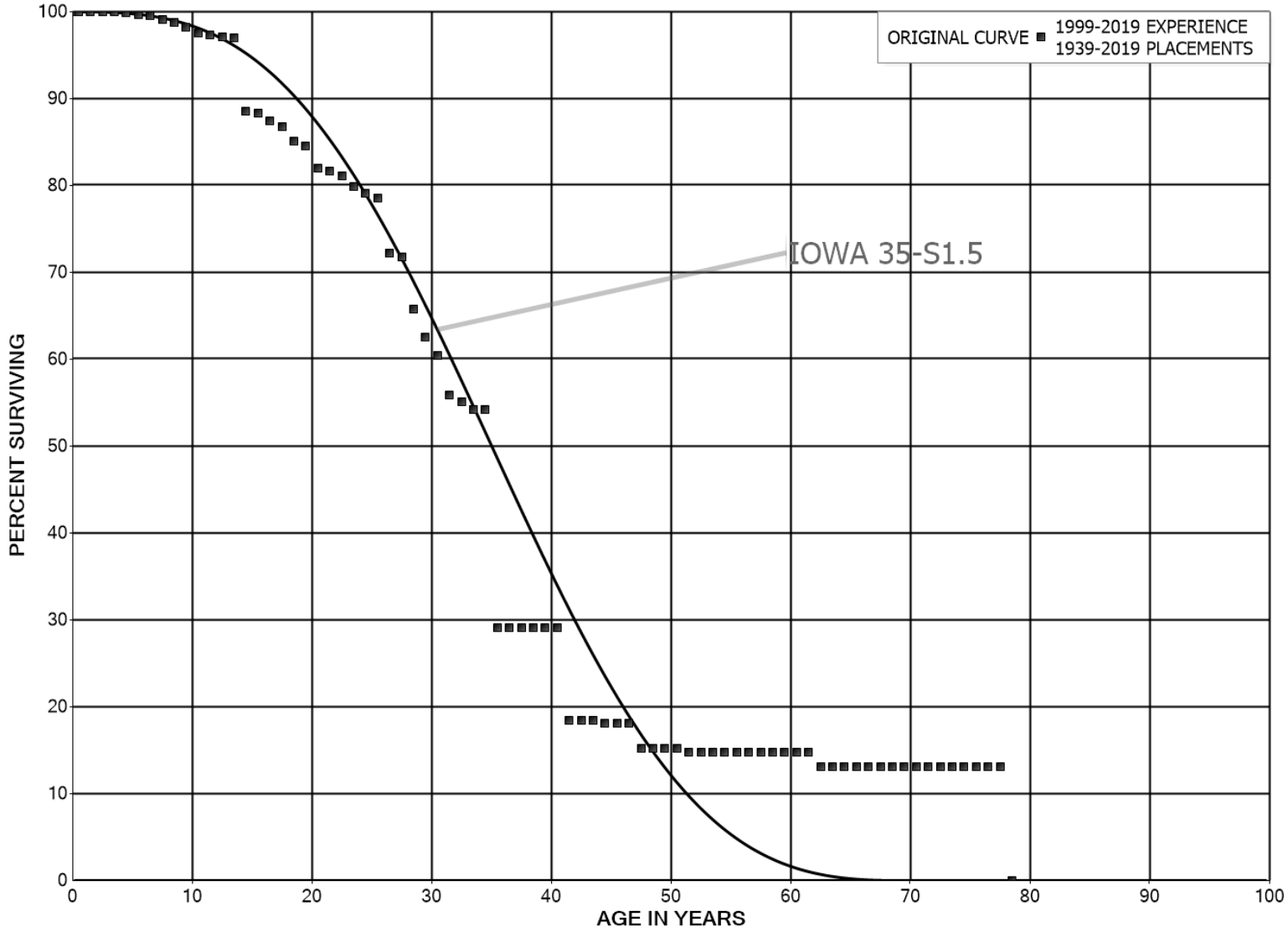
ACCOUNT 371.00 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1960-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	128,004	9,910	0.0774	0.9226	32.14
40.5	140,361	56,891	0.4053	0.5947	29.65
41.5	83,470		0.0000	1.0000	17.63
42.5	83,470	6,122	0.0733	0.9267	17.63
43.5	28,842		0.0000	1.0000	16.34
44.5	28,842		0.0000	1.0000	16.34
45.5	28,842	860	0.0298	0.9702	16.34
46.5	27,983		0.0000	1.0000	15.85
47.5	21,408		0.0000	1.0000	15.85
48.5	5,141		0.0000	1.0000	15.85
49.5	5,141	2,187	0.4255	0.5745	15.85
50.5	2,953	2,953	1.0000		9.11
51.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 380.00 TREATMENT EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	52,484,979		0.0000	1.0000	100.00
0.5	52,338,297		0.0000	1.0000	100.00
1.5	64,377,580	1,853	0.0000	1.0000	100.00
2.5	61,280,085	2,456	0.0000	1.0000	100.00
3.5	56,645,719	97,216	0.0017	0.9983	99.99
4.5	44,542,853	95,360	0.0021	0.9979	99.82
5.5	39,192,994	29,279	0.0007	0.9993	99.61
6.5	37,993,990	195,343	0.0051	0.9949	99.53
7.5	37,038,634	104,008	0.0028	0.9972	99.02
8.5	38,046,057	237,211	0.0062	0.9938	98.74
9.5	28,856,102	179,693	0.0062	0.9938	98.13
10.5	11,015,164	26,343	0.0024	0.9976	97.52
11.5	15,100,040	30,352	0.0020	0.9980	97.28
12.5	16,280,292	28,816	0.0018	0.9982	97.09
13.5	16,807,417	1,468,058	0.0873	0.9127	96.92
14.5	14,676,816	22,218	0.0015	0.9985	88.45
15.5	11,808,330	121,942	0.0103	0.9897	88.32
16.5	11,627,778	92,492	0.0080	0.9920	87.41
17.5	12,550,432	231,211	0.0184	0.9816	86.71
18.5	10,724,551	78,054	0.0073	0.9927	85.11
19.5	10,812,422	322,982	0.0299	0.9701	84.49
20.5	9,468,414	37,906	0.0040	0.9960	81.97
21.5	9,609,732	62,020	0.0065	0.9935	81.64
22.5	9,543,450	153,592	0.0161	0.9839	81.11
23.5	9,334,263	87,607	0.0094	0.9906	79.81
24.5	9,070,811	59,133	0.0065	0.9935	79.06
25.5	8,792,217	707,485	0.0805	0.9195	78.54
26.5	4,703,706	32,521	0.0069	0.9931	72.22
27.5	4,778,474	397,707	0.0832	0.9168	71.72
28.5	6,059,797	298,086	0.0492	0.9508	65.75
29.5	6,184,153	215,062	0.0348	0.9652	62.52
30.5	5,152,304	387,965	0.0753	0.9247	60.35
31.5	5,356,247	72,674	0.0136	0.9864	55.80
32.5	3,421,800	52,448	0.0153	0.9847	55.05
33.5	2,753,091		0.0000	1.0000	54.20
34.5	2,272,767	1,055,181	0.4643	0.5357	54.20
35.5	635,826		0.0000	1.0000	29.04
36.5	779,480		0.0000	1.0000	29.04
37.5	801,627		0.0000	1.0000	29.04
38.5	778,140		0.0000	1.0000	29.04

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

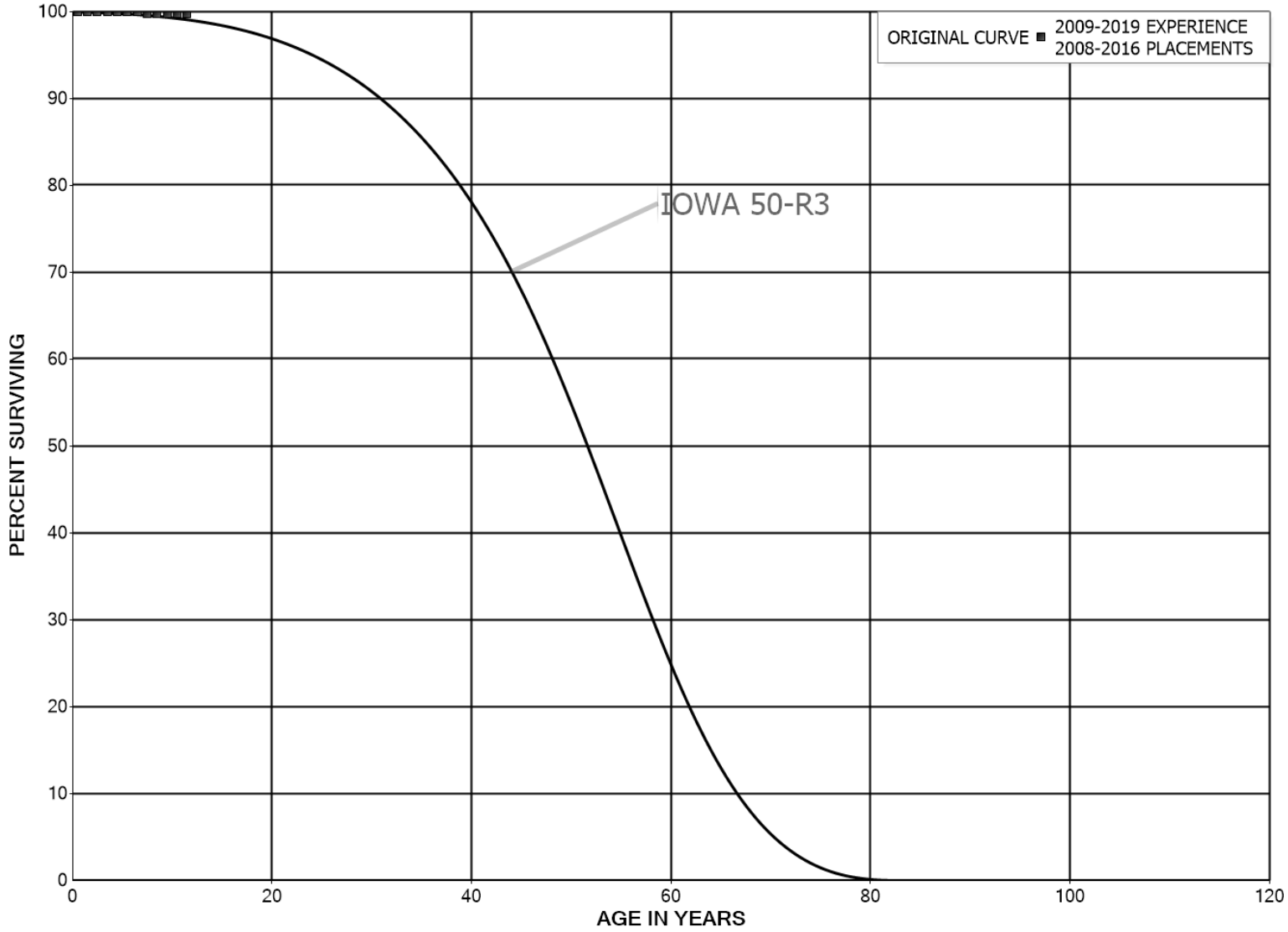
ACCOUNT 380.00 TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	778,140	411	0.0005	0.9995	29.04
40.5	777,730	285,407	0.3670	0.6330	29.02
41.5	15,823,498		0.0000	1.0000	18.37
42.5	15,823,498		0.0000	1.0000	18.37
43.5	15,823,498	268,317	0.0170	0.9830	18.37
44.5	515,644		0.0000	1.0000	18.06
45.5	515,644		0.0000	1.0000	18.06
46.5	371,038	60,316	0.1626	0.8374	18.06
47.5	288,575		0.0000	1.0000	15.12
48.5	288,575		0.0000	1.0000	15.12
49.5	288,575		0.0000	1.0000	15.12
50.5	288,575	6,818	0.0236	0.9764	15.12
51.5	281,757	315	0.0011	0.9989	14.77
52.5	107,182		0.0000	1.0000	14.75
53.5	107,182	462	0.0043	0.9957	14.75
54.5	23,321		0.0000	1.0000	14.69
55.5	23,321		0.0000	1.0000	14.69
56.5	298,010		0.0000	1.0000	14.69
57.5	298,010		0.0000	1.0000	14.69
58.5	298,010		0.0000	1.0000	14.69
59.5	25,215		0.0000	1.0000	14.69
60.5	25,215		0.0000	1.0000	14.69
61.5	25,215	2,761	0.1095	0.8905	14.69
62.5	1,894		0.0000	1.0000	13.08
63.5	1,894		0.0000	1.0000	13.08
64.5	1,894		0.0000	1.0000	13.08
65.5	1,894		0.0000	1.0000	13.08
66.5	1,894		0.0000	1.0000	13.08
67.5	1,894		0.0000	1.0000	13.08
68.5	1,894		0.0000	1.0000	13.08
69.5	1,894		0.0000	1.0000	13.08
70.5	1,894		0.0000	1.0000	13.08
71.5	1,894		0.0000	1.0000	13.08
72.5	1,894		0.0000	1.0000	13.08
73.5	1,894		0.0000	1.0000	13.08
74.5	1,894		0.0000	1.0000	13.08
75.5	1,894		0.0000	1.0000	13.08
76.5	1,894		0.0000	1.0000	13.08
77.5	1,894	1,894	1.0000		13.08
78.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 381.00 PLANT SEWERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

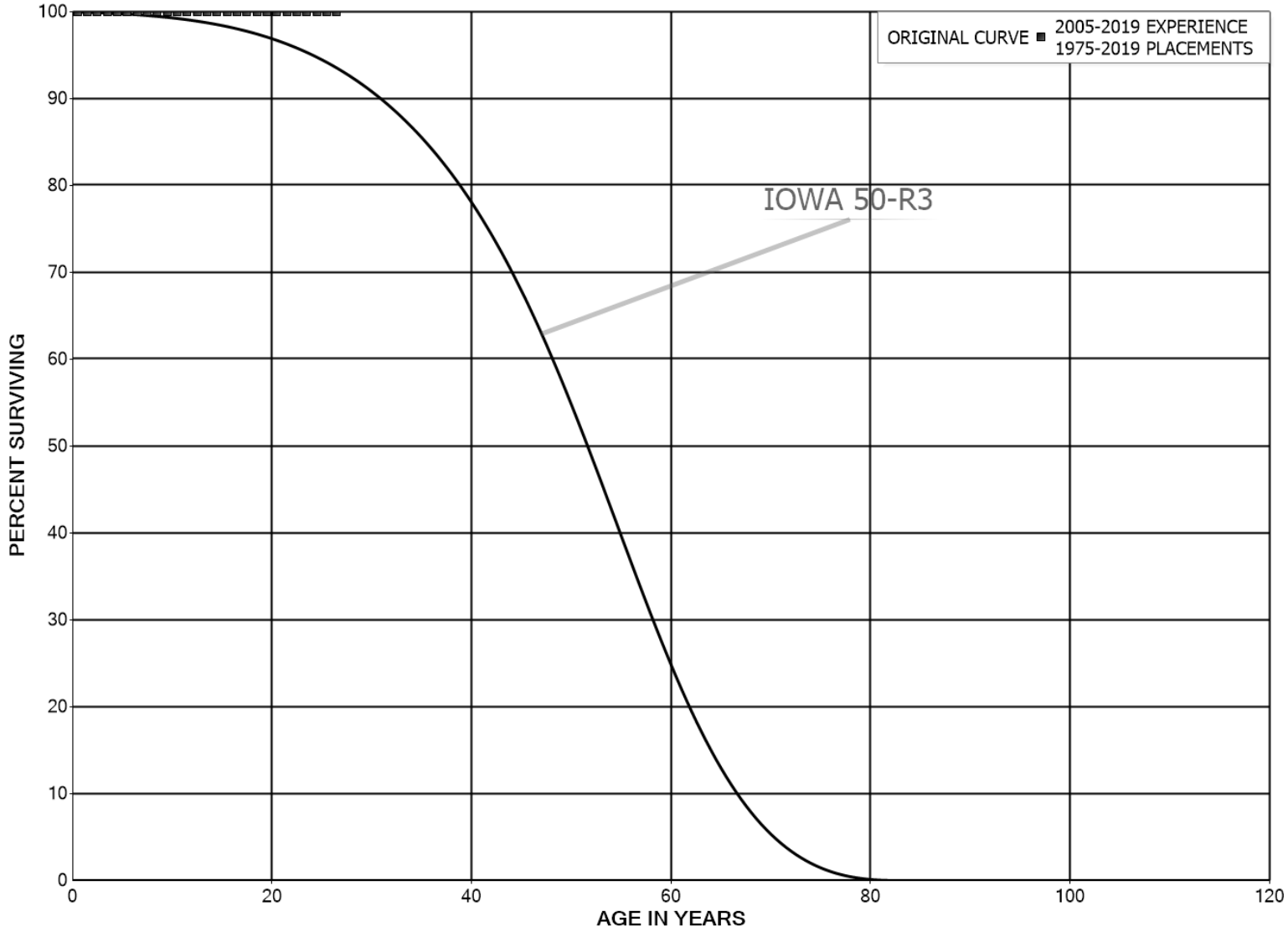
ACCOUNT 381.00 PLANT SEWERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2008-2016 EXPERIENCE BAND 2009-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,524,134		0.0000	1.0000	100.00
0.5	6,227,961		0.0000	1.0000	100.00
1.5	6,227,961		0.0000	1.0000	100.00
2.5	6,227,961		0.0000	1.0000	100.00
3.5	6,182,721		0.0000	1.0000	100.00
4.5	6,175,263		0.0000	1.0000	100.00
5.5	5,940,945		0.0000	1.0000	100.00
6.5	5,940,945	13,300	0.0022	0.9978	100.00
7.5	5,925,961	2,120	0.0004	0.9996	99.78
8.5	5,917,243		0.0000	1.0000	99.74
9.5	4,729,279		0.0000	1.0000	99.74
10.5	294,412		0.0000	1.0000	99.74
11.5					99.74

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 382.00 OUTFALL SEWER LINES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1975-2019 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,700,716		0.0000	1.0000	100.00
0.5	1,605,061		0.0000	1.0000	100.00
1.5	360,675		0.0000	1.0000	100.00
2.5	355,425		0.0000	1.0000	100.00
3.5	355,425		0.0000	1.0000	100.00
4.5	355,425		0.0000	1.0000	100.00
5.5	255,003		0.0000	1.0000	100.00
6.5	264,243		0.0000	1.0000	100.00
7.5	265,939		0.0000	1.0000	100.00
8.5	265,939		0.0000	1.0000	100.00
9.5	238,111		0.0000	1.0000	100.00
10.5	212,060		0.0000	1.0000	100.00
11.5	244,789	6	0.0000	1.0000	100.00
12.5	244,783		0.0000	1.0000	100.00
13.5	43,666		0.0000	1.0000	100.00
14.5	34,425		0.0000	1.0000	100.00
15.5	32,729		0.0000	1.0000	100.00
16.5	32,729		0.0000	1.0000	100.00
17.5	32,729		0.0000	1.0000	100.00
18.5	32,729		0.0000	1.0000	100.00
19.5	32,729		0.0000	1.0000	100.00
20.5	32,729		0.0000	1.0000	100.00
21.5	202,476		0.0000	1.0000	100.00
22.5	202,476		0.0000	1.0000	100.00
23.5	202,476		0.0000	1.0000	100.00
24.5	202,476		0.0000	1.0000	100.00
25.5	202,476		0.0000	1.0000	100.00
26.5					100.00
27.5					
28.5					
29.5					
30.5					
31.5					
32.5					
33.5					
34.5					
35.5					
36.5	4,984		0.0000		
37.5	4,984		0.0000		
38.5	4,984		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

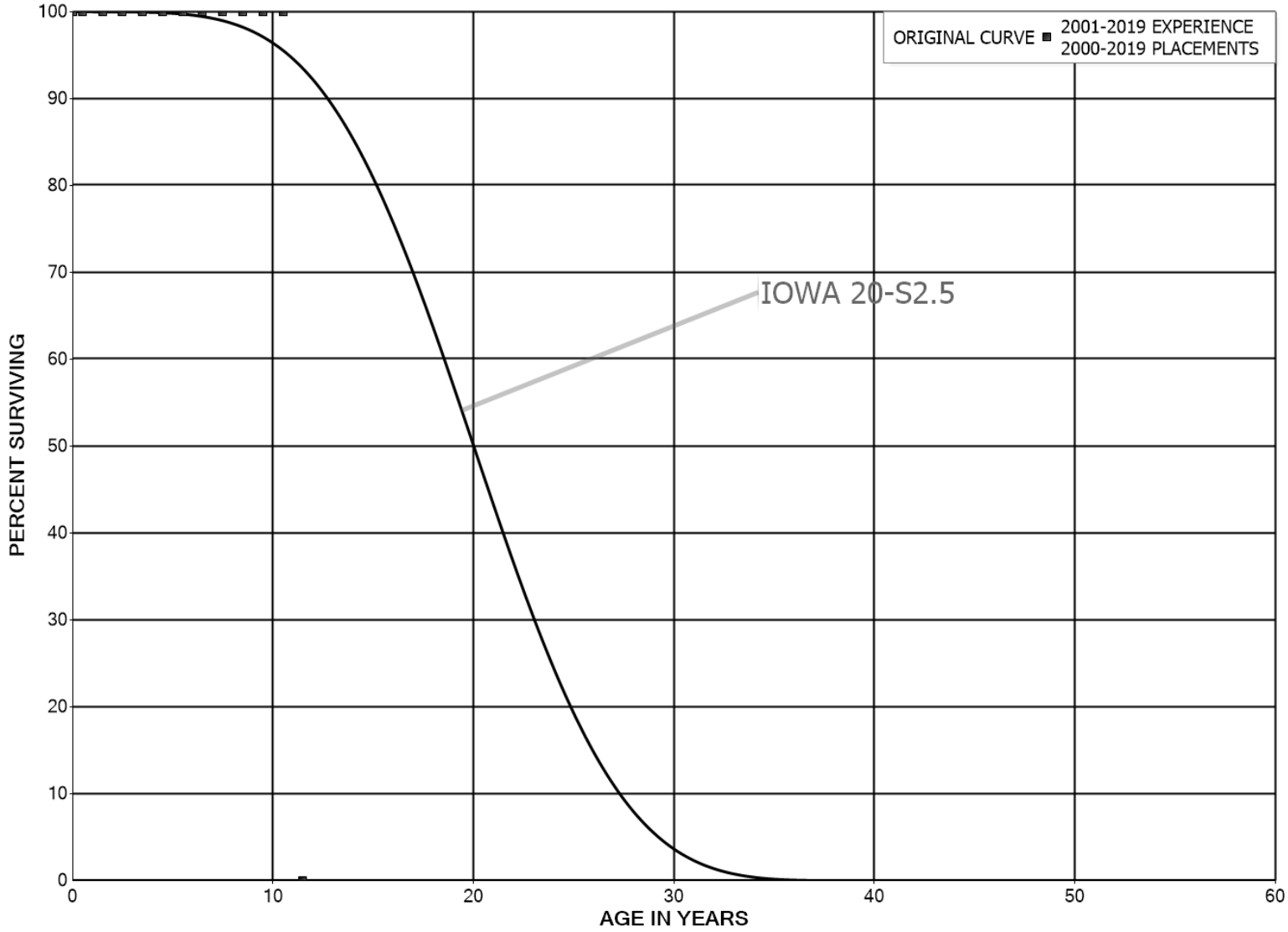
ACCOUNT 382.00 OUTFALL SEWER LINES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1975-2019 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,984		0.0000		
40.5	4,984		0.0000		
41.5	4,984		0.0000		
42.5	4,984		0.0000		
43.5	4,984		0.0000		
44.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

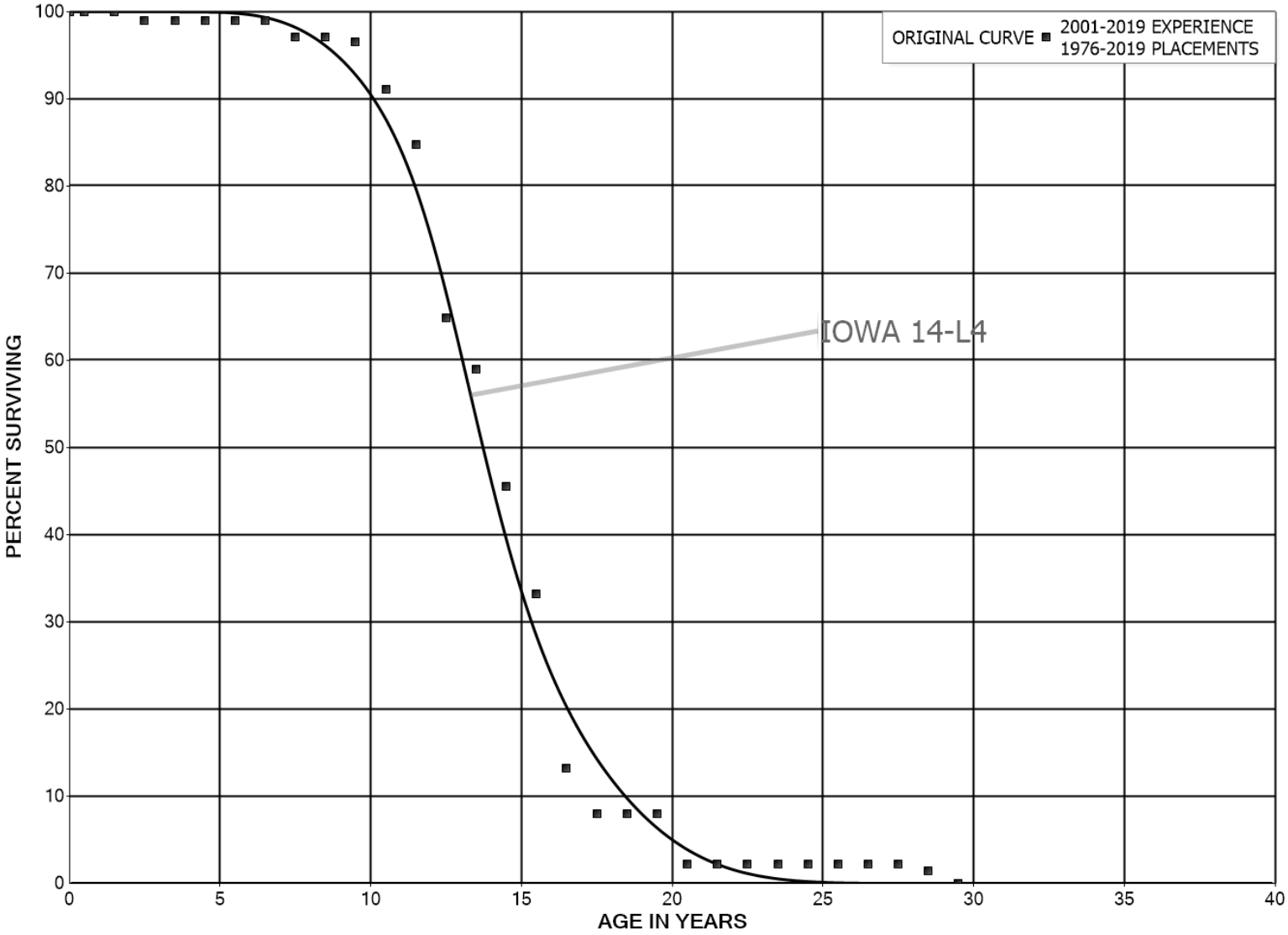
ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 2000-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	737,756		0.0000	1.0000	100.00
0.5	437,340		0.0000	1.0000	100.00
1.5	405,165		0.0000	1.0000	100.00
2.5	4,547,918		0.0000	1.0000	100.00
3.5	4,547,918		0.0000	1.0000	100.00
4.5	4,547,918	2,997	0.0007	0.9993	100.00
5.5	4,544,921		0.0000	1.0000	99.93
6.5	393,353		0.0000	1.0000	99.93
7.5	393,353		0.0000	1.0000	99.93
8.5	281,642		0.0000	1.0000	99.93
9.5	8,492		0.0000	1.0000	99.93
10.5	8,492	8,492	1.0000		99.93
11.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 391.00 TRANSPORTATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

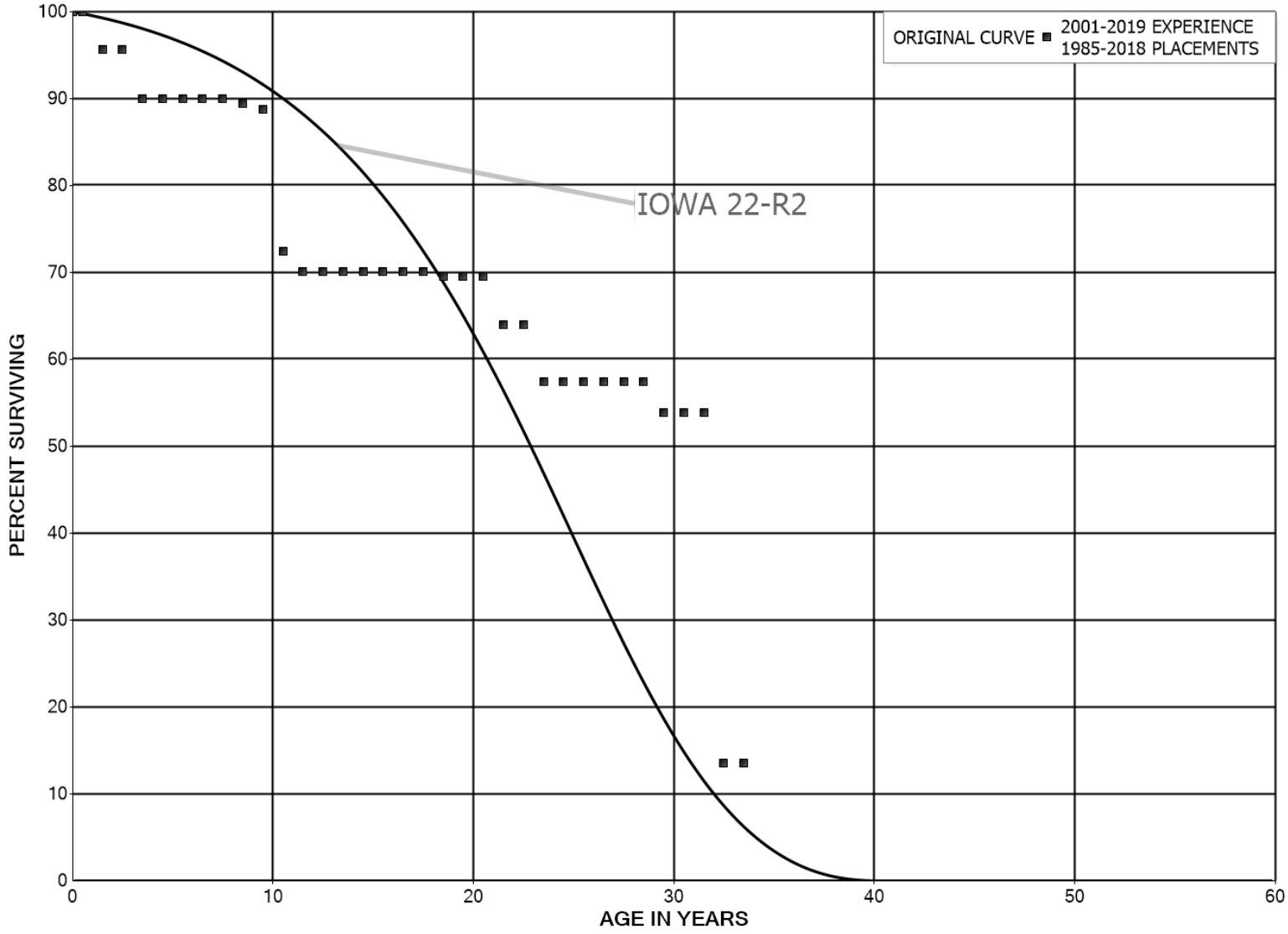
ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1976-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,168,919		0.0000	1.0000	100.00
0.5	3,692,372		0.0000	1.0000	100.00
1.5	1,458,511	14,523	0.0100	0.9900	100.00
2.5	2,332,879		0.0000	1.0000	99.00
3.5	2,514,168		0.0000	1.0000	99.00
4.5	1,930,107		0.0000	1.0000	99.00
5.5	1,664,209		0.0000	1.0000	99.00
6.5	1,677,203	32,676	0.0195	0.9805	99.00
7.5	1,535,566		0.0000	1.0000	97.08
8.5	1,373,777	8,793	0.0064	0.9936	97.08
9.5	1,545,830	87,008	0.0563	0.9437	96.45
10.5	879,899	61,030	0.0694	0.9306	91.03
11.5	743,329	174,600	0.2349	0.7651	84.71
12.5	440,822	40,215	0.0912	0.9088	64.81
13.5	348,542	79,500	0.2281	0.7719	58.90
14.5	276,542	75,000	0.2712	0.7288	45.47
15.5	195,354	117,872	0.6034	0.3966	33.14
16.5	51,900	20,700	0.3988	0.6012	13.14
17.5	31,200		0.0000	1.0000	7.90
18.5	32,855		0.0000	1.0000	7.90
19.5	32,855	23,700	0.7214	0.2786	7.90
20.5	9,155		0.0000	1.0000	2.20
21.5	9,155		0.0000	1.0000	2.20
22.5	9,155		0.0000	1.0000	2.20
23.5	9,155		0.0000	1.0000	2.20
24.5	14,155		0.0000	1.0000	2.20
25.5	14,155		0.0000	1.0000	2.20
26.5	14,155		0.0000	1.0000	2.20
27.5	14,155	5,000	0.3532	0.6468	2.20
28.5	9,155	9,155	1.0000		1.42
29.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 395.00 POWER OPERATED EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1985-2018 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	192,967		0.0000	1.0000	100.00
0.5	192,967	8,551	0.0443	0.9557	100.00
1.5	127,706		0.0000	1.0000	95.57
2.5	255,380	14,864	0.0582	0.9418	95.57
3.5	324,176		0.0000	1.0000	90.01
4.5	885,603		0.0000	1.0000	90.01
5.5	967,489		0.0000	1.0000	90.01
6.5	1,410,131		0.0000	1.0000	90.01
7.5	1,250,710	8,033	0.0064	0.9936	90.01
8.5	871,073	6,988	0.0080	0.9920	89.43
9.5	536,633	98,717	0.1840	0.8160	88.71
10.5	191,853	6,125	0.0319	0.9681	72.39
11.5	137,458		0.0000	1.0000	70.08
12.5	190,308		0.0000	1.0000	70.08
13.5	169,091		0.0000	1.0000	70.08
14.5	169,091		0.0000	1.0000	70.08
15.5	169,587		0.0000	1.0000	70.08
16.5	190,470		0.0000	1.0000	70.08
17.5	117,685	875	0.0074	0.9926	70.08
18.5	116,810		0.0000	1.0000	69.56
19.5	116,810		0.0000	1.0000	69.56
20.5	124,335	9,999	0.0804	0.9196	69.56
21.5	124,336		0.0000	1.0000	63.97
22.5	124,336	12,782	0.1028	0.8972	63.97
23.5	111,554		0.0000	1.0000	57.39
24.5	111,554		0.0000	1.0000	57.39
25.5	111,554		0.0000	1.0000	57.39
26.5	18,021		0.0000	1.0000	57.39
27.5	8,021		0.0000	1.0000	57.39
28.5	8,021	496	0.0618	0.9382	57.39
29.5	30,053		0.0000	1.0000	53.84
30.5	30,053		0.0000	1.0000	53.84
31.5	30,053	22,528	0.7496	0.2504	53.84
32.5	7,525		0.0000	1.0000	13.48
33.5					13.48

PART VII. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1919	8,313	6,745	1,568	1,568	0.0
1920	52,452	42,115	10,337	11,905	0.2
1924	4,262	3,405	857	12,762	0.2
1927	156,739	122,765	33,974	46,736	0.6
1929	206,032	158,998	47,034	93,770	1.3
1930	521,956	400,149	121,807	215,577	2.9
1938	39,855	29,799	10,056	225,633	3.0
1945	3,092	2,310	782	226,415	3.1
1946	8,452	5,758	2,694	229,109	3.1
1947	6,649	4,446	2,203	231,312	3.1
1948	22,873	15,316	7,557	238,869	3.2
1949	36,762	24,574	12,188	251,057	3.4
1950	37,484	24,727	12,757	263,814	3.6
1952	16,749	10,994	5,755	269,569	3.6
1958	58,216	36,259	21,957	291,526	3.9
1961	22,508	13,681	8,827	300,353	4.0
1962	2,717	1,679	1,038	301,391	4.1
1963	17,233	10,222	7,011	308,402	4.2
1964	2,613	1,569	1,044	309,446	4.2
1966	21,055	12,153	8,902	318,348	4.3
1971	32,358	17,850	14,508	332,856	4.5
1972	4,617	2,549	2,068	334,924	4.5
1982	40,220	17,744	22,476	357,400	4.8
1990	714,564	265,417	449,147	806,547	10.9
1991	697,274	270,181	427,093	1,233,640	16.6
2001	23,343	6,181	17,162	1,250,802	16.9
2002	36,963	9,362	27,601	1,278,403	17.2
2003	298,769	77,854	220,915	1,499,318	20.2
2004	145,859	36,745	109,114	1,608,432	21.7
2005	312,360	69,325	243,035	1,851,467	25.0
2006	847,363	182,300	665,063	2,516,530	33.9
2007	1,712,913	356,433	1,356,480	3,873,010	52.2
2008	882,877	174,673	708,204	4,581,214	61.7
2010	67,282	11,320	55,962	4,637,176	62.5
2011	123,763	23,101	100,662	4,737,838	63.8
2012	397,711	58,867	338,844	5,076,682	68.4
2013	260,232	37,932	222,300	5,298,982	71.4
2014	240,725	32,867	207,858	5,506,840	74.2
2015	348,247	39,499	308,748	5,815,588	78.4
2016	33,475	4,421	29,054	5,844,642	78.8
2017	515,629	47,028	468,601	6,313,243	85.1
2018	265,629	21,051	244,578	6,557,821	88.4
2019	273,921	17,976	255,945	6,813,766	91.8
2020	162,776	9,045	153,731	6,967,497	93.9

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2021	128,389	5,489	122,900	7,090,397	95.6
2022	107,654	3,170	104,484	7,194,881	97.0
2024	226,968	1,527	225,441	7,420,322	100.0
SUBTOTAL	10,147,895	2,727,571	7,420,323		
NONDEPRECIABLE	36		36		
TOTAL	10,147,931	2,727,571	7,420,359		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1919	6,746.32	6,163	5,179	1,567	9.94	158
1920	43,137.67	39,031	32,800	10,338	10.94	945
1924	3,516.29	3,165	2,660	856	11.11	77
1927	118,771.36	105,992	89,071	29,700	11.70	2,538
1929	150,692.98	133,137	111,883	38,810	12.53	3,097
1930	397,531.50	351,259	295,184	102,348	12.38	8,267
1938	29,013.31	24,702	20,759	8,254	15.01	550
1945	1,829.79	1,489	1,251	579	18.09	32
1946	6,169.89	5,005	4,206	1,964	18.15	108
1947	4,945.22	3,960	3,328	1,617	19.15	84
1948	14,631.17	11,676	9,812	4,819	19.24	250
1949	23,899.36	19,000	15,967	7,932	19.34	410
1950	27,693.27	21,723	18,255	9,438	20.34	464
1952	12,995.32	10,105	8,492	4,503	20.59	219
1958	44,777.45	32,804	27,567	17,210	24.09	714
1961	15,094.79	10,746	9,031	6,064	25.50	238
1962	936.14	662	556	380	25.72	15
1963	13,467.21	9,365	7,870	5,597	26.72	209
1964	1,157.91	799	671	487	26.96	18
1966	15,068.36	10,138	8,520	6,548	28.21	232
1971	21,545.15	13,589	11,420	10,125	31.03	326
1972	2,408.76	1,503	1,263	1,146	31.33	37
1982	40,219.92	21,115	17,744	22,476	38.00	591
1990	714,563.59	315,837	265,417	449,147	42.92	10,465
1991	509,115.52	220,091	184,956	324,160	43.34	7,479
2001	23,342.66	7,355	6,181	17,162	49.99	343
2002	36,962.58	11,141	9,362	27,601	50.99	541
2003	215,472.60	62,444	52,475	162,998	51.46	3,167
2004	101,386.62	28,185	23,686	77,701	51.94	1,496
2005	312,360.46	82,494	69,325	243,035	52.94	4,591
2006	781,220.43	196,868	165,440	615,780	53.43	11,525
2007	1,430,997.64	343,010	288,251	1,142,747	53.92	21,193
2008	721,110.76	163,836	137,681	583,430	54.42	10,721
2010	67,282.41	13,470	11,320	55,962	55.93	1,001
2012	371,175.37	64,585	54,274	316,901	56.97	5,563
2013	141,639.15	22,747	19,116	122,523	57.49	2,131
2014	89,590.99	13,170	11,068	78,523	58.03	1,353
2015	328,944.53	43,815	36,820	292,125	58.57	4,988
2017	452,481.62	47,511	39,926	412,556	59.67	6,914
2018	205,885.12	18,653	15,675	190,210	60.23	3,158
2019	253,672.91	19,406	16,308	237,365	60.36	3,932

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
2020	106,044.87	6,532	5,489	100,556	60.94	1,650
2021	95,902.74	4,517	3,796	92,107	60.69	1,518
2024	165,228.69	710	597	164,632	57.55	2,861
	8,120,630.40	2,523,505	2,120,652	5,999,978		126,169
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					47.6	1.55

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1927	12,388.94	12,378	8,115	4,274	0.09	4,274
1929	23,345.93	23,066	15,122	8,224	1.15	7,151
1930	55,138.13	54,421	35,679	19,459	1.24	15,693
1938	4,964.59	4,825	3,163	1,802	2.50	721
1945	545.57	522	342	204	3.64	56
1946	867.64	826	542	326	3.97	82
1947	1,035.86	981	643	393	4.30	91
1948	3,806.24	3,616	2,371	1,435	4.00	359
1949	5,646.03	5,335	3,498	2,148	4.37	492
1950	4,772.93	4,486	2,941	1,832	4.74	386
1952	1,459.77	1,366	896	564	4.92	115
1958	6,084.83	5,582	3,660	2,425	5.94	408
1961	4,045.12	3,644	2,389	1,656	6.93	239
1962	876.49	788	517	359	6.97	52
1963	1,931.94	1,721	1,128	804	7.49	107
1964	835.39	742	486	349	7.57	46
1966	3,757.98	3,313	2,172	1,586	7.79	204
1971	5,623.96	4,769	3,127	2,497	9.50	263
1972	1,375.97	1,159	760	616	9.73	63
1991	96,858.61	63,287	41,492	55,367	17.51	3,162
2003	60,814.10	27,330	17,918	42,896	25.73	1,667
2004	29,787.05	12,808	8,397	21,390	26.51	807
2006	66,142.27	25,716	16,860	49,282	28.30	1,741
2007	281,915.10	103,998	68,182	213,733	29.08	7,350
2008	161,766.59	56,424	36,992	124,775	29.87	4,177
2011	123,763.24	35,235	23,101	100,662	32.66	3,082
2012	26,536.10	7,006	4,593	21,943	33.45	656
2013	118,592.58	28,699	18,816	99,777	34.45	2,896
2014	151,134.29	33,250	21,799	129,335	35.45	3,648
2015	11,428.42	2,263	1,484	9,944	36.45	273
2016	5,829.22	1,026	673	5,156	37.45	138
2017	23,741.54	3,673	2,408	21,334	38.25	558
2018	48,020.28	6,367	4,174	43,846	39.25	1,117
2019	5,216.39	576	378	4,838	40.25	120
2020	32,899.18	2,908	1,906	30,993	41.25	751
2022	99,327.78	4,390	2,878	96,450	43.25	2,230
2024	30,030.00	165	108	29,922	45.00	665
	1,512,306.05	548,661	359,710	1,152,596		65,840

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.5 4.35

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1919	1,566.30	1,566	1,566			
1920	9,314.76	9,315	9,315			
1924	745.46	745	745			
1927	25,578.90	25,579	25,579			
1929	31,992.67	31,993	31,993			
1930	69,285.96	69,286	69,286			
1938	5,876.79	5,877	5,877			
1945	716.89	717	717			
1946	1,414.75	1,412	1,010	405	0.12	405
1947	668.17	664	475	193	0.52	193
1948	4,435.66	4,382	3,133	1,303	0.92	1,303
1949	7,216.95	7,145	5,109	2,108	0.76	2,108
1950	5,017.42	4,938	3,531	1,486	1.19	1,249
1952	2,293.55	2,246	1,606	688	1.53	450
1958	7,353.73	7,038	5,032	2,322	2.97	782
1961	3,368.49	3,162	2,261	1,107	4.11	269
1962	904.23	847	606	298	4.23	70
1963	1,834.00	1,712	1,224	610	4.36	140
1964	619.85	576	412	208	4.52	46
1966	2,229.06	2,043	1,461	768	5.29	145
1971	5,189.20	4,620	3,303	1,886	6.52	289
1972	832.35	736	526	306	6.82	45
1991	91,299.82	61,162	43,733	47,567	16.26	2,925
2003	22,482.40	10,434	7,461	15,021	24.25	619
2004	14,685.38	6,520	4,662	10,023	25.05	400
2015	7,873.84	1,672	1,195	6,679	33.37	200
2016	27,646.08	5,242	3,748	23,898	34.19	699
2017	39,405.47	6,565	4,694	34,711	35.02	991
2018	11,723.51	1,681	1,202	10,522	35.84	294
2019	15,031.78	1,804	1,290	13,742	36.67	375
2020	23,832.25	2,307	1,650	22,182	37.32	594
2021	32,486.67	2,368	1,693	30,794	38.15	807
2022	8,326.23	408	292	8,034	38.82	207
2024	5,459.73	34	24	5,436	39.43	138
	488,708.30	286,796	246,411	242,297		15,743

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.4 3.22

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2024	1,050.00	13	26	1,024	19.75	52
	1,050.00	13	26	1,024		52
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					19.7	4.95

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L4						
NET SALVAGE PERCENT.. 0						
2024	14,700.00	279	509	14,191	12.94	1,097
	14,700.00	279	509	14,191		1,097

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.9 7.46

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 393.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2024	10,500.00	131	263	10,237	19.75	518
	10,500.00	131	263	10,237		518

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.8 4.93

EXHIBIT NO. 11-J - DEPRECIATION STUDY

BRENTWOOD WASTEWATER OPERATIONS

AS OF JUNE 30, 2025

Exhibit No. 11-J
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

BRENTWOOD WASTEWATER OPERATIONS

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2025

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-J
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

BRENTWOOD WASTEWATER OPERATIONS

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2025

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
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gannettfleming.com

October 12, 2023

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention: Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant as of June 30, 2025. The results of our study as of June 30, 2024 are presented in our report titled "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of June 30, 2024". The same methods, procedures and estimates are used in both studies.

Summaries of the original cost, annual accruals, book depreciation reserve and amortization of net salvage are presented in Tables 1 through 5, beginning on page I-3 of the attached report.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

FREDERICK B. JOHNSTON, JR.
Senior Analyst

JJS:mle

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PART I. RESULTS OF STUDY

PENNSYLVANIA-AMERICAN WATER COMPANY

BRENTWOOD WASTEWATER OPERATIONS

DEPRECIATION STUDY

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Tables 1 through 5 presented on pages I-3 through I-7 summarize the results of the depreciation study as of June 30, 2025. Table 1 sets forth the development of the net original cost by account as of June 30, 2025. Table 2 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of June 30, 2025, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 3 presents the bringforward of the book reserve to June 30, 2025. Table 4 sets forth the calculation of the depreciation accruals for the twelve months ended June 30, 2025. Table 5 presents the annual amortization of experienced and estimated net salvage based on the period 2020 through 2024.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-6. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2020 through 2024 on page III-2.

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2025

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2025		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2025
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
DEPRECIABLE PLANT										
353.20	LAND AND LAND RIGHTS - COLLECTION	36.00								36.00
361.10	COLLECTION SEWERS - GRAVITY MAINS	10,948,269.08								10,948,269.08
361.20	MANHOLES	1,677,231.43								1,677,231.43
363.00	SERVICES	518,694.72								518,694.72
390.00	OFFICE FURNITURE AND EQUIPMENT	5,000.00								5,000.00
391.00	TRANSPORTATION EQUIPMENT	70,000.00								70,000.00
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	55,000.00								55,000.00
TOTAL DEPRECIABLE PLANT		**13,274,231.23**		**0.00**		**0.00**		**0.00**		**13,274,231.23**

PENNSYLVANIA AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF JUNE 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE	FMV PLANT	FMV RESERVE	CALCULATED EXPENSE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)	(9)	(10)	(11)=((9)-(10))*(7)
	DEPRECIABLE PLANT										
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	10,948,269.08	1,713,845	9,234,424	181,903	1.66	50.8	36,664,615.88	17,208,522	322,971
361.20	MANHOLES	50-S2.5	1,677,231.43	403,896	1,273,335	61,221	3.65	20.8	4,615,269.51	2,678,447	70,694
363.00	SERVICES	47-R3	518,694.72	253,860	264,835	15,336	2.96	17.3	8,164,098.55	6,713,300	42,944
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	5,000.00	222	4,778	244	4.88	19.6	5,000.00	222	233
391.00	TRANSPORTATION EQUIPMENT	14-L4	70,000.00	4,601	65,399	5,113	7.30	12.8	70,000.00	4,601	4,774
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	55,000.00	2,242	52,758	2,690	4.89	19.6	55,000.00	2,242	2,580
	TOTAL DEPRECIABLE PLANT		**13,274,195.23**	**2,378,666**	**10,895,529**	**266,507**	**2.01**		**49,573,983.94**	**26,607,334**	**444,196**
	NONDEPRECIABLE PLANT										
353.20	LAND AND LAND RIGHTS - COLLECTION		36.00						32,371.20		
	TOTAL NONDEPRECIABLE PLANT		**36.00**						**32,371.20**		
	AMORTIZATION OF NET SALVAGE					**11,610**					
	TOTAL UTILITY PLANT		**13,274,231.23**	**2,378,666**	**10,895,529**	**278,117**			**49,606,355.14**		

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2025, OF BOOK RESERVE AS OF JUNE 30, 2024

ACCOUNT	BOOK RESERVE BALANCE AS OF 6/30/2024		PROJECTED DEPRECIATION ACCRUALS		PROJECTED RETIREMENTS		PROJECTED COST OF REMOVAL		PROJECTED SALVAGE		ACQUISITIONS AND ADJUSTMENTS		PROJECTED BOOK RESERVE BALANCE AS OF 6/30/2025
(1)	(2)	+	(3)	-	(4)	-	(5)	+	(6)	+	(7)	=	(8)
361.10	2,120,652		139,393		335,091		211,109						1,713,845
361.20	359,710		69,985		19,545		6,254						403,896
363.00	246,411		16,653		3,554		5,650						253,860
390.00	26		196										222
391.00	509		4,092										4,601
393.00	263		1,979										2,242
TOTAL	**2,727,571**		**232,298**		**358,190**		**223,013**		**0**		**0**		**2,378,666**

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

ACCOUNT (1)	NET ORIGINALCOST AS OF 6/30/2024 (2)	NET ORIGINALCOST AS OF 6/30/2025 (3)	ACCRUAL RATE (4)	AVERAGE ACCRUALS (5)=([(2)+(3)]/2)*(4)	AMORTIZATION OF NET SALVAGE (6)	PROJECTED DEPRECIATION ACCRUALS (7)=(5)+(6)
361.10	8,120,630.40	10,948,269.08	1.55	134,455	4,938	139,393
361.20	1,512,306.05	1,677,231.43	4.35	69,529	456	69,985
363.00	488,708.30	518,694.72	3.22	16,241	412	16,653
390.00	1,050.00	5,000.00	4.95	196		196
391.00	14,700.00	70,000.00	7.46	4,092		4,092
393.00	10,500.00	55,000.00	4.93	1,979		1,979
TOTAL	**10,147,894.75**	**13,274,195.23**		**226,492**	**5,806**	**232,298**

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

TABLE 5. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

	2020		2021		2022		2023		PROJECTED 2024			
ACCOUNT	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2)	- (3) +	(4)	- (5) +	(6)	- (7) +	(8)	- (9) +	(10)	- (11) =	(12)*	(13)=(12)/5
361.10										49,381.00	(49,381.00)	(9,876)
361.20										4,556.00	(4,556.00)	(911)
363.00										4,117.00	(4,117.00)	(823)
TOTAL	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**58,054.00**	**(58,054.00)**	**(11,610)**

* Column (12) equals the summation of Columns (2) through (11).

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1919	1,517	1,517			0.0
1920	9,037	9,037			0.0
1924	985	895	90	90	0.0
1927	99,376	74,087	25,289	25,379	0.2
1929	149,906	109,183	40,723	66,102	0.6
1930	391,466	279,540	111,926	178,028	1.6
1938	34,140	23,771	10,369	188,397	1.7
1945	2,797	2,008	789	189,186	1.7
1946	7,594	5,150	2,444	191,630	1.8
1947	5,961	3,723	2,238	193,868	1.8
1948	20,826	13,231	7,595	201,463	1.8
1949	33,593	21,248	12,345	213,808	2.0
1950	34,121	21,057	13,064	226,872	2.1
1952	15,345	9,263	6,082	232,954	2.1
1958	54,385	31,494	22,891	255,845	2.3
1961	21,280	12,273	9,007	264,852	2.4
1962	2,609	1,633	976	265,828	2.4
1963	16,329	9,007	7,322	273,150	2.5
1964	2,506	1,500	1,006	274,156	2.5
1966	20,130	10,919	9,211	283,367	2.6
1971	31,357	16,504	14,853	298,220	2.7
1972	4,487	2,443	2,044	300,264	2.8
1982	39,494	15,478	24,016	324,280	3.0
1990	706,816	232,688	474,128	798,408	7.3
1991	691,176	255,809	435,367	1,233,775	11.3
2001	23,217	5,525	17,692	1,251,467	11.5
2002	36,776	8,449	28,327	1,279,794	11.7
2003	297,622	75,853	221,769	1,501,563	13.8
2004	145,354	36,108	109,246	1,610,809	14.8
2005	311,073	63,055	248,018	1,858,827	17.1
2006	844,276	169,424	674,852	2,533,679	23.3
2007	1,707,491	341,018	1,366,473	3,900,152	35.8
2008	880,326	168,642	711,684	4,611,836	42.3
2010	67,086	10,419	56,667	4,668,503	42.8
2011	123,714	27,375	96,339	4,764,842	43.7
2012	396,760	55,984	340,776	5,105,618	46.9
2013	259,868	40,517	219,351	5,324,969	48.9
2014	240,501	36,859	203,642	5,528,611	50.7
2015	347,570	38,394	309,176	5,837,787	53.6
2016	33,467	5,258	28,209	5,865,996	53.8
2017	514,815	47,902	466,913	6,332,909	58.1
2018	265,285	22,569	242,716	6,575,625	60.4
2019	273,529	18,855	254,674	6,830,299	62.7
2020	162,620	10,686	151,934	6,982,233	64.1
2021	128,257	6,672	121,585	7,103,818	65.2

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2022	107,652	5,209	102,443	7,206,261	66.1
2024	226,793	6,137	220,656	7,426,917	68.2
2025	3,482,911	14,298	3,468,613	10,895,530	100.0
SUBTOTAL	13,274,195	2,378,666	10,895,529		
NONDEPRECIABLE	36		36		
TOTAL	13,274,231	2,378,666	10,895,565		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1924	258.46	232	169	89	11.36	8
1927	64,206.66	57,259	41,750	22,457	11.89	1,889
1929	99,072.96	87,501	63,800	35,273	12.70	2,777
1930	277,132.68	244,847	178,528	98,605	12.53	7,870
1938	23,974.99	20,441	14,904	9,071	15.04	603
1945	1,593.76	1,313	957	637	17.09	37
1946	5,405.93	4,399	3,207	2,199	18.09	122
1947	4,355.34	3,533	2,576	1,779	18.15	98
1948	12,951.37	10,371	7,562	5,389	19.15	281
1949	21,261.75	16,967	12,371	8,891	19.24	462
1950	24,754.29	19,680	14,349	10,405	19.34	538
1952	11,718.34	9,153	6,674	5,044	20.46	247
1958	41,353.51	30,755	22,425	18,929	23.09	820
1961	14,097.74	10,105	7,368	6,730	25.29	266
1962	877.42	625	456	421	25.50	17
1963	12,666.17	8,952	6,527	6,139	25.72	239
1964	1,092.74	760	554	539	26.72	20
1966	14,311.90	9,711	7,081	7,231	27.96	259
1971	20,749.42	13,222	9,641	11,108	30.75	361
1972	2,325.28	1,467	1,070	1,255	31.03	40
1982	39,493.95	21,228	15,478	24,016	37.00	649
1990	706,816.02	319,127	232,688	474,128	42.52	11,151
1991	503,928.25	222,736	162,406	341,522	42.92	7,957
2001	23,216.99	7,578	5,525	17,692	49.53	357
2002	36,776.12	11,588	8,449	28,327	49.99	567
2003	214,454.68	64,637	47,129	167,326	50.99	3,282
2004	100,938.82	29,252	21,329	79,610	51.46	1,547
2005	311,072.89	86,478	63,055	248,018	51.94	4,775
2006	778,208.91	205,525	149,856	628,353	52.94	11,869
2007	1,425,841.64	359,312	261,989	1,163,853	53.43	21,783
2008	718,683.74	172,268	125,607	593,077	53.92	10,999
2010	67,085.87	14,289	10,419	56,667	55.42	1,023
2012	370,232.34	69,307	50,534	319,698	56.44	5,664
2013	141,303.81	24,587	17,927	123,377	56.97	2,166
2014	89,393.41	14,357	10,468	78,925	57.49	1,373
2015	328,271.63	48,256	35,186	293,086	58.03	5,051
2017	451,680.27	53,840	39,257	412,423	59.11	6,977
2018	205,546.01	21,582	15,736	189,810	59.67	3,181
2019	253,284.49	22,948	16,732	236,552	60.23	3,927
2020	105,894.40	8,101	5,907	99,987	60.36	1,657

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
2021	95,776.46	5,900	4,302	91,474	60.94	1,501
2024	165,054.45	2,723	1,986	163,068	59.61	2,736
2025	3,161,153.22	13,593	9,911	3,151,242	57.55	54,757
	10,948,269.08	2,350,505	1,713,845	9,234,424		181,903
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					50.8	1.66

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1927	10,166.07	10,162	7,334	2,832	0.04	2,832
1929	19,502.77	19,472	14,053	5,450	0.15	5,450
1930	46,424.72	45,868	33,103	13,322	1.15	11,584
1938	4,371.15	4,259	3,074	1,297	2.29	566
1945	493.92	474	342	152	3.33	46
1946	788.06	753	543	245	3.64	67
1947	944.24	899	649	295	3.97	74
1948	3,480.75	3,297	2,379	1,102	4.30	256
1949	5,178.77	4,920	3,551	1,628	4.00	407
1950	4,392.23	4,151	2,996	1,396	4.37	319
1952	1,351.11	1,262	911	440	5.12	86
1958	5,722.97	5,253	3,791	1,932	5.99	323
1961	3,831.91	3,482	2,513	1,319	6.42	205
1962	832.20	750	541	291	6.93	42
1963	1,838.35	1,653	1,193	645	6.97	93
1964	796.64	709	512	285	7.49	38
1966	3,598.64	3,185	2,299	1,300	7.67	169
1971	5,436.95	4,668	3,369	2,068	8.89	233
1972	1,332.60	1,130	816	517	9.50	54
1991	96,076.60	64,025	46,206	49,871	17.02	2,930
2003	60,700.72	28,444	20,528	40,173	24.95	1,610
2004	29,739.55	13,365	9,645	20,095	25.73	781
2006	66,067.40	27,114	19,568	46,499	27.30	1,703
2007	281,649.26	109,505	79,029	202,620	28.30	7,160
2008	161,642.23	59,630	43,035	118,607	29.08	4,079
2011	123,714.20	37,931	27,375	96,339	31.66	3,043
2012	26,527.84	7,552	5,450	21,078	32.66	645
2013	118,564.52	31,301	22,590	95,975	33.45	2,869
2014	151,108.04	36,568	26,391	124,717	34.45	3,620
2015	11,426.97	2,514	1,814	9,613	35.45	271
2016	5,828.71	1,154	833	4,996	36.45	137
2017	23,740.17	4,178	3,015	20,725	37.45	553
2018	48,018.49	7,428	5,361	42,657	38.25	1,115
2019	5,216.28	692	499	4,717	39.25	120
2020	32,898.81	3,635	2,624	30,275	40.25	752

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
2022	99,327.59	6,585	4,752	94,576	42.25	2,238
2024	30,030.00	664	479	29,551	44.25	668
2025	184,470.00	1,015	733	183,737	45.00	4,083
	1,677,231.43	559,647	403,896	1,273,335		61,221
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					20.8	3.65

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1919	1,516.98	1,517	1,517			
1920	9,037.17	9,037	9,037			
1924	726.50	726	726			
1927	25,003.27	25,003	25,003			
1929	31,329.80	31,330	31,330			
1930	67,908.88	67,909	67,909			
1938	5,793.36	5,793	5,793			
1945	709.31	709	709			
1946	1,400.40	1,400	1,400			
1947	661.67	661	498	164	0.12	164
1948	4,394.25	4,365	3,290	1,104	0.52	1,104
1949	7,152.31	7,066	5,326	1,826	0.92	1,826
1950	4,974.30	4,925	3,712	1,262	0.76	1,262
1952	2,275.40	2,226	1,678	597	1.63	366
1958	7,308.18	7,002	5,278	2,030	2.93	693
1961	3,350.03	3,173	2,392	958	3.57	268
1962	899.47	844	636	263	4.11	64
1963	1,824.74	1,708	1,287	538	4.23	127
1964	616.85	576	434	183	4.36	42
1966	2,219.12	2,042	1,539	680	5.10	133
1971	5,170.44	4,635	3,494	1,676	6.24	269
1972	829.47	739	557	272	6.52	42
1991	91,170.67	62,616	47,197	43,974	15.50	2,837
2003	22,466.29	10,874	8,196	14,270	23.45	609
2004	14,675.49	6,811	5,134	9,541	24.25	393
2015	7,871.31	1,850	1,394	6,477	32.55	199
2016	27,637.82	5,870	4,425	23,213	33.37	696
2017	39,394.54	7,469	5,630	33,765	34.19	988
2018	11,720.49	1,953	1,472	10,248	35.02	293
2019	15,028.20	2,155	1,624	13,404	35.84	374
2020	23,827.00	2,859	2,155	21,672	36.67	591
2021	32,480.05	3,144	2,370	30,110	37.32	807
2022	8,324.67	607	457	7,868	38.15	206
2024	5,458.86	135	102	5,357	39.32	136
2025	33,537.43	211	159	33,378	39.43	847
	518,694.72	289,940	253,860	264,835		15,336

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.3 2.96

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2024	1,050.00	52	114	936	19.00	49
2025	3,950.00	49	108	3,842	19.75	195
	5,000.00	101	222	4,778		244

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.6 4.88

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L4						
NET SALVAGE PERCENT.. 0						
2024	14,700.00	1,114	2,367	12,333	12.19	1,012
2025	55,300.00	1,051	2,234	53,066	12.94	4,101
	70,000.00	2,165	4,601	65,399		5,113

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.8 7.30

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

ACCOUNT 393.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2024	10,500.00	525	1,089	9,411	19.00	495
2025	44,500.00	556	1,153	43,347	19.75	2,195
	55,000.00	1,081	2,242	52,758		2,690

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.6 4.89

PART III. EXPERIENCED AND ESTIMATED NET SALVAGE

PENNSYLVANIA-AMERICAN WATER COMPANY
BRENTWOOD WASTEWATER OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2024 TRANSACTION YEAR				
361.10	335,091.32	49,381.00		49,381.00-
361.20	19,544.62	4,556.00		4,556.00-
363.00	3,553.58	4,117.00		4,117.00-
	358,189.52	58,054.00		58,054.00-
TOTAL	358,189.52	58,054.00		58,054.00-

VOLUME 15

PENNSYLVANIA-AMERICAN WATER COMPANY

2023 GENERAL BASE RATE CASE
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

EXHIBITS NO. 11-K, 11-L, 11-M
DEPRECIATION STUDY

WASTEWATER CSS OPERATIONS
AS OF JUNE 30, 2023, 2024, 2025

EXHIBIT NO. 11-K - DEPRECIATION STUDY

WASTEWATER CSS OPERATIONS

AS OF JUNE 30, 2023

Exhibit No. 11-K
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

WASTEWATER CSS OPERATIONS

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2023

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-K
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WASTEWATER CSS OPERATIONS

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2023

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

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October 12, 2023

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention: Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant as of June 30, 2023. Summaries of the original cost, annual accruals and the book depreciation reserve are presented in Tables 1 through 3, beginning on page I-3 of the attached report.

A description of the methods and procedures upon which the study was based, as well as support for the service life estimates, is set forth in a companion report "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of June 30, 2024".

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

FREDERICK B. JOHNSTON, JR.
Senior Analyst

JJS:mle

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PART I. RESULTS OF STUDY

PENNSYLVANIA-AMERICAN WATER COMPANY

WASTEWATER CSS OPERATIONS

DEPRECIATION STUDY

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Table 1 presents the development of net original cost used in the study. The net original cost is the original cost of wastewater plant less advances and contributions. The results of the depreciation study are summarized in Table 2, which sets forth the book reserve and the calculated annual depreciation related to net original cost as of June 30, 2023, and the annual amortization of net negative salvage. Table 3 presents the calculation of the amortization of experienced net salvage by account, based on the five-year period, 2018-2022.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-2. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage, and cost of removal are set forth by account for the years 2018 through 2022, on pages III-2 through III-4.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2023

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2023		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2023
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
DEPRECIABLE PLANT										
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	8,334,302.21								8,334,302.21
354.30	STRUCTURES AND IMPROVEMENTS - SPP	20,986,044.46								20,986,044.46
354.40	STRUCTURES AND IMPROVEMENTS - TDP	125,862,935.68				2,500,000.00				123,362,935.68
355.00	POWER GENERATING EQUIPMENT	932,654.26								932,654.26
360.10	COLLECTION SEWERS - FORCE MAINS	9,576,689.00								9,576,689.00
361.10	COLLECTION SEWERS - GRAVITY MAINS	391,547,732.60				8,113,082.47				383,434,650.13
361.20	MANHOLES	38,889,415.73								38,889,415.73
363.00	SERVICES	14,254,769.13				1,133,516.15				13,121,252.98
364.00	FLOW MEASURING DEVICES	2,099,193.73								2,099,193.73
371.00	PUMPING EQUIPMENT	14,926,204.71								14,926,204.71
380.00	TREATMENT EQUIPMENT	78,524,654.41								78,524,654.41
381.00	PLANT SEWERS	1,576,345.41								1,576,345.41
382.00	OUTFALL SEWER LINES	189,250.37								189,250.37
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT	10,740,054.36								10,740,054.36
390.00	OFFICE FURNITURE AND EQUIPMENT	2,551,002.00								2,551,002.00
391.00	TRANSPORTATION EQUIPMENT	7,818,254.14								7,818,254.14
392.00	STORES EQUIPMENT	106,844.28								106,844.28
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2,286,410.29								2,286,410.29
394.00	LABORATORY EQUIPMENT	1,323,996.94								1,323,996.94
395.00	POWER OPERATED EQUIPMENT	1,909,398.22								1,909,398.22
396.00	COMMUNICATION EQUIPMENT	2,767,307.88								2,767,307.88
397.00	MISCELLANEOUS EQUIPMENT	2,662,917.90								2,662,917.90
TOTAL DEPRECIABLE PLANT		**739,866,377.71**		**0.00**		**11,746,598.62**		**0.00**		**728,119,779.09**
NONDEPRECIABLE PLANT										
353.20	LAND AND LAND RIGHTS - COLLECTION	3,161,743.45								3,161,743.45
353.30	LAND AND LAND RIGHTS - SPP	1,153,570.00								1,153,570.00
353.40	LAND AND LAND RIGHTS - TDP	148,041.59								148,041.59
TOTAL NONDEPRECIABLE PLANT		**4,463,355.04**		**0.00**		**0.00**		**0.00**		**4,463,355.04**
TOTAL UTILITY PLANT		**744,329,732.75**		**0.00**		**11,746,598.62**		**0.00**		**732,583,134.13**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF JUNE 30, 2023

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF JUNE 30, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	45-R3	8,334,302.21	573,427	7,760,875	213,970	2.57	36.3
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	20,986,044.46	7,304,734	13,681,310	434,551	2.07	31.5
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	123,362,935.68	52,990,817	70,372,118	2,334,160	1.89	30.1
355.00	POWER GENERATING EQUIPMENT	35-S0.5	932,654.26	296,907	635,747	31,574	3.39	20.1
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	9,576,689.00	567,264	9,009,425	150,395	1.57	59.9
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	383,434,650.13	150,631,841	232,802,809	5,202,980	1.36	44.7
361.20	MANHOLES	50-S2.5	38,889,415.73	20,528,009	18,361,407	960,372	2.47	19.1
363.00	SERVICES	47-R3	13,121,252.98	5,815,433	7,305,820	317,052	2.42	23.0
364.00	FLOW MEASURING DEVICES	15-L2.5	2,099,193.73	728,505	1,370,689	182,525	8.70	7.5
371.00	PUMPING EQUIPMENT	30-S0.5	14,926,204.71	4,539,008	10,387,196	599,686	4.02	17.3
380.00	TREATMENT EQUIPMENT	35-S1.5	78,524,654.41	26,850,889	51,673,765	2,792,661	3.56	18.5
381.00	PLANT SEWERS	50-R3	1,576,345.41	800,718	775,628	31,722	2.01	24.5
382.00	OUTFALL SEWER LINES	50-R3	189,250.37	50,018	139,232	3,551	1.88	39.2
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT	20-S2.5	10,740,054.36	2,553,314	8,186,740	644,251	6.00	12.7
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	2,551,002.00	377,432	2,173,570	145,239	5.69	15.0
391.00	TRANSPORTATION EQUIPMENT	14-L4	7,818,254.14	3,816,617	4,001,637	541,361	6.92	7.4
392.00	STORES EQUIPMENT	25-SQ	106,844.28	11,756	95,089	4,359	4.08	21.8
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	2,286,410.29	334,814	1,951,596	117,338	5.13	16.6
394.00	LABORATORY EQUIPMENT	15-SQ	1,323,996.94	149,758	1,174,239	96,345	7.28	12.2
395.00	POWER OPERATED EQUIPMENT	22-R2	1,909,398.22	957,232	952,166	75,037	3.93	12.7
396.00	COMMUNICATION EQUIPMENT	15-SQ	2,767,307.88	825,358	1,941,950	189,893	6.86	10.2
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	2,662,917.90	434,518	2,228,400	183,761	6.90	12.1
	TOTAL DEPRECIABLE PLANT		**728,119,779.09**	**281,138,370**	**446,981,408**	**15,252,783**	**2.09**	
	NONDEPRECIABLE PLANT							
353.20	LAND AND LAND RIGHTS - COLLECTION		3,161,743.45					
353.30	LAND AND LAND RIGHTS - SPP		1,153,570.00					
353.40	LAND AND LAND RIGHTS - TDP		148,041.59					
	TOTAL NONDEPRECIABLE PLANT		**4,463,355.04**					
	AMORTIZATION OF NET SALVAGE					**1,950,438**		
	TOTAL UTILITY PLANT		**732,583,134.13**	**281,138,370**	**446,981,408**	**17,203,221**		

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

TABLE 3. AMORTIZATION OF EXPERIENCED NET SALVAGE

	2018		2019		2020		2021		2022			
ACCOUNT	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2) -	(3) +	(4) -	(5) +	(6) -	(7) +	(8) -	(9) +	(10) -	(11) =	(12)*	(13)=(12)/5
354.20		12,897.00				27,261.65				30,686.12	(70,844.77)	(14,169)
354.30		2,859.26		85,934.54				7,613.98		2,731.90	(99,139.68)	(19,828)
354.40		2,465.65		67,526.93		3,035.88		76,589.11		612,785.01	(762,402.58)	(152,481)
360.10		2,819.19		2,367.85		22,982.08		164,970.27		232,064.30	(425,203.69)	(85,041)
361.10		26,538.94		1,430,976.01	3,491.13	1,344,641.10		1,074,276.48		2,044,135.19	(5,917,076.59)	(1,183,415)
361.20				90,279.20		81,137.03		219,777.95		326,964.80	(718,158.98)	(143,632)
363.00		27,682.42		52,929.84		75,298.32		129,688.68		108,024.33	(393,623.59)	(78,725)
364.00						8,901.01					(8,901.01)	(1,780)
371.00		522.61		66,936.02		24,730.31		51,352.70		14,057.96	(157,599.60)	(31,520)
380.00		58,050.21		92,448.13		399,155.43		104,870.48		277,412.74	(931,936.99)	(186,387)
382.00		1,045.59		3,306.40							(4,351.99)	(870)
389.10		3,678.20									(3,678.20)	(736)
390.00		13,128.96		9,975.61		1,886.85		1,482.56		12,873.26	(39,347.24)	(7,869)
391.00		42,449.74		48,014.34							(90,464.08)	(18,093)
393.00		4,038.83		28,436.64		7,289.38		953.49		6,599.32	(47,317.66)	(9,464)
394.00				5,445.26		1,548.07		1,919.19		877.73	(9,790.25)	(1,958)
395.00				5,217.77		510.16				183.61	(5,911.54)	(1,182)
396.00				39,091.19		1,822.13		9,833.75		1,647.58	(52,394.65)	(10,479)
397.00				4,026.89		3,318.49		6,698.53			(14,043.91)	(2,809)
TOTAL	**0.00**	**198,176.60**	**0.00**	**2,032,912.62**	**3,491.13**	**2,003,517.89**	**0.00**	**1,850,027.17**	**0.00**	**3,671,043.85**	**(9,752,187.00)**	**(1,950,438)**

* Column (12) equals the summation of Columns (2) through (11).

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1918	3,377,082	3,050,031	327,051	327,051	0.1
1938	1,270,233	1,086,800	183,433	510,484	0.1
1945	274,246	223,775	50,471	560,955	0.1
1950	1,040,208	813,135	227,073	788,028	0.2
1955	17,124,064	12,588,799	4,535,265	5,323,293	1.2
1959	66,899,799	48,305,703	18,594,096	23,917,389	5.4
1960	14,474,967	12,162,407	2,312,560	26,229,949	5.9
1962	11,518,386	7,862,477	3,655,909	29,885,858	6.7
1963	28,918,420	19,811,932	9,106,488	38,992,346	8.7
1965	837,811	583,816	253,995	39,246,341	8.8
1968	3,025,034	2,122,171	902,863	40,149,204	9.0
1970	1,057,224	705,333	351,891	40,501,095	9.1
1972	30,694,797	20,871,074	9,823,723	50,324,818	11.3
1973	938,414	628,779	309,635	50,634,453	11.3
1974	746,732	487,744	258,988	50,893,441	11.4
1975	35,935,260	26,838,810	9,096,450	59,989,891	13.4
1976	36,756,942	20,891,081	15,865,861	75,855,752	17.0
1977	559,981	356,862	203,119	76,058,871	17.0
1978	1,474,471	928,002	546,469	76,605,340	17.1
1979	1,550,569	959,382	591,187	77,196,527	17.3
1980	2,028,930	1,186,066	842,864	78,039,391	17.5
1981	1,209,220	725,949	483,271	78,522,662	17.6
1982	932,252	554,668	377,584	78,900,246	17.7
1983	668,516	390,000	278,516	79,178,762	17.7
1984	991,019	549,033	441,986	79,620,748	17.8
1985	3,541,517	2,037,736	1,503,781	81,124,529	18.1
1986	1,405,177	778,255	626,922	81,751,451	18.3
1987	2,620,506	1,643,600	976,906	82,728,357	18.5
1988	897,936	542,091	355,845	83,084,202	18.6
1989	26,693,511	11,980,710	14,712,801	97,797,003	21.9
1990	4,845,014	2,411,751	2,433,263	100,230,266	22.4
1991	2,018,395	995,919	1,022,476	101,252,742	22.7
1992	3,100,426	1,418,504	1,681,922	102,934,664	23.0
1993	480,762	206,231	274,531	103,209,195	23.1
1994	1,431,052	635,158	795,894	104,005,089	23.3
1995	18,163,368	9,723,750	8,439,618	112,444,707	25.2
1996	9,066,553	4,245,440	4,821,113	117,265,820	26.2
1997	423,074	179,314	243,760	117,509,580	26.3
1998	2,736,819	1,113,680	1,623,139	119,132,719	26.7
1999	13,226,522	4,589,803	8,636,719	127,769,438	28.6
2000	420,448	148,801	271,647	128,041,085	28.6
2001	2,540,163	1,211,045	1,329,118	129,370,203	28.9
2002	500,564	213,575	286,989	129,657,192	29.0
2003	2,244,245	973,855	1,270,390	130,927,582	29.3
2004	7,602,143	3,156,490	4,445,653	135,373,235	30.3

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2005	2,542,671	770,562	1,772,109	137,145,344	30.7
2006	5,395,209	1,957,657	3,437,552	140,582,896	31.5
2007	5,881,812	1,542,598	4,339,214	144,922,110	32.4
2008	4,568,849	1,434,077	3,134,772	148,056,882	33.1
2009	10,712,942	2,844,762	7,868,180	155,925,062	34.9
2010	17,667,360	5,453,768	12,213,592	168,138,654	37.6
2011	4,840,939	1,046,034	3,794,905	171,933,559	38.5
2012	3,468,009	1,351,626	2,116,383	174,049,942	38.9
2013	6,204,938	2,617,897	3,587,041	177,636,983	39.7
2014	29,320,830	6,872,350	22,448,480	200,085,463	44.8
2015	24,615,111	6,219,033	18,396,078	218,481,541	48.9
2016	39,649,790	6,661,117	32,988,673	251,470,214	56.3
2017	15,713,936	2,258,809	13,455,127	264,925,341	59.3
2018	12,423,395	1,947,279	10,476,116	275,401,457	61.6
2019	45,763,192	3,427,144	42,336,048	317,737,505	71.1
2020	54,763,953	3,947,899	50,816,054	368,553,559	82.5
2021	29,998,825	1,522,464	28,476,361	397,029,920	88.8
2022	40,379,411	1,039,008	39,340,403	436,370,324	97.6
2023	17,692,434	98,227	17,594,206	453,964,531	101.6
9999	11,746,599-	4,763,478-	6,983,121-	446,981,410	100.0
SUBTOTAL	728,119,779	281,138,370	446,981,408		
NONDEPRECIABLE	4,463,355		4,463,355		
TOTAL	732,583,134	281,138,370	451,444,763		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2017	1,006,878.64	151,032	143,874	863,005	34.00	25,382
2018	1,926,648.96	241,794	230,334	1,696,315	34.84	48,689
2019	1,211,517.34	122,121	116,332	1,095,185	35.68	30,695
2020	173,808.85	13,244	12,616	161,193	36.37	4,432
2021	218,083.90	11,166	10,637	207,447	37.06	5,598
2022	1,945,021.67	50,376	47,989	1,897,033	37.61	50,440
2023	1,852,342.85	12,225	11,645	1,840,698	37.77	48,734
	8,334,302.21	601,958	573,427	7,760,875		213,970

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.3 2.57

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1960	2,307,540.06	1,831,725	1,959,250	348,290	16.37	21,276
1968	671,326.79	494,768	529,214	142,113	19.63	7,240
1970	60,405.27	43,860	46,914	13,491	19.99	675
1972	432,344.07	306,489	327,827	104,517	20.94	4,991
1990	89,924.53	49,854	53,325	36,600	26.52	1,380
1995	131,932.60	65,755	70,333	61,600	28.18	2,186
1996	513,721.35	251,056	268,535	245,186	28.25	8,679
2000	105,072.37	46,158	49,372	55,700	29.36	1,897
2004	244,354.55	93,783	100,312	144,043	30.50	4,723
2005	52,725.90	19,456	20,811	31,915	30.78	1,037
2006	2,710,094.59	958,289	1,025,005	1,685,090	31.08	54,218
2011	7,145.91	1,938	2,073	5,073	32.25	157
2012	7,147.63	1,808	1,934	5,214	32.48	161
2013	148,319.26	34,707	37,123	111,196	32.74	3,396
2014	10,489,746.72	2,246,904	2,403,333	8,086,414	33.02	244,894
2015	40,952.90	7,961	8,515	32,438	33.15	979
2017	762,725.81	116,239	124,332	638,394	33.37	19,131
2018	1,526,953.41	197,740	211,506	1,315,447	33.61	39,139
2019	446,541.64	47,512	50,820	395,722	33.59	11,781
2021	237,069.10	13,276	14,200	222,869	33.71	6,611
	20,986,044.46	6,829,278	7,304,734	13,681,310		434,551

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.5 2.07

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1960	10,599,624.45	8,413,982	9,031,719	1,567,905	16.37	95,779
1972	12,719,036.07	9,016,525	9,678,499	3,040,537	20.94	145,202
1975	17,982,761.29	12,343,367	13,249,590	4,733,171	21.93	215,831
1985	1,204,742.75	727,906	781,347	423,396	24.89	17,011
1993	12,736.38	6,648	7,136	5,600	27.47	204
1994	101,865.06	51,992	55,809	46,056	27.82	1,655
1995	8,797,962.75	4,384,905	4,706,835	4,091,128	28.18	145,178
1996	2,958,647.48	1,445,891	1,552,045	1,406,602	28.25	49,791
1999	75,887.27	34,240	36,754	39,133	29.19	1,341
2001	236,542.84	100,436	107,810	128,733	29.81	4,318
2003	1,489,978.03	593,011	636,549	853,429	30.25	28,213
2004	367,499.67	141,046	151,401	216,099	30.50	7,085
2006	131,140.18	46,371	49,775	81,365	31.08	2,618
2007	18,890.83	6,378	6,846	12,045	31.39	384
2008	404,821.01	130,555	140,140	264,681	31.51	8,400
2009	16,621.70	5,073	5,445	11,177	31.87	351
2010	12,122,799.45	3,498,640	3,755,503	8,367,296	32.05	261,070
2011	393,025.03	106,588	114,413	278,612	32.25	8,639
2012	282,267.24	71,414	76,657	205,610	32.48	6,330
2013	8,325.00	1,948	2,091	6,234	32.74	190
2014	16,814,574.82	3,601,682	3,866,111	12,948,464	33.02	392,140
2015	5,564,740.72	1,081,786	1,161,209	4,403,532	33.15	132,837
2016	19,818,007.39	3,440,406	3,692,993	16,125,014	33.32	483,944
2017	3,095,376.46	471,735	506,369	2,589,007	33.37	77,585
2018	101,683.42	13,168	14,135	87,548	33.61	2,605
2019	265,878.40	28,289	30,366	235,512	33.59	7,011
2020	1,060,026.32	86,816	93,190	966,836	33.63	28,749
2021	9,213,537.28	515,958	553,838	8,659,699	33.71	256,888
2022	3,936.39	114	123	3,813	33.48	114
9999	2,500,000.00-	1,000,431-	1,073,881-	1,426,119-		47,303-
	123,362,935.68	49,366,439	52,990,817	70,372,118		2,334,160

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.1 1.89

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 355.00 POWER GENERATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
1991	21,295.06	15,401	14,682	6,613	12.25	540
2002	19,740.16	11,234	10,709	9,031	15.90	568
2004	38,295.54	20,373	19,421	18,875	16.71	1,130
2012	403,177.35	144,136	137,403	265,774	19.77	13,443
2015	426,122.43	117,610	112,116	314,006	20.99	14,960
2020	22,037.01	2,545	2,426	19,611	22.97	854
2021	1,986.71	157	150	1,837	23.38	79
	932,654.26	311,456	296,907	635,747		31,574

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.1 3.39

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1955	1,834.70	1,460	1,210	625	17.47	36
1960	17,379.90	13,249	10,976	6,404	19.64	326
1972	234,615.90	153,157	126,881	107,735	27.12	3,973
1989	4,590.34	2,154	1,784	2,806	38.46	73
1995	333,428.74	131,638	109,054	224,375	42.92	5,228
1996	180,459.83	69,188	57,318	123,142	43.42	2,836
2004	32,074.48	8,897	7,371	24,703	49.49	499
2015	1,176,886.32	142,168	117,778	1,059,108	58.23	18,188
2018	135,690.81	10,313	8,544	127,147	60.79	2,092
2019	37,085.16	2,270	1,881	35,204	61.36	574
2020	355,800.39	16,438	13,618	342,182	61.94	5,524
2021	1,912,544.39	59,289	49,117	1,863,427	62.52	29,805
2022	4,606,802.78	72,327	59,917	4,546,886	62.69	72,530
2023	547,495.26	2,190	1,815	545,681	62.64	8,711
	9,576,689.00	684,738	567,264	9,009,425		150,395

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 59.9 1.57

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1918	3,165,687.50	2,891,856	2,838,636	327,052	9.94	32,903
1938	864,120.91	727,158	713,776	150,345	16.01	9,391
1945	211,474.50	171,548	168,391	43,084	18.15	2,374
1950	883,492.33	690,096	677,396	206,096	20.46	10,073
1955	16,990,586.69	12,708,959	12,475,071	4,515,516	22.91	197,098
1959	56,285,174.18	40,345,213	39,602,725	16,682,449	25.29	659,646
1960	1,048,519.00	746,441	732,704	315,815	25.50	12,385
1962	11,518,386.30	8,009,886	7,862,477	3,655,909	26.72	136,823
1963	27,097,985.26	18,697,610	18,353,511	8,744,474	26.96	324,350
1965	643,545.07	432,977	425,009	218,536	28.21	7,747
1968	1,816,850.93	1,179,136	1,157,436	659,415	29.75	22,165
1970	758,504.59	478,389	469,585	288,920	31.03	9,311
1972	15,322,894.08	9,377,611	9,205,031	6,117,863	32.33	189,232
1973	521,012.45	315,213	309,412	211,600	32.64	6,483
1974	461,865.68	273,840	268,800	193,066	33.64	5,739
1975	2,152,470.28	1,260,487	1,237,290	915,180	33.97	26,941
1976	35,540,394.99	20,378,862	20,003,823	15,536,572	34.97	444,283
1977	317,232.52	179,490	176,187	141,046	35.30	3,996
1978	827,334.53	461,653	453,157	374,178	35.65	10,496
1979	873,231.30	476,435	467,667	405,564	36.65	11,066
1980	1,418,197.87	762,281	748,252	669,946	37.00	18,107
1981	670,590.22	352,060	345,581	325,009	38.00	8,553
1982	500,997.21	258,815	254,052	246,945	38.37	6,436
1983	368,514.24	187,205	183,760	184,754	38.74	4,769
1984	640,078.88	317,031	311,197	328,882	39.74	8,276
1985	1,586,704.73	771,773	757,570	829,135	40.12	20,666
1986	747,339.81	353,940	347,426	399,914	41.12	9,726
1987	693,358.17	321,996	316,070	377,288	41.52	9,087
1988	277,604.33	125,338	123,031	154,573	42.52	3,635
1989	24,461,874.61	10,812,149	10,613,169	13,848,706	42.92	322,663
1990	2,866,885.77	1,239,355	1,216,547	1,650,339	43.34	38,079
1991	1,111,799.61	466,066	457,489	654,311	44.34	14,757
1992	2,121,767.08	868,227	852,249	1,269,518	44.76	28,363
1993	361,205.59	143,037	140,405	220,801	45.76	4,825
1994	942,968.24	363,703	357,010	585,958	46.19	12,686
1995	2,290,835.85	859,522	843,704	1,447,132	46.63	31,034
1996	3,469,911.30	1,255,414	1,232,310	2,237,601	47.63	46,979
1997	222,135.18	77,969	76,534	145,601	48.07	3,029
1998	1,457,372.54	495,507	486,388	970,985	48.53	20,008
1999	11,527,136.26	3,762,457	3,693,215	7,833,921	49.53	158,165
2000	303,294.31	95,568	93,809	209,485	49.99	4,191

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
2001	543,534.45	163,821	160,806	382,728	50.99	7,506
2002	203,064.99	58,848	57,765	145,300	51.46	2,824
2003	33,631.17	9,349	9,177	24,454	51.94	471
2004	1,870,309.08	493,949	484,859	1,385,450	52.94	26,170
2005	1,348,814.96	339,901	333,646	1,015,169	53.43	19,000
2006	1,133,612.79	271,727	266,726	866,887	53.92	16,077
2007	4,888,314.95	1,110,625	1,090,186	3,798,129	54.42	69,793
2008	2,341,549.71	498,750	489,571	1,851,979	55.42	33,417
2009	9,135,819.13	1,828,991	1,795,331	7,340,488	55.93	131,244
2010	3,738,045.64	699,762	686,884	3,051,162	56.44	54,060
2011	3,667,547.99	638,153	626,409	3,041,139	56.97	53,381
2012	260,419.22	41,823	41,053	219,366	57.49	3,816
2013	436,419.34	64,154	62,973	373,446	58.03	6,435
2014	1,125,472.88	149,913	147,154	978,319	58.57	16,703
2015	16,178.80	1,929	1,893	14,286	59.11	242
2016	12,896,387.96	1,354,121	1,329,201	11,567,187	59.67	193,853
2017	6,837,445.87	619,473	608,073	6,229,373	60.23	103,426
2018	3,906,758.97	298,867	293,367	3,613,392	60.36	59,864
2019	37,737,163.87	2,324,609	2,281,828	35,455,336	60.94	581,807
2020	30,762,974.56	1,448,936	1,422,271	29,340,704	60.69	483,452
2021	11,244,090.85	359,811	353,189	10,890,902	60.50	180,015
2022	11,327,268.31	186,900	183,460	11,143,808	59.61	186,945
2023	10,751,572.22	46,232	45,382	10,706,190	57.55	186,033
9999	8,113,082.47-	3,246,970-	3,187,215-	4,925,867-		110,090-
	383,434,650.13	153,455,947	150,631,841	232,802,809		5,202,980

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 44.7 1.36

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1918	192,002.76	192,003	192,003			
1938	263,057.70	254,903	229,969	33,089	2.72	12,165
1945	40,698.28	38,728	34,940	5,758	3.97	1,450
1950	100,436.85	93,848	84,668	15,769	5.12	3,080
1955	82,962.76	76,724	69,219	13,744	5.53	2,485
1959	10,614,625.01	9,646,571	8,702,978	1,911,647	6.42	297,764
1960	124,835.20	112,464	101,463	23,372	6.93	3,373
1963	1,820,434.96	1,616,546	1,458,421	362,014	7.57	47,822
1965	115,835.77	102,121	92,132	23,704	7.79	3,043
1968	63,258.02	54,623	49,280	13,978	8.69	1,609
1970	131,490.13	111,504	100,597	30,893	9.50	3,252
1972	1,406,333.16	1,176,257	1,061,200	345,133	9.98	34,582
1973	300,514.18	249,427	225,029	75,485	10.24	7,372
1974	145,131.67	119,472	107,786	37,346	10.52	3,550
1975	428,835.35	349,930	315,701	113,134	10.82	10,456
1976	1,216,546.67	983,456	887,258	329,289	11.14	29,559
1977	135,672.33	108,592	97,970	37,702	11.47	3,287
1978	365,240.42	287,627	259,492	105,748	12.14	8,711
1979	376,391.09	293,133	264,460	111,931	12.50	8,954
1980	344,640.29	265,270	239,322	105,318	12.87	8,183
1981	303,876.29	231,007	208,411	95,465	13.25	7,205
1982	241,192.22	180,967	163,265	77,927	13.64	5,713
1983	167,201.76	123,729	111,626	55,576	14.05	3,956
1984	193,153.85	140,867	127,088	66,066	14.48	4,563
1985	425,383.15	305,510	275,626	149,757	14.91	10,044
1986	362,362.31	256,081	231,032	131,330	15.36	8,550
1987	251,003.20	173,493	156,523	94,480	16.08	5,876
1988	96,404.18	65,458	59,055	37,349	16.55	2,257
1989	1,480,246.96	986,437	889,947	590,300	17.02	34,683
1990	1,029,539.70	672,701	606,900	422,640	17.51	24,137
1991	480,597.06	306,044	276,108	204,489	18.25	11,205
1992	446,706.85	278,343	251,117	195,590	18.75	10,431
1993	106,820.01	65,053	58,690	48,130	19.26	2,499
1994	172,867.94	102,269	92,265	80,603	20.02	4,026
1995	499,983.10	288,390	260,181	239,802	20.54	11,675
1996	766,628.21	428,469	386,558	380,070	21.31	17,835
1997	99,518.88	53,820	48,556	50,963	22.08	2,308
1998	667,600.22	350,490	316,206	351,394	22.62	15,535
1999	377,718.65	191,277	172,567	205,152	23.39	8,771
2001	40,263.23	18,867	17,021	23,242	24.95	932
2004	391,028.74	160,478	144,781	246,248	27.30	9,020

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
2005	622,671.32	242,095	218,414	404,257	28.30	14,285
2006	485,376.83	179,056	161,541	323,836	29.08	11,136
2007	261,475.47	91,203	82,282	179,193	29.87	5,999
2008	302,656.61	98,969	89,288	213,369	30.87	6,912
2010	100,531.28	28,621	25,821	74,710	32.66	2,288
2011	258,381.57	68,213	61,541	196,841	33.45	5,885
2012	100,205.47	24,250	21,878	78,327	34.45	2,274
2013	16,187.94	3,561	3,213	12,975	35.45	366
2014	101,870.38	20,170	18,197	83,673	36.45	2,296
2016	19,978.89	3,091	2,789	17,190	38.25	449
2018	20,870.34	2,306	2,080	18,790	40.25	467
2019	2,569,932.92	227,182	204,960	2,364,973	41.25	57,333
2020	1,739,484.28	115,328	104,047	1,635,437	42.25	38,709
2021	987,890.94	43,665	39,394	948,497	43.25	21,931
2022	2,881,786.38	63,687	57,457	2,824,329	44.25	63,827
2023	1,551,076.00	8,531	7,696	1,543,380	45.00	34,297
	38,889,415.73	22,732,877	20,528,009	18,361,407		960,372

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.1 2.47

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1918	19,391.53	19,392	19,392			
1938	143,054.88	143,055	143,055			
1945	22,073.48	22,038	20,444	1,629	0.12	1,629
1950	56,278.80	55,052	51,071	5,208	1.63	3,195
1955	48,679.71	46,674	43,299	5,381	2.92	1,843
1960	76,154.48	71,486	66,316	9,838	4.11	2,394
1965	78,429.72	71,873	66,675	11,755	5.29	2,222
1970	106,824.27	95,116	88,237	18,587	6.52	2,851
1972	579,573.92	508,402	471,636	107,938	7.14	15,117
1973	116,887.81	101,692	94,338	22,550	7.47	3,019
1974	139,735.00	119,823	111,158	28,577	8.14	3,511
1975	332,974.60	282,895	262,437	70,538	8.50	8,299
1977	107,076.26	89,152	82,705	24,371	9.25	2,635
1978	281,896.00	232,141	215,353	66,543	9.64	6,903
1979	300,946.68	244,971	227,255	73,692	10.05	7,333
1980	266,091.96	213,965	198,492	67,600	10.48	6,450
1981	234,753.75	185,362	171,957	62,797	11.19	5,612
1982	190,062.15	148,058	137,351	52,711	11.63	4,532
1983	132,799.92	101,990	94,614	38,186	12.08	3,161
1984	157,785.94	119,381	110,748	47,038	12.55	3,748
1985	324,685.98	240,592	223,193	101,493	13.28	7,643
1986	295,474.98	215,372	199,797	95,678	13.76	6,953
1987	205,043.94	146,893	136,270	68,774	14.25	4,826
1988	70,509.94	49,357	45,788	24,722	15.00	1,648
1989	746,798.97	512,902	475,810	270,989	15.50	17,483
1990	832,608.91	557,765	517,429	315,180	16.26	19,384
1991	393,283.11	257,994	239,337	153,946	16.78	9,174
1992	531,951.61	339,704	315,138	216,814	17.54	12,361
1994	66,342.64	40,403	37,481	28,862	18.62	1,550
1995	100,262.25	59,235	54,951	45,311	19.39	2,337
1996	265,445.95	151,941	140,953	124,493	20.17	6,172
1997	87,126.12	48,477	44,971	42,155	20.73	2,034
1998	573,379.95	308,192	285,905	287,475	21.51	13,365
1999	165,344.70	86,112	79,885	85,460	22.08	3,870
2000	12,081.20	6,058	5,620	6,461	22.87	283
2004	188,269.92	80,128	74,333	113,937	25.64	4,444
2005	502,155.36	203,373	188,666	313,489	26.44	11,857
2006	406,003.36	155,986	144,705	261,298	27.25	9,589
2007	228,819.60	83,107	77,097	151,723	28.05	5,409
2008	64,952.16	22,311	20,698	44,254	28.67	1,544
2009	79,573.30	25,623	23,770	55,803	29.48	1,893

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
2011	170,969.39	47,598	44,156	126,813	31.10	4,078
2012	79,926.00	20,485	19,004	60,922	31.92	1,909
2013	16,092.23	3,782	3,508	12,584	32.55	387
2014	58,450.63	12,415	11,517	46,934	33.37	1,406
2016	134,440.98	22,398	20,778	113,663	35.02	3,246
2017	244,388.55	35,045	32,511	211,878	35.84	5,912
2018	200,000.13	24,000	22,264	177,736	36.67	4,847
2019	316,998.28	30,685	28,466	288,532	37.32	7,731
2020	725,786.40	52,910	49,084	676,702	38.15	17,738
2021	1,090,214.49	53,421	49,557	1,040,657	38.82	26,807
2022	1,094,692.63	27,148	25,185	1,069,508	39.32	27,200
2023	591,224.61	3,725	3,455	587,770	39.43	14,907
9999	1,133,516.15-	540,539-	502,382-	631,134-		27,389-
	13,121,252.98	6,257,116	5,815,433	7,305,820		317,052

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.0 2.42

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 364.00 FLOW MEASURING DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2.5						
NET SALVAGE PERCENT.. 0						
1960	34,668.83	34,669	34,669			
1996	10,667.26	9,793	7,432	3,235	2.41	1,342
1998	11,518.92	10,367	7,868	3,651	2.78	1,313
2008	91,182.72	70,575	53,559	37,624	4.38	8,590
2010	110,716.42	81,609	61,933	48,783	4.64	10,514
2011	38,771.91	27,683	21,009	17,763	4.81	3,693
2013	175,978.36	114,210	86,674	89,304	5.41	16,507
2015	40,642.36	22,695	17,223	23,419	6.33	3,700
2016	442,654.44	222,788	169,074	273,580	6.91	39,592
2017	160,544.63	70,993	53,877	106,668	7.57	14,091
2018	43,907.33	16,531	12,545	31,362	8.28	3,788
2019	795,450.85	244,363	185,448	610,003	9.02	67,628
2020	73,232.10	17,136	13,005	60,227	9.82	6,133
2022	69,257.60	5,520	4,189	65,069	11.55	5,634
	2,099,193.73	948,932	728,505	1,370,689		182,525

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.5 8.70

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0.5						
NET SALVAGE PERCENT.. 0						
1991	11,419.78	8,917	8,303	3,117	8.98	347
1996	865,081.19	621,301	578,506	286,575	10.59	27,061
1997	12,345.74	8,699	8,100	4,246	10.90	390
1998	26,947.66	18,594	17,313	9,635	11.23	858
2001	72,361.53	46,485	43,283	29,079	12.25	2,374
2002	53,105.57	33,233	30,944	22,162	12.56	1,764
2004	392,031.81	230,162	214,309	177,723	13.36	13,303
2005	8,726.79	4,964	4,622	4,105	13.65	301
2006	407,498.43	223,065	207,700	199,798	14.06	14,210
2007	12,937.95	6,811	6,342	6,596	14.40	458
2008	19,211.28	9,682	9,015	10,196	14.76	691
2009	466,279.80	223,908	208,485	257,795	15.15	17,016
2010	709,519.49	322,831	300,595	408,924	15.57	26,264
2011	128,559.92	55,229	51,425	77,135	15.93	4,842
2012	1,573,089.45	633,326	589,703	983,386	16.32	60,256
2013	413,699.69	154,724	144,067	269,633	16.74	16,107
2014	92,722.35	31,961	29,760	62,962	17.11	3,680
2015	3,950,385.67	1,238,841	1,153,511	2,796,875	17.51	159,730
2016	1,239,193.93	347,842	323,883	915,311	17.94	51,021
2017	146,258.17	36,067	33,583	112,675	18.33	6,147
2018	1,351,999.41	284,596	264,993	1,087,006	18.75	57,974
2019	555,436.69	95,979	89,368	466,069	19.15	24,338
2020	1,329,556.93	176,698	164,527	1,165,030	19.57	59,531
2021	320,418.37	29,222	27,209	293,209	19.93	14,712
2022	640,944.19	30,124	28,049	612,895	20.28	30,222
2023	126,472.92	1,518	1,413	125,059	20.54	6,089
	14,926,204.71	4,874,779	4,539,008	10,387,196		599,686

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.3 4.02

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
1960	266,244.60	258,311	225,310	40,935	1.94	21,101
1968	473,598.24	442,814	386,241	87,357	3.82	22,868
1975	15,038,218.01	13,498,304	11,773,792	3,264,426	5.48	595,698
1987	1,471,100.21	1,186,295	1,034,737	436,363	8.64	50,505
1988	453,417.65	360,240	314,217	139,201	9.05	15,381
1990	26,054.86	20,120	17,550	8,505	9.74	873
1994	147,008.14	106,155	92,593	54,415	11.16	4,876
1995	5,121,087.36	3,627,778	3,164,301	1,956,786	11.53	169,713
1996	35,990.79	24,974	21,783	14,208	11.91	1,193
1997	1,947.81	1,322	1,153	795	12.31	65
1999	1,063,142.61	686,365	598,677	464,466	13.17	35,267
2001	1,639,960.84	1,003,000	874,859	765,102	13.97	54,768
2002	197,596.78	117,017	102,067	95,530	14.46	6,607
2003	91,197.97	52,165	45,501	45,697	14.97	3,053
2004	4,022,702.87	2,216,509	1,933,333	2,089,370	15.48	134,972
2006	15,980.22	8,096	7,062	8,918	16.56	539
2007	294,938.32	142,514	124,307	170,631	17.11	9,973
2008	1,128,495.46	517,979	451,803	676,692	17.68	38,274
2009	55,372.86	24,032	20,962	34,411	18.26	1,885
2010	59,634.62	24,343	21,233	38,402	18.85	2,037
2012	120,670.02	42,609	37,165	83,505	20.15	4,144
2013	57,973.54	18,783	16,383	41,591	20.86	1,994
2014	33,877.11	9,970	8,696	25,181	21.58	1,167
2015	11,571,720.19	3,054,934	2,664,642	8,907,078	22.30	399,421
2016	4,135,341.06	963,948	840,796	3,294,545	23.03	143,054
2017	2,481,538.11	500,278	436,364	2,045,174	23.76	86,076
2018	1,101,543.02	186,161	162,377	939,166	24.59	38,193
2019	167,428.01	22,770	19,861	147,567	25.41	5,807
2020	9,842,801.46	1,009,871	880,852	8,961,949	26.24	341,538
2021	2,375,913.56	162,988	142,165	2,233,749	27.15	82,274
2022	14,101,847.05	485,104	423,128	13,678,719	28.07	487,307
2023	930,311.06	8,001	6,979	923,332	28.82	32,038
	78,524,654.41	30,783,750	26,850,889	51,673,765		2,792,661

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.5 3.56

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 381.00 PLANT SEWERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1995	874,635.54	492,245	501,151	373,485	21.75	17,172
1999	17,293.00	8,550	8,705	8,588	24.54	350
2002	27,056.54	11,875	12,090	14,967	26.85	557
2003	603,123.96	253,312	257,895	345,229	27.62	12,499
2004	48,787.57	19,652	20,007	28,781	28.17	1,022
2016	5,448.80	854	870	4,579	37.64	122
	1,576,345.41	786,488	800,718	775,628		31,722

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.5 2.01

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2017	12,867.84	1,737	4,011	8,857	38.44	230
2018	176,024.64	19,891	45,931	130,094	39.25	3,314
2019	357.89	33	76	281	39.86	7
	189,250.37	21,661	50,018	139,232		3,551

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 39.2 1.88

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S2.5						
NET SALVAGE PERCENT.. 0						
2003	732.57	608	483	250	4.10	61
2013	4,140,223.53	2,169,477	1,721,812	2,418,412	9.08	266,345
2019	38.03	8	6	32	14.18	2
2020	6,201,677.71	1,025,137	813,604	5,388,074	15.15	355,648
2022	397,382.52	21,936	17,409	379,973	17.12	22,195
	10,740,054.36	3,217,166	2,553,314	8,186,740		644,251
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					12.7	6.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	7,577.02	6,819	4,403	3,174	2.00	1,587
2008	12,008.00	9,006	5,815	6,193	5.00	1,239
2009	12,846.21	8,992	5,806	7,040	6.00	1,173
2010	44,755.08	29,091	18,784	25,971	7.00	3,710
2011	17,379.55	10,428	6,734	10,646	8.00	1,331
2012	39,909.19	21,950	14,173	25,736	9.00	2,860
2013	4,929.42	2,465	1,592	3,337	10.00	334
2014	23,508.40	10,579	6,831	16,677	11.00	1,516
2015	19,770.58	7,908	5,106	14,665	12.00	1,222
2016	717,221.40	251,027	162,092	555,129	13.00	42,702
2017	200,445.74	60,134	38,829	161,617	14.00	11,544
2018	57,523.48	14,381	9,286	48,237	15.00	3,216
2019	218,312.76	43,663	28,194	190,119	16.00	11,882
2020	417,202.09	62,580	40,409	376,793	17.00	22,164
2021	305,742.77	30,574	19,742	286,001	18.00	15,889
2022	247,326.91	12,366	7,985	239,342	19.00	12,597
2023	204,543.40	2,557	1,651	202,893	19.75	10,273
	2,551,002.00	584,520	377,432	2,173,570		145,239

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.0 5.69

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L4						
NET SALVAGE PERCENT.. 0						
1995	13,240.08	13,124	13,240			
2001	7,500.00	7,128	7,266	234	1.15	203
2003	25,581.36	23,791	24,250	1,331	1.51	881
2004	6,788.48	6,243	6,363	425	1.66	256
2006	99,532.58	88,833	90,547	8,986	2.05	4,383
2007	154,794.96	135,972	138,595	16,200	2.21	7,330
2008	150,540.49	130,519	133,037	17,503	2.30	7,610
2009	672,138.06	573,065	584,121	88,017	2.42	36,371
2010	253,581.52	210,980	215,051	38,531	2.62	14,706
2011	91,691.79	73,500	74,918	16,774	2.97	5,648
2012	283,568.72	215,853	220,017	63,552	3.45	18,421
2013	590,227.54	419,062	427,147	163,081	4.08	39,971
2014	555,945.44	362,754	369,753	186,192	4.79	38,871
2015	697,815.92	411,991	419,940	277,876	5.55	50,068
2016	185,576.14	97,038	98,910	86,666	6.39	13,563
2017	177,747.52	80,306	81,855	95,893	7.28	13,172
2018	1,449,339.70	548,575	559,159	890,181	8.21	108,426
2019	840,388.91	254,806	259,722	580,667	9.19	63,185
2021	89,577.43	13,580	13,842	75,735	11.19	6,768
2022	869,888.42	65,938	67,210	802,678	12.19	65,847
2023	602,789.08	11,453	11,674	591,115	12.94	45,681
	7,818,254.14	3,744,511	3,816,617	4,001,637		541,361

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.4 6.92

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 392.00 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2017	6,402.78	1,537	1,330	5,073	19.00	267
2020	100,441.50	12,053	10,426	90,016	22.00	4,092
	106,844.28	13,590	11,756	95,089		4,359

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.8 4.08

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 393.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	5,970.32	5,075	4,596	1,374	3.00	458
2007	7,829.70	6,264	5,673	2,157	4.00	539
2008	5,161.15	3,871	3,506	1,655	5.00	331
2009	28,227.61	19,759	17,895	10,333	6.00	1,722
2010	23,867.97	15,514	14,051	9,817	7.00	1,402
2011	11,907.00	7,144	6,470	5,437	8.00	680
2012	34,047.65	18,726	16,960	17,088	9.00	1,899
2013	19,113.82	9,557	8,655	10,459	10.00	1,046
2014	13,575.00	6,109	5,533	8,042	11.00	731
2015	28,072.98	11,229	10,170	17,903	12.00	1,492
2016	36,897.99	12,914	11,696	25,202	13.00	1,939
2017	210,186.54	63,056	57,108	153,079	14.00	10,934
2018	247,854.50	61,964	56,118	191,736	15.00	12,782
2019	188,452.28	37,690	34,135	154,317	16.00	9,645
2020	225,198.10	33,780	30,593	194,605	17.00	11,447
2021	211,300.01	21,130	19,137	192,163	18.00	10,676
2022	627,893.94	31,395	28,433	599,461	19.00	31,551
2023	360,853.73	4,511	4,085	356,768	19.75	18,064
	2,286,410.29	369,688	334,814	1,951,596		117,338

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.6 5.13

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 394.00 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2010	63,682.43	55,192	44,316	19,366	2.00	9,683
2011	7,356.65	5,885	4,725	2,632	3.00	877
2012	727.50	533	428	300	4.00	75
2013	4,573.96	3,049	2,448	2,126	5.00	425
2014	8,402.05	5,041	4,048	4,354	6.00	726
2015	18,226.62	9,721	7,806	10,421	7.00	1,489
2017	9,868.23	3,947	3,169	6,699	9.00	744
2018	16,270.55	5,423	4,354	11,917	10.00	1,192
2019	88,575.86	23,621	18,967	69,609	11.00	6,328
2020	15,147.63	3,030	2,433	12,715	12.00	1,060
2021	14,898.86	1,986	1,595	13,304	13.00	1,023
2022	1,022,807.99	68,191	54,754	968,054	14.00	69,147
2023	53,458.61	891	715	52,744	14.75	3,576
	1,323,996.94	186,510	149,758	1,174,239		96,345

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.2 7.28

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 22-R2						
NET SALVAGE PERCENT.. 0						
2007	13,810.00	9,104	11,270	2,540	8.27	307
2008	48,270.00	30,410	37,645	10,625	8.81	1,206
2009	246,063.00	147,785	182,947	63,116	9.31	6,779
2010	440,226.19	250,092	309,597	130,629	9.88	13,222
2011	45,902.54	24,567	30,412	15,491	10.42	1,487
2012	282,853.13	141,568	175,251	107,602	10.98	9,800
2013	157,521.76	73,090	90,480	67,042	11.55	5,805
2014	2,683.87	1,145	1,417	1,267	12.10	105
2015	7,815.84	3,026	3,746	4,070	12.66	321
2016	15,995.00	5,542	6,861	9,134	13.20	692
2017	29,847.33	9,062	11,218	18,629	13.76	1,354
2018	44,891.21	11,649	14,421	30,470	14.27	2,135
2020	9,692.97	1,599	1,979	7,714	15.18	508
2021	563,825.38	64,614	79,988	483,837	15.45	31,316
	1,909,398.22	773,253	957,232	952,166		75,037

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.7 3.93

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	2,300.20	1,840	1,749	551	3.00	184
2013	15,352.54	10,235	9,731	5,622	5.00	1,124
2015	1,055,779.23	563,079	535,378	520,401	7.00	74,343
2016	2,645.52	1,235	1,174	1,472	8.00	184
2017	232,168.62	92,867	88,298	143,871	9.00	15,986
2018	92,490.12	30,830	29,313	63,177	10.00	6,318
2019	110,810.89	29,550	28,096	82,715	11.00	7,520
2021	820,669.12	109,420	104,037	716,632	13.00	55,126
2022	435,091.64	29,008	27,582	407,510	14.00	29,108
	2,767,307.88	868,064	825,358	1,941,950		189,893

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.2 6.86

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 397.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2017	99,244.73	39,698	34,008	65,237	9.00	7,249
2018	22,944.61	7,648	6,552	16,393	10.00	1,639
2019	212,822.69	56,753	48,618	164,205	11.00	14,928
2020	1,709,084.63	341,817	292,819	1,416,266	12.00	118,022
2021	391,062.13	52,140	44,666	346,396	13.00	26,646
2022	107,463.52	7,165	6,138	101,326	14.00	7,238
2023	120,295.59	2,005	1,717	118,578	14.75	8,039
	2,662,917.90	507,226	434,518	2,228,400		183,761
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					12.1	6.90

PART III. EXPERIENCED NET SALVAGE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2018 TRANSACTION YEAR				
354.20		12,897.00		12,897.00-
354.30	5,732.53	2,859.26		2,859.26-
354.40	202,178.63	2,465.65		2,465.65-
355.00	3,187.39			
360.10		2,819.19		2,819.19-
361.10	229,297.81	26,538.94		26,538.94-
363.00	4,745.21	27,682.42		27,682.42-
371.00	65,154.40	522.61		522.61-
380.00	1,806,025.87	58,050.21		58,050.21-
382.00		1,045.59		1,045.59-
389.10		3,678.20		3,678.20-
390.00	64,677.45	13,128.96		13,128.96-
391.00	423,853.34	42,449.74		42,449.74-
393.00	225,336.27	4,038.83		4,038.83-
394.00	11,316.17			
395.00	8,551.14			
	3,050,056.21	198,176.60		198,176.60-
2019 TRANSACTION YEAR				
354.30	796,005.52	85,934.54		85,934.54-
354.40	1,080,902.70	67,526.93		67,526.93-
360.10	3,403.50	2,367.85		2,367.85-
361.10	6,619.40	1,430,976.01		1,430,976.01-
361.20		90,279.20		90,279.20-
363.00	3,929.16	52,929.84		52,929.84-
364.00	59,781.23			
371.00	185,795.47	66,936.02		66,936.02-
380.00	1,622,269.11	92,448.13		92,448.13-
382.00		3,306.40		3,306.40-
390.00	130,250.08	9,975.61		9,975.61-
391.00	83,792.82	48,014.34		48,014.34-
393.00	7,573.30	28,436.64		28,436.64-
394.00	19,315.01	5,445.26		5,445.26-
395.00	52,412.61	5,217.77		5,217.77-
396.00		39,091.19		39,091.19-
397.00		4,026.89		4,026.89-
	4,052,049.91	2,032,912.62		2,032,912.62-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
354.20	5,414.90	27,261.65		27,261.65-
354.30	15,012.08			
354.40	5,402.39	3,035.88		3,035.88-
360.10	2,601.63	22,982.08		22,982.08-
361.10	1,935,411.80	1,344,641.10	3,491.13	1,341,149.97-
361.20	855,928.79	81,137.03		81,137.03-
363.00		75,298.32		75,298.32-
364.00		8,901.01		8,901.01-
371.00	208,080.94	24,730.31		24,730.31-
380.00	702,130.50	399,155.43		399,155.43-
390.00	724.38	1,886.85		1,886.85-
391.00	20,099.66			
393.00	68,342.45	7,289.38		7,289.38-
394.00	8,232.73	1,548.07		1,548.07-
395.00		510.16		510.16-
396.00		1,822.13		1,822.13-
397.00		3,318.49		3,318.49-
	3,827,382.25	2,003,517.89	3,491.13	2,000,026.76-
2021 TRANSACTION YEAR				
354.30	1,942.90	7,613.98		7,613.98-
354.40	45,344.71	76,589.11		76,589.11-
360.10	2,808.79	164,970.27		164,970.27-
361.10	1,848,146.44	1,074,276.48		1,074,276.48-
361.20	512,911.70	219,777.95		219,777.95-
363.00	130,642.17	129,688.68		129,688.68-
371.00	60,139.27	51,352.70		51,352.70-
380.00	230,130.31	104,870.48		104,870.48-
390.00		1,482.56		1,482.56-
393.00	33.43	953.49		953.49-
394.00	633.03	1,919.19		1,919.19-
396.00		9,833.75		9,833.75-
397.00		6,698.53		6,698.53-
	2,832,732.75	1,850,027.17		1,850,027.17-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
354.20	128,984.57	30,686.12		30,686.12-
354.30	5,000.83	2,731.90		2,731.90-
354.40	955,038.55	612,785.01		612,785.01-
360.10	6,487.72	232,064.30		232,064.30-
361.10	5,400,909.25	2,044,135.19		2,044,135.19-
361.20	863,890.35	326,964.80		326,964.80-
363.00	108,769.18	108,024.33		108,024.33-
371.00	101,130.80	14,057.96		14,057.96-
380.00	234,196.28	277,412.74		277,412.74-
390.00	99,806.02	12,873.26		12,873.26-
393.00	33,317.01	6,599.32		6,599.32-
394.00	10,743.07	877.73		877.73-
395.00	99,992.04	183.61		183.61-
396.00	17,087.95	1,647.58		1,647.58-
397.00	5,273.39			
	8,070,627.01	3,671,043.85		3,671,043.85-
TOTAL	21,832,848.13	9,755,678.13	3,491.13	9,752,187.00-

EXHIBIT NO. 11-L - DEPRECIATION STUDY

WASTEWATER CSS OPERATIONS

AS OF JUNE 30, 2024

Exhibit No. 11-L
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

WASTEWATER CSS OPERATIONS

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2024

Prepared by:

Exhibit No. 11-L
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WASTEWATER CSS OPERATIONS

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OFJUNE 30, 2024

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

October 12, 2023

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant. The results of our study as of June 30, 2024 are presented in the attached report. The results of our study as of June 30, 2023 are presented in our report, "2023 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of June 30, 2023." The same methods, procedures and estimates are used in both studies.

The attached report sets forth a description of the methods and procedures upon which the studies were based, the estimates of survivor curves, and the calculated annual depreciation as of June 30, 2024.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

FREDERICK B. JOHNSTON, JR.
Senior Analyst

JJS:mle

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PART I. INTRODUCTION

PENNSYLVANIA-AMERICAN WATER COMPANY

WASTEWATER CSS OPERATIONS

DEPRECIATION STUDY

PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study for Pennsylvania-American Water Company to determine the annual depreciation accrual rates and amounts applicable to the original cost of wastewater plant as of June 30, 2024. The rates and amounts are based on the straight line remaining life method of depreciation. This report also describes the concepts, methods and judgments which underlie the recommended annual depreciation accrual rates related to wastewater plant in service as of June 30, 2024.

Part I, Introduction, contains statements with respect to the basis of the study and the development of net original cost. Part II, Estimation of Survivor Curves, presents descriptions of the considerations and methods used in the service life study. Part III, Service Life Considerations, presents the results of the average service life analysis. Part IV, Calculation of Annual and Accrued Depreciation, describes the procedures used in the calculation of group depreciation. Part V, Results of Study, presents summaries by depreciable group of annual depreciation accrual rates and amounts, as well as composite remaining lives. Part VI, Service Life Statistics, presents the statistical analysis of service life estimates, Part VII, Detailed Depreciation Calculations, presents the detailed tabulations of annual depreciation and Part VIII, Experienced and Estimated Net Salvage, presents the cost of removal and gross salvage recorded for the period 2019-2023.

BASIS OF THE STUDY

The purpose of the depreciation study was to determine the annual depreciation accruals applicable to the original cost of wastewater plant in service as of June 30, 2024. For most accounts, the straight line remaining life method using attained ages, the book depreciation reserve and estimated survivor curves, was the basis for the calculation of annual depreciation. For certain accounts, the annual and accrued amortization amounts were based on the age of the property and the selected amortization period.

The survivor curve estimates were based on judgment which incorporated (1) analyses of historical data related to wastewater property for all Pennsylvania-American Water Company Wastewater Operations; (2) consideration of the character, use and location of the property; (3) probable future events and management plans; and (4) a general knowledge of wastewater property lives. The use of Iowa type survivor curves is a generally-accepted method of estimating average service life when the actual lives of individual property units are dispersed.

DEVELOPMENT OF NET ORIGINAL COST

The original cost data used in this study were obtained from the Company's continuing property records and work order system which show in detail the original cost of the property including descriptions, locations and years of installation of property units. The net original cost was developed from the original cost data by deducting contributions in aid of construction. The development of net original cost by plant account is set forth in Table 1 on page V-4.

PART II. ESTIMATION OF SURVIVOR CURVES

PART II. ESTIMATION OF SURVIVOR CURVES

The calculation of annual depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. The estimation of survivor curves is discussed below and the development of net salvage is discussed in later sections of this report.

SURVIVOR CURVES

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units or by constructing a survivor curve by plotting the number of units which survive at successive ages.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1, the remaining life at age 30 is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval. It is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

This study has incorporated the use of Iowa curves developed from a retirement rate analysis of historical retirement history. A discussion of the concepts of survivor curves and of the development of survivor curves using the retirement rate method is presented below.

Iowa Type Curves

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. There are four families in the Iowa system, labeled in accordance with the location of the modes of the retirements (or the portion of the frequency curve with the highest level of retirements) in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family. A higher number designates a higher mode curve.

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.

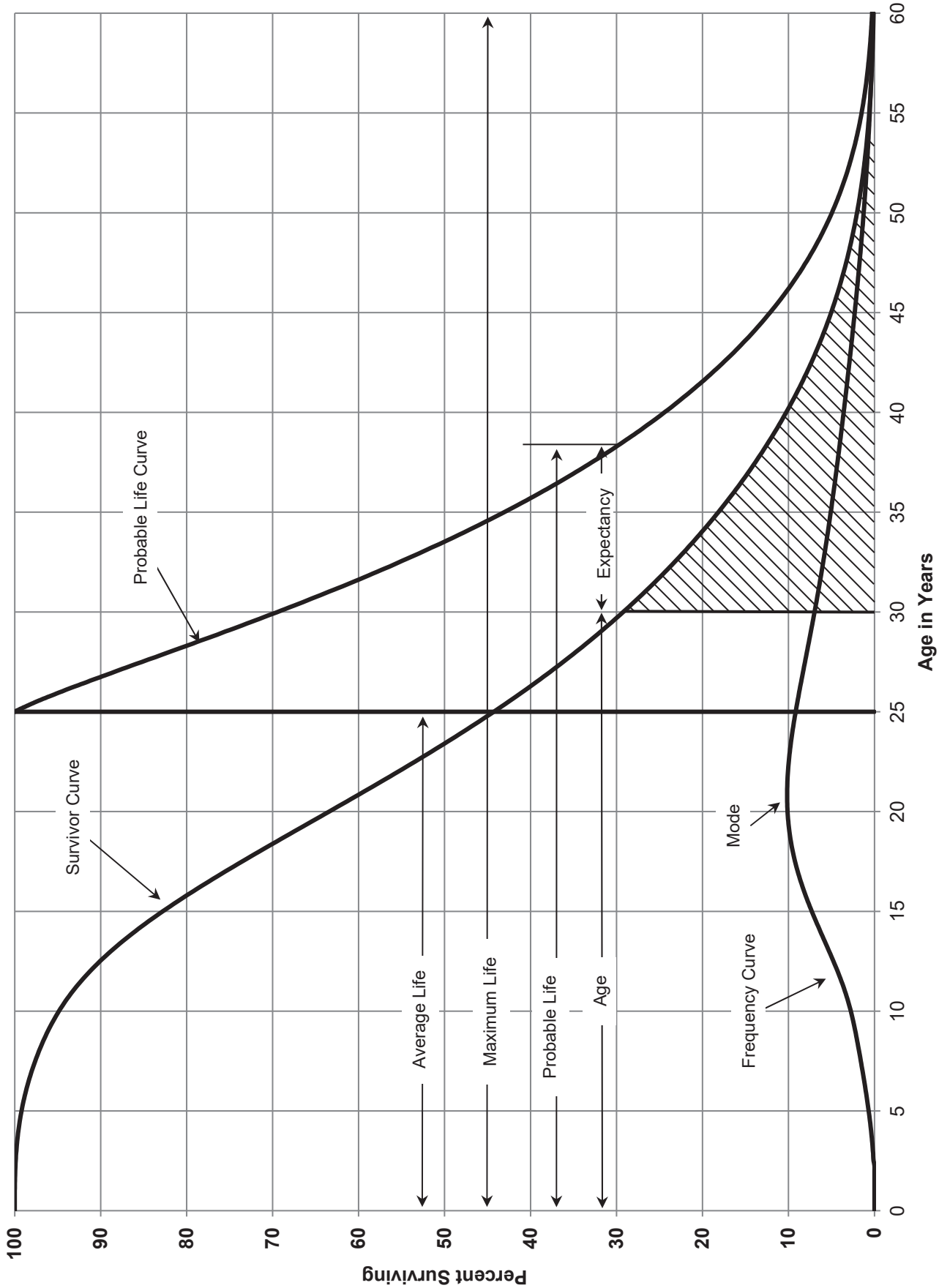


FIGURE 1. TYPICAL SURVIVOR CURVE AND DERIVED CURVES

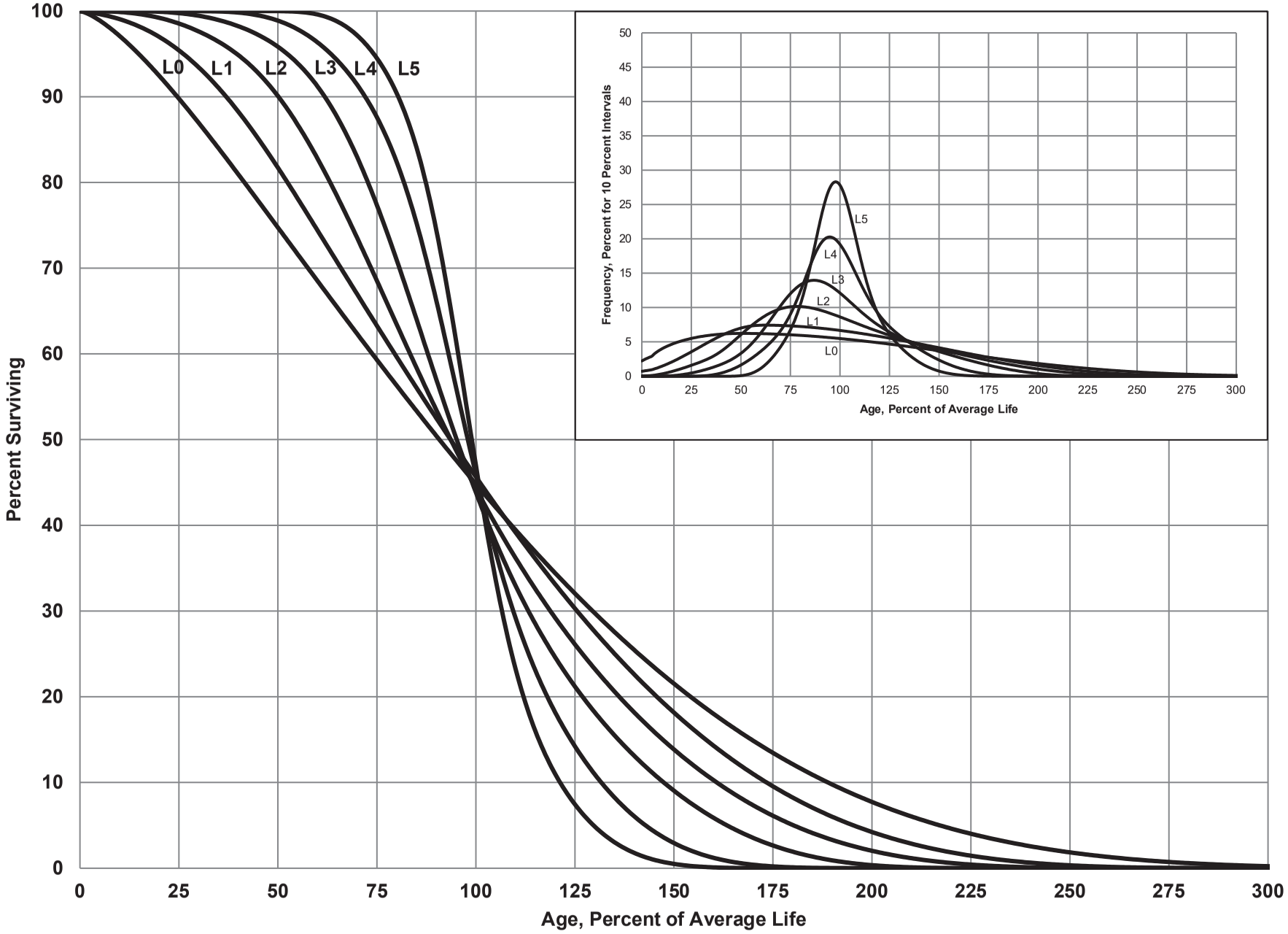


FIGURE 2.. LEFT MODAL OR "L" IOWA TYPE SURVIVOR CURVES

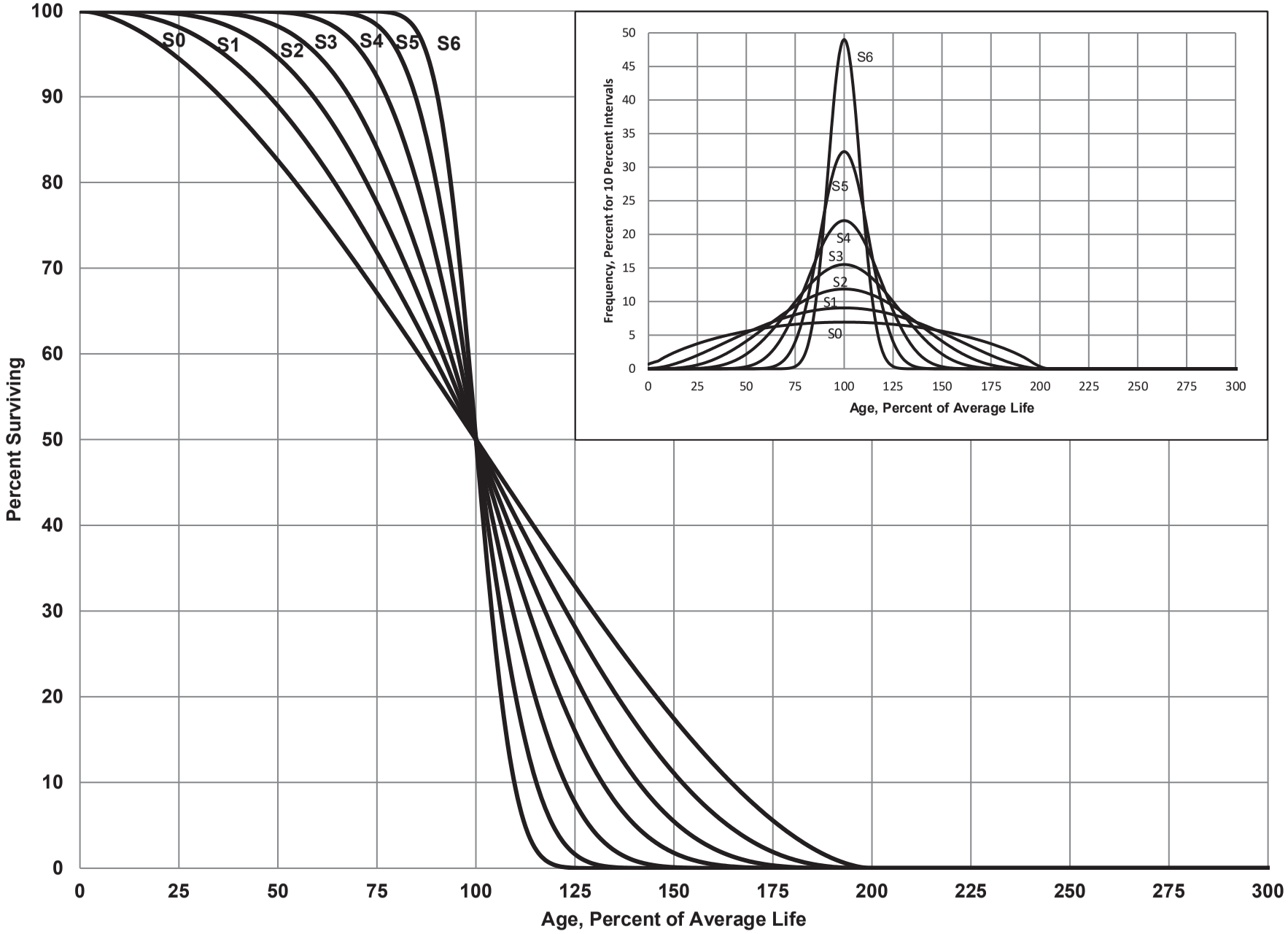


FIGURE 3.. SYMMETRICAL OR "S" IOWA TYPE SURVIVOR CURVES

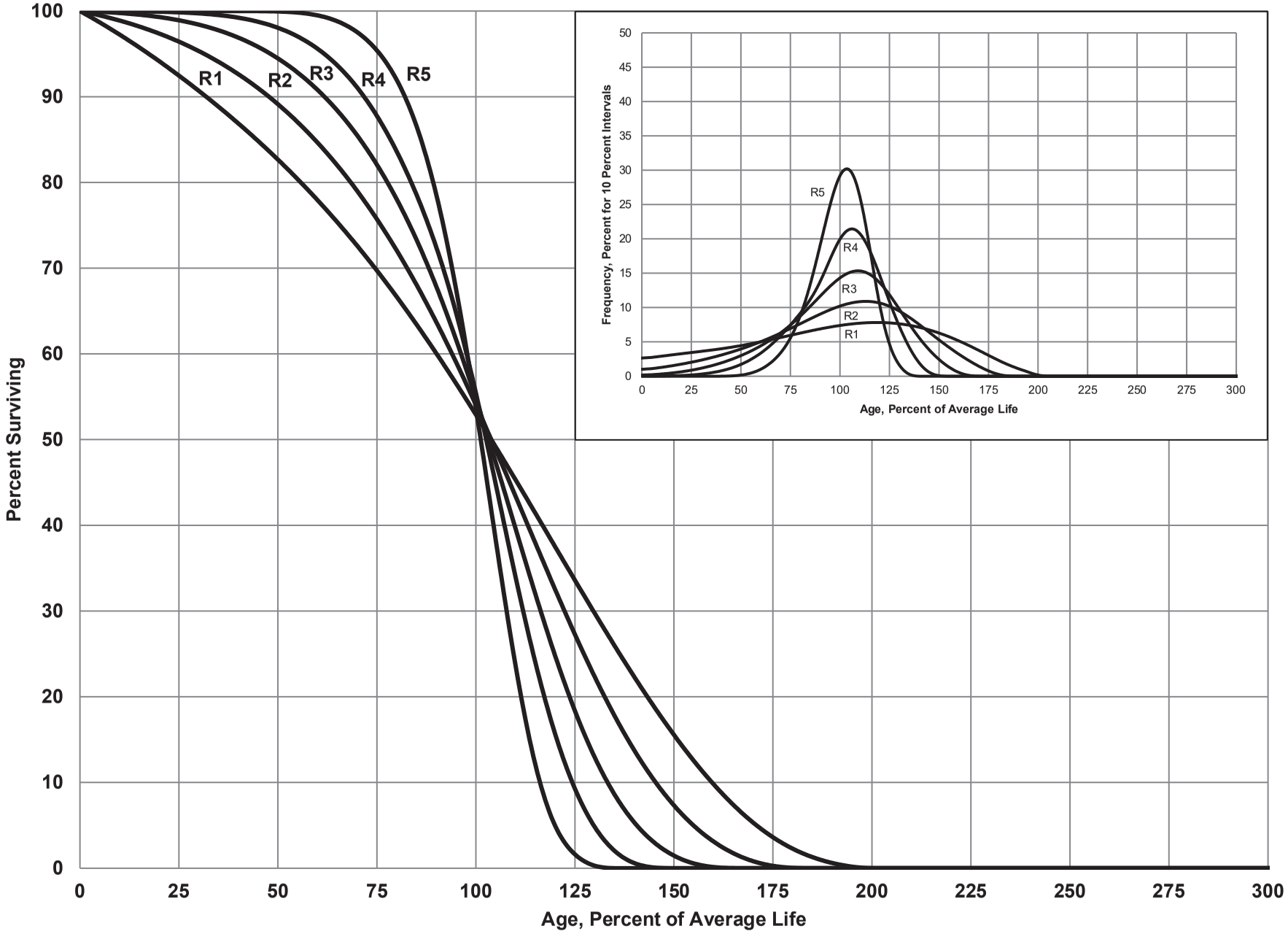


FIGURE 4. RIGHT MODAL OR "R" IOWA TYPE SURVIVOR CURVES

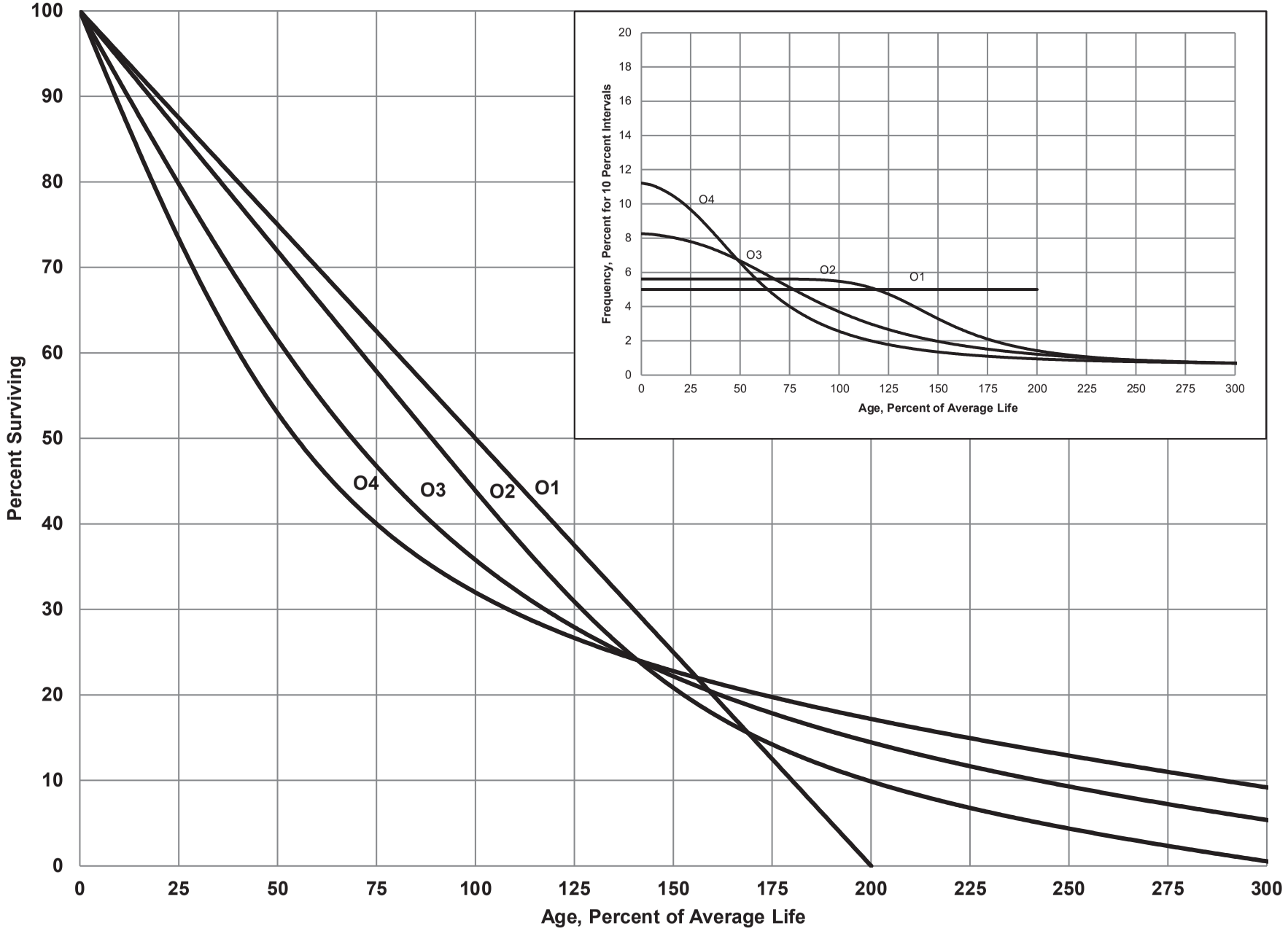


FIGURE 5. ORIGIN MODAL OR "O" IOWA TYPE SURVIVOR CURVES

These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."[1] In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student, submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text and is also explained in several publications including "Statistical Analyses of Industrial Property Retirements,"[2] "Engineering Valuation and Depreciation,"[3] and "Depreciation Systems."[4]

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band. The band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

---

[1]Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

[2]Winfrey, Robley, Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

[3]Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.

[4]Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994.

Schedules of Annual Transactions in Plant Records

The property group used to illustrate the retirement rate method is observed for the experience band 2015-2024 for which there were placements during the years 2010-2024. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-11 and II-12. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, $10,000 of the dollars invested in 2010 were retired in 2015. The $10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of $143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2015 retirements of 2010 installations and ending with the 2024 retirements of the 2019 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

$$10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20.$$

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024

Placement Band 2010-2024

Year Placed	Retirements, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	10	11	12	13	14	16	23	24	25	26	26	13½-14½
2011	11	12	13	15	16	18	20	21	22	19	44	12½-13½
2012	11	12	13	14	16	17	19	21	22	18	64	11½-12½
2013	8	9	10	11	11	13	14	15	16	17	83	10½-11½
2014	9	10	11	12	13	14	16	17	19	20	93	9½-10½
2015	4	9	10	11	12	13	14	15	16	20	105	8½-9½
2016		5	11	12	13	14	15	16	18	20	113	7½-8½
2017			6	12	13	15	16	17	19	19	124	6½-7½
2018				6	13	15	16	17	19	19	131	5½-6½
2019					7	14	16	17	19	20	143	4½-5½
2020						8	18	20	22	23	146	3½-4½
2021							9	20	22	25	150	2½-3½
2022								11	23	25	151	1½-2½
2023									11	24	153	½-1½
2024										13	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606	

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024 Placement Band 2010-2024

Year Placed	Acquisitions, Transfers and Sales, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	-	-	-	-	-	-	60[a]	-	-	-	-	13½-14½
2011	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2012	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2013	-	-	-	-	-	-	-	(5)[b]	-	-	60	10½-11½
2014	-	-	-	-	-	-	-	6[a]	-	-	-	9½-10½
2015	-	-	-	-	-	-	-	-	-	-	(5)	8½-9½
2016		-	-	-	-	-	-	-	-	-	6	7½-8½
2017			-	-	-	-	-	-	-	-	-	6½-7½
2018				-	-	-	-	(12)[b]	-	-	-	5½-6½
2019					-	-	-	-	22[a]	-	-	4½-5½
2020						-	-	(19)[b]	-	-	10	3½-4½
2021							-	-	-	-	-	2½-3½
2022								-	-	(102)[c]	(121)	1½-2½
2023									-	-	-	½-1½
2024											-	0-½
Total	-	-	-	-	-	-	60	(30)	22	(102)	(50)	

[a] Transfer Affecting Exposures at Beginning of Year
[b] Transfer Affecting Exposures at End of Year
[c] Sale with Continued Use
Parentheses Denote Credit Amount.

In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

Schedule of Plant Exposed to Retirement

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14. The surviving plant at the beginning of each year from 2015 through 2024 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2020 are calculated in the following manner:

Exposures at age 0	= amount of addition	= $750,000
Exposures at age ½	= $750,000 - $ 8,000	= $742,000
Exposures at age 1½	= $742,000 - $18,000	= $724,000
Exposures at age 2½	= $724,000 - $20,000 - $19,000	= $685,000
Exposures at age 3½	= $685,000 - $22,000	= $663,000

SCHEDULE 3. PLANT EXPOSED TO RETIREMENT
JANUARY 1 OF EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024 | Placement Band 2010-2024

Year Placed	Exposures, Thousands of Dollars — Annual Survivors at the Beginning of the Year										Total at Beginning of Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	255	245	234	222	209	195	239	216	192	167	167	13½-14½
2011	279	268	256	243	228	212	194	174	153	131	323	12½-13½
2012	307	296	284	271	257	241	224	205	184	162	531	11½-12½
2013	338	330	321	311	300	289	276	262	242	226	823	10½-11½
2014	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½
2015	420[a]	416	407	397	386	374	361	347	332	316	1,503	8½-9½
2016		460[a]	455	444	432	419	405	390	374	356	1,952	7½-8½
2017			510[a]	504	492	479	464	448	431	412	2,463	6½-7½
2018				580[a]	574	561	546	530	501	482	3,057	5½-6½
2019					660[a]	653	639	623	628	609	3,789	4½-5½
2020						750[a]	742	724	685	663	4,332	3½-4½
2021							850[a]	841	821	799	4,955	2½-3½
2022								960[a]	949	926	5,719	1½-2½
2023									1,080[a]	1,069	6,579	½-1½
2024										1,220[a]	7,490	0-½
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	

[a]Additions during the year

For the entire experience band 2015-2024, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

255 + 268 + 284 + 311 + 334 + 374 + 405 + 448 + 501 + 609.

Original Life Table

The original life table, illustrated in Schedule 4 on page II-16, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½	=	88.15				
Exposures at age 4½	=	3,789,000				
Retirements from age 4½ to 5½	=	143,000				
Retirement Ratio	=	143,000	÷	3,789,000	=	0.0377
Survivor Ratio	=	1.000	-	0.0377	=	0.9623
Percent surviving at age 5½	=	(88.15)	x	(0.9623)	=	84.83

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

SCHEDULE 4. ORIGINAL LIFE TABLE
CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2015-2024 Placement Band 2010-2024

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	Percent Surviving at Beginning of Age Interval
(1)	(2)	(3)	(4)	(5)	(6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	167	26	0.1557	0.8443	42.24
					35.66
Total	44,780	1,606			

Column 2 from Schedule 3, Column 12, Plant Exposed to Retirement.
Column 3 from Schedule 1, Column 12, Retirements for Each Year.
Column 4 = Column 3 Divided by Column 2.
Column 5 = 1.0000 Minus Column 4.
Column 6 = Column 5 Multiplied by Column 6 as of the Preceding Age Interval.

The original survivor curve is plotted from the original life table (column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

Smoothing the Original Survivor Curve

The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R Iowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group.

FIGURE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

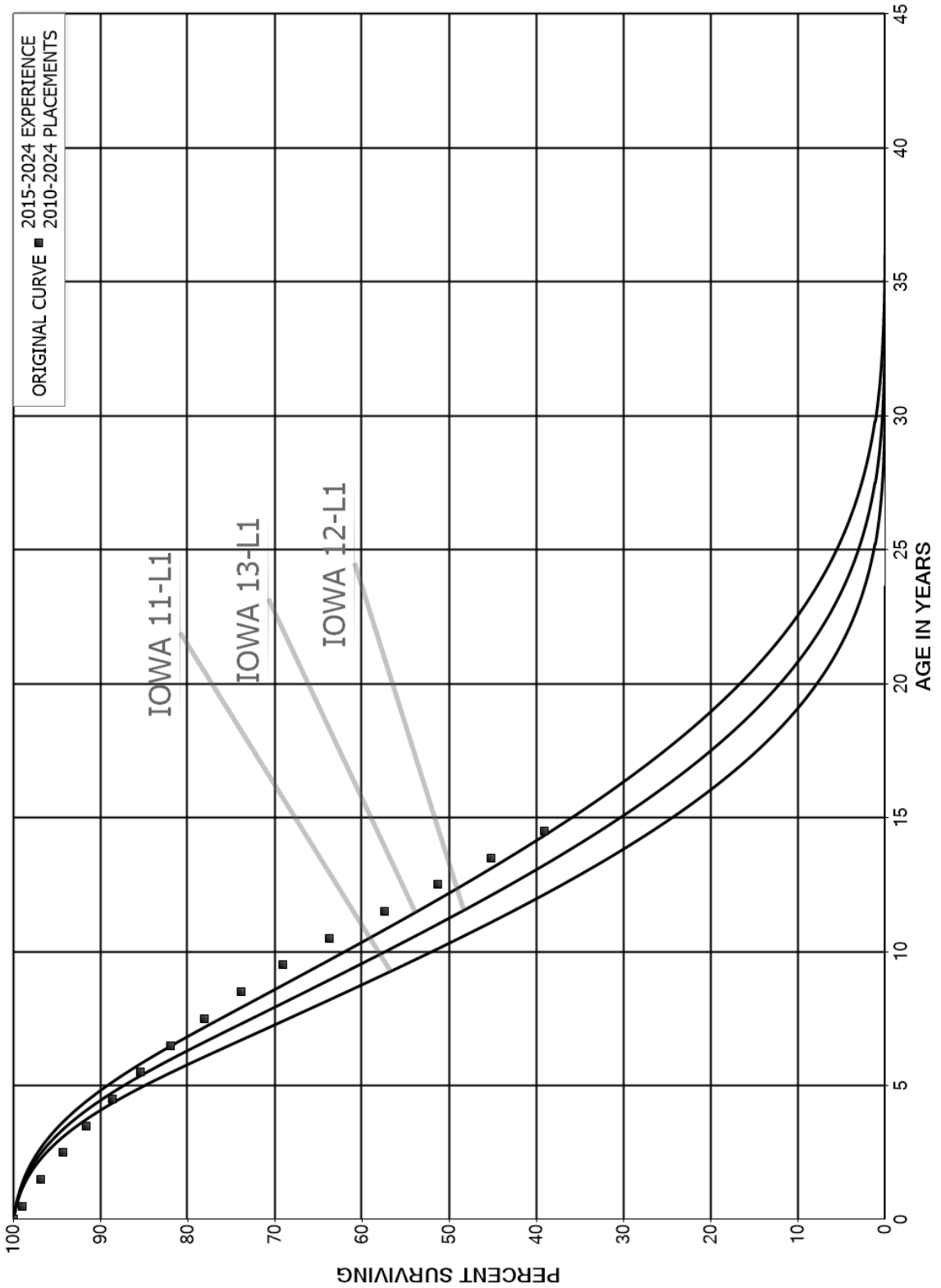


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

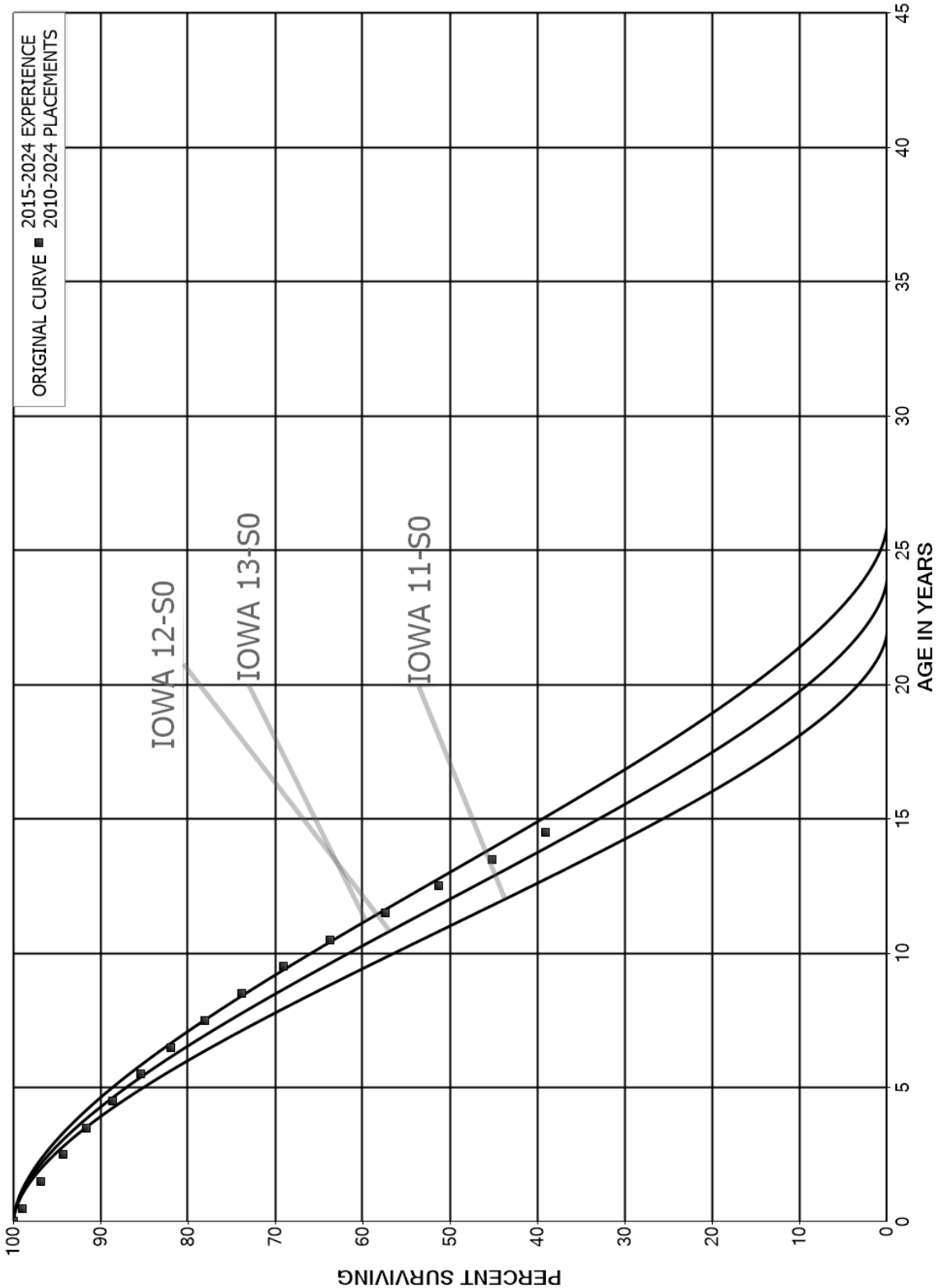


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

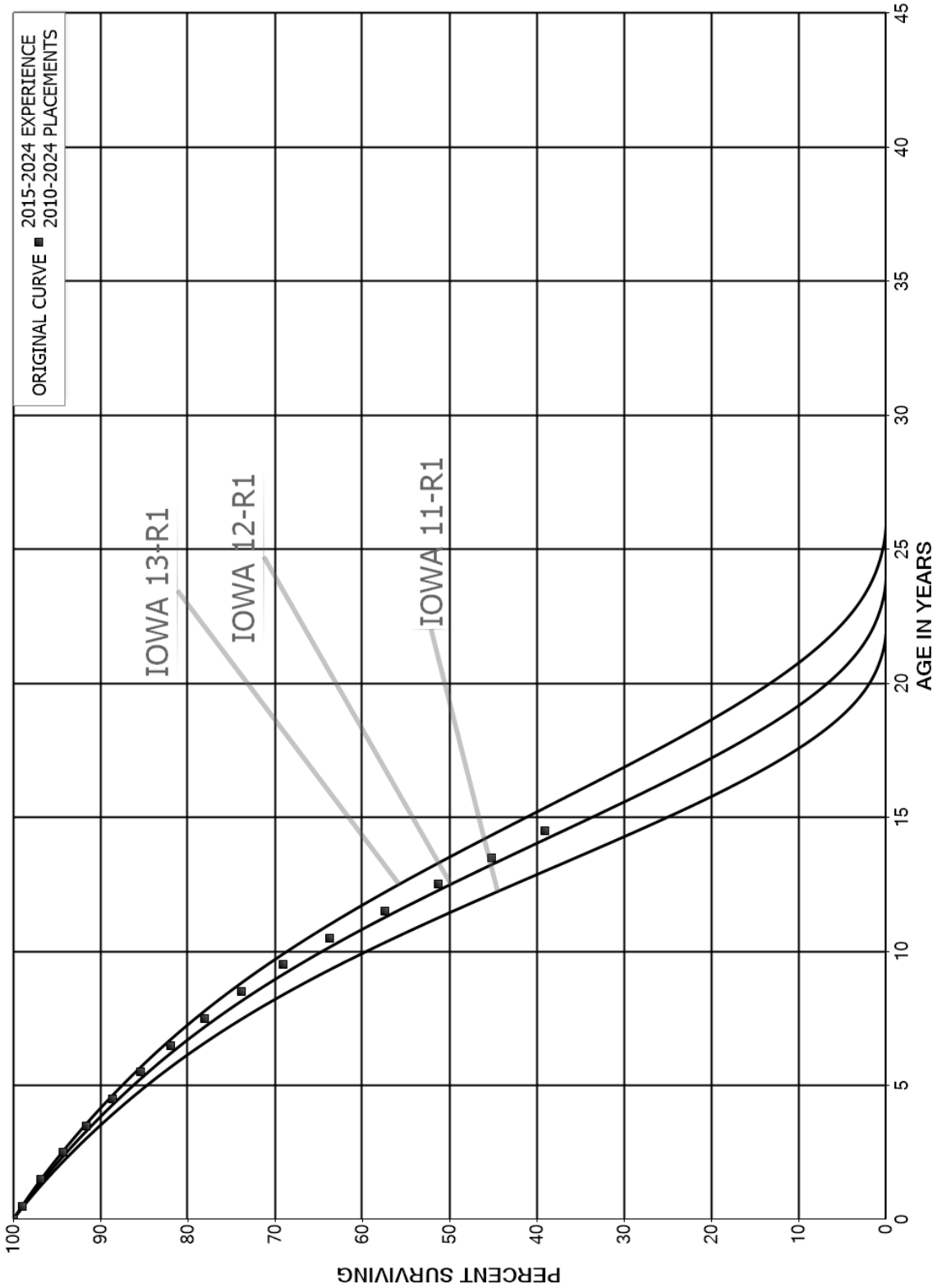
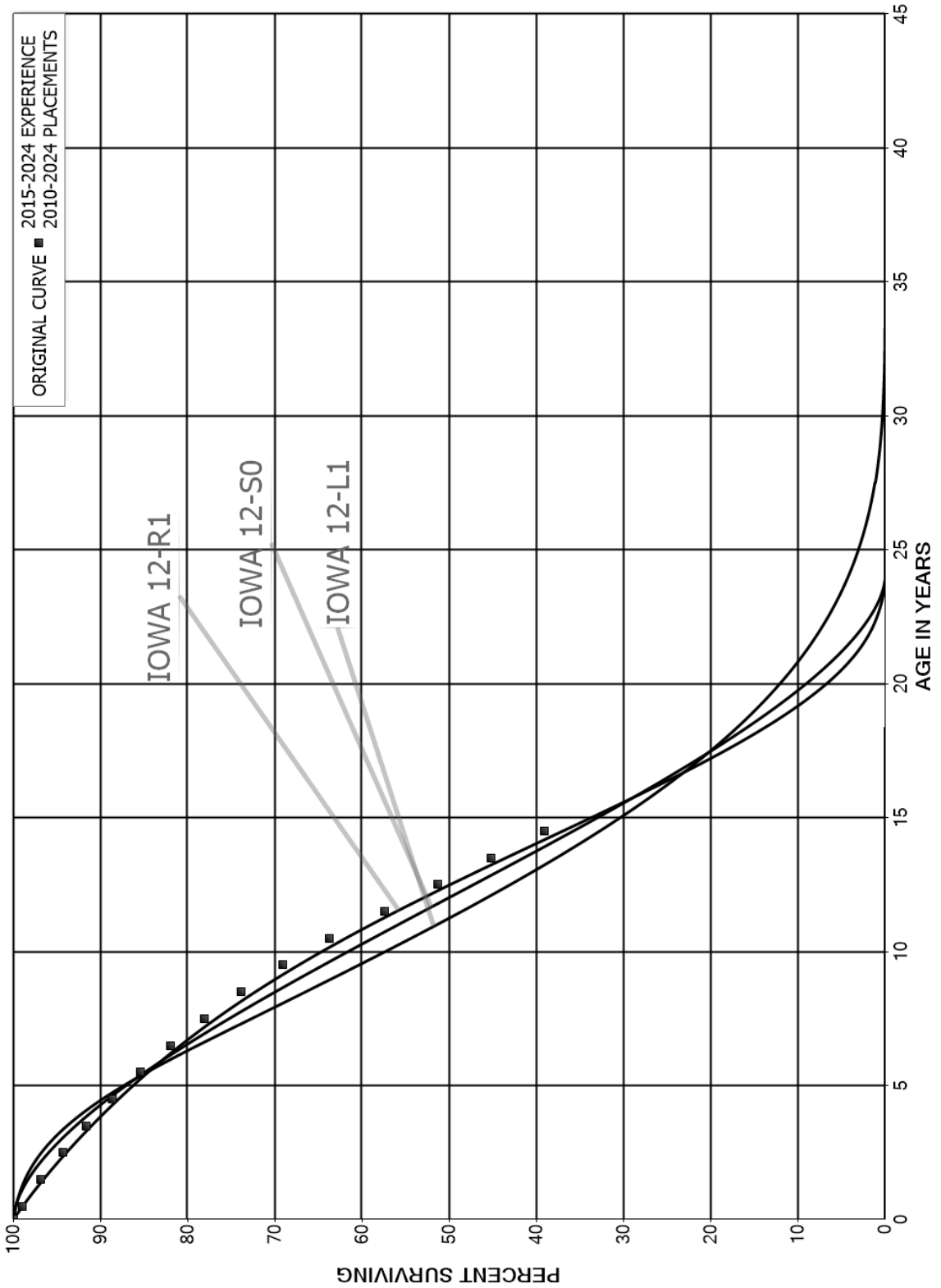


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PART III. SERVICE LIFE CONSIDERATIONS

PART III. SERVICE LIFE CONSIDERATIONS

FIELD TRIPS

In order to be familiar with the operation of the Company and observe representative portions of the plant, field trips have been conducted for the system. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements are obtained during field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

The following is a list of the locations visited during the recent field trips.

January 28, 2020

McKeesport Wastewater Treatment Plant
West Shore Pump Station
28th Street Pump Station
Long Run Pump Station
Dravosburg Wastewater Treatment Plant
Duquesne Wastewater Treatment Plant

March 27, 2017

Keyser Valley Pump Station
Parrott Avenue Pump Station
Scranton Wastewater Treatment Facility

Judgments. The survivor curve estimates were based on judgment which considered factors including statistical analyses of retirements, Company policies and outlook as determined during discussions with management, and survivor curve estimates from previous studies of other Pennsylvania-American wastewater systems. For depreciable groups which consist of numerous similar items of property, the distribution of the lives of the units in the group was judged on the basis of an average survival pattern for the entire group.

The amortization periods selected for general plant Accounts 390.00, 392.00, 393.00, 394.00, 396.00 and 397.00 are discussed in the section, “Amortization of General Plant Accounts.”

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

BOOK RESERVE

The book reserve as of June 30, 2023, is the result of a bringforward of the book reserves established by the Commission for the CSS wastewater operations. The projected book reserve as of June 30, 2024, is a bringforward of the June 30, 2023 book reserve based on projected accruals, retirements, cost of removal, gross salvage and other credits.

GROUP DEPRECIATION PROCEDURES

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally the items within a group do not have identical service lives but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group. In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

Single Unit of Property

The calculation of straight line depreciation for a single unit of property is straightforward. For example, if a $1,000 unit of property attains an age of four years and has a life expectancy of six years, the annual accrual over the total life is:

$$\frac{\$1{,}000}{(4 + 6)} = \$100 \text{ per year.}$$

The accrued depreciation is:

$$\$1{,}000\left(1 - \frac{6}{10}\right) = \$400.$$

Remaining Life Annual Accruals

For the purpose of calculating remaining life accruals as of June 30,2024, the depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation follow. The detailed calculations as of June 30, 2024, are set forth in the Results of Study section of the report.

Equal Life Group Procedure

In the equal life group procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the composite remaining life for the surviving original cost of that vintage. The composite remaining life is derived by compositing the individual equal life group remaining lives in accordance with the following equation:

$$\text{Composite Remaining Life} = \frac{\sum\left(\frac{\text{Book Cost}}{\text{Life}} \times \text{Remaining Life}\right)}{\sum\frac{\text{Book Cost}}{\text{Life}}}.$$

The book costs and lives of the several equal life groups which are summed in the foregoing equation are defined by the estimated survivor curve.

Inasmuch as book cost divided by life equals the whole life annual accrual, the foregoing equation reduces to the following form:

$$\text{Composite Remaining Life} = \frac{\sum \text{Whole Life Future Accruals}}{\sum \text{Whole Life Annual Accruals}}$$

or

$$\text{Composite Remaining Life} = \frac{\sum \text{Book Cost - Calc. Reserve}}{\sum \text{Whole Life Annual Accrual}}.$$

The annual accrual rate for each account is equal to the sum of the remaining life annual accruals for all vintages divided by the account's total original cost. The account's "composite remaining life" is calculated by dividing the sum of the future book accruals for all vintages by the sum of the remaining life annual accruals for all vintages.

The calculated accrued depreciation in the equal life group procedure also represents that portion of depreciable cost which will not be allocated to expense through future accruals. However, the calculation is based at the equal life group level rather than the vintage group level and does not require the use of averages. The equal life group accrued depreciation ratio is calculated as follows:

$$Ratio = 1 - \left(\frac{Remaining\ Life}{Service\ Life}\right)$$

Inasmuch as service life minus remaining life equals age, when averages are not employed, the foregoing equation reduces to:

$$Ratio = \left(\frac{Age}{Service\ Life}\right)$$

AMORTIZATION OF GENERAL PLANT ACCOUNTS

In order to use a more efficient and cost effective accounting process for equipment recorded in general plant Accounts 390, 392, 393, 394, 396 and 397; amounts capitalized in these accounts are amortized rather than depreciated. Amortization as defined in the Uniform System of Accounts is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized.

The primary reasons for the amortization of certain general plant accounts are that the effort required to unitize additions, periodically inventory equipment and determine amounts to be retired for equipment recorded in these accounts is disproportionate to the original cost of the equipment when compared to other wastewater plant accounts.

Accounting for such equipment using an amortization concept consists of capitalization of amounts to these accounts based on the same criteria as used previously under depreciation accounting, amortization of the asset over a fixed period, retirement of the equipment at the end of the amortization period and recognition of any net salvage related to disposition of equipment in these accounts as a gain or loss. For equipment in these accounts that was placed in service prior to implementation of amortization accounting, the net book value by vintage amortized over the remaining amortization period specified for each account and the original cost will be retired at the end of this period.

The amortization periods selected for each account or subaccount are based on a review of the existing depreciation rates for the accounts, typical service lives used for

each type of equipment and a consideration of the period during which it is anticipated that most of the benefit of the equipment will be realized. The amortization periods are as follows:

Account Number	Description	Amortization Period, Years
390.00	Office Furniture and Equipment	20
392.00	Stores Equipment	25
393.00	Tools, Shop and Garage Equipment	20
394.00	Laboratory Equipment	15
396.00	Communication Equipment	15
397.00	Miscellaneous Equipment	15

NET SALVAGE

Experienced net salvage is incorporated in the results of the study as it was reported on the Company's books and records for the period January 1, 2019 through June 30, 2023, and estimated for the period July 1, 2023 through December 31, 2023. The calculation of the amortization is shown in Table 5 on page V-8. The amounts of gross salvage and removal cost by account for each year are set forth in the section beginning on page VIII-2.

Net salvage is presented in this manner to determine the amount of net salvage to be amortized to the cost of service for ratemaking purposes. In order to be consistent with this manner of recognizing net salvage, no adjustments for net salvage were made to the annual depreciation calculated for the individual accounts.

PART V. RESULTS OF STUDY

PART V. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Table 1 presents the development of the net original cost used in the study. The results of the depreciation study are summarized in Table 2 which sets forth, by depreciable group, the estimated survivor curve, calculated annual accruals and book reserve related to net original cost and the annual amortization of net salvage. Table 3 presents the bringforward to June 30, 2024 of the book reserve as of June 30, 2023. Table 4 sets forth the calculation of estimated depreciation accruals for the twelve months ended June 30, 2024. Table 5 presents the amortization of experienced and estimated net salvage, by account, based on the five-year period, 2019-2023. The total amortization amount is incorporated in the total annual accrual in Table 2.

DESCRIPTION OF DETAILED TABULATIONS

Supporting statistical data for the estimates of average service lives and survivor curves, the annual depreciation calculations, and gross salvage and cost of removal for the years 2019-2023 are presented in three sections.

The section beginning on page VI-2 sets forth, for each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of the original life table plotted on the chart. A cumulative summary, by year installed, for utility plant and the supporting data for the original cost depreciation calculations are presented in the section beginning on page VII-3. The tabulations of experienced and estimated net salvage, by year and account for the five-year period 2019-2023, are presented in the section beginning on page VIII-2.

In the first section, the survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the type curve designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. In cases where only a segment of the estimated curve is used in the depreciation calculation, the numeral used for identification purposes is not a designation of the average life of the group. The titles of the charts indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which were plotted. The experience band indicates the range of years for which the retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The tables of the calculated annual depreciation related to net original cost are presented in account sequence in the second section and indicate the estimated average survivor curves used in the calculations. The tables set forth, for each installation year, the original cost, calculated accrued depreciation, allocated book reserve, remaining life expectancy, and the calculated annual accrual.

Detailed tabulations setting forth the cost of removal, gross salvage and net salvage amounts, by account and year, are presented in the third section. The net salvage amounts, by account and year, are carried forward to Table 5, which presents the five-year amortization of net salvage.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2024

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2024		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2024
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
DEPRECIABLE PLANT										
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	9,058,844.25								9,058,844.25
354.30	STRUCTURES AND IMPROVEMENTS - SPP	21,022,488.72								21,022,488.72
354.40	STRUCTURES AND IMPROVEMENTS - TDP	139,603,395.31				2,500,000.00				137,103,395.31
355.00	POWER GENERATING EQUIPMENT	1,059,130.23								1,059,130.23
360.10	COLLECTION SEWERS - FORCE MAINS	21,610,655.58								21,610,655.58
361.10	COLLECTION SEWERS - GRAVITY MAINS	419,099,952.24				8,245,749.11				410,854,203.13
361.20	MANHOLES	46,559,179.99								46,559,179.99
363.00	SERVICES	16,884,333.81				1,133,516.15				15,750,817.66
364.00	FLOW MEASURING DEVICES	2,099,193.73								2,099,193.73
371.00	PUMPING EQUIPMENT	17,227,545.48								17,227,545.48
380.00	TREATMENT EQUIPMENT	82,645,469.17								82,645,469.17
381.00	PLANT SEWERS	1,576,345.41								1,576,345.41
382.00	OUTFALL SEWER LINES	189,250.37								189,250.37
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT	10,740,054.36								10,740,054.36
390.00	OFFICE FURNITURE AND EQUIPMENT	2,949,393.85								2,949,393.85
391.00	TRANSPORTATION EQUIPMENT	8,309,341.23								8,309,341.23
392.00	STORES EQUIPMENT	106,844.28								106,844.28
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	3,085,746.41								3,085,746.41
394.00	LABORATORY EQUIPMENT	1,364,898.43								1,364,898.43
395.00	POWER OPERATED EQUIPMENT	1,909,398.22								1,909,398.22
396.00	COMMUNICATION EQUIPMENT	2,856,535.48								2,856,535.48
397.00	MISCELLANEOUS EQUIPMENT	2,939,335.21								2,939,335.21
TOTAL DEPRECIABLE PLANT		**812,897,331.76**		**0.00**		**11,879,265.26**		**0.00**		**801,018,066.50**
NONDEPRECIABLE PLANT										
353.20	LAND AND LAND RIGHTS - COLLECTION	3,161,743.45								3,161,743.45
353.30	LAND AND LAND RIGHTS - SPP	1,153,570.00								1,153,570.00
353.40	LAND AND LAND RIGHTS - TDP	148,041.59								148,041.59
TOTAL NONDEPRECIABLE PLANT		**4,463,355.04**		**0.00**		**0.00**		**0.00**		**4,463,355.04**
TOTAL UTILITY PLANT		**817,360,686.80**		**0.00**		**11,879,265.26**		**0.00**		**805,481,421.54**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF JUNE 30, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF JUNE 30, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	45-R3	9,058,844.25	678,726	8,380,118	233,637	2.58	35.9
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	21,022,488.72	7,754,269	13,268,220	423,726	2.02	31.3
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	137,103,395.31	53,649,066	83,454,329	2,740,423	2.00	30.5
355.00	POWER GENERATING EQUIPMENT	35-S0.5	1,059,130.23	315,200	743,930	36,432	3.44	20.4
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	21,610,655.58	336,740	21,273,916	341,092	1.58	62.4
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	410,854,203.13	150,264,489	260,589,714	5,751,228	1.40	45.3
361.20	MANHOLES	50-S2.5	46,559,179.99	20,545,147	26,014,033	1,089,740	2.34	23.9
363.00	SERVICES	47-R3	15,750,817.66	5,504,611	10,246,207	418,919	2.66	24.5
364.00	FLOW MEASURING DEVICES	15-L2.5	2,099,193.73	912,915	1,186,279	168,993	8.05	7.0
371.00	PUMPING EQUIPMENT	30-S0.5	17,227,545.48	4,868,761	12,358,784	703,162	4.08	17.6
380.00	TREATMENT EQUIPMENT	35-S1.5	82,645,469.17	29,306,935	53,338,534	2,823,974	3.42	18.9
381.00	PLANT SEWERS	50-R3	1,576,345.41	832,403	743,942	31,193	1.98	23.8
382.00	OUTFALL SEWER LINES	50-R3	189,250.37	54,342	134,908	3,514	1.86	38.4
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT	20-S2.5	10,740,054.36	3,198,085	7,541,969	633,351	5.90	11.9
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	2,949,393.85	541,121	2,408,273	163,948	5.56	14.7
391.00	TRANSPORTATION EQUIPMENT	14-L4	8,309,341.23	4,318,769	3,990,572	542,354	6.53	7.4
392.00	STORES EQUIPMENT	25-SQ	106,844.28	16,115	90,729	4,359	4.08	20.8
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	3,085,746.41	482,262	2,603,484	154,945	5.02	16.8
394.00	LABORATORY EQUIPMENT	15-SQ	1,364,898.43	250,520	1,114,378	98,195	7.19	11.3
395.00	POWER OPERATED EQUIPMENT	22-R2	1,909,398.22	1,033,646	875,752	71,505	3.74	12.2
396.00	COMMUNICATION EQUIPMENT	15-SQ	2,856,535.48	1,028,735	1,827,800	194,017	6.79	9.4
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	2,939,335.21	630,605	2,308,730	201,227	6.85	11.5
	TOTAL DEPRECIABLE PLANT		**801,018,066.50**	**286,523,462**	**514,494,601**	**16,829,934**	**2.10**	
	NONDEPRECIABLE PLANT							
353.20	LAND AND LAND RIGHTS - COLLECTION		3,161,743.45					
353.30	LAND AND LAND RIGHTS - SPP		1,153,570.00					
353.40	LAND AND LAND RIGHTS - TDP		148,041.59					
	TOTAL NONDEPRECIABLE PLANT		**4,463,355.04**					
	AMORTIZATION OF NET SALVAGE					**2,380,927**		
	TOTAL UTILITY PLANT		**805,481,421.54**	**286,523,462**	**514,494,601**	**19,210,861**		

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2024, OF BOOK RESERVE AS OF JUNE 30, 2023

ACCOUNT	BOOK RESERVE BALANCE AS OF 6/30/2023		PROJECTED DEPRECIATION ACCRUALS		PROJECTED RETIREMENTS		PROJECTED COST OF REMOVAL		PROJECTED SALVAGE		ACQUISITIONS AND ADJUSTMENTS		PROJECTED BOOK RESERVE BALANCE AS OF 6/30/2024
(1)	(2)	+	(3)	-	(4)	-	(5)	+	(6)	+	(7)	=	(8)
354.20	573,427		240,877		88,613		46,965						678,726
354.30	7,304,734		454,527		4,457		535						7,754,269
354.40	52,990,817		2,638,205		1,488,689		491,267						53,649,066
355.00	296,907		33,761		15,468								315,200
360.10	567,264		370,191		1,470,140		735,070				1,604,495		336,740
361.10	150,631,841		6,670,348		3,333,254		2,099,950				(1,604,495)		150,264,489
361.20	20,528,009		1,227,910		917,252		293,521						20,545,147
363.00	5,815,433		454,937		295,660		470,099						5,504,611
364.00	728,505		184,410										912,915
371.00	4,539,008		681,577		281,460		70,365						4,868,761
380.00	26,850,889		3,060,829		503,986		100,797						29,306,935
381.00	800,718		31,685										832,403
382.00	50,018		4,324										54,342
389.10	2,553,314		644,771										3,198,085
390.00	377,432		163,689										541,121
391.00	3,816,617		572,423		60,061		10,210						4,318,769
392.00	11,756		4,359										16,115
393.00	334,814		147,448										482,262
394.00	149,758		100,762										250,520
395.00	957,232		76,414										1,033,646
396.00	825,358		203,377										1,028,735
397.00	434,518		196,087										630,605
TOTAL	**281,138,370**		**18,162,911**		**8,459,041**		**4,318,779**		**0**		**0**		**286,523,462**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30, 2024

ACCOUNT	NET ORIGINALCOST AS OF 6/30/2023	NET ORIGINALCOST AS OF 6/30/2024	ACCRUAL RATE	AVERAGE ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED DEPRECIATION ACCRUALS
(1)	(2)	(3)	(4)	(5)=([(2)+(3)]/2)*(4)	(6)	(7)=(5)+(6)
354.20	8,334,302.21	9,058,844.25	2.57	223,502	17,375	240,877
354.30	20,986,044.46	21,022,488.72	2.07	434,788	19,739	454,527
354.40	123,362,935.68	137,103,395.31	1.89	2,461,407	176,798	2,638,205
355.00	932,654.26	1,059,130.23	3.39	33,761		33,761
360.10	9,576,689.00	21,610,655.58	1.57	244,821	125,370	370,191
361.10	383,434,650.13	410,854,203.13	1.36	5,401,164	1,269,184	6,670,348
361.20	38,889,415.73	46,559,179.99	2.47	1,055,290	172,620	1,227,910
363.00	13,121,252.98	15,750,817.66	2.42	349,352	105,585	454,937
364.00	2,099,193.73	2,099,193.73	8.70	182,630	1,780	184,410
371.00	14,926,204.71	17,227,545.48	4.02	646,290	35,287	681,577
380.00	78,524,654.41	82,645,469.17	3.56	2,868,828	192,001	3,060,829
381.00	1,576,345.41	1,576,345.41	2.01	31,685		31,685
382.00	189,250.37	189,250.37	1.88	3,558	766	4,324
389.10	10,740,054.36	10,740,054.36	6.00	644,403	368	644,771
390.00	2,551,002.00	2,949,393.85	5.69	156,486	7,203	163,689
391.00	7,818,254.14	8,309,341.23	6.92	558,015	14,408	572,423
392.00	106,844.28	106,844.28	4.08	4,359		4,359
393.00	2,286,410.29	3,085,746.41	5.13	137,796	9,652	147,448
394.00	1,323,996.94	1,364,898.43	7.28	97,876	2,886	100,762
395.00	1,909,398.22	1,909,398.22	3.93	75,039	1,375	76,414
396.00	2,767,307.88	2,856,535.48	6.86	192,898	10,479	203,377
397.00	2,662,917.90	2,939,335.21	6.90	193,278	2,809	196,087
TOTAL	**728,119,779.09**	**801,018,066.50**		**15,997,226**	**2,165,685**	**18,162,911**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

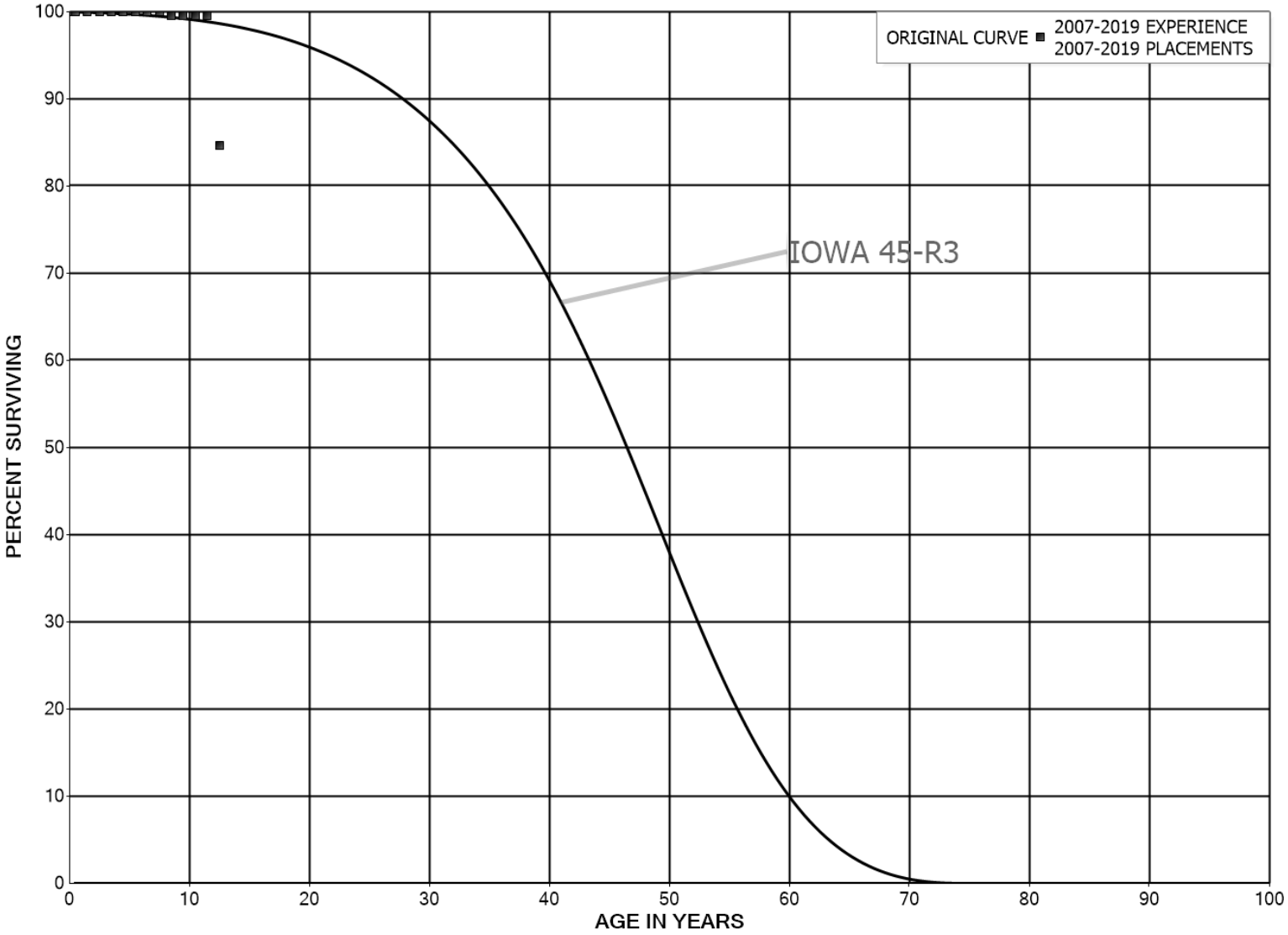
TABLE 5. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

	2019		2020		2021		2022		PROJECTED 2023			
ACCOUNT	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2) -	(3) +	(4) -	(5) +	(6) -	(7) +	(8) -	(9) +	(10) -	(11) =	(12)*	(13)=(12)/5
354.20				27,261.65		0.00		30,686.12		44,958.24	(102,906.01)	(20,581)
354.30		85,934.54				7,613.98		2,731.90		1,968.74	(98,249.16)	(19,650)
354.40		67,526.93		3,035.88		76,589.11		612,785.01		245,634.00	(1,005,570.93)	(201,114)
360.10		2,367.85		22,982.08		164,970.27		232,064.30		406,108.42	(828,492.92)	(165,699)
361.10		1,430,976.01	3,491.13	1,344,641.10		1,074,276.48		2,044,135.19	4,370.75	888,597.83	(6,774,764.73)	(1,354,953)
361.20		90,279.20		81,137.03		219,777.95		326,964.80		289,877.22	(1,008,036.20)	(201,607)
363.00		52,929.84		75,298.32		129,688.68		108,024.33		296,281.28	(662,222.45)	(132,444)
364.00				8,901.01							(8,901.01)	(1,780)
371.00		66,936.02		24,730.31		51,352.70		14,057.96		38,191.07	(195,268.06)	(39,054)
380.00		92,448.13		399,155.43		104,870.48		277,412.74		114,189.97	(988,076.75)	(197,615)
382.00		3,306.40									(3,306.40)	(661)
390.00		9,975.61		1,886.85		1,482.56		12,873.26		6,466.02	(32,684.30)	(6,537)
391.00		48,014.34								5,598.73	(53,613.07)	(10,723)
393.00		28,436.64		7,289.38		953.49		6,599.32		5,920.63	(49,199.46)	(9,840)
394.00		5,445.26		1,548.07		1,919.19		877.73		9,280.42	(19,070.67)	(3,814)
395.00		5,217.77		510.16				183.61		1,922.08	(7,833.62)	(1,567)
396.00		39,091.19		1,822.13		9,833.75		1,647.58			(52,394.65)	(10,479)
397.00		4,026.89		3,318.49		6,698.53					(14,043.91)	(2,809)
TOTAL	**0.00**	**2,032,912.62**	**3,491.13**	**2,003,517.89**	**0.00**	**1,850,027.17**	**0.00**	**3,671,043.85**	**4,370.75**	**2,354,994.65**	**(11,904,634.30)**	**(2,380,927)**

* Column (12) equals the summation of Columns (2) through (11).

PART VI. SERVICE LIFE STATISTICS

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

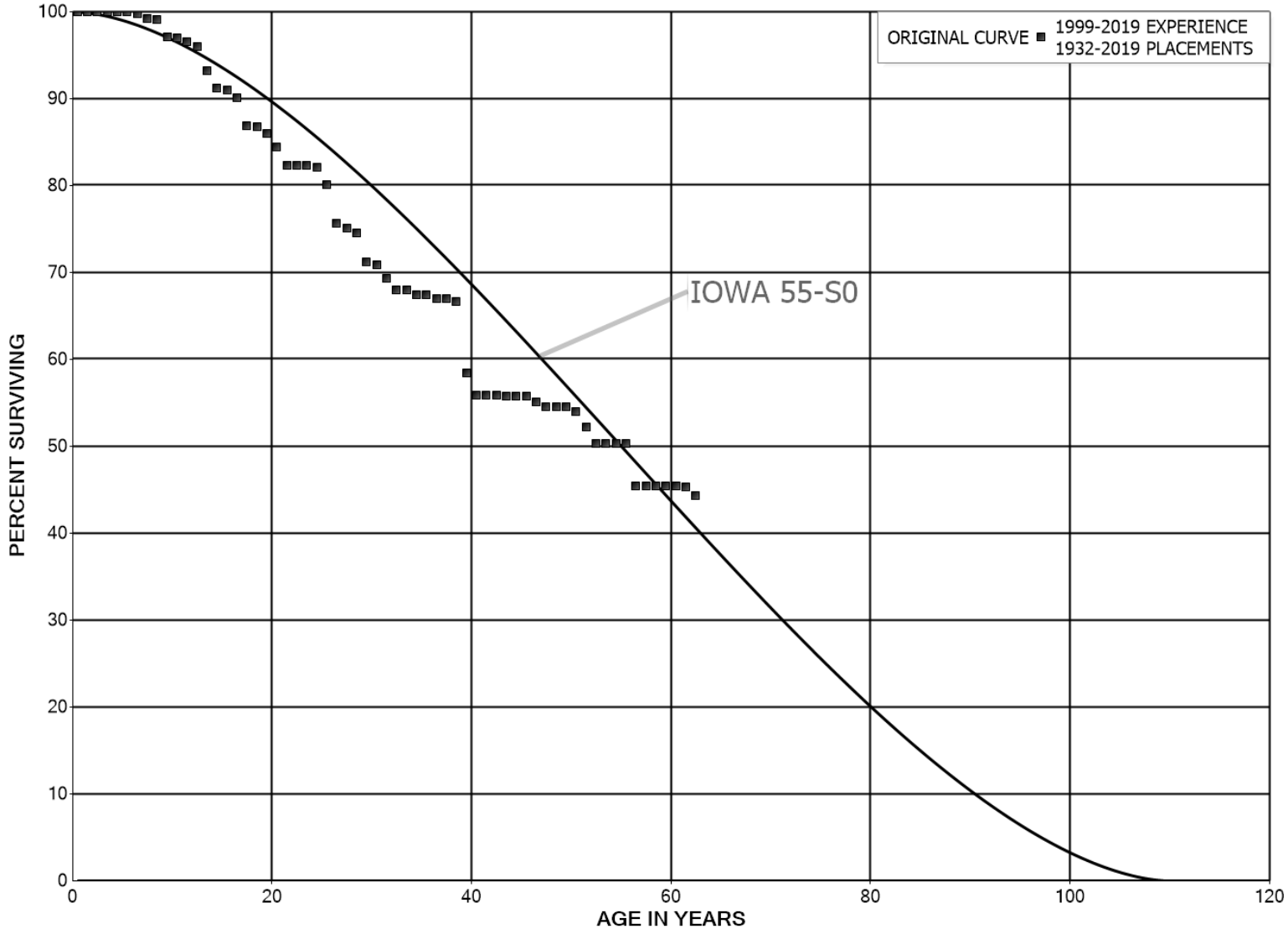
ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

ORIGINAL LIFE TABLE

PLACEMENT BAND 2007-2019 EXPERIENCE BAND 2007-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,844,636		0.0000	1.0000	100.00
0.5	3,478,774		0.0000	1.0000	100.00
1.5	1,864,154		0.0000	1.0000	100.00
2.5	516,452	0	0.0000	1.0000	100.00
3.5	479,797		0.0000	1.0000	100.00
4.5	437,900	416	0.0010	0.9990	100.00
5.5	422,717		0.0000	1.0000	99.90
6.5	321,516		0.0000	1.0000	99.90
7.5	321,516	1,408	0.0044	0.9956	99.90
8.5	311,522		0.0000	1.0000	99.47
9.5	311,522		0.0000	1.0000	99.47
10.5	134,415		0.0000	1.0000	99.47
11.5	20,659	3,076	0.1489	0.8511	99.47
12.5					84.66

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE

PLACEMENT BAND 1932-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	70,500,767		0.0000	1.0000	100.00
0.5	76,131,665		0.0000	1.0000	100.00
1.5	80,233,751	6,642	0.0001	0.9999	100.00
2.5	105,447,960		0.0000	1.0000	99.99
3.5	85,605,007	28,836	0.0003	0.9997	99.99
4.5	79,002,174	4,425	0.0001	0.9999	99.96
5.5	46,624,214	105,422	0.0023	0.9977	99.95
6.5	51,444,895	277,564	0.0054	0.9946	99.73
7.5	50,906,335	75,090	0.0015	0.9985	99.19
8.5	50,793,050	1,027,715	0.0202	0.9798	99.04
9.5	34,780,266	28,544	0.0008	0.9992	97.04
10.5	15,695,508	65,025	0.0041	0.9959	96.96
11.5	15,618,899	88,716	0.0057	0.9943	96.56
12.5	20,002,643	601,564	0.0301	0.9699	96.01
13.5	17,169,269	353,428	0.0206	0.9794	93.12
14.5	16,203,968	41,247	0.0025	0.9975	91.20
15.5	16,204,082	163,309	0.0101	0.9899	90.97
16.5	13,585,539	481,677	0.0355	0.9645	90.06
17.5	12,995,837	17,548	0.0014	0.9986	86.86
18.5	12,210,208	114,143	0.0093	0.9907	86.74
19.5	7,393,964	134,551	0.0182	0.9818	85.93
20.5	6,513,761	157,405	0.0242	0.9758	84.37
21.5	6,711,244	2,801	0.0004	0.9996	82.33
22.5	7,374,817	1,543	0.0002	0.9998	82.30
23.5	6,783,698	15,823	0.0023	0.9977	82.28
24.5	6,921,413	166,617	0.0241	0.9759	82.09
25.5	6,763,696	380,532	0.0563	0.9437	80.11
26.5	5,899,041	38,147	0.0065	0.9935	75.60
27.5	4,281,769	34,820	0.0081	0.9919	75.12
28.5	3,967,252	175,318	0.0442	0.9558	74.50
29.5	4,051,668	21,732	0.0054	0.9946	71.21
30.5	5,300,696	114,682	0.0216	0.9784	70.83
31.5	4,027,463	76,382	0.0190	0.9810	69.30
32.5	2,813,504	2,190	0.0008	0.9992	67.98
33.5	2,649,698	20,846	0.0079	0.9921	67.93
34.5	1,122,954		0.0000	1.0000	67.40
35.5	398,615	2,457	0.0062	0.9938	67.40
36.5	369,394		0.0000	1.0000	66.98
37.5	339,885	1,942	0.0057	0.9943	66.98
38.5	249,055	30,753	0.1235	0.8765	66.60

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1932-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	877,505	37,754	0.0430	0.9570	58.37
40.5	1,351,121		0.0000	1.0000	55.86
41.5	19,298,436	4,893	0.0003	0.9997	55.86
42.5	19,293,543	30,808	0.0016	0.9984	55.85
43.5	32,745,779		0.0000	1.0000	55.76
44.5	14,343,608	10,968	0.0008	0.9992	55.76
45.5	14,332,640	153,806	0.0107	0.9893	55.72
46.5	14,199,715	156,087	0.0110	0.9890	55.12
47.5	552,598		0.0000	1.0000	54.51
48.5	1,223,925		0.0000	1.0000	54.51
49.5	1,265,936	12,500	0.0099	0.9901	54.51
50.5	1,284,936	43,517	0.0339	0.9661	53.98
51.5	570,093	20,853	0.0366	0.9634	52.15
52.5	524,823		0.0000	1.0000	50.24
53.5	524,823		0.0000	1.0000	50.24
54.5	447,474		0.0000	1.0000	50.24
55.5	447,474	42,843	0.0957	0.9043	50.24
56.5	13,313,486	1,903	0.0001	0.9999	45.43
57.5	13,311,583		0.0000	1.0000	45.42
58.5	13,049,341	13	0.0000	1.0000	45.42
59.5	140,486		0.0000	1.0000	45.42
60.5	140,486	363	0.0026	0.9974	45.42
61.5	140,123	3,040	0.0217	0.9783	45.31
62.5					44.32
63.5					
64.5					
65.5					
66.5					
67.5					
68.5	39,928		0.0000		
69.5	39,928		0.0000		
70.5	39,928		0.0000		
71.5	39,928		0.0000		
72.5	40,428		0.0000		
73.5	39,928		0.0000		
74.5	39,928		0.0000		
75.5	39,928		0.0000		
76.5	602		0.0000		
77.5	602		0.0000		
78.5	602		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

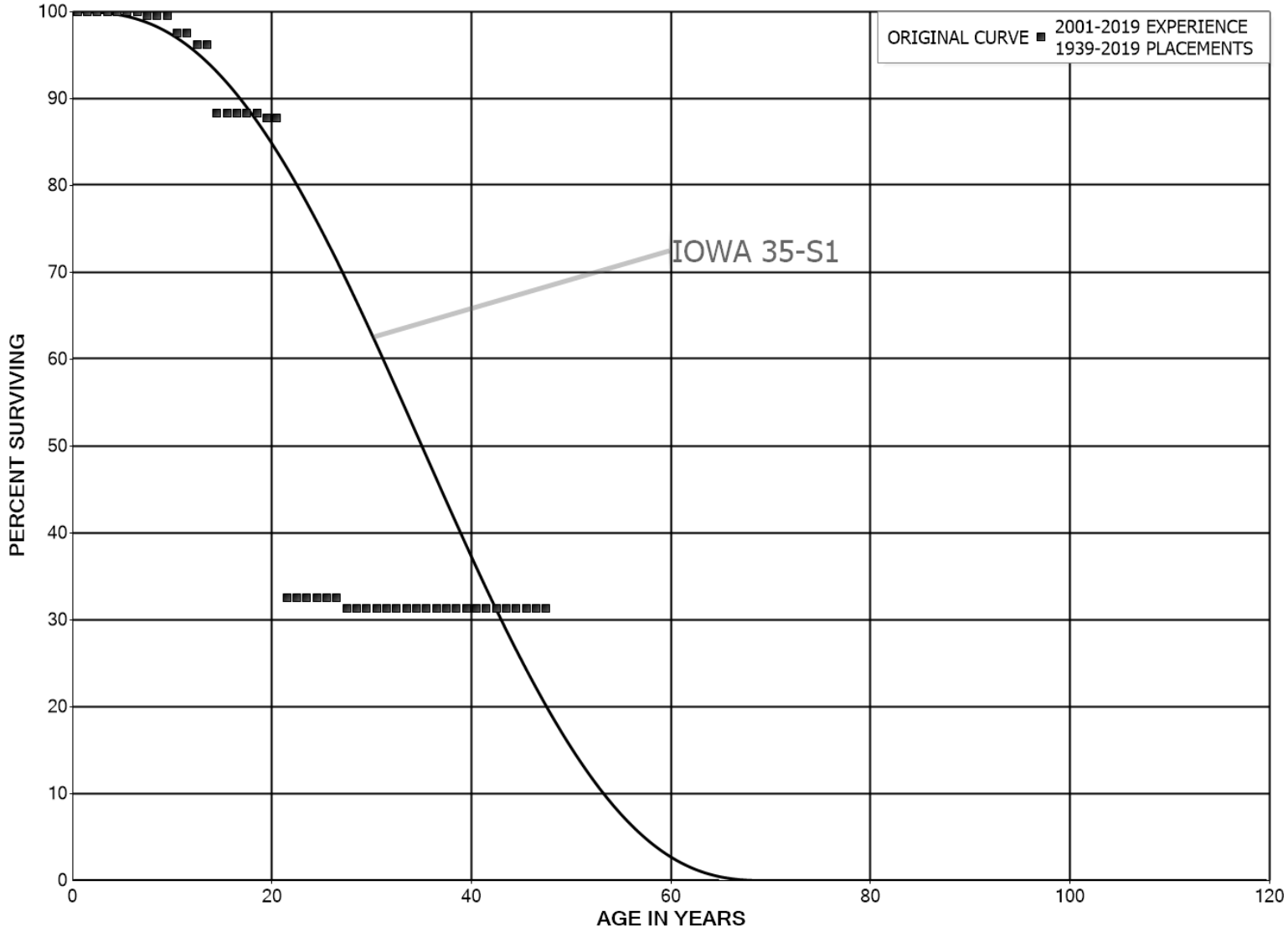
ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1932-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	602		0.0000		
80.5	602		0.0000		
81.5	602		0.0000		
82.5	602		0.0000		
83.5	602		0.0000		
84.5	602		0.0000		
85.5	602		0.0000		
86.5	602		0.0000		
87.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,331,347		0.0000	1.0000	100.00
0.5	2,248,872	400	0.0002	0.9998	100.00
1.5	2,139,519		0.0000	1.0000	99.98
2.5	2,007,976		0.0000	1.0000	99.98
3.5	1,998,798		0.0000	1.0000	99.98
4.5	978,189		0.0000	1.0000	99.98
5.5	566,034		0.0000	1.0000	99.98
6.5	540,776	2,524	0.0047	0.9953	99.98
7.5	668,631		0.0000	1.0000	99.52
8.5	661,526		0.0000	1.0000	99.52
9.5	622,592	12,303	0.0198	0.9802	99.52
10.5	529,371	373	0.0007	0.9993	97.55
11.5	209,362	2,752	0.0131	0.9869	97.48
12.5	204,311		0.0000	1.0000	96.20
13.5	220,425	18,073	0.0820	0.9180	96.20
14.5	208,207		0.0000	1.0000	88.31
15.5	208,207		0.0000	1.0000	88.31
16.5	165,317		0.0000	1.0000	88.31
17.5	193,471		0.0000	1.0000	88.31
18.5	210,457	1,510	0.0072	0.9928	88.31
19.5	223,914		0.0000	1.0000	87.68
20.5	223,914	140,772	0.6287	0.3713	87.68
21.5	67,028		0.0000	1.0000	32.56
22.5	73,481		0.0000	1.0000	32.56
23.5	73,481		0.0000	1.0000	32.56
24.5	73,481		0.0000	1.0000	32.56
25.5	44,261		0.0000	1.0000	32.56
26.5	27,275	1,047	0.0384	0.9616	32.56
27.5	11,260		0.0000	1.0000	31.31
28.5	11,260		0.0000	1.0000	31.31
29.5	11,260		0.0000	1.0000	31.31
30.5	11,260		0.0000	1.0000	31.31
31.5	11,260		0.0000	1.0000	31.31
32.5	11,260		0.0000	1.0000	31.31
33.5	11,260		0.0000	1.0000	31.31
34.5	11,260		0.0000	1.0000	31.31
35.5	450		0.0000	1.0000	31.31
36.5	450		0.0000	1.0000	31.31
37.5	450		0.0000	1.0000	31.31
38.5	450		0.0000	1.0000	31.31

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	450		0.0000	1.0000	31.31
40.5	450		0.0000	1.0000	31.31
41.5	450		0.0000	1.0000	31.31
42.5	450		0.0000	1.0000	31.31
43.5	450		0.0000	1.0000	31.31
44.5	450		0.0000	1.0000	31.31
45.5	450		0.0000	1.0000	31.31
46.5	450		0.0000	1.0000	31.31
47.5					31.31
48.5					
49.5					
50.5					
51.5					
52.5					
53.5					
54.5					
55.5					
56.5					
57.5					
58.5					
59.5					
60.5					
61.5					
62.5					
63.5					
64.5					
65.5					
66.5					
67.5					
68.5	3,802		0.0000		
69.5	3,802		0.0000		
70.5	3,802	283	0.0744		
71.5	3,519		0.0000		
72.5	3,519		0.0000		
73.5	3,519		0.0000		
74.5	3,519		0.0000		
75.5	3,519		0.0000		
76.5	3,519		0.0000		
77.5	3,519		0.0000		
78.5	3,519		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

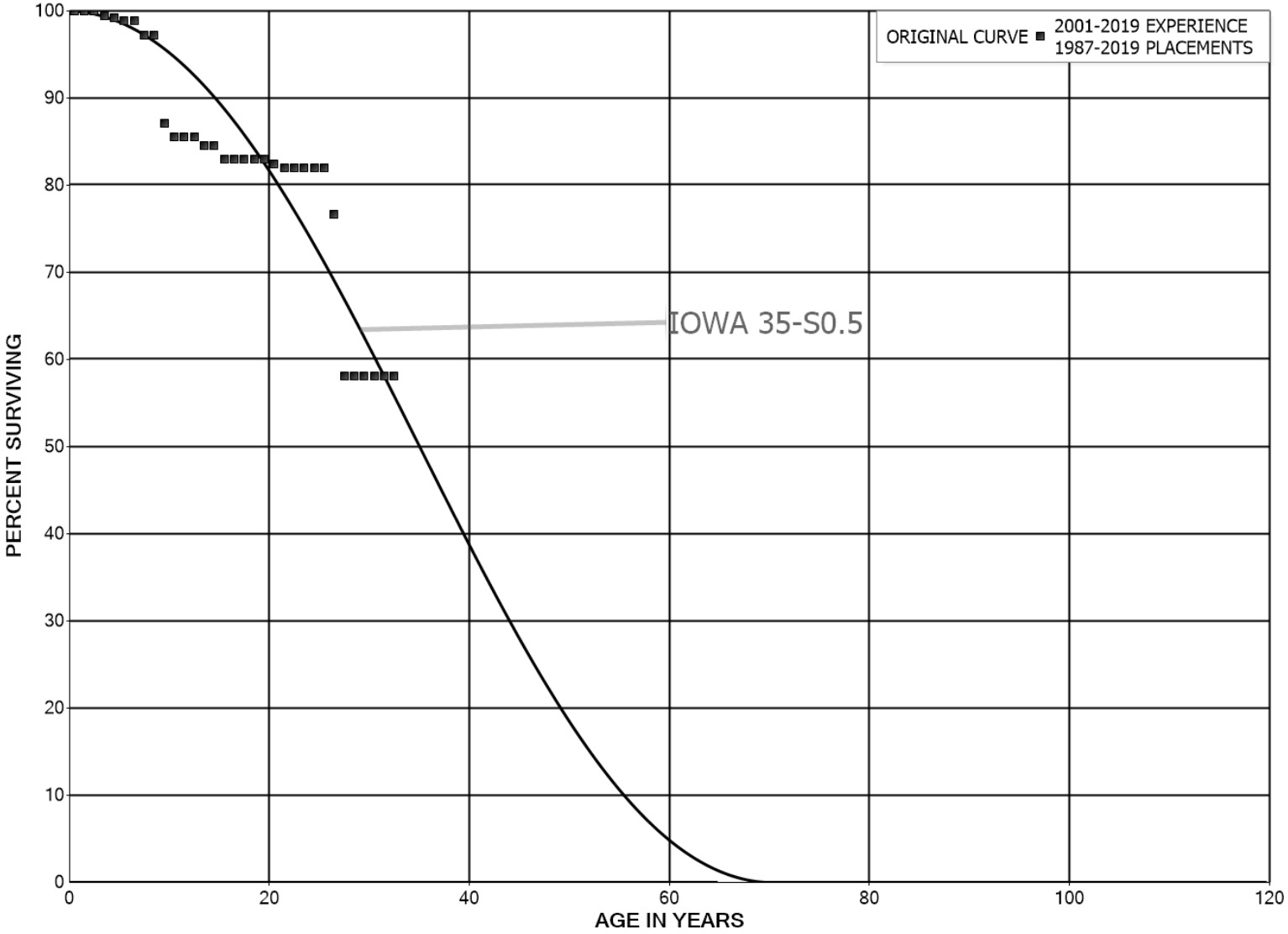
ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	3,519		0.0000		
80.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 355.00 POWER GENERATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

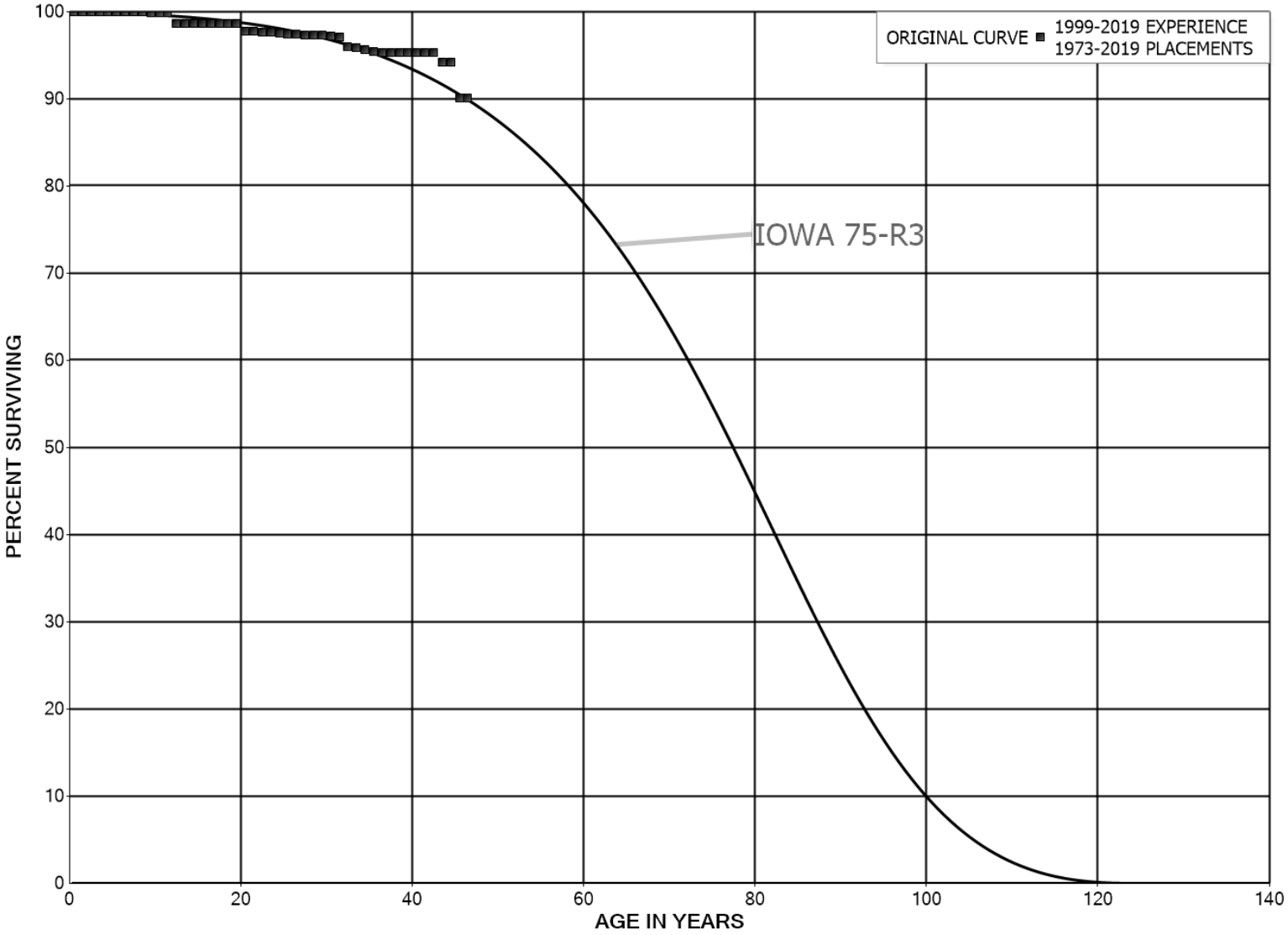
ACCOUNT 355.00 POWER GENERATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1987-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,656,122		0.0000	1.0000	100.00
0.5	3,685,338		0.0000	1.0000	100.00
1.5	4,385,880		0.0000	1.0000	100.00
2.5	4,494,639	26,926	0.0060	0.9940	100.00
3.5	4,479,665	10,161	0.0023	0.9977	99.40
4.5	4,398,000	14,523	0.0033	0.9967	99.18
5.5	3,773,674	1,387	0.0004	0.9996	98.85
6.5	3,828,658	61,470	0.0161	0.9839	98.81
7.5	3,336,361		0.0000	1.0000	97.23
8.5	3,321,984	347,576	0.1046	0.8954	97.23
9.5	2,953,727	51,388	0.0174	0.9826	87.05
10.5	328,249		0.0000	1.0000	85.54
11.5	144,528		0.0000	1.0000	85.54
12.5	267,555	3,097	0.0116	0.9884	85.54
13.5	327,093		0.0000	1.0000	84.55
14.5	278,538	5,336	0.0192	0.9808	84.55
15.5	281,064		0.0000	1.0000	82.93
16.5	293,645		0.0000	1.0000	82.93
17.5	241,944		0.0000	1.0000	82.93
18.5	203,466		0.0000	1.0000	82.93
19.5	203,466	1,204	0.0059	0.9941	82.93
20.5	202,262	1,103	0.0055	0.9945	82.44
21.5	432,455		0.0000	1.0000	81.99
22.5	402,008		0.0000	1.0000	81.99
23.5	402,008		0.0000	1.0000	81.99
24.5	402,008		0.0000	1.0000	81.99
25.5	402,978	26,388	0.0655	0.9345	81.99
26.5	174,978	42,310	0.2418	0.7582	76.62
27.5	89,880		0.0000	1.0000	58.09
28.5	68,585		0.0000	1.0000	58.09
29.5	68,585		0.0000	1.0000	58.09
30.5	19,246		0.0000	1.0000	58.09
31.5	19,246		0.0000	1.0000	58.09
32.5					58.09

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	31,766,704	19	0.0000	1.0000	100.00
0.5	28,215,316	26	0.0000	1.0000	100.00
1.5	35,558,986	33	0.0000	1.0000	100.00
2.5	23,783,577	70	0.0000	1.0000	100.00
3.5	21,373,939	350	0.0000	1.0000	100.00
4.5	18,774,036	315	0.0000	1.0000	100.00
5.5	14,425,014	397	0.0000	1.0000	100.00
6.5	14,188,090	1,611	0.0001	0.9999	99.99
7.5	14,122,868	1,747	0.0001	0.9999	99.98
8.5	13,850,582	16,747	0.0012	0.9988	99.97
9.5	13,465,099	64	0.0000	1.0000	99.85
10.5	13,318,392	82	0.0000	1.0000	99.85
11.5	10,748,868	127,626	0.0119	0.9881	99.85
12.5	9,661,386		0.0000	1.0000	98.66
13.5	7,868,737	3,291	0.0004	0.9996	98.66
14.5	7,779,655	99	0.0000	1.0000	98.62
15.5	5,905,707	9	0.0000	1.0000	98.62
16.5	5,774,986	949	0.0002	0.9998	98.62
17.5	5,344,267	1,253	0.0002	0.9998	98.60
18.5	4,614,847	826	0.0002	0.9998	98.58
19.5	4,197,905	37,017	0.0088	0.9912	98.56
20.5	3,986,776	70	0.0000	1.0000	97.69
21.5	4,475,797	1,897	0.0004	0.9996	97.69
22.5	3,907,599	569	0.0001	0.9999	97.65
23.5	4,900,347	3,932	0.0008	0.9992	97.64
24.5	6,419,851	13,411	0.0021	0.9979	97.56
25.5	6,580,720	788	0.0001	0.9999	97.35
26.5	6,033,834	1,095	0.0002	0.9998	97.34
27.5	6,011,515	2,049	0.0003	0.9997	97.32
28.5	5,991,855	3,135	0.0005	0.9995	97.29
29.5	6,011,945	3,365	0.0006	0.9994	97.24
30.5	5,911,879	4,784	0.0008	0.9992	97.19
31.5	5,517,306	65,876	0.0119	0.9881	97.11
32.5	5,225,480	4,106	0.0008	0.9992	95.95
33.5	5,192,765	13,636	0.0026	0.9974	95.87
34.5	4,869,190	12,733	0.0026	0.9974	95.62
35.5	4,856,457	2,869	0.0006	0.9994	95.37
36.5	4,661,206	15	0.0000	1.0000	95.31
37.5	4,607,713		0.0000	1.0000	95.31
38.5	4,446,768	1,883	0.0004	0.9996	95.31

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

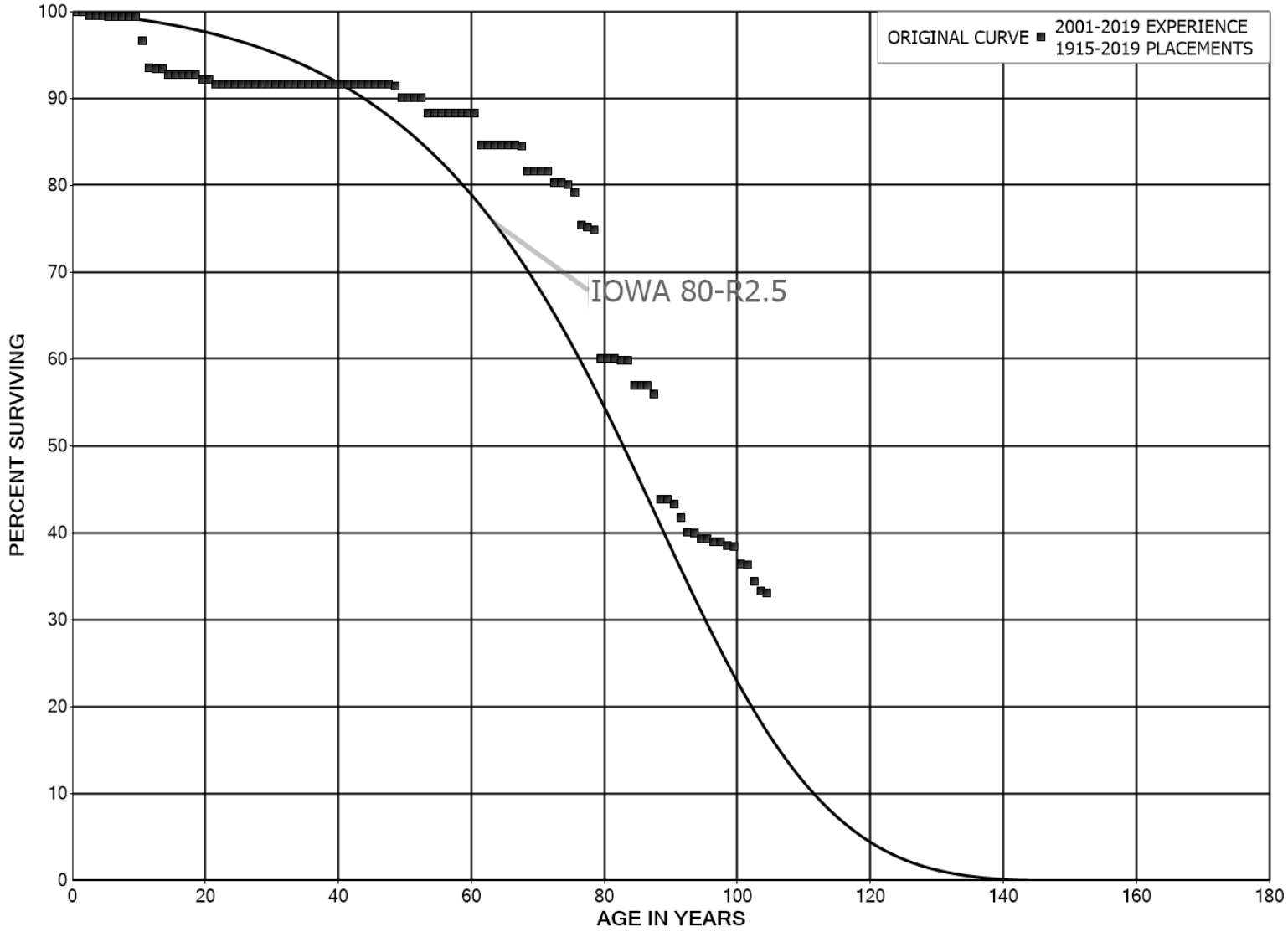
ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1973-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,369,779	82	0.0000	1.0000	95.27
40.5	4,295,948	6	0.0000	1.0000	95.27
41.5	4,025,587	0	0.0000	1.0000	95.27
42.5	3,566,737	42,283	0.0119	0.9881	95.27
43.5	2,553,034		0.0000	1.0000	94.14
44.5	1,703,254	73,783	0.0433	0.9567	94.14
45.5	125,695		0.0000	1.0000	90.06
46.5					90.06

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	123,698,865	1,489	0.0000	1.0000	100.00
0.5	80,968,134	1,744	0.0000	1.0000	100.00
1.5	71,427,735	349,743	0.0049	0.9951	100.00
2.5	61,491,291		0.0000	1.0000	99.51
3.5	47,985,505		0.0000	1.0000	99.51
4.5	43,496,282	26,093	0.0006	0.9994	99.51
5.5	34,622,702	11,064	0.0003	0.9997	99.45
6.5	36,236,717	10,556	0.0003	0.9997	99.42
7.5	44,473,440	0	0.0000	1.0000	99.39
8.5	44,403,805	13,334	0.0003	0.9997	99.39
9.5	42,579,956	1,180,167	0.0277	0.9723	99.36
10.5	27,257,562	886,763	0.0325	0.9675	96.60
11.5	23,041,413	10,064	0.0004	0.9996	93.46
12.5	15,696,984	13,300	0.0008	0.9992	93.42
13.5	13,197,516	82,522	0.0063	0.9937	93.34
14.5	9,898,866	187	0.0000	1.0000	92.76
15.5	8,175,329	367	0.0000	1.0000	92.75
16.5	11,005,722	1,374	0.0001	0.9999	92.75
17.5	22,668,123		0.0000	1.0000	92.74
18.5	22,367,436	144,378	0.0065	0.9935	92.74
19.5	21,841,271		0.0000	1.0000	92.14
20.5	10,429,000	56,430	0.0054	0.9946	92.14
21.5	13,494,984		0.0000	1.0000	91.64
22.5	12,095,717		0.0000	1.0000	91.64
23.5	13,846,891		0.0000	1.0000	91.64
24.5	14,182,481		0.0000	1.0000	91.64
25.5	19,071,002		0.0000	1.0000	91.64
26.5	16,170,692		0.0000	1.0000	91.64
27.5	36,060,280		0.0000	1.0000	91.64
28.5	35,923,542		0.0000	1.0000	91.64
29.5	33,683,971		0.0000	1.0000	91.64
30.5	8,391,683	866	0.0001	0.9999	91.64
31.5	8,167,272	21	0.0000	1.0000	91.63
32.5	8,027,418		0.0000	1.0000	91.63
33.5	7,266,714		0.0000	1.0000	91.63
34.5	5,540,059		0.0000	1.0000	91.63
35.5	3,406,034		0.0000	1.0000	91.63
36.5	3,951,146		0.0000	1.0000	91.63
37.5	4,287,296		0.0000	1.0000	91.63
38.5	4,273,219		0.0000	1.0000	91.63

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,243,666		0.0000	1.0000	91.63
40.5	41,503,891	5,447	0.0001	0.9999	91.63
41.5	41,043,016	49	0.0000	1.0000	91.62
42.5	41,341,828		0.0000	1.0000	91.62
43.5	20,516,395		0.0000	1.0000	91.62
44.5	17,262,745	4,573	0.0003	0.9997	91.62
45.5	17,447,879		0.0000	1.0000	91.60
46.5	16,922,111	1,617	0.0001	0.9999	91.60
47.5	1,493,981	2,878	0.0019	0.9981	91.59
48.5	1,491,103	21,283	0.0143	0.9857	91.41
49.5	995,707	187	0.0002	0.9998	90.11
50.5	1,249,631		0.0000	1.0000	90.09
51.5	1,214,773		0.0000	1.0000	90.09
52.5	1,253,366	24,618	0.0196	0.9804	90.09
53.5	28,374,663		0.0000	1.0000	88.32
54.5	38,998,170		0.0000	1.0000	88.32
55.5	39,986,553		0.0000	1.0000	88.32
56.5	13,005,874		0.0000	1.0000	88.32
57.5	59,432,346		0.0000	1.0000	88.32
58.5	60,820,282	557	0.0000	1.0000	88.32
59.5	59,761,303	747	0.0000	1.0000	88.32
60.5	2,094,297	87,761	0.0419	0.9581	88.32
61.5	22,663,762	8	0.0000	1.0000	84.62
62.5	21,213,491	61	0.0000	1.0000	84.62
63.5	21,215,934	289	0.0000	1.0000	84.62
64.5	46,353		0.0000	1.0000	84.62
65.5	1,102,303		0.0000	1.0000	84.62
66.5	1,102,303	1,673	0.0015	0.9985	84.62
67.5	1,100,630	37,140	0.0337	0.9663	84.49
68.5	1,259,440		0.0000	1.0000	81.64
69.5	290,689		0.0000	1.0000	81.64
70.5	962,463	168	0.0002	0.9998	81.64
71.5	962,295	15,230	0.0158	0.9842	81.62
72.5	1,042,298	993	0.0010	0.9990	80.33
73.5	946,072	2,053	0.0022	0.9978	80.25
74.5	683,176	7,508	0.0110	0.9890	80.08
75.5	675,668	32,767	0.0485	0.9515	79.20
76.5	642,901	1,310	0.0020	0.9980	75.36
77.5	1,531,686	8,017	0.0052	0.9948	75.20
78.5	1,523,669	299,242	0.1964	0.8036	74.81

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

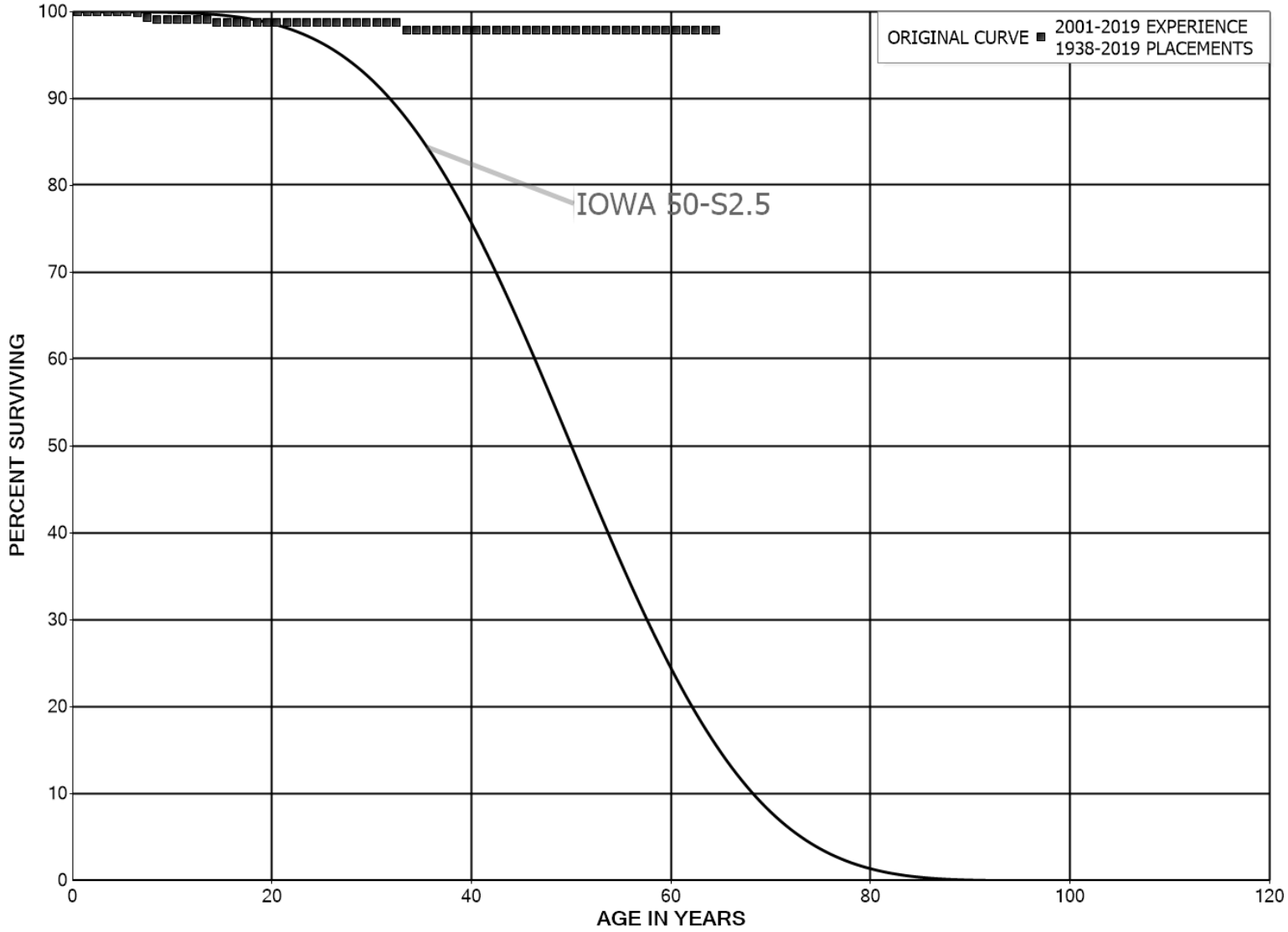
ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	1,224,427	291	0.0002	0.9998	60.12
80.5	1,522,508		0.0000	1.0000	60.10
81.5	632,413	2,303	0.0036	0.9964	60.10
82.5	648,868		0.0000	1.0000	59.89
83.5	648,868	31,252	0.0482	0.9518	59.89
84.5	601,981	10	0.0000	1.0000	57.00
85.5	722,814		0.0000	1.0000	57.00
86.5	722,814	13,485	0.0187	0.9813	57.00
87.5	709,329	153,014	0.2157	0.7843	55.94
88.5	556,315	264	0.0005	0.9995	43.87
89.5	329,027	4,352	0.0132	0.9868	43.85
90.5	306,175	11,276	0.0368	0.9632	43.27
91.5	294,898	11,132	0.0377	0.9623	41.68
92.5	283,767	1,273	0.0045	0.9955	40.10
93.5	282,494	4,366	0.0155	0.9845	39.92
94.5	278,128	221	0.0008	0.9992	39.31
95.5	277,906	1,967	0.0071	0.9929	39.27
96.5	275,939	42	0.0002	0.9998	39.00
97.5	3,804,626	42,906	0.0113	0.9887	38.99
98.5	3,761,720	15,091	0.0040	0.9960	38.55
99.5	3,616,599	191,754	0.0530	0.9470	38.40
100.5	3,424,846	6,012	0.0018	0.9982	36.36
101.5	96,405	5,167	0.0536	0.9464	36.30
102.5	91,238	2,967	0.0325	0.9675	34.35
103.5	88,271	309	0.0035	0.9965	33.23
104.5					33.12

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 361.20 MANHOLES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1938-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	14,379,651		0.0000	1.0000	100.00
0.5	10,176,887		0.0000	1.0000	100.00
1.5	10,661,285	0	0.0000	1.0000	100.00
2.5	11,952,425		0.0000	1.0000	100.00
3.5	12,083,028	911	0.0001	0.9999	100.00
4.5	7,585,455		0.0000	1.0000	99.99
5.5	5,573,639	6,667	0.0012	0.9988	99.99
6.5	4,589,383	27,566	0.0060	0.9940	99.87
7.5	4,569,090	10,961	0.0024	0.9976	99.27
8.5	5,066,097		0.0000	1.0000	99.03
9.5	5,304,644		0.0000	1.0000	99.03
10.5	5,838,060		0.0000	1.0000	99.03
11.5	5,353,439		0.0000	1.0000	99.03
12.5	4,555,554		0.0000	1.0000	99.03
13.5	4,114,028	12,188	0.0030	0.9970	99.03
14.5	2,635,311		0.0000	1.0000	98.74
15.5	2,105,291	0	0.0000	1.0000	98.74
16.5	2,247,105	472	0.0002	0.9998	98.74
17.5	2,934,821		0.0000	1.0000	98.72
18.5	2,849,242		0.0000	1.0000	98.72
19.5	2,782,656		0.0000	1.0000	98.72
20.5	2,425,509	0	0.0000	1.0000	98.72
21.5	1,772,096		0.0000	1.0000	98.72
22.5	970,343		0.0000	1.0000	98.72
23.5	1,299,611		0.0000	1.0000	98.72
24.5	1,741,110		0.0000	1.0000	98.72
25.5	2,636,710		0.0000	1.0000	98.72
26.5	3,361,749		0.0000	1.0000	98.72
27.5	3,450,899		0.0000	1.0000	98.72
28.5	3,240,536		0.0000	1.0000	98.72
29.5	2,574,979		0.0000	1.0000	98.72
30.5	1,538,799		0.0000	1.0000	98.72
31.5	1,635,548		0.0000	1.0000	98.72
32.5	1,551,747	13,277	0.0086	0.9914	98.72
33.5	1,328,056		0.0000	1.0000	97.88
34.5	1,038,030		0.0000	1.0000	97.88
35.5	1,093,592		0.0000	1.0000	97.88
36.5	1,326,879		0.0000	1.0000	97.88
37.5	1,450,927		0.0000	1.0000	97.88
38.5	1,304,196		0.0000	1.0000	97.88

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1938-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	994,944		0.0000	1.0000	97.88
40.5	2,263,935		0.0000	1.0000	97.88
41.5	2,043,826		0.0000	1.0000	97.88
42.5	2,216,232		0.0000	1.0000	97.88
43.5	2,406,018		0.0000	1.0000	97.88
44.5	2,040,304		0.0000	1.0000	97.88
45.5	2,008,665		0.0000	1.0000	97.88
46.5	1,708,150		0.0000	1.0000	97.88
47.5	301,817		0.0000	1.0000	97.88
48.5	301,817		0.0000	1.0000	97.88
49.5	170,327		0.0000	1.0000	97.88
50.5	201,568		0.0000	1.0000	97.88
51.5	166,180		0.0000	1.0000	97.88
52.5	172,781		0.0000	1.0000	97.88
53.5	1,995,623		0.0000	1.0000	97.88
54.5	1,827,036		0.0000	1.0000	97.88
55.5	1,951,871		0.0000	1.0000	97.88
56.5	131,436		0.0000	1.0000	97.88
57.5	10,950,272		0.0000	1.0000	97.88
58.5	10,950,272		0.0000	1.0000	97.88
59.5	10,825,437		0.0000	1.0000	97.88
60.5	89,564		0.0000	1.0000	97.88
61.5	89,564		0.0000	1.0000	97.88
62.5	89,564		0.0000	1.0000	97.88
63.5	89,564		0.0000	1.0000	97.88
64.5					97.88
65.5	100,437		0.0000		
66.5	100,437		0.0000		
67.5	123,426		0.0000		
68.5	167,059	22,989	0.1376		
69.5	43,633		0.0000		
70.5	84,331		0.0000		
71.5	84,331		0.0000		
72.5	90,699		0.0000		
73.5	84,331		0.0000		
74.5	43,633		0.0000		
75.5	43,633		0.0000		
76.5	43,633		0.0000		
77.5	306,691		0.0000		
78.5	306,691		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

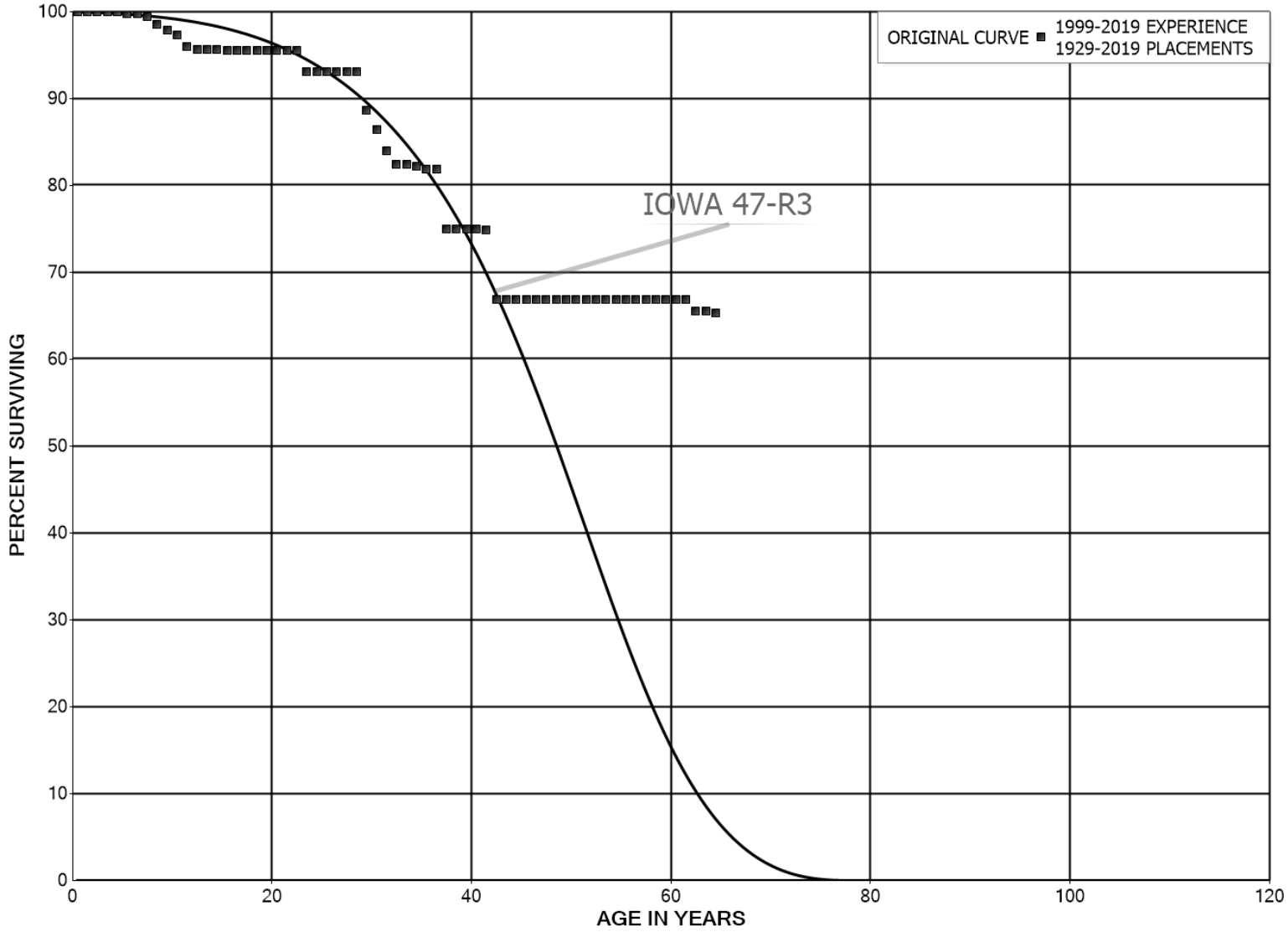
ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1938-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	306,691	1,171	0.0038		
80.5	263,058		0.0000		
81.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 363.00 SERVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1929-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	10,615,796	0	0.0000	1.0000	100.00
0.5	10,038,138	0	0.0000	1.0000	100.00
1.5	9,510,472	60	0.0000	1.0000	100.00
2.5	8,790,677	5,668	0.0006	0.9994	100.00
3.5	8,679,530	421	0.0000	1.0000	99.93
4.5	7,932,683	12,635	0.0016	0.9984	99.93
5.5	6,966,530	2,890	0.0004	0.9996	99.77
6.5	8,411,000	31,963	0.0038	0.9962	99.73
7.5	8,278,555	65,894	0.0080	0.9920	99.35
8.5	8,313,922	64,649	0.0078	0.9922	98.56
9.5	8,351,147	42,617	0.0051	0.9949	97.79
10.5	6,470,010	87,729	0.0136	0.9864	97.29
11.5	6,246,021	19,892	0.0032	0.9968	95.98
12.5	5,858,877	0	0.0000	1.0000	95.67
13.5	4,698,450	4,942	0.0011	0.9989	95.67
14.5	4,095,435	871	0.0002	0.9998	95.57
15.5	3,284,377		0.0000	1.0000	95.55
16.5	3,511,888	0	0.0000	1.0000	95.55
17.5	3,953,464	0	0.0000	1.0000	95.55
18.5	3,909,166	55	0.0000	1.0000	95.55
19.5	3,630,733		0.0000	1.0000	95.55
20.5	3,925,137		0.0000	1.0000	95.55
21.5	3,646,749		0.0000	1.0000	95.55
22.5	3,395,484	87,997	0.0259	0.9741	95.55
23.5	3,780,922		0.0000	1.0000	93.07
24.5	4,115,954	497	0.0001	0.9999	93.07
25.5	5,003,579		0.0000	1.0000	93.06
26.5	5,176,777		0.0000	1.0000	93.06
27.5	4,635,070		0.0000	1.0000	93.06
28.5	4,421,930	209,578	0.0474	0.9526	93.06
29.5	3,596,999	92,585	0.0257	0.9743	88.65
30.5	2,947,708	80,733	0.0274	0.9726	86.37
31.5	2,783,645	51,927	0.0187	0.9813	84.00
32.5	2,491,265	1,241	0.0005	0.9995	82.43
33.5	2,228,511	4,871	0.0022	0.9978	82.39
34.5	1,965,612	8,461	0.0043	0.9957	82.21
35.5	1,925,423	503	0.0003	0.9997	81.86
36.5	1,973,278	167,021	0.0846	0.9154	81.84
37.5	1,839,375	192	0.0001	0.9999	74.91
38.5	1,657,395		0.0000	1.0000	74.90

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,207,182		0.0000	1.0000	74.90
40.5	1,197,802	385	0.0003	0.9997	74.90
41.5	1,022,673	110,064	0.1076	0.8924	74.88
42.5	886,687		0.0000	1.0000	66.82
43.5	1,408,938		0.0000	1.0000	66.82
44.5	900,914		0.0000	1.0000	66.82
45.5	855,938		0.0000	1.0000	66.82
46.5	736,586		0.0000	1.0000	66.82
47.5	156,414		0.0000	1.0000	66.82
48.5	155,860		0.0000	1.0000	66.82
49.5	82,277		0.0000	1.0000	66.82
50.5	145,022		0.0000	1.0000	66.82
51.5	132,653		0.0000	1.0000	66.82
52.5	134,754	0	0.0000	1.0000	66.82
53.5	137,757		0.0000	1.0000	66.82
54.5	20,119		0.0000	1.0000	66.82
55.5	100,869		0.0000	1.0000	66.82
56.5	100,869		0.0000	1.0000	66.82
57.5	97,866		0.0000	1.0000	66.82
58.5	256,316		0.0000	1.0000	66.82
59.5	180,162	20	0.0001	0.9999	66.82
60.5	228,822		0.0000	1.0000	66.81
61.5	228,822	4,595	0.0201	0.9799	66.81
62.5	50,781		0.0000	1.0000	65.47
63.5	50,781	162	0.0032	0.9968	65.47
64.5					65.26
65.5	60,144		0.0000		
66.5	60,144		0.0000		
67.5	60,144		0.0000		
68.5	70,211		0.0000		
69.5	13,932	819	0.0588		
70.5	36,101		0.0000		
71.5	36,101	4,521	0.1252		
72.5	31,580	1,251	0.0396		
73.5	30,329	442	0.0146		
74.5	6,899	644	0.0933		
75.5	6,255		0.0000		
76.5	6,255		0.0000		
77.5	151,010		0.0000		
78.5	151,010		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

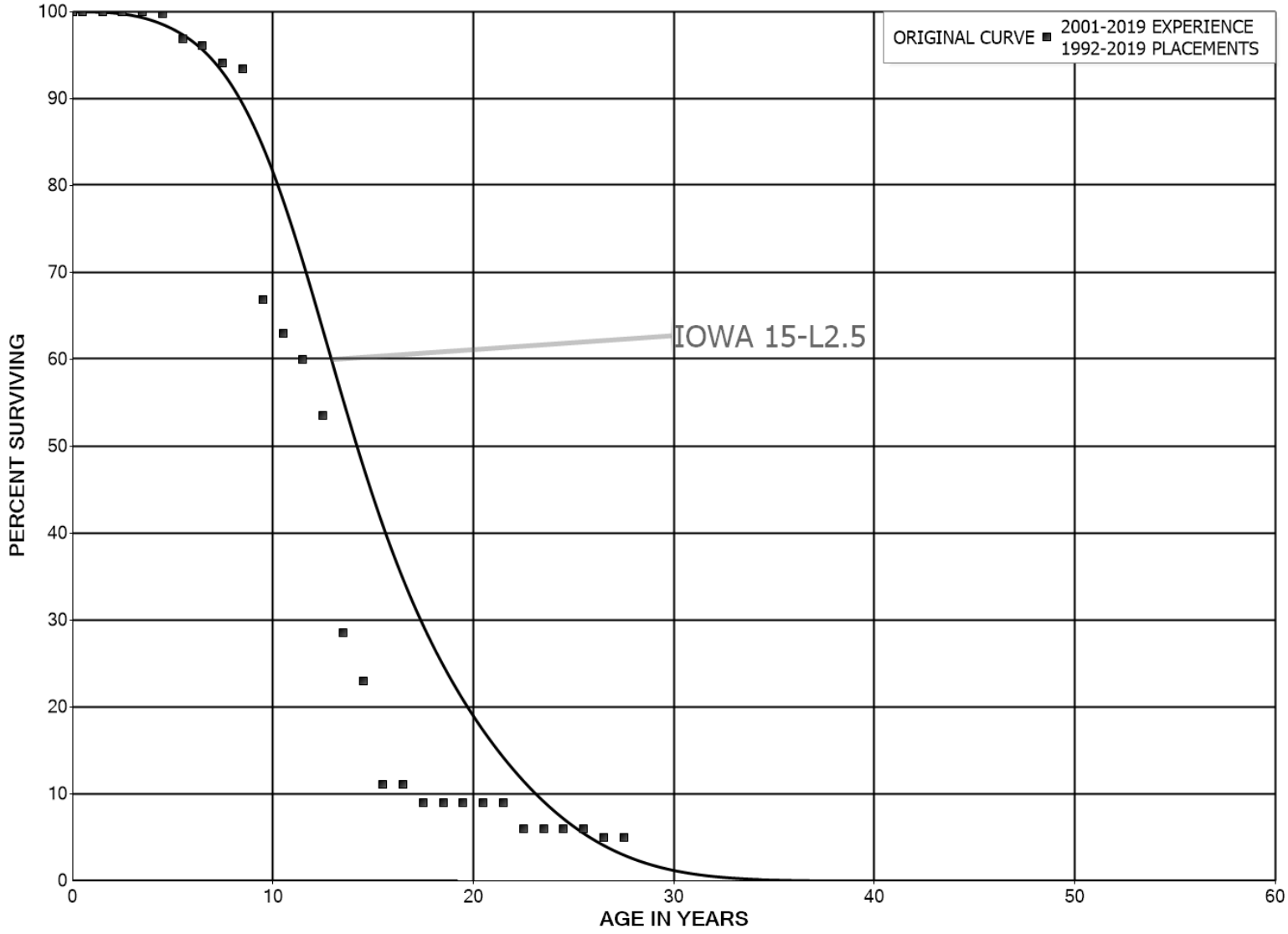
ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	151,010		0.0000		
80.5	144,755	1,628	0.0112		
81.5					
82.5	717		0.0000		
83.5	717		0.0000		
84.5	717		0.0000		
85.5	717		0.0000		
86.5	717		0.0000		
87.5	717		0.0000		
88.5	717		0.0000		
89.5	717		0.0000		
90.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 364.00 FLOW MEASURING DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

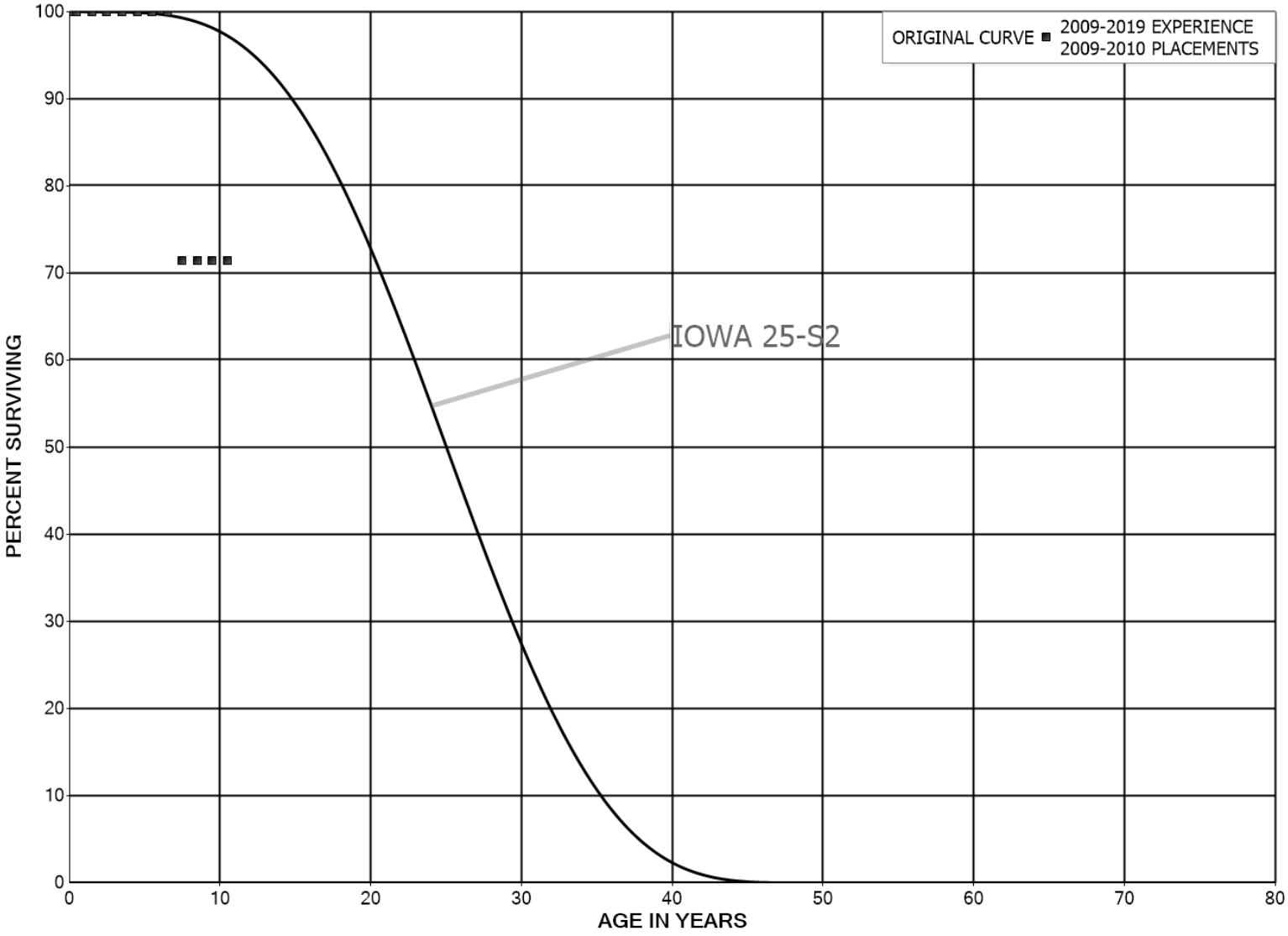
ACCOUNT 364.00 FLOW MEASURING DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1992-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,359,184		0.0000	1.0000	100.00
0.5	993,961		0.0000	1.0000	100.00
1.5	1,007,023		0.0000	1.0000	100.00
2.5	1,088,761		0.0000	1.0000	100.00
3.5	829,368	2,564	0.0031	0.9969	100.00
4.5	790,917	22,463	0.0284	0.9716	99.69
5.5	745,466	5,882	0.0079	0.9921	96.86
6.5	575,156	12,254	0.0213	0.9787	96.10
7.5	576,785	4,337	0.0075	0.9925	94.05
8.5	639,652	181,670	0.2840	0.7160	93.34
9.5	332,968	19,182	0.0576	0.9424	66.83
10.5	221,704	10,816	0.0488	0.9512	62.98
11.5	90,287	9,617	0.1065	0.8935	59.91
12.5	71,639	33,466	0.4671	0.5329	53.53
13.5	31,704	6,133	0.1934	0.8066	28.52
14.5	16,849	8,739	0.5187	0.4813	23.00
15.5	16,281		0.0000	1.0000	11.07
16.5	16,281	3,203	0.1967	0.8033	11.07
17.5	13,078		0.0000	1.0000	8.90
18.5	13,078		0.0000	1.0000	8.90
19.5	13,078		0.0000	1.0000	8.90
20.5	13,078		0.0000	1.0000	8.90
21.5	13,078	4,272	0.3266	0.6734	8.90
22.5	8,806		0.0000	1.0000	5.99
23.5	8,806		0.0000	1.0000	5.99
24.5	8,806		0.0000	1.0000	5.99
25.5	8,806	1,522	0.1728	0.8272	5.99
26.5	7,285		0.0000	1.0000	4.95
27.5					4.95

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

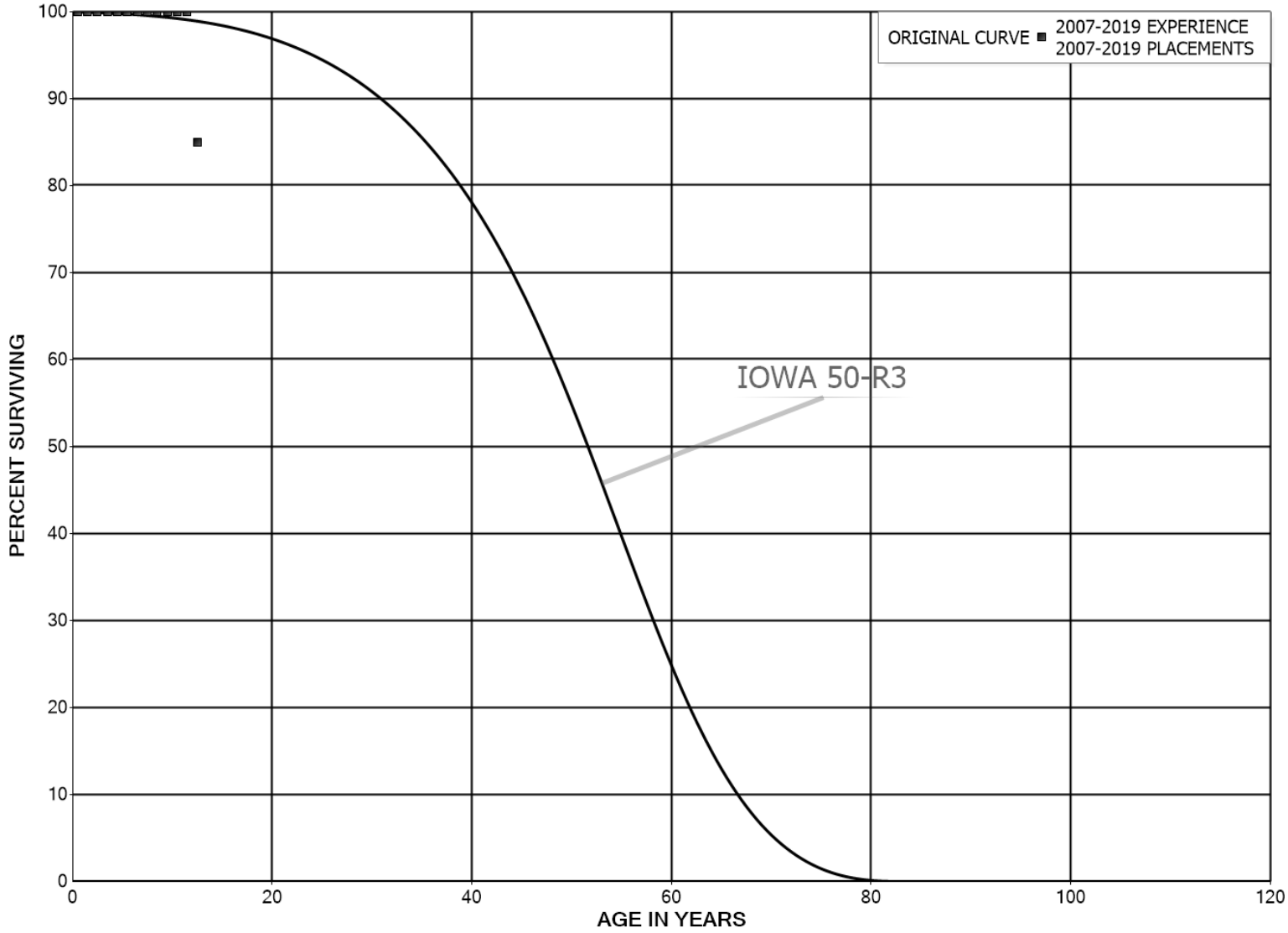
ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2009-2010 EXPERIENCE BAND 2009-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	20,918		0.0000	1.0000	100.00
0.5	20,918		0.0000	1.0000	100.00
1.5	20,918		0.0000	1.0000	100.00
2.5	20,918		0.0000	1.0000	100.00
3.5	20,918		0.0000	1.0000	100.00
4.5	20,918		0.0000	1.0000	100.00
5.5	20,918		0.0000	1.0000	100.00
6.5	20,918	5,980	0.2859	0.7141	100.00
7.5	14,938		0.0000	1.0000	71.41
8.5	14,938		0.0000	1.0000	71.41
9.5	14,938		0.0000	1.0000	71.41
10.5					71.41

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 370.00 RECEIVING WELLS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

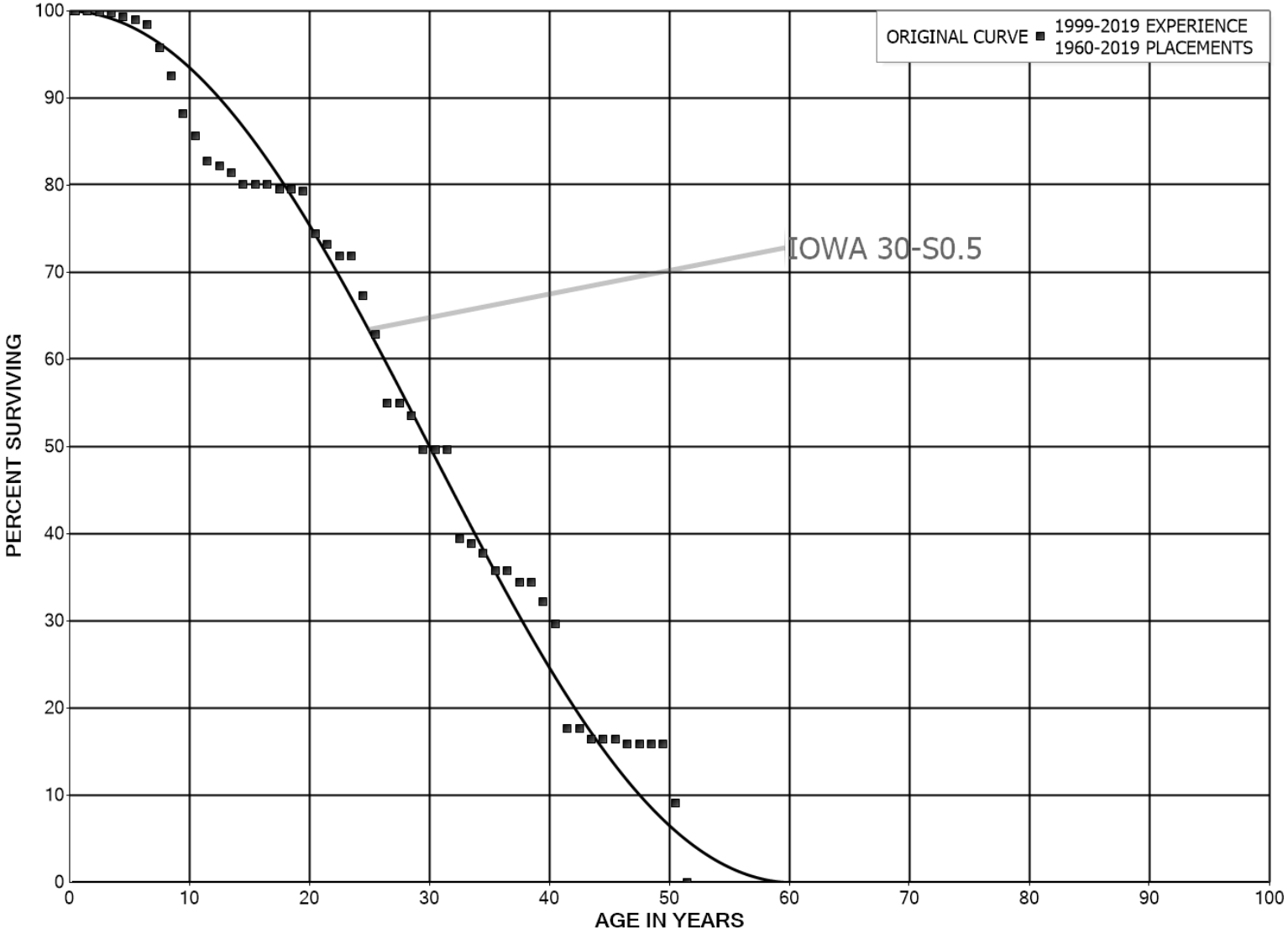
ACCOUNT 370.00 RECEIVING WELLS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2007-2019 EXPERIENCE BAND 2007-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	121,180		0.0000	1.0000	100.00
0.5	111,148		0.0000	1.0000	100.00
1.5	111,148		0.0000	1.0000	100.00
2.5	132,949		0.0000	1.0000	100.00
3.5	132,949		0.0000	1.0000	100.00
4.5	132,949		0.0000	1.0000	100.00
5.5	132,949		0.0000	1.0000	100.00
6.5	99,482		0.0000	1.0000	100.00
7.5	99,482		0.0000	1.0000	100.00
8.5	99,482		0.0000	1.0000	100.00
9.5	99,482		0.0000	1.0000	100.00
10.5	7,370		0.0000	1.0000	100.00
11.5	7,370	1,109	0.1505	0.8495	100.00
12.5					84.95

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 371.00 PUMPING EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1960-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	13,928,914		0.0000	1.0000	100.00
0.5	8,653,630	5,419	0.0006	0.9994	100.00
1.5	11,021,964	12,306	0.0011	0.9989	99.94
2.5	10,781,219	12,096	0.0011	0.9989	99.83
3.5	9,453,412	44,345	0.0047	0.9953	99.71
4.5	6,817,321	23,246	0.0034	0.9966	99.25
5.5	5,785,361	27,560	0.0048	0.9952	98.91
6.5	5,413,591	148,677	0.0275	0.9725	98.44
7.5	3,768,518	126,794	0.0336	0.9664	95.73
8.5	3,446,810	160,001	0.0464	0.9536	92.51
9.5	2,549,487	73,710	0.0289	0.9711	88.22
10.5	1,455,129	50,056	0.0344	0.9656	85.67
11.5	1,043,502	7,445	0.0071	0.9929	82.72
12.5	1,137,255	10,025	0.0088	0.9912	82.13
13.5	837,345	14,096	0.0168	0.9832	81.41
14.5	784,395		0.0000	1.0000	80.04
15.5	677,887		0.0000	1.0000	80.04
16.5	534,434	3,610	0.0068	0.9932	80.04
17.5	610,401	101	0.0002	0.9998	79.50
18.5	664,971	1,413	0.0021	0.9979	79.48
19.5	663,558	41,426	0.0624	0.9376	79.31
20.5	588,736	9,514	0.0162	0.9838	74.36
21.5	638,927	11,409	0.0179	0.9821	73.16
22.5	599,786		0.0000	1.0000	71.85
23.5	517,501	33,177	0.0641	0.9359	71.85
24.5	484,324	31,555	0.0652	0.9348	67.25
25.5	497,723	62,415	0.1254	0.8746	62.87
26.5	428,133		0.0000	1.0000	54.98
27.5	312,603	8,673	0.0277	0.9723	54.98
28.5	241,647	17,595	0.0728	0.9272	53.46
29.5	235,281		0.0000	1.0000	49.56
30.5	280,168		0.0000	1.0000	49.56
31.5	280,168	57,666	0.2058	0.7942	49.56
32.5	222,502	2,887	0.0130	0.9870	39.36
33.5	140,599	3,932	0.0280	0.9720	38.85
34.5	136,159	7,170	0.0527	0.9473	37.77
35.5	183,946		0.0000	1.0000	35.78
36.5	183,946	7,008	0.0381	0.9619	35.78
37.5	176,938		0.0000	1.0000	34.41
38.5	127,299	8,408	0.0660	0.9340	34.41

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

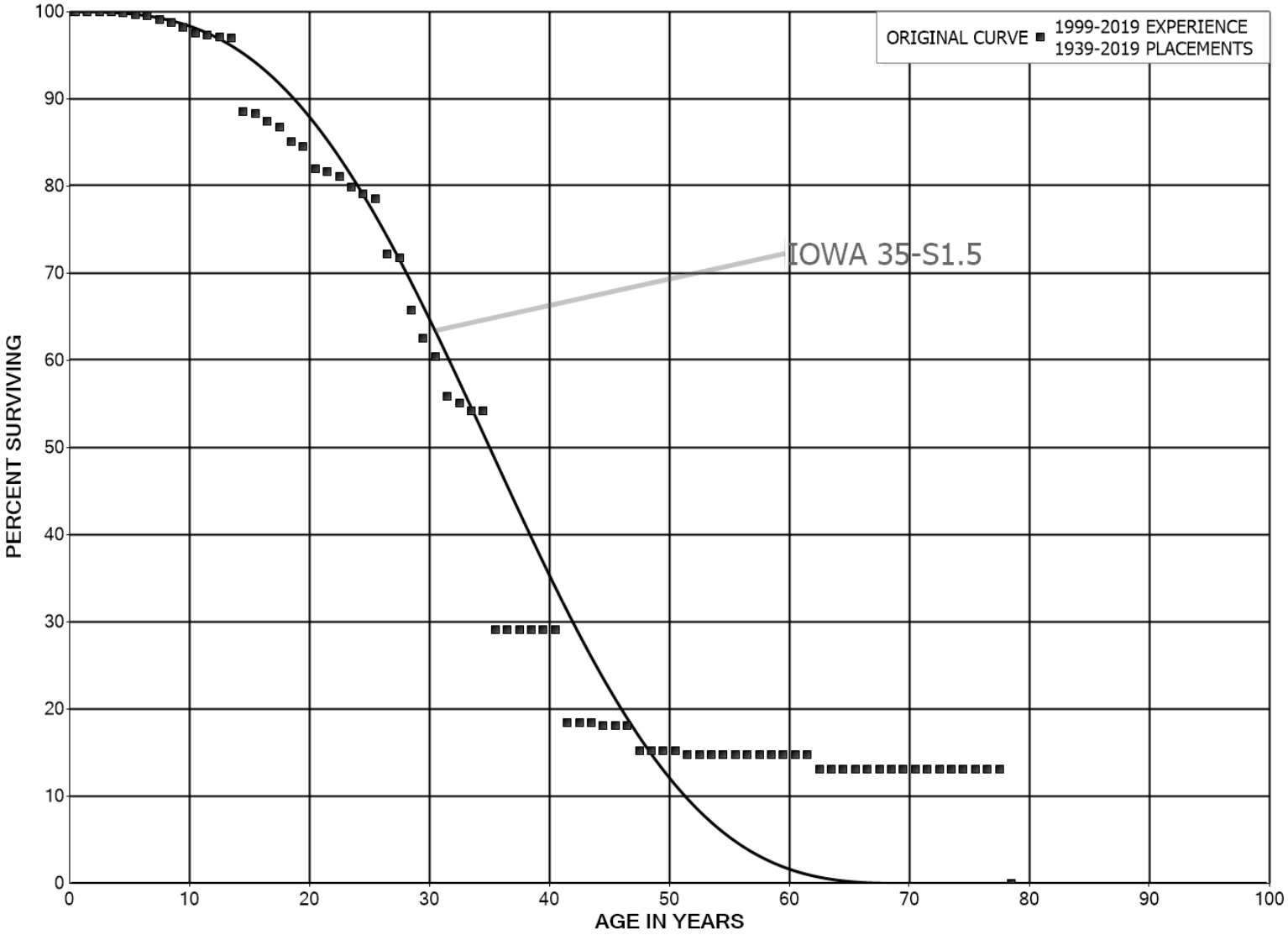
ACCOUNT 371.00 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1960-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	128,004	9,910	0.0774	0.9226	32.14
40.5	140,361	56,891	0.4053	0.5947	29.65
41.5	83,470		0.0000	1.0000	17.63
42.5	83,470	6,122	0.0733	0.9267	17.63
43.5	28,842		0.0000	1.0000	16.34
44.5	28,842		0.0000	1.0000	16.34
45.5	28,842	860	0.0298	0.9702	16.34
46.5	27,983		0.0000	1.0000	15.85
47.5	21,408		0.0000	1.0000	15.85
48.5	5,141		0.0000	1.0000	15.85
49.5	5,141	2,187	0.4255	0.5745	15.85
50.5	2,953	2,953	1.0000		9.11
51.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 380.00 TREATMENT EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	52,484,979		0.0000	1.0000	100.00
0.5	52,338,297		0.0000	1.0000	100.00
1.5	64,377,580	1,853	0.0000	1.0000	100.00
2.5	61,280,085	2,456	0.0000	1.0000	100.00
3.5	56,645,719	97,216	0.0017	0.9983	99.99
4.5	44,542,853	95,360	0.0021	0.9979	99.82
5.5	39,192,994	29,279	0.0007	0.9993	99.61
6.5	37,993,990	195,343	0.0051	0.9949	99.53
7.5	37,038,634	104,008	0.0028	0.9972	99.02
8.5	38,046,057	237,211	0.0062	0.9938	98.74
9.5	28,856,102	179,693	0.0062	0.9938	98.13
10.5	11,015,164	26,343	0.0024	0.9976	97.52
11.5	15,100,040	30,352	0.0020	0.9980	97.28
12.5	16,280,292	28,816	0.0018	0.9982	97.09
13.5	16,807,417	1,468,058	0.0873	0.9127	96.92
14.5	14,676,816	22,218	0.0015	0.9985	88.45
15.5	11,808,330	121,942	0.0103	0.9897	88.32
16.5	11,627,778	92,492	0.0080	0.9920	87.41
17.5	12,550,432	231,211	0.0184	0.9816	86.71
18.5	10,724,551	78,054	0.0073	0.9927	85.11
19.5	10,812,422	322,982	0.0299	0.9701	84.49
20.5	9,468,414	37,906	0.0040	0.9960	81.97
21.5	9,609,732	62,020	0.0065	0.9935	81.64
22.5	9,543,450	153,592	0.0161	0.9839	81.11
23.5	9,334,263	87,607	0.0094	0.9906	79.81
24.5	9,070,811	59,133	0.0065	0.9935	79.06
25.5	8,792,217	707,485	0.0805	0.9195	78.54
26.5	4,703,706	32,521	0.0069	0.9931	72.22
27.5	4,778,474	397,707	0.0832	0.9168	71.72
28.5	6,059,797	298,086	0.0492	0.9508	65.75
29.5	6,184,153	215,062	0.0348	0.9652	62.52
30.5	5,152,304	387,965	0.0753	0.9247	60.35
31.5	5,356,247	72,674	0.0136	0.9864	55.80
32.5	3,421,800	52,448	0.0153	0.9847	55.05
33.5	2,753,091		0.0000	1.0000	54.20
34.5	2,272,767	1,055,181	0.4643	0.5357	54.20
35.5	635,826		0.0000	1.0000	29.04
36.5	779,480		0.0000	1.0000	29.04
37.5	801,627		0.0000	1.0000	29.04
38.5	778,140		0.0000	1.0000	29.04

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

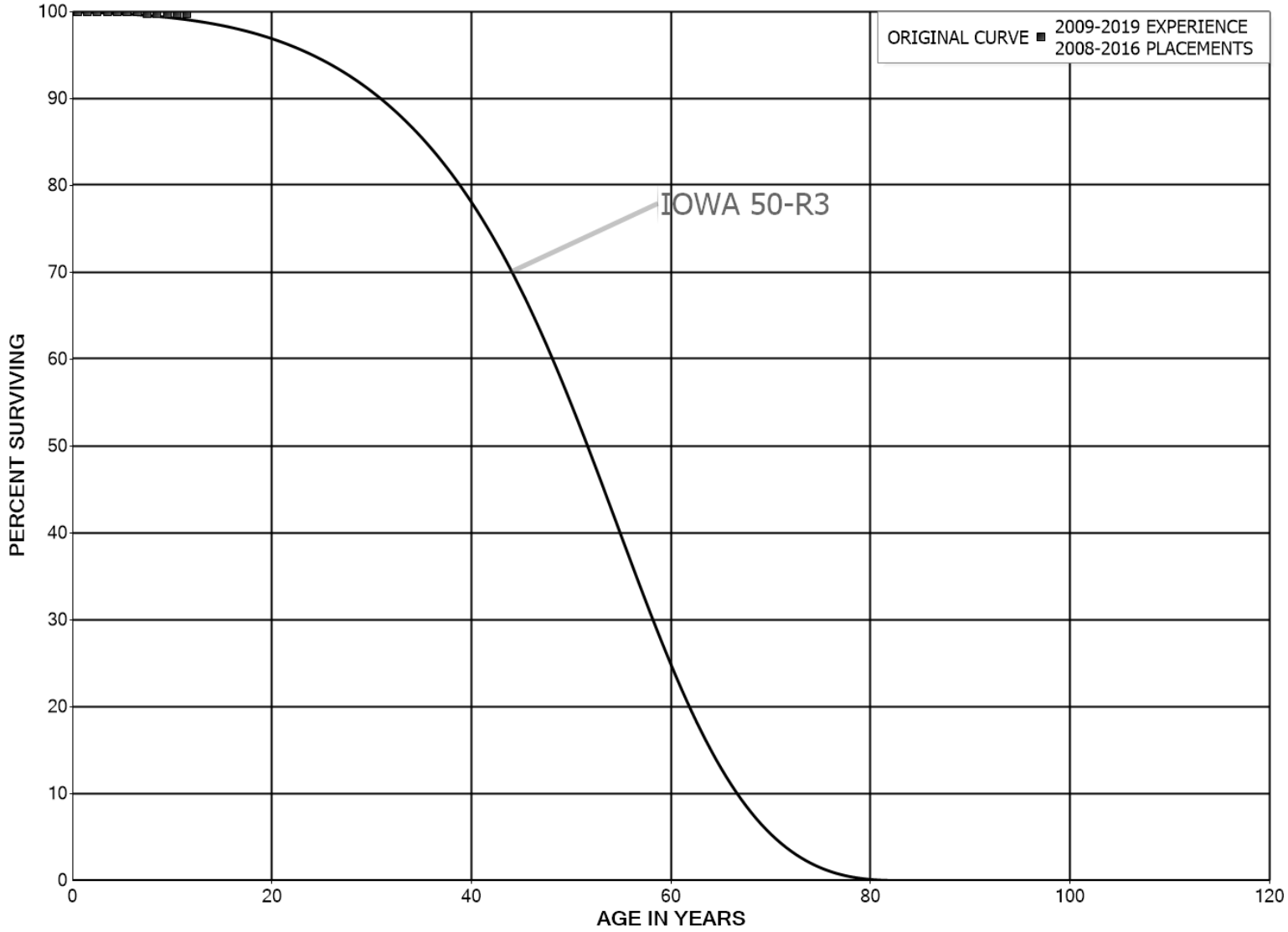
ACCOUNT 380.00 TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019 EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	778,140	411	0.0005	0.9995	29.04
40.5	777,730	285,407	0.3670	0.6330	29.02
41.5	15,823,498		0.0000	1.0000	18.37
42.5	15,823,498		0.0000	1.0000	18.37
43.5	15,823,498	268,317	0.0170	0.9830	18.37
44.5	515,644		0.0000	1.0000	18.06
45.5	515,644		0.0000	1.0000	18.06
46.5	371,038	60,316	0.1626	0.8374	18.06
47.5	288,575		0.0000	1.0000	15.12
48.5	288,575		0.0000	1.0000	15.12
49.5	288,575		0.0000	1.0000	15.12
50.5	288,575	6,818	0.0236	0.9764	15.12
51.5	281,757	315	0.0011	0.9989	14.77
52.5	107,182		0.0000	1.0000	14.75
53.5	107,182	462	0.0043	0.9957	14.75
54.5	23,321		0.0000	1.0000	14.69
55.5	23,321		0.0000	1.0000	14.69
56.5	298,010		0.0000	1.0000	14.69
57.5	298,010		0.0000	1.0000	14.69
58.5	298,010		0.0000	1.0000	14.69
59.5	25,215		0.0000	1.0000	14.69
60.5	25,215		0.0000	1.0000	14.69
61.5	25,215	2,761	0.1095	0.8905	14.69
62.5	1,894		0.0000	1.0000	13.08
63.5	1,894		0.0000	1.0000	13.08
64.5	1,894		0.0000	1.0000	13.08
65.5	1,894		0.0000	1.0000	13.08
66.5	1,894		0.0000	1.0000	13.08
67.5	1,894		0.0000	1.0000	13.08
68.5	1,894		0.0000	1.0000	13.08
69.5	1,894		0.0000	1.0000	13.08
70.5	1,894		0.0000	1.0000	13.08
71.5	1,894		0.0000	1.0000	13.08
72.5	1,894		0.0000	1.0000	13.08
73.5	1,894		0.0000	1.0000	13.08
74.5	1,894		0.0000	1.0000	13.08
75.5	1,894		0.0000	1.0000	13.08
76.5	1,894		0.0000	1.0000	13.08
77.5	1,894	1,894	1.0000		13.08
78.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 381.00 PLANT SEWERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

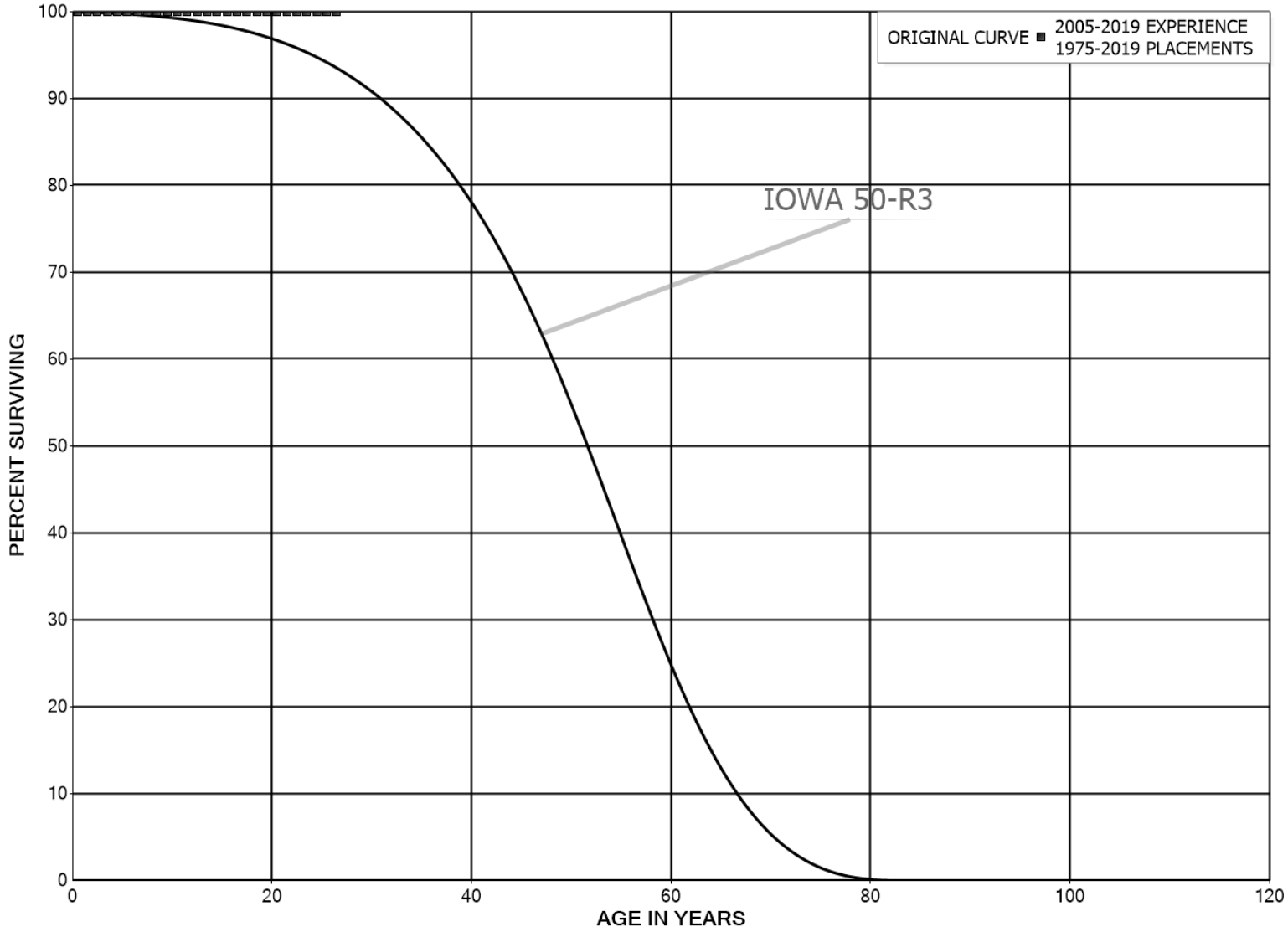
ACCOUNT 381.00 PLANT SEWERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2008-2016 EXPERIENCE BAND 2009-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,524,134		0.0000	1.0000	100.00
0.5	6,227,961		0.0000	1.0000	100.00
1.5	6,227,961		0.0000	1.0000	100.00
2.5	6,227,961		0.0000	1.0000	100.00
3.5	6,182,721		0.0000	1.0000	100.00
4.5	6,175,263		0.0000	1.0000	100.00
5.5	5,940,945		0.0000	1.0000	100.00
6.5	5,940,945	13,300	0.0022	0.9978	100.00
7.5	5,925,961	2,120	0.0004	0.9996	99.78
8.5	5,917,243		0.0000	1.0000	99.74
9.5	4,729,279		0.0000	1.0000	99.74
10.5	294,412		0.0000	1.0000	99.74
11.5					99.74

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 382.00 OUTFALL SEWER LINES
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1975-2019 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,700,716		0.0000	1.0000	100.00
0.5	1,605,061		0.0000	1.0000	100.00
1.5	360,675		0.0000	1.0000	100.00
2.5	355,425		0.0000	1.0000	100.00
3.5	355,425		0.0000	1.0000	100.00
4.5	355,425		0.0000	1.0000	100.00
5.5	255,003		0.0000	1.0000	100.00
6.5	264,243		0.0000	1.0000	100.00
7.5	265,939		0.0000	1.0000	100.00
8.5	265,939		0.0000	1.0000	100.00
9.5	238,111		0.0000	1.0000	100.00
10.5	212,060		0.0000	1.0000	100.00
11.5	244,789	6	0.0000	1.0000	100.00
12.5	244,783		0.0000	1.0000	100.00
13.5	43,666		0.0000	1.0000	100.00
14.5	34,425		0.0000	1.0000	100.00
15.5	32,729		0.0000	1.0000	100.00
16.5	32,729		0.0000	1.0000	100.00
17.5	32,729		0.0000	1.0000	100.00
18.5	32,729		0.0000	1.0000	100.00
19.5	32,729		0.0000	1.0000	100.00
20.5	32,729		0.0000	1.0000	100.00
21.5	202,476		0.0000	1.0000	100.00
22.5	202,476		0.0000	1.0000	100.00
23.5	202,476		0.0000	1.0000	100.00
24.5	202,476		0.0000	1.0000	100.00
25.5	202,476		0.0000	1.0000	100.00
26.5					100.00
27.5					
28.5					
29.5					
30.5					
31.5					
32.5					
33.5					
34.5					
35.5					
36.5	4,984		0.0000		
37.5	4,984		0.0000		
38.5	4,984		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

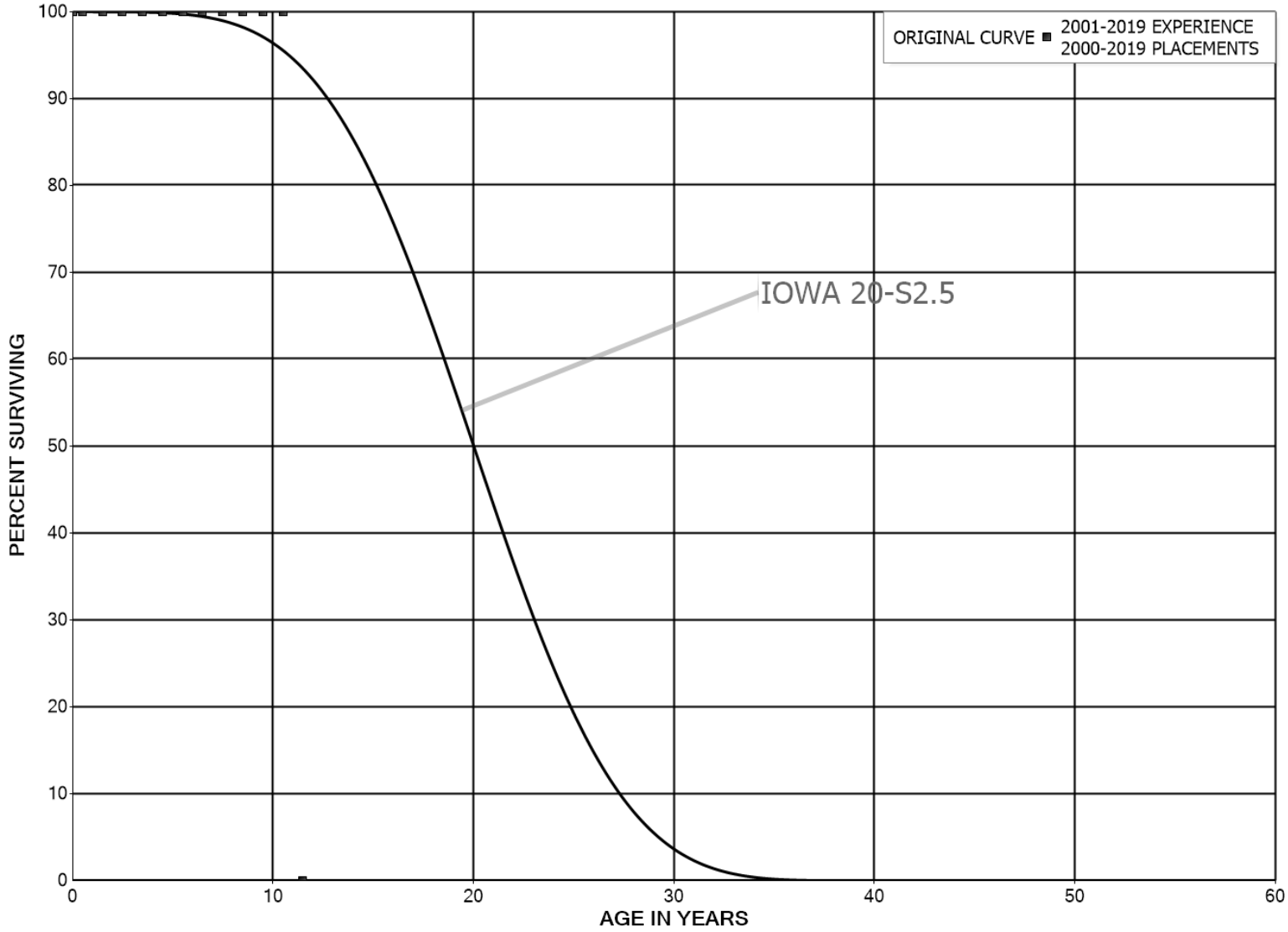
ACCOUNT 382.00 OUTFALL SEWER LINES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1975-2019 EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,984		0.0000		
40.5	4,984		0.0000		
41.5	4,984		0.0000		
42.5	4,984		0.0000		
43.5	4,984		0.0000		
44.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

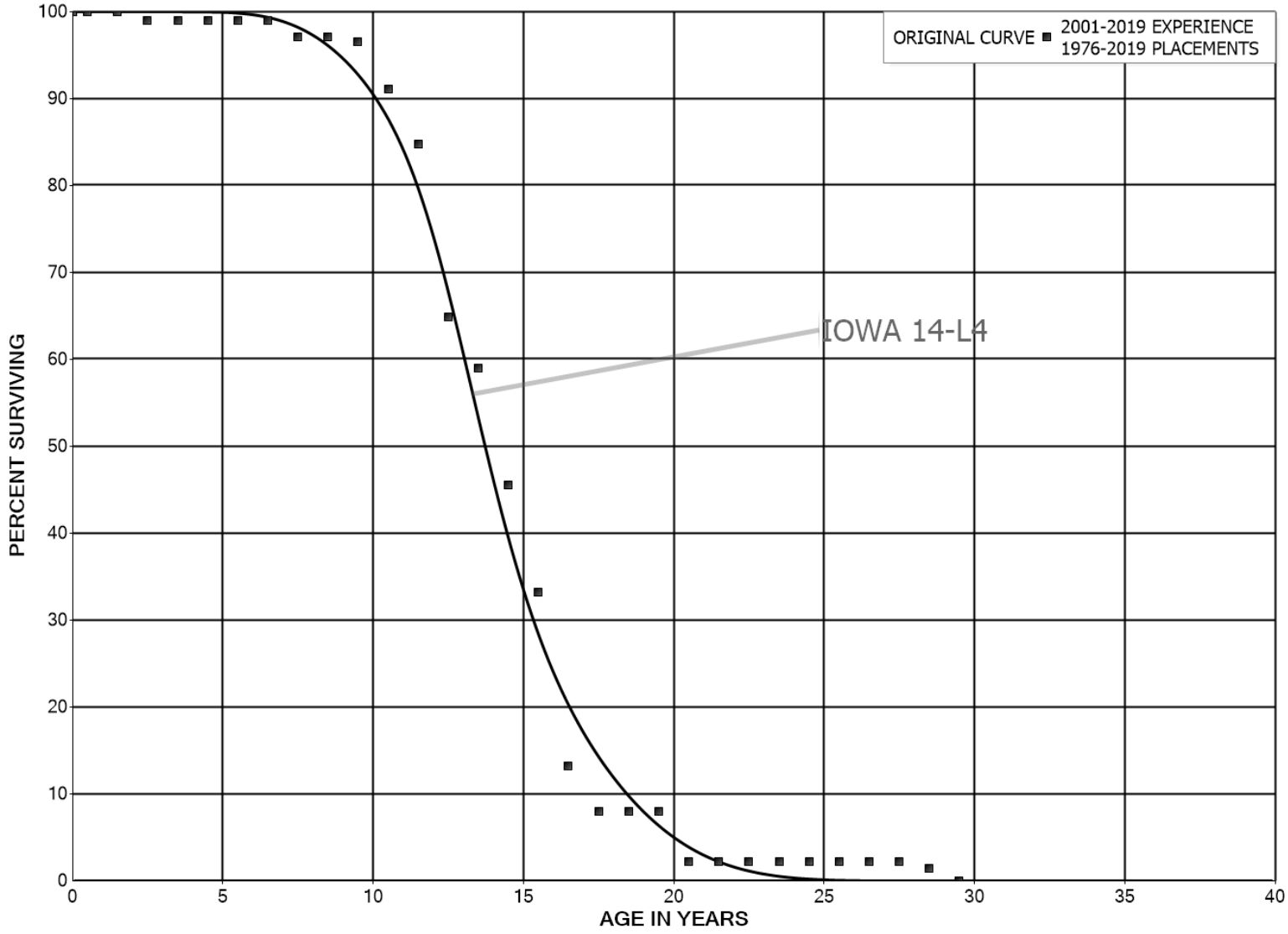
ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 2000-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	737,756		0.0000	1.0000	100.00
0.5	437,340		0.0000	1.0000	100.00
1.5	405,165		0.0000	1.0000	100.00
2.5	4,547,918		0.0000	1.0000	100.00
3.5	4,547,918		0.0000	1.0000	100.00
4.5	4,547,918	2,997	0.0007	0.9993	100.00
5.5	4,544,921		0.0000	1.0000	99.93
6.5	393,353		0.0000	1.0000	99.93
7.5	393,353		0.0000	1.0000	99.93
8.5	281,642		0.0000	1.0000	99.93
9.5	8,492		0.0000	1.0000	99.93
10.5	8,492	8,492	1.0000		99.93
11.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 391.00 TRANSPORTATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

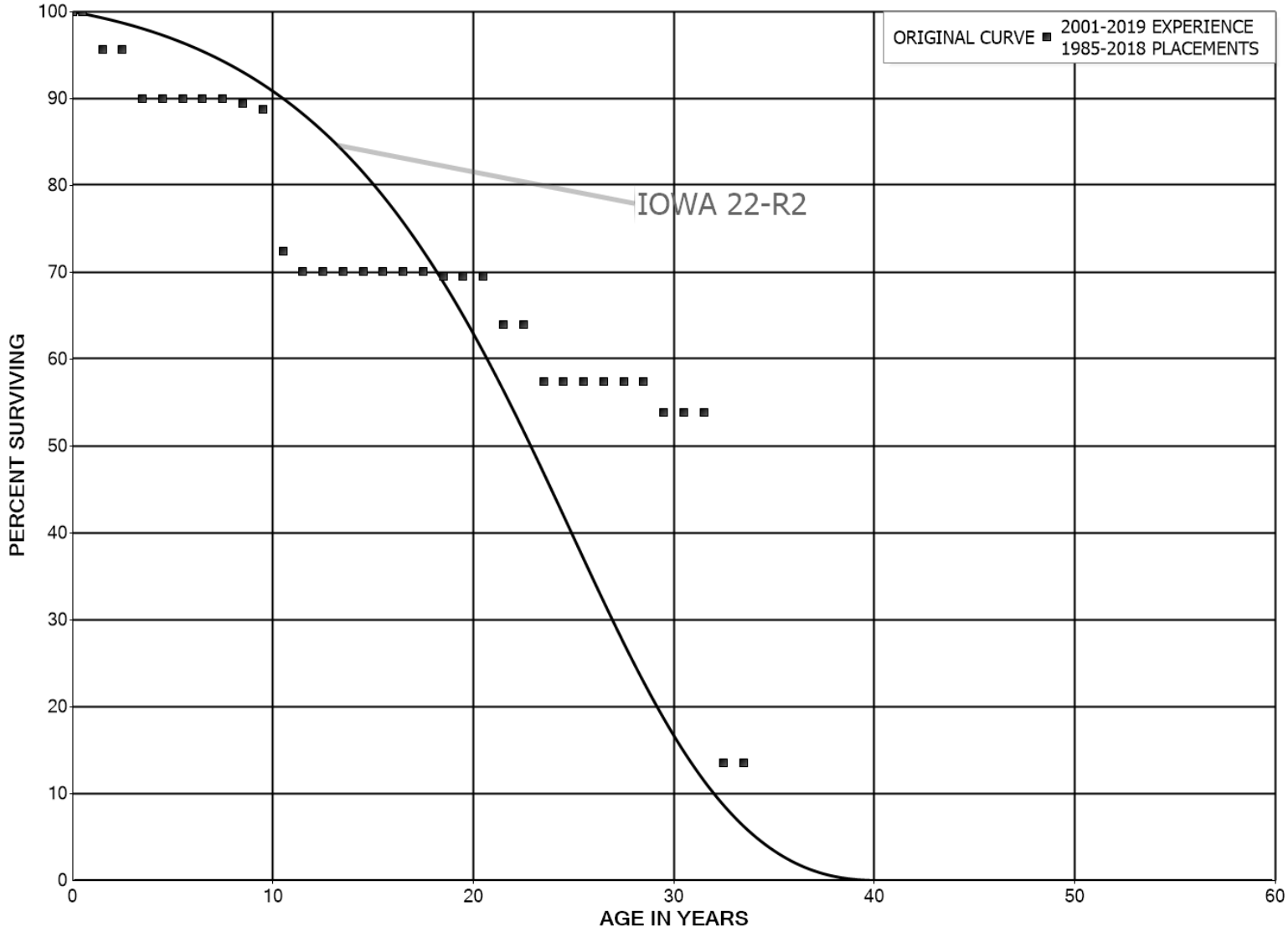
ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1976-2019 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,168,919		0.0000	1.0000	100.00
0.5	3,692,372		0.0000	1.0000	100.00
1.5	1,458,511	14,523	0.0100	0.9900	100.00
2.5	2,332,879		0.0000	1.0000	99.00
3.5	2,514,168		0.0000	1.0000	99.00
4.5	1,930,107		0.0000	1.0000	99.00
5.5	1,664,209		0.0000	1.0000	99.00
6.5	1,677,203	32,676	0.0195	0.9805	99.00
7.5	1,535,566		0.0000	1.0000	97.08
8.5	1,373,777	8,793	0.0064	0.9936	97.08
9.5	1,545,830	87,008	0.0563	0.9437	96.45
10.5	879,899	61,030	0.0694	0.9306	91.03
11.5	743,329	174,600	0.2349	0.7651	84.71
12.5	440,822	40,215	0.0912	0.9088	64.81
13.5	348,542	79,500	0.2281	0.7719	58.90
14.5	276,542	75,000	0.2712	0.7288	45.47
15.5	195,354	117,872	0.6034	0.3966	33.14
16.5	51,900	20,700	0.3988	0.6012	13.14
17.5	31,200		0.0000	1.0000	7.90
18.5	32,855		0.0000	1.0000	7.90
19.5	32,855	23,700	0.7214	0.2786	7.90
20.5	9,155		0.0000	1.0000	2.20
21.5	9,155		0.0000	1.0000	2.20
22.5	9,155		0.0000	1.0000	2.20
23.5	9,155		0.0000	1.0000	2.20
24.5	14,155		0.0000	1.0000	2.20
25.5	14,155		0.0000	1.0000	2.20
26.5	14,155		0.0000	1.0000	2.20
27.5	14,155	5,000	0.3532	0.6468	2.20
28.5	9,155	9,155	1.0000		1.42
29.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS
ACCOUNT 395.00 POWER OPERATED EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1985-2018 EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	192,967		0.0000	1.0000	100.00
0.5	192,967	8,551	0.0443	0.9557	100.00
1.5	127,706		0.0000	1.0000	95.57
2.5	255,380	14,864	0.0582	0.9418	95.57
3.5	324,176		0.0000	1.0000	90.01
4.5	885,603		0.0000	1.0000	90.01
5.5	967,489		0.0000	1.0000	90.01
6.5	1,410,131		0.0000	1.0000	90.01
7.5	1,250,710	8,033	0.0064	0.9936	90.01
8.5	871,073	6,988	0.0080	0.9920	89.43
9.5	536,633	98,717	0.1840	0.8160	88.71
10.5	191,853	6,125	0.0319	0.9681	72.39
11.5	137,458		0.0000	1.0000	70.08
12.5	190,308		0.0000	1.0000	70.08
13.5	169,091		0.0000	1.0000	70.08
14.5	169,091		0.0000	1.0000	70.08
15.5	169,587		0.0000	1.0000	70.08
16.5	190,470		0.0000	1.0000	70.08
17.5	117,685	875	0.0074	0.9926	70.08
18.5	116,810		0.0000	1.0000	69.56
19.5	116,810		0.0000	1.0000	69.56
20.5	124,335	9,999	0.0804	0.9196	69.56
21.5	124,336		0.0000	1.0000	63.97
22.5	124,336	12,782	0.1028	0.8972	63.97
23.5	111,554		0.0000	1.0000	57.39
24.5	111,554		0.0000	1.0000	57.39
25.5	111,554		0.0000	1.0000	57.39
26.5	18,021		0.0000	1.0000	57.39
27.5	8,021		0.0000	1.0000	57.39
28.5	8,021	496	0.0618	0.9382	57.39
29.5	30,053		0.0000	1.0000	53.84
30.5	30,053		0.0000	1.0000	53.84
31.5	30,053	22,528	0.7496	0.2504	53.84
32.5	7,525		0.0000	1.0000	13.48
33.5					13.48

PART VII. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1918	3,025,032	2,674,111	350,921	350,921	0.1
1938	1,110,337	936,729	173,608	524,529	0.1
1945	257,415	208,728	48,687	573,216	0.1
1950	997,609	768,129	229,480	802,696	0.2
1955	16,730,319	12,135,071	4,595,248	5,397,944	1.0
1959	65,307,389	47,134,295	18,173,094	23,571,038	4.6
1960	14,096,868	11,768,309	2,328,559	25,899,597	5.0
1962	11,334,440	7,716,959	3,617,481	29,517,078	5.7
1963	28,427,525	19,297,376	9,130,149	38,647,227	7.5
1965	818,321	562,804	255,517	38,902,744	7.6
1968	2,986,448	2,113,859	872,589	39,775,333	7.7
1970	1,039,164	687,292	351,872	40,127,205	7.8
1972	29,963,817	20,408,080	9,555,737	49,682,942	9.7
1973	920,520	613,579	306,941	49,989,883	9.7
1974	733,433	475,595	257,838	50,247,721	9.8
1975	35,172,896	26,849,776	8,323,120	58,570,841	11.4
1976	36,437,485	20,772,783	15,664,702	74,235,543	14.4
1977	551,339	347,925	203,414	74,438,957	14.5
1978	1,453,094	907,850	545,244	74,984,201	14.6
1979	1,529,490	941,825	587,665	75,571,866	14.7
1980	2,006,858	1,165,204	841,654	76,413,520	14.9
1981	1,194,744	715,828	478,916	76,892,436	14.9
1982	921,610	544,710	376,900	77,269,336	15.0
1983	661,485	383,636	277,849	77,547,185	15.1
1984	982,150	543,950	438,200	77,985,385	15.2
1985	3,503,341	2,013,700	1,489,641	79,475,026	15.4
1986	1,392,939	771,190	621,749	80,096,775	15.6
1987	2,591,929	1,674,542	917,387	81,014,162	15.7
1988	889,055	554,613	334,442	81,348,604	15.8
1989	26,557,975	11,952,416	14,605,559	95,954,163	18.7
1990	4,815,550	2,402,871	2,412,679	98,366,842	19.1
1991	2,004,205	994,585	1,009,620	99,376,462	19.3
1992	3,084,420	1,412,143	1,672,277	101,048,739	19.6
1993	478,669	209,634	269,035	101,317,774	19.7
1994	1,423,759	643,259	780,500	102,098,274	19.8
1995	17,666,140	9,803,577	7,862,563	109,960,837	21.4
1996	8,780,014	4,196,399	4,583,615	114,544,452	22.3
1997	420,757	179,906	240,851	114,785,303	22.3
1998	2,725,720	1,121,713	1,604,007	116,389,310	22.6
1999	13,185,795	4,703,425	8,482,370	124,871,680	24.3
2000	419,599	151,817	267,782	125,139,462	24.3
2001	2,523,060	1,272,222	1,250,838	126,390,300	24.6
2002	496,114	221,506	274,608	126,664,908	24.6
2003	2,226,073	996,213	1,229,860	127,894,768	24.9
2004	7,528,534	3,321,585	4,206,949	132,101,717	25.7

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2005	2,537,446	793,005	1,744,441	133,846,158	26.0
2006	5,370,142	2,031,322	3,338,820	137,184,978	26.7
2007	5,863,688	1,594,980	4,268,708	141,453,686	27.5
2008	4,552,944	1,519,585	3,033,359	144,487,045	28.1
2009	10,668,041	2,945,686	7,722,355	152,209,400	29.6
2010	17,554,135	5,689,239	11,864,896	164,074,296	31.9
2011	4,828,382	1,105,705	3,722,677	167,796,973	32.6
2012	3,422,858	1,429,463	1,993,395	169,790,368	33.0
2013	6,192,576	2,977,839	3,214,737	173,005,105	33.6
2014	29,223,910	7,473,202	21,750,708	194,755,813	37.9
2015	23,993,729	6,943,170	17,050,559	211,806,372	41.2
2016	39,523,885	7,486,581	32,037,304	243,843,676	47.4
2017	15,665,188	2,607,652	13,057,536	256,901,212	49.9
2018	12,354,856	2,299,201	10,055,655	266,956,867	51.9
2019	45,703,656	4,237,628	41,466,026	308,422,895	59.9
2020	54,706,063	5,332,119	49,373,942	357,796,839	69.5
2021	29,921,170	2,239,121	27,682,047	385,478,888	74.9
2022	40,306,717	2,102,529	38,204,188	423,683,077	82.3
2023	17,677,260	381,214	17,296,047	440,979,124	85.7
2024	81,457,250	452,677	81,004,574	521,983,698	101.5
9999	11,879,265-	4,390,175-	7,489,090-	514,494,608	100.0
SUBTOTAL	801,018,067	286,523,462	514,494,601		
NONDEPRECIABLE	4,463,355		4,463,355		
TOTAL	805,481,422	286,523,462	518,957,956		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2017	981,626.00	170,410	146,270	835,356	33.32	25,071
2018	1,892,100.26	283,815	243,609	1,648,491	34.00	48,485
2019	1,196,298.28	150,135	128,867	1,067,431	34.84	30,638
2020	172,331.79	17,371	14,910	157,422	35.68	4,412
2021	216,880.38	16,526	14,185	202,695	36.37	5,573
2022	1,938,356.51	99,244	85,185	1,853,172	37.06	50,005
2023	1,848,618.99	47,879	41,097	1,807,522	37.61	48,060
2024	812,632.04	5,363	4,603	808,029	37.77	21,393
	9,058,844.25	790,743	678,726	8,380,118		233,637

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.9 2.58

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1960	2,303,082.85	1,827,727	1,976,952	326,131	16.65	19,587
1968	671,326.79	500,004	540,827	130,500	19.19	6,800
1970	60,405.27	44,362	47,984	12,421	19.53	636
1972	432,344.07	310,250	335,580	96,764	20.46	4,729
1990	89,924.53	50,753	54,897	35,028	26.24	1,335
1995	131,932.60	67,338	72,836	59,097	27.82	2,124
1996	513,721.35	256,039	276,943	236,778	28.18	8,402
2000	105,072.37	47,409	51,280	53,792	29.19	1,843
2004	244,354.55	97,253	105,193	139,162	30.25	4,600
2005	52,725.90	20,236	21,888	30,838	30.50	1,011
2006	2,710,094.59	1,000,025	1,081,673	1,628,422	30.78	52,905
2011	7,145.91	2,062	2,230	4,916	32.05	153
2012	7,147.63	1,938	2,096	5,052	32.25	157
2013	148,319.26	37,525	40,589	107,730	32.48	3,317
2014	10,489,746.72	2,454,601	2,655,008	7,834,739	32.74	239,302
2015	40,952.90	8,772	9,488	31,465	33.02	953
2017	762,725.81	132,409	143,220	619,506	33.32	18,593
2018	1,526,953.41	232,708	251,708	1,275,245	33.37	38,215
2019	446,541.64	57,827	62,548	383,994	33.61	11,425
2021	237,069.10	19,416	21,001	216,068	33.63	6,425
2024	40,901.47	303	328	40,573	33.42	1,214
	21,022,488.72	7,168,957	7,754,269	13,268,220		423,726

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.3 2.02

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1960	10,286,772.65	8,163,583	8,663,880	1,622,893	16.65	97,471
1972	12,440,290.40	8,927,152	9,474,243	2,966,047	20.46	144,968
1975	17,615,904.87	12,257,147	13,008,313	4,607,592	21.42	215,107
1985	1,185,464.26	725,860	770,344	415,120	24.69	16,813
1993	12,571.10	6,703	7,114	5,457	27.14	201
1994	100,580.35	52,503	55,721	44,859	27.47	1,633
1995	8,690,119.63	4,435,437	4,707,258	3,982,862	27.82	143,165
1996	2,923,420.02	1,457,033	1,546,326	1,377,094	28.18	48,868
1999	75,064.00	34,717	36,845	38,219	29.05	1,316
2001	234,139.53	102,857	109,160	124,980	29.36	4,257
2003	1,475,890.94	607,477	644,706	831,185	30.02	27,688
2004	364,151.81	144,932	153,814	210,338	30.25	6,953
2006	130,036.76	47,984	50,925	79,112	30.78	2,570
2007	18,738.81	6,626	7,032	11,707	31.08	377
2008	401,705.96	135,616	143,927	257,779	31.39	8,212
2009	16,499.71	5,321	5,647	10,853	31.51	344
2010	12,038,187.30	3,674,055	3,899,215	8,138,972	31.87	255,380
2011	390,432.17	112,679	119,584	270,848	32.05	8,451
2012	280,511.60	76,075	80,737	199,775	32.25	6,195
2013	8,276.37	2,094	2,222	6,054	32.48	186
2014	16,722,845.33	3,913,146	4,152,959	12,569,886	32.74	383,931
2015	5,536,636.41	1,185,948	1,258,628	4,278,008	33.02	129,558
2016	19,726,378.79	3,834,808	4,069,820	15,656,559	33.15	472,294
2017	3,082,373.65	535,100	567,893	2,514,481	33.32	75,465
2018	101,300.93	15,438	16,384	84,917	33.37	2,545
2019	265,000.39	34,318	36,421	228,579	33.61	6,801
2020	1,057,076.41	112,473	119,366	937,710	33.59	27,916
2021	9,192,769.73	752,888	799,028	8,393,742	33.63	249,591
2022	3,929.79	220	233	3,697	33.71	110
2024	15,226,325.64	112,675	119,581	15,106,745	33.42	452,027
9999	2,500,000.00-	921,770-	978,260-	1,521,740-		49,970-
	137,103,395.31	50,551,095	53,649,066	83,454,329		2,740,423

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.5 2.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 355.00 POWER GENERATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
1991	19,943.82	14,677	13,977	5,967	11.84	504
2002	19,053.44	11,150	10,618	8,435	15.59	541
2004	37,115.59	20,414	19,441	17,675	16.36	1,080
2012	396,359.96	151,727	144,493	251,867	19.35	13,016
2015	420,858.84	128,025	121,922	298,937	20.59	14,519
2020	21,916.13	3,296	3,139	18,777	22.60	831
2021	1,978.37	229	218	1,760	22.97	77
2024	141,904.08	1,462	1,392	140,512	23.96	5,864
	1,059,130.23	330,980	315,200	743,930		36,432

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.4 3.44

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
2015	660,421.77	89,157	72,585	587,837	57.67	10,193
2018	120,153.54	10,958	8,921	111,233	59.79	1,860
2019	34,520.65	2,624	2,136	32,385	60.79	533
2020	341,239.44	20,884	17,002	324,237	61.36	5,284
2021	1,868,836.86	86,340	70,292	1,798,545	61.94	29,037
2022	4,553,417.42	141,156	114,920	4,438,497	62.52	70,993
2023	544,669.52	8,551	6,962	537,708	62.69	8,577
2024	13,487,396.38	53,950	43,922	13,443,474	62.64	214,615
	21,610,655.58	413,620	336,740	21,273,916		341,092

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 62.4 1.58

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1918	2,879,240.77	2,624,716	2,528,319	350,922	10.28	34,136
1938	822,872.76	700,594	674,864	148,009	15.01	9,861
1945	203,926.98	165,935	159,841	44,086	18.09	2,437
1950	858,360.15	673,298	648,570	209,790	20.34	10,314
1955	16,610,335.29	12,492,633	12,033,822	4,576,513	22.74	201,254
1959	55,245,732.65	40,218,893	38,741,793	16,503,940	24.29	679,454
1960	1,030,136.33	738,402	711,283	318,853	25.29	12,608
1962	11,334,439.67	8,011,182	7,716,959	3,617,481	25.72	140,649
1963	26,687,156.07	18,558,248	17,876,668	8,810,488	26.72	329,734
1965	634,649.09	430,609	414,794	219,855	27.96	7,863
1968	1,795,080.17	1,176,137	1,132,942	662,138	29.47	22,468
1970	750,252.94	478,061	460,503	289,750	30.75	9,423
1972	15,171,421.33	9,466,967	9,119,279	6,052,142	31.33	193,174
1973	516,087.51	315,846	304,246	211,842	32.33	6,552
1974	457,688.97	276,902	266,732	190,957	32.64	5,850
1975	2,133,970.15	1,265,231	1,218,764	915,206	33.64	27,206
1976	35,248,200.70	20,641,346	19,883,262	15,364,939	33.97	452,309
1977	314,736.68	180,470	173,842	140,895	34.97	4,029
1978	821,148.21	464,606	447,543	373,605	35.30	10,584
1979	866,984.60	483,777	466,010	400,975	35.65	11,248
1980	1,408,489.04	768,472	740,249	668,240	36.65	18,233
1981	666,228.05	358,098	344,946	321,282	37.00	8,683
1982	497,879.64	261,387	251,787	246,093	38.00	6,476
1983	366,320.04	189,241	182,291	184,029	38.37	4,796
1984	636,459.20	323,321	311,447	325,012	38.74	8,390
1985	1,578,123.63	781,645	752,938	825,186	39.74	20,765
1986	743,473.81	361,626	348,345	395,129	40.12	9,849
1987	689,954.00	326,762	314,761	375,193	41.12	9,124
1988	276,301.44	128,314	123,601	152,700	41.52	3,678
1989	24,352,116.12	10,994,980	10,591,173	13,760,943	42.52	323,635
1990	2,854,686.85	1,261,772	1,215,431	1,639,256	42.92	38,193
1991	1,107,279.86	478,677	461,097	646,183	43.34	14,910
1992	2,113,526.40	885,990	853,451	1,260,075	44.34	28,418
1993	359,876.40	147,261	141,853	218,023	44.76	4,871
1994	939,655.42	372,104	358,438	581,217	45.76	12,701
1995	2,283,152.04	880,612	848,270	1,434,882	46.19	31,065
1996	3,458,894.99	1,297,777	1,250,114	2,208,781	46.63	47,368
1997	221,462.38	80,125	77,182	144,280	47.63	3,029
1998	1,453,161.53	510,060	491,327	961,835	48.07	20,009
1999	11,495,641.96	3,908,518	3,764,972	7,730,670	48.53	159,297
2000	302,504.34	98,737	95,111	207,393	49.53	4,187

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
2001	542,184.95	170,842	164,568	377,617	49.99	7,554
2002	202,588.74	61,060	58,817	143,772	50.99	2,820
2003	33,556.03	9,725	9,368	24,188	51.46	470
2004	1,866,328.84	518,839	499,784	1,366,545	51.94	26,310
2005	1,346,106.17	355,507	342,450	1,003,656	52.94	18,958
2006	1,131,445.55	285,124	274,652	856,794	53.43	16,036
2007	4,879,419.72	1,169,597	1,126,642	3,752,778	53.92	69,599
2008	2,337,532.53	531,087	511,582	1,825,951	54.42	33,553
2009	9,120,908.11	1,942,753	1,871,402	7,249,506	55.42	130,810
2010	3,732,242.13	747,195	719,753	3,012,489	55.93	53,862
2011	3,662,184.02	685,561	660,383	3,001,801	56.44	53,186
2012	260,057.11	45,250	43,588	216,469	56.97	3,800
2013	435,842.43	69,996	67,425	368,417	57.49	6,408
2014	1,124,072.47	165,239	159,170	964,902	58.03	16,628
2015	16,159.67	2,152	2,073	14,087	58.57	241
2016	12,881,899.37	1,535,522	1,479,128	11,402,771	59.11	192,908
2017	6,830,219.68	717,173	690,834	6,139,386	59.67	102,889
2018	3,902,837.19	353,597	340,611	3,562,226	60.23	59,144
2019	37,701,189.98	2,884,141	2,778,216	34,922,974	60.36	578,578
2020	30,735,403.42	1,893,301	1,823,767	28,911,636	60.94	474,428
2021	11,234,521.73	529,146	509,712	10,724,810	60.69	176,715
2022	11,318,117.24	362,180	348,878	10,969,239	60.50	181,310
2023	10,743,411.36	177,266	170,756	10,572,655	59.61	177,364
2024	30,874,115.67	132,759	127,883	30,746,233	57.55	534,253
9999	8,245,749.14-	3,130,755-	3,015,773-	5,229,976-		115,426-
	410,854,203.13	155,993,589	150,264,489	260,589,714		5,751,228

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 45.3 1.40

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1918	145,791.55	145,792	145,792			
1938	234,316.62	227,709	208,718	25,599	2.50	10,240
1945	37,159.40	35,521	32,559	4,600	3.64	1,264
1950	93,076.91	87,474	80,179	12,898	4.74	2,721
1955	77,905.46	72,031	66,024	11,881	5.63	2,110
1959	10,061,656.23	9,156,107	8,392,502	1,669,154	6.43	259,588
1960	118,595.45	107,780	98,791	19,804	6.42	3,085
1963	1,740,368.98	1,549,973	1,420,708	319,661	7.49	42,678
1965	111,180.29	98,395	90,189	20,991	7.67	2,737
1968	61,054.47	52,995	48,575	12,479	8.52	1,465
1970	127,354.94	109,347	100,228	27,127	8.89	3,051
1972	1,366,633.03	1,151,252	1,055,239	311,394	9.73	32,003
1973	292,480.81	244,631	224,229	68,252	9.98	6,839
1974	141,465.58	117,416	107,624	33,842	10.24	3,305
1975	418,642.64	344,627	315,886	102,757	10.52	9,768
1976	1,189,284.15	970,456	889,521	299,763	10.82	27,705
1977	132,817.42	107,370	98,416	34,401	11.14	3,088
1978	358,041.54	286,576	262,676	95,366	11.47	8,314
1979	369,432.35	290,928	266,665	102,767	12.14	8,465
1980	338,703.23	263,782	241,783	96,920	12.50	7,754
1981	298,996.08	230,137	210,944	88,052	12.87	6,842
1982	237,580.49	180,609	165,546	72,034	13.25	5,437
1983	164,890.28	123,717	113,399	51,491	13.64	3,775
1984	190,676.75	141,101	129,333	61,344	14.05	4,366
1985	420,339.84	306,554	280,988	139,352	14.48	9,624
1986	358,425.92	257,421	235,953	122,473	14.91	8,214
1987	248,491.50	175,609	160,963	87,528	15.36	5,698
1988	95,521.94	66,025	60,519	35,003	16.08	2,177
1989	1,467,920.90	996,718	913,593	554,328	16.55	33,494
1990	1,021,711.46	680,869	624,086	397,625	17.02	23,362
1991	477,297.70	311,866	285,857	191,441	17.51	10,933
1992	443,937.26	282,699	259,122	184,815	18.25	10,127
1993	106,221.41	66,187	60,667	45,554	18.75	2,430
1994	172,006.43	104,752	96,016	75,990	19.26	3,945
1995	497,751.44	294,470	269,912	227,839	20.02	11,381
1996	763,577.85	440,432	403,701	359,877	20.54	17,521
1997	99,171.62	55,427	50,804	48,368	21.31	2,270
1998	665,537.90	359,923	329,906	335,632	22.08	15,201
1999	376,697.64	197,766	181,273	195,425	22.62	8,639
2001	40,181.12	19,592	17,958	22,223	24.17	919
2004	390,532.32	167,929	153,924	236,608	26.51	8,925

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
2005	622,015.06	255,275	233,985	388,030	27.30	14,214
2006	484,949.04	188,548	172,823	312,126	28.30	11,029
2007	261,284.44	96,388	88,349	172,935	29.08	5,947
2008	302,479.32	105,505	96,706	205,773	29.87	6,889
2010	100,493.52	30,811	28,241	72,253	31.66	2,282
2011	258,306.95	73,540	67,407	190,900	32.66	5,845
2012	100,183.16	26,448	24,242	75,941	33.45	2,270
2013	16,185.29	3,917	3,590	12,595	34.45	366
2014	101,858.37	22,409	20,540	81,318	35.45	2,294
2016	19,977.81	3,516	3,223	16,755	37.45	447
2018	20,869.91	2,767	2,536	18,334	39.25	467
2019	2,569,906.48	283,975	260,293	2,309,613	40.25	57,382
2020	1,739,475.69	153,770	140,946	1,598,530	41.25	38,752
2021	987,889.16	65,497	60,035	927,854	42.25	21,961
2022	2,881,785.03	127,375	116,752	2,765,033	43.25	63,931
2023	1,551,076.00	34,279	31,420	1,519,656	44.25	34,343
2024	8,587,015.86	47,229	43,291	8,543,725	45.00	189,861
	46,559,179.99	22,401,214	20,545,147	26,014,033		1,089,740

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.9 2.34

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1938	53,147.14	53,147	53,147			
1945	16,328.38	16,328	16,328			
1950	46,171.56	45,442	39,380	6,792	1.19	5,708
1955	42,077.94	40,647	35,225	6,853	2.43	2,820
1960	68,284.23	64,679	56,051	12,233	3.57	3,427
1965	72,491.16	66,721	57,821	14,670	5.10	2,876
1970	101,150.80	90,672	78,577	22,574	6.24	3,618
1972	553,128.40	488,966	423,739	129,389	6.82	18,972
1973	111,951.92	98,204	85,104	26,848	7.14	3,760
1974	134,278.83	116,823	101,239	33,040	7.47	4,423
1975	320,960.89	275,224	238,510	82,451	8.14	10,129
1977	103,784.74	87,314	75,667	28,118	8.87	3,170
1978	273,904.30	228,053	197,631	76,273	9.25	8,246
1979	293,072.58	241,345	209,150	83,923	9.64	8,706
1980	259,665.98	211,368	183,172	76,494	10.05	7,611
1981	229,520.27	184,557	159,938	69,582	10.48	6,640
1982	186,149.60	146,984	127,377	58,773	11.19	5,252
1983	130,274.80	101,484	87,946	42,329	11.63	3,640
1984	155,013.76	119,051	103,170	51,844	12.08	4,292
1985	319,413.20	241,668	209,430	109,983	12.55	8,764
1986	291,039.01	215,660	186,892	104,147	13.28	7,842
1987	202,201.63	147,385	127,724	74,478	13.76	5,413
1988	69,605.70	49,866	43,214	26,392	14.25	1,852
1989	737,937.95	516,557	447,650	290,288	15.00	19,353
1990	823,468.62	565,558	490,114	333,355	15.50	21,507
1991	389,289.29	260,785	225,997	163,292	16.26	10,043
1992	526,956.10	345,683	299,570	227,386	16.78	13,551
1994	65,810.69	41,066	35,588	30,223	18.08	1,672
1995	99,520.22	60,608	52,523	46,997	18.62	2,524
1996	263,637.05	155,757	134,979	128,658	19.39	6,635
1997	86,579.58	49,558	42,947	43,633	20.17	2,163
1998	570,070.72	317,187	274,875	295,196	20.73	14,240
1999	164,467.97	88,402	76,609	87,859	21.51	4,085
2000	12,022.44	6,261	5,426	6,596	22.08	299
2004	187,633.12	83,309	72,196	115,437	25.05	4,608
2005	500,613.58	213,061	184,639	315,975	25.64	12,324
2006	404,875.60	163,975	142,101	262,775	26.44	9,939
2007	228,244.78	87,692	75,994	152,251	27.25	5,587
2008	64,804.97	23,537	20,397	44,408	28.05	1,583
2009	79,411.04	27,278	23,639	55,772	28.67	1,945
2011	170,689.46	51,258	44,420	126,269	30.29	4,169

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
2012	79,809.25	22,219	19,255	60,554	31.10	1,947
2013	16,071.32	4,119	3,570	12,501	31.92	392
2014	58,383.29	13,720	11,890	46,493	32.55	1,428
2016	134,320.84	25,467	22,070	112,251	34.19	3,283
2017	244,196.84	40,683	35,256	208,941	35.02	5,966
2018	199,862.89	28,660	24,837	175,026	35.84	4,884
2019	316,808.77	38,017	32,946	283,863	36.67	7,741
2020	725,409.88	70,220	60,853	664,557	37.32	17,807
2021	1,089,725.72	79,441	68,844	1,020,882	38.15	26,760
2022	1,094,270.26	53,619	46,466	1,047,804	38.82	26,991
2023	591,029.28	14,658	12,702	578,327	39.32	14,708
2024	2,924,795.47	18,426	15,968	2,908,827	39.43	73,772
9999	1,133,516.15-	456,403-	396,142-	737,374-		30,148-
	15,750,817.66	6,341,966	5,504,611	10,246,207		418,919

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.5 2.66

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 364.00 FLOW MEASURING DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2.5						
NET SALVAGE PERCENT.. 0						
1960	34,668.83	34,669	34,669			
1996	10,667.26	9,857	8,404	2,263	2.30	984
1998	11,518.92	10,482	8,937	2,582	2.57	1,005
2008	91,182.72	71,925	61,321	29,862	4.28	6,977
2010	110,716.42	83,857	71,494	39,222	4.48	8,755
2011	38,771.91	28,579	24,366	14,406	4.64	3,105
2013	175,978.36	120,404	102,653	73,325	5.08	14,434
2015	40,642.36	24,690	21,050	19,592	5.81	3,372
2016	442,654.44	247,178	210,736	231,918	6.33	36,638
2017	160,544.63	80,802	68,889	91,656	6.91	13,264
2018	43,907.33	19,416	16,553	27,354	7.57	3,613
2019	795,450.85	299,487	255,333	540,118	8.28	65,232
2020	73,232.10	22,497	19,180	54,052	9.02	5,992
2022	69,257.60	10,943	9,330	59,928	10.66	5,622
	2,099,193.73	1,064,786	912,915	1,186,279		168,993

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.0 8.05

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0.5						
NET SALVAGE PERCENT.. 0						
1991	10,394.30	8,232	7,657	2,737	8.67	316
1996	810,381.57	594,496	552,993	257,389	10.17	25,309
1997	11,609.29	8,338	7,756	3,853	10.59	364
1998	25,431.42	17,919	16,668	8,763	10.90	804
2001	68,956.72	45,360	42,193	26,764	11.97	2,236
2002	50,755.56	32,605	30,329	20,427	12.25	1,668
2004	376,755.74	228,314	212,375	164,381	13.00	12,645
2005	8,408.52	4,937	4,592	3,817	13.36	286
2006	393,616.87	223,889	208,259	185,358	13.65	13,579
2007	12,527.31	6,857	6,378	6,149	14.06	437
2008	18,645.15	9,815	9,130	9,515	14.40	661
2009	453,561.97	228,595	212,636	240,926	14.76	16,323
2010	691,674.46	332,142	308,954	382,720	15.15	25,262
2011	125,592.03	57,144	53,155	72,437	15.57	4,652
2012	1,539,964.36	661,569	615,383	924,581	15.93	58,040
2013	405,801.76	163,376	151,970	253,832	16.32	15,553
2014	91,129.00	34,082	31,703	59,426	16.74	3,550
2015	3,889,839.77	1,340,828	1,247,221	2,642,619	17.11	154,449
2016	1,222,465.12	383,365	356,601	865,864	17.51	49,450
2017	144,542.87	40,573	37,740	106,803	17.94	5,953
2018	1,338,460.05	330,064	307,022	1,031,438	18.33	56,270
2019	550,799.86	115,943	107,849	442,951	18.75	23,624
2020	1,320,632.37	228,205	212,273	1,108,359	19.15	57,878
2021	318,777.23	42,365	39,407	279,370	19.57	14,275
2022	638,655.92	58,245	54,179	584,477	19.93	29,326
2023	126,220.64	5,932	5,518	120,703	20.28	5,952
2024	2,581,945.62	30,983	28,820	2,553,126	20.54	124,300
	17,227,545.48	5,234,173	4,868,761	12,358,784		703,162

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.6 4.08

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
1960	255,327.29	250,016	226,683	28,644	1.36	21,062
1968	458,986.56	431,815	391,515	67,472	3.52	19,168
1975	14,683,417.87	13,310,518	12,068,303	2,615,115	5.05	517,845
1987	1,451,282.36	1,181,344	1,071,094	380,188	8.45	44,993
1988	447,626.40	360,966	327,279	120,347	8.64	13,929
1990	25,758.59	20,231	18,343	7,416	9.29	798
1994	145,705.78	107,531	97,496	48,210	10.65	4,527
1995	5,078,635.25	3,667,283	3,325,030	1,753,605	11.16	157,133
1996	35,713.95	25,300	22,939	12,775	11.53	1,108
1997	1,933.85	1,342	1,217	717	11.91	60
1999	1,056,630.13	700,017	634,687	421,943	12.74	33,120
2001	1,631,423.82	1,028,123	932,173	699,251	13.50	51,796
2002	196,659.30	120,277	109,052	87,607	13.97	6,271
2003	90,803.57	53,774	48,755	42,049	14.46	2,908
2004	4,006,866.37	2,291,928	2,078,032	1,928,834	14.97	128,847
2006	15,929.39	8,430	7,643	8,286	16.01	518
2007	294,096.92	148,989	135,084	159,013	16.56	9,602
2008	1,125,639.55	543,909	493,148	632,492	17.11	36,966
2009	55,249.83	25,360	22,993	32,257	17.68	1,824
2010	59,518.25	25,831	23,420	36,098	18.26	1,977
2012	120,496.07	45,837	41,559	78,937	19.55	4,038
2013	57,902.31	20,445	18,537	39,365	20.15	1,954
2014	33,842.15	10,965	9,942	23,900	20.86	1,146
2015	11,562,060.57	3,402,714	3,085,153	8,476,908	21.58	392,813
2016	4,132,546.71	1,090,992	989,174	3,143,373	22.30	140,958
2017	2,480,216.71	578,139	524,184	1,956,033	23.03	84,934
2018	1,101,108.35	221,983	201,266	899,842	23.76	37,872
2019	167,380.29	28,287	25,647	141,733	24.59	5,764
2020	9,840,901.15	1,338,363	1,213,460	8,627,441	25.41	339,529
2021	2,375,646.06	243,741	220,994	2,154,652	26.24	82,113
2022	14,101,072.84	967,334	877,056	13,224,017	27.15	487,072
2023	930,294.59	32,002	29,016	901,279	28.07	32,108
2024	4,624,796.34	39,773	36,061	4,588,735	28.82	159,221
	82,645,469.17	32,323,559	29,306,935	53,338,534		2,823,974

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.9 3.42

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 381.00 PLANT SEWERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1995	874,635.54	504,752	517,355	357,281	21.25	16,813
1999	17,293.00	8,819	9,039	8,254	24.02	344
2002	27,056.54	12,381	12,690	14,367	26.08	551
2003	603,123.96	264,711	271,320	331,804	26.85	12,358
2004	48,787.57	20,491	21,003	27,785	27.62	1,006
2016	5,448.80	972	996	4,453	36.84	121
	1,576,345.41	812,126	832,403	743,942		31,193

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.8 1.98

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2017	12,867.84	2,018	4,247	8,621	37.64	229
2018	176,024.64	23,763	50,011	126,014	38.44	3,278
2019	357.89	40	84	274	39.25	7
	189,250.37	25,821	54,342	134,908		3,514

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 38.4 1.86

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S2.5						
NET SALVAGE PERCENT.. 0						
2003	732.57	622	529	204	3.75	54
2013	4,140,223.53	2,349,991	1,999,400	2,140,824	8.38	255,468
2019	38.03	10	9	29	13.25	2
2020	6,201,677.71	1,364,369	1,160,821	5,040,857	14.18	355,491
2022	397,382.52	43,871	37,326	360,057	16.12	22,336
	10,740,054.36	3,758,863	3,198,085	7,541,969		633,351
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					11.9	5.90

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	7,577.02	7,198	5,451	2,126	1.00	2,126
2008	12,008.00	9,606	7,275	4,733	4.00	1,183
2009	12,846.21	9,635	7,297	5,549	5.00	1,110
2010	44,755.08	31,329	23,727	21,028	6.00	3,505
2011	17,379.55	11,297	8,556	8,824	7.00	1,261
2012	39,909.19	23,946	18,135	21,774	8.00	2,722
2013	4,929.42	2,711	2,053	2,876	9.00	320
2014	23,508.40	11,754	8,902	14,606	10.00	1,461
2015	19,770.58	8,897	6,738	13,033	11.00	1,185
2016	717,221.40	286,889	217,275	499,946	12.00	41,662
2017	200,445.74	70,156	53,133	147,313	13.00	11,332
2018	57,523.48	17,257	13,070	44,453	14.00	3,175
2019	218,312.76	54,578	41,335	176,978	15.00	11,799
2020	417,202.09	83,440	63,193	354,009	16.00	22,126
2021	305,742.77	45,861	34,733	271,010	17.00	15,942
2022	247,326.91	24,733	18,731	228,596	18.00	12,700
2023	204,543.40	10,227	7,745	196,798	19.00	10,358
2024	398,391.85	4,980	3,772	394,620	19.75	19,981
	2,949,393.85	714,494	541,121	2,408,273		163,948

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.7 5.56

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L4						
NET SALVAGE PERCENT.. 0						
1995	10,392.93	10,393	10,393			
2001	6,173.70	5,921	6,170	4	0.98	4
2003	21,966.05	20,666	21,535	431	1.32	327
2004	6,008.28	5,588	5,823	185	1.51	123
2006	93,223.72	84,405	87,952	5,272	1.88	2,804
2007	147,736.77	131,855	137,396	10,341	2.05	5,044
2008	145,514.68	127,820	133,192	12,323	2.21	5,576
2009	655,273.42	568,122	591,998	63,275	2.30	27,511
2010	248,771.46	212,103	221,017	27,754	2.42	11,469
2011	90,413.47	75,224	78,385	12,028	2.62	4,591
2012	280,791.01	225,082	234,541	46,250	2.97	15,572
2013	586,483.73	446,431	465,193	121,291	3.45	35,157
2014	553,862.95	393,243	409,769	144,094	4.08	35,317
2015	696,491.65	454,461	473,560	222,932	4.79	46,541
2016	185,432.83	109,480	114,081	71,352	5.55	12,856
2017	177,709.69	92,924	96,829	80,881	6.39	12,657
2018	1,449,302.96	654,795	682,313	766,990	7.28	105,356
2019	840,388.69	318,087	331,455	508,934	8.21	61,990
2021	89,577.43	20,370	21,226	68,351	10.19	6,708
2022	869,888.42	131,875	137,418	732,470	11.19	65,458
2023	602,789.08	45,691	47,611	555,178	12.19	45,544
2024	551,148.31	10,472	10,912	540,236	12.94	41,749
	8,309,341.23	4,145,008	4,318,769	3,990,572		542,354

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.4 6.53

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 392.00 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2017	6,402.78	1,793	1,617	4,786	18.00	266
2020	100,441.50	16,071	14,498	85,944	21.00	4,093
	106,844.28	17,864	16,115	90,729		4,359

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.8 4.08

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 393.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	5,970.32	5,373	5,294	676	2.00	338
2007	7,829.70	6,655	6,557	1,273	3.00	424
2008	5,161.15	4,129	4,068	1,093	4.00	273
2009	28,227.61	21,171	20,858	7,370	5.00	1,474
2010	23,867.97	16,708	16,461	7,407	6.00	1,234
2011	11,907.00	7,740	7,626	4,281	7.00	612
2012	34,047.65	20,429	20,127	13,921	8.00	1,740
2013	19,113.82	10,513	10,358	8,756	9.00	973
2014	13,575.00	6,788	6,688	6,887	10.00	689
2015	28,072.98	12,633	12,446	15,627	11.00	1,421
2016	36,897.99	14,759	14,541	22,357	12.00	1,863
2017	210,186.54	73,565	72,479	137,708	13.00	10,593
2018	247,854.50	74,356	73,258	174,596	14.00	12,471
2019	188,452.28	47,113	46,417	142,035	15.00	9,469
2020	225,198.10	45,040	44,375	180,823	16.00	11,301
2021	211,300.01	31,695	31,227	180,073	17.00	10,593
2022	627,893.94	62,789	61,861	566,033	18.00	31,446
2023	360,853.73	18,043	17,777	343,077	19.00	18,057
2024	799,336.12	9,992	9,844	789,492	19.75	39,974
	3,085,746.41	489,491	482,262	2,603,484		154,945

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.8 5.02

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 394.00 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2010	63,682.43	59,437	54,233	9,449	1.00	9,449
2011	7,356.65	6,376	5,818	1,539	2.00	770
2012	727.50	582	531	196	3.00	65
2013	4,573.96	3,354	3,060	1,514	4.00	378
2014	8,402.05	5,601	5,111	3,291	5.00	658
2015	18,226.62	10,936	9,978	8,249	6.00	1,375
2017	9,868.23	4,605	4,202	5,666	8.00	708
2018	16,270.55	6,508	5,938	10,333	9.00	1,148
2019	88,575.86	29,525	26,940	61,636	10.00	6,164
2020	15,147.63	4,039	3,685	11,463	11.00	1,042
2021	14,898.86	2,980	2,719	12,180	12.00	1,015
2022	1,022,807.99	136,371	124,431	898,377	13.00	69,106
2023	53,458.61	3,564	3,252	50,207	14.00	3,586
2024	40,901.49	682	622	40,279	14.75	2,731
	1,364,898.43	274,560	250,520	1,114,378		98,195

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.3 7.19

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 22-R2						
NET SALVAGE PERCENT.. 0						
2007	13,810.00	9,461	11,548	2,262	7.81	290
2008	48,270.00	31,820	38,839	9,431	8.27	1,140
2009	246,063.00	155,020	189,216	56,847	8.81	6,453
2010	440,226.19	264,400	322,724	117,502	9.31	12,621
2011	45,902.54	26,077	31,829	14,074	9.88	1,424
2012	282,853.13	151,383	184,776	98,077	10.42	9,412
2013	157,521.76	78,840	96,231	61,291	10.98	5,582
2014	2,683.87	1,245	1,520	1,164	11.55	101
2015	7,815.84	3,334	4,069	3,747	12.10	310
2016	15,995.00	6,193	7,559	8,436	12.66	666
2017	29,847.33	10,342	12,623	17,224	13.20	1,305
2018	44,891.21	13,629	16,636	28,255	13.76	2,053
2020	9,692.97	2,067	2,523	7,170	14.76	486
2021	563,825.38	93,031	113,553	450,272	15.18	29,662
	1,909,398.22	846,842	1,033,646	875,752		71,505

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.2 3.74

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	2,300.20	1,994	1,946	354	2.00	177
2013	15,352.54	11,258	10,988	4,365	4.00	1,091
2015	1,055,779.23	633,468	618,259	437,520	6.00	72,920
2016	2,645.52	1,411	1,377	1,269	7.00	181
2017	232,168.62	108,346	105,745	126,424	8.00	15,803
2018	92,490.12	36,996	36,108	56,382	9.00	6,265
2019	110,810.89	36,937	36,050	74,761	10.00	7,476
2021	820,669.12	164,134	160,193	660,476	12.00	55,040
2022	435,091.64	58,011	56,618	378,474	13.00	29,113
2024	89,227.60	1,487	1,451	87,777	14.75	5,951
	2,856,535.48	1,054,042	1,028,735	1,827,800		194,017

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.4 6.79

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 397.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2017	99,244.73	46,315	42,491	56,754	8.00	7,094
2018	22,944.61	9,178	8,420	14,525	9.00	1,614
2019	212,822.69	70,940	65,082	147,741	10.00	14,774
2020	1,709,084.63	455,762	418,128	1,290,957	11.00	117,360
2021	391,062.13	78,212	71,754	319,308	12.00	26,609
2022	107,463.52	14,328	13,145	94,319	13.00	7,255
2023	120,295.59	8,020	7,358	112,938	14.00	8,067
2024	276,417.31	4,608	4,227	272,190	14.75	18,454
	2,939,335.21	687,363	630,605	2,308,730		201,227

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.5 6.85

PART VIII. EXPERIENCED AND ESTIMATED NET SALVAGE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TRANSACTION YEAR				
354.30	796,005.52	85,934.54		85,934.54-
354.40	1,080,902.70	67,526.93		67,526.93-
360.10	3,403.50	2,367.85		2,367.85-
361.10	6,619.40	1,430,976.01		1,430,976.01-
361.20		90,279.20		90,279.20-
363.00	3,929.16	52,929.84		52,929.84-
364.00	59,781.23			
371.00	185,795.47	66,936.02		66,936.02-
380.00	1,622,269.11	92,448.13		92,448.13-
382.00		3,306.40		3,306.40-
390.00	130,250.08	9,975.61		9,975.61-
391.00	83,792.82	48,014.34		48,014.34-
393.00	7,573.30	28,436.64		28,436.64-
394.00	19,315.01	5,445.26		5,445.26-
395.00	52,412.61	5,217.77		5,217.77-
396.00		39,091.19		39,091.19-
397.00		4,026.89		4,026.89-
	4,052,049.91	2,032,912.62		2,032,912.62-
2020 TRANSACTION YEAR				
354.20	5,414.90	27,261.65		27,261.65-
354.30	15,012.08			
354.40	5,402.39	3,035.88		3,035.88-
360.10	2,601.63	22,982.08		22,982.08-
361.10	1,935,411.80	1,344,641.10	3,491.13	1,341,149.97-
361.20	855,928.79	81,137.03		81,137.03-
363.00		75,298.32		75,298.32-
364.00		8,901.01		8,901.01-
371.00	208,080.94	24,730.31		24,730.31-
380.00	702,130.50	399,155.43		399,155.43-
390.00	724.38	1,886.85		1,886.85-
391.00	20,099.66			
393.00	68,342.45	7,289.38		7,289.38-
394.00	8,232.73	1,548.07		1,548.07-
395.00		510.16		510.16-
396.00		1,822.13		1,822.13-
397.00		3,318.49		3,318.49-
	3,827,382.25	2,003,517.89	3,491.13	2,000,026.76-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2021 TRANSACTION YEAR				
354.30	1,942.90	7,613.98		7,613.98-
354.40	45,344.71	76,589.11		76,589.11-
360.10	2,808.79	164,970.27		164,970.27-
361.10	1,848,146.44	1,074,276.48		1,074,276.48-
361.20	512,911.70	219,777.95		219,777.95-
363.00	130,642.17	129,688.68		129,688.68-
371.00	60,139.27	51,352.70		51,352.70-
380.00	230,130.31	104,870.48		104,870.48-
390.00		1,482.56		1,482.56-
393.00	33.43	953.49		953.49-
394.00	633.03	1,919.19		1,919.19-
396.00		9,833.75		9,833.75-
397.00		6,698.53		6,698.53-
	2,832,732.75	1,850,027.17		1,850,027.17-
2022 TRANSACTION YEAR				
354.20	128,984.57	30,686.12		30,686.12-
354.30	5,000.83	2,731.90		2,731.90-
354.40	955,038.55	612,785.01		612,785.01-
360.10	6,487.72	232,064.30		232,064.30-
361.10	5,400,909.25	2,044,135.19		2,044,135.19-
361.20	863,890.35	326,964.80		326,964.80-
363.00	108,769.18	108,024.33		108,024.33-
371.00	101,130.80	14,057.96		14,057.96-
380.00	234,196.28	277,412.74		277,412.74-
390.00	99,806.02	12,873.26		12,873.26-
393.00	33,317.01	6,599.32		6,599.32-
394.00	10,743.07	877.73		877.73-
395.00	99,992.04	183.61		183.61-
396.00	17,087.95	1,647.58		1,647.58-
397.00	5,273.39			
	8,070,627.01	3,671,043.85		3,671,043.85-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2023 TRANSACTION YEAR				
354.20	88,613.36	44,958.24		44,958.24-
354.30	4,457.23	1,968.74		1,968.74-
354.40	1,488,688.72	245,634.00		245,634.00-
355.00	15,468.34			
360.10	1,470,140.04	406,108.42		406,108.42-
361.10	3,333,254.41	888,597.83	4,370.75	884,227.08-
361.20	917,251.60	289,877.22		289,877.22-
363.00	295,659.50	296,281.28		296,281.28-
371.00	281,459.89	38,191.07		38,191.07-
380.00	503,986.24	114,189.97		114,189.97-
390.00		6,466.02		6,466.02-
391.00	60,061.21	5,598.73		5,598.73-
393.00		5,920.63		5,920.63-
394.00		9,280.42		9,280.42-
395.00		1,922.08		1,922.08-
	8,459,040.54	2,354,994.65	4,370.75	2,350,623.90-
TOTAL	27,241,832.46	11,912,496.18	7,861.88	11,904,634.30-

EXHIBIT NO. 11-M - DEPRECIATION STUDY

WASTEWATER CSS OPERATIONS

AS OF JUNE 30, 2025

Exhibit No. 11-M
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

WASTEWATER CSS OPERATIONS

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2025

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-M
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WASTEWATER CSS OPERATIONS

2025 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF JUNE 30, 2025

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

October 12, 2023

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention: Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant as of June 30, 2025. The results of our study as of June 30, 2024 are presented in our report titled "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of June 30, 2024. The same methods, procedures and estimates are used in both studies.

Summaries of the original cost, annual accruals, book depreciation reserve and amortization of net salvage are presented in Tables 1 through 5, beginning on page I-3 of the attached report.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

FREDERICK B. JOHNSTON, JR.
Senior Analyst

JJS:mle

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PART I. RESULTS OF STUDY

PENNSYLVANIA-AMERICAN WATER COMPANY

WASTEWATER CSS OPERATIONS

DEPRECIATION STUDY

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Tables 1 through 5 presented on pages I-3 through I-7 summarize the results of the depreciation study as of June 30, 2025. Table 1 sets forth the development of the net original cost by account as of June 30, 2025. Table 2 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of June 30, 2025, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 3 presents the bringforward of the book reserve to June 30, 2025. Table 4 sets forth the calculation of the depreciation accruals for the twelve months ended June 30, 2025. Table 5 presents the annual amortization of experienced and estimated net salvage based on the period 2020 through 2024.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-2. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2020 through 2024, beginning on pages III-2 through III-4.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF JUNE 30, 2025

	DEPRCIABLE GROUP	ORIGINAL COST AS OF JUNE 30, 2025		CUSTOMER ADVANCES		CONTRIBUTIONS IN AID OF CONSTRUCTION		EXCLUDED PROPERTY		NET ORIGINAL COST AS OF JUNE 30, 2025
	(1)	(2)	-	(3)	-	(4)	-	(5)	=	(6)
DEPRECIABLE PLANT										
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	9,755,421.35								9,755,421.35
354.30	STRUCTURES AND IMPROVEMENTS - SPP	21,053,791.97								21,053,791.97
354.40	STRUCTURES AND IMPROVEMENTS - TDP	150,169,252.51				2,500,000.00				147,669,252.51
355.00	POWER GENERATING EQUIPMENT	5,259,130.23								5,259,130.23
360.10	COLLECTION SEWERS - FORCE MAINS	24,889,714.44								24,889,714.44
361.10	COLLECTION SEWERS - GRAVITY MAINS	427,415,299.87				8,378,415.81				419,036,884.06
361.20	MANHOLES	59,326,868.83								59,326,868.83
363.00	SERVICES	19,209,537.99				1,133,516.15				18,076,021.84
364.00	FLOW MEASURING DEVICES	2,099,193.73								2,099,193.73
371.00	PUMPING EQUIPMENT	18,041,430.43								18,041,430.43
380.00	TREATMENT EQUIPMENT	88,898,702.45								88,898,702.45
381.00	PLANT SEWERS	1,576,345.41								1,576,345.41
382.00	OUTFALL SEWER LINES	189,250.37								189,250.37
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT	10,740,054.36								10,740,054.36
390.00	OFFICE FURNITURE AND EQUIPMENT	3,347,253.97								3,347,253.97
391.00	TRANSPORTATION EQUIPMENT	8,379,886.54								8,379,886.54
392.00	STORES EQUIPMENT	106,844.28								106,844.28
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	3,524,789.98								3,524,789.98
394.00	LABORATORY EQUIPMENT	1,401,650.48								1,401,650.48
395.00	POWER OPERATED EQUIPMENT	1,909,398.22								1,909,398.22
396.00	COMMUNICATION EQUIPMENT	2,903,863.89								2,903,863.89
397.00	MISCELLANEOUS EQUIPMENT	3,197,757.35								3,197,757.35
TOTAL DEPRECIABLE PLANT		**863,395,438.65**		**0.00**		**12,011,931.96**		**0.00**		**851,383,506.69**
NONDEPRECIABLE PLANT										
353.20	LAND AND LAND RIGHTS - COLLECTION	3,161,743.45								3,161,743.45
353.30	LAND AND LAND RIGHTS - SPP	1,153,570.00								1,153,570.00
353.40	LAND AND LAND RIGHTS - TDP	148,041.59								148,041.59
TOTAL NONDEPRECIABLE PLANT		**4,463,355.04**		**0.00**		**0.00**		**0.00**		**4,463,355.04**
TOTAL UTILITY PLANT		**867,858,793.69**		**0.00**		**12,011,931.96**		**0.00**		**855,846,861.73**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF JUNE 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
	DEPRECIABLE PLANT							
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	45-R3	9,755,421.35	762,913	8,992,508	253,754	2.60	35.4
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	21,053,791.97	8,184,256	12,869,536	413,563	1.96	31.1
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	147,669,252.51	56,715,396	90,953,857	2,969,694	2.01	30.6
355.00	POWER GENERATING EQUIPMENT	35-S0.5	5,259,130.23	357,652	4,901,478	210,757	4.01	23.3
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	24,889,714.44	62,109	24,827,605	398,457	1.60	62.3
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	419,036,884.06	155,183,595	263,853,289	5,794,665	1.38	45.5
361.20	MANHOLES	50-S2.5	59,326,868.83	19,268,258	40,058,611	1,402,469	2.36	28.6
363.00	SERVICES	47-R3	18,076,021.84	5,203,897	12,872,125	507,622	2.81	25.4
364.00	FLOW MEASURING DEVICES	15-L2.5	2,099,193.73	1,083,679	1,015,515	155,103	7.39	6.5
371.00	PUMPING EQUIPMENT	30-S0.5	18,041,430.43	5,448,964	12,592,466	720,875	4.00	17.5
380.00	TREATMENT EQUIPMENT	35-S1.5	88,898,702.45	31,061,063	57,837,639	2,942,431	3.31	19.7
381.00	PLANT SEWERS	50-R3	1,576,345.41	863,615	712,730	30,852	1.96	23.1
382.00	OUTFALL SEWER LINES	50-R3	189,250.37	58,189	131,061	3,487	1.84	37.6
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT	20-S2.5	10,740,054.36	3,831,745	6,908,309	619,092	5.76	11.2
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	3,347,253.97	721,775	2,625,479	179,922	5.38	14.6
391.00	TRANSPORTATION EQUIPMENT	14-L4	8,379,886.54	4,855,626	3,524,261	509,477	6.08	6.9
392.00	STORES EQUIPMENT	25-SQ	106,844.28	20,471	86,373	4,358	4.08	19.8
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	3,524,789.98	654,201	2,870,589	174,754	4.96	16.4
394.00	LABORATORY EQUIPMENT	15-SQ	1,401,650.48	353,232	1,048,418	90,689	6.47	11.6
395.00	POWER OPERATED EQUIPMENT	22-R2	1,909,398.22	1,106,103	803,295	68,230	3.57	11.8
396.00	COMMUNICATION EQUIPMENT	15-SQ	2,903,863.89	1,230,716	1,673,148	195,723	6.74	8.5
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	3,197,757.35	843,210	2,354,547	217,215	6.79	10.8
	TOTAL DEPRECIABLE PLANT		**851,383,506.69**	**297,870,665**	**553,512,839**	**17,863,189**	**2.10**	
	NONDEPRECIABLE PLANT							
353.20	LAND AND LAND RIGHTS - COLLECTION		3,161,743.45					
353.30	LAND AND LAND RIGHTS - SPP		1,153,570.00					
353.40	LAND AND LAND RIGHTS - TDP		148,041.59					
	TOTAL NONDEPRECIABLE PLANT		**4,463,355.04**					
	AMORTIZATION OF NET SALVAGE					**2,718,072**		
	TOTAL UTILITY PLANT		**855,846,861.73**	**297,870,665**	**553,512,839**	**20,581,261**		

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2025, OF BOOK RESERVE AS OF JUNE 30, 2024

ACCOUNT	BOOK RESERVE BALANCE AS OF 6/30/2024		PROJECTED DEPRECIATION ACCRUALS		PROJECTED RETIREMENTS		PROJECTED COST OF REMOVAL		PROJECTED SALVAGE		ACQUISITIONS AND ADJUSTMENTS		PROJECTED BOOK RESERVE BALANCE AS OF 6/30/2025
(1)	(2)	+	(3)	-	(4)	-	(5)	+	(6)	+	(7)	=	(8)
354.20	678,726		269,698		121,249		64,262						762,913
354.30	7,754,269		436,089		5,449		653						8,184,256
354.40	53,649,066		3,070,002		2,760		912						56,715,396
355.00	315,200		42,452										357,652
360.10	336,740		575,896		567,018		283,509						62,109
361.10	150,264,489		7,158,625		1,373,939		865,580						155,183,595
361.20	20,545,147		1,518,548		2,117,755		677,682						19,268,258
363.00	5,504,611		626,896		358,151		569,459						5,203,897
364.00	912,915		170,764										1,083,679
371.00	4,868,761		757,289		141,669		35,418						5,448,964
380.00	29,306,935		3,060,286		1,088,466		217,692						31,061,063
381.00	832,403		31,212										863,615
382.00	54,342		3,847										58,189
389.10	3,198,085		633,660										3,831,745
390.00	541,121		180,654										721,775
391.00	4,318,769		551,223		12,279		2,087						4,855,626
392.00	16,115		4,356										20,471
393.00	482,262		171,939										654,201
394.00	250,520		102,712										353,232
395.00	1,033,646		72,457										1,106,103
396.00	1,028,735		201,981										1,230,716
397.00	630,605		212,605										843,210
TOTAL	**286,523,462**		**19,853,191**		**5,788,735**		**2,717,254**		**0**		**0**		**297,870,665**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

ACCOUNT	NET ORIGINALCOST AS OF 6/30/2024	NET ORIGINALCOST AS OF 6/30/2025	ACCRUAL RATE	AVERAGE ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED DEPRECIATION ACCRUALS
(1)	(2)	(3)	(4)	(5)=([(2)+(3)]/2)*(4)	(6)	(7)=(5)+(6)
354.20	9,058,844.25	9,755,421.35	2.58	242,775	26,923	269,698
354.30	21,022,488.72	21,053,791.97	2.02	424,967	11,122	436,089
354.40	137,103,395.31	147,669,252.51	2.00	2,851,019	218,983	3,070,002
355.00	1,059,130.23	5,259,130.23	3.44	42,452		42,452
360.10	21,610,655.58	24,889,714.44	1.58	362,343	213,553	575,896
361.10	410,854,203.13	419,036,884.06	1.40	5,801,910	1,356,715	7,158,625
361.20	46,559,179.99	59,326,868.83	2.34	1,245,212	273,336	1,518,548
363.00	15,750,817.66	18,076,021.84	2.66	447,628	179,268	626,896
364.00	2,099,193.73	2,099,193.73	8.05	168,984	1,780	170,764
371.00	17,227,545.48	18,041,430.43	4.08	719,299	37,990	757,289
380.00	82,645,469.17	88,898,702.45	3.42	2,863,154	197,132	3,060,286
381.00	1,576,345.41	1,576,345.41	1.98	31,212		31,212
382.00	189,250.37	189,250.37	1.86	3,516	331	3,847
389.10	10,740,054.36	10,740,054.36	5.90	633,660	0	633,660
390.00	2,949,393.85	3,347,253.97	5.56	175,114	5,540	180,654
391.00	8,309,341.23	8,379,886.54	6.53	544,680	6,543	551,223
392.00	106,844.28	106,844.28	4.08	4,356		4,356
393.00	3,085,746.41	3,524,789.98	5.02	164,942	6,997	171,939
394.00	1,364,898.43	1,401,650.48	7.19	99,442	3,270	102,712
395.00	1,909,398.22	1,909,398.22	3.74	71,412	1,045	72,457
396.00	2,856,535.48	2,903,863.89	6.79	195,411	6,570	201,981
397.00	2,939,335.21	3,197,757.35	6.85	210,199	2,406	212,605
TOTAL	**801,018,066.50**	**851,383,506.69**		**17,303,687**	**2,549,504**	**19,853,191**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

TABLE 5. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

	2020		2021		2022		PROJECTED 2023		PROJECTED 2024			
ACCOUNT	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	GROSS SALVAGE	COST OF REMOVAL	NET SALVAGE	SALVAGE ACCRUAL
(1)	(2) -	(3) +	(4) -	(5) +	(6) -	(7) +	(8) -	(9) +	(10) -	(11) =	(12)*	(13)=(12)/5
354.20		27,261.65		0.00		30,686.12		44,958.24		63,421.00	(166,327.01)	(33,265)
354.30				7,613.98		2,731.90		1,968.74		656.00	(12,970.62)	(2,594)
354.40		3,035.88		76,589.11		612,785.01		245,634.00		246,216.00	(1,184,260.00)	(236,852)
360.10		22,982.08		164,970.27		232,064.30		406,108.42		480,906.00	(1,307,031.07)	(261,406)
361.10	3,491.13	1,344,641.10		1,074,276.48		2,044,135.19	4,370.75	888,597.83		1,448,594.00	(6,792,382.72)	(1,358,477)
361.20		81,137.03		219,777.95		326,964.80		289,877.22		807,562.00	(1,725,319.00)	(345,064)
363.00		75,298.32		129,688.68		108,024.33		296,281.28		521,162.00	(1,130,454.61)	(226,091)
364.00		8,901.01									(8,901.01)	(1,780)
371.00		24,730.31		51,352.70		14,057.96		38,191.07		56,295.00	(184,627.04)	(36,925)
380.00		399,155.43		104,870.48		277,412.74		114,189.97		87,613.00	(983,241.62)	(196,648)
390.00		1,886.85		1,482.56		12,873.26		6,466.02			(22,708.69)	(4,542)
391.00								5,598.73		6,218.00	(11,816.73)	(2,363)
393.00		7,289.38		953.49		6,599.32		5,920.63			(20,762.82)	(4,153)
394.00		1,548.07		1,919.19		877.73		9,280.42			(13,625.41)	(2,725)
395.00		510.16				183.61		1,922.08			(2,615.85)	(523)
396.00		1,822.13		9,833.75		1,647.58					(13,303.46)	(2,661)
397.00		3,318.49		6,698.53							(10,017.02)	(2,003)
TOTAL	**3,491.13**	**2,003,517.89**	**0.00**	**1,850,027.17**	**0.00**	**3,671,043.85**	**4,370.75**	**2,354,994.65**	**0.00**	**3,718,643.00**	**(13,590,364.68)**	**(2,718,072)**

* Column (12) equals the summation of Columns (2) through (11).

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
1918	2,791,080	2,496,035	295,045	295,045	0.1
1938	965,696	808,758	156,938	451,983	0.1
1945	232,147	188,240	43,907	495,890	0.1
1950	954,789	745,095	209,694	705,584	0.1
1955	16,575,650	12,299,419	4,276,231	4,981,815	0.9
1959	63,718,687	46,431,322	17,287,365	22,269,180	4.0
1960	14,032,349	11,924,569	2,107,780	24,376,960	4.4
1962	11,263,292	7,792,565	3,470,727	27,847,687	5.0
1963	28,089,427	19,495,788	8,593,639	36,441,326	6.6
1965	795,296	552,331	242,965	36,684,291	6.6
1968	2,941,042	2,128,523	812,519	37,496,810	6.8
1970	1,016,978	679,278	337,700	37,834,510	6.8
1972	29,761,392	20,642,473	9,118,919	46,953,429	8.5
1973	891,408	595,407	296,001	47,249,430	8.5
1974	713,885	461,199	252,686	47,502,116	8.6
1975	34,368,187	26,870,176	7,498,011	55,000,127	9.9
1976	36,237,795	21,072,165	15,165,630	70,165,757	12.7
1977	537,812	339,575	198,237	70,363,994	12.7
1978	1,419,344	883,907	535,437	70,899,431	12.8
1979	1,496,395	920,472	575,923	71,475,354	12.9
1980	1,976,866	1,159,458	817,408	72,292,762	13.1
1981	1,171,808	700,934	470,874	72,763,636	13.1
1982	904,591	536,316	368,275	73,131,911	13.2
1983	650,396	376,981	273,415	73,405,326	13.3
1984	969,494	539,407	430,087	73,835,413	13.3
1985	3,477,490	2,033,199	1,444,291	75,279,704	13.6
1986	1,373,570	761,882	611,688	75,891,392	13.7
1987	2,536,446	1,681,727	854,719	76,746,111	13.9
1988	872,142	556,255	315,887	77,061,998	13.9
1989	26,453,296	12,285,966	14,167,330	91,229,328	16.5
1990	4,772,996	2,401,331	2,371,665	93,600,993	16.9
1991	1,986,170	992,523	993,647	94,594,640	17.1
1992	3,064,657	1,427,480	1,637,177	96,231,817	17.4
1993	476,256	214,044	262,212	96,494,029	17.4
1994	1,415,811	659,699	756,112	97,250,141	17.6
1995	17,559,922	10,104,344	7,455,578	104,705,719	18.9
1996	8,739,139	4,309,659	4,429,480	109,135,199	19.7
1997	418,202	182,346	235,856	109,371,055	19.8
1998	2,711,680	1,134,225	1,577,455	110,948,510	20.0
1999	13,148,486	4,877,219	8,271,267	119,219,777	21.5
2000	419,047	157,979	261,068	119,480,845	21.6
2001	2,501,116	1,320,420	1,180,696	120,661,541	21.8
2002	492,651	230,642	262,009	120,923,550	21.8
2003	2,224,630	1,039,138	1,185,492	122,109,042	22.1
2004	7,480,462	3,478,214	4,002,248	126,111,290	22.8

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2005	2,531,297	820,172	1,711,125	127,822,415	23.1
2006	5,358,011	2,117,555	3,240,456	131,062,871	23.7
2007	5,852,994	1,677,375	4,175,619	135,238,490	24.4
2008	4,541,537	1,610,825	2,930,712	138,169,202	25.0
2009	10,647,835	3,123,646	7,524,189	145,693,391	26.3
2010	17,540,124	6,072,888	11,467,236	157,160,627	28.4
2011	4,822,393	1,184,480	3,637,913	160,798,540	29.1
2012	3,404,820	1,519,139	1,885,681	162,684,221	29.4
2013	6,187,362	3,307,944	2,879,418	165,563,639	29.9
2014	29,221,610	8,159,516	21,062,094	186,625,733	33.7
2015	23,628,926	7,669,528	15,959,398	202,585,131	36.6
2016	39,497,389	8,429,441	31,067,948	233,653,079	42.2
2017	15,623,069	2,972,633	12,650,436	246,303,515	44.5
2018	12,280,372	2,638,082	9,642,290	255,945,805	46.2
2019	45,649,946	5,074,680	40,575,266	296,521,071	53.6
2020	54,652,783	6,769,766	47,883,017	344,404,088	62.2
2021	29,847,327	2,882,332	26,964,995	371,369,083	67.1
2022	40,197,701	3,027,255	37,170,445	408,539,528	73.8
2023	17,658,694	736,662	16,922,031	425,461,559	76.9
2024	81,372,661	1,633,991	79,738,669	505,200,228	91.3
2025	56,278,613	343,385	55,935,228	561,135,455	101.4
9999	12,011,932-	4,389,315-	7,622,617-	553,512,838	100.0
SUBTOTAL	851,383,507	297,870,665	553,512,839		
NONDEPRECIABLE	4,463,355		4,463,355		
TOTAL	855,846,862	297,870,665	557,976,194		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2017	949,345.72	187,591	143,811	805,535	32.49	24,793
2018	1,846,532.89	320,558	245,746	1,600,787	33.32	48,043
2019	1,175,532.20	176,330	135,178	1,040,354	34.00	30,599
2020	170,234.41	21,364	16,378	153,856	34.84	4,416
2021	215,091.34	21,681	16,621	198,470	35.68	5,562
2022	1,927,926.65	146,908	112,623	1,815,304	36.37	49,912
2023	1,842,424.48	94,332	72,317	1,770,107	37.06	47,763
2024	811,026.98	21,006	16,104	794,923	37.61	21,136
2025	817,306.68	5,394	4,135	813,172	37.77	21,530
	9,755,421.35	995,164	762,913	8,992,508		253,754

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.4 2.60

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1960	2,297,634.05	1,836,958	2,002,007	295,627	16.30	18,137
1968	671,326.79	505,106	550,489	120,838	18.76	6,441
1970	60,405.27	44,519	48,519	11,886	19.63	606
1972	432,344.07	313,925	342,131	90,213	19.99	4,513
1990	89,924.53	51,617	56,255	33,670	25.98	1,296
1995	131,932.60	68,869	75,057	56,876	27.47	2,070
1996	513,721.35	262,203	285,762	227,959	27.82	8,194
2000	105,072.37	48,596	52,962	52,110	29.05	1,794
2004	244,354.55	100,576	109,613	134,742	30.02	4,488
2005	52,725.90	20,985	22,870	29,856	30.25	987
2006	2,710,094.59	1,040,134	1,133,589	1,576,506	30.50	51,689
2011	7,145.91	2,181	2,377	4,769	31.87	150
2012	7,147.63	2,063	2,248	4,900	32.05	153
2013	148,319.26	40,224	43,838	104,481	32.25	3,240
2014	10,489,746.72	2,653,906	2,892,356	7,597,391	32.48	233,910
2015	40,952.90	9,583	10,444	30,509	32.74	932
2017	762,725.81	148,274	161,596	601,130	33.15	18,134
2018	1,526,953.41	265,079	288,896	1,238,057	33.32	37,157
2019	446,541.64	68,053	74,168	372,374	33.37	11,159
2021	237,069.10	25,224	27,490	209,579	33.59	6,239
2024	40,901.47	1,186	1,293	39,608	33.48	1,183
2025	36,752.05	272	296	36,456	33.42	1,091
	21,053,791.97	7,509,533	8,184,256	12,869,536		413,563

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.1 1.96

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1960	10,284,012.47	8,222,068	8,822,700	1,461,312	16.30	89,651
1972	12,440,290.40	9,032,895	9,692,759	2,747,531	19.99	137,445
1975	17,615,904.87	12,419,213	13,326,453	4,289,452	20.92	205,041
1985	1,185,464.26	734,988	788,680	396,784	24.52	16,182
1993	12,571.10	6,839	7,339	5,232	26.82	195
1994	100,580.35	53,629	57,547	43,033	27.14	1,586
1995	8,690,119.63	4,536,242	4,867,620	3,822,500	27.47	139,152
1996	2,923,420.02	1,492,114	1,601,115	1,322,305	27.82	47,531
1999	75,064.00	35,715	38,324	36,740	28.64	1,283
2001	234,139.53	105,644	113,361	120,779	29.19	4,138
2003	1,475,890.94	626,663	672,442	803,449	29.81	26,952
2004	364,151.81	149,885	160,834	203,318	30.02	6,773
2006	130,036.76	49,908	53,554	76,483	30.50	2,508
2007	18,738.81	6,915	7,420	11,319	30.78	368
2008	401,705.96	142,043	152,419	249,287	31.08	8,021
2009	16,499.71	5,570	5,977	10,523	31.39	335
2010	12,038,187.30	3,882,315	4,165,923	7,872,264	31.51	249,834
2011	390,432.17	119,160	127,865	262,567	31.87	8,239
2012	280,511.60	80,956	86,870	193,642	32.05	6,042
2013	8,276.37	2,245	2,409	5,867	32.25	182
2014	16,722,845.33	4,230,880	4,539,951	12,182,894	32.48	375,089
2015	5,536,636.41	1,295,573	1,390,216	4,146,420	32.74	126,647
2016	19,726,378.79	4,225,390	4,534,060	15,192,319	33.02	460,094
2017	3,082,373.65	599,213	642,986	2,439,388	33.15	73,586
2018	101,300.93	17,586	18,871	82,430	33.32	2,474
2019	265,000.39	40,386	43,336	221,664	33.37	6,643
2020	1,057,076.41	136,891	146,891	910,185	33.61	27,081
2021	9,192,769.73	978,111	1,049,563	8,143,207	33.59	242,430
2022	3,929.79	322	346	3,584	33.63	107
2024	15,226,325.64	441,563	473,820	14,752,506	33.48	440,636
2025	10,568,617.38	78,208	83,921	10,484,696	33.42	313,725
9999	2,500,000.00-	894,809-	960,176-	1,539,824-		50,276-
	147,669,252.51	52,854,321	56,715,396	90,953,857		2,969,694

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.6 2.01

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 355.00 POWER GENERATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
1991	19,943.82	14,918	13,277	6,667	11.45	582
2002	19,053.44	11,482	10,219	8,834	15.17	582
2004	37,115.59	21,122	18,798	18,318	15.90	1,152
2012	396,359.96	161,279	143,535	252,825	18.95	13,342
2015	420,858.84	139,725	124,353	296,506	20.12	14,737
2020	21,916.13	4,033	3,589	18,327	22.17	827
2021	1,978.37	298	265	1,713	22.60	76
2024	141,904.08	5,747	5,115	136,789	23.69	5,774
2025	4,200,000.00	43,260	38,501	4,161,499	23.96	173,685
	5,259,130.23	401,864	357,652	4,901,478		210,757

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.3 4.01

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
2015	351,620.37	52,743	5,033	346,587	56.67	6,116
2018	103,108.46	10,899	1,040	102,068	59.23	1,723
2019	31,467.25	2,870	274	31,193	59.79	522
2020	322,487.25	24,509	2,339	320,148	60.79	5,266
2021	1,806,727.57	110,572	10,551	1,796,177	61.36	29,273
2022	4,467,299.13	206,389	19,695	4,447,604	61.94	71,805
2023	539,312.41	16,719	1,595	537,717	62.52	8,601
2024	13,425,986.17	210,788	20,116	13,405,870	62.69	213,844
2025	3,841,705.83	15,367	1,466	3,840,240	62.64	61,307
	24,889,714.44	650,856	62,109	24,827,605		398,457

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 62.3 1.60

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1918	2,791,079.88	2,568,352	2,496,035	295,045	9.28	31,794
1938	810,527.01	691,055	671,597	138,930	15.04	9,237
1945	201,565.74	166,090	161,413	40,153	17.09	2,350
1950	850,082.42	675,816	656,787	193,295	19.34	9,995
1955	16,476,584.48	12,571,634	12,217,654	4,258,930	21.74	195,903
1959	54,860,029.51	40,190,458	39,058,813	15,801,217	24.09	655,924
1960	1,023,195.24	744,886	723,912	299,283	24.29	12,321
1962	11,263,291.98	8,018,338	7,792,565	3,470,727	25.50	136,107
1963	26,525,462.19	18,748,197	18,220,303	8,305,159	25.72	322,907
1965	631,066.44	435,436	423,175	207,891	26.96	7,711
1968	1,785,967.53	1,191,062	1,157,525	628,443	28.47	22,074
1970	746,705.19	484,612	470,967	275,738	29.75	9,269
1972	15,104,609.10	9,526,477	9,258,239	5,846,370	31.03	188,410
1973	513,894.47	320,670	311,641	202,253	31.33	6,456
1974	455,812.51	278,957	271,102	184,711	32.33	5,713
1975	2,125,529.36	1,285,945	1,249,737	875,792	32.64	26,832
1976	35,113,711.35	20,818,919	20,232,719	14,880,992	33.64	442,360
1977	313,578.38	183,631	178,460	135,118	33.97	3,978
1978	818,233.72	469,175	455,964	362,270	34.97	10,359
1979	864,017.25	488,861	475,096	388,921	35.30	11,018
1980	1,403,841.06	783,343	761,286	642,555	35.65	18,024
1981	664,108.56	362,338	352,136	311,973	36.65	8,512
1982	496,352.86	266,790	259,278	237,075	37.00	6,407
1983	365,237.44	191,750	186,351	178,886	38.00	4,708
1984	634,646.65	327,858	318,626	316,021	38.37	8,236
1985	1,573,793.48	799,487	776,976	796,817	38.74	20,568
1986	741,508.72	367,269	356,928	384,581	39.74	9,677
1987	688,197.47	334,739	325,314	362,883	40.12	9,045
1988	275,624.02	130,536	126,860	148,764	41.12	3,618
1989	24,294,631.76	11,282,427	10,964,747	13,329,885	41.52	321,047
1990	2,848,199.18	1,285,962	1,249,753	1,598,446	42.52	37,593
1991	1,104,857.78	488,347	474,597	630,261	42.92	14,685
1992	2,109,076.96	911,754	886,082	1,222,995	43.34	28,219
1993	359,147.40	150,555	146,316	212,831	44.34	4,800
1994	937,824.19	383,758	372,953	564,871	44.76	12,620
1995	2,278,874.31	902,434	877,024	1,401,850	45.76	30,635
1996	3,452,662.35	1,331,692	1,294,195	2,158,467	46.19	46,730
1997	221,078.65	82,949	80,613	140,466	46.63	3,012
1998	1,450,740.61	524,878	510,099	940,642	47.63	19,749
1999	11,477,231.73	4,028,508	3,915,077	7,562,155	48.07	157,315
2000	302,038.67	102,693	99,801	202,238	48.53	4,167

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
2001	541,382.83	176,707	171,731	369,652	49.53	7,463
2002	202,300.77	63,745	61,950	140,351	49.99	2,808
2003	33,510.20	10,100	9,816	23,694	50.99	465
2004	1,863,880.47	540,153	524,944	1,338,936	51.46	26,019
2005	1,344,410.07	373,746	363,222	981,188	51.94	18,891
2006	1,130,076.41	298,453	290,049	840,027	52.94	15,868
2007	4,873,750.28	1,228,185	1,193,603	3,680,147	53.43	68,878
2008	2,334,924.81	559,681	543,922	1,791,003	53.92	33,216
2009	9,111,140.85	2,070,051	2,011,765	7,099,376	54.42	130,455
2010	3,728,405.88	794,150	771,789	2,956,617	55.42	53,349
2011	3,658,571.19	732,446	711,823	2,946,748	55.93	52,686
2012	259,810.92	48,637	47,268	212,543	56.44	3,766
2013	435,446.53	75,768	73,635	361,812	56.97	6,351
2014	1,123,092.84	180,369	175,290	947,803	57.49	16,486
2015	16,146.16	2,373	2,306	13,840	58.03	238
2016	12,871,568.29	1,714,493	1,666,218	11,205,350	58.57	191,316
2017	6,824,965.87	813,536	790,629	6,034,337	59.11	102,087
2018	3,899,958.31	409,496	397,966	3,501,992	59.67	58,689
2019	37,674,522.28	3,413,312	3,317,204	34,357,318	60.23	570,435
2020	30,714,554.48	2,349,663	2,283,503	28,431,051	60.36	471,025
2021	11,227,214.70	691,596	672,123	10,555,092	60.94	173,205
2022	11,311,060.35	532,751	517,750	10,793,310	60.69	177,843
2023	10,736,989.92	343,584	333,910	10,403,080	60.50	171,952
2024	30,856,427.25	509,131	494,795	30,361,632	59.61	509,338
2025	9,686,570.61	41,652	40,480	9,646,091	57.55	167,612
9999	8,378,415.81-	3,192,709-	3,102,812-	5,275,604-		115,861-
	419,036,884.06	159,679,707	155,183,595	263,853,289		5,794,665

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 45.5 1.38

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1938	155,169.34	151,197	137,161	18,008	2.29	7,864
1945	29,071.98	27,909	25,318	3,754	3.33	1,127
1950	76,996.29	72,761	66,007	10,989	4.37	2,515
1955	66,958.46	62,338	56,551	10,407	5.19	2,005
1959	8,858,657.27	8,126,932	7,372,509	1,486,148	5.94	250,193
1960	104,982.92	95,534	86,666	18,317	6.43	2,849
1963	1,563,965.12	1,406,005	1,275,485	288,480	6.97	41,389
1965	100,832.73	89,539	81,227	19,606	7.57	2,590
1968	56,078.87	48,906	44,366	11,713	8.36	1,401
1970	117,894.22	101,802	92,352	25,542	8.69	2,939
1972	1,274,451.75	1,080,735	980,410	294,042	9.50	30,952
1973	273,713.23	230,576	209,172	64,541	9.73	6,633
1974	132,840.66	111,108	100,794	32,047	9.98	3,211
1975	394,422.39	327,371	296,981	97,441	10.24	9,516
1976	1,124,084.11	925,346	839,446	284,638	10.52	27,057
1977	125,927.72	102,757	93,218	32,710	10.82	3,023
1978	340,495.78	275,257	249,705	90,791	11.14	8,150
1979	352,360.63	282,029	255,848	96,513	11.47	8,414
1980	323,969.41	255,126	231,443	92,526	12.14	7,622
1981	286,775.49	223,341	202,608	84,167	12.50	6,733
1982	228,475.28	175,857	159,532	68,943	12.87	5,357
1983	158,977.47	120,855	109,636	49,341	13.25	3,724
1984	184,293.73	138,276	125,440	58,854	13.64	4,315
1985	407,235.72	301,354	273,379	133,857	14.05	9,527
1986	348,046.53	253,830	230,267	117,780	14.48	8,134
1987	241,825.49	173,679	157,556	84,269	14.91	5,652
1988	93,154.99	65,833	59,722	33,433	15.36	2,177
1989	1,434,425.18	991,475	899,436	534,989	16.08	33,270
1990	1,000,311.39	679,211	616,160	384,151	16.55	23,212
1991	468,152.66	311,977	283,016	185,137	17.02	10,878
1992	436,184.54	285,003	258,546	177,639	17.51	10,145
1993	104,537.11	66,569	60,389	44,148	18.25	2,419
1994	169,540.06	105,640	95,833	73,707	18.75	3,931
1995	491,324.98	299,217	271,441	219,884	19.26	11,417
1996	754,741.29	446,505	405,056	349,685	20.02	17,467
1997	98,147.86	56,612	51,357	46,791	20.54	2,278
1998	659,440.35	368,561	334,348	325,092	21.31	15,255
1999	373,651.18	202,071	183,313	190,338	22.08	8,620
2001	39,932.34	20,222	18,345	21,587	23.39	923
2004	388,993.81	174,814	158,586	230,408	25.73	8,955
2005	619,938.64	266,574	241,828	378,111	26.51	14,263

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
2006	483,589.19	198,465	180,041	303,548	27.30	11,119
2007	260,674.95	101,350	91,942	168,733	28.30	5,962
2008	301,898.48	111,370	101,032	200,866	29.08	6,907
2010	100,367.49	32,820	29,773	70,594	30.87	2,287
2011	258,050.79	79,118	71,773	186,278	31.66	5,884
2012	100,105.89	28,500	25,854	74,252	32.66	2,273
2013	16,175.80	4,270	3,874	12,302	33.45	368
2014	101,813.91	24,639	22,352	79,462	34.45	2,307
2016	19,973.41	3,955	3,588	16,385	36.45	450
2018	20,867.97	3,228	2,928	17,940	38.25	469
2019	2,569,766.21	340,751	309,119	2,260,647	39.25	57,596
2020	1,739,425.24	192,206	174,364	1,565,061	40.25	38,884
2021	987,876.03	87,328	79,221	908,655	41.25	22,028
2022	2,881,770.85	191,061	173,325	2,708,446	42.25	64,105
2023	1,551,074.08	68,557	62,193	1,488,881	43.25	34,425
2024	8,587,015.60	189,773	172,156	8,414,860	44.25	190,166
2025	14,885,443.97	81,870	74,270	14,811,174	45.00	329,137
	59,326,868.83	21,239,965	19,268,258	40,058,611		1,402,469

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 28.6 2.36

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1945	1,509.24	1,509	1,509			
1950	27,710.52	27,433	22,301	5,410	0.76	5,410
1955	32,107.39	31,016	25,214	6,893	2.46	2,802
1960	56,827.13	53,929	43,840	12,987	3.49	3,721
1965	63,397.26	58,959	47,929	15,468	4.52	3,422
1970	91,973.22	82,960	67,440	24,533	5.98	4,103
1972	509,697.18	453,834	368,934	140,763	6.52	21,589
1973	103,800.75	91,760	74,594	29,207	6.82	4,283
1974	125,231.36	109,853	89,303	35,928	7.14	5,032
1975	300,992.69	261,864	212,876	88,117	7.47	11,796
1977	98,306.26	83,521	67,897	30,409	8.50	3,578
1978	260,614.13	219,255	178,238	82,376	8.87	9,287
1979	280,016.66	233,142	189,528	90,489	9.25	9,783
1980	249,055.49	205,097	166,729	82,326	9.64	8,540
1981	220,923.98	179,832	146,190	74,734	10.05	7,436
1982	179,762.61	144,547	117,506	62,257	10.48	5,941
1983	126,181.23	99,633	80,994	45,187	11.19	4,038
1984	150,553.43	117,281	95,341	55,212	11.63	4,747
1985	310,996.74	238,845	194,164	116,833	12.08	9,672
1986	284,014.90	214,886	174,687	109,328	12.55	8,711
1987	197,731.81	146,519	119,109	78,623	13.28	5,920
1988	68,196.59	49,708	40,409	27,788	13.76	2,019
1989	724,238.84	518,845	421,783	302,456	14.25	21,225
1990	809,444.62	566,611	460,614	348,831	15.00	23,255
1991	383,204.97	263,185	213,950	169,255	15.50	10,920
1992	519,395.79	347,943	282,852	236,544	16.26	14,548
1994	65,014.84	41,518	33,751	31,264	17.54	1,782
1995	98,415.51	61,411	49,923	48,493	18.08	2,682
1996	260,951.87	158,920	129,190	131,762	18.62	7,076
1997	85,770.93	50,673	41,193	44,578	19.39	2,299
1998	565,192.17	323,516	262,995	302,197	20.17	14,982
1999	163,179.63	90,793	73,808	89,372	20.73	4,311
2000	11,936.43	6,416	5,216	6,720	21.51	312
2004	186,710.83	86,652	70,442	116,269	24.25	4,795
2005	498,384.19	221,283	179,887	318,497	25.05	12,714
2006	403,245.84	171,621	139,516	263,730	25.64	10,286
2007	227,416.38	92,104	74,874	152,542	26.44	5,769
2008	64,593.46	24,817	20,174	44,419	27.25	1,630
2009	79,178.62	28,758	23,378	55,801	28.05	1,989
2011	170,291.30	54,834	44,576	125,715	29.48	4,264
2012	79,643.87	23,917	19,443	60,201	30.29	1,987

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
2013	16,041.89	4,466	3,631	12,411	31.10	399
2014	58,288.93	14,939	12,144	46,145	31.92	1,446
2016	134,153.62	28,494	23,164	110,990	33.37	3,326
2017	243,931.60	46,249	37,597	206,335	34.19	6,035
2018	199,674.27	33,266	27,043	172,631	35.02	4,929
2019	316,550.09	45,393	36,901	279,649	35.84	7,803
2020	724,899.69	86,988	70,715	654,185	36.67	17,840
2021	1,089,068.77	105,422	85,700	1,003,369	37.32	26,886
2022	1,093,707.58	79,731	64,816	1,028,892	38.15	26,970
2023	590,771.29	28,948	23,533	567,238	38.82	14,612
2024	2,923,718.21	72,508	58,943	2,864,775	39.32	72,858
2025	2,682,921.39	16,902	13,740	2,669,181	39.43	67,694
9999	1,133,516.15-	401,402-	326,327-	807,189-		31,832-
	18,076,021.84	6,401,104	5,203,897	12,872,125		507,622

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.4 2.81

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 364.00 FLOW MEASURING DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2.5						
NET SALVAGE PERCENT.. 0						
1960	34,668.83	34,669	34,669			
1996	10,667.26	9,930	9,162	1,505	2.15	700
1998	11,518.92	10,574	9,756	1,763	2.41	732
2008	91,182.72	73,165	67,506	23,677	4.19	5,651
2010	110,716.42	85,695	79,067	31,649	4.38	7,226
2011	38,771.91	29,366	27,095	11,677	4.48	2,606
2013	175,978.36	125,649	115,931	60,047	4.81	12,484
2015	40,642.36	26,377	24,337	16,305	5.41	3,014
2016	442,654.44	268,913	248,115	194,539	5.81	33,483
2017	160,544.63	89,648	82,715	77,830	6.33	12,295
2018	43,907.33	22,099	20,390	23,517	6.91	3,403
2019	795,450.85	351,748	324,544	470,907	7.57	62,207
2020	73,232.10	27,572	25,439	47,793	8.28	5,772
2022	69,257.60	16,206	14,953	54,305	9.82	5,530
	2,099,193.73	1,171,611	1,083,679	1,015,515		155,103

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.5 7.39

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0.5						
NET SALVAGE PERCENT.. 0						
1991	10,011.06	8,033	7,683	2,328	8.37	278
1996	787,873.83	587,202	561,618	226,256	9.91	22,831
1997	11,301.22	8,291	7,930	3,371	10.17	331
1998	24,787.88	17,803	17,027	7,761	10.59	733
2001	67,451.16	45,489	43,507	23,944	11.59	2,066
2002	49,702.86	32,695	31,271	18,432	11.97	1,540
2004	369,752.73	231,391	221,310	148,443	12.56	11,819
2005	8,260.90	5,006	4,788	3,473	13.00	267
2006	387,114.54	227,275	217,373	169,742	13.36	12,705
2007	12,332.69	7,015	6,709	5,624	13.65	412
2008	18,373.92	10,058	9,620	8,754	14.06	623
2009	447,401.58	235,512	225,251	222,151	14.40	15,427
2010	682,922.09	344,193	329,197	353,725	14.76	23,965
2011	124,122.31	59,604	57,007	67,115	15.15	4,430
2012	1,523,323.31	693,112	662,914	860,409	15.57	55,261
2013	401,778.03	172,604	165,084	236,694	15.93	14,858
2014	90,306.51	36,357	34,773	55,534	16.32	3,403
2015	3,858,012.74	1,442,897	1,380,032	2,477,981	16.74	148,028
2016	1,213,510.20	418,297	400,072	813,438	17.11	47,542
2017	143,603.13	45,034	43,072	100,531	17.51	5,741
2018	1,330,824.88	373,563	357,288	973,537	17.94	54,266
2019	548,108.51	135,164	129,275	418,834	18.33	22,850
2020	1,315,187.66	276,847	264,785	1,050,403	18.75	56,021
2021	317,708.18	54,900	52,508	265,200	19.15	13,849
2022	637,003.28	84,658	80,970	556,033	19.57	28,413
2023	125,988.05	11,490	10,989	114,999	19.93	5,770
2024	2,579,290.76	121,227	115,945	2,463,346	20.28	121,467
2025	955,376.42	11,465	10,966	944,410	20.54	45,979
	18,041,430.43	5,697,182	5,448,964	12,592,466		720,875

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.5 4.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
1960	231,027.90	226,754	210,775	20,253	1.23	16,466
1968	427,668.66	404,660	376,143	51,526	3.24	15,903
1975	13,931,337.65	12,677,517	11,784,129	2,147,209	4.95	433,780
1987	1,408,691.35	1,161,607	1,079,748	328,943	8.08	40,711
1988	435,166.59	354,226	329,264	105,903	8.45	12,533
1990	25,116.27	19,955	18,549	6,567	9.05	726
1994	142,851.86	107,167	99,615	43,237	10.32	4,190
1995	4,985,421.90	3,679,241	3,419,964	1,565,458	10.65	146,991
1996	35,101.10	25,347	23,561	11,540	11.16	1,034
1997	1,902.90	1,348	1,253	650	11.53	56
1999	1,042,066.79	707,147	657,314	384,753	12.31	31,255
2001	1,612,257.95	1,040,874	967,523	644,735	13.17	48,955
2002	194,537.27	122,597	113,958	80,579	13.50	5,969
2003	89,907.05	54,987	51,112	38,795	13.97	2,777
2004	3,970,818.34	2,351,519	2,185,806	1,785,012	14.46	123,445
2006	15,812.40	8,713	8,099	7,713	15.48	498
2007	292,157.88	154,610	143,715	148,443	16.01	9,272
2008	1,119,016.32	566,894	526,945	592,071	16.56	35,753
2009	54,961.60	26,557	24,686	30,276	17.11	1,769
2010	59,244.98	27,193	25,277	33,968	17.68	1,921
2012	120,080.15	49,017	45,563	74,517	18.85	3,953
2013	57,731.33	21,961	20,413	37,318	19.55	1,909
2014	33,757.75	11,920	11,080	22,678	20.15	1,125
2015	11,538,037.03	3,738,324	3,474,882	8,063,155	20.86	386,537
2016	4,125,519.32	1,214,140	1,128,579	2,996,940	21.58	138,876
2017	2,476,838.53	653,885	607,805	1,869,034	22.30	83,813
2018	1,099,941.28	256,396	238,328	861,613	23.03	37,413
2019	167,247.86	33,717	31,341	135,907	23.76	5,720
2020	9,835,324.86	1,662,170	1,545,036	8,290,289	24.59	337,141
2021	2,374,747.57	322,966	300,206	2,074,542	25.41	81,643
2022	14,097,890.33	1,446,444	1,344,513	12,753,377	26.24	486,028
2023	930,192.23	63,811	59,314	870,878	27.15	32,077
2024	4,624,641.18	159,088	147,877	4,476,764	28.07	159,486
2025	7,341,686.27	63,139	58,690	7,282,996	28.82	252,706
	88,898,702.45	33,415,891	31,061,063	57,837,639		2,942,431

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.7 3.31

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 381.00 PLANT SEWERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1995	874,635.54	519,534	534,117	340,519	20.51	16,603
1999	17,293.00	9,127	9,383	7,910	23.26	340
2002	27,056.54	12,882	13,244	13,813	25.31	546
2003	603,123.96	275,990	283,737	319,387	26.08	12,246
2004	48,787.57	21,413	22,014	26,774	26.85	997
2016	5,448.80	1,089	1,120	4,329	36.05	120
	1,576,345.41	840,035	863,615	712,730		30,852

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.1 1.96

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2017	12,867.84	2,296	4,462	8,406	36.84	228
2018	176,024.64	27,601	53,634	122,391	37.64	3,252
2019	357.89	48	93	265	38.44	7
	189,250.37	29,945	58,189	131,061		3,487

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.6 1.84

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S2.5						
NET SALVAGE PERCENT.. 0						
2003	732.57	632	566	167	3.51	48
2013	4,140,223.53	2,513,944	2,250,897	1,889,327	7.76	243,470
2019	38.03	12	11	27	12.32	2
2020	6,201,677.71	1,699,260	1,521,457	4,680,221	13.25	353,224
2022	397,382.52	65,687	58,814	338,569	15.15	22,348
	10,740,054.36	4,279,535	3,831,745	6,908,309		619,092
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					11.2	5.76

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	7,577.02	7,577	7,577			
2008	12,008.00	10,207	8,532	3,476	3.00	1,159
2009	12,846.21	10,277	8,591	4,255	4.00	1,064
2010	44,755.08	33,566	28,059	16,696	5.00	3,339
2011	17,379.55	12,166	10,170	7,210	6.00	1,202
2012	39,909.19	25,941	21,685	18,224	7.00	2,603
2013	4,929.42	2,958	2,473	2,456	8.00	307
2014	23,508.40	12,930	10,808	12,700	9.00	1,411
2015	19,770.58	9,885	8,263	11,508	10.00	1,151
2016	717,221.40	322,750	269,794	447,427	11.00	40,675
2017	200,445.74	80,178	67,023	133,423	12.00	11,119
2018	57,523.48	20,133	16,830	40,693	13.00	3,130
2019	218,312.76	65,494	54,748	163,565	14.00	11,683
2020	417,202.09	104,301	87,188	330,014	15.00	22,001
2021	305,742.77	61,149	51,116	254,627	16.00	15,914
2022	247,326.91	37,099	31,012	216,315	17.00	12,724
2023	204,543.40	20,454	17,098	187,445	18.00	10,414
2024	398,391.85	19,920	16,651	381,741	19.00	20,092
2025	397,860.12	4,973	4,157	393,703	19.75	19,934
	3,347,253.97	861,958	721,775	2,625,479		179,922

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.6 5.38

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L4						
NET SALVAGE PERCENT.. 0						
1995	9,197.80	9,198	9,198			
2001	5,952.64	5,757	5,953			
2003	21,465.46	20,401	21,465			
2004	5,896.62	5,548	5,867	30	1.32	23
2006	92,070.74	84,668	89,530	2,541	1.66	1,531
2007	146,283.52	132,445	140,051	6,233	1.88	3,315
2008	144,402.63	128,879	136,280	8,123	2.05	3,962
2009	651,516.27	572,292	605,155	46,361	2.21	20,978
2010	247,747.72	214,797	227,131	20,617	2.30	8,964
2011	90,161.08	76,871	81,285	8,876	2.42	3,668
2012	280,299.69	233,209	246,601	33,699	2.62	12,862
2013	585,899.47	469,657	496,627	89,272	2.97	30,058
2014	553,588.82	421,392	445,590	107,999	3.45	31,304
2015	696,353.44	494,411	522,802	173,551	4.08	42,537
2016	185,422.67	120,988	127,936	57,487	4.79	12,001
2017	177,708.48	104,919	110,944	66,764	5.55	12,030
2018	1,449,302.83	757,840	801,358	647,945	6.39	101,400
2019	840,388.69	379,688	401,491	438,898	7.28	60,288
2021	89,577.43	27,160	28,720	60,857	9.19	6,622
2022	869,888.42	197,813	209,172	660,716	10.19	64,840
2023	602,789.08	91,383	96,630	506,159	11.19	45,233
2024	551,148.31	41,777	44,176	506,972	12.19	41,589
2025	82,824.73	1,574	1,664	81,161	12.94	6,272
	8,379,886.54	4,592,667	4,855,626	3,524,261		509,477

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.9 6.08

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 392.00 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2017	6,402.78	2,049	1,895	4,508	17.00	265
2020	100,441.50	20,088	18,576	81,866	20.00	4,093
	106,844.28	22,137	20,471	86,373		4,358

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.8 4.08

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 393.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	5,970.32	5,672	5,804	166	1.00	166
2007	7,829.70	7,047	7,212	618	2.00	309
2008	5,161.15	4,387	4,489	672	3.00	224
2009	28,227.61	22,582	23,109	5,119	4.00	1,280
2010	23,867.97	17,901	18,319	5,549	5.00	1,110
2011	11,907.00	8,335	8,530	3,377	6.00	563
2012	34,047.65	22,131	22,648	11,400	7.00	1,629
2013	19,113.82	11,468	11,736	7,378	8.00	922
2014	13,575.00	7,466	7,640	5,935	9.00	659
2015	28,072.98	14,036	14,364	13,709	10.00	1,371
2016	36,897.99	16,604	16,992	19,906	11.00	1,810
2017	210,186.54	84,075	86,038	124,149	12.00	10,346
2018	247,854.50	86,749	88,775	159,080	13.00	12,237
2019	188,452.28	56,536	57,856	130,596	14.00	9,328
2020	225,198.10	56,300	57,615	167,583	15.00	11,172
2021	211,300.01	42,260	43,247	168,053	16.00	10,503
2022	627,893.94	94,184	96,383	531,511	17.00	31,265
2023	360,853.73	36,085	36,928	323,926	18.00	17,996
2024	799,336.12	39,967	40,900	758,436	19.00	39,918
2025	439,043.57	5,488	5,616	433,428	19.75	21,946
	3,524,789.98	639,273	654,201	2,870,589		174,754

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.4 4.96

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 394.00 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2010	63,682.43	63,682	63,682			
2011	7,356.65	6,866	6,587	770	1.00	770
2012	727.50	631	605	122	2.00	61
2013	4,573.96	3,659	3,510	1,064	3.00	355
2014	8,402.05	6,161	5,911	2,491	4.00	623
2015	18,226.62	12,151	11,658	6,569	5.00	1,314
2017	9,868.23	5,263	5,049	4,819	7.00	688
2018	16,270.55	7,593	7,285	8,986	8.00	1,123
2019	88,575.86	35,430	33,991	54,585	9.00	6,065
2020	15,147.63	5,049	4,844	10,304	10.00	1,030
2021	14,898.86	3,973	3,812	11,087	11.00	1,008
2022	1,022,807.99	204,562	196,255	826,553	12.00	68,879
2023	53,458.61	7,128	6,839	46,620	13.00	3,586
2024	40,901.49	2,727	2,616	38,285	14.00	2,735
2025	36,752.05	613	588	36,164	14.75	2,452
	1,401,650.48	365,488	353,232	1,048,418		90,689

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.6 6.47

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 22-R2						
NET SALVAGE PERCENT.. 0						
2007	13,810.00	9,819	11,849	1,961	7.32	268
2008	48,270.00	33,070	39,906	8,364	7.81	1,071
2009	246,063.00	162,205	195,734	50,329	8.27	6,086
2010	440,226.19	277,342	334,671	105,555	8.81	11,981
2011	45,902.54	27,569	33,268	12,635	9.31	1,357
2012	282,853.13	160,689	193,905	88,948	9.88	9,003
2013	157,521.76	84,306	101,733	55,789	10.42	5,354
2014	2,683.87	1,343	1,621	1,063	10.98	97
2015	7,815.84	3,627	4,377	3,439	11.55	298
2016	15,995.00	6,823	8,233	7,762	12.10	641
2017	29,847.33	11,557	13,946	15,901	12.66	1,256
2018	44,891.21	15,555	18,770	26,121	13.20	1,979
2020	9,692.97	2,515	3,035	6,658	14.27	467
2021	563,825.38	120,208	145,055	418,770	14.76	28,372
	1,909,398.22	916,628	1,106,103	803,295		68,230

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.8 3.57

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	2,300.20	2,147	2,124	176	1.00	176
2013	15,352.54	12,282	12,153	3,200	3.00	1,067
2015	1,055,779.23	703,856	696,461	359,318	5.00	71,864
2016	2,645.52	1,587	1,570	1,076	6.00	179
2017	232,168.62	123,822	122,521	109,648	7.00	15,664
2018	92,490.12	43,162	42,709	49,781	8.00	6,223
2019	110,810.89	44,324	43,858	66,953	9.00	7,439
2021	820,669.12	218,848	216,549	604,120	11.00	54,920
2022	435,091.64	87,018	86,104	348,988	12.00	29,082
2024	89,227.60	5,949	5,886	83,342	14.00	5,953
2025	47,328.41	789	781	46,547	14.75	3,156
	2,903,863.89	1,243,784	1,230,716	1,673,148		195,723

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.5 6.74

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

ACCOUNT 397.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2017	99,244.73	52,930	50,544	48,701	7.00	6,957
2018	22,944.61	10,708	10,225	12,720	8.00	1,590
2019	212,822.69	85,129	81,292	131,531	9.00	14,615
2020	1,709,084.63	569,689	544,012	1,165,073	10.00	116,507
2021	391,062.13	104,285	99,585	291,477	11.00	26,498
2022	107,463.52	21,493	20,524	86,940	12.00	7,245
2023	120,295.59	16,039	15,316	104,980	13.00	8,075
2024	276,417.31	18,429	17,598	258,819	14.00	18,487
2025	258,422.14	4,308	4,114	254,308	14.75	17,241
	3,197,757.35	883,010	843,210	2,354,547		217,215

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.8 6.79

PART III. EXPERIENCED AND ESTIMATED NET SALVAGE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
354.20	5,414.90	27,261.65		27,261.65-
354.30	15,012.08			
354.40	5,402.39	3,035.88		3,035.88-
360.10	2,601.63	22,982.08		22,982.08-
361.10	1,935,411.80	1,344,641.10	3,491.13	1,341,149.97-
361.20	855,928.79	81,137.03		81,137.03-
363.00		75,298.32		75,298.32-
364.00		8,901.01		8,901.01-
371.00	208,080.94	24,730.31		24,730.31-
380.00	702,130.50	399,155.43		399,155.43-
390.00	724.38	1,886.85		1,886.85-
391.00	20,099.66			
393.00	68,342.45	7,289.38		7,289.38-
394.00	8,232.73	1,548.07		1,548.07-
395.00		510.16		510.16-
396.00		1,822.13		1,822.13-
397.00		3,318.49		3,318.49-
	3,827,382.25	2,003,517.89	3,491.13	2,000,026.76-
2021 TRANSACTION YEAR				
354.30	1,942.90	7,613.98		7,613.98-
354.40	45,344.71	76,589.11		76,589.11-
360.10	2,808.79	164,970.27		164,970.27-
361.10	1,848,146.44	1,074,276.48		1,074,276.48-
361.20	512,911.70	219,777.95		219,777.95-
363.00	130,642.17	129,688.68		129,688.68-
371.00	60,139.27	51,352.70		51,352.70-
380.00	230,130.31	104,870.48		104,870.48-
390.00		1,482.56		1,482.56-
393.00	33.43	953.49		953.49-
394.00	633.03	1,919.19		1,919.19-
396.00		9,833.75		9,833.75-
397.00		6,698.53		6,698.53-
	2,832,732.75	1,850,027.17		1,850,027.17-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
354.20	128,984.57	30,686.12		30,686.12-
354.30	5,000.83	2,731.90		2,731.90-
354.40	955,038.55	612,785.01		612,785.01-
360.10	6,487.72	232,064.30		232,064.30-
361.10	5,400,909.25	2,044,135.19		2,044,135.19-
361.20	863,890.35	326,964.80		326,964.80-
363.00	108,769.18	108,024.33		108,024.33-
371.00	101,130.80	14,057.96		14,057.96-
380.00	234,196.28	277,412.74		277,412.74-
390.00	99,806.02	12,873.26		12,873.26-
393.00	33,317.01	6,599.32		6,599.32-
394.00	10,743.07	877.73		877.73-
395.00	99,992.04	183.61		183.61-
396.00	17,087.95	1,647.58		1,647.58-
397.00	5,273.39			
	8,070,627.01	3,671,043.85		3,671,043.85-
2023 TRANSACTION YEAR				
354.20	88,613.36	44,958.24		44,958.24-
354.30	4,457.23	1,968.74		1,968.74-
354.40	1,488,688.72	245,634.00		245,634.00-
355.00	15,468.34			
360.10	1,470,140.04	406,108.42		406,108.42-
361.10	3,333,254.41	888,597.83	4,370.75	884,227.08-
361.20	917,251.60	289,877.22		289,877.22-
363.00	295,659.50	296,281.28		296,281.28-
371.00	281,459.89	38,191.07		38,191.07-
380.00	503,986.24	114,189.97		114,189.97-
390.00		6,466.02		6,466.02-
391.00	60,061.21	5,598.73		5,598.73-
393.00		5,920.63		5,920.63-
394.00		9,280.42		9,280.42-
395.00		1,922.08		1,922.08-
	8,459,040.54	2,354,994.65	4,370.75	2,350,623.90-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2024 TRANSACTION YEAR				
354.20	121,249.37	63,421.00		63,421.00-
354.30	5,448.80	656.00		656.00-
354.40	2,760.18	246,216.00		246,216.00-
360.10	567,018.34	480,906.00		480,906.00-
361.10	1,373,938.82	1,448,594.00		1,448,594.00-
361.20	2,117,755.13	807,562.00		807,562.00-
363.00	358,150.54	521,162.00		521,162.00-
371.00	141,668.50	56,295.00		56,295.00-
380.00	1,088,465.98	87,613.00		87,613.00-
391.00	12,279.42	6,218.00		6,218.00-
	5,788,735.08	3,718,643.00		3,718,643.00-
TOTAL	28,978,517.63	13,598,226.56	7,861.88	13,590,364.68-

PAWC Statement No. 11-R

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

REBUTTAL TESTIMONY OF
JOHN J. SPANOS

ON BEHALF OF
PENNSYLVANIA-AMERICAN WATER COMPANY

DEPRECIATION

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

February 21, 2024

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

RE: PENNSYLVANIA-AMERICAN WATER COMPANY

REBUTTAL TESTIMONY OF JOHN J. SPANOS

Q. Please state your name and address.

A. My name is John J. Spanos. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania 17011.

Q. Are you the same John J. Spanos who submitted Direct Testimony in this proceeding?

A. Yes. My direct testimony was submitted on November 8, 2023.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to portions of the testimony filed by Office of Consumer Advocate ("OCA") witness Ralph C. Smith regarding his recommended adjustments to service lives and resulting depreciation expense calculated for each test year. I will also discuss the appropriate service lives for the Butler Area Sewer Authority ("BASA") and Brentwood Wastewater facilities in response to concerns raised by Mr. Smith. Finally, I will present a change in depreciation expense for the fully forecasted test year which related to Pennsylvania Lead Service Inventory costs.

Q. Can you summarize the changes proposed by Witness Smith?

A. Yes. OCA Witness Smith proposed to utilize the life parameters for three water accounts from an earlier service life study completed as of December 31, 2016 (the "2016 Service Life Study") instead of utilizing the life parameters from the Company's most recent service life study that was completed as of

December 31, 2021 (the "2021 Service Life Study"). The three accounts are: Account 304.15, Other Water Source Structures, Account 331.00, Mains and Accessories and Account 335.00, Fire Hydrants. He criticizes the updated life parameters for these accounts as "not justified" because they are shorter than the life parameters in the 2016 Service Life Study. Beyond highlighting the difference in expected useful lives between the 2016 and 2021 studies, he does not explain why the 2021 Service Life Study analysis is unjustified for these particular accounts. Mr. Smith also does not explain why he accepts the 2021 Service Life Study analysis for all other accounts.

Q. Are there standard practices or regulations for analyzing service lives in Pennsylvania?

A. Yes. The standard practice in Pennsylvania is to conduct a service life study every 5 years for each regulated entity. For Pennsylvania American Water Company, the most recent service life study was completed as of December 31, 2021 and filed in August 2022. Prior to that filing, Pennsylvania American Water had a service life study conducted as of December 31, 2016 and filed in August 2017.

Q. Had the 2021 Service Life Study presented in this case been completed at the time of the water and wastewater base rate filings at Docket Nos. R-2022-3031672 and R-2022-3031673?

A. No.

Q. Did the determination of service life and survivor curve combinations by account in the 2016 and 2021 service life studies follow standard practices?

A. Yes. Proper life analyses or life estimation should include statistical analyses and informed judgment in order to determine the most appropriate life estimate for each property account that matches asset utilization with asset recovery. The informed judgment component will include key factors such as Company plans, estimates of others in the industry, trends in the data, changes in the nature of the assets in the account and changes in the regulatory authorities.

Q. Do authoritative texts emphasize the need to include a subjective component of estimating service lives?

A. Yes. For example, the National Association of Regulatory Utility Commissioners, ("NARUC") explains that there must be a subjective component to estimating service lives. Chapter XIII of Public Utility Depreciation Practices, entitled "Actuarial Life Analysis" discusses and emphasizes the subjective nature of the process of estimating service lives. NARUC starts this chapter by explaining that the analysis of historical data is only one part of the process of estimating service lives:

> Actuarial analysis objectively measures how the company has retired its investment. The analyst must then judge whether this historical view depicts the future life of the property in service. The analyst takes into consideration various factors, such as changes in technology, services provided, or capital budgets.[1]

NARUC further explains that the process of estimating service lives must go beyond any objective measurement of the past. In describing the determination of a survivor curve estimate (referred to as the "projection life" in this passage), NARUC states:

1 National Association of Regulatory Utility Commissioners, *Public Utility Depreciation Practices*, 1996, p. 111.

> The projection life is a projection, or forecast, of the future of the property. Historical indications may be useful in estimating a projection life curve. Certainly the observations based on the property's history are a starting point. Trends in life or retirement dispersion can often be expected to continue. Likewise, unless there is some reason to expect otherwise, stability in life or retirement dispersion can be expected to continue, at least in the near term.
>
> Depreciation analysts should avoid becoming ensnared in the mechanics of the historical life study and relying solely on mathematical solutions. The reason for making an historical life analysis is to develop a sufficient understanding of history in order to evaluate whether it is a reasonable predictor of the future. The importance of being aware of circumstances having direct bearing on the reason for making an historical life analysis cannot be understated. These circumstances, when factored into the analysis, determine the application and limitations of an historical life analysis.[2]

NARUC further elaborates on the need for a subjective component to forecasting service lives:

> A depreciation study is commonly described as having three periods of analysis: the past, present, and future. The past and present can usually be analyzed with great accuracy using many currently available analytical tools. The future still must be predicted and must largely include some subjective analysis. *Informed judgment* is a term used to define the subjective portion of the depreciation study process. It is based on a combination of general experience, knowledge of the properties and a physical inspection, information gathered throughout the industry, and other factors which assist the analyst in making a knowledgeable estimate.
>
> The use of informed judgment can be a major factor in forecasting. A logical process of examining and

2 National Association of Regulatory Utility Commissioners, *Public Utility Depreciation Practices*, 1996, p. 126. Emphasis added.

> prioritizing the usefulness of information must be employed, since there are many sources of data that must be considered and weighed by importance. For example, the following forces of retirement need to be considered: Do the past and current service life dispersions represent the future? Will scrap prices rise or fall? What will be the impact of future technological obsolescence? Will the company be in existence in the future? The analyst must rank the factors and decide the relative weight to apply to each. The final estimate might not resemble any one of the specific factors; however, the result would be a decision based upon a combination of the components.[3]

Q. Has Pennsylvania American Water had significant changes to the plant investment since the 2016 Service Life Study was conducted?

A. Yes. The Company has made significant acquisitions as well as considerable amounts of capital improvements to all of the asset classes over the last 5 to 6 years. These plant investment activities are expected to continue.

Q. For each account identified by Mr. Smith, can you compare the life analyses from the 2016 Service Life Study and the 2021 Service Life Study?

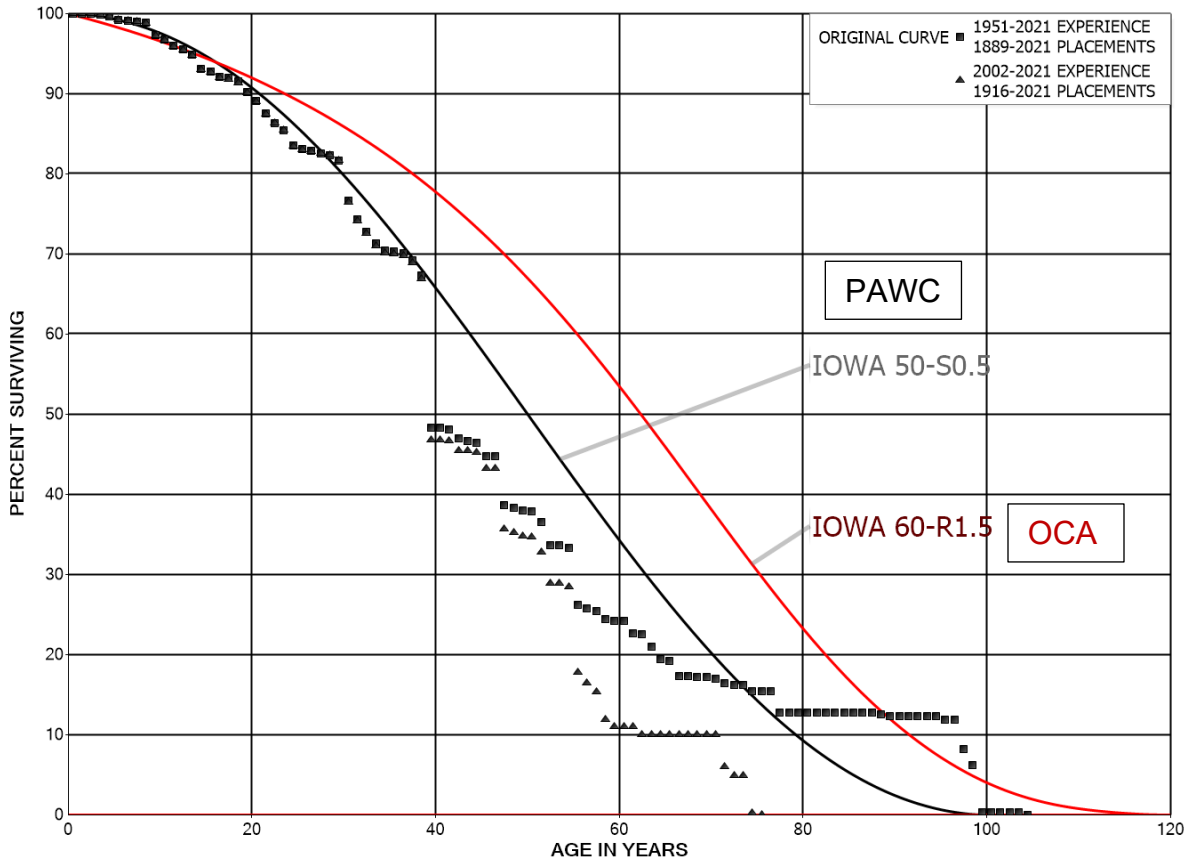
A. Yes. I will present the statistical analysis of Account 304.15, Other Water Source Structures, Account 331.00, Mains and Accessories and Account 335.00, Fire Hydrants in graphical form with both the proposed estimate in the 2021 Service Life Study utilized in this case as well as the prior estimate that was established in the 2016 Service Life Study.

3 National Association of Regulatory Utility Commissioners, *Public Utility Depreciation Practices*, 1996, p. 128. Emphasis added.

Q. Please explain Account 304.15, Other Water Source Structures.

A. The 2016 Service Life Study included a 60-R1.5 survivor curve for this account and the estimate from the 2021 Service Life Study is a 50-S0.5 survivor curve. Figure 1 below sets forth each of the curves and the original curve (historical data) for this account through 2021. The 50-S0.5 is a much better fit of the historical data (indicated by the squares and diamonds) and it reflects all the changes that have occurred to this account over the last five years. The curve also reflects the changes in the type of asset being constructed and the expected life characteristics of assets in this account going forward.

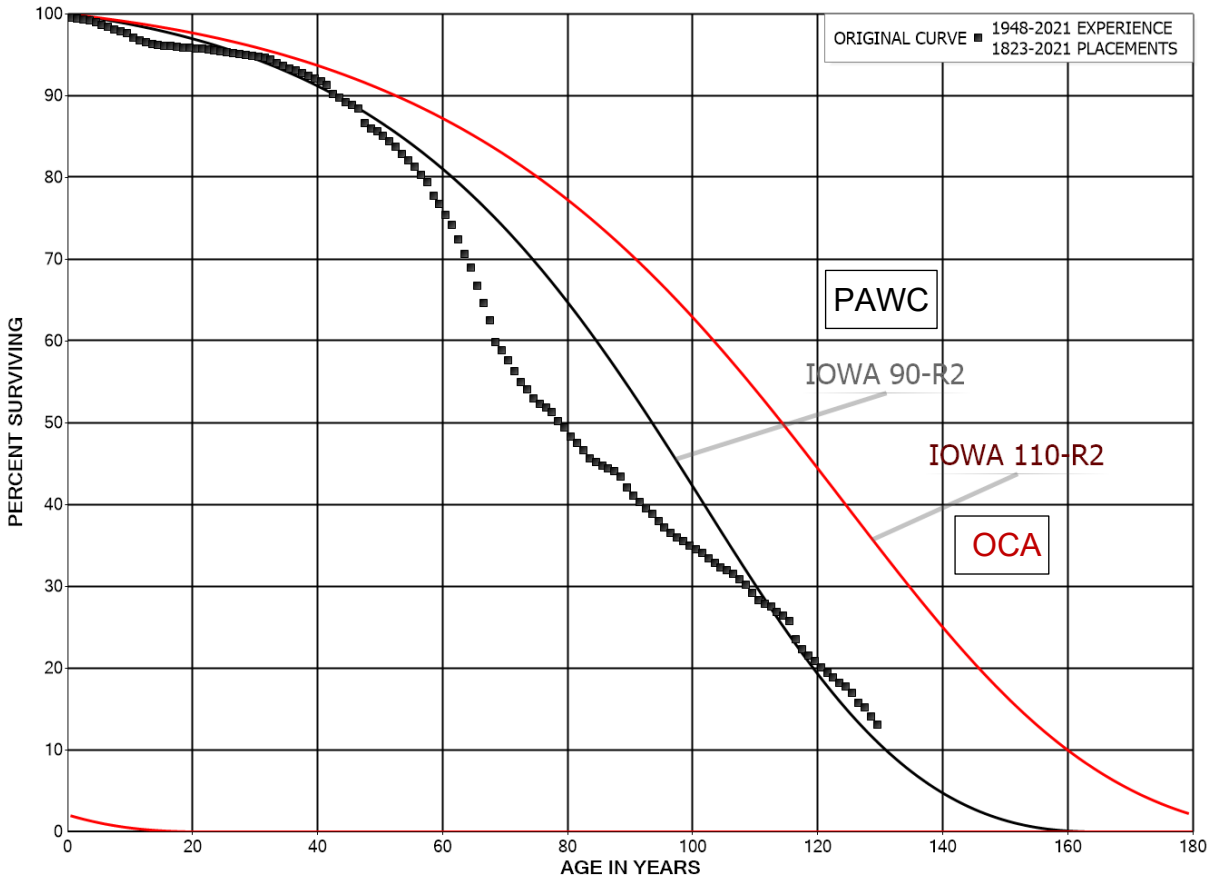
Figure 1 – Account 304.15, Other Water Source Structures



Q. Please explain Account 331.00, Mains and Accessories.

A. Figure 2 below presents a comparison of the previous 110-R2 survivor curve from the 2016 Service Life Study to the current service life estimate of 90-R2 in the 2021 Service Life Study. The historical data represents transactions from 1948 through 2021 so there is a very long history and various types of mains that were installed during that time period. Clearly, the 90-R2 survivor curve is a better statistical fit with the most current historical data. In recent years, there have been significant retirements which are based on numerous factors. Some of those factors are age, wear and tear, leaks, change in main type, water pressure, and change in water source. The 90-R2 survivor curve has a 90-year average life and maximum life expectancy of 160 years. Given all the forces of retirement on water mains, valves, etc., that are part of this account, the 90-year average is most reasonable for future life characteristics.

Figure 2 – Account 331.00, Mains and Accessories

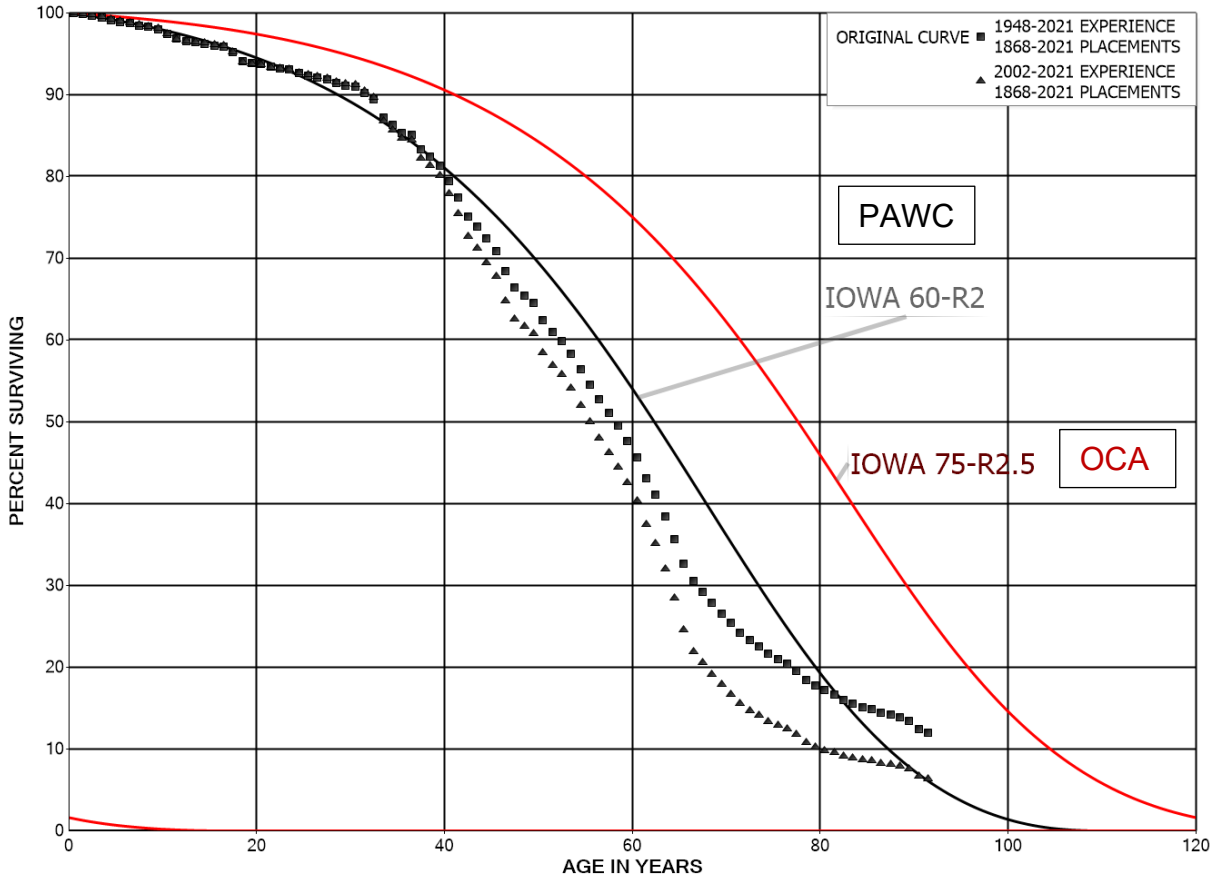


Q. Please explain Account 335.00, Fire Hydrants.

A. Figure 3 below sets forth the previous estimate of 75-R2.5 from the 2016 Service Life Study and the current estimate of 60-R2 survivor curve in the 2021 Service Life Study. The historical data represents the transactions from 1948 through 2021. Additionally, the statistical analysis of historical data for the 2002 to 2021 time period is presented in order to see the trend in the more recent 20 years. Clearly, the 60-R2 survivor curve is a better statistical fit with the most current historical data. There have been considerable replacements for fire hydrants over the last two years but a very high level in the last 5 years in conjunction with changes in the mains. Many older hydrants that were acquired over the years do not meet the diameter requirements for new mains. Including

this recent replacement activity in the 2021 Service Life Study was important in the development of a reasonable survivor curve for this account.

Figure 3 – Account 335.00, Fire Hydrants



Q. Does OCA Witness Smith have any other support for his rejection of the updated life parameters for these three accounts other than he believes there is too great a change from the 2016 Service Life Study to the 2021 Service Life Study?

A. No. It is not reasonable to ignore that last five years of transactional data as well as the ever-changing life expectancy of each asset class, not to mention how the water industry has been changing. Also, maintaining the same rates without reflecting the plant to reserve relationship also creates tremendous

misrepresentation of proper recovery patterns of the service value of each asset class over its remaining life.

Q. Can you address OCA Witness Smith's concern with regard to useful lives and depreciation expense related to the BASA and Brentwood Wastewater Systems?

A. Yes. First, I will address the average service life/survivor curve combination established in the calculations of depreciation expense in the future and fully forecasted future test year for both wastewater systems. When determining the most appropriate life characteristics for wastewater facilities in this case, it is critical to follow all the appropriate steps for life estimation. This includes consideration of statistical analyses, Company plans, nature of the assets, estimates of others and past estimates of the Company. The average service lives and survivor curve combinations for wastewater assets were the accumulation of all data and Company plans for all of the wastewater systems at the time of the last combined service life study. Because there has not been extensive historical data for the BASA or Brentwood Systems, a large component of the life analysis is related to how the Company plans to operate all of the existing and future wastewater systems. In contrast, the life estimates utilized in the Company's Section 1329 acquisition proceedings for BASA and Brentwood were based on different concepts that are not intended for determining depreciation recovery patterns for existing and future assets. Additionally, the I BASA and Brentwood life estimates for the acquisition proceedings did not incorporate Company plans for determining life characteristics for all PAWC wastewater assets. Second, the depreciation

expense for BASA and Brentwood in this rate case must follow consistent practices as all the other wastewater systems in this case. Therefore, developing of depreciation expense must be based on the proper life characteristics of each account and developing of the projected depreciation rates and capital activity for each test year in order to properly identify the book reserve as of the end of each test year.

Q. Are the life estimates and depreciation expense for BASA and Brentwood presented by the Company in this proceeding appropriate?

A. Yes. The developed lives and depreciation expense for BASA and Brentwood wastewater exhibits follow standard practices and procedures for depreciation in this rate case. Witness Smith is inappropriately applying components of the Section 1329 proceeding practices to the depreciation components of a rate case.

Q. Finally, can you please explain the change in capital additions for the fully forecasted test year that relates to Pennsylvania Lead Service Line Inventory?

A. Yes. In the initial filing, there was a project for Pennsylvania Lead Service Line Inventory which was classified into Account 348, Other Tangible Equipment which should have been recorded as a capital project in Account 340.3, Computer Software. The amount to be reclassified was $11,163,718.

Q. Have you prepared a schedule that sets forth the change in depreciation expense due to the reclassification of the $11,163,718 project?

A. Yes. Exhibit JJS-1R sets forth the overall depreciation expense for the fully forecasted future test year. The schedule represents an overall increase in expense from Exhibit 11-C of $1,660,367. There is a decrease of $456,540 for Account 348 and an increase of $2,116,907 for Account 340.3.

Q. Does this complete your rebuttal testimony?

A. Yes, it does.

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF JUNE 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
INTANGIBLE PLANT									
301.00	ORGANIZATION	NONDEPR.		766,405.12					
302.00	FRANCHISES AND CONSENTS	NONDEPR.		2,404,599.20					
303.00	MISCELLANEOUS INTANGIBLE PLANT	NONDEPR.		15,572.16					
	TOTAL INTANGIBLE PLANT			**3,186,576.48**					
NONDEPRECIABLE PLANT									
303.20	POWER AND PUMPING LAND	NONDEPR.		6,211,287.02					
303.30	PURIFICATION LAND	NONDEPR.		2,621,561.64					
303.40	TRANSMISSION AND DISTRIBUTION LAND AND RIGHTS OF WAY	NONDEPR.		3,511,859.04					
303.50	DISTRIBUTION RESERVOIRS AND STANDPIPES LAND	NONDEPR.		2,107,863.83					
303.51	TRANSMISSION AND DISTRIBUTION - LAND	NONDEPR.		1,865,772.73					
303.52	TRANSMISSION AND DISTRIBUTION - RIGHTS OF WAY	NONDEPR.		5,338,245.56					
303.61	OFFICE LAND	NONDEPR.		3,221,899.78					
	TOTAL NONDEPRECIABLE PLANT			**24,878,489.60**					
DEPRECIABLE PLANT									
303.14	WATER RIGHTS - HIBERNIA	25-SQ		1,942,822.51	1,942,823	0	0	-	-
303.35	WASTE HANDLING AND TREATMENT LAND	100-R3	*	155,025.17	134,486	20,539	1,303	0.84	15.8
303.99	COMPREHENSIVE PLANNING STUDIES	5-SQ		13,338,478.83	10,223,405	3,115,074	1,176,824	8.82	2.6
304.15	OTHER WATER SOURCE STRUCTURES	50-S0.5		105,718,516.03	11,659,067	94,059,449	2,995,935	2.83	31.4
304.20	POWER AND PUMPING STRUCTURES								
	LARGE STRUCTURES	75-S0.5	*	56,459,468.67	10,740,331	45,719,138	1,602,716	2.84	28.5
	OTHER STRUCTURES	55-R3		55,296,189.35	10,044,840	45,251,349	1,428,896	2.58	31.7
	TOTAL ACCOUNT 304.2			111,755,658.02	20,785,171	90,970,487	3,031,612	2.71	30.0
304.30	PURIFICATION BUILDINGS								
	LARGE STRUCTURES	55-S1	*	299,956,857.25	111,411,219	188,545,640	7,483,884	2.49	25.2
	OTHER STRUCTURES	60-R3		64,803,801.71	13,452,705	51,351,097	1,200,386	1.85	42.8
	TOTAL ACCOUNT 304.3			364,760,658.96	124,863,924	239,896,737	8,684,270	2.38	27.6
304.36	WASTE HANDLING AND TREATMENT STRUCTURES	55-S1	*	26,629,042.76	8,631,394	17,997,648	815,227	3.06	22.1
304.38	WASTE HANDLING AND TREATMENT STRUCTURES PAINTING	10-SQ		1,403,438.95	603,418	800,021	133,337	9.50	6.0
304.39	PURIFICATION BUILDINGS - TANK PAINTING	10-SQ		119,362.95	119,360	3	0	-	-
304.61	OFFICE BUILDINGS								
	LARGE STRUCTURES	55-S0	*	30,363,147.68	7,107,547	23,255,601	1,529,855	5.04	15.2
	OTHER OTHER STRUCTURES	50-R3		16,201,450.79	4,394,978	11,806,473	376,592	2.32	31.4
	TOTAL ACCOUNT 304.61			46,564,598.47	11,502,525	35,062,074	1,906,447	4.09	18.4
304.62	STORES, SHOP AND GARAGE BUILDINGS								
	LARGE STRUCTURES	55-S0.5	*	62,301,831.95	18,101,774	44,200,059	1,518,872	2.44	29.1
	OTHER OTHER STRUCTURES	45-R3		12,497,279.74	4,223,330	8,273,950	246,966	1.98	33.5
	TOTAL ACCOUNT 304.62			74,799,111.69	22,325,104	52,474,009	1,765,838	2.36	29.7
304.63	MISCELLANEOUS STRUCTURES AND IMPROVEMENTS	35-S0.5		11,514,247.71	2,856,281	8,657,967	371,972	3.23	23.3
	TOTAL ACCOUNT 304			743,264,635.54	203,346,244	539,918,395	19,704,638	2.65	27.4

PENNSYLVANIA-AMERICAN WATER COMPANY
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TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET ORIGINAL COST AS OF JUNE 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
305.00	COLLECTING AND IMPOUNDING RESERVOIRS								
	LARGE RESERVOIRS	130-R2	*	190,471,458.05	7,708,843	182,762,616	3,125,193	1.64	58.5
	OTHER RESERVOIRS	75-R3		7,974,536.30	242,940	7,731,596	147,982	1.86	52.2
	TOTAL ACCOUNT 305			198,445,994.35	7,951,783	190,494,212	3,273,175	1.65	58.2
306.00	LAKE, RIVER AND OTHER INTAKES								
	LARGE RESERVOIRS	55-S1.5	*	12,329,112.16	5,242,607	7,086,505	285,812	2.32	24.8
	OTHER RESERVOIRS	50-S0.5		6,343,554.16	1,672,477	4,671,077	167,187	2.64	27.9
	TOTAL ACCOUNT 306			18,672,666.32	6,915,084	11,757,582	452,999	2.43	26.0
307.00	WELLS AND SPRINGS	55-S0		16,858,304.68	4,240,951	12,617,354	409,292	2.43	30.8
310.00	POWER GENERATION EQUIPMENT	45-S0.5		25,871,991.01	6,082,054	19,789,937	720,780	2.79	27.5
	PUMPING EQUIPMENT								
311.20	ELECTRIC	39-S0		41,084,584.61	1,928,386	39,156,199	1,682,807	4.10	23.3
311.50	OTHER	39-S0		20,857,210.96	251,890	20,605,321	869,380	4.17	23.7
311.52	SOURCE OF SUPPLY	39-S0		12,940,570.90	3,436,500	9,504,071	420,058	3.25	22.6
311.53	WATER TREATMENT	39-S0		47,853,790.34	27,854,875	19,998,915	1,216,638	2.54	16.4
311.54	TRANSMISSION AND DISTRIBUTION	39-S0		6,707,900.44	2,696,554	4,011,346	191,739	2.86	20.9
	TOTAL ACCOUNT 311			129,444,057.25	36,168,205	93,275,852	4,380,622	3.38	21.3
	PURIFICATION SYSTEM								
320.10	LARGE STRUCTURES								
	LARGE STRUCTURES	50-S1	*	257,232,388.91	88,380,857	168,851,531	7,115,931	2.77	23.7
	OTHER OTHER STRUCTURES	55-R3		21,147,066.95	3,479,854	17,667,213	439,184	2.08	40.2
	TOTAL ACCOUNT 320.1			278,379,455.86	91,860,711	186,518,744	7,555,115	2.71	24.7
320.18	LARGE STRUCTURES PAINT	10-SQ		103,245.73	103,246	0	0	-	-
320.19	LARGE STRUCTURES PAINT	10-SQ		3,667,945.94	3,220,121	447,825	74,638	2.03	6.0
320.20	CHEMICAL TREATMENT	42-R0.5		159,740,980.00	23,764,484	135,976,496	6,625,402	4.15	20.5
320.29	CHEMICAL TREATMENT PAINT	FULLY ACCRUED		8,167.87	8,168	0	0	-	-
320.30	GRANULAR ACTIVATED CARBON	11-L0.5		14,370,730.58	7,963,693	6,407,038	1,160,194	8.07	5.5
320.37	WASTE HANDLING AND TREATMENT - EQUIPMENT	30-R3		19,048,869.77	10,134,011	8,914,859	471,474	2.48	18.9
	TOTAL ACCOUNT 320			475,319,395.75	137,054,434	338,264,962	15,886,823	3.34	21.3
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	65-S0.5		148,602,297.21	43,738,815	104,863,482	2,738,085	1.84	38.3
330.10	ELEVATED TANKS AND STANDPIPES	65-S0.5		24,572,432.37	2,970,426	21,602,006	510,622	2.08	42.3
330.20	GROUND LEVEL FACILITIES	65-S0.5		19,913,409.67	2,865,778	17,047,632	413,105	2.07	41.3
330.30	BELOW GRADE FACILITIES	65-S0.5		818,707.23	190,827	627,880	15,727	1.92	39.9
330.40	CLEARWELL	65-S0.5		12,806,300.04	3,116,599	9,689,701	244,452	1.91	39.6
330.58	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ		2,303,924.15	2,244,150	59,774	9,962	0.43	6.0
330.59	DISTRIBUTION RESERVOIRS AND STANDPIPES - PAINTING	10-SQ		53,585,998.63	29,713,492	23,872,507	3,559,119	6.64	6.7
	TOTAL ACCOUNT 330			262,603,069.30	84,840,087	177,762,982	7,491,072	2.85	23.7
331.00	MAINS AND ACCESSORIES	90-R2		3,533,014,149.56	320,293,493	3,212,720,657	54,371,951	1.54	59.1
333.00	SERVICES	65-R2.5		758,836,459.21	173,808,467	585,027,992	14,059,475	1.85	41.6
334.00	METERS AND METER INSTALLATIONS	20-L1.5		275,376,160.82	98,232,397	177,143,764	16,251,857	5.90	10.9
335.00	FIRE HYDRANTS	60-R2		156,182,918.00	22,126,934	134,055,984	3,532,857	2.26	37.9

PENNSYLVANIA-AMERICAN WATER COMPANY
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TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2025

	DEPRECIABLE GROUP	SURVIVOR CURVE	NET ORIGINAL COST AS OF JUNE 30, 2025	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
340.00	OFFICE FURNITURE AND EQUIPMENT							
	FURNITURE	20-SQ	9,765,026.15	2,225,292	7,539,734	571,595	5.85	13.2
	COMPUTERS AND PERIPHERAL EQUIPMENT	5-SQ	20,929,590.90	7,353,689	13,575,902	5,229,815	24.99	2.6
	COMPUTER SOFTWARE	5-SQ	95,254,566.00	30,999,139	64,255,427	29,170,693	30.62	2.2
	COMPUTER SOFTWARE - ENTERPRISE SOLUTIONS	10-SQ	215,330.44	16,573	198,757	66,253	30.77	3.0
	OTHER OFFICE EQUIPMENT	10-SQ	9,100.95	4,261	4,840	1,210	13.29	4.0
	TOTAL ACCOUNT 340		126,173,614.44	40,598,954	85,574,660	35,039,566	27.77	2.4
341.00	TRANSPORATION EQUIPMENT							
	NOT CLASSIFIED	10-L2.5	2,587.67	1,902	686	156	6.03	4.4
	LIGHT DUTY TRUCKS	10-L2.5	75,542,986.69	32,074,239	43,468,748	7,193,168	9.52	6.0
	EQUIPMENT	10-L2.5	17,334,733.21	15,866,742	1,467,991	394,498	2.28	3.7
	AUTOS	10-L2.5	2,120,994.81	1,662,086	458,909	172,283	8.12	2.7
	OTHER	10-L2.5	7,584,706.89	6,832,146	752,561	190,108	2.51	4.0
	TOTAL ACCOUNT 341		102,586,009.27	56,437,115	46,148,895	7,950,213	7.75	5.8
342.00	STORES EQUIPMENT	20-SQ	469,790.25	128,629	341,161	29,150	6.20	11.7
343.00	TOOLS AND WORK EQUIPMENT	20-SQ	53,886,280.27	14,656,979	39,229,301	2,923,285	5.42	13.4
344.00	LABORATORY EQUIPMENT	20-SQ	2,125,988.78	727,066	1,398,923	207,010	9.74	6.8
345.00	POWER OPERATED EQUIPMENT	21-S0.5	2,242,714.26	1,506,133	736,581	83,224	3.71	8.9
346.00	COMUNICATION EQUIPMENT							
	EQUIPMENT	15-SQ	4,837,798.93	898,903	3,938,896	319,993	6.61	12.3
	NON-TELEPHONE	15-SQ	11,538,536.76	2,888,978	8,649,559	796,120	6.90	10.9
	REMOTE CONTROL AND INSTRUMENTATION	10-SQ	5,985,571.87	2,361,391	3,624,181	641,528	10.72	5.6
	TELEPHONE	10-SQ	259,216.96	138,370	120,847	29,007	11.19	4.2
	TOTAL ACCOUNT 346		22,621,124.52	6,287,642	16,333,483	1,786,648	7.90	9.1
347.00	MISCELLANEOUS EQUIPMENT	25-SQ	43,810,400.74	7,309,665	36,500,736	2,007,334	4.58	18.2
348.00	OTHER TANGIBLE EQUIPMENT	25-SQ	3,595,578.07	614,172	2,981,406	149,585	4.16	19.9
	TOTAL DEPRECIABLE PLANT		**6,966,837,628.90**	**1,241,627,202**	**5,725,210,432**	**191,889,683**	**2.75**	
	AMORTIZATION OF NET SALVAGE					**26,487,385**		
	TOTAL UTILITY PLANT IN SERVICE		**6,994,902,694.98**	**1,241,627,202**	**5,725,210,432**	**218,377,068**		

* Life Span Procedure was used. Curve shown is Interim Survivor Curve.

PENNSYLVANIA-AMERICAN WATER COMPANY
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TABLE 3. BRINGFORWARD TO JUNE 30, 2025, OF BOOK RESERVE AS OF JUNE 30, 2024

Account	BOOK RESERVE BALANCE AS OF 06/30/2024		PROJECTED DEPRECIATION ACCRUALS		PROJECTED RETIREMENTS		PROJECTED COST OF REMOVAL		PROJECTED SALVAGE		ADJUSTMENTS AND ACQUISITIONS		PROJECTED BOOK RESERVE BALANCE AS OF 06/30/2025
(1)	(2)	+	(3)	-	(4)	-	(5)	+	(6)	+	(7)	=	(8)
303.14	1,942,823												1,942,823
303.35	133,178		1,308										134,486
303.61	0												0
303.99	9,027,061		1,493,958		161,747		135,867						10,223,405
304.15	8,694,594		3,686,544		396,007		356,407		3,960		26,383		11,659,067
304.20	18,459,251		3,091,762		676,177		155,521		13,523		52,333		20,785,171
304.30	120,816,440		8,557,248		4,254,496		297,813		42,545				124,863,924
304.36	8,232,332		753,652		351,079		3,511						8,631,394
304.38	467,566		135,852										603,418
304.39	115,844		3,516										119,360
304.61	10,999,830		1,353,942		967,325		357,910		473,988				11,502,525
304.62	20,685,178		1,633,341								6,585		22,325,104
304.63	3,313,011		291,896		719,831		43,191		14,396				2,856,281
305.00	25,095,019		2,897,832		15,068,472		4,972,596						7,951,783
306.00	6,710,138		437,185		221,180		11,059						6,915,084
307.00	3,612,473		366,481		152,473		19,820				434,290		4,240,951
310.00	5,546,185		754,799		179,451		39,479						6,082,054
311.20	3,183,068		1,337,373		2,331,161		512,856				251,962		1,928,386
311.50	770,023		751,416		1,067,308		234,809				32,568		251,890
311.52	3,000,408		436,092										3,436,500
311.53	26,577,175		1,277,700										27,854,875
311.54	2,497,330		199,224										2,696,554
320.10	88,028,988		8,254,620		3,595,851		827,046						91,860,711
320.18	103,246												103,246
320.19	3,139,061		81,060										3,220,121
320.20	30,308,513		4,388,722		9,320,612		2,143,742				531,603		23,764,484
320.29	8,168												8,168

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2025, OF BOOK RESERVE AS OF JUNE 30, 2024

Account	BOOK RESERVE BALANCE AS OF 06/30/2024		PROJECTED DEPRECIATION ACCRUALS		PROJECTED RETIREMENTS		PROJECTED COST OF REMOVAL		PROJECTED SALVAGE		ADJUSTMENTS AND ACQUISITIONS		PROJECTED BOOK RESERVE BALANCE AS OF 06/30/2025
(1)	(2)	+	(3)	-	(4)	-	(5)	+	(6)	+	(7)	=	(8)
320.30	6,870,691		1,378,894		228,711		57,181						7,963,693
320.37	10,789,269		315,726		882,712		88,272						10,134,011
330.00	42,731,163		4,058,731		1,940,228		1,629,792				518,941		43,738,815
330.10	2,576,544		393,882										2,970,426
330.20	2,447,602		418,176										2,865,778
330.30	174,867		15,960										190,827
330.40	2,868,151		248,448										3,116,599
330.58	2,164,662		79,488										2,244,150
330.59	28,235,459		3,446,079		1,968,046								29,713,492
331.00	317,168,189		67,709,848		41,655,347		24,160,100				1,230,903		320,293,493
333.00	165,593,656		16,098,050		5,718,338		2,287,335				122,434		173,808,467
334.00	86,478,411		17,907,074		5,574,665		1,393,669		111,492		703,754		98,232,397
335.00	20,657,896		4,698,134		2,126,718		1,169,696				67,318		22,126,934
340.10	1,627,429		597,863										2,225,292
340.20	4,881,170		3,766,708		1,294,189								7,353,689
340.30	32,442,490		19,036,338		20,014,689						(465,000)		30,999,139
340.31	343,459		60,600		852,486						465,000		16,573
340.50	3,049		1,212		17,653						17,653		4,261
341.00	1,734		168										1,902
341.10	28,279,582		5,630,712		3,543,734		70,874		1,346,618		431,935		32,074,239
341.20	15,100,515		437,420								328,807		15,866,742
341.30	1,837,721		52,621								(228,256)		1,662,086
341.40	6,612,942		219,204										6,832,146

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 3. BRINGFORWARD TO JUNE 30, 2025, OF BOOK RESERVE AS OF JUNE 30, 2024

Account	BOOK RESERVE BALANCE AS OF 06/30/2024		PROJECTED DEPRECIATION ACCRUALS	-	PROJECTED RETIREMENTS	-	PROJECTED COST OF REMOVAL	+	PROJECTED SALVAGE	+	ADJUSTMENTS AND ACQUISITIONS	=	PROJECTED BOOK RESERVE BALANCE AS OF 06/30/2025
(1)	(2)	+	(3)	-	(4)	-	(5)	+	(6)	+	(7)	=	(8)
342.00	98,512		30,117										128,629
343.00	11,953,618		2,844,711		200,918						59,568		14,656,979
344.00	624,008		206,368		103,310								727,066
345.00	1,449,816		86,409		30,092		602		602				1,506,133
346.00	671,739		344,391		120,124						2,897		898,903
346.10	2,158,396		730,676		94								2,888,978
346.19	1,864,142		594,197		96,948								2,361,391
346.20	185,515		24,579		71,724								138,370
347.00	5,438,554		1,871,611		25,703						25,203		7,309,665
348.00	510,231		103,941										614,172
TOTAL	**1,206,308,085**		**195,593,859**		**125,929,599**		**40,969,148**		**2,007,124**		**4,616,882**		**1,241,627,202**

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30,2025

ACCOUNT	NET ORIGINALCOST AS OF 6/30/2024	NET ORIGINALCOST AS OF 6/30/2025	ACCRUAL RATE	AVERAGE ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED DEPRECIATION ACCRUALS
(1)	(2)	(3)	(4)	(5)**	(6)	(7)=(5)+(6)
303.14	1,942,822.51	1,942,822.51	-			0
303.35	155,025.17	155,025.17	0.84	1,308		1,308
303.61	3,221,899.78	3,221,899.78				0
303.99	11,838,420.51	13,338,478.83	12.08	1,493,651	307	1,493,958
304.15	103,236,517.17	105,718,516.03	2.89	2,988,698	697,846	3,686,544
304.20	109,016,914.72	111,755,658.02	2.76	3,018,144	73,618	3,091,762
304.30	345,578,963.18	364,760,658.96	2.37	8,332,622	224,626	8,557,248
304.36	25,230,121.46	26,629,042.76	2.98	753,597	55	753,652
304.38	1,403,438.95	1,403,438.95	9.68	135,852		135,852
304.39	119,362.95	119,362.95	2.95	3,516		3,516
304.61	43,670,750.85	46,564,598.47	3.12	1,419,037	(65,095)	1,353,942
304.62	70,281,795.83	74,799,111.69	2.36	1,665,932	(32,591)	1,633,341
304.63	8,983,176.16	11,514,247.71	2.69	275,650	16,246	291,896
305.00	138,403,599.63	198,445,994.35	1.41	2,263,047	634,785	2,897,832
306.00	17,791,345.90	18,672,666.32	2.43	433,217	3,968	437,185
307.00	12,416,177.55	16,858,304.68	2.37	330,678	35,803	366,481
310.00	25,156,942.49	25,871,991.01	2.82	713,370	41,429	754,799
311.20	23,116,136.75	41,084,584.61	3.76	958,419	378,954	1,337,373
311.50	16,571,799.32	20,857,210.96	4.02	751,416		751,416
311.52	12,940,570.90	12,940,570.90	3.37	436,092		436,092
311.53	47,853,790.34	47,853,790.34	2.67	1,277,700		1,277,700
311.54	6,707,900.44	6,707,900.44	2.97	199,224		199,224
320.10	261,593,481.26	278,379,455.86	2.66	7,031,328	1,223,292	8,254,620
320.18	103,245.73	103,245.73	-			
320.19	3,667,945.94	3,667,945.94	2.21	81,060		81,060
320.20	118,733,555.85	159,740,980.00	3.42	4,388,722		4,388,722
320.29	8,167.87	8,167.87	-			

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30,2025

ACCOUNT	NET ORIGINALCOST AS OF 6/30/2024	NET ORIGINALCOST AS OF 6/30/2025	ACCRUAL RATE		AVERAGE ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED DEPRECIATION ACCRUALS
(1)	(2)	(3)	(4)		(5)**	(6)	(7)=(5)+(6)
320.30	13,459,406.97	14,370,730.58	8.94		1,243,549	135,345	1,378,894
320.37	15,531,581.93	19,048,869.77	1.75		297,801	17,925	315,726
330.00	130,768,568.22	148,602,297.21	1.79		2,358,826	1,699,905	4,058,731
330.10	14,144,856.97	24,572,432.37	1.99		393,882		393,882
330.20	19,913,409.67	19,913,409.67	2.10		418,176		418,176
330.30	818,707.23	818,707.23	1.95		15,960		15,960
330.40	12,806,300.04	12,806,300.04	1.94		248,448		248,448
330.58	2,303,924.15	2,303,924.15	3.45		79,488		79,488
330.59	45,744,045.26	53,585,998.63	6.96		3,446,079		3,446,079
331.00	3,327,488,033.47	3,533,014,149.56	1.53		51,918,017	15,791,831	67,709,848
333.00	719,078,190.47	758,836,459.21	1.85		13,633,883	2,464,167	16,098,050
334.00	249,227,878.51	275,376,160.82	6.06		15,845,804	2,061,270	17,907,074
335.00	145,278,472.78	156,182,918.00	2.27		3,407,391	1,290,743	4,698,134
340.10	8,638,585.84	9,765,026.15	6.01		552,855	45,008	597,863
340.20	17,320,326.29	20,929,590.90	20.00	*	3,766,708		3,766,708
340.30	91,455,720.27	95,254,566.00	20.00	*	19,036,338		19,036,338
340.31	1,067,816.75	215,330.44	10.00	*	60,600		60,600
340.50	9,100.95	9,100.95	13.29		1,212		1,212
341.00	2,587.67	2,587.67	6.53		168		168
341.10	61,327,985.93	75,542,986.69	8.84		6,050,991	(420,279)	5,630,712
341.20	16,793,602.21	17,334,733.21	2.56		437,420		437,420
341.30	1,995,589.81	2,120,994.81	2.55		52,621		52,621
341.40	7,584,706.89	7,584,706.89	2.89		219,204		219,204

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED JUNE 30,2025

ACCOUNT	NET ORIGINALCOST AS OF 6/30/2024	NET ORIGINALCOST AS OF 6/30/2025	ACCRUAL RATE	AVERAGE ACCRUALS	AMORTIZATION OF NET SALVAGE	PROJECTED DEPRECIATION ACCRUALS
(1)	(2)	(3)	(4)	(5)**	(6)	(7)=(5)+(6)
342.00	469,790.25	469,790.25	6.20	29,124	993	30,117
343.00	48,121,656.24	53,886,280.27	5.54	2,813,939	30,772	2,844,711
344.00	2,229,299.11	2,125,988.78	9.09	197,555.00	8,813	206,368
345.00	2,122,806.77	2,242,714.26	3.84	85,932.00	477	86,409
346.00	3,712,250.99	4,837,798.93	6.56	278,846.00	65,545	344,391
346.10	9,649,123.69	11,538,536.76	6.95	730,676.00		730,676
346.19	4,902,319.79	5,985,571.87	10.95	594,197.00		594,197
346.20	309,958.34	259,216.96	8.76	24,579.00		24,579
347.00	36,245,335.69	43,810,400.74	4.62	1,838,685.00	32,926	1,871,611
348.00	795,577.91	3,595,578.07	4.08	103,860.00	81	103,941
TOTAL	**6,421,061,386.27**	**6,970,059,528.68**		**169,135,094**	**26,458,765**	**195,593,859**

* UTILIZING ACCRUAL RATE CONSISTENT WITH AMORTIZATION PERIOD TO MITIGATE ANOMALOUS CALCULATED ACCRUAL RATE.
** ANNUAL ACRUAL DEVELOPED BASED ON MONTHLY AVERAGES.

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 340.3 OFFICE FURNITURE AND EQUIPMENT - COMPUTER SOFTWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2020	17,145,049.52	17,145,050	17,145,050			
2021	16,784,591.24	13,427,673	5,167,902	11,616,689	1.00	11,616,689
2022	14,702,503.96	8,821,502	3,395,127	11,307,377	2.00	5,653,688
2023	22,550,450.41	9,020,180	3,471,592	19,078,858	3.00	6,359,619
2024	23,492,635.21	4,698,527	1,808,319	21,684,316	4.00	5,421,079
2025	579,335.66	28,967	11,149	568,187	4.75	119,618
	95,254,566.00	53,141,899	30,999,139	64,255,427		29,170,693

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.2 30.62

PENNSYLVANIA-AMERICAN WATER COMPANY
WATER OPERATIONS

ACCOUNT 348 OTHER TANGIBLE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2003	5,843.07	5,142	4,792	1,051	3.00	350
2004	20,479.05	17,202	16,030	4,449	4.00	1,112
2006	12,840.00	9,758	9,093	3,747	6.00	624
2007	694,887.82	500,319	466,222	228,666	7.00	32,667
2015	1,360.35	544	507	853	15.00	57
2019	52,243.29	12,538	11,684	40,559	19.00	2,135
2020	7,924.33	1,585	1,477	6,447	20.00	322
2024	2,800,000.16	112,000	104,367	2,695,633	24.00	112,318
	3,595,578.07	659,088	614,172	2,981,406		149,585

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.9 4.16

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **John J. Spanos**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 11-R and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024

John J. Spanos

VOLUME 16

PENNSYLVANIA-AMERICAN WATER COMPANY

2023 GENERAL BASE RATE CASE
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

STATEMENT NO. 12
DIRECT TESTIMONY OF CONSTANCE E. HEPPENSTALL

EXHIBIT NO. 12-A
WATER OPERATIONS
COST OF SERVICE AS OF JUNE 30, 2025

PAWC STATEMENT NO. 12

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DIRECT TESTIMONY OF CONSTANCE E. HEPPENSTALL

ON BEHALF OF PENNSYLVANIA-AMERICAN WATER COMPANY

CONCERNING

COST OF SERVICE ALLOCATION

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: November 8, 2023

DIRECT TESTIMONY OF
CONSTANCE E. HEPPENSTALL

Q. Please state your name and address.

A. My name is Constance E. Heppenstall. My business address is 1010 Adams Avenue, Audubon, PA 19403.

Q. By whom are you employed?

A. I am employed by Gannett Fleming Valuation and Rate Consultants, LLC.

Q. Please describe your position with Gannett Fleming Valuation and Rate Consultants, LLC, and briefly state your general duties and responsibilities.

A. My title is Senior Project Manager. My duties and responsibilities include the preparation of accounting and financial data for revenue requirement, the allocation of cost of service to customer classifications, and the design of customer rates in support of public utility rate filings.

Q. Have you presented testimony in rate proceedings before a regulatory agency?

A. Yes. I have testified before the Pennsylvania Public Utility Commission ("Commission" or "PUC"), the Kentucky Public Service Commission, the Arizona Corporation Commission, the Missouri Public Service Commission, the Virginia State Corporation Commission, the Hawaii Public Utility Commission, the West Virginia Public Service Commission, the New Jersey Board of Public Utilities, the Indiana Utility Regulatory Commission, the Public Utilities Commission of Ohio, the Nevada Public Utility Commission, and the California Public Utility Commission concerning revenue requirements, cost of service allocation, rate design

and revenue requirements. A list of cases in which I have testified is attached to my testimony.

Q. What is your educational background?

A. I have a Bachelor of Arts degree from the University of Virginia, Charlottesville, Virginia and a Master of Science in Industrial Administration from the Carnegie-Mellon University Tepper School of Business, Pittsburgh, Pennsylvania.

Q. Would you please describe your professional affiliations?

A. I am a member of the American Water Works Association ("AWWA"), the Pennsylvania Municipal Authorities Association and the National Association of Water Companies.

Q. Briefly describe your work experience.

A. I joined the Valuation and Rate Division of Gannett Fleming (formerly Gannett Fleming, Inc.) in August 2006, as a Rate Analyst. Prior to my employment at Gannett Fleming, I was a Vice President of PriMuni, LLP where I developed financial analyses to test proprietary software to ensure its pricing accuracy in accordance with securities industry conventions. From 1987 to 2001, I was employed by Commonwealth Securities and Investments, Inc. as a public finance professional where I created and implemented financial models for public finance clients to create debt structures to meet clients' needs. From 1986 to 1987, I was a public finance associate with Mellon Capital Markets.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to explain the cost of service allocation studies conducted under my direction and supervision for Pennsylvania-American Water

Company ("PAWC" or the "Company") and to describe the results produced by those studies.

Q. What revenue requirement data did you use to prepare PAWC's cost of service studies?

A. The cost of service studies ("COSS") I performed are based on data from PAWC's separate revenue requirement studies for the following operations: (1) Water Operations; (2) Wastewater ("WW") Sanitary Sewer System ("SSS") General Operations; (3) WW SSS Butler Area Operations; (4) WW SSS Brentwood Operations; and (5) Wastewater Combined Sewer System ("CSS") Operations. The Company's revenue requirements for each of those operations are developed in PAWC Exhibit 3-A, which is sponsored by PAWC witness Ashley E. Everette and discussed in her direct testimony.

Q. Have you prepared exhibits presenting the results of your studies?

A. Yes. The exhibits identified below accompany my testimony and are described in detail further in my testimony.

Exhibit Number	Type of Study	Operation	Rate Zones
12-A Confidential (Pgs. A35-A37)	Cost of Service	Water Operations	Water Zones 1-5
12-B	Cost of Service	WW SSS General Operations	Wastewater Zones 1, 2, 5, 7, 8 and 9
12-C	Cost of Service	Wastewater CSS Operations	Wastewater Zones 3, 4 and 6
12-D	Cost of Service	WW SSS Brentwood Operations	Acquisition
12-E	Cost of Service	WW Butler Area Operations	Acquisition

Q. Is the Company presenting separate cost of service and rate design studies for CSS and SSS wastewater operations?

A. Yes. A CSS collects and conveys a wastewater stream that consists of flows of sewage from homes and businesses, infiltration and in-flow ("I&I") and storm water. As explained by Ms. Everette in PAWC Statement No. 1, as part of the settlement of PAWC's last base rate case approved by the Commission at Docket Nos. R-2022-3031672 and R-2022-3031673 (the "2022 Rate Case Settlement"), the Company agreed to provide in its next base rate filing a separate revenue requirement study for CSS systems it owns and a cost of service study that separately identifies all storm water costs for CSS operations. Accordingly, I prepared a separate cost of service study to identify the cost of collecting, treating, and disposing of storm water in the CSS wastewater systems PAWC acquired from the Municipal Authority of the City of Scranton in 2016, the Municipal Authority of the City of McKeesport in 2017, and the Borough of Kane Authority in 2020.

Q. Why is the Company presenting separate cost of service studies for PAWC's Butler Area and Brentwood wastewater operations?

A. PAWC currently has applications pending before the Commission to acquire the wastewater assets of the Butler Area Sewer Authority ("BASA") and the Borough of Brentwood under Section 1329 of the Public Utility Code ("Code"), 66 Pa. C.S. § 1329. The Company anticipates a Commission decision in both matters prior to the close of the record in this rate case. On August 14, 2023, PAWC filed a unanimous settlement of all issues with the active parties in the BASA acquisition proceeding, which includes a settlement term requiring the Company to submit a separate cost of

service study in this proceeding . I prepared a separate cost of service study for the SSS wastewater system currently owned and operated by the Brentwood Borough, which PAWC expects to obtain PUC approval to acquire in 2024, consistent with the proposed settlement for the BASA acquisition and past practice for systems acquired pursuant to Section 1329. Company witness Christopher Abruzzo provides a detailed description of these pending acquisitions in his direct testimony.

COST OF SERVICE ALLOCATION – WATER OPERATIONS

Q. Please describe the revenue requirements included in the cost of service study for PAWC's water operations being presented in this case.

A. The cost of service study for Water Operations prepared for this case is based upon the Company's revenue requirement for the fully projected future test year ("FPFTY") ending June 30, 2025, including a portion of the revenue requirement of PAWC's wastewater operations, as authorized by Section 1311(c) of the Code. The development of the revenue requirements for Water Operations, including the revenue requirement allocated to Water Operations from the Company's Wastewater Operations, is explained by Ms. Everette in PAWC Statement No. 1.

Using the total revenue requirement for the FPFTY developed by the Company in the manner described by Ms. Everette, I prepared the cost of service study set forth in Exhibit No. 12-A (Water Operations). The cost of service study presented in Exhibit No. 12-A allocates among customer classes: (1) the entire revenue requirement of the Company's Water Operations; and (2) the portion of the revenue requirement of the Company's Wastewater Operations that will not be recovered from wastewater customers under the Company's proposed wastewater

rates, which I will refer to, collectively, as the cost of service or total revenue requirement for the FPFTY.

Q. Briefly describe the purpose of your cost of water service allocation study.

A. The study applies generally accepted cost of service principles and procedures to allocate the total revenue requirement to the residential, commercial, industrial, public, other water utilities, private fire protection and public fire protection classifications. The results of the cost of service study indicate the relative cost responsibilities of each class of customers. The allocated cost of service is one of several criteria that are appropriately considered in designing customer rates to produce the required revenues.

Q. Have you prepared exhibits that set forth the results of your study?

A. Yes. As I previously noted, Exhibit No. 12-A sets forth the results of my allocation of the pro forma cost of service for Water Operations as of June 30, 2025.

Q. Please describe the method of cost allocation that was used in your study.

A. For Exhibit No. 12-A, the base-extra capacity method, as described in the 2017 (seventh edition) and prior editions of the Water Rates Manual published by AWWA, was used to allocate the pro forma costs that comprise the total revenue requirement. It is a recognized method for allocating the cost of providing water service to customer classifications in proportion to each classification's use of the commodity, facilities, and services of a water utility and has been accepted by this Commission for that purpose. Indeed, it is the method that was used in the Company's prior rate cases, including its last base rate case at Docket No. R-2022-

3031672, and has been accepted by the Commission for use by the Company and other water utilities in the Commonwealth.

Q. Is the base-extra capacity method described in Exhibit No. 12-A?

A. Yes. It is described on pages 3 and 4 of the exhibit.

Q. Please describe the procedure followed in the cost allocation studies.

A. Each identified category of cost in the pro forma cost of service was allocated to the customer classifications using appropriate allocation factors. This allocation is presented in Schedule D of Exhibit No. 12-A. The categories of cost, which consist of operation and maintenance expenses, depreciation expense, taxes and income available for return, are identified in columns 1 and 2 of Schedule D. The costs in each category, shown in column 4, are allocated to the several customer classifications based on allocation factors referenced in column 3. The development of the allocation factors is presented in Schedule E of each exhibit.

I will use some of the larger cost items to illustrate the principles and considerations used in the cost allocation methodology. Purchased water, purchased electric power and treatment chemicals are examples of costs that tend to vary with the amount of water consumed and are, therefore, considered base costs. These costs are allocated to the several customer classifications in direct proportion to the average daily consumption of those classifications using Factor 1. The development of Factor 1 is shown in Schedule E of Exhibit No. 12-A.

Other source of supply, water treatment and transmission costs are associated with meeting usage requirements more than the average. This means that these costs are incurred generally to meet maximum day requirements. Costs of this nature

were allocated to customer classifications partially as base costs (i.e., in proportion to average daily consumption, pursuant to Factor 1), partially as maximum day extra capacity costs (i.e., in proportion to maximum day extra capacity, pursuant to Factor 2) and, for certain pumping stations and transmission mains, partially as fire protection costs (i.e., pursuant to Factor 3). Factors 2 and 3 are developed in Schedule E of Exhibit No. 12-A.

Costs associated with storage facilities and the capital costs of distribution mains were allocated partly based on average consumption and partly based on maximum hour extra demand, including the demand for fire protection service, because these facilities are designed to meet maximum hour and fire demand requirements. The development of Factor 4, which is used for these allocations, is shown in Schedule E of Exhibit No. 12-A. Fire demand costs were allocated to public and private fire protection service and to general service in proportion to the relative potential demands on the system from hydrants and fire services and from commercial service lines sized to provide both fire protection and general service.

Costs associated with pumping facilities and the operation and maintenance of mains were allocated on the combined bases of maximum day and maximum hour extra capacity because these facilities serve both functions. The relative weightings of Factor 3 (maximum day) and Factor 4 (maximum hour) for pumping facilities and the operation and maintenance of mains were based on the functional use of pumps and footage of mains, respectively, serving maximum day and maximum hour functions. The weighted factors, identified as Factor 5, Factor 5A and Factor 8, are developed on Schedule E of Exhibit No. 12-A.

Costs associated with meters and services were allocated to customer classifications in proportion to the capital costs of the sizes and quantities of meters and services serving each classification. The factors for allocating the cost of meters and services, identified as Factor 10 and Factor 11, are developed on Schedule E of Exhibit No. 12-A.

The costs of customer accounting, billing and collections were allocated based on the number of customers for each customer classification. The costs of meter reading were allocated based on the pro forma number of meters by classification. These factors, identified as Factor 14 and Factor 15, are developed on Schedule E of Exhibit No. 12-A. Bad debt expense, except for bad debt expenses related to the Company's Arrearage Management Program, was allocated based on the average net write-offs for 2020, 2021 and 2022 (Factor 22). The bad debt expense related to the Company's Arrearage Management Program was directly assigned to the Residential class.

Administrative and general costs (except those that are directly assignable to the Residential class, such as Customer Assistance Program costs) were allocated based on allocated direct costs excluding those costs that require little administrative and general expense, such as purchased water, power, chemicals, and waste disposal. The factor for this allocation is identified as Factor 16.

Annual depreciation accruals were allocated based on the function of the facilities in each plant account to which depreciation expense is recorded. The original cost less accrued depreciation of utility plant in service was also allocated based on the function of the plant recorded in each account for the purpose of

developing Factor 19, which is used to allocate items such as return and income taxes.

Q. What was the source of the total cost of service data set forth in column 4 of Schedule D of Exhibit No. 12-A?

A. The pro forma costs of service were furnished by the Company and are the same as those set forth in PAWC Exhibit No. 3-A for Water Operations.

Q. Refer to Schedule E of Exhibit No. 12-A and explain the source of the system maximum day and maximum hour ratios used in the development of Factors 2, 3 and 4.

A. The ratios were based on a review of experienced Company data. The maximum day ratio of 1.4 times the average day approximates the ratio of maximum daily send-out experienced by the Company in 1988, 1995, 1996, 1999 and 2003. The maximum hour ratio of 2.1 times the average hour approximates the results of an analysis that was performed to determine the peak hour consumption experienced by the Company's three largest operating districts.

Q. These maximum day and maximum hour ratios were recorded 20 years ago. Why are you using these ratios rather than more recent ones?

A. A water system must be designed to meet the highest peak demand that potentially could be experienced – not just the highest peak demand that was experienced within a recent historical period. Peak demands can vary based on contingencies that do not reoccur on a regular or predictable basis. The facilities needed to produce and distribute water have a long lead-time to design and construct and have a correspondingly long service life. Given those inherent characteristics of water

utility facilities, responsible waterworks practice necessitates building a system that can meet peak demands whenever they may occur because the system cannot be expanded (or contracted) to meet only those demands that appear within a limited historical study period, such as a ten-year look-back. Additionally, the water usage on the maximum days in areas within the Company's overall water operations are often more than 1.4 times the average usage for that year. Given PAWC's obligation to furnish safe and reliable service, the Company must be prepared to meet customers' peak demands whenever they occur and, therefore, it is not reasonable to ignore the maximum day ratios that the Company has actually experienced.

Q. Does the AWWA M1 Manual, Seventh Edition, address system wide maximum day demand factors for use in the base extra capacity method?

A. The AWWA M1 Manual does not directly prescribe specific a system wide maximum day factor. However, Appendix A to the manual addresses the diversity ratio, which is calculated using the system wide peaking factor. Specifically, the diversity ratio is the non-coincident peaking factor divided by the system peaking factor. In Appendix A, the manual recommends that a reasonable diversity ratio should be between 1.1 and 1.4. The 1.4 system wide maximum day demand factor employed in the Water COSS produces a diversity factor that is reasonable based on the range recommended in the AWWA manual.

Q. Please explain the calculation of a diversity ratio using the Company's system wide maximum day factor.

A. The Company's non-coincident peaking factor (the dividend, which is divided by the system wide maximum day factor to derive the diversity factor) is calculated based

on the non-coincident maximum day volumes found on Schedule E, in Exhibit 12-A. The total average daily consumption (in 100 gallons) shown in this schedule totals 1,169,719. The maximum day extra capacity (in 100 gallons) totals 1,126,999. The factors (column 3) that produce this amount were obtained from a demand study completed by the Company from January 2013 through October 2015. If these volumes of average day and maximum day extra capacity are added together, the sum equals the non-coincident maximum day volume (in 100 gallons) of 2,296,718. The ratio of the non-coincident peak volume (in 100 gallons) of 2,296,718 to average day volume (in 100 gallons) of 1,169,719 equals 1.96. This non-coincident ratio is then divided by the system wide peaking factor (coincident peaking factor) to develop the diversity ratio. The Company's system wide peaking factor of 1.4 produces a diversity factor of 1.41 (1.97/1.40), which is reasonable based on the recommended range of diversity ratios set forth in the AWWA Manual. In short, calculating the diversity ratios using the system wide maximum day factors of PAWC, fully supports the reasonableness of the system wide maximum day factor used in the COSS.

Q. Are the system maximum day and maximum hour ratios the same as those used in studies presented on behalf of the Company in prior proceedings before this Commission?

A. Yes, they are.

Q. Are the customer class extra capacity factors the same as those used in the most recent prior study for the Company?

A. Yes, the extra capacity factors used in Exhibit No. 12-A reflect the results of PAWC's most recent customer class demand study submitted in the Company's 2017 base rate case. A detailed explanation of the methods and procedures used, the sampling techniques, the areas and customers monitored, the results of the monitoring during the 2013-2015 period, and the conclusions from the study results are described in the text of the study provided in Appendix A of Exhibit No. 12-A.

Q. For Exhibit No. 12-A, did you make any adjustments to the cost allocation study?

A. Yes, four adjustments were made to the study. I will describe each adjustment and explain why it was made.

Q. Please explain the first adjustment.

A. The first adjustment was made to exclude the volume of contract sales under Riders DIS (Demand Industrial Sales) and DRS (Demand Resale Sales) in developing the allocation factors for the industrial classification and the sales for resale – Group A classification. As a result, costs are allocated only to the non-Rider DIS and non-Rider DRS customers. Correspondingly, the revenues received from those contract sales were deducted from the total cost of service and from each of the classes of service, as shown on Schedule D of Exhibit No. 12-A.

Q. Why did you make this adjustment?

A. This adjustment was made to provide a more meaningful comparison of allocated costs and revenues. Including contract sales would inappropriately reduce the relative rate of return for the applicable class because revenues from the contract sales reflect contract rates that, to address competitive situations and avoid loss of

load (or gain incremental load), are lower than the non-Rider DIS and non-Rider DRS rates. By excluding contract sales, as I have done, the resulting cost of service and revenues properly reflect the costs and the rates for non-contract customers. The Commission, in approving Riders DIS and DRS, found that those riders create benefits for all the Company's customers by preserving or attracting incremental sales that, because of competitive forces, could not otherwise be made. Accordingly, the revenues derived from Rider DIS and Rider DRS customers are reflected as deductions from all classes' cost of service.

Q. Please describe the second adjustment.

A. The second adjustment excludes from the extra capacity portion of Factors 2, 3 and 4 the curtailment volumes associated with service provided under the Company's industrial curtailment rate schedule. This adjustment properly accounts for the fact that curtailment volumes are interruptible and that a customer, to be eligible for this service, is required to meet certain minimum load factor requirements and have sufficient on-site storage capacity to meet its demands during periods of curtailment or interruption. This adjustment reflects the fact that a customer on this rate does not impose extra-capacity demand costs.

Q. Are the volumes associated with curtailment service included in the base portion of Factors 2, 3 and 4 in Exhibit No. 12-A?

A. Yes, they are.

Q. Please describe the third adjustment.

A. The third adjustment reallocates the unrecovered portion of public fire protection costs to the residential, commercial, industrial and public classifications. This was

done to comply with Section 1328 of the Code, which provides that public fire hydrant rates may only recover 25% of the cost of public fire protection service and that the unrecovered portion should be recovered in the fixed charges of other customer classifications.

Q. How did you allocate the unrecovered portion of public fire service costs in Exhibit No. 12-A?

A. Consistent with the statutory requirement that these costs are to be recovered in fixed charges, I allocated the unrecovered public fire costs using Factor 21, which is based on the meter equivalents of the residential, commercial, industrial and public classifications.

Q. Please describe the fourth adjustment.

A. The fourth adjustment to the water cost of service study in Exhibit No. 12-A allocates a portion of the Company's total wastewater cost of service to the Company's water operations. The wastewater cost of service allocated to Water Operations is the cost of wastewater service less the revenues the Company's proposed wastewater rates are expected to produce.

Q. What is the total amount of wastewater revenue requirement allocated to the Company's Water Operations?

A. As shown in column 3 of Schedule A of Exhibit No. 12-A, the wastewater cost of service allocated to the cost of service for PAWC's Water Operations totals $71,087,394.

Q. How are the Wastewater Operations revenue requirements allocated to the customer classes in Exhibit No. 12-A?

A. The wastewater operations revenue requirements are allocated to the customer classes in Exhibit No. 12-A in the manner described in the direct testimony of Company Witness Charles Rea.

Q. Have you summarized the results of your cost allocation study in Exhibit No. 12-A?

A. Yes. In Exhibit No. 12-A, the results for the combined water and wastewater operations are summarized in columns 2, 3 and 4 of Schedule A. Column 5 presents each customer classification's cost responsibility as a percent of the total cost.

Q. Have you compared these cost responsibilities with the proportionate revenue under existing rates for each customer classification in Exhibit 12-A?

A. Yes. Allocated cost responsibilities can be compared to the percentage revenue under present rates, as shown on Schedule A. The percentage cost responsibilities (relative cost of service) can be compared to the percentage of pro forma revenues (relative revenues) under proposed rates, as shown on Schedule A in Exhibit No. 12-A.

COST OF SERVICE ALLOCATION – WASTEWATER SSS OPERATIONS

Q. Please describe the overall cost of service allocation studies for the Company's Wastewater SSS Operations.

A. The cost of service allocation study for the Company's Wastewater SSS General Operations includes the combined wastewater revenue requirements for PAWC's Wastewater Rate Zones 1, 2, 5, 7, 8 and 9. As previously noted, I performed separate cost of service allocation studies for the Company's WW SSS Butler Area Operations and WW SSS Brentwood Operations.

The purpose of each of those studies was to allocate the total cost of service, which is the total revenue requirement, to the several customer classifications. In the studies, the total costs were allocated to the residential, non-residential, large industrial, and bulk use customer classifications in accordance with generally accepted cost of service principles and procedures.

For the purposes of cost allocation in the Wastewater SSS General Operations study presented in Exhibit No. 12-B, small industrial customers are included in the non-residential class, which also includes commercial and public customers. In Exhibit No. 12-B, two large industrial customers are included in the large industrial class. The bulk user class also includes the Veterans Administration Hospital, which is served from the Coatesville system. Finally, in accordance with Paragraph 41 of the 2022 Rate Case Settlement, Exhibit 12-B includes a separate class for municipal and utility wastewater systems ("York Bulk Customers")[1] that have entered into Wastewater Treatment and Conveyance Agreements ("Bulk Agreements") to treat their wastewater flows at the York treatment plant.

In Exhibits No. 12-D and 12-E costs were allocated to the residential and non-residential classes.

Q. In its 2022 rate case, did PAWC include the cost of providing service to the York Bulk Customers in the cost-of-service study for its York WW SSS operations?

[1] The York Bulk Customers consist of The York Water Company, which is the owner of the former West York Borough Collection System; Springettsbury Township; North York Borough; York Township; Manchester Township; West Manchester Township; and Spring Garden Township.

A. No. Only retail customers that receive wastewater collection, conveyance and treatment service were identified as separate classes (residential and non-residential) for purposes of allocating the total system cost of service among customer classes. The York Bulk Customers have competitive alternatives to service from PAWC that were discussed in detail by PAWC witness Bernard D. Grundusky in Statement No. 7-R submitted on August 19, 2022 at Docket Nos. R-2022-3031672 and R-2022-3031673. Therefore, prices above those negotiated extensively and at arm's length in the Bulk Agreements would result in the loss of the York Bulk Customers as a revenue source. Accordingly, in the Company's last rate case, compensation received under the Bulk Agreements was treated as incremental revenue and, as such, was used to reduce the cost of service of the retail customers that were reflected as separate classes in the cost-of-service study.

Q. Is the cost of furnishing service to the York Bulk Customers shown in Exhibit 12-B subsidized by other wastewater customers?

A. No. As explained by Company witness Bruce W. Aiton in PAWC Statement No. 3, the York Bulk Customers continue to have competitive options for bulk treatment and the negotiated contract rate is necessary to maintain the York Bulk Customers on the York wastewater system. Retail customers benefit from the contribution that bulk service revenues provide to offset the fixed costs that otherwise would be borne entirely by retail customers. In that regard, as shown in Table 1 below, the total variable cost to furnish wastewater service in the WW SSS General Operations is $7,710,415 or $0.157 per 100 gallons.

Table 1

	VARIABLE COSTS	Total Costs
615.3	Purchased Power	$ 3,234,166
618.3	Chemicals	$ 1,810,725
675.4	Misc. Operating Expense - Waste Disposal	$ 2,572,562
615.5	Purchased Power	$ 92,962
	TOTAL VARIABLE COSTS	$ 7,710,415
	Total Flow (100 gallons)*	49,167,101
	Total Variable Cost per 100 gallon usage	$ 0.157

* Source: Exhibit 10-B.

By comparison, the Bulk Agreements impose rates of s $0.2737 per 100 gallons for Springettsbury Township and $0.4123 per 100 gallons for the other five York Bulk Customers during the FPFTY. As such, the revenues from the York Bulk Customers, or Bulk User – Contract customers, cover the variable costs of bulk treatment service and provide a meaningful contribution to the total fixed costs incurred to furnish wastewater service to retail customers in the Company's WW SSS General Operations.

Q. Have you prepared exhibits presenting the results of your studies?

A. Yes. The results of my allocations of the pro forma cost of service as of June 30, 2025 are presented in Exhibit Nos. 12-B (Wastewater SSS General Operations), 12-D (WW SSS Brentwood Operations), and 12-E (WW SSS Butler Area Operations).

Q. Please describe the method of cost allocation that was used in your studies presented in Exhibit Nos. 12-B, 12-D and 12-E.

A. I used the functional cost allocation methodology described in "Financing and Charges for Wastewater Systems", Manual of Practice No. 27, published by the Water Environment Federation ("Manual of Practice No. 27"). This method allocates the cost of providing wastewater service to customer classifications in proportion to each classification's use of the service provider's facilities and services. Costs are assigned to cost components using predominant operational purposes as cost-causative factors. The functional cost method is generally accepted as a sound method for allocating the cost of wastewater service.

Q. What procedures did you use to apply the cost allocation methodology for wastewater operations?

A. Each element of the cost of service is allocated to customer classifications according to the functional categories of flow, I&I, customer facilities and customer accounting. Except for certain depreciation and rate base items that are directly assigned to the Bulk User/VA Hospital class in Exhibit No. 12-B, the functional costs are allocated to customer classifications based on the amount of flow contributed to the system, the amount of I&I allocated to each class, and the number and relative size of customers.

Q. What costs have you directly assigned to the Bulk User/VA Hospital class for the Company's Wastewater SSS General Operations in Exhibit No. 12-B?

A. I have directly assigned certain components of rate base and annual depreciation expense related to wastewater treatment, gravity mains, and manholes based on the result of the allocation in the 2010 Coatesville cost of service study in Docket R-2010-2166212 ("Prior Cost of Service Study"). This study allocated Coatesville

Wastewater System capital costs to their bulk users in accordance with the design-basis methodology described in Manual of Practice No. 27 and the I&I study submitted in compliance with the terms of the settlement at Docket No. R-2008-2032689. Pursuant to the terms of that settlement, the Company conducted a comprehensive study to determine the current and future flow volumes for each classification and the volume of I&I in the system as it relates to direct and bulk customers. The study was submitted with the Company's wastewater base rate filing at Docket No. R-2010-2166212 and was used in determining the cost of service for the bulk user class in that case. In this case, it is appropriate to continue to allocate certain capital costs related to treatment and mains to the remaining bulk users in the Coatesville area in Exhibit No. 12-B based on the Prior Cost of Service Study and I&I study.

Q. What is the basis for the volumes used to allocate costs to customer classifications in Factor 1?

A. Factor 1 is used to allocate costs related to wastewater treatment. In Factor 1, for the residential and non-residential classes, the flows were based on pro forma water usage billing determinants multiplied by a factor of 88%, consistent with the Coatesville I&I study, which determined that 88% of water use is returned to the sewer system. I then added average daily I&I in column 3 of Schedule E. In Exhibit No. 12-B, using the Company's flow records, it was determined that 32.9% of the average daily flow was from I&I. Using the Company's flow and certain assumptions, it was determined that 62.5% and 32.9% of the average daily flow was from I&I for WW SSS Butler Area Operations and WW SSS Brentwood Operations,

respectively. Except for the bulk user classes for WW SSS General Operations, 1/3 of I&I was allocated to the customer classes based on average daily flow and 2/3 was allocated based on service equivalents. The I&I allocated to the bulk user/VA Hospital class and the Bulk Users – Contract classes in Exhibit No. 12-B was based on 25% of the ratio of I&I to customer flow of 32.9%, as the flows from bulk users already contain I&I from their own collection systems.

Q. Please give a similar description of Factor 2 for Exhibit Nos. 12-B, 12-C, and 12-D.

A. Factor 2 is used to allocate costs related to collection. This factor was calculated in a similar manner as Factor 1. However, based on Company records, maximum day volumes were found to be 3.0 times total average flow for PAWC's WW SSS General Operations and this ratio was used for all areas. Except for the bulk use classes for PAWC's WW SSS General Operations, 1/3 of I&I was allocated to the customer classes based on average daily flow and 2/3 was allocated based on service equivalents. The I&I allocated to the Bulk User/VA Hospital class in Exhibit No. 12-B was based on 25% of the ratio of I&I to customer flow. The Bulk User – Contract class was not allocated any costs related to the collection system.

Q. Please explain the factors used to allocate capital costs.

A. Factors 3 and 3A are similar to Factors 1 and 2 except that Factors 3 and 3A exclude the Bulk User/VA Hospital class in Exhibit No. 12-B because assets for these customers have been directly assigned. Factors 3 and 3A are not used in Exhibit Nos. 12-C and 12-D as these areas do not have bulk customers who have specific allocations related to a wastewater treatment plant.

Q. Please explain the remaining cost allocation factors.

A. Factors 4 and 5 were used to allocate customer facilities and customer accounting costs. These factors were based on the number and relative size of the customers.

Factor 6 is a composite factor used to allocate employee pension and benefit expenses and payroll taxes. Factor 6 is based on the allocation of direct labor expense.

Factors 7 and 8 are based on the allocation of plant in service and rate base, respectively. Factor 7 allocates other rate base elements and Factor 8 is used to allocate return and taxes.

Factor 9 is based on the total cost of service and is used to allocate regulatory commission expense and other revenues.

Factor 10 is used to allocate administrative and general expenses and is based on the allocation of all other operating expenses exclusive of power, chemicals and waste disposal. Factor 11 allocates cash working capital and is based on the allocation of all operating expenses.

Q. Please explain the procedure for allocating costs to the several customer classifications.

A. The items of cost, which include operation and maintenance expenses, depreciation expense, taxes and income available for return, are identified in column 1 of Schedule D in Exhibit Nos. 12-B, 12-D and 12-E. The cost of each item, shown in column 3, is allocated to the several customer classifications based on allocation factors referenced in column 2. The development of the allocation factors is presented in Schedule E of each exhibit.

Q. What was the source of the total cost of service data set forth in column 3 of Schedule D of Exhibit Nos. 12-B, 12-C and 12-D?

A. The pro forma costs of service were furnished by the Company and are the same as those set forth in Exhibit No. 3-A. The pro forma cost of service in Exhibit Nos. 12-B, 12-C and 12-D was reduced by the $31,962,411, $1,565,232 and $21,552,699 in revenue requirement, respectively, that is proposed to be recovered in water rates.

Q. Have you summarized the results of your cost allocation studies for the Company's SSS Wastewater Operations?

A. Yes. The results are summarized in columns 1, 2 and 3 of Schedule A of Exhibit Nos. 12-B, 12-D and 12-E. Column 2 sets forth the total allocated pro forma cost of service as of June 30, 2025, for each customer classification identified in column 1. Column 3 presents each customer classification's cost responsibility as a percent of the total cost.

Q. Have you compared these cost responsibilities with the proportionate revenue under existing rates for each customer classification?

A. Yes. A comparison of the allocated cost responsibilities and the percentage revenue under existing rates can be made by comparing columns 3 and 5 of Schedule A of Exhibit Nos. 12-B, 12-D and 12-E. A similar comparison of the percentage cost responsibilities (relative cost of service) and the percentage of pro forma revenues (relative revenues) under proposed rates can be made by comparing columns 3 and 7 of Schedule A of each exhibit. The rate of return by customer classification under present and proposed rates is set forth on Schedules B and C, respectively.

COST OF SERVICE ALLOCATION – WASTEWATER CSS OPERATIONS

Q. Please describe the cost of service allocation for the Company's Wastewater CSS Operations.

A. The cost of service allocation study is based on the revenue requirements developed by the Company in Exhibit 3-A for its Wastewater CSS Operations. The study allocated the combined cost of service of the Scranton, McKeesport and Kane operations to residential, non-residential, industrial, bulk, and stormwater classifications.

Q. Have you prepared an exhibit presenting the results of your study?

A. Yes. The results of my allocation of the pro forma cost of service as of June 30, 2025 is shown in Exhibit No. 12-C.

Q. Please describe the method of cost allocation that was used in your study.

A. For this study, I also used the functional cost allocation methodology described in Manual of Practice No. 27. I modified the allocation method to determine the incremental cost related to handling stormwater for a CSS and combined sewer overflows ("CSO").

Q. What procedures did you use to apply the cost allocation methodology for Wastewater CSS Operations?

A. Each element of the cost of service is allocated to customer classifications according to the functional categories of sanitary flow (including normal I&I), stormwater introduced from surface sources, customer facilities and customer accounting. Except for certain operating costs, depreciation, and rate base items that are directly assigned to either the sanitary system or to the stormwater function, the functional

costs are allocated to customer classifications based on the amount of flow contributed to the system, the amount of I&I allocated to each class, the volume of stormwater, and the number and relative size of customers.

Q. What costs have you directly assigned to the sanitary sewer classifications?

A. I directly assigned rate base items and annual depreciation expense associated with pumping stations, wastewater treatment structures and equipment, gravity mains, and manholes to the sanitary sewer classes (residential, non-residential and large industrial). The wastewater collection systems in the Scranton operating district are not entirely a combined system. Approximately 63% of the collection system is combined sewers and the remaining 37% comprises sanitary sewers only. Therefore, for gravity mains, after assigning specific stormwater assets to the stormwater class described below, I allocated 37% of the remaining costs of gravity mains to the sanitary classes, and I allocated 63% on a combined system basis. The cost of manholes in Account 361.2 were allocated in the same manner. For the McKeesport operating district, the collection system is a combined system except for the Port Vue area where approximately 25% is combined sewers and 75% is sanitary only. For the Kane operating district, the collection system inside the Borough is a combined system and the collection system outside the Borough is sanitary only. The collection system assets allocated to sanitary only, allocated on a combined system basis and directly assigned to stormwater for each CSS operating district were aggregated and used to allocate the combined investment to customer classifications.

For pumping system assets, the Froude Avenue pumping station in the Scranton operating district serves only sanitary sewers and, therefore, its cost was assigned solely to the sanitary classifications. The remaining pumping stations were allocated on a combined system basis.

For the wastewater treatment plants, a detailed analysis of the structures account and the equipment account was performed to identify the portions of the plants specifically related to secondary sanitary treatment. The portions of the plants thus identified were allocated to the sanitary classifications.

The remaining portions of the wastewater treatment structures and equipment accounts in the Scranton operating district, sized to handle 60 mgd of flow, were assigned 41.67% (25 mgd) to the sanitary classes and 58.33% (35 mgd) to stormwater. For the McKeesport operating district, the wastewater treatment plant costs were assigned based on the capacity of the McKeesport wastewater treatment plant (the largest treatment plant). This plant is sized to handle 56 mgd of combined flow, and 35.71% (20 mgd) was assigned to the sanitary classes and 64.29% (36 mgd) to stormwater. The Kinzua and Pine Street wastewater treatment plants in the Kane operating district are each sized for 1.5 mgd or a total of 3.0 mgd of combined flow. This capacity was assigned 66.67% (2 mgd) to the sanitary classes and 33.33% (1 mgd) to stormwater.

Q. What costs have you directly assigned to the stormwater classification?

A. I directly assigned approximately 10.9% of collection operating labor to stormwater for seven collection system employees who are specifically tasked with operating and maintaining the CSO assets within the collection systems. In addition to the

pumping stations and portions of the treatment plant related to stormwater that I previously discussed, I also identified rate base items and associated annual depreciation expense for specific CSO assets within Account 361.10, Gravity Mains. These assets include catch basins, CSO outfalls, regulator chambers, diversion manholes, culverts, detention basins, and biofiltration catch basin systems. The costs of these assets were directly assigned to the stormwater classification.

Q. What other costs were directly assigned to the stormwater function?

A. For Account 391, Transportation Equipment, the cost of one vactor truck and the cost of a street sweeper in Scranton, as well as vactor truck assets in McKeesport and Kane were allocated directly to stormwater.

Q. What is the basis for the volumes used to allocate costs to customer classifications for operating and maintenance expenses?

A. Factors 1 and 2 are used to allocate operation and maintenance costs related to wastewater collection and treatment. For Factor 1, for the residential, non-residential, industrial, and bulk classes, the flows were based on pro forma water usage billing determinants multiplied by a factor of 88%, consistent with the Coatesville I&I study. I then added average daily I&I in column 3 of Schedule E. Using Company flow records for Wastewater SSS, it was determined that 32.9% of the average daily flow was from I&I. One-third of the I&I was allocated to the customer classes based on average daily flow and 2/3 was allocated based on service equivalents using Factor 1A.

Factor 2 is based on average daily sanitary flows from Factor 1 plus average daily stormwater flow. The total wastewater flow (sanitary and stormwater for

Scranton, McKeesport and Kane combined) is based on the experienced average daily total flow for 2022 of 25.4 mgd.

Q. Please explain the factors used to allocate the capital costs.

A. Factors 3 and 4 are similar to Factors 1 and 2 except that Factors 3 and 4 include peak flows. For Factor 3, the total peak sanitary flow is based on 47 mgd, (sum of Scranton at 25 mgd, McKeesport at 20 mgd and Kane at 2 mgd) which reflects additional I&I under peak conditions. For Factor 4, the total peak wastewater flow capacity is based on 1,190 mgd, with the addition of 72 mgd of peak stormwater flow, (sum of Scranton at 35 mgd, McKeesport at 36 mgd and Kane at 1 mgd).

Q. Please explain the remaining cost allocation factors.

A. Factors 5 and 6 were used to allocate customer facilities and customer accounting costs. These factors were based on the number and relative size of the customers.

Factor 7 is a composite factor used to allocate employee pension and benefit expenses and payroll taxes. Factor 7 is based on the allocation of direct labor expense.

Factors 8 and 9 are based on the allocation of plant in service and rate base, respectively. Factor 8 allocates other rate base elements, and Factor 9 is used to allocate return and taxes.

Factor 10 is based on the total cost of service and is used to allocate regulatory commission expense and other revenues. Factor 10A is based on the total cost of service with stormwater costs reallocated to the sanitary classes and is used to allocate the portion of the CSS wastewater cost of service to be recovered through water rates.

Factor 11 is used to allocate administrative and general expenses and is based on the allocation of all other operating expenses exclusive of power, chemicals and waste disposal. Factor 12 allocates cash working capital and is based on the allocation of all operating expenses.

Q. Please explain the procedure for allocating costs to the several customer classifications.

A. The items of cost, which include operation and maintenance expenses, depreciation expense, taxes and income available for return, are identified in column 1 of Schedule D. The cost of each item, shown in column 3, is allocated to the several customer classifications based on allocation factors referenced in column 2. The development of the allocation factors is presented in Schedule E of the exhibit.

Q. What was the source of the total cost of service data set forth in column 3 of Schedule D of Exhibit No. 12-C?

A. The pro forma cost of service was furnished by the Company and are the same as those set forth in Exhibit No. 3-A. This pro forma cost of service was reduced by $16,007,052, which is the amount the Company proposes to recover in water rates. The revenues under proposed rates for the WW CSS Operations are sufficient to recover the remaining revenue requirement.

Q. Have you summarized the results of your cost allocation studies for the Company's Wastewater CSS Operations?

A. Yes. The results are summarized in columns 1, 2 and 3 of Schedule A of Exhibit No. 12-C. Column 2 sets forth the total allocated pro forma cost of service as of June 30, 2025 for each customer classification identified in column 1. Column 3

presents each customer classification's cost responsibility as a percent of the total cost. The total cost of service associated with stormwater for the combined systems is $41,027,181, as shown in column 7 of Schedule D. This cost was reallocated to the sanitary classes based on Factor 1A.

Q. Have you compared these cost responsibilities with the proportionate revenue under existing rates for each customer classification?

A. Yes. A comparison of the allocated cost responsibilities and the percentage revenue under existing rates can be made by comparing columns 3 and 5 of Schedule A of Exhibit No. 12-C. A similar comparison of the percentage cost responsibilities (relative cost of service) and the percentage of pro forma revenues (relative revenues) under proposed rates can be made by comparing columns 3 and 7 of Schedule A of Exhibit No. 12-C. The rate of return by customer classification under present and proposed rates is set forth on Schedules B and C.

CONCLUSION

Q. Does this complete your direct testimony at this time?

A. Yes, it does.

CONSTANCE E. HEPPENSTALL – LIST OF CASES TESTIFIED

	Year	Jurisdiction	Docket No.	Client Utility	Subject
1.	2010	AZ CC	W-01303A-09-0343 and SW-01303A-09-0343	Arizona American Water Company	Rate Consolidation
2.	2010	PA PUC	R-2010-2179103	City of Lancaster – Bureau of Water	Revenue requirements
3.	2012	PA PUC	R-2012-2311725	Hanover Borough	Cost of Service/Revenue requirements
4.	2012	PA PUC	R-2012-2310366	City of Lancaster – Sewer Fund	Revenue requirements
5.	2013	PA PUC	R-2013-2350509	City of DuBois – Bureau of Water	Revenue requirements
6.	2013	PA PUC	R-2013-2390244	City of Bethlehem – Bureau of Water	Revenue requirements
7.	2014	PA PUC	R-2014-2418872	City of Lancaster – Bureau of Water	Revenue requirements
8.	2014	PA PUC	R-2014-2428304	Hanover Borough	Revenue and Revenue requirements
9.	2015	KY PSC	Case No.2015-000143	Northern Kentucky Water District	Cost of Service
10.	2016	PA PUC	R-2016-2554150	City of DuBois – Bureau of Water	Cost of Service/Revenue requirements
11.	2016	AZ CC	WS-01303A-16-0145	EPCOR Water Arizona, Inc.	Cost of Service/Rate Design
12.	2017	MO PSC	WR-2017-0285	Missouri-American Water Company	Cost of Service/Rate Design
13.	2017	MO PSC	SR-2017-0286	Missouri-American Water Company	Cost of Service/Rate Design
14.	2017	VA SCC	PUR-2017-00082	Aqua Virginia, Inc	Cost of Service
15.	2017	AZ CC	WS-01303A-17-0257	EPCOR Water Arizona, Inc	Cost of Service/Rate Design
16.	2017	HI PUC	2017-0446	Hana Water Systems, LLC – North	Cost of Service/Rate Design
17.	2017	HI PUC	2017-0447	Hana Water Systems, LLC – South	Cost of Service/Rate Design
18.	2018	PA PUC	2018-200208	SUEZ Water Pennsylvania	Revenue requirements
19.	2018	KY PSC	2018-00208	Water Service Corp of KY	Cost of Service/Rate Design
20.	2018	WV PSC	18-0573-W-42t	West Virginia American Water Co.	Cost of Service
21.	2018	IN IRC	50208	Indiana American Water Company	Cost of Service/Demand Study
22.	2018	KY PSC	2018-00291	Northern Kentucky Water District	Cost of Service/Rate Design
23.	2018	KY PSC	2018-0358	Kentucky American Water	Cost of Service/Rate Design
24.	2019	PA PUC	R-2019-3006904	Newtown Artesian Water Co.	Revenue Reqmts./Rate Design
25.	2019	PA PUC	R-2019-3010955	City of Lancaster – Sewer Fund	Revenue requirements./Cost of Service/Rates
26.	2020	PA PUC	R-2020-3017206	Philadelphia Gas Works	Cost of Service
27.	2020	PA PUC	R-2020-3019369	Pennsylvania American Water Co.	Cost of Service/Rate Design
28.	2020	PA PUC	R-2020-3019371	Pennsylvania American Water Co.	Cost of Service/Rate Design
29.	2020	PA PUC	R-2020-3020256	City of Bethlehem	Revenue requirements./Cost of Service/Rates
30.	2020	CA PUC	A2101003	San Jose Water Company	Rate Design
31.	2020	VA SCC	PUR-2020-00106	Aqua Virginia, Inc.	Cost of Service
32.	2021	PUCO	21-0595-WW-AIR	Aqua Ohio, Inc	Cost of Service
33.	2021	PUCO	21-0596-ST-AIR	Aqua Ohio, Inc	Cost of Service
34.	2021	PA PUC	R-2021-3026116	Hanover Borough	Cost of Service
35.	2021	NJ BPU	WR21071007	Atlantic City Sewerage Co.	Revenue requirements./Cost of Service/Rates
36.	2021	PA PUC	R-2021-3027385	Aqua Pennsylvania	Cost of Service/Rate Design
37.	2021	PA PUC	R-2021-3027386	Aqua Pennsylvania	Cost of Service/Rate Design
38.	2021	PA PUC	R-2021-3026682	City of Lancaster – Bureau of Water	Cost of Service/Rate Design
39.	2021	NV PUC	21-12025	Great Basin Water Company	Cost of Service/Rate Design
40.	2022	PA PUC	R-2021-3030218	UGI Utilities, Inc. – Gas Division	Cost of Service
41.	2022	PA PUC	R-2022-3031704	Borough of Ambler	Rev. Req./Rate Design
42.	2022	PA PUC	R-2022-30316732	Pennsylvania American Water	Cost of Service

	Year	Jurisdiction	Docket No.	Client Utility	Subject
43.	2022	PA PUC	R-2022-3031340	York Water Company	Cost of Service/Rate Design
44.	2022	PA PUC	R-2022-3032806	York Water Company	Cost of Service/Rate Design
45.	2022	KY PSC	2022-00161	Northern Kentucky Water District	Cost of Service/Rate Design
46.	2022	PUCO	22-1094-WW-AIR	Aqua Ohio Inc.	Cost of Service
47.	2022	PUCO	22-1096-ST-AIR	Aqua Ohio Inc.	Cost of Service
48.	2023	PA PUC	R-2023-3037933	Philadelphia Gas Works	Cost of Service
49.	2023	NJBPU	WR23050292	Middlesex Water Company	Cost of Service/Rate Design

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	DOCKET NOS. R-2023-3043189 (WATER) R-2023-3043190 (WASTEWATER)
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Constance E. Heppenstall**, hereby state that the facts set forth in the pre-marked Statement No. 12 and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: November 8, 2023

Constance E. Heppenstall

EXHIBIT NO. 12-A - WATER OPERATIONS

COST OF SERVICE

AS OF JUNE 30, 2025

Exhibit 12-A
Witness: C. Heppenstall

PENNSYLVANIA AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WATER OPERATIONS

WATER COST OF SERVICE

ALLOCATION STUDY

AS OF JUNE 30, 2025

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

October 31, 2023

Pennsylvania American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention: Ashely E. Everette
Senior Director, Rates & Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have conducted a cost of service allocation study based on pro forma revenue requirements estimated for the test year ended June 30, 2025.

The attached report presents the results of the allocation study, as well as supporting schedules which set forth the detailed cost allocation calculations. Schedule A presents a comparison of the cost of service by customer classification with the pro forma revenues produced by each classification under present and proposed rates.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

CONSTANCE E. HEPPENSTALL
Senior Project Manager, Rate Studies

GREGORY R. HERBERT
Analyst, Rate Studies

CEH:mle
075543.200

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PART I. INTRODUCTION

PENNSYLVANIA AMERICAN WATER COMPANY

WATER COST OF SERVICE ALLOCATION STUDY
AS OF JUNE 30, 2025

PART I. INTRODUCTION

PLAN OF REPORT

The report sets forth the results of the cost of service allocation study for the water operations based on pro forma costs as of June 30, 2025, or the fully forecasted future test year (FFTY), for Pennsylvania American Water Company. Part I, Introduction, contains statements with respect to the basis of the study, the procedures employed, and a summary of the results of the study. Schedule A summarizes the cost allocation for the water and wastewater operations and total revenues under present and proposed rates. Part II, Cost of Service by Customer Classification - Water Operations, presents detailed schedules of the allocation of costs to customer classifications, as well as the basis for the allocations for the FFTY. Schedule A in Part II summarizes the water cost allocation and the revenues produced under present and proposed rates.

BASIS OF STUDY

The purpose of the cost allocation study was to determine the relative cost of service responsibilities of the several customer classifications based on considerations of quantity of water consumed, variability of rate of consumption, and costs associated with customer metering, billing and accounting. The allocation study incorporated generally- accepted principles and procedures for allocating the several categories of

cost to customer classifications in proportion to each classification's use of facilities, commodities and services required in providing water service.

ALLOCATION PROCEDURES

The allocation study was based on the Base-Extra Capacity Method for allocating costs to customer classifications. The method is described in the 2017 and prior editions of the Water Rates Manual published by the American Water Works Association. The four basic categories of cost responsibility are base, extra capacity, customer, and fire protection costs. The following discussion presents a brief description of these costs and the manner in which they were allocated.

Base Costs are costs that tend to vary with the quantity of water used, plus costs associated with supplying, treating, pumping, and distributing water to customers under average load conditions, without the elements necessary to meet peak demands. Base costs were allocated to customer classifications on the basis of average daily usage.

Extra Capacity Costs are costs associated with meeting usage requirements in excess of the average. They include operating and capital costs for additional plant and system capacity beyond that required for average use. The extra capacity costs in this study are subdivided into costs necessary to meet maximum day extra demand and costs to meet maximum hour extra demand. The extra capacity costs were allocated to customer classifications on the bases of each classification's maximum day and hour usage in excess of average usage.

Customer Costs are costs associated with serving customers regardless of their usage or demand characteristics. Customer costs include the operating and capital costs related to meters and services, meter reading costs, and billing and collecting costs. The

customer costs were allocated on the bases of the capital cost of meters and services, the man-hours required to read meters and the number of customers.

Fire Protection Costs are costs associated with providing the facilities to meet the potential peak demand of fire protection service. Fire Protection costs are subdivided into costs to meet Public Fire Protection and Private Fire Protection demands. The extra capacity costs assigned to fire protection service were allocated to Public and Private Fire Protection and Commercial General Service on the basis of the total relative demands of the hydrants, fire service lines, and commercial service lines sized to provide fire protection, as well as general service.

RESULTS OF STUDY

The results for the cost of service allocation study is set forth on the following pages. The data summarized in Schedule A, Comparison of Pro Forma Cost of Service with Revenues Under Present and Proposed Rates for the Twelve Months Ended June 30, 2025, constitute the principal results of the cost allocation studies and subsequent rate design.

The water operations cost of service by customer classification is shown in column 2 of Schedule A and are developed in Schedule D, Allocation of Cost of Service to Customer Classifications water operations. The allocation of the total cost of service to the several customer classifications was performed by applying the allocation factors referenced in column 2 of Schedule D to the cost of service set forth in column 3. The bases for the allocation factors are presented in Schedule E. The other cost of service shown in column 3 includes wastewater cost of service not recovered by wastewater rates.

Schedule F presents the calculation of the firm standby service and interruptible standby service commodity-demand rates based on the unit costs of service by function for the water operation.

Schedule G sets forth the average day, maximum day system sendout, and maximum day ratios.

PART II. COST OF SERVICE BY CUSTOMER CLASSIFICATION

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

COMPARISON OF PRO FORMA COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Customer Classification	Pro Forma Cost of Service, as of June 30, 2025				Pro Forma Revenues Under Present Rates		Pro Forma Revenues Under Proposed Rates		Proposed Increase	
	Cost of Service	Allocation of Other COS*	Total Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Residential	$ 603,126,055	$ 46,505,573	$ 649,631,628	64.7%	$ 528,290,043	65.5%	$ 657,085,231	65.4%	$ 128,795,188	24.4%
Commercial	232,115,036	18,320,153	250,435,189	24.9%	202,779,636	25.1%	254,604,000	25.3%	51,824,364	25.6%
Industrial	45,115,631	3,939,176	49,054,807	4.9%	37,580,738	4.7%	48,143,784	4.8%	10,563,046	28.1%
Public (Municipal)	35,175,459	1,635,240	36,810,699	3.7%	22,559,539	2.8%	26,209,929	2.6%	3,650,390	16.2%
Other Water Utilities - Group A	11,335		11,335	0.0%	51,822	0.0%	53,666	0.0%	1,844	3.6%
Other Water Utilities - Group B	624,708		624,708	0.1%	202,436	0.0%	277,021	0.0%	74,585	36.8%
Private Fire Protection	5,777,625	341,990	6,119,615	0.6%	5,301,032	0.7%	6,304,285	0.6%	1,003,253	18.9%
Public Fire Protection	11,847,471	-	11,847,471	1.2%	9,519,368	1.2%	11,847,068	1.2%	2,327,700	24.5%
Total Sales of Water	$ 933,793,321	$ 70,742,132	$ 1,004,535,453	100.0%	$ 806,284,614	100.0%	$ 1,004,524,984	100.0%	$ 198,240,370	24.6%
Other Water Revenues	$ 10,675,369	345,262	11,020,631		10,034,383		11,031,091		996,708	9.9%
Contract Sales - Industrial	4,482,099		4,482,099		4,482,099		4,482,099		-	0.0%
Contract Sales - Resale	3,316,086		3,316,086		3,316,086		3,316,086		0	0.0%
Total	$ 952,266,876	$ 71,087,394	$ 1,023,354,270		$ 824,117,182		$ 1,023,354,261		$ 199,237,079	24.2%

* Includes unrecovered Wastewater Cost of Service.

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PRESENT RATES

ITEM	COST OF SERVICE	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	PUBLIC	OTHER WATER UTILITIES GROUP A	OTHER WATER UTILITIES GROUP B	FIRE PROTECTION PRIVATE	FIRE PROTECTION PUBLIC
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. REVENUES FROM SALES	$ 806,284,614	$ 528,290,043	$ 202,779,636	$ 37,580,738	$ 22,559,539	$ 51,822	$ 202,436	$ 5,301,032	$ 9,519,368
2. OTHER REVENUES	17,832,568	13,501,986	2,891,704	519,001	355,177	2,759	16,078	105,591	440,272
3. TOTAL OPERATING REVENUES	824,117,182	541,792,028	205,671,340	38,099,739	22,914,716	54,581	218,515	5,406,623	9,959,640
4. LESS: OPERATING EXPENSES (INCLUDES REALLOCATION OF FIRE & WW ALLOC.)	481,923,142	331,036,728	115,355,909	22,445,241	19,795,847	7,602	283,188	2,468,428	(9,469,802)
5. RETURN AND INCOME TAXES	342,194,041	210,755,301	90,315,431	15,654,498	3,118,868	46,978	(64,674)	2,938,196	19,429,442
6. LESS: TAXABLE EXCLUSIONS (FACTOR 19)	98,323,965	58,739,863	24,993,708	4,887,348	3,176,352	1,456	75,780	716,948	5,732,509
7. TAXABLE INCOME	243,870,076	152,015,437	65,321,723	10,767,150	(57,484)	45,522	(140,454)	2,221,247	13,696,933
8. LESS: INCOME TAXES (TAX. INC.)	46,982,378	29,286,278	12,584,446	2,074,327	(11,074)	8,770	(27,059)	427,931	2,638,760
9. NET RETURN (Line 5 - Line 8)	295,211,663	181,469,023	77,730,985	13,580,171	3,129,943	38,208	(37,615)	2,510,265	16,790,682
10. ORIGINAL COSTS MEASURE OF VALUE	4,704,067,662	2,810,263,927	1,195,762,346	233,823,123	151,964,746	69,679	3,625,490	34,300,616	274,257,735
11. RATE OF RETURN, PERCENT	6.28	6.46	6.50	5.81	2.06	54.84	(1.04)	7.32	6.12
12. RELATIVE RATE OF RETURN	1.00	1.03	1.04	0.93	0.33	8.74	(0.17)	1.17	0.98

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PROPOSED RATES

ITEM	COST OF SERVICE	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	PUBLIC	OTHER WATER UTILITIES GROUP A	OTHER WATER UTILITIES GROUP B	FIRE PROTECTION PRIVATE	FIRE PROTECTION PUBLIC
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. REVENUES FROM SALES	$1,004,524,984	$ 657,085,231	$ 254,604,000	$ 48,143,784	$ 26,209,929	$ 53,666	$ 277,021	$ 6,304,285	$ 11,847,068
2. OTHER REVENUES	18,818,816	14,252,615	3,063,351	553,172	367,246	3,164	17,765	112,627	448,876
3. TOTAL OPERATING REVENUES	1,023,343,801	671,337,846	257,667,351	48,696,956	26,577,175	56,830	294,786	6,416,913	12,295,944
4. LESS: OPERATING EXPENSES (INCLUDES REALLOCATION OF FIRE & WW ALLOC.)	555,327,535	384,151,129	134,596,300	26,365,071	22,073,383	7,574	282,073	2,820,133	(14,968,128)
5. RETURN AND INCOME TAXES	468,016,266	287,186,717	123,071,050	22,331,886	4,503,792	49,256	12,713	3,596,780	27,264,072
6. LESS: TAXABLE EXCLUSIONS (FACTOR 19)	98,315,014	58,761,526	24,976,939	4,882,471	3,172,907	1,455	75,707	716,757	5,727,253
7. TAXABLE INCOME	369,701,252	228,425,192	98,094,111	17,449,415	1,330,885	47,802	(62,993)	2,880,022	21,536,819
8. LESS: INCOME TAXES (TAX. INC.)	81,352,374	50,264,725	21,585,507	3,839,725	292,860	10,519	(13,862)	633,746	4,739,155
9. NET RETURN (Line 5 - Line 8)	386,663,892	236,921,993	101,485,544	18,492,160	4,210,932	38,738	26,575	2,963,034	22,524,917
10. ORIGINAL COSTS MEASURE OF VALUE	4,704,067,662	2,811,556,261	1,195,068,862	233,611,050	151,813,718	69,606	3,622,334	34,294,610	274,031,221
11. RATE OF RETURN, PERCENT	8.22	8.43	8.49	7.92	2.77	55.65	0.73	8.64	8.22
12. RELATIVE RATE OF RETURN	1.00	1.03	1.03	0.96	0.34	6.77	0.09	1.05	1.00

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities Group A	Other Water Utilities Group B	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OPERATION AND MAINTENANCE EXPENSES											
	Source of Supply Expenses										
	----Operation----										
601.1	Salaries and Wages	2	$ 200,585	$ 115,551	$ 61,758	$ 14,673	$ 7,200	$ 3	$ 209	$ 200	$ 991
610.1	Purchased Water	1	3,099,741	1,762,200	914,845	262,507	133,427	53	949	4,319	21,441
615.1	Purchased Power	1	2,955,902	1,680,428	872,393	250,326	127,236	50	905	4,118	20,446
616.1	Purchased Fuel	1	67,006	38,093	19,776	5,675	2,884	1	21	93	463
618.1	Chemicals	1	-	-	-	-	-	-	-	-	-
620.1	Materials and Supplies	2	27,006	15,557	8,315	1,976	969	0	28	27	133
631.1	Contract Services -Engineering	2	267,118	153,878	82,243	19,540	9,588	4	278	266	1,320
633.1	Contract Services -Legal	2	-	-	-	-	-	-	-	-	-
636.1	Contract Services -Other	2	596,009	343,342	183,506	43,600	21,394	8	621	593	2,945
641.1	Rental of Building	2	-	-	-	-	-	-	-	-	-
642.1	Rental of Equipment	2	284	164	87	21	10	0	0	0	1
650.1	Transportation	2	117	67	36	9	4	0	0	0	1
675.1	Miscellaneous Expenses	2	1,674,987	964,908	515,714	122,530	60,123	24	1,746	1,667	8,276
	Total Operation		8,888,755	5,074,190	2,658,673	720,856	362,836	143	4,757	11,284	56,017
	----Maintenance----										
601.2	Salaries and Wages	2	218,630	125,946	67,314	15,993	7,848	3	228	218	1,080
620.2	Materials and Supplies	2	19,714	11,357	6,070	1,442	708	0	21	20	97
636.2	Contract Services	2	-	-	-	-	-	-	-	-	-
631.2	Contract Services - Engineering	2	174,594	100,578	53,756	12,772	6,267	2	182	174	863
636.2	Contract Services - Other	2	323,184	186,176	99,505	23,642	11,601	5	337	322	1,597
650.1	Transportation	2	-	-	-	-	-	-	-	-	-
675.2	Misc. Maintenance Expense	2	17,886	10,304	5,507	1,308	642	0	19	18	88
	Total Maintenance		754,008	434,361	232,152	55,158	27,065	11	786	750	3,725
	Total Source of Supply Expenses		$ 9,642,763	$ 5,508,550	$ 2,890,825	$ 776,014	$ 389,901	$ 154	$ 5,543	$ 12,034	$ 59,743
	Water Treatment Expenses										
	----Operation----										
601.3	Salaries and Wages										
	Power and Pumping and Other Dept Exp	5A	$ 1,269,892	$ 708,557	$ 369,703	$ 105,551	$ -	$ -	$ -	$ 12,887	$ 73,194
	Purification and Laboratory	2	12,200,015	7,028,051	3,756,276	892,463	437,917	173	12,716	12,142	60,277
615.3	Purchased Power	1	12,368,422	7,031,439	3,650,365	1,047,443	532,394	210	3,785	17,233	85,553
618.3	Chemicals	1	23,183,305	13,179,693	6,842,224	1,963,322	997,916	393	7,095	32,301	160,360
620.3	Materials and Supplies	6	882,144	506,670	270,210	65,360	28,679	11	833	1,639	8,741
631.3	Contract Services -Engineering	6	82,454	47,358	25,257	6,109	2,681	1	78	153	817

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities Group A	Other Water Utilities Group B	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
635.3	Contract Services -Testing	6	289,335	166,183	88,626	21,437	9,407	4	273	538	2,867
636.3	Contract Services -Other	6	1,503,192	863,377	460,444	111,375	48,870	19	1,419	2,793	14,895
641.3	Rental of Building	6	640	368	196	47	21	0	1	1	6
642.3	Rental of Equipment	6	13,718	7,879	4,202	1,016	446	0	13	25	136
650.3	Transportation	6	206,827	118,794	63,353	15,324	6,724	3	195	384	2,049
675.3	Miscellaneous Expenses										
	Waste Disposal	1	2,797,872	1,590,588	825,752	236,943	120,433	47	856	3,898	19,353
	Other	6	4,130,968	2,372,673	1,265,360	306,072	134,301	53	3,900	7,676	40,933
	Total Operation		58,928,784	33,621,630	17,621,970	4,772,464	2,319,788	914	31,164	91,672	469,182
	----Maintenance----										
601.4	Salaries and Wages										
	Power and Pumping	5A	527,026	294,063	153,433	43,805	-	-	-	5,348	30,377
	Purification and Laboratory	2	2,429,797	1,399,731	748,113	177,746	87,217	34	2,533	2,418	12,005
620.4	Materials and Supplies	7	911,734	522,280	277,991	68,315	26,893	11	781	2,395	13,068
631.4	Contract Services - Engineering	7	164,513	94,240	50,161	12,327	4,853	2	141	432	2,358
636.4	Contract Services	7	1,073,816	615,127	327,410	80,460	31,674	12	920	2,821	15,392
636.4	Contract Services - Other	7	-	-	-	-	-	-	-	-	-
650.4	Transportation	7	3,461	1,983	1,055	259	102	0	3	9	50
675.4	Miscellaneous Expenses - Waste Disposal	1	105,382	59,910	31,102	8,924	4,536	2	32	147	729
	Total Maintenance		5,215,729	2,987,333	1,589,265	391,837	155,276	61	4,409	13,570	73,978
	Total Water Treatment Expenses		$ 64,144,513	$ 36,608,964	$ 19,211,234	$ 5,164,300	$ 2,475,064	$ 975	$ 35,574	$ 105,242	$ 543,160
	Transmission & Distribution Expenses										
	----Operation----										
601.5	Salaries and Wages										
	Supervision & Other Dept. Exps.	12	$ 3,375,637	$ 2,046,393	$ 865,993	$ 145,573	$ 142,000	$ 73	$ 2,673	$ 30,073	$ 142,858
	Mains	8	3,149,402	1,789,680	902,810	166,242	93,081	41	3,054	29,162	165,332
	Storage Facilities	4	133,618	76,776	37,823	6,156	3,698	2	128	1,352	7,683
	Miscellaneous Meter Expense	10	546,371	382,671	87,728	3,474	69,221	42	51	3,184	-
	Services on Customer Premises	11	258,807	229,238	20,433	430	5,975	3	5	2,723	-
615.5	Purchased Power	1	901,229	512,348	265,985	76,322	38,793	15	276	1,256	6,234
620.5	Materials and Supplies	12	1,214,988	736,555	311,695	52,396	51,110	26	962	10,824	51,419
631.5	Contract Services -Engineering	12	5,638	3,418	1,446	243	237	0	4	50	239
636.5	Contract Services -Other	12	429,983	260,666	110,309	18,543	18,088	9	340	3,831	18,197
641.5	Rental of Building	12	27,852	16,885	7,145	1,201	1,172	1	22	248	1,179
642.5	Rental of Equipment	12	5,965	3,616	1,530	257	251	0	5	53	252
650.5	Transportation	12	74,136	44,943	19,019	3,197	3,119	2	59	660	3,137
675.5	Miscellaneous Expenses	12	1,652,735	1,001,928	423,996	71,274	69,524	36	1,309	14,724	69,944
	Total Operation		11,776,360	7,105,117	3,055,913	545,308	496,269	250	8,888	98,141	466,474

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities Group A	Other Water Utilities Group B	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	----Maintenance----										
601.6	Salaries and Wages										
	Supervision and Engineering	13	111,343	68,226	19,247	2,926	3,104	2	53	934	16,852
	Structures and Improvements	4	27,436	15,764	7,766	1,264	759	0	26	278	1,578
	Mains	8	1,384,063	786,508	396,757	73,058	40,906	18	1,342	12,816	72,658
	Services	11	1,014,442	898,540	80,092	1,686	23,419	13	18	10,674	-
	Meters	10	129,536	90,725	20,799	824	16,411	10	12	755	-
	Storage Facilities	4	-	-	-	-	-	-	-	-	-
	Fire Hydrants	9	368,275	-	-	-	-	-	-	-	368,275
	Other	13	6,408,562	3,926,866	1,107,814	168,407	178,629	91	3,066	53,750	969,938
620.6	Materials and Supplies	13	968,088	593,199	167,348	25,440	26,984	14	463	8,120	146,520
636.6	Contract Services	13	1,372,991	841,305	237,342	36,080	38,270	19	657	11,516	207,803
637.6	Contract Services - Engineering	13	226,727	138,928	39,193	5,958	6,320	3	108	1,902	34,315
650.6	Transportation	13	137,640	84,339	23,793	3,617	3,837	2	66	1,154	20,832
675.6	Miscellaneous Expenses	13	3,711,716	2,274,366	641,625	97,538	103,459	53	1,776	31,131	561,769
	Total Maintenance		15,860,818	9,718,766	2,741,776	416,797	442,097	225	7,588	133,028	2,400,540
	Total Transmission and Distribution Expenses		$ 27,637,178	$ 16,823,883	$ 5,797,689	$ 962,105	$ 938,367	$ 475	$ 16,475	$ 231,169	$ 2,867,014
	Customer Accounting Expenses										
601.7	Salaries and Wages										
	Meter Reading and Other Expense	15	$ 3,456,790	$ 3,215,166	$ 220,177	$ 2,626	$ 18,336	$ 18	$ 27	$ 440	$ -
	Meter Services	10	1,944,280	1,361,747	312,184	12,362	246,327	150	180	11,329	-
620.7	Materials and Supplies	14	43,775	40,473	2,772	33	231	0	0	243	24
636.7	Contract Services -Other	14	155,866	144,107	9,869	118	822	1	1	865	84
642.7	Rental of Equipment	14	1,862	1,722	118	1	10	0	0	10	1
650.7	Transportation	14	367	339	23	0	2	0	0	2	0
670.7	Bad Debt	22	13,646,543	12,374,302	1,186,980	29,322	7,353	-	-	48,586	-
675.7	Miscellaneous Expenses	14	2,744,294	2,537,257	173,754	2,072	14,470	14	22	15,224	1,481
	Total Customer Accounting Expenses		21,993,776	19,675,113	1,905,876	46,534	287,550	183	231	76,699	1,590
	Administrative and General Expenses										
601.8	Salaries and Wages	16	$ 25,658,773	17,369,955	5,393,582	1,019,739	702,301	334	14,454	119,103	1,039,306
603.8	Salaries of Officers	16	-	-	-	-	-	-	-	-	-
604.8	Employees Pension and Benefits	17	10,560,035	6,831,685	2,383,636	465,165	339,603	165	6,644	50,473	482,665
615.8	Purchased Power	16	112,113	75,896	23,567	4,456	3,069	1	63	520	4,541

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities Group A	Other Water Utilities Group B	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
621	Materials and Supplies	16	513,543	347,648	107,949	20,409	14,056	7	289	2,384	20,801
631.8	Contract Services -Engineering	16	150,100	101,612	31,552	5,965	4,108	2	85	697	6,080
632.8	Contract Services -Accounting	16	646,641	437,750	135,927	25,699	17,699	8	364	3,002	26,192
633.8	Contract Services -Legal	16	1,126,427	762,546	236,780	44,767	30,831	15	635	5,229	45,626
634.8	Contract Services -Management										
	Customer Related	14	15,164,933	14,020,854	960,161	11,450	79,959	78	119	84,128	8,183
	Employee Related	17	9,909,922	6,411,102	2,236,891	436,528	318,696	154	6,235	47,366	452,950
	Water Quality Related	2	705,977	406,691	217,364	51,644	25,341	10	736	703	3,488
	Other	16	35,167,807	23,807,187	7,392,421	1,397,649	962,571	458	19,810	163,242	1,424,469
636.8	Contract Services -Other	16	1,819,225	1,231,542	382,409	72,300	49,794	24	1,025	8,444	73,688
641.8	Rental of Buildings	16	62,740	42,472	13,188	2,493	1,717	1	35	291	2,541
642.8	Rental of Equipment	16	(2,065)	(1,398)	(434)	(82)	(57)	(0)	(1)	(10)	(84)
650.8	Transportation	16	4,620,464	3,127,868	971,241	183,628	126,466	60	2,603	21,447	187,151
656.8	Insurance -Vehicles	16	235,390	159,349	49,480	9,355	6,443	3	133	1,093	9,534
657.8	Insurance -General Liability	16	10,453,060	7,076,300	2,197,277	415,429	286,109	136	5,888	48,521	423,400
658.8	Insurance -Workers Comp	17	780,043	504,639	176,073	34,361	25,086	12	491	3,728	35,653
659.8	Insurance -Other	16	3,496,763	2,367,167	735,034	138,969	95,709	46	1,970	16,231	141,636
660.8	Advertising	14	-	-	-	-	-	-	-	-	-
666.8	Amortization of Rate Case Exp.	20	970,923	603,708	233,841	46,312	31,612	15	655	6,004	48,776
667.8	Regulatory Commission	20	47,541	29,560	11,450	2,268	1,548	1	32	294	2,388
675.8	Miscellaneous Expenses	16	12,713,029	8,606,208	2,672,332	505,245	347,966	166	7,161	59,011	514,940
	Total Administrative and General Expenses		134,913,384	94,320,342	26,561,718	4,893,749	3,470,627	1,696	69,425	641,901	4,953,925
	Total Operation & Maintenance Expenses		$ 258,331,614	$ 172,936,852	$ 56,367,343	$ 11,842,702	$ 7,561,509	$ 3,483	$ 127,248	$ 1,067,046	$ 8,425,432

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities Group A	Other Water Utilities Group B	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
DEPRECIATION EXPENSE											
303.00	Comprehensive Planning Studies/Waste Handling	18	$ 1,178,127	$ 703,556	$ 299,677	$ 58,678	$ 37,896	$ 17	$ 905	$ 8,620	$ 68,777
304.15	Other Water Source Structures	2	3,745,952	2,157,927	1,153,345	274,026	134,460	53	3,904	3,728	18,508
304.20	Power and Pumping Structures	5A	3,106,325	1,733,226	904,342	258,192	-	-	-	31,524	179,041
304.30	Purification Buildings	2	8,913,742	5,134,931	2,744,462	652,063	319,957	126	9,291	8,871	44,041
304.36	Waste Handling & Treatment Structures	1	948,564	539,258	279,955	80,331	40,831	16	290	1,322	6,561
304.39	Purification Buildings - Tank Painting	2	-	-	-	-	-	-	-	-	-
304.61	Office Buildings	16	1,889,962	1,279,428	397,278	75,111	51,730	25	1,065	8,773	76,553
304.62	Stores, Shop and Garage Bldgs.	16	1,745,446	1,181,597	366,900	69,368	47,774	23	983	8,102	70,699
304.63	Misc. Structures and Improvements	16	392,677	265,826	82,542	15,606	10,748	5	221	1,823	15,905
305.00	Collecting & Impounding Reservoirs	1	4,023,018	2,287,083	1,187,337	340,697	173,169	68	1,231	5,605	27,827
306.00	Lake, River and Other Intakes	2	455,533	262,418	140,255	33,323	16,351	6	475	453	2,251
307.00	Wells and Springs	2	435,165	250,685	133,983	31,833	15,620	6	454	433	2,150
310.00	Power Generation Equipment	5A	770,558	429,946	224,332	64,047	-	-	-	7,820	44,413
311.00	Pumping Equipment Other	5	2,871,600	1,606,626	837,480	178,281	92,334	38	2,829	23,165	130,847
311.52	Pumping Equipment Source of Supply	2	420,058	241,982	129,332	30,728	15,078	6	438	418	2,075
311.53	Pumping Equipment Water Treatment	2	1,216,638	700,867	374,592	89,000	43,671	17	1,268	1,211	6,011
311.54	Pumping Equipment Transmission and Distribution	8	191,739	108,958	54,964	10,121	5,667	2	186	1,775	10,066
320.00	Purification System	2	17,333,296	9,985,175	5,336,768	1,267,975	622,176	245	18,066	17,250	85,640
330.00	Distr. Reservoirs and Standpipes	4	8,944,120	5,139,218	2,531,773	412,089	247,567	114	8,572	90,517	514,269
331.00	Mains and Accessories										
	10-inch and Over	3	27,095,143	14,954,823	8,018,264	1,899,050	931,834	367	27,058	190,760	1,072,988
	Under 10-inch	4	43,364,501	24,916,887	12,275,000	1,997,962	1,200,299	554	41,562	438,863	2,493,373
333.00	Services	11	16,565,411	14,672,787	1,307,866	27,529	382,415	214	299	174,301	-
334.00	Meters	10	18,171,666	12,727,187	2,917,740	115,542	2,302,223	1,405	1,686	105,884	-
335.00	Fire Hydrants	9	4,850,117	-	-	-	-	-	-	-	4,850,117
340.00	Office Furniture	16	571,595	386,947	120,152	22,716	15,645	7	322	2,653	23,152
340.00	Computers and Peripheral Equipment	16	5,229,815	3,540,374	1,099,329	207,845	143,144	68	2,946	24,276	211,833
340.00	Other Office Equipment	16	1,210	819	254	48	33	0	1	6	49
340.00	Computer Software	16	27,153,874	18,382,077	5,707,858	1,079,157	743,223	354	15,296	126,043	1,099,865
341.00	Transportation Equipment	16	3,878,620	2,625,669	815,302	154,145	106,161	51	2,185	18,004	157,103
342.00	Stores Equipment	16	29,174	19,750	6,132	1,159	799	0	16	135	1,182
343.00	Tools and work Equipment	16	2,953,131	1,999,151	620,761	117,364	80,830	38	1,664	13,708	119,616
344.00	Laboratory Equipment	2	214,331	123,469	65,991	15,679	7,693	3	223	213	1,059
345.00	Power Operated Equipment	16	83,342	56,419	17,519	3,312	2,281	1	47	387	3,376
346.00	Communication Equipment	16	1,843,473	1,247,957	387,506	73,264	50,457	24	1,038	8,557	74,670
347.00	Miscellaneous Equipment	16	2,033,724	1,376,749	427,497	80,825	55,665	27	1,146	9,440	82,376
348.00	Other Tangible Equipment	16	606,125	410,322	127,410	24,089	16,590	8	341	2,814	24,551
	Citizens Acquisition CIAC and CAC	4A	(427,974)	(238,795)	(124,596)	(35,572)	-	-	-	(4,343)	(24,667)
	Total Depreciation Expense		$ 212,799,798	$ 131,211,298	$ 50,969,305	$ 9,725,587	$ 7,914,319	$ 3,890	$ 146,010	$ 1,333,111	$ 11,496,277

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Account Number (1)	Account Description (2)	Factor Ref. (3)	Cost of Service (4)	Residential (5)	Commercial (6)	Industrial (7)	Other Public Authority (8)	Other Water Utilities Group A (9)	Other Water Utilities Group B (10)	Private Fire Protection (11)	Public Fire Protection (12)
	Amortizations	19	$ (2,099,462)	$ (1,254,819)	$ (533,369)	$ (104,262)	$ (67,756)	$ (31)	$ (1,617)	$ (15,306)	$ (122,302)
	Taxes, Other Than Income										
	Local Property and Miscellaneous	19	$ 2,073,365	$ 1,239,222	$ 526,739	$ 102,966	$ 66,913	$ 31	$ 1,597	$ 15,116	$ 120,782
	Federal and State Payroll Taxes	17	5,033,998	3,256,683	1,136,286	221,745	161,890	78	3,167	24,061	230,088
	State Capital Stock Tax	19	-	-	-	-	-	-	-	-	-
	PUC and OCA Assessments	20	5,974,096	3,714,621	1,438,825	284,959	194,509	91	4,031	36,942	300,119
	Public Utility Realty Taxes	19	2,126,732	1,271,118	540,296	105,617	68,636	31	1,638	15,505	123,891
	Total Taxes Other Than Income Taxes		$ 15,208,191	$ 9,481,644	$ 3,642,145	$ 715,287	$ 491,948	$ 232	$ 10,432	$ 91,624	$ 774,879
	Total O&M, Depreciation, Amort,and Taxes Other than Inc.		484,240,141	312,374,975	110,445,424	22,179,314	15,900,020	7,574	282,073	2,476,474	20,574,286
	Federal and State Income Taxes	19	81,352,374	$ 48,623,190	$ 20,667,579	$ 4,040,081	$ 2,625,474	$ 1,204	$ 62,645	$ 593,093	$ 4,739,109
	Utility Operating Income Available for Return	19	386,674,361	231,109,924	98,234,660	19,202,828	12,479,088	5,722	297,756	2,819,017	22,525,366
	Total Cost of Service - Water		$ 952,266,876	$ 592,108,089	$ 229,347,663	$ 45,422,223	$ 31,004,582	$ 14,499	$ 642,473	$ 5,888,584	$ 47,838,762
469	Other Water Revenues - Intercompany Rent	20	(288,615)	(179,457)	(69,511)	(13,767)	(9,397)	(4)	(195)	(1,785)	(14,499)
470	Other Water Revenues -Late Payment Fees	23	(4,733,381)	(4,011,578)	(526,982)	(106,567)	(44,434)	(3,004)	(11,734)	(29,082)	-
471	Other Water Revenues - Misc. Service Revenues	14	(4,857,120)	(4,490,687)	(307,526)	(3,667)	(25,610)	(25)	(38)	(26,945)	(2,621)
472	Other Water Revenues - Rents from Other Properties	20	(796,254)	(495,101)	(191,773)	(37,981)	(25,925)	(12)	(537)	(4,924)	(40,001)
	Revenue from Contract Sales	20	(7,798,185)	(4,848,818)	(1,878,145)	(371,966)	(253,899)	(119)	(5,261)	(48,222)	(391,755)
	Unrecovered Public Fire	9	(35,542,414)	-	-	-	-	-	-	-	(35,542,414)
	Reallocate Unrecovered Public Fire	21	35,542,414	25,043,607	5,741,310	227,355	4,530,142	-	-	-	-
-10,675,369.00	**Total Cost of Service Related to Sales of Water**		$ 933,793,321	$ 603,126,055	$ 232,115,036	$ 45,115,631	$ 35,175,459	$ 11,335	$ 624,708	$ 5,777,625	$ 11,847,471
	Wastewater Allocation	DA	71,087,394	46,732,547	18,409,566	3,958,401	1,643,221	-	-	343,659	-
	Total Allocation		71,087,394	46,732,547	18,409,566	3,958,401	1,643,221	-	-	343,659	-
	Total Cost of Service Including WW Alloc.		$ 1,004,880,715	$ 649,858,602	$ 250,524,601	$ 49,074,033	$ 36,818,680	$ 11,335	$ 624,708	$ 6,121,285	$ 11,847,471

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1. ALLOCATION OF COSTS WHICH VARY WITH THE AMOUNT OF WATER CONSUMED.

Factors are based on the pro forma future test year average daily consumption for each customer classification.

Customer Classification	Average Daily Consumption, 100 Gallons	Allocation Factor
(1)	(2)	(3)
Residential	670,557	0.5685
Commercial	348,119	0.2951
Industrial	99,890	0.0847
Public	50,772	0.0430
Other Water Utilities A	20	0.0000
Other Water Utilities B	361	0.0003
Private Fire Protection	1,643	0.0014
Public Fire Protection	8,159	0.0069
Total	1,179,521	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 2. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM DAY EXTRA CAPACITY FUNCTIONS.

(Factor 1) and the factors derived from maximum day extra capacity demand for each customer classification, as follows:

	Average Daily Consumption		Maximum Day Extra Capacity		
Customer Classification	Allocation Factor 1	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)x 0.7143	(4)	(5)=(4)x 0.2857	(6)=(3)+(5)
Residential	0.5685	0.4061	0.5950	0.1700	0.5761
Commercial	0.2951	0.2108	0.3398	0.0971	0.3079
Industrial	0.0847	0.0605	0.0443	0.0127	0.0732
Public	0.0430	0.0307	0.0180	0.0051	0.0359
Other Water Utilities A	0.0000	0.0000	0.0000	0.0000	0.0000
Other Water Utilities B	0.0003	0.0002	0.0029	0.0008	0.0010
Private Fire Protection	0.0014	0.0010			0.0010
Public Fire Protection	0.0069	0.0049			0.0049
Total	1.0000	0.7143	1.0000	0.2857	1.0000

The derivation of the maximum day extra capacity factors in column 4 and the basis for the column 3 and column 5 weightings are presented on the following page.

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PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 2. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM DAY EXTRA CAPACITY FUNCTIONS, cont.

Customer Classification	Average Daily Consumption, 100 Gallons	Maximum Day Extra Capacity Factor*	Maximum Day Extra Capacity Rate of Flow, 100 Gallons Per Day	Allocation Factor
(1)	(2)	(3)	(4)	(5)
Residential	670,557	1.0	670,557	0.5950
Commercial	348,119	1.1	382,931	0.3398
Industrial	99,890	0.5	49,945	0.0443
Public	50,772	0.4	20,309	0.0180
Other Water Utilities A	20	0.4	8	0.0000
Other Water Utilities B	361	9.0	3,249	0.0029
Total	1,169,719		1,126,999	1.0000

The weighting of the factors is based on the maximum day ratio of 1.4, based on a review of maximum day ratios experienced by the company. (See Schedule G)

	Maximum Day Ratio	Weight
Average Day	1.0	0.7143
Maximum Day Extra Capacity	0.4	0.2857
Total	1.4	1.0000

* Ratio of maximum day to average day minus 1.0.

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE, MAXIMUM DAY EXTRA CAPACITY AND FIRE PROTECTION FUNCTIONS.

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

	Average Daily Consumption		Maximum Day Extra Capacity		Fire Protection		
Customer Classification	Allocation Factor 1	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2) X 0.6844	(4)	(5)=(4) X 0.2737	(6)	(7)=(6) X 0.0419	(8)=(3)+ (5)+(7)
Residential	0.5685	0.3891	0.5950	0.1629			0.5519
Commercial	0.2951	0.2020	0.3398	0.0930	0.0224	0.0009	0.2959
Industrial	0.0847	0.0580	0.0443	0.0121			0.0701
Public	0.0430	0.0295	0.0180	0.0049			0.0344
Other Water Utilities A	0.0000	0.0000	0.0000	0.0000			0.0000
Other Water Utilities B	0.0003	0.0002	0.0029	0.0008			0.0010
Private Fire Protection	0.0014	0.0010			0.1453	0.0061	0.0070
Public Fire Protection	0.0069	0.0047			0.8323	0.0349	0.0396
Total	1.0000	0.6844	1.0000	0.2737	1.0000	0.0419	1.0000

The basis for the column 3, column 5 and column 7 weightings are presented on the following page.

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE, MAXIMUM DAY EXTRA CAPACITY AND FIRE PROTECTION FUNCTIONS, cont.

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum day ratio of 1.4 and the average pumpage for the year ended 12/31/2022. The system demand for fire protection is 20,000 gpm, for 10 hours.

	Ratio	Rate of Flow, (GPD)	Weight
Average Day	1.0	196,045,066	0.6844
Maximum Day Extra Capacity	0.4	78,418,026	0.2737
Subtotal	1.4	274,463,092	0.9581
Fire Protection		12,000,000	0.0419
Total		286,463,092	1.0000

The allocation factors in column 6 on the preceding page are based on the relative potential fire demands of General Service and Public and Private Fire Protection Service.

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM HOUR EXTRA CAPACITY FUNCTIONS.

Factors are based on the weighting of the average hourly consumption, the maximum hour extra capacity demand, and fire protection demand for each customer classification.

Customer Classification	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor
	100 Gals.	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)	(4)=(3) X 0.4451	(5)	(6)=(5) X 0.4896	(7)	(8)=(7) X 0.0654	(9)=(4)+(6)+(8)
Residential	27,939.9	0.5685	0.2530	0.6569	0.3216			0.5746
Commercial	14,505.0	0.2951	0.1314	0.3069	0.1503	0.0224	0.0015	0.2831
Industrial	4,162.1	0.0847	0.0377	0.0171	0.0084			0.0461
Public	2,115.5	0.0430	0.0192	0.0174	0.0085			0.0277
Other Water Utilities A	0.8	0.0000	0.0000	0.0000	0.0000			0.0000
Other Water Utilities B	15.0	0.0003	0.0001	0.0017	0.0008			0.0010
Private Fire Protection	68.5	0.0014	0.0006			0.1453	0.0095	0.0101
Public Fire Protection	340.0	0.0069	0.0031			0.8323	0.0544	0.0575
Total	49,146.7	1.0000	0.4451	1.0000	0.4896	1.0000	0.0654	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4A. ALLOCATION OF CITIZENS ACQUISITION CONTRIBUTIONS

Factors are based on the weighting of the average hourly consumption, the maximum hour extra capacity demand, and fire protection demand for each customer classification.

Customer Classification	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor
	100 Gals.	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)	(4)=(3) X 0.4451	(5)	(6)=(5) X 0.4896	(7)	(8)=(7) X 0.0654	(9)=(4)+(6)+(8)
Residential	27,939.9	0.5943	0.2645	0.5995	0.2935			0.5580
Commercial	14,505.0	0.3085	0.1373	0.3112	0.1524	0.0224	0.0015	0.2911
Industrial	4,162.1	0.0885	0.0394	0.0893	0.0437			0.0831
Public	0.0	0.0000	0.0000		0.0000			0.0000
Other Water Utilities A	0.0	0.0000	0.0000		0.0000			0.0000
Other Water Utilities B	0.0	0.0000	0.0000		0.0000			0.0000
Private Fire Protection	68.5	0.0015	0.0006			0.1453	0.0095	0.0101
Public Fire Protection	340.0	0.0072	0.0032			0.8323	0.0544	0.0576
Total	47,015.4	1.0000	0.4451	1.0000	0.4896	1.0000	0.0654	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM HOUR EXTRA CAPACITY FUNCTIONS, cont.

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum hour ratio of 2.1, and the average pumpage for the year ended 12/31/2022. The system demand for fire protection is 20,000 gpm.

	Ratio	Rate of Flow, (GPM)	Weight
Average Hour	1.0	136,142	0.4451
Maximum Hour Extra Capacity	1.1	149,756	0.4896
Subtotal	2.1	285,898	0.9346
Fire Protection		20,000	0.0654
Total		305,898	1.0000

The allocation factors in column 7 of Factor 4 are based on the relative potential fire demands of General Service and Public and Private Fire Protection Service..

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4 AND 4A. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM HOUR EXTRA CAPACITY FUNCTIONS, cont.

Customer Classification	Average Hourly Consumption 100 Gals.	Maximum Hour Extra Capacity Factor*	Maximum Hour Extra Capacity Rate, 100 Gals. Per Hour	Factor 4 Allocation Factor	Factor 4A Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)	(5)
Residential	27,939.9	4.0	111,759.5	0.6569	0.5995
Commercial	14,505.0	3.6	52,217.9	0.3069	0.3112
Industrial	4,162.1	0.7	2,913.5	0.0171	0.0893
Public	2,115.5	1.4	2,961.7	0.0174	
Other Water Utilities A	0.8	2.2	1.8	0.0000	
Other Water Utilities B	15.0	19.0	285.8	0.0017	
Total	48,738.3		170,140.1	1.0000	1.0000

* Ratio Of Maximum Hour To Average Hour Minus 1.0.

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH POWER AND PUMPING EQUIPMENT OTHER

Factors are based on the weighting of the maximum daily consumption with fire, Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows.

Customer Classification	Maximum Daily Consumption Allocation Factor 3	Maximum Daily Consumption Weighted Factor	Maximum Hourly Consumption Allocation Factor 4	Maximum Hourly Consumption Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)x 0.6667	(4)	(5)=(4)x 0.3333	(6)=(3)+5
Residential	0.5519	0.3680	0.5746	0.1915	0.5595
Commercial	0.2959	0.1973	0.2831	0.0943	0.2916
Industrial	0.0701	0.0467	0.0461	0.0154	0.0621
Public	0.0344	0.0229	0.0277	0.0092	0.0322
Other Water Utilities A	0.0000	0.0000	0.0000	0.0000	0.0000
Other Water Utilities B	0.0010	0.0007	0.0010	0.0003	0.0010
Private Fire Protection	0.0070	0.0047	0.0101	0.0034	0.0081
Public Fire Protection	0.0396	0.0264	0.0575	0.0192	0.0456
Total	1.0000	0.6667	1.0000	0.3333	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5A. ALLOCATION OF COSTS ASSOCIATED WITH POWER AND PUMPING FACILITIES.

Factors are based on the a composite of rate base costs related to pumping equipment.

Customer Classification	Account 311 Net Original Cost Measure of Value	Allocation Factor
(1)	(2)	(3)
Residential	$ 52,711,106	0.5651
Commercial	27,662,589	0.2966
Industrial	6,080,204	0.0652
Public	3,099,139	0.0332
Other Water Utilities A	1,264	0.0000
Other Water Utilities B	93,520	0.0010
Private Fire Protection	548,596	0.0059
Public Fire Protection	3,079,436	0.0330
Total	$ 93,275,852	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 6. ALLOCATION OF WATER TREATMENT OPERATION EXPENSES.

Factors are based on the allocation of water treatment operation salaries and wages, as follows:

Customer Classification	Water Treatment Operation Salaries and Wages	Allocation Factor
(1)	(2)	(3)
Residential	$ 7,736,608	0.5744
Commercial	4,125,979	0.3063
Industrial	998,014	0.0741
Public	437,917	0.0325
Other Water Utilities A	173	0.0000
Other Water Utilities B	12,716	0.0009
Private Fire Protection	25,029	0.0019
Public Fire Protection	133,471	0.0099
Total	$ 13,469,907	1.0000

FACTOR 7. ALLOCATION OF WATER TREATMENT MAINTENANCE EXPENSES.

Factors are based on the allocation of water treatment maintenance salaries and wages, as follows:

Customer Classification	Water Treatment Maintenance Salaries and Wages	Allocation Factor
(1)	(2)	(3)
Residential	$ 1,693,794	0.5728
Commercial	901,546	0.3049
Industrial	221,551	0.0749
Public	87,217	0.0295
Other Water Utilities A	34	0.0000
Other Water Utilities B	2,533	0.0009
Private Fire Protection	7,767	0.0026
Public Fire Protection	42,382	0.0143
Total	$ 2,956,823	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 8. ALLOCATION OF COSTS ASSOCIATED WITH MAINS.

Factors are based on the weighting of the maximum daily consumption, Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows:

	10-inch and Larger		Under 10-inch		
Customer Classification	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)x 0.2795	(4)	(5)=(4)x 0.7205	(6)=(3)+(5)
Residential	0.5519	0.1543	0.5746	0.4140	0.5683
Commercial	0.2959	0.0827	0.2831	0.2040	0.2867
Industrial	0.0701	0.0196	0.0461	0.0332	0.0528
Public	0.0344	0.0096	0.0277	0.0199	0.0296
Other Water Utilities A	0.0000	0.0000	0.0000	0.0000	0.0000
Other Water Utilities B	0.0010	0.0003	0.0010	0.0007	0.0010
Private Fire Protection	0.0070	0.0020	0.0101	0.0073	0.0093
Public Fire Protection	0.0396	0.0111	0.0575	0.0414	0.0525
Total	1.0000	0.2795	1.0000	0.7205	1.0000

The weighting of the factors is based on the length of transmission mains and distribution mains, as follows:

	Length of Mains (Feet)	Weight
10-inch and Larger	15,222,531	0.2795
Under 10-inch	39,245,693	0.7205
Total	54,468,224	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 9. ALLOCATION OF COSTS ASSOCIATED WITH FIRE HYDRANTS.

These costs are assigned directly to Public Fire Protection.

Customer Classification	Allocation Factor
(1)	(2)
Public Fire Protection	1.0000

FACTOR 10. ALLOCATION OF COSTS ASSOCIATED WITH METERS.

Factors are based on the relative cost of meters by size and customer classification, as developed on the following page and summarized below.

Customer Classification	5/8" Dollar Equivalents	Allocation Factor
(1)	(2)	(3)
Residential	724,799	0.70039
Commercial	166,162	0.16057
Industrial	6,580	0.00636
Public	131,109	0.12669
Other Water Utilities A	80	0.00008
Other Water Utilities B	96	0.00009
Private Fire Protection	6,030	0.00583
Total	1,034,856	1.00000

FACTOR 11. ALLOCATION OF COSTS ASSOCIATED WITH SERVICES.

Factors are based on the relative cost of services by size and customer classification, as developed on the second of the following pages, and summarized below.

Customer Classification	3/4" Dollar Equivalents	Allocation Factor
(1)	(2)	(3)
Residential	686,494	0.88575
Commercial	61,191	0.07895
Industrial	1,288	0.00166
Public	17,892	0.02309
Other Water Utilities A	10	0.00001
Other Water Utilities B	14	0.00002
Private Fire Protection	8,155	0.01052
Total	775,044	1.00000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

BASIS FOR ALLOCATING METER COSTS TO CUSTOMER CLASSIFICATIONS

Meter Size	5/8" Dollar Equivalent	Residential		Commercial		Industrial		Public		Other Water Utilities A		Other Water Utilities B		Private Fire Protection		Total	
		Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting
(1)	(2)	(3)	(4)=(2)X(3)	(5)	(6)=(2)X(5)	(7)	(8)=(2)X(7)	(9)	(10)=(2)X(9)	(11)	(12)=(2)X(11)	(13)	(14)=(2)X(13)	(15)	(16)=(2)X(15)	(17)	(18)
5/8	1.0	675,824	675,824	29,903	29,903	51	51	56	56	0	0	0	0	0	0	705,834	705,834
3/4	1.5	1,036	1,576	1,777	2,703	11	17	451	685	0	0	0	0	0	0	3,274	4,981
1	2.0	23,467	45,827	6,969	13,609	86	168	85	167	0	0	0	0	15	29	30,623	59,800
1-1/2	2.2	329	726	1,406	3,105	44	98	584	1,289	0	0	0	0	3	7	2,365	5,225
2	3.0	130	389	3,878	11,577	164	491	29	86	1	3	2	6	22	66	4,227	12,618
3	8.2	0	0	119	974	15	123	150	1,225	0	0	0	0	11	90	295	2,412
4	20.3	13	269	1,685	34,220	75	1,530	207	4,213	1	20	3	60	58	1,178	2,043	41,490
6	29.6	6	188	1,646	48,721	71	2,087	54	1,597	2	57	1	30	105	3,109	1,884	55,789
8	33.0	0	0	544	17,972	44	1,447	8	275	0	0	0	0	33	1,090	629	20,784
10	51.2	0	0	66	3,378	11	568	2,372	121,516	0	0	0	0	9	461	2458	125,923
Total		700,806	724,799	47,992	166,162	572	6,580	3,997	131,109	4	80	6	96	256	6,030	753,633	1,034,856

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

BASIS FOR ALLOCATING SERVICE COSTS TO CUSTOMER CLASSIFICATIONS

Service Size	3/4" Dollar Equivalent	Residential		Commercial		Industrial		Public		Other Water Utilities A		Other Water Utilities B		Private Fire Protection		Total	
		Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting
(1)	(2)	(3)	(4)=(2)X(3)	(5)	(6)=(2)X(5)	(7)	(8)=(2)X(7)	(9)	(10)=(2)X(9)	(11)	(12)=(2)X(11)	(13)	(14)=(2)X(13)	(15)	(16)=(2)X(15)	(17)	(18)
3/4 & 1"	1.00	685,597 *	685,597	38,075 **	38,075	148	148	592	592	0	0	0	0	104	104	724,516	724,516
1-1/2	1.43	329	471	1,406	2,015	44	63	584	837	0	0	0	0	3	4	2,365	3,390
2	2.56	130	333	3,878	9,916	164	420	29	74	1	3	2	5	87	222	4,292	10,973
3	2.27	0	0	119	270	15	34	150	340	0	0	0	0	26	59	310	703
4	1.99	13	26	1,685	3,347	75	150	207	412	1	2	3	6	379	753	2,364	4,696
6	2.80	13	37	1,646	4,606	71	197	54	151	2	5	1	3	1,257	3,518	3,043	8,517
8	4.66	6	30	544	2,533	44	204	8	39	0	0	0	0	625	2,909	1,228	5,715
10	6.51	0	0	66	429	11	72	2,372	15,447	0	0	0	0	61	397	2,510	16,345
12	12.63	0	0	0	0	0	0	0	0	0	0	0	0	15	189	15	189
Total		686,088	686,494	47,418	61,191	572	1,288	3,997	17,892	4	10	6	14	2,557	8,155	740,642	775,044

* Reduced by 14,731 service lines.
** Reduced by 574 service lines.

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 12. ALLOCATION OF TRANSMISSION AND DISTRIBUTION OPERATION SUPERVISION AND ENGINEERING AND OTHER OPERATION DEPARTMENT EXPENSES.

The factors are based on the allocation of Transmission and Distribution Operation Salaries and Wages, as follows:

Customer Classification	Transmission & Distribution Operation Salaries & Wages	Allocation Factor
(1)	(2)	(3)
Residential	$ 2,478,365	0.6062
Commercial	1,048,794	0.2565
Industrial	176,302	0.0431
Public	171,975	0.0421
Other Water Utilities A	88	0.0000
Other Water Utilities B	3,237	0.0008
Private Fire Protection	36,421	0.0089
Public Fire Protection	173,014	0.0423
Total	$ 4,088,197	1.0000

FACTOR 13. ALLOCATION OF TRANSMISSION AND DISTRIBUTION MAINTENANCE SUPERVISION AND ENGINEERING AND OTHER MAINTENANCE DEPARTMENT EXPENSES.

The factors are based on the allocation of Transmission and Distribution Maintenance Salaries and Wages, as follows:

Customer Classification	Transmission & Distribution Maintenance Salaries & Wages	Allocation Factor
(1)	(2)	(3)
Residential	$ 1,791,538	0.6128
Commercial	505,414	0.1729
Industrial	76,832	0.0263
Public	81,495	0.0279
Other Water Utilities A	41	0.0000
Other Water Utilities B	1,399	0.0005
Private Fire Protection	24,522	0.0084
Public Fire Protection	442,511	0.1514
Total	$ 2,923,752	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 14. ALLOCATION OF CUSTOMER ACCOUNTING, BILLING AND COLLECTING COSTS.

Factors are based on the pro forma number of customers, as follows:

Customer Classification	Proforma Number of Customers	Allocation Factor
(1)	(2)	(3)
Residential	700,806	0.92456
Commercial	47,992	0.06331
Industrial	572	0.00076
Public	3,997	0.00527
Other Water Utilities A	4	0.00001
Other Water Utilities B	6	0.00001
Private Fire Protection	4,205	0.00555
Public Fire Protection	409	0.00054
Total	757,991	1.00000

FACTOR 15. ALLOCATION OF METER READING COSTS.

Factors are based on the number of meters by class.

Customer Classification	Pro Forma Number of Meters	Allocation Factor
(1)	(2)	(3)
Residential	700,806	0.93010
Commercial	47,992	0.06369
Industrial	572	0.00076
Public	3,997	0.00530
Other Water Utilities A	4	0.00001
Other Water Utilities B	6	0.00001
Private Fire Protection	96	0.00013
Total	753,473	1.00000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 16. ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES.

The factors are based on the allocation of all other operation and maintenance expenses excluding purchased water, power, fuel, chemicals and waste disposal expenses.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 52,761,810	0.6770
Commercial	16,383,183	0.2102
Industrial	3,097,490	0.0397
Public	2,133,263	0.0274
Other Water Utilities A	1,016	0.0000
Other Water Utilities B	43,904	0.0006
Private Fire Protection	361,778	0.0046
Public Fire Protection	3,156,927	0.0405
Total	$ 77,939,371	1.0000

FACTOR 16A. ALLOCATION OF CASH WORKING CAPITAL - EXPENSES

The functions are based on the allocation of all other operation and maintenance expenses excluding regulatory commission expense.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 172,303,583	0.6696
Commercial	56,122,052	0.2181
Industrial	11,794,122	0.0458
Public	7,528,349	0.0293
Other Water Utilities A	3,468	0.0000
Other Water Utilities B	126,560	0.0005
Private Fire Protection	1,060,748	0.0041
Public Fire Protection	8,374,268	0.0325
Total	$ 257,313,150	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 17. ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

The factors are based on the allocation of direct salaries and wages as follows:

Customer Classification	Salaries and Wages	Allocation Factor
(1)	(2)	(3)
Residential	$ 41,930,154	0.6469
Commercial	14,629,803	0.2257
Industrial	2,854,998	0.0440
Public	2,084,350	0.0322
Other Water Utilities A	1,010	0.0000
Other Water Utilities B	40,775	0.0006
Private Fire Protection	309,785	0.0048
Public Fire Protection	2,962,403	0.0457
Total	$64,813,278	1.0000

FACTOR 18. ALLOCATION OF ORGANIZATION, FRANCHISES AND CONSENTS, OTHER INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.

The factors are based on the allocation of the original cost less depreciation other than those items being allocated, as follows:

Customer Classification	Original Cost Less Depreciation	Allocation Factor
(1)	(2)	(3)
Residential	$ 3,432,738,540	0.5972
Commercial	1,462,162,634	0.2544
Industrial	286,299,847	0.0498
Public	184,897,249	0.0322
Other Water Utilities A	84,772	0.0000
Other Water Utilities B	4,417,572	0.0008
Private Fire Protection	42,058,847	0.0073
Public Fire Protection	335,573,279	0.0584
Total	$ 5,748,232,741	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 19. ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

The factors are based on the allocation of the original cost measure of value rate base as shown on the following pages and summarized below:

Customer Classification	Original Cost Measure of Value	Allocation Factor
(1)	(2)	(3)
Residential	$ 2,811,556,261	0.5977
Commercial	1,195,068,862	0.2541
Industrial	233,611,050	0.0497
Public	151,813,718	0.0323
Other Water Utilities A	69,606	0.0000
Other Water Utilities B	3,622,334	0.0008
Private Fire Protection	34,294,610	0.0073
Public Fire Protection	274,031,221	0.0583
Total	$ 4,704,067,662	1.0000

FACTOR 20. ALLOCATION OF REGULATORY COMMISSION EXPENSES, ASSESSMENTS AND OTHER WATER REVENUES.

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	$ 587,760,200	0.6218
Commercial	227,663,548	0.2408
Industrial	45,088,685	0.0477
Public	30,776,913	0.0326
Other Water Utilities A	14,393	0.0000
Other Water Utilities B	637,756	0.0007
Private Fire Protection	5,845,343	0.0062
Public Fire Protection	47,487,479	0.0502
Total	$ 945,274,316	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTOR 19. ORIGINAL COSTS MEASURE OF VALUE RATE BASE ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account Number	Account Description	Factor Ref.	Rate Base	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities Group A	Other Water Utilities Group B	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Nondepreciable Plant										
301.00	Organization	18	$ 766,405	$ 457,683	$ 194,948	$ 38,172	$ 24,652	$ 11	$ 589	$ 5,608	$ 44,742
302.00	Franchises and Consents	18	2,404,599	1,435,982	611,651	119,765	77,346	35	1,848	17,594	140,377
303.00	Other Intangible Plant	18	15,572	9,299	3,961	776	501	0	12	114	909
303.20	Power and Pumping Land	5	6,211,287	3,475,141	1,811,474	385,623	199,718	83	6,120	50,106	283,023
303.30	Purification Land	2	2,621,562	1,510,201	807,156	191,774	94,100	37	2,732	2,609	12,953
303.40	Transmission and Distribution Land	8	3,511,859	1,995,651	1,006,713	185,374	103,793	46	3,405	32,518	184,359
303.50	Distr. Reservoir & Standpipe Land	4	9,311,882	5,350,531	2,635,874	429,033	257,746	119	8,925	94,239	535,415
303.61	Office Land	16	3,221,900	2,181,096	677,257	128,046	88,186	42	1,815	14,955	130,503
	Total Nondepreciable Plant		28,065,066	16,415,584	7,749,034	1,478,562	846,044	373	25,446	217,743	1,332,280
	Depreciable Plant										
303.14	Water Rights - Hibernia Dam	1	-	-	-	-	-	-	-	-	-
303.35	Waste Handling & Treatment Land	1	20,539	11,676	6,062	1,739	884	0	6	29	142
304	Comprehensive Planning Studies	18	3,115,074	1,860,265	792,373	155,151	100,199	46	2,394	22,792	181,853
304.15	Other Water Source Structures	2	94,059,449	54,184,737	28,960,070	6,880,692	3,376,247	1,330	98,037	93,610	464,725
304.20	Power and Pumping Structures	5A	90,970,487	50,758,496	26,484,178	7,561,287	-	-	-	923,208	5,243,319
304.30	Purification Buildings	2	239,896,737	138,197,085	73,862,078	17,549,067	8,611,051	3,392	250,042	238,749	1,185,272
304.36	Waste Handling & Treatment Structures	1	17,997,648	10,231,650	5,311,751	1,524,165	774,701	305	5,508	25,076	124,491
304.38	Waste Handling & Treatment Structure F	1	800,021	454,811	236,115	67,751	34,437	14	245	1,115	5,534
304.39	Purification Buildings - Tank Painting	2	3	2	1	0	0	0	0	0	0
304.61	Office Buildings	16	35,062,074	23,735,610	7,370,195	1,393,447	959,677	457	19,751	162,751	1,420,186
304.62	Stores, Shop and Garage Bldgs.	16	52,474,009	35,522,788	11,030,257	2,085,438	1,436,255	684	29,559	243,573	2,125,455
304.63	Misc. Structures and Improvements	16	8,657,967	5,861,094	1,819,941	344,088	236,975	113	4,877	40,188	350,690
305.00	Collecting & Impounding Reservoirs	1	190,494,212	108,295,825	56,221,670	16,132,365	8,199,744	3,230	58,302	265,416	1,317,660
306.00	Lake, River and Other Intakes	2	11,757,582	6,773,179	3,620,055	860,098	422,036	166	12,255	11,701	58,091
307.00	Wells and Springs	2	12,617,354	7,268,467	3,884,771	922,992	452,898	178	13,151	12,557	62,339
310.00	Power Generation Equipment	5A	19,789,937	11,042,124	5,761,431	1,644,900	-	-	-	200,837	1,140,644
311.20	Pumping Equipment Other	5	59,761,520	33,435,860	17,428,985	3,710,244	1,921,578	794	58,879	482,091	2,723,088
311.52	Pumping Equipment Source of Supply	2	9,504,071	5,475,001	2,926,219	695,247	341,147	134	9,906	9,459	46,957
311.53	Pumping Equipment Water Treatment	2	19,998,915	11,520,756	6,157,489	1,462,972	717,858	283	20,845	19,903	98,810
311.54	Pumping Equipment T&D	8	4,011,346	2,279,489	1,149,896	211,740	118,556	52	3,890	37,143	210,580
320.00	Purification System	2	338,264,962	194,863,974	104,148,783	24,744,958	12,141,961	4,783	352,571	336,647	1,671,286
330.00	Distr. Reservoirs and Standpipes	4	177,762,982	102,141,153	50,318,593	8,190,195	4,920,354	2,272	170,376	1,799,019	10,221,020
331.00	Mains and Accessories										
	10-inch and Over	3	1,235,446,568	681,889,157	365,605,610	86,590,241	42,488,467	16,737	1,233,753	8,697,991	48,924,613
	Under 10-inch	4	1,977,274,089	1,136,125,494	559,698,364	91,100,302	54,729,548	25,273	1,895,107	20,010,652	113,689,349
333.00	Services	11	585,027,992	518,187,621	46,188,923	972,224	13,505,454	7,548	10,568	6,155,655	-

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTOR 19. ORIGINAL COSTS MEASURE OF VALUE RATE BASE ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account Number	Account Description	Factor Ref.	Rate Base	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities Group A	Other Water Utilities Group B	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
334.00	Meters	10	177,143,764	124,069,071	28,443,148	1,126,346	22,442,873	13,694	16,433	1,032,199	-
335.00	Fire Hydrants	9	134,055,984	-	-	-	-	-	-	-	134,055,984
340.00	Office Furniture	16	7,539,734	5,104,096	1,584,884	299,646	206,369	98	4,247	34,998	305,396
340.00	Computers and Peripheral Equipment	16	13,575,902	9,190,338	2,853,712	539,538	371,583	177	7,647	63,017	549,891
340.00	Other Office Equipment	16	4,840	3,276	1,017	192	132	0	3	22	196
340.00	Computer Software	16	54,871,993	37,146,126	11,534,324	2,180,739	1,501,890	715	30,910	254,704	2,222,585
341.00	Transportation Equipment	16	46,148,895	31,240,941	9,700,692	1,834,063	1,263,132	601	25,996	214,214	1,869,257
342.00	Stores Equipment	16	341,161	230,952	71,713	13,559	9,338	4	192	1,584	13,819
343.00	Tools and work Equipment	16	39,229,301	26,556,655	8,246,164	1,559,063	1,073,737	511	22,098	182,094	1,588,979
344.00	Laboratory Equipment	2	1,398,923	805,876	430,716	102,335	50,214	20	1,458	1,392	6,912
345.00	Power Operated Equpment	16	736,581	498,636	154,832	29,273	20,161	10	415	3,419	29,835
346.00	Communication Equipment	16	16,333,483	11,057,109	3,433,367	649,130	447,060	213	9,201	75,817	661,586
347.00	Miscellaneous Equipment	16	36,500,736	24,709,526	7,672,608	1,450,623	999,054	476	20,561	169,429	1,478,459
348.00	Other Tangible Equipment	16	13,822,490	9,357,268	2,905,545	549,338	378,333	180	7,786	64,161	559,879
	Total Depreciable Plant		5,726,469,325	3,420,086,185	1,456,016,534	285,135,149	184,253,904	84,492	4,396,969	41,887,211	334,608,881
	Total Utility Plant in Service (Net)		5,754,534,391	3,436,501,770	1,463,765,568	286,613,711	185,099,948	84,865	4,422,415	42,104,955	335,941,160
	Other Rate Base Elements										
	Materials and Supplies	18	21,781,099	13,007,270	5,540,400	1,084,842	700,609	321	16,739	159,369	1,271,548
	Cash Working Capital - Expenses	16A	23,164,070	15,511,264	5,052,269	1,061,741	677,724	312	11,393	95,492	753,876
	Cash Working Capital - Interest	18	(8,352,730)	(4,988,096)	(2,124,662)	(416,021)	(268,673)	(123)	(6,419)	(61,116)	(487,620)
	Accrued and Prepaid Taxes	18	1,694,560	1,011,960	431,041	84,400	54,507	25	1,302	12,399	98,926
	Extension Deposits in Suspense	4	(20,895)	(12,006)	(5,915)	(963)	(578)	(0)	(20)	(211)	(1,201)
	Unamortized Investment Tax Credit	18	(213,324)	(127,393)	(54,263)	(10,625)	(6,862)	(3)	(164)	(1,561)	(12,454)
	Deferred Taxes	18	(1,082,382,243)	(646,378,706)	(275,322,685)	(53,909,764)	(34,815,831)	(15,962)	(831,821)	(7,919,608)	(63,187,866)
	Citizens Acquistion CIAC & CAC	4A	(17,729,494)	(9,892,466)	(5,161,576)	(1,473,640)	-	-	-	(179,927)	(1,021,885)
	Tax Cust and Jobs Act- Stub Period	18	(1,508,401)	(900,789)	(383,688)	(75,128)	(48,519)	(22)	(1,159)	(11,037)	(88,058)
	Other Additions	18	327,057	195,312	83,193	16,290	10,520	5	251	2,393	19,093
	Other Deductions	18	(431,508)	(257,689)	(109,762)	(21,492)	(13,880)	(6)	(332)	(3,157)	(25,191)
	Acquisition Adjustments	18	13,205,080	7,885,830	3,358,941	657,700	424,754	195	10,148	96,619	770,893
	Total Other Rate Base Elements		(1,050,466,729)	(624,945,508)	(268,696,706)	(53,002,661)	(33,286,230)	(15,260)	(800,081)	(7,810,345)	(61,909,939)
	Total Original Cost Rate Base		4,704,067,662	2,811,556,261	1,195,068,862	233,611,050	151,813,718	69,606	3,622,334	34,294,610	274,031,221

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 21. ALLOCATION OF UNRECOVERED PUBLIC FIRE PROTECTION.

Factors are based on the relative cost of meters by size for the Residential, Commercial, Industrial, and Public classifications, as follows:

Customer Classification	5/8" Dollar Equivalents	Allocation Factor
(1)	(2)	(3)
Residential	$ 724,799	0.7046
Commercial	166,162	0.1615
Industrial	6,580	0.0064
Public	131,109	0.1275
Total	$ 1,028,650	1.0000

FACTOR 22. ALLOCATION OF BAD DEBT EXPENSE.

Factors are based on the historic net charge offs by class.

Customer Classification	Net Charge Off	Allocation Factor
(1)	(2)	(3)
Residential	$ 10,207,248	0.9068
Commercial	979,109	0.0870
Industrial	24,187	0.0021
Public	6,066	0.0005
Other Water Utilities A	-	0.0000
Other Water Utilities B	-	0.0000
Private Fire Protection	40,077	0.0036
Public Fire Protection	-	0.0000
Total	$ 11,256,687	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 23. ALLOCATION OF LATE PAYMENT FEES.

Factors based on collection of Late Payment fees by class.

Customer Classification	Late Payment Fees	Allocation Factor
(1)	(2)	(3)
Residential	$ 3,745,571	0.8475
Commercial	492,038	0.1113
Industrial	99,500	0.0225
Public	41,488	0.0094
Other Water Utilities A	2,805	0.0006
Other Water Utilities B	10,956	0.0025
Private Fire Protection	27,154	0.0061
Public Fire Protection	-	0.0000
Total	$ 4,419,511	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

CALCULATION OF COMMODITY/DEMAND RATES FOR STANDBY SERVICE
UNDER PROPOSED LEVEL OF REVENUE

Firm Standby Service:

Description	Cost of Service Annual	Cost of Service Per Month	Units Hundred Gals.	Cost Per Unit	
Total Base Costs	$ 470,121,284				
Less: Variable Costs	45,100,913		426,947,484	$ 0.1056	Per Hundred Gallons
Fixed Base Costs	425,020,371	35,418,364	1,169,719 Avg Day	30.2794	Per Hundred of Avg. Day
Max Day Extra Capacity	107,050,621	8,920,885	2,296,718 Peak Day	3.8842	Per Hundred of Peak Day
Max Hour Extra Capacity	146,569,287	12,214,107	265,837 Peak Hour	45.9459	Per Hundred of Peak Hour

Interruptible Standby Service:

Description	Cost of Service Annual	Cost of Service Per Month	Units Hundred Gals.	Cost Per Unit	
Fixed Base Costs	$ 425,020,371				
Less: Depreciation Return and Taxes	317,426,498				
Total	107,593,873	8,966,156	1,169,719 Avg Day	$ 7.6652	Per Hundred of Avg. Day
Max Day Extra Capacity	107,050,621				
Less: Depreciation Return and Taxes	75,183,796				
Total	31,866,825	2,655,569	2,296,718 Peak Day	1.1562	Per Hundred of Peak Day
Max Hour Extra Capacity	146,569,287				
Less: Depreciation Return and Taxes	120,450,094				
Total	26,119,193	2,176,599	265,837 Peak Hour	8.1876	Per Hundred of Peak Hour
Depreciation, Return & Taxes for Base, Max Day and Max Hour	513,060,388				
Plus: Variable Costs	45,100,913				
Total	558,161,301		426,947,484	1.3073	Per Hundred Gallons

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

SUMMARY OF AVERAGE AND MAXIMUM DAY SYSTEM SENDOUT AND MAXIMUM DAY RATIOS

Year	Average Daily Sendout (MGD)	Maximum Day Sendout (MGD)	Ratio, Maximum to Average
1987	153.4	207.7	1.35
1988	152.7	209.1	1.37
1989	144.8	188.6	1.30
1990	144.9	192.5	1.33
1991	145.1	192.3	1.32
1992	141.5	181.4	1.28
1993	138.7	184.3	1.33
1994	149.4	202.1	1.35
1995	144.1	198.5	1.38
1996	211.4	290.9	1.38
1997	220.3	297.7	1.35
1998	212.2	279.6	1.32
1999	199.1	275.0	1.38
2000	207.5	263.6	1.27
2001	200.5	249.5	1.24
2002	210.4	259.6	1.23
2003	199.8	273.7	1.37
2004	218.1	279.7	1.28
2005	215.3	268.2	1.25
2006	210.1	259.8	1.24
2007	220.9	266.6	1.21
2008	212.4	254.3	1.20
2009	206.0	267.8	1.30
2010	205.8	262.4	1.28
2011	202.3	240.0	1.19
2012	194.0	236.3	1.22
2013	192.7	221.3	1.15
2014	195.7	222.7	1.14
2015	194.7	226.7	1.16
2016	190.7	214.0	1.12
2017	184.8	207.3	1.12
2018	192.2	220.3	1.15
2019	193.7	215.8	1.11
2020	189.7	222.1	1.17
2021	196.0	219.1	1.12
2022	196.0	221.3	1.13

APPENDIX A

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

a. A description of the allocation methods used. A comparison of the allocated cost of service by class with the present and proposed revenues. A cost of service schedule showing the Rate of Return produced by present and proposed rates by class of service.

RESPONSE

A description of the methods used for the cost of service study is provided on Exhibit 12-A and in PAWC Statement No. 12. A comparison of the allocated cost of service by class with the present and proposed revenues is provided on Schedule A of Exhibit 12-A. Schedules B and C showing the rate of return produced by present and proposed rates by customer classification are provided in Exhibit 12-A.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

b. Indicate if the method used for establishing the allocation factors in the Cost of Service Study deviates from the previous study submitted in the last rate case. If yes, indicate which allocation factors were changed and discuss the reason for the changes.

RESPONSE

The methods used for establishing the allocation factors in the cost of service study have not deviated from the previous study submitted in the last case.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

c. Supply the average day, the maximum day and the maximum hour deliveries to the system adjusted for storage for the test year and two prior years. Also provide workpapers, analyses, comparative data or other documentation supporting the estimated maximum day and peak hour demands by customer class reflected in the Company's cost of service study.

RESPONSE

Refer to Schedule G of Exhibit 12-A for the average day and maximum day system deliveries for the years 1987 through 2021. Support for the system maximum hour ratio is provided below and on the attached schedules.

The peak hour consumption analysis in support of the 2.1 system peak hour ratio is attached and summarized below.

Analyses were made to determine hourly water consumption during 1988 peak periods of sendout for PAWC's three largest operating districts, as follows:

Pittsburgh	July 5, 6 and 7, 1988
Riverton	July 6 and 7, 1988
Norristown	July 6, 7 and 8, 1988

These dates had the greatest sendouts experienced in recent years.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1c., cont.

Recording charts or other hourly logs of total production were read to derive total hourly delivery to each of the districts. Recording charts for storage reservoirs were read to derive hourly draw or fill from each reservoir. The total hourly delivery plus hourly draw less hourly fill equals hourly consumption.

District	Average M.G.D.	Max Hour M.G.D.	Max Hour Ratio
Pittsburgh	69.28	140.88	2.03
Riverton	10.16	26.17	2.58
Norristown	12.68	22.53	1.78
Total	92.12	189.58	2.06

The attachments set forth the hourly deliveries, storage draws and fills and hourly consumption for the several days and districts which support the above amounts.

Support for the customer class demand factors is provided on the attached pages, Customer Class Demand Study, which was included in the Company's 2017 Rate Case that was filed on April 28, 2017 (Docket No. R-2017-2595853).

Witness: P. R. Herbert

PENNSYLVANIA AMERICAN WATER COMPANY

Hershey, Pennsylvania

CUSTOMER CLASS DEMAND STUDY

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Harrisburg, Pennsylvania

Gannett Fleming

Excellence Delivered ***As Promised***

February 27, 2017

Pennsylvania American Water Company
800 West Hersheypark Drive
Hershey, PA 17033-2400

Attention John Cox
Manager of Rates and Regulations

Gentlemen:

Pursuant to your request, we have prepared a customer class demand study. The study was conducted to provide a basis for the selection of class maximum day and hour demand ratios for use in the cost of service allocation study.

The attached report presents a description of the methods and procedures used, the usage data for each monitored customer, and the detailed calculations of maximum day and hour ratios by classification. The results of the study are presented on page I-9 of the report.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

Paul R Herbert

PAUL R. HERBERT
President

CONSTANCE E. HEPPENSTALL
Project Manager, Rate Studies

PRH:mlw
058602

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PART I. INTRODUCTION

PLAN OF REPORT

The report sets forth the results of the customer class demand study conducted during the period of January 2013 through October 2015 for Pennsylvania American Water Company (Company). The study is organized into three parts. Part I, Introduction, contains statements with respect to the basis and purpose of the study, a description of the methods and procedures used, and a summary of the study results. Part II, Maximum Day and Hour Ratios, describes the calculations of the maximum day and maximum hour ratios for each customer class using the observed demand data. Part III, Daily and Hourly Usage Data, provides the daily usage for each monitored location and the hourly usage for selected days during the study period. Unless noted otherwise, all residential usage units are gallons and non-residential units are hundred gallons.

BASIS OF STUDY

Pursuant to the Join Petition for Settlement at Docket No. R-2011-2232243, approved by the Commission's Final Order entered November 10, 2011, the Joint Petitioners agreed that the Company would prepare and submit a study on the feasibility and costs of conducting a customer class demand study including the timetable required to complete such a study. In February 2012, the Company submitted the required Feasibility Study to the Joint Petitioners for their review and comment. The Feasibility Study outlined the scope of the proposed demand study, the facilities and equipment that would be required, and an estimate of the total costs. Subsequent to a meeting of the Joint Petitioners to discuss the Feasibility Study, the parties decided to move forward with the Demand Study.

PURPOSE OF STUDY

In the Base Extra-Capacity method of cost allocation, as described in AWWA Manual M1 - Principles of Water Rates, Fees, and Charges, the extra capacity portion of the water system is allocated to customer classifications based on the non-coincident demands of each classification. The non-coincident demand is the sum of the peaks for each class regardless of the day or hour such peaks may occur. The purpose of a customer class demand study is to establish a basis for selecting maximum day and maximum hour ratios for each customer classification. The ratios will be used for allocating maximum day and hour extra capacity costs in the cost of service allocation study prepared for the Company's rate filing. The results of the cost of service allocation study are used as a guide for designing the proposed rate structure.

METHOD AND PROCEDURES

Overview

The customers were selected for the study with the objective of obtaining a representative sample of customers in each class. Originally, customer usage was to be monitored for one year, with an extension possible if the weather was deemed insufficiently dry to capture typical peak water use behaviors. In order to determine whether to extend the study in subsequent years, the Palmer Drought Severity Index (PDSI) was used. The National Oceanic and Atmospheric Administration publishes the PDSI, among other measures of drought conditions. The PDSI is a long term measure that is used in determining the severity of droughts. The decision criterion for applying the PDSI to the demand study was that, if there was not at least one summer month (June-August) in which the PDSI was less than 1.0, the study would continue. As shown by the presence of green shading in Table 1-1 below, this threshold was met in the first study year for all but two climate divisions and had been met by August 2014 for all climate divisions. Since neither 2013 nor 2014 had remarkably dry summers, it was deemed worthwhile to continue monitoring through a third summer.

Table 1-1
Palmer (Long Term) Drought Severity Index for Summer 2013, 2014 , and 2015

		2013			2014			2015		
	Cimate Division	June	July	August	June	July	August	June	July	August
1	Poconos	1.29	1.11	1.17	-0.30	-0.18	-0.25	-0.93	-0.94	-1.13
2	East Central Mountains	1.02	0.96	1.08	0.96	-0.19	0.94	1.13	1.36	0.98
3	Southeastern Piedmon	1.48	1.84	2.11	2.61	2.67	-0.29	1.45	1.38	0.76
4	Lower Susquehanna	0.46	0.54	0.77	2.20	2.15	2.19	1.92	1.84	1.34
5	Middle Susquehanna	-0.70	-0.68	-1.05	0.46	0.71	1.35	1.59	1.75	1.37
6	Upper Susquehanna	0.58	1.01	0.86	0.60	0.44	0.79	1.12	1.31	-0.29
7	Central Mountains	0.45	0.62	-0.46	1.03	1.24	2.01	1.66	2.25	1.72
8	South central Mountain	0.43	-0.16	-0.10	1.04	1.24	1.38	1.80	1.89	1.14
9	SW Plateau	0.76	1.69	2.54	1.98	2.05	2.44	2.07	1.85	0.95
10	NW Plateau	0.71	1.01	-0.13	1.77	2.04	2.56	1.51	-0.16	-0.72

Source: National Oceanic and Atmospheric Administration at http://www.ncdc.noaa.gov/cag/time-series/us

Legend

Greater than Threshold

Within threshold for acceptability of usage data (less than 1)

Table 1-2 below displays the values for a short-term soil moisture index, the Palmer Moisture Anomaly or "Z" index. This index better reflects the immediate term weather conditions that influence water use for lawn and garden watering. The blue shading indicates relatively moist months and the light orange shading relatively dry months. The table displays that the driest months in general were experienced in late summer of 2015.

Table 1-2
Palmer (Short Term) Moisture Anomaly Index for Summer 2013, 2014 , and 2015

		2013			2014			2015		
	Cimate Division	June	July	August	June	July	August	June	July	August
1	Poconos	3.87	-0.15	0.52	-0.41	0.25	-0.36	3.71	-0.32	-0.88
2	East Central Mountains	3.06	0.12	0.67	0.49	1.04	-0.44	3.41	1.05	-0.74
3	Southeastern Piedmont	4.46	1.53	1.38	0.23	0.99	-1.05	4.19	0.13	-1.23
4	Lower Susquehanna	1.39	0.38	0.88	0.72	0.52	0.82	5.75	0.36	-0.94
5	Middle Susquehanna	1.26	-0.14	-1.28	0.29	0.91	2.29	4.77	0.95	-0.60
6	Upper Susquehanna	1.59	1.48	-0.14	-0.52	-0.29	1.08	3.37	0.89	-0.90
7	Central Mountains	1.33	0.64	-1.40	1.21	0.94	3.33	4.96	2.27	-0.89
8	South Central Mountains	1.30	-0.47	0.13	2.61	0.90	0.72	5.36	0.79	-1.69
9	SW Plateau	2.29	3.01	3.06	1.71	0.81	1.66	6.21	-0.02	-2.13
10	NW Plateau	2.12	1.13	-0.41	3.84	1.34	2.11	4.56	-0.47	-1.72

Source: National Oceanic and Atmospheric Administration at http://www.ncdc.noaa.gov/cag/time-series/us

Legend

	Moderately to extremely moist (greater than 1.00)
	Near normal (between 1 and negative 1.24)
	Moderately to very dry (negative 1.25 and lower)

Residential Sample

The source of the usage data for the residential sample is the Company's SCADA information system. The SCADA information system continuously monitors flows through a pump or valve and relays the information to a central location. Some of these monitored pumps or valves serve a closed loop of customers, allowing the data to be used to measure daily and hourly flows for the *group* of residential customers consuming water that passes through that pump or valve.

In order to make the results of the customer demand study representative, residential customers are categorized by housing density to insure that each type of residential user is included. Residential peak demands are primarily influenced by income, lawn size and the amount of precipitation and evapotranspiration. Housing density is used to categorize monitoring points because it represents a measure of both income level and lawn size. The residential monitoring points are located throughout the Company's service area, as indicated in the locator map in Attachment A. The residential class sample consists of approximately 2,500 customers from the following ten SCADA monitoring points that serve a closed loop of exclusively or predominantly residential customers.

System	Housing Density	Residential Customers
Shire Oaks	Low	306
Linnwood	Low	93
Sandy Ridge	Low	31
Sutton Hills	Low	76
Thornburgh and Rosslyn	Medium	649
Winter Road	Medium	212
Ridge Road	Medium	62
Silver	Medium	347
North Strabane	High	106
Millview	High	660
Total		2,542

Commercial Sample

Because the Company serves a large and diverse set of commercial customers, statistical stratified sampling techniques were applied to the design of the commercial sample. The sample design for this report was based on the recommendations of Dr. Berwood Yost, Director of the Floyd Institute's Center for Opinion and Research at Franklin and Marshall College. The sampling used consumption records available for the most recent twelve month period prior to sample design. The customer consumption records were stratified by consumption level into nine strata, using generally accepted statistical techniques for determining strata boundaries. Strata numbers six through nine encompass customers that consume less than 37,000 gallons per year (3,075 gallons per month). The total 2011 consumption by these customers accounted for approximately two percent of total commercial consumption. Because the consumption within these strata is too small to have an impact on the ratio estimates, the customers in these strata were not included in the sampling.

For the five study strata, simple random sampling was used to draw a sample within each stratum. The sampling approach and sample sizes are designed such that each stratum sample yields a reasonable estimate of the consumption for the population of customers within the stratum. This approach of stratification by size, which is common in large populations with skewed distributions, achieves desired precision levels with smaller sample sizes than can be achieved with simple random sampling from the entire population. The total number of customers and the minimum required and actual sample sizes for each stratum are shown in Table 1-3 below. The stratum boundaries and number of customers monitored in each stratum are for the time period when the sample was drawn. The proportion of all commercial customers in each stratum is fixed for the study period by the stratification design; the stratum boundaries vary slightly from year to year as the consumption totals for each customer change. The monitored customers are placed in the stratum for each year based on how their consumption for the year compares to the stratum boundaries for the year. For this reason the number of monitoring points in each stratum varies slightly from year to year.

The commercial customer sample includes monitoring points in each of the Company's six service regions and a broad variety of types including but not limited to apartments, mobile home parks, nursing homes, hotels, office buildings, golf courses, medical facilities, health clubs, stores, restaurants, and private schools.

Table 1-3
Commercial Sample Design

Stratum	Stratum Lower Boundary (1,000 gallons / year)	Number of Customers	Recommended Sample Size	Customers Monitored
1	13,587	94	13	17
2	3,101	597	18	21
3	708	2,790	19	25
4	162	8,163	19	22
5	37	16,053	17	21
Total		27,697	86	106

Monitoring data results support the accuracy of the sample design and selection. The total commercial consumption estimated from the sample varied from the actual total billed consumption for the class by no more than seven percent. This performance exceeds the target used to determine the minimum sample size, which was set in order to produce a 95% likelihood of being within twenty percent of the actual population amount.

Industrial and Public Samples

Both the industrial and public customer classes are characterized by the concentration of consumption among a small number of very large customers. This concentration allows for the production of reasonably reliable estimates with relatively modest sample sizes. The industrial sample included 29 monitoring points representing 25 customer accounts. The consumption at these monitoring points constituted 42% to 44% of total industrial class consumption in the three study years. The public sample included 32 customers, which accounted for 50% to 57% of total public class consumption in the three study years.

Sales for Resale Sample

The study included all six sales for resale customers and a total of nine monitoring points, with one customer having four different meter locations.

Data Collection and Processing Procedures

SCADA monitoring data for residential customers was processed by Company staff on a monthly basis. Hourly flows were estimated by averaging the flows reported for fifteen minute intervals. For systems which included a storage tank, the change in tank level was used to calculate flows into and out of the tank and used in determining net flows to customers for each hour. Because the tank level change and average hourly flow data do not line up precisely, sometimes the net flow calculated after the tank adjustment can appear to indicate a negative flow or an extreme high hour. Another adjustment was made for Thornburgh and Rosslyn, a residential system with two significant non-residential customers. The usage of the large customers was monitored with data logging devices and deducted from the flows for the SCADA monitoring point to yield a net flow for the remaining customers.

Radio read data logging devices were installed on the non-residential sample customers. The device attaches to a customer's meter head and records hourly usage for a fixed period of time, which is then periodically read by a mobile device. The majority of the data logging devices were the "Hot Rod" sold by Mueller/Hersey. The Mueller Hot Rod can store approximately five months of data. Most of the remaining devices were "e-coders" by Neptune, which store data for approximately three months. Several non-residential customers had been fitted with Sensus r900i meters, which have built-in data logging capability, but only keep approximately 31 days of data. Regardless of the device used, Company personnel were on a monthly schedule to download the monitoring data. The accuracy of the data was verified by comparing the logged data to consumption recorded by meter reading for billing purposes.

The hourly and daily monitoring data for each location and customer are summarized in spreadsheet format for each customer class, where each sampled customer's data is in a column, with each day (hour) on a different row. Part III of this report contains the spreadsheets with the daily monitoring data along with hourly data for the day on which the maximum hour occurs. For each day (hour), a consumption per sampled customer is calculated. This amount per average customer is the sum of each customer's consumption divided by the number of customers reporting that day. The *average* customer is calculated because technical difficulties with the data logging equipment or anomalous events at the customer locations can result in the absence of data on any given day for one or several customers. Having a missing data point would result in the simple sum of usage representing an underestimate of the total for that day. As a result, a potential maximum day might be missed.

For sales for resale customers, a total consumption is calculated, because all of the customers are monitored. Use of a total rather than average is advised in this case because the high variance in customer size means that occasional missing datapoints can significantly alter the calculated average and produce false peaks.

Identifying Peaks and Calculating Maximum Day and Hour Ratios

The maximum day (hour) is the highest day (hour) of consumption in the class or stratum as a whole for the year. It is the peak that occurs in the calculated average usage per customer in the stratum or class. The maximum day ratios were calculated for each customer and for the class by dividing the peak day consumption by the annual average consumption per day. Maximum hour ratios were calculated similarly, using hourly peaks and annual hourly averages. For the residential monitoring stations, the annual average usages were calculated from the SCADA monitoring station data. For the non-residential customers, the annual average usages were determined from the billing records over a twelve-month period.

RESULTS OF STUDY

A description and results of the calculations of the maximum day and hour ratios for each customer classification are provided in Part II of the report. Part III contains the detailed tables of monitoring data for each customer and residential SCADA monitoring area. A summary of the resulting calculated ratios for the samples is shown in the Table I-4 below and Figure I-1 on the following page. The selected ratios for use in the Company's future cost of service allocation study are summarized in Table 1-5 below.

Table I-4
Ratio Results from Study Samples

	Maximum Day Ratios			Maximum Hour Ratios		
	2013	2014	2015	2013	2014	2015
Residential	1.79	1.72	1.98	5.68	5.29	6.17
Commercial	2.12	1.96	1.63	4.61	4.02	3.95
Industrial	1.46	1.27	1.23	1.72	1.56	1.64
Public	1.32	1.33	1.36	1.82	1.88	2.41
Sales for Resale	1.36	1.19	1.38	3.42	5.06	2.68

Table I-5
Summary of Maximum Day and Hour Ratios

Customer Classification	Maximum Day Ratio	Maximum Hour Ratio
Residential	2.0	5.0
Commercial	2.1	4.6
Industrial	1.5	1.7
Public	1.4	2.4
Sales for Resale	1.4	3.2

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

d. Explain thoroughly the methodology employed if the Company distinguishes between transmission and distribution mains in its allocation of costs.

RESPONSE

For cost allocation purposes, mains that are 10-inch and larger are considered to be transmission mains and are allocated using Factor 3, which is based on average and maximum day extra capacity demands plus the daily requirement for fire demand. Mains sized under 10-inch are considered distribution mains and are allocated using Factor 4, which is based on average and maximum hour extra capacity demands plus the hourly requirement for fire demands.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

e. Provide a detailed explanation of how storage is utilized to meet base, maximum day and maximum hour demands.

RESPONSE

Storage facilities have been considered to be adequate if the effective volume of the facility, or groups of facilities acting together, provided sufficient volume during peak hour demands and to meet equalization needs on the maximum day and provide a fire protection reserve. The effective volume of storage is that quantity, which can be used from the tank while maintaining adequate system pressures under the domestic, and fire flow conditions for distribution mains. The equalization volume is that quantity of water needed to allow production plant or booster station output rates to be constant and equal to the daily demand on the maximum day of the year. The use of equalization storage enables a reasonably constant rate of treatment plant operation and thereby promotes overall system efficiently and economy. Existing storage capacity has also been analyzed on a case-by-case basis to determine its contribution to overall system reliability. Where appropriate recommendations are made if additional storage will significantly improve a system's reliability (e.g., its ability to maintain service to its customers during an emergency, such as a spill or power outage.)

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

f. Provide workpapers, calculations and supporting documentation which develop the equivalent meters and equivalent service weights reflected in the Company's cost of service study.

RESPONSE

The 5/8-inch dollar equivalent was developed using actual installation costs by meter size, provided by the Company for the years 2011-2022, as follows:

Meter Size	Actual Installation Cost 2011-2022	5/8-Inch Dollar Equivalent
5/8"	$ 190.27	1.0
3/4"	289.45	1.5
1"	372.56	2.0
1-1/2"	420.36	2.2
2"	567.97	3.0
3"	1,556.79	8.2
4"	3,864.30	20.3
6"	5,633.17	29.6
8"	6,282.93	33.0
10"	9,745.75	51.2

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1f., cont.

The 3/4-inch dollar equivalent was developed using the actual installation costs by size, for the years 2011-2022, provided by the Company, as follows:

Service Size	Actual Installation Cost 2011-2022	1-Inch Equivalent
3/4" & 1"	$2,186.38	1.00
1-1/2"	3,135.14	1.43
2"	5,589.98	2.56
4"	4,343.38	1.99
6"	6,119.45	2.80
8"	25,508.47	11.67
10"	14,235.83	6.51
12"	27,619.60	12.63

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

g. Provide all workpapers and supporting documentation for the fire flow requirement and duration utilized in the cost of service study.

RESPONSE

The source for the estimated fire protection demand of 20,000 gpm is published fire flow criteria for the population served. The 20,000 gpm estimate is the maximum fire flow requirement generally accepted by published authorities, regardless of population size. This maximum has been established by the National Board of Fire Underwriters (now the American Insurance Association).

General fire-fighting requirements, based on population established by the National Board of Fire Underwriters, are as follows:

a) For populations of 200,00 or less, $Q = 1020 \sqrt{P} (1 - 0.01\sqrt{P})$, where Q is the fire draft in gpm and P is the population in thousands.

b) For populations in excess of 200,00, Q = 12,000 gpm plus 2,000 to 8,000 gpm for a potential second fire.

Inasmuch as PAWC serves a population in excess of 1.5 million, the maximum fire flow of 12,000 gpm would apply. Also, in consideration of the population being well over 200,000, the maximum of the additional allowance to provide for a second fire was selected for a maximum fire flow of 20,000 gpm.

The foregoing requirements were published in Volume I, "Water and Wastewater Engineering," by Fair, Geyer & Okon, published in 1966 by John Wiley & Sons, Inc.

The required fire flow duration is ten hours.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

h. Provide a breakdown of the number and size of private fire services according to the general water service class of customer.

RESPONSE

Please refer to Filing Requirement Section II, Question OR-10a.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

i. Provide a calculation of the Company's base cost of water per unit of consumption.

RESPONSE

The calculation of the base cost of water per hundred gallons is as follows:

Base Cost of Water (See attached Functional Allocation)	$435,187,477
Pro Forma Water Consumption (Hundred Gallons)	426,947,484
Base Cost per Hundred Gallons	$1.0193

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

j. Provide a detailed cost analysis that supports the Company's customer charges, by meter size, showing all direct and indirect costs included.

RESPONSE

Please refer to the attached schedules for the year ended June 30, 2025.

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

CALCULATION OF THE 5/8-INCH CUSTOMER COSTS PER MONTH
INCLUDING THE UNRECOVERED PUBLIC FIRE COSTS

Cost Function	Cost of Service	Number of Units	Unit Cost Per Month
Meters	47,201,009	1,028,826 5/8 Equivalents	$ 3.82
Services	85,268,741	766,889 3/4 Equvalents	9.27
Billing/Collecting	65,383,374	9,040,521 Bills	7.23
Meter Reading	12,928,261	9,040,521 Bills	1.43
Subtotal	210,781,385		21.75
Unrecovered Public Fire	35,542,414	1,028,826 5/8 Equivalents	2.88
Total	246,323,799		$ 24.63

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

CALCULATION OF THE 5/8-INCH CUSTOMER COSTS PER MONTH
INCLUDING THE UNRECOVERED PUBLIC FIRE COSTS

Cost Function	Cost of Service*	Number of Units	Unit Cost Per Month
Meters	41,480,864	1,028,826 5/8 Equivalents	$ 3.36
Services	79,498,685	766,889 3/4 Equvalents	8.64
Billing/Collecting	34,210,530	9,040,521 Bills	3.78
Meter Reading	5,876,272	9,040,521 Bills	0.65
Subtotal	161,066,352		16.43
Unrecovered Public Fire	35,542,414	1,028,826 5/8 Equivalents	2.88
Total	196,608,766		$ 19.31

* Includes only direct customer costs as shown on the attached schedules.

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

ANALYSIS OF DIRECT CUSTOMER COSTS

Description	Meters	Services	Billing & Collecting	Meter Reading
Operation and Maintenance Expenses				
T&D Supervision - Operation	$ 448,511	$ 211,449	$ -	$ -
Miscellaneous Meter Expense	543,187	-	-	-
Services on Customer Premises	-	256,084	-	-
T&D Supervision - Maintenance	4,904	38,226	-	-
Services Maintenance	-	1,003,768	-	-
Meter Maintenance	128,781	-	-	-
Customer Accounting Expenses	1,932,951	-	16,526,188	3,456,350
Management Fees - Customer	-	-	15,072,622	-
Employee Pension and Benefits	762,651	932,593	885,251	748,288
Transportation Expense	241,341	362,704	978,396	204,625
Worker's Compensation	56,335	68,888	65,391	55,274
Advertising Expense	-	-	-	-
Office Rents	(40,052)	(72,355)	(59,578)	(10,970)
Other Rev. Billing and Collecting	(14,518)	(26,226)	(21,595)	(3,976)
Other Rev. Customer Related	-	-	(4,827,554)	-
Subtotal	4,064,091	2,775,131	28,619,121	4,449,591
Depreciation Expense				
Meters	18,065,782	-	-	-
Services	-	16,391,110	-	-
Office Buildings	98,718	148,361	400,205	83,700
Office Furniture & Equipment	29,856	44,870	121,037	25,314
Transportation Equipment	202,592	304,470	821,308	171,772
Subtotal	18,396,948	16,888,811	1,342,550	280,786
Taxes Other Than Income				
Payroll Taxes	363,558	444,570	422,001	356,711
Assessments	300,504	542,861	446,996	82,307
Subtotal	664,062	987,431	868,997	439,018
Rate Base				
Meters	176,111,565	-	-	-
Services	-	578,872,337	-	-
Office Land/Buildings	1,999,688	3,005,274	8,106,735	1,695,474
Office Furniture and Equipment	3,969,316	5,965,373	16,091,611	3,365,460
Transportation Equipment	2,410,496	3,622,666	9,772,153	2,043,785
Subtotal	184,491,065	591,465,650	33,970,499	7,104,719
Return and Income Taxes	18,355,763	58,847,312	3,379,862	706,877
Total Direct Customer Costs	$ 41,480,864	$ 79,498,685	$ 34,210,530	$ 5,876,272

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS2. Provide a listing of negotiated special rate contracts which includes a comparison of revenues under special rate contracts and under tariff rates. Provide the cost of service treatment of any deficiency in revenues resulting from the negotiated special rate contracts.

RESPONSE

See attached redacted schedules, as well as Confidential Volume 6d for the following customers.

Industrial
- Demand Base Industrial Service 1
- Demand Base Industrial Service 2
- Demand Base Industrial Service 3

Other Water Utilities
- Demand Base Resale Service 1
- Demand Base Resale Service 2
- Demand Base Resale Service 3
- Demand Base Resale Service 4
- Demand Base Resale Service 5
- Demand Base Resale Service 6
- Demand Base Resale Service 7
- Demand Base Resale Service 8

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

APPLICATION OF CONTRACT RATES AND PROPOSED RATES TO CONSUMPTION ANALYSIS

Rate Block 100 Gallons	Number Of Bills	Total Consumption	2025 Present Rate	2025 Present Revenue	2025 Proposed Rate	2025 Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
DEMAND BASE INDUSTRIAL SERVICE 1						
TARIFF RATES						
Customer Charge						
2	48					
8	48					
First Block (First 160)						
Second Block (Next 5,840)						
Third Block (Over 6,000)						
Total	96					
CONTRACT RATES						
Monthly Demand Charge	12					
All Usage						
Total Contract Rates						
Tariff Less Contract Revenues						
DEMAND BASE INDUSTRIAL SERVICE 2						
TARIFF RATES						
Customer Charge						
1	12					
2	144					
4	12					
6	24					
8	12					
10	24					
First Block (First 160)						
Second Block (Next 5,840)						
Third Block (Over 6,000)						
Total	228					
CONTRACT RATES						
Monthly Demand Charge	-					
All Usage						
Total						
Tariff Less Contract Revenues						
DEMAND BASE INDUSTRIAL SERVICE 3						
TARIFF RATES						
Customer Charge						
5/8	24					
1 1/2	24					
2	48					
6	60					
8	12					
First Block (First 160)						
Second Block (Next 5,840)						
Third Block (Over 6,000)						
Total	168					
CONTRACT RATES						
Monthly Demand Charge	-					
All Usage						
Total						
Tariff Less Contract Revenues						

Redacted - Refer to Confidential Volume 6e

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

APPLICATION OF CONTRACT RATES AND PROPOSED RATES TO CONSUMPTION ANALYSIS

Rate Block 100 Gallons	Number Of Bills	Total Consumption	2025 Present Rate	2025 Present Revenue	2025 Proposed Rate	2025 Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
DEMAND BASE RESALE SERVICE 1						
TARIFF RATES						
Customer Charge						
6	12					
All Usage						
Total	12					
CONTRACT RATES						
Monthly Demand Charge 1	12		Redacted - Refer to Confidential Volume 6e			
Commodity Charge						
Total	12					
Tariff Less Contract Revenues						
DEMAND BASE RESALE SERVICE 2						
TARIFF RATES						
Customer Charge						
6	12					
8	24					
All Usage						
Total	36					
CONTRACT RATES						
Monthly Demand Charge	-		Redacted - Refer to Confidential Volume 6e			
Commodity Charge						
Total						
Tariff Less Contract Revenues						
DEMAND BASE RESALE SERVICE 3						
TARIFF RATES						
Customer Charge						
4	12					
All Usage						
Total	12					
CONTRACT RATES						
Monthly Demand Charge	-		Redacted - Refer to Confidential Volume 6e			
Commodity Charge						
Total						
Tariff Less Contract Revenues						
DEMAND BASE RESALE SERVICE 4						
TARIFF RATES						
Customer Charge						
4	12					
First Block						
Total	12					
CONTRACT RATES						
Monthly Demand Charge	-		Redacted - Refer to Confidential Volume 6e			
Commodity Charge						
Total						
Tariff Less Contract Revenues						

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

APPLICATION OF CONTRACT RATES AND PROPOSED RATES TO CONSUMPTION ANALYSIS

Rate Block 100 Gallons (1)	Number Of Bills (2)	Total Consumption (3)	2025 Present Rate (4)	2025 Present Revenue (5)	2025 Proposed Rate (6)	2025 Proposed Revenue (7)
		DEMAND BASE RESALE SERVICE 5				
TARIFF RATES						
Customer Charge						
4	12					
First Block						
Total	12					
CONTRACT RATES						
Monthly Demand Charge	12		Redacted - Refer to Confidential Volume 6e			
Commodity Charge						
Total	12					
Tariff Less Contract Revenues						
		DEMAND BASE RESALE SERVICE 6				
TARIFF RATES						
Customer Charge						
6	12					
First Block						
Total	12					
CONTRACT RATES						
Monthly Demand Charge	-		Redacted - Refer to Confidential Volume 6e			
Commodity Charge						
Total						
Tariff Less Contract Revenues						
		DEMAND BASE RESALE SERVICE 7				
TARIFF RATES						
Customer Charge						
First Block						
Total	-					
CONTRACT RATES						
Monthly Demand Charge	12		Redacted - Refer to Confidential Volume 6e			
Commodity Charge						
Total	$ 12					
Tariff Less Contract Revenues						
		DEMAND BASE RESALE SERVICE 8				
TARIFF RATES						
Customer Charge						
First Block						
Total	-					
CONTRACT RATES						
Monthly Demand Charge	12		Redacted - Refer to Confidential Volume 6e			
Commodity Charge						
Total	$ 12					
Tariff Less Contract Revenues						
Total Industrial Contract - Zone 1						
Total OWU Contract - Zone 1						

*PAWC does not have meter size or number of meters available for DRS-7 or DRS-8.

VOLUME 17

PENNSYLVANIA-AMERICAN WATER COMPANY

2023 GENERAL BASE RATE CASE
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

EXHIBITS NO. 12-B, 12-C, 12-D, 12-E
WASTEWATER SSS GENERAL OPERATIONS, BASA WASTEWATER OPERATIONS,
BRENTWOOD WASTEWATER OPERATIONS,
WASTEWATER CSS OPERATIONS
COST OF SERVICE AS OF JUNE 30, 2025

EXHIBIT NO. 12-B -

WASTEWATER SSS GENERAL OPERATIONS

COST OF SERVICE

AS OF JUNE 30, 2025

Exhibit 12-B
Witness: C. Heppenstall

PENNSYLVANIA AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WASTEWATER SANITARY SEWER SYSTEM OPERATIONS

WASTEWATER COST OF SERVICE

ALLOCATION STUDY

AS OF JUNE 30, 2025

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

October 31, 2023

Pennsylvania American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention Ashley E. Everette
Senior Director, Rates & Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have conducted a cost of service allocation study based on pro forma revenue requirements estimated for the test year ended June 30, 2025.

The attached report presents the results of the allocation study, as well as supporting schedules which set forth the detailed cost allocation calculations. Schedule A presents a comparison of the cost of service by customer classification with the pro forma revenues produced by each classification under present and proposed rates.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

CONSTANCE E. HEPPENSTALL
Senior Project Manager, Rate Studies

GREGORY R. HERBERT
Analyst, Rate Studies

CEH:mle
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APPENDIX

Responses to Rate Structure and Cost of Service Filing Requirements A-1

PART I. INTRODUCTION

PENNSYLVANIA AMERICAN WATER COMPANY

WASTEWATER SANITARY SEWER SYSTEM
GENERAL OPERATIONS

COST OF SERVICE ALLOCATION STUDY AS OF
JUNE 30, 2025

PART I. INTRODUCTION

PLAN OF REPORT

The report sets forth the results of the cost of service allocation study for the Wastewater Sanitary Sewer System General Operations (WW SSS Operations) based on pro forma costs as of June 30, 2025, for Pennsylvania-American Water Company. Part I, Introduction, contains statements with respect to the basis of the study, the procedures employed, and a summary of the results of the study. Schedule A summarizes the cost allocation for the WW SSS Operations and total revenues under present and proposed rates. Part II, Cost of Service by Customer Classification, presents detailed schedules of the allocation of costs to customer classifications, as well as the basis for the allocations.

BASIS OF STUDY

The method used for the allocation of wastewater cost of service incorporates the functional cost allocation methodology described in the text “Financing and Charges for Wastewater Systems,” Manual of Practice No. 27, published by the Water Environment Federation. This method is recognized for allocating the cost of providing wastewater service to customer classifications in proportion to the classifications' use of the commodity, facilities, and services. It is generally accepted as a sound method for allocating the cost of wastewater service. Under the functional cost method, costs are assigned to cost components using

predominant operational purposes as cost-causative factors.

Each element of the cost of service is allocated to customer classifications according to the functional categories. The cost functions are flow, infiltration and inflow (I&I), customer facilities and customer accounting. The functional costs are allocated to customer classifications based on the amount of flow contributed to the system, the amount of I&I allocated to each class, and the number and relative size of customers.

The results for the allocation of WW SSS Operations cost of service are summarized on Schedule A, column 2. The cost allocation results can be compared with revenues under present and proposed rates in columns 4 and 6 of Schedule A. The proposed increase and percentage increase in revenues are shown in columns 8 and 9.

The cost of service by customer classification is developed in Schedule D. The allocation factors referenced in column 2 are applied to the costs by account in column 3. The allocation factors are set forth in Schedule E.

PART II. COST OF SERVICE BY CUSTOMER CLASSIFICATION

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Customer Classification	Cost of Service Amount (Schedule B)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates Amount	Revenues, Proposed Rates Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$ 48,365,379	52.5%	$ 62,061,414	67.3%	$ 60,277,357	65.5%	$ (1,784,057)	-2.9%
Non-Residential	18,171,446	19.7%	19,828,485	21.5%	20,704,933	22.5%	876,448	4.4%
Large Industrial	908,443	1.0%	903,713	1.0%	1,299,305	1.4%	395,592	43.8%
Bulk Users/VA Hospital	2,171,473	2.4%	2,019,421	2.2%	2,076,363	2.3%	56,942	2.8%
Bulk Users - Contract	22,443,808	24.4%	7,425,108	8.0%	7,702,598	8.4%	277,490	3.7%
Total Sales	92,060,549	100.0%	92,238,141	100.0%	92,060,556	100.0%	(177,585)	-0.2%
Other Revenues	1,406,017		1,397,685		1,406,017		8,332	0.6%
IPP Surcharge	1,835,040		1,835,040		1,835,040		0	
COS Recovered from Water Rates	31,962,411		-		31,962,411		31,962,411	
Total	$ 127,264,017		$ 95,470,866		$ 127,264,024		$ 31,793,158	33.3%

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PRESENT RATES

ITEM	COST OF SERVICE	RESIDENTIAL	NON-RESIDENTIAL	LARGE INDUSTRIAL	BULK USERS/ VA HOSP
(1)	(2)	(3)	(4)	(5)	(6)
1. REVENUES FROM SALES	92,238,141	62,061,414	19,828,485	903,713	2,019,421
2. OTHER REVENUES	3,232,725	1,867,151	738,505	41,434	52,456
3. TOTAL OPERATING REVENUES	95,470,866	63,928,565	20,566,990	945,147	2,071,877
4. LESS: OPERATING EXPENSES (RECOVERED FROM WATER)	56,633,668	31,616,044	11,766,945	611,418	1,123,232
5. RETURN AND INCOME TAXES	38,837,198	32,312,520	8,800,045	333,729	948,645
6. LESS: TAXABLE EXCLUSIONS - ALLOCATED ON RATE BASE	13,962,886	7,015,533	2,689,122	132,254	2,157,540
7. TAXABLE INCOME	24,874,312	25,296,987	6,110,922	201,475	(1,208,896)
8. LESS: INCOME TAXES (TAX. INC.)	9,971,223	10,140,659	2,449,650	80,764	(484,603)
9. NET RETURN (Line 5 - Line 8)	28,865,975	22,171,862	6,350,394	252,965	1,433,248
10. ORIGINAL COSTS MEASURE OF VALUE	755,893,693	379,792,346	145,578,120	7,159,719	116,800,437
11. RATE OF RETURN, PERCENT	3.82	5.84	4.36	3.53	1.23
12. RELATIVE RATE OF RETURN	1.00	1.53	1.14	0.93	0.32

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PROPOSED RATES

ITEM	COST OF SERVICE	RESIDENTIAL	NON-RESIDENTIAL	LARGE INDUSTRIAL	BULK USERS/ VA HOSP
(1)	(2)	(3)	(4)	(5)	(6)
1. REVENUES FROM SALES	92,060,556	60,277,357	20,704,933	1,299,305	2,076,363
2. OTHER REVENUES	3,241,057	1,873,585	740,515	41,320	52,456
3. TOTAL OPERATING REVENUES	95,301,613	62,150,942	21,445,448	1,340,625	2,128,819
4. LESS: OPERATING EXPENSES (RECOVERED FROM WATER)	25,246,699	9,244,354	3,210,740	177,913	1,120,758
5. RETURN AND INCOME TAXES	70,054,913	52,906,588	18,234,708	1,162,713	1,008,061
6. LESS: TAXABLE EXCLUSIONS - ALLOCATED ON RATE BASE	13,960,609	7,018,850	2,688,268	132,152	2,155,109
7. TAXABLE INCOME	56,094,304	45,887,738	15,546,440	1,030,561	(1,147,048)
8. LESS: INCOME TAXES (TAX. INC.)	18,498,056	15,132,266	5,126,704	339,845	(378,259)
9. NET RETURN (Line 5 - Line 8)	51,556,857	37,774,322	13,108,004	822,868	1,386,320
10. ORIGINAL COSTS MEASURE OF VALUE	755,774,950	379,974,179	145,532,755	7,154,195	116,669,492
11. RATE OF RETURN, PERCENT	6.82	9.94	9.01	11.50	1.19
12. RELATIVE RATE OF RETURN	1.00	1.46	1.32	1.69	0.17

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025 ALLOCATED TO CUSTOMER CLASSES

Account		Factor Ref.	Cost of Service	Residential	Non-Residential	Large Industrial	Bulk/VA Hospital	Bulk - Contract
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
OPERATION AND MAINTENANCE EXPENSES								
	SEWAGE TREATMENT							
601.3	Salary and Wages	1	$ 3,023,499	$ 1,426,561	$ 595,330	$ 36,688	$ 86,429	$ 878,491
601.4	Salary and Wages	1	226,565	106,899	44,611	2,749	6,477	65,829
604.3	Employee Benefits	1	225	106	44	3	6	65
615.3	Purchased Power	1	3,234,166	1,525,959	636,810	39,244	92,452	939,702
618.3	Chemicals	1	1,810,725	854,345	356,534	21,972	51,761	526,114
620.3	Materials and Supplies - Operation	1	911,627	430,128	179,500	11,062	26,060	264,877
631.3	Contractual Services - Engineering	1	11,497	5,425	2,264	140	329	3,341
635.3	Contract Services Test	1	336,086	158,574	66,176	4,078	9,607	97,651
636.3	Contract Services - Operation	1	1,054,403	497,493	207,613	12,794	30,141	306,362
641.3-642.3	Rental of Buildings and Equipment	1	(8,355)	(3,942)	(1,645)	(101)	(239)	(2,428)
650.3	Transportation	1	21,621	10,201	4,257	262	618	6,282
620.4	Materials and Supplies - Maintenance	1	58,189	27,455	11,457	706	1,663	16,907
631.4-636.4	Contract Sevices - Maintenance	1	55,494	26,183	10,927	673	1,586	16,124
650.4	Transportation	1	-	-	-	-	-	-
675.4	Misc. Operating Expense - Waste Disposal	1	2,572,562	1,213,798	506,540	31,216	73,539	747,469
675.3-4	Misc. Operating Expense	1	2,018,277	952,272	397,401	24,490	57,694	586,419
	TOTAL SEWAGE TREATMENT EXPENSE		$ 15,326,581	$ 7,231,456	$ 3,017,818	$ 185,975	$ 438,124	$ 4,453,207

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025 ALLOCATED TO CUSTOMER CLASSES

Account		Factor Ref.	Cost of Service	Residential	Non-Residential	Large Industrial	Bulk/VA Hospital	Bulk - Contract
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
	COLLECTION							
601.1	Salary and Wages	2	$ -	$ -	$ -	$ -	$ -	$ -
601.5	Salary and Wages	2	336,184	240,956	87,653	3,521	4,054	-
601.6	Salary and Wages	2	249,834	179,065	65,139	2,617	3,012	-
615.5	Purchased Power	2	92,962	66,629	24,238	974	1,121	-
615.1	Purchased Power	2	-	-	-	-	-	-
620.5	Materials and Supplies	2	15,075	10,805	3,931	158	182	-
636.5	Contract Services	2	47,222	33,846	12,312	495	569	-
641.5-642.5	Rental of Buildings and Equipment	2	40,700	29,171	10,612	426	491	-
675.1	Miscellaneous Operating Expense	2	-	-	-	-	-	-
675.5	Miscellaneous Operating Expense	3	-	-	-	-	-	-
	TOTAL COLLECTION EXPENSE OPERATION		781,977	560,472	203,885	8,191	9,429	-
620.6	Materials and Supplies	2	$ 125,874	$ 90,219	$ 32,819	$ 1,319	$ 1,518	$ -
636.6	Contract Services	2	131,144	93,995	34,193	1,374	1,581	-
650.6	Transportation	2	-	-	-	-	-	-
675.6	Miscellaneous Maintenance Expense	2	-	-	-	-	-	-
675.5&6	Miscellaneous Operating Expense	2	125,429	89,900	32,703	1,314	1,512	-
	TOTAL T & D EXPENSE - MAINTENANCE		$ 382,447	$ 274,114	$ 99,716	$ 4,006	$ 4,611	$ -
	TOTAL COLLECTION EXPENSE		$ 1,164,423	$ 834,585	$ 303,601	$ 12,197	$ 14,040	$ -
	CUSTOMER ACCOUNTS							
601.7	Salary and Wages	5	$ 3,303	$ 2,948	$ 353	$ 0	$ 1	$ 1
641.7	Rental of Building	5	18,000	16,065	1,925	1	6	3
670.7	Bad Debts	5	1,696,295	1,513,958	181,384	81	586	285
675.7	Miscellaneous Expense	5	84,053	75,018	8,988	4	29	14
	TOTAL CUSTOMER ACCOUNTING EXPENSE		$ 1,801,650	$ 1,607,989	$ 192,650	$ 86	$ 623	$ 303

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025 ALLOCATED TO CUSTOMER CLASSES

Account		Factor Ref.	Cost of Service	Residential	Non-Residential	Large Industrial	Bulk/VA Hospital	Bulk - Contract
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ADMINISTRATIVE AND GENERAL EXPENSES							
601.8	Salaries and Wages	10	$ 1,076,942	$ 611,966	$ 202,515	$ 10,671	$ 23,805	$ 227,985
603.8	Salaries of Officiers	10	-	-	-	-	-	-
604.8	Employee Pension & Benefits	6	1,463,981	764,815	296,470	16,749	36,859	349,089
615.8	Purchased Power	10	107,349	61,000	20,187	1,064	2,373	22,725
620.8	Materials and Supplies	10	9,769	5,551	1,837	97	216	2,068
631.8	Contractual Services	10	14,445	8,208	2,716	143	319	3,058
632.8	Contractual Services - Legal	10	115,507	65,636	21,721	1,144	2,553	24,452
634.8	Contractual Services - Management							
	Customer Related	5	487,535	435,129	52,132	23	169	82
	Employee Related	6	318,593	166,440	64,518	3,645	8,021	75,969
	Lab Testing	1	22,696	10,709	4,469	275	649	6,595
	Other	10	1,130,604	642,460	212,606	11,202	24,991	239,345
636.8	Contractual Services	10	12,226	6,947	2,299	121	270	2,588
642.8	Rental of Equipment	10	-	-	-	-	-	-
650.8	Transportation	10	154,433	87,756	29,040	1,530	3,414	32,693
656.8	Insurance Vehicles	10	32,669	18,564	6,143	324	722	6,916
657.8	Insurance	10	1,453,593	825,997	273,342	14,403	32,131	307,721
658.8	Advertising	10	139,443	79,238	26,222	1,382	3,082	29,520
659.8	Workers Compensation	6	485,302	253,532	98,278	5,552	12,218	115,721
666.8	Amortization of Rate Case	9	76,393	43,895	16,516	830	1,337	13,814
675.8	Miscellaneous Expense	10	989,005	561,997	185,978	9,799	21,861	209,369
	TOTAL A & G EXPENSE		$ 8,090,486	$ 4,649,841	$ 1,516,989	$ 78,954	$ 174,991	$ 1,669,710
	Total Operation & Maintenance Expenses		$ 26,383,140	$ 14,323,872	$ 5,031,057	$ 277,212	$ 627,778	$ 6,123,221

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025 ALLOCATED TO CUSTOMER CLASSES

Account		Factor Ref.	Cost of Service	Residential	Non-Residential	Large Industrial	Bulk/VA Hospital	Bulk - Contract
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
	DEPRECIATION EXPENSE							
354.20	Structures and Improvements - Collection	2	$ 306,681	$ 219,810	$ 79,961	$ 3,212	$ 3,698	$ -
354.30	Structures and Improvements -Pumping	2	435,157	311,893	113,459	4,558	5,247	-
354.40	Structures and Improvements - Treatment	3	6,728,371	3,241,514	1,352,743	83,364	54,592	1,996,159
354.40	Structures and Improvements - Treatment - Bulk	DA	124,544				124,544	-
354.70	Structures and Improvements - General	2	528,271	378,631	137,736	5,534	6,370	-
355.00	Power Generation Equipment	2	197,036	141,223	51,373	2,064	2,376	-
360.10	Force Mains	3	1,044,283	503,102	209,954	12,939	8,473	309,816
361.10	Gravity Mains	3A	4,305,155	3,112,763	1,132,344	45,492	14,556	-
361.10	Gravity Mains - Bulk	DA	26,858				26,858	-
361.20	Manholes	3A	1,851,538	1,338,720	486,992	19,565	6,260	-
361.20	Manholes - Bulk	DA	185				185	-
363.00	Service Laterals	4	1,867,929	1,420,493	425,466	1,888	13,388	6,694
364.00	Flow Measuring Devices	2	51,836	37,153	13,515	543	625	-
365.00	Flow Measuring Devices - Installations	2	8,174	5,859	2,131	86	99	-
370.00	Receiving Wells	2	16,143	11,570	4,209	169	195	-
371.00	Pumping Equipment	2	1,266,314	907,614	330,167	13,264	15,269	-
380.00	Treatment Equipment	3	7,189,190	3,463,522	1,445,390	89,073	58,331	2,132,873
380.00	Treatment Equipment - Bulk	DA	59,827				59,827	-
381.00	Plant Sewers	1	148,466	70,050	29,233	1,802	4,244	43,137
382.00	Outfall Sewers	1	61,464	29,000	12,102	746	1,757	17,859
389.00	Other Plant and Misc. Equip. - Intangible	10	204,555	116,237	38,466	2,027	4,522	43,304
390.00	Office Furniture and Equipment	10	80,935	45,991	15,219	802	1,789	17,134
391.00	Transportation Equipment	10	277,526	157,703	52,188	2,750	6,135	58,751
392.00	Stores Equipment	10	4,301	2,444	809	43	95	911
393.00	Tools, Shop and Garage Equipment	10	71,873	40,841	13,515	712	1,589	15,215
394.00	Laboratory Equipment	1	58,132	27,428	11,446	705	1,662	16,891
395.00	Power Operated Equipment	10	107,639	61,165	20,241	1,067	2,379	22,787
396.00	Communication Equipment	10	280,271	159,262	52,704	2,777	6,195	59,332
397.00	Miscellaneous Equipment	10	178,874	101,644	33,637	1,772	3,954	37,867
398.00	Miscellaneous Equipment	10	594	338	112	6	13	126
	Total Depreciation Expense		$ 27,482,122	$ 15,905,972	$ 6,065,113	$ 296,958	$ 435,225	$ 4,778,855

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025 ALLOCATED TO CUSTOMER CLASSES

Account		Factor Ref.	Cost of Service	Residential	Non-Residential	Large Industrial	Bulk/VA Hospital	Bulk - Contract
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Amortization Expense	8	$ (75,633)	$ (44,259)	$ (16,951)	$ (833)	$ (1,191)	$ (12,398)
	Taxes Other Than Income							
685100	Utility Reg Assessment Fee	9	$ 800,253	$ 459,822	$ 173,018	$ 8,694	$ 14,008	$ 144,711
685200	Property Taxes	8	2,227,703	1,303,603	499,289	24,544	35,080	365,186
685320	Payroll Taxes	6	391,525	204,541	79,287	4,479	9,857	93,360
	Total Taxes, Other Than Income		$ 3,419,481	$ 1,967,967	$ 751,594	$ 37,717	$ 58,946	$ 603,257
	Total Operating Expense		$ 57,209,110	$ 32,153,551	$ 11,830,813	$ 611,054	$ 1,120,758	$ 11,492,934
4091	**Income Taxes**	8	$ 18,498,056	$ 10,824,661	$ 4,145,920	$ 203,808	$ 291,293	$ 3,032,374
	Utility Income Available for Return	8	$ 51,556,851	$ 30,169,950	$ 11,555,301	$ 568,043	$ 811,878	$ 8,451,680
	Total Cost of Service		$ 127,264,017	$ 73,148,161	$ 27,532,034	$ 1,382,905	$ 2,223,930	$ 22,976,987
	Less: Other Revenues	9A	$ 1,406,017	$ 1,007,769	$ 379,194	$ 19,054	$ -	$ -
	Less: IPP Surcharge	1	1,835,040	865,817	361,321	22,267	52,456	533,179
	Less: Cost of Service Recovered from Water Rates	9A	31,962,411	22,909,197	8,620,073	433,142	-	-
	Total Cost of Service Related to Sales of Wastewater Services		$ 92,060,549	$ 48,365,379	$ 18,171,446	$ 908,443	$ 2,171,473	$ 22,443,808

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1. ALLOCATION OF COSTS ASSOCIATED WITH WASTEWATER TREATMENT

Factors are based on the pro forma test year average daily consumption for each customer classification with adjustments. The detail regarding calculation of adjusted flows can be found on the following page.

Classification	Total Adjusted Average Daily Customer Flow 100 gallons (a)	I&I Gallons Per Day 100 gallons (b)	Total I&I And Average Flow	Allocation Factor	
(1)	(2)	(3)	(4)=(2)+(3)	(7)	
Residential	51,566	27,607	79,173	0.4718	0.6651
Non-Residential	23,467	9,573	33,040	0.1969	0.2775
Large Industrial	1,730	306	2,036	0.0121	0.0171
Bulk Users/VA Hospital	4,432	365 (c)	4,797	0.0286	0.0403
Bulk Users - Contract	45,048	3,708 (c)	48,756	0.2906	
Total	126,243	41,559	167,802	1.0000	

(a) Customer Flow.
(b) Allocation based on Factor 1A for Residential, Non-Residential and Large Industrial.
(c) Equal to 25% of total I&I portion.

FACTOR 1A. ALLOCATION OF INFILTRATION AND INFLOW BY CUSTOMER CLASS.

Factors are based on a 1/3-2/3 weighting of flow and number of customers, as follows:

Customer Classification	Total Adjusted Average Daily Flow 100 gallons	Average Daily Flow		Number of Service Equivalents	Number of Customers		Allocation Factor
		Factor	Weight		Factor	Weight	
(1)	(2)	(3)	(4)=(3) x 0.3333	(5)	(6)	(7)=(6) x 0.6667	(8)=(4)+(7)
Residential	51,566	0.6718	0.2239	37,137	0.7687	0.5125	0.7364
Non-Residential	23,467	0.3057	0.1019	11,123	0.2302	0.1535	0.2554
Large Industrial	1,730	0.0225	0.0075	49	0.0010	0.0007	0.0082
Total	76,763	1.0000	0.3333	48,309	0.9999	0.6666	0.9999

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 2. ALLOCATION OF COSTS ASSOCIATED WITH THE COLLECTION SYSTEM

Factors are based on peak daily flow for each customer classification.

Customer Classification	Ave. Flow Consumption, 100 gpd	Peak I&I Flow 100 gallons (a)	Total Peak I&I And Average	Allocation Factor
(1)	(2)	(3)	(4)=(2)+(3)	(5)
Residential	51,566	276,938	328,504	0.7167
Non-Residential	23,467	96,035	119,502	0.2607
Large Industrial	1,730	3,071	4,801	0.0105
Bulk Users/VA Hospital	4,432	1,094 (b)	5,526	0.0121
Bulk Users - Contract	0	0	-	0.0000
Total	81,195	377,138	458,333	1.0000

(a) Allocation based on Factor 1A.
(b) Equal to 25% of total I&I percentage.

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 3. ALLOCATION OF CAPITAL COSTS ASSOCIATED WITH PROJECTED AVERAGE DAILY FLOW INCLUDING INFILTRATION AND INFLOW EXCLUDING COATESVILLE BULK USERS

Factors are based on the projected average daily consumption for each customer classification.

Classification	Total Average Daily Flow 100 gallons	Direct I&I Gallons Per Day 100 gallons (a)	Total Direct I&I And Average	Allocation Factor
(1)	(2)	(3)	(4)=(2)+(3)	(7)
Residential	51,566	27,607	79,173	0.4818
Non-Residential	23,467	9,573	33,040	0.2011
Large Industrial	1,730	306	2,036	0.0124
Bulk Users Excl. Coatesville	1,232	101	1,333	0.0081
Bulk Users - Contract	45,048	3,708	48,756	0.2967
Total	123,043	41,296	164,339	1.0000

(a) Allocation based on Factor 1A.
(b) Allocated based on Column 4

FACTOR 3A. ALLOCATION OF CAPITAL COSTS ASSOCIATED WITH PROJECTED MAXIMUM DAILY FLOW INCLUDING INFILTRATION AND INFLOW EXCLUDING COATESVILLE BULK USERS

Factors are based on the projected average daily consumption for each customer classification.

Classification	Ave. Flow Consumption, 100 gpd	Direct I&I Peak I&I Flow 100 gallons (a)	Total Peak I&I And Average	Allocation Factor
(1)	(2)	(3)	(4)=(2)+(3)	(7)
Residential	51,566	276,938	328,504	0.7230
Non-Residential	23,467	96,035	119,502	0.2630
Large Industrial	1,730	3,071	4,801	0.0106
Bulk Users Excl. Coatesville	1,232	304	1,536	0.0034
Bulk Users - Contract	-	-	-	-
Total	77,995	376,348	454,343	1.0000

(a) Allocation based on Factor 1A.
(b) Allocated based on Column 4

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS

FACTOR 1. ALLOCATION OF COSTS ASSOCIATED WITH AVERAGE DAILY FLOW INCLUDING INFILTRATION AND INFLOW (CONT.)

Classification	Annual Flow 100 gallons	Average Daily Flow 100 gallons	Average Daily Unmetered Flow 100 gallons	Total Average Daily Flow 100 gallons	Water Sales Adjustment Per I&I Study	Average Daily Adjusted Water sales 100 gallons
(1)	(2)	(3)=(2)/365	(4)	(3)+(4)=(5)	(6)	(7)
Residential	19,261,924	52,772	5,826	58,598	0.8800	51,566
Non-Residential	8,923,428	24,448	2,220	26,668	0.8800	23,467
Large Industrial	631,588	1,730		1,730	1.0000	1,730
Bulk Users						
Bulk Users/VA Hospital	1,167,943	3,200		3,200	1.0000	3,200
Bulk User - Other	510,916	1,400		1,400	0.8800	1,232
Bulk User - Contract	18,684,743	51,191		51,191	0.8800	45,048
Total Bulk Users	20,363,601	55,791		55,791		49,480
Total	49,180,541	134,741	8,046	142,787		126,243

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH CUSTOMER FACILITIES.

Factors are based on the estimated relative cost of customer facilities, as follows:

Customer Classification	Number of Customers	Service Equiv. Ratio (a)	Service Equivalents	Allocation Factor
(1)	(2)	(3)	(2)X(3)=(4)	(5)
Residential	37,137	1.0	37,137	0.7605
Non-Residential	4,449	2.5	11,123	0.2278
Large Industrial	2	25.0	49	0.0010
Bulk Customers/VA	14	25.0	350	0.0072
Bulk Users - Contract	7	25.0	175	0.0036
Total	41,609		48,834	1.0000

(a) Based on ratio by class for Coatesville service area.

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH BILLING AND COLLECTING.

Factors are based on the number of customers.

Customer Classification	Number of Customers	Allocation Factor
(1)	(2)	(3)
Residential	37,137	0.89251
Non-Residential	4,449	0.10693
Large Industrial	2	0.00005
Bulk Customers/VA	14	0.00035
Bulk Users - Contract	7	0.00017
Total	41,609	1.00000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 6. ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of direct labor expense.

Customer Classification	Direct Labor Expense	Allocation Factor
(1)	(2)	(3)
Residential	$ 2,568,395	0.5224
Non-Residential	995,601	0.2025
Large Industrial	56,246	0.0114
Bulk Users/VA Hospital	123,778	0.0252
Bulk Users - Contract	1,172,306	0.2385
Total	$ 4,916,327	1.0000

FACTOR 7. ALLOCATION OF ORGANIZATION, FRANCHISES AND CONSENTS, MISCELLANEOUS INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.

Factors are based on the allocation of the original cost less depreciation other than those items being allocated, as follows:

Customer Classification	Original Cost Less Depreciation	Allocation Factor
(1)	(2)	(3)
Residential	$ 411,965,527	0.5853
Non-Residential	157,827,596	0.2242
Large Industrial	7,755,838	0.0110
Bulk Users/VA Hospital	11,063,728	0.0157
Bulk Users - Contract	115,211,790	0.1637
Total	$ 703,824,480	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 8. ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

Factors are based on the allocation of the original cost measure of value rate base as shown on the following pages and summarized below.

Customer Classification	Original Cost Measure of Value	Allocation Factor
(1)	(2)	(3)
Residential	$ 379,974,179	0.5852
Non-Residential	145,532,755	0.2241
Large Industrial	7,154,195	0.0110
Bulk Users/VA Hospital	10,225,164	0.0157
Bulk Users - Contract	106,444,329	0.1639
Total	$ 649,330,621	1.0000

FACTOR 9. ALLOCATION OF REGULATORY COMMISSION EXPENSES, ASSESSMENTS AND OTHER WATER REVENUES.

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	$ 71,385,100	0.5746
Non-Residential	26,860,162	0.2162
Large Industrial	1,349,670	0.0109
Bulk Users/VA Hospital	2,174,695	0.0175
Bulk Users - Contract	22,465,674	0.1808
Total	$ 124,235,301	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY

WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS

COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025 ALLOCATED TO CUSTOMER CLASSES

Account		Factor Ref.	Cost of Service	Residential	Non-Residential	Large Industrial	Bulk/VA Hospital	Bulk - Contract
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
RATE BASE								
352.00	Franchises	7	$ 221,140	$ 129,438	$ 49,589	$ 2,437	$ 3,476	$ 36,199
353.20	Land and Land Rights - Collection	2	3,611,014	2,588,148	941,502	37,825	43,540	-
353.30	Land and Land Rights - Pumping	2	953,051	683,087	248,490	9,983	11,491	-
353.40	Land and Land Rights - Treatment	3	10,757,369	5,182,557	2,162,775	133,282	87,282	3,191,473
354.40	Land and Land Rights - Treatment - Bulk User	DA	180,167				180,167	-
354.20	Structures and Improvements - Collection	2	9,257,960	6,635,523	2,413,834	96,976	111,627	-
354.30	Structures and Improvements - Pumping	2	12,975,165	9,299,782	3,383,024	135,913	156,447	-
354.40	Structures and Improvements - Treatment	3	178,593,404	86,040,592	35,906,299	2,212,748	1,449,058	52,984,707
354.40	Structures and Improvements - Treatment - Bulk	DA	3,310,181				3,310,181	-
354.70	Structures and Improvements - General	2	8,844,490	6,339,174	2,306,030	92,644	106,642	-
355.00	Power Generation Equipment	2	3,795,967	2,720,710	989,725	39,762	45,770	-
360.10	Force Mains	3	44,055,119	21,224,348	8,857,305	545,837	357,451	13,070,178
361.10	Gravity Mains	3A	185,176,934	133,888,770	48,705,323	1,956,731	626,109	-
361.10	Gravity Mains - Bulk	DA	1,158,572				1,158,572	-
361.20	Manholes	3A	29,690,250	21,466,988	7,809,143	313,731	100,387	-
361.20	Manholes - Bulk	DA	3,735				3,735	-
363.00	Service Laterals	4	30,363,053	23,090,019	6,915,918	30,694	217,615	108,807
364.00	Flow Measuring Devices	2	240,267	172,208	62,645	2,517	2,897	-
365.00	Flow Measuring Devices - Installations	2	29,703	21,289	7,744	311	358	-
370.00	Receiving Wells	2	596,803	427,751	155,605	6,251	7,196	-
371.00	Pumping Equipment	2	19,996,897	14,332,517	5,213,805	209,464	241,111	-
380.00	Treatment Equipment	3	136,477,542	65,750,516	27,438,883	1,690,938	1,107,341	40,489,863
380.00	Treatment Equipment - Bulk	DA	1,191,483				1,191,483	-
381.00	Plant Sewers	1	4,665,176	2,201,144	918,577	56,608	133,358	1,355,488
382.00	Outfall Sewer Lines	1	2,423,145	1,143,299	477,119	29,403	69,268	704,056
389.00	Other Plant and Misc. Equip. - Intangible	10	3,271,432	1,858,974	615,179	32,414	72,313	692,551
390.00	Office Furniture and Equipment	10	1,049,106	596,149	197,280	10,395	23,190	222,092
391.00	Transportation Equipment	10	2,735,161	1,554,241	514,336	27,101	60,459	579,025

PENNSYLVANIA AMERICAN WATER COMPANY

WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS

COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025 ALLOCATED TO CUSTOMER CLASSES

Account	Factor Ref.	Cost of Service	Residential	Non-Residential	Large Industrial	Bulk/VA Hospital	Bulk - Contract
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
392.00 Stores Equipment	10	63,283	35,960	11,900	627	1,399	13,397
393.00 Tools, Shop and Garage Equipment	10	1,059,761	602,203	199,284	10,500	23,425	224,348
394.00 Laboratory Equipment	1	390,333	184,169	76,857	4,736	11,158	113,413
395.00 Power Operated Equipment	10	1,504,869	855,134	282,984	14,911	33,264	318,576
396.00 Communication Equipment	10	3,136,445	1,782,268	589,796	31,077	69,329	663,975
397.00 Miscellaneous Equipment	10	2,266,643	1,288,008	426,233	22,459	50,103	479,841
398.00 Other Tangible Plant	7	11,280	6,602	2,529	124	177	1,846
TOTAL SEWER UTILITY PLANT IN SERVICE		$ 704,056,899	$ 412,101,568	$ 157,879,715	$ 7,758,399	$ 11,067,382	$ 115,249,835
Other Rate Base Items:							
Cash Working Capital - Expenses	11	$ 2,230,011	$ 1,210,507	$ 425,080	$ 23,429	$ 53,103	$ 517,892
Cash Working Capital - - Int and Div	7	(1,186,070)	(694,236)	(265,968)	(13,070)	(18,644)	(194,152)
Materials and Supplies	7	439,941	257,508	98,654	4,848	6,916	72,016
Tax Cut and Jobs Act - Stub Period	7	(84,324)	(49,357)	(18,909)	(929)	(1,326)	(13,803)
Acquisition Adjustment	7	3,749,235	2,194,518	840,739	41,315	58,936	613,727
Deferred, Accrued and Prepaid Taxes	7	(59,875,071)	(35,046,330)	(13,426,556)	(659,797)	(941,203)	(9,801,185)
Total Other Rate Base Elements		$ (54,726,278)	$ (32,127,389)	$ (12,346,959)	$ (604,205)	$ (842,218)	$ (8,805,507)
Total Original Cost Measure of Value		$ 649,330,621	$ 379,974,179	$ 145,532,755	$ 7,154,195	$ 10,225,164	$ 106,444,329

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 9A. ALLOCATION OF REVENUE FROM WATER RATES

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	$ 71,385,100	0.7168
Non-Residential	26,860,162	0.2697
Large Industrial	1,349,670	0.0136
Bulk Users/VA Hospital	-	0.0000
Bulk Users - Contract	-	0.0000
Total	$ 99,594,932	1.000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 10. ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES

Factors are based on the allocation of all other operation and maintenance expenses excluding purchased water, power, chemicals and waste disposal.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 6,013,300	0.5682
Non-Residential	1,989,947	0.1880
Large Industrial	104,853	0.0099
Bulk Users/VA Hospital	233,914	0.0221
Bulk Users - Contract	2,240,225	0.2117
Total	$ 10,582,239	1.0000

FACTOR 11. ALLOCATION OF CASH WORKING CAPITAL

Factors are based on the allocation of operation and maintenance expenses including purchased water, power, chemicals and waste disposal.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 14,279,977	0.5428
Commercial	5,014,541	0.1906
Large Industrial	276,382	0.0105
Other Public Authority	626,441	0.0238
Bulk Users - Contract	6,109,407	0.2322
Total	$ 26,306,747	1.0000

APPENDIX A

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

a. A description of the allocation methods used. A comparison of the allocated cost of service by class with the present and proposed revenues. A cost of service schedule showing the Rate of Return produced by present and proposed rates by class of service.

RESPONSE

A description of the methods used for the cost of service study is provided in Exhibit 12-B and in PAWC Statement No. 12. A comparison of the allocated cost of service by class with the present and proposed revenues is provided on Schedule A of Exhibit 12-B.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

b. Indicate if the method used for establishing the allocation factors in the Cost of Service Study deviates from the previous study submitted in the last rate case. If yes, indicate which allocation factors were changed and discuss the reason for the changes.

RESPONSE

The methods used for establishing the allocation factors in the cost of service study have not deviated from the previous study submitted in the last case.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

c. Supply the average day, the maximum day and the maximum hour deliveries to the system adjusted for storage for the test year and two prior years. Also provide workpapers, analyses, comparative data or other documentation supporting the estimated maximum day and peak hour demands by customer class reflected in the Company's cost of service study.

RESPONSE

Not applicable.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

d. Explain thoroughly the methodology employed if the Company distinguishes between transmission and distribution mains in its allocation of costs.

RESPONSE

Not applicable.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

e. Provide a detailed explanation of how storage is utilized to meet base, maximum day and maximum hour demands.

RESPONSE

There is no storage for this system.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

f. Provide workpapers, calculations and supporting documentation which develop the equivalent meters and equivalent service weights reflected in the Company's cost of service study.

RESPONSE

There are no meter or service equivalents calculated for this study.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

g. Provide all workpapers and supporting documentation for the fire flow requirement and duration utilized in the cost of service study.

RESPONSE

Because this is a wastewater operation, there is no fire flow requirements.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

h. Provide a breakdown of the number and size of private fire services according to the general water service class of customer.

RESPONSE

Not applicable.

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

i. Provide a calculation of the Company's base cost of water per unit of consumption.

RESPONSE

The calculation of the average flow cost per hundred gallons is as follows:

Total Flow Cost	$59,529,129
Pro Forma Usage (Hundred Gallons) (Includes Estimated Unmetered)	46,078,695
Flow Cost per Hundred Gallons	$1.2919

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water users (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study, and shall include the following:

j. Provide a detailed cost analysis that supports the Company's customer charges, by meter size, showing all direct and indirect costs included.

RESPONSE

Please refer to the attached schedules.

PENNSYLVANIA AMERICAN WATER
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS

CALCULATION OF CUSTOMER COST PER MONTH

			Per Month
(1)	Cost Related to Customer Facilities	$ 3,696,032	
(2)	Service Equivalents X 12	586,012	
(3)	Cost per Bill - Meter related		$ 6.31
(4)	Cost Related to Customer Accounting	$ 2,793,994	
(5)	Number of Bills	499,313	
(6)	Cost per Bill		$ 5.60
(7)	Cost Related to I&I	$ 26,041,395	
(8)	Percentage of I&I Cost to to be recoverd in Customer Charge	66.67%	
(9)	Net Cost Related to I&I to be recovered in Customer Charge	$ 17,361,798	
(10)	Service Equivalents X 12	586,012	
(11)	Cost per Bill - I&I Related		$ 29.63
(12)	Total Customer Costs (3)+(6)+(11)		$ 41.53

PENNSYLVANIA AMERICAN WATER
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS

CALCULATION OF DIRECT CUSTOMER COST PER MONTH

			Per Month
(1)	Cost Related to Customer Facilities	$ 5,175,167	
(2)	Service Equivalents X 12	586,012	
(3)	Cost per Bill - Meter related		$ 8.83
(4)	Cost Related to Customer Accounting	$ 2,516,498	
(5)	Number of Bills	499,313	
(6)	Cost per Bill		$ 5.04
(7)	Cost Related to I&I	$ 26,041,395	
(8)	Percentage of I&I Cost to to be recoverd in Customer Charge	66.67%	
(9)	Net Cost Related to I&I to be recovered in Customer Charge	$ 17,361,798	
(10)	Service Equivalents X 12	586,012	
(11)	Cost per Bill - I&I Related		$ 29.63
(12)	Total Customer Costs (3)+(6)+(11)		$ 43.50

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
ANALYSIS OF DIRECT CUSTOMER COSTS

Description	Customer Facilities	Billing & Collecting
Operation and Maintenance Expenses		
Customer Accounting Expenses		1,801,650
Management Fees - Customer		487,535
Employee Pension and Benefits		55,582
Transportation Expense		26,293
Worker's Compensation		18,425
Other Rev.		(42,685)
Subtotal	-	2,346,800
Depreciation Expense		
Service Laterals	1,867,929	
Office Furniture & Equipment		13,779
Transportation Equipment		47,249
Subtotal	1,867,929	61,029
Taxes Other Than Income		
Payroll Taxes	-	14,865
Assessments	31,432	24,295
Subtotal	31,432	39,160
Rate Base		
Service Laterals	30,363,053	
Office Furniture and Equipment	-	178,613
Transportation Equipment	-	465,667
Subtotal	30,363,053	644,280
Return and Income Taxes	3,275,806	69,510
Total Direct Customer Costs	$ 5,175,167	$ 2,516,498
Plus I&I Costs	26,041,395	
2/3 of I&I Costs	17,360,930	

PENNSYLVANIA AMERICAN WATER COMPANY

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS2. Provide a listing of negotiated special rate contracts which includes a comparison of revenues under special rate contracts and under tariff rates. Provide the cost of service treatment of any deficiency in revenues resulting from the negotiated special rate contracts.

RESPONSE

See attached schedule.

PENNSYLVANIA AMERICAN WATER COMPANY - WASTEWATER SSS OPERATIONS

APPLICATION OF CONTRACT RATES AND PROPOSED RATES TO CONSUMPTION ANALYSIS

Rate Block 100 Gallons (1)	Number Of Bills (2)	Total Consumption (3)	2025 Present Rate (4)	2025 Present Revenue (5)	2025 Proposed Rate (6)	2025 Proposed Revenue (7)
		CONTRACT BULK WASTEWATER				
TARIFF RATES						
Customer Charge						
	84		$415.00 *	$ 34,860	$430.00 *	$ 36,120
First Block		18,684,743	1.4500	27,092,877	1.4900	27,840,267
Total	84	18,684,743		27,127,737		27,876,387
CONTRACT RATES						
Monthly Demand Charge						
Commodity Charge 1		18,676,652	0.3932	7,343,660	0.4123	7,700,384
Commodity Charge 2		8,091	0.2611	2,113	0.2737	2,214
Total	$ -	18,684,743		$ 7,345,772		$ 7,702,598
Tariff Less Contract Revenues				$ 19,781,965		$ 20,173,789

EXHIBIT NO. 12-C -

WASTEWATER CSS OPERATIONS

COST OF SERVICE

AS OF JUNE 30, 2025

Exhibit 12-C
Witness: C. Heppenstall

PENNSYLVANIA AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WASTEWATER COMBINED SEWER SYSTEM OPERATIONS

WASTEWATER COST OF SERVICE

ALLOCATION STUDY

AS OF JUNE 30, 2025

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Camp Hill, Pennsylvania

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Customer Classification	Cost of Service Amount (Schedule D)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates Amount	Revenues, Proposed Rates Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$ 43,847,878	56.4%	46,175,290	59.2%	46,347,482	59.6%	172,192	0.4%
Non-Residential	24,376,668	31.4%	21,188,954	27.2%	20,866,854	26.8%	(322,100)	-1.5%
Industrial	3,729,314	4.8%	2,268,788	2.9%	2,267,854	2.9%	(934)	0.0%
Bulk	5,782,065	7.4%	8,329,819	10.7%	8,253,737	10.6%	(76,082)	-0.9%
Total Sales	77,735,924	100.0%	77,962,851	100.0%	77,735,927	100.0%	(226,924)	-0.3%
COS Recovered from Water	16,007,052		-		16,007,052		16,007,052	
Other Revenues, IPP Surcharge	673,366		673,371		673,366		(4)	0.0%
Total	$ 94,416,343		$ 78,636,222		$ 94,416,346		$ (226,928)	-0.3%

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PRESENT RATES

Item	Cost of Service	Residential	Non-Residential	Industrial	Bulk
(1)	(2)	(3)	(4)	(5)	(6)
1. Revenues From Sales	$ 77,962,851	$ 46,175,290	$ 21,188,954	$ 2,268,788	$ 8,329,819
2. Other Revenues	673,371	398,819	183,011	19,596	71,945
3. Total Operating Revenues	78,636,222	46,574,109	21,371,965	2,288,384	8,401,764
4. Less: Operating Expenses (Net of costs recovered from water)	44,166,687	24,902,672	13,726,281	2,043,889	3,493,845
5. Return and Income Taxes	34,469,535	21,671,438	7,645,683	244,495	4,907,919
6. Less: Taxable Exclusions - Allocated on Rate Base	10,518,592	5,915,352	3,335,379	523,668	744,194
7. Taxable Income	23,950,943	15,756,086	4,310,304	(279,172)	4,163,726
8. Less: Income Taxes (Based on Taxable Income, Line 7.)	6,890,625	4,532,985	1,240,064	(80,317)	1,197,893
9. Net Return (Line 5 - Line 8)	27,578,910	17,138,452	6,405,620	324,812	3,710,026
10. Original Cost Measure of Value	489,236,860	275,132,663	155,133,902	24,356,633	34,613,662
11. Rate Of Return, Percent	5.64	6.23	4.13	1.33	10.72
12. Relative Rate of Return	1.00	1.11	0.73	0.24	1.90

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PROPOSED RATES

Item	Cost of Service	Residential	Non-Residential	Industrial	Bulk
(1)	(2)	(3)	(4)	(5)	(6)
1. Revenues From Sales	$ 77,735,927	$ 46,347,482	$ 20,866,854	$ 2,267,854	$ 8,253,737
2. Other Revenues	673,366	401,473	180,753	19,645	71,496
3. Total Operating Revenues	78,409,294	46,748,955	21,047,607	2,287,499	8,325,233
4. Less: Operating Expenses (Net of costs recovered from water)	28,445,249	16,116,472	8,750,310	1,275,508	2,302,958
5. Return and Income Taxes	49,964,045	30,632,482	12,297,297	1,011,990	6,022,275
6. Less: Taxable Exclusions - Allocated on Rate Base	10,517,462	5,916,542	3,334,010	523,305	743,605
7. Taxable Income	39,446,583	24,715,941	8,963,287	488,685	5,278,670
8. Less: Income Taxes (Based on Taxable Income, Line 7.)	11,122,810	6,969,189	2,527,391	137,795	1,488,434
9. Net Return (Line 5 - Line 8)	38,841,235	23,663,293	9,769,906	874,195	4,533,841
10. Original Cost Measure of Value	489,184,281	275,187,995	155,070,239	24,339,786	34,586,260
11. Rate Of Return, Percent	7.94	8.60	6.30	3.59	13.11
12. Relative Rate of Return	1.00	1.08	0.79	0.45	1.65

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
COST OF SERVICE ALLOCATED TO CUSTOMER CLASSES FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

Account		Factor Ref.	Cost of Service	Residential	Non-Residential	Industrial	Bulk	CSO Stormwater
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
OPERATION AND MAINTENANCE EXPENSES								
	SEWAGE TREATMENT							
601.3	Salary and Wages	2	$ 2,482,147	$ 584,044	$ 357,790	$ 48,740	$ 134,775	$ 1,356,797
601.4	Salary and Wages	2	771,951	181,639	111,273	15,158	41,915	421,966
615.3	Purchased Power	2	1,408,498	331,417	203,028	27,658	76,478	769,917
618.3	Chemicals	1	2,105,466	1,092,714	669,405	91,190	252,156	0
620.3	Materials and Supplies - Operation	2	74,486	17,526	10,737	1,463	4,044	40,716
635.3	Contract Services Test	2	127,573	30,018	18,389	2,505	6,927	69,734
636.3	Contract Services - Operation	2	240,739	56,645	34,701	4,727	13,072	131,593
641.3	Rental of Building	2	-	0	0	0	0	0
642.3	Rental of Equipment	2	-	0	0	0	0	0
650.3	Transportation	2	1,519	357	219	30	82	830
620.4	Materials and Supplies - Maintenance	2	46,243	10,881	6,666	908	2,511	25,277
636.4	Contract Sevices - Maintenance	2	275,818	64,899	39,758	5,416	14,976	150,768
650.4	Transportation	2	9,182	2,161	1,324	180	499	5,019
675.4	Misc. Maint. Expense	2	71,964	16,933	10,373	1,413	3,907	39,337
675.3	Waste Disposal	1	1,344,100	697,573	427,339	58,215	160,973	0
675.3	Misc. Operating Expense	2	910,989	214,354	131,315	17,889	49,465	497,967
	TOTAL SEWAGE TREATMENT EXPENSE		9,870,675	3,301,162	2,022,316	275,492	761,781	3,509,923
	COLLECTION EXPENSES							
601.5	Salary and Wages	2	663,570	156,137	95,651	13,030	36,030	362,722
601.6	Salary and Wages	2	1,391,526	327,423	200,582	27,324	75,557	760,639
601.6	Salary and Wages - CSO	DA	170,889					170,889
615.5	Purchased Power	2	44,450	10,459	6,407	873	2,414	24,297
620.5	Materials and Supplies	2	199,330	46,902	28,732	3,914	10,823	108,958
636.5	Contract Services	2	152,132	35,796	21,929	2,987	8,260	83,159
641.5	Rental of Building	2	0	0	0	0	0	0
642.5	Rental of Equipment	2	2,449	576	353	48	133	1,339
650.5	Transportation	2	8,934	2,102	1,288	175	485	4,884
	TOTAL COLLECTION EXPENSE OPERATION		2,633,280	579,396	354,942	48,352	133,702	1,516,887

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
COST OF SERVICE ALLOCATED TO CUSTOMER CLASSES FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

Account		Factor Ref.	Cost of Service	Residential	Non-Residential	Industrial	Bulk	CSO Stormwater
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
620.6	Materials and Supplies	2	2,948	694	425	58	160	1,611
636.6	Contract Services	2	57,069	13,428	8,226	1,121	3,099	31,195
675.6	Miscellaneous Maintenance Expense	2	191,298	45,012	27,575	3,756	10,387	104,568
675.5	Miscellaneous Operating Expense	2	226,927	53,395	32,710	4,456	12,322	124,043
	TOTAL COLLECTION - MAINTENANCE		478,242	112,529	68,936	9,391	25,967	261,418
	TOTAL COLLECTION EXPENSE		3,111,522	691,925	423,878	57,743	159,670	1,778,305
	CUSTOMER ACCOUNTS							
601.7	Salary and Wages	6	0	0	0	0	0	0
670.7	Bad Debts	6	1,261,022	1,023,257	215,409	3,847	18,510	0
675.7	Miscellaneous Expense	6	67,837	55,047	11,588	207	996	0
	TOTAL CUSTOMER ACCOUNTING EXPENSE		1,328,859	1,078,304	226,997	4,054	19,505	0
	ADMINISTRATIVE AND GENERAL EXPENSES							
601.8	Salaries and Wages	11	1,252,873	391,397	182,036	21,220	59,782	598,438
603.8	Salaries of Officiers	11	0	0	0	0	0	0
604.8	Employee Pension & Benefits	7	1,763,620	429,747	248,142	32,866	91,170	961,694
615.8	Purchased Power	11	262,460	81,992	38,134	4,445	12,523	125,365
620.8	Materials and Supplies	11	5,402	1,688	785	91	258	2,580
631.8	Contractual Services	11	0	0	0	0	0	0
632.8	Contractual Services - Legal	11	(2,844)	(888)	(413)	(48)	(136)	(1,358)
636.8	Contractual Services	11	1,089,017	340,209	158,229	18,445	51,963	520,172
641.8	Rental of Building	11	13,934	4,353	2,025	236	665	6,656
642.8	Rental of Equipment	11	42	13	6	1	2	20
650.8	Transportation	11	670,840	209,570	97,470	11,362	32,010	320,428
657.8	Insurance	11	1,338,943	418,286	194,541	22,678	63,889	639,549
658.8	Workers Compensation	7	95,317	23,226	13,411	1,776	4,927	51,976
666.8	Rate Case Expense	10	98,964	31,226	17,263	2,538	4,599	43,338
675.8	Miscellaneous Expense	11	724,477	226,327	105,263	12,271	34,569	346,048
	TOTAL A & G EXPENSE		7,313,044	2,157,145	1,056,892	127,881	356,221	3,614,906
	Total Operation & Maintenance Expenses		21,624,101	7,228,536	3,730,083	465,170	1,297,177	8,903,134

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
COST OF SERVICE ALLOCATED TO CUSTOMER CLASSES FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

Account		Factor Ref.	Cost of Service	Residential	Non-Residential	Industrial	Bulk	CSO Stormwater
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
DEPRECIATION EXPENSE								
354.20	Structures and Improvements - Collection	4	287,019	62,977	36,026	5,567	8,790	173,659
354.30	Structures and Improvements - Pumping							
	Froude Ave - Sanitary Only	3	5,970	3,317	1,897	293	463	0
	Combined System	4	410,187	90,003	51,486	7,956	12,562	248,180
354.40	Structures and Improvements - Treatment							
	Sewage Treatment	3	2,786,521	1,548,054	885,562	136,843	216,062	0
	CSO Stormwater	DA	420,025					420,025
355.00	Power Generation Equipment	4	210,757	46,244	26,454	4,088	6,454	127,517
360.10	Force Mains	4	659,863	144,787	82,825	12,799	20,208	399,245
361.10	Gravity Mains							
	Gravity Mains - Sanitary Only	3	875,551	486,413	278,252	42,997	67,889	0
	Gravity Mains - Combined Sewers	4	5,096,050	1,118,171	639,649	98,843	156,063	3,083,324
	CSO Assets	DA	1,181,543					1,181,543
361.20	Manholes							
	Sanitary Only	3	213,899	118,832	67,978	10,504	16,585	0
	Combined System	4	1,244,979	273,172	156,268	24,148	38,127	753,265
	CSO Stormwater	DA	288,654					288,654
362.00	Service Lines - CSO	DA	80,838					80,838
363.00	Service Laterals	5	652,875	394,032	207,372	37,031	14,441	0
364.00	Flow Measuring Devices	4	156,883	34,423	19,692	3,043	4,804	94,921
371.00	Pumping Equipment	4	757,800	166,276	95,118	14,698	23,207	458,501
380.00	Treatment Equipment							
	Sewage Treatment	3	2,851,187	1,583,979	906,113	140,018	221,076	0
	CSO Stormwater	DA	287,892					287,892
381.00	Plant Sewers	4	30,852	6,770	3,872	598	945	18,667
382.00	Outfall Sewer Lines	DA	3,487					3,487
389.10	Other Plant and Misc. Equip. - Intangible	11	619,092	193,404	89,951	10,486	29,540	295,711
389.60	Other Plant and Misc. Equipment - CPS	11	0	0	0	0	0	0
390.00	Office Furniture and Equipment	11	184,464	57,627	26,802	3,124	8,802	88,110
391.00	Transportation Equipment	11	368,608	115,153	53,557	6,243	17,588	176,067
391.00	Transportation Equipment - CSO Related	DA	62,930					62,930
392.00	Stores Equipment	11	4,358	1,361	633	74	208	2,082
393.00	Tools, Shop and Garage Equipment	11	178,907	55,891	25,994	3,030	8,537	85,455
394.00	Laboratory Equipment	1	93,414	48,481	29,700	4,046	11,188	0
395.00	Power Operated Equipment	11	68,753	21,478	9,989	1,164	3,281	32,840
396.00	Communication Equipment	11	198,384	61,975	28,824	3,360	9,466	94,759
397.00	Miscellaneous Equipment	11	219,218	68,484	31,851	3,713	10,460	104,710
	Total Depreciation Expense		20,500,960	6,701,302	3,755,865	574,666	906,747	8,562,379

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
COST OF SERVICE ALLOCATED TO CUSTOMER CLASSES FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

	Account	Factor Ref.	Cost of Service	Residential	Non-Residential	Industrial	Bulk	CSO Stormwater
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Amortization Expense	9	(3,943)	(1,198)	(679)	(105)	(164)	(1,798)
	Taxes Other Than Income							
685100	Utility Reg Assessment Fee	10	597,985	188,680	104,313	15,333	27,791	261,868
685200	Property Taxes	9	1,198,060	363,971	206,190	31,752	49,847	546,299
685320	Payroll Taxes	7	535,138	130,399	75,294	9,973	27,664	291,808
	Total Taxes, Other Than Income		2,331,183	683,049	385,798	57,058	105,301	1,099,976
	Total Operating Expense		44,452,301	14,611,690	7,871,068	1,096,789	2,309,061	18,563,692
4091	**Income Taxes**	9	11,122,810	3,379,113	1,914,276	294,789	462,778	5,071,854
	Utility Income Available for Return	9	38,841,232	11,799,977	6,684,718	1,029,414	1,616,037	17,711,086
	Total Cost of Service		94,416,343	29,790,780	16,470,061	2,420,992	4,387,877	41,346,632
	Less: Other Revenues	10	447,326	141,143	78,032	11,470	20,789	195,892
	Less: IPP Surcharge	2	226,040	53,187	32,583	4,439	12,273	123,559
	Total Cost of Service Related to Sales of Wastewater Services		93,742,976	29,596,451	16,359,447	2,405,084	4,354,814	41,027,181
	Reallocation of CSO Stormwater Costs	1A	0	23,280,396	13,036,762	2,092,154	2,617,869	(41,027,181)
	Less: Cost of Service Recovered from Water Rates	10A	(16,007,052)	(9,028,969)	(5,019,540)	(767,924)	(1,190,618)	0
	Total		$ 77,735,924	$ 43,847,878	$ 24,376,668	$ 3,729,314	$ 5,782,065	$ -

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTORS 1 and 2. ALLOCATION OF COSTS ASSOCIATED WITH AVERAGE DAILY FLOWS.

Factors are based on the pro forma test year average daily consumption for each customer classification.

Classification	Total Average Daily Customer Flow 100 gallons (a)	I&I Average Day 100 gallons (b)	Total Sanitary Average Flow	Allocation Factor 1	Average Day CSO 100 gallons	Total Average Day Wastewater Flow	Allocation Factor 2
(1)	(2)	(3)	(4)=(2)+(3)	(5)	(6)	(7)=(4)+(6)	(8)
Residential	38,324	21,530	59,854	0.5190		59,854	0.2353
Non-Residential	24,610	12,057	36,667	0.3179		36,667	0.1441
Industrial	3,060	1,935	4,995	0.0433		4,995	0.0196
Bulk	11,391	2,421	13,812	0.1198		13,812	0.0543
Stormwater CSO	-	-	-	-	139,047	139,047	0.5466
Total	77,385	37,943	115,328	1.0000	139,047	254,375	1.0000

(a) Customer water usage from bill analysis, adjusted to reflect 88% returned to sewer system. See below.
(b) Allocation based on Factor 1A for Residential, Non-Residential and Industrial.

Classification	Annual Usage 100 gallons	Average Day 100 gallons	Percent to Sewer System	Adjusted Average Day 100 gallons
(1)	(2)	(3)=(2)/365	(6)	(7)
Residential	15,895,672	43,550	88.0%	38,324
Non-Residential	10,207,424	27,966	88.0%	24,610
Industrial	1,269,373	3,478	88.0%	3,060
Bulk	4,724,512	12,944	88.0%	11,391
Total	32,096,981	87,937		77,385

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1A. ALLOCATION OF INFILTRATION AND INFLOW BY CUSTOMER CLASS.

Factors are based on a 1/3-2/3 weighting of flow and number of customers, as follows:

Customer Classification	Total Average Daily Flow 100 gallons	Average Daily Flow		Service Equivalents (Factor 5)			Allocation Factor 1A
		Factor	Weight	Number	Factor 5	Weight	
(1)	(2)	(3)	(4)=(3) x 0.3333	(5)	(6)	(7)=(6) x 0.6667	(8)=(4)+(7)
Residential	38,324	0.4952	0.1651	31,124	0.6035	0.4024	0.5674
Non-Residential	24,610	0.3180	0.1060	16,380	0.3176	0.2118	0.3178
Industrial	3,060	0.0395	0.0132	2,925	0.0567	0.0378	0.0510
Bulk	11,391	0.1472	0.0491	1,141	0.0221	0.0147	0.0638
Total	77,385	1.0000	0.3333	51,570	1.0000	0.6667	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTORS 3 and 4. ALLOCATION OF CAPITAL COSTS ASSOCIATED WITH PEAK DAILY FLOW.

Factors are based on the peak daily flow for each customer classification.

Classification	Total Average Daily Customer Flow 100 gallons (a)	I&I Peak Day 100 gallons (b)	Total Sanitary Peak Flow	Allocation Factor 3	Peak Day CSO 100 gallons	Total Peak Day Wastewater Flow	Allocation Factor 4
(1)	(2)	(3)	(4)=(2)+(3)	(5)	(6)	(7)=(4)+(6)	(8)
Residential	38,324	222,785	261,109	0.5556		261,109	0.2194
Non-Residential	24,610	124,757	149,367	0.3178		149,367	0.1255
Industrial	3,060	20,021	23,081	0.0491		23,081	0.0194
Bulk	11,391	25,052	36,443	0.0775		36,443	0.0306
Stormwater CSO	-	-	-	-	720,000	720,000	0.6050
Total	77,385	392,615	470,000	1.0000	720,000	1,190,000	1.0000

(a) See Factor 1.
(b) Allocated based on Factor 1A

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH CUSTOMER FACILITIES.

Factors are based on the estimated relative cost of customer facilities, as follows:

Customer Classification	Number of Customers	Service Equiv. Ratio	Service Equivalents	Allocation Factor
(1)	(2)	(3)	(2)X(3)=(4)	(5)
Residential	31,124	1.0	31,124	0.6035
Non-Residential	6,552	2.5	16,380	0.3176
Industrial	117	25.0	2,925	0.0567
Bulk	563	*	1,141 *	0.0221
Stormwater CSO	-	-	-	-
Total	38,356		51,570	1.0000

* Based on 514 aggregated residential customers and 49 Bulk customers at 25.0 service equivalent ratio.

FACTOR 6. ALLOCATION OF COSTS ASSOCIATED WITH BILLING AND COLLECTING.

Factors are based on the number of customers.

Customer Classification	Number of Customers	Allocation Factor
(1)	(2)	(3)
Residential	31,124	0.8115
Non-Residential	6,552	0.1708
Industrial	117	0.0031
Bulk	563	0.0147
Stormwater CSO	-	-
Total	38,356	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 7. ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of direct labor expense.

Customer Classification	Direct Labor Expense	Allocation Factor
(1)	(2)	(3)
Residential	$ 1,640,640	0.2437
Non-Residential	947,331	0.1407
Industrial	125,473	0.0186
Bulk	348,059	0.0517
Stormwater CSO	3,671,452	0.5453
Total	$ 6,732,956	1.0000

FACTOR 8. ALLOCATION OF ORGANIZATION, FRANCHISES AND CONSENTS, MISCELLANEOUS INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.

Factors are based on the allocation of the original cost less depreciation other than those items being allocated, as follows:

Customer Classification	Original Cost Less Depreciation	Allocation Factor
(1)	(2)	(3)
Residential	$ 169,478,961	0.3037
Non-Residential	96,029,295	0.1721
Industrial	14,793,737	0.0265
Bulk	23,194,565	0.0416
Stormwater CSO	254,479,640	0.4561
Total	$ 557,976,198	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 9. ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

Factors are based on the allocation of the original cost measure of value rate base as shown on the following pages and summarized below.

Customer Classification	Original Cost Measure of Value	Allocation Factor
(1)	(2)	(3)
Residential	$ 148,614,323	0.3038
Non-Residential	84,190,398	0.1721
Industrial	12,964,909	0.0265
Bulk	20,353,116	0.0416
Stormwater CSO	223,061,535	0.4560
Total	$ 489,184,281	1.0000

FACTOR 10 and 10A. ALLOCATION OF REGULATORY COMMISSION EXPENSES, ASSESSMENTS, OTHER WATER REVENUES.

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification	Total Cost of Service	Allocation Factor 10	Total Cost of Service with Stormwater Reallocated	Allocation Factor 10A
(1)	(2)	(3)	(4)	(5)
Residential	$ 29,570,875	0.3155	$ 52,876,847	0.5641
Non-Residential	16,348,485	0.1744	29,396,208	0.3136
Industrial	2,403,121	0.0256	4,497,238	0.0480
Bulk	4,355,487	0.0465	6,972,683	0.0744
Stormwater CSO	41,041,425	0.4379	-	-
Total	$ 93,719,394	1.0000	$ 93,742,976	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
COST OF SERVICE ALLOCATED TO CUSTOMER CLASSES FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

Account		Factor Ref.	Cost of Service	Residential	Non-Residential	Industrial	Bulk	CSO Stormwater
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
RATE BASE								
353.20	Land and Land Rights - Collection	4	3,161,743	693,747	396,857	61,325	96,826	1,912,988
353.30	Land and Land Rights - Pumping	4	1,153,570	253,115	144,794	22,375	35,327	697,958
353.40	Land and Land Rights - Treatment	3	148,042	82,245	47,048	7,270	11,479	0
354.20	Structures and Improvements - Collection	4	8,992,508	1,973,129	1,128,726	174,418	275,390	5,440,845
354.30	Structures and Improvements - Pumping							
	Froude Ave - Sanitary Only	3	184,625	102,569	58,674	9,067	14,316	0
	Combined System	4	12,684,911	2,783,313	1,592,191	246,036	388,468	7,674,904
354.40	Structures and Improvements - Treatment							
	Sewage Treatment	3	79,039,824	43,910,627	25,119,025	3,881,553	6,128,620	0
	CSO Stormwater	DA	11,914,032					11,914,032
355.00	Power Generation Equipment	4	4,901,478	1,075,478	615,226	95,069	150,105	2,965,600
360.10	Force Mains	4	24,827,605	5,447,653	3,116,324	481,554	760,331	15,021,744
361.10	Gravity Mains							
	Gravity Mains - Sanitary Only	3	32,295,855	17,941,984	10,263,692	1,586,011	2,504,168	0
	Gravity Mains - Combined Sewers	4	187,974,648	41,245,241	23,594,294	3,645,941	5,756,611	113,732,560
	CSO Assets	DA	43,582,785					43,582,785
361.20	Manholes							
	Sanitary Only	3	4,903,207	2,723,980	1,558,250	240,791	380,187	0
	Combined System	4	28,538,600	6,261,916	3,582,122	553,532	873,978	17,267,052
	CSO Stormwater	DA	6,616,806					6,616,806
363.00	Services - CSO	DA	3,326,663					3,326,663
363.00	Service Laterals	5	9,545,462	5,761,002	3,031,912	541,413	211,136	0
364.00	Flow Measuring Devices	4	1,015,515	222,823	127,466	19,697	31,100	614,429
371.00	Pumping Equipment	4	12,592,466	2,763,029	1,580,587	244,242	385,637	7,618,971
380.00	Treatment Equipment							
	Sewage Treatment	3	52,533,226	29,184,869	16,695,171	2,579,845	4,073,341	0
	CSO Stormwater	DA	5,304,413					5,304,413
381.00	Plant Sewers	4	712,730	156,387	89,461	13,824	21,827	431,232
382.00	Outfall Sewer Lines	DA	131,061					131,061

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
COST OF SERVICE ALLOCATED TO CUSTOMER CLASSES FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

Account		Factor Ref.	Cost of Service	Residential	Non-Residential	Industrial	Bulk	CSO Stormwater
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
389.10	Other Plant and Misc. Equip. - Intangible	11	6,908,309	2,158,155	1,003,742	117,007	329,635	3,299,771
389.60	Other Plant and Misc. Equipment - CPS	11	0	0	0	0	0	0
390.00	Office Furniture and Equipment	11	2,625,479	820,199	381,468	44,468	125,277	1,254,067
391.00	Transportation Equipment	11	3,010,332	940,427	437,386	50,986	143,640	1,437,893
391.00	Transportation Equipment - CSO Related	DA	513,929					513,929
392.00	Stores Equipment	11	86,373	26,983	12,550	1,463	4,121	41,256
393.00	Tools, Shop and Garage Equipment	11	2,870,589	896,772	417,082	48,619	136,972	1,371,144
394.00	Laboratory Equipment	1	1,048,418	544,118	333,331	45,408	125,561	0
395.00	Power Operated Equipment	11	803,295	250,949	116,715	13,605	38,330	383,696
396.00	Communication Equipment	11	1,673,148	522,691	243,100	28,338	79,835	799,183
397.00	Miscellaneous Equipment	11	2,354,547	735,560	342,104	39,879	112,349	1,124,655
	TOTAL SEWER UTILITY PLANT IN SERVICE		557,976,198	169,478,961	96,029,295	14,793,737	23,194,565	254,479,640
	Other Rate Base Items:							
	Cash Working Capital	12	986,424	329,743	170,155	21,220	59,173	406,133
	Materials and Supplies	8	176,374	53,572	30,354	4,676	7,332	80,440
	Accrued and Prepaid Taxes	8	245,310	74,510	42,219	6,504	10,197	111,880
	Acquisition Adjustments	8	3,686,015	1,119,585	634,374	97,728	153,224	1,681,104
	Tax Cuts and Jobs Act -Stub Period	8	(64,842)	(19,695)	(11,159)	(1,719)	(2,695)	(29,573)
	Deferred, Accrued and Prepaid Taxes	8	(73,821,198)	(22,422,354)	(12,704,839)	(1,957,236)	(3,068,680)	(33,668,088)
	Total Other Rate Base Elements		(68,791,917)	(20,864,639)	(11,838,897)	(1,828,828)	(2,841,449)	(31,418,104)
	Total Original Cost Measure of Value		$ 489,184,281	$ 148,614,323	$ 84,190,398	$12,964,909	$ 20,353,116	$ 223,061,535

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 11. ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES

Factors are based on the allocation of all other operation and maintenance expenses excluding purchased water, power, chemicals and waste disposal.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 2,939,228	0.3124
Non-Residential	1,367,012	0.1453
Industrial	159,353	0.0169
Bulk	448,935	0.0477
Stormwater CSO	4,494,014	0.4777
Total	$ 9,408,543	1.0000

FACTOR 12. ALLOCATION OF CASH WORKING CAPITAL

Factors are based on the allocation of operation and maintenance expenses including purchased water, power, chemicals and waste disposal.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 7,228,536	0.3343
Commercial	3,730,083	0.1725
Industrial	465,170	0.0215
Bulk	1,297,177	0.0600
Stormwater CSO	8,903,134	0.4117
Total	$ 21,624,101	1.0000

EXHIBIT NO. 12-D -

BRENTWOOD
WASTEWATER OPERATIONS

COST OF SERVICE

AS OF JUNE 30, 2025

Exhibit 12-D
Witness: C. Heppenstall

PENNSYLVANIA AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WASTEWATER SANITARY SEWER SYSTEM
BRENTWOOD OPERATIONS

WASTEWATER COST OF SERVICE

ALLOCATION STUDY

AS OF JUNE 30, 2025

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Camp Hill, Pennsylvania

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Customer Classification	Cost of Service Amount (Schedule B)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates Amount	Revenues, Proposed Rates Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$ 1,754,328	80.4%	$ 1,434,460	79.0%	$ 1,713,458	78.5%	$ 278,998	19.4%
Non-Residential	428,295	19.6%	380,607	21.0%	469,166	21.5%	88,559	23.3%
Total Sales	2,182,624	100.0%	1,815,067	100.0%	2,182,624	100.0%	367,557	20.3%
Other Revenues	10,972		9,124		10,972		1,848	20.3%
COS Recovered from Water Rates	1,565,232		-		1,565,232		1,565,232	
Total	$ 3,758,828		$ 1,824,191		$ 3,758,828		$ 1,934,637	106.1%

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PRESENT RATES

ITEM	COST OF SERVICE	RESIDENTIAL	NON-RESIDENTIAL
(1)	(2)	(3)	(4)
1. REVENUES FROM SALES	1,815,067	1,434,460	380,607
2. OTHER REVENUES	9,124	7,406	1,718
3. TOTAL OPERATING REVENUES	1,824,191	1,441,866	382,325
4. LESS: OPERATING EXPENSES (NET OF COST OF SERVICE RECOVERED FROM WATER)	1,380,385	1,126,019	254,366
5. RETURN AND INCOME TAXES	443,807	315,847	127,959
6. LESS: TAXABLE EXCLUSIONS - ALLOCATED ON RATE BASE	474,298	377,122	97,176
7. TAXABLE INCOME	(30,491)	(61,275)	30,784
8. LESS: INCOME TAXES (TAX. INC.)	73,480	147,665	(74,185)
9. NET RETURN (Line 5 - Line 8)	370,327	168,182	202,144
10. ORIGINAL COSTS MEASURE OF VALUE	22,053,946	17,535,472	4,518,474
11. RATE OF RETURN, PERCENT	1.68	0.96	4.47
12. RELATIVE RATE OF RETURN	1.00	0.57	2.66

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PROPOSED RATES

ITEM	COST OF SERVICE	RESIDENTIAL	NON-RESIDENTIAL
(1)	(2)	(3)	(4)
1. REVENUES FROM SALES	2,182,624	1,713,458	469,166
2. OTHER REVENUES	10,972	8,824	2,148
3. TOTAL OPERATING REVENUES	2,193,596	1,722,282	471,314
4. LESS: OPERATING EXPENSES (NET OF COST OF SERVICE RECOVERED FROM WATER)	(149,830)	(100,248)	(49,582)
5. RETURN AND INCOME TAXES	2,343,426	1,822,530	520,897
6. LESS: TAXABLE EXCLUSIONS - ALLOCATED ON RATE BASE	474,160	377,033	97,127
7. TAXABLE INCOME	1,869,266	1,445,496	423,770
8. LESS: INCOME TAXES (TAX. INC.)	592,343	458,057	134,286
9. NET RETURN (Line 5 - Line 8)	1,751,083	1,364,473	386,610
10. ORIGINAL COSTS MEASURE OF VALUE	22,053,946	17,536,432	4,517,514
11. RATE OF RETURN, PERCENT	7.94	7.78	8.56
12. RELATIVE RATE OF RETURN	1.00	0.98	1.08

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025, ALLOCATED TO CUSTOMER CLASSES

Account		Factor Ref.	Cost of Service	Residential	Non-Residential
(1)		(2)	(3)	(4)	(5)
OPERATION AND MAINTENANCE EXPENSES					
	SEWAGE TREATMENT				
601.3	Salary and Wages	1	$ 76,876	$ 60,873	$ 16,004
636.3	Contract Services - Operation	1	151,404	119,885	31,519
	TOTAL SEWAGE TREATMENT EXPENSE		228,280	180,757	47,523
	COLLECTION				
620.6	Materials and Supplies	2	56,530	45,309	11,221
636.6	Contract Services	2	-	-	-
675.6	Miscellaneous Maintenance Expense	2	18,297	14,665	3,632
675.5	Miscellaneous Operating Expense	2	-	-	-
	TOTAL T & D EXPENSE - MAINTENANCE		74,826	59,974	14,852
	TOTAL COLLECTION EXPENSE		74,826	59,974	14,852
	CUSTOMER ACCOUNTS				
601.7	Salary and Wages	5	-	-	-
670.7	Bad Debts	5	86,156	80,108	6,049
675.7	Miscellaneous Expense	5	8,863	8,240	622
	TOTAL CUSTOMER ACCOUNTING EXPENSE		95,019	88,348	6,671

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025, ALLOCATED TO CUSTOMER CLASSES

Account		Factor Ref.	Cost of Service	Residential	Non-Residential
(1)		(2)	(3)	(4)	(5)
	ADMINISTRATIVE AND GENERAL EXPENSES				
604.8	Employee Pension & Benefits	6	21,731	17,207	4,524
634.8	Contractual Services - Management				
	Customer Related	5	87,965	81,789	6,176
	Employee Related	6	57,483	45,515	11,968
	Lab Testing	1	4,095	3,243	852
	Other	10	203,992	168,614	35,378
641.8	Rental of Building	10	12,318	10,181	2,136
650.8	Transportation	10	3,551	2,935	616
657.8	Insurance	10	25,387	20,984	4,403
666.8	Amortization of Rate Case	9	5,370	4,319	1,051
675.8	Miscellaneous Expense	10	4,619	3,818	801
	TOTAL A & G EXPENSE		426,512	358,606	67,906
	Total Operation & Maintenance Expenses		824,637	687,685	136,952
	DEPRECIATION EXPENSE				
361.10	Gravity Mains	3	332,847	263,556	69,291
361.20	Manholes	3	71,605	56,698	14,907
363.00	Service Laterals	4	43,767	36,817	6,950
390.00	Office Furniture and Equipment	10	233	193	40
391.00	Transportation Equipment	10	4,357	3,601	756
393.00	Tool Shop	10	2,580	2,133	447
	Total Depreciation Expense		455,389	362,998	92,391

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025, ALLOCATED TO CUSTOMER CLASSES

Account		Factor Ref.	Cost of Service	Residential	Non-Residential
(1)		(2)	(3)	(4)	(5)
	Amortization Expense	8	70,194	55,816	14,378
	Taxes Other Than Income				
685100	Utility Reg Assessment Fee	9	23,830	19,164	4,666
685200	Property Taxes	8	35,268	28,044	7,224
685320	Payroll Taxes	6	6,084	4,817	1,267
	Total Taxes, Other Than Income		65,182	52,025	13,157
	Total Operating Expense		1,415,402	1,158,523	256,878
4091	**Income Taxes**	8	592,343	471,008	121,335
	Utility Income Available for Return	8	1,751,083	1,392,392	358,691
	Total Cost of Service		3,758,828	3,021,924	736,904
	Less: Misc Revenues	9	10,972	8,824	2,148
	Less: Cost of Service Recovered from Water Rates	9A	1,565,232	1,258,771	306,461
	Total Cost of Service Related to Sales of Wastewater Services		2,182,624	1,754,328	428,295

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1. ALLOCATION OF COSTS ASSOCIATED WITH WASTEWATER TREATMENT

Factors are based on the pro forma test year average daily consumption for each customer classification with adjustments. The detail regarding calculation of adjusted flows can be found on the following page.

Classification	Total Adjusted Average Daily Customer Flow 100 gallons (a)	I&I Gallons Per Day 100 gallons (b)	Total I&I And Average Flow	Allocation Factor
(1)	(2)	(3)	(4)=(2)+(3)	(7)
Residential	3,592	5,032	8,625	0.7918
Non-Residential	1,123	1,144	2,268	0.2082
Total	4,716	6,177	10,892	1.0000

(a) Customer Flow.
(b) Allocation based on Factor 1A for Residential, Non-Residential and Large Industrial.

FACTOR 1A. ALLOCATION OF INFILTRATION AND INFLOW BY CUSTOMER CLASS.

Factors are based on a 1/3-2/3 weighting of flow and number of customers, as follows:

Customer Classification	Total Adjusted Average Daily Flow 100 gallons	Average Daily Flow		Number of Service Equivalents	Number of Customers		Allocation Factor
		Factor	Weight		Factor	Weight	
(1)	(2)	(3)	(4)=(3) x 0.3333	(5)	(6)	(7)=(6) x 0.6667	(8)=(4)+(7)
Residential	3,592	0.7618	0.2539	44,340	0.8412	0.5608	0.8147
Non-Residential	1,123	0.2382	0.0794	8,370	0.1588	0.1059	0.1853
Total	4,716	1.0000	0.3333	52,710	1.0000	0.6667	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 2. ALLOCATION OF COSTS ASSOCIATED WITH THE COLLECTION SYSTEM

Factors are based on peak daily flow for each customer classification.

Customer Classification	Ave. Flow Consumption, 100 gpd	Peak I&I Flow 100 gallons (a)	Total Peak I&I And Average	Allocation Factor
(1)	(2)	(3)	(4)=(2)+(3)	(5)
Residential	3,592	11,526	15,119	0.8015
Non-Residential	1,123	2,621	3,744	0.1985
Total	4,716	14,147	18,863	1.0000

(a) Allocation based on Factor 1A.

FACTOR 3. ALLOCATION OF CAPITAL COSTS ASSOCIATED WITH PROJECTED AVERAGE DAILY FLOW INCLUDING INFILTRATION AND INFLOW

Factors are based on the projected average daily consumption for each customer classification.

Classification	Total Average Daily Flow 100 gallons	Direct I&I Gallons Per Day 100 gallons (a)	Total Direct I&I And Average	Allocation Factor
(1)	(2)	(3)	(4)=(2)+(3)	(7)
Residential	3,592	5,032	8,625	0.7918
Non-Residential	1,123	1,144	2,268	0.2082
Total	4,716	6,177	10,892	1.0000

(a) Allocation based on Factor 1A.

FACTOR 3A. NOT USED IN THIS ALLOCATION

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH CUSTOMER FACILITIES.

Factors are based on the estimated relative cost of customer facilities, as follows:

Customer Classification	Number of Customers	Service Equiv. Ratio (a)	Service Equivalents	Allocation Factor
(1)	(2)	(3)	(2)X(3)=(4)	(5)
Residential	44,340	1.0	44,340	0.8412
Non-Residential	3,348	2.5	8,370	0.1588
Total	47,688		52,710	1.0000

(a) Based on ratio by class for Coatesville service area.

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH BILLING AND COLLECTING.

Factors are based on the number of customers.

Customer Classification	Number of Customers	Allocation Factor
(1)	(2)	(3)
Residential	44,340	0.9298
Non-Residential	3,348	0.0702
Total	47,688	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 6. ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of direct labor expense.

Customer Classification	Direct Labor Expense	Allocation Factor
(1)	(2)	(3)
Residential	$ 60,873	0.7918
Non-Residential	16,004	0.2082
Total	$ 76,876	1.0000

FACTOR 7. ALLOCATION OF ORGANIZATION, FRANCHISES AND CONSENTS, MISCELLANEOUS INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.

Factors are based on the allocation of the original cost less depreciation other than those items being allocated, as follows:

Customer Classification	Original Cost Less Depreciation	Allocation Factor
(1)	(2)	(3)
Residential	$ 17,739,721	0.7951
Non-Residential	4,572,039	0.2049
Total	$ 22,311,759	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 8. ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

Factors are based on the allocation of the original cost measure of value rate base as shown on the following pages and summarized below.

Customer Classification	Original Cost Measure of Value	Allocation Factor
(1)	(2)	(3)
Residential	$ 17,536,432	0.7952
Non-Residential	4,517,514	0.2048
Total	$ 22,053,946	1.0000

FACTOR 9. ALLOCATION OF REGULATORY COMMISSION EXPENSES, ASSESSMENTS AND OTHER WATER REVENUES.

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	$ 2,914,581	0.8042
Non-Residential	709,584	0.1958
Total	$ 3,624,165	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025, ALLOCATED TO CUSTOMER CLASSES

Account		Factor Ref.	Cost of Service	Residential	Non-Residential
(1)		(2)	(3)	(4)	(5)
RATE BASE					
353.20	Land and Land Rights - Collection	2	$ 32,371	$ 25,946	$ 6,425
361.10	Gravity Mains	3	18,903,539	14,968,255	3,935,284
361.20	Manholes	3	1,873,075	1,483,144	389,931
363.00	Service Laterals	4	1,381,977	1,162,528	219,449
390.00	Office Furniture and Equipment	10	4,716	3,898	818
391.00	Transportation Equipment	10	64,167	53,039	11,128
393.00	Tool Shop	10	51,915	42,911	9,004
	TOTAL SEWER UTILITY PLANT IN SERVICE		$ 22,311,759	$ 17,739,721	$ 4,572,039
	Other Rate Base Items:				
	Cash Working Capital - Expenses	11	$ 43,531	$ 36,310	$ 7,221
	Cash Working Capital - Int and Div	7	(40,313)	(32,053)	(8,260)
	Materials and Supplies	7	31,673	25,183	6,490
	Acquistion Adjustment	7	637,591	506,949	130,642
	Deferred, Accrued and Prepaid Taxes	7	(930,295)	(739,678)	(190,617)
	Total Other Rate Base Elements		$ (257,813)	$ (203,289)	$ (54,524)
	Total Original Cost Measure of Value		$ 22,053,946	$ 17,536,432	$ 4,517,514

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 9A. ALLOCATION OF REVENUE FROM WATER RATES

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	$ 2,914,581	0.8042
Non-Residential	709,584	0.1958
Total	$ 3,624,165	1.000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 10. ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES

Factors are based on the allocation of all other operation and maintenance expenses excluding purchased water, power, chemicals and waste disposal.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 329,079	0.8266
Non-Residential	69,046	0.1734
Total	$ 398,125	1.0000

FACTOR 11. ALLOCATION OF CASH WORKING CAPITAL

Factors are based on the allocation of operation and maintenance expenses including purchased water, power, chemicals and waste disposal.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 683,366	0.8341
Commercial	135,901	0.1659
Total	$ 819,267	1.0000

EXHIBIT NO. 12-E -

BUTLER AREA
WASTEWATER OPERATIONS

COST OF SERVICE

AS OF JUNE 30, 2025

Exhibit 12-E
Witness: C. Heppenstall

PENNSYLVANIA AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WASTEWATER SANITARY SEWER SYSTEM
BUTLER AREA OPERATIONS

WASTEWATER COST OF SERVICE

ALLOCATION STUDY

AS OF JUNE 30, 2025

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Camp Hill, Pennsylvania

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Customer Classification	Cost of Service Amount (Schedule B)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates Amount	Revenues, Proposed Rates Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$ 13,126,573	79.6%	$ 8,694,030	73.8%	$ 12,170,706	73.8%	$ 3,476,676	40.0%
Non-Residential	3,365,035	20.4%	3,085,655	26.2%	4,320,902	26.2%	1,235,247	40.0%
Total Sales	16,491,608	100.0%	11,779,685	100.0%	16,491,608	100.0%	4,711,923	40.0%
Other Revenues	91,403		67,716		91,403		23,687	35.0%
COS Recovered from Water Rates	21,552,699		-		21,552,699		21,552,699	
Total	$ 38,135,710		$ 11,847,401		$ 38,135,710		$ 26,288,309	221.9%

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PRESENT RATES

ITEM	COST OF SERVICE	RESIDENTIAL	NON-RESIDENTIAL
(1)	(2)	(3)	(4)
1. REVENUES FROM SALES	11,779,685	8,694,030	3,085,655
2. OTHER REVENUES	67,716	53,917	13,799
3. TOTAL OPERATING REVENUES	11,847,401	8,747,947	3,099,454
4. LESS: OPERATING EXPENSES (NET OF COST OF SERVICE RECOVERED FROM WATER)	12,667,768	10,081,330	2,586,438
5. RETURN AND INCOME TAXES	(820,367)	(1,333,383)	513,016
6. LESS: TAXABLE EXCLUSIONS - ALLOCATED ON RATE BASE	4,979,926	3,948,822	1,031,104
7. TAXABLE INCOME	(5,800,293)	(5,282,205)	(518,088)
8. LESS: INCOME TAXES (TAX. INC.)	(442,348)	(402,837)	(39,511)
9. NET RETURN (Line 5 - Line 8)	(378,019)	(930,546)	552,527
10. ORIGINAL COSTS MEASURE OF VALUE	231,536,917	183,596,709	47,940,207
11. RATE OF RETURN, PERCENT	(0.16)	(0.51)	1.15
12. RELATIVE RATE OF RETURN	1.00	3.10	(7.06)

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PROPOSED RATES

ITEM	COST OF SERVICE	RESIDENTIAL	NON-RESIDENTIAL
(1)	(2)	(3)	(4)
1. REVENUES FROM SALES	16,491,608	12,170,706	4,320,902
2. OTHER REVENUES	91,403	72,763	18,640
3. TOTAL OPERATING REVENUES	16,583,011	12,243,469	4,339,542
4. LESS: OPERATING EXPENSES (NET OF COST OF SERVICE RECOVERED FROM WATER)	(8,409,122)	(6,632,579)	(1,776,544)
5. RETURN AND INCOME TAXES	24,992,133	18,876,047	6,116,086
6. LESS: TAXABLE EXCLUSIONS - ALLOCATED ON RATE BASE	4,978,043	3,950,208	1,027,835
7. TAXABLE INCOME	20,014,090	14,925,839	5,088,251
8. LESS: INCOME TAXES (TAX. INC.)	6,608,102	4,928,102	1,680,000
9. NET RETURN (Line 5 - Line 8)	18,384,031	13,947,946	4,436,085
10. ORIGINAL COSTS MEASURE OF VALUE	231,536,917	183,730,629	47,806,288
11. RATE OF RETURN, PERCENT	7.94	7.59	9.28
12. RELATIVE RATE OF RETURN	1.00	0.96	1.17

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025, ALLOCATED TO CUSTOMER CLASSES

Account	Factor Ref.	Cost of Service	Residential	Non-Residential
(1)	(2)	(3)	(4)	(5)
OPERATION AND MAINTENANCE EXPENSES				
SEWAGE TREATMENT				
601.3 Salary and Wages	1	$ 2,407,470	$ 1,874,225	$ 533,246
615.3 Purchased Power	1	368,561	286,926	81,635
618.3 Chemicals	1	221,550	172,478	49,072
636.3 Contract Services - Operation	1	106,594	82,984	23,610
675.3 Misc. Operating Expense - Waste Disposal	1	59,515	46,333	13,182
675.4 Misc. Operating Expense	1	225,485	175,541	49,944
TOTAL SEWAGE TREATMENT EXPENSE		3,389,176	2,638,486	750,690
COLLECTION				
615.5 Purchased Power	2	10,594	8,544	2,050
TOTAL T & D EXPENSE OPERATION		10,594	8,544	2,050

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025, ALLOCATED TO CUSTOMER CLASSES

Account		Factor Ref.	Cost of Service	Residential	Non-Residential
(1)		(2)	(3)	(4)	(5)
620.6	Materials and Supplies	2	194,254	156,669	37,585
675.6	Miscellaneous Maintenance Expense	2	171,872	138,618	33,255
	TOTAL T & D EXPENSE - MAINTENANCE		366,127	295,287	70,840
	TOTAL COLLECTION EXPENSE		376,721	303,831	72,890
	CUSTOMER ACCOUNTS				
670.7	Bad Debts	5	500,900	465,990	34,910
675.7	Miscellaneous Expense	5	33,099	30,793	2,307
	TOTAL CUSTOMER ACCOUNTING EXPENSE		533,999	496,783	37,217
	ADMINISTRATIVE AND GENERAL EXPENSES				
604.8	Employee Pension & Benefits	6	682,879	531,621	151,258
634.8	Contractual Services - Management				
	Customer Related	5	326,604	303,841	22,762
	Employee Related	6	213,428	166,153	47,274
	Lab Testing	1	15,204	11,837	3,368
	Other	10	757,401	608,642	148,759
650.8	Transportation	10	58,011	46,617	11,394
657.8	Insurance	10	445,104	357,683	87,421
666.8	Amortization of Rate Case	9	20,057	15,967	4,090
675.8	Miscellaneous Expense	10	90,755	72,930	17,825
	TOTAL A & G EXPENSE		2,609,443	2,115,292	494,151
	Total Operation & Maintenance Expenses		6,909,339	5,554,391	1,354,948

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025, ALLOCATED TO CUSTOMER CLASSES

Account		Factor Ref.	Cost of Service	Residential	Non-Residential
(1)		(2)	(3)	(4)	(5)
	DEPRECIATION EXPENSE				
354.20	Structures and Improvements - Collection	2	219,504	177,033	42,471
354.30	Structures and Improvements -Pumping	2	844,486	681,091	163,395
354.40	Structures and Improvements - Treatment	3	197,414	153,688	43,726
354.70	Structures and Improvements - General	10	468,983	376,872	92,111
355.00	Power Generation Equipment	2	51,060	41,181	9,879
360.10	Force Mains	3	122,746	95,558	27,188
361.10	Gravity Mains	3	1,480,629	1,152,675	327,954
361.20	Manholes	3	7,251	5,645	1,606
363.00	Service Laterals	4	293,397	272,949	20,448
364.00	Flow Measuring Devices	2	13,855	11,174	2,681
371.00	Pumping Equipment	2	403,139	325,138	78,001
380.00	Treatment Equipment	3	874,088	680,481	193,607
382.00	Outfall Sewer Lines	1	1,497	1,165	332
390.00	Office Furniture and Equipment	10	5,037	4,048	989
391.00	Transportation Equipment	10	28,999	23,303	5,696
393.00	Tools, Shop and Garage Equipment	10	7,139	5,737	1,402
395.00	Power Operated Equipment	10	26,899	21,616	5,283
396.00	Communication Equipment	10	45,629	36,667	8,962
	Total Depreciation Expense		5,091,752	4,066,020	1,025,731

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025, ALLOCATED TO CUSTOMER CLASSES

Account		Factor Ref.	Cost of Service	Residential	Non-Residential
(1)		(2)	(3)	(4)	(5)
	Amortization Expense	8	120,264	95,433	24,831
	Taxes Other Than Income				
685100	Utility Reg Assessment Fee	9	241,765	192,460	49,305
685200	Property Taxes	8	589,414	467,716	121,698
685320	Payroll Taxes	6	191,043	148,727	42,316
	Total Taxes, Other Than Income		1,022,222	808,903	213,319
	Total Operating Expense		13,143,577	10,524,747	2,618,829
4091	**Income Taxes**	8	6,608,102	5,243,703	1,364,399
	Utility Income Available for Return	8	18,384,031	14,588,212	3,795,819
	Total Cost of Service		38,135,710	30,356,662	7,779,048
	Less: Misc Revenues	9	91,403	72,763	18,640
	Less: Cost of Service Recovered from Water Rates	9A	21,552,699	17,157,326	4,395,373
	Total Cost of Service Related to Sales of Wastewater Services		16,491,608	13,126,573	3,365,035

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1. ALLOCATION OF COSTS ASSOCIATED WITH WASTEWATER TREATMENT

Factors are based on the pro forma test year average daily consumption for each customer classification with adjustments. The detail regarding calculation of adjusted flows can be found on the following page.

Classification	Total Adjusted Average Daily Customer Flow 100 gallons (a)	I&I Gallons Per Day 100 gallons (b)	Total I&I And Average Flow	Allocation Factor
(1)	(2)	(3)	(4)=(2)+(3)	(7)
Residential	14,112	34,875	48,987	0.7785
Non-Residential	7,295	6,643	13,937	0.2215
Total	21,407	41,518	62,924	1.0000

(a) Customer Flow.
(b) Allocation based on Factor 1A for Residential, Non-Residential and Large Industrial.

FACTOR 1A. ALLOCATION OF INFILTRATION AND INFLOW BY CUSTOMER CLASS.

Factors are based on a 1/3-2/3 weighting of flow and number of customers, as follows:

Customer Classification	Total Adjusted Average Daily Flow 100 gallons	Average Daily Flow		Number of Service Equivalents	Number of Customers		Allocation Factor
		Factor	Weight		Factor	Weight	
(1)	(2)	(3)	(4)=(3) x 0.3333	(5)	(6)	(7)=(6) x 0.6667	(8)=(4)+(7)
Residential	14,112	0.6592	0.2197	171,216	0.9304	0.6203	0.8400
Non-Residential	7,295	0.3408	0.1136	12,816	0.0696	0.0464	0.1600
Total	21,407	1.0000	0.3333	184,032	1.0000	0.6667	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 2. ALLOCATION OF COSTS ASSOCIATED WITH THE COLLECTION SYSTEM

Factors are based on peak daily flow for each customer classification.

Customer Classification	Ave. Flow Consumption, 100 gpd	Peak I&I Flow 100 gallons (a)	Total Peak I&I And Average	Allocation Factor
(1)	(2)	(3)	(4)=(2)+(3)	(5)
Residential	14,112	79,097	93,209	0.8065
Non-Residential	7,295	15,067	22,361	0.1935
Total	21,407	94,163	115,570	1.0000

(a) Allocation based on Factor 1A.

FACTOR 3. ALLOCATION OF CAPITAL COSTS ASSOCIATED WITH PROJECTED AVERAGE DAILY FLOW INCLUDING INFILTRATION AND INFLOW

Factors are based on the projected average daily consumption for each customer classification.

Classification	Total Average Daily Flow 100 gallons	I&I Gallons Per Day 100 gallons (a)	Total Direct I&I And Average	Allocation Factor
(1)	(2)	(3)	(4)=(2)+(3)	(7)
Residential	14,112	34,875	48,987	0.7785
Non-Residential	7,295	6,643	13,937	0.2215
Total	21,407	41,518	62,924	1.0000

(a) Allocation based on Factor 1A.

FACTOR 3A. NOT USED IN THIS ALLOCATION

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH CUSTOMER FACILITIES.

Factors are based on the estimated relative cost of customer facilities, as follows:

Customer Classification	Number of Customers	Service Equiv. Ratio (a)	Service Equivalents	Allocation Factor
(1)	(2)	(3)	(2)X(3)=(4)	(5)
Residential	171,072	1.0	171,072	0.9303
Non-Residential	12,816	1.0	12,816	0.0697
Total	183,888		183,888	1.0000

(a) Based on ratio by class for Coatesville service area.

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH BILLING AND COLLECTING.

Factors are based on the number of customers.

Customer Classification	Number of Customers	Allocation Factor
(1)	(2)	(3)
Residential	171,072	0.9303
Non-Residential	12,816	0.0697
Total	183,888	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 6. ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of direct labor expense.

Customer Classification	Direct Labor Expense	Allocation Factor
(1)	(2)	(3)
Residential	$ 1,874,225	0.7785
Non-Residential	533,246	0.2215
Total	$ 2,407,470	1.0000

FACTOR 7. ALLOCATION OF ORGANIZATION, FRANCHISES AND CONSENTS, MISCELLANEOUS INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.

Factors are based on the allocation of the original cost less depreciation other than those items being allocated, as follows:

Customer Classification	Original Cost Less Depreciation	Allocation Factor
(1)	(2)	(3)
Residential	$ 185,670,939	0.7935
Non-Residential	48,323,487	0.2065
Total	$ 233,994,426	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 8. ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

Factors are based on the allocation of the original cost measure of value rate base as shown on the following pages and summarized below.

Customer Classification	Original Cost Measure of Value	Allocation Factor
(1)	(2)	(3)
Residential	$ 183,730,629	0.7935
Non-Residential	47,806,288	0.2065
Total	$ 231,536,917	1.0000

FACTOR 9. ALLOCATION OF REGULATORY COMMISSION EXPENSES, ASSESSMENTS AND OTHER WATER REVENUES.

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	$ 29,585,086	0.7961
Non-Residential	7,579,123	0.2039
Total	$ 37,164,209	1.0000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025, ALLOCATED TO CUSTOMER CLASSES

Account (1)		Factor Ref. (2)	Cost of Service (3)	Residential (4)	Non-Residential (5)
RATE BASE					
353.40	Land and Land Rights - Treatment	3	$ 13,335,927	$ 10,382,069	$ 2,953,858
354.20	Structures and Improvements - Collection	2	8,105,225	6,536,990	1,568,236
354.30	Structures and Improvements - Pumping	2	36,944,919	29,796,649	7,148,270
354.40	Structures and Improvements - Treatment	3	14,064,894	10,949,572	3,115,321
354.70	Structures and Improvements - General	10	9,429,707	7,577,649	1,852,058
355.00	Power Generation Equipment	2	1,502,908	1,212,119	290,789
360.10	Force Mains	3	7,987,183	6,218,052	1,769,131
361.10	Gravity Mains	3	98,503,648	76,685,458	21,818,189
361.20	Manholes	3	322,613	251,155	71,458
363.00	Service Laterals	4	11,155,171	10,377,716	777,455
364.00	Flow Measuring Devices	2	190,433	153,587	36,846
371.00	Pumping Equipment	2	8,345,933	6,731,124	1,614,809
380.00	Treatment Equipment	3	22,748,079	17,709,465	5,038,614
382.00	Outfall Sewer Lines	1	70,691	55,033	15,658
390.00	Office Furniture and Equipment	10	75,534	60,699	14,835
390.20	Computer and Peripheral Equipment	10	18,896	15,185	3,711
391.00	Transportation Equipment	10	412,344	331,357	80,987
393.00	Tools, Shop and Garage Equipment	10	141,852	113,991	27,861
395.00	Power Operated Equipment	10	638,467	513,068	125,399
396.00	Communication Equipment	10	576,938	463,623	113,314
397.00	Miscellaneous Equipment	10	730	587	143
	TOTAL SEWER UTILITY PLANT IN SERVICE		$ 234,572,094	$ 186,135,149	$ 48,436,944
	Other Rate Base Items:				
	Cash Working Capital - Expenses	11	373,592	300,338	73,254
	Cash Working Capital - Int and Div	7	(422,915)	(335,583)	(87,332)
	Materials and Supplies	7	117,597	93,313	24,284
	Acquistion Adjustment	7	1,092,393	866,814	225,579
	Deferred, Accrued and Prepaid Taxes	7	(4,195,844)	(3,329,402)	(866,442)
	Total Other Rate Base Elements		(3,035,177)	(2,404,520)	(630,657)
	Total Original Cost Measure of Value		231,536,917	183,730,629	47,806,288

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 9A. ALLOCATION OF REVENUE FROM WATER RATES

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	$ 29,585,086	0.7961
Non-Residential	7,579,123	0.2039
Total	$ 37,164,209	1.000

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 10. ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES

Factors are based on the allocation of all other operation and maintenance expenses excluding purchased water, power, chemicals and waste disposal.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 2,924,819	0.8036
Non-Residential	714,857	0.1964
Total	$ 3,639,676	1.0000

FACTOR 11. ALLOCATION OF CASH WORKING CAPITAL

Factors are based on the allocation of operation and maintenance expenses including purchased water, power, chemicals and waste disposal.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 5,538,425	0.8039
Commercial	1,350,857	0.1961
Total	$ 6,889,282	1.0000

PAWC STATEMENT NO. 12-R

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

REBUTTAL TESTIMONY OF CONSTANCE E. HEPPENSTALL

ON BEHALF OF PENNSYLVANIA-AMERICAN WATER COMPANY

CONCERNING

COST OF SERVICE ALLOCATION

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DATE: February 21, 2024

REBUTTAL TESTIMONY OF
CONSTANCE E. HEPPENSTALL

Q. Please state your name and address.

A. My name is Constance E. Heppenstall. My business address is 1010 Adams Avenue, Audubon, PA 19403.

Q. By whom are you employed?

A. I am employed by Gannett Fleming Valuation and Rate Consultants, LLC.

Q. Have you previously submitted testimony on behalf of Pennsylvania-American Water Company ("PAWC" or the "Company") in this proceeding before the Pennsylvania Public Utility Commission ("Commission")?

A. Yes. My direct testimony is set forth in PAWC Statement No. 12. I sponsored Exhibits Nos. 12-A through 12-F.

Q. What is the purpose of your rebuttal testimony in this proceeding?

A. I will address the direct testimonies and exhibits of the Pennsylvania Public Utility Commission ("Commission") Bureau of Investigation and Enforcement ("I&E") witnesses Ethan H. Cline and Joseph Kubas, Office of Consumer Advocate ("OCA") witness Jerome D. Mierzwa, Office of Small Business Advocate ("OSBA") witness Kevin C. Higgins, Commission on Economic Opportunity ("CEO") witness Jennifer Warabak, Cleveland-Cliffs Steel witness Richard A. Baudino, and PAWLUG witness Billie S. LaConte concerning cost of service allocation issues.

Q. Do you have any revisions to your exhibits accompanying your direct testimony?

A. Yes, I do. The Company's revised water and wastewater cost-of-service studies ("COSS") in Exhibits 12-A Revised through 12-E Revised incorporate several

revisions summarized below and the acceptance of OSBA witness Higgins' recommendation regarding the treatment of certain low-income program costs discussed later in my rebuttal testimony. The results of these changes are summarized in Exhibit CEH-1R.

Water COSS Revisions

During the discovery process, the Company determined that the calculation of maximum day and maximum hour demands for Factors 2, 3 and 4 in the Water COSS inadvertently omitted the adjustment for interruptible customer usage that was described in my direct testimony. I have corrected this error in the extra capacity factor allocations in Exhibit 12-A Revised.

In addition, the allocation factors for meters and services for the Public class used in the Water COSS were overstated due to an error in linking to PAWC Exhibit 10-A. This error was corrected in Exhibit 12-A Revised and reduces the Public class meter and services allocator from 3.7% to 2.7%. This revision addresses the concern expressed by Cleveland-Cliffs Steel witness Richard A. Baudino regarding the large increase in cost allocation to the Public class as compared to the Water COSS presented in the Company's last base rate case.

Finally, the Company corrected the amounts of wastewater revenue requirement that were re-allocated to the rate classes in the Water COSS in column 3 of Schedule A of Exhibit 12-A to tie to the data presented in PAWC Exhibit 3-A, Schedule A.

Wastewater COSS Corrections

During the discovery process, the Company determined that the values used to calculate peak infiltration and inflow (I&I) in Factor 2 for the Wastewater

Sanitary Sewer System ("SSS") Operations and Brentwood Operations presented Exhibits 12-B and 12-D, respectively, were misstated. Specifically, the value for "Total Adjusted Average Daily Flow" in Column 2 of Factor 1 used to calculate peak I&E flow in Exhibit 12-B should have excluded the average flow of bulk contract customers. In Exhibit 12-D, the calculation of Factors 1 and 2 should have excluded the average flow consumption in column 2. These amounts were corrected in Exhibit 12-B Revised and 12-D Revised, respectively.

Q. Have you prepared any exhibits to accompany your rebuttal testimony?

A. Yes. PAWC Exhibits 12-A Revised, 12-B Revised, 12-C Revised, 12-D Revised and 12-E Revised are described in my rebuttal testimony. I have also prepared Exhibits CEH-R1, CEH-R2 and CEH-R3.

Cost of Service Study for Water Operations

Q. Ms. Heppenstall, do any parties propose revisions to PAWC's Water COSS presented in Exhibit 12-A?

A. Yes. OCA witness Mierzwa agrees with PAWC's use of the base-extra capacity method for allocating costs to customer classifications. However, Mr. Mierzwa contends that the system-wide demand factors used in the Company's Water COSS to functionalize costs between facilities used to meet average day demand and, respectively, maximum day and maximum hour demand, are not appropriate, purportedly because they are out of date. Mr. Mierzwa also contends that interruptible industrial usage should be included in the extra capacity allocations because those customers have not been regularly interrupted during periods of peak demand. Based on those criticisms, Mr. Mierzwa developed a revised COSS employing different extra capacity factors. The effect of using those revised extra

capacity factors is to shift costs from the class with higher maximum day and maximum hour demand (the residential class) to other classes with lower demand ratios, principally the industrial class.

PAWLUG witness LaConte expresses concern that the demand study statistics used in the Water COSS, which include the maximum day and maximum hour demand factors for each customer class, are outdated and do not account for changes in consumption patterns. She also recommends that the Company use the actual maximum hour demand ratio (6) from the results of PAWC's demand study that was conducted over the period 2013-2015 (the "Demand Study"). Ms. LaConte's alternative COSS using the revised ratio increases the costs of service allocated to the residential class by $7.6 million and decreases the increase to other classes by between 0.7% and 6%.

OSBA witness Higgins disagrees with the way I allocated Arrearage Management Plan ("AMP") credit costs and administrative costs associated with PAWC's customer assistance programs. Mr. Higgins proposes to directly assign those costs to the residential class because PAWC's AMP and other customer assistance programs are designed to benefit residential customers.

Q. Please respond to Mr. Mierzwa's criticisms of the extra capacity demand ratios used in the Company's Water COSS.

A. The ratios of average demand to extra capacity (maximum day and maximum hour) demands for classes of general service (i.e., other than fire protection) are weighted by ratios derived from system wide maximum day and maximum hour demand factors.

The use of the system wide maximum day factor of 1.4 to derive the weighting factors for average demand and maximum day extra demand is shown on Exhibit No. 12-A, Schedule E, page 5. The use of the average day to maximum day extra capacity demand ratio to weight the individual class demand ratios is shown on page 4 of the same schedule.

As I explained in my direct testimony, the system wide maximum day demand factor reflects the maximum daily send-out of the Company since 1987. (PAWC was established in its current form in 1987 by the merger of American Water Works Company Inc.'s three Pennsylvania water utility subsidiaries.) Specifically, the Company's actual maximum day send out was 1.4 times average day send out in each of the years 1988, 1995, 1996, 1999 and 2003. Mr. Mierzwa rejects the use of these experienced system wide maximum day factors and, instead, recommends truncating the data set to include data for only the last twelve years. On that basis he proposes using a maximum day factor of 1.2, which was experienced in 2012 and is the highest maximum day factor within that limited twelve-year window.

Q. What is the error in Mr. Mierzwa's approach to developing a system wide maximum day factor?

A. Mr. Mierzwa ignores the fact that a water system must be designed to meet the highest peak demand that potentially could be experienced – not just the highest peak demand that was experienced within a recent historical period. As described in my direct testimony, peak demands can vary based on contingencies that do not recur on a regular or predictable basis. The facilities needed to produce and distribute water have a long lead-time to design and construct and have a

correspondingly long service life. Given those inherent characteristics of water utility facilities, responsible waterworks practice necessitates building a system that can meet peak demands whenever they may occur because the system cannot be expanded (or contracted) to meet only those demands that appear within a limited historical study period, such as the twelve year look-back that Mr. Mierzwa has arbitrarily selected. Since its formation, PAWC has actually experienced a system wide maximum day factor of 1.4 several times.

Additionally, as PAWC Exhibit CEH-R2 shows, the water usage on the maximum day of 2022 in several areas within the Company's overall water operations was more than 1.4 times the average usage for that year. Given PAWC's obligation to furnish safe and reliable service, the Company must be prepared to meet customers' peak demands whenever they occur and, therefore, it is not reasonable to ignore the maximum day ratios that the Company has actually experienced by imposing an arbitrary limit on the data set that is examined to determine the system wide maximum day ratio.

Q. Does the American Water Works Association ("AWWA") M1 Manual, Seventh Edition, address system wide maximum day demand factors for use in the base extra capacity method?

A. As stated in my direct testimony, the AWWA M1 Manual does not directly prescribe a specific system wide maximum day factor. However, in my direct testimony I describe the concept of a diversity ratio. Specifically, the diversity ratio is the non-coincident peaking factor divided by the system peaking factor. In Appendix A, the Manual recommends that a reasonable diversity ratio should be between 1.1 and 1.4. This is significant because if the system wide maximum day demand factor of 1.2

proposed by Mr. Mierzwa were used to calculate the diversity factor for PAWC, it would yield a diversity factor well outside the range of reasonableness identified by the AWWA Manual. In contrast, the 1.4 system wide maximum day demand factor I employed in the Water COSS produces a diversity factor that is reasonable based on the range recommended in the AWWA manual.

Q. Please explain the calculation of a diversity ratio using the Company's system wide maximum day factor and the factor proposed by Mr. Mierzwa.

A. As described in my direct testimony, the Company's non-coincident peaking factor (the dividend, which is divided by the system wide maximum day factor to derive the diversity factor) is calculated based on the non-coincident maximum day volumes found on Schedule E in Exhibit 12-A. The total average daily consumption (in 100 gallons) shown in this schedule totals 1,169,719. The maximum day extra capacity (in 100 gallons) totals 1,126,999. The factors (column 3) that produce this amount were obtained from a demand study completed by the Company from January 2013 through October 2015. If these volumes of average day and maximum day extra capacity are added together, the sum equals the non-coincident maximum day volume (in 100 gallons) of 2,296,718. The ratio of the non-coincident peak volume (in 100 gallons) of 2,296,718 to average day volume (in 100 gallons) of 1,169.719 equals 1.96. This non-coincident ratio is then divided by the system wide peaking factor (coincident peaking factor) to develop the diversity ratio. The Company's system wide peaking factor of 1.4 produces a diversity factor of 1.41 (1.96/1.40), which is reasonable based on the recommended range of diversity ratios set forth in the AWWA Manual. In contrast, Mr. Mierzwa's peaking factor of 1.20 produces a diversity factor of 1.64 (1.97/1.20), which is outside the bounds set for

reasonable diversity ratios in the AWWA M1 Manual. In short, calculating the diversity ratios using the system wide maximum day factors of PAWC and Mr. Mierzwa, respectively, fully supports the reasonableness of the system wide maximum day factor I used in the COSS and, conversely, underscores the unreasonableness of the system wide maximum day factor that Mr. Mierzwa proposes.

Q. Please address Mr. Mierzwa's proposal to use a maximum hour demand factor of 1.5 in lieu of the 2.1 factor you employed in the Water COSS.

A. Mr. Mierzwa recommends rejecting the system wide maximum hour factor of 2.1 that I used in the COSS. That factor was calculated by PAWC based on a detailed analysis of its actual maximum hour send out. Mr. Mierzwa has not identified any errors or inaccuracies in the PAWC-specific analysis. And rather than addressing the merits of that analysis, which has been accepted in a number of prior cases, Mr. Mierzwa rejects its results simply because, in his estimation, the analysis was conducted too long ago. However, Mr. Mierzwa did not conduct his own analysis of maximum hour send out. Instead, he proposes a maximum hour ratio derived from demand data for The York Water Company, which was an estimate for that system and not based on a demand study. Mr. Mierzwa's proposal should be rejected.

Q. Please respond to PAWLUG witness LaConte's criticism of the maximum hour demand ratio for the Residential class used in the Water COSS.

A. Ms. LaConte points to the fact that the Company used a maximum hour demand ratio of 5 when the Demand Study shows a ratio of 6. In reviewing the results of the Demand Study, the demand ratio of 6 occurred in 2015 when the hourly data for North Strabane, a larger monitoring area, was not available. In addition, the peak

usage for Shire Oaks was on February 22, 2015, rather than a summer day. It is an anomaly to have a residential peak on a winter day. *See* Exhibit CEH-R3 for the relevant pages of the Demand Study. As a result, the Company chose to use a max hour demand ratio of 5 rather than 6.

Q. Ms. LaConte recommends that a customer class demand study be conducted prior to the Company's next base rate case. Do you agree?

A. No. If the residential class is using a greater share of the overall sale of water, this will be reflected in the cost of service study as usage factors are based on annual pro forma billed usage. In addition, a demand study is a substantial undertaking and would require significant Company and outside consultant resources. As none of the other intervenors in the case are recommending this course of action, Ms. LaConte's proposal would require the Company to incur unnecessary expense. However, if the Commission directs PAWC to pursue a demand study, the first step would be to do a study of the feasibility of conducting such a demand study. The feasibility study would determine the overall scope of the demand study, the methods for selecting the customers to be monitored, the location of the selected areas, the equipment to be used, and the overall cost of the study. The feasibility study would take approximately 90-120 days to complete. At that time, the feasibility study could be presented to the parties for their input and approval of the overall scope and cost before any full-scale demand study would be undertaken.

Q. Should the Commission require PAWC perform analysis of its system wide maximum hour extra capacity demands prior to the Company's next rate case as Mr. Mierzwa contends?

A. No. As I explained previously**,** Mr. Mierzwa has not even alleged, let alone provided any basis to contend, that the results of the Company's 1988 study of actual maximum hour send-outs from water storage tanks are inaccurate. Moreover, the detailed study proposed by Mr. Mierzwa is a large, multi-year undertaking. In performing such analysis, the Company faces challenges in accurately measuring maximum hour demand in districts with multiple groundwater sources due to a number of factors, such as missing SCADA connections, tank filling, and metering issues.

Q. Mr. Mierzwa rejects the Company's long standing procedure of excluding Industrial curtailment usage from the extra capacity factor allocations. Please respond.

A. Mr. Mierzwa cites the fact that the curtailment customers have not had their service regularly interrupted in the past three years and therefore their usage should not be excluded from the extra capacity factor allocation. I disagree. These customers need to be prepared for a curtailment in water service even if their usage is not curtailed in a three-year period. In addition, the water system was built so that in the event of a water shortage, these customers could be curtailed, regardless of whether they have been curtailed over the past three years. Finally, this adjustment to the cost of service for Industrial curtailment customers has been reflected in the Company's cost of service studies since at least the Company's 2007 rate case at Docket No. R-00072229 and has long been accepted by the Commission and other parties.

Q. Mr. Higgins' recommends direct assignment of $2.8 million of AMP costs and customer assistance-related administrative costs to the residential class in the Company's Water COSS. Have you accepted this proposal?

A. Yes. This adjustment is reflected in the revised Water COSS results that are summarized in Exhibit CEH-R1.

Q. Do you agree with OCA witness Mierzwa's recommendation that the Company include Rider Demand Industrial Sales ("DIS") and Rider Demand Resale Sales ("DRS") customers as separate customer classes in the Water COSS presented in PAWC's next base rate proceeding?

A. No. Riders DIS and DRS authorize the Company to negotiate contracts at rates, with specified minimum and maximum levels, designed to retain or attract industrial and resale load for which the customer or applicant for service has a viable competitive alternative to service from the Company which the customer intends to select to the detriment of the Company and its other customers. In approving Riders DIS and DRS, the Commission found that those riders create benefits for all of the Company's water customers by preserving or attracting incremental sales that, because of competitive forces, could not otherwise be made. Accordingly, the revenues derived from Rider DIS and DRS customers are appropriately reflected as a deduction to all classes' cost of service.

Cost of Service Studies for Wastewater Operations

Q. Did you make any changes to the Company's wastewater cost of service studies to reflect acceptance of OSBA witness Higgins recommendation regarding allocation of AMP costs and customer assistance program administrative costs?

A. Yes, Exhibits 12-B Revised, 12-C Revised, 12-D Revised and 12-E were revised to reflect the changes in the allocation of AMP costs and customer assistance program administrative costs in the Company's four wastewater COSSs as recommended by OSBA witness Higgins.

Q. I&E witness Kubas recommends that the Company continue to provide separate COSSs for the Company's Water Operations, the Wastewater SSS Operations, and Waster CSS Operations. Do you agree?

A. Yes. The Company's Water Operations, Wastewater SSS Operations and Wastewater CSS Operations each have unique cost of service elements that require the operations to remain separate.

Q. Mr. Kubas and Mr. Mierzwa also recommend that the Company provide separate COSSs for the BASA and Brentwood systems again in the next rate case. How do you respond.

A. I disagree for the reasons discussed in the rebuttal testimony of Company witness Ashley E. Everette (PAWC Statement No. 1-R).

Q. Mr. Kubas also recommends that the Company continue to separate the Bulk User/VA class and the Bulk Contract classes from the other classes in the SSS Operations Cost of Service Study. Do you agree?

A. Yes, as these classes of customers are unique, I agree that the Company should continue to separate these classes in the next base rate case.

Q. On page 23 of his direct testimony, Mr. Mierzwa infers that $41 million for stormwater costs are being assigned to water customers. Is this correct?

A. No. Exhibit 12-E shows the allocation of costs to customer classes for the CSS Operations. He is correct that $41 million of these costs are related to stormwater. However, these costs are reallocated to the CSS customer classes as shown on page 7 of Exhibit 12-E. No stormwater costs are reallocated to water customers in this case.

Water Customer Charges

Q. Do any parties take issue with the Company's proposed customer charges?

A. Yes. I&E witness Cline recommends a 5/8-inch residential customer charge of $19.50 rather than the Company's proposed customer charge of $20.00. Mr. Cline's proposed customer charges are based solely on the Company's direct cost analysis presented in Appendix A to Exhibit 12-A. As a result of recommending a lower customer charge, Mr. Cline recommends raising the volumetric rates to make up for the reduced revenue.

OCA witness Mierzwa recommends keeping existing customer charges at the current rate level ($17.50) for residential customer with a 5/8-inch, 3/4-inch, 1-inch or 1 ½-inch meter, based on his analysis of direct customer costs.

Q. Do you agree with Mr. Cline's recommendation?

A. No, for two reasons. First, the corrected cost of service study shows customer costs for a 5/8-inch meter to be $20.26, which is higher than the Company's request. In addition, the direct cost analysis only applies to 5/8-inch meter customers. The Company is proposing a $20.00 residential customer charge for 5/8-inch, 3/4-inch, and 1-inch meters. As shown in Table 1 below, the weighted average residential customer charge for those meter sizes supported by my direct cost analysis is $21.61, assuming the 3/4-inch and 1-inch customers were charged a meter charge commensurate with the 5/8-inch dollar equivalent and based on a $20.26 customer charge for a 5/8-inch and higher charges for the 3/4-inch and 1-inch.

Meter Size	5/8" Dollar Equivalent	Customer Charge	Number of Residential Meters	Hypothetical Revenue By Meter Size
(1)	(2)	(3)	(4)	(5)=(3)X(4)
5/8	1.0	20.26	675,824	$ 13,692,203
3/4	1.5	30.82	1,036	$ 31,927
1	2.0	60.19	23,467	$ 1,412,459
Total			700,328	$ 15,136,589
Weighted Average Customer Charge (Total of Column 5 divided by Total of Column 4)				$ 21.61

Q. Do you agree with Mr. Mierzwa's direct cost analysis?

A. No. Mr. Mierzwa improperly omits office building and furniture expenses that I included in my direct cost analysis in Exhibit 12-A. These facilities are essential for billing and collections personnel to perform their jobs. Consequently, these categories of costs are directly related to customer cost functions. In addition, Mr. Mierzwa's direct cost analysis reflects the OCA's recommended pre-tax return of 8.71%, which is unreasonable for the reasons explained by Company witness Ann E. Bulkley in PAWC Statement 13-R. Accordingly, the OCA's direct cost analysis should not be used to determine the proposed level of customer charges in this case.

Q. Is the Company's proposed residential 5/8-inch meter customer charge of $20.00 supported by the Company's fully allocated customer cost analysis?

A. Yes, even though Mr. Mierzwa and CEO witness Warabak both recommend no increase to the customer charge. Not only is the Company's proposed customer charge supported by Exhibit 12-A Revised, but the Company also considered the fully allocated customer cost analysis that includes an allocable share of the

administrative and general costs in the customer cost components. Under the fully allocated analysis described in the AWWA M1 Manual, the administrative and general costs are allocated to both customer charges and consumption charges in proportion to the other directly assigned costs, excluding variable costs such as power, chemical, and waste disposal costs.

Q. What do you recommend regarding customer charges?

A. I continue to support the Company's original proposed 5/8-inch customer charge. The Company's revised direct customer cost analysis supports the $20.00 customer charge and a weighted residential customer charge of $21.60 per month for 5/8-inch, 3/4-inch, and 1-inch meters.

Conclusion

Q. Does this complete your rebuttal testimony at this time?

A. Yes, it does.

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

COMPARISON OF PRO FORMA COST OF SERVICE STUDIES AS FILED AND REBUTTAL
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

	Pro Forma Cost of Service, As Filed as of June 30, 2025				Revised Rebuttal Cost of Service, as of June 30, 2025					
Customer Classification	Cost of Service	Allocation of Other COS*	Total Amount	Percent of Total	Cost of Service	Allocation of Other COS*	Total Amount	Percent of Total	Dollar Change	Percentage Change
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Residential	$ 603,126,055	$ 46,505,573	$ 649,631,628	64.7%	$ 612,997,598	$ 45,864,399	$ 658,861,997	65.6%	$ 9,230,369	0.9%
Commercial	232,115,036	18,320,153	250,435,189	24.9%	233,858,828	17,571,738	251,430,566	25.0%	$ 995,377	0.1%
Industrial	45,115,631	3,939,176	49,054,807	4.9%	44,198,427	4,547,070	48,745,497	4.9%	$ (309,310)	0.0%
Public (Municipal)	35,175,459	1,635,240	36,810,699	3.7%	24,425,618	2,664,710	27,090,328	2.7%	$ (9,720,371)	-1.0%
Other Water Utilities - Group A	11,335	-	11,335	0.0%	11,845		11,845	0.0%	$ 510	0.0%
Other Water Utilities - Group B	624,708	-	624,708	0.1%	628,455		628,455	0.1%	$ 3,746	0.0%
Private Fire Protection	5,777,625	341,990	6,119,615	0.6%	5,808,618	439,468	6,248,085	0.6%	$ 128,470	0.0%
Public Fire Protection	11,847,471	-	11,847,471	1.2%	11,863,933	-	11,863,933	1.2%	$ 16,462	0.0%
Total Sales of Water	$ 933,793,321	$ 71,087,384	$ 1,004,535,453	100.0%	$ 933,793,321	$ 71,087,384	$ 1,004,880,705	100.0%	$ 345,252	0.0%
Other Water Revenues	$ 10,675,369	345,262	11,020,631		$ 10,675,369		10,675,369		$ (345,262)	
Contract Sales - Industrial	4,482,099	-	4,482,099		4,482,099		4,482,099		-	
Contract Sales - Resale	3,316,086	-	3,316,086		3,316,086		3,316,086		-	
Total	$ 952,266,876	$ 71,432,646	$ 1,023,354,270		$ 952,266,876	$ 71,087,384	$ 1,023,354,260		$ (10)	

* Includes unrecovered Wastewater Cost of Service.

Exhibit CEH-1R
Page 1 of 1

Sum of Value	Column Labels					
Row Labels	PA11 - Pittsburgh	PA14 - Steelton	PA22 - Mon-Valley	PA23 - Uniontown	PA25 - Brownsville	PA31 - New Castle
1/1/2022	58211	1015	7	4013	724	7077
1/2/2022	59241	997	7	3899	689	7089
1/3/2022	59838	1010	7	3379	1023	7103
1/4/2022	60618	992	7	3538	809	7483
1/5/2022	53667	848	7	4026	697	8109
1/6/2022	58931	1134	7	4074	840	6912
1/7/2022	60644	1163	7	4149	790	6884
1/8/2022	58464	878	7	4430	759	7342
1/9/2022	58190	881	7	4222	774	7246
1/10/2022	61164	1033	7	3914	796	7784
1/11/2022	60743	1061	7	4079	825	7739
1/12/2022	61795	1340	7	4145	782	7894
1/13/2022	62834	1036	7	4351	844	7479
1/14/2022	57162	1004	7	4030	957	7668
1/15/2022	60603	1214	7	4019	901	7321
1/16/2022	62252	1124	7	3946	748	7718
1/17/2022	62854	1081	7	3950	860	7457
1/18/2022	61600	1275	7	4275	890	7431
1/19/2022	62465	1260	7	4514	871	7919
1/20/2022	61988	1117	7	4369	867	7679
1/21/2022	63158	1395	7	4225	901	7685
1/22/2022	64145	1127	7	4182	1017	7494
1/23/2022	64089	1135	7	4221	863	7811
1/24/2022	67695	1212	7	4045	968	7469
1/25/2022	66707	1045	7	4103	937	7775
1/26/2022	65871	1344	7	4116	985	8091
1/27/2022	66668	1023	7	4001	1024	7873
1/28/2022	66329	1080	7	4147	981	8717
1/29/2022	66288	1035	7	4113	1015	7829
1/30/2022	68137	1090	7	4024	936	8120
1/31/2022	68611	1024	7	4150	995	9089
2/1/2022	67094	1159	7	4513	908	9318
2/2/2022	67221	1056	7	4492	1014	8617

Sum of Value	Column Labels					
Row Labels	PA11 - Pittsburgh	PA14 - Steelton	PA22 - Mon-Valley	PA23 - Uniontown	PA25 - Brownsville	PA31 - New Castle
2/3/2022	68294	1032	7	3881	849	8479
2/4/2022	67416	1087	7	3903	930	8453
2/5/2022	65783	1028	7	4291	1066	7583
2/6/2022	68604	968	7	3883	1032	8231
2/7/2022	67630	934	7	3524	951	8255
2/8/2022	65704	1118	7	3895	994	7967
2/9/2022	66909	1273	7	4105	860	8230
2/10/2022	64913	1046	7	4118	1071	8084
2/11/2022	62495	1054	7	4112	918	8063
2/12/2022	66558	901	7	4113	966	8409
2/13/2022	65065	880	7	4088	1004	7459
2/14/2022	64647	908	7	3948	898	8389
2/15/2022	66026	1246	7	3921	1078	7943
2/16/2022	65754	983	7	3837	878	7976
2/17/2022	62349	889	7	3579	1074	8375
2/18/2022	64242	1107	7	3007	911	7918
2/19/2022	63021	981	7	4118	998	8044
2/20/2022	64128	1007	7	4043	912	8249
2/21/2022	64851	970	7	4035	1068	8817
2/22/2022	63133	948	7	4010	865	8766
2/23/2022	62950	1018	7	4003	1025	9223
2/24/2022	64378	1000	7	4074	864	8237
2/25/2022	61768	1211	7	4079	1019	8520
2/26/2022	61981	1115	7	4084	868	8644
2/27/2022	63389	841	7	4110	1089	8893
2/28/2022	65965	919	7	4067	852	8549
3/1/2022	60982	1241	7	3981	1011	8187
3/2/2022	59996	1075	7	3060	852	7645
3/3/2022	61223	991	7	4005	1034	8187
3/4/2022	60382	1334	7	4129	825	8038
3/5/2022	61136	1020	7	4166	875	7617
3/6/2022	62142	931	7	4177	869	8230
3/7/2022	62548	968	7	4033	822	7670

Sum of Value	Column Labels					
Row Labels	PA11 - Pittsburgh	PA14 - Steelton	PA22 - Mon-Valley	PA23 - Uniontown	PA25 - Brownsville	PA31 - New Castle
3/8/2022	56516	1081	7	3727	938	8002
3/9/2022	60182	1229	7	3834	762	8709
3/10/2022	58789	1114	7	3532	950	7694
3/11/2022	59735	1125	7	3544	724	7638
3/12/2022	59090	814	7	3566	780	7600
3/13/2022	57035	991	7	3645	842	7447
3/14/2022	55984	966	7	3307	1091	7958
3/15/2022	68588	1137	7	3297	968	8400
3/16/2022	63579	1125	7	3328	788	8179
3/17/2022	58883	1053	7	3770	957	8147
3/18/2022	63985	1143	7	3611	919	7759
3/19/2022	57773	1036	7	3688	828	8051
3/20/2022	61875	977	7	3420	869	7567
3/21/2022	55736	1013	7	3351	1039	7832
3/22/2022	64418	974	7	3491	1014	7759
3/23/2022	58574	1122	7	3404	732	8304
3/24/2022	60900	1105	7	3442	835	7663
3/25/2022	62262	1119	7	3313	897	7570
3/26/2022	60427	1029	7	3349	969	7626
3/27/2022	61005	1006	7	3399	884	7437
3/28/2022	62352	976	7	3763	765	8028
3/29/2022	60942	1059	7	3738	912	8038
3/30/2022	63263	979	7	3724	1028	7444
3/31/2022	60208	1006	7	3463	1127	7883
4/1/2022	64452	934	7	2978	638	7725
4/2/2022	60551	914	7	3211	789	7946
4/3/2022	59468	1026	7	3421	847	7892
4/4/2022	63000	948	7	3409	983	7913
4/5/2022	61253	985	7	3443	975	7284
4/6/2022	59623	1082	7	3415	703	8021
4/7/2022	64821	1008	7	4176	808	6937
4/8/2022	58288	1083	7	3674	994	7714
4/9/2022	59164	1156	7	3655	992	7412

Sum of Value	Column Labels					
Row Labels	PA11 - Pittsburgh	PA14 - Steelton	PA22 - Mon-Valley	PA23 - Uniontown	PA25 - Brownsville	PA31 - New Castle
4/10/2022	61347	948	7	3719	715	7365
4/11/2022	60090	969	7	3266	785	7906
4/12/2022	61630	1051	7	3417	950	7628
4/13/2022	60931	1064	7	3846	957	7886
4/14/2022	62194	844	7	3839	935	7399
4/15/2022	58516	937	7	3892	666	7242
4/16/2022	61665	888	7	3854	851	7516
4/17/2022	63517	925	7	3867	932	7311
4/18/2022	60455	980	7	4252	864	7482
4/19/2022	61076	1001	7	3742	731	7587
4/20/2022	62533	1127	7	3792	878	7873
4/21/2022	59909	1150	7	3843	916	7541
4/22/2022	62164	1096	7	3919	1071	7376
4/23/2022	61028	951	7	3813	716	7585
4/24/2022	64585	901	7	4001	914	7518
4/25/2022	64064	962	7	3772	962	8476
4/26/2022	60062	1103	7	3600	1070	7863
4/27/2022	58330	1132	7	3790	883	7426
4/28/2022	64246	920	7	3737	924	7137
4/29/2022	58750	945	7	3721	842	7230
4/30/2022	61461	830	7	3738	1092	7538
5/1/2022	59844	786	7	3746	799	6891
5/2/2022	61837	774	7	3976	740	7784
5/3/2022	64122	1000	7	3729	804	7556
5/4/2022	60573	1088	7	3726	885	7496
5/5/2022	58886	876	7	3472	860	7143
5/6/2022	62141	937	7	3444	854	6743
5/7/2022	58827	654	7	3263	849	6554
5/8/2022	61448	814	7	3414	853	7110
5/9/2022	61661	914	7	3374	897	7142
5/10/2022	61211	926	7	3623	846	7415
5/11/2022	63561	828	7	3600	944	7726
5/12/2022	64491	824	7	3534	881	7365

Sum of Value	Column Labels					
Row Labels	PA11 - Pittsburgh	PA14 - Steelton	PA22 - Mon-Valley	PA23 - Uniontown	PA25 - Brownsville	PA31 - New Castle
5/13/2022	63727	812	7	3506	929	8290
5/14/2022	64506	880	7	3546	771	7347
5/15/2022	66125	802	7	3605	940	7480
5/16/2022	63871	800	7	3558	817	7898
5/17/2022	59924	971	7	3467	902	8141
5/18/2022	63619	1110	7	3486	881	7274
5/19/2022	62300	995	7	3368	873	6910
5/20/2022	65858	834	7	3420	790	8120
5/21/2022	65182	936	7	3867	850	7886
5/22/2022	64515	816	7	3882	848	7033
5/23/2022	62049	939	7	4086	843	8268
5/24/2022	61077	905	7	3667	855	7482
5/25/2022	63701	900	7	3559	793	7888
5/26/2022	63811	851	7	3259	868	7769
5/27/2022	62078	791	7	3340	770	6881
5/28/2022	58893	743	7	3665	835	7171
5/29/2022	61297	742	7	3710	915	7150
5/30/2022	65231	752	7	3653	952	7538
5/31/2022	68617	743	7	4351	931	8127
6/1/2022	67696	892	7	3884	908	8069
6/2/2022	58544	1003	7	3927	790	7193
6/3/2022	62037	944	7	3787	890	7629
6/4/2022	61120	669	7	3778	864	7196
6/5/2022	63479	742	7	3666	936	7215
6/6/2022	65572	736	7	3515	774	7614
6/7/2022	63314	634	7	3338	855	7398
6/8/2022	60284	696	7	3436	827	7204
6/9/2022	59199	781	7	3550	827	7477
6/10/2022	62259	766	7	3582	817	7306
6/11/2022	62296	853	7	3566	791	7175
6/12/2022	62385	756	7	3555	821	7286
6/13/2022	65485	635	13	3810	897	7350
6/14/2022	59036	734	13	3505	876	7558

Sum of Value	Column Labels					
Row Labels	PA11 - Pittsburgh	PA14 - Steelton	PA22 - Mon-Valley	PA23 - Uniontown	PA25 - Brownsville	PA31 - New Castle
6/15/2022	64426	973	13	3612	961	8243
6/16/2022	64585	979	13	3240	746	8001
6/17/2022	64983	831	13	3687	888	7671
6/18/2022	65119	1007	13	4008	957	7347
6/19/2022	63663	529	13	3956	946	7515
6/20/2022	65688	1173	1	3810	685	7646
6/21/2022	68281	1065	1	3760	1022	8045
6/22/2022	70842	519	1	3775	920	8126
6/23/2022	63235	1665	1	3817	684	9484
6/24/2022	70052	938	1	3745	1030	9038
6/25/2022	69577	785	1	3491	908	8122
6/26/2022	66157	933	1	3511	816	7648
6/27/2022	67273	884	7	3644	910	8597
6/28/2022	66652	1201	7	3893	923	7993
6/29/2022	69174	1072	7	3759	978	7884
6/30/2022	69586	1014	7	3806	726	8130
7/1/2022	65182	826	7	3753	999	8598
7/2/2022	56527	818	7	3675	890	6859
7/3/2022	72485	990	7	3596	687	7475
7/4/2022	66389	855	7	3611	1063	7489
7/5/2022	66939	982	7	3450	977	7212
7/6/2022	63935	1056	7	3198	727	7770
7/7/2022	67696	1110	7	3737	989	7788
7/8/2022	64485	1059	7	3771	1467	7981
7/9/2022	66543	810	7	3446	950	7933
7/10/2022	68277	944	7	3729	759	6975
7/11/2022	72415	820	7	4061	1022	9271
7/12/2022	71219	1039	7	3928	1177	8127
7/13/2022	72785	1066	7	3728	1186	8340
7/14/2022	71850	1097	7	4081	677	8479
7/15/2022	68495	1125	7	3552	1541	8111
7/16/2022	66910	882	7	3712	1024	7366
7/17/2022	66768	828	7	3846	831	7011

Sum of Value	Column Labels					
Row Labels	PA11 - Pittsburgh	PA14 - Steelton	PA22 - Mon-Valley	PA23 - Uniontown	PA25 - Brownsville	PA31 - New Castle
7/18/2022	60148	1014	7	3955	837	6960
7/19/2022	65033	1187	7	3825	1079	7460
7/20/2022	64027	1137	7	3986	1065	8257
7/21/2022	67150	970	7	3908	865	7575
7/22/2022	64507	999	7	2981	764	8075
7/23/2022	67498	923	7	2999	1076	6710
7/24/2022	64515	911	7	3435	980	7062
7/25/2022	64925	1062	7	3693	838	7577
7/26/2022	64147	860	7	3294	748	7448
7/27/2022	59748	757	7	3200	1073	7686
7/28/2022	63634	1218	7	3244	1019	7060
7/29/2022	62994	1029	7	3389	732	7576
7/30/2022	60519	843	7	3481	869	7406
7/31/2022	64223	1026	7	3456	1048	7019
8/1/2022	61729	816	7	3638	922	7902
8/2/2022	62497	768	7	3745	755	7161
8/3/2022	63548	965	7	3814	974	7926
8/4/2022	64510	1087	7	3241	996	7655
8/5/2022	63108	965	7	3105	892	7114
8/6/2022	61998	1076	7	3530	895	7152
8/7/2022	63860	1134	7	3635	812	7442
8/8/2022	63651	729	7	4012	924	7730
8/9/2022	63633	857	7	3851	924	7504
8/10/2022	60664	923	7	3878	947	7376
8/11/2022	67043	890	7	3776	806	7987
8/12/2022	65912	922	7	4011	705	7315
8/13/2022	61888	839	7	3937	929	7291
8/14/2022	67276	1132	7	3839	558	7395
8/15/2022	64450	1083	7	4074	907	7604
8/16/2022	64708	727	7	4221	917	7675
8/17/2022	67004	772	7	3373	1014	7437
8/18/2022	64486	1029	7	3718	666	7692
8/19/2022	66252	1092	7	3825	765	7437

Sum of Value	Column Labels					
Row Labels	PA11 - Pittsburgh	PA14 - Steelton	PA22 - Mon-Valley	PA23 - Uniontown	PA25 - Brownsville	PA31 - New Castle
8/20/2022	66582	726	7	3710	994	7314
8/21/2022	63152	737	7	4075	925	6680
8/22/2022	61545	1020	6	4084	983	7651
8/23/2022	61353	1138	6	4033	751	7156
8/24/2022	62885	1185	6	4112	937	7798
8/25/2022	63282	932	6	4042	1171	7578
8/26/2022	64837	805	6	3775	947	7873
8/27/2022	63843	1042	6	3713	764	7126
8/28/2022	68087	871	6	3815	840	7395
8/29/2022	65194	1095	6	3658	1057	8200
8/30/2022	60933	1241	6	3762	1048	7486
8/31/2022	63650	894	6	3721	665	7198
9/1/2022	64160	906	6	3854	919	7668
9/2/2022	63116	1165	6	4024	1017	7967
9/3/2022	63892	1077	6	3894	967	7292
9/4/2022	56715	897	6	4033	675	5584
9/5/2022	60936	838	6	4088	820	7614
9/6/2022	60146	1083	6	4404	1009	7562
9/7/2022	61009	1117	6	4230	973	7048
9/8/2022	59471	1058	6	3601	868	8220
9/9/2022	62260	1020	6	4272	827	7594
9/10/2022	61673	815	6	3960	912	7047
9/11/2022	61364	786	6	3831	964	7685
9/12/2022	60349	1098	6	3957	1005	7588
9/13/2022	60178	1070	6	3916	749	7488
9/14/2022	59946	783	6	3757	1062	7506
9/15/2022	62324	813	6	4142	927	7757
9/16/2022	58993	1054	6	3822	801	7720
9/17/2022	61379	971	6	4079	903	7021
9/18/2022	62542	749	6	3912	906	7270
9/19/2022	61066	830	6	4049	848	7614
9/20/2022	59352	837	6	3654	984	7313
9/21/2022	61869	1051	6	4368	813	7474

Sum of Value	Column Labels					
Row Labels	PA11 - Pittsburgh	PA14 - Steelton	PA22 - Mon-Valley	PA23 - Uniontown	PA25 - Brownsville	PA31 - New Castle
9/22/2022	60033	955	6	3934	882	7071
9/23/2022	60286	1075	6	3752	849	7132
9/24/2022	60054	691	6	3691	886	6690
9/25/2022	60081	905	6	3883	859	6991
9/26/2022	60415	1065	6	3810	886	6881
9/27/2022	59358	1091	6	3858	901	7265
9/28/2022	58422	798	6	3915	829	6692
9/29/2022	60393	1043	6	3802	911	7194
9/30/2022	59886	852	6	3631	826	7045
10/1/2022	58875	800	6	3529	715	6974
10/2/2022	60827	1110	6	3288	1008	7091
10/3/2022	60002	1357	6	3912	769	6972
10/4/2022	61684	1215	6	3750	784	7272
10/5/2022	58388	1105	6	4164	879	7201
10/6/2022	60444	833	6	4056	849	6959
10/7/2022	59466	778	6	4080	908	7143
10/8/2022	58082	865	6	3870	773	6450
10/9/2022	58292	795	6	3821	878	6516
10/10/2022	60219	862	6	3518	824	7059
10/11/2022	60318	1010	6	4223	908	7224
10/12/2022	59784	1067	6	3740	915	6819
10/13/2022	58959	947	6	3957	937	7080
10/14/2022	58225	989	6	4027	854	6912
10/15/2022	58611	915	6	4461	763	6667
10/16/2022	61196	1041	6	4339	784	6970
10/17/2022	56985	851	6	3930	1038	7681
10/18/2022	61516	802	6	3579	659	6887
10/19/2022	56846	930	6	3415	864	6900
10/20/2022	59547	770	6	3778	835	7106
10/21/2022	56422	898	6	3988	844	6993
10/22/2022	58542	896	6	4043	847	6645
10/23/2022	60851	939	6	4002	799	7000
10/24/2022	59700	799	6	3926	926	7075

Sum of Value	Column Labels					
Row Labels	PA11 - Pittsburgh	PA14 - Steelton	PA22 - Mon-Valley	PA23 - Uniontown	PA25 - Brownsville	PA31 - New Castle
10/25/2022	60966	1036	6	3505	899	7297
10/26/2022	58536	853	6	3400	820	6858
10/27/2022	58103	871	6	3312	884	7409
10/28/2022	59817	869	6	3550	810	6774
10/29/2022	56716	901	6	3446	815	7130
10/30/2022	58800	877	6	3270	834	7027
10/31/2022	57080	863	6	3530	1045	7217
11/1/2022	59491	837	6	3538	669	6870
11/2/2022	59393	886	6	3563	1114	7425
11/3/2022	58758	861	6	4442	663	6921
11/4/2022	57066	924	6	4253	814	7197
11/5/2022	60104	947	6	4053	977	6871
11/6/2022	58992	882	6	3985	1000	7186
11/7/2022	58925	851	6	3774	838	6913
11/8/2022	58964	883	6	3908	705	7426
11/9/2022	59985	846	6	3708	944	7027
11/10/2022	56330	881	6	4234	975	6988
11/11/2022	57748	873	6	3924	955	7075
11/12/2022	59602	857	6	3882	890	6622
11/13/2022	58012	824	6	3245	970	6799
11/14/2022	58292	906	6	3949	935	7707
11/15/2022	55901	956	6	3852	855	6774
11/16/2022	58185	831	6	3730	793	7654
11/17/2022	58485	908	6	4165	879	7589
11/18/2022	58191	877	6	3654	832	7177
11/19/2022	54234	885	6	3862	962	7587
11/20/2022	62097	880	6	3999	901	6896
11/21/2022	62321	944	6	3850	908	8049
11/22/2022	63131	943	6	3370	894	8243
11/23/2022	63050	930	6	3547	780	7657
11/24/2022	62893	931	6	3961	816	7076
11/25/2022	61059	878	6	3900	761	6627
11/26/2022	58741	990	6	3900	772	6635

Sum of Value	Column Labels					
Row Labels	PA11 - Pittsburgh	PA14 - Steelton	PA22 - Mon-Valley	PA23 - Uniontown	PA25 - Brownsville	PA31 - New Castle
11/27/2022	59930	872	6	3706	752	7164
11/28/2022	61207	912	6	4464	1025	7342
11/29/2022	59415	899	6	3845	938	7152
11/30/2022	58243	920	6	3771	899	6997
12/1/2022	59506	910	6	3651	823	7410
12/2/2022	58415	936	6	3677	828	6859
12/3/2022	59687	844	6	3883	858	6863
12/4/2022	58953	942	6	3509	925	7126
12/5/2022	60728	919	6	4428	853	7127
12/6/2022	58478	1030	6	3948	898	6903
12/7/2022	60728	815	6	3942	730	7257
12/8/2022	59079	833	6	4033	818	7317
12/9/2022	58523	934	6	4048	829	7147
12/10/2022	59859	857	6	3841	801	7174
12/11/2022	58845	823	6	3685	765	7011
12/12/2022	60945	877	6	4191	771	7412
12/13/2022	60968	969	6	4032	915	7078
12/14/2022	57642	884	6	3814	644	7064
12/15/2022	58768	901	6	4144	715	6967
12/16/2022	56626	926	6	3920	932	7282
12/17/2022	58316	860	6	3981	610	7021
12/18/2022	59066	860	6	3693	765	7011
12/19/2022	59035	852	6	4609	989	7431
12/20/2022	60273	1039	6	3707	1162	7033
12/21/2022	60068	1054	6	4157	709	7009
12/22/2022	59997	893	6	6434	932	7769
12/23/2022	61920	838	6	6031	943	7259
12/24/2022	64897	988	6	5125	1039	7179
12/25/2022	68006	980	6	5072	1044	7534
12/26/2022	74496	1087	6	5080	1047	7357
12/27/2022	74887	1072	6	2869	1141	8495
12/28/2022	75570	1220	6	3820	1130	8853
12/29/2022	77625	1102	6	4706	993	9261

Sum of Value	Column Labels					
Row Labels	**PA11 - Pittsburgh**	**PA14 - Steelton**	**PA22 - Mon-Valley**	**PA23 - Uniontown**	**PA25 - Brownsville**	**PA31 - New Castle**
12/30/2022	76202	1109	6	4383	955	8562
12/31/2022	75980	949	6	4457	1025	9044
Grand Total	**22773723**	**351592**	**2423**	**1395729**	**325266**	**2759422**
Average Day	62.3938	0.9633	0.0066	3.8239	0.8911	7.5601
Maximum Day	77.6250	1.6650	0.0130	6.4340	1.5410	9.4840
Max Day/Ave Da	1.2441	1.7285	1.9583	1.6826	1.7292	1.2545

Sum of Value Row Labels	PA33 - Butler	PA41 - Indiana	PA42 - Punxsutawney	PA43 - CLARION	PA44 - Kittanning	PA45 - Warren	PA46 - Kane
1/1/2022	4184	1645	698	1471	201	1994	382
1/2/2022	4306	1770	698	1455	230	2142	404
1/3/2022	4667	1654	699	1458	227	2131	396
1/4/2022	5437	1901	697	1495	225	2087	394
1/5/2022	4299	1666	708	1452	223	1875	398
1/6/2022	4548	1686	741	1471	279	1685	397
1/7/2022	3475	1755	752	1521	230	1711	389
1/8/2022	4094	1795	756	1469	239	1713	393
1/9/2022	4771	1814	753	1493	251	1667	416
1/10/2022	3522	1834	759	1473	246	1775	405
1/11/2022	4958	1924	778	1487	292	1720	398
1/12/2022	4761	1844	822	1563	258	1868	412
1/13/2022	5211	1774	861	1556	244	1796	407
1/14/2022	5832	2165	863	1550	238	1684	405
1/15/2022	3075	1985	813	1451	619	1642	522
1/16/2022	4754	2104	721	1482	236	1648	517
1/17/2022	4530	1844	718	1537	227	1697	516
1/18/2022	5332	2035	721	1565	258	1704	395
1/19/2022	4166	2024	718	1446	298	1961	406
1/20/2022	6258	2042	720	1646	238	1990	407
1/21/2022	3941	2405	767	1504	317	1822	401
1/22/2022	4826	2350	801	1631	274	1890	398
1/23/2022	4715	2970	820	1715	305	1780	422
1/24/2022	3890	3114	827	1918	234	1839	417
1/25/2022	5861	2253	829	1932	244	1842	410
1/26/2022	3564	2063	879	1854	262	1820	417
1/27/2022	3517	1838	907	1744	309	1839	417
1/28/2022	5407	2521	908	1712	287	1855	413
1/29/2022	3352	2034	908	1609	296	1804	420
1/30/2022	5999	2278	885	1720	314	1818	429
1/31/2022	4397	1958	880	1591	364	1918	432
2/1/2022	5940	2299	879	1688	309	1939	419
2/2/2022	4042	2293	870	1941	286	2122	429

Sum of Value Row Labels	PA33 - Butler	PA41 - Indiana	PA42 - Punxsutawney	PA43 - CLARION	PA44 - Kittanning	PA45 - Warren	PA46 - Kane
2/3/2022	4812	2131	863	1589	288	2118	439
2/4/2022	4175	1881	827	1728	323	1984	434
2/5/2022	3780	1971	790	1709	284	2111	433
2/6/2022	4030	1922	797	1645	279	2028	448
2/7/2022	5784	2158	810	1662	276	2112	453
2/8/2022	4357	2291	867	1654	308	1933	450
2/9/2022	4834	2161	929	1690	261	1942	441
2/10/2022	5695	2188	895	1758	264	1920	426
2/11/2022	5692	1852	860	1730	258	1896	417
2/12/2022	4448	1960	837	1662	297	1844	418
2/13/2022	4465	1979	841	1725	271	1860	433
2/14/2022	5850	2019	816	1572	268	1910	422
2/15/2022	5140	2081	830	1773	264	1901	433
2/16/2022	4986	2209	826	1633	311	1904	427
2/17/2022	6883	2289	843	1851	261	1907	430
2/18/2022	4289	1793	840	1710	241	1868	433
2/19/2022	5142	1909	828	1741	295	1835	423
2/20/2022	5435	1709	790	1857	265	1852	430
2/21/2022	5167	2109	793	2280	260	1912	425
2/22/2022	6333	1929	792	1870	292	1919	410
2/23/2022	7035	2127	811	1761	243	1887	411
2/24/2022	5072	1883	818	1776	240	1927	435
2/25/2022	5174	2047	823	1869	228	1904	438
2/26/2022	6722	1680	820	1899	225	1878	432
2/27/2022	4959	1587	793	2129	307	1880	451
2/28/2022	4028	2095	786	2071	260	1945	450
3/1/2022	5640	1972	790	1727	245	1940	453
3/2/2022	3297	1974	873	1677	245	1954	452
3/3/2022	3969	1992	925	1732	292	2045	453
3/4/2022	5013	2048	888	1776	251	2234	430
3/5/2022	2900	2050	805	1750	239	1881	420
3/6/2022	3207	1749	792	1712	240	1886	493
3/7/2022	4279	1679	735	1571	282	2071	498

Sum of Value Row Labels	PA33 - Butler	PA41 - Indiana	PA42 - Punxsutawney	PA43 - CLARION	PA44 - Kittanning	PA45 - Warren	PA46 - Kane
3/8/2022	4095	1918	756	1836	235	2099	449
3/9/2022	4486	2068	882	1621	24	1871	459
3/10/2022	2845	1989	890	1616	236	1844	437
3/11/2022	2845	2008	838	1655	286	1862	465
3/12/2022	2965	1640	786	1622	250	1869	466
3/13/2022	3966	1610	756	1574	245	1686	469
3/14/2022	4646	1839	773	1752	259	1998	494
3/15/2022	4644	1788	793	1889	322	2384	468
3/16/2022	5990	1900	805	1742	317	2391	475
3/17/2022	4656	1959	815	1737	276	2365	470
3/18/2022	4580	1889	851	1733	272	2133	437
3/19/2022	6171	1629	866	1743	251	1874	458
3/20/2022	4289	1469	861	1733	273	1898	474
3/21/2022	4098	2119	864	1757	273	2119	474
3/22/2022	4706	1869	864	1744	314	1967	482
3/23/2022	6756	1939	798	1699	262	2104	458
3/24/2022	4140	1706	777	1679	261	1903	453
3/25/2022	4500	1986	777	1724	248	2015	446
3/26/2022	4516	1625	781	1667	293	1963	449
3/27/2022	4516	1639	760	1609	258	1970	462
3/28/2022	5788	1962	764	1745	258	2121	460
3/29/2022	5334	1788	764	1749	269	2379	461
3/30/2022	5474	1960	765	1737	327	2963	461
3/31/2022	5923	1980	760	1719	265	2940	461
4/1/2022	5015	1759	763	1187	271	2819	459
4/2/2022	4417	1669	789	1262	273	2879	462
4/3/2022	4417	2179	791	1266	327	2815	467
4/4/2022	4414	2051	804	1300	290	3092	441
4/5/2022	4366	2026	836	1489	270	2863	472
4/6/2022	4662	1452	863	1383	263	2889	477
4/7/2022	5627	2646	864	1437	316	2779	497
4/8/2022	4303	1821	853	1289	268	2739	482
4/9/2022	4305	1539	791	1175	262	2700	462

Sum of Value Row Labels	PA33 - Butler	PA41 - Indiana	PA42 - Punxsutawney	PA43 - CLARION	PA44 - Kittanning	PA45 - Warren	PA46 - Kane
4/10/2022	4308	1657	795	1187	257	2678	469
4/11/2022	4053	1999	790	1282	304	2793	467
4/12/2022	5592	1897	792	1324	276	2763	465
4/13/2022	4614	2009	791	1330	267	2897	447
4/14/2022	4391	1491	799	1256	262	2957	448
4/15/2022	4396	1989	835	1293	305	2734	442
4/16/2022	4396	1679	851	1206	249	2764	443
4/17/2022	4380	1679	811	1189	247	2612	443
4/18/2022	4949	1539	799	1233	261	2784	445
4/19/2022	4616	1871	800	1376	299	1906	443
4/20/2022	4329	1802	799	1303	250	1891	465
4/21/2022	4698	1884	797	1273	241	1852	454
4/22/2022	5249	1811	802	1286	237	2590	445
4/23/2022	5314	2558	800	1243	272	2598	447
4/24/2022	5428	1988	797	1273	239	3099	463
4/25/2022	5002	1929	799	1517	242	3250	461
4/26/2022	5555	1915	804	1490	227	3124	462
4/27/2022	5205	1675	814	1171	406	3081	456
4/28/2022	5446	1673	793	1310	339	3000	451
4/29/2022	5835	1967	759	1329	243	3021	446
4/30/2022	4339	1989	768	1251	226	3108	443
5/1/2022	4732	1648	771	1243	277	2979	447
5/2/2022	5883	1960	774	1301	351	3324	457
5/3/2022	5021	2017	767	1422	287	3224	447
5/4/2022	4937	2059	770	1374	345	3144	451
5/5/2022	5115	2118	768	1323	342	3408	452
5/6/2022	6150	2117	760	1351	314	3083	448
5/7/2022	4227	1552	757	1293	317	3069	454
5/8/2022	4134	1767	755	1313	333	2825	468
5/9/2022	4611	1619	757	1300	291	2497	482
5/10/2022	5377	1698	758	1389	242	2259	484
5/11/2022	6276	1949	779	1354	243	2356	482
5/12/2022	5036	1759	777	1309	247	2136	521

Sum of Value Row Labels	PA33 - Butler	PA41 - Indiana	PA42 - Punxsutawney	PA43 - CLARION	PA44 - Kittanning	PA45 - Warren	PA46 - Kane
5/13/2022	6996	1619	844	1295	356	2134	495
5/14/2022	4409	1959	857	1339	259	2034	460
5/15/2022	4535	1609	833	1322	279	2137	485
5/16/2022	6304	1599	826	1341	244	2289	459
5/17/2022	4347	1849	807	1356	289	2142	494
5/18/2022	6370	2024	807	1368	235	2127	509
5/19/2022	4828	2026	792	1340	238	2305	506
5/20/2022	5932	2091	768	1346	235	2307	435
5/21/2022	6685	1889	693	1312	352	1977	457
5/22/2022	5721	1743	814	1264	328	1985	465
5/23/2022	4926	1944	862	1427	240	2336	450
5/24/2022	6686	1731	865	1352	245	2156	437
5/25/2022	4255	2208	895	1367	298	2199	489
5/26/2022	6866	2126	918	1453	235	2088	496
5/27/2022	4775	1799	983	1346	388	2002	474
5/28/2022	6206	1837	797	1289	226	1938	454
5/29/2022	4483	1730	760	1291	288	1943	459
5/30/2022	4800	1589	757	1352	343	2106	497
5/31/2022	6068	1928	769	1354	345	2446	497
6/1/2022	5416	2567	785	1334	342	2369	469
6/2/2022	6899	1857	786	1276	356	2426	434
6/3/2022	5928	1780	793	1298	350	2356	446
6/4/2022	5695	1698	827	1334	354	2141	443
6/5/2022	4341	1746	824	1282	326	1956	457
6/6/2022	6324	1770	849	1318	283	1988	452
6/7/2022	5240	1708	853	1257	264	1958	439
6/8/2022	5814	1867	858	1196	234	2207	445
6/9/2022	5706	1663	855	1128	226	2136	443
6/10/2022	5597	1709	811	1216	438	1938	440
6/11/2022	5182	1629	723	1142	389	1939	446
6/12/2022	4641	1599	719	1166	236	1809	490
6/13/2022	6881	1739	747	1236	244	1920	462
6/14/2022	4659	1829	757	1236	415	1921	446

Sum of Value Row Labels	PA33 - Butler	PA41 - Indiana	PA42 - Punxsutawney	PA43 - CLARION	PA44 - Kittanning	PA45 - Warren	PA46 - Kane
6/15/2022	6887	2079	770	1211	248	2058	356
6/16/2022	6439	1788	816	1237	237	2251	516
6/17/2022	5025	1729	857	1271	249	2154	464
6/18/2022	5590	1993	863	1258	220	2119	454
6/19/2022	4741	1854	805	1193	210	1883	452
6/20/2022	6871	1727	792	1198	280	2017	464
6/21/2022	4982	1729	792	1312	269	2243	465
6/22/2022	7100	1996	818	1276	243	2351	461
6/23/2022	5939	1962	859	1199	241	2245	459
6/24/2022	5757	1978	865	1338	436	2148	462
6/25/2022	6952	1708	864	1238	235	2372	460
6/26/2022	4564	1829	864	1224	357	2790	462
6/27/2022	6762	1678	860	1185	284	2513	461
6/28/2022	5483	1748	867	1225	406	2141	459
6/29/2022	6062	1968	865	1287	352	2151	452
6/30/2022	6962	1948	863	1260	365	2260	459
7/1/2022	5484	2247	846	1269	336	2283	505
7/2/2022	6042	2078	864	1386	335	2184	426
7/3/2022	5868	1570	828	1156	336	2637	431
7/4/2022	5548	1999	797	1199	237	2261	443
7/5/2022	5903	2098	784	1189	246	2261	445
7/6/2022	6964	1728	788	1128	231	2292	458
7/7/2022	5898	2229	831	1305	235	2544	453
7/8/2022	7151	2184	822	1255	222	2278	440
7/9/2022	7111	1739	827	1332	326	2382	427
7/10/2022	4526	1839	829	1376	237	2272	442
7/11/2022	6322	2329	829	1382	253	2460	463
7/12/2022	7095	1926	827	1322	272	2280	432
7/13/2022	7066	2215	843	1371	263	2166	432
7/14/2022	7106	1932	860	1311	261	2571	439
7/15/2022	6953	2147	878	1436	272	2164	443
7/16/2022	4554	2130	878	1403	220	2140	433
7/17/2022	5739	1659	779	1412	246	1944	442

Sum of Value Row Labels	PA33 - Butler	PA41 - Indiana	PA42 - Punxsutawney	PA43 - CLARION	PA44 - Kittanning	PA45 - Warren	PA46 - Kane
7/18/2022	6248	1738	834	1295	243	2550	433
7/19/2022	4916	1808	834	1288	400	2245	444
7/20/2022	6855	2100	835	1308	264	2955	475
7/21/2022	6871	2295	837	1527	311	2643	447
7/22/2022	5775	1770	833	1537	452	2278	486
7/23/2022	5982	2180	824	1449	238	2686	457
7/24/2022	5265	1918	793	1306	255	2655	414
7/25/2022	5763	2059	791	1480	338	2523	460
7/26/2022	7043	1658	791	1441	360	2279	450
7/27/2022	6278	1859	794	1392	397	2238	441
7/28/2022	7093	2136	791	1405	510	2072	439
7/29/2022	7248	2309	792	1398	501	1939	443
7/30/2022	8168	2158	792	1389	399	1731	447
7/31/2022	7795	1509	792	1315	361	1960	469
8/1/2022	7955	2278	780	1359	354	2657	457
8/2/2022	8630	2128	794	1369	333	2385	475
8/3/2022	8454	1848	796	1381	318	2396	476
8/4/2022	8282	2139	762	1355	393	2396	469
8/5/2022	8457	2089	736	1338	378	2256	453
8/6/2022	7339	1659	789	1274	333	2009	436
8/7/2022	7925	1699	790	1235	276	2158	435
8/8/2022	7522	2059	792	1341	282	2377	441
8/9/2022	8162	1469	793	1294	271	2386	428
8/10/2022	7761	2269	792	1299	284	2080	417
8/11/2022	6968	1896	790	1428	272	1813	425
8/12/2022	5778	2108	786	1359	271	2002	418
8/13/2022	7009	1878	792	1295	268	2045	402
8/14/2022	5015	1719	791	1279	269	1757	398
8/15/2022	7168	1770	793	1397	271	1823	389
8/16/2022	7090	2005	792	1360	349	1919	403
8/17/2022	5222	1802	791	1296	281	1814	419
8/18/2022	6682	1920	792	1368	282	1846	423
8/19/2022	7215	2128	796	1399	261	1767	411

Sum of Value Row Labels	PA33 - Butler	PA41 - Indiana	PA42 - Punxsutawney	PA43 - CLARION	PA44 - Kittanning	PA45 - Warren	PA46 - Kane
8/20/2022	6707	2148	788	1349	241	1717	400
8/21/2022	5592	1971	760	1357	272	1761	415
8/22/2022	7179	2108	761	1413	359	2774	415
8/23/2022	7156	1898	834	1388	440	1900	428
8/24/2022	5947	1929	833	1481	499	1855	451
8/25/2022	7187	2158	832	1536	450	1687	445
8/26/2022	6890	2170	835	1504	382	1800	407
8/27/2022	5343	2198	770	1157	425	1466	393
8/28/2022	7129	2180	755	1599	438	1652	421
8/29/2022	5762	2199	756	1425	397	1689	402
8/30/2022	7170	2238	756	1590	522	1888	394
8/31/2022	7099	1920	758	1400	329	1723	376
9/1/2022	5649	2359	806	1468	359	1622	412
9/2/2022	7184	1739	854	1427	396	1493	392
9/3/2022	6408	2589	835	1435	265	1533	360
9/4/2022	5545	2019	734	1407	259	1464	380
9/5/2022	6791	1589	719	1360	269	1607	398
9/6/2022	6487	1849	718	1422	322	1620	408
9/7/2022	5889	2219	721	1387	139	1613	390
9/8/2022	5263	2102	731	1385	276	1628	389
9/9/2022	7176	1856	756	1424	290	1600	381
9/10/2022	6343	1964	762	1381	273	1565	378
9/11/2022	4622	1955	750	1325	270	1613	384
9/12/2022	6300	1759	760	1402	274	1643	388
9/13/2022	5733	2048	742	1437	265	1587	340
9/14/2022	5573	2010	797	1381	264	1617	332
9/15/2022	6511	1950	807	1405	275	1587	323
9/16/2022	5837	2157	843	1483	264	1623	310
9/17/2022	5312	1970	841	1395	266	1828	313
9/18/2022	6378	2098	771	865	278	1780	325
9/19/2022	5811	1989	759	1646	359	1914	314
9/20/2022	5172	1828	728	1495	351	1901	313
9/21/2022	6178	2039	795	1391	337	1901	309

Sum of Value Row Labels	PA33 - Butler	PA41 - Indiana	PA42 - Punxsutawney	PA43 - CLARION	PA44 - Kittanning	PA45 - Warren	PA46 - Kane
9/22/2022	6460	2086	823	1381	335	1707	317
9/23/2022	4959	1919	831	1372	305	1625	311
9/24/2022	4742	1839	827	1355	309	1447	305
9/25/2022	6418	1936	790	1352	336	1736	325
9/26/2022	5302	1580	789	1403	272	1802	317
9/27/2022	5733	1719	821	1411	273	2160	314
9/28/2022	5172	2166	849	1399	270	2046	309
9/29/2022	5707	1899	854	1371	270	2156	310
9/30/2022	6176	1759	804	1393	263	2037	310
10/1/2022	4605	2322	829	1418	261	2063	306
10/2/2022	4579	1403	836	1401	274	2678	319
10/3/2022	5759	1678	863	1415	272	2160	319
10/4/2022	6123	2199	899	1474	393	2165	327
10/5/2022	6807	1519	900	1538	426	2610	323
10/6/2022	5644	2066	897	1373	334	2154	329
10/7/2022	6924	2236	902	1399	410	2014	319
10/8/2022	4526	1925	784	1279	274	2012	338
10/9/2022	5761	1869	779	1364	272	2403	338
10/10/2022	5652	1798	777	1362	279	2663	337
10/11/2022	6401	1259	776	1392	318	2157	329
10/12/2022	6461	2061	777	1392	271	2040	327
10/13/2022	5538	1977	516	1335	261	2153	331
10/14/2022	6929	1968	821	1364	263	2034	315
10/15/2022	4656	1779	863	1322	268	2019	307
10/16/2022	5841	1806	835	1282	274	2001	324
10/17/2022	5941	2017	794	1330	366	2138	348
10/18/2022	6301	2127	799	1346	368	2009	328
10/19/2022	6323	2078	777	1329	356	2147	335
10/20/2022	5821	2075	756	1328	374	1994	338
10/21/2022	5890	2136	753	1401	339	2147	338
10/22/2022	6034	1898	755	1323	359	1994	331
10/23/2022	5844	1625	757	1313	346	2163	348
10/24/2022	6308	1621	717	1347	352	2157	332

Sum of Value Row Labels	PA33 - Butler	PA41 - Indiana	PA42 - Punxsutawney	PA43 - CLARION	PA44 - Kittanning	PA45 - Warren	PA46 - Kane
10/25/2022	5903	2403	759	1370	395	2120	326
10/26/2022	8108	1660	757	1356	348	2622	338
10/27/2022	7063	2309	753	1350	362	1986	342
10/28/2022	5404	1899	757	1358	322	1493	325
10/29/2022	5942	1609	755	1288	266	1674	324
10/30/2022	5303	1959	756	1281	361	1465	339
10/31/2022	6629	2119	772	1324	300	1597	325
11/1/2022	6246	1839	863	1313	553	1662	348
11/2/2022	5856	2079	868	1344	343	1603	343
11/3/2022	6630	2219	847	1352	268	1565	337
11/4/2022	5913	2030	802	1388	267	1701	334
11/5/2022	6867	2146	800	1305	273	1602	352
11/6/2022	4918	2008	766	1359	369	1686	332
11/7/2022	6961	1928	797	1352	443	1694	343
11/8/2022	5126	2027	956	1343	481	1639	334
11/9/2022	4766	2048	826	1337	433	1738	341
11/10/2022	6731	1981	822	1387	505	1571	330
11/11/2022	5970	2199	817	1350	467	1636	326
11/12/2022	5034	1736	817	1297	258	1515	333
11/13/2022	4400	1905	830	1294	271	1558	326
11/14/2022	5367	1827	772	1431	347	1561	315
11/15/2022	6554	2108	756	1355	351	1723	320
11/16/2022	4747	2079	754	1359	355	1772	317
11/17/2022	5527	2115	757	1344	421	1547	317
11/18/2022	5471	1853	756	1357	405	1580	312
11/19/2022	4690	1800	757	1335	342	1487	314
11/20/2022	5625	1977	738	1326	352	1581	324
11/21/2022	5512	1761	740	1373	374	1627	320
11/22/2022	6028	2295	737	1444	272	1676	324
11/23/2022	5205	2318	719	1374	425	1468	336
11/24/2022	4721	1889	751	1270	265	1333	329
11/25/2022	5789	1909	727	1287	292	1304	320
11/26/2022	5315	1809	739	1280	249	1303	322

Sum of Value Row Labels	PA33 - Butler	PA41 - Indiana	PA42 - Punxsutawney	PA43 - CLARION	PA44 - Kittanning	PA45 - Warren	PA46 - Kane
11/27/2022	4774	1379	677	1350	260	1305	328
11/28/2022	5136	1959	720	1423	268	1322	348
11/29/2022	6531	2119	728	1368	303	1483	373
11/30/2022	4688	1769	692	1370	256	1328	389
12/1/2022	6243	1970	735	1519	253	1394	376
12/2/2022	4796	2716	775	1328	239	1365	365
12/3/2022	4712	2328	769	1324	244	1333	337
12/4/2022	4760	1902	774	1318	215	1458	340
12/5/2022	5449	1999	778	1370	209	1451	333
12/6/2022	5746	1836	754	1453	237	1714	341
12/7/2022	5054	1900	746	1359	473	1650	346
12/8/2022	7251	2028	749	1413	206	1318	363
12/9/2022	5496	1908	770	1366	206	1333	369
12/10/2022	4827	1955	790	1312	201	1336	355
12/11/2022	5141	1678	792	1325	255	1437	346
12/12/2022	6414	1698	792	1358	356	1346	337
12/13/2022	4692	1716	788	1351	268	1518	353
12/14/2022	6058	1808	763	1363	281	1314	351
12/15/2022	5251	2036	749	1230	319	1437	369
12/16/2022	4928	2457	755	1361	300	1350	343
12/17/2022	5972	1628	756	1417	300	1332	360
12/18/2022	4675	1738	755	1241	307	1497	364
12/19/2022	5030	1598	756	1314	318	1323	349
12/20/2022	6145	1858	728	1371	275	1466	352
12/21/2022	5402	1724	709	1396	268	1442	359
12/22/2022	5911	1859	736	1383	233	1368	359
12/23/2022	5989	1686	892	1362	248	1587	391
12/24/2022	4921	2049	935	1359	274	1516	413
12/25/2022	6653	2279	934	1459	264	1320	396
12/26/2022	4821	2139	1012	1603	314	1629	390
12/27/2022	7106	2419	1092	1826	296	1541	389
12/28/2022	5035	3195	1102	1835	300	1693	388
12/29/2022	6921	2304	1089	1712	315	1622	376

Sum of Value Row Labels	PA33 - Butler	PA41 - Indiana	PA42 - Punxsutawney	PA43 - CLARION	PA44 - Kittanning	PA45 - Warren	PA46 - Kane
12/30/2022	6254	2328	1080	1634	304	1628	404
12/31/2022	4999	1988	956	1459	237	1527	418
Grand Total	**2026929**	**709676**	**293489**	**522585**	**108275**	**740449**	**150127**
Average Day	5.5532	1.9443	0.8041	1.4317	0.2966	2.0286	0.4113
Maximum Day	8.6300	3.1950	1.1020	2.2800	0.6190	3.4080	0.5220
Max Day/Ave Da	1.5541	1.6432	1.3705	1.5925	2.0867	1.6800	1.2691

Sum of Value Row Labels	PA51 - Norristown	PA52 - Yardley	PA53 - Abington	PA54 - Susquehanna	PA55 - Bangor	PA56 - Nazareth	PA57 - Pocono
1/1/2022	8645	2798	1641	478	729	1854	1772
1/2/2022	8185	3056	1620	538	771	1918	1384
1/3/2022	9626	2999	1728	584	731	1939	1793
1/4/2022	9411	2933	1576	562	784	2003	1643
1/5/2022	9291	2913	1738	517	719	1801	1549
1/6/2022	8500	2787	1537	591	676	1728	1692
1/7/2022	8899	2742	1531	584	803	2073	1580
1/8/2022	9434	2736	1723	575	766	1722	1660
1/9/2022	9575	2783	1635	586	783	1571	1609
1/10/2022	9212	3026	1693	627	754	2506	1610
1/11/2022	9740	2794	1698	572	721	1700	1517
1/12/2022	9643	2848	1712	567	828	1965	1566
1/13/2022	10473	2895	1604	589	1058	2017	1645
1/14/2022	9861	2907	1445	577	845	1987	1853
1/15/2022	9206	2917	1664	575	957	2106	1905
1/16/2022	9307	2931	1690	615	936	1958	1837
1/17/2022	10616	2968	1706	672	975	2006	1753
1/18/2022	10164	2974	1700	648	977	2248	1947
1/19/2022	9245	2918	1624	616	910	2185	1562
1/20/2022	9558	2789	1578	631	904	2138	1916
1/21/2022	9028	2847	1635	605	941	2579	1596
1/22/2022	10231	2977	1633	604	921	1545	1744
1/23/2022	9141	3023	1525	645	1002	2101	1514
1/24/2022	9692	3034	1483	690	883	2186	1554
1/25/2022	9321	2883	1430	617	869	2161	1693
1/26/2022	9762	2758	1418	705	801	1973	1707
1/27/2022	9259	2688	1453	670	871	1996	1580
1/28/2022	9124	2805	1331	638	878	2094	1719
1/29/2022	9260	2942	1494	633	846	1937	1749
1/30/2022	9450	2816	1433	625	944	2286	1494
1/31/2022	10761	2827	1441	643	810	1982	1841
2/1/2022	9368	2707	1460	659	841	1847	1757
2/2/2022	9264	2934	1351	638	911	2680	1961

Sum of Value Row Labels	PA51 - Norristown	PA52 - Yardley	PA53 - Abington	PA54 - Susquehanna	PA55 - Bangor	PA56 - Nazareth	PA57 - Pocono
2/3/2022	9130	2712	1392	621	820	1916	1257
2/4/2022	9147	2758	1420	623	915	2098	1734
2/5/2022	9463	2700	1444	621	862	2273	1792
2/6/2022	9532	2935	1541	625	869	1859	1446
2/7/2022	9582	2806	1337	637	905	2161	1816
2/8/2022	9156	2943	1344	604	785	2000	1605
2/9/2022	9433	2861	1490	619	930	2126	1769
2/10/2022	8838	2678	1390	618	795	1700	1644
2/11/2022	9343	2712	1305	618	869	2206	1597
2/12/2022	8844	2788	1506	589	758	2081	1794
2/13/2022	9011	2960	1613	618	823	1920	1464
2/14/2022	9743	2772	1625	637	834	1832	1699
2/15/2022	8838	2763	1509	658	815	1825	1607
2/16/2022	9096	2745	1460	606	722	2000	1405
2/17/2022	8943	2729	1638	571	818	2355	1642
2/18/2022	9039	2620	1353	456	701	1764	1725
2/19/2022	9069	2603	1388	643	842	2141	1706
2/20/2022	8877	2759	1648	635	774	1811	1766
2/21/2022	9431	2730	1458	614	769	1884	1806
2/22/2022	9455	2790	1431	524	822	1928	1448
2/23/2022	8746	2665	1597	673	713	2037	1904
2/24/2022	8881	2635	1429	618	732	2015	1354
2/25/2022	8803	2484	1200	640	796	1538	1935
2/26/2022	8568	2735	1567	595	748	2237	1608
2/27/2022	8903	2737	1480	624	784	1978	1939
2/28/2022	9516	2740	1464	628	834	1766	1413
3/1/2022	8536	2718	1540	572	690	2057	1626
3/2/2022	9184	2636	1265	608	848	1972	1607
3/3/2022	8971	2620	1374	570	706	2190	1581
3/4/2022	8468	2666	1304	588	700	2167	1630
3/5/2022	9157	2739	1375	554	825	2189	1749
3/6/2022	8654	2658	1685	570	737	1746	1660
3/7/2022	9084	2770	1436	572	778	2080	1658

Sum of Value Row Labels	PA51 - Norristown	PA52 - Yardley	PA53 - Abington	PA54 - Susquehanna	PA55 - Bangor	PA56 - Nazareth	PA57 - Pocono
3/8/2022	8585	2623	1593	575	805	2233	1626
3/9/2022	9036	2765	1253	577	702	1942	1512
3/10/2022	8588	2512	1437	603	778	1950	1625
3/11/2022	8796	2627	1058	619	702	2052	1493
3/12/2022	8126	2794	1478	592	825	1748	1534
3/13/2022	8627	2922	1617	614	785	2139	1602
3/14/2022	9730	2776	1529	643	873	2136	1634
3/15/2022	9080	2661	1300	642	829	2041	1537
3/16/2022	8157	2509	1419	643	719	1962	1790
3/17/2022	9198	2677	1498	624	774	1825	1512
3/18/2022	8411	2750	1317	608	759	2304	1485
3/19/2022	9225	2613	1552	601	742	2234	1730
3/20/2022	8546	2800	1488	552	773	1937	1599
3/21/2022	8909	2835	1552	630	818	1720	1464
3/22/2022	8840	2699	1347	614	685	2239	1736
3/23/2022	8980	2568	1452	614	811	1951	1451
3/24/2022	8039	2788	1456	563	784	1805	1628
3/25/2022	8532	2766	1250	600	737	1920	1565
3/26/2022	8632	2621	1399	578	829	2321	1710
3/27/2022	8649	2742	1537	573	830	2005	1581
3/28/2022	8514	2801	1437	595	847	1846	1711
3/29/2022	8511	2502	1389	588	794	1975	1463
3/30/2022	8491	2800	1550	597	743	1933	1634
3/31/2022	8414	2722	1195	545	792	2143	1573
4/1/2022	8597	2634	1514	624	759	1688	1599
4/2/2022	8809	2568	1306	581	792	2116	1683
4/3/2022	8810	2597	1686	587	878	2033	1543
4/4/2022	8989	2520	1438	644	785	1713	1726
4/5/2022	8609	2774	1447	580	797	2290	1466
4/6/2022	8396	2447	1341	592	775	1624	1578
4/7/2022	8430	2581	1437	484	713	1818	1596
4/8/2022	8359	2464	1339	669	815	2006	1575
4/9/2022	8794	2688	1339	583	767	2007	1552

Sum of Value Row Labels	PA51 - Norristown	PA52 - Yardley	PA53 - Abington	PA54 - Susquehanna	PA55 - Bangor	PA56 - Nazareth	PA57 - Pocono
4/10/2022	8385	2745	1473	556	822	1721	1622
4/11/2022	8612	2698	1544	557	833	1949	1701
4/12/2022	8505	2601	1422	576	824	1819	1339
4/13/2022	8957	2627	1457	516	742	2218	1487
4/14/2022	8933	2577	1419	551	816	1796	1791
4/15/2022	8853	2711	1314	553	792	1920	1539
4/16/2022	8561	3057	1361	573	764	2210	1704
4/17/2022	8608	2869	1526	553	795	1933	1665
4/18/2022	9116	2747	1531	463	859	1860	1570
4/19/2022	8479	2559	1372	494	718	2005	1616
4/20/2022	8816	2784	1542	525	769	2280	1498
4/21/2022	8692	2698	1416	483	789	1817	1500
4/22/2022	8525	2599	1295	608	656	2180	1757
4/23/2022	8783	2669	1454	610	749	2008	1676
4/24/2022	8832	2837	1679	578	810	2085	1697
4/25/2022	8593	2767	1374	583	711	1804	1824
4/26/2022	9240	2619	1426	558	787	2106	1356
4/27/2022	8659	2759	1580	540	680	1849	1439
4/28/2022	8148	2746	1463	544	709	2002	1569
4/29/2022	8821	2760	1457	551	690	2038	1697
4/30/2022	8947	2867	1401	513	725	2232	1716
5/1/2022	8939	2948	1759	571	845	1647	1536
5/2/2022	8632	2749	1268	595	715	2336	1654
5/3/2022	8645	2779	1535	514	735	2068	1225
5/4/2022	9149	2702	1497	510	749	2061	1552
5/5/2022	8573	2734	1409	551	792	2005	1635
5/6/2022	8130	2669	1283	509	682	1853	1522
5/7/2022	7797	2680	1481	576	682	2191	1681
5/8/2022	7979	2633	1560	547	738	1917	1623
5/9/2022	9658	2806	1642	545	827	2075	1555
5/10/2022	9422	2811	1404	558	690	1821	1529
5/11/2022	9165	3094	1523	551	804	2462	1574
5/12/2022	9781	2811	1510	570	697	2095	1693

Sum of Value Row Labels	PA51 - Norristown	PA52 - Yardley	PA53 - Abington	PA54 - Susquehanna	PA55 - Bangor	PA56 - Nazareth	PA57 - Pocono
5/13/2022	9224	2820	1479	508	813	1819	1636
5/14/2022	9532	2866	1485	567	727	2157	1718
5/15/2022	9527	2990	1621	536	790	1926	1471
5/16/2022	9614	2957	1433	514	815	2139	1524
5/17/2022	9215	2852	1364	553	896	2182	1955
5/18/2022	9297	3104	1513	553	749	2263	1436
5/19/2022	9593	2903	1296	546	802	2021	1702
5/20/2022	9843	2854	1379	571	693	2669	1537
5/21/2022	9900	3332	1633	573	881	2064	1852
5/22/2022	10349	3418	1729	592	890	2190	1738
5/23/2022	9788	3206	1564	571	813	2397	1545
5/24/2022	8888	3075	1493	596	802	2342	1644
5/25/2022	9109	3335	1319	556	718	2341	1650
5/26/2022	8917	3202	1603	582	799	1923	1700
5/27/2022	8861	3206	1301	566	680	2273	1730
5/28/2022	8898	2775	1457	586	713	2076	1766
5/29/2022	8538	3076	1463	575	888	2105	1616
5/30/2022	9294	3290	1802	611	891	1916	1998
5/31/2022	10228	3203	1716	621	812	2257	1739
6/1/2022	10073	3210	1425	602	816	2604	1663
6/2/2022	9294	3055	1445	551	706	2150	1818
6/3/2022	9301	3044	1513	560	825	2214	1718
6/4/2022	9639	3179	1518	580	756	2290	1799
6/5/2022	9242	3265	1661	566	815	2137	1669
6/6/2022	9954	3459	1585	568	820	1866	1555
6/7/2022	9401	3192	1498	506	772	2497	1671
6/8/2022	9297	3072	1495	492	718	2394	1539
6/9/2022	9371	2893	1503	557	768	2077	1818
6/10/2022	8925	3193	1191	516	720	1778	1459
6/11/2022	9251	2979	1510	564	686	2029	1600
6/12/2022	8942	3126	1569	556	737	2105	1726
6/13/2022	9054	3075	1542	554	770	1976	1731
6/14/2022	9035	3104	1483	566	759	2158	1574

Sum of Value Row Labels	PA51 - Norristown	PA52 - Yardley	PA53 - Abington	PA54 - Susquehanna	PA55 - Bangor	PA56 - Nazareth	PA57 - Pocono
6/15/2022	9197	3383	1577	568	849	2209	1755
6/16/2022	9249	3129	1434	549	700	2535	1436
6/17/2022	8989	3093	1494	577	781	1781	1785
6/18/2022	8848	2947	1499	657	728	2174	1652
6/19/2022	9170	3001	1558	625	777	2052	1710
6/20/2022	9707	3230	1615	584	838	1980	1608
6/21/2022	9466	3084	1625	569	744	2251	1624
6/22/2022	8818	3012	1358	587	714	2032	1431
6/23/2022	8824	3004	1433	563	755	2170	1550
6/24/2022	9020	2961	1503	629	747	1846	1824
6/25/2022	9760	3135	1697	629	799	2205	1714
6/26/2022	9575	3225	1648	554	779	2108	1639
6/27/2022	9107	3262	1618	554	726	1794	1833
6/28/2022	8958	3206	1475	557	840	2493	1742
6/29/2022	9948	3024	1637	574	785	2506	1510
6/30/2022	9650	3359	1650	548	786	1737	1751
7/1/2022	10349	3627	1469	512	811	2319	1839
7/2/2022	9406	3450	1503	657	802	2280	1772
7/3/2022	9218	3152	1354	602	801	2114	1949
7/4/2022	9503	3522	1697	603	920	2095	2032
7/5/2022	9428	3399	1602	617	772	2346	1544
7/6/2022	9625	3593	1522	603	784	2017	1626
7/7/2022	9602	3196	1633	633	848	1903	1918
7/8/2022	9706	3732	1473	599	807	2330	1646
7/9/2022	9237	2859	1645	621	817	2299	1933
7/10/2022	9205	3286	1680	616	910	2223	1814
7/11/2022	9604	3520	1647	625	794	2430	2034
7/12/2022	9937	4470	1684	589	836	2044	1610
7/13/2022	10210	3180	1604	619	845	2304	1752
7/14/2022	10255	4046	1752	582	790	2566	1743
7/15/2022	10125	4174	1607	576	810	2417	1592
7/16/2022	10050	4035	1673	629	774	2335	1828
7/17/2022	9704	3541	1629	594	781	2552	1690

Sum of Value Row Labels	PA51 - Norristown	PA52 - Yardley	PA53 - Abington	PA54 - Susquehanna	PA55 - Bangor	PA56 - Nazareth	PA57 - Pocono
7/18/2022	9656	3293	1443	607	769	2186	1635
7/19/2022	10301	3908	1685	530	788	2123	1548
7/20/2022	10290	4418	1718	652	748	2588	1626
7/21/2022	10992	4322	1882	574	782	2202	1612
7/22/2022	10684	4774	1517	620	743	2499	1862
7/23/2022	10881	4533	1605	636	783	2313	1734
7/24/2022	10470	4678	1580	571	895	2308	1724
7/25/2022	10389	4285	1468	547	764	2532	1560
7/26/2022	10457	4086	1474	617	759	2515	1697
7/27/2022	11205	4227	1543	628	803	2018	1816
7/28/2022	10004	3722	1469	604	737	2280	1535
7/29/2022	9058	3537	1601	585	753	2326	1762
7/30/2022	9734	3743	1604	619	804	2483	1761
7/31/2022	9725	4347	1594	610	805	2238	1600
8/1/2022	9276	3394	1624	616	802	2578	1652
8/2/2022	9590	3557	1536	565	792	2099	1617
8/3/2022	10021	3453	1559	556	821	2605	1522
8/4/2022	9701	4255	1707	540	769	2138	1504
8/5/2022	9841	3775	1508	584	766	2570	1720
8/6/2022	9696	3405	1695	599	828	2543	1737
8/7/2022	9610	3516	1661	636	904	1985	1541
8/8/2022	10590	3577	1629	636	839	1955	1805
8/9/2022	10032	3596	1611	543	758	2284	1585
8/10/2022	10171	3934	1673	615	801	2391	1649
8/11/2022	10019	2978	1615	629	778	2540	1895
8/12/2022	9652	3887	1643	637	909	2600	1640
8/13/2022	9623	3485	1690	678	860	2435	1529
8/14/2022	9721	3626	1759	564	1000	2291	1816
8/15/2022	10445	3987	1799	557	897	2542	1650
8/16/2022	9213	3841	1684	550	749	2289	1541
8/17/2022	9545	3939	1728	574	760	2281	1914
8/18/2022	9973	3627	1555	598	659	2221	1454
8/19/2022	10466	3923	1620	638	640	2466	1544

Sum of Value Row Labels	PA51 - Norristown	PA52 - Yardley	PA53 - Abington	PA54 - Susquehanna	PA55 - Bangor	PA56 - Nazareth	PA57 - Pocono
8/20/2022	10295	3742	1697	645	692	2400	1863
8/21/2022	9832	3640	1680	591	696	2302	1836
8/22/2022	9763	3327	1305	573	593	2277	1811
8/23/2022	9463	3418	1445	622	660	1777	1456
8/24/2022	9944	3583	1646	602	659	2459	1515
8/25/2022	10559	3837	1647	616	648	1778	1905
8/26/2022	10206	4007	1406	587	601	2197	1646
8/27/2022	10281	3795	1513	597	653	2601	1800
8/28/2022	9871	3666	1720	551	673	2156	1580
8/29/2022	11338	3988	1289	526	732	2374	1680
8/30/2022	10452	3911	1533	549	640	2470	1507
8/31/2022	9632	3512	1372	558	593	2313	1490
9/1/2022	10676	3865	1553	541	687	2416	1764
9/2/2022	10166	4030	1354	570	653	2310	1432
9/3/2022	10729	3551	1484	568	516	2482	2014
9/4/2022	10460	3479	1332	507	603	2202	1875
9/5/2022	9630	3573	1630	471	668	2115	1714
9/6/2022	10015	3148	1447	475	592	1994	1487
9/7/2022	9317	2998	1432	487	633	2051	1559
9/8/2022	10388	3037	1491	484	643	1889	1642
9/9/2022	9990	3177	1338	525	548	2381	1546
9/10/2022	9558	4032	1381	590	578	1875	1802
9/11/2022	9601	3441	1460	582	630	2086	1578
9/12/2022	9962	3249	1385	545	563	1886	1451
9/13/2022	9692	3363	1375	487	547	1955	1598
9/14/2022	9575	3422	1468	517	586	1952	1479
9/15/2022	9763	3456	1436	500	615	2391	1621
9/16/2022	9658	3027	1479	503	540	2157	1505
9/17/2022	9634	3385	1354	541	589	2130	1721
9/18/2022	9612	3623	1529	554	640	2005	1781
9/19/2022	10801	3624	1543	544	632	2206	1494
9/20/2022	10979	3157	1340	535	592	1869	1603
9/21/2022	9812	3371	1431	609	565	2150	1558

Sum of Value Row Labels	PA51 - Norristown	PA52 - Yardley	PA53 - Abington	PA54 - Susquehanna	PA55 - Bangor	PA56 - Nazareth	PA57 - Pocono
9/22/2022	9483	3275	1568	543	546	2072	1407
9/23/2022	9382	3253	1274	550	566	2268	1618
9/24/2022	9834	3019	1431	582	614	2050	1652
9/25/2022	9773	3289	1487	561	667	1794	1760
9/26/2022	10088	3096	1477	492	584	1940	1417
9/27/2022	9726	3044	1407	491	581	2079	1559
9/28/2022	9037	3236	1404	526	549	1956	1430
9/29/2022	10754	3147	1289	512	599	2009	1661
9/30/2022	9246	3109	1346	503	598	2120	1376
10/1/2022	9359	2804	1160	552	593	2140	1383
10/2/2022	9420	2859	1429	526	615	1815	1488
10/3/2022	8997	2956	1356	584	570	2033	1507
10/4/2022	9874	2827	1380	497	541	1982	1465
10/5/2022	9115	2760	1377	467	617	1995	1451
10/6/2022	9684	2936	1361	583	584	2058	1449
10/7/2022	10036	2789	1445	551	594	2045	1662
10/8/2022	8936	2992	1304	626	651	2125	1462
10/9/2022	8691	2989	1298	588	619	2289	1435
10/10/2022	10349	3075	1388	509	583	2022	1729
10/11/2022	9617	3122	1356	541	576	2092	1417
10/12/2022	9140	3094	1338	575	581	2102	1416
10/13/2022	8233	2974	1449	501	617	1902	1520
10/14/2022	9768	2783	1454	538	542	2116	1682
10/15/2022	10010	2727	1369	540	598	1954	1808
10/16/2022	9387	2932	1460	524	616	1918	1591
10/17/2022	9330	2996	1392	506	563	1867	1568
10/18/2022	8736	2976	1333	531	631	2147	1442
10/19/2022	9358	2809	1386	553	637	2074	1653
10/20/2022	9243	2960	1360	514	561	2026	1554
10/21/2022	9191	2923	1375	524	562	1921	1504
10/22/2022	8806	2650	1368	547	578	2071	1650
10/23/2022	8909	2884	1433	561	609	1995	1404
10/24/2022	9888	2902	1417	520	572	1827	1487

Sum of Value Row Labels	PA51 - Norristown	PA52 - Yardley	PA53 - Abington	PA54 - Susquehanna	PA55 - Bangor	PA56 - Nazareth	PA57 - Pocono
10/25/2022	9383	2654	1402	529	608	1849	1692
10/26/2022	8561	2815	1352	565	604	2019	1228
10/27/2022	9038	2871	1423	535	583	2027	1466
10/28/2022	8595	2704	1433	535	560	2320	1500
10/29/2022	9790	2794	1398	541	608	1907	1551
10/30/2022	8887	2872	1505	552	633	1958	1359
10/31/2022	9130	2918	1423	522	573	1820	1600
11/1/2022	8873	2799	1496	516	645	1817	1288
11/2/2022	9413	2786	1431	557	606	1960	1438
11/3/2022	9414	2662	1481	519	571	1894	1671
11/4/2022	8624	3066	1462	507	545	1890	1239
11/5/2022	8568	2416	1451	551	618	2178	1553
11/6/2022	10028	3077	1477	541	630	1682	1562
11/7/2022	9115	2814	1561	559	587	1920	1634
11/8/2022	8797	2728	1529	491	566	2045	1198
11/9/2022	9000	2824	1368	599	643	1645	1575
11/10/2022	8386	2912	1387	564	582	1882	1257
11/11/2022	8740	2772	1372	598	529	1755	1548
11/12/2022	8643	2827	1413	597	569	2011	1569
11/13/2022	8707	3032	1419	600	653	1857	1445
11/14/2022	9020	3102	1416	610	561	1857	1473
11/15/2022	8907	2636	1392	527	586	1682	1434
11/16/2022	10337	2704	1354	579	612	1884	1448
11/17/2022	10979	2791	1387	573	567	2046	1412
11/18/2022	8318	2896	1328	555	549	1716	1481
11/19/2022	8882	2772	1387	532	620	2063	1580
11/20/2022	10137	2837	1581	512	615	1877	1510
11/21/2022	8835	2939	1481	538	602	1567	1389
11/22/2022	9242	2881	1367	490	598	1944	1612
11/23/2022	9582	3208	1349	456	691	1872	1400
11/24/2022	9407	3218	1555	544	639	2000	1727
11/25/2022	9447	2787	1459	536	620	2000	1754
11/26/2022	8915	2967	1503	561	591	1689	1765

Sum of Value Row Labels	PA51 - Norristown	PA52 - Yardley	PA53 - Abington	PA54 - Susquehanna	PA55 - Bangor	PA56 - Nazareth	PA57 - Pocono
11/27/2022	8226	3012	1574	521	657	1754	1345
11/28/2022	8972	3138	1503	520	617	1804	1676
11/29/2022	8915	2861	1381	509	589	1865	1380
11/30/2022	7691	2923	1390	501	676	1872	1421
12/1/2022	8603	2788	1415	541	616	1873	1410
12/2/2022	8813	2878	1349	495	551	1870	1572
12/3/2022	8140	2860	1406	497	596	1822	1416
12/4/2022	9259	2963	1446	496	674	1802	1471
12/5/2022	8785	2890	1411	538	574	1882	1485
12/6/2022	8443	2851	1260	502	665	1884	1398
12/7/2022	8021	2721	1307	491	636	2298	1409
12/8/2022	8519	2902	1377	521	608	1429	1492
12/9/2022	8692	2529	1385	498	565	1797	1433
12/10/2022	9295	2818	1400	492	618	1842	1669
12/11/2022	8746	2812	1473	490	710	1807	1491
12/12/2022	8902	2884	1477	514	629	1922	1288
12/13/2022	8787	2817	1413	484	577	2217	1416
12/14/2022	8599	2637	1277	509	650	1807	1277
12/15/2022	8821	2859	1487	468	684	1708	1388
12/16/2022	9113	2730	1385	552	597	1929	1718
12/17/2022	8124	2871	1469	447	694	1907	1016
12/18/2022	8978	2922	1432	545	717	1918	1741
12/19/2022	9029	3020	1558	534	647	2065	1703
12/20/2022	8788	2922	1430	521	739	2184	1203
12/21/2022	8843	2954	1548	510	651	2090	1433
12/22/2022	8664	2776	1533	502	662	2247	1593
12/23/2022	9274	2761	1725	507	688	1919	1539
12/24/2022	8709	3198	1946	505	846	2127	1927
12/25/2022	9115	3098	1677	658	702	1990	1663
12/26/2022	9254	2809	1755	524	801	2139	1965
12/27/2022	10155	2990	1470	427	720	2135	1952
12/28/2022	9759	3066	1503	523	886	2166	1957
12/29/2022	8919	2930	1494	606	786	2245	2193

Sum of Value Row Labels	PA51 - Norristown	PA52 - Yardley	PA53 - Abington	PA54 - Susquehanna	PA55 - Bangor	PA56 - Nazareth	PA57 - Pocono
12/30/2022	9478	2627	1528	581	897	2115	1983
12/31/2022	9449	3066	1575	587	788	2025	1953
Grand Total	**3395546**	**1114340**	**543594**	**207649**	**267083**	**755368**	**591367**
Average Day	9.3029	3.0530	1.4893	0.5689	0.7317	2.0695	1.6202
Maximum Day	11.3380	4.7740	1.9460	0.7050	1.0580	2.6800	2.1930
Max Day/Ave Da	1.2188	1.5637	1.3067	1.2392	1.4459	1.2950	1.3536

Sum of Value Row Labels	PA59 - Glen Alsace	PA61 - Mechanicsburg	PA62 - Hershey	PA63 - Wyomissing	PA64 - Royersford	PA65 - Coatesville
1/1/2022	1500	9066	5270	2351	3416	3359
1/2/2022	1676	9542	5609	2484	2263	3303
1/3/2022	1624	10675	5707	2489	3915	3348
1/4/2022	1672	9971	6119	2442	3911	3427
1/5/2022	1629	10385	6006	2364	3896	3431
1/6/2022	1585	10111	5646	2531	3862	3363
1/7/2022	1831	10138	5742	2338	3772	3424
1/8/2022	1586	10493	6083	2546	3870	3408
1/9/2022	1728	10062	5373	2487	3936	3405
1/10/2022	1587	10264	6912	2304	3996	3506
1/11/2022	1679	10428	6555	2548	2935	3678
1/12/2022	1723	11347	6100	2573	3992	3510
1/13/2022	1616	10516	6144	2407	3740	3570
1/14/2022	1498	9939	6231	2549	4091	3539
1/15/2022	1757	11181	6053	2434	3574	3582
1/16/2022	1574	9919	5799	2564	3993	3580
1/17/2022	2147	10607	6264	2560	3288	3719
1/18/2022	1846	10198	6401	2571	3821	3766
1/19/2022	1729	11377	6279	2530	3842	3626
1/20/2022	1877	10951	6146	2512	3879	3719
1/21/2022	1746	10361	6254	2521	3835	3639
1/22/2022	1769	10536	6174	2602	3390	3735
1/23/2022	1722	10618	6068	2659	3545	3789
1/24/2022	1873	10875	6082	2772	3678	3644
1/25/2022	1682	10407	6334	2667	3948	3560
1/26/2022	1725	11010	6013	2763	4040	3650
1/27/2022	1680	10377	6230	2530	4090	3733
1/28/2022	1592	10254	6127	2491	3908	3669
1/29/2022	1740	10688	6066	2635	3921	3553
1/30/2022	1684	10494	6312	2745	4012	3776
1/31/2022	1747	10713	6084	2714	3872	3970
2/1/2022	1530	10472	6205	2615	3384	4105
2/2/2022	1809	10761	6559	2652	4011	3911

Sum of Value Row Labels	PA59 - Glen Alsace	PA61 - Mechanicsburg	PA62 - Hershey	PA63 - Wyomissing	PA64 - Royersford	PA65 - Coatesville
2/3/2022	1698	10253	6077	2509	3996	4087
2/4/2022	1640	10318	5991	2516	3518	3868
2/5/2022	1546	10374	6048	2692	3577	3948
2/6/2022	1811	10385	6442	2833	3926	3885
2/7/2022	1708	10414	6421	2772	4154	3658
2/8/2022	1696	10848	6450	2706	3931	3473
2/9/2022	1622	10647	6095	2625	4049	3590
2/10/2022	1693	10915	6138	2620	3924	3558
2/11/2022	1563	10128	6225	2503	3822	3412
2/12/2022	1517	10332	6142	2648	4263	3565
2/13/2022	1713	10184	6012	2586	3720	3481
2/14/2022	1727	10306	5936	2648	3911	3469
2/15/2022	1753	10194	6208	2486	3565	3574
2/16/2022	1632	10419	6150	2666	3146	3501
2/17/2022	1746	10454	6462	2554	3983	3605
2/18/2022	1614	10160	6025	2489	3446	3580
2/19/2022	1536	9698	5995	2580	3823	3678
2/20/2022	1634	10089	5828	2651	3743	3677
2/21/2022	1636	10701	6173	2638	3730	3751
2/22/2022	1571	10040	6081	2577	4001	3381
2/23/2022	1643	10135	6179	2427	4228	3687
2/24/2022	1566	10366	5800	2555	4240	3649
2/25/2022	1590	9923	5963	2407	3814	3570
2/26/2022	1627	11074	5892	2673	3512	3626
2/27/2022	1672	10628	6125	2637	3791	3810
2/28/2022	1671	10243	6211	2654	3971	3774
3/1/2022	1542	10669	5895	2476	3546	3728
3/2/2022	1605	10462	5876	2603	3807	3758
3/3/2022	1599	10026	6353	2495	3646	3607
3/4/2022	1581	10214	5973	2522	3946	3705
3/5/2022	1641	10543	5838	2632	3580	3694
3/6/2022	1755	10096	5740	2616	3630	3713
3/7/2022	1849	10373	6247	2487	3911	3653

Sum of Value Row Labels	PA59 - Glen Alsace	PA61 - Mechanicsburg	PA62 - Hershey	PA63 - Wyomissing	PA64 - Royersford	PA65 - Coatesville
3/8/2022	1554	9698	6072	2569	3568	3559
3/9/2022	1644	10236	5635	2455	3677	3580
3/10/2022	1541	10113	5699	2507	3789	3177
3/11/2022	1612	9968	5827	2521	3793	3176
3/12/2022	1672	9890	5623	2490	3537	4075
3/13/2022	1694	9931	5607	2678	3569	3890
3/14/2022	1700	10125	5884	2534	3997	3920
3/15/2022	1492	10636	6109	2364	3917	3786
3/16/2022	1600	9973	6109	2354	2745	3729
3/17/2022	1591	10438	5690	2343	3797	3544
3/18/2022	1537	10052	5844	2356	4015	3506
3/19/2022	1751	9962	5978	2464	3999	3491
3/20/2022	1501	9845	5699	2385	3693	3498
3/21/2022	1745	10175	5678	2476	3866	3733
3/22/2022	1534	9984	5851	2284	3671	3681
3/23/2022	1601	9658	5847	2373	3572	3376
3/24/2022	1549	9796	5384	2327	3282	3713
3/25/2022	1617	9836	5813	2283	3581	3632
3/26/2022	1589	9770	5619	2419	3952	3485
3/27/2022	1575	9372	5773	2414	3495	3454
3/28/2022	1684	10173	5388	2416	3890	3458
3/29/2022	1585	10091	6002	2499	3952	3563
3/30/2022	1673	9528	5527	2414	4022	3428
3/31/2022	1626	10406	5844	2265	3961	3053
4/1/2022	1677	9797	5795	2375	3064	3318
4/2/2022	1652	10037	5653	2381	3367	3242
4/3/2022	1707	9843	5390	2497	3405	3421
4/4/2022	1710	10004	5859	2535	4108	3778
4/5/2022	1630	10056	5908	2287	3912	2738
4/6/2022	1671	10199	5811	2404	2886	3521
4/7/2022	1627	9931	5455	2289	3478	3322
4/8/2022	1584	10103	5736	2365	3630	3324
4/9/2022	1523	9458	5636	2269	3742	3034

Sum of Value Row Labels	PA59 - Glen Alsace	PA61 - Mechanicsburg	PA62 - Hershey	PA63 - Wyomissing	PA64 - Royersford	PA65 - Coatesville
4/10/2022	1551	9555	5896	2613	4206	3318
4/11/2022	1682	10441	5836	2350	4100	3218
4/12/2022	1359	10411	6043	2367	4002	3315
4/13/2022	1947	10281	6458	2343	3608	3172
4/14/2022	1739	10902	5932	2382	4200	3360
4/15/2022	1648	10248	6083	2456	3653	3189
4/16/2022	1712	9908	5787	2482	3856	3164
4/17/2022	1629	9695	5352	2378	3802	3230
4/18/2022	1764	10132	5638	2515	3949	3152
4/19/2022	1735	10374	5879	2390	3461	3261
4/20/2022	1850	10486	5672	2382	4117	3267
4/21/2022	1700	10361	6075	2340	3928	3223
4/22/2022	1624	10285	6098	2344	3832	3603
4/23/2022	1587	9848	5404	2479	4175	3880
4/24/2022	1766	10321	6149	2534	3940	3631
4/25/2022	1812	10566	6377	2512	4048	3276
4/26/2022	1799	10414	6048	2347	2840	3698
4/27/2022	1662	10148	6257	2394	3314	3461
4/28/2022	1684	10775	6099	2439	4796	3144
4/29/2022	1649	10242	5896	2324	5233	3145
4/30/2022	1672	10968	6088	2441	5389	3299
5/1/2022	1755	10964	5983	2515	4926	3530
5/2/2022	1777	10722	5959	2397	4611	3454
5/3/2022	1719	10176	5757	2373	4086	3236
5/4/2022	1719	10567	6190	2305	4036	3133
5/5/2022	1718	11012	5665	2513	4221	3267
5/6/2022	1609	9905	5032	2248	4561	3328
5/7/2022	1638	9747	5278	2260	2835	3220
5/8/2022	1700	9840	5906	2535	3696	3478
5/9/2022	1804	11059	6293	2468	4138	3608
5/10/2022	1709	10214	6274	2453	3957	3374
5/11/2022	1764	10299	6463	2527	3882	3435
5/12/2022	1843	11783	6661	2544	3922	3439

Sum of Value Row Labels	PA59 - Glen Alsace	PA61 - Mechanicsburg	PA62 - Hershey	PA63 - Wyomissing	PA64 - Royersford	PA65 - Coatesville
5/13/2022	1658	10699	6451	2196	3673	3398
5/14/2022	1558	10221	6287	2477	3440	3314
5/15/2022	1830	11081	6478	2534	3847	3478
5/16/2022	1731	10319	6142	2418	3861	3472
5/17/2022	1727	11047	6183	2482	3749	3262
5/18/2022	1935	11072	6493	2508	3691	3658
5/19/2022	1727	10974	6528	2539	3240	3632
5/20/2022	1667	10331	6443	2439	3685	3658
5/21/2022	1939	11080	6690	2728	3027	3815
5/22/2022	1915	10290	6723	2651	4196	3879
5/23/2022	1770	10136	6369	2629	4334	3395
5/24/2022	1747	10044	6229	2468	4548	3485
5/25/2022	1751	10433	6350	2491	4493	4005
5/26/2022	1693	10345	6550	2607	4249	3507
5/27/2022	1682	9740	6291	2405	4332	3094
5/28/2022	1666	10571	6334	2525	3700	3271
5/29/2022	1579	10120	6366	2569	4583	3499
5/30/2022	2027	11354	6821	2680	4418	3706
5/31/2022	1885	11572	7304	2853	4708	3633
6/1/2022	1775	11849	7096	2623	4261	3764
6/2/2022	1706	10717	6682	2459	3857	3578
6/3/2022	1721	10772	6892	2551	4572	3440
6/4/2022	1804	11260	6811	2560	3943	3379
6/5/2022	1961	11407	6768	2675	4174	3496
6/6/2022	1798	11473	6930	2605	5128	3612
6/7/2022	1699	11143	6752	2407	4917	3872
6/8/2022	1674	9662	6821	2464	4352	3584
6/9/2022	1711	11424	6936	2402	4861	3534
6/10/2022	1724	11451	6857	2477	4703	3220
6/11/2022	1668	10270	6308	2383	4007	3568
6/12/2022	1572	10452	6364	2384	4227	3623
6/13/2022	1821	11757	7031	2455	4307	3740
6/14/2022	1808	10964	6672	2468	4645	3473

Sum of Value Row Labels	PA59 - Glen Alsace	PA61 - Mechanicsburg	PA62 - Hershey	PA63 - Wyomissing	PA64 - Royersford	PA65 - Coatesville
6/15/2022	1754	11239	7063	2570	4535	3190
6/16/2022	1676	10427	6773	2443	4278	3433
6/17/2022	1689	11488	7050	2617	4337	3534
6/18/2022	1705	10618	6627	2452	4379	3354
6/19/2022	1857	10710	6499	2597	4654	3319
6/20/2022	1753	11133	6886	2710	4791	3385
6/21/2022	1808	11555	7023	2718	4696	3728
6/22/2022	1852	11520	6847	2534	4600	3783
6/23/2022	1653	10113	6384	2296	3701	3449
6/24/2022	1513	10622	6732	2412	4669	3381
6/25/2022	1687	11283	7118	2589	4863	3617
6/26/2022	1960	10655	6808	2542	4663	3649
6/27/2022	1701	10950	6459	2447	4724	3837
6/28/2022	1691	10340	7506	2490	4534	3846
6/29/2022	1654	11049	7094	2654	4623	3620
6/30/2022	1843	11550	7504	2633	5076	3289
7/1/2022	1491	11599	7343	2535	5302	3495
7/2/2022	1654	10702	6993	2417	5097	3743
7/3/2022	1679	10631	7298	2581	5238	3273
7/4/2022	1835	11586	7019	2531	4781	3490
7/5/2022	1554	10830	7149	2505	5236	3615
7/6/2022	1718	11525	7511	2636	5475	3268
7/7/2022	1746	11381	7522	2544	5644	3354
7/8/2022	1657	11022	7578	2616	4991	3567
7/9/2022	1681	11582	7303	2418	4627	3728
7/10/2022	1888	11534	7402	2681	4759	4096
7/11/2022	1769	11245	7889	2671	5233	4010
7/12/2022	1671	11888	7751	2647	5071	3667
7/13/2022	1866	11527	7852	2717	4956	3697
7/14/2022	1862	10638	7745	2840	5614	3000
7/15/2022	1978	12140	7758	2716	5790	3943
7/16/2022	1648	10841	7424	2505	5594	3705
7/17/2022	1704	10482	7084	2531	4709	3430

Sum of Value Row Labels	PA59 - Glen Alsace	PA61 - Mechanicsburg	PA62 - Hershey	PA63 - Wyomissing	PA64 - Royersford	PA65 - Coatesville
7/18/2022	1601	10665	7376	2446	5395	3400
7/19/2022	1651	11701	7838	2674	4598	3473
7/20/2022	1808	11826	7703	2814	4980	3723
7/21/2022	1707	11916	7632	2671	5458	3387
7/22/2022	1863	11964	7922	2738	5485	3864
7/23/2022	1838	12163	8330	2774	5540	3698
7/24/2022	1863	11492	7762	2786	5351	3687
7/25/2022	1712	11336	7753	2719	5649	3668
7/26/2022	1781	11549	7795	2784	6092	3593
7/27/2022	1805	11952	7788	2780	5713	3651
7/28/2022	1473	10870	7686	2552	5266	3611
7/29/2022	1684	10691	7174	2416	4428	3422
7/30/2022	1733	10435	7143	2525	4763	3481
7/31/2022	1535	10652	7372	2577	4952	3500
8/1/2022	1805	10835	6866	2424	4631	3480
8/2/2022	1564	10851	7539	2720	4462	3615
8/3/2022	1739	11462	7529	2677	5252	3579
8/4/2022	1700	11289	7944	2542	4661	3704
8/5/2022	1611	11062	7757	2569	4491	3321
8/6/2022	1611	11091	7454	2528	4828	3221
8/7/2022	1684	11131	7574	2656	5043	3372
8/8/2022	1620	12037	8187	2778	4967	3609
8/9/2022	1686	11820	7933	2586	5160	3561
8/10/2022	1743	11692	8058	2718	4950	3522
8/11/2022	1746	11738	8343	2729	4709	3566
8/12/2022	1731	11403	7815	2581	4879	3533
8/13/2022	1683	11840	7781	2767	4395	3629
8/14/2022	1942	11105	7373	2629	4672	3544
8/15/2022	1784	11035	7771	2745	5177	3690
8/16/2022	1763	11867	7922	2677	4997	3599
8/17/2022	1748	11850	8052	2698	5041	3752
8/18/2022	1723	11461	7823	2664	5238	3745
8/19/2022	1796	11887	7739	2636	5520	3713

Sum of Value Row Labels	PA59 - Glen Alsace	PA61 - Mechanicsburg	PA62 - Hershey	PA63 - Wyomissing	PA64 - Royersford	PA65 - Coatesville
8/20/2022	1763	11849	8159	2859	5461	3693
8/21/2022	1691	11010	8147	2600	4872	3713
8/22/2022	1691	11490	7804	2683	4962	3736
8/23/2022	1714	11636	7413	2853	4815	3555
8/24/2022	1857	11747	8156	2838	5009	3554
8/25/2022	1821	12014	8421	2864	4903	3697
8/26/2022	1764	11950	7931	2802	5324	3779
8/27/2022	1748	11879	7865	2772	4900	3692
8/28/2022	1928	11816	7877	2982	5101	3721
8/29/2022	1780	11759	8265	2995	5423	3648
8/30/2022	1694	11463	8152	2725	5386	4163
8/31/2022	1673	11351	7317	2809	5453	4081
9/1/2022	1697	11414	7676	2659	5355	3648
9/2/2022	1617	11282	7645	2692	4943	4163
9/3/2022	1737	11243	7038	2662	5022	4081
9/4/2022	1656	10785	7264	2562	4974	3600
9/5/2022	1712	10912	6823	2705	4805	3636
9/6/2022	1590	10906	6853	2392	4637	3729
9/7/2022	1519	10774	6930	2546	3968	3644
9/8/2022	1604	10768	6823	2567	4489	3424
9/9/2022	1653	11144	6866	2526	4465	3405
9/10/2022	1713	10709	6817	2643	4317	3474
9/11/2022	1606	10433	6460	2519	4288	3983
9/12/2022	1636	10731	7091	2631	4503	3317
9/13/2022	1703	11087	7147	2541	4390	3593
9/14/2022	1591	11021	7078	2556	4356	3430
9/15/2022	1325	10700	7463	2558	4599	3919
9/16/2022	1659	11013	6848	2287	4814	3724
9/17/2022	1723	10825	6884	2380	4437	3632
9/18/2022	1777	11010	6972	2616	4154	3380
9/19/2022	1747	10973	7589	2424	4936	3350
9/20/2022	1699	11126	7345	2420	4554	4081
9/21/2022	1689	11124	7387	2513	4389	3124

Sum of Value Row Labels	PA59 - Glen Alsace	PA61 - Mechanicsburg	PA62 - Hershey	PA63 - Wyomissing	PA64 - Royersford	PA65 - Coatesville
9/22/2022	1573	10761	6766	2333	3954	3985
9/23/2022	1574	10643	6872	2238	4808	3570
9/24/2022	1615	10584	6647	2340	4057	3327
9/25/2022	1606	10459	6850	2469	4193	3420
9/26/2022	1739	10708	7002	2415	3670	3611
9/27/2022	1628	11177	6984	2395	4428	3805
9/28/2022	1589	10774	6876	2324	4481	3326
9/29/2022	1458	10647	7067	2511	4285	3504
9/30/2022	1709	10580	6701	2352	4289	3427
10/1/2022	1481	10378	6428	2347	4515	3593
10/2/2022	1697	10310	6738	2360	3673	3539
10/3/2022	1618	10571	6439	2378	3788	3690
10/4/2022	1640	10637	5964	2406	4389	3400
10/5/2022	1812	10502	7508	2296	3621	3228
10/6/2022	1644	10338	6858	2347	4174	3659
10/7/2022	1600	10963	6837	2512	4314	3586
10/8/2022	1565	10087	6527	2311	4044	3583
10/9/2022	1517	10724	6794	2426	4223	3726
10/10/2022	1810	10338	6921	2577	4294	3452
10/11/2022	1672	10374	6812	2476	4023	3809
10/12/2022	1611	11042	6883	2380	4670	3667
10/13/2022	1567	10191	6919	2300	4709	3519
10/14/2022	1548	10423	6669	2404	3453	3355
10/15/2022	1497	10263	6631	2353	3868	3347
10/16/2022	1673	9966	6950	2399	3942	3416
10/17/2022	1591	10540	6852	2446	4133	3406
10/18/2022	1678	10629	6704	2428	4148	3452
10/19/2022	1586	10567	6305	2327	4010	3396
10/20/2022	1573	9698	6819	2331	4065	3430
10/21/2022	1569	10694	7058	2465	3784	3441
10/22/2022	1501	10014	6795	2359	4470	3547
10/23/2022	1671	10655	6687	2453	3904	3371
10/24/2022	1757	10334	6343	2372	3732	3435

Sum of Value Row Labels	PA59 - Glen Alsace	PA61 - Mechanicsburg	PA62 - Hershey	PA63 - Wyomissing	PA64 - Royersford	PA65 - Coatesville
10/25/2022	1547	10427	6659	2389	4088	3549
10/26/2022	1612	10624	6758	2461	4079	3579
10/27/2022	1724	10599	6582	2389	4032	3394
10/28/2022	1529	10210	6770	2424	3879	3360
10/29/2022	1543	10159	6278	2401	3528	3327
10/30/2022	1658	10230	6617	2494	3728	3149
10/31/2022	1580	9776	6698	2396	3647	3500
11/1/2022	1594	9536	6485	2460	4183	2982
11/2/2022	1586	10436	6607	2406	4085	2990
11/3/2022	1568	9873	6945	2431	3760	3187
11/4/2022	1538	10714	6513	2401	4393	3493
11/5/2022	1546	10277	6705	2438	4184	3511
11/6/2022	1690	10633	7057	2570	3796	3387
11/7/2022	1582	10571	7129	2549	4304	3365
11/8/2022	1602	10017	6553	2375	4246	3715
11/9/2022	1532	10796	6522	2300	4297	3462
11/10/2022	1514	10081	6559	2370	4240	3347
11/11/2022	1526	10139	6782	2248	4298	3296
11/12/2022	1486	10479	6789	2295	4023	3279
11/13/2022	1646	10171	6600	2444	4136	3361
11/14/2022	1601	11185	6314	2354	3624	3396
11/15/2022	1557	11293	6476	2325	3811	3389
11/16/2022	1710	10877	6537	2395	3585	3396
11/17/2022	1600	10577	6393	2378	3917	3205
11/18/2022	1576	10257	6476	2355	4368	3425
11/19/2022	1617	10464	6345	2389	3649	3386
11/20/2022	1805	10431	6214	2438	3672	3158
11/21/2022	1706	11025	6361	2512	4044	3259
11/22/2022	1594	10801	6431	2494	3873	3594
11/23/2022	1694	11062	6346	2427	4136	3464
11/24/2022	1606	10665	5883	2486	3783	3574
11/25/2022	1604	10351	6130	2394	3855	2912
11/26/2022	1528	10415	5209	2348	4138	3049

Sum of Value Row Labels	PA59 - Glen Alsace	PA61 - Mechanicsburg	PA62 - Hershey	PA63 - Wyomissing	PA64 - Royersford	PA65 - Coatesville
11/27/2022	1596	10868	6045	2818	3901	3285
11/28/2022	1665	10625	6188	2536	4075	3540
11/29/2022	1562	10494	6342	2297	4050	3303
11/30/2022	1560	10541	6242	2245	4244	3184
12/1/2022	1605	10732	6447	2455	3925	3529
12/2/2022	1542	11042	6463	2302	4276	3457
12/3/2022	1572	10622	6375	2291	4157	3563
12/4/2022	1663	10774	6479	2427	4034	3651
12/5/2022	1664	10627	6639	2562	4204	3550
12/6/2022	1577	10650	6813	2374	4138	3389
12/7/2022	1553	10788	6350	2261	3418	3526
12/8/2022	1576	10831	6596	2425	4143	3275
12/9/2022	1535	10516	6517	2338	4214	3098
12/10/2022	1535	10899	6359	2384	4047	2806
12/11/2022	1616	10625	6486	2429	4021	3140
12/12/2022	1650	10683	6593	2578	4252	3306
12/13/2022	1588	11246	6773	2331	4254	3294
12/14/2022	1610	10759	6422	2493	4104	3051
12/15/2022	1682	10700	6466	2568	4119	3736
12/16/2022	1578	10739	6309	2506	3228	3704
12/17/2022	1589	11281	6204	2551	4223	3525
12/18/2022	1749	10838	6277	2699	4301	3528
12/19/2022	1656	11283	6082	2934	4656	3170
12/20/2022	1670	10986	6181	2647	4565	3496
12/21/2022	1632	11319	5928	2499	4445	3188
12/22/2022	1594	10954	5945	2503	4553	3551
12/23/2022	1605	10762	5459	2318	3774	3291
12/24/2022	1837	11865	5705	2819	3920	3212
12/25/2022	1650	11895	5616	2821	4059	3445
12/26/2022	1856	12316	5779	2807	4200	3290
12/27/2022	1715	12723	6826	2835	4508	3577
12/28/2022	1790	12338	6000	2743	4830	3737
12/29/2022	1715	12096	6350	2707	4425	3654

Sum of Value Row Labels	PA59 - Glen Alsace	PA61 - Mechanicsburg	PA62 - Hershey	PA63 - Wyomissing	PA64 - Royersford	PA65 - Coatesville
12/30/2022	1654	11792	6018	2629	4458	3660
12/31/2022	1659	11478	5883	2552	4326	3731
Grand Total	**611440**	**3907536**	**2399483**	**918693**	**1540982**	**1285150**
Average Day	1.6752	10.7056	6.5739	2.5170	4.2219	3.5210
Maximum Day	2.1470	12.7230	8.4210	2.9950	6.0920	4.1630
Max Day/Ave Da	1.2817	1.1884	1.2810	1.1899	1.4430	1.1823

Sum of Value Row Labels	PA66 - Lake Heritage	PA68 - Lehman Pike	PA71 - Milton	PA72 - Philipsburg	PA73 - Berwick	PA74 - Frackville	PA77 - Boggs
1/1/2022	131	1723	4262	1827	1282	276	19
1/2/2022	129	1557	4393	1858	1069	316	19
1/3/2022	122	1640	5369	1875	1308	282	16
1/4/2022	120	1398	5988	1821	1208	325	17
1/5/2022	117	1455	5544	1863	1151	259	28
1/6/2022	114	1394	5578	1867	1277	283	20
1/7/2022	122	1360	5370	1840	997	295	20
1/8/2022	121	1301	4893	1844	1321	303	20
1/9/2022	130	1526	4703	1903	1090	299	19
1/10/2022	117	1565	4851	1927	1305	286	18
1/11/2022	110	1272	5545	1890	1272	302	22
1/12/2022	124	1161	5430	2071	1437	308	21
1/13/2022	115	1300	5632	1980	1255	315	170
1/14/2022	116	1486	5336	1908	1034	328	23
1/15/2022	128	1381	4979	1888	1353	334	23
1/16/2022	132	1546	4806	1920	1283	344	23
1/17/2022	141	1504	4685	1995	1308	347	24
1/18/2022	120	2033	5702	1931	1548	383	21
1/19/2022	117	1763	5900	1954	1123	398	17
1/20/2022	113	1534	5898	1978	1338	384	22
1/21/2022	116	1571	5556	2038	1353	413	22
1/22/2022	126	1555	5135	2079	1159	348	21
1/23/2022	134	1518	4868	2110	1394	374	21
1/24/2022	116	1684	5798	2169	1338	341	17
1/25/2022	115	1653	5808	2039	1181	373	26
1/26/2022	120	1498	5844	2034	1383	314	17
1/27/2022	118	1418	5750	1935	1253	345	22
1/28/2022	120	1476	5888	2318	1244	318	22
1/29/2022	126	1453	5828	2123	1314	332	21
1/30/2022	135	1600	5431	2132	1236	353	21
1/31/2022	123	1904	5448	2332	1376	344	22
2/1/2022	119	1546	5892	2231	1135	321	22
2/2/2022	109	1489	5561	2190	1549	309	16

Sum of Value Row Labels	PA66 - Lake Heritage	PA68 - Lehman Pike	PA71 - Milton	PA72 - Philipsburg	PA73 - Berwick	PA74 - Frackville	PA77 - Boggs
2/3/2022	118	1358	5594	2122	1187	310	19
2/4/2022	118	1506	5460	2043	1315	308	19
2/5/2022	128	1544	4963	2092	1066	352	19
2/6/2022	127	1651	4857	2060	1402	346	19
2/7/2022	124	1799	5058	2069	1109	389	18
2/8/2022	113	1451	5872	1861	1392	307	22
2/9/2022	112	1496	5754	1966	1272	325	17
2/10/2022	117	1439	5751	1973	1151	308	20
2/11/2022	117	1549	5853	1959	1352	291	19
2/12/2022	125	1383	5464	1940	1077	319	19
2/13/2022	138	1628	4788	1870	1406	308	19
2/14/2022	127	1658	4906	1938	1128	286	22
2/15/2022	132	1491	5405	1906	1340	295	87
2/16/2022	123	1565	5405	1985	1188	300	27
2/17/2022	125	1358	5499	1863	1247	304	21
2/18/2022	125	1502	5172	1734	1340	294	21
2/19/2022	131	1581	5205	1902	1071	314	21
2/20/2022	143	1578	4732	1906	1287	311	20
2/21/2022	129	1792	5181	1937	1311	320	22
2/22/2022	116	1727	5667	1916	1114	284	17
2/23/2022	112	1482	5653	2041	1203	291	23
2/24/2022	111	1538	5630	2009	1225	283	18
2/25/2022	114	1440	5568	2016	1216	316	18
2/26/2022	130	1502	5263	1865	1044	314	18
2/27/2022	132	1426	4536	1942	1340	315	18
2/28/2022	116	1728	5280	1982	1281	304	22
3/1/2022	116	1461	5540	1865	1051	295	22
3/2/2022	115	1362	4975	1884	1313	282	17
3/3/2022	111	1505	5359	1847	1302	295	18
3/4/2022	119	1431	5310	1865	1052	268	18
3/5/2022	125	1255	5573	1817	1331	304	18
3/6/2022	138	1582	4543	1787	1181	310	18
3/7/2022	118	1785	5175	1874	1235	302	22

Sum of Value Row Labels	PA66 - Lake Heritage	PA68 - Lehman Pike	PA71 - Milton	PA72 - Philipsburg	PA73 - Berwick	PA74 - Frackville	PA77 - Boggs
3/8/2022	114	1304	5243	1901	1258	259	17
3/9/2022	114	1476	5565	1825	844	301	17
3/10/2022	122	1681	5528	1873	1433	305	19
3/11/2022	114	1354	5401	1862	1261	269	19
3/12/2022	135	1438	4839	1781	1235	290	19
3/13/2022	132	1540	4117	1701	1125	296	19
3/14/2022	117	1702	4775	1918	1302	295	17
3/15/2022	124	1478	5203	1927	1237	293	17
3/16/2022	118	1486	5446	1933	1152	289	18
3/17/2022	119	1639	5632	1845	1322	291	19
3/18/2022	121	1429	5253	1884	1354	301	19
3/19/2022	132	1213	5095	1776	1253	294	19
3/20/2022	141	1561	4541	1750	1283	316	19
3/21/2022	123	1814	4891	1872	1340	313	17
3/22/2022	122	1386	5763	1827	1266	269	22
3/23/2022	127	1330	5740	1839	1034	301	16
3/24/2022	119	1281	5818	1733	1260	292	18
3/25/2022	120	1395	5646	1817	1226	267	18
3/26/2022	134	1337	5159	1756	991	294	18
3/27/2022	146	1472	4792	1967	1331	294	17
3/28/2022	122	1609	5398	1895	1169	298	21
3/29/2022	118	1399	5701	1897	1214	280	17
3/30/2022	126	1371	5611	1854	1266	278	16
3/31/2022	123	1331	5707	1840	1086	288	17
4/1/2022	120	1338	5125	1867	1543	285	17
4/2/2022	133	1286	4742	1835	1199	297	18
4/3/2022	147	1459	4188	1739	1129	290	18
4/4/2022	128	1537	5036	1859	1271	280	21
4/5/2022	121	1440	5283	1815	1033	278	17
4/6/2022	122	1407	5335	1774	1277	272	17
4/7/2022	128	1389	4870	1771	1181	278	19
4/8/2022	129	1341	5163	1897	1066	291	19
4/9/2022	142	1356	5096	1828	1228	276	19

Sum of Value Row Labels	PA66 - Lake Heritage	PA68 - Lehman Pike	PA71 - Milton	PA72 - Philipsburg	PA73 - Berwick	PA74 - Frackville	PA77 - Boggs
4/10/2022	139	1413	5228	1805	1108	290	19
4/11/2022	126	1663	5401	1881	1157	291	16
4/12/2022	123	1483	5469	1882	1277	273	22
4/13/2022	119	1403	5644	1807	1232	289	22
4/14/2022	116	1443	4982	1846	1095	286	19
4/15/2022	128	1506	4563	1870	1273	295	19
4/16/2022	140	1421	3987	1780	1111	296	19
4/17/2022	135	1242	4670	1750	1223	318	19
4/18/2022	131	1845	4667	1807	1302	317	16
4/19/2022	113	1606	5431	1821	1134	226	16
4/20/2022	112	1453	5885	1850	1260	302	22
4/21/2022	114	1531	6248	1787	1084	361	21
4/22/2022	121	1605	6130	1893	1389	280	21
4/23/2022	129	1271	5621	1759	1019	291	20
4/24/2022	144	1506	5275	1845	1363	301	20
4/25/2022	121	2023	6409	1976	1263	307	16
4/26/2022	118	1357	6093	1945	1215	306	22
4/27/2022	118	1422	6235	1774	1283	343	17
4/28/2022	117	1458	5845	1868	1039	278	23
4/29/2022	124	1378	5947	1790	1292	207	23
4/30/2022	132	1439	5210	1787	1184	289	23
5/1/2022	141	1547	5261	1836	1212	304	23
5/2/2022	121	1528	5503	1801	1344	290	16
5/3/2022	119	1479	6391	1762	1149	282	21
5/4/2022	125	1304	5693	1804	1290	278	20
5/5/2022	116	1343	5672	1824	1181	290	20
5/6/2022	112	1464	6034	1838	1206	273	20
5/7/2022	123	1315	5654	1767	1057	281	19
5/8/2022	126	1531	5282	1830	1280	295	19
5/9/2022	120	1516	5602	1821	1249	316	22
5/10/2022	140	1571	6026	2021	1294	281	17
5/11/2022	120	1260	6005	1934	1327	318	23
5/12/2022	137	1472	6033	1889	1182	309	25

Sum of Value Row Labels	PA66 - Lake Heritage	PA68 - Lehman Pike	PA71 - Milton	PA72 - Philipsburg	PA73 - Berwick	PA74 - Frackville	PA77 - Boggs
5/13/2022	123	1429	5931	2008	1347	287	25
5/14/2022	128	1381	5510	1874	1149	287	25
5/15/2022	136	1531	5333	1950	1473	298	25
5/16/2022	122	1738	5601	1952	1298	312	21
5/17/2022	118	1467	5646	1872	1300	324	16
5/18/2022	120	1432	5983	1885	1362	295	16
5/19/2022	128	1557	5344	1915	1121	283	19
5/20/2022	121	1447	5778	1883	1348	281	19
5/21/2022	137	1443	5684	1897	1302	297	19
5/22/2022	151	1697	6039	2087	1473	372	18
5/23/2022	124	1645	5600	2051	1287	295	18
5/24/2022	115	1659	5779	1956	1426	343	22
5/25/2022	118	1602	6055	1917	1347	288	22
5/26/2022	191	1776	5908	1991	1326	300	18
5/27/2022	214	1509	5935	1943	1287	275	18
5/28/2022	144	1622	4675	1926	1167	310	18
5/29/2022	150	1792	4127	1977	1635	323	19
5/30/2022	166	1721	4935	2083	1491	361	19
5/31/2022	144	2112	5930	2176	1326	345	18
6/1/2022	138	1713	6723	2082	1448	377	21
6/2/2022	124	1608	6673	2007	1139	358	18
6/3/2022	130	1582	5912	1993	1390	340	18
6/4/2022	145	1454	5974	1961	1289	322	17
6/5/2022	151	1760	5613	2040	1251	304	17
6/6/2022	143	1868	5759	2098	1396	339	20
6/7/2022	127	1647	5904	2026	1196	322	17
6/8/2022	121	1812	6005	1892	1281	289	16
6/9/2022	127	1688	6036	1900	1229	343	19
6/10/2022	141	1476	6147	1983	1124	335	19
6/11/2022	130	1402	5541	1961	1238	294	18
6/12/2022	135	1610	4855	1927	1328	293	18
6/13/2022	136	1655	5745	2032	1255	341	16
6/14/2022	112	1556	6198	2049	1276	338	22

Sum of Value Row Labels	PA66 - Lake Heritage	PA68 - Lehman Pike	PA71 - Milton	PA72 - Philipsburg	PA73 - Berwick	PA74 - Frackville	PA77 - Boggs
6/15/2022	131	1583	6183	1947	1391	329	15
6/16/2022	125	1489	6122	2001	1200	292	19
6/17/2022	133	1522	6407	1988	1283	279	19
6/18/2022	149	1478	5762	1978	1114	295	19
6/19/2022	173	1617	5493	1961	1447	334	19
6/20/2022	140	1841	5858	2177	1213	322	17
6/21/2022	148	1582	6348	2111	1271	300	22
6/22/2022	119	1629	6231	2068	1421	288	16
6/23/2022	124	1440	6220	1972	1164	294	23
6/24/2022	135	1491	6051	1945	1289	307	23
6/25/2022	155	1502	5337	2047	1351	292	22
6/26/2022	151	1711	5130	2008	1229	316	22
6/27/2022	137	1894	4902	1984	1300	324	28
6/28/2022	139	1366	5543	2086	1399	305	22
6/29/2022	141	1619	5796	2069	1310	265	28
6/30/2022	158	1762	5603	2000	1343	351	25
7/1/2022	143	1533	4992	2252	1396	319	24
7/2/2022	157	1577	5229	2239	1181	308	24
7/3/2022	150	1952	4882	2066	1329	315	24
7/4/2022	48	1779	4662	2039	1347	364	24
7/5/2022	141	2178	6002	2046	1363	328	23
7/6/2022	123	1685	6003	2004	1265	295	23
7/7/2022	128	1429	6773	1942	1429	309	24
7/8/2022	128	1596	6534	2091	1326	297	23
7/9/2022	133	1355	6332	2079	1432	294	23
7/10/2022	140	1517	5953	2026	1402	311	23
7/11/2022	131	1955	6214	2127	1304	345	28
7/12/2022	134	1517	6482	2027	1455	324	23
7/13/2022	139	1414	6530	2027	1268	308	22
7/14/2022	137	1592	6571	2040	1390	317	18
7/15/2022	145	1459	6514	1992	1219	317	17
7/16/2022	130	1618	6272	2059	1377	321	17
7/17/2022	132	1424	5634	1969	1320	295	17

Sum of Value Row Labels	PA66 - Lake Heritage	PA68 - Lehman Pike	PA71 - Milton	PA72 - Philipsburg	PA73 - Berwick	PA74 - Frackville	PA77 - Boggs
7/18/2022	124	1788	5753	1914	1171	318	21
7/19/2022	133	1584	6219	1859	1365	282	21
7/20/2022	141	1529	6696	1945	1312	325	23
7/21/2022	143	1506	6725	1996	1248	312	24
7/22/2022	153	1616	6388	1999	1371	305	24
7/23/2022	187	1577	6204	1996	1306	316	24
7/24/2022	158	1609	5118	2114	1253	331	23
7/25/2022	129	1741	5888	2040	1341	360	23
7/26/2022	144	1572	6217	1952	1320	307	23
7/27/2022	132	1525	5939	1875	1165	329	27
7/28/2022	135	1432	6241	1995	1402	313	25
7/29/2022	131	1471	6144	2006	1069	300	26
7/30/2022	142	1656	5428	1975	1420	320	25
7/31/2022	147	1566	5359	1992	1279	353	26
8/1/2022	133	1820	6422	1964	1263	316	25
8/2/2022	129	1425	6355	2090	1417	305	26
8/3/2022	142	1411	6390	2002	1226	364	26
8/4/2022	140	1530	6306	2019	1380	329	25
8/5/2022	129	1523	6256	1984	1385	316	26
8/6/2022	138	1336	6212	1940	1094	363	25
8/7/2022	150	1679	5666	1928	1400	331	25
8/8/2022	159	1979	6159	1930	1280	326	23
8/9/2022	139	1511	6415	1961	1286	338	27
8/10/2022	125	1520	6402	2017	1418	329	21
8/11/2022	137	1454	6136	2043	1180	298	26
8/12/2022	140	1556	6308	2072	1399	310	26
8/13/2022	150	1503	5863	1997	1273	330	26
8/14/2022	179	1541	4817	1930	1257	319	26
8/15/2022	127	1773	6109	2131	1367	310	22
8/16/2022	132	1491	6258	1957	1161	327	27
8/17/2022	133	1456	6146	1869	1445	290	32
8/18/2022	143	1570	6399	1904	1307	322	25
8/19/2022	145	1429	6054	1842	1234	312	25

Sum of Value Row Labels	PA66 - Lake Heritage	PA68 - Lehman Pike	PA71 - Milton	PA72 - Philipsburg	PA73 - Berwick	PA74 - Frackville	PA77 - Boggs
8/20/2022	152	1539	6496	1894	1445	331	25
8/21/2022	144	1601	5751	1860	1129	313	24
8/22/2022	140	1658	6395	1896	1411	294	22
8/23/2022	151	1546	6410	1873	1240	309	27
8/24/2022	136	1411	6620	1927	1213	303	22
8/25/2022	135	1426	6901	1921	1380	323	23
8/26/2022	144	1509	6653	1998	1109	312	23
8/27/2022	161	1442	6468	1948	1321	314	23
8/28/2022	168	1483	5930	1970	1243	325	22
8/29/2022	173	1792	6133	2026	1341	332	22
8/30/2022	139	1493	6599	1935	1276	295	24
8/31/2022	150	1371	6717	1911	1217	297	23
9/1/2022	179	1467	6682	1967	1364	312	23
9/2/2022	157	1470	6225	1994	1171	310	23
9/3/2022	179	1412	5198	1863	1288	300	23
9/4/2022	209	1558	4843	1825	1207	308	23
9/5/2022	156	1557	4652	1665	1256	311	22
9/6/2022	144	1504	5883	2147	1337	300	22
9/7/2022	130	1488	6431	2005	1116	288	18
9/8/2022	159	1390	6474	1886	1348	302	22
9/9/2022	137	1268	5973	1817	1304	293	22
9/10/2022	140	1227	5556	1886	1079	318	22
9/11/2022	140	1423	5542	1884	1389	305	21
9/12/2022	127	1637	6074	1901	1318	304	18
9/13/2022	129	1366	5740	1863	1314	287	23
9/14/2022	132	1468	6513	1907	1367	305	17
9/15/2022	127	1122	6570	1902	1133	277	23
9/16/2022	131	1467	6282	1941	1358	298	23
9/17/2022	138	1312	5677	1952	1239	295	22
9/18/2022	147	1523	5386	1883	1287	312	22
9/19/2022	135	1657	5782	1866	1331	309	18
9/20/2022	135	1357	6466	1923	1350	306	22
9/21/2022	139	1344	6120	1908	1150	291	23

Sum of Value Row Labels	PA66 - Lake Heritage	PA68 - Lehman Pike	PA71 - Milton	PA72 - Philipsburg	PA73 - Berwick	PA74 - Frackville	PA77 - Boggs
9/22/2022	126	1334	6469	1934	1333	292	19
9/23/2022	130	1344	6214	1872	1227	307	19
9/24/2022	133	1157	5601	1798	1164	297	19
9/25/2022	144	1400	5101	1807	1369	309	18
9/26/2022	132	1741	6166	1865	1124	303	22
9/27/2022	127	1360	6264	1863	1336	302	18
9/28/2022	133	1478	6535	1895	1165	310	17
9/29/2022	141	1363	6675	1747	1146	314	20
9/30/2022	137	1266	6013	1728	1323	292	20
10/1/2022	141	1252	5411	1827	1141	313	20
10/2/2022	147	1246	5590	1882	1314	300	20
10/3/2022	133	1709	6073	1834	1268	299	18
10/4/2022	149	1275	6063	1831	1151	294	17
10/5/2022	149	1256	6191	1892	1199	297	21
10/6/2022	133	1200	5935	1873	1342	297	21
10/7/2022	135	1419	5666	1840	1219	310	21
10/8/2022	137	1084	5538	1881	1156	291	20
10/9/2022	139	1427	5204	1756	1328	314	20
10/10/2022	136	1653	5647	1902	1191	309	18
10/11/2022	120	1359	5238	1891	1312	307	22
10/12/2022	117	1363	6192	1864	1145	304	18
10/13/2022	116	1290	5731	1878	1346	285	20
10/14/2022	118	1285	5909	1883	1111	300	18
10/15/2022	129	1316	5639	1820	1285	316	18
10/16/2022	135	1325	4966	1805	1143	311	18
10/17/2022	125	1636	5792	1906	1326	323	18
10/18/2022	121	1219	5852	1819	1289	324	18
10/19/2022	119	1398	5734	1851	1078	276	23
10/20/2022	117	1418	6013	1851	1371	292	22
10/21/2022	118	1392	5972	1803	1205	291	21
10/22/2022	132	1158	5291	1786	1164	302	21
10/23/2022	133	1559	5249	1920	1357	313	21
10/24/2022	120	1530	5180	1896	1145	306	18

Sum of Value Row Labels	PA66 - Lake Heritage	PA68 - Lehman Pike	PA71 - Milton	PA72 - Philipsburg	PA73 - Berwick	PA74 - Frackville	PA77 - Boggs
10/25/2022	115	1263	6324	1873	1291	304	21
10/26/2022	115	1231	5990	1837	1270	296	23
10/27/2022	121	1220	6310	1892	1161	297	22
10/28/2022	116	1219	6143	1891	1300	304	22
10/29/2022	124	1263	5613	1893	1073	300	22
10/30/2022	132	1294	5112	1915	1388	314	22
10/31/2022	117	1581	5473	1931	1171	292	22
11/1/2022	114	1248	5961	1888	1205	303	23
11/2/2022	118	1197	5820	1841	1227	301	22
11/3/2022	111	1150	5878	1838	1151	296	22
11/4/2022	118	1267	6148	1917	1274	296	22
11/5/2022	127	1269	5580	1819	1166	294	22
11/6/2022	135	1346	5571	1989	1249	319	22
11/7/2022	121	1486	5805	1928	1376	315	19
11/8/2022	115	1149	5778	1912	1089	305	23
11/9/2022	112	1391	5748	1832	1280	303	17
11/10/2022	110	1199	5556	1848	1075	186	21
11/11/2022	116	1196	5735	1782	1328	353	21
11/12/2022	126	1339	4444	1757	1030	364	21
11/13/2022	134	1249	5984	1896	1372	336	20
11/14/2022	121	1533	5381	1995	1122	299	17
11/15/2022	114	1320	5878	2005	1188	300	23
11/16/2022	119	1218	5749	1840	1297	315	18
11/17/2022	119	1315	5614	1909	1215	286	20
11/18/2022	117	1310	5629	1936	1143	304	20
11/19/2022	128	1101	5843	1952	1317	308	20
11/20/2022	133	1452	5607	1914	1129	322	20
11/21/2022	128	1639	5594	1961	1330	322	19
11/22/2022	127	1454	5847	2014	1214	318	19
11/23/2022	135	1709	6058	1941	1269	323	20
11/24/2022	142	1394	4745	2117	1268	339	20
11/25/2022	129	1472	4255	2219	1166	289	20
11/26/2022	131	1758	3770	2311	1321	314	20

Sum of Value Row Labels	PA66 - Lake Heritage	PA68 - Lehman Pike	PA71 - Milton	PA72 - Philipsburg	PA73 - Berwick	PA74 - Frackville	PA77 - Boggs
11/27/2022	131	1284	4413	2265	1151	310	21
11/28/2022	122	1608	4679	2025	1358	311	21
11/29/2022	111	1280	5782	1912	1124	290	21
11/30/2022	113	1292	5651	1914	1343	301	18
12/1/2022	111	1170	5910	1856	1267	266	20
12/2/2022	110	1230	6128	1991	1126	311	20
12/3/2022	121	1176	5598	1835	1345	291	20
12/4/2022	130	1389	5215	1985	1123	306	20
12/5/2022	116	1543	5494	2062	1353	302	21
12/6/2022	112	1377	6480	2029	1267	293	17
12/7/2022	115	1421	5565	2002	1131	282	22
12/8/2022	113	1149	6131	2007	1335	303	18
12/9/2022	114	1225	5982	2076	1224	299	18
12/10/2022	116	1141	5439	2033	1107	299	18
12/11/2022	124	1342	5401	1900	1366	312	19
12/12/2022	114	1517	5292	1918	1116	310	22
12/13/2022	213	1239	6051	1868	1365	185	16
12/14/2022	150	1358	6072	1861	1288	286	24
12/15/2022	114	1306	5533	1981	1149	364	20
12/16/2022	109	1239	5926	1919	1293	298	20
12/17/2022	124	1365	5614	1914	1291	322	20
12/18/2022	128	1338	4914	1943	1328	322	20
12/19/2022	115	1507	5406	1895	1203	305	17
12/20/2022	113	1302	5953	1922	1348	304	23
12/21/2022	116	1285	5351	1906	1144	311	16
12/22/2022	117	1220	5661	1929	1306	300	21
12/23/2022	135	1224	4822	1730	1338	311	21
12/24/2022	133	1629	4918	2043	1302	343	21
12/25/2022	133	1052	4437	2285	1529	339	21
12/26/2022	137	1595	4633	2342	1613	323	21
12/27/2022	124	1982	5031	2367	1548	346	20
12/28/2022	117	1596	5631	2400	1451	362	22
12/29/2022	114	1940	4392	2336	1574	410	23

Sum of Value Row Labels	PA66 - Lake Heritage	PA68 - Lehman Pike	PA71 - Milton	PA72 - Philipsburg	PA73 - Berwick	PA74 - Frackville	PA77 - Boggs
12/30/2022	117	1406	5445	2214	1550	365	23
12/31/2022	130	1450	4476	2180	1368	316	23
Grand Total	**47547**	**541279**	**2059520**	**707495**	**461256**	**112616**	**7745**
Average Day	0.1303	1.4830	5.6425	1.9383	1.2637	0.3085	0.0212
Maximum Day	0.2140	2.1780	6.9010	2.4000	1.6350	0.4130	0.1700
Max Day/Ave Da	1.6428	1.4687	1.2230	1.2382	1.2938	1.3386	8.0116

Sum of Value Row Labels	PA78 - Nittany	PA79 - Wildcat	PA84 - McEwensville	PA88 - Turbotville	PA91 - Scranton	Grand Total
1/1/2022	125	5	17	60	44232	178460
1/2/2022	121	5	17	70	45611	180441
1/3/2022	139	5	17	65	46572	188160
1/4/2022	136	5	16	74	48750	191995
1/5/2022	137	5	18	53	47564	182408
1/6/2022	133	5	19	81	48486	186571
1/7/2022	131	5	15	77	47326	186485
1/8/2022	129	5	15	66	47182	186141
1/9/2022	135	5	21	64	47748	185661
1/10/2022	132	5	17	52	48485	191469
1/11/2022	134	5	15	73	48564	191780
1/12/2022	143	9	13	59	49882	196523
1/13/2022	134	9	13	57	47032	194686
1/14/2022	137	6	21	110	50530	191922
1/15/2022	139	5	15	42	49730	192100
1/16/2022	137	5	23	80	50295	194554
1/17/2022	139	5	16	49	51838	198610
1/18/2022	139	5	16	77	53079	201803
1/19/2022	136	4	13	67	53294	201284
1/20/2022	139	5	15	67	53060	202479
1/21/2022	146	4	18	70	53254	200676
1/22/2022	143	5	14	59	53123	201770
1/23/2022	140	5	19	68	53823	202679
1/24/2022	147	5	19	58	52982	206755
1/25/2022	145	5	12	73	52211	205158
1/26/2022	143	5	15	73	53171	204215
1/27/2022	148	4	15	80	52700	202112
1/28/2022	145	5	21	66	54129	206746
1/29/2022	145	5	12	65	54255	203853
1/30/2022	150	5	19	60	56427	211397
1/31/2022	152	5	19	73	57312	213931
2/1/2022	159	5	16	68	55713	210649
2/2/2022	150	5	15	77	55345	210647

Sum of Value Row Labels	PA78 - Nittany	PA79 - Wildcat	PA84 - McEwensville	PA88 - Turbotville	PA91 - Scranton	Grand Total
2/3/2022	134	4	15	56	54271	206438
2/4/2022	142	5	16	77	55207	205910
2/5/2022	135	4	23	66	54335	202903
2/6/2022	147	5	16	63	53427	206083
2/7/2022	142	5	18	81	54443	208182
2/8/2022	148	4	16	57	54648	204977
2/9/2022	146	5	18	68	54206	206883
2/10/2022	143	5	14	62	53093	202972
2/11/2022	141	5	14	77	53036	200070
2/12/2022	138	5	15	42	52323	202097
2/13/2022	140	5	19	81	51899	198483
2/14/2022	144	5	16	64	52388	201475
2/15/2022	153	4	13	79	53357	202700
2/16/2022	146	5	16	53	49918	198010
2/17/2022	145	4	13	96	52756	201668
2/18/2022	148	5	66	74	52726	196545
2/19/2022	165	5	27	81	50940	196487
2/20/2022	160	5	16	47	51409	198190
2/21/2022	159	5	15	50	52957	203893
2/22/2022	145	4	17	67	53325	201722
2/23/2022	151	5	13	72	51976	202157
2/24/2022	138	5	13	71	52432	200024
2/25/2022	139	5	15	47	51813	196457
2/26/2022	135	5	15	71	51439	198618
2/27/2022	134	5	18	63	50867	198339
2/28/2022	134	5	13	54	51684	201482
3/1/2022	137	5	21	67	51070	195421
3/2/2022	137	5	16	55	50748	190247
3/3/2022	135	5	10	64	50771	194015
3/4/2022	128	4	14	75	50551	193654
3/5/2022	131	5	13	52	49715	191721
3/6/2022	134	5	17	51	49258	190719
3/7/2022	128	5	17	63	50337	195122

Sum of Value Row Labels	PA78 - Nittany	PA79 - Wildcat	PA84 - McEwensville	PA88 - Turbotville	PA91 - Scranton	Grand Total
3/8/2022	134	5	11	61	50734	187760
3/9/2022	123	5	17	62	49784	191281
3/10/2022	125	4	9	53	49601	187015
3/11/2022	135	5	19	69	49447	186931
3/12/2022	128	6	16	34	48818	184578
3/13/2022	124	5	17	56	48438	183518
3/14/2022	132	5	11	92	50330	189251
3/15/2022	132	5	19	52	50204	201770
3/16/2022	139	5	14	67	50795	195797
3/17/2022	134	5	15	68	49422	191117
3/18/2022	132	5	12	53	49230	194056
3/19/2022	127	5	11	53	48498	189193
3/20/2022	128	5	17	47	48777	188613
3/21/2022	136	4	15	52	49840	186700
3/22/2022	125	5	14	72	50124	195769
3/23/2022	125	5	19	57	49145	190151
3/24/2022	133	5	11	52	48476	187183
3/25/2022	132	4	12	54	48415	190102
3/26/2022	130	5	14	49	47097	186609
3/27/2022	128	5	16	51	47308	186479
3/28/2022	128	5	16	47	48613	193070
3/29/2022	136	5	14	55	49458	192648
3/30/2022	131	5	13	57	47708	192908
3/31/2022	125	4	13	51	48694	191560
4/1/2022	130	4	13	58	48420	191368
4/2/2022	128	5	12	50	47617	186678
4/3/2022	126	5	16	44	46436	184917
4/4/2022	139	5	14	52	48880	193683
4/5/2022	135	5	16	51	49136	190093
4/6/2022	133	4	15	53	48193	186687
4/7/2022	127	5	14	68	48571	193505
4/8/2022	130	5	16	44	48075	185660
4/9/2022	126	5	19	43	47796	184946

Sum of Value Row Labels	PA78 - Nittany	PA79 - Wildcat	PA84 - McEwensville	PA88 - Turbotville	PA91 - Scranton	Grand Total
4/10/2022	126	5	25	51	47025	187149
4/11/2022	130	5	23	50	48391	189366
4/12/2022	142	4	16	65	48966	192097
4/13/2022	146	5	18	44	48728	192316
4/14/2022	138	5	16	56	48533	191755
4/15/2022	133	5	21	50	48161	186237
4/16/2022	124	5	23	50	47053	187517
4/17/2022	122	5	22	41	45670	187172
4/18/2022	134	5	21	42	47143	188776
4/19/2022	127	5	22	49	48063	188411
4/20/2022	136	5	19	63	48320	192464
4/21/2022	128	5	21	49	47511	188447
4/22/2022	146	5	18	63	48913	194043
4/23/2022	131	5	18	51	46888	189857
4/24/2022	140	5	22	48	47974	196715
4/25/2022	139	5	23	51	49122	199145
4/26/2022	135	5	22	54	47506	191298
4/27/2022	137	5	19	53	48145	188669
4/28/2022	136	5	23	54	47991	194938
4/29/2022	138	5	16	68	48332	190918
4/30/2022	140	5	18	54	47525	192854
5/1/2022	130	5	22	48	47717	190334
5/2/2022	137	4	19	48	48915	195763
5/3/2022	141	5	23	74	48563	195260
5/4/2022	143	4	22	41	48128	191877
5/5/2022	147	5	17	63	49159	190702
5/6/2022	136	4	17	56	47989	190829
5/7/2022	155	5	14	42	46109	180430
5/8/2022	160	5	12	58	47400	187391
5/9/2022	162	5	16	60	48781	193700
5/10/2022	153	6	13	71	49153	193197
5/11/2022	148	5	12	53	49790	198643
5/12/2022	158	5	16	65	50615	200142

Sum of Value Row Labels	PA78 - Nittany	PA79 - Wildcat	PA84 - McEwensville	PA88 - Turbotville	PA91 - Scranton	Grand Total
5/13/2022	149	5	16	66	49778	198548
5/14/2022	135	5	16	57	49722	195012
5/15/2022	138	6	16	37	50236	199447
5/16/2022	138	5	13	72	49432	197656
5/17/2022	153	5	20	68	49163	192315
5/18/2022	150	5	12	59	49041	198449
5/19/2022	150	5	17	61	49176	193767
5/20/2022	147	7	12	66	50007	201028
5/21/2022	154	6	16	61	50347	202970
5/22/2022	168	7	24	53	50622	202692
5/23/2022	160	6	13	65	50429	198587
5/24/2022	149	5	14	64	50143	196501
5/25/2022	157	5	13	57	50050	198741
5/26/2022	148	8	14	82	50174	200360
5/27/2022	144	5	16	54	48814	192009
5/28/2022	149	5	17	55	47943	188430
5/29/2022	157	6	13	54	48835	190840
5/30/2022	172	8	16	56	50050	201463
5/31/2022	174	6	20	57	51802	212824
6/1/2022	310	5	14	59	50205	209594
6/2/2022	150	6	15	37	49386	195037
6/3/2022	148	5	15	98	49507	198506
6/4/2022	149	5	15	25	49273	196273
6/5/2022	145	5	19	62	48925	197105
6/6/2022	152	5	12	79	50621	205047
6/7/2022	145	5	15	68	49716	198780
6/8/2022	154	5	10	37	49051	193312
6/9/2022	145	5	14	45	48269	193673
6/10/2022	150	4	13	59	49467	196018
6/11/2022	141	5	14	69	48537	192311
6/12/2022	144	5	19	48	46561	189796
6/13/2022	157	5	16	114	48990	201694
6/14/2022	141	5	16	78	49455	192940

Sum of Value Row Labels	PA78 - Nittany	PA79 - Wildcat	PA84 - McEwensville	PA88 - Turbotville	PA91 - Scranton	Grand Total
6/15/2022	146	6	14	57	50647	204175
6/16/2022	139	5	14	49	48978	199343
6/17/2022	144	4	14	35	49690	200555
6/18/2022	139	5	11	62	47000	196600
6/19/2022	153	5	14	62	46909	194476
6/20/2022	158	5	15	40	49196	203554
6/21/2022	149	5	15	53	50012	206873
6/22/2022	146	4	14	50	50638	210140
6/23/2022	151	5	16	47	49288	198429
6/24/2022	146	5	20	48	48854	205961
6/25/2022	146	5	17	72	49260	208015
6/26/2022	141	5	20	55	49432	201181
6/27/2022	154	5	14	47	50366	205225
6/28/2022	153	5	17	54	49509	203274
6/29/2022	167	6	17	90	50521	208718
6/30/2022	158	5	17	78	52189	212451
7/1/2022	158	6	17	49	52394	208309
7/2/2022	132	5	18	59	49080	192576
7/3/2022	140	5	24	34	48074	206951
7/4/2022	153	5	19	61	48911	202924
7/5/2022	147	5	15	42	49404	204784
7/6/2022	160	14	18	45	52408	206228
7/7/2022	161	5	15	47	51696	210704
7/8/2022	166	5	21	54	52654	209741
7/9/2022	149	7	22	55	52303	208767
7/10/2022	161	7	0	43	52195	208084
7/11/2022	178	5	18	46	52935	220391
7/12/2022	204	5	18	50	51610	217365
7/13/2022	139	6	16	48	53126	219640
7/14/2022	181	5	16	53	52843	219267
7/15/2022	170	6	19	45	53807	218460
7/16/2022	167	6	19	48	51521	208255
7/17/2022	159	6	19	47	51235	204200

Sum of Value Row Labels	PA78 - Nittany	PA79 - Wildcat	PA84 - McEwensville	PA88 - Turbotville	PA91 - Scranton	Grand Total
7/18/2022	143	4	18	40	51226	199254
7/19/2022	165	5	18	43	52066	207104
7/20/2022	160	5	18	66	53447	213832
7/21/2022	164	7	18	68	54548	217302
7/22/2022	162	6	16	47	54402	213488
7/23/2022	161	5	18	68	52963	214682
7/24/2022	146	6	18	41	51744	207244
7/25/2022	143	5	19	37	51105	208729
7/26/2022	154	5	21	53	52106	209599
7/27/2022	160	5	14	37	52134	205141
7/28/2022	156	4	18	56	52383	206597
7/29/2022	146	5	13	37	51886	203028
7/30/2022	153	5	22	51	51133	201367
7/31/2022	149	6	23	48	50447	203882
8/1/2022	158	4	23	41	51198	204204
8/2/2022	170	3	11	46	52079	205610
8/3/2022	210	4	19	54	52470	209996
8/4/2022	124	4	19	49	52839	210510
8/5/2022	155	4	15	40	51736	206042
8/6/2022	152	4	21	53	51399	202470
8/7/2022	153	4	18	59	49748	203882
8/8/2022	169	3	17	37	51424	209602
8/9/2022	156	4	17	49	50112	206749
8/10/2022	165	4	19	38	50453	205125
8/11/2022	166	3	18	73	50976	209896
8/12/2022	166	3	23	27	50841	207375
8/13/2022	153	3	18	65	50292	202648
8/14/2022	154	4	18	32	49840	203594
8/15/2022	151	4	15	43	51654	209521
8/16/2022	149	3	21	67	51490	207948
8/17/2022	157	4	18	69	51388	208121
8/18/2022	167	4	20	49	50594	206156
8/19/2022	155	4	20	66	51822	211051

Sum of Value Row Labels	PA78 - Nittany	PA79 - Wildcat	PA84 - McEwensville	PA88 - Turbotville	PA91 - Scranton	Grand Total
8/20/2022	149	6	20	63	50146	210067
8/21/2022	138	5	19	38	49230	200566
8/22/2022	168	4	22	46	49372	203741
8/23/2022	180	3	18	61	47768	198894
8/24/2022	180	3	19	59	49273	204653
8/25/2022	188	3	20	52	49367	207755
8/26/2022	160	4	21	57	50325	208746
8/27/2022	144	5	20	39	50993	205220
8/28/2022	148	4	18	46	49104	209291
8/29/2022	159	4	24	68	51428	211139
8/30/2022	149	3	16	49	49026	204683
8/31/2022	153	3	18	55	48243	202051
9/1/2022	153	3	19	62	49166	205536
9/2/2022	154	4	22	71	49772	205010
9/3/2022	138	4	19	38	46751	200893
9/4/2022	139	5	20	44	46481	187679
9/5/2022	149	4	22	39	45711	192973
9/6/2022	144	4	19	49	47026	194880
9/7/2022	148	3	23	64	47223	193536
9/8/2022	155	4	19	66	48820	194892
9/9/2022	150	3	16	55	49233	199297
9/10/2022	142	3	14	55	47907	194917
9/11/2022	142	4	14	49	46889	192024
9/12/2022	150	3	13	64	48222	195310
9/13/2022	151	3	14	49	48270	194246
9/14/2022	154	3	13	72	48322	194338
9/15/2022	160	3	13	43	48867	199413
9/16/2022	157	4	16	56	48200	194060
9/17/2022	153	3	14	50	47244	193618
9/18/2022	149	4	16	42	47800	196104
9/19/2022	154	3	21	38	47837	198219
9/20/2022	154	3	12	49	48269	195280
9/21/2022	153	3	15	49	47869	197317

Sum of Value Row Labels	PA78 - Nittany	PA79 - Wildcat	PA84 - McEwensville	PA88 - Turbotville	PA91 - Scranton	Grand Total
9/22/2022	154	3	13	49	48467	194449
9/23/2022	151	3	14	62	46397	190778
9/24/2022	142	5	18	43	45487	186458
9/25/2022	147	4	8	35	46410	190698
9/26/2022	166	3	19	60	48030	192398
9/27/2022	172	3	12	49	49296	195016
9/28/2022	158	3	18	56	48981	191130
9/29/2022	152	3	10	51	48131	195112
9/30/2022	153	3	14	59	47224	190576
10/1/2022	141	4	14	38	47238	186976
10/2/2022	148	4	14	46	46451	188451
10/3/2022	147	3	30	64	47716	191265
10/4/2022	146	4	16	49	47595	193883
10/5/2022	153	3	14	49	47895	191734
10/6/2022	155	3	16	60	47900	192554
10/7/2022	154	3	14	65	47362	193727
10/8/2022	148	3	11	48	46136	183850
10/9/2022	148	4	18	42	45629	186442
10/10/2022	158	3	13	38	47523	192994
10/11/2022	159	3	15	49	48108	192791
10/12/2022	169	3	15	42	46929	192320
10/13/2022	154	3	22	57	46552	187852
10/14/2022	151	3	12	66	46603	188901
10/15/2022	147	3	13	47	44959	185294
10/16/2022	151	4	13	34	45050	188428
10/17/2022	159	3	16	63	46456	188438
10/18/2022	162	4	13	49	46762	191194
10/19/2022	159	3	13	56	46177	185854
10/20/2022	161	3	14	47	46895	189066
10/21/2022	155	4	11	60	46933	187131
10/22/2022	146	4	10	40	45774	185857
10/23/2022	148	4	19	41	44850	188143
10/24/2022	160	3	12	56	45473	187751

Sum of Value Row Labels	PA78 - Nittany	PA79 - Wildcat	PA84 - McEwensville	PA88 - Turbotville	PA91 - Scranton	Grand Total
10/25/2022	158	3	12	49	45481	190655
10/26/2022	149	3	19	61	46472	189385
10/27/2022	150	3	6	65	44748	187408
10/28/2022	158	3	16	51	45865	186291
10/29/2022	155	3	15	51	45469	182678
10/30/2022	141	3	16	40	46127	184424
10/31/2022	149	3	13	43	46767	185952
11/1/2022	147	4	11	49	46691	186553
11/2/2022	153	3	13	50	45890	187759
11/3/2022	144	3	15	51	45758	187262
11/4/2022	148	3	16	49	45757	186095
11/5/2022	136	4	16	58	45015	187805
11/6/2022	150	4	15	39	46278	188736
11/7/2022	155	3	10	42	46185	189960
11/8/2022	146	3	15	49	46141	186385
11/9/2022	146	3	10	70	46678	188158
11/10/2022	150	3	15	46	45703	183734
11/11/2022	130	3	7	52	45745	185417
11/12/2022	138	4	7	59	45282	183400
11/13/2022	133	4	26	39	44822	182526
11/14/2022	142	3	16	101	45755	186413
11/15/2022	144	4	17	49	45334	183902
11/16/2022	142	3	7	61	45548	186317
11/17/2022	139	3	14	50	45573	188142
11/18/2022	139	4	15	65	45103	183556
11/19/2022	134	3	12	45	44792	179602
11/20/2022	139	4	15	43	44418	188685
11/21/2022	161	3	16	35	44991	190242
11/22/2022	172	4	18	49	44704	192224
11/23/2022	155	3	11	34	46268	193428
11/24/2022	142	4	16	55	42261	185831
11/25/2022	138	4	16	31	41512	181959
11/26/2022	139	4	13	59	41148	177727

Sum of Value Row Labels	PA78 - Nittany	PA79 - Wildcat	PA84 - McEwensville	PA88 - Turbotville	PA91 - Scranton	Grand Total
11/27/2022	141	4	13	53	42097	179988
11/28/2022	141	4	20	39	43613	186932
11/29/2022	147	3	9	49	43855	185291
11/30/2022	143	3	14	37	44444	181091
12/1/2022	147	3	14	53	44031	185583
12/2/2022	154	3	14	46	44446	184494
12/3/2022	144	3	12	47	42467	181564
12/4/2022	145	4	15	30	43320	183049
12/5/2022	150	3	16	57	43912	187490
12/6/2022	142	3	15	49	44263	185335
12/7/2022	146	3	15	53	43935	184475
12/8/2022	144	3	13	56	44391	186771
12/9/2022	148	4	14	58	44225	183439
12/10/2022	141	4	14	50	42756	182596
12/11/2022	142	5	17	39	42993	181615
12/12/2022	142	4	16	74	44183	187889
12/13/2022	149	4	11	49	44892	187893
12/14/2022	144	3	14	56	45338	183781
12/15/2022	143	4	14	43	44981	185230
12/16/2022	143	4	10	61	44743	183039
12/17/2022	143	4	17	64	43262	182600
12/18/2022	139	4	13	95	43207	183074
12/19/2022	147	4	16	66	43224	185852
12/20/2022	169	4	17	119	45012	189033
12/21/2022	159	4	12	60	45640	187347
12/22/2022	152	4	16	111	45077	190871
12/23/2022	153	4	15	71	45271	189869
12/24/2022	159	4	16	101	46007	195993
12/25/2022	159	4	20	97	46146	200558
12/26/2022	151	4	20	66	47494	208875
12/27/2022	200	4	20	134	47538	214486
12/28/2022	155	4	20	136	51489	218828
12/29/2022	158	4	20	59	52081	221263

Sum of Value Row Labels	PA78 - Nittany	PA79 - Wildcat	PA84 - McEwensville	PA88 - Turbotville	PA91 - Scranton	Grand Total
12/30/2022	160	4	20	56	51764	217393
12/31/2022	157	5	20	48	51220	213510
Grand Total	**53832**	**1631**	**5959**	**20766**	**17838887**	**71556449**
Average Day	0.1475	0.0045	0.0163	0.0569	48.8737	196.0451
Maximum Day	0.3100	0.0140	0.0660	0.1360	57.3120	221.2630
Max Day/Ave Da	2.1019	3.1330	4.0426	2.3904	1.1727	1.1286

Table II-1
Residential Monitoring Points
2013 Average and Maximum Consumption (gallons)

	Daily				Hourly			
Customer	**Average**	**Maximum**	**Ratio**	**Date of Maximum**	**Average**	**Maximum**	**Ratio**	**Date & Time of Maximum**
Low Density								
Shire Oaks	26,684	48,611	1.82	05/19/13	1,112	5,904	5.31	11/18/13 9:00
Linnwood	21,654	31,310	1.45	06/19/13	902	2,582	2.86	5/16/13 19:00
Sandy Ridge	2,530	7,486	2.96	06/02/13	105	1,174	11.14	6/20/13 21:00
Sutton Hills	13,579	20,783	1.53	07/20/13				
Medium Density								
Thornburgh & Rosslyn	108,617	172,574	1.59	08/05/13				
Winter Road	20,019	27,659	1.38	05/19/13	834	2,571	3.08	5/27/13 11:00
Ridge Road Booster	5,800	10,352	1.78	07/18/13	242	1,638	6.78	5/10/13 17:00
High Density								
North Strabane	17,664	40,781	2.31	08/17/13	736	3,594	4.88	9/2/13 15:00
Millview	70,577	89,037	1.26	05/27/13				
Simple Average of Ratios			1.79				5.68	

Table II-2
Pennsylvania American Water Company
2014 Average and Maximum Consumption (gallons)

	Daily				Hourly			
Customer	**Average**	**Maximum**	**Ratio**	**Date of Maximum**	**Average**	**Maximum**	**Ratio**	**Date & Time of Maximum**
Low Density								
Linnwood	20,064	29,115	1.45	05/15/14	836	2,192	2.62	5/15/14 7:00
Sutton Hills	13,356	21,388	1.60	06/03/14				
Medium Density								
Thornburgh and Rosslyn	125,480	229,971	1.83	05/19/14				
Winter Road	19,174	27,311	1.42	05/31/14	799	2,742	3.43	8/14/14 15:00
Ridge Road Booster	6,035	12,248	2.03	01/11/14	251	2,512	9.99	2/20/14 9:00
Silver	41,475	79,644	1.92	01/10/14				
High Density								
North Strabane	17,779	39,187	2.20	08/16/14	741	3,781	5.10	8/31/14 16:00
Millview	73,479	97,242	1.32	03/02/14				
Simple Average of Ratios			1.72				5.29	

Table II-3
Residential Monitoring Points
2015 Average and Maximum Consumption (gallons)

	Daily				Hourly			
Customer	**Average**	**Maximum**	**Ratio**	**Date of Maximum**	**Average**	**Maximum**	**Ratio**	**Date & Time of Maximum**
Low Density								
Shire Oaks	19,817	52,521	2.65	5/31/2015	826	4,973	6.02	2/22/15 12:00
Linnwood	20,420	31,385	1.54	6/15/2015	851	2,395	2.81	5/25/15 11:00
Sandy Ridge	2,309	7,673	3.32	05/23/15	96	1,152	11.98	5/23/15 15:00
Medium Density								
Winter Road	19,770	26,087	1.32	5/10/2015	824	3,193	3.88	4/1/15 20:00
Ridge Road Booster	6,029	12,224	2.03	9/26/2015	251	1,552	6.18	7/11/15 10:00
Silver	42,131	68,940	1.64	4/9/2015				
High Density								
Millview	73,769	102,673	1.39	8/2/2015				
Simple Average of Ratios			1.98				6.17	

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Constance E. Heppenstall**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 12-R and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024

Constance E. Heppenstall

VOLUME 18

PENNSYLVANIA-AMERICAN WATER COMPANY

2023 GENERAL BASE RATE CASE
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

DIRECT TESTIMONY AND EXHIBIT OF
ANN E. BULKLEY

STATEMENT NO. 13
EXHIBIT NO. 13-A

PAWC Statement No. 13

PENNSYLVANIA-AMERICAN WATER COMPANY

Direct Testimony

of

Ann E. Bulkley, Principal
The Brattle Group

Concerning

Fair Rate of Return and Capital Structure

DOCKET NOS.

R-2023-3043189 (WATER)

R-2023-3043190 (WASTEWATER)

Date: November 8, 2023

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I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name, affiliation and business address.

A. My name is Ann E. Bulkley. I am a Principal at The Brattle Group ("Brattle"). My business address is One Beacon Street, Suite 2600, Boston, Massachusetts 02108.

Q. On whose behalf are you submitting this testimony?

A. I am submitting this testimony on behalf of Pennsylvania-American Water Company ("PAWC" or the "Company"), a wholly-owned subsidiary of American Water Works Company Inc. ("AWK").

Q. Please describe your education and experience.

A. I hold a Bachelor's degree in Economics and Finance from Simmons College and a Master's degree in Economics from Boston University, with over 25 years of experience consulting to the regulated utility industry. I have advised numerous energy and utility clients on a wide range of financial and economic issues with primary concentrations in valuation and utility rate matters. Many of these assignments have included the determination of the cost of capital for valuation and ratemaking purposes. My resume and a summary of testimony that I have filed in other proceedings are presented in more detail in Appendix A.

II. PURPOSE AND OVERVIEW OF DIRECT TESTIMONY

Q. Please describe the purpose of your Direct Testimony.

A. The purpose of my Direct Testimony is to present evidence and provide a recommendation regarding the appropriate return on equity ("ROE") for the Company and to provide an assessment of the reasonableness of PAWC's proposed capital structure for ratemaking purposes.

Q. Are you sponsoring any exhibits in support of your direct testimony?

A. Yes. My analysis and recommendations are supported by the data presented in Exhibit No. 13-A Schedule 1 through Schedule 14, which were prepared by me or under my direction.

Q. Please provide a brief overview of the analyses that led to your ROE recommendation.

A. As discussed in more detail below, it is important to consider the results of several analytical approaches in determining a reasonable recommendation for the Company's ROE. To develop my ROE recommendation, I first developed a proxy group of utility companies. I did not limit the proxy group to water utilities, but included a broader group of utilities that face risk similar to PAWC because a proxy group composed only of water utilities would result in a small group of companies for which data is limited. To that proxy group, I applied the Constant Growth Form of the Discounted Cash Flow ("DCF") model, the Capital Asset Pricing Model ("CAPM"), and the Empirical Capital Asset Pricing Model ("ECAPM"). My recommendation also takes into consideration the following factors:

1. PAWC's capital expenditure program relative to the proxy group companies;
2. Flotation costs associated with AWK's recent equity issuance;

3. the risks related to environmental and water quality regulation;

4. the regulatory risk of PAWC relative to the proxy group; and

5. PAWC's proposed capital structure as compared to the capital structures of the proxy group companies.[1]

While I did not make specific adjustments to my recommended ROE for these factors, I did consider them in the aggregate when determining where my recommended ROE falls within the range of the analytical results.

Q. How is the remainder of your Direct Testimony organized?

A. The remainder of my direct testimony is organized as follows:

- Section III provides a summary of my analyses and conclusions.
- Section IV reviews the regulatory guidelines pertinent to the development of the cost of capital.
- Section V discusses current and projected capital market conditions and the effect of those conditions on PAWC's cost of equity.
- Section VI explains my selection of the proxy group for PAWC.
- Section VII describes my analyses and the analytical basis for my recommendation of the appropriate ROE for PAWC.
- Section VIII provides a discussion of specific regulatory, business, and financial risks that have a direct bearing on the ROE to be authorized for PAWC in this case.
- Section IX provides an assessment of the reasonableness of PAWC's proposed capital structure relative to the proxy group.
- Section X presents my conclusions and recommendations.

[1] The selection and purpose of developing a group of comparable companies will be discussed in detail in Section VI of my Direct Testimony.

III. SUMMARY OF ANALYSIS AND CONCLUSIONS

Q. Please summarize the key factors considered in your analyses and upon which you base your recommended ROE.

A. The key factors that I considered in my cost of equity analyses and recommended ROE for the Company in this proceeding are:

- The United States Supreme Court's *Hope* and *Bluefield* decisions[2] established the standards for determining a fair and reasonable authorized ROE for public utilities, including consistency of the allowed return with the returns of other businesses having similar risk, adequacy of the return to provide access to capital and support credit quality, and the requirement that the result lead to just and reasonable rates.
- The effect of current and prospective capital market conditions on the cost of equity estimation models and on investors' return requirements.
- The results of several analytical approaches that provide estimates of the Company's cost of equity. Because the Company's authorized ROE should be a forward-looking estimate over the period during which the rates will be in effect, these analyses rely on forward-looking inputs and assumptions (*e.g.*, projected analyst growth rates in the DCF model, forecasted risk-free rate and market risk premium in the CAPM analysis).
- Although the companies in my proxy group are generally comparable to PAWC, each company is unique, and no two companies have the exact same business and financial risk profiles. Accordingly, I considered the Company's regulatory, business, and financial risks relative to the proxy group of comparable companies in determining where the Company's ROE should fall within the reasonable range of analytical results to appropriately account for any residual differences in risk.

Q. Please explain how you considered those factors.

A. I relied on the range of results produced by the Constant Growth DCF model, the CAPM and ECAPM analysis. As shown in Figure 1, these COE estimation models produce a wide

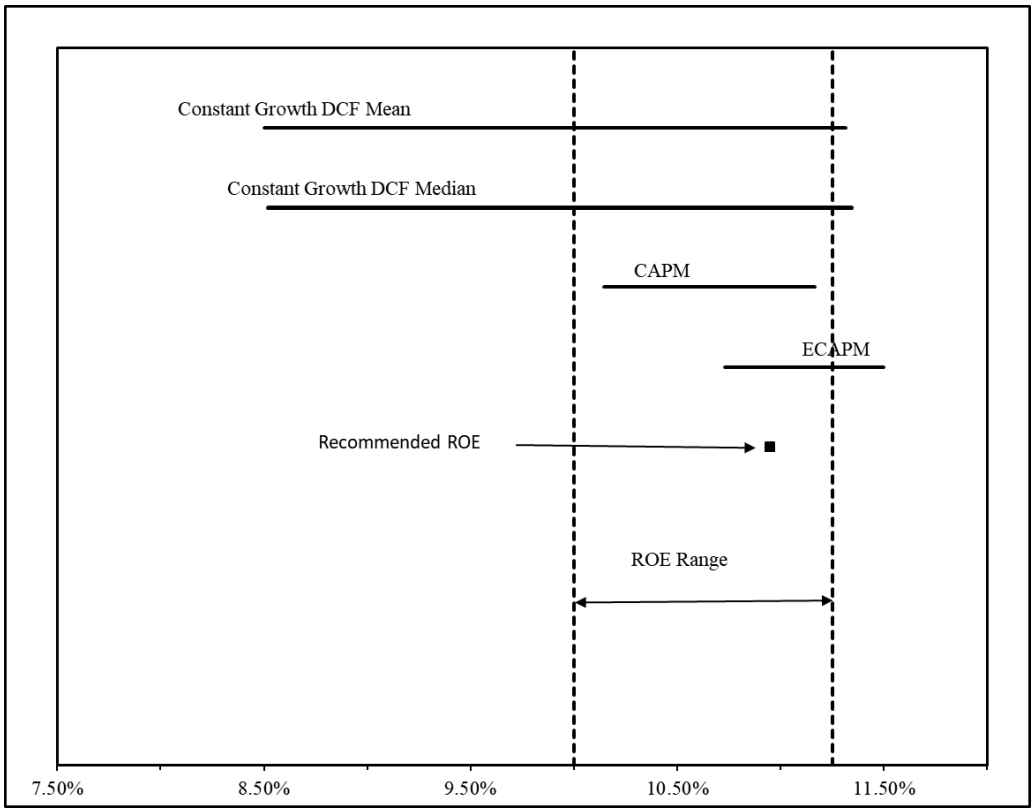
[2] Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944) ("Hope"); Bluefield Waterworks & Improvement Co., v. Public Service Commission of West Virginia, 262 U.S. 679 (1923) ("Bluefield").

range of results. My conclusion as to the appropriate ROE for PAWC within that range of results is based on Company's business and financial risk relative to the proxy group and my assessment of market conditions. As noted above, although the companies in my proxy group are generally comparable to PAWC, each company is unique. Accordingly, I considered the Company's business, financial and regulatory risk in aggregate relative to that of the proxy group companies when determining where the Company's ROE should fall within the reasonable range of analytical results to appropriately account for any residual differences in risk.

Q. What are the results of the models that you have used to estimate the cost of equity for PAWC?

A. Figure 1 (and Exhibit No. 13-A, Schedule 1) summarizes the range of results produced by the Constant Growth DCF, CAPM, and ECAPM analyses.

Figure 1: Summary of Cost of Equity Analytical Results[3]



As shown in Figure 1 (and Exhibit No. 13-A, Schedule 1), the range of results produced by the models used to estimate the COE is wide. For example, the low end of the DCF results are below any ROE that has been authorized by a regulatory commission for a water utility whereas the range set by the higher end of the DCF model overlap the results of the other risk premium-based methodologies. While it is common to consider multiple models to estimate the cost of equity, it is particularly important when the range of results varies

[3] DCF results exclude the result for Middlesex Water Company because the low and mean results are lower than the current yield on the Moody's Baa rated utility bond index, which is illogical and the high end DCF result does not provide a reasonable equity risk premium over the current yield on the Moody's Baa rated utility bond index of 6.48 percent on a 30-day average basis ending October 31, 2023.

considerably across methodologies. My ROE recommendation also considers PAWC's company-specific risk factors and current and prospective capital market conditions.

Q. Are prospective capital market conditions expected to affect the results of the cost of equity for PAWC during the period in which the rates established in this proceeding will be in effect?

A. Yes. Capital market conditions are expected to affect the results of the cost of equity estimation models. Specifically:

- Inflation is expected to persist over the near-term, which increases the retail revenue requirement due to increases in operating costs. Inflation increases the risk that the revenue requirement that is set in a rate proceeding will not recover the operating costs of the business going forward, which increases the operating risk of the utility during the period in which rates will be in effect.
- Long-term interest rates have increased substantially in the past year in response to inflation.
- Equity analysts have noted the increased risk for the utility sector as a result of rising interest rates and expect the sector to underperform over the near-term.
- Since utility dividend yields are now less attractive than the risk-free rates of government bonds, and interest rates are expected to remain elevated, it is likely that utility share prices will decline.
- A decline in utility stock prices will increase the dividend yields and thus, all else equal, the cost of equity estimates produced by the DCF model.
- Consequently, the results of the DCF model using current utility share prices may understate the cost of equity during the period that the Company's rates will be in effect.
- Furthermore, expected market conditions warrant consideration of forward-looking cost of equity estimation models such as the CAPM and ECAPM, which rely on interest rates as a direct input into the models and thus may better reflect the market expected during the period that the Company's rates will be in effect.

- Rating agencies have cited increased risk in the utility sector due to increased interest rates, inflation and elevated capital expenditures.

It is appropriate to consider all of these factors when estimating a reasonable range of the investor-required cost of equity and the recommended ROE for PAWC.

Q. What is your conclusion regarding the appropriate authorized ROE for PAWC in this proceeding?

A. Considering the analytical results presented in Figure 1, current and prospective capital market conditions, as well as the level of regulatory, business, and financial risk faced by PAWC's water and wastewater operations in Pennsylvania relative to the proxy group, I believe a range from 10.00 percent to 11.25 percent is reasonable. Taking into consideration the results of the analytical models, current market conditions, the Company's relative risk, and superior management performance, an ROE in the higher end of that range of 10.95 percent is reasonable and appropriate.

Q. Is PAWC's requested capital structure reasonable and appropriate?

A. Yes. Comparing the Company's proposed equity ratio of 55.00 percent to the equity ratios of the operating companies owned by the proxy group companies demonstrates that the Company's requested equity ratio is well within the range of equity ratios for the proxy group. Further, the Company's proposed equity ratio is reasonable considering credit rating agencies' continued concern with the negative effect on the cash flows and credit metrics associated with increasing interest rates, inflation and capital expenditures.

IV. REGULATORY GUIDELINES

Q. Please describe the guiding principles to be used in establishing the cost of capital for a regulated utility.

A. The U.S. Supreme Court's precedent-setting *Hope* and *Bluefield* cases established the standards for determining the fairness and reasonableness of a utility's authorized ROE. Among the standards established by the Court in those cases are: (1) consistency with other businesses having similar or comparable risks; (2) adequacy of the return to support credit quality and access to capital; and (3) the principle that the specific means of arriving at a fair return does not need to be determined, only that the end result leads to just and reasonable rates.[4]

Q. Is fixing a proper rate of return just about protecting the utility's interests?

A. No. As the Court noted in *Bluefield,* a proper rate of return not only assures "confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit [but also] enable[s the utility] to raise the money necessary for the proper discharge of its public duties."[5] As the Court went on to explain in *Hope*, "[t]the rate-making process … involves balancing of the investor and consumer interests."[6]

---

4 *Bluefield*, 262 U.S. at 692-93; *Hope*, 320 U.S. at 603.
5 *Bluefield*, 262 U.S. at 693.
6 *Hope*, 320 U.S. at 603.

Q. Has the Pennsylvania Public Utility Commission ("Commission") provided similar guidance in establishing the appropriate return on common equity?

A. Yes. The Commission follows the precedents of the Hope and Bluefield cases and acknowledges that utility investors are entitled to a fair and reasonable return. This position was set forth by the Commission as follows:

> In determining a fair rate of return, the Commission must adhere to the constitutional standards established by the United States Supreme Court in the seminal cases *Bluefield Water Works and Improvement Co. v. Public Service Comm'n of West Virginia*, 262 U.S. 679, 692-93 (1923) (*Bluefield*) and *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944) (*Hope Natural Gas*). In *Bluefield*, the Supreme Court stated:
>
> > A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.

Twenty years later in *Hope Natural Gas*, the Supreme Court reiterated:

> From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the

financial integrity of the enterprise, so as to maintain its credit and to attract capital.[7]

Q. Why is it important for a utility to be allowed the opportunity to earn a return that is adequate to attract capital at reasonable terms?

A. A return that is adequate to attract capital at reasonable terms enables PAWC to continue to provide safe, reliable water and wastewater service efficiently while maintaining its financial integrity. That return should be commensurate with returns expected elsewhere in the market for investments of equivalent risk. If it is not, debt and equity investors will seek alternative investment opportunities for which the expected return reflects the perceived risks, thereby inhibiting PAWC's ability to attract capital at reasonable cost. When the Company is afforded a reasonable opportunity to earn its market-based cost of capital, a fair and reasonable balance will be achieved between customers' and shareholders' interests.

Q. Is a utility's ability to attract capital also affected by the ROEs authorized for other utilities?

A. Yes. Utilities compete directly for capital with other investments of similar risk, which include other water, natural gas, and electric utilities. Therefore, the ROE authorized for a utility sends an important signal to investors regarding whether there is regulatory support for financial integrity, dividends, growth, and fair compensation for business and financial risk. The cost of capital represents an opportunity cost to investors. If higher returns are available elsewhere for other investments of comparable risk over the same time period,

[7] Pennsylvania Public Utility Commission, Opinion and Order, PECO Energy Company – Gas Division, Docket No. R-2020-3018929, June 17, 2021 at 8.

investors have an incentive to direct their capital to those alternative investments. Thus, an authorized ROE significantly below authorized ROEs for other water, natural gas, and electric utilities can inhibit the utility's ability to attract capital for investment.

Q. Is the regulatory framework and the authorized ROE and equity ratio important to the financial community?

A. Yes. The regulatory framework is one of the most important factors in debt and equity investors' assessments of risk. Specifically regarding debt investors, credit rating agencies consider the authorized ROE and equity ratio for regulated utilities to be very important for two reasons: (1) they help determine the cash flows and credit metrics of the regulated utility; and (2) they provide an indication of the degree of regulatory support for credit quality in the jurisdiction. To the extent that the authorized returns in a jurisdiction are lower than the returns that have been authorized more broadly, credit rating agencies will consider this in the overall risk assessment of the regulatory jurisdiction in which the company operates. Not only do credit ratings affect the overall cost of borrowing, they also act as a signal to equity investors about the risk of investing in the equity of a company.

Q. What is the standard for setting the ROE in any jurisdiction?

A. The stand-alone ratemaking principle is the foundation of jurisdictional ratemaking. This principle requires that the rates that are charged in any operating jurisdiction be for the costs incurred in that jurisdiction. The stand-alone ratemaking principle ensures that customers in each jurisdiction only pay for the costs of the service provided in that jurisdiction, which is not influenced by the business operations in other operating companies. In order to maintain this principle, the cost of equity analysis is performed for

an individual operating company as a stand-alone entity. As such, I have evaluated the investor-required return for PAWC's water and wastewater operations in Pennsylvania.

Q. What are your conclusions regarding regulatory guidelines?

A. The ratemaking process is premised on the principle that, in order for investors and companies to commit the capital needed to provide safe and reliable utility services, a utility must have a reasonable opportunity to recover the return of, and the market-required return on, its invested capital. Accordingly, the Commission's order in this proceeding should establish rates that provide the Company with a reasonable opportunity to earn a ROE that is: (1) adequate to attract capital at reasonable terms; (2) sufficient to ensure its financial integrity; and (3) commensurate with returns on investments in enterprises with similar risk. It is important for the ROE authorized in this proceeding to take into consideration current and projected capital market conditions, as well as investors' expectations and requirements for both risks and returns. Because utility operations are capital-intensive, regulatory decisions should enable the utility to attract capital at reasonable terms under a variety of economic and financial market conditions. Providing the opportunity to earn a market-based cost of capital supports the financial integrity of the Company, which is in the interest of both customers and shareholders.

V. CAPITAL MARKET CONDITIONS

Q. Why is it important to analyze capital market conditions?

A. The models used to estimate the cost of equity rely on market data that are specific either to the proxy group, in the case of the DCF model, or to the expectations of market risk, in

the case of the CAPM. The results of the cost of equity estimation models can be affected by prevailing market conditions at the time the analysis is performed. While the ROE established in a rate proceeding is intended to be forward-looking, the analyst uses both current and projected market data, specifically stock prices, dividends, growth rates, and interest rates, in the cost of equity estimation models to estimate the investor-required return for the subject company.

Regulatory commissions and analysts recognize that current market conditions affect the results of the cost of equity estimation models. As a result, it is important to consider the effect of the market conditions on these models when determining an appropriate range for the ROE and the recommended ROE for ratemaking purposes for a future period. If investors do not expect current market conditions to be sustained in the future, it is possible that the cost of equity estimation models will not provide an accurate estimate of investors' required return during that rate period. Therefore, it is very important to consider projected market data to estimate the return for that forward-looking period.

Q. What factors are affecting the cost of equity for regulated utilities in the current and prospective capital markets?

A. The cost of equity for regulated utility companies is being affected by several factors in the current and prospective capital markets, including: (1) changes in monetary policy; (2) relatively high inflation; and (3) increased interest rates that also are expected to remain relatively high over the next few years. These factors affect the assumptions used in the cost of equity estimation models.

Q. What effect do current and prospective market conditions have on the cost of equity for the Company?

A. As is discussed in more detail in the remainder of this section, the combination of inflation persistently higher than the Federal Reserve's target level and the Federal Reserve's changes in monetary policy contribute to an expectation of increased market risk and an increase in the cost of the investor-required return. It is important that these factors be considered in setting a forward-looking ROE. Inflation has recently been at some of the highest levels seen in approximately 40 years, and while inflation has declined from these recent peaks, it remains relatively high. Interest rates, which have increased significantly, are expected to continue to remain relatively high in direct response to the Federal Reserve's use of monetary policy to combat inflation. There is a strong historical inverse correlation between interest rates (i.e., yields on long-term government bonds) and the share prices of utility stocks (i.e., as utility share prices decline, utility dividend yields increase). Since the yields on long-term government bonds currently exceed the dividend yields of utilities, and historically long-term government bond yields have been lower than the dividend yields of utilities, it is reasonable to expect that utility investors' cost of equity is increasing. Because the cost of equity in this proceeding is being estimated for the future period that the Company's rates will be in effect, and because the cost of equity is expected to increase over the near term for utilities, cost of equity estimates based in whole or in part on historical or current market conditions, as opposed to projected market conditions, will likely understate the cost of equity during the future period that the Company's rates will be in effect.

A. Inflationary Expectations in Current and Projected Capital Market Conditions

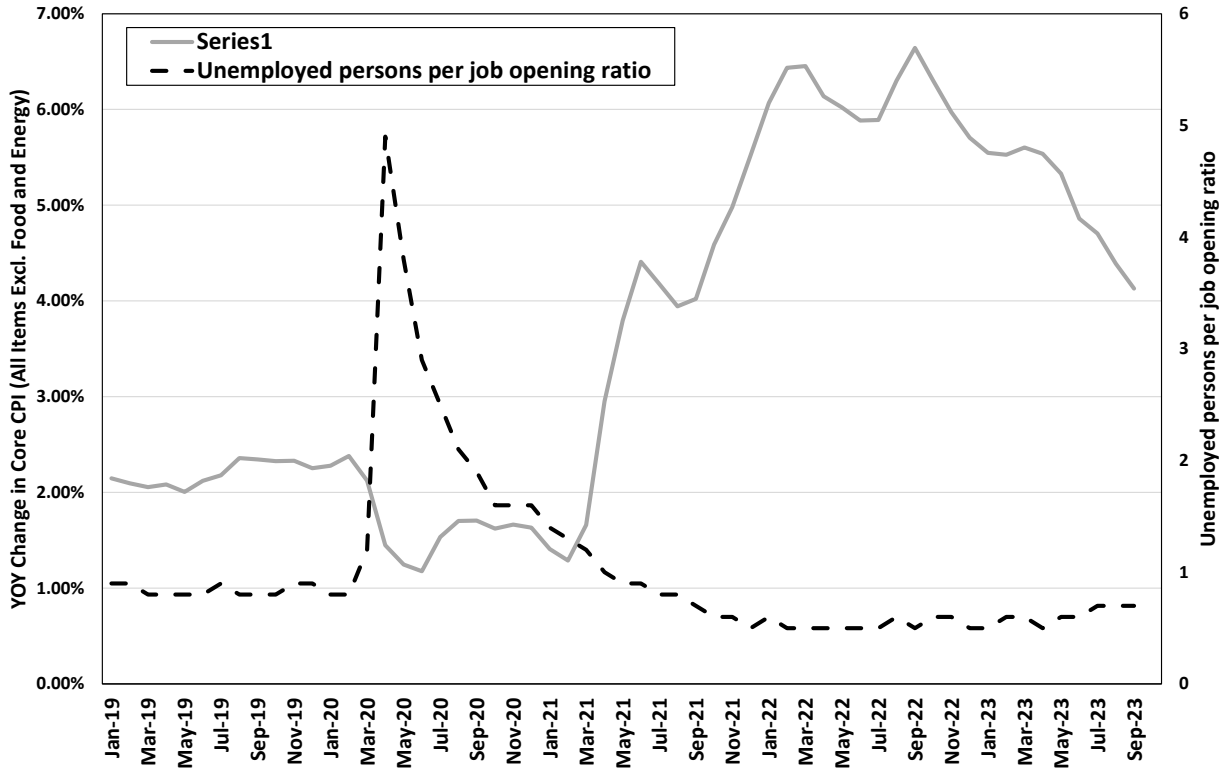
Q. Has inflation increased significantly in recent years?

A. Yes. As shown in Figure 2, core inflation increased steadily beginning in early 2021, rising from 1.41 percent in January 2021 to a high of 6.64 percent in September 2022, which was the largest 12-month increase since 1982.[8] Since that time, while core inflation has declined in response to the Federal Reserve's monetary policy, core inflation continues to remain significantly above the Federal Reserve's target level of 2.0 percent.

Finally, Figure 2 also considers the ratio of unemployed persons per job opening, which is currently 0.7 and has been consistently below 1.0 since mid- 2021 despite the Federal Reserve's accelerated policy normalization. This metric indicates sustained strength in the labor market. Given the Federal Reserve's dual mandate of maximum employment and price stability, the continued increased levels of core inflation coupled with the strength in the labor market has resulted in the Federal Reserve's sustained focus on the priority of reducing inflation.

[8] Figure 2, presents the year-over-year ("YOY") change in core inflation as measured by the Consumer Price Index ("CPI") excluding food and energy prices as published by the Bureau of Labor Statistics. I considered core inflation because it is the preferred inflation indicator of the Federal Reserve for determining the direction of monetary policy. Core inflation is preferred by the Federal Reserve since it removes the effect of food and energy prices, which can be highly volatile.

Figure 2: Core Inflation and Unemployed Persons-to-Job Openings, January 2019 to October 2023[9]



Q. What are the expectations for inflation over the near term?

A. Despite the declines from 40-year highs, the Federal Reserve has indicated that it expects inflation will remain above its target level over at least the next year and that monetary policy will remain restrictive in order to reduce inflation. For example, Federal Reserve Chair Powell observed at the Federal Open Market Committee (FOMC) meeting in September 2023 that while inflation is down from its recent highs, it remains significantly above the Federal Reserve's long-term target:

[9] Bureau of Labor Statistics.

> Inflation remains well above our longer-run goal of 2 percent. Based on the Consumer Price Index and other data, we estimate that total PCE [personal consumption expenditures] prices rose 3.4 percent over the 12 months ending in August; and that, excluding the volatile food and energy categories, core PCE prices rose 3.9 percent. Inflation has moderated somewhat since the middle of last year, and longer-term inflation expectations appear to remain well anchored, as reflected in a broad range of surveys of households, businesses, and forecasters, as well as measures from financial markets. Nevertheless, the process of getting inflation sustainably down to 2 percent has a long way to go. The median projection in the SEP for total PCE inflation is 3.3 percent this year, falls to 2.5 percent next year, and reaches 2 percent in 2026.[10]

After the September 2023 and the November 2023 meetings Chair Powell kept open the possibility of additional rate increases, considering even December this year, or thereafter if it is appropriate to do so. He also stated that interest rates would likely remain positive for some time:

> First of all, interest rates – real interest rates are, are positive now. They're meaningfully positive, and that's a good thing. We need policy to be restrictive so that we can get inflation down to target. Okay. And we need - we're going to need that to remain to be the case for some time. So I think, you know – remember that the – of course, the SEP [Summary of Economic Projections] is not a plan that is negotiated or discussed, really, as a plan. It's accumulation, really, and what you see are the medians. It's accumulation of individual forecasts from 19 people, and then what you're seeing are the medians. So I wouldn't want to, you know, bestow upon it the idea that, that it's really a plan. But what it reflects, though, is that economic activity's been stronger than we expected – stronger than I think everyone expected. And, so what you're – what you're seeing is, this is what people believe, as of now, will be appropriate to achieve what we're looking to achieve, which is progress toward our – toward our inflation goal, as you see in the SEP.[11]

> The fact is the committee is not thinking about rate cuts right now at all. We're not talking about rate cuts. We're still very focused on the first question, which is 'have we achieved a stance of monetary policy that's

[10] Federal Reserve, Transcript of Chair Powell's Press Conference, September 20, 2023, p 2.
[11] *Id.*, Transcript of Chair Powell Press Conference, September 20, 2023 at 6.

sufficiently restrictive to bring inflation down to 2% over time, sustainably?' That is the question we're focusing on.[12]

B. The Use of Monetary Policy to Address Inflation

Q. What policy actions has the Federal Reserve enacted to respond to increased inflation?

A. The dramatic increase in inflation has prompted the Federal Reserve to pursue an aggressive normalization of monetary policy, removing the accommodative policy programs used to mitigate the economic effects of COVID-19. Since the March 2022 FOMC meeting, the Federal Reserve increased the target federal funds rate through a series of increases from a range of 0.00 – 0.25 percent to a range of 5.25 percent to 5.50 percent.[13] Further, as noted above, while the Federal Reserve acknowledges that inflation has declined from its peak, it still is well above the Federal Reserve's target of 2 percent. Therefore, the Federal Reserve anticipates the continued need to maintain the federal funds rate at a restrictive level in order to achieve its goal of 2 percent inflation over the long run.

C. The Effect of Inflation and Monetary Policy on Interest Rates and the Investor-Required Return

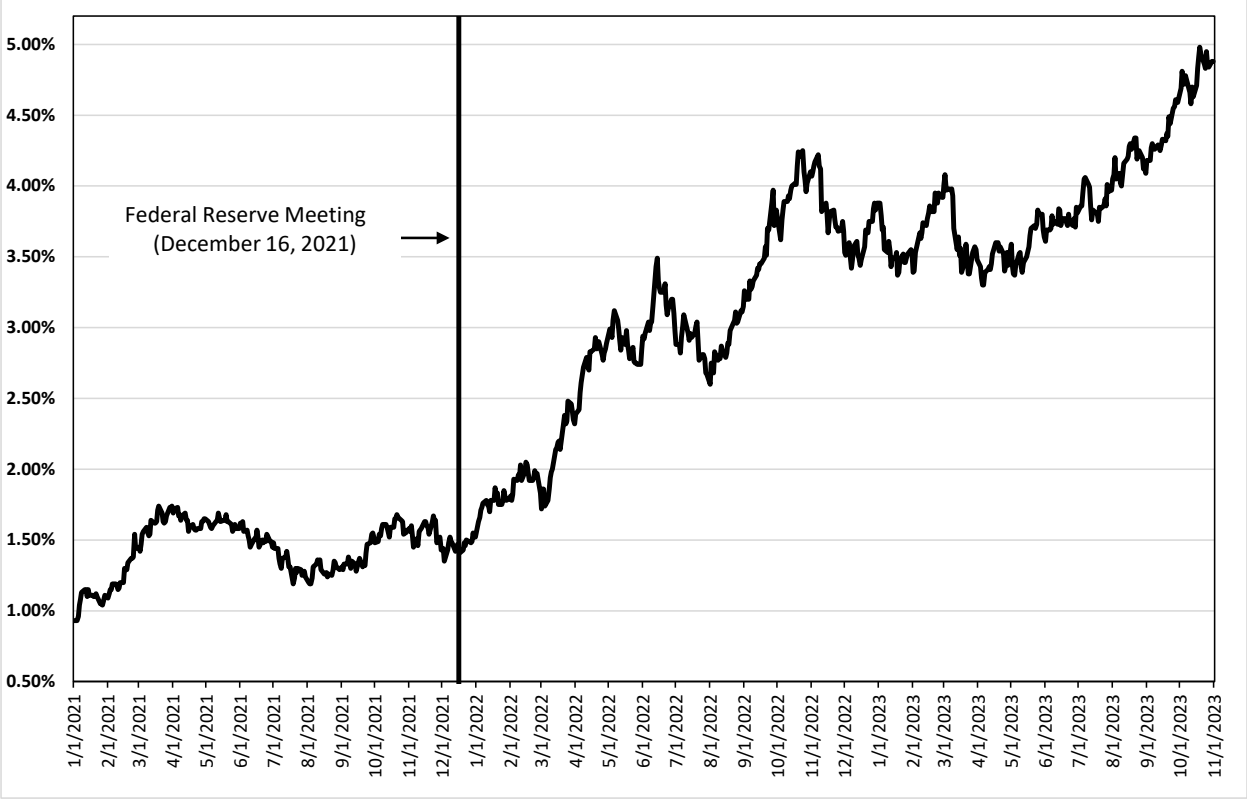
[12] CNBC "Full recap: Fed leaves rates unchanged, Powell discusses December decision", November 1, 2023.

[13] Federal Reserve, Press Releases, March 16, 2022, May 4, 2022, June 15, 2022, September 22, 2022, November 2, 2022, February 1, 2023, March 22, 2023, May 3, 2023, July 26, 2023, September 20, 2023, November 1, 2023. Federal Reserve Board - Press Releases

Q. Have the yields on long-term government bonds increased in response to inflation and the Federal Reserve's normalization of monetary policy?

A. Yes. As the Federal Reserve has substantially increased the federal funds rate in response to increased levels of inflation that have persisted for longer than originally projected, longer term interest rates have also increased. As shown in Figure 3, since the Federal Reserve's December 2021 meeting, the yield on 10-year Treasury bond has more than doubled, increasing from 1.47 percent on December 15, 2021 to 4.88 percent at the end of October 2023.

Figure 3: 10-Year Treasury Bond Yield, January 2021 through October 2023[14]



[14] S&P Capital IQ Pro.

Q. What have equity analysts said about long-term government bond yields?

A. Leading equity analysts have noted that they expect the yields on long-term government bonds to remain elevated. According to the most recent *Blue Chip Financial Forecasts* report, the consensus estimate of the average yield on the 10-year Treasury Bond is approximately 3.80 percent through the first quarter of 2025.[15] It is reasonable to expect that if government bond yields remain elevated, the cost of equity will be increasing above the levels experienced in the 2020 and 2021 lower interest rate environment.

Q. How have interest rates and inflation changed since the Company's last rate case?

A. As shown in Figure 4, at the time that the Commission approved the Company's settlement in its last rate proceeding, interest rates (as measured by the 30-year Treasury bond yield) were 3.91 percent and inflation was 5.70 percent. Since the Company's last rate proceeding, long-term interest rates have increased approximately 93 basis points as the Federal Reserve has increased the federal funds rate to combat inflation. While inflation has moderated since the Company's last case, it remains above the Federal Reserve's target.

Figure 4: Change in Market Conditions Since the Company's Last Rate Case[16]

Docket	Date	Federal Funds Rate	30-Day Avg of 30-Year Treasury Bond Yield	Core Inflation Rate
D-R-2022-3031672	12/8/2022	4.10%	3.91%	5.70%

[15] *Blue Chip Financial Forecasts*, Vol. 42, No. 10, October 10, 2023, p. 2.
[16] St. Louis Federal Reserve Bank; Bureau of Labor Statistics.

Current	10/31/2023	5.33%	4.84%	4.13%

D. Expected Performance of Utility Stocks and the Investor-Required Return on Utility Investments

Q. Are utility share prices correlated to changes in the yields on long-term government bonds?

A. Yes. Interest rates and utility share prices are inversely correlated, which means that increases in interest rates result in declines in the share prices of utilities and vice versa. For example, Goldman Sachs and Deutsche Bank examined the sensitivity of share prices of different industries to changes in interest rates over the past five years. Both Goldman Sachs and Deutsche Bank found that utilities had one of the strongest negative relationships with bond yields (*i.e.*, increases in bond yields resulted in the decline of utility share prices).[17]

Q. How do equity analysts expect the utilities sector to perform in an increasing interest rate environment?

A. Equity analysts project that utilities will underperform the broader market given high inflation and the recent increases in interest rates. Fidelity classifies the utility sector as underweight,[18] and Bank of America recently noted that it is "not so constructive on

[17] Lee, Justina. "Wall Street Is Rethinking the Treasury Threat to Big Tech Stocks." Bloomberg.com, 11 Mar. 2021, www.bloomberg.com/news/articles/2021-03-11/wall-street-is-rethinking-the-treasury-threat-to-big-tech-stocks.

[18] Fidelity. "Third Quarter 2023 Investment Research Update." July 24, 2023.

[u]tilities" given that the dividend yields for utilities are below the yields available on both long- and short-term government bonds.[19]

E. Conclusion

Q. What are your conclusions regarding the effect of current market conditions on the cost of equity for the Company?

A. Investors expect long-term interest rates to remain relatively high in response to continued elevated levels of inflation and the Federal Reserve's normalization of monetary policy. Because the share prices of utilities are inversely correlated to interest rates, and government bond yields have increased significantly since the lows of 2020, the share prices of utilities are likely to continue to decline, which is the reason a number of equity analysts have classified the sector as either underperform or underweight. The expected underperformance of utilities means that DCF models using recent historical data likely underestimate investors' required return over the period that rates will be in effect. Therefore, this expected change in market conditions supports consideration of the higher end of the range of cost of equity results produced by the DCF models. Moreover, prospective market conditions warrant consideration of, and placing more weight on, forward-looking cost of equity estimation models such as the CAPM and ECAPM, which better reflect expected market conditions.

[19] Dumoulin-Smith, "US Electric Utilities & IPPs: As the leaves fall, preparing for Autumn utility outlook. Macro still has potholes," September 6, 2023.

VI. PROXY GROUP SELECTION

Q. Why have you used a group of proxy companies to estimate the cost of equity for PAWC?

A. In this proceeding, I am estimating the cost of equity for PAWC, which is a rate regulated subsidiary of AWK. Because the ROE is a market-based concept, and given the fact that PAWC's operations do not make up the entirety of a publicly-traded entity, it is necessary to establish a group of companies that is both publicly-traded and comparable to the Company in certain fundamental business and financial respects to serve as its "proxy" for purposes of the ROE estimation process. The proxy companies used in my analyses all possess a set of operating and financial risk characteristics that are substantially comparable to PAWC, and, therefore, provide a reasonable basis for deriving the appropriate ROE.

Q. Please provide a brief profile of PAWC.

A. PAWC, a wholly-owned subsidiary of AWK, provides water distribution service to approximately 679,000 customers and wastewater services to approximately 97,000 customers in Pennsylvania.[20] The Company can access debt markets through American Water Capital Corp. ("AWCC") or independently. The current credit ratings for AWCC

[20] American Water Works Company, Inc., 2022 SEC Form 10-K, at 4.

and AWK are as follows: (1) S&P - A (Outlook: Stable)[21]; and (2) Moody's - Baa1 (Outlook: Stable).[22]

Q. How did you select the companies in your proxy group?

A. I began with the group of U.S. utilities that Value Line classifies as "Water Utilities" and "Natural Gas Distribution Companies". That combined group includes 16 domestic U.S. utilities. I simultaneously applied the following screening criteria to select companies that:

- pay consistent quarterly cash dividends because companies that do not cannot be analyzed using the Constant Growth DCF model;
- have investment grade long-term issuer ratings from S&P and/or Moody's;
- are covered by at least two utility industry analysts;
- have positive long-term earnings growth forecasts from at least two utility industry equity analysts;
- derive more than 70.00 percent of their total operating income from regulated operations; and
- were not parties to a merger or transformative transaction during the analytical periods relied on.

Q. Did you consider any additional companies for inclusion in your proxy group?

A. Yes. I also considered the group of 36 companies that Value Line classifies as "Electric Utilities". In determining which electric utilities would qualify for inclusion in my proxy group, I started by relying on the criteria used to screen the water and natural gas utilities.

[21] S&P Global Ratings, American Water Works Co. Inc., June 26, 2023.

[22] Moody's Investors Service, accessed June 30, 2023. Moody's last rating change for American Water Works Company, Inc was as of April 1, 2019. (https://www.moodys.com/research/Moodys-downgrades-American-Water-and-American-Water-Capital-Corp-to--PR_397640)

I then applied two additional screening criteria to only include electric utilities that would be considered risk comparable to PAWC:

- have owned generation comprising less than 10 percent of the Company's MWh sales to ultimate customers to ensure that the electric utilities included did not own a substantial amount of generation and therefore had operations that were primarily transmission and distribution; and
- own water operations.

Q. Did you include AWK in your proxy group?

A. No. Consistent with my general practice of excluding the subject company, or its parent holding company, from the proxy group, I have excluded AWK from my proxy group for PAWC.

Q. What is the composition of your proxy group?

A. The screening criteria discussed above resulted in a proxy group consisting of the companies in Figure 5 (see also Exhibit No. 13-A, Schedule 2).

Figure 5: Proxy Group

Company	Ticker
American States Water Company	AWR
Atmos Energy Corporation	ATO
California Water Service Group	CWT
Essential Utilities, Inc.	WTRG
Eversource Energy	ES
Middlesex Water Company	MSEX
NiSource Inc.	NI
Northwest Natural Gas Company	NWN
ONE Gas, Inc.	OGS
SJW Group	SJW
Spire, Inc.	SR

Q. Why did you include electric utilities and natural gas distribution companies in the proxy group?

A. Value Line currently classifies only seven companies as water utilities. Therefore, the universe of water utilities is already small before a set of screening criteria are applied. Additionally, there has been a recent trend towards consolidation in the utility industry, which reduces the number of available proxy companies. Because there are a small number of companies that are available for inclusion in the proxy group, I also considered electric utilities and natural gas distribution companies that meet the screening criteria.

Q. Are electric utilities and natural gas distribution companies reasonably comparable to water utilities to be included in a proxy group used to estimate the cost of equity for a water utility?

A. Yes, I believe that it is reasonable to rely on a combined proxy group. As noted above, due to consolidation in the water utility industry, there is only a small group of water companies that can be included in the proxy group. In addition, the screening criteria relied on for my proxy group require that a company derive more than 70 percent of their operating income from regulated operations. Therefore, the electric utilities and natural gas distribution companies included in my proxy group generate a large portion of their operating income from regulated operations similar to PAWC and the water utilities that will be included in the proxy group. As a result, I believe that it is appropriate to include electric utilities and natural gas distribution companies in my proxy group.

VII. COST OF EQUITY ESTIMATION

Q. Please briefly discuss the ROE in the context of the regulated rate of return.

A. The ROE is the cost of common equity capital in the utility's capital structure for ratemaking purposes. The overall rate of return for a regulated utility is the weighted average cost of capital, in which the cost rates of the individual sources of capital are weighted by their respective book values. While the costs of debt and preferred stock can be directly observed, the cost of equity is market-based and, therefore, must be estimated based on observable market data.

Q. How is the required cost of equity determined?

A. The required cost of equity is estimated by using analytical techniques that rely on market-based data to quantify investor expectations regarding equity returns, adjusted for certain incremental costs and risks. Informed judgment is then applied to determine where the given company's cost of equity falls within the range of results produced by multiple analytical techniques. The key consideration in determining the cost of equity is to ensure that the methodologies employed reasonably reflect investors' views of the financial markets in general, as well as the subject company (in the context of the proxy group), in particular.

Q. What methods did you use to estimate PAWC's cost of equity?

A. I considered the results of the Constant Growth DCF model, the CAPM, and the ECAPM. As discussed in more detail below, a reasonable ROE estimate considers alternative

methodologies, observable market data, and the reasonableness of their individual and collective results.

A. Importance of Multiple Analytical Approaches

Q. Is it important to use more than one analytical approach?

A. Yes. Because the cost of equity is not directly observable, it must be estimated based on both quantitative and qualitative information. When faced with the task of estimating the cost of equity, analysts and investors are inclined to gather and evaluate as much relevant data as reasonably can be analyzed. Several models have been developed to estimate the cost of equity, and I use multiple approaches to estimate the cost of equity. As a practical matter, however, all of the models available for estimating the cost of equity are subject to limiting assumptions or other methodological constraints. Consequently, many well-regarded finance texts recommend using multiple approaches when estimating the cost of equity. For example, Copeland, Koller, and Murrin[23] suggest using the CAPM and Arbitrage Pricing Theory model, while Brigham and Gapenski[24] recommend the CAPM, DCF, and Bond Yield Plus Risk Premium approaches.

[23] Tom Copeland, Tim Koller and Jack Murrin, Valuation: Measuring and Managing the Value of Companies, 3rd Ed. (New York: McKinsey & Company, Inc., 2000), at 214.

[24] Eugene Brigham, Louis Gapenski, Financial Management: Theory and Practice, 7th Ed. (Orlando: Dryden Press, 1994), at 341.

Q. Do current market conditions support the reliance on more than one analytical approach?

A. Yes. As I discussed above, interest rates have increased substantially over the past year and are expected to remain elevated from the lows seen during the COVID-19 pandemic. The benefit of using multiple models is that each model relies on different assumptions, certain of which may better reflect current and projected market conditions at different times. As discussed previously, the CAPM, and the ECAPM analyses offer some balance through the use of projected interest rates since the effect of changes in interest rates, particularly the recent increase in interest rates, may not be captured as well in the DCF model at this time. Therefore, it is important to use multiple analytical approaches to ensure that the cost of equity results reflect market conditions that are expected during the period that the Company's rates will be in effect.

Q. Has the Commission made similar findings regarding the reliance on multiple models?

A. Yes, it has. In a 2012 decision for PPL Electric Utilities, while noting that the Commission has traditionally relied primarily on the DCF method to estimate the cost of equity for regulated utilities, the Commission recognized that market conditions were causing the DCF model to produce results that were much lower than other models such as the CAPM and Risk Premium. The Commission's Order explained:

> Sole reliance on one methodology without checking the validity of the results of that methodology with other cost of equity analyses does not always lend itself to responsible ratemaking. We conclude that

methodologies other than the DCF can be used as a check upon the reasonableness of the DCF derived equity return calculation.[25]

The Commission ultimately concluded:

> As such, where evidence based on the CAPM and RP methods suggest that the DCF-only results may understate the utility's current cost of equity capital, we will give consideration to those other methods, to some degree, in determining the appropriate range of reasonableness for our equity return determination.[26]

Q. Are you aware of any regulatory commissions that have recognized the importance of considering the results of multiple models?

A. Yes, several regulatory commissions consider the results of multiple COE estimation methodologies such as the DCF, CAPM, and ECAPM in determining the authorized ROE, including the Minnesota Public Utilities Commission ("Minnesota PUC")[27], the Michigan Public Service Commission ("Michigan PSC")[28], the Iowa Utilities Board ("IUB")[29], the Washington Utilities and Transportation Commission ("Washington UTC")[30] and the New Jersey Board of Public Utilities ("NJBPU")[31]. For example, the Washington UTC has repeatedly emphasized that it "places value on each of the methodologies used to calculate the cost of equity and does not find it appropriate to select a single method as being the

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[25] Pennsylvania Public Utility Commission, PPL Electric Utilities, R-2012-2290597, meeting held December 5, 2012, at 80.

[26] *Id.*, at 81.

[27] Docket No. G011/GR-17-563, Findings of Fact, Conclusions and Order, at 27; Docket No. E015/GR-16-664, Findings of Fact, Conclusions and Order, at 60-61.

[28] Michigan Public Service Commission Order, DTE Gas Company, Case No. U-18999, September 13, 2018, at 45-47.

[29] Iowa Utilities Board, Iowa-American Water Company, RPU-2016-0002, Final Decision and Order issued February 27, 2017, at 35.

[30] Wash. Utils. & Transp. Comm'n v. PacifiCorp, Docket UE-130043, Order 05, n. 89 (Dec. 4, 2013); Wash. Utils. & Transp. Comm'n v. PacifiCorp, Docket UE-100749, Order 06, ¶ 91 (March 25, 2011).

[31] NJBPU Docket No. ER12111052, OAL Docket No. PUC16310-12, Order Adopting Initial Decision with Modifications and Clarifications, March 18, 2015, at 71.

most accurate or instructive."[32] The Washington UTC has also explained that "[f]inancial circumstances are constantly shifting and changing, and we welcome a robust and diverse record of evidence based on a variety of analytics and cost of capital methodologies."[33]

Additionally, in its recent order for DTE Gas Company ("DTE Gas") in Case No. U-18999, the Michigan PSC considered the results of each of the models presented by the ROE witnesses, which included the DCF, CAPM, and ECAPM in the determination of the authorized ROE.[34] The Commission also considered authorized ROEs in other states, increased volatility in capital markets and the company-specific business risks of DTE Gas.

B. Constant Growth DCF Model

Q. Please describe the DCF approach.

A. The DCF approach is based on the theory that a stock's current price represents the present value of all expected future cash flows. In its most general form, the DCF model is expressed as follows:

$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \cdots + \frac{D_\infty}{(1+k)^\infty} \qquad [1]$$

Where P_0 represents the current stock price, D1…D∞ are all expected future dividends, and k is the discount rate, or required ROE. Equation [1] is a standard present value calculation that can be simplified and rearranged into the following form:

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[32] Wash. Utils. & Transp. Comm'n v. PacifiCorp, Docket UE-130043, Order 05, n. 89 (Dec. 4, 2013).
[33] Wash. Utils. & Transp. Comm'n v. PacifiCorp, Docket UE-100749, Order 06, ¶ 91 (March 25, 2011).
[34] Michigan Public Service Commission Order, DTE Gas Company, Case No. U-18999, September 13, 2018, at 45-47.

$$k = \frac{D_0(1+g)}{P_0} + g \qquad [2]$$

Equation [2] is often referred to as the Constant Growth DCF model in which the first term is the expected dividend yield and the second term is the expected long-term growth rate.

Q. What assumptions are required for the Constant Growth DCF model?

A. The Constant Growth DCF model requires the following four assumptions: (1) a constant growth rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant price-to-earnings ratio; and (4) a discount rate greater than the expected growth rate. To the extent that any of these assumptions are not objectively valid, considered judgment and/or specific adjustments should be applied to the results.

Q. What market data do you use to calculate the dividend yield in your Constant Growth DCF model?

A. The dividend yield in my Constant Growth DCF model is based on the proxy group companies' current annualized dividend and average closing stock prices over the 30-, 90-, and 180-trading days ended October 31, 2023.

Q. Why do you use 30-, 90-, and 180-day averaging periods?

A. I use an average of recent trading days to calculate the term P_0 in the DCF model to reflect current market data while also ensuring that the result of the model is not skewed by anomalous events that may affect stock prices on any given trading day.

Q. Did you make any adjustments to the dividend yield to account for periodic growth in dividends?

A. Yes, I did. Because utility companies tend to increase their quarterly dividends at different times throughout the year, it is reasonable to assume that dividend increases will be evenly distributed over calendar quarters. Given that assumption, it is reasonable to apply one-half of the expected annual dividend growth rate for purposes of calculating the expected dividend yield component of the DCF model. This adjustment ensures that the expected first-year dividend yield is, on average, representative of the coming twelve-month period, and does not overstate the aggregated dividends to be paid during that time.

Q. Why is it important to select appropriate measures of long-term growth in applying the DCF model?

A. In its Constant Growth form, the DCF model (*i.e.*, Equation [2]) assumes a single growth estimate in perpetuity. To reduce the long-term growth rate to a single measure, one must assume that the payout ratio remains constant and that earnings per share, dividends per share and book value per share all grow at the same constant rate. Over the long run, however, dividend growth can only be sustained by earnings growth. Therefore, it is important to consider a variety of sources in arriving at a singular long-term earnings growth rate for the Constant Growth DCF model.

Q. Which sources of long-term earnings growth rates did you use?

A. My Constant Growth DCF model incorporates three sources of long-term earnings growth rates: (1) Zacks Investment Research; (2) Thompson as reported by Yahoo! Finance; and (3) *Value Line Investment Survey* ("*Value Line*").

Q. Why are EPS growth rates the appropriate growth rates to be relied on in the DCF model?

A. Earnings are the fundamental driver of a company's ability to pay dividends; therefore, projected EPS growth is the appropriate measure of a company's long-term growth. In contrast, changes in a company's dividend payments are based on management decisions related to cash management and other factors. For example, a company may decide to retain earnings rather than pay out a portion of those earnings to shareholders through dividends. Therefore, dividend growth rates are less likely than earnings growth rates to reflect accurately investor perceptions of a company's growth prospects.

Q. How did you calculate the range of results for the Constant Growth DCF Model?

A. I calculated a low end result for my DCF model using the minimum growth rate of the three sources (*i.e.*, the lowest of the Zacks, Yahoo Finance, and *Value Line* projected earnings growth rates) for each of the proxy group companies. I used a similar approach to calculate a high end result, using the maximum growth rate of the three sources for each proxy group company. The mean results were calculated using the average growth rate from all three sources for each proxy group company.

Q. What were the results of your DCF analyses?

A. Figure 6 summarizes the results of my DCF analyses. As shown in Figure 6, the mean and median DCF results using the average growth rates range from 9.28 percent to 10.00 percent, and the mean and median results using the maximum growth rates range from 10.63 percent to 11.34 percent. While I also summarize the DCF results using the minimum growth rates, given the expected underperformance of utility stocks going

forward and thus the likelihood that the DCF model is understating the cost of equity, I do not believe it is appropriate to consider these understated DCF results at this time. It is important to note that there have been no relevant regulatory decisions where a commission has determined that the appropriate ROE for a water utility should be set in the range resulting from the use of the minimum growth rates in the DCF model.

Figure 6: Summary of Constant Growth DCF Results

	Mean Low	Mean	Mean High
Constant Growth DCF[35]			
Mean Results:			
30-Day Average	8.90%	10.00%	11.31%
90-Day Average	8.66%	9.77%	11.08%
180-Day Average	8.50%	9.60%	10.91%
Average	8.69%	9.79%	11.10%
Median Results:			
30-Day Average	8.91%	9.98%	11.34%
90-Day Average	8.65%	9.54%	10.90%
180-Day Average	8.52%	9.28%	10.63%
Average	8.69%	9.60%	10.96%

Q. Has the Commission acknowledged that the DCF model might understate the cost of equity given the current capital market conditions of high inflation and elevated interest rates?

A. Yes. For example, in its May 2022 decision establishing the cost of equity for Aqua Pennsylvania, Inc., the Pennsylvania Public Utility Commission concluded that the current

[35] DCF results exclude the result for Middlesex Water Company because the low and mean results are lower than the current yield on the Moody's Baa rated utility bond index, which is illogical and the high end DCF result does not provide a reasonable equity risk premium over the current yield on the Moody's Baa rated utility bond index of 6.48 percent on a 30-day average basis ending October 31, 2023.

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capital market conditions of high inflation and increased interest rates has resulted in the DCF model understating the utility cost of equity, and that weight should be placed on risk premium models, such as the CAPM, in the determination of the ROE.

> To help control rising inflation, the Federal Open Market Committee has signaled that it is ending its policies designed to maintain low interest rates. Aqua Exc. at 9. Because the DCF model does not directly account for interest rates, consequently, it is slow to respond to interest rate changes. However, I&E's CAPM model uses forecasted yields on ten-year Treasury bonds, and accordingly, its methodology captures forward looking changes in interest rates.
>
> Therefore, our methodology for determining Aqua's ROE shall utilize both I&E's DCF and CAPM methodologies. As noted above, the Commission recognizes the importance of informed judgment and information provided by other ROE models. In the 2012 PPL Order, the Commission considered PPL's CAPM and RP methods, tempered by informed judgment, instead of DCF-only results. We conclude that methodologies other than the DCF can be used as a check upon the reasonableness of the DCF derived ROE calculation. Historically, we have relied primarily upon the DCF methodology in arriving at ROE determinations and have utilized the results of the CAPM as a check upon the reasonableness of the DCF derived equity return. As such, where evidence based on other methods suggests that the DCF-only results may understate the utility's ROE, we will consider those other methods, to some degree, in determining the appropriate range of reasonableness for our equity return determination. In light of the above, we shall determine an appropriate ROE for Aqua using informed judgement based on I&E's DCF and CAPM methodologies.[36]
>
> …..
>
> We have previously determined, above, that we shall utilize I&E's DCF and CAPM methodologies. I&E's DCF and CAPM produce a range of reasonableness for the ROE in this proceeding from 8.90% [DCF] to 9.89% [CAPM]. Based upon our informed judgment, which includes consideration of a variety of factors, including increasing inflation leading to increases in interest rates and capital costs since the rate filing, we

[36] Pennsylvania Public Utility Commission, Docket Nos. R-2021-3027385 and R-2021-3027386, Opinion and Order, May 12, 2022, pp. 154–155.

determine that a base ROE of 9.75% is reasonable and appropriate for Aqua.[37]

Also, in a recent decision, the Massachusetts Department of Public Utilities recognized that long-term interest rates had increased and found greater certainty in that proceeding (as compared with prior decisions) that the DCF results understate the Company's cost of equity. As such, the Department considered this finding in establishing the range of reasonable results from within the analytical results presented.[38]

Q. What are your conclusions about the results of the DCF models?

A. As discussed previously, one primary assumption of the DCF models is a constant price-to-earnings ratio. That assumption is heavily influenced by the market price of utility stocks. Because utility stocks are expected to underperform the broader market over the near-term as interest rates remain elevated and yields on long-term government bonds exceed utility dividend yields, it is important to consider the results of the DCF models with caution. Therefore, although I have given weight to the results of the Constant Growth DCF model, my recommendation also gives weight to the results of other cost of equity estimation models that take into greater consideration current and expected market conditions.

[37] *Id.*, pp. 177–178.
[38] D.P.U. 22-22 at 386.

C. CAPM Analysis

Q. Please briefly describe the CAPM.

A. The CAPM is a risk premium approach that estimates the cost of equity for a given security as a function of a risk-free return plus a risk premium to compensate investors for the non-diversifiable or "systematic" risk of that security. Systematic risk is the risk inherent in the entire market or market segment—which cannot be diversified away using a portfolio of assets. Unsystematic risk is the risk of a specific company that can, theoretically, be mitigated through portfolio diversification.

The CAPM is defined by four components, each of which must theoretically be a forward-looking estimate:

$$K_e = r_f + \beta(r_m - r_f) \qquad [3]$$

Where:

Ke = the required market ROE;

β = beta coefficient of an individual security;

rf = the risk-free rate of return; and

r_m = the required return on the market.

In this specification, the term (r_m – r_f) represents the market risk premium. According to the theory underlying the CAPM, because unsystematic risk can be diversified away,

investors should only be concerned with systematic or non-diversifiable risk. Non-diversifiable risk is measured by beta, which is defined as:

$$\beta = \frac{Covariance(r_e, r_m)}{Variance(r_m)} \quad [4]$$

The variance of the market return (*i.e.*, Variance (r_m)) is a measure of the uncertainty of the general market, and the Covariance between the return on a specific security and the general market (*i.e.*, Covariance (r_e, r_m)) reflects the extent to which the return on that security will respond to a given change in the general market return. Thus, beta represents the risk of the security relative to the general market.

Q. What risk-free rate did you use in your CAPM analysis?

A. I relied on three sources for my estimate of the risk-free rate: (1) the current 30-day average yield on 30-year U.S. Treasury bonds, which is 4.84 percent;[39] (2) the average projected 30-year U.S. Treasury bond yield for the fourth quarter of 2023 through the fourth quarter of 2024, which is 4.44 percent;[40] and (3) the average projected 30-year U.S. Treasury bond yield for 2025 through 2029, which is 3.80 percent.[41]

Q. What Beta coefficients did you use in your CAPM analyses?

A. As shown in Exhibit No. 13-A, Schedule 5, I used the average Beta coefficients for the proxy group companies as reported by Bloomberg and *Value Line*. The beta coefficients reported by Bloomberg are calculated using ten years of weekly returns relative to the S&P

[39] Bloomberg Professional as of October 31, 2023.
[40] Blue Chip Financial Forecasts, Vol. 42, No. 11, November 1, 2023, at 2.
[41] Blue Chip Financial Forecasts, Vol. 42, No. 6, June 1, 2023, at 14.

500 Index. Value Line's calculation of the beta coefficients is based on five years of weekly returns relative to the New York Stock Exchange Composite Index ("NYSE"). Additionally, as shown on Exhibit No. 13-A, Schedule 5 and Exhibit No. 13-A, Schedule 6, I also considered an additional CAPM analysis that relies on the long-term average utility beta coefficient for the companies in my proxy group, which is calculated as an average of the *Value Line* beta coefficients for the companies in my proxy group from 2013 through 2022.

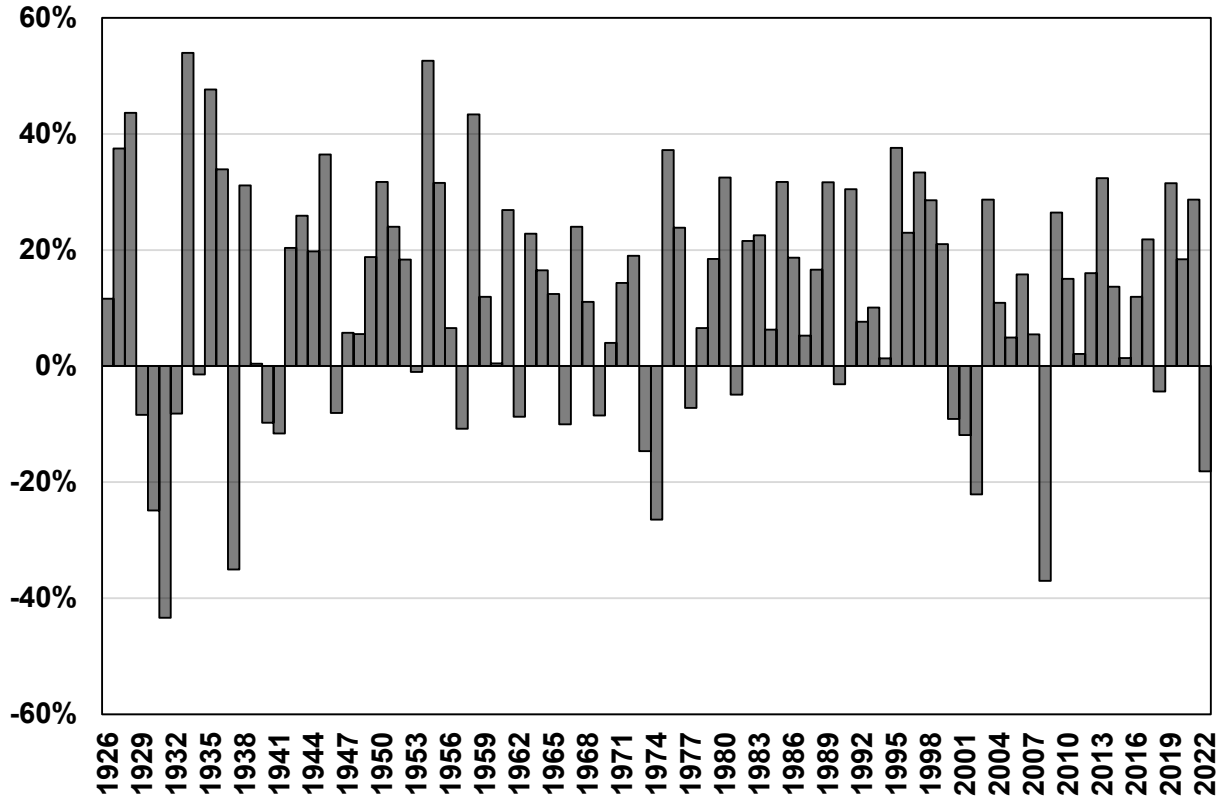
Q. How did you estimate the Market Risk Premium in the CAPM?

A. I estimated the market risk premium as the difference between the implied expected equity market return and the risk-free rate. As shown in Exhibit No. 13-A, Schedule 7, the expected market return is calculated using the Constant Growth DCF model discussed earlier in my testimony for the companies in the S&P 500 Index. Based on an estimated market capitalization-weighted dividend yield of 1.88 percent and a weighted long-term earnings growth rate of 10.51 percent, the estimated required market return for the S&P 500 Index as of October 31, 2023 is 12.49 percent. Based on the three risk-free rates considered, the implied market risk premia ranges from 7.64 percent to 8.69 percent.

Q. How does the current expected market return compare to observed historical market returns?

A. As shown in Figure 7, given the range of annual equity returns that have been observed over the past century, a current expected market return of 12.49 percent is not unreasonable. As shown, in 50 out of the past 97 years (or roughly 52 percent of observations), the realized equity market return was at least 12.49 percent or greater.

Figure 7: Realized U.S. Equity Market Returns (1926-2022)[42]



Q. Did you consider another form of the CAPM in your analysis?

A. Yes. I have also considered the results of an ECAPM in estimating the cost of equity for PAWC.[43] The ECAPM calculates the product of the adjusted beta coefficient and the market risk premium and applies a weight of 75.00 percent to that result. The model then applies a 25.00 percent weight to the market risk premium without any effect from the beta coefficient. The results of the two calculations are summed, along with the risk-free rate, to produce the ECAPM result, as noted in Equation [5] below:

$$k_e = r_f + 0.75\beta(r_m - r_f) + 0.25(r_m - r_f) \qquad [5]$$

[42] Depicts total annual returns on large company stocks, as reported in the 2023 Kroll SBBI Yearbook.
[43] See, e.g., Roger A. Morin, New Regulatory Finance, Public Utilities Reports, Inc., 2006, at 189.

Where:

k_e = the required market ROE

β = Adjusted Beta coefficient of an individual security

r_f = the risk-free rate of return

r_m = the required return on the market as a whole

In essence, the empirical form of the CAPM addresses the tendency of the "traditional" CAPM to underestimate the cost of equity for companies with low beta coefficients such as regulated utilities. In that regard, the ECAPM is not redundant to the use of adjusted betas in the traditional CAPM; rather, it recognizes the results of academic research indicating that the risk-return relationship is different (in essence, flatter) than estimated by the CAPM, and that the CAPM underestimates the "alpha," or the constant return term.[44]

As with the CAPM, my application of the ECAPM uses the forward-looking market risk premium estimates, the three yields on 30-year Treasury securities noted earlier as the risk-free rate, and the current Bloomberg and *Value Line* and long-term *Value Line* beta coefficients.

[44] *Id.*, at 191.

Q. What are the results of your CAPM analyses?

A. As shown in Figure 8 (*see* also Exhibit No. 13-A, Schedule 5), my traditional CAPM analyses produce a range of returns from 10.15 percent to 11.17 percent. The ECAPM analysis results range from 10.73 percent to 11.50 percent.

Figure 8: CAPM Results

	Current 30-day Average 30-Year Treasury Bond Yield	Near-Term Projected 30-Year Treasury Yield	Longer-Term Projected 30-Year Treasury Yield
CAPM:			
Current Value Line Beta	11.17%	11.10%	10.99%
Current Bloomberg Beta	10.66%	10.56%	10.41%
Long-term Avg. Beta	10.43%	10.32%	10.15%
ECAPM:			
Current Value Line Beta	11.50%	11.44%	11.36%
Current Bloomberg Beta	11.12%	11.04%	10.93%
Long-term Avg. Beta	10.94%	10.86%	10.73%

VIII. BUSINESS RISKS AND MANAGEMENT PERFORMANCE

Q. Taken alone, do the results from the cost of equity estimation models for the proxy group provide an appropriate estimate of the cost of equity for the Company?

A. No. These results provide only a range for the appropriate estimate of the Company's cost of equity. There are several additional factors that must be taken into consideration when determining where the Company's cost of equity falls within the range of results. These factors, which are discussed below, should be considered with respect to their overall effect on the Company's risk profile.

A. Flotation Costs

Q. What are flotation costs?

A. Flotation costs are the costs associated with the sale of new issues of common stock. These costs include out-of-pocket expenditures for preparation, filing, underwriting, and other issuance costs.

Q. Why is it important to consider flotation costs in the allowed ROE?

A. A regulated utility must have the opportunity to earn an ROE that is both competitive and compensatory to attract and retain new investors. To the extent that a company is denied the opportunity to recover prudently incurred flotation costs, actual returns will fall short of expected (or required) returns, thereby diluting equity share value.

Q. Are flotation costs part of the utility's invested costs or part of the utility's expenses?

A. Flotation costs are part of the invested costs of the utility, which are properly reflected on the balance sheet under "paid in capital." They are not current expenses, and, therefore, are not reflected on the income statement. Rather, like investments in rate base or the issuance costs of long-term debt, flotation costs are incurred over time. As a result, the great majority of a utility's flotation cost is incurred prior to the test year but remains part of the cost structure that exists during the test year and beyond, and as such, should be recognized for ratemaking purposes. Therefore, it is irrelevant whether an issuance occurs during the test year or is planned for the test year because failure to allow recovery of past flotation costs may deny PAWC the opportunity to earn its required rate of return in the future.

Q. Please provide an example of why a flotation cost adjustment is necessary to compensate investors for the capital they have invested?

A. As shown in Exhibit No. 13-A, Schedule 4, in AWK's most recent stock issuance, the offering price was $135.5 per share of common stock. After paying flotation costs associated with the equity issuance, which include fees paid to underwriters and attorneys, among others, AWK's net proceeds are only $133.41 per share invested. AWK invests that $133.41 per share in plant used to serve its customers, which becomes part of rate base. Absent a flotation cost adjustment, the investor will thereafter earn a return on only the $133.41 per share invested in rate base, even though the contribution was $135.50. Making a small flotation cost adjustment gives the investor a reasonable opportunity to earn the authorized return, rather than the lower return that results when the authorized return is applied to an amount less than what the investor contributed.

Q. Is the need to consider flotation costs eliminated because PAWC is a wholly-owned subsidiary of AWK?

A. No. Although PAWC is a wholly-owned subsidiary of AWK, it is appropriate to consider flotation costs because wholly-owned subsidiaries receive equity capital from their parent and provide returns on the capital that roll up to the parent, which is designated to attract and raise capital based upon the returns of those subsidiaries. To deny recovery of issuance costs associated with the capital that is invested in the subsidiaries ultimately penalizes the investors that fund the utility operations and could inhibit the utility's ability to obtain new equity capital at a reasonable cost. This is important for PAWC because, as I will discuss

in more detail below, the Company is planning significant capital expenditures in the near term.

Q. Is the need to consider flotation costs recognized by the academic and financial communities?

A. Yes. The need to reimburse shareholders for the lost returns associated with equity issuance costs is recognized by the academic and financial communities in the same spirit that investors are reimbursed for the costs of issuing debt. This treatment is consistent with the philosophy of a fair rate of return. According to Dr. Shannon Pratt:

> Flotation costs occur when new issues of stock or debt are sold to the public. The firm usually incurs several kinds of flotation or transaction costs, which reduce the actual proceeds received by the firm. Some of these are direct out-of-pocket outlays, such as fees paid to underwriters, legal expenses, and prospectus preparation costs. Because of this reduction in proceeds, the firm's required returns on these proceeds equate to a higher return to compensate for the additional costs. Flotation costs can be accounted for either by amortizing the cost, thus reducing the cash flow to discount, or by incorporating the cost into the cost of capital. Because flotation costs are not typically applied to operating cash flow, one must incorporate them into the cost of capital.[45]

Q. How did you calculate the flotation costs for PAWC?

A. My flotation cost calculation is based on the costs incurred by AWK in its most recent equity offering as of March 3, 2023. That flotation cost percentage is then applied to the DCF analysis to estimate impact on ROE. As shown in Exhibit No. 13-A, Schedule 4, based on the flotation costs incurred in the most recent AWK issuance, the impact on the

[45] Shannon P. Pratt, Cost of Capital Estimation and Applications, Second Edition, at 220-221.

proxy group's cost of equity amounts to 6 basis points (i.e., 0.6 percent) based on the median and 6 basis points (i.e., 0.6 percent) based on the mean.

Q. Do your final results include an adjustment for flotation cost recovery?

A. No. While the final ROE results do not incorporate an explicit adjustment for flotation costs, the estimated effect of flotation cost on ROE is considered in identifying a recommended ROE within the range of ROE estimates from the various models.

B. Risks Associated with Capital Expenditure Program

Q. How is PAWC's risk profile affected by its substantial capital expenditure program?

A. PAWC projects that the Company will make over $1 billion in capital investments for the period through June 30, 2025, including significant investment to replace aging infrastructure to meet the needs of its customers and to comply with various regulations and recent acquisitions of water utility systems.[46] These investments are summarized in PAWC Statement No. 03 in the testimony of Mr. Aiton.

From a credit perspective, the additional pressure on cash flows associated with high levels of capital expenditures exerts corresponding pressure on credit metrics and, therefore, credit ratings. An S&P report explains:

> [T]here is little doubt that the U.S. electric industry needs to make record capital expenditures to comply with the proposed carbon pollution rules over the next several years, while maintaining safety standards and grid stability. We believe the higher capital spending and subsequent rise in debt levels could strain these companies' financial measures, resulting in an almost consistent negative discretionary cash flow throughout this higher

[46] Data provided by PAWC.

> construction period. To meet the higher capital spending requirements, companies will require ongoing and steady access to the capital markets, necessitating that the industry maintains its high credit quality. We expect that utilities will continue to effectively manage their regulatory risk by using various creative means to recover their costs and to finance their necessary higher spending.[47]

Although this S&P report refers to electric utilities, the same applies to water utilities. In an August 2016 report, S&P explained the importance of regulatory support for large capital projects:

> When applicable, a jurisdiction's willingness to support large capital projects with cash during construction is an important aspect of our analysis. This is especially true when the project represents a major addition to rate base and entails long lead times and technological risks that make it susceptible to construction delays. Broad support for all capital spending is the most credit-sustaining. Support for only specific types of capital spending, such as specific environmental projects or system integrity plans, is less so, but still favorable for creditors. Allowance of a cash return on construction work-in-progress or similar ratemaking methods historically were extraordinary measures for use in unusual circumstances, but when construction costs are rising, cash flow support could be crucial to maintain credit quality through the spending program. Even more favorable are those jurisdictions that present an opportunity for a higher return on capital projects as an incentive to investors.[48]

Q. Does PAWC have a capital tracking mechanism to recover some of the costs associated with its capital expenditures plan between rate cases?

A. Yes. PAWC has a Water and Wastewater Distribution System Improvement Charge ("DSIC") which allows PAWC to recover the costs associated with replacing and repairing aging water and wastewater infrastructure. In addition, the Company is proposing an Environmental Compliance Investment Charge recovery mechanism, which will allow for

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[47] S&P, Ratings Direct, "U.S. Regulated Electric Utilities' Annual Capital Spending is Poised to Eclipse $100 Billion," July 2014.

[48] S&P Global Ratings, "Assessing U.S. Investor-Owned Utility Regulatory Environments," August 10, 2016, at 7.

the recovery of the fixed costs associated with certain non-revenue producing, non DSIC eligible projects between rate cases that are related to environmental requirements. The presence of these clauses is certainly a positive aspect of Pennsylvania regulation but they have become quite commonplace in utility regulation. In fact, each of the proxy group companies has infrastructure and capital recovery mechanisms that address significant capital expenditure requirements. As shown in Exhibit AEB-10, the companies in the proxy group have infrastructure replacement recovery mechanisms in approximately 78.57 percent of their operating jurisdictions. Consequently, the presence of the DSIC, and the Company's proposed Environmental Compliance Investment Charge recovery mechanism, while positive regulatory mechanisms, do not reduce the Company's risk vis-à-vis that of the proxy group.

Q. Why is it important that PAWC's capital tracking mechanisms recover these costs?

A. Over the next few years, PAWC is proposing to invest $3.28 billion in infrastructure improvements. On an annual basis, PAWC's capital investment program is greater than its allowance for depreciation which results in negative Free Cash Flow. Therefore, the Company will need to seek financing for its capital investments beyond any internally generated cash flow. Similar to the credit rating agencies, discussed previously, investors consider the stability and supportiveness of the regulatory environment in the assessment of overall risk of investment. The use of tracking mechanisms for the recovery of capital

investments has become a key component of the strategy to address regulatory lag that results from significant investments in supportive regulatory jurisdictions.[49]

Q. Has Pennsylvania been viewed as a supportive regulatory jurisdiction?

A. Yes. S&P conducts a ranking of regulatory jurisdictions, using a scale of 9 steps ranging from a low of Below Average to Above Average, with each ranking having three notches ("3" being the low end of the ranking and "1" being the high end of the ranking). These rankings are assigned from an investor perspective and are intended to indicate the relative regulatory risk associated with the ownership of securities issued by the utilities in the jurisdiction. The evaluation is intended to assess the level and quality of earnings realized by the state utilities as a result of regulatory, legislative and court actions. Pennsylvania has been ranked Above Average 2 since 2019. S&P indicates that this ranking is based on a constructive regulatory climate, relying on forward test years, year -end rate base and reduction in regulatory lag.

Q. What is your conclusion regarding the regulatory environment in Pennsylvania as it relates to PAWC's capital investment plan?

A. The Company's capital plan demonstrates a need to access external capital for financing. Therefore, it is important that the constructive regulatory environment that has been established by the Commission be maintained to ensure that the Company continues to be able to secure capital on favorable terms.

[49] S&P Global Market Intelligence, RRA Regulatory Focus: Adjustment Mechanisms, July 22, 2022, pp. 6-15.

C. Rate Decoupling Mechanism

Q. Are you aware that the Company is proposing to implement a Rate Decoupling Mechanism ("RDM")?

A. Yes. As discussed in PAWC Statement No. 10, the Direct Testimony of Company witness Mr. Charles Rea, the Company's current rate design recovers approximately 81 percent of water and wastewater service revenues under volumetric rates whereas approximately 95 percent of the Company's costs are fixed costs, which do not vary with usage. Further, Mr. Rea's analysis demonstrates that there are two primary factors that cause revenue volatility, seasonal weather conditions and continuing trends in declining use per customer in the residential, commercial and municipal customer classes. As Mr. Rea notes, seasonal weather conditions can cause water sales to increase or decrease from expected going-forward levels, which creates volatility in revenues. Further, if water usage going forward is less than the levels set in this rate proceeding, the Company's revenues will be less than what is authorized as a result of this case, making it difficult to earn the authorized ROE.

Q. Does the implementation of an RDM affect your recommended ROE?

A. No. The recommended ROE in this proceeding has been estimated using market data for a proxy group of companies. In order to determine the appropriate ROE from within the range of results, it is necessary to consider PAWC's overall risks as compared with the operating companies of the proxy group companies. That evaluation demonstrates whether or not the Company has greater or less risk and informs the decision regarding the estimated investor-required return on equity. Therefore, it is necessary to review the proposed

mechanism as compared with proxy group to determine if the Company's overall risk is greater or less than the proxy group companies.

Q. Have you conducted an analysis of the proxy group companies and whether or not they have implemented recovery mechanisms?

A. Yes. I have reviewed each of the operating companies of the proxy group to determine whether or not they have implemented a mechanism similar to the RDM proposed by PAWC. As shown on Exhibit No. 13-A, Schedule 9, approximately 59 percent of the proxy group companies have implemented some form of revenue decoupling mechanism.

Q. What are your conclusions regarding the Company's proposed RDM?

A. Since a significant amount of the operating companies of the proxy group companies have implemented some form of RDM, the Company's proposed RDM makes PAWC more like the proxy group. Therefore, comparing PAWC to the proxy group, the Company would be more comparable to the proxy group with the RDM. If the RDM were not authorized, PAWC would have greater risk than the proxy group.

D. Risks Associated with Environmental and Water Quality Regulation

Q. Please provide an overview of the risks associated with water quantity, water quality and other environmental regulations applicable to PAWC's water supply facilities and operations.

A. Water supply utilities are subject to a complex array of regulations at the federal, state and river basin commission levels with respect to water quantity, water quality and other environmental aspects of their facilities and operations.

In addition to the requirement to make significant investments to extend facilities to accommodate applicants for service, there are multiple levels of authorization and regulation that apply to a public water system that wants to add a new source of supply or increase its withdrawals from existing sources. These factors add to the costs and lead-time for obtaining new, or increasing existing, water sources to meet new demands that may arise in portions of the Company's system. These are additional risk factors that can directly affect PAWC's ability to continue to furnish safe, adequate and reliable service, and increase the costs PAWC incurs to provide that service.

As discussed in the direct testimony of Company witness Mr. Jim Runzer, there are significant regulations that require the monitoring and treatment of water supplies to ensure the safety of and reliability of drinking water service. Further, there is increased research and awareness of contaminants on an ongoing basis that, once identified, require investment to meet more stringent regulatory standards related to new contaminants.

While the Company intends to comply with all state and federal regulatory standards for safe and reliable drinking water service, the upstream releases of chemicals that are then found in the Company's water supplies and must be remediated present an ongoing business risk.

Q. Provide an overview of the risks associated with environmental regulation with respect to PAWC's wastewater system operations.

A. As is the case with regard to drinking water system operations, the operation of wastewater collection and treatment systems face a range of environmental regulatory risks.

Wastewater operations are also regulated at both the federal and state levels pursuant to numerous statutes and regulations. At the federal level, wastewater systems are regulated pursuant to the Clean Water Act and numerous regulations adopted by the Environmental Protection Agency ("EPA") under that law. At the state level, the Pennsylvania Clean Streams Law, Sewage Facilities Act, Solid Waste Management Act, Storage Tank and Spill Prevention Act and other laws administered by the DEP, coupled with the regulations adopted under those statutes, set standards and requirements for virtually every aspect of wastewater system operations. Similar to water regulation meeting regulatory compliance requirements, including evolving permitting requirements, and more stringent limits can be challenging and can result in significant increases in operating costs. Furthermore, wastewater systems face significant regulatory and environmental liability risks enforceable by governmental agencies through penalties and through citizen lawsuits.

Finally, combined sewer systems present additional risks, particularly during storms when water flows can exceed the treatment system capacity and result in excess untreated water discharging through combined sewer outfalls. These systems can present increased risk, as they often cannot be separated, and the EPA seeks to reduce the number of these systems that operate.

Q. What is your conclusion with respect to the effect of the risk associated with environmental regulations and water quality regulations on PAWC's cost of equity?

A. PAWC has significant risk and uncertainty associated with environmental and water quality regulations, and the recovery of costs to comply with those regulations. It is clear that the financial community recognizes the additional risks to credit quality associated

with the capital investment required to meet environmental and water quality regulations. As discussed in Section VI of my testimony, in order to establish a proxy group of sufficient size, the group is composed of water utilities, electric utilities and natural gas utilities, which all face significant and increasing environmental requirements. The environmental risk factors faced by PAWC, and the magnitude of the capital program that the Company has planned to maintain compliance, support an ROE above the proxy group mean and median.

E. Management Performance and Recognition

Q. Please summarize the Public Utility Code as it pertains to consideration of performance factors in the utility's revenue requirement.

A. Section 523 of the Pennsylvania Public Utility Code states that the Commission shall consider "the efficiency, effectiveness and adequacy of service of each utility when determining just and reasonable rates under this title". Additionally, the Commission's Policy Statement on Small Nonviable Water and Wastewater Systems at 52 Pa. Code § 69.711 states that the Commission will consider acquisition incentives including "rate of return premiums", "acquisition adjustments", "deferral of acquisition improvement costs" and "plant improvement surcharges" to encourage the acquisition of troubled water and wastewater systems by viable utilities.

Q. What are the specific performance factors that are to be considered by the Commission?

A. Sections 523 (a) and (b) address the factors considered in evaluating the performance of water and wastewater utilities. These provisions include 1) the efficiency, effectiveness and adequacy of service, 2) management effectiveness and operating efficiency, 3) action or inaction to encourage cost-effective conservation by customers of water, and 4) other relevant evidence that relates to efficiency, effectiveness and adequacy of service.

Q. How has PAWC demonstrated excellence in these categories?

A. The testimony of Company witness Ashley Everette discusses several areas where PAWC has demonstrated exemplary management performance. Among these areas, the performance highlighted by Ms. Everette includes:

- The Company's H2O program ranks at the top of the Pennsylvania water utility customer assistance programs for the types of benefits provided under the program. Further, the Company is expanding this program to add a fourth tier of eligibility to its bill discount program to customers whose household incomes are between 151% and 200% of FPL as well as to offer arrearage forgiveness for certain qualifying customers.
- PAWC's treatment plants are nationally recognized for optimization and performance above the regulatory standards.
- The Company is committed to continuing improvement in water quality and monitoring for pollutants where there is no obligation to monitor.
- PAWC's demonstrated commitment to operational and water efficiency for the benefit of customers.
- The Company has acted as a receiver for and acquired troubled water and wastewater systems for over 25 years, acquiring sixteen companies in the last 10 years.

Q. How have you considered the management performance of PAWC in your recommendation?

A. Yes. As discussed above, a reasonable range of ROE estimates for PAWC is from 10 percent to 11.25 percent. I recommend an ROE of 10.95 percent for PAWC, which is at the high end of the reasonable range. This recommendation considers the effects of current market conditions as well as the Company's excellent management performance.

IX. CAPITAL STRUCTURE

Q. Please explain how the water services capital structure was calculated for PAWC.

A. Because there is specific debt that has been identified for wastewater services, the capital structures for water and wastewater services were calculated separately. The capital structure for the total company was calculated first, including all debt issuances and all sources of capital. As shown in Exhibit No. 13-A, Schedule 11, the total company projected permanent capital structure includes 44.70 percent long-term debt, 0.00 percent preferred stock and 55.30 percent common equity for the fully projected future test year ending June 30, 2025. The total company capital structure includes three issuances that can be specifically assigned to the wastewater services: Pennvest Clarion; Pennvest Scranton; and $47 million of a PEDFA tax-exempt debt issuance for Coatsville. These issuances are shown on Exhibit No. 13-A, Schedule 14. The capital structure for water service was calculated by removing the wastewater specific debt instruments from the total long-term debt of the company and recalculating the ratios of the remaining capital stock. As shown in Exhibit No. 13-A, Schedule 12 the permanent ratemaking capital structure for the water service after removing the wastewater specific debt issuances from the total company

capital structure is 44.01 percent long-term debt, 0.00 percent preferred stock and 55.99 percent common equity for the fully projected future test year ending June 30, 2025.

Q. How was the wastewater services capital structure calculated?

A. The wastewater specific capital structure was calculated by applying the total company debt ratio to the wastewater rate base, excluding the specific wastewater debt issuances. Preferred stock is also calculated by applying the total company percentage of preferred stock to the rate base less the wastewater specific debt issuances. The equity component of the capital structure is the rate base less long-term debt, wastewater specific debt issuances and preferred stock. As shown in Exhibit No. 13-A, Schedule 13, the wastewater specific capital structure includes 42.73 percent long-term debt, wastewater specific financing of 4.40 percent, for a total long-term debt of 47.13 percent, 0.00 percent preferred stock and 52.87 percent common equity for fully projected future test year ending June 30, 2025.

Figure 13: Ratemaking Capital Structures for the Fully Projected Future Test Year ending June 30, 2025

Total Company[50]	
Common Equity	55.30%
Preferred Stock	0.00%
Long-Term Debt	44.70%
Water Services[51]	
Common Equity	55.99%
Preferred Stock	0.00%
Long-Term Debt	44.01%
Wastewater Services[52]	
Common Equity	52.87%
Preferred Stock	0.00%
Long-Term Debt	42.73%
WW Specific Debt	4.40%

Q. Why does the ratemaking capital structure exclude short-term debt?

A. The ratemaking capital structure is intended to reflect the permanent financing of rate base assets. PAWC has relied on short-term debt as temporary financing; to finance Construction Work in Progress (CWIP), and the acquisitions of other water systems. As those assets are brought into rate base, the Company secures permanent financing including equity and long-term debt.

Q. Did you conduct any analysis to determine if the requested equity ratio was reasonable?

A. Yes, I did. I reviewed the Company's proposed capital structure and the capital structures of the utility operating subsidiaries of the proxy companies.

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50 *See* Exhibit 13-A, Schedule 11.

51 *Ibid.*, at Schedule 12.

52 *Ibid.*, at Schedule 13.

Q. Why is it appropriate to consider the equity ratio for the proxy companies?

A. The determination of the ROE is based on the expected return for a proxy group of companies that are comparable in risk to PAWC. The equity ratio is a measure of the financial risk of the company, and the authorized ROE is the return to compensate investors for that risk. If the Commission is going to rely on the ROE estimates for the proxy companies to establish the authorized ROE for PAWC, it is important that the financial risk of PAWC be similar to the financial risk of the proxy group. This is accomplished when the equity ratio of the subject company (in this case PAWC) is within the range established by the proxy group.

Q. How did you conduct your analysis of the proxy group capital structures?

A. Specifically, I calculated the mean proportions of common equity, long-term debt and short-term debt over the past three years for each of companies in the proxy group at the operating subsidiary level. Exhibit No. 13-A, Schedule 10 summarizes the actual capital structures of the operating subsidiaries. As shown, the average equity ratios for the operating subsidiaries of the proxy group range from 49.41 percent to 59.88 percent, with a mean of 55.88 percent. PAWC's proposed equity ratio of 55.30 percent is well within the equity ratio range established by the utility operating subsidiaries of the proxy group.

Q. Are there other factors to be considered in setting the Company's capital structure?

A. Yes, there are other factors that should be considered in setting the Companies' capital structures, namely the challenges that the credit rating agencies have highlighted as placing pressure on the outlook for utilities in 2023.

For example, Moody's recently revised its 2023 outlook for the regulated gas and electric utilities sector to "negative" based on ongoing challenges of inflation, increasing interest rates and higher natural gas prices. Moody's noted that these challenges increase the pressure on customer affordability, and thus face heightened public scrutiny and the ability of utilities to promptly recover their costs. Moody's concluded that regulated utilities' financial metrics are already under pressure with little cushion, and that sustained capital spending is likely as utilities continue progress towards emissions reductions and net-zero goals. Moody's noted that the outlook could return to stable if regulatory support remains intact, natural gas prices are at a level where utilities are able to recover their fuel and purchased power costs without delay beyond 12 months, overall inflation moderates, interest rates stabilize and/or utilities' aggregate funds from operations-to-debt ratio remains between 14% and 15%.[53]

Fitch Ratings ("Fitch") also highlights similar factors identified by Moody's as challenging utilities' outlook for 2023, stating that the sector faces mounting cost pressures due to "elevated commodity prices, inflationary headwinds and rising interest costs," and that some offset in managing these headwinds include "higher authorized ROEs and the use of tools such as securitization of under-recovered fuel balances."[54]

Likewise, S&P also continues to maintain a negative outlook for the utility industry, noting that downgrades have outpaced upgrades for the third consecutive year in 2022 with a

[53] Moody's Investors Service, Outlook. "2023 outlook negative due to higher natural gas prices, inflation and rising interest rates." November 10, 2022; Moody's Investors Service. Outlook, Sector In-Depth. "Inflation, high natural gas prices complicate prospects for supportive rate increases." November 11, 2022.

[54] Fitch Ratings. "North American Utilities, Power & Gas Outlook 2023." December 7, 2022, at 1-2.

median investor-owned utility credit rating of "BBB+".[55] Further, S&P expects the industry to have negative discretionary cash flow as a result of significant capital spending and consistent dividends.[56] Therefore, the utility industry will need ongoing access to capital markets to fund the capital expenditures. However, S&P notes that inflation, rising interest rates and decreasing equity prices may "hamper" consistent access to capital markets and result in additional pressure on cash flows.[57] Moreover, S&P indicates that if inflation risks persist over the near-term and customer bills increase, regulatory credit support could decrease resulting in weaker financial metrics for the industry:

> Over the past decade the industry's financial measures have weakened from a combination of rising capital spending, regulatory lag, and lower authorized return on equity (ROE). The industry's return on capital was about 6% a decade ago and today is closer to 4%. More recently, we have seen instances where not only is the authorized ROE lowered but also the equity ratio is lowered. These results have weakened the industry's financial measures, pressuring credit quality. Under our base case of moderating inflationary risks during 2023, we expect the industry's credit measures to generally remain flat. However, if inflationary risks persist, it may further pressure the customer bill, potentially decreasing the level of regulatory credit support, weakening the industry's financial performance.[58]

The credit ratings agencies' continued concerns over the negative effects of inflation and increased capital expenditures underscore the importance of maintaining adequate cash flow metrics for the industry as a whole, and PAWC in particular in the context of this proceeding.

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[55] S&P Global Ratings. Industry Top Trends, "North American Regulated Utilities: The industries outlook remains negative." January 23, 2023.

[56] *Id.*

[57] *Id.*

[58] *Id.*

Q. What is your conclusion with regard to PAWC's proposed capital structure?

A. Considering the actual capital structures of the proxy group operating companies, I believe that PAWC's proposed common equity ratio of 55.30 percent is reasonable. The proposed equity ratio is well within the range and slightly below the mean established by the capital structures of the utility operating subsidiaries of the proxy companies.

X. CONCLUSION AND RECOMMENDATIONS

Q. What is your conclusion regarding a fair ROE for PAWC?

A. Figure 9 summarizes the results of my cost of equity analyses. Based on the various quantitative analyses summarized in Figure 1 above and the qualitative analyses presented in my Direct Testimony, a reasonable range of ROE results for PAWC is from 10.00 percent to 11.25 percent. Within that range, I believe that an ROE of 10.95 percent is reasonable and appropriate. A return at the high end of the range of results would recognize the Company's superior performance and service quality, as discussed in the testimony of Ms. Ashley Everette at PAWC Statement No. 1. In addition, the recommended ROE takes into consideration the current conditions in capital markets including the high interest rates, and elevated inflationary pressures, both of which increase the cost of capital as well as the need to recover flotation costs and the relative business and financial risk of PAWC as compared to the proxy group. This ROE would enable the company to attract capital at reasonable terms under a variety of economic and financial market conditions, while continuing to provide safe, reliable and affordable water service to customers in Pennsylvania.

Figure 9: Summary of Cost of Equity Model Results[59]

	Mean Low	Mean	Mean High
Constant Growth DCF			
Mean Results:			
30-Day Average	8.90%	10.00%	11.31%
90-Day Average	8.66%	9.77%	11.08%
180-Day Average	8.50%	9.60%	10.91%
Average	8.69%	9.79%	11.10%
Median Results:			
30-Day Average	8.91%	9.98%	11.34%
90-Day Average	8.65%	9.54%	10.90%
180-Day Average	8.52%	9.28%	10.63%
Average	8.69%	9.60%	10.96%

	Current 30-day Average Treasury Bond Yield	Near-Term Blue Chip Forecast Yield	Long-Term Blue Chip Forecast Yield
CAPM:			
Current Value Line Beta	11.17%	11.10%	10.99%
Current Bloomberg Beta	10.66%	10.56%	10.41%
Long-term Avg. Beta	10.43%	10.32%	10.15%
ECAPM:			
Current Value Line Beta	11.50%	11.44%	11.36%
Current Bloomberg Beta	11.12%	11.04%	10.93%
Long-term Avg. Beta	10.94%	10.86%	10.73%

Q. What is your conclusion regarding PAWC's proposed capital structure?

A. My conclusion is that PAWC's proposed rate-making capital structure consisting of 55.30 percent common equity, 44.70 percent long-term debt is reasonable as compared to the proxy group companies and should be used for setting rates in this case.

[59] DCF results exclude the result for Middlesex Water Company because the low and mean results are lower than the current yield on the Moody's Baa rated utility bond index, which is illogical and the high end DCF result does not provide a reasonable equity risk premium over the current yield on the Moody's Baa rated utility bond index of 6.48 percent on a 30-day average basis ending October 31, 2023.

Q. Does this conclude you direct testimony?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Ann E. Bulkley**, hereby state that the facts set forth in the pre-marked Statement No. 13 and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: November 8, 2023

Ann E. Bulkley

SUMMARY OF ROE ANALYSES RESULTS

	Mean Low	Mean	Mean High
Constant Growth DCF[1]			
Mean Results:			
30-Day Average	8.90%	10.00%	11.31%
90-Day Average	8.66%	9.77%	11.08%
180-Day Average	8.50%	9.60%	10.91%
Average	8.69%	9.79%	11.10%
Median Results:			
30-Day Average	8.91%	9.98%	11.34%
90-Day Average	8.65%	9.54%	10.90%
180-Day Average	8.52%	9.28%	10.63%
Average	8.69%	9.60%	10.96%

	Current 30-day Average Treasury Bond Yield	Near-Term Blue Chip Forecast Yield	Long-Term Blue Chip Forecast Yield
CAPM:			
Current Value Line Beta	11.17%	11.10%	10.99%
Current Bloomberg Beta	10.66%	10.56%	10.41%
Long-term Avg. Beta	10.43%	10.32%	10.15%
ECAPM:			
Current Value Line Beta	11.50%	11.44%	11.36%
Current Bloomberg Beta	11.12%	11.04%	10.93%
Long-term Avg. Beta	10.94%	10.86%	10.73%

[1] Excludes the results for Middlesex Water Company

PROXY GROUP SCREENING DATA AND RESULTS - PROXY GROUP

Company	Ticker	[1] Dividends	[2] S&P Credit Rating Between BBB- and AAA	[3] Covered by More Than 1 Analyst	[4] Positive Growth Rates from at least two sources (Value Line, Yahoo! First Call, and Zacks)	[5] % Regulated Operating Income > 70%	[6] Announced Merger	[7] Electric Companies with < 10% Generation	[8] Electric Companies with Water Operations
American States Water Company	AWR	Yes	A	Yes	Yes	83.04%	No	n/a	n/a
Atmos Energy Corporation	ATO	Yes	A-	Yes	Yes	100.00%	No	n/a	n/a
California Water Service Group	CWT	Yes	A+	Yes	Yes	97.98%	No	n/a	n/a
Essential Utilities, Inc.	WTRG	Yes	A	Yes	Yes	98.55%	No	n/a	n/a
Eversource Energy	ES	Yes	A-	Yes	Yes	92.38%	No	0.06%	Yes
Middlesex Water Company	MSEX	Yes	A	Yes	Yes	91.18%	No	n/a	n/a
NiSource Inc.	NI	Yes	BBB+	Yes	Yes	100.17%	No	n/a	n/a
Northwest Natural Gas Company	NWN	Yes	A+	Yes	Yes	99.84%	No	n/a	n/a
ONE Gas, Inc.	OGS	Yes	A-	Yes	Yes	100.00%	No	n/a	n/a
SJW Group	SJW	Yes	A-	Yes	Yes	98.70%	No	n/a	n/a
Spire, Inc.	SR	Yes	A-	Yes	Yes	86.84%	No	n/a	n/a

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional
[3] Source: Yahoo! Finance, Value Line Investment Survey, and Zacks
[4] Source: Yahoo! Finance, Value Line Investment Survey, and Zacks
[5] Source: Form 10-K's for 2022, 2021, and 2020
[6] Source: SNL Financial News Releases

30-DAY CONSTANT GROWTH DCF

Company	Ticker	[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Value Line Earnings Growth	[6] Yahoo! Finance Earnings Growth	[7] Zacks Earnings Growth	[8] Average Growth Rate	[9] Mean Low ROE	[10] Mean ROE	[11] Mean High ROE
American States Water Company	AWR	$1.72	$78.68	2.19%	2.25%	6.50%	4.40%	6.30%	5.73%	6.63%	7.98%	8.76%
Atmos Energy Corporation	ATO	$2.96	$108.89	2.72%	2.82%	7.00%	7.50%	7.30%	7.27%	9.81%	10.08%	10.32%
California Water Service Group	CWT	$1.04	$47.85	2.17%	2.27%	6.50%	10.80%	n/a	8.65%	8.74%	10.92%	13.09%
Essential Utilities, Inc.	WTRG	$1.23	$33.92	3.62%	3.73%	7.50%	5.40%	5.60%	6.17%	9.12%	9.90%	11.26%
Eversource Energy	ES	$2.70	$56.56	4.77%	4.90%	6.50%	4.00%	5.00%	5.17%	8.87%	10.06%	11.43%
Middlesex Water Company	MSEX	$1.25	$65.50	1.91%	1.94%	5.00%	2.70%	n/a	3.85%	4.63%	5.79%	6.96%
NiSource Inc.	NI	$1.00	$25.13	3.98%	4.13%	9.50%	6.70%	7.00%	7.73%	10.81%	11.87%	13.67%
Northwest Natural Gas Company	NWN	$1.95	$38.12	5.11%	5.23%	6.50%	2.80%	3.70%	4.33%	7.99%	9.56%	11.78%
ONE Gas, Inc.	OGS	$2.60	$67.61	3.85%	3.95%	6.50%	5.00%	5.00%	5.50%	8.94%	9.45%	10.47%
SJW Group	SJW	$1.52	$60.01	2.53%	2.61%	6.50%	6.10%	n/a	6.30%	8.71%	8.91%	9.12%
Spire, Inc.	SR	$2.88	$57.02	5.05%	5.20%	8.00%	n/a	4.20%	6.10%	9.36%	11.30%	13.25%
Mean				3.45%	3.55%	6.91%	5.54%	5.51%	6.07%	8.51%	9.62%	10.92%
Median				3.62%	3.73%	6.50%	5.20%	5.30%	6.10%	8.87%	9.90%	11.26%
Excluding Middlesex												
Mean										8.90%	10.00%	11.31%
Median										8.91%	9.98%	11.34%

Notes:

[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals 30-day average as of October 31, 2023
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.50 x [8])
[5] Source: Value Line
[6] Source: Yahoo! Finance
[7] Source: Zacks
[8] Equals Average ([5], [6], [7])
[9] Equals [3] x (1 + 0.50 x Minimum ([5], [6], [7]) + Minimum ([5], [6], [7])
[10] Equals [4] + [8]
[11] Equals [3] x (1 + 0.50 x Maximum ([5], [6], [7]) + Maximum ([5], [6], [7])

90-DAY CONSTANT GROWTH DCF

Company	Ticker	[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Value Line Earnings Growth	[6] Yahoo! Finance Earnings Growth	[7] Zacks Earnings Growth	[8] Average Growth Rate	[9] Mean Low ROE	[10] Mean ROE	[11] Mean High ROE
American States Water Company	AWR	$1.72	$83.40	2.06%	2.12%	6.50%	4.40%	6.30%	5.73%	6.51%	7.85%	8.63%
Atmos Energy Corporation	ATO	$2.96	$114.42	2.59%	2.68%	7.00%	7.50%	7.30%	7.27%	9.68%	9.95%	10.18%
California Water Service Group	CWT	$1.04	$49.92	2.08%	2.17%	6.50%	10.80%	n/a	8.65%	8.65%	10.82%	13.00%
Essential Utilities, Inc.	WTRG	$1.23	$37.37	3.29%	3.39%	7.50%	5.40%	5.60%	6.17%	8.78%	9.56%	10.91%
Eversource Energy	ES	$2.70	$63.56	4.25%	4.36%	6.50%	4.00%	5.00%	5.17%	8.33%	9.52%	10.89%
Middlesex Water Company	MSEX	$1.25	$74.06	1.69%	1.72%	5.00%	2.70%	n/a	3.85%	4.41%	5.57%	6.73%
NiSource Inc.	NI	$1.00	$26.25	3.81%	3.96%	9.50%	6.70%	7.00%	7.73%	10.64%	11.69%	13.49%
Northwest Natural Gas Company	NWN	$1.95	$39.90	4.89%	4.99%	6.50%	2.80%	3.70%	4.33%	7.76%	9.33%	11.55%
ONE Gas, Inc.	OGS	$2.60	$73.09	3.56%	3.66%	6.50%	5.00%	5.00%	5.50%	8.65%	9.16%	10.17%
SJW Group	SJW	$1.52	$65.26	2.33%	2.40%	6.50%	6.10%	n/a	6.30%	8.50%	8.70%	8.90%
Spire, Inc.	SR	$2.88	$59.42	4.85%	4.99%	8.00%	n/a	4.20%	6.10%	9.15%	11.09%	13.04%
Mean				3.22%	3.31%	6.91%	5.54%	5.51%	6.07%	8.28%	9.39%	10.68%
Median				3.29%	3.39%	6.50%	5.20%	5.30%	6.10%	8.65%	9.52%	10.89%
Excluding Middlesex												
Mean										8.66%	9.77%	11.08%
Median										8.65%	9.54%	10.90%

Notes:

[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals 30-day average as of October 31, 2023
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.50 x [8])
[5] Source: Value Line
[6] Source: Yahoo! Finance
[7] Source: Zacks
[8] Equals Average ([5], [6], [7])
[9] Equals [3] x (1 + 0.50 x Minimum ([5], [6], [7]) + Minimum ([5], [6], [7])
[10] Equals [4] + [8]
[11] Equals [3] x (1 + 0.50 x Maximum ([5], [6], [7]) + Maximum ([5], [6], [7])

180-DAY CONSTANT GROWTH DCF

Company	Ticker	[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Value Line Earnings Growth	[6] Yahoo! Finance Earnings Growth	[7] Zacks Earnings Growth	[8] Average Growth Rate	[9] Mean Low ROE	[10] Mean ROE	[11] Mean High ROE
American States Water Company	AWR	$1.72	$85.94	2.00%	2.06%	6.50%	4.40%	6.30%	5.73%	6.45%	7.79%	8.57%
Atmos Energy Corporation	ATO	$2.96	$113.86	2.60%	2.69%	7.00%	7.50%	7.30%	7.27%	9.69%	9.96%	10.20%
California Water Service Group	CWT	$1.04	$53.14	1.96%	2.04%	6.50%	10.80%	n/a	8.65%	8.52%	10.69%	12.86%
Essential Utilities, Inc.	WTRG	$1.23	$39.68	3.10%	3.19%	7.50%	5.40%	5.60%	6.17%	8.58%	9.36%	10.71%
Eversource Energy	ES	$2.70	$68.77	3.93%	4.03%	6.50%	4.00%	5.00%	5.17%	8.00%	9.19%	10.55%
Middlesex Water Company	MSEX	$1.25	$75.84	1.65%	1.68%	5.00%	2.70%	n/a	3.85%	4.37%	5.53%	6.69%
NiSource Inc.	NI	$1.00	$26.61	3.76%	3.90%	9.50%	6.70%	7.00%	7.73%	10.58%	11.64%	13.44%
Northwest Natural Gas Company	NWN	$1.95	$42.32	4.61%	4.71%	6.50%	2.80%	3.70%	4.33%	7.47%	9.04%	11.26%
ONE Gas, Inc.	OGS	$2.60	$75.75	3.43%	3.53%	6.50%	5.00%	5.00%	5.50%	8.52%	9.03%	10.04%
SJW Group	SJW	$1.52	$70.29	2.16%	2.23%	6.50%	6.10%	n/a	6.30%	8.33%	8.53%	8.73%
Spire, Inc.	SR	$2.88	$63.09	4.56%	4.70%	8.00%	n/a	4.20%	6.10%	8.86%	10.80%	12.75%
Mean				3.07%	3.16%	6.91%	5.54%	5.51%	6.07%	8.12%	9.23%	10.53%
Median				3.10%	3.19%	6.50%	5.20%	5.30%	6.10%	8.52%	9.19%	10.55%
Excluding Middlesex												
Mean										8.50%	9.60%	10.91%
Median										8.52%	9.28%	10.63%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals 30-day average as of October 31, 2023
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.50 x [8])
[5] Source: Value Line
[6] Source: Yahoo! Finance
[7] Source: Zacks
[8] Equals Average ([5], [6], [7])
[9] Equals [3] x (1 + 0.50 x Minimum ([5], [6], [7]) + Minimum ([5], [6], [7])
[10] Equals [4] + [8]
[11] Equals [3] x (1 + 0.50 x Maximum ([5], [6], [7]) + Maximum ([5], [6], [7])

FLOTATION COST ADJUSTMENT

			[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	
Company	Ticker	Date [i]	Shares Issued (000)	Offering Price	Under-writing Discount [ii]	Offering Expense ($000)	Net Proceeds Per Share	Total Flotation Costs ($000)	Gross Equity Issue Before Costs ($000)	Net Proceeds ($000)	Flotation Cost Percentage	
American Water Works Company	AWK	2/28/2023	12,650	135.50	2.033	700	133.41	26,411	1,714,075	1,687,664	1.54%	[iii]

[i] Offering Completion Date
[ii] Underwriting discount is calculated as the market price minus the offering price when not explicitly given in the prospectus.
[iii] American Water Works Company: AWK Prospectus 424B7 02.28.2023

The flotation cost adjustment is derived by dividing the dividend yield by 1 − F (where F = flotation costs expressed in percentage terms), or by 0.9846, and adding that result to the constant growth rate to determine the cost of equity. Using the formulas shown previously in my testimony, the Constant Growth DCF calculation is modified as follows to accommodate an adjustment for flotation costs:

$$k = \frac{D \times (1 + 0.5g)}{P \times (1 - F)} + g$$

		[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	
Company	Ticker	Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	Expected Dividend Yield Adjusted for Flotation Costs	Value Line Earnings Growth	Yahoo! Finance Earnings Growth	Zacks Earnings Growth	Average Earnings Growth	Cost of Equity: Mean Growth Rate	Cost of Equity Adjusted for Flotation Costs	
American States Water Company	AWR	$ 1.72	$ 78.68	2.19%	2.25%	2.28%	6.50%	4.40%	6.30%	5.73%	7.98%	8.02%	
Atmos Energy Corporation	ATO	$ 2.96	$ 108.89	2.72%	2.82%	2.86%	7.00%	7.50%	7.30%	7.27%	10.08%	10.13%	
California Water Service Group	CWT	$ 1.04	$ 47.85	2.17%	2.27%	2.30%	6.50%	10.80%	n/a	8.65%	10.92%	10.95%	
Essential Utilities, Inc.	WTRG	$ 1.23	$ 33.92	3.62%	3.73%	3.79%	7.50%	5.40%	5.60%	6.17%	9.90%	9.96%	
Eversource Energy	ES	$ 2.70	$ 56.56	4.77%	4.90%	4.97%	6.50%	4.00%	5.00%	5.17%	10.06%	10.14%	
Middlesex Water Company	MSEX	$ 1.25	$ 65.50	1.91%	1.94%	1.98%	5.00%	2.70%	n/a	3.85%	5.79%	5.83%	
NiSource Inc.	NI	$ 1.00	$ 25.13	3.98%	4.13%	4.20%	9.50%	6.70%	7.00%	7.73%	11.87%	11.93%	
Northwest Natural Gas Company	NWN	$ 1.95	$ 38.12	5.11%	5.23%	5.31%	6.50%	2.80%	3.70%	4.33%	9.56%	9.64%	
ONE Gas, Inc.	OGS	$ 2.60	$ 67.61	3.85%	3.95%	4.01%	6.50%	5.00%	5.00%	5.50%	9.45%	9.51%	
SJW Group	SJW	$ 1.52	$ 60.01	2.53%	2.61%	2.65%	6.50%	6.10%	n/a	6.30%	8.91%	8.95%	
Spire, Inc.	SR	$ 2.88	$ 57.02	5.05%	5.20%	5.29%	8.00%	n/a	4.20%	6.10%	11.30%	11.39%	
Mean											9.62%	9.68%	
Median											9.90%	9.96%	
Flotation Cost Adjustment (Mean)												0.06%	[21]
Flotation Cost Adjustment (Median)												0.06%	[22]

Notes:
[1] - [4] See Notes [i] to [iii] above
[5] Equals [8]/[1]
[6] Equals [4] + ([1] x [3])
[7] Equals [1] x [2]
[8] Equals [7] - [6]
[9] Equals [6] / [7]
[10] Bloomberg Professional
[11] Bloomberg Professional, equals 30-day average as of October 31, 2023
[12] Equals [10] / [11]
[13] Equals [12] x (1 + 0.5 x [18])
[14] Equals [13] / (1 − Flotation Cost)
[15] Value Line
[16] Yahoo! Finance
[17] Zacks Investment Research
[18] Equals Average of [15], [16], [17]
[19] Equals [13] + [18]
[20] Equals [14] + [18]
[21] Equals [20] (Mean) − [19] (Mean)
[22] Equals [20] (Median) − [19] (Median)

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VL BETA

$$K = Rf + \beta (Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
American States Water Company	AWR	4.84%	0.70	12.49%	7.64%	10.19%	10.77%
Atmos Energy Corporation	ATO	4.84%	0.85	12.49%	7.64%	11.34%	11.63%
California Water Service Group	CWT	4.84%	0.70	12.49%	7.64%	10.19%	10.77%
Essential Utilities, Inc.	WTRG	4.84%	1.00	12.49%	7.64%	12.49%	12.49%
Eversource Energy	ES	4.84%	0.90	12.49%	7.64%	11.72%	11.91%
Middlesex Water Company	MSEX	4.84%	0.75	12.49%	7.64%	10.58%	11.05%
NiSource Inc.	NI	4.84%	0.90	12.49%	7.64%	11.72%	11.91%
Northwest Natural Gas Company	NWN	4.84%	0.80	12.49%	7.64%	10.96%	11.34%
ONE Gas, Inc.	OGS	4.84%	0.80	12.49%	7.64%	10.96%	11.34%
SJW Group	SJW	4.84%	0.85	12.49%	7.64%	11.34%	11.63%
Spire, Inc.	SR	4.84%	0.85	12.49%	7.64%	11.34%	11.63%
Mean			0.83			11.17%	11.50%

Notes:

[1] Source: Bloomberg Professional, 30-day average as of October 31, 2023
[2] Source: Value Line Reports, August 25, 2023, October 6, 2023
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE & VL BETA

$$K = Rf + \beta\,(Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2024 - Q1 2025)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
American States Water Company	AWR	4.44%	0.70	12.49%	8.05%	10.07%	10.68%
Atmos Energy Corporation	ATO	4.44%	0.85	12.49%	8.05%	11.28%	11.58%
California Water Service Group	CWT	4.44%	0.70	12.49%	8.05%	10.07%	10.68%
Essential Utilities, Inc.	WTRG	4.44%	1.00	12.49%	8.05%	12.49%	12.49%
Eversource Energy	ES	4.44%	0.90	12.49%	8.05%	11.68%	11.88%
Middlesex Water Company	MSEX	4.44%	0.75	12.49%	8.05%	10.48%	10.98%
NiSource Inc.	NI	4.44%	0.90	12.49%	8.05%	11.68%	11.88%
Northwest Natural Gas Company	NWN	4.44%	0.80	12.49%	8.05%	10.88%	11.28%
ONE Gas, Inc.	OGS	4.44%	0.80	12.49%	8.05%	10.88%	11.28%
SJW Group	SJW	4.44%	0.85	12.49%	8.05%	11.28%	11.58%
Spire, Inc.	SR	4.44%	0.85	12.49%	8.05%	11.28%	11.58%
Mean			0.83			11.10%	11.44%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 42, No. 11, November 1, 2023, at 2

[2] Source: Value Line Reports, August 25, 2023, October 6, 2023

[3] Source: Schedule 7

[4] Equals [3] - [1]

[5] Equals [1] + [2] x [4]

[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE & VL BETA

$$K = Rf + \beta (Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2025-2029)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
American States Water Company	AWR	3.80%	0.70	12.49%	8.69%	9.88%	10.53%
Atmos Energy Corporation	ATO	3.80%	0.85	12.49%	8.69%	11.18%	11.51%
California Water Service Group	CWT	3.80%	0.70	12.49%	8.69%	9.88%	10.53%
Essential Utilities, Inc.	WTRG	3.80%	1.00	12.49%	8.69%	12.49%	12.49%
Eversource Energy	ES	3.80%	0.90	12.49%	8.69%	11.62%	11.84%
Middlesex Water Company	MSEX	3.80%	0.75	12.49%	8.69%	10.32%	10.86%
NiSource Inc.	NI	3.80%	0.90	12.49%	8.69%	11.62%	11.84%
Northwest Natural Gas Company	NWN	3.80%	0.80	12.49%	8.69%	10.75%	11.18%
ONE Gas, Inc.	OGS	3.80%	0.80	12.49%	8.69%	10.75%	11.18%
SJW Group	SJW	3.80%	0.85	12.49%	8.69%	11.18%	11.51%
Spire, Inc.	SR	3.80%	0.85	12.49%	8.69%	11.18%	11.51%
Mean			0.83			10.99%	11.36%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 42, No. 6, June 1, 2023, at 14

[2] Source: Value Line Reports, August 25, 2023, October 6, 2023

[3] Source: Schedule 7

[4] Equals [3] - [1]

[5] Equals [1] + [2] x [4]

[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & BLOOMBERG BETA

$$K = Rf + \beta\,(Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
American States Water Company	AWR	4.84%	0.65	12.49%	7.64%	9.82%	10.48%
Atmos Energy Corporation	ATO	4.84%	0.75	12.49%	7.64%	10.57%	11.05%
California Water Service Group	CWT	4.84%	0.69	12.49%	7.64%	10.09%	10.69%
Essential Utilities, Inc.	WTRG	4.84%	0.85	12.49%	7.64%	11.33%	11.62%
Eversource Energy	ES	4.84%	0.80	12.49%	7.64%	10.98%	11.36%
Middlesex Water Company	MSEX	4.84%	0.77	12.49%	7.64%	10.74%	11.18%
NiSource Inc.	NI	4.84%	0.81	12.49%	7.64%	11.06%	11.42%
Northwest Natural Gas Company	NWN	4.84%	0.70	12.49%	7.64%	10.19%	10.77%
ONE Gas, Inc.	OGS	4.84%	0.79	12.49%	7.64%	10.86%	11.27%
SJW Group	SJW	4.84%	0.80	12.49%	7.64%	10.93%	11.32%
Spire, Inc.	SR	4.84%	0.76	12.49%	7.64%	10.69%	11.14%
Mean			0.76			10.66%	11.12%

Notes:
[1] Source: Bloomberg Professional, 30-day average as of October 31, 2023
[2] Source: Bloomberg Professional, as of October 31, 2023
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE & BLOOMBERG BETA

$$K = Rf + \beta\,(Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2024 - Q1 2025)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
American States Water Company	AWR	4.44%	0.65	12.49%	8.05%	9.67%	10.38%
Atmos Energy Corporation	ATO	4.44%	0.75	12.49%	8.05%	10.47%	10.97%
California Water Service Group	CWT	4.44%	0.69	12.49%	8.05%	9.96%	10.60%
Essential Utilities, Inc.	WTRG	4.44%	0.85	12.49%	8.05%	11.27%	11.57%
Eversource Energy	ES	4.44%	0.80	12.49%	8.05%	10.90%	11.30%
Middlesex Water Company	MSEX	4.44%	0.77	12.49%	8.05%	10.65%	11.11%
NiSource Inc.	NI	4.44%	0.81	12.49%	8.05%	10.99%	11.36%
Northwest Natural Gas Company	NWN	4.44%	0.70	12.49%	8.05%	10.07%	10.68%
ONE Gas, Inc.	OGS	4.44%	0.79	12.49%	8.05%	10.77%	11.20%
SJW Group	SJW	4.44%	0.80	12.49%	8.05%	10.85%	11.26%
Spire, Inc.	SR	4.44%	0.76	12.49%	8.05%	10.59%	11.06%
Mean			0.76			10.56%	11.04%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 42, No. 11, November 1, 2023, at 2

[2] Source: Bloomberg Professional, as of October 31, 2023

[3] Source: Schedule 7

[4] Equals [3] - [1]

[5] Equals [1] + [2] x [4]

[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE & BLOOMBERG BETA

$$K = Rf + \beta\,(Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2025-2029)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
American States Water Company	AWR	3.80%	0.65	12.49%	8.69%	9.45%	10.21%
Atmos Energy Corporation	ATO	3.80%	0.75	12.49%	8.69%	10.31%	10.85%
California Water Service Group	CWT	3.80%	0.69	12.49%	8.69%	9.76%	10.45%
Essential Utilities, Inc.	WTRG	3.80%	0.85	12.49%	8.69%	11.17%	11.50%
Eversource Energy	ES	3.80%	0.80	12.49%	8.69%	10.77%	11.20%
Middlesex Water Company	MSEX	3.80%	0.77	12.49%	8.69%	10.50%	11.00%
NiSource Inc.	NI	3.80%	0.81	12.49%	8.69%	10.87%	11.27%
Northwest Natural Gas Company	NWN	3.80%	0.70	12.49%	8.69%	9.88%	10.53%
ONE Gas, Inc.	OGS	3.80%	0.79	12.49%	8.69%	10.64%	11.10%
SJW Group	SJW	3.80%	0.80	12.49%	8.69%	10.72%	11.16%
Spire, Inc.	SR	3.80%	0.76	12.49%	8.69%	10.44%	10.95%
Mean			0.76			10.41%	10.93%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 42, No. 6, June 1, 2023, at 14

[2] Source: Bloomberg Professional, as of October 31, 2023

[3] Source: Schedule 7

[4] Equals [3] - [1]

[5] Equals [1] + [2] x [4]

[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VALUE LINE LT AVERAGE BETA

$$K = Rf + \beta\ (Rm - Rf)$$
$$K = Rf + 0.25 \times (Rm - Rf) + 0.75 \times \beta \times (Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
American States Water Company	AWR	4.84%	0.69	12.49%	7.64%	10.12%	10.71%
Atmos Energy Corporation	ATO	4.84%	0.74	12.49%	7.64%	10.50%	11.00%
California Water Service Group	CWT	4.84%	0.71	12.49%	7.64%	10.23%	10.80%
Essential Utilities, Inc.	WTRG	4.84%	0.77	12.49%	7.64%	10.73%	11.17%
Eversource Energy	ES	4.84%	0.74	12.49%	7.64%	10.53%	11.02%
Middlesex Water Company	MSEX	4.84%	0.74	12.49%	7.64%	10.46%	10.97%
NiSource Inc.	NI	4.84%	0.74	12.49%	7.64%	10.48%	10.98%
Northwest Natural Gas Company	NWN	4.84%	0.70	12.49%	7.64%	10.19%	10.77%
ONE Gas, Inc.	OGS	4.84%	0.73	12.49%	7.64%	10.41%	10.93%
SJW Group	SJW	4.84%	0.76	12.49%	7.64%	10.61%	11.08%
Spire, Inc.	SR	4.84%	0.73	12.49%	7.64%	10.42%	10.94%
Mean			0.73			10.43%	10.94%

Notes:

[1] Source: Bloomberg Professional, 30-day average as of October 31, 2023
[2] Source: Value Line Reports, 2013 - 2022.
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VALUE LINE LT AVERAGE BETA

$$K = Rf + \beta\ (Rm - Rf)$$
$$K = Rf + 0.25 \times (Rm - Rf) + 0.75 \times \beta \times (Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2024 - Q1 2025)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
American States Water Company	AWR	4.44%	0.69	12.49%	8.05%	9.99%	10.62%
Atmos Energy Corporation	ATO	4.44%	0.74	12.49%	8.05%	10.39%	10.92%
California Water Service Group	CWT	4.44%	0.71	12.49%	8.05%	10.11%	10.71%
Essential Utilities, Inc.	WTRG	4.44%	0.77	12.49%	8.05%	10.64%	11.10%
Eversource Energy	ES	4.44%	0.74	12.49%	8.05%	10.42%	10.94%
Middlesex Water Company	MSEX	4.44%	0.74	12.49%	8.05%	10.35%	10.89%
NiSource Inc.	NI	4.44%	0.74	12.49%	8.05%	10.37%	10.90%
Northwest Natural Gas Company	NWN	4.44%	0.70	12.49%	8.05%	10.07%	10.68%
ONE Gas, Inc.	OGS	4.44%	0.73	12.49%	8.05%	10.30%	10.85%
SJW Group	SJW	4.44%	0.76	12.49%	8.05%	10.52%	11.01%
Spire, Inc.	SR	4.44%	0.73	12.49%	8.05%	10.31%	10.86%
Mean			0.73			10.32%	10.86%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 42, No. 11, November 1, 2023, at 2

[2] Source: Value Line Reports, 2013 - 2022.

[3] Source: Schedule 7

[4] Equals [3] - [1]

[5] Equals [1] + [2] x [4]

[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VALUE LINE LT AVERAGE BETA

$$K = Rf + \beta\ (Rm - Rf)$$
$$K = Rf + 0.25 \times (Rm - Rf) + 0.75 \times \beta \times (Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2025-2029)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
American States Water Company	AWR	3.80%	0.69	12.49%	8.69%	9.79%	10.47%
Atmos Energy Corporation	ATO	3.80%	0.74	12.49%	8.69%	10.23%	10.79%
California Water Service Group	CWT	3.80%	0.71	12.49%	8.69%	9.92%	10.56%
Essential Utilities, Inc.	WTRG	3.80%	0.77	12.49%	8.69%	10.49%	10.99%
Eversource Energy	ES	3.80%	0.74	12.49%	8.69%	10.26%	10.82%
Middlesex Water Company	MSEX	3.80%	0.74	12.49%	8.69%	10.18%	10.76%
NiSource Inc.	NI	3.80%	0.74	12.49%	8.69%	10.21%	10.78%
Northwest Natural Gas Company	NWN	3.80%	0.70	12.49%	8.69%	9.88%	10.53%
ONE Gas, Inc.	OGS	3.80%	0.73	12.49%	8.69%	10.13%	10.72%
SJW Group	SJW	3.80%	0.76	12.49%	8.69%	10.36%	10.89%
Spire, Inc.	SR	3.80%	0.73	12.49%	8.69%	10.14%	10.73%
Mean			0.73			10.15%	10.73%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 42, No. 6, June 1, 2023, at 14

[2] Source: Value Line Reports, 2013 - 2022.

[3] Source: Schedule 7

[4] Equals [3] - [1]

[5] Equals [1] + [2] x [4]

[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

HISTORICAL BETA - 2013 - 2022

Company	Ticker	[1] 12/31/2013	[2] 12/31/2014	[3] 12/31/2015	[4] 12/31/2016	[5] 12/31/2017	[6] 12/31/2018	[7] 12/31/2019	[8] 12/31/2020	[9] 12/31/2021	[10] 12/31/2022	[11] Average
American States Water Company	AWR	0.65	0.70	0.70	0.75	0.80	0.70	0.65	0.65	0.65	0.65	0.69
Atmos Energy Corporation	ATO	0.80	0.80	0.80	0.70	0.70	0.60	0.60	0.80	0.80	0.80	0.74
California Water Service Group	CWT	0.60	0.70	0.75	0.75	0.80	0.70	0.70	0.65	0.70	0.70	0.71
Essential Utilities, Inc.	WTRG	0.60	0.70	0.75	0.70	0.75	0.70	0.65	0.95	0.95	0.95	0.77
Eversource Energy	ES			0.75	0.70	0.65	0.60	0.55	0.90	0.90	0.90	0.74
Middlesex Water Company	MSEX	0.75	0.70	0.70	0.75	0.80	0.75	0.75	0.75	0.70	0.70	0.74
NiSource Inc.	NI	0.85	0.85	NMF	NMF	0.60	0.50	0.55	0.85	0.85	0.85	0.74
Northwest Natural Gas Company	NWN	0.65	0.70	0.65	0.65	0.70	0.60	0.60	0.80	0.85	0.80	0.70
ONE Gas, Inc.	OGS				0.70	0.70	0.65	0.65	0.80	0.80	0.80	0.73
SJW Group	SJW	0.85	0.85	0.75	0.75	0.70	0.60	0.60	0.85	0.80	0.80	0.76
Spire, Inc.	SR	0.65	0.70	0.70	0.70	0.70	0.65	0.65	0.85	0.85	0.85	0.73
Mean		0.71	0.74	0.73	0.72	0.72	0.64	0.63	0.80	0.80	0.80	0.73

Notes:
[1] Value Line, dated December 26, 2013.
[2] Value Line, dated December 31, 2014.
[3] Value Line, dated December 30, 2015.
[4] Value Line, dated December 29, 2016.
[5] Value Line, dated December 28, 2017.
[6] Value Line, dated December 27, 2018.
[7] Value Line, dated December 26, 2019.
[8] Value Line, dated December 30, 2020.
[9] Value Line, dated December 29, 2021.
[10] Value Line, dated December 30, 2022.
[11] Average ([1] - [10])

MARKET RISK PREMIUM DERIVED FROM S&P 500 INDEX

[1] Estimated Weighted Average Dividend Yield	1.88%
[2] Estimated Weighted Average Long-Term Growth Rate	10.51%
[3] S&P 500 Estimated Required Market Return	12.49%

Name	Ticker	[4] Shares Outst'g	[5] Price	[6] Market Capitalization	[7] Weight in Index	[8] Estimated Dividend Yield	[9] Cap-Weighted Dividend Yield	[10] Bloomberg Long-Term Growth Est.	[11] Cap-Weighted Long-Term Growth Est.
LyondellBasell Industries NV	LYB	324.362	90.24	29,270	0.11%	5.54%	0.01%	11.00%	0.01%
American Express Co	AXP	728.746	146.03	106,419	0.40%	1.64%	0.01%	13.94%	0.06%
Verizon Communications Inc	VZ	4204.102	35.13	147,690		7.57%			
Broadcom Inc	AVGO	412.736	841.37	347,264	1.31%	2.19%	0.03%	12.40%	0.16%
Boeing Co/The	BA	604.977	186.82	113,022					
Caterpillar Inc	CAT	510.143	226.05	115,318	0.44%	2.30%	0.01%	20.00%	0.09%
JPMorgan Chase & Co	JPM	2906.085	139.06	404,120	1.52%	3.02%	0.05%	1.00%	0.02%
Chevron Corp	CVX	1867.245	145.73	272,114	1.03%	4.14%	0.04%	7.27%	0.07%
Coca-Cola Co/The	KO	4323.414	56.49	244,230	0.92%	3.26%	0.03%	7.02%	0.06%
AbbVie Inc	ABBV	1765.047	141.18	249,189	0.94%	4.39%	0.04%	6.50%	0.06%
Walt Disney Co/The	DIS	1829.779	81.59	149,292				22.27%	
FleetCor Technologies Inc	FLT	73.957	225.17	16,653	0.06%			12.40%	0.01%
Extra Space Storage Inc	EXR	211.277	103.59	21,886	0.08%	2.36%	0.00%	0.61%	0.00%
Exxon Mobil Corp	XOM	3962.918	105.85	419,475	1.58%	3.59%	0.06%	16.80%	0.27%
Phillips 66	PSX	445.288	114.07	50,794	0.19%	3.68%	0.01%	15.21%	0.03%
General Electric Co	GE	1088.386	108.63	118,231	0.45%	0.29%	0.00%	7.00%	0.03%
HP Inc	HPQ	988.269	26.33	26,021	0.10%	3.99%	0.00%	0.50%	0.00%
Home Depot Inc/The	HD	1000.066	284.69	284,709	1.07%	2.94%	0.03%	3.32%	0.04%
Monolithic Power Systems Inc	MPWR	47.911	441.74	21,164	0.08%	0.91%	0.00%	8.00%	0.01%
International Business Machines Corp	IBM	913.119	144.64	132,074	0.50%	4.59%	0.02%	2.77%	0.01%
Johnson & Johnson	JNJ	2407.279	148.34	357,096	1.35%	3.21%	0.04%	3.86%	0.05%
Lululemon Athletica Inc	LULU	121.425	393.48	47,778	0.18%			16.00%	0.03%
McDonald's Corp	MCD	728.763	262.17	191,060	0.72%	2.55%	0.02%	9.67%	0.07%
Merck & Co Inc	MRK	2537.521	102.7	260,603	0.98%	2.84%	0.03%	8.51%	0.08%
3M Co	MMM	552.317	90.95	50,233	0.19%	6.60%	0.01%	4.00%	0.01%
American Water Works Co Inc	AWK	194.669	117.65	22,903	0.09%	2.41%	0.00%	8.00%	0.01%
Bank of America Corp	BAC	7913.732	26.34	208,448		3.64%			
Pfizer Inc	PFE	5645.96	30.56	172,541		5.37%		50.40%	
Procter & Gamble Co/The	PG	2356.886	150.03	353,604	1.33%	2.51%	0.03%	7.51%	0.10%
AT&T Inc	T	7150.02	15.4	110,110	0.42%	7.21%	0.03%	2.44%	0.01%
Travelers Cos Inc/The	TRV	228.399	167.44	38,243	0.14%	2.39%	0.00%	15.33%	0.02%
RTX Corp	RTX	1437.901	81.39	117,031	0.44%	2.90%	0.01%	8.61%	0.04%
Analog Devices Inc	ADI	498.314	157.33	78,400	0.30%	2.19%	0.01%	6.50%	0.02%
Walmart Inc	WMT	2691.564	163.41	439,828	1.66%	1.40%	0.02%	8.00%	0.13%
Cisco Systems Inc	CSCO	4050.542	52.13	211,155	0.80%	2.99%	0.02%	7.50%	0.06%
Intel Corp	INTC	4216	36.5	153,884		1.37%		-1.82%	
General Motors Co	GM	1369.481	28.2	38,619	0.15%	1.28%	0.00%	0.36%	0.00%
Microsoft Corp	MSFT	7432.262	338.11	2,512,922	9.48%	0.89%	0.08%	15.72%	1.49%
Dollar General Corp	DG	219.476	119.04	26,126		1.98%		-2.50%	
Cigna Group/The	CI	295.98	309.2	91,517	0.35%	1.59%	0.01%	9.80%	0.03%
Kinder Morgan Inc	KMI	2222.774	16.2	36,009	0.14%	6.98%	0.01%	2.00%	0.00%
Citigroup Inc	C	1913.9	39.49	75,580		5.37%		-9.70%	
American International Group Inc	AIG	711.9	61.31	43,647	0.16%	2.35%	0.00%	10.00%	0.02%
Altria Group Inc	MO	1768.647	40.17	71,047	0.27%	9.76%	0.03%	4.50%	0.01%
HCA Healthcare Inc	HCA	267.661	226.14	60,529	0.23%	1.06%	0.00%	7.56%	0.02%
International Paper Co	IP	346.017	33.73	11,671		5.48%		-2.00%	
Hewlett Packard Enterprise Co	HPE	1282.865	15.38	19,730	0.07%	3.12%	0.00%	3.03%	0.00%
Abbott Laboratories	ABT	1735.358	94.55	164,078	0.62%	2.16%	0.01%	3.27%	0.02%
Aflac Inc	AFL	594.062	78.11	46,402	0.18%	2.15%	0.00%	5.98%	0.01%
Air Products and Chemicals Inc	APD	222.149	282.44	62,744	0.24%	2.48%	0.01%	10.86%	0.03%
Royal Caribbean Cruises Ltd	RCL	256.235	84.73	21,711					
Hess Corp	HES	307.061	144.4	44,340	0.17%	1.21%	0.00%	13.00%	0.02%
Archer-Daniels-Midland Co	ADM	533.381	71.57	38,174		2.52%		-7.07%	
Automatic Data Processing Inc	ADP	411.7	218.22	89,841	0.34%	2.29%	0.01%	16.00%	0.05%
Verisk Analytics Inc	VRSK	145.027	227.36	32,973	0.12%	0.60%	0.00%	10.52%	0.01%
AutoZone Inc	AZO	17.634	2477.13	43,682	0.16%			13.72%	0.02%
Avery Dennison Corp	AVY	80.531	174.07	14,018	0.05%	1.86%	0.00%	7.00%	0.00%
Enphase Energy Inc	ENPH	136.551	79.58	10,867				30.50%	
MSCI Inc	MSCI	79.091	471.55	37,295	0.14%	1.17%	0.00%	14.41%	0.02%
Ball Corp	BALL	315.059	48.15	15,170	0.06%	1.66%	0.00%	10.30%	0.01%
Axon Enterprise Inc	AXON	74.76	204.49	15,288					
Ceridian HCM Holding Inc	CDAY	155.613	64.01	9,961					
Carrier Global Corp	CARR	839.047	47.66	39,989	0.15%	1.55%	0.00%	10.80%	0.02%
Bank of New York Mellon Corp/The	BK	769.073	42.5	32,686	0.12%	3.95%	0.00%	10.00%	0.01%
Otis Worldwide Corp	OTIS	409.259	77.21	31,599	0.12%	1.76%	0.00%	9.00%	0.01%
Baxter International Inc	BAX	506.405	32.43	16,423	0.06%	3.58%	0.00%	0.33%	0.00%
Becton Dickinson & Co	BDX	290.109	252.78	73,334	0.28%	1.44%	0.00%	9.20%	0.03%
Berkshire Hathaway Inc	BRK/B	1308.07	341.33	446,484					
Best Buy Co Inc	BBY	217.638	66.82	14,543	0.05%	5.51%	0.00%	3.21%	0.00%
Boston Scientific Corp	BSX	1464.223	51.19	74,954	0.28%			12.10%	0.03%
Bristol-Myers Squibb Co	BMY	2034.758	51.53	104,851	0.40%	4.42%	0.02%	2.22%	0.01%
Brown-Forman Corp	BF/B	310.136	56.16	17,417	0.07%	1.46%	0.00%	7.04%	0.00%
Coterra Energy Inc	CTRA	755.046	27.5	20,764		2.91%		23.02%	
Campbell Soup Co	CPB	297.622	40.41	12,027	0.05%	3.66%	0.00%	3.17%	0.00%
Hilton Worldwide Holdings Inc	HLT	256.44	151.53	38,858	0.15%	0.40%	0.00%	17.09%	0.03%
Carnival Corp	CCL	1119.445	11.46	12,829					
Qorvo Inc	QRVO	97.91	87.42	8,559	0.03%			2.83%	0.00%
UDR Inc	UDR	328.928	31.81	10,463	0.04%	5.28%	0.00%	6.08%	0.00%
Clorox Co/The	CLX	124.001	117.7	14,595	0.06%	4.08%	0.00%	14.82%	0.01%
Paycom Software Inc	PAYC	60.467	244.97	14,813		0.61%		21.43%	
CMS Energy Corp	CMS	291.764	53.856	15,713	0.06%	3.62%	0.00%	7.33%	0.00%

Name	Ticker	[4] Shares Outst'g	[5] Price	[6] Market Capitalization	[7] Weight in Index	[8] Estimated Dividend Yield	[9] Cap-Weighted Dividend Yield	[10] Bloomberg Long-Term Growth Est.	[11] Cap-Weighted Long-Term Growth Est.
Colgate-Palmolive Co	CL	823.372	75.12	61,852	0.23%	2.56%	0.01%	7.61%	0.02%
EPAM Systems Inc	EPAM	57.961	217.57	12,611	0.05%			4.70%	0.00%
Comerica Inc	CMA	131.873	39.4	5,196	0.02%	7.21%	0.00%	10.63%	0.00%
Conagra Brands Inc	CAG	477.968	27.01	12,910	0.05%	5.18%	0.00%	0.84%	0.00%
Airbnb Inc	ABNB	426.359	118.29	50,434	0.19%			18.84%	0.04%
Consolidated Edison Inc	ED	344.924	87.79	30,281	0.11%	3.69%	0.00%	4.88%	0.01%
Corning Inc	GLW	853.175	26.76	22,831	0.09%	4.19%	0.00%	1.57%	0.00%
Cummins Inc	CMI	141.647	216.3	30,638	0.12%	3.11%	0.00%	11.27%	0.01%
Caesars Entertainment Inc	CZR	215.711	39.89	8,605					
Danaher Corp	DHR	738.927	192.02	141,889		0.56%		-5.34%	
Target Corp	TGT	461.605	110.79	51,141		3.97%		-0.10%	
Deere & Co	DE	288.001	365.36	105,224	0.40%	1.48%	0.01%	16.67%	0.07%
Dominion Energy Inc	D	836.773	40.32	33,739		6.62%		-3.05%	
Dover Corp	DOV	139.89	129.95	18,179	0.07%	1.57%	0.00%	10.00%	0.01%
Alliant Energy Corp	LNT	252.719	48.79	12,330	0.05%	3.71%	0.00%	6.26%	0.00%
Steel Dynamics Inc	STLD	165.644	106.51	17,643		1.60%		-16.12%	
Duke Energy Corp	DUK	771	88.89	68,534	0.26%	4.61%	0.01%	6.06%	0.02%
Regency Centers Corp	REG	171.003	60.26	10,305	0.04%	4.31%	0.00%	4.98%	0.00%
Eaton Corp PLC	ETN	399.3	207.91	83,018	0.31%	1.65%	0.01%	15.00%	0.05%
Ecolab Inc	ECL	285.034	167.74	47,812	0.18%	1.26%	0.00%	15.40%	0.03%
Revvity Inc	RVTY	124.135	82.85	10,285		0.34%		-26.69%	
Emerson Electric Co	EMR	571.5	88.97	50,846	0.19%	2.34%	0.00%	16.70%	0.03%
EOG Resources Inc	EOG	582.261	126.25	73,510	0.28%	2.61%	0.01%	11.33%	0.03%
Aon PLC	AON	200.216	309.4	61,947	0.23%	0.80%	0.00%	11.58%	0.03%
Entergy Corp	ETR	211.456	95.59	20,213	0.08%	4.73%	0.00%	6.03%	0.00%
Equifax Inc	EFX	123.217	169.57	20,894	0.08%	0.92%	0.00%	12.33%	0.01%
EQT Corp	EQT	411.332	42.38	17,432		1.49%		22.52%	
IQVIA Holdings Inc	IQV	183.122	180.83	33,114	0.12%			13.12%	0.02%
Gartner Inc	IT	78.825	332.04	26,173	0.10%			7.22%	0.01%
FedEx Corp	FDX	251.42	240.1	60,366	0.23%	2.10%	0.00%	14.50%	0.03%
FMC Corp	FMC	124.734	53.2	6,636		4.36%		-4.00%	
Brown & Brown Inc	BRO	284.598	69.42	19,757	0.07%	0.75%	0.00%	11.00%	0.01%
Ford Motor Co	F	3932.102	9.75	38,338		6.15%		-2.52%	
NextEra Energy Inc	NEE	2023.714	58.3	117,983	0.45%	3.21%	0.01%	8.76%	0.04%
Franklin Resources Inc	BEN	498.978	22.79	11,372		5.27%		-9.00%	
Garmin Ltd	GRMN	191.452	102.53	19,630	0.07%	2.85%	0.00%	5.60%	0.00%
Freeport-McMoRan Inc	FCX	1433.636	33.78	48,428		1.78%		-13.95%	
Dexcom Inc	DXCM	386.374	88.83	34,322				30.59%	
General Dynamics Corp	GD	272.897	241.31	65,853	0.25%	2.19%	0.01%	10.40%	0.03%
General Mills Inc	GIS	581.279	65.24	37,923	0.14%	3.62%	0.01%	8.00%	0.01%
Genuine Parts Co	GPC	140.197	128.86	18,066	0.07%	2.95%	0.00%	9.49%	0.01%
Atmos Energy Corp	ATO	148.462	107.66	15,983	0.06%	2.75%	0.00%	7.25%	0.00%
WW Grainger Inc	GWW	49.634	729.83	36,224		1.02%			
Halliburton Co	HAL	895.052	39.34	35,211		1.63%		24.14%	
L3Harris Technologies Inc	LHX	189.54	179.41	34,005	0.13%	2.54%	0.00%	3.50%	0.00%
Healthpeak Properties Inc	PEAK	547.074	15.55	8,507		7.72%			
Insulet Corp	PODD	69.821	132.57	9,256				39.24%	
Catalent Inc	CTLT	180.272	34.39	6,200					
Fortive Corp	FTV	351.434	65.28	22,942	0.09%	0.43%	0.00%	8.68%	0.01%
Hershey Co/The	HSY	149.885	187.35	28,081	0.11%	2.54%	0.00%	9.00%	0.01%
Synchrony Financial	SYF	413.804	28.05	11,607		3.57%			
Hormel Foods Corp	HRL	546.481	32.55	17,788	0.07%	3.38%	0.00%	2.39%	0.00%
Arthur J Gallagher & Co	AJG	215.9	235.49	50,842	0.19%	0.93%	0.00%	14.49%	0.03%
Mondelez International Inc	MDLZ	1360.418	66.21	90,073	0.34%	2.57%	0.01%	7.97%	0.03%
CenterPoint Energy Inc	CNP	629.432	26.88	16,919	0.06%	2.98%	0.00%	8.02%	0.01%
Humana Inc	HUM	123.907	523.69	64,889	0.24%	0.68%	0.00%	12.32%	0.03%
Willis Towers Watson PLC	WTW	103.26	235.89	24,358	0.09%	1.42%	0.00%	11.19%	0.01%
Illinois Tool Works Inc	ITW	300.886	224.12	67,435	0.25%	2.50%	0.01%	3.91%	0.01%
CDW Corp/DE	CDW	134.048	200.4	26,863	0.10%	1.18%	0.00%	13.10%	0.01%
Trane Technologies PLC	TT	228.398	190.31	43,466	0.16%	1.58%	0.00%	11.86%	0.02%
Interpublic Group of Cos Inc/The	IPG	383.004	28.4	10,877	0.04%	4.37%	0.00%	5.71%	0.00%
International Flavors & Fragrances Inc	IFF	255.253	68.35	17,447		4.74%		-10.08%	
Generac Holdings Inc	GNRC	62.243	84.07	5,233	0.02%			4.50%	0.00%
NXP Semiconductors NV	NXPI	257.802	172.43	44,453		2.35%		20.50%	
Kellanova	K	342.347	50.47	17,278	0.07%	4.44%	0.00%	1.94%	0.00%
Broadridge Financial Solutions Inc	BR	117.621	170.64	20,071		1.88%			
Kimberly-Clark Corp	KMB	337.941	119.64	40,431	0.15%	3.95%	0.01%	9.64%	0.01%
Kimco Realty Corp	KIM	619.892	17.94	11,121	0.04%	5.35%	0.00%	3.47%	0.00%
Oracle Corp	ORCL	2739.376	103.4	283,251	1.07%	1.55%	0.02%	14.45%	0.15%
Kroger Co/The	KR	719.316	45.37	32,635	0.12%	2.56%	0.00%	4.55%	0.01%
Lennar Corp	LEN	250.152	106.68	26,686	0.10%	1.41%	0.00%	1.00%	0.00%
Eli Lilly & Co	LLY	949.295	553.93	525,843		0.82%		23.26%	
Bath & Body Works Inc	BBWI	227.381	29.65	6,742	0.03%	2.70%	0.00%	11.38%	0.00%
Charter Communications Inc	CHTR	147.92	402.8	59,582	0.22%			13.16%	0.03%
Loews Corp	L	223.251	64.01	14,290		0.39%			
Lowe's Cos Inc	LOW	577.115	190.57	109,981		2.31%		20.59%	
Hubbell Inc	HUBB	53.631	270.1	14,486		1.81%			
IDEX Corp	IEX	75.626	191.41	14,476	0.05%	1.34%	0.00%	11.00%	0.01%
Marsh & McLennan Cos Inc	MMC	493.072	189.65	93,511	0.35%	1.50%	0.01%	10.85%	0.04%
Masco Corp	MAS	224.501	52.09	11,694	0.04%	2.19%	0.00%	4.36%	0.00%
S&P Global Inc	SPGI	318.2	349.31	111,150	0.42%	1.03%	0.00%	13.54%	0.06%
Medtronic PLC	MDT	1330.534	70.56	93,882	0.35%	3.91%	0.01%	3.17%	0.01%
Viatris Inc	VTRS	1199.532	8.9	10,676		5.39%		-2.38%	
CVS Health Corp	CVS	1284.399	69.01	88,636	0.33%	3.51%	0.01%	7.13%	0.02%
DuPont de Nemours Inc	DD	459.061	72.88	33,456	0.13%	1.98%	0.00%	12.18%	0.02%
Micron Technology Inc	MU	1098.034	66.87	73,426		0.69%		-11.00%	
Motorola Solutions Inc	MSI	167.02	278.46	46,508	0.18%	1.26%	0.00%	12.22%	0.02%
Cboe Global Markets Inc	CBOE	105.517	163.89	17,293	0.07%	1.34%	0.00%	7.62%	0.00%
Laboratory Corp of America Holdings	LH	84.9	199.73	16,957		1.44%		-19.90%	
Newmont Corp	NEM	794.8	37.47	29,781	0.11%	4.27%	0.00%	12.20%	0.01%

		[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
NIKE Inc	NKE	1224.013	102.77	125,792	0.47%	1.32%	0.01%	16.07%	0.08%
NiSource Inc	NI	413.255	25.16	10,397	0.04%	3.97%	0.00%	7.00%	0.00%
Norfolk Southern Corp	NSC	226.136	189.4358	42,838	0.16%	2.85%	0.00%	0.73%	0.00%
Principal Financial Group Inc	PFG	241.715	67.68	16,359	0.06%	3.96%	0.00%	8.76%	0.01%
Eversource Energy	ES	349.086	53.79	18,777	0.07%	5.02%	0.00%	5.21%	0.00%
Northrop Grumman Corp	NOC	150.793	471.43	71,088	0.27%	1.59%	0.00%	2.53%	0.01%
Wells Fargo & Co	WFC	3631.64	39.4186	143,154	0.54%	3.55%	0.02%	13.41%	0.07%
Nucor Corp	NUE	248.722	147.79	36,759		1.38%		-11.10%	
Occidental Petroleum Corp	OXY	884.682	61.81	54,682		1.16%		-2.25%	
Omnicom Group Inc	OMC	197.934	74.91	14,827	0.06%	3.74%	0.00%	6.36%	0.00%
ONEOK Inc	OKE	582.473	65.2	37,977	0.14%	5.86%	0.01%	7.43%	0.01%
Raymond James Financial Inc	RJF	208.8	95.44	19,928		1.76%			
PG&E Corp	PCG	2133.508	16.3	34,776	0.13%			9.63%	0.01%
Parker-Hannifin Corp	PH	128.51	368.91	47,409	0.18%	1.60%	0.00%	14.56%	0.03%
Rollins Inc	ROL	484.038	37.61	18,205	0.07%	1.60%	0.00%	14.86%	0.01%
PPL Corp	PPL	737.089	24.57	18,110	0.07%	3.91%	0.00%	5.20%	0.00%
ConocoPhillips	COP	1197.491	118.8	142,262		0.51%		0.00%	
PulteGroup Inc	PHM	215.595	73.59	15,866	0.06%	0.87%	0.00%	2.04%	0.00%
Pinnacle West Capital Corp	PNW	113.312	74.18	8,405	0.03%	4.75%	0.00%	5.90%	0.00%
PNC Financial Services Group Inc/The	PNC	398.341	114.47	45,598	0.17%	5.42%	0.01%	12.87%	0.02%
PPG Industries Inc	PPG	235.8	122.77	28,949	0.11%	2.12%	0.00%	11.24%	0.01%
Progressive Corp/The	PGR	585.041	158.09	92,489		0.25%		38.38%	
Veralto Corp	VLTO	246.308	69	16,995					
Public Service Enterprise Group Inc	PEG	499.111	61.65	30,770	0.12%	3.70%	0.00%	6.23%	0.01%
Robert Half Inc	RHI	105.895	74.77	7,918	0.03%	2.57%	0.00%	1.26%	0.00%
Cooper Cos Inc/The	COO	49.524	311.75	15,439	0.06%	0.02%	0.00%	7.54%	0.00%
Edison International	EIX	383.289	63.06	24,170	0.09%	4.68%	0.00%	4.80%	0.00%
Schlumberger NV	SLB	1423.421	55.66	79,228		1.80%		33.41%	
Charles Schwab Corp/The	SCHW	1770.22	52.04	92,122	0.35%	1.92%	0.01%	3.60%	0.01%
Sherwin-Williams Co/The	SHW	255.966	238.21	60,974	0.23%	1.02%	0.00%	7.95%	0.02%
West Pharmaceutical Services Inc	WST	73.99	318.29	23,550	0.09%	0.25%	0.00%	5.80%	0.01%
J M Smucker Co/The	SJM	102.142	113.84	11,628	0.04%	3.72%	0.00%	6.09%	0.00%
Snap-on Inc	SNA	52.78	257.94	13,614	0.05%	2.51%	0.00%	4.85%	0.00%
AMETEK Inc	AME	230.799	140.77	32,490	0.12%	0.71%	0.00%	8.16%	0.01%
Southern Co/The	SO	1091.515	67.3	73,459	0.28%	4.16%	0.01%	5.05%	0.01%
Truist Financial Corp	TFC	1333.668	28.36	37,823	0.14%	7.33%	0.01%	16.00%	0.02%
Southwest Airlines Co	LUV	596.115	22.23	13,252	0.05%	3.24%	0.00%	10.15%	0.01%
W R Berkley Corp	WRB	258.044	67.42	17,397	0.07%	0.65%	0.00%	13.00%	0.01%
Stanley Black & Decker Inc	SWK	153.311	85.05	13,039	0.05%	3.81%	0.00%	9.00%	0.00%
Public Storage	PSA	175.829	238.71	41,972	0.16%	5.03%	0.01%	4.44%	0.01%
Arista Networks Inc	ANET	311.1	200.37	62,335				20.66%	
Sysco Corp	SYY	504.226	66.49	33,526	0.13%	3.01%	0.00%	13.00%	0.02%
Corteva Inc	CTVA	709.516	48.14	34,156	0.13%	1.33%	0.00%	17.67%	0.02%
Texas Instruments Inc	TXN	908.204	142.01	128,974	0.49%	3.66%	0.02%	10.00%	0.05%
Textron Inc	TXT	196.005	76	14,896	0.06%	0.11%	0.00%	11.73%	0.01%
Thermo Fisher Scientific Inc	TMO	385.95	444.77	171,659		0.31%		-5.00%	
TJX Cos Inc/The	TJX	1144.081	88.07	100,759	0.38%	1.51%	0.01%	10.00%	0.04%
Globe Life Inc	GL	94.82	116.36	11,033		0.77%			
Johnson Controls International plc	JCI	680.32	49.02	33,349	0.13%	3.02%	0.00%	13.36%	0.02%
Ulta Beauty Inc	ULTA	49.229	381.31	18,772	0.07%			6.54%	0.00%
Union Pacific Corp	UNP	609.597	207.61	126,558	0.48%	2.50%	0.01%	6.50%	0.03%
Keysight Technologies Inc	KEYS	177.575	122.05	21,673	0.08%			2.52%	0.00%
UnitedHealth Group Inc	UNH	926.305	535.56	496,092	1.87%	1.40%	0.03%	12.79%	0.24%
Blackstone Inc	BX	718.443	92.35	66,348	0.25%	3.47%	0.01%	7.63%	0.02%
Marathon Oil Corp	MRO	605.687	27.31	16,541		1.61%		-10.00%	
Bio-Rad Laboratories Inc	BIO	24.059	275.28	6,623	0.02%			4.00%	0.00%
Ventas Inc	VTR	402.378	42.46	17,085	0.06%	4.24%	0.00%	7.81%	0.01%
VF Corp	VFC	388.868	14.73	5,728	0.02%	2.44%	0.00%	7.80%	0.00%
Vulcan Materials Co	VMC	132.873	196.49	26,108		0.88%		23.22%	
Weyerhaeuser Co	WY	730.001	28.69	20,944		2.65%			
Whirlpool Corp	WHR	54.853	104.56	5,735		6.69%		-2.33%	
Williams Cos Inc/The	WMB	1216.421	34.4	41,845	0.16%	5.20%	0.01%	3.50%	0.01%
Constellation Energy Corp	CEG	321.592	112.92	36,314		1.00%		26.26%	
WEC Energy Group Inc	WEC	315.435	81.39	25,673	0.10%	3.83%	0.00%	6.47%	0.01%
Adobe Inc	ADBE	455.3	532.06	242,247	0.91%			17.33%	0.16%
AES Corp/The	AES	669.629	14.9	9,977	0.04%	4.45%	0.00%	6.37%	0.00%
Amgen Inc	AMGN	535.178	255.7	136,845	0.52%	3.33%	0.02%	5.33%	0.03%
Apple Inc	AAPL	15634.232	170.77	2,669,858	10.07%	0.56%	0.06%	9.05%	0.91%
Autodesk Inc	ADSK	213.764	197.63	42,246	0.16%			13.86%	0.02%
Cintas Corp	CTAS	101.854	507.12	51,652	0.19%	1.06%	0.00%	11.86%	0.02%
Comcast Corp	CMCSA	4015.635	41.29	165,806	0.63%	2.81%	0.02%	9.26%	0.06%
Molson Coors Beverage Co	TAP	200.96	57.77	11,609	0.04%	2.84%	0.00%	8.01%	0.00%
KLA Corp	KLAC	135.932	469.7	63,847	0.24%	1.11%	0.00%	9.93%	0.02%
Marriott International Inc/MD	MAR	298.24	188.56	56,236	0.21%	1.10%	0.00%	17.06%	0.04%
Fiserv Inc	FI	600.186	113.75	68,271	0.26%			14.08%	0.04%
McCormick & Co Inc/MD	MKC	251.291	63.9	16,057	0.06%	2.44%	0.00%	7.01%	0.00%
PACCAR Inc	PCAR	523.1	82.53	43,171	0.16%	1.31%	0.00%	12.00%	0.02%
Costco Wholesale Corp	COST	442.741	551.428	244,140	0.92%	0.74%	0.01%	13.06%	0.12%
Stryker Corp	SYK	379.778	270.22	102,624	0.39%	1.11%	0.00%	7.26%	0.03%
Tyson Foods Inc	TSN	285.55	46.35	13,235		4.14%		-24.28%	
Lamb Weston Holdings Inc	LW	144.927	89.5236	12,974	0.05%	1.25%	0.00%	13.32%	0.01%
Applied Materials Inc	AMAT	836.534	132.35	110,715	0.42%	0.97%	0.00%	3.73%	0.02%
American Airlines Group Inc	AAL	653.541	11.15	7,287				54.64%	
Cardinal Health Inc	CAH	246.354	91	22,418		2.20%			
Cincinnati Financial Corp	CINF	156.908	99.67	15,639	0.06%	3.01%	0.00%	18.21%	0.01%
Paramount Global	PARA	610.399	10.88	6,641		1.84%		-22.86%	
DR Horton Inc	DHI	338.297	104.4	35,318		0.96%		-8.43%	
Electronic Arts Inc	EA	270.912	123.79	33,536	0.13%	0.61%	0.00%	9.26%	0.01%
Fair Isaac Corp	FICO	24.857	845.87	21,026					
Expeditors International of Washington Inc	EXPD	147.897	109.25	16,158		1.26%			

Name	Ticker	[4] Shares Outst'g	[5] Price	[6] Market Capitalization	[7] Weight in Index	[8] Estimated Dividend Yield	[9] Cap-Weighted Dividend Yield	[10] Bloomberg Long-Term Growth Est.	[11] Cap-Weighted Long-Term Growth Est.
Fastenal Co	FAST	571.413	58.34	33,336		2.40%			
M&T Bank Corp	MTB	165.97	112.75	18,713	0.07%	4.61%	0.00%	11.59%	0.01%
Xcel Energy Inc	XEL	551.816	59.27	32,706	0.12%	3.51%	0.00%	5.95%	0.01%
Fifth Third Bancorp	FITB	680.99	23.71	16,146		5.90%		25.00%	
Gilead Sciences Inc	GILD	1246.014	78.54	97,862	0.37%	3.82%	0.01%	2.15%	0.01%
Hasbro Inc	HAS	138.741	45.15	6,264		6.20%		-3.49%	
Huntington Bancshares Inc/OH	HBAN	1448.075	9.65	13,974		6.42%		-7.69%	
Welltower Inc	WELL	532.268	83.61	44,503	0.17%	2.92%	0.00%	10.19%	0.02%
Biogen Inc	BIIB	144.823	237.54	34,401	0.13%			0.05%	0.00%
Northern Trust Corp	NTRS	207.036	65.91	13,646	0.05%	4.55%	0.00%	13.00%	0.01%
Packaging Corp of America	PKG	89.915	153.05	13,761	0.05%	3.27%	0.00%	3.00%	0.00%
Paychex Inc	PAYX	361.232	111.05	40,115	0.15%	3.21%	0.00%	7.00%	0.01%
QUALCOMM Inc	QCOM	1116	108.99	121,633		2.94%		-1.35%	
Ross Stores Inc	ROST	338.632	115.97	39,271	0.15%	1.16%	0.00%	10.00%	0.01%
IDEXX Laboratories Inc	IDXX	83.012	399.47	33,161	0.13%			17.57%	0.02%
Starbucks Corp	SBUX	1145.4	92.24	105,652		2.47%		20.53%	
KeyCorp	KEY	936.161	10.22	9,568	0.04%	8.02%	0.00%	7.08%	0.00%
Fox Corp	FOXA	253.684	30.39	7,709	0.03%	1.71%	0.00%	6.24%	0.00%
Fox Corp	FOX	235.581	27.91	6,575	0.02%	1.86%	0.00%	6.24%	0.00%
State Street Corp	STT	308.584	64.63	19,944	0.08%	4.27%	0.00%	6.92%	0.01%
Norwegian Cruise Line Holdings Ltd	NCLH	425.424	13.6	5,786					
US Bancorp	USB	1556.965	31.88	49,636	0.19%	6.02%	0.01%	7.50%	0.01%
A O Smith Corp	AOS	122.828	69.76	8,568		1.83%			
Gen Digital Inc	GEN	639.439	16.66	10,653		3.00%			
T Rowe Price Group Inc	TROW	223.47	90.5	20,224		5.39%		-3.90%	
Waste Management Inc	WM	402.775	164.33	66,188	0.25%	1.70%	0.00%	10.05%	0.03%
Constellation Brands Inc	STZ	183.663	233.26	42,841	0.16%	1.53%	0.00%	9.75%	0.02%
DENTSPLY SIRONA Inc	XRAY	211.716	30.41	6,438	0.02%	1.84%	0.00%	9.78%	0.00%
Zions Bancorp NA	ZION	148.146	30.85	4,570		5.32%		-9.73%	
Alaska Air Group Inc	ALK	127.12	31.63	4,021	0.02%			3.56%	0.00%
Invesco Ltd	IVZ	449.554	12.97	5,831		6.17%		-4.35%	
Intuit Inc	INTU	280.259	494.95	138,714	0.52%	0.73%	0.00%	18.84%	0.10%
Morgan Stanley	MS	1656.967	70.82	117,346	0.44%	4.80%	0.02%	3.64%	0.02%
Microchip Technology Inc	MCHP	544.334	71.29	38,806	0.15%	2.30%	0.00%	12.06%	0.02%
Chubb Ltd	CB	407.984	214.62	87,562	0.33%	1.60%	0.01%	15.50%	0.05%
Hologic Inc	HOLX	244.942	66.17	16,208				-16.00%	
Citizens Financial Group Inc	CFG	466.222	23.43	10,924		7.17%		-10.63%	
O'Reilly Automotive Inc	ORLY	59.621	930.44	55,474	0.21%			11.39%	0.02%
Allstate Corp/The	ALL	261.574	128.13	33,515		2.78%		-3.00%	
Equity Residential	EQR	379.032	55.33	20,972	0.08%	4.79%	0.00%	5.17%	0.00%
BorgWarner Inc	BWA	235.063	36.9	8,674	0.03%	1.19%	0.00%	5.16%	0.00%
Keurig Dr Pepper Inc	KDP	1398.336	30.33	42,412	0.16%	2.84%	0.00%	6.85%	0.01%
Host Hotels & Resorts Inc	HST	711.605	15.48	11,016		4.65%			
Incyte Corp	INCY	224.109	53.93	12,086				36.36%	
Simon Property Group Inc	SPG	326.247	109.89	35,851	0.14%	6.92%	0.01%	1.71%	0.00%
Eastman Chemical Co	EMN	118.564	74.73	8,860	0.03%	4.23%	0.00%	4.75%	0.00%
AvalonBay Communities Inc	AVB	142.016	165.74	23,538	0.09%	3.98%	0.00%	10.62%	0.01%
Prudential Financial Inc	PRU	363	91.44	33,193	0.13%	5.47%	0.01%	10.60%	0.01%
United Parcel Service Inc	UPS	723.276	141.25	102,163	0.39%	4.59%	0.02%	1.64%	0.01%
Walgreens Boots Alliance Inc	WBA	863.915	21.08	18,211	0.07%	9.11%	0.01%	0.25%	0.00%
STERIS PLC	STE	98.781	209.98	20,742		0.99%			
McKesson Corp	MCK	134.902	455.36	61,429	0.23%	0.54%	0.00%	10.03%	0.02%
Lockheed Martin Corp	LMT	248.099	454.64	112,796	0.43%	2.77%	0.01%	7.04%	0.03%
Cencora Inc	COR	202.175	185.15	37,433	0.14%	1.05%	0.00%	9.44%	0.01%
Capital One Financial Corp	COF	381	101.29	38,591		2.37%		-6.32%	
Waters Corp	WAT	59.103	238.53	14,098	0.05%			5.37%	0.00%
Nordson Corp	NDSN	57.014	212.59	12,121		1.28%			
Dollar Tree Inc	DLTR	220.006	111.09	24,440	0.09%			7.37%	0.01%
Darden Restaurants Inc	DRI	120.315	145.53	17,509	0.07%	3.60%	0.00%	10.45%	0.01%
Evergy Inc	EVRG	229.583	49.14	11,282	0.04%	4.99%	0.00%	4.82%	0.00%
Match Group Inc	MTCH	278.087	34.6	9,622				48.68%	
Domino's Pizza Inc	DPZ	34.881	338.99	11,824	0.04%	1.43%	0.00%	13.97%	0.01%
NVR Inc	NVR	3.21	5412.62	17,375				-4.57%	
NetApp Inc	NTAP	208.791	72.78	15,196	0.06%	2.75%	0.00%	7.40%	0.00%
Old Dominion Freight Line Inc	ODFL	109.268	376.66	41,157	0.16%	0.42%	0.00%	5.83%	0.01%
DaVita Inc	DVA	91.3	77.23	7,051	0.03%			15.78%	0.00%
Hartford Financial Services Group Inc/The	HIG	300.77	73.45	22,092	0.08%	2.56%	0.00%	7.00%	0.01%
Iron Mountain Inc	IRM	291.852	59.07	17,240	0.07%	4.40%	0.00%	4.00%	0.00%
Estee Lauder Cos Inc/The	EL	232.297	128.87	29,936		2.05%		22.00%	
Cadence Design Systems Inc	CDNS	272.062	239.85	65,254	0.25%			18.56%	0.05%
Tyler Technologies Inc	TYL	42.078	372.9	15,691					
Universal Health Services Inc	UHS	62.14	125.89	7,823	0.03%	0.64%	0.00%	9.41%	0.00%
Skyworks Solutions Inc	SWKS	159.393	86.74	13,826	0.05%	3.14%	0.00%	4.99%	0.00%
Quest Diagnostics Inc	DGX	112.435	130.1	14,628		2.18%		-1.27%	
Rockwell Automation Inc	ROK	114.86	262.81	30,186	0.11%	1.90%	0.00%	15.47%	0.02%
Kraft Heinz Co/The	KHC	1228.295	31.46	38,642	0.15%	5.09%	0.01%	3.92%	0.01%
American Tower Corp	AMT	466.165	178.19	83,066	0.31%	3.64%	0.01%	13.67%	0.04%
Regeneron Pharmaceuticals Inc	REGN	106.741	779.89	83,246	0.31%			3.33%	0.01%
Amazon.com Inc	AMZN	10334.031	133.09	1,375,356				52.33%	
Jack Henry & Associates Inc	JKHY	72.801	140.99	10,264	0.04%	1.48%	0.00%	7.52%	0.00%
Ralph Lauren Corp	RL	40.388	112.53	4,545	0.02%	2.67%	0.00%	10.82%	0.00%
Boston Properties Inc	BXP	156.865	53.57	8,403	0.03%	7.32%	0.00%	3.79%	0.00%
Amphenol Corp	APH	598.31	80.55	48,194	0.18%	1.09%	0.00%	4.04%	0.01%
Howmet Aerospace Inc	HWM	412.208	44.1	18,178	0.07%	0.45%	0.00%	19.27%	0.01%
Pioneer Natural Resources Co	PXD	233.309	239	55,761		3.08%		-3.00%	
Valero Energy Corp	VLO	340.453	127	43,238		3.21%		35.66%	
Synopsys Inc	SNPS	152.084	469.44	71,394	0.27%			16.27%	0.04%
Etsy Inc	ETSY	123.014	62.3	7,664	0.03%			7.02%	0.00%
CH Robinson Worldwide Inc	CHRW	116.439	81.83	9,528	0.04%	2.98%	0.00%	5.00%	0.00%
Accenture PLC	ACN	664.787	297.09	197,502	0.75%	1.74%	0.01%	10.00%	0.07%

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TransDigm Group Inc	TDG	55.183	828.09	45,696				26.65%	
Yum! Brands Inc	YUM	280.211	120.86	33,866	0.13%	2.00%	0.00%	12.91%	0.02%
Prologis Inc	PLD	923.862	100.75	93,079	0.35%	3.45%	0.01%	8.04%	0.03%
FirstEnergy Corp	FE	573.815	35.6	20,428		4.61%		-0.83%	
VeriSign Inc	VRSN	102.1	199.66	20,385	0.08%			11.50%	0.01%
Quanta Services Inc	PWR	145.199	167.12	24,266	0.09%	0.19%	0.00%	8.00%	0.01%
Henry Schein Inc	HSIC	130.585	64.98	8,485	0.03%			5.16%	0.00%
Ameren Corp	AEE	262.475	75.71	19,872	0.07%	3.33%	0.00%	6.21%	0.00%
ANSYS Inc	ANSS	86.791	278.26	24,150	0.09%			11.14%	0.01%
FactSet Research Systems Inc	FDS	37.988	431.89	16,407	0.06%	0.91%	0.00%	10.45%	0.01%
NVIDIA Corp	NVDA	2470	407.8	1,007,266		0.04%		56.84%	
Sealed Air Corp	SEE	144.41	30.79	4,446	0.02%	2.60%	0.00%	0.93%	0.00%
Cognizant Technology Solutions Corp	CTSH	505.041	64.47	32,560	0.12%	1.80%	0.00%	12.00%	0.01%
Intuitive Surgical Inc	ISRG	352.072	262.22	92,320	0.35%			11.57%	0.04%
Take-Two Interactive Software Inc	TTWO	169.831	133.75	22,715				54.11%	
Republic Services Inc	RSG	314.637	148.49	46,720	0.18%	1.44%	0.00%	9.93%	0.02%
eBay Inc	EBAY	532.157	39.23	20,877	0.08%	2.55%	0.00%	9.50%	0.01%
Goldman Sachs Group Inc/The	GS	329.671	303.61	100,091	0.38%	3.62%	0.01%	7.71%	0.03%
SBA Communications Corp	SBAC	108.383	208.63	22,612	0.09%	1.63%	0.00%	8.00%	0.01%
Sempra	SRE	629.307	70.03	44,070	0.17%	3.40%	0.01%	5.49%	0.01%
Moody's Corp	MCO	183	308	56,364	0.21%	1.00%	0.00%	14.08%	0.03%
ON Semiconductor Corp	ON	430.698	62.64	26,979	0.10%			5.81%	0.01%
Booking Holdings Inc	BKNG	35.692	2789.56	99,565	0.38%			17.50%	0.07%
F5 Inc	FFIV	59.207	151.59	8,975	0.03%			5.45%	0.00%
Akamai Technologies Inc	AKAM	151.713	103.33	15,677	0.06%			10.72%	0.01%
Charles River Laboratories International Inc	CRL	51.271	168.36	8,632	0.03%			11.00%	0.00%
MarketAxess Holdings Inc	MKTX	37.905	213.75	8,102		1.35%			
Devon Energy Corp	DVN	640.7	46.57	29,837		4.21%		-4.00%	
Bio-Techne Corp	TECH	158.24	54.63	8,645	0.03%	0.59%	0.00%	5.00%	0.00%
Alphabet Inc	GOOGL	5918	124.08	734,305	2.77%			16.65%	0.46%
Teleflex Inc	TFX	46.992	184.75	8,682	0.03%	0.74%	0.00%	7.03%	0.00%
Bunge Ltd	6369743D	145.288	105.98	15,398		2.50%			
Netflix Inc	NFLX	437.68	411.69	180,188				30.96%	
Allegion plc	ALLE	87.788	98.36	8,635	0.03%	1.83%	0.00%	5.93%	0.00%
Agilent Technologies Inc	A	292.587	103.37	30,245	0.11%	0.87%	0.00%	11.00%	0.01%
Warner Bros Discovery Inc	WBD	2437.384	9.94	24,228				71.32%	
Elevance Health Inc	ELV	234.959	450.09	105,753	0.40%	1.32%	0.01%	10.85%	0.04%
Trimble Inc	TRMB	248.322	47.13	11,703					
CME Group Inc	CME	359.746	213.46	76,791	0.29%	2.06%	0.01%	11.10%	0.03%
Juniper Networks Inc	JNPR	318.868	26.92	8,584	0.03%	3.27%	0.00%	7.96%	0.00%
BlackRock Inc	BLK	149.303	612.28	91,415	0.34%	3.27%	0.01%	6.72%	0.02%
DTE Energy Co	DTE	206.109	96.38	19,865	0.07%	3.95%	0.00%	6.00%	0.00%
Nasdaq Inc	NDAQ	491.316	49.6	24,369	0.09%	1.77%	0.00%	2.68%	0.00%
Celanese Corp	CE	108.852	114.51	12,465	0.05%	2.45%	0.00%	3.27%	0.00%
Philip Morris International Inc	PM	1552.406	89.16	138,413	0.52%	5.83%	0.03%	9.19%	0.05%
Salesforce Inc	CRM	973	200.83	195,408				21.67%	
Ingersoll Rand Inc	IR	404.399	60.68	24,539		0.13%			
Roper Technologies Inc	ROP	106.711	488.57	52,136		0.56%		-1.00%	
Huntington Ingalls Industries Inc	HII	39.868	219.82	8,764		2.26%		40.00%	
MetLife Inc	MET	752.022	60.01	45,129	0.17%	3.47%	0.01%	12.89%	0.02%
Tapestry Inc	TPR	227.439	27.56	6,268	0.02%	5.08%	0.00%	15.00%	0.00%
CSX Corp	CSX	1976.131	29.85	58,988	0.22%	1.47%	0.00%	6.39%	0.01%
Edwards Lifesciences Corp	EW	606.5	63.72	38,646	0.15%			8.45%	0.01%
Ameriprise Financial Inc	AMP	102.626	314.57	32,283	0.12%	1.72%	0.00%	15.82%	0.02%
Zebra Technologies Corp	ZBRA	51.36	209.43	10,756					
Zimmer Biomet Holdings Inc	ZBH	208.964	104.41	21,818	0.08%	0.92%	0.00%	9.48%	0.01%
CBRE Group Inc	CBRE	304.793	69.34	21,134					
Camden Property Trust	CPT	106.771	84.88	9,063	0.03%	4.71%	0.00%	6.77%	0.00%
Mastercard Inc	MA	930.438	376.35	350,170	1.32%	0.61%	0.01%	17.85%	0.24%
CarMax Inc	KMX	158.668	61.09	9,693	0.04%			16.34%	0.01%
Intercontinental Exchange Inc	ICE	594.936	107.44	63,920	0.24%	1.56%	0.00%	9.87%	0.02%
Fidelity National Information Services Inc	FIS	592.465	49.11	29,096	0.11%	4.24%	0.00%	2.68%	0.00%
Chipotle Mexican Grill Inc	CMG	27.445	1942.2	53,304				25.41%	
Wynn Resorts Ltd	WYNN	113.936	87.78	10,001		1.14%			
Live Nation Entertainment Inc	LYV	230.151	80.02	18,417					
Assurant Inc	AIZ	53.023	148.9	7,895	0.03%	1.88%	0.00%	14.70%	0.00%
NRG Energy Inc	NRG	229.117	42.38	9,710	0.04%	3.56%	0.00%	10.26%	0.00%
Regions Financial Corp	RF	938.377	14.53	13,635	0.05%	6.61%	0.00%	0.99%	0.00%
Monster Beverage Corp	MNST	1047.518	51.1	53,528	0.20%			15.56%	0.03%
Mosaic Co/The	MOS	332.28	32.48	10,792		2.46%		22.93%	
Baker Hughes Co	BKR	1006.234	34.42	34,635	0.13%	2.32%	0.00%	16.00%	0.02%
Expedia Group Inc	EXPE	137.841	95.29	13,135	0.05%			17.50%	0.01%
CF Industries Holdings Inc	CF	192.948	79.78	15,393		2.01%		44.50%	
Leidos Holdings Inc	LDOS	137.506	99.12	13,630	0.05%	1.53%	0.00%	6.45%	0.00%
APA Corp	APA	307.265	39.72	12,205		2.52%		-2.68%	
Alphabet Inc	GOOG	5725	125.3	717,343	2.71%			16.65%	0.45%
First Solar Inc	FSLR	106.844	142.45	15,220	0.06%			19.80%	0.01%
TE Connectivity Ltd	TEL	313.939	117.85	36,998	0.14%	2.00%	0.00%	3.10%	0.00%
Discover Financial Services	DFS	250.058	82.08	20,525		3.41%		56.16%	
Linde PLC	LIN	484.89	382.16	185,306	0.70%	1.33%	0.01%	12.47%	0.09%
Visa Inc	V	1594	235.1	374,749	1.41%	0.88%	0.01%	14.73%	0.21%
Mid-America Apartment Communities Inc	MAA	116.677	118.15	13,785	0.05%	4.74%	0.00%	2.36%	0.00%
Xylem Inc/NY	XYL	241.078	93.54	22,550	0.09%	1.41%	0.00%	12.00%	0.01%
Marathon Petroleum Corp	MPC	379.697	151.25	57,429		2.18%		83.00%	
Tractor Supply Co	TSCO	108.808	192.56	20,952	0.08%	2.14%	0.00%	3.81%	0.00%
Advanced Micro Devices Inc	AMD	1615.671	98.5	159,144				27.10%	
ResMed Inc	RMD	147.092	141.22	20,772	0.08%	1.36%	0.00%	7.00%	0.01%
Mettler-Toledo International Inc	MTD	21.865	985.2	21,541	0.08%			8.29%	0.01%
Jacobs Solutions Inc	J	125.918	133.3	16,785	0.06%	0.78%	0.00%	9.26%	0.01%
Copart Inc	CPRT	960.183	43.52	41,787					

Name	Ticker	[4] Shares Outst'g	[5] Price	[6] Market Capitalization	[7] Weight in Index	[8] Estimated Dividend Yield	[9] Cap-Weighted Dividend Yield	[10] Bloomberg Long-Term Growth Est.	[11] Cap-Weighted Long-Term Growth Est.
VICI Properties Inc	VICI	1034.532	27.9	28,863	0.11%	5.95%	0.01%	11.05%	0.01%
Albemarle Corp	ALB	117.347	126.78	14,877		1.26%		25.23%	
Fortinet Inc	FTNT	785.337	57.17	44,898	0.17%			18.00%	0.03%
Moderna Inc	MRNA	380.593	75.96	28,910				-42.47%	
Essex Property Trust Inc	ESS	64.183	213.92	13,730	0.05%	4.32%	0.00%	9.46%	0.00%
CoStar Group Inc	CSGP	408.363	73.41	29,978	0.11%			20.00%	0.02%
Realty Income Corp	O	723.912	47.38	34,299		6.48%			
Westrock Co	WRK	256.403	35.93	9,213		3.37%		-6.74%	
Westinghouse Air Brake Technologies Corp	WAB	179.159	106.02	18,994	0.07%	0.64%	0.00%	12.86%	0.01%
Pool Corp	POOL	38.679	315.77	12,214		1.39%		-5.49%	
Western Digital Corp	WDC	324.145	40.15	13,014				-10.00%	
PepsiCo Inc	PEP	1374.864	163.28	224,488	0.85%	3.10%	0.03%	8.70%	0.07%
Diamondback Energy Inc	FANG	178.818	160.32	28,668	0.11%	2.10%	0.00%	8.97%	0.01%
Palo Alto Networks Inc	PANW	310.816	243.02	75,535				20.50%	
ServiceNow Inc	NOW	205	581.85	119,279					
Church & Dwight Co Inc	CHD	246.047	90.94	22,376	0.08%	1.20%	0.00%	5.85%	0.00%
Federal Realty Investment Trust	FRT	81.523	91.19	7,434	0.03%	4.78%	0.00%	6.53%	0.00%
MGM Resorts International	MGM	350.889	34.92	12,253					
American Electric Power Co Inc	AEP	515.176	75.54	38,916	0.15%	4.66%	0.01%	4.83%	0.01%
SolarEdge Technologies Inc	SEDG	56.558	75.95	4,296	0.02%			19.59%	0.00%
Invitation Homes Inc	INVH	611.958	29.69	18,169	0.07%	3.50%	0.00%	4.51%	0.00%
PTC Inc	PTC	118.833	140.42	16,687	0.06%			16.99%	0.01%
JB Hunt Transport Services Inc	JBHT	103.143	171.87	17,727		0.98%		27.00%	
Lam Research Corp	LRCX	131.792	588.22	77,523	0.29%	1.36%	0.00%	5.44%	0.02%
Mohawk Industries Inc	MHK	63.682	80.38	5,119				-3.08%	
GE HealthCare Technologies Inc	GEHC	455.243	66.57	30,306	0.11%	0.18%	0.00%	12.70%	0.01%
Pentair PLC	PNR	165.299	58.12	9,607	0.04%	1.51%	0.00%	6.22%	0.00%
Vertex Pharmaceuticals Inc	VRTX	258.095	362.11	93,459	0.35%			13.55%	0.05%
Amcor PLC	AMCR	1446.437	8.89	12,859	0.05%	5.62%	0.00%	1.33%	0.00%
Meta Platforms Inc	META	2219.607	301.27	668,701				24.05%	
T-Mobile US Inc	TMUS	1156.475	143.86	166,370		1.81%		38.46%	
United Rentals Inc	URI	67.781	406.27	27,537	0.10%	1.46%	0.00%	17.87%	0.02%
Honeywell International Inc	HON	659.251	183.26	120,814	0.46%	2.36%	0.01%	7.69%	0.04%
Alexandria Real Estate Equities Inc	ARE	173.775	93.13	16,184	0.06%	5.33%	0.00%	5.53%	0.00%
Delta Air Lines Inc	DAL	643.463	31.25	20,108		1.28%		30.85%	
Seagate Technology Holdings PLC	STX	209.184	68.25	14,277	0.05%	4.10%	0.00%	6.11%	0.00%
United Airlines Holdings Inc	UAL	326.729	35.01	11,439				46.54%	
News Corp	NWS	191.837	21.44	4,113	0.02%	0.93%	0.00%	8.00%	0.00%
Centene Corp	CNC	534.201	68.98	36,849	0.14%			4.72%	0.01%
Martin Marietta Materials Inc	MLM	61.804	408.94	25,274	0.10%	0.72%	0.00%	19.03%	0.02%
Teradyne Inc	TER	154.014	83.27	12,825	0.05%	0.53%	0.00%	7.82%	0.00%
PayPal Holdings Inc	PYPL	1098.037	51.8	56,878	0.21%			15.96%	0.03%
Tesla Inc	TSLA	3178.921	200.84	638,454				32.00%	
Arch Capital Group Ltd	ACGL	373.1	86.68	32,340	0.12%			14.50%	0.02%
Dow Inc	DOW	703.075	48.34	33,987	0.13%	5.79%	0.01%	0.93%	0.00%
Everest Group Ltd	EG	43.4	395.62	17,170		1.77%		35.22%	
Teledyne Technologies Inc	TDY	47.185	374.59	17,675	0.07%			6.36%	0.00%
News Corp	NWSA	379.585	20.68	7,850	0.03%	0.97%	0.00%	8.00%	0.00%
Exelon Corp	EXC	994.299	38.94	38,718	0.15%	3.70%	0.01%	4.00%	0.01%
Global Payments Inc	GPN	260.389	106.22	27,659	0.10%	0.94%	0.00%	13.33%	0.01%
Crown Castle Inc	CCI	434	92.98	40,353	0.15%	6.73%	0.01%	7.00%	0.01%
Aptiv PLC	APTV	282.824	87.2	24,662	0.09%			12.44%	0.01%
Align Technology Inc	ALGN	76.534	184.59	14,127					
Illumina Inc	ILMN	158.3	109.42	17,321					
Kenvue Inc	KVUE	1914.894	18.6	35,617		4.30%			
Targa Resources Corp	TRGP	223.712	83.61	18,705	0.07%	2.39%	0.00%	15.00%	0.01%
LKQ Corp	LKQ	267.598	43.92	11,753		2.73%			
Zoetis Inc	ZTS	460.317	157	72,270	0.27%	0.96%	0.00%	10.91%	0.03%
Equinix Inc	EQIX	93.883	729.64	68,501	0.26%	2.34%	0.01%	15.33%	0.04%
Digital Realty Trust Inc	DLR	302.846	124.36	37,662	0.14%	3.92%	0.01%	6.80%	0.01%
Molina Healthcare Inc	MOH	58.3	332.95	19,411	0.07%			11.24%	0.01%
Las Vegas Sands Corp	LVS	764.491	47.46	36,283		1.69%			

Notes:
[1] Equals sum of Col. [9]
[2] Equals sum of Col. [11]
[3] Equals ([1] x (1 + (0.5 x [2]))) + [2]
[4] Source: Bloomberg Professional as of October 31, 2023
[5] Source: Bloomberg Professional as of October 31, 2023
[6] Equals [4] x [5]
[7] Equals weight in the S&P 500
[8] Source: Bloomberg Professional as of October 31, 2023
[9] Equals [7] x [8]
[10] Source: Bloomberg Professional, as of October 31, 2023
[11] Equals [7] x [10]

2024-2028 CAPITAL EXPENDITURES AS A PERCENT OF 2022 NET PLANT
($ Millions)

		[1]	[2]	[3]	[4]	[5]	[6]	[7]
		2022	2024	2025	2026	2027	2028	2024-28 Cap. Ex. / 2022 Net Plant
American States Water Co	AWR							
Capital Spending per Share			$5.25	$4.75	$4.25	$4.25	$4.25	
Common Shares Outstanding			$37.00	$37.25	37.50	37.50	37.50	
Capital Expenditures			$194.3	$176.9	$159.4	$159.4	$159.4	48.43%
Net Plant		$1,753.8						
Atmos Energy Corporation	ATO							
Capital Spending per Share			$18.70	$18.50	$18.30	$18.30	$18.30	
Common Shares Outstanding			$155.00	$162.50	170.00	170.00	170.00	
Capital Expenditures			$2,898.5	$3,006.3	$3,111.0	$3,111.0	$3,111.0	88.39%
Net Plant		$17,240.0						
California Water Service Group	CWT							
Capital Spending per Share			$6.15	$6.30	$6.45	$6.45	$6.45	
Common Shares Outstanding			$52.00	$51.00	50.00	50.00	50.00	
Capital Expenditures			$319.8	$321.3	$322.5	$322.5	$322.5	52.59%
Net Plant		$3,058.9						
Essential Utilities, Inc.	WTRG							
Capital Spending per Share			$4.00	$3.93	$3.85	$3.85	$3.85	
Common Shares Outstanding			$270.00	$277.50	285.00	285.00	285.00	
Capital Expenditures			$1,080.0	$1,089.2	$1,097.3	$1,097.3	$1,097.3	49.06%
Net Plant		$11,131.0						
Eversource Energy	ES							
Capital Spending per Share			$11.00	$11.00	$11.00	$11.00	$11.00	
Common Shares Outstanding			$355.00	$357.50	360.00	360.00	360.00	
Capital Expenditures			$3,905.0	$3,932.5	$3,960.0	$3,960.0	$3,960.0	54.60%
Net Plant		$36,113.0						
Middlesex Water Company	MSEX							
Capital Spending per Share			$5.45	$5.73	$6.00	$6.00	$6.00	
Common Shares Outstanding			$17.90	$17.95	18.00	18.00	18.00	
Capital Expenditures			$97.6	$102.8	$108.0	$108.0	$108.0	56.95%
Net Plant		$920.6						
NiSource Inc.	NI							
Capital Spending per Share			$6.55	$6.65	$6.75	$6.75	$6.75	
Common Shares Outstanding			$420.00	$430.00	440.00	440.00	440.00	
Capital Expenditures			$2,751.0	$2,859.5	$2,970.0	$2,970.0	$2,970.0	73.18%
Net Plant		$19,843.0						
Northwest Natural Gas Company	NWN							
Capital Spending per Share			$7.75	$7.63	$7.50	$7.50	$7.50	
Common Shares Outstanding			$37.50	$38.75	40.00	40.00	40.00	
Capital Expenditures			$290.6	$295.5	$300.0	$300.0	$300.0	47.72%
Net Plant		$3,114.4						
ONE Gas Inc.	OGS							
Capital Spending per Share			$11.85	$12.18	$12.50	$12.50	$12.50	
Common Shares Outstanding			$55.50	$56.25	57.00	57.00	57.00	
Capital Expenditures			$657.7	$684.8	$712.5	$712.5	$712.5	61.83%
Net Plant		$5,628.8						
SJW Group	SJW							
Capital Spending per Share			$8.25	$8.50	$8.75	$8.75	$8.75	
Common Shares Outstanding			$30.00	$30.00	30.00	30.00	30.00	
Capital Expenditures			$247.5	$255.0	$262.5	$262.5	$262.5	49.04%
Net Plant		$2,630.3						
Spire, Inc.	SR							
Capital Spending per Share			$12.85	$12.60	$12.35	$12.35	$12.35	
Common Shares Outstanding			$53.00	$54.00	55.00	55.00	55.00	
Capital Expenditures			$681.1	$680.4	$679.3	$679.3	$679.3	63.30%
Net Plant		$5,370.4						
Pennsylvania-American Water Company	PAWC							
Capital Expenditures [8]			$686.1	$713.8	$649.7	$648.3	$586.2	52.97%
Net Plant [9]		$6,200.3						

PAWC CapEx Total (5 years)	$3,284.13
PAWC CapEx Annual Average	$656.8
Proxy Group Median	54.60%
Ratio of PAWC to the Proxy Group	0.97

Notes:
[1] - [6] Source: Value Line Reports, August 25, 2023, October 6, 2023
[7] Equals (Column [2] + [3] + [4] + [5] + [6]) / Column [1]
[8] Data provided by PAWC
[9] PAWC PUC 2022 Annual Reports

2024-2028 CAPITAL EXPENDITURES AS A PERCENT OF 2022 NET PLANT

Projected CAPEX / 2022 Net Plant

	Company		2024-2028
1	Northwest Natural Gas Company	NWN	47.72%
2	American States Water Co	AWR	48.43%
3	SJW Group	SJW	49.04%
4	Essential Utilities, Inc.	WTRG	49.06%
5	California Water Service Group	CWT	52.59%
6	Pennsylvania-American Water Company	PAWC	52.97%
7	Eversource Energy	ES	54.60%
8	Middlesex Water Company	MSEX	56.95%
9	ONE Gas Inc.	OGS	61.83%
10	Spire, Inc.	SR	63.30%
11	NiSource Inc.	NI	73.18%
12	Atmos Energy Corporation	ATO	88.39%
	Proxy Group Median		54.60%
	PAWC / Proxy Group		0.97

Notes:
Source: Schedule AEB-8, col. [7]

COMPARISON OF PAWC AND PROXY GROUP COMPANIES
CAPITAL COST RECOVERY MECHANISMS

Company	Ticker	State	Utility Type	Infrastructure Cost Recovery Mechanism	Future Test Year	Revenue Stabilization or Decoupling	Citations
American States Water Co							Infrastructure Cost Recovery: 2022 10-K, p. 28 and p. 54.
	AWR	California	Water	Yes	Fully Forecast	Full	Revenue Stabilization or Decoupling: 2022 10-K, p. 29 and p. 43
	AWR	California	Electric	Yes	Fully Forecast	Full	Test Year: S&P Cap IQ Pro, Rate Case History and Commission Profiles
Atmos Energy Corporation							
	ATO	Colorado	Gas	Yes	Historical	No	Infrastructure Cost Recovery: 2022 10-K, p. 9
	ATO	Kansas	Gas	Yes	Historical	Partial	Revenue Stabilization or Decoupling: 2022 10-K, p.9, S&P Global Market Intelligence,
	ATO	Kentucky	Gas	Yes	Fully Forecast	Partial	Regulatory Focus: Adjustment Clauses, dated 7/18/22, Company Tariffs (CO and VA).
	ATO	Louisiana	Gas	No	Historical	FRP	
	ATO	Mississippi	Gas	Yes	Historical	FRP	Test Year: S&P Cap IQ Pro, Rate Case History and Commission Profiles; Company Tariffs
	ATO	Tennessee	Gas	No	Historical	FRP	(LA, MS, TN); 2022 10-K, p. 10
	ATO	Texas	Gas	Yes	Historical	FRP	
	ATO	Virginia	Gas	Yes	Historical	Partial	
California Water Service Group							
	CWT	California	Water	Yes	Fully Forecast	Full	Infrastructure Cost Recovery and Revenue Stabilization or Decoupling: 2022 10-K, p.9
	CWT	Hawaii	Water	No	Fully Forecast	No	(California Water); Tariffs (HI, WA, NM)
	CWT	New Mexico	Water	No	Historical	No	Test Year: S&P Cap IQ Pro, Rate Case History and Commission Profiles
	CWT	Washington	Water	Yes	Historical	No	
Essential Utilities, Inc.							
	WTRG	Pennsylvania	Water	Yes	Fully Forecast	No	Infrastructure Cost Recovery: 2022 10-K, p. 9; S&P Global Market Intelligence, Regulatory
	WTRG	Pennsylvania	Gas	Yes	Fully Forecast	No	Focus: Adjustment Clauses, dated 7/18/22
	WTRG	Ohio	Water	Yes	Partially Forecast	No	Revenue Stabilization or Decoupling: 2022 10-K, p. 11
	WTRG	Illinois	Water	Yes	Fully Forecast	Full	Test Year: S&P Cap IQ Pro, Rate Case History and Commission Profiles
	WTRG	Texas	Water	Yes	Historical	No	
	WTRG	New Jersey	Water	Yes	Partially Forecast	No	
	WTRG	North Carolina	Water	Yes	Historical	No	
	WTRG	Indiana	Water	Yes	Fully Forecast	No	
	WTRG	Virginia	Water	Yes	Historical	No	
	WTRG	Kentucky	Gas	Yes	Fully Forecast	Partial	
	WTRG	West Virginia	Gas	No	Historical	No	
Eversource Energy							
	ES	Connecticut	Electric	Yes	Fully Forecast	Full	Infrastructure Cost Recovery: 2022 10-K, p. 11 (water); S&P Global Market Intelligence,
	ES	Connecticut	Gas	Yes	Fully Forecast	Full	Regulatory Focus: Adjustment Clauses, dated 7/18/22 (electric and natural gas)
	ES	Connecticut	Water	Yes	Fully Forecast	Full	
	ES	Massachusetts	Electric	Yes	Historical	Full	
	ES	Massachusetts	Gas	Yes	Historical	Full	Revenue Stabilization or Decoupling: 2022 10-K, p. 11 (water); S&P Global Market
	ES	Massachusetts	Water	Yes	Historical	No	Intelligence, Regulatory Focus: Adjustment Clauses, dated 7/18/22 (electric and natural gas)
	ES	New Hampshire	Electric	Yes	Historical	Partial	Test Year: S&P Cap IQ Pro, Rate Case History
	ES	New Hampshire	Water	Yes	Historical	No	
Middlesex Water Company							
	MSEX	New Jersey	Water	Yes	Partially Forecast	No	Infrastructure Cost Recovery/ Revenue Decoupling: Tariffs (NJ, DE, PA)
	MSEX	Delaware	Water	Yes	Historical	No	Test Year: S&P Cap IQ Pro, Rate Case History
	MSEX	Pennsylvania	Water	No	Fully Forecast	No	
NiSource Inc.							
	NI	Indiana	Electric	Yes	Fully Forecast	Partial	Infrastructure Cost Recovery and Revenue Stabilization or Decoupling: S&P Global Market
	NI	Indiana	Gas	Yes	Fully Forecast	No	Intelligence, Regulatory Focus: Adjustment Clauses, dated 7/18/22
	NI	Kentucky	Gas	Yes	Fully Forecast	Partial	Test Year: S&P Cap IQ Pro, Rate Case History
	NI	Maryland	Gas	Yes	Partially Forecast	Partial	
	NI	Ohio	Gas	Yes	Partially Forecast	SFV	
	NI	Pennsylvania	Gas	Yes	Fully Forecast	Partial	
	NI	Virginia	Gas	Yes	Historical	Partial	
Northwest Natural Gas Company							Infrastructure Cost Recovery and Revenue Stabilization or Decoupling: S&P Global Market
	NWN	Oregon	Gas	Yes	Fully Forecast	Partial	Intelligence, Regulatory Focus: Adjustment Clauses, dated 7/18/22
	NWN	Washington	Gas	No	Historical	No	Test Year: S&P Cap IQ Pro, Rate Case History
ONE Gas, Inc.							
	OGS	Kansas	Gas	Yes	Historical	Partial	Infrastructure Cost Recovery and Revenue Stabilization or Decoupling: S&P Global Market
	OGS	Oklahoma	Gas	No	Historical	FRP	Intelligence, Regulatory Focus: Adjustment Clauses, dated 7/18/22; 2022 10-K, p. 7.
	OGS	Texas	Gas	Yes	Historical	FRP	Test Year: S&P Cap IQ Pro, Rate Case History
SJW Group							
	SJW	California	Water	Yes	Fully Forecast	No	Infrastructure Cost Recovery: 2022 10-K, pp. 5-8
	SJW	Connecticut	Water	Yes	Fully Forecast	Full	Revenue Stabilization or Decoupling: 2022 10-K, p. 60.
	SJW	Maine	Water	Yes	Historical	No	Test Year: S&P Cap IQ Pro, Rate Case History and Commission Profiles
	SJW	Texas	Water	No	Historical	No	
Spire, Inc.							Infrastructure Cost Recovery and Revenue Stabilization or Decoupling: S&P Global Market
	SR	Alabama (AL)	Gas	No	Fully Forecast	FRP	Intelligence, Regulatory Focus: Adjustment Clauses, dated 7/18/22, Company Tariffs (AL
	SR	Alabama (Gulf)	Gas	No	Fully Forecast	FRP	and MS)
	SR	Mississippi	Gas	No	Historical	FRP	Test Year: S&P Cap IQ Pro, Rate Case History; 2022 10-K, pgs. 117-121
	SR	Missouri	Gas	Yes	Partially Forecast	Partial	

Proxy Group Totals				Yes	44	Historical	27	Full 10
				No	12	Fully Forecast	23	Partial 13
						Partially Forecast	6	FRP 9
								SFV 1
								No 23
				CCRM	78.57%	FTY	51.79%	58.93%
PAWC		Pennsylvania	Water		Yes		Fully Forecast	No

CAPITAL STRUCTURE ANALYSIS

COMMON EQUITY RATIO [1]

Proxy Group Company	Ticker	2022	2021	2020	3-yr Avg.
American States Water Company	AWR	60.78%	59.68%	56.75%	59.07%
Atmos Energy Corporation	ATO	60.01%	59.88%	58.31%	59.40%
California Water Service Group	CWT	50.88%	48.85%	52.23%	50.65%
Essential Utilities, Inc.	WTRG	57.80%	55.09%	55.36%	56.08%
Eversource Energy	ES	56.37%	54.75%	55.63%	55.58%
Middlesex Water Company	MSEX	61.42%	59.01%	59.21%	59.88%
NiSource Inc.	NI	54.17%	54.85%	54.43%	54.48%
Northwest Natural Gas Company	NWN	51.21%	49.57%	47.44%	49.41%
ONE Gas, Inc.	OGS	58.23%	61.09%	60.04%	59.79%
SJW Group	SJW	53.78%	52.06%	56.76%	54.20%
Spire, Inc.	SR	54.32%	55.46%	58.61%	56.13%
Proxy Group					
MEAN		56.27%	55.48%	55.89%	55.88%
LOW		50.88%	48.85%	47.44%	49.41%
HIGH		61.42%	61.09%	60.04%	59.88%

COMMON EQUITY RATIO - UTILITY OPERATING COMPANIES

Company Name	Ticker	2022	2021	2020	3-yr Avg.
Golden State Water / Bear Valley	AWR	60.78%	59.68%	56.75%	59.07%
Atmos Energy Corporation	ATO	60.01%	59.88%	58.31%	59.40%
California Water Service	CWT	50.41%	48.11%	51.34%	49.95%
New Mexico Water Service Water Division	CWT		69.19%	67.06%	68.12%
New Mexico Water Service Sewer Division	CWT		62.89%	59.47%	61.18%
Washington Water Service	CWT	62.87%	65.96%	71.93%	66.92%
Hawaii Water Service Pukalani Division	CWT	65.87%	65.58%	64.56%	65.34%
Aqua Pennsylvania Water	WTRG		54.32%	51.14%	52.73%
Aqua Pennsylvania Wastewater	WTRG		98.06%	97.07%	97.57%
Peoples Natural Gas Company	WTRG	58.85%	57.75%	61.48%	59.36%
Peoples Gas Company	WTRG	67.48%	55.97%	79.59%	67.68%
Aqua Ohio Water	WTRG	54.03%	52.11%	64.62%	56.92%
Aqua Ohio Wastewater	WTRG	74.40%	73.67%	72.82%	73.63%
Aqua Illinois	WTRG	56.55%	57.99%	54.57%	56.37%
Aqua Texas	WTRG		49.91%	50.17%	50.04%
Aqua New Jersey, Inc. Water	WTRG	55.74%	53.19%	50.28%	53.07%
Aqua New Jersey, Inc. Wastewater	WTRG	100.00%	100.00%	100.00%	100.00%
Aqua North Carolina	WTRG	50.21%	48.75%	50.62%	49.86%
Aqua Virginia	WTRG	47.83%	48.83%	55.23%	50.63%
Delta Natural Gas Company	WTRG	58.51%	54.49%	56.93%	56.64%
Peoples Gas of WV	WTRG	58.78%	47.74%	48.44%	51.65%
Connecticut Light and Power Company	ES	57.03%	54.86%	55.42%	55.77%
Yankee Gas Company	ES	61.62%	61.12%	61.97%	61.57%
Aquarion Water Company CT	ES	55.94%	57.55%	58.76%	57.42%
NSTAR Electric Company	ES	55.89%	55.10%	54.95%	55.32%
NSTAR Gas Company	ES	55.96%	55.54%	55.54%	55.68%
Aquarion Water Company MA	ES	86.93%	85.64%	96.04%	89.54%
Eversource Gas of MA	ES	53.20%	52.25%	68.65%	58.03%
Public Service Company of NH	ES	53.77%	49.10%	48.66%	50.51%
Aquarion Water Company NH	ES	75.26%	59.74%	58.81%	64.60%
Middlesex Water Company	MSEX	61.15%	58.76%	59.03%	59.65%
Pinelands Water	MSEX	100.00%	100.00%	100.00%	100.00%
Pinelands WW	MSEX	100.00%	100.00%	100.00%	100.00%
Northern Indiana Public Service Company LLC	NI	56.92%	58.59%	58.01%	57.84%
Columbia Gas of Kentucky, Inc.	NI	54.91%	53.87%	54.68%	54.49%
Columbia Gas of Maryland, Inc.	NI	51.96%	55.26%	54.95%	54.06%
Columbia Gas of Ohio, Inc.	NI	50.67%	50.79%	50.45%	50.64%
Columbia Gas of Pennsylvania, Inc.	NI	56.64%	56.05%	55.68%	56.12%
Columbia Gas of Virginia, Inc.	NI	44.25%	44.52%	43.69%	44.15%
Northwest Natural Gas Company	NWN	51.21%	49.57%	47.44%	49.41%
Kansas Gas Service Company, Inc.	OGS	58.37%	61.37%	60.33%	60.02%
Oklahoma Natural Gas Company	OGS		60.99%	59.85%	60.42%
Texas Gas Service Company, Inc.	OGS	58.13%	60.98%	59.99%	59.70%
San Jose Water	SJW	53.20%	50.25%	54.02%	52.49%
CT Water	SJW	54.61%	52.66%	59.12%	55.46%
Maine Water Co.	SJW	53.92%	57.59%	60.15%	57.22%
Canyon Lake Water Service Company	SJW		59.64%	74.05%	66.85%
Spire Alabama Inc.	SR	61.18%	58.51%	64.20%	61.30%
Spire Gulf Inc.	SR	51.61%	49.48%	40.55%	47.21%
Spire Mississippi Inc.	SR		100.00%	100.00%	100.00%
Spire Missouri Inc.	SR	51.46%	53.96%	56.68%	54.03%

Notes:
[1] Ratios are weighted by actual common capital, preferred equity, and long-term debt of Operating Subsidiaries.
[2] Electric, Natural Gas and Water operating subsidiaries where data was unable to be obtained for 2022, 2021 and 2020 were removed from the analysis.

CAPITAL STRUCTURE ANALYSIS

LONG-TERM DEBT RATIO [1]

Proxy Group Company	Ticker	2022	2021	2020	3-yr Avg.
American States Water Company	AWR	39.22%	40.32%	43.25%	40.93%
Atmos Energy Corporation	ATO	39.99%	40.12%	41.69%	40.60%
California Water Service Group	CWT	49.12%	51.15%	47.77%	49.35%
Essential Utilities, Inc.	WTRG	42.20%	44.91%	44.64%	43.92%
Eversource Energy	ES	43.11%	44.67%	43.74%	43.84%
Middlesex Water Company	MSEX	38.26%	40.66%	40.43%	39.78%
NiSource Inc.	NI	45.83%	45.15%	45.57%	45.52%
Northwest Natural Gas Company	NWN	48.79%	50.43%	52.56%	50.59%
ONE Gas, Inc.	OGS	41.77%	38.91%	39.96%	40.21%
SJW Group	SJW	46.22%	47.94%	43.24%	45.80%
Spire, Inc.	SR	45.68%	44.54%	41.39%	43.87%
Proxy Group					
MEAN		43.65%	44.44%	44.02%	44.04%
LOW		38.26%	38.91%	39.96%	39.78%
HIGH		49.12%	51.15%	52.56%	50.59%

LONG-TERM DEBT RATIO - UTILITY OPERATING COMPANIES

Company Name	Ticker	2022	2021	2020	3-yr Avg.
Golden State Water / Bear Valley	AWR	39.22%	40.32%	43.25%	40.93%
Atmos Energy Corporation	ATO	39.99%	40.12%	41.69%	40.60%
California Water Service	CWT	49.59%	51.89%	48.66%	50.05%
New Mexico Water Service Water Division	CWT		30.81%	32.94%	31.88%
New Mexico Water Service Sewer Division	CWT		37.11%	40.53%	38.82%
Washington Water Service	CWT	37.13%	34.04%	28.07%	33.08%
Hawaii Water Service Pukalani Division	CWT	34.13%	34.42%	35.44%	34.66%
Aqua Pennsylvania Water	WTRG		45.68%	48.86%	47.27%
Aqua Pennsylvania Wastewater	WTRG		1.94%	2.93%	2.43%
Peoples Natural Gas Company	WTRG	41.15%	42.25%	38.52%	40.64%
Peoples Gas Company	WTRG	32.52%	44.03%	20.41%	32.32%
Aqua Ohio Water	WTRG	45.97%	47.89%	35.38%	43.08%
Aqua Ohio Wastewater	WTRG	25.60%	26.33%	27.18%	26.37%
Aqua Illinois	WTRG	43.45%	42.01%	45.43%	43.63%
Aqua Texas	WTRG		50.09%	49.83%	49.96%
Aqua New Jersey, Inc. Water	WTRG	44.26%	46.81%	49.72%	46.93%
Aqua New Jersey, Inc. Wastewater	WTRG	0.00%	0.00%	0.00%	0.00%
Aqua North Carolina	WTRG	49.79%	51.25%	49.38%	50.14%
Aqua Virginia	WTRG	52.17%	51.17%	44.77%	49.37%
Delta Natural Gas Company	WTRG	41.49%	45.51%	43.07%	43.36%
Peoples Gas of WV	WTRG	41.22%	52.26%	51.56%	48.35%
Connecticut Light and Power Company	ES	41.82%	43.93%	43.30%	43.02%
Yankee Gas Company	ES	38.38%	38.88%	38.03%	38.43%
Aquarion Water Company CT	ES	44.06%	42.45%	41.24%	42.58%
NSTAR Electric Company	ES	43.68%	44.42%	44.52%	44.21%
NSTAR Gas Company	ES	44.04%	44.46%	44.46%	44.32%
Aquarion Water Company MA	ES	13.07%	14.36%	3.96%	10.46%
Eversource Gas of MA	ES	46.80%	47.75%	31.35%	41.97%
Public Service Company of NH	ES	46.23%	50.90%	51.34%	49.49%
Aquarion Water Company NH	ES	24.73%	40.26%	41.18%	35.39%
Middlesex Water Company	MSEX	38.53%	40.91%	40.62%	40.02%
Pinelands Water	MSEX	0.00%	0.00%	0.00%	0.00%
Pinelands WW	MSEX	0.00%	0.00%	0.00%	0.00%
Northern Indiana Public Service Company LLC	NI	43.08%	41.41%	41.99%	42.16%
Columbia Gas of Kentucky, Inc.	NI	45.09%	46.13%	45.32%	45.51%
Columbia Gas of Maryland, Inc.	NI	48.04%	44.74%	45.05%	45.94%
Columbia Gas of Ohio, Inc.	NI	49.33%	49.21%	49.55%	49.36%
Columbia Gas of Pennsylvania, Inc.	NI	43.36%	43.95%	44.32%	43.88%
Columbia Gas of Virginia, Inc.	NI	55.75%	55.48%	56.31%	55.85%
Northwest Natural Gas Company	NWN	48.79%	50.43%	52.56%	50.59%
Kansas Gas Service Company, Inc.	OGS	41.63%	38.63%	39.67%	39.98%
Oklahoma Natural Gas Company	OGS		39.01%	40.15%	39.58%
Texas Gas Service Company, Inc.	OGS	41.87%	39.02%	40.01%	40.30%
San Jose Water	SJW	46.80%	49.75%	45.98%	47.51%
CT Water	SJW	45.39%	47.34%	40.88%	44.54%
Maine Water Co.	SJW	46.08%	42.41%	39.85%	42.78%
Canyon Lake Water Service Company	SJW		40.36%	25.95%	33.15%
Spire Alabama Inc.	SR	38.82%	41.49%	35.80%	38.70%
Spire Gulf Inc.	SR	48.39%	50.52%	59.45%	52.79%
Spire Mississippi Inc.	SR		0.00%	0.00%	0.00%
Spire Missouri Inc.	SR	48.54%	46.04%	43.32%	45.97%

Notes:
[1] Ratios are weighted by actual common capital, preferred equity, and long-term debt of Operating Subsidiaries.
[2] Electric, Natural Gas and Water operating subsidiaries where data was unable to be obtained for 2022, 2021 and 2020 were removed from the analysis.

CAPITAL STRUCTURE ANALYSIS

PREFERRED EQUITY RATIO [1]

Proxy Group Company	Ticker	2022	2021	2020	3-yr Avg.
American States Water Company	AWR	0.00%	0.00%	0.00%	0.00%
Atmos Energy Corporation	ATO	0.00%	0.00%	0.00%	0.00%
California Water Service Group	CWT	0.00%	0.00%	0.00%	0.00%
Essential Utilities, Inc.	WTRG	0.00%	0.00%	0.00%	0.00%
Eversource Energy	ES	0.53%	0.58%	0.63%	0.58%
Middlesex Water Company	MSEX	0.32%	0.33%	0.35%	0.33%
NiSource Inc.	NI	0.00%	0.00%	0.00%	0.00%
Northwest Natural Gas Company	NWN	0.00%	0.00%	0.00%	0.00%
ONE Gas, Inc.	OGS	0.00%	0.00%	0.00%	0.00%
SJW Group	SJW	0.00%	0.00%	0.00%	0.00%
Spire, Inc.	SR	0.00%	0.00%	0.00%	0.00%
Proxy Group					
MEAN		0.08%	0.08%	0.09%	0.08%
LOW		0.00%	0.00%	0.00%	0.00%
HIGH		0.53%	0.58%	0.63%	0.58%

PREFERRED EQUITY RATIO - UTILITY OPERATING COMPANIES

Company Name	Ticker	2022	2021	2020	3-yr Avg.
Golden State Water / Bear Valley	AWR	0.00%	0.00%	0.00%	0.00%
Atmos Energy Corporation	ATO	0.00%	0.00%	0.00%	0.00%
California Water Service	CWT	0.00%	0.00%	0.00%	0.00%
New Mexico Water Service Water Division	CWT		0.00%	0.00%	0.00%
New Mexico Water Service Sewer Division	CWT		0.00%	0.00%	0.00%
Washington Water Service	CWT	0.00%	0.00%	0.00%	0.00%
Hawaii Water Service Pukalani Division	CWT	0.00%	0.00%	0.00%	0.00%
Aqua Pennsylvania Water	WTRG		0.00%	0.00%	0.00%
Aqua Pennsylvania Wastewater	WTRG		0.00%	0.00%	0.00%
Peoples Natural Gas Company	WTRG	0.00%	0.00%	0.00%	0.00%
Peoples Gas Company	WTRG	0.00%	0.00%	0.00%	0.00%
Aqua Ohio Water	WTRG	0.00%	0.00%	0.00%	0.00%
Aqua Ohio Wastewater	WTRG	0.00%	0.00%	0.00%	0.00%
Aqua Illinois	WTRG	0.00%	0.00%	0.00%	0.00%
Aqua Texas	WTRG		0.00%	0.00%	0.00%
Aqua New Jersey, Inc. Water	WTRG	0.00%	0.00%	0.00%	0.00%
Aqua New Jersey, Inc. Wastewater	WTRG	0.00%	0.00%	0.00%	0.00%
Aqua North Carolina	WTRG	0.00%	0.00%	0.00%	0.00%
Aqua Virginia	WTRG	0.00%	0.00%	0.00%	0.00%
Delta Natural Gas Company	WTRG	0.00%	0.00%	0.00%	0.00%
Peoples Gas of WV	WTRG	0.00%	0.00%	0.00%	0.00%
Connecticut Light and Power Company	ES	1.15%	1.20%	1.28%	1.21%
Yankee Gas Company	ES	0.00%	0.00%	0.00%	0.00%
Aquarion Water Company CT	ES	0.00%	0.00%	0.00%	0.00%
NSTAR Electric Company	ES	0.42%	0.48%	0.52%	0.47%
NSTAR Gas Company	ES	0.00%	0.00%	0.00%	0.00%
Aquarion Water Company MA	ES	0.00%	0.00%	0.00%	0.00%
Eversource Gas of MA	ES	0.00%	0.00%	0.00%	0.00%
Public Service Company of NH	ES	0.00%	0.00%	0.00%	0.00%
Aquarion Water Company NH	ES	0.01%	0.01%	0.01%	0.01%
Middlesex Water Company	MSEX	0.32%	0.33%	0.36%	0.34%
Pinelands Water	MSEX	0.00%	0.00%	0.00%	0.00%
Pinelands WW	MSEX	0.00%	0.00%	0.00%	0.00%
Northern Indiana Public Service Company LLC	NI	0.00%	0.00%	0.00%	0.00%
Columbia Gas of Kentucky, Inc.	NI	0.00%	0.00%	0.00%	0.00%
Columbia Gas of Maryland, Inc.	NI	0.00%	0.00%	0.00%	0.00%
Columbia Gas of Ohio, Inc.	NI	0.00%	0.00%	0.00%	0.00%
Columbia Gas of Pennsylvania, Inc.	NI	0.00%	0.00%	0.00%	0.00%
Columbia Gas of Virginia, Inc.	NI	0.00%	0.00%	0.00%	0.00%
Northwest Natural Gas Company	NWN	0.00%	0.00%	0.00%	0.00%
Kansas Gas Service Company, Inc.	OGS	0.00%	0.00%	0.00%	0.00%
Oklahoma Natural Gas Company	OGS		0.00%	0.00%	0.00%
Texas Gas Service Company, Inc.	OGS	0.00%	0.00%	0.00%	0.00%
San Jose Water	SJW	0.00%	0.00%	0.00%	0.00%
CT Water	SJW	0.00%	0.00%	0.00%	0.00%
Maine Water Co.	SJW	0.00%	0.00%	0.00%	0.00%
Canyon Lake Water Service Company	SJW		0.00%	0.00%	0.00%
Spire Alabama Inc.	SR	0.00%	0.00%	0.00%	0.00%
Spire Gulf Inc.	SR	0.00%	0.00%	0.00%	0.00%
Spire Mississippi Inc.	SR		0.00%	0.00%	0.00%
Spire Missouri Inc.	SR	0.00%	0.00%	0.00%	0.00%

Notes:
[1] Ratios are weighted by actual common capital, preferred equity, and long-term debt of Operating Subsidiaries.
[2] Electric, Natural Gas and Water operating subsidiaries where data was unable to be obtained for 2022, 2021 and 2020 were removed from the analysis.

Pennsylvania-American Water Company
Total Company

Type of Capital	Ratios	Cost Rate	Weighted Cost Rate
Proforma at June 30, 2024			
Long-term Debt	44.55%	4.59%	2.04%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	55.45%	10.95%	6.07%
Total			8.12%
Proforma at June 30, 2025			
Long-term Debt	44.70%	4.71%	2.11%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	55.30%	10.95%	6.06%
Total			8.17%

Pennsylvania-American Water Company
Water Services - Cost of Capital

Type of Capital	Ratios	Cost Rate	Weighted Cost Rate
Proforma at June 30, 2024			
Long-term Debt	43.80%	4.63%	2.03%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	56.20%	10.95%	6.15%
Total			8.18%
Proforma at June 30, 2025			
Long-term Debt	44.01%	4.76%	2.09%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	55.99%	10.95%	6.13%
Total			8.22%

Pennsylvania-American Water Company
Wastewater Services - Cost of Capital

Type of Capital	Ratios	Cost Rate	Weighted Cost Rate
Proforma at June 30, 2024			
Long-term Debt	42.46%	4.63%	1.97%
LTD WW Financing	4.70%	2.64%	0.12%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	52.84%	10.95%	5.79%
Total			7.88%
Proforma at June 30, 2025			
Long-term Debt	42.73%	4.76%	2.03%
LTD WW Financing	4.40%	2.62%	0.12%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	52.87%	10.95%	5.79%
Total			7.94%

Pennsylvania American Water Company
Capital Structure - Wastewater Specific LTD

6/30/2023

DATE OF ISSUE	DATE OF MATURITY	AMOUNT ISSUED	AMOUNT OUTSTANDING	COUPON RATE	ANNUAL INTEREST	NOTE #	ISSUANCE EXPENSE	NET PROCEEDS	NET PROCEEDS Ratio	SINKING REQUIR.	PERCENT TO TOTAL	EFFECTIVE COST RATE (1)	WEIGHTED COST RATE
PENNVEST- Clarion WW													
04/01/15	02/01/37	16,892,338	10,887,689	1.000%	108,877	20	0	16,892,338	100.00%	0	17.16%	1.00%	0.17%
PEDFA - Coatesville WW													
06/21/19	04/01/39	47,000,000	47,000,000	3.000%	1,410,000	5	1,173,060	45,826,940	97.50%	0	74.06%	3.17%	2.35%
PENNVEST- Scranton WW													
12/29/16	11/01/37	7,951,445	5,571,037	1.000%	55,710	24	0	7,951,445	100.00%	0	8.78%	1.00%	0.09%
		$71,843,783	**$63,458,726**		**$1,574,587**		**$1,173,060**	**$70,670,723**		**$0**	100.00%		2.61%

6/30/2024

DATE OF ISSUE	DATE OF MATURITY	AMOUNT ISSUED	AMOUNT OUTSTANDING	COUPON RATE	ANNUAL INTEREST	NOTE #	ISSUANCE EXPENSE	NET PROCEEDS	NET PROCEEDS Ratio	SINKING REQUIR.	PERCENT TO TOTAL	EFFECTIVE COST RATE (1)	WEIGHTED COST RATE
PENNVEST- Clarion WW													
04/01/15	02/01/37	16,892,338	10,138,880	1.000%	101,389	20	0	16,892,338	100.00%	0	16.26%	1.00%	0.16%
PEDFA - Coatesville WW													
06/21/19	04/01/39	47,000,000	47,000,000	3.000%	1,410,000	5	1,173,060	45,826,940	97.50%	0	75.38%	3.17%	2.39%
PENNVEST- Scranton WW													
12/29/16	11/01/37	7,951,445	5,209,980	1.000%	52,100	24	0	7,951,445	100.00%	0	8.36%	1.00%	0.08%
		$71,843,783	**$62,348,860**		**$1,563,489**		**$1,173,060**	**$70,670,723**		**$0**	100.00%		2.64%

6/30/2025

DATE OF ISSUE	DATE OF MATURITY	AMOUNT ISSUED	AMOUNT OUTSTANDING	COUPON RATE	ANNUAL INTEREST	NOTE #	ISSUANCE EXPENSE	NET PROCEEDS	NET PROCEEDS Ratio	SINKING REQUIR.	PERCENT TO TOTAL	EFFECTIVE COST RATE (1)	WEIGHTED COST RATE
PENNVEST- Clarion WW													
04/01/15	02/01/37	16,892,338	9,382,548	1.000%	93,825	20	0	16,892,338	100.00%	0.00%	15.05%	1.00%	0.15%
PEDFA - Coatesville WW													
06/21/19	04/01/39	47,000,000	47,000,000	3.000%	1,410,000	5	1,173,060	45,826,940	97.50%	0.00%	75.38%	3.17%	2.39%
PENNVEST- Scranton WW													
12/29/16	11/01/37	7,951,445	4,845,296	1.000%	48,453	24	0	7,951,445	100.00%	0.00%	7.77%	1.00%	0.08%
		$71,843,783	**$61,227,844**		**$1,552,278**		**$1,173,060**	**$70,670,723**		**$0**	98.20%		2.62%

PA AMERICAN WATER - TOTAL COMPANY
SCHEDULE OF DEBT AT June 30, 2023

DATE OF ISSUE	DATE OF MATURITY	AMOUNT ISSUED	AMOUNT OUTSTANDING	COUPON RATE	ANNUAL INTEREST	NOTE #	ISSUANCE EXPENSE	NET PROCEEDS	NET PROCEEDS RATIO	SINKING REQUIR.	PERCENT TO TOTAL	EFFECTIVE COST RATE (1)	WEIGHTED COST RATE
Bonds and Notes													
11/01/03	11/01/33	38,000,000	38,000,000	6.780%	2,576,400		174,946	37,825,054	99.54%		1.72%	6.82%	0.12%
09/01/06	09/01/26	150,000,000	150,000,000	7.800%	11,700,000		2,069,648	147,930,352	98.62%		6.81%	7.94%	0.54%
11/01/04	11/01/31	10,000,000	10,000,000	8.820%	882,000		88,352	9,911,648	99.12%		0.45%	8.91%	0.04%
08/01/04	08/01/25	10,000,000	10,000,000	8.150%	815,000		60,119	9,939,881	99.40%		0.45%	8.21%	0.04%
12/21/12	12/01/42	23,015,000	23,015,000	4.300%	989,645	1	895,945	22,119,055	96.11%		1.04%	4.54%	0.05%
12/17/12	12/01/42	45,000,000	45,000,000	4.300%	1,935,000	2	582,689	44,417,311	98.71%		2.04%	4.38%	0.09%
11/21/11	10/15/37	35,000,000	35,000,000	5.050%	1,767,500		0	35,000,000	100.00%		1.59%	5.05%	0.08%
11/21/11	10/15/37	15,500,000	15,500,000	5.050%	782,750		740,260	14,759,740	95.22%		0.70%	5.39%	0.04%
11/20/13	03/01/24	67,000,000	67,000,000	3.850%	2,579,500		791,901	66,208,099	98.82%		3.04%	3.99%	0.12%
08/14/14	03/01/25	36,200,000	36,200,000	3.400%	1,230,800		1,189,364	35,010,636	96.71%		1.64%	3.78%	0.06%
08/14/14	12/01/42	65,700,000	65,700,000	4.300%	2,825,100		4,432,879	61,267,121	93.25%		2.98%	4.74%	0.14%
08/10/17	09/01/47	240,000,000	240,000,000	3.750%	9,000,000		3,231,905	236,768,095	98.65%		10.89%	3.83%	0.42%
09/13/17	09/01/27	101,426,171	101,426,171	2.950%	2,992,072	3	11,291,519	90,134,652	88.87%		4.60%	4.34%	0.20%
08/09/18	09/01/28	74,739,360	74,739,360	3.750%	2,802,726		623,814	74,115,546	99.17%		3.39%	3.85%	0.13%
08/09/18	09/01/48	227,489,000	227,489,000	4.200%	9,554,538		2,490,214	224,998,786	98.91%		10.33%	4.26%	0.44%
09/11/18	09/01/28	124,719,875	124,719,875	3.750%	4,676,995	4	8,287,774	116,432,101	93.35%		5.66%	4.59%	0.26%
05/23/19	06/01/29	110,000,000	110,000,000	3.450%	3,795,000		1,141,559	108,858,441	98.96%		4.99%	3.57%	0.18%
06/21/19	04/01/39	80,000,000	80,000,000	3.000%	2,400,000	5	1,996,698	78,003,302	97.50%		3.63%	3.17%	0.12%
12/12/19	12/03/29	80,000,000	80,000,000	2.450%	1,960,000	6	1,907,647	78,092,353	97.62%		3.63%	2.72%	0.10%
12/12/19	12/03/29	13,165,000	13,165,000	2.450%	322,543	6	483,935	12,681,065	96.32%		0.60%	2.88%	0.02%
04/14/20	05/01/30	30,000,000	30,000,000	2.800%	840,000	26	373,996	29,626,004	98.75%		1.36%	2.94%	0.04%
04/14/20	05/01/50	90,000,000	90,000,000	3.450%	3,105,000	27	1,141,788	88,858,212	98.73%		4.09%	3.52%	0.14%
06/14/21	06/01/31	47,500,000	47,500,000	2.300%	1,092,500	28	1,798,391	45,701,609	96.21%		2.16%	2.74%	0.06%
05/14/21	06/01/51	47,500,000	47,500,000	3.250%	1,543,750	29	641,731	46,858,269	98.65%		2.16%	3.32%	0.07%
05/05/22	06/01/32	255,000,000	255,000,000	4.450%	11,347,500	30	2,964,855	252,035,145	98.84%		11.58%	4.59%	0.53%
12/27/22	09/01/48	120,000,000	120,000,000	4.200%	5,040,000	31	1,128,649	118,871,351	99.06%		5.45%	4.26%	0.23%
12/27/22	10/15/37	6,000,000	6,000,000	5.050%	303,000	32	0	6,000,000	100.00%		0.27%	5.05%	0.01%
12/27/22	10/15/37	9,000,000	9,000,000	5.060%	455,400	33	117,667	8,882,333	98.69%		0.41%	5.19%	0.02%
12/27/22	10/15/37	3,370,000	3,370,000	4.200%	141,540	34	0	3,370,000	100.00%		0.15%	4.20%	0.01%
12/27/22	10/15/37	500,000	500,000	5.060%	25,300	35	0	500,000	100.00%		0.02%	5.06%	0.00%
12/27/22	10/15/37	600,000	600,000	4.750%	28,500	36	0	600,000	100.00%		0.03%	4.75%	0.00%
12/27/22	05/19/39	5,000,000	5,000,000	5.140%	257,000	37	1,346	4,998,654	99.97%		0.23%	5.14%	0.01%
Pennvest Loans													
08/01/04	07/01/24	1,559,205	85,926	2.774%	2,384	7	13,749	1,545,456	99.12%		0.00%	2.83%	0.00%
06/01/05	11/01/24	5,721,348	430,451	1.156%	4,976	8	29,484	5,691,864	99.48%		0.02%	1.19%	0.00%
01/01/06	12/01/25	5,670,111	639,732	2.763%	17,676	9	34,130	5,635,981	99.40%		0.03%	2.80%	0.00%
09/01/04	08/01/24	5,240,631	372,303	2.774%	10,328	10	7,951	5,232,680	99.85%		0.02%	2.78%	0.00%
11/01/04	10/01/24	3,099,441	246,443	2.432%	5,994	11	5,660	3,093,781	99.82%		0.01%	2.44%	0.00%
10/01/09	09/01/29	2,359,891	838,783	2.547%	21,364	12	0	2,359,891	100.00%		0.04%	2.55%	0.00%
06/01/11	02/01/31	12,150,000	5,278,326	2.690%	141,987	13	0	12,150,000	100.00%		0.24%	2.69%	0.01%
01/05/12	10/01/32	9,936,500	5,354,376	3.117%	166,896	14	0	9,936,500	100.00%		0.24%	3.12%	0.01%
01/05/12	12/01/31	1,606,709	791,106	3.098%	24,508	15	0	1,606,709	100.00%		0.04%	3.10%	0.00%
03/23/12	03/01/41	1,724,610	1,119,744	1.000%	11,197	16	0	1,724,610	100.00%		0.05%	1.00%	0.00%
03/20/12	04/01/31	1,675,790	865,549	2.810%	24,322	17	0	1,675,790	100.00%		0.04%	2.81%	0.00%
03/26/12	03/01/32	1,273,465	549,926	2.690%	14,793	18	0	1,273,465	100.00%		0.02%	2.69%	0.00%
03/22/13	03/01/33	1,378,357	709,760	2.196%	15,586	19	0	1,378,357	100.00%		0.03%	2.20%	0.00%
04/01/15	02/01/37	16,892,338	10,887,689	1.000%	108,877	20	0	16,892,338	100.00%		0.49%	1.00%	0.00%
10/15/15	07/01/40	123,663	88,573	1.000%	886	21	0	123,663	100.00%		0.00%	1.00%	0.00%
10/15/15	07/01/40	969,823	694,627	1.000%	6,946	22	0	969,823	100.00%		0.03%	1.00%	0.00%
04/21/16	05/01/37	4,152,000	2,923,387	1.985%	58,029	23	0	4,152,000	100.00%		0.13%	1.98%	0.00%
12/29/16	11/01/37	7,951,445	5,571,037	1.000%	55,710	24	0	7,951,445	100.00%		0.25%	1.00%	0.00%
06/14/17	11/01/36	5,937,613	4,130,079	2.027%	83,717	25	0	5,937,613	100.00%		0.19%	2.03%	0.00%
		$2,250,847,347	**$2,203,002,222**		**$90,543,235**		**$50,740,564**	**$2,200,106,783**			**100.00%**		**4.34%**

Notes to Debt Schedule

(1) Re-issuance 12/21/12 from Parent at a coupon rate of 4.30% for 30 years
(2) New unsecured borrowing at a coupon rate of 4.30% for 30 years
(3) Issuances costs included make whole premium of $10M
(4) Issuances costs included make whole premium of $7.2M
(5) Refinanced June 2019 at a lower rate for the remaining term of the bond
(6) Refinanced Dec 2019 at a lower rate for the remaining term of the bond
(7) Farmington Twp., Interest rate 1.387% for first 70 months and 2.774% (07/2009) for remainder
(8) Sandy Ridge, Interest rate 1.000% for first 60 months and 1.156% (07/2010) for remainder
(9) Sligo/Shippenville, Interest rate 1.385% for first 86 months and 2.763% (06/2013) for remainder
(10) Ellwood/Butler Interconnect, Interest rate 1.387% for first 74 months and 2.774% (08/2009) for remainder
(11) Mahoning & Union Twp, Interest rate 1.305% for first 82 months and 2.432% (10/2009) for remainder
(12) Hanover & Collier 1.274% first 2009 - 2014 and 2.547% starting Oct 2014
(13) Mount Pleasant Water System Extension 1.559% first 2011 - 2016 and 2.69% starting March 2016
(14) Rock Run WTP 2.414% first 2011 - 2016 and 3.117% starting Dec 2017
(15) Silver Spring Clearwell 2.376% first 2012 - 2016 and 3.098% starting Jan 2017
(16) Wallaceton Municipal Authority 1.00% for 30 years starting March 2012
(17) Pittsburgh Meter Improvements 1.799% first 2012 - 2017 and 2.81% starting April 2017
(18) Pittsburgh Meter Improvement Project Phase II 1.559% first 60 months and 2.69% starting May 2016
(19) Southwest PA Pipeline Exts Phase II - Interest 1.591% first 5 years - 2.196% starting April 2018
(20) Clarion WW Act 537 Implementation Project - Interest rate is 1.0% for the life of the loan
(21) Paint Twp #1 - Interest rate is 1% for the remaining life of the Bond
(22) Paint Twp #2 - Interest rate is 1% for the remaining life of the Bond
(23) Fairview Water Main Extension - Interest rate is 1.356% for the first 5 years, 1.985% June 2022 for remaining 5 years
(24) Debt assumed as part of Scranton Sewer acquisition
(25) Washington County Main Extension Project - Interest rate is 1.439% until Oct 2021 - 2.027% for the remaining term
(26) Unsecured borrowing at a coupon rate of 2.80% for 10 years
(27) Unsecured borrowing at a coupon rate of 3.45% for 30 years
(28) Issuance costs include make whole premium of $1.2M
(29) New unsecured borrowing at a coupon rate of 3.25% for 30 years
(30) New projected unsecured borrowing at a coupon rate of 4.45% for 10 years
(31) New unsecured borrowing at a coupon rate of 4.20% for 26 years
(32) New unsecured borrowing at a coupon rate of 5.05% for 15 years
(33) New unsecured borrowing at a coupon rate of 5.06% for 15 years
(34) New unsecured borrowing at a coupon rate of 4.20% for 15 years
(35) New unsecured borrowing at a coupon rate of 5.06% for 15 years
(36) New unsecured borrowing at a coupon rate of 4.75% for 15 years
(37) New unsecured borrowing at a coupon rate of 5.14% for 17 years

PA AMERICAN WATER - TOTAL COMPANY
SCHEDULE OF DEBT AT June 30, 2024

DATE OF ISSUE	DATE OF MATURITY	AMOUNT ISSUED	AMOUNT OUTSTANDING	COUPON RATE	ANNUAL INTEREST	NOTE #	ISSUANCE EXPENSE	NET PROCEEDS	NET PROCEEDS RATIO	SINKING REQUIR.	PERCENT TO TOTAL	EFFECTIVE COST RATE (1)	WEIGHTED COST RATE
Bonds and Notes													
11/01/03	11/01/33	38,000,000	38,000,000	6.780%	2,576,400		174,946	37,825,054	99.54%		1.44%	6.82%	0.10%
09/01/06	09/01/26	150,000,000	150,000,000	7.800%	11,700,000		2,069,648	147,930,352	98.62%		5.70%	7.94%	0.45%
11/01/04	11/01/31	10,000,000	10,000,000	8.820%	882,000		88,352	9,911,648	99.12%		0.38%	8.91%	0.03%
08/01/04	08/01/25	10,000,000	10,000,000	8.150%	815,000		60,119	9,939,881	99.40%		0.38%	8.21%	0.03%
12/21/12	12/01/42	23,015,000	23,015,000	4.300%	989,645	1	895,945	22,119,055	96.11%		0.87%	4.54%	0.04%
12/17/12	12/01/42	45,000,000	45,000,000	4.300%	1,935,000	2	582,689	44,417,311	98.71%		1.71%	4.38%	0.07%
11/21/11	10/15/37	35,000,000	35,000,000	5.050%	1,767,500		0	35,000,000	100.00%		1.33%	5.05%	0.07%
11/21/11	10/15/37	15,500,000	15,500,000	5.050%	782,750		740,260	14,759,740	95.22%		0.59%	5.39%	0.03%
08/14/14	03/01/25	36,200,000	36,200,000	3.400%	1,230,800		1,189,364	35,010,636	96.71%		1.38%	3.78%	0.05%
08/14/14	12/01/42	65,700,000	65,700,000	4.300%	2,825,100		4,432,879	61,267,121	93.25%		2.50%	4.74%	0.12%
08/10/17	09/01/47	240,000,000	240,000,000	3.750%	9,000,000		3,231,905	236,768,095	98.65%		9.12%	3.83%	0.35%
09/13/17	09/01/27	101,426,171	101,426,171	2.950%	2,992,072	3	11,291,519	90,134,652	88.87%		3.85%	4.34%	0.17%
08/09/18	09/01/28	74,739,360	74,739,360	3.750%	2,802,726		623,814	74,115,546	99.17%		2.84%	3.85%	0.11%
08/09/18	09/01/48	227,489,000	227,489,000	4.200%	9,554,538		2,490,214	224,998,786	98.91%		8.64%	4.26%	0.37%
09/11/18	09/01/28	124,719,875	124,719,875	3.750%	4,676,995	4	8,287,774	116,432,101	93.35%		4.74%	4.59%	0.22%
05/23/19	06/01/29	110,000,000	110,000,000	3.450%	3,795,000		1,141,559	108,858,441	98.96%		4.18%	3.57%	0.15%
06/21/19	04/01/39	80,000,000	80,000,000	3.000%	2,400,000	5	1,996,698	78,003,302	97.50%		3.04%	3.17%	0.10%
12/12/19	12/03/29	80,000,000	80,000,000	2.450%	1,960,000	6	1,907,647	78,092,353	97.62%		3.04%	2.72%	0.08%
12/12/19	12/03/29	13,165,000	13,165,000	2.450%	322,543	6	483,935	12,681,065	96.32%		0.50%	2.88%	0.01%
04/14/20	05/01/30	30,000,000	30,000,000	2.800%	840,000	26	373,996	29,626,004	98.75%		1.14%	2.94%	0.03%
04/14/20	05/01/50	90,000,000	90,000,000	3.450%	3,105,000	27	1,141,788	88,858,212	98.73%		3.42%	3.52%	0.12%
06/14/21	06/01/31	47,500,000	47,500,000	2.300%	1,092,500	28	1,798,391	45,701,609	96.21%		1.80%	2.74%	0.05%
05/14/21	06/01/51	47,500,000	47,500,000	3.250%	1,543,750	29	641,731	46,858,269	98.65%		1.80%	3.32%	0.06%
05/05/22	06/01/32	255,000,000	255,000,000	4.450%	11,347,500	30	2,964,855	252,035,145	98.84%		9.69%	4.59%	0.44%
12/27/22	09/01/48	120,000,000	120,000,000	4.200%	5,040,000	31	1,128,649	118,871,351	99.06%		4.56%	4.26%	0.19%
12/27/22	10/15/37	6,000,000	6,000,000	5.050%	303,000	32	0	6,000,000	100.00%		0.23%	5.05%	0.01%
12/27/22	10/15/37	9,000,000	9,000,000	5.060%	455,400	33	117,667	8,882,333	98.69%		0.34%	5.19%	0.02%
12/27/22	10/15/37	3,370,000	3,370,000	4.200%	141,540	34	0	3,370,000	100.00%		0.13%	4.20%	0.01%
12/27/22	10/15/37	500,000	500,000	5.060%	25,300	35	0	500,000	100.00%		0.02%	5.06%	0.00%
12/27/22	10/15/37	600,000	600,000	4.750%	28,500	36	0	600,000	100.00%		0.02%	4.75%	0.00%
12/27/22	05/19/39	5,000,000	5,000,000	5.140%	257,000	37	1,346	4,998,654	99.97%		0.19%	5.14%	0.01%
08/15/23	06/15/26	150,000,000	150,000,000	3.625%	5,437,500	38	2,181,818	147,818,182	98.55%		5.70%	4.17%	0.24%
05/15/24	06/01/34	175,000,000	175,000,000	5.904%	10,331,125	39	1,750,000	173,250,000	99.00%		6.65%	6.04%	0.40%
05/15/24	06/01/54	175,000,000	175,000,000	6.201%	10,851,138	40	1,750,000	173,250,000	99.00%		6.65%	6.27%	0.42%
Pennvest Loans													
08/01/04	07/01/24	1,559,205	6,701	2.774%	186	7	13,749	1,545,456	99.12%		0.00%	2.83%	0.00%
06/01/05	11/01/24	5,721,348	127,335	1.156%	1,472	8	29,484	5,691,864	99.48%		0.00%	1.19%	0.00%
01/01/06	12/01/25	5,670,111	389,123	2.763%	10,751	9	34,130	5,635,981	99.40%		0.01%	2.80%	0.00%
09/01/04	08/01/24	5,240,631	53,926	2.774%	1,496	10	7,951	5,232,680	99.85%		0.00%	2.78%	0.00%
11/01/04	10/01/24	3,099,441	62,362	2.432%	1,517	11	5,660	3,093,781	99.82%		0.00%	2.44%	0.00%
10/01/09	09/01/29	2,359,891	713,377	2.547%	18,170	12	0	2,359,891	100.00%		0.03%	2.55%	0.00%
06/01/11	02/01/31	12,150,000	4,649,925	2.690%	125,083	13	0	12,150,000	100.00%		0.18%	2.69%	0.00%
01/05/12	10/01/32	9,936,500	4,861,715	3.117%	151,540	14	0	9,936,500	100.00%		0.18%	3.12%	0.01%
01/05/12	12/01/31	1,606,709	708,465	3.098%	21,948	15	0	1,606,709	100.00%		0.03%	3.10%	0.00%
03/23/12	03/01/41	1,724,610	1,061,802	1.000%	10,618	16	0	1,724,610	100.00%		0.04%	1.00%	0.00%
03/20/12	04/01/31	1,675,790	765,438	2.810%	21,509	17	0	1,675,790	100.00%		0.03%	2.81%	0.00%
03/26/12	03/01/32	1,273,465	486,793	2.690%	13,095	18	0	1,273,465	100.00%		0.02%	2.69%	0.00%
03/22/13	03/01/33	1,378,357	643,802	2.196%	14,138	19	0	1,378,357	100.00%		0.02%	2.20%	0.00%
04/01/15	02/01/37	16,892,338	10,138,880	1.000%	101,389	20	0	16,892,338	100.00%		0.39%	1.00%	0.00%
10/15/15	07/01/40	123,663	83,794	1.000%	838	21	0	123,663	100.00%		0.00%	1.00%	0.00%
10/15/15	07/01/40	969,823	657,151	1.000%	6,572	22	0	969,823	100.00%		0.02%	1.00%	0.00%
04/21/16	05/01/37	4,152,000	2,739,161	1.985%	54,372	23	0	4,152,000	100.00%		0.10%	1.98%	0.00%
12/29/16	11/01/37	7,951,445	5,209,980	1.000%	52,100	24	0	7,951,445	100.00%		0.20%	1.00%	0.00%
06/14/17	11/01/36	5,937,613	3,859,447	2.027%	78,231	25	0	5,937,613	100.00%		0.15%	2.03%	0.00%
		$2,683,847,347	**$2,631,643,583**		**$114,492,347**		**$55,630,481**	**$2,628,216,866**			**100.00%**		**4.59%**

Notes to Debt Schedule

(1) Re-issuance 12/21/12 from Parent at a coupon rate of 4.30% for 30 years
(2) New unsecured borrowing at a coupon rate of 4.30% for 30 years
(3) Issuances costs included make whole premium of $10M
(4) Issuances costs included make whole premium of $7.2M
(5) Refinanced June 2019 at a lower rate for the remaining term of the bond
(6) Refinanced Dec 2019 at a lower rate for the remaining term of the bond
(7) Farmington Twp., Interest rate 1.387% for first 70 months and 2.774% (07/2009) for remainder
(8) Sandy Ridge, Interest rate 1.000% for first 60 months and 1.156% (07/2010) for remainder
(9) Sligo/Shippenville, Interest rate 1.385% for first 86 months and 2.763% (06/2013) for remainder
(10) Ellwood/Butler Interconnect, Interest rate 1.387% for first 74 months and 2.774% (08/2009) for remainder
(11) Mahoning & Union Twp, Interest rate 1.305% for first 82 months and 2.432% (10/2009) for remainder
(12) Hanover & Collier 1.274% first 2009 - 2014 and 2.547% starting Oct 2014
(13) Mount Pleasant Water System Extension 1.559% first 2011 - 2016 and 2.69% starting March 2016
(14) Rock Run WTP 2.414% first 2011 - 2016 and 3.117% starting Dec 2017
(15) Silver Spring Clearwell 2.376% first 2012 - 2016 and 3.098% starting Jan 2017
(16) Wallaceton Municipal Authority 1.00% for 30 years starting March 2012
(17) Pittsburgh Meter Improvements 1.799% first 2012 - 2017 and 2.81% starting April 2017
(18) Pittsburgh Meter Improvement Project Phase II 1.559% first 60 months and 2.69% starting May 2016
(19) Southwest PA Pipeline Exts Phase II - Interest 1.591% first 5 years - 2.196% starting April 2018
(20) Clarion WW Act 537 Implementation Project - Interest rate is 1.0% for the life of the loan
(21) Paint Twp #1 - Interest rate is 1% for the remaining life of the Bond
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(23) Fairview Water Main Extension - Interest rate is 1.356% for the first 5 years, 1.985% June 2022 for remaining 5 years
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(26) Unsecured borrowing at a coupon rate of 2.80% for 10 years
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(29) New unsecured borrowing at a coupon rate of 3.25% for 30 years
(30) New projected unsecured borrowing at a coupon rate of 4.45% for 10 years
(31) New unsecured borrowing at a coupon rate of 4.20% for 26 years
(32) New unsecured borrowing at a coupon rate of 5.05% for 15 years
(33) New unsecured borrowing at a coupon rate of 5.06% for 15 years
(34) New unsecured borrowing at a coupon rate of 4.20% for 15 years
(35) New unsecured borrowing at a coupon rate of 5.06% for 15 years
(36) New unsecured borrowing at a coupon rate of 4.75% for 15 years
(37) New unsecured borrowing at a coupon rate of 5.14% for 17 years
(38) New unsecured borrowing at a coupon rate of 3.625% for 3 years
(39) New unsecured borrowing at a coupon rate of 5.247% for 10 years
(40) New unsecured borrowing at a coupon rate of 5.646% for 30 years

PA AMERICAN WATER - TOTAL COMPANY
SCHEDULE OF DEBT AT June 30, 2025

DATE OF ISSUE	DATE OF MATURITY	AMOUNT ISSUED	AMOUNT OUTSTANDING	COUPON RATE	ANNUAL INTEREST	NOTE #	ISSUANCE EXPENSE	NET PROCEEDS	NET PROCEEDS RATIO	SINKING REQUIR.	PERCENT TO TOTAL	EFFECTIVE COST RATE (1)	WEIGHTED COST RATE
Bonds and Notes													
11/01/03	11/01/33	38,000,000	38,000,000	6.780%	2,576,400		174,946	37,825,054	99.54%		1.35%	6.82%	0.09%
09/01/06	09/01/26	150,000,000	150,000,000	7.800%	11,700,000		2,069,648	147,930,352	98.62%		5.33%	7.94%	0.42%
11/01/04	11/01/31	10,000,000	10,000,000	8.820%	882,000		88,352	9,911,648	99.12%		0.36%	8.91%	0.03%
08/01/04	08/01/25	10,000,000	10,000,000	8.150%	815,000		60,119	9,939,881	99.40%		0.36%	8.21%	0.03%
12/21/12	12/01/42	23,015,000	23,015,000	4.300%	989,645	1	895,945	22,119,055	96.11%		0.82%	4.54%	0.04%
12/17/12	12/01/42	45,000,000	45,000,000	4.300%	1,935,000	2	582,689	44,417,311	98.71%		1.60%	4.38%	0.07%
11/21/11	10/15/37	35,000,000	35,000,000	5.050%	1,767,500		0	35,000,000	100.00%		1.24%	5.05%	0.06%
11/21/11	10/15/37	15,500,000	15,500,000	5.050%	782,750		740,260	14,759,740	95.22%		0.55%	5.39%	0.03%
08/14/14	12/01/42	65,700,000	65,700,000	4.300%	2,825,100		4,432,879	61,267,121	93.25%		2.34%	4.74%	0.11%
08/10/17	09/01/47	240,000,000	240,000,000	3.750%	9,000,000		3,231,905	236,768,095	98.65%		8.54%	3.83%	0.33%
09/13/17	09/01/27	101,426,171	101,426,171	2.950%	2,992,072	3	11,291,519	90,134,652	88.87%		3.61%	4.34%	0.16%
08/09/18	09/01/28	74,739,360	74,739,360	3.750%	2,802,726		623,814	74,115,546	99.17%		2.66%	3.85%	0.10%
08/09/18	09/01/48	227,489,000	227,489,000	4.200%	9,554,538		2,490,214	224,998,786	98.91%		8.09%	4.26%	0.34%
09/11/18	09/01/28	124,719,875	124,719,875	3.750%	4,676,995	4	8,287,774	116,432,101	93.35%		4.44%	4.59%	0.20%
05/23/19	06/01/29	110,000,000	110,000,000	3.450%	3,795,000		1,141,559	108,858,441	98.96%		3.91%	3.57%	0.14%
06/21/19	04/01/39	80,000,000	80,000,000	3.000%	2,400,000	5	1,996,698	78,003,302	97.50%		2.85%	3.17%	0.09%
12/12/19	12/03/29	80,000,000	80,000,000	2.450%	1,960,000	6	1,907,647	78,092,353	97.62%		2.85%	2.72%	0.08%
12/12/19	12/03/29	13,165,000	13,165,000	2.450%	322,543	6	483,935	12,681,065	96.32%		0.47%	2.88%	0.01%
04/14/20	05/01/30	30,000,000	30,000,000	2.800%	840,000	26	373,996	29,626,004	98.75%		1.07%	2.94%	0.03%
04/14/20	05/01/50	90,000,000	90,000,000	3.450%	3,105,000	27	1,141,788	88,858,212	98.73%		3.20%	3.52%	0.11%
06/14/21	06/01/31	47,500,000	47,500,000	2.300%	1,092,500	28	1,798,391	45,701,609	96.21%		1.69%	2.74%	0.05%
05/14/21	06/01/51	47,500,000	47,500,000	3.250%	1,543,750	29	641,731	46,858,269	98.65%		1.69%	3.32%	0.06%
05/05/22	06/01/32	255,000,000	255,000,000	4.450%	11,347,500	30	2,964,855	252,035,145	98.84%		9.07%	4.59%	0.42%
12/27/22	09/01/48	120,000,000	120,000,000	4.200%	5,040,000	31	1,128,649	118,871,351	99.06%		4.27%	4.26%	0.18%
12/27/22	10/15/37	6,000,000	6,000,000	5.050%	303,000	32	0	6,000,000	100.00%		0.21%	5.05%	0.01%
12/27/22	10/15/37	9,000,000	9,000,000	5.060%	455,400	33	117,667	8,882,333	98.69%		0.32%	5.19%	0.02%
12/27/22	10/15/37	3,370,000	3,370,000	4.200%	141,540	34	0	3,370,000	100.00%		0.12%	4.20%	0.01%
12/27/22	10/15/37	500,000	500,000	5.060%	25,300	35	0	500,000	100.00%		0.02%	5.06%	0.00%
12/27/22	10/15/37	600,000	600,000	4.750%	28,500	36	0	600,000	100.00%		0.02%	4.75%	0.00%
12/27/22	05/19/39	5,000,000	5,000,000	5.140%	257,000	37	1,346	4,998,654	99.97%		0.18%	5.14%	0.01%
08/15/23	06/15/26	150,000,000	150,000,000	3.625%	5,437,500	38	2,181,818	147,818,182	98.55%		5.33%	4.17%	0.22%
05/15/24	06/01/34	175,000,000	175,000,000	5.904%	10,331,125	39	1,750,000	173,250,000	99.00%		6.22%	6.04%	0.38%
05/15/24	06/01/54	175,000,000	175,000,000	6.201%	10,851,138	40	1,750,000	173,250,000	99.00%		6.22%	6.27%	0.39%
05/15/25	06/01/35	110,000,000	110,000,000	5.802%	6,382,420	41	1,100,000	108,900,000	99.00%		3.91%	5.94%	0.23%
05/15/25	06/01/55	110,000,000	110,000,000	6.098%	6,708,295	42	1,100,000	108,900,000	99.00%		3.91%	6.17%	0.24%
Pennvest Loans													
01/01/06	12/01/25	5,670,111	131,502	2.763%	3,633	9	34,130	5,635,981	99.40%		0.00%	2.80%	0.00%
10/01/09	09/01/29	2,359,891	584,740	2.547%	14,893	12	-	2,359,891	100.00%		0.02%	2.55%	0.00%
06/01/11	02/01/31	12,150,000	4,004,410	2.690%	107,719	13	-	12,150,000	100.00%		0.14%	2.69%	0.00%
01/05/12	10/01/32	9,936,500	4,353,257	3.117%	135,691	14	-	9,936,500	100.00%		0.15%	3.12%	0.00%
01/05/12	12/01/31	1,606,709	623,228	3.098%	19,308	15	-	1,606,709	100.00%		0.02%	3.10%	0.00%
03/23/12	03/01/41	1,724,610	1,003,277	1.000%	10,033	16	-	1,724,610	100.00%		0.04%	1.00%	0.00%
03/20/12	04/01/31	1,675,790	662,469	2.810%	18,615	17	-	1,675,790	100.00%		0.02%	2.81%	0.00%
03/26/12	03/01/32	1,273,465	421,935	2.690%	11,350	18	-	1,273,465	100.00%		0.02%	2.69%	0.00%
03/22/13	03/01/33	1,378,357	576,376	2.196%	12,657	19	-	1,378,357	100.00%		0.02%	2.20%	0.00%
04/01/15	02/01/37	16,892,338	9,382,548	1.000%	93,825	20	-	16,892,338	100.00%		0.33%	1.00%	0.00%
10/15/15	07/01/40	123,663	78,968	1.000%	790	21	-	123,663	100.00%		0.00%	1.00%	0.00%
10/15/15	07/01/40	969,823	619,299	1.000%	6,193	22	-	969,823	100.00%		0.02%	1.00%	0.00%
04/21/16	05/01/37	4,152,000	2,551,245	1.985%	50,642	23	-	4,152,000	100.00%		0.09%	1.98%	0.00%
12/29/16	11/01/37	7,951,445	4,845,296	1.000%	48,453	24	-	7,951,445	100.00%		0.17%	1.00%	0.00%
06/14/17	11/01/36	5,937,613	3,583,278	2.027%	72,633	25	-	5,937,613	100.00%		0.13%	2.03%	0.00%
		$2,852,026,723	**$2,811,646,232**		**$126,273,672**		**$56,584,274**	**$2,795,442,449**			**100.00%**		**4.71%**

Notes to Debt Schedule

(1) Re-issuance 12/21/12 from Parent at a coupon rate of 4.30% for 30 years
(2) New unsecured borrowing at a coupon rate of 4.30% for 30 years
(3) Issuances costs included make whole premium of $10M
(4) Issuances costs included make whole premium of $7.2M
(5) Refinanced June 2019 at a lower rate for the remaining term of the bond
(6) Refinanced Dec 2019 at a lower rate for the remaining term of the bond
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(12) Hanover & Collier 1.274% first 2009 - 2014 and 2.547% starting Oct 2014
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(14) Rock Run WTP 2.414% first 2011 - 2016 and 3.117% starting Dec 2017
(15) Silver Spring Clearwell 2.376% first 2012 - 2016 and 3.098% starting Jan 2017
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(24) Debt assumed as part of Scranton Sewer acquisition
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(36) New unsecured borrowing at a coupon rate of 4.75% for 15 years
(37) New unsecured borrowing at a coupon rate of 5.14% for 17 years
(38) New unsecured borrowing at a coupon rate of 3.625% for 3 years
(39) New unsecured borrowing at a coupon rate of 5.247% for 10 years
(40) New unsecured borrowing at a coupon rate of 5.646% for 30 years
(41) New unsecured borrowing at a coupon rate of 5.101% for 10 years
(42) New unsecured borrowing at a coupon rate of 5.548% for 30 years

PENNSYLVANIA AMERICAN WATER COMPANY
SCHEDULE OF PREFERRED STOCK AT JUNE 30, 2023

SERIES	DATE OF ISSUE	DATE OF MATURITY	(1) (3) AVG TERM (YRS)	SHARES ISSUED	SHARES OUTSTANDING	PRINCIPAL AMOUNT ISSUED	AMOUNT OUTSTANDING	EXPENSE	NET PROCEEDS	SINKING REQUIR.	ANNUAL DIVIDEND	PERCENT TO TOTAL	EFFECTIVE COST RATE	(2) WEIGHTED COST RATE
9.75%	23-Apr-71	---	19.5	3,000	1,780	300,000	178,000	5,473	294,527	0	17,355	39.42%	9.96%	3.93%
9.35%	23-Apr-71	---	22.5	4,250	2,735	425,000	273,500	7,275	417,725	0	25,572	60.58%	9.53%	5.77%
				7,250	4,515	725,000	451,500	12,748	712,252	0	42,927	100.00%		9.70%

Notes:

(1) Determined by taking into account the effect of the annual sinking fund requirements which are met by the retirement of stock which reduce the term of each issue.
(2) The effective cost for each issue is the yield to maturity using as inputs the average term of issue, stated dividend rate, and net proceeds ratio.

(3) Series without sinking fund requirements are outstanding in perpetuity. For those series, the effective cost rate is the stated dividend rate divided by the net proceeds ratio.

PENNSYLVANIA AMERICAN WATER COMPANY
SCHEDULE OF PREFERRED STOCK AT JUNE 30, 2024

SERIES	DATE OF ISSUE	DATE OF MATURITY	(1) (3) AVG TERM (YRS)	SHARES ISSUED	SHARES OUTSTANDING	PRINCIPAL AMOUNT ISSUED	AMOUNT OUTSTANDING	EXPENSE	NET PROCEEDS	SINKING REQUIR.	ANNUAL DIVIDEND	PERCENT TO TOTAL	EFFECTIVE COST RATE	(2) WEIGHTED COST RATE
				-	-	-	-	-	-	0	-	0.00%		0.00%

Notes:

(1) Determined by taking into account the effect of the annual sinking fund requirements which are met by the retirement of stock which reduce the term of each issue.
(2) The effective cost for each issue is the yield to maturity using as inputs the average term of issue, stated dividend rate, and net proceeds ratio.

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PENNSYLVANIA AMERICAN WATER COMPANY
SCHEDULE OF PREFERRED STOCK AT JUNE 30, 2025

SERIES	DATE OF ISSUE	DATE OF MATURITY	(1) (3) AVG TERM (YRS)	SHARES ISSUED	SHARES OUTSTANDING	PRINCIPAL AMOUNT ISSUED	AMOUNT OUTSTANDING	EXPENSE	NET PROCEEDS	SINKING REQUIR.	ANNUAL DIVIDEND	PERCENT TO TOTAL	EFFECTIVE COST RATE	(2) WEIGHTED COST RATE
				-	-	-	-	-	-	0	-	0.00%		0.00%

Notes:

(1) Determined by taking into account the effect of the annual sinking fund requirements which are met by the retirement of stock which reduce the term of each issue.
(2) The effective cost for each issue is the yield to maturity using as inputs the average term of issue, stated dividend rate, and net proceeds ratio.

(3) Series without sinking fund requirements are outstanding in perpetuity. For those series, the effective cost rate is the stated dividend rate divided by the net proceeds ratio.

PENNSYLVANIA AMERICAN WATER

Common Stock Stock as of June 30, 2023

Designation of Kind and Class (a)	Par Value Per Share (b)	Number of Shares Authorized (c)	Amount Authorized (d)	Number of Shares Issued & Outstanding (e)	Amount Outstanding (f)
Common Stock	5.50	10,000,000	$55,000,000	3,910,343	$21,506,887

PAWC Statement No. 13-R

PENNSYLVANIA-AMERICAN WATER COMPANY

Rebuttal Testimony

of

Ann E. Bulkley, Principal
The Brattle Group

Concerning
Fair Rate of Return and Capital Structure

Docket Nos.
R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)

Date February 21, 2024

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I. INTRODUCTION

Q. Are you the same Ann E. Bulkley who previously submitted direct testimony in this proceeding?

A. Yes. I previously submitted direct testimony in this proceeding,[1] and am submitting this rebuttal testimony before the Pennsylvania Public Utility Commission ("Commission") on behalf of Pennsylvania-American Water Company ("PAWC" or the "Company"), a wholly-owned subsidiary of American Water Works Company, Inc. ("AWK").

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to the issues raised in the direct testimonies of Mr. D.C. Patel on behalf of the Bureau of Investigation and Enforcement ("I&E"),[2] Mr. David Garrett on behalf of the Pennsylvania Office of Consumer Advocate ("OCA"),[3] Mr. Kevin C. Higgins on behalf of the Pennsylvania Office of Small Business Advocate[4] and Ms. Billie S. LaConte on

[1] Pennsylvania Public Utility Commission, Docket Nos. R-2023-3043189 and R-2023-3043190, Direct Testimony of Ann E. Bulkley, November 8, 2023 ("Bulkley Direct Testimony").

[2] Pennsylvania Public Utility Commission, Docket Nos. R-2023-3043189 and R-2023-3043190, Direct Testimony of D. C. Patel, February 1, 2024 ("Patel Direct Testimony").

[3] Pennsylvania Public Utility Commission, Docket Nos. R-2023-3043189 and R-2023-3043190, Direct Testimony of David J. Garrett, February 1, 2024 ("Garrett Direct Testimony").

[4] Pennsylvania Public Utility Commission, Docket Nos. R-2023-3043189 and R-2023-3043190, Direct Testimony of Kevin C. Higgins, February 1, 2024 ("Higgins Direct Testimony").

behalf of the Pennsylvania-American Water Large Users Group[5] as they relate to the just and reasonable ROE and the appropriate capital structure for PAWC.

I have not attempted to respond to every position offered by these witnesses, and the fact that I may not have responded to any particular position or statement made does not indicate my agreement with that position or statement.

Q. Have you prepared any exhibits to support your analysis and recommendations?

A. Yes. My recommendations are supported by the data presented in Exhibit No. 13-R, Schedules 1 through 14, which have been prepared by me or under my direction.

Q. Have you updated the cost of equity analyses you presented in your direct testimony to reflect current market conditions?

A. Yes. As discussed in more detail herein, I have updated my cost of equity analyses based on market data through January 31, 2024. These results provide additional support for my ROE recommendation of 10.95 percent. I continue to base my recommendation not only on the results of multiple cost of equity models, but also other factors, including capital market conditions, the relative business and financial risk of PAWC as compared to the proxy group, and the Company's management performance.

[5] Pennsylvania Public Utility Commission, Docket Nos. R-2023-3043189 and R-2023-3043190, Direct Testimony and Exhibits of Billie S. LaConte, February 1, 2024 ("LaConte Direct Testimony").

Q. How is the remainder of your rebuttal testimony organized?

A. The remainder of my rebuttal testimony is organized as follows:

- Section II provides a summary and overview of my Rebuttal Testimony and the important factors to be considered in establishing the ROE for PAWC.
- Section III provides the update to my cost of equity analyses based on market data as of January 31, 2024.
- Section IV discusses the changes in capital market conditions since my direct testimony, their effect on the cost of equity, and the comparable return.
- Section V provides my response to Mr. Patel's cost of equity and capital structure analyses and recommendations.
- Section VI provides my response to Mr. Garrett's cost of equity and capital structure analyses and recommendations.
- Section VII provides my response to the positions of Mr. Patel, Mr. Garrett, Ms. LaConte, and Mr. Higgins regarding the Company's business and regulatory risks, including the Company's proposed revenue decoupling mechanism ("RDM") and Environmental Compliance Infrastructure Charge ("ECIC").
- Section VIII provides my response to the positions of Mr. Patel and Mr. Garrett regarding consideration of the Company's management performance in establishing the authorized ROE in this proceeding.

II. SUMMARY AND OVERVIEW

Q. What analyses do Mr. Patel and Mr. Garrett conduct, and what ROEs and capital structures are each recommending for the Company in this proceeding?

A. Figure 1 summarizes the results of the cost of equity analyses presented by Mr. Patel and Mr. Garrett in this proceeding and their final recommendations. Specifically, Mr. Patel's ROE recommendation of 8.45 percent is based solely on

the result of a single DCF analysis.[6] Mr. Garrett states that his ROE recommendation of 9.10 percent represents the average of his CAPM result of 8.7 percent and his DCF result of 9.4 percent.[7] Mr. Garrett also states that his ROE recommendation is contingent on his proposed capital structure being approved by the Commission, which is 51 percent equity and 49 percent debt, but if the Company's proposed capital structure is approved, he recommends an ROE of 8.70 percent. Mr. Higgins utilizes a "proxy" ROE of the Commission's most recently approved ROE for the Distribution System Improvement Charge ("DSIC") of 9.65 percent, and, acknowledges that this is not based on any cost of equity analysis he performed and is not intended to supplant the Commission's consideration of the traditional cost of equity analyses.[8]

Figure 1: Recommended ROE and Capital Structure

	Witness Patel (I&E)	**Witness Garrett (OCA)**
Constant Growth DCF	8.45%	6.3% - 9.4%
CAPM	10.44%	8.70%
Recommended ROE	8.45%	9.10%
Recommended Equity Ratio	Water: 55.99% Wastewater: 52.87%	51%
Recommended ROE – at Company's Proposed Capital Structure	8.45%	8.70%

6 Patel Direct Testimony, at 31.

7 Garrett Direct Testimony, at 50.

8 Higgins Direct Testimony, at 17.

Ms. LaConte contends that the Company's proposed ROE is excessive but she did not conduct any cost analysis for a proxy group relative to the Company for the current time period. Instead, Ms. LaConte references some recently authorized ROEs in the US, the most recently authorized ROE by the Commission of 10.0 percent for Aqua Pennsylvania Inc. and Aqua Pennsylvania Wastewater, Inc. in 2022, and the proxy ROE used in Pennsylvania for utilities' quarterly Distribution System Improvement Charges ("DSIC"), and contends that the Commission should approve an ROE "at the lower end of the Commission's deemed range of reasonableness."[9]

Q. What factors should be considered in evaluating the results of ROE models and establishing the authorized ROE?

A. The primary factors that should be considered are: (1) the importance of investors' actual return requirements and the critical role of judgment in selecting the appropriate ROE; (2) the importance of providing a return that is comparable to returns on alternative investments with commensurate risk; (3) the need for a return that supports a utility's ability to attract needed capital at reasonable terms; (4) the

[9] *Id.*, at 5. As the Commission has previously noted, "Further, we note the DSIC ROE is unlike a ROE set in a base rate proceeding. The DSIC ROE is determined by the Commission on a quarterly basis and is set per industry. As such, it is not company specific." (*Pa. PUC v. Aqua Pennsylvania, Inc*., Docket Nos. R-2021-3027385 & R-2021-3027386, at 177 (Order entered May 16, 2022) ("*Aqua*")).

effect of current and expected capital market conditions; and (5) achieving a reasonable balance between the interests of investors and customers.

Q. What are your key conclusions and recommendations regarding the appropriate ROE and capital structure for PAWC?

A. Nothing in the testimony of the witnesses that I address herein has caused me to change my recommendations Based on my review of their direct testimonies, my key conclusions regarding a reasonable ROE and capital structure for the Company in this proceeding are as follows:

ROE

- Updating the cost of equity estimation models that I relied upon in my direct testimony to reflect the most current data demonstrates that an ROE range of 10.00 percent to 11.25 percent remains reasonable. Considering these updated results, current and prospective capital market conditions, PAWC's specific business risks, and the company's management performance, I continue to recommend an ROE of 10.95 percent for PAWC in this proceeding.
- Mr. Patel's recommended ROE of 8.45 percent is unreasonable given that it is:
    - below any return that has been authorized for a water utility in the United States since at least 2010 as covered by Regulatory Research Associates;
    - inconsistent with the fact that the cost of equity has increased significantly in response to the increase in interest rates since 2022; and
    - inconsistent with recent ROE authorizations by the Commission for Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc. ("Aqua") and Columbia Water Company ("Columbia Water") of

10.00 percent (inclusive of a 25 basis point adder for management effectiveness) and 9.75 percent, respectively. [10]

- Mr. Patel's CAPM result is approximately 200 basis points higher than his DCF result, yet he exclusively relies on his DCF result, which is also inconsistent with the *Aqua* and *Columbia Water* decisions.
- Current and prospective market conditions are similar to the conditions identified by the Commission in *Aqua* and *Columbia Water*.
    - Interest rates and capital costs have increased and remain elevated, and inflation remains above the Federal Reserve's target level.
    - Current market conditions suggest that interest rates will likely remain higher than was anticipated in December 2023 given the recent macroeconomic data demonstrating strength in the overall economy and the labor market, both of which have exceeded expectations.
    - Mr. Patel's view of market conditions, particularly an alleged "commitment" by the Federal Reserve to reduce interest rates, incorrectly summarizes the Federal Reserve's position regarding future interest rate policy and is also inconsistent with recent macroeconomic data.
    - Mr. Garrett fails to consider the effect of current market conditions on the traditional cost of equity estimation models and the current cost of equity.
- Reasonable adjustments to Mr. Patel's cost of equity analyses indicates a significantly higher result:
    - A conservative 50/50 weighting of the DCF and CAPM analyses and reasonable adjustments to those analyses, while retaining his small water utility proxy group, results in an ROE estimate for PAWC of 10.02 percent.
    - The same 50/50 weighting of the DCF and CAPM analyses and reasonable adjustments to those analyses, but reasonably relying on a larger proxy group of distribution utilities comparable to the Company results in an ROE estimate of 10.53 percent.
- Mr. Garrett's ROE recommendation of 9.1 percent (assuming his recommended capital structure) or 8.7 percent (assuming the Company's proposed capital structure) are both also directionally inconsistent with

[10] *Aqua*, at 177; *Pa. PUC v. Columbia Water Company*, Docket No. R-2023-3040258, at 108 (Order Entered January 18, 2024) ("*Columbia Water*").

current and prospective market conditions and fail to consider the specific factors that the Commission considered in *Columbia Water* just one month ago – higher inflation, elevated interest rates, and higher equity costs.

- Making no modifications to Mr. Garrett's DCF result (i.e., 9.4 percent), and only one change to Mr. Garrett's CAPM assumptions by relying on Mr. Patel's market risk premium,(i.e., resulting in a cost of equity of 10.60 percent), averaging each model result as Mr. Garret has done to establish his recommendation, would result in an ROE calculation of 10.00 percent.

Business and Regulatory Risks

- None of the witnesses in this proceeding have presented reasonable evidence to support their conclusions that the authorized ROE for the Company should be reduced if the Commission approves the proposed RDM or ECIC.
- The appropriate comparison when considering how business risks affect the ROE for PAWC is a comparison to the proxy group companies – not simply suggesting that approval of the proposed RDM or ECIC would reduce risk for the Company alone.
- Numerous regulatory commissions have rejected a reduction in the authorized ROE as a result of the approval of revenue decoupling mechanisms if such mechanisms were prevalent among the proxy companies being used to estimate the ROE.

Management Performance

- Consideration of the Company's management performance in determining where within the range of results that the Company's ROE should fall is reasonable and consistent with the Commission's policy and prior precedent.
- Neither Mr. Patel nor Mr. Garrett have provided any basis for deviating from the Commission's policy and prior precedent.

Capital Structure

- Mr. Patel supports the Company's proposed capital structures.
- The Company's proposed capital structures are reasonable based on a comparison with the actual capital structures of the utility operating companies owned by the proxy group companies.
- There are multiple problems with Mr. Garrett's capital structure analysis.

- First, he inappropriately compares the Company's proposed capital structure to that of the holding companies of the proxy group, which includes corporate level debt that is not a part of the regulated capital structure of the operating subsidiaries, instead of the operating utilities of the holding companies.
- Second, even though Mr. Garrett inappropriately compares the Company's proposed capital structure to the holding companies in the proxy group, he incorrectly does so to my proxy group and not his own.
- Lastly, Mr. Garrett incorrectly applies the Hamada equation to my proxy group, which causes him to incorrectly conclude that his CAPM result should be lower if the Commission approves the Company's proposed capital structure.

III. UPDATED COST OF EQUITY RESULTS

Q. Have you updated your cost of equity analyses?

A. Yes. I have updated the results of the cost of equity analyses based on market data through January 31, 2024, using the same analyses as in my direct testimony. Figure 2 summarizes the results of my updated cost of equity analyses. The results of the constant growth DCF analyses are slightly higher and the CAPM and ECAPM results are slightly lower than as in my direct testimony,[11] and these updated results are generally consistent with the results presented in my direct testimony. Considering the updated cost of equity model results, the current and projected market conditions discussed later herein, the relative risks of the Company as discussed in my direct testimony, and the Company's excellent management performance as discussed in the direct testimony of PAWC witness

[11] Bulkley Direct Testimony, at 66.

Ms. Ashley Everette, the ROE range of 10.00 percent to 11.25 percent that I established in my direct testimony, and my recommended ROE of 10.95 percent, are reasonable for setting rates in this proceeding.

Figure 2: Summary of Updated Cost of Equity Results[12]

	Minimum Growth Rate	Average Growth Rate	Maximum Growth Rate
Constant Growth DCF			
Mean Results:			
30-Day Average	8.97%	10.07%	11.36%
90-Day Average	9.04%	10.14%	11.42%
180-Day Average	8.87%	9.97%	11.25%
Average	8.96%	10.06%	11.34%
Median Results:			
30-Day Average	8.63%	9.66%	10.86%
90-Day Average	8.72%	9.71%	10.98%
180-Day Average	8.60%	9.46%	10.69%
Average	8.65%	9.61%	10.85%

	30-Year Treasury Bond Yield		
	Current 30-Day Avg	Near-Term Projected	Longer-Term Projected
CAPM			
Current *Value Line* Beta	10.90%	10.89%	10.89%
Current Bloomberg Beta	10.31%	10.29%	10.29%
Long-term Avg. *Value Line* Beta	10.13%	10.11%	10.11%
ECAPM			
Current *Value Line* Beta	11.23%	11.22%	11.22%
Current Bloomberg Beta	10.79%	10.77%	10.77%
Long-term Avg. *Value Line* Beta	10.65%	10.64%	10.64%

[12] *See* Petitioner's Exhibit 13-R, Schedules 1-5. Excludes results for Middlesex Water Company in the DCF analyses since the results do not reflect any equity risk premium.

Q. Have you updated any other analyses that were presented in your direct testimony?

A. Yes. I have updated Exhibit No. 13-A, Schedule 13 from my direct testimony to reflect a change in the wastewater LTD financing rate. This rate changed from 2.62 percent to 2.67 percent as of June 30, 2025. This updated schedule is provided as Exhibit 13-R, Schedule 14.

IV. CAPITAL MARKET CONDITIONS

Q. Has the Commission previously considered capital market conditions in establishing the ROE for a utility?

A. Yes. In *Aqua*, the Commission concluded that I&E's DCF result was likely understating the cost of equity given increased inflation and expected increases in interest rates and capital costs and, therefore, placed weight on the results of the CAPM to set the range of reasonableness and authorized ROE.[13] Most recently, in *Columbia Water*, the Commission also utilized both the DCF and CAPM results to establish the authorized ROE, stating that it considered increasing inflation, interest rates, and capital costs in its determination.[14] As discussed further in this section of my rebuttal testimony, given that current market conditions are still characterized by high interest rates and capital costs, it is important that the Commission continue

[13] *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, p. 177 (Order entered May 16, 2022).

[14] *Pa. PUC v. Columbia Water Company*, Docket No. R-2023-3040258, at 108 (Order Entered January 18, 2024).

to place weight on the results of the CAPM when determining the authorized ROE for PAWC.

Q. What is Mr. Patel's assessment of current market conditions?

A. Mr. Patel's summary of market conditions appears to rely exclusively on the Federal Reserve's Summary of Economic Projections ("SEP") published on December 13, 2023. Mr. Patel suggests that the "Federal Reserve indicated that it would lower the Fed-funds rate to 4.60% by the end of 2024."[15] In addition, Mr. Patel states that in light of the Federal Reserves "commitment" to an interest rate reduction, he does not believe it is important to consider the underperformance of the utilities sector in the DCF model.[16]

Q. Has Mr. Patel correctly summarized the Federal Reserve's position on interest rates?

A. No. The Federal Reserve has indicated that it expects inflation will remain elevated above its target level until 2026 and that the extent to which it maintains the restrictive monetary policy will depend on market indicators going forward. For example, Federal Reserve Chair Powell at the Federal Open Market Committee ("FOMC") meeting on December 13, 2023 observed that while inflation is off of

[15] Patel Direct Testimony, at 40.

[16] *Id*., at 41.

its recent highs, it remains too high and noted that further policy firming is possible based on the data:

> Today, we decided to leave our policy interest rate unchanged and to continue to reduce our securities holdings. Given how far we have come, along with the uncertainties and risks that we face, the Committee is proceeding carefully. We will make decisions about the extent of any additional policy firming and how long policy will remain restrictive based on the totality of the incoming data, the evolving outlook, and the balance of risks.[17]

Chair Powell reiterated that the FOMC was committed to bringing inflation down to the 2.0 percent target level, and that while the easing of inflation has been good news, it is currently projected to take until 2026 to reach the Federal Reserve's target of 2.0 percent:

> Inflation has eased over the past year but remains above our longer-run goal of 2 percent. Based on the Consumer Price Index and other data, we estimate that total PCE [Personal Consumption Expenditures] prices rose 2.6 percent over the 12 months ending in November; and that, excluding the volatile food and energy categories, core PCE prices rose 3.1 percent. The lower inflation readings over the past several months are welcome, but we will need to see further evidence to build confidence that inflation is moving down sustainably toward our goal. Longer-term inflation expectations appear to remain well anchored, as reflected in a broad range of surveys of households, businesses, and forecasters, as well as measures from financial markets. As is evident from the SEP [Summary of Economic Projections], we anticipate that the process of getting inflation all the way to 2 percent will take some time. The

[17] Federal Reserve, Transcript of Chair Powell's Press Conference, December 13, 2023, at 1.

> median projection in the SEP is 2.8 percent this year, falls to 2.4 percent next year, and reaches 2 percent in 2026.[18]

Chair Powell also noted that the FOMC members project a gradual decline in the federal funds rates over time, but remain cautious and leave open the possibility of further monetary policy tightening as required:

> While we believe that our policy rate is likely at or near its peak for this tightening cycle, the economy has surprised forecasters in many ways since the pandemic, and ongoing progress toward our 2 percent inflation objective is not assured. We are prepared to tighten policy further if appropriate. We are committed to achieving a stance of monetary policy that is sufficiently restrictive to bring inflation sustainably down to 2 percent over time, and to keeping policy restrictive until we are confident that inflation is on a path to that objective.
>
> In our SEP, FOMC participants wrote down their individual assessments of an appropriate path for the federal funds rate based on what each participant judges to be the most likely scenario going forward. While participants do not view it as likely to be appropriate to raise interest rates further, neither do they want to take the possibility off the table. If the economy evolves as projected, the median participant projects that the appropriate level of the federal funds rate will be 4.6 percent at the end of 2024, 3.6 percent at the end of 2025, and 2.9 percent at the end of 2026, still above the median longer-term rate. These projections are not a Committee decision or plan; if the economy does not evolve as projected, the path for policy will adjust as appropriate to foster our maximum employment and price stability goals.[19]

On January 31, 2024, the FOMC concluded their meeting with a unanimous decision to leave the federal funds rate unchanged. In his speech following that

[18] *Id*., at 2-3; clarification added.

[19] *Id*., at 3-4.

meeting, Chair Powell indicated that inflation was still too high and added that a March cut is "not the most likely" or "base case" scenario.[20] Therefore, it is clear that the timing and nature of any interest rate cuts are speculative at this time.

Q. Have there been economic indicators published since the FOMC published the SEP on December 13, 2023 that indicate strength in the US economy?

A. Yes. Since December 13, 2023, the following data has been released demonstrating the unexpected strength in the U.S. economy:

- GDP increased in the fourth quarter of 2023 by 3.3 percent, which exceeded the expectation of 2.0 percent. This followed an increase of 4.9 percent in the third quarter of the year.
- U.S. employers added 353,000 jobs in January, far exceeding forecasts. Further, revised 2023 data indicated that 2023 was stronger than previously reported.
- The unemployment rate remained at 3.7 percent, and has been below 4.0 percent for 24 months.
- Average hourly earnings increased 0.6 percent in January 2024, up 4.5 percent year-over-year.

Q. What has been the market's expectation about interest rate cuts since the recent economic data you referenced has been reported?

A. The market has recognized the strength in the economy and the labor market and has tempered its expectations that the FOMC will decrease interest rates in the first quarter of this year. The CME Group, which publishes a "FedWatch" probability

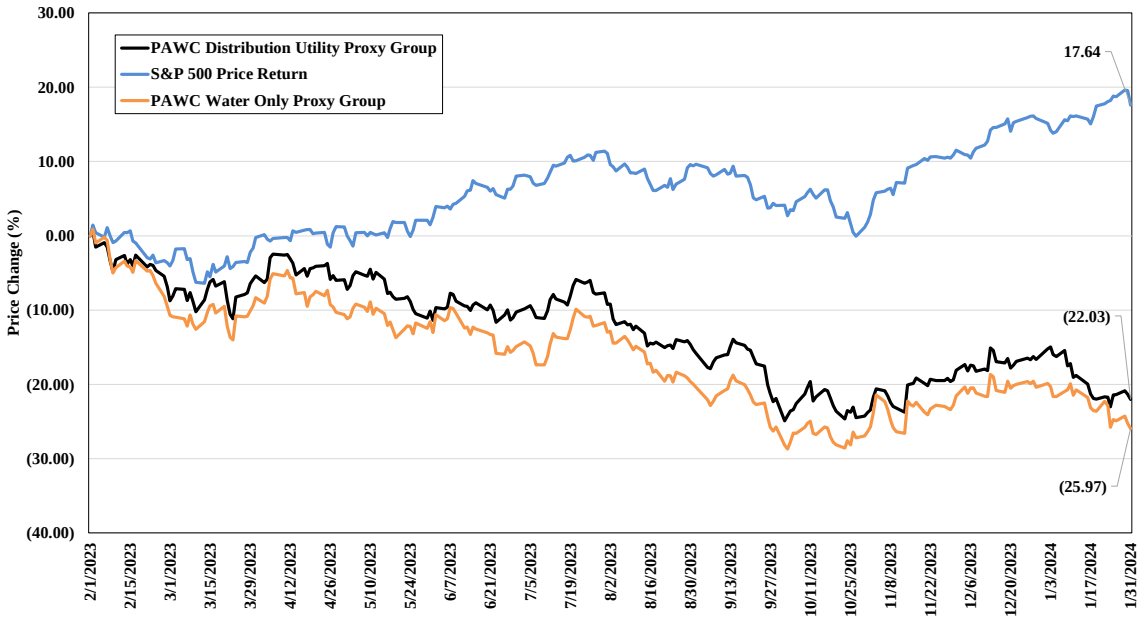
[20] Federal Reserve, Transcript of Chair Powell's Press Conference, January 31, 2024, at 16.

chart of FOMC activity, is currently reporting less than a 20 percent probability that the FOMC will reduce rates in March.[21]

Q. Mr. Patel disagrees that the share prices of utilities are likely to continue to decline due to higher interest rates.[22] What is your response?

A. I disagree with Mr. Patel. As shown in Figure 3, the companies in Mr. Patel's water utility proxy group and the companies in my distribution utility proxy group have both significantly underperformed the broader market over the past year as interest rates have increased.

Figure 3: Share Price Performance of Water Utility Proxy Group and Distribution Utility Proxy Group Performance v. S&P 500



[21] https://www.cmegroup.com/markets/interest-rates/cme-fedwatch-tool.htm; accessed February 8, 2023.

[22] Patel Direct Testimony, at 40.

Q. What are your conclusions about the effect of current market conditions on the investor-required ROE?

A. Current market conditions suggest that interest rates will likely remain higher than was anticipated in December 2023 given the recent macroeconomic data demonstrates strength in the overall economy and the labor market, both of which have exceeded expectations. These factors suggest that the cost of equity for utilities will also remain high. Therefore, consistent with the *Aqua* and *Columbia* decisions, the Commission should again determine the authorized ROE for PAWC using both the DCF and CAPM to ensure the return that the authorized ROE is reflective of market conditions expected during the time period rates will be in effect.

V. RESPONSE TO MR. PATEL'S COST OF EQUITY ANALYSES

Q. What is Mr. Patel's ROE recommendation in this proceeding?

A. As noted previously, Mr. Patel recommends an ROE for PAWC of 8.45 percent based on the mean result of his single constant growth DCF analysis. Mr. Patel's CAPM analysis, which is based on forward-looking assumptions for the risk-free rate and market risk premium, produces a mean result of 10.44 percent; however, he gives no weight to his CAPM result. Mr. Patel indicates that the results of his

CAPM are used as a comparison to the DCF results, but "not for recommendation purposes."[23]

Mr. Patel does not consider any company-specific risk factors or PAWC's superior management performance in setting his recommended ROE. Rather, he contends that PAWC faces the same risk from capital expenditures and water quality and environmental regulations as other proxy group companies, and that PAWC's proposed ROE adder for management performance should be disallowed because: (1) PAWC is already rewarded through higher net income if the Company is able to operate more efficiently; (2) the Company is already fairly compensated for its acquisitions of nonviable water and wastewater systems; and (3) the financial impact to ratepayers of the proposed 25 basis point adjustment.[24]

Q. Is Mr. Patel's ROE recommendation consistent with the Commission's recent *Aqua* and *Columbia Water* decisions in which it has considered the results of multiple cost of equity models?

A. No. Mr. Patel acknowledges – but disregards – the Commission's decisions in the recent Aqua and Columbia Water rate proceedings. In both of those cases, I&E's CAPM result was higher than its DCF result, and I&E recommended an ROE based solely on the DCF result, yet the Commission recognized the need to consider the

[23] *Id*., at 35.

[24] *Id*., at 69-82.

range of results set by multiple cost of equity models, and in fact set the ROE above the mean of the range in both cases.[25] As discussed, the current and projected market conditions are consistent with the circumstances in those proceedings with elevated interest rates, inflation higher than the Federal Reserve's target, and large capital expenditure requirements. Therefore, consistent with the Commission's recent decisions, Mr. Patel should have relied on both his DCF and CAPM result for purposes of his recommended ROE, and by failing to do so, has understated the cost of equity for PAWC.

A. Proxy Group Composition

Q. What is the composition of Mr. Patel's proxy group for purposes of his cost of equity analyses?

A. Mr. Patel's proxy group is comprised of five water utilities selected from the *Value Line* Water Utility industry, of which four are also in my proxy group.

Q. Do you agree with Mr. Patel including AWK in the proxy group?

A. No. As I discussed in my direct testimony, it is not appropriate to include AWK in the proxy group used to determine the authorized ROE for PAWC because of the circular logic that would occur.[26] For example, in the current proceeding, we are

[25] *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, at 147, 178 (Order entered May 16, 2022); *Pa. PUC v. Columbia Water Company*, Docket No. R-2023-3040258, at 108 (Order entered January 18, 2024).

[26] Bulkley Direct Testimony, at 26.

determining the ROE for PAWC, which, in turn, contributes to the ROE of its parent company, AWK. If AWK is included in the proxy group, AWK is being used to determine its own ROE. Therefore, to avoid the circular logic, AWK should be excluded from the proxy group.

Q. Do you agree with Mr. Patel's exclusion of Essential Utilities ("Essential") from the proxy group?

A. No. It appears that Mr. Patel's decision to exclude Essential from the proxy group is based on his revenue screening criterion, specifically that 50 percent of a company's revenue should be from water operations. However, operating income, not revenue, more appropriately reflects the risk profile of the operations. This is particularly the case for Essential. As shown in Figure 4, as well as in Exhibit 13-R, Schedule 6, Essential has historically derived more than 50 percent of its revenue and operating income from water utility operations. However in 2022, the company experienced natural gas costs that were $237.6 million higher than in 2021 as a result of unusually high gas prices. This increase in the utility's gas costs affected the percentage of water versus natural gas operations on a revenue basis, but did not affect operating income since natural gas costs are recovered as a pass through directly to customers. Therefore, while the 2022 data on a revenue basis might suggest that Essential should be excluded from the proxy group, it is clear that this

company meets Mr. Patel's screening criteria on an operating income basis and should be included.

Further, when the revenue is adjusted to remove the unusually high gas costs, it is clear that, even on a revenue basis, Essential would meet Mr. Patel's screening criteria. Therefore, it is appropriate to include Essential in the proxy group for PAWC.

Figure 4: Essential Utilities' Revenue and Operating Income, 2020-2022[27]

		Total	Regulated Water	Natural Gas
Revenue (%)	2022	100.00%	48.64%	51.36%
	2021	100.00%	53.27%	46.73%
	2020	100.00%	64.95%	35.05%
	Average	100.00%	55.62%	44.38%
Operating Income (%)	2022	100.00%	67.87%	32.13%
	2021	100.00%	68.35%	31.65%
	2020	100.00%	87.54%	12.46%
	Average	100.00%	74.59%	25.41%
Revenue adjusted for higher gas costs [1]	2022	$ 1,988,715.00	$ 1,082,972.00	$ 905,743.00
Revenue % adjusted for higher gas costs			54.46%	45.54%

Q. Mr. Patel disagrees with your decision to include gas distribution companies and electric companies in the proxy group for PAWC.[28] What is your response?

A. As discussed in my direct testimony, due to consolidation in the water industry, there is only a small group of water utilities that can be included in the proxy group. The smaller the size of the proxy group, the greater the chance the proxy group average can be affected by the results of one company. As I discuss in more detail later herein, due to the small size of Mr. Patel's proxy group, the mean DCF result is particularly affected by the low results of just one company, Middlesex Water Company ("Middlesex Water"). As also discussed in my direct testimony, similar

[27] Essential Utilities 2022 SEC Form 10-K, p. 52 reporting that Operating Revenues in 2022 were higher by $237,619,000 as a result of higher gas costs.

[28] Patel Direct Testimony, at 12.

to the water utilities, the electric and natural gas utilities included in my proxy group generate a substantial portion of their operating income from regulated utility distribution operations.[29] Therefore, there are significant similarities between the business and operating risks of the water, electric, and natural gas distribution utilities included in my proxy group.

Q. Have other regulatory commissions relied on proxy groups that include natural gas and electric distribution utilities?

A. Yes. Several regulatory commissions such as the Massachusetts Department of Public Utilities, the Florida Public Service Commission, and the Illinois Commerce Commission have considered the results of a proxy group that includes natural gas companies when determining the authorized ROE for water and wastewater utilities.[30]

[29] Bulkley Direct Testimony, at 27.

[30] Massachusetts Department of Public Utilities, Docket No. 17-90, Petition of Aquarion Water Company of Massachusetts, Inc., pursuant to G.L. c. 164, § 94, and G.L. c. 165, § 2, for Approval of a General Rate Increase as set forth in M.D.P.U. No. 3., October 31, 2018, p. 286-287. *See also*, Docket No. 20180006-WS, In re. Water and wastewater industry annual reestablishment of authorized range of return on common equity for water and wastewater utilities pursuant to Section 367.081(4)(f),F.S., Order No. PSC-2018-0327-PAA-WS, at 7. *See also*, Illinois Commerce Commission, Illinois-American Water Company Proposed Rate increases for Water and Sewer Service (tariffs filed February 10, 2022), Docket No. 22-0210, Order, December 15, 2022, at 102.

Q. Have the stock prices of water utilities and electric and natural gas distribution companies responded to market conditions in a similar manner?

A. Yes. As shown previously in Figure 3, both my distribution utility proxy group and Mr. Patel's water utility proxy group have significantly underperformed the market since January 2023. As shown therein, the change in total return for these two proxy groups have tracked very closely over the past year as interest rates have increased, demonstrating that the return on the water, electric and natural gas utility distribution companies are inversely correlated to interest rates, providing further support for the proxy group I rely on for my analyses.

Q. Do you have any other observations regarding the inclusion of electric and natural gas utilities in your proxy group?

A. Yes. While consolidation has occurred among water utilities, there have been acquisitions in recent years that have involved the merger of a water utility with a natural gas utility or an electric utility. One of the reasons cited for the purpose of Northwest Natural Gas Company's ("NW Natural") acquisition of Salmon Valley Water Company and Falls Water Company was the similarity in operating characteristics and risk profiles of natural gas and water utilities. In an interview regarding the transaction, the CEO of NW Natural noted:

> While these transactions and the companies' continuing operations are not expected to have a material impact on NW Natural's financial results, we view these acquisitions as the first step in a broader strategy. The water utility sector has a risk profile and

> business model that is similar to our core gas utility. There are also substantial investment opportunities over the long term, as water infrastructure needs to be replaced and upgraded to serve growing communities with safe, clean drinking water.[31]

Similarly, Aqua America completed the acquisition of PNG Companies, LLC, a natural gas utility operating in Pennsylvania, West Virginia and Kentucky, forming Essential. In discussing the acquisition, Essential's CEO noted that "both gas and water utilities are underground utilities, and that the systems share a common burden of being old and in need of replacement."[32]

These statements from the utilities themselves underscore the similar operating characteristics and risk profiles of these utility distribution industries, which have been a catalyst for consolidation.

Q. What is your conclusion with regard to the proxy group for PAWC?

A. I continue to support the use of the screening criteria outlined in my direct testimony to develop the proxy group for PAWC, which includes Essential, as well as electric and natural gas distribution utilities. For the reasons discussed, my screening criteria results in a proxy group that more appropriately balances the goal of establishing a sufficiently large proxy group, while maintaining a proxy group that is generally comparable to the risk profile and operating characteristics of

[31] Northwest Natural Gas Company Press Release, "NW Natural Expands into Regulated Water Utility Sector with Acquisitions in Oregon and Idaho," December 21, 2017.

[32] Margaret J. Krauss, "Aqua America Will Buy Peoples Gas For $4.3 Billion," 90.5 WESA (NPR), January 16, 2020, www.wesa.fm/post/aqua-america-will-buy-peoples-gas-43-billion.

PAWC. Relying on a smaller proxy group, as Mr. Patel has done, increased the relative weight of the results for each proxy company and undermines the benefit of relying on a proxy group. In the case of Mr. Patel's analysis, this results in placing a 20 percent weight on an ROE estimate for Middlesex Water that is at or below the current yield on utility bond indexes, and therefore assumes a zero or negative equity risk premium.[33] The inclusion of a ROE estimate that does not recognize the equity risk premium is unreasonable, and placing such significant weight on that estimate, through the use of a small proxy group results in a downward bias in his cost of equity estimate.

B. Constant Growth DCF Analysis

Q. What is the difference between your application of the constant growth DCF model and Mr. Patel's specification of this model?

A. Mr. Patel's application of the constant growth DCF model is generally similar to the way in which I have performed my DCF analysis. Mr. Patel has relied on spot stock prices, projected dividends for 2024, and analysts' earnings per share ("EPS") growth rates. The primary difference between our respective specifications of the DCF model is the range that I establish using the low and high growth rate assumptions and the level of reliance on the results of the DCF model. Mr. Patel

[33] As of January 31, 2024, the yields on the Moody's A and Baa rated utility bond indexes were in the range of 5.42 percent to 6.10 percent using 30, 90, and 180 day averages.

has placed sole reliance on the result from a single scenario of the DCF model without considering the reasonableness of the assumptions used in the model and the reasonableness of the individual company-specific results. While Mr. Patel suggests that the CAPM should be used for comparison purposes, he then gives the CAPM results no consideration simply because that the model produces results that are 199 basis points higher than the result of I&E's DCF model. It is not reasonable for Mr. Patel determine that the CAPM cannot be used simply by reference to the result of one other model. At best, it is reasonable to note the differences, but the simple fact that there is a difference between the numbers does not provide a basis for which estimate better reflects the cost of equity; indeed, as Mr. Patel acknowledges, the difference between the I&E DCF and CAPM results in *Columbia Water* was greater than here (325 basis points compared to 199 basis points), and the Commission relied on the CAPM in determining the ROE for *Columbia Water*. Furthermore, Mr. Patel does not consider how his recommendation compares with recently authorized ROEs established by this Commission or the range of returns set by other regulatory jurisdictions. In contrast, I have considered whether the assumptions used in the DCF model are

sustainable and whether the model results for each company meet the *Hope* and *Bluefield* standards for a reasonable return.[34]

1. Reasonableness of Mr. Patel's Constant Growth DCF Analysis

Q. Are the cost of equity estimates produced by Mr. Patel's constant growth DCF model reasonable compared to the returns available to investors in companies with similar risk?

A. No. Since January 2019, there have been no comparable ROEs authorized for either a water or natural gas utility that were equal to or less than 8.45 percent. Further, in January 2024, as Mr. Patel was preparing testimony for this proceeding, the Commission issued its decision in the Columbia Water proceeding, authorizing an ROE of 9.75 percent. In 2022, the Commission also authorized an ROE for Aqua of 10.00 percent, which included a 25 basis point adjustment for management performance. Mr. Patel summarizes these decisions, but simply disregards them (noting that, with respect to *Columbia Water*, he "respectfully disagree[]s" with the Commission's decision). .[35] The *Hope* and *Bluefield* decisions require the authorized return to be just and reasonable, as well as comparable to other returns

[34] Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944) ("Hope"); Bluefield Waterworks & Improvement Co., v. Public Service Commission of West Virginia, 262 U.S. 679 (1923) ("Bluefield").

[35] Patel Direct Testimony, at 27.

available to investors in companies with similar risk. Mr. Patel's constant growth DCF results clearly violate this standard.

2. Application of the DCF Model to the Proxy Group

Q. Have you reviewed the ROE results for each of the companies in Mr. Patel's proxy group?

A. Yes. As shown in I&E Exhibit No. 2, Schedule 6, the result for Middlesex Water is 5.77 percent, which is only slightly greater than the 30-day average yield on the Moody's A-rated utility bonds of 5.56 percent, and is *less than* the 30-day average yield on the Moody's Baa-rated utility bonds of 5.81 percent.[36] Therefore, Middlesex Water's DCF result does not compensate investors for the added risk of an equity investment relative to a debt investment, and thus should be excluded in Mr. Patel's DCF model results. As I noted earlier, Mr. Patel has selected a proxy group of only 5 companies, including the parent company of PAWC, and therefore, the effect of Middlesex Water's unreasonably low DCF result is greater because of his reliance on only 5 proxy group companies as opposed to the larger proxy group of 11 proxy group companies that I selected to conduct my analysis.

[36] Yields are as of January 2, 2023, which appears to be the spot stock price for each of the proxy group companies used in Mr. Patel's DCF analysis as reflected in I&E Exhibit No. 2, Schedule 4.

Q. Is it appropriate to rely on the spot stock price in developing an ROE estimate?

A. No. While I agree with Mr. Patel that the cost of equity that is being set in this proceeding is forward-looking, the use of the price on a single day can be biased significantly by the volatility that exists in the market on any given day. Therefore, it is more appropriate to consider an average stock price such as is reflected in my DCF analysis as well as the DCF analysis conducted by Mr. Garrett.[37]

Q. Have you updated Mr. Patel's constant growth DCF to reflect the issues with his analysis that you have identified?

A. Yes. I have modified Mr. Patel's constant growth DCF analysis to:

- appropriately include Essential in the proxy group;
- rely on a 30-day average stock price in the calculation of the dividend yield;
- calculate the range of DCF results based on the full range of growth rate assumptions reported by Yahoo! Finance, *Zacks*, and *Value Line*; and,
- consider the results of the DCF model in the context of the yield on comparable utility bonds, recognizing that an equity risk premium is reasonable and appropriate, and eliminating results that do not provide an equity risk premium.

As shown in Exhibit No. 13-R, Schedule 7, based on these updates, Mr. Patel's mean constant growth DCF result would increase by 80 basis points from 8.45 percent to 9.21 percent. Further, considering the range of results, and in particular the higher end of the range, the DCF results demonstrate a cost of equity as high as

[37] Garrett Direct Testimony, Exhibit DJG-3.

10.58 percent. Further, considering the results of a distribution utility proxy group instead of Mr. Patel's very small water only proxy group, the mean DCF result would increase to 9.82 percent.

Q. Mr. Patel's primary concern with your DCF analysis is that you eliminated the low-end of your DCF results.[38] What is your response?

A. First, it is important to recognize that Mr. Patel's analysis does not consider the results of a low growth rate scenario. Instead, he relies exclusively on the mean growth rates for the proxy group. Therefore, his criticism that I dismissed low growth rate results lacks merit because he did not find a low growth rate scenario sufficiently useful for comparison purposes to even develop in his own analyses.

Second, Mr. Patel's characterization of my analysis is incorrect. The range of results presented in my DCF analysis include a low end, which relies on the lowest growth rates assumed for each of the proxy companies, and a high end, which relies on the highest growth rates assumed for each of the proxy group companies, as well as the mean result, which is generally consistent to the one scenario that was prepared by Mr. Patel. Therefore, I considered a much broader range of results than were considered by Mr. Patel in his analyses.

[38] Patel Direct Testimony, at 44-45.

Q. Is there any market evidence that demonstrates that the low end of your range of DCF results does not reflect the investor-required ROE?

A. Yes. The market response to recent authorized ROEs that were below the investor-required return resulting in credit rating downgrades and significant declines in the stock prices of the parent companies demonstrate that the low end of the range of DCF results is not reflective of the investor required ROE. There are numerous examples in which utilities have experienced a negative market response related to the financial effects of a rate decision, including credit rating downgrades and material stock price declines. For example, ALLETE, Inc.,[39] CenterPoint Energy Houston Electric,[40] and Pinnacle West Capital Corporation ("PNW")[41] each received credit rating downgrades following rate case decisions in the past few years for reasons that included below average authorized ROEs. The most recent example is the decision by the Illinois Commerce Commission ("ICC") in mid-December 2023 that rejected the multiyear grid plan proposals of Ameren Illinois Co. ("Ameren IL") and Commonwealth Edison Co. ("ComEd") and authorized lower-than-expected ROEs for both of these electric transmission and distribution

[39] Moody's Investors Service, "Credit Opinion: ALLETE, Inc. Update following downgrade," April 3, 2019, at 3.

[40] FitchRatings, "Fitch Downgrades CenterPoint Energy Houston Electric to BBB+; Affirms CNP; Outlooks Negative," February 19, 2020.

[41] S&P Capital IQ Pro; FitchRatings, "Fitch Downgrades Pinnacle West Capital & Arizona Public Service to 'BBB+'; Outlooks Remain Negative," October 12, 2021; and Moody's Investors Service, "Rating Actions: Moody's downgrades Pinnacle West to Baa1 and Arizona Public Service to A3; outlook negative," November 17, 2021.

utilities. Specifically, the ICC authorized an ROE for Ameren IL of 8.72 percent and 8.905 percent for ComEd, which was a significant reduction from the Administrative Law Judge's recommendations of 9.24 percent and 9.28 percent, respectively.[42]

Q. How did the market respond to the ICC's decisions for these utilities?

A. While the S&P 500 was increasing, the share prices of the parent companies of both Ameren IL and ComEd (*i.e.*, Ameren Corp. and Exelon Corp., respectively) each dropped more than 7 percent on December 14, 2023 after the ICC's decision, and declined again by more than 4.4 percent and 6.4 percent the following day, respectively.[43] In addition, the reactions of equity analysts were universally negative, and questioned whether the parents of both Ameren IL and ComEd will shift their capital spending out of the jurisdiction as a result of the uncertainty associated with the multi-year grid plan and low authorized ROEs. For example:

- Barclays characterized the ICC's ROE authorizations as "draconian" and "one of the lowest awarded in recent memory, especially in an elevated interest rate and cost of capital environment."[44] Barclays also stated it found it hard to believe utilities "can deploy capital under the same magnitude on the updated grid plans to be filed, especially under the current proposed ROE framework."

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42 Allison Good, "Ameren, Exelon shares fall after Illinois regulators reject grid plans," *Platts*, December 15, 2023.

43 Yahoo! Finance.

44 Barclays, "AEE/EXC: Coal Stocking-Stuffer in Illinois," December 14, 2023.

- In its assessment of the impact on Exelon, the parent of ComEd, UBS stated that "[t]he actions taken by the ICC today call into question, in our view, the regulatory backdrop in which EXC operates."[45]

- Wells Fargo stated that it was not mincing words, and that the ICC's orders were "onerous" and that:

> We now view IL as one of the worst regulatory jurisdictions in the U.S. (nipping at CT's heels). We think the totality of the recent orders suggest that the regulatory balancing act between customers and investors is currently heavily skewed toward customers. As a result, we wonder if AEE & EXC will allocate capital away from IL. Keep in mind, IL represents ~25% of both AEE's & EXC's total rate base."[46]

- In its evaluation of Ameren IL, BofA Securities characterized the ICC's decision as "punitive" and stated that it was a surprise based on numerous conversations with investors that believed the ICC may authorize an ROE above the ALJ's recommendation, not substantially lower, and that the downside surprise was one of the biggest in recent memory for their regulated utility coverage.[47] While BofA Securities acknowledged that Ameren IL represents less than 20 percent of Ameren Corp.'s consolidated rate base, it will nonetheless need offsets or capital expenditures elsewhere in order to hit its earnings growth rate targets.[48]

- After the decisions, Guggenheim questioned, "Is Illinois Becoming the Next Connecticut?" Guggenheim noted that investors questioned whether Illinois was "slowly becoming a CT-esque jurisdiction," and that equity and debt holders are going to be wary of Illinois as a jurisdiction going forward and that the ICC is "simply sending a negative message to investors."[49]

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[45] UBS, First Read Exelon Corp., "Negative Rate Case Outcome – Rating and PT Under Review," December 14, 2023.

[46] Wells Fargo, "The ICC Delivers a Lump of Coal for AEE & EXC," December 14, 2023.

[47] BofA Securities, Ameren Corporation, "Illinois delivers downside surprise," December 15, 2023.

[48] *Id*.

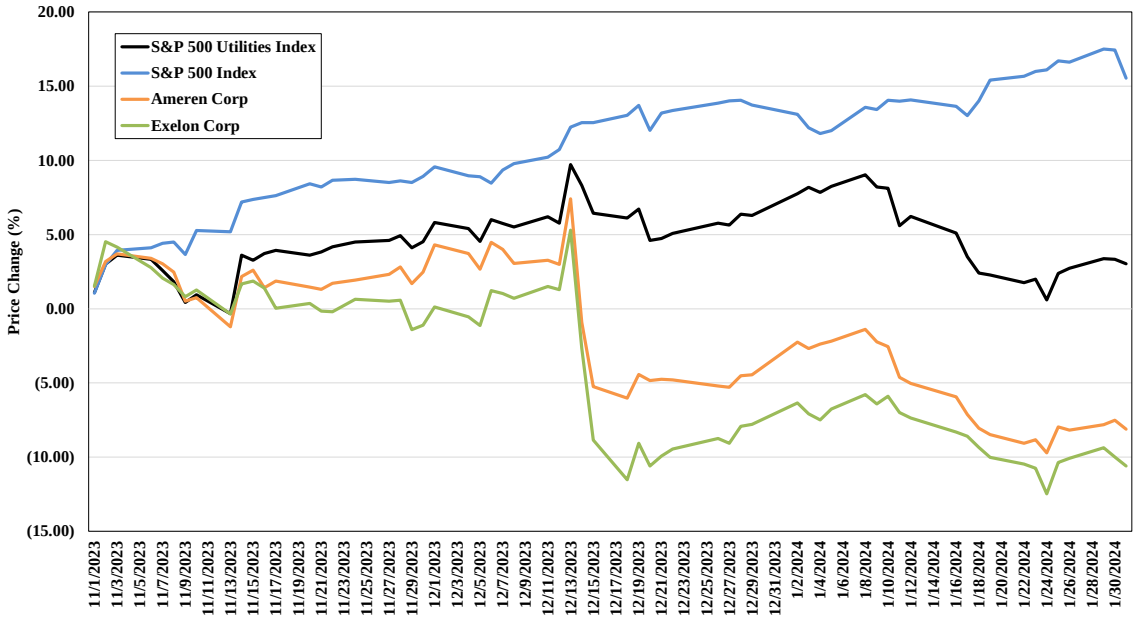
[49] Guggenheim, "IL: Is Illinois Becoming the Next Connecticut? To Be Determined, but Taking a Neutral Stance on the State," December 15, 2023.

Further, after the ICC's decisions, Regulatory Research Associates ("RRA") lowered its rating of the Illinois regulatory jurisdiction from Average/2 to Average/3 due to the "concerning pattern of restrictive" rate actions in the state.

Q. Do the stock prices of AEE and EXC continue to be affected by these rate case outcomes?

A. Yes. As shown in Figure 5, the share prices for AEE and EXC continue to be affected by these decisions. As of the decision date, both AEE and EXC experienced a significant decline in share prices and continue to trade at approximately 10.88 percent and 14.54 percent below prices as of November 2023. In contrast, the S&P 500 Utilities index is trading generally flat with November 2023.

Figure 5: AEE and EXC Stock Price Performance Following ICC Rate Decisions



Q. Do you agree with the adjustments that Mr. Patel makes to your DCF analysis?

A. No. Mr. Patel reduces the size of the proxy group and the range of results considered because he: (1) inappropriately concludes that the electric and natural gas utilities included in my proxy are not comparable to PAWC; and, (2) appears to conclude that the range of projected analysts' EPS growth rates should not be used to develop a range of DCF results, but rather only the average growth rates. Therefore, Mr. Patel uses a narrow review of the mean and median results of a small water utility proxy group to underestimate the cost of equity. Mr. Patel's adjustments to my DCF analysis results in an ROE of 8.21 percent, which is below

any comparable authorized ROE for either a water or natural gas utility of which I am aware. In addition, it is 154 basis points below the return that was authorized by the Commission only a few weeks ago in *Columbia Water*, which did not consider management performance. Therefore, while Mr. Patel "respectfully disagree[s]" with the Commission's decision in that proceeding, it is clear that, based on the response of investors in the recent Illinois decision discussed previously, investors would disagree with Mr. Patel that his DCF analysis as well as his "adjustment" to my analysis reflect the investor-required return. It would be reasonable to expect a similar market response as occurred in Illinois in this proceeding if Mr. Patel's ROE recommendation were implemented.

3. Weighting of the DCF Results in the Final Recommendation

Q. Do you agree with Mr. Patel's sole reliance on the DCF model?

A. No, and as previously discussed, neither has the Commission in *Aqua* or *Columbia*. Mr. Patel contends that prior Commission opinions in substantially different market conditions suggest that sole reliance on the results of the DCF model reflect Commission precedent, but dismisses the most recent two decisions by the Commission simply because disagrees with them. Regardless of his lack of agreement, the Commission was clear in both *Aqua* and *Columbia Water* that it was not accepting I&E's position to rely exclusively on the DCF result to the exclusion of the CAPM model results. In *Aqua*, the Commission noted that inflation was

currently high and that the Federal Reserve was ending its accommodative monetary policy to keep interest rates low in response to inflation. Further, the Commission noted that the DCF model is slow to respond to changes in interest rates while the CAPM can be calculated using forecasted interest rates and thus captures "forward-looking" changes in interest rates.[50] As a result, the Commission concluded that it would determine Aqua's authorized ROE based on both the DCF and CAPM models as opposed to relying solely on the DCF model as proposed by Mr. Patel. This was consistent with the Commission's long-standing openness to consideration of other ROE models when appropriate:

> As such, where evidence based on *other* methods suggests that the DCF-only results may understate the utility's ROE, we will consider those other methods, to some degree, in determining the appropriate range of reasonableness for our equity return determination. In light of the above, we shall determine an appropriate ROE for Aqua using informed judgement based on I&E's DCF and CAPM methodologies.[51]

The Commission relied on the range of results of 8.90 percent to 9.89 percent produced by I&E's DCF and CAPM models, and ultimate authorized an ROE of

[50] *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, at 154 (Order entered May 16, 2022).

[51] *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, p. 155 (Order entered May 16, 2022).

9.75 percent at the high end of the range considering increased inflation leading to increases in interest rates and capital costs since Aqua filed its rate case.[52]

Likewise in *Columbia Water*, the Commission affirmed its view that the DCF and the CAPM should be relied upon to set the range, agreeing with the Administrative Law Judge that the CAPM is more responsive to changes in interest rates. Further, the Commission recognized that where evidence based on other methodologies suggests that the DCF results may understate the utility's ROE, the Commission will consider those methods, to some degree in determining the appropriate range of reasonableness. As such, the Commission established its range based on the DCF and CAPM results and used its judgement as to where within that range to set the ROE, which was 9.75 percent.[53]

Q. Please summarize your conclusions on Mr. Patel's DCF analysis and his reliance on those results in establishing his ROE recommendation.

A. Mr. Patel relies on a proxy group that is limited in size, excludes a comparable water utility based on an incomplete review of historical operating revenue, and includes PAWC's parent company, which is circular. The small size of the proxy

[52] *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, p. 178 (Order entered May 16, 2022). The Commission authorized an ROE for Aqua of 10.00 percent which was based on a 9.75 percent ROE considering the DCF and CAPM results plus a 0.25 percent adder for management performance.

[53] *Pa. PUC v. Columbia Water Company*, Docket No. R-2023-3040258, at 107-108 (Order Entered January 18, 2024).

group increases the weight placed on each individual result. This is an important point to consider, particularly because he includes an estimate of the cost of equity for Middlesex Water that is below the cost of debt in the average used to develop his ROE recommendation. As discussed previously, it is unreasonable to consider a return that is below the cost of debt as a return to equity investors, based on the increased risk associated with equity ownership. This issue is further magnified in a proxy group of five companies, such as is relied upon by Mr. Patel. As discussed in my response to Mr. Patel, I believe that a larger proxy group that is composed of distribution utilities that are of similar overall risk as water utilities addresses concerns about sample size. Further, I believe that Essential Utilities, which was excluded from Mr. Patel's proxy group should be included in the group.

In addition to my concerns regarding the proxy group, I disagree with Mr. Patel's view that the DCF model is superior to other ROE estimation models and his claims that that it has a stronger capability to estimate returns in the current market are unsubstantiated. The capital market conditions discussed in my rebuttal testimony demonstrate that interest rates are currently elevated and will remain elevated for some period of time, which has an effect on the prices used in the DCF model. This provides further support for the Commission's concern in *Aqua* that the DCF model may presently be understating the cost of equity.

Q. Please summarize the adjustments you made to Mr. Patel's DCF analysis.

A. As shown in Figure 6 below, I made the following four adjustments to Mr. Patel's DCF analysis.

- Include Essential in the proxy group given that the company meets Mr. Patel's screening criteria when revenues are properly adjusted to exclude the effect of high natural gas prices that have no effect on the Company's operating income.
- Utilize the 30-day average stock price in the DCF analysis rather than a spot stock price, which is consistent with the methodology that both Mr. Garrett and I rely upon.
- Exclude the DCF result for MSEX, since the result is below the yield on the utility bond index and therefore does not provide an equity risk premium, which exclusion is also supported by the market response to authorized ROEs in Illinois that were more than 350 basis points higher than the DCF result for MSEX.
- Consider the results of a distribution utility proxy group.

As shown in Figure 6, reasonable changes to Mr. Patel's DCF analysis results in a cost of equity estimate of 9.82 percent.

Figure 6: Summary of Adjustments to Mr. Patel's DCF analysis

	DCF
As Filed Result	8.45%
DCF Adjustments (Adj'mts Additive)	
Include Essential in Proxy Group	8.62%
Exclude MSEX Results (No Equity Risk Prem)	9.19%
Use 30-Day Avg Stock Price (Not Spot Price)	9.21%
Use Distribution Utility Proxy Group	9.82%

C. CAPM Analysis

Q. Please summarize Mr. Patel's CAPM analysis.

A. Mr. Patel's CAPM analysis is based on the following assumptions: (1) a projected risk-free rate on the 10-year Treasury bond of 4.00 percent; (2) *Value Line* beta coefficients for his proxy group companies; and (3) a market risk premium that is based on the average of (i) an estimate of the total return for the companies in the *Value Line* universe and the S&P 500 Index less the risk-free rate, and (ii) the historical average return on the S&P 500. Mr. Patel's CAPM analysis produces a return estimate of 10.44 percent, which is 199 basis points higher than the results of his constant growth DCF analysis of 8.45 percent, which, as noted, he solely relies on for his ROE recommendation.

Q. What are the specific areas that you disagree with in Mr. Patel's CAPM analysis?

A. My primary areas of disagreement with Mr. Patel's CAPM are; 1) excluding Essential Utilities from the proxy group; 2) relying on the projected yield on the 10-year Treasury bond as the risk-free rate; and 3) relying on a single *Value Line* report for the calculation of the market risk premium. In addition, I believe that a broader distribution utility proxy group is more appropriate to estimate the cost of equity than the smaller proxy group relied upon in his CAPM analysis.

Q. Why do you disagree with the use of the 10-year Treasury bond as the risk-free rate?

A. While I recognize the Commission's previous decision to use the 10-year Treasury bond as the risk-free rate in the CAPM analysis, in determining the security most relevant to the application of the CAPM, it is important to select the term (or maturity) that best matches the life of the underlying investment. As noted by *Morningstar*:

> The horizon of the chosen Treasury security should match the horizon of whatever is being valued… If an investor plans to hold stock in a company for only five years, the yield on a five-year Treasury note would not be appropriate since the company will continue to exist beyond those five years.[54]

Because utility companies represent long-duration investments, the 30-year Treasury bond yield, not the 10-year Treasury bond yield, is the appropriate measure of the risk-free rate for the purpose of the CAPM.[55] In addition, based on principles of prudent financial management, the term of the debt financing should match the useful life of the assets being financed. Utility plant assets generally have useful lives between 25 and 40 years, meaning that, under prudent financial management, those assets should be financed with bonds of longer duration than 10 years. The average useful life of PAWC's net utility plant for water distribution operations is approximately

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[54] *Morningstar, Inc.*, 2010 Ibbotson Stocks, Bonds, Bills and Inflation, Valuation Yearbook, at 44.

[55] Bulkley Direct Testimony, at 50.

34.74 years,[56] which suggests that it would be reasonable to assume that the duration of debt instruments would be at least 30 years, further supporting the use of the 30-year Treasury bond yield as the risk-free rate in the CAPM analysis.

Q. How would the use of the 30-year Treasury bond yield change the results of Mr. Patel's CAPM analysis?

A. As shown in Exhibit No. 13-R, Schedule 8, relying on the 30-year Treasury bond yield rather than the 10-year Treasury bond yield increases the risk-free rate to 4.20 percent. As shown in Exhibit No. 13-R, Schedule 9, and as summarized in Figure 8 below, updating Mr. Patel's CAPM analysis for the 30-year Treasury bond yield and including Essential Utilities increases his CAPM result by 30 basis points to 10.74 percent, which is approximately 230 basis points higher than his ROE recommendation of 8.45 percent based solely on the results of his constant growth DCF analysis. In addition, if the distribution utility proxy group is used, then the CAPM result increases to 10.87 percent.

Q. Do you agree with Mr. Patel's calculation of the market return using the *Value Line* reports?

A. No, I do not. Mr. Patel relies on a *Value Line* report for a single week – January 5 2024 – in the development of his projected market return. As shown in Exhibit No.

[56] Pennsylvania-American Water Company 2022 Annual Report filed with Pennsylvania Public Utility Commission. Calculation based on 2022 net utility plant in service of $4,935,007,207 divided by 2022 depreciation expense of $142,049,228 = 34.74 years.

13-R, Schedule 7 and Figure 7 below, the *Value Line* Appreciation Potential was somewhat variable over the last few months, with January 2024 being the low point. Further, I&E relied on a similar analysis in the Columbia Water proceeding, where the June 2023 *Value Line* Appreciation Potential was higher still, resulting in a projected average yearly return of 14.77 percent. Therefore, based on this data, it appears that Mr. Patel has relied on a low point in the data set that is not reasonable and does not reflect projected market conditions.

Figure 7: Summary of Projected Market Return based on *Value Line* Projected Dividend Yield and Market Appreciation Potential

VL Report Date	Dividend Yield	Appreciation Potential	Growth Rate	DCF Result
6/30/2023	2.30%	60%	12.47%	14.77%
7/1/2023	2.30%	65%	13.34%	15.64%
7/7/2023	2.30%	65%	13.34%	15.64%
7/14/2023	2.20%	55%	11.58%	13.78%
7/21/2023	2.20%	60%	12.47%	14.67%
7/28/2023	2.20%	55%	11.58%	13.78%
8/4/2023	2.10%	55%	11.58%	13.68%
8/11/2023	2.20%	50%	10.67%	12.87%
8/18/2023	2.20%	55%	11.58%	13.78%
8/25/2023	2.20%	55%	11.58%	13.78%
9/1/2023	2.30%	60%	12.47%	14.77%
9/8/2023	2.30%	60%	12.47%	14.77%
9/15/2023	2.20%	55%	11.58%	13.78%
9/22/2023	2.30%	60%	12.47%	14.77%
9/29/2023	2.30%	60%	12.47%	14.77%
10/6/2023	2.30%	65%	13.34%	15.64%
10/13/2023	2.40%	65%	13.34%	15.74%
10/20/2023	2.40%	65%	13.34%	15.74%
10/27/2023	2.30%	65%	13.34%	15.64%
11/3/2023	2.40%	75%	15.02%	17.42%
11/10/2023	2.50%	75%	15.02%	17.52%
11/17/2023	2.40%	65%	13.34%	15.74%
11/6/2023	2.40%	75%	15.02%	17.42%
11/24/2023	2.40%	65%	13.34%	15.74%
12/1/2023	2.30%	60%	12.47%	14.77%
12/8/2023	2.30%	60%	12.47%	14.77%
12/15/2023	2.20%	55%	11.58%	13.78%
12/22/2023	2.20%	50%	10.67%	12.87%
12/29/2023	2.20%	45%	9.73%	11.93%
1/5/2024	2.20%	45%	9.73%	11.93%
1/12/2024	2.20%	45%	9.73%	11.93%
1/19/2024	2.20%	45%	9.73%	11.93%
1/26/2024	2.20%	45%	9.73%	11.93%
2/2/2024	2.20%	45%	9.73%	11.93%
2/9/2024	2.20%	50%	10.67%	12.87%
2/16/2024	2.20%	50%	10.67%	12.87%
Average Dec 1, 2023-Feb. 16, 2024			10.58%	12.79%

As shown in Exhibit No. 13-R, Schedule 9, relying on the average market return calculated using the *Value Line* appreciation potential and dividend yield on 1,700 companies since December 1, 2023 and the historical average return on the market,

results in a market return of 12.48 percent. While this is considerably lower than the 13.39 percent that I&E calculated as a 5 year forward projection in July 2023, it is more consistent with the recent market return estimates from this source. Therefore, it is reasonable and appropriate to update Mr. Patel's CAPM to rely on this average market return.

Q. What adjustments have you made to Mr. Patel's DCF analysis?

A. As shown in Figure 8 below, I made the following four adjustments to Mr. Patel's DCF analysis.

- Include Essential in the proxy group given that the company meets Mr. Patel's screening criteria when revenues are properly adjusted to exclude the effect of high natural gas prices that have no effect on the Company's operating income.
- Utilize the projected 30-year Treasury bond yield as the estimate of the risk-free rate in the CAPM rather than the 10-year Treasury bond yield.
- Rely on an average of the *Value Line* projected market return
- Consider the results of a distribution utility proxy group.

As shown in Figure 8, reasonable changes to Mr. Patel's CAPM analysis results in a cost of equity estimate of 11.24 percent.

Figure 8: Summary of Adjustments to Mr. Patel's CAPM Analysis

	CAPM
As Filed Result	10.44%
CAPM Adjustments (Adj'mts Additive)	
Include Essential Utilities	10.71%
Use Projected 30- year Treasury Bond	10.74%
Update Market Return calculation	11.10%
Use Distribution Utility Proxy Group	11.24%

Q. Does Mr. Patel acknowledge the significant disparity between the results of his DCF and CAPM analyses?

A. Yes. While Mr. Patel cites to the difference between his model results (the CAPM result being 199 basis points higher than the result of his DCF analysis) as a reason the Commission should not place weight on the CAPM result in authorizing the ROE for PAWC, he has provided no evidence to suggest that the results of one of these models is more appropriate than the other. It is not reasonable for Mr. Patel to determine that the CAPM cannot be used simply because it is higher. In order to identify an outlying data point, it is necessary to have a broader sample with which to compare the results of the models. Reduced to its essence, his support for placing no weight on the CAPM result is that 1) he "respectfully disagree[s]" with the Commission's *Aqua* and *Columbia Water* decisions, 2) he believes the CAPM result can be disregarded because it is 199 basis points above his DCF result and 3) the difference between the DCF and CAPM results in the *Aqua* decision was more "modest' at 99 basis points ignores the fact that the 325 basis point difference in

the I&E CAPM and DCF results in *Columbia Water* did not preclude the Commission's reliance on the CAPM in that decision.[57] As discussed previously, many of the same concerns the Commission had in *Aqua* and *Columbia Water* regarding capital market conditions remain relevant in the consideration of the model results in the current case for PAWC. Therefore, Mr. Patel's proposal to reject the CAPM on the basis of prior decisions in different market conditions, while dismissing recent decisions in current market conditions is unreasonable and should be rejected. The Commission should continue to place weight on the CAPM analysis in setting the authorized ROE for PAWC in this proceeding.

D. Mr. Patel Adjusted Cost of Equity Results

Q. Do the results of Mr. Patel's cost of equity analyses materially change if the issues that you have identified are changed?

A. Yes. When the issues with Mr. Patel's cost of equity analyses that I have discussed are reasonably adjusted, the results of his DCF and CAPM analyses increase materially. Specifically, these reasonable adjustments are noted below and the results of Mr. Patel's adjusted cost of equity analyses are summarized in Figure 9:

[57] I note that in *Columbia Water* I&E calculated a CAPM result of 11.09 percent.

Figure 9: Average of Mr. Patel's Adjusted DCF and CAPM Results

Adjusted DCF	9.82%
Adjusted CAPM	11.24%
Average	**10.53%**

Q. How would Mr. Patel's ROE recommendation change considering the adjustments just discussed and the Commission's methodology for determining the ROE in *Aqua* and *Columbia Water*?

A. As shown in Figure 9, simply placing equal weight on the adjusted results of Mr. Patel's DCF and CAPM analysis, which is less weight on the CAPM than it appears the Commission relied upon in both *Aqua* and *Columbia Water*, would result in a base ROE of 9.96 percent using a water utility proxy group and 10.34 percent using a distribution utility proxy group, without consideration of the management performance adjustment. Including the 25 basis point adjustment for the Company's excellent management performance, as discussed in the direct and rebuttal testimonies of Company witness Ashley Everette, would result in an ROE of 10.21 percent using the water utility proxy group and 10.59 percent using the distribution utility proxy group.

VI. RESPONSE MR. GARRETT

Q. Please summarize Mr. Garrett's cost of equity analyses and recommendations.

A. Mr. Garrett conducts two forms of the DCF model and CAPM. Specifically, Mr. Garrett conducts a constant growth DCF model using analyst-projected dividend

growth rates and another using sustainable growth rates. In addition, he conducts two CAPM scenarios; one assuming the proxy group debt ratio for the Company, and another CAPM assuming the Company's proposed debt ratio to which he applies the Hamada adjustment. Mr. Garrett recommends an ROE for the Company in this proceeding of 9.10 percent, which he states is an average of his DCF result (*i.e.*, 9.40 percent) and his CAPM model result (*i.e.*, 8.70 percent). However, Mr. Garrett states that if the Commission accepts the Company's proposed capital structure and/or adopts either of its proposed RDM or ECIC, then he recommends an ROE of 8.70 percent. In addition, Mr. Garrett recommends that the Commission reject the Company's proposal for a performance-based adder to its ROE of up to a 25 basis points for managerial performance, stating that such adder is unsupported and excessive. Lastly, Mr. Garrett recommends that the Commission impute a capital structure consisting of 51 percent long-term debt and 49 percent equity.[58]

Q. Do you agree with Mr. Garrett's proposals?

A. No. In particular, I disagree with various aspects of his model specifications including the proxy group used in his analyses, certain of the growth rates used in his DCF analysis, and the market risk premium relied upon in his CAPM. I also disagree with Mr. Garrett's proposed capital structure and the application of the Hamada Adjustment to his CAPM analysis using the Company's proposed capital

[58] Garrett Direct Testimony, at 3-4.

structure. Finally, I disagree with his conclusions regarding adjustments to the ROE for the authorization of the Company's proposed RDM and ECIC, and his recommendation to disregard the Company's management performance and the proposed adjustment to the ROE for that performance.

A. Proxy Group

Q. What are the differences between Mr. Garrett's proxy group and the proxy group you rely on in your analyses?

A. Mr. Garrett utilizes the same water utilities that I have used in my proxy group, but states that he does not believe it is necessary to include non-water utilities in the proxy group. While Mr. Garrett bases his ROE recommendation on the results of his cost of equity analyses based a water utility proxy group he presents the results of his cost of equity models using (1) the water utilities; (2) the non-water utilities; and (3) the combined water and non-water utilities (i.e., my proxy group).[59]

Q. Do you agree with the proxy group that Mr. Garrett has relied on for his ROE recommendation?

A. No. For the same reasons as I previously discussed with respect to Mr. Patel's testimony, a larger proxy group that includes comparable distribution utilities is the

[59] Garrett Direct Testimony, at 11.

most appropriate proxy group for purposes of establishing the ROE in this proceeding.

B. Constant Growth DCF Model

Q. While Mr. Garrett conducts two constant growth DCF analyses, does he rely on the results of both of these analyses?

A. No. As noted, Mr. Garrett conducts a constant growth DCF analysis using analysts' projected dividend per share ("DPS") growth rates and another using sustainable growth rates. However, Mr. Garrett states that, given the unique growth opportunities for water utilities, he gives "more consideration" to the results of his DCF analysis using projected DPS growth rates. While Mr. Garrett states that he gives "more consideration" to the DCF analysis relying on projected DPS growth rates, he actually relies solely on the result of this analysis.

Q. Is it reasonable that Mr. Garrett dismisses the results of his DCF analyses using sustainable growth rates?

A. Yes. The results of Mr. Garrett's DCF using sustainable growth rates for his water utility proxy group is just 6.30 percent, which is well below any authorized ROE for any water, electric, or natural gas utility in over 40 years, and as noted previously, is only marginally above the existing utility bond yields. Thus, I agree with Mr. Garrett that it is appropriate to disregard the results of these DCF analyses.

Q. What is Mr. Garrett's position regarding your constant growth DCF analysis?

A. Mr. Garrett claims that the growth rates in my DCF model are inconsistent with the long-term U.S. GDP growth rate, but also suggests that my growth rates are also short-term growth rates and thus inconsistent with a long-term projection.[60]

Q. Are the analysts' projected EPS growth rates in your constant growth DCF analysis unreasonable?

A. No. First, it is important to recognize that Mr. Garrett and I both rely on the constant growth form of the DCF model. While Mr. Garrett develops this model using sustainable growth rates, he dismisses the result of that model. Therefore, the only DCF model that he relies upon is his DCF using projected DPS growth rates. Comparing the growth rates that Mr. Garrett uses in his model to the projected EPS growth rates I relied on in my analyses demonstrates that my growth rate assumption is lower than the growth rate assumption Mr. Garrett relies on in his analysis. Therefore, there is no basis to either of Mr. Garrett's claims that the projected analyst EPS growth rates used in my DCF analysis are unreasonable. Further, his comparison to any estimate of GDP growth is moot, given that the growth rates he relies on would violate his GDP growth rate test. As shown on Exhibit DJG-6, the average growth rate for Mr. Garrett's water utility proxy group

[60] Garrett Direct Testimony, at 30.

is 6.90 percent.[61] As shown on Exhibit 13-A, Schedule 3, the average growth rate in my DCF analyses was 6.07 percent; *lower* than Mr. Garrett's projected growth rates. Likewise, the average growth rate in my updated cost of equity analyses is 6.19 percent, which is still materially *lower* than the projected growth rates on which Mr. Garrett relies.

Second, while Mr. Garrett criticizes my growth rates as being short-term and inappropriate for use in the DCF model as long-term growth rates, the growth rates that he relies upon project growth over a similar period. Specifically, his projected DPS growth rates, which are sourced from *Value Line* project growth over the period 2020-2022 to 2026-2028. Therefore, Mr. Garrett and I have relied on projected growth rates over similar time periods which makes his concern regarding the use of short-term growth rates in my analyses equally applicable to the growth rates used in his own specification of the DCF model.

C. CAPM Analysis

Q. Please summarize Mr. Garrett's CAPM analysis.

A. Mr. Garrett presents a CAPM analysis based on (1) a risk-free rate of 4.42 percent, which is the 30-day average yield on 30-year Treasury bonds through December 20, 2023; (2) the current betas for each of the proxy group companies as published

[61] While Mr. Garrett does not present the average of his "Analyst Growth" rates from column [2] of Exhibit DJG-6, the average of his water proxy group (*i.e.*, the average of 8.5 percent, 6.5 percent, 8.0 percent, 6.5 percent, and 5.0 percent) is 6.90 percent.

by *Value Line*; and (3) a market risk premium of 5.30 percent based on an average of a IESE Business School survey of experts reflecting an average equity risk premium of 5.70 percent, a *Kroll* equity risk premium estimate of 5.50 percent, an average of several equity risk premium estimates produced by Dr. Damodaran of 4.50 percent, and Mr. Garrett's own calculation of an implied equity risk premium of 5.30 percent.[62] As shown in Exhibit DJG-11, these inputs produce a CAPM result for his water utility proxy group of 8.70 percent.

In addition, Mr. Garrett also calculates another version of the CAPM using the same inputs as just discussed, except that he adjusts the average proxy group beta using the Hamada formula to account for what he contends is a lower level of leverage in the Company's proposed capital structure, and thus a lower level of risk, as compared to the proxy group. In applying the Hamada formula, the average beta of the proxy group is unlevered and then re-levered to account for the differences in leverage in the Company's proposed capital structure as compared to the proxy group. After the application of the Hamada adjustment, Mr. Garrett's CAPM result is 8.20 percent.

Q. Is the market risk premium used in Mr. Garrett's CAPM reasonable?

A. No. Mr. Garrett's equity risk premium in his CAPM analysis is inconsistent with the well-established inverse relationship between interest rates and the market risk

[62] Garrett Direct Testimony, at 50-51.

premium. This relationship is such that as interest rates increase, the market risk premium decreases, or if interest rates decline, the market risk premium increases. As shown on Exhibit DJG-11, Mr. Garrett relies on an average market risk premium of 5.30 percent; however, the long-term historical arithmetic average income-only return on long-term government bonds as published by *Kroll* is 4.85 percent and the corresponding long-term historical arithmetic average market risk premium over that same time period is 7.17 percent. Therefore, since the current 30-year Treasury bond yield is below its long-term average, currently at 4.19 percent on a 30-day average basis, the inverse relationship between interest rates and the market risk premium implies that the market risk premium should be *above* the long-term historical average market risk premium of 7.17 percent –not 187 basis points lower than the historical average, such as Mr. Garrett has assumed. Therefore, Mr. Garrett's assumed market risk premium is understated.

Q. Do you agree with Mr. Garrett's use of the IESE Business school survey as an estimate of the market risk premium?

A. No. Mr. Garrett relies on an average equity risk premium from the IESE Business School survey; however, the author of that survey specifically states that the average of the distribution of the required equity risk premium from the survey cannot be interpreted as the required equity premium of the market nor of a

representative investor.[63] Therefore, Mr. Garrett's use of this survey data is in direct conflict with the author's conclusions about the analysis.

Q. How does Mr. Garrett estimate his own implied equity risk premium?

A. As shown on Exhibit DJG-9, Mr. Garrett uses a form of the DCF analysis to solve for an implied equity risk premium. Specifically, given that the current value of the S&P 500 Index is known, Mr. Garrett solves for the discount rate (*i.e.*, the implied market return on the S&P 500 Index) that is required to produce the present value of a future stream of dividends (based on a historical dividend yield, historical buyback yield, and historical earnings growth rate) that is equivalent to the current value of the S&P 500 Index. For purposes of this analysis, Mr. Garrett relies on a multi-stage DCF analysis in that he uses historical EPS growth for the first five years of the future stream of dividends and stock buybacks, and then his risk-free rate for calculating the terminal value of that same future stream. After solving for the implied market return, Mr. Garrett then subtracts his risk-free rate to estimate the implied market risk premium.

[63] Pablo Fernandez, Diego Garcia de la Garza, and Javier Fernandez Acin, "Survey: Market Risk Premium and Risk-Free Rate used for 80 countries in 2023," IESE Business School, April 3, 2023, at 10.

Q. Is Mr. Garrett's approach for estimating his implied market return and implied equity risk premium reasonable and consistent with his constant growth DCF analysis?

A. No. There are multiple reasons why the approach that Mr. Garrett has used to estimate his implied market return, and thus implied market risk premium, are unreasonable.

First, the approach that Mr. Garrett has utilized to estimate an implied market return is inconsistent with the approach that he uses for estimating the cost of equity using the DCF model. Specifically, Mr. Garrett conducts a constant growth DCF for purposes of estimating the cost of equity using the DCF analysis, yet applies a multi-stage DCF of the S&P 500 for his calculation of an implied market return. In addition, unlike Mr. Garrett, both Mr. Patel and I have both relied on a constant growth DCF analysis of the S&P 500 for purposes of calculating the market return in the CAPM. The market return that Mr. Patel relies on is 12.02 percent, while the market return in my updated CAPM analyses is 12.22 percent, both of which are materially higher than Mr. Garrett's understated market return of 9.80 percent.

Second, Mr. Garrett relies on *projected* DPS growth for purposes of estimating the cost of equity in his constant growth DCF model, yet he relies on *historical* EPS growth rates for purposes of estimating his implied market return.

Third, Mr. Garrett condemns his own assumption of using historical growth rates by acknowledging that "past growth is not always a good indicator of future growth."[64]

Lastly, Mr. Garrett has provided no evidence that his assumed risk-free rate (*i.e.*, the current 30-day average yield on the 30-year Treasury bond) is an appropriate estimate of long-term growth in his estimation of an implied market return, particularly given the significant changes in interest rates that have occurred over the past two years.

Q. Would the results of Mr. Garrett's CAPM change materially if he had relied on a market return consistent with what Mr. Patel has utilized in this proceeding?

A. Yes. Exhibit No. 13-R, Schedule 10 presents a comparison of the results of Mr. Garrett's CAPM analysis as reflected in his testimony versus if he had used the market return supported by Mr. Patel. As shown, Mr. Garrett's CAPM result increases from 8.68 percent to 10.60 percent for his water utility proxy group, and from 8.84 percent to 10.84 percent using my proxy distribution utility proxy group.

Even if no modification is made to Mr. Garrett's DCF result (*i.e.*, 9.4 percent), and Mr. Patel's market risk premium is used in Mr. Garrett's CAPM (i.e., resulting in

[64] Garrett Direct Testimony, at 24.

a cost of equity 10.60 percent), based on Mr. Garrett's methodology of taking the average of each model result for purposes of his ROE recommendation means that his ROE recommendation would be 10.00 percent.

Q. Do you agree with Mr. Garrett's position that your estimation of the market risk premium in the CAPM is too high? [65]

A. No. As noted above, Mr. Patel and I both rely on a forward-looking market return. As discussed in my response to Mr. Patel, *Value Line*, which is the source of his projected market return, estimates a return on the market overall of 12.29 percent based on an average of the Value Line estimates from December 1, 2023 through February 16, 2024. Further, I&E projected a market return of 14.77 percent using Value Line data in the Columbia Water case. The calculation of the market risk premium is based on the return on the broader stock market, as measured by S&P 500 Index, less the return on a risk-free instrument (which in my case and as also used by Mr. Garrett, is the yield on the 30-year Treasury bond). The S&P 500 Index is composed of the largest top performing companies. It is reasonable to assume that the projected growth of the S&P 500 Index could be sustainable in the long run. Over time, the specific companies that are included in the S&P 500 Index will vary; however, because the index is composed of the largest top performing companies, it is reasonable to assume the index will always contain individual

[65] Garrett Direct Testimony, at 44-45.

companies with projected earnings growth rates that will be considered high. Therefore, investor expectations of growth and return overall for the index as a whole may not change materially over time because of the selection process involved of including the largest top performing companies in the index.

Q. Has the Commission supported the use of a forward-looking market return in the CAPM analysis such as you have relied on in estimating the cost of equity?

A. Yes. For example, in Docket No. R-2021-3027385, the Commission relied on I&E's DCF and CAPM results to establish the authorized ROE,[66] and I&E's CAPM reflected a forward-looking market return based on a constant growth DCF of the *Value Line* universe of stocks and of the S&P 500 (yielding a market return of 12.14%).[67]

Q. Have other regulatory commissions also supported the use of a forward-looking market return in the CAPM analysis?

A. Yes. The Federal Energy Regulatory Commission ("FERC") continues to support the use of the constant growth DCF model to calculate the market return for the CAPM:

> We also continue to find that the CAPM should use a one-step DCF for its risk premium. This is because the rationale for using a two-step DCF methodology for a specific group of utilities does not

[66] Pennsylvania Public Utility Commission, Aqua Pennsylvania, Inc., Opinion and Order, Public Meeting held May 12, 2022, at 178.

[67] Pennsylvania Public Utility Commission, Aqua Pennsylvania, Inc., Opinion and Order, Public Meeting held May 12, 2022, at 147.

> apply when conducting a DCF study of the dividend-paying companies in the S&P 500, as the Commission found in Opinion Nos. 531-B and 569. A long-term component is unnecessary because of the regular updates to the S&P 500, which allows it to continue to grow at a short-term growth rate and because S&P 500 companies include stocks that are both new and mature, the latter of which have a moderating effect on the short-term growth rates.[68]

In addition, the Maine Public Utilities Commission ("Maine PUC") has also relied on the constant growth DCF model to estimate the market return. Specifically, the Staff of the Maine PUC conducted a constant growth DCF of the dividend-paying companies in the S&P 500,[69] and the Maine PUC relied on the Staff's CAPM to determine the authorized ROE and did not dispute the use of the constant growth DCF model to calculate the market return.[70]

Q. Have the courts addressed Mr. Garrett's assertion that your forward-looking market return is inflated?

A. Yes. In its review of FERC Opinion No. 569-B, the U.S. State Court of Appeals for the District of Columbia addressed the concern regarding the use of projected EPS growth rates in a constant growth DCF model to estimate the market return. In the Court's decision, it acknowledged that the FERC has relied on the use of projected EPS growth rates in the calculation of the market return on the S&P 500

[68] *Ass'n. of Businesses Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, 171 FERC ¶ 61,154 (2020), at ¶ 85.

[69] Northern Utilities, Inc. d/b/a Unitil Request for Approval of Rate Change, Docket No. 2019-00092, Bench Analysis, October 29, 2019, at 21.

[70] Northern Utilities, Inc. d/b/a Unitil Request for Approval of Rate Change, Docket No. 2019-00092, Order Part II, April 1, 2020, at 58.

because the S&P 500 is regularly updated to include companies with high market capitalization and it includes companies at all stages of growth, including lower and higher growth potential. The Court determined that FERC's rationale for using projected EPS growth rates was sufficient and did not accept the challenge to this assumption.[71]

D. ECAPM

Q. What is Mr. Garrett's position regarding your ECAPM analysis?

A. Mr. Garrett contends that the use of an adjusted beta along with the adjustments in the ECAPM are effectively duplicative and thus produces overstated results.[72] In addition, Mr. Garrett also contends that the *Value Line* adjustment to betas overstates betas for firms with a beta less than 1.0, and as he indicated regarding my CAPM, he states that my ECAPM also suffers from an overstated market return, and thus market risk premium.[73]

Q. Do you agree with Mr. Garrett that it is inappropriate to use adjusted betas in the ECAPM?

A. No. The purpose of adjusting beta in the CAPM is to account for the tendency of beta to trend back over time to the market beta of 1.00. The betas published by

[71] United States Court of Appeals, District of Columbia Circuit, Opinion, Docket No. 16-1325, August 9, 2022, at 19.

[72] Garrett Direct Testimony, at 46-47.

[73] Garrett Direct Testimony, at 57-58.

Value Line include this adjustment, which was first proposed by Marshall E. Blume in 1975.[74] The use of adjusted betas in the CAPM is important because if beta trends towards 1.00, as Blume noted, then the adjusted beta will be more reflective of the beta that can be expected over the near-term. This is equally important in the specification of the CAPM in this case since we are estimating the cost of equity for the Company over the near-term.

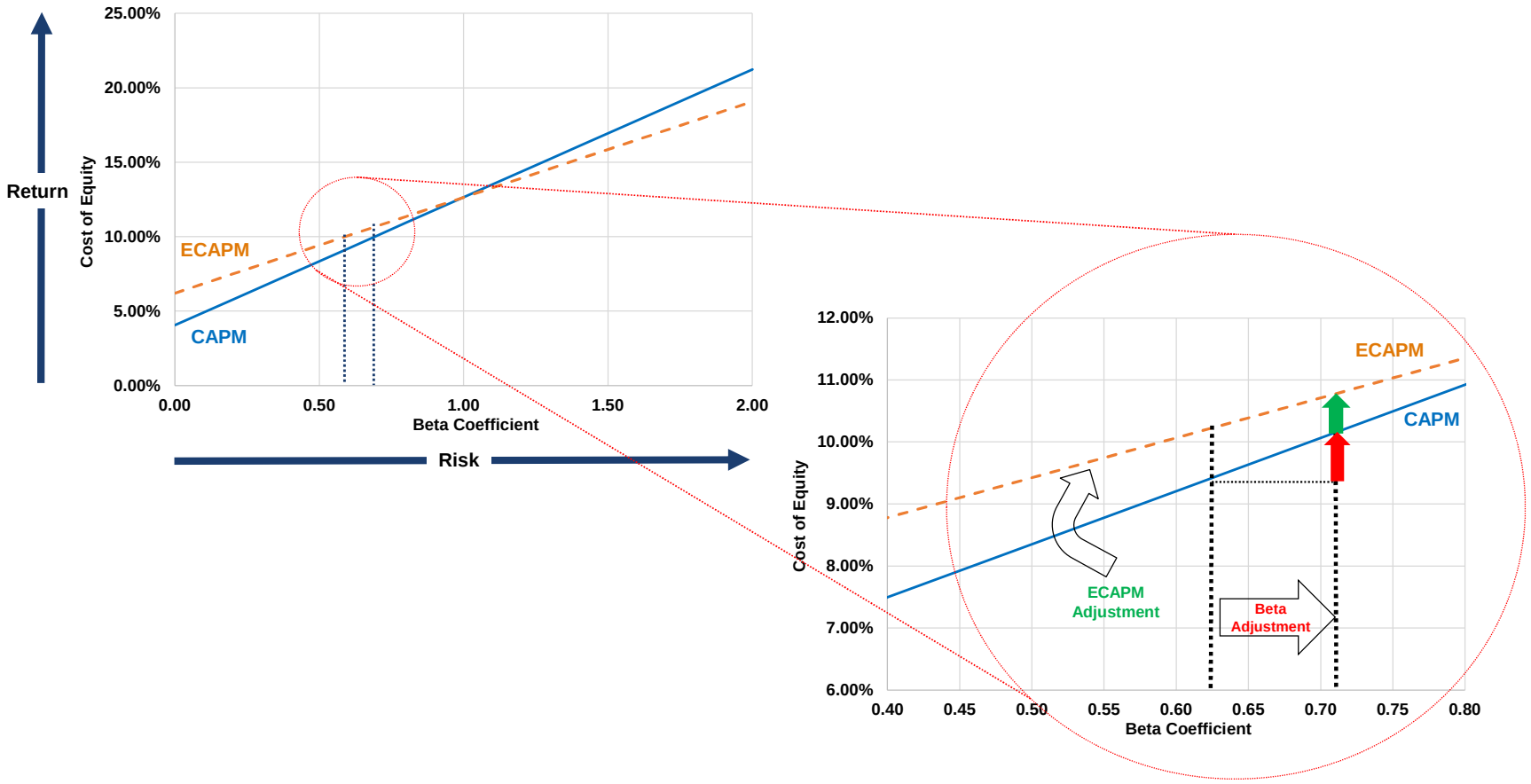
The ECAPM does not account for the tendency of beta to trend toward 1.00. The purpose of the ECAPM is to account for the fact that the risk-return relationship is flatter than what is estimated by the CAPM, ***even when using adjusted betas***. While beta is not observable and must be estimated, the theory behind the ECAPM is that even if the true value of a stock's beta were observable, the CAPM would understate the results for stocks with betas less than 1.00 and overstate the results for stocks with betas greater than 1.00. Therefore, contrary to the assertions of Mr. Walters and Mr. Garrett, the purpose of each adjustment is different and thus applying both adjustments in the ECAPM is not duplicative.

[74] Blume, Marshall E. "Betas And Their Regression Tendencies." *The Journal of Finance*, Vol. 30, No. 3, 1975, pp. 785–795.

Q. Can you demonstrate that using adjusted betas in the CAPM and relying on the ECAPM are two distinct adjustments to the CAPM?

A. Yes. Figure 10 demonstrates the point that adjusting betas and adjusting the slope of the risk/return relationship through the ECAPM are two distinct adjustments and are not duplicative as alleged by Mr. Garrett. As shown in Figure 10, when beta is adjusted to recognize that betas revert to the market mean of 1.0 over time and used in the CAPM, the resulting adjustment is shown by the red arrow in the lower right-hand corner. Separately, when the ECAPM is employed to recognize that the risk/return relationship is flatter than predicted by the CAPM, the resulting adjustment is shown by the green arrow in the lower right-hand corner. To the extent that a company with a beta greater than 1.0 were being evaluated, the same process of two separate adjustments would apply, albeit in the opposite direction from what is shown in Figure 10 and would result in a decrease in the cost of equity otherwise predicted by the CAPM.

Figure 10: Risk/Return Relationship between CAPM and ECAPM



Q. Are you aware of any other academic studies that have used adjusted betas to estimate the ECAPM?

A. Yes. For example, Chrétien and Coggins (2011) studied the CAPM and its ability to estimate the risk premium for the utility industry in particular subgroups of utilities for a data set that included market data through the end of 2006.[75] Chrétien and Coggins considered the CAPM, the Fama-French three-factor model and a model similar to the ECAPM. The study shows that the ECAPM significantly outperformed the traditional CAPM at predicting the observed risk premium for the various utility subgroups.

Additionally, Mr. Garett's concern with the ECAPM analysis is addressed directly by Dr. Roger Morin in Modern Regulatory Finance as follows:

> Because of this adjustment, some critics of the ECAPM argue that the use of Value Line adjusted betas in the traditional CAPM amounts to using an ECAPM. This is incorrect. The use of adjusted betas in a CAPM analysis is not equivalent to the ECAPM. Betas are adjusted because of the regression tendency of betas to converge towards 1.0 over time. We have seen that numerous empirical studies have determined that the SML [Security Market Line] described by the CAPM formula at any given moment in time is not as steeply sloped as the predicted SML. The slope of the SML should not be confused with Beta. On the point, Eugene F. Brigham, finance professor and the author of many financial textbooks states:
>
> The Slope of the SML (5% in Figure 6-16) reflects the degree of risk aversion in the economy. The greater the average investor's aversion to risk, then (a) the steeper the slope of the line, (b) the greater the risk premium for all stocks, and (c) the higher required rate of return on all stocks. Students sometimes confuse beta with the slope of the SML. This is a mistake.
>
> The use of an adjusted beta by Value Line is correcting for a different problem than the ECAPM. The adjusted beta captures the fact that betas regress towards one over time. The ECAPM corrects for the fact that the

[75] Stéphane Chrétien, and Frank Coggins, "Cost Of Equity For Energy Utilities: Beyond The CAPM," *Energy Studies Review*, Vol. 18, No. 2, 2011.

CAPM under-predicts observed returns when beta is less than one and over-predicts observed returns when beta is greater than one.[76]

Q. Are you aware of state regulatory commissions that have accepted the use of the ECAPM?

A. Yes. There are various regulatory commissions that have supported the use of the ECAPM in establishing an authorized ROE, and have done so when adjusted betas are used in the ECAPM analysis. For example, the New York Public Service Commission ("NYPSC"), the Montana Public Service Commission ("Montana PSC"), and North Carolina Utilities Commission ("NCUC") have accepted the ECAPM analysis with the use of adjusted beta coefficients in establishing the authorized ROE for regulated utilities. Specifically, the NYPSC gives equal weight to the CAPM and ECAPM (which it refers to as the "Zero Beta" CAPM) results,[77] the Montana PSC has expressed preference for the ECAPM analysis,[78] and the NCUC has recently found that both the adjustment to beta in the CAPM and the adjustment in the ECAPM were needed because they correct for different things.[79]

Q. Do you agree with Mr. Garrett's contention that the adjustment made by *Value Line* to its betas overstates betas for firms with a beta less than 1.0?

A. No. There is no basis to Mr. Garrett's contention that the adjusted betas published by *Value Line* are overstated. Both *Value Line* and *Bloomberg* publish betas adjusted using the

[76] Dr. Roger A. Morin, *Modern Regulatory Finance*, Public Utilities Report, Inc. (2021), at 223-224 (emphasis added).

[77] *See, e.g.*, New York Public Service Commission, Case No. 20-G-0101, Order, May 19, 2021, at 44-46.

[78] Montana Public Service Commission, Docket No. D2017.9.80, Order No. 7575c, September 26, 2018, at 46.

[79] North Carolina Utilities Commission, Docket No. E-2, SUB 1300, Order Accepting Stipulations, Granting Partial Rate Increase, and Requiring Public Notice, at 162-163.

Blume adjustment, have been doing so for many years, and investors clearly rely on both *Value Line* and *Bloomberg* for financial data in making investment decisions.

E. Flotation Costs

Q. What is Mr. Garrett's position regarding your consideration of flotation costs?[80]

A. While Mr. Garrett acknowledges that I have considered flotation costs in my overall risk assessment, but have not made a specific adjustment to the ROE for such costs, he claims that there are two reasons from a technical standpoint that flotation costs should be disallowed: flotation costs are not actual out-of-pocket costs and the market already accounts for such costs.[81] In addition, Mr. Garrett also states that it would be inappropriate from a practical standpoint to adjust the authorized ROE upward for flotation costs given that the Company's requested ROE is well above the market cost of equity.[82]

Q. Do you agree with Mr. Garrett's rationale from a technical perspective for disallowing flotation costs?

A. No. I addressed both of Mr. Garrett's alleged technical reasons for disallowing flotation costs in my direct testimony. First, while Mr. Garrett claims that if the Company actually had flotation costs then those costs should be included in the Company's expense schedules. However, as stated in my direct testimony, flotation costs are part of the invested costs of the utility, which are properly reflected on the balance sheet under "paid in capital" and are not current expenses, and, therefore, are not reflected on the income

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[80] Mr. Patel also briefly notes that he believes it is inappropriate to consider the potential impact of flotation costs in the authorized ROE (Patel Direct Testimony, at 68-69).

[81] Garrett Direct Testimony, at 32-33.

[82] *Id*., at 33.

statement. The great majority of a utility's flotation costs are incurred prior to the test year but remain part of the cost structure that exists during the test year, and failure to allow recovery of past flotation costs constrains the opportunity to earn the required rate of return in the future. In addition, simply because the Company does not issue its own equity does not mean that the recovery of flotation costs is inappropriate. Again, as stated in my direct testimony, denying recovery of issuance costs associated with the capital that is invested in the subsidiaries ultimately penalizes the investors that fund the utility operations and could inhibit the utility's ability to obtain new equity capital at a reasonable cost.

Second, Mr. Garrett's claim that investors already account for flotation costs is counter to the need recognized by the academic and financial communities that shareholders need to be reimbursed for the lost returns associated with equity issuance costs in the same spirit that investors are reimbursed for the costs of issuing debt.

Lastly, Mr. Garrett's "practical" reason for not allowing the recovery of flotation costs incorrectly assumes that the Company's proposed ROE exceeds the market cost of equity, but that conclusion is based on his cost of equity analyses, which, as discussed, are not supportable.

F. Capital Structure

Q. What is Mr. Garrett's position regarding the Company's proposed capital structure?

A. Mr. Garrett states that the Company's proposed capital structure of 55 percent equity and 45 percent debt represents an excessive equity ratio, and that the Company's equity ratio should be 51 percent, which is consistent with the average equity ratio of the proxy group companies. In addition, Mr. Garrett applies a Hamada formula to his CAPM results to

assess the difference in the cost of equity of a capital structure with a greater proportion of equity relative to the proxy group. Based on this analysis, Mr. Garrett recommends that if the Commission adopts the Company's proposed capital structure, which has a greater proportion of equity and thus lower risk relative to the proxy group, the cost of equity using the CAPM should be 8.5 percent instead of 8.8 percent.

Q. Is Mr. Garrett's position regarding the Company's proposed capital structure reasonable?

A. No. I disagree with Mr. Garrett's analysis for four primary reasons. First, Mr. Garrett's proposed capital structure does not reflect how the Company capitalizes its business. Second, he inappropriately compares the Company's proposed capital structure to that of the holding companies of the proxy group instead of the operating utilities of the holding companies. Third, even though Mr. Garrett inappropriately compares the Company's proposed capital structure to the holding companies in the proxy group, he incorrectly does so to my proxy group and not his own. Lastly, Mr. Garrett incorrectly applies the Hamada equation to my proxy group, which results in Mr. Garrett incorrectly concluding that his CAPM result should be lower if the Commission approves the Company's proposed capital structure.

Q. Does the Company's proposed capital structure reflect its actual capital structure?

A. Yes. It is my understanding that the Company's proposed capital structure recognizes the composition of the financing that the Company is currently using to fund the significant investments PAWC must make to continue to meet its obligations to provide reliable water and wastewater service while meeting ever more stringent environmental laws and

regulations. Moreover, it is my understanding that the projected capital structures as of June 30, 2024 and June 30, 2025 are the Company's expected capital structures that will result from incremental investment over this time period.

Q. Why is Mr. Garrett's capital structure comparison to the proxy group inappropriate?

A. As shown on Exhibit DJG-13, Mr. Garrett considers the common equity ratio for the proxy group companies at the holding company level, not the utility operating subsidiaries, which includes corporate-level debt that is not part of the regulated or financial capital structure of the operating utilities. Simply because the parent companies in the proxy group are used to estimate the Company's cost of equity does not mean that the *holding company* capital structures are the relevant comparators for establishing the Company's authorized capital structure. There is no question that the utility operating subsidiaries of those holding companies are *more* comparable to PAWC in terms of risk. Holding companies have multiple regulated utility subsidiaries, including in multiple jurisdictions, as well as unregulated operations or other business activities, which differs from the Company's purely regulated utility operations in a single jurisdiction. Therefore, the appropriate comparison for the Company's proposed capital structure is a comparison to the capital structures of the utility operating subsidiaries of the proxy group companies, which, as shown in my direct testimony, PAWC's proposed equity ratio of 55.20 percent is well within the range of equity ratios for the utility operating subsidiaries of the proxy group companies, and is in fact below the average.[83]

[83] Direct Testimony of Ann E. Bulkley, at 62-63.

Q. Is the average debt ratio of Mr. Garrett's water utility proxy group 49 percent such as he suggests?

A. No. As shown on Exhibit DJG-13, the 49 percent debt ratio is an average of all of the holding companies in my proxy – not just the water utilities such as Mr. Garrett has relied for purposes of his cost of equity analyses. As shown on Exhibit 13-R, Schedule 11, the actual average debt ratio for Mr. Garrett's proxy group at the holding company level is 47.30 percent, meaning an equity ratio of 52.70 percent.

Q. What is the purpose of the Hamada equation?

A. The Hamada equation allows an analyst to first "unlever" beta to remove the effect of the debt ratio of a company and then "relever" beta at different debt ratios to examine the effect of changes in the debt ratio on the cost of equity produced by the CAPM. The Hamada equation is as follows:[84]

$$\beta_l = \beta_u [1 + (1 - T) \frac{D}{E}$$

Where:

β_l = Levered beta of a company

β_u = Unlevered beta of a company

T = Corporate income tax rate

D = Market value of debt

E = Market value of equity

[84] *See*, Villadsen, Vilbert, Harris and Kolbe, *Risk and Return for Regulated Utilities*, 2017, at 146-154; Brealey, Myers, and Allen, *Principles of Corporate Finance*, 13th Ed., 2020, at 452-462; and Aswath Damodaran, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset*, 3rd ed., John Wiley & Sons, Inc., 2012.

Q. Do you agree with Mr. Garrett's application of the Hamada formula?

A. No. In his analysis, Mr. Garrett is unlevering the proxy group beta to remove the effect of the debt ratios of the proxy group on the average beta and then relevering beta to reflect the Company's proposed capital structure to determine its effect on the cost of equity. However, in applying the Hamada formula, Mr. Garrett incorrectly relies on the book value of debt and equity for each of the proxy group companies at the holding company level as published by *Value Line*, instead of the market value of debt and equity as required in applying the Hamada equation. As a result, this has a substantial effect on the debt-to-equity ratio used to unlever and relever beta given the market value of debt and equity in this instance deviates significantly from the book value.

Q. Have you estimated the equity ratio and debt ratio for the proxy group based on the market value of debt and equity to illustrate the problem with Mr. Garrett's analysis?

A. Yes. In applying the Hamada equation, Mr. Garrett relies on an average debt ratio of 49 percent and equity ratio of 51 percent, which is the book value of debt and equity for each of the companies in my proxy group. Mr. Garrett contends that, since the Company's proposed debt ratio of 44.8 percent is lower than the proxy group average debt ratio of 49 percent, the Company has less risk and that applying the Hamada equation results in a downward adjustment to his CAPM result from 8.8 percent to 8.5 percent to reflect the decreased financial risk of the Company's proposed capital structure. However, as shown in Exhibit 13-R, Schedule 12, if Mr. Garrett had instead correctly relied on the *market value* of debt and equity of each company in my proxy group for his analysis, he would have estimated a proxy group average debt ratio of 34.3 percent, not 49.1 percent. Since the

debt ratio for the proxy group when correctly based on market value as required in the Hamada formula is *lower* than the Company's proposed debt ratio, the Hamada formula, when specified and applied correctly, implies that Mr. Garrett's CAPM result of 8.80 percent should *increase* – not decrease – to reflect the increased financial risk associated with the Company's proposed debt ratio relative to the proxy group. As shown in Exhibit 13-R, Schedule 13, Mr. Garrett's CAPM estimate is actually *understated* by approximately 120 basis points based on his water utility proxy group, and 100 basis points based on my distribution utility proxy group. Given that the capital structures of the proxy group companies at the holding company level should not be used to evaluate the reasonableness of the Company's proposed capital structure, and Mr. Garrett's Hamada adjustment is nonetheless incorrect, the Commission should disregard the results of Mr. Garrett's CAPM scenario in which he applies the Hamada equation.

VII. BUSINESS AND REGULATORY RISK

Q. What is Mr. Patel's position regarding how the Company's general business and regulatory risk should affect the Company's authorized ROE in this proceeding?

A. Mr. Patel contends that PAWC's business and operating risks are not unique to PAWC, and the fact that the utilities in Pennsylvania have mechanisms such as the DSIC, the Fully Projected Forecast Test Year, and the ability to file rates cases as needed, reduce risk.[85]

Q. Do you agree with Mr. Patel's assessment?

A. No. It is not reasonable or appropriate to consider the regulatory mechanisms of the utilities in Pennsylvania generally, or the regulatory mechanisms applicable to the Company

[85] Patel Direct Testimony, at 55-60.

specifically, on a stand-alone basis without reference to the other comparable utilities as Mr. Patel seemingly suggests. Rather, the risk that is relevant for purposes of establishing the authorized ROE in this proceeding is the *relative* risk of the Company as compared to the proxy group. Mr. Patel appears to acknowledge that a comparative analysis is appropriate relative the proxy group given that he states that only 22 percent of the water utilities have some form of revenue decoupling or revenue stabilization.

Q. Mr. Patel characterizes your regulatory risk analysis regarding the RDM as "extremely misleading" given that only 22 percent of the water utilities have some form of revenue decoupling or revenue stabilization? Do you agree?

A. No. As discussed previously, I disagree with Mr. Patel's very small water only proxy group, and as presented in Exhibit 13-A, Schedule 9 of my direct testimony, nearly 60 percent of the distribution utilities in my proxy have some form of revenue stabilization. There is clearly no attempt to be misleading given that all of the information on which Mr. Patel relies on for his characterization of my assessment is from my Exhibit 13-A, Schedule 9. The issue is simply that there is no meaningful difference between distribution utilities with respect to whether they benefit from revenue decoupling or revenue stabilization, and looking at only the water utilities in my view is not reasonable.

Q. What has Mr. Garrett stated regarding the Company's proposed ECIC and RDM?

A. Mr. Garrett claims that these proposals improperly shift the risk of operating the utility from investors to ratepayers, and that if the Commission were to adopt these proposals, the Company's risk would greatly decrease. Mr. Garrett states that it is the OCA's primary recommendation that the ECIC and RDM be rejected by the Commission; however, if the

Commission approves these proposals, then he recommends that the Commission authorize an ROE of 8.70 percent, which is the low end of his cost of equity range.[86]

Q. Has Mr. Garrett provided any basis for using the low end of his cost of equity range for purposes of setting the ROE in this proceeding if the ECIC and RDM are approved by the Commission?

A. No. Mr. Garrett provides no analysis of the risk of the Company relative to other comparable utilities if the ECIC and RDM are approved. As discussed in my direct testimony, the proper analysis is to compare the risk of the Company relative to the proxy group, and Mr. Garrett has conducted no such analysis. In contrast, in Exhibit No. 13-A, Schedule 9 of my direct testimony, I reviewed the utility operating subsidiaries of the proxy group companies and showed that the majority of the proxy group companies have implemented some form of RDM. As I stated in my direct testimony, capital and operating cost recovery mechanisms are commonplace within the utility industry. Therefore, the approval of the proposed RDM in this proceeding does not by itself reduce the risk of the Company relative to the proxy group if approved by the Commission. Rather, if the Commission approves the Company's proposed ECIC and RDM, my testimony demonstrates that it would make the Company consistent with the proxy group companies, not less risky as incorrectly suggested by Mr. Garrett.

[86] Garrett Direct Testimony, at 19.

Q. Is Mr. Garrett recommending a specific reduction to the Company's authorized ROE if the ECIC and RDM are approved?

A. It is unclear whether Mr. Garrett is recommending a specific reduction to the Company's authorized ROE if the ECIC or RDM are approved. In his discussion of the ECIC and RDM, Mr. Garrett mentions that the Public Utilities Regulatory Authority ("PURA") of Connecticut found that there should be a 10 basis point reduction in Aquarion Water's authorized ROE associated with its revenue adjustment mechanism. Mr. Garrett states that if the Commission adopts the ECIC or RDM, then "there should be a corresponding reduction to the allowed ROE." While it appears that Mr. Garrett is using this as support for stating that the Commission should authorize at the low end of the range of results of his cost of equity models as opposed to the average, it is unclear whether he is also recommending a further, specific basis point reduction to the authorized ROE as well. Regardless of this lack of clarity, as discussed, there is no basis for the adoption of an ROE at either the low end of his range of results or a specific basis point reduction given that Mr. Garrett fails to evaluate the relative risk of the Company as compared to the proxy group if either the RDM or ECIC are approved by the Commission.

Q. What do Ms. LaConte, Mr. Higgins and Ms. Hoover state regarding the Company's proposed RDM and ECIC mechanisms?

A. Ms. LaConte, Mr. Higgins, and Ms. Hoover oppose approval of both of these mechanisms.[87] Specifically, they contend that the RDM shifts the risk of cost recovery from PAWC to its customers, with Ms. LaConte suggesting that it "provides PAWC with

[87] LaConte Direct Testimony, at 13-14; Higgins Direct Testimony, at 38-39; Hoover Direct Testimony, at 46-50.

the guarantee of cost recovery and a significant advantage of achieving its earnings targets for shareholders,"[88] and Mr. Higgins suggesting that shareholders are already compensated for accepting revenue risk as part of its authorized ROE. Regarding the ECIC, Ms. LaConte and Mr. Higgins state that the ECIC is another example of single issue ratemaking, with Ms. LaConte noting that none of the water utilities in Pennsylvania, nor any of the water utilities in the my proxy group, have environmental cost recovery mechanisms.[89] Ms. LaConte states that if the Commission approves the RDM and ECIC, a downward adjustment to the Company's proposed ROE should be applied to reflect the reduced risk.[90] Ms. LaConte also states that, at a minimum, considering the extraordinary timing of the proposed rate increase, and that the proposed RDM, ECIC, and deferral mechanisms reduce risk, warrants approval of an ROE at the lower end of the Commission's deemed range of reasonableness.[91]

Q. Do Ms. LaConte, Mr. Higgins, or Ms. Hoover provide any evidence that suggests that your regulatory risk analysis of the Company relative to the proxy group is insufficient or that it does not demonstrate that PAWC's risk is comparable to the proxy group?

A. No. None of these witnesses have provided any additional analysis of the cost recovery mechanisms implemented by the proxy group companies relied on by the ROE witnesses in this proceeding.

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88 LaConte Direct Testimony, at 13-14.

89 LaConte Direct Testimony, at 16; Higgins Direct Testimony, at 46.

90 LaConte Direct Testimony, at 6.

91 *Id*., at 7.

Q. Does the Company's proposed RDM and ECIC reduce the risk of PAWC as compared to the proxy group?

A. No. As discussed in my direct testimony, based on a review of the operating subsidiaries of the proxy group companies as shown in Schedule-6 of Exhibit No. 13-A, 59 percent of the group had implemented some form of revenue stabilization mechanism and therefore the Company would be more comparable to the group if the proposed RDM and ECIC were approved.

Q. Are you aware of regulatory commissions that have concluded that rate mechanisms to provide more stable revenue do not reduce the risk of the company as compared to the proxy group?

A. Yes. I am aware that the Public Service Commission of Wyoming ("WY PSC"), the Public Service Commission of Maryland ("MD PSC") and the Minnesota Public Utilities Commission ("MN PUC") have each rejected a proposed reduction to a utility's authorized ROE due to a revenue stabilization or revenue decoupling mechanism. For example, in Docket No. 30010-94-GR-08 for Quester Gas Company, the WY PSC noted the following:

> Regarding the OCA's suggestion about reducing ROE by 25 basis points if the Commission adopted the CET, the Commission agrees the CET [Conservation Enabling Tariff] may reduce its risk, but the OCA did not provided a logical basis on which to derive or apply the 25 basis point reduction in this docket. **This suggested reduction in ROE is not appropriate because eight of the ten utilities in the proxy group Questar used in its DCF analysis have some sort of decoupling mechanism. If the decoupled utilities are part of the proxy group, the risk reduction is already accounted for when the proxy group financial parameters are used to determine a ROE for the Company**. The Commission agrees with Questar that financial analysts now tend to treat revenue stabilization

> measures as a norm, rather than an exception which requires adjustments. (Tr. Vol. II, p. 257.)[92]

Similarly, in Docket No. G-008/GR-08-1075 for CenterPoint Energy, the MN PUC rejected a proposal by the Office of the Attorney General to reduce CenterPoint Energy's ROE by 27 basis points if a revenue decoupling mechanism was approved due in part:

> Further, the Company argued persuasively that the comparison group used to determine that 8.09 percent was reasonable was composed of companies most of whom had significant revenue stabilization arrangements in place (including decoupling and including decoupling that adjusted for weather) so that adopting the limited decoupling plan for CenterPoint simply made CenterPoint more like the comparison group. In these circumstances, lowering the cost of equity in response to CenterPoint's limited decoupling would overemphasize the risk reduction resulting from the limited decoupling approved in this Order.[93]

Finally, in Case No. 9299 for Baltimore Gas and Electric Company, the MD PSC did not reduce the ROE for Baltimore Gas and Electric Company's natural gas operations due to its decoupling mechanism because revenue decoupling mechanisms were prevalent among natural gas distribution companies.[94]

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[92] In the Matter of the Application of Questar Gas Company for Approval to Implement an Increase in the Non-Gas Rates and Charges for A General Rate Increase of $482,980 and for Approval of a Conservation Enabling Tariff, Docket No. 30010-94-GR-08, Order, June 17, 2009, at 14-15. (emphasis added)

[93] In the Matter of an Application by CenterPoint Energy for Authorized to Increase Natural Gas Rates in Minnesota, Docket No. G-008/GR-08-1075, Order, January 11, 2010, at 28.

[94] In the Matter of an Application of Baltimore Gas and Electric Company for Adjustment in its Electric and Gas Case Rates, Order, February 22, 2013, at 78.

VIII. MANAGEMENT PERFORMANCE

Q. What is Mr. Patel's position regarding the Company's management performance and how it should be considered relative to the Company's authorized ROE in this proceeding?

A. In addition to contending that the performance of the Company's management does not justify an ROE adder,[95] which is addressed by PAWC witness Ashley Everette's rebuttal testimony, Mr. Patel also states that the Company is able to recover all of its costs associated with acquisition of troubled water and wastewater systems, as well as has the opportunity to earn a return on the fair value of the rate base of such acquisitions, which Mr. Patel states "adequately compensates for the investment risk of the acquiring company."[96]

Q. Has Mr. Patel provided any evidence to support his notion that the Company is already adequately compensated for its investment risk as a result of acquiring troubled water and wastewater utilities?

A. No, Mr. Patel has not provided any evidence as to the adequacy of the compensation for such investment risk. Regardless, Mr. Patel's position that management performance should not be compensated is counter to the Commission's Policy Statement on Small Nonviable Water and Wastewater Systems, which specifies that the Commission will consider rate of return incentives to encourage the acquisition of troubled water and wastewater systems. In fact, as noted by Patel, the Commission recently approved a 25 basis point adder for management performance in *Aqua* based primarily on the utility's

[95] Patel Direct Testimony, at 71-74.

[96] *Id*., at 78.

willingness to provide emergency aide to water and wastewater systems that required substantial investment.[97] Mr. Patel also recognizes that simply because the Commission will consider a potential ROE adder for management performance, it does not mean such an adder will be granted. However, as discussed by PAWC witness Ms. Everette, and Company President Justin L. Ladner, the Company has delivered superior performance that goes well beyond the requirements of the Public Utility Code.

Q. What is Mr. Garrett's position regarding your consideration of the Company's management performance on the ROE to be authorized by the Commission in this proceeding?

A. Mr. Garrett contends that the ROE should not consider management performance, as the risk of imprudent management is related to firm-specific risk that is not rewarded by the market because investors can eliminate such risks through portfolio diversification.[98]

Q. Is it appropriate to consider management performance as one factor in determining where within the range of cost of equity results an authorized ROE should fall?

A. Yes. As Mr. Garrett's own cost of equity analyses demonstrate, there is a range of results that occur when using multiple analytical approaches to estimating the cost of equity. As such, the analyst needs to determine where best within that range of results that the authorized ROE should fall, and considering management performance is one factor that reasonably should be considered when setting the authorized ROE.

[97] Patel Direct Testimony, at 25.

[98] Garrett Direct Testimony, at 48.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

SUMMARY OF COST OF EQUITY ANALYSES RESULTS

	Minimum Growth Rate	Average Growth Rate	Maximum Growth Rate
Constant Growth DCF			
Mean Results:			
30-Day Average	8.97%	10.07%	11.36%
90-Day Average	9.04%	10.14%	11.42%
180-Day Average	8.87%	9.97%	11.25%
Average	8.96%	10.06%	11.34%
Median Results:			
30-Day Average	8.63%	9.66%	10.86%
90-Day Average	8.72%	9.71%	10.98%
180-Day Average	8.60%	9.46%	10.69%
Average	8.65%	9.61%	10.85%

	30-Year Treasury Bond Yield		
	Current 30-Day Avg	Near-Term Projected	Longer-Term Projected
CAPM			
Current *Value Line* Beta	10.90%	10.89%	10.89%
Current Bloomberg Beta	10.31%	10.29%	10.29%
Long-term Avg. *Value Line* Beta	10.13%	10.11%	10.11%
ECAPM			
Current *Value Line* Beta	11.23%	11.22%	11.22%
Current Bloomberg Beta	10.79%	10.77%	10.77%
Long-term Avg. *Value Line* Beta	10.65%	10.64%	10.64%

Excludes the results for Middlesex Water Company in the DCF analyses.

30-DAY CONSTANT GROWTH DCF

Company	Ticker	[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Value Line Earnings Growth	[6] Yahoo! Finance Earnings Growth	[7] Zacks Earnings Growth	[8] Average Growth Rate	[9] Mean Low ROE	[10] Mean ROE	[11] Mean High ROE
American States Water Company	AWR	$1.72	$78.58	2.19%	2.25%	6.50%	4.40%	6.30%	5.73%	6.64%	7.99%	8.76%
Atmos Energy Corporation	ATO	$3.22	$115.04	2.80%	2.90%	7.00%	7.50%	7.30%	7.27%	9.90%	10.17%	10.40%
California Water Service Group	CWT	$1.04	$49.27	2.11%	2.20%	6.50%	10.80%	n/a	8.65%	8.68%	10.85%	13.02%
Essential Utilities, Inc.	WTRG	$1.23	$37.21	3.30%	3.40%	7.50%	5.20%	5.60%	6.10%	8.59%	9.50%	10.92%
Eversource Energy	ES	$2.70	$58.34	4.63%	4.73%	6.00%	3.60%	4.20%	4.60%	8.31%	9.33%	10.77%
Middlesex Water Company	MSEX	$1.30	$62.37	2.08%	2.12%	5.00%	2.70%	n/a	3.85%	4.81%	5.97%	7.14%
NiSource Inc.	NI	$1.00	$26.31	3.80%	3.96%	9.50%	8.30%	7.20%	8.33%	11.14%	12.29%	13.48%
Northwest Natural Gas Company	NWN	$1.95	$38.25	5.10%	5.21%	6.50%	2.80%	3.70%	4.33%	7.97%	9.54%	11.76%
ONE Gas, Inc.	OGS	$2.60	$62.39	4.17%	4.28%	6.50%	5.00%	5.00%	5.50%	9.27%	9.78%	10.80%
SJW Group	SJW	$1.52	$63.73	2.38%	2.47%	8.00%	6.10%	n/a	7.05%	8.56%	9.52%	10.48%
Spire, Inc.	SR	$3.02	$61.03	4.95%	5.11%	8.00%	6.36%	5.60%	6.65%	10.69%	11.77%	13.15%
Mean				3.41%	3.51%	7.00%	5.71%	5.61%	6.19%	8.60%	9.70%	10.97%
Median				3.30%	3.40%	6.50%	5.20%	5.60%	6.10%	8.59%	9.54%	10.80%
Excluding Middlesex												
Mean										8.97%	10.07%	11.36%
Median										8.63%	9.66%	10.86%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals 30-day average as of January 31, 2024
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.50 x [8])
[5] Source: Value Line
[6] Source: Yahoo! Finance
[7] Source: Zacks
[8] Equals Average ([5], [6], [7])
[9] Equals [3] x (1 + 0.50 x Minimum ([5], [6], [7]) + Minimum ([5], [6], [7])
[10] Equals [4] + [8]
[11] Equals [3] x (1 + 0.50 x Maximum ([5], [6], [7]) + Maximum ([5], [6], [7])

90-DAY CONSTANT GROWTH DCF

Company	Ticker	[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Value Line Earnings Growth	[6] Yahoo! Finance Earnings Growth	[7] Zacks Earnings Growth	[8] Average Growth Rate	[9] Mean Low ROE	[10] Mean ROE	[11] Mean High ROE
American States Water Company	AWR	$1.72	$79.16	2.17%	2.24%	6.50%	4.40%	6.30%	5.73%	6.62%	7.97%	8.74%
Atmos Energy Corporation	ATO	$3.22	$111.87	2.88%	2.98%	7.00%	7.50%	7.30%	7.27%	9.98%	10.25%	10.49%
California Water Service Group	CWT	$1.04	$49.47	2.10%	2.19%	6.50%	10.80%	n/a	8.65%	8.67%	10.84%	13.02%
Essential Utilities, Inc.	WTRG	$1.23	$35.36	3.47%	3.58%	7.50%	5.20%	5.60%	6.10%	8.76%	9.68%	11.10%
Eversource Energy	ES	$2.70	$57.25	4.72%	4.82%	6.00%	3.60%	4.20%	4.60%	8.40%	9.42%	10.86%
Middlesex Water Company	MSEX	$1.30	$64.47	2.02%	2.06%	5.00%	2.70%	n/a	3.85%	4.74%	5.91%	7.07%
NiSource Inc.	NI	$1.00	$25.76	3.88%	4.04%	9.50%	8.30%	7.20%	8.33%	11.22%	12.38%	13.57%
Northwest Natural Gas Company	NWN	$1.95	$37.60	5.19%	5.30%	6.50%	2.80%	3.70%	4.33%	8.06%	9.63%	11.85%
ONE Gas, Inc.	OGS	$2.60	$63.04	4.12%	4.24%	6.50%	5.00%	5.00%	5.50%	9.23%	9.74%	10.76%
SJW Group	SJW	$1.52	$62.96	2.41%	2.50%	8.00%	6.10%	n/a	7.05%	8.59%	9.55%	10.51%
Spire, Inc.	SR	$3.02	$59.22	5.10%	5.27%	8.00%	6.36%	5.60%	6.65%	10.84%	11.92%	13.30%
Mean				3.46%	3.57%	7.00%	5.71%	5.61%	6.19%	8.65%	9.75%	11.02%
Median				3.47%	3.58%	6.50%	5.20%	5.60%	6.10%	8.67%	9.68%	10.86%
Excluding Middlesex												
Mean										9.04%	10.14%	11.42%
Median										8.72%	9.71%	10.98%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals 90-day average as of January 31, 2024
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.50 x [8])
[5] Source: Value Line
[6] Source: Yahoo! Finance
[7] Source: Zacks
[8] Equals Average ([5], [6], [7])
[9] Equals [3] x (1 + 0.50 x Minimum ([5], [6], [7]) + Minimum ([5], [6], [7])
[10] Equals [4] + [8]
[11] Equals [3] x (1 + 0.50 x Maximum ([5], [6], [7]) + Maximum ([5], [6], [7])

180-DAY CONSTANT GROWTH DCF

Company	Ticker	[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Value Line Earnings Growth	[6] Yahoo! Finance Earnings Growth	[7] Zacks Earnings Growth	[8] Average Growth Rate	[9] Mean Low ROE	[10] Mean ROE	[11] Mean High ROE
American States Water Company	AWR	$1.72	$82.58	2.08%	2.14%	6.50%	4.40%	6.30%	5.73%	6.53%	7.88%	8.65%
Atmos Energy Corporation	ATO	$3.22	$113.76	2.83%	2.93%	7.00%	7.50%	7.30%	7.27%	9.93%	10.20%	10.44%
California Water Service Group	CWT	$1.04	$50.65	2.05%	2.14%	6.50%	10.80%	n/a	8.65%	8.62%	10.79%	12.96%
Essential Utilities, Inc.	WTRG	$1.23	$37.26	3.30%	3.40%	7.50%	5.20%	5.60%	6.10%	8.58%	9.50%	10.92%
Eversource Energy	ES	$2.70	$62.28	4.34%	4.44%	6.00%	3.60%	4.20%	4.60%	8.01%	9.04%	10.47%
Middlesex Water Company	MSEX	$1.30	$71.29	1.82%	1.86%	5.00%	2.70%	n/a	3.85%	4.55%	5.71%	6.87%
NiSource Inc.	NI	$1.00	$26.27	3.81%	3.97%	9.50%	8.30%	7.20%	8.33%	11.14%	12.30%	13.49%
Northwest Natural Gas Company	NWN	$1.95	$39.17	4.98%	5.09%	6.50%	2.80%	3.70%	4.33%	7.85%	9.42%	11.64%
ONE Gas, Inc.	OGS	$2.60	$69.55	3.74%	3.84%	6.50%	5.00%	5.00%	5.50%	8.83%	9.34%	10.36%
SJW Group	SJW	$1.52	$66.09	2.30%	2.38%	8.00%	6.10%	n/a	7.05%	8.47%	9.43%	10.39%
Spire, Inc.	SR	$3.02	$60.12	5.02%	5.19%	8.00%	6.36%	5.60%	6.65%	10.76%	11.84%	13.22%
Mean				3.30%	3.40%	7.00%	5.71%	5.61%	6.19%	8.48%	9.59%	10.86%
Median				3.30%	3.40%	6.50%	5.20%	5.60%	6.10%	8.58%	9.43%	10.47%
Excluding Middlesex												
Mean										8.87%	9.97%	11.25%
Median										8.60%	9.46%	10.69%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals 180-day average as of January 31, 2024
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.50 x [8])
[5] Source: Value Line
[6] Source: Yahoo! Finance
[7] Source: Zacks
[8] Equals Average ([5], [6], [7])
[9] Equals [3] x (1 + 0.50 x Minimum ([5], [6], [7]) + Minimum ([5], [6], [7])
[10] Equals [4] + [8]
[11] Equals [3] x (1 + 0.50 x Maximum ([5], [6], [7]) + Maximum ([5], [6], [7])

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VL BETA

$$K = Rf + \beta (Rm - Rf)$$

Company	Ticker	[1] Current 30-day average of 30-year U.S. Treasury bond yield	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] ROE (K)	[6] ECAPM ROE
American States Water Company	AWR	4.19%	0.70	12.22%	8.03%	9.81%	10.41%
Atmos Energy Corporation	ATO	4.19%	0.85	12.22%	8.03%	11.01%	11.32%
California Water Service Group	CWT	4.19%	0.70	12.22%	8.03%	9.81%	10.41%
Essential Utilities, Inc.	WTRG	4.19%	1.00	12.22%	8.03%	12.22%	12.22%
Eversource Energy	ES	4.19%	0.90	12.22%	8.03%	11.42%	11.62%
Middlesex Water Company	MSEX	4.19%	0.75	12.22%	8.03%	10.21%	10.71%
NiSource Inc.	NI	4.19%	0.90	12.22%	8.03%	11.42%	11.62%
Northwest Natural Gas Company	NWN	4.19%	0.85	12.22%	8.03%	11.01%	11.32%
ONE Gas, Inc.	OGS	4.19%	0.85	12.22%	8.03%	11.01%	11.32%
SJW Group	SJW	4.19%	0.85	12.22%	8.03%	11.01%	11.32%
Spire, Inc.	SR	4.19%	0.85	12.22%	8.03%	11.01%	11.32%
Mean			0.84			10.90%	11.23%

Notes:
[1] Source: Bloomberg Professional, 30-day average as of January 31, 2024
[2] Source: Value Line Reports, November 25, 2023, January 5, 2024
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE & VL BETA

$$K = Rf + \beta\,(Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2024 - Q1 2025)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
#REF!	#REF!	4.10%	0.70	12.22%	8.12%	9.78%	10.39%
#REF!	#REF!	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
#REF!	#REF!	4.10%	0.70	12.22%	8.12%	9.78%	10.39%
#REF!	#REF!	4.10%	1.00	12.22%	8.12%	12.22%	12.22%
#REF!	#REF!	4.10%	0.90	12.22%	8.12%	11.41%	11.61%
#REF!	#REF!	4.10%	0.75	12.22%	8.12%	10.19%	10.70%
#REF!	#REF!	4.10%	0.90	12.22%	8.12%	11.41%	11.61%
#REF!	#REF!	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
#REF!	#REF!	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
#REF!	#REF!	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
#REF!	#REF!	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
Mean			0.84			10.89%	11.22%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 2, February 1, 2024, at 2
[2] Source: Value Line Reports, November 25, 2023, January 5, 2024
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE & VL BETA

$$K = Rf + \beta\,(Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2025-2029)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
#REF!	#REF!	4.10%	0.70	12.22%	8.12%	9.78%	10.39%
#REF!	#REF!	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
#REF!	#REF!	4.10%	0.70	12.22%	8.12%	9.78%	10.39%
#REF!	#REF!	4.10%	1.00	12.22%	8.12%	12.22%	12.22%
#REF!	#REF!	4.10%	0.90	12.22%	8.12%	11.41%	11.61%
#REF!	#REF!	4.10%	0.75	12.22%	8.12%	10.19%	10.70%
#REF!	#REF!	4.10%	0.90	12.22%	8.12%	11.41%	11.61%
#REF!	#REF!	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
#REF!	#REF!	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
#REF!	#REF!	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
#REF!	#REF!	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
Mean			0.84			10.89%	11.22%

Notes:

[1] Source: Blue Chip Financial Forecasts,Vol. 42, No. 12, December 1, 2023, at 14

[2] Source: Value Line Reports, November 25, 2023, January 5, 2024

[3] Source: Schedule 7

[4] Equals [3] - [1]

[5] Equals [1] + [2] x [4]

[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & BLOOMBERG BETA

$$K = Rf + \beta\,(Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
#REF!	#REF!	4.19%	0.65	12.22%	8.03%	9.43%	10.13%
#REF!	#REF!	4.19%	0.75	12.22%	8.03%	10.23%	10.72%
#REF!	#REF!	4.19%	0.69	12.22%	8.03%	9.74%	10.36%
#REF!	#REF!	4.19%	0.85	12.22%	8.03%	11.01%	11.32%
#REF!	#REF!	4.19%	0.80	12.22%	8.03%	10.64%	11.03%
#REF!	#REF!	4.19%	0.78	12.22%	8.03%	10.42%	10.87%
#REF!	#REF!	4.19%	0.81	12.22%	8.03%	10.66%	11.05%
#REF!	#REF!	4.19%	0.70	12.22%	8.03%	9.83%	10.42%
#REF!	#REF!	4.19%	0.78	12.22%	8.03%	10.47%	10.91%
#REF!	#REF!	4.19%	0.80	12.22%	8.03%	10.63%	11.02%
#REF!	#REF!	4.19%	0.77	12.22%	8.03%	10.37%	10.83%
Mean			0.76			10.31%	10.79%

Notes:
[1] Source: Bloomberg Professional, 30-day average as of January 31, 2024
[2] Source: Bloomberg Professional, as of January 31, 2024
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE & BLOOMBERG BETA

$$K = Rf + \beta\,(Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2024 - Q1 2025)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
#REF!	#REF!	4.10%	0.65	12.22%	8.12%	9.40%	10.10%
#REF!	#REF!	4.10%	0.75	12.22%	8.12%	10.21%	10.71%
#REF!	#REF!	4.10%	0.69	12.22%	8.12%	9.71%	10.34%
#REF!	#REF!	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
#REF!	#REF!	4.10%	0.80	12.22%	8.12%	10.62%	11.02%
#REF!	#REF!	4.10%	0.78	12.22%	8.12%	10.40%	10.86%
#REF!	#REF!	4.10%	0.81	12.22%	8.12%	10.65%	11.04%
#REF!	#REF!	4.10%	0.70	12.22%	8.12%	9.80%	10.40%
#REF!	#REF!	4.10%	0.78	12.22%	8.12%	10.45%	10.90%
#REF!	#REF!	4.10%	0.80	12.22%	8.12%	10.61%	11.01%
#REF!	#REF!	4.10%	0.77	12.22%	8.12%	10.35%	10.82%
Mean			0.76			10.29%	10.77%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 2, February 1, 2024, at 2
[2] Source: Bloomberg Professional, as of January 31, 2024
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE & BLOOMBERG BETA

$$K = Rf + \beta (Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2025-2029)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
#REF!	#REF!	4.10%	0.65	12.22%	8.12%	9.40%	10.10%
#REF!	#REF!	4.10%	0.75	12.22%	8.12%	10.21%	10.71%
#REF!	#REF!	4.10%	0.69	12.22%	8.12%	9.71%	10.34%
#REF!	#REF!	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
#REF!	#REF!	4.10%	0.80	12.22%	8.12%	10.62%	11.02%
#REF!	#REF!	4.10%	0.78	12.22%	8.12%	10.40%	10.86%
#REF!	#REF!	4.10%	0.81	12.22%	8.12%	10.65%	11.04%
#REF!	#REF!	4.10%	0.70	12.22%	8.12%	9.80%	10.40%
#REF!	#REF!	4.10%	0.78	12.22%	8.12%	10.45%	10.90%
#REF!	#REF!	4.10%	0.80	12.22%	8.12%	10.61%	11.01%
#REF!	#REF!	4.10%	0.77	12.22%	8.12%	10.35%	10.82%
Mean			0.76			10.29%	10.77%

Notes:

[1] Source: Blue Chip Financial Forecasts,Vol. 42, No. 12, December 1, 2023, at 14
[2] Source: Bloomberg Professional, as of January 31, 2024
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VALUE LINE LT AVERAGE BETA

$$K = Rf + \beta\ (Rm - Rf)$$
$$K = Rf + 0.25 \times (Rm - Rf) + 0.75 \times \beta \times (Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
#REF!	#REF!	4.19%	0.69	12.22%	8.03%	9.74%	10.36%
#REF!	#REF!	4.19%	0.75	12.22%	8.03%	10.21%	10.71%
#REF!	#REF!	4.19%	0.70	12.22%	8.03%	9.85%	10.44%
#REF!	#REF!	4.19%	0.79	12.22%	8.03%	10.54%	10.96%
#REF!	#REF!	4.19%	0.76	12.22%	8.03%	10.30%	10.78%
#REF!	#REF!	4.19%	0.74	12.22%	8.03%	10.10%	10.63%
#REF!	#REF!	4.19%	0.76	12.22%	8.03%	10.26%	10.75%
#REF!	#REF!	4.19%	0.71	12.22%	8.03%	9.88%	10.47%
#REF!	#REF!	4.19%	0.74	12.22%	8.03%	10.11%	10.64%
#REF!	#REF!	4.19%	0.76	12.22%	8.03%	10.32%	10.80%
#REF!	#REF!	4.19%	0.74	12.22%	8.03%	10.14%	10.66%
Mean			0.74			10.13%	10.65%

Notes:
[1] Source: Bloomberg Professional, 30-day average as of January 31, 2024
[2] Source: Value Line Reports, 2013 - 2022.
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VALUE LINE LT AVERAGE BETA

$$K = Rf + \beta\ (Rm - Rf)$$
$$K = Rf + 0.25 \times (Rm - Rf) + 0.75 \times \beta \times (Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2024 - Q1 2025)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
#REF!	#REF!	4.10%	0.69	12.22%	8.12%	9.71%	10.34%
#REF!	#REF!	4.10%	0.75	12.22%	8.12%	10.19%	10.70%
#REF!	#REF!	4.10%	0.70	12.22%	8.12%	9.82%	10.42%
#REF!	#REF!	4.10%	0.79	12.22%	8.12%	10.52%	10.95%
#REF!	#REF!	4.10%	0.76	12.22%	8.12%	10.28%	10.76%
#REF!	#REF!	4.10%	0.74	12.22%	8.12%	10.08%	10.61%
#REF!	#REF!	4.10%	0.76	12.22%	8.12%	10.23%	10.73%
#REF!	#REF!	4.10%	0.71	12.22%	8.12%	9.86%	10.45%
#REF!	#REF!	4.10%	0.74	12.22%	8.12%	10.09%	10.62%
#REF!	#REF!	4.10%	0.76	12.22%	8.12%	10.30%	10.78%
#REF!	#REF!	4.10%	0.74	12.22%	8.12%	10.12%	10.64%
Mean			0.74			10.11%	10.64%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 2, February 1, 2024, at 2
[2] Source: Value Line Reports, 2013 - 2022.
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VALUE LINE LT AVERAGE BETA

$$K = Rf + \beta\ (Rm - Rf)$$
$$K = Rf + 0.25 \times (Rm - Rf) + 0.75 \times \beta \times (Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2025-2029)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm − Rf)	ROE (K)	ECAPM ROE
#REF!	#REF!	4.10%	0.69	12.22%	8.12%	9.71%	10.34%
#REF!	#REF!	4.10%	0.75	12.22%	8.12%	10.19%	10.70%
#REF!	#REF!	4.10%	0.70	12.22%	8.12%	9.82%	10.42%
#REF!	#REF!	4.10%	0.79	12.22%	8.12%	10.52%	10.95%
#REF!	#REF!	4.10%	0.76	12.22%	8.12%	10.28%	10.76%
#REF!	#REF!	4.10%	0.74	12.22%	8.12%	10.08%	10.61%
#REF!	#REF!	4.10%	0.76	12.22%	8.12%	10.23%	10.73%
#REF!	#REF!	4.10%	0.71	12.22%	8.12%	9.86%	10.45%
#REF!	#REF!	4.10%	0.74	12.22%	8.12%	10.09%	10.62%
#REF!	#REF!	4.10%	0.76	12.22%	8.12%	10.30%	10.78%
#REF!	#REF!	4.10%	0.74	12.22%	8.12%	10.12%	10.64%
Mean			0.74			10.11%	10.64%

Notes:

[1] Source: Blue Chip Financial Forecasts,Vol. 42, No. 12, December 1, 2023, at 14
[2] Source: Value Line Reports, 2013 - 2022.
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

HISTORICAL BETA - 2013 - 2022

Company	Ticker	[1] 12/31/2013	[2] 12/31/2014	[3] 12/31/2015	[4] 12/31/2016	[5] 12/31/2017	[6] 12/31/2018	[7] 12/31/2019	[8] 12/31/2020	[9] 12/31/2021	[10] 12/31/2022	[11] 12/31/2023	[12] Average
American States Water Company	AWR	0.65	0.70	0.70	0.75	0.80	0.70	0.65	0.65	0.65	0.65	0.70	0.69
Atmos Energy Corporation	ATO	0.80	0.80	0.80	0.70	0.70	0.60	0.60	0.80	0.80	0.80	0.85	0.75
California Water Service Group	CWT	0.60	0.70	0.75	0.75	0.80	0.70	0.70	0.65	0.70	0.70	0.70	0.70
Essential Utilities, Inc.	WTRG	0.60	0.70	0.75	0.70	0.75	0.70	0.65	0.95	0.95	0.95	1.00	0.79
Eversource Energy	ES			0.75	0.70	0.65	0.60	0.55	0.90	0.90	0.90	0.90	0.76
Middlesex Water Company	MSEX	0.75	0.70	0.70	0.75	0.80	0.75	0.75	0.75	0.70	0.70	0.75	0.74
NiSource Inc.	NI	0.85	0.85	NMF	NMF	0.60	0.50	0.55	0.85	0.85	0.85	0.90	0.76
Northwest Natural Gas Company	NWN	0.65	0.70	0.65	0.65	0.70	0.60	0.60	0.80	0.85	0.80	0.80	0.71
ONE Gas, Inc.	OGS				0.70	0.70	0.65	0.65	0.80	0.80	0.80	0.80	0.74
SJW Group	SJW	0.85	0.85	0.75	0.75	0.70	0.60	0.60	0.85	0.80	0.80	0.85	0.76
Spire, Inc.	SR	0.65	0.70	0.70	0.70	0.70	0.65	0.65	0.85	0.85	0.85	0.85	0.74
Mean		0.71	0.74	0.73	0.72	0.72	0.64	0.63	0.80	0.80	0.80	0.83	0.74

Notes:
[1] Value Line, dated December 26, 2013.
[2] Value Line, dated December 31, 2014.
[3] Value Line, dated December 30, 2015.
[4] Value Line, dated December 29, 2016.
[5] Value Line, dated December 28, 2017.
[6] Value Line, dated December 27, 2018.
[7] Value Line, dated December 26, 2019.
[8] Value Line, dated December 30, 2020.
[9] Value Line, dated December 29, 2021.
[10] Value Line, dated December 30, 2022.
[11] Value Line, dated December 28, 2023.
[12] Average ([1] - [11])

MARKET RISK PREMIUM DERIVED FROM S&P 500 INDEX

[1] Estimated Weighted Average Dividend Yield	1.63%
[2] Estimated Weighted Average Long-Term Growth Rate	10.51%
[3] S&P 500 Estimated Required Market Return	12.22%

Name	Ticker	[4] Shares Outst'g	[5] Price	[6] Market Capitalization	[7] Weight in Index	[8] Estimated Dividend Yield	[9] Cap-Weighted Dividend Yield	[10] Bloomberg Long-Term Growth Est.	[11] Cap-Weighted Long-Term Growth Est.
LyondellBasell Industries NV	LYB	324.362	94.12	30,529	0.10%	5.31%	0.01%	8.00%	0.01%
American Express Co	AXP	723	200.74	145,135	0.46%	1.20%	0.01%	14.17%	0.06%
Verizon Communications Inc	VZ	4204	42.35	178,039		6.28%		-4.10%	
Broadcom Inc	AVGO	468.141	1180	552,406	1.75%	1.78%	0.03%	13.90%	0.24%
Boeing Co/The	BA	610.135	211.04	128,763					
Caterpillar Inc	CAT	509.085	300.31	152,883	0.48%	1.73%	0.01%	20.00%	0.10%
JPMorgan Chase & Co	JPM	2891.008	174.36	504,076	1.59%	2.41%	0.04%	2.00%	0.03%
Chevron Corp	CVX	1887.749	147.43	278,311	0.88%	4.10%	0.04%	7.27%	0.06%
Coca-Cola Co/The	KO	4323.414	59.49	257,200	0.81%	3.09%	0.03%	6.58%	0.05%
AbbVie Inc	ABBV	1765.537	164.4	290,254	0.92%	3.77%	0.03%	9.09%	0.08%
Walt Disney Co/The	DIS	1830.316	96.05	175,802	0.56%	0.62%	0.00%	18.88%	0.10%
FleetCor Technologies Inc	FLT	72.204	289.93	20,934	0.07%			12.79%	0.01%
Extra Space Storage Inc	EXR	211.278	144.44	30,517	0.10%	4.49%	0.00%	1.20%	0.00%
Exxon Mobil Corp	XOM	4006.133	102.81	411,871	1.30%	3.70%	0.05%	13.21%	0.17%
Phillips 66	PSX	439.956	144.31	63,490		2.91%		-7.56%	
General Electric Co	GE	1088.386	132.42	144,124	0.46%	0.24%	0.00%	7.00%	0.03%
HP Inc	HPQ	990.902	28.71	28,449	0.09%	3.84%	0.00%	3.00%	0.00%
Home Depot Inc/The	HD	995.262	352.96	351,288	1.11%	2.37%	0.03%	1.82%	0.02%
Monolithic Power Systems Inc	MPWR	47.912	602.72	28,878	0.09%	0.66%	0.00%	8.00%	0.01%
International Business Machines Corp	IBM	913.119	183.66	167,703	0.53%	3.62%	0.02%	5.14%	0.03%
Johnson & Johnson	JNJ	2407.279	158.9	382,517	1.21%	3.00%	0.04%	3.76%	0.05%
Lululemon Athletica Inc	LULU	121.075	453.82	54,946	0.17%			17.00%	0.03%
McDonald's Corp	MCD	725.342	292.72	212,322	0.67%	2.28%	0.02%	9.53%	0.06%
Merck & Co Inc	MRK	2534.023	120.78	306,059	0.97%	2.55%	0.02%	17.33%	0.17%
3M Co	MMM	552.317	94.35	52,111	0.16%	6.36%	0.01%	5.50%	0.01%
American Water Works Co Inc	AWK	194.705	124.02	24,147	0.08%	2.28%	0.00%	7.76%	0.01%
Bank of America Corp	BAC	7895.5	34.01	268,526		2.82%		-7.00%	
Pfizer Inc	PFE	5646.413	27.08	152,905		6.20%		33.35%	
Procter & Gamble Co/The	PG	2353.021	157.14	369,754	1.17%	2.39%	0.03%	7.56%	0.09%
AT&T Inc	T	7150	17.69	126,484		6.27%		-4.61%	
Travelers Cos Inc/The	TRV	228.2	211.36	48,232	0.15%	1.89%	0.00%	19.03%	0.03%
RTX Corp	RTX	1437.901	91.12	131,022	0.41%	2.59%	0.01%	10.14%	0.04%
Analog Devices Inc	ADI	495.84	192.36	95,380	0.30%	1.79%	0.01%	4.50%	0.01%
Walmart Inc	WMT	2692.234	165.25	444,892	1.41%	1.38%	0.02%	3.00%	0.04%
Cisco Systems Inc	CSCO	4063.476	50.18	203,905	0.64%	3.11%	0.02%	10.00%	0.06%
Intel Corp	INTC	4228	43.08	182,142		1.16%		31.13%	
General Motors Co	GM	1154.433	38.8	44,792	0.14%	1.24%	0.00%	15.71%	0.02%
Microsoft Corp	MSFT	7430.436	397.58	2,954,193	9.33%	0.75%	0.07%	16.62%	1.55%
Dollar General Corp	DG	219.497	132.07	28,989		1.79%		-5.94%	
Cigna Group/The	CI	292.62	300.95	88,064	0.28%	1.63%	0.00%	9.80%	0.03%
Kinder Morgan Inc	KMI	2222.774	16.92	37,609	0.12%	6.68%	0.01%	3.00%	0.00%
Citigroup Inc	C	1903.1	56.17	106,897		3.77%		21.67%	
American International Group Inc	AIG	702.04	69.51	48,799	0.15%	2.07%	0.00%	10.00%	0.02%
Altria Group Inc	MO	1768.647	40.12	70,958	0.22%	9.77%	0.02%	4.50%	0.01%
HCA Healthcare Inc	HCA	267.661	304.9	81,610	0.26%	0.87%	0.00%	7.72%	0.02%
International Paper Co	IP	346.017	35.83	12,398		5.16%		-2.00%	
Hewlett Packard Enterprise Co	HPE	1300	15.29	19,877	0.06%	3.40%	0.00%	2.64%	0.00%
Abbott Laboratories	ABT	1736.059	113.15	196,435	0.62%	1.94%	0.01%	8.00%	0.05%
Aflac Inc	AFL	584.38	84.34	49,287	0.16%	2.37%	0.00%	6.85%	0.01%
Air Products and Chemicals Inc	APD	222.228	255.71	56,826	0.18%	2.77%	0.00%	12.06%	0.02%
Royal Caribbean Cruises Ltd	RCL	256.235	127.5	32,670					
Hess Corp	HES	307.152	140.53	43,164	0.14%	1.25%	0.00%	13.50%	0.02%
Archer-Daniels-Midland Co	ADM	533.381	55.58	29,645		3.60%		-7.81%	
Automatic Data Processing Inc	ADP	410.7	245.78	100,942	0.32%	2.28%	0.01%	16.00%	0.05%
Verisk Analytics Inc	VRSK	144.987	241.53	35,019	0.11%	0.56%	0.00%	11.70%	0.01%
AutoZone Inc	AZO	17.292	2762.13	47,763	0.15%			14.29%	0.02%
Linde PLC	LIN	484.89	404.83	196,298	0.62%	1.26%	0.01%	14.00%	0.09%
Avery Dennison Corp	AVY	80.531	199.45	16,062	0.05%	1.62%	0.00%	7.00%	0.00%
Enphase Energy Inc	ENPH	136.551	104.13	14,219				28.57%	
MSCI Inc	MSCI	79.1	598.62	47,351	0.15%	1.07%	0.00%	12.12%	0.02%
Ball Corp	BALL	315.301	55.45	17,483	0.06%	1.44%	0.00%	9.50%	0.01%
Axon Enterprise Inc	AXON	74.934	249.06	18,663					
Dayforce Inc	DAY	156.127	69.52	10,854					
Carrier Global Corp	CARR	897.656	54.71	49,111	0.16%	1.39%	0.00%	10.94%	0.02%
Bank of New York Mellon Corp/The	BK	759.344	55.46	42,113	0.13%	3.03%	0.00%	10.00%	0.01%
Otis Worldwide Corp	OTIS	409.259	88.44	36,195	0.11%	1.54%	0.00%	9.00%	0.01%
Baxter International Inc	BAX	507.324	38.69	19,628		3.00%		-3.00%	
Becton Dickinson & Co	BDX	289.542	238.81	69,146		1.59%		-2.02%	
Berkshire Hathaway Inc	BRK/B	1308.414	383.74	502,091					
Best Buy Co Inc	BBY	215.396	72.49	15,614	0.05%	5.08%	0.00%	3.08%	0.00%
Boston Scientific Corp	BSX	1464.983	63.26	92,675	0.29%			12.10%	0.04%
Bristol-Myers Squibb Co	BMY	2034.758	48.87	99,439	0.31%	4.91%	0.02%	2.78%	0.01%
Brown-Forman Corp	BF/B	306.475	54.9	16,825	0.05%	1.59%	0.00%	4.85%	0.00%
Coterra Energy Inc	CTRA	752.192	24.88	18,715		3.22%		55.04%	
Campbell Soup Co	CPB	298.1	44.63	13,304	0.04%	3.32%	0.00%	2.81%	0.00%
Hilton Worldwide Holdings Inc	HLT	256.44	190.96	48,970	0.15%	0.31%	0.00%	17.14%	0.03%
Carnival Corp	CCL	1119.445	16.58	18,560					
Qorvo Inc	QRVO	97.346	99.74	9,709	0.03%			18.15%	0.01%
Builders FirstSource Inc	BLDR	123.347	173.73	21,429				-1.67%	
UDR Inc	UDR	328.928	36.02	11,848	0.04%	4.66%	0.00%	6.08%	0.00%
Clorox Co/The	CLX	124.059	145.25	18,020	0.06%	3.30%	0.00%	11.90%	0.01%

		[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
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Paycom Software Inc	PAYC	60.228	190.24	11,458	0.04%	0.79%	0.00%	15.19%	0.01%
CMS Energy Corp	CMS	291.764	57.16	16,677	0.05%	3.41%	0.00%	7.75%	0.00%
Colgate-Palmolive Co	CL	823.372	84.2	69,328	0.22%	2.28%	0.00%	8.18%	0.02%
EPAM Systems Inc	EPAM	57.7	278.11	16,047	0.05%			4.87%	0.00%
Comerica Inc	CMA	131.873	52.58	6,934		5.40%		31.00%	
Conagra Brands Inc	CAG	478.005	29.15	13,934	0.04%	4.80%	0.00%	2.08%	0.00%
Airbnb Inc	ABNB	434.745	144.14	62,664	0.20%			18.20%	0.04%
Consolidated Edison Inc	ED	344.924	90.9	31,354	0.10%	3.65%	0.00%	6.00%	0.01%
Corning Inc	GLW	853.182	32.49	27,720	0.09%	3.45%	0.00%	9.34%	0.01%
Cummins Inc	CMI	141.745	239.3	33,920	0.11%	2.81%	0.00%	7.01%	0.01%
Caesars Entertainment Inc	CZR	215.711	43.87	9,463				127.12%	
Danaher Corp	DHR	739.2	239.91	177,341	0.56%	0.40%	0.00%	5.83%	0.03%
Target Corp	TGT	461.662	139.08	64,208	0.20%	3.16%	0.01%	15.29%	0.03%
Deere & Co	DE	279.99	393.58	110,198	0.35%	1.49%	0.01%	3.96%	0.01%
Dominion Energy Inc	D	836.773	45.72	38,257	0.12%	5.84%	0.01%	6.90%	0.01%
Dover Corp	DOV	139.89	149.78	20,953	0.07%	1.36%	0.00%	10.00%	0.01%
Alliant Energy Corp	LNT	252.719	48.66	12,297	0.04%	3.95%	0.00%	6.16%	0.00%
Steel Dynamics Inc	STLD	161.816	120.69	19,530		1.41%		-13.01%	
Duke Energy Corp	DUK	771	95.83	73,885	0.23%	4.28%	0.01%	6.34%	0.01%
Regency Centers Corp	REG	184.576	62.67	11,567	0.04%	4.28%	0.00%	3.46%	0.00%
Eaton Corp PLC	ETN	399.3	246.08	98,260	0.31%	1.40%	0.00%	15.00%	0.05%
Ecolab Inc	ECL	285.14	198.22	56,520	0.18%	1.15%	0.00%	14.33%	0.03%
Revvity Inc	RVTY	123.407	107.18	13,227		0.26%		-7.32%	
Emerson Electric Co	EMR	570.1	91.73	52,295	0.17%	2.29%	0.00%	12.01%	0.02%
EOG Resources Inc	EOG	583.15	113.79	66,357	0.21%	3.20%	0.01%	17.83%	0.04%
Aon PLC	AON	200.216	298.43	59,750	0.19%	0.82%	0.00%	10.03%	0.02%
Entergy Corp	ETR	211.456	99.76	21,095	0.07%	4.53%	0.00%	6.51%	0.00%
Equifax Inc	EFX	123.217	244.34	30,107	0.10%	0.64%	0.00%	13.64%	0.01%
EQT Corp	EQT	411.332	35.4	14,561		1.78%		21.41%	
IQVIA Holdings Inc	IQV	182.5	208.23	38,002	0.12%			9.67%	0.01%
Gartner Inc	IT	77.949	457.44	35,657	0.11%			8.24%	0.01%
FedEx Corp	FDX	249.893	241.29	60,297	0.19%	2.09%	0.00%	13.50%	0.03%
FMC Corp	FMC	124.759	56.2	7,011		4.13%		-4.00%	
Brown & Brown Inc	BRO	284.6	77.43	22,037	0.07%	0.67%	0.00%	7.91%	0.01%
Ford Motor Co	F	3932.102	11.72	46,084		5.12%		-2.52%	
NextEra Energy Inc	NEE	2023.714	58.63	118,650	0.37%	3.19%	0.01%	8.10%	0.03%
Franklin Resources Inc	BEN	526.558	26.63	14,022		4.66%		-7.00%	
Garmin Ltd	GRMN	191.331	119.49	22,862	0.07%	2.44%	0.00%	5.60%	0.00%
Freeport-McMoRan Inc	FCX	1433.977	39.69	56,915		1.51%		-15.66%	
Dexcom Inc	DXCM	386.374	121.35	46,886				26.89%	
General Dynamics Corp	GD	272.897	264.99	72,315	0.23%	1.99%	0.00%	11.30%	0.03%
General Mills Inc	GIS	567.89	64.91	36,862	0.12%	3.64%	0.00%	8.00%	0.01%
Genuine Parts Co	GPC	140.197	140.23	19,660	0.06%	2.71%	0.00%	9.26%	0.01%
Atmos Energy Corp	ATO	150.834	113.94	17,186	0.05%	2.83%	0.00%	7.26%	0.00%
WW Grainger Inc	GWW	49.634	895.64	44,454		0.83%			
Halliburton Co	HAL	895.052	35.65	31,909	0.10%	1.91%	0.00%	16.34%	0.02%
L3Harris Technologies Inc	LHX	189.54	208.42	39,504	0.12%	2.19%	0.00%	5.53%	0.01%
Healthpeak Properties Inc	PEAK	547.074	18.5	10,121	0.03%	6.49%	0.00%	1.21%	0.00%
Insulet Corp	PODD	69.828	190.87	13,328				39.34%	
Catalent Inc	CTLT	180.641	51.64	9,328				26.24%	
Fortive Corp	FTV	351.434	78.18	27,475	0.09%	0.41%	0.00%	9.29%	0.01%
Hershey Co/The	HSY	149.885	193.54	29,009	0.09%	2.46%	0.00%	9.00%	0.01%
Synchrony Financial	SYF	406.9	38.87	15,816		2.57%			
Hormel Foods Corp	HRL	546.84	30.37	16,608	0.05%	3.72%	0.00%	1.08%	0.00%
Arthur J Gallagher & Co	AJG	216.686	232.16	50,306	0.16%	1.03%	0.00%	12.38%	0.02%
Mondelez International Inc	MDLZ	1360.896	75.27	102,435	0.32%	2.26%	0.01%	8.83%	0.03%
CenterPoint Energy Inc	CNP	629.432	27.94	17,586	0.06%	2.86%	0.00%	8.02%	0.00%
Humana Inc	HUM	122.224	378.06	46,208		0.94%		-3.07%	
Willis Towers Watson PLC	WTW	103.26	246.3	25,433	0.08%	1.36%	0.00%	10.94%	0.01%
Illinois Tool Works Inc	ITW	300.886	260.9	78,501	0.25%	2.15%	0.01%	3.86%	0.01%
CDW Corp/DE	CDW	133.96	226.72	30,371	0.10%	1.09%	0.00%	13.10%	0.01%
Trane Technologies PLC	TT	227.557	252.05	57,356	0.18%	1.19%	0.00%	13.04%	0.02%
Interpublic Group of Cos Inc/The	IPG	383.004	32.99	12,635	0.04%	3.76%	0.00%	6.29%	0.00%
International Flavors & Fragrances Inc	IFF	255.279	80.68	20,596	0.07%	4.02%	0.00%	5.67%	0.00%
Generac Holdings Inc	GNRC	61.432	113.67	6,983	0.02%			5.00%	0.00%
NXP Semiconductors NV	NXPI	257.763	210.57	54,277		1.93%		34.00%	
Kellanova	K	342.52	54.76	18,756		4.09%		-2.42%	
Broadridge Financial Solutions Inc	BR	117.647	204.2	24,024		1.57%			
Kimberly-Clark Corp	KMB	337.941	120.97	40,881	0.13%	4.03%	0.01%	4.42%	0.01%
Kimco Realty Corp	KIM	671.722	20.2	13,569	0.04%	4.75%	0.00%	4.75%	0.00%
Oracle Corp	ORCL	2748.922	111.7	307,055	0.97%	1.43%	0.01%	15.00%	0.15%
Kroger Co/The	KR	719.423	46.14	33,194	0.10%	2.51%	0.00%	4.21%	0.00%
Lennar Corp	LEN	247.163	149.85	37,037	0.12%	1.33%	0.00%	9.02%	0.01%
Eli Lilly & Co	LLY	949.307	645.61	612,882		0.81%		24.60%	
Bath & Body Works Inc	BBWI	225.941	42.66	9,639	0.03%	1.88%	0.00%	6.51%	0.00%
Charter Communications Inc	CHTR	147.92	370.71	54,835	0.17%			12.44%	0.02%
Loews Corp	L	223.251	72.86	16,266		0.34%			
Lowe's Cos Inc	LOW	575.113	212.84	122,407	0.39%	2.07%	0.01%	4.43%	0.02%
Hubbell Inc	HUBB	53.622	335.57	17,994	0.06%	1.45%	0.00%	18.00%	0.01%
IDEX Corp	IEX	75.626	211.5	15,995	0.05%	1.21%	0.00%	11.00%	0.01%
Marsh & McLennan Cos Inc	MMC	493.072	193.84	95,577	0.30%	1.47%	0.00%	8.27%	0.02%
Masco Corp	MAS	224.501	67.29	15,107	0.05%	1.69%	0.00%	6.17%	0.00%
S&P Global Inc	SPGI	316.8	448.35	142,037	0.45%	0.81%	0.00%	13.58%	0.06%
Medtronic PLC	MDT	1329.654	87.54	116,398	0.37%	3.15%	0.01%	4.33%	0.02%
Viatris Inc	VTRS	1199.671	11.77	14,120		4.08%		-2.58%	
CVS Health Corp	CVS	1286.897	74.37	95,707	0.30%	3.58%	0.01%	6.24%	0.02%
DuPont de Nemours Inc	DD	430.042	61.8	26,577	0.08%	2.33%	0.00%	10.20%	0.01%
Micron Technology Inc	MU	1103.909	85.75	94,660		0.54%		-7.00%	
Motorola Solutions Inc	MSI	165.968	319.5	53,027	0.17%	1.23%	0.00%	10.82%	0.02%
Cboe Global Markets Inc	CBOE	105.556	183.85	19,406	0.06%	1.20%	0.00%	12.81%	0.01%

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Laboratory Corp of America Holdings	LH	84.9	222.3	18,873		1.30%		-7.29%	
Newmont Corp	NEM	1152.492	34.51	39,772	0.13%	4.64%	0.01%	6.21%	0.01%
NIKE Inc	NKE	1217.225	101.53	123,585	0.39%	1.46%	0.01%	14.65%	0.06%
NiSource Inc	NI	413.415	25.97	10,736	0.03%	4.08%	0.00%	7.65%	0.00%
Norfolk Southern Corp	NSC	225.681	233.89	52,785	0.17%	2.31%	0.00%	0.61%	0.00%
Principal Financial Group Inc	PFG	238.412	79.1	18,858	0.06%	3.39%	0.00%	8.77%	0.01%
Eversource Energy	ES	349.086	54.22	18,927	0.06%	5.27%	0.00%	5.21%	0.00%
Northrop Grumman Corp	NOC	150.036	446.76	67,030	0.21%	1.67%	0.00%	16.03%	0.03%
Wells Fargo & Co	WFC	3598.9	49.83	179,333	0.57%	2.81%	0.02%	13.41%	0.08%
Nucor Corp	NUE	245.839	186.93	45,955		1.16%		-10.80%	
Occidental Petroleum Corp	OXY	877.581	57.57	50,522		1.25%			
Omnicom Group Inc	OMC	197.934	90.38	17,889	0.06%	3.10%	0.00%	4.83%	0.00%
ONEOK Inc	OKE	582.551	68.25	39,759	0.13%	5.80%	0.01%	7.65%	0.01%
Raymond James Financial Inc	RJF	208.7	110.18	22,995	0.07%	1.63%	0.00%	13.15%	0.01%
PG&E Corp	PCG	2133.508	16.87	35,992	0.11%	0.24%	0.00%	6.26%	0.01%
Parker-Hannifin Corp	PH	128.476	464.5	59,677	0.19%	1.27%	0.00%	15.28%	0.03%
Rollins Inc	ROL	484.038	43.31	20,964	0.07%	1.39%	0.00%	14.86%	0.01%
PPL Corp	PPL	737.124	26.2	19,313	0.06%	3.66%	0.00%	8.00%	0.00%
ConocoPhillips	COP	1187.408	111.87	132,835	0.42%	0.52%	0.00%	12.00%	0.05%
PulteGroup Inc	PHM	215.595	104.56	22,543	0.07%	0.77%	0.00%	5.41%	0.00%
Pinnacle West Capital Corp	PNW	113.312	68.9	7,807	0.02%	5.11%	0.00%	6.98%	0.00%
PNC Financial Services Group Inc/The	PNC	398	151.21	60,182	0.19%	4.10%	0.01%	14.67%	0.03%
PPG Industries Inc	PPG	235.8	141.04	33,257	0.11%	1.84%	0.00%	11.71%	0.01%
Progressive Corp/The	PGR	585.3	178.25	104,330		0.22%		29.97%	
Veralto Corp	VLTO	246.308	76.69	18,889		0.47%			
Public Service Enterprise Group Inc	PEG	499.111	57.99	28,943	0.09%	3.93%	0.00%	5.47%	0.01%
Robert Half Inc	RHI	105.895	79.54	8,423		2.41%			
Cooper Cos Inc/The	COO	49.526	373.03	18,475	0.06%			9.41%	0.01%
Edison International	EIX	383.568	67.48	25,883	0.08%	4.62%	0.00%	6.00%	0.00%
Schlumberger NV	SLB	1427.395	48.7	69,514		2.26%		20.37%	
Charles Schwab Corp/The	SCHW	1771.682	62.92	111,474		1.59%			
Sherwin-Williams Co/The	SHW	255.966	304.38	77,911	0.25%	0.80%	0.00%	10.94%	0.03%
West Pharmaceutical Services Inc	WST	73.99	373.03	27,600	0.09%	0.21%	0.00%	18.89%	0.02%
J M Smucker Co/The	SJM	106.144	131.55	13,963	0.04%	3.22%	0.00%	6.91%	0.00%
Snap-on Inc	SNA	52.78	289.93	15,303	0.05%	2.57%	0.00%	4.85%	0.00%
AMETEK Inc	AME	230.799	162.05	37,401	0.12%	0.62%	0.00%	6.87%	0.01%
Uber Technologies Inc	UBER	2057.858	65.27	134,316				68.00%	
Southern Co/The	SO	1091.515	69.52	75,882	0.24%	4.03%	0.01%	4.50%	0.01%
Truist Financial Corp	TFC	1333.743	37.06	49,429	0.16%	5.61%	0.01%	7.33%	0.01%
Southwest Airlines Co	LUV	596.115	29.89	17,818	0.06%	2.41%	0.00%	15.74%	0.01%
W R Berkley Corp	WRB	256.545	81.88	21,006	0.07%	0.54%	0.00%	15.00%	0.01%
Stanley Black & Decker Inc	SWK	153.311	93.3	14,304	0.05%	3.47%	0.00%	9.00%	0.00%
Public Storage	PSA	175.829	283.19	49,793	0.16%	4.24%	0.01%	3.77%	0.01%
Arista Networks Inc	ANET	311.1	258.68	80,475	0.25%			19.72%	0.05%
Sysco Corp	SYY	497.83	80.93	40,289	0.13%	2.47%	0.00%	14.00%	0.02%
Corteva Inc	CTVA	704.88	45.48	32,058	0.10%	1.41%	0.00%	16.42%	0.02%
Texas Instruments Inc	TXN	909	160.12	145,549	0.46%	3.25%	0.01%	10.00%	0.05%
Textron Inc	TXT	196.005	84.71	16,604		0.09%			
Thermo Fisher Scientific Inc	TMO	386.372	538.98	208,247		0.26%			
TJX Cos Inc/The	TJX	1139.677	94.91	108,167	0.34%	1.40%	0.00%	6.38%	0.02%
Globe Life Inc	GL	94.119	122.82	11,560		0.73%			
Johnson Controls International plc	JCI	681.477	52.69	35,907	0.11%	2.81%	0.00%	9.77%	0.01%
Ulta Beauty Inc	ULTA	48.562	502.05	24,381	0.08%			6.26%	0.00%
Union Pacific Corp	UNP	609.597	243.93	148,699	0.47%	2.13%	0.01%	11.00%	0.05%
Keysight Technologies Inc	KEYS	175.045	153.26	26,827	0.08%			2.61%	0.00%
UnitedHealth Group Inc	UNH	924.925	511.74	473,321	1.50%	1.47%	0.02%	10.61%	0.16%
Blackstone Inc	BX	719.358	124.45	89,524	0.28%	3.02%	0.01%	8.58%	0.02%
Marathon Oil Corp	MRO	585.247	22.85	13,373	0.04%	1.93%	0.00%	8.00%	0.00%
Bio-Rad Laboratories Inc	BIO	24.059	320.89	7,720					
Ventas Inc	VTR	402.381	46.39	18,666	0.06%	3.88%	0.00%	8.66%	0.01%
VF Corp	VFC	388.883	16.46	6,401	0.02%	2.19%	0.00%	3.10%	0.00%
Vulcan Materials Co	VMC	132.873	226.01	30,031		0.76%		22.79%	
Weyerhaeuser Co	WY	730.001	32.77	23,922		0.43%			
Whirlpool Corp	WHR	55	109.52	6,024		6.39%		-1.36%	
Williams Cos Inc/The	WMB	1216.499	34.66	42,164	0.13%	5.48%	0.01%	3.50%	0.00%
Constellation Energy Corp	CEG	319.382	122	38,965		0.92%		27.95%	
WEC Energy Group Inc	WEC	315.435	80.76	25,475	0.08%	4.14%	0.00%	6.39%	0.01%
Adobe Inc	ADBE	452	617.78	279,237	0.88%			16.91%	0.15%
AES Corp/The	AES	669.629	16.68	11,169	0.04%	4.14%	0.00%	10.14%	0.00%
Expeditors International of Washington Inc	EXPD	145.389	126.33	18,367		1.09%		-16.00%	
Amgen Inc	AMGN	535.178	314.26	168,185	0.53%	2.86%	0.02%	4.23%	0.02%
Apple Inc	AAPL	15461.896	184.4	2,851,174	9.01%	0.52%	0.05%	13.00%	1.17%
Autodesk Inc	ADSK	213.915	253.81	54,294	0.17%			12.48%	0.02%
Cintas Corp	CTAS	101.371	604.57	61,286	0.19%	0.89%	0.00%	11.35%	0.02%
Comcast Corp	CMCSA	3962.413	46.54	184,411	0.58%	2.66%	0.02%	9.65%	0.06%
Molson Coors Beverage Co	TAP	200.955	61.79	12,417	0.04%	2.65%	0.00%	12.08%	0.00%
KLA Corp	KLAC	135.234	594.04	80,334	0.25%	0.98%	0.00%	9.06%	0.02%
Marriott International Inc/MD	MAR	293.691	239.73	70,407	0.22%	0.87%	0.00%	17.45%	0.04%
Fiserv Inc	FI	600.186	141.87	85,148	0.27%			15.20%	0.04%
McCormick & Co Inc/MD	MKC	251.441	68.16	17,138	0.05%	2.46%	0.00%	5.40%	0.00%
PACCAR Inc	PCAR	523.3	100.39	52,534	0.17%	1.08%	0.00%	12.00%	0.02%
Costco Wholesale Corp	COST	443.728	693.86	307,885	0.97%	0.59%	0.01%	7.64%	0.07%
Stryker Corp	SYK	379.895	335.48	127,447	0.40%	0.95%	0.00%	8.20%	0.03%
Tyson Foods Inc	TSN	286.351	54.76	15,681		3.58%		46.71%	
Lamb Weston Holdings Inc	LW	144.372	102.08	14,737	0.05%	1.41%	0.00%	15.46%	0.01%
Applied Materials Inc	AMAT	832.062	164.3	136,708	0.43%	0.78%	0.00%	5.50%	0.02%
American Airlines Group Inc	AAL	653.541	14.23	9,300				-7.46%	
Cardinal Health Inc	CAH	246.468	109.19	26,912	0.09%	1.83%	0.00%	13.66%	0.01%
Cincinnati Financial Corp	CINF	156.908	110.8	17,385	0.05%	2.92%	0.00%	15.15%	0.01%
Paramount Global	PARA	610.704	14.59	8,910		1.37%		-21.36%	

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Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
DR Horton Inc	DHI	331.817	142.91	47,420	0.15%	0.84%	0.00%	4.49%	0.01%
Electronic Arts Inc	EA	268.966	137.58	37,004	0.12%	0.55%	0.00%	11.07%	0.01%
Fair Isaac Corp	FICO	24.852	1198.83	29,793				22.00%	
Fastenal Co	FAST	571.982	68.23	39,026		2.29%			
M&T Bank Corp	MTB	166.149	138.1	22,945	0.07%	3.77%	0.00%	8.08%	0.01%
Xcel Energy Inc	XEL	551.816	59.87	33,037	0.10%	3.47%	0.00%	6.21%	0.01%
Fifth Third Bancorp	FITB	681.125	34.24	23,322		4.09%		25.00%	
Gilead Sciences Inc	GILD	1246.042	78.26	97,515	0.31%	3.83%	0.01%	3.06%	0.01%
Hasbro Inc	HAS	138.764	48.95	6,792		5.72%		-3.49%	
Huntington Bancshares Inc/OH	HBAN	1448	12.73	18,433		4.87%		-5.65%	
Welltower Inc	WELL	556.094	86.51	48,108	0.15%	2.82%	0.00%	9.22%	0.01%
Biogen Inc	BIIB	144.898	246.66	35,741	0.11%			10.50%	0.01%
Northern Trust Corp	NTRS	205.126	79.64	16,336	0.05%	3.77%	0.00%	2.57%	0.00%
Packaging Corp of America	PKG	89.624	165.88	14,867	0.05%	3.01%	0.00%	3.00%	0.00%
Paychex Inc	PAYX	359.822	121.73	43,801	0.14%	2.92%	0.00%	7.00%	0.01%
QUALCOMM Inc	QCOM	1116	148.51	165,737	0.52%	2.15%	0.01%	10.81%	0.06%
Ross Stores Inc	ROST	336.666	140.28	47,228	0.15%	0.96%	0.00%	10.00%	0.01%
IDEXX Laboratories Inc	IDXX	83.052	515.08	42,778	0.14%			16.36%	0.02%
Starbucks Corp	SBUX	1132.2	93.03	105,329	0.33%	2.45%	0.01%	15.41%	0.05%
KeyCorp	KEY	936.564	14.53	13,608		5.64%		-1.67%	
Fox Corp	FOXA	247.227	32.3	7,985	0.03%	1.61%	0.00%	12.00%	0.00%
Fox Corp	FOX	235.581	30.01	7,070	0.02%	1.73%	0.00%	12.00%	0.00%
State Street Corp	STT	301.944	73.87	22,305	0.07%	3.74%	0.00%	7.85%	0.01%
Norwegian Cruise Line Holdings Ltd	NCLH	425.425	17.8	7,573					
US Bancorp	USB	1558	41.54	64,719	0.20%	4.72%	0.01%	6.00%	0.01%
A O Smith Corp	AOS	122.828	77.61	9,533		1.65%			
Gen Digital Inc	GEN	640.715	23.48	15,044	0.05%	2.13%	0.00%	12.98%	0.01%
T Rowe Price Group Inc	TROW	223.47	108.45	24,235		4.57%		-1.21%	
Waste Management Inc	WM	402.775	185.63	74,767	0.24%	1.51%	0.00%	10.39%	0.02%
Constellation Brands Inc	STZ	182.796	245.08	44,800	0.14%	1.45%	0.00%	10.63%	0.02%
DENTSPLY SIRONA Inc	XRAY	211.86	34.75	7,362	0.02%	1.61%	0.00%	7.93%	0.00%
Zions Bancorp NA	ZION	148.153	41.9	6,208		3.91%		-9.40%	
Invesco Ltd	IVZ	449.5	15.83	7,116	0.02%	5.05%	0.00%	4.00%	0.00%
Intuit Inc	INTU	279.936	631.33	176,732	0.56%	0.57%	0.00%	18.96%	0.11%
Morgan Stanley	MS	1641.312	87.24	143,188	0.45%	3.90%	0.02%	5.28%	0.02%
Microchip Technology Inc	MCHP	541.045	85.18	46,086		2.06%		-1.85%	
Chubb Ltd	CB	405.27	245	99,291	0.31%	1.40%	0.00%	6.00%	0.02%
Hologic Inc	HOLX	234.721	74.44	17,473	0.06%			8.86%	0.00%
Citizens Financial Group Inc	CFG	466.418	32.7	15,252		5.14%		-6.96%	
Jabil Inc	JBL	127.546	125.29	15,980	0.05%	0.26%	0.00%	12.00%	0.01%
O'Reilly Automotive Inc	ORLY	59.162	1023.05	60,526	0.19%			11.80%	0.02%
Allstate Corp/The	ALL	261.687	155.25	40,627		2.29%		-7.00%	
Equity Residential	EQR	379.291	60.19	22,830	0.07%	4.40%	0.00%	4.75%	0.00%
BorgWarner Inc	BWA	235.055	33.9	7,968	0.03%	1.30%	0.00%	4.81%	0.00%
Keurig Dr Pepper Inc	KDP	1398.336	31.44	43,964	0.14%	2.74%	0.00%	6.81%	0.01%
Host Hotels & Resorts Inc	HST	705.4	19.22	13,558		4.16%			
Incyte Corp	INCY	224.109	58.77	13,171				37.00%	
Simon Property Group Inc	SPG	326.247	138.61	45,221	0.14%	5.48%	0.01%	1.71%	0.00%
Eastman Chemical Co	EMN	118.564	83.55	9,906	0.03%	3.88%	0.00%	5.02%	0.00%
AvalonBay Communities Inc	AVB	142.015	179.01	25,422	0.08%	3.80%	0.00%	5.95%	0.00%
Prudential Financial Inc	PRU	361	104.93	37,880	0.12%	4.77%	0.01%	10.55%	0.01%
United Parcel Service Inc	UPS	723.257	141.9	102,630		4.59%		-0.39%	
Walgreens Boots Alliance Inc	WBA	862.376	22.57	19,464	0.06%	4.43%	0.00%	0.31%	0.00%
STERIS PLC	STE	98.8	218.95	21,632		0.95%			
McKesson Corp	MCK	133.062	499.89	66,516	0.21%	0.50%	0.00%	10.04%	0.02%
Lockheed Martin Corp	LMT	241.643	429.41	103,764	0.33%	2.93%	0.01%	5.39%	0.02%
Cencora Inc	COR	199.482	232.68	46,415	0.15%	0.88%	0.00%	8.66%	0.01%
Capital One Financial Corp	COF	380.4	135.32	51,476		1.77%		50.24%	
Waters Corp	WAT	59.127	317.71	18,785	0.06%			4.87%	0.00%
Nordson Corp	NDSN	57.016	251.72	14,352		1.08%		45.00%	
Dollar Tree Inc	DLTR	217.872	130.62	28,458	0.09%			7.77%	0.01%
Darden Restaurants Inc	DRI	119.411	162.58	19,414	0.06%	3.22%	0.00%	3.78%	0.00%
Evergy Inc	EVRG	229.583	50.77	11,656	0.04%	5.06%	0.00%	4.35%	0.00%
Match Group Inc	MTCH	271.812	38.38	10,432				28.33%	
Domino's Pizza Inc	DPZ	34.881	426.22	14,867	0.05%	1.14%	0.00%	12.71%	0.01%
NVR Inc	NVR	3.195	7075.29	22,606	0.07%			4.41%	0.00%
NetApp Inc	NTAP	206.031	87.2	17,966	0.06%	2.29%	0.00%	6.00%	0.00%
Old Dominion Freight Line Inc	ODFL	109.114	391.02	42,666	0.13%	0.53%	0.00%	9.31%	0.01%
DaVita Inc	DVA	91.3	108.16	9,875	0.03%			19.69%	0.01%
Hartford Financial Services Group Inc/The	HIG	300.77	86.96	26,155	0.08%	2.16%	0.00%	7.00%	0.01%
Iron Mountain Inc	IRM	291.99	67.52	19,715	0.06%	3.85%	0.00%	4.00%	0.00%
Estee Lauder Cos Inc/The	EL	232.305	131.99	30,662	0.10%	2.00%	0.00%	10.88%	0.01%
Cadence Design Systems Inc	CDNS	272.062	288.46	78,479	0.25%			17.03%	0.04%
Tyler Technologies Inc	TYL	42.124	422.75	17,808					
Universal Health Services Inc	UHS	61.007	158.81	9,689	0.03%	0.50%	0.00%	11.38%	0.00%
Skyworks Solutions Inc	SWKS	160.226	104.46	16,737	0.05%	2.60%	0.00%	9.03%	0.00%
Quest Diagnostics Inc	DGX	112.435	128.43	14,440		2.21%		-1.18%	
Rockwell Automation Inc	ROK	114.592	253.28	29,024	0.09%	1.97%	0.00%	11.06%	0.01%
Kraft Heinz Co/The	KHC	1226.539	37.13	45,541	0.14%	4.31%	0.01%	4.46%	0.01%
American Tower Corp	AMT	466.165	195.65	91,205	0.29%	3.48%	0.01%	11.81%	0.03%
Regeneron Pharmaceuticals Inc	REGN	107.129	942.78	100,999	0.32%			5.33%	0.02%
Amazon.com Inc	AMZN	10334.031	155.2	1,603,842				35.10%	
Jack Henry & Associates Inc	JKHY	72.828	165.83	12,077	0.04%	1.25%	0.00%	7.06%	0.00%
Ralph Lauren Corp	RL	39.752	143.67	5,711	0.02%	2.09%	0.00%	10.25%	0.00%
Boston Properties Inc	BXP	156.941	66.5	10,437		5.89%		-1.26%	
Amphenol Corp	APH	598.31	101.1	60,489	0.19%	0.87%	0.00%	9.02%	0.02%
Howmet Aerospace Inc	HWM	411.744	56.26	23,165		0.36%		20.41%	
Pioneer Natural Resources Co	PXD	233.623	229.83	53,694	0.17%	5.57%	0.01%	2.00%	0.00%
Valero Energy Corp	VLO	340.453	138.9	47,289	0.15%	3.08%	0.00%	8.16%	0.01%
Synopsys Inc	SNPS	152.521	533.35	81,347	0.26%			17.68%	0.05%

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Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Etsy Inc	ETSY	119.746	66.56	7,970	0.03%			8.47%	0.00%
CH Robinson Worldwide Inc	CHRW	116.651	84.09	9,809		2.90%		-10.00%	
Accenture PLC	ACN	666.512	363.88	242,530	0.77%	1.42%	0.01%	10.00%	0.08%
TransDigm Group Inc	TDG	55.594	1092.68	60,746	0.19%			15.56%	0.03%
Yum! Brands Inc	YUM	280.308	129.49	36,297	0.11%	2.07%	0.00%	11.49%	0.01%
Prologis Inc	PLD	923.971	126.69	117,058	0.37%	2.75%	0.01%	8.60%	0.03%
FirstEnergy Corp	FE	573.815	36.68	21,048		4.47%		-0.33%	
VeriSign Inc	VRSN	102.1	198.88	20,306	0.06%			11.50%	0.01%
Quanta Services Inc	PWR	145.285	194.05	28,193	0.09%	0.19%	0.00%	8.00%	0.01%
Henry Schein Inc	HSIC	130.585	74.84	9,773	0.03%			3.44%	0.00%
Ameren Corp	AEE	262.945	69.57	18,293	0.06%	3.62%	0.00%	6.40%	0.00%
ANSYS Inc	ANSS	86.917	327.83	28,494	0.09%			9.00%	0.01%
FactSet Research Systems Inc	FDS	38.086	475.92	18,126	0.06%	0.82%	0.00%	10.60%	0.01%
NVIDIA Corp	NVDA	2470	615.27	1,519,717		0.03%		43.97%	
Cognizant Technology Solutions Corp	CTSH	501.413	77.12	38,669	0.12%	1.50%	0.00%	12.00%	0.01%
Intuitive Surgical Inc	ISRG	352.326	378.22	133,257	0.42%			12.00%	0.05%
Take-Two Interactive Software Inc	TTWO	170.068	164.93	28,049				35.02%	
Republic Services Inc	RSG	314.637	171.12	53,841	0.17%	1.25%	0.00%	10.11%	0.02%
eBay Inc	EBAY	519	41.07	21,315	0.07%	2.43%	0.00%	0.32%	0.00%
Goldman Sachs Group Inc/The	GS	326.112	384.01	125,230	0.40%	2.86%	0.01%	8.36%	0.03%
SBA Communications Corp	SBAC	107.887	223.86	24,152	0.08%	1.52%	0.00%	8.00%	0.01%
Sempra	SRE	629.328	71.56	45,035	0.14%	3.33%	0.00%	4.95%	0.01%
Moody's Corp	MCO	183	392.04	71,743	0.23%	0.79%	0.00%	13.59%	0.03%
ON Semiconductor Corp	ON	430.698	71.13	30,636	0.10%			1.60%	0.00%
Booking Holdings Inc	BKNG	34.89	3507.47	122,376	0.39%			15.00%	0.06%
F5 Inc	FFIV	58.797	183.7	10,801	0.03%			7.09%	0.00%
Akamai Technologies Inc	AKAM	150.832	123.23	18,587	0.06%			7.87%	0.00%
Charles River Laboratories International Inc	CRL	51.297	216.28	11,095	0.04%			14.00%	0.00%
MarketAxess Holdings Inc	MKTX	37.905	225.51	8,548		1.31%			
Devon Energy Corp	DVN	640.7	42.02	26,922		7.33%		21.68%	
Alphabet Inc	GOOGL	5893	140.1	825,609	2.61%			10.05%	0.26%
Bio-Techne Corp	TECH	158.15	70.32	11,121	0.04%	0.46%	0.00%	5.00%	0.00%
Teleflex Inc	TFX	46.993	242.83	11,411	0.04%	0.56%	0.00%	7.00%	0.00%
Allegion plc	ALLE	87.788	123.89	10,876	0.03%	1.45%	0.00%	5.14%	0.00%
Netflix Inc	NFLX	432.76	564.11	244,124				31.81%	
Warner Bros Discovery Inc	WBD	2438.566	10.02	24,434				91.04%	
Agilent Technologies Inc	A	293.004	130.1	38,120		0.73%			
Trimble Inc	TRMB	248.768	50.86	12,652					
Elevance Health Inc	ELV	234.959	493.44	115,938	0.37%	1.32%	0.00%	10.83%	0.04%
CME Group Inc	CME	359.99	205.84	74,100	0.23%	2.14%	0.01%	8.54%	0.02%
Juniper Networks Inc	JNPR	318.868	36.96	11,785	0.04%	2.38%	0.00%	7.96%	0.00%
BlackRock Inc	BLK	148.762	774.31	115,188	0.36%	2.63%	0.01%	9.00%	0.03%
DTE Energy Co	DTE	206.109	105.42	21,728	0.07%	3.87%	0.00%	7.00%	0.00%
Celanese Corp	CE	108.855	146.29	15,924	0.05%	1.91%	0.00%	2.16%	0.00%
Nasdaq Inc	NDAQ	576.965	57.77	33,331	0.11%	1.52%	0.00%	9.08%	0.01%
Philip Morris International Inc	PM	1552.406	90.85	141,036	0.45%	5.72%	0.03%	6.49%	0.03%
Ingersoll Rand Inc	IR	404.797	79.86	32,327	0.10%	0.10%	0.00%	14.00%	0.01%
Salesforce Inc	CRM	968	281.09	272,095				22.50%	
Roper Technologies Inc	ROP	106.822	537	57,363	0.18%	0.56%	0.00%	8.00%	0.01%
Huntington Ingalls Industries Inc	HII	39.723	258.92	10,285		2.01%		40.00%	
MetLife Inc	MET	740.19	69.32	51,310	0.16%	3.00%	0.00%	9.84%	0.02%
Tapestry Inc	TPR	229.186	38.79	8,890	0.03%	3.61%	0.00%	11.00%	0.00%
CSX Corp	CSX	1976.131	35.7	70,548	0.22%	1.23%	0.00%	6.75%	0.02%
Edwards Lifesciences Corp	EW	606.5	78.47	47,592	0.15%			8.75%	0.01%
Ameriprise Financial Inc	AMP	101.196	386.83	39,146		1.40%			
Zebra Technologies Corp	ZBRA	51.36	239.55	12,303					
Zimmer Biomet Holdings Inc	ZBH	208.981	125.6	26,248	0.08%	0.76%	0.00%	7.19%	0.01%
Camden Property Trust	CPT	106.771	93.84	10,019	0.03%	4.26%	0.00%	5.67%	0.00%
CBRE Group Inc	CBRE	304.793	86.31	26,307					
Mastercard Inc	MA	930.438	449.23	417,981	1.32%	0.59%	0.01%	16.64%	0.22%
CarMax Inc	KMX	157.921	71.18	11,241				29.90%	
Intercontinental Exchange Inc	ICE	572.364	127.33	72,879	0.23%	1.32%	0.00%	9.64%	0.02%
Fidelity National Information Services Inc	FIS	592.484	62.26	36,888	0.12%	3.34%	0.00%	11.42%	0.01%
Chipotle Mexican Grill Inc	CMG	27.445	2408.77	66,109				24.78%	
Wynn Resorts Ltd	WYNN	112.946	94.43	10,665		1.06%		140.51%	
Live Nation Entertainment Inc	LYV	230.325	88.85	20,464					
Assurant Inc	AIZ	52.591	167.95	8,833	0.03%	1.71%	0.00%	11.66%	0.00%
NRG Energy Inc	NRG	225.764	53.04	11,975	0.04%	3.07%	0.00%	8.88%	0.00%
Monster Beverage Corp	MNST	1040.441	55.02	57,245	0.18%			15.46%	0.03%
Regions Financial Corp	RF	930.065	18.67	17,364	0.05%	5.14%	0.00%	1.41%	0.00%
Baker Hughes Co	BKR	1006.234	28.5	28,678	0.09%	2.81%	0.00%	17.00%	0.02%
Mosaic Co/The	MOS	326.835	30.71	10,037		2.74%		24.50%	
Expedia Group Inc	EXPE	133.325	148.33	19,776	0.06%			17.50%	0.01%
CF Industries Holdings Inc	CF	191.057	75.51	14,427		2.65%		46.00%	
APA Corp	APA	306.719	31.33	9,610	0.03%	3.19%	0.00%	2.00%	0.00%
Leidos Holdings Inc	LDOS	137.506	110.47	15,190	0.05%	1.38%	0.00%	8.12%	0.00%
Alphabet Inc	GOOG	5671	141.8	804,148	2.54%			10.05%	0.26%
First Solar Inc	FSLR	106.844	146.3	15,631				43.22%	
TE Connectivity Ltd	TEL	308.799	142.19	43,908	0.14%	1.66%	0.00%	5.27%	0.01%
Discover Financial Services	DFS	250.058	105.52	26,386	0.08%	2.65%	0.00%	17.16%	0.01%
Visa Inc	V	1581.59	273.26	432,185	1.37%	0.76%	0.01%	13.41%	0.18%
Mid-America Apartment Communities Inc	MAA	116.688	126.38	14,747	0.05%	4.65%	0.00%	1.86%	0.00%
Xylem Inc/NY	XYL	241.078	112.44	27,107		1.17%			
Marathon Petroleum Corp	MPC	379.697	165.6	62,878		1.99%		-11.89%	
Tractor Supply Co	TSCO	108.114	224.6	24,282	0.08%	1.83%	0.00%	3.42%	0.00%
Advanced Micro Devices Inc	AMD	1615.787	167.69	270,951				29.35%	
ResMed Inc	RMD	147.089	190.2	27,976	0.09%	1.01%	0.00%	8.67%	0.01%
Mettler-Toledo International Inc	MTD	21.684	1197.19	25,960	0.08%			5.96%	0.00%
VICI Properties Inc	VICI	1034.532	30.12	31,160	0.10%	5.51%	0.01%	4.78%	0.00%
Copart Inc	CPRT	960.231	48.04	46,129					

		[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Jacobs Solutions Inc	J	126.316	134.77	17,024	0.05%	0.86%	0.00%	12.31%	0.01%
Albemarle Corp	ALB	117.353	114.74	13,465		1.39%		35.15%	
Fortinet Inc	FTNT	767.91	64.49	49,523	0.16%			14.37%	0.02%
Moderna Inc	MRNA	381.284	101.05	38,529				-29.33%	
Essex Property Trust Inc	ESS	64.183	233.27	14,972	0.05%	3.96%	0.00%	5.71%	0.00%
CoStar Group Inc	CSGP	408.363	83.48	34,090	0.11%			20.00%	0.02%
Realty Income Corp	O	831.787	54.39	45,241	0.14%	5.66%	0.01%	1.39%	0.00%
Westrock Co	WRK	256.508	40.26	10,327	0.03%	3.01%	0.00%	5.70%	0.00%
Westinghouse Air Brake Technologies Corp	WAB	179.159	131.57	23,572	0.07%	0.52%	0.00%	14.08%	0.01%
Pool Corp	POOL	38.679	371.25	14,360		1.19%		-0.25%	
Western Digital Corp	WDC	324.243	57.25	18,563				-13.91%	
PepsiCo Inc	PEP	1374.864	168.53	231,706	0.73%	3.00%	0.02%	8.62%	0.06%
Diamondback Energy Inc	FANG	178.985	153.74	27,517	0.09%	8.77%	0.01%	8.47%	0.01%
Palo Alto Networks Inc	PANW	315.3	338.51	106,732				30.00%	
ServiceNow Inc	NOW	205	765.4	156,907				30.00%	
Church & Dwight Co Inc	CHD	246.382	99.85	24,601	0.08%	1.09%	0.00%	6.28%	0.00%
Federal Realty Investment Trust	FRT	81.618	101.73	8,303	0.03%	4.29%	0.00%	4.42%	0.00%
MGM Resorts International	MGM	341.583	43.37	14,814					
American Electric Power Co Inc	AEP	515.176	78.14	40,256	0.13%	4.50%	0.01%	5.11%	0.01%
Invitation Homes Inc	INVH	611.958	32.93	20,152	0.06%	3.40%	0.00%	2.83%	0.00%
PTC Inc	PTC	119.437	180.65	21,576	0.07%			19.53%	0.01%
JB Hunt Transport Services Inc	JBHT	103.143	200.98	20,730	0.07%	0.86%	0.00%	15.00%	0.01%
Lam Research Corp	LRCX	131.103	825.17	108,182	0.34%	0.97%	0.00%	11.37%	0.04%
Mohawk Industries Inc	MHK	63.682	104.25	6,639				-2.33%	
GE HealthCare Technologies Inc	GEHC	455.243	73.36	33,397	0.11%	0.16%	0.00%	12.70%	0.01%
Pentair PLC	PNR	165.299	73.17	12,095	0.04%	1.26%	0.00%	7.53%	0.00%
Vertex Pharmaceuticals Inc	VRTX	257.683	433.38	111,675	0.35%			13.40%	0.05%
Amcor PLC	AMCR	1445.343	9.43	13,630	0.04%	5.30%	0.00%	2.20%	0.00%
Meta Platforms Inc	META	2219.607	390.14	865,957				20.79%	
T-Mobile US Inc	TMUS	1195.807	161.23	192,800	0.61%	1.61%	0.01%	5.25%	0.03%
United Rentals Inc	URI	67.192	625.4	42,022	0.13%	1.04%	0.00%	6.85%	0.01%
Alexandria Real Estate Equities Inc	ARE	174.968	120.9	21,154	0.07%	4.20%	0.00%	5.28%	0.00%
Honeywell International Inc	HON	659.251	202.26	133,340	0.42%	2.14%	0.01%	7.87%	0.03%
Delta Air Lines Inc	DAL	643.463	39.14	25,185	0.08%	1.02%	0.00%	8.37%	0.01%
United Airlines Holdings Inc	UAL	328.017	41.38	13,573				49.56%	
Seagate Technology Holdings PLC	STX	209.511	85.68	17,951		3.27%		-4.90%	
News Corp	NWS	191.385	25.57	4,894		0.78%			
Centene Corp	CNC	534.201	75.31	40,231	0.13%			9.26%	0.01%
Martin Marietta Materials Inc	MLM	61.807	508.42	31,424		0.58%		20.66%	
Teradyne Inc	TER	152.879	96.59	14,767	0.05%	0.50%	0.00%	6.00%	0.00%
PayPal Holdings Inc	PYPL	1078.14	61.35	66,144	0.21%			6.26%	0.01%
Tesla Inc	TSLA	3184.79	187.29	596,479	1.88%			2.00%	0.04%
Arch Capital Group Ltd	ACGL	373.172	82.43	30,761	0.10%			15.00%	0.01%
Dow Inc	DOW	702.293	53.6	37,643		5.22%		23.26%	
Everest Group Ltd	EG	43.39	384.97	16,704		1.82%		33.50%	
Teledyne Technologies Inc	TDY	47.185	418.47	19,746	0.06%			8.03%	0.01%
News Corp	NWSA	380.67	24.64	9,380		0.81%			
Exelon Corp	EXC	994.299	34.81	34,612	0.11%	4.14%	0.00%	4.69%	0.01%
Global Payments Inc	GPN	260.389	133.23	34,692	0.11%	0.75%	0.00%	13.05%	0.01%
Crown Castle Inc	CCI	434	108.25	46,981	0.15%	5.78%	0.01%	7.00%	0.01%
Aptiv PLC	APTV	282.862	81.33	23,005	0.07%			11.44%	0.01%
Align Technology Inc	ALGN	76.589	267.32	20,474	0.06%			12.52%	0.01%
Illumina Inc	ILMN	158.8	143.01	22,710				-9.88%	
Kenvue Inc	KVUE	1914.995	20.76	39,755		3.85%			
Targa Resources Corp	TRGP	222.976	84.96	18,944	0.06%	2.35%	0.00%	14.00%	0.01%
Bunge Global SA	BG	161.429	88.09	14,220		3.01%		-5.94%	
LKQ Corp	LKQ	267.598	46.67	12,489	0.04%	2.57%	0.00%	11.50%	0.00%
Zoetis Inc	ZTS	459.114	187.81	86,226	0.27%	0.92%	0.00%	10.91%	0.03%
Equinix Inc	EQIX	93.883	829.77	77,901	0.25%	2.05%	0.01%	14.63%	0.04%
Digital Realty Trust Inc	DLR	302.846	140.46	42,538	0.13%	3.47%	0.00%	6.80%	0.01%
Molina Healthcare Inc	MOH	58.3	356.44	20,780	0.07%			11.24%	0.01%
Las Vegas Sands Corp	LVS	764.491	48.92	37,399		1.64%			

Notes:
[1] Equals sum of Col. [9]
[2] Equals sum of Col. [11]
[3] Equals ([1] x (1 + (0.5 x [2]))) + [2]
[4] Source: Bloomberg Professional as of January 31, 2024
[5] Source: Bloomberg Professional as of January 31, 2024
[6] Equals [4] x [5]
[7] Equals weight in the S&P 500
[8] Source: Bloomberg Professional as of January 31, 2024
[9] Equals [7] x [8]
[10] Source: Bloomberg Professional, as of January 31, 2024
[11] Equals [7] x [10]

Essential Utilities (WTRG)
2022 Form 10-K p. 47, 50-52, 69, 118.

$000s		Total	Regulated Water	Natural Gas
Revenue	2022	$ 2,226,334.00	$ 1,082,972.00	$ 1,143,362.00
	2021	$ 1,840,105.00	$ 980,203.00	$ 859,902.00
	2020	$ 1,445,104.00	$ 938,540.00	$ 506,564.00
Operating Income	2022	$ 657,508.00	$ 446,258.00	$ 211,250.00
	2021	$ 588,546.00	$ 402,267.00	$ 186,279.00
	2020	$ 453,845.00	$ 397,275.00	$ 56,570.00

		Total	Regulated Water	Natural Gas
Revenue (%)	2022	100.00%	48.64%	51.36%
	2021	100.00%	53.27%	46.73%
	2020	100.00%	64.95%	35.05%
	Average	100.00%	55.62%	44.38%
Operating Income (%)	2022	100.00%	67.87%	32.13%
	2021	100.00%	68.35%	31.65%
	2020	100.00%	87.54%	12.46%
	Average	100.00%	74.59%	25.41%

Revenue adjusted for higher gas costs [1]	2022	$ 1,988,715.00	$ 1,082,972.00	$ 905,743.00
Revenue % adjusted for higher gas costs			54.46%	45.54%

Notes
[1] Essential Utilities 2022-SEC form 10-K, p. 52 indicates that Operating Revenues in 2022 were higher by $237,619,000 as a result of higher gas costs.

1. Mr. Patel DCF - As Filed

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
						Dividend Yield			Earnings Growth Rates				DCF Result Avg.
		Spot Price	52-Wk Low Price	52-Wk High Price	2024 Dividend	Spot	52-Wk	Average	Yahoo	Zacks	Value Line	Average	Gwth Rate
American Water Works, Inc.	AWK	$ 133.51	$ 114.25	$ 162.59	$ 3.00	2.25%	2.17%	2.21%	7.78%	7.80%	3.00%	6.19%	8.40%
American States Water Company	AWR	$ 79.52	$ 75.20	$ 99.19	$ 1.80	2.26%	2.06%	2.16%	4.40%	6.30%	6.50%	5.73%	7.90%
California Water Service Group	CWT	$ 51.89	$ 45.44	$ 63.92	$ 1.12	2.16%	2.05%	2.10%	10.80%	NA	6.50%	8.65%	10.75%
Middlesex Water Company	MSEX	$ 62.95	$ 61.34	$ 90.56	$ 1.32	2.10%	1.74%	1.92%	2.70%	NA	5.00%	3.85%	5.77%
SJW Group	SJW	$ 65.65	$ 56.96	$ 81.90	$ 1.60	2.44%	2.30%	2.37%	6.10%	NA	8%	7.05%	9.42%
								2.15%				Mean	**8.45%**
												Mean - Excluding MSEX	**9.12%**

Notes:
[1] - [4] I&E Exhibit No. 2, Schedule 4
[5] Equals [4] / [1]
[6] Equals [4] / average of [2] and [3]
[7] Equals average of [5] and [6]
[8] - [10] I&E Exhibit No. 2, Schedule 5
[11] Equals average of [8], [9], [10]
[12] Equals [7] + [11]

	DCF
As Filed Results	8.45%
DCF Adjustments (Adj'mts Additive)	
Include Essential in Proxy Group	8.62%
Exclude MSEX Results (No Equity Risk Prem)	9.19%
Use 30-Day Avg Stock Price (Not Spot Price)	9.21%
Use Distribution Utility Proxy Group	9.82%

2. Mr. Patel DCF - Corrected to Include Essential Utilities

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
						Dividend Yield			Earnings Growth Rates				DCF Result Avg.
		Spot Price	52-Wk Low Price	52-Wk High Price	2024 Dividend	Spot	52-Wk	Average Div Yield	Yahoo	Zacks	Value Line	Average	Gwth Rate
American Water Works, Inc.	AWK	$ 133.51	$ 114.25	$ 162.59	$ 3.00	2.25%	2.17%	2.21%	7.78%	7.80%	3.00%	6.19%	8.40%
American States Water Company	AWR	$ 79.52	$ 75.20	$ 99.19	$ 1.80	2.26%	2.06%	2.16%	4.40%	6.30%	6.50%	5.73%	7.90%
California Water Service Group	CWT	$ 51.89	$ 45.44	$ 63.92	$ 1.12	2.16%	2.05%	2.10%	10.80%	NA	6.50%	8.65%	10.75%
Middlesex Water Company	MSEX	$ 62.95	$ 61.34	$ 90.56	$ 1.32	2.10%	1.74%	1.92%	2.70%	NA	5.00%	3.85%	5.77%
SJW Group	SJW	$ 65.65	$ 56.96	$ 81.90	$ 1.60	2.44%	2.30%	2.37%	6.10%	NA	8.00%	7.05%	9.42%
Essential Utilties	WTRG	$ 37.82	$ 32.30	$ 46.70	$ 1.27	3.36%	3.22%	3.36%	5.20%	5.60%	7.50%	6.10%	9.46%
												Mean	**8.62%**
												Mean - Excluding MSEX	**9.19%**

Notes:
[1] - [4] I&E Exhibit No. 2, Schedule 4
[5] Equals [4] / [1]
[6] Equals [4] / average of [2] and [3]
[7] Equals average of [5] and [6]
[8] - [10] I&E Exhibit No. 2, Schedule 5
[11] Equals average of [8], [9], [10]
[12] Equals [7] + [11]

3. Mr. Patel's DCF - Corrected to Replace Spot Price with 30 day Average Stock Price (through January 31, 2024)

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
						Dividend Yield			Earnings Growth Rates				DCF Result Avg.
		30-Day Avg. Price	52-Wk Low Price	52-Wk High Price	2024 Dividend	30 day Avg.	52-Wk	Average	Yahoo	Zacks	Value Line	Average	Gwth Rate
American Water Works, Inc.	AWK	$ 129.57	$ 114.25	$ 162.59	$ 3.00	2.32%	2.17%	2.24%	7.78%	7.80%	3.00%	6.19%	8.43%
American States Water Company	AWR	$ 78.58	$ 75.20	$ 99.19	$ 1.80	2.29%	2.06%	2.18%	4.40%	6.30%	6.50%	5.73%	7.91%
California Water Service Group	CWT	$ 49.27	$ 45.44	$ 63.92	$ 1.12	2.27%	2.05%	2.16%	10.80%	NA	6.50%	8.65%	10.81%
Middlesex Water Company	MSEX	$ 62.37	$ 61.34	$ 90.56	$ 1.32	2.12%	1.74%	1.93%	2.70%	NA	5.00%	3.85%	5.78%
SJW Group	SJW	$ 63.73	$ 56.96	$ 81.90	$ 1.60	2.51%	2.30%	2.41%	6.10%	NA	8.00%	7.05%	9.46%
Essential Utilties	WTRG	$ 37.21	$ 32.30	$ 46.70	$ 1.27	3.41%	3.22%	3.31%	5.20%	5.60%	7.50%	6.10%	9.41%
												Mean	**8.63%**
												Mean - Excluding MSEX	**9.21%**

Notes:
[1] Bloomberg Professional
[2] - [4] I&E Exhibit No. 2, Schedule 4
[5] Equals [4] / [1]
[6] Equals [4] / average of [2] and [3]
[7] Equals average of [5] and [6]
[8] - [10] I&E Exhibit No. 2, Schedule 5
[11] Equals average of [8], [9], [10]
[12] Equals [7] + [11]

4. Mr. Patel DCF - Reasonably Consider Min/Max Growth Rates

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
						Dividend Yield			Earnings Growth Rates				DCF Result		
		30-Day Avg. Price	52-Wk Low Price	52-Wk High Price	2024 Dividend	30 day Avg.	52-Wk	Average	Yahoo	Zacks	Value Line	Average	Avg Gwth Rate	Min Gwth Rate	Max Gwth Rate
American Water Works, Inc.	AWK	$ 129.57	$ 114.25	$ 162.59	$ 3.00	2.32%	2.17%	2.24%	7.78%	7.80%	3.00%	6.19%	8.43%	5.24%	10.04%
American States Water Company	AWR	$ 78.58	$ 75.20	$ 99.19	$ 1.80	2.29%	2.06%	2.18%	4.40%	6.30%	6.50%	5.73%	7.91%	6.58%	8.68%
California Water Service Group	CWT	$ 49.27	$ 45.44	$ 63.92	$ 1.12	2.27%	2.05%	2.16%	10.80%	NA	6.50%	8.65%	10.81%	8.66%	12.96%
Middlesex Water Company	MSEX	$ 62.37	$ 61.34	$ 90.56	$ 1.32	2.12%	1.74%	1.93%	2.70%	NA	5.00%	3.85%	5.78%	4.63%	6.93%
SJW Group	SJW	$ 63.73	$ 56.96	$ 81.90	$ 1.60	2.51%	2.30%	2.41%	6.10%	NA	8.00%	7.05%	9.46%	8.51%	10.41%
Essential Utilties	WTRG	$ 37.21	$ 32.30	$ 46.70	$ 1.27	3.41%	3.22%	3.31%	5.20%	5.60%	7.50%	6.10%	9.41%	8.51%	10.81%
												Mean	**8.63%**	**7.02%**	**9.97%**
												Mean - Excluding MSEX	**9.21%**	**7.50%**	**10.58%**
												Mean - Excluding MSEX and Other Results At or Below Current Bond Yields	**9.21%**	**8.06%**	**9.97%**

Notes:
[1] Bloomberg Professional
[2] - [4] I&E Exhibit No. 2, Schedule 4
[5] Equals [4] / [1]
[6] Equals [4] / average of [2] and [3]
[7] Equals average of [5] and [6]
[8] - [10] I&E Exhibit No. 2, Schedule 5
[11] Equals average of [8], [9], [10]
[12] Equals [7] + [11]
[13] Equals [7] + minimum of [8], [9], [10]
[14] Equals [7] + maximum of [8], [9], [10]

5. Mr. Patel DCF - Include Entire Distribution Utility Proxy Group

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
						Dividend Yield			Earnings Growth Rates				DCF Result		
		30-Day Avg. Price	52-Wk Low Price	52-Wk High Price	2024 Dividend	30 day Avg.	52-Wk	Average	Yahoo	Zacks	Value Line	Average	Avg Gwth Rate	Min Gwth Rate	Max Gwth Rate
American Water Works, Inc.	AWK	$ 129.57	$ 114.25	$ 162.59	$ 3.00	2.32%	2.17%	2.24%	7.78%	7.80%	3.00%	6.19%	8.43%	5.24%	10.04%
American States Water Company	AWR	$ 78.58	$ 75.20	$ 99.19	$ 1.80	2.29%	2.06%	2.18%	4.40%	6.30%	6.50%	5.73%	7.91%	6.58%	8.68%
California Water Service Group	CWT	$ 49.27	$ 45.44	$ 63.92	$ 1.12	2.27%	2.05%	2.16%	10.80%	NA	6.50%	8.65%	10.81%	8.66%	12.96%
Middlesex Water Company	MSEX	$ 62.37	$ 61.34	$ 90.56	$ 1.32	2.12%	1.74%	1.93%	2.70%	NA	5.00%	3.85%	5.78%	4.63%	6.93%
SJW Group	SJW	$ 63.73	$ 56.96	$ 81.90	$ 1.60	2.51%	2.30%	2.41%	6.10%	NA	8.00%	7.05%	9.46%	8.51%	10.41%
Essential Utilties	WTRG	$ 37.21	$ 32.30	$ 46.70	$ 1.27	3.41%	3.22%	3.31%	5.20%	5.60%	7.50%	6.10%	9.41%	8.51%	10.81%
Atmos Energy Corporation	ATO	$ 115.04	$ 102.03	$ 122.74	$ 3.22	2.80%	2.87%	2.83%	7.50%	7.30%	7.00%	7.27%	10.10%	9.83%	10.33%
Eversource Energy	ES	$ 58.34	$ 51.90	$ 80.18	$ 2.86	4.90%	4.33%	4.62%	3.60%	4.20%	6.00%	4.60%	9.22%	8.22%	10.62%
NiSource Inc.	NI	$ 26.31	$ 22.95	$ 28.35	$ 1.04	3.95%	4.05%	4.00%	8.30%	7.20%	9.50%	8.33%	12.34%	11.20%	13.50%
Northwest Natural Gas Company	NWN	$ 38.25	$ 35.30	$ 49.85	$ 1.95	5.10%	4.58%	4.84%	2.80%	3.70%	6.50%	4.33%	9.17%	7.64%	11.34%
ONE Gas, Inc.	OGS	$ 62.39	$ 57.63	$ 81.99	$ 2.72	4.36%	3.90%	4.13%	5.00%	5.00%	6.50%	5.50%	9.63%	9.13%	10.63%
Spire, Inc.	SR	$ 61.03	$ 54.10	$ 72.23	$ 3.00	4.92%	4.75%	4.83%	6.36%	5.60%	8.00%	6.65%	11.49%	10.43%	12.83%
												Mean	**9.48%**	**8.21%**	**10.76%**
												Mean - Excluding MSEX	**9.82%**	**8.54%**	**11.10%**
												Mean - Excluding MSEX and Other Results At or Below Current Bond Yields	**9.82%**	**8.87%**	**11.10%**

Notes:
[1] Bloomberg Professional
[2] - [4] I&E Exhibit No. 2, Schedule 4
[5] Equals [4] / [1]
[6] Equals [4] / average of [2] and [3]
[7] Equals average of [5] and [6]
[8] - [10] I&E Exhibit No. 2, Schedule 5
[11] Equals average of [8], [9], [10]
[12] Equals [7] + [11]
[13] Equals [7] + minimum of [8], [9], [10]
[14] Equals [7] + maximum of [8], [9], [10]

	AWK	AWR	CWT	MSEX	SJW	WTRG
30 Day Average Price (as of 1/31/24)	$129.57	$78.58	$49.27	$62.37	$63.73	$37.21
Patel Spot Price	$133.51	$79.52	$51.89	$62.95	$65.65	$37.82
Actual Spot Price (as of 1/2/24)	$133.51	$80.46	$51.89	$64.71	$65.65	
52-Week High (as of 1/31/24)	$157.47	$96.90	$62.72	$88.60	$79.48	$46.70
52-Week Low (as of 1/31/24)	$114.84	$74.60	$45.27	$55.97	$57.01	$32.30
Patel Filed 52-Week High	$162.59	$99.19	$63.92	$90.56	$81.90	
Patel Filed 52-Week Low	$114.25	$75.20	$45.44	$61.34	$56.96	
Actual 52-Week High (as of 1/2/24)	$158.27	$96.90	$62.72	$88.60	$81.60	
Actual 52-Week Low (as of 1/2/24)	$114.84	$75.97	$46.04	$61.38	$57.01	

AWK US Equity		AWR US Equity		CWT US Equity		MSEX US Equity		SJW US Equity		WTRG US Equity	
Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST
1/31/2024	$124.02	1/31/2024	$74.60	1/31/2024	$45.27	1/31/2024	$55.97	1/31/2024	$59.54	1/31/2024	$35.86
1/30/2024	$124.40	1/30/2024	$75.16	1/30/2024	$45.76	1/30/2024	$56.66	1/30/2024	$60.10	1/30/2024	$36.20
1/29/2024	$125.75	1/29/2024	$75.88	1/29/2024	$45.86	1/29/2024	$57.83	1/29/2024	$60.87	1/29/2024	$36.80
1/26/2024	$123.16	1/26/2024	$75.14	1/26/2024	$45.38	1/26/2024	$56.57	1/26/2024	$60.08	1/26/2024	$36.59
1/25/2024	$123.98	1/25/2024	$75.88	1/25/2024	$45.82	1/25/2024	$58.00	1/25/2024	$60.99	1/25/2024	$36.37
1/24/2024	$121.94	1/24/2024	$75.26	1/24/2024	$45.34	1/24/2024	$57.50	1/24/2024	$59.94	1/24/2024	$35.78
1/23/2024	$126.26	1/23/2024	$77.70	1/23/2024	$47.25	1/23/2024	$60.53	1/23/2024	$62.43	1/23/2024	$37.16
1/22/2024	$126.86	1/22/2024	$77.76	1/22/2024	$47.76	1/22/2024	$59.49	1/22/2024	$62.79	1/22/2024	$37.56
1/19/2024	$125.30	1/19/2024	$76.70	1/19/2024	$47.30	1/19/2024	$57.42	1/19/2024	$62.16	1/19/2024	$36.83
1/18/2024	$125.83	1/18/2024	$77.12	1/18/2024	$47.58	1/18/2024	$58.46	1/18/2024	$62.30	1/18/2024	$36.72
1/17/2024	$128.42	1/17/2024	$77.03	1/17/2024	$47.12	1/17/2024	$58.60	1/17/2024	$62.20	1/17/2024	$37.16
1/16/2024	$130.41	1/16/2024	$78.57	1/16/2024	$47.91	1/16/2024	$60.32	1/16/2024	$63.23	1/16/2024	$37.78
1/12/2024	$132.21	1/12/2024	$78.61	1/12/2024	$48.71	1/12/2024	$61.55	1/12/2024	$63.82	1/12/2024	$38.37
1/11/2024	$131.53	1/11/2024	$77.38	1/11/2024	$48.33	1/11/2024	$61.42	1/11/2024	$63.36	1/11/2024	$38.05
1/10/2024	$133.62	1/10/2024	$78.87	1/10/2024	$49.70	1/10/2024	$63.62	1/10/2024	$64.62	1/10/2024	$38.66
1/9/2024	$132.74	1/9/2024	$77.96	1/9/2024	$49.23	1/9/2024	$63.00	1/9/2024	$63.57	1/9/2024	$38.28
1/8/2024	$133.04	1/8/2024	$78.13	1/8/2024	$49.59	1/8/2024	$61.53	1/8/2024	$63.75	1/8/2024	$38.08
1/5/2024	$131.89	1/5/2024	$77.54	1/5/2024	$49.17	1/5/2024	$60.92	1/5/2024	$63.50	1/5/2024	$37.69
1/4/2024	$131.76	1/4/2024	$78.27	1/4/2024	$50.04	1/4/2024	$61.96	1/4/2024	$64.37	1/4/2024	$37.26
1/3/2024	$133.51	1/3/2024	$79.52	1/3/2024	$51.23	1/3/2024	$62.95	1/3/2024	$64.78	1/3/2024	$37.91
1/2/2024	$133.51	1/2/2024	$80.46	1/2/2024	$51.89	1/2/2024	$64.71	1/2/2024	$65.65	1/2/2024	$37.82
12/29/2023	$131.99	12/29/2023	$80.42	12/29/2023	$51.87	12/29/2023	$65.62	12/29/2023	$65.35	12/29/2023	$37.35
12/28/2023	$132.98	12/28/2023	$81.32	12/28/2023	$52.51	12/28/2023	$67.23	12/28/2023	$65.99	12/28/2023	$37.64
12/27/2023	$132.23	12/27/2023	$81.14	12/27/2023	$52.35	12/27/2023	$67.22	12/27/2023	$65.85	12/27/2023	$37.40
12/26/2023	$132.27	12/26/2023	$81.77	12/26/2023	$52.55	12/26/2023	$68.12	12/26/2023	$66.57	12/26/2023	$37.42
12/22/2023	$131.56	12/22/2023	$81.67	12/22/2023	$52.29	12/22/2023	$67.58	12/22/2023	$66.51	12/22/2023	$37.14
12/21/2023	$131.50	12/21/2023	$81.36	12/21/2023	$52.13	12/21/2023	$67.73	12/21/2023	$66.72	12/21/2023	$37.05
12/20/2023	$130.80	12/20/2023	$81.24	12/20/2023	$52.21	12/20/2023	$68.76	12/20/2023	$66.63	12/20/2023	$36.67
12/19/2023	$132.62	12/19/2023	$83.05	12/19/2023	$53.59	12/19/2023	$70.45	12/19/2023	$67.77	12/19/2023	$36.76
12/18/2023	$130.87	12/18/2023	$81.75	12/18/2023	$52.25	12/18/2023	$69.28	12/18/2023	$66.52	12/18/2023	$36.08
12/15/2023	$131.75	12/15/2023	$82.09	12/15/2023	$52.64	12/15/2023	$69.69	12/15/2023	$66.97	12/15/2023	$36.09
12/14/2023	$134.49	12/14/2023	$83.61	12/14/2023	$53.82	12/14/2023	$71.01	12/14/2023	$68.17	12/14/2023	$37.10
12/13/2023	$135.08	12/13/2023	$84.19	12/13/2023	$53.91	12/13/2023	$71.57	12/13/2023	$69.19	12/13/2023	$37.11
12/12/2023	$131.03	12/12/2023	$81.69	12/12/2023	$52.55	12/12/2023	$68.01	12/12/2023	$66.68	12/12/2023	$35.59
12/11/2023	$130.71	12/11/2023	$81.53	12/11/2023	$52.50	12/11/2023	$67.49	12/11/2023	$66.44	12/11/2023	$35.74
12/8/2023	$131.35	12/8/2023	$81.58	12/8/2023	$52.33	12/8/2023	$67.59	12/8/2023	$67.56	12/8/2023	$36.00
12/7/2023	$132.55	12/7/2023	$82.30	12/7/2023	$52.75	12/7/2023	$68.25	12/7/2023	$67.97	12/7/2023	$36.33
12/6/2023	$132.70	12/6/2023	$82.39	12/6/2023	$52.73	12/6/2023	$68.40	12/6/2023	$67.67	12/6/2023	$36.37
12/5/2023	$131.38	12/5/2023	$81.79	12/5/2023	$52.83	12/5/2023	$67.88	12/5/2023	$67.55	12/5/2023	$35.83
12/4/2023	$133.14	12/4/2023	$82.85	12/4/2023	$53.05	12/4/2023	$68.61	12/4/2023	$68.23	12/4/2023	$36.26
12/1/2023	$133.24	12/1/2023	$81.26	12/1/2023	$51.69	12/1/2023	$65.98	12/1/2023	$66.92	12/1/2023	$36.03
11/30/2023	$131.84	11/30/2023	$79.90	11/30/2023	$50.57	11/30/2023	$63.90	11/30/2023	$65.64	11/30/2023	$35.61
11/29/2023	$131.22	11/29/2023	$79.23	11/29/2023	$50.14	11/29/2023	$63.82	11/29/2023	$64.42	11/29/2023	$35.37
11/28/2023	$130.66	11/28/2023	$79.88	11/28/2023	$50.57	11/28/2023	$63.79	11/28/2023	$64.70	11/28/2023	$35.37
11/27/2023	$130.75	11/27/2023	$80.60	11/27/2023	$50.93	11/27/2023	$65.58	11/27/2023	$65.08	11/27/2023	$35.24
11/24/2023	$132.06	11/24/2023	$80.67	11/24/2023	$51.15	11/24/2023	$65.51	11/24/2023	$65.17	11/24/2023	$35.33
11/22/2023	$130.47	11/22/2023	$80.85	11/22/2023	$50.77	11/22/2023	$65.33	11/22/2023	$64.86	11/22/2023	$34.96
11/21/2023	$130.83	11/21/2023	$79.21	11/21/2023	$50.14	11/21/2023	$64.45	11/21/2023	$64.24	11/21/2023	$34.77
11/20/2023	$130.67	11/20/2023	$79.47	11/20/2023	$50.35	11/20/2023	$63.50	11/20/2023	$64.57	11/20/2023	$35.03
11/17/2023	$132.10	11/17/2023	$80.75	11/17/2023	$51.44	11/17/2023	$65.63	11/17/2023	$65.39	11/17/2023	$35.57
11/16/2023	$130.99	11/16/2023	$80.40	11/16/2023	$51.03	11/16/2023	$65.64	11/16/2023	$64.82	11/16/2023	$35.31
11/15/2023	$130.45	11/15/2023	$80.57	11/15/2023	$51.30	11/15/2023	$65.73	11/15/2023	$64.97	11/15/2023	$35.42
11/14/2023	$129.74	11/14/2023	$81.44	11/14/2023	$51.90	11/14/2023	$66.18	11/14/2023	$65.46	11/14/2023	$35.45
11/13/2023	$121.79	11/13/2023	$77.24	11/13/2023	$48.73	11/13/2023	$61.67	11/13/2023	$61.61	11/13/2023	$33.49
11/10/2023	$122.79	11/10/2023	$77.07	11/10/2023	$49.01	11/10/2023	$61.38	11/10/2023	$61.75	11/10/2023	$33.67
11/9/2023	$123.56	11/9/2023	$77.62	11/9/2023	$49.41	11/9/2023	$63.02	11/9/2023	$62.10	11/9/2023	$33.87
11/8/2023	$125.42	11/8/2023	$78.17	11/8/2023	$49.75	11/8/2023	$63.16	11/8/2023	$62.50	11/8/2023	$34.24
11/7/2023	$126.13	11/7/2023	$80.08	11/7/2023	$50.93	11/7/2023	$65.32	11/7/2023	$63.68	11/7/2023	$34.73
11/6/2023	$126.85	11/6/2023	$81.92	11/6/2023	$51.57	11/6/2023	$67.56	11/6/2023	$64.69	11/6/2023	$35.01
11/3/2023	$129.30	11/3/2023	$82.45	11/3/2023	$52.48	11/3/2023	$67.71	11/3/2023	$65.00	11/3/2023	$35.50
11/2/2023	$123.78	11/2/2023	$80.21	11/2/2023	$50.49	11/2/2023	$65.34	11/2/2023	$63.28	11/2/2023	$34.34
11/1/2023	$118.12	11/1/2023	$78.52	11/1/2023	$49.34	11/1/2023	$63.63	11/1/2023	$62.33	11/1/2023	$33.35
10/31/2023	$116.98	10/31/2023	$77.62	10/31/2023	$48.43	10/31/2023	$63.22	10/31/2023	$62.11	10/31/2023	$33.16
10/30/2023	$116.04	10/30/2023	$77.19	10/30/2023	$48.13	10/30/2023	$62.88	10/30/2023	$60.81	10/30/2023	$32.95
10/27/2023	$115.72	10/27/2023	$77.13	10/27/2023	$48.19	10/27/2023	$63.19	10/27/2023	$58.32	10/27/2023	$32.98
10/26/2023	$117.34	10/26/2023	$78.09	10/26/2023	$48.42	10/26/2023	$63.86	10/26/2023	$59.18	10/26/2023	$33.37
10/25/2023	$115.83	10/25/2023	$76.41	10/25/2023	$46.10	10/25/2023	$62.90	10/25/2023	$58.08	10/25/2023	$32.73
10/24/2023	$117.10	10/24/2023	$77.13	10/24/2023	$46.82	10/24/2023	$63.75	10/24/2023	$58.00	10/24/2023	$32.94
10/23/2023	$114.84	10/23/2023	$76.23	10/23/2023	$46.55	10/23/2023	$64.37	10/23/2023	$57.01	10/23/2023	$32.33
10/20/2023	$115.14	10/20/2023	$76.90	10/20/2023	$46.86	10/20/2023	$61.76	10/20/2023	$57.73	10/20/2023	$32.63
10/19/2023	$116.35	10/19/2023	$77.05	10/19/2023	$47.38	10/19/2023	$62.47	10/19/2023	$57.88	10/19/2023	$32.75
10/18/2023	$117.46	10/18/2023	$77.84	10/18/2023	$47.91	10/18/2023	$62.67	10/18/2023	$58.61	10/18/2023	$33.09
10/17/2023	$119.61	10/17/2023	$78.85	10/17/2023	$48.70	10/17/2023	$64.70	10/17/2023	$59.47	10/17/2023	$33.60
10/16/2023	$119.29	10/16/2023	$79.26	10/16/2023	$49.08	10/16/2023	$65.37	10/16/2023	$59.51	10/16/2023	$33.53
10/13/2023	$117.36	10/13/2023	$78.16	10/13/2023	$47.70	10/13/2023	$64.80	10/13/2023	$58.75	10/13/2023	$33.18
10/12/2023	$117.65	10/12/2023	$78.31	10/12/2023	$47.83	10/12/2023	$65.76	10/12/2023	$59.30	10/12/2023	$33.16
10/11/2023	$121.52	10/11/2023	$79.97	10/11/2023	$48.65	10/11/2023	$67.01	10/11/2023	$61.02	10/11/2023	$33.93
10/10/2023	$121.16	10/10/2023	$79.62	10/10/2023	$48.35	10/10/2023	$67.18	10/10/2023	$60.80	10/10/2023	$33.78
10/9/2023	$120.11	10/9/2023	$79.52	10/9/2023	$48.49	10/9/2023	$67.26	10/9/2023	$60.48	10/9/2023	$33.32
10/6/2023	$118.17	10/6/2023	$78.87	10/6/2023	$48.06	10/6/2023	$66.35	10/6/2023	$60.03	10/6/2023	$32.90
10/5/2023	$118.05	10/5/2023	$78.72	10/5/2023	$47.97	10/5/2023	$65.92	10/5/2023	$59.40	10/5/2023	$33.07
10/4/2023	$118.67	10/4/2023	$77.22	10/4/2023	$46.71	10/4/2023	$64.33	10/4/2023	$58.78	10/4/2023	$32.69
10/3/2023	$116.33	10/3/2023	$75.97	10/3/2023	$46.19	10/3/2023	$63.98	10/3/2023	$57.33	10/3/2023	$32.30
10/2/2023	$119.06	10/2/2023	$76.43	10/2/2023	$46.04	10/2/2023	$64.02	10/2/2023	$58.07	10/2/2023	$32.64
9/29/2023	$123.12	9/29/2023	$78.24	9/29/2023	$47.07	9/29/2023	$65.93	9/29/2023	$59.75	9/29/2023	$34.02
9/28/2023	$122.87	9/28/2023	$77.54	9/28/2023	$46.67	9/28/2023	$65.59	9/28/2023	$59.83	9/28/2023	$33.74
9/27/2023	$125.62	9/27/2023	$78.06	9/27/2023	$46.42	9/27/2023	$66.86	9/27/2023	$60.48	9/27/2023	$34.03
9/26/2023	$128.90	9/26/2023	$78.79	9/26/2023	$46.82	9/26/2023	$67.31	9/26/2023	$60.78	9/26/2023	$34.96
9/25/2023	$131.94	9/25/2023	$80.30	9/25/2023	$48.05	9/25/2023	$67.67	9/25/2023	$61.83	9/25/2023	$36.08
9/22/2023	$131.49	9/22/2023	$80.23	9/22/2023	$48.03	9/22/2023	$67.69	9/22/2023	$61.61	9/22/2023	$35.94
9/21/2023	$132.78	9/21/2023	$80.47	9/21/2023	$48.20	9/21/2023	$67.93	9/21/2023	$62.12	9/21/2023	$36.08
9/20/2023	$136.41	9/20/2023	$81.30	9/20/2023	$48.20	9/20/2023	$68.82	9/20/2023	$62.59	9/20/2023	$36.69
9/19/2023	$136.78	9/19/2023	$81.79	9/19/2023	$48.59	9/19/2023	$70.80	9/19/2023	$63.82	9/19/2023	$36.95
9/18/2023	$137.63	9/18/2023	$82.29	9/18/2023	$48.90	9/18/2023	$71.99	9/18/2023	$64.12	9/18/2023	$37.28
9/15/2023	$138.10	9/15/2023	$83.24	9/15/2023	$49.63	9/15/2023	$72.78	9/15/2023	$64.48	9/15/2023	$37.36
9/14/2023	$140.17	9/14/2023	$83.50	9/14/2023	$50.00	9/14/2023	$73.58	9/14/2023	$64.85	9/14/2023	$37.82
9/13/2023	$138.51	9/13/2023	$82.78	9/13/2023	$49.20	9/13/2023	$73.37	9/13/2023	$64.02	9/13/2023	$37.56
9/12/2023	$136.77	9/12/2023	$81.63	9/12/2023	$48.40	9/12/2023	$71.54	9/12/2023	$63.04	9/12/2023	$37.13

AWK US Equity		AWR US Equity		CWT US Equity		MSEX US Equity		SJW US Equity		WTRG US Equity	
Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST
9/11/2023	$137.43	9/11/2023	$82.09	9/11/2023	$48.69	9/11/2023	$72.05	9/11/2023	$62.85	9/11/2023	$36.77
9/8/2023	$136.94	9/8/2023	$81.98	9/8/2023	$48.26	9/8/2023	$71.71	9/8/2023	$62.46	9/8/2023	$36.29
9/7/2023	$136.92	9/7/2023	$82.17	9/7/2023	$48.63	9/7/2023	$72.17	9/7/2023	$62.70	9/7/2023	$35.50
9/6/2023	$134.95	9/6/2023	$81.31	9/6/2023	$48.24	9/6/2023	$71.72	9/6/2023	$62.48	9/6/2023	$35.23
9/5/2023	$135.60	9/5/2023	$81.57	9/5/2023	$48.76	9/5/2023	$72.69	9/5/2023	$63.15	9/5/2023	$35.65
9/1/2023	$137.01	9/1/2023	$83.60	9/1/2023	$49.84	9/1/2023	$73.45	9/1/2023	$65.04	9/1/2023	$36.36
8/31/2023	$137.95	8/31/2023	$83.74	8/31/2023	$49.99	8/31/2023	$74.89	8/31/2023	$65.37	8/31/2023	$36.57
8/30/2023	$138.73	8/30/2023	$84.16	8/30/2023	$50.40	8/30/2023	$75.71	8/30/2023	$65.78	8/30/2023	$36.64
8/29/2023	$139.27	8/29/2023	$84.92	8/29/2023	$50.89	8/29/2023	$76.47	8/29/2023	$66.03	8/29/2023	$36.76
8/28/2023	$139.33	8/28/2023	$85.67	8/28/2023	$51.32	8/28/2023	$77.10	8/28/2023	$66.26	8/28/2023	$36.74
8/25/2023	$139.62	8/25/2023	$86.11	8/25/2023	$51.32	8/25/2023	$78.50	8/25/2023	$66.11	8/25/2023	$37.05
8/24/2023	$137.46	8/24/2023	$85.09	8/24/2023	$50.63	8/24/2023	$77.10	8/24/2023	$65.13	8/24/2023	$36.34
8/23/2023	$138.75	8/23/2023	$85.54	8/23/2023	$51.16	8/23/2023	$78.88	8/23/2023	$66.04	8/23/2023	$36.70
8/22/2023	$137.61	8/22/2023	$85.75	8/22/2023	$51.19	8/22/2023	$78.98	8/22/2023	$66.33	8/22/2023	$36.66
8/21/2023	$136.70	8/21/2023	$84.56	8/21/2023	$50.47	8/21/2023	$77.91	8/21/2023	$65.82	8/21/2023	$36.45
8/18/2023	$138.16	8/18/2023	$86.04	8/18/2023	$51.38	8/18/2023	$78.40	8/18/2023	$67.00	8/18/2023	$37.18
8/17/2023	$137.41	8/17/2023	$85.72	8/17/2023	$51.15	8/17/2023	$77.58	8/17/2023	$66.60	8/17/2023	$37.12
8/16/2023	$139.22	8/16/2023	$86.84	8/16/2023	$51.44	8/16/2023	$78.89	8/16/2023	$67.45	8/16/2023	$37.82
8/15/2023	$139.88	8/15/2023	$86.62	8/15/2023	$51.62	8/15/2023	$79.97	8/15/2023	$67.57	8/15/2023	$37.65
8/14/2023	$141.33	8/14/2023	$87.63	8/14/2023	$52.14	8/14/2023	$80.75	8/14/2023	$68.04	8/14/2023	$38.70
8/11/2023	$139.40	8/11/2023	$88.20	8/11/2023	$52.58	8/11/2023	$80.62	8/11/2023	$68.79	8/11/2023	$39.08
8/10/2023	$138.68	8/10/2023	$87.46	8/10/2023	$51.98	8/10/2023	$79.51	8/10/2023	$68.74	8/10/2023	$39.00
8/9/2023	$139.65	8/9/2023	$87.31	8/9/2023	$52.24	8/9/2023	$79.85	8/9/2023	$69.13	8/9/2023	$39.16
8/8/2023	$141.26	8/8/2023	$87.26	8/8/2023	$51.79	8/8/2023	$80.26	8/8/2023	$69.15	8/8/2023	$39.83
8/7/2023	$141.30	8/7/2023	$86.21	8/7/2023	$51.77	8/7/2023	$81.03	8/7/2023	$69.67	8/7/2023	$40.27
8/4/2023	$140.45	8/4/2023	$85.10	8/4/2023	$51.20	8/4/2023	$79.28	8/4/2023	$68.85	8/4/2023	$39.99
8/3/2023	$140.61	8/3/2023	$85.04	8/3/2023	$50.49	8/3/2023	$78.29	8/3/2023	$68.03	8/3/2023	$40.18
8/2/2023	$144.11	8/2/2023	$86.16	8/2/2023	$51.62	8/2/2023	$79.72	8/2/2023	$69.29	8/2/2023	$40.99
8/1/2023	$142.92	8/1/2023	$85.59	8/1/2023	$51.52	8/1/2023	$79.51	8/1/2023	$68.63	8/1/2023	$41.03
7/31/2023	$145.85	7/31/2023	$87.50	7/31/2023	$52.48	7/31/2023	$79.72	7/31/2023	$69.65	7/31/2023	$41.59
7/28/2023	$145.37	7/28/2023	$87.16	7/28/2023	$51.52	7/28/2023	$80.31	7/28/2023	$69.82	7/28/2023	$41.44
7/27/2023	$146.90	7/27/2023	$85.78	7/27/2023	$50.36	7/27/2023	$80.98	7/27/2023	$69.19	7/27/2023	$41.83
7/26/2023	$146.20	7/26/2023	$87.30	7/26/2023	$52.23	7/26/2023	$82.14	7/26/2023	$71.40	7/26/2023	$42.08
7/25/2023	$146.69	7/25/2023	$87.25	7/25/2023	$52.42	7/25/2023	$83.13	7/25/2023	$71.31	7/25/2023	$41.87
7/24/2023	$146.14	7/24/2023	$87.63	7/24/2023	$52.36	7/24/2023	$82.28	7/24/2023	$71.32	7/24/2023	$41.97
7/21/2023	$147.23	7/21/2023	$88.95	7/21/2023	$52.94	7/21/2023	$83.00	7/21/2023	$72.07	7/21/2023	$42.39
7/20/2023	$145.37	7/20/2023	$87.99	7/20/2023	$52.25	7/20/2023	$82.53	7/20/2023	$71.70	7/20/2023	$41.71
7/19/2023	$142.44	7/19/2023	$86.86	7/19/2023	$51.41	7/19/2023	$81.63	7/19/2023	$70.85	7/19/2023	$40.81
7/18/2023	$141.13	7/18/2023	$85.93	7/18/2023	$50.86	7/18/2023	$80.07	7/18/2023	$70.15	7/18/2023	$40.17
7/17/2023	$142.53	7/17/2023	$85.95	7/17/2023	$50.76	7/17/2023	$80.60	7/17/2023	$69.48	7/17/2023	$40.23
7/14/2023	$144.65	7/14/2023	$85.83	7/14/2023	$50.72	7/14/2023	$80.18	7/14/2023	$69.19	7/14/2023	$40.50
7/13/2023	$143.90	7/13/2023	$86.41	7/13/2023	$50.89	7/13/2023	$80.04	7/13/2023	$69.77	7/13/2023	$40.75
7/12/2023	$143.89	7/12/2023	$85.64	7/12/2023	$50.28	7/12/2023	$79.55	7/12/2023	$68.64	7/12/2023	$39.91
7/11/2023	$141.01	7/11/2023	$84.89	7/11/2023	$49.56	7/11/2023	$77.83	7/11/2023	$67.33	7/11/2023	$38.92
7/10/2023	$139.10	7/10/2023	$83.42	7/10/2023	$48.80	7/10/2023	$76.87	7/10/2023	$65.84	7/10/2023	$38.54
7/7/2023	$139.55	7/7/2023	$82.97	7/7/2023	$49.08	7/7/2023	$76.89	7/7/2023	$66.00	7/7/2023	$38.50
7/6/2023	$140.90	7/6/2023	$86.44	7/6/2023	$49.97	7/6/2023	$77.96	7/6/2023	$68.19	7/6/2023	$38.94
7/5/2023	$143.25	7/5/2023	$86.10	7/5/2023	$50.50	7/5/2023	$78.68	7/5/2023	$69.13	7/5/2023	$39.55
7/3/2023	$142.43	7/3/2023	$86.67	7/3/2023	$51.35	7/3/2023	$79.91	7/3/2023	$69.56	7/3/2023	$39.65
6/30/2023	$141.22	6/30/2023	$86.10	6/30/2023	$51.10	6/30/2023	$79.95	6/30/2023	$69.31	6/30/2023	$39.25
6/29/2023	$138.97	6/29/2023	$85.99	6/29/2023	$51.21	6/29/2023	$79.62	6/29/2023	$69.21	6/29/2023	$38.82
6/28/2023	$139.47	6/28/2023	$84.58	6/28/2023	$51.29	6/28/2023	$78.51	6/28/2023	$68.60	6/28/2023	$38.91
6/27/2023	$141.35	6/27/2023	$85.25	6/27/2023	$50.52	6/27/2023	$79.36	6/27/2023	$69.49	6/27/2023	$39.51
6/26/2023	$138.73	6/26/2023	$83.98	6/26/2023	$49.39	6/26/2023	$78.61	6/26/2023	$68.58	6/26/2023	$39.18
6/23/2023	$144.20	6/23/2023	$83.77	6/23/2023	$49.77	6/23/2023	$77.58	6/23/2023	$67.98	6/23/2023	$39.35
6/22/2023	$146.91	6/22/2023	$86.29	6/22/2023	$51.74	6/22/2023	$81.19	6/22/2023	$70.78	6/22/2023	$40.21
6/21/2023	$147.05	6/21/2023	$86.63	6/21/2023	$51.64	6/21/2023	$80.98	6/21/2023	$70.94	6/21/2023	$40.26
6/20/2023	$146.53	6/20/2023	$86.54	6/20/2023	$51.36	6/20/2023	$82.13	6/20/2023	$70.70	6/20/2023	$40.45
6/16/2023	$147.39	6/16/2023	$86.76	6/16/2023	$51.94	6/16/2023	$81.79	6/16/2023	$71.05	6/16/2023	$40.75
6/15/2023	$146.51	6/15/2023	$86.80	6/15/2023	$51.73	6/15/2023	$81.53	6/15/2023	$71.77	6/15/2023	$40.95
6/14/2023	$144.55	6/14/2023	$85.41	6/14/2023	$51.06	6/14/2023	$80.24	6/14/2023	$71.55	6/14/2023	$40.53
6/13/2023	$144.80	6/13/2023	$86.47	6/13/2023	$53.32	6/13/2023	$80.97	6/13/2023	$71.59	6/13/2023	$40.72
6/12/2023	$144.47	6/12/2023	$86.51	6/12/2023	$53.28	6/12/2023	$81.35	6/12/2023	$70.79	6/12/2023	$40.68
6/9/2023	$145.09	6/9/2023	$89.68	6/9/2023	$55.77	6/9/2023	$83.05	6/9/2023	$74.57	6/9/2023	$40.92
6/8/2023	$145.55	6/8/2023	$90.18	6/8/2023	$56.48	6/8/2023	$83.05	6/8/2023	$75.01	6/8/2023	$41.23
6/7/2023	$145.51	6/7/2023	$91.37	6/7/2023	$57.16	6/7/2023	$82.89	6/7/2023	$75.23	6/7/2023	$41.02
6/6/2023	$143.24	6/6/2023	$89.63	6/6/2023	$56.54	6/6/2023	$81.95	6/6/2023	$73.81	6/6/2023	$40.26
6/5/2023	$144.35	6/5/2023	$88.63	6/5/2023	$56.29	6/5/2023	$80.99	6/5/2023	$74.35	6/5/2023	$40.21
6/2/2023	$144.23	6/2/2023	$90.66	6/2/2023	$57.30	6/2/2023	$81.80	6/2/2023	$75.65	6/2/2023	$40.26
6/1/2023	$142.04	6/1/2023	$87.87	6/1/2023	$55.55	6/1/2023	$79.01	6/1/2023	$73.72	6/1/2023	$39.30
5/31/2023	$142.91	5/31/2023	$87.90	5/31/2023	$56.33	5/31/2023	$80.65	5/31/2023	$75.65	5/31/2023	$40.07
5/30/2023	$141.67	5/30/2023	$87.27	5/30/2023	$55.77	5/30/2023	$79.42	5/30/2023	$75.41	5/30/2023	$39.60
5/26/2023	$141.93	5/26/2023	$89.06	5/26/2023	$56.55	5/26/2023	$78.40	5/26/2023	$75.27	5/26/2023	$39.94
5/25/2023	$140.93	5/25/2023	$86.82	5/25/2023	$55.17	5/25/2023	$76.69	5/25/2023	$73.93	5/25/2023	$39.50
5/24/2023	$141.64	5/24/2023	$87.41	5/24/2023	$55.56	5/24/2023	$77.42	5/24/2023	$74.40	5/24/2023	$40.10
5/23/2023	$141.97	5/23/2023	$88.34	5/23/2023	$55.66	5/23/2023	$76.74	5/23/2023	$74.72	5/23/2023	$40.05
5/22/2023	$142.04	5/22/2023	$88.33	5/22/2023	$54.88	5/22/2023	$76.26	5/22/2023	$74.64	5/22/2023	$39.85
5/19/2023	$139.94	5/19/2023	$85.98	5/19/2023	$54.06	5/19/2023	$74.63	5/19/2023	$73.37	5/19/2023	$39.58
5/18/2023	$140.22	5/18/2023	$88.78	5/18/2023	$54.89	5/18/2023	$75.73	5/18/2023	$74.37	5/18/2023	$39.80
5/17/2023	$142.08	5/17/2023	$89.81	5/17/2023	$55.52	5/17/2023	$74.30	5/17/2023	$74.85	5/17/2023	$40.38
5/16/2023	$143.15	5/16/2023	$88.45	5/16/2023	$55.13	5/16/2023	$72.38	5/16/2023	$74.31	5/16/2023	$40.45
5/15/2023	$145.98	5/15/2023	$89.27	5/15/2023	$56.02	5/15/2023	$73.49	5/15/2023	$75.76	5/15/2023	$41.32
5/12/2023	$148.17	5/12/2023	$90.43	5/12/2023	$56.54	5/12/2023	$72.79	5/12/2023	$74.91	5/12/2023	$41.83
5/11/2023	$147.82	5/11/2023	$88.15	5/11/2023	$56.18	5/11/2023	$72.09	5/11/2023	$75.31	5/11/2023	$41.49
5/10/2023	$148.14	5/10/2023	$90.78	5/10/2023	$56.72	5/10/2023	$73.37	5/10/2023	$76.77	5/10/2023	$41.98
5/9/2023	$146.30	5/9/2023	$88.98	5/9/2023	$55.88	5/9/2023	$73.25	5/9/2023	$75.47	5/9/2023	$41.43
5/8/2023	$145.89	5/8/2023	$89.13	5/8/2023	$56.02	5/8/2023	$73.09	5/8/2023	$75.52	5/8/2023	$41.85
5/5/2023	$146.14	5/5/2023	$89.55	5/5/2023	$56.45	5/5/2023	$72.94	5/5/2023	$75.77	5/5/2023	$42.08
5/4/2023	$145.54	5/4/2023	$89.38	5/4/2023	$56.08	5/4/2023	$71.51	5/4/2023	$75.01	5/4/2023	$41.75
5/3/2023	$144.23	5/3/2023	$87.85	5/3/2023	$55.17	5/3/2023	$70.66	5/3/2023	$74.29	5/3/2023	$41.30
5/2/2023	$144.48	5/2/2023	$87.12	5/2/2023	$54.99	5/2/2023	$68.47	5/2/2023	$74.47	5/2/2023	$41.30
5/1/2023	$144.33	5/1/2023	$86.72	5/1/2023	$54.64	5/1/2023	$71.65	5/1/2023	$74.58	5/1/2023	$41.72
4/28/2023	$145.97	4/28/2023	$87.45	4/28/2023	$55.25	4/28/2023	$72.04	4/28/2023	$74.68	4/28/2023	$41.71
4/27/2023	$146.17	4/27/2023	$88.60	4/27/2023	$55.93	4/27/2023	$73.11	4/27/2023	$75.73	4/27/2023	$41.85
4/26/2023	$146.75	4/26/2023	$88.51	4/26/2023	$56.16	4/26/2023	$74.11	4/26/2023	$75.89	4/26/2023	$42.02
4/25/2023	$150.07	4/25/2023	$90.13	4/25/2023	$57.31	4/25/2023	$76.39	4/25/2023	$77.76	4/25/2023	$42.86
4/24/2023	$149.18	4/24/2023	$89.57	4/24/2023	$57.17	4/24/2023	$77.36	4/24/2023	$77.63	4/24/2023	$42.28
4/21/2023	$148.61	4/21/2023	$89.85	4/21/2023	$57.55	4/21/2023	$77.86	4/21/2023	$77.60	4/21/2023	$42.68
4/20/2023	$147.32	4/20/2023	$89.86	4/20/2023	$57.65	4/20/2023	$77.28	4/20/2023	$77.72	4/20/2023	$42.26
4/19/2023	$146.72	4/19/2023	$88.48	4/19/2023	$57.28	4/19/2023	$77.35	4/19/2023	$76.97	4/19/2023	$42.37
4/18/2023	$145.82	4/18/2023	$87.63	4/18/2023	$56.85	4/18/2023	$76.33	4/18/2023	$75.93	4/18/2023	$41.65
4/17/2023	$147.53	4/17/2023	$89.30	4/17/2023	$57.93	4/17/2023	$77.78	4/17/2023	$77.15	4/17/2023	$42.57
4/14/2023	$147.39	4/14/2023	$89.87	4/14/2023	$58.21	4/14/2023	$77.91	4/14/2023	$77.78	4/14/2023	$42.19
4/13/2023	$149.66	4/13/2023	$92.25	4/13/2023	$60.22	4/13/2023	$79.49	4/13/2023	$78.59	4/13/2023	$43.09
4/12/2023	$148.50	4/12/2023	$91.82	4/12/2023	$59.80	4/12/2023	$79.25	4/12/2023	$78.95	4/12/2023	$43.26
4/11/2023	$149.72	4/11/2023	$92.48	4/11/2023	$60.00	4/11/2023	$80.28	4/11/2023	$79.48	4/11/2023	$43.88
4/10/2023	$149.55	4/10/2023	$91.50	4/10/2023	$59.34	4/10/2023	$79.10	4/10/2023	$78.31	4/10/2023	$43.75
4/6/2023	$149.54	4/6/2023	$91.33	4/6/2023	$59.42	4/6/2023	$79.89	4/6/2023	$78.12	4/6/2023	$43.99
4/5/2023	$147.90	4/5/2023	$90.35	4/5/2023	$58.92	4/5/2023	$78.51	4/5/2023	$77.69	4/5/2023	$43.72
4/4/2023	$144.86	4/4/2023	$88.40	4/4/2023	$57.81	4/4/2023	$77.83	4/4/2023	$75.75	4/4/2023	$42.45
4/3/2023	$143.20	4/3/2023	$87.38	4/3/2023	$57.04	4/3/2023	$77.39	4/3/2023	$74.90	4/3/2023	$42.07
3/31/2023	$144.23	3/31/2023	$87.59	3/31/2023	$57.34	3/31/2023	$77.11	3/31/2023	$74.88	3/31/2023	$42.64

AWK US Equity		AWR US Equity		CWT US Equity		MSEX US Equity		SJW US Equity		WTRG US Equity	
Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST
3/30/2023	$143.64	3/30/2023	$86.54	3/30/2023	$56.74	3/30/2023	$76.71	3/30/2023	$74.55	3/30/2023	$42.05
3/29/2023	$141.92	3/29/2023	$85.91	3/29/2023	$56.55	3/29/2023	$76.63	3/29/2023	$74.70	3/29/2023	$41.56
3/28/2023	$139.05	3/28/2023	$85.28	3/28/2023	$56.41	3/28/2023	$76.25	3/28/2023	$74.21	3/28/2023	$41.08
3/27/2023	$139.50	3/27/2023	$85.37	3/27/2023	$56.04	3/27/2023	$75.19	3/27/2023	$74.38	3/27/2023	$41.16
3/24/2023	$139.66	3/24/2023	$85.37	3/24/2023	$55.85	3/24/2023	$76.51	3/24/2023	$74.75	3/24/2023	$41.14
3/23/2023	$134.61	3/23/2023	$82.58	3/23/2023	$53.67	3/23/2023	$73.53	3/23/2023	$71.75	3/23/2023	$39.71
3/22/2023	$134.28	3/22/2023	$82.72	3/22/2023	$54.01	3/22/2023	$72.99	3/22/2023	$71.22	3/22/2023	$40.01
3/21/2023	$136.72	3/21/2023	$84.02	3/21/2023	$54.82	3/21/2023	$74.01	3/21/2023	$72.17	3/21/2023	$40.80
3/20/2023	$140.36	3/20/2023	$86.67	3/20/2023	$56.93	3/20/2023	$75.40	3/20/2023	$75.92	3/20/2023	$41.81
3/17/2023	$139.63	3/17/2023	$85.47	3/17/2023	$55.97	3/17/2023	$75.23	3/17/2023	$74.46	3/17/2023	$41.58
3/16/2023	$140.45	3/16/2023	$86.93	3/16/2023	$56.68	3/16/2023	$75.83	3/16/2023	$75.43	3/16/2023	$42.08
3/15/2023	$138.46	3/15/2023	$86.12	3/15/2023	$55.90	3/15/2023	$74.75	3/15/2023	$75.11	3/15/2023	$42.28
3/14/2023	$135.55	3/14/2023	$85.46	3/14/2023	$55.30	3/14/2023	$74.31	3/14/2023	$75.18	3/14/2023	$41.79
3/13/2023	$134.27	3/13/2023	$83.77	3/13/2023	$54.23	3/13/2023	$72.45	3/13/2023	$74.39	3/13/2023	$41.32
3/10/2023	$131.59	3/10/2023	$83.50	3/10/2023	$53.87	3/10/2023	$72.05	3/10/2023	$73.19	3/10/2023	$40.72
3/9/2023	$133.78	3/9/2023	$84.52	3/9/2023	$54.80	3/9/2023	$73.57	3/9/2023	$73.76	3/9/2023	$40.81
3/8/2023	$136.11	3/8/2023	$85.19	3/8/2023	$55.51	3/8/2023	$74.71	3/8/2023	$74.85	3/8/2023	$41.46
3/7/2023	$135.02	3/7/2023	$84.25	3/7/2023	$54.64	3/7/2023	$73.88	3/7/2023	$74.70	3/7/2023	$40.54
3/6/2023	$137.77	3/6/2023	$84.53	3/6/2023	$54.81	3/6/2023	$73.72	3/6/2023	$74.82	3/6/2023	$41.32
3/3/2023	$137.55	3/3/2023	$85.92	3/3/2023	$56.00	3/3/2023	$74.95	3/3/2023	$74.54	3/3/2023	$41.04
3/2/2023	$136.43	3/2/2023	$83.50	3/2/2023	$55.92	3/2/2023	$75.77	3/2/2023	$73.28	3/2/2023	$41.53
3/1/2023	$136.01	3/1/2023	$85.64	3/1/2023	$55.08	3/1/2023	$75.66	3/1/2023	$73.12	3/1/2023	$41.59
2/28/2023	$138.22	2/28/2023	$87.99	2/28/2023	$56.40	2/28/2023	$75.51	2/28/2023	$75.19	2/28/2023	$41.79
2/27/2023	$137.63	2/27/2023	$88.65	2/27/2023	$57.24	2/27/2023	$78.13	2/27/2023	$76.47	2/27/2023	$42.43
2/24/2023	$139.38	2/24/2023	$89.98	2/24/2023	$57.78	2/24/2023	$82.14	2/24/2023	$76.58	2/24/2023	$43.37
2/23/2023	$141.64	2/23/2023	$90.59	2/23/2023	$58.19	2/23/2023	$83.20	2/23/2023	$76.15	2/23/2023	$44.10
2/22/2023	$144.42	2/22/2023	$91.81	2/22/2023	$58.98	2/22/2023	$84.01	2/22/2023	$76.05	2/22/2023	$44.32
2/21/2023	$145.39	2/21/2023	$91.81	2/21/2023	$58.76	2/21/2023	$84.26	2/21/2023	$75.66	2/21/2023	$44.34
2/17/2023	$147.31	2/17/2023	$92.89	2/17/2023	$59.84	2/17/2023	$85.06	2/17/2023	$76.43	2/17/2023	$45.08
2/16/2023	$145.19	2/16/2023	$90.86	2/16/2023	$58.52	2/16/2023	$83.39	2/16/2023	$74.93	2/16/2023	$44.46
2/15/2023	$146.95	2/15/2023	$91.44	2/15/2023	$59.21	2/15/2023	$84.55	2/15/2023	$75.12	2/15/2023	$44.79
2/14/2023	$147.01	2/14/2023	$91.83	2/14/2023	$59.07	2/14/2023	$84.25	2/14/2023	$75.66	2/14/2023	$44.82
2/13/2023	$149.37	2/13/2023	$93.10	2/13/2023	$60.02	2/13/2023	$84.51	2/13/2023	$76.40	2/13/2023	$44.92
2/10/2023	$148.13	2/10/2023	$91.79	2/10/2023	$59.17	2/10/2023	$83.58	2/10/2023	$75.95	2/10/2023	$44.61
2/9/2023	$146.76	2/9/2023	$90.79	2/9/2023	$58.58	2/9/2023	$83.09	2/9/2023	$75.61	2/9/2023	$44.29
2/8/2023	$148.37	2/8/2023	$92.64	2/8/2023	$59.67	2/8/2023	$84.67	2/8/2023	$76.75	2/8/2023	$44.88
2/7/2023	$153.08	2/7/2023	$94.94	2/7/2023	$61.35	2/7/2023	$87.39	2/7/2023	$77.58	2/7/2023	$46.18
2/6/2023	$154.00	2/6/2023	$96.05	2/6/2023	$62.10	2/6/2023	$88.60	2/6/2023	$78.69	2/6/2023	$46.08
2/3/2023	$153.55	2/3/2023	$96.06	2/3/2023	$61.75	2/3/2023	$88.07	2/3/2023	$78.52	2/3/2023	$45.53
2/2/2023	$157.47	2/2/2023	$96.90	2/2/2023	$62.72	2/2/2023	$87.46	2/2/2023	$79.20	2/2/2023	$46.67
2/1/2023	$155.52	2/1/2023	$95.15	2/1/2023	$61.46	2/1/2023	$84.95	2/1/2023	$78.13	2/1/2023	$46.70
1/31/2023	$153.44	1/31/2023	$92.39	1/31/2023	$60.02	1/31/2023	$82.47	1/31/2023	$75.78	1/31/2023	$45.37
1/30/2023	$151.97	1/30/2023	$91.04	1/30/2023	$58.77	1/30/2023	$81.62	1/30/2023	$74.35	1/30/2023	$44.76
1/27/2023	$153.96	1/27/2023	$93.39	1/27/2023	$60.76	1/27/2023	$84.51	1/27/2023	$75.47	1/27/2023	$45.69
1/26/2023	$153.15	1/26/2023	$93.20	1/26/2023	$61.12	1/26/2023	$84.64	1/26/2023	$75.90	1/26/2023	$45.56
1/25/2023	$152.47	1/25/2023	$94.29	1/25/2023	$61.56	1/25/2023	$84.16	1/25/2023	$76.55	1/25/2023	$45.55
1/24/2023	$151.52	1/24/2023	$94.41	1/24/2023	$61.18	1/24/2023	$81.54	1/24/2023	$76.86	1/24/2023	$45.49
1/23/2023	$148.02	1/23/2023	$92.09	1/23/2023	$60.07	1/23/2023	$80.87	1/23/2023	$74.36	1/23/2023	$45.11
1/20/2023	$148.58	1/20/2023	$91.28	1/20/2023	$59.59	1/20/2023	$79.31	1/20/2023	$74.64	1/20/2023	$45.18
1/19/2023	$147.26	1/19/2023	$91.13	1/19/2023	$59.70	1/19/2023	$78.50	1/19/2023	$74.96	1/19/2023	$45.14
1/18/2023	$149.71	1/18/2023	$92.46	1/18/2023	$60.49	1/18/2023	$79.44	1/18/2023	$76.31	1/18/2023	$45.70
1/17/2023	$154.17	1/17/2023	$94.22	1/17/2023	$61.36	1/17/2023	$79.96	1/17/2023	$77.40	1/17/2023	$46.82
1/13/2023	$155.77	1/13/2023	$93.68	1/13/2023	$61.22	1/13/2023	$80.46	1/13/2023	$78.50	1/13/2023	$47.37
1/12/2023	$156.31	1/12/2023	$93.46	1/12/2023	$61.11	1/12/2023	$79.98	1/12/2023	$78.35	1/12/2023	$47.56
1/11/2023	$158.27	1/11/2023	$93.50	1/11/2023	$61.11	1/11/2023	$80.48	1/11/2023	$78.05	1/11/2023	$47.48
1/10/2023	$157.63	1/10/2023	$93.09	1/10/2023	$60.65	1/10/2023	$79.89	1/10/2023	$79.37	1/10/2023	$47.38
1/9/2023	$155.35	1/9/2023	$91.50	1/9/2023	$59.90	1/9/2023	$78.67	1/9/2023	$77.28	1/9/2023	$47.29
1/6/2023	$155.17	1/6/2023	$92.86	1/6/2023	$60.75	1/6/2023	$78.70	1/6/2023	$79.01	1/6/2023	$47.39
1/5/2023	$151.65	1/5/2023	$91.17	1/5/2023	$59.64	1/5/2023	$76.34	1/5/2023	$78.77	1/5/2023	$46.49
1/4/2023	$154.10	1/4/2023	$94.43	1/4/2023	$61.66	1/4/2023	$80.23	1/4/2023	$81.60	1/4/2023	$47.34
1/3/2023	$151.09	1/3/2023	$93.34	1/3/2023	$60.64	1/3/2023	$78.76	1/3/2023	$80.50	1/3/2023	$46.76

ATO	ES	NI	NWN	OGS	SR
$115.04	$58.34	$26.31	$38.25	$62.39	$61.03
$122.74	$80.18	$28.35	$49.85	$81.99	$72.23
$102.03	$51.90	$22.95	$35.30	$57.63	$54.10

ATO US Equity		ES US Equity		NI US Equity		NWN US Equity		OGS US Equity		SR US Equity	
Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST
1/31/2024	$113.94	1/31/2024	$54.22	1/31/2024	$25.97	1/31/2024	$36.86	1/31/2024	$61.37	1/31/2024	$56.77
1/30/2024	$114.51	1/30/2024	$54.81	1/30/2024	$26.12	1/30/2024	$37.70	1/30/2024	$61.47	1/30/2024	$58.03
1/29/2024	$114.26	1/29/2024	$55.16	1/29/2024	$26.09	1/29/2024	$38.49	1/29/2024	$62.39	1/29/2024	$58.53
1/26/2024	$113.70	1/26/2024	$55.12	1/26/2024	$25.82	1/26/2024	$38.25	1/26/2024	$61.34	1/26/2024	$58.15
1/25/2024	$113.92	1/25/2024	$54.86	1/25/2024	$25.56	1/25/2024	$38.50	1/25/2024	$61.23	1/25/2024	$58.83
1/24/2024	$110.89	1/24/2024	$53.16	1/24/2024	$25.18	1/24/2024	$37.97	1/24/2024	$60.59	1/24/2024	$59.50
1/23/2024	$112.70	1/23/2024	$52.88	1/23/2024	$25.68	1/23/2024	$38.51	1/23/2024	$61.15	1/23/2024	$60.81
1/22/2024	$113.14	1/22/2024	$52.78	1/22/2024	$25.59	1/22/2024	$38.29	1/22/2024	$60.30	1/22/2024	$60.17
1/19/2024	$113.08	1/19/2024	$53.41	1/19/2024	$25.60	1/19/2024	$37.52	1/19/2024	$59.18	1/19/2024	$58.79
1/18/2024	$112.43	1/18/2024	$54.00	1/18/2024	$25.65	1/18/2024	$37.30	1/18/2024	$58.57	1/18/2024	$58.20
1/17/2024	$112.74	1/17/2024	$54.76	1/17/2024	$25.94	1/17/2024	$37.24	1/17/2024	$58.86	1/17/2024	$58.41
1/16/2024	$114.08	1/16/2024	$56.24	1/16/2024	$26.28	1/16/2024	$37.36	1/16/2024	$59.27	1/16/2024	$59.00
1/12/2024	$115.79	1/12/2024	$56.88	1/12/2024	$26.74	1/12/2024	$37.95	1/12/2024	$60.80	1/12/2024	$60.09
1/11/2024	$115.39	1/11/2024	$57.12	1/11/2024	$26.50	1/11/2024	$37.83	1/11/2024	$61.03	1/11/2024	$59.84
1/10/2024	$118.04	1/10/2024	$58.36	1/10/2024	$27.34	1/10/2024	$38.70	1/10/2024	$62.50	1/10/2024	$61.41
1/9/2024	$118.36	1/9/2024	$58.00	1/9/2024	$27.14	1/9/2024	$38.70	1/9/2024	$63.02	1/9/2024	$61.74
1/8/2024	$118.85	1/8/2024	$62.87	1/8/2024	$27.29	1/8/2024	$39.13	1/8/2024	$64.53	1/8/2024	$63.06
1/5/2024	$117.98	1/5/2024	$62.07	1/5/2024	$27.04	1/5/2024	$38.89	1/5/2024	$63.93	1/5/2024	$62.70
1/4/2024	$117.60	1/4/2024	$62.89	1/4/2024	$26.86	1/4/2024	$39.19	1/4/2024	$64.39	1/4/2024	$63.08
1/3/2024	$118.02	1/3/2024	$64.29	1/3/2024	$26.89	1/3/2024	$39.43	1/3/2024	$65.01	1/3/2024	$63.68
1/2/2024	$116.93	1/2/2024	$63.74	1/2/2024	$27.01	1/2/2024	$39.18	1/2/2024	$64.69	1/2/2024	$63.76
12/29/2023	$115.90	12/29/2023	$61.72	12/29/2023	$26.55	12/29/2023	$38.45	12/29/2023	$63.72	12/29/2023	$62.34
12/28/2023	$116.08	12/28/2023	$61.96	12/28/2023	$26.55	12/28/2023	$38.53	12/28/2023	$64.27	12/28/2023	$62.41
12/27/2023	$115.92	12/27/2023	$61.36	12/27/2023	$26.28	12/27/2023	$38.67	12/27/2023	$64.35	12/27/2023	$62.58
12/26/2023	$115.81	12/26/2023	$61.44	12/26/2023	$26.43	12/26/2023	$38.62	12/26/2023	$64.82	12/26/2023	$63.30
12/22/2023	$114.91	12/22/2023	$61.08	12/22/2023	$26.25	12/22/2023	$38.67	12/22/2023	$65.06	12/22/2023	$63.78
12/21/2023	$113.75	12/21/2023	$60.91	12/21/2023	$26.04	12/21/2023	$38.04	12/21/2023	$64.24	12/21/2023	$62.99
12/20/2023	$113.16	12/20/2023	$60.53	12/20/2023	$26.08	12/20/2023	$37.72	12/20/2023	$63.01	12/20/2023	$62.70
12/19/2023	$115.15	12/19/2023	$61.60	12/19/2023	$26.54	12/19/2023	$38.14	12/19/2023	$63.72	12/19/2023	$63.58
12/18/2023	$114.28	12/18/2023	$61.98	12/18/2023	$26.39	12/18/2023	$37.56	12/18/2023	$63.02	12/18/2023	$62.80
12/15/2023	$114.82	12/15/2023	$61.82	12/15/2023	$26.48	12/15/2023	$37.95	12/15/2023	$63.23	12/15/2023	$62.93
12/14/2023	$115.39	12/14/2023	$62.86	12/14/2023	$26.68	12/14/2023	$38.79	12/14/2023	$64.46	12/14/2023	$64.66
12/13/2023	$116.85	12/13/2023	$62.42	12/13/2023	$27.03	12/13/2023	$39.26	12/13/2023	$64.16	12/13/2023	$65.30
12/12/2023	$113.70	12/12/2023	$59.57	12/12/2023	$26.18	12/12/2023	$37.90	12/12/2023	$61.04	12/12/2023	$63.90
12/11/2023	$113.32	12/11/2023	$60.14	12/11/2023	$26.34	12/11/2023	$38.12	12/11/2023	$61.11	12/11/2023	$63.38
12/8/2023	$113.46	12/8/2023	$59.02	12/8/2023	$26.30	12/8/2023	$38.15	12/8/2023	$61.55	12/8/2023	$62.88
12/7/2023	$114.53	12/7/2023	$59.73	12/7/2023	$26.43	12/7/2023	$38.10	12/7/2023	$61.09	12/7/2023	$63.15
12/6/2023	$114.73	12/6/2023	$59.96	12/6/2023	$26.41	12/6/2023	$37.83	12/6/2023	$61.33	12/6/2023	$62.70
12/5/2023	$113.88	12/5/2023	$59.55	12/5/2023	$26.14	12/5/2023	$37.26	12/5/2023	$60.31	12/5/2023	$61.11
12/4/2023	$114.92	12/4/2023	$60.05	12/4/2023	$26.44	12/4/2023	$37.70	12/4/2023	$61.88	12/4/2023	$61.83
12/1/2023	$113.85	12/1/2023	$60.13	12/1/2023	$26.20	12/1/2023	$36.83	12/1/2023	$59.74	12/1/2023	$61.15
11/30/2023	$113.81	11/30/2023	$58.78	11/30/2023	$25.64	11/30/2023	$36.16	11/30/2023	$57.63	11/30/2023	$60.29
11/29/2023	$112.05	11/29/2023	$59.08	11/29/2023	$25.81	11/29/2023	$35.92	11/29/2023	$58.87	11/29/2023	$60.20
11/28/2023	$112.50	11/28/2023	$59.29	11/28/2023	$26.18	11/28/2023	$36.24	11/28/2023	$59.02	11/28/2023	$60.61
11/27/2023	$112.64	11/27/2023	$58.41	11/27/2023	$26.20	11/27/2023	$36.27	11/27/2023	$58.78	11/27/2023	$60.19
11/24/2023	$112.00	11/24/2023	$58.63	11/24/2023	$26.10	11/24/2023	$36.01	11/24/2023	$58.99	11/24/2023	$60.01
11/22/2023	$112.25	11/22/2023	$58.90	11/22/2023	$26.19	11/22/2023	$36.19	11/22/2023	$59.31	11/22/2023	$59.81
11/21/2023	$110.81	11/21/2023	$58.20	11/21/2023	$26.01	11/21/2023	$35.85	11/21/2023	$59.07	11/21/2023	$59.05
11/20/2023	$112.12	11/20/2023	$57.68	11/20/2023	$26.06	11/20/2023	$36.27	11/20/2023	$60.41	11/20/2023	$60.24
11/17/2023	$113.09	11/17/2023	$57.89	11/17/2023	$26.08	11/17/2023	$36.75	11/17/2023	$61.68	11/17/2023	$60.64
11/16/2023	$113.24	11/16/2023	$56.87	11/16/2023	$25.77	11/16/2023	$36.69	11/16/2023	$61.75	11/16/2023	$59.03
11/15/2023	$112.72	11/15/2023	$56.64	11/15/2023	$25.75	11/15/2023	$36.89	11/15/2023	$61.79	11/15/2023	$59.20
11/14/2023	$113.33	11/14/2023	$55.63	11/14/2023	$25.97	11/14/2023	$36.79	11/14/2023	$61.46	11/14/2023	$58.94
11/13/2023	$110.33	11/13/2023	$52.47	11/13/2023	$24.81	11/13/2023	$35.30	11/13/2023	$59.02	11/13/2023	$56.55
11/10/2023	$110.62	11/10/2023	$53.23	11/10/2023	$25.00	11/10/2023	$35.75	11/10/2023	$59.67	11/10/2023	$56.25
11/9/2023	$110.50	11/9/2023	$53.66	11/9/2023	$24.82	11/9/2023	$35.66	11/9/2023	$59.54	11/9/2023	$56.48
11/8/2023	$108.49	11/8/2023	$55.10	11/8/2023	$24.98	11/8/2023	$36.25	11/8/2023	$59.06	11/8/2023	$56.38
11/7/2023	$109.08	11/7/2023	$55.75	11/7/2023	$25.06	11/7/2023	$36.87	11/7/2023	$60.56	11/7/2023	$57.20
11/6/2023	$109.91	11/6/2023	$55.96	11/6/2023	$25.29	11/6/2023	$37.28	11/6/2023	$61.53	11/6/2023	$57.45
11/3/2023	$110.70	11/3/2023	$54.84	11/3/2023	$25.72	11/3/2023	$38.85	11/3/2023	$61.53	11/3/2023	$58.69
11/2/2023	$110.59	11/2/2023	$53.70	11/2/2023	$25.78	11/2/2023	$38.10	11/2/2023	$61.67	11/2/2023	$57.50
11/1/2023	$107.90	11/1/2023	$52.53	11/1/2023	$25.40	11/1/2023	$36.99	11/1/2023	$60.77	11/1/2023	$56.15
10/31/2023	$106.89	10/31/2023	$53.22	10/31/2023	$25.16	10/31/2023	$36.25	10/31/2023	$59.74	10/31/2023	$54.97
10/30/2023	$105.68	10/30/2023	$52.82	10/30/2023	$25.12	10/30/2023	$35.84	10/30/2023	$60.65	10/30/2023	$54.34
10/27/2023	$105.36	10/27/2023	$52.60	10/27/2023	$24.90	10/27/2023	$36.11	10/27/2023	$60.84	10/27/2023	$54.15
10/26/2023	$107.99	10/26/2023	$53.58	10/26/2023	$25.46	10/26/2023	$36.70	10/26/2023	$62.35	10/26/2023	$54.86
10/25/2023	$107.58	10/25/2023	$53.64	10/25/2023	$25.06	10/25/2023	$36.75	10/25/2023	$62.13	10/25/2023	$54.72
10/24/2023	$107.90	10/24/2023	$53.46	10/24/2023	$24.98	10/24/2023	$36.85	10/24/2023	$63.70	10/24/2023	$54.83
10/23/2023	$107.02	10/23/2023	$51.90	10/23/2023	$24.43	10/23/2023	$37.22	10/23/2023	$64.67	10/23/2023	$55.85
10/20/2023	$108.01	10/20/2023	$52.93	10/20/2023	$24.97	10/20/2023	$38.40	10/20/2023	$65.25	10/20/2023	$56.93
10/19/2023	$109.32	10/19/2023	$53.33	10/19/2023	$25.38	10/19/2023	$38.92	10/19/2023	$65.86	10/19/2023	$56.88
10/18/2023	$111.08	10/18/2023	$53.91	10/18/2023	$25.72	10/18/2023	$39.33	10/18/2023	$67.52	10/18/2023	$58.16
10/17/2023	$111.93	10/17/2023	$54.87	10/17/2023	$25.87	10/17/2023	$39.33	10/17/2023	$68.82	10/17/2023	$58.73
10/16/2023	$111.45	10/16/2023	$55.60	10/16/2023	$25.85	10/16/2023	$38.88	10/16/2023	$69.04	10/16/2023	$57.72
10/13/2023	$111.18	10/13/2023	$54.45	10/13/2023	$25.52	10/13/2023	$38.17	10/13/2023	$68.36	10/13/2023	$56.98
10/12/2023	$110.33	10/12/2023	$53.98	10/12/2023	$25.14	10/12/2023	$37.75	10/12/2023	$67.60	10/12/2023	$56.90
10/11/2023	$110.99	10/11/2023	$58.34	10/11/2023	$25.79	10/11/2023	$38.23	10/11/2023	$68.49	10/11/2023	$57.91
10/10/2023	$110.01	10/10/2023	$57.66	10/10/2023	$25.21	10/10/2023	$38.13	10/10/2023	$67.93	10/10/2023	$57.70
10/9/2023	$108.91	10/9/2023	$56.63	10/9/2023	$24.89	10/9/2023	$38.06	10/9/2023	$67.63	10/9/2023	$57.28
10/6/2023	$107.78	10/6/2023	$55.22	10/6/2023	$24.35	10/6/2023	$37.56	10/6/2023	$66.67	10/6/2023	$56.82
10/5/2023	$106.67	10/5/2023	$54.62	10/5/2023	$23.59	10/5/2023	$37.15	10/5/2023	$66.24	10/5/2023	$56.17
10/4/2023	$105.55	10/4/2023	$55.51	10/4/2023	$23.77	10/4/2023	$36.87	10/4/2023	$65.99	10/4/2023	$55.07
10/3/2023	$103.60	10/3/2023	$55.45	10/3/2023	$23.72	10/3/2023	$36.49	10/3/2023	$65.74	10/3/2023	$54.67
10/2/2023	$102.03	10/2/2023	$55.14	10/2/2023	$22.95	10/2/2023	$35.99	10/2/2023	$64.94	10/2/2023	$54.10
9/29/2023	$105.18	9/29/2023	$57.53	9/29/2023	$24.43	9/29/2023	$37.19	9/29/2023	$67.54	9/29/2023	$55.91
9/28/2023	$105.16	9/28/2023	$56.75	9/28/2023	$24.36	9/28/2023	$37.29	9/28/2023	$68.36	9/28/2023	$55.24
9/27/2023	$105.70	9/27/2023	$58.15	9/27/2023	$24.93	9/27/2023	$37.18	9/27/2023	$69.17	9/27/2023	$55.63
9/26/2023	$106.22	9/26/2023	$59.08	9/26/2023	$25.48	9/26/2023	$38.00	9/26/2023	$70.04	9/26/2023	$56.56
9/25/2023	$109.69	9/25/2023	$61.15	9/25/2023	$26.43	9/25/2023	$38.41	9/25/2023	$72.26	9/25/2023	$57.85
9/22/2023	$110.06	9/22/2023	$61.92	9/22/2023	$26.42	9/22/2023	$38.59	9/22/2023	$72.57	9/22/2023	$57.68
9/21/2023	$110.85	9/21/2023	$62.66	9/21/2023	$26.79	9/21/2023	$38.70	9/21/2023	$72.41	9/21/2023	$57.84
9/20/2023	$113.35	9/20/2023	$62.61	9/20/2023	$27.32	9/20/2023	$39.10	9/20/2023	$73.77	9/20/2023	$58.07
9/19/2023	$113.28	9/19/2023	$62.45	9/19/2023	$27.28	9/19/2023	$39.30	9/19/2023	$73.34	9/19/2023	$58.30
9/18/2023	$113.68	9/18/2023	$62.94	9/18/2023	$27.28	9/18/2023	$39.59	9/18/2023	$74.08	9/18/2023	$59.18
9/15/2023	$114.19	9/15/2023	$62.86	9/15/2023	$27.40	9/15/2023	$40.17	9/15/2023	$74.83	9/15/2023	$59.93
9/14/2023	$115.53	9/14/2023	$63.08	9/14/2023	$27.46	9/14/2023	$39.81	9/14/2023	$73.78	9/14/2023	$59.96
9/13/2023	$114.44	9/13/2023	$62.02	9/13/2023	$27.14	9/13/2023	$39.14	9/13/2023	$73.26	9/13/2023	$59.66
9/12/2023	$113.07	9/12/2023	$61.08	9/12/2023	$26.86	9/12/2023	$39.07	9/12/2023	$73.13	9/12/2023	$59.06

ATO US Equity		ES US Equity		NI US Equity		NWN US Equity		OGS US Equity		SR US Equity	
Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST
9/11/2023	$113.12	9/11/2023	$61.05	9/11/2023	$26.81	9/11/2023	$38.88	9/11/2023	$73.92	9/11/2023	$58.67
9/8/2023	$113.37	9/8/2023	$60.77	9/8/2023	$26.70	9/8/2023	$38.31	9/8/2023	$73.35	9/8/2023	$58.25
9/7/2023	$113.22	9/7/2023	$60.06	9/7/2023	$26.54	9/7/2023	$38.11	9/7/2023	$73.12	9/7/2023	$57.98
9/6/2023	$111.47	9/6/2023	$59.70	9/6/2023	$26.05	9/6/2023	$37.80	9/6/2023	$72.55	9/6/2023	$57.07
9/5/2023	$111.42	9/5/2023	$60.09	9/5/2023	$25.93	9/5/2023	$37.46	9/5/2023	$71.62	9/5/2023	$56.10
9/1/2023	$114.65	9/1/2023	$61.72	9/1/2023	$26.30	9/1/2023	$37.93	9/1/2023	$72.39	9/1/2023	$57.33
8/31/2023	$115.12	8/31/2023	$62.48	8/31/2023	$26.49	8/31/2023	$38.28	8/31/2023	$71.68	8/31/2023	$57.02
8/30/2023	$116.52	8/30/2023	$63.06	8/30/2023	$26.48	8/30/2023	$38.85	8/30/2023	$73.13	8/30/2023	$57.85
8/29/2023	$116.42	8/29/2023	$63.95	8/29/2023	$26.48	8/29/2023	$38.81	8/29/2023	$73.78	8/29/2023	$58.05
8/28/2023	$115.98	8/28/2023	$63.80	8/28/2023	$26.34	8/28/2023	$38.70	8/28/2023	$73.64	8/28/2023	$57.66
8/25/2023	$116.86	8/25/2023	$63.80	8/25/2023	$26.32	8/25/2023	$38.79	8/25/2023	$74.03	8/25/2023	$57.45
8/24/2023	$115.57	8/24/2023	$62.62	8/24/2023	$26.07	8/24/2023	$38.59	8/24/2023	$73.30	8/24/2023	$57.18
8/23/2023	$115.68	8/23/2023	$62.78	8/23/2023	$26.26	8/23/2023	$38.95	8/23/2023	$74.00	8/23/2023	$57.45
8/22/2023	$116.18	8/22/2023	$62.53	8/22/2023	$26.11	8/22/2023	$39.07	8/22/2023	$74.18	8/22/2023	$57.59
8/21/2023	$115.91	8/21/2023	$62.51	8/21/2023	$26.08	8/21/2023	$39.21	8/21/2023	$73.71	8/21/2023	$57.50
8/18/2023	$116.13	8/18/2023	$63.11	8/18/2023	$26.18	8/18/2023	$39.57	8/18/2023	$73.94	8/18/2023	$57.74
8/17/2023	$115.11	8/17/2023	$63.02	8/17/2023	$25.94	8/17/2023	$39.65	8/17/2023	$73.71	8/17/2023	$57.83
8/16/2023	$114.11	8/16/2023	$63.06	8/16/2023	$25.96	8/16/2023	$39.37	8/16/2023	$73.94	8/16/2023	$57.63
8/15/2023	$113.16	8/15/2023	$62.91	8/15/2023	$25.83	8/15/2023	$39.07	8/15/2023	$72.68	8/15/2023	$57.23
8/14/2023	$114.69	8/14/2023	$64.94	8/14/2023	$26.25	8/14/2023	$39.44	8/14/2023	$73.21	8/14/2023	$57.48
8/11/2023	$115.88	8/11/2023	$65.63	8/11/2023	$26.56	8/11/2023	$40.14	8/11/2023	$74.14	8/11/2023	$58.55
8/10/2023	$115.39	8/10/2023	$64.94	8/10/2023	$26.46	8/10/2023	$39.87	8/10/2023	$74.65	8/10/2023	$58.55
8/9/2023	$115.90	8/9/2023	$65.87	8/9/2023	$26.71	8/9/2023	$40.09	8/9/2023	$74.61	8/9/2023	$58.81
8/8/2023	$115.57	8/8/2023	$65.53	8/8/2023	$26.47	8/8/2023	$39.88	8/8/2023	$74.99	8/8/2023	$58.62
8/7/2023	$116.41	8/7/2023	$65.67	8/7/2023	$26.40	8/7/2023	$40.29	8/7/2023	$76.31	8/7/2023	$59.39
8/4/2023	$115.70	8/4/2023	$65.82	8/4/2023	$26.25	8/4/2023	$40.28	8/4/2023	$75.95	8/4/2023	$59.32
8/3/2023	$116.75	8/3/2023	$66.69	8/3/2023	$26.68	8/3/2023	$41.40	8/3/2023	$76.52	8/3/2023	$59.24
8/2/2023	$119.85	8/2/2023	$68.33	8/2/2023	$27.43	8/2/2023	$41.01	8/2/2023	$77.79	8/2/2023	$59.88
8/1/2023	$119.44	8/1/2023	$68.87	8/1/2023	$27.21	8/1/2023	$41.17	8/1/2023	$76.51	8/1/2023	$60.57
7/31/2023	$120.08	7/31/2023	$70.81	7/31/2023	$27.56	7/31/2023	$41.87	7/31/2023	$77.59	7/31/2023	$62.06
7/28/2023	$120.46	7/28/2023	$70.58	7/28/2023	$27.47	7/28/2023	$42.17	7/28/2023	$77.76	7/28/2023	$61.91
7/27/2023	$120.62	7/27/2023	$70.75	7/27/2023	$27.45	7/27/2023	$42.09	7/27/2023	$77.92	7/27/2023	$62.37
7/26/2023	$122.74	7/26/2023	$72.07	7/26/2023	$27.90	7/26/2023	$43.05	7/26/2023	$79.80	7/26/2023	$63.69
7/25/2023	$122.19	7/25/2023	$72.33	7/25/2023	$27.59	7/25/2023	$42.83	7/25/2023	$79.23	7/25/2023	$63.60
7/24/2023	$121.52	7/24/2023	$72.15	7/24/2023	$27.52	7/24/2023	$42.71	7/24/2023	$79.05	7/24/2023	$63.81
7/21/2023	$121.63	7/21/2023	$72.75	7/21/2023	$27.55	7/21/2023	$42.55	7/21/2023	$79.04	7/21/2023	$63.68
7/20/2023	$120.54	7/20/2023	$71.99	7/20/2023	$27.49	7/20/2023	$42.69	7/20/2023	$78.53	7/20/2023	$63.87
7/19/2023	$119.54	7/19/2023	$70.63	7/19/2023	$27.18	7/19/2023	$41.77	7/19/2023	$77.25	7/19/2023	$62.74
7/18/2023	$117.75	7/18/2023	$69.91	7/18/2023	$26.78	7/18/2023	$41.33	7/18/2023	$76.45	7/18/2023	$62.00
7/17/2023	$118.08	7/17/2023	$70.66	7/17/2023	$26.95	7/17/2023	$41.26	7/17/2023	$75.95	7/17/2023	$61.66
7/14/2023	$117.84	7/14/2023	$71.29	7/14/2023	$27.42	7/14/2023	$41.73	7/14/2023	$74.72	7/14/2023	$61.53
7/13/2023	$118.77	7/13/2023	$71.50	7/13/2023	$27.63	7/13/2023	$41.69	7/13/2023	$76.45	7/13/2023	$62.33
7/12/2023	$118.75	7/12/2023	$70.90	7/12/2023	$27.54	7/12/2023	$41.27	7/12/2023	$76.30	7/12/2023	$62.34
7/11/2023	$116.89	7/11/2023	$69.86	7/11/2023	$27.04	7/11/2023	$40.82	7/11/2023	$75.03	7/11/2023	$61.69
7/10/2023	$116.00	7/10/2023	$68.90	7/10/2023	$26.70	7/10/2023	$40.59	7/10/2023	$73.83	7/10/2023	$61.48
7/7/2023	$115.74	7/7/2023	$69.34	7/7/2023	$27.00	7/7/2023	$40.32	7/7/2023	$72.75	7/7/2023	$60.66
7/6/2023	$115.96	7/6/2023	$69.88	7/6/2023	$27.21	7/6/2023	$40.79	7/6/2023	$74.53	7/6/2023	$60.96
7/5/2023	$117.00	7/5/2023	$70.13	7/5/2023	$27.36	7/5/2023	$41.33	7/5/2023	$75.37	7/5/2023	$62.14
7/3/2023	$115.73	7/3/2023	$69.55	7/3/2023	$26.90	7/3/2023	$41.66	7/3/2023	$75.55	7/3/2023	$61.99
6/30/2023	$114.78	6/30/2023	$69.43	6/30/2023	$26.84	6/30/2023	$41.49	6/30/2023	$75.31	6/30/2023	$61.93
6/29/2023	$114.15	6/29/2023	$68.25	6/29/2023	$26.66	6/29/2023	$41.29	6/29/2023	$75.80	6/29/2023	$61.52
6/28/2023	$113.71	6/28/2023	$68.12	6/28/2023	$26.62	6/28/2023	$40.96	6/28/2023	$74.96	6/28/2023	$61.09
6/27/2023	$115.62	6/27/2023	$69.81	6/27/2023	$26.92	6/27/2023	$41.16	6/27/2023	$75.77	6/27/2023	$61.59
6/26/2023	$114.79	6/26/2023	$69.33	6/26/2023	$26.74	6/26/2023	$40.80	6/26/2023	$75.46	6/26/2023	$61.48
6/23/2023	$112.88	6/23/2023	$68.26	6/23/2023	$26.22	6/23/2023	$40.51	6/23/2023	$74.90	6/23/2023	$61.22
6/22/2023	$114.39	6/22/2023	$69.26	6/22/2023	$26.64	6/22/2023	$41.06	6/22/2023	$76.21	6/22/2023	$62.30
6/21/2023	$116.00	6/21/2023	$69.73	6/21/2023	$26.98	6/21/2023	$40.71	6/21/2023	$77.63	6/21/2023	$62.41
6/20/2023	$114.35	6/20/2023	$69.15	6/20/2023	$26.71	6/20/2023	$40.79	6/20/2023	$76.85	6/20/2023	$61.50
6/16/2023	$115.43	6/16/2023	$70.56	6/16/2023	$26.87	6/16/2023	$40.96	6/16/2023	$76.72	6/16/2023	$61.98
6/15/2023	$115.91	6/15/2023	$69.51	6/15/2023	$26.83	6/15/2023	$41.00	6/15/2023	$76.26	6/15/2023	$62.17
6/14/2023	$115.50	6/14/2023	$68.43	6/14/2023	$26.65	6/14/2023	$41.29	6/14/2023	$77.34	6/14/2023	$62.45
6/13/2023	$115.99	6/13/2023	$68.58	6/13/2023	$26.54	6/13/2023	$41.99	6/13/2023	$78.58	6/13/2023	$64.54
6/12/2023	$115.92	6/12/2023	$68.75	6/12/2023	$26.61	6/12/2023	$41.76	6/12/2023	$78.96	6/12/2023	$64.10
6/9/2023	$115.76	6/9/2023	$68.89	6/9/2023	$26.58	6/9/2023	$41.90	6/9/2023	$80.62	6/9/2023	$64.52
6/8/2023	$115.92	6/8/2023	$70.08	6/8/2023	$26.82	6/8/2023	$42.34	6/8/2023	$80.96	6/8/2023	$65.01
6/7/2023	$115.57	6/7/2023	$70.22	6/7/2023	$26.89	6/7/2023	$42.70	6/7/2023	$81.99	6/7/2023	$65.68
6/6/2023	$113.62	6/6/2023	$68.53	6/6/2023	$26.45	6/6/2023	$41.75	6/6/2023	$79.80	6/6/2023	$63.25
6/5/2023	$113.06	6/5/2023	$69.03	6/5/2023	$26.27	6/5/2023	$41.11	6/5/2023	$78.41	6/5/2023	$62.43
6/2/2023	$112.98	6/2/2023	$68.54	6/2/2023	$26.26	6/2/2023	$41.75	6/2/2023	$79.79	6/2/2023	$63.27
6/1/2023	$110.57	6/1/2023	$67.38	6/1/2023	$26.17	6/1/2023	$40.60	6/1/2023	$78.08	6/1/2023	$61.41
5/31/2023	$113.73	5/31/2023	$67.77	5/31/2023	$26.38	5/31/2023	$41.15	5/31/2023	$79.36	5/31/2023	$62.36
5/30/2023	$112.89	5/30/2023	$66.49	5/30/2023	$26.10	5/30/2023	$41.27	5/30/2023	$79.83	5/30/2023	$62.66
5/26/2023	$112.17	5/26/2023	$67.24	5/26/2023	$26.35	5/26/2023	$42.30	5/26/2023	$79.53	5/26/2023	$63.47
5/25/2023	$113.30	5/25/2023	$69.37	5/25/2023	$26.50	5/25/2023	$42.21	5/25/2023	$78.10	5/25/2023	$63.40
5/24/2023	$114.85	5/24/2023	$70.29	5/24/2023	$26.74	5/24/2023	$42.62	5/24/2023	$79.05	5/24/2023	$63.78
5/23/2023	$114.84	5/23/2023	$71.22	5/23/2023	$26.85	5/23/2023	$43.40	5/23/2023	$80.05	5/23/2023	$65.70
5/22/2023	$114.81	5/22/2023	$71.22	5/22/2023	$26.88	5/22/2023	$43.08	5/22/2023	$79.16	5/22/2023	$65.57
5/19/2023	$115.00	5/19/2023	$71.63	5/19/2023	$26.85	5/19/2023	$43.05	5/19/2023	$78.73	5/19/2023	$65.67
5/18/2023	$113.82	5/18/2023	$72.07	5/18/2023	$26.85	5/18/2023	$42.88	5/18/2023	$78.17	5/18/2023	$65.47
5/17/2023	$114.48	5/17/2023	$72.53	5/17/2023	$26.91	5/17/2023	$43.27	5/17/2023	$78.34	5/17/2023	$65.72
5/16/2023	$113.70	5/16/2023	$72.29	5/16/2023	$27.02	5/16/2023	$42.48	5/16/2023	$77.46	5/16/2023	$64.94
5/15/2023	$115.27	5/15/2023	$74.54	5/15/2023	$27.51	5/15/2023	$43.37	5/15/2023	$78.36	5/15/2023	$65.70
5/12/2023	$116.80	5/12/2023	$74.77	5/12/2023	$27.95	5/12/2023	$44.01	5/12/2023	$79.52	5/12/2023	$66.72
5/11/2023	$115.77	5/11/2023	$73.97	5/11/2023	$27.63	5/11/2023	$44.29	5/11/2023	$78.94	5/11/2023	$66.26
5/10/2023	$116.96	5/10/2023	$74.68	5/10/2023	$28.35	5/10/2023	$44.79	5/10/2023	$79.36	5/10/2023	$66.95
5/9/2023	$116.16	5/9/2023	$74.16	5/9/2023	$27.92	5/9/2023	$44.62	5/9/2023	$78.69	5/9/2023	$66.10
5/8/2023	$115.54	5/8/2023	$74.45	5/8/2023	$27.92	5/8/2023	$45.06	5/8/2023	$78.25	5/8/2023	$65.98
5/5/2023	$115.24	5/5/2023	$75.12	5/5/2023	$28.00	5/5/2023	$45.34	5/5/2023	$78.53	5/5/2023	$67.18
5/4/2023	$115.64	5/4/2023	$74.42	5/4/2023	$27.84	5/4/2023	$46.57	5/4/2023	$77.47	5/4/2023	$66.05
5/3/2023	$110.69	5/3/2023	$74.35	5/3/2023	$27.59	5/3/2023	$44.46	5/3/2023	$77.56	5/3/2023	$65.38
5/2/2023	$110.09	5/2/2023	$74.15	5/2/2023	$27.39	5/2/2023	$44.30	5/2/2023	$76.16	5/2/2023	$64.36
5/1/2023	$112.29	5/1/2023	$75.39	5/1/2023	$27.97	5/1/2023	$45.15	5/1/2023	$75.17	5/1/2023	$65.32
4/28/2023	$111.89	4/28/2023	$75.29	4/28/2023	$27.93	4/28/2023	$45.25	4/28/2023	$74.84	4/28/2023	$65.41
4/27/2023	$112.68	4/27/2023	$75.65	4/27/2023	$28.01	4/27/2023	$45.55	4/27/2023	$76.06	4/27/2023	$66.39
4/26/2023	$111.61	4/26/2023	$75.19	4/26/2023	$27.51	4/26/2023	$44.73	4/26/2023	$74.99	4/26/2023	$65.33
4/25/2023	$113.98	4/25/2023	$77.19	4/25/2023	$27.86	4/25/2023	$45.58	4/25/2023	$77.87	4/25/2023	$67.44
4/24/2023	$113.93	4/24/2023	$76.97	4/24/2023	$27.75	4/24/2023	$45.48	4/24/2023	$78.42	4/24/2023	$67.25
4/21/2023	$113.11	4/21/2023	$76.48	4/21/2023	$27.85	4/21/2023	$45.51	4/21/2023	$78.50	4/21/2023	$67.52
4/20/2023	$113.49	4/20/2023	$76.26	4/20/2023	$27.81	4/20/2023	$45.41	4/20/2023	$78.38	4/20/2023	$67.39
4/19/2023	$112.48	4/19/2023	$76.63	4/19/2023	$27.77	4/19/2023	$45.42	4/19/2023	$78.46	4/19/2023	$67.56
4/18/2023	$111.36	4/18/2023	$76.03	4/18/2023	$27.42	4/18/2023	$44.86	4/18/2023	$77.22	4/18/2023	$66.66
4/17/2023	$111.85	4/17/2023	$76.77	4/17/2023	$27.52	4/17/2023	$45.32	4/17/2023	$78.43	4/17/2023	$67.28
4/14/2023	$110.81	4/14/2023	$76.11	4/14/2023	$27.09	4/14/2023	$44.87	4/14/2023	$77.44	4/14/2023	$65.68
4/13/2023	$112.09	4/13/2023	$77.24	4/13/2023	$27.56	4/13/2023	$45.39	4/13/2023	$79.06	4/13/2023	$66.94
4/12/2023	$113.62	4/12/2023	$77.38	4/12/2023	$27.87	4/12/2023	$45.73	4/12/2023	$79.70	4/12/2023	$67.35
4/11/2023	$114.08	4/11/2023	$77.85	4/11/2023	$27.85	4/11/2023	$46.24	4/11/2023	$80.15	4/11/2023	$68.64
4/10/2023	$113.78	4/10/2023	$78.05	4/10/2023	$27.90	4/10/2023	$46.56	4/10/2023	$80.41	4/10/2023	$68.90
4/6/2023	$113.15	4/6/2023	$78.40	4/6/2023	$28.03	4/6/2023	$46.55	4/6/2023	$79.94	4/6/2023	$68.66
4/5/2023	$112.58	4/5/2023	$78.11	4/5/2023	$27.90	4/5/2023	$46.06	4/5/2023	$79.30	4/5/2023	$69.07
4/4/2023	$108.96	4/4/2023	$75.71	4/4/2023	$27.00	4/4/2023	$44.74	4/4/2023	$76.79	4/4/2023	$67.19
4/3/2023	$108.92	4/3/2023	$75.09	4/3/2023	$27.00	4/3/2023	$44.81	4/3/2023	$76.32	4/3/2023	$67.26
3/31/2023	$110.15	3/31/2023	$75.92	3/31/2023	$27.19	3/31/2023	$45.36	3/31/2023	$77.06	3/31/2023	$67.74

ATO US Equity		ES US Equity		NI US Equity		NWN US Equity		OGS US Equity		SR US Equity	
Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST	Date	PX_LAST
3/30/2023	$109.73	3/30/2023	$75.77	3/30/2023	$27.08	3/30/2023	$45.26	3/30/2023	$76.82	3/30/2023	$68.41
3/29/2023	$109.33	3/29/2023	$75.23	3/29/2023	$26.84	3/29/2023	$45.18	3/29/2023	$76.75	3/29/2023	$67.87
3/28/2023	$107.89	3/28/2023	$73.90	3/28/2023	$26.47	3/28/2023	$44.80	3/28/2023	$76.17	3/28/2023	$66.87
3/27/2023	$108.08	3/27/2023	$73.59	3/27/2023	$26.31	3/27/2023	$44.67	3/27/2023	$75.75	3/27/2023	$66.91
3/24/2023	$107.22	3/24/2023	$73.46	3/24/2023	$26.02	3/24/2023	$44.26	3/24/2023	$74.91	3/24/2023	$66.84
3/23/2023	$104.42	3/23/2023	$71.06	3/23/2023	$25.27	3/23/2023	$42.82	3/23/2023	$72.75	3/23/2023	$64.53
3/22/2023	$105.18	3/22/2023	$71.32	3/22/2023	$25.65	3/22/2023	$43.55	3/22/2023	$73.55	3/22/2023	$65.10
3/21/2023	$108.04	3/21/2023	$72.68	3/21/2023	$26.24	3/21/2023	$44.63	3/21/2023	$75.45	3/21/2023	$66.52
3/20/2023	$112.62	3/20/2023	$73.90	3/20/2023	$27.06	3/20/2023	$45.42	3/20/2023	$77.35	3/20/2023	$67.90
3/17/2023	$112.43	3/17/2023	$73.64	3/17/2023	$26.72	3/17/2023	$45.11	3/17/2023	$76.26	3/17/2023	$67.61
3/16/2023	$112.09	3/16/2023	$74.50	3/16/2023	$27.19	3/16/2023	$45.88	3/16/2023	$76.43	3/16/2023	$68.63
3/15/2023	$111.54	3/15/2023	$74.52	3/15/2023	$27.09	3/15/2023	$45.86	3/15/2023	$75.03	3/15/2023	$67.16
3/14/2023	$109.84	3/14/2023	$73.66	3/14/2023	$27.00	3/14/2023	$44.71	3/14/2023	$74.16	3/14/2023	$67.27
3/13/2023	$108.35	3/13/2023	$72.56	3/13/2023	$26.58	3/13/2023	$43.97	3/13/2023	$72.84	3/13/2023	$65.57
3/10/2023	$107.01	3/10/2023	$70.70	3/10/2023	$25.98	3/10/2023	$43.52	3/10/2023	$72.30	3/10/2023	$64.20
3/9/2023	$108.35	3/9/2023	$72.05	3/9/2023	$26.63	3/9/2023	$44.20	3/9/2023	$73.89	3/9/2023	$64.93
3/8/2023	$110.18	3/8/2023	$72.68	3/8/2023	$26.94	3/8/2023	$44.88	3/8/2023	$75.52	3/8/2023	$65.30
3/7/2023	$109.01	3/7/2023	$71.84	3/7/2023	$26.56	3/7/2023	$44.79	3/7/2023	$75.70	3/7/2023	$65.02
3/6/2023	$111.17	3/6/2023	$73.43	3/6/2023	$26.80	3/6/2023	$45.22	3/6/2023	$77.67	3/6/2023	$65.72
3/3/2023	$110.51	3/3/2023	$73.18	3/3/2023	$26.94	3/3/2023	$46.04	3/3/2023	$78.77	3/3/2023	$66.87
3/2/2023	$109.29	3/2/2023	$71.93	3/2/2023	$26.52	3/2/2023	$45.61	3/2/2023	$76.76	3/2/2023	$66.61
3/1/2023	$108.36	3/1/2023	$70.98	3/1/2023	$26.09	3/1/2023	$44.86	3/1/2023	$77.22	3/1/2023	$67.32
2/28/2023	$110.59	2/28/2023	$72.45	2/28/2023	$26.68	2/28/2023	$46.10	2/28/2023	$77.96	2/28/2023	$67.27
2/27/2023	$112.64	2/27/2023	$74.11	2/27/2023	$26.74	2/27/2023	$45.54	2/27/2023	$78.65	2/27/2023	$68.07
2/24/2023	$113.47	2/24/2023	$74.39	2/24/2023	$27.06	2/24/2023	$45.38	2/24/2023	$77.86	2/24/2023	$68.46
2/23/2023	$113.86	2/23/2023	$75.03	2/23/2023	$27.13	2/23/2023	$45.92	2/23/2023	$78.06	2/23/2023	$68.72
2/22/2023	$113.36	2/22/2023	$75.40	2/22/2023	$26.85	2/22/2023	$46.01	2/22/2023	$77.15	2/22/2023	$68.90
2/21/2023	$113.76	2/21/2023	$75.33	2/21/2023	$26.21	2/21/2023	$45.60	2/21/2023	$77.08	2/21/2023	$68.49
2/17/2023	$114.80	2/17/2023	$77.17	2/17/2023	$26.39	2/17/2023	$46.80	2/17/2023	$78.90	2/17/2023	$69.68
2/16/2023	$113.41	2/16/2023	$75.68	2/16/2023	$26.14	2/16/2023	$46.16	2/16/2023	$78.44	2/16/2023	$68.62
2/15/2023	$113.88	2/15/2023	$76.80	2/15/2023	$26.26	2/15/2023	$46.34	2/15/2023	$78.06	2/15/2023	$68.79
2/14/2023	$112.77	2/14/2023	$75.84	2/14/2023	$26.19	2/14/2023	$45.94	2/14/2023	$77.92	2/14/2023	$68.39
2/13/2023	$113.78	2/13/2023	$77.19	2/13/2023	$26.39	2/13/2023	$46.67	2/13/2023	$79.24	2/13/2023	$69.84
2/10/2023	$113.24	2/10/2023	$76.98	2/10/2023	$26.14	2/10/2023	$46.29	2/10/2023	$78.61	2/10/2023	$69.54
2/9/2023	$111.63	2/9/2023	$75.17	2/9/2023	$25.61	2/9/2023	$45.09	2/9/2023	$76.89	2/9/2023	$68.50
2/8/2023	$113.43	2/8/2023	$76.07	2/8/2023	$26.05	2/8/2023	$46.64	2/8/2023	$77.70	2/8/2023	$69.44
2/7/2023	$113.87	2/7/2023	$77.56	2/7/2023	$26.48	2/7/2023	$48.99	2/7/2023	$79.58	2/7/2023	$71.13
2/6/2023	$114.59	2/6/2023	$78.17	2/6/2023	$26.52	2/6/2023	$49.22	2/6/2023	$80.81	2/6/2023	$71.87
2/3/2023	$114.15	2/3/2023	$77.25	2/3/2023	$26.32	2/3/2023	$49.37	2/3/2023	$79.91	2/3/2023	$72.23
2/2/2023	$116.45	2/2/2023	$80.18	2/2/2023	$26.76	2/2/2023	$49.85	2/2/2023	$80.94	2/2/2023	$71.19
2/1/2023	$115.89	2/1/2023	$79.52	2/1/2023	$26.85	2/1/2023	$48.76	2/1/2023	$79.55	2/1/2023	$70.95
1/31/2023	$114.49	1/31/2023	$79.15	1/31/2023	$26.74	1/31/2023	$47.82	1/31/2023	$79.45	1/31/2023	$69.01
1/30/2023	$112.54	1/30/2023	$78.23	1/30/2023	$26.55	1/30/2023	$46.82	1/30/2023	$77.52	1/30/2023	$67.79
1/27/2023	$112.95	1/27/2023	$77.81	1/27/2023	$26.52	1/27/2023	$47.26	1/27/2023	$77.71	1/27/2023	$68.14
1/26/2023	$112.49	1/26/2023	$77.22	1/26/2023	$26.54	1/26/2023	$46.70	1/26/2023	$77.17	1/26/2023	$67.90
1/25/2023	$112.16	1/25/2023	$76.63	1/25/2023	$26.58	1/25/2023	$46.48	1/25/2023	$78.96	1/25/2023	$67.90
1/24/2023	$111.87	1/24/2023	$77.15	1/24/2023	$26.33	1/24/2023	$46.62	1/24/2023	$76.26	1/24/2023	$67.88
1/23/2023	$110.58	1/23/2023	$76.81	1/23/2023	$26.11	1/23/2023	$46.39	1/23/2023	$75.55	1/23/2023	$67.27
1/20/2023	$110.07	1/20/2023	$76.66	1/20/2023	$26.22	1/20/2023	$46.05	1/20/2023	$74.00	1/20/2023	$66.89
1/19/2023	$109.14	1/19/2023	$76.70	1/19/2023	$25.85	1/19/2023	$45.81	1/19/2023	$74.07	1/19/2023	$67.04
1/18/2023	$108.73	1/18/2023	$78.07	1/18/2023	$26.06	1/18/2023	$45.90	1/18/2023	$74.54	1/18/2023	$67.26
1/17/2023	$111.00	1/17/2023	$80.50	1/17/2023	$26.62	1/17/2023	$46.83	1/17/2023	$76.14	1/17/2023	$68.46
1/13/2023	$111.77	1/13/2023	$80.78	1/13/2023	$26.78	1/13/2023	$46.83	1/13/2023	$77.68	1/13/2023	$69.87
1/12/2023	$113.36	1/12/2023	$81.84	1/12/2023	$26.89	1/12/2023	$46.94	1/12/2023	$77.26	1/12/2023	$69.60
1/11/2023	$113.71	1/11/2023	$82.50	1/11/2023	$26.91	1/11/2023	$46.52	1/11/2023	$77.98	1/11/2023	$69.59
1/10/2023	$111.34	1/10/2023	$82.38	1/10/2023	$26.56	1/10/2023	$46.06	1/10/2023	$76.79	1/10/2023	$68.83
1/9/2023	$110.84	1/9/2023	$82.40	1/9/2023	$26.87	1/9/2023	$46.02	1/9/2023	$76.08	1/9/2023	$68.50
1/6/2023	$109.61	1/6/2023	$82.49	1/6/2023	$26.61	1/6/2023	$46.52	1/6/2023	$76.16	1/6/2023	$68.91
1/5/2023	$106.05	1/5/2023	$80.52	1/5/2023	$26.14	1/5/2023	$45.50	1/5/2023	$73.75	1/5/2023	$66.98
1/4/2023	$109.04	1/4/2023	$82.04	1/4/2023	$26.77	1/4/2023	$46.14	1/4/2023	$74.44	1/4/2023	$67.67
1/3/2023	$108.32	1/3/2023	$80.97	1/3/2023	$26.44	1/3/2023	$45.61	1/3/2023	$73.61	1/3/2023	$66.38

to Patel Rf Rate

	[1]	[2]
	10-year	30-year
1Q 2024	4.20	4.30
2Q 2024	4.10	4.30
3Q 2024	3.90	4.20
4Q 2023	3.90	4.10
2025-2029	3.90	4.10
Average	4.00	4.20

Notes:
No. 2, Schedule 8
cember 28, 2023.

hole Forecasted

o. 2, Schedule 9

	Dividend Yield	Growth Rate	Expected Market Return
ue Line Estimate	2.20%	9.73%	11.93%
Historical Return			12.16%
d Market Return			12.05%

Sources:	1926-2023	
e Dividend Yield	1/5/2024	2.20%
eciation Potential	1/5/2024	45%

d Index Report

ue Line Estimate	2.20%	10.67%	12.79%
Historical Return			12.16%
d Market Return			12.48%

Sources:	1926-2023	
e Dividend Yield	2/5/2024	2.20%
eciation Potential	2/5/2024	50%

d Index Report

VL Report Date	Dividend Yield	Appreciation Potential	Growth Rate	DCF Result
6/30/2023	2.30%	60%	12.47%	14.77%
7/1/2023	2.30%	65%	13.34%	15.64%
7/7/2023	2.30%	65%	13.34%	15.64%
7/14/2023	2.20%	55%	11.58%	13.78%
7/21/2023	2.20%	60%	12.47%	14.67%
7/28/2023	2.20%	55%	11.58%	13.78%
8/4/2023	2.10%	55%	11.58%	13.68%
8/11/2023	2.20%	50%	10.67%	12.87%
8/18/2023	2.20%	55%	11.58%	13.78%
8/25/2023	2.20%	55%	11.58%	13.78%
9/1/2023	2.30%	60%	12.47%	14.77%
9/8/2023	2.30%	60%	12.47%	14.77%
9/15/2023	2.20%	55%	11.58%	13.78%
9/22/2023	2.30%	60%	12.47%	14.77%
9/29/2023	2.30%	60%	12.47%	14.77%
10/6/2023	2.30%	65%	13.34%	15.64%
10/13/2023	2.40%	65%	13.34%	15.74%
10/20/2023	2.40%	65%	13.34%	15.74%
10/27/2023	2.30%	65%	13.34%	15.64%
11/3/2023	2.40%	75%	15.02%	17.42%
11/10/2023	2.50%	75%	15.02%	17.52%
11/17/2023	2.40%	65%	13.34%	15.74%
11/6/2023	2.40%	75%	15.02%	17.42%
11/24/2023	2.40%	65%	13.34%	15.74%
12/1/2023	2.30%	60%	12.47%	14.77%
12/8/2023	2.30%	60%	12.47%	14.77%
12/15/2023	2.20%	55%	11.58%	13.78%
12/22/2023	2.20%	50%	10.67%	12.87%
12/29/2023	2.20%	45%	9.73%	11.93%
1/5/2024	2.20%	45%	9.73%	11.93%
1/12/2024	2.20%	45%	9.73%	11.93%
1/19/2024	2.20%	45%	9.73%	11.93%
1/26/2024	2.20%	45%	9.73%	11.93%
2/2/2024	2.20%	45%	9.73%	11.93%
2/9/2024	2.20%	50%	10.67%	12.87%
2/16/2024	2.20%	50%	10.67%	12.87%
Average Dec 1, 2023-Feb. 16, 2024			10.58%	12.79%

Adjustments to Mr. Patel's CAPM Analysis

	Mr. Patel As Filed Uses 10 Yr Treas Bond Yld Patel Mkt. Return	Adjustments: Include Essential / Use 10 Yr Treas Bond Yld Patel Mkt. Return	Include Essential / Use 30 Yr Treas Bond Yld Patel Mkt. Return	Include Essential / Use 30 Yr Treas Bond Yld Update Mkt Return	Incl. All Proxy Companies / Use 30 Yr Treas Bond Yld Update Mkt Return
Risk-free rate [1]	4.00%	4.00%	4.20%	4.20%	4.20%
Total Market Return [2]	12.05%	12.05%	12.05%	12.48%	12.48%
Market Risk Premium [3]	8.05%	8.05%	7.85%	8.28%	8.28%
Value Line Beta [4]	0.80	0.83	0.83	0.83	0.85
CAPM Result [5]	**10.44%**	**10.71%**	**10.74%**	**11.10%**	**11.24%**

CAPM Adjustments (Adj'mts Additive)	**CAPM**
Include Essential Utilities	10.71%
Use Projected 30- year Treasury B	10.74%
Update Market Return calculation	11.10%
Use Distribution Utility Proxy Grc	11.24%

Average of Mr. Patel's Adjusted DCF and CAPM	
Adjusted DCF	9.82%
Adjusted CAPM	11.24%
Average	**10.53%**

Notes:
[1] I&E Exhibit No. 2, Schedule 8 and Exhibit No.13-R, Schedule 7
[2] I&E Exhibit No. 2, Schedule 9
[3] Equals [2] - [1]
[4] I&E Exhibit No. 2, Schedule 7, Including Essential
[5] Equals [1] + ([3] x [4])

		Beta
American Water Works, Inc.	AWK	0.95
American States Water Company	AWR	0.70
California Water Service Group	CWT	0.75
Middlesex Water Company	MSEX	0.75
SJW Group	SJW	0.85
Essential Utilties	WTRG	1.00
Atmos Energy Corporation	ATO	0.85
Eversource Energy	ES	0.9
NiSource Inc.	NI	0.9
Northwest Natural Gas Company	NWN	0.85
ONE Gas, Inc.	OGS	0.85
Spire, Inc.	SR	0.85
	Water Only	0.83
	All Companies	0.85

GARRETT CAPM
IMPLIED EQUITY RISK PREMIUM AS FILED

Company	Ticker	[1] Current 30-day average of 30-year U.S. Treasury bond yield	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] CAPM ROE (K)
American States Water Co.	AWR	4.42%	0.70	9.68%	5.26%	8.10%
California Water Services Group	CWT	4.42%	0.75	9.68%	5.26%	8.36%
Essential Utilities Inc.	WTRG	4.42%	1.00	9.68%	5.26%	9.68%
Middlesex Water Co.	MSEX	4.42%	0.75	9.68%	5.26%	8.36%
SJW Group	SJW	4.42%	0.85	9.68%	5.26%	8.89%
Atmos Energy Corp	ATO	4.42%	0.85	9.68%	5.26%	8.89%
Eversource Energy	ES	4.42%	0.90	9.68%	5.26%	9.15%
NiSource Inc.	NI	4.42%	0.90	9.68%	5.26%	9.15%
Northwest Natural Gas Co.	NWN	4.42%	0.85	9.68%	5.26%	8.89%
ONE Gas Inc.	OGS	4.42%	0.85	9.68%	5.26%	8.89%
Spire Inc.	SR	4.42%	0.85	9.68%	5.26%	8.89%
Mean - Water Utilities Only			0.81			8.68%
Mean - All Proxy Group			0.84			8.84%

Notes:
[1] Exhibit DJG-7
[2] Exhibit DJG-8
[3] Equals [4] + [1]
[4] Exhibit DJG-10
[5] Equals [1] + ([2] x [4])

GARRETT CAPM
IMPLIED EQUITY RISK PREMIUM BASED ON I&E'S PROJECTED MARKET RISK PREMIUM

Company	Ticker	[1] Current 30-day average of 30-year U.S. Treasury bond yield	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] CAPM ROE (K)
American States Water Co.	AWR	4.42%	0.70	12.05%	7.63%	9.76%
California Water Services Group	CWT	4.42%	0.75	12.05%	7.63%	10.14%
Essential Utilities Inc.	WTRG	4.42%	1.00	12.05%	7.63%	12.05%
Middlesex Water Co.	MSEX	4.42%	0.75	12.05%	7.63%	10.14%
SJW Group	SJW	4.42%	0.85	12.05%	7.63%	10.91%
Atmos Energy Corp	ATO	4.42%	0.85	12.05%	7.63%	10.91%
Eversource Energy	ES	4.42%	0.90	12.05%	7.63%	11.29%
NiSource Inc.	NI	4.42%	0.90	12.05%	7.63%	11.29%
Northwest Natural Gas Co.	NWN	4.42%	0.85	12.05%	7.63%	10.91%
ONE Gas Inc.	OGS	4.42%	0.85	12.05%	7.63%	10.91%
Spire Inc.	SR	4.42%	0.85	12.05%	7.63%	10.91%
Mean - Water Utilities Only			0.81			10.60%
Mean - All Proxy Group			0.84			10.84%

Notes:
[1] Exhibit DJG-7
[2] Exhibit DJG-8
[3] I&E Statement No. 2, p. 34; and I&E Exhibit No. 2, Schedule 9, pp. 1-3
[4] Exhibit DJG-10
[5] Equals [1] + ([2] x [4])

Garrett Proxy Group Debt Ratio
(Recreation of Exhibit DJG-13)

Company	Ticker	Debt Ratio
American States Water Company	AWR	44%
California Water Service Group	CWT	42%
Essential Utilities, Inc.	WTRG	52%
Middlesex Water Company	MSEX	44%
SJW Group	SJW	56%
Atmos Energy Corp	ATO	38%
Eversource Energy	ES	57%
NiSource Inc.	NI	58%
Northwest Natural Gas Company	NWN	54%
ONE Gas, Inc.	OGS	42%
Spire Inc.	SR	55%
Average - All Utilities		49.1%
Average - Water Utilities Only		**47.3%**

Source: Debt ratios from Value Line Investment Survey - 2023

Market Value of the Capital Structure of the Proxy Group

Expressed in ($000s)

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]
		Debt												Preferred Equity		Common Equity		Market Value			
Company	Ticker	Current Assets	Current Liabilities	Current Long-Term Debt and Leases	Net Working Capital	Short-Term Debt	Short-Term Debt Adj'd for Net Working Capital	Long-Term Debt	Book Value of Debt	Unadjusted Market Value of Debt	Carrying Amount	Adjustment to Book Value of Long-Term Debt	Market Value of Debt	Book Value	Market Value	Book Value	Market Value	Market Value of Firm	Ratio of Market Value Debt	Preferred Equity	Common Equity
American States Water Company	AWR	$151,294	$396,522	$257,791	$12,563	$0	$0	$ 476,637	$734,428	$424,151	$450,373	-$26,222	$708,206	$0	$0	$ 709,549	$ 3,420,731	$4,128,937	17.15%	0.00%	82.85%
California Water Service Group	CWT	$295,535	$294,650	$4,375	$5,260	$70,000	$0	$ 1,066,325	$1,070,700	$977,277	$1,055,797	-$78,520	$992,180	$0	$0	$ 1,317,590	$ 3,324,527	$4,316,707	22.98%	0.00%	77.02%
Essential Utilities, Inc.	WTRG	$658,159	$1,021,869	$208,672	($155,038)	$257,194	$155,038	$ 6,408,723	$6,772,433	$5,528,131	$6,617,395	-$1,089,264	$5,683,169	$0	$0	$ 5,377,386	$ 12,519,143	$18,202,312	31.22%	0.00%	68.78%
Middlesex Water Company	MSEX	$37,306	$117,859	$18,162	($62,391)	$55,500	$55,500	$ 293,986	$367,648	$353,356	$361,869	-$8,513	$359,135	$2,084	$2,084	$ 400,328	$ 1,387,628	$1,748,847	20.54%	0.12%	79.35%
SJW Group	SJW	$154,714	$264,650	$4,360	($105,576)	$159,578	$105,576	$ 1,491,965	$1,601,901	$1,294,354	$1,491,965	-$197,611	$1,404,290	$0	$0	$ 1,110,868	$ 2,461,625	$3,865,915	36.32%	0.00%	63.68%
Atmos Energy Corp	ATO	$3,627,763	$3,531,894	$2,201,484	$2,297,353	$0	$0	$ 6,551,795	$8,753,279	$7,856,154	$8,760,000	-$903,846	$7,849,433	$0	$0	$ 9,836,274	$ 15,803,660	$23,653,093	33.19%	0.00%	66.81%
Eversource Energy	ES	$4,223,198	$6,799,283	$1,376,139	($1,199,946)	$1,442,200	$1,199,946	$ 20,236,586	$22,812,671	$18,891,300	$21,044,100	-$2,152,800	$20,659,871	$0	$0	$ 15,473,158	$ 29,202,094	$49,861,965	41.43%	0.00%	58.57%
NiSource Inc.	NI	$2,584,300	$4,660,500	$34,800	($2,041,400)	$1,761,900	$1,761,900	$ 9,555,500	$11,352,200	$8,479,400	$9,553,600	-$1,074,200	$10,278,000	$1,546,500	$1,546,500	$ 6,028,900	$ 11,136,204	$22,960,704	44.76%	6.74%	48.50%
Northwest Natural Gas Company	NWN	$744,213	$898,734	$92,211	($62,310)	$258,200	$62,310	$ 1,325,132	$1,479,653	$1,148,395	$1,336,864	-$188,469	$1,291,184	$0	$0	$ 1,175,441	$ 1,670,369	$2,961,553	43.60%	0.00%	56.40%
ONE Gas, Inc.	OGS	$1,217,608	$1,189,419	$27,216	$55,405	$552,000	$0	$ 2,679,143	$2,706,359	$2,500,000	$2,700,000	-$200,000	$2,506,359	$0	$0	$ 2,584,426	$ 4,099,559	$6,605,918	37.94%	0.00%	62.06%
Spire Inc.	SR	$1,629,700	$2,404,700	$256,600	($518,400)	$1,227,000	$518,400	$ 3,156,300	$3,931,300	$3,083,700	$3,412,900.0	-$329,200	$3,602,100	$242,000	$242,000	$ 2,622,100	$ 3,617,915	$7,462,015	48.27%	3.24%	48.48%
																		Average - Water Utilities Only	25.64%	0.02%	74.33%
																		Average - Total Proxy Group	34.31%	0.92%	64.77%

Notes:

[1] S&P Capital IQ Pro.
[2] S&P Capital IQ Pro.
[3] S&P Capital IQ Pro.
[4] Equals [1] - ([2] -[3])
[5] S&P Capital IQ Pro.
[6] Equals:
  [A] 0 if [4] > 0
  [B] ABS of [4] if [4] < 0 and ABS of [4] < [5]
  [C] [5] if [4] < 0 and ABS of [4] > [5]
[7] S&P Capital IQ Pro.
[8] Equals [3] + [6] + [7]
[9] Company 10-Ks
[10] Company 10-Ks
[11] Equals [9] - [10]
[12] Equals [8] + [11]
[13] S&P Capital IQ Pro.
[14] Equals [13]
[15] S&P Capital IQ Pro.
[16] S&P Capital IQ Pro.
[17] Equals [12] + [14] + [16]
[18] Equals [12] / [17]
[19] Equals [14] / [17]
[20] Equals [16] / [17]

Corrected Garrett Hamada Adjustment

Water Utility Proxy Group Unlevering Beta		
Proxy Debt Ratio	25.6%	[1]
Proxy Equity Ratio	74.4%	[2]
Debt / Equity Ratio	34%	[3]
Tax Rate	25.7%	[4]
Equity Risk Premium	5.3%	[5]
Risk-free Rate	4.4%	[6]
Proxy Group Beta	0.84	[7]
Unlevered Beta	0.67	[8]

[9]	[10]	[11]	[12]	
Relevered Betas and Cost of Equity Estimates				
Debt Ratio	D/E Ratio	Levered Beta	Cost of Equity	
0%	0%	0.67	7.9%	
20%	25%	0.79	8.6%	
25.6%	34%	0.84	8.8%	**<-- Proxy Group Average**
30%	43%	0.88	9.1%	
45%	81%	1.07	10.1%	**<-- PAWC proposed**
49%	96%	1.15	10.5%	
53%	113%	1.23	10.9%	
60%	150%	1.42	11.9%	

Increase in CAPM: 1.2%

Distribution Utility Proxy Group Unlevering Beta		
Proxy Debt Ratio	34.3%	[1]
Proxy Equity Ratio	65.7%	[2]
Debt / Equity Ratio	52%	[3]
Tax Rate	25.7%	[4]
Equity Risk Premium	5.3%	[5]
Risk-free Rate	4.4%	[6]
Proxy Group Beta	0.84	[7]
Unlevered Beta	0.61	[8]

[9]	[10]	[11]	[12]	
Relevered Betas and Cost of Equity Estimates				
Debt Ratio	D/E Ratio	Levered Beta	Cost of Equity	
0%	0%	0.67	7.9%	
20%	25%	0.79	8.6%	
30%	43%	0.88	9.1%	
34.3%	52%	0.93	9.3%	**<-- Proxy Group Average**
45%	81%	1.07	10.1%	**<-- PAWC proposed**
49%	96%	1.15	10.5%	
53%	113%	1.23	10.9%	
60%	150%	1.42	11.9%	

Increase in CAPM: 1.0%

[1] Proxy group actual market value debt ratio
[2] Proxy group actual market value equity ratio
[3] Equals [1] / [2]
[4] Company assumed tax rate
[5] Equity risk premium from Exhibit DJG-11
[6] Risk-free rate from Exhibit DJG-11
[7] Average proxy beta from Exhibit DJG-11
[8] Equals [7] / (1 + (1 - [4]) * [3])
[9] Various debt ratios (proxy group average and Company prop
[10] Equals [9] / (1 - [9])
[11] Equals [8] * (1 + (1 - [4]) * [10])
[12] Equals [6] + [11] * [5]

Pennsylvania-American Water Company
Wastewater Services - Cost of Capital

Type of Capital	Ratios	Cost Rate	Weighted Cost Rate
Proforma at June 30, 2024			
Long-term Debt	42.46%	4.63%	1.97%
LTD WW Financing	4.70%	2.64%	0.12%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	52.84%	10.95%	5.79%
Total			7.88%
Proforma at June 30, 2025			
Long-term Debt	42.73%	4.76%	2.03%
LTD WW Financing	4.40%	2.67%	0.12%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	52.87%	10.95%	5.79%
Total			7.94%

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)** **R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Ann E. Bulkley**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 13-R and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024

Ann E. Bulkley

Morgan Lewis

Kenneth M. Kulak
Partner
+1.215.963.5384
ken.kulak@morganlewis.com

March 6, 2024

VIA eFILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Re: Pennsylvania Public Utility Commission v. Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 and R-2023-3043190

Dear Secretary Chiavetta:

Attached please find in the above-captioned proceedings, the **Errata to PAWC Statement No. 13-R – Rebuttal Testimony of Ann E. Bulkley**, which was served on February 21, 2024 (the "Errata").

As evidenced by the Certificate of Service, copies of the Errata are being served upon Deputy Chief Administrative Law Judge Christopher P. Pell, Administrative Law Judge John Coogan, and all parties of record.

If you have any questions, please contact me directly at 215.963.5384.

Very truly yours,

Kenneth M. Kulak

KMK/tp
Enclosures

c: Per Certificate of Service (w/encls.)

DB1/ 145213277.1

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	**DOCKET NOS.: R-2023-3043189 (Water)**
	:	**R-2023-3043190 (Wastewater)**
v.	:	
PENNSYLVANIA-AMERICAN WATER COMPANY	:	
	:	

CERTIFICATE OF SERVICE

I hereby certify and affirm that I have this day served a true and correct copy of the **Errata to PAWC Statement No. 13-R – Rebuttal Testimony of Ann E. Bulkley**, on the following persons, in the manner specified below, in accordance with the requirements of 52 Pa. Code Section 1.54:

VIA ELECTRONIC MAIL

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Counsel for
Pennsylvania-American Water Company

Dated: March 6, 2024

***=executed confidentiality agreement**

DB1/ 145213500.1

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

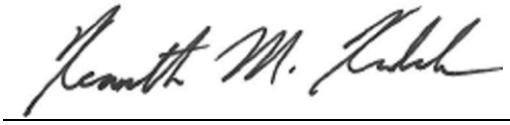
PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189**
	:	**R-2023-3043190**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

ERRATA

On February 21, 2024, Pennsylvania-American Water Company ("PAWC" or the "Company") submitted its Rebuttal Testimony and Exhibits in the above-referenced matters, including the Rebuttal Testimony of Ann E. Bulkley (PAWC Statement No. 13-R). Upon review of the as-served document, PAWC discovered an error on Schedule 3 (pages 2 through 9) of Exhibit No. 13-R. The columns titled "Company" and "Ticker"

incorrectly refer to #REF!". Accordingly, PAWC submits the following errata with a revised Schedule 3 (included as Attachment A).

Respectfully submitted,



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Counsel for Pennsylvania-American Water Company

Dated: March 6, 2024

ATTACHMENT A

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VL BETA

$$K = Rf + \beta (Rm - Rf)$$

Company	Ticker	[1] Current 30-day average of 30-year U.S. Treasury bond yield	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm – Rf)	[5] ROE (K)	[6] ECAPM ROE
American States Water Company	AWR	4.19%	0.70	12.22%	8.03%	9.81%	10.41%
Atmos Energy Corporation	ATO	4.19%	0.85	12.22%	8.03%	11.01%	11.32%
California Water Service Group	CWT	4.19%	0.70	12.22%	8.03%	9.81%	10.41%
Essential Utilities, Inc.	WTRG	4.19%	1.00	12.22%	8.03%	12.22%	12.22%
Eversource Energy	ES	4.19%	0.90	12.22%	8.03%	11.42%	11.62%
Middlesex Water Company	MSEX	4.19%	0.75	12.22%	8.03%	10.21%	10.71%
NiSource Inc.	NI	4.19%	0.90	12.22%	8.03%	11.42%	11.62%
Northwest Natural Gas Company	NWN	4.19%	0.85	12.22%	8.03%	11.01%	11.32%
ONE Gas, Inc.	OGS	4.19%	0.85	12.22%	8.03%	11.01%	11.32%
SJW Group	SJW	4.19%	0.85	12.22%	8.03%	11.01%	11.32%
Spire, Inc.	SR	4.19%	0.85	12.22%	8.03%	11.01%	11.32%
Mean			0.84			10.90%	11.23%

Notes:
[1] Source: Bloomberg Professional, 30-day average as of January 31, 2024
[2] Source: Value Line Reports, November 25, 2023, January 5, 2024
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL – NEAR-TERM PROJECTED RISK-FREE RATE & VL BETA

$$K = Rf + \beta\,(Rm - Rf)$$

Company	Ticker	[1] Near-term projected 30-year U.S. Treasury bond yield (Q1 2024 - Q1 2025)	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm – Rf)	[5] ROE (K)	[6] ECAPM ROE
American States Water Company	AWR	4.10%	0.70	12.22%	8.12%	9.78%	10.39%
Atmos Energy Corporation	ATO	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
California Water Service Group	CWT	4.10%	0.70	12.22%	8.12%	9.78%	10.39%
Essential Utilities, Inc.	WTRG	4.10%	1.00	12.22%	8.12%	12.22%	12.22%
Eversource Energy	ES	4.10%	0.90	12.22%	8.12%	11.41%	11.61%
Middlesex Water Company	MSEX	4.10%	0.75	12.22%	8.12%	10.19%	10.70%
NiSource Inc.	NI	4.10%	0.90	12.22%	8.12%	11.41%	11.61%
Northwest Natural Gas Company	NWN	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
ONE Gas, Inc.	OGS	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
SJW Group	SJW	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
Spire, Inc.	SR	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
Mean			0.84			10.89%	11.22%

Notes:
[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 2, February 1, 2024, at 2
[2] Source: Value Line Reports, November 25, 2023, January 5, 2024
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE & VL BETA

$$K = Rf + \beta (Rm - Rf)$$

Company	Ticker	[1] Projected 30-year U.S. Treasury bond yield (2025-2029)	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm – Rf)	[5] ROE (K)	[6] ECAPM ROE
American States Water Company	AWR	4.10%	0.70	12.22%	8.12%	9.78%	10.39%
Atmos Energy Corporation	ATO	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
California Water Service Group	CWT	4.10%	0.70	12.22%	8.12%	9.78%	10.39%
Essential Utilities, Inc.	WTRG	4.10%	1.00	12.22%	8.12%	12.22%	12.22%
Eversource Energy	ES	4.10%	0.90	12.22%	8.12%	11.41%	11.61%
Middlesex Water Company	MSEX	4.10%	0.75	12.22%	8.12%	10.19%	10.70%
NiSource Inc.	NI	4.10%	0.90	12.22%	8.12%	11.41%	11.61%
Northwest Natural Gas Company	NWN	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
ONE Gas, Inc.	OGS	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
SJW Group	SJW	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
Spire, Inc.	SR	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
Mean			0.84			10.89%	11.22%

Notes:
[1] Source: Blue Chip Financial Forecasts,Vol. 42, No. 12, December 1, 2023, at 14
[2] Source: Value Line Reports, November 25, 2023, January 5, 2024
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL – CURRENT RISK-FREE RATE & BLOOMBERG BETA

$$K = Rf + \beta\,(Rm - Rf)$$

Company	Ticker	[1] Current 30-day average of 30-year U.S. Treasury bond yield	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm – Rf)	[5] ROE (K)	[6] ECAPM ROE
American States Water Company	AWR	4.19%	0.65	12.22%	8.03%	9.43%	10.13%
Atmos Energy Corporation	ATO	4.19%	0.75	12.22%	8.03%	10.23%	10.72%
California Water Service Group	CWT	4.19%	0.69	12.22%	8.03%	9.74%	10.36%
Essential Utilities, Inc.	WTRG	4.19%	0.85	12.22%	8.03%	11.01%	11.32%
Eversource Energy	ES	4.19%	0.80	12.22%	8.03%	10.64%	11.03%
Middlesex Water Company	MSEX	4.19%	0.78	12.22%	8.03%	10.42%	10.87%
NiSource Inc.	NI	4.19%	0.81	12.22%	8.03%	10.66%	11.05%
Northwest Natural Gas Company	NWN	4.19%	0.70	12.22%	8.03%	9.83%	10.42%
ONE Gas, Inc.	OGS	4.19%	0.78	12.22%	8.03%	10.47%	10.91%
SJW Group	SJW	4.19%	0.80	12.22%	8.03%	10.63%	11.02%
Spire, Inc.	SR	4.19%	0.77	12.22%	8.03%	10.37%	10.83%
Mean			0.76			10.31%	10.79%

Notes:
[1] Source: Bloomberg Professional, 30-day average as of January 31, 2024
[2] Source: Bloomberg Professional, as of January 31, 2024
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE & BLOOMBERG BETA

$$K = Rf + \beta (Rm - Rf)$$

Company	Ticker	[1] Near-term projected 30-year U.S. Treasury bond yield (Q1 2024 - Q1 2025)	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm – Rf)	[5] ROE (K)	[6] ECAPM ROE
American States Water Company	AWR	4.10%	0.65	12.22%	8.12%	9.40%	10.10%
Atmos Energy Corporation	ATO	4.10%	0.75	12.22%	8.12%	10.21%	10.71%
California Water Service Group	CWT	4.10%	0.69	12.22%	8.12%	9.71%	10.34%
Essential Utilities, Inc.	WTRG	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
Eversource Energy	ES	4.10%	0.80	12.22%	8.12%	10.62%	11.02%
Middlesex Water Company	MSEX	4.10%	0.78	12.22%	8.12%	10.40%	10.86%
NiSource Inc.	NI	4.10%	0.81	12.22%	8.12%	10.65%	11.04%
Northwest Natural Gas Company	NWN	4.10%	0.70	12.22%	8.12%	9.80%	10.40%
ONE Gas, Inc.	OGS	4.10%	0.78	12.22%	8.12%	10.45%	10.90%
SJW Group	SJW	4.10%	0.80	12.22%	8.12%	10.61%	11.01%
Spire, Inc.	SR	4.10%	0.77	12.22%	8.12%	10.35%	10.82%
Mean			0.76			10.29%	10.77%

Notes:
[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 2, February 1, 2024, at 2
[2] Source: Bloomberg Professional, as of January 31, 2024
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL – LONG-TERM PROJECTED RISK-FREE RATE & BLOOMBERG BETA

$$K = Rf + \beta\,(Rm - Rf)$$

Company	Ticker	[1] Projected 30-year U.S. Treasury bond yield (2025-2029)	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm – Rf)	[5] ROE (K)	[6] ECAPM ROE
American States Water Company	AWR	4.10%	0.65	12.22%	8.12%	9.40%	10.10%
Atmos Energy Corporation	ATO	4.10%	0.75	12.22%	8.12%	10.21%	10.71%
California Water Service Group	CWT	4.10%	0.69	12.22%	8.12%	9.71%	10.34%
Essential Utilities, Inc.	WTRG	4.10%	0.85	12.22%	8.12%	11.00%	11.31%
Eversource Energy	ES	4.10%	0.80	12.22%	8.12%	10.62%	11.02%
Middlesex Water Company	MSEX	4.10%	0.78	12.22%	8.12%	10.40%	10.86%
NiSource Inc.	NI	4.10%	0.81	12.22%	8.12%	10.65%	11.04%
Northwest Natural Gas Company	NWN	4.10%	0.70	12.22%	8.12%	9.80%	10.40%
ONE Gas, Inc.	OGS	4.10%	0.78	12.22%	8.12%	10.45%	10.90%
SJW Group	SJW	4.10%	0.80	12.22%	8.12%	10.61%	11.01%
Spire, Inc.	SR	4.10%	0.77	12.22%	8.12%	10.35%	10.82%
Mean			0.76			10.29%	10.77%

Notes:
[1] Source: Blue Chip Financial Forecasts,Vol. 42, No. 12, December 1, 2023, at 14
[2] Source: Bloomberg Professional, as of January 31, 2024
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VALUE LINE LT AVERAGE BETA

$$K = Rf + \beta\,(Rm - Rf)$$
$$K = Rf + 0.25 \times (Rm - Rf) + 0.75 \times \beta \times (Rm - Rf)$$

Company	Ticker	[1] Current 30-day average of 30-year U.S. Treasury bond yield	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm – Rf)	[5] ROE (K)	[6] ECAPM ROE
American States Water Company	AWR	4.19%	0.69	12.22%	8.03%	9.74%	10.36%
Atmos Energy Corporation	ATO	4.19%	0.75	12.22%	8.03%	10.21%	10.71%
California Water Service Group	CWT	4.19%	0.70	12.22%	8.03%	9.85%	10.44%
Essential Utilities, Inc.	WTRG	4.19%	0.79	12.22%	8.03%	10.54%	10.96%
Eversource Energy	ES	4.19%	0.76	12.22%	8.03%	10.30%	10.78%
Middlesex Water Company	MSEX	4.19%	0.74	12.22%	8.03%	10.10%	10.63%
NiSource Inc.	NI	4.19%	0.76	12.22%	8.03%	10.26%	10.75%
Northwest Natural Gas Company	NWN	4.19%	0.71	12.22%	8.03%	9.88%	10.47%
ONE Gas, Inc.	OGS	4.19%	0.74	12.22%	8.03%	10.11%	10.64%
SJW Group	SJW	4.19%	0.76	12.22%	8.03%	10.32%	10.80%
Spire, Inc.	SR	4.19%	0.74	12.22%	8.03%	10.14%	10.66%
Mean			0.74			10.13%	10.65%

Notes:
[1] Source: Bloomberg Professional, 30-day average as of January 31, 2024
[2] Source: Value Line Reports, 2013 - 2022.
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VALUE LINE LT AVERAGE BETA

$$K = Rf + \beta\,(Rm - Rf)$$
$$K = Rf + 0.25 \times (Rm - Rf) + 0.75 \times \beta \times (Rm - Rf)$$

Company	Ticker	[1] Near-term projected 30-year U.S. Treasury bond yield (Q1 2024 - Q1 2025)	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm – Rf)	[5] ROE (K)	[6] ECAPM ROE
American States Water Company	AWR	4.10%	0.69	12.22%	8.12%	9.71%	10.34%
Atmos Energy Corporation	ATO	4.10%	0.75	12.22%	8.12%	10.19%	10.70%
California Water Service Group	CWT	4.10%	0.70	12.22%	8.12%	9.82%	10.42%
Essential Utilities, Inc.	WTRG	4.10%	0.79	12.22%	8.12%	10.52%	10.95%
Eversource Energy	ES	4.10%	0.76	12.22%	8.12%	10.28%	10.76%
Middlesex Water Company	MSEX	4.10%	0.74	12.22%	8.12%	10.08%	10.61%
NiSource Inc.	NI	4.10%	0.76	12.22%	8.12%	10.23%	10.73%
Northwest Natural Gas Company	NWN	4.10%	0.71	12.22%	8.12%	9.86%	10.45%
ONE Gas, Inc.	OGS	4.10%	0.74	12.22%	8.12%	10.09%	10.62%
SJW Group	SJW	4.10%	0.76	12.22%	8.12%	10.30%	10.78%
Spire, Inc.	SR	4.10%	0.74	12.22%	8.12%	10.12%	10.64%
Mean			0.74			10.11%	10.64%

Notes:
[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 2, February 1, 2024, at 2
[2] Source: Value Line Reports, 2013 - 2022.
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VALUE LINE LT AVERAGE BETA

$$K = Rf + \beta (Rm - Rf)$$
$$K = Rf + 0.25 \times (Rm - Rf) + 0.75 \times \beta \times (Rm - Rf)$$

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2025-2029)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm – Rf)	ROE (K)	ECAPM ROE
American States Water Company	AWR	4.10%	0.69	12.22%	8.12%	9.71%	10.34%
Atmos Energy Corporation	ATO	4.10%	0.75	12.22%	8.12%	10.19%	10.70%
California Water Service Group	CWT	4.10%	0.70	12.22%	8.12%	9.82%	10.42%
Essential Utilities, Inc.	WTRG	4.10%	0.79	12.22%	8.12%	10.52%	10.95%
Eversource Energy	ES	4.10%	0.76	12.22%	8.12%	10.28%	10.76%
Middlesex Water Company	MSEX	4.10%	0.74	12.22%	8.12%	10.08%	10.61%
NiSource Inc.	NI	4.10%	0.76	12.22%	8.12%	10.23%	10.73%
Northwest Natural Gas Company	NWN	4.10%	0.71	12.22%	8.12%	9.86%	10.45%
ONE Gas, Inc.	OGS	4.10%	0.74	12.22%	8.12%	10.09%	10.62%
SJW Group	SJW	4.10%	0.76	12.22%	8.12%	10.30%	10.78%
Spire, Inc.	SR	4.10%	0.74	12.22%	8.12%	10.12%	10.64%
Mean			0.74			10.11%	10.64%

Notes:
[1] Source: Blue Chip Financial Forecasts,Vol. 42, No. 12, December 1, 2023, at 14
[2] Source: Value Line Reports, 2013 - 2022.
[3] Source: Schedule 7
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

PAWC STATEMENT NO. 15-R

REBUTTAL TESTIMONY
OF
JUSTIN L. LADNER

WITH REGARD TO
RESPONDING TO OPPOSING PARTY WITNESSES' TESTIMONY REGARDING THE COMPANY'S NEED FOR RATE RELIEF, MANAGEMENT EFFECTIVENESS, ACCQUISTIONS AND DEPLOYMENT OF PUBLIC FUNDING

DOCKET NOS.
R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

FEBRUARY 21, 2024

PENNSYLVANIA-AMERICAN WATER COMPANY

REBUTTAL TESTIMONY OF JUSTIN L. LADNER

Introduction

Q. Please state your name and address?

A. My name is Justin L. Ladner and my business address is 852 Wesley Drive, Mechanicsburg, Pennsylvania 17055.

Q. By whom are you employed and in what capacity?

A. I am the President of Pennsylvania-American Water Company, Inc. ("Pennsylvania-American", "PAWC" or the "Company").

Q. What are your responsibilities in this position?

A. As President of PAWC, I am responsible for all aspects of its business, including financial, operations, production, distribution, customer service, engineering and capital investment planning, employee relations, environmental, and regulatory affairs. I lead a team of dedicated professionals who are devoted to providing safe and reliable service to approximately 780,000 residential, commercial and industrial water and wastewater service customers in 37 counties in Commonwealth of Pennsylvania. PAWC has three operating areas, western, northeast, and central/southeast, which collectively serve an estimated population of about 2.4 million people. My goals are to ensure that all activities of the Company are carried out in compliance with all local, state and federal laws and regulations, adhere to standards of good business practice, and enhance the quality of service provided to our customers.

Q. Please describe your educational background and business experience.

A. I joined American Water in 2018 as director of National Regulatory Affairs. In this role I was responsible for developing and implementing strategies, practices, and processes related to national regulatory affairs. In 2020, I joined Illinois American Water, serving in the role of president until 2022, when I joined PAWC. Before joining American Water, I served in multiple roles at Southern Company, including attorney for Southern Nuclear and governmental affairs and policy manager, project manager for the Integration Management Office, and assistant to the executive vice president of Nuclear Development at George Power. Prior to joining Southern Company, I was an associate attorney for Huie, Fernambucq & Stewart in Birmingham, Alabama. I also worked for U.S. Steel as a metallurgical engineer.

I received my law degree, cum laude, from the University of Alabama School of Law, as well as a master's and a bachelor's degree in Metallurgical and Materials Engineering with honors from the University of Alabama.

Q. Have you previously submitted direct testimony in this proceeding?

A. No, I have not.

Q. What is the purpose of your rebuttal testimony?

A. I will address the direct testimonies submitted by: Office of Consumer Advocate ("OCA") witness Christine Maloni Hoover relating to her assessment of the Company's rate case filing and position that the Company's request for a 25 basis point management efficiency adder is not supported by substantial evidence; OCA witness Ralph C. Smith and the Pennsylvania Public Utility Commission ("Commission") Bureau of Investigation and Enforcement ("I&E") witnesses Vanessa Okum, Ethan H. Cline and Joseph Kubas

recommended disallowance of certain acquisitions from the Company's proposed rate base; and State Representative Kyle T. Donahue and the City of Scranton witness Paige G. Cognetti regarding the Company's use of PENNVEST funding.

Response to OCA Witness Hoover Regarding Assessment of the Rate Case Filing

Q. OCA witness Hoover describes the purpose of her testimony as providing an overview of the Company's rate case proposals from the consumers' perspective, which includes discussion of how the Company's proposals, when taken together, result in large bill increases and harms customers.[1] Do you agree with Ms. Hoover's assessment?

A. No, I do not agree. As explained in the Company's initial filing, the most significant driver for the Company seeking additional rate relief at this time is the substantial capital investments PAWC is and will continue to make in its water and wastewater systems through to the end of the Fully Projected Future Test Year ("FPFTY") ending June 30, 2025, which are projected to exceed $1 billion. The Company's rate case filing provided extensive data in support of its requested rate increase, including the detailed description of 118 discrete capital projects[2] anticipated to be in service by the end of the FPFTY, with costs ranging from $1 million to $17 million per project. In addition to these large infrastructure improvement projects, the Company will perform routine replacement of mains, meters, company-owned service lines, customer-owned lead service lines, and wastewater laterals. As explained by Company witness Bruce W. Aiton, the Company needs to make significant investment in both its water and wastewater facilities to meet environmental and public health standards, address aging infrastructure and maintain and

[1] OCA Statement 1, p. 1.
[2] See PAWC Statement No. 3, pp. 13-51.

enhance the reliability and resiliency of its systems.[3] No party challenged the need for these projects.

Despite the significant level of investment that the Company plans to make through the end of the FPFTY, PAWC water service will remain quite reasonable for our customers. The average residential water customer taking service under Zone 1 will pay approximately 2 cents per gallon under proposed rates, which equates to about $2.90 per day for all their water needs for drinking, cooking, cleaning and sanitation. Contrary to Ms. Hoover's claim that the Company's proposed rates will result in large bill increases and harm customers, the Company's rate case proposals, if adopted, will result in customers benefitting from the Company's extensive capital investments while still paying reasonable rates.

Q. OCA Witness Hoover states that, "it is in the decision-making process by the utility in planning for their rate case and making choices about what to pursue … that the consideration of the consumers' interests often fall away."[4] Did PAWC consider the impact of increased rates on customers?

A. Of course. The Company recognizes that a rate increase can have an impact on our customers, but we also recognize that our customers rely on the Company to provide them with safe and reliable water and wastewater service which requires the Company to make ongoing, significant capital investments. We strive to find the right balance between the investments that are essential to providing safe and reliable service with the costs that will ultimately be paid by customers, and we work to deploy our capital as cost effectively as possible. As Mr. Aiton explains, our systematic, proactive approach to planning capital

[3] See PAWC Statement No. 3, pp. 9-53.
[4] OCA Statement 1, p. 26.

projects allows the Company to deploy capital more cost effectively than simply reacting to pipe breaks or equipment failures.[5]

Our water and wastewater services are critical for our customers, and we know how important it is for customer bills for those services to not only be reasonable, but remain affordable.[6] The Company was the first Pennsylvania water utility to implement customer assistance programs and is one of the first utilities to prepare and present an affordability analysis of the kind presented by Charles B. Rea in this proceeding. In light of our analysis, the Company has proposed to further expand its Bill Discount Program ("BDP"), as discussed further below.

Q. Regarding affordability, please respond to Ms. Hoover's contention that her concern about rising utility costs are magnified because this case represents the Company's third case in four years.[7]

A. It is true that this is the Company's third rate case since 2020. But utility costs are rising despite our success in mitigating rate increases for customers by operating efficiently and controlling operating and maintenance ("O&M") expenses year-after-year as discussed in Company witness Ashley Everette's direct testimony.[8] With the monumental investment challenges we face, keeping our costs as low as practicable is paramount. The combination of our proactive investment, efficient O&M, and continued affordability of our service demonstrates that the Company's management of the business and investment in the business delivers high-value service to customers at affordable rates, which is in the long-term best interest of our customers.

[5] See PAWC Statement No. 3, p. 4.
[6] See, PAWC Statement No. 10-R, pp. 8-10, 27.
[7] OCA Statement 1, p. 19.
[8] See, PAWC Statement No. 1, pp. 8-9.

In addition to delivering our services in the most efficient, cost-effective ways to benefit all of our customers, PAWC also offers several targeted customer assistance programs to help our most vulnerable customers. In this case, PAWC proposes to expand the Company's BDP to residential customers whose household incomes are between 151% and 200% of Federal Poverty Level, which will further contribute to the affordability of our rates. In addition, as discussed in Company witness Rea's rebuttal testimony,[9] the Company is not opposed to the proposals of OCA witness Roger D. Colton and CAUSE-PA witness Harry S. Geller that would increase the BDP's existing discount levels to provide greater levels of affordability for qualifying customers.

Response to Ms. Hoover's Position on the Company's Requested Management Efficiency Adder

Q. Ms. Hoover recommends that the Company's request for a 25 basis point management efficiency adder be rejected on the basis that it is not supported by substantial evidence.[10] Please respond.

A. It appears that in making this recommendation, Ms. Hoover is relying on the conclusions drawn by OCA witnesses Barbara R. Alexander, Colton and David J. Garrett. Company witnesses Everette, Deborah Degillio, Tawana Dean and Ann Bulkley respond to Mr. Garret's, Mr. Colton's and Ms. Alexander's testimonies directly in their rebuttal testimonies, but I want to underscore the extensive evidence supporting the Company's request. As demonstrated below, it is simply incorrect to state that the Company has not supported its request for a management efficiency adder with substantial evidence.

[9] PAWC Statement No. 10-R, pp. 29-31.
[10] OCA Statement 1, p. 52-53, 64.

PAWC has Industry-Leading Customer Assistance Programs

As testified to by Ms. Everette[11] and Ms. Degillio,[12] the Company has several programs to assist low income and payment troubled customers and makes significant efforts to educate customers about the availability of assistance programs (both Company-sponsored and non-Company sponsored). These programs include the BDP, which the Company has proposed to expand, the Help to Others ("H2O") program, which is funded primarily with shareholder dollars (currently $750,000/year and, upon closing of the BASA acquisition, increasing by $700,000 annually for the next five years), and the Arrearage Management Program ("AMP"), which is a new program to provide customers participating in the BDP who have an arrearage balance of at least $150 with $25 of arrearage forgiveness for each in-full payment of current charges plus a $5 co-payment. I will note that, unlike the electric and gas utilities that are required to offer customer assistance programs, PAWC voluntarily developed and is initiating these programs to assist our customers, and we were the first water company to do so in Pennsylvania.

Regarding the Company's customer outreach efforts to educate customers on the availability of customer assistance programs, I note that the number of H2O grants provided to customers increased between 2022 and 2023, from 1,441 grants in 2022, to 3,443 grants between January and November 2023. These increasing amounts demonstrate that the Company's efforts have been successful. In addition to the Company's H2O grant program, the Company also applied over 15,400 grants to customer accounts, amounting to approximately $8.6 million, through the Low Income Household Water Assistance Program ("LIHWAP"). PAWC also has been involved in advocating for continuation of

[11] PAWC Statement No. 1, pp. 34-36.
[12] PAWC Statement No. 6, pp. 13-19.

the LIHWAP program, which Ms. Everette discusses in direct testimony.[13] Ms. Everette also described the Company's community engagement and customer education initiatives.

PAWC's has a Distinguished Environmental Record and Strong Commitment to Water Quality, Safety, Efficiency and Infrastructure Improvements

Company witness Runzer[14] discussed several of the Company's initiatives representative of its superior performance, including (1) the Company's distinguished environmental record, (2) optimization of water treatment plant performance and water quality, and the recognition PAWC has received for both, (3) excellent safety record and the Company's commitments to employee safety and development, and (4) use of technology to enhance employee effectiveness and improve billing accuracy. Below I highlight a few of these initiatives as justification for the Company's request for a management efficiency adder:

- The Company participates in the Partnership for Safe Water Treatment Plant Optimization program. Of the 501 participating treatment plants, only 44 plants have received the high honor of the Phase IV Presidents Award – nine (9) PAWC treatment plants have received these awards, and each of these plants were also recognized as a 5-year Presidents Award winner, which has only been awarded to 18 systems nationally. Additionally, in 2023, PAWC's Clarion Water Treatment Plant was presented with the Directors 15-year longevity Award and it's Shady Lane Water Treatment Plant was recognized with the Directors 10-year Longevity Award.[15]

[13] PAWC Statement No. 1, pp. 35-36.
[14] PAWC Statement No. 2.
[15] PAWC Statement No. 2, p. 5.

- The development of the environmental near miss program, which in 2022, identified and avoided 197 potential customer impacts[16] and in 2023 identified and avoided 218 potential customer impacts.
- Since the submission of direct testimony in this proceeding, the Company has converted three (3) additional treatments plants from the use of gaseous chlorine for disinfection to liquid sodium hypochlorite or ultra-violet disinfection, bringing the total of treatment plants converted to 24. Making these conversions reduce the risk of toxic exposure to our employees and the surrounding communities. This conversion practice is now standard practice as new systems are acquired by the Company, and it intends to convert its remaining treatment plants that utilize gaseous chlorine to either liquid sodium hypochlorite or UV disinfection until all of its chlorine gas locations are eliminated.[17]
- The Company has taken a proactive approach to protect customers from lead exposure in the Company's drinking water, which include conducting corrosion control studies to review the effectiveness of corrosion control treatment measures and implementing an initiative to replace customer-owned lead service lines.[18]
- The Company has installed an online source water quality monitoring device at each of its surface water treatment plants as a tool for optimizing treatment decisions and aiding in the detection of potential source water contamination. This device helps establish baseline water quality data and alert water plant operators to certain changes in water characteristics. The Company uses this information to better understand the characteristics of its source water and optimize chemical usage.[19]

[16] PAWC Statement No. 2, pp. 6-7.
[17] PAWC Statement No. 2, p. 7.
[18] PAWC Statement No. 2, p. 8.
[19] PAWC Statement No. 2, pp. 13-14.

- The Company has created a strong safety culture, as demonstrated by the OSHA recordable incident rate ("ORIR") improving from 2.62 in 2018 to 0.50 in 2023, which represents PAWC's best safety record in its operational history.[20]
- The Company's Near Miss Reporting Program, which was implemented in 2015, provides a convenient platform for employees to identify hazards that could have resulted in injury or accident and for the Company to share these incidents with other employees to raise awareness. In 2022, PAWC employees reported 1,967 near misses from across the state, far surpassing our goal of 1,200. This is more than triple the number of Near Misses reported in 2019 and reflects the increased employee awareness and use of this program.[21]
- PAWC employees are encouraged to participate in a Certified Safe Worker program, which is a self-directed program promoting safety and health awareness and participation, documenting work, and at-home safety activities. In 2022, 1,129 PAWC employees completed the program, achieving the highest number of Certified Safe Workers in our history and the highest total in all the American Water subsidiaries.[22]

Ms. Everette and Mr. Aiton described the Company's plans to continue making significant investment in its infrastructure. In the past 17 years, PAWC has invested more than $5 billion in its infrastructure. In addition, the Company has delivered a variety of public benefits through acquisitions. In that regard, I want to underscore just a few examples of recent water and wastewater acquisitions where PAWC has addressed longstanding water quality and environmental compliance issues for the benefit of our customers.

[20] PAWC Statement No. 2, p. 17 (updated with PAWC's 2023 ORIR).
[21] PAWC Statement No. 2, p. 17-19.
[22] PAWC Statement no. 2, p. 18.

- Investing in numerous improvements in the Steelton and Turbotville water systems to help ensure that the plants produce high quality drinking water, including deployment of state-of-the-art SCADA systems and water quality analyzers, replacing filters, and transitioning away from the use of toxic gases in the treatment process.
- Reducing the number of sewage overflows per year from 30 to 1 in the wastewater system acquired from the Clarion Area Authority.
- Committing to a 25-year program, ordered by the Pennsylvania Department of Environmental Protection ("PADEP") prior to the Company's acquisition of the Scranton combined sewer system, to control and significantly reduce the amount of untreated sewage discharged into the Lackawanna River and its tributaries.
- Developing a solution after taking over the McKeesport wastewater system to address sewage that had been illegally discharged into an old underground mine shaft for years.
- Remedial actions to address nearly 50 violations cited by the PADEP for the Exeter Township wastewater system at the time of the acquisition.

Mr. Aiton provides more detail about the investments the Company has made to address the service, safety and environmental challenges of acquired systems in PAWC Statement No. 3-R.

PAWC is an Industry Leader in Acquiring Small and Troubled Systems

Ms. Everette[23] outlines the Company's history of assisting troubled water and wastewater system resolve significant challenges – including the four small water and

[23] PAWC Statement No. 1, pp. 42-45.

wastewater acquisitions pending before the Commission and contemplated as part of this rate case (Sadsbury Township Municipal Authority wastewater system, Farmington Township water system, Farmington Township wastewater system, and Audubon Water Company), and several other small non- or less- viable systems that PAWC has executed agreements to acquire. In addition, PAWC recently began acting as receiver for the East Dunkard Water Authority ("EDWA") where the EDWA water treatment plant had simply ceased producing water and all customers were without even non-potable water for several days. The Company worked collaboratively with the Commission, the PADEP, and EDWA to achieve a creative and novel solution for the customers of EDWA. It is my understanding that this is the first time an investor-owned utility under the Commission's jurisdiction has been appointed receiver of a municipal authority. This is but one example of PAWC's demonstrated commitment to providing solutions to troubled systems.

PAWC's Extensive Efforts to Extend Service to Meet the Needs of Customers without Access to Safe and Reliable Water Service

As discussed by Ms. Everette, the Company routinely extends service to customers who are in need of water and/or wastewater service. Recent examples discussed by Ms. Everette include:

- A $21 million water main extension project that will bring high-quality, reliable drinking water and fire service to the Avella School District and portions of surrounding communities in Washington County.
- In 2021, the Office of Attorney General requested PAWC to assist in helping find a drinking water solution for a community of approximately 21 Dimock properties that have not had access to safe well water due to unsafe levels of methane and other

contaminants for approximately 15 years. The Company responded to this request by developing a plan for the most effective public drinking water system for Dimock residents. Since then, the Company has filed an application with the Commission to extend its service territory for a public groundwater project in Dimock, Pennsylvania. PAWC projects that the new drinking water system in Dimock will be in service by the end of 2026.

The above examples, and the many others provided in the Company's initial filing, justify awarding the Company with its requested 25 basis points for exemplary management performance.

Q. Besides the Company's testimony, is there other testimonial support that highlights the Company's performance?

A. Yes, there is. During the public input hearings held in this proceeding there were a number of individuals who testified regarding how the Company has benefited customers, the communities we serve, and even the labor force. I summarize some of this testimony below:

- The President of Butler County Chamber of Commerce testified that the Company is an outstanding partner that they have had the privilege of working with on a variety of different projects including environmental remediation, greenspace preservation, trail connectivity, and community beautification. He stated that the Company is always willing to provide employees to volunteer and be engaged in the communities where PAWC serves.
- A customer from Pittsburgh testified stating that the Company's water quality is "by far better than any other city" that they and their family have lived in across the country.
- A representative of North Branch Land Trust testified that PAWC has partnered with them on projects to conserve land and protect watersheds to improve water quality. In addition,

employees of the Company have volunteered their time to help plant seedlings as part of the Forest Echo Bird Sanctuary.

- The Director of Economic Development for Scranton Lackawanna Industrial Building Company ("SLIBCO") testified regarding the historic relationship shared between SLIBCO and PAWC that has created "remarkable results" facilitating the creation of 50,000 jobs in Lackawanna County and attracting over $2 billion in community investments.
- The Deputy Director of the Schuylkill River Watershed testified that the Company has been a valued partner for the past several years supporting projects to improve water quality throughout the watershed both within their service territory and assisting the Schuylkill River Watershed in selecting other work projects along the river corridor.
- A representative of Brandywine Red Clay Alliance testified that the Company is a strong supporter of watershed protection and conservation and providing clean water, the Company has helped fund clean-up events, tree planting, water education, land preservation, and community outreach.
- The Executive Director of the Watershed of South Pittsburgh testified that PAWC has been a valued partner of the Watershed for eight years, supporting much of the work they've done throughout the region to protecting and improving water quality.
- The Executive Director Big West Food Bank testified that PAWC is a wonderful partner and supporter, coming out to their facilities and offices on numerous occasions to provide educational material as well as information about PAWC customer assistance programs.
- A resident of New Cumberland testified that as a former member of the Borough Council during the time PAWC acquired the Borough's wastewater system, PAWC was a great

partner, not only in the acquisition but also with capital improvements needed in the Borough of Cumberland.

- A State Representative for Clarion County and part of Armstrong County testified stating the access to clean water and the service PAWC has provided to Clarion County is a valuable asset and critical to the economic growth and development of the area. In addition, the Company has been committed to being a good neighbor in the community, participating in community activities, community boards, and communicating with elected officials.
- A State Representative for Washington County and Greene County testified that after the breakdown of the East Dunkard Water Authority's system that recently occurred, he is pleased that the PADEP enlisted the Company to receive and take control of the failing system and restore safe and clean water for his constituents.
- The President of Local IBEW 654 testified stating the Company's commitment to invest into water and wastewater infrastructure serves as both a job opportunity for local workers but also provides a significant public health benefit for Chester County residents.
- The President of Hydrotech Environmental, a small minority owned business that transports wastewater for commercial and municipal customers, testified that in her capacity of working with PAWC, the Company has taken pride and exhibited a very positive attitude in their working relationship. PAWC's award of the hauling bid to Hydrotech Environmental has allowed the business to hire an additional employee and continue to grow their business.

Response to OCA Witness Smith & I&E Witnesses Regarding Disallowance of Acquisitions

Q. OCA witness Mr. Smith and I&E witnesses Okum, Cline and Kubas recommend that the Commission disallow certain acquisitions from the Company's proposed rate base because the acquisitions are not likely to be approved by the close of the record in this case. Please respond.

A. As Company witness Christopher Abruzzo explains in rebuttal testimony,[24] acquisitions that are likely to close before the end of the FPFTY should be included in the Company's rate base for purposes of developing the revenue requirement and setting rates in this proceeding. To use the close of the record, which will occur on or about March 8, 2024, and is over 15 months before the end of the FPFTY, effectively denies the Company the ability to earn its appropriate and authorized return on actual investment that was known, measurable, and prudent by the end of the FPFTY. Thus, OCA's and I&E's position, if adopted, would result in punitive regulatory lag for the Company.

Response to the testimony of State Representative Kyle T. Donahue and City of Scranton Witness Paige G. Cognetti Regarding PAWC's use of PENNVEST and Like Programs

Q. State Representative Donahue and City of Scranton witness Cognetti both state in direct testimony that the Company has not taken advantage of programs like PENNVEST. Please respond.

A. This is not accurate. PAWC currently has PENNVEST loans and is pursuing additional PENNVEST funding. It is my understanding that in 2024, PAWC is participating in multiple PENNVEST requests.

[24] PAWC Statement No. 6-R.

Conclusion

Q. Do you have any final remarks regarding the direct testimony submitted by other parties in this case?

A. I do. This rate case is driven largely by the investments the Company has and will continue to make to continue to provide safe and reliable water and wastewater services to our customers. I did not see a single party express concern about the prudency of the Company's investments in this regard. The Company is quite simply asking for appropriate and timely returns of and on its investments; for appropriate and timely cost recovery of its ongoing expenses; and for constructive regulatory measures that allow PAWC to compete for capital so that it can continue to make proactive investments so crucial not only to the Company, but also to the Commonwealth as a whole. The Company simply wants to continue its successes and trends of wise investment and prudent operational expenditure. While I have provided a broad overview of the Company's filing in my rebuttal testimony responding to just a few issues raised by other parties to this proceeding, other Company witnesses provide detailed testimony in support of the Company's request that goes beyond the few critical and overarching points I have chosen to highlight for the Commission.

Q. Does this conclude your Rebuttal Testimony?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)**
	:	**R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Justin L. Ladner**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 15-R and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024

Justin L. Ladner

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION
v.
PENNSYLVANIA-AMERICAN WATER COMPANY

DOCKETS NO.: R-2023-3043189 (WATER)
R-2023-3043190 (WASTEWATER)

REBUTTAL TESTIMONY

WITNESS: PAUL J. HIBBARD

SUBJECT: RATEMAKING PRINCIPLES AND PRECEDENT

DATED: FEBRUARY 21, 2024

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REBUTTAL TESTIMONY
OF
PAUL J. HIBBARD

I. INTRODUCTION

1. Q. Would you please state your name, business address, and occupation?

A. My name is Paul Hibbard. I am a Principal at Analysis Group (AG), an economic, finance and strategy consulting firm headquartered in Boston, Massachusetts, where I work on energy and environmental economic and policy consulting. My business address is 111 Huntington Avenue, 14th Floor, Boston, Massachusetts 02199.

2. Q. Please describe your background and experience.

A. I have been with AG for approximately twenty years, since 2003. First, from 2003 to April 2007, and most recently, from August 2010 to the present. In between, from April 2007 to June 2010, I served as Chairman of the Massachusetts Department of Public Utilities ("MA DPU") where I participated in deciding rate cases for electric, natural gas, and water utilities. While Chairman, I also served as a member of the Massachusetts Energy Facilities Siting Board, the New England Governors' Conference Power Planning Committee, and the NARUC Electricity Committee and Procurement Work Group. I also served as State Manager for the New England States Committee on Electricity and as Treasurer to the Executive Committee of the 41-state Eastern Interconnect States' Planning Council.

I have previously worked in energy and environmental consulting with Lexecon, Inc. from 2000 to 2003. Prior to working with Lexecon, I worked in state energy and environmental agencies for almost ten years. From 1998 to 2000, I worked for the Massachusetts Department of Environmental Protection on the development and administration of air quality regulations, State Implementation Plans and emission control programs for the electric industry with a focus on criteria pollutants and carbon dioxide ("CO_2"), as well as various policy issues related to controlling pollutants from electric power generators within the Commonwealth of Massachusetts. From 1991 to 1998, I worked in the Electric Power Division of the DPU on cases related to the setting of company rates, restructuring of the electric industry in Massachusetts, quantification of environmental externalities, integrated resource planning, energy efficiency, utility compliance with state and federal emission control requirements, regional electricity market structure development, and coordination with other states on electricity and gas policy issues through the staff subcommittee of the New England Conference of Public Utility Commissioners.

I hold an M.S. in Energy and Resources from the University of California, Berkeley, and a B.S. in Physics from the University of Massachusetts at Amherst. My curriculum vitae is provided in Appendix A, which follows my rebuttal testimony.

3. Q. Have you previously testified before the Pennsylvania Public Utilities Commission ("PUC," or "Commission")?

A. Yes. In November of 2011, I presented comments to the Commission in an En Banc Hearing related to auctions for retail service in the electric sector on behalf of Direct Energy. In January of 2021, I provided Rebuttal Testimony to the PUC on behalf of PECO Energy Company related to ratemaking principles.

II. SUMMARY

4. Q. What is the purpose of your testimony?

A. In this testimony I respond to certain aspects of the testimony of the Pennsylvania Office of Consumer Advocate ("OCA") witness Christine Maloni Hoover. First, I discuss Ms. Hoover's framing of what she refers to as the "regulatory compact," and the principles and precedent related to the practice of reviewing and setting utility rates. Next, I review Ms. Hoover's discussion of alternative ratemaking in this context. Finally, I review Ms. Hoover's discussion related to the application of the fair market value approach in incorporating the cost of municipal water system acquisitions in the rates of Pennsylvania-American Water Company ("PAWC" or "Company").

5. Q. Please provide a summary of your views.

A. There are long-standing principles and precedent applied by the Commission in setting rates. The Commission identifies these in describing the legal framework for its decision in every rate case. They are neither ambiguous nor subject to reinterpretation. In short, the utility is allowed to recover its used and useful and prudently-incurred costs and investments, and earn a fair return on the capital it

commits to discharge its public service obligations. The *Hope*[1] and *Bluefield*[2] decisions of the United States Supreme Court established the fundamental obligation in ratemaking to allow a utility the opportunity to recover its costs and earn a fair return on equity (one attendant to the risks experienced by similarly situated companies) and an overall return on investment that allows the utility to maintain financial integrity and maintain credit. In establishing rates, the Commission exercises its judgement to achieve the correct balance of utility and consumer interests and determine just and reasonable rates based on a utility's filing and record evidence. The Commission has the latitude to consider policy objectives and has the obligation to adhere to Pennsylvania statutes that address certain specific elements allowed or required in the setting of utility rates.

Ms. Hoover narrowly defines "regulatory compact" and "traditional ratemaking" to create a distorted view of the ratemaking process and confuse the Commission's administration of its jurisdictional obligations by inducing the Commission to disregard application of long-standing and time-tested precedent and principles of ratemaking. The phrase "regulatory compact" is simply a shorthand simplification used to illustrate elements of the framework for utility regulation. Ms. Hoover's incomplete description of a "regulatory compact" ignores critical aspects of the regulatory structure and purports to grant the Commission broad authority under her construction to disregard application of long-standing and unambiguous ratemaking principles and precedent, and its

[1] F.P.C. v. Hope Natural Gas Co., 320 U.S. 591 (1944) ("Hope").

[2] Bluefield Water Works & Improvement Co. v. P.S.C. of West Virginia, 262 U.S. 679 (1923) ("Bluefield").

evidence-based evaluation of specific elements included in the Company's proposal.

The use of "regulatory compact" in this proceeding by Ms. Hoover and the OCA reflects an unnecessary and exclusively consumer-focused viewpoint on Commission responsibilities that starts with the erroneous presumption that the whole ratemaking process in Pennsylvania and/or the Commission's exercise of its jurisdictional responsibilities are structurally biased in favor of regulated utilities. The OCA's application of this viewpoint leads to recommendations that are inconsistent with the appropriate application of ratemaking principles and precedent.

Similarly, Ms. Hoover uses the concept of "traditional ratemaking" to imply that the Company's filing somehow deviates from what is appropriately presented by the utility and considered by the Commission in a rate case, and systematically changes the balance of risk. In fact, the Company has filed a traditional rate case with all of the required elements, including a cost of service study, revenue requirement allocation, proposed weighted average cost of capital, rate design, and additional proposals that include assistance to low-income customers. And the Company's proposals for "alternative ratemaking" – authorized under Pennsylvania law and by the policy statements of this Commission[3] – include specific measures designed to achieve legislated public policy objectives around

[3] *See* 66 Pa.C.S. § 1330 (authorizing alternative rates and ratemaking mechanisms); 52 Pa. Code § 69.3301 (inviting alternative ratemaking proposals by utilities).

efficiency, environmental compliance, and consolidation of municipal services that provide a vital public service to achieve efficiency and reliability.

The Company has also included in the filing its prior and pending acquisitions, which reflect the consolidation of municipal services that provide a vital public service to achieve efficiency and reliability. Ms. Hoover discusses the fair market valuation of these acquisitions as "alternative ratemaking." The Company is not requesting alternative ratemaking for these acquisitions, but rather has included systems at the ratemaking rate base as provided for under Pennsylvania law and as approved by the Commission. My testimony will respond to Ms. Hoover's arguments on fair market value as part of her "alternative ratemaking," but to be clear, I do not agree that inclusion of an acquisition at the rate base approved by the Commission constitutes alternative ratemaking.

In my view, Ms. Hoover's testimony regarding the "regulatory compact" and "traditional ratemaking" are nothing more than an effort to misconstrue traditional ratemaking principles to try to fashion authority otherwise lacking for the specific changes the OCA proposes to the Company's proposed revenue requirement. Her testimony does not add any probative value to the decisions the Commission must make in this traditional rate case.

Finally, Ms. Hoover claims that by using a fair market value approach with respect to acquisition of municipal water companies rather than the original cost approach, the rate base associated with such acquisitions is inflated, and creates a large revenue deficiency for the customers acquired through these acquisitions.

I disagree with Ms. Hoover's and OCA's position. PAWC's use of fair market value in calculating its rate base for acquisitions is fully supported by existing laws and regulations in Pennsylvania, which were intentionally designed this way by the legislature and regulators to encourage regionalization and acquisitions of smaller, often nonviable, water and wastewater utilities by larger utilities better able to maintain acceptable service quality and meet customer needs. As I understand it, for acquisitions approved by the PUC under Section 1329,[4] the law specifies that the lower of the negotiated purchase price or fair market value of the acquired utility is to be included in the acquiring public utility's rate base. For acquisitions where Section 1329 is not applicable or utilized, Section 1327 allows PAWC to request an adjustment to its rate base if its acquisition costs or purchase price is greater than the depreciated original cost of the acquired systems. Thus, whether Commission-approved acquisition purchase prices exceed depreciated original cost should have no impact on whether they are included in PAWC's rate base, and any associated wastewater revenue deficiency can be properly allocated to both water and wastewater companies in accordance with Section 1331.

6. Q. Are you providing a legal opinion in this proceeding?

A. No, I am not and I am not a lawyer. My discussion of regulatory precedent and practice is focused on regulatory policy based on my experience as a former

[4] 66 Pa. C.S. § 1329. All references to Sections in my testimony refer to Sections of the Pennsylvania Public Utility Code unless otherwise noted.

Commissioner and staff person at the Massachusetts' Department of Public Utilities, and on my work as a consultant in regulatory matters.

III. THE "REGULATORY COMPACT"

7. Q. Are you familiar with the principles behind the setting of regulated utility rates by public utility commissions?

A. Yes, through my work as both a staff person and as Chairman of the Massachusetts Department of Public Utilities, and in private practice. The principles and precedent underlying public utility commission rate case decisions across the United States are a well-understood framework that guides this Commission's review of record evidence to set utility rates in a way that ensures efficient, safe, and reliable utility service at reasonable cost to consumers.

8. Q. Please provide a summary of your understanding of these principles.

A. Public utilities are generally obligated through law and regulation to reliably meet the needs of all customers within their service territory. The utilities in turn are allowed to collect the costs of serving customers through commission-approved cost of service rates, including operating expenses and a return of and on prudently-incurred capital investment. Rates are set in order to allow the utility an opportunity to earn a fair return on the value of the property which it employs for the convenience of the public, with the rate of return designed to approximate the return being earned at the same time in businesses that face similar risks and uncertainties. This level of return on investment is designed to assure confidence in the financial soundness of the utility and to be sufficient to enable the utility to

maintain credit and attract the capital needed to reliably meet customer needs over time.[5]

In addition, in rate cases, regulators set rates in a way that is consistent with any applicable state laws, regulations, and policies, and ensure that their decisions adhere to regulatory and judicial precedent. Specifically, rates should be designed to allow the recovery of prudently-incurred costs while promoting efficient consumption decisions by consumers, encouraging efficiency in the management and operation of the utility, and allocating costs fairly. When a utility's operational practices and/or the prudence of its investment decisions are questioned, commissions evaluate claims based on record evidence.[6] The structure of regulated utility rate setting encourages utility managers to make reasonable operational and investment decisions on behalf of their customers, in order to provide reliable service at a reasonable cost and in a manner consistent with the ratemaking and policy directives of the state.[7] The foundational principles for the purpose and process of setting rates for regulated utilities are not new law or policy; they have been actively used and vetted through regulatory

[5] *See*, e.g., James C. Bonbright, Albert L. Danielsen, and David R. Kamerschen, *Principles of Public Utility Rates*, Public Utility Reports, Inc., March 1998 (Second Edition) (hereafter "Bonbright"), at 315-316; and Dr. Karl McDermott, *Cost of Service Regulation in the Investor-Owned Electric Utility Industry*, Edison Electric Institute, June 2012 (hereafter "McDermott") at 5-7.

[6] The job of a public utility commission is not to substitute its judgement for that of the utility; utilities are presumed to act in good faith and make efficient operational and prudent investment decisions absent evidence to the contrary. *See*, *e.g.*, McDermott at 9, 13.

[7] *See, e.g.*, McDermott at 7.

and legal decisions consistent with principles set in place beginning almost a century ago.[8]

9. Q. Based on your review, do you have a view as to an appropriate approach for assessing the operational and investment decisions of the utility?

A. Yes. First and foremost, evaluating the Company's actions and investments must not be taken lightly. The practice of setting rates evolved from a necessary but difficult balancing of companies' obligations to shareholders and ratepayers; it is part of the fabric of public utility ratemaking that seeks to maintain the financial integrity of regulated utilities while providing appropriate incentives for efficiency in management, operations, and customer consumption. One cannot be cavalier in a review of the costs associated with the utility's management and discharge of its public service obligations; rate case reviews need to be based on careful review of record evidence in the context of regulatory and judicial precedent, with an eye toward sustaining a functioning and efficient service provider.

10. Q. Have you reviewed Ms. Hoover's discussion of what she calls the "regulatory compact?"

A. Yes.

11. Q. Please summarize how Ms. Hoover represents the "regulatory compact."

[8] The *Bluefield* decision, one of the landmark Supreme Court decisions on ratemaking, was issued by the United States Supreme Court just over 100 years ago, in 1923.

A. It is not entirely clear to me exactly what the purpose is of Ms. Hoover's "regulatory compact" discussion. It appears that Ms. Hoover provides her views on the "regulatory compact" to suggest that the Commission intentionally and aggressively err in every discrete decision related to the Company's filing in favor of consumers. Ms. Hoover tees up the "regulatory compact" and "traditional ratemaking" discussions as support for the OCA's various recommendations to reject recovery of legitimate, prudent, and necessary company expenses and investments.

Ms. Hoover's summary of the "regulatory compact" describes a quid-pro-quo whereby the utility receives an exclusive franchise in exchange for the obligation to provide service.[9] Ms. Hoover goes on to suggest that the Commission "enforces" the regulatory compact through a system of incentives and deterrents designed to protect consumers against the effects of monopoly power.[10] Ms. Hoover's discussion of the regulatory compact focuses on obligations of the utility to provide service at reasonable rates subject to state policing powers, with little or no reference to the obligation to allow the utility to recover the legitimate costs of meeting its public service obligation.

12. Q. In your view, does Ms. Hoover's discussion of the regulatory compact provide any guidance or probative value in this case?

[9] *Pennsylvania Office of Consumer Advocate*, Direct Testimony of Christine Maloni Hoover, OCA Statement 1, Docket Nos. R-2023-3043189 et al., February 1, 2024 ("Hoover Testimony"), p. 20.

[10] Hoover Testimony, pp. 22-23.

No, it does not. The phrase "regulatory compact" has been used in various ways by utility industry participants and practitioners to characterize the nature of public utility regulation and the relationship between a state and its jurisdictional utilities. While there is no explicit compact, contract or agreement between the state and its jurisdictional utilities, in statute, state codes, or Commission orders, it is a shorthand simplification often used to try to illustrate certain elements of the framework for utility regulation, a simplification that in practice is described in different ways by different industry stakeholders and practitioners. There is no explicit or indicative utility-consumer balance implied uniquely by the metaphor of a "regulatory compact" that would enable the Commission to disregard reasonable and prudent costs incurred by a utility in favor of protecting customers.

No description of a "regulatory compact" can take the place of long-standing principles and precedent applied by the Commission in setting rates. The Commission identifies these principles in describing the legal framework for its decision in every rate case. They are neither ambiguous nor subject to reinterpretation. In short, the utility is allowed to recover its used and useful and prudently-incurred costs and investments, and must be given the opportunity to earn a reasonable return on the capital it commits to discharge its public service obligations. *Hope* and *Bluefield* clearly establish the fundamental obligation to allow a utility an opportunity to recover its costs and earn a fair return on equity (one attendant to the risks experienced by similarly situated companies), and an overall return on investment that allows the utility to maintain financial integrity

and maintain credit. Consistent with these obligations, the Commission exercises its judgement to achieve the correct balance of utility and consumer interests, and determine just and reasonable rates based on the company's filing and record evidence.

The presentation of Ms. Hoover's view of what the "regulatory compact" might be in this proceeding only provides a manufactured premise for Ms. Hoover and the OCA to argue for their disallowance recommendations, a premise that starts with the erroneous presumption that the whole ratemaking process in Pennsylvania and/or the Commission's exercise of its jurisdictional responsibilities are structurally biased in favor of regulated utilities. In the end, the OCA's application of this viewpoint leads to recommendations that are inconsistent with the appropriate application of ratemaking principles and precedent.

13. Q. Ms. Hoover discusses the principles of "just and reasonable" and "zone of reasonableness" as an element of the "regulatory compact." How do "just and reasonable" and "zone of reasonableness" enter into commission rate case deliberations?

A. In practice, the setting of rates is not formulaic; there are often variabilities and uncertainties in the data and forecasts that underlie utility and intervenor perspectives on forward-looking costs, billing determinants, and company rates. A commission must weigh record evidence against appropriate standards to determine—within those ranges of uncertainty—where rates should be set. In this

context, various principles such as "just and reasonable" and "zone of reasonableness" have evolved to guide commission deliberations and have been used in commission and court decisions. These principles have been interpreted through decades of precedent as standards to apply in the evaluation of record evidence and the ultimate setting of rates. Importantly, just and reasonable is bounded; it is not meant to be used by commissions to render decisions that are not tethered to the purpose of allowing utilities to recover the costs they incur to provide reliable service.[11]

14. Q. Ms. Hoover suggests that there may be circumstances where the Commission can set rates that are outside a zone of reasonableness to "…fairly balance the interests of all parties." Do you agree?

A. No. Ms. Hoover would have the Commission believe that they should focus primarily or exclusively on consumer interests when determining whether rates are just and reasonable, and that this provides the Commission an unbounded latitude to set rates outside a zone of reasonableness, even if the outcome does not reflect the true costs for the utility to discharge its public service obligation and attract the capital needed to safely and reliably meet customer demands on a going-forward basis. Yet "just and reasonable" is not a one-sided standard to be interpreted to define a range of rate outcomes acceptable only to the consumer.

[11] A "zone of reasonableness" is intended to represent both the consumer and investor interest, for example the landmark *Hope* case adopted "just and reasonable rates as a balance of the investor and the consumer interests." This balance was "gradually refined into the concept of a 'zone of reasonableness.'" Further, *Duquesne Light Co. v. Barasch*, 488 U.S. 299 (1989) describes the "lower limit of the zone of reasonableness, that is, where just and reasonable is bounded by a constitutional prohibition against confiscation." Steve Isser, *Just and Reasonable: The Cornerstone of Energy Regulation*, June 30, 2015 (hereafter "Isser"), at 31, 38.

This one-sided perspective ignores or understates the fundamental balance established between requiring a utility to safely and reliably meet the needs of current and future customers in exchange for the ability to recover the costs of doing so, including a return on prudently-invested capital sufficient to attract investors.[12]

15. Q. You have observed that utilities should be compensated for providing reliable services. In this case the OCA has recommended a dramatic reduction in PAWC's proposed revenue requirement increase. Are there potential negative impacts if the Commission were to accept OCA's proposed reductions, from a public policy perspective?

A. Yes. PAWC's proposed revenue requirement increase is driven in large part by necessary investments in water and wastewater system infrastructure – investments needed for the Company to continue to provide safe and reliable delivery of *vital* water and wastewater services to customers in their service territory. In fact, no one in this case has challenged these investments as not used and useful for reliable water and wastewater services, and no one has alleged that the Company's investments or management of construction projects has been imprudent. Yet if the Commission accepts OCA's recommendations, the Company would not be able to recover the cost of prudent investments needed to discharge its public service obligation. This would threaten the financial viability

[12] *See*, *e.g.*, Filipink's analysis of the Supreme Court cases Bluefield Waterworks and Hope Natural Gas: "These decisions said that a return should be reasonably sufficient so that investors had confidence in the financial soundness of the utility and should be adequate to raise necessary financing," including "capital costs of the business." Eric Filipink, *Serving the Public Interest - Traditional vs. Expansive Utility Regulation*, December 30, 2009, at 12-13.

of the company and make it difficult to raise capital to fund water and wastewater service projects.

There are numerous reasons for ensuring the financial integrity of water utilities like PAWC, and sufficiently funding system investment and operations. PAWC serves a critical function, providing an essential service needed to support the health and welfare of residents in its service territory, and supporting the operation of businesses vital to the local economy. It has no choice. As a regulated utility it must provide safe and reliable service to customers in its service territory.

It should not be necessary to highlight the importance of safe, reliable water and wastewater services; they are unquestionably necessary for life, and for the health, safety, and comfort of the Commonwealth's residents. In turn, providing a stable and secure revenue environment for water companies supports local economic activity both through projects funded through utility investments and support of local business activity, and it can help lower the costs incurred by utilities in attracting capital to fund such investments.

If the Commission accepts the dramatic revenue requirement reduction proposal of the OCA (and other intervenors), it risks destabilizing the financial conditions for efficient operation of the Company's system, increasing the long-run cost of providing reliable service, depressing local investment in the economy, and increasing the risks of less safe and reliable water and wastewater system operations.

IV. ALTERNATIVE RATEMAKING

16. Q. Have you reviewed Ms. Hoover's discussions with respect to alternative ratemaking?

A. Yes.

17. Q. Please summarize Ms. Hoover's position.

A. Ms. Hoover claims that because alternative ratemaking mechanisms tend to shift risks to customers, they require more scrutiny.[13] In addition, she argues that the two new alternative ratemaking mechanisms that PAWC is proposing in this case—the Revenue Decoupling Mechanism and an Environmental Compliance Investment Charge—represent additional incentives encouraging the same behavior as previously authorized alternative ratemaking mechanisms—namely, "(1) the Distribution System Improvement Charge (DSIC); (2) the Fully Projected Future Test Year (FPFTY); (3) the addition of Section 1329 that permits fair market valuation for municipal acquisitions; and (4) the addition of Section 1311(c) that permits the Commission to approve the shift of wastewater revenue deficiencies to water customers if it is in the 'public interest.'"[14] She claims that approving multiple incentives for the same behavior can cause it to be "unclear which incentive is having the desired effect on a utility's performance"[15] and

[13] Hoover Testimony, p. 30.

[14] Hoover Testimony, p. 29.

[15] Hoover Testimony, p. 41.

"serves to transfer risk disproportionately from the shareholders to the consumers and to transfer wealth unjustly from consumers to the shareholders.[16]

18. Q. Do you agree with Ms. Hoover?

A. No, I do not. I do not agree that there is a limit on the number of incentives that should be applied to encourage particular behaviors by utilities, particularly when those particular behaviors are consonant with the public interest and/or have been provided for in state law. Indeed, Section 1330 allows for a broad array of alternative ratemaking mechanisms and demonstrates that the Pennsylvania legislature did not set limits on the number of alternative ratemaking mechanisms that could be applied as it explicitly allowed the Commission to approve "rates based on a combination of more than one" mechanism.[17] Moreover, I do not agree that the new alternative ratemaking mechanisms proposed by PAWC duplicate incentives already in place. The new mechanisms proposed by PAWC are designed to achieve different goals than existing mechanisms.

19. Q. Please describe the existing alternative ratemaking mechanisms in more detail.

A. A Distribution System Improvement Charge ("DSIC") is a surcharge on customers' bills that is revised quarterly and allows recovery of costs to replace aging infrastructure between rate cases.[18] It thus "provides utilities with an

[16] *Id.*

[17] 66 Pa. C.S. §1330(b)(1).

[18] 66 Pa.C.S. §§ 1353, 1357.

additional rate mechanism to recover the capitalized costs related to repair, improvement and replacement [of] utility infrastructure. A DSIC can reduce regulatory lag, improve access to capital at lower rates, and accelerate infrastructure improvement and replacement."[19]

A Fully Projected Future Test Year ("FPFTY") was implemented by the Pennsylvania legislature to "reduce regulatory lag due to the use of rate case inputs that are outdated by the time new base rates become effective and, further, to provide more ratemaking flexibility for the timely recovery of prudently incurred infrastructure costs."[20] The FPFTY mechanism allows forecasted costs to be used that more accurately capture expected conditions during the period for which the rates will be effective and allows investments that will become used and useful after the date the rates become effective to be included in the utility's revenue requirement.[21] Reducing regulatory lag can reduce capital costs and facilitate infrastructure investments, particularly when costs are rising faster than usage.

Section 1329 permits fair market valuation for municipal acquisitions. As discussed in more detail in the next section, this statute was passed in order to allow larger utilities, with greater resources, to acquire smaller municipal utilities, many of which have heavily depreciated assets and are in need of upgrades to

[19] Final Implementation Order, *Implementation of Act 11 of 2012*, Docket No. M-2012-2293611 (August 2, 2012) ("2012 Implementation Order re Act 11"), p. 57.

[20] 2012 Implementation Order re Act 11, p. 4.

[21] 2012 Implementation Order re Act 11, p. 5.

maintain safe and reliable service.[22] Absent this rule, such acquisitions may have created financial hardship for such municipalities and delayed necessary improvements to the systems. This rule also mitigated the risk to the utility of not being able to recover the full cost of these acquisitions—thus encouraging larger utilities to acquire such systems.[23]

Section 1311(c) permits the Commission to approve the shift of wastewater revenue deficiencies to water customers if it is in the "public interest."[24] "The benefits of this provision are that the costs of necessary upgrades to wastewater systems to maintain safe and reliable service, which can be substantial on a stand-alone basis, can be spread among the common customer base of the water and wastewater utilities."[25] This can prevent rate shock for wastewater customers from needed infrastructure upgrades and thus facilitates the implementation of such upgrades.

20. Q. What behaviors were the existing alternative ratemaking mechanisms designed to incentivize?

A. The four alternative ratemaking mechanisms in use by PAWC are designed to encourage and accelerate needed infrastructure upgrades to maintain safe and reliable service and to reduce the costs of these upgrades to consumers. While

[22] Final Implementation Order, *Implementation of Section 1329 of the Public Utility Code*, Docket No. M-2016-2543193 (October 27, 2016) ("2016 Implementation Order re Section 1329"), p. 2.

[23] 2016 Implementation Order re Section 1329, pp. 2-3.

[24] Hoover Testimony, p. 29.

[25] 2012 Implementation Order re Act 11, p. 8.

these mechanisms are all focused on reliable service, they each operate to relieve a different constraint. The first two mechanisms work by relieving timing constraints on when certain investments and other costs can be included in rates, thus reducing long-term capital costs through the more efficient deployment of proactive capital; the third relieves constraints on mutually beneficial acquisitions for both the small municipalities whose systems are being acquired and the buyer utilities; and the fourth ensures that potential rate shock does not further delay critical infrastructure upgrades. Implementing these mechanisms in combination thus ensures that no one of these constraints can hold up infrastructure investments needed to support safe, reliable service over the long-term.

21. Q. What behaviors are the alternative ratemaking mechanisms PAWC has proposed in this proceeding designed to incentivize?

A. PAWC has proposed two mechanisms: revenue decoupling and an Environmental Compliance Investment Charge.[26] Revenue decoupling is a mechanism that removes utilities' disincentive to promote efficient usage. The more successful a utility is at encouraging customers to use less water, the lower the revenue the utility collects and the more likely it is that the utility will not receive sufficient revenue to cover its costs. By allowing the utility to recover its fixed costs with more certainty, revenue decoupling removes financial barriers to utility-provided

[26] *Pennsylvania-American Water Company*, Testimony of Ashley E. Everette, PAWC Statement No. 1, Pa. P.U.C. Docket Nos. R-2023-3043189 et al., November 8, 2023 ("Everette Testimony"), pp. 23-27.

efficiency programs, which ultimately reduces operating expenses, capital expenditure needs, and costs to consumers.

The Environmental Compliance Investment Charge is a rate adjustment clause designed to reflect and recover, between rate cases, the capital costs and expenses imposed on the Company to address and comply with new or changed federal and state environmental mandates.[27] Such an adjustment clause provides appropriate incentives for the company to rapidly respond to changing mandates, reducing the costs of doing so and ensuring that changes needed to improve the safety and/or quality of water service are implemented expeditiously.

22. Q. How do the proposed ratemaking mechanisms differ from the existing mechanisms?

A. Where the existing mechanisms focus on accelerating necessary system upgrades at reasonable rates to consumers, the two proposed in this proceeding are designed to encourage efficiency and incentivize rapid response to changing environmental mandates, respectively. Thus, they are not duplicative of existing mechanisms, and Ms. Hoover's concern that their implementation could result in a lack of clarity regarding any individual mechanism's effectiveness is unfounded.

[27] Everette Testimony, p. 26.

23. Q. Do you agree with Ms. Hoover that allowing multiple alternative ratemaking mechanisms renders the ratemaking process "non-traditional," or somehow compromises the rate regulation of public utilities?

A. No, and I do not agree with Ms. Hoover's narrow view of what constitutes "traditional ratemaking." In its decision-based review of PAWC's proposed rate change, the Commission is engaged in a traditional ratemaking exercise, and to suggest otherwise because the proposal includes certain alternative mechanisms is an effort to make a mountain out of a molehill. Utility inclusion and public utility commission approval of various mechanisms in rate cases to achieve public policy goals and/or meet statutory objectives is nothing new. Nor does it render the Commission unable to consider the impact of individual rate case components on the balance of risk between consumers and the Company.

In this case, PAWC has filed all the elements of a "traditional rate case," such as a cost of service study, revenue requirement allocation, proposed components of the cost of capital, rate design, mechanisms to assist low-income customers, and proposals for other utility offerings. It is true that the Company's proposals *also* include specific measures and mechanisms designed to achieve legislated public policy objectives around efficiency, environmental compliance, and consolidation of municipal services. But there is nothing new or "non-traditional" about these rate case elements, and they are similar to features that have been required or adopted in rate cases across many states and utilities. In my view, the OCA's treatise on "regulatory construct" and "traditional ratemaking" are forced and exaggerated constructs simply to set the stage for the very real-world and

significant reductions it proposes to the Company's revenue requirement, and do not add any probative value to the decisions the Commission must make in this traditional rate case.

V. THE USE OF FAIR MARKET VALUE

24. Q. Have you reviewed Ms. Hoover's discussion related to the Company's use of Fair Market Value in incorporating in rates the cost of recent municipal water company acquisitions?

A. Yes.

25. Q. Please summarize Ms, Hoover's position.

A. Ms. Hoover states that PAWC has completed 10 acquisitions where the ratemaking rate base was calculated using fair market value along with two others that are in progress.[28] She claims that by using a fair market value approach rather than the traditional original cost approach, the rate base associated with these acquisitions is "inflated"[29] and creates a large revenue deficiency for the customers acquired through these acquisitions.[30] This revenue deficiency occurs because the revenue PAWC proposes to collect from the acquired customers is less than the cost of service based on the fair market value of the acquired assets.[31] Consequently, she claims that the "rates for the acquired customers are

[28] Hoover Testimony, pp. 33-34

[29] Hoover Testimony, p. 9.

[30] *Id.*

[31] *Id.*

disconnected from the actual cost to serve them,"[32] and argues that PAWC's proposed reallocation is not consistent with principles of fairness and efficiency.[33]

26. Q. Do you agree with Ms. Hoover?

A. No. PAWC's use of fair market value in calculating its rate base for acquisitions is fully supported by existing laws and regulations in Pennsylvania, which were intentionally designed this way by the legislature and regulators to encourage regionalization and acquisitions of smaller, often nonviable, water and wastewater utilities by larger utilities better able to maintain acceptable service quality.

The Pennsylvania legislature passed Section 1329 to encourage the acquisition of municipal water and wastewater systems by larger public utilities and entities, recognizing that such acquisitions "can facilitate necessary infrastructure improvements and ensure the continued provision of safe, reliable service to customers at reasonable rates."[34] Prior to the enactment of Section 1329, the method of valuing utility property as "the original construction cost less accumulated depreciation" could lead to municipalities with heavily depreciated assets being viewed as "less advantageous" acquisitions.[35] In response, the Pennsylvania legislature enacted Section 1329 which allowed for the fair market valuation of water and wastewater systems to be acquired.[36] Additionally, this

[32] Hoover Testimony, p. 34.

[33] Hoover Testimony, pp. 37-38.

[34] *Id.*

[35] *Id.*

[36] *Id.*

rule mitigated the risk that the acquiring utility may not be able to recover the full cost of such acquisitions.[37]

The Pennsylvania legislature also enacted Section 1327, which further encouraged the acquisition and regionalization of small water and wastewater utilities. Previous law prohibited the recognition of the fair market value of acquired utilities in the ratemaking process, which resulted in an "economic disincentive for larger, more capable and viable water utilities to acquire and merge with smaller, nonviable water systems."[38] Under Section 1327, the legislature allowed acquiring utilities to request adjustments to its rate base when "the actual purchase price or acquisition costs are greater than the depreciated original cost of the assets of the acquired system."[39] And Section 1311 permits a utility to propose to allocate a portion of wastewater systems' higher revenue requirements to water customers when such allocation is in the public interest.

I understand from the testimony of PAWC witness Ashley Everette that the OCA entered into settlement agreements that requested Commission approval of eleven of the Company's twelve Section 1329 acquisitions and PAWC has closed on ten of those eleven transactions. Ms. Hoover's contention that the "fair market value rate base exacerbates the revenue deficiencies"[40] is irrelevant, and the associated valuations have nothing to do with "fairness" and "efficiency." The need to

[37] 2016 Implementation Order re Section 1329, p. 3.

[38] Proposed Policy Statement on Acquisitions of Water and Wastewater Systems, Docket Nos. M-00051926 et. al. (December 5, 2005) ("2005 Proposed Policy Statement on Acquisitions of Water and Wastewater Systems"), p. 2.

[39] *Id.*

[40] Hoover testimony, p. 39.

allocate a portion of the wastewater revenue requirement under Section 1311 is simply a rate design question for the Commission to decide, which Mr. Rea addresses in his testimony.

27. Q. Does this conclude your rebuttal testimony?

A. Yes.

Appendix A

CV of Paul Hibbard

PAUL J. HIBBARD
Principal

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Mr. Hibbard is an expert on economics, strategy, regulation, and policy in the electric and natural gas industries. He has a comprehensive background merging business development, technical analysis, resource planning and development modeling, economics, and public policy in the energy and environmental fields. Mr. Hibbard has provided technical and strategic advice to government, industry, business, public interest groups, and trade organizations on energy market structure, electric and natural gas infrastructure planning and siting, utility resource solicitation and procurement, emission allocation and environmental policy, renewable resource program design and administration, transmission pricing, climate change policy, utility ratemaking practices, and the transfer of US federal and state emission control programs to other countries.

Prior to joining Analysis Group, Mr. Hibbard was chairman of the Massachusetts Department of Public Utilities. During his tenure, he carried out a forward-looking ratemaking and policy agenda to advance energy efficiency and renewable resources, coordinate regional efforts in the development of energy resources and associated infrastructure, and promote the administration of fair and efficient transmission pricing models in regional and national contexts. He also has provided testimony on resource planning, competitive electricity markets, and transmission pricing in hearings before committees of the Massachusetts legislature and the US House of Representatives, the Federal Energy Regulatory Commission (FERC), and state and regional planning councils.

EDUCATION

M.S.	Energy and resources, University of California, Berkeley *Thesis: Safety and Environmental Hazards of Nuclear Reactor Designs* *(Ph.D. coursework in nuclear engineering)*
B.S.	Physics, University of Massachusetts Amherst

PROFESSIONAL EXPERIENCE

2010–Present	**Analysis Group, Inc.** *Principal (2015–Present)* *Vice President (2010–2015)*
2007–2010	**Massachusetts Department of Public Utilities** *Chairman* *Member, Energy Facilities Siting Board* *Manager, New England States Committee on Electricity (NESCOE)* *Treasurer, Executive Committee, Eastern Interconnect States' Planning Council*

2007–2010 **Massachusetts Department of Public Utilities** (continued)
Representative, New England Governors' Conference (NEGC)
Power Planning Committee
Member, National Association of Regulatory Utility Commissioners (NARUC)
Electricity Committee, Procurement Work Group

2003–2007 **Analysis Group, Inc.**
Vice President (2005–2007)
Manager (2003–2005)

2000–2003 **Lexecon Inc.**
Senior Consultant (2002–2003)
Consultant (2000–2002)

1998–2000 **Massachusetts Department of Environmental Protection**
Environmental Analyst

1991–1998 **Massachusetts Department of Public Utilities**
Senior Analyst, Electric Power Division

1988–1991 **University of California, Berkeley**
Research Assistant, Safety/Environmental Factors in Nuclear Designs

SELECTED PUBLIC-SECTOR EXPERIENCE (MASSACHUSETTS)

- ***Chairman, Department of Public Utilities***
  - Chaired the state's public utilities commission during a period of aggressive change in state policies affecting the electricity and natural gas industries, including initial implementation of several new state energy laws and initiatives restructuring the setting of utility rates, promoting the expansion of energy efficiency and demand response, facilitating the retail and wholesale market integration of renewable and low-carbon resources, and revising state policy on the siting of major generation and transmission infrastructure.
  - Oversaw the issuance of initial regulations and policy related to revenue decoupling, net metering, long-term contracting for renewables, and power system emergency planning and outage restoration.
  - Led Massachusetts's work with regulators across the Northeast to pursue large-scale renewable resource development through coordinated procurement strategies to develop coordinated positions related to national transmission development proposals and establish a regional presence on transmission-related provisions in federal legislation.
  - As chairman, served as the administrative and policy head of an agency of nearly 150 employees, and was responsible for agency management and growth, budgeting, legislative matters, press inquiries, and policy agenda-setting.
  - Oversaw the completion of all dockets jurisdictional to the department, including rate cases and associated tariff matters, forecast and supply planning for electric and natural gas industries, and state oversight of natural gas pipeline safety and public transit authorities.
  - Responsible for all interaction with the governor's office, legislature, and Executive Office of Energy and Environmental Affairs, as well as representing the state in regional deliberations related to electric and natural gas utility policy, electricity market design and oversight, and regional power system reliability issues.

- ***Member, Energy Facilities Siting Board***
  Sitting member of the state board responsible for reviewing all proposals for major generation and transmission infrastructure projects within the state, as well as state intervention in federal review of natural gas pipeline infrastructure. Review involved technical, environmental, and economic evaluation of jurisdictional power plants, transmission lines, and other energy infrastructure, as well as ruling on proposals for exemption from state and local zoning ordinances.
- ***Manager, NESCOE***
  State representative of the regional group chartered to develop New England regional policy positions on electricity market and transmission planning issues. Responsibilities included consideration of group development issues, input into regional determinations of the Installed Capacity Requirement, consideration of regional approaches to transmission planning and the consideration of non-transmission alternatives, and coordinated development of a regional RFP/RFI for the solicitation of renewable power under long-term contracts for the New England states.
- ***Treasurer, Executive Committee, Eastern Interconnection States' Planning Council***
  Elected treasurer of the steering committee for the state council formed under a US Department of Energy (DOE) grant to coordinate with power system operators on developing long-range plans for a transmission system spanning 41 states in the eastern US. Coordinated New England states' approach to policy issues stemming from council efforts.
- ***Representative, NEGC Power Planning Committee***
  Represented the governor's office in all discussions related to regional energy/environmental issues, including transmission cost allocation, regional energy policy coordination, and development of mechanisms for and approaches to procurement of renewable power through long-term contracts with sources in New England and eastern Canada. Engaged in collaborative discussions with counterparts representing the Eastern Canadian Premiers.

SELECTED CONSULTING EXPERIENCE

Government, Foundations, Commissions, and Cooperatives

- ***For the Natural Resources Defense Council (NRDC)*** – Coauthored a public report on the Clean Electricity Payment Program's (CEPP) positive impact on the US economy if adopted (2021).
- ***For Advanced Energy Economy (AEE)*** – Coauthored a public report on the potential economic impacts of applying stimulus funds to electrification of the US transportation sector using estimated spending levels from President Biden's American Jobs Plan (2021).
- ***For AEE*** – Coauthored a public report on the potential economic impacts of applying stimulus funds to develop advanced energy technologies, products, and services in the US using estimated spending levels from President Biden's American Jobs Plan (2021).
- ***For the Coalition for Green Capital*** – Coauthored a white paper examining the potential of the federally authorized Clean Energy and Sustainability Accelerator that could address economic and climate crises (2021).
- ***For AEE*** – Coauthored a series of public reports on the economic impacts in select states of potential stimulus spending on clean and advanced energy resources (2020).
- ***For a municipal association*** – Drafted a white paper related to the fuel mix and emission characteristics of the portfolio of generating assets and power contracts used by municipal electric light companies in Massachusetts (2020).
- ***For the Wellesley Municipal Light Plant (WMLP)*** – Coauthored two white papers on the greenhouse gas (GHG) impacts of the WMLP power portfolio, and considerations for the WMLP associated with achieving continued reductions in carbon emissions over the ensuing decades (2020).

- ***For the Georgetown Climate Center*** – Conducted a bill impact analysis related to Virginia's proposed implementation of a carbon cap-and-trade program (2018).
- ***For Energy New England*** – Provided strategic assistance on energy market and public policy issues in New England (2017).
- ***For the Environmental Defense Fund*** – Coauthored a white paper related to historical power system emission trends (2015).
- ***For the Massachusetts Attorney General*** – Coauthored a report evaluating electric and natural gas infrastructure in New England from the perspectives of reliability, cost, and GHG emissions (2015).
- ***For AEE*** – Coauthored a report on the status of the electric industry in the State of Ohio, and developed recommendations on state energy policy in consideration of the state's market and technological circumstances at the time.
- ***For the Energy Foundation and industry groups*** – Coauthored multiple white papers on the reliability, cost, and market efficiency impacts of the US Environmental Protection Agency's (EPA's) proposed regulations to control emissions of carbon dioxide from existing electric generating facilities. Presented results in numerous conference, stakeholder, and regulatory settings.
- ***For a foundation*** – Led a study of the economic impacts of a state clean energy policy (2013–2014).
- ***For the Massachusetts Department of Energy Resources –*** Provided testimony on the ratepayer and social benefits of reducing methane leaks from a local natural gas distribution company's system (2013).
- ***For AEE*** – Facilitated a regional symposium for the New England Conference of Public Utility Commissioners and staff related to advanced energy technology development and commercialization, and the legal and regulatory structures needed to facilitate integration of emerging technologies (2013).
- ***For the Regional Greenhouse Gas Initiative (RGGI)*** – Conducted a bill impact analysis related to changes to retail customer electric bills in New England, New York, and RGGI Pennsylvania, New Jersey, and Maryland Interconnection (PJM) states associated with various changes considered by RGGI to program cap level and use of allowance revenues (2012).
- ***For AEE*** – Participated in a project advising AEE with respect to its national program to support public utility commission consideration of policies and regulations related to the development and integration of advanced energy technologies (2012–2013).
- ***For the Merck Family Fund*** – Developed an interactive tool to compare the impacts of energy, economic, environmental, legislative, and regulatory policies and programs across the US (2012).
- ***For AEE*** – Coauthored a report on the perspectives of CEOs at advanced energy companies doing business in California on California's energy policies. Conducted over 30 interviews with energy business leaders to get perspectives and recommendations for policy changes (2012).
- ***For the Barr Foundation*** – Coauthored a report on the benefits and costs associated with reducing natural gas leaks on natural gas distribution systems through implementation of targeted infrastructure replacement ratemaking mechanisms in Massachusetts, Rhode Island, and Ohio. Developed a cost-benefit model to quantify the impacts of such programs (2012–2013).
- ***For the American Clean Skies Foundation*** – Developed a dispatch price and emissions model to forecast power system outcomes in the PJM Interconnection, Midwest Independent System Operator, and Southwest Power Pool regions (2012).
- ***For a national environmental organization*** – Conducted a comprehensive national review of energy efficiency monitoring and verification programs in order to support development of a protocol that

could be used to allow energy efficiency to be used as a compliance tool in national carbon emission control regimes (2012–2013).

- ***For the Merck Family Fund –*** Co-led a project to carry out an analysis of the economic impacts of the Northeast states' use of revenues collected from the auctioning of carbon allowances associated with RGGI (2011).
- ***For AEE –*** Developed background on electric industry structure, regional planning and market structures and operations, and state energy policy organization and initiatives. Assisted with the development of a web-based information platform (2011).
- ***For the American Clean Skies Foundation –*** Authored a paper on the redesign of wholesale electricity market structures to efficiently integrate a higher level of variable resources (2012). Coauthored a white paper examining electric reliability and air emission issues associated with the potential retirement of the Potomac River Generating Station in Alexandria, Virginia (2011).
- ***For the Public Service Commission of Colorado –*** Coauthored a white paper on the design of incentives for the photovoltaic (PV) solar energy market (2011).
- ***For a national environmental organization*** – Conducted an economic analysis of key US cities that were or had been in nonattainment under the National Ambient Air Quality Standards, to explore relationships between air quality control requirements and the local economy (2011).
- ***For a national environmental organization*** – Completed a comprehensive report on the full scope of energy efficiency and demand response programs administered by New York electric utilities and the New York Independent System Operator (NYISO). Assessed the potential for additional innovative programs to improve energy efficiency and demand response in New York City (2010).
- ***For the North Carolina Attorney General –*** Managed a project in support of expert testimony on the economic and financial feasibility of requiring the installation of controls to reduce emissions of sulfur dioxide, nitrogen oxides, and mercury from coal-fired power plants owned by the Tennessee Valley Authority (TVA). The project was in the context of a public nuisance lawsuit brought by the North Carolina Attorney General against TVA (2006).
- ***For the National Commission on Energy Policy –*** Authored white papers on (1) the implications for US energy infrastructure of the damage to Gulf Coast energy facilities from Hurricanes Katrina and Rita (2006); (2) the practical and economic implications of various mechanisms for the allocation of carbon dioxide emission allowances to the electric sector under potential federal carbon control regimes (2005); and (3) national energy infrastructure needs for the electricity, natural gas, and petroleum industries, and for addressing the long-term impacts of energy production and use associated with spent nuclear fuel and carbon dioxide (2004).
- ***For the Massachusetts Health and Educational Facilities Authority (MHEFA) PowerOptions Program*** – Managed several projects providing regulatory, economic, and strategic advice to PowerOptions to assist in their selection and pricing of retail electricity products from competitive electricity suppliers. Over a three-year period, projects included analyses of forward prices and wholesale markets for capacity and reserves; analysis of contract price options, terms, and conditions; and analysis of congestion pricing implications for retail supply (2002–2004).
- ***For the Energy Foundation*** – Coauthored a report (with Dr. Susan Tierney) documenting best practices in energy facility siting regulations in the US, and analyzing in particular the impact of California's energy facility siting process on that state's electricity crisis (2002). Supported a foundation-based program to provide international assistance to China's efforts to privatize and restructure its electric industry, and to develop regulations to control air emissions from power plants in that country (2000–2003).
- ***For the Massachusetts Technology Collaborative (MTC) –*** Managed projects in support of the MTC's renewable and premium power programs, including the (1) creation of a standard financial

pro-forma for wind and landfill gas technologies in New England under various assumptions related to capital and operating costs, financing, discount rates, and the impact of state and federal policies to support renewable development; (2) development of an economic model to determine the financial impact on potential wind and combined heat and power facilities of proposed changes to utility standby service tariffs; and (3) research, strategic, and regulatory support of MTC's efforts to advance distributed generation in Massachusetts to promote renewable resources and improve power reliability for commercial and industrial customers (2000–2002).

ENERGY INDUSTRY STAKEHOLDERS

- ***For PECO Energy*** – Provided testimony on traditional ratemaking principles as applied to PECO's cost of providing gas delivery service (2021).
- ***For the Hingham Municipal Lighting Plant (HMLP)*** – Conducted an internal evaluation of the impact of decarbonization of residential and commercial energy use in the town, and its effect on HMLP's investments and operations (2020).
- ***For a natural gas interstate pipeline company*** – Coauthored a white paper and presention showing options to decarbonize the company's operations. The study included an analysis of its GHG footprint, identification of options and pathways to reduce net GHG emissions from operations to zero over time, and the development of recommendations for senior management (2020).
- ***For Oracle Corporation*** – Conducted an analysis of and report on the GHG emission reduction impacts of various types of energy efficiency programs and measures, with a focus on the comparison of structural and behavioral energy efficiency programs (2020).
- ***For NYISO*** – Conducted a study of the parameters used as the basis to set the NYISO's installed capacity demand curves for the four capability years beginning with the summer 2021 capability period (2020).
- ***For NYISO*** – Conducted an internal study of the potential reliability impacts on the electric grid due to changes in system mix and operations associated with a changing climate, and with state programs to address climate change (2020).
- ***For NYISO*** – Conducted a study of the potential risks to New York power system operations associated with an increased reliance on natural gas for power generation (2020).
- ***For Commonwealth Edison*** – Provided testimony on issues associated with a request for a certificate of public convenience and necessity by NextEra related to the proposed acquisition of the transmission assets of Rochelle Municipal Utilities (2020).
- ***For Repsol Energy North America*** – Provided strategic assistance related to the potential impacts of electric system market rules and public policy on the potential marketability of liquefied natural gas (LNG) in New England (2020).
- ***For Liberty Utilities*** – Provided testimony on the need for and economic and environmental impacts of the proposed Granite Bridge pipeline and LNG project in the State of New Hampshire (2020).
- ***For NYISO*** – Coauthored a white paper for NYISO on the potential impacts of a proposed carbon pricing mechanism in New York on power prices; energy policy; and economic, environmental, and public health impacts in New York (2020).
- ***For NTE Energy*** – Provided testimony before the Connecticut Siting Council on the need for and potential benefits associated with a proposed new natural gas-fired power plant in the State of Connecticut (2020).
- ***AltaGas*** – Provided testimony before the Maryland and District of Columbia public utility commissions on the potential environmental impacts of a proposed merger between AltaGas and Washington Gas (2017–2018).

- ***For Calpine Corporation*** – Coauthored a white paper on the design of a proposed carbon trading mechanism in Massachusetts (2017).
- ***For Vermont Gas*** – Provided testimony on the prudence of Vermont Gas' decisions and investments with respect to the Addison natural gas project (2017).
- ***For the Vermont Electric Power Company (VELCO)*** – Coauthored a white paper on VELCO's capital structure associated with its transmission assets and operations (2016).
- ***For the Merck Family Fund*** – Coauthored a white paper on economic principles associated with the trading of emission allowances associated with RGGI (2016).
- ***For a consortium of solar companies*** – Developed a white paper on the appropriate evaluation and treatment of behind-the-meter solar PV generation from the perspective of net metering policies in Massachusetts (2015).
- ***For a group of owners of electric generating facilities*** – Developed a comprehensive quantitative and qualitative critique of a utility proposal to invest in electricity storage capability in the State of Texas. Drafted a report for circulation to legislative, regulatory, and market interests stating the results of the critique and analysis (2015).
- ***For an energy resource developer*** – Conducted a financial and ratepayer analysis of the benefits of a project to develop a power plant and natural gas pipeline in the State of Maine. Submitted testimony to the Maine Public Utilities Commission describing the results (2014–2015).
- ***For an energy storage company*** – Developed an optimization analysis to evaluate the security, reliability, economic, and environmental benefits and costs of multiple battery storage installations across the Hawaiian Islands in different industry settings (renewable generator, island utility, military base, hotel/resort). Drafted a report presenting the results, considering the state's unique energy price and fuel security context (2014–2015).
- ***For NYISO*** – Developed a model to compare cost, resource, and emission outcomes of alternative designs for a capacity market in the State of New York. Coauthored a report presenting the results of the analysis and a comprehensive review of the benefits and drawbacks of moving from a spot to a forward capacity market (FCM) structure. Presented results to NYISO senior management and several meetings of New York electricity market participants and stakeholders (2014–2015).
- ***For multiple regional transmission organizations (RTOs)*** – Provided strategic support at the board-of-director and senior-management levels for considering the changing structures of retail regulation and wholesale market incentives within their regions (2014–2015).
- ***For Calpine Corporation –*** Provided testimony on the costs and benefits of different proposals for generation capacity in Florida (2014).
- ***For an RTO*** – Conducted an internal analysis of the financial risk associated with the RTO's position in administering the trading of power system transmission rights (2014).
- ***For a regional transmission operator*** – Conducted a top-to-bottom review of the content and design of the RTO's Rate Schedule 1 tariff for the collection of operational costs from market participants. Presented results of the analysis to the RTO's board of directors and senior management (2014).
- ***For a retail electricity supplier*** – Provided analytic and strategic support with respect to the supplier's participation in a state regulatory proceeding related to changing the nature of and rate structure for electric distribution service (2014).
- ***For Ambri Inc. –*** Led a study of the economic feasibility of using battery storage in conjunction with wind and solar for a micro-grid application (2013–2014).
- ***For Calpine Corporation –*** Provided testimony on the costs and benefits of different proposals for generation capacity in Minnesota (2013).

- ***For the New England Independent System Operator (ISO-NE) –*** Assisted on several projects related to addressing the codependence of electric and natural gas systems in New England through a mix of short- and long-term market rule changes and administrative actions. Assistance included review of market structures to improve unit performance, particularly under stressed natural gas system conditions; quantification of the costs of potential natural gas and electric system infrastructure, and contractual responses to market rules and administrative actions (e.g., dual-fuel capability, new pipeline investment, LNG purchasing, and firm natural gas transportation agreements); and assistance with a series of discussions between ISO-NE and regional electricity and natural gas market participants. Also quantified the potential benefits of improved performance associated with reduced system interruptions (2012–2013).
- ***For the ISO-NE*** – Developed an economic supply/demand model of the FCM to estimate the cost impact of integrating a new long-term performance incentive design element into the FCM auctions and pricing structure (2012–2013).
- ***For Calpine Corporation*** – Filed a report with the EPA on the impact of emergency generation demand response programs on the costs and emissions associated with power system dispatch in the PJM electricity market (2012).
- ***For the ISO-NE*** – Organized and helped lead a strategic planning initiative to address unit retirement, fuel mix, operational performance, and wind resource integration issues. Oversaw comprehensive generating unit performance analysis and electric-gas system risk review. Conducted a thorough internal risk assessment and key-challenge solution development. Facilitated meetings and developed organizational and concept documents to explore outcomes and assist in deliberations with states and regional industry stakeholders, and participated in external meetings to gain input and feedback (2010–2012).
- ***For an RTO*** – Conducted a top-to-bottom review of its external market monitoring function and a comprehensive best-practices survey of all internal and external market monitoring functions at US RTOs and independent system operators (ISOs) (2012).
- ***For a wind power development company*** – Conducted a regional review of wind power development projects and an assessment of potentially valuable projects for acquisition based on power system location and siting viability (2012).
- ***For an energy services company –*** Oversaw and conducted an analysis of business, legal, and regulatory conditions related to a legal dispute over the legitimacy of a contract for energy and water management services. Coauthored a report to be used in the development of legal strategy and legal proceedings (2012).
- ***For an international power company*** – Conducted a review of a regional utility's compliance with the FERC requirements for transmission open access, and developed strategies for the filing of complaints of anticompetitive conduct before the FERC (2011–2012).
- ***For an RTO*** – Comprehensively reviewed and suggested changes to the design of regional market structures; oversaw data review and analysis related to key market design features and asset performance (2011).
- ***For Direct Energy*** – Assisted with the development of strategies to increase retail choice in Pennsylvania, including the design of an opt-in descending-clock auction to increase migration from default service to competitive supply. Prepared comments and analysis on utility contract structures. Provided testimony before the Pennsylvania Public Utilities Commission (2011).
- ***For Algonquin Gas*** – Submitted affidavits and testified in bankruptcy court on the impact on power plant value of changes in market rules related to the FCM in New England. Also provided testimony on the impact on power system reliability of the availability of firm transportation contracts for natural gas supplied to power plants in New England (2010).

- ***For an RTO*** – Conducted a best-practices and performance metrics analysis to benchmark the ISO's performance against industry peers with respect to responsiveness to consumers, stakeholders, and policymakers. Drafted a report with comprehensive benchmarking and performance metric recommendations; participated in stakeholder discussions (2010).
- ***For a power generators trade association*** – Developed and facilitated an all-day group discussion concerning key economic, environmental, legal, and policy challenges to the economic viability of existing and new power generation capacity in regional wholesale electricity markets (2010).
- ***For a coalition of electric companies*** – Coauthored the report "Ensuring a Clean, Modern Electric Generating Fleet while Maintaining Electric System Reliability," which reviewed the impact on power plant operations of proposed EPA rules to reduce emissions of sulfur dioxide, nitrogen oxides, mercury, and other hazardous air pollutants. Presented findings to numerous regional and national industry and regulatory groups (2010).
- ***For an industry coalition*** – Conducted a study and coauthored a white paper (with Dr. Susan Tierney) for the New England Energy Alliance on New England energy infrastructure needs and policy issues (e.g., facility siting policies, RGGI/climate change) influencing the future addition of energy infrastructure in the region (2006).
- ***For an interstate pipeline company and offshore LNG developer*** – Authored a report related to recent developments in the supply and demand for natural gas in New England, and surveyed the development, regulatory, and commercial status of proposed LNG projects across the US (2006); coauthored a report (with Susan Tierney) providing an overview of Northeastern natural gas markets and conditions, and an assessment of natural gas supply and demand conditions (2005).
- ***For independent system operators*** – Managed several projects and coauthored reports or analyses for the Northeast region's ISOs/RTOs related to ISO/RTO annual strategic plans; market monitoring and mitigation best practices; and the links between wholesale electricity markets and local distribution company retail prices (2002–2006).
- ***For electric utilities*** – Managed or participated in numerous engagements with wires-only as well as vertically integrated electric utilities within New England and across the country related to rate case strategy and regulatory support; strategic planning; power supply resource planning and procurement (including the role of independent monitor of utility procurements); price and environmental analyses related to the siting of new high-voltage transmission lines; and evaluation of the allocation of SO_2 and NO_x emission allowances under the EPA Clean Air Interstate Rule (CAIR) program (2001–2006).
- ***For a developer of a land-based LNG facility –*** Assisted in the preparation of confidential reports on US natural gas supply/demand conditions, market pricing indices, US LNG facilities' status, Northeast interstate and intrastate pipeline infrastructure conditions and prospects, and LNG supply contract prices, terms, and conditions (2006).
- ***For retail energy providers*** – Managed projects and authored or coauthored confidential reports on the experience with retail competition in the US, a benefit/cost analysis of wholesale electricity competition, and comparative analyses of retail electricity prices for utility and competitive retail suppliers in select states (2004–2006).
- ***For merchant generating companies/coalitions*** – Managed production cost dispatching analyses for strategic planning related to the construction of new generating capacity in New England; assisted in the development of regulatory proposals for new wholesale market organizations and policies in New England (2001–2002).
- ***For a major interstate pipeline owner/operator –*** Modeled the electrical load characteristics of pipeline operations and utility rate structures to quantify the extent to which the company was being overcharged for electricity services. Supported company intervention in public utility commission proceedings and with analytical support in settlement negotiations (2002).

- ***For a renewable power developer association*** – Provided testimony on the potential negative effects – and remedial policy options – related to the impact of locational marginal pricing on the development and operation of renewable generating resources in New England (2001).

OTHER PROFESSIONAL ACTIVITIES

AEE
Advisory Board (2011)

SELECTED REPORTS, TESTIMONY, PUBLICATIONS, AND PRESENTATIONS

Testimony of Paul J. Hibbard before the Rhode Island Public Utilities Commission, Docket No. 22-20-NG on behalf of The Narragansett Electric Company, d/b/a Rhode Island Energy (September 1, 2022)

Answering Testimony of Paul J. Hibbard before FERC, Docket No. ER20-2441-002 on behalf of McKenzie Electric Cooperative, Inc. (July 15, 2022)

Testimony of Paul J. Hibbard before the US District Court, Southern District of Florida, Ft. Lauderdale Division on behalf of Simon Property Group et al., Case No. 0:20-cv-60981-AMC (June 6, 2022)

Methane Reduction Technology Electricity and Abatement Costs: The Cost to Power Zero-Emission Pneumatic Controllers and Pumps in Grid-Connected and Remote Locations, with Scott Ario and Elisa Gan (May 6, 2022)

Affidavit of Paul Hibbard and Charles Wu before FERC, Docket No. ER22-772-000 on behalf of NYISO (January 5, 2022)

Modifications to the BSM Construct in the NYISO Capacity Market: Analysis of Potential Capacity Market Competitiveness and Reliability Outcomes, with Charles Wu (December 2021)

Economic Impact of a Clean Electricity Payment Program, with Pavel Darling and Luke Daniels (September 2021)

"Why Hydrogen?," presentation during the EBC Energy Resources Webinar: Future of Green Hydrogen – Earthshot Effort to Meet the Needs of Climate Change (September 30, 2021)

"Decarbonization and The Power System," presentation during the Northeast Public Power Association RodE&O Conference and Expo, Engineering Track (September 22, 2021)

"Net Zero Carbon: What Is It and What Should It Be?," presentation during the LDC Gas Forum (September 14, 2021)

"Net Zero Carbon: What Is It and What Should It Be?," presentation during the NEPPA Annual Conference, General Session (August 23–24, 2021)

"Motivating Customers to Decarbonize with an Eye Toward Equity," presentation during the 2021 NARUC Summer Policy Summit (July 18, 2021)

Economic Impact of Stimulus Investment in Advanced Energy for America, with Pavel Darling (June 2021)

Economic Impact of Stimulus Investment in Transportation Electrification, with Pavel Darling (June 2021)

"A Step Through the Looking Glass – Outlook for Natural Gas in the Northeast," Webinar for the Northeast Gas Association (NGA) Regional Market Trends Forum, What are the Market Pathways and Their Various Implications (April 29, 2021)

Accelerating Job Growth and an Equitable Low-Carbon Energy Transition: The Role of the Clean Energy Accelerator, with Susan F. Tierney (January 2021)

"Carbon Pricing: This Is the Way," presentation on a plenary panel to the New England Restructuring Roundtable (December 11, 2020)

"Approaches to Meeting Decarbonization Mandates: Important Decisions with Cost, Equity, and Reliability Implications," presentation during the EUCI Decarbonization Summit on state decarbonization opportunities (December 9, 2020)

"Approaches to Meeting Decarbonization Mandates: Important Decisions with Cost, Equity, and Reliability Implications," presentation during the New England Energy Summit on state decarbonization opportunities (November 23, 2020)

Affidavit of Paul J. Hibbard before FERC, Docket No. ER21-502-000 on behalf of NYISO (November 30, 2020)

Economic Impact of Stimulus Investment in Advanced Energy (series of 10 state-specific reports), with Pavel G. Darling (September–October 2020)

Climate Change Impact and Resilience Study – Phase II: An Assessment of Climate Change Impacts on Power System Reliability in New York State, with Charles Wu, Hannah Krovetz, Tyler Farrell, and Jessica Landry (September 2020)

Presented virtually at the Annual NECA Conference on how New England can transition away from fossil fuels, as well as the costs, reliability, and societal implications of moving toward low-carbon alternatives (September 30, 2020)

Independent Consultant Study to Establish New York ICAP Demand Curve Parameters for the 2021/2022 through 2024/2025 Capability Years – Final Report, with Todd Schatzki, Charles Wu, Christopher Llop, Matthew Lind, Kiernan McInerney, and Stephanie Villarreal (September 9, 2020)

Utility energy efficiency program performance from a climate change perspective: A comparison of structural and behavioral programs, with Jonathan Baker, Mona Birjandi-Feriz, and Hannah Krovetz (August 2020)

"Energy Efficiency for Climate, Not Ratepayers," presentation on a plenary panel to the American Council for an Energy-Efficient Economy (ACEEE) Summer Study Session (August 19, 2020)

For the New England Power Generators Association (NEPGA), coauthored a report assessing the potential use of carbon pricing in New England; the analysis applied tested industry models to identify effective and efficient economy-wide pricing of carbon dioxide (CO_2) emissions consistent with New England states' GHG emission reduction targets (June 23, 2020)

Carbon Pricing for New England: Context, Key Factors, and Impacts, with Joseph Cavicchi (June 2020)

"Decarbonization and Wholesale Markets in New England – Looking Ahead: Achieving 80% GHG Reduction by 2050," presentation on a plenary panel to the Association of Energy Engineers Conference, "ISO-NE in 2050: Getting to an advanced energy future in New England," Boston, MA (March 18, 2020)

"Decarbonization and Natural Gas in the Northeast," panel moderator and presenter at the EUCI conference on Natural Gas Decarbonization, Denver, CO (January 22–23, 2020)

Fuel and Energy Security in New York State: An Assessment of Winter Operational Risks for a Power System in Transition, with Charles Wu (November 2019)

Clean Energy in New York State: The Role and Economic Impacts of a Carbon Price in NYISO's Wholesale Electricity Markets, with Susan F. Tierney (October 2019)

"Natural Gas in Power Generation: Role Going Forward," 7th Annual Maine Natural Gas Conference to discuss power generation in the New England region. Falmouth, ME (October 3, 2019)

Direct Testimony of Paul J. Hibbard before the New Hampshire Public Utilities Commission on the need for and economic and environmental impacts of proposed Liberty Utilities Granite Bridge pipeline and LNG project, Docket No. DG 17-152 (June 28, 2019)

Rebuttal Testimony on Reopening of Paul J. Hibbard before the Illinois Commerce Commission on Behalf of Commonwealth Edison, Docket No. 18-0843 (May 31, 2019)

Pre-filed Testimony of Paul J. Hibbard before the Connecticut Siting Council on behalf of NTE Connecticut LLC, Docket No. 470 (January 18, 2019)

Vehicle Fuel-Economy and Air Pollution Standards: A Literature Review of the Rebound Effect, with Susan F. Tierney, Benjamin Dalzell, Grace Howland, Jonathan Baker, Tom Beckford, Sarah Centanni, Asie Makarova, and Scott Ario (June 28, 2018)

"An Expanding Carbon Cap-and-trade Regime? A Decade of Experience with RGGI Charts a Path Forward," with Susan F. Tierney and Pavel G. Darling, *The Electricity Journal* (June 2018)

Testimony of Paul J. Hibbard before the District of Columbia on behalf of AltaGas, Case No. 1142 (May 25, 2018)

The Economic Impacts of the Regional Greenhouse Gas Initiative on Nine Northeast and Mid-Atlantic States, review of RGGI's third three-year compliance period (2015–2017), with Susan F. Tierney, Pavel G. Darling, and Sarah Cullinan (April 2018)

Post-Settlement Testimony of Paul J. Hibbard before the Maryland Public Service Commission on behalf of AltaGas, Case No. 9449 (January 5, 2018)

Rebuttal Testimony of Paul J. Hibbard before the Public Service Commission of the District of Columbia on behalf of AltaGas, Formal Case No. 1142 (October 27, 2017)

Capacity Resource Performance in NYISO Markets: An Assessment of Wholesale Market Options, with Todd Schatski and Sarah Bolthrunis (November 2017)

RGGI and Emissions Allowance Trading: Options for Voluntary Cooperation Among RGGI and Non-RGGI States, with Ellery Berk (July 2017)

"Analytical Issues in Linking," presentation on Virginia and the Regional Greenhouse Gas Initiative, Virginia Commonwealth University, Richmond, VA (July 12, 2017)

Electricity Markets, Reliability and the Evolving U.S. Power System, with Susan Tierney and Katherine Franklin (June 2017)

"Storage and Microgrids – New Applications," panel presentation during the Electricity Advisory Committee's Energy Storage Session (June 8, 2017)

Supplemental Affidavit of Paul J. Hibbard before FERC, Docket No. ER17-386-000 on behalf of NYISO (December 18, 2016)

Affidavit of Paul J. Hibbard before FERC, Docket No. ER17-386-000 on behalf of NYISO (November 18, 2016)

Evaluation of Vermont Transco, LLC Capital Structure, with Craig Aubuchon and Mike Cliff (October 2016)

Rebuttal Testimony of Paul J. Hibbard before the State of Vermont Public Service Board on behalf of Vermont Gas Systems Inc., Docket Nos. 8698 and 8710 (September 26, 2016)

RGGI and CO_2 Emissions Trading Under the Clean Power Plan: Options for Trading Among Generating Units in RGGI and Other States, Susan Tierney and Ellery Berk (July 12, 2016)

Affidavit of Paul J. Hibbard before the FERC, Docket No. ER16-1751-000 on behalf of the NYISO (May 20, 2016)

Declaration of Paul J. Hibbard and Andrea M. Okie in the US Court of Appeals for the District of Columbia Circuit, Case No. 15-1363 (and consolidated cases) on behalf of multiple parties (December 8, 2015)

Power System Reliability in New England: Meeting Electric Resource Needs in an Era of Growing Dependence on Natural Gas, report for the Massachusetts Office of the Attorney General, with Craig Aubuchon (November 2015)

Testimony of Paul J. Hibbard before the Senate Committee on Global Warming and Climate Change, *Power System Reliability in New England: Meeting Electric Resource Needs in an Era of Growing Dependence on Natural Gas* (November 24, 2015)

The Economic Impacts of the Regional Greenhouse Gas Initiative on Nine Northeast and Mid-Altantic States, review of RGGI's Second Three-Year Compliance Period (2012–2014), with Andrea Okie, Susan Tierney, and Pavel Darling (July 14, 2015)

Electric System Reliability and EPA's Clean Power Plan: The Case of MISO, report for the Energy Foundation, with Susan Tierney and Craig Aubuchon (June 8, 2015)

Net Metering in the Commonwealth of Massachusetts: A Framework for Evaluation (May 2015)

NYISO Capacity Market: Evaluation of Options, report for the NYISO, with Todd Schatzki, Craig Aubuchon, and Charles Wu (May 2015)

Ohio's Electricity Future: Assessment of Context and Options, report for Advanced Energy Economy, with Andrea Okie (April 2015)

Electric System Reliability and EPA's Clean Power Plan: The Case of PJM, report for the Energy Foundation, with Susan Tierney and Craig Aubuchon (March 16, 2015)

Electric System Reliability and EPA's Clean Power Plan: Tools and Practices, report for the Energy Foundation, with Susan Tierney and Craig Aubuchon (February 2015)

Tools States Can Utilize for Managing Compliance Costs and the Distribution of Economic Benefits to Consumers Under EPA's Clean Power Plan, Electricity Forum, with Andrea Okie and Susan Tierney (February 2015)

The Economic Potential of Energy Efficiency, report for the Environmental Defense Fund, with Katherine Franklin and Andrea Okie (December 2014)

Assessment of EPA's Clean Power Plan: Evaluation of Energy Efficiency Program Ramp Rates and Savings Levels, report for the Environmental Defense Fund and National Resources Defense Council, with Andrea Okie and Katherine Franklin (December 2014)

"EPA's Proposed Clean Power Plan and States' Planning for Implementation," presentation to the Power-Gen International Annual Conference (December 2014)

"Storage/Renewables Valuation: A Case Study Hitting Multiple Perspectives," presentation to the Caribbean Renewable Energy Forum 2014 (October 2014)

"Electric Industry Transformation: A New World, or a Step Through the Looking Glass?" presentation to the New England Independent System Operator Quarterly Meeting (September 2014)

"Consumers, Markets, and Infrastructure: New England at a Crossroads," presentation to the New England Consumer Liaison Group (September 2014)

"Columbia River Treaty Hydropower: Perspectives on Power Benefits," presentation to the LSI Conference on the Columbia River Treaty (September 2014)

Direct Testimony of Paul J. Hibbard on Behalf of Calpine Construction Finance Company, L.P., before the Florida Public Service Commission, Docket No. 140110-E1 (July 2014)

"States in Control: EPA's Clean Power Plan and State Implementation," presentation at the National Association of Regulatory Utility Commissioners Summer Meetings (July 2014)

"EPA's Clean Power Plan: States' Tools for Reducing Costs and Increasing Benefits to Consumers," with Andrea Okie and Susan Tierney, *The Electricity Journal* (July 2014)

Direct Testimony of Paul J. Hibbard on behalf of Calpine Construction Finance Company, L.P., before the Florida Public Service Commission, Docket No. 140110-E1 (July 14, 2014)

"Project Vigilance: Value of Ambri Batteries at Joint Base Cape Cod," presentation to the Raab Restructuring Roundtable, Boston MA (June 2014)

Further Explanation on Rate Calculations, with Todd Schatzki, memo to the New England Independent System Operator Markets Committee on setting the compensation rate for the ISO Winter Program (May 28, 2014)

"Markets, Infrastructure, and Policy: New England at a Crossroads," presentation to the US/Canada Cross-Border Power Summit (April 2014)

"Siting Infrastructure: Economic and Siting Hurdles," presentation to the US/Canada Cross-Border Power Summit (April 2014)

Economic Impact of the Green Communities Act in the Commonwealth of Massachusetts: Review of the Impacts of the First Six Years," with Susan Tierney and Pavel Darling (March 4, 2014)

Crediting Greenhouse Gas Emission Reductions from Energy Efficiency Investments: Recommended Framework for Proposed Guidance on Quantifying Energy Savings and Emission Reductions in Section 111(d) State Plans Implementing the Carbon Pollution Standards for Existing Power Plants, report for the Environmental Defense Fund, with Andrea Okie (March 2014)

"Climate Policy and the Economy," presentation to the 2014 Joint Institute for Strategic Energy Analysis Annual Meeting, NREL, Golden CO (March 2014)

Testimony of Paul Hibbard and Todd Schatzki on behalf of the New England Independent System Operator before the Federal Energy Regulatory Commission, Docket Nos. ER14-1050-000 and ER14-1050-001 (February 12, 2014)

Project Vigilance: Functional Feasibility Study for the Installation of Ambri Energy Storage Batteries at Joint Base Cape Cod, report for demonstration project under the MassInnovate Program of the Massachusetts Clean Energy Center, with Steve Carpenter, Pavel Darling, Margaret Reilly, and Susan Tierney (February 2014)

Testimony of Paul J. Hibbard before the Maine Public Utilities Commission on behalf of Loring Holdings LLC; testimony described the results of a financial and ratepayer analysis of the benefits of a project to develop a power plant and natural gas pipeline in the State of Maine (2014–2015)

Rebuttal Testimony of Paul Hibbard on behalf of Calpine Corporation before the Minnesota Public Utilities Commission, MPUC Docket No. E-002/CN-12-1240 (October 18, 2013)

Direct Testimony of Paul Hibbard on behalf of Calpine Corporation before the Minnesota Public Utilities Commission, MPUC Docket No. E-002/CN-12-1240 (September 27, 2013)

Assessment of the Impact of ISO-NE's Proposed Forward Capacity Market Performance Incentives, with Todd Schatzki (September 2013)

"Market Monitoring at US RTOs," presentation to the 12th Annual Gas and Power Institute, Houston, TX (August 2013)

Testimony of Paul J. Hibbard before the Massachusetts Department of Public Utilities on behalf of the Massachusetts Department of Energy Resources, DPU 13-07 (May 31, 2013)

Testimony of Paul Hibbard before the House Committee on Energy and Commerce, Subcommittee on Energy and Power, *The Role of Regulators and Grid Operators in Meeting Natural Gas and Electric Coordination Challenges* (March 19, 2013)

Testimony of Paul J. Hibbard, on behalf of the Massachusetts Department of Energy Resources, on the ratepayer and social benefits of reducing methane leaks from a local natural gas distribution company's system (2013)

California's Advanced Energy Economy – Advanced Energy Business Leaders' Perspectives and Recommendations on California's Energy Policies, with Andrea Okie and Susan Tierney, Advanced Energy Economy Institute, (February 2013)

Information from the Literature on the Potential Value of Measures that Improve System Reliability, memo to the New England Independent System Operator (January 24, 2013)

Information on the Range of Costs Associated with Potential Market Responses to Address the Risks Associated with New England's Reliance on Natural Gas, New England Independent System Operator (January 24, 2013)

Summary of Quantifiable Benefits and Costs Related to Select Targeted Infrastructure Replacement Programs, with Craig Aubuchon, report for the Barr Foundation, (January 2013)

"Demand Response in Capacity Markets: Reliability, Dispatch and Emission Outcomes," *The Electricity Journal*, with Andrea Okie and Pavel Darling (November 2012)

"The Electric Generation Landscape – A Marathon of Challenges," presentation to SNL Generation Landscape, Chicago IL (October 2012)

"Economics, EPA, and Old Capacity – Bring Out Your Dead," presentation to LSI Energy in the Northeast, Boston MA (September 2012)

Paul Hibbard, *Reliability and Emission Impacts of Stationary Engine-Backed Demand Response in Regional Power Markets*, report to the EPA on behalf of Calpine Corporation (August 2012)

"Uncertainty in Electricity Infrastructure Development – Key Drivers, International Context," presentation to NCEA Annual Conference, Brainerd, MN (June 2012)

"The Interdependence of Electricity and Natural Gas: Current Factors and Future Prospects," with Todd Schatzki, *The Electricity Journal* (May 2012)

"Economic Impacts of RGGI," presentation to the New Hampshire Environmental Business Council (April 2012)

Testimony of Paul Hibbard before the California Legislature, *The Economic Impacts of RGGI's First Three Years*, California Select Committee on the Environment, the Economy, and Climate Change (March 27, 2012)

Testimony of Paul Hibbard before the New Hampshire Legislature, *RGGI and the Economy – Following the Dollars*," New Hampshire House Committee on Science, Technology, and Energy (February 14, 2012)

Testimony of Paul Hibbard before the Massachusetts Legislature, *RGGI and the Economy – Following the Dollars*," Massachusetts Senate Committee on Global Warming and Climate Change (February 13, 2012)

"Economic Impacts of RGGI: Following the Dollars," presentation tothe California Business Climate Network, with Susan Tierney (February 2012)

"Carbon Control and the Economy: Economic Impacts of RGGI's First Three Years," with Susan Tierney, *The Electricity Journal* (December 2011)

"Public Policy Transmission: Competition and Cooperation," presentation to the Energy Bar Association Renewables Subcommittee, Washington, DC (November 2011)

"Competitive Markets and Wind Power: Challenge and Opportunity," presentation to the Governors' Wind Energy Coalition, Washington, DC (November 2011)

The Economic Impacts of the Regional Greenhouse Gas Initiative on Ten Northeast and Mid-Atlantic States; Review of the Use of RGGI Auction Proceeds from the First Three-Year Compliance Period, with Susan Tierney, Andrea Okie, and Pavel Darling (November 15, 2011)

Testimony before the Pennsylvania Public Utilities Commission on retail opt-in auctions (November 10, 2011)

"Interdependence and Opportunity: The Growing Link Between Electricity and Natural Gas," presentation to the Colorado Oil & Gas Association Energy Epicenter Conference, Denver, CO (August 2011)

Potomac River Generating Station: Update on Reliability and Environmental Considerations, with Pavel Darling and Susan Tierney (July 19, 2011)

"Retirement is Coming: Preparing for New England's Capacity Transition," *Public Utilities Fortnightly* (June 2011)

Generation Fleet Turnover in New England: Modeling Energy Market Impacts, with Todd Schatzki, Pavel Darling, and Bentley Clinton (June 2011)

Solar Development Incentives: Status of Colorado's Solar PV Program, Practices in Other States, and Suggestions for Next Steps, with Susan Tierney and Andrea Okie (June 30, 2011)

"The Balancing Act: Challenges in Traversing the Modernization of New England's Infrastructure," presentation to the NECA Annual Conference, Mystic, CT (May 2011)

"Renewables v. Gas: The Future of New England Infrastructure," presentation to the EBC Energy Seminar, Waltham, MA (April 2011)

"Upcoming Power Sector Environmental Regulations: Framing the Issues About Potential Reliability/ Cost Impacts," presentation to the Raab Restructuring Roundtable, Boston, MA (October 2010)

"Carbon Regulation: Action and Convergence Spanning the Pond," presentation to the Energy Smart Conference, Boston, MA (October 2010)

"Renewables Development – A Tricky Time to be Placing Bets," presentation to the NECA Renewables Committee, Boston, MA (October 2010)

"Energy Infrastructure Challenges in the Current Policy Environment, A Wide Angle Point of View," presentation to NARUC, Providence, RI, September 2010.

Ensuring a Clean, Modern Electric Generating Fleet while Maintaining Electric System Reliability, with Susan F. Tierney, Michael J. Bradley, Christopher Van Atten, Amlan Saha, and Carrie Jenks (August 2010)

"Renewables Development – National Policies, New England Progress," presentation to the National Association of State Energy Officials Annual Meeting, Boston, MA (September 2010)

"Northeast US and Eastern Canada – Competitive Markets and Renewable Resource Development," presentation to the LSI Conference on US/Canada Energy Transactions, Vancouver, BC (August 2010)

"Renewables in the Northeast – Local Opportunities, National Context," presentation to the Council of State Governments, Portland, ME (August 2010)

"Ensuring a Clean, Modern Electric Generating Fleet while Maintaining Electric System Reliability," with Susan Tierney, Michael Bradley, Christopher Van Atten, Amlan Saha, and Carrie Jenks (August 2010)

"Federal Transmission Legislation," comments to Capitol Hill briefing of the Coalition for Fair Transmission Policy, Washington, DC (April 2010)

"Transmission Planning & Cost Allocation Alternatives under Order 890," comments to the Energy Bar Association's 64th Meeting, Washington, DC (April 2010)

"Deregulation and Sustainable Energy," class lecture, Massachusetts Institute of Technology (Jonathan Raab Energy Course), Cambridge, MA (March 2010)

"Transmission for Renewables," presentation to the Raab Restructuring Roundtable, Boston, MA (March 2010)

"US Electric Power Transmission: The Battle of the Jurisdictions," comments to CERAWeek 2010 (March 2010)

"New England Blueprint and the Federal Context," presentation to the New England Independent System Operator Consumer Liaison Group Meeting, Westborough, MA (February 2010)

"Interconnection-Wide Planning and Renewable Energy," comments to the National Wind Coordinating Collaborative, Transmission Update Briefing (December 2009)

"Infrastructure Planning," comments to the Northeast Energy and Commerce Association Power Markets Conference, Westborough, MA (November 2009)

"Transmission for Renewables - Risks and Opportunities for the Northeast," presentation to the Governor's Clean Energy Innovation Forum, New Brunswick, NJ (October 2009)

"Renewable Energy Development – The Role of Markets and Planning," presentation to the Northeast Power Planning Council General Meeting, Cambridge, MA (September 2009)

"Transmission Planning," comments to the Federal Energy Regulatory Commission Technical Conference on Transmission Planning Processes Under Order No. 890, Docket No. AD09-8-000, Philadelphia, PA (September 2009)

"New England Governors' Blueprint – Purpose and Context," presentation to the Raab Restructuring Roundtable, Boston, MA (September 2009)

"Wind, Transmission, and Federal Legislation," comments to the MIT Wind Group, Cambridge, MA (Fall 2009)

"National Transmission Policy," comments to The Energy Daily's Transmission Siting Policy Summit, Washington, DC (September 2009)

Testimony before the Massachusetts Joint Committee on Telecommunications, Utilities and Energy Hearing to Review Implementation of the Green Communities Act, Boston, MA (July 8, 2009)

"Federal Transmission Legislation," comments to the National Association of State Utility Consumer Advocates, Boston, MA (July 2009)

"Renewable Energy Development – The Role of Markets and Planning," presentation to the Governor's Wind Energy Coalition, Washington, DC (July 2009)

"Transmission and Renewables: ISO and Regulator Perspectives" comments to the Raab Restructuring Roundtable, Boston, MA (June 2009)

"Renewable Development in and for New England: Massachusetts' Perspective," presentation to Law Seminars International, Boston, MA (June 2009)

"Roadmap to New Renewable Resources in New England," comments on the New England Governors' Blueprint to the New England Conference of Public Utilities Commissioners Annual Symposium, Newport, RI (May 2009)

"Comments of Chairman Paul Hibbard," presentation to the EBC Energy Seminar: New Transmission – The Key to Renewable Resource Integration in New England, Boston, MA (April 2009)

"Coordinating Wind and Transmission Development – Who Pays?" comments to the 2009 Platts Wind Power Development Conference, Chicago, IL (March 2009)

"Integrating Energy and Environmental Regulations in Massachusetts," presentation to the Northeast Sustainable Energy Association Building Energy Conference, Boston, MA (March 2009)

"One Reason for the GCA: Energy Pricing in Massachusetts," presentation to the South Shore Coalition, Hingham, MA (January 2009)

"Non-Reliability Transmission: State Choice and Control," presentation to the New England Conference of Public Utility Commissioners Transmission Group, Chelmsford, MA (January 2009)

"Regulation and Renewable Energy Policy," panel moderator, Center for Resource Solutions National Renewable Energy Marketing Conference, Denver, CO (October 2008)

"Energy Pricing in Massachusetts (… and What We Should Do About It)," presentation to the Berkshire Gas Large Commercial and Industrial Customer Annual Meeting, Lenox, MA (October 2008)

"Conversation with Chairman Hibbard," presentation to the New England Energy Alliance, Boston, MA (September 2008)

"Creating the Path: Delivering Clean Energy through Transmission Improvements," presentation to the New England Independent System Operator Lights, Power, Action Conference, Boston, MA (September 2008)

"Distributed Resources, the Decoupling Model, and the Green Communities Act," presentation to the Raab Restructuring Roundtable, Boston, MA (September 2008)

"Resource Planning: The Contribution of Efficiency and Renewables in Massachusetts," presentation to the Law Seminars International Renewable Energy in New England Conference, Boston, MA (September 2008)

"Remarks to Economic Studies Working Group," ESWG Committee Meeting, Westborough, MA (July 2008)

"Power Trade: Market Context and Opportunities," presentation to the New England Governors' Council/Eastern Canadian Premiers' Energy Dialogue, Montreal, Canada (May 2008)

"New England Transmission Investment," presentation to the Municipal Electric Association of Massachusetts Annual Business Meeting, North Falmouth, MA (April 2008)

"Bringing Power from the North," presentation to the Raab Restructuring Roundtable, Boston, MA (February 2008)

"Natural Gas: Drivers of Supply, Demand, and Prices," comments to the Guild of Gas Managers (November 2007)

"Generation and Demand Outlook for New England," presentation to NECA Dinner Meeting, Cambridge, MA (September 2007)

"Comments on ISO's Draft Regional System Plan," presentation to the Independent System Operator Planning Advisory Committee, Boston, MA (September 2007)

"Regulatory Pressures, Policy Opinions," presentation to the Environmental Business Council, Boston, MA (July 2007)

"Is New England Ensuring the Adequacy and Cost Effectiveness of the Region's Transmission Grid?" panel moderator, New England Conference of Public Utility Commissioners Annual Symposium, Mystic, CT (June 2007)

"Energy Regulation in Massachusetts – Concerns and Options," presentation to the Raab Restructuring Roundtable, Boston, MA (June 2007)

"View From the Regulatory Bench," comments to the New England Energy Conference and Exposition, Groton, CT (May 2007)

"Energy for New England – The Demand, Supply and Price Context," presentation to Massachusetts Municipal Wholesale Electric Cooperative Annual Meeting, Boylston, MA (May 2007)

"Demand Resources in New England: New Opportunities and Future Directions," presentation to the New England Independent System Operator Annual Demand Resources Summit, Westborough, MA (May 2007)

"Power Supply for the New England Region," presentation to the Boston Bar Association, Boston, MA (March 2007)

"Fuel Supplies and the Need for Fuel Diversity: Forecast for Global Fuel Markets and the Likely Impact on Electric Generation in the Northeast," presentation to the Law Seminars International Seminar on Resource Adequacy and Reliability in the Northeast (October 16, 2006)

"Consumers and Politicians Claim They Want Cheap, Reliable and Clean Energy – Do They Have the Will to Make That Happen?" presentation to the National Association of Energy Service Companies New England Regional Meeting (September 28, 2006)

"The Need for New LNG Infrastructure in Massachusetts and New England: An Update," report prepared for Northeast Gateway Energy Bridge, LLC, and Algonquin Gas Transmission, LLC (August 2006)

"Natural Gas & LNG for New England: What's Needed & How To Get It," presentation to the Foundation for American Communications Meeting on *New England's Energy Needs – Who Pays and Who Suffers?* (May 17, 2006)

Energy Policy Act Section 1813 Comments: Report of the Ute Indian Tribe of the Uintah and Ouray Reservation for Submission to the US Departments of Energy and Interior, with Susan F. Tierney, in cooperation with the Ute Indian Tribe of the Uintah and Ouray Reservation (May 15, 2006)

"US Energy Infrastructure Vulnerability: Lessons From the Gulf Coast Hurricanes," report to the National Commission on Energy Policy (March 2006)

"New England Energy Infrastructure – Adequacy Assessment and Policy Review" prepared for the New England Energy Alliance, with Susan Tierney (November 2005)

"Federal Legislative Developments in Energy," presentation to the Law Seminars International Seminar on Energy in the Northeast (October 2005)

"The Benefits of New LNG Infrastructure in Massachusetts and New England: The Northeast Gateway Project," prepared for Northeast Gateway Energy Bridge, LLC, and Algonquin Gas Transmission, LLC, with Susan Tierney (June 2005)

"Climate Change Policy – New Business and Regulatory Risks," presentation to EnviroExpo & Conference (May 2005)

"Carbon Cap & Trade Allocation Options – Practical Considerations," "Carbon Trading Program Emission Allowances: Practical Considerations for Allocation," and "Allocation of Carbon Allowances to Mitigate Electric Sector Costs," reports to the National Commission on Energy Policy (May 2005)

"U.S. Energy Infrastructure: Demand, Supply and Facility Siting," report to the National Commission on Energy Policy (November 2004)

Comments of Susan F. Tierney and Paul. J. Hibbard on their own behalf before the Federal Energy Regulatory Commission, in the Matters of Solicitation Processes for Public Utilities (Docket No. PL04-6-000) and Acquisition and Disposition of Merchant Generation Assets by Public Utilities (Docket No. PL04-9-000), on the role of independent monitors and independent evaluators in public utility resource solicitations (July 1, 2004)

"Energy and Environmental Policy in the United States: Synergies and Challenges in the Electric Industry," prepared for Le Centre Français sur les Etats-Unis (The French Center on the United States), with Susan Tierney (July 2003)

"Controlling China's Power Plant Emissions after Utility Restructuring: The Role of Output-Based Emission Controls," with Barbara A. Finamore, Nancy Seidman, and Tara Szymanski, *The Sinosphere Journal* (July 2002)

"Siting Power Plants in the New Electric Industry Structure: Lessons from California and Best Practices for Other States," with Susan Tierney, *The Electricity Journal* (June 2002)

"Siting Power Plants: Recent Experience in California and Best Practices in Other States," with Susan Tierney, prepared for The Hewlett Foundation and The Energy Foundation (February 2002)

"Setting and Administering Output-Based Emission Standards for the Power Sector: A Case Study of the Massachusetts Output-Based Emission Control Programs," prepared for the China Sustainable Energy Program, Paul Hibbard, N. Seidman, and B. Finamore (October 2001)

Joint Affidavit before the Federal Energy Regulatory Commission, New England Power Pool and ISO New England, Inc., Docket No. ER01-2329, on behalf of the New England Renewable Power Producers Association, with Janet Besser, (July 3, 2001)

"Output-Based Emission Control Programs – U.S. Experience," prepared for the China Sustainable Energy Program, with N. Seidman, B. Finamore, and David Moskovitz (May 2000)

"P2 and Power Plants: The Massachusetts Allowance Trading Program," *Proceedings of the National Pollution Prevention Roundtable* (March 2000)

"Safety and Environmental Comparisons of Stainless Steel with Alternative Structural Materials for Fusion Reactors," with Ann P. Kinzig, and John P. Holdren, *Fusion Technology* (August 1994)

"Utility Environmental Impacts: Incentives and Opportunities for Policy Coordination in the New England Region," US EPA CX817494-01-0, RCEE Core Group (June 1994)

"Final Report: Code Development Incorporating Environmental, Safety, and Economic Aspects of Fusion Reactors," UC-BFE-027, Fusion Environmental and Safety Group, University of California, Berkeley (1991)

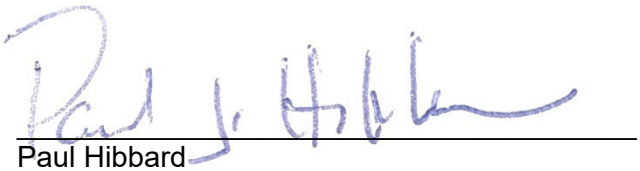
BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS. R-2023-3043189 (WATER)**
	:	**R-2023-3043190 (WASTEWATER)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

VERIFICATION

I, **Paul Hibbard**, hereby state that the facts set forth in the pre-marked PAWC Statement No. 16-R and accompanying exhibits, if any, are true and correct to the best of my knowledge, information, and belief. I understand that this verification is made subject to the provisions and penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024



Paul Hibbard

PAWC Cross Exhibit No. 2

Society of Utility and
Regulatory Financial Analysts

SURFA
Society of Utility and Regulatory Financial Analysts

THE COST OF CAPITAL –

A PRACTITIONER'S GUIDE

BY

DAVID C. PARCELL

PREPARED FOR THE SOCIETY OF UTILITY AND REGULATORY FINANCIAL ANALYSTS (SURFA)

2020 EDITION

Author's Note: This manual has been prepared as an educational reference on cost of capital concepts. Its purpose is to describe a broad array of cost of capital models and techniques. No cost of equity model or other concept is recommended or emphasized, nor is any procedure for employing any model recommended. Furthermore, no opinions or preferences are expressed by either the author or the Society of Utility and Regulatory Financial Analysts.

and regulators should recognize that no model can be refined to the extent that the cost of common equity for any firm can be reduced to a simple formulistic exercise and be exactly measured. Investor expectations differ and it is apparent that all investors do not rely upon the same information and models in making investment decisions. Consequently, so single model and model variant can be demonstrated to capture all investor expectations.

Furthermore, no single model is so inherently precise that it can be relied on solely to the exclusion of other theoretically sound models. Each model requires the exercise of judgment as to the reasonableness of the underlying assumptions of the methodology and on the reasonableness of the proxies used to validate the theory. Each model has its own way of examining investor behavior, its own premises, and its own set of simplifications of reality. Each method proceeds from different fundamental premises, most of which cannot be validated empirically. Investors clearly do not subscribe to any singular method, nor does the stock price reflect the application of any one single method by investors. Therefore, it is essential that estimates of investors' required rate of return produced by one method be compared with those produced by other methods, and that all cost of equity estimates be required to pass fundamental tests of reasonableness and economic logic. "The concept of a fair rate of return, therefore, represents a range or a zone of reasonableness" (Phillips, 1988, 357-358).

Two texts have evaluated the various cost of equity models (Kolbe, Read and Hall, 1986; Thompson, 1991). These texts, while informative to the process of evaluating alternative methods, do not establish a single model as superior to the others. In addition, the texts do not evaluate the alternative methodologies available for implementing each model. Nevertheless, they do provide informative insights to the interested reader.

Classification of Models

There are numerous ways that the various cost of equity models can be classified. One way is to classify models according to their underlying financial theory. The capital asset pricing model (CAPM) is based upon portfolio theory; the comparable earnings method is based upon the economic concept of opportunity cost; the discounted cash flow (DCF) model is based on the

Models and Court Decisions

It is worth noting that the regulatory concept of a fair rate of return, as used in current utility regulation, was articulated long before the development of modern approaches (such as CAPM and DCF) for estimating market returns. In addition, the Court decisions cited in Chapter 3 preceded each of these methods. Nevertheless, it is proper to apply these approaches to the traditional regulatory framework since the concepts remain compatible with the Court decisions, which endorsed no specific method of estimating the cost of equity (Bonbright, Danielsen and Kamerschen, 1988, 315). In addition, the Court decisions subsequent to the Hope case have generally endorsed the previous standards of a fair rate of return and neither endorsed nor rejected any specific methodologies.

How do the various approaches relate to the guidelines of the Court cases cited in Chapter 3? Three standards for measuring equity costs rates have evolved from these guidelines:

1. comparable earnings;
2. capital attraction; and,
3. risk and return.

The comparable earnings approach relies on the earnings of similar risk utility and/or industrial companies as a comparable proxy for a utility's fair return on equity. The capital attraction standard uses market valuation approaches such as the discounted cash flow model to measure required returns in the form of cash flows to the investor. The risk-return version of the capital attraction standard, traditionally a risk premium model and more currently the capital asset pricing model, formally defines market return requirements in light of specific investment risk.

Models Preferred By Commissions

What models do the various regulatory agencies consider? Table 1 summarizes the most recent (1995) NARUC survey on rate of return methods. As this indicates, most commissions use multiple methods and several appear to be widely used.

TABLE 1
COST OF COMMON EQUITY MODELS
FAVORED BY FEDERAL AND STATE
REGULATORY AGENCIES

MODEL	NUMBER OF COMMISSIONS FAVORING METHOD
Discounted Cash Flow	44
Comparable Earnings	21
Risk Premium	12
Capital Asset Pricing Model	11
Earnings/Price Ratio	5
No One Method – All are considered	27

Source: National Association of Regulatory Utility Commissioners, NARUC Compilation of Utility Regulatory Policy 1994-1995 (latest date published).

Importance of Stock Prices

Most of the cost of equity models described in this manual depend, to some degree, on common stock prices. Stock prices are directly utilized in the DCF model and are indirectly used in the CAPM (through use of stock price betas), comparable earnings (if market-to-book ratios are considered), and risk premium (if total market returns are used). In fact, it is the dependence on stock prices which gives rise to the term "market tests" often used in describing cost of equity models. Given the importance of stock prices, it is useful to describe the principles underlying the significance and interpretation of stock prices.

The market price of a firm's stock represents the collective judgment of all stock market participants as to the value of the firm at a particular point in time. The stock price takes into consideration the participants' interpretation of all relevant factors, such as past, present and future earnings, the risk of these earnings, dividend policy and other factors. Thus, the market

Use of this formula requires use of a computer. The value for K (cost of equity) is determined in an iterative fashion by substituting values of K into equation (8.21) until the result for P_0 equates to the actual stock price.

A more practical multi-stage DCF combines a short-term growth rate with a long-term growth rate by weighting the two (or three) growth rates. An example of this is the two-stage DCF model used by the Federal Energy Regulatory Commission to set the cost of equity for inter-state natural gas pipelines.

$$(8.22)\quad K = \frac{D_0}{P_0}(1 + 0.5g) + 0.67(g_s) + 0.33(g_l)$$

where:
- K = cost of equity
- D_0/P_0 = average dividend yield over past six months
- g = average growth rate
- g_s = short-term growth rate (EPS forecasts)
- g_l = long-term growth rate (gross domestic product forecasts)

An alternative non-constant DCF model is implemented using a computer model which projects annual (or quarterly) dividends many years into the future. The summed present value of these dividends is then calculated and compared to the current stock price, in an iterative framework, until the present value of future dividends equals the current stock price. The resulting discount rate which produces equality is the DCF estimate.

Strengths and Weaknesses

The DCF model is characterized by strengths and weaknesses, as are the other cost of equity models. This concluding section lists the most frequently cited strengths and weaknesses.

Strengths

The DCF model is noted for the following strengths:

1. It has "intuitive appeal" since it is based upon the common notion that receipt of dividends plus expected appreciation is the total return requirement determined by the market;

2. It is the most company-specific method, since a company's own stock price and growth rates are directly employed. Even when company-specific information is not available or appropriate, the use of "comparable company" or "proxy" company data has the effect of giving market requirements on a company-specific risk basis;

3. The model is formalistic and data required to make the calculation are readily available;

4. It has the most wide-spread regulatory acceptance; and,

5. It recognizes the time value of money and is forward-looking.

Weaknesses

The DCF method is cited as having the following weaknesses:

1. Some of the underlying assumptions of the model are at odds with investor and capital market behavior. There is generally no empirical evidence that these assumptions are valid;

2. Growth rates are subjective. There is no way to prove that the presumed growth in value reflected in the price of stock used to developed the dividend yield is the product of any one or any combination of growth indicators;

3. One underpinning of the model is the Efficient Market Hypothesis. There is no universal acceptance of this hypothesis in either the long-run or short-run;

4. It is sometimes difficult to match the yield and growth components in a consistent framework; and,

5. Analysts' forecasts are generally short-term in nature, whereas the DCF model is log-term in nature.

I&E Statement No. 1
Witness: Vanessa Okum
NON-PROPRIETARY

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2023-3043189 (Water)

and

Docket No. R-2023-3043190 (Wastewater)

Direct Testimony

of

Vanessa Okum

Bureau of Investigation and Enforcement

Concerning:

PENSION, OPEB, AND PRODUCTION EXPENSE TRACKERS, OPERATING AND MAINTENANCE EXPENSES, ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE, CASH WORKING CAPITAL

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INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Vanessa Okum. My business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

Q. IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am employed as a Fixed Utility Financial Analyst in the Pennsylvania Public Utility Commission's (Commission) Bureau of Investigation and Enforcement (I&E).

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. Appendix A, which is attached to my testimony, describes my educational background and professional experience.

Q. DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS.

A. I&E is responsible for protecting the public interest in proceedings before the Commission. The I&E analysis in this proceeding is based on its responsibility to represent the public interest. This responsibility requires balancing the interests of the ratepayers, the regulated utility, and the regulated community as a whole.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my direct testimony is to review the base rate filing of Pennsylvania-American Water Company (PAWC or Company) and make recommended adjustments to PAWC's proposed operating and maintenance (O&M) expense claims for the fully projected future test year (FPFTY) ending June 30, 2025. I will also address several alternative ratemaking mechanisms proposed by the Company.

Q. DOES YOUR DIRECT TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. I&E Exhibit No. 1 contains schedules relating to my direct testimony.

Q. WHAT ARE THE TEST YEARS USED BY PAWC IN THIS PROCEEDING?

A. PAWC uses the year ended June 30, 2023 as the historic test year (HTY), the year ending June 30, 2024 as the future test year (FTY), and the year ending June 30, 2025 as the FPFTY in this proceeding.[1]

Q. WHAT IS PAWC'S REQUESTED REVENUE INCREASE?

A. PAWC is requesting a total annual revenue increase of $203,945,911 (or 20.2%) based upon the FPFTY pro forma revenue requirement,[2] which reflects a total rate

[1] PAWC Statement No. 5, pp. 2-3.
[2] PAWC Exhibit No. 3-A, p. A.

base claim for the combined water and wastewater operations. The revenue increase includes two pending acquisitions: Butler Area Sewer Authority (BASA) and the Borough of Brentwood (Brentwood) wastewater collection system, and is broken down by operation as follows:[3]

	Present Rate Revenue	**Net Revenue Increase after Act 11 WW Allocation**	**% Increase in Revenue**
Water Operations	$824,117,186	$199,237,084	24.2%
Wastewater SSS Ops.	$95,470,867	($169,261)	-0.2%
BASA WW Ops.	$11,847,402	$4,735,609	40.0%
Brentwood WW Ops.	$1,824,191	$369,405	20.3%
Wastewater CSS Ops.	$78,636,216	($226,926)	-0.3%
Total Company	**$1,011,895,862**	**$203,945,911**	**20.2%**

The requested Water Operations revenue increase of $199,237,084 includes $71,087,394 (35.68% of the Water Operations increase) allocated from the various Wastewater Operations per the Act 11 provision.

[3] PAWC Exhibit No. 3-A, p. A.

PAWC ACQUISITIONS

Q. PAWC HAS INCLUDED A SEPARATE REVENUE REQUIREMENT FOR TWO PENDING ACQUISITIONS: BASA AND BRENTWOOD. PLEASE SUMMARIZE THE HISTORY OF THESE ACQUISITION PROCEEDINGS.

A. The petition to acquire BASA was filed with the Commission on February 14, 2023 at Docket No. A-2022-3037047. A joint settlement was filed on August 14, 2023, with the support of PAWC, BASA, I&E, the Office of Consumer Advocate (OCA), and the Office of Small Business Advocate (OSBA); conversely, the administrative law judge assigned to the case recommended denial of the settlement. PAWC and BASA filed an exception to this decision, asking the Commission to approve the settlement, and on November 9, 2023, the Commission voted to approve the settlement. However, Center and Summit Townships, each having residents that are BASA members, have filed a joint appeal against the sale[4] and the case remains unresolved as of the writing of this direct testimony.

The petition to acquire Brentwood was filed with the Commission on March 31, 2023, at Docket No. A-2021-3024058. The petition was highly contested by the public, as well as by I&E and OCA. As of the writing of this direct testimony, the petition has not been approved or denied by the Commission.

[4] https://butlerradio.com/summit-and-center-townships-file-appeal-of-puc-basa-decision/, accessed January 22, 2024.

Q. WHAT IS THE COMPANY'S BASIS FOR INCLUDING THESE PENDING ACQUISITIONS IN THIS RATE FILING?

A. PAWC witness E. Christopher Abruzzo, Esq. cites Section 1329(d)(5) of the Public Utility Code which states, "The selling utility's cost of service shall be incorporated into the revenue requirement of the acquiring public utility as part of the acquiring utility's next base rate case proceeding." He continues that it is his understanding from PAWC counsel that the statute points to the instant proceeding as the "next" base rate case, assuming that BASA closes in December 2023 and Brentwood closes shortly after the end of its acquisition proceeding in March 2024.[5]

Q. DO YOU AGREE THAT THESE ACQUISITIONS SHOULD BE INCLUDED IN THIS BASE RATE PROCEEDING?

A. No. I&E is recommending that inclusion of these pending acquisitions in this base rate proceeding be disallowed; therefore, I have excluded them from my analysis and subsequent adjustments.

Q. PLEASE EXPLAIN YOUR RECOMMENDATION TO EXCLUDE BASA AND BRENTWOOD IN THE INSTANT PROCEEDING.

A. I disagree with the Company's interpretation that the instant proceeding is the next

[5] PAWC Statement No. 6, p. 24.

base rate case in which to include these acquisitions; however, any legal arguments will be addressed by I&E counsel in the Main and Reply Briefs. As neither facility has yet been acquired, I assert that the "next" base rate case proceeding would be the base rate proceeding immediately following the closing on the acquisition of the respective facility. Since closing has not occurred for either utility, as the Brentwood acquisition proceeding is undecided and the BASA decision has been appealed to Commonwealth Court, which has stayed any closing, I conclude that including BASA and Brentwood in the instant proceeding is inappropriate and should be disallowed.

Q. ARE THERE OTHER ACQUISITIONS CLAIMED IN THE INSTANT FILING?

A. Yes. PAWC has included O&M expenses for costs associated with the following planned acquisitions: Audubon Water, Farmington Water, Farmington Wastewater, and Sadsbury Wastewater. [6] The costs are allocated between Water Operations and Wastewater SSS Operations and are included in the respective revenue requirements.[7]

[6] PAWC Exhibit No. 3-B, pp. 303-308.
[7] PAWC Exhibit No. 3-A, pp. 48 and 113.

Q. DO YOU AGREE THAT EXPENSE CLAIMS ATTRIBUTABLE TO THESE ACQUISITIONS SHOULD BE ALLOWED IN THE INSTANT PROCEEDING?

A. No. As these acquisitions have not been completed or even approved by the Commission,[8] it is inappropriate for the Commission to allow these costs as claimed in the instant proceeding. A discussion of these expenses and supporting calculations are forthcoming in my testimony below.

I&E OPERATING AND MAINTENANCE EXPENSE ADJUSTMENTS

Q. PLEASE SUMMARIZE YOUR ADJUSTMENTS.

A. The following tables summarize my recommended adjustments:

Water Operations:

	Company Claim	Recommended Allowance	I&E Adjustment
O&M Expenses:			
Performance Pay	$4,868,107	$4,195,822	($672,285)
Payroll Taxes	$4,999,459	$4,947,222	($52,237)
Pension	$22,218	($3,800,736)	($3,822,954)
OPEBs	($5,817,327)	($8,160,753)	($2,343,426)
Acquisition O&M	$1,675,709	$0	($1,675,709)
Miscellaneous Expense Adjustment	$1,728,285	$1,545,547	($182,738)
Total O&M Expense Adjustments			**($8,749,349)**
Rate Base:			
Cash Working Capital	$23,164,070	$22,082,926	($1,081,144)
Total Rate Base Adjustments			**($1,081,144)**

[8] I&E Exhibit No. 1, Schedule 1. Reference Part K of each data request.

Wastewater SSS Operations:

	Company Claim	Recommended Allowance	I&E Adjustment
O&M Expenses:			
Acquisition O&M	$504,709	$0	($504,709)
Total O&M Expense Adjustments			**($504,709)**
Rate Base:			
Cash Working Capital	$2,230,011	$2,199,053	($30,958)
Total Rate Base Adjustments			**($30,958)**

OVERALL I&E RECOMMENDED POSITION

Q. WHAT IS I&E'S TOTAL RECOMMENDED REVENUE REQUIREMENT FOR WATER OPERATIONS?

A. I&E's total recommended revenue requirement for Water Operations is $848,325,560. This recommended revenue requirement represents an increase of $27,439,769 to the I&E-adjusted present rate revenues of $820,885,791. This total recommended allowance incorporates my adjustments made in this testimony to O&M expenses and cash working capital, as well as the recommended adjustments made in the testimony of I&E witnesses D.C. Patel,[9] Ethan Cline,[10] and Joseph Kubas.[11] A calculation of the I&E recommended revenue requirement is shown in Table I(a) below:

[9] I&E Statement No. 2.
[10] I&E Statement No. 3.
[11] I&E Statement No. 4.

PAWC - Water Operations		TABLE I(a)			
R-2023-3043189		INCOME SUMMARY			
	6/30/25	INVESTIGATION & ENFORCEMENT			
	Proforma	[----------			]
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	824,117,186	-3,231,395	820,885,791	27,439,769	848,325,560
Deductions:					
O&M Expenses	256,824,574	-8,749,350	248,075,224	322,692	248,397,916
Depreciation	210,700,336	-1,720,264	208,980,072		208,980,072
Taxes, Other	14,398,232	-20,588	14,377,644	174,831	14,552,475
Income Taxes:					
Current State	13,347,020	600,688	13,947,708	2,152,685	16,100,393
Current Federal	33,868,950	1,452,629	35,321,579	5,205,808	40,527,387
Deferred Taxes	0	0	0		0
ITC	-233,592	0	-233,592		-233,592
Total Deductions	528,905,520	-8,436,885	520,468,635	7,856,016	528,324,651
Income Available	295,211,666	5,205,490	300,417,156	19,583,753	320,000,909
Rate Base	4,704,067,656	-11,972,223	4,692,095,433	0	4,692,095,433
Rate of Return	6.28%		6.40%		6.82%

Q. WHAT IS I&E'S TOTAL RECOMMENDED REVENUE REQUIREMENT FOR WASTEWATER SSS OPERATIONS?

A. I&E's total recommended revenue requirement for Wastewater SSS Operations is $114,539,947. This recommended revenue requirement represents an increase of $19,863,234 to the I&E-adjusted present rate revenues of $94,676,713. This total recommended allowance incorporates my adjustments made in this testimony to O&M expenses and cash working capital, as well as the recommended adjustments made in the testimony of I&E witnesses D.C. Patel, Ethan Cline, and Joseph Kubas. A calculation of the I&E recommended revenue requirement is

shown in Table I(b) below:

PAWC - Wastewater SSS Operations		TABLE I(b)			
R-2023-3043190		INCOME SUMMARY			
	6/30/25	INVESTIGATION & ENFORCEMENT			
	Proforma	[----------			]
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	95,470,867	-794,154	94,676,713	19,863,234	114,539,947
Deductions:					
O&M Expenses	26,009,252	-504,710	25,504,542	233,592	25,738,134
Depreciation	27,406,489	43,762	27,450,251		27,450,251
Taxes, Other	3,217,927	-5,060	3,212,867	126,558	3,339,425
Income Taxes:					
Current State	2,906,503	-20,840	2,885,663	1,558,296	4,443,959
Current Federal	7,064,720	-50,401	7,014,319	3,768,405	10,782,724
Deferred Taxes	0	0	0		0
ITC	0	0	0		0
Total Deductions	66,604,891	-537,249	66,067,642	5,686,851	71,754,493
Income Available	28,865,976	-256,905	28,609,071	14,176,383	42,785,453
Rate Base	649,330,622	-3,024,688	646,305,934	0	646,305,934
Rate of Return	4.45%		4.43%		6.62%

Q. WHAT IS I&E'S TOTAL RECOMMENDED REVENUE REQUIREMENT FOR WASTEWATER CSS OPERATIONS?

A. I&E's total recommended revenue requirement for Wastewater CSS Operations is $85,369,303. This recommended revenue requirement represents an increase of $6,733,087 to the Company's claimed present rate revenues of $78,636,216. This total recommended allowance incorporates my adjustments made in this testimony to O&M expenses and cash working capital, as well as the recommended adjustments made in the testimony of I&E witness D.C. Patel. A calculation of the

I&E recommended revenue requirement is shown in Table I(c) below:

PAWC - Wastewater CSS Operations		TABLE I(c)			
R-2023-3043190		INCOME SUMMARY			
	6/30/25	INVESTIGATION & ENFORCEMENT			
	Proforma	[----------			]
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	78,636,216	0	78,636,216	6,733,087	85,369,303
Deductions:					
O&M Expenses	21,438,527	0	21,438,527	79,181	21,517,708
Depreciation	20,497,016	0	20,497,016		20,497,016
Taxes, Other	2,231,143	0	2,231,143	42,900	2,274,043
Income Taxes:					
Current State	1,984,048	90	1,984,138	528,219	2,512,357
Current Federal	4,906,577	218	4,906,795	1,277,385	6,184,180
Deferred Taxes	0	0	0		0
ITC	0	0	0		0
Total Deductions	51,057,311	308	51,057,619	1,927,685	52,985,304
Income Available	27,578,905	-308	27,578,597	4,805,402	32,383,999
Rate Base	489,184,280	0	489,184,280	0	489,184,280
Rate of Return	5.64%		5.64%		6.62%

Q. SUMMARIZE I&E'S COMBINED RECOMMENDED REVENUE REQUIREMENT.

A. I&E's total recommended revenue requirement for all PAWC operations combined is $1,048,234,810 as shown in Table II below. This recommended revenue requirement represents an increase of $54,036,090 to the I&E-recommended total present rate revenues of $994,198,720 for Water Operations, Wastewater SSS Operations, and Wastewater CSS Operations. This total recommended allowance incorporates my adjustments made in this testimony to O&M expenses and cash

working capital, as well as the recommended adjustments made in the testimony of I&E witnesses D.C. Patel, Ethan Cline, and Joseph Kubas. To be clear, this overall recommendation reflects I&E's disallowance for claims related to BASA and Brentwood as discussed above.

Q. WHAT IS I&E'S PROPOSED ACT 11 REVENUE ALLOCATION AS SUPPORTED BY I&E WITNESS JOSEPH KUBAS IN I&E STATEMENT NO. 4?

A. As further discussed in his testimony,[12] I&E witness Joseph Kubas does not recommend the application of an Act 11 allocation in the instant proceeding as shown the table below:

TABLE II
PAWC - Docket Nos. R-2023-3043189 and R-2023-3043190
I&E Recommended - Combined Water and Wastewater Revenue Requirement Summary

		Total Company	Water Operations	WW SSS Genera Ops	CSS WW Ops
I&E Present Rate Revenue	(1)	$ 994,198,720	$ 820,885,791	$ 94,676,713	$ 78,636,216
I&E Recommended:					
Additional Revenue Requirement	(2)	$ 54,036,090	$ 27,439,769	$ 19,863,234	$ 6,733,087
Act 11 Wastwater Allocation	(3)	$ -	$ -	$ -	$ -
Proposed Revenues	(4)	$ 1,048,234,810	$ 848,325,560	$ 114,539,947	$ 85,369,303
Rate Increase/(Decrease)	(5)	$ 54,036,090	$ 27,439,769	$ 19,863,234	$ 6,733,087
	(6)	5.4%	3.3%	21.0%	8.6%
Company Claimed Increase/(Decrease)		$ 198,840,897	$ 199,237,084	$ (169,261)	$ (226,926)

[12] I&E Statement No. 4.

PERFORMANCE PAY

Q. WHAT IS PERFORMANCE PAY?

A. Performance pay is a component of labor expense defined by PAWC witness Lori O'Malley as annual and long-term performance compensation for eligible employees. This is made up of two components: the Annual Performance Plan (APP) and the Long-Term Performance Plan (LTPP).[13]

Q. WHAT IS THE COMPANY'S CLAIM FOR PERFORMANCE PAY EXPENSE?

A. The Company is claiming FPFTY O&M performance pay expense broken down as follows:[14]

	FPFTY Claim	O&M Allocation Factor	FPFTY O&M Claim
Water Operations	$8,053,114	60.45%	$4,868,107
Wastewater SSS Operations	$377,659	77.86%	$294,054
Wastewater CSS Operations	$324,254	77.86%	$252,464
Total	**$8,755,027**		**$5,414,617**

The O&M allocation factor is calculated as one minus the capitalization rate.[15]

[13] PAWC Statement No. 5, p. 8.
[14] PAWC Exhibit No. 3-B, p. 47.
[15] PAWC Exhibit No. 3-B, p. 2.

Q. WHAT IS THE BASIS FOR THE COMPANY'S PERFORMANCE PAY EXPENSE CLAIM?

A. The Company's projected performance pay was calculated on a position-by-position basis for eligible employees based on each position's target percent, or percentage of base salary that is provided if an employee achieves their performance target, under both the APP and LTPP. The target percent was multiplied by each eligible employee's pro forma base salary in the FTY and FPFTY to determine the cost of compensation under the APP and LTPP.[16] Total annual performance compensation was further separated into expensed and capitalized portions by application of the specified capitalization rates as shown in the table above.

Q. DO YOU AGREE WITH THE COMPANY'S PERFORMANCE PAY CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR PERFORMANCE PAY?

A. I recommend an allowance of $4,195,822 for Water Operations performance pay expense, or a reduction of $672,285 ($4,868,107 - $4,195,822) to the Company's Water Operations claim.

[16] PAWC Statement No. 5, p. 8.

Q. HOW DID YOU CALCULATE YOUR RECOMMENDED ALLOWANCE FOR WATER OPERATIONS' PERFORMANCE PAY?

A. The following table shows the calculation of my recommended Water Operations FPFTY allowance and adjustment for performance pay:

1. FPFTY Base Payroll[17]	$88,103,860
2. Performance Pay Factor – I&E Recommended	7.88%
3. Performance Pay Allowance (1 x 0.0788)	$6,940,979
4. O&M Allowance (3 x 0.6045)	$4,195,822
5. FPFTY O&M – Company Claim ($8,053,114 x 0.6045)	$4,868,107
6. I&E Recommended O&M Adjustment (4 – 5)	($672,285)

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on a three-year average performance payout factor of 7.88% of the base payroll expense for Water Operations. This calculation uses historic data provided in response to I&E-RE-21-D[18] as summarized in the table below:

	2021	**2022**	**2023**
Base Payroll	$70,693,112	$75,709,119	$78,576,599
Performance Pay	$5,031,188	$5,532,881	$7,236,524
% of Base Payroll	7.12%	7.31%	9.21%

[17] I&E Exhibit No. 1, Schedule 2.
[18] I&E Exhibit No. 1, Schedule 2.

The Company has claimed a target level payout factor of 9.14% for Water Operations ($8,053,114 / $88,103,860) in the FPFTY,[19] which is contingent upon achieving targeted financial performance goals.

The achievement of these financial goals is speculative and not guaranteed as performance against goals is calculated at three separate levels: **{BEGIN PROPRIETARY}** [redacted] **{END PROPRIETARY}** Therefore, my recommended three-year historic average payout factor of 7.88% provides a more reliable and moderate base for the FPFTY allowance because it is based on historic data, rather than the significantly higher and speculative projected payout factor of 9.14%. It should be noted that I am not addressing or recommending any adjustments to the performance pay claims for Wastewater SSS Operations or Wastewater CSS Operations as the payout factors for these business units are reasonable when compared to historic actual data.

[19] I&E Exhibit No. 1, Schedule 2.
[20] I&E Exhibit No. 1, Schedule 3. Note: I have only included the specifically referenced page from this document to avoid unnecessary bulk in my Exhibit.

PAYROLL TAX EXPENSE

Q. WHAT IS INCLUDED IN THE COMPANY'S CLAIM FOR PAYROLL TAX EXPENSE?

A. The Company's claim for payroll tax expense includes its share of federal and state payroll taxes, such as Social Security, Medicare, and federal and state unemployment taxes, and is based on employee compensation.

Q. WHAT IS THE COMPANY'S CLAIM FOR PAYROLL TAX EXPENSE?

A. The Company's payroll tax expense claim is broken down as follows:[21]

	FPFTY Claim	O&M Allocation Factor	FPFTY O&M Claim
Water Operations	$8,270,403	60.45%	$4,999,459
Wastewater SSS Operations	$496,169	77.86%	$386,317
Wastewater CSS Operations	$687,308	77.86%	$535,138
	$9,453,880		$5,920,914

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR PAYROLL TAX EXPENSE?

A. I recommend an allowance of $4,947,222 for Water Operations payroll tax

[21] PAWC Exhibit No. 3-B, p. 74.

expense, or a reduction of $52,237 ($4,999,459 - $4,947,222) to the Company's FPFTY Water Operations claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on an effective payroll tax rate of 7.77%, as shown in the table below, and represents the Company's share of the payroll taxes as applied to my recommended performance pay adjustment [($672,285) x 7.77% = ($52,237)] explained above.

Water Ops FPFTY Compensation Claim[22]	$106,487,061
Water Ops FPFTY Payroll Tax Claim	$8,270,403
Effective Payroll Tax Rate	7.77%

It should be noted that I am not addressing or recommending any adjustments to the payroll tax expense claims for Wastewater SSS Operations or Wastewater CSS Operations since I am not recommending performance pay adjustments to these operational units.

[22] PAWC Exhibit No. 3-B, p. 3.

PENSION AND OTHER POST-EMPLOYMENT BENEFITS (OPEB) TRACKER

Q. WHAT IS THE PROPOSED PENSION AND OPEB TRACKER?

A. The Company is requesting Commission authorization to defer and record any amounts above or below the projected level of pension and OPEB expenses into separate regulatory accounts.[23] PAWC witness J. Cas Swiz states that these costs are difficult to predict and that the associated claims in this case are based off projections calculated by WTW, formerly Willis Towers Watson, a national actuarial firm. Mr. Swiz explains that despite the sound and well-established actuarial methods used in the reports from WTW, pension and OPEB costs exhibit volatility due to several variables and are difficult to forecast. He uses this argument to support establishment of regulatory assets which would track the difference between the Commission-approved pension and OPEB expenses included in base rates and the actual expense incurred.[24]

Q. EXPLAIN HOW THE COMPANY PROPOSES THE PENSION AND OPEB TRACKER WOULD WORK.

A. The Company would track actual pension and OPEB expenses along with Commission-approved amounts included for recovery in base rates. Each month, actual expenses would be compared to the monthly amount authorized for recovery in base rates (annual amount divided by twelve). Actual costs above or

[23] PAWC Statement No. 8, p. 10.
[24] PAWC Statement No. 8, pp. 12-15.

below the authorized amount would be credited or debited to the applicable pension or OPEB deferral account. The Company would continue to defer the net balance in those accounts until the end of its next base rate case, where it would seek rate recovery via amortization of the regulatory asset or liability.[25] It should be noted here that this methodology assumes that PAWC claims are approved by the Commission in the event of any black box settlements.

Q. DO YOU AGREE THAT PENSION AND OPEB EXPENSES SHOULD BE GRANTED REGULATORY ASSET TREATMENT?

A. No. I recommend that the Commission disallow the proposed pension and OPEB expense tracker in its entirety.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. While I do not dispute that the Commission has previously authorized utilities to track certain expenses via a regulatory asset, the Company's pension and OPEB expenses do not meet the requirements to be treated as a regulatory asset. Specifically, the Commission has previously ruled that deferred accounting treatment may be granted if the expense is: (1) extraordinary; (2) unanticipated; (3) non-recurring; and (4) substantial.[26]

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[25] PAWC Statement No. 8, p. 15.

[26] *Petition of Columbia Gas of Pa., Inc. for Authority to Defer for Accounting and Financial Purposes Certain Start Up Expenses Assoc. with the Redesign of Upgrade of Financial Processes and Info. Systems*, Docket No. P-2012-2319920 (Order Entered December 5, 2012).

Q. HOW DO PENSION AND OPEB EXPENSES FAIL TO MEET THE COMMISSION'S CRITERIA?

A. While I agree that these costs have sometimes been substantial in the past, the costs are not extraordinary because pension and OPEB costs are routine expenses incurred by PAWC as well as many other water and wastewater utilities. Secondly, the costs are not unanticipated because they are a part of contractual agreements with past employees. Finally, the expenses cannot be categorized as non-recurring while also being forecasted on an annual basis. As the Company's pension and OPEB expenses may have only met one of four criteria to be considered for regulatory asset treatment, it is not appropriate for the Commission to grant approval for the Company to defer these costs.

Pension and OPEB expenses are normal, expected, recurring costs for which the Company cannot expect a virtually guaranteed dollar-for-dollar recovery. Pensions and OPEB costs do not meet the requirements for deferral treatment, and I recommend that the Commission deny the Company's request.

PENSION EXPENSE

Q. WHAT IS THE COMPANY'S CLAIM FOR PENSION EXPENSES?

A. The Company is claiming pension expense of $22,218 for Water Operations in the FPFTY but is not claiming any pension expense for Wastewater SSS Operations or

Wastewater CSS Operations.[27]

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. PAWC witness Lori O'Malley states that the Company started with a report furnished by its actuary, Willis Towers Watson, which reflects pension costs for 2023 in accordance with ASC 715. The Company then reduced the amount by the capitalized portion to determine the portion of total pension costs to be recorded as an expense. In addition, the Company's claim reflects a credit for the amortization of a deferred pension asset created during the Company's switch to the accrual accounting method. This deferred asset was approved in a previous rate case at Docket No. R-2017-2595853.[28]

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT IS YOUR RECOMMENDATION FOR PENSION EXPENSE?

A. I recommend a negative allowance of ($3,800,736) for pension expense, or a reduction of $3,822,954 [$22,218 - ($3,800,736)] to the Company's FPFTY claim for Water Operations.

[27] PAWC Exhibit No. 3-A, p. 52.
[28] PAWC Statement No. 5, pp. 12-13.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I based my recommendation on a three-year average of historic actuals for pension expense,[29] as shown below. If the Company continues this approach in future base rate proceedings it will allow the expense to normalize over time and address PAWC's concern about over-recovery of pension expense without the need for a tracker.

	2021	2022	2023	Average
Pension - ASC 715 Accrual	($710,325)	($3,603,106)	($1,213,524)	($1,842,318)
Add Deferred Liability				($1,958,418)
Total Pension				**($3,800,736)**

Pension:	FPFTY
PAWC Claim	$22,218
I&E Allowance	($3,800,736)
Adjustment	($3,822,954)

OPEB EXPENSE

Q. WHAT IS THE COMPANY'S CLAIM FOR OPEB EXPENSE?

A. The Company is claiming OPEB expense of ($5,817,327) for Water Operations, $9,810 for Wastewater SSS Operations, and $32,234 for Wastewater CSS Operations in the FPFTY.[30]

[29] I&E Exhibit No. 1, Schedule 4.
[30] PAWC Exhibit No. 3-A, pp. 51, 116, and 236.

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. PAWC witness Lori O'Malley states that OPEB expense is based on the accrual cost recognized under ASC 715 as projected by Willis Towers Watson for 2023. In addition, the Company makes an annual contribution of $600 per union employee for those who are not eligible for retiree medical benefits under the OPEB plan. The Company then reduced the total amount by the capitalized portion to determine the portion of total OPEB costs to be recorded as an expense.[31] It should be noted that claims for Wastewater SSS Operations and Wastewater CSS Operations are made up entirely of these $600 contributions.[32]

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT IS YOUR RECOMMENDATION FOR OPEB EXPENSES?

A. I recommend a negative allowance of ($8,160,753) for OPEB expenses, or a reduction of $2,343,426 [($8,160,753) - ($5,817,327)] to the Company's as-filed FPFTY claim. I am not addressing or recommending any adjustments to the OPEB claims for Wastewater SSS Operations or Wastewater CSS Operations since these claims are made up entirely of the aforementioned $600 contributions per

[31] PAWC Statement No. 5, p. 14.
[32] PAWC Exhibit No. 3-A, pp. 116 and 236.

union employee for those who are not eligible for retiree medical benefits under the OPEB plan.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I based my recommendation on a three-year average of historic actuals for OPEB expense,[33] as shown below. If the Company continues this approach in future base rate proceedings it will allow the expense to normalize over time and address PAWC's concern about over-recovery of OPEB expense without the need for a tracker.

	2021	2022	2023	Average
Total OPEBs	($8,281,292)	($8,877,869)	($7,323,097)	**($8,160,753)**

OPEBs:	FPFTY
PAWC Claim	($5,817,327)
I&E Allowance	($8,160,753)
Adjustment	($2,343,426)

ACQUISITION O&M

Q. WHAT IS INCLUDED IN THE COMPANY'S ACQUISITION O&M CLAIM?

A. As part of the acquisition O&M claim, the Company has included various O&M expenses for the following potential acquisitions: Farmington Water, Audubon

[33] I&E Exhibit No. 1, Schedule 5.

Water, Farmington Wastewater, Sadsbury Wastewater, BASA Wastewater, and Brentwood Wastewater.[34]

Q. WHAT IS THE COMPANY'S ACQUISITION O&M CLAIM?

A. The Company has allocated these O&M expenses among Water Operations[35] and Wastewater SSS Operations[36] as follows:

Acquisition O&M Expense:	**FPFTY**
Water Operations	$1,675,709
Wastewater SSS Operations	$504,709
Total PAWC Expense	**$2,180,418**

I have calculated the above total amounts using PAWC's adjustment data provided in the Company's Exhibit 3-A as cited with the table. Assuming zero as the starting point since no costs were incurred in the historic test year regarding these acquisitions, I have added the FTY and FPFTY adjustments to reach the FPFTY total claim.

Acquisition O&M Adjustment:	FTY	FPFTY	Total
Water Operations	$1,657,302	$18,407	$1,675,709
Wastewater SSS Operations	$499,513	$5,196	$504,709

[34] PAWC Exhibit No. 3-B, pp. 303-308.
[35] PAWC Exhibit No. 3-A, p. 48.
[36] PAWC Exhibit No. 3-A, p. 113.

It should be noted that no amounts were allocated to Wastewater CSS Operations by the Company, and the amounts allocated to BASA and Brentwood are not addressed here because I have already removed them from the revenue requirement as addressed earlier in my testimony.

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. According to PAWC witness Lori O'Malley, the Company has made adjustments to annualize the O&M expenses not fully recognized in the HTY for the Company's pending acquisitions.[37] The Company has not provided any supporting documentation to validate these claims.

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM FOR ACQUISITION O&M EXPENSE?

A. No.

Q. WHAT DO YOU RECOMMEND FOR ACQUISITION O&M EXPENSES?

A. I recommend disallowance of PAWC's entire claim of $1,675,709 for Water Operations and $504,709 for Wastewater SSS Operations.

[37] PAWC Statement No. 5, p. 27.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. As mentioned earlier in my testimony, it is inappropriate for the Company to claim expenses for utilities that have not yet been acquired. With the exception of BASA , the Commission has not yet made a ruling on any of these acquisitions; however, the BASA decision is currently under appeal and the outcome is, therefore, unknown. Due to the uncertainty surrounding each of these acquisitions, I recommend disallowance of the entire claim.

MISCELLANEOUS EXPENSE ADJUSTMENT

Q. WHAT IS THE COMPANY'S CLAIM FOR MISCELLANEOUS EXPENSE ADJUSTMENT - CREDIT CARD AND E-CHECK TRANSACTION FEES?

A. Per PAWC Exhibit 3-B, the FPFTY claim for credit card and e-check transaction fees is $1,766,752 and is allocated among operations as follows:[38]

Credit Card and Echeck Fees:	FPFTY
Water Operations	$1,545,547
Wastewater SSS Operations	$126,067
Wastewater CSS Operations	$95,138
Total	$1,766,752

[38] PAWC Exhibit No. 3-B, p. 326.

However, per PAWC Exhibit 3-A, which is used to calculate the revenue requirement for each operation, the respective adjustments for Water Operations result in a claim of $1,728,285 for the FPFTY.[39]

Base Year (HTY) Water Ops Actual	$1,665,018
2024 Adjustment from Exhibit 3-A	$57,480
2025 Adjustment from Exhibit 3-A	$5,787
FPFTY Claim	$1,728,285

Q. DID THE COMPANY PROVIDE ADDITIONAL INFORMATION REGARDING ITS CLAIM?

A. Yes. After the initial filing, the Company provided updated information in response to I&E-RE-59-D explaining the amounts for credit card and e-check fees on page 64 of Exhibit 3-A are incorrect and the amounts in Exhibit 3-B are correct.[40]

Q. HAS THE COMPANY INDICATED IT WILL UPDATE ITS CLAIM?

A. Yes. PAWC confirmed that it will update its claim for credit card and e-check transaction fees in rebuttal testimony as explained above.

[39] PAWC Exhibit No. 3-A, p. 64.
[40] I&E Exhibit No. 1, Schedule 6.

Q. DO YOU ACCEPT THE COMPANY'S REVISED FPFTY CLAIM?

A. Yes. I accept the Company's revised claim of $1,545,547 for Water Operations, or a reduction of $182,738 ($1,728,285- $1,545,547) to the as-filed claim.

PRODUCTION EXPENSE TRACKER

Q. WHAT IS THE PROPOSED PRODUCTION EXPENSE TRACKER?

A. The Company is requesting Commission authorization to defer and record any amounts above or below the projected level of production expenses into separate regulatory accounts.[41] The Company defines production expenses as the costs incurred to provide water and wastewater services to its customers, including purchased water and wastewater treatment, chemicals, fuel and power, and waste disposal.[42] PAWC witness J. Cas Swiz argues that these expenses can materially increase or decrease based on the prices charged by suppliers, and are needed to provide safe and reliable water and wastewater service to customers. Mr. Swiz asserts that market conditions impacting production expenses represent an extraordinary combination of circumstances that are expected to continue to produce significant price volatility over the next several years. He uses this argument to support establishing regulatory assets to track the difference between the individual Commission-approved production expenses included in base rates and the actual expense incurred.[43]

[41] PAWC Statement No. 8, p. 10.
[42] PAWC Statement No. 8, p. 17.
[43] PAWC Statement No. 8, pp. 18-20.

Q. EXPLAIN HOW THE COMPANY PROPOSES THE PRODUCTION EXPENSE TRACKER WOULD WORK.

A. The Company would maintain separate regulatory accounts for purchased water and wastewater treatment, chemicals, fuel and power, and waste disposal. Beginning the first month after rates from the instant proceeding take effect, the Company would record the difference between actual costs and Commission-approved amounts included for recovery in rate base (which assumes PAWC claimed amounts are approved in the event of a black box settlement). The total amount authorized in the instant proceeding for all production expense items would be unitized (cost per 1,000 gallons) by taking the total expenses divided by overall water and wastewater usage used to derive rates and charges in this proceeding. This rate would be multiplied by monthly usage to determine the authorized amount collected in the current month, which would be compared to actual monthly expense. The difference would be recorded in the appropriate regulatory accounts and would accumulate until the next rate case when it is presented for collection via amortization.[44]

Q. DO YOU AGREE THAT PRODUCTION EXPENSES SHOULD BE GRANTED REGULATORY ASSET TREATMENT?

A. No. I recommend the Commission disallow the production expense tracker in its

[44] PAWC Statement No. 8, pp. 19-20.

entirety.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. While I do not dispute that the Commission has previously authorized utilities to track certain expenses via a regulatory asset, the Company's production expenses do not meet the requirements to be treated as a regulatory asset. Specifically, the Commission has previously ruled that deferred accounting treatment may be granted if the expense is: (1) extraordinary; (2) unanticipated; (3) non-recurring; and (4) substantial.[45]

Q. HOW DO PRODUCTION EXPENSES FAIL TO MEET THE COMMISSION'S CRITERIA?

A. First, while I agree that production costs are substantial for PAWC, the costs are not extraordinary because production costs are normal expenses incurred by PAWC and virtually all other water and wastewater utilities. Second, the costs are not unanticipated because they are an integral part of providing safe and reliable service to customers. Finally, the expenses cannot be categorized as non-recurring while also being forecasted on an annual basis. As the Company's production expenses may have only met one of four criteria to be considered for regulatory

[45] *Petition of Columbia Gas of Pa., Inc. for Authority to Defer for Accounting and Financial Purposes Certain Start Up Expenses Assoc. with the Redesign of Upgrade of Financial Processes and Info. Systems*, Docket No. P-2012-2319920 (Order Entered December 5, 2012).

asset treatment, it is not appropriate for the Commission to approve deferral of these routine expenses.

Production expenses are normal, expected, recurring costs of which the Company cannot expect to have a virtually guaranteed dollar-for-dollar recovery. Volatility among these expenses is an issue affecting all water and wastewater utilities, and the Company is not unique in its circumstances. There is no reasonable justification for the argument that PAWC should be allowed to establish regulatory assets for production expenses, and therefore, I recommend the Commission deny the Company's request.

Q. WHAT IS THE COMPANY'S CLAIM FOR PRODUCTION EXPENSES?

A. The Company is claiming total FPFTY production expenses of $59,989,147, which can be broken down as $3,098,544 for purchased water and wastewater treatment, $21,276,332 for fuel and power, $27,485,022 for chemicals, and $8,129,249 for waste disposal.[46]

Q. DO YOU ACCEPT THE COMPANY'S CLAIMS REGARDING PRODUCTION EXPENSES?

A. Yes. I am not making any adjustments to production expenses in the instant proceeding. However, I disagree with the proposed tracker.

[46] PAWC Statement No. 8, p. 17.

ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE

Q. PLEASE SUMMARIZE PAWC'S PROPOSED ENVIRONMENTAL COMPLIANCE CHARGE.

A. The Company is requesting approval of an Environmental Compliance Investment Charge (ECIC) as part of the instant proceeding. The ECIC is designed to recover capital costs and expenses imposed on the Company due to new or changed federal and state environmental mandates. The rate adjustment mechanism would allow for recovery of these expenses between rate cases. Applicable costs would be consistent with the set of projects and activities set forth in an annual environmental compliance plan to be filed by the Company and approved by the Commission.[47]

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. PAWC witness J. Cas Swiz claims that because the Company has no control over the need for and timing of costs to comply with regulatory requirements, the ECIC should be approved to ensure full and timely rate recognition of the Company's environmental compliance investments. He states that the ECIC would result in smaller, more gradual increases in rates, rather than infrequent, significant increases caused by general base rate proceedings, thereby benefiting ratepayers. Mr. Swiz concludes by pointing to PAWC Exhibit JCS-1, which addresses factors

[47] PAWC Statement No. 1, p. 26.

that the Commission has previously found relevant when evaluating an alternative ratemaking mechanism.[48]

Q. DO YOU AGREE WITH PAWC'S PROPOSAL TO IMPLEMENT THE ECIC?

A. No. The proposed ECIC is problematic for several reasons. First, the proposed environmental compliance plan would be filed outside the parameters of a base rate case, disrupting the ability of the Commission to review the data in the context of the total impact to ratepayers and with respect to other expenses that may be increasing or decreasing between rate cases, which constitutes single-issue ratemaking.

Second, I disagree with Mr. Swiz's assertion that the ECIC will not impact efficiency incentives.[49] The fact that changing regulations require the Company to make investments or increase spending in certain areas does not mean the Company has no choice in the matter. There may be more than one option for compliance or other ways to save money, but the Company would not be incentivized to explore these if it were virtually guaranteed recovery of all environmental compliance projects approved through the plan.

Third, it is difficult to adequately evaluate the impact of such a charge when the Company has not provided any measurable data associated with the charge.

[48] PAWC Statement No. 8, pp. 22-23.
[49] PAWC Statement No. 8, Exhibit JCS-1, p. 1.

As noted in the Company's response to OCA 10-014,[50] the Company has not projected any data related to the ECIC. The Company argues in response to I&E-RE-46-D[51] that it disagrees with my classification of these expenses as "unknown" as it plans to submit an environmental plan to the Commission before implementing the charge. The Company states further that it is not seeking to recover expenses in the instant proceeding, but rather to establish the mechanism and methodology. However, I maintain that as the Company has not provided any forecasted data, the costs are in fact entirely unknown at this time, and it is difficult to evaluate the mechanism and methodology without better understanding the impact to ratepayers.

Finally, although I understand that environmental issues will be ongoing as environmental science continues to evolve, the implementation of such a charge indefinitely seems unnecessary. Environmental compliance has been and will continue to be a normal part of a utility's expenditures. It is important to realize that water and wastewater utilities nationwide face these same emerging contaminant issues, and implementing a rider recovery mechanism for one company before any universal Commission action could occur and before any potential government funding has been established is simply premature. While I generally agree that the utility should be able to recover costs associated with

[50] I&E Exhibit No. 1, Schedule 7.
[51] I&E Exhibit No. 1, Schedule 8.

environmental compliance, I do not agree that this open-ended surcharge is the proper way to do so.

Q. DO YOU HAVE ANY OTHER CONCERNS ABOUT THE PROPOSAL OF SUCH A SURCHARGE MECHANISM?

A. Anytime companies receive approval for such surcharge mechanisms, it increases the workload of the Commission's Bureau of Audits (Audits). Additionally, periodic review of reports made and presented to Audits does not constitute a proper analysis of these expenses in comparison to related changes (increases or decreases) in other expenses, as mentioned above, that should all be conducted in a base rate proceeding.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE PROPOSED ECIC?

A. I recommend the Commission deny the establishment of the ECIC as an alternative rate-making mechanism.

CASH WORKING CAPITAL

Q. WHAT IS A CASH WORKING CAPITAL (CWC) ALLOWANCE FOR RATEMAKING PURPOSES?

A. CWC includes the amount of funds necessary to operate a utility during the interim period between the rendition of service, including the payment of related

expenses, and the receipt of revenue in payment for services rendered by the utility.

Q. HOW DOES THE COMPANY CALCULATE ITS CWC CLAIM?

A. The Company calculates its CWC claim by using a lead/lag study. Briefly, the CWC requirement is calculated by multiplying the net leg days (revenue lag days less expense lag days) by the average operating expense per day (total operating expenses ÷ 365 days). A lead/lag study measures the differences in time between: (1) the time services are rendered until payment of those services is received; and (2) the time between the point when a utility has incurred an expense and the actual payment of the expense. Stating this in a different way, the lead/lag study measures how many days exist on average between the midpoint of the service period and the date the payment is made.

Q. DO YOU AGREE WITH THE COMPANY'S USE OF A LEAD/LAG METHOD?

A. Yes. I agree with the Company's use of this method.

Q. WHAT IS THE COMPANY'S CLAIM FOR CWC?

A. The following table shows PAWC's CWC claim broken down by business

operation:[52]

	FPFTY Claim
Water Operations	$23,164,070
Wastewater SSS Ops.	$2,230,011
Wastewater CSS Ops.	$1,879,977
Total	**$27,274,058**

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND?

A. I recommend an adjustment to the Company's FPFTY claim broken down by business operation as shown in the table below:

	FPFTY Claim	I&E Allowance	Adjustment
Water Operations	$23,164,070	$22,082,926	($1,081,144)
Wastewater SSS Operations	$2,230,011	$2,199,053	($30,958)
Wastewater CSS Operations	$1,879,977	$1,879,977	$0
Total	**$27,274,058**	**$26,161,956**	**($1,112,102)**

Note that no changes have been made to Wastewater CSS Operations CWC since I did not make any O&M adjustments to this operating unit.

[52] PAWC Exhibit No. 3-A, pp. 31, 101, and 221.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATIONS?

A. All O&M adjustments that are cash-based expense claims are included when determining each operating unit's overall CWC requirement. My CWC recommendations are based on my recommended adjustments to O&M expenses as discussed in this direct testimony.

I subtracted all of my recommended O&M expense adjustments from the tables above in the I&E Operating and Maintenance Expense Adjustments section that correspond to the Company's CWC calculation. I did this using the Company's electronic workpapers for each operation. I&E-modified CWC schedules reflect my changes for each operation's CWC allowance calculation.[53]

Q. ARE YOUR ABOVE-RECOMMENDED CWC ALLOWANCES FINAL RECOMMENDATIONS?

A. No. All adjustments to the Company's claims for revenues, expenses, taxes, and rate base must be continually brought together for each operating unit in the Administrative Law Judge's Recommended Decision and again in the Commission's Final Order. This process, known as iteration, effectively prevents the determination of a precise calculation until all adjustments have been made to the Company's claims.

[53] I&E Exhibit No. 1, Schedule 9.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

Vanessa Okum

Professional and Educational Background

Experience:

Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania
June 2022 – Present
Fixed Utility Financial Analyst, Bureau of Investigation and Enforcement

Magnolia Realty Services, Elizabethville, Pennsylvania
February 2016 – Present
Realtor

May 2015 – May 2019
Business Manager

The Vanguard Group, Malvern, Pennsylvania
October 2011 – December 2014
Financial Administrator, Corporate Financial Services

March 2010 – October 2011
Financial Analyst, Fund Financial Services

June 2008 – March 2010
Financial Associate, Fund Financial Services

Education/Professional Development:

University of Massachusetts – Amherst, Amherst, Massachusetts, 2012
Master of Business Administration

Elizabethtown College, Elizabethtown, Pennsylvania, 2008
Bachelor of Science in International Business
Concentration in Finance

Testimony Submitted:

I have submitted testimony in the following proceedings:

R-2023-3039919 et al. – Pittsburgh Water and Sewer Authority

R-2023-3037428 – National Fuel Gas Distribution Corporation (1307(f))

R-2022-3037368 – UGI Utilities, Inc. – Electric Division

I have assisted with testimony in the following proceedings:

R-2022-3031704 – Borough of Ambler Water Department

R-2022-3032764 – Leatherstocking Gas Company, LLC

I&E Exhibit No. 1
Witness: Vanessa Okum
NON-PROPRIETARY

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2023-3043189 (Water)

and

Docket No. R-2023-3043190 (Wastewater)

Exhibit to Accompany

the

Direct Testimony

of

Vanessa Okum

Bureau of Investigation and Enforcement

Concerning:
PENSION, OPEB, AND PRODUCTION EXPENSE TRACKERS,
OPERATING AND MAINTENANCE EXPENSES,
ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE,
CASH WORKING CAPITAL

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 12

OCA 12-008

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of Sadsbury Township Municipal Authority (wastewater)

For purposes of PAWC's historic test year (HTY), future test year (FTY), and fully projected future test year (FPFTY) utility revenue requirement presentations in its current rate case, concerning the impact on such revenue requirements for the acquisition of the Sudbury Township Municipal Authority wastewater utility system by PAWC, please provide the following information:

a. The amounts of rate base for acquired plant, by account, reflected by PAWC in its HTY, FTY and FPFTY rate base related to this acquisition.
b. The amounts of rate base for new utility plant for, relating to, or caused by the Sadsbury system (assuming post-acquisition), by account, reflected by PAWC in its HTY, FTY and FPFTY.
c. The amounts of operating expenses, by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses relating to this acquisition.
d. The amounts of other taxes expenses (such as but not limited to property taxes), by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses for this acquisition.
e. The amounts of revenues by account, reflected by PAWC in its HTY, FTY and FPFTY revenues related to this acquisition.
f. The amounts of any other costs related to this acquisition, by account, that have been reflected by PAWC in its HTY, FTY and FPFTY utility revenue requirement calculations.
g. The date that PAWC assumed this acquisition transaction would be closed.
h. Detailed listings of all projected utility plant additions, by account, that PAWC has assumed would occur, by month, after PAWC's assumed acquisition closing date.
i. The number of customers by type by month that PAWC has reflected for this acquisition.
j. The quantities of utility sales by type by month that PAWC has reflected for this acquisition.
k. A citation to, and copy of, the Commission Order approving or denying this acquisition.
l. A complete copy of all accounting entries related to closing this acquisition.
m. All supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n. A detailed itemization of all legal expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
o. A detailed itemization of all consulting expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
p. A detailed itemization of all affiliated service company charges to PAWC to date, by amount and account, related to this acquisition.

q. A copy of each legal and consulting expense invoice to PAWC over $5,000 related to this acquisition.
r. The number of work force positions that PAWC expects to acquire from this acquisition, including job titles for each position.
s. The amounts of salary and wages for each workforce position that PAWC expects to acquire from this acquisition.
t. The amounts for employee benefits for each workforce position that PAWC expects to acquire from this acquisition.
u. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, PAWC's allocation of costs between PAWC's water and wastewater utility operations.
v. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, the allocation and charging of costs to PAWC from the affiliate American Water Works Service Company.
w. Any and all additional information that PAWC believes should be considered in determining the impact on PAWC's calculated HTY, FTY and FPFTY utility revenue requirements from this acquisition.

Response:

a. Please refer to Volume 03, Exhibit No. 3-A, page 97.
b. The rate base claims in this case do not include any post-acquisition capital investment for the Sadsbury Township Municipal Authority ("STMA") Wastewater acquisition in this case.
c-d. STMA costs are included in the Wastewater SSS General Operations totals in Volume 03, Exhibit No. 3-A, pages 109-112 and page 76, lines 6-19. For specific incremental expenses related to STMA, please refer to Volume 04, Exhibit No. 3-B, page 306.
e. The revenue adjustment for the STMA acquisition is included in Wastewater SSS General Operations in Volume 03, Exhibit No. 3-A, page 79, line 19 and page 94.
f. Please refer to parts c-d.
g. The STMA acquisition is anticipated to close in Q3 2024.
h. Please refer to part b.
i-j. Please refer to Volume 06 - Filing Requirements I-V, page 54.
k. The Company filed an application of acquisition for STMA on August 3, 2023. An order approving or denying this acquisition has not yet been issued by the Commission.
l. Please see the response to part k. The Company therefore does not have any accounting entries related to the closing of this acquisition at this time.
m. Please refer to Volume 03, Exhibit No. 3-A, pages 96-108 and Volume 05, Exhibit No. 3-C, pages 80-81 for supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n-o. Please refer to OCA 12-008_Attachment 1 for the requested cost incurred through October 2023 YTD.
p. There are no affiliated service company charges to PAWC to date related to this acquisition.
q. Please refer to OCA 12-008_Attachment 2.
r-t. PAWC does not expect to acquire any workforce positions from this acquisition.

u-v. PAWC's allocation of costs between PAWC's water and wastewater utility operations is affected by the number of customers for each respective operation. Acquisitions will result in a new proportioned allocation of cost based on the new level of customers. Please refer to Volume 08 - Statements Nos. 1-9, PAWC Statement No. 4, Schedule SDG-1, Page 1. Factor 1 has the allocations percentages as of 06/30/2023 and Factor 2 has the allocation percentages as of 06/30/2025 including the acquisitions reflected in the filing.

w. The Company has provided all information relevant to the calculated revenue requirement for the STMA wastewater system.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 12

OCA 12-010

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of Farmington Township (water and wastewater)

For purposes of PAWC's historic test year (HTY), future test year (FTY), and fully projected future test year (FPFTY) utility revenue requirement presentations in its current rate case, concerning the impact on such revenue requirements for the acquisition of the Farmington Township water and wastewater utility system by PAWC, please provide the following information:

a. The amounts of rate base for acquired plant, by account, reflected by PAWC in its HTY, FTY and FPFTY rate base related to this acquisition.
b. The amounts of rate base for new utility plant for, relating to, or caused by the Farmington systems (assuming post-acquisition), by account, reflected by PAWC in its HTY, FTY and FPFTY.
c. The amounts of operating expenses, by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses relating to this acquisition.
d. The amounts of other taxes expenses (such as but not limited to property taxes), by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses for this acquisition.
e. The amounts of revenues by account, reflected by PAWC in its HTY, FTY and FPFTY revenues related to this acquisition.
f. The amounts of any other costs related to this acquisition, by account, that have been reflected by PAWC in its HTY, FTY and FPFTY utility revenue requirement calculations.
g. The date that PAWC assumed this acquisition transaction would be closed.
h. Detailed listings of all projected utility plant additions, by account, that PAWC has assumed would occur, by month, after PAWC's assumed acquisition closing date.
i. The number of customers by type by month that PAWC has reflected for this acquisition.
j. The quantities of utility sales by type by month that PAWC has reflected for this acquisition.
k. A citation to, and copy of, the Commission Order approving or denying this acquisition.
l. A complete copy of all accounting entries related to closing this acquisition.
m. All supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n. A detailed itemization of all legal expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
o. A detailed itemization of all consulting expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
p. A detailed itemization of all affiliated service company charges to PAWC to date, by amount and account, related to this acquisition.

q. A copy of each legal and consulting expense invoice to PAWC over $5,000 related to this acquisition.
r. The number of work force positions that PAWC expects to acquire from this acquisition, including job titles for each position.
s. The amounts of salary and wages for each workforce position that PAWC expects to acquire from this acquisition.
t. The amounts for employee benefits for each workforce position that PAWC expects to acquire from this acquisition.
u. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, PAWC's allocation of costs between PAWC's water and wastewater utility operations.
v. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, the allocation and charging of costs to PAWC from the affiliate American Water Works Service Company.
w. Any and all additional information that PAWC believes should be considered in determining the impact on PAWC's calculated HTY, FTY and FPFTY utility revenue requirements from this acquisition.

Response:

a. Please refer to Volume 03, Exhibit No. 3-A, page 26 for acquired plant for Farmington Water and Volume 03, Exhibit No. 3-A, page 97 for acquired plant for Farmington Wastewater.
b. The rate base claims in this case do not include any post-acquisition capital investment for the Farmington Water and Wastewater acquisition in this case.
c-d. Farmington Water costs are included in the Water Operations totals in Volume 03, Exhibit No. 3-A, pages 44-47 and page 1, lines 6-19. For specific incremental expenses related to Farmington Water, please refer to Volume 04, Exhibit No. 3-B, page 303.
Farmington Wastewater costs are included in the Wastewater SSS General Operations totals in Volume 03, Exhibit No. 3-A, page 109-112 and page 76, lines 6-19. For specific incremental expenses related to Farmington Wastewater, please refer to Volume 04, Exhibit No. 3-B, page 305.
e. The revenue adjustment for Farmington Water is included in Water Operations in Volume 03, Exhibit No. 3-A, page 4, line 15 and page 23.
The revenue adjustment for Farmington Wastewater is included in the Wastewater SSS General Operations in Volume 03, Exhibit No. 3-A, page 79, line 18 and page 93.
f. Please refer to parts c-d.
g. The acquisition of Farmington Water and Wastewater assets is anticipated to close in Q2 2024.
h. Please refer to part b.
i-j. Please refer to Volume 06 - Filing Requirements I-V, page 52 for Farmington Water customer counts and utility sales and page 53 for Farmington Wastewater customer counts and utility sales.
k. The Company filed an application for acquisition of Farmington Township Water and Wastewater assets on August 28, 2023. An order approving or denying this acquisition has not yet been issued by the Commission.
l. Please see the response to part k. The Company therefore does not have any accounting entries related to the closing of this acquisition at this time.

m. Please refer to Volume 03, Exhibit No. 3-A, page 25-43 and Volume 05, Exhibit No. 3-C, pages 74-75 for supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for the acquisition of the Farmington Water system. Please refer to Volume 03, Exhibit No. 3-A, pages 96-108 and Volume 05, Exhibit No. 3-C, pages 74 and 76 for supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for the acquisition the Farmington Wastewater assets.

n-o. Please refer to OCA 12-010_Attachment 1 for the requested cost incurred through October 2023 YTD.

p. There are no affiliated service company charges to PAWC to date related to this acquisition.

q. Please refer to OCA 12-010_Attachment 2.

r-t. Please refer to OCA 12-010_Attachment 3.

u-v. PAWC's allocation of costs between PAWC's water and wastewater utility operations is affected by the number of customers for each respective operation. Acquisitions will result in a new proportioned allocation of cost based on the new level of customers. Please refer to Volume 08 - Statements Nos. 1-9, PAWC Statement No. 4, Schedule SDG-1, Page 1. Factor 1 has the allocations percentages as of 06/30/2023 and Factor 2 has the allocation percentages as of 06/30/2025 including the acquisitions reflected in the filing.

w. The Company has provided all information relevant to the calculated revenue requirement for the Farmington water and wastewater system acquisition.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 12

OCA 12-012

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of Audubon Water Company (water)

For purposes of PAWC's historic test year (HTY), future test year (FTY), and fully projected future test year (FPFTY) utility revenue requirement presentations in its current rate case, concerning the impact on such revenue requirements for the acquisition of Audubon Water Company by PAWC, please provide the following information:

a. The amounts of rate base for acquired plant, by account, reflected by PAWC in its HTY, FTY and FPFTY rate base related to this acquisition.
b. The amounts of rate base for new utility plant for, relating to, or caused by the Audubon system (assuming post-acquisition), by account, reflected by PAWC in its HTY, FTY and FPFTY.
c. The amounts of operating expenses, by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses relating to this acquisition.
d. The amounts of other taxes expenses (such as but not limited to property taxes), by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses for this acquisition.
e. The amounts of revenues by account, reflected by PAWC in its HTY, FTY and FPFTY revenues related to this acquisition.
f. The amounts of any other costs related to this acquisition, by account, that have been reflected by PAWC in its HTY, FTY and FPFTY utility revenue requirement calculations.
g. The date that PAWC assumed this acquisition transaction would be closed.
h. Detailed listings of all projected utility plant additions, by account, that PAWC has assumed would occur, by month, after PAWC's assumed acquisition closing date.
i. The number of customers by type by month that PAWC has reflected for this acquisition.
j. The quantities of utility sales by type by month that PAWC has reflected for this acquisition.
k. A citation to, and copy of, the Commission Order approving or denying this acquisition.
l. A complete copy of all accounting entries related to closing this acquisition.
m. All supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n. A detailed itemization of all legal expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
o. A detailed itemization of all consulting expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
p. A detailed itemization of all affiliated service company charges to PAWC to date, by amount and account, related to this acquisition.

q. A copy of each legal and consulting expense invoice to PAWC over $5,000 related to this acquisition.
r. The number of work force positions that PAWC expects to acquire from this acquisition, including job titles for each position.
s. The amounts of salary and wages for each workforce position that PAWC expects to acquire from this acquisition.
t. The amounts for employee benefits for each workforce position that PAWC expects to acquire from this acquisition.
u. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, PAWC's allocation of costs between PAWC's water and wastewater utility operations.
v. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, the allocation and charging of costs to PAWC from the affiliate American Water Works Service Company.
w. Any and all additional information that PAWC believes should be considered in determining the impact on PAWC's calculated HTY, FTY and FPFTY utility revenue requirements from this acquisition.

Response:

a. Please refer to Volume 03, Exhibit No. 3-A, page 26.
b. The rate base claims in this case do not include any post-acquisition capital investment for the Audubon Water acquisition in this case.
c-d. Audubon Water costs are included in the total PAWC Water Operations in Volume 03, Exhibit No. 3-A, page 44-47 and on page 1, lines 6-19. For specific incremental expenses related to Audubon, please refer to Volume 04, Exhibit No. 3-B, page 304.
e. The revenue adjustment for the Audubon Water acquisition is included in Water Operations in Volume 03, Exhibit No. 3-A, page 4, line 14 and page 22.
f. Please refer to parts c-d.
g. The acquisition of the Audubon Water Company system is anticipated to close in Q4 2024.
h. Please refer to part b.
i-j. Please refer to Volume 06 - Filing Requirements I-V, pages 50-51 for Audubon customer counts and utility sales.
k. The Company filed an application for acquisition of the Audubon Water Company on September 21, 2023. An order approving or denying this acquisition has not yet been issued by the Commission.
l. Please see the response to part k. The Company therefore does not have any accounting entries related to the closing of this acquisition at this time.
m. Please refer to Volume 03, Exhibit No. 3-A, page 25-43 and Volume 05, Exhibit No. 3-C, pages 77-78 for supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n. Please refer to OCA 12-012_Attachment 1 for the requested costs incurred through October 2023 YTD.

o-p. There are no consulting expenses or affiliated service company charges to PAWC to date related to this acquisition.

q. PAWC has not received any legal or consulting expense invoice to over $5,000 to date related to this acquisition.

r-t. Please refer to OCA 12-012_Attachment 2.

u-v. PAWC's allocation of costs between PAWC's water and wastewater utility operations is affected by the number of customers for each respective operation. Acquisitions will result in a new proportioned allocation of cost based on the new level of customers. Please refer to Volume 08 - Statements Nos. 1-9, PAWC Statement No. 4, Schedule SDG-1, Page 1. Factor 1 has the allocations percentages as of 06/30/2023 and Factor 2 has the allocation percentages as of 06/30/2025 including the acquisitions reflected in the filing.

w. The Company has provided all information relevant to the calculated revenue requirement for the Audubon water system acquisition.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)
I&E RE-021-D_Attachment

Pennsylvania-American Water Company
Annualized Performance Plan

	Actual			Projected	
	6/30/2021	6/30/2022	6/30/2023	6/30/2024	6/30/2025
Water Operations					
Non-Collective Bargaining Unit Salary	$3,031,385	$3,612,725	$4,800,113	$5,493,746	$5,669,121
Collective Bargaining Unit	1,075,123	1,029,163	1,292,065	1,168,524	1,198,064
Non-Collective Bargaining Unit Hourly	924,681	890,994	1,144,346	1,149,248	1,185,929
Total	$5,031,188	$5,532,881	$7,236,524	$7,811,518	$8,053,114
Wastewater SSS General Operations					
Non-Collective Bargaining Unit Salary	49,708	68,837	122,461	135,641	139,969
Collective Bargaining Unit	-	-	21,703	39,497	40,597
Non-Collective Bargaining Unit Hourly	150,925	151,219	204,205	201,069	207,487
Total	$200,633	$220,056	$348,368	$376,207	$388,053
Wastewater CSS Operations					
Non-Collective Bargaining Unit Salary	$128,421	$116,423	$148,990	$141,432	$145,944
Collective Bargaining Unit	160,479	157,922	194,620	170,149	173,823
Non-Collective Bargaining Unit Hourly	7,913	7,698	9,472	4,348	4,487
Total	$296,813	$282,043	$353,082	$315,929	$324,254

Pennsylvania-American Water Company
Base Payroll Dollars

	Actual			Projected	
	6/30/2021	6/30/2022	6/30/2023	6/30/2024	6/30/2025
Water Operations					
Non-Collective Bargaining Unit Salary	$22,442,606	$26,564,948	$28,346,940	$31,136,290	$32,130,322
Collective Bargaining Unit	35,158,182	36,175,936	36,324,539	38,950,095	39,934,441
Non-Collective Bargaining Unit Hourly	13,092,324	12,968,234	13,905,120	15,542,905	16,039,097
Total	$70,693,112	$75,709,119	$78,576,599	$85,629,290	$88,103,860
Wastewater SSS General Operations					
Non-Collective Bargaining Unit Salary	488,536	591,327	964,797	1,099,800	1,134,910
Collective Bargaining Unit	-	-	1,079,663	1,316,421	1,353,170
Non-Collective Bargaining Unit Hourly	2,146,652	2,314,652	2,607,787	2,872,420	2,964,083
Total	$2,635,188	$2,905,979	$4,652,247	$5,288,641	$5,452,164
Wastewater CSS Operations					
Non-Collective Bargaining Unit Salary	$963,990	$918,096	$952,647	$1,097,034	$1,132,061
Collective Bargaining Unit	5,163,666	5,405,018	5,525,579	5,671,238	5,794,284
Non-Collective Bargaining Unit Hourly	108,388	111,979	174,807	62,118	64,102
Total	$6,236,043	$6,435,093	$6,653,033	$6,830,390	$6,990,446

Pennsylvania American Water Company **I&E RE-D-028-D_Attachment**
Case Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)

	June 30, 2021			
	Gross Amount	Capital Rate	Capitalized Service Costs	Pro forma Expense
Pension Cost - Service Costs	$5,717,844	37.60%	$2,150,109	$3,567,735
Pension Cost - Non-Service Costs	(4,278,060)			(4,278,060)
Pension Cost - ASC 715 (FAS 87) Accrual	$1,439,784			($710,325)
PAWC Amortization of Deferred Pension Liability				($1,479,089)
Service Company Amortization of Deferred Pension Liability				(479,329)
Total Amortization of Deferred Pension Liability				($1,958,418)
Total Pro Forma Pension Expense				($2,668,743)

	June 30, 2022			
	Gross Amount	Capital Rate	Capitalized Service Costs	Pro forma Expense
Pension Cost - Service Costs	$5,745,318	37.63%	$2,162,134	$3,583,184
Pension Cost - Non-Service Costs	(7,186,290)			(7,186,290)
Pension Cost - ASC 715 (FAS 87) Accrual	($1,440,972)			($3,603,106)
PAWC Amortization of Deferred Pension Liability				($1,479,089)
Service Company Amortization of Deferred Pension Liability				(479,329)
Total Amortization of Deferred Pension Liability				($1,958,418)
Total Pro Forma Pension Expense				($5,561,524)

	June 30, 2023			
	Gross Amount	Capital Rate	Capitalized Service Costs	Pro forma Expense
Pension Cost - Service Costs	$4,322,298	40.29%	$1,741,308	$2,580,990
Pension Cost - Non-Service Costs	(3,794,514)			(3,794,514)
Pension Cost - ASC 715 (FAS 87) Accrual	$527,784			($1,213,524)
PAWC Amortization of Deferred Pension Liability				($1,479,089)
Service Company Amortization of Deferred Pension Liability				(479,329)
Total Amortization of Deferred Pension Liability				($1,958,418)
Total Pro Forma Pension Expense				($3,171,942)

Pennsylvania-American Water Company **I&E RE-027-D_Attachment**
Case No. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)
Other Post Employment Benefits (OPEB)

	06/30/2021 Per Books
OPEB Cost - Service Costs	$921,252
Retiree Medical VEBA	243,872
Subtotal	1,165,124
OPEB Cost - Service Costs and Retiree Medical VEBA Capitalized	(509,230)
OPEB Cost - Non-Service Costs	(8,937,186)
OPEB Cost - ASC 715 (FAS 106) and Retiree VEBA Medical	($8,281,291)

	06/30/2022 Per Books
OPEB Cost - Service Costs	$844,216
Retiree Medical VEBA	233,058
Subtotal	1,077,274
OPEB Cost - Service Costs and Retiree Medical VEBA Capitalized	(434,811)
OPEB Cost - Non-Service Costs	(9,520,332)
OPEB Cost - ASC 715 (FAS 106) and Retiree VEBA Medical	($8,877,869)

	06/30/2023 Per Books
OPEB Cost - Service Costs	$691,584
Retiree Medical VEBA	293,534
Subtotal	985,118
OPEB Cost - Service Costs and Retiree Medical VEBA Capitalized	(412,413)
OPEB Cost - Non-Service Costs	(7,895,802)
OPEB Cost - ASC 715 (FAS 106) and Retiree VEBA Medical	($7,323,097)

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Bureau of Investigation and Enforcement

I&E RE-059-D

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Reference PAWC Exhibit 3-A, p. 64 and PAWC Exhibit 3-B p. 326 concerning credit card and Echeck transactions for Water Operations, reconcile the $57,480 in the FTY and $5,787 in the FPFTY shown in Exhibit 3-A with the ($124,416) in the FTY and $4,945 in the FPFTY shown in Exhibit 3-B.

Response:

For Water Operations, the ($124,416) and $4,945 amounts shown on PAWC Exhibit 3-B p.326 are the correct allocated adjustment amounts of credit card and E-check transactions. The adjustment amounts of $57,480 and $5,787 shown on PAWC Exhibit 3-A, p. 64 are incorrect. They represent the total company adjustments rather than Water Operations. The adjustment amounts for Water Operations will be updated through the rebuttal phase of the proceeding. The allocated adjustment amounts are shown below.

	Base Yr	2024 Adjustment	12 Mos Jun 2024	2025 Adjustment	12 Mos Jun 2025
Water Operations	$1,665,018	(124,416)	$1,540,602	$4,945	$1,545,547
Wastewater SSS General Operations	$52,049	73,615	$125,664	$403	$126,067
Brentwood WW	$0	8,834	$8,834	$28	$8,863
BASA WW	$0	32,994	$32,994	$106	$33,099
Wastewater CSS Operations	$28,381	66,453	$94,834	$304	$95,138
Total	$1,745,448	$57,480	$1,802,928	$5,787	$1,808,715

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 10

OCA 10-014

Responsible Witness: Cas Swiz, Senior Director of Rates and Regulatory

Question:

Based on PAWC's current projections for expenses incurred and capital investment placed in service on and after July 1, 2025 through June 30, 2027, please provide a schedule showing:

a. The projected water ECIC rates for the eight quarters beginning November 1, 2025, assuming that new base rates do not go into effect and the charge is not reset due to overearning. Please provide all documentation and calculations supporting the Company's response.
b. The projected quarterly water ECIC revenues for the eight quarters beginning November 1, 2025 shown in dollars and as a percentage of projected total water revenues for the same quarters. Please provide supporting calculations in native format with all formula intact.
c. The projected wastewater ECIC rates for the eight quarters beginning November 1, 2025, assuming that new base rates do not go into effect and the charge is not reset due to overearning. Please provide all documentation and calculations supporting the Company's response.
d. The projected quarterly wastewater ECIC revenues for the eight quarters beginning November 1, 2025 shown in dollars and as a percentage of projected total wastewater revenues for the same quarters. Please provide supporting calculations in native format with all formula intact.

Response:

a.-d. PAWC does not have a projection for the requested information. As noted within PAWC Statement No. 8, page 25, lines 10-22 through page 26, lines 1-21, the ECIC requires that the Environmental Plan (as defined in the proposed ECIC Tariff) be approved by the Commission before inclusion in the ECIC. At such time as the Company submits for approval before the Commission an Environmental Plan eligible for ECIC recovery, the requested amounts will be projected.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Bureau of Investigation and Enforcement

I&E RE-046-D

Responsible Witness: Cas Swiz, Senior Director of Rates and Regulatory

Question:

Reference PAWC Exhibit JCS-1, Question 8, concerning the proposed Environmental Compliance Investment Charge, explain how large expenditures flowing through customer bills with minimal delay will add to any rate stability principals, given that PAWC is indicating unknown amounts of rate base and O&M-related expenditures.

Response:

The Company disagrees with the claim that it is indicating "unknown amounts of rate base and O&M-related expenditures." As noted within the ECIC tariff, the Company will submit an Environmental Plan to the Commission that will detail the specific projects, estimates, timing, and justification. The Company is not proposing to include any investments or O&M expenditures in the ECIC as part of this rate case, but rather to establish the mechanism and methodology.

The proposed ECIC will provide gradual changes to customer rates and bills. If ECIC-eligible investment costs are first included in customers' rates through a base rate case, the increase in customers' bills upon approval of the base rate case will be larger than if ECIC-eligible investment costs have been gradually incorporated into rates through the ECIC tariff in the period before the rate case. Moreover, the required investments necessary to comply with Environmental Laws (as defined in the ECIC tariff) would become significant drivers of both the timing and magnitude of future rate cases absent the approval of the ECIC.

I&E Modified - PAWC Exhibit No. 3-A, p. 31

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for water service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months ended June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2025.

The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2023				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	$752,093,381	$814,253,947	$810,059,803	$824,117,186
9	Lag Days	50.6	50.6	50.6	50.6
10	Dollar Days	$38,063,444,538	$41,209,390,662	$40,997,125,042	$41,708,569,168
11	Total Billed Revenue	$752,093,381	$814,253,947	$810,059,803	$824,117,186
12	Total Dollar Days	$38,063,444,538	$41,209,390,662	$40,997,125,042	$41,708,569,168
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	50.6	50.6	50.6	50.6
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	15.2	15.0	16.1	16.8
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	35.4	35.6	34.5	33.8
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		$219,851,712	$240,502,390	$238,469,356
20	Operating Expenses Per Day (Line 20 / 365 Days)		602,333	658,911	653,341
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		$21,443,055	$22,732,430	$22,082,926

Witness: Stacey D. Gress

I&E Modified - PAWC Exhibit No. 3-A, p. 101

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for wastewater service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months ended June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2025.

The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 06/30/23 AMOUNT	PRESENT RATES 06/30/24 AMOUNT	PRESENT RATES 06/30/25 AMOUNT
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2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	$69,272,386	$83,258,471	$95,165,465	$95,470,867
9	Lag Days	50.6	50.6	50.6	50.6
10	Dollar Days	$3,505,875,320	$4,213,711,054	$4,816,323,997	$4,831,780,392
11	Total Billed Revenue	$69,272,386	$83,258,471	$95,165,465	$95,470,867
12	Total Dollar Days	$3,505,875,320	$4,213,711,054	$4,816,323,997	$4,831,780,392
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	50.6	50.6	50.6	50.6
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	25.8	25.7	18.6	18.2
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	24.8	24.9	32.0	32.4
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		$18,994,003	$22,472,928	$24,773,331
20	Operating Expenses Per Day (Line 20 / 365 Days)		52,038	61,570	67,872
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		$1,295,746	$1,970,240	$2,199,053

Witness: Stacey D. Gress

I&E Statement No. 1-R
Witness: Vanessa Okum

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2023-3043189 (Water)

and

Docket No. R-2023-3043190 (Wastewater)

Rebuttal Testimony

of

Vanessa Okum

Bureau of Investigation and Enforcement

Concerning:

LOW INCOME PROGRAMS

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RESPONSE TO OCA WITNESS ROGER COLTON **4**

INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Vanessa Okum. My business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

Q. IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am employed as a Fixed Utility Financial Analyst in the Pennsylvania Public Utility Commission's (Commission) Bureau of Investigation and Enforcement (I&E).

Q. ARE YOU THE SAME VANESSA OKUM WHO SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. I submitted I&E Statement No. 1 Proprietary and I&E Exhibit No. 1 Proprietary.

Q. DOES YOUR REBUTTAL TESTIMONY INCLUDE AN ACCOMPANYING EXHIBIT?

A. No.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to respond to the direct testimony of the following witnesses from the Coalition for Affordable Utility Services and Energy

Efficiency in Pennsylvania (CAUSE-PA) and the Office of Consumer Advocate (OCA):

- Harry S. Geller, Esq. – CAUSE-PA Statement No. 1 regarding Pennsylvania-American Water Company's (PAWC or the Company) Hardship Fund and the development of a comprehensive conservation and line repair/replace program for low-income customers.
- Roger Colton – OCA Statement No. 5 CONFIDENTIAL regarding the development of a "universal service plan."

RESPONSE TO CAUSE-PA WITNESS HARRY GELLER

Q. WHAT RECOMMENDATIONS DOES MR. GELLER PRESENT REGARDING THE COMPANY'S HARDSHIP FUND?

A. First, Mr. Geller recommends the Company increase annual hardship funding by $1 million over the existing funding levels, with unspent funds being rolled over and added to the budget for the following year. Second, he recommends eliminating any upfront or "good faith" payment requirements to be eligible for participation in the Hardship Fund, with immediate communication of this fact through all customer-facing information sources. Third, he recommends an increase in the maximum amount of annual hardship funding per customer from

$500 to $600 for water and wastewater accounts.[1]

Mr. Geller also notes in his testimony that the Company's low-income assistance programs, including the Hardship Fund, are woefully undersubscribed and that an effort should be made through education, outreach, and screening to increase participation in these programs.[2]

Q. DO YOU HAVE ANY CONCERNS ABOUT MR. GELLER'S RECOMMENDATIONS REGARDING THE HARDSHIP FUND?

A. Yes. Although I do not argue against Mr. Geller's recommendation to increase funding for hardship grants, he does not explicitly state how his proposed $1 million increase is to be funded. As the current program for hardship grants is entirely funded by shareholders and not recovered from ratepayers,[3] I believe this should continue and recommend that any increase to funding of hardship grants continue to be funded entirely by shareholders and not recovered from ratepayers.

Q. PLEASE SUMMARIZE MR. GELLER'S RECOMMENDATIONS REGARDING CONSERVATION AND LINE REPAIR/REPLACE ASSISTANCE FOR LOW INCOME CUSTOMERS.

A. Mr. Geller recommends the Company develop and implement a comprehensive conservation and line repair/replacement program to be available to all customers

[1] CAUSE-PA Statement No. 1, pp. 52-53.
[2] CAUSE-PA Statement No. 1, pp. 53-59.
[3] PAWC Statement No. 1, pp. 12-13.

at or below 200% of the federal poverty level. He further stipulates that the Company should be required to work with its customer assistance advisory group to develop this program no later than six months after the final order in this proceeding.

Q. DO YOU HAVE ANY CONCERNS ABOUT MR. GELLER'S RECOMMENDATIONS REGARDING THIS PROGRAM?

A. Yes. Mr. Geller does not explicitly state how this program should be funded, nor does he present any type of budget or cap for this proposal.

Q. WHAT DO YOU RECOMMEND?

A. I recommend that, if explored and ultimately developed, this program should be funded entirely by shareholders and not recovered from ratepayers. As the program focuses on water conservation efforts inside customers' homes and assistance in repairing or replacing service lines on customers' property, it would be inappropriate to add this expense to the rates of customers not participating in the program given the Company's ever-increasing utility bills.

<u>RESPONSE TO OCA WITNESS ROGER COLTON</u>

Q. PLEASE SUMMARIZE MR. COLTON'S RECOMMENDATION FOR A WRITTEN UNIVERSAL SERVICE PLAN.

A. Mr. Colton recommends a "universal service plan" that includes not only a

description of each low-income program component offered by PAWC, but also identifies: (1) the objectives of each component; (2) the metrics by which each component will be measured; (3) the manner in which the components interact with each other; (4) the evaluation process of program metrics including proposed remedies if metrics are not met; (5) qualifications for each component; (6) proposed means of outreach and intake; (7) current and projected participation levels; and (8) expected annual budgets. He explains that this plan should be filed with the Commission's Bureau of Consumer Services (BCS) and should be subject to review and comment by BCS and other stakeholders who choose to be involved.[4]

Mr. Colton also points out that, beyond any formal requirement for a written universal service plan to be filed with the Commission, the Company does not even have an internal document or process that addresses the issues identified above.

Q. DO YOU HAVE ANY CONCERNS WITH MR. COLTON'S RECOMMENDATION?

A. Yes. Currently, Commission regulations requiring utilities to develop such plans apply only to electric and natural gas utilities.[5] If the Commission chooses to require water and wastewater utilities to file such plans with BCS on a periodic

[4] OCA Statement No. 5, p. 67.
[5] 52 Pa. Code § 69.261.

basis, it should issue guidance statewide rather than impose a singular requirement for PAWC. Furthermore, PAWC's low-income benefits flow through base rates, and even if the Commission were to approve OCA's recommendation to have periodic reports filed with BCS and reviewed/discussed by interested parties, there would be no avenue in that forum to make any changes to base rate items.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

I&E Exhibit No. 1-SR
Witness: Vanessa Okum

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2023-3043189 (Water)

and

Docket No. R-2023-3043190 (Wastewater)

Exhibit to Accompany

the

Surrebuttal Testimony

of

Vanessa Okum

Bureau of Investigation and Enforcement

Concerning:
PENSION, OPEB, AND PRODUCTION EXPENSE TRACKERS,
OPERATING AND MAINTENANCE EXPENSES,
ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE,
CASH WORKING CAPITAL

I&E Modified - PAWC Exhibit No. 3-A Revised, p. 31R

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for water service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months ended June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2025.

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16	Average Lag Between Payment Of Operating					
17	Expenses And Receipt Of Revenues	35.4	35.7	34.5	33.8	
18	Working Capital Requirements					
19	Annual Operating Expenses (Including Payroll Expenses)		$219,728,462	$239,508,832	$238,258,749	*
20	Operating Expenses Per Day (Line 20 / 365 Days)		601,996	656,189	652,764	*
21	Cash Working Capital Required					
22	(Line 17 * Line 20)		$21,491,257	$22,638,521	$22,063,423	*

Witness: Stacey D. Gress

* I&E Modified Cell

I&E Modified - PAWC Exhibit No. 3-A Revised, p. 101R

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

Charges for wastewater service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months ended June 30, 2023 and as annualized under present rates for the twelve months ending June 30, 2024 and June 30, 2025.

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17	Expenses And Receipt Of Revenues	24.8	24.9	32.0	32.4	
18	Working Capital Requirements					
19	Annual Operating Expenses (Including Payroll Expenses)		$18,994,003	$22,512,374	$24,833,595	*
20	Operating Expenses Per Day (Line 20 / 365 Days)		52,038	61,678	68,037	*
21	Cash Working Capital Required					
22	(Line 17 * Line 20)		$1,295,746	$1,973,696	$2,204,399	*

Witness: Stacey D. Gress

* I&E Modified Cell

I&E Statement No. 2
Witness: D. C. Patel
PROPRIETARY

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2023-3043189 (Water)
&
Docket No. R-2023-3043190 (Wastewater)

Direct Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

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INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is D. C. Patel, and my business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission (Commission) in the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility Financial Analyst.

Q. WHAT IS YOUR EDUCATION AND PROFESSIONAL EXPERIENCE?

A. My educational and professional experience is set forth in Appendix A, which is attached.

Q. PLEASE DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS.

A. I&E is responsible for representing the public interest in rate and other proceedings before the Commission. I&E's analysis in this proceeding is based on its responsibility to represent the public interest. This responsibility requires balancing the interests of ratepayers, the utility company, and the regulated community as a whole.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my direct testimony is to address the rate of return, including capital structure, cost of long-term debt, the cost of equity, and the overall fair rate of return for the water and wastewater operations of Pennsylvania-American Water Company (PAWC or Company) for the fully projected future test year (FPFTY) ending June 30, 2025.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. I&E Exhibit No. 2 contains schedules that support my direct testimony.

BACKGROUND

Q. WHAT IS THE GENERAL DEFINITION OF RATE OF RETURN IN THE CONTEXT OF A RATE CASE?

A. Rate of return is one of the components of the revenue requirement formula. Rate of return is the amount of revenue an investment generates in the form of net income and is usually expressed as a percentage of the amount of capital invested over a given period of time.

Q. WHAT IS THE REVENUE REQUIREMENT FORMULA?

A. The revenue requirement formula used in base rate cases is as follows:

$$RR = E + D + T + (RB \times ROR)$$

Where:

RR = Revenue Requirement

E = Operating Expenses

D = Depreciation Expense

T = Taxes

RB = Rate Base

ROR = Overall Rate of Return

In the above formula, the rate of return is expressed as a percentage. The calculation of that percentage is independent of the determination of the appropriate rate base value for ratemaking purposes. As such, the appropriate total dollar return is dependent upon the proper computation of the rate of return and the proper valuation of the Company's rate base.

Q. WHAT CONSTITUTES A FAIR AND REASONABLE OVERALL RATE OF RETURN?

A. A fair and reasonable overall rate of return is one that will allow the utility an opportunity to recover those costs prudently incurred by all classes of capital used to finance the rate base during the prospective period in which its rates will be in effect.

The *Bluefield Water Works & Improvements Co. v. Public Service Comm. of West Virginia,* 262 U.S. 679, 692-93 (1923), and the *Federal Power Commission et al v. Hope Natural Gas Co.,* 320 U.S. 591, 603 (1944) cases set forth the principles that are generally accepted by regulators throughout the

country as the appropriate criteria for measuring a fair rate of return:

1. A utility is entitled to a return similar to that being earned by other enterprises with corresponding risks and uncertainties, but not as high as those earned by highly profitable or speculative ventures.
2. A utility is entitled to a return level reasonably sufficient to assure financial soundness.
3. A utility is entitled to a return sufficient to maintain and support its credit and raise necessary capital.
4. A fair return can change (increase or decrease) along with economic conditions and capital markets.

Q. EXPLAIN HOW THE OVERALL RATE OF RETURN IS TRADITIONALLY CALCULATED IN BASE RATE PROCEEDINGS.

A. In base rate proceedings, the overall rate of return is traditionally calculated using the weighted average cost of capital method. To calculate the weighted average cost of capital, a company's capital structure must first be determined by comparing the percentage of each capitalization component, which has a financed rate base, to total capital. Next, the effective cost rate of each capital structure component must be determined. The historical component of the cost rate of debt can be computed accurately, and any future debt issuances are based on estimates. The cost rate of common equity is not fixed and is more difficult to measure. Because of this difficulty, a proxy group is used as discussed later in this

testimony. Then, each capital structure component percentage is multiplied by its corresponding effective cost rate to determine the weighted capital component cost rate. The table in the *"I&E Position"* section below demonstrates the interaction of each capital structure component and its corresponding effective cost rate. Finally, the sum of the weighted cost rates produces the overall rate of return. This overall rate of return is multiplied by the rate base to determine the return portion of a company's revenue requirement.

COMPANY'S RATE OF RETURN CLAIM

Q. WHO IS THE COMPANY'S RATE OF RETURN WITNESS IN THIS PROCEEDING?

A. Ann E. Bulkley, Principal of the Brattle Group, is the primary witness addressing the rate of return (PAWC Statement No. 13). Throughout her direct testimony, Ms. Bulkley provides her analysis for the claimed capital structure, long-term debt, preferred stock, and cost of common equity for PAWC Water and Wastewater Operations.

Q. PLEASE SUMMARIZE MS. BULKLEY'S RECOMMENDATIONS FOR THE COMPANY'S RATE OF RETURN CLAIM.

A. Ms. Bulkley recommends the following rates of return for the Company based on the FPFTY ending June 30, 2025 (PAWC Exhibit No. 13-A, Schedule 12 and 13):

PENNSYLVANIA-AMERICAN WATER COMPANY **Summary of Cost of Capital** Pennsylvania-American Water Company - Water Operations			
Type of Capital	**Ratio**	**Cost Rate**	**Weighted Cost Rate**
Long-Term Debt	44.01%	4.76%	2.09%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	55.99%	10.95%	6.13%
Total	**100.00%**		**8.22%**

PENNSYLVANIA-AMERICAN WATER COMPANY **Summary of Cost of Capital** Pennsylvania-American Water Company - Wastewater Operations			
Type of Capital	**Ratio**	**Cost Rate**	**Weighted Cost Rate**
Long-Term Debt	42.73%	4.76%	2.03%
Wastewater Specific Debt	4.40%	2.62%	0.12%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	52.87%	10.95%	5.79%
Total	**100.00%**		**7.94%**

I&E POSITION

Q. PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS FOR THE COMPANY.

A. I recommend the following rates of return for the Company (I&E Exhibit No. 2, Schedule 1):

I&E Summary of Cost of Capital Pennsylvania-American Water Company - Water Operations			
Type of Capital	**Ratio**	**Cost Rate**	**Weighted Cost Rate**
Long-Term Debt	44.01%	4.76%	2.09%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	55.99%	8.45%	4.73%
Total	**100.00%**		**6.82%**

I&E Summary of Cost of Capital Pennsylvania-American Water Company - Wastewater Operations			
Type of Capital	**Ratio**	**Cost Rate**	**Weighted Cost Rate**
Long-Term Debt	42.73%	4.76%	2.03%
Wastewater Specific Debt	4.40%	2.62%	0.12%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	52.87%	8.45%	4.47%
Total	**100.00%**		**6.62%**

PROXY GROUP

Q. WHAT IS A PROXY GROUP AS USED IN BASE RATE CASES?

A. A proxy group is a set of companies that have similar traits as compared to the subject utility. This group of companies acts as a benchmark for determining the subject utility's rate of return in a base rate case.

Q. WHAT ARE THE REASONS FOR USING A PROXY GROUP?

A. A proxy group's cost of equity is used as a benchmark to satisfy the long-

established guideline of utility regulation that seeks to provide the subject utility with the opportunity to earn a return similar to that of enterprises with corresponding risks and uncertainties.

A proxy group is typically utilized since the use of data exclusively from one company may be less reliable. The lower reliability occurs because the data for one company may be subject to events that can cause short-term anomalies in the marketplace. The rate of return on common equity for a single company could become distorted in these circumstances and would therefore not be representative of similarly situated companies. Therefore, a proxy group has the effect of smoothing out potential anomalies associated with a single company.

Q. DID YOU REQUIRE THAT THE COMPANIES IN YOUR PROXY GROUP EXCLUSIVELY PROVIDE WATER OR WASTEWATER SERVICE?

A. No. Few, if any, publicly held 'wastewater-only' companies exist because most water companies have diversified their businesses to include wastewater operations. Accordingly, this type of criterion produces an insufficient sample of companies for my proxy group, adversely affecting the calculation of a fair rate of return for the subject utility. Further, Value Line does not offer a standalone wastewater utilities industry category as an option. Therefore, my proxy group began with a search of the regulated water utility companies.

Q. WHAT CRITERIA DID YOU USE IN SELECTING YOUR WATER UTILITY PROXY GROUP?

A. The criteria for my proxy group was designed to select companies that are representative of PAWC. I applied the following criteria to Value Line's "Water Utility" company group:

1. Fifty percent or more of the company's revenues must be generated from the regulated water utility industry.
2. The company's stock must be publicly traded.
3. Investment information for the company must be available from more than one source, which includes Value Line.
4. The company must not be currently involved in an announced merger or the target of an acquisition.
5. The company must have four consecutive years of historic earnings data.

Q. WHAT CRITERIA DID MS. BULKLEY USE IN SELECTING THE COMPANIES THAT FORMULATE HER COMBINED UTILITY PROXY GROUP (GAS, ELECTRIC, AND WATER)?

A. Ms. Bulkley implemented the following criteria to both Value Line's "Water Utility" and "Natural Gas Distribution Utility" companies to formulate her proxy group (PAWC Statement No. 13, p. 25, lines 4-16):

1. Pay consistent quarterly cash dividends because companies that do

not cannot be analyzed using the Constant Growth DCF model.

2. Have investment grade long-term issuer ratings from S&P and/or Moody's.

3. Are covered by at least two utility industry analysts.

4. Have positive long-term earnings growth forecasts from at least two utility industry equity analysts.

5. Derive more than 70% of their total operating income from regulated operations.

6. Were not parties to a merger or transformative transaction during the analytical periods relied on.

Further, Ms. Bulkley considered the thirty-six companies contained in Value Line's three "Electric Utility" groups. She applied the criteria listed above, as well as the following two additional criteria (PAWC Statement No. 13, p. 25, lines 19-21 and p. 26 lines 1-7):

1. Have owned electric generation comprising less than 10% of the Company's MWh sales to ultimate customers to ensure that the electric utilities included did not own a substantial amount of generation, and therefore, had operations that were primarily transmission and distribution.

2. Own water operations.

Q. WHAT PROXY GROUP DID YOU USE IN YOUR ANALYSIS?

A. I included the following five companies in my proxy group:

Company	Stock Ticker
American Water Works Company, Inc.	AWK
American States Water Company	AWR
California Water Service Group	CWT
Middlesex Water Company	MSEX
SJW Group	SJW

Q. WHAT PROXY GROUP DID MS. BULKLEY USE IN HER ANALYSIS?

A. Ms. Bulkley's combined proxy group consists of the following eleven companies (PAWC Statement No. 13, p. 26, ln. 15):

Company	Stock Ticker
American States Water Company	AWR
Atmos Energy Corporation	ATO
California Water Service Group	CWT
Essential Utilities, Inc.	WTRG
Eversource Energy	ES
Middlesex Water Company	MSEX
NiSource, Inc.	NI
Northwest Natural Gas Company	NWN
ONE Gas, Inc.	OGS
SJW Group	SJW
Spire, Inc.	SR

Q. DO YOU AGREE WITH MS. BULKLEY'S COMBINED PROXY GROUP?

A. No. While Ms. Bulkley's proxy group includes four of the five water utility companies of my proxy group, I have included one company that she does not include. Specifically, Ms. Bulkley excludes PAWC's parent company, American Water Works Company (AWK). Additionally, I have not considered all the natural gas and electric utility companies, which she includes in her combined proxy group for the determination of a return on equity (ROE).

Q. WHY DOES MS. BULKLEY EXCLUDE AMERICAN WATER WORKS COMPANY FROM HER PROXY GROUP?

A. Ms. Bulkley excludes PAWC's parent company, AWK, simply because she claims it is her general practice to exclude the subject company or its parent holding company from her proxy group (PAWC Statement No. 13, p. 26, lines 9-11).

Q. DO YOU BELIEVE IT IS NECESSARY TO EXCLUDE AMERICAN WATER WORKS COMPANY AS A COMPARABLE COMPANY IN THIS PROCEEDING?

A. No. While I cannot opine on Ms. Bulkley's "general practice," I also do not see any valid reason or basis for the exclusion of AWK. In my view, inclusion of AWK's vast operations across many states and numerous divisions eliminates the potential for circularity as opposed to if only PAWC itself was included in the proxy group.

Q. WHAT IS THE BASIS OF MS. BULKLEY'S INCLUSION OF GAS AND ELECTRIC COMPANIES IN HER PROXY GROUP?

A. First, Ms. Bulkley states that there are a small number of water companies available for inclusion in the proxy group, and therefore, she has considered electric utilities and natural gas distribution companies that meet her screening criteria (PAWC Statement No. 13, p. 27, lines 6-8). Second, she asserts that the electric utilities and natural gas distribution companies included in her proxy group generate a large portion (more than 70%) of their operating income from regulated operations (gas or electric) similar to PAWC (water and wastewater operations) and the water utilities that are included in her proxy group (PAWC Statement No. 19, p. 27, lines 16-19). Lastly, she believes that all the proxy companies used in her analyses possess a set of operating and financial risk characteristics that are substantially comparable to PAWC, and therefore, provide a reasonable basis for deriving the appropriate ROE (PAWC Statement No. 13, p. 24, lines 9-12).

Q. PLEASE EXPLAIN WHY YOU DID NOT INCLUDE THE NATURAL GAS AND ELECTRIC DISTRIBUTION COMPANIES IN YOUR PROXY GROUP THAT MS. BULKLEY INCLUDED.

A. Companies within the water industry are similarly situated utilities and have a much better representation of the financial and operational risks faced by PAWC. The five companies used in my water utility proxy group are a fair and appropriate

representation of regulated water industry. Ideally, it is better to have more companies in a proxy group, however, using more companies (engaged in gas or electric operations) that are dissimilar to the subject company will provide less accurate or distorted information than using fewer, more similarly situated companies as a proxy.

Additionally, the water industry has less risk as it has a more captive customer base for water and wastewater services. For example, unlike the natural gas and electric distribution industries where customers can shop for generation or limit or eliminate the need for the service entirely, there are generally no alternatives for water customers. Gas and electric companies also bear the risk of a certain degree of competition between each other and the potential for alternative energy sources that water utilities are immune from. Further, gas, electric, and water utilities face different degrees of operational, safety, and weather-related risks and uncertainties in addition to substantially different environmental regulations. Lastly, Ms. Bulkley's belief that the regulated gas and electric utilities used in her analyses all possess a set of operating and financial risk characteristics that are substantially comparable to PAWC is incorrect and unsupported.

CAPITAL STRUCTURE

Q. WHAT IS A CAPITAL STRUCTURE?

A. A capital structure represents how a firm has financed its rate base with different

sources of funds. The primary sources of funding are long-term debt and common equity. A capital structure may also include preferred stock and/or short-term debt.

Q. WHAT ARE THE COMPANY'S CLAIMED CAPITAL STRUCTURES?

A. The Company's claimed capital structures for Water and Wastewater Operations for the FPFTY are summarized in the tables below (PAWC Statement No. 13, p. 61, ln. 2).

PAWC - Water Operations	
Type of Capital	**Capitalization Ratio**
Long-Term Debt	44.01%
Preferred Stock	0.00%
Common Equity	55.99%
Total	**100.00%**

PAWC - Wastewater Operations	
Type of Capital	**Capitalization Ratio**
Long-Term Debt	42.73%
WW Specific Debt	4.40%
Preferred Stock	0.00%
Common Equity	52.87%
Total	**100.00%**

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIMED CAPITAL STRUCTURES?

A. Ms. Bulkley explains that because specific debt has been identified for Wastewater Operations only, capital structures for Water and Wastewater Operations were calculated separately (PAWC Statement No. 13, p. 59, lines 9-10). She claims to have examined the actual capital structures of her proxy group operating companies and believes that PAWC's proposed common equity ratios for Water and Wastewater Operations are reasonable. She states that the proposed equity ratio of 55.30% for the total Company is well within the range (49.41% - 59.88%) and slightly below the mean (55.88%) established by the capital structures of the utility operating subsidiaries of her proxy group companies (PAWC Statement No. 13, p. 61, lines 14-17).

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE COMPANY'S CAPITAL STRUCTURE?

A. I recommend using the Company's claimed capital structures as presented in the tables above.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I recommend using the Company's claimed capital structures for both Water and Wastewater Operations as they fall within the range of my proxy group's most recently available capital structures. The most recent five-year average range of

my proxy group individual company capital structure ratios are from 42.44% to 58.43% long-term debt and 41.57% to 57.18% common equity, with an overall five-year average of 49.16% long-term debt and 50.76% common equity (I&E Exhibit No. 2, Schedule 2).

COST OF LONG-TERM DEBT

Q. WHAT IS THE COMPANY'S FPFTY CLAIMED COST RATE OF LONG-TERM DEBT?

A. Ms. Bulkley recommends a 4.76% weighted cost rate of long-term debt for both Water and Wastewater Operations. Additionally, she recommends a 2.62% weighted cost rate for wastewater specific long-term debt (PAWC Exhibit No. 13-A, Schedule 12 and 13).

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE COMPANY'S LONG-TERM DEBT COST RATES?

A. I recommend using the Company's claimed 4.76% cost of long-term debt for Water and Wastewater Operations, as well as the 2.62% cost rate of long-term debt for wastewater specific debt issuances.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION TO USE THE COMPANY'S CLAIMED COST RATES OF LONG-TERM DEBT?

A. The Company's FPFTY claimed cost rates of long-term debt are based on the

projected actual cost rates and they are representative of the water industry. The 4.76% long-term debt cost falls within my proxy group's 2022 implied long-term debt cost range of 3.19% to 5.67%, with an average implied long-term debt cost of 4.30% (I&E Exhibit No. 2, Schedule 3), while the 2.62% wastewater specific long-term debt cost falls below that same range. There is an upward trend in the Company's long-term debt cost rate in 2022 due to new long term bond issuances with higher coupon rates from 4.20% to 5.14% under the then interest rates. Additionally, the Company has planned for new long-term bond issues in 2024 and 2025 (PAWC Exhibit No. 13-A, Schedule 14, p. 6). The Mergent Bond Record shows an average yield of 5.54% (November 2022 through November 2023) for A-rated public utility bond (I&E Exhibit No. 2, Schedule 3). Therefore, I recommend applying the Company's claimed cost rates of long-term debt for water and wastewater operations.

COST OF COMMON EQUITY

COMMON METHODS

Q. WHAT METHODS ARE COMMONLY PRESENTED BY UTILITIES IN DETERMINING THE COST OF COMMON EQUITY?

A. Four methods commonly presented to estimate the cost of common equity are the Discounted Cash Flow (DCF), the Capital Asset Pricing Model (CAPM), the Risk Premium (RP) Method, and the Comparable Earnings (CE) Method.

Q. WHAT IS THE THEORETICAL BASIS FOR THE DCF METHOD?

A. The DCF method is the "dividend discount model" of financial theory, which maintains that the value (price) of any security or commodity is the discounted present value of all future cash flows. The DCF method assumes that investors evaluate stocks in the traditional economic framework, which maintains that the value of a financial asset is determined by its earning power, or its ability to generate future cash flows. The DCF method is also considered as a forward-looking model to estimate the cost of common equity.

Q. WHAT IS THE THEORETICAL BASIS FOR THE CAPM?

A. The CAPM describes the relationship of a stock's investment risk and its market rate of return. It identifies the rate of return investors expect so that it is comparable with returns of other stocks of similar risk. This method hypothesizes that the investor-required return on a company's stock is equal to the return on a "risk free" asset plus an equity premium reflecting the company's investment risk. In the CAPM, two types of risk are associated with a stock: (1) firm-specific risk (unsystematic risk); and (2) market risk (systematic risk), which is measured by a firm's beta. The CAPM allows investors to receive a return only for bearing systematic risk. Unsystematic risk is assumed to be diversified away, and therefore, does not earn a return.

Q. WHAT IS THE THEORETICAL BASIS FOR THE RP METHOD?

A. The theoretical basis for the RP method is a simplified version of the CAPM. The RP method's theory is that common stock is riskier than debt, thus, investors require a higher expected return on stocks than bonds. In the RP approach, the cost of equity is made up of the cost of debt and a risk premium. While the CAPM uses the market risk premium, it also directly measures the systematic risk of a company or proxy group through the use of beta. The RP method does not measure the specific risk of a company.

Q. WHAT IS THE THEORETICAL BASIS FOR THE CE METHOD?

A. The CE method utilizes the concept of opportunity cost. This means that investors will likely dedicate their capital to the investment offering the highest return with similar risk to alternative investments. Unlike the DCF, CAPM, and the RP methods, the CE method is not market-based and relies upon historic accounting data. The most problematic issue with the CE method is determining what constitutes comparable companies.

<u>I&E RECOMMENDED METHOD TO EMPLOY</u>

Q. WHAT METHOD DO YOU RECOMMEND TO DETERMINE AN APPROPRIATE COST OF COMMON EQUITY FOR THE COMPANY?

A. I recommend using the DCF method as the primary method to determine the cost of common equity. Additionally, I provide a CAPM analysis to be used as a

comparison, not as a check, to the DCF results. It has the most wide-spread regulatory acceptance, and the Commission has historically relied mostly upon the DCF results in base rate proceedings, but also as recently as 2017, 2018, 2020, and 2021.[1]

Q. PLEASE EXPLAIN WHY YOU CHOSE TO EMPLOY THE DCF TO DETERMINE YOUR RECOMMENDED RETURN ON EQUITY.

A. I recommend using the DCF for a variety of reasons. The DCF is appealing to investors since it is based upon the concept that the receipt of dividends in addition to expected appreciation is the total return requirement determined by the market.[2] The use of a growth rate and expected dividend yield are also strengths of the DCF, as this recognizes the time value of money and is forward-looking. The use of the utilities' own, or in this case the proxy group's, stock prices and growth rates directly in the calculation also causes the DCF to be industry and company specific. Finally, current financial, inflationary, and economic trends are most certainly reflected in a stock's price, which is used in determining the dividend

[1] *Pa. PUC v. City of DuBois – Bureau of Water*; Docket No. R-2016-2554150 (Order Entered March 28, 2017). *See generally* Disposition of Cost Rate Models, pp. 96-97; *Pa. PUC v. UGI Utilities, Inc. - Electric Division;* Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Cost of Common Equity, p. 119; *Pa. PUC v. Wellsboro Electric Company;* Docket No. R-2019-3008208 (Order Entered April 29, 2020). *See generally* Disposition of Primary Methodology to Determine ROE, pp. 80-81; *Pa. PUC v. Citizens Electric Company of Lewisburg, PA;* Docket No. R-2019-3008212 (Order Entered April 29, 2020). *See generally* Disposition of Cost of Common Equity, pp. 91-92. *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.;* Docket No. R-2020-3018835 (Order Entered February 19, 2021). *See generally* Disposition of Cost of Common Equity, p. 131; Pa. PUC v. PECO Energy Company – Gas Division; Docket No. R-2020-3018929 (Order Entered June 22, 2021). See generally Disposition of Return of Rate on Common Equity, p. 171.

[2] David C. Parcell, "The Cost of Capital – A Practitioner's Guide," 2010 Edition, p. 151.

yield, and forecasted earnings growth rates by stock market analysts. Therefore, the DCF contains the most up-to-date projected information of any model and is the superior method for determining the rate of return for the current economic market because it measures the cost of equity directly.

Q. PLEASE EXPLAIN WHY YOU CHOSE TO USE THE CAPM AS A COMPARISON TO THE DCF IN YOUR ANALYSIS.

A. I have included a CAPM analysis only as a comparison, and not as a basis, for my recommendation because both the CAPM and the DCF include inputs that allow the results to be specific to the utility industry. However, the CAPM is based on the performance of U.S. Treasury bonds and the performance of the market as measured through the S&P 500 and is company-specific only through the use of beta. Beta reflects a stock's volatility relative to the overall market, thereby incorporating an industry-specific aspect to the CAPM, but only as a measure of how reactive the industry is compared to the market as a whole. Although changes in the utility industry are more likely to be accurately reflected in the DCF, which uses the companies' actual prices, dividends, and growth rates, I have included the results of my CAPM analysis because changes in the market, whether as a whole or specific to the utility industry, affect the outcome of each method in different ways. Although I have provided the results of my CAPM analysis as a comparison, and not as a check, it does have several disadvantages and should not be given comparable weight to the DCF result.

Q. EXPLAIN THE DISADVANTAGES OF THE CAPM.

A. The CAPM, and the RP method by virtue of its similarities to the CAPM, give results that indicate to an investor what the equity cost rate should be if current economic and regulatory conditions are the same as those present during the historical period in which the risk premiums were determined. This is because beta, which is the only company-specific variable in the CAPM model, measures the *historical* volatility of a stock compared to the *historical* overall market return. Reliance on historical values is especially problematic now given the recent impact of the COVID-19 pandemic on economic conditions. Although the CAPM and RP results can be useful to investors in making rational buy and sell decisions within their portfolios, the DCF method is the superior method for determining the rate of return for the current economic market and measuring the cost of equity directly. The CAPM and the RP methods are less reliable indicators because they measure the cost of equity indirectly and risk premiums vary depending on the debt and equity being compared. The use of historic risk premiums contains the implicit assumption that future risk premiums will mirror historic premiums. In addition, the period of time chosen to measure the risk premium is subjective. Also, regulators can never be certain that economic and regulatory conditions underlying the historical period during which the risk premiums were calculated are the same today or will be the same in the future.

Q. IS THERE ANY ACADEMIC EVIDENCE THAT QUESTIONS THE CREDIBILITY OF THE CAPM MODEL?

A. Yes. An article, "Market Place; A Study Shakes Confidence in the Volatile-Stock Theory," that appeared in the *New York Times* on February 18, 1992, summarized a CAPM study conducted by professors Eugene F. Fama and Kenneth R. French.[3] Their study examined the importance of beta, CAPM's risk factor, in explaining returns on common stock. In CAPM theory a stock with a higher beta should have a higher expected return. However, they found that the model did not do well in predicting actual returns and suggested the use of more elaborate multi-factor models.

A more recent article, "The Capital Asset Pricing Model: Theory and Evidence," which appeared in the *Journal of Economic Perspectives,* states that "the attraction of the CAPM is that it offers powerful and intuitively pleasing predictions about how to measure risk and the relation between expected return and risk. Unfortunately, the empirical record of the model is poor - poor enough to invalidate the way it is used in applications."[4] As a result, I conclude that the CAPM's relevance to the investment decision making process does not carry over into the regulatory rate setting process.

[3] Berg, Eric N. "Market Place; A Study Shakes Confidence in the Volatile-Stock Theory" *The New York Times*, 18 Feb 1992: *nytimes.com* Web. 23 Mar 2016.

[4] Fama, Eugene F. and French, Kenneth R., "The Capital Asset Pricing Model: Theory and Evidence." *Journal of Economic Perspectives* (2004): Volume 18, Number 3, pp. 25-46.

Q. PLEASE EXPLAIN WHY YOU HAVE CHOSEN TO EXCLUDE THE RP METHOD FROM YOUR ANALYSIS.

A. The RP method is excluded because it is a simplified version of the CAPM and is subject to the same faults explained above. Most importantly, unlike the CAPM, the RP method does not recognize the company-specific risk through beta.

Q. EXPLAIN WHY YOU HAVE CHOSEN TO EXCLUDE THE CE METHOD IN YOUR ANALYSIS.

A. The CE method is excluded because the choice of which companies are comparable is highly subjective, and it is debatable whether historic accounting values are representative of the future. Moreover, its historical usage in this regulatory forum has been minimal.

Q. ARE THERE ANY RECENT COMMISSION ORDERS THAT DEVIATE FROM THE USE OF THE DCF AS THE PRIMARY METHOD IN DETERMINING A COMPANY'S RETURN ON EQUITY?

A. Yes. The Commission indicated in the 2021 Aqua Pennsylvania, Inc. (Aqua) base rate case order that its method "for determining Aqua's ROE shall utilize both I&E's DCF and CAPM methodologies"[5] and that "I&E's DCF and CAPM produce a range of reasonableness for the ROE…"[6] , which deviates from prior

[5] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 154 (Order entered May 16, 2022).

[6] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 178 (Order entered May 16, 2022).

Commission practice of primarily relying on the DCF. Most recently, the Commission's Columbia Water Company (Columbia Water) base rate case order relied on the results of I&E's DCF and CAPM analyses for determining Columbia Water's ROE.[7]

Q. SHOULD THE COMMISSION'S USE OF THE CAPM AS A CEILING FOR A "RANGE OF REASONABLENESS" APPLY IN THIS PROCEEDING?

A. No. In a report issued by Regulatory Research Associates, a group within S&P Global Market Intelligence,[8] Aqua's ROE of 10.00% was stated as being above the national average for water utility base rate cases and above the Distribution System Improvement Charge (DSIC) rate authorized by the Commission of 9.80%[9] for water and wastewater utilities for the year ended December 31, 2021. This DSIC rate for water and wastewater utilities has since dropped 5 basis points to 9.75% for the year ended March 31, 2023[10] and further dropped 10 basis points to 9.65% for the year ended June 30, 2023[11] and remained at the same level 9.65%

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7 *Pa. PUC v. Columbia Water Company,* Docket Nos. R-2023-3040258, p. 105 (Order entered January 18, 2024).

8 Regulatory Research Associates, "Commission authorizes management performance bonus for Aqua Pennsylvania," *S&P Global Market Intelligence*, May 16, 2022. CIQ Pro: RRA Regulatory Focus: Commission authorizes management performance bonus for Aqua Pennsylvania (spglobal.com) (Accessed December 14, 2023).

9 PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended December 31, 2021, approved at Public Meeting on June 16, 2022, at Docket No. M-2022-3032405.

10 PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended March 31, 2023, approved at Public Meeting on July 13, 2023 at Docket No. M-2023-3041106.

11 PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended June 30, 2023, approved at Public Meeting on October 19, 2023 at Docket No. M-2023-3042679.

for the year ended September 30, 2023[12] The above referenced S&P report, which directly reviews Aqua's ROE of 10.00% on the very date the Commission entered its order in Aqua's rate case demonstrated that the ROE awarded to Aqua was higher than average. Specifically, the S&P report determined that the average ROE for water utility base rate cases that have been completed during the first four months of 2022 was 9.63% and for the twelve months ended April 30, 2022 was 9.53%, each of which were well below the 10.00% ROE authorized by the Commission for Aqua. This demonstrates the unreasonable skewing of results associated with using the CAPM as a ceiling for determining a utility's ROE.

In the Columbia Water order, the Commission noted that I&E's DCF and CAPM produced a range of reasonableness for the ROE from 7.84% to 11.09% and approved an ROE of 9.75% as reasonable and appropriate for that company, which is based upon consideration of a variety of factors such as increasing inflation leading to increases in interest rates and capital costs.[13] I respectfully disagree with the Commission's basis (current inflation and interest rates) for determining Columbia Water's ROE of 9.75%. I have presented and discussed in the Capital Market Conditions section, the forecasted lower-level inflation rates, and the Federal Reserve's intention to cut interest rates in 2024, which would have

[12] PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended September 30, 2023, approved at Public Meeting on January 18, 2024 at Docket No. M-2023-3044811.

[13] *Pa. PUC v. Columbia Water Company,* Docket Nos. R-2023-3040258, pp.108-109 (Order entered January 18, 2024).

the effect of reducing potential inflation and interest rate risks in the capital costs during 2024-2025, when PAWC's rates will be in effect.

Additionally, as explained above, the CAPM should not be used as a primary method, and it should only be used as a comparison and not as a check of the DCF. Also, as demonstrated below, the use of the CAPM in this proceeding would result in a significant burden to ratepayers due to large water companies like PAWC increasing rate base significantly over time due to recent fair market value acquisitions. Therefore, I disagree with giving the CAPM similar weight to the DCF method.

SUMMARY OF THE COMPANY'S RESULTS

Q. WHAT ARE THE RESULTS OF THE COMPANY'S COST OF EQUITY ANALYSES?

A. Ms. Bulkley employed the Constant Growth DCF, CAPM, and Empirical Capital Asset Pricing Model (ECAPM) methods in analyzing the Company's cost of equity (PAWC Statement No. 13, p. 4, lines 26-27). Ms. Bulkley opines that a reasonable range for PAWC's cost of equity is 10.00% to 11.25% relative to her combined utility proxy group. Ultimately, she claims an ROE at the higher end of that range of 10.95% is reasonable and appropriate as it recognizes the Company's management performance and risk factors (PAWC Statement No. 13, p. 8, lines 9-13).

I&E RECOMMENDATION

Q. WHAT IS YOUR RECOMMENDED COST OF COMMON EQUITY FOR PAWC?

A. Based upon my analysis, I recommend a cost of common equity of 8.45% for both Water and Wastewater Operations (I&E Exhibit No. 2, Schedule 1).

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on the use of the DCF method. As explained below, I used my CAPM result only to present to the Commission a comparison to my DCF results. My DCF analysis uses a spot dividend yield, a 52-week dividend yield, and earnings growth forecasts.

DISCOUNTED CASH FLOW

Q. PLEASE EXPLAIN YOUR DCF ANALYSIS.

A. My analysis employs the constant growth DCF model as portrayed in the following formula:

$$K = D_1/P_0 + g$$

Where:

K	=	Cost of equity
D_1	=	Dividend expected during the year
P_0	=	Current price of the stock
g	=	Expected growth rate

When a forecast of D_1 is not available, D_0 (the current dividend) must be adjusted by one half of the expected growth rate to account for changes in the dividend paid in period one. As forecasts for each company in my proxy group were available from Value Line, no dividends were adjusted for the purpose of my analysis.

Q. PLEASE EXPLAIN HOW YOU DEVELOPED THE DIVIDEND YIELDS USED IN YOUR DCF ANALYSIS.

A. A representative dividend yield must be calculated over a time frame that avoids the problems of both short-term anomalies and stale data series. For my DCF analysis, the dividend yield calculation places equal emphasis on the most recent spot and the 52-week average dividend yields. The following table summarizes my dividend yield computations for the proxy group (I&E Exhibit No. 2, Schedule 4):

Proxy Group - Average Dividend Yields	
(a) Spot Dividend Yield	2.24%
(b) 52-week Average Dividend Yield	2.06%
(c) Average ((a +b) ÷ 2)	2.15%

Q. WHAT INFORMATION DID YOU RELY UPON TO DETERMINE YOUR EXPECTED GROWTH RATE?

A. I have used five-year projected growth rate estimates from Yahoo! Finance, Zacks, and Value Line.

Q. WHAT WERE THE RESULTS OF YOUR FORECASTED EARNINGS GROWTH RATES?

A. The expected average growth rates for my proxy group ranged from 3.85% to 8.65% with an overall average of 6.30% (I&E Exhibit No. 2, Schedule 5).

Q. WHAT IS THE RESULT OF YOUR DCF ANALYSIS BASED ON YOUR RECOMMENDED DIVIDEND YIELD AND GROWTH RATE?

A. The results of my DCF analysis are calculated as follows, which is based on the source data published in the first week of January 2024 (I&E Exhibit No. 2, Schedule 6):

K	**=**	**D_1/P_0**	**+**	**g**
8.45%	=	2.15%	+	6.30%

CAPITAL ASSET PRICING MODEL

Q. PLEASE EXPLAIN YOUR CAPM ANALYSIS.

A. My analysis employs the traditional CAPM as portrayed in the following formula:

$$K = R_f + \beta(R_m - R_f)$$

Where:

K = Cost of equity

R_f = Risk-free rate of return

R_m = Expected rate of return on the overall stock market

β = Beta measures the systematic risk of an asset

Q. WHAT IS BETA AS EMPLOYED IN YOUR CAPM ANALYSIS?

A. Beta is a measure of the systematic risk of a stock in relation to the rest of the stock market. A stock's beta is estimated by calculating the linear regression of a stock's return against the return on the overall stock market. The beta of a stock with a price pattern identical to that of the overall stock market will equal one. A stock with a price movement that is greater than the overall stock market will have a beta that is greater than one and would be described as having more investment risk than the market. Conversely, a stock with a price movement that is less than the overall stock market will have a beta of less than one and would be described as having less investment risk than the overall stock market.

Q. HOW DID YOU DETERMINE YOUR BETA FOR YOUR CAPM ANALYSIS?

A. In estimating an equity cost rate for my proxy group, I used the average of the betas for the companies as provided in the Value Line Investment Survey. The average beta for my proxy group is 0.80 (I&E Exhibit No. 2, Schedule 7).

Q. WHAT RISK-FREE RATE OF RETURN HAVE YOU USED FOR YOUR FORECASTED CAPM ANALYSIS?

A. I have chosen to use the risk-free rate of return (R_f) from the projected yield on 10-

year Treasury Notes. The yield on the short-term T-Bill is a more theoretically correct parameter to represent a risk-free rate of return, however, it can be extremely volatile. The volatility of short-term T-Bills is directly influenced by Federal Reserve policy. At the other extreme, the 30-year Treasury Bond exhibits more stability but is not risk-free. Long-term Treasury Bonds have substantial maturity risk associated with market risk and the risk of unexpected inflation. Long-term treasuries normally offer higher yields to compensate investors for these risks. As a result, I chose to use the yield on the 10-year Treasury Note because it mitigates the shortcomings of the other two alternatives. Additionally, the Commission has recently agreed with I&E and recognized the 10-year Treasury Note as the superior measure of the risk-free rate of return.[14]

The forecasted yield on the 10-year Treasury Note, as seen in Blue Chip Financial Forecasts, is expected to range between 4.20% and 3.90% from the first quarter of 2024 through the fourth quarter of 2024, and it is forecasted to be 3.90% from 2025-2029. For my forecasted CAPM analysis, I used 4.00%, the average of all the yield forecasts I observed (I&E Exhibit No. 2, Schedule 8).

[14] *Pa. PUC v. UGI Utilities, Inc. – Electric Division;* Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Capital Asset Pricing Model (CAPM), p. 99; *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, p. 154 (Order entered May 16, 2022).

Q. HOW DID YOU DETERMINE THE RETURN ON THE OVERALL STOCK MARKET EMPLOYED IN YOUR FORECASTED CAPM ANALYSIS?

A. To arrive at a representative expected return on the overall stock market, I observed Value Line's 1700 stocks and the S&P 500. Value Line expects its universe of 1700 stocks to have an average yearly return of 11.93% over the next three to five years based on a forecasted dividend yield of 2.20% and a yearly index appreciation of 45%. The S&P 500 index has an average yearly return of 12.16% over the past 98 years (1926-2023). I have averaged these two figures, which results in an estimated or expected market return of 12.05% ((11.93% + 12.16%) ÷ 2) (I&E Exhibit No. 2, Schedule 9, pp. 1-3).

Q. WHAT IS THE COST OF EQUITY RESULT FROM YOUR CAPM ANALYSIS?

A. The result of my analysis is based on the source data published in December 2023 and the first week of January 2024, which is as follows (I&E Exhibit No. 2, Schedule 10):

K	=	R_f	+	$\beta(R_m - R_f)$
10.44%	=	4.00%	+	0.80 (12.05% - 4.00%)

Q. DO YOU HAVE ANY ADDITIONAL COMMENTS REGARDING YOUR CAPM ANALYSIS?

A. Yes. As discussed earlier in my testimony, my recommended cost of equity is based upon my DCF analysis. For the multiple reasons I explained above, I only present a CAPM analysis to the Commission as a comparison and not for recommendation purposes. It must also be recognized that CAPM inputs are highly subjective, and other than beta, they are not company or industry specific.

Q. IS IT NECESSARY TO APPLY THE CAPM WITH SIMILAR WEIGHT TO THE DCF WHEN DETERMINING A SPECIFIC RETURN ON EQUITY DUE TO RECENT INFLATIONARY TRENDS?

A. No. My use of the DCF as a primary method in determining an appropriate ROE already sufficiently takes recent inflationary trends into consideration. As mentioned above, the DCF includes a spot stock price in the dividend yield calculation and analysts who generate forecasted earnings growth should take inflation into consideration as well, so it contains the most up-to-date projected information of any model. In other words, the inputs of the DCF capture all known economic factors, including inflation.

Q. DID YOU QUANTIFY THE NUMBER OF BASIS POINTS BETWEEN YOUR DCF AND CAPM RESULTS TO ILLUSTRATE THE FINANCIAL IMPACT BETWEEN USING EACH MODEL?

A. Yes. The difference between my DCF and CAPM analysis is 199 basis points (CAPM result of 10.44% - DCF result of 8.45% = 1.99% difference). As demonstrated below, relying on the results of the CAPM is unnecessary and places undue hardship on PAWC's ratepayers.

Q. BASED ON THE COMPANY'S CLAIMED FPFTY RATE BASE AND CLAIMED CAPITAL STRUCTURE, WHAT IS THE VALUE OF AN ADDITIONAL 199 BASIS POINTS TO THE COST OF EQUITY BASED ON THE DIFFERENCE IN RESULTS BETWEEN YOUR CAPM ANALYSIS (10.44%) AND YOUR DCF ANALYSIS (8.45%)?

A. The example below illustrates the impact of 199 additional basis points on the Company's cost of equity if the results of my CAPM analysis, rather than my DCF results were applied to the Company's FPFTY total claimed rate base and combined capital structure:

PAWC's Claimed Equity Percentage of Capital Structure*	55.30%
Difference in Return on Equity between I&E's CAPM and DCF Analysis (10.44% – 8.45% = 1.99%)	1.99%
Claimed Rate Base**	$6,096,173,421
Impact Prior to Gross Up (0.5530 x 0.0199 x $6,096,173,421)	$67,086,560
Gross Revenue Conversion Factor***	1.4011
Total Impact to Ratepayers ($67,086,560 x 1.4011)	**$93,994,979**

*PAWC Exhibit 13-A, Schedule 11, p. 1 (Total Company).
** PAWC Statement No. 4, p. 4 (Total Company).
*** I&E Exhibit No. 2, Schedule 11, p. 2.

In this example, an addition of 199 basis points to the cost of equity would require ratepayers to fund an additional $93,994,979 annually to cover the increase of the inflated rate of return along with the associated impact resulting from increases to income taxes, uncollectibles, and assessments.

Q. DOES THE FINANCIAL IMPACT OF FUNDING AN ADDITIONAL $93,994,979 ANNUALLY DEMONSTRATE THAT IT IS INAPPROPRIATE TO USE THE CAPM TO ESTABLISH A "ZONE OF REASONABLENESS" IN THIS PROCEEDING?

A. Yes. In my opinion it is inappropriate to use the CAPM as the top end of a range for this case as was done by the Commission in the recent Aqua and Columbia Water rate cases for determining an ROE. Contrary to the 199-basis point spread in this proceeding, as illustrated above, the spread between the DCF and the CAPM in

the Aqua case was more modest at 99-basis points.[15] In the Columbia Water case, the spread between the CAPM and DCF results has significantly increased to 325-basis points (11.09% - 7.84%). In this case, with two times the basis-point impact of the Aqua rate case, the burden would be far more onerous for PAWC's ratepayers due its significantly larger rate base, which would be unwarranted and inappropriate. In my opinion, and as demonstrated by my analysis, any amount granted above the DCF (8.45% based on my recommendation) is not justified and places an inappropriate burden on ratepayers.

CRITIQUE OF MS. BULKLEY'S PROPOSED COST OF EQUITY

Q. DO YOU AGREE WITH MS. BULKLEY'S PROPOSED COST OF EQUITY?

A. No. I disagree with Ms. Bulkley's proposed cost of equity analysis for several reasons. First, I take issue with certain aspects of her discussion on capital market conditions, her application of the DCF, her application of the CAPM, and her use of Empirical Capital Asset Pricing Method (ECAPM). Additionally, I disagree with the claimed risks from the Company's capital expenditure program and adherence to environmental and water quality regulations. Finally, I disagree with Ms. Bulkley's recommendation to include a minimum 25-basis point adjustment

[15] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 178 (Order entered May 16, 2022).

to the cost of equity for recognition of management performance if the Commission determines anything less than her cost of equity recommendation.

CAPITAL MARKET CONDITIONS

Q. WHAT IS MS. BULKLEY'S POSITION REGARDING CURRENT CAPITAL MARKET CONDITIONS?

A. Ms. Bulkley claims that the cost of equity for regulated utilities is being affected in the current and prospective capital markets by several factors. The factors she discusses are changes in monetary policy, relatively high inflation, and the increased interest rates that she expects to remain high over the next few years (PAWC Statement No. 13, pp. 13-23).

Q. SUMMARIZE MS. BULKLEY'S COMMENTS REGARDING THE IMPACT OF CURRENT MARKET CONDITIONS ON COST OF EQUITY MODELS.

A. Ms. Bulkley opines that ROE estimates will understate the ROE during the period the Company's rates will be in effect because the share prices of utilities are likely to continue to decline or underperform due to higher interest rates and government bond yields, and the DCF models using the recent historical data are likely to underestimate investors' required return. Therefore, she opines, this expected change in market conditions supports consideration of the higher end of the range of cost of equity results produced by the DCF model. Moreover, she asserts that

the prospective market conditions warrant consideration of and placing more weight on cost of equity estimation models such as the CAPM and ECAPM, which may better reflect expected market conditions (PAWC Statement No. 13, p. 23, lines 8-18).

Q. PLEASE COMMENT ON MS. BULKLEY'S CONCERNS REGARDING CURRENT MARKET CONDITIONS.

A. First, I cannot dispute the current economic conditions with respect to increased interest rates and government bond yields, however, it is important to note that all companies, including regulated utilities, are impacted by high interest rates. Second, I disagree with Ms. Bulkley's speculative statement that share prices of utilities are likely to continue to decline due to higher interest rates in the future. Most recently at the Federal Open Market Committee meeting held on December 13, 2023, the Federal Reserve indicated that it would lower the Fed-fund rate to 4.60% by the end of 2024 equivalent to a three quarter-point reduction from the current level. Federal Reserve Chairman Powell indicated that inflation is well on its way to the targeted 2% level, and they would not wait for the 2% inflation target to cut the interest rate (I&E Exhibit No. 2, Schedule 12, pp. 1-6). Per the most recent monthly Blue Chip Financial Forecasts,[16] the 2024 inflation

[16] Blue Chip Financial Forecasts Vol. 43, No. 1, December 28, 2023.

rates by two measures are forecasted to be slightly over 2% as shown in the table below:

	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025
Consumer Price Index	2.9%	2.4%	2.4%	2.4%	2.3%	2.2%	2.2%
PCE Price Index	2.6%	2.2%	2.2%	2.2%	2.2%	2.1%	2.0%

In light of the Federal Reserve's commitment to an interest rate reduction and forecasted gradual reduction in inflationary pressure to the Federal Reserve target level of 2.0%, Ms. Bulkley's speculative opinion about *future* underperformance of utility share prices of utilities due to higher interest rates and inflationary pressure are not supported. Lastly, it is important to note that unlike unregulated companies, public utilities may file rate cases to address unforeseen or increased expenses and/or revenue shortfalls due to changes in market conditions. It is important to note that despite the increased inflation level and high interest costs, AWK has accessed the capital market and successfully completed a stock issue of 12.65 million shares at an offering price of $135.50 amounting to a total of $1.71 billion on February 28, 2023 (PAWC Exhibit No. 13-A, Schedule 4). This signifies the confidence of investors in AWK's financial soundness and integrity.

Q. DO YOU AGREE WITH MS. BULKLEY'S CONCERNS THAT THE DCF MODEL IS LIKELY TO UNDERSTATE THE COST OF EQUITY?

A. No. As a general rule, it is always necessary to consider current and projected market conditions when estimating the cost of common equity using the models discussed throughout this testimony. Again, as mentioned above, the DCF is a forward-looking cost of equity estimation model, which includes a spot stock price in the dividend yield calculation and analysts who generate forecasted earnings growth expectations consider current as well as future market conditions that will be impacted by related economic factors. Therefore, the inputs of the DCF capture all known economic factors, including current and projected inflation and interest rates, which ultimately produces the most up-to-date projected or forward-looking information for the DCF model.

Q. DO YOU AGREE WITH MS. BULKLEY'S DESIRE TO PLACE MORE WEIGHT ON THE CAPM AND ECAPM MODELS TO REFLECT PROSPECTIVE MARKET CONDITIONS IN DETERMINING THE ESTIMATED COST OF EQUITY?

A. No. The CAPM and ECAPM models rely on the current beta of a utility's stock price, which influences the cost of equity estimation. Beta is a measure of a stock's volatility in relation to the overall market such as the S&P 500 Index (which has a beta of 1.0), on the basis of historic stock price movement and individual stocks that are ranked according to how much they deviate from the

overall market. Beta is influenced by systematic risks such as economic, financial, and political risk factors, and the beta does not give enough information about the fundamentals of a company and is of limited value when making stock selections. Beta is probably a better indicator of short-term (less than a year) rather than long-term risk. Another troubling factor is that past price movement is a poor predictor of the future. Betas are merely rear-view mirrors, reflecting very little of what lies ahead. For traders looking to buy and sell stocks within short time periods, beta is a reasonable risk metric. However, for investors with long-term horizons, it is less useful.

Considering the limitation of the beta measure discussed above, the CAPM and ECAPM models do not generate or provide a forward-looking cost of equity estimation for the future periods when customer rates will be in effect. Therefore, it is inappropriate to give more weight to the CAPM and ECAPM results in the determination of a forward-looking, fair, and reasonable common equity cost rate.

DCF ANALYSIS

Q. PLEASE SUMMARIZE MS. BULKLEY'S DCF ANALYSIS.

A. Ms. Bulkley calculates mean and median results for 30-day, 90-day, and 180-day average constant growth DCF models with mean low, mean, and mean high results (PAWC Statement No. 13, p. 36, ln. 6). She relies on the mean and median DCF results using the average growth rate range from 9.28% to 10.00%, and the mean and median DCF results using the maximum growth rate range from 10.63% to

11.34% (PAWC Statement No. 13, p. 35, lines 18-21). She claims that her mean high and median high results are a more appropriate measure than using minimum or low growth rates of the cost of equity since the DCF model is likely understating the cost of equity due to expected underperformance of utility stocks going forward (PAWC Statement No. 13, p. 35, lines 21-22 and p. 36, lines 1-2). She concludes that her DCF results range is 8.69% - 11.10% (PAWC Statement No. 13, p. 66, ln. 1).

Q. SUMMARIZE THE ISSUES YOU HAVE WITH MS. BULKLEY'S DCF ANALYSIS.

A. Aside from including gas and electric utilities in her analysis for reasons previously discussed in the *"Proxy Group"* section, the primary issue I have with Ms. Bulkley's DCF analysis is her elimination of the low-end results and considering mean and high-end DCF results mainly to support her speculative claim of expected underperformance of utility stocks over the near term caused by elevated interest rates and yields on long-term government bonds, which exceed the dividend yield (PAWC Statement No. 13, p. 38, lines 11-14).

Q. DOES MS. BULKLEY SELECTIVELY ELIMINATE HER LOW-END DCF RESULTS FROM HER PROXY GROUP?

A. Yes. Ms. Bulkley dismisses the low-end results of her DCF analysis; however, she does not take issue with results that are significantly higher than the average

calculated ROE. For example, she excludes the lowest results of Middlesex Water Company: (a) 30-day, 90-day, and 180-day mean low DCF results of 4.63%, 4.41%, and 4.37% respectively; (b) 30-day, 90-day, and 180-day mean DCF results of 5.79%, 5.57%, and 5.53% respectively; and (c) 30-day, 90-day, and 180-day mean high DCF results of 6.96%, 6.73%, and 6.69% respectively from her proxy group DCF results analysis (PAWC Exhibit No. 13-A, Schedule 3, pp. 1-3). However, she includes the top-end results of NiSource Inc.'s (a natural gas distribution company): (a) 30-day, 90-day, and 180-day mean low DCF results of 10.81%, 10.64%, and 10.58% respectively; (b) 30-day, 90-day, and 180-day mean DCF results of 11.87%, 11.69%, and 11.64% respectively; and (c) 30-day, 90-day, and 180-day mean high DCF results of 13.67%, 13.49%, and 13.44% respectively in her proxy group individual company DCF result analysis (PAWC Exhibit No. 13-A, Schedule 3, pp. 1-3).

In my view, Ms. Bulkley undermines the purpose of using a proxy group by excluding low-end results of a water utility and including high-end results of a *dissimilar company* in her ROE analysis. Again, the purpose of a proxy group is to employ a group of similarly situated companies, in this case, water utilities, to smooth out any anomalous data points in an ROE analysis. Further, by only removing the results on the low end of her analysis and by retaining the higher end results, her DCF analysis serves to inflate the true results and provides a skewed ROE.

Q. WHAT IS YOUR CONCLUSION REGARDING MS. BULKLEY'S DCF ANALYSIS?

A. Ms. Bulkley and I have slightly different applications of our DCF analyses. Notably, although I believe it is appropriate to consider AWK (parent company) in the ROE analysis for this proceeding, I honored Ms. Buckley's decision to ignore the parent company in her proxy group analysis. I have recalculated and summarized Ms. Bulkley's DCF analysis (PAWC Exhibit No. 13-A, Schedule 3) by simply removing the gas and electric distribution utilities and including the entire range of results in her average. The overall average result of my recalculation yields the DCF result of 8.21% for water utilities after removing the gas and electric distribution utilities, which is now comparable, yet lower than my recommended DCF result of 8.45%. The following table is an I&E Modified version of PAWC Exhibit No. 13-A, Schedule 3 shown below:

I&E MODIFIED PAWC Exhibit No. 13-A, Schedule 3

30-DAY CONSTANT GROWTH DCF - PAWC PROXY GROUP

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Ticker	Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	Value Line Earnings Growth	Yahoo! Finance Earnings Growth	Zacks Earnings Growth	Average Growth Rate	Mean Low ROE	Mean ROE	Mean High ROE
American States Water Company	AWR	$1.72	$78.68	2.19%	2.25%	6.50%	4.40%	6.30%	5.73%	6.63%	7.98%	8.76%
California Water Service Group	CWT	$1.04	$47.85	2.17%	2.27%	6.50%	10.80%	n/a	8.65%	8.74%	10.92%	13.09%
Middlesex Water Company	MSEX	$1.25	$65.50	1.91%	1.94%	5.00%	2.70%	n/a	3.85%	4.63%	5.79%	6.96%
SJW Group	SJW	$1.52	$60.01	2.53%	2.61%	6.50%	6.10%	n/a	6.30%	8.71%	8.91%	9.12%
Mean				2.20%	2.27%	6.13%	6.00%	6.30%	6.13%	7.18%	8.40%	9.48%
Median				2.18%	2.26%	6.50%	5.25%	6.30%	6.02%	7.67%	8.45%	8.94%
Excluding Middlesex												
Mean										8.03%	9.27%	10.32%
Median										8.71%	8.91%	9.12%

90-DAY CONSTANT GROWTH DCF - PAWC PROXY GROUP

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Ticker	Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	Value Line Earnings Growth	Yahoo! Finance Earnings Growth	Zacks Earnings Growth	Average Growth Rate	Mean Low ROE	Mean ROE	Mean High ROE
American States Water Company	AWR	$1.72	$83.40	2.06%	2.12%	6.50%	4.40%	6.30%	5.73%	6.51%	7.85%	8.63%
California Water Service Group	CWT	$1.04	$49.92	2.08%	2.17%	6.50%	10.80%	n/a	8.65%	8.65%	10.82%	13.00%
Middlesex Water Company	MSEX	$1.25	$74.06	1.69%	1.72%	5.00%	2.70%	n/a	3.85%	4.41%	5.57%	6.73%
SJW Group	SJW	$1.52	$65.26	2.33%	2.40%	6.50%	6.10%	n/a	6.30%	8.50%	8.70%	8.90%
Mean				2.04%	2.10%	6.13%	6.00%	6.30%	6.13%	7.02%	8.24%	9.32%
Median				2.07%	2.15%	6.50%	5.25%	6.30%	6.02%	7.50%	8.28%	8.77%
Excluding Middlesex												
Mean										7.89%	9.13%	10.18%
Median										8.50%	8.70%	8.90%

180-DAY CONSTANT GROWTH DCF - PAWC PROXY GROUP

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Company	Ticker	Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	Value Line Earnings Growth	Yahoo! Finance Earnings Growth	Zacks Earnings Growth	Average Growth Rate	Mean Low ROE	Mean ROE	Mean High ROE
American States Water Company	AWR	$1.72	$85.94	2.00%	2.06%	6.50%	4.40%	6.30%	5.73%	6.45%	7.79%	8.57%
California Water Service Group	CWT	$1.04	$53.14	1.96%	2.04%	6.50%	10.80%	n/a	8.65%	8.52%	10.69%	12.86%
Middlesex Water Company	MSEX	$1.25	$75.84	1.65%	1.68%	5.00%	2.70%	n/a	3.85%	4.37%	5.53%	6.69%
SJW Group	SJW	$1.52	$70.29	2.16%	2.23%	6.50%	6.10%	n/a	6.30%	8.33%	8.53%	8.73%
Mean				1.94%	2.00%	6.13%	6.00%	6.30%	6.13%	6.92%	8.14%	9.21%
Median				1.98%	2.05%	6.50%	5.25%	6.30%	6.02%	7.39%	8.16%	8.65%
Excluding Middlesex												
Mean										7.76%	9.00%	10.05%
Median										8.33%	8.53%	8.73%

Notes:

[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals 30-day average as of October 31, 2023
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.50 x [8])
[5] Source: Value Line
[6] Source: Yahoo! Finance
[7] Source: Zacks
[8] Equals Average ([5], [6], [7])
[9] Equals [3] x (1 + 0.50 x Minimum ([5], [6], [7]) + Minimum ([5], [6], [7])
[10] Equals [4] + [8]
[11] Equals [3] x (1 + 0.50 x Maximum ([5], [6], [7]) + Maximum ([5], [6], [7])

I&E Recalculated DCF Results:	
(A) Average of Expected Dividend Yields Highlighted Above	**2.14%**
(B) Average of Growth Rates Highlighted Above	**6.08%**
(C) I&E Recalculated DCF Results (A+B)	**8.21%**

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CAPM ANALYSIS

Q. PLEASE SUMMARIZE MS. BULKLEY'S CAPM ANALYSIS.

A. Ms. Bulkley performs several variations of analyses for her CAPM (PAWC Exhibit No. 13-A, Schedule 5). She provides one analysis using betas from Value Line reports (August 25, 2023 and October 6, 2023), another analysis employing Bloomberg betas (October 31, 2023), and a third analysis using long-term average betas from Value Line (2013 through 2022). Within those sets, she provides subsets using three risk-free rates including the current 30-day average yield on 30-year U.S. Treasury Bonds, the near term projected 30-year U.S. Treasury Bond yield for Q1-2024 through Q1-2025, and the long term projected 30-year U.S. Treasury Bond yield for 2025-2029. She calculates the expected return on the S&P 500 Index for each company in the entire S&P 500 Index using the data published by Bloomberg Professional (October 31, 2023). Finally, Ms. Bulkley includes an ECAPM analysis paired with each result of her standard CAPM analysis for the proxy group companies (PAWC Statement No. 13, pp. 39-43 and PAWC Exhibit 13-A, Schedule 5-7).

Q. SUMMARIZE THE ISSUES YOU HAVE WITH MS. BULKLEY'S CAPM ANALYSIS.

A. Aside from the improper inclusion of gas and electric utilities in her analysis, which I disputed above, the primary issues I have with Ms. Bulkley's CAPM

analysis are the use of 30-year U.S. Treasury Bond yields for the risk-free rate and the inclusion of the ECAPM.

Q. DISCUSS YOUR DISAGREEMENT WITH MS. BULKLEY'S RISK-FREE RATE.

A. As stated earlier, long-term Treasury Bonds have substantial maturity risk associated with the market risk and the risk of unexpected inflation and normally offer higher yields to compensate investors for these risks. Using the 10-year Treasury Note is more appropriate to balance the short-term volatility risk and the long-term inflation risk.

The Commission has recently recognized the 10-year Treasury Note as the superior measure for the risk-free rate by stating the following:[17]

> We agree with I&E and the ALJs that using the yield on the 10-year Treasury Note provides a better measure of the risk-free rate of return than using the yield on the 30-year Treasury Bond, as recommended by UGI. In our view, using the 10-year Treasury Note balances the shortcomings of the short-term T-Bill and the 30-year Treasury Bond. Although long-term Treasury Bonds have less risk of being influenced by federal policies, they have substantial maturity risk associated with the market risk. In addition, long-term Treasury Bonds bear the risk of unexpected inflation.

[17] *Pa. PUC v. UGI Utilities, Inc. – Electric Division*; Docket No. R-2017-2640058 (Order entered October 25, 2018), p. 99.

Additionally, the Commission recognized:[18]

> I&E's CAPM model uses forecasted yields on ten-year Treasury bonds, and accordingly, its methodology captures forward-looking changes in interest rates.

Q. WHAT IS THE ECAPM?

A. The ECAPM is a modified version of the CAPM which attempts to address the belief that the actual risk versus return correlation is flatter than what is predicted by the CAPM. The implication is that the CAPM underestimates returns with lower levels of risk and over-estimates the returns associated with higher levels of risk. ECAPM entails assigning 25% weight to the market beta (1.0) and 75% weight to the individual company or proxy group beta.[19]

Q. EXPLAIN YOUR DISAGREEMENT WITH MS. BULKLEY'S USE OF THE ECAPM.

A. The use of the ECAPM in estimating the cost of capital does not increase the validity of the result, but instead it injects another measure of subjectivity to the CAPM in an attempt to make the Security Market Line more accurate. The ECAPM reduces the purpose of the beta, which is the only company-specific variable in the CAPM model. This additional layer of subjectivity provides an

[18] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 154 (Order entered May 16, 2022).

[19] David C. Parcell, "The Cost of Capital – A Practitioner's Guide," 2010 Edition, p. 104.

even stronger basis to rely on the DCF, as I have done, as the primary method to calculate a utility's cost of equity.

Q. WHAT IS YOUR CONCLUSION REGARDING MS. BULKLEY'S CAPM ANALYSIS?

A. In the table below, I have recalculated and summarized Ms. Bulkley's CAPM analysis (PAWC Exhibit No. 13-A, Schedule 5) by removing the gas and electric utilities in her proxy group, using my recommended 10-Year Treasury Note (risk-free rate of 4.00%) rather than 30-Year Treasury Bond as the risk-free rate (4.84%), and eliminating the ECAPM analysis. This recalculation maintains Ms. Bulkley's forecasted market return, as well as separate analyses for the Value Line betas, Bloomberg betas, and Value Line long-term average betas from 2013 through 2022. The overall average result of this recalculation below yields a 9.81% CAPM result, which is lower than my CAPM result of 10.44%. The following table shows the I&E Modified version of PAWC Exhibit No. 13-A, Schedule 5:

I&E MODIFIED - PAWC Exhibit 13-A, Schedule 5

CAPITAL ASSET PRICING MODEL - CURRENT RISK-FREE RATE & VL BETA

K = Rf + β (Rm − Rf)

		[1]	[2]	[3]	[4]	[5]
Company	**Ticker**	**Forecasted 10-Year Treasury Note**	**Beta (β)**	**Market Return (Rm)**	**Market Risk Premium (Rm − Rf)**	**ROE (K)**
American States Water Company	AWR	4.00%	0.70	12.49%	8.49%	9.94%
California Water Service Group	CWT	4.00%	0.70	12.49%	8.49%	9.94%
Middlesex Water Company	MSEX	4.00%	0.75	12.49%	8.49%	10.37%
SJW Group	SJW	4.00%	0.85	12.49%	8.49%	11.21%
Mean			0.75			10.37%

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & BLOOMBERG BETA

K = Rf + β (Rm − Rf)

		[1]	[2]	[3]	[4]	[5]
Company	**Ticker**	**Forecasted 10-Year Treasury Note**	**Beta (β)**	**Market Return (Rm)**	**Market Risk Premium (Rm − Rf)**	**ROE (K)**
American States Water Company	AWR	4.00%	0.65	12.49%	7.64%	8.97%
California Water Service Group	CWT	4.00%	0.69	12.49%	7.64%	9.25%
Middlesex Water Company	MSEX	4.00%	0.77	12.49%	7.64%	9.90%
SJW Group	SJW	4.00%	0.80	12.49%	7.64%	10.09%
Mean			0.73			9.55%

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE & VALUE LINE LT AVERAGE BETA

K = Rf + β (Rm − Rf)

		[1]	[2]	[3]	[4]	[5]
Company	**Ticker**	**Forecasted 10-Year Treasury Note**	**Beta (β)**	**Market Return (Rm)**	**Market Risk Premium (Rm − Rf)**	**ROE (K)**
American States Water Company	AWR	4.00%	0.69	12.49%	7.64%	9.27%
California Water Service Group	CWT	4.00%	0.71	12.49%	7.64%	9.39%
Middlesex Water Company	MSEX	4.00%	0.74	12.49%	7.64%	9.62%
SJW Group	SJW	4.00%	0.76	12.49%	7.64%	9.77%
Mean			0.72			9.51%

Notes:

[1] I&E Source: Blue Chip Financial Forecasts - December 1, 2023 and December 28, 2023

[2] Source: PAWC Exhibit No. 13-A, Schedule 5 - Value Line Reports and Bloomberg Professional

[3] Source: Schedule 7

[4] Equals [3] - [1]

[5] Equals [1] + [2] x [4]

I&E Recalculated Average Of All CAPM Results : 9.81%

BUSINESS RISKS

Q. SUMMARIZE MS. BULKLEY'S CLAIMS REGARDING THE COMPANY'S BUSINESS RISKS.

A. Ms. Bulkley explains that PAWC will spend approximately $1.00 billion on capital investments for the period through June 30, 2025 (FTY and FPFTY), which includes significant investment to replace aging infrastructure and to comply with various regulations and recent acquisitions of utility systems (PAWC Statement No. 13, p. 49, lines 9-12). She claims in general that the additional pressure on cash flows associated with high levels of capital expenditures exerts corresponding pressure on credit metrics and credit ratings (PAWC Statement No. 13, p. 49, lines 14-16). She also briefly mentions that the water and wastewater Distribution System Improvement Charge (DSIC), allows PAWC to recover the costs associated with replacing and repairing aging water and wastewater infrastructure. The Company is proposing an Environmental Compliance Investment Charge recovery mechanism, which would allow for the recovery of the fixed costs associated with certain non-revenue producing, non DSIC-eligible projects between rate cases that are related to environmental requirements (PAWC Statement No. 13, p. 50, lines 26-28 and p. 51 lines 1-2).

Additionally, Ms. Bulkley supports PAWC's proposed Rate Decoupling Mechanism (RDM) discussed by Company witness Charles B. Rea to insulate the Company from revenue volatility caused by seasonal weather conditions and continuing trends in declining use per customer in the residential, commercial, and

municipal customer classes to support her recommended ROE range (PAWC Statement No. 13, p. 53, lines 7-10). She claims that if the RDM is not authorized, PAWC will have greater risks than the proxy group (PAWC Statement No. 13, p. 54, lines 13-14).

Lastly, Ms. Bulkley discusses stock issue flotation costs, the costs associated with the sale of new issues of common stock of the parent company, which include out-of-pocket expenditures for preparation, filing, underwriting, and other issuance costs. She calculates the impact on the proxy group's cost of equity of six basis points (i.e., 0.6 percent) based on the mean and median values and states that her final ROE results do not incorporate an explicit adjustment for flotation costs (PAWC Statement No. 13, pp. 46-49).

Q. DO YOU AGREE WITH MS. BULKLEY'S CONCERNS REGARDING THE COMPANY'S HIGH LEVEL OF CAPITAL EXPENDITURES OVER THE NEXT FEW YEARS?

A. Not entirely. While I do agree that the Company makes substantial capital investments and as usual will continue its capital expenditure program in coming years, it is not unique to PAWC. It is common knowledge that the entire water industry must cope with aging infrastructure, which positions all water companies in her proxy group in a similar situation. Additionally, Ms. Bulkley acknowledges that each of the industries in her proxy group face similar risks associated with

cost recovery related capital investment/expenditures (I&E Exhibit No. 2, Schedule 13, p. 1).

Q. DO YOU AGREE WITH MS. BULKLEY'S CONCERN REGARDING THE COMPANY'S CREDIT RATING RISK DUE TO CAPITAL EXPENDITURES OR THE INEVESTMENT PLAN?

A. No. The Commission does encourage efficiency and savings in costs where possible to reduce ratepayer expenses and allows the opportunity for utilities to recover the full true cost of doing business. Pennsylvania utilizes various mechanisms to assist utilities in recovering costs and earn fair returns. The first, which Ms. Bulkley herself discusses, is the DSIC. In addition to the DSIC, jurisdictional utilities, including PAWC, can take advantage of an FPFTY for ratemaking, which allows utilities to recover forecasted expenses and capital expenditures and to anticipate future anomalous events. Accordingly, PAWC has been taking advantage of the FPFTY for ratemaking by filing base rate cases at regular interval as shown in the table below:

Base Rate Case Docket No.	Filing Date
R-2023-3043189 and 3043190	November 8, 2023
R-2022-3031672 and 3031673	April 29, 2022
R-2020-3019369 and 3019371	April 29, 2020
R-2017-2595853	April 28, 2017

Furthermore, utilities have the option to file petitions and rate cases with the Commission should unforeseen or extraordinary circumstances occur. In short, the DSIC mechanism and base rate case filings are risk-reduction mechanisms available to PAWC that mitigate pressure on cash flows and alleviate concerns about potential credit risks.

Lastly, it is important to note that PAWC and its parent company, AWK have consistently maintained their credit ratings between 2018 and 2022 as shown in table below (PAWC Filing, Volume 7, FR VII.17):

2018-2022	PAWC	AWW
Moody's Investors	A3 (Stable Outlook)	Baa1 (Stable Outlook)
S&P Global	A (Stable Outlook)	A (Stable Outlook)

Ms. Bulkley's concerns regarding pressure on credit metrics and potential credit rating risk due to the capital expenditure plan are speculative and unsupported because historically PAWC has been consistently making capital expenditures to improve its infrastructure summarized in the table below (I&E Exhibit No. 2, Schedule 13, pp. 2-5):

	Water Ops.	Wastewater SSS Ops.	Wastewater CSS Ops.	Total
2018	$406.36 Mn.	$13.36 Mn.	$13.51 Mn.	$433.23 Mn.
2019	$283.47 Mn.	$21.63 Mn.	$45.87 Mn.	$350.97 Mn.
2020	$313.79 Mn.	$18.65 Mn.	$54.57 Mn.	$387.01 Mn.
2021	$340.40 Mn.	$19.03 Mn.	$34.21 Mn.	$393.64 Mn.
2022	$406.80 Mn.	$39.00 Mn.	$39.46 Mn.	$485.26 Mn.

Considering the historic capital expenditure level, the proposed capital expenditures of approximately $1.00 billion for the two-year period through June 30, 2025 (the FTY and FPFTY) is not an extraordinary increase in the CapEx plan that would create pressure on financials and credit metrics. This does not support or justify PAWC's claim for a higher cost of equity.

Q. PLEASE CONTINUE.

A. Despite the historically consistent increase in capital investment as shown in the above table, PAWC has depicted a consistent financial result or increase in operating revenues, operating income, net income, and rate base as reported in its PUC Annual Reports, which is summarized in the table below (I&E Exhibit No. 2, Schedule 13, pp. 6-7):

Water Operations:

	Operating Revenue	Operating Income	Net Income
2018	$627.98 Mn.	$240.19 Mn.	$164.71 Mn.
2019	$626.14 Mn.	$231.68 Mn.	$159.99 Mn.
2020	$662.03 Mn.	$246.82 Mn.	$168.09 Mn.
2021	$686.62 Mn.	$278.70 Mn.	$197.29 Mn.
2022	$711.79 Mn.	$281.10 Mn.	$195.37 Mn.

Wastewater Operations:

	Operating Revenue	Operating Income	Net Income
2018	$61.23 Mn.	$24.32 Mn.	$24.82 Mn.
2019	$62.98 Mn.	$25.43 Mn.	$27.11 Mn.
2020	$71.03 Mn.	$28.18 Mn.	$29.31 Mn.
2021	$82.95 Mn.	$31.44 Mn.	$31.55 Mn.
2022	$106.61 Mn.	$40.54 Mn.	$41.14 Mn.

Total Company - Rate Base:

2018	2019	2020	2021	2022
$3,389 Mn.	$3,722 Mn.	$3,952 Mn.	$4,210 Mn.	$4,726 Mn.

Additionally, the parent company, AWK has consistently increased yearly dividend payments to its shareholders as shown in the table below,[20] which

[20] American Water - Stock Information - Dividend History (amwater.com) (accessed on January 10, 2023).

acknowledges steady and sustainable growth in the historic financial condition or strength of the parent company and the group as a whole:

Year	Dividend paid per stock	Year	Dividend paid per stock
2014	$1.21	2019	$1.96
2015	$1.33	2020	$2.15
2016	$1.47	2021	$2.36
2017	$1.62	2022	$2.57
2018	$1.78	2023	$2.78

AWK has a yearly target of 7% to 9% growth rate in the long-term EPS and dividend payment.[21]

Q. PLEASE DISCUSS MS. BULKLEY'S COMMENTS CONCERNING THE COMPANY'S DSIC.

A. Ms. Bulkley acknowledges the benefits of the DSIC to the Company when it comes to recovering the costs of repairing and replacing aging water and wastewater infrastructure (PAWC Statement No. 13, p. 50, lines 26-28). However, she opines that since each of the companies in her proxy group have infrastructure and capital recovery mechanisms, the presence of a DSIC and the Company's proposed Environmental Compliance Investment Charge recovery

[21] Q3 2023 Earnings & 2024 Outlook Call Presentation (q4cdn.com) p. 6 (accessed on January 10, 2023).

mechanism may not reduce PAWC's risk vis-à-vis that of the proxy group (PAWC Statement No. 13, p. 51, lines 8-11).

Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY'S COMMENTS REGARDING THE COMPANY'S DSIC?

A. While the comparative risk to Ms. Bulkley's proxy group companies (water, gas, and electric) with different jurisdictions that have implemented the infrastructure and capital recovery mechanism may not change, the fact that the mechanisms, such as DSIC, FPFTY ratemaking, and the ability to file rate cases as needed are accessible to Pennsylvania's regulated utilities to reduce risk. Additionally, these mechanisms were designed to reduce regulatory lag and assist in timely cost recovery, not to replace rate case proceedings. Further, Ms. Bulkley notes that S&P ranked "Pennsylvania Above Average 2 since 2019 using a scale of 9 steps ranging from a low of Below Average to Above Average, which indicates that this ranking is based on a constructive regulatory climate, relying on forward test years, year-end rate base and reduction in regulatory lag" (PAWC Statement No. 13, p. 52, lines 10-13).

Q. SUMMARIZE THE COMPANY'S PROPOSAL REGARDING THE PROPOSED RDM.

A. Company witness Charles B. Rea (PAWC Statement No. 10, pp. 86-106) is the primary witness who discusses PAWC's RDM proposal as an alternative rate

design mechanism, while Ms. Bulkley provides an analysis of the implications on the Company's risk profile of accepting or denying the RDM proposal. As Mr. Rea claims in much greater detail, the ultimate purpose of the RDM is to more reliably recover the revenue requirement and associated fixed costs approved by the Commission in this case to stabilize revenue volatility and the associated risk in recovering fixed costs from year to year as revenues vary due to seasonal weather conditions and the ongoing trend of declining water usage by residential, commercial, and municipal customers (PAWC Statement No. 10, p. 86, lines 16-18 and p. 87, lines 13-15).

Q. DISCUSS MS. BULKLEY'S RISK CLAIMS REGARDING THE COMPANY'S PROPOSED RDM.

A. Ms. Bulkley argues that if water usage going forward is less than the levels set in this rate proceeding, the Company's revenues will be less than what is authorized as a result of this case, making it difficult to earn the authorized ROE (PAWC Statement No. 13, p. 53, lines 12-14). Ms. Bulkley provides an analysis in which she determines that 59 percent of the companies in her proxy group have implemented some form of a revenue decoupling mechanism (PAWC Exhibit No. 13-A, Schedule 9). She concludes that PAWC would be more comparable to the proxy group with the RDM (PAWC Statement No. 13, p. 54, lines 12-13). She states that the implementation of an RDM would not affect her recommended

ROE range considering the overall risk of PAWC and the proxy group companies (PAWC Statement No. 13, pp. 53 lines 15- 16).

Q. WHAT ARE YOUR COMMENTS REGARDING THE PROPOSED RDM AND ITS POTENTIAL IMPACT ON THE COMPANY'S RISK PROFILE?

A. I agree with the simple concept that a guaranteed revenue recovery mechanism reduces a company's overall business risk profile and protects it from financial loss caused due to revenue loss. However, as discussed above, PAWC already has access to and is currently taking advantage of risk reducing mechanisms such as the DSIC, the use of a FPFTY in base rate filings, and petitions to request deferral of extraordinary costs incurred, such as COVID-19 related deferrals for example, in order to cover the entire cost of doing business and reduce any regulatory lag.

Q. DOES MS. BULKLEY'S ANALYSIS HEAVILY RELY UPON THE INCLUSION OF GAS AND ELECTRIC UTILITIES TO SUPPORT THE CLAIM THAT 59% OF HER PROXY GROUP COMPANIES HAVE A REVENUE DECOUPLING MECHANISM?

A. Yes. Ms. Bulkley's analysis is extremely misleading as it included gas and electric utilities, which as discussed above, are dissimilar to water companies and should not be included in the proxy group. In the table below, I recreate Ms. Bulkley's Schedule 9 analysis and change it only by removing the gas and electric

utilities she identifies under "Utility Type," which results in the inclusion of only the companies she identifies as water utilities.

I&E MODIFIED PAWC EXHIBIT 13-A, SCHEDULE 9

COMPARISON OF PAWC AND PROXY GROUP COMPANIES
CAPITAL COST RECOVERY MECHANISMS

Company	State	Utility Type	Infrastructure Cost Recovery Mechanism	Future Test year	Revenue Stabilization or Decoupling
American States Water Co.					
	California	Water	Yes	Fully Forecast	Full
California Water Service Group					
	California	Water	Yes	Fully Forecast	Full
	Hawaii	Water	No	Fully Forecast	No
	New Mexico	Water	No	Historical	No
	Washington	Water	Yes	Historical	No
Essential Utilities, Inc.					
	Pennsylvania	Water	Yes	Fully Forecast	No
	Ohio	Water	Yes	Partially Forecast	No
	Illinois	Water	Yes	Fully Forecast	Full
	Texas	Water	Yes	Historical	No
	New Jersey	Water	Yes	Partially Forecast	No
	North Carolina	Water	Yes	Historical	No
	Indiana	Water	Yes	Fully Forecast	No
	Virginia	Water	Yes	Historical	No
Eversource Energy					
	Connecticut	Water	Yes	Fully Forecast	Full
	Massachusetts	Water	Yes	Historical	No
	New Hampshire	Water	Yes	Historical	No
Middlesex Water Company					
	New Jersey	Water	Yes	Partially Forecast	No
	Delaware	Water	Yes	Historical	No
	Pennsylvania	Water	No	Fully Forecast	No
SJW Group					
	California	Water	Yes	Fully Forecast	No
	Connecticut	Water	Yes	Fully Forecast	Full
	Maine	Water	Yes	Historical	No
	Texas	Water	No	Historical	No
Proxy Group Totals			Yes 19	Historical 10	Full 5
			No 4	Fully FC 10	Partial 0
				Partially FC 3	FRP 0
					SFV 0
					No 18
			Yes 82.60%	**Forecast 56.52%**	**Full 21.74%**
PAWC	**Pennsylvania**	**Water**	**Yes**	**Fully Forecast**	**Proposing**

This analysis illustrates that less than 22% of Ms. Bulkley's proxy group have implemented some type of revenue decoupling mechanism. Ms. Bulkley's claim of 59% of utilities (comprised of gas, electric, and water) does not support PAWC's proposed RDM when compared with the analysis of the more comparable water utilities in the proxy group as shown in the above table.

Q. IN YOUR OPINION, DOES PAWC'S CURRENT ACCESS TO A WIDE VARIETY OF REGULATORY RISK-REDUCING MEASURES WEIGH AGAINST ITS ALLEGED NEED FOR AN RDM AND ITS REQUESTED ROE?

A. Yes. PAWC already has use of a DSIC, an FPFTY for ratemaking, the discretionary ability to file rate cases, and the ability to file petitions for deferral of extraordinary costs. In my view, to permit it to add both a declining water usage adjustment as well as an additional revenue decoupling mechanism such as the proposed RDM as Mr. Rea recommends (PAWC Statement No. 10, p. 105 lines 12-20 and p. 106, lines 1-5), all while requesting an extremely high ROE, would be unreasonable and harmful to ratepayers and conservation efforts. To add additional mechanisms for risk reduction while requesting an ROE above that which any comparable utility has received as cited previously herein is simply rapacious. Investors expect higher risk investments to yield higher returns, while the inverse is also true, that lower risk investments typically require lower returns, and regulated utilities are inherently lower risk investments. However, in this proceeding, the Company is effectively

seeking to eliminate virtually all business risks all while claiming an excessively high ROE.

Q. WHAT IS I&E'S RECOMMENDATION REGARDING THE COMPANY'S RDM PROPOSAL?

A. I&E witness Ethan Cline (I&E Statement No. 4) addresses the proposed RDM in detail and presents I&E's recommendation that the Commission deny the Company's RDM proposal.

Q. DISCUSS MS. BULKLEY'S CLAIMED RISKS ASSOCIATED WITH ENVIRONMENTAL AND WATER QUALITY REGULATION.

A. Ms. Bulkley explains that water utilities are subject to a complex array of regulations at the federal, state, and river basin commission levels with respect to water quantity, water quality, and other environmental aspects of their facilities and operations (PAWC Statement No. 13, p. 54, lines 19-21). She defers to Company witness Jim Runzer (PAWC Statement No. 3) who provides a detailed discussion of the environmental and regulatory risks facing water and wastewater utilities.

Q. SUMMARIZE MR. RUNZER'S TESTIMONY REGARDING THE ENVIRONMENTAL AND REGULATORY RISKS FACING WATER AND WASTEWATER UTILITIES.

A. Mr. Runzer discusses PAWC's operational performance by implementing various operating measures and initiatives for water quality improvement and source water monitoring efforts, commitment to safety, state-of-the-art technology, advanced metering infrastructure, etc. to provide safe and reliable services to its customers (PAWC Statement No. 3, p. 3, lines 8-17). All these business operation-related measures and initiatives enable the Company to remain in compliance with the federal, state, and local environmental and regulatory requirements.

Q. DO YOU AGREE WITH MS BULKLEY'S CLAIM REGARDING RISKS ASSOCIATED WITH ENVIRONMENTAL AND WATER QUALITY REGULATIONS AND THE PLANNED CAPITAL INVESTMENT PROGRAM?

A. No. I accept that PAWC may be subject to environmental risks and challenges, however, as discussed by Mr. Runzer, PAWC is effectively managing these challenges by implementing various operating measures and initiatives. I disagree that those challenges are unique to PAWC as necessary to support a risk adjustment. All water utilities providing water and/or wastewater services are required and expected to comply with all applicable statutory (federal, state, and local) rules and regulations including environmental and water quality-related

regulations for doing a business within the framework of the law. The arguments made by Ms. Bulkley concerning environmental and water quality regulations have an impact not only on PAWC, but they are industry-wide realities. Since all regulated water and wastewater utility companies must deal with these regulations, no one water company in Ms. Bulkley's proxy group is riskier than another in this respect. Ms. Bulkley herself acknowledges that all the water utilities in her proxy group are required to comply with the environmental and water quality regulations at the federal level and also required to comply with the state and local regulations (I&E Exhibit No. 2, Schedule 13, p. 8). Further, operating costs associated with providing safe and reliable water and wastewater services in compliance with regulations are recoverable, eliminating a vast majority of the risks and concerns regarding this issue.

Q. IS THERE A CAUSE FOR CONCERN REGARDING THE IMPACT OF RISK ASSOCIATED WITH ENVIRONMENTAL AND WATER QUALITY REGULATIONS ON PAWC'S COST OF EQUITY AND CREDIT QUALITY?

A. No. Ms. Bulkley points out that the significant environmental risk factors faced by PAWC and the magnitude of the capital program that the Company has planned to maintain compliance, support an ROE above the proxy group mean and median (PAWC Statement No. 13, p. 57, lines 4-7). As discussed above, environmental risk factors faced by PAWC are industry-wide realities and they are

normal business risk factors managed by all water utilities in the proxy group. Therefore, Ms. Bulkley's claim to support her proxy group mean and median ROE highlighting environmental risk factors is not logical or appropriate.

Additionally, these risk factors did not impact the Company's current credit ratings of "A3" with a stable outlook from Moody's Investors Service and "A" with a stable outlook from S&P Global as discussed above. These credit ratings are considered investment grade with low credit risk. In the most recent Moody's credit opinion of January 25, 2023, Moody's summarizes PAWC's business risks as follow (PAWC filing, FR VII, Attachment 1 Confidential, pdf p. 539): **[BEGIN PROPRIETARY]**

> PAWC credit profile benefits from its low business risk as a regulated water utility, strong cost recovery features provided by legislation, supportive regulatory decisions from the Pennsylvania Public Utilities Commission (PUC) and equity and liquidity support from its large, diversified parent company, American Water Works, Inc. (Baa1 stable). These strengths have supported PAWC's record of consistent cash flow generation and strong financial metrics including an FFO to net debt ratio of about 20%. We expect the utility to sustain stable credit metrics over the next several years.**[END PROPRIETARY]**

Q. DO YOU AGREE WITH MS. BULKLEY'S DISCUSSION REGARDING THE POTENTIAL IMPACT OF SHARE ISSUE FLOTATION COSTS ON THE ROE?

A. No. Generally, the flotation costs of the parent company are accounted for and recovered as O&M expenses or amortized over a certain period on the books of

the issuer company. It is inappropriate to present the potential impact of this cost for seeking support to the claimed ROE in this proceeding.

MANAGEMENT PERFORMANCE

Q. WHAT IS MS. BULKLEY'S CLAIM REGARDING ADDITIONAL POINTS TO PAWC'S ROE FOR MANAGEMENT PERFORMANCE?

A. Ms. Bulkley refers to Sections 523(a) and (b) that lists efficiency, effectiveness, and adequacy of service factors as well as the management effectiveness and operating efficiency that the Commission shall consider in evaluating the performance of water and wastewater utilities. She also refers to 52 Pa. Code § 69.711, which outlines the Commission's acquisition incentives, including rate of return premiums, acquisition adjustments, deferral of acquisition improvement costs and plant improvement surcharges to encourage the acquisition of troubled water and wastewater systems by viable utilities (PAWC Statement No. 13, p. 57, lines 11-18). She largely refers to PAWC witness Ashley Everette's testimony (PAWC Statement No. 1) to support the Company's management performance claims. Ultimately, Ms. Bulkley suggests that a reasonable range of ROE estimates for PAWC is from 10.00% to 11.25% and specifically recommends an ROE of 10.95%, which she acknowledges is at the high end of the reasonable range to account for the Company's claimed excellent management performance (PAWC Statement No. 13, p. 59, lines 3-6).

Ms. Everette supports Ms. Bulkley's recommended ROE of 10.95% - at the upper end of her ROE estimated range (10.00% - 11.25%) in recognition of claimed superior management performance (PAWC Statement No. 1, p. 33. lines 9-12). Further, she opines that if the Commission were to approve a rate of ROE that is lower than the upper end of Ms. Bulkley's recommended range, it should add (for a management performance reward) no less than 25 basis points to its market-determined rate of return (PAWC Statement No. 1, p. 33. lines 12-15).

Q. WHAT EVIDENCE DOES THE COMPANY PRESENT TO SUPPORT ITS 25 BASIS POINT ADJUSTMENT TO ITS ROE FOR MANAGEMENT PERFORMANCE?

A. Like Ms. Bulkley, Ms. Everette also refers to 52 Pa. Code § 69.711 as well as 66 Pa C.S.A. § 523, which dictates the Commission "shall consider" "the efficiency, effectiveness, and adequacy of service of each utility when determining just and reasonable rates" to support additional basis points for exemplary management performance. Ms. Everette identifies eight specific factors that she claims demonstrates the Company's "exemplary management performance." These factors include the Company's dedication to assisting its low-income and payment-troubled customers, environmental efforts and a commitment to water quality, strong safety performance, the Company's commitment to operational and water efficiency, significant infrastructure investment, community engagement and consumer education initiatives, efforts to eliminate problems of small,

troubled, and nonviable water and wastewater systems through acquisitions, and efforts to extend water service to untapped service areas (PAWC Statement No. 1, p. 33, lines 18-22 and p. 34, lines 1-6).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIMS REGARDING AN ROE ADJUSTMENT FOR MANAGEMENT PERFORMANCE?

A. No. First, many of the topics presented by the Company witnesses fall within the categories of reliability, customer service obligation, and safety that are required of every public utility company under 66 Pa C.S.A. §1501. The Company passes capital expenditures (investments) for infrastructure improvements onto ratepayers via base rates and utilizes a DSIC mechanism for capital expenditure recovery. Further, if the Company's operational efficiency results in controlling operating and maintenance costs, those savings should flow through to ratepayers and/or investors. These savings would likely be offset by the addition of basis points for management performance as ratepayers would have to fund the additional costs. This defeats the purpose of any cost cutting measures to benefit ratepayers. The Company has burdened ratepayers with three substantial rate increases starting on January 1, 2018, caused by three consecutive base rate cases filed on April 28, 2017, April 29, 2020, and April 29, 2022, and now, this fourth-rate case filed on November 8, 2023 within 18 months of the 2022 base rate case, in addition to the DSIC and other surcharges. Regarding the Company's bill payment assistance programs or initiatives for the low-income and payment-troubled customers, it is

important to note that the cost of such programs are largely funded by residential customers and government funded programs. For example, in this case the Company claimed a $2,864,700 expense to fund its recent Arrearage Management Plan to provide qualifying low-income customers with $25 of arrearage forgiveness per month (PAWC Statement No. 1, p. 16, lines 1 and 16-17).

Q. DO YOU HAVE ANY OTHER POINTS TO SUPPORT YOUR RECOMMENDED DISALLOWANCE OF THE PROPOSED ROE ADJUSTMENT FOR A MANAGEMENT PERFORMANCE AWARD?

A. Yes. Further to my discussion above, I refer to the Company's most recent Management and Operations Audit Report, prepared by the Commission's Bureau of Audits, issued in October 2023, which illustrates the following summary of findings (Exhibit I-1, page 4 of the report):[22]

[22] Management and Operations Audit of Pennsylvania-American Water Company, prepared by The Pennsylvania Public Utility Commission, Bureau of Audits at Docket No. D-2022-3035217, October 2023.

Functional Area	Meets Expected Performance Level	Minor Improvement Necessary	Moderate Improvement Necessary	Significant Improvement Necessary	Major Improvement Necessary
Executive Management and Organizational Structure		X			
Corporate Governance		X			
Cost Allocations and Affiliated Interests			X		
Financial Management		X			
Water Operations			X		
Wastewater Operations		X			
Emergency Preparedness			X		
Purchasing and Materials Management		X			
Customer Service			X		
Information Technology		X			
Fleet Management		X			
Human Resources and Diversity		X			

It is important to note that not a single functional area out of the twelve functional areas meets the expected level of performance. All twelve areas require some level of improvement. The audit report contains identifiable, potential quantifiable cost savings of approximately $3.13 million in annual savings and $4.00 million in one-time savings (summarized on Exhibit I-2, page 5 of the report) from effective implementation of the recommendations. Notably, the audit report

recommendations identified operational and service improvements for customers as listed below:

- Reducing unaccounted-for-water (UFW) below the Commission's 20% threshold and reporting UFW correctly.
- Reducing line hits to the Company's underground facilities.
- Improving physical security for control rooms and SCADA control systems.
- Improving customer service performance to pre-pandemic levels at a minimum.
- Continuing outreach efforts to payment troubled customers and leveraging low-income resources to help reduce the level of outstanding customer balances.

PAWC's implementation plan[23] accepts twenty-three of the recommendations and partially agrees with the remaining eight recommendations detailed in the audit report.

With the level of improvement that PAWC requires, and other topics discussed above, I do not believe that PAWC's claim for an exemplary management performance award of 25 basis points in ROE is justified or warranted in the interest of ratepayers.

[23] PAWC Implementation Plan in response to the 2022-23 Focused Management and Operations Audit Report filed with the Commission at Docket No. D-2022-3035217.

Q. ARE YOU AWARE OF ANY COMPANIES IN PENNSYLVANIA THAT HAVE RECEIVED ADDITIONAL BASIS POINTS IN RECOGNITION OF MANAGEMENT PERFORMANCE IN THE LAST FIFTEEN YEARS?

A. Yes. Most recently in one base rate case, the Commission awarded Aqua an addition of 25 basis points for its management performance efforts.[24] However, it is important to recognize that this addition was based specifically on the record created in the Aqua case for it rescuing troubled water and wastewater systems at the Commission's request. The Commission stated: [25]

> We specifically recognize Aqua's efforts and willingness to quickly provide emergency aid to various water and wastewater systems that needed substantial improvement. Aqua has often provided this emergency aid on short notice and at the request of the Commission or other parties to protect the public from egregious health and safety threats and to protect the Commonwealth's drinking water resources from catastrophic damage.

Q. DOES THE COMMISSION'S PAST ISSUANCE OF ADDITIONAL EQUITY POINTS RECOGNIZING MANAGEMENT PERFORMANCE MEAN THAT PAWC SHOULD ALSO RECEIVE AN ADJUSTED RETURN ON EQUITY?

A. No. The issuance of equity points to recognize management performance should be done on a case-by-case basis and based on the unique facts of each case.

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[24] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 168-173 (Order entered May 16, 2022).

[25] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, p. 169 (Order entered May 16, 2022).

Notably, in the recommended decision for the Aqua case, Administrative Law Judge Mary D. Long pointed out that while Aqua had in fact acquired troubled water systems, it had also acquired non-troubled water and wastewater systems with the expectation that existing customers help pay the costs to serve the newly acquired customers.[26]

In fact, in this very proceeding, PAWC is proposing to allocate approximately $71 million of wastewater service costs including for the acquired wastewater systems, which is approximately 7% of the FPFTY total proposed water revenue of $1,023,354,270 to its current water operation customers (PAWC Statement No. 1, p. 19, lines 20-21 and p. 20, lines 1 and 9, and PAWC filing Exhibit No. 3-A, p. A, Combined Water and Wastewater Revenue Requirement-Summary). The Company is causing unwarranted financial harm to current customers by forcing them to subsidize services they do not and likely will not ever use. I&E witness Kubas (I&E Statement No. 3) discusses these subsidies and their impact on rates in greater detail.

Additionally, it must be made clear that companies are made whole for their acquisitions and receiverships of small nonviable water and wastewater systems. For example, in the orders of two acquisition cases under 66 Pa. C. S. § 529, the Company references, Delaware Sewer Company and Indian Springs Water Company (PAWC Statement No. 1, p. 42, lines 26-27 and p. 43, lines 3-5),

[26] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, Recommended Decision, pp. 79-80 (February 18, 2022).

where the Commission confirmed that PAWC was able to recover all costs associated with these acquisitions. In the Delaware Sewer Company order, the Commission recognized that PAWC would be made whole:[27]

> That Pennsylvania-American Water Company–Wastewater Operations is permitted to establish a regulatory asset for any ineligible property in order to claim appropriate ratemaking and revenue recovery within a future base rate proceeding.

Additionally, in the Indian Springs Water Company order, the Commission recognized that PAWC would recoup full reimbursement:[28]

> That if Pennsylvania-American Water Company does not receive full reimbursement for all costs of receivership from The Indian Springs Water Company for any reason, including but not limited to this Settlement not being approved by the Commission or the Sale not closing, Pennsylvania-American Water Company may claim any unreimbursed costs in a subsequent base rate case. All Parties to the Settlement reserve their respective rights to challenge a claim for recovery of such costs.

Q. ASIDE FROM BEING ABLE TO RECOVER COSTS OF ACQUIRING TROUBLED SYSTEMS, IS PAWC ALSO REWARDED ON TOP OF JUST COST RECOUPMENT?

A. Yes. Not only is PAWC able to recover all its acquisition costs, but it also earns a return on the associated amounts put into the rate base for both troubled and non-troubled acquired systems. In fact, the benefit of the return PAWC earns on 66 Pa. C.S. § 1329 (Section 1329) acquisitions is significantly compounded when

[27] *Pa. PUC v. Delaware Sewer Company* Docket No. I-2016-2526085, p. 26 (Order entered March 26, 2020).
[28] *Pa. PUC v. Indian Springs Water Company,* Docket No. M-2019-3011972, p. 51 (Order entered October 7, 2021).

considering the continually increasing rate base is determined on a fair market value basis, which is significantly higher than the book value of the acquired system assets as of the date of acquisition. A rate base amount determined at fair market value rather than on book value (net of depreciation) of the acquired system assets adequately compensates for the investment risk of the acquiring company. This enhancement in return due to Section 1329 acquisitions also benefits the Company's shareholders in the end. Lastly, besides the benefit of earning a return on the inflated rate base value of the acquired system, PAWC is expanding its service area (adding to its customer count) and forever revenue stream, strengthening its market monopoly and benefits from combined (water and wastewater) business synergy in the certificated service areas, which results in an improvement or enhancement in the financial performance and balance sheet.

Q. FOR PURPOSES OF ILLUSTRATION, CAN YOU QUANTIFY THE RATE OF RETURN THAT PAWC IS ESTIMATED TO EARN AS A RESULT OF THE LATEST SECTION 1329 TRANSACTIONS INCLUDED IN THIS RATE CASE?

A. Yes. The chart below illustrates the dollar return assuming the Company's claimed rate of return were applied to the ratemaking rate base for the wastewater systems of Butler Area Sewer Authority and The Borough of Brentwood yet to be closed under Section 1329:

PENNSYLVANIA-AMERICAN WATER COMPANY	
Wastewater Systems Ratemaking Rate Base ($231,536,917 + $22,053,946)*	$253,590,863
FPFTY Claimed Overall Rate of Return for Wastewater Systems**	7.94%
Total Return on Wastewater under Acquisitions ($253,590,863 x 7.94%)	$20,135,115
Gross Revenue Conversion Factor***	1.4011
Total Impact to Ratepayers ($20,135,115 x 1.4011)	**$28,211,310**

* PAWC Exhibit No. 3A, pp. 145 and 178.
** PAWC Exhibit No. 13-A, Schedule 13.
*** I&E Exhibit No. 2, Schedule 11.

The above chart illustrates that if the Company's claimed rate of return for the above two wastewater systems were achieved, PAWC would earn a $20,135,115 return on these Section 1329 acquisitions. The Company may be well-intentioned for the acquisitions, but it cannot be ignored that it is earning a meaningful return on its acquisitions that is to be paid by all PAWC customers. PAWC binds ratepayers to fund all the acquisitions, so compelling ratepayers to reward them yet again, in the name of management performance, is inappropriate, unjust, and unreasonable.

Q. BASED ON THE COMPANY'S CLAIMED RATE BASE AND CLAIMED CAPITAL STRUCTURE, WHAT IS THE VALUE OF AN ADDITIONAL 25 BASIS POINTS FOR THE CONSIDERATION OF MANAGEMENT PERFORMANCE TO THE COST OF EQUITY?

A. The example below illustrates the impact of 25 additional basis points to the

Company's cost of equity for the consideration of management performance if applied to the Company's total as-filed rate base and combined capital structure:

PENNSYLVANIA-AMERICAN WATER COMPANY	
FPFTY Claimed Equity Percentage of Capital Structure*	55.30%
Additional Basis Points to Calculated Cost of Equity	25
FPFTY Claimed Rate Base**	$6,096,173,421
Impact Prior to Gross Up (0.5530 x 0.0025 x $6,096,173,421)	$8,427,960
Gross Revenue Conversion Factor***	1.4011
Total Impact to Ratepayers ($8,427,960 x 1.4011)	**$11,808,415**

* PAWC Exhibit No. 13-A, Schedule 11 (Total Company).
** PAWC Exhibit No. 3-A, Summary of Rate Base, pp. 25, 96, 145, 178, and 217 and PAWC Statement No. 4, p. 4 (Total Company).
*** I&E Exhibit No. 2, Schedule 11, p. 2.

In this example, an addition of 25 basis points to the cost of equity in consideration of management performance would force ratepayers to fund an unwarranted additional amount of $11,808,415 annually to cover the increase of the inflated rate of return along with the associated impact resulting from increases to income taxes, uncollectibles, and assessments.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE CONSIDERATION OF 25 ADDITIONAL BASIS POINTS FOR PAWC'S MANAGEMENT PERFORMANCE?

A. I am aware that under 66 Pa C.S.A. §523 the Commission has authority to *consider* a utility's performance, however, it is not mandatory that the Commission grant additional basis points to the ROE. Ultimately, for any

company, true management effectiveness is earning a higher return through efficient use of resources and cost-cutting measures. The greater net income resulting from growth, cost savings, and true efficiency in management and operations is available to be passed onto shareholders. I do not believe that PAWC should be granted additional basis points for doing what it is required to do under 66 Pa C.S.A. §1501 in order to provide adequate, efficient, safe, and reliable service.

Yet, even putting aside cost savings and efficiency benefits for argument's sake, as I explained above, ratepayers are already paying PAWC a return for all closed water and wastewater system acquisitions under Section 1329. As I demonstrated above, regarding the acquisitions of nonviable water and wastewater systems, the Company is not only made whole, but it makes a fair profit from these acquisitions. On top of this, PAWC has also made the management decision to bind ratepayers to fund Section 1329 acquisitions as part of this rate case. I am certainly not opposed to the Company making a fair return, but it is disingenuous to imply that the Company is making acquisitions consistently since the implementation of Act 12 of 2016 (Section 1329) out of goodwill, when in reality, it is simply forcing existing customers to fund them to increase its rate base and earn a larger return. The Company is already fairly compensated for these acquisitions so additional basis points to the cost of equity are unreasonable and unnecessary. Per American Water Work's investor presentation on November 2,

2023, PAWC has entered into twelve acquisition agreements as of September 2023,[29] which would impact customers' rates in the future.

For the reasons previously discussed and the financial impact on ratepayers as illustrated above, I recommend that any addition of basis points to the cost of equity for management performance be disallowed.

OVERALL RATE OF RETURN RECOMMENDATION

Q. WHAT IS THE COMPANY'S PROPOSED COST OF EQUITY AND OVERALL RATES OF RETURN?

A. The Company recommends a cost of equity of 10.95% for both water and wastewater service and overall rates of return of 8.22% and 7.94% respectively.

Q. WHAT IS I&E'S RECOMMENDED COST OF EQUITY AND OVERALL RATES OF RETURN?

A. I&E Exhibit No. 2, Schedule 1, shows the calculation of an appropriate cost of equity for PAWC to be 8.45% for both water and wastewater services and overall rates of return of 6.82% and 6.62% respectively.

[29] Q3 2023 Earnings & 2024 Outlook Call Presentation (q4cdn.com) p. 15 (accessed on January 10, 2023).

FINAL COMMENTS

Q. DO YOU HAVE ANY FINAL COMMENTS REGARDING THE COMPANY'S PROPOSED RETURN ON EQUITY?

A. Yes. First, when asked, Ms. Bulkley indicated that she is not aware of any Commission-authorized ROEs of 10.95% or higher for water utilities throughout the United States in the last two years despite the high interest rate environment since March 2022 (I&E Exhibit No. 2, Schedule 14).

Additionally, the Company's requested 10.95% return on common equity is 130 basis points (1.30%) higher than the Commission's latest approved DSIC incentive ROE of 9.65% (Q3 2023 Quarterly Earnings Summary Report)[30] for water utility companies. The DSIC rate is designed to encourage its use and to incentivize accelerated pipeline replacement and infrastructure upgrades to bring the existing aging infrastructure closer to meeting safety and reliability requirements in between base rate filings. Additionally, it is my understanding that the DSIC rate establishes a benchmark above which a utility company is considered "overearning." As such, the DSIC rate does not serve as a proper measurement of a subject utility's cost of equity in a rate case proceeding. To suggest the cost of equity must be at or above the DSIC rate in this base rate proceeding is inappropriate and not in the public interest.

[30] *PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended September 30, 2023,* approved at Public Meeting on January 18, 2024, at Docket No. M-2023-3044811.

Finally, considering the impact PAWC's claimed high-end record ROE of 10.95% would have on rates, I believe it is important not to overburden ratepayers. As illustrated in the various charts above, any additional basis points beyond the I&E recommended ROE of 8.45% based on a DCF (market-determined) result are unnecessary and will put an enormous burden on ratepayers.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

D. C. Patel
Professional and Educational Background

EXPERIENCE:

- Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania
  June 2015 to present
  Fixed Utility Financial Analyst, Bureau of Investigation and Enforcement
- Pennsylvania Insurance Department, Harrisburg, Pennsylvania
  March 2013 - June 2015
  Insurance Company Financial Analyst, Bureau of Company Licensing & Financial Analysis
- Pennsylvania Department of Revenue, Harrisburg, Pennsylvania
  November 2010 - March 2013
  Accounting Assistant, Bureau of Corporation Taxes (Accounting)
- Hersha Hospitality Management, Harrisburg, Pennsylvania
  June 2007 - November 2010
  Staff Accountant (Taxes), Accounting Department
- Corporate Experience-India
  February 1987 - April 2007
  Worked as Company Secretary for three different companies during this period, which were listed on the Stock Exchanges.

EDUCATION/CERTIFICATION:

- Gujarat State University, Ahmedabad, India:
  - Bachelor of Commerce (Major concentration: Accounting)
    June 1980 - April 1983
  - Bachelor of Law
    June 1983 - December 1988
- The Institute of Company Secretaries of India, New Delhi, India:
  Post Graduate Professional Degree: Company Secretary
  June 1983 - December 1985

RATE CASE TRAINING:

- Attended SURFA – 54th Financial Forum (ROR) in April 2023
- Attended 37th Western NARUC Utility Rate School in May 2016

WORKED ON THE FOLLOWING CASES (Testimony not required):

- R-2022-3032167 - Columbia Gas of Pennsylvania, Inc. (Green Path Rider)
- R-2022-3031172 - Columbia Gas of Pennsylvania, Inc. (1307(f))
- R-2021-3024349 - Columbia Gas of Pennsylvania, Inc. (1307(f))
- R-2021-3023541 - National Fuel Gas Distribution Corporation (§ 1307(f))
- A-2020-3021460 - PA American Water Co.-Upper Pottsgrove-Wastewater (1329)
- A-2020-3020178 - PA American Water Co.-Valley Township-Wastewater (1329)
- A-2020-3019859 - PA American Water Co.-Valley Township-Water (1329)
- R-2020-3019661 - PECO Energy Co. - Gas Operations (1307(f))
- U-2020-3015258 - Pittsburgh Water and Sewer Authority
- R-2019-3008255 - Columbia Gas of Pennsylvania, Inc. (1307(f))
- R-2018-3001568 - PECO Energy Co. - Gas Operations (1307(f))
- R-2018-3000253 - Columbia Gas of Pennsylvania, Inc. (1307(f))
- R-2017-2631441 - Reynolds Water Co.
- A-2017-2629534 - PPL Electric Utilities (Restructuring Plan)
- R-2017-2602611 - PECO Energy Co. - Gas Operations (1307(f))
- R-2016-2567893 - Andreassi Gas Co.
- R-2016-2525128 - Columbia Water Co. - Marietta Division
- R-2015-2493905 - Sands, Inc.
- R-2015-2479962 - Corner Water Supply and Service Corporation
- R-2015-2479955 - Allied Utility Services, Inc.

SUBMITTED TESTIMONY IN THE FOLLOWING CASES:

- R-2023-3038630 Columbia Gas of Pennsylvania, Inc. (1307(f))
- R-2023-3037933 Philadelphia Gas Works
- R-2022-3037368 UGI Electric, Inc. - Electric Division
- A-2022-3034143 Aqua Pennsylvania, Inc. - Borough of Shenandoah (Water System) (1329)
- R-2022-3031672 and R-2022-3031673 - PA American Water Co.
- R-2022-3031211 - Columbia Gas of Pennsylvania, Inc.
- R-2021-3024773 et al. - Pittsburgh Water and Sewer Authority
- A-2021-3024058- PA American Water Co. - Borough of Brentwood (Wastewater System) - 1329
- A-2021-3024681 - PA American Water Co. - York City Sewer Authority/City of York (Wastewater System) (1329)
- R-2021-3024601 - PECO Energy Co. - Electric Operations
- A-2021-3024267 - Aqua Pennsylvania Wastewater, Inc. - Lower Makefield (WW) (1329)
- A-2020-3019634 - PA American Water Co. - Royersford Wastewater (1329)
- R-2020-3018993 - Columbia Gas Pennsylvania, Inc. (1307(f))
- R-2020-3018921 - PECO Energy Co. - Gas Operations

- R-2020-3017951 et al. - Pittsburgh Water and Sewer Authority
- A-2019-3008491 - Aqua Pennsylvania Wastewater, Inc.
- R-2019-3008212 - Citizens Electric Company of Lewisburg, PA
- R-2019-3008208 - Wellsboro Electric Company
- R-2018-3006814 - UGI Utilities, Inc. (Gas Division)
- R-2018-3002645 and 3002647 - Pittsburgh Water and Sewer Authority
- R-2018-3000834 - Suez Water Pennsylvania, Inc.
- R-2018-2647577 - Columbia Gas of Pennsylvania, Inc.
- M-2018-2640802 and M-2018-2640803 - Pittsburgh Water and Sewer Authority (Compliance Plan Stage 2)
- R-2017-2595853 - Pennsylvania American Water Co.
- R-2016-2580030 - UGI Penn Natural Gas, Inc.
- R-2016-2554150 - City of DuBois - Bureau of Water
- R-2016-2529660 - Columbia Gas of Pennsylvania, Inc.
- P-2016-2526627 - PPL Electric Utilities Corp. (DSP IV)

I&E Exhibit No. 2
Witness: D. C. Patel

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2023-3043189 (Water)
&
Docket No. R-2023-3043190 (Wastewater)

Exhibit to Accompany

the

Direct Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

I&E
Summary of Cost of Capital - Water Operations

Type of Capital	Ratio	Cost Rate	Weighted Cost
Pennsylvania-American Water Company (Water Operations)			
Long-Term Debt	44.01%	4.76%	2.09%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	55.99%	8.45%	4.73%
Total	100.00%		6.82%

I&E
Summary of Cost of Capital - Wastewater Operations

Type of Capital	Ratio	Cost Rate	Weighted Cost
Pennsylvania-American Water Company (Wastewater Operations)			
Long-Term Debt	42.73%	4.76%	2.03%
WW Specific Debt	4.40%	2.62%	0.12%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	52.87%	8.45%	4.47%
Total	100.00%		6.62%

Proxy Group Capital Structure

($ in Millions)

	2022		2021		2020		2019		2018		Average
American Water Works Company, Inc.											
Long-term Debt	$ 10,999,000	58.84%	$ 10,424,000	58.82%	$ 9,414,000	59.33%	$ 8,733,000	58.79%	$ 7,576,000	56.37%	58.43%
Preferred Stock	$ -	0.00%	$ -	0.00%	$ -	0.00%	$ -	0.00%	$ -	0.00%	0.00%
Common Equity	$ 7,693,000	41.16%	$ 7,298,000	41.18%	$ 6,454,000	40.67%	$ 6,121,000	41.21%	$ 5,864,000	43.63%	41.57%
	$ 18,692,000	100.00%	$ 17,722,000	100.00%	$ 15,868,000	100.00%	$ 14,854,000	100.00%	$ 13,440,000	100.00%	100.00%
American States Water Company											
Long-term Debt	476,637	40.18%	595,596	46.47%	584,184	47.66%	492,735	45.03%	376,587	40.28%	43.93%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	709,549	59.82%	685,947	53.53%	641,673	52.34%	601,530	54.97%	558,223	59.72%	56.07%
	1,186,186	100.00%	1,281,543	100.00%	1,225,857	100.00%	1,094,265	100.00%	934,810	100.00%	100.00%
California Water Service Group											
Long-term Debt	1,066,325	44.73%	1,069,395	47.59%	794,968	46.32%	799,682	50.63%	710,027	49.30%	47.71%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	1,317,590	55.27%	1,177,594	52.41%	921,344	53.68%	779,906	49.37%	730,157	50.70%	52.29%
	2,383,915	100.00%	2,246,989	100.00%	1,716,312	100.00%	1,579,588	100.00%	1,440,184	100.00%	100.00%
Middlesex Water Company											
Long-term Debt	293,986	42.22%	310,887	45.67%	278,286	44.41%	236,509	42.05%	152,851	37.83%	42.44%
Preferred Stock	2,084	0.30%	2,084	0.31%	2,084	0.33%	2,084	0.37%	2,433	0.60%	0.38%
Common Equity	400,328	57.49%	367,726	54.02%	346,208	55.25%	323,792	57.57%	248,787	61.57%	57.18%
	696,398	100.00%	680,697	100.00%	626,578	100.00%	562,385	100.00%	404,071	100.00%	100.00%
SJW Group											
Long-term Debt	1,491,965	57.32%	1,492,935	59.07%	1,287,580	58.40%	1,283,597	59.05%	431,424	32.67%	53.30%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	1,110,868	42.68%	1,034,519	40.93%	917,160	41.60%	889,984	40.95%	889,312	67.33%	46.70%
	2,602,833	100.00%	2,527,454	100.00%	2,204,740	100.00%	2,173,581	100.00%	1,320,736	100.00%	100.00%

Five-Year Average Capital Structure					
Long-term Debt	49.16%	**Maximum**	58.43%	**Minimum**	42.44%
Preferred Stock	0.08%				
Common Equity	50.76%	**Minimum**	41.57%	**Maximum**	57.18%
	100.00%				

Source:
Compustat (S&P Global Market Intelligence - Data Management Solutions)
Yearly data updates typically provided late April of each year

I&E Exhibit No. 2
Schedule 2

Proxy Group Debt Cost

Company	2022 Interest Charges	2022 Long-Term Debt	Debt Cost
American Water Works Company, Inc.	$ 447.00	$ 10,999.00	4.06%
American States Water Company	27.03	476.64	5.67%
California Water Service Group	46.69	1,066.32	4.38%
Middlesex Water Company	9.37	293.99	3.19%
SJW Group	62.76	1,491.96	4.21%
	Range:	**Low**	**3.19%**
		High	**5.67%**
		Average	**4.30%**

Source:
Compustat (S&P Global Market Intelligence - Data Management Solutions)
Yearly data updates typically provided late April of each year
Dollar amount in millions.

Mergent Bond Record
A-Rated Public Utility Bond Yields

Month	Yield
11/1/2022	5.75%
12/1/2022	5.28%
1/1/2023	5.20%
2/1/2023	5.29%
3/1/2023	5.39%
4/1/2023	5.13%
5/1/2023	5.36%
6/1/2023	5.38%
7/1/2023	5.41%
8/1/2023	5.71%
9/1/2023	5.86%
10/1/2023	6.34%
11/1/2023	5.96%
Average	**5.54%**

Source: Mergent Bond Record - Public Utility Bonds 12/1/2023.

Dividend Yields of the Proxy Group

Company	American Water Works Company, Inc.	American States Water Company	California Water Service Group	Middlesex Water Company	SJW Group
Symbol	*AWK*	*AWR*	*CWT*	*MSEX*	*SJW*
Div	3.00	1.80	1.12	1.32	1.60
52-wk low	114.25	75.20	45.44	61.34	56.96
52-wk high	162.59	99.19	63.92	90.56	81.90
Spot Price	133.51	79.52	51.89	62.95	65.65
Spot Div Yield	2.25%	2.26%	2.16%	2.10%	2.44%
52-wk Div Yield	2.17%	2.06%	2.05%	1.74%	2.30%
Average	**2.21%**	**2.16%**	**2.10%**	**1.92%**	**2.37%**

	Average
Spot Div Yield	**2.24%**
52-wk Div Yield	**2.06%**
Average	**2.15%**

Source: Barrons 1/3/2024
Value Line 01/05/24

I&E Exhibit No. 2
Schedule 5

Five-Year Growth Estimate Forecast for Proxy Group (Actual)

Company	Symbol	Yahoo!	Zacks	Value Line	Average
		Source			
American Water Works Company, Inc.	AWK	7.78%	7.80%	3.00%	6.19%
American States Water Company	AWR	4.40%	6.30%	6.50%	5.73%
California Water Service Group	CWT	10.80%	NA	6.50%	8.65%
Middlesex Water Company	MSEX	2.70%	NA	5.00%	3.85%
SJW Group	SJW	6.10%	NA	8.00%	7.05%
Average					**6.30%**

Sources date:
1/3/2024 & 1/4/2024

Expected Market Cost Rate of Equity for the Proxy Group

	Adjusted Dividend Yield (1)	Growth Rate (2)	Expected Return on Equity (3=1+2)
American Water Works Company, Inc.	2.21%	6.19%	8.40%
American States Water Company	2.16%	5.73%	7.90%
California Water Service Group	2.10%	8.65%	10.75%
Middlesex Water Company	1.92%	3.85%	5.77%
SJW Group	2.37%	7.05%	9.42%
Average	**2.15%**	**6.30%**	**8.45%**

Minimum ROE	**5.77%**
Maximum ROE	**10.75%**

Company	**Beta**
American Water Works Company, Inc.	0.95
American States Water Company	0.70
California Water Service Group	0.75
Middlesex Water Company	0.75
SJW Group	0.85
Average beta for CAPM	**0.80**

Source:
Value Line
01/05/24

Risk-Free Rate

10-Year Treasury Note	Yield
1Q 2024	4.20
2Q 2024	4.10
3Q 2024	3.90
4Q 2024	3.90
2025-2029	3.90
Average	**4.00**

Source:
12/1/2023 & 12/28/2023

Required Rate of Return on Market as a Whole Forecasted

	Dividend Yield	+	Growth Rate	=	Expected Market Return
Value Line Estimate	2.20%		9.73%	(a)	11.93%
S&P 500 Historical Return					12.16%
Average Expected Market Return				**=**	**12.05%**

(a) ((1+45%)^.25)-1) Value Line forecast for the 3 to 5 year index appreciation is 45%

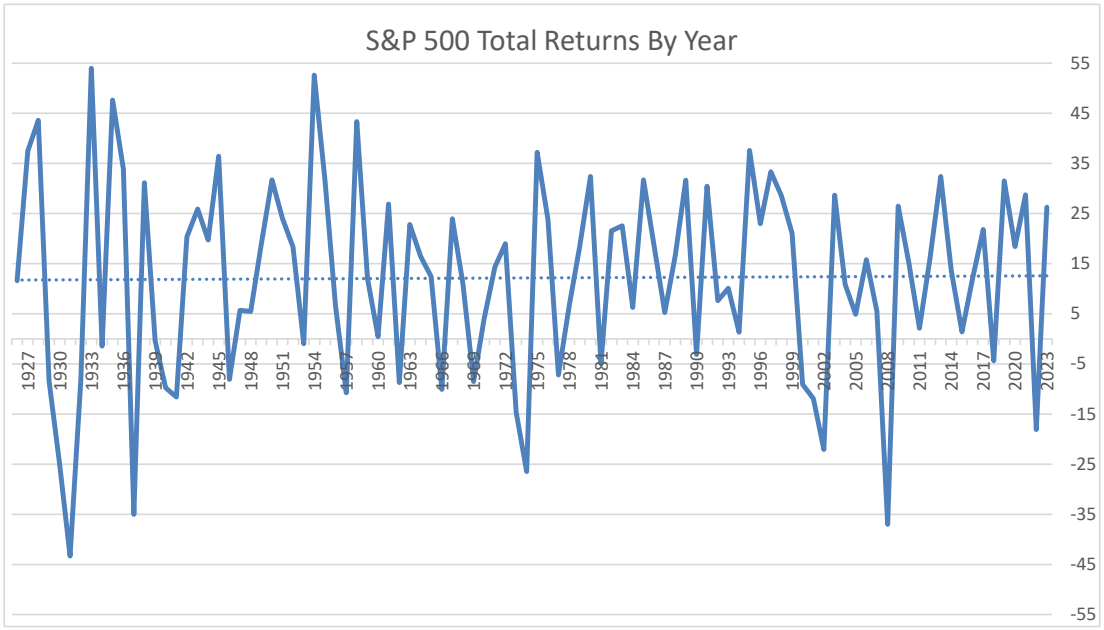
Sources:

S&P 500 Historical Return	1926-2023	12.16%
Value Line Dividend Yield	1/5/2024	2.20%
Value Line Appreciation Potential	1/5/2024	45.00%

S&P 500 Total Return

Year	Return
2023	26.29
2022	-18.11
2021	28.71
2020	18.4
2019	31.49
2018	-4.38
2017	21.83
2016	11.96
2015	1.38
2014	13.69
2013	32.39
2012	16
2011	2.11
2010	15.06
2009	26.46
2008	-37
2007	5.49
2006	15.79
2005	4.91
2004	10.88
2003	28.68
2002	-22.1
2001	-11.89
2000	-9.1
1999	21.04
1998	28.58
1997	33.36
1996	22.96
1995	37.58
1994	1.32
1993	10.08
1992	7.62
1991	30.47
1990	-3.1
1989	31.69
1988	16.61
1987	5.25
1986	18.67
1985	31.73
1984	6.27
1983	22.56
1982	21.55
1981	-4.91
1980	32.42
1979	18.44
1978	6.56
1977	-7.18
1976	23.84
1975	37.2
1974	-26.47
1973	-14.66
1972	18.98
1971	14.31
1970	4.01
1969	-8.5
1968	11.06
1967	23.98
1966	-10.06
1965	12.45
1964	16.48
1963	22.8
1962	-8.73

1961	26.89
1960	0.47
1959	11.96
1958	43.36
1957	-10.78
1956	6.56
1955	31.56
1954	52.62
1953	-0.99
1952	18.37
1951	24.02
1950	31.71
1949	18.79
1948	5.5
1947	5.71
1946	-8.07
1945	36.44
1944	19.75
1943	25.9
1942	20.34
1941	-11.59
1940	-9.78
1939	-0.41
1938	31.12
1937	-35.03
1936	33.92
1935	47.67
1934	-1.44
1933	53.99
1932	-8.19
1931	-43.34
1930	-24.9
1929	-8.42
1928	43.61
1927	37.49
1926	11.62
Average	**12.16**



Source:
https://www.slickcharts.com/sp500/returns

CAPM with Forecasted Return

Re		Required return on individual equity security
Rf		Risk-free rate
Rm		Required return on the market as a whole
Be		Beta on individual equity security
Re	=	Rf+Be(Rm-Rf)
Rf	=	4.00
Rm	=	12.05
Be	=	0.80
Re	=	**10.44**

Sources: Blue Chip Financial Forecasts 12/1/2023 & 12/28/2023
Value Line 1/5/2024

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Bureau of Investigation & Enforcement Set 1

I&E RR-020-D

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Identify and provide the calculation for the gross revenue conversion factor separately for water, wastewater, and total Company for the HTY, FTY, and FPFTY to account for the need to gross-up revenue for taxes, uncollectibles, assessments, etc.

Response:

The Company does not employ a gross revenue conversion factor in the calculation of its revenue requirement. Please see I&E-RR-020-D_Attachment which illustrates a gross revenue conversion factor based on the gross-up revenue components of the revenue requirement for the FPFTY.

Pennsylvania-American Water Company - Total Company Case No. R-2023-3043189
Gross Revenue Conversion Factor- Illustrative Example I&E-RR-020-D_Attachment

I&E Exhibit No. 2
Schedule 11
Page 2 of 2

1	Gross Revenue Increase	$203,945,911	
2	Less: Penalty Revenues	1,020,110	
3	Net: Revenue Increase	$202,925,801	
4	Less: Uncollectibles	2,398,405	1.176%
5	General Assessments	1,290,476	0.636%
6	Taxable Income Before SIT	$200,257,030	
7	Less: State Income Taxes	16,001,685	7.99%
8	Taxable Income Before FIT	$184,255,345	
9	Less: Federal Income Taxes	38,696,642	21.00%
10	Change in Net Operating Income	$145,558,703	
11	Gross Revenue Conversion Factor	1.4011	
12	Net Income	$145,573,082	
13	Uncollectibles	2,398,405	
14	General Assessment	1,290,476	
15	State Income Taxes	16,001,685	
16	Federal Income Taxes	38,696,642	
17	Interest Synchronization CWC	(14,379)	
18	Total Revenue Increase	$203,945,911	

	Check	
19	=1/((1-(0.01176+0.006371447721))*(1-0.0799)*(1-0.21))	1.4011
20	Variance - Rounding	(0.0000)

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https://www.wsj.com/economy/central-banking/fed-holds-rates-steady-and-sees-cuts-next-year-4d554e9f

ECONOMY | CENTRAL BANKING

Fed Begins Pivot Toward Lowering Rates as Inflation Declines

Officials don't rule out further hikes while penciling in three rate cuts in 2024

By Nick Timiraos Follow

Updated Dec. 13, 2023 6:32 pm ET

WASHINGTON—Slowing inflation prompted Federal Reserve Chair Jerome Powell to pivot away from raising interest rates and toward considering when to cut them, igniting a rally on Wall Street.

The Fed held its benchmark federal-funds rate steady at a 22-year high on Wednesday and offered every reason to think that its most recent increase this past July probably marked the end of the most aggressive cycle of hikes in four decades.

At a press conference, Powell focused instead on the risk of causing unnecessary harm to the economy by leaving rates too high as inflation falls. "We're aware of the risk that we would hang on too long," he said. "We're very focused on not making that mistake."

All three major stock indexes climbed, with the Dow industrials up 512 points or 1.4% to 37090, a record close. Yields on the 10-year Treasury note declined 0.173 percentage point to 4.032%, the lowest level since August.

Officially, the Fed's policy statement indicated policy makers left the door open to raising rates again. "It is far too early to declare victory, and there are certainly risks," Powell said.

But Powell's comments made the carefully crafted policy communiqué feel stale less than an hour after it was released by suggesting officials had turned their attention to rate cuts. "There's a general expectation that this will be a topic for us, looking ahead. That's really what happened in today's meeting," he said.

Powell's remarks, along with new projections showing Fed officials anticipated three rate cuts next year, marked a notable U-turn. For more than a year, he had warned that they would raise rates as much as needed to lower inflation even if that triggered a recession.

The comment about rate cuts was surprising because just two weeks ago during an appearance at Spelman College in Atlanta, Powell said it was too soon to speculate about when lower rates might be appropriate.

The Federal Reserve, led by Chair Jerome Powell, has held its benchmark rate steady at three consecutive meetings. PHOTO: BRENDAN SMIALOWSKI/AGENCE FRANCE-PRESSE/GETTY IMAGES

"Powell played Santa Claus early," said Diane Swonk, chief economist at KPMG. "It was a 180-degree shift, right there."

Powell indicated officials were turning their attention to rate cuts because inflation has declined much faster than they expected. In their latest projections, they expected core prices, which exclude volatile food and energy items, to rise 3.2% this quarter from a year ago, down from their September projection of 3.7%. They see core inflation of 2.4% at the end of next year, down from their September expectation of 2.6%.

Government data released Wednesday morning suggest that core prices registered a very mild rise in November as measured by the

Fed's preferred inflation gauge, which will be released by the Commerce Department later this month. Wall Street forecasters said that could put core inflation on track to reach or even dip below 2% on a six-month annualized basis, and it could drop the 12-month rate to 3.1%. The Fed targets 2% annual inflation.

"I welcome the progress," Powell said. "We just need to see more."

Powell said it was too soon to say whether the last stretch of inflation reduction would prove harder than the ground covered so far. "We kind of assume that it will get harder from here, but so far, it hasn't," he said.

With Wednesday's decision, the Fed has held its fed-funds rate steady at three consecutive policy meetings in a range between 5.25% and 5.5%.

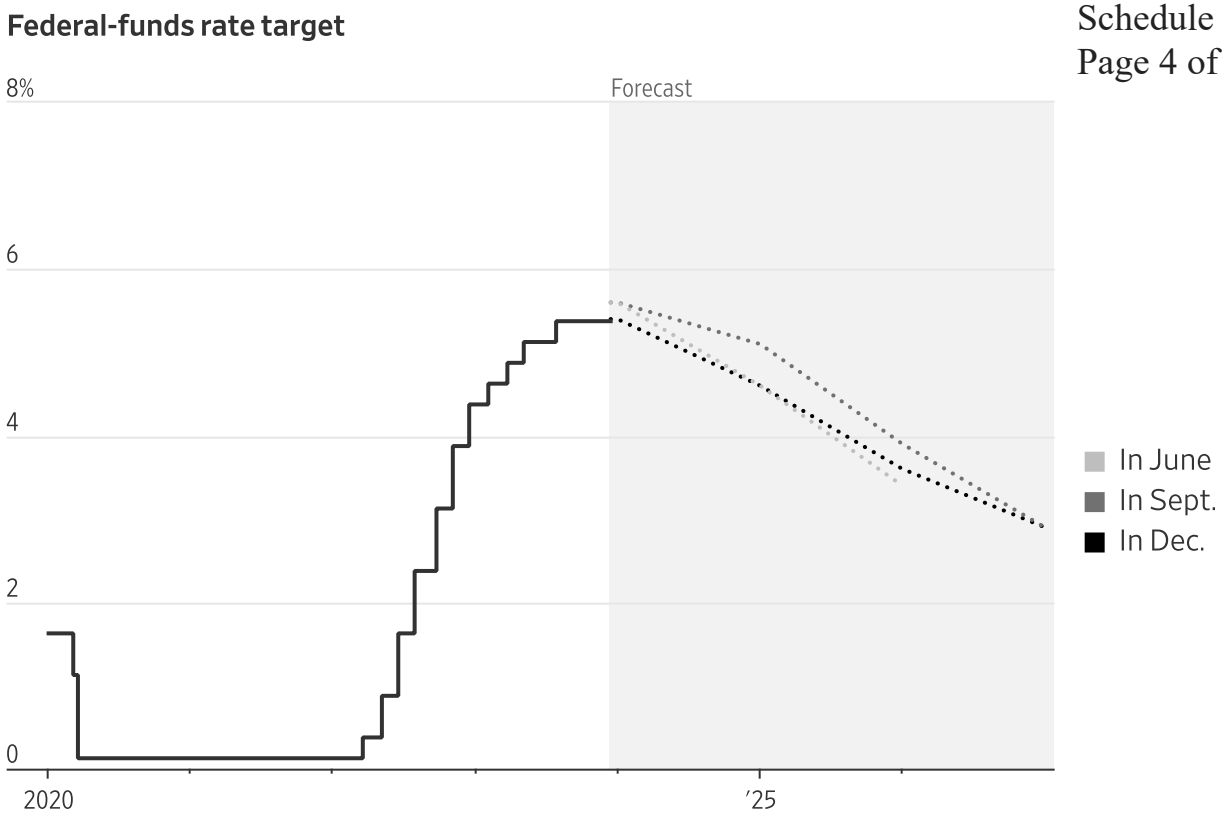
In September, officials had projected one more hike this year followed by two cuts next year, taking the fed-funds rate to around 5.1%. On Wednesday, officials projected they would lower it to around 4.6% by the end of 2024, the equivalent of three quarter-point reductions from the current level.

Investors in interest-rate futures markets dialed up bets that the Fed would begin cutting rates in March, placing a roughly 80% probability of lower rates, according to CME Group.

The U.S. economic outlook has brightened in recent months because inflation and wage growth are slowing. That would give the Fed more room to lower rates rapidly if the economy weakens more than officials expect, and it could open the door to cuts even if the expansion doesn't stall.

One year ago, many economists anticipated that Fed officials would have to raise rates to levels that would create enough slack—such as unemployed workers and idled factories—to significantly slow inflation. But healed supply chains and an influx of workers into the labor force are curbing wage and price increases without causing broad economic weakness.

“This has worked out beautifully. Things are going very well from their perspective,” said William Dudley, a former president of the New York Fed.

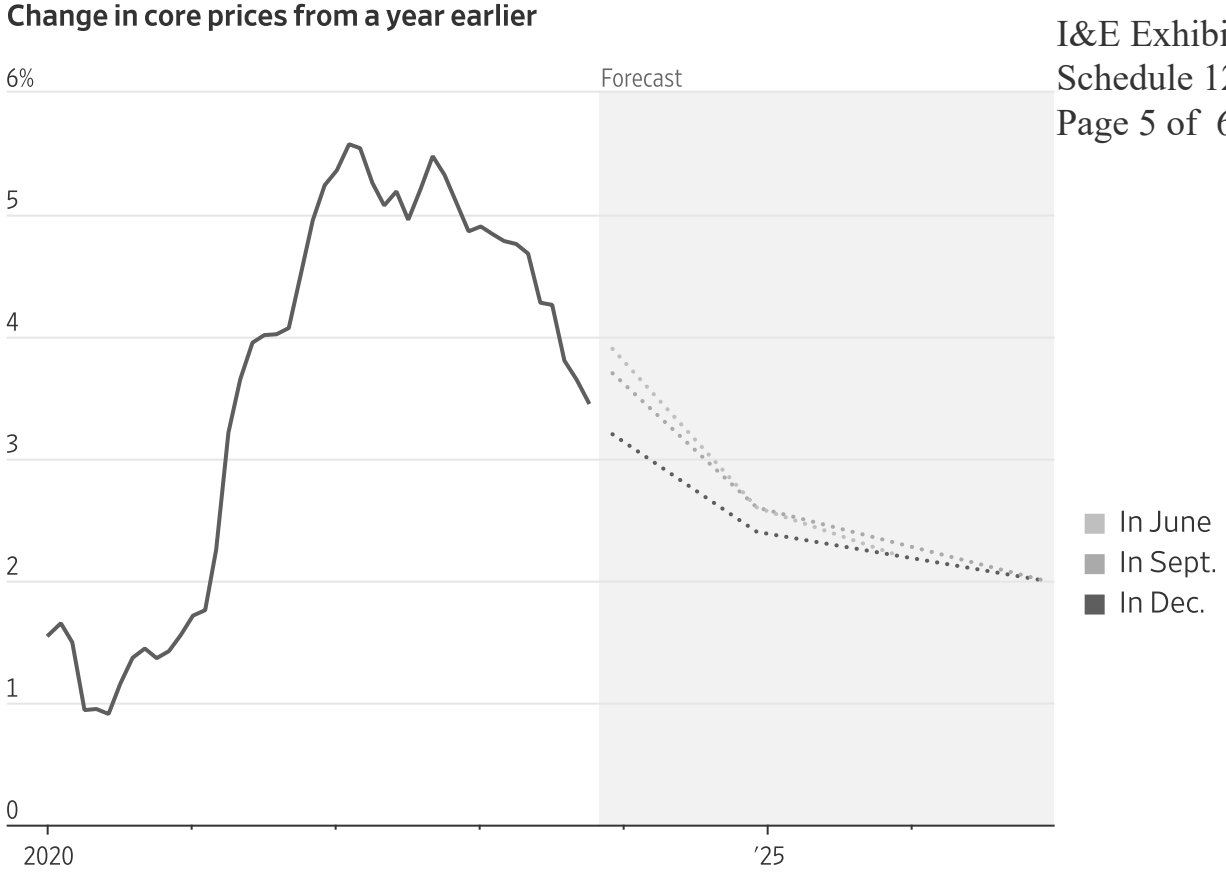


Notes: Midpoint of range; forecasts are the median value projected at the end of each year
Source: Federal Reserve

The labor market has been cooling but remains solid. The unemployment rate ticked down to 3.7% last month from 3.9% in October, and private-sector employers have added an average of 130,000 jobs a month over the past six months, down from 228,000 during the six months before that.

Powell repeated his view that officials could lower rates next year simply because inflation is well on its way to their 2% target. Holding rates steady as inflation falls would lead inflation-adjusted or “real” rates to rise, which the Fed doesn’t want. Officials could lower nominal rates simply to prevent real interest rates from turning too tight.

“You wouldn’t wait to get to 2% [inflation] to cut rates,” Powell said. “It would be too late. You’d want to be reducing” the amount of “restriction on the economy well before you get to 2%.”



Notes: Seasonally adjusted personal consumption expenditure prices excluding food and energy costs; forecasts are the median value projected at the end of each year
Source: Commerce Department (actual), Federal Reserve (forecast)

Still, officials don't want a premature declaration of victory over inflation to cause market rallies that might make it harder to sustain the slower economic growth they believe necessary to conquer inflation.

Before cutting rates, "you'd want to be highly confident that you were going to be able to pull off" maintaining inflation around 2%, said Dudley. "Things are going to be very tricky this coming year. This is going to be more art than science."

Swonk said Powell's comments on Wednesday suggested officials were comfortable with some easing in financial conditions now after a bond-market selloff this fall had pushed up a range of borrowing costs for auto loans, mortgages and business debt.

"They clearly don't want to look like they are the enemy of growth with inflation coming down," she said. "Financial conditions easing are going to stimulate the economy enough to slow down the deceleration of inflation, and I think the Fed is comfortable with that."

Write to Nick Timiraos at Nick.Timiraos@wsj.com

Inflation and the Economy

Analysis from The Wall Street Journal, selected by the editors

Fed Holds Rates Steady and Sees Cuts Next Year

Inflation Eased in November

Yellen Says Economy on Path to Soft Landing

Here's Where Prices Are Actually Coming Down

The Economy Is Great. Why Are Americans in Such a Rotten Mood?

Household Net Worth Surged After the Pandemic Hit

Americans Finally Start to Feel the Rate-Hike Sting

What to Know About Inflation

Appeared in the December 14, 2023, print edition as 'Fed Starts The Pivot Toward Lowering Rates'.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Bureau of Investigation & Enforcement Set 1

I&E RR-001-D

Responsible Witness: Ann E. Bulkley, Principal, The Brattle Group

Question:

Reference PAWC Statement No. 13, p. 27, lines 12-20. State whether Ms. Bulkley believes that water and wastewater utilities face similar operating and financial risks including bypass via competition and alternative energy sources such as propane, solar, wind, and the creation of micro-grids as do electric and gas utilities. If so, please explain.

Response:

As discussed on page 27 of Ms. Bulkley's direct testimony, as a result of the consolidation in the water utility industry, a small number of water companies were available to use in the proxy group that met certain screening criteria to be risk-comparable to PAWC. In applying these screening criteria, Ms. Bulkley has developed a proxy group of companies, the operations of which are largely regulated utility operations that are investment grade and meet the criteria necessary to develop the traditional ROE estimation methodologies.

Ms. Bulkley recognizes no two companies have identical risk profiles and does not attempt to address each specific risk factor faced by each of the regulated companies in the proxy group. It may be easier for some customers to install a solar panel or procure alternative electric energy supply than to establish alternative water or wastewater service, but a possible lower bypass risk for one type of utility service may be outweighed by a more substantial risk factor common to water and wastewater utilities. Further, as discussed in Ms. Bulkley's direct testimony, it is recognized that each of the industries is facing similar risks related to inflation, higher interest rates and regulatory lag and cost recovery related to capital investment, each of which has been noted by the credit rating agencies for utilities generally.

Ms. Bulkley recognizes that there are trade-offs in establishing a sample that is of sufficient size to produce a meaningful range of estimated returns to be relied upon in setting the ROE for PAWC and believes that her proxy group is reasonably risk-comparable to PAWC to achieve that objective.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Bureau of Investigation & Enforcement

I&E RB-024-D

Responsible Witness: Bruce W. Aiton, Vice President of Engineering for PAWC

Question:

Provide a schedule that shows actual annual plant additions for water, wastewater, and wastewater CSS operations for each year ended December 31, 2018 through 2022.

Response:

Please refer to I&E RB-024-D_Attachment.

Pennsylvania-American Water Company - Water Operations

Actual Additions

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	2018 ADDITIONS	2019 ADDITIONS	2020 ADDITIONS	2021 ADDITIONS	2022 ADDITIONS
1	301.00	Organization	$0	$0	$0	$0	$0
2	302.00	Franchises & Consents	0	0	0	0	0
3	303.00	Miscellaneous Intangible Plant	0	0	0	0	0
4		Total Intangible Plant	$0	$0	$0	$0	$0
5	303.00	Land & Land Rights	($375,509)	$2,027,723	$1,505,400	($1,667,113)	$269,902
6		Total Land & Land Rights	($375,509)	$2,027,723	$1,505,400	($1,667,113)	$269,902
7	303.14	Water Rights - Hibernia	$0	$0	$0	$0	$0
8	303.35	Waste Handling and Treatment Land	0	0	0	0	0
9	303.99	Comprehensive Planning Studies	950,456	393,213	1,046,645	1,186,722	860,961
10	304.15	Other Water Source Structures	675,077	3,324,730	5,309,391	0	40,522,451
11	304.20	Power and Pumping Structures	14,316,979	335,945	1,305,904	8,313,541	(12,692,090)
12	304.30	Purification Buildings	31,171,865	2,078,927	2,391,620	41,594,219	18,831,212
13	304.36	Waste Handling Struct. & Improv.	0	0	0	0	0
14	304.61	Office Buildings	23,643,598	3,347,045	816,945	4,398,729	(1,194,175)
15	304.62	Stores, Shop and Garage Buildings	18,084,446	6,314,838	1,441,209	6,260,489	1,865,274
16	304.63	Miscellaneous Structures and Improvements	963,534	2,760,819	1,245,668	9,069,957	8,080,056
17	305.00	Collecting and Impounding Reservoirs	9,960,366	702,823	744,662	59,575	(82,547)
18	306.00	Lake, River and Other Intakes	2,137,603	(82,554)	67,412	110,242	(1,699,953)
19	307.00	Wells and Springs	104,461	118,991	269,451	150,145	1,652,081
20	310.00	Other Power Production Equipment	1,219,320	508,365	209,578	68,515	7,251
21	311.00	Pumping Equipment	13,195,396	2,335,700	5,254,622	4,491,438	(2,315,488)
22	320.00	Purification System	49,601,391	8,706,369	8,981,490	22,844,225	14,263,721
23	320.30	Granular Activated Carbon	811,852	1,606,858	586,978	228,407	2,695,566
24	320.37	Waste Handling and Treatment Equipment	0	0	0	0	0
25	330.00	Distribution Reservoirs and Standpipes	6,512,122	3,559,233	4,170,576	13,480,827	9,901,131
26	331.00	Mains and Accessories	163,310,180	161,733,396	188,328,318	131,971,153	198,802,222
27	333.00	Services	24,191,282	25,957,460	29,494,353	32,902,994	40,006,987
28	334.00	Meters	13,296,497	18,743,461	10,674,739	8,194,148	24,331,976
29	335.00	Fire Hydrants	7,182,148	8,635,411	6,738,380	7,882,077	12,238,692
30	340.00	Office Furniture and Equipment	3,999,951	1,531,904	1,992,262	4,100,623	7,987,006
31	340.31	Computer Software	4,985,010	14,459,437	17,226,746	21,796,596	15,494,086
32	341.00	Transportation Equipment	10,679,801	10,429,773	10,010,257	10,887,282	9,837,118
33	342.00	Stores Equipment	57,629	87,537	2,991	12,195	80,982
34	343.00	Tools and Work Equipment	2,507,431	1,340,183	4,300,146	4,812,766	6,392,538
35	344.00	Laboratory Equipment	280,428	142,341	213,298	98,171	117,000
36	345.00	Power Operated Equipment	313,315	3,407	0	0	55,501
37	346.00	Communication Equipment	1,410,097	1,496,738	3,118,315	2,234,465	3,058,622
38	347.00	Miscellaneous Equipment	1,169,446	807,935	6,335,491	4,917,292	7,431,549
39	348.00	Other Tangible Equipment	0	58,386	7,444	0	0
40		Total Tangible Plant	$406,731,681	$281,438,672	$312,284,888	$342,066,793	$406,529,732
41		Total Utility Plant In Service	$406,356,172	$283,466,395	$313,790,288	$340,399,680	$406,799,634

Pennsylvania-American Water Company - Wastewater SSS General Operations

Actual Additions

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	2018 ADDITIONS	2019 ADDITIONS	2020 ADDITIONS	2021 ADDITIONS	2022 ADDITIONS
1	352.00	Franchises & Consents	$0	$0	$0	$0	$0
2	353.00	Land & Land Rights	0	0	0	0	3,001
3		Total Intangible Plant	$0	$0	$0	$0	$3,001
4	354.20	Structures And Improvements - Collection	$188,457	$359,941	$538,754	$1,663,564	$3,939,657
5	354.30	Structures And Improvements - SPP	400,191	(2,436,512)	(10,181)	790,719	957,231
6	354.40	Structures And Improvements - TDP	(2,678,232)	(2,141,688)	11,826	0	5,436,099
7	354.70	Structures And Improvements - General	305,457	242,820	189,312	651,603	1,457,688
8	355.00	Power Generation Equipment	153,952	(433,167)	160,927	67	213,387
9	360.10	Collection Sewers - Force Mains	1,664,118	4,987,765	(5,798,461)	2,480,762	2,848,339
10	361.10	Collection Sewers - Gravity Mains	8,001,419	15,977,901	9,809,282	5,850,443	5,291,655
11	361.20	Manholes	0	0	0	0	0
12	363.00	Services	1,007,420	1,068,268	1,712,454	1,201,441	1,478,154
13	364.00	Flow Measuring Devices	1,299	(155,559)	0	0	(157)
14	365.00	Flow Measuring Installations	0	0	0	906,006	0
15	370.00	Receiving Wells	30	(28,614)	0	(1,547)	533,969
16	371.00	Pumping Equipment	(273,616)	3,930,834	2,346,200	790,910	1,214,651
17	380.00	Treatment Equipment	3,403,632	2,555,895	8,582,138	3,962,764	11,108,773
18	381.00	Plant Sewers	0	(204,903)	0	1,641	371,850
19	382.00	Outfall Sewer Lines	0	(87,816)	0	0	(117)
20	389.10	Other Plant And Miscellaneous Equipment - Intangibles	32,175	268,066	14,337	1,863	66,063
21	390.00	Office Furniture And Equipment	10,868	20,626	73,045	77,757	295,908
22	390.20	Computers & Peripheral	0	0	0	0	0
23	391.00	Transportation Equipment	901,953	327,152	28,473	0	1,415,932
24	392.00	Stores Equipment	48,960	0	0	0	0
25	393.00	Tools, Shop And Garage Equipment	98,243	13,455	194,288	102,470	291,737
26	394.00	Laboratory Equipment	28,278	57,623	33,094	14,563	40,141
27	395.00	Power Operated Equipment	19,634	0	0	0	64,677
28	396.00	Communication Equipment	12,408	7,059	628,269	78,186	839,557
29	397.00	Miscellaneous Equipment	33,270	(2,710,329)	138,535	460,383	1,136,959
30	398.00	Other Tangible Plant	0	14,232	0	0	0
31		Total Tangible Plant	$13,359,917	$21,633,050	$18,652,292	$19,033,597	$39,002,153
32		Total Utility Plant In Service	$13,359,917	$21,633,050	$18,652,292	$19,033,597	$39,005,154

Pennsylvania-American Water Company - Wastewater CSS Operations

Acutal Additions

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	2018 ADDITIONS	2019 ADDITIONS	2020 ADDITIONS	2021 ADDITIONS	2022 ADDITIONS
1	352.00	Franchises & Consents	$0	$0	$0	$0	$0
2	353.00	Land & Land Rights	0	0	0	0	0
3		Total Intangible Plant	$0	$0	$0	$0	$0
4	354.20	Structures And Improvements - Collection	$1,448,833	$1,065,563	$641,572	8,440,088	$1,585,565
5	354.30	Structures And Improvements - SPP	2,198,692	319,380	(515,458)	179,683	22,266
6	354.40	Structures And Improvements - TDP	70,438	87,750	943,347	145	464,060
7	354.70	Structures And Improvements - General	0	0	0	0	0
8	355.00	Power Generation Equipment	0	0	0	0	0
9	360.10	Collection Sewers - Force Mains	104,686	43,583	377,081	1,919,841	4,790,375
10	361.10	Collection Sewers - Gravity Mains	3,318,540	40,576,403	34,283,655	16,559,227	15,089,147
11	361.20	Manholes	0	0	0	0	0
12	362.00	Spec Collection Structures	0	0	0	0	0
13	363.00	Services	240,813	423,484	619,325	1,198,104	1,186,562
14	364.00	Flow Measuring Devices	46,454	592,619	59,463	207,135	65,861
15	365.00	Flow Measuring Installations	0	0	0	0	0
16	370.00	Receiving Wells	0	0	0	0	0
17	371.00	Pumping Equipment	1,555,655	647,479	926,879	417,028	670,547
18	380.00	Treatment Equipment	1,060,923	47,239	9,939,968	2,501,416	12,005,397
19	381.00	Plant Sewers	0	0	0	0	0
20	382.00	Outfall Sewer Lines	1,417,396	123,766	(1,224,332)	(43,429)	(97,021)
21	389.10	Other Plant And Miscellaneous Equipment - Intangibles	0	144,062	6,080,445	(25,321)	398,559
22	390.00	Office Furniture And Equipment	65,736	214,601	430,689	297,786	259,103
23	390.20	Computers & Peripheral	0	0	0	0	0
24	391.00	Transportation Equipment	1,416,991	866,503	2,283	201,856	853,639
25	392.00	Stores Equipment	0	0	100,283	158	0
26	393.00	Tools, Shop And Garage Equipment	381,709	282,087	396,699	1,572,135	84,453
27	394.00	Laboratory Equipment	16,218	103,268	(9,529)	12,792	1,024,780
28	395.00	Power Operated Equipment	34,043	11,466	9,693	230,787	220,760
29	396.00	Communication Equipment	108,547	114,357	(36,207)	29,251	696,093
30	397.00	Miscellaneous Equipment	22,883	207,015	1,547,014	512,815	125,758
31	398.00	Other Tangible Plant	0	0	0	0	0
32		Total Tangible Plant	$13,508,558	$45,870,623	$54,572,870	$34,211,496	$39,445,905
33		Total Utility Plant In Service	$13,508,558	$45,870,623	$54,572,870	$34,211,496	$39,445,905

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 3

OCA 03-010

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Please provide the Company's annual figures for the following items over the past 10 years and the source of such information:

a. Total load
b. Total customers
c. Total revenue
d. Operating income
e. Net income
f. Rate base

Response:

a. Not Applicable. There is no "load" for a Water or Wastewater system.

b-f. Please refer to OCA 03-010_Attachment.

Pennsylvania-American Water Company
OCA-03-010

OCA-03-010_Attachment

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Source of Information
Water Operations											
b. Total customers	648,884	649,108	650,972	654,551	657,710	659,904	665,695	672,672	676,999	679,166	PUC Annual Report PAWC - Water (Schedule 402. Customer Data)
c. Total revenue	553,926,887	589,018,122	596,449,938	616,234,556	615,980,204	627,983,582	626,143,871	662,028,323	686,616,812	711,787,576	PUC Annual Report PAWC - Water (Schedule 400. Operating Revenues)
d. Operating income	177,096,895	200,191,835	202,875,368	207,611,278	212,670,902	240,192,822	231,680,977	246,817,001	278,702,172	281,103,622	PUC Annual Report PAWC - Water (Schedule 400. Net Utility Operating Income (Loss))
e. Net income	114,630,079	133,599,319	137,222,341	144,214,627	143,288,496	164,706,423	159,991,556	168,094,620	197,286,689	195,368,880	PUC Annual Report PAWC - Water (Schedule 400. Net Income (Loss))
Wastewater Operations											
b. Total customers	12,527	16,644	17,061	50,426	60,641	64,007	72,966	76,059	79,072	93,004	PUC Annual Report PAWC - Wastewater (Schedule 402. Customer Data)
c. Total revenue	17,268,359	16,414,360	17,247,882	22,305,928	45,109,622	61,231,232	62,985,131	71,032,252	82,948,236	106,608,411	PUC Annual Report PAWC - Wastewater (Schedule 400. Operating Revenues)
d. Operating income	8,322,753	7,190,825	6,746,355	9,503,461	17,858,118	24,318,269	25,429,309	28,184,282	31,440,793	40,540,847	PUC Annual Report PAWC - Wastewater (Schedule 400. Net Utility Operating Income (Loss))
e. Net income	8,432,160	7,444,639	6,849,296	9,560,174	17,972,106	24,819,698	27,106,140	29,315,557	31,552,477	41,145,823	PUC Annual Report PAWC - Wastewater (Schedule 400. Net Income (Loss))
Total Company											
f. Rate base*		$2,516,298	$2,631,295	$2,812,627	$3,141,320	$3,389,242	$3,721,968	$3,951,566	$4,210,033	$4,725,902	Company Earnings Disclosure Reports for the twelve month period ended December 31, 2014 to 2022. The 2013 Earnings Disclosure Report was not filed due to filing of the general rate increase at R-2013-2355276.

*Amounts in Thousands of Dollars

I&E Exhibit No. 2
Schedule 13
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Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Bureau of Investigation & Enforcement Set 1

I&E RR-006-D

Responsible Witness: Ann E. Bulkley, Principal, The Brattle Group

Question:

Reference PAWC Statement No. 13, p. 26, line 15 concerning the proxy group. State whether Ms. Bulkley believes the water utilities contained in her proxy group face similar environmental and water quality regulation risks as compared to PAWC. If not, please explain.

Response:

Ms. Bulkley recognizes that the water utility industry faces environmental and water quality regulatory risk. However, while all of the water utilities in the proxy group are required to comply with the environmental and water quality regulations at the federal level, water utilities are also required to comply with state and local regulations that can vary by state and locality. Therefore, environmental and water quality regulatory risk will vary among the water utilities in the proxy group and PAWC.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Bureau of Investigation & Enforcement Set 1

I&E RR-013-D

Responsible Witness: Ann E. Bulkley, Principal, The Brattle Group

Question:

Reference PAWC Statement No. 13, p. 74, lines 17-18:

A. State whether Ms. Bulkley is aware of any water utilities throughout the United States that have been granted a Commission authorized 10.95% or higher cost of common equity in the past two years.
B. If the answer to I&E-RR-14-D, Part A is yes, identify which company/companies have been authorized such cost of common equity, in what jurisdiction, and docket numbers associated with each instance.

Response:

A. Historically authorized ROEs are not a reasonable indicator of the forward-looking cost of equity. Authorized ROEs are established based on market data known and expected during a rate proceeding. As discussed in Ms. Bulkley's direct testimony, market conditions during this rate proceeding differ from the conditions over the past two years. For example, inflation is at the highest level that it has been since the 1980s. Interest rates have been increasing rapidly. Since March of 2022, the Federal Reserve has increased the Federal Funds from 0.25% to 0.50% to 5.25% to 5.50%. This is a significant change in market conditions over the referenced time period. Therefore, while Ms. Bulkley is not aware of any authorized ROEs of 10.95 percent for water utilities in the last two years, it is also the case that the conditions that were present over the entire historical period referenced have not been consistent with the market conditions that were considered in setting the recommended ROE in this proceeding.
B. Please see the response to I&E-RR-013-D, part A.

I&E Statement No. 2-R
Witness: D. C. Patel

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2023-3043189 (Water)
&
Docket No. R-2023-3043190 (Wastewater)

Rebuttal Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

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RETURN ON EQUITY 2

INTRODUCTION OF WITNESS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is D. C. Patel, and my business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission (Commission) in the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility Financial Analyst.

Q. ARE YOU THE SAME D. C. PATEL WHO IS RESPONSIBLE FOR THE DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 2 AND THE SCHEDULES IN I&E EXHIBIT NO. 2?

A. Yes.

Q. DOES YOUR REBUTTAL TESTIMONY INCLUDE AN ACCOMPANYING EXHIBIT?

A. No.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to address the direct testimony of the

Office of Small Business Advocate (OSBA) witness Kevin Higgins concerning his recommended return on equity (ROE) of 9.65% applied in the revenue requirement computation for Pennsylvania-American Water Company (PAWC). This recommended ROE contributed a reduction of $61,540,957 to the overall recommended revenue requirement (OSBA Statement No. 1, p. 8).

RETURN ON EQUITY

Q. WHAT IS PAWC'S CLAIMED ROE?

A. PAWC has claimed an ROE of 10.95% (PAWC Exhibit No. 13-A, Schedules 12 and 13) in the calculation of a claimed total revenue increase of $203,945,911 for its water and wastewater operations.

Q. SUMMARIZE MR. HIGGINS'S DIRECT TESTIMONY CONCERNING HIS RECOMMENDED ROE.

A. First, Mr. Higgins states that his recommended proxy ROE of 9.65% is based on the ROE authorized for PAWC's Distribution System Improvement Charge (DSIC) in the Bureau of Technical Utility Services' most recent Report on the Quarterly Earnings of Jurisdictional Utilities[1] (OSBA Statement No. 1, p. 8). Second, he states that the use of this proxy ROE is not intended to displace the Commission's consideration of traditional cost of capital analyses presented by the Company and other parties in this proceeding such as the Office of Consumer

[1] Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended September 30, 2023, Attachment D, p. 15, at Docket No. M-2023-3044811 approved at the Commission's Public Meeting Held January 18, 2024.

Advocate (OCA) (OSBA Statement No. 1, p. 17). Lastly, he states that based on his experience in other proceedings, he would not be surprised if other parties present credible analyses indicating that PAWC's ROE should be set lower than 9.65% (OSBA Statement No. 1, pp. 17-18).

Q. WHAT ARE THE ROE RECOMMENDATIONS MADE BY I&E AND OCA?

A. I recommend an ROE of 8.45% based on the analysis of financial modeling applying the Discounted Cash Flow (DCF) and Capital Asset Pricing Method (CAPM) results (I&E Statement No. 2, p. 29). Similarly, the OCA recommends an ROE of 9.1% based on its analysis of the DCF and CAPM results. Alternatively, OCA recommends 8.7% ROE if the Commission accepts the Company's claimed capital structure and/or proposed alternative ratemaking proposals (OCA Statement No. 3, p. 3).

Q. WHAT IS THE BASIS OF MR. HIGGINS'S RECOMMENDED ROE OF 9.65%?

A. Mr. Higgins avers that OSBA's overall revenue requirement recommendation without an ROE adjustment could be mistaken for implicit endorsement of PAWC's proposed ROE of 10.95%. Therefore, the use of the proxy ROE as a placeholder helps to avoid that misrepresentation. Moreover, the cost of capital has implications for the recommended adjustments in PAWC's acquisitions of other utilities, which would provide a more realistic measurement of their impact

(OSBA Statement No. 1, p. 18).

Q. DO YOU AGREE WITH MR. HIGGINS'S USE OF THE DSIC ROE OF 9.65% IN THIS BASE RATE PROCEEDING?

A. No.

Q. DID MR. HIGGINS CONDUCT ANY ANALYSIS BEFORE APPLYING THE DSIC ROE OF 9.65%?

A. No. Mr. Higgins confirms that he did not conduct any analysis for the ROE, but simply utilized the 9.65% ROE authorized for PAWC's DSIC in the Bureau of Technical Utility Services' most recent Report on the Quarterly Earnings of Jurisdictional Utilities as a proxy in his revenue requirement calculation (OSBA Statement No. 1, p. 17).

Q. WHAT IS THE BASIS FOR YOUR DISAGREEMENT WITH MR. HIGGINS'S USE OF THE DSIC ROE OF 9.65% IN THE COMPUTATION OF HIS RECOMMENDED REVENUE REQUIREMENT FOR PAWC?

A. The DSIC rate is specifically designed to encourage its use and to incentivize accelerated pipeline replacement and infrastructure upgrades to bring the existing aging infrastructure closer to meeting the safety and reliability requirements in between base rate filings. The DSIC rate is not intended to substitute the ROE established in a base rate proceeding after conducting a detailed ROE analysis. Additionally, the DSIC rate establishes a benchmark above which a utility

company is considered "overearning." As such, the DSIC rate does not serve as a proper measurement of a subject utility's cost of equity in a rate case proceeding. To suggest the cost of equity must be at the DSIC rate absent a detailed analysis in a base rate proceeding is inappropriate and not in the public interest.

Q. SHOULD THE COMMISSION CONSIDER THE AUTHORIZED DSIC RATE ESTABLISHED IN THE QUARTERLY EARNINGS SUMMARY REPORTS AS AN APPROPRIATE MEASURE TO DETERMINE THE COST OF EQUITY IN THIS PROCEEDING?

A. No. Mr. Higgins's application of the DSIC ROE rate in this proceeding is used as more of a placeholder for a properly analyzed and determined ROE. As discussed above, the DSIC rate should not serve as a proper measurement of a subject utility's cost of equity in a base rate proceeding since the DSIC rate is subject to change at a quarterly intervals. In fact, 66 Pa. C.S. § 1358(b)(3) states,

> The distribution system improvement charge shall be reset at zero if, in any quarter, data filed with the commission in the utility's most recent annual or quarterly earnings report show that the utility will earn a rate of return that would exceed the allowable rate of return used to calculate its fixed costs under the distribution system improvement charge.

Finally, the DSIC mechanism serves to lower a utility's risk because it reduces the lag time in the recovery of a company's capital outlays. The DSIC spending requires preapproval of eligible plant via a Long-Term Infrastructure Improvement Plan so there is little question as to the prudence of those expenditures.

Q. ARE THERE ANY POTENTIAL PROBLEMS WITH AWARDING AN ROE THAT IS EQUAL TO OR HIGHER THAN THE DSIC RATE?

A. Yes. First, if a company ultimately achieves a return that is above the DSIC rate, it eliminates the possibility for the utility to utilize the DSIC mechanism until its earnings fall below the DSIC rate. Further, if a company believes it will receive a return higher than the DSIC rate in a litigated base rate proceeding, it will remove the incentive to use the DSIC mechanism between rate filings and may encourage the more frequent filing of base rate cases.

Therefore, in my opinion, the DSIC rate should generally be viewed as an incentive rate that is higher than a return on equity percentage granted in a base rate proceeding.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

I&E Statement No. 2-SR
Witness: D. C. Patel

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2023-3043189 (Water)
&
Docket No. R-2023-3043190 (Wastewater)

Surrebuttal Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

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OVERALL RATE OF RETURN 43

INTRODUCTION OF WITNESS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is D. C. Patel. My business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission (Commission) in the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility Financial Analyst.

Q. ARE YOU THE SAME D. C. PATEL WHO IS RESPONSIBLE FOR THE DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 2, I&E EXHIBIT NO. 2, AND REBUTTAL TESTIMONY CONTAINED IN I&E STATEMENT NO. 2-R?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to address statements made by: (1) Pennsylvania-American Water Company (PAWC or Company) witnesses Ann E. Bulkley (PAWC Statement No. 13-R), Ashley E. Everette (PAWC Statement No. 1-R), and Justin L. Ladner (PAWC Statement No. 15-R) regarding rate of

return topics including the proxy group, capital structure, cost of common equity, management performance adder, and the overall fair rate of return, as applied to PAWC's rate base; and (2) the Office of Consumer Advocate (OCA) witness David J. Garrett (OCA Statement No. 3-R) regarding PAWC's equity and debt ratios applied in my recommended capital structure.

I will not reiterate the extensive arguments and evidence that I provided in my direct testimony and exhibit (I&E Statement No. 2 and I&E Exhibit No. 2). Absence of my comment on or response to any particular statements or topics addressed in the rebuttal testimony of PAWC and OCA concerning the return on equity and capitalization ratio does not signify my acceptance or support to the Company's or OCA's positions in this proceeding.

Q. WHAT WAS YOUR OVERALL RECOMMENDATION IN DIRECT TESTIMONY?

A. I recommended the following rates of return for the Company's Water and Wastewater Operations (I&E Statement No. 2, pp. 6-7):

I&E Summary of Cost of Capital Pennsylvania-American Water Company - Water Operations			
Type of Capital	**Ratio**	**Cost Rate**	**Weighted Cost Rate**
Long-Term Debt	44.01%	4.76%	2.09%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	55.99%	8.45%	4.73%
Total	**100.00%**		**6.82%**

I&E Summary of Cost of Capital Pennsylvania-American Water Company - Wastewater Operations			
Type of Capital	**Ratio**	**Cost Rate**	**Weighted Cost Rate**
Long-Term Debt	42.73%	4.76%	2.03%
Wastewater Specific Debt	4.40%	2.62%	0.12%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	52.87%	8.45%	4.47%
Total	**100.00%**		**6.62%**

SUMMARY OF MS. BULKLEY'S RESPONSE IN REBUTTAL TESTIMONY

Q. SUMMARIZE MS. BULKLEY'S RESPONSE TO YOUR RECOMMENDATIONS MADE IN DIRECT TESTIMONY.

A. First, Ms. Bulkley provides an updated cost of equity analysis based on market data of January 2024 (PAWC Exhibit No. 13-R, Schedules 1-14) that she claims supports her return on equity (ROE) recommendation of 10.95% made in her direct testimony (PAWC Statement No. 13-R, p. 2). Second, she challenges my

discussion regarding: (1) capital market conditions; (2) exclusion of Essential Utilities and natural gas and electric distribution companies and inclusion of Middlesex Water in my proxy group; (3) application of the Discounted Cash Flow (DCF) and Capital Asset Pricing Model (CAPM) in the cost of capital analysis; and (4) PAWC's business and financial risks. She also emphasizes the Commission's orders in the Aqua Pennsylvania and Columbia Water base rate proceedings that considered DCF and CAPM results in determining the appropriate ROE. Third, she presents my DCF and CAPM analysis results after making changes in the data to produce a higher ROE to support her claimed ROE of 10.95%. Fourth, Ms. Bulkley echoes the concerns made by Ms. Everette regarding my recommendation to reject additional basis points to the cost of equity for exemplary management performance. Finally, Ms. Bulkley suggests that my ROE recommendation should not be adopted by the Commission as she argues it does not meet the *Hope* and *Bluefield* standards for a fair rate of return.

COMPANY'S UPDATED POSITION

Q. SUMMARIZE MS. BULKLEY'S UPDATED ANALYSIS AND OVERALL RATE OF RETURN FOR THE COMPANY.

A. Ms. Bulkley provides an updated ROE analyses employing the same methodologies as presented in her direct testimony. In her updated analysis, she uses market data through January 31, 2024 (PAWC Exhibit 13-R, Schedules 1-6) in place of her original October 2023 market data that was used in her analysis

presented in direct testimony and the accompanying exhibit (PAWC Statement No. 13 and PAWC Exhibit 13-A, Schedules 1-14). Ultimately, she does not change her cost of equity recommendation or capital structure. She simply argues that her updated analyses support her original ROE claim of 10.95%. However, she does increase the fully projected future test year (FPFTY) wastewater specific long-term debt cost rate from 2.62% to 2.67%. (PAWC Statement No. 13-R, p. 11 and PAWC Exhibit 13-R, Schedule 14).

Q. WHAT IS THE COMPANY'S RATE OF RETURN CLAIM?

A. The Company's overall rate of return claim for water and wastewater is as follows (PAWC Exhibit 13-A, Schedule 12 and PAWC Exhibit 13-R, Schedule 14):

PENNSYLVANIA-AMERICAN WATER COMPANY
Summary of Cost of Capital
Pennsylvania-American Water Company - Water Operations

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	44.01%	4.76%	2.09%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	55.99%	10.95%	6.13%
Total	**100.00%**		**8.22%**

PENNSYLVANIA-AMERICAN WATER COMPANY **Summary of Cost of Capital** Pennsylvania-American Water Company - Wastewater Operations			
Type of Capital	**Ratio**	**Cost Rate**	**Weighted Cost Rate**
Long-Term Debt	42.73%	4.76%	2.03%
Wastewater Specific Debt	4.40%	2.67%	0.12%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	52.87%	10.95%	5.79%
Total	**100.00%**		**7.94%**

CAPITAL MARKET CONDITIONS

Q. PLEASE SUMMARIZE MS. BULKLEY'S REBUTTAL TESTIMONY REGARDING CURRENT CAPITAL MARKET CONDITIONS.

A. First, Ms. Bulkley states that in the Aqua Pennsylvania base rate proceeding, the Commission concluded that I&E's DCF result was likely understating the cost of equity given increased inflation and *expected increases* in interest rates and capital costs and, therefore, placed weight on the CAPM results to set the range of reasonableness and accordingly authorize the ROE. Likewise, in the Columbia Water base rate proceeding, the Commission utilized both the DCF and CAPM results to establish the authorized ROE, stating that it considered increasing inflation, interest rates, and capital costs in its determination. Second, she reiterates that the current market conditions are still characterized by high interest rates and capital costs, therefore, she asserts, it is important that the Commission continue to place weight on the results of the CAPM in determining the authorized

ROE for PAWC (PAWC Statement No. 13-R, pp. 11-12). Third, she references Federal Reserve Chair Powell's statement that it is currently projected to take until 2026 to reach the Federal Reserve's target inflation rate of 2.00%, and therefore, a March 2024 rate cut would most likely not happen (PAWC Statement No. 13-R, pp. 13-15). Fourth, she continues to assert that the share prices of utilities are likely to continue to decline or underperform due to the higher interest rates (PAWC Statement No. 13-R, p. 16). Lastly, she opines that the current market conditions suggest that interest rates will likely remain higher than was anticipated in December 2023 due to recent macro-economic data (PAWC Statement No. 13-R, p. 17).

Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY'S CLAIMS?

A. First, I partly disagree with Ms. Bulkley's statement that the Commission concluded I&E's DCF result was likely understating the cost of equity given the increased inflation and expected increases in interest rates and capital costs. The Commission order in the Aqua Pennsylvania base rate proceeding states,[1]

> Based upon our informed judgment, which includes consideration of *a variety of factors* ("emphasis added") including increasing inflation leading to increases in interest rates and capital costs since the rate filing, we determine that a base ROE of 9.75% is reasonable and appropriate for Aqua. When combined with our upward adjustment of 25 basis points to the Company's ROE for management effectiveness, this will

[1] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 178 (Order entered May 16, 2022).

> produce a final authorized ROE for Aqua of 10.00% (*i.e.*, 9.75% + 0.25% = 10.00%).

It is important to note that the Commission relied on *various other factors* besides inflation leading to increases in interest rates and capital costs for determining a range of reasonableness for the ROE based on I&E's DCF and CAPM results. Similarly, in the Columbia Water rate case order, the Commission states,[2]

> Based upon our informed judgment, which includes consideration of *a variety of factors* ("emphasis added") such as increasing inflation leading to increases in interest rates and capital costs, we determine that an ROE of 9.75% is reasonable and appropriate for Columbia.

Also, in this Columbia Water proceeding, the Commission relied on *various other factors* besides inflation leading to increases in interest rates and capital costs for determining a range of reasonableness for the ROE based on I&E's DCF and CAPM results. In both these cases, the Commission concluded its decision to rely on the DCF and CAPM results in determining a reasonable ROE was based on various factors, evidence, and informed judgment specific to each case.

Second, I agree the current market conditions are still characterized by high interest rates and capital costs, however, it is speculative to assume that the current high inflation and interest rates scenario will continue in the longer term. It is also important to note that the Company's new rates will be effective during the FPFTY ending June 25, 2025, and will continue thereafter when the capital market conditions would be different.

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[2] *Pa. PUC v. Columbia Water Company*, Docket No. R-2023-3040258, p. 108 (Order Entered January 18, 2024).

Third, as discussed at length in my direct testimony, Federal Reserve Chairman Powell indicated that inflation is well on its way to the targeted 2% level, and *they would not wait for the 2%* inflation target to cut the interest rate (I&E Statement No. 2, pp. 40-43 and I&E Exhibit No. 2, Schedule 12, pp. 1-6). Per the most recent monthly Blue Chip Financial Forecasts (February 2024),[3] the 2024 inflation rates by two measures are forecasted to be slightly over 2% as shown in the table below:

	Q4 2023	**Q1 2024**	**Q2 2024**	**Q3 2024**	**Q4 2024**	**Q1 2025**	**Q2 2025**
Consumer Price Index	2.8%	2.5%	2.4%	2.4%	2.3%	2.2%	2.2%
PCE Price Index	1.7%	2.2%	2.3%	2.2%	2.2%	2.1%	2.1%

Considering the above, it is still likely that the Federal Reserve will consider a series of interest rate cuts in 2024 and 2025.

Fourth, Ms. Bulkley's assertion that the share prices of utilities are likely to continue to decline or underperform due to the higher interest rates is speculative and unsupported.

Lastly, in light of the above discussion, Ms. Bulkley's statement that the current market conditions suggest that interest rates will likely remain higher than was anticipated in December 2023 is speculative and unsupported.

[3] Blue Chip Financial Forecasts Vol. 43, No. 2, February 1, 2024.

Q. DOES MS. BULKLEY'S POSITION REGARDING CAPITAL MARKET CONDITIONS IGNORE FACTS THAT DIFFERENTIATE PAWC FROM COMPANIES THAT ARE NOT REGULATED UTILTIES?

A. Yes. Notably, unlike companies in unregulated industries, public utilities, such as PAWC, are in a unique position to recover their entire cost of doing business by filing rate cases as required and PAWC has filed four base rate cases since 2017 including this case (I&E Statement No. 2, p. 55). This includes addressing revenue shortfalls due to increased expenses and costs resulting from unforeseen circumstances, including rising interest rates and inflation and the consequent increase in the capital costs. Finally, PAWC will be shielded from any volatile market conditions in ways that unregulated entities are not regarding recent inflation and rising interest rates. I&E is not disputing the FPFTY claimed long-term debt cost rates and the updated increase in the cost of wastewater specific long-term debt as presented above.

Q. WHAT IS YOUR CONCLUSION ABOUT THE EFFECT OF CURRENT MARKET CONDITIONS IN DETERMINING PAWC'S ROE?

A. I disagree with Ms. Bulkley's recommendation that the Commission should determine the authorized ROE for PAWC using both the DCF and CAPM results to ensure that the authorized ROE is reflective of current market conditions for rates to be effective in the future periods. In fact, an ROE that is based on the DCF result is a forward-looking cost of equity model, which considers *projections*

for the dividend payments and earnings per share growth rates. The independent stock market analysts consider all market conditions, including the current and future state of interest rates, inflation, and stock market (price) volatility when making their projections for dividend payments and growth rates. Therefore, there is no reason to suggest that the CAPM result should be given weight with the DCF result in determining the ROE for PAWC. Additionally, as discussed above, the Commission's reliance on DCF and CAPM results in determining the ROE for the Aqua Pennsylvania and Columbia Water rate cases was based on the utility-specific factors and evidence-based determination or informed judgment. Therefore, I believe the Commission's decisions in these two cases should not be considered as precedent for PAWC and other rate cases in the future. The ROE should be determined based on the merits of each case with due consideration of various factors including the impact of higher rates on ratepayers.

I have discussed at length the reasons for applying the DCF as a primary method and using the CAPM result for comparison purposes. Additionally, I have previously highlighted the disadvantages of the CAPM as a reason why not to use it as a primary method in determining PAWC's ROE (I&E Statement No. 1, pp. 21-28).

PROXY GROUP

Q. SUMMARIZE MS. BULKLEY'S REBUTTAL TESTIMONY REGARDING YOUR PROXY GROUP.

A. First, Ms. Bulkley disagrees with my inclusion of PAWC's parent company, American Water Works Company, as she claims including it would lead to circular logic (PAWC Statement No. 13-R, pp. 19-20). Second, she disagrees with my exclusion of Essential Utilities from the proxy group, which is based on my revenue screening criterion of 50% of a company's revenue should be from water operations. She states that operating income more appropriately reflects the risk profile of the operations and not the revenue, and further states that in 2022 gas revenue was more than 50% of the total revenue due to increased natural gas costs. Therefore, while the water revenue fell below 50% of the total revenue, the net income still favored water operations, which would then result in Essential's inclusion in her proxy group. She notes that in 2020 and 2021, before gas prices increased so substantially, water operations revenue was more than 50% of the total revenue (PAWC Statement No. 13-R, pp. 20-22). Third, she disagrees with my exclusion of gas and electric distribution companies in my proxy group due to there being so few water utilities as a result of consolidation in the water industry. She opines that there are significant similarities between the business and operating risks of the water, electric, and natural gas distribution utilities included in her proxy group. Additionally, she states that three other state public utility commissions have considered the results of a proxy group that includes natural gas

companies when determining the authorized ROE for water and wastewater utilities. She concludes that her proxy group comprised of gas, electric, and water utilities appropriately balances the goal of establishing a sufficiently large proxy group, while maintaining a proxy group that is generally comparable to the risk profile and operating characteristics of PAWC (PAWC Statement No. 13-R, pp. 22-25). Lastly, she opines that the smaller the size of the proxy group, the greater the chance the proxy group average can be affected by the results of one company. In particular, she asserts, I&E's mean DCF result is affected by the low results of just one company, Middlesex Water Company (PAWC Statement No. 13-R, p. 26).

Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY'S REBUTTAL TESTIMONY REGARDING YOUR INCLUSION OF AMERICAN WATER WORKS COMPANY AND EXCLUSION OF ESSENTIAL UTILITIES IN/FROM YOUR PROXY GROUP?

A. I disagree with Ms. Bulkley's averment that inclusion of the parent company, American Water Works would create circular logic for determining PAWC's ROE. As discussed in my direct testimony, I reiterate that the inclusion of American Water Work's vast operations across many states and numerous divisions and its required compliance to an equal number of state regulatory bodies eliminates the potential for any circularity effect as opposed to if only PAWC itself was included in the proxy group (I&E Statement No. 2, p. 12).

Regarding the exclusion of Essential Utilities (natural gas distribution and water utility), I relied on I&E's consistently followed proxy group selection criterion requiring that fifty percent or more of the company's revenues be generated from the regulated water utility industry. Based on S&P Global's FY 2022 business segment analysis of Essential Utilities (the most recent information available at the time of my analysis), regulated water revenue was 47.33% of total revenue, which supports my exclusion of this company from my proxy group. Additionally, I disagree with Ms. Bulkley's assertion that an operating income criterion is more appropriate as it reflects the risk profile of operations and not the revenue criterion. The generation of revenue is the first step that drives the net income (net profit) and cash flow. A company's realization of net income depends on various factors such as management efficiency, operational and financial efficiency in the best use of utility assets with available resources, O&M cost containment measures, capital expenditure programs, etc. Therefore, I believe a utility's revenue composition is a more appropriate measure than net income for establishing a proxy group because this measure represents the percentage of cash flow a company receives from each business segment. While the financial community is more likely to rely on measures of income rather than measures of revenue when making credit assessments and investment decisions, the purpose of a proxy group is to compile a set of companies that have similar risks to the subject utility. If less than 50% of revenues come from the regulated water

business sector, the company is not comparable to the subject utility as it does not provide a similar level of regulated water business.

Additionally, in the most recent Columbia Water rate case, the Commission concludes,[4]

> In Columbia Gas 2021, we stated the following regarding the proxy group at issue in that proceeding: First, as I&E and the ALJ pointed out, a company's revenues represent the percentage of cash flow the company receives from each business line related to providing a good or service. Therefore, if less than fifty percent of revenues come from the regulated gas sector, the company is not comparable to the subject utility as it does not provide a similar level of regulated business.
>
> As further noted by I&E, while two companies or segments can have the same level of revenue, their net operating income may vary greatly, depending on their performance and decisions. The purpose of a proxy group is to compile a set of companies that have similar risks to the subject utility. As such, we are of the same opinion, as in our decisions in *Columbia Gas 2021* and *PECO 2021*, that if less than 50% of a utility's revenues come from the regulated business sector, the company is not comparable to the subject utility as it does not provide a similar level of regulated business.
>
> Based on the specific record developed in the instant case, we find that the percentage of revenues generated from regulated utility operations, in this instance regulated water utility operations, is the appropriate criterion to include when setting Columbia's proxy group. Therefore, we concur with I&E that Essential Utilities should be excluded from the proxy group that we will use in setting the authorized ROE and the resulting overall rate of return for Columbia in this proceeding.

[4] *Pa. PUC v. Columbia Water Company*, Docket No. R-2023-3040258, pp.75, 76, and 77 (Order Entered January 18, 2024).

Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY'S REBUTTAL TESTIMONY REGARDING YOUR EXCLUSION OF NATURAL GAS AND ELECTRIC DISTRIBUTION COMPANIES IN YOUR PROXY GROUP?

A. I generally agree with Ms. Bulkley that it is advantageous to have a greater number of companies in a proxy group; however, I reject the notion that skewing the analysis by including companies that are demonstrably dissimilar, simply in favor of having a larger group, produces a valid analysis. Instead, I believe it is more appropriate to include fewer companies that are more similar to the subject company, because it will produce a more valid result. Specifically, as explained in my direct testimony, water companies face different degrees operational, safety, and weather-related risks and uncertainties in addition to substantially different environmental regulations than natural gas and electric distribution companies. Water companies also have a more captive customer base than do natural gas companies as customers cannot eliminate the need for water whereas gas is not a necessity and can be replaced with other fuel sources. Additionally, water companies remain vertically integrated wherein the company generates and distributes the commodity, so there is no opportunity for customers to shop competitively for the commodity as there is with gas and electric shopping. These differences, among others, make electric and gas utilities dissimilar enough from water companies to properly be excluded from a water proxy group (I&E Statement No. 2, pp. 13-14). Lastly, Ms. Bulkley's belief that the regulated gas

and electric utilities used in her analyses all possess a set of risk profile, and operating and financial risk characteristics that are substantially comparable to PAWC is incorrect and unsupported. Therefore, including natural gas and electric distribution companies in the proxy group for PAWC, a water and wastewater utility, dilutes the integrity of the analysis.

Q. DO YOU AGREE WITH MS. BULKLEY'S RECALCULATION OF YOUR DCF RESULTS BASED ON THE REMOVAL OF MIDDLESEX WATER DUE TO WHAT SHE DEEMS TO BE AN UNREASONABLY LOW DCF RESULT SKEWING THE MEAN DCF RESULT OF THE PROXY GROUP?

A. No. As discussed above, it is important to use a proxy group having all water utilities, which possess a similar set of operating and financial risk characteristics that are substantially comparable to PAWC rather than Ms. Bulkley's inclusion of dissimilar gas and electric utilities to make a larger proxy group. I disagree with Ms. Bulkley's contention that the smaller the size of the proxy group, the greater the chance the proxy group average can be affected by the results of one company with low end financial numbers, specifically in this instance the Middlesex Water DCF result. Regarding Ms. Bulkley's characterization of Middlesex Water's low-end numbers, it should be noted that its spot dividend yield is 2.77% less than the next low end dividend yield of California Water Service Group and its 52-week dividend yield is 15.12% less than the next low end dividend yield of California

Water Service Group. Regarding the growth rate of Middlesex Water Company, Yahoo finance projects 2.70% while Value Line projects 5.00%, so these projections influenced Middlesex Water's DCF results (I&E Exhibit No. 2, Schedules 4-5). It is important to note that each company has a different jurisdictional operating and management set up. Therefore, I believe Middlesex Water's DCF result is not an outlier or abnormal and should not be ignored in the calculation of the proxy group mean results unless the projections would result in a negative DCF result for Middlesex Water (I&E Exhibit No. 2, Schedule 6). The principal purpose of assembling a proxy group is to avoid relying on data for a single company that is not representative and thereby to smooth out any abnormalities.

Ms. Bulkley's decision to remove Middlesex Water only serves to inflate the DCF result and defeats the purpose of using a proxy group. Ironically, Ms. Bulkley employs Middlesex Water in her own CAPM analysis.

Q. DO YOU HAVE ANY CHANGES TO YOUR PROXY GROUP IN RESPONSE TO MS. BULKLEY'S REBUTTAL TESTIMONY?

A. No. I continue to support the proxy group I used in my rate of return analysis as shown in my direct testimony (I&E Statement No. 2, p. 11).

COST OF COMMON EQUITY

DISCOUNTED CASH FLOW

Q. SUMMARIZE MS. BULKLEY'S REBUTTAL TESTIMONY REGARDING YOUR DCF ANALYSIS.

A. First, Ms. Bulkley notes that my application of the DCF model is generally similar to hers. However, she identifies differences and raises concerns with my DCF results. Ms. Bulkley relies on low and high growth rate assumptions and the level of reliance on the range of the DCF results rather than my use of the proxy group average DCF result for my cost of equity recommendation (PAWC Statement No. 13-R, pp. 26-27). Second, she raises issue with my recommended ROE, which "ignores" the Commission's recent decisions concerning the ROE determination in the Aqua Pennsylvania and Columbia Water base rate proceedings (PAWC Statement No. 13-R, p. 27). Lastly, she takes issue with my CAPM result, that is used for comparison purposes, and produces a result that is 199 basis points higher than my DCF results (PAWC Statement No. 13-R, p. 27).

Q. PLEASE RESPOND TO MS. BULKLEY'S CONCERNS ABOUT YOUR EXCLUSIVE RELIANCE ON THE DCF.

A. Although my recommendation was based on the results of my DCF analysis, I also employed the CAPM as a comparison. For reasons discussed in my direct testimony, the DCF method is the most reliable method (I&E Statement No. 2, pp. 20-25). My DCF mean results capture high and low-end growth rates as well as

the individual company specific DCF result. Although no one method can capture every factor that influences an investor, including the results of methods less reliable than the DCF does not make the end result more reliable or more accurate. It is important to note that the DCF is appealing to investors since it is based upon the concept that the receipt of dividends in addition to expected appreciation is the total return requirement determined by the market.[5] In direct testimony, I cited several cases that illustrate the methodology I employed is consistent with the methodology historically used by the Commission in base rate proceedings as recently as 2017, 2018, 2020, and 2021 (I&E Statement No. 2, pp. 21-22).

Additionally, as indicated in my direct testimony (I&E Statement No. 2, pp. 25-26), the Commission indicated in the 2022 Aqua Pennsylvania rate case order that its method "for determining Aqua's ROE shall utilize both I&E's DCF and CAPM methodologies"[6] and that "I&E's DCF and CAPM produce a range of reasonableness for the ROE…"[7]. Similarly, most recently, the Commission's Columbia Water rate case order relied on the results of I&E's DCF and CAPM analyses for determining Columbia Water's ROE.[8] Thus, it is inappropriate to characterize my direct testimony as having ignored the Commission's recent decisions concerning the ROE determination deviating from prior Commission

[5] David C. Parcell, "The Cost of Capital – A Practitioner's Guide," 2010 Edition, p. 151.
[6] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 154 (Order entered May 16, 2022).
[7] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, p. 178 (Order entered May 16, 2022).
[8] *Pa. PUC v. Columbia Water Company,* Docket Nos. R-2023-3040258, p. 105 (Order entered January 18, 2024).

practice. In my direct testimony I explain more fully why the CAPM should not be used as a primary method and continue to express those concerns in this proceeding as to why it should only be used as a comparison to, not a check of, the DCF. Thus, I continue to disagree with a method that provides the CAPM comparable weight to the DCF method (I&E Statement No. 2, pp. 22-24).

I disagree with Ms. Bulkley's assertion that because my CAPM model produces results that are 199-basis points higher than my DCF results, I ignored the CAPM results in the ROE recommendation. In fact, I highlighted the revenue increase impact of $93,994,979 on ratepayers due to 199-basis point higher CAPM result (10.44%) in comparison to my recommended DCF result (8.45%) for consideration by the Commission in determining the final ROE (I&E Statement No. 2, pp. 36-38).

Q. SUMMARIZE MS. BULKLEY'S REBUTTAL TESTIMONY REGARDING THE REASONABLENESS OF YOUR DCF ANALYSIS.

A. Ms. Bulkley claims that my recommended ROE is not comparable to ROEs authorized for either a water or natural gas utility since January 2019. She then refers to the Commission's authorized ROEs of 10.00% and 9.75% in the Aqua Pennsylvania and Columbia Water base rate proceedings respectively and states that I did not consider these ROEs to test the reasonableness of my recommended ROE in light of the Hope and Bluefield decisions that require the authorized return

to be just and reasonable as available to investors in companies with similar risk (PAWC Statement No. 13-R, pp. 28-29).

Q. PLEASE RESPOND TO MS. BULKLEY'S REBUTTAL TESTIMONY REGARDING THE REASONABLENESS OF YOUR DCF ANALYSIS.

A. I have discussed earlier in this testimony and in my direct testimony (I&E Statement No. 2, pp. 26-28) the various factors including the company specific factors considered by the Commission in determining the ROEs of 10.00% and 9.75% in Aqua Pennsylvania and Columbia Water base rate proceedings. In my opinion, each rate case should be evaluated independently based on the company specific details, proxy group data analysis, and most importantly the impact of the revenue increase on ratepayers. Accordingly, in my opinion my cost of equity analysis produces a just and reasonable DCF result for the Company and ratepayers. Regarding the Hope and Bluefield decisions that require the authorized return to be just and reasonable, I am responding separately in the Fair Rate of Return section.

Q. SUMMARIZE MS. BULKLEY'S REBUTTAL TESTIMONY REGARDING YOUR APPLICATION OF THE DCF MODEL TO YOUR PROXY GROUP.

A. First, Mr. Bulkley states that my DCF result of 5.77% for Middlesex Water is unreasonably low, which is slightly greater than the 30-day average yield on

Moody's A-rated utility bonds of 5.56% and, according to her, does not compensate investors for the added risk of an equity investment. Therefore, she recommends this result should be excluded from my DCF analysis (PAWC Statement No. 13-R, p. 29).

Second, she comments that it is inappropriate to rely on the spot stock price in developing an ROE estimate and suggests considering the 30-day, 90-day, and 180-day average stock prices as reflected in her DCF analysis (PAWC Statement No. 13-R, p. 30).

Third, she presents a modified DCF result with her own selective data choice to include Essential Utilities from the proxy group, exclude Middlesex Water from the proxy group, use a 30-day average stock price in the calculation of the dividend yield, and use a range of growth rate assumptions (PAWC Statement No. 13-R, p. 30). Ms. Bulkley's modified mean DCF result is 9.21% in contrast to my mean DCF result of 8.45%. Considering the high-end growth rate, her DCF result produces a cost of equity at 10.58% and considering the large proxy group, including gas and electric utilities with water utilities, she produces a mean DCF result of 9.82% (PAWC Statement No. 13-R, pp. 30-31 and PAWC Exhibit No. 13-R, Schedule 7, p. 2).

Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY'S REBUTTAL TESTIMONY REGARDING YOUR APPLICATION OF THE DCF MODEL TO THE PROXY GROUP.

A. First, I disagree with Ms. Bulkley's recommendation to remove Middlesex Water and include Essential Utilities in my proxy group analysis, which I have adequately discussed in the Proxy Group section above. The DCF result for every single company in my proxy group is higher than PAWC's cost of debt which again satisfies the notion that equity investors require a higher return than do bondholders. Additionally, to address Ms. Bulkley's specific concern that the Middlesex DCF is too low, I would point out the purpose of using a proxy group is to smooth out any perceived anomalous results. In my view, any attempt to eliminate or disregard low end Middlesex Water results, or one side of a range of results, is inconsistent with the purpose of a proxy group and only serves to subjectively influence the results of an otherwise unbiased analysis.

Second, I disagree with Ms. Bulkley's assertion that it is inappropriate to rely on the spot stock price in developing an ROE estimate and her suggestion to consider the 30-day, 90-day, and 180-day average stock prices in my DCF analysis. My DCF analysis considers the spot price, the 52-week high and 52-week low price in the calculation of the average spot dividend yield and average 52-week dividend yield as shown in the table below (I&E Exhibit No. 2, Schedule 4). This calculation reflects the average current dividend yield based on the current stock price and historic average of the 52-week dividend yield of proxy

group companies, which satisfies Ms. Bulkley's concern about the DCF analysis using a 30-day, 90-day, and 180-day average stock prices scenario.

Dividend Yields of the Proxy Group

Company	American Water Works Company, Inc.	American States Water Company	California Water Service Group	Middlesex Water Company	SJW Group
Symbol	*AWK*	*AWR*	*CWT*	*MSEX*	*SJW*
Div	3.00	1.80	1.12	1.32	1.60
52-wk low	114.25	75.20	45.44	61.34	56.96
52-wk high	162.59	99.19	63.92	90.56	81.90
Spot Price	133.51	79.52	51.89	62.95	65.65
Spot Div Yield	2.25%	2.26%	2.16%	2.10%	2.44%
52-wk Div Yield	2.17%	2.06%	2.05%	1.74%	2.30%
Average	**2.21%**	**2.16%**	**2.10%**	**1.92%**	**2.37%**

	Average
Spot Div Yield	**2.24%**
52-wk Div Yield	**2.06%**
Average	**2.15%**

Source:	Barrons	January 3, 2024
	Value Line	January 5, 2024

Third, I disagree with Ms. Bulkley's modified DCF mean results of: (1) 9.21 after excluding Middlesex Water and including Essential Utilities in my proxy group; (2) 10.58% after excluding Middlesex Water and including Essential Utilities in my proxy group and applying a maximum growth rate range; and (3) 9.82% after excluding Middlesex Water and including Essential Utilities and gas and electric utilities in my proxy group for the reasons discussed above. It appears that Ms. Bulkley presents these results with variations to my proxy group data just to prove her DCF analysis is correct and undermine my DCF analysis results with the ultimate objective to justify her updated DCF mean result range of 8.96% - 11.34% (excluding Middlesex Water's DCF results) and PAWC's claimed high end ROE of 10.95% (PAWC statement No. 13-R, p. 10).

Q. DID MS. BULKLEY SUMMARIZE INSTITUTIONS' AND BANKS' COMMENTS IN RESPONSE TO OTHER STATE COMMISSIONS' AUTHORIZED LOW-END RANGE OF ROE?

A. Yes. She discusses comments or observation notes including credit rating notes made by various institutions and banks for other state commissions' authorized low-end range of ROEs for gas and electric utilities. She highlights certain utilities that have experienced a negative market response related to the financial effects of a rate decision, including credit rating downgrades and material stock price declines (PAWC Statement No. 13-R, pp. 32-35).

Q. DO YOU AGREE WITH MS. BULKLEY'S SUMMARY OF THE INSTITUTIONS' AND BANKS' COMMENTS IN RESPONSE TO OTHER STATE COMMISSIONS' AUTHORIZED LOW-END ROE?

A. No. It is inappropriate to suggest or infer that if the Commission authorize a low-end ROE, PAWC or its parent company's credit rating would be downgraded, or its credit worthiness would be impacted because besides the financial performance, there are several other factors considered in overall assessment of any company such as business operations, management profile, business risks assessment, business expansion plan, capital expenditure programs, etc.

CAPITAL ASSET PRICING MODEL

Q. SUMMARIZE MS. BULKLEY'S REBUTTAL TESTIMONY REGARDING YOUR CAPM ANALYSIS.

A. Other than my lack of reliance on the CAPM model to determine an appropriate cost of equity recommendation as discussed above, Ms. Bulkley's major concerns with my CAPM analysis are: (1) exclusion of Essential Utilities and excluding gas and electric utilities from the proxy group; (2) reliance on the projected yield on the 10-year Treasury bond as the risk-free rate rather than 30-year Treasury Bond yields she uses; and (3) reliance on a single date Value Line report for the calculation of the market risk premium (PAWC Statement No. 13-R, p. 42).

Q. EXPLAIN MS. BULKLEY'S CRITICISM REGARDING YOUR USE OF THE YIELD ON THE 10-YEAR TREASURY NOTE TO DETERMINE YOUR RISK-FREE RATE.

A. First, Ms. Bulkley acknowledges the Commission's decision to use the 10-year Treasury Note, as opposed to the 30-year Treasury Bond yield, as the risk-free rate in the CAPM model (PAWC Statement No. 13-R, p. 43). However, she suggests that it is important to select the term that most closely matches the useful life of the assets financed. Then, she provides a recalculation of my risk-free rate using the 30-year Treasury Bond yield and including Essential Utilities in my proxy group that produces her CAPM result of 10.74% an increase of 30-basis points to my CAPM result of 10.44% (PAWC Statement No. 13-R, p. 44).

Q. DO YOU AGREE WITH MS. BULKLEY'S REBUTTAL TESTIMONY REGARDING YOUR RISK-FREE RATE?

A. No. First, while rate base assets are long-lived, utility company debt may have the opportunity to be refinanced at any point to capture favorable interest rates, which would reduce the financial risk associated with the corresponding assets. Second, I believe it is more appropriate to utilize a risk-free rate that will be in effect during the investment period being considered, which, in this case, is the FPFTY or possibly the normalization period between base rate cases. Although short-term Treasury Bills may align closer with the investment timeframe, they are very volatile. Finally, as Ms. Bulkley has acknowledged the Commission's previous decisions (PAWC Statement No. 13-R, p. 43), it is important to reiterate that the Commission has recently agreed with I&E and recognized the 10-year Treasury Note as the superior measure of the risk-free rate of return.[9]

Q. DO YOU AGREE WITH MS. BULKLEY'S SUGGESTED RECALCULATION OF YOUR RISK-FREE RATE AND CAPM RESULTS?

A. No. As previously discussed, it is more appropriate to employ the 10-year Treasury Note and weight the quarters and years as shown in my exhibit (I&E Exhibit No. 2, Schedule 8) because my calculation provides a more accurate

[9] *Pa. PUC v. UGI Utilities, Inc. – Electric Division;* Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Capital Asset Pricing Model (CAPM), p. 99; *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 154 (Order entered May 16, 2022).

estimation of the risk-free rate for the FPFTY. The time periods I employ place more weight on the FPFTY yet also consider forecasts of the mid-term (2025-2029) that may better match the rate case filing frequency. It is also important to keep in mind that the further out one forecasts, the less reliable the information becomes.

Q. HAS MS. BULKLEY PRESENTED MODIFIED CAPM RESULTS USING DIFFERENT RISK-FREE RATES AND AN UPDATED MARKET RETURN TO JUSTFY HER ORIGINAL CAPM RESULTS?

A. Yes. She presents four modified CAPM scenarios with variation as shown in the table below (PAWC Exhibit No. 13-R, Schedule 9) to justify her CAPM analysis results presented in her direct testimony and reject my CAPM analysis result of 10.44%:

CAPM Adjustments	Adjusted CAPM Results
(1) CAPM with 10-year Treasury yield and Essential Utilities in I&E Proxy Group	10.71%
(2) CAPM with 30-year Treasury Bond yield and Essential Utilities in I&E Proxy Group	10.74%
(3) CAPM with 30-year Treasury Bond yield and Essential Utilities and updated market return	11.10%
(4) CAPM with 30-year Treasury Bond yield and Proxy Group with gas and electric utilities	11.24%

Q. DO YOU AGREE WITH MS. BULKLEY'S MODIFIED CAPM RESULTS SCENARIO?

A. No. First, as discussed above in the Proxy Group section, I disagree with the inclusion of Essential Utilities and gas and electric utilities in the proxy group for CAPM analysis and the resultant beta coefficient of 0.83 applied in the analysis at line nos. 1-3 and the beta coefficient of 0.85 applied in the analysis at line no. 4 in the above table. Second, as discussed above and in my direct testimony (I&E Statement No. 2, pp. 32-33 and pp. 49-50), I disagree with using the 30-year Treasury Bond yield as a risk-free rate in the CAPM analysis. Third, I disagree with Ms. Bulkley's total market return calculation method and its application of 12.48% in her analysis at line nos. 3-4 shown in the above table. Again, it is important to note that Ms. Bulkley excluded Middlesex Water's results in her DCF analysis, however, she included Middlesex Water in her proxy group for CAPM analysis. Lastly. I disagree with Ms. Bulkley's modified CAPM analysis results of 11.24% (line no. 4 in the table above) as reasonable and appropriate.

<u>BUSINESS RISK</u>

Q. DID MS. BULKLEY RESPOND YOUR BUSINESS RISK ASSESSMENT FOR PAWC?

A. No. Ms. Bulkley did not specifically respond to my discussion regarding the capital expenditure plan, credit rating risk, PAWC's historic financial performance, American Water Work's (parent company) consistently increased

dividend payments and future yearly target of 7% to 9% growth rate in the long-term EPS and dividend payment (I&E Statement No. 2, pp. 54-60).

Q. DID MS. BULKLEY RESPOND TO YOUR POSITION REGARDING THE PROPOSED REVENUE DECOUPLING MECHANISM (RDM) AND RISKS ASSOCIATED WITH ENVIRONMENTAL AND WATER QUALITY REGULATIONS?

A. Yes, in part. Ms. Bulkley reiterates that nearly 60% of the distribution utilities (gas, electric, and water) in her proxy group have some form of RDM. She claims that there is no meaningful difference between distribution utilities with respect to whether they benefit from revenue decoupling or revenue stabilization, and looking at only the water utilities in her view is not reasonable (PAWC Statement No. 13-R, pp. 76-77).

It appears Ms. Bulkley did not specifically respond to my discussion in response to her claimed risks associated with environmental and water regulations (I&E Statement No. 2, pp. 66-68).

Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY'S POSITION WITH REGARD TO THE PROPOSED RDM?

A. I disagree with Ms. Bulkley's response. As discussed in my direct testimony, Ms. Bulkley's analysis is extremely misleading as her proxy group includes gas and electric utilities with water utilities of which 59% of the utilities have an RDM.

Based on my analysis, after removing gas and electric utilities from her proxy group, less than 22% of water utilities in other state jurisdictions have implemented some type RDM (I&E Statement No. 2, pp. 62-64). Ms. Bulkley did not respond to my assertion that the proposed RDM is a guaranteed revenue recovery mechanism, which reduces the Company's overall business risk profile and protects it from financial loss due to revenue shortfall or losses. PAWC already has access to and is currently taking advantage of risk reducing mechanisms such as the DSIC and the use of a FPFTY in base rate filings (I&E Statement No. 2, p. 64).

I&E witness Ethan Cline (I&E Statement Nos. 4 and 4-SR) presents further discussion on this topic as well as I&E's recommendation that the Commission deny the Company's RDM proposal.

MANAGEMENT PERFORMANCE

Q. SUMMARIZE THE COMPANY'S REBUTTAL TESTIMONY REGARDING YOUR DISCUSSION CONCERNING MANAGEMENT PERFORMANCE.

A. First, Ms. Bulkley disagrees with my recommended rejection of an additional 25-basis points to the cost of equity for management performance if a lower return on equity is approved by the Commission, and she points to Ms. Everette's discussion on this topic (PAWC Statement No. 1-R). She states that I have not provided any evidence as to the adequacy of compensation for investment risk to recover costs

associated with acquiring troubled water and wastewater systems and the opportunity to earn a return on the fair value of the rate base of such acquisitions. Then, she states that PAWC witnesses Ms. Everette and Mr. Ladner discuss the Company's superior performance that purportedly goes well beyond the requirements of the Public Utility Code (PAWC Statement No. 13-R, pp. 83-84).

Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY'S REBUTTAL TESTIMONY REGARDING MANAGEMENT PERFORMANCE?

A. As discussed in my direct testimony, the benefit of the return PAWC earns on system acquisitions per 66 Pa. C.S. § 1329 (Section 1329) is significantly compounded when considering that the continually increasing rate base is determined on a fair market value (FMV) basis, which is significantly higher than the book value (net of depreciation) of the acquired system assets as of the date of acquisition. A rate base amount determined at FMV rather than the book value of the acquired system assets adequately compensates for the investment risk of the acquiring company. Additionally, PAWC is expanding its service area (adding to its customer count) and forever revenue stream, strengthening its market monopoly and benefits from combined (water and wastewater) business synergy in the certificated service areas (I&E Statement No. 1, pp. 77-78). Ms. Bulkley did not reject my assertion that the Company is earning a return on the inflated rate base amount due to the FMV-determined rate base addition of the acquired system assets, however, she requires evidence as to the adequacy of the compensation for

investment risk. I provided an example of PAWC's potential return on Section 1329 ratemaking rate base at FMV for the wastewater systems of the Butler Area Sewer Authority and the Borough of Brentwood, which are yet to close (I&E Statement No. 2, pp. 78-79).

Q. SUMMARIZE MS. EVERETTE'S REBUTTAL TESTIMONY REGARDING YOUR DISCUSSION OF THE COMPANY'S MANAGEMENT PERFORMANCE.

A. As in her direct testimony (PAWC Statement No. 1, pp. 33-34), Ms. Everette itemizes the accomplishments and achievements in which she argues PAWC demonstrates "superior" management performance established by 52 Pa. Code § 69.711 and 66 Pa C.S.A. § 523 (Section 523) (PAWC Statement No. 1-R, pp. 7-8). She claims that my position contradicts Section 523 that envisions utilities can achieve levels of performance that exceed the base level of the requirements and that the Company has demonstrated superior service beyond the requirements of the Public Utility Code (PAWC Statement No. 1-R, p. 9). She points to the rebuttal testimony of Mr. Ladner who highlights the accomplishments of the Company in delivering superior performance (PAWC Statement No. 15-R). She then produces a list of witnesses who attended the Company's public input hearings and testified for the excellent services provided by the Company (PAWC Statement No. 1-R, pp. 9-12). She disagrees with my assertion that the Company's shareholders have benefited from higher returns on the FMV-

determined ratemaking rate base associated with Section 1329 acquisitions although the depreciated assets value (book value) of the acquired assets are significantly below the FMV, because Section 1329 permits the FMV-determined acquired assets' addition to rate base (PAWC Statement No. 1-R, p. 13). She claims the Company's efforts and long-standing commitment to assist troubled systems justifies an upward adjustment to the rate of return consistent with 52 Pa. Code § 69.71 (PAWC Statement No. 1-R, p. 14). She disagrees with my assertion that the Company's most recent Management Performance Audit is inconsistent with superior management performance (PAWC Statement No. 1-R, pp. 14-15). Lastly, she disagrees with my argument that no management performance adjustment is warranted because PAWC's rate increases have burdened its customers, despite its low-income assistance programs (largely funded by residential customers), and PAWC's customers paying the costs of acquired wastewater services (PAWC Statement No. 1-R, pp. 15-16).

Q. WHAT IS YOUR RESPONSE TO MS. EVERETTE'S REBUTTAL TESTIMONY REGARDING MANAGEMENT PERFORMANCE?

A. As discussed in greater detail in my direct testimony (I&E Statement No. 1, pp. 71-82), I maintain my position that PAWC or any utility company, should not be entitled to additional rewards for implementing programs funded by ratepayers or for meeting their obligations under 66 Pa C.S.A. §1501 (Section 1501).

I am aware that under Section 523 the Commission shall consider a utility's performance, however, it is not mandatory that the Commission grant additional basis points to the ROE. Although I am not offering a legal position and I will defer to counsel to address the legal aspect of it in briefing, I am advised by counsel that the Commission's consideration is not limited to the listing of claims made by PAWC but that it should also consider other factors including evidence of PAWC's efficiency, effectiveness, and adequacy of service. Ultimately, for any company, true management effectiveness is earning a higher return through efficient use of resources and cost-cutting measures. The greater net income resulting from growth, cost savings, and true efficiency in management and operations is available to be passed onto shareholders. I do not believe that PAWC should be granted additional basis points for doing what it is required to do under Section 1501 to provide adequate, efficient, safe, and reliable service (I&E Statement No. 2, pp. 80-81).

As explained above, ratepayers are already paying PAWC a return on the FMV-determined rate base associated with Section 1329 water and wastewater acquisitions. Beyond that, in this proceeding PAWC is proposing to allocate approximately $71 million of wastewater costs to current water customers, causing an unwarranted financial burden in subsidizing wastewater service of others to facilitate PAWC's continued acquisition of water and wastewater systems.

Q. MS. EVERETTE SUMMARIZES MULTIPLE PUBLIC INPUT HEARING WITNESSES TO SUPPORT HER POSITION, THAT PAWC'S SERVICE JUSTIFIES FINANCIAL RECOGNITION. HOW DO YOU RESPOND?

A. Based on my review of the list of public input hearings witnesses' summary as produced by Ms. Everette, she conveniently omits individual customers complaints and concerns regarding water quality, rate increase impacts, bill payment plans, service-related issues, etc. raised at the public input hearings. Ms. Everette's list of witnesses who supports PAWC's efforts are: (1) speaking as representative on behalf of organizations or institutions; (2) possibly not themselves customers of PAWC and, therefore, would not be subject to a rate increase; (3) might have been asked by PAWC to speak at the hearings; and (4) may be directly or indirectly benefitting from association with PAWC and hope to remain associated in the future. I will defer to counsel to address this more specifically in briefing.

Q. PLEASE CONTINUE.

A. Ms. Everette purposefully ignores several customer and public official complaints and concerns raised at the public input hearings about the quality of water services, billing issues, payment issues, service lines repairs, billing, and marketing of the American Water Resources service protection plan, etc.

All these concerns and complaints are echoed and summarized in the supplemental direct testimonies of the OCA witnesses, Christine M. Hoover (OCA

Statement No. 1 - Supp), Barbara Alexander (OCA Statement Nos. 6 - Supp), and Terry Fought (OCA Statement Nos. 7 - Supp) served on February 13, 2024.

Section 523(b)(1) requires the Commission to review management effectiveness and operating efficiency as measured by an audit pursuant to 66 Pa.16 C.S. § 516 (Section 516) as one of the management performance factors. As discussed in my direct testimony, PAWC's most recent Management and Operations Audit Report pursuant to Section 516 prepared by the Commission's Bureau of Audits, issued in October 2023, identified, and recommended a need for improvements in twelve functional areas relating to the operations and service improvements for customers. PAWC's implementation plan[10] accepts twenty-three of the recommendations and partially agrees with the remaining eight recommendations detailed in the audit report (I&E Statement No. 2, pp. 72-74).

Q. SUMMARIZE MR. LADNER'S REBUTTAL TESTIMONY REGARDING THE COMPANY'S PURPORTED SUPERIOR PERFORMANCE.

A. Mr. Ladner summarizes the Company's distinguished environmental record, optimization of water treatment plant performance and water quality, excellent safety record, use of technology, the acquisition of small and troubled systems, and various other initiatives and approaches to provide safe and reliable service to its customers (PAWC Statement No. 15-R, pp. 8-12). Like Ms. Everette, Mr.

[10] PAWC Implementation Plan in response to the 2022-23 Focused Management and Operations Audit Report filed with the Commission at Docket No. D-2022-3035217.

Ladner also presents a summary of witnesses who support the Company's efforts (PAWC Statement No. 15-R, pp. 8-12).

Q. WHAT IS YOUR RESPONSE TO MR. LADNER'S REBUTTAL TESTIMONY REGARDING THE COMPANY'S PURPORTED SUPERIOR PERFORMANCE?

A. As discussed above, the Company's actions and initiatives to excel in its operating performance is not a novel effort, but I believe it is a normal business requirement to provide adequate, efficient, safe, and reliable services to customers as required under Section 1501. In fact, with PAWC's efficient operating performance, all stakeholders of the Company, including its shareholders, benefit because management effectiveness leads to a higher return through efficient use of resources and cost-cutting measures.

Considering the above discussion, I do not believe that PAWC should be granted additional basis points for doing what it is required to do under Section 1501 to provide adequate, efficient, safe, and reliable service. Therefore, I continue to recommend that the addition of 25-basis point to the cost of equity for the claimed superior or exemplary performance be disallowed.

Q. WHAT IS MS. BULKLEY'S CONCLUSION WITH HER ADJUSTMENTS TO YOUR DCF AND CAPM RESULTS?

A. Ms. Bulkley states that with her adjustments to my cost of equity analyses, she

produces the following results (PAWC Statement No. 13-R, pp. 49-50):

Cost of Equity Model	Bulkley's Adjusted Results
Adjusted DCF	9.82%
Adjusted CAPM	11.24%
Average	10.53%

Q. DO YOU AGREE WITH MS. BULKLEY'S ADJUSTED ROE RESULTS?

A. No. As discussed at length above, I disagree with Ms. Bulkley's adjusted DCF and CAPM results as well as her calculated average of adjusted results to suggest that the Commission should consider an average of the DCF and CAPM results in determining an appropriate ROE for PAWC.

FAIR RATE OF RETURN

Q. HAS MS. BULKLEY STATED THAT YOUR COST OF EQUITY RECOMMENDATION DOES NOT ALLOW FOR A FAIR RATE OF RETURN?

A. Yes. Ms. Bulkley suggests that my cost of equity recommendation does not meet the standards determined by the *Hope* and *Bluefield* cases when determining a fair rate of return. Specifically, she argues that my recommended cost of equity is not consistent with the comparable return standard (PAWC Statement No. 13-R, pp. 28-29).

Q. PLEASE RESPOND TO MS. BULKLEY'S ALLEGATION THAT YOUR COST OF EQUITY RECOMMENDATION DOES NOT ALLOW PAWC TO RECEIVE A FAIR RATE OF RETURN.

A. The main reason a proxy group is used is to satisfy the very standard that seeks to provide the subject utility with the opportunity to earn a return similar to that of companies with corresponding risks and uncertainties. The criteria I used in developing my proxy group were specifically designed to identify a group of comparable water utilities that serves as a benchmark in determining a fair cost of equity and overall rate of return.

Additionally, it is important to recognize another standard determined by the *Hope* and *Bluefield* cases when determining a fair rate of return that dictates a fair return can change (increase or decrease) along with economic conditions and capital markets. Forecasted growth rates and stock prices used to calculate the dividend yield component of the DCF model reflect how analysts and investors perceive current and future market conditions. Therefore, while my recommended ROE may not be as high as Ms. Bulkley would like, I believe it is in fact a fair return when considering current market conditions and expectations through the FPFTY.

SUMMARY OF OCA WITNESS GARRETT'S RESPONSE IN REBUTTAL TESTIMONY

Q. SUMMARIZE MR. GARRETT'S RESPONSE CONCERNING YOUR RECOMMENDED CAPITAL STRUCTURE.

A. Mr. Garrett disagrees with my recommended capital structure because it would result in an unreasonably high authorized rate of return and would be unfair to ratepayers. He opines that cost of capital analysts almost always rely on proxy group averages (or medians) for their financial modeling (e.g., average stock price, average dividend yield, average beta, etc.) rather than the range of a proxy group's capital structure. He suggests that it would be fairer and objective to use an average rather than a range in this analysis (OCA Statement No. 3-R, p. 3).

He then recommends that the Commission reject the Company's proposed capital structure for the results of the ROE models to be accurate, and he asserts that any discrepancy between the utility's capital structure and the proxy group's capital structure must be reconciled either through a capital structure adjustment for ratemaking purposes or a lower authorized ROE (OCA Statement No. 3-R, p. 4).

Q. WHAT IS YOUR RESPONSE TO MR. GARRETT'S REBUTTAL TESTIMONY REGARDING YOUR RECOMMENDED CAPITAL STRUCTURE?

A. Generally, with few exceptions such as municipalities and smaller investor-owned

utilities with largely contributed capital, the actual and FPFTY capital structure of a company and the parent company should be reviewed and applied in the cost of equity analyses to truly reflect the utility's financing structure (capitalization ratio) that will be used to finance the utility's rate base. Based on this fundamental procedure and comparing the Company's actual capital structure with the proxy group's capital structure range, the Company's claimed capital structure is reasonable in this case. It is difficult to assess the reasonableness of a company's capitalization ratio because there are pros and cons of higher debt or higher equity in the capitalization ratio. For example, a higher debt ratio may result in higher financial risk and borrowing costs which negatively impacts ratepayers. The reverse would be true for companies with a higher equity ratio. Additionally, my recommended ROE of 8.45% appropriately addresses Mr. Garrette's concern about applying the Company's higher equity ratio as recommended in my direct testimony.

OVERALL RATE OF RETURN

Q. HAS YOUR OVERALL RATE OF RETURN RECOMMENDATION CHANGED FROM YOUR DIRECT TESTIMONY?

A. No. While my cost of equity and capital structure recommendations remain the same, the cost of wastewater specific long-term debt has been updated to reflect the Company's revision, but due to this minor change in the debt cost rate, the weighted cost of wastewater specific debt did not change in the analysis.

Q. WHAT IS YOUR OVERALL RATE OF RETURN RECOMMENDATION FOR THE COMPANY?

A. The following are my rate of return recommendations for the Company:

I&E Summary of Cost of Capital Pennsylvania-American Water Company - Water Operations			
Type of Capital	**Ratio**	**Cost Rate**	**Weighted Cost Rate**
Long-Term Debt	44.01%	4.76%	2.09%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	55.99%	8.45%	4.73%
Total	**100.00%**		**6.82%**

I&E Summary of Cost of Capital Pennsylvania-American Water Company - Wastewater Operations			
Type of Capital	**Ratio**	**Cost Rate**	**Weighted Cost Rate**
Long-Term Debt	42.73%	4.76%	2.03%
Wastewater Specific Debt	4.40%	2.67%	0.12%
Preferred Stock	0.00%	0.00%	0.00%
Common Equity	52.87%	8.45%	4.47%
Total	**100.00%**		**6.62%**

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

I&E Statement No. 3
Witness: Joseph Kubas

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA AMERICAN WATER COMPANY

Docket No. R-2023-3041389 (Water)

Docket No. R -2023-3041390 (Wastewater)

Direct Testimony

of

Joseph Kubas

Bureau of Investigation and Enforcement

Concerning:
Overall Act 11 Revenue, Wastewater
Present Rate Revenue, Late Payment Revenue
Proposed Revenue, Tariff Zones
Rate Structure, Revenue Shortfall
Cost of Service Studies Scaleback of Rates
Rate Base
Acquisition Adjustment
Annual Depreciation and Amortization Expense

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Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is Joseph Kubas. My business address is 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission (Commission) in the Bureau of Investigation and Enforcement (I&E) as an Annuitant. I was previously employed as the Fixed Utility Valuation Engineer Supervisor.

Q. WHAT IS YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND?

A. My education and professional background are set forth in Appendix A, which is attached.

Q. PLEASE DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS.

A. I&E is responsible for protecting the public interest in proceedings before the Commission. The I&E analysis in this proceeding is based on its responsibility to represent the public interest. This responsibility requires balancing the interests of ratepayers, the regulated utility, and the regulated community as a whole.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my direct testimony is to evaluate Pennsylvania – American Water Company's (PAWC or Company) request for an annual increase in operating

revenue of approximately $203,946,000. My testimony regarding PAWC's request will focus on the exclusion of four wastewater systems, the rate structure contained in the remaining two wastewater systems, Cost of Service Studies, and the scaleback of rates.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. I&E Exhibit No. 3 contains schedules relating to my direct testimony.

INTRODUCTION

Q. PLEASE DESCRIBE THE FILING.

A. On November 8, 2023, PAWC filed a combined water and wastewater base rate case based on a fully projected future test year (FPFTY) ending June 30, 2025. The total increase of approximately $203,946,000 is comprised of an increase in water revenue of approximately $199,237,000, and an increase in wastewater revenue of approximately $4,709,000 (PAWC Volume 3, Sch. 3-A).

Q. HOW MANY DIFFERENT WASTEWATER ZONES DOES PAWC HAVE AND DO THE RATES VARY BY ZONE?

A. PAWC currently has eleven different wastewater rate zones with various rates, with eight in the Sanitary Sewer System (SSS) Group, which only includes sanitary systems, and three zones in the Combined Sewer System (CSS) Group, which include systems that treat both sanitary and storm water flows (PAWC Volume 9,

Ex. 10-B and 10-C). PAWC also included in this filing the Butler Area Sewer Authority (BASA), the Borough of Brentwood (Brentwood), Farmington Township Wastewater (Farmington), and the Sadsbury Township Wastewater (Sadsbury) systems that the Company does not currently own but are pending purchase. Presently, the average bill for a residential customer varies between $49.24 per month in the York WW system to $106.70 in the Kane WW system (PAWC Volume 9, Ex 10-B, p. 70 and Ex. 10-C, p. 30).

BRENTWOOD WASTEWATER

Q. PLEASE DESCRIBE THE BRENTWOOD WASTEWATER SYSTEM.

A. The Brentwood system is a municipal owned wastewater collection only system in Allegheny County. PAWC filed an application with the Commission to purchase this system on April 3, 2023, at Docket A-2021-3024058.

Q. DID YOU PARTICIPATE IN THE APPLICATION PROCEEDING FOR THE PURCHASE OF THE BRENTWOOD WASTEWATER SYSTEM?

A. Yes. I provided direct and surrebuttal testimony recommending that the Application to acquire the system be denied for many reasons including the lack of affirmative public benefit and the improper inclusion of plant used by "non-customers" in the rate base (I&E St. No. 1 and St. No. 1-SR at Docket A-2021-3024058).

Q. WHAT IS THE CURRENT STATUS OF THE BRENTWOOD APPLICATION?

A. Administrative Law Judge (ALJ) Katrina T. Dunderdale recommended that the Application be denied in a Recommended Decision (RD) dated January 17, 2024. The RD is currently pending before the Commission. As part of this base rate case filing, the Company reflected a revenue shortfall of $1,565,232, as a result of the Brentwood acquisition that will be paid by water customers (PAWC Volume 3, Exhibit 3-A).

Q. WHAT DO YOU RECOMMEND CONCERNING THE INCLUSION OF THE RATE BASE, EXPENSES, TAXES, AND REVENUE FROM THE BRENTWOOD SYSTEM IN THIS CASE?

A. I recommend that the rate base, expenses, taxes, revenue, and corresponding revenue shortfall from the Brentwood system be excluded from this case.

Q. WHY DO YOU RECOMMEND THIS SYSTEM BE EXCLUDED FROM THIS BASE RATE CASE?

A. First, PAWC does not currently own the Brentwood system and as no decision has been issued by the Commission regarding this acquisition, it is uncertain whether the acquisition will proceed or whether the closing would even occur within the FPFTY. Therefore it is premature to allow the inclusion of the rate base, expenses, taxes, and revenue from Brentwood in this base rate case. Second, excluding the Brentwood

system in this case saves water customers $1,565,232, because the revenue shortfall as a result of purchasing the Brentwood system will be eliminated. Finally, in the Application proceeding, the Company alleged there would be no "immediate" harm to other PAWC customers as a result of this acquisition (PAWC St. No. 3. p. 10 at A-2021-3024058). Since this base rate case was filed before PAWC will be able to close on the acquisition of the Brentwood system, I believe this case falls into the "immediate" time frame PAWC was referring to. Therefore, I recommend the Commission hold the Company to this promise and exclude the Brentwood rate base, expenses, taxes, revenue and revenue shortfall from this case resulting in no harm to PAWC water customers.

BASA WASTEWATER

Q. PLEASE DESCRIBE THE BASA WASTEWATER SYSTEM.

A. The BASA system is a municipal owned wastewater collection and treatment system in Butler County. PAWC filed an application with the Commission to purchase this system on March 9, 2023, at Docket A-2022-3037047.

Q. WHAT IS THE CURRENT STATUS OF THE BASA APPLICATION?

A. The Commission approved the Application by an Order entered November 16, 2023. As part of this filing, the Company reflected a revenue shortfall of $21,552,699 for BASA that will be paid by water customers (PAWC Volume 3, Exhibit 3-A). However, I have been advised by counsel that this Commission order has been

appealed by Center and Summit Townships, and it is currently pending before the Commonwealth Court.

Q. WHAT DO YOU RECOMMEND CONCERNING THE INCLUSION OF THE RATE BASE, EXPENSES, TAXES AND REVENUE FROM THE BASA SYSTEM IN THIS CASE?

A. I recommend that the rate base, expenses, taxes, and revenue from the BASA system be excluded from this case.

Q. WHY DO YOU RECOMMEND THIS SYSTEM BE EXCLUDED FROM THIS BASE RATE CASE?

A. First, PAWC does not currently own the BASA system, and any closing will be dependent upon the outcome of the Commonwealth Court appeal, which could easily extend any potential closing beyond the FPFTY in this case. Therefore it is premature to allow the inclusion of the rate base, expenses, taxes, and revenue from BASA in this base rate case. Second, excluding the BASA system in this case saves water customers $21,552,699, because the revenue shortfall as a result of purchasing the BASA system will be eliminated. Finally, in the Application, the Company claimed there would be no "immediate" harm to other PAWC customers (PAWC St. No. 3. p. 11 at A-2022-3037047). Since this case was filed before PAWC will acquire the system, I believe this case falls also into the "immediate" time frame PAWC was referring to. Therefore, I recommend the Commission hold the

Company to this promise and exclude the BASA rate base, expenses, taxes, revenue, and revenue shortfall from this case, resulting in no harm to PAWC water customers.

FARMINGTON WASTEWATER

Q. PLEASE DESCRIBE THE FARMINGTON TOWNSHIP WASTEWATER SYSTEM.

A. The Farmington system is a municipal owned wastewater collection and treatment system in Clarion County. PAWC filed an application with the Commission to purchase this system on August 28, 2023 at Docket A-2023-3042567.

Q. WHAT IS THE CURRENT STATUS OF THE FARMINGTON APPLICATION?

A. The Commission has yet to approve this Application.

Q. WHAT DO YOU RECOMMEND CONCERNING THE INCLUSION OF THE RATE BASE, EXPENSES, TAXES AND REVENUE FROM THE FARMINGTON SYSTEM IN THIS CASE?

A. As this application has not been approved and a closing date is unknown, I recommend that the rate base, expenses, taxes, and revenue from the Farmington system be excluded from this case, since the system is not currently owned by PAWC.

SADSBURY WASTEWATER

Q. PLEASE DESCRIBE THE SADSBURY TOWNSHIP WASTEWATER SYSTEM.

A. The Sadsbury system is a municipal owned wastewater collection and treatment system in Lancaster County. PAWC filed an application with the Commission to purchase this system on March 9, 2023, at Docket A-2023-3042058.

Q. WHAT IS THE CURRENT STATUS OF THE SADSBURY APPLICATION?

A. The Commission has yet to approve this Application.

Q. WHAT DO YOU RECOMMEND CONCERNING THE INCLUSION OF THE RATE BASE, EXPENSES, TAXES AND REVENUE FROM THE SADSBURY SYSTEM IN THIS CASE?

A. As this application has not been approved and a closing date is unknown, I recommend that the rate base, expenses, taxes, and revenue from the Sadsbury system be excluded from this case, since the system is not currently owned by PAWC.

WASTEWATER PRESENT RATE REVENUE

Q. PLEASE SUMMARIZE THE WASTEWATER PRESENT RATE REVENUE THAT YOU RECOMMEND BE EXCLUDED FROM THE FILING.

A. For the reasons stated above, I recommend that $11,847,402 of present rate revenue

from BASA and $1,824,191 of present rate revenue from Brentwood shown on PAWC Volume 3, Sch. 3-A be excluded from this case. I also recommend that $322,926 of present rate revenue from Farmington and $471,228 of present rate revenue from Sadsbury shown on PAWC Volume 9, Exhibit 10-B, p. 1 be excluded from this case.

WASTEWATER PROPOSED RATE SUMMARY

Q. WHAT DID PAWC STATE CONCERNING PROPOSED WASTEWATER RATES?

A. PAWC made several claims and statements concerning wastewater rates. First, the Company states that "cost causation" is an important goal in establishing proposed rates. The Company goes on to state that "cost causation" is the "foundation" of its proposed wastewater rates (PAWC Volume 9, St. No. 10, pp. 28-30).

Q. DID THE COMPANY PROPOSE WASTEWATER RATES TO RECOVER THE HIGHER COST OF PROVIDING WASTEWATER SERVICE?

A. No. Contrary to this testimony, the Company did not propose wastewater rates to better recover the cost of providing wastewater service. The Company proposed various wastewater rate decreases, kept some rates the same, and proposed increases in some other cases. The increased rates did move the lower rates closer to the corresponding rates in Zone 1. A review of the Company's proposed rates indicates that the Company's primary goal was to ignore the cost of providing wastewater

service and limit the average bill of residential wastewater customers to make them comparable to the average bill of a water customer (PAWC Volume 9, St. No. 10, pp. 47-48).

Q. WHAT IS ACT 11 of 2012?

A. On February 14, 2012, Governor Corbett signed into law Act 11 of 2012 (Act 11), which amends Chapters 3, 13, and 33 of the Pennsylvania Public Utility Code. Act 11 amends Chapters 3 and 13 to allow jurisdictional utilities to make rate case claims based on an FPFTY, to allow wastewater utilities to allocate a portion of their revenue requirement to the combined wastewater and water utility customer base, and to allow water and wastewater utilities, electric distribution companies, and natural gas distribution companies or a city natural gas distribution operation to petition for a distribution system improvement charge (Docket No. M-2012-2293611, Final Implementation Order entered August 2, 2012).

Q. DOES ACT 11 SPECIFY HOW RATES SHOULD BE DETERMINED OR WHAT PORTION OF A COMPANY'S WASTEWATER REVENUE REQUIREMENT SHOULD BE ALLOCATED TO ITS COMBINED WATER AND WASTEWATER CUSTOMERS?

A. No. Act 11 does not specify how the Commission should determine rates or dictate the amount of revenue that should be allocated or shifted, leaving the Commission wide latitude in applying this provision of Act 11. However, it is important to

remember that Section 1311(c) states that it must be in the public interest for the utility to allocate a portion of the wastewater revenue requirement to the combined water and wastewater customer base.

Q. IS PAWC PROPOSING TO SHIFT SOME OF THE WASTEWATER REVENUE REQUIREMENT FROM WASTEWATER CUSTOMERS TO WATER CUSTOMERS IN THIS FILING?

A. Yes. In its filing, the Company proposes that its wastewater operations receive a $71,087,394 subsidy from its water operations (PAWC Volume 3, Ex. 3-A, p. 1).

Q. WHY IS PAWC PROPOSING TO SHIFT SOME OF THE WASTEWATER REVENUE REQUIREMENT FROM WASTEWATER CUSTOMERS TO WATER CUSTOMERS IN THIS FILING?

A. The Company believes it is important to limit the overall increase to wastewater customers. After increasing, and decreasing various wastewater rates, the Company's goal was to have an average wastewater bill of approximately $100 per month in the SSS Operations and approximately $110 per month in the CSS Operations which is in parity with the average water customer bill of $90 per month. This proposal results in a wastewater revenue shortfall of $71,087,394 being shifted to water customers (PAWC Volume 3, Sch. Act 11, p. 1).

Q. SHOULD THE COMMISSION ACCEPT PAWC'S PROPOSAL TO SHIFT $71,087,394 OF THE WASTEWATER REVENUE REQUIREMENT FROM WASTEWATER CUSTOMERS TO WATER CUSTOMERS IN THIS FILING?

A. No, for several reasons. First, as described below, the primary consideration should have been to design wastewater rates to recover the cost of providing wastewater service, a goal the Company described, but ignored. Second, I believe that the wastewater rates that I propose result in average bills that are reasonable considering all the factors. Third, the Company's affordability analysis is flawed because it ignores the wastewater rates paid to other entities by PAWC water customers. Finally, the Company's affordability analysis ignores the benefits that it claims accrue to customers of being acquired by PAWC.

Q. HOW MUCH IS THE ACT 11 SUBSIDY REDUCED IF THE BASA AND BRENTWOOD SYSTEMS ARE NOT INCLUDED?

A. The $71,087,394 subsidy is reduced to $47,969,463 ($71,087,394 – $21,552,699 - $1,565,232).

Q. HOW DO YOU RECOMMEND REDUCTION OF THE REMAINING $47,969,493 SUBSIDY?

A. As described below, I recommend various changes to the wastewater rates to reduce the remaining $47,969,463 subsidy needed to operate the wastewater systems.

Q. WHAT DID THE COMPANY PROVIDE TO SUPPORT ITS WASTEWATER RATES?

A. The Company provided what it calls an "Affordability Analysis" as described in PAWC Volume 9, St. 10. In summary, the Company believes that its rate structure proposal makes all rates more "affordable," by increasing the bill of an average water customer by approximately $6.08 per month so that wastewater rates can be between $10 and $90 per month lower (PAWC Volume 9, St. No. 10, p. 52).

Q. WHAT DO YOU RECOMMEND CONCERNING THE COMPANY'S AFFORDABILITY ANALYSIS?

A. I recommend that the Commission not rely on the Company's affordability analysis to justify limiting PAWC's wastewater rates for three reasons. First, I do not believe that making the average bills of water and wastewater customers "comparable" should be the primary goal as there is a substantial difference in operating costs between water and wastewater systems, and the Company itself notes that cost causation should be a primary factor in rate setting. I am not aware of any rate making criteria that would imply that water customers and wastewater customers should have comparable rates. Second, as described above, the analysis ignores the fact that water customer who do not receive wastewater service from PAWC will incur their own wastewater costs that may or may not be comparable to their PAWC water rates while they subsidize PAWC wastewater customers to provide them with comparable rates. This is definitely a cost to PAWC water customers that should not

be ignored. Third, the analysis ignores the benefits the Company claims that could or have accrued to customers in acquired systems. As an example, the analysis ignores the potential local tax reductions PAWC claimed a customer may receive after the wastewater system was acquired by PAWC. Therefore, the affordability analysis is flawed and should not be used to establish wastewater rates.

WASTEWATER RATE STRUCTURE AND REVENUE SUMMARY

Q. DID YOU COMPILE A SUMMARY THAT SHOWS THE REVENUE IMPACT OF I&E'S RATE STRUCTURE RECOMMENDATIONS?

A. Yes. A summary of the I&E wastewater revenue recommendations described below is provided on I&E Ex. No. 3, Sch. 1. On this exhibit, column B shows the total PAWC operations, column C shows PAWC water operations, column D shows total Wastewater Operations, and columns E through H show the various Wastewater Operations. Line 1 shows the present rate revenue from each operation, line 2 shows the additional revenue requirement the Company claimed, line 3 shows the Act 11 allocation, line 4 shows the proposed revenue requested by the Company reallocated by I&E, line 5 shows the increase, and line 6 shows the percentage increase.

Based upon my proposed wastewater rates, the total subsidy needed to operate the SSS Operations wastewater systems is $357,517 (I&E Ex. No. 3, Sch. 1, columns C and D, line 3).

SSS OPERATIONS – ZONES 1, 2, 5, 7, 8, AND 9

Q. DID THE COMPANY PROVIDE A COST OF SERVICE STUDY (COSS) TO DETERMINE THE COSTS OF PROVIDING WASTEWATER SERVICE FOR THE SSS OPERATIONS?

A. Yes. The Company provided one COSS for the SSS Operations - Zones 1, 2, 5, 7, 8, and 9 (PAWC Volume 17, Ex. 12-B). This COSS included a customer cost analysis that claims the SSS Operations wastewater customer cost is comprised of $13.87 per month of direct customer costs, and $29.63 per month of Inflow and Infiltration (I&I) costs for a total cost of $43.50 for a Residential customer (PAWC Volume 17, Ex. 12-B, Sch. RS1 j. Responses p. 2).

Q. WHAT CHANGE IN REVENUE DID THE COMPANY PROPOSE IN THE SSS OPERATIONS?

A. The Company proposed that present rate revenue be decreased from $95,470,866 to $95,301,613 which is a decrease of $169,253 or 0.2% (PAWC Volume 9 Ex. 10-B, p. 1). To achieve this reduction, the Company proposed to increase some customer charges, usage rates and flat rates, and decrease other customer charges, usage rates and flat rates (PAWC Volume 9 Ex. 10-B, pp. 3-32).

Q. DO THE PROPOSED REVENUES FROM THE SSS OPERATIONS RECOVER THE ENTIRE COST OF PROVIDING WASTEWATER SERVICE TO THE SSS OPERATIONS?

A. No. The revenue shortfall for SSS Operations is $31,962,411 (PAWC Volume 3, Exhibit 3-A).

Q. WHAT PERCENTAGE OF TOTAL PAWC CUSTOMERS ARE WASTEWATER CUSTOMERS?

A. Based upon the number of customers in each system, wastewater customers comprise only approximately 12.6% of all PAWC customers (I&E Ex. No. 3, Sch. 2).

Q. IS THIS LARGE SUBSIDY REASONABLE?

A. No. I believe each type of utility service should recover as much of the cost of providing that service as possible. Since most PAWC water customers are not wastewater customers, it is unreasonable to require water customers to subsidize wastewater customers to the extent PAWC has requested. Therefore, as described below, I recommend that rates increase for SSS and CSS Operations to significantly reduce the remaining $47,969,463 subsidy.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN THE SSS OPERATIONS.

A. My goal was to reduce the $31,962,411 subsidy the Company claims is needed in the SSS Operations. The proposed rates that I recommend are shown on I&E Ex No. 3, Sch 3, pp. 1-2 column D. My proposed revenue by class and zone as well as the increases by class are amounts shown on I&E Ex. No. 3, Sch. 4. The total increase in the SSS system that I recommend is $32,265,198 (I&E Ex No. 3, Sch. 4, p. 1, column G, line 23). This recommendation results in a remaining subsidy in the SSS Operations of $321,682 (I&E Ex No. 3, Sch 1, column E, line 3).

Q. WHAT LIMITATIONS DID YOU FOLLOW TO ALMOST ELIMINATE THE SUBSIDY NEEDED TO OPERATE THE SSS OPERATIONS?

A. I recommend monthly customer charges and usage rates that will limit the highest increase in an average bill to less than 70%, except in one case. As described below, the highest average percent increase in a bill a residential customer will experience is the 69.2% increase I propose in Zone 7 - York. The 70% maximum increase to an average bill also applies to non-residential customers, with one exception.

Q. WHAT OTHER CRITERIA DID YOU USE TO PROPOSE RATES?

A. I utilized the Company's COSS to develop the various wastewater rates that moves the relative rate of return of each class towards 1.0. During the course of discovery,

the Company revised its SSS Operations COSS. I provide the revised results under present and proposed rates as I&E Ex. No. 3, Sch. 5, p. 1 and 2 respectively.

Q. WHAT ARE RATE OF RETURN AND RELATIVE RATE OF RETURN?

A. The rate of return is the Commission authorized return on rate base that is determined in a base rate proceeding; this is the return the Company and shareholders earn on the rate base investment. A relative rate of return indicates how the rate of return of each customer class compares to the system average rate of return. In general, a relative rate of return that provides revenue equal to its cost to serve would have a relative rate of return equal to 1.0. If a class of service has a relative rate of return below 1.0, the revenue received from that class does not cover the cost of providing service to that class. If a class of service has a relative rate of return above 1.0, the revenue received from that class exceeds the cost of providing service to that class.

SSS OPERATIONS - RESIDENTIAL

Q. DID YOU PREPARE A SCHEDULE SHOWING PRESENT AND YOUR PROPOSED RATES AND REVENUE FOR RESIDENTIAL CUSTOMERS IN THE SSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 6, showing present and proposed rates and revenue for Residential SSS Operation customers.

Q. HOW DID YOU DETERMINE THE RESIDENTIAL CUSTOMER CHARGE OF $15.00 PER MONTH?

A. With a present customer charge of $14.30 per month, my proposed $15.00 per month customer charge equates to an increase of $0.70 per month or 4.9% (I&E Ex. No. 3, Sch. 3, p. 1, line 1). The $15.00 per month customer charge will recover more than the direct customer cost of $13.87 per month plus a small portion of the I&I costs identified by the Company, both described above. Furthermore, I believe this 4.9% increase will provide sufficient revenue, while limiting the increase to low-usage residential customers.

Q. WHY DO YOU NOT RECOMMEND MORE OF THE I&I COSTS BE RECOVERED IN THE RESIDENTIAL CUSTOMER CHARGE OF $15.00 PER MONTH?

A. I recognize that I&I costs are a large portion of the cost of operating wastewater systems. However, I&I costs relate to flow, which does not vary with the number of customers, a typical criterion for determining if a cost should be recovered in the customer charge. Therefore, I recommend that only a small part of I&I costs be recovered in the customer charge to generate revenue, but I believe it is improper to recover more than a small amount of the cost of I&I in the customer charge.

Q. HOW DID YOU DETERMINE THE SSS OPERATIONS RESIDENTIAL USAGE RATES?

A. In order to reduce the $31,962,411 subsidy described above in the SSS Operations I increased the residential usage rate to $3.74 per hundred gallons in Zones 1, 2, and 5 (I&E Ex. No. 3, Sch. 2, p. 1, column D, line 4). The lower residential usage rates for Zones 7 and 9 were limited by the maximum average bill increase of 70.0% described above and are shown on I&E Ex. No. 3, Sch. 3, p. 2, column D, lines 2-3 and 14-15.

Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE RECOMMENDATIONS REDUCE THE SSS OPERATIONS SUBSIDY?

A. These residential customer charges and usage rates reduce the subsidy needed to operate the SSS Operations by $19,612,917 (I&E Ex. No. 3, Sch. 4, p. 1, column B, line 27).

Q. DID YOU ALSO PREPARE BILL COMPARISON SCHEDULES SHOWING THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVELS FOR THE SSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 7, showing the present and proposed bills at various usage levels. The average bill is shown in bold with an asterisk for each zone in the SSS Operations.

Q. WHAT INCREASE WILL THE AVERAGE ZONE 1 AND ZONE 5 RESIDENTIAL CUSTOMERS RECEIVE UNDER YOUR CUSTOMER CHARGE AND USAGE RATE PROPOSAL?

A. The bill for an average Residential customer in Zones 1 and 5 will increase from $105.18 per month to $131.76 per month, which is an increase of $26.58 per month or 25.3% (I&E Ex. No. 3, Sch. 7, p. 1 and p. 3, line 7).

Q. WHAT INCREASE WILL THE AVERAGE CUSTOMERS RECEIVE IN THE OTHER RATE ZONES?

A. The bill for an average Residential customer in Zone 2 will increase from $91.77 per month to $131.76 per month, which is an increase of $39.99 per month or 43.6% (I&E Ex. No. 3, Sch. 7, p. 2, line 7). The bill for an average Residential customer in Zone 7 will increase from $49.24 per month to $83.32 per month, which is an increase of $34.08 per month or 69.2% (I&E Ex. No. 3, Sch. 7, p. 4, line 7). The bill for an average Residential customer in Zone 9 will increase from $49.68 per month to $83.68 per month, which is an increase of $34.00 per month or 68.4% (I&E Ex. No. 3, Sch. 7, p. 6, line 7). The bill for a flat rate Residential customer in Zone 8 will increase from $107.14 per month to $132.00 per month, which is an increase of $24.86 per month or 23.2% (I&E Ex. No. 3, Sch. 7, p. 5, line 7).

Q. HOW DID YOU DETERMINE THE MONTHLY FLAT RATE FOR THE CUSTOMERS IN ZONE 8, AND FOR CUSTOMERS WHERE THERE IS NO WATER USAGE DATA AVAILABLE?

A. The $132.00 per month Residential flat rate that I propose in these zones and in other zones if a customer has no water usage available is based upon the average bill of a Zone 1 customer that uses 3,122 gallons per month as a result of my rate structure proposal, rounded to the nearest dollar (I&E Ex. No. 3, Sch. 7, p. 1, line 7).

Q. HOW DID YOU DETERMINE THE MONTHLY FLAT RATE FOR THE CUSTOMERS IN ZONE 9?

A. The present flat rate in Zone 9 is $50.00 per month. Increasing this flat rate to $75.00 per month equates to an increase of $25.00 per month or 50%. This increase of $25.00 per month will move the Zone 9 flat rate towards the Zone 1 flat rate that I recommend in a more gradual manner (I&E Ex. No. 3, Sch. 3, p. 2, line 13).

Q. WHY IS IT REASONABLE FOR THE AVERAGE CUSTOMER'S BILL IN ZONE 2 TO INCREASE MORE THAN THE AVERAGE BILL OF A CUSTOMER IN ZONE 1?

A. The present usage rate for Zone 1 customers is $2.875 per hundred gallons, and the usage rate for Zone 2 customers is $2.450 per hundred gallons (I&E Ex No. 3, Sch.

3, p. 1, lines 4 and 22). In order to consolidate these rate rates, Zone 2 customers will need to experience a slightly larger increase than the average Zone 1 customer to equalize the usage rates.

Q. WHY IS IT REASONABLE FOR THE AVERAGE CUSTOMER'S BILL IN ZONES 7 AND 9 TO INCREASE MORE THAT THE AVERAGE INCREASE FOR ZONE 1 CUSTOMERS?

A. There are two reasons that the increases for these systems are greater. First, the average Residential bill for customers in these zones is below $50.00 per month, well below the present average bill of $105.18 in Zone 1 (I&E Ex. No. 3, Sch. 7, pp. 1, 4, and 6). Therefore, a greater percentage increase in the average bill is necessary to begin to consolidate rates, so that all SSS Operations Residential customers eventually pay the same rates. Second, Zones 7 and 9 were acquired under Section 1329, which among other things, provided benefits to the municipalities that sold their systems to PAWC including such things as debt relief, the municipality's financial outlook, and other improvements and investments to municipal properties in addition to PAWC's claimed improved service to their customers. Therefore, since the municipalities and presumably the customers benefited from being acquired by PAWC through Section 1329 it is reasonable to assign a greater than average increase in rates to customers acquired under Section 1329.

Q. HOW DID THE CITY OF YORK BELIEVE THE SALE WOULD BENEFIT THE CITY OF YORK AND ITS RESIDENTS?

A. City Manager Micheal Helfich testified in the Application Docket at A-2021-3024681, City St. No. 1, p. 6 that:

> Sales proceeds realized by the Authority will be applied to repay or defease sewer debt and the remaining proceeds will be transferred to the City upon Closing of the Transaction and dissolution of the Authority. These remaining proceeds would be available to address critical public service needs in the community, including additional municipal bond debt, municipal pension obligations, social programs, infrastructural improvements, and other key initiatives.

Q. HOW DID THE BOROUGH OF ROYERSFORD BELIEVE THE SALE WOULD BENEFIT THE BOROUGH OF ROYERSFORD AND ITS RESIDENTS?

A. City Manager Micheal A Leonard testified in the Application Docket at A-2020-3014248, St. No. 1, p. 10 that:

> The sale will (1) improve the Borough's financial condition and outlook, (2) enable the Borough to reallocate its administration time to focus on other key initiatives of the Borough, and (3) provide for economies of scale given that PA American Water already provides water service to Borough residents.

Q. DID YOU MAKE A SIMILAR RECOMMENDATION IN THE RECENT AQUA BASE RATE CASE CONCERNING THE ACT 11 SUBSIDY AND THE RATES PAID BY SECTION 1329 CUSTOMERS?

A. Yes. In the recent Aqua base rate case at Docket R-2021-3027385, I recommended a

larger percentage increase in wastewater rates and the corresponding average bills of most customers to reduce the Act 11 subsidy. I recommended an even larger percentage increase in the rates and corresponding average bills for customers in the systems acquired under Section 1329 (I&E Ex, No. 3, Sch. 8).

Q. DID THE ALJ AND COMMISSION ACCEPT YOUR RECOMMENDATIONS CONCERNING THE ACT 11 SUBSIDY AND RATES PAID BY SECTION 1329 CUSTOMERS?

A. Yes. The Commission agreed with the ALJ that the Act 11 subsidy should be reduced and that rates for customers acquired under Section 1329 should increase more than the rates for other customers because of the benefits received by these customers (Aqua Docket R-2021-3027385, Order entered May 16, 2022, p. 224 – 230).

Q. WHAT IS THE RELATIVE RATE OF RETURN FOR THE RESIDENTIAL CLASS IN THE SSS OPERATIONS AS A RESULT OF YOUR PROPOSED RATE RECOMMENDATIONS?

A. The relative rate of return for the Residential class in the SSS Operations is 1.19 (I&E Ex. No. 3, Sch. 5, p. 3, Column D).

Q. ABOVE YOU DESCRIBED HOW THE RELATIVE RATE OF RETURN SHOULD BE 1.00, EXPLAIN WHY THIS RELATIVE RATE OF RETURN IS ABOVE ONE.

A. It is above 1.00 because even after increasing the Bulk Contract rates, the relative rate of return for the Bulk Contracts is well below 1.00 (I&E Ex. No. 3, Sch. 5, p. 3, line 13, columns D and H). In other words, the Residential and Non-Residential classes must contribute more revenue than the cost of providing service to compensate PAWC for the Bulk service customers paying rates substantially below their full cost of service.

SSS OPERATIONS – COMMERCIAL

Q. DID YOU PREPARE A SCHEDULE SHOWING PRESENT AND YOUR PROPOSED RATES AND REVENUE FOR COMMERCIAL CUSTOMERS IN THE SSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 9, showing present and proposed rates and revenue for Commercial SSS Operations customers.

Q. HOW DID YOU DETERMINE THE COMMERCIAL CUSTOMER CHARGE OF $36.70 PER MONTH FOR GENERAL COMMERCIAL CUSTOMERS?

A. With a present customer charge of $35.00 per month, my proposed $36.70 per month customer charge equates to an increase of $1.70 per month or 4.9% (I&E Ex. No. 3,

Sch. 3, p. 1, line 2). The 4.9% increase is the same increase I proposed in the Residential class. I believe this 4.9% increase will provide sufficient revenue, while limiting the increase to low-usage commercial customers.

Q. HOW DID YOU DETERMINE THE USAGE RATE IN THE SSS OPERATIONS FOR GENERAL COMMERCIAL CUSTOMERS?

A. In order to reduce the $31,962,411 subsidy described above in the SSS Operations, I increased the general Commercial usage rate to $3.150 per hundred gallons in Zones 1, 2, and 5 (I&E Ex. No. 3, Sch. 3, p. 1, column D, line 5). The lower special Commercial usage rates for Zone 1, 5, which I will discuss below, and the general usage rates for Zones 7 and 9 that were limited by the average bill increase are shown on I&E Ex. No. 3, Sch. 3, pp. 2, column D, lines 5-6 and 18-19.

Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE RECOMMENDATIONS REDUCE THE SSS OPERATIONS SUBSIDY?

A. These commercial customer charges and usage rates reduce the subsidy needed to operate the SSS Operations by $7,545,735 (I&E Ex. No. 3, Sch. 4, p. 1, column C, line 27).

Q. DID YOU ALSO PREPARE BILL COMPARISON SCHEDULES SHOWING THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVELS FOR THE SSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 10, showing the present and proposed bills at various usage levels. The average bill for each Zone is shown in bold with an asterisk for each zone in the SSS Operations.

Q. WHAT INCREASE WILL THE AVERAGE ZONE 1 AND ZONE 5 COMMERCIAL CUSTOMERS RECEIVE UNDER YOUR CUSTOMER CHARGE AND USAGE RATE PROPOSAL?

A. The bill for an average Commercial customer in Zones 1 and 5 will increase from $505.03 per month to $732.66 per month, which is an increase of $227.63 per month or 45.1% (I&E Ex. No. 3, Sch. 10, p. 1 and p. 3, line 19).

Q. WHAT INCREASE WILL THE AVERAGE CUSTOMERS RECEIVE IN THE OTHER RATE ZONES?

A. The bill for an average Commercial customer in Zone 2 will increase from $459.70 per month to $732.66 per month, which is an increase of $261.96 per month or 59.4% (I&E Ex. No. 3, Sch. 10, p. 2, line 19). The bill for an average Commercial customer in Zone 7 will increase from $363.02 per month to $611.35 per month, which is an increase of $248.33 per month or 68.4% (I&E Ex. No. 3, Sch. 10, p. 4, line 19). The bill for a flat rate Commercial customer in Zone 8 will increase from

$107.14 per month to $150.00 per month, which is an increase of $42.86 per month or 40.0% (I&E Ex. No. 3, Sch. 10, p. 5, line 19). The bill for an average Commercial customer in Zone 9 will increase from $229.94 per month to $385.79 per month, which is an increase of $155.84 per month or 67.8% (I&E Ex. No. 3, Sch. 10, p. 6, line 19).

Q. HOW DID YOU DETERMINE THE MONTHLY FLAT RATE FOR THE CUSTOMERS IN ZONES 1, 5, 8 AND FOR CUSTOMERS WHERE THERE IS NO WATER USAGE DATA AVAILABLE?

A. As described above, the Residential flat rate of $132.00 per month is based upon the average usage of a Residential customer. Following this concept, the flat rate for a Commercial customer should be based upon the average bill of a Commercial customer. However, that would require a very large increase. Therefore, I recommend a Commercial flat rate of $150.00 per month to begin to move the Commercial flat rate towards the average $732.66 per month bill of Zone 1 Commercial customers (I&E Ex. No. 3, Sch. 10, p. 1, line 19).

Q. WHAT IS THE PRESENT COMMERCIAL FLAT CHARGE IN ZONE 9 AND WHAT FLAT CHARGE DO YOU RECOMMEND?

A. The present flat rate in Zone 9 is $67.00 per month. Therefore, my recommendation of $113.00 per month in rate Zone 9 equates to an increase of

$46.00 per month or 68.7% (I&E Ex. No. 3, Sch. 3, p. 2, line 17). I limited the increase to $46.00 per month to keep the increase reasonable and under 70%.

Q. ARE THERE SPECIAL COMMERCIAL RATES IN THE SSS OPERATIONS?

A. Yes. In the SSS Operations, the Company maintains a separate usage charge for Upper Pottsgrove, and separate monthly charges and usage rates for Cleveland Cliffs and Rainbow Washhouse (PAWC Volume 9, Ex, 10-B, p. 12 and 14).

Q. WHAT DID THE COMPANY PROPOSE FOR THESE SPECIAL COMMERCIAL RATES IN THE SSS OPERATIONS?

A. For Upper Pottsgrove, the Company proposed the monthly charge be decreased, and the usage rate be increased. The total bill will decrease by 2.4% (I&E Ex. No. 3. Sch. 9, p. 7, lines 1-3). For Cleveland Cliffs, the Company proposed no increase in the monthly charge and a small increase in the usage rate. The total bill will increase by 0.3% (I&E Ex. No. 3. Sch. 9, p. 7, lines 4-6). For the Rainbow Washhouse, the Company proposed small increases in both the customer charge and usage rate. The Company also proposed the usage rate be applied to all usage, thus eliminating the usage allowance. The total bill will increase 5.9% (I&E Ex. No. 3. Sch. 9, p. 7, lines 8-11).

Q. IS IT REASONABLE TO DECREASE OR LIMIT THE INCREASES FOR THESE SPECIAL RATE COMMERCIAL CUSTOMERS IN THE SSS OPERATIONS?

A. No. Given the overall increase in cost to operate all PAWC systems, it is reasonable to believe that the cost to serve these customers has also increased since the last case or will increase before the end of the FPFTY. With all the increase in regulatory costs, more stringent environmental compliance issues, need for plant additions, and overall higher costs and risk described by the Company, it is disingenuous of the Company and unfair to other customers to propose a decrease for one customer and minimal increases for the remaining two customers. Second, PAWC acquiring the York and Royersford systems resulted in a revenue shortfall. This revenue shortfall should be recovered from all customers including special rate customers. Therefore, I believe it's also reasonable that these special rate customers should contribute to this revenue shortfall that currently exists as a result of the York and Royersford acquisitions. Also as described below, there is a revenue shortfall as a result of not charging York Bulk customers the fully imbedded cost of providing service to them to which these customers should also contribute (I&E Ex. No. 3, Sch. 5, column H).

Q. WHAT RATES DO YOU RECOMMEND FOR THESE SPECIAL COMMERCIAL CUSTOMERS IN THE SSS OPERATIONS?

A. For Upper Pottsgrove, I recommend a customer charge of $37.60 per month, and a usage rate of $2.350 per hundred gallons (I&E Ex. No. 3. Sch. 3, p. 1, lines 8-9). For

Cleveland Cliffs, I recommend a customer charge of $456.50 per month and a usage rate of $2.350 per hundred gallons (I&E Ex. No. 3. Sch. 3, p. 1, lines 10-11). For the Rainbow Washhouse, I recommend a monthly customer charge of $75.00 and a usage rate of $0.380 per hundred gallons for all usage (I&E Ex. No. 3. Sch. 3, p. 1, lines 35-38).

Q. DO YOUR RATES PRODUCE REASONABLE INCREASES FOR THESE SPECIAL RATE COMMERCIAL CUSTOMERS?

A. Yes. For Upper Pottsgrove the increase in revenue is 29.2% (I&E Ex. No. 3. Sch. 9, p. 7, line 14). For Cleveland Cliffs, the total bill will increase by 22.3% (I&E Ex. No. 3. Sch. 9, p. 7, line 17). These percentage increases are below the 45.1% increase than I propose for the average Commercial customer in Zone 1 but will move the usage rate towards the usage rate I propose for the Commercial class in the SSS Operations (I&E Ex. No. 3, Sch. 4, p. 1, column C, line 24). For the Rainbow Washhouse, the total bill will increase 67.1% (I&E Ex. No. 3. Sch. 9, p. 7, lines 18-20). The larger percentage increase is reasonable because of the low present usage rate of $0.210 per hundred gallons. This larger percentage increase is justified to move the usage rate towards the proposed Commercial usage rate of $3.150 per hundred gallons that I recommend in the SSS Operations (I&E Ex. No. 3. Sch. 3, p. 1, line 5).

Q. WHY DO YOU RECOMMEND LARGER PERCENTAGE INCREASES FOR COMMERCIAL CUSTOMERS THAN THE RESIDENTIAL CUSTOMERS IN SOME ZONES?

A. Under present rates, the relative rate of return for the Residential class is 1.35 and 1.00 for the Non-Residential classes including the Commercial class, indicating that a higher percentage increase is justified for the Commercial class (I&E Ex. No. 3, Sch. 5, p. 1, line 12, columns C and D). Under my proposed rates, the relative rate of return for the Residential class is 1.19 and 1.18 for the Non-Residential class, which includes the Commercial class (I&E Ex. No. 3, Sch. 5, p. 3, line 13, columns D and E).

SSS OPERATIONS – INDUSTRIAL

Q. DID YOU PREPARE A SCHEDULE SHOWING PRESENT AND YOUR PROPOSED RATES AND REVENUE FOR INDUSTRIAL CUSTOMERS IN THE SSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 11, showing present and proposed rates and revenue for Industrial SSS Operations customers. It should be noted that I included the customer charge revenue for the one Zone 7 Industrial customer that the Company failed to include (I&E Ex. No. 3, Sch. 11, p. 2, line 1).

Q. HOW DID YOU DETERMINE THE INDUSTRIAL CUSTOMER CHARGE OF $36.70 PER MONTH AND USAGE RATE OF $3.150 PER HUNDRED GALLONS FOR GENERAL INDUSTRIAL CUSTOMERS?

A. These rates are the same rates I propose for the Commercial class described above. Since the Company combined the Commercial, Small Industrial, and Municipal customers in the "Non-Residential" class in the COSS, it is reasonable to recommend the same rates for these general Non-Residential customers.

Q. HOW DID YOU DETERMINE THE USAGE RATES IN ZONES 7 AND 9, AND THE FLAT RATE FOR INDUSTRIAL CUSTOMERS?

A. These are the same rates that I proposed for the Commercial class described above.

Q. ARE THERE ALSO SPECIAL USAGE RATES FOR SOME INDUSTRIAL CUSTOMERS?

A. Yes. There are special Industrial usage rates for Zone 1, which I will discuss below. The special rates that I recommend are shown on I&E Ex. No. 3, Sch. 3, p. 1, column D.

Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE RECOMMENDATIONS REDUCE THE SSS OPERATIONS SUBSIDY?

A. These Industrial customer charges and usage rates reduce the subsidy needed to

operate the SSS Operations by $1,256,978 (I&E Ex. No. 3, Sch. 4, p. 1, column D, line 27).

Q. DID YOU ALSO PREPARE BILL COMPARISON SCHEDULES SHOWING THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVELS FOR SSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 12, showing the present and proposed bills at various usage levels. The average bill is shown in bold with an asterisk for each zone in the SSS system.

Q. WHAT INCREASE WILL THE AVERAGE ZONE 1 INDUSTRIAL CUSTOMERS RECEIVE UNDER YOUR CUSTOMER CHARGE AND USAGE RATE PROPOSAL?

A. The bill for an average Industrial customer in Zone 1 will increase from $14,614.64 per month to $21,644.03 per month, which is an increase of $7,027.39 per month or 48.1% (I&E Ex. No. 3, Sch. 12, p. 1, line 23).

Q. WHAT INCREASE WILL THE AVERAGE CUSTOMERS RECEIVE IN THE OTHER RATE ZONES?

A. The bill for an average Industrial customer in Zone 7 will increase from $875.92 per month to $1,458.17 per month, which is an increase of $582.25 per month or 66.5% (I&E Ex. No. 3, Sch. 12, p. 2, line 13). The bill for a flat rate Industrial customer in

Zone 8 will increase from $107.14 per month to $150.00 per month, which is an increase of $42.86 per month or 40.0% (I&E Ex. No. 3, Sch. 12, p. 3, line 23). The bill for an average Industrial customer in Zone 9 will increase from $116.06 per month to $196.42 per month, which is an increase of $80.36 per month or 69.2% (I&E Ex. No. 3, Sch. 12, p. 4, line 7).

Q. ARE THERE SPECIAL INDUSTRIAL RATES IN THE SSS OPERATIONS?

A. Yes. In the SSS Operations, the Company charges the same separate customer charge and usage rate for Cleveland Cliffs and Victory Brewing. The Company also charges various flat rates for Knouse Foods, Penn State Special Metals, PSC Metals, and Ipsco Koppel Tubulars (PAWC Volume 9, Ex, 10-B, p. 20).

Q. WHAT DID THE COMPANY PROPOSE FOR THESE SPECIAL INDUSTRIAL RATES IN THE SSS OPERATIONS?

A. For Cleveland Cliffs and Victory Brewing, the Company proposed no increase in the $415.00 per month customer charge and proposed to increase the present usage rate of $1.400 per hundred gallons to $1.480 per hundred gallons, which equates to an increase of $0.08 per hundred gallons or 4.6%. The Company proposed no increase for Knouse Foods, Penn State Special Metals, PSC Metals, and Ipsco Koppel Tubulars (PAWC Volume 9, Ex, 10-B, p. 20).

Q. IS IT REASONABLE TO PROPOSE NO INCREASE OR LIMIT THE INCREASE FOR THESE SPECIAL INDUSTRIAL RATE CUSTOMERS IN THE SSS OPERATIONS?

A. No. For the reasons described above applicable to special rate Commercial customers.

Q. WHAT RATES DO YOU RECOMMEND FOR THESE SPECIAL COMMERCIAL RATES IN THE SSS OPERATIONS?

A. For Cleveland Cliffs and Victory Brewing, I recommend a customer charge of $456.50 per month, and a usage rate of $2.350 per hundred gallons (I&E Ex. No. 3. Sch. 3, p. 1, lines 10-11). For Knouse Foods, I recommend a flat rate of $12,093 per month. For Penn State Special Metals, I recommend a flat rate of $4,161.50 per month. For PCS metals, I recommend a flat rate of $1,609.50 per month. For Ipsco Koppel Tubulars, I recommend a flat rate of $24,998.00 per month (I&E Ex. No. 3. Sch. 3, p. 1, lines 13-16).

Q. DO YOUR RATES RESULT IN A REASONABLE INCREASES FOR THESE SPECIAL RATE INDUSTRIAL CUSTOMERS?

A. Yes. For Cleveland Cliffs and Victory Brewing, I recommend the customer charge increase 10.0% and the usage rate increase by 67.9% (I&E Ex. No 3, Sch. 3, p. 1, lines 10-11). These percentage increases are below the 70% maximum increase that I describe above, and the usage rate will be the same as the usage rate these

customers pay as Commercial customers (I&E Ex. No. 3. Sch. 11, p. 2, lines 4 and 7). For Knouse Foods, Penn State Special Metals, PCS metals, and Ipsco Koppel Tubulars, I recommend an increase of 45.0% (I&E Ex. No. 3. Sch. 3, p. 1, lines 13-16). These 45.0% increases are comparable, but less than the 48.1% increase the average Industrial Zone 1 customer will receive under my rate structure proposal.

Q. WHY DO YOU RECOMMEND LARGER PERCENTAGE INCREASES FOR SOME INDUSTRIAL CUSTOMERS AND LARGE INDUSTRIAL CUSTOMERS THAN THE RESIDENTIAL CUSTOMERS IN SOME ZONES?

A. Under present rates, the relative rate of return for the Residential class is 1.35. The relative rate of return for the Non-Residential class which includes the Industrial class is 1.00, justifying a larger percentage increase for the Industrial class (I&E Ex. No. 3, Sch. 5, p. 1, line 13, Columns C and D). Also, the relative rate of return of the Large Industrial class is 0.79 indicating that a higher percentage increase is justified for the Large Industrial customers (I&E Ex. No. 3, Sch. 5, p. 1, Column E). Under my proposed rates, the relative rate of return for the Non-Residential class is 1.18, and the relative rate of return for the Large Industrial class is 1.16 (I&E Ex. No. 3, Sch. 5, p. 3, line 13, Columns E and F).

SSS OPERATIONS – MUNICIPAL

Q. DID YOU PREPARE A SCHEDULE SHOWING PRESENT AND YOUR PROPOSED RATES AND REVENUE FOR MUNICIPAL CUSTOMERS IN THE SSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 13, showing present and proposed rates and revenue for Municipal SSS Operations customers.

Q. HOW DID YOU DETERMINE THE MUNICIPAL CUSTOMER CHARGE OF $36.70 PER MONTH AND A USAGE RATE OF $3.150 PER HUNDRED GALLONS FOR GENERAL MUNICIPAL CUSTOMERS?

A. These are the same rates that I proposed for the Commercial class described above.

Q. HOW DID YOU DETERMINE THE USAGE RATES IN ZONES 7, 9, AND THE FLAT RATE FOR ZONE 1 MUNICIPAL CUSTOMERS?

A. These are the same rates that I proposed for the Commercial class described above.

Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE RECOMMENDATIONS REDUCE THE SSS OPERATIONS SUBSIDY?

A. These Municipal customer charges and usage rates reduce the subsidy needed to operate the SSS Operations by $687,364 (I&E Ex. No. 3, Sch. 4, p. 1, column E, line 27).

Q. DID YOU ALSO PREPARE BILL COMPARISON SCHEDULES SHOWING THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVEL FOR SSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 14, showing the present and proposed bills at various usage levels. The average bill is shown in bold with an asterisk for each zone in the SSS system.

Q. WHAT INCREASE WILL THE AVERAGE ZONE 1 AND ZONE 5 MUNICIPAL CUSTOMERS RECEIVE UNDER YOUR PROPOSED CUSTOMER CHARGE AND USAGE RATE?

A. The bill for an average Municipal customer in Zone 1 and Zone 5 will increase from $1,009.25 per month to $1,479.84 per month, which is an increase of $470.59 per month or 46.4% (I&E Ex. No. 3, Sch. 14, p. 1, line 16).

Q. WHAT INCREASE WILL THE AVERAGE CUSTOMERS RECEIVE IN THE OTHER RATE ZONES?

A. The bill for an average Municipal customer in Zone 2 will increase from $220.94 per month to $341.05 per month, which is an increase of $120.11 per month or 54.4% (I&E Ex. No. 3, Sch. 14, p. 2, line 9). The bill for an average Municipal customer in Zone 7 will increase from $573.85 per month to $967.90 per month, which is an increase of $394.05 per month or 68.7% (I&E Ex. No. 3, Sch. 14, p. 3, line 13). The bill for an average Municipal customer in Zone 9 will increase from $328.59 per

month to $549.82 per month, which is an increase of $221.24 per month or 67.3% (I&E Ex. 3, Sch. 14, p. 4, line 13).

Q. WHAT IS THE PRESENT MUNICIPAL FLAT CHARGE IN ZONE 8 AND WHAT FLAT CHARGE DO YOU RECOMMEND?

A. The present flat rate in Zone 8 is $15.00 per month. Therefore, my recommendation of $40.00 per month in rate Zone 8 equates to an increase of $25.00 per month or 166.7% (I&E Ex. No. 3, Sch. 3, p. 2, line 11). I believe an increase of 166.7% is justified because of the low $15.00 per month present flat rate and the need to eventually increase this monthly charge to the $150.00 per month applicable in other divisions.

Q. ARE THERE SPECIAL MUNICIPAL RATES IN THE SSS OPERATIONS?

A. Yes. In the SSS Operations, the Company charges Strattanville Borough a flat rate of $6,200.00 per month (PAWC Volume 9, Ex, 10-B, p. 25).

Q. WHAT DID THE COMPANY PROPOSE FOR THIS SPECIAL RATE CUSTOMER IN THE SSS OPERATIONS?

A. For Strattanville Borough the Company proposed the present rate of $6,200.00 per month be increased to $6,572.00 per month which is an increase of $372.00 per month or 4.9%.

Q. IS IT REASONABLE TO LIMIT THE INCREASE TO THIS SPECIAL MUNICIPAL CUSTOMER IN THE SSS OPERATIONS TO 4.9%?

A. No. For the same reasons given above in the Commercial class.

Q. WHAT MONTHLY CHARGE DO YOU RECOMMEND FOR STRATTANVILLE BOROUGH IN THE SSS OPERATIONS?

A. For Strattanville Borough, I recommend a flat rate of $8,680.00 per month. This $8,680.000 equates to an increase of $2,480.00 per month or 40.0% (I&E Ex. No. 3. Sch. 3, p. 1, line 18).

Q. DOES YOUR RECOMMENDATION RESULT IN A REASONABLE INCREASE FOR THIS SPECIAL RATE MUNICIPAL CUSTOMER?

A. Yes. The 40% increase is comparable, but below the 46.6% increase the average Municipal customer will experience.

Q. WHY DO YOU RECOMMEND LARGER PERCENTAGE INCREASES FOR MUNICIPAL CUSTOMERS THAN THE RESIDENTIAL CUSTOMERS IN SOME ZONES?

A. For the same reasons described above in the Commercial and Industrial classes.

SSS OPERATIONS – BULK

Q. DID YOU PREPARE A SCHEDULE SHOWING PRESENT AND YOUR PROPOSED RATES AND REVENUE FOR BULK CUSTOMERS IN THE SSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 15, showing present and proposed rates and revenue for Bulk SSS Operations customers.

Q. HOW DID YOU DETERMINE THE BULK CUSTOMER CHARGE OF $50.00 PER MONTH AND A USAGE RATE OF $3.15 PER HUNDRED GALLONS FOR GENERAL BULK CUSTOMERS?

A. The $50.00 per month customer charge is the same customer charge proposed by the Company and $3.15 per hundred-gallon usage rates are the same rates I propose for the other general Non-Residential customers. The remaining rates are special rates which I will describe below.

Q. HOW DID YOU DETERMINE THE FLAT RATE OF $113.00 PER MONTH FOR BULK CUSTOMERS WHERE USAGE DATA IS NOT AVAILABLE?

A. The $113.00 per month flat rate in Zone 9 is the same flat rate I recommend for the Zone 9 Commercial class described above.

Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE RECOMMENDATIONS REDUCE THE SSS OPERATIONS SUBSIDY?

A. These Bulk customer charges and usage rates reduce the subsidy needed to operate the SSS Operations by $3,177,009 (I&E Ex. No. 3, Sch. 4, p. 1, column F, line 27).

Q. DID YOU ALSO PREPARE BILL COMPARISON SCHEDULES SHOWING THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVEL FOR SSS OPERATIONS?

A. No. However, the increases I propose for each zone are all below the 70% maximum increase I described above. The total increase in Bulk revenue is 37.2%, the lowest of all the SSS Operation classes (I&E Ex. No. 3, Sch. 6, 9, 11, 13 and 15, p. 1).

Q. ARE THERE SPECIAL MUNICIPAL RATES IN THE SSS OPERATIONS?

A. Yes. In the SSS Operations, the Company charges Caln, West Brandywine, the VA Medical Center (VA), St Lawrence Borough (St. Lawrence) in Zone 1, and various Bulk contracts in Zone 7 are charged special municipal rates (PAWC Volume 9, Ex, 10-B, p. 31).

Q. WHAT DID THE COMPANY PROPOSE FOR CALN, WEST BRANDYWINE, THE VA, AND ST. LAWRENCE SPECIAL RATE CUSTOMERS IN THE SSS OPERATIONS ZONE 1?

A. For Caln, West Brandywine, and the VA, the Company proposed the customer charge increase from $415.00 to $430.00 per month which is an increase of $15.00 per month or 2.5%, and the usage rate increase from $1.450 per hundred gallons to $1.490 per hundred gallons which is an increase of $0.04 per hundred gallons or 2.5%. For St. Lawrence, the Company does not charge a customer charge but did propose to increase the present usage rate of $0.400 per hundred gallons to $0.412 per hundred gallons which is an increase of $0.012 per hundred gallons or 1.9% (PAWC Volume 9, Ex. 10-B, p 31).

Q. IS IT REASONABLE TO LIMIT INCREASES TO THESE SPECIAL BULK CUSTOMERS IN THE SSS OPERATIONS TO BETWEEN 1.9% AND 2.5%?

A. No. The Company's proposal contradicts its testimony that proposed rates are based upon cost. The Company only proposed an increase of $56,942 for the Bulk class (Volume 9 Ex. 12-B, Sch. A). After this minimal increase under proposed rates, the relative rate of return for the VA/Bulk class is 0.87, indicating that the revenue received from this class is less than the cost of providing service to this class (I&E Ex. No. 3, Sch. 5, p. 2, column F).

Q. WHAT MONTHLY CHARGE AND USAGE RATE DO YOU RECOMMEND FOR CALN, WEST BRANDYWINE AND THE VA?

A. I recommend a monthly charge of $456.50. This equates to an increase of $41.50 per month or 10.0% (I&E Ex No. 3, Sch. 3, line 19). I also recommend a usage rate of $1.680 per hundred gallons. This equates to an increase of $0.230 per hundred gallons or 15.9% (I&E Ex. No. 3. Sch. 3, p. 1, line 20).

Q. WHAT MONTHLY CHARGE AND USAGE RATE DO YOU RECOMMEND FOR ST. LAWRENCE?

A. I recommend that the Company begin to charge St. Lawrence a monthly charge of $456.50. This recommendation is based upon the general tariff provision that requires all customers to pay a monthly customer charge, and to generate revenue in a class that is not recovering its cost. I also recommend the present usage rate of $0.400 per hundred gallons be increased to $0.630 per hundred gallons. This equates to an increase of $0.230 per hundred gallons or 57.5% (I&E Ex. No. 3. Sch. 3, p. 1, lines 19 and 21).

Q. DO YOUR RECOMMENDATIONS RESULT IN REASONABLE INCREASES FOR THESE SPECIAL RATE BULK CUSTOMERS?

A. Yes. The 14.6% increase in the Caln, West Brandywine and VA usage revenue and the 55.8% increase in the St. Lawrence usage revenue are both below the 70.0% maximum increase that I describe above (I&E Ex. No. 3, Sch. 15, p. 2, lines 3-8).

Q. WHAT MUNICIPALITIES COMPRISE THE BULK CUSTOMERS IN ZONE 7?

A. The York Bulk Customers consist of The York Water Company, which is the owner of the former West York Borough collection system, Springettsbury Township, North York Borough, York Township, Manchester Township, West Manchester Township, and Spring Garden Township (PAWC Volume 8, St. 3, p. 66).

Q. WHAT DID THE COMPANY PROPOSE FOR THE YORK BULK CUSTOMERS IN THE SSS OPERATIONS ZONE 7?

A. For York Bulk Customers in Zone 7, the Company proposed to charge two different usage rates. For the first rate, the Company proposed the present usage rate be increased from $0.3750 per hundred gallons to $0.4123 per hundred gallons, which is an increase $0.0373 per hundred gallons or 9.9%. For the second usage rate, the Company proposed the present usage rate of $0.249 per hundred gallons increase to $0.2737 per hundred gallons which equates to an increase of $0.0247 per hundred or 9.9%. These 9.9% increases are over the two-year period 2023-2025 which results in an annual increase of approximately 4.45% per year (PAWC Volume 9, Exh. 10-B, p. 31).

Q. WHY DID THE COMPANY LIMIT THE INCREASE IN THESE RATES TO 4.5% PER YEAR?

A. First, the Company claims that these customers have "competitive alternatives" and since the proposed rates are greater than the incremental cost of providing service to these customers, these customers are not being subsidized (PAWC Volume 8, St. 12, pp. 18-19). Another witness describes how these Bulk Customers are "sophisticated," are in close geographic proximity, and they could enter into intermunicipal flow agreements to transmit wastewater flow between themselves and to other surrounding municipalities with existing treatment capacity, instead of sending their flows to the York plant owned by PAWC (PAWC Volume 8, St. No. 3, pp. 66-67). The Company claims that the flow from these Bulk customer provide benefits to the treatment process, that if these customers left the system, it would conflict with the Commission goal of regionalization, and retail customers would experience rate increases, (PAWC Volume 8, St. No. 3, pp. 66-69).

Q. DID THE COMPANY PROVIDE ANY ANALYSIS THAT SHOWS THE COMPETITIVE ALTERNATIVE THESE CUSTOMERS ALLEGEDLY HAVE?

A. No. Therefore, these statements are speculation and should be rejected. While this is enough to support my recommendation and increase these usage rates, I will

address some of the Company's other bogus arguments concerning the York Bulk customers and rates.

Q. DID THE COMPANY INCLUDE A COMPLETE COST OF SERVICE SUMMARY IN THE FILING?

A. No. Volume 17, Exhibit 12-B which details the SSS COSS does not include the details of the Bulk User Contract class on either Sch. B, or C. However, the excel version does include this column on each schedule. As described above, the Company also made corrections to these schedules in discovery. Therefore, I provided a complete corrected version of PAWC Volume 17, Ex. No. 12-B, Sch. A and B as I&E Ex. No. 3, Sch. 5, pp. 1-2, respectively. I also included an additional line which shows the subsidy each class is providing and receiving (I&E Ex. No. 3, Sch. 5, pp. 1-2, line 13).

Q. WHAT DOES I&E EXHIBIT NO. 3, SCHEDULE 5, PAGE 2 SHOW?

A. This schedule shows that under present rates, the Bulk Users are receiving a subsidy from the other customers of $9,879,620 even after contributing $7,702,598 of revenue, putting the low level of revenue from these bulk customers into perspective (I&E Ex. No. 3, Sch. 5, p. 2, column G).

Q. DID THE COMPANY SUPPORT THE RATES THAT IT PROPOSED FOR THESE BULK CUSTOMERS?

A. No. Therefore, the minimal increase the Company proposes for these customers should be rejected, in favor of the 50% increases I show on I&E Ex. No. 3, Sch. 3. p. 2, lines 7-8.

Q. IS THE COMPANY'S CLAIM CONCERNING INCREMENTAL COST TO SERVICE BULK CUSTOMER'S THE CORRECT COMPARISON?

A. No. First this argument assumes that these customers have a viable alternative, which the Company has not provided. Second, if these customers did have a viable alternative, the Company's proposed rates may be well below the cost these customers would incur if they did select the viable alternative, thus not maximizing the revenue from these customers. The valid comparison would be to compare the customer's cost of utilizing a viable alternative to the competitive rate so that the customer makes the maximum contribution to fixed costs.

Q. PLEASE ELABORATE ON WHY THE CUSTOMER'S COST OF UTILIZING A VIABLE ALTERNATIVE IS THE PROPER ANALYSIS?

A. This analysis will show the customer is making the maximum contribution to PAWC's fixed costs. For example, if a competitive analysis shows that a customer can utilize an alternative, but the cost of this alternative is $0.800 per hundred gallons, the $0.4123 per hundred gallons the Company is proposing is woefully

inadequate and indicates the customer could pay up to $0.7900 per hundred gallons to PAWC and not leave the system. However, since the Company failed to describe the competitive alternative, the Company has failed to show the cost each customer would incur to utilize the alleged competitive alternative. Therefore, the higher rates that I propose should be approved.

Q. DOES YOUR RECOMMENDATIONS RESULT IN A REASONABLE INCREASES FOR THISE ZONE 7 BULK CUSTOMERS?

A. Yes. The $0.5625 per hundred gallon and $0.3735 per hundred-gallon usage rates that I recommend are much less than the $1.680 per hundred-gallon usage rate I recommend for Caln, West Brandywine and the VA. They are significantly less than the $3.740 per hundred-gallon rate that I recommend for the Zone 1 Residential customers indicating that even after the 50% increase I propose for these customers, the Zone 7 Bulk usage rates that I propose will be much less than other usage rates.

Q. PLEASE ADDRESS THE COMPANY'S OTHER ARGUMENTS FOR PROPOSING SUCH A SMALL INCREASE FOR THE YORK BULK CUSTOMERS IN ZONE 7.

A. A customer's "sophistication" should not be used to establish or justify a rate. This implies that the Commission and a utility should take advantage of less sophisticated customers by requiring them to pay higher rates. First, the Company failed to describe how the Commission is to determine if a customer is

"sophisticated" or not. Second, rates should be based upon cost. The "closeness" argument is also not valid because it fails to provide any details of how close the customers are or how it could be an advantage. There may be substantial logistical problems to combining and/or changing flows. Just because two or more systems are "close" or "could" enter into flow agreements doesn't necessarily mean they can or even will, or if a lower rate is justified. Even if it did, the rate to which two or more close systems should receive simply because they are close has not been quantified. The Company claims that the flow from these Bulk customers provides benefits to the treatment process is also speculation and does not take into account the benefits of flow from non-bulk customers which also could provide a benefit to the system. Finally, in the near future, existing customers may be better off if these bulk customers did leave the system, because after a bulk customer leaves, there would be much less need for plant upgrades and/or expansions. Costly plant upgrades and/or expansions to serve bulk customers would likely be paid for by other non-bulk customers, increasing the subsidy to the bulk customers.

Q. IS YOUR RECOMMENDATION TO INCREASE THE YORK BULK RATES SUPPORTED BY THE COMPANY'S COSS?

A. Yes. The higher percentage increases that I propose for the York Bulk customers compared to the small increase proposed by the Company are justified by the Company's COSS. Even after the larger than average increase that I propose, the

revenue received from York Bulk customers is still less than the cost of providing service to Bulk customers (I&E Ex. No. 3, Sch. 5, p. 3, column H).

Q. HOW MUCH OF A SUBSIDY WILL THE YORK BULK CUSTOMERS RECEIVE AFTER YOUR RECOMMENDATION?

A. The York Bulk customers will receive a subsidy of $7,999,227 (I&E Ex. No. 3, Sch. 5, p. 3, line 14, column H). While a significant subsidy will continue to exist, I recommend it be reduced in future cases.

SSS OPERATIONS OTHER OPERATING REVENUE

Q. WHAT TYPES OF OTHER OPERATING REVENUE DOES PAWC COLLECT?

A. PAWC includes Industrial Pretreatment revenue, late payment fees, and Miscellaneous revenue in Other Operating revenue (PAWC Volume 9, Ex. 10-B, p. 33).

Q. HOW MUCH OTHER OPERATING REVENUE DOES PAWC PROJECT IT WILL COLLECT IN THE SSS OPERATIONS?

A. The Company is projecting it will collect $3,241,057 of Other Operating Revenue in the SSS Operations (PAWC Volume 9, Ex. 10-B, p. 33).

Q. DOES THIS INCLUDE AN INCREASE IN LATE PAYMENT REVENUE?

A. Yes. Going from present to proposed rate, the Company projected late payment revenue will increase $8,332 ($472,013 - $463,681) (PAWC Volume 9, Ex. 10-B, p. 33).

Q. WHAT LEVEL OF OTHER OPERATING REVENUE IN THE SSS OPERATIONS DO YOU RECOMMEND?

A. I recommend that Other Operating Revenue be increased from $3,241,057 to $3,395,504 which is an increase of $154,448 (I&E Ex. No. 3, Sch. 4, p. 2, columns E-G). This $154,448 is all additional late payment revenue.

Q. HOW DID YOU DETERMINE THE $154,448 INCREASE IN LATE PAYMENT REVENUE?

A. I multiplied the present rate late payment revenue of $463,681 times the percentage increase in tariff rates of approximately 35.1% to arrive at the $162,780 ($463,681 X 35.106%). Then subtracting the $8,332 increase the Company reflected to arrive at the $154,448 ($162,780 - $8,332) increase in late payment revenue projected by I&E (I&E Ex. No. 3, Sch. 4, p. 2, line 3).

Q. WHY DO YOU BELIEVE THAT LATE PAYMENT REVENUE WILL INCREASE UNDER PROPOSED RATES?

A. Late Payment Revenue is received from a customer when that customer does not pay

their bill on time. Since it is based upon a percentage of a customer's bill, it is reasonable to believe that an increase in base rates will cause Late Payment Revenue to increase by the same percentage.

WASTEWATER WINTER USAGE

Q. DID THE COMPANY PROPOSE TO ADJUST WATER USAGE TO DETERMINE THE BILLS FOR WASTEWATER CUSTOMERS?

A. Yes. The Company is proposing to change the way that it determines the volumetric component of bills for residential customers. Currently, wastewater usage is based upon actual water usage. In the proposal, the wastewater usage volume of a Residential customer will be adjusted downward to account for water purchased, but not entering the wastewater system. The Company refers to this plan as winter averaging (PAWC Volume 8, St. 10, p. 42-45).

Q. DO YOU OPPOSE THE PAWC WINTER AVERAGE BILLING PROPOSAL?

A. No. However, if the Commission approves the proposal, I have two conditions. First, that none of the revenue shortfall from this proposal be recovered from other wastewater customers or water customers. Second, that the Commission determine that the proposal is approved initially as a temporary program to permit the resulting revenue impacts to be evaluated in the first rate case following its implementation.

Q. WHY DO YOU RECOMMEND THAT NONE OF THE REVENUE SHORTFALL BE RECOVERED FROM OTHER WASTEWATER OR WATER CUSTOMERS?

A. The proposal is designed to help only Residential wastewater customers. Therefore, only Residential wastewater customers should be required to fund this program and 100% of the revenue shortfall should be recovered in the Residential wastewater rates.

Q. WHY DO YOU RECOMMEND THAT THE PROGRAM BE CONSIDERED A TEMPORARY PROGRAM?

A. This is a new proposal that reduces revenue, and it should not be approved in perpetuity. Therefore, the program and its underlying concepts should be studied, and the results reported in the Company's next base rate case. This will enable the Commission and interested parties to determine if the program should be changed, continued as proposed, or ended.

<u>CSS OPERATIONS SUMMARY</u>

Q. WHAT CHANGE IN REVENUE DID THE COMPANY PROPOSE IN THE CSS OPERATIONS?

A. The Company proposed that present rate revenue be decreased from $78,636,222 to $78,409,294, which is a decrease of $226,926 or 0.30% (PAWC Volume 9, Ex. 10-C, p. 1). To achieve this reduction, the Company proposed to increase and

decrease various customer charges, usage rates, and flat rates (PAWC Volume 9, Ex. 10-C, pp. 3-38).

CSS OPERATIONS – ZONES 3, 4, and 6

Q. DID THE COMPANY PROVIDE A COSS TO DETERMINE THE COSTS OF PROVIDING WASTEWATER SERVICE FOR THE CSS OPERATIONS?

A. Yes. The Company provided one COSS for the CSS Operations - Zones 3, 4, and 6 (PAWC Volume 17, Ex. 12-C). This COSS did not include a customer cost analysis.

Q. DO THE PROPOSED REVENUES FROM THE CSS OPERATIONS RECOVER THE ENTIRE COST OF PROVIDING WASTEWATER SERVICE TO THE CSS OPERATIONS?

A. No. The revenue shortfall for CSS Operations is $16,007,052 (PAWC Volume 3, Exhibit 3-A, p. 1).

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN THE CSS OPERATIONS.

A. My goal was to reduce the $16,007,052 subsidy the Company claims is needed to fund the CSS Operations. The proposed rates that I recommend are shown on I&E Ex. No. 3, Sch 17, p. 1, column D. My proposed revenue by class and zone as well as the increases by class are shown on I&E Ex. No. 3, Sch. 16. The total

increase in the CSS system that I recommend is $15,744,287 (I&E Ex. No. 3, Sch 16, column G, line 14). This recommendation results in the CSS Operations needing a subsidy of $35,835 (I&E Ex. No. 3, Sch 1, column H, line 3).

Q. WHAT IS THE HIGHEST AVERAGE BILL INCREASE UNDER YOUR RATE STRUCTURE PROPOSAL?

A. The highest average bill increase under my rate structure proposal is 47.7% for an average Industrial customer in Zone 3 (I&E Ex. No. 3, Sch. 24, p. 1, line 23).

Q. WHY IS THIS 47.7% MAXIMUM AVERAGE BILL LOWER THAN THE 70% MAXIMUM BILL YOU PROPOSE IN THE SSS OPERATIONS?

A. There are two related reasons. First, there are no systems recently acquired under Section 1329 in the CSS Operations, which as described above, generally justifies a higher percentage increase to customers in systems acquired under Section 1329. The Section 1329 customers generally have lower rates and should be subject to higher percentage increases. Second, the cost of providing service to the CSS Operations can be recovered with smaller percentage increases to the average bills in the CSS Operations compared to the SSS Operations.

Q. WHAT OTHER CRITERIA DID YOU USE TO PROPOSE RATES?

A. I utilized the Company's CSS COSS to propose the various rate increases by class

that moves the relative rate of return of each class towards 1.0 (I&E Ex. No. 3, Sch. 18, line 13).

CSS OPERATIONS – RESIDENTIAL

Q. WHAT ARE THE PRESENT RESIDENTIAL CUSTOMER CHARGES AND THE COMPANY PROPOSED RESIDENTIAL CUSTOMER CHARGES?

A. The Company proposed the Zone 3 Residential customer charge increase from $19.50 per month to $19.71 per month, which equates to an increase of $0.21 per month or 1.1%. The Company proposed the Zone 4 Residential customer charge decrease from $40.00 per month to $20.00 per month, which equates to a decrease of $20.00 per month or 50%. The Company also proposed that the Zone 6 Residential customer charge increase from $14.30 per month to $20.00 per month, which equates to an increase of $5.70 per month or 39.9%. Finally, there is one Zone 4 Residential customer that pays $100.00 per month where the Company proposed this monthly charge be reduced to $20.00 per month (PAWC Volume 9, Sch. 10-C, pp. 3-5).

Q. DID THE COMPANY DISCUSS WHY IT LIMITED THE INCREASE IN RATES IN ZONE 3?

A. Yes. The Company states that it acquired the Scranton – Zone 3 system in 2016 and in accordance with its agreement with the seller, it is limited to proposing an increase of 1.9% per year (Volume 8, PAWC St. No. 4, p. 40).

Q. SHOULD THE COMMISSION BE BOUND BY THIS AGREEMENT WHEN ESTABLISHING RATES IN ZONE 3?

A. No. Therefore, I recommend the higher rates for Zone 3 be approved for two reasons. First, this rate commitment is only a proposal, and the Commission is not bound by any rate promises made in asset purchase agreements, as stated in the Order approving the acquisition of the Scranton system (Joint Application of PAWC and the City of Scranton, at Docket R-2016-2537209, Order entered Oct. 19, 2016. p. 70). Second, the cost to operate the CSS Operations, which includes the Scranton system, is more than the revenue received from the CSS Operations justifying a rate increase for CSS Operations customers.

Q. DID YOU PREPARE A SCHEDULE SHOWING PRESENT AND YOUR PROPOSED RATES AND REVENUE FOR RESIDENTIAL CUSTOMERS IN THE CSS OPERATIONS THAT YOU RECOMMEND?

A. Yes. I prepared I&E Ex. No. 3, Sch. 19, showing present and proposed rates and revenue for Residential CSS Operation customers.

Q. IS THE PROPOSED RESIDENTIAL CUSTOMER CHARGE OF $20.00 PER MONTH IN ZONE 4 AND 6 REASONABLE?

A. Yes. While I don't normally recommend a reduction in a customer charge, or an increase of almost 40%, consolidating these Residential customer charges to $20.00 per month in the CSS Operations in this case is reasonable.

Q. IS THE PROPOSED RESIDENTIAL CUSTOMER CHARGE OF $19.71 PER MONTH IN ZONE 3 REASONABLE?

A. No. I recommend that all Residential customer charges be the same $20.00 per month in the CSS Operations. This $20.00 per month Residential customer charge in Zone 3 equates to an increase of $0.50 per month or 2.6% (I&E Ex. No. 3, Sch. 17, line 1). This recommendation will consolidate the Residential customer charge in Zones 3, 4, and 6.

Q. HOW DID YOU DETERMINE THE RESIDENTIAL USAGE RATE OF $2.900 PER HUNDRED GALLONS FOR ALL ZONES?

A. I increased the present Residential usage rate to $2.900 per hundred gallons to significantly reduce the subsidy needed to operate the CSS Operations and move the relative rate of return for the Residential class from 1.11 under present rates (PAWC Volume 17, Ex. 12-C, Sch. B, column 3) to 0.99 under proposed rates (I&E Ex. No. 3, Sch. 18, column D line 13). As described above, a relative rate of return of 1.00 indicates that the revenue received from that class is equal to the cost of providing service to that class.

Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE RECOMMENDATIONS REDUCE THE CSS OPERATIONS SUBSIDY?

A. These residential customer charges and usage rates reduce the subsidy needed to

operate the CSS Operations by $6,196,302 (I&E Ex. No. 3, Sch. 16, column B, line 18).

Q. DID YOU ALSO PREPARE BILL COMPARISON SCHEDULES SHOWING THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVELS FOR THE CSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 20, showing the present and proposed bills at various usage levels. The average bill is shown in bold with an asterisk for each zone in the CSS Operations.

Q. HOW DID YOU DETERMINE THE MONTHLY FLAT RATE FOR THE RESIDENTIAL CUSTOMERS IN ZONES 3 AND 4?

A. The $113.00 per month flat rate that I propose in these zones if a customer has no water usage available is based upon the bill of an average Zone 3 customer that uses 3,201 gallons per month, rounded to the nearest dollar (I&E Ex. No. 3, Sch. 20, p. 1, line 7).

<u>CSS OPERATIONS – COMMERCIAL</u>

Q. WHAT ARE THE PRESENT COMMERCIAL CUSTOMER CHARGES AND THE COMPANY PROPOSED COMMERCIAL CUSTOMER CHARGES?

A. The Company proposed the Zone 3 Commercial customer charge increase from

$35.00 per month to $35.38 per month, which equates to an increase of $0.38 per month or 1.1%. The Company proposed the Zone 4 Commercial customer charge increase from $40.00 per month to $50.00 per month, which equates to an increase of $10.00 per month or 25.0%. The Company also proposed that the Zone 6 – McKeesport Commercial customer charge increase from $35.50 per month to $50.00 per month, which equates to an increase of $15.00 per month or 42.9%. Finally, the Company proposed that the Zone 6 – Port Vue Commercial customer charge increase from $14.30 to $50.00 per month, which equates to an increase of $35.70 per month or 249.7% (PAWC Volume 9, Sch. 10-C, pp. 6-9).

Q. ARE THE PROPOSED COMMERCIAL CUSTOMER CHARGES OF $35.38 PER MONTH IN ZONE 3, AND $50.00 PER MONTH IN ZONES 4 AND 6 REASONABLE?

A. No. There is no reason to have two separate Commercial customer charges in the CSS Operations and proposing a $50.00 per month Commercial customer charge in Zones 4 and 6 is not reasonable.

Q. DID YOU PREPARE A SCHEDULE SHOWING PRESENT AND YOUR PROPOSED RATES AND REVENUE FOR COMMERCIAL CUSTOMERS IN THE CSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 21, showing present and proposed rates and revenue for Commercial CSS Operations customers.

Q. WHAT COMMERCIAL CUSTOMER CHARGE AND USAGE RATE DO YOU RECOMMEND FOR COMMERCIAL CUSTOMERS IN THE CSS OPERATIONS?

A. I recommend a Commercial customer charge of $40.00 per month and a usage rate of $2.580 per hundred gallons in all zones (I&E Ex. No. 3, Sch. 17, column D, lines 4-5). The $40.00 per month Commercial customer charge in Zone 3 equates to an increase of $5.00 per month or a 14.3% (I&E Ex. No. 3, Sch. 17, line 4). In Zone 4, the present rate of $40.00 per month will remain $40.00 per month, and the special rate of $100.00 per month will decrease to $40.00 per month (I&E Ex. No. 3, Sch. 17, line 12-13). The $40.00 per month Commercial customer charge in Zone 6 – McKeesport equates to an increase of $5.00 per month or 14.3% (I&E Ex. No. 3, Sch. 17, line 18). Finally, the $40.00 per month Commercial customer charge in Zone 6 – Port Vue equates to an increase of $25.70 per month or a 179.7% (I&E Ex. No. 3, Sch. 17, line 20).

Q. IS THE LARGE INCREASE IN THE PORT VUE COMMERCIAL CUSTOMER CHARGE REASONABLE?

A. Yes, for two reasons. First, the present Zone 6 - Port Vue customer charge of $14.30 per month is relatively low, thus justifying a larger than normal percentage increase. Second, I recommend a reduction in the Zone 6 – Port Vue usage rate from $2.875 per hundred gallons to $2.580 per hundred gallons which will offset the large increase in the customer charge (I&E Ex. No. 3, Sch 22. p. 4).

Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE RECOMMENDATIONS REDUCE THE CSS OPERATIONS SUBSIDY?

A. These commercial customer charges and usage rates reduce the subsidy needed to operate the CSS Operations by $7,894,461 (I&E Ex. No. 3, Sch. 16, column C, line 18).

Q. DID YOU ALSO PREPARE BILL COMPARISON SCHEDULES SHOWING THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVELS FOR THE CSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 22, showing the present and proposed bills at various usage levels. The average bill for each Zone is shown in bold with an asterisk for each zone in the CSS Operations.

Q. WHY DO YOU RECOMMEND LARGER PERCENTAGE INCREASES FOR AVERAGE COMMERCIAL CUSTOMERS THAN RESIDENTIAL CUSTOMERS IN SOME ZONES?

A. Under present rates, the relative rate of return for the Residential class is 1.11 and 0.73 for the Non-Residential classes including the Commercial class, indicating that a higher percentage increase is justified for the Commercial class (PAWC Volume 17, Ex. 12-C, Sch. B). Under my proposed rates, the relative rate of return for the Non-Residential class is 0.99 which includes the Commercial class (I&E Ex. No. 3, Sch. 18, line 13, columns D and E).

CSS OPERATIONS – INDUSTRIAL

Q. WHAT ARE THE PRESENT INDUSTRIAL CUSTOMER CHARGES AND USAGE RATES AND WHAT ARE THE COMPANY'S PROPOSED CUSTOMER CHARGES AND USAGE RATES?

A. The present and Company proposed Industrial customer charges and usage rates are shown on PAWC Volume 9, Ex. 10-C, p. 11-13.

Q. DID YOU PREPARE A SCHEDULE SHOWING PRESENT AND YOUR PROPOSED RATES AND REVENUE FOR INDUSTRIAL CUSTOMERS IN THE CSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 23, showing present and proposed rates and revenue for Industrial CSS Operations customers that I recommend.

Q. HOW DID YOU DETERMINE THE INDUSTRIAL CUSTOMER CHARGES AND USAGE RATES?

A. They are the same as the Commercial class. Since the Company combined the Commercial, and Municipal customers in the "Non-Residential" class in the COSS, it is reasonable to recommend the same rates for these general Non-Residential customers.

Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE RECOMMENDATIONS REDUCE THE CSS OPERATIONS SUBSIDY?

A. These Industrial customer charges and usage rates reduce the subsidy needed to operate the CSS Operations by $1,063,058 (I&E Ex. No. 3, Sch. 16, column D, line 18).

Q. DID YOU ALSO PREPARE BILL COMPARISON SCHEDULES SHOWING THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVEL FOR CSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 24, showing the present and proposed bills at various usage levels. The average bill is shown in bold with an asterisk for each zone in the CSS system.

Q. WHY DO YOU RECOMMEND LARGER PERCENTAGE INCREASES FOR AVERAGE INDUSTRIAL CUSTOMERS THAN THE RESIDENTIAL CUSTOMERS IN SOME ZONES?

A. Under present rates, the relative rate of return for the Residential class is 1.11 and 0.24 for the Industrial class, indicating that a higher percentage increase is justified for the Industrial class (PAWC Volume 17, Ex. 12-C, Sch. B). Under my proposed rates, the relative rate of return for the Industrial class moves to 0.57 (I&E Ex. No. 3, Sch. 18, line 13, columns D and F).

CSS OPERATIONS - MUNICIPAL

Q. WHAT ARE THE PRESENT MUNICIPAL CUSTOMER CHARGES AND USAGE RATES AND WHAT ARE THE COMPANY'S PROPOSED CUSTOMER CHARGES AND USAGE RATES?

A. The present and Company proposed Municipal customer charges and usage rates are shown on PAWC Volume 9, Ex. 10-C, p. 14-17.

Q. DID YOU PREPARE A SCHEDULE SHOWING PRESENT AND YOUR PROPOSED RATES AND REVENUE FOR MUNICIPAL CUSTOMERS IN THE CSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 25, showing present and proposed rates and revenue for Municipal CSS Operations customers.

Q. HOW DID YOU DETERMINE THE MUNICIPAL CUSTOMER CHARGES AND USAGE RATES?

A. They are the same as the Commercial class for the reason stated above in the Commercial class.

Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE RECOMMENDATIONS REDUCE THE CSS OPERATIONS SUBSIDY?

A. These Municipal customer charges and usage rates reduce the subsidy needed to

operate the CSS Operations by $366,673 (I&E Ex. No. 3, Sch. 16, column E, line 18).

Q. DID YOU ALSO PREPARE BILL COMPARISON SCHEDULES SHOWING THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVEL FOR CSS OPERATIONS?

A. No. The Company did not provide the average bill comparisons for Municipal customers. However, the Municipal customers pay the same rates as the Commercial customers pay. Therefore, the increases at the various usage levels will be the same as shown on I&E Ex. No. 3, Sch. 22.

<u>CSS OPERATIONS – BULK</u>

Q. WHAT ARE THE PRESENT BULK CUSTOMER CHARGES AND USAGE RATES AND WHAT ARE THE COMPANY'S PROPOSED CUSTOMER CHARGES AND USAGE RATES?

A. The present and Company proposed Bulk customer charges and usage rates are shown on PAWC Volume 9, Ex. 10-C, p. 18-21.

Q. DID YOU PREPARE A SCHEDULE SHOWING PRESENT AND YOUR PROPOSED RATES AND REVENUE FOR BULK CUSTOMERS IN THE CSS OPERATIONS?

A. Yes. I prepared I&E Ex. No. 3, Sch. 26, showing present and proposed rates and

revenue for Bulk CSS Operations customers.

Q. DID YOU ALSO PREPARE BILL COMPARISON SCHEDULES SHOWING THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVEL FOR CSS OPERATIONS?

A. No. However, the increases I propose for each zone are all below the 45% maximum increase I described above. The total increase in Bulk revenue is 3.5%, the lowest of all the CSS Operation classes (I&E Ex. No. 3, Sch. 19, 21, 23 and 25, p. 1).

Q. WHY DID YOU NOT PROPOSE A LARGER INCREASE IN BULK USAGE RATES FOR CSS OPERATIONS CUSTOMERS?

A. Under present rates, the relative rate of return for the Bulk class is 1.9 (PAWC Volume 17, Ex. 12-C, Sch. B). The relative rate of return for the Bulk customers under my proposed rates is lowered to 1.44, well above 1.00, indicating that no further increase in Bulk rates is justified (I&E Ex. No. 3, Sch. 18, Column G, line 13).

CSS OPERATIONS OTHER OPERATING REVENUE

Q. WHAT TYPES OF OTHER OPERATING REVENUE DOES PAWC COLLECT?

A. PAWC includes Industrial Pretreatment revenue, late payment fees, and

Miscellaneous revenue in Other Operating revenue (PAWC Volume 9, Ex. 10-C, p. 22).

Q. HOW MUCH OTHER OPERATING REVENUE DOES PAWC PROJECT IT WILL COLLECT IN THE CSS OPERATIONS?

A. The Company is projecting that it will collect $673,366 of Other Operating Revenue in the CSS Operations (PAWC Volume 9, Ex. 10-C, p. 22).

Q. WHAT LEVEL OF LATE PAYMENT REVENUE IS THE COMPANY PROJECTING UNDER PRESENT AND PROPOSED RATES?

A. Going from present to proposed rates, the Company projected late payment revenue will decrease $4, ($391,919 - $391,915) (PAWC Volume 9, Ex. 10-B, p. 33).

Q. WHAT LEVEL OF OTHER OPERATING REVENUE IN THE CSS OPERATIONS DO YOU RECOMMEND?

A. I recommend that Other Operating Revenue be increased from $673,367 to $752,121 which is an increase of $78,755 (I&E Ex. No. 3, Sch. 27, column F). The $78,755 is entirely Late Payment Revenue.

Q. HOW DID YOU DETERMINE THE $78,755 INCREASE IN LATE PAYMENT REVENUE?

A. I multiplied the present rate late payment revenue of $391,919 times the percentage

increase in tariff rates of approximately 20% to arrive at $78,751 ($391,919 X 20.0936%). Then adding $4 the Company subtracted to arrive at the $78,755 ($78,751 + $4) increase in late payment revenue projected by I&E (I&E Ex. No. 3, Sch. 27, line 3).

CSS OPERATIONS SUMMARY

Q. WHAT TOTAL REVENUE DO YOU RECOMMEND FOR THE CSS OPERATIONS?

A. I recommend that CSS Operations revenue increase from $78,636,222 to $94,380,509 which is an increase of $15,744,287 or 20.2% (I&E Ex. No. 3, Sch. 16, column G, lines 6, 13-15).

COST OF SERVICE STUDIES

Q. DID PAWC ADDRESS THE FILING OF SEPARATE COST OF SERVICE STUDIES IN FUTURE BASE RATE CASES?

A. No. The Company did not address the continuation of separate COSS' in the next case.

Q. WHAT DO YOU RECOMMEND THE COMPANY PROVIDE IN THE NEXT BASE RATE CASE?

A. I recommend the Company continue to provide separate COSS's for the Water Operations, the SSS Operations, and the CSS Operations. I also recommend that the

Company provide separate COSS' for the BASA and Brentwood systems in the next case if these systems are acquired.

Q. WHAT SPECIFIC RECOMMENDATION DO YOU MAKE FOR THE SSS OPERATIONS COSS?

A. I recommend the Company continue to separate the Bulk User/VA class and the Bulk Contract classes from the other classes. The flow from the Bulk Users/VA and Bulk Contracts amount to 3% and 29% respectively of the flow in the SSS wastewater Operations (PAWC Volume 17, Exhibit 12-B, Sch. E, p. 1). As described above, the public and the Commission should be aware of the revenue received, the cost to provide service and the subsidy being provided to the Bulk Users/VA and Bulk Contracts separately. There is value in knowing the cost of providing service and the revenue received from customers that account for 32% (3% + 29%) of the flow in the SSS Operations.

Q. DO YOU ALSO RECOMMEND THE COMPANY PROVIDE A SEPARATE COSS FOR BASA IN THE NEXT BASE RATE CASE?

A. Yes, for two reasons. First, I&E believes the BASA COSS is not currently relevant given the I&E recommendation to exclude the BASA system revenue and expenses in this case making the BASA COSS premature. The review in the next base rate case after which PAWC closes on BASA will then include plant in service, allocation factors, and expenses that have not been reviewed or addressed by I&E in

this case. Second, the present rate revenue from BASA shown in this case is so far below the cost of providing service to BASA customers, the public and the Commission should be aware of the subsidy being provided to BASA in the next base rate case after PAWC officially closes on BASA.

Q. WHY DO YOU ALSO RECOMMEND THE COMPANY PROVIDE A SEPARATE COSS FOR THE BRENTWOOD SYSTEM IN ALL FUTURE BASE RATE CASES?

A. In the event that PAWC does acquire the Brentwood system, I recommend PAWC provide a separate COSS for Brentwood in all future cases for two reasons. First, as described by the Company in the Brentwood Application at A-2021-3024058, some of the flow carried by the Brentwood plant is from "non-customers." Since only plant "used and useful" to serve customers can be recovered from customers, plant in service to serve "non-customers" should be identified and excluded from rate base. Second, Brentwood customers will also pay a separate treatment fee. With no treatment costs in base rates, I believe it could be reasonable to establish a lower rate for Brentwood customers than other SSS customers that have treatment costs recovered in their usage rates.

Q. IS THERE ALSO A SPECIFIC REASON FOR A SEPARATE BRENTWOOD COSS IN THE NEXT PROCEEDING?

A. Yes. The two primary inputs for cost allocation are the number of customers, and

flow. Almost all allocations in a COSS are based on one of these inputs. The Company's response to I&E-RS-31 indicates that the Company has no idea how much flow is coming into the system from "non-customers" and how much flow is going out of the system from a combination of "non-customers" and Brentwood customers. This lack of data indicates that the Brentwood COSS filed in this case is totally speculative and not based on any known and measurable data (I&E Ex. No. 3 Sch. 29).

SCALE BACK OF RATES

Q. WHAT DO YOU RECOMMEND IF THE COMMISSION GRANTS LESS THAN THE FULL INCREASE?

A. If the Commission grants less than the full increase for the SSS Operations, I recommend the following steps to reduce revenue and rates for SSS Operations customers. First, any subsidy from Water customers should be eliminated. That way, water customers will not subsidize any of the SSS Operations.

The scale back should start with the Zone 1, 2, and 5 Residential usage rate, reducing it to achieve the desired level of increase together with a reduction in the Non-Residential usage rate proportional to the percentage increase that I proposed for each rate under the full increase. For example, if the general Residential usage rate is scaled back 50%, the Residential usage rate would increase 15.05% (30.1% X 50%). The increase in the general Non-Residential usage rate should be approximately 24.9% (49.8% X 50%) (I&E Ex. No. 3, Sch 3, p. 1, lines 4-5). This

will keep the total increase in the Residential class and No-Residential class relatively proportional. The Special Commercial rate of $2.350 per hundred gallons for Cleveland Cliffs and Victory Brewing should be similarly scaled back based upon the 67.9% increase shown on I&E Ex. No. 3, Sch. 3, p. 1, line 11. The Special Commercial flat monthly charges shown on I&E Ex. No. 3, Sch. 3, p. 1, lines 13-16 and line 18 should also be similarly scaled back. The Non-Residential flat rate of $150.00 per month should not be scaled back since it is below the average bill of a Non-Residential customer. The special customer charge of $465.50 per month should not be scaled back because the increase is only 10.0% (I&E Ex. No. 3, Sch. 3, p. 1, line 19). The usage rates for Caln, West Brandywine, the VA, and St. Lawrence should not be scaled back because the rates that I propose are below the corresponding usage rate in Zone 1 (I&E Ex. No. 3, Sch. 3, p. 1, lines 20-21). The customer charge and usage rate paid by Rainbow Washhouse where the usage rate that I propose is below the present Commercial usage rate, should not be scaled back (I&E Ex. No. 3, Sch. 3, lines 35-38).

Q. WHAT SPECIFIC SCALE BACK DO YOU RECOMMEND FOR ZONES 7, 8, AND 9?

A. In Zones 7 and 9, the general usage rates should not be scaled back since they are below the Zone 1 usage rate. The Zone 8 Residential and Commercial flat charge can be made the same as the corresponding Zone 1 flat charge. However, the Butler Township flat rate of $40.00 per month and the Zone 9 flat rate of $75.00 should not

be scaled back because they are below the $132.00 per month flat rate I propose in Zone 1. The Bulk rates for the York Bulk customers and the Bulk rates in Royersford should not be scaled back since the revenue received from these classes is so far below the cost to provide service to these classes (I&E Ex. No. 3, Sch. 3, p. 2, line 1-21).

Q. WHAT SPECIFIC SCALE BACK DIRECTION DO YOU RECOMMEND FOR THE CSS OPERATIONS?

A. I recommend that the customer charges not be scaled back. In Zone 4, the charge decreased, thus no further decrease is appropriate. There should be a corresponding decrease in the Residential flat rate of $113.00 per month that I recommend match the eventual average bill of a Residential usage customer. The scale back should start with the Zone 3, 4, and 6 Residential usage rate, reducing it to achieve the desired level of increase together with a reduction in the Non-Residential usage rate proportional to the percentage increase that I proposed for each rate under the full increase. For example, if the general Residential usage rate is scaled back 50% which would result in the general Residential usage rate increasing 11.7% (23.4% X 50%). The increase in the general Non-Residential usage rate should be approximately 24.7% (49.4% X 50%) (I&E Ex. No. 3, Sch 17, p. 1, lines 2 and 5). This will keep the total increase in the Residential class and No-Residential class relatively proportional. Finally, the Bulk rates in Zone 6 should not be scaled back since they are not being increased (I&E Ex. No. 3, Sch 17, p. 1, lines 22-24).

RATE BASE

Q. WHAT IS RATE BASE?

A. Rate base is the depreciated original cost of a utility's investment in plant a utility has in place to serve customers plus other additions and deductions that the Commission determines to be necessary in order to keep the utility operating and providing safe and reliable service to its customers.

Q. HOW IS THE DEPRECIATED ORIGINAL COST PLANT IN SERVICE AT THE END OF THE TEST YEAR DETERMINED?

A. The depreciated original cost is determined by subtracting the book reserve, which is the accumulation of all prior annual depreciation expense, and other items such as retirements and salvage value from the original cost of the plant in service at the end of the fully projected future test year.

Q. WHAT OTHER ADDITIONS AND DEDUCTIONS TO THE DEPRECIATED ORIGINAL COST OF UTILITY PLANT ARE ALLOWED?

A. Some of the additions to the depreciated original cost of a company's investment in utility include acquisition adjustments, materials and supplies, prepayments, and cash working capital. Some of the deductions include deferred income taxes and customer deposits. Some additions are applicable to a specific utility or utility type.

Q. WHAT RATE BASE CLAIMED BY THE COMPANY DO YOU WISH TO ADDRESS?

A. I will address the Company's claimed SSS Operations rate base of $649,330,622 for the FPFTY ending June 30, 2025 (PAWC Volume 3, p. 96).

Q. WHAT SPECIFIC AREAS OF THE SYSTEM THAT COMPRISE THIS $649,330,622 SSS OPERATIONS RATE BASE WILL YOU ADDRESS?

A. I will address the net plant and the acquisition adjustment, and amortization expenses associated with the not yet acquired Sadsbury and the Farmington systems.

Q. HOW MUCH OF THE $649,330,622 SSS OPERATIONS RATE BASE IS THE RESULT OF THE FARMINGTON AND SADSBURY SYSTEMS?

A. According to information in the filing, the Company is reflecting $1,935,612 of net plant as a result of the Sadsbury acquisition and $932,272 of net plant as a result of the Farmington acquisition. The determination of this net plant and the references used to arrive at these net plant amounts are shown on I&E Ex. No. 3, Schedule 28 lines 1-5 and 11-15.

Q. WHAT DO YOU RECOMMEND CONCERNING THE FARMINGTON AND SADSBURY RATE BASE?

A. I recommend that $1,935,612 of rate base associated with the Sadsbury system and

$923,272 of rate base Farmington system be removed from the SSS Operations rate base.

Q. WHY DO YOU RECOMMEND THAT THESE AMOUNTS BE REMOVED FROM THE SSS OPERATIONS RATE BASE?

A. As described above, these systems are not yet owned by PAWC, therefore PAWC should not be able to include the rate base from these systems in the SSS Operations rate base.

ANNUARL DEPRECIATION EXPENSE

Q. WHAT IS ANNUAL DEPRECIATION EXPENSE?

A. Annual depreciation expense is an operating expense. It represents the loss of service value of plant over the life of the plant.

Q. WHAT ANNUAL DEPRECIATION EXPENSE IS PAWC CLAIMING IN THE SSS OPERATIONS?

A. PAWC is claiming $27,482,112 of annual depreciation expense for the FPFTY ending June 30, 2025 (PAWC Volume 3, p. 76, line 3).

Q. WHAT ADJUSTMENT TO THE SSS OPERATIONS ANNUAL DEPRECIATION EXPENSE DO YOU RECOMMEND?

A. I recommend that $24,342 of annual depreciation expense associated with the

Sadsbury system and $11,611 associated with the Farmington system be removed from the SSS Operations annual depreciation expense. The determination of the $24,342 and the references to arrive at this amount are shown on I&E Ex. No. 3, Schedule 28 lines 6-8. Since the filing did not contain a breakdown of annual depreciation expense for the Farmington System, I applied the same approximately 1.26% composite depreciation rate applicable in the Sadsbury system to the Farmington system net plant to arrive at the $11,611 ($923,272 X 0.012576) of Farmington annual depreciation expense (I&E Ex. No. 3, Schedule 28 line 16).

Q. WHY DO YOU RECOMMEND THAT $24,342 AND $11,611 BE REMOVED FROM THE SSS OPERATIONS ANNUAL DEPRECIATION EXPENSE?

A. As described above, these systems are not yet owned by PAWC, therefore PAWC should not be able to include the annual depreciation expense on the plant from these systems in the SSS Operations annual depreciation expense claim.

<u>AMORTIZATION EXPENSE</u>

Q. WHAT IS ANNUAL AMORTIZATION EXPENSE?

A. Annual amortization expense is an operating expense. It represents the recovery or refund of regulatory assets and liabilities over an agreed upon period of time. Regulatory assets and liabilities may or may not be included in a company's rate base.

Q. IF THE COMMISSION AGREES WITH YOUR RECOMMENDATION TO REMOVE THE SADSBURY AND FARMINGTON SYSTEMS, SHOULD THERE BE A CORRESPONDING ADJUSTMENT TO AMORTIZATION EXPENSE OF TRANSACTION COSTS?

A. Yes. If the Commission agrees with my recommendation to exclude the Sadsbury and Farmington system, there should be a corresponding $9,147 reduction of amortization expense claimed for the Sadsbury system and $5,699 claimed for the Farmington System (PAWC Volume 3, SSS Operations, page 130). As described above, these systems are not yet owned by PAWC. Therefore, it is premature to allow PAWC to recover these corresponding transaction expense in this case.

Q. DID THE COMPANY ALSO CLAIM A NEGATIVE PLANT ACQUISITION ADJUSTMENT IN THE TOTAL AMORTIZATION EXPENSE RELATED TO THE SADSBURY SYSTEM?

A. Yes. For the Sadsbury system, the Company is projecting that the purchase price will be $945,612 less than the net book value of the Sadsbury plant. This $945,612 is shown on PAWC Volume 4, Ex. 3-B, p. 344. Because it is a negative Acquisition Adjustment, the Company is required to amortize the adjustment as a credit back to customers over 10 years. While there is no rate base adjustment, the Company is claiming a negative $94,561 ($945,612 /10) Acquisition Adjustment expense be credited back to customers over 10 years (PAWC Volume 3, Ex. 3-A, p. 130).

Q. IF THE COMMISSION AGREES WITH YOUR RECOMMENDATION TO REMOVE THE RATE MAKING COMPONENTS RELATED TO THE SADSBURY SYSTEM, SHOULD THIS $94,561 CREDIT ALSO BE REMOVED?

A. Yes. If the Commission agrees with my recommendation to remove the plant, revenue, expenses, taxes, and amortizations related to the Sadsbury system, I recommend the Commission reverse the negative $94,561 Annual Amortization expense credit related to the Sadsbury system shown on PAWC Volume 3, Ex. 3-A, p. 130. Since the system has not yet been acquired, the Company should not be required to credit this $94,561 Annual Amortization expense back to customers.

ACQUISITION ADJUSTMENT – RATE BASE AND ACCRUED

Q. WHAT IS AN ACQUISITION ADJUSTMENT?

A. An Acquisition adjustment occurs when a utility purchases another system for more or less than the book value. It can also include transaction costs incurred by PAWC to acquire the system. The acquisition adjustment is typically claimed in rate base and amortized over a reasonable period of time.

Q. IS PAWC CLAIMING ACQUISITION ADJUSTMENTS IN THE FULLY PROJECTED FUTURE TEST YEAR RATE BASE?

A. Yes. PAWC is claiming $3,749,235 of Acquisition Adjustment in the FPFTY (PAWC Volume 3, Ex. 3-A, p. 96, line 16 and p. 106).

Q. WHAT ADJUSTMENTS TO THE SSS OPERATIONS ACQUISITION ADJUSTMENT DO YOU RECOMMEND?

A. I recommend that $83,085 of Transaction Costs related to the Sadsbury system and $51,761 of Transaction Costs related to the Farmington system included in the Acquisition Adjustments be removed from the total Acquisition Adjustment claimed in rate base. These amounts and the references to these amounts are shown on I&E Ex. No. 3, Schedule 28 lines 9 and 17).

Q. WHY DO YOU RECOMMEND THAT THESE AMOUNTS BE REMOVED FROM THE SSS OPERATIONS ACQUISITION ADJUSTMENT CLAIMED IN RATE BASE?

A. As described above, these systems are not yet owned by PAWC, therefore PAWC should not be able to include the corresponding Transaction Costs incurred to acquire these systems as part of the total Acquisition Adjustment in rate base from these systems in the SSS Operations.

Q. IF THE COMMISSION AGREES WITH YOUR RECOMMENDATION TO REMOVE THESE TRANSACTION COSTS, SHOULD THERE BE A CORRESPONDING ADJUSTMENT TO ACCRUED AMORTIZATION EXPENSE?

A. Yes. If the Commission agrees with my recommendation that $83,085 of Transaction Costs related to the Sadsbury system and $51,761 of Transaction Costs

related to the Farmington system be removed from the total Acquisition Adjustment claimed in rate base, there should be a corresponding reduction of $8,358 of Annual Amortization related to the Sadsbury system and a reduction of $5,224 of Annual Amortization related to the Farmington system (I&E Ex. No. 3, Sch. 28, lines 10 and 18).

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS CONCERNING THE FARMINGTON TOWNSHIP AND SADSBURY SYSTEMS?

A. For the reasons stated above, I recommend that the Commission remove the revenue requirement for the Farmington and Sadsbury systems from the present proceeding including all costs, revenues, taxes, and amortizations. The table below shows the net plant in service, acquisition adjustment accrued and annual, depreciation expense, and revenues as shown on I&E Ex. No. 3, Sch. 28.

	Farmington Township	Sadsbury
Net Plant- Rate Base	$923,272	$1,935,612
Transaction Costs - Rate Base	$51,761	$83,085
/Transaction Costs – Accrued Amortization	-$5,224	-$8,385
Acquisition Adjustment – Annual Expense		-$94,561
Transaction Costs Amortization Expense	$5,699	$9,147
Depreciation Expense	$11,611	$24,342
Present Rate Revenue	$322,926	$471,228

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS CONCERNING THE BASA AND BRENTWATER SYSTEMS?

A. For the reasons stated above, I recommend the Commission disallow the present and proposed rate revenue, rate base, expenses, amortizations, and taxes related to the Brentwood and BASA systems. These are shown on PAWC Volume 3, p. 139, 145, 172 and 178 as summarized on the following table.

	Present Rate BASA	Proposed Rate BASA
Rate Base	$231,624,479	$231,536,917
Revenue	$11,847,402	$38,135,710
Expenses and Income Taxes	$12,225,420	$19,751,679
Income Deductions	$4,979,926	$4,978,043
	Present Rate Brentwood	Proposed Rate Brentwood
Rate Base	$22,060,403	$22,053,946
Revenue	$1,824,191	$3,758,828
Expenses and Income Taxes	$1,453,865	$2,007,745
Income Deductions	$474,298	$474,160

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

JOSEPH KUBAS

PENNSYLVANIA PUBLIC UTILITY COMMISSION
COMMONWEALTH KEYSTONE BUILDING
400 NORTH STREET
HARRISBURG, PA 17120

Education: Bachelor of Science in Civil Engineering Technology, 1985, University of Pittsburgh at Johnstown, Johnstown, PA.

Continuing Education: Legal Principles and Practices of Surveying at the University of Maryland. Economics, Accounting, 33 Credit hours of accounting at the Howard County Community College and the University of Pittsburgh at Johnstown. Managing Multiple Priorities at the Pennsylvania State University. Various PA-PUC and Utility Company Seminars.

Professional: Engineer In Training, 1985,

Exams: Uniform Certified Public Accounting Exam, 1993.

Rate School: Cost of Service - Rate Structure & Rate Design instructor at Commission's Rate School - September 2010, 2012, 2014, 2016 and 2022.

Title: **RATE CASE REVIEW SPECIALIST - ANNUITANT**

July 2023 – Present
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Duties: Provide consultation and assist the Bureau of I&E in the areas of Engineering, Revenue and Rate Structure for all fixed utility types. This includes measure of value claims, rate structure and rates, revenue annualizations, depreciation claims, fuel purchasing practices and economic analyses. The types of dockets reviewed by the Bureau of I&E included applications, formal complaints, investigations, applications, petitions and rate investigations. The review includes analyzing all pertinent supporting information such as cost of service studies, bill frequency analyses, proofs of revenue schedules, depreciation studies, water quality test results and formal complaints.

Title: **FIXED UTILITY VALUATION ENGINEER SUPERVISOR**

December 2011 – June 2023
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Duties: Duties included the areas of Engineering, Revenue and Rate Structure for all fixed utility types. During the course of formal and informal investigations personnel under my direction were responsible for reviewing and presenting recommendations regarding tariff rate schedules, tariff rules and regulations, measures of value claims, revenue annualizations, depreciation claims, fuel purchasing practices and economic analyses. The types of dockets reviewed by the Bureau of I&E included: applications, formal complaints, investigations, petitions and rate investigations. The Engineering Section was also responsible for reviewing all pertinent supporting information such as cost of service studies, bill frequency analyses, proofs of revenue, depreciation studies, water quality test results and formal complaints. Duties also included reviewing default service petitions by electric distribution companies and Act 129 Filings by the seven major electric Utilities, including energy efficiency and conservation plans and Smart Meter Plans.

Title: **RATE CASE REVIEW SPECIALIST**

December 2009 - December 2011
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement and Office of Trial Staff

Duties: These duties included the determination of the reasonableness of claims and proposals in the areas of plant in service, rate base, depreciation expense, cost of service, quality of service, revenues, acquisitions, purchase gas expense, rate structure, and tariff proposal submitted by Water, Sewer, Telephone, Gas and Steam Heat utilities to justify utility service rates, or alternative forms of regulation. Research, analyze, and review rate case filings, tariff filings, acquisitions and investigations. Participate in on-site inspections of utility properties to determine the used and usefulness of the plant-in service and make recommendations. Prepare interrogatories in the areas of rate base, depreciation expense, purchase gas expense, amortizations, rate structure, revenue and quality of service in order to obtain additional information regarding a utility's filing. Analyze present revenue, proposed revenue, rate structure and tariff issues. Recommend adjustments to rate base, depreciation expense, revenue, rate structure and other issues concerning fixed utilities. Prepare testimony and exhibits for the purpose of establishing the I&E position in formal and informal proceedings before the

Commission. Provide assistance and input to I&E employees concerning engineering and rate structure issues including input for briefs and exceptions. Participate in Commission consultative report proceedings and collaboratives undertaken by the Commission.

Title: **FIXED UTILITY VALUATION ENGINEER III**

December 1999 - December 2009
Pennsylvania Public Utility Commission
Office of Trial Staff

Duties: These duties included the determination of the reasonableness of claims and proposals in the areas of plant in service, rate base, depreciation expense, cost of service, quality of service, revenues, acquisitions, purchase gas expense, rate structure, and tariff proposal submitted by Water, Sewer, Telephone, Gas and Steam Heat utilities to justify utility service rates, or alternative forms of regulation. Research, analyze, and review rate case filings, tariff filings, acquisitions and investigations. Participate in on-site inspections of utility properties to determine the used and usefulness of the plant-in service and make recommendations. Prepare interrogatories in the areas of rate base, depreciation expense, purchase gas expense, amortizations, rate structure, revenue and quality of service in order to obtain additional information regarding a utility's filing. Analyze present revenue, proposed revenue, rate structure and tariff issues. Recommend adjustments to rate base, depreciation expense, revenue, rate structure and other issues concerning fixed utilities. Prepare testimony and exhibits for the purpose of establishing the OTS position in formal and informal proceedings before the Commission. Provide assistance and input to OTS employees concerning engineering and rate structure issues including input for briefs and exceptions. Participate in Commission consultative report proceedings and collaboratives undertaken by the Commission.

Title: **FIXED UTILITY VALUATION ENGINEER II**

April 1996 - December 1999
Pennsylvania Public Utility Commission
Office of Trial Staff and Bureau of Fixed Utility Services

Duties: Perform the duties of a Fixed Utility Valuation Engineer II in the Office of Trail Staff (OTS) and Bureau of Fixed Utility Services.

Title: **FIXED UTILITY VALUATION ENGINEER TRAINEE, I & II**

May 1993 - March 1996
Pennsylvania Public Utility Commission
Office of Trial Staff
Telecommunications and Water Division

Duties: Perform the duties of a Fixed Utility Valuation Engineer II in the Rate Structure/Engineering Section of the Telecommunications and Water Division of the Office of Trial Staff (OTS).

Title: **CIVIL ENGINEER**

May 1985 - January 1991
Clark Finefrock & Sackett Inc.
7135 Minstrel Way
Columbia, MD 21045

Duties: Engineering, Surveying, Computer, and Field Inspection work related to land development projects in Maryland.

Testimony Before the Pennsylvania Public Utility Commission

1.	National Utilities Inc. (Water)	R-00953416
2.	Consumer Pennsylvania Water Company - Roaring Creek Division	R-00973869
3.	Philadelphia Suburban Water Company	R-00973952
4.	Bell Atlantic - Pennsylvania Inc.	P-00971307
5.	City of Bethlehem- Bureau of Water	R-00984375
6.	Pennsylvania Telephone Association - Chapter 30 Plan	P-00981425
7.	GTE North Inc. Telephone Chapter 30 Plan	P-00981449
8.	Pennsylvania American Water Co.	R-00994638
9.	Philadelphia Suburban Water Co.	R-00994868
10.	PG Energy (Gas)	R-00005119
11.	Pennsylvania American Water - Coatesville Acquisition	A-212285-F0071
12.	T. W Phillips Gas and Oil Company	R-00005459
13.	Verizon North - Chapter 30 Plan	P-00001854
14.	Philadelphia Gas Works	R-00006042
15.	PFG Gas Inc. & Penn Fuels Gas Co.	R-00013679

16.	Pennsylvania American Water Co.	R-00016339
17.	Philadelphia Suburban Water Co.	R-00016750
18.	Philadelphia Gas Works	R-00017034
19.	PFG Gas Inc. & Penn Fuels Gas Co	R-00027389
20.	Verizon - Pennsylvania, Inc.	P-00021973
21.	Verizon - Pennsylvania, Inc.	P-00937105-F0002
22.	Pennsylvania American Water Co.	R-00027982
23.	Dominion Peoples 1307(f)	R-00038170
24.	Verizon PA / Verizon North	C-20027195
25.	National Fuel Gas Distribution, Inc.	R-00038168
26.	Aqua Pennsylvania Inc.	R-00038805
27.	Dominion Peoples 1307 (f)	R-00049153
28.	PPL Electric Utilities	R-00049255
29.	National Fuel Gas Distribution, Inc.	R-00049656
30.	City of Lancaster - Sewer	R-00049862
31.	Dominion Peoples 1307(f)	R-00050267
32.	Verizon PA / Verizon North	C-20027195
33.	PPL Gas Utilities Inc. 1307(f)	R-00050540
34.	United Telephone	A-313200-F0007
35.	Aqua Pa	R-00051030
36.	T.W. Phillips 1307(f)	R-00051134
37.	City of Dubois	R-00050671
38.	T.W. Phillips	R-00051178
39.	The Peoples Natural Gas Co. 1307(f)	R-00061301
40.	Meted/Penelec	R-00061366 and R-00061367
41.	The York Water Company	R-00061322
42.	PPL Gas Utilities Corporation	R-00061398
43.	National Fuel Gas Distribution, Inc.	R-00061493
44.	Pennsylvania American Water Co.	P-00062241
45.	Philadelphia Gas Works	R-00061931
46.	PPL Electric	R-00072155
47.	Pennsylvania-American Water Co.	R-00072229
48.	Valley Energy	R-00072349
49.	City of Bethlehem	R-00072492
50.	Aqua Pennsylvania, Inc.	R-00072711
51.	T.W. Phillips 1307(f)	R-2008-2013026
52.	Columbia Gas	R-2008-2011621
53.	The Peoples Natural Gas Co. 1307(f)	R-2008-2022206
54.	PECO Energy	P-2008-2032333
55.	NRG Energy Center Harrisburg	R-2008-2028395
56.	PAWC - Coatesville Wastewater	R-2008-2032689
57.	York Water	R-2008-2023067
58.	Pike County Power and Light (Gas)	R-2008-2046520

59.	Columbia Water	R-2008-2045157
60.	T. W. Phillips Gas (1307-f)	R-2008-2075250
61.	The Peoples Natural Gas Co. (1307-f)	R-2009-2088069
62.	UGI Utilities Inc. (1307-f)	R-2009-2105911
63.	PAWC Water	R-2009-2097323
64.	UGI Utilities Inc.	R-2009-2105911
65.	Penn Estates Water	R-2009-2117532
66.	Penn Estates Sewer	R-2009-2117740
67.	AT&T Communications	C-2009-2098380
68.	Aqua Pennsylvania Inc.	R-2009-2132019
69.	T.W. Phillips Gas (1307-f)	R-2009-2145441
70.	PGW Gas	R-2009-2139884
71.	City of Bethlehem - Remand	R-00072492
72.	Dominion Peoples (1307-f)	R-2010-2155608
73.	PECO Energy - Gas Division	R-2010-2161592
74.	UGI Penn National Gas	R-2010-2172928
75.	PAWC Coatesville Operations	R-2010-2166212
76.	PAWC Northeast Operations	R-2010-2166214
77.	Duquesne Light	R-2010-2179522
78.	Peoples Natural Gas Company	R-2010-2201702
79.	T.W. Phillips - Steel River Application	A-2010-2210326
80.	Peoples Natural Gas 1307(f)	R-2011-2228694
81.	UGI Penn Natural Gas 1307(f)	R-2011-2238943
82	Pennsylvania American Water	R-2011-2232243
83.	Aqua Pennsylvania, Inc.	R-2011-2267958
84.	Borough of Quakertown	R-2011-2251181
85.	Peoples Natural Gas Company	R-2012-2285985
86.	Columbia Gas of Pennsylvania	R-2012-2321748
87.	UGI Utilities Inc.	R-2015-2518438
88.	Aqua Wastewater	A-2017-2605434
89.	Pennsylvania American Water	R-2017-2595853
90.	UGI Electric	R-2017-2640058
91.	PECO Electric	R-2018-3000164
92.	York Water Company	R-2018-3000019
93.	Penn Power	P-2019-3012628
94.	Aqua-PA -New Garden Twp	A-2019-2580061
95.	UGI Gas	R-2019-3015162
96.	Pittsburgh Water and Sewer Auth.	P-2020-3019019
97.	PAWC Wastewater	R-2020-3019371
98.	Aqua PA Wastewater	R-2021-3027386
99.	PECO Electric	R-2021-3024601
100.	Borough of Ambler	R-2022-3031704
101.	PAWC – Borough of Brentwood	A-2022-3024058

I&E Exhibit No. 3
Witness: Joseph Kubas

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA AMERICAN WATER COMPANY

Docket No. R-2023-3041389 (Water)

Docket No. R -2023-3041390 (Wastewater)

Exhibits to Accompany
the

Direct Testimony

of

Joseph Kubas

Bureau of Investigation and Enforcement

Concerning:
Overall Act 11 Revenue, Wastewater
Present Rate Revenue, Late Payment Revenue
Proposed Revenue, Tariff Zones
Rate Structure, Revenue Shortfall
Cost of Service Studies Scaleback of Rates
Rate Base
Acquisition Adjustment
Annual Depreciation and Amortization Expense

Exhibit No. 3
Schedule 1

Pennsylvania-American Water Company
Exhibit 3-A Act 11 Summary
I&E
R-2023-3041389 and 3041390

		Total System	Water Operations	Total Wastewater	SSS Wastewater	BASA Wastewater	Brentwood Wastewater	CSS Wastewater
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Present Rate Revenue	$998,224,270	$824,117,186	$174,107,084	$95,470,866	$0	$0	$78,636,218
2	Additional Revenue Requirement	$203,945,911	$156,372,635	$47,573,276	$31,793,150	$0	$0	$15,780,126
3	Act 11 Allocation	$0	$357,517	-$357,517	-$321,682	$0	$0	-$35,835
4	Proposed Revenue	$1,202,170,181	$824,474,703	$221,322,843	$126,942,334	$0	$0	$94,380,509
5	Rate Increase (Decrease)	$203,945,911	$156,730,152	$47,215,759	$31,471,468	$0	$0	$15,744,291
6	Percentage Increase	20.4%	19.0%	27.1%	33.0%			20.0%

I&E Exhibit No. 3
Schedule 1

Exhibit No. 3
Schedule 2

PENNSYLVANIA-AMERICAN WATER COMPANY
TOTAL CUSTOMERS OF PAWC

	(A)	(B)
1	SSS Wastewater Customers	55,222
2	CSS Wastewater Customers	42,363
3	Total Wastewater Customers	97,585
4	Total Water Customers	677,319
5	TOTAL CUSTOMERS	774,904
6	**Percental of WW Customer to All Customers**	**12.6%**

Pennsylvania-American Water Company
Proposed General Wastewater Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons
R-2023-3041390

	SSS Rates Zone 1 - PAWC	Present Rate	Dollar Increase	Proposed Rate	Percent Increase
	(A)	(B)	(C)	(D)	(E)
1	Residential Service Charge	$14.30	$0.70	**$15.00**	4.9%
2	Non-Residential Service Charge	$35.00	$1.70	**$36.70**	4.9%
3	Bulk Service	$35.00	$15.00	**$50.00**	42.9%
4	Residential Usage (per 100 gallons)	$2.8750	$0.8650	**$3.7400**	30.1%
5	Non-Residential Usage (per 100 gallons)	$2.1030	$1.0470	**$3.1500**	49.8%
6	Residential Unmetered	$106.00	$26.00	$132.00	24.5%
7	Non Residential Unmetered	$106.00	$44.00	**$150.00**	41.5%
8	Upper Pottsgrove: Non-Residential Service Charge	$63.60	-$26.90	$36.70	-42.3%
9	Upper Pottsgrove: Non-Residential Volumetric Charge	$0.5653	$1.7847	**$2.3500**	315.7%
10	Cleveland Cliffs and Victory Brewing Service Charge	$415.00	$41.50	**$456.50**	10.0%
11	Cleveland Cliffs and Victory Brewing Volumetric Charge	$1.4000	$0.9500	**$2.3500**	67.9%
12	Special Rate (Flat):				
13	Knouse Foods	$8,340.00	$3,753.00	**$12,093.00**	45.0%
14	Penn State Special Metals	$2,870.00	$1,291.50	**$4,161.50**	45.0%
15	PSC Metals	$1,110.00	$499.50	**$1,609.50**	45.0%
16	Ipsco Kopper Tubilers	$17,240.00	$7,758.00	**$24,998.00**	45.0%
17	Special Rate (Flat):				
18	Strattanville Borough	$6,200.00	$2,480.00	**$8,680.00**	40.0%
19	Special Rate (Caln, West Brandywine, VA Med)	$415.00	$41.50	**$456.50**	10.0%
20	Special Rate (Caln, West Brandywine, VA Med)	$1.4500	$0.2300	**$1.6800**	15.9%
21	St Lawrence Borough	$0.4000	$0.2300	**$0.6300**	57.5%

	Zone 2 - New Cumberland	Present Rate	Dollar Increase	Proposed Rate	Percent Increase
22	Residential Service Charge	$14.30	$0.70	$15.00	4.9%
23	Non-Residential Service Charge	$35.00	$1.70	$36.70	4.9%
24	Residential Usage (per 100 gallons)	$2.4500	$1.2900	$3.7400	52.7%
25	Non-Residential Usage (per 100 gallons)	$1.9000	$1.2500	$3.1500	65.8%

	Zone 5 - Valley	Present Rate	Dollar Increase	Proposed Rate	Percent Increase
26	Residential Service Charge	$14.30	$0.70	$15.00	4.9%
27	Residential Usage (per 100 gallons)	$2.8750	$0.8650	$3.7400	30.1%
28	Non-Residential Service Charge	$35.00	$1.70	$36.70	4.9%
29	Non-Residential Usage (per 100 gallons)	$2.1030	$1.0470	$3.1500	49.8%
30	Residential Unmetered	$106.00	$26.00	$132.00	24.5%
31	Non Residential Unmetered	$106.00	$44.00	$150.00	41.5%
32	Westwood Fire Company				
33	Service Charge	$0.00	$36.70	$36.70	0.0%
34	Usage Charge (per 100 gallons)	$2.1030	$1.0470	$3.1500	49.8%
35	Rainbow Washhouse Inc				
36	Service Charge	$75.00	$0.00	**$75.00**	0.0%
37	First 2,000 Gallons	$0.0000	$0.3800	**$0.3800**	0.0%
38	All Over 2,000 Gallons	$0.2100	$0.1700	**$0.3800**	81.0%

Pennsylvania-American Water Company
Proposed General Wastewater Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons
R-2023-3041390

	SSS Rates Zone 7 - York	Present Rate	Dollar Increase	Proposed Rate	Percent Increase
	(A)	(B)	(C)	(D)	(E)
1	Residential Service Charge	$18.00	-$3.00	$15.00	-16.7%
2	Residential First 2,000 Gallons	$0.0000	$1.3180	**$1.3180**	0.0%
3	Residential All Over 2,000 Gallons	$2.7375	$1.0025	$3.7400	36.6%
4	Non-Residential Service Charge	$30.00	$6.70	$36.70	22.3%
5	Non-Residential First 2,000 Gallons	$0.0000	$0.6010	**$0.6010**	
6	Non-Residential All Over 2,000 Gallons	$1.6380	$1.1620	**$2.8000**	70.9%
7	Bulk Rate A (per 100 gallons)	$0.3750	$0.1875	**$0.5625**	50.0%
8	Bulk Rate B (per 100 gallons)	$0.2490	$0.1245	**$0.3735**	50.0%
	Zone 8- Foster Township	Present Rate	Dollar Increase	Proposed Rate	Percent Increase
9	Unmetered	$106.00	$26.00	$132.00	24.5%
10	Non Residential Unmetered	$106.00	$44.00	$150.00	41.5%
11	Butler Township per EDU	$15.00	$25.00	**$40.00**	166.7%
	Zone 9 - Royersford	Present Rate	Dollar Increase	Proposed Rate	Percent Increase
12	Residential: Service Charge	$48.00	-$33.00	$15.00	-68.8%
13	Residential Flat Rate Per EDU	$50.00	$25.00	**$75.00**	50.0%
14	Residential: First 3,000 Gallons	$0.0000	$2.2000	**$2.2000**	0.0%
15	Residential: Over 3,000 Gallons	$0.9400	$1.2600	**$2.2000**	134.0%
16	Non-Residential: Service Charge	$48.00	-$11.30	**$36.70**	-23.5%
17	Non-Residential Flat Rtae Per EDU	$67.00	$46.00	**$113.00**	68.7%
18	Non-Residential: First 3,000 Gallons	$0.0000	$1.5800	**$1.5800**	0.0%
19	Non-Residential: Over 3,000 Gallons	$0.9400	$0.6400	**$1.5800**	68.1%
	BULK: Per EDU	$48.00	$2.00	**$50.00**	4.2%
20	BULK: First 3,000 Gallons	$0.0000	$1.4800	**$1.4800**	0.0%
21	BULK: Over 3,000 Gallons	$0.9400	$0.1491	**$1.0891**	15.9%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
SUMMARY OF APPLICATION OF PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDING JUNE 30, 2025

	Rate Zone	Residential	Commercial	Industrial	Municipal	Bulk	Total Revenues
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
	Present Rate Application						
1	Zone 1 - Most WW Areas	$39,323,052	$10,183,912	$1,830,201	$931,880	$1,938,536	$54,207,581
2	Zone 2 - New Cumberland	$2,880,248	$514,850	$0	$26,451		$3,421,549
3	Zone 5 - Valley WW	$3,729,117	$378,045	$0	$93,482		$4,200,644
4	Zone 7 - York WW	$14,076,537	$5,221,440	$10,512	$315,566	$7,425,108	$27,049,163
5	Zone 8 - Foster Township	$646,340	$45,001	$493,723	$13,646		$1,198,710
6	Zone 9 -Royersford WW	$792,301	$456,488	$17,883	$19,208	$80,885	$1,366,765
7	Zone XX - Farmington WW	$0	$0	$0	$0		$0
8	Zone XX - Sadsbury WW	$0	$0	$0	$0		$0
		$61,447,595	$16,799,736	$2,352,319	$1,400,233	$9,444,529	$91,444,412
9	IPP Surcharge						$1,835,040
10	Other Revenues						$1,397,685
11	**Total WW SSS**	$61,447,595	$16,799,736	$2,352,319	$1,400,233	$9,444,529	$94,677,137
	Proposed Rate Application						
12	Zone 1 - Most WW Areas	$48,011,563	$14,693,592	$2,849,189	$1,358,319	$2,311,608	$69,224,271
13	Zone 2 - New Cumberland	$3,956,241	$773,274	$0	$40,824		$4,770,339
14	Zone 5 - Valley WW	$4,552,909	$531,983	$0	$137,772		$5,222,664
15	Zone 7 - York WW	$20,695,382	$8,738,293	$17,497	$530,135	$10,508,639	$40,489,946
16	Zone 8 - Foster Township	$796,392	$63,000	$691,200	$36,000		$1,586,592
17	Zone 9 -Royersford WW	$1,263,968	$792,277	$28,172	$32,878	$135,723	$2,253,018
18	Zone XX - Farmington WW	$0	$0	$0	$0		$0
19	Zone XX - Sadsbury WW	$0	$0	$0	$0		$0
		$79,276,455	$25,592,419	$3,586,058	$2,135,928	$12,955,970	$123,546,830
20	IPP Surcharge						$1,835,040
21	Other Revenues						$1,560,465
22	**Total WW SSS**	$79,276,455	$25,592,419	$3,586,058	$2,135,928	$12,955,970	$126,942,335
23	Change in Revenues	$17,828,860	$8,792,683	$1,233,739	$735,695	$3,511,441	$32,265,198
24	% Change in Revenues	29.0%	52.3%	52.4%	52.5%	37.2%	35.3%
25	Company Original Proposal	-$1,784,057	$1,246,948	-$23,239	$48,331	$334,432	-$169,253
26	Additional LPR						$154,448
27	**I&E Additional Revenue**	**$19,612,917**	**$7,545,735**	**$1,256,978**	**$687,364**	**$3,177,009**	**$32,434,451**

PENNSYLVANIA-AMERICAN WATER COMPANY
MISCELLANEOUS AND OTHER OPERATING REVENUES
WASTEWATER SSS OPERATIONS
TWELVE MONTHS ENDING JUNE 2024, AND 2025

			06/30/2024	Adjustments	06/30/2025	Proposed 06/30/2025	Percent Increase **35.1059%**	Proposed 06/30/2025
		(A)	(B)	(C)	(D)	(E)	(F)	(G)
	523	Other WW Revenues						
1		IPP Revenue	$1,835,040	$0	$1,835,040	$1,835,040	$0	$1,835,040
								$0
2	536	Guaranteed Revenues	$0		$0	$0		$0
3	532	Late Payment Fees	$462,154	$1,528	$463,681	$472,013	$154,448	$626,461
4	536	Miscellaneous Services	$934,004		$934,004	$934,004		$934,004
5	472	Rents From Property	$0		$0	$0		$0
6	473	Intercompany Rent	$0		$0	$0		$0
7		Subotal	$1,396,157	$1,528	$1,397,685	$1,406,017	$154,448	$1,560,465
8		**Total Other Revenues**	$3,231,197	$1,528	$3,232,725	$3,241,057	$154,448	$3,395,504

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
Company Revised Present Rates - OSBA 04-011_Attachment 1

	ITEM	COST OF SERVICE	RESIDENTIAL	NON-RESIDENTIAL	LARGE INDUSTRIAL	BULK USERS/ VA HOSP	BULK USERS CONTRACT
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
1	REVENUES FROM SALES	$92,238,141	$62,061,414	$19,828,485	$903,713	$2,019,421	$7,425,108
2	OTHER REVENUES	$3,232,724	$1,865,546	$739,751	$41,801	$52,455	$533,171
3	TOTAL OPERATING REVENUES	$95,470,865	$63,926,960	$20,568,236	$945,514	$2,071,876	$7,958,279
4	LESS: OPERATING EXPENSES (RECOVERED FROM WATER)	$56,633,668	$31,559,466	$11,790,467	$619,899	$1,147,980	$11,515,856
5	RETURN AND INCOME TAXES	$38,837,197	$32,367,494	$8,777,769	$325,615	$923,896	-$3,557,577
6	LESS: TAXABLE EXCLUSIONS - ALLOCATED ON RATE BASE	$13,962,886	$8,143,527	$3,141,701	$157,767	$228,446	$2,291,445
7	TAXABLE INCOME	$24,874,311	$24,223,967	$5,636,068	$167,848	$695,450	-$5,849,022
8	LESS: INCOME TAXES (TAX. INC.)	$9,971,223	$9,710,523	$2,259,299	$67,284	$278,781	-$2,344,664
9	NET RETURN (Line 5 - Line 8)	$28,865,974	$22,656,971	$6,518,470	$258,331	$645,115	-$1,212,913
10	ORIGINAL COSTS MEASURE OF VALUE	$649,330,621	$378,706,922	$146,101,778	$7,336,808	$10,623,659	$106,561,454
11	RATE OF RETURN, PERCENT	4.45	5.98	4.46	3.52	6.07	(1.14)
12	RELATIVE RATE OF RETURN	1.00	1.35	1.00	0.79	1.37	(0.26)
13	SUBSIDY	$0	$5,821,565	$23,520	($67,827)	$172,840	($5,950,099)

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
Company Revised Proposed Rates - OSBA 04-011_Attachment 1

	ITEM	COST OF SERVICE	RESIDENTIAL	NON RESIDENTIAL	LARGE INDUSTRIAL	BULK USERS/ VA HOSP	BULK USERS CONTRACT
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
1	REVENUES FROM SALES	$92,060,556	$60,277,357	$21,059,653	$944,585	$2,076,363	$7,702,598
2	OTHER REVENUES	$3,241,057	$1,871,844	$741,869	$41,718	$52,455	$533,171
3	TOTAL OPERATING REVENUES	$95,301,613	$62,149,201	$21,801,522	$986,303	$2,128,818	$8,235,769
4	LESS: OPERATING EXPENSES (RECOVERED FROM WATER)	$25,246,699	$9,227,058	$3,203,813	$177,531	$1,145,536	$11,492,761
5	RETURN AND INCOME TAXES	$70,054,914	$52,922,143	$18,597,709	$808,772	$983,282	-$3,256,992
6	LESS: TAXABLE EXCLUSIONS - ALLOCATED ON RATE BASE	$13,962,886	$8,147,444	$3,140,723	$157,648	$228,179	$2,288,892
7	TAXABLE INCOME	$56,092,028	$44,774,699	$15,456,986	$651,124	$755,103	-$5,545,884
8	LESS: INCOME TAXES (TAX. INC.)	$18,498,056	$14,765,822	$5,097,412	$214,728	$249,018	-$1,828,924
9	NET RETURN (Line 5 - Line 8)	$51,556,858	$38,156,321	$13,500,297	$594,044	$734,264	-$1,428,068
10	ORIGINAL COSTS MEASURE OF VALUE	$649,330,622	$378,889,069	$146,056,326	$7,331,246	$10,611,268	$106,442,713
11	RATE OF RETURN, PERCENT	7.94	10.07	9.24	8.10	6.92	(1.34)
12	RELATIVE RATE OF RETURN	1.00	1.27	1.16	1.02	0.87	(0.17)
13	SUBSIDY	$0	$8,072,525	$1,903,423	$11,943	($108,271)	($9,879,620)

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER I&E PROPOSED RATES AT FULL INCREASE

	ITEM	TAX RATE	COST OF SERVICE	RESIDENTIAL	NON-RESIDENTIAL	LARGE INDUSTRIAL	BULK USERS/ VA HOSP	BULK USERS CONTRACT
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	REVENUES FROM SALES		$123,545,772	$79,276,455	$29,808,196	$1,495,049	$2,457,433	$10,508,639
2	OTHER REVENUES		$3,241,056	$1,873,586	$740,515	$41,320	$52,456	$533,179
3	ADDITIONAL OTHER REVENUE		$154,442	$108,315	$40,727	$2,043	$3,358	$0
4	TOTAL OPERATING REVENUES		$126,941,271	$81,258,357	$30,589,438	$1,538,412	$2,513,247	$11,041,818
5	LESS: OPERATING EXPENSES (RECOVERED FROM WATER)		$56,886,357	$31,922,216	$11,743,768	$606,681	$1,120,758	$11,492,934
6	RETURN AND INCOME TAXES		$70,054,914	$49,336,141	$18,845,670	$931,731	$1,392,489	-$451,116
7	LESS: TAXABLE EXCLUSIONS - ALLOCATED ON RB		$13,960,609	$8,146,115	$3,140,211	$157,622	$228,142	$2,288,518
8	TAXABLE INCOME		$56,094,305	$41,190,026	$15,705,459	$774,109	$1,164,346	-$2,739,634
9	LESS: INCOME TAXES (TAX. INC.)	33.0%	$18,498,056	$13,583,115	$5,179,144	$255,276	$383,963	-$903,441
10	NET RETURN (Line 5 - Line 8)		$51,556,858	$35,753,026	$13,666,526	$676,455	$1,008,525	$452,325
11	ORIGINAL COSTS MEASURE OF VALUE		$649,330,621	$378,889,068	$146,056,326	$7,331,246	$10,611,268	$106,442,713
12	RATE OF RETURN, PERCENT		7.94	9.44	9.36	9.23	9.50	0.42
13	RELATIVE RATE OF RETURN		1.00	1.19	1.18	1.16	1.20	0.05
14	SUBSIDY		$0	$5,669,230	$2,069,652	$94,354	$165,991	($7,999,227)

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

	Residential Class	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Zone 1 - Most WW Areas	10,774,958	$39,203,742	10,659,306	$420,150	$39,323,052	$48,011,563	22.1%
2	Zone 2 - New Cumberland	991,528	$2,890,426	974,813	$30,774	$2,880,248	$3,956,241	37.4%
3	Zone 5 - Valley WW	602,466	$3,718,473	592,309	$39,845	$3,729,117	$4,552,909	22.1%
4	Zone 7 - York WW	6,667,643	$14,121,627	6,555,238	$150,402	$14,076,537	$20,695,382	47.0%
5	Zone 8 - Foster Township		$639,434		$6,906	$646,340	$796,392	23.2%
6	Zone 9 -Royersford WW	488,493	$784,748	480,258	$8,465	$792,301	$1,263,968	59.5%
7	Zone XX - Farmington WW		$0			$0	$0	0.0%
8	Zone XX - Sadsbury WW		$0			$0	$0	0.0%
9	**Total Residential**	19,525,088	$61,358,450	19,261,924	$656,542	$61,447,595	$79,276,455	29.0%

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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

	Zone 1 - Most WW Areas	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge Per EDU	352,068	$14.30	$5,034,576	353,175	$14.30	$54,544	$5,104,950	$15.00	$5,297,629	3.8%
2	Consumption Charges										
3	Usage (100 Gallons)	10,967,060	$2.8750	$31,530,298	10,774,958	$2.8750	$334,562	$31,312,567			
4	Flat (Unmetered)	38,529	$106.00	$4,084,025	38,529	$106.00	$44,107	$4,128,132	$132.00	$5,085,767	23.2%
	Low Income:										
5	Low Income Discount Tier 1			-$350,015			-$3,780	-$353,795		-$329,587	
6	Low Income Discount Tier 2			-$259,147			-$2,799	-$261,946		-$244,021	
7	Low Income Discount Tier 3			-$299,532			-$3,235	-$302,767		-$282,050	
8	Low Income Discount Tier 4									-$292,887	
	Adjustment (1):										
9	Service Charge Per EDU	1,107	$14.30	$15,830	2,214	$14.30	$342	$32,002	$15.00	$33,210	3.8%
10	Consumption Charges										
11	Usage (100 Gallons)	32,722	$2.8750	$94,076	65,444	$2.8750	$2,032	$190,183			
	Adjustment (2):										
12	Flat (Unmetered)										
	Adjustment (3):										
13	Usage (100 Gallons)	(224,824)	$2.8750	-$646,369	(181,096)	$2.8750	-$5,623	-$526,274			
14	Total Usage	10,774,958			10,659,306						
15	Annualized Winter Usage(4)				10,359,225				$3.7400	$38,743,502	
16	**Total Zone 1 Residential**			**$39,203,742**			**$420,150**	**$39,323,052**		**$48,011,563**	22.1%

Note (1) Adjustment to account revenues brought about by customer growth
Note (2) Adjustment to annualized Upper Pottsgrove which started billing August 2022
Note (3) Adjustment to normalize usage
Note (4) Annualized Winter Usage is from average winter usage multiplied by 12

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

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	Zone 2 - New Cumberland	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge Per EDU	33,821	$14.30	$483,634	33,821	$14.30	$5,223	$488,857	$15.00	$507,309	3.8%
2	Consumption Charges										
3	Usage (100 Gallons)	1,012,280	$2.4500	$2,480,085	991,528	$2.4500	$26,236	$2,455,479			
	Low Income:										
4	Low Income Discount Tier 1			-$5,889			-$64	-$5,953		-$6,334	6.4%
5	Low Income Discount Tier 2			-$5,205			-$56	-$5,261		-$5,599	6.4%
6	Low Income Discount Tier 3			-$11,357			-$123	-$11,480		-$12,216	6.4%
7	Low Income Discount Tier 4									-$13,332	
	Adjustment (1):										
8	Usage (100 Gallons)	(20,752)	$2.4500	-$50,842	(16,715)	$2.4500	-$442	-$41,394			
9	Total Usage	991,528			974,813						
10	Annualized Winter Usage(2)	947,702			932,196				$3.7400	$3,486,413	44.4%
11	**Total Zone 2 Residential**			**$2,890,426**			**$30,774**	**$2,880,248**		**$3,956,241**	37.4%

Note (1) Adjustment to normalize usage
Note (2) Annualized Winter Usage is from average winter usage multiplied by 12

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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

	Zone 5 - Valley WW	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue (1)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge	19,577	$14.30	$279,945	19,577	$14.30	$3,023	$282,968	$15.00	$293,649	3.8%
	Consumption Charges										
2	First 3400 Gallons	615,075	$2.8750	$1,768,341	602,466	$2.8750	$18,707	$1,750,797	$3.7400		
3	All Over 3400 Gallons										
4	Flat (Unmetered)	16,190	$106.00	$1,716,186	16,190	$106.00	$18,535	$1,734,721	$132.00	$2,137,137	23.2%
	Low Income:										
5	Low Income Discount Tier 1			-$2,672			-$29	-$2,701		-$3,794	
6	Low Income Discount Tier 2			-$1,399			-$15	-$1,414		-$1,320	
7	Low Income Discount Tier 3			-$5,677			-$61	-$5,738		-$6,787	
	Adjustment (2):										
8	Usage (100 Gallons)	(12,609)	$2.8750	-$36,251	(10,157)	$2.8750	-$315	-$29,516			
9	Total Usage	602,466			592,309						
10	Annualized Winter Usage(3)				570,595				$3.7400	$2,134,025	24.0%
11	**Total Zone 5 Residential**			**$3,718,473**			**$39,845**	**$3,729,117**		**$4,552,909**	22.1%

Note (1) The annualized revenue for 12 months ending June 2024 is using rates effective 11/19/2023.
Note (2) Adjustment to normalize usage
Note (3) Annualized Winter Usage is from average winter usage multiplied by 12

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

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	Zone 7 - York WW	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue (1)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge	141,871	$18.00	$2,553,686	141,871	$18.00	$27,580	$2,581,266	$15.00	$2,128,072	-17.6%
	Consumption Charges										
2	First 2000 Gallons	2,482,462	$0.0000	$0	2,431,572	$0.0000	$0	$0			
3	All Over 2000 Gallons	4,324,728	$2.7375	$11,838,943	4,236,071	$2.7375	$125,239	$11,721,484			
	Low Income:										
4	Low Income Discount Tier 1			-$12,660			-$137	-$12,797		-$13,470	
5	Low Income Discount Tier 2			-$8,704			-$94	-$8,798		-$9,261	
6	Low Income Discount Tier 3			-$6,939			-$75	-$7,014		-$7,383	
										-$6,733	
	Adjustment (2):										
7	First 2000 Gallons	(50,890)	$0.0000	$0	(40,992)	$0.0000	$0	$0			
8	All Over 2000 Gallons	(88,657)	$2.7375	-$242,699	(71,413)	$2.7375	-$2,111	-$197,604			
9	Total Usage	6,667,643			6,555,238						
	Annualized Winter Usage(3)										
10	First 2000 Gallons				2,390,580				$1.3180	$3,150,784	0.0%
11	All Over 2000 Gallons				4,131,918				$3.7400	$15,453,373	34.1%
					6,522,498						
12	**Total Zone 7 Residential**			**$14,121,627**			**$150,402**	**$14,076,537**		**$20,695,382**	47.0%

Note (1) The annualized revenue for 12 months ending June 2024 is using authorized rates from Docket No. R-2022-3031673.
Note (2) Adjustment to normalize usage
Note (3) Annualized Winter Usage is from average winter usage multiplied by 12

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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

	Zone 8 - Foster Township	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Flat Rate Per EDU	6,036	$106.00	$639,816	6,036	$106.00	$6,910	$646,726	$132.00	$796,752	23.2%
2											
3	*Low Income:*										
	Low Income Discount Tier 1			$0			$0	$0		$0	0.0%
4	Low Income Discount Tier 2			$0			$0	$0		$0	0.0%
	Low Income Discount Tier 3			-$382			-$4	-$386		-$360	-6.7%
	Low Income Discount Tier 4									$0	
5											
6	*Adjustment (1):*										
7	Flat Rate Per EDU										
8											
9	**Total Zone 8 Residential**			**$639,434**			**$6,906**	**$646,340**		**$796,392**	23.2%
10											

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Note (1) Foster Township was acquired October 2022. Adjustment (1) is to annualized the revenue for full 12 months of billing.
Note (2) The annualized revenue for 12 months ending June 2024 is applying the approved rates in Docket No. R-2022-3031673.

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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

	Zone 9 - Royersford WW	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
1	Service Charge	15,216	$48.00	$730,375	15,216	$48.00	$7,888	$738,263	$15.00	$228,242	-69.1%
	Consumption Charges										
2	First 3000 Gallons	439,975	$0.0000	$0	430,956	$0.0000	$0	$0			
3	All Over 3000 Gallons	58,741	$0.9400	$55,216	57,537	$0.9400	$584	$54,668			
4	Flat (Unmetered)	108	$50.00	$5,400	108	$50.00	$58	$5,458	$75.00	$8,100	48.4%
	Low Income:										
5	Low Income Discount Tier 1			-$1,982			-$21	-$2,003		-$2,480	
6	Low Income Discount Tier 2			-$341			-$4	-$345		-$425	
7	Low Income Discount Tier 3			-$2,788			-$30	-$2,818		-$3,492	
8	Low Income Discount Tier 4									-$4,656	
	Adjustment (1):										
9	First 3000 Gallons	(9,019)	$0.0000	$0	(7,265)	$0.0000	$0	$0			
10	All Over 3000 Gallons	(1,204)	$0.9400	-$1,132	(970)	$0.9400	-$10	-$922			
11	Total Usage	488,493			480,258						
	Annualized Winter Usage(2)										
12	First 3000 Gallons				397,422				$2.2000	$874,329	0.0%
13	All Over 3000 Gallons				74,705				$2.2000	$164,350	205.8%
					472,127						
14	**Total Zone 9 Residential**			**$784,748**			**$8,465**	**$792,301**		**$1,263,968**	59.5%

Note (1) Adjustment to normalize usage
Note (2) Annualized Winter Usage is from average winter usage multiplied by 12

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 1 RESIDENTIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$14.45	$15.00	$0.55	3.8%
2	100		$17.36	$18.74	$1.38	7.9%
3	500		$28.98	$33.70	$4.72	16.3%
4	1,000		$43.51	$52.40	$8.89	20.4%
5	2,000		$72.58	$89.80	$17.22	23.7%
6	3,000		$101.64	$127.20	$25.56	25.2%
7	**3,122**	*	**$105.18**	**$131.76**	**$26.58**	**25.3%**
8	3,500		$116.17	$145.90	$29.73	25.6%
9	4,000		$130.70	$164.60	$33.90	25.9%
10	5,000		$159.76	$202.00	$42.24	26.4%
11	6,000		$188.82	$239.40	$50.58	26.8%
12	7,000		$217.88	$276.80	$58.92	27.0%
13	8,000		$246.94	$314.20	$67.26	27.2%
14	9,000		$276.00	$351.60	$75.60	27.4%
15	10,000		$305.06	$389.00	$83.94	27.5%
16	11,000		$334.12	$426.40	$92.28	27.6%
17	12,000		$363.18	$463.80	$100.62	27.7%
18	13,000		$392.24	$501.20	$108.96	27.8%
19	14,000		$421.30	$538.60	$117.30	27.8%
20	15,000		$450.36	$576.00	$125.64	27.9%
21	16,000		$479.42	$613.40	$133.98	27.9%
22	17,000		$508.48	$650.80	$142.32	28.0%
23	18,000		$537.54	$688.20	$150.66	28.0%
24	19,000		$566.60	$725.60	$159.00	28.1%
25	20,000		$595.66	$763.00	$167.34	28.1%
26	21,000		$624.72	$800.40	$175.68	28.1%
27	22,000		$653.79	$837.80	$184.01	28.1%
28	23,000		$682.85	$875.20	$192.35	28.2%
29	24,000		$711.91	$912.60	$200.69	28.2%
30	25,000		$740.97	$950.00	$209.03	28.2%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 2 NEW CUMBERLAND RESIDENTIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$14.45	$15.00	$0.55	3.8%
2	100		$16.93	$18.74	$1.81	10.7%
3	500		$26.84	$33.70	$6.86	25.6%
4	1,000		$39.22	$52.40	$13.18	33.6%
5	2,000		$63.98	$89.80	$25.82	40.3%
6	3,000		$88.75	$127.20	$38.45	43.3%
7	**3,122**	*	**$91.77**	**$131.76**	**$39.99**	**43.6%**
8	3,500		$101.13	$145.90	$44.77	44.3%
9	4,000		$113.51	$164.60	$51.09	45.0%
10	5,000		$138.28	$202.00	$63.72	46.1%
11	6,000		$163.04	$239.40	$76.36	46.8%
12	7,000		$187.81	$276.80	$88.99	47.4%
13	8,000		$212.57	$314.20	$101.63	47.8%
14	9,000		$237.34	$351.60	$114.26	48.1%
15	10,000		$262.10	$389.00	$126.90	48.4%
16	11,000		$286.87	$426.40	$139.53	48.6%
17	12,000		$311.63	$463.80	$152.17	48.8%
18	13,000		$336.39	$501.20	$164.81	49.0%
19	14,000		$361.16	$538.60	$177.44	49.1%
20	15,000		$385.92	$576.00	$190.08	49.3%
21	16,000		$410.69	$613.40	$202.71	49.4%
22	17,000		$435.45	$650.80	$215.35	49.5%
23	18,000		$460.22	$688.20	$227.98	49.5%
24	19,000		$484.98	$725.60	$240.62	49.6%
25	20,000		$509.75	$763.00	$253.25	49.7%
26	21,000		$534.51	$800.40	$265.89	49.7%
27	22,000		$559.28	$837.80	$278.52	49.8%
28	23,000		$584.04	$875.20	$291.16	49.9%
29	24,000		$608.80	$912.60	$303.80	49.9%
30	25,000		$633.57	$950.00	$316.43	49.9%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 5 VALLEY WW RESIDENTIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
	(A)		(B)	(C)	(D)	(E)
1	0		$14.45	$15.00	$0.55	3.8%
2	100		$17.36	$18.74	$1.38	7.9%
3	500		$28.98	$33.70	$4.72	16.3%
4	1,000		$43.51	$52.40	$8.89	20.4%
5	2,000		$72.58	$89.80	$17.22	23.7%
6	3,000		$101.64	$127.20	$25.56	25.2%
7	**3,122**	*	**$105.18**	**$131.76**	**$26.58**	**25.3%**
8	3,500		$116.17	$145.90	$29.73	25.6%
9	4,000		$130.70	$164.60	$33.90	25.9%
10	5,000		$159.76	$202.00	$42.24	26.4%
11	6,000		$188.82	$239.40	$50.58	26.8%
12	7,000		$217.88	$276.80	$58.92	27.0%
13	8,000		$246.94	$314.20	$67.26	27.2%
14	9,000		$276.00	$351.60	$75.60	27.4%
15	10,000		$305.06	$389.00	$83.94	27.5%
16	11,000		$334.12	$426.40	$92.28	27.6%
17	12,000		$363.18	$463.80	$100.62	27.7%
18	13,000		$392.24	$501.20	$108.96	27.8%
19	14,000		$421.30	$538.60	$117.30	27.8%
20	15,000		$450.36	$576.00	$125.64	27.9%
21	16,000		$479.42	$613.40	$133.98	27.9%
22	17,000		$508.48	$650.80	$142.32	28.0%
23	18,000		$537.54	$688.20	$150.66	28.0%
24	19,000		$566.60	$725.60	$159.00	28.1%
25	20,000		$595.66	$763.00	$167.34	28.1%
26	21,000		$624.72	$800.40	$175.68	28.1%
27	22,000		$653.79	$837.80	$184.01	28.1%
28	23,000		$682.85	$875.20	$192.35	28.2%
29	24,000		$711.91	$912.60	$200.69	28.2%
30	25,000		$740.97	$950.00	$209.03	28.2%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 7 YORK TOWNSHIP RESIDENTIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER ROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$18.19	$15.00	-$3.19	-17.6%
2	100		$18.19	$16.32	-$1.88	-10.3%
3	500		$18.19	$21.59	$3.40	18.7%
4	1,000		$18.19	$28.18	$9.99	54.9%
5	2,000		$18.19	$41.36	$23.17	127.3%
6	3,000		$45.87	$54.54	$8.67	18.9%
7	**3,122**	*	**$49.24**	**$83.32**	**$34.08**	**69.2%**
8	3,500		$59.70	$97.46	$37.76	63.2%
9	4,000		$73.54	$116.16	$42.62	58.0%
10	5,000		$101.21	$153.56	$52.35	51.7%
11	6,000		$128.88	$190.96	$62.08	48.2%
12	7,000		$156.55	$228.36	$71.81	45.9%
13	8,000		$184.22	$265.76	$81.54	44.3%
14	9,000		$211.89	$303.16	$91.27	43.1%
15	10,000		$239.56	$340.56	$101.00	42.2%
16	11,000		$267.23	$377.96	$110.73	41.4%
17	12,000		$294.90	$415.36	$120.46	40.8%
18	13,000		$322.57	$452.76	$130.19	40.4%
19	14,000		$350.24	$490.16	$139.92	39.9%
20	15,000		$377.91	$527.56	$149.65	39.6%
21	16,000		$405.58	$564.96	$159.38	39.3%
22	17,000		$433.25	$602.36	$169.11	39.0%
23	18,000		$460.92	$639.76	$178.84	38.8%
24	19,000		$488.60	$677.16	$188.56	38.6%
25	20,000		$516.27	$714.56	$198.29	38.4%
26	21,000		$543.94	$751.96	$208.02	38.2%
27	22,000		$571.61	$789.36	$217.75	38.1%
28	23,000		$599.28	$826.76	$227.48	38.0%
29	24,000		$626.95	$864.16	$237.21	37.8%
30	25,000		$654.62	$901.56	$246.94	37.7%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 8 FOSTER TOWNSHIP RESIDENTIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$107.14	$132.00	$24.86	23.2%
2	100		$107.14	$132.00	$24.86	23.2%
3	500		$107.14	$132.00	$24.86	23.2%
4	1,000		$107.14	$132.00	$24.86	23.2%
5	2,000		$107.14	$132.00	$24.86	23.2%
6	3,000		$107.14	$132.00	$24.86	23.2%
7	**3,122**	*	**$107.14**	**$132.00**	**$24.86**	**23.2%**
8	3,500		$107.14	$132.00	$24.86	23.2%
9	4,000		$107.14	$132.00	$24.86	23.2%
10	5,000		$107.14	$132.00	$24.86	23.2%
11	6,000		$107.14	$132.00	$24.86	23.2%
12	7,000		$107.14	$132.00	$24.86	23.2%
13	8,000		$107.14	$132.00	$24.86	23.2%
14	9,000		$107.14	$132.00	$24.86	23.2%
15	10,000		$107.14	$132.00	$24.86	23.2%
16	11,000		$107.14	$132.00	$24.86	23.2%
17	12,000		$107.14	$132.00	$24.86	23.2%
18	13,000		$107.14	$132.00	$24.86	23.2%
19	14,000		$107.14	$132.00	$24.86	23.2%
20	15,000		$107.14	$132.00	$24.86	23.2%
21	16,000		$107.14	$132.00	$24.86	23.2%
22	17,000		$107.14	$132.00	$24.86	23.2%
23	18,000		$107.14	$132.00	$24.86	23.2%
24	19,000		$107.14	$132.00	$24.86	23.2%
25	20,000		$107.14	$132.00	$24.86	23.2%
26	21,000		$107.14	$132.00	$24.86	23.2%
27	22,000		$107.14	$132.00	$24.86	23.2%
28	23,000		$107.14	$132.00	$24.86	23.2%
29	24,000		$107.14	$132.00	$24.86	23.2%
30	25,000		$107.14	$132.00	$24.86	23.2%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 9 ROYERSFORD TOWNSHIP RESIDENTIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$48.52	$15.00	-$33.52	-69.1%
2	100		$48.52	$17.20	-$31.32	-64.6%
3	500		$48.52	$26.00	-$22.52	-46.4%
4	1,000		$48.52	$37.00	-$11.52	-23.7%
5	2,000		$48.52	$59.00	$10.48	21.6%
6	3,000		$48.52	$81.00	$32.48	66.9%
7	**3,122**	*	**$49.68**	**$83.68**	**$34.00**	**68.4%**
8	3,500		$53.27	$92.00	$38.73	72.7%
9	4,000		$58.02	$103.00	$44.98	77.5%
10	5,000		$67.52	$125.00	$57.48	85.1%
11	6,000		$77.02	$147.00	$69.98	90.8%
12	7,000		$86.53	$169.00	$82.47	95.3%
13	8,000		$96.03	$191.00	$94.97	98.9%
14	9,000		$105.53	$213.00	$107.47	101.8%
15	10,000		$115.03	$235.00	$119.97	104.3%
16	11,000		$124.53	$257.00	$132.47	106.4%
17	12,000		$134.03	$279.00	$144.97	108.2%
18	13,000		$143.54	$301.00	$157.46	109.7%
19	14,000		$153.04	$323.00	$169.96	111.1%
20	15,000		$162.54	$345.00	$182.46	112.3%
21	16,000		$172.04	$367.00	$194.96	113.3%
22	17,000		$181.54	$389.00	$207.46	114.3%
23	18,000		$191.04	$411.00	$219.96	115.1%
24	19,000		$200.54	$433.00	$232.46	115.9%
25	20,000		$210.05	$455.00	$244.95	116.6%
26	21,000		$219.55	$477.00	$257.45	117.3%
27	22,000		$229.05	$499.00	$269.95	117.9%
28	23,000		$238.55	$521.00	$282.45	118.4%
29	24,000		$248.05	$543.00	$294.95	118.9%
30	25,000		$257.55	$565.00	$307.45	119.4%

* Ave * Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill a Bill at proposed rate was calculated using DSIC rate @ 0.00%

I&E Statement No. 5
Witness: Joseph Kubas

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

AQUA PENNSYLVANIA, INC

Docket No. R-2021-3027385 (Water)

Docket No. R -2021-3027386 (Wastewater)

Direct Testimony

of

Joseph Kubas

Bureau of Investigation and Enforcement

Concerning:
Overall Act 11 Revenue, Wastewater
Present Rate Revenue, Late Payment Revenue
Proposed Revenue, Tariff Zones
Rate Structure, Revenue Shortfall
Cost of Service Studies Scaleback of Rates

month to $65.82 per month, which is an increase of $20.31 per month or 44.6% (I&E Ex. No. 5, Sch. 5, p. 2, line 5).

Q. HOW DID YOU DETERMINE THESE RATES?

A. In order to reduce the $13.452 million subsidy described above, the Zone 6 rates should be increased more than proposed by the Company. The rates I recommend were established so that the average Zone 6 customer receives an increase of slightly below 45% in this case. The 45% is reasonable given the low present bill for an average customer, the revenue it will generate, and the percentage increase relative to other proposed rates and average bills in this proceeding. I recommended the same $56.20 per month charge for all other Zone 6 customer charges. The flat rate of $67.00 per month that I recommended is approximately equal to the $66.60 per month bill applicable to a Zone 6 customer that uses 4,000 gallons per month (I&E Ex. No. 5, Sch. 5, p. 2, line 6).

ZONES 7-11 SUMMARY

Q. DO ZONES 7-11 INCLUDE THE SYSTEMS RECENTLY ACQUIRED UNDER ACT 129?

A. Yes. The Limerick system became Zone 7, the East Bradford system became Zone 8, the Cheltenham system became Zone 9, the East Norriton System became Zone 10, and the New Garden System became Zone 11.

Q. WHAT DOES ACT 129 ALLOW?

A. Act 129, at 66 Pa. C.S §1329, enables the investor-owned utility to establish the ratemaking rate base of the acquired property in the same proceeding that it seeks to acquire the property based upon a fair market valuation of the system.

Q. DID THE COMPANY PROVIDE COST OF SERVICE STUDIES (COSS) TO DETERMINE THE COST OF PROVIDING WASTEWATER SERVICE TO EACH SYSTEM?

A. Yes. The Company provided separate COSS' for Zones 7-11 (Aqua Volume 5, Ex. 5-B, Part I).

Q. DO PROPOSED REVENUE FROM ZONES 7-11 RECOVER THE COST OF PROVIDING SERVICE TO ZONES 7-11?

A. No. The revenue shortfall under Company proposed rates for Zones 7-11 is $7,387,428 ($2,977,700 + $457,861 + $515,804 + $1,749,281 + $1,686,782) (Aqua Volume 2, Sch. Act 11). The Company is requesting that this revenue shortfall be subsidized by Aqua water customers.

Q. IS THIS LARGE SUBSIDY REASONABLE?

A. No. Since most Aqua water customers are not wastewater customers, it is unreasonable to require water customers to subsidize wastewater customers. I believe each type of utility service should recover as much of the cost of providing

that service as possible. Therefore, as described below, I recommend adjustments to rates in Zone 7 - Zone 11 to reduce the subsidy, simplify the rate structure, and limit the increase to Zone 7 flat rate customers and certain Zone 11 usage blocks. Overall, my recommendations reduce the $7,387,428 by $2,539,680 to $4,847,748 (I&E Ex No. 5, Sch. 1, p. 1, line 16).

Q. SHOULD THE COMMISSION BE CONCERNED IF THE RATES AND AVERAGE BILL FOR THESE CUSTOMERS INCREASE GREATER THAN THE SYSTEM AVERAGE INCREASE?

A. No. In each acquisition, the municipalities benefited by selling the system and therefore the customers benefited by the sale. As stated in the various acquisitions, examples of these benefits to the municipality and/or customers include gaining the expertise of wastewater professionals, economies of scale, environmental impacts, spreading the cost of improvements over a larger customer base, access to low-income programs, paying off municipal debt, lowering taxes, exiting the ever-increasing difficult utility business, and improving public facilities such as parks, and libraries.

Q. SHOULD THE BENEFITS TO THE MUNICIPALITIES BALANCE THE HIGHER PERCENTAGE INCREASES TO SOME OF THESE SYSTEMS?

A. Yes. These benefits balance the larger than average increase customers will experience to recover the cost to Aqua and its other customers of acquiring the

systems. Acquiring these systems should not harm existing customers; therefore, the larger than average increase in rates will limit the harm to other Aqua customers by reducing the subsidy paid by other Aqua customers.

Q. WHAT OVERALL MISCONCEPTION DID YOU OBSERVE IN MOST OF THESE ACQUISITIONS?

A. In most cases, the municipal governments believed that the cost to acquire, operate, and upgrade their system would be borne by other Company customers through the large customer base/economies of scale arguments presented by the Company, thus keeping their residents' rates low. There are two flaws in this belief. First, they fail to consider that Aqua needs to recover the excess costs of operating the acquired system as is evidenced in the separate COSS' provided for the acquired systems. Second, the municipalities fail to recognize that the Company has acquired and will continue to acquire other systems and that any revenue shortfall for operating cost coverage will be spread across the Company's existing customers, which their residents have now become, so regular rate increases will be a certainty for those former municipal customers. Those acquired customers are now part of a large investor-owned utility that must ensure return for shareholders and coverage in rates for tax liabilities that did not apply to the municipality, and it would be untenable for existing Aqua customers to endlessly bear the burden of the revenue shortfalls that are typical of these acquired systems.

Q. WHY DIDN'T YOU ELIMINATE THE SUBSIDY NEEDED TO OPERATE ZONES 7 THROUGH 11.

A. Eliminating the entire subsidy would have resulted in very large increases to the monthly customer charges, usage rates, unmetered rates, and average bills for both residential and Commercial customers. Instead, I limited the increase in the monthly customer charges and usage rates that will limit the increase to the average Residential usage customer to generally less than 100%.

ZONE 7 – LIMERICK

Q. WHEN DID AQUA ACQUIRE THE LIMERICK SYSTEM?

A. Aqua acquired the Limerick system on July 26, 2018, at Docket A-2017-2605434.

Q. WHAT PRESENT RATES DO CUSTOMERS IN ZONE 7 CURRENTLY PAY?

A. The present Zone 7 rates are shown on I&E Ex. No. 5, Sch. 6, p. 1, column B, lines 1-7 (Aqua Volume 5, Ex. 5-B, Part II, Sch. LMK-3, p. 1, column 4).

Q. IS THE COMPANY PROPOSING TO INCREASE THE PRESENT CUSTOMER CHARGE, UNMETERED RATE, AND USAGE RATES IN ZONE 7?

A. Yes. The proposed Zone 7 rates are shown on I&E Ex. No. 5, Sch. 6, p. 1, column D, lines 1-7 (Aqua Volume 5, Ex. 5-B, Part II, Sch. LMK-3, p. 1, column 6).

Q. WHAT INCREASE WILL THE AVERAGE RESIDENTIAL CUSTOMER IN ZONE 7 EXPERIENCE UNDER YOUR PROPOSAL?

A. The bill for an average Residential customer in Zone 7 will increase from $37.69 per month to $71.32 per month, which is an increase of $33.63 per month or 89.2% (I&E Ex. No. 5, Sch. 6, p. 2, line 5).

Q. HOW DID YOU DETERMINE THESE RATES?

A. In order to reduce the $13.452 million subsidy described above, the Zone 7 rates should be increased. The rates I recommend were established so that the average Zone 7 customer receives an increase of slightly below 90% in this case. The 90% is reasonable given the revenue it will generate, the subsidy to Zone 7, the percentage increase relative to other proposed rates, the elimination of the current allowance, the average bills in this proceeding, and the benefits to Limerick customers from the acquisition by Aqua. I applied the same percentage increase to the other Zone 7 customer charges. The present unmetered rate is $28.33 per month and establishing an unmetered rate of $60.00 per month would be an increase of $31.67 per month or 111.8% ($31.67 / $28.33) over the present unmetered rate of $28.33 per month (I&E Ex. No. 5, Sch. 6, p. 1, line 6).

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Commercial Class	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Zone 1 - Most WW Areas	4,319,952	$10,115,507	4,298,941	$108,811	$10,183,912	$14,693,592	44.3%
2	Zone 2 - New Cumberland	208,933	$513,782	206,600	$5,501	$514,850	$773,274	50.2%
3	Zone 5 - Valley WW	35,803	$374,326	35,650	$4,040	$378,045	$531,983	40.7%
4	Zone 7 - York WW	3,125,504	$5,218,857	3,090,610	$55,789	$5,221,440	$8,738,293	67.4%
5	Zone 8 - Foster Township		$44,520		$481	$45,001	$63,000	40.0%
6	Zone 9 -Royersford WW	372,640	$454,604	368,480	$4,877	$456,488	$792,277	73.6%
7	Zone XX - Farmington WW		$0		$0	$0	$0	0.0%
8	Zone XX - Sadsbury WW		$0		$0	$0	$0	0.0%
9	**Total Commercial**	8,062,832	$16,721,596	8,000,281	$179,499	$16,799,736	$25,592,419	52.3%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Zone 1 - Most WW Areas	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge Per EDU	23,455	$35.00	$820,930	23,509	$35.00	$8,886	$831,706	$36.70	$862,785	3.7%
	Consumption Charges										
2	Usage per 100 Gallons:	4,358,444	$2.1030	$9,165,809	4,303,044	$2.1030	$97,732	$9,147,035	$3.1500	$13,554,590	48.2%
3	Flat Rate (Unmetered)	1,820	$106.00	$192,944	1,820	$106.00	$2,084	$195,028	$150.00	$273,034	40.0%
	Upper Pottsgrove										
4	Service Charge Per EDU	550	$63.60	$34,992	550	$63.60	$378	$35,370	$36.70	$20,192	-42.9%
	Consumption Charges										
5	Usage per 100 Gallons:	15,818	$0.5653	$8,942	15,818	$0.5653	$97	$9,039	$2.3500	$37,172	311.2%
	Cleveland-Cliffs										
6	Service Charge	12	$415.00	$4,980	12	$415.00	$54	$5,034	$456.50	$5,478	8.8%
	Consumption Charges										
7	Usage per 100 Gallons:	1,090	$1.4000	$1,526	1,090	$1.4000	$16	$1,542	$2.3500	$2,562	66.1%
	Adjustment (1):										
8	Service Charge Per EDU	54	$35.00	$1,890	108	$35.00	$41	$3,821	$36.70	$3,964	3.7%
	Consumption Charges										
9	Usage (100 Gallons)	13,534	$2.1030	$28,462	27,068	$2.1030	$615	$57,539	$3.1500	$85,264	48.2%
	Adjustment (2):										
10	Service Charge (Unmetered)										
11	Service Charge (Metered)										
	Consumption Charges										
12	Usage per 100 Gallons:										
	Adjustment (3):										
13	Usage (100 Gallons)	(68,934)	$2.1030	-$144,968	(48,079)	$2.1030	-$1,092	-$102,202	$3.1500	-$151,449	48.2%
14	**Total Zone 1 Commercial**			**$10,115,507**			**$108,811**	**$10,183,912**		**$14,693,592**	44.3%

Note (1) Adjustment to account revenues brought about by customer growth.
Note (2) Adjustment to annualized Upper Pottsgrove which started billing August 2022
Note (3) Adjustment to normalize usage

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WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Zone 2 - New Cumberland	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge Per EDU	3,337	$35.00	$116,809	3,337	$35.00	$1,262	$118,071	$36.70	$122,483	3.7%
	Consumption Charges										
2	Usage per 100 Gallons:	212,277	$1.9000	$403,327	208,933	$1.9000	$4,287	$401,260	$3.1500	$658,140	64.0%
	Adjustment (1):										
3	Usage (100 Gallons)	(3,344)	$1.9000	-$6,354	(2,333)	$1.9000	-$48	-$4,481	$3.1500	-$7,349	64.0%
4	**Total Zone 2 Commercial**			**$513,782**			**$5,501**	**$514,850**		**$773,274**	50.2%

Note (1) Adjustment to normalize usage

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WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Zone 5 - Valley WW	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(1)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge	131	$35.00	$4,572	131	$35.00	$49	$4,621	$36.70	$4,794	3.7%
	Consumption Charges										
2	First 3400 Gallons	13,914	$2.1030	$29,261	13,695	$2.1030	$311	$29,112	$3.1500	$43,139	48.2%
3	All Over 3400 Gallons										
4	Flat Rate (Unmetered)	3,149	$106.00	$333,777	3,149	$106.00	$3,605	$337,382	$150.00	$472,325	40.0%
	Westwood Fire Company										
5	Service Charge	12	$0.00	$0	12	$0.00	$0	$0	$36.70	$440	0.0%
	Consumption Charges										
6	First 3400 Gallons	890	$2.1030	$1,872	890	$2.1030	$20	$1,892	$3.1500	$2,804	48.2%
7	All Over 3400 Gallons										
	Rainbow Washhouse										
8	Service Charge	12	$75.00	$900	12	$75.00	$10	$910	$75.00	$900	-1.1%
	Consumption Charges										
9	First 2000 Gallons	240	$0.0000	$0	240	$0.0000	$0	$0	$0.3800	$91	0.0%
10	All Over 2000 Gallons	20,978	$0.2100	$4,405	20,978	$0.2100	$48	$4,453	$0.3800	$7,972	79.0%
	Adjustment (2):										
11	Usage (100 Gallons)	(219)	$2.1030	-$461	(153)	$2.1030	-$3	-$325	$3.1500	-$482	48.3%
12	**Total Zone 5 Commercial**			**$374,326**			**$4,040**	**$378,045**		**$531,983**	40.7%

Note (1) The annualized revenue for 12 months ending June 2024 is using rates effective 11/19/2023.
Note (2) Adjustment to normalize usage

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PENNSYLVANIA-AMERICAN WATER COMPANY
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APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Zone 7 - York WW	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge	15,107	$30.00	$453,217	15,107	$30.00	$4,895	$458,112	$36.70	$554,436	21.0%
	Consumption Charges										
2	First 2000 Gallons	219,536	$0.0000	$0	216,077	$0.0000	$0	$0	$0.6010	$129,863	0.0%
3	All Over 2000 Gallons	2,955,998	$1.6380	$4,841,925	2,909,426	$1.6380	$51,469	$4,817,109	$2.8000	$8,146,394	69.1%
	Adjustment (2):										
4	First 2000 Gallons	(3,459)	$0.0000	$0	(2,412)	$0.0000	$0	$0	$0.6010	-$1,450	0.0%
5	All Over 2000 Gallons	(46,572)	$1.6380	-$76,285	(32,482)	$1.6380	-$575	-$53,781	$2.8000	-$90,950	69.1%
6	**Total Zone 7 Commercial**			**$5,218,857**			**$55,789**	**$5,221,440**		**$8,738,293**	67.4%

Note (1) The annualized revenue for 12 months ending June 2024 is using authorized rates from Docket No. R-2022-3031673.
Note (2) Adjustment to normalize usage

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WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Zone 8 - Foster Township	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Flat Rate Per EDU	420	$106.00	$44,520	420	$106.00	$481	$45,001	$150.00	$63,000	40.0%
	Adjustment (1):										
2	Flat Rate Per EDU										
3	**Total Zone 8 Commercial**			**$44,520**			**$481**	**$45,001**		**$63,000**	40.0%

Note (1) Foster Township was acquired October 2022. Adjustment (1) is to annualized the revenue for full 12 months of billing.
Note (2) The annualized revenue for 12 months ending June 2024 is applying the approved rates in Docket No. R-2022-3031673.

	Zone 9 - Royersford WW	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
4	Service Charge	2,362	$48.00	$113,374	2,362	$48.00	$1,224	$114,598	$36.70	$86,684	-24.4%
	Consumption Charges										
5	First 3000 Gallons	88,863	$0.0000	$0	87,463	$0.0000	$0	$0	$1.5800	$138,192	0.0%
6	All Over 3000 Gallons	289,741	$0.9400	$272,357	285,176	$0.9400	$2,895	$270,961	$1.5800	$450,578	66.3%
7	Flat Rate (Unmetered)	1,092	$67.00	$73,164	1,092	$67.00	$790	$73,954	$113.00	$123,396	66.9%
	Adjustment (1):										
8	First 3000 Gallons	(1,400)	$0.0000	$0	(976)	$0.0000	$0	$0	$1.5800	-$1,542	0.0%
9	All Over 3000 Gallons	(4,565)	$0.9400	-$4,291	(3,184)	$0.9400	-$32	-$3,025	$1.5800	-$5,031	66.3%
10	**Total Zone 9 Commercial**			**$454,604**			**$4,877**	**$456,488**		**$792,277**	73.6%

Note (1) Adjustment to normalize usage

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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

COMPANY PROPOSAL - SPECIAL RATES

	(A)	6/30/2024 Billing Determinants (B)	Rate (C)	6/30/2024 Annualized Revenue (D)	6/30/2025 Billing Determinants (E)	Present Rate (F)	Proforma DSIC Revenues (G)	6/30/2025 Proforma Revenues (H)	Proposed Rate (I)	6/30/2025 Proforma @ Proposed Rate (J)	% Percent Change (K)
	Upper Pottsgrove										
1	Service Charge Per EDU	550	$63.60	$34,992	550	$63.60	$378	$35,370	$50.00	$27,510	-22.2%
	Consumption Charges										
2	Usage per 100 Gallons:	15,818	$0.5653	$8,942	15,818	$0.5653	$97	$9,039	$1.0000	$15,818	75.0%
3				**$43,934**			**$475**	**$44,409**		**$43,328**	**-2.4%**
	Cleveland-Cliffs										
4	Service Charge	12	$415.00	$4,980	12	$415.00	$54	$5,034	$415.00	$4,980	-1.1%
	Consumption Charges										
5	Usage per 100 Gallons:	1,090	$1.4000	$1,526	1,090	$1.4000	$16	$1,542	$1.4800	$1,613	4.6%
6				**$6,506**			**$70**	**$6,576**		**$6,593**	**0.3%**
	Rainbow Washhouse										
8	Service Charge	12	$75.00	$900	12	$75.00	$10	$910	$79.50	$954	4.8%
	Consumption Charges										
9	First 2000 Gallons	240	$0.0000	$0	240	$0.0000	$0	$0	$0.2226	$53	0.0%
10	All Over 2000 Gallons	20,978	$0.2100	$4,405	20,978	$0.2100	$48	$4,453	$0.2226	$4,670	4.9%
11				**$5,305**			**$58**	**$5,363**		**$5,677**	**5.9%**

BUREAU OF INVESTIGATION AND ENFORCEMENT - SPECIAL RATES

	(A)	6/30/2024 Billing Determinants (B)	Rate (C)	6/30/2024 Annualized Revenue (D)	6/30/2025 Billing Determinants (E)	Present Rate (F)	Proforma DSIC Revenues (G)	6/30/2025 Proforma Revenues (H)	Proposed Rate (I)	6/30/2025 Proforma @ Proposed Rate (J)	% Percent Change (K)
	Upper Pottsgrove										
12	Service Charge Per EDU	550	$63.60	$34,992	550	$63.60	$378	$35,370	$36.70	$20,192	-42.9%
	Consumption Charges										
13	.	15,818	$0.5653	$8,942	15,818	$0.5653	$97	$9,039	$2.3500	$37,172	311.2%
14				**$43,934**			**$475**	**$44,409**		**$57,364**	**29.2%**
	Cleveland-Cliffs										
15	Service Charge	12	$415.00	$4,980	12	$415.00	$54	$5,034	$456.50	$5,478	8.8%
	Consumption Charges										
16	Usage per 100 Gallons:	1,090	$1.4000	$1,526	1,090	$1.4000	$16	$1,542	$2.3500	$2,562	66.1%
17				**$6,506**			**$70**	**$6,576**		**$8,040**	**22.3%**
	Rainbow Washhouse										
18	Service Charge	12	$75.00	$900	12	$75.00	$10	$910	$75.00	$900	-1.1%
	Consumption Charges										
19	First 2000 Gallons	240	$0.0000	$0	240	$0.0000	$0	$0	$0.3800	$91	0.0%
20	All Over 2000 Gallons	20,978	$0.2100	$4,405	20,978	$0.2100	$48	$4,453	$0.3800	$7,972	79.0%
				$5,305			**$58**	**$5,363**		**$8,963**	**67.1%**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 1 COMMERCIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$35.38	$36.70	$1.32	3.7%
2	100		$37.50	$39.85	$2.35	6.3%
3	500		$46.01	$52.45	$6.44	14.0%
4	1,000		$56.64	$68.20	$11.56	20.4%
5	2,000		$77.89	$99.70	$21.81	28.0%
6	3,000		$99.15	$131.20	$32.05	32.3%
7	3,500		$109.78	$146.95	$37.17	33.9%
8	4,000		$120.41	$162.70	$42.29	35.1%
9	5,000		$141.66	$194.20	$52.54	37.1%
10	6,000		$162.92	$225.70	$62.78	38.5%
11	7,000		$184.18	$257.20	$73.02	39.6%
12	8,000		$205.43	$288.70	$83.27	40.5%
13	9,000		$226.69	$320.20	$93.51	41.2%
14	10,000		$247.95	$351.70	$103.75	41.8%
15	16,000		$375.49	$540.70	$165.21	44.0%
16	20,000		$460.52	$666.70	$206.18	44.8%
17	21,000		$481.78	$698.20	$216.42	44.9%
18	22,000		$503.03	$729.70	$226.67	45.1%
19	**22,094**	*	**$505.03**	**$732.66**	**$227.63**	**45.1%**
20	23,000		$524.29	$761.20	$236.91	45.2%
21	24,000		$545.55	$792.70	$247.15	45.3%
22	25,000		$566.81	$824.20	$257.39	45.4%
23	26,000		$588.06	$855.70	$267.64	45.5%
24	27,000		$609.32	$887.20	$277.88	45.6%
25	28,000		$630.58	$918.70	$288.12	45.7%
26	29,000		$651.83	$950.20	$298.37	45.8%
27	30,000		$673.09	$981.70	$308.61	45.8%
28	35,000		$779.38	$1,139.20	$359.82	46.2%
29	45,000		$991.95	$1,454.20	$462.25	46.6%
30	55,000		$1,204.52	$1,769.20	$564.68	46.9%
31	65,000		$1,417.09	$2,084.20	$667.11	47.1%
32	75,000		$1,629.66	$2,399.20	$769.54	47.2%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 2 NEW CUMBERLAND COMMERCIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$35.38	$36.70	$1.32	3.7%
2	100		$37.30	$39.85	$2.55	6.8%
3	500		$44.98	$52.45	$7.47	16.6%
4	1,000		$54.58	$68.20	$13.62	24.9%
5	2,000		$73.79	$99.70	$25.91	35.1%
6	3,000		$92.99	$131.20	$38.21	41.1%
7	3,500		$102.60	$146.95	$44.35	43.2%
8	4,000		$112.20	$162.70	$50.50	45.0%
9	5,000		$131.40	$194.20	$62.80	47.8%
10	6,000		$150.61	$225.70	$75.09	49.9%
11	7,000		$169.81	$257.20	$87.39	51.5%
12	8,000		$189.02	$288.70	$99.68	52.7%
13	9,000		$208.22	$320.20	$111.98	53.8%
14	10,000		$227.43	$351.70	$124.27	54.6%
15	16,000		$342.66	$540.70	$198.04	57.8%
16	20,000		$419.48	$666.70	$247.22	58.9%
17	21,000		$438.69	$698.20	$259.51	59.2%
18	22,000		$457.89	$729.70	$271.81	59.4%
19	**22,094**	*	**$459.70**	**$732.66**	**$272.96**	**59.4%**
20	23,000		$477.10	$761.20	$284.10	59.5%
21	24,000		$496.30	$792.70	$296.40	59.7%
22	25,000		$515.51	$824.20	$308.69	59.9%
23	26,000		$534.71	$855.70	$320.99	60.0%
24	27,000		$553.92	$887.20	$333.28	60.2%
25	28,000		$573.12	$918.70	$345.58	60.3%
26	29,000		$592.33	$950.20	$357.87	60.4%
27	30,000		$611.53	$981.70	$370.17	60.5%
28	35,000		$707.56	$1,139.20	$431.64	61.0%
29	45,000		$899.61	$1,454.20	$554.59	61.6%
30	55,000		$1,091.66	$1,769.20	$677.54	62.1%
31	65,000		$1,283.72	$2,084.20	$800.48	62.4%
32	75,000		$1,475.77	$2,399.20	$923.43	62.6%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
RATE ZONE 5 VALLEY WW RESIDENTIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$35.38	$36.70	$1.32	3.7%
2	100		$37.50	$39.85	$2.35	6.3%
3	500		$46.01	$52.45	$6.44	14.0%
4	1,000		$56.64	$68.20	$11.56	20.4%
5	2,000		$77.89	$99.70	$21.81	28.0%
6	3,000		$99.15	$131.20	$32.05	32.3%
7	3,500		$109.78	$146.95	$37.17	33.9%
8	4,000		$120.41	$162.70	$42.29	35.1%
9	5,000		$141.66	$194.20	$52.54	37.1%
10	6,000		$162.92	$225.70	$62.78	38.5%
11	7,000		$184.18	$257.20	$73.02	39.6%
12	8,000		$205.43	$288.70	$83.27	40.5%
13	9,000		$226.69	$320.20	$93.51	41.2%
14	10,000		$247.95	$351.70	$103.75	41.8%
15	16,000		$375.49	$540.70	$165.21	44.0%
16	20,000		$460.52	$666.70	$206.18	44.8%
17	21,000		$481.78	$698.20	$216.42	44.9%
18	22,000		$503.03	$729.70	$226.67	45.1%
19	**22,094**	*	**$505.03**	**$732.66**	**$227.63**	**45.1%**
20	23,000		$524.29	$761.20	$236.91	45.2%
21	24,000		$545.55	$792.70	$247.15	45.3%
22	25,000		$566.81	$824.20	$257.39	45.4%
23	26,000		$588.06	$855.70	$267.64	45.5%
24	27,000		$609.32	$887.20	$277.88	45.6%
25	28,000		$630.58	$918.70	$288.12	45.7%
26	29,000		$651.83	$950.20	$298.37	45.8%
27	30,000		$673.09	$981.70	$308.61	45.8%
28	35,000		$779.38	$1,139.20	$359.82	46.2%
29	45,000		$991.95	$1,454.20	$462.25	46.6%
30	55,000		$1,204.52	$1,769.20	$564.68	46.9%
31	65,000		$1,417.09	$2,084.20	$667.11	47.1%
32	75,000		$1,629.66	$2,399.20	$769.54	47.2%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 7 YORK TOWNSHIP COMMERCIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$30.32	$36.70	$6.38	21.0%
2	100		$30.32	$37.30	$6.98	23.0%
3	500		$30.32	$39.71	$9.38	30.9%
4	1,000		$30.32	$42.71	$12.39	40.8%
5	2,000		$30.32	$48.72	$18.40	60.7%
6	3,000		$46.88	$76.72	$29.84	63.6%
7	3,500		$55.16	$90.72	$35.56	64.5%
8	4,000		$63.44	$104.72	$41.28	65.1%
9	5,000		$79.99	$132.72	$52.73	65.9%
10	6,000		$96.55	$160.72	$64.17	66.5%
11	7,000		$113.11	$188.72	$75.61	66.8%
12	8,000		$129.67	$216.72	$87.05	67.1%
13	9,000		$146.22	$244.72	$98.50	67.4%
14	10,000		$162.78	$272.72	$109.94	67.5%
15	16,000		$262.12	$440.72	$178.60	68.1%
16	20,000		$328.35	$552.72	$224.37	68.3%
17	21,000		$344.91	$580.72	$235.81	68.4%
18	22,000		$361.46	$608.72	$247.26	68.4%
19	**22,094**	*	**$363.02**	**$611.35**	**$248.33**	**68.4%**
20	23,000		$378.02	$636.72	$258.70	68.4%
21	24,000		$394.58	$664.72	$270.14	68.5%
22	25,000		$411.13	$692.72	$281.59	68.5%
23	26,000		$427.69	$720.72	$293.03	68.5%
24	27,000		$444.25	$748.72	$304.47	68.5%
25	28,000		$460.80	$776.72	$315.92	68.6%
26	29,000		$477.36	$804.72	$327.36	68.6%
27	30,000		$493.92	$832.72	$338.80	68.6%
28	35,000		$576.70	$972.72	$396.02	68.7%
29	45,000		$742.27	$1,252.72	$510.45	68.8%
30	55,000		$907.84	$1,532.72	$624.88	68.8%
31	65,000		$1,073.41	$1,812.72	$739.31	68.9%
32	75,000		$1,238.98	$2,092.72	$853.74	68.9%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 8 FOSTER TOWNSHIP COMMERCIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$107.14	$150.00	$42.86	40.0%
2	100		$107.14	$150.00	$42.86	40.0%
3	500		$107.14	$150.00	$42.86	40.0%
4	1,000		$107.14	$150.00	$42.86	40.0%
5	2,000		$107.14	$150.00	$42.86	40.0%
6	3,000		$107.14	$150.00	$42.86	40.0%
7	3,500		$107.14	$150.00	$42.86	40.0%
8	4,000		$107.14	$150.00	$42.86	40.0%
9	5,000		$107.14	$150.00	$42.86	40.0%
10	6,000		$107.14	$150.00	$42.86	40.0%
11	7,000		$107.14	$150.00	$42.86	40.0%
12	8,000		$107.14	$150.00	$42.86	40.0%
13	9,000		$107.14	$150.00	$42.86	40.0%
14	10,000		$107.14	$150.00	$42.86	40.0%
15	16,000		$107.14	$150.00	$42.86	40.0%
16	20,000		$107.14	$150.00	$42.86	40.0%
17	21,000		$107.14	$150.00	$42.86	40.0%
18	22,000		$107.14	$150.00	$42.86	40.0%
19	**22,094**	*	**$107.14**	**$150.00**	**$42.86**	**40.0%**
20	23,000		$107.14	$150.00	$42.86	40.0%
21	24,000		$107.14	$150.00	$42.86	40.0%
22	25,000		$107.14	$150.00	$42.86	40.0%
23	26,000		$107.14	$150.00	$42.86	40.0%
24	27,000		$107.14	$150.00	$42.86	40.0%
25	28,000		$107.14	$150.00	$42.86	40.0%
26	29,000		$107.14	$150.00	$42.86	40.0%
27	30,000		$107.14	$150.00	$42.86	40.0%
28	35,000		$107.14	$150.00	$42.86	40.0%
29	45,000		$107.14	$150.00	$42.86	40.0%
30	55,000		$107.14	$150.00	$42.86	40.0%
31	65,000		$107.14	$150.00	$42.86	40.0%
32	75,000		$107.14	$150.00	$42.86	40.0%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 9 ROYERSFORD TOWNSHIP COMMERCIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$48.52	$36.70	-$11.82	-24.4%
2	100		$48.52	$38.28	-$10.24	-21.1%
3	500		$48.52	$44.60	-$3.92	-8.1%
4	1,000		$48.52	$52.50	$3.98	8.2%
5	2,000		$48.52	$68.30	$19.78	40.8%
6	3,000		$48.52	$84.10	$35.58	73.3%
7	3,500		$53.27	$92.00	$38.73	72.7%
8	4,000		$58.02	$99.90	$41.88	72.2%
9	5,000		$67.52	$115.70	$48.18	71.4%
10	6,000		$77.02	$131.50	$54.48	70.7%
11	7,000		$86.52	$147.30	$60.78	70.2%
12	8,000		$96.03	$163.10	$67.07	69.8%
13	9,000		$105.53	$178.90	$73.37	69.5%
14	10,000		$115.03	$194.70	$79.67	69.3%
15	16,000		$172.04	$289.50	$117.46	68.3%
16	20,000		$210.04	$352.70	$142.66	67.9%
17	21,000		$219.55	$368.50	$148.95	67.8%
18	22,000		$229.05	$384.30	$155.25	67.8%
19	**22,094**	*	**$229.94**	**$385.79**	**$155.84**	**67.8%**
20	23,000		$238.55	$400.10	$161.55	67.7%
21	24,000		$248.05	$415.90	$167.85	67.7%
22	25,000		$257.55	$431.70	$174.15	67.6%
23	26,000		$267.05	$447.50	$180.45	67.6%
24	27,000		$276.55	$463.30	$186.75	67.5%
25	28,000		$286.06	$479.10	$193.04	67.5%
26	29,000		$295.56	$494.90	$199.34	67.4%
27	30,000		$305.06	$510.70	$205.64	67.4%
28	35,000		$352.57	$589.70	$237.13	67.3%
29	45,000		$447.58	$747.70	$300.12	67.1%
30	55,000		$542.60	$905.70	$363.10	66.9%
31	65,000		$637.61	$1,063.70	$426.09	66.8%
32	75,000		$732.63	$1,221.70	$489.07	66.8%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

	Industrial Class	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Zone 1 - Most WW Areas	896,360	$1,810,645	896,360	$19,556	$1,830,201	$2,849,189	55.7%
2	Zone 2 - New Cumberland							
3	Zone 5 - Valley WW							
4	Zone 7 - York WW	6,092	$10,399	6,092	$108	$10,512	$17,497	66.4%
5	Zone 8 - Foster Township		$488,448		$5,275	$493,723	$691,200	40.0%
6	Zone 9 -Royersford WW	14,487	$17,692	14,487	$191	$17,883	$28,172	57.5%
7	Zone XX - Farmington WW		$0			$0	$0	0.0%
8	Zone XX - Sadsbury WW							
9	**Total Industrial**	916,939	$2,327,184	916,939	$25,130	$2,352,319	$3,586,058	52.4%

I&E Exhibit No. 3
Schedule 11
Page 1 of 4

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

	Zone 1 - Most WW Areas	6/30/2024 Billing Determinants	*	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge Per EDU	108	$35.00	$3,780	108	$35.00	$41	$3,821	$36.70	$3,964	3.7%
	Consumption Charges										
2	Usage per 100 Gallons:	264,772	$2.1030	$556,816	264,772	$2.1030	$6,014	$562,830	$3.1500	$834,032	48.2%
3	Flat Rate (Unmetered)	12	$106.00	$1,272	12	$106.00	$14	$1,286	$150.00	$1,800	40.0%
	Special Rate:										
	Cleveland Cliff Plate										
4	Service Charge	12	$415.00	$4,980	12	$415.00	$54	$5,034	$456.50	$5,478	8.8%
5	Usage (100 Gallons)	357,318	$1.4000	$500,245	357,318	$1.4000	$5,403	$505,648	$2.3500	$839,697	66.1%
	Special Rate:										
	Victory Brewing										
6	Service Charge	12	$415.00	$4,854	12	$415.00	$52	$4,906	$456.50	$5,339	8.8%
7	Usage (100 Gallons)	274,270	$1.4000	$383,978	274,270	$1.4000	$4,147	$388,125	$2.3500	$644,535	66.1%
	Special Rate (Flat):										
8	Knouse Foods	12	$8,340.00	$100,080	12	$8,340.00	$1,081	$101,161	$12,093.00	$145,116	43.5%
9	Penn State Special Metals	12	$2,870.00	$34,440	12	$2,870.00	$372	$34,812	$4,161.50	$49,938	43.5%
10	PSC Metals	12	$1,110.00	$13,320	12	$1,110.00	$144	$13,464	$1,609.50	$19,314	43.4%
11	Ipsco Koppel Tubulars	12	$17,240.00	$206,880	12	$17,240.00	$2,234	$209,114	$24,998.00	$299,976	43.5%
12	**Total Zone 1 Industrial**			**$1,810,645**			**$19,556**	**$1,830,201**		**$2,849,189**	55.7%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

	Zone 7 - York WW	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(1)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Flat Rate Per EDU	12	$35.00	$420	12	$35.00	$5	$425	$36.70	$440	3.5%
	Consumption Charges										
2	Usage per 100 Gallons:	6,092	$1.6380	$9,979	6,092	$1.6380	$108	$10,087	$2.8000	$17,057	69.1%
3	**Total Zone 7 Industrial**			**$10,399**			**$108**	**$10,512**		**$17,497**	66.4%

Note (1) The annualized revenue for 12 months ending June 2024 is using authorized rates from Docket No. R-2022-3031673.

	Zone 8 - Foster Township	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(2)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
4	Flat Rate Per EDU	4,608	$106.00	$488,448	4,608	$106.00	$5,275	$493,723	$150.00	$691,200	40.0%
	Adjustment (1):										
5	Flat Rate Per EDU										
6	**Total Zone 8 Commercial**			**$488,448**			**$5,275**	**$493,723**		**$691,200**	40.0%

Note (1) Foster Township was acquired October 2022. Adjustment (1) is to annualized the revenue for full 12 months of billing.
Note (2) The annualized revenue for 12 months ending June 2024 is applying the approved rates in Docket No. R-2022-3031673.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

	Zone 9 - Royersford WW	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge	143	$48.00	$6,879	143	$48.00	$74	$6,953	$36.70	$5,260	-24.3%
	Consumption Charges										
2	First 3000 Gallons	2,998	$0.0000	$0	2,998	$0.0000	$0	$0	$1.5800	$4,737	0.0%
3	All Over 3000 Gallons	11,490	$0.9400	$10,800	11,490	$0.9400	$117	$10,917	$1.5800	$18,153	66.3%
4	Flat Rate (Unmetered)	0	$67.00	$13	0	$67.00	$0	$13	$113.00	$22	69.2%
5	**Total Zone 9 Industrial**			**$17,692**			**$191**	**$17,883**		**$28,172**	57.5%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 1 INDUSTRIAL - MONTHLY
2 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$35.38	$36.70	$1.32	3.7%
2	1,000		$56.64	$68.20	$11.56	20.4%
3	2,000		$77.89	$99.70	$21.81	28.0%
4	3,000		$99.15	$131.20	$32.05	32.3%
5	4,000		$120.41	$162.70	$42.29	35.1%
6	5,000		$141.66	$194.20	$52.54	37.1%
7	10,000		$247.95	$351.70	$103.75	41.8%
8	16,000		$375.49	$540.70	$165.21	44.0%
9	20,000		$460.52	$666.70	$206.18	44.8%
10	30,000		$673.09	$981.70	$308.61	45.8%
11	40,000		$885.66	$1,296.70	$411.04	46.4%
12	50,000		$1,098.23	$1,611.70	$513.47	46.8%
13	60,000		$1,310.81	$1,926.70	$615.89	47.0%
14	70,000		$1,523.38	$2,241.70	$718.32	47.2%
15	80,000		$1,735.95	$2,556.70	$820.75	47.3%
16	90,000		$1,948.52	$2,871.70	$923.18	47.4%
17	100,000		$2,161.09	$3,186.70	$1,025.61	47.5%
18	200,000		$4,286.80	$6,336.70	$2,049.90	47.8%
19	300,000		$6,412.52	$9,486.70	$3,074.18	47.9%
20	400,000		$8,538.23	$12,636.70	$4,098.47	48.0%
21	500,000		$10,663.94	$15,786.70	$5,122.76	48.0%
22	600,000		$12,789.65	$18,936.70	$6,147.05	48.1%
23	**685,947**	*	**$14,616.64**	**$21,644.03**	**$7,027.39**	**48.1%**
24	700,000		$14,915.36	$22,086.70	$7,171.34	48.1%
25	800,000		$17,041.08	$25,236.70	$8,195.62	48.1%
26	900,000		$19,166.79	$28,386.70	$9,219.91	48.1%
27	1,000,000		$21,292.50	$31,536.70	$10,244.20	48.1%
28	1,100,000		$23,418.21	$34,686.70	$11,268.49	48.1%
29	1,200,000		$25,543.93	$37,836.70	$12,292.77	48.1%
30	1,300,000		$27,669.64	$40,986.70	$13,317.06	48.1%
31	1,400,000		$29,795.35	$44,136.70	$14,341.35	48.1%
32	1,500,000		$31,921.06	$47,286.70	$15,365.64	48.1%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 7 YORK TOWNSHIP INDUSTRIAL - MONTHLY
2 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$35.38	$36.70	$1.32	3.7%
2	1,000		$51.93	$64.70	$12.77	24.6%
3	2,000		$68.49	$92.70	$24.21	35.3%
4	3,000		$85.05	$120.70	$35.65	41.9%
5	4,000		$101.61	$148.70	$47.09	46.4%
6	5,000		$118.16	$176.70	$58.54	49.5%
7	10,000		$200.95	$316.70	$115.75	57.6%
8	16,000		$300.29	$484.70	$184.41	61.4%
9	20,000		$366.52	$596.70	$230.18	62.8%
10	30,000		$532.09	$876.70	$344.61	64.8%
11	40,000		$697.65	$1,156.70	$459.05	65.8%
12	50,000		$863.22	$1,436.70	$573.48	66.4%
13	**50,767**	*****	**$875.92**	**$1,458.17**	**$582.25**	**66.5%**
14	60,000		$1,028.79	$1,716.70	$687.91	66.9%
15	70,000		$1,194.36	$1,996.70	$802.34	67.2%
16	80,000		$1,359.93	$2,276.70	$916.77	67.4%
17	90,000		$1,525.50	$2,556.70	$1,031.20	67.6%
18	100,000		$1,691.07	$2,836.70	$1,145.63	67.7%
19	200,000		$3,346.76	$5,636.70	$2,289.94	68.4%
20	300,000		$5,002.45	$8,436.70	$3,434.25	68.7%
21	400,000		$6,658.14	$11,236.70	$4,578.56	68.8%
22	500,000		$8,313.83	$14,036.70	$5,722.87	68.8%
23	550,000		$9,141.68	$15,436.70	$6,295.02	68.9%
24	600,000		$9,969.52	$16,836.70	$6,867.18	68.9%
25	700,000		$11,625.21	$19,636.70	$8,011.49	68.9%
26	800,000		$13,280.90	$22,436.70	$9,155.80	68.9%
27	900,000		$14,936.59	$25,236.70	$10,300.11	69.0%
28	1,000,000		$16,592.28	$28,036.70	$11,444.42	69.0%
29	1,100,000		$18,247.97	$30,836.70	$12,588.73	69.0%
30	1,200,000		$19,903.66	$33,636.70	$13,733.04	69.0%
31	1,300,000		$21,559.35	$36,436.70	$14,877.35	69.0%
32	1,400,000		$23,215.04	$39,236.70	$16,021.66	69.0%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 8 FOSTER TOWNSHIP INDUSTRIAL - MONTHLY
PER EDU

	CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
1	0		$107.14	$150.00	$42.86	40.0%
2	1,000		$107.14	$150.00	$42.86	40.0%
3	2,000		$107.14	$150.00	$42.86	40.0%
4	3,000		$107.14	$150.00	$42.86	40.0%
5	4,000		$107.14	$150.00	$42.86	40.0%
6	5,000		$107.14	$150.00	$42.86	40.0%
7	10,000		$107.14	$150.00	$42.86	40.0%
8	16,000		$107.14	$150.00	$42.86	40.0%
9	20,000		$107.14	$150.00	$42.86	40.0%
10	30,000		$107.14	$150.00	$42.86	40.0%
11	40,000		$107.14	$150.00	$42.86	40.0%
12	50,000		$107.14	$150.00	$42.86	40.0%
13	60,000		$107.14	$150.00	$42.86	40.0%
14	70,000		$107.14	$150.00	$42.86	40.0%
15	80,000		$107.14	$150.00	$42.86	40.0%
16	90,000		$107.14	$150.00	$42.86	40.0%
17	100,000		$107.14	$150.00	$42.86	40.0%
18	200,000		$107.14	$150.00	$42.86	40.0%
19	300,000		$107.14	$150.00	$42.86	40.0%
20	400,000		$107.14	$150.00	$42.86	40.0%
21	500,000		$107.14	$150.00	$42.86	40.0%
22	600,000		$107.14	$150.00	$42.86	40.0%
23	**685,947**	*	**$107.14**	**$150.00**	**$42.86**	**40.0%**
24	700,000		$107.14	$150.00	$42.86	40.0%
25	800,000		$107.14	$150.00	$42.86	40.0%
26	900,000		$107.14	$150.00	$42.86	40.0%
27	1,000,000		$107.14	$150.00	$42.86	40.0%
28	1,100,000		$107.14	$150.00	$42.86	40.0%
29	1,200,000		$107.14	$150.00	$42.86	40.0%
30	1,300,000		$107.14	$150.00	$42.86	40.0%
31	1,400,000		$107.14	$150.00	$42.86	40.0%
32	1,500,000		$107.14	$150.00	$42.86	40.0%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 9 ROYERSFORD TOWNSHIP INDUSTRIAL - MONTHLY
2 INCH METERS

	CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
1	0		$48.52	$36.70	-$11.82	-24.4%
2	1,000		$48.52	$52.50	$3.98	8.2%
3	2,000		$48.52	$68.30	$19.78	40.8%
4	3,000		$48.52	$84.10	$35.58	73.3%
5	4,000		$58.02	$99.90	$41.88	72.2%
6	5,000		$67.52	$115.70	$48.18	71.4%
7	**10,109**	*****	**$116.06**	**$196.42**	**$80.36**	**69.2%**
8	15,000		$162.54	$273.70	$111.16	68.4%
9	19,000		$200.54	$336.90	$136.36	68.0%
10	29,000		$295.56	$494.90	$199.34	67.4%
11	39,000		$390.57	$652.90	$262.33	67.2%
12	49,000		$485.59	$810.90	$325.31	67.0%
13	59,000		$580.60	$968.90	$388.30	66.9%
14	69,000		$675.62	$1,126.90	$451.28	66.8%
15	79,000		$770.63	$1,284.90	$514.27	66.7%
16	89,000		$865.65	$1,442.90	$577.25	66.7%
17	99,000		$960.66	$1,600.90	$640.24	66.6%
18	199,000		$1,910.82	$3,180.90	$1,270.08	66.5%
19	299,000		$2,860.97	$4,760.90	$1,899.93	66.4%
20	399,000		$3,811.12	$6,340.90	$2,529.78	66.4%
21	499,000		$4,761.27	$7,920.90	$3,159.63	66.4%
22	599,000		$5,711.42	$9,500.90	$3,789.48	66.3%
23	685,947	*	$6,537.55	$10,874.66	$4,337.11	66.3%
24	699,000		$6,661.58	$11,080.90	$4,419.32	66.3%
25	799,000		$7,611.73	$12,660.90	$5,049.17	66.3%
26	899,000		$8,561.88	$14,240.90	$5,679.02	66.3%
27	999,000		$9,512.03	$15,820.90	$6,308.87	66.3%
28	1,099,000		$10,462.18	$17,400.90	$6,938.72	66.3%
29	1,199,000		$11,412.34	$18,980.90	$7,568.56	66.3%
30	1,299,000		$12,362.49	$20,560.90	$8,198.41	66.3%
31	1,399,000		$13,312.64	$22,140.90	$8,828.26	66.3%
32	1,499,000		$14,262.79	$23,720.90	$9,458.11	66.3%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

	Municipal Class	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Zone 1 - Most WW Areas	377,064	$924,792	375,700	$9,957	$931,880	$1,358,319	45.8%
2	Zone 2 - New Cumberland	11,603	$26,249	11,561	282	$26,451	$40,824	54.3%
3	Zone 5 - Valley WW	43,335	$92,814	43,178	998	$93,482	$137,772	47.4%
4	Zone 7 - York WW	188,623	$313,270	187,941	3,371	$315,566	$530,135	68.0%
5	Zone 8 - Foster Township		$13,500		146	$13,646	$36,000	163.8%
6	Zone 9 -Royersford WW	19,486	$19,061	19,416	205	$19,208	$32,878	71.2%
7	Zone XX - Farmington WW		$0		0	$0	$0	0.0%
8	Zone XX - Sadsbury WW							
9	**Total Municipal**	640,110	$1,389,686	637,795	$14,959	$1,400,233	$2,135,928	52.5%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

	Zone 1 - Most WW Areas	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge Per EDU	823	$35.00	$28,806	823	$35.00	$311	$29,117	$36.70	$30,205	3.7%
	Consumption Charges										
2	Usage per 100 Gallons:	390,360	$2.1030	$820,927	377,064	$2.1030	8,564	$801,529	$3.1500	$1,187,751	48.2%
3	Flat Rate (Unmetered)	270	$106.00	$28,620	270	$106.00	309	$28,929	$150.00	$40,500	40.0%
	Special Rate:										
4	Strattanville Borough	12	$6,200.00	$74,400	12	$6,200.00	804	$75,204	$8,680.00	$104,160	38.5%
	Adjustment (1):										
5	Strattanville Borough										
	Adjustment (2):										
6	Usage (100 Gallons)	(13,296)	$2.1030	-$27,961	(1,364)	$2.1030	(31)	-$2,899	$3.1500	-$4,297	48.2%
7	**Total Zone 1 Municipal**			**$924,792**			**$9,957**	**$931,880**		**$1,358,319**	45.8%

Note (1) Adjustment to reflect 12 months bill for Strattanville Borough
Note (2) Adjustment to normalize usage

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

	Zone 2 - New Cumberland	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge Per EDU	120	$35.00	$4,203	120	$35.00	$45	$4,248	$36.70	$4,407	3.7%
	Consumption Charges										
2	Usage per 100 Gallons:	12,012	$1.9000	$22,823	11,603	$1.9000	238	$22,284	$3.1500	$36,549	64.0%
	Adjustment (1):										
3	Usage (100 Gallons)	(409)	$1.9000	-$777	(42)	$1.9000	(1)	-$81	$3.1500	-$132	63.0%
4	**Total Zone 2 Municipal**			**$26,249**			**$282**	**$26,451**		**$40,824**	54.3%

Note (1) Adjustment to normalize usage

	Zone 5 - Valley WW	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(1)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	Service Charge	48	$35.00	$1,680	48	$35.00	$18	$1,698	$36.70	$1,762	3.8%
5	Consumption Charges										
	First 3400 Gallons	44,863	$2.1030	$94,347	43,335	$2.1030	984	$92,118	$3.1500	$136,505	48.2%
	All Over 3400 Gallons										
6											
	Flat Rate (Unmetered)	-	$106.00	$0	-	$106.00	0	$0	$150.00	$0	0.0%
7	*Adjustment (2):*										
	Usage (100 Gallons)	(1,528)	$2.1030	-$3,213	(157)	$2.1030	(4)	-$334	$3.1500	-$495	48.2%
8	**Total Zone 5 Municipal**			**$92,814**			**$998**	**$93,482**		**$137,772**	47.4%

Note (1) The annualized revenue for 12 months ending June 2024 is using rates effective 11/19/2023.
Note (2) Adjustment to normalize usage

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

	Zone 7 - York WW	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue(1)	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge	542	$30.00	$16,247	542	$30.00	$175	$16,422	$36.70	$19,876	21.0%
	Consumption Charges										
2	First 2000 Gallons	7,547	$0.0000	$0	7,290	$0.0000	0	$0	$0.6010	$4,381	0.0%
3	All Over 2000 Gallons	187,727	$1.6380	$307,496	181,333	$1.6380	3,208	$300,231	$2.8000	$507,731	69.1%
	Adjustment (2):										
4	First 2000 Gallons	(257)	$0.0000	$0	(26)	$0.0000	0	$0	$0.6010	-$16	0.0%
5	All Over 2000 Gallons	(6,394)	$1.6380	-$10,473	(656)	$1.6380	(12)	-$1,087	$2.8000	-$1,837	69.0%
6	**Total Zone 7 Municipal**			**$313,270**			**$3,371**	**$315,566**		**$530,135**	68.0%

Note (1) The annualized revenue for 12 months ending June 2024 is using authorized rates from Docket No. R-2022-3031673.

	Zone 8 - Foster Township	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	Butler Townshhip										
7	Flat Rate Per EDU	900	$15.00	$13,500	900	$15.00	$146	$13,646	$40.00	$36,000	163.8%
	Adjustment (1):										
8	Flat Rate Per EDU										
9	**Total Zone 8 Municipal**			**$13,500**			**$146**	**$13,646**		**$36,000**	163.8%

Note (1) The annualized revenue for 12 months ending June 2024 is applying the approved rates in Docket No. R-2022-3031673.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Exhibit 3
Schedule 13
Page 5 of 5

	Zone 9 - Royersford WW	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge	60	$48.00	$2,880	60	$48.00	$31	$2,911	$36.70	$2,202	-24.4%
	Consumption Charges										
2	First 3000 Gallons	2,352	$0.0000	$0	2,272	$0.0000	0	$0	$1.5800	$3,589	0.0%
3	All Over 3000 Gallons	17,821	$0.9400	$16,752	17,214	$0.9400	175	$16,356	$1.5800	$27,198	66.3%
	Flat Rate (Unmetered)	-	$67.00	$0	-	$67.00	0	$0	$113.00	$0	0.0%
	Adjustment (1):										
4	First 3000 Gallons	(80)	$0.0000	$0	(8)	$0.0000	0	$0	$1.5800	-$13	0.0%
5	All Over 3000 Gallons	(607)	$0.9400	-$571	(62)	$0.9400	(1)	-$59	$1.5800	-$98	66.1%
6	**Total Zone 9 Municipal**			**$19,061**			**$205**	**$19,208**		**$32,878**	71.2%

Note (1) Adjustment to normalize usage

I&E Exhibit No. 3
Schedule 13
Page 5 of 5

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 1 AND ZONE 5 MUNICIPAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$35.38	$36.70	$1.32	3.7%
2	100		$37.50	$39.85	$2.35	6.3%
3	500		$46.01	$52.45	$6.44	14.0%
4	1,000		$56.64	$68.20	$11.56	20.4%
5	2,000		$77.89	$99.70	$21.81	28.0%
6	3,000		$99.15	$131.20	$32.05	32.3%
7	5,000		$141.66	$194.20	$52.54	37.1%
8	10,000		$247.95	$351.70	$103.75	41.8%
9	15,000		$354.23	$509.20	$154.97	43.7%
10	20,000		$460.52	$666.70	$206.18	44.8%
11	25,000		$566.81	$824.20	$257.39	45.4%
12	30,000		$673.09	$981.70	$308.61	45.8%
13	35,000		$779.38	$1,139.20	$359.82	46.2%
14	40,000		$885.66	$1,296.70	$411.04	46.4%
15	45,000		$991.95	$1,454.20	$462.25	46.6%
16	**45,814**	*	**$1,009.25**	**$1,479.84**	**$470.59**	**46.6%**
17	50,000		$1,098.23	$1,611.70	$513.47	46.8%
18	55,000		$1,204.52	$1,769.20	$564.68	46.9%
19	60,000		$1,310.81	$1,926.70	$615.89	47.0%
20	65,000		$1,417.09	$2,084.20	$667.11	47.1%
21	70,000		$1,523.38	$2,241.70	$718.32	47.2%
22	75,000		$1,629.66	$2,399.20	$769.54	47.2%
23	80,000		$1,735.95	$2,556.70	$820.75	47.3%
24	85,000		$1,842.23	$2,714.20	$871.97	47.3%
25	90,000		$1,948.52	$2,871.70	$923.18	47.4%
26	95,000		$2,054.80	$3,029.20	$974.40	47.4%
27	100,000		$2,161.09	$3,186.70	$1,025.61	47.5%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 2 MUNICIPAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$35.38	$36.70	$1.32	3.7%
2	100		$37.30	$39.85	$2.55	6.8%
3	500		$44.98	$52.45	$7.47	16.6%
4	1,000		$54.58	$68.20	$13.62	24.9%
5	2,000		$73.79	$99.70	$25.91	35.1%
6	3,000		$92.99	$131.20	$38.21	41.1%
7	5,000		$131.40	$194.20	$62.80	47.8%
8	6,000		$150.61	$225.70	$75.09	49.9%
9	**9,662**	*	**$220.94**	**$341.05**	**$120.11**	**54.4%**
10	10,000		$227.43	$351.70	$124.27	54.6%
11	15,000		$323.46	$509.20	$185.74	57.4%
12	20,000		$419.48	$666.70	$247.22	58.9%
13	25,000		$515.51	$824.20	$308.69	59.9%
14	30,000		$611.53	$981.70	$370.17	60.5%
15	35,000		$707.56	$1,139.20	$431.64	61.0%
16	40,000		$803.59	$1,296.70	$493.11	61.4%
17	45,000		$899.61	$1,454.20	$554.59	61.6%
18	50,000		$995.64	$1,611.70	$616.06	61.9%
19	55,000		$1,091.66	$1,769.20	$677.54	62.1%
20	60,000		$1,187.69	$1,926.70	$739.01	62.2%
21	65,000		$1,283.72	$2,084.20	$800.48	62.4%
22	70,000		$1,379.74	$2,241.70	$861.96	62.5%
23	75,000		$1,475.77	$2,399.20	$923.43	62.6%
24	80,000		$1,571.79	$2,556.70	$984.91	62.7%
25	85,000		$1,667.82	$2,714.20	$1,046.38	62.7%
26	90,000		$1,763.85	$2,871.70	$1,107.85	62.8%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 7 YORK TOWNSHIP MUNICIPAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$30.32	$36.70	$6.38	21.0%
2	100		$30.32	$37.30	$6.98	23.0%
3	500		$30.32	$39.71	$9.38	30.9%
4	1,000		$30.32	$42.71	$12.39	40.8%
5	2,000		$30.32	$48.72	$18.40	60.7%
6	3,000		$46.88	$76.72	$29.84	63.6%
7	5,000		$79.99	$132.72	$52.73	65.9%
8	10,000		$162.78	$272.72	$109.94	67.5%
9	15,000		$245.56	$412.72	$167.16	68.1%
10	20,000		$328.35	$552.72	$224.37	68.3%
11	25,000		$411.13	$692.72	$281.59	68.5%
12	30,000		$493.92	$832.72	$338.80	68.6%
13	**34,828**	*	**$573.85**	**$967.90**	**$394.05**	**68.7%**
14	35,000		$576.70	$972.72	$396.02	68.7%
15	40,000		$659.49	$1,112.72	$453.23	68.7%
16	45,000		$742.27	$1,252.72	$510.45	68.8%
17	50,000		$825.06	$1,392.72	$567.66	68.8%
18	55,000		$907.84	$1,532.72	$624.88	68.8%
19	60,000		$990.62	$1,672.72	$682.10	68.9%
20	65,000		$1,073.41	$1,812.72	$739.31	68.9%
21	70,000		$1,156.19	$1,952.72	$796.53	68.9%
22	75,000		$1,238.98	$2,092.72	$853.74	68.9%
23	80,000		$1,321.76	$2,232.72	$910.96	68.9%
24	85,000		$1,404.55	$2,372.72	$968.17	68.9%
25	90,000		$1,487.33	$2,512.72	$1,025.39	68.9%
26	95,000		$1,570.12	$2,652.72	$1,082.60	69.0%
27	100,000		$1,652.90	$2,792.72	$1,139.82	69.0%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 9 ROYERSFORD TOWNSHIP MUNICIPAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS	BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
	(A)	(B)	(C)	(D)	(E)
1	0	$48.52	$36.70	-$11.82	-24.4%
2	100	$48.52	$38.28	-$10.24	-21.1%
3	500	$48.52	$44.60	-$3.92	-8.1%
4	1,000	$48.52	$52.50	$3.98	8.2%
5	2,000	$48.52	$68.30	$19.78	40.8%
6	3,000	$48.52	$84.10	$35.58	73.3%
7	5,000	$67.52	$115.70	$48.18	71.4%
8	10,000	$115.03	$194.70	$79.67	69.3%
9	15,000	$162.54	$273.70	$111.16	68.4%
10	20,000	$210.04	$352.70	$142.66	67.9%
11	25,000	$257.55	$431.70	$174.15	67.6%
12	30,000	$305.06	$510.70	$205.64	67.4%
13	**32,476**	**$328.59**	**$549.82**	**$221.24**	**67.3%**
14	35,000	$352.57	$589.70	$237.13	67.3%
15	40,000	$400.07	$668.70	$268.63	67.1%
16	45,000	$447.58	$747.70	$300.12	67.1%
17	50,000	$495.09	$826.70	$331.61	67.0%
18	55,000	$542.60	$905.70	$363.10	66.9%
19	60,000	$590.11	$984.70	$394.59	66.9%
20	65,000	$637.61	$1,063.70	$426.09	66.8%
21	70,000	$685.12	$1,142.70	$457.58	66.8%
22	75,000	$732.63	$1,221.70	$489.07	66.8%
23	80,000	$780.14	$1,300.70	$520.56	66.7%
24	85,000	$827.64	$1,379.70	$552.06	66.7%
25	90,000	$875.15	$1,458.70	$583.55	66.7%
26	95,000	$922.66	$1,537.70	$615.04	66.7%
27	100,000	$970.17	$1,616.70	$646.53	66.6%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BULK WASTEWATER CLASS BILL ANALYSIS

	Bulk WW Class	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Zone 1 - Most WW Areas	1,639,475	$1,917,824	1,639,475	$20,712	$1,938,536	$2,311,608	19.2%
2	Zone 2 - New Cumberland							
3	Zone 5 - Valley WW							
4	Zone 7 - York WW	18,684,743	$7,345,773	18,684,743	$79,335	$7,425,108	$10,508,639	41.5%
5	Zone 8 - Foster Township							
6	Zone 9 -Royersford WW	25,944	$80,021	25,944	$864	$80,885	$135,723	67.8%
7	**Total Bulk WW**	20,350,161	$9,343,618	20,350,161	$100,911	$9,444,529	$12,955,970	37.2%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BULK WASTEWATER CLASS BILL ANALYSIS

	Zone 1 - Most WW Areas (A)	6/30/2024 Billing Determinants (B)	Rate (C)	6/30/2024 Annualized Revenue (D)	6/30/2025 Billing Determinants (E)	Present Rate (F)	Proforma DSIC Revenues (G)	6/30/2025 Proforma Revenues (H)	Proposed Rate (I)	6/30/2025 Proforma @ Proposed Rate (J)	% Percent Change (K)
1	Service Charge	125	$35.00	$4,362	125	$35.00	$47	$4,409	$50.00	$6,232	41.3%
	Consumption Charges										
2	Usage per 100 Gallons:	9,625	$2.1030	$20,242	9,625	$2.1030	$219	$20,461	$3.1500	$30,319	48.2%
	Special Rate (Caln, West Brandywine, VA Med)										
3	Service Charge	36	$415.00	$14,940	36	$415.00	$161	$15,101	$456.50	$16,434	8.8%
	Consumption Charges										
4	Usage per 100 Gallons:	1,167,943	$1.4500	$1,693,517	1,167,943	$1.4500	$18,290	$1,711,807	$1.6800	$1,962,144	14.6%
5	Total Caln West Brandywine, Va Med.			$1,708,457				$1,726,908		$1,978,578	14.6%
6	St Lawrence Borough	12			12				$456.50	$5,478	
7	Usage per 100 Gallons:	461,907	$0.4000	$184,763	461,907	$0.4000	$1,995	$186,758	$0.6300	$291,001	55.8%
8	Total St Lawerence Borough			$184,763				$186,758		$296,479	58.8%
9	**Total Zone 1 Bulk WW**			**$1,917,824**			**$20,712**	**$1,938,536**		**$2,311,608**	19.2%

	Zone 7 - York WW	6/30/2024 Billing Determinants	Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	Special Bulk WW Rate										
	Consumption Charges										
10	Usage per 100 Gallons:	18,676,652	$0.3932	$7,343,660	18,676,652	$0.3932	$79,312	$7,422,972	$0.5625	$10,505,617	41.5%
11	Usage per 100 Gallons:	8,091	$0.2611	$2,113	8,091	$0.2611	$23	$2,136	$0.3735	$3,022	41.5%
12	**Total Zone 7 Bulk WW**			**$7,345,773**			**$79,335**	**$7,425,108**		**$10,508,639**	41.5%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BULK WASTEWATER CLASS BILL ANALYSIS

	Zone 9 - Royersford WW (A)	6/30/2024 Billing Determinants (B)	Rate (C)	6/30/2024 Annualized Revenue (D)	6/30/2025 Billing Determinants (E)	Present Rate (F)	Proforma DSIC Revenues (G)	6/30/2025 Proforma Revenues (H)	Proposed Rate (I)	6/30/2025 Proforma @ Proposed Rate (J)	% Percent Change (K)
1	Service Charge	1,094	$48.00	$52,494	1,094	$48.00	$567	$53,061	$50.00	$54,682	3.1%
	Consumption Charges										
2	First 3000 Gallons	24,031	$0.0000	$0	24,031	$0.0000	$0	$0	$1.4800	$35,565	0.0%
3	All Over 3000 Gallons	1,913	$0.9400	$1,799	1,913	$0.9400	$19	$1,818	$1.0891	$2,084	14.6%
4	Flat Rate (Unmetered)	384	$67.00	$25,728	384	$67.00	$278	$26,006	$113.00	$43,392	66.9%
5	**Total Zone 9 Bulk WW**			**$80,021**			**$864**	**$80,885**		**$135,723**	67.8%

I&E Exhibit No. 3
Schedule 16

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
SUMMARY OF APPLICATION OF PRESENT AND PROPOSED RATES
]

	Rate Zone	Residential	Commercial	Industrial	Municipal	Bulk	Total Revenues
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
	Present Rate Application						
1	Zone 3 - Scranton WW	$33,227,937	$15,900,531	$2,240,339	$488,104	$1,207,931	$53,064,842
2	Zone 4 - Kane WW	$2,108,564	$507,998	$20,255	$115,789	$0	$2,752,606
3	Zone 6 - McKeesport WW	$10,838,789	$3,788,874	$8,194	$387,658	$7,121,888	$22,145,403
		$46,175,290	$20,197,403	$2,268,788	$991,551	$8,329,819	$77,962,851
4	IPP Surcharge						$226,040
5	Other Revenues						$447,331
6	**Total WW CSS**	$46,175,290	$20,197,403	$2,268,788	$991,551	$8,329,819	$78,636,222
	Proposed Rate Application						
7	Zone 3 - Scranton WW	$39,139,769	$22,690,465	$3,294,191	$712,696	$1,574,617	$67,411,738
8	Zone 4 - Kane WW	$2,112,495	$635,373	$26,973	$155,466	$0	$2,930,307
9	Zone 6 - McKeesport WW	$11,291,521	$4,479,091	$9,748	$460,190	$7,045,793	$23,286,343
10	**Total WW CSS**	$52,543,784	$27,804,929	$3,330,912	$1,328,352	$8,620,410	$93,628,387
11	IPP Surcharge						$226,040
12	Other Revenues						$526,081
13	**Total WW CSS**	$52,543,784	$27,804,929	$3,330,912	$1,328,352	$8,620,410	$94,380,509
14	Change in Revenues	$6,368,494	$7,607,526	$1,062,124	$336,801	$290,591	$15,744,287
15	% Change in Revenues	13.8%	37.7%	46.8%	34.0%	3.5%	20.2%
16	Company Original Proposal	$172,192	-$286,935	-$934	-$35,165	-$76,082	-$226,924
17	Additional LPR						$78,751
18	**I&E Additional Revenue**	**$6,196,302**	**$7,894,461**	**$1,063,058**	**$371,966**	**$366,673**	**$15,971,211**

I&E Exhibit No. 3
Schedule 17

Pennsylvania-American Water Company
Proposed General Wastewater Rate Design (not including special rates)
Volumetric Rates are in $ per hundred gallons
R-2023-3041390

	CSS Rates Zone 3 - Scranton	Present Rate	Dollar Increase	Proposed Rate	Percent Increase
	(A)	(B)	(C)	(D)	(E)
1	Residential Service Charge	$19.50	$0.50	**$20.00**	2.6%
2	Residential Usage (per 100 gallons)	$2.3510	$0.5490	**$2.9000**	23.4%
3	Unmetered Service	$95.00	$18.00	**$113.00**	18.9%
4	Non-Residential Service Charge	$35.00	$5.00	**$40.00**	14.3%
5	Usage per 100 gallons)	$1.7270	$0.8530	**$2.5800**	49.4%
6					
	Zone 4 - Kane	Present Rate	Dollar Increase	Proposed Rate	Percent Increase
7	Residential 5/8" Service Charge	$40.00	-$20.00	$20.00	-50.0%
8	Residential Other Meter Sizes	$100.00	-$80.00	$20.00	-80.0%
9	Residential Unmetered Service	$110.00	$3.00	$113.00	2.7%
10	Residential: First 10,000 Gallons	$2.1000	$0.8000	$2.9000	38.1%
11	Residential: Over 10,000 Gallons	$1.8000	$1.1000	$2.9000	61.1%
12	Non-Residential 5/8" Service Charge	$40.00	$0.00	$40.00	0.0%
13	Non-Residential Other Meter Sizes	$100.00	-$60.00	$40.00	-60.0%
14	Non-Residential: First 10,000 Gallons	$2.1000	$0.4800	$2.5800	22.9%
15	Non-Residential: Over 10,000 Gallons	$1.8000	$0.7800	$2.5800	43.3%
	Zone 6 - McKeesport / Port Vue	Present Rate	Dollar Increase	Proposed Rate	Percent Increase
16	Residential Service Charge	$14.30	$5.70	$20.00	39.9%
17	Residential Usage (per 100 gallons)	$2.8750	$0.0250	$2.9000	0.9%
18	McKeesport: Non-Residential Service Charge	$35.00	$5.00	$40.00	14.3%
19	McKeesport: Non-Residential Usage (per 100 gallons)	$2.1416	$0.4384	$2.5800	20.5%
20	Port Vue: Non-Residential Service Charge	$14.30	$25.70	$40.00	179.7%
21	Port Vue: Non-Residential Usage (per 100 gallons)	$2.8750	-$0.2950	$2.5800	-10.3%
22	McKeesport Bulk - Monthly Charge	$86.00	$0.00	$86.00	0.0%
23	McKeesport Bulk - Quarterly Charge	$258.00	$0.00	$258.00	0.0%
24	McKeesport Bulk - Usage Charge	$1.6680	$0.0000	**$1.6680**	0.0%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PROPOSED RATES

	Item	Tax Rate	Cost of Service	Residential	Non-Residential	Industrial	Bulk
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
1	Revenues From Sales		$93,628,387	$52,543,784	$29,133,281	$3,330,912	$8,620,410
2	Other Revenues		$673,367	$377,890	$209,524	$23,956	$61,997
3	Additional Other Revneue		$78,755	$44,197	$24,505	$2,802	$7,251
4	Total Operating Revenues		$94,380,508	$52,965,871	$29,367,310	$3,357,669	$8,689,658
5	Less: Operating Expenses (Net of costs recovered from water)		$44,416,462	$25,125,227	$13,758,612	$2,041,713	$3,490,910
6	Return and Income Taxes		$49,964,046	$27,840,644	$15,608,698	$1,315,957	$5,198,748
7	Less: Taxable Exclusions - Allocated on Rate Base		$10,517,462	$5,916,542	$3,334,010	$523,305	$743,605
8	Taxable Income		$39,446,584	$21,924,102	$12,274,688	$792,651	$4,455,143
9	Less: Income Taxes (Based on TI Line 7.)	28.20%	$11,122,810	$6,181,971	$3,461,111	$223,505	$1,256,223
10	Net Return (Line 5 - Line 8)		$38,841,236	$21,658,673	$12,147,586	$1,092,452	$3,942,525
11	Original Cost Measure of Value		$489,184,280	$275,187,995	$155,070,239	$24,339,786	$34,586,260
12	Rate Of Return, Percent		7.94	7.87	7.83	4.49	11.40
13	Relative Rate of Return		1.00	0.99	0.99	0.57	1.44

I&E Exhibit No. 3
Schedule 18

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

	Residential Class	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Zone 3 - Scranton WW	11,616,430	$33,251,074	11,449,159	$355,026	$33,227,937	$39,139,769	17.8%
2	Zone 4 - Kane WW	606,682	$2,117,632	593,551	$22,528	$2,108,564	$2,112,495	0.2%
3	Zone 6 - McKeesport WW	3,351,122	$10,942,545	3,277,885	$115,809	$10,838,789	$11,291,521	4.2%
4	**Total Residential**	15,574,234	$46,311,251	15,320,595	$493,363	$46,175,290	$52,543,784	13.8%

I&E Exhibit No. 3
Schedule 19
Page 1 of 4

WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

	Zone 3 - Scranton WW	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge Per EDU	351,314	$19.50	$6,850,620	351,701	$19.50	$74,068	$6,932,234	$20.00	$7,034,017	1.5%
2	Consumption Charges:										
3	Usage (in 100 Gallons)	11,845,091	$2.3510	$27,847,808	11,616,430	$2.3510	$294,950	$27,605,176	$2.9000	$33,687,646	22.0%
4	Flat Rate (Unmetered)	132	$95.00	$12,540	132	$95.00	$135	$12,675	$113.00	$14,916	17.7%
	Low Income:										
5	Low Income Discount Tier 1			-$307,149			-$3,317	-$310,466		-$302,374	-2.6%
6	Low Income Discount Tier 2			-$263,304			-$2,844	-$266,148		-$259,211	-2.6%
7	Low Income Discount Tier 3			-$359,406			-$3,882	-$363,288		-$353,820	-2.6%
8	Low Income Discount Tier 4									-$211,798	0.0%
	Adjustment (1):										
9	Service Charge Per EDU	387	$19.50	$7,547	774	$19.50	$163	$15,256	$20.00	$15,480	1.5%
10	Usage (in 100 Gallons)	14,162	$2.3510	$33,295	28,324	$2.3510	$719	$67,308	$2.9000	$82,139	22.0%
	Adjustment (2):										
11	Usage (in 100 Gallons)	(242,823)	$2.3510	-$570,877	(195,595)	$2.3510	-$4,966	-$464,810	$2.9000	-$567,226	22.0%
12	**Total Zone 3 Residential**			**$33,251,074**			**$355,026**	**$33,227,937**		**$39,139,769**	17.8%

Note (1): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (2): Adjustment from usage normalization

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WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

	Zone 4 - Kane WW	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge (5/8")	21,714	$40.00	$868,564	21,663	$40.00	$9,358	$875,882	$20.00	$433,262	-50.5%
2	Service Charge (Other than 5/8")	12	$100.00	$1,200	12	$100.00	$13	$1,213	$20.00	$240	-80.2%
3	Usage (in 100 Gallons)										
4	First 10,000 Gallons	609,041	$2.1000	$1,278,987	595,117	$2.1000	$13,497	$1,263,242			
5	All Over 10,000 Gallons	11,807	$1.8000	$21,253	11,565	$1.8000	$225	$21,043			
6	Flat Rate (Unmetered)	334	$110.00	$36,712	334	$110.00	$396	$37,108	$113.00	$37,713	1.6%
	Low Income:										
7	Low Income Discount Tier 1			-$18,242			-$197	-$18,439		-$17,966	-2.6%
8	Low Income Discount Tier 2			-$13,201			-$143	-$13,344		-$13,002	-2.6%
9	Low Income Discount Tier 3			-$25,923			-$280	-$26,203		-$25,530	-2.6%
10	Low Income Discount Tier 4									-$15,106	
	Adjustment (1):										
11	Service Charge	(51)	$40.00	-$2,040	(102)	$40.00	-$44	-$4,124	$20.00	-$2,040	-50.5%
12	Usage (in 100 Gallons)	(1,440)	$2.1000	-$3,023	(2,879)	$2.1000	-$65	-$6,111			
	Adjustment (2):										
13	First 10,000 Gallons	(12,485)	$2.1000	-$26,219	(10,057)	$2.1000	-$228	-$21,348			
14	All Over 10,000 Gallons	(242)	$1.8000	-$436	(195)	$1.8000	-$4	-$355			
15	Total Usage	606,682			593,551						
	Annualized Winter Usage(3)										
16	First 10,000 Gallons	596,556			585,060						
17	All Over 10,000 Gallons	7,566			6,293						
18		604,123			591,353						
19	Winter Average Usage				591,353				$2.9000	$1,714,924	36.5%
20	**Total Zone 4 Residential**			**$2,117,632**			**$22,528**	**$2,108,564**		**$2,112,495**	0.2%

Note(1): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (2): Adjustment from usage normalization
Note (3): Annualized Winter Usage is from average winter usage multiplied by 12

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WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

	Zone 6 - McKeesport WW	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge	115,382	$14.30	$1,649,968	115,067	$14.30	$17,771	$1,663,235	$20.00	$2,301,348	38.4%
	Consumption Charges:										
2	Usage (in 100 Gallons)	3,031,255	$2.8750	$8,714,859	2,952,645	$2.8750	$91,680	$8,580,534			
	Port Vue:										
3	Service Charge	182	$14.30	$2,597	182	$14.30	$28	$2,625	$20.00	$3,633	38.4%
	Consumption Charges:										
4	Usage (in 100 Gallons)	398,478	$2.8750	$1,145,623	398,478	$2.8750	$12,373	$1,157,996			
	Adjustment (1):										
5	Service Charge	(315)	$14.30	-$4,505	(630)	$14.30	-$97	-$9,106	$20.00	-$12,600	38.4%
6	Usage (in 100 Gallons)	(8,302)	$2.8750	-$23,867	(16,603)	$2.8750	-$516	-$48,250			
	Low Income:										
7	Low Income Discount Tier 1			-$100,035			-$1,080	-$101,115		-$102,516	1.4%
8	Low Income Discount Tier 2			-$99,605			-$1,076	-$100,681		-$102,074	1.4%
9	Low Income Discount Tier 3			-$140,352			-$1,516	-$141,868		-$143,832	1.4%
10	Low Income Discount Tier 4									-$81,102	
	Adjustment (2):										
11	Usage (in 100 Gallons)	(70,309)	$2.8750	-$202,138	(56,634)	$2.8750	-$1,758	-$164,581			
12	Total Usage	3,351,122			3,277,885						
13	Annualized Winter Usage(3)	3,323,695			3,251,263				$2.9000	$9,428,663	-1.0%
14	**Total Zone 6 Residential**			**$10,942,545**			**$115,809**	**$10,838,789**		**$11,291,521**	4.2%

Note(1): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (2): Adjustment from usage normalization
Note (3): Annualized Winter Usage is from average winter usage multiplied by 12

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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
ZONE 3 SCRANTON RESIDENTIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS (A)		BILLS UNDER PRESENT RATES (B)	BILLS UNDER PROPOSED RATES (C)	INCREASE AMOUNT (D)	INCREASE PERCENT (E)
1	0		$19.71	$20.00	$0.29	1.5%
2	100		$22.09	$22.90	$0.81	3.7%
3	500		$31.59	$34.50	$2.91	9.2%
4	1,000		$43.47	$49.00	$5.53	12.7%
5	2,000		$67.24	$78.00	$10.76	16.0%
6	3,000		$91.00	$107.00	$16.00	17.6%
7	**3,201**	*	**$95.78**	**$112.83**	**$17.05**	**17.8%**
8	3,500		$102.88	$121.50	$18.62	18.1%
9	4,000		$114.77	$136.00	$21.23	18.5%
10	5,000		$138.53	$165.00	$26.47	19.1%
11	6,000		$162.29	$194.00	$31.71	19.5%
12	7,000		$186.06	$223.00	$36.94	19.9%
13	8,000		$209.82	$252.00	$42.18	20.1%
14	9,000		$233.59	$281.00	$47.41	20.3%
15	10,000		$257.35	$310.00	$52.65	20.5%
16	11,000		$281.11	$339.00	$57.89	20.6%
17	12,000		$304.88	$368.00	$63.12	20.7%
18	13,000		$328.64	$397.00	$68.36	20.8%
19	14,000		$352.41	$426.00	$73.59	20.9%
20	15,000		$376.17	$455.00	$78.83	21.0%
21	16,000		$399.93	$484.00	$84.07	21.0%
22	17,000		$423.70	$513.00	$89.30	21.1%
23	18,000		$447.46	$542.00	$94.54	21.1%
24	19,000		$471.22	$571.00	$99.78	21.2%
25	20,000		$494.99	$600.00	$105.01	21.2%
26	21,000		$518.75	$629.00	$110.25	21.3%
27	22,000		$542.52	$658.00	$115.48	21.3%
28	23,000		$566.28	$687.00	$120.72	21.3%
29	24,000		$590.04	$716.00	$125.96	21.3%
30	25,000		$613.81	$745.00	$131.19	21.4%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 4 KANE RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$40.43	$20.00	-$20.43	-50.5%
100		$42.55	$22.90	-$19.65	-46.2%
500		$51.05	$34.50	-$16.55	-32.4%
1,000		$61.66	$49.00	-$12.66	-20.5%
2,000		$82.89	$78.00	-$4.89	-5.9%
3,000		$104.11	$107.00	$2.89	2.8%
3,122	*	**$106.70**	**$110.54**	**$3.84**	**3.6%**
3,500		$114.73	$121.50	$6.77	5.9%
4,000		$125.34	$136.00	$10.66	8.5%
5,000		$146.57	$165.00	$18.43	12.6%
6,000		$167.79	$194.00	$26.21	15.6%
7,000		$189.02	$223.00	$33.98	18.0%
8,000		$210.25	$252.00	$41.75	19.9%
9,000		$231.47	$281.00	$49.53	21.4%
10,000		$252.70	$310.00	$57.30	22.7%
11,000		$270.89	$339.00	$68.11	25.1%
12,000		$289.09	$368.00	$78.91	27.3%
13,000		$307.28	$397.00	$89.72	29.2%
14,000		$325.48	$426.00	$100.52	30.9%
15,000		$343.67	$455.00	$111.33	32.4%
16,000		$361.87	$484.00	$122.13	33.8%
17,000		$380.06	$513.00	$132.94	35.0%
18,000		$398.26	$542.00	$143.74	36.1%
19,000		$416.45	$571.00	$154.55	37.1%
20,000		$434.64	$600.00	$165.36	38.0%
21,000		$452.84	$629.00	$176.16	38.9%
22,000		$471.03	$658.00	$186.97	39.7%
23,000		$489.23	$687.00	$197.77	40.4%
24,000		$507.42	$716.00	$208.58	41.1%
25,000		$525.62	$745.00	$219.38	41.7%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
ZONE 6 MCKEESPORT RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
0		$14.45	$20.00	$5.55	38.4%
100		$17.36	$22.90	$5.54	31.9%
500		$28.98	$34.50	$5.52	19.0%
1,000		$43.51	$49.00	$5.49	12.6%
2,000		$72.58	$78.00	$5.42	7.5%
3,000		$101.64	$107.00	$5.36	5.3%
3,122	*	**$105.18**	**$110.54**	**$5.36**	**5.1%**
3,500		$116.17	$121.50	$5.33	4.6%
4,000		$130.70	$136.00	$5.30	4.1%
5,000		$159.76	$165.00	$5.24	3.3%
6,000		$188.82	$194.00	$5.18	2.7%
7,000		$217.88	$223.00	$5.12	2.4%
8,000		$246.94	$252.00	$5.06	2.0%
9,000		$276.00	$281.00	$5.00	1.8%
10,000		$305.06	$310.00	$4.94	1.6%
11,000		$334.12	$339.00	$4.88	1.5%
12,000		$363.18	$368.00	$4.82	1.3%
13,000		$392.24	$397.00	$4.76	1.2%
14,000		$421.30	$426.00	$4.70	1.1%
15,000		$450.36	$455.00	$4.64	1.0%
16,000		$479.42	$484.00	$4.58	1.0%
17,000		$508.48	$513.00	$4.52	0.9%
18,000		$537.54	$542.00	$4.46	0.8%
19,000		$566.60	$571.00	$4.40	0.8%
20,000		$595.66	$600.00	$4.34	0.7%
21,000		$624.72	$629.00	$4.28	0.7%
22,000		$653.79	$658.00	$4.21	0.6%
23,000		$682.85	$687.00	$4.15	0.6%
24,000		$711.91	$716.00	$4.09	0.6%
25,000		$740.97	$745.00	$4.03	0.5%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Commercial Class	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Zone 3 - Scranton WW	7,755,892	$15,685,749	7,772,888	$169,891	$15,900,531	$22,690,465	42.7%
2	Zone 4 - Kane WW	218,206	$507,169	215,770	$5,427	$507,998	$635,373	25.1%
3	Zone 6 - McKeesport WW	1,613,898	$3,817,016	1,583,213	$40,483	$3,788,874	$4,479,091	18.2%
4	**Total Commercial**	9,587,996	$20,009,934	9,571,871	$215,801	$20,197,403	$27,804,929	37.7%

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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Zone 3 - Scranton WW	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Proforma Revenues	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge Per EDU	65,244	$35.00	$2,283,553	65,466	$35.00	$24,746	$2,316,069	$40.00	$2,618,654	13.1%
	Consumption Charges										
2	Usage (in 100 Gallons)	7,827,713	$1.7270	$13,518,460	7,755,892	$1.7270	$144,660	$13,539,086	$2.5800	$20,010,202	47.8%
	Adjustment (1):										
3	Service Charge Per EDU	222	$35.00	$7,770	444	$35.00	$168	$15,708	$40.00	$17,760	13.1%
4	Usage (in 100 Gallons)	51,506	$1.7270	$88,950	103,011	$1.7270	$1,921	$179,822	$2.5800	$265,770	47.8%
	Adjustment (2):										
5	Usage (in 100 Gallons)	(123,326)	$1.7270	-$212,984	(86,016)	$1.7270	-$1,604	-$150,154	$2.5800	-$221,921	47.8%
6	**Total Zone 3 Commercial**			**$15,685,749**			**$169,891**	**$15,900,531**		**$22,690,465**	42.7%

Note(1): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (2): Adjustment from usage normalization

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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Zone 4 - Kane WW	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Proforma Revenues	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge (5/8")	1,690	$40.00	$67,596	1,690	$40.00	$730	$68,326	$40.00	$67,596	-1.1%
2	Service Charge (Other than 5/8")	277	$100.00	$27,729	277	$100.00	$299	$28,028	$40.00	$11,091	-60.4%
	Usage (in 100 Gallons)										
3	First 10,000 Gal	64,599	$2.1000	$135,657	63,581	$2.1000	$1,442	$134,961	$2.5800	$164,038	21.5%
4	All Over 10,000 Gal	157,100	$1.8000	$282,780	154,625	$1.8000	$3,006	$281,331	$2.5800	$398,933	41.8%
	Adjustment (1):										
5	Service Charge	0	$40.00	$0	0	$40.00	$0	$0	$40.00	$0	0.0%
6	Usage (in 100 Gallons)	0	$2.1000	$0	0	$2.1000	$0	$0	$2.5800	$0	0.0%
	Adjustment (2):										
7	Usage (in 100 Gallons)										
8	First 10,000 Gal	(1,018)	$2.1000	-$2,138	(710)	$2.1000	-$16	-$1,507	$2.5800	-$1,832	21.6%
9	All Over 10,000 Gal	(2,475)	$1.8000	-$4,455	(1,726)	$1.8000	-$34	-$3,141	$2.5800	-$4,453	41.8%
10	**Total Zone 4 Commercial**			**$507,169**			**$5,427**	**$507,998**		**$635,373**	25.1%

Note(1): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (2): Adjustment from usage normalization

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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Zone 6 - McKeesport WW	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Proforma Revenues	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge	9,818	$35.00	$343,614	9,779	$35.00	$3,696	$345,945	$40.00	$391,141	13.1%
	Consumption Charges:										
2	Usage (in 100 Gallons)	1,623,741	$2.1416	$3,477,404	1,591,861	$2.1416	$36,819	$3,445,949	$2.5800	$4,107,002	19.2%
	Port Vue:										
3	Service Charge	160	$14.30	$2,281	160	$14.30	$25	$2,306	$40.00	$6,380	176.7%
	Consumption Charges:										
4	Usage (in 100 Gallons)	22,390	$2.8750	$64,371	22,037	$2.8750	$684	$64,040	$2.5800	$56,855	-11.2%
	Adjustment (1):										
5	Service Charge	(39)	$35.00	-$1,365	(78)	$35.00	-$29	-$2,759	$40.00	-$3,120	13.1%
6	Usage (in 100 Gallons)	(6,298)	$2.1416	-$13,488	(12,596)	2.1416	-$291	-$27,266	$2.5800	-$32,497	19.2%
	Adjustment (2):										
7	Usage (in 100 Gallons)	(25,582)	$2.1416	-$54,786	(17,843)	$2.1416	-$413	-$38,626	$2.5800	-$46,035	
8	Usage (in 100 Gallons) Port Vu	(353)	$2.8750	-$1,015	(246)	$2.8750	-$8	-$715	$2.5800	-$635	
9	**Total Zone 6 Commercial**			**$3,817,016**			**$40,483**	**$3,788,874**		**$4,479,091**	18.2%

Note(1): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (2): Adjustment from usage normalization

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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
ZONE 3 SCRANTON COMMERCIAL (C) - MONTHLY
5/8 INCH METERS

		CONSUMPTION GALLONS	BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
1		0	$35.38	$40.00	$4.62	13.1%
2		100	$37.12	$42.58	$5.46	14.7%
3		500	$44.11	$52.90	$8.79	19.9%
4		1,000	$52.83	$65.80	$12.97	24.5%
5		2,000	$70.29	$91.60	$21.31	30.3%
6		3,000	$87.75	$117.40	$29.65	33.8%
7		3,500	$96.48	$130.30	$33.82	35.1%
8		4,000	$105.20	$143.20	$38.00	36.1%
9		5,000	$122.66	$169.00	$46.34	37.8%
10		6,000	$140.12	$194.80	$54.68	39.0%
11		7,000	$157.57	$220.60	$63.03	40.0%
12		8,000	$175.03	$246.40	$71.37	40.8%
13		9,000	$192.49	$272.20	$79.71	41.4%
14		10,000	$209.94	$298.00	$88.06	41.9%
15		16,000	$314.68	$452.80	$138.12	43.9%
16		20,000	$384.51	$556.00	$171.49	44.6%
17		21,000	$401.96	$581.80	$179.84	44.7%
18		22,000	$419.42	$607.60	$188.18	44.9%
19	*	**22,094**	**$421.06**	**$610.03**	**$188.96**	**44.9%**
20		23,000	$436.88	$633.40	$196.52	45.0%
21		23,692	$448.96	$651.25	$202.30	45.1%
22		24,000	$454.33	$659.20	$204.87	45.1%
23		25,000	$471.79	$685.00	$213.21	45.2%
24		26,000	$489.25	$710.80	$221.55	45.3%
25		27,000	$506.70	$736.60	$229.90	45.4%
26		28,000	$524.16	$762.40	$238.24	45.5%
27		29,000	$541.62	$788.20	$246.58	45.5%
28		30,000	$559.07	$814.00	$254.93	45.6%
29		40,000	$733.64	$1,072.00	$338.36	46.1%
30		50,000	$908.20	$1,330.00	$421.80	46.4%
31		60,000	$1,082.77	$1,588.00	$505.23	46.7%
32		70,000	$1,257.33	$1,846.00	$588.67	46.8%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 4 KANE COMMERCIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
1	0		$40.43	$40.00	-$0.43	-1.1%
2	100		$42.55	$42.58	$0.03	0.1%
3	500		$51.05	$52.90	$1.85	3.6%
4	1,000		$61.66	$65.80	$4.14	6.7%
5	2,000		$82.89	$91.60	$8.71	10.5%
6	3,000		$104.11	$117.40	$13.29	12.8%
7	3,500		$114.73	$130.30	$15.57	13.6%
8	4,000		$125.34	$143.20	$17.86	14.2%
9	5,000		$146.57	$169.00	$22.43	15.3%
10	6,000		$167.79	$194.80	$27.01	16.1%
11	7,000		$189.02	$220.60	$31.58	16.7%
12	8,000		$210.25	$246.40	$36.15	17.2%
13	9,000		$231.47	$272.20	$40.73	17.6%
14	10,000		$252.70	$298.00	$45.30	17.9%
15	15,000		$343.67	$427.00	$83.33	24.2%
16	20,000		$434.64	$556.00	$121.36	27.9%
17	21,000		$452.84	$581.80	$128.96	28.5%
18	22,000		$471.03	$607.60	$136.57	29.0%
19	**22,094**	*	**$472.74**	**$610.03**	**$137.28**	**29.0%**
20	23,000		$489.23	$633.40	$144.17	29.5%
21	23,692		$501.82	$651.25	$149.44	29.8%
22	24,000		$507.42	$659.20	$151.78	29.9%
23	25,000		$525.62	$685.00	$159.38	30.3%
24	26,000		$543.81	$710.80	$166.99	30.7%
25	27,000		$562.00	$736.60	$174.60	31.1%
26	28,000		$580.20	$762.40	$182.20	31.4%
27	29,000		$598.39	$788.20	$189.81	31.7%
28	30,000		$616.59	$814.00	$197.41	32.0%
29	40,000		$798.53	$1,072.00	$273.47	34.2%
30	50,000		$980.48	$1,330.00	$349.52	35.6%
31	60,000		$1,162.42	$1,588.00	$425.58	36.6%
32	70,000		$1,344.36	$1,846.00	$501.64	37.3%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
ZONE 6 MCKEESPORT COMMERCIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
1	0		$35.38	$40.00	$4.62	13.1%
2	100		$37.54	$42.58	$5.04	13.4%
3	500		$46.20	$52.90	$6.70	14.5%
4	1,000		$57.03	$65.80	$8.77	15.4%
5	2,000		$78.67	$91.60	$12.93	16.4%
6	3,000		$100.32	$117.40	$17.08	17.0%
7	3,500		$111.14	$130.30	$19.16	17.2%
8	4,000		$121.97	$143.20	$21.23	17.4%
9	5,000		$143.61	$169.00	$25.39	17.7%
10	6,000		$165.26	$194.80	$29.54	17.9%
11	7,000		$186.91	$220.60	$33.69	18.0%
12	8,000		$208.56	$246.40	$37.84	18.1%
13	9,000		$230.20	$272.20	$42.00	18.2%
14	10,000		$251.85	$298.00	$46.15	18.3%
15	16,000		$381.73	$452.80	$71.07	18.6%
16	20,000		$468.32	$556.00	$87.68	18.7%
17	21,000		$489.97	$581.80	$91.83	18.7%
18	22,000		$511.62	$607.60	$95.98	18.8%
19	**22,094**	*	**$513.65**	**$610.03**	**$96.37**	**18.8%**
20	23,000		$533.27	$633.40	$100.13	18.8%
21	23,692		$548.25	$651.25	$103.01	18.8%
22	24,000		$554.91	$659.20	$104.29	18.8%
23	25,000		$576.56	$685.00	$108.44	18.8%
24	26,000		$598.21	$710.80	$112.59	18.8%
25	27,000		$619.85	$736.60	$116.75	18.8%
26	28,000		$641.50	$762.40	$120.90	18.8%
27	29,000		$663.15	$788.20	$125.05	18.9%
28	30,000		$684.80	$814.00	$129.20	18.9%
29	40,000		$901.27	$1,072.00	$170.73	18.9%
30	50,000		$1,117.74	$1,330.00	$212.26	19.0%
31	60,000		$1,334.22	$1,588.00	$253.78	19.0%
32	70,000		$1,550.69	$1,846.00	$295.31	19.0%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND 2022 RATES
ZONE 6 PORT VUE COMMERCIAL - MONTHLY
5/8 INCH METERS

	CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
1	0		$14.45	$40.00	$25.55	176.7%
2	100		$17.36	$42.58	$25.22	145.3%
3	500		$28.98	$52.90	$23.92	82.5%
4	1,000		$43.51	$65.80	$22.29	51.2%
5	2,000		$72.58	$91.60	$19.02	26.2%
6	3,000		$101.64	$117.40	$15.76	15.5%
7	3,500		$116.17	$130.30	$14.13	12.2%
8	4,000		$130.70	$143.20	$12.50	9.6%
9	5,000		$159.76	$169.00	$9.24	5.8%
10	6,000		$188.82	$194.80	$5.98	3.2%
11	7,000		$217.88	$220.60	$2.72	1.2%
12	8,000		$246.94	$246.40	-$0.54	-0.2%
13	9,000		$276.00	$272.20	-$3.80	-1.4%
14	10,000		$305.06	$298.00	-$7.06	-2.3%
15	16,000		$479.42	$452.80	-$26.62	-5.6%
16	20,000		$595.66	$556.00	-$39.66	-6.7%
17	21,000		$624.72	$581.80	-$42.92	-6.9%
18	22,000		$653.79	$607.60	-$46.19	-7.1%
19	**22,094**	*	**$656.52**	**$610.03**	**-$46.49**	**-7.1%**
20	23,000		$682.85	$633.40	-$49.45	-7.2%
21	23,692		$702.96	$651.25	-$51.70	-7.4%
22	24,000		$711.91	$659.20	-$52.71	-7.4%
23	25,000		$740.97	$685.00	-$55.97	-7.6%
24	26,000		$770.03	$710.80	-$59.23	-7.7%
25	27,000		$799.09	$736.60	-$62.49	-7.8%
26	28,000		$828.15	$762.40	-$65.75	-7.9%
27	29,000		$857.21	$788.20	-$69.01	-8.1%
28	30,000		$886.27	$814.00	-$72.27	-8.2%
29	40,000		$1,176.87	$1,072.00	-$104.87	-8.9%
30	50,000		$1,467.48	$1,330.00	-$137.48	-9.4%
31	60,000		$1,758.08	$1,588.00	-$170.08	-9.7%
32	70,000		$2,048.69	$1,846.00	-$202.69	-9.9%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

	Industrial Class	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Zone 3 - Scranton WW	1,255,447	$2,216,402	1,255,447	$23,937	$2,240,339	$3,294,191	47.0%
2	Zone 4 - Kane WW	10,271	$20,038	10,271	$217	$20,255	$26,973	33.2%
3	Zone 6 - McKeesport WW	3,654	$8,106	3,654	$88	$8,194	$9,748	19.0%
4	**Total Industrial**	1,269,373	$2,244,546	1,269,373	$24,242	$2,268,788	$3,330,912	46.8%

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Schedule 23
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WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

	Zone 3 - Scranton WW	6/30/2024 Billing Determinants (B)	Current Rate (C)	6/30/2024 Proforma Revenues (D)	6/30/2025 Billing Determinants (E)	Current Rate (F)	Proforma DSIC Revenues (G)	6/30/2025 Proforma Revenues (H)	Proposed Rate (I)	6/30/2025 Proforma @ Proposed Rate (J)	% Percent Change (K)
1	C. Service Charge Per EDU	1,378	$35.00	$48,245	1,378	$35.00	$521	$48,766	$40.00	$55,137	13.1%
2	C. Consumption Charges										
3	All Usage (100 Gallons)	1,255,447	$1.7270	$2,168,157	1,255,447	$1.7270	$23,416	$2,191,573	$2.5800	$3,239,054	47.8%
4	**Total Zone 3 Industrial**			**$2,216,402**			**$23,937**	**$2,240,339**		**$3,294,191**	47.0%

	Zone 4 - Kane WW	6/30/2024 Billing Determinants (B)	Current Rate (C)	6/30/2024 Proforma Revenues (D)	6/30/2025 Billing Determinants (E)	Current Rate (F)	Proforma DSIC Revenues (G)	6/30/2025 Proforma Revenues (H)	Proposed Rate (I)	6/30/2025 Proforma @ Proposed Rate (J)	% Percent Change (K)
5	Service Charge (5/8")	0	$40.00	$0	0	$40.00	$0	$0	$40.00	$0	0.0%
6	Service Charge (Other than 5/8")	12	$100.00	$1,185	12	$100.00	$13	$1,198	$40.00	$474	-60.4%
	Usage per 100 Gallons:										
7	First 10,000 Gal	1,218	$2.1000	$2,558	1,218	$2.1000	$28	$2,586	$2.5800	$3,142	21.5%
8	All Over 10,000 Gal	9,053	$1.8000	$16,295	9,053	$1.8000	$176	$16,471	$2.5800	$23,357	41.8%
9	**Total Zone 4 Industrial**			**$20,038**			**$217**	**$20,255**		**$26,973**	33.2%

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Schedule 23
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WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

	Zone 6 - McKeesport WW	6/30/2024 Billing Determinants (B)	Current Rate (C)	6/30/2024 Proforma Revenues (D)	6/30/2025 Billing Determinants (E)	Current Rate (F)	Proforma DSIC Revenues (G)	6/30/2025 Proforma Revenues (H)	Proposed Rate (I)	6/30/2025 Proforma @ Proposed Rate (J)	% Percent Change (K)
1	Service Charge	8	$35.00	$280	8	$35.00	$3	$283	$40.00	$320	13.1%
	Consumption Charges:										
2	Usage per 100 Gallons:	3,654	$2.1416	$7,826	3,654	$2.1416	$85	$7,911	$2.5800	$9,428	19.2%
	Port Vue:										
3	Service Charge	0	$14.30	$0	0	$14.30	$0	$0	$40.00	$0	0.0%
	Consumption Charges:										
4	Usage per 100 Gallons:	0	$2.8750	$0	0	$2.8750	$0	$0	$2.5800	$0	0.0%
5	**Total Zone 6 Industrial**			**$8,106**			**$88**	**$8,194**		**$9,748**	19.0%

I &E Exhibit No. 3
Schedule 23
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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
ZONE 3 SCRANTON INDUSTRIAL - MONTHLY
2 INCH METERS

	CONSUMPTION GALLONS	BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
1	0	$35.38	$40.00	$4.62	13.1%
2	1,000	$52.83	$65.80	$12.97	24.5%
3	2,000	$70.29	$91.60	$21.31	30.3%
4	3,000	$87.75	$117.40	$29.65	33.8%
5	4,000	$105.20	$143.20	$38.00	36.1%
6	5,000	$122.66	$169.00	$46.34	37.8%
7	10,000	$209.94	$298.00	$88.06	41.9%
8	16,000	$314.68	$452.80	$138.12	43.9%
9	20,000	$384.51	$556.00	$171.49	44.6%
10	30,000	$559.07	$814.00	$254.93	45.6%
11	40,000	$733.64	$1,072.00	$338.36	46.1%
12	50,000	$908.20	$1,330.00	$421.80	46.4%
13	60,000	$1,082.77	$1,588.00	$505.23	46.7%
14	70,000	$1,257.33	$1,846.00	$588.67	46.8%
15	80,000	$1,431.90	$2,104.00	$672.10	46.9%
16	90,000	$1,606.46	$2,362.00	$755.54	47.0%
17	100,000	$1,781.03	$2,620.00	$838.97	47.1%
18	200,000	$3,526.68	$5,200.00	$1,673.32	47.4%
19	300,000	$5,272.33	$7,780.00	$2,507.67	47.6%
20	400,000	$7,017.98	$10,360.00	$3,342.02	47.6%
21	500,000	$8,763.64	$12,940.00	$4,176.36	47.7%
22	600,000	$10,509.29	$15,520.00	$5,010.71	47.7%
23	**685,947**	**$12,009.62**	**$17,737.43**	**$5,727.81**	**47.7%**
24	700,000	$12,254.94	$18,100.00	$5,845.06	47.7%
25	800,000	$14,000.59	$20,680.00	$6,679.41	47.7%
26	900,000	$15,746.24	$23,260.00	$7,513.76	47.7%
27	1,000,000	$17,491.89	$25,840.00	$8,348.11	47.7%
28	1,100,000	$19,237.55	$28,420.00	$9,182.45	47.7%
29	1,200,000	$20,983.20	$31,000.00	$10,016.80	47.7%
30	1,300,000	$22,728.85	$33,580.00	$10,851.15	47.7%
31	1,400,000	$24,474.50	$36,160.00	$11,685.50	47.7%
32	1,500,000	$26,220.15	$38,740.00	$12,519.85	47.7%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
RATE ZONE 4 KANE INDUSTRIAL - MONTHLY
2 INCH METERS

	CONSUMPTION GALLONS	BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
1	0	$101.08	$40.00	-$61.08	-60.4%
2	1,000	$122.31	$65.80	-$56.51	-46.2%
3	2,000	$143.53	$91.60	-$51.93	-36.2%
4	3,000	$164.76	$117.40	-$47.36	-28.7%
5	4,000	$185.99	$143.20	-$42.79	-23.0%
6	5,000	$207.21	$169.00	-$38.21	-18.4%
7	10,000	$313.35	$298.00	-$15.35	-4.9%
8	15,000	$404.32	$427.00	$22.68	5.6%
9	20,000	$495.29	$556.00	$60.71	12.3%
10	30,000	$677.24	$814.00	$136.76	20.2%
11	40,000	$859.18	$1,072.00	$212.82	24.8%
12	50,000	$1,041.12	$1,330.00	$288.88	27.7%
13	60,000	$1,223.07	$1,588.00	$364.93	29.8%
14	70,000	$1,405.01	$1,846.00	$440.99	31.4%
15	80,000	$1,586.96	$2,104.00	$517.04	32.6%
16	90,000	$1,768.90	$2,362.00	$593.10	33.5%
17	100,000	$1,950.84	$2,620.00	$669.16	34.3%
18	200,000	$3,770.28	$5,200.00	$1,429.72	37.9%
19	300,000	$5,589.72	$7,780.00	$2,190.28	39.2%
20	400,000	$7,409.16	$10,360.00	$2,950.84	39.8%
21	500,000	$9,228.60	$12,940.00	$3,711.40	40.2%
22	600,000	$11,048.04	$15,520.00	$4,471.96	40.5%
23	**685,947**	**$12,611.80**	**$17,737.43**	**$5,125.63**	**40.6%**
24	700,000	$12,867.48	$18,100.00	$5,232.52	40.7%
25	800,000	$14,686.92	$20,680.00	$5,993.08	40.8%
26	900,000	$16,506.36	$23,260.00	$6,753.64	40.9%
27	1,000,000	$18,325.80	$25,840.00	$7,514.20	41.0%
28	1,100,000	$20,145.24	$28,420.00	$8,274.76	41.1%
29	1,200,000	$21,964.68	$31,000.00	$9,035.32	41.1%
30	1,300,000	$23,784.12	$33,580.00	$9,795.88	41.2%
31	1,400,000	$25,603.56	$36,160.00	$10,556.44	41.2%
32	1,500,000	$27,423.00	$38,740.00	$11,317.00	41.3%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
COMPARISON OF BILLS UNDER PRESENT AND 2025 RATES
ZONE 6 MCKEESPORT INDUSTRIAL - MONTHLY
2 INCH METERS

	CONSUMPTION GALLONS		BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
1	0		$35.38	$40.00	$4.62	13.1%
2	1,000		$57.03	$65.80	$8.77	15.4%
3	2,000		$78.67	$91.60	$12.93	16.4%
4	3,000		$100.32	$117.40	$17.08	17.0%
5	4,000		$121.97	$143.20	$21.23	17.4%
6	5,000		$143.61	$169.00	$25.39	17.7%
7	10,000		$251.85	$298.00	$46.15	18.3%
8	16,000		$381.73	$452.80	$71.07	18.6%
9	20,000		$468.32	$556.00	$87.68	18.7%
10	30,000		$684.80	$814.00	$129.20	18.9%
11	40,000		$901.27	$1,072.00	$170.73	18.9%
12	50,000		$1,117.74	$1,330.00	$212.26	19.0%
13	60,000		$1,334.22	$1,588.00	$253.78	19.0%
14	70,000		$1,550.69	$1,846.00	$295.31	19.0%
15	80,000		$1,767.16	$2,104.00	$336.84	19.1%
16	90,000		$1,983.63	$2,362.00	$378.37	19.1%
17	100,000		$2,200.11	$2,620.00	$419.89	19.1%
18	200,000		$4,364.84	$5,200.00	$835.16	19.1%
19	300,000		$6,529.57	$7,780.00	$1,250.43	19.2%
20	400,000		$8,694.30	$10,360.00	$1,665.70	19.2%
21	500,000		$10,859.02	$12,940.00	$2,080.98	19.2%
22	600,000		$13,023.75	$15,520.00	$2,496.25	19.2%
23	**685,947**	*	**$14,884.27**	**$17,737.43**	**$2,853.16**	**19.2%**
24	700,000		$15,188.48	$18,100.00	$2,911.52	19.2%
25	800,000		$17,353.21	$20,680.00	$3,326.79	19.2%
26	900,000		$19,517.94	$23,260.00	$3,742.06	19.2%
27	1,000,000		$21,682.67	$25,840.00	$4,157.33	19.2%
28	1,100,000		$23,847.40	$28,420.00	$4,572.60	19.2%
29	1,200,000		$26,012.13	$31,000.00	$4,987.87	19.2%
30	1,300,000		$28,176.86	$33,580.00	$5,403.14	19.2%
31	1,400,000		$30,341.59	$36,160.00	$5,818.41	19.2%
32	1,500,000		$32,506.32	$38,740.00	$6,233.68	19.2%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 1.08%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

	Municipal Class	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Zone 3 - Scranton WW	266,222	$484,552	265,259	$5,215	$488,104	$712,696	46.0%
2	Zone 4 - Kane WW	58,862	$114,940	58,649	$1,238	$115,789	$155,466	34.3%
3	Zone 6 - McKeesport WW	169,362	$384,833	168,749	$4,142	$387,658	$460,190	18.7%
4	**Total Municipal**	494,446	$984,325	492,657	$10,595	$991,551	$1,328,352	34.0%

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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

	Zone 3 - Scranton WW	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	C. Service Charge Per EDU	708	$35.00	$24,787	708	$35.00	$268	$25,055	$40.00	$28,328	13.1%
	C. Consumption Charges										
2	All Usage (100 Gallons)	275,610	$1.7270	$475,978	266,222	$1.7270	$4,965	$464,730	$2.5800	$686,853	47.8%
	Adjustment (1):										
3	All Usage (100 Gallons)	(9,388)	$1.7270	-$16,213	(963)	$1.7270	-$18	-$1,681	$2.5800	-$2,485	47.8%
4	**Total Zone 3 Municipal**			**$484,552**			**$5,215**	**$488,104**		**$712,696**	46.0%

	Zone 4 - Kane WW	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
5	Service Charge (5/8")	54	$40.00	$2,167	54	$40.00	$23	$2,190	$40.00	$2,167	-1.1%
6	Service Charge (Other than 5/8")	50	$100.00	$4,962	50	$100.00	$54	$5,016	$40.00	$1,985	-60.4%
	Consumption Charges										0.0%
7	First 10,000 Gallons	6,419	$2.1000	$13,480	6,200	$2.1000	$141	$13,161	$2.5800	$15,996	21.5%
8	All Over 10,000 Gallons	54,519	$1.8000	$98,134	52,662	$1.8000	$1,024	$95,816	$2.5800	$135,868	41.8%
	Adjustment (1):										
9	First 10,000 Gallons	(219)	$2.1000	-$460	(22)	$2.1000	$0	-$46	$2.5800	-$57	23.9%
10	All Over 10,000 Gallons	(1,857)	$1.8000	-$3,343	(191)	$1.8000	-$4	-$348	$2.5800	-$493	41.7%
11	**Total Zone 4 Municipal**			**$114,940**			**$1,238**	**$115,789**		**$155,466**	34.3%

Note (1): Adjustment from usage normalization

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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

	Zone 6 - McKeesport WW	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge	584	$35.00	$20,437	584	$35.00	$221	$20,658	$40.00	$23,356	13.1%
	Consumption Charges:										
2	Usage (in 100 Gallons)	173,684	$2.1416	$371,961	167,768	$2.1416	$3,880	$363,171	$2.5800	$432,841	19.2%
	Port Vue:										
3	Service Charge	37	$14.30	$522	37	$14.30	$6	$528	$40.00	$1,461	176.7%
	Consumption Charges:										
4	Usage (in 100 Gallons)	1,650	$2.8750	$4,744	1,594	$2.8750	$49	$4,632	$2.5800	$4,113	-11.2%
	Adjustment (1):										
5	Usage (in 100 Gallons)	(5,916)	$2.1416	-$12,670	(607)	$2.1416	-$14	-$1,314	$2.5800	-$1,566	19.2%
6	Usage (in 100 Gallons) Port Vu	(56)	$2.8750	-$161	(6)	$2.8750	$0	-$17	$2.5800	-$15	-11.8%
7	**Total Zone 6 Municipal**			**$384,833**			**$4,142**	**$387,658**		**$460,190**	18.7%

Note (1): Adjustment from usage normalization

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PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BULK WASTEWATER CLASS BILL ANALYSIS

	Bulk WW Class	6/30/2024 Water Usage (in 100 Gallons)	6/30/2024 Proforma Revenues	6/30/2025 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2025 Proforma @ Present Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Zone 3 - Scranton WW	521,607	$1,195,024	521,607	$12,907	$1,207,931	$1,574,617	30.4%
2	Zone 4 - Kane WW	0	$0	0	$0	$0	$0	0.0%
3	Zone 6 - McKeesport WW	4,202,906	$7,045,793	4,202,906	$76,095	$7,121,888	$7,045,793	-1.1%
4	**Total Bulk WW**	4,724,512	$8,240,817	4,724,512	$89,002	$8,329,819	$8,620,410	3.5%

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WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BULK WASTEWATER CLASS BILL ANALYSIS

	Zone 3 - Scranton WW	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
	Bulk (Residential)										
1	Service Charge	5,354	$19.50	$104,403	5,354	$19.50	$1,128	$105,531	$20.00	$107,080	1.5%
	Consumption Charges										
2	All Usage (100 Gallons)	241,973	$2.3510	$568,879	241,973	$2.3510	$6,144	$575,023	$2.9000	$701,723	22.0%
	Bulk (Non-Residential)										
3	Service Charge	1,109	$35.00	$38,815	1,109	$35.00	$419	$39,234	$40.00	$44,360	13.1%
	Consumption Charges										
4	All Usage (100 Gallons)	279,633	$1.7270	$482,927	279,633	$1.7270	$5,216	$488,143	$2.5800	$721,454	47.8%
5	**Total Zone 3 Bulk WW**			**$1,195,024**			**$12,907**	**$1,207,931**		**$1,574,617**	30.4%

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WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BULK WASTEWATER CLASS BILL ANALYSIS

	Zone 4 - Kane WW	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Service Charge (5/8")	0	$40.00	$0	0	$40.00	$0	$0	$40.00	$0	0.0%
2	Service Charge (Other than 5/8")	0	$100.00	$0	0	$100.00	$0	$0	$40.00	$0	0.0%
	Usage per 100 Gallons:										
3	First 10,000 Gallons	0	$2.1000	$0	0	$2.1000	$0	$0	$2.5800	$0	0.0%
4	All Over 10,000 Gallons	0	$1.8000	$0	0	$1.8000	$0	$0	$2.5800	$0	0.0%
5	**Total Zone 4 Bulk WW**			**$0**			**$0**	**$0**		**$0**	0.0%

	Zone 6 - McKeesport WW	6/30/2024 Billing Determinants	Current Rate	6/30/2024 Annualized Revenue	6/30/2025 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2025 Proforma Revenues	Proposed Rate	6/30/2025 Proforma @ Proposed Rate	% Percent Change
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
6	Flat Rate Monthly	228	$86.00	$19,608	228	$86.00	$212	$19,820	$86.00	$19,608	-1.1%
7	Flat Rate Quarterly	61	$258.00	$15,738	61	$258.00	$170	$15,908	$258.00	$15,738	-1.1%
	Consumption Charges:										
8	Usage per 100 Gallons:	4,202,906	$1.6680	$7,010,447	4,202,906	$1.6680	$75,713	$7,086,160	$1.6680	$7,010,447	-1.1%
9	**Total Zone 6 Bulk WW**			**$7,045,793**			**$76,095**	**$7,121,888**		**$7,045,793**	-1.1%

I&E Exhibit No. 3
Schedule 26
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Exhibit No. 3
Schedule 28

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
Summary of Farmington Municipal Authority and Sadsbury Municipal Authority
R-2023-3041839

SADSBURY TOWNSHIP MUNICIPAL AUTHORITY

	(A)	(B)	(C)
1	Plant In Service	$3,390,193	PAWC Volume 5, Ex. 3-C, p. 30
2	Accrued	-$849,730	PAWC Volume 5, Ex. 3-C, p. 30
3	CIAC	-$925,000	PAWC Volume 5, Ex. 3-C, p. 31
4	Accrued CIAC	$320,149	PAWC Volume 5, Ex. 3-C, p. 31
5	**NET PLANT**	$1,935,612	
6	Annual	$37,328	PAWC Volume 5, Ex. 3-C, p. 30
7	CIAC Annual	-$12,986	PAWC Volume 5, Ex. 3-C, p. 31
8	**NET ANNUAL**	$24,342	1.2576% Of Net Plant
9	AA Transaction Costs - Rate Base	$83,085	PAWC Volume 3, Ex. 3-A, p. 106
10	Transaction Accrued Amort	-$8,385	PAWC Volume 3, Ex. 3-A, p. 106

FARMINGTON TOWNSHIP WASTEWATER SYSTEM

	(A)	(B)	(C)
11	Plant In Service	$5,720,178	PAWC Volume 5, Ex. 3-C, p. 28
12	Accrued	-$4,030,888	PAWC Volume 5, Ex. 3-C, p. 28
13	CIAC	-$1,970,206	PAWC Volume 5, Ex. 3-C, p. 29
14	Accrued CIAC	$1,204,188	PAWC Volume 5, Ex. 3-C, p. 29
15	**NET PLANT**	$923,272	
16	Annual Depreciation Expense	$11,611	1.2576% Of Net Plant
17	AA Transaction Costs - Rate Base	$51,761	PAWC Volume 3, Ex. 3-A, p. 106
18	Transaction Accrued Amort	-$5,224	PAWC Volume 3, Ex. 3-A, p. 106

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Bureau of Investigation & Enforcement

I&E RS-031-D

Responsible Witness: Connie Heppenstall, Senior Project Manager, Gannett Fleming

Question:

Reference PAWC Volume 17, Exhibit 12-D, page 7 showing the flow volumes per customer class in the Brentwood WW System.

A. How did the Company determine the average 395,200 gallons of residential and 112,300 gallons of flow non-residential flows given the response to I&E-RB-6 indicates that the flow from Brentwood customers alone is unknown.
B. Provide the back-up data used to determine these flows.
C. Did the Company include the flow from upstream municipalities in the 395,200 gallons of residential flow and 112,300 gallons of non-residential flow volumes? If yes, provide the volumes of upstream flow the Company attributed to these municipalities by class?
D. If the Company did not include the flow from upstream municipalities, explain why not.

Response:

A. The flow listed for the average residential flow in Exhibit 12-D, page 7 is actually 359,200, not 395,200 as stated in the question. The average flow per customer class is equal to the annualized winter metered water usage for each customer class as found in Exhibit 10-D divided by 365. This value is not based on actual measured sewage flows.
B. Please refer to Volume 9, Exhibit 10-D.
C. No, the Company did not include the flow from upstream municipalities in the 359,200 gallons of residential flow and 112,300 gallons of non-residential flow volumes.
D. The flow from upstream municipalities is not included because there are no data available on the quantity of sewage entering the Brentwood system from upstream municipalities.

Exhibit No. 3
Schedule 1
Corrected 2-12-24

Pennsylvania-American Water Company
Exhibit 3-A Act 11 Summary
I&E
R-2023-3041389 and 3041390

		Total System	Water Operations	Total Wastewater	SSS Wastewater	BASA Wastewater	Brentwood Wastewater	CSS Wastewater
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Present Rate Revenue	$998,224,270	$824,117,186	$174,107,084	$95,470,866	$0	$0	$78,636,218
2	Additional Revenue Requirement	$175,722,966	$128,149,690	$47,573,276	$31,793,150	$0	$0	$15,780,126
3	Act 11 Allocation	$0	$357,517	-$357,517	-$321,682	$0	$0	-$35,835
4	Proposed Revenue	$1,173,947,236	$824,474,703	$221,322,843	$126,942,334	$0	$0	$94,380,509
5	Rate Increase*	$175,722,966	$128,507,207	$47,215,759	$31,471,468	$0	$0	$15,744,291
6	Percentage Increase	17.6%	15.6%	27.1%	33.0%			20.0%

The lower Rate increase of $175,722,966 reflects the removal of $26,288,308 additional revneue for BASA and the $1,934,637 additional revneue for Brentwood.

I&E Statement No. 3-R
Witness: Joseph Kubas

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA AMERICAN WATER COMPANY

Docket No. R-2023-3041389 (Water)

Docket No. R -2023-3041390 (Wastewater)

Rebuttal Testimony

of

Joseph Kubas

Bureau of Investigation and Enforcement

Concerning:
Overall Act 11 Revenue, Wastewater
Rate Structure, Revenue Shortfall

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ACT 22 – OVERALL REVENUE **2**

CSS OPERATIONS – RESIDENTIAL CUSTOMER CHARGE **4**

SUMMARY **6**

Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is Joseph Kubas, and my business address is 400 North Street, Harrisburg, PA 17120.

Q. ARE YOU THE SAME JOSEPH KUBAS THAT SUBMITTED DIRECT TESTIMONY TO THE PARTIES ON FEBRUARY 1, 2024?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to address the direct testimony submitted on behalf of the Office of Consumer Advocate (OCA) by Jerome D. Mierzwa (OCA St. No. 4. My testimony will address the OCA's recommendation concerning the Act 11 allocation and the CSS customer charges.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

A. No.

INTRODUCTION

Q. PLEASE DESCRIBE THE FILING.

A. On November 8, 2023, PAWC filed a combined water and wastewater base rate case based on a fully projected future test year (FPFTY) ending June 30, 2025. The total increase of approximately $203,946,000 is comprised of an increase in water revenue

of approximately $199,237,000, and an increase in wastewater revenue of approximately $4,709,000 (PAWC Volume 3, Sch. 3-A).

ACT 22 – OVERALL REVENUE

Q. IS PAWC PROPOSING TO SHIFT SOME OF THE WASTEWATER REVENUE REQUIREMENT FROM WASTEWATER CUSTOMERS TO WATER CUSTOMERS IN THIS FILING?

A. Yes. In its filing, the Company proposes that its wastewater operations receive a $71,087,394 subsidy from its water operations (PAWC Volume 3, Ex. 3-A, p. 1).

Q. DID YOU ADDRESS THIS $71,087,394 SUBSIDY FROM WATER OPERATIONS?

A. Yes. I recommended that the $71,087,394 be reduced to $357,517 (I&E St. No. 3 and I&E Ex. No. 3, Sch. 1).

Q. DID THE OCA ALSO ADDRESS THIS $71,087,394 SUBSIDY FROM WATER OPERATIONS?

A. Yes. The OCA also believed that the $71,087,394 was excessive and recommended that the $71,087,394 be reduced to $18,899,766 through various rate making reductions and the exclusion of the large Butler Area Sewer Authority (BASA) and Borough of Brentwood (Brentwood) revenue shortfalls (OCA St. No. 4, pp. 38-40 and Table 5).

Q. WHAT REASON DID THE OCA GIVE FOR RECOMMENDING A SUBSIDY OF $18,899,766 FROM WATER OPERATIONS?

A. The OCA proposed to limit the increase in the Scranton area to 4.7% in this case consistent with the 4.7% increase it applied to the other CSS systems of McKeesport and Kane (OCA St. No. 4, pp. 39-40).

Q. DID THE OCA PROVIDE ANY REASON OR JUSTIFICATION FOR BELIEVING THAT INCREASES BETWEEN 21.0% AND 25.9% SHOWN ON OCA TABLE 5 BEFORE ANY ACT 11 SUBSIDY IS UNREASONABLE?

A. No. The OCA did not explain why its "Pre-Act 11" percentage increases of between 21.0% and 25.9% shown on OCA St. No. 4, Table 5 are excessive. I believe that considering the OCA total increase, this range is reasonable, given that the Company proposed the average Zone 1 Residential water customer bill increase 24.9% (PAWC Volume 9, Ex. 10-A, p. 76.

Q. DO YOU AGREE WITH THE OCA THAT IT IS REASONABLE TO RECOVER $18,899,766 OF WASTEWATER COSTS FROM WATER CUSTOMERS?

A. No, for the reasons described in my direct testimony. Overall, I believe the OCA was not aggressive enough in significantly reducing the wastewater subsidy to the extent described in my direct testimony. Therefore, I recommend that the OCA proposal to approve a wastewater subsidy of $18,899,766 be rejected.

CSS OPERATIONS – RESIDENTIAL CUSTOMER CHARGE

Q. WHAT ARE THE PRESENT RESIDENTIAL CUSTOMER CHARGES AND THE COMPANY PROPOSED RESIDENTIAL CUSTOMER CHARGES FOR CSS OPERATIONS?

A. The Company proposed the Zone 3 Residential customer charge increase from $19.50 per month to $19.71 per month, which equates to an increase of $0.21 per month or 1.1%. The Company proposed the Zone 4 Residential customer charge decrease from $40.00 per month to $20.00 per month, which equates to a decrease of $20.00 per month or 50%. The Company also proposed that the Zone 6 Residential customer charge increase from $14.30 per month to $20.00 per month, which equates to an increase of $5.70 per month or 39.9%. Finally, there is one Zone 4 Residential customer that pays $100.00 per month where the Company proposed this monthly charge be reduced to $20.00 per month (PAWC Volume 9, Sch. 10-C, pp. 3-5).

Q. WHAT RESIDENTIAL CUSTOMER CHARGE DID YOU RECOMMEND IN THE CSS OPERATIONS?

A. I recommended a Residential customer charge of $20.00 per month in the CSS Operations. This recommendation consolidated the Residential customer charge in Zones 3, 4, and 6 (I&E St. No. 3, p. 61).

Q. DID THE OCA ALSO ADDRESS THE PROPOSED RESIDENTIAL CUSTOMER CHARGE IN THE CSS OPERATIONS?

A. Yes. In the CSS Operations, the OCA recommended that the present Zone 3 customer charge be reduced from $19.50 per month to $14.30 per month, that the Zone 4 customer charge be reduced from $40.00 per month to $14.30 per month and the Zone 6 customer charge of $14.30 remain at $14.30 per month (OCA St. No. 4, p. 46-47).

Q. DO YOU AGREE WITH THE $14.30 PER MONTH CUSTOMER CHARGE FOR THE CSS RESIDENTIAL CUSTOMERS PROPOSED BY OCA?

A. No for several reasons. First, 72% ($33.228 million / $46.175 million) of present rate CSS Operations revenues are generated by Zone 3 (PAWC Volume 9, Ex. 10-C, p. 2). Therefore, granting a $5.20 per month reduction in the Zone 3 Residential customer charge will have a large impact on total CSS Operations revenue. Since Zone 3 Residential customers are used to paying $19.50 per month, my recommendation to increase the monthly charge to $20.00 is reasonable and will generate needed revenue. Second, for Zone 4, Residential customers currently paying $40.00 per month would experience a decrease of $25.70 ($40.00 -$14.30) per month under the OCA proposal, which I believe is too large of a decrease and will also reduce CSS Operations revenue more than my proposal. Third, for Zone 6, I believe these customers can absorb the larger increase in the customer charge that I propose because under present rates, Zone 6 customers pay the highest Residential

usage rates in the CSS Operations (I&E Ex. No. 3, Sch. 17, column B, line 17). The higher customer charge together with the small increase in the Zone 6 usage rate will cause the bill for an average Residential customer to increase only 5.1% under my rate structure proposal (I&E Ex. No. 3, Sch. 20, p. 3, line 7).

SUMMARY

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN REBUTTAL TESTIMONY?

A. For the reasons stated above and in my direct testimony, I recommend that the Commission reject the OCA proposal to allow $18,889,766 of Act 11 subsidy and instead approve the $357,517 subsidy that I recommend (I&E Ex. No. 3, Sch. 1). I also recommend the proposed CSS Residential customer charge be $20.00 per month, rather than the $14.30 per month proposed by the OCA.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

I&E Statement No. 3-SR
Witness: Joseph Kubas

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA AMERICAN WATER COMPANY

Docket No. R-2023-3041389 (Water)

Docket No. R -2023-3041390 (Wastewater)

Surrebuttal Testimony

of

Joseph Kubas

Bureau of Investigation and Enforcement

Concerning:
Overall Act 11 Revenue, Wastewater
Present Rate Revenue,
Proposed Revenue, Tariff Zones
Rate Structure, Revenue Shortfall
Cost of Service Studies Scaleback of Rates
Rate Base
Acquisition Adjustment
Annual Depreciation and Amortization Expense

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Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is Joseph Kubas. My business address is 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission (Commission) in the Bureau of Investigation and Enforcement (I&E) as an Annuitant. I was previously employed as the Fixed Utility Valuation Engineer Supervisor.

Q. ARE YOU THE SAME JOSEPH KUBAS THAT SUBMITTED DIRECT TESTIMONY ON FEBRUARY 1, 2024 AND REBUTTAL TESTIMONY ON FEBRUARY 21, 2024?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to address the rebuttal testimony submitted on behalf of Pennsylvania American Water Company (PAWC) by Ashley E. Everette (PAWC St. No. 1-R), Stacey D, Gess (PAWC St. No. 4-R), E. Christopher Abruzzo (PAWC St. No. 6-R), Charles. B. Rea (PAWC St. No. 10-R), John J. Spanos (PAWC St. No. 11-R), and Constance C. Heppenstall (PAWC St. No. 12-R). I will also address the rebuttal testimony of the Office of Consumer Advocate by Jerome D. Mierzwa (OCA St. No. 4-R).

INTRODUCTION

Q. PLEASE DESCRIBE THE FILING.

A. On November 8, 2023, PAWC filed a combined water and wastewater base rate case based on a fully projected future test year (FPFTY) ending June 30, 2025. The total increase of approximately $203,946,000 is comprised of an increase in water revenue of approximately $199,237,000, and an increase in wastewater revenue of approximately $4,709,000 (PAWC Volume 3, Sch. 3-A).

Q. DID PAWC MAKE REVISIONS TO THE ORIGINAL INCREASE?

A. Yes, PAWC revised its original increase upwards to approximately $204,291,000 (PAWC Ex. 3-A- Revised). This small increase did not change the Act 11 subsidy but did result in changes to the proposed level of water and wastewater revenue. For example, the proposed increase after the Act 11 allocation for the Sanitary Sewer System (SSS) was changed from $95,301,606 on PAWC Ex. 3-A to $95,363,564, and for the Combined Sewer System (CSS) it was changed from $78,409,290 to $78,464,092. The Company also made several revisions to some of the ratemaking components related to the Farmington and Sadsbury systems that I will describe below (PAWC Volume 3, Ex. 3-A, and PAWC St. 1-R).

Q. DID PAWC PROVIDE REVISED PROPOSED RATES TO ACCOUNT FOR THIS CHANGE?

A. No.

Q. IS IT NECESSARY FOR YOU TO REVISE YOUR PROPOSED WASTEWATER RATES TO ACCOUNT FOR THIS ADDITIONAL REVENUE?

A. No. I believe the scale-back described in my direct testimony can be used as described without impact due to these small changes.

Q. WHAT WILL YOUR SURREBUTTAL TESTIMONY FOCUS ON?

A. My surrebuttal testimony regarding PAWC's request will focus on the rebuttal testimony of the witness listed above addressing the exclusion of four wastewater systems, the rate structure contained in the remaining two wastewater systems, Cost of Service Studies (COSS), winter rates, and the scaleback of rates.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

A. No.

<u>WASTEWATER ZONES</u>

Q. HOW MANY DIFFERENT WASTEWATER ZONES DOES PAWC HAVE AND DO THE RATES VARY BY ZONE?

A. PAWC currently has eleven different wastewater rate zones with various rates, with eight in the Sanitary Sewer System (SSS) Group, which only includes sanitary systems, and three zones in the Combined Sewer System (CSS) Group, which include systems that treat both sanitary and storm water flows (PAWC Volume 9,

Ex. 10-B and 10-C). PAWC also included in this filing the Butler Area Sewer Authority (BASA), Borough of Brentwood (Brentwood), Farmington Township Wastewater (Farmington), and Sadsbury Township Wastewater (Sadsbury) systems that the Company does not currently own but are pending purchase.

BRENTWOOD WASTEWATER

Q. PLEASE DESCRIBE THE BRENTWOOD WASTEWATER SYSTEM.

A. The Brentwood system is a municipal owned wastewater collection only system in Allegheny County. PAWC filed an application with the Commission to purchase this system on April 3, 2023, at Docket A-2021-3024058.

Q. WHAT IS THE CURRENT STATUS OF THE BRENTWOOD APPLICATION?

A. The Commission denied the Application at the February 22, 2024 Public Meeting. As part of this base rate case filing, the Company reflected a revenue shortfall of $1,565,232, as a result of the Brentwood acquisition that will be paid by water customers (PAWC Volume 3, Exhibit 3-A).

Q. WHAT DID YOU RECOMMEND CONCERNING THE INCLUSION OF THE REVENUE, RATE BASE, EXPENSES, AMORTIZATIONS AND TAXES RELATED TO THE BRENTWOOD SYSTEM IN THIS CASE?

A. I recommended that the revenue, rate base, expenses, and taxes, and corresponding

revenue shortfall from the Brentwood system be excluded from this case (I&E St. No. 3, p. 4).

Q. WHY DID YOU RECOMMEND THIS SYSTEM BE EXCLUDED FROM THIS BASE RATE CASE IN YOUR DIRECT TESTIMONY?

A. I identified the following issues for my recommendation that Brentwood be excluded from this base rate case. First, PAWC does not currently own the Brentwood system. At the time I submitted direct testimony, the Commission had yet to decide the Application. Second, excluding the Brentwood system in this case eliminates the revenue shortfall of $1,565,232, as a result of the purchase of the Brentwood system and ensures that water customers will not be responsible for this shortfall while PAWC does not yet own the system. Finally, in the Application proceeding, the Company alleged there would be no "immediate" harm to other PAWC customers as a result of this acquisition (PAWC St. No. 3. p. 10 at A-2021-3024058). Since this base rate case was filed before PAWC will be able to close on the acquisition of the Brentwood system, I believed this case falls into the "immediate" time frame PAWC was referring to. Therefore, I recommended that the Commission hold the Company to this promise and exclude the Brentwood rate base, expenses, taxes, revenue, and revenue shortfall from this case resulting in no harm to PAWC water customers (I&E St. No. 3, pp. 4-5).

Q. DID THE COMPANY ADDRESS YOUR RECOMMENDATION CONCERNING THE BRENTWOOD WASTEWATER SYSTEM?

A. Yes. The Company disagreed with my recommendation to exclude the Brentwood wastewater system for several reasons. First, the Company believes that it will eventually purchase the Brentwood wastewater system shortly after the Commission issues a final Commission Order. However, if the Application is appealed to Commonwealth Court, the Company believes the system would still be acquired before the end of the FPFTY (PAWC St. No. 1-R, p. 4). Second, the Company believes that excluding the systems to reduce the bills of water customers as I suggest violates its rights under State and Federal law. Third, the Company believes that I misinterpreted the promise made in the Application docket that there would be no "immediate" impact on other ratepayers and this "promise" really meant "no immediate harm unless we file a base rate case before the system is acquired." Finally, the Company believes that any promise made in the past was not made with any foreknowledge of this impending case, and the equitable remedy I recommended is not an enforcement action available to the Commission (PAWC St. No. 6-R, p. 16-17).

Q. HAS THE STATUS OF THE BRENTWOOD ACQUISITION CHANGED?

A. Yes. As described above, the Commission denied the Company's Application to acquire the Brentwood wastewater system at Public Meeting on February 22, 2024.

Q. DOES THIS OUTCOME CHANGE THE LIKELIHOOD THAT THIS TRANSACTION WILL CLOSE WITHIN THE FPFTY?

A. Yes, the Company's belief that it will quickly purchase the Brentwood wastewater system is more speculative than it was before the Commission denied the Application. There is even greater question now as to whether this acquisition will close within the FPFTY, if at all.

Q. PLEASE ADDRESS THE SECOND REASON CONCERNING ALLEGED VIOLATIONS OF PAWC'S RIGHTS.

A. As explained above, excluding the Brentwood system in this case "saves" water customers $1,565,232, because the revenue shortfall as a result of purchasing the Brentwood system will be eliminated. This argument that removing this system violates its rights under State and Federal law makes no sense because the Company currently does not own the system. While the legal arguments concerning this claim will be addressed in the I&E brief, the Company does not own this system and cannot, therefore, include it in rates.

Q. PLEASE ADDRESS THE THIRD REASON CONCERNING ALLEGED PROMISES PAWC MADE IN THE APPLICATION.

A. I disagree with the Company that I misinterpreted the promise made in the Application docket. It was clear in the Application that the Company assured the Commission that there would be no "immediate" impact to other ratepayers as a

result of the acquisition. In this instance, PAWC is attempting to impact ratepayers before it even officially owns the system. If impacting ratepayers before the acquisition even closes is not immediate, it is unclear what would be classified as such.

Q. PLEASE ADDRESS THE FINAL REASON CONCERNING PAWC'S CLAIMS THAT ANY PROMISE MADE IN THE APPLICATION IS OUTDATED AND EQUITABLE REMEDIES ARE BEYOND THE COMMISSION'S ENFORCEMENT AUTHORITY.

A. This argument will be addressed in the I&E Brief. However, this argument leaves the parties and Commission to question the validity of statements made by PAWC in this case and in the future.

Q. DID THE COMPANY PROVIDE ANY VALID REASON FOR INCLUDING THE REVENUE, RATE BASE, EXPENSES, TAXES, AND REVENUE SHORTFALL FOR THE BRENTWOOD SYSTEM?

A. No. Therefore, I continue to recommend that the revenue, rate base, taxes, expenses, and revenue shortfall associated with the Brentwood wastewater system be excluded from this case.

BASA WASTEWATER

Q. PLEASE DESCRIBE THE BASA WASTEWATER SYSTEM.

A. The BASA system is a municipal owned wastewater collection and treatment system in Butler County. PAWC filed an application with the Commission to purchase this system on March 9, 2023, at Docket A-2022-3037047.

Q. WHAT IS THE CURRENT STATUS OF THE BASA APPLICATION?

A. The Commission approved the Application by an Order entered November 16, 2023. As part of this filing, the Company reflected a revenue shortfall of $21,552,699 for BASA that will be paid by water customers (PAWC Volume 3, Exhibit 3-A). However, I have been advised by counsel that this Commission order has been appealed by Center and Summit Townships, and it is currently pending before the Commonwealth Court.

Q. WHAT DID YOU RECOMMEND CONCERNING THE INCLUSION OF THE REVENUE, RATE BASE, EXPENSES, AND TAXES RELATED TO THE BASA SYSTEM IN THIS CASE?

A. I recommended that the revenue, rate base, expenses, taxes, and corresponding revenue shortfall from the BASA system be excluded from this case (I&E St. No. 3, p. 6).

Q. WHY DID YOU RECOMMEND THIS SYSTEM BE EXCLUDED FROM THIS BASE RATE CASE?

A. First, PAWC does not currently own the BASA system, and any closing will be dependent upon the outcome of the Commonwealth Court appeal, which could easily extend any potential closing beyond the FPFTY in this case. Therefore, it is premature to allow the inclusion of the rate base, expenses, taxes, and revenue from BASA in this base rate case. Second, excluding the BASA system in this case eliminates the claimed revenue shortfall of $21,552,699 for the BASA system. Finally, in the Application, the Company claimed there would be no "immediate" harm to other PAWC customers (PAWC St. No. 3. p. 11 at A-2022-3037047). Since this case was filed before PAWC will acquire the system, I believe this case falls also into the "immediate" time frame PAWC was referring to. Therefore, I recommended that the Commission hold the Company to this promise and exclude the BASA rate base, expenses, taxes, revenue, and revenue shortfall from this case, resulting in no harm to PAWC water customers (I&E St. No. 3, p. 6-7).

Q. DID THE COMPANY ADDRESS YOUR RECOMMENDATION CONCERNING THE BASA WASTEWATER SYSTEM?

A. Yes. The Company disagreed with my recommendation to exclude the BASA wastewater system for the same reason reasons it disagreed with my recommendation concerning the Brentwood system (PAWC St. No. 1, page 3-4 and St. No. 6-R, p. 16-17).

Q. DID YOU ADDRESS THESE SAME CLAIM IN THE BRENTWOOD SECTION ABOVE?

A. Yes. Similar to the Brentwood system, the Company did not provide any valid reason for including the BASA wastewater system in this filing. Therefore, I continue to recommend that the revenue, rate base, expenses, taxes, and revenue shortfall related to the BASA wastewater system should be excluded from this filing.

<u>BASA AND BRENTWOOD ANNUAL DEPRECIATION EXPENSE</u>

Q. IS THERE ANOTHER ISSUE WITH BASA AND BRENTWOOD THE COMMISSION SHOULD BE AWARE OF?

A. Yes. The OCA has raised an issue concerning service lives for some of the BASA and Brentwood plant accounts and corresponding annual depreciation expense. The OCA has preliminarily determined that recent shortening of service lives has increased the annual depreciation expense for BASA by $877,000 and has increased the annual depreciation expense for Brentwood by $48,000 (OCA St. No. 2, p. 41).

Q. DID PAWC ADDRESS THE OCA TESTIMONY CONCERNING SERVICE LIVES AND ANNUAL DEPRECIATION EXPENSE FOR BASA AND BRENTWOOD?

A. Yes. The Company states that based upon new analyses, the shorter service lives are justified (PAWC St. No. 11-R, pp. 10-11).

Q. DO YOU HAVE ANY COMMENTS ON THIS ISSUE?

A. Yes. I do agree that the Company can adjust service lives going forward. However, in this situation, the Company has yet to purchase these systems. When the Company filed these Applications, the prior service lives were used to estimate the net plant, a component of the purchase price and Fair Market Value and eventually the customer notices. In this case, increasing depreciation expense before the systems are acquired is unfair to customers. Therefore, if the Company does acquire these systems, I recommend separate plant account summaries for each of these systems so that the parties and the Commission can review the depreciation expense and proposed changes in more detail.

FARMINGTON WASTEWATER

Q. PLEASE DESCRIBE THE FARMINGTON TOWNSHIP WASTEWATER SYSTEM.

A. The Farmington system is a municipal owned wastewater collection and treatment system in Clarion County. PAWC filed an application with the Commission to purchase this system on August 28, 2023, at Docket A-2023-3042567.

Q. WHAT IS THE CURRENT STATUS OF THE FARMINGTON APPLICATION?

A. The Commission has yet to approve this Application.

Q. WHAT DID YOU RECOMMEND CONCERNING THE INCLUSION OF THE REVENUE, RATE BASE, EXPENSES, AMORTIZATIONS, AND TAXES RELATED TO THE FARMINGTON SYSTEM IN THIS CASE?

A. As this application has not been approved and a closing date is unknown, I recommended that $322,926 of present rate revenue and various rate base, expenses, amortizations, and taxes related to the Farmington wastewater system be excluded from this case, since the system is not currently owned by PAWC (I&E St. No. 3, pp. 7-9, 78-86, and Ex. No. 3, Sch. 28, lines 11-18).

Q. DID THE COMPANY ADDRESS YOUR RECOMMENDATIONS CONCERNING THE FARMINGTON WASTEWATER SYSTEM?

A. Yes. The Company disagreed with my recommendations concerning the Farmington wastewater system because it believes that it will eventually purchase the Farmington wastewater system, and that it is improper to exclude the rate making components in this case (PAWC St. No. 4, pp. 3g-9, St. No. 6-R, pp. 4-15, St. No. 10-R, pp. 62-63).

Q. DID THE COMPANY PROVIDE ANY VALID REASON FOR INCLUDING THE FARMINGTON WASTEWATER SYSTEM?

A. No. Therefore, the Commission should exclude the revenue, and corresponding rate making claims described in my direct testimony for the reason described in my direct testimony (I&E St. No. 3, p. 7).

SADSBURY WASTEWATER

Q. PLEASE DESCRIBE THE SADSBURY TOWNSHIP WASTEWATER SYSTEM.

A. The Sadsbury system is a municipal owned wastewater collection and treatment system in Lancaster County. PAWC filed an application with the Commission to purchase this system on March 9, 2023, at Docket A-2023-3042058.

Q. WHAT IS THE CURRENT STATUS OF THE SADSBURY APPLICATION?

A. The Commission has yet to approve this Application.

Q. WHAT DID YOU RECOMMEND CONCERNING THE INCLUSION OF THE REVENUE, RATE BASE, EXPENSES, AMORTIZATIONS AND TAXES RELATED TO THE SADSBURY SYSTEM IN THIS CASE?

A. As this application has not been approved and a closing date is unknown, I recommended that the $471,228 in present rate revenue and various rate base, expenses, amortizations, and taxes related to the Sadsbury system be excluded from this case, since the system is not currently owned by PAWC (I&E St. No. 3, p. 8-9, 78-86, and Ex. No. 3, Sch. 28, lines 1-10).

Q. DID THE COMPANY ADDRESS YOUR RECOMMENDATION CONCERNING THE SADSBURY WASTEWATER SYSTEM?

A. Yes. The Company disagreed with my recommendations concerning the Sadsbury

wastewater system because the Company believes that it will eventually purchase the Sadsbury wastewater system, and that it is improper to exclude the revenue shortfall in this case (PAWC St. No. 4, pp. 3-9, St. No. 6-R, pp. 4-15, St. No. 10-R, pp. 62-63).

Q. DID THE COMPANY PROVIDE ANY VALID REASON FOR INCLUDING THE SADSBURY WASTEWATER SYSTEM?

A. No. Therefore, the Commission should exclude the revenue, and corresponding rate making claims described in my direct testimony, for the reason described in my direct testimony.

ACQUISITION SUMMARY

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS CONCERNING THE FARMINGTON TOWNSHIP AND SADSBURY SYSTEMS?

A. For the reason stated above and in my direct testimony, I recommend that the Commission remove the revenue requirement for the Farmington and Sadsbury systems from the present proceeding including all costs, revenues, taxes, and amortizations. The table below shows the net plant in service, acquisition adjustment accrued and annual, depreciation expense, and revenues as shown on I&E Ex. No. 3, Sch. 28.

	Farmington Township	Sadsbury
Net Plant- Rate Base	$923,272	$1,935,612
Transaction Costs - Rate Base	$51,761	$83,085
Transaction Costs – Accrued Amortization	-$5,224	-$8,385
Acquisition Adjustment – Annual Expense		-$94,561
Transaction Costs Amortization Expense	$5,699	$9,147
Depreciation Expense	$11,611	$24,342
Present Rate Revenue	$322,926	$471,228

Q. DID THE COMPANY REVISE THE REVENUE, EXPENSE AND RATE BASE CLAIMS IN THE BASA AND BRENTWOOD SYSTEMS?

A. Yes. The Company made small changes to the revenue, expenses, and rate base for BASA and Brentwood wastewater systems that I reflect below.

Q. PLEASE SUMMARIZE YOUR REVISED RECOMMENDATIONS CONCERNING THE BASA AND BRENTWOOD SYSTEMS?

A. For the reason stated above and in my direct testimony, I recommend the Commission disallow the present and proposed rate revenue, rate base, expenses, amortizations, and taxes related to the Brentwood and BASA systems. These revised amounts are shown on PAWC St. No. 1-R, Ex. 3-A, revised, p. 139R, 145R, 172R and 178R.

	Present Rate BASA	Proposed Rate BASA
Rate Base	$231,621,374	$231,537,003
Revenue	$12,814,193	$38,135,140
Expenses and Income Taxes	$12,503,224	$19,753,102
Income Deductions	$4,979,860	$4,978,045
	Present Rate Brentwood	Proposed Rate Brentwood
Rate Base	$22,053,946	$22,053,946
Revenue	$1,824,191	$3,759,210
Expenses and Income Taxes	$1,454,133	$2,008,125
Income Deductions	$474,300	$474,161

Q. DO YOU HAVE ANY FINAL COMMENTS REGARDING THE COMPANY'S INCLUSION OF NOT YET ACQUIRED SYSTEM ASSETS IN BASE RATE PROCEEDINGS?

A. Yes. With the application of Act 12 and the routine cost-sharing that occurs for system water customers, to include systems that are not yet acquired with associated speculative subsidy needs not based on any actual known operating costs is inappropriate and unfair to existing customers as the additional costs applied to their rates may not come to fruition or be accurate in the scope established in the proceeding. For these reasons, I recommend that the Company not be permitted to include systems not yet acquired in base rate proceedings now or in the future.

WASTEWATER PRESENT RATE REVENUE

Q. PLEASE SUMMARIZE THE WASTEWATER PRESENT RATE REVENUE THAT YOU RECOMMEND BE EXCLUDED FROM THE FILING.

A. For the reasons stated above, I recommended that $11,847,402 of present rate revenue from BASA and $1,824,191 of present rate revenue from Brentwood shown on PAWC Volume 3, Sch. 3-A be excluded from this case. I also recommend that $322,926 of present rate revenue from Farmington and $471,228 of present rate revenue from Sadsbury shown on PAWC Volume 9, Exhibit 10-B, p. 1 be excluded from this case (I&E St. No. 3, pp. 8-9).

Q. DO YOU WISH TO REVISE YOUR RECOMMENDATION CONCERNING PRESENT RATE REVENUE?

A. Yes. As described above, present rate revenue for the BASA system has been updated by the Company to $12,814,193. Overall, the Company did not provide any valid reason for including these wastewater systems and corresponding present rate revenue of these systems in this filing, so any associated present rate revenues should be removed.

WASTEWATER PROPOSED RATE SUMMARY

Q. WHAT DID PAWC STATE CONCERNING PROPOSED WASTEWATER RATES?

A. PAWC made several claims and statements concerning wastewater rates. First, the

Company states that "cost causation" is an important goal in establishing proposed rates. The Company goes on to state that "cost causation" is the "foundation" of its proposed wastewater rates (PAWC Volume 9, St. No. 10, pp. 28-30).

Q. DID YOU ADDRESS THE CONTRADICTIONS IN THE COMPANY'S TESTIMONY VERSUS ITS PROPOSED WASTEWATER RATES?

A. Yes. In my direct testimony I described how the Company failed to propose wastewater rates to better recover the cost of providing wastewater service. The Company proposed various wastewater rate decreases, kept some rates the same, and proposed increases in some other cases. The increased rates did move the lower rates closer to the corresponding rates in Zone 1. A review of the Company's proposed rates indicates that the Company's primary goal was to ignore the cost of providing wastewater service and limit the average bill of residential wastewater customers to make them comparable to the average bill of a water customer (I&E St. No. 3, p. 12).

Q. IS PAWC CONTINUING TO PROPOSE TO SHIFT SOME OF THE WASTEWATER REVENUE REQUIREMENT FROM WASTEWATER CUSTOMERS TO WATER CUSTOMERS IN THIS FILING?

A. Yes. In rebuttal testimony the Company continues to propose that its wastewater operations receive a $71,087,394 subsidy from its water operations (PAWC Volume 3, Ex. 3-A, p. 1 in Rebuttal).

Q. WHAT DID YOU RECOMMEND CONCERNING PAWC'S PROPOSAL TO SHIFT $71,087,394 OF THE WASTEWATER REVENUE REQUIREMENT FROM WASTEWATER CUSTOMERS TO WATER CUSTOMERS IN THIS FILING?

A. I recommended that it be denied for several reasons. First, as described below, the primary consideration should have been to design wastewater rates to recover the cost of providing wastewater service, a goal the Company described, but ignored. Second, I believe that the wastewater rates that I propose result in average bills that are reasonable considering all the factors. Third, the Company's affordability analysis is flawed because it ignores the wastewater rates paid to other entities by PAWC water customers. Finally, the Company's affordability analysis ignores the benefits that it claims accrue to customers after being acquired by PAWC (I&E St. No. 3, p. 12).

Q. HOW MUCH IS THE ACT 11 SUBSIDY REDUCED IF THE BASA AND BRENTWOOD SYSTEMS ARE NOT INCLUDED?

A. The $71,087,394 subsidy is reduced to $47,969,463 ($71,087,394 – $21,552,699 - $1,565,232 (I&E St. No. 3, p. 12).

Q. HOW DID YOU RECOMMEND REDUCTION OF THE REMAINING $47,969,493 SUBSIDY?

A. As described in my direct testimony and below, I recommended various changes to

the wastewater rates to reduce the remaining $47,969,463 subsidy needed to operate the wastewater systems (I&E St. No. 3, p. 12).

WASTEWATER RATE STRUCTURE AND REVENUE SUMMARY

Q. DID YOU COMPILE A SUMMARY THAT SHOWS THE REVENUE IMPACT OF I&E'S RATE STRUCTURE RECOMMENDATIONS?

A. Yes. A summary of the I&E wastewater revenue recommendations described below was provided in I&E Ex. No. 3, Sch. 1.

Q. DID YOU PROVIDE THE PARTIES IN THIS CASE A REVISED SUMMARY THAT SHOWS THE REVENUE IMPACT OF I&E'S RATE STRUCTURE RECOMMENDATIONS?

A. Yes. Subsequent to the submission of my direct testimony, I became aware of an error in the increase that I reflected for the Water Operations. Therefore, I submitted I&E Ex. No. 3, Sch. 1 – Corrected 2/12/24. On this revised exhibit, column B shows the total PAWC operations, column C shows PAWC water operations, column D shows total Wastewater Operations, and columns E through H show the various Wastewater Operations. Line 1 shows the present rate revenue from each operation, line 2 shows the additional revenue requirement the Company claimed, line 3 shows the Act 11 allocation, line 4 shows the proposed revenue requested by the Company reallocated by I&E, line 5 shows the increase, and line 6 shows the percentage increase.

Based upon my proposed wastewater rates, the total subsidy needed to operate all the wastewater systems is $357,517 (I&E Ex. No. 3, Sch. 1, columns C and D, line 3- Corrected 2-12-24).

SSS OPERATIONS INTRODUCTION

Q. WHAT CHANGE IN REVENUE DID THE COMPANY PROPOSE IN THE CSS OPERATIONS?

A. The Company proposed that present rate revenue be decreased from $95,470,866 to $95,301,613, which is a decrease of $169,523 or 0.18% (PAWC Volume 9, Ex. 10-B, p. 1). To achieve this reduction, the Company proposed to increase and decrease various customer charges, usage rates, and flat rates (PAWC Volume 9, Ex. 10-B, pp. 3-32).

SSS OPERATIONS – ZONES 1, 2, 5, 7, 8, AND 9

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN THE SSS OPERATIONS.

A. My goal was to reduce the $31,962,411 subsidy the Company claims is needed in the SSS Operations. I achieved this goal by generally proposing higher usage rates than the Company proposed. The proposed rates that I recommend are shown on I&E Ex No. 3, Sch 3, pp. 1-2 column D. My proposed revenue by class and zone as well as the increases by class are shown on I&E Ex. No. 3, Sch. 4. The total increase in the SSS system that I recommend is $32,265,198 (I&E Ex

No. 3, Sch. 4, p. 1, column G, line 23). This recommendation results in a remaining subsidy in the SSS Operations of $321,682 (I&E Ex No. 3, Sch 1, column E, line 3).

Q. DID THE COMPANY PROVIDE A REVISED COSS FOR THE SSS OPERATIONS?

A. Yes (PAWC St. 12-R, p. 11).

Q. ARE THE CHANGES IN THE SSS OPERATIONS COSS MATERIAL ENOUGH FOR YOU TO CHANGE YOUR SSS OPERATIONS REVENUE RECOMMENDATION?

A. No. Comparing the results in the revised SSS Operations COSS with the SSS Operations COSS that I utilized to propose rates show only minimal changes. Therefore, I did not revise my SSS Operations Exhibits.

Q. DID THE COMPANY ADDRESS YOUR PROPOSED REVENUE AND CORRESPONDING ACT 11 REVENUE REDUCTION IN THE SSS OPERATIONS?

A. Yes. The Company disagrees with my recommendation to increase revenue in the SSS Operations and reduce the Act 11 subsidy to $321,682. The Company believes that the increases I proposed will result in rates that are too high relative to the average bill of water customers and may result in "rate shock" for

wastewater customers (PAWC St. No. 1, p. 23-24, and St. No. 10-R, pp. 58-59).

Q. PLEASE ADDRESS THE COMPANY'S CLAIM THAT REDUCING THE ACT 11 WASTEWATER SUBSIDY RESULTS IN BILLS THAT ARE TOO HIGH AND COULD RESULT IN "RATE SHOCK."

A. The Company failed to provide any new arguments on this issue. I provided unrebutted testimony concerning how the Company's affordability analysis fails to consider the wastewater costs that water customers who are not PAWC wastewater customers experience and fails to consider the benefits that accrue to recently acquired customers (I&E St. No. 3, pp. 12-14 and pp. 23-26).

Q. CAN YOU DESCRIBE HOW YOUR WASTEWATER RATE STRUCTURE PROPOSALS ARE REASONABLE AND DO NOT CONSTITUTE "RATE SHOCK?"

A. Yes. The Company proposed that the average Zone 1 Residential water customer bill increase 24.9% (PAWC Volume 9, Ex. 10-A, p. 76). In comparison, I propose the bill of an average Zone 1 Residential SSS Operations Wastewater customer increase 25.3% (I&E Ex. No. 3, Sch. 7, p. 1, line 7). Therefore, comparing these two percentage increases shows that my proposed wastewater increase is in line with PAWC's proposed Zone 1 Residential water increase. Therefore, there is no support for the Company's contention that reducing the Act 11 subsidy in the SSS Operations to $321,682 could result in "rate shock."

Q. WHAT CUSTOMER CHARGES DID YOU RECOMMEND IN THE SSS OPERATIONS?

A. I recommended a monthly customer charge of $15.00 per month for SSS Residential customers, $36.70 per month for Non-Residential customers, and $50.00 per month for Bulk customers for the reasons stated in my direct testimony (I&E St. No. 3, p. 19, 26-27, 43 and Ex. No. 3, Sch. 3).

Q. DID THE COMPANY ADDRESS ANY OF THESE SSS OPERATIONS CUSTOMER CHARGES?

A. Yes. The Company states that the $15.00 per month customer charge is inconsistent with the $20.00 per month customer charge recommended by I&E witness Cline in the CSS Operations (PAWC St. No. 10-R, p. 59). The Company did not address the general Non-Residential or Bulk rate customer charges above; therefore, they should be approved.

Q. PLEASE ADDRESS THE COMPANY'S CONCERN REGARDING THE $15.00 PER MONTH SSS OPERATIONS RESIDENTIAL CUSTOMER CHARGE?

A. First, Mr. Cline did not address CSS Operations; therefore, the Company cited the incorrect witness on this issue. If the Company meant to say that SSS and CSS monthly charges should be the same, there is no reason they must be the same. The present Residential customer charges in the SSS Operations are much

different than the Residential customer charge in the CSS Operations (I&E Ex. No. 3, Sch. 3 and 17). Finally, since the present customer charges are much different, and the revenue requirement is different, there is no reason the SSS Operations and CSS Operations should have the same Residential customer charge.

Q. HOW DID YOU DETERMINE THE MONTHLY FLAT RATE FOR THE CUSTOMERS IN ZONE 8 AND FOR CUSTOMERS WHERE THERE IS NO WATER USAGE DATA AVAILABLE?

A. In my direct testimony, my recommendation of a $132.00 per month Residential flat rate in Zone 8 and other zones if a customer has no water usage data available was based upon the average bill of a Zone 1 customer that uses 3,122 gallons per month, rounded to the nearest dollar (I&E St. No. 3, p. 22, and Ex. No. 3, Sch. 7, p. 1, line 7).

Q. DID THE COMPANY ADDRESS THE GENERAL FLAT SERVICE CHARGE THAT YOU RECOMMEND?

A. Yes. The Company disagreed with my recommendation but did agree that the methodology was consistent with what they proposed (PAWC St. No. 10, p. 59).

Q. PLEASE ADDRESS THE COMPANY'S CONCERN REGARDING FLAT RATE RESIDENTIAL SERVICE?

A. I believe the Company's concern is with the final rate, not the methodology for determining the final rate. To clarify this issue, I will recommend that the Residential flat rate be adjusted downward based upon the final average Residential Zone 1 bill established when rates are scaled back. I believe this will satisfy the Company's concern regarding the Residential flat rate.

Q. WHAT DID YOU PROPOSE FOR CERTAIN SPECIFIC BULK, MUNICIPAL, AND COMMERCIAL CUSTOMERS IN DIRECT TESTIMONY?

A. In my direct testimony, I recommended that the flat rate for Strattanville Borough be increased 40.0%, and for St. Lawerence Borough, I recommended an increase of 57.5% (I&E Ex. No. 3, Sch. 3, p. 1, lines 18 and 21). For the Westwood Fire Company, I recommended they begin to pay a customer charge of $36.70 per month and increase the usage rate 49.8%, and for the Rainbow Warehouse, I recommended the usage rate increase 81.1% (I&E Ex. No. 3, Sch. 3, p. 1, lines 32-38).

Q. DID THE COMPANY ADDRESS THESE SPECIFIC COMMERCIAL, MUNICIPAL, AND BULK CUSTOMERS?

A. Yes. The Company disagreed with my proposal to increase the rates for

Strattanville Borough, St. Lawerence Borough, Westwood Fire Company, and Rainbow Warehouse, only stating that the increase applicable to these customers should be consistent with the overall increase in the SSS Operations (PAWC St. No. 10, p. 59).

Q. DO YOU AGREE WITH THE COMPANY'S RECOMMENDATION THAT THE INCREASE FOR THESE CUSTOMERS BE CONSISTENT WITH THE OVERALL INCREASE IN THE SSS OPERATIONS?

A. No. Specific rates should be established based on various factors, not whether they are consistent with the increase in the SSS Operations. For example, as described in my direct testimony, Strattanville Borough, which is in the Municipal class, and St. Lawerence Borough, which is the Bulk class, both of which are part of the "Non-Residential" class has a lower relative rate of return than the Residential class, justifying a larger percentage increase for the customers in the Municipal and Bulk classes (I&E St. No. 3, p. 41-42 and 45-46). Furthermore, the 40% increase I propose for Strattanville Borough is below the 52.5% increase I propose for the Municipal class (I&E Ex. No. 3, Sch. 4, p. 1, column E, line 24). For St. Lawerence Borough, the minimal $0.230 per hundred gallon increase I propose results in a usage rate of only $0.630 per hundred gallons (I&E Ex. No. 3, Sch. 3, p. 1, line 21). Given the general Bulk usage rate of $3.150 per hundred gallons that I propose, the $0.630 per hundred-gallon usage rate is only 20 % of what other Bulk customers are paying. Therefore, the $0.630 per hundred-gallon

rate is reasonable. For the Westwood Fire Company, I recommended that they begin to pay a customer charge of $36.70 per month and a usage rate of $3.150 per hundred gallons, the same as other general Commercial customers. Finally, for the Rainbow Washhouse, the minimal $0.170 per hundred gallon increase I propose results in a usage rate of only $0.380 per hundred gallons (I&E Ex. No. 3, Sch. 3, p. 1, line 38). Given the general Commercial usage rate of $3.150 per hundred gallons that I propose, the $0.380 per hundred-gallon usage rate is only 12.1 % of what the usage rate other Commercial customers are paying. Therefore, the 81.1% increase in the Rainbow Washhouse usage rate that I proposed is reasonable (I&E Ex. No. 3, Sch. 3, p. 1, lines 32-38).

Q. DID THE COMPANY ADDRESS ALL OF YOUR RATE RECOMMENDATIONS, ANY OF YOUR COSS RATIONALE, OR THE BENEFITS TO 1329 CUSTOMERS AFTER BEING ACQUIRED BY PAWC?

A. No. Therefore, this unrebutted testimony should be accepted by the Commission to approve the SSS Operation rates that I propose.

<u>SSS OPERATIONS – BULK</u>

Q. WHAT DID THE COMPANY PROPOSE FOR THE YORK BULK CUSTOMERS IN THE SSS OPERATIONS ZONE 7?

A. For York Bulk Customers in Zone 7, the Company proposed to charge two different usage rates. For the first rate, the Company proposed the present usage rate be

increased from $0.3750 per hundred gallons to $0.4123 per hundred gallons, which is an increase $0.0373 per hundred gallons or 9.9%. For the second usage rate, the Company proposed the present usage rate of $0.249 per hundred gallons increase to $0.2737 per hundred gallons which equates to an increase of $0.0247 per hundred or 9.9%. These 9.9% increases are over the two-year period 2023-2025, which results in an annual increase of approximately 4.45% per year (PAWC Volume 9, Exh. 10-B, p. 31).

Q. WHAT DID YOU RECOMMEND CONCERNING THESE YORK BULK CUSTOMERS?

A. I recommended that the minimal increase the Company proposes for these customers should be rejected, in favor of the 50% increases I show on I&E Ex. No. 3, Sch. 3. p. 2, lines 7-8 (I&E St. No. 3, p. 50).

Q. WHY DID YOU REJECT THE MINIMAL INCREASE FOR THESE CUSTOMERS AS PROPOSED BY THE COMPANY?

A. First the Company failed to support its argument that these customers have a viable alternative. Second, the alleged "sophistication" of these customers is not relevant. Just because the systems are close, doesn't mean they can easily be interconnected to each other or another treatment plant. Third, if these customers did have a viable alternative, the Company's proposed rates may be well below the cost these customers would incur if they did select the viable alternative, thus not maximizing

the revenue from these customers. The valid comparison would be to compare the customer's cost of utilizing a viable alternative to the competitive rate so that the customer makes the maximum contribution to fixed costs. Finally, in the near future, existing customers may be better off if these bulk customers did leave the system, because after a bulk customer leaves, there would be much less need for plant upgrades and/or expansions. Costly plant upgrades and/or expansions to serve bulk customers would likely be paid for by other non-bulk customers, increasing the subsidy to the bulk customers.

Q. DID THE COMPANY ADDRESS YOUR DIRECT TESTIMONY REGARDING THE COMPETITIVE ALTERNATIVES THESE CUSTOMERS ALLEGEDLY HAVE?

A. Yes. First, the Company believes that it twice before demonstrated that the York Bulk Customers have competitive alternatives, once in the Application docket at Docket No. A-2021-3024681 *et al.* and again in the most recent base rate case at Docket No. R-2022-3031672 *et al*. To support this notion, the Company provided documents from the Bulk customers. Second, the Company also states that I&E participated in the PAWC's 2022 rate case and in the York Acquisition Proceeding, and, in both cases, I&E had the opportunity to develop the record by direct testimony and cross examination and failed to provide evidence that these Bulk customers lack a competitive alternative. Third, the Company also states that in PAWC's 2022 rate case, I&E withdrew a similar proposal; therefore, it cannot

raise the same issue in this case. Third, the Company believes that since these bulk customers formed an alliance and called it the York Area Regional Sewer Authority (YARSA), these customers must have a competitive alternative. Fourth, the Company speculates that the loss of one customer will likely lead to the loss of all customers. Finally, the Company believes that maximizing the revenue from contract customers is not always realistic or desirable (PAWC St. No. 6-R, pp. 19-22).

Q. PLEASE ADDRESS THE FIRST CLAIM CONCERNING THE COMPETITIVE ALTERNATIVES THESE CUSTOMERS ALLEGEDLY HAVE.

A. The Company's belief that this issue was fully reviewed in the Application docket and /or the last rate case is mistaken. In the Application docket, rates are not established, therefore, no consideration is given to future tariff or contract rates. In the last base rate case, it was determined to accept the Company's representations because the cost to serve these customers versus the revenue received was unknown. However, the acceptance at that time does not mean I&E can never review this evidence or raise any issue related to Bulk contracts in future cases. Furthermore, this is the first base rate case where the Company provided the actual cost of providing service to these Bulk customers. While the cost to serve these customers does not determine if these customers have a competitive alternative, it can put the issue into perspective. In the last case, it was not known if the subsidy was a few

thousand dollars or several million dollars. Under the Company's proposed Bulk rates, the subsidy is approximately $9.88 million (I&E Ex. No. 3, Sch. 5, p. 2, column G, line 13. Under my proposed Bulk rates, the subsidy is approximately $8.00 million (I&E Ex. No. 3, Sch. 5, p. 3, column H, line 14).

Q. WHAT DOCUMENTATION DID THE COMPANY PROVIDE FROM THE BULK CUSTOMERS?

A. The Company provided separate affidavits from each of the Bulk customers claiming that they each (or as a group) have the potential to find an alternative. They each state "We will explore the alternative treatment options" (PAWC St. 6-R, Ex. ECA-2R).

Q. PLEASE ADDRESS THESE DOCUMENTS FROM THE BULK CUSTOMERS?

A. First, the vague statement that they would explore alternative treatment options in no way implies that an exploration would or could yield a competitive outcome. I would simply state that any customer could have an alternative, which is all these statements convey. These customers and, therefore, the Company failed to provide any cost comparison to justify granting the rate proposed by the Company. Second, exploring alternative options does not constitute a valid competitive alternative. There should be actual alternatives that are supported by cost data. The Customer's

affidavits fail to provide the total fixed or variable cost of the alternative to do determine if the alternative is viable and competitive.

Q. PLEASE ADDRESS THE COMPANY'S CLAIM THAT I&E HAD AMPLE OPPORTUNITY TO DEVELOP A RECORD IN THE PAST CASE AND FAILED TO PROVIDE EVIDENCE IN THIS CASE THAT THESE CUSTOMERS LACK COMPETITIVE ALTERNATIVES?

A. I am advised by counsel that I&E does not have the burden of proof in rate cases. However, the Company's claim that I&E can somehow prove a negative makes no sense. What I&E did determine in this case is that the Company's claim that these customers have a competitive alternative has not been shown.

Q. PLEASE ADDRESS THE COMPANY'S CLAIM THAT SINCE THESE CUSTOMERS FORMED YARSA, THESE CUSTOMERS MUST HAVE A COMPETITIVE ALTERNATIVE?

A. While the Company may believe this, simply forming an alliance in no way demonstrates that there is an actual competitive alternative that has been evaluated or established. Without evidence of the alternatives' costs to the alliance, the Company cannot establish any factual basis for its negotiated bulk rates.

Q. PLEASE ADDRESS THE COMPANY'S CLAIM THAT MAXIMIZING REVENUE FROM COMPETITIVE CUSTOMERS IS NOT ALWAYS REALISTIC OR FEASIBLE.

A. The Company failed to provide an example where maximizing revenue from a customer with a competitive alternative is neither feasible nor desirable. I can understand the Company's position since it can recover all the revenue shortfall from tariff rate customers, regardless of the revenue received from these Bulk customers. The Company doesn't make any additional profit if these customers pay higher rates. However, the Commission should consider the plight of tariff rate customers that pay higher rates as a result of these Bulk customers not contributing the maximum amount towards fixed costs. In conclusion, a requirement that companies have substantive evidence of competitive alternative costs from bulk customers in order to set fair rates that maximizes the contribution to fixed costs and minimizes the subsidy required of other tariff customers would be a reasonable requirement to be imposed. With this type of data, a company could reasonably ensure that it had met its burden of proof in setting fair and reasonable bulk rates.

Q. DID THE COMPANY ADDRESS YOUR DIRECT TESTIMONY COMPARING THE ZONE 7 BULK CUSTOMERS TO OTHER SSS OPERATIONS CUSTOMER RATES (I&E ST. NO. 3, P. 51)?

A. No. The Company failed to respond to my direct testimony that the $0.5625 per hundred gallon and $0.3735 per hundred-gallon usage rates that I recommend are

much less than the $1.680 per hundred-gallon usage rate I recommend for Caln, West Brandywine, and the VA. My proposed rates are significantly less than the $3.740 per hundred-gallon rate that I recommend for the Zone 1 Residential customers indicating that even after the 50% increase I propose, the Zone 7 Bulk usage rates remain much less than other usage rates.

Q. DID THE COMPANY ADDRESS YOUR DIRECT TESTIMONY CONCERNING THE YORK BULK CUSTOMERS IN THE COMPANY'S COSS AND LARGE SUBSIDY THESE BULK CUSTOMERS WILL RECEIVE (I&E ST. NO. 3, PP. 51-53)?

A. No. The Company failed to provide a response to the argument that the higher percentage increases that I propose for the York Bulk customers compared to the small increase proposed by the Company are justified by the Company's COSS. After my 50% increase, the York Bulk customers will receive a subsidy of $7,999,227 (I&E Ex. No. 3, Sch. 5, p. 3, line 14, column H). While a significant subsidy will continue to exist, I recommend it be reduced in future cases.

SSS OPERATIONS SUMMARY

Q. WHAT TOTAL REVENUE DO YOU RECOMMEND FOR THE CSS OPERATIONS?

A. The Company provided no testimony that would alter my opinion regarding the rates that I recommend in the SSS Operations, including the rates paid by York Bulk

customers. Therefore, I recommend that SSS Operations revenue increase from $94,677,137 to $126,942,335, which is an increase of $32,265,198 or 35.3% (I&E Ex. No. 3, Sch. 4, column G, lines 11, 22-27).

WASTEWATER WINTER USAGE

Q. DID THE COMPANY PROPOSE TO ADJUST WATER USAGE TO DETERMINE THE BILLS FOR WASTEWATER CUSTOMERS?

A. Yes. The Company is proposing to change the way that it determines the volumetric component of bills for residential customers. Currently, wastewater usage is based upon actual water usage. In the proposal, the wastewater usage volume of a Residential customer will be adjusted downward to account for water purchased, but not entering the wastewater system. The Company refers to this plan as winter averaging (PAWC Volume 8, St. 10, p. 42-45).

Q. DID YOU OPPOSE THE PAWC WINTER AVERAGE BILLING PROPOSAL?

A. No. However, I recommended that if the Commission approves the proposal, two conditions apply. First, that none of the revenue shortfall from this proposal be recovered from other wastewater customers or water customers. Second, that the Commission determine that the proposal is approved initially as a temporary program to permit the resulting revenue impacts to be evaluated in the first rate case following its implementation (I&E St No. 3, p 55).

Q. WHY DID YOU RECOMMEND THAT THE PROGRAM BE CONSIDERED A TEMPORARY PROGRAM?

A. This is a new proposal that reduces revenue, and it should not be approved in perpetuity. Therefore, the program and its underlying concepts should be studied, and the results reported in the Company's next base rate case. This will enable the Commission and interested parties to determine if the program should be changed, continued as proposed, or ended (I&E St. No. 3, p. 56).

Q. DID THE COMPANY ADDRESS YOUR RECOMMENDATION?

A. Yes. The Company believes that my second condition is not acceptable because it doesn't want this to be a temporary program and doesn't want to track any of the results (PAWC St. 10-R, p. 54).

Q. SINCE THE COMPANY CANNOT ACCEPT YOUR CONDITION, WHAT DO YOU RECOMMEND?

A. I recommend that the winter average program be denied because the Company is unwilling to accept this as a temporary program or determine and report the success or failure of the winter average program. Furthermore, I believe the Commission should accept the rationale provided by the Office of Consumer Advocate (OCA) and CAUSE-PA to reject the winter average program based on harm to lower income customers who likely do not have the opportunity or income necessary to engage in discretionary outdoor water usage that does not enter the wastewater

systems (OCA St. No. 4, pp. 40-44 and CAUSE-PA St. No. 1, pp, 12-14).

CSS OPERATIONS INTRUDUCTION

Q. WHAT CHANGE IN REVENUE DID THE COMPANY PROPOSE IN THE CSS OPERATIONS?

A. The Company proposed that present rate revenue be decreased from $78,636,222 to $78,409,294, which is a decrease of $226,926 or 0.30% (PAWC Volume 9, Ex. 10-C, p. 1). To achieve this reduction, the Company proposed to increase and decrease various customer charges, usage rates, and flat rates (PAWC Volume 9, Ex. 10-C, pp. 3-38).

CSS OPERATIONS – ZONES 3, 4, AND 6

Q. DID THE COMPANY PROVIDE A COSS TO DETERMINE THE COSTS OF PROVIDING WASTEWATER SERVICE FOR THE CSS OPERATIONS?

A. Yes. The Company provided one COSS for the CSS Operations - Zones 3, 4, and 6 (PAWC Volume 17, Ex. 12-C). This COSS did not include a customer cost analysis.

Q. DID THE COMPANY PROVIDE A REVISED COSS FOR THE CSS OPERATIONS?

A. Yes (PAWC St. 12-R, p. 11).

Q. ARE THE CHANGES IN THE CSS OPERATIONS COSS MATERIAL ENOUGH FOR YOU TO CHANGE YOUR CSS OPERATIONS REVENUE RECOMMENDATION?

A. No. Comparing the results in the revised CSS Operations COSS with the CSS Operations COSS that I utilized to propose rates show only minimal changes. Therefore, I did not revise my CSS Operations Exhibits.

Q. DO THE PROPOSED REVENUES FROM THE CSS OPERATIONS RECOVER THE ENTIRE COST OF PROVIDING WASTEWATER SERVICE TO THE CSS OPERATIONS?

A. No. The revenue shortfall for CSS Operations is $16,007,052 (PAWC Volume 3, Exhibit 3-A, p. 1 - Revised).

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN THE CSS OPERATIONS.

A. My goal was to reduce the $16,007,052 subsidy the Company claims is needed to fund the CSS Operations. The proposed rates that I recommended are shown on I&E Ex. No. 3, Sch 17, p. 1, column D. My proposed revenue by class and zone as well as the increases by class are shown on I&E Ex. No. 3, Sch. 16. The total increase in the CSS system that I recommended was $15,744,287 (I&E Ex. No. 3, Sch 16, column G, line 14). This recommendation results in the CSS Operations needing a subsidy of $35,835 (I&E Ex. No. 3, Sch 1, column H, line 3).

Q. DID THE COMPANY ADDRESS YOUR RATE RECOMMENDATIONS IN THE CSS OPERATIONS?

A. The Company generally agreed with my rate proposals in the CSS Operations (PAWC St. No. 4-R, p. 16). The only specific Company rebuttal testimony focused on the Zone 3 rates where the Company states that it believes that Zone 3 rates should be just and reasonable, consistent with the concept of gradualism, and avoid rate shock (PAWC St. No. 4-R, pp. 12-13).

Q. WHAT DID YOU PREPARE TO ADDRESS THE COMPANY'S CONCERN REGARDING GRADUALISM AND RATE SHOCK?

A. In my direct testimony I describe the increases the Zone 3 customers would experience and compiled bill comparisons for the Residential, Commercial, and Industrial classes presented as I&E Ex. No. 3, Sch. 20, p. 1, Sch. 22. p. 1, and Sch. 24, p. 1, respectively.

Q. DO YOU BELIEVE YOUR PROPOSED RATES FOR ZONE 3 VIOLATE THE CONCEPT OF GRADUALISM OR WILL RESULT IN RATE SHOCK?

A. No. For the Residential class, I proposed an increase of 17.8% (I&E Ex. No. 3, Sch. 20, p. 1, line 7). This 17.8% increase is reasonable and less than the 24.9% increase the Company proposed for Zone 1 water customers described above. While the average Commercial and Industrial customers will experience a larger increase, the increases are smaller than the Company proposed for the average water Commercial

customers in Zones 2 and 4 (PAWC Volume 9, Ex. 10-A, pp 83 and 85). Finally, if the Commission grants less than the full increase in the CSS Operations, the average bills in the CSS Operations will decrease.

CSS OPERATIONS SUMMARY

Q. WHAT TOTAL REVENUE DO YOU RECOMMEND FOR THE CSS OPERATIONS?

A. The Company did not provide any testimony that would cause me to alter the rates I proposed in the CSS Operations. Therefore, I recommend that CSS Operations revenue increase from $78,636,222 to $94,380,509 which is an increase of $15,744,287 or 20.2% (I&E Ex. No. 3, Sch. 16, column G, lines 6, 13-15).

OCA REBUTTAL TESTIMONY

Q. DID THE OCA ADDRESS YOUR DIRECT TESTIMONY?

A. Yes. The OCA disagrees with my SSS Operations Residential customer charge of $15.00 per month and disagrees with my recommendation to essentially eliminate the Act 11 subsidy (OCA St. No. 4-R, p. 6-7).

Q. WHAT REASON DOES THE OCA PROVIDE FOR DISAGREEING WITH YOUR $15.00 PER MONTH RESIDENTIAL CUSTOMER CHARGE?

A. The OCA states that none of the cost of Inflow and Infiltration (I&I) should be recovered in the customer charge and thus believes it's important to keep the Zone 1

Residential customer charge at $14.30 per month (OCA St. No. 4-R, pp. 6- 7).

Q. DO YOU CONTINUE TO BELIEVE THE RESIDENTIAL CUSTOMER CHARGE SHOULD BE $15.00 PER MONTH IN THE SSS OPERATIONS?

A. Yes. While the overall difference of $0.70 per month is minimal, I continue to recommend an SSS Operations Residential customer charge of $15.00 per month. Furthermore, under this proposal, the decrease to the present Zone 7 usage rate of from $18.00 per month to $15.00 per month will be slightly less under my proposal and generate more revenue in Zone 7 than reducing the Zone 7 customer charge to $14.30 per month.

Q. WHAT REASON DOES THE OCA PROVIDE FOR DISAGREEING WITH PROPOSAL TO VIRTUALLY ELIMINATE THE ACT 11 SUBSIDY?

A. The OCA believes there are not enough wastewater customers over which to spread the cost of the wastewater operations (OCA St. No. 4-R, pp. 7-8).

Q. DO YOU AGREE WITH THE OCA THAT THE FEWER WASTEWATER CUSTOMERS JUSTIFIES A LARGE SUBSIDY?

A. No. As described in my direct testimony, my SSS and CSS Operations proposed rates result in reasonable increases for these customers. As described above, some of the average bill increases that result from my rates are comparable or less than the percentage increases the Company has proposed in the water operations.

COST OF SERVICE STUDIES

Q. WHAT DID YOU RECOMMEND THE COMPANY PROVIDE IN THE NEXT BASE RATE CASE?

A. I recommended that the Company continue to provide separate COSS's for the Water Operations, the CSS Operations, and the SSS Operations including separating the Bulk and Bulk contract customers into separate classes. I also recommend that the Company provide separate COSS' for the BASA and Brentwood systems in the next case if these systems are acquired (I&E St. No. 3, pp. 72-73).

Q. DID THE COMPANY AGREE WITH YOUR RECOMMENDATION CONCERNING THE SSS AND CSS OPERATIONS IN THE NEXT BASE RATE CASE?

A. Yes. The Company agreed to provide separate COSS for the SSS Operations and the CSS Operations (PAWC St. No. 12-R, p. 12).

Q. WHY DID YOU RECOMMEND THE COMPANY PROVIDE A SEPARATE COSS FOR BASA IN THE NEXT BASE RATE CASE?

A. There are two reasons. First, I&E believes the BASA COSS is not currently relevant given the I&E recommendation to exclude the BASA system revenue and expenses in this case making the BASA COSS premature in addition to being speculative as the Company does not own the system and can not accurately project its actual operating costs. The review in the next base rate case after which PAWC closes on

BASA will then include plant in service, allocation factors, and expenses that have not been reviewed or addressed by I&E in this case. Second, the present rate revenue from BASA shown in this case is so far below the cost of providing service to BASA customers, the public and the Commission should be aware of the subsidy being provided to BASA in the next base rate case after PAWC purchases BASA.

Q. WHY DID YOU ALSO RECOMMEND THE COMPANY PROVIDE A SEPARATE COSS FOR THE BRENTWOOD SYSTEM IN ALL FUTURE BASE RATE CASES?

A. In the event that PAWC does acquire the Brentwood system, I recommend PAWC provide a separate COSS for Brentwood in all future cases for two reasons. First, as described by the Company in the Brentwood Application at A-2021-3024058, some of the flow carried by the Brentwood plant is from "non-customers." Since only plant "used and useful" to serve customers can be recovered from customers, plant in service to serve "non-customers" should be identified and excluded from rate base. Second, Brentwood customers will also pay a separate treatment fee. With no treatment costs in base rates, I believe it could be reasonable to establish a lower rate for Brentwood customers than other SSS customers that have treatment costs recovered in their usage rates (I&E St. No. 3, pp. 74-75).

Q. DID YOU PROVIDE ADDITIONAL SPECIFIC REASONS FOR A SEPARATE BRENTWOOD COSS IN THE NEXT PROCEEDING?

A. Yes. The two primary inputs for cost allocation are the number of customers, and flow. Almost all allocations in a COSS are based on one of these inputs. The Company's response to I&E-RS-31 indicates that the Company has no idea how much flow is coming into the system from "non-customers" and how much flow is going out of the system from a combination of "non-customers" and Brentwood customers. This lack of data indicates that the Brentwood COSS filed in this case is totally speculative and not based on any known and measurable data (I&E Ex. No. 3 Sch. 29 and I&E St. No. 3, pp. 74-75).

Q. DID THE COMPANY ADRESS YOUR RECOMMENDATION CONCERNING THE BASA COSS IN THE NEXT BASE RATE CASE AND THE BRENTWOOD COSS IN ALL FUTURE CASES?

A. The Company disagreed with these recommendations (PAWC St. No. 12-R, p. 12). The Company states that once a COSS for a 1329 system is submitted, future separate COSS are unnecessary and the Company is unwilling to provide any of them again (PAWC St. No. 1-R, pp. 29-31).

Q. DID THE COMPANY ADRESS THE UNIQUE CIRCUMSTANCES CONCERNING THE BASA SYSTEM IN THE NEXT CASE, OR THE ISSUES IN THE BRENTWOOD SYSTEM APPLICABLE IN ALL FUTURE CASES?

A. No. The Company did not address the claim that since they do not own the BASA system, a separate COSS should be provided after they own the BASA system. Furthermore, the Company failed to address the unique circumstances of the Brentwood system. Therefore, since the Company failed to address my specific concerns, my recommendation that the Company provide a separate COSS for BASA in the next case and a separate COSS for the Brentwood system in all future base rate cases should be approved.

SCALE BACK OF RATES

Q. WHAT DID YOU RECOMMEND IF THE COMMISSION GRANTS LESS THAN THE FULL INCREASE?

A. If the Commission grants less than the full increase for the SSS Operations and the CSS Operations, I described a detailed scale back proposal that continued the progress of consolidating rates in the various wastewater zones (I&E St. No. 3, pp. 75-76). Additionally, I clarified above how the Residential flat rate should be scaled back.

Q. DID THE COMPANY ADDRESS YOUR SCALE BACK RECOMMENDATION?

A. No. The Company did not address any specific scale back recommendation that I proposed and only addressed how total revenue should be scaled back. In summary the Company is proposing that the Act 11 allocation should be maintained on a proportional basis to the amount of the scale back the Commission grants (PAWC St. No. 1-R, p. 37).

Q. DO YOU AGREE WITH THIS RECOMMENDATION?

A. No. The Company did not describe any specific rates and failed to show how rates in the various zones should be consolidated. Since the Company did not address my specific scale back that accomplished this goal, the methodology that I propose should be approved to continue to consolidate rates. I&E continues to believe that the Act 11 subsidy should be reduced first (I&E St. No. 4, pp. 42-44).

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

I&E Statement No. 4
Witness: Ethan H. Cline

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket Nos. R-2023-3043189 and R-2023-3043190

Direct Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

FPFTY Reporting Requirements
Acquisition Adjustments
Revenue Decoupling Mechanism
Customer Cost Analysis
Water Rate Design
Rate Design Commitments
Scale Back of Rates

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INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Ethan H. Cline. My business address is Pennsylvania Public Utility Commission, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission in the Bureau of Investigation and Enforcement ("I&E") as a Fixed Utility Valuation Engineer.

Q. WHAT IS YOUR EDUCATIONAL AND EMPLOYMENT EXPERIENCE?

A. An outline of my education and employment experience is attached as Appendix A.

Q. PLEASE DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS.

A. I&E is responsible for representing the public interest in rate and other proceedings before the Commission. I&E's analysis in this proceeding is based on its responsibility to represent the public interest. This responsibility requires the balancing of the interests of ratepayers, the utility company, and the regulated community as a whole.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to evaluate Pennsylvania American Water's

("PAWC" or "Company") request for an annual increase in operating revenue of approximately $203.9 million in the Fully Projected Future Test Year ("FPFTY") ending June 30, 2025. My testimony will address issues related to the proposed revenue, cost allocation, and rate design of the water and wastewater operations of the Company.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. I&E Exhibit No. 4 contains schedules relating to my testimony.

Q. PLEASE DESCRIBE PAWC's FILING.

A. On November 8, 2023, PAWC filed a combined water and wastewater base rate case. Using the FPFTY ending June 30, 2025, PAWC's filing requested a net increase of $203,945,911, which is comprised of an increase in water revenue of $199,237,084 and decreases of $169,261 for the wastewater SSS General Operations and $226,926 for the Combined Sewer System ("CSS") Wastewater Operations, and increases of $4,735,609 for the Butler Area Sewer Authority ("BASA") Wastewater Operations and $369,405 for the Brentwood Wastewater Operations (PAWC Ex. 3-A, Combined Water and Wastewater Revenue Requirement-Summary).

FPFTY REPORTING REQUIREMENTS

Q. WHAT DO YOU RECOMMEND REGARDING PLANT ADDITIONS THAT PAWC PROJECTS TO BE IN SERVICE DURING THE FPFTY?

A. Consistent with agreements in previous PAWC base rate cases, I recommend that the Company provide the Commission's Bureau of Investigation and Enforcement and Office of Consumer Advocate ("OCA") with updates to PAWC Ex. 3-A, pp. 26, 97, 146, 179, and 218 no later than December 1, 2025, under this docket number. PAWC's updates should include actual plant additions and retirements for the twelve months ending June 30, 2024 and for the twelve months ending June 30, 2025.

Q. WHY DO YOU RECOMMEND THAT PAWC PROVIDE THESE UPDATES?

A. As explained on PAWC Statement No. 3, p. 4, the Company is estimating that it will add approximately $742,020,7140 of plant additions in the Future Test Year ("FTY") ending June 30, 2024 and approximately $797,874,110 of plant additions in the FPFTY. There is value in determining how closely PAWC's projected investments in future facility comport with the actual investments that are made by the end of the FTY and the FPFTY. Determining the correlation between PAWC's projected and actual plant additions and retirements will help verify the validity of PAWC's projections.

Q. HAS PAWC PROVIDED THE RECOMMENDED UPDATES IN THE PAST?

A. Yes. The Company previously agreed to provide these updates to its capital projections in previous base rate cases, most recently in its last base rate case at Docket Nos. R-2022-3031672 and R-2022-3031673.

ACQUISITIONS - WATER

Q. WHAT WATER ACQUISITIONS ARE INCLUDED IN THE COMPANY'S FILING?

A. PAWC has proposed to include in the present proceeding the Farmington Township water distribution system ("Farmington Township") and Audubon Water Company ("AWC") acquisitions (PAWC St. No. 6, p. 3).

Q. HAS EITHER THE FARMINGTON TOWNSHIP OR AWC ACQUSITION CLOSED?

A. No. As described on pages 8 and 10 of PAWC Statement No. 6, the Farmington Township application was filed on August 28, 2023, and the AWC application was filed on September 21, 2023. As far as I am aware, neither of these applications have been approved by the Commission, and the Company only anticipates these acquisitions closing by the end of the FPFTY.

Q. WHAT JUSTIFICATION DOES THE COMPANY PROVIDE FOR ITS PROPOSAL TO INCLUDE THE FARMINGTON TOWNSHIP AND AWC SYSTEMS IN THE PRESENT BASE RATE CASE?

A. On pages 10 and 12-13 of PAWC Statement No. 6, PAWC witness Abruzzo provided the same justification to include both acquisitions in the present base rate case. Specifically, Mr. Abruzzo stated that the Company anticipates each transaction will close no later than the end of the FPFTY, that including the systems into the larger PAWC systems is prudent and fair, and to address expenses associated with the operation and maintenances of these systems as soon as reasonably possible to avoid regulatory lag.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL TO INCLUDE THE FARMINGTON TOWNSHIP AND AWC SYSTEMS IN THE PRESENT BASE RATE CASE?

A. No, I do not agree with the Company's proposal to include the Farmington Township and AWC systems in the present base rate case. Specifically, including any not as yet acquired system in a base rate case based on the mere speculation that the acquisition will close no later than the end of the FPFTY, is not in the public interest. Utilities are entitled to earn a fair return on the value of their rate base, and it is unfair to require utility customers to pay for this return when PAWC does not currently own the assets and cannot guarantee it will own the assets by the end of the FPFTY. Assets the Company does not own cannot be considered

used and useful in public service. Additionally, the Company provided insufficient support for its proposal to include the Farmington and AWC systems in the present base rate case. Lastly, there is no guarantee that the Commission will approve either acquisition.

Q. WHY IS INCLUDING THESE SYSTEMS IN A BASE RATE CASE BEFORE ACQUISITION CLOSING NOT IN THE PUBLIC INTEREST?

A. Simply put, PAWC does not yet own these systems and will not own them until the Commission issues an order and PAWC is able to close on the sales. Treating potential acquisitions as a fait accompli regardless of the status of the actual acquisition to begin recovering costs as early as possible is not in the public interest and is harmful to ratepayers. Sometimes during the investigation of an acquisition, issues are revealed that must be resolved in the next base rate case. However, should those types of issues arise in the Farmington or AWC acquisitions, the issues would not be able to be resolved until the next base rate case after the instant case. In that situation, ratepayers would have already been paying for a return of and a return on the Farmington and AWC assets and expenses that could be proved to be inaccurate for the entire period between the implementation of rates in this case and the implementation of rates in the next subsequent case. It is unreasonable to ask this of ratepayers for acquisitions where the acquisition dockets are still active and no closing dates have been established.

In the case of Farmington Township and AWC, the present base rate case was filed so early in the acquisition process that it is highly unlikely that any parties have been able to determine issues that would need to be addressed at all. Prematurely including the acquisitions in a base rate case severely limits the effectiveness of any public input hearings and removes the main opportunity for customers to make their voices heard regarding the potential sale of their water or wastewater utility. No incentive exists for a customer to speak up regarding an acquisition if the Commission has already allowed it to be included in a base rate case before it ever even issued an order approving PAWC's ownership. This stands directly opposed to the public interest. The public interest requires that ratepayers pay a return of and on assets that are used and useful in the public service. If PAWC does not yet own the assets, they are not used and useful in the public service to PAWC ratepayers.

Finally, the Company included the Farmington Township and AWC systems in the current filing each with a claim for the amortization of utility plant acquisition adjustments ("UPAA") based upon the purchase price and depreciated original cost of each system as explain by PAWC witness Gress on page 6 of PAWC Statement No. 4. It is possible that through the acquisition proceeding and investigation, errors could be identified that would affect the amortization claim in this proceeding. These potential changes would not be reflected in this case, because it is possible, if not likely, that this base rate case concludes with a Commission Order before an Order is issued for either of the Farmington

Township or AWC acquisition cases. Thus, the Company would be recovering amounts associated with these acquisition adjustments in rates that may be deemed inaccurate until the next base rate case and its rates effective date, which is not in the public interest.

Q. WHAT SUPPORT DID THE COMPANY PROVIDE FOR ITS CLAIM THAT INCLUDING THE SYSTEMS IN THE CURRENT BASE RATE CASE IS PRUDENT AND FAIR?

A. On pages 8-13 of PAWC Statement No. 6, the Company listed the claimed benefits for each acquisition and a description of each system.

Q. DO YOU AGREE THAT THE LISTED CLAIMED BENEFITS FOR EACH ACQUISITION PROVIDES SUFFICIENT SUPPORT TO INCLUDE THE ACQUISITIONS IN THE PRESENT BASE RATE CASE?

A. No. The lists of claimed benefits provided by the Company would more properly be considered as part of an acquisition case and not a base rate case. These lists of perceived benefits do not provide any support for why the Commission should consider including those systems in the present base rate case prior to issuing Orders approving the applications.

Q. ARE YOU PROVIDING TESTIMONY ON WHETHER OR NOT IT IS IN THE PUBLIC INTEREST FOR PAWC TO ACQUIRE THE FARMINGTON TOWNSHIP AND AWC SYSTEMS?

A. Not at all. Whether or not PAWC's proposed acquisition of these systems is in the public interest is not something to be decided in a base rate case. The claims made by the Company regarding the Farmington Township and AWC systems as well as whether the acquisitions themselves are in the public interest is something more appropriately decided through the application dockets where proper investigations can take place.

Q. DID THE COMPANY IDENTIFY THE INDIVIDUAL REVENUE REQUIREMENTS OF THE FARMINGTON TOWNSHIP AND AWC SYSTEMS?

A. No. In its responses to OCA-21-9 and OCA-21-12, attached as I&E Exhibit No. 3, Schedules 1 and 2, respectively, the Company stated that it has not performed a revenue requirement calculation that includes only the AWC or Farmington Township systems.

Q. WHAT DO YOU RECOMMEND REGARDING THE FARMINGTON TOWNSHIP AND AWC SYSTEMS?

A. For the reasons described above, I recommend that the Commission remove the revenue requirement for the Farmington Township and AWC systems from the

present proceeding including all costs, revenues, taxes, and amortizations. The table below shows the net plant in service, acquisition adjustments and amortizations, transaction costs and amortizations, depreciation expense, and revenues, as shown on PAWC Ex. 3-C, pp. 72-77 that should be removed.

	Farmington Township	AWC
Net Plant	$2,502,811	$360,229
Acquisition Adjustment	$215,489	$7,639,771
Acquisition Adjustment Amortization Expense	$21,549	$763,977
Transaction Costs	$54,825	$117,954
Transaction Costs Amortization Expense	$5,483	$11,795
Depreciation Expense	$607,272	$310,188
Revenue	$266,371	$2,965,024

REVENUE DECOUPLING MECHANISM

Q. WHAT IS THE REVENUE DECOUPLING MECHANISM PROPOSED BY PAWC?

A. According to PAWC, the proposed Revenue Decoupling Mechanism ("RDM") is an alternative rate design mechanism whose purpose is to more reliably recover the revenue requirement and associated fixed costs approved by the Commission in this case. In other words, the Company is proposing to stabilize its revenue level received from customers by charging or crediting the difference between the revenue requirement and fixed cost authorized in this case and actual revenues to customers in the subsequent year. (PAWC Statement No. 10, pp. 86-87).

Q. WHAT CUSTOMERS ARE AFFECTED BY THIS PROPOSAL?

A. The Company is proposing to apply an RDM to its water and wastewater service, with separate tariffs and separate recovery mechanisms for each service for all customers in the residential, commercial, industrial, municipal, and sales for resale classes except those customers taking service under contract rates (PAWC St. No. 10, p. 86). I also note that PAWC is proposing to exempt any future acquisition customers from the RDM surcharge provided they are customers of a system that is not included in this case and to delay any assessment of the charge until a future rate proceeding (PAWC St. No. 10, p. 88).

Q. HOW DOES THE COMPANY PROPOSE TO ENACT THE RDM?

A. The Company proposes to compare actual revenues recovered from eligible water and wastewater customers in a given month or year to the revenues that would result from applying the RDM cost-components. If the actual revenues are short of the revenue requirement, the Company intends to charge the reconciliation amount as a volumetric rate from April 1 through December 31 for that calendar year. If the actual revenue is larger than the revenue requirement, the credit would be issued as a volumetric credit during the same period. (PAWC St. No. 10, pp. 92-94).

Q. HOW WILL THE COMPANY DETERMINE THE "GOAL" LEVEL OF REVENUE TO WHICH THE ACTUAL REVENUE IS COMPARED?

A. The Company generated a set of rate components (residential fixed charge, nonresidential fixed charge, and volumetric charge) based on its cost of service study ("COSS") and the concept of Straight Fixed Variable ("SFV") pricing. The rate components proposed are shown on Tables 18 and 19 on PAWC Statement No. 10, p. 92 and copied below.

TABLE 18 **Water Service** **RDM Cost Components**	**Amount**	**Description**
Residential Fixed Charge	$83.18	$ per residential customer per month
Nonresidential Fixed Charge	$515.94	$ per nonresidential customer per month
Volumetric Charge	$0.1033	$ per hundred gallons sold

TABLE 19 **Wastewater Service** **RDM Cost Components**	**Amount**	**Description**
Residential Fixed Charge	$87.87	$ per residential customer per month
Nonresidential Fixed Charge	$504.66	$ per nonresidential customer per month
Volumetric Charge	$0.1548	$ per hundred gallons sold

The residential fixed charges are applied to all residential customers regardless of meter size or enrollment in the Bill Discount Program ("BDP"), and the nonresidential fixed charges are applied to all commercial, industrial, municipal, and sales for resale customers regardless of meter size or rate structure, though the RDM does not apply contract customers. (PAWC St. No. 10, p. 94).

Q. WHAT IS SFV PRICING?

A. SFV pricing, as described by Mr. Rea on page 90 of PAWC Statement No. 10, is a rate design that collects a utility's fixed costs through fixed charges and a utility's variable costs through volumetric charges. Mr. Rea also claimed on page 86 of PAWC Statement No. 10 that over 95% of the Company's costs are fixed costs. Therefore, under SFV pricing, the Company would collect 95% of its revenues through fixed costs rather than volumetric costs.

Q. DID MR. REA DESCRIBE THE NEGATIVE ASPECTS OF SFV PRICING?

A. Yes. Mr. Rea described the negative aspects of SFV pricing on pages 90-91 of PAWC Statement No. 10, "SFV is arguably not consistent with generally accepted cost-causation principles at a customer class level because fixed costs between classes vary more than may be reflected in SFV rate components. On its own, SFV pricing also has the potential to reduce incentives to use utility service efficiently and can disadvantage lower-income customers from an affordability perspective if fixed charges are set too high."

Q. DID THE COMPANY EXPLAIN WHY THE COMMISSION SHOULD ALLOW RATE COMPONENTS WITH THESE NEGATIVE ASPECTS BE USED TO DETERMINE THE GOAL REVENUES FROM THE RDM?

A. The only support that the Company provides for including the SFV pricing-based

rate components in the calculation of the goal revenue is that it provides additional revenue stability for the Company. Revenue stability for the Company, in my opinion, is not sufficient support to base monthly or annual goal revenues on rate components that are not consistent with cost-causation principles, has the potential to reduce incentives to use utility service efficiently, and can disadvantage lower-income customers from an affordability perspective. As acknowledged in the seventh edition of the American Water Works Association M1 Manual, there is a tradeoff between revenue stability from a high customer charge, and affordability and conservation from a low customer charge and higher usage rates.[1] SFV pricing strays too far from the concerns of affordability and conservation in the name of revenue stability for the Company.

Q. WHAT SUPPORT DID THE COMPANY PROVIDE FOR ITS RDM PROPOSAL?

A. The Company described its concern regarding seasonal weather conditions and the ongoing trend of declining use for residential, commercial, and municipal customers as primary factors that cause revenue volatility from year to year (PAWC St. No. 10, p. 78). PAWC also cited to section 1330 of the Public Utility Code ("Code") which allows the Commission to approve various forms of alternative ratemaking mechanisms proposed by utilities (PAWC St No. 10, p. 81).

[1] AWWA Manual of Water Supply Practices M1 Principles of Water Rates, Fees, Charges, Seventh Edition. pp. 154-155.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSED IMPLEMENTATION OF THE RDM?

A. No. As I discuss in greater detail below, I do not agree that the Company has established a need for revenue stabilization, especially when it is also simultaneously proposing a declining usage adjustment in this case. Additionally, the proposed RDM may cause harm to PAWC's customers by completely separating their usage patterns from the surcharge/credit program. Also, this type of mechanism will devalue conservation efforts undertaken by customers that can afford efficiency measures and harm customers who cannot afford these measures by assessing an additional charge to all customers. Furthermore, the proposal does not achieve the policy goals supported based on the Commission's policy statement associated with Section 1330 of the Code, or the Code itself. Finally, it is likely to cause rate confusion with yet another surcharge on PAWC's customer bills.

Q. HAS THE COMPANY DEMONSTRATED A NEED FOR SUCH REVENUE STABILIZATION?

A. No. The purpose of revenue stabilization is to remove the inherent risk of not recovering the full amount of revenue requirement allowed by the Commission due to changes in usage. However, through Act 11 and the FPFTY, the Company is permitted to build into its revenue requirement an adjustment for revenue lost due to a decline in usage that is projected to occur after rates go into effect.

Between the frequent base rate cases filed by the Company, only one and a half years since the last previous filing, the FPFTY, and the DSIC, the Company has demonstrated no need for further revenue stabilization measures.

Q. IS PAWC ALREADY PROPOSING AN ADJUSTMENT IN THIS CASE TO ADDRESS DECLINING USAGE?

A. Yes. PAWC is proposing adjustments for the normalization of the actual billing determinants for the 12-month period ended June 30, 2025. PAWC alleges that the need for the adjustment is related to trends in declining use, weather normalization, and the impact of the COVID-public health emergency on water consumption for PAWC's water customers (PAWC St. No. 10, pp. 52-72).

Q. ARE YOU CONTESTING PAWC'S DECLINING USAGE ADJUSTMENT AS PART OF YOUR TESTIMONY?

A. No. I am not contesting PAWC's adjustment for declining usage in this case. In conjunction with the Company's rate case filing frequency, I do not believe it is necessary to add an additional revenue stabilization measure as the Company has already adjusted for anticipated declining usage in the FPFTY.

Q. IS THERE ANY BASIS TO BELIEVE THAT PAWC'S IMPLEMENTATION OF THE RDM WOULD RESULT IN IT FILING FEWER BASE RATE CASES?

A. No. The Company's response to question (10) on PAWC Exhibit No. CBR-10 stated, "if future rate cases are driven by future investment needs and associated cost recovery, the RDM would not reduce the need for such cases." Additionally, the Company's response to I&E-RS-38-D indicated that the main drivers of the Company's most recent four base rate cases are its substantial investment in infrastructure and to allow the Company the opportunity to earn a reasonable rate of return on that investment (I&E Ex. No. 4, Sch. 3). These two statements combined with the fact that the Company has provided no indication that the rate of its capital improvement projects will decrease going forward indicate that there is no basis to believe that PAWC's proposed implementation of the RDM would result in filing fewer base rate cases.

Q. IS THE RDM NECESSARY TO ENSURE THAT PAWC IS VIABLE?

A. No. As discussed by I&E witness Patel in I&E Statement No. 2, the Company has no history of an inability to attract capital. This is particularly true when considering that PAWC was able to generate approximately $262 million to acquire new water and wastewater systems since the last base rate case despite an overall continuing decline in usage (I&E Ex. No. 4, Sch. 4).

Q. CAN THE PROPOSED RDM CAUSE HARM?

A. Yes. For the RDM to be approved, it should have some benefit to customers; however, in this case, it not only would not provide any benefit, but it may harm customers by causing them to overpay and negating any cost incentive to conserve water. Customers who undertake conservation efforts will see their savings eroded and their investment payback time increased as the Company is permitted to increase rates in response to usage declines.

Further, customers who lack the financial means to undertake conservation efforts will be penalized by the RDM, which increases rates to address usage reductions. PAWC has specifically stated in its response to OCA 6-59 that the RDM does not account for low-income participation (I&E Ex. No. 4, Sch. 5). Therefore, there are potentially many customers whose ability to pay may be compromised as their rates increase to address conservation efforts undertaken by those more able to afford such measures, or from more low-income customers enrolling in the BDP than was originally anticipated (I&E Ex. No. 4, Sch. 6). Finally, as described above, there is no expectation it will lead to fewer base rate cases. The facts show that customers would be harmed by the proposal and all benefits will flow only to the Company; therefore, there is no demonstrated need for the RDM.

Q. WHAT DOES SECTION 1330 OF THE CODE ALLOW?

A. As explained on page 81 of PAWC Statement No. 10, "section 1330 of the Public

Utility Code allows the Commission to approve an application by PAWC to establish various forms of alternative ratemaking mechanisms." An RDM is one such mechanism.

Q. DID THE GENERAL ASSEMBLY IDENTIFY ANY POLICY GOALS THAT UTILITIES SHOULD ACHIEVE WHEN IMPLEMENTING ALTERNATIVE RATEMAKING MECHANISMS?

A. Yes. Although I am not offering a legal opinion, the plain language of Section 1330 includes a "declaration of policy" that reads, in part, as follows:

> Innovations in utility operations and information technologies are creating new opportunities for all customers, and it is in the public interest for the commission to approve just and reasonable rates and rate mechanisms to facilitate customer access to these new opportunities while ensuring that utility infrastructure costs are reasonably allocated to and recovered from customers and market participants consistent with the use of the infrastructure.[2]

Q. DOES PAWC'S RDM ALIGN WITH THE GOAL OF ENSURING THAT ITS INFRASTRUCTURE COSTS ARE REASONABLY RECOVERED FROM CUSTOMERS CONSISTENT WITH USE OF INFRASTRUCTURE?

A. No. The Company has stated that "[a]ny acquisitions that are completed by the Company that are not already included in this proceeding will not be included in

[2] 66 Pa. C.S. §1330(a)(1).

the proposed RDM until such time that they are included in rate base and revenue requirement calculations in a future rate proceeding." (PAWC St. No. 10, p. 95). Approving the RDM in this case would only subject existing customers to paying the surcharge while any customers of the systems that PAWC chooses to acquire between rate cases will be exempt from paying the RDM even if the system serving them requires PAWC to make significant infrastructure improvements prior to the next base rate case.

Q. DID THE COMMISSION RELEASE A POLICY STATEMENT REGARDING PA CODE SECTION 1330?

A. Yes. The Statements of Policy as outlined by the Commission in the alternative rate making Docket No. M-2015-2518883 includes a list of fourteen questions for utilities to answer when they propose alternative ratemaking mechanisms, including revenue decoupling. In my opinion, it is important that as many of these questions as are applicable to each proposal are answered so that the Commission may determine if the alternative ratemaking proposal will result in just and reasonable rates.

Q. DID PAWC PROVIDE A RESPONSE TO EACH OF THE QUESTIONS SET FORTH IN THE STATEMENTS OF POLICY?

A. Yes. In PACW Exhibit CBR-10, Mr. Rea provided the Company's responses to

each of the 14 questions set forth in the statements of policy regarding alternative ratemaking described above.

Q. DO YOU DISAGREE WITH THE COMPANY'S RESPONSES TO ANY OF THE QUESTIONS?

A. Yes. I disagree with the Company's response to the following questions:

(6) how the ratemaking and rate design impact customer incentives to employ efficiency measures and distributed energy resources;

(7) how the ratemaking mechanism and rate design impact low-income customers and support consumer assistance programs;

(8) how the ratemaking mechanism and rate design impact customer rate stability principles; and

(13) whether the alternative ratemaking mechanism and rate design are understandable to consumers.

Q. HOW DID THE COMPANY RESPOND TO THE QUESTION REGARDING THE IMPACT TO CUSTOMER INCENTIVES TO EMPLOY EFFICIENCY MEASURES AND DISTRIBUTED ENERGY RESOURCES?

A. Mr. Rea claimed that the proposed mechanism encourages water efficiency by reducing the throughput incentive and that customer-employed efficiency

measures would far outweigh any surcharges that may result from the proposed RDM (PAWC Ex. CBR-10, p. 2).

Q. WILL THE RDM ENCOURAGE WATER EFFICIENCY AND CONSERVATION FROM CUSTOMERS?

A. Not at all. From the perspective of a customer, the RDM will appear as a random surcharge or credit on their bill that is completely removed from their own usage. Specifically, by calculating the RDM based on a total class-wide (or multiple classes in the case of non-residential customers) basis, a single customer, particularly low-usage customers, will have zero ability to affect whether they are assessed an additional surcharge or a credit on their bill in the subsequent year. Therefore, it is the bill based on base charges that would encourage water efficiency and conservation. The only thing the RDM provides customers is the worry that the next year's RDM would erode the savings derived from conservation efforts.

Q. HOW DID THE COMPANY RESPOND TO THE QUESTION REGARDING THE IMPACT TO LOW-INCOME CUSTOMERS AND SUPPORT FOR CONSUMER ASSISTANCE PROGRAMS?

A. Mr. Rea claimed that the RDM does not have any specific impacts on low-income customers that do not apply to residential customers generally (PAWC Ex. CBR-10, p. 2).

Q. COULD THE RDM NEGATIVELY IMPACT LOW-INCOME CUSTOMERS?

A. Yes. As I stated above, there are potentially many customers, who cannot themselves enact cost-saving water conservation measures, whose ability to pay may be compromised as their rates increase to address conservation efforts undertaken by more affluent customers or from more low-income customers enrolling in the BDP than was originally anticipated.

Q. HOW DID THE COMPANY RESPOND TO THE QUESTION REGARDING THE IMPACT TO RATE STABILITY PRINCIPLES?

A. Mr. Rea claimed that the proposed RDM will, by definition, improve rate stability (PAWC EX. CBR-10, p. 2).

Q. HOW DID THE COMPANY RESPOND TO THE QUESTION REGARDING WHETHER THE ALTERNATIVE RATEMAKING MECHANISM AND RATE DESIGN ARE UNDERSTANDABLE TO CUSTOMERS.

A. Mr. Rea stated that the Company does not anticipate that there would be any issues related to customer confusion over the proposed RDM because revenue reconciliation riders are not new to the utility industry (PAWC Ex. CBR-10, p. 3).

Q. COULD THE RDM RESULT IN RATE INSTABILITY AND RATE CONFUSION FOR CUSTOMERS?

A. Yes. As I described above, the Company's proposal to determine the credit or surcharge based on a total class basis results in customers being completely unaware and unable to control or predict whether they will be receiving a surcharge or credit from the RDM for the following year. Additionally, the entire concept of the RDM introduces rate confusion for customers. Essentially, PAWC is telling customers that it will charge one set of rates from January through March, but that in April their rates will be adjusted based on the comparison of their revenues (but not just theirs, the revenue from all of the other customers as well) from the previous year to the revenues generated by some other rate that was not included or mentioned on their bill at all.

Q. WHAT DO YOU RECOMMEND REGARDING THE PROPOSED RDM?

A. For the reasons I described above, I have determined that the RDM will result in rates that are not just and reasonable and, therefore, I recommend the proposed RDM be denied.

<u>ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE</u>

Q. WHAT IS THE ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE PROPOSED BY PAWC?

A. Per PAWC witness Swiz, the Environmental Compliance Investment Charge

("ECIC") "is a rate adjustment clause designed to reflect and recover, between rate cases, the costs imposed on the Company to address and comply with continuously evolving government-mandated environmental standards that are beyond the Company's control and difficult to estimate at any single point in time." (PAWC St. No. 8, p. 21).

Q. WHY IS THE COMPANY PROPOSING THE ECIC?

A. PAWC witness Aiton described the problems imposed by the rapidly changing set of regulatory mandates from a combination of federal and state regulations concerning per- and polyfluoroalkyl substances ("PFAS") which the Company claims will require an investment in the range of $200 million of work before the end of 2027. Mr. Aiton claims that the ECIC will provide the Company a reasonable opportunity to recover capital costs and expenses incurred after June 30, 2025 to comply with the new federal standards (PAWC St. No. 3, pp. 5-7).

Q. DID THE COMPANY PROPOSE A REVIEW AND APPROVAL PROCESS FOR THE ECIC?

A. Yes. PAWC witness Swiz proposed a review and approval process on pages 25-26 of PAWC Statement No. 8 that includes the filing of an Environmental Plan detailing specific projects, estimates, timing, and justification for inclusion within the ECIC, and the process for reviewing the Environmental Plan.

Q. HOW DOES THE COMPANY PLAN TO ASSESS THE ECIC TO CUSTOMERS?

A. Mr. Swiz indicated on page 29 of PAWC Statement No. 8 that the ECIC will be a percentage carried to two decimal places applied to the total amount billed to each customer excluding the State Tax Adjustment Surcharge ("STAS") and the Distribution System Improvement Charge ("DSIC"). Mr. Swiz further proposed that the ECIC would be subject to audit and reconciliation at intervals determined by the Commission.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSED ECIC?

A. No. The ECIC proposed by the Company should be denied because the proposal is premature and filed in the wrong venue.

Q. WHY DO YOU BELIEVE THAT THE PROPOSAL IS PREMATURE?

A. I believe the proposal is premature because the Company, as stated on pages 26 and 27 of PAWC Statement No. 8 and in its response to Office of Consumer Advocate ("OCA") discovery OCA-15-1 (I&E Ex. No. 3, Sch. 7), is unable to provide any projection of the actual level of capital additions that will be included in the ECIC because it has the Environmental Plan must be approved by the Commission before inclusion in the ECIC. It is my understanding that the Company has also not filed an Environmental Plan and has projected no other information beyond a speculative cost "in the range of $200 million by the end of

2027." While I do not deny that impending environmental regulations involving PFAS and other issues detailed by the Company will cause a need for significant future capital investment, I do question the need for recovery between base rate cases. Specifically, had the Company delayed filing the present base rate case by two years so that the FPFTY encompassed all of 2027 rather than half of 2025, the Company would have been able to accurately include the environmental capital investments in rate base. As a side note, the water and wastewater acquisitions addressed above and in I&E Statement No. 3 by I&E witness Kubas would likely have all closed and would then properly be included in the filing. Additionally, the Company has not lost the ability to file for emergency rate relief if it becomes necessary in between base rate cases.

Q. WHY IS THE PRESENT BASE RATE CASE NOT THE CORRECT FORUM FOR THE INTRODUCTION OF THE ECIC?

A. The structure of the ECIC appears to be extremely similar to that of the DSIC in that the Environmental Plan is similar to the Long-Term Infrastructure Improvement Plan ("LTIIP"), which is required for a utility to institute a DSIC, there are quarterly reviews and annual reconciliations, and it is assessed to customers in the form of a percentage of their overall bill (less other certain Riders such as STAS). However, it is my understanding that in order for a utility to start utilizing a DSIC it must first get approval in a separate petition with an LTIIP

prepared. The Company has not provided any reason why the ECIC should be treated differently.

Additionally, the issue of environmental rules changes to deal with PFAS and other issues is an industry-wide concern. At this juncture, final regulations have not been formulated, and the Commission has not had the opportunity to react to this situation on a utility-wide basis such as was done with Covid cost impacts, which further supports my opinion that the Company request in this proceeding is premature. Additionally, this is not a concern that is limited to Pennsylvania utilities, and like lead, there may be federal or state programs and funding that have yet to be established to address this problem on a nationwide or state basis.

RATE DESIGN

WATER OPERATIONS

Q. BRIEFLY DESCRIBE THE COMPANY'S RATE DESIGN PROPOSALS IN THE VARIOUS WATER OPERATIONS' RATE ZONES.

A. The Company's filing includes primarily six different rate zones. Most of PAWC's customers are included in Rate Zone 1 – PAWC ("Rate Zone 1") and pay the Rate Zone 1 rates. Customers in the remaining rate zones pay present rates that are different from Rate Zone 1 present rates. The remaining rate zones are as follows: Rate Zone 2 – Valley, Rate Zone 3 – SLIBCO, Rate Zone 4 – Turbotville, Rate Zone 5 – Steelton, Rate Zone X – Audubon, and Rate Zone X - Farmington. It should be

noted that, per my recommendation above, the Audubon and Farmington rate zones should be removed in this case and, therefore, I will not be addressing proposed rate changes for those customers.

Q. WHAT RATE DESIGN ADJUSTMENTS ARE THE COMPANY PROPOSING?

A. The Company is proposing to consolidate the monthly metered rates for all classes of customers in Rate Zone 2 – Valley, Rate Zone 3 – SLIBCO, Rate Zone 4 – Turbotville, and Rate Zone 5 - Steelton into Rate Zone 1 in the FPFTY (PAWC St. No. 10, p. 35).

Q. ARE THE COMPANY'S RATE DESIGN PROPOSALS TO MERGE THE USAGE RATES IN RATE ZONES 2, 3, 4, AND 5 INTO RATE ZONE 1 OVER THE FPFTY REASONABLE?

A. In general, yes. The rates proposed by the Company that merge the various rate zones described above into Rate Zone 1, are reasonable, except for the proposal to merge Rate Zone 2 – Valley usage rates into Rate Zone 1. I will discuss the Rate Zone 2 – Valley usage rates further below.

<u>WATER OPERATIONS - CUSTOMER COST ANALYSIS</u>

Q. WHAT IS A CUSTOMER COST ANALYSIS AND HOW IS IT USED?

A. A customer cost analysis is a part of a COSS that is used to determine the

appropriate fixed customer charges for the various classes and meter sizes. It includes customer costs only.

Q. WHY IS IT NECESSARY TO PERFORM A CUSTOMER COST ANALYSIS?

A. A fixed customer charge represents the revenue that the Company is guaranteed to receive each month, regardless of the level of usage. As I described above, the seventh edition of the American Water Works Association M1 Manual acknowledged that there is a tradeoff between revenue stability from a high customer charge, and affordability and conservation from a low customer charge and higher usage rates.

<u>WATER OPERATIONS – CUSTOMER COSTS</u>

Q. DID THE COMPANY PREPARE A CUSTOMER COST ANALYSIS TO SUPPORT INCREASING THE CUSTOMER CHARGES?

A. Yes. The Company provided two customer cost analyses for the FPFTY in PAWC Exhibit 12-A, Appendix A, Attachment RS1j. The results of the first cost analysis, shown on page 1 of 3, includes all costs being allocated to the customer cost function and results in a unit cost of $24.63 per month in the FPFTY.

Additionally, PAWC provided a second customer cost analysis that relies on the allocation of costs more directly applicable to customers. The result of the

more direct customer cost analysis is $19.31 per month per customer in the FPFTY (PAWC Ex. 12-A, Appendix A, Attachments RS1j, p. 2 of 3).

Q. WHICH CUSTOMER COST ANALYSIS DO YOU RECOMMEND BE USED TO DETERMINE THE CUSTOMER CHARGES FOR WATER OPERATIONS CUSTOMERS?

A. I recommend that the second customer cost analysis, that is the result of more direct customer costs, be used to determine the customer charges for Water Operations customers.

Q. WHY DO YOU RECOMMEND THE SECOND CUSTOMER COST ANALYSIS BE USED?

A. I recommend the second customer cost analysis for several reasons. Costs that are recovered from customers are continuously increasing, even between rate cases, with surcharges such the DSIC. Therefore, I believe it is appropriate to limit the increase in the customer charges and to consider the affordability of rates through a lower customer charge and higher usage rate. Additionally, the Commission has traditionally relied on customer cost analyses based on direct cost allocations to determine customer charges. For these reasons, I recommend the Commission continue to reject the "fully allocated" customer cost analysis provided by Ms. Heppenstall and base the customer charges instead on the direct cost customer cost

analysis provided by the Company on PAWC Exhibit 12-A, Appendix A, Attachments RS1j, p. 2 of 3.

WATER CUSTOMER CHARGES

Q. IS PAWC PROPOSING TO INCREASE MOST RESIDENTIAL, COMMERCIAL AND MUNICIPAL CUSTOMER CHARGES?

A. Yes. For Rate Zone 1, the Company is proposing to increase the residential 5/8-, ¾-, 1-, and 1 ½-inch customer charges from $17.50 to $20.00 in the FPFTY. The increases for all Water Operations rate zones and meter sizes are shown on PAWC Exhibit No. 10-A.

As shown on PAWC Exhibit CBR-3, PAWC is also proposing to increase the customer charges of the larger meter sizes and commercial, municipal, and industrial by approximately 7%-8%, except for Zone 2 – Valley Industrial customers, Zone 3 – SLIBCO customers, and Zone 5 – Steelton Industrial customers, which have a wide arrange of varying customer charge increases.

Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSED $20.00 PER MONTH CUSTOMER CHARGE FOR A 5/8-INCH RESIDENTIAL CUSTOMER?

A. The basis for the $20.00 per month per month 5/8-inch customer charge is the Company's overly inclusive customer cost analysis that claims the Company

incurs a cost of $24.63 per month to provide service to a 5/8-inch Residential customer as described above.

Q. WHAT 5/8-INCH RESIDENTIAL CUSTOMER CHARGE DO YOU RECOMMEND?

A. I recommend a $19.50 per month 5/8-inch Residential customer charge in the FPFTY.

Q. WHY DO YOU RECOMMEND THAT THE PRESENT RESIDENTIAL CUSTOMER CHARGE IN RATE ZONE 1 INCREASE TO $19.50 PER MONTH IN THE FPFTY INSTEAD OF TO THE LEVEL PROPOSED BY PAWC?

A. My recommended customer charge is based on the direct cost customer cost analysis, as described above, which shows that the cost to provide service to a 5/8-inch residential customer is $19.31 per month in the FPFTY. Therefore, my recommended $19.50 per month customer charge approximates the monthly customer cost per customer, rounded to the nearest half dollar. There is no cost basis for increasing the residential customer charges to $20.00 per month as requested by the Company. My recommended $19.50 customer charge for Rate Zone 1 and all rate zones that are proposed to match Rate Zone 1 in the FPFTY is an increase of $2.00 per month over the Company's present rate 5/8-inch customer charge for Rate Zones 1 of $17.50 per month.

Q. WHAT CUSTOMER CHARGES DO YOU RECOMMEND FOR RESIDENTIAL CUSTOMERS IN RATE ZONES 1, 2, 3, AND 4 WITH METERS LARGER THAN 1-1/2-INCH?

A. I do not oppose the Company's proposed increase for residential customers with meters larger than 1-1/2-inch in all Rate Zones in the FPFTY. I recommend the customer charges for all meter sizes in all of the remaining rate zones be set equal to the customer charges in Rate Zone 1. My recommended residential customer charges by meter size are as follows:

Rate Zone 1, 2, 4, and 5 Residential Customer Charges			
Meter Size	Present Rate	I&E Proposed Rate	Revenue Percent Increase
5/8 – inch	$17.50	$19.50	11.4%
3/4-inch	$17.50	$19.50	11.4%
1-inch	$17.50	$19.50	11.4%
1 1/2-inch	$17.50	$19.50	11.4%
2-inch	$121.80	$132.00	8.4%
3-inch	$227.20	$246.00	8.3%
4-inch	$285.10	$308.00	8.0%
6-inch	$426.80	$461.00	8.0%
8-inch	$826.30	$893.00	8.1%

Q. WHY DO YOU NOT OPPOSE THE COMPANY'S PROPOSED INCREASE FOR RESIDENTIAL CUSTOMERS WITH METER SIZES 2-INCHES AND OVER?

A. The Company's proposed increase for residential customers with meter sizes 2-

inches and over are all consistently increased by approximately 8%, which is a reasonable increase.

Q. ARE YOU RECOMMENDING ANY ADJUSTMENTS TO THE PROPOSED CUSTOMER CHARGES FOR THE COMMERCIAL AND MUNICIPAL RATE CLASSES?

A. No. The Company's proposal for the commercial and municipal rate class customer charges is to increase those rates by approximately 7%-8% over present rates as shown on PAWC Exhibit CBR-3. As I stated above, a 7%-8% increase for a customer charge is reasonable.

Q. ARE YOU RECOMMENDING AN ADJUSTMENT TO THE PROPOSED CUSTOMER CHARGE RATE STRUCTURES FOR THE INDUSTRIAL AND OTHER WATER UTILITIES MONTHLY – GROUPS A AND B RATE ZONE 1 CUSTOMER CLASSES?

A. No. I am not recommending any adjustments to the customer charges each for the Rate Zone 1 Industrial class and the Other Water Utilities Monthly – Groups A and B. Despite these classes in general having larger percentage increases in their customer charges, the percent increase in the bill for the average industrial customers shown on PAWC Exhibit 10-A, pp. 89-91, is reasonable.

USAGE RATES

RATE ZONE 1

Q. WILL THE COMPANY'S PROPOSED USAGE RATES FOR THE RESIDENTIAL, COMMERCIAL, AND MUNICIPAL CLASSES FOR RATE ZONE 1 NEED TO BE INCREASED UNDER YOUR CUSTOMER CHARGE RECOMMENDATION AT THE COMPANY'S FULLY REQUESTED INCREASE?

A. Yes. As a result of the revenue produced by the customer charge being decreased based on my recommended customer charges compared to the Company's proposed customer charges, under the fully requested revenue increase, the proposed usage rates for the Rate Zone 1 residential class would need to increase slightly. As would the usage rates for any Rate Zones that are being proposed to merge with Rate Zone 1 rates, as I described above.

Q. DID YOU DETERMINE THE RESULTING INCREASE TO THE PROPOSED USAGE CHARGE?

A. No. Based on I&E's recommendation regarding the Act 11 subsidy, as well as the adjustments made by I&E witnesses Patel and Okum, it is more likely that the usage rate will be subject to a scale back rather than an increase. Therefore, I did not calculate what the increase would be at the fully proposed increase. I will discuss my usage rate recommendations for each Rate Zone below.

RATE ZONE 2 – USAGE RATE

Q. IS THE COMPANY PROPOSING THAT RATE ZONE 2 USAGE RATES BE SET EQUAL TO RATE ZONE 1?

A. Yes. As shown on PAWC Exhibit 10-A, pp. 4 and 11, the Company is proposing to set Rate Zone 2 residential and commercial usage rates equal to Rate Zone 1.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL TO SET RATE ZONE 2 RESIDENTIAL AND COMMERCIAL USAGE RATES EQUAL TO RATE ZONE 1?

A. No. The Company's proposal to set Rate Zone 2 residential and commercial usage rates equal to Rate Zone 1 would result in the bill for an average Rate Zone 2 residential customer to increase by 63.64%, and the average bill for a commercial customer would increase by 64.37% (PAWC Ex. 10-A, pp. 77, 83). For residential customers in Rate Zone 2, the proposed percent increase is at least double that of the average residential customers in the other rate zones. For Rate Zone 2 commercial customers, the disparity between the percent increases for the other rate zones, apart from Rate Zone 4, is even greater than that of the residential customers.

Q. WHAT USAGE CHARGES DO YOU RECOMMEND FOR RATE ZONE 2 CUSTOMERS?

A. The table below shows the usage rates that I recommend for the Rate Zone 2

residential and commercial customers.

Rate Zone 2 Residential and Commercial Usage Rates			
Usage Level	Present Rate per hundred gal.	I&E Proposed Rate per hundred gal.	Revenue Percent Increase
Residential			
First 3,400 gal.	$1.1000	$1.6000	45.5%
Over 3,400 gal.	$1.1000	$1.6000	45.5%
Commercial			
First 16,000 gal.	$1.1000	$1.6500	55%
Over 16,000 gal.	$1.1000	$1.2540	14%

Q. HOW DID YOU DETERMINED YOUR RECOMMENDED USAGE RATES AT THE FULLY REQUESTED REVENUE INCREASE?

A. I selected a $1.6 per hundred-gallon usage rate for residential customers because it generated a reasonable percent increase on the total bill of a rate zone 5 residential customer as shown on I&E Exhibit No. 4, Schedule 8. I performed a similar analysis for the Rate Zone 2 commercial customers, but I kept the second block usage rate at approximately 76% of the first block, which is the same ratio as the Company's proposed rates. As shown on I&E Exhibit No. 4, Schedule 9, the resulting overall percentage increase for commercial customers is reasonable.

<u>RATE ZONE 3 – USAGE RATE</u>

Q. IS THE COMPANY PROPOSING THAT RATE ZONE 3 USAGE RATES BE SET EQUAL TO RATE ZONE 1?

A. Yes. As shown on PAWC Exhibit 10-A, pp. 12 and 25, the Company is proposing

to set Rate Zone 3 commercial and municipal usage rates equal to Rate Zone 1.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL TO SET RATE ZONE 3 COMMERCIAL AND MUNICIPAL USAGE RATES EQUAL TO RATE ZONE 1?

A. Yes. The Company's proposal to set Rate Zone 3 commercial and municipal usage rates equal to Rate Zone 1 is reasonable.

<u>RATE ZONE 4 – USAGE RATE</u>

Q. IS THE COMPANY PROPOSING THAT RATE ZONE 4 USAGE RATES BE SET EQUAL TO RATE ZONE 1?

A. Yes. As shown on PAWC Exhibit 10-A, pp. 5, 13, and 26, the Company is proposing to set Rate Zone 4 residential, commercial, and municipal usage rates equal to Rate Zone 1.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL TO SET RATE ZONE 4 RESIDENTIAL AND COMMERCIAL USAGE RATES EQUAL TO RATE ZONE 1?

A. Partially. I believe the Company's proposal to set the Rate Zone 4 residential and municipal rates equal to Rate Zone 1 is reasonable. However, the Company's proposal to set Rate Zone 4 commercial usage rates equal to Rate Zone 1 would result in the bill for an average Rate Zone 4 commercial customer to increase by

68.56% (PAWC Ex. 10-A, pp. 77, 83). This increase is unnecessarily large when compared to the increase proposed for Rate Zone 1 commercial customers.

Q. WHAT USAGE CHARGES DO YOU RECOMMEND FOR RATE ZONE 4 COMMERCIAL CUSTOMERS?

A. The table below shows the usage rates that I recommend for the Rate Zone 4 commercial customers.

Rate Zone 4 Residential and Commercial Usage Rates			
Usage Level	Present Rate per hundred gal.	I&E Proposed Rate per hundred gal.	Revenue Percent Increase
Commercial			
First 16,000 gal.	$1.1000	$1.6500	55%
Over 16,000 gal.	$1.1000	$1.2540	14%

Q. HOW DID YOU DETERMINED YOUR RECOMMENDED USAGE RATES AT THE FULLY REQUESTED REVENUE INCREASE?

A. I set the Rate Zone 4 commercial usage rates equal to those of Rate Zone 2 so that Rate Zone 2 and Rate Zone 4 can be merged after this base rate case and likely merged with Rate Zone 1 after the next base rate case. As shown on I&E Exhibit No. 4, Schedule 10, the resulting overall percentage increase for commercial customers is reasonable.

RATE ZONE 5 – USAGE RATE

Q. IS THE COMPANY PROPOSING THAT RATE ZONE 5 USAGE RATES BE SET EQUAL TO RATE ZONE 1?

A. Yes. As shown on PAWC Exhibit 10-A, pp. 6, 14, 20, and 27, the Company is proposing to set Rate Zone 5 residential, commercial, industrial, and municipal usage rates equal to Rate Zone 1.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL TO SET RATE ZONE 5 RESIDENTIAL, COMMERCIAL, AND MUNICIPAL USAGE RATES EQUAL TO RATE ZONE 1?

A. Yes. The Company's proposal to set Rate Zone 5 residential, commercial, municipal and industrial usage rates equal to Rate Zone 1 is reasonable.

SCALE BACK OF RATES

Q. WHAT IS A SCALE BACK OF RATES?

A. If the Commission grants an increase less than the amount the Company requested, the Company's proposed rates would be reduced, or scaled back, to produce the revenue requirement allowed by the Commission.

Q. WHAT IS THE FIRST STEP THAT MUST BE COMPLETED IN ANY SCALE BACK OF RATES?

A. The first step that must be completed in any scale back is to determine the revenue

requirements and scale backs of the wastewater operations.

Q. WHY MUST THE WASTEWATER OPERATIONS REVENUE REQUIREMENT AND SCALE BACK BE DETERMINED PRIOR TO THE APPLICATION OF A SCALE BACK TO WATER OPERATION RATES?

A. The wastewater operations revenue requirement must be set first because that will determine the amount of revenue requirement that must be allocated to Water Operations. Once the wastewater to water allocation is determined, then the full Water Operations revenue requirement will be known, and those rates can be scaled back.

Q. WHAT DO YOU RECOMMEND IF THE COMMISSION GRANTS LESS THAN THE FULL INCREASE FOR ANY OF THE WW OPERATIONS?

A. I recommend that any scale back be netted against the subsidy the Commission determines for the wastewater operations.

<u>WATER OPERATIONS RATE SCALE BACK</u>

Q. WHAT OVERALL PERCENTAGE INCREASES HAS THE COMPANY PROPOSED FOR EACH WATER CUSTOMER CLASS?

A. As shown on PAWC Exhibit No. 12-A, Schedule A, the Company is proposing the following increases for each class in the FPFTY:

- Residential 24.4%,

- Commercial 25.6%,
- Industrial 28.1%,
- Municipal 16.2%,
- Resale –A 3.6%,
- Resale – B 36.8%,
- Private Fire 18.9%,
- Public Fire 24.5%.

Q. WHAT DO YOU RECOMMEND IF THE COMMISSION GRANTS AN INCREASE THAT IS LESS THAN THE FULLY REQUESTED INCREASE FOR WATER OPERATIONS?

A. If the Commission grants an increase less than the fully requested increase, I recommend that the usage rates and customer charges be decreased to produce the revenue level the Commission approves.

Q. WHY DO YOU RECOMMEND THAT THE CUSTOMER CHARGES BE INCLUDED IN ANY SCALE BACK?

A. Because the $19.50 per month customer charge I recommend is based upon the direct customer cost, any reduction in any of the ratemaking inputs by the Commission would reduce the inputs used in the customer cost analysis that was used to determine the $19.50 per month customer charge. The Commission recently reaffirmed its commitment to including the customer charge in the scale back on

pages 166-167 in the Order for Philadelphia Gas Works in its recent base rate case at Docket No. R-2023-3037933, Order entered November 9, 2023.

Q. WHAT GUIDELINE SHOULD THE COMPANY FOLLOW IN ADJUSTING THE USAGE RATES DESCRIBED ABOVE?

A. I recommend that the usage rates for the Rate Zone 2 residential and commercial and the Rate Zone 4 commercial rate classes not be scaled back as long as they remain lower than the usage rates in Rate Zone 1.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

ETHAN H. CLINE

PROFESSIONAL EXPERIENCE AND EDUCATION

EXPERIENCE:

03/2009 - Present
Bureau of Investigation and Enforcement, Pennsylvania Public Utility Commission - Harrisburg, Pennsylvania

Fixed Utility Valuation Engineer – Assists in the performance of studies and analyses of the engineering-related areas including valuation, depreciation, cost of service, quality and reliability of service as they apply to fixed utilities. Assists in reviewing, comparing and performing analyses in specific areas of valuation engineering and rate structure including valuation concepts, original cost, rate base, fixed capital costs, inventory processing, excess capacity, cost of service, and rate design.

06/2008 – 09/2008
Akens Engineering, Inc. - Shiremanstown, Pennsylvania

Civil Engineer – Responsible, primarily, for assisting engineers and surveyors in the planning and design of residential development projects.

10/2007 – 05/2008
J. Michael Brill and Associates - Mechanicsburg, Pennsylvania

Design Technician – Responsible, primarily, for assisting engineers in the permit application process for commercial development projects.

01/2006 – 10/2007
CABE Associates, Inc. - Dover, Delaware

Civil Engineer – Responsible, primarily, for assisting engineers in performing technical reviews of the sewer and sanitary sewer systems of Sussex County, Delaware residential development projects.

EDUCATION:

Pennsylvania State University, State College, Pennsylvania
Bachelor of Science; Major in Civil Engineering, 2005

- Attended NARUC Rate School, Clearwater, FL
- Attended Society of Depreciation Professionals Annual Conference and Training

TESTIMONY SUBMITTED:

I have testified and/or submitted testimony in the following proceedings:

1. Clean Treatment Sewage Company, Docket No. R-2009-2121928
2. Pennsylvania Utility Company – Water Division, Docket No. R-2009-2103937
3. Pennsylvania Utility Company – Sewer Division, Docket No. R-2009-2103980
4. UGI Central Penn Gas, Inc., 1307(f) proceeding, Docket No. R-2010-2172922
5. PAWC Clarion Wastewater Operations, Docket No. R-2010-2166208
6. PAWC Claysville Wastewater Operations, Docket No. R-2010-2166210
7. Citizens' Electric Company of Lewisburg, Pa, Docket No. R-2010-2172665
8. City of Lancaster – Bureau of Water, Docket No. R-2010-2179103
9. Peoples Natural Gas Company LLC, Docket No. R-2010-2201702
10. UGI Central Penn Gas, Inc., Docket No. R-2010-2214415
11. Pennsylvania-American Water Company, Docket No. R-2011-2232243
12. Pentex Pipeline Company, Docket No. A-2011-2230314
13. Peregrine Keystone Gas Pipeline, LLC, Docket No. A-2010-2200201
14. Philadelphia Gas Works 1307(f), Docket No. R-2012-2286447
15. Peoples Natural Gas Company LLC, Docket No. R-2012-2285985
16. Equitable Gas Company, Docket Nos. R-2012-2312577, G-2012-2312597
17. City of Lancaster – Sewer Fund, Docket No. R-2012-2310366
18. Peoples TWP, LLC 1307(f), Docket No. R-2013-2341604
19. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2013-2361763
20. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2013-2361764
21. Joint Application, Docket Nos. A-2013-2353647, A-2013-2353649, A-2013-2353651
22. City of Dubois – Bureau of Water, Docket No. R-2013-2350509
23. The Columbia Water Company, Docket No. R-2013-2360798
24. Pennsylvania American Water Company, Docket No. R-2013-2355276
25. Generic Investigation Regarding Gas-on-Gas Competition, Docket Nos. P-2011-227868, I-2012-2320323
26. Philadelphia Gas Works 1307(f), Docket No. R-2014-2404355
27. Pike County Light and Power Company (Gas), Docket No. R-2013-2397353
28. Pike County Light and Power Company (Electric), Docket No. R-2013-2397237
29. Peoples Natural Gas Company LLC 1307(f), Docket No. R-2014-2403939
30. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2014-2420273
31. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2014-2420276
32. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2014-2420279
33. Emporium Water Company, Docket No. R-2014-2402324
34. Borough of Hanover – Hanover Municipal Water, Docket No. R-2014-2428304
35. Philadelphia Gas Works 1307(f), Docket No. R-2015-2465656
36. Peoples Natural Gas Company LLC 1307(f), Docket No. R-2015-2465172
37. Peoples Natural Gas Company – Equitable Division 1307(f), Docket No. R-2015-2465181
38. PPL Electric Utilities Corporation, Docket No. R-2015-2469275
39. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2015-2480934
40. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2015-2480937

41. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2015-2480950
42. UGI Utilities, Inc. – Gas Division, Docket No. R-2015-2518438
43. Joint Application of Pennsylvania American Water, et al., Docket No. A-2016-2537209
44. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2016-2543309
45. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2016-2543311
46. City of Dubois – Company, Docket No. R-2016-2554150
47. UGI Penn Natural Gas, Inc., Docket No. R-2016-2580030
48. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2017-2602627
49. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2017-2602633
50. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2017-2602638
51. Application of Pennsylvania American Water Company Acquisition of the Municipal Authority of the City of McKeesport, Docket No. A-2017-2606103
52. Pennsylvania American Water Company, Docket No. R-2017-2595853
53. Pennsylvania American Water Company Lead Line Petition, Docket No. P-2017-2606100
54. UGI Utilities, Inc. – Electric Division, Docket No. R-2017-2640058
55. Peoples Natural Gas Company, LLC – Peoples and Equitable Division 1307(f), Docket Nos. R-2018-2645278 & R-2018-3000236
56. Peoples Gas Company, LLC 1307(f), Docket No. R-2018-2645296
57. Columbia Gas of Pennsylvania, Inc., Docket No. R-2018-2647577
58. Duquesne Light Company, Docket No. R-2018-3000124
59. Suez Water Pennsylvania, Inc., Docket No. R-2018-3000834
60. Application of Pennsylvania American Water Company Acquisition of the Municipal Authority of the Township of Sadsbury, Docket No. A-2018-3002437
61. The York Water Company, Docket No. R-2018-3000006
62. Application of SUEZ Water Pennsylvania, Inc. Acquisition of the Water and Wastewater Assets of Mahoning Township, Docket Nos. A-2018-3003517 and A-2018-3003519
63. Pittsburgh Water and Sewer Authority, Docket Nos. R-2018-3002645 and R-2018-3002647
64. Joint Application of Aqua America, Inc. et al., Acquisition of Peoples Natural Gas Company LLC, et al., Docket Nos. A-2018-3006061, A-2018-3006062, and A-2018-3006063
65. Implementation of Chapter 32 of the Public Utility Code Regarding Pittsburgh Water and Sewer Authority, Docket Nos. M-2018-2640802 and M-2018-2640803
66. Philadelphia Gas Works 1307(f), Docket No. R-2019-3007636
67. People Natural Gas Company, LLC, Docket No. R-2018-3006818
68. Application of Pennsylvania American Water Company Acquisition of the Steelton Borough Authority, Docket No. A-2019-3006880
69. Application of Aqua America, Inc. et al., Acquisition of the Wastewater System Assets of the Township of Cheltenham, Docket No. A-2019-3006880
70. Philadelphia Gas Works, Docket No. R-2019-3009016
71. Wellsboro Electric Company, Docket No. R-2019-3008208
72. Valley Energy, Inc., Docket No. R-2019-3008209
73. Citizens' Electric Company of Lewisburg, Pa, Docket Non. R-2019-3008212
74. Application of Aqua America, Inc. et al., Acquisition of the Wastewater System Assets of the East Norriton Township, Docket No. A-2019-3009052

75. Peoples Natural Gas Company, LLC 1307(f), Docket No. R-2020-3017850
76. Peoples Gas Company, LLC 1307(f), Docket No. R-2020-3017846
77. Philadelphia Gas Works, Docket No. R-2020-3017206
78. Pittsburgh Water and Sewer Authority, Docket Nos. R-2020-3017951 et al.
79. Columbia Gas of Pennsylvania, Docket No. R-2020-3018835
80. Pennsylvania America Water Company, Docket Nos. R-2020-3019369 and R-2020-3019371
81. PECO Energy Company – Gas Division, Docket No. R-2020-3019829
82. PGW 1307(f), Docket No. R-2021-3023970
83. Peoples Natural Gas Company, LLC 1307(f), Docket No. R-2021-3023965
84. Peoples Gas Company, LLC 1307(f), Docket No. R-2021-3023967
85. UGI Utilities, Inc. – Electric Division, Docket No. R-2021-3023618
86. Columbia Gas of Pennsylvania, Inc., Docket No. R-2021-3024926
87. Duquesne Light Company, Docket No. R-2021-3024750
88. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2021-3025652
89. Pittsburgh Water and Sewer Authority, Docket Nos. R-2021-3024773 et al.
90. Application of Aqua America Wastewater, Inc. et al., Acquisition of the Wastewater System Assets of Lower Makefield Township, Docket No. A-2021-3024267
91. Aqua Pennsylvania Water, Inc. and Aqua Pennsylvania Wastewater, Inc., Docket Nos. R-2021-3027385 and R-2021-3027386
92. Application of Pennsylvania-American Water Company for Acquisition of the Wastewater Collection and Treatment System Assets of the York City Sewer Authority, Docket No. A-2021-3024681
93. City of Lancaster – Bureau of Water, Docket No. R-2021-3026682
94. Application of Aqua America Wastewater, Inc. et al., Acquisition of the Wastewater System Assets of East Whiteland Township, Docket No. A-2021-30246132
95. UGI Utilities, Inc. – Gas Division, Docket No. R-2021-3030218
96. Peoples Natural Gas Company, LLC 1307(f), Docket No. R-2022-3030661
97. Columbia Gas of Pennsylvania, Inc., Docket No. R-2022-3031211
98. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2022-3032242
99. Pennsylvania American Water Company, Docket Nos. R-2022-3031672 and R-2022-3031673
100. The York Water Company, Docket Nos. R-2022-3031340 and R-2022-3032806
101. Columbia Gas of Pennsylvania, Inc., Docket No. R-2022-3032167
102. National Fuel Gas Distribution Corporation, Docket No. R-2022-3035730
103. UGI Utilities, Inc. – Electric Division, Docket No. R-2022-3037368
104. Application of Pennsylvania-American Water Company for Acquisition of the Wastewater Collection and Treatment System Assets of the Butler Area Sewer Authority, Docket No. A-2022-3037047
105. Philadelphia Gas Works, Docket No. R-2023-3037933
106. Pittsburgh Water and Sewer Authority, Docket Nos. R-2023-3039920 et al.

I&E Statement No. 4-SR
Witness: Ethan H. Cline

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket Nos. R-2023-3043189 and R-2023-3043190

Surrebuttal Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

FPFTY Reporting Requirements
Acquisition Adjustments
Revenue Decoupling Mechanism
Customer Cost Analysis
Water Rate Design
Rate Design Commitments
Scale Back of Rates

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INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Ethan H. Cline. My business address is Pennsylvania Public Utility Commission, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission in the Bureau of Investigation and Enforcement ("I&E") as a Fixed Utility Valuation Engineer.

Q. ARE YOU THE SAME ETHAN H. CLINE THAT SUBMITTED I&E STATEMENT NO. 4 AND I&E EXHIBIT NO. 4 ON FEBRUARY 1, 2024?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony submitted by witnesses on behalf of Pennsylvania-American Water Company ("PAWC" or "Company"): Stacey D. Gress (PAWC St. No. 4-R), E. Christopher Abruzzo (PAWC St. No. 6-R), J. Cas Swiz (PAWC St. No. 7-R), and Constance E. Heppenstall (PAWC St. No. 12-R). I will also address the rebuttal testimony submitted on behalf of the Office of Small Business Advocate ("OSBA") by witness Brian Kalcic (OSBA St. No. 1-R), and the rebuttal testimony submitted on

behalf of the Office of Consumer Advocate ("OCA") by witness Jerome Mierzwa (OCA St. No. 4R).

Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN EXHIBIT?

A. No.

FPFTY REPORTING REQUIREMENTS

Q. WHAT DID YOU RECOMMEND REGARDING PLANT ADDITIONS THAT PAWC PROJECTS TO BE IN SERVICE DURING THE FPFTY?

A. I recommended that the Company provide I&E and OCA with updates to PAWC Ex. 3-A, pp. 26, 97, 146, 179, and 218 no later than December 1, 2025, under this docket number. PAWC's updates should include actual plant additions and retirements for the twelve months ending June 30, 2024 and for the twelve months ending June 30, 2025 (I&E St. No. 3, p. 3).

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION?

A. Yes. PAWC witness Gress indicated on page 7 of PAWC Statement No. 4-R that the Company agrees with my reporting requirement recommendation and indicates that PAWC will provide the updates as I recommended.

ACQUISITIONS - WATER

Q. WHAT WATER ACQUISITIONS ARE INCLUDED IN THE COMPANY'S FILING?

A. PAWC has proposed to include in the present proceeding the Farmington Township water distribution system ("Farmington Township") and Audubon Water Company ("AWC") acquisitions (PAWC St. No. 6, p. 3).

Q. HAS EITHER THE FARMINGTON TOWNSHIP OR AWC ACQUSITION CLOSED?

A. No. As described on pages 8 and 10 of PAWC Statement No. 6, the Farmington Township application was filed on August 28, 2023, and the AWC application was filed on September 21, 2023. As far as I am aware, neither of these applications have been approved by the Commission, and the Company continues to only anticipate these acquisitions closing and making it through any potential appeals by the end of the FPFTY.

Q. WHAT DID YOU RECOMMEND REGARDING THE FARMINGTON TOWNSHIP AND AWC SYSTEMS?

A. I recommended that the Commission remove the revenue requirement for the Farmington Township and AWC systems from the present proceeding including all costs, revenues, taxes, and amortizations (I&E St. No. 4, pp. 9-10).

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION?

A. Yes. PAWC witnesses Gress, Abruzzo, and Ladner each provided testimony indicating that the Company disagreed with my recommendation. I will mainly address the testimony of Mr. Abruzzo since witnesses Gress and Ladner indicated their agreement with Mr. Abruzzo's testimony.

Q. WHAT REASONS DID MR. ABRUZZO PROVIDE FOR DISAGREEING WITH YOUR RECOMMENDATION TO REMOVE THE FARMINGTON TOWNSHIP AND AWC SYSTEMS FROM THE PRESENT FILING?

A. Mr. Abruzzo first provided updates to the ongoing proceedings regarding the Farmington Township and AWC systems. Specifically, Mr. Abruzzo indicated that the parties involved in the Farmington case are exchanging informal discovery as they attempt to hold settlement discussions, but a litigation schedule has yet to be set. Regarding the AWC case, Mr. Abruzzo explained that a litigation schedule has been set with Reply Briefs set to be submitted to the Administrative Law Judge by May 14, 2024. Mr. Abruzzo indicated that PAWC would close on each system "likely" before the end of the FPFTY in this case (PAWC St. No. 6-R, pp. 4-5).

Mr. Abruzzo then provided three main reasons why the Company disagrees with I&E's recommendation to not include the Farmington and AWC systems in the current proceeding. First, he believes that the "test" for whether or not an acquisition should be included in a base rate case should be whether the

acquisition closes within the FPFTY and claims that the Company is asking the Commission, in its final order, to take official notice of the status of the acquisition proceedings and that the Commission would then see that each acquisition is likely to close by the end of the FPFTY. Second, Mr. Abruzzo compares the inclusion of the Farmington Township and AWC systems to "assets that are used and useful before the end of the FPFTY." Third, Mr. Abruzzo claims that no special "public interest" test is necessary or warranted. (PAWC St. No. 6-R, pp. 13-16).

Q. WHY DOES MR. ABRUZZO SUGGEST THAT THE TEST FOR WHETHER OR NOT AN ACQUSITION SHOULD BE INCLUDED IN A BASE RATE CASE BE WHETHER OR NOT THE ACQUISITION CLOSES WITHIN THE FPFTY?

A. It is Mr. Abruzzo's opinion that the Commission should take official notice of its own decisions and that an appeal of that decision has or has not been filed as well as judicial decisions after the record in a base rate case closes. Mr. Abruzzo claimed that this is so the Company can integrate acquisitions into the larger PAWC systems "as soon as reasonably possible to avoid regulatory lag." (PAWC St. No. 6-R, pp. 12-13).

Q. IS THE COMPANY'S POSITION REASONABLE?

A. No. The Company's preference would be for the Commission to take official

notice of its orders approving the acquisitions so that it can avoid regulatory lag. However, as I described on p. 7 of I&E Statement No. 4, "[i]t is possible that through the acquisition proceeding and investigation, errors could be identified that would affect the amortization claim in this proceeding. These potential changes would not be reflected in this case, because it is possible, if not likely, that this base rate case concludes before a Commission Order is for either of the Farmington Township or AWC acquisition cases." Mr. Abruzzo did not address this potentially harmful result as the focus of his testimony was solely on the Company's ability to recover its investment as fast as possible. Therefore, contrary to the Company's position, the "test" for whether an acquisition can reasonably be included in a base rate case is if the regulatory process has played out and all issues have been resolved. The goal of reducing regulatory lag cannot come at the expense of the actual regulatory process.

Q. HOW DOES MR. ABRUZZO COMPARE THE FARMINGTON TOWNSHIP AND AWC ACQUISITIONS TO OTHER ASSETS THAT ARE INCLUDED IN THE FPFTY?

A. Mr. Abruzzo stated that he is arguing that assets that are used and useful in providing service to PAWC's by the end of the FPFTY are properly included in rates and that denying the recovery of such assets is unconstitutional. He further stated that "[i]t is well established that assets that are used and useful before the end of the FPFTY are properly included in rates." (PAWC St. No. 6-R, p. 15).

Q. DO YOU AGREE THAT ASSETS THAT ARE USED AND USEFUL BEFORE THE END OF THE FPFTY ARE PROPERLY INCLUDED IN RATES?

A. Yes. However, capital projects relate to systems that PAWC already undoubtedly owns. These capital projects that are set to be included in rate base in the FPFTY will have projected in-service dates that are before the end of the FPFTY. Additionally, parties are able to look at a Company's history of completing projects on time to determine if the projected in-service dates are reasonable and determine if adjustments to the Company's projections are necessary. In the case of the Farmington Township and AWC acquisitions, the Company, even through rebuttal testimony, has not identified any set closing date other than a nebulous "likely before the end of the FPFTY." Therefore, I&E is recommending that the acquisitions not be included in the current proceeding due to the inability predict whether the acquisitions will actually be "in-service" before the end of the FPFTY. Furthermore, unlike plant additions to existing systems, all of the projected costs and revenues for these not yet acquired systems are based on speculation and are not reflective of PAWC's own costs to own and operate the system, so projected revenue shortfalls that are recovered from other water customers could be inaccurate resulting in improper rates being established for existing customers. In addition, PAWC itself determines when it files a base rate case. If it was necessary for these systems to be included in rate base, PAWC could have simply waited until it actually owned these systems to file its case.

Q. DOES YOUR RECOMMENDATION DENY THE COMPANY ITS RIGHT TO COLLECT A RETURN ON AND OF ITS INVESTMENT?

A. No. My recommendation is not to permanently deny the recovery of the Company's investment in the Farmington Township and AWC systems. The Company will have the ability to properly include these investments in a subsequent base rate case after the acquisitions close.

Q. DO YOU AGREE WITH MR. ABRUZZO THAT YOUR RECOMMENDATION IS REQUIRING A "SPECIAL PUBLIC INTEREST TEST?"

A. No. There is nothing special about ensuring a proposal or claim by the Company is in the public interest. Every claim made by the Company in its filing must be determined to be in the public interest. This is the very basis for how rates are determined to be just and reasonable. Simply because issues such as necessary capital improvement projects, the Company paying its employees, or paying its taxes, are obviously in the public interest that does not mean that they are not also subject to this "test." Being in the public interest is the bare minimum standard for a proposal being approved by the Commission. What is extraordinary is Mr. Abruzzo's claim that the Company's proposal to include the Farmington Township and AWC systems in the present base rate case prior to the completion of a full Commission review of the acquisitions does not need to be in the public interest.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. As I discussed above, the Company has not provided any evidence that would support a change in my recommendation. Therefore, I continue to recommend the Commission deny the inclusion of the Farmington Township and AWC systems in this proceeding.

Q. DO YOU HAVE ANY FINAL COMMENTS REGARDING THE COMPANY'S INCLUSION OF NOT YET ACQUIRED SYSTEM ASSETS IN BASE RATE PROCEEDINGS?

A. Yes. With the application of Act 12 and the routine cost-sharing that occurs for system water customers, to include systems that are not yet acquired with associated speculative subsidy needs not based on any actual known operating costs is inappropriate and unfair to existing customers as the additional costs applied to their rates may not come to fruition or be accurate in the scope established in the proceeding. For these reasons, I recommend that the Company not be permitted to include systems not yet acquired in base rate proceedings now or in the future.

REVENUE DECOUPLING MECHANISM

Q. WHAT IS THE REVENUE DECOUPLING MECHANISM PROPOSED BY PAWC?

A. According to PAWC, the proposed Revenue Decoupling Mechanism ("RDM") is

an alternative rate design mechanism whose purpose is to more reliably recover the revenue requirement and associated fixed costs approved by the Commission in this case. In other words, the Company is proposing to stabilize its revenue level received from customers by charging or crediting the difference between the revenue requirement and fixed cost authorized in this case and actual revenues to customers in the subsequent year (PAWC Statement No. 10, pp. 86-87).

Q. DID YOU AGREE WITH THE COMPANY'S PROPOSED IMPLEMENTATION OF THE RDM?

A. No. As I discussed in greater detail on pages 16-23 of I&E Statement No. 3, I did not agree that the Company has established a need for revenue stabilization, especially when it is also simultaneously proposing a declining usage adjustment in this case. Additionally, the proposed RDM may cause harm to PAWC's customers by completely separating their usage patterns from the surcharge/credit program. Also, this type of mechanism will devalue conservation efforts undertaken by customers that can afford efficiency measures and harm customers who cannot afford these measures by assessing an additional charge to all customers. Furthermore, the proposal does not achieve the policy goals supported based on the Commission's policy statement associated with Section 1330 of the Code, or the Code itself. Finally, it is likely to cause rate confusion with yet another surcharge on PAWC's customer bills.

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION REGARDING THE PROPOSED RDM?

A. Yes. Witness Rea provided testimony opposing my recommendation that the Commission deny the proposed RDM.

Q. WHY DID THE COMPANY DISAGREE WITH YOUR RECOMMENDATION THAT THE COMMISSION DENY THE PROPOSED RDM?

A. Witness Rea responded to the issues of the problems regarding straight fixed variable ("SFV") pricing, the effect of the RDM on customers' conservation efforts, the RDMs effect on rate stability and rate confusion, the existing mechanisms such as the Distribution System Improvement Charge ("DSIC") and FPFTY that protect against regulatory lag and the Commission's Policy Statement on alternative ratemaking mechanism at Docket No. M-2015-2518883 (PAWC St. No. 10-R, pp. 64-78).

Q. HOW DID MR. REA RESPOND TO YOUR CONCERNS REGARDING SFV PRICING?

A. Mr. Rea did not disagree that utilizing SFV pricing to establish rates makes it more difficult for customers to mitigate their bills by adjusting their consumption. Mr. Rea then attempted to distinguish the Company's RDM proposal from straight SFV pricing by restating that SFV is being used only to reconcile actual revenues

collected with those authorized in this proceeding. (PAWC St. No. 10-R, pp. 71-72).

Q. DO YOU AGREE THAT THE COMPANY'S RDM PROPOSAL IS REASONABLE BECAUSE IT ONLY USES SFV PRICING TO SET THE GOAL RATES FOR EACH RATE CLASS?

A. No. The Company's proposal to use a rate methodology that would otherwise be unacceptable to judge actual revenues generated by rates that have been determined by the Commission to be just and reasonable makes no sense. At the conclusion of the base rate case, the Commission sets the rates that it determines to be just and reasonable which includes providing the Company the opportunity to recover its rate of return. The Company has not established a need to hedge against the Commission's decision.

Q. DOES YOUR DIRECT TESTIMONY DESCRIBE HOW THE RDM COULD POTENTIALLY HARM CUSTOMERS FROM A CONSERVATION STANDPOINT?

A. Yes. I indicated that by calculating the RDM based on a total class-wide (or multiple classes in the case of non-residential customers) basis, a single customer, particularly low-usage customers, will have zero ability to affect whether they are assessed an additional surcharge or a credit on their bill in the subsequent year. Therefore, it is the bill based on base charges that would encourage water

efficiency and conservation. The only thing the RDM provides customers is the worry that the next year's RDM would erode the savings derived from conservation efforts. (I&E St. No. 3, p. 22).

Q. HOW DID THE COMPANY RESPOND TO YOUR CONCERNS?

A. Witness Rea stated regardless of what the volumetric rate happens to be, customers who use less water will have lower bills. He then provided an example of a customer taking actions to reduce their water consumption by 5% per month, who would save $4.16 per month without the RDM, and claimed that this is well above the amount the Company estimates an average customer bill would increase due to implementation of the RDM (PAWC St. No. 10-R, p. 72).

Q. DOES MR. REA'S CALCULATION PROVE YOUR CONCERN THAT THE RDM WOULD ERODE CUSTOMER SAVINGS FROM CONSERVATION?

A. Yes. Mr. Rea's statement that the $4.16 per month saved without the RDM is well above the amount that the customer bill would increase due to the RDM just shows that the RDM would erode the savings and not completely remove them. This savings erosion would be larger for customers who conserve less than 5% per month. This savings erosion for customers who choose to conserve water could have a chilling effect on conservation efforts for customers.

Q. HOW DID MR. REA RESPOND TO YOUR CONCERNS REGARDING RATE STABILITY AND RATE CONFUSION?

A. Mr. Rea claimed that the RDM will improve stability. He then described how, under the RDM, rates will change every based on the previous year's usage patterns of the entire rate class. Mr. Rea addressed rate confusion by pointing out that revenue reconciliation riders are not new to the utility industry, and he claimed that there is no reason to think that customers would be more confused about an RDM surcharge or credit on their bill than they would be for any other rate design element (PAWC St. No. 10-R, p. 73).

Q. DO YOU AGREE WITH MR. REA'S POSITION REGARDING RATE STABILITY AND RATE CONFUSION?

A. No. First, Mr. Rea did not identify how yearly changes in rates that customers cannot anticipate promote rate stability. It seems contradictory to state that the RDM promotes rate stability and then to say that the rate can change every year in either direction based on the previous year's usage patterns. Second, while Mr. Rea is correct that utility customers have experienced revenue reconciliation riders in the past, I disagree that continuing to add additional riders and surcharges to a customer's bill will not lead to further rate confusion. This is particularly true in the case of the RDM which customers will be unable to anticipate whether they will be receiving a credit or an additional surcharge on a year-to-year basis.

Q. HOW DID THE COMPANY RESPOND TO THE REDUCTION OF REGULATORY RISK THROUGH EXISTING MECHANISMS SUCH AS THE DSIC AND FPFTY?

A. Mr. Rea claims that the DSIC and FPFTY do not address the usage decline between cases which affects the Company's ability prudently operate, manage, and invest in the rest of the business for the long-term benefit of its customers (PAWC St. No. 10-R, pp. 75-76).

Q. HAS THE COMPANY ESTABLISHED THAT REVENUE DECLINE HAS AFFECTED ITS ABILITY TO ATTRACT CAPITAL, PLAN, AND INVEST IN ITS SYSTEM TO DATE?

A. Not at all. As I described on page 17 of I&E Statement No. 4, since its last base rate case one and a half years prior to the current base rate case, PAWC was able to generate approximately $262 million in capital to acquire new water and wastewater systems despite an overall continuing decline in usage. This ability to generate capital to acquire new water and wastewater systems shows that the RDM is not necessary.

Q. HOW DID THE COMPANY ADDRESS THE COMMISSION'S POLICY STATEMENT ON ALTERNATIVE RATEMAKING MECHANISMS AT DOCKET NO. M-2015-2518883?

A. Mr. Rea asserts that the Policy Statement lists several factors that may be

considered but does not prescribe how or the extent to which each factor must be "satisfied." (PAWC St. No. 10-R, p. 70). Specifically, Mr. Rea provided responses to the issues brought up on pages 21-24 of I&E Statement No. 4 as well as those discussed by OCA witness Mierzwa (PAWC Ex. CBR-10R).

Q. PLEASE ADDRESS THE COMPANY'S TESTIMONY REGARDING THE FACTORS INTRODUCED IN THE POLICY STATEMENT AT DOCKET NO. M-2015-2518883.

A. First, Mr. Rea addressed the effects of the RDM on water conservation and rate stability. I addressed the fact that the RDM does not promote water conservation or rate stability above. Second, Mr. Rea claimed that I have provided no evidence that low-income customers will be harmed or negatively impacted by the RDM and that RDM credits and surcharges will be subject to discounts through the Company's Bill Discount Program ("BDP"). Third, Mr. Rea addressed the issue of customer confusion over rates. (PAWC Ex. CBR-10R).

Q. IS MR. REA CORRECT THAT YOU DID NOT PROVIDE ANY EVIDENCE THAT LOW-INCOME CUSTOMERS WILL BE HARMED OR NEGATIVELY IMPACTED BY THE RDM?

A. Yes. I have no definitive proof that the low-income customers will be harmed or negatively impacted by the RDM because the RDM has not been enacted. Therefore, there is no actual data regarding the impact on low-income customers.

However, on page 22 of I&E Statement No. 4, a single low-income customer will have zero ability to influence whether they are assessed an additional surcharge or a credit on their bill in a subsequent year because the RDM is based on a total class-wide basis. This uncontrollable extra charge, even if it is passed through the BDP as Mr. Rea indicated, could negatively impact low-income customers who have difficulty affording their unadjusted bills.

Q. HOW DID MR. REA RESPOND TO CONCERNS REGARDING RATE CONFUSION?

A. As discussed above, Mr. Rea's position is that revenue reconciliation riders are not new to the utility industry and that there is no reason to think that customers would be more confused about an RDM surcharge or credit on their bill than they would be for any other rate design element (PAWC Ex. CBR-10R, p. 7).

Q. DO YOU AGREE WITH MR. REA'S POSITION ON RATE CONFUSION?

A. No. Unlike the other rate design elements that appear on the customer bills, the customer is completely unaware of how the RDM is generated and whether they will be receiving a surcharge or credit on a year-to-year basis. This would only serve to increase customer confusion.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. For the reasons stated above, I continue to recommend that the RDM be

denied.

ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE

Q. WHAT IS THE ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE PROPOSED BY PAWC?

A. Per PAWC witness Swiz, the Environmental Compliance Investment Charge ("ECIC") "is a rate adjustment clause designed to reflect and recover, between rate cases, the costs imposed on the Company to address and comply with continuously evolving government-mandated environmental standards that are beyond the Company's control and difficult to estimate at any single point in time." (PAWC St. No. 8, p. 21).

Q. DID YOU AGREE WITH THE COMPANY'S PROPOSED ECIC?

A. No. I recommended the ECIC proposed by the Company should be denied because the proposal is premature and filed in the wrong venue (I&E St. No. 4, p. 26).

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION?

A. Yes. PAWC witness Swiz disagreed with my recommendation because he claims the Public Utility Code "requires utilities to propose alternative rate mechanisms as part of a base rate case, so it is entirely timely for the Company to propose the

ECIC in this case in advance of the need to file its first Environmental Plan." (PAWC St. No. 8-R, p. 12).

Q. PLEASE RESPOND TO MR. SWIZ CLAIMS REGARDING YOUR RECOMMENDATIONS RELATED TO THE ECIC.

A. While Mr. Swiz is correct regarding the Public Utility Code requiring alternate ratemaking mechanisms to be proposed in base rate cases, that is not in conflict with my recommendation that the ECIC would follow the same process as the Distribution System Improvement Charge ("DSIC"). The Commission has the authority to deny the proposal in this case and instead have it follow the same process as the DSIC if the Commission deems that such a recovery mechanism is relevant. In fact, on page 12 of PAWC Statement No. 8-R, Mr. Swiz notes that the ECIC is modeled on the DSIC. Therefore, it is reasonable for the ECIC to follow the example of the DSIC and require a utility to first get approval in a separate petition with its Environmental Plan prepared as I suggested on page 27 of I&E Statement No. 4.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. I still believe that a single company proposing such a plan before regulations are finalized and before the Commission or Legislature has had any opportunity to evaluate this issue on an industry-wide basis is premature. Further, the Company's own claim that the ECIC is modeled after the DSIC would support

that it be filed and evaluated in a similar petition venue. For these reasons, I continue to recommend that the Commission deny the ECIC.

RATE DESIGN

WATER OPERATIONS

Q. BRIEFLY DESCRIBE THE COMPANY'S RATE DESIGN PROPOSALS IN THE VARIOUS WATER OPERATIONS' RATE ZONES.

A. The Company's filing includes primarily six different rate zones. Most of PAWC's customers are included in Rate Zone 1 – PAWC ("Rate Zone 1") and pay the Rate Zone 1 rates. Customers in the remaining rate zones pay present rates that are different from Rate Zone 1 present rates. The remaining rate zones are as follows: Rate Zone 2 – Valley, Rate Zone 3 – SLIBCO, Rate Zone 4 – Turbotville, Rate Zone 5 – Steelton, Rate Zone X – Audubon, and Rate Zone X - Farmington. It should be noted that, per my recommendation above, the Audubon and Farmington rate zones should be removed in this case, and, therefore, I will not be addressing proposed rate changes for those customers.

Q. WHAT RATE DESIGN ADJUSTMENTS ARE THE COMPANY PROPOSING?

A. The Company is proposing to consolidate the monthly metered rates for all classes of customers in Rate Zone 2 – Valley, Rate Zone 3 – SLIBCO, Rate Zone 4 –

Turbotville, and Rate Zone 5 - Steelton into Rate Zone 1 in the FPFTY (PAWC St. No. 10, p. 35).

Q. ARE THE COMPANY'S RATE DESIGN PROPOSALS TO MERGE THE USAGE RATES IN RATE ZONES 2, 3, 4, AND 5 INTO RATE ZONE 1 OVER THE FPFTY REASONABLE?

A. In general, yes. The rates proposed by the Company that merge the various rate zones described above into Rate Zone 1, are reasonable, except for the proposal to merge Rate Zone 2 – Valley usage rates into Rate Zone 1. I will discuss the Rate Zone 2 – Valley usage rates further below.

WATER OPERATIONS – CUSTOMER COSTS

Q. DID THE COMPANY PREPARE A CUSTOMER COST ANALYSIS TO SUPPORT INCREASING THE CUSTOMER CHARGES?

A. Yes. The Company provided two customer cost analyses for the FPFTY in PAWC Exhibit 12-A, Appendix A, Attachment RS1j. The results of the first cost analysis, shown on page 1 of 3, include all costs being allocated to the customer cost function and results in a cost of $24.63 per month in the FPFTY.

Additionally, PAWC provided a second customer cost analysis that relies on the allocation of costs more directly applicable to customers. The result of the more direct customer cost analysis is $19.31 per month per customer in the FPFTY (PAWC Ex. 12-A, Appendix A, Attachments RS1j, p. 2 of 3).

Q. DID THE COMPANY UPDATE BOTH OF ITS CUSTOMER COST ANALYSES?

A. Yes. PAWC witness Heppenstall described, on page 2 of PAWC Statement No. 12-R, several corrections to its cost of service study that affected the customer cost analyses that were performed. The result of the corrections is that the Company's fully allocated customer cost analysis increased to $25.57 and the direct customer cost analysis increased to $20.26 (PAWC Ex. 12-A REVISED, Appendix A, Attachments RS1j, pp. 1 - 2 of 3),

Q. WHICH CUSTOMER COST ANALYSIS DID YOU RECOMMEND BE USED TO DETERMINE THE CUSTOMER CHARGES FOR WATER OPERATIONS CUSTOMERS?

A. I recommended that the second customer cost analysis that is the result of more direct customer costs be used to determine the customer charges for Water Operations customers (I&E St. No. 4, p. 31).

Q. DID THE COMPANY AGREE WITH YOUR RECOMMENDATION?

A. No. Mr. Rea claimed that both customer cost analyses are reasonable methodologies for considering the calculation of a monthly meter service charge and represent a window to determine a customer charge. He further claimed that choosing a customer charge based only on the direct customer-related customer cost analysis is an extreme position to take (PAWC St. No. 10-R, p. 44). Ms.

Heppenstall stated that the direct cost analysis applies to 5/8-inch meter customers and the Company is grouping 5/8-inch, 3/4-inch, and 1-inch meter customer charges together and that the weighted average residential customer charge for those meter sizes is $21.61 per month (PAWC St. No. 12-R, p. 13).

Q. DO YOU AGREE THAT BASING THE RESIDENTIAL CUSTOMER CHARGE ON THE CUSTOMER COST ANALYSIS THAT IS BASED ONLY ON DIRECT CUSTOMERS COSTS IS "EXTREME?"

A. No. Traditionally, the Commission has determined customer charges based upon the direct-cost customer cost analysis. Further, the Commission reaffirmed its preference for this customer cost analysis in the UGI Electric base rate case at Docket R-2017-2640058, p. 182, Order entered October 25, 2018 ("2018 UGI Electric Order"). Therefore, Mr. Rea's proposed consideration of the "fully allocated" customer cost analysis should be disregarded.

Q. DO YOU AGREE WITH MS. HEPPENSTALL THAT THE 5/8-INCH CUSTOMER CHARGE SHOULD BE INCREASED TO ACCOMMODATE A MERGE WITH LARGER SIZED METER CUSTOMER CHARGES?

A. No. Traditionally, 3/4-inch and larger meters are assigned individual customer charges which can often be increased based on the percent increase of the 5/8-inch meter customer charge. The consolidation of the 5/8-inch, 3/4-inch, and 1-inch meter customer charge to solve the concerns of a limited number of customers that

may have sprinkler systems, and thus require a larger meter was the Company's prerogative, and the 5/8-inch meter customer charges should not be increased beyond the results of the 5/8-inch customer cost analysis since the vast majority of customers only have a 5/8-inch meter.

WATER CUSTOMER CHARGES

Q. WHAT 5/8-INCH RESIDENTIAL CUSTOMER CHARGE DID YOU RECOMMEND?

A. I recommended a $19.50 per month 5/8-inch Residential customer charge in the FPFTY (I&E St. No. 3, p. 33).

Q. WHAT WAS THE BASIS FOR RESIDENTIAL CUSTOMER CHARGE RECOMMENDATION?

A. The basis for my recommendation was the Company's original direct customer cost of $19.31 per month (I&E St. No. 3, p. 33).

Q. DID OCA WITNESS MIERZWA AGREE WITH YOUR CUSTOMER CHARGE RECOMMENDATION?

A. No. OCA witness Mierzwa disagreed with my customer charge recommendation for two reasons. First, Mr. Mierzwa contends that the Company's customer cost analysis is flawed because it includes costs that are not direct customer costs and do not change with the addition or subtraction of a customer, using office building

and furniture expenses as an example. Second, Mr. Mierzwa claims that a reduction in the Company's revenue requirement increase would reduce the customer charge and provided the example of the OCA's recommended pre-tax rate of return reducing the customer cost analysis result to $17.77. (OCA St. No. 4-R, pp. 1-2).

Q. DO YOU AGREE WITH MR. MIERZWA REGARDING WHAT IS PROPERLY INCLUDED IN A DIRECT CUSTOMER COST ANALYSIS?

A. No. Prior to 2018, I&E's long-standing position agreed with the OCA that only costs that would change with the addition or subtraction of a customer should properly be included in a direct customer cost analysis. However, the Commission, in the 2018 UGI Electric Order clearly rejected that approach and identified what is properly included in a direct customer cost analysis. Both the Company's recommendation to consider a fully-allocated customer cost analysis and OCA's recommendation to consider only those costs that would change with the addition or subtraction of a single customer are inconsistent with that order and should be rejected.

Q. DO YOU AGREE WITH MR. MIERZWA THAT A REDUCTION IN THE COMPANY'S REVENUE REQUIREMENT WOULD RESULT IN A REDUCTION IN THE CUSTOMER COST ANALYSIS?

A. Yes. As I discussed on pages 43-44 of I&E Statement No. 4 and below, I agree

that a reduction in the Company's revenue requirement would result in a reduction in the customer cost analysis, which is why I recommended the customer charge be included in any scale back of rates.

Q. DO YOU WANT TO CHANGE YOUR RECOMMENDATION REGARDING THE RESIDENTIAL CUSTOMER CHARGE?

A. Yes. As described above, the Company provided in rebuttal testimony an updated direct customer cost analysis that results in $20.26 per 5/8" residential customer. Therefore, the Company's proposed $20.00 per month residential customer charge is supported by the direct customer cost analysis and, as such, I withdraw my recommendation to lower the 5/8" residential customer charge to $19.50 at the Company's fully requested increase.

USAGE RATES

RATE ZONE 1

Q. DID YOU DETERMINE THE RESULTING INCREASE TO THE PROPOSED USAGE CHARGE?

A. No. Based on I&E's recommendation regarding the Act 11 subsidy, as well as the adjustments made by I&E witnesses Patel and Okum, it is more likely that the usage rate will be subject to a scale back rather than an increase. Therefore, I did not calculate what the increase would be at the fully proposed increase. I will

discuss my usage rate recommendations for each Rate Zone below (I&E St. No. 4, p. 36).

Q. DID THE COMPANY REFERENCE A CALCULATED INCREASE IN USAGE RATES AS A RESULT OF YOUR CUSTOMER CHARGE ADJUSTMENT?

A. Yes. However, first, those calculations were intended as an example and not as a recommendation. Second, as I discussed above, I am withdrawing my recommended adjustment to the Company's proposed customer charge, therefore, the resulting adjustments to the usage rates no longer apply.

<u>RATE ZONES 2 AND 4 – USAGE RATE</u>

Q. DID YOU AGREE WITH THE COMPANY'S PROPOSAL TO SET RATE ZONE 2 RESIDENTIAL AND COMMERCIAL AND RATE ZONE 4 USAGE RATES EQUAL TO RATE ZONE 1?

A. No. The Company's proposal to set Rate Zone 2 residential and commercial usage rates equal to Rate Zone 1 would result in the bill for an average Rate Zone 2 residential customer to increase by 63.64%, and the average bill for a commercial customer would increase by 64.37%. For residential customers in Rate Zone 2, the proposed percent increase is at least double that of the average residential customers in the other rate zones. For Rate Zone 2 commercial customers, the disparity between the percent increases for the other rate zones, apart from Rate

Zone 4, is even greater than that of the residential customers. (I&E St. No. 4, p. 38).

The Company's proposal to set Rate Zone 4 commercial usage rates equal to Rate Zone 1 would result in the bill for an average Rate Zone 4 commercial customer to increase by 68.56%. This increase is unnecessarily large when compared to the increase proposed for Rate Zone 1 commercial customers. (I&E St. No. 4, p. 40).

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATIONS?

A. Yes. Mr. Rea stated that the Company believes that the increases for Rate Zone 2 and the commercial increases for Rate Zone 4 are not unreasonable given the relative level of rates currently in place and continues to support full integration of Rate Zone 4 into the Company's single-tariff statewide rate (PAWC St. No. 10-R, p. 47).

Q. DID THE OCA ADDRESS YOUR USAGE RATE RECOMMENDATIONS?

A. Yes. Mr. Mierzwa shared my concerns regarding the Company's proposed increases for Rate Zones 2 and 4, however, he disagreed with my usage rate recommendation because they were calculated based on the Company's cost of service study, which he opposes (OCA St. No. 4-R, pp. 3-4).

Q. PLEASE RESPOND TO MR. MIERZWA'S TESTIMONY REGARDING YOUR USAGE RATE RECOMMENDATIONS.

A. I am not taking a position regarding Mr. Mierzwa's proposed adjustments to the Company's cost of service study. However, I do agree that rates should be set based upon the cost of service study ultimately approved by the Commission.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDAITON?

A. No. Despite the Company's belief, imposing such large increases on Rate Zone 2 and commercial Rate Zone 4 customers is unnecessary at this time. I continue to recommend a more moderate increase to the usage rates for these customers as described in my direct testimony.

<u>SCALE BACK OF RATES</u>

Q. WHAT DID YOU RECOMMEND REGARDING A SCALE BACK OF RATES?

A. I recommended that the first step that must be completed in any scale back is to determine the revenue requirements and scale backs of the wastewater operations. I then recommended that any scale back be netted against the subsidy the Commission determines for the WW Operations (I&E St. No. 4, pp. 41-42).

Q. DID THE COMPANY RESPOND TO YOUR SCALE BACK RECOMMENDATION?

A. Yes. Mr. Rea stated that the "Company does not support the position that any scale back in rates be applied to the Act 11 allocation amount first. Instead, Mr. Rea stated that the Company's proposal for scale back is designed such that the same relative percentages to the total of water service revenue requirement, wastewater service revenue requirement, and Act 11 reallocation amounts be maintained at proposed levels and that the levels of rates for water service and wastewater service relative to each other should be maintained as proposed in the event that a lower revenue requirement is approved by the Commission in this case." (PAWC St. No. 10R, pp. 40-41).

Q. DO YOU AGREE WITH THE COMPANY'S RECOMMENDATION?

A. No. Since I&E witness Kubas has proposed adjustments to PAWC's wastewater rates and Act 11 allocation amount, as described in I&E Statements No. 3 and 3-SR, I&E does not agree with the relative percentages to the total of water service revenue requirement, wastewater service revenue requirement, and Act 11 reallocation amounts at proposed levels. Additionally, eliminating the allocation amounts first sets both divisions at their own base revenue requirement which then allows for any further reduction in revenue requirement to be scaled back proportionally based on the approved cost of service study.

WATER OPERATIONS RATE SCALE BACK

Q. DID YOU RECOMMEND THAT THE CUSTOMER CHARGES YOU RECOMMEND BE INCLUDED IN ANY SCALE BACK?

A. Yes. The customer charges that I recommended should be scaled back proportional to the increase granted by the Commission and not adjusted independently as they are in alignment with my recommended customer cost analysis and any reduction in costs will cause a reduction in the customer cost analysis (I&E St. No. 4, p. 43).

Q. WHAT GUIDELINE DID YOU RECOMMEND THE COMPANY SHOULD FOLLOW IN ADJUSTING THE USAGE RATES DESCRIBED ABOVE?

A. I recommended that the usage rates for the Rate Zone 2 residential and commercial and the Rate Zone 4 commercial rate classes not be scaled back as long as they remain lower than the usage rates in Rate Zone 1 (I&E St. No. 4, p. 44).

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION REGARDING THE SCALE BACK OF CUSTOMER CHARGE, USAGE RATES, AND YOUR GUIDELINES REGARDING THE USAGE RATES FOR RATE ZONES 2 AND 4?

A. Yes. Mr. Rea stated that the "Company does not object to my proposal that, in the event that a revenue requirement for water service is approved a levels below the Company's recommended amount, there is a reduction of both usage rates and fixed charges, but that the usage rates for the Rate Zone 2 residential and commercial and

the Rate Zone 4 commercial rate classes not be scaled back as long as they remain lower than the usage rates in Rate Zone 1." (PAWC St. No. 10R, pp. 40).

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket Nos.: R-2023-3043189 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	
Pennsylvania-American Water Company	:	

DIRECT TESTIMONY

OF

CHRISTINE MALONI HOOVER

On behalf of the

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

Date Served: February 1, 2024

Corrected: March 6, 2024

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Introduction

Q. Please state your name and business address.

A. My name is Christine Maloni Hoover. My business address is 555 Walnut Street, 5th Floor, Harrisburg, PA 17101.

Q. By whom are you employed and in what capacity?

A. I am employed by the Office of Consumer Advocate (OCA) as the Deputy Consumer Advocate.

Q. What is the purpose of your testimony in this case?

A. I have been asked to provide an overview of this case from the consumers' perspective, including a discussion of how Pennsylvania-American Water Company's (PAWC or Company) proposals that, when taken together, result in large bill increases and other harms to its customers. I will also introduce and synthesize the OCA's other witnesses who address the rate requests filed by the Company and provide an overall recommendation.

Q. Have you provided testimony before the Pennsylvania Public Utility Commission?

A. No. My appearances before the Commission have been as an attorney on behalf of the Office of Consumer Advocate.

Q. What are your qualifications to provide this testimony in this case?

A. I have been employed by the OCA since 1987 in increasingly responsible roles as an attorney, then a senior attorney, and now as the Deputy Consumer Advocate. I also served as the Interim Acting Consumer Advocate for slightly more than 6 months from June 2021 through mid-December 2021. I have concentrated my legal career on cases and

public policy issues that have been before the Public Utility Commission (PUC or Commission). I also have been involved in public policy issues at the state and federal level, concentrating on water and wastewater issues. During my career at OCA, I have had increasing responsibilities and have had a role in setting the OCA's policy positions on a wide range of utility issues. In addition, during my career at OCA I have been responsible for supervising the technical staff and the support staff of the office, and responsible for the operations of the office.

During my career, I developed expertise relating to the regulation of public utilities. I have presented many times relating to regulatory issues and have prepared testimony for the legislature. I have participated as a faculty member in educational programs for the Institute of Public Utilities at Michigan State University and presented before the American Water Works Association (AWWA), the Society of Utility and Regulatory Financial Analysts, the National Conference of Regulatory Attorneys, and the Pennsylvania Bar Institute. My complete curriculum vitae is provided as Appendix A.

Q. Do you have any experience that is particularly relevant to the issues in this case?

A. Yes, I do. During my career at OCA, I developed specific expertise in the regulation of water and wastewater issues. In addition to my case work on water and wastewater utilities, including appellate work, I have been involved in several activities that are not tied to specific legal proceedings. I am the OCA's representative on the Department of Environmental Protection's Technical Assistance Center. I have participated on behalf of the National Association of State Utility Consumer Advocates (NASUCA) in negotiations for rulemakings on Stage 2 Disinfection By Products, Total Coliform Rule, and the National Drinking Water Advisory Committee's Small Systems Implementation

Working Group. I was a member and chair of American Water Works Association (AWWA)'s Public Interest Advisory Forum for many years. I also served as a consumer representative on the Water Research Foundation's Public Council. I am a member of, and past chair of, NASUCA's Water Committee.

Q. Have you prepared Exhibits to accompany your testimony?

A. Yes, I have Exhibits CMH-1 through CMH-5 attached to my testimony.

Q. Do you have any other preliminary matters to address?

A. Yes, there are occasions where I may refer to decisions by regulatory agencies, courts, statutes and regulations. This should not be considered a legal opinion as I am not acting as an OCA attorney in this proceeding. Any reference or citation would be related to supporting my opinion about the public policy that I discuss below.

Summary

Q. Please summarize your conclusions and recommendations.

A. I summarize my conclusions and recommendations as follows:

- PAWC should receive no more than $43,733,007 (4.3%) of additional annual revenues on a total company basis. It has not supported its requested $203,945,910 (20.2%) of additional annual revenues;
- PAWC's proposed rate increase is overstated in part due to its high cost of equity in an equity rich capital structure and its unsupported request for a 25 basis point addition to return on equity;

- PAWC's overstated rate of return is applied to a rate base that includes six acquisitions, five of which do not have a Commission order and one that has been appealed to Commonwealth Court;
- PAWC already uses at least four different alternative ratemaking provisions of the Public Utility Code, namely the Fully Projected Future Test Year, the shift of wastewater revenue deficiency to water customers, the use of fair market value for municipal acquisitions, and the Distribution System Improvement Charge that shift risk to its customers and provide higher returns to its investors. 66 Pa. C.S. §§ 315(e), 1311(c), 1329, 1350-1360. The impact of all four of these provisions is to move the rate setting away from cost of service.
- PAWC is requesting approval of two additional alternative ratemaking mechanisms in this proceeding:
    - The Revenue Decoupling Mechanism (RDM) will shift risk from its investors to its customers and will send improper price signals to its customers.
    - The Environmental Compliance Investment Charge (ECIC) would permit quarterly rate increases between rate cases to collect capital expenditures, and operations and maintenance expenses to provide service that complies with environmental regulations.

  Both alternative ratemaking mechanisms fail to meet the requirements under Section 1330 of the Public Utility Code, violate sound ratemaking principles, and pose a risk to the consumers of unknown rate increases outside of the rate case process.
- PAWC proposes to shift 94% of the wastewater revenue deficiency , or $71 million, to its water customers. This represents 27% of the total wastewater cost of service.
- PAWC's ten acquisitions with ratemaking rate base valued under Section 1329 have added a cumulative annual revenue deficiency of $44,645,164, calculated before any

capital expenditures were added. It proposes the addition of two proposed acquisitions with ratemaking rate base valued using Section 1329 that would add revenue deficiencies of $28,222,944 to this case.

- PAWC's winter averaging proposal for wastewater customer should be rejected because PAWC has not justified it and it disproportionately harms low-income customers;
- PAWC's proposes a small expansion to its bill discount program, however, it continues to propose recovery only from residential customers.
- PAWC's customer service has not shown improvement, including the lack of specific monthly and annual call center performance standards, improvement of its analysis of customer complaints, reform of Pennsylvania-specific training, along with evaluation of its third party contractors, additional customer education, and reforms in its implementation of termination of water service to its customers on behalf of non-Company sewer service providers.
- PAWC's pressure and pressure surveys need to be improved as does its customer complaint log.
- PAWC likely has water customers in all the 36 counties it serves who are struggling to pay utility bills because of the large burden of their current utility bills; in 18 of those 36 counties, the median household income is between the federal poverty income guidelines but below the ALICE (Asset Limited, Income Constrained, Employed) household survival budget for a family of four. Similarly, for the 18 counties in which PAWC provides wastewater service, there are six counties where the median household income is below the ALICE household survival budget.

- PAWC's third rate case in four years seeks to increase rates that many customers are struggling to pay. PAWC filed this case 8 months after its last rate increase went into effect which means that rates will have increased every year between 2021-2024.
- The Commission can choose to adopt the OCA's recommendations that reflect the consumers' interests and still ensure that PAWC has sufficient ability to attract capital and the opportunity to earn a fair rate of return. The Commission's adoptions of the OCA's recommendations in this case would comport with the regulatory compact.

Overview of this Case

Q. Please provide your general understanding of PAWC's proposed revenue increase in this case.

A. PAWC has proposed to increase its revenues in August 2024 by $203.9 million (20.2%).[1] The proposed increase would take effect approximately eighteen months after its most recent rate increase of approximately $138 million.

PAWC provided rate case notices to its customers, but these notices very likely significantly underestimate the impact that many consumers will experience because the notices use only what PAWC considered a "typical" residential customer usage level of 3,201 gallons of water per month. Increases for a residential bill based on 3,201 gallons of water per month, by zone, are reflected below and range from 20.1% to 63.6%.[2]

[1] PAWC Vol. 1, Statement of Reasons, p. 1.
[2] Rate Zone 3 – SLIBCO would see a 10% decrease under PAWC's proposal. There are no residential customers in Rate Zone 3, so I have excluded that from the range of increases.

Water Bills for Residential Customers Based on 3,201 gallons per month usage					
Current Rate Zone	Service Area	Present Rate	Proposed Rate	$ Increase	% Increase
1	All except as designated	$70.65	$88.24	$17.59	24.9%
2	Valley Township	$53.92	$88.24	$34.32	63.6%
3	SLIBCO*	$488.47	$439.77	-$48.70	-10.0%
4	Turbotville Borough	$70.65	$88.24	$17.59	24.9%
5	Borough of Steelton and portions of Swatara Township	$70.65	$88.24	$17.59	24.9%
n/a	Lower Providence Township (formerly Audubon Water Company)	$44.39	$53.32	$8.93	20.1%
n/a	Farmington Township	$67.50	$88.24	$20.74	30.7%
*There are only commercial customers in the SLIBCO service area currently, but the rate schedule applies to residential customers should they come into existence.					

The impact on individual customers varies by their water usage. By using 3,201 gallons per month, PAWC's notice has underestimated the impact of the proposed rate increase for many customers.

PAWC proposes that $199.2 million of the total increase of $203.7 would be collected from water operations and $4.7 million from wastewater operations. This is even though the increased wastewater cost of service is equal to $75.8 million per year. Thus, PAWC's proposal reflects a shift of approximately 94% of the wastewater revenue increase to its water customers and 27% of the total wastewater revenue requirement. OCA St. 4, Table 2. PAWC currently has more than nine times as many water customers as wastewater customers. Further, there are several PAWC wastewater systems whose customers do not purchase their water from PAWC.

Instead of accurately reflecting a cost of service based increase of $75.8 million that are contained in its schedules, PAWC's notices to its wastewater customers reflect what the resulting rates would be if PAWC's proposed shift of approximately 94% of the

wastewater deficiency is adopted by the Commission. In my view, this presents an inaccurate and unrealistic picture for wastewater customers as it is not very likely that the PUC will shift such a large percentage.

The impact on wastewater customers also reflects PAWC's proposed shift and the winter averaging proposal and other agreements it has entered into with acquired systems is shown below.

Wastewater
Bills for Residential Customers
Based on 3,122 gallons per month usage

Current Rate Zone	Service Area	Present Rate	Proposed Rate	$ Increase	% Increase
1	All except as designated	$105.18	$100.08	-$5.10	-4.8%
2	New Cumberland Borough	$91.77	$100.08	$8.31	9.1%
3	City of Scranton and Borough of Dunmore	$95.78	$95.78	$0.00	0%
4	Kane Borough	$106.70	$109.76	$3.06	2.9%
5	Valley Township	$105.18	$100.08	-$5.10	-4.8%
6	City of McKeesport	$105.18	$109.76	$4.58	4.4%
7	York County (portions)* (formerly York City Sewer Authority)	$28.82	$63.78	$34.96	121.3%
8	Foster Township**	$85.92	$100.00	$14.08	16.4%
9	Royersford Borough	$49.68	$64.18	$14.50	29.2%
n/a	Farmington Township	$53.50	$62.15	$8.65	16.2%
n/a	Butler Area Sewer Authority (BASA)***	$45.99	$74.25	$28.26	61.4%
n/a	Brentwood Borough	$75.01	$83.25	$8.24	11.0%
n/a	Sadsbury Township	$128.33	$128.33	$0.00	0%

*Company is requesting that the current York wastewater rates not increase until May 27, 2025, consistent with PAWC's agreement to freeze rates until then.

**Company is requesting that the current Foster wastewater rates not increase until January 1, 2025, consistent with the PAWC's agreement to freeze rates until then.

***Company is requesting that the current BASA wastewater rates not increase until one year from the acquisition closing or January 1, 2025, whichever is later, consistent with PAWC's agreement with BASA.

In addition to seeking an inflated rate base based on acquisitions that are not yet final, as outlined below, PAWC seeks a 10.95% return on equity which results in overall rates of return of 8.22% for water operations and 7.94% for wastewater operations using capital structures that are equity rich and inconsistent with both an appropriate proxy group and its parent company's capital structure.

PAWC has proposed two alternative ratemaking mechanisms that shift the risk of not meeting PAWC's authorized revenue target from the company to its customers. Specifically, they seek a Revenue Decoupling Mechanism (RDM) that would guarantee that PAWC meets its revenue targets by allowing the Company to adjust rates between bae rate cases without Commission review or approval and an Environmental Compliance Investment Charge (ECIC). The ECIC would recover the capital costs and expenses incurred to address and comply with new or changed federal or state environmental mandates for projects that are not eligible for recovery under the existing Distribution System Improvement Charge (DSIC).

PAWC proposes a new wastewater rate design where a wastewater customer's monthly bill during the summer months will be based on the customer's average winter consumption rather than the customer's actual water consumption during the summer months. The Company states that the purpose of this proposed change is to accommodate customers that have a high seasonal outdoor water usage where such water usage does not get collected in the wastewater system, e.g., filling a swimming pool or watering a lawn.

PAWC is proposing deferred accounting treatment for several expenses, including pension and OPEB expenses, and production costs that change between rate cases.

The only enhancement to customer service proposed by PAWC is a small, proposed expansion to its bill discount programs that it proposes to collect those costs only from residential customers.

Finally, PAWC has also included six acquisitions to its already large ratebase. Five of those acquisitions are pending before the Commission but have no final order and one application has a final order but was appealed by two parties to Commonwealth Court. Despite not receiving Commission approval, PAWC has included the rate base, O&M, and return costs in its requested revenue requirement. In addition, some of the cost of service related to these proposed acquisitions is proposed to be shifted to water customers pursuant to PAWC's Section 1311(c) shift. As outlined more fully by OCA witness Ralph Smith, PAWC has not met its burden of proof regarding the six acquisitions: one that is on appeal and has not closed and the five that do not yet have a final order (and it cannot be presumed that the final order will approve the proposed acquisition).

Q. Is the OCA opposing these proposals?

A. Yes. As I describe below, the OCA has six witnesses addressing each of these proposals along with the Company's claims for rate base, cash working capital, operations and maintenance expense claims, rate of return, cost of service and rate design, bill discount programs, customer service, management performance, and PAWC's water and wastewater operations. PAWC's proposals represent what it and its investors want: limited risk, but with a return on equity that does not reflect that limited risk. PAWC's proposals shift risk to its customers by requiring the customers to pay rates that ensure that:

- PAWC collects the revenue authorized in this proceeding by raising customers rates even if usage by its customers is lower through its RDM;
- PAWC recovers capital and O&M **between** rate cases for nearly everything that is not already included in its fully projected future test year and not included in the DSIC through its ECIC;
- PAWC is awarded high returns on equity despite the lack of support, the large portion of PAWC's rate base that is based on fair market value, and the ratemaking proposals that will reduce its risk.

In addition to the new alternative ratemaking claims made in this case, there are existing alternative ratemaking provisions built into PAWC's existing and proposed revenue requirements, such as the DSIC, the fully projected future test year ending June 30, 2025, Section 1329, and Section 1311(c). 66 Pa. C.S. §§ 315, 1311(c), 1329, 1350-1360. PAWC's proposed alternative ratemaking claims would be layered on top of those existing mechanisms.

Setting a revenue requirement that is based on layer upon layer of alternative ratemaking that reduces risk to the utility and its investors, without recognition that all these proposals burden ratepayers and undermine the regulatory compact is neither reasonable nor necessary.

Q. Are there others opposed to the Company's proposed increases?

A. In addition to the formal parties represented by counsel, there have been approximately 149 different formal complainants who filed complaints at the Commission.[3] Also, as of January 16, 2024, the OCA has reviewed approximately 535 informal complaints sent to the Commission. The formal and informal complaints raise general complaints about the rate increase, question the size of the rate increase, affordability of bills, and the taste, odor and hardness of water in certain areas.

Q. Does the public have an opportunity to comment on the rate proposals?

A. Yes. There will be twelve public input hearings held between January 29 and February 7, 2024.

Q. **Are you addressing testimony from the public input hearings?**

A. Not at this time. Six public input hearings were held the week that the other parties' direct testimony is due and six will be held the week after. OCA will address the public input testimony in Supplemental Direct Testimony that will be served on February 13, 2024.

Financial Demographic Information For PAWC's Service Territory

Q. What information do you have that will assist the Commission in understanding the impact of the proposed rate increases on PAWC's customers?

A. I will provide information about the financial demographics for the counties in which PAWC provides service and the bill burden for the counties served by PAWC and show how PAWC's proposed bills compare to their customers' bills for electric and natural gas service, to reflect the full burden customers face for their fixed utilities.

[3] The Commission has docketed 286 formal complaints because some complaints are docketed at both the water and wastewater dockets.

Q. In this information in addition to that provided by other OCA witnesses?

A. Yes. OCA witness Roger Colton (OCA Statement 5) provides testimony regarding the impacts of PAWC's proposal on low income customers. This information is critical as the adverse impact of PAWC's proposals on low-income customers cannot be emphasized enough as Mr. Colton explains in his testimony. However, low income customers are not the only ones struggling and the impact of PAWC's proposals on customers who are not at or below the federal poverty income thresholds but may be struggling to cover their bills, rent, and other costs should be considered as well.

PAWC serves water customers in portions of 36 counties across the Commonwealth. Using United States Census data, of those 36 counties, Fayette County has the lowest median household income ($55,579) and the highest percentage of persons in poverty (17.2%). Exhibit CMH-1.

PAWC provides wastewater service in portions of 18 counties across the Commonwealth. Of those 18 counties, McKean County has the lowest median household income ($57,861) and the highest percentage of persons in poverty (15.4%). Exhibit CMH-2.

Q. What other information is useful in looking at the impact on customers in Fayette County who are above the FPL income levels but may struggle to pay their household bills, including utilities?

A. There is county-level and statewide data provided by United for ALICE[4] through the ALICE (Asset Limited, Income Constrained, Employed) Report for Pennsylvania. In the 2023 report, using data from 2021, in Pennsylvania, a family of four would need an annual income of $65,796 to cover the essentials needed to live and work, pay rent, and pay utilities.[5] Exhibit CMH-3 (Excerpts). ALICE estimates utility bills for Pennsylvania of $292 per month for a family of four. *Id.*

Using the ALICE household survival budget of $65,796 for a family of four in Pennsylvania and reviewing the median household income of the 36 counties where PAWC provides water service, there are eighteen counties where the median household income for the county would be below the ALICE household survival budget for a family of four. Those counties are highlighted in yellow on Exhibit CMH-1.

Looking at the ALICE data specifically for Fayette County, which has the lowest median income and the highest poverty level for the 36 counties served by PAWC Water shows there are 55,986 households in Fayette County. The 2021 ALICE data shows that Fayette County had 32% of its households (approximately 17,886 households) that would be at or below the household survival budget or "ALICE households".[6]

[4] An overview of United for Alice is available at https://www.unitedforalice.org/overview. While Mr. Colton in his testimony also uses the Self-Sufficiency Standard these two measures are substantially similar.

[5] https://www.unitedforalice.org/state-reports-mobile

[6] https://www.unitedforalice.org/county-reports/pennsylvania

Q. What about the 17 other counties served by PAWC that are above the FPL but below the ALICE survival budget?

A. Those counties have similar data for ALICE households ranging from 25% of households in Lackawanna County to 37% in Wayne County. Exhibit CMH-1, Col. G.

Q. Is similar data available for PAWC's wastewater service territory and the level of poverty in those areas?

A. Yes, as I described above. Using the annual income level of $65,796 (ALICE household survival budget for a family of four in Pennsylvania) and reviewing the median household income of the 18 counties where PAWC provides wastewater service, shows a total of six counties where the median household income for the county would be below the ALICE household survival budget. Those counties are highlighted in yellow on Exhibit CMH-2.

Looking at the ALICE data for McKean County, which has the lowest median income and the highest poverty level for the 18 counties served by PAWC Wastewater there are 40,652 households in McKean County. In the 2021 data, ALICE shows that McKean County had 31% of its households (approximately 12,602 households) that would be at or below the annual income level ALICE households.[7]

[7] https://www.unitedforalice.org/county-reports/pennsylvania

Q. What about the 5 other counties served by PAWC Wastewater that are above the FPL but below the ALICE survival budget?

A. Those counties have similar data for ALICE households ranging from 25% in Lackawanna County to 34% in Northumberland County. Exhibit CMH-2, Col. G.

Q. What information does ALICE have about utilities as part of a household's budget?

On a statewide level, the ALICE Household Survival Budget assumes a family of four in Pennsylvania will spend $292 dollars per month on utilities (as of 2021, the most recent data available). An example of what that might mean for a PAWC customer in one of the counties where the median household income is below the ALICE household survival budget is helpful to understand what customers are facing now, *before any rate increases go into effect*. The table below shows the cumulative utility burden for a PAWC Rate Zone 1 water and wastewater customer using 3,201 gallons of water per month, including electric and natural gas service. I used McKean, and Luzerne Counties[8] as examples to show what that customer currently pays and would pay using PAWC's proposed rates, for their utilities. The usage used in the current PAWC rate case notices would likely understate the bills for a 4-person household.

[8] PAWC provides water and wastewater service in these counties. These examples provides information about two counties in separate geographic areas with different electric and natural gas utilities.

Utility providers-McKean County	Current Bill	Proposed Bill
PAWC Water Rate Zone 1[9]	$70.65	$88.24
PAWC Wastewater Rate Zone 1	$105.18	$100.08
Pennsylvania Electric Co.[10]	$138.86	$138.86
National Fuel Gas Distribution Corp.	$108.36	$108.36
Columbia Gas of PA	$148.96	$148.96
Total Monthly Utilities for a customer of National Fuel Gas Distribution Corp.	$423.05	$435.54
Total Monthly Utilities for a customer of Columbia Gas of PA	$463.65	$476.14

Utility providers-Luzerne County	Current Bill	Proposed Bill
PAWC Water Rate Zone 1	$70.65	$88.24
PAWC Wastewater Rate Zone 1	$105.18	$100.08
UGI Electric Company	$190.43	$190.43
UGI Gas Company	$124.49	$124.49
PPL	$199.85	$199.85
Total Monthly Utilities for a customer of UGI Electric	$490.75	$503.24
Total Monthly Utilities for a customer of PPL	$500.17	$512.66

Q. What does this information show?

A. For many customers, whether an ALICE household or not, the **current** utility bills at a "typical" level far exceed the amount estimated by ALICE for the cost of utilities for a household of four in Pennsylvania and is even higher using the proposed water and wastewater bills, even if PAWC's reduced Zone 1 wastewater rates are adopted. It is likely that many of PAWC's water and wastewater customers are struggling to meet their

[9] The current rates are based on the rate case notices that PAWC provided to its customers. PAWC Vol. 1.
[10] The rates for the electric and natural gas companies are from the Commission's Rate Comparison Report dated April 15, 2023 at page 6. https://www.puc.pa.gov/media/2364/23_rate-comparison-report_final.pdf.

household bills, including their current water and wastewater bills yet do not qualify for PAWC's bill discount programs that Mr. Colton addresses in his testimony.

Q. Why are you raising these concerns in this case?

A. This case represents PAWC's third case in four years. It has received base rate increases in February 2021, February 2022, and January 2023. Looking at the rate cases filed since 2020, base rates for PAWC customers have increased each year since 2021 and PAWC proposes to increase the rates again in 2024. The three rate increases over the last four years are not insignificant as can be seen below.

In the five rate cases prior to 2021, PAWC increased rates in November 2007, November 2009, November 2011, December 2013, and December 2017. As shown in the chart below, over the longer period, 2007-2023, the revenue requirement increases were substantial. Importantly, the impact on customers' bills often is well more than the percentage increase in revenues.

PAWC Rate Increase History

Year	Effective date	Docket Number	Increase Requested	Increase Allowed	Bill Increase				Noticed Usage
					Water		Wastewater		
2007	Nov. 2007	R-00072229	$ 59,236,366	$ 36,000,000	9.3%				4,500
2009	Nov. 2009	R-2009-2097323	$ 58,062,930	$ 30,750,000	7.35%				4,200
2011	Nov. 2011	R-2011-2232243	$ 70,676,379	$ 36,000,000	6.30%				4,150
2013	Dec. 2013	R-2013-2355276	$ 58,600,000	$ 26,000,000	5.58%		Clarion 36.9%	Others 0%-(36%)	3,960
2017	Jan. 2018	R-2017-2595853	$107,900,000	$ 61,850,000	9.38%		13.90%		3,630
2020	Jan. 2021 Jan. 2022	R-2020-3019369 R-2020-3019371	$138,600,000	$ 70,500,000	7.00%	1.40%	12.50%	15.40%	3,201
2022	Jan. 2023	R-2022-3031672 R-2022-3031673	$173,200,000	$138,000,002	14.50%		39.10%		3,212

Q. Considering these concerns about the financial demographics of some of those living in PAWC's service territory and may be customers of PAWC, and the multiple increases in bills over the last 16 years, what is your concern about PAWC's proposals in these rate cases?

A. Coming on the heels of the rate increases from 2021-2024, the concerns about rising utility costs are magnified. In this case, PAWC has added a multitude of alternative ratemaking requests on top of what it already has. I will discuss each of these briefly below while OCA's other witnesses address these requests in detail. It is my opinion that PAWC's requests inappropriately shifts risk to ratepayers and deviates from the regulatory compact that should govern monopolistic necessities such as water and wastewater service. I urge the Commission to fully consider the interests of these customers and all customers of PAWC in reaching its determinations on PAWC's multitude of requests, including a 25 basis point management adder, the overstated rate of return on equity, the overall return, the inclusion of acquisitions that have not even made it through the Commission process and closed, the alternative ratemaking claims including RMD and ECIC, cost of service, rate design, and the proposed Section 1311shift that all impact the bills that the customers pay. Keeping the rates as low as reasonably possible while ensuring that the service is consistent with the obligations under Section 1501 should be the outcome of this case.

Purpose of this and all Rate Cases

Q. What is your understanding of the purpose of this proceeding?

A. As I understand it, the purpose of this case is to determine the "just and reasonable" rates for PAWC under Chapter 13, and other provisions, of the Public Utility Code. In this

section of my testimony, I will address the regulatory compact and related legal and policy concepts. This foundation is necessary because when put into proper context it is evident that PAWC's specific claims and proposals as filed, would produce unjust and unreasonable rates and, when taken together, would result in larger bills than necessary to maintain service obligations and would substantially harm PAWC's customers.

The Regulatory Compact

Q: What is the purpose of this section of your testimony?

A: The purpose of this section of my testimony is to explain the regulatory compact and the economics and legal principles that underlie and support it.

Q: What is the regulatory compact?

A: The regulatory compact is a public policy concept that fundamentally recognizes that public utility companies such as PAWC are natural monopolists, and that in return for the public utility company being granted an exclusive franchise to operate in a specific service territory without rival, the public utility company in turn has the duty to provide service to all customers under certain governmental direction and oversight as to rates and service quality, subject to due process constraints.

Q: Is the regulatory compact unique to the Commonwealth of Pennsylvania?

A: No. As a public policy concept, the regulatory compact is not unique to the Commonwealth of Pennsylvania. It is the public policy concept that underlies the state regulatory frameworks which exist across the country governing the rights and responsibilities of public utility companies.

Q: Please explain the state's authority to regulate public utilities.

A: Foundationally, the state's authority to regulate public utilities stems from the state's police powers, which is a term that refers to the broad governmental regulatory power to enact laws to regulate behaviors to protect and improve the health, safety, and general welfare of the state's citizenry.

Q: Can you explain the Pennsylvania statutory framework?

A: The Pennsylvania General Assembly has sought to protect consumers from the effects of natural monopoly power by enacting the Public Utility Code and granting the Commission comprehensive authority to oversee and regulate a public utility's service, rates, certificates of public convenience (service territory, entry into the public utility business, abandonment of utility service), and dealings with affiliated interests.

Q. How does the regulatory compact work in the Pennsylvania statutory framework?

A. The regulatory compact in Pennsylvania, as set forth in the Public Utility Code, permits the Commission to grant a public utility company the legal privilege to exclusively serve in a defined service area, and in turn, the public utility is obligated within that area to provide consumers adequate, efficient, safe, and reasonable utility service and to maintain adequate, efficient, safe, and reasonable utility facilities at rates that are just and reasonable and not unreasonably discriminatory.

Q: What statutory authority and discretion does the Commission have to enforce the regulatory compact?

A: To enforce a certificated public utility company's statutory responsibility, the General Assembly has given the Commission the statutory authority and discretion to use a combination of incentives and deterrents.

Q: What do you mean by deterrents?

A: A deterrent is a tool that the Commission can use to force a public utility company's compliance with statutory and regulatory obligations. In theory, the effectiveness of any deterrent cannot be measured by the frequency with which it is used by the Commission. Rather, the severity of the punishment and likelihood, or degree of certainty, of getting caught for non-compliance can have a deterrent effect.

Q: Can you provide examples of deterrents?

A: Yes. For example, the Commission has the authority to reject a rate increase request in whole or in part due to inadequate quality or quantity of service. 66 Pa. C.S. § 526. The Commission is required to consider the "efficiency, effectiveness and quality of service of each utility when determining just and reasonable rates." 66 Pa. C.S. § 523. It also has the authority to require a utility to prove that its existing rates are just and reasonable and to fix just and reasonable rates upon its own investigation or upon complaint and order refunds (66 Pa C.S. §§ 1309(a), 315(a), 1312). These examples are merely illustrative, not exhaustive.

Q: What do you mean by incentives?

A: Incentive regulation is a tool that the Commission can use to motivate a public utility company's compliance with its statutory and regulatory obligations. In terms of incentive

regulation, the Public Utility Code gives the Commission the power and discretion to, after notice and hearing, approve any of the following:

- Deferred regulatory accounting treatment to recover certain costs;
- use of Future Test Year or Fully Projected Future Test Year for setting rates to reduce regulatory lag between plant investment and recovery; (§ 315(e))
- inclusion in rate base amounts paid in excess of original cost less depreciation in acquisition of troubled water or wastewater systems; (§ 1327)
- use of a rate base value that exceeds original cost less depreciation for ratemaking purposes in acquisitions of municipal water or wastewater systems; (§1329)
- alternative ratemaking; (§ 1330)
- adjustment to the return on equity in recognition of a public utility's "efficiency, effectiveness and adequacy of service." (§ 523).

Traditional Cost-of-Service Ratemaking and the Regulatory Compact in Pennsylvania

Q: Does traditional cost-of-service ratemaking support the regulatory compact in Pennsylvania?

A: Yes. Traditional cost-of-service ratemaking is a longstanding support to the regulatory compact in Pennsylvania. Cost-of-service ratemaking involves a set of well-established methodologies, norms, and standards for analyzing and determining a utility's cost of providing service and setting just and reasonable rates. Foundationally, under cost-of-service ratemaking, a utility's rates are based on costs either experienced or projected in a test year, including the utility's prudent and necessary expenses, used and useful plant investment, reasonable debt financing costs, and no more than a reasonable profit sufficient to keep a private company in the public utility business. A private company that wishes to be in the public utility business and wishes to earn a return on equity should be fully knowledgeable of the governmental interest in the utility's provision and maintenance of adequate, efficient, safe, and reasonable utility service and facilities as are necessary or proper for the accommodation, convenience, and safety of consumers and the public. This means that these companies are subject to significant oversight to

restrain the power of their monopoly to ensure that they do not charge rates for services that are excessive. The regulatory power of the Commission is a check on this excess and cost-of-service ratemaking supports the regulatory compact.

Q: Does traditional cost-of-service ratemaking benefit consumers and public utility companies?

A: Yes. Traditional cost-of-service ratemaking should benefit both consumers and public utility companies.

Q: Please explain.

A: As I explained above, there is no competition in the public utility industry since the industry is a natural monopoly. Traditional cost-of-service ratemaking serves as a substitute for the beneficial effects of competition by setting rates on a prospective basis. Because the utility can recover its authorized costs (or authorized revenue requirement) on a prospective basis, the utility is given the opportunity to recover its authorized profit, but such recovery *is not* guaranteed – just as recovery of costs and profits are not guaranteed in a competitive marketplace. To fully recover the authorized costs and return on equity, once rates are set, the utility must go forward and operate efficiently and control its costs and pace of growth, if any. All of this must be done while providing and maintaining adequate, efficient, safe, and reasonable service and facilities.

Q: What is the most beneficial aspect of traditional cost-of-service ratemaking for consumers?

A: The most beneficial aspect of traditional cost-of-service ratemaking is the lack of guaranteed recovery for the utility while the utility remains obligated to provide and maintain adequate, efficient, safe, and reasonable service and facilities. This means that

the public utility company faces the risk of under recovery due to normal business risks and management underperformance if it fails to control costs or if it asks for rates to be set based on inaccurate sales projections. Under traditional ratemaking, the utility – not its guaranteed consumer base – bears the risk of recovery until it files for another base rate increase and reflect the increased costs or decreased sales in new prospective rates granted by the Commission after a record is developed by parties to that case.

Q: Why is it beneficial for consumers that the risk of recovery be placed with the public utility company?

A: Placing the risk of recovery of authorized costs (or authorized revenue requirement) on the public utility company creates an incentive for the utility's management to manage its normal business risks and perform its service duties efficiently – just as competition would place similar pressure on performance in a competitive marketplace when firms compete for consumers and sales. The utility also faces normal business risks impacting recovery in between rate cases, such as weather, recessions, changing technologies, and other sources of sales fluctuations. Indeed, the utility management is faced with having to operate efficiently, control costs, and achieve growth at a sustainable pace. While the utility is and should be given the opportunity to earn its authorized return on equity to remain financially stable based on efficient management performance, the lack of guaranteed recovery protects consumers from having to overpay for a utility management's underperformance.

Q. Given this background information, what concerns do you have about how PAWC seeks to have rate set in this case?

A. PAWC seeks to move even farther away from this paradigm in several significant ways building on years of the entire utility industry seeking to shift risk from where it belongs – on the utility – to where it does not – on consumers. I want to emphasize that almost all the parties presenting testimony will quote the same seminal cases about rate setting, but it is in the decision-making process by the utility in planning for their rate case and making choices about what to pursue and by the Commission in its regulatory oversight that the consideration of the consumers' interests often falls away.

As a rule, a public utility, with facilities and assets dedicated to public service, is entitled to **no more than** a reasonable opportunity to earn a fair rate of return on its investment. The United States Supreme Court established the standard by which to evaluate what is a fair rate of return in *Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923) (*Bluefield*):

> The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to raise the money necessary for the proper discharge of public duties.

Bluefield at 693.

Twenty-one years later, the United States Supreme Court reviewed the issue of fair rate of return in *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) (*Hope*). In *Hope*, the Court held that a fair rate of return "should be commensurate with returns on investments in other enterprises having corresponding risks" while being sufficient "to assure confidence in the financial integrity of the enterprise, so as to

maintain its credit and attract capital." *Hope* at 603. This attraction of capital quote is used frequently to support rate of return requests. The Court also noted, however, that:

> The rate-making process under the Act, i.e., the fixing of 'just and reasonable' rates, involves a **balancing of the investor and consumer interests** and does not insure that the business shall produce revenues.

Id. (emphasis added). The Supreme Court added that **consumers are obliged to rely upon regulatory commissions to protect them from excessive rates and charges.** *See Permian Basin Area Rate Cases*, 390 U.S. 747, 794-95 (1968) (*Permian Basin*) (citing *Atlantic Refining Co. v. Public Serv. Comm'n,* 360 U.S. 378, 388 (1981)).

Protecting consumers from excessive rates and charges is part of the setting of just and reasonable rates. The legal arguments often focus on the investors and utility's interests. The ability of the utility to attract capital is but one part of the rate setting process, not the only criterion. Consumers' interests are often overlooked in both the nuts and bolts and the big picture of rate setting. If the test of the overall rates is confined to the utility's interests, then it is not a reasonable process. Moreover, in Pennsylvania, the statute that created the OCA also created obligations on the Commission to consider the consumer interests. Specifically, it requires that:

> Section 905-A. Duties of the Commission. -- In dealing with any proposed action which may substantially affect the interest of consumers, including but not limited to a proposed change of rates and the adoption of rules, regulations, guidelines, orders, standards or final policy decisions, the commission shall:
>
> . . .
>
> (2) Consistent with its other statutory responsibilities, take such action with due consideration to the interest of consumers.

71 Pa. Stat. Ann. §309-5.

Thus, the fact that consumer interest must be considered in the assessment of whether rates are just and reasonable is a well-founded concept in both the regulatory compact as established in case law and in Pennsylvania statutory authority. Often, in setting just and reasonable rates, regulators, parties, and the courts refer to a zone of reasonableness. *Permian Basin*, 390 U.S. at 797. Within that zone of reasonableness, the interests of consumers and investors should overlap. There may be circumstances where the rates are outside of a normal range of reasonableness, but the regulators must still fairly balance the interests of all parties.[11] Thus, as outlined above, while the focus of the rate case is usually on the investors' needs, missing from the focus is defining the consumers' needs. While the need to attract capital is important, it is not paramount and in no way is it superior to the needs of consumers.

In this case, the OCA seeks to present a clear focus on the needs of consumers to safe and reliable drinking water and wastewater at just and reasonable rates that they can afford. The OCA's witnesses' testimony contains the customary adjustments to the components of PAWC's rate filings as well as analysis of a reasonable rate of return, rate design, and customer service. The OCA is focused on providing evidence of the consumers' needs too. In plain language, PAWC's rates are already too high for many consumers. The case presented by PAWC in so many ways adds insult to injury because it is driven by multiple layers of excessive and overreaching claims such as, by way of example, the request by the Company to include in rate base acquisitions that have not yet occurred. On top of those and other aspirational ratemaking claims, the Company is

[11]For example, *in Market Street Railway Co. v. Railroad Commission*, 324 U.S. 548, 566 (1945) the Court refused to overturn a rate reduction for a failing street railway company noting that *Hope* recognized that "regulation does not assure that the regulated business make a profit.

asking for approval now of future unknown rate increases due to the alternative ratemaking proposals for revenue decoupling and capital surcharge recovery. None of this is in the public interest and all of it deviates significantly from the regulatory compact as outlined above.

Incentive Regulation, Alternative Ratemaking, and the Regulatory Compact in Pennsylvania

Q. You referenced traditional ratemaking. Is that what is in place in Pennsylvania?

A. Not in the strictest sense. There have been modifications to the Public Utility Code that have introduced alternative ratemaking. I will discuss four major changes that were made to the Public Utility Code, between 2012 and 2016 that established several alternative ratemaking provisions. These modifications preceded Act 58 of 2018 which added Section 1330, Alternative Ratemaking to the Public Utility Code, which I discuss after this section.[12]

Q: What are the four major changes that you are discussing here?

A: The four major changes are: (1) the Distribution System Improvement Charge (DSIC); (2) the Fully Projected Future Test Year (FPFTY); (3) the addition of Section 1329 that permits fair market valuation for municipal acquisitions; and (4) the addition of Section 1311(c) that permits the Commission to approve the shift of wastewater revenue deficiencies to water customers if it is in the "public interest". Each of these individually is a departure from traditional ratemaking and when layered together as PAWC has done,

[12] In the *Implementation of Act 58 of 2018 Alternative Ratemaking for Utilities*, Implementation Order at Docket No. M-2018-3003269, entered April 25, 2019 (*Act 58 Implementation Order*), the Commission found that "utilities have always had the ability to propose, and the Commission has had the ability to approve, alternative rates or rate mechanisms….". Order at 33 (footnote omitted).

they significantly shift the risk of uncertainties from the public utility to captive consumers who have no choice but to purchase water and wastewater from PAWC due to its monopoly status. As such, they require far more exacting scrutiny from the Commission in a rate case than under principles of traditional ratemaking.

Distribution System Improvement Charge (DSIC)

Q. Briefly explain the DSIC and how it is different from traditional ratemaking?

In Act 11 of 2012, the legislature added new DSIC provisions that permitted a DSIC for electric, natural gas, and wastewater utilities and replaced the existing DSIC provisions for water utilities. 66 Pa. C.S. §§ 1350-1360. A DSIC had been in place for water utilities via a Commission Order followed by an amendment to the Public Utility Code (66 Pa. C.S. § 1307(g)).[13] Traditional ratemaking rate cases used a test year period that provided a snapshot of the components that make up the revenue requirement formula including utility plant in service, depreciation, revenues, operation and maintenance expenses, cost rates of debt and equity, taxes, and there was no provision for the recovery of capital in between rate cases. The DSIC when first implemented for water utilities and again when expanded for electric, natural gas, and wastewater utilities provided for capital recovery in between rate cases and on a quarterly basis to reduce lag was seen as an exception to the traditional ratemaking The DSIC permitted capital recovery and return in between rate cases for eligible capital.

Q: Why is it your opinion that the DSIC was an exception to traditional ratemaking?

[13] Initially, by order entered on August 26, 1996, the Commission approved a Petition filed by PAWC seeking to establish a Distribution System Improvement Charge under Section 1307(a), at Docket No. P-00961931.

A: Because when I look at the provisions of the Public Utility Code governing DSIC and LTIIP, at 66 Pa. C.S. §§ 1350-1360, these provisions provide a good illustration of alternative ratemaking that carry out the policy objective of to *enhance the safety, security, reliability, or availability of utility infrastructure*.

The DSIC is an alternative ratemaking mechanism because it transfers the risk of recovery of the utility's capital costs and depreciation expense, subject to a cap, related to the utility's investment in underground mains, lines, and the like. By enabling the utility to recover these costs through a surcharge on customers' bills that is updated quarterly and in between base rate cases, the utility need not wait nor carry these costs until it can reflect these capital costs in new rates granted by the Commission in the next base rate case. Thus, the DSIC accelerates the utility's cost recovery of new plant investment in underground mains and lines and related appurtenances. This may make sense when it is tied to the accelerated replacement of aging infrastructure that otherwise would have taken longer under traditional ratemaking. If properly implemented and overseen by the Commission, a DSIC can provide public benefit because of its nexus to safety, security and reliability. That is, it is not designed to be growth for growth's sake between rate cases.

Fully Projected Future Test Year (FPFTY)

Q. Why do you characterize the FPFTY as a departure from traditional ratemaking?

A. The use of a fully projected future test year was added to the Public Utility Code in Act 11 of 2012 by amending Section 315. 66 Pa. C.S. § 315. Prior to the 2012 amendment,

utilities filing a base rate case could use a historic test year or a future test year.[14] The fully projected future test year that is defined as the 12-month period beginning with the first month that the new rates will be placed in effect after the application of the full suspension period under Section 1308(d). 66 Pa. C.S. § 315(e). The rates that go into effect are based on the utility plant that is projected to be in service at the end of the FPFTY, along with projected expenses at the end of the FPFTY. All the revenue requirement components are determined using the end date of the FPFTY. In its Implementation Order, the Commission recognized import of this change, stating, "Under this approach, the risks associated with regulatory lag will be substantially reduced because the new rates will be consistent with the test year used to establish those rates for at least the first year.at using the FPFTY."[15] Thus, the ability to use the FPFTY is another break from traditional ratemaking and is alternative ratemaking.

Section 1329

Q. Why do you characterize the addition of Section 1329 as a departure from traditional ratemaking?

A. In Pennsylvania, rate base has been calculated using original cost less depreciation since the mid-1980s. Section 1329 provides an option for a water and wastewater utility to add, after approval by the Commission under Section 1103, an acquisition of a municipal

[14] An historic test year is complete, and all data is known when the utility files its rate case. If a future test year used it is based on estimates for the 12 months following the end of the historic test year. It is partially historic and partially projected when the rate case is filed. 52 Pa. Code § 53.56(a). If the utility uses a future test year, the regulations require quarterly updates during the rate proceeding. 52. Pa. Code § 53.56(b).

[15] *Implementation of Act 11 of 2012*, Docket No. M-2012-2293611, Order at 5 (Aug. 2, 2012) (*Act 11 of 2012 Implementation Order*). *See* Costello, Ken, *Future Test Year: Evidence from State Utility Commissions*, National Regulatory Review Institute, NRRI Report 13-10 (October 2013) at 8, n. 24, https://pubs.naruc.org/pub/FA86C105-05F5-9766-BC78-29829AC50361, last viewed January 3, 2024.

water or wastewater provider at "fair market value" rather than depreciated original cost. 66 Pa. C.S. § 1329.

Q. What transactions has PAWC completed using Section 1329 as the valuation method?

A. PAWC has completed 10 acquisitions[16] where the ratemaking rate base for the acquired assets has been calculated using fair market value. The additional ratemaking rate base, as determined under Section 1329, was approximately $575,885,000. Exhibit CMH-4, Col K, line 12. The ratemaking base was almost double the depreciated original cost of these assets.[17] Exhibit CMH-4, Col. K, line 12/line 10.

The revenues of the acquired customers do not recover the revenue requirement associated with the ratemaking rate base. Exhibit CMH-5. As a result, in PAWC's 2017, 2020, and 2022 rate cases there was a revenue deficiency for the customers acquired under Section 1329 valuation. *Id.* Then, when the cost to serve the acquired customers was calculated using the FPFTY, including PAWC's return and taxes, capital expenditures, and O&M, the acquired customers' revenues did not cover that additional cost of service.

The same is true in this case. The annual revenue deficiency calculated by PAWC for the BASA wastewater operations is $26,288,308, and for Brentwood Wastewater is $1,934,636. PAWC Exh. 3-A, p. A. Although I point to BASA and Brentwood revenue deficiencies as an example of the ratemaking impact of the Section 1329 valuations, as

[16] The 10 acquisitions reflect those where PAWC has closed on the transaction and has already included the acquired ratemaking ratebase in a rate case.
[17] The depreciated original cost of the acquired assets was $279,334,005 as calculated pursuant to Section 1329(d)(5) which does not require the subtraction of contributed capital. That is also a change from traditional rate base calculation. The ratemaking rate base exceeded the depreciated original cost by $311,000,995. Exhibit CMH-4

discussed by OCA witness Mr. Smith, the OCA's recommendation is that the costs for these two proposed acquisitions along with four other proposed acquisitions be removed from the calculated revenue requirements.

Q. What impact does that have in the rate cases?

A. It has several impacts but one of the issues in this case is a revenue requirement shortfall from both the ratemaking rate base and from the increased cost of service for each of the acquisitions as of the end of the FPFTY. The revenue deficiency if placed on the acquired customers may mean very large increases. PAWC's proposal is to shift almost all the wastewater revenue deficiency to water customers pursuant to Section 1311(c), as discussed below and in Mr. Mierzwa's testimony. What Section 1311(c) shift, if any, is in the public interest is one of the issues that must be addressed in each case and Mr. Mierzwa presents OCA's recommendation. However, it is critical to understand that the use of fair market value to set the ratemaking rate base of the qualifying acquisitions under Section 1329 has, in almost all PAWC's acquisitions, resulted in a large revenue deficiency as of closing. That deficiency grows in the rate cases when the cost of service for each acquired system using the FPFTY is calculated. To the extent that the acquired customers do not see part or all that revenue requirement deficiency in the rates that they are paying, those rates become more disconnected from the actual cost to serve them. The revenue deficiency that exists at closing and grows in the rate cases impacts existing water customers in that they are being asked to bear all or part of the revenue deficiency in their rates, as discussed below and in Mr. Mierzwa's testimony.

The interplay between the fair market valuation when it is multiples of depreciated original cost and Section 1311(c) is an example of how it is important to

view the layering of the alternative regulatory provisions included in PAWC's rate proceedings.

Section 1311 (c)

Q. Why do you characterize the amendments to Section 1311(c) as a departure from traditional ratemaking?

A. Section 1311(c) was amended in Act 11 of 2012. The amendment exempted certain water and wastewater utilities from the existing requirement to segregate utility property and a definition was added as subsection (e). This exemption permits the combination of water and wastewater revenue requirement while other utilities that provide more than one type of service continue to follow the requirement to segregate the property used to provide two different utility services.

The relevant portions of Section 1311 read as follows:

§ 1311 Valuation of and return on the property of a public utility.

* * *

(c) Segregation of property. When any public utility furnishes more than one of the different types of utility service, the commission shall segregate the property used and useful in furnishing each type of such service, and shall not consider the property of such public utility as a unit in determining the value of the rate base of such public utility for the purpose of fixing base rates. A utility that provides water and wastewater service shall be exempt from this subsection upon petition of a utility to combine water and wastewater revenue requirements. The commission, when setting base rates, after notice and an opportunity to be heard, may allocate a portion of the wastewater revenue requirement to the combined water and wastewater customer base if in the public interest.

* * *

(e) Definition. As used in this section, the term "utility that provides both water and wastewater service" shall include separate companies that

> individually provide water and wastewater service so long as the companies are wholly owned by a common parent company.

66 Pa. C.S. § 1311 (effective April 16, 2012). The statutory language does not contain any guidelines, nor has the Commission promulgated regulations.[18] The determination of what is in the public interest in Section 1311(c) is within the Commission's discretion. The concept of taking wastewater revenue requirement based on the wastewater cost of service and placing additional revenue requirement onto water customers, who are already paying rates that collect the water cost of service was a break from traditional ratemaking.

There are principles of ratemaking that should be used to guide the Commission's determination of whether and in what amount a shift of wastewater revenue requirement to water customers should occur based on the record in each case.[19] In defining the public interest, the affected public certainly includes PAWC's wastewater customers and its water customers. The public interest also could include policies regarding the acquisition of small, nonviable wastewater systems. For example, when acquiring a small, troubled wastewater system that would need a complete rebuild of its system, it may be that the customers of that system could not bear the costs of the rehabilitation and replacement of the system. In that instance, the costs could be spread among the other wastewater systems as part of rate consolidation of wastewater systems. Or, under

[18] In the *Act 11 of 2012 Implementation Order* the Commission clarifies two points regarding notice and the definition contained in 1311(e).

[19] The first case that was filed using Section 1311(c) was PAWC's 2013 base rate case at Docket No. R-2013-2355276. *Pa. PUC v. Pennsylvania-American Water Co.,* Docket No. R-2013-2355276 (Order entered Dec. 19, 2013).

Section 1311(c), the utility could ask that a portion of the small wastewater systems higher revenue requirement be allocated to water customers.

Q. Does the Commission have a range of options when looking at requests for Section 1311(c) shifts from wastewater to water?

A. Yes. I see the Commission as having a range of options under 1311(c). The question is whether the options are consistent with established regulatory principles. For example, the Commission could choose to not approve any shift. It also could approve a shift of the entire wastewater revenue requirement. In that instance it is hard to support that as being consistent with established regulatory principles. Although this range of possibilities under Section 1311(c) exists, it has not been addressed in regulations since the enactment of Section 1311(c).

Q. What framework do you recommend that the Commission use to choose what shift, if any, should be approved?

A. Professor James Bonbright provides a useful framework for setting and evaluating utility rates:

- Practicality, including simplicity, understandability, ability to implement, and public acceptability;
- Clarity in its interpretation;
- Effectiveness in yielding the total revenue requirement;
- Revenue stability from year to year;
- Continuity of rates, including the concept of gradualism;
- Fairness in relation to the cost of serving different types of customers;[20]

[20] The "fairness" of a utility rate generally means that the rate bears a reasonable relationship to the utility's cost of serving the customer without exceeding the value of service to the customer. See, e.g., James C. Bonbright, *Principles of Public Utility Rates* (New York, NY, 1961) (hereafter "Bonbright"), pp. 82-92.

- Avoidance of undue discrimination among similarly situated customers; and
- Encouragement of efficient consumption practices.[21]

According to Bonbright, the most important criteria are adequacy of collection of the revenue requirement, fairness to all customer classes, and efficiency to encourage economically efficient consumption and discouragement of waste.[22] He notes that these criteria are primary "not only because of their widespread acceptance but also because most of the more detailed criteria are ancillary" to these three principles.[23]

Q. How does this framework apply in this proceeding?

A. The OCA has focused on the principles of efficiency and fairness. Mr. Mierzwa discusses these issues in OCA Statement 4. I would note that the review of PAWC's proposal must include an examination of whether similarly situated customers are being treated similarly. This is significant when most of PAWC's water customers do not receive wastewater service from PAWC. PAWC has more than nine times as many water customers as wastewater customers. OCA St. 4 at 26. Those water customers are paying their own wastewater bills to other entities, or they have on-lot septic systems that they must install and cover maintenance costs. They also have been paying a portion of the wastewater deficiency for PAWC's wastewater customers since 2013. Mr. Mierzwa addresses the cost-of-service details in OCA Statement 4.

[21] Bonbright, p. 291-92.

[22] Bonbright, p. 292.

[23] *Id.*

Proper price signals are sent through rates meaning that rates are set to reflect the cost of providing the service. Mr. Mierzwa addresses these issues in his testimony (OCA Statement 4).

Q. What do you conclude regarding PAWC's proposal to shift $71 million of wastewater revenue requirement to its water customers?

A. PAWC's proposal fails to meet the fundamental principles of fairness and efficiency in setting rates for water and wastewater customers. The impact of more than $585 million of fair market value rate base exacerbates the revenue deficiencies on wastewater revenue requirement and is one of the causes for a large shift. However, shifting 94% of the wastewater revenue deficiency is not reasonable.

Q. You have reviewed numerous changes to the Public Utility Code through Act 11 of 2012 and Act 12 of 2016. What do you conclude about these changes as applied to PAWC's proposals in this proceeding?

A. Each of the changes represented a change to traditional ratemaking and represent alternative ratemaking provisions that PAWC has used since the passage of these changes including in leading up to this case (DSIC, FPFTY, 1311(c), and 1329 acquisitions) and in this case (discretionary selection of the FPFTY, proposed 1311(c) shift, and seeking to include not yet completed acquisitions in rate base). The OCA does not agree with many of PAWC's proposals in this proceeding as set forth above and, in the testimony, provided by the OCA witnesses. However, as explained below, PAWC proposes additional alternative ratemaking mechanisms that will further reduce its risk, shift unknown rate increases onto its customers, and unreasonably increase the rates and bills for its customers.

It is important to note that PAWC could have chosen any of these or none of them, but the fact that they chose to employ them all in coordination with each other and its selection of the FPFTY and 1311(c) shift present an unreasonable choice by PAWC that seeks to insulate shareholders and PAWC management from the difficult job of efficient management and seeks to place nearly all the risk on PAWC's captive customers. This should be looked at with a great deal of skepticism by the Commission when reaching a determination about the justness, reasonableness, and lawfulness of PAWC's proposals.

PAWC's Alternative Ratemaking Proposals Pursuant To Section 1330 of the Public Utility Code

Q. Does the passage of Section 1330 and the related orders provide any constraints on the use of alternative ratemaking?

A. Yes. Section 1330[24] provides the declaration of policy from the General Assembly where it declared that "utility ratemaking should encourage and sustain investment through appropriate cost-recovery mechanisms to enhance the safety, security, reliability or availability of utility infrastructure and be consistent with the efficient consumption of utility service." 66 Pa. C.S. § 1330(a)(2).

Q: When is incentive regulation appropriate under the regulatory compact?

A: In my opinion, under the regulatory compact, incentive regulation is appropriate when the regulator seeks to generate certain behavior by the public utility company that benefits

[24]The Commission adopted the *Act 58 Implementation Order* in 2019. In the *Act 58 Implementation Order*, the Commission recognized that the policy statement proceeding was intended to give guidance to the utilities and stakeholders on what is to be considered in a Section 1308 proceeding and that it did not "establish a binding norm, nor does it establish a predicate" for the adoption of an alternative rate mechanism. *Act 58 Implementation Order* at 3-4. The Commission entered an order adopting a final policy statement, at 52 Pa. Code § 69.3301-3302, on alternative ratemaking that was the result of a proceeding that began prior to the passage of Act 58. *Fixed Utility Distribution Rates Policy Statement*, Docket No. M-2015-2518883 entered July 18, 2019.

consumers or the public at large. The General Assembly in its wisdom gave the Commission discretion on which incentive regulation to approve and when, and the temporary or permanent nature of such incentives. However, I recommend that the Commission approach incentive regulation with caution especially when faced with a request by a utility that seeks to receive multiple incentives for the same reason or to generate the same behavior.

Q: Why do you recommend that the Commission approach incentive regulation with caution?

A: Incentive regulation is not meant to be a smorgasbord where you pick a little bit of everything. If more than one incentive regulation is granted to generate the same behavior, it can quickly become unclear which incentive is having the desired effect on a utility's performance. In my opinion, offering multiple incentives to generate the same behavior by the public utility company carries the risk of undermining the regulatory compact.

Q: Why is this your opinion?

A: Because offering more than one incentive regulation to generate the same behavior by the public utility company serves to transfer risk disproportionately from the shareholders to the consumers and to transfer wealth unjustly from consumers to the shareholders. This is the same effect as monopoly pricing. And as I discussed above, it is the effect of monopoly pricing that the regulatory compact is intended to remedy.

Q: Is alternative ratemaking under Section 1330 of the Code a type of incentive regulation?

A: Yes. Alternative regulation is a type of incentive regulation, and as its name suggests, it is an alternative to traditional cost-of-service ratemaking.

Q: What is alternative ratemaking?

A: As a concept, alternative ratemaking encompasses different forms of rate mechanisms that essentially shift the risk of recovery from the public utility company to the consumer.

Q: If alternative ratemaking shifts the risk of recovery from the public utility company to consumers, is it an appropriate part of the regulatory compact in Pennsylvania?

A: Alternative ratemaking is an appropriate part of the regulatory compact in Pennsylvania where it is used pursuant to the policy objectives laid out in Section 1330(b)(2) of the Public Utility Code. In my opinion, alternative ratemaking should be a "package deal" with symmetrical protections required for both utility and consumers, so that there is clear overall societal benefit reducing the utility's risk of recovery. Importantly, Section 1330(b)(2) states that "it is the policy of the Commonwealth" that the appropriate cost-recovery mechanisms be allowed "to *enhance* the safety, security, reliability or availability of utility infrastructure." In my opinion, the General Assembly's use of the word "enhance" is very important in relation to the regulatory compact.

Q: Please explain.

A: To "enhance" means to increase or further improve; meaning, alternative ratemaking can be used where it will increase or further improve the safety, security, reliability, or availability of utility infrastructure. As I explained above, under the regulatory compact in Pennsylvania, as a baseline, a public utility company is expected and obligated to

provide and maintain adequate, efficient, safe, and reasonable service and facilities. If a public utility company is meeting this baseline standard satisfactorily under traditional cost-of-service ratemaking and with the use of a FPFTY, then it leaves the question of how and why alternative ratemaking will *enhance* the *safety, security, reliability or availability of utility infrastructure*.

Q. What does the Commission's Policy Statement address for use in a Section 1308(d) proceeding, like this proceeding?

A. It provides a statement of purpose and scope that states that the alternative ratemaking proposals promote the efficient use of the relevant utility service, through technologies and information and that may include:

> reducing disincentives for promoting these objectives, providing incentives to improve system economic efficiency, and avoiding unnecessary future capital investments while ensuring that fixed utilities receive adequate revenue to maintain the safe, secure and reliable operation of their distribution systems. At the same time, an alternative rate design methodology should reflect the sound application of cost of service principles, establish a rate structure that is just and reasonable, and consider customer impacts.

52 Pa. Code § 69.3301. In 52 Pa. Code § 69.3302, the Policy Statement provides considerations that the Commission may consider in determining alternative ratemaking mechanisms as well as a directive that the utility "shall explain how these factors impact the distribution rates for each customer class."

Q. How do these considerations impact your review of PAWC's proposed alternative ratemaking mechanisms?

A. As I discuss each proposal below, I will overlay the relevant considerations onto PAWC's proposals.

Response to Company's testimony on Alternative Ratemaking: RDM and ECIC

Q: Does PAWC seek the Commission's approval of proposed alternative ratemaking mechanisms?

A: Yes. PAWC seeks the Commission's approval of two proposed alternative ratemaking mechanisms. Specifically, PAWC seeks approval of its RDM and ECIC proposals.

Q: Which witnesses discuss these proposals and who are you responding to?

A: As for the Company's RDM proposal, Company Witnesses Everette and Rea discuss the RDM proposal. I will respond to PAWC Witness Everette while Mr. Mierzwa will respond to PAWC Witness Rea. In OCA Statement 5, Mr. Colton addresses the disproportionate adverse impact of the PAWC's RDM proposal on low-income customers.

As for the Company's ECIC proposal, Witnesses Everette and Swiz discuss these proposals. I will respond to Witness Everette while OCA witness Jerry Mierzwa will be responding to Witness Swiz.

Revenue Decoupling Mechanism (RDM)

Q: Can you please describe your understanding of the Company's RDM proposal?

A: In terms of how the RDM will work, my understanding is that the Company's RDM proposal is a revenue decoupling proposal that is designed to provide PAWC with guaranteed recovery of its authorized revenue requirement and fixed costs. I understand that the RDM will compare the difference between actual revenue collected from eligible customers under approved rates in this case against cost components calculated to recover fixed costs of providing service. If actual revenues are higher than would have been collected under RDM formula, the difference will be credited to customers in the

subsequent year. If actual revenues are lower than would have been collected under the RDM formula, the difference will be collected from customers in the subsequent year.

Q: Can you please describe your understanding of why the Company has proposed the RDM?

A: In terms of why the Company proposed the RDM, my understanding is that the Company believes that its proposal meets the Section 1330(b)(2) policy objectives for two reasons. First, according to Witness Everette, she submits that current method of recovery relies heavily on sales volumes and customer usage through volumetric or variable rates but the Company's need to recover its authorized fixed costs and revenue requirement does not vary with sales volumes or customer usage. Witness Everette testified that the Company's ability to reliably recover its authorized revenue requirement will improve the Company's ability to plan, manage, maintain, and invest in the facilities necessary to continue providing safe, reliable, and high-quality water and wastewater service at a reasonable cost to customers.

Second, according to Witness Everette, the volumetric rates create a "throughput incentive" for the public utility company to sell more water, which competes with the interest of customer end-use efficiency and conservation. Witness Everette testified,

therefore, that the Company's RDM proposal is consistent with the efficient consumption of utility service.

Q: Do you agree with Witness Everette that the Company's RDM proposal meets the Section 1330(a)(2) policy objectives?

A: No. I do not agree with Witness Everette that the Company's RDM proposal meets the Section 1330(a)(2) policy objectives.

Q: Please explain why.

A: As for the first policy objective of Section 1330(a)(2), the Company has not shown how or why the RDM proposal could or would "*enhance* the safety, security, reliability or availability of utility infrastructure." In my opinion, Witness Everette's statements that the RDM will improve the Company's ability to provide service that meets the standards of Section 1501 are superficial for several reasons.

First, the Company has credibly shown in its initial filing in this case that the Company is already meeting the standards of Section 1501 regarding its service and facilities. I refer also to the OCA testimony of Witness Terry Fought, who gives his opinion that the Company is performing more than satisfactorily from an engineering standpoint.

Second, where the public utility company is already meeting the required standards of Section 1501 service and facilities pursuant to the traditional cost-of-service ratemaking and the use of the FPFTY, it is not clear how adding guaranteed rate recovery will have the impact of enhancing the safety, security, reliability, or availability of utility infrastructure. Rather, the downside of granting multiple incentives to address the same

behavior is potentially undermining the regulatory compact by mirroring the detrimental effects of monopoly pricing.

As I discussed above, one of the most beneficial aspects of traditional cost-of-service ratemaking under the regulatory compact is that the public utility company bears the risk of recovery in the face of all normal business risk in between rate cases, such as weather, recessions, changing technologies, and other sources of sales fluctuations from impacting revenues. However, the Company's RDM proposal shifts the risk of recovery away from the Company and places it wholly onto consumers. In this sense, the RDM proposal would guarantee revenue recovery for the utility where no guarantee has ever been provided. That guarantee wholly shifts the risk onto consumers without consumers gaining any obvious benefit of enhancement to the safety, security, reliability, or availability of utility infrastructure.

Q: What about the second policy objective of 1330(a)(2) – to be consistent with the efficient consumption of utility service?

A: As for the second policy objective of Section 1330(a)(2), the Company has not shown how or why the RDM proposal is "consistent with the efficient consumption of utility service." The whole point of the RDM is to eliminate PAWC's risk of recovery due to variable sales. It does this through rate true-ups resulting from over- or under-recovery of revenues. The true-ups result in after-the-fact surcharges or credits that misalign consumption decisions with actual utility costs. Thus, if sales decrease, the RDM formula will adjust rates to charge customers to make-up for the reduced recovery due to decreased sales. In my opinion, guaranteed revenue recovery for the utility means

inaccurate price signals for efficient consumption of utility service because it misaligns the incremental or variable component of rates from actual incremental costs.

Q: Under traditional cost-of-service ratemaking, if a utility experiences sales reduction and under-recovery, can it achieve the same result as an RDM true-up by just filing another base rate case with adjusted sales forecasts?

A: No. Under traditional cost-of-service ratemaking, if a utility experiences sales reductions and under-recovery, it cannot simply achieve the same result as an RDM true-up by filing another base rate case with adjusted sales forecasts. When a utility files a general rate increase, all relevant information is reviewed to determine just and reasonable rates, not just sales forecasts.

Q. Did PAWC address the considerations contained in 52 Pa. Code § 69.3302?

A. Ms. Everette did not address the factors listed in 52 Pa. Code § 69.3302. In response to PAWC witness Rea's testimony, Mr. Mierzwa addresses the factors in OCA Statement 4.

Q: In your opinion, should PAWC be allowed to implement the RDM?

A: No, consistent with the above and as outlined more fully by Mr. Mierzwa and Mr. Colton, PAWC should not be permitted to implement the RDM.

Environmental Compliance Investment Charge (ECIC)

Q: Can you please describe the Company's ECIC proposal?

A: In terms of how the ECIC will work, my understanding is that the Company's ECIC is a rate adjustment clause designed to reflect and recover, between rate cases, the capital costs and expenses imposed on the Company to address and comply with new or changed federal and state environmental mandates. Costs that are recoverable through the ECIC

must be consistent with the set of projects and activities set forth in an annual environmental compliance plan to be filed by the Company and approved by the Commission.

Q: Can you please describe your understanding of why the Company has proposed the ECIC?

A: Witness Everette stated that the Company's environmental compliance requirements are continuously evolving and one of the drivers that increases the costs of water and wastewater service and the need for rate relief. Witness Everette asserts that the need for and timing of measures to comply with new or changed government mandates under applicable environmental laws are outside of the Company's control. Witness Everette says that the Company's proposed ECIC will provide a mechanism for adjusting the Company's rates between base rate cases to support full and timely rate recognition of PAWC's costs to comply with new and updated environmental regulatory mandates in a prudent and efficient manner as they emerge.

Q: Do you agree with Witness Everette that the ECIC proposal meets the 1330(a)(2) policy objectives?

A: No. While the Company has sought to model the ECIC proposal on the DSIC/Long Term Infrastructure Investment Plan (LTIIP) model with a plan/surcharge, the similarities are superficial. Unlike DSIC/LTIIP which achieves acceleration of replacement of aging underground infrastructure, the Company's proposed ECIC is simply aimed to shift the risk of recovery for sizeable and wide-ranging capital investments from the Company to customers based on the Company's normal business risk of complying with environmental laws. However, the Company's compliance with environmental laws is

part and parcel of the Company satisfying the mandatory requirements of providing and maintaining adequate, safe, and reasonable service and facilities under Section 1501. PAWC has already shown that it can do this without any further incentive or inducement. In my opinion, the Company has not shown how the ECIC will enhance the safety, security, reliability, or availability of utility infrastructure.

Q: What kind of capital investments does the Company want to recover under the ECIC?

A: The Company wants to recover through the ECIC sizeable and wide-ranging capital investments in water production, treatment, and storage infrastructure and wastewater treatment infrastructure. For example, new dams, dam rehabilitations, new treatment plants would be included in the ECIC surcharge.

Q: What would happen if these types of costs were recovered through the ECIC?

A: Recovering these types of capital costs would greatly reduce the transparency of the ratemaking process for these types of costs. While the Company seeks to address the transparency problem by proposing that the Company file an annual environmental compliance plan that is approved by the Commission, the Commission does not have expertise to determine whether the investments are prudent or necessary to comply with environmental laws. The Company has this expertise, and it has the responsibility for this type of decision-making. And such decision-making should be subject to the

Commission's full investigation and review with the benefit of the evidence as developed by party litigants in base rate cases.

Q. Did PAWC address the considerations contained in 52 Pa. Code § 69.3302?

A. Ms. Everette did not address the factors in 52 Pa. Code § 69.3302. OCA witness Mierzwa addresses the factors in his testimony.

Q. **Do you think the ECIC is reasonable and consistent with setting just and reasonable rates**?

A. No. The ECIC is a broad, unrestricted surcharge to recover capital and O&M in between rate cases. This is a surcharge that could be a large component of a customers' bill for usage because of the broadness of this proposed surcharge. Even with limits this surcharge is unnecessary and unreasonable. These large items of capital expenditures and the associated O&M should be reviewed as part of a base rate case when they become used and useful.[25]

Q: Should PAWC be permitted to implement the ECIC?

A: No. Consistent with the above and the testimony of Mr. Mierzwa, PAWC should not be allowed to implement the ECIC.

[25] Mr. Mierzwa notes that PAWC's proposal to recover a large range of capital expenditures and O&M by a surcharge that would be filed on a quarterly basis and would need to be reviewed within ten days of each filing would strain the limited resources of the advocates and I would add, presumably the Commission too.

Response to Company's testimony on Section 523 and 52 Pa. Code § 69.711 regarding a 25 Basis Points Addition To the Return On Equity

Q. PAWC Witness Everette recommends "no less than 25 basis points" be added to the return on equity if the Commission were to approve a return on equity that is lower than 10.95% which is the upper end of PAWC's range of return on equity. Do you agree?

A. No. OCA witness Smith determined that the 25 basis points request by PAWC is equal to $11.8 million of additional revenue requirement. PAWC wants its customers to pay more than5% of the requested increase for PAWC's claimed superior management performance. That request should be denied.

The Commission is required to look at the efficiency, effectiveness and adequacy of service of each utility, in addition to all other relevant evidence, when determining just and reasonable rates. 66 Pa. C.S. § 523(a). Any adjustments to specific components of the utility's claimed cost of service must be made based on specific findings in the record. *Id.* PAWC is obligated to provide service that complies with Section 1501 of the Public Utility Code. 66 Pa. C.S. § 1501. Section 1501 requires:

> **§ 1501. Character of service and facilities.**
>
> Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public. Such service also shall be reasonably continuous and without unreasonable interruptions or delay. Such service and facilities shall be in

> conformity with the regulations and orders of the commission.

66 Pa. C.S. § 1501. PAWC's obligation to meet the requirements of Section 1501 do not require additional basis points be added to its return on equity claim, as OCA witness Garrett discusses in OCA Statement 3. In OCA Statement 5, Mr. Colton provided specific evidence that PAWC's customer service, credit and collection management performance does not warrant any additional basis points on equity. Mr. Colton also examined PAWC's performance regarding residential complaints, payment arrangement requests, and verified infractions. Ms. Alexander reviews the Company's customer service performance and concludes that PAWC's failure to properly manage and oversee the call center performance refutes its claim of superior management performance. OCA witnesses Garrett, Colton, and Alexander each address reasons why PAWC's 25 basis point addition to return on equity should be denied and the resulting $11.8 million of additional revenue requirement should be denied.

Introduction of OCA's Other Witnesses

Q. Who are the OCA's other expert witnesses?

A. Ralph Smith (OCA Statement 2) supports the OCA's traditional revenue requirements recommendations. Mr. Smith also discusses the reasons why PAWC cannot meet its burden of proving the reasonableness of its FPFTY projections. Mr. Smith removes the 5 pending applications and 1 application that has not closed from the calculation of the revenue requirement because those proposed acquisitions are either pending before the Commission and there is no certainty that the proposed acquisitions will be approved and close before the close of the record in this proceeding.

Mr. Smith's Exhibit LA-1 provides a summary of the OCA's revenue requirement recommendations that result in his recommendation that PAWC should receive no more than $43,733,007 (4.3%) of additional annual revenues on a total (water and wastewater) company basis.

In developing his recommendations, Mr. Smith incorporates the rate of return analysis presented by David Garrett (OCA Statement 3). Mr. Garrett addresses the appropriate capital structure for ratemaking, the return on equity, and the impact of PAWC's claims for alternative ratemaking as well as its request for additional basis points for management performance. Mr. Garrett also recommends an adjustment to the proposed capital structures due to the substantial deviation from its parent and its proxy group. However, if the Commission accepts the Company's capital structure or the Company's alternative ratemaking proposals, Mr. Garrett recommends a return on equity of 8.7%. Mr. Garrett's adjustments reduce PAWC's overstated return on equity and adjust PAWC's equity-rich capital structure. Mr. Smith provided the individual revenue requirement impact of each of Mr. Garrett's recommendations as well. OCA St. 2, Exhibit LA-6.

Jerome Mierzwa (OCA Statement No. 4) provides adjustments to the Company's cost of service, recommendations regarding PAWC's proposed rate designs, including PAWC's winter averaging proposal, and recommendations regarding PAWC's alternative ratemaking claims. Mr. Mierzwa also addresses the Company's proposed shift of nearly 94% of the wastewater revenue requirement increase to water customers pursuant to Section 1311(c) of the Public Utility Code.

Roger Colton (OCA Statement No. 5) addresses the impact of the Company's current rates and their requested increase on low-income customers. He recommends changes in the Company's bill discount programs, the collection of those costs from all customer classes, and related matters to help all PAWC customers afford essential utility service. Mr. Colton also demonstrates that PAWC's winter averaging proposal will disproportionately harm low-income customers. He also addresses the company's performance in key areas that impact customers.

Barbara Alexander (OCA Statement No. 6) provides an analysis and recommendations regarding customer-service issues, including certain provisions of the Company's tariffs and management performance, including the lack of specific monthly and annual call center performance standards, improvement of its analysis of customer complaints, reform of Pennsylvania-specific training, along with evaluation of its third party contractors, additional customer education, and reforms in its implementation of termination of water service to its customers on behalf of non-Company sewer service providers.

Finally, Terry Fought (OCA Statement 7), a consulting engineer, makes several recommendations about the pressures and pressure surveys in the water operations and customer complaints in PAWC's customer complaint log.

Information in Customer Notices

Q. Do you have any other concerns about PAWC's filing?

A. Yes. I am concerned about PAWC's rate case notices to its customers. There are three issues that impact the accuracy of the bill impacts and the notice that I discuss below:

1) The impact of PAWC's proposed revenue deficiency shift (under Section 1311(c)) on the proposed bill impact;

2) the residential customer usage level used by PAWC, and
3) notice of the final order's disposition of PAWC's proposed alternative ratemaking mechanisms under Section 1330.

Impact of Section 1311(c)

Q. You mentioned that the notices provided by PAWC reflect its proposal to shift $71 million or 94% of the wastewater revenue requirement to water customers. What is your concern?

A. While Mr. Mierzwa discusses the OCA's recommendation about what shift, if any, is in the public interest under Section 1311(c), I will discuss PAWC's rate case notices that reflect the rate impacts **after** its proposed shift.[26]

The notices PAWC provided to its wastewater customers reflect only 6% of the calculated cost of service revenue deficiency presumably because PAWC is proposing to shift 94% of the revenue deficiency to its water customers. It is highly probable that PAWC's proposed shift of nearly all its calculated wastewater cost of service increases will not be granted by the Commission. That means that the wastewater customers from the inception of this case, have been misled by PAWC about the likely rate increase that they will experience, and they are not seeing an accurate estimate of the proposed rate filing on their bills.

[26] I discuss Section 1311(c) in the alternative ratemaking section of my testimony, *supra*.

Q. What should PAWC use in the wastewater notices to estimate the impact of its filings on wastewater customers?

A. The notices should use the revenue requirement deficiencies that PAWC calculated for each of its wastewater costs of service. That is, PAWC should have shown what it wants to charge for wastewater service *before* the shift. PAWC provides cost of service studies for four wastewater service areas and one for water.[27] PAWC provides testimony and exhibits from multiple witnesses to support the data and results of the cost of service studies for the four wastewater divisions. The additional revenues needed to provide service to those customers, as calculated in the cost of service studies, should be used to reflect the proposed rate increases for each rate zone within that division. If that were done in the notices to customers, the wastewater customers would get a realistic picture of what rate increases they would be facing if their rates were set on the cost to serve them. PAWC's notices already state that it is requesting approval of a "combined revenue requirement for the company's water and wastewater operations as authorized by legislation enacted in 2012." PAWC Vol.1, pp. 16-37 of the PDF.

Q. What about PAWC's other proposals that might impact the customers' bills?

A. PAWC provided language in all its notices regarding the Section 1311(c) shift, and other alternative ratemaking claims, stating:

> The filing requests approval of a combined revenue requirement for the company's water and wastewater operations as authorized by legislation enacted in 2012. The filing also requests approval of the following alternative rate mechanisms in accordance with 66 Pa. C.S. § 1330: a Revenue Decoupling Mechanism and an Environmental Compliance Investment Charge.

[27] Wastewater SSS, Wastewater CSS, BASA WW, and Brentwood WW.

PAWC Vol.1, pp. 16-37 of the PDF. In the wastewater notices[28], PAWC added the following before these sentences to include its winter averaging proposal:

> Pennsylvania American Water's filing requests a change to base residential bills for wastewater collection from April-December on an average of usage during the prior January-March to better reflect seasonal outdoor usage.

PAWC Vol. 1, pp. 17-24, 26, 29-33, 35-36. Nowhere in any of the wastewater notices does PAWC disclose that the **proposed rates** shown in the notices are calculated **after** PAWC's proposed shift of 96% of the wastewater revenue requirement.

Q. What should have been provided to wastewater customers to provide an accurate level of proposed rates that could result from PAWC's filing?

A. The notice should have based the proposed rates on the calculated cost of service, not on the "post" shift rate levels. PAWC already has language in the notice that it is requesting approval to use Section 1311(c), among other requests.

Q. What changes would be necessary for the notices to water customers?

A. I recommend the same change as I recommend for the wastewater notices. PAWC should be required to calculate the proposed bill using the water only revenue deficiency. The notice language following the bill impact could be modified to state that PAWC's request for approval of a shift from wastewater to water could increase the final level of rates and the bills for water customers.

[28] The only wastewater notice that did not have this sentence was Rate Zone 8 which would not have a rate increase until 2025, according to PAWC's proposal. PAWC Vol 1., p. 34 of the PDF.

Residential Customer Usage Level

Q. Turning to another concern about the rate case notices, what usage level does PAWC use in its rate case notice to customers?

A. In its rate case notice for each water rate zone, PAWC uses 3,201 gallons per month usage for a residential customer to calculate the impact of its proposed rate increases. PAWC Filing, Vol. 1, pp. 16-37 of PDF. The rate impact is calculated based on a "typical water bill" for residential customers of 3,201 gallons per month. *Id.* PAWC derives the "typical" level of usage by averaging the usage of all residential customers in all its service areas.

Q. What about the rate case notices for its wastewater rate zones?

A. In its rate case notice for each wastewater zone and for notices to customers who receive water and wastewater service from PAWC, it used a "typical wastewater bill" for residential customers of 3,122 gallons a month.[29] PAWC Filing, Vol. 1, pp. 29-37 of PDF PAWC derives the "typical" wastewater usage by averaging the usage of all residential customers in all its service areas.

Q. Why is this a concern?

A. PAWC has residential customers who have usage levels ranging above the "typical" usage level, yet its notice does not show what the bill impact of its proposed rate increase will be. For example, a customer using 5,000 gallons per month (perhaps a small family) would see a different bill impact. A customer using 10,000 gallons per month (perhaps a larger family) would see a different impact. There is no information in the rate case notice

[29] PAWC's notice for Wastewater Zone 3 (Scranton) uses 3,201 gallons per month.

that would permit a customer with different usage levels to calculate the impact on their bill.[30]

Q. Can you provide an example of what that would look like?

A. Yes. The chart below is an example of what could be used in the rate case notice to provide the bill impacts for additional usage levels.

Gallons per month	Current Bill	Proposed Bill
3,201	$70.65	$88.24
5,000	$100.29	$126.60
10,000	$182.69	$233.19

PAWC Exh. 10-A, p. 76. This chart should be used for each rate case notice that PAWC sends to its customers.[31]

Q. Why did you choose 5,000 and 10,000 gallons per month for additional usage levels?

A. I used those amounts as an estimate that falls at or near the middle of a range of usage for 2 and 4-person households and a range of daily usage of 5-100 gallons per day (gpd). This range is based on information contained in Penn State Extension: Estimating Water Needs.[32] Although this paper is based on designing water systems, using 50 gallons per day per person (gppd) as the minimum and 100 gppd for a 30 day month would equal 3,000-6,000 gallons per month for a 2-person household and 6,000-12,000 gallons per day for a 4-person household. By choosing a level close to the middle of each range, I

[30] The notice directs the customers who want "[t]o find out more about how the request might affect your water bill" to contact PAWC's customer service or to review the rates in the proposed tariff supplements on PAWC's website under Customer Service & Billing menu, and then select Your Water and Wastewater Rates. That page provides a link to the proposed tariff supplements that were filed on November 7 as well as the current customer charge and consumption charges for a customer to calculate their current bill. https://www.amwater.com/paaw/customer-service-billing/your-water-and-wastewater-rates

[31] For any existing flat rate zones, this recommendation would not apply if PAWC proposes to continue the flat rate.

[32] https://extension.psu.edu/water-system-planning-estimating-water-needs

think it is a reasonable approach to show the impact of the proposed rate increases on customers at different usage levels.

Q. Is your recommendation the same for the wastewater notices?

A. Yes. The chart below, using Wastewater Rate Zone 2[33] is an example of what could be used in the wastewater only notices to provide bill impacts for additional usage levels.

Gallons per month	Current Bill	Proposed Bill
3,201	$91.77	100.08
5,000	$138.28	$148.25
10,000	$262.10	$276.50

PAWC Exh. 10-B, p. 68.

Q. PAWC is required to use the Commission's rate case notice form at 52 Pa. Code § 53.45. Does your recommendation conflict with that requirement?

A. No. This recommendation would require information in addition to what the Commission's rate case notice requires. It is relevant information that will help residential customers better understand the impact on their bills. A good example of additional relevant information is shown in PAWC's notice to Wastewater Rate Zone 7 customers, where it used a chart to provide additional information regarding its request that rates in Rate Zone 7 not increase until May 27, 2025. PAWC Rate Filing, Vol. 1, p. 33 of the PDF. In its chart, PAWC provided the average usage per month for residential bills reflecting an average of 3,122 gallons per month, the current bill, current rates approved to go into effect in 2025 plus the proposed rates effective 5/27/25. I provided a screenshot below of PAWC's chart.

[33] Some wastewater rate zones reflect decreases at proposed rates, while others, like Rate Zone 2, show increases at proposed rates. *See* PAWC Exh. 10-B, pp. 29-37 of PDF. In addition, the increases vary depending on the current rates.

If the entire rate request is approved as filed, the estimated impact on a typical wastewater bill is outlined in this chart:

Customer Class	Average Usage/ Month	Current Monthly Wastewater Bill	Current Rates Approved to go into effect in 2025	Proposed Rates Effective 5/27/2025
Residential	3,122 gallons	$28.82	$49.24	$63.78
Commercial	22,094 gallons	$208.51	$363.02	$459.88
Industrial	685,947 gallons	$6,496.74	$11,357.16	$13,718.94

PAWC Rate Filing, Vol. 1, p. 33 of PDF. My recommendation is no different than what PAWC has already done in its notice to Rate Zone 7 other than my recommendation would apply in each rate zone notice.

Notice of the impact of the Final Order in the case

Q. What is your recommendation for customer notice at the end of the case?

A. At the end of the rate proceeding, upon entry of the final order and the filing of the compliance tariffs and schedules, the Commission and PAWC will likely issue press releases that provide the overall revenue increase granted by the Commission and include an overall percentage increase. The press releases will likely include the impact on the "typical" residential, commercial, and industrial customers, like what is found in the rate case notices at the beginning of the case.

My recommendation is that a notice be provided via bill insert at the end of the rate proceeding that shows the final revenue requirement approved by the Commission and includes the impact on customers' bills at multiple usage levels as I described above. This should be implemented at the end of this case.

Q. Why do you recommend a notice at the end of the case?

A. The notice would provide the customers with the Commission's decision on the rate filing and the rate adjustments and the resulting bill impact. PAWC's request for alternative ratemaking already requires it to issue a notice at the end of the proceeding to

provide its customers with a plain language summary of the Commission's decision and the approved alternative rate or rate mechanism to comply with 66 Pa. C.S. § 1330(c)(1) and (2).[34]

As I discussed in this testimony, the rate case notices PAWC provided do not accurately relay the impact of its proposals on its customers' bills. At the end of the proceeding, I recommend that PAWC's notice required for the alternative ratemaking determination include the Commission's overall determination and the impact on ;customers at different usage levels (5,000 and 10,000 per month). The additional information about the bill impacts resulting from the Commission's final order will reflect the final revenue requirement and rate design. Customers will not have to wait until they receive their first bill after the rate case ends to find out what the bill impact is from the rate case. The basic information that is included in press releases is not sufficient to inform customers of the impact on their bills.

Q. Can you summarize your recommendations regarding notices?

A. Yes. Customer notices should provide relevant information about the impact on their bill if PAWC's cost of service revenue deficiencies are used to set rates. There is already language about PAWC's proposals that, if adopted, may impact customers' rates. I also recommend that a chart, using three usage levels, be included in the rate case notices for water and wastewater in PAWC's next base rate filing. My final recommendation about notices is that a notice be sent at the end of the proceeding that shows customers what the final order's impact on their bills. This notice can include the two other recommendations

[34] *Act 58 Implementation Order* at 26-27.

as well as the information regarding any Section 1311(c) shift, and any other proposals that are adopted in the final order.

Conclusion

Q. What is your overall recommendation?

A. PAWC's proposals unreasonably increase its customers' rates through a layering of claims including excessive rate of return, overstated rate base, operation and maintenance expenses, and taxes. Their claim should be rejected, and they should be granted an increase of no more than that which was presented by OCA witness Smith.

PAWC's proposal to shift almost all the wastewater revenue deficiency to water customers should be rejected. Its rate design proposals, including its alternative rate design proposals, are not reasonable and unreasonably increase the bills that its customers will have to pay.

PAWC's proposal for a 25 basis point management adder to its cost of equity claim is responsible for $11.8 of its revenue requirement claim and is not supported by its customer service or substantial evidence. PAWC's capital structure and return on equity are major drivers of its proposed increase. OCA's adjustments to both should be adopted to reflect the consumers' interests in not paying an excessive return.

PAWC's alternative ratemaking proposals for a revenue decoupling mechanism and an Environmental Compliance Investment Charge should be rejected as unsupported under Section 1330 and unreasonable because both involve unknown increases to customers' bills. The OCA's recommendations as set forth in its witnesses' testimony address these issues and others and should be adopted by the Commission.

Q. Does this complete your direct testimony?

A. Yes, at this time except I reserve the right to serve supplemental direct testimony by February 13 based on the information learned at the Public Input Hearings.

APPENDIX A

Christine Maloni Hoover
Pennsylvania Office of Consumer Advocate
555 Walnut Street, 5th Floor
Harrisburg, PA 17101-1923
717-783-5048

Deputy Consumer Advocate, Pennsylvania Office of Consumer Advocate, Harrisburg PA. March 2023-present. Oversee and coordinate the legal work of the office, including the work of the Senior Assistant Consumer Advocates, to make recommendations to the Consumer Advocate regarding legal and policy matters; represent the office and the Consumer Advocate at hearings, events, meetings, boards, councils; and serve as a primary resource to the Consumer Advocate, along with the Director of Operations, regarding office policies, administration, budget, assessments, personnel, and other duties as necessary.

Previous Positions

- Interim Acting Consumer Advocate, Pennsylvania Office of Consumer Advocate, Harrisburg PA. June 2021-December 2021. As Interim Acting Consumer Advocate, I represented the interest of consumers as a party to proceedings before the Public Utility Commission, state and federal courts, and agencies working with Senior Assistant Consumer Advocates and OCA staff; provided testimony at the General Assembly.

- Senior Assistant Consumer Advocate, Pennsylvania Office of Consumer Advocate, Harrisburg PA. 1999-May 2021, December 2021-March 2023. Work on all aspects of utility law and regulation, acting as one of the directors of the office's policies and litigation strategies. Responsible for water and wastewater cases. Responsible for coordinating and supervising administrative staff, IT, support staff, consumer outreach, education, and call center staff.

- Assistant Consumer Advocate, Pennsylvania Office of Consumer Advocate, Harrisburg, PA. 1987-1999. Increasing levels of responsibility, including the water coordinator for Pa. OCA's work on water and wastewater cases, including small companies, from 1990-1994. In 1994 became the small utilities project coordinator.

Current Professional Activities

- Admitted to practice law before the Supreme Court of Pennsylvania, and the United States District Court for the Middle District of Pennsylvania.

- Representative for Pennsylvania OCA, Technical Assistance Center Board, Pennsylvania Department of Environmental Protection, Harrisburg, PA.

- Member, Planning Committee for Pennsylvania Bar Institute's Public Utility Law Conference, Mechanicsburg, PA

- Member, Pennsylvania Public Utility Commission's Small Water Task Force, Harrisburg, PA

- Member, Water Committee, National Association of State Utility Consumer Advocates (NASUCA), Washington, DC

- Presenter or faculty member in educational programs for the Institute for Public Utilities at Michigan State University, the Society of Utility and Regulatory Financial Analysts, the National Conference of Regulatory Attorneys, the Pennsylvania Bar Institute American Water Works Association, National Association of Water Companies, NASUCA, NARUC, PA Department of Environmental Protection conferences and training sessions.

Previous Professional Activities

- Faculty member and presenter, NARUC Eastern Rate School and Western Rate School
- Member, Federal Advisory Committee on Total Coliform Rule/Distribution System Advisory, U.S. Environmental Protection Agency, Washington, DC.
- Member, Federal Advisory Committee on Stage 2 Disinfectants and Disinfection By-Products in Drinking Water, U.S. Environmental Protection Agency, Washington, DC.
- Member, on behalf of Pennsylvania OCA, NDWAC Small Systems Implementation Working Group, Washington, DC

Education

- J.D. American University's Washington College of Law, Washington, DC. 1987.
- B.A. in Political Science and Public Policy, University of Pennsylvania, Philadelphia, PA. 1984.

EXHIBIT CMH-1

Col. A	Col. B	Col. C	Col. D	Col. E	Col. F
County	**Housing Units (As of 7/1/2022)**	**Median Household Income (in 2022)**	**Persons in Poverty**	**Unemployment Rate (Nov. 2023)**	**ALICE HH**
Adams	43,673	$ 78,975	8.6%	2.7%	
Allegheny	63,131	$ 72,537	11.3%	3.7%	
Armstrong	32,153	$ 61,011	12.5%	4.3%	29%
Beaver	79,271	$ 67,194	10.2%	4.5%	
Berks	171,712	$ 74,617	10.8%	3.8%	
Bucks	257,265	$ 107,826	5.9%	3.4%	
Butler	87,500	$ 82,932	8.9%	3.4%	
Centre	66,474	$ 70,087	16.0%	2.8%	
Chester	212,731	$ 118,574	5.6%	2.9%	
Clarion	18,846	$ 58,690	13.7%	4.6%	30%
Cleafield	38,203	$ 56,982	11.7%	4.3%	29%
Clinton	18,634	$ 59,011	12.9%	4.4%	30%
Columbia	29,843	$ 59,457	13.9%	3.9%	28%
Cumberland	110,884	$ 82,849	7.9%	3.0%	
Dauphin	127,758	$ 71,046	12.3%	3.6%	
Fayette	62,181	$ 55,579	17.2%	5.0%	
Indiana	37,637	$ 57,170	14.0%	4.7%	33%
Jefferson	22,069	$ 56,607	13.3%	4.5%	33%
Lackawanna	100,169	$ 63,739	13.1%	4.1%	25%
Lancaster	218,994	$ 81,458	9.1%	2.8%	
Lawrence	39,604	$ 57,585	12.7%	4.8%	31%
Lebanon	60,039	$ 72,532	11.3%	3.1%	
Luzerne	151,347	$ 60,836	15.2%	4.7%	27%
McKean	19,456	$ 57,861	15.4%	4.8%	31%
Monroe	79,662	$ 80,656	12.3%	4.6%	
Montgomery	350,269	$ 107,441	6.6%	3.0%	
Northampton	129,619	$ 82,201	10.6%	3.9%	
Northumberland	43,395	$ 55,952	14.0%	4.4%	34%
Pike	40,172	$ 76,416	9.0%	5.1%	
Schuykill	67,314	$ 63,574	12.2%	4.6%	28%
Susquehanna	21,342	$ 63,968	11.2%	3.6%	29%
Union	16,186	$ 64,914	11.4%	3.3%	33%
Warren	21,612	$ 57,925	13.5%	4.1%	29%
Washington	98,044	$ 74,403	11.5%	3.9%	
Wayne	32,138	$ 59,240	12.8%	4.3%	37%
Wyoming	12,865	$ 67,968	11.6%	4.0%	
York	189,822	$ 79,183	9.1%	3.1%	
	data extracted from US Census			PA rate 3.4%	
				www.workstats.dli.pa.gov	
	least amount of poverty			US rate 3.7%	
	Alice HH Data			https://www.uwp.org/alice/reports/	
	most amount of poverty			www.bls.gov	

EXHIBIT CMH-2

Col. A	Col. B	Col. C	Col. D	Col. E	Col. F
County	**Housing Units (As of 7/1/2022)**	**Median Household Income (in 2022)**	**Persons in Poverty**	**Unemployment Rate (Nov. 2023)**	**ALICE HH**
Adams	43,673	$ 78,975	8.6%	2.7%	
Allegheny	63,131	$ 72,537	11.3%	3.7%	
Beaver	79,271	$ 67,194	10.2%	4.5%	
Berks	171,712	$ 74,617	10.8%	3.8%	
Butler	87,500	$ 82,932	8.9%	3.4%	
Chester	212,731	$ 118,574	5.6%	2.9%	
Clarion	18,846	$ 58,690	13.7%	4.6%	30%
Cumberland	110,884	$ 82,849	7.9%	3.0%	
Lackawanna	100,169	$ 63,739	13.1%	4.1%	25%
Lancaster	218,994	$ 81,458	9.1%	2.8%	
Luzerne	151,347	$ 60,836	15.2%	4.7%	27%
McKean	19,456	$ 57,861	15.4%	4.8%	31%
Monroe	79,662	$ 80,656	12.3%	4.6%	
Montgomery	350,269	$ 107,441	6.6%	3.0%	
Northumberland	43,395	$ 55,952	14.0%	4.4%	34%
Pike	40,172	$ 76,416	9.0%	5.1%	
Schuykill	67,314	$ 63,574	12.2%	4.6%	28%
Washington	98,044	$ 74,403	11.5%	3.9%	
York	189,822	$ 79,183	9.1%	3.1%	
	data extracted from US Census			PA rate 3.4%	
				www.workstats.dli.pa.gov	
	least amount of poverty			US rate 3.7%	
	Alice HH Data			https://www.uwp.org/alice/reports/	
	most amount of poverty			www.bls.gov	

EXHIBIT CMH-3

April 2023 ALICE (Asset Limited, Income Constrained, Employed) Report
https://www.unitedforalice.org/state-reports-mobile

	ALICE Household Survival Budget	Average Monthly Costs, Pennsylvania, 2021	
	Description, Update, and Sources	One Adult	Family of Four
Housing	**Rent:** Fair Market Rent (40th percentile) for an efficiency, one-bedroom, or two-bedroom apartment (based on family size), adjusted in metro areas using the American Community Survey (ACS) — minus utilities **Utilities:** As captured by the Community Expenditure Survey (CEX) **Update:** Costs of rent and utilities are now shown separately. ***Sources:*** *ACS metro housing costs and U.S. Department of Housing and Urban Development (rent); CEX (utilities)*	$519 rent + $154 utilities	$628 rent + $292 utilities

Figure 1. ALICE Household Survival Budget and Federal Poverty Level, Pennsylvania, 2021

	Federal Poverty Level Census income thresholds that vary by household size but not geography to determine who is in poverty	ALICE Household Survival Budget The cost of the essentials needed to live and work in the modern economy, by household type and location
Family of Four		
Monthly Total	$2,208	$5,483
Annual Total	$26,500	$65,796
Percent Change, 2019–2021	3%	12%
Single Adult		
Monthly Total	$1,073	$2,193
Annual Total	$12,880	$26,316
Percent Change, 2019–2021	3%	14%

Note: Percent change is pre-tax.

Sources: ALICE Household Survival Budget, 2021; Assistant Secretary for Planning and Evaluation (ASPE), HHS poverty guidelines for 2021, U.S. Department of Health and Human Services

EXHIBIT CMH-4

Line #	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. K
1	Buyer	PAWC	PAWC	PAWC	PAWC	PAWC	PAWC	PAWC	PAWC	PAWC	PAWC	**Total**
2	Seller	McKeesport	Sadsbury	Exeter	Steelton	Kane	Royersford	Upper Pottsgrove	Valley	Valley	City of York	
3	Utility Type	Wastewater	Wastewater	Wastewater	Water	Wastewater	Wastewater	Wastewater	Wastewater	Water	Wastewater	
4	Type of System	Integrated	Collection	Integrated	Distribution	Integrated	Collection	Collection	Distribution	Collection	Collection	
5	County	Allegheny	Chester	Berks	Dauphin	McKean	Montgomery	Montgomery	Chester	Chester	York	
6	Docket No.	A-2017-2606103	A-2018-3002437	A-2018-3004933	A-2019-3006880	A-2019-3014248	A-2020-3019634	A-2020-3021460	A-2020-3019859	A-2020-3020178	A-2021-3024681	
7	As-Filed Purchase Price	$ 162,000,000	$ 9,250,000	$ 96,000,000	$ 22,500,000	$ 17,560,000	$ 13,000,000	$ 13,750,000	$ 7,325,000	$ 13,950,000	$ 235,000,000	**$ 590,335,000**
8	Number of Customers	12,780	998	9,015	2,415	2,019	1,620	1,447	1,670	3,125	13,747	**$ 48,836**
9	As-Filed Purchase Price per Customer	$ 12,676	$ 9,269	$ 10,649	$ 9,317	$ 8,697	$ 8,025	$ 9,502	$ 4,386	$ 4,464	$ 17,095	**$ 94,080**
10	Net Book Value	$ 80,085,602	$ 7,480,573	$ 40,057,634	$ 14,433,435	$ 12,070,455	$ 4,545,699	$ 8,970,325	$ 5,370,438	$ 9,214,738	$ 97,105,106	**$ 279,334,005**
11	Amount Over (Under) Net Book Value	$ 81,914,398	$ 1,769,427	$ 55,942,366	$ 8,066,565	$ 5,489,545	$ 8,454,301	$ 4,779,675	$ 1,954,562	$ 4,735,262	$ 137,894,894	**$ 311,000,995**
12	Final Rate Base	$ 158,000,000	$ 8,300,000	$ 92,000,000	$ 20,500,000	$ 17,560,000	$ 13,000,000	$ 13,750,000	$ 7,325,000	$ 13,950,000	$ 231,500,000	**$ 575,885,000**
13	Final Amount Over (Under) Net Book Value	$ 77,914,398	$ 819,427	$ 51,942,366	$ 6,066,565	$ 5,489,545	$ 8,454,301	$ 4,779,675	$ 1,954,562	$ 4,735,262	$ 134,394,894	**$ 296,550,995**

CMH-4

EXHIBIT CMH-5

REVENUE REQUIREMENT SHORTFALL[1]			
PAWC	McKeesport	$	16,737,759
PAWC	Sadsbury	$	94,062
PAWC	Exeter	$	5,378,000
PAWC	Steelton	$	1,117,000
PAWC	Kane	$	1,265,000
PAWC	Royersford	$	1,210,343
PAWC	Upper Pottsgrove	$	1,002,000
PAWC	Valley W	$	1,697,000
PAWC	Valley WW	$	(1,413,000)
PAWC	City of York	$	17,557,000
TOTAL ANNUAL REVENUE DEFICIENCY		**$**	**44,645,164**
PENDING CASES			
PAWC	BASA	$	17,895,000
PAWC	Brentwood	$	664,000
PAWC	Towamencin	$	7,731,000
TOTAL PENDING ANNUAL REVENUE DEFICIENCY		**$**	**26,290,000**

1Application of Pennsylvania-American Water Company under Section 1329 of the Pennsylvania Public Utility Code, A-2017-2606103 (Order October 11, 2017) (McKeesport); In Re: Application and related filings of Pennsylvania-American Water Company under Sections 507, 1102(a), and 1329 of the Pennsylvania Public Utility Code, A-2018-3002437 (Order October 25, 2018) (Sadsbury); Application of Pennsylvania-America Water Company under Sections 507, 1102, and 1329 of the Public Utility Code, A-2018-3334933 (Order October 3, 2019) (Exeter); Application of Pennsylvania-American Water Company Pursuant to Sections 1102 and 1329 of the Public Utility Code, A-2019-3006880 (Order October 3, 2019) (Steelton); Application of Pennsylvania-American Water Company, Pursuant to the Pennsylvania Public Utility Code, 66 Pa.C.S. § 1102(a) and 1329, A-2019-3014248 (Order June 18, 2020) (Kane); Application of Pennsylvania-American Water Company – Wastewater Division under section 1329 of the Pennsylvania Public Utility Code, A-2020-3019634 (Order May 7, 2021) (Royersford); Application of Pennsylvania-American Water Company – Wastewater Division under sections 1102 and 1329 of the Public Utility Code, A-2020-3021460 (Order September 15, 2021) (Upper Pottsgrove); Application of Pennsylvania-American Water Company under Section 1102(a) of the Public Utility Code, A-2020-3019859 (W), A-2020-3020178 (WW) (Order October 28, 2021) (Valley Water/Wastewater); In re: Application of Pennsylvania-American Water Company under Section 1102(a) of the Pennsylvania Public Utility Code, A-2021-3024681 (Order April 14, 2022) (City of York).

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Christine Maloni Hoover, Deputy Consumer Advocate, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 1 **Corrected**, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: March 6, 2024

Signature: Christine Maloni Hoover

Christine Maloni Hoover

Witness Address:
Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket Nos.: R-2023-3043189 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	
Pennsylvania-American Water Company	:	

SUPPLEMENTAL DIRECT TESTIMONY

OF

CHRISTINE MALONI HOOVER

On behalf of the

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

Date Served: February 13, 2024

Q. Please state your name, address and occupation.

A. My name is Christine Maloni Hoover. My business address is 555 Walnut Street, 5th Floor, Harrisburg, PA 17101. I am employed by the Office of Consumer Advocate (OCA) as the Deputy Consumer Advocate. I appear in this case as a witness on behalf of the OCA.

Q. What is the purpose of this testimony?

A. I am submitting Supplemental Direct Testimony with regard to testimony by PAWC's customers submitted at the public hearings on PAWC's proposed rate increase that was not already addressed in the OCA's Direct Testimony. Specifically, I will supplement my Direct Testimony on consumers' request for the PUC to reject PAWC's proposed rate increase and consumer testimony regarding their experience with quality issues (quality of service and customer service). However, I am not addressing all testimony or concerns raised at the Public Input Hearings, recognizing that the sworn consumer testimony was transcribed and is part of the evidentiary record.

Q. Please describe consumer testimony that requested the Commission to reject PAWC's proposed rate increase.

A. An overwhelming number of consumers and public officials requested that the Commission outright reject or deny PAWC's proposed rate increase. See, for example, Transcript at pages 182, 183-184, 408, 513, 520-521, 530, 536, 542, 610, 616, 869, 872, 915, 964, 1008, 1046, 1066, 1100, 1013, 1657, 1789, 1823, 1848, 1860, 1875. I believe this testimony supports the OCA's recommendations in this proceeding, including a substantial reduction to the Company's requested revenue requirement increase and rejection of new surcharges and proposed alternative rate mechanisms.

Q. Please describe your concern regarding consumer testimony that raised quality of service and customer service issues.

A. It is concerning how many consumers testified about quality of service issues relating to the look, taste, and smell of the water delivered by PAWC. Mr. Fought's Supplemental Direct Testimony summarizes many of the concerns raised by consumers, including dirty or discolored water and bad taste and odor. (OCA Statement 7 Supp.). Other consumers raised concerns about customer service including inconsistent billing cycles and PAWC's billing for protection plan services, as addressed in Ms. Alexander's Supplemental Direct Testimony (OCA Statement 6 Supp.). Although Mr. Fought and Ms. Alexander set forth a number of consumer concerns in their Supplemental Direct Testimony, it is important for PAWC to fully address all of the concerns raised in the consumers' sworn testimony at the Public Input Hearings. The OCA will consider the evidence from the Public Input Hearings and PAWC's rebuttal in making any recommendations regarding whether PAWC is meeting its obligations under Section 1501 of the Public Utility Code (66 Pa. C.S. § 1501), and regarding the application of Sections 523 and 526 of the Public Utility Code (66 Pa. C.S. §§ 523, 526) in its final recommendations to the ALJs and to the Commission.

Q. Does this conclude your supplemental direct testimony?

A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Christine Maloni Hoover, Deputy Consumer Advocate, hereby state that the facts above set forth in my Supplemental Direct Testimony, OCA Statement 1 - Supp., are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: February 13, 2024

Signature: Christine Maloni Hoover

Christine Maloni Hoover

Witness Address:
Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket Nos.: R-2023-3043189 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	
Pennsylvania-American Water Company	:	

REBUTTAL TESTIMONY

OF

CHRISTINE MALONI HOOVER

On behalf of the

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

Date Served: February 21, 2024

Q. Please state your name, address and occupation.

A. My name is Christine Maloni Hoover. My business address is 555 Walnut Street, 5th Floor, Harrisburg, PA 17101. I am employed by the Office of Consumer Advocate (OCA) as the Deputy Consumer Advocate. I appear in this case as a witness on behalf of the OCA.

Q. Have you previously submitted testimony in this case?

A. Yes. I prepared Direct Testimony and Supplemental Direct Testimony.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my Rebuttal Testimony is to respond to certain aspects of the Direct testimony of the Honorable Paige G. Cognetti, Mayor of the City of Scranton (Scranton St. 1) and the Direct Testimony of Representative Kyle Donahue (Donahue St. 1). Other OCA witnesses submitting rebuttal testimony are Mr. Garrett (OCA St. 3R), Mr. Mierzwa (OCA St. 4R), and Mr. Colton (OCA St. 5R).

Scranton St. 1 and Donahue St. 1

Q. Please briefly describe your understanding of PAWC's proposed Section 1311(c) shift in this case.

A. PAWC calculated an additional wastewater revenue requirement of $76 million. PAWC proposes to shift $71 million of that increased revenue requirement to water customers. The Company's wastewater divisions include the Sanitary Sewer Systems (SSS) division and the Combined Sewer System (CSS) division. The CSS division includes the City of Scranton, McKeesport, and Kane. PAWC's $71 million shift proposal includes a shift of $16,007,052 of the additional revenue requirement for the CSS division.[1] That proposed

[1] Prior to this rate filing, there were separate cost of service studies for the City of Scranton, McKeesport, and Kane.

shift of $16,007,052 is greater than the Company's claimed revenue requirement increase of $15,780,126 for the CSS division by $226,926 ($16,007,052 - $15,780,126 = $226,926). It is a 101% revenue shift. This means that the Company's proposed shift to water customers *exceeds* the Company's claimed revenue requirement increase for the CSS division.

Q. What is your understanding of Mayor Cognetti's testimony and Representative Donahue's testimony regarding the Act 11 shift?

A. I want to acknowledge that I understand that both Mayor Cognetti and Representative Donahue do not want to see any increase for Scranton customers. The OCA shares the goal that any increase for PAWC should be as low as possible. Where we diverge is that if any increase is granted by the Commission, then it is the OCA's position that all customers should share in the cost of that increase. Mayor Cognetti and Representative Donahue use as their starting point PAWC's ***proposal*** to have its water customers pay 94% of PAWC's calculated *wastewater* revenue requirement increase, with no proposed revenue increase paid by consumers in the CSS division. Mayor Cognetti and Representative Donahue state that the OCA's position is to shift water revenue requirement to wastewater customers. Scranton St. 1 at 3-4; Donahue St. 1 at 3-4. This is not the OCA's position.

The OCA does not propose to shift water revenue requirement to wastewater customers. Instead, the OCA has proposed (1) a significantly less overall revenue requirement increase for both water and wastewater customers, and (2) to shift less of the wastewater revenue requirement to water customers.

Q. How does the OCA's recommendation impact PAWC customers in the City of Scranton?

A. First, the OCA recommends a lower overall revenue requirement increase to the CSS division ($7.3 million or 9.3%), compared to PAWC's proposed revenue increase ($15.8 million or 20.1%). *See* OCA St. 2, Exh. LA-1. This benefits all of PAWC's customers, including those in Scranton.[2] Second, the OCA recommends a shift of half of the OCA-reduced CSS revenue requirement to water customers, which would result in a 4.7% revenue increase remaining for the customers in the CSS division. *Id.*; OCA St. 4, Table 5 . Even under the OCA's proposal, the customers in the CSS division would not be paying the full costs for their wastewater service. The customers in the CSS division would be paying only 50% of the increase needed to cover their full cost of service.

Any shift of wastewater revenue requirement under Act 11 impacts all water customers, not just water customers in the City of Scranton. Even under the OCA's proposal, water customers, most of whom are not wastewater customers, would see an additional revenue requirement increase of $18.9 million, or 2.2% (which doubles the increase for water customers under OCA's recommended revenue requirement increase for the Water division) related solely to the shift of costs that the SSS and CSS wastewater customers are not covering for their wastewater service. *See* OCA St. 2, Exh. LA-1.

[2] In her testimony (p. 5), Mayor Cognetti refers to a statement regarding the City's financial standing that she attributes to OCA. In response to OCA Set 1, Q. 1 to Scranton, Mayor Cognetti's attachment does not contain any such statement from OCA. See attached Exhibit CMH-6.

Q. Mayor Cognetti discusses the Asset Purchase Agreement (APA) for PAWC's 2016 purchase of the Scranton Sewer Authority and the Compound Annual Growth Rate (CAGR) provision that would limit rate increases. Please address that testimony.

A. Mayor Cognetti included the APA as an exhibit to her direct testimony (Exhibit 1) and discusses the CAGR provision in the APA. Scranton St. 1 at 5. Even though the CAGR is in the APA, the Commission's statutory rate setting authority is not voided or otherwise limited in any way by this agreement. *Joint Application of Pennsylvania-American Water Co. and the Sewer Authority of the City of Scranton*, Docket No. A-2016-2537209, slip op. at 70 (Order entered October 19, 2016.)

Furthermore, although PAWC promised the Scranton Sewer Authority in the APA to limit the future rate increases it proposes in accordance with the CAGR provision of the APA, since then PAWC has never proposed in any rate case that its shareholders absorb any cost difference between its calculated revenue requirement for the Scranton combined sewer system and the promised rate limit.[3] Rather, since acquiring the Scranton Sewer Authority system in 2016, PAWC has only ever proposed in its rate cases to shift the cost difference to its water customers under Act 11.

Q. **Does this conclude your rebuttal testimony**?

A. Yes. To the extent I have not addressed an issue or proposal raised by the other parties in this proceeding, it should not be construed that I agree with the same.

[3] In his testimony discussing the impact of PAWC's rate increases on his constituents, Representative Donahue states, "PAWC has a monopoly on water and sewer in my district it's time the 30-billion-dollar company invest some of their profits into the infrastructure work and stop burdening the ratepayers." Donahue St. 1 at 5. Similarly, in response to OCA Set 1-2.c to Scranton, Ms. Cognetti stated her position that "the Water Company is able to afford the cost difference without placing the burden on ratepayers." In making this response, she referred to her response to OCA Set 1-2.b., where she stated "it is believed and therefore averred that the Water Company is able to afford the changes that it needs to make without placing the burden on water *or* wastewater customers at this time, including and especially those within the City of Scranton." *See* Exhibit CMH-6.

EXHIBIT CMH-6

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission v. Pennsylvania-American Water Company	Docket Nos. R-2023-3043189 (Water) R-2023-3043190 (Wastewater)

THE CITY OF SCRANTON'S RESPONSES TO INTERROGATORIES OF THE OFFICE OF CONSUMER ADVOCATE TO THE CITY OF SCRANTON SET I

AND NOW COMES the Intervenor, THE CITY OF SCRANTON, by and through its counsel, The City of Scranton Law Department, and hereby responds to the Office of the Consumer Advocate's First Set of Interrogatories, in accordance with 52 Pa. Code § 5.342, as follows:

1. In the Direct Testimony of the Honorable Paige G. Cognetti, Mayor of the City of Scranton, Scranton St. 1, at p. 5, lines 137-139, Ms. Cognetti states that the OCA stated that "since the City is doing better financially, the terms of the APA are negotiable to permit the relief that they are seeking." Scranton St. 1 at 5.

    a. Please cite to a written document where the OCA has made this statement.

    ANSWER: Please see a copy of an e-mail chain attached hereto as Exhibit A in response to the same. Answering Intervenor respectfully requests the opportunity to supplement this response and the responses contained herein and ahead of the hearings scheduled for this coming March.

    b. If the above-referenced statement is based on oral discussions between the City of Scranton and the OCA, please describe the date, time, location of such discussion, and provide the name of the individuals from the City of Scranton and the OCA who participated in that discussion.

    ANSWER: Denied at this time. By way of further answer, a reasonable inquiry concerning this request has been made, and the information known or readily obtainable to Answering Intervenor is insufficient to enable the Answering Intervenor to adequately respond to this request. Answering Intervenor respectfully requests the opportunity to supplement this response and the responses contained herein and ahead of the hearings scheduled for this coming March.

2. Ms. Cognetti references and discusses that certain Asset Purchase Agreement between PAWC and the City of Scranton dated March 29, 2016 ("APA") pursuant to which PAWC acquired the assets of the City of Scranton's combined sewer stormwater system

("Scranton System"). In her testimony, Ms. Cognetti discusses Section 7.07(d) of the APA where PAWC agreed to propose a rate increase in annual revenues associated with the provision of wastewater service to the customers of the Scranton System over a ten-year period no higher than 1.9% Compound Annual Growth Rate ("annual 1.9% CAGR rate increase limit" or "rate limits").

b. Where there is a cost difference, does Ms. Cognetti believe that it is fair or reasonable that PAWC should collect some or all of that cost difference from PAWC's water customers, including water customers located in the Scranton service area?

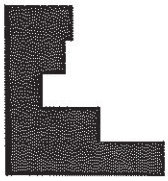
ANSWER: Denied as stated. Due to the Water Company's rate increases over the last few years and pending purchase of another wastewater system, it is believed and therefore averred that the Water Company is able to afford the changes that it needs to make without placing the burden on water *or* wastewater customers at this time, including and especially those within the City of Scranton.

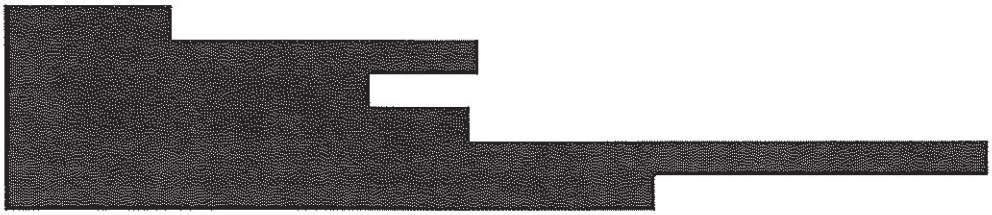
c. Where there is a cost difference, does Ms. Cognetti believe that it is fair or reasonable that PAWC's shareholders should absorb some or all of that cost difference?

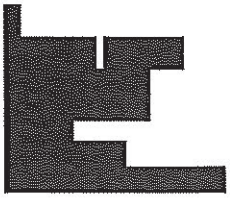
ANSWER: Admitted in part, denied in part. Mayor Cognetti's position is that the Water Company is able to afford the cost difference without placing the burden on ratepayers. As to how the Company can afford the same, Mayor Cognetti would need more financial information to answer the same. Please see answer b, above, for more information.

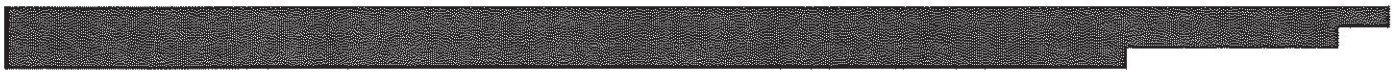
EXHIBIT A

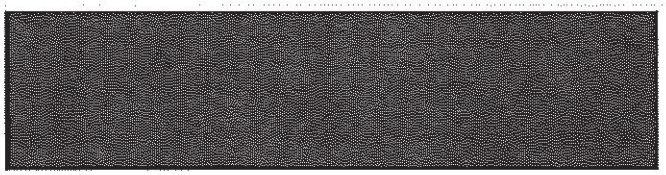
Katherine Kennedy

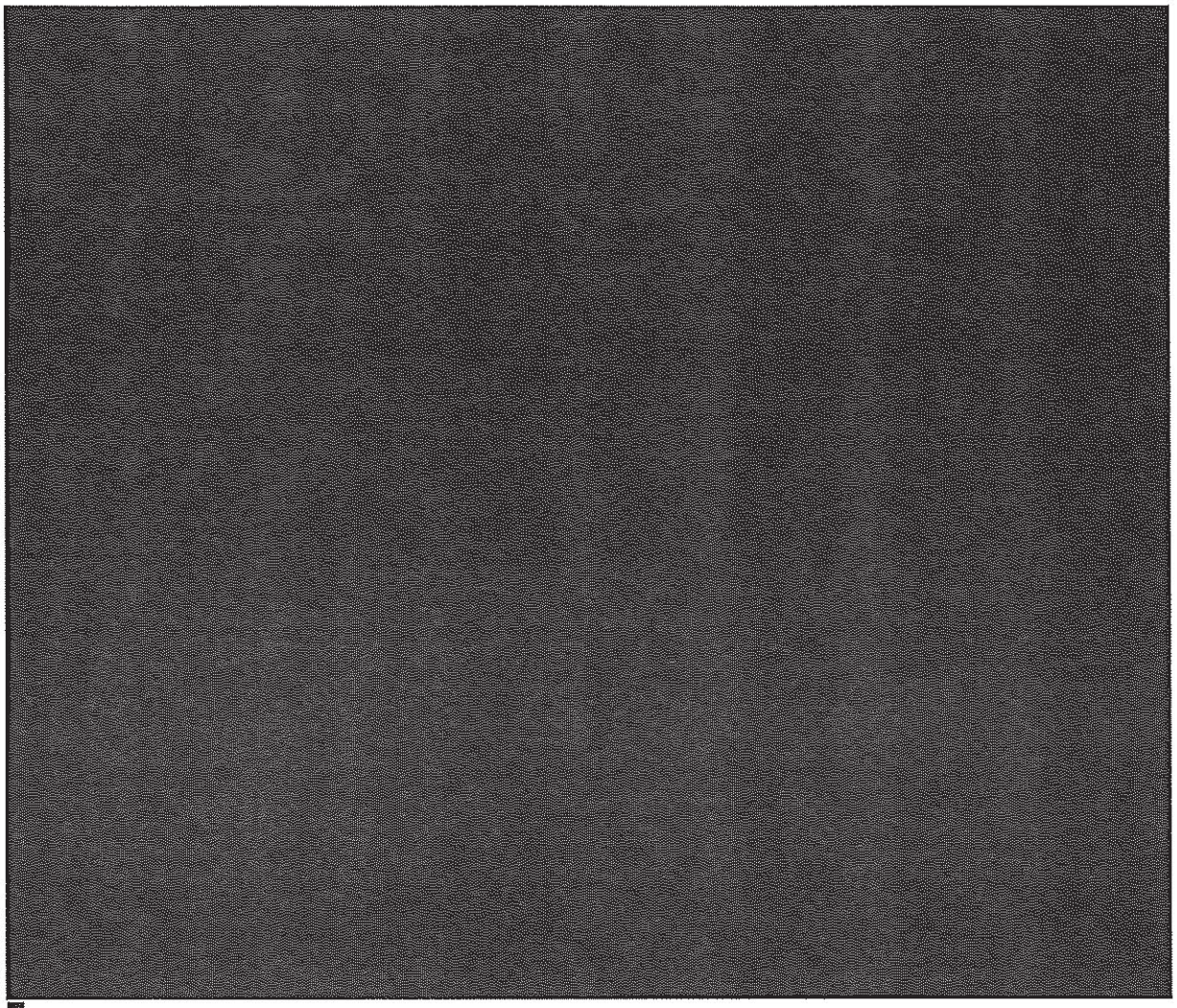


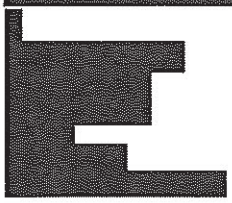












From: Gannon, Erin L. <EGannon@paoca.org>
Sent: Monday, December 4, 2023 4:52 PM
To: Andrew Cutillo <acutillo@scrantonpa.gov>
Cc: Hoover, Christine Maloni <CHoover@paoca.org>; El Atieh, Melanie J. <MElAtieh@paoca.org>
Subject: RE: Scranton Sewer Sale & Rate Changes

Hi Andrew.

The letter does not need to be filed prior to the Commission's next meeting. It would be helpful to have it filed prior to the prehearing, if that is possible. The prehearing could be as soon as the week of December 18.

- Regarding SLIBCO, all documents filed with the PUC related to the acquisition are available here: https://www.puc.pa.gov/docket/A-2020-3023369 The acquisition closed in fall 2021. PAWC adopted the

then-existing SLIBCO rates (first attachment). In PAWC's 2022 base rate case, they kept rates pretty similar. In the 2023 rate case, PAWC proposes to move SLIBCO into Rate Zone 1. This chart summarizes PAWC's proposed rate changes:

Zone 3 - SLIBCO

All Charges		Present Rate		Proposed Rate		I Inc
5/8 - Meter	$	63.55	$	20.00	$	(4
3/4 - Meter	$	63.55	$	30.00	$	(3
1 - Meter	$	63.55	$	50.00	$	(1
1 1/2 - Meter	$	63.55	$	82.00	$	1
2 - Meter	$	63.55	$	132.00	$	6
3 - Meter	$	63.55	$	246.00	$	18
4 - Meter	$	136.30	$	308.00	$	17
6 - Meter	$	136.30	$	461.00	$	32
8 - Meter	$	309.30	$	893.00	$	58
Current Volumetric Rates						
First 20,000 Gallons	$	1.8940			$	(1.8
Next 80,000 Gallons	$	1.6780			$	(1.(
Over 100,000 Gallons	$	1.3810			$	(1.3
Commercial - First 16,000 gallons			$	2.0346	$	2.(

- Regarding complaints, this page on the PUC's website contains information about filing informal and formal complaints: https://www.puc.pa.gov/complaints/

- Regarding the limitations on rate increases in Scranton's asset purchase agreement. There were two, related provisions – one to adjust the purchase price if revenues from the Scranton wastewater system exceed a 1.9% CAGR at the end of year 10. That proposed variance adjustment was withdrawn by Scranton and PAWC. The second provision was that rate increases would be limited to avoid producing revenues in excess of 1.9% CAGR at the end of year 10 following closing. For years 11-13, PAWC would propose to move the system in equal increments towards zone 1 rates. In the current rate case, PAWC states that in the 2022 rate case, revenues for Scranton increased by 63.55%, which exceeds the CAGR so PAWC is proposing no rate increase in the current rate case. (See fourth attachment to this email.) But that proposed level of rates will not cover PAWC's cost to serve customers in the CSS rate zone (that Scranton is part of) so PAWC is going to take the $16M revenue deficiency and add it to the rate increase for water customers.

Please let us know if you have questions or we can provide any additional information. - Erin

---

From: Andrew Cutillo <acutillo@scrantonpa.gov>
Sent: Monday, December 4, 2023 3:42 PM
To: Gannon, Erin L. <EGannon@paoca.org>
Cc: Hoover, Christine Maloni <CHoover@paoca.org>; El Atieh, Melanie J. <MElAtieh@paoca.org>
Subject: Re: Scranton Sewer Sale & Rate Changes

Thank you all again so much for your time! Very, very helpful.

Quick question -- if the City sends a letter to the Commission requesting public input hearings, would that need to be before the PUC's next mtg (on Dec 7)? I'm wondering if we have time to get such a letter co-signed by our city council via a formal resolution.

Also, if you'd prefer I only bug one or two of us, just let me know.

Thanks,
Andrew

Andrew Cutillo

Deputy Solicitor

City of Scranton

he/him/his

570-348-4105

acutillo@scrantonpa.gov

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From: Gannon, Erin L. <EGannon@paoca.org>
Sent: Friday, December 1, 2023 9:26 AM
To: Andrew Cutillo <acutillo@scrantonpa.gov>
Cc: Hoover, Christine Maloni <CHoover@paoca.org>; El Atieh, Melanie J. <MElAtieh@paoca.org>
Subject: RE: Scranton Sewer Sale & Rate Changes

Invitation sent. We look forward to talking with you. Have a good weekend!

From: Andrew Cutillo <acutillo@scrantonpa.gov>
Sent: Friday, December 1, 2023 9:09 AM
To: Gannon, Erin L. <EGannon@paoca.org>
Cc: Hoover, Christine Maloni <CHoover@paoca.org>; El Atieh, Melanie J. <MElAtieh@paoca.org>
Subject: RE: Scranton Sewer Sale & Rate Changes

> You don't often get email from acutillo@scrantonpa.gov. Learn why this is important

Excellent, thanks so much. 2:00pm on Monday works well on my end.

Sincere thanks again, and have a great weekend!

Andrew

--
Andrew Cutillo
Deputy Solicitor
City of Scranton
he/him/his
570-348-4105
acutillo@scrantonpa.gov

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From: Gannon, Erin L. <EGannon@paoca.org>
Sent: Friday, December 1, 2023 8:44 AM
To: Andrew Cutillo <acutillo@scrantonpa.gov>
Cc: Hoover, Christine Maloni <CHoover@paoca.org>; El Atieh, Melanie J. <MElAtieh@paoca.org>
Subject: RE: Scranton Sewer Sale & Rate Changes

Good morning, Mr. Cutillo. We are available at 2pm or 3pm on Monday or Tuesday. Please let us know what works best for you and we will send a video call invite.

Thank you. – Erin Gannon

From: Andrew Cutillo <acutillo@scrantonpa.gov>
Sent: Thursday, November 30, 2023 8:25 PM
To: Hoover, Christine Maloni <CHoover@paoca.org>; Gannon, Erin L. <EGannon@paoca.org>; El Atieh, Melanie J. <MElAtieh@paoca.org>
Subject: Re: Scranton Sewer Sale & Rate Changes

Some people who received this message don't often get email from acutillo@scrantonpa.gov. Learn why this is important

Thanks so much. Looking forward to chatting.

I have wide availability Monday and Tuesday next week. Feel free to recommend a time or two if that's convenient for you. Or else happy to explore other days.

I'm also happy to set up a Teams video call, or defer to your preference.

Thanks again.

Best,
Andrew

--

Andrew Cutillo

Deputy Solicitor

City of Scranton

he/him/his

570-348-4105

acutillo@scrantonpa.gov

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From: Hoover, Christine Maloni <CHoover@paoca.org>
Sent: Thursday, November 30, 2023 5:38 PM
To: Andrew Cutillo <acutillo@scrantonpa.gov>
Subject: RE: Scranton Sewer Sale & Rate Changes

Dear Mr. Cutillo,

Thank you for reaching out to me. We certainly are able to discuss the current rate filings and the interplay of the 1.9% CAGR from the APA between PAWC and the City of Scranton for the sale of the wastewater assets. Erin Gannon and Melanie El Atieh are the senior attorneys working on the rate case filing. Their email addresses are egannon@paoca.org and melatieh@paoca.org. I don't know if they will be able to talk to you tomorrow, so if you can provide us with some dates next week, they will be able to set up a time to talk.

Christine Maloni Hoover
Deputy Consumer Advocate

PA Office of Consumer Advocate
555 Walnut Street, 5Th Floor, Forum Place
Harrisburg, PA 17101-1923
(717) 783-5048
(800) 684-6560
www.oca.pa.gov

From: Andrew Cutillo <acutillo@scrantonpa.gov>
Sent: Wednesday, November 29, 2023 2:22 PM
To: Hoover, Christine Maloni <CHoover@paoca.org>
Subject: Scranton Sewer Sale & Rate Changes

Good afternoon Atty Hoover,

I'm writing on behalf of the City of Scranton to discuss the recent proposed water rate increases for our residents. Residents have been *quite* vocal in their opposition and have been looking to our administration for advocacy.

In particular, we have been reviewing the 2016 sewer system sale agreement to make sure that all provisions of that agreement with respect to rate increases are being followed.

I noticed your name and Atty Erin Gannon's name on the OCA brief and thought you might be most familiar with the situation (and any implications for rate changes). I confess I haven't read all 1500 pages yet, but we have identified at least one potentially relevant provision—regarding a 1.9% CAGR on wastewater rates.

Would you (or Erin or another colleague) be willing to chat briefly sometime this week? Happy to schedule a time or happy to play phone tag – 570-878-8918 is my cell.

Thanks so much,
Andrew

--
Andrew Cutillo
Deputy Solicitor
City of Scranton
he/him/his
570-348-4105
acutillo@scrantonpa.gov

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BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Christine Maloni Hoover, Deputy Consumer Advocate, hereby state that the facts above set forth in my Rebuttal Testimony, OCA Statement 1R, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: February 21, 2024

Signature: Christine Maloni Hoover
Christine Maloni Hoover

Witness Address:
Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101

*4865-9162-1285

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket Nos.: R-2023-3043189 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	
Pennsylvania-American Water Company	:	

SURREBUTTAL TESTIMONY

OF

CHRISTINE MALONI HOOVER

On behalf of the

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

Date Served: March 4, 2024

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Introduction

Q. Please state your name, address and occupation.

A. My name is Christine Maloni Hoover. My business address is 555 Walnut Street, 5th Floor, Harrisburg, PA 17101. I am employed by the Office of Consumer Advocate (OCA) as the Deputy Consumer Advocate. I appear in this case as a witness on behalf of the OCA.

Q. Have you previously submitted testimony in this case?

A. Yes. I prepared Direct Testimony, Supplemental Direct Testimony, and Rebuttal Testimony.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my Surrebuttal Testimony is to provide an overview of the OCA's surrebuttal testimony and to respond to certain aspects of the Rebuttal testimony of PAWC witnesses Everette (PAWC St. No. 1-R), Swiz (PAWC St. No. 8-R), Rea (PAWC St. No. 10-R), Bulkley (PAWC St. No. 13-R), Ladner (PAWC St. No. 15-R) and Hibbard (PAWC St. No. 16-R). Other OCA witnesses submitting surrebuttal testimony are Mr. Smith (OCA St. 2SR), Mr. Garrett (OCA St. 3SR), Mr. Mierzwa (OCA St. 4SR), Mr. Colton (OCA St. 5SR), Ms. Alexander (OCA St. 6SR), and Mr. Fought (OCA St. 7SR).

Q. Please provide an overview of the OCA's surrebuttal testimony.

A. The OCA's overall position has not changed as a result of PAWC's rebuttal testimony. PAWC's proposed $203.9 million revenue increase[1] and related proposals will have a substantial adverse impact on its customers. The OCA's surrebuttal addresses PAWC's

[1] In rebuttal, PAWC's revised claim supports a revenue requirement of $204.3 million according to PAWC witness Everette. PAWC St. No. 1-R, p. 3. She acknowledges that the Commission cannot approve a revenue requirement increase greater than the $203.9 million in the Company's original filing that was noticed to customers. *Id.*

arguments, but I want to highlight a few points. PAWC's rebuttal testimony incorrectly characterizes the statutory requirements of the Public Utility Code that require the review of service quality and management performance in a base rate proceeding, as will be discussed in more detail in OCA's brief. The OCA continues to oppose the management adder as discussed by Ms. Alexander, Mr. Colton, and Mr. Garrett. PAWC's rebuttal testimony also overlooks the impact of its alternative ratemaking proposals on its customers and blurs the concept of the Fully Projected Future Test Year (FPFTY) that it used to justify its revenue requirement by proposing the Environmental Compliance Investment Charge (ECIC). The ECIC is a new charge that could include all capital expenditures and it would recover quarterly increases for capital, return, and operation and maintenance expenses, rather than adhering to the test year used in rate base/rate of return ratemaking. PAWC's rebuttal testimony in support of its Revenue Decoupling Mechanism (RDM) ignores the significant Public Input Hearing testimony of consumers who testified to the water efficiency and conservation measures they are taking to reduce their monthly water bills, and how they cannot reduce their consumption any further to save money. PAWC's proposed alternative ratemaking mechanisms fail to meet the requirements of Section 1330 of the Public Utility Code. PAWC also unreasonably relies on its proposed enhancements low-income programs to justify its proposed increases.

As I stated in my direct testimony, in addition to the protection that consumers rely on from the Commission under the Public Utility Code, in Pennsylvania the OCA's authorizing statute creates obligations on the Commission to consider consumer interests in rate determinations. OCA St. 1 at 27; 71 Pa. Stat. Ann. § 309-5.

The overview of OCA's surrebuttal testimony is:

- Mr. Smith (OCA St. 2SR) addresses PAWC's rebuttal testimony regarding his exclusion of six proposed acquisitions and the related adjustments to revenue requirement, the problems with PAWC's alternative proposal for the acquisitions, stock-based compensation expense for executives, call center expense, arrearage management plan credits to uncollectibles expense, pension and OPEB expense tracker and production cost tracker, and other components of the revenue requirement. Mr. Smith did not revise his schedules calculating the OCA's revenue requirement deficiency of $43.7 million.[2]

- Mr. Garrett (OCA St. 3SR) addresses PAWC's rebuttal regarding cost of capital and rate of return issues as well as the Company's claim for a 25 basis point management adder to its return on equity.

- Mr. Mierzwa (OCA St. 4SR) responds to PAWC rebuttal that contains revisions to the water and wastewater class cost of service studies, as well as rebuttal testimony about customer charge recommendations, the methodology and size of the Act 11/Section 1311(c) shift, scaleback, winter averaging, the RDM, the ECIC, and the impact on multiple parts of the cost of service and customer confusion. Mr. Mierzwa also responds to rebuttal testimony of other parties' witnesses on issues related to cost of service, Section 1311(c) (Act 11) shift, and tariff riders.

- Mr. Colton (OCA St. 5SR) responds to PAWC rebuttal regarding affordability of PAWC rates at the enterprise level, addresses affordability at the community level, explains that the PAWC rates are unaffordable for low income customers even after receiving PAWC's proposed bill discount, and highlights PAWC's failure to enroll the vast majority of its low-income customers in its bill discount program. Mr. Colton also addresses the rebuttal testimony regarding his conclusions about the impact of PAWC's winter averaging proposal, the RDM, and the ECIC on low-income customers, and PAWC's management adder. Mr. Colton refutes PAWC's assertions about the superiority of its low-income programs.

- Ms. Alexander (OCA St. 6SR) responds to PAWC rebuttal to her recommendations for improving service quality and customer service performance and the impact that the current level of service has on the Company's request, including its request for a management performance adder, the below average performance of the Service Company's call centers and lack of oversight of the third party call center contractors, the program and proposed tariff to terminate service related to third party sewer service providers, PAWC's billing arrangements with American Water Resources, the lack of customer education on high water pressure and pressure reducing valve, and the volatility of the number of days in customer billing cycles.

[2] The calculated revenue deficiency for water operations is $16.1 million and $27.6 million for wastewater operations. OCA St. 1, Exh. LA-1, Sch. A.

- Mr. Fought (OCA St. 7SR) responds to PAWC rebuttal to his recommendations for notifying and educating customers about pressure reducing valves, information provided when customers have normal operating pressure at 100 psi and above, the complaints and Public Input Hearing testimony about water quality, and the Main Extension complaint by the Jefferson Township Municipal Authority.

Q. Please provide an overview of your surrebuttal testimony.

A. In my direct testimony, I concluded that PAWC's proposed revenue requirement and related proposals layering special ratemaking claims and alternative ratemaking mechanisms: (1) do not adequately address service quality, customer service, and affordability of service for low-income customers, (2) unreasonably burdens consumers; and (3) undermine the regulatory compact. OCA St. 1 at 3-11. The OCA's direct testimony and recommendations addressed all of these issues in detail.

PAWC's rebuttal position has not materially changed from its direct testimony and for the most part repeated generalized statements that do not address the actual facts in this case. My conclusion about PAWC's proposals, and the impact those have on its customers, has not changed, and as noted above, the OCA's recommendations have not changed in surrebuttal in any material way.

My surrebuttal testimony addresses PAWC rebuttal testimony that disagrees with my conclusions that PAWC's proposals in this case reduce it and its investors' risks at the expense of its customers, while its requested rate of return does not reflect that shift. I also address rebuttal testimony that responds to arguments that I did not make.

Q. If some point raised in PAWC's rebuttal is not specifically addressed in your surrebuttal testimony, should it be presumed that you agree with the Company?

A. No.

Response to Specific PAWC Witnesses

PAWC witness Hibbard, PAWC St. No. 16-R

Regulatory Compact

Q. Do you have a preliminary comment regarding Mr. Hibbard's testimony on the regulatory compact?

A. Yes. The regulatory compact is a guiding policy and generally accepted by stakeholders in the Pennsylvania regulatory community. Yet, at pages 4-7 of his testimony, Mr. Hibbard makes sweeping statements about my testimony on the regulatory compact, including that I narrowly define the regulatory compact and traditional ratemaking. I disagree with Mr. Hibbard's characterization of my testimony and OCA's position. His testimony is filled with straw man fallacies that are not tied directly to my testimony. For example, he states that I and the OCA reflect an "exclusively consumer-focused viewpoint on Commission responsibilities". PAWC St. No. 16-R at 5. This statement is incorrect. Throughout my testimony, I refer to regulation's benefits to both consumers and utilities (p. 24), the fair rate of return standard in seminal cases (p. 26), the components in setting just and reasonable rates include investors and consumers (p. 27). I explained that the OCA's focus is on providing evidence of consumers' needs while recognizing the requirements of the utility. OCA St. 1 at 28.

Mr. Hibbard also states that I use traditional ratemaking "to imply that the Company's filing somehow deviates from what is appropriately presented by the utility and considered by the Commission in a rate case, and systematically changes the balance of risk." PAWC St. No. 16-R at 5. My testimony does not imply that the Company's filing "deviates" from what is appropriately presented. Rather, my testimony

recommends denial of what is presented because the proposals shift more risk to consumers, are inconsistent with Section 1330 of the Public Utility Code, and otherwise inconsistent with the setting of just and reasonable rates. The facts of the case and the choices made by PAWC in this case are what require the Commission to restrain PAWC's request as monopolistic excesses.

I provide these two examples of Mr. Hibbard's rebuttal because there are many such statements in Mr. Hibbard's testimony that take my testimony (usually not cited by Mr. Hibbard) and refute straw man arguments that he creates.

Q. What is your recommendation on these rate filings?

A. This proceeding clearly presents an opportunity for the Commission to exercise constraint in deciding PAWC's proposals, including PAWC's alternative ratemaking proposals. The OCA's recommendations provide an opportunity for recovery of a reasonable return while protecting customers from unreasonable bill impacts, along with an expansion of the bill discount program and other recommendations that will protect customers from unreasonable rates and service.

Q. At pages 10-11, when Mr. Hibbard states that he will begin to address your specific statements, he states that you have "little or no reference" to the utility's recovery of legitimate costs of meeting its public service obligation (p. 11, lines 16-17). Is he correct?

A. No. I referenced the utility's recovery of legitimate costs numerous times in my testimony. OCA St. 1 at 19, 22-23, 27, 28.

Q. At page 11, line 18, Mr. Hibbard opines that your testimony does not provide any guidance or have probative value in this case. What is your response?

A. This is Mr. Hibbard's opinion, and it is baseless as he has no authority in this proceeding to make such a declaration as he is neither sitting as an Administrative Law Judge nor as a Commissioner. The ALJs and the Commissioners will determine the probative value of all of the testimony in this case, including mine as well as Mr. Hibbard's.

Mr. Hibbard refutes supposed statements that are not in my testimony, essentially creating straw man arguments. For example, he states that there is no utility-consumer balance under the regulatory compact that would enable the Commission to disregard reasonable and prudent costs in favor of protecting customers. (PAWC St. No. 16-R, at 12). This is a truism and irrelevant as I did not testify that reasonable and prudent costs should be disregarded.

Q. Mr. Hibbard accuses you and the OCA of erroneously presuming that the ratemaking process is structurally biased in favor of regulated utilities. PAWC St. No. 16-R at 13. What is your response?

A. Mr. Hibbard appears to believe that hyperbole is a substitute for fact. I stated that traditional cost of service ratemaking should benefit both consumers and public utilities. OCA St. 1 at 24. One of the most beneficial aspects of cost of service ratemaking is the lack of guaranteed recovery for the utility while the utility is obligated to provide adequate, efficient, safe, and reasonable service and facilities. *Id.* As the basis for setting rates moves away from the traditional ratemaking process to alternative mechanisms that guarantee certain cost recovery or otherwise reduces or removes risk for the utility, the

impact on consumers becomes greater and the process tilts towards the utility and its investors.

Q. Mr. Hibbard states that you would have the Commission believe that they should focus primarily or exclusively on consumer interests and that the zone of reasonableness that you discuss would be one-sided. Is that accurate?

A. No. Once again, as discussed above, Mr. Hibbard reaches conclusions that are not reasonable or supported by what is in my testimony.

Q. Mr. Hibbard claims that OCA's dramatic reduction in PAWC's proposed increases would have potential negative impacts and repeats the company's statement that the increase is driven in large part by necessary investments. PAWC St. No. 16-R at 15. Is that accurate?

A. No. The OCA's recommendations result in reasonable revenue requirements that would permit an opportunity for PAWC to recover its reasonable and prudent expenses and earn a reasonable return on its prudent capital investments that are likely to be used and useful in the FPFTY. The OCA did not make any adjustments to the proposed $1.5 billion of gross plant additions through the end of the FPFTY to its existing water and wastewater systems that PAWC witnesses emphasize in rebuttal testimony. Mr. Hibbard even acknowledges that no party challenged the proposed capital expenditures.[3]

The OCA's proposed adjustments to PAWC's claimed rate base, rate of return, expenses, Act 11 allocation, class cost of service allocation, and rate design are consistent with ratemaking principles and precedent. Mr. Hibbard's claims that the OCA's

[3] As explained by Mr. Smith, the OCA's recommended revenue requirement reflects the removal of the rate base for the six acquisitions that have not closed, and Future Test Year (FTY) and FPFTY capital expenditures for the BASA and Brentwood proposed acquisitions. See OCA St. 2SR at 21-27.

recommendation of an increase of $43.7 million in additional annual water and wastewater revenues would cause potential negative impacts are unsupported and should be rejected.

Alternative Ratemaking

Q. Mr. Hibbard thinks there should be no limit on the number of incentives under Section 1330 (PAWC St. No. 16-R at 17-20). What is your response?

A. I did not state that there should be a numerical limit. I discussed the multiple alternative ratemaking mechanisms that PAWC already uses and the two that it proposes in this case to emphasize that these incentive mechanisms cannot be viewed in isolation. Rather, each incentive mechanism has an impact on customers' bills. The proposed RDM and ECIC would be in addition to the cumulative impact of existing mechanisms and also layered over a ratemaking rate base set at the end of the FPFTY. Other OCA witnesses have addressed the problems with the RDM and the ECIC in direct and surrebuttal testimony including that the RDM and ECIC do not meet the legislative policies stated in Section 1330. There is no reasonable basis to approve the RDM and the ECIC, especially given that they would be above and beyond that which is determined to be just and reasonable in this case.

The Commission has the authority to approve alternative ratemaking provisions under Section 1330 of the Public Utility Code, 66 Pa. C.S. § 1330, but the Company's proposal of alternative ratemaking mechanisms is neither entitled to a presumption of being just and reasonable nor is it automatically approved. The determination of whether a proposed alternative ratemaking mechanism should be approved must be addressed in a rate case, based on the facts as presented by the utility subject to the challenge of others

and the scrutiny of the PUC as a regulator whose job it is to restrain a utility's monopolistic tendencies. In this case, PAWC's RDM and ECIC should be rejected, for the reasons discussed in detail in my direct testimony, as well as the testimony of Mr. Mierzwa, Mr. Colton, and Ms. Alexander.

Q. Mr. Hibbard discusses Section 1311(c) on page 20 and states that the wastewater costs are "spread among the common customer base of the water and wastewater utilities." Is that accurate?

A. No. The large majority of PAWC water customers are not PAWC wastewater customers. Nor has the Commission required that the wastewater and water customer base be the same. Given these facts, PAWC's proposals to shift 94% of its wastewater revenue requirement to water customers and to recover no increase from existing wastewater customers are not reasonable, as addressed in the testimony of Mr. Mierzwa.

Q. Mr. Hibbard states that the RDM and the ECIC are different alternative ratemaking mechanisms than what PAWC currently has. PAWC St. No. 16-R, p. 21-22. Do you agree?

A. The RDM may be different than existing mechanisms because it shifts the risk of revenue fluctuations, but I would note that PAWC already reflects a declining consumption adjustment in the future test year and FPFTY and the OCA reflected a declining per customer water usage in the projection of 2025 water sales. OCA St. 4SR at 22-23, Sch. JDM-6SR, p. 3. The ECIC is set up like a much broader mechanism to the Distribution System Improvement Charge (DSIC) mechanism with none of the safeguards. The OCA's testimony, including surrebuttal testimony from Mr. Mierzwa and Mr. Colton, provides a full discussion of why the RDM and the ECIC should be rejected.

Q. Mr. Hibbard characterizes your position on traditional ratemaking as narrow and that the use of alternative ratemaking renders the ratemaking process non-traditional. (PAWC St. No. 16-R at 22-23). Do you agree?

A. No. I disagree that I have a "narrow view" of traditional ratemaking or that the use of some alternative ratemaking provisions in the Public Utility Code makes the entire rate regulation system "non-traditional." I described the current ratemaking in Pennsylvania as not traditional ratemaking "in the strictest sense" because of certain existing statutory provisions. OCA St. 1 at 29. Traditional ratemaking for water and wastewater utilities in Pennsylvania has been rate base/rate of return for a very long time. Since the 1980s, that has included the use of depreciated original cost to calculate the rate base. In my direct testimony, I described four alternative ratemaking provisions that were added to the Public Utility Code between 2012 and 2016 and are used by PAWC and reflected in its rates. OCA St. 1 at 4, 29-40. Those four statutory provisions are outside of traditional ratemaking because each creates an exception to traditional ratemaking. The DSIC permits a return on and of capital costs between rate cases, which moves that recovery outside of the test year used in a rate case and increases rates between rate cases. It also permits capital cost recovery through a surcharge. The FPFTY permits a full year projection to be included in rates as of day one and thus permits property that is not (but projected to be) used and useful as of the time rates are set to be reflected in rates. The use of fair market valuation as defined in Section 1329 and in the type of acquisition covered by Section 1329 is an exception to the use of depreciated original cost to set rates. Section 1311(c) permits the shift of wastewater revenue requirement to water

customers and is the exception added to a section that prohibits utilities that provide two types of service from combining the revenue requirements.

These statutory provisions created exceptions to traditional ratemaking concepts of test years, valuation, and recovery of separate utility service revenue requirements.

Fair Market Value

Q. Mr. Hibbard opines on Section 1327 and fair market valuation under Section 1329 (PAWC St. 16-R at 24-27). What is your response?

A. Once again, Mr. Hibbard creates a straw man argument about Section 1329 valuations. The OCA did not propose any adjustments to the ratemaking rate base that was approved in the ten acquisitions that are already closed and reflected in PAWC's rate base in its filing. Notably, Mr. Hibbard did not provide any evidence to refute the revenue requirement shortfall that is created and that is shifted to water customers under PAWC's proposed Section 1311(c) shift. Regarding the six proposed acquisitions that have not closed or met the other criteria set forth by Mr. Smith, the OCA removed the rate base additions and ratemaking claims for BASA and Brentwood, per Mr. Smith's surrebuttal testimony at pages 23-29.

At page 26, line 18, Mr. Hibbard characterizes the revenue requirement deficiencies created by the FMV acquisitions as "irrelevant". This statement is incorrect. I provided the annual revenue requirement shortfall that existed at closing on the ten FMV acquisitions that are reflected in PAWC's rate filing. OCA St. 1, Exhibit CMH-5. Those revenue deficiencies grow in each rate case due to increased O&M and capital expenditures projected in the rate case. The revenue deficiency for just five of those

acquisitions, and at the OCA's smaller revenue requirement, is more than $10 million.[4] At PAWC's calculated revenue requirement, the shortfall would be greater. I would not characterize that shortfall as irrelevant.

Regarding Section 1327, Mr. Hibbard characterizes it as permitting fair market value that was prohibited by previous law. PAWC St. 16-R at 26, lines 5-6. That is not correct. Section 1327 permits positive acquisition premiums to be included in water or wastewater rate base if the statutory criteria set forth in Section 1327(a) is met (*i.e.*, for the purchase of *distressed small* water or wastewater utilities). 66 Pa. C.S. § 1327. The acquisition premium is based on the difference between the purchase price and the depreciated original cost.[5] The inclusion of acquisition premiums, consistent with Section 1327, is available only for water and wastewater utilities under Section 1327 and created an exception to the traditional ratemaking rule that only depreciated original cost is included in rate base and is not available to gas and electric utilities for acquisitions.

[4]Exhibit CMH-5 shows ten closed FMV acquisitions and the related revenue requirement shortfall. Eight of the ten are wastewater acquisitions. In the current rate filing, only five of the eight wastewater FMV acquisitions can be identified in the revenue requirement calculations, the others have been rolled into Zone 1. See e.g., OCA St. 4SR, Table 5 (Valley, York, Royersford all in the SSS division, and Kane and McKeesport in the CSS division).

[5] Note that the depreciated original cost as used in Section 1327 includes the traditional deduction of contributions in aid of construction and customer advances from the original costs because those funds are not investor-supplied funds.

PAWC witness Ladner, PAWC St. No. 15-R

Assessment of Rate Filing

Q. Mr. Ladner talks about the capital expenditures, rehabilitation of aging infrastructure that the Company undertakes, and states that no party challenged the need for the projects. He concludes that the impact on customers will be reasonable while customers benefit from extensive capital investments. (PAWC St. No. 15-R at 3-4). Please address his statements.

A. It is correct that the OCA did not challenge the Company's proposed capital expenditures through the end of the FPFTY to its existing water and wastewater systems, as I stated above. However, the OCA submitted substantial testimony regarding other claims and proposals by PAWC that do not benefit the customers. The OCA presented adjustments to the claimed cost of capital and capital structure, the claimed rate base of property that is targeted for acquisition but is not reasonably certain to be used and useful in the FPFTY, certain operation and maintenance expenses, including bonuses and incentive compensation, the proposed rate designs that front load a customer's bill with a high customer charge, the proposed shift of wastewater revenue requirement to water customers, the proposed bill discount program and the arrearage management program, the impact on customers who are not eligible for those programs but who may be struggling to pay their current bills, the service received by customers at their taps, and the customers who interact with the Call Center or report service issues to the Company. The OCA also recommends rejection of the Company's proposed RDM and ECIC, and multiple deferral/tracker accounts.

In addition to the OCA's adjustments, the overwhelming majority of the more than two hundred customers who testified at the public input hearings said that they were concerned about the size of their monthly bills.

Q. In direct testimony, you stated that the consideration of the consumers' interests often fall away in the utility's planning and choices for the rate case. Mr. Ladner disagrees with your statement. (PAWC St. No. 15-R, pp. 4-5). What is your response?

A. Mr. Ladner states that PAWC considered the impact of increased rates on its customers and that PAWC sought to find the right balance between investments and the costs paid by customers. PAWC St. No. 15-R, p. 4. However, the OCA's testimony and the testimony of the overwhelming majority of customers who testified at the public input hearing make it clear that the result of PAWC's choices is that the balance is tilted towards investors. There are many choices that PAWC made in this case that do not strike a reasonable balance as I described above and as discussed in the OCA's testimony. The OCA's litigation position provides a more balanced approach that results in less onerous bill impacts while permitting a reasonable opportunity for investors to earn a reasonable return on prudent and reasonably certain capital investments. The OCA's position also recognizes that there is work to be done on specific service quality and customer service issues.

Q. Mr. Ladner also disagreed with your concern about the frequency of the PAWC's rate increases with this representing the third case in four years. (PAWC St. No. 15-R, pp. 5-6). What is your response?

A. Mr. Ladner's position is that utility costs are rising and that PAWC has controlled O&M costs. For sake of argument, even if I accepted that, PAWC has not controlled the revenue requirement impact of its fair market value acquisitions, nor has it refrained from asking for alternative ratemaking that will benefit its investors at the cost of the impact on its customers' bills. The expansion of PAWC's bill discount program, as Mr. Ladner references, including PAWC's non-opposition to recommendations from Mr. Colton and CAUSE-PA witness Geller (PAWC St. No. 15-R, p. 6) should help more customers who qualify and are actually enrolled in the program (see OCA St. 5SR). However, the expansion of a bill discount program does not offset the overall increase in a rate case. When facing the frequency of rate filings, it takes a toll on low-income and other customers who do not qualify for those programs. Those low-income programs do not justify the frequency of PAWC's rate filings that takes a toll on all customers' bills, as many customers testified at the public input hearings.

Q. Mr. Ladner responds to OCA's position that PAWC's 25 basis point management adder be rejected because it was not supported by substantial evidence. PAWC St. No. 15-R, pp. 6-13. What is your response?

A. The OCA maintains its position that PAWC has not supported it management adder and that the evidence in this case establishes that the adder should be rejected. Mr. Ladner notes that I relied on the conclusions drawn by Ms. Alexander, Mr. Colton, and Mr. Garrett. Similarly he points to rebuttal testimony by PAWC witnesses Everette, Degillio,

Dean and Bulkley. His testimony "underscores the extensive evidence supporting the Company's request" and states that it is incorrect that the Company has not supported its request. PAWC St. No. 15-R, p. 6. I am providing an overview of the categories listed by Mr. Ladner and the response of OCA to that evidence.

Customer Assistance Programs:

Mr. Colton has provided testimony refuting the evidence related to the Company's position that it has industry-leading customer assistance programs. See Mr. Colton's testimony. OCA St. 5, 5SR.

Service Quality:

The OCA has addressed the Company's premise that it should receive an additional 25 basis points for doing what it is required to do under Section 1501. Moreover, as discussed below, and will be discussed in the OCA's brief, there are customers who have service quality concerns that need to be addressed by the Company.

Acquiring Small and Troubled Systems:

The Company's premise that PAWC's acquisitions of small or troubled systems justifies an additional 25 basis points is not supported because its acquisitions are part of its growth strategy. When the Company acts as a receiver it is made whole for its costs as receiver. See e.g., In re: The Indian Springs Water Company, Docket No. M-2019-3011972 Aug. 8, 2019 Order at App. A. When it acquires troubled systems, it often requests a positive acquisition premium for the amount it paid over depreciated original cost. It is not reasonable for the Company to receive both the acquisition premium and a 25 basis point management adder for the same acquisition.

Extending Service to Customers:

The Company's extension of service to customers who do not have access to safe and reliable service is part of its obligations under Section 1501 of the Public Utility Code.

Q. Mr. Ladner also points to testimony at the PIH to support PAWC's proposed 25 basis point management adder. PAWC St. No. 15-R, pp. 13-15. What is your response?

A. Mr. Ladner's list of public input hearing testimony is a very small subset of the testimony over the twelve hearings. Most of the testimony he highlights is not from actual customers, but rather representatives of entities that have business relationships with PAWC. Given these entities' motivation to maintain a good business relationship with PAWC, it is not surprising that those entities will have positive things to say about the Company as a good business or community partner, even if the representatives would not testify as to specific rate increase. However, there were hundreds of PAWC customers who testified in opposition to the proposed rate increases, and many others expressed opposition to the Company's proposed management adder and the RDM.

Acquisitions

Q. Mr. Ladner references Mr. Abruzzo's rebuttal to OCA and I&E adjustments to remove acquisitions from PAWC's revenue requirement claims because the acquisitions are not likely to be approved by the close of the record (PAWC St. No. 15-R, p. 16). Please respond.

A. Mr. Ladner's position, incorporating Mr. Abruzzo's rebuttal, is refuted by Mr. Smith in his surrebuttal testimony. PAWC's arguments are inconsistent with the fundamental concepts of ratemaking as Mr. Smith explains. The uncertainties associated with the six acquisitions that PAWC includes in this case are fully set out by Mr. Smith in OCA St. 2SR. The simple fact of the matter is that merely because PAWC hopes that these acquisitions will be approved within the FPFTY is indicative of nothing more than its

desire to include them now rather than later so that it can begin earning a return on and of its investment. There is no reasonable basis in fact or law to allow PAWC to include in rate base those acquisitions that are challenged by the OCA in this case and the challenged acquisitions should be disallowed for the reasons discussed by OCA's other witnesses.

PAWC witness Everette PAWC St. No. 1-R

Section 1329

Q. Ms. Everette comments on your testimony regarding the revenue requirement shortfall resulting from the ratemaking rate base in the company's Section 1329 acquisitions at pages 22-23 of her rebuttal testimony. Please address her testimony.

A. Ms. Everette acknowledges that, "It is accurate that the revenues of acquired customers often do not cover the revenue requirement of the system upon acquisition." PAWC St. 1-R at 22. As explained in my direct testimony, PAWC has not had a 1329 acquisition where the acquired customers' revenues cover the revenue requirement upon ownership by PAWC given the high ratemaking rate base valuations. Although Ms. Everette offers a possible explanation (rate differentials), she does not acknowledge that the higher revenue requirement associated with the ratemaking rate base values under PAWC's ownership reflects a higher cost of ownership in addition to a rate base that is multiples higher than depreciated original cost.

Ms. Everette provides the example of York City acquisition where the average customer had a monthly bill of $29.36 which was "40% of the Zone 1 wastewater rate at that time." PAWC St. 1-R at 22-23. This supports my concern about the initial revenue shortfall and the ongoing impact of that initial shortfall that then grows in each rate case.

In this case, York City is Wastewater Rate Zone 7 and part of the SSS division. PAWC has proposed no increase to Rate Zone 7 until May 27, 2025 because of its commitment in its Asset Purchase Agreement with York City. PAWC Filing, Vol. 1, Notice to Rate Zone 7. The calculated revenue requirement for Rate Zone 7 shows an increase of $6.66 million (24.6%) and under OCA's Act 11 reduction, an increase of $1.66 million (6.2%). OCA St. 4, Table 5. PAWC's notice, for former York City customers, shows that on May 27, 2025, at PAWC's proposed revenue requirement, the average customer bill would be $63.78 per month. PAWC Filing, Vol. 1, Notice to Rate Zone 7. The rate hike for York City customer bills from $29.36 to $63.78 is a concrete example of how the revenue shortfall created in the Section 1329 case grows in the first rate case and subsequent rate cases. That shortfall is part of what is shifted in the Act 11 shift.

Q. Ms. Everette also states that OCA agreed to the ratemaking rate bases reflected in the 1329 cases. Please respond.

A. Ms. Everette's testimony rebuts a non-issue. The OCA has not challenged the ratemaking rate base for any of PAWC's completed 1329 acquisitions reflected in this case because the ratemaking rate bases were already determined in the application dockets pursuant to PAWC's choice to use Section 1329's fair market valuation. As I said in direct, the revenue requirement shortfall at the time of closing is part of what drives the Section 1311(c) shift in the future rate cases because the wastewater revenue requirement to serve those acquired customers is not covered by the acquired customers. As I discussed above, in the future rate case(s), the revenue requirement shortfall grows because there may be additional capital expenditures for those systems, as well as PAWC's proposed increases in O&M, return, etc.

Customer Notice

Q. Ms. Everette disagrees with your testimony regarding the notices that PAWC provides. PAWC St. No. 1-R, pp. at 25-29. Is she correct?

A. Ms. Everette claims that the notices must reflect PAWC's proposed tariffs that reflect the proposed 94% shift of the wastewater revenue requirement increase. She points to what the company did in prior cases but in prior cases PAWC was not proposing to shift 94% of the wastewater revenue increase. This case points out that this is not a reasonable approach. That is why I recommend that the notices provide an accurate bill impact for wastewater customers. There is no reason that PAWC could not also indicate that it is proposing to keep wastewater bills at current levels as part of its filing.

Q. Ms. Everette responds to your recommendation that PAWC should provide multiple usage levels in the notice by stating that OCA should propose changes to the Commission's regulation. Do you agree?

A. No. PAWC should not be afraid to accurately disclose the rate impact of its proposed rate increase at different, realistic usage levels. PAWC currently benefits from the obscurity that is provided by merely showing what a typical customer's bill would be. PAWC could choose to show usage at multiple levels but has made the choice not to do so. There is no need to change the notice regulation to have the customer notice show multiple usage levels. As I explained in my direct testimony, PAWC already makes changes to the notice regarding small, explanatory charts, and it did not seek a change to the PUC's regulations to do so. See OCA St. 1 at 61-62.

Q. Ms. Everette also states that the customer can visit PAWC's website. (PAWC St. No. 1-R, p. 27). Do you agree?

A. I agree that a customer can visit PAWC's website, but as I pointed out in my direct testimony, there is no rate calculation provided there, let alone bill impact calculations at different usage levels. Rather, the website provides PAWC's proposed tariffs, which the customer would then have to review to find the right rate zone and then calculate their bill at the proposed rate. Even if the customer did that, to my earlier point, that would not reflect a true picture of what the customer's increase might be but would reflect only PAWC's proposal.

Q. Ms. Everette disagrees with your recommendation about notice being provided at the end of the case. (PAWC St. No. 1-R, pp. 27-29). What is your response?

A. As I said in direct, the notice at the end of the case would provide the bill impact resulting from the Commission's decision on the rate filing, including revenue requirement and rate design decisions. PAWC's request for alternative ratemaking already requires it to issue a notice at the end of the proceeding to provide its customers with a plain language summary of the Commission's decision and the approved alternative rate or rate mechanism to comply with 66 Pa. C.S. § 1330(c)(1) and (2).[6]

Regarding Ms. Everette's testimony about the feasibility of a notice at the end of the case, I acknowledge that the timing is very tight. With regard to timing, the OCA would support a direct mailing of the notice at the end of the case, just as PAWC used direct mailing for the notices at the time of its filing. The notice –however delivered –

[6] *Act 58 Implementation Order* at 26-27.

should include a link to the alternative ratemaking information posted on PAWC's website as required by regulation or Commission Order, and Section 1330(c)(1) and (2).

Additionally, the website posting with the alternative ratemaking information could include information about the bill impact of the Commission's order at three usage levels.

The OCA's main concern about the notice at the end of the case is that, currently, the information customers might see at the end of the case is limited to press releases that use typical usage level and that information is not meaningful for most customers. Because of this, when customers receive the first bills containing the new rates, they have not received any information regarding the Commission's final order or any meaningful information about the bill impact of that order.

Q. Ms. Everette claims that the Company already adds a bill message at the end of the base rate case. (PAWC St. No. 1-R, p. 27-28). Is that sufficient to address your recommendations?

A. No. Ms. Everette provides as an example the bill message provided to the customers of the Steelton system after the last rate case. This message has similar flaws as the press release that I mentioned in my testimony. The only difference is that it is customized for a customer in the former Steelton water system. The bill message only provides the amount of the monthly bill increase of $30.48 (78%). The message does not even provide what usage level was used to calculate that monthly increase that resulted from the rate case or tie it back to what was proposed. It does not address customers at different usage levels. This illustrates my point – if I were a customer receiving that notice, I would not know how that impacts my bill at my usage levels because of the lack of information.

PAWC witness Rea, PAWC St. No. 10-R

Act 11

Q. Mr. Rea identifies your use of Bonbright principles for reviewing PAWC's proposal to shift 94% of the wastewater revenue requirement to water customers (p. 32). Does he address that testimony or those principles?

A. No.

Q. Mr. Rea claims that Act 11 "contemplates" that acquired wastewater systems may not be able to implement sufficient rates to support needed investment. P. 35-36. What is your response?

A. His statement focuses solely on capital improvements and disregards the shortfall that is created solely by the ratemaking rate base determined in the fair market valuation under Section 1329.

Q. At page 40-41, Mr. Rea claims that if revenue requirement reductions or scale back is first applied to PAWC's proposed Act 11 shift, then that is a revenue requirement reduction to water service. Please respond.

A. I disagree. PAWC calculated a wastewater revenue requirement and then proposed to shift 94% of that calculated wastewater revenue requirement to water customers. The imposition of $71 million on water customers has nothing to do with water service. So, the reduction of the shift to something less than PAWC's proposed $71 million is a reduction to the wastewater revenue requirement that would be shifted. This obfuscation that Mr. Rea is creating is exactly the reason why PAWC's notices to its wastewater customers should have reflected the calculated revenue requirement for the wastewater rate divisions to begin with. If it had properly notified those customers of the bill impact

of the calculated revenue requirement, then any changes made by the final Commission order would be in a reasonable context.

RDM

Q. At page 73-74, Mr. Rea states that the RDM dos does not shift revenue risk "completely" but rather "allows a <u>sharing</u> of revenue risk between the Company and its customers allowing the Company to enjoy the benefits of revenue stability…." (Emphasis in original). Do you agree?

A. No. Once a revenue requirement is determined using a test year or snapshot of capital, O&M, and cost of capital, rates are designed to permit a reasonable opportunity for PAWC to collect its revenue requirement. Customers pay bills that reflect those rates whether the company is able to earn more than its revenue requirement or less. If the Company determines that it is not earning its revenue requirement, then it can file a new rate case. Note that the use of an FPFTY provides a full year of projected costs and capital expenditures to determine the revenue requirement even though not one dollar has been spent as of the day that rates go into effect. Mr. Rea appears to acknowledge that the use of the FPFTY provides for some advantages for the Company (p. 75-76), yet claims that it only allows recognition of declining usage through the end of the FPFTY. As I stated, the end of the FPFTY is one year *after* the new rates go into effect, so rates are set with the use of lower consumption *as of the end* of the FPFTY. Moreover, PAWC filed its current case *during* its FPFTY from its last rate case, so the gap between the end of the FPFTY and new rates is very small.[7]

[7] The FPFTY for PAWC's 2022 rate case ended December 31, 2023. Rates in this case will go into effect on August 7, 2024.

PAWC's RDM would guarantee that PAWC recovers the exact revenue requirement that is set while its customers' bills will vary to ensure that recovery. It is not clear what risk PAWC's investors are bearing if the RDM is approved. Mr. Rea's statement that the RDM provides "payment stability" for PAWC's customers (p. 74) is not supported because the design of the RDM uses adjustments to customers' bills to maintain the Company's revenue levels.

An overwhelming majority of consumers testified at the public input hearings that they are taking reasonable, and in some cases drastic, steps to reduce their water consumption to save on their water bills, and that they would lose the incentive to conserve if they had to return or share back those savings with the Company under the RDM proposal, and that they do not believe they can reduce their consumption any further to be able to save under the RDM proposal (which as explained in Jerry Mierzwa's direct testimony would be what is required for a customer to be able to achieve a credit under the RDM mechanism).

PAWC witness Swiz St. No. 8-R

ECIC

Q. Mr. Swiz, at pages 9-13, addresses his justification for the ECIC. Do you agree?

A. The pace of new or changing regulations is not as quick as he portrays, and preapproval of projects is not what is done in Pennsylvania. Rather, traditionally the utility invests in capital, and if found to be just and reasonable, used and useful, and a prudent level of expenditures, then the utility recovers those capital expenditures in rates. The review outside of a full base rate case is not a "full and fair review" in my opinion. Mr. Swiz states that, "The ECIC helps ensure PAWC receives adequate revenue to maintain safe,

reliable, and compliant water and wastewater service…." PAWC St. No. 8-R, p. 12. That process is what is done in rate cases where all components of costs to serve can be reviewed. Also, I note that this case was filed within FPFTY from last case.

At page 12, Mr. Swiz states that the ECIC is modeled on the DSIC with "similar formula and customer safeguards". The ECIC does not have similar customer safeguards. For example, the DSIC has a statutory cap on the percentage of the bill that the DSIC can reflect. The DSIC is limited to distribution improvements and capital recovery for those improvements. The ECIC does not have a limitation on the type of property that can be recovered; it includes capital ***and*** O&M costs.

Mr. Swiz continues to claim that the ECIC will promote rate stability through gradual changes to customers rates and bills (p. 13). I disagree with the premise that guaranteed gradual rate increases on customer bills promote rate stability. From my reading of the transcripts of the sworn consumer testimony at the public input hearings held in this proceeding, an overwhelming number of consumers and public officials requested that the Commission outright reject or deny PAWC's proposed rate increase. Another large number of customers' testimony expressed concern over the frequency of PAWC's rate increase and cumulative effect of back-to-back rate increases.

There is no upper limit on the amount that can be charged through the ECIC. The ECIC would mean that rates would be guaranteed to increase as a result of rate filings and then every quarter in between rate filings, without any cap on the ECIC charges. These issues are addressed more fully by Mr. Garrett (OCA St. 3), Mr. Mierzwa (OCA St. 4, 4SR), and Mr. Colton (OCA St. 5, 5SR).

PAWC witness Bulkley PAWC St. No. 13-R

Q. Ms. Bulkley refers to your opposition to the RDM and the ECIC (PAWC St. No. 13-R, p. 79-81) and states that you did not provide any evidence regarding the proxy group.

A. That is correct, I did not conduct an analysis of the proxy group. Mr. Garrett addressed the proxy groups and the shift of risk from investors to ratepayers the RDM and ECIC present. OCA St. 3 at 10-11, 19-20.

Notably, Ms. Bulkley states, at page 81 of her rebuttal, that 59% of the proxy group operating subsidiaries have revenue stabilization mechanisms. That means that 41% do not. Moreover, although she refers only to her analysis of revenue stabilization mechanisms, she includes the ECIC as part of the revenue stabilization without any specific information. Ms. Bulkley also does not acknowledge that the water proxy group companies with operating subsidiaries in Pennsylvania (Essential Utilities and Middlesex Water) do not have revenue stabilization mechanisms or an ECIC.

Q. Does this conclude your surrebuttal testimony?

A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Christine Maloni Hoover, Deputy Consumer Advocate, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 1SR, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: March 4, 2024

Signature: Christine Maloni Hoover
Christine Maloni Hoover

Witness Address:
Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101

OCA Statement 2

BEFORE THE
COMMONWEALTH OF PENNSYLVANIA
PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
v.	:	R-2023-3043190 (Wastewater)
Pennsylvania-American Water Company	:	
	:	

Direct Testimony of
Ralph C. Smith

on Behalf of the
Pennsylvania Office of Consumer Advocate

PUBLIC VERSION

Date Served: February 1, 2024

DIRECT TESTIMONY OF RALPH C. SMITH
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RCS-1, Background and Qualifications

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LA-2, Schedules Showing Recommended Adjustments

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LA-6, Schedules showing alternative rate of return and revenue requirement impact calculations that OCA requested be performed

I. INTRODUCTION

Q. Please state your name, position and business address.

A. Ralph C. Smith. I am a Senior Regulatory Consultant at Larkin & Associates, PLLC, 15728 Farmington Road, Livonia, Michigan 48154.

Q. Please describe Larkin & Associates.

A. Larkin & Associates is a Certified Public Accounting and Regulatory Consulting firm. The firm performs independent regulatory consulting primarily for public service/utility commission staffs and consumer interest groups (public counsels, public advocates, consumer counsels, attorneys general, etc.). Larkin & Associates has extensive experience in the utility regulatory field as expert witnesses in over 400 regulatory proceedings including numerous telephone, water and sewer, gas, and electric matters.

Q. Please summarize your educational background.

A. I received a Bachelor of Science degree in Business Administration (Accounting Major) with distinction from the University of Michigan - Dearborn, in April 1979. I passed all parts of the C.P.A. examination in my first sitting in 1979, received my CPA license in 1981, and received a certified financial planning certificate in 1983. I also have a Master of Science in Taxation from Walsh College, 1981, and a law degree (J.D.) cum laude from Wayne State University, 1986. In addition, I have attended a variety of continuing education courses in conjunction with maintaining my accountancy license. I am a licensed Certified Public Accountant and attorney in

the State of Michigan. I am also a Certified Financial Planner™ professional and a Certified Rate of Return Analyst ("CRRA"). Since 1981, I have been a member of the Michigan Association of Certified Public Accountants. I am also a member of the Michigan Bar Association. I have been a member of the Society of Utility and Regulatory Financial Analysts ("SURFA"). I have also been a member of the American Bar Association ("ABA"), and the ABA sections on Public Utility Law and Taxation.

Q. Please summarize your professional experience.

A. Subsequent to graduation from the University of Michigan, and after a short period of installing a computerized accounting system for a Southfield, Michigan realty management firm, I accepted a position as an auditor with the predecessor CPA firm to Larkin & Associates in July 1979. Before becoming involved in utility regulation, where the majority of my time for the past 44 years has been spent, I performed audit, accounting, and tax work for a wide variety of businesses that were clients of the firm.

During my service in the regulatory section of our firm, I have been involved in rate cases and other regulatory matters concerning numerous electric, gas, telephone, water, and sewer utility companies. My present work consists primarily of analyzing rate case and regulatory filings of public utility companies before various regulatory commissions and where appropriate, preparing testimony and schedules relating to the issues for presentation before these regulatory agencies.

I have performed work in the field of utility regulation on behalf of industry, state attorneys general, consumer groups, municipalities, and public service commission staffs concerning regulatory matters before regulatory agencies in Alabama, Alaska, Arizona, Arkansas, Barbados California, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Kentucky, Louisiana, Massachusetts, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, New Jersey, New Mexico, New York, Nevada, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Washington D.C., West Virginia, and Canada as well as the Federal Energy Regulatory Commission and various state and federal courts of law. My prior testimonies have included evaluations of numerous utility rate case filings and revenue requirement determinations.

Q. Have you prepared an attachment summarizing your educational background and regulatory experience?

A. Yes. Attachment RCS-1 provides details concerning my experience and qualifications.

Q. Have you previously testified before the Pennsylvania Public Utility Commission?

A. Yes. I have testified before the Pennsylvania Public Utility Commission ("PUC" or "Commission") previously on a number of occasions.

Q. On whose behalf are you appearing?

A. Larkin & Associates, PLLC, was retained by the Pennsylvania Office of Consumer Advocate ("OCA") to review the rate request of Pennsylvania American Water Company ("PAWC" or "Company"). Accordingly, I am appearing on behalf of the OCA.

Q. How will your testimony be organized?

A. I will present an Overall Financial Summary that addresses the revenue increases requested by PAWC for one water utility operations ("Water Operations") revenue requirement and for four wastewater utility operations ("Wastewater Operations") revenue requirements. I then address each of the utility revenue requirements that are the subject of the Company's revenue requirement filings in this proceeding. I then present an explanation of the organization and content of my exhibits for each system, which are attached to my testimony. That discussion is then followed by sections on Rate Base and Net Operating Income adjustments, where I explain each adjustment for each respective system.

Q. How many revenue requirement calculations has PAWC presented in the current case?

A. For the fully projected future test year ("FPFTY") of June 30, 2025, PAWC has presented one Water Operations and four Wastewater Operations revenue requirement calculations where the Company applies a rate of return to rate base and compares the required operating income with its adjusted operating income and uses

the difference to derive a revenue deficiency or sufficiency. The Company's four separate Wastewater Operations revenue requirements in this proceeding reflect a wastewater sanitary sewer system ("Wastewater SSS General Operations") general group and a combined sewer system ("CSS Wastewater Operations") group. PAWC is also presenting separate revenue requirements for the wastewater systems that the Company expects to acquire from the Butler Area Sewer Authority ("BASA Wastewater Operations") and the Borough of Brentwood ("Brentwood Wastewater Operations"), pursuant to the pending acquisition applications.

Q. What base rate revenue increases has PAWC calculated in the current case?

A. As shown in the Company's Exhibit 3-A, page A, the Company is proposing to increase its base rate revenues by $203.9 million on a total Company basis, or approximately 20.2 percent, when factoring in the Company's proposed Act 11 or Section 1311(c)[1] shift to recover portions of the Wastewater Operations revenue requirement from the Water Operations.

For its Water Operations, PAWC has calculated a base rate revenue increase of approximately $199.2 million, or 24.2 percent, after factoring in the proposed Section 1311(c) shift.

For its Wastewater Operations, PAWC has calculated the following base rate revenue increases/(decreases), after factoring in the proposed Section 1311(c) shift:

(1) ($169,261), or -0.2 percent for its Wastewater SSS General Operations;

(2) $4.7 million, or 40.0 percent for its BASA Wastewater Operations;

[1] 66 Pa.C.S. § 1311(c).

(3) $369,404, or 20.3 percent for its Brentwood Wastewater Operations; and

(4) ($226,926) or -0.3 percent for its CSS Wastewater Operations.

Q. Has PAWC proposed that some of its calculated rate increases for Wastewater Operations be borne by water utility customers under Section 1311(c) of the Public Utility Code?

A. Yes. As shown in the table below, the Company is proposing to determine its revenue requirement on a combined water and wastewater basis and to allocate approximately $71.1 million of its Wastewater Operations' cost of service (total for all four Wastewater Operations) to Water Operations:

	FPFTY Ending
Company Proposal - Allocation of Calculated Wastewater Increases to Water Customers	**6/30/2025**
Wastewater SSS General Operations	$32.0 million
Butler Wastewater Operations	$21.6 million
Brentwood Wastewater Operations	$1.6 million
CSS Wastewater Operations	$16.0 million
Total	**$71.1 million**
Source: Exhibit 3-A, page A from PAWC filing	

Q. What is the Company's basis for allocating approximately $71.1 million of its calculated Wastewater Operations' revenue requirement to Water Operations?

A. PAWC asks the Commission to exercise its discretion to approve the subsidy of wastewater revenue increases by water utility customers pursuant to Section 1311(c) of the Public Utility Code. The Company's request is discussed on pages 19 through 22 of the Direct Testimony of Company Witness Everette. On page 20 of her

testimony, Ms. Everette states that the allocation of the $71.1 million of wastewater cost of service to water operations increases the revenue requirement to be recovered from water customers by approximately 7 percent. In addition, Ms. Everette states that the allocation would increase the monthly water bill of a residential water customer by approximately $6.08 per month at proposed rates. OCA witness Jerome Mierzwa addresses the Company's proposed shift under Section 1311(c) in his direct testimony.

Q. What is Mr. Mierzwa's recommendation with regard to shifting the Wastewater revenue deficiencies to Water Operations pursuant to Act 11?

A. As discussed in his Direct Testimony, Mr. Mierzwa recommends that 75 percent of OCA's recommended revenue deficiency for Wastewater SSS General Operations be allocated to Water Operations. In addition, Mr. Mierzwa recommends that 50 percent of OCA's recommended revenue deficiency for CSS Wastewater Operations be allocated to Water Operations.

As shown on Exhibit LA-1, Schedule A, page 1, Mr. Mierzwa's recommendations shift approximately $15.2 million of the revenue deficiency for Wastewater SSS General Operations and approximately $3.7 million of the revenue deficiency for CSS Wastewater Operations to Water Operations.

Q. For which PAWC utilities are you addressing PAWC's revenue requirements?

A. I am addressing the revenue requirements requested by PAWC for its Water Operations, and the four separate revenue requirements requested by PAWC for its

Wastewater Operations, including (1) Wastewater SSS General Operations, (2) BASA Wastewater Operations, (3) Brentwood Wastewater Operations, and (4) CSS Wastewater Operations.

Exhibits Filed with Testimony

Q. Have you prepared any attachments to be filed with your testimony?

A. Yes. Exhibits LA-1 through LA-4 were prepared and/or referenced by me or under my supervision and are attached to my testimony.

Q. What is shown on Exhibit LA-1?

A. Exhibit LA-1 shows the OCA's revenue requirement summary schedules for PAWC's one Water Operations and four Wastewater Operations for the FPFTY ending June 30, 2025.

Q. What is shown on Exhibit LA-2?

A. Exhibit LA-2 shows schedules related to my recommended adjustments to rate base and net operating income for the FPFTY ending June 30, 2025.

Q. What is shown on Exhibit LA-3?

A. Exhibit LA-3 presents selected non-confidential documents that are referenced in my testimony and Exhibits LA-1 and LA-2.

Q. What is shown on Exhibit LA-4?

A. Exhibit LA-4 presents selected confidential documents that are referenced in my testimony and Exhibits LA-1 and LA-2.

Q. What is shown on Exhibit LA-5?

A. Exhibit LA-5 contains materials showing the survivor curves for wastewater utility plant accounts prepared by Gannett Fleming that were used in PAWC's acquisition proceedings under §1329 for BASA and Brentwood.

Q. What is shown on Exhibit LA-6?

A. Exhibit LA-6 contains certain rate of return and revenue requirement impact calculations that OCA requested be performed.

II. OVERALL FINANCIAL SUMMARY

Water and Wastewater Utility Operations

Q. What does Exhibit LA-1, Schedule A, page 1 show?

A. Exhibit LA-1 shows the development of the adjusted revenue requirements for PAWC's Water Operations and four Wastewater Operations for the FPFTY ending June 30, 2025.

Schedule A, page 1 presents the revenue requirement calculations reflecting all of the adjustments I am recommending for PAWC's Water and Wastewater Operations, including the complete removal of the separate revenue requirement amounts related to the proposed BASA and Brentwood Wastewater acquisitions. My recommendations for the Water Operations and Wastewater SSS General Operations also reflect the complete removal of costs related to the remaining proposed acquisitions, including Audubon Water Company ("Audubon Water"), Farmington Township water ("Farmington Water"), Farmington Township

wastewater ("Farmington Wastewater"), and Sadsbury Township Municipal Authority wastewater system ("Sadsbury Wastewater").

As shown on Schedule A, page 1, line 7, the results of my recommendations do not support PAWC's proposed overall increase of approximately $203.9 million in the FPFTY. Instead, my analysis – after removing the proposed acquisitions, applying my other recommended adjustments, and using the cost of capital recommended by OCA Witness Garrett – shows an overall revenue deficiency of $43.7 million in the FPFTY, inclusive of a base rate revenue deficiency of $16.1 million for PAWC's Water Operations and $27.6 million for PAWC's Wastewater SSS General Operations and the CSS Wastewater Operations.

Q. What is shown on Exhibit LA-1, Schedule A, page 2?

A. Schedule A, page 2 shows PAWC's proposed Summary of Revenue Requirement for Water Operations and for each Wastewater Operations from PAWC Exhibit 3-A, page A. As shown on Schedule A, page 2, column A, line 7, PAWC's filing shows an overall revenue deficiency of approximately $203.9 million based on a FPFTY ending June 30, 2025.

Q. What is shown on Exhibit LA-1, Schedule A, page 3?

A. Schedule A, page 3 shows the differences between the OCA's adjusted amounts (Schedule A, page 1) and PAWC's calculated amounts (Schedule A, page 2).

Q. What is shown on Exhibit LA-1, Schedule A, page 4?

A. Schedule A, page 4, shows a reconciliation of PAWC's calculated base rate revenue deficiency amount of approximately $128.1 million for the FPFTY Water Operations with the revenue deficiency amount of approximately $16.1 million for Water operations that I have calculated on Schedule A, page 1.

Q. What is shown on Exhibit LA-1, Schedule A, page 5?

A. Schedule A, page 5, shows a reconciliation of PAWC's calculated base rate revenue deficiency amount of approximately $75.8 million for overall Wastewater Operations with the alternate revenue deficiency amount of approximately $27.6 million for overall Wastewater Operations that I have calculated on Schedule A, page 1, which reflects the removal of the BASA and Brentwood Wastewater Operations revenue requirements.

Q. What is the revenue requirement impact of incorporating the cost of capital and ROE recommendations of OCA Witness Garrett?

A. As shown on Exhibit LA-1, Schedule A, page 4, column C, line 1, the impact of Mr. Garrett's cost of capital and ROE recommendations reduces PAWC's requested revenue requirement by approximately $82.4 million for Water Operations.

As shown on Exhibit LA-1, Schedule A, page 5, column C, line 1, the impact of Mr. Garrett's cost of capital and ROE recommendations reduces PAWC's requested revenue deficiency by approximately $22.4 million for Wastewater Operations.

The total expected reduction to PAWC's requested revenue requirement is approximately $104.8 million for Water and Wastewater operations combined.

Q. Did OCA request that you perform additional calculations with regard to PAWC's capital structure and ROE?

A. Yes. OCA requested that I perform additional calculations with regard to PAWC's requested capital structure and ROE. Specifically, OCA requested the following calculations:

- To calculate the revenue requirement impact of 25 basis points ROE change using PAWC's rate base and capital structure.
- To calculate the revenue requirement impact of comparing the difference between PAWC's proposed capital structure and OCA's recommended capital structure using PAWC's rate base.
- To calculate the revenue requirement impact of comparing the difference between PAWC's proposed ROE of 10.95 percent and OCA's recommended ROE of 9.1 percent using PAWC's rate base.
- To calculate the revenue requirement impact of comparing the difference between PAWC's proposed capital structure and ROE and OCA's recommended capital structure and ROE using PAWC's rate base.

Q. What is the revenue requirement impact of adopting the Company's performance-based increment award to ROE of up to 25 basis points?

A. As shown on Exhibit LA-6, page 1 the impact of a 25-basis points ROE change, at PAWC's claimed rate base and proposed capital structure, is approximately $9.2 million for Water Operations and approximately $2.6 million for Wastewater Operations, for a total impact of $11.8 million.

Q. What is the revenue requirement impact of adopting the OCA's recommended capital structure over PAWC's proposed capital structure?

A. As shown on Exhibit LA-6, page 2, column D, line 14, the revenue requirement impact of adopting the OCA's recommended capital structure over PAWC's proposed capital structure, at PAWC's claimed rate base and at PAWC's proposed ROE of 10.95 percent, is a reduction of approximately $24.7 million for Water Operations, and as shown on Exhibit LA-6, page 3, column D, line 21, is a reduction of approximately $5.9 million for Wastewater Operations.

The combined impact is a reduction of approximately $30.6 million to PAWC's requested revenue requirement for its Water and Wastewater Operations.

Q. What is the revenue requirement impact of adopting the OCA's recommended 9.1 percent ROE over PAWC's proposed ROE of 10.95 percent?

A. As shown on Exhibit LA-6, page 4, column D, line 12, the revenue requirement impact of adopting the OCA's recommended 9.1 percent ROE over PAWC's proposed 10.95 percent ROE is a total reduction on a combined basis of

approximately $87 million; inclusive of a reduction of approximately $67.9 million for Water Operations, and as shown on Exhibit LA-6, page 5, column D, line 14, is a reduction of approximately $19.1 million for Wastewater Operations.

Q. What is the revenue requirement impact of adopting PAWC's proposed cost of capital structure and ROE and OCA's recommended cost of capital and ROE?

A. As shown on Exhibit LA-6, page 6, column D, line 14, the impact of OCA's versus PAWC's proposed cost of capital using PAWC's rate base, reduces PAWC's proposed revenue deficiency by approximately $86.7 million for Water Operations. This amount includes a reduction of approximately $82.4 million for the rate of return difference (column D, line 12) and a reduction of approximately $4.3 million related to interest synchronization (column D, line 13).[2]

As shown on Exhibit LA-6, page 7, column D, line 21, the impact reduces PAWC's proposed revenue deficiency by approximately $23.5 million for Wastewater Operations. This amount includes a reduction of approximately $22.4 million for the rate of return difference (column D, line 14) and a reduction of approximately $1.1 million related to interest synchronization (column D, line 20).[3]

[2] The revenue requirement impact amount for interest synchronization on Exhibit LA-6, page 6, line 13 is different than what is shown on Exhibit LA-1, Schedule A, page 4, column C, line 16. This is due to the amount on Exhibit LA-6 being calculated with PAWC's claimed rate base for Water Operations whereas the amount shown on Exhibit LA-1 was calculated using OCA's recommended rate base for Water Operations.

[3] The revenue requirement impact amount for interest synchronization on Exhibit LA-6, page 7, line 20 is different than what is shown on Exhibit LA-1, Schedule A, page 5, column C, line 12. This is due to the amount on Exhibit LA-6 being calculated with PAWC's claimed rate base for Wastewater Operations whereas the amount shown on Exhibit LA-1 was calculated using OCA's recommended rate base for Wastewater Operations.

The combined impact is a reduction of approximately $110.2 million to PAWC's requested revenue requirement for its Water and Wastewater Operations.

Q. What is shown on Exhibit LA-1, Schedules A-1.B through A-1.F?

A. Schedules A-1.B through A-1.F of Exhibit LA-1 present the derivation of my recommended gross revenue conversion factor ("GRCF") for each of the PAWC water and wastewater revenue requirements for the FPFTY ending June 30, 2025.

Q. What is a GRCF?

A. The GRCF is used to derive the amount of revenue increase (or decrease) that is needed based upon a deficiency (or excess) in the utility's ongoing level net operating income. Any increase or decrease in net income granted in this proceeding will cause PAWC to incur additional taxes and uncollectible expenses. The GRCF "grosses up" the net operating income deficiency (or sufficiency) for these items in order to derive a revenue requirement impact. Using the same data shown on PAWC Exhibit 3-A for each PAWC water and wastewater revenue requirements, I calculated the GRCFs shown in Exhibit LA-1, Schedules A-1.B through A-1.F.

Q. How does the GRCF recommended by you compare with the GRCF in PAWC's water and wastewater utility filings?

A. Exhibit LA-1, Schedule A-1.B, column A, reproduces the GRCF of 1.401114 that I used to convert PAWC's net operating income deficiency into a revenue deficiency amount on Schedule A, page 3 for Water Operations. Exhibit LA-1, Schedule A-

1.B, column C, shows the GRCF of 1.400941 that is used in my calculation of PAWC's adjusted water utility revenue deficiency. The difference in the GRCF is attributable to the Uncollectibles factor. The Company's GRCF for the water utility reflects an Uncollectibles factor of 1.17600 percent, as shown on Schedule A-1.B, column C, line 2. In contrast, I have used an Uncollectibles factor of 1.163386 percent, as shown on Schedule A-1.B, column E, line 2. The Uncollectibles factor is calculated on Exhibit LA-2, Schedule C-9.

Exhibit LA-1, Schedules A-1.C through A-1.F reproduce the GRCF of 1.401143 that I used to convert PAWC's net operating income deficiency into a revenue deficiency amount on Schedule A, page 3 for Wastewater Operations. The Company's GRCF for wastewater operations reflects a similar Uncollectibles factor of 1.17600 percent, as shown on Schedules A-1.C through A-1.F, column C, line 2. In contrast, I have used the aforementioned Uncollectibles factor of 1.163386 percent, as shown on Schedules A-1.C through A-1.F, column E, line 2.

Q. What is shown on Exhibit LA-1, Schedule B (pages 1-5)?

A. Schedule B (pages 1-5) presents my recommended adjusted rate base for each PAWC water and wastewater revenue requirement for the June 30, 2025 FPFTY. Schedules B.1.B through B.1.F summarize my recommended adjustments rate base for each PAWC water and wastewater revenue requirement for the June 30, 2025 FPFTY.

Q. What is shown on Exhibit LA-1, Schedule C (pages 1-5)?

A. Schedule C (pages 1-5) presents my recommended adjusted net operating income for each PAWC water and wastewater revenue requirement for the June 30, 2025 FPFTY. Schedules C.1.B through C.1.F summarize my recommended adjustments to revenue and expenses for each PAWC Water Operations and Wastewater Operations revenue requirement for the June 30, 2025 FPFTY. Schedules C.1.B through C.1.F also present the impact on income tax expense resulting from my recommended adjustments for each PAWC water and wastewater revenue requirement for the June 30, 2025 FPFTY.

Q. What is shown on Exhibit LA-1, Schedule D?

A. Schedule D (pages 1-2) presents OCA's recommended capital structure cost rates and overall rate of return based on the recommendations of OCA witness Garrett. Schedule D, page 1, shows the capital structure and cost rates for PAWC's Water Operations. Schedule D, page 2, shows the capital structure and cost rates for PAWC's Wastewater Operations. The capital structure for PAWC's Wastewater Operations includes Pennvest Financing.

Q. What does Exhibit LA-2 show overall?

A. Overall, Exhibit LA-2 presents my recommended adjustments to rate base, revenue, and operating expenses for the FPFTY ending June 30, 2025. Adjustments to rate base are shown on Schedules B-1 through B-5 of Exhibit LA-2. Adjustments

affecting net operating income are shown on Schedules C-1 through C-22 of Exhibit LA-2.

III. FULLY PROJECTED FUTURE TEST YEAR – JUNE 30, 2025

Q. What time period has PAWC used as the basis for determining its revenue requirements in this proceeding?

A. PAWC used the 12 months ending June 30, 2025, as the rate year for determining its revenue requirements in this proceeding. The June 30, 2025 fiscal year projections are a FPFTY, which means all claims are fully projected rather than experienced. The use of a FPFTY is permitted pursuant to Section 315(e) of the Public Utility Code.

IV. ACQUISITIONS INCLUDED IN PAWC'S BASE RATE CASE

Q. Has the Company proposed including certain pending acquisitions in the current base rate case?

A. Yes. As discussed in the Direct Testimony Company witness Abruzzo, the Company has included the following proposed acquisitions in this rate case:

1. Audubon Water,
2. Farmington Water,
3. Farmington Wastewater,
4. Sadsbury Wastewater,
5. BASA Wastewater, and
6. Brentwood Wastewater.

The Company has included rate base claims for those systems in its revenue requirements based on its prediction that the utility plant will be acquired and used

and useful by the end of the FPFTY. The Company has also included certain improvements for the BASA and Brentwood Wastewater systems in rate base in the FPFTY. Finally, the Company has included expense claims related to Audubon Water, Farmington Water, Farmington Wastewater, Sadsbury Water, BASA Wastewater, and Brentwood Wastewater in the FPFTY. I discuss each of the proposed acquisitions further below in my testimony.

Q. In your opinion, what criteria should be used to determine whether a proposed acquisition should be included in the FPFTY in this case?

A. In my opinion, the criteria that should be used to determine whether a proposed acquisition is reasonably likely to occur by the end of the FPFTY and thus can be included in the FPFTY for ratemaking purposes are the following two criteria **prior to or at the close of the record in the base rate case**:

1. there is a Commission **final** order approving the acquisition (*i.e.*, the appeal period has run, and no appeals filed) in the acquisition proceeding docket; **AND**
2. there is a lack of uncertainty as to whether the utility will close the acquisition for reasons other than Commission approval (*i.e.*, it appears reasonably certain that the utility will close the acquisition because there is no other apparent regulatory, legal, or business risk that would prevent the transaction from closing).

Q. Why do you select these criteria for inclusion of an acquisition in the FPFTY for ratemaking purposes?

A. The PUC is obligated to approve only just and reasonable rates. PAWC's aspiration that these systems be included is based on its belief the PUC will approve its pending applications and that no other party will take legal steps to protect its interests to challenge those cases. In my view, that is not a reasonable belief. If customers rates are set that reflect a proposed to-be-acquired utility system in its revenue requirement that is later not authorized under law and therefore not eligible to be included in the utility's revenue requirement for ratemaking purposes, those rates would be unjust and unreasonable. Ensuring that there is a high degree of certainty as to the utility acquisitions that are included in the FPFTY will avoid the aggravation and public confusion of the Commission having to later enter an order to adjust the utility's rates to remove the unauthorized transaction from the utility's revenue requirement and to issue refunds to customers for previously amounts collected under unjust and unreasonable rates. The two criteria I offer in my testimony for evaluating the certainty level of a utility acquisition are objective and reasonable and clear. Additionally, PAWC controls the timing of its rate filings. It could have waited for more certainty on each of these acquisitions it is wanted to include them in rates and, of course, the fact that they are not included in rates set in this proceeding does not negate that they can be included in rates in any future filing when they are more certain.

Q. Based on the above criteria, should any of the proposed acquisitions be included in the FPFTY in this case?

A. No. I outline the specifics for each proposed acquisition in more detail below, but in my opinion, none of the proposed acquisitions addressed in PAWC's Witness Abruzzo's testimony should be included in the FPFTY for ratemaking purposes because based on my review of those acquisitions, none of the acquisitions will have met the two criteria set forth above by the close of the record in this proceeding. It is simply too premature to tell what will happen. There is no reasonable indication that by the close of the record in this proceeding any of the transactions will receive a Commission final order where the appeal period has run or, in the case of BASA that the appeal will be resolved before the close of the record. In my opinion, it would be unreasonable to rely on a party's prediction that the Commission will approve a utility acquisition in a separate application proceeding or will do so by a date certain. It would be unreasonable because reliance on such premature predictions would improperly signal to the general public, to the system seller, and to the management and shareholders of public utility companies that the Commission is expected in the future to adjudicate the utility acquisition in favor of the utility (*i.e.*, effectively "pre-judging" the outcome of the acquisition application in a base rate proceeding). A party or a member of the public having access to that type of "inside ball" as to future Commission decision-making is inappropriate; accordingly, it would be unreasonable to include a utility acquisition for ratemaking purposes based on a party's premature prediction of Commission future decision-making to occur after the close of the record in this base rate case.

Q. What if the current information that you have about the status of any of the proposed transactions changes during the course of this case and before the close of the record in this proceeding?

A. It is possible that the information about any of the proposed transactions could change and that one or more of the proposed transactions could meet the criteria I have outlined above before the close of the record in this proceeding. To the extent the uncertainties about any of the proposed transactions are sufficiently resolved before the close of the record in this proceeding, *i.e.*, the Commission's Order becomes final (appeal period has run and no appeal filed) and there are no other outstanding risk items that would prevent the closing, then I reserve the right to change my recommended revenue requirement to include the proposed transactions that are more reasonably certain to occur in the FPFTY along with my recommended adjustments relating to the claims for that transaction. Thus, out of an abundance of caution, in the event that there is a change in status to either the Brentwood or BASA transactions, I present my recommended adjustments to the revenue requirements for the BASA Wastewater Operations and Brentwood Wastewater Operations. To be clear, my current recommendation is that these proposed acquisitions should not be included ratemaking rate base or the calculation of revenue requirement, but the adjustments are presented only in the alternative so that if they become more reasonably likely that the necessary information is available to calculate an adjusted revenue requirement.

Q. Why do you address your recommended adjustments to the revenue requirement for BASA Wastewater and Brentwood Wastewater but not the remaining proposed transactions?

A. I present my alternative recommendations for the BASA Wastewater and Brentwood Wastewater revenue requirements because the Company in its direct case presented separate revenue requirements for these systems. For the remaining proposed acquisitions, the ratemaking elements are embedded in the revenue requirements for Water Operations and Wastewater SSS General Operations. Specifically, Audubon Water and Farmington Water are included in the revenue requirement for the general Water Operations, while Farmington Wastewater and Sadsbury Wastewater are embedded in the revenue requirement for Wastewater SSS General Operations.

Audubon Water

Q. Please describe the proposed Audubon Water acquisition.

A. As discussed on pages 10-13 of Mr. Abruzzo's testimony, pursuant to 66 Pa. C.S. § 1102, the Company filed its application to acquire Audubon Water on September 21, 2023 in Docket No. A-2023-3043194. The first prehearing was held on January 16, 2024, where a litigation schedules was set with briefs due in May 2024. Tr. 60-62. As shown on Exhibit 3-C, page 77, the proposed Audubon Water acquisition has a purchase price of $8 million and an anticipated closing date occurring in the fourth quarter of 2024. On page 11 of his testimony, Mr. Abruzzo states that Audubon Water and American Water Works Company, Inc., the parent company of PAWC ("Parent Company") entered into a merger agreement pursuant to the proposed acquisition whereby the issued and outstanding shares of Audubon Water's capital

stock will be surrendered to the Parent Company's common stock per the merger agreement.

Q. Did PAWC include any post-acquisition costs in the rate base related to the Audubon Water acquisition?

A. No. In its response to OCA 12-012, the Company stated that its rate base claims in this proceeding do not include any post-acquisition capital investment for the Audubon Water acquisition.

Q. Based on the above criteria for including acquisitions in the FPFTY for ratemaking purposes, should the proposed Audubon Water acquisition be included in the FPFTY in this case?

A. No. Based on the above criteria, the proposed Audubon Water acquisition should not be included in the FPFTY in this case. At this time, there is no Commission Order approving the Audubon Water acquisition, and there is no indication based on my review of that proceeding that there will be a Commission final order (meaning, the appeal period has run) by the close of the record in this proceeding. Even if an assumption is made – prior even to the development of the evidentiary record in that separate proceeding – that the Commission will ultimately approve the acquisition, as discussed above, such approval could be subject to appeal. If an appeal is filed, then the acquisition is too uncertain such that the appellate court could potentially reverse the Commission's approval of the acquisition.

Q. Is PAWC seeking treatment under 66 Pa. C.S. § 1327(a) with regard to the proposed acquisition of Audubon Water?

A. Yes. Mr. Abruzzo states that the merger agreement provides that the Company will seek distressed utility treatment under 66 Pa. C.S. § 1327(a) for Audubon Water in its next rate case. Specifically, on pages 11 (lines 19-23) and 12 (lines 1-3) of his testimony, Mr. Abruzzo states:

> If the Commission grants 1327(a) treatment and some or all of the difference between the depreciated original cost of the assets and purchase price is approved for inclusion in rate base, American Water will release the Contingent Escrowed Shares to AWC in a corresponding percentage in an amount up to $2,000,000 upon entry of a final, non-appealable Commission order. If the Commission does not grant the request for 1327(a) treatment, the purchase price for AWC will be $6,000,000 and the Contingent Escrowed Shares will be returned to American Water.

Q. Is PAWC claiming that the Audubon Water system meets all nine criteria of 66 Pa. C.S. § 1327(a)?

A. Yes. PAWC is claiming that the Audubon Water system meets all nine criteria of 66 Pa. C.S. § 1327(a). Specifically, on pages 15-18 of his testimony, Mr. Abruzzo discusses each of the nine criteria in the context of the proposed Audubon Water acquisition.

Q. Does the proposed Audubon Water acquisition satisfy all nine criteria of 66 Pa. C.S. § 1327(a)?

A. It is premature to reach this conclusion when there is a separate, ongoing application proceeding where the evidentiary record is being developed and no findings of fact have been adopted.

Q. What is your recommendation regarding PAWC's potential acquisition of Audubon Water for ratemaking purposes?

A. Based on the foregoing, I recommend that the costs associated with the proposed Audubon Water acquisition be removed from the FPFTY as reflected in Exhibit LA-1, Schedule A, page 1. As discussed in a later section of my testimony, I have removed the costs associated with the Audubon Water acquisition from the FPFTY, including the amounts included in rate base (Schedule B-1), operating expense (Schedule C-1) and depreciation expense (Schedule C-5).

Farmington Water and Wastewater

Q. Please describe the proposed Farmington Water and Wastewater acquisitions.

A. As discussed on page 8 of Mr. Abruzzo's testimony, pursuant to 66 Pa. C.S. § 1102, the Company filed its application to acquire Farmington Township's water distribution system in Docket No. A-2023-3042567, and its wastewater collection, conveyance and treatment system in Docket No. A-2023-3042587. Mr. Abruzzo also states that OCA filed a protest and the OSBA filed a Notice of Intervention and that this matter is currently pending before the Office of the Administrative Law Judge with a pre-hearing scheduled for January 24, 2024. As shown on Exhibit 3-C,

page 74, the purchase price for Farmington Water is $2.718 million and the purchase price for Farmington Wastewater is $2.827 million for an overall purchase price of $5.545 million for both systems and an anticipated closing date occurring in the second quarter of 2024.

Q. Did PAWC include any post-acquisition costs in the rate base related to the Farmington Water and Wastewater acquisitions?

A. No. In its response to OCA 12-010, the Company stated that its rate base claims in this proceeding do not include any post-acquisition capital investment for the Farmington Water and Wastewater acquisitions.

Q. Based on the two previously discussed criteria regarding whether a proposed acquisition should be included in the FPFTY, should the proposed Farmington Water and Wastewater acquisitions be included in the FPFTY in this case?

A. No. Based on the two previously discussed criteria, the proposed Farmington Water and Wastewater acquisitions should not be included in the FPFTY in this case. At this early phase of the application proceeding, there is no predicting with reasonable certainty that the Commission will approve the Farmington Water and Wastewater transactions or by when the Commission will enter an order. Even if an assumption is made – prior even to the development of the evidentiary record in that separate proceeding – that the Commission will ultimately approve the acquisition, such approval could be subject to appeal. If an appeal is filed, then the acquisition is too

uncertain such that the appellate court could potentially reverse the Commission's approval of the acquisition.

Q. Is PAWC seeking treatment under 66 Pa. C.S. § 1327(a) with regard to the proposed acquisition of Farmington Water?

A. Yes. On page 10 of his testimony, Mr. Abruzzo states that the Company will pay slightly more than the depreciated original cost of the Farmington Water assets and that it is requesting an acquisition adjustment on the water system pursuant to 66 Pa. C.S. § 1327 and 52 Pa. Code § 69.711.

Q. Is PAWC claiming that it the Farmington Water system meets all nine criteria of 66 Pa. C.S. § 1327(a)?

A. Yes. PAWC is claiming that the Farmington Water system meets all nine criteria of 66 Pa. C.S. § 1327(a). Specifically, on pages 18-22 of his testimony, Mr. Abruzzo discusses each of the nine criteria in the context of the proposed Farmington Water acquisition.

Q. Does the proposed Farmington Water acquisition satisfy all nine criteria of 66 Pa. C.S. § 1327(a)?

A. It is premature to reach this conclusion when there is a separate, ongoing application proceeding where the evidentiary record is being developed and no findings of fact have been adopted.

Q. What is your recommendation regarding PAWC's potential acquisition of Farmington Water and Wastewater for ratemaking purposes?

A. Based on the foregoing, I recommend that the costs associated with the proposed Farmington Water and Wastewater acquisitions be removed from the FPFTY as reflected in Exhibit LA-1, Schedule A, page 1. As discussed in a later section of my testimony, I have removed the costs associated with the Farmington Water and Wastewater acquisitions from the FPFTY for the Water Operations and Wastewater SSS General Operations, respectively, including the amounts included in rate base (Schedule B-2 for water and Schedule B-3 for wastewater), operating expense (Schedule C-2 for water and Schedule C-3 for wastewater) and depreciation expense (Schedule C-6 for water and Schedule C-7 for wastewater).

Sadsbury Wastewater

Q. Please describe the proposed Sadsbury Wastewater acquisition.

A. As discussed on page 7 of Mr. Abruzzo's testimony, pursuant to 66 Pa. C.S. § 1102, the Company filed its application to acquire the Sadsbury Township Municipal Authority wastewater collection and conveyance system on August 3, 2023, in Docket No. A-2023-3042058. Mr. Abruzzo also states that Sadsbury Wastewater filed a Petition to Intervene and both OCA and the OSBA filed protests, which are currently pending before the Office of the Administrative Law Judge. As shown on Exhibit 3-C, page 80, the purchase price for the Sadsbury Wastewater system is $990,000 and an anticipated closing date occurring in the third quarter of 2024.

On page 8 of his testimony, Mr. Abruzzo states that the depreciated original cost of the Sadsbury Wastewater assets is more than the purchase price, thus the

Company is proposing to amortize the difference between the purchase price and the cost of Sadsbury Wastewater assets.

Q. Did PAWC include any post-acquisition costs in the rate base related to the Sadsbury Township Municipal Authority Wastewater acquisition?

A. No. In its response to OCA 12-008, the Company stated that its rate base claims in this proceeding do not include any post-acquisition capital investment for the Sadsbury Township Municipal Authority acquisition.

Q. Based on the two previously discussed criteria regarding whether a proposed acquisition should be included in the FPFTY, should the proposed Sadsbury Wastewater acquisition be included in the FPFTY in this case?

A. No. Based on the two previously discussed criteria, the proposed Sadsbury Wastewater acquisition should not be included in the FPFTY in this case. At this time, it is not known with reasonable certainty that the Commission will or will not approve the acquisition.

Q. What is your recommendation regarding PAWC's potential acquisition of the Sadsbury Wastewater system for ratemaking purposes?

A. Based on the foregoing, I recommend that the costs associated with the proposed Sadsbury Wastewater acquisition be removed from the FPFTY as reflected in Exhibit LA-1, Schedule A, page 1. As discussed in a later section of my testimony, I have removed the costs associated with the Sadsbury Wastewater acquisition from

the FPFTY, including the amounts included in rate base (Schedule B-4), operating expense (Schedule C-4) and depreciation expense (Schedule C-8).

BASA Wastewater

Q. Please describe the proposed BASA Wastewater acquisition.

A. The BASA system is a regional wastewater service provider that provides wastewater service to the City of Butler, Township of Butler, portions of Center, Summit, Connoquenessing, and Oakland Townships and the Borough of East Butler. According to Exhibit 3-C, PAWC filed its application for the BASA Wastewater system on February 14, 2023, in Docket No. A-2022-3037047.

As discussed on page 3 of Mr. Abruzzo's testimony, on August 14, 2023, the Company filed a unanimous settlement of all issues with all active parties in the BASA acquisition proceeding. On page 5 of his testimony, Mr. Abruzzo states that as part of the settlement, the parties requested that the Commission approve the addition of $228 million to PAWC's rate base pursuant to the BASA acquisition.

In its Order dated November 16, 2023, the Commission approved the Settlement.

Q. Were there appeals filed by certain parties in response to the Commission's Order approving the Joint Petition for Approval of Unanimous Settlement of All Issues?

A. Yes. On December 29, 2023, both Center Township, Butler County (1459 C.D. 2023) and Summit Township, Butler County (1460 C.D. 2023), filed appeals that are pending before the Pennsylvania Commonwealth Court.

Q. What is the status of the BASA acquisition as a result of those appeals?

A. The BASA Wastewater acquisition has not closed as of the date of the filing of my Direct Testimony, and it is unclear whether they will close while the appeals are pending. On page 20 of both Center Township's and Summit Township's applications, it states:

> PAWC and the BASA Parties are reluctant to close on the transaction while the Townships' Petitions for Review are pending before this Court.

Q. Did PAWC include any post-acquisition costs in the rate base related to the BASA Wastewater acquisition?

A. Yes. In its response to OCA 12-014, the Company referred to Exhibit 3-A, page 146 from PAWC's filing, which includes a column titled "Additions" with amounts totaling $15.4 million. In its response to OCA 21-008, the Company stated that the amounts shown in the "Additions" column reflect the post-acquisition costs related to the BASA Wastewater acquisition.

Q. Based on the two previously discussed criteria regarding whether a proposed acquisition should be included in the FPFTY, should the proposed BASA Wastewater acquisition be included in the FPFTY in this case?

A. No. Based on the two previously discussed criteria, the proposed BASA Wastewater acquisition should not be included in the FPFTY in this case. While there is a Commission order approving PAWC's acquisition of the BASA wastewater system, appeals of that decision have been filed with the Commonwealth Court. In my

opinion, there is no predicting with any degree of reasonable certainty how or when the Commonwealth Court will act. It is possible that the acquisition proceeding could be remanded and the ratemaking rate base or other aspects of the transaction that impact revenue requirement or recovery could change.[4] Thus, at this time, there is too much uncertainty with respect to that transaction and therefore it should not be included in the FPFTY for ratemaking purposes.

Q. What is your primary recommendation regarding PAWC's potential acquisition of the BASA wastewater system for ratemaking purposes?

A. Based on the foregoing, I recommend that the costs associated with the proposed BASA Wastewater acquisition be removed from the FPFTY. Since PAWC is presenting a separate revenue requirement for the BASA Wastewater Operations, as shown on Exhibit LA-1, Schedule A, page 2, I have reflected the removal of the entire BASA revenue requirement from the Company's overall filing in Exhibit LA-1, Schedule A, page 1.[5]

[4] I point to the example of the East Whiteland Township wastewater system acquisition by Aqua Pennsylvania Wastewater, Inc. at Docket No. A-2021-3026132. There, subsequent to the Commission entering an order approving Aqua's acquisition of the East Whiteland system, the OCA filed a timely appeal of the Commission's decision. However, prior to the thirty-day appeal period having run, Aqua moved quickly and closed the transaction and acquired the East Whiteland system. Subsequently, in response to the OCA's appeal, the Commonwealth Court entered an order reversing the Commission's decision. Aqua and the Commission have appealed the Commonwealth Court's decision to the state Supreme Court. I am advised by OCA counsel that, absent a stay, Aqua and the Commission are obligated to comply with the Commonwealth Court's order.

[5] There are no separate rate base or net operating income schedules in Exhibit LA-2 to reflect the removal of the BASA wastewater acquisition from the FPFTY.

Q. What is your alternative recommendation as to the BASA Wastewater system?

A. As stated above, to the extent the uncertainties about the proposed BASA transaction are sufficiently resolved before the close of the record in this proceeding, *i.e*., the Commission's Order becomes final and there are no other outstanding risk items that would prevent the closing, then I will change my recommended revenue requirement to include the BASA Wastewater Operations with my recommended adjustments. For BASA Wastewater operations, specifically, I would recommend that the rate of return recommended by OCA witness Garrett be applied to the ratemaking rate base value and I further recommend adjustments to the claimed depreciation expense.

<u>Brentwood Wastewater</u>

Q. Please describe the proposed Borough of Brentwood Wastewater acquisition.

A. As shown on page 86 of Exhibit 3-C, the Company filed its application to acquire the Borough of Brentwood ("Brentwood") wastewater system at a purchase price of $19.4 million on March 31, 2023 in Docket No. A-2021-3024058. As discussed on page 5 of Mr. Abruzzo's testimony, the Company's application to acquire Brentwood was accepted for filing on September 14, 2023. In addition, Mr. Abruzzo states that the Commission is required under Section 1329(d)(2) to enter a final decision by March 14, 2024. Upon approval, Mr. Abruzzo states that the Brentwood acquisition would close shortly thereafter.

Q. Did PAWC include any post-acquisition costs in the rate base related to the Brentwood Wastewater acquisition?

A. Yes. In its response to OCA 12-006, the Company referred to Exhibit 3-A, page 179 from PAWC's filing, which includes a column titled "Additions" with amounts totaling $3.5 million. In its response to OCA 21-003, the Company stated that the amounts shown in the "Additions" column reflect the post-acquisition costs related to the Brentwood Wastewater acquisition.

Q. Based on the two previously discussed criteria regarding whether a proposed acquisition should be included in the FPFTY, should the proposed Brentwood wastewater acquisition be included in the FPFTY in this case?

A. No. Based on the two previously discussed criteria, the proposed Brentwood wastewater acquisition should not be included in the FPFTY for ratemaking purposes in this case. Even if the Commission were to enter a final order by March 14, 2024, the evidentiary record in this proceeding closes on or around March 8, 2024, which is the last scheduled day of evidentiary hearings in this case.[6] Hence,

[6] Regarding the six-month period under Section 1329(d)(2), I am advised by OCA counsel that while the Commission may within its discretion act within the six-month period, it may also exercise its discretion to act outside of the six-month period as well. I point to the example of Aqua's application to acquire the DELCORA's wastewater system assets at Docket No. A-2019-3015173, in which the Commission did not enter a final order to approve or deny Aqua's application but instead remanded Aqua's application for further proceedings and for the issuance of a Recommended Decision on remand based on new developments in the case after the close of the evidentiary record in that case. This example demonstrates that even Section 1329 proceedings with truncated litigation schedules can be unpredictable as to the substance and timing of a Commission decision after the close of the record in a base rate proceeding.

by the close of the record in this proceeding, there is expected to be no Commission Order adjudicating the Brentwood acquisition.

Furthermore, I understand from counsel for OCA that the OCA has contested the transaction and PAWC has vigorously defended the transaction. This means that even if an order is entered in March, the appeal period must run, and there is no predicting with any reasonable degree of certainty whether a party (including possibly PAWC) will appeal the Commission decision once it is entered. This uncertainty is increased because, in a Recommended Decision issued January 17, 2024, the Administrative Law Judge recommended the Commission should deny the Brentwood acquisition. It makes no sense to presume – as PAWC seeks to do by including this in rate base – that the PUC will reverse this decision on March 14th. It seems as or more likely that the PUC will deny any exceptions filed by PAWC and Brentwood, and since we will not know this until on or after March 14, 2024, after the record is closed, it makes no sense to include this proposed acquisition in this case.

Moreover, PAWC is seeking approval of a ratemaking rate base for Brentwood Wastewater in the application proceedings. It is possible that, in the course of possible scenarios, the Commission could approve a different ratemaking rate base or impose conditions or modifications to the filed-for transaction that impact treatment of the assets for ratemaking purposes. For all of these reasons, there is too much uncertainty with respect to the Brentwood transaction and it would be unreasonable to rely on predictions of PAWC as to what the Commission will do and

whether an appeal will be taken, all of which would occur after the close of the record in this proceeding.

Q. What is your primary recommendation regarding PAWC's potential acquisition of the Brentwood wastewater system for ratemaking purposes?

A. Based on the two criteria previously discussed, I recommend that the costs associated with the proposed Brentwood Wastewater acquisition be removed from the FPFTY. Since PAWC is presenting a separate revenue requirement for the Brentwood wastewater system, as shown on Exhibit LA-1, Schedule A, page 2, I have reflected the removal of the entire Brentwood revenue requirement from the Company's overall filing in Exhibit LA-1, Schedule A, page 1.[7]

Q. What is your alternative recommendation as to the Brentwood Wastewater system?

A. As stated above, to the extent the uncertainties about the proposed Brentwood Wastewater transaction are sufficiently resolved before the close of the record in this proceeding, *i.e.*, the Commission's Order becomes final and there are no other outstanding risk items that would prevent the closing, then I will change my recommended revenue requirement to include the Brentwood Wastewater Operations with my recommended adjustments. For Brentwood Wastewater operations, specifically, I would recommend that the rate of return recommended by

[7] There are no separate rate base or net operating income schedules in Exhibit LA-2 to reflect the removal of the Brentwood wastewater acquisition from the FPFTY.

OCA witness Garrett be applied to the ratemaking rate base value and I further recommend adjustments to the claimed depreciation expense.

Concerns Regarding BASA and Brentwood Wastewater Plant Account Useful Lives and the Impact on Depreciation Expense

Q. What is your alternative recommendation for depreciation expense for BASA and Brentwood Wastewater?

A. As discussed in above, I am recommending that the acquisitions related to BASA Wastewater and Brentwood Wastewater be excluded from the FPFTY in the current proceeding. However, to the extent the information changes by the close of the record to meet the criteria I have outlined above to include these acquisitions in the FPFT for ratemaking purposes, I recommend adjustments to PAWC's claimed depreciation expense for these acquisitions.

Q. What is shown in Exhibit LA-5?

A. Exhibit LA-5 contains materials showing the survivor curves for wastewater utility plant accounts prepared by Gannett Fleming that were used in PAWC's acquisition proceedings under §1329 for BASA and Brentwood.

Pages 2-3 show information from Appendix A-5.2 in the BASA §1329 case, A-2022-3037047, containing the Gannett Fleming recommended survivor curves for BASA. Pages 4-5 show information from Appendix A-5.2 in the Brentwood §1329 case, A-2021-3024058, containing the Gannett Fleming recommended survivor curves for Brentwood.

Pages 6 through 10 contain PAWC's responses to OCA 26-027, 26-028, 26-029 and 26-030, which show comparable survivor curve information.

PAWC's response to OCA 26-027 confirms that the listed survivor curves for each plant account listed there "are the confirmed life estimates used in Docket No. A-2022-30378047" which was the BASA §1329 acquisition case.

PAWC's response to OCA 26-028 confirms that the listed survivor curves for BASA are the ones being proposed on behalf of PAWC in the current rate case for purposes of computing depreciation in the FTY and FPFTY.

PAWC's response to OCA 26-029 confirms that the listed survivor curves for each plant account listed there "are the confirmed life estimates used in Docket No. A-2021-3024058" which was the Brentwood §1329 acquisition case.

PAWC's response to OCA 26-030 confirms that the listed survivor curves for Brentwood are the ones being proposed on behalf of PAWC in the current rate case for purposes of computing depreciation in the FTY and FPFTY.

Q. In comparing the information from the BASA and Brentwood Wastewater acquisition cases and PAWC's recommended survivor curves in the current rate case, what did you notice?

A. I noticed some instances in which PAWC has drastically shortened the utility plant useful lives for purposes of depreciation expense in the current rate case. For BASA Wastewater, PAWC has drastically shortened its proposed utility plant life for the following accounts in the current rate case, by as much as 8 to 20 years, as compared

with the corresponding recommendation in the BASA's Section1329 acquisition case. The table below shows the differences between the two proceedings:

BASA Wastewater Operations

Account No.	Description	Rate Case Survivior Curve	§1329 Survivor Curve	Shortening of Useful Life from §1329 Case to Rate Case
		(A)	(B)	(C)
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	65-S0	10
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	70-S0	15
361.20	MANHOLES	50-S2.5	60-S2.5	10
363.00	SERVICES	47-R3	55-R3	8
364.00	FLOW MEASURING DEVICES	15-L2.5	30-L2.5	15
371.00	PUMPING EQUIPMENT	30-S0.5	40-S0.5	10
380.00	TREATMENT EQUIPMENT	35-S1.5	45-S1.5	10
382.00	OUTFALL SEWER LINES	50-R3	70-R3	20

Notes and Source:
Col. (A): PAWC Filing, Exhibit 11-H, Table 2
Col. (B): Useful Lives per PAWC-BASA Section 1329, Docket No. A-2022-3037047, Gannett Fleming Exhibit 7, page 3

Similarly, for Brentwood Wastewater, PAWC has drastically shortened its proposed utility plant life for the account 363.00, services, by 13 years, and for account 361.2, manholes, by 15 years, in the current rate case, compared with the corresponding recommendation in the §1329 acquisition case:

Brentwood Wastewater Operations

Account No.	Description	Rate Case Survivior Curve	§1329 Survivor Curve	Shortening of Useful Life from §1329 Case to Rate Case
		(A)	(B)	(C)
361.20	MANHOLES	50-S2.5	65-S2.5	15
363.00	SERVICES	47-R3	60-R3	13

Notes and Source:
Col. (A): PAWC Filing, Exhibit 11-J, Table 2
Col. (B): Useful Lives per PAWC-Brentwood Section 1329, Docket No. A-2021-3024058, Gannett Fleming Exhibit 7, page 3

Q. How does the estimated useful life generally affect depreciation expense for a regulated utility like PAWC?

A. Generally, the shorter the useful life, the higher the depreciation expense. Under remaining life depreciation, the estimated useful life is the denominator. So having a significantly lower estimated useful life in the denominator, other things being equal, can significantly increase the resulting depreciation rate and depreciation expense.

Q. Should depreciation lives which are 8 to 20 years shorter be allowed for PAWC's rate case depreciation expense for BASA and Brentwood in the current rate case?

A. No. As noted above, PAWC has been dramatically inconsistent in the depreciation lives that were used for a number of important utility plant accounts between the BASA and Brentwood Wastewater acquisition proceedings and the corresponding lives that PAWC is using for depreciation expense for those not-yet acquired systems in the current rate case. PAWC's use of significantly shortened useful lives for those accounts has contributed to PAWC's requested amounts for depreciation expense in the current rate case.

Q. Have you made an adjustment to reduce depreciation expense for the above-noted wastewater utility plant accounts for BASA and Brentwood?

A. Based on a preliminary estimate, PAWC's proposed depreciation expense for BASA Wastewater should be reduced by as much as $877,000 to remove the impact of useful life shortening from the Section 1329 acquisition proceeding to the rate case.

PAWC's proposed depreciation expense for Brentwood Wastewater should be reduced by as much as $48,000. I have not yet completed or reflected adjustments for those depreciation expenses due to the way the BASA and Brentwood Wastewater Operations total cost of service amounts are being reflected in the OCA's revenue requirement recommendations. At this time, PAWC's entire proposed cost of service for BASA and Brentwood Wastewater Operations are being removed from the revenue requirement for the reasons presented in my testimony. Consequently, there is not a need at this stage to adjust the BASA and Brentwood Wastewater Operations depreciation expense proposed by PAWC. If either of those acquisitions meet the criteria for inclusion in PAWC's revenue requirement, at a subsequent point in this proceeding, the cost of serving the acquired BASA and Brentwood customers may need to be reflected. At that point, the amount of depreciation expense that PAWC has proposed for those not-yet acquired wastewater utility systems will need to be adjusted.

V. RATE BASE

Q. At this time are you recommending any adjustments to rate base?

A. Yes. As shown on Exhibit LA-1, Schedule B (pages 1-5), column B, I am recommending a number of adjustments to the Company's adjusted rate base for PAWC's Water and Wastewater Operations.

Q. Please summarize your adjustments to PAWC's Water Operations rate base.

A. As shown in PAWC's Exhibit 3-A, page 25, the Company proposes a FPFTY rate base of approximately $4.704 billion for its Water Operations. As shown on Exhibit LA-1, Schedule B, page 1, I recommend FPFTY rate base of approximately $4.692 billion for PAWC's Water Operations, which is about $11.9 million lower than the Company's proposal.

Q. Please summarize your adjustments to PAWC's Wastewater Operations rate base.

A. As shown in PAWC's Exhibit 3-A, pages 96, 145, 178 and 217 and summarized in the table below, the Company proposes an overall FPFTY rate base of approximately $1.392 billion for its combined or total Wastewater Operations.

PAWC Rate Base for Wastewater Operations	Proposed Rate Base 6/30/2025 ($000's)
Wastewater SSS General Operations	$ 649,331
BASA Wastewater Operations	$ 231,537
Brentwood Wastewater Operations	$ 22,054
CSS Wastewater Operations	$ 489,184
Total	$ 1,392,106
Source: Exhibit 3-A (pages 96, 145, 178 and 217) from PAWC's filing	

As summarized in the table below, I recommend an overall FPFTY rate base of approximately $1.133 billion for PAWC's total Wastewater Operations after removing BASA and Brentwood, which is about $258.7 million lower than the Company's proposal.

OCA Recommended Rate Base for Wastewater Operations	Rate Base 6/30/2025 ($000's)
Wastewater SSS General Operations	$ 644,283
BASA Wastewater Operations	$ -
Brentwood Wastewater Operations	$ -
CSS Wastewater Operations	$ 489,085
Total	$ 1,133,368

Q. Would you please discuss each of your recommended adjustments to rate base.

A. Yes, each of my recommended adjustments to rate base is discussed below.

Schedule B-1, Acquisition – Audubon Water

Q. Please explain your adjustment on Schedule B-1?

A. As discussed in Section IV of my testimony, I am recommending that the acquisition related to the Audubon Water be excluded from the FPFTY in the current proceeding. As discussed in the Direct Testimony of Company Witness Abruzzo, the Company anticipates that the Audubon Water acquisition transaction will close by the end of the FPFTY. Based upon the criteria discussed in Section IV of my testimony, using the information PAWC provided in its responses to OCA 21-007 and OCA 21-009, I am removing the amounts from rate base that the Company included in the FPFTY for the Audubon Water acquisition.

As shown on Exhibit LA-2, Schedule B-1, this adjustment reduces rate base by $7.407 million for PAWC's Water Operations.

Schedule B-2, Acquisition – Farmington Water

Q. Please explain your adjustment on Schedule B-2?

A. As discussed in Section IV of my testimony, I am recommending that the acquisition related to Farmington Water be excluded from the FPFTY in the current proceeding. As discussed in the Direct Testimony of Company witness Abruzzo, the Company

anticipates that the Farmington Water acquisition transaction will close by the end of the FPFTY. Based upon the criteria discussed in Section IV of my testimony, using the information PAWC provided in its responses to OCA 21-005 and OCA 21-012, I am removing the amounts from rate base that the Company included in the FPFTY for the Farmington Water acquisition.

As shown on Exhibit LA-2, Schedule B-2, this adjustment reduces rate base by $2.773 million for PAWC's Water Operations.

Schedule B-3, Acquisition – Farmington Wastewater

Q. Please explain your adjustment on Schedule B-3?

A. As discussed in Section IV of my testimony, I am recommending that the acquisition related to Farmington Wastewater be excluded from the FPFTY in the current proceeding. As discussed in the Direct Testimony of Company witness Abruzzo, the Company anticipates that the Farmington Wastewater acquisition transaction will close by the end of the FPFTY. Based upon the criteria discussed in Section IV of my testimony, using the information PAWC provided in its responses to OCA 21-006 and OCA 21-011, I am removing the amounts from rate base that the Company included in the FPFTY for the Farmington Wastewater acquisition.

As shown on Exhibit LA-2, Schedule B-3, this adjustment reduces rate base by $2.878 million for PAWC's Wastewater SSS General Operations.

Schedule B-4, Acquisition – Sadsbury Wastewater

Q. Please explain your adjustment on Schedule B-4.

A. As discussed in Section IV of my testimony, I am recommending that the acquisition related to Sadsbury Wastewater be excluded from the FPFTY in the current

proceeding. As discussed in the Direct Testimony of Company witness Abruzzo, the Company anticipates that the Sadsbury Wastewater acquisition transaction will close by the end of the FPFTY. Based upon the criteria discussed in Section IV of my testimony, using the information PAWC provided in its responses to OCA 21-004 and OCA 21-010, I am removing the amounts from rate base that the Company included in the FPFTY for the Sadsbury Wastewater acquisition.

As shown on Exhibit LA-2, Schedule B-4, this adjustment reduces rate base by $2.019 million for PAWC's Wastewater SSS General Operations.

Schedule B-5, Cash Working Capital

Q. What is Cash Working Capital?

A. Cash working capital is the cash needed by the Company to cover its day-to-day operations. If the Company's cash expenditures, on an aggregate basis, precede the cash recovery of expenses, investors must provide cash working capital. In that situation a positive cash working capital requirement exists. On the other hand, if revenues are typically received prior to when cash expenditures are made, on average, then ratepayers provide the cash working capital to the utility, and the negative cash working capital allowance is reflected as a reduction to rate base. In this case, the cash working capital requirement is a reduction to rate base as ratepayers are supplying these funds.

Q. What has PAWC proposed for cash working capital in the current rate case?

A. In the current rate case, PAWC proposed the following positive cash working capital amounts:

- Water Operations - approximately $23.2 million for Operating and Management Expenses and negative $8.35 million for Interest and Dividend Expenses.
- Wastewater SSS General Operations - $2.2 million for Operating and Management Expenses and negative $1.19 million for Interest and Dividend Expenses.
- BASA Wastewater Operations - $373,592 for Operating and Management Expenses and negative $422,915 for Interest and Dividend Expenses.
- Brentwood Wastewater Operations - $43,531 for Operating and Management Expenses and negative $40,313 for Interest and Dividend Expenses.
- CSS Wastewater Operations - $1.9 million for Operating and Management Expenses and negative $893,553 for Interest and Dividend Expenses.

The Company's proposed CWC amounts are shown on PAWC Exhibit 3-A.

Q. Have you prepared schedules showing OCA's recommended CWC allowances for each of these PAWC utility operations?

A. Yes. I have recalculated the CWC requirements on Schedules B-5.B, B-5.C and B-5.D in Exhibit LA-2 for Water Operations, Wastewater SSS General Operations, and CSS Wastewater Operations, respectively.[8] The adjustments to CWC incorporate the impacts of adjustments to expenses that I have recommended as well as the different capital structure proposed by OCA Witness Garrett.

As shown on Exhibit LA-2, Schedule B-5.B, my adjusted CWC requirements are approximately $22.34 million for Operating and Management Expenses and negative $9.29 million for Interest and Dividend Expenses for Water Operations. My total adjusted CWC requirement is $1.761 million lower than PAWC's proposed CWC allowance for Water Operations.

[8] Since the BASA and Brentwood revenue requirements have been removed in their entirety, no separate adjustments to BASA and Brentwood cash working capital requirements were made.

As shown on Exhibit LA-2, Schedule B-5.C, adjusted CWC is approximately $2.18 million for Operating and Management Expenses and negative $1.29 million for Interest and Dividend Expenses for Wastewater SSS General Operations. My total adjusted CWC requirement is $150,794 lower than PAWC's proposed CWC for its Wastewater SSS General Operations.

As shown on Exhibit LA-2, Schedule B-5.D, adjusted CWC is approximately $1.86 million for Operating and Management Expenses and negative $976,474 for Interest and Dividend Expenses for CSS Wastewater Operations. My total adjusted CWC Requirement is $98,811 lower than PAWC's proposed CWC for its CSS Wastewater Operations.

VI. OPERATING INCOME

Q. What does PAWC show for its water and wastewater utility operating income?

A. On PAWC's Exhibit 3-A, line 21, in the "Present Rates 6/30/25 Amount" column, for each of the Water Operations and Wastewater Operations revenue requirements included in its filing, the Company shows the adjusted utility operating income amounts as summarized in the following table:

PAWC Operating Income	Present Rates 6/30/2025 ($000's)
Water Operations	$ 295,212
Wastewater SSS General Operations	$ 28,866
BASA Wastewater Operations	$ (378)
Brentwood Wastewater Operations	$ 370
CSS Wastewater Operations	$ 27,579
Total	$ 351,649
Source: Exhibit 3-A from PAWC filing	

As shown in the table above, the Company's filing reflects operating income totaling $351.649 million in 2025.

Q. Have you summarized PAWC's calculation of net operating income for each utility revenue requirement on one of your schedules in Exhibit LA-1?

A. Yes. I have summarized PAWC's proposed net operating income for Water and Wastewater Operations on Exhibit LA-1, Schedule C (pages 1-5).

Q. Are you recommending any adjustments that impact net operating income?

A. Yes. As shown on Exhibit LA-1, Schedule C (pages 1-5), column B, I am recommending a number of adjustments to the Company's adjusted operating income for PAWC's Water and Wastewater Operations.

Q. On which Schedules do you present your recommended adjustments to net operating income?

A. My recommended adjustments to net operating income for the Company's Water and Wastewater Operations are presented below and on Schedules C-1 through C-22 of Exhibit LA-2. Each of those adjustments is discussed below.

Schedule C-1, Acquisition O&M Expense – Audubon Water

Q. Please explain your adjustment on Schedule C-1.

A. As discussed in Section IV of my testimony, I am recommending that the acquisition related to the Audubon Water be excluded from the FPFTY in the current proceeding. As discussed in the Direct Testimony of Company witness Abruzzo, the

Company anticipates that the Audubon acquisition transaction will close by the end of the FPFTY. Based upon the criteria discussed in Section IV of my testimony, I am removing the amounts of operating revenue and expenses that the Company included in the FPFTY for the Audubon Water acquisition.

As shown on Exhibit LA-2, Schedule C-1, this adjustment reduces operating revenue by $2.965 million, operating expenses and taxes other than income by $1.586 million and amortization expense by $763,977 for PAWC's Water Operations.

Schedule C-2, Acquisition O&M Expense – Farmington Water

Q. Please explain your adjustment on Schedule C-2.

A. As discussed in Section IV of my testimony, I am recommending that the acquisition related to Farmington Water be excluded from the FPFTY in the current proceeding. As discussed in the Direct Testimony of Company witness Abruzzo, the Company anticipates that the Farmington Water acquisition transaction will close by the end of the FPFTY. Based upon the criteria discussed in Section IV of my testimony, I am removing the amounts of operating revenue and expenses that the Company included in the FPFTY for the Farmington Water acquisition.

As shown on Exhibit LA-2, Schedule C-2, this adjustment reduces operating revenue by $266,371, operating expenses and taxes other than income by $152,385 and amortization expense by $21,549 for PAWC's Water Operations.

Schedule C-3, Acquisition O&M Expense – Farmington Wastewater

Q. Please explain your adjustment on Schedule C-3.

A. As discussed in Section IV of my testimony, I am recommending that the acquisition related to Farmington Wastewater be excluded from the FPFTY in the current proceeding. As discussed in the Direct Testimony of Company witness Abruzzo, the Company anticipates that the Farmington Wastewater acquisition transaction will close by the end of the FPFTY. Based upon the criteria discussed in Section IV of my testimony, I am removing the amounts of operating revenue and expenses that the Company included in the FPFTY for the Farmington Wastewater acquisition.

As shown on Exhibit LA-2, Schedule C-3, this adjustment reduces operating revenue by $322,926, operating expenses and taxes other than income by $264,176 and amortization expense by $5,699 for PAWC's Wastewater SSS General Operations.

Schedule C-4, Acquisition O&M Expense – Sadsbury Wastewater

Q. Please explain your adjustment on Schedule C-4.

A. As discussed in Section IV of my testimony, I am recommending that the acquisition related to Sadsbury Wastewater be excluded from the FPFTY in the current proceeding. As discussed in the Direct Testimony of Company witness Abruzzo, the Company anticipates that the Sadsbury Wastewater acquisition transaction will close by the end of the FPFTY. Based upon the criteria discussed in Section IV of my testimony, I am removing the amounts of operating revenue and expenses that the Company included in the FPFTY for the Sadsbury Wastewater acquisition.

As shown on Exhibit LA-2, Schedule C-4, this adjustment reduces operating revenue by $471,228, operating expenses and taxes other than income by $249,288 and amortization expense by $85,414 for PAWC's Wastewater SSS General Operations.

Schedule C-5, Depreciation Expense – Audubon Water

Q. Please explain your adjustment on Schedule C-5.

A. As discussed in Section IV of my testimony, I am recommending that the acquisition related to Audubon be excluded from the FPFTY in the current proceeding. As discussed in the Direct Testimony of Company witness Abruzzo, the Company anticipates that the Audubon acquisition transaction will close by the end of the FPFTY. Based upon the criteria discussed in Section IV of my testimony, I am removing the amounts of depreciation expense that the Company included in the FPFTY for the Audubon acquisition.

As shown on Exhibit LA-2, Schedule C-5, this adjustment reduces depreciation expense by $269,599 for PAWC's Water Operations.

Schedule C-6, Depreciation Expense – Farmington Water

Q. Please explain your adjustment on Schedule C-6.

A. As discussed in Section IV of my testimony, I am recommending that the acquisition related to Farmington Water be excluded from the FPFTY in the current proceeding. As discussed in the Direct Testimony of Company witness Abruzzo, the Company anticipates that the Audubon acquisition transaction will close by the end of the FPFTY. Based upon the criteria discussed in Section IV of my testimony, I am

removing the amounts of depreciation expense that the Company included in the FPFTY for the Farmington Water acquisition.

As shown on Exhibit LA-2, Schedule C-6, this adjustment reduces depreciation expense by $101,751 for PAWC's Water Operations.

Schedule C-7, Depreciation Expense – Farmington Wastewater

Q. Please explain your adjustment on Schedule C-7.

A. As discussed in Section IV of my testimony, I am recommending that the acquisition related to Farmington Wastewater be excluded from the FPFTY in the current proceeding. As discussed in the Direct Testimony of Company witness Abruzzo, the Company anticipates that the Audubon acquisition transaction will close by the end of the FPFTY. Based upon the criteria discussed in Section IV of my testimony, I am removing the amounts of depreciation expense that the Company included in the FPFTY for the Farmington Wastewater acquisition.

As shown on Exhibit LA-2, Schedule C-7, this adjustment reduces depreciation expense by $137,987 for PAWC's Wastewater SSS General Operations.

Schedule C-8, Depreciation Expense – Sadsbury Wastewater

Q. Please explain your adjustment on Schedule C-8.

A. As discussed in Section IV of my testimony, I am recommending that the acquisition related to Sadsbury Wastewater be excluded from the FPFTY in the current proceeding. As discussed in the Direct Testimony of Company witness Abruzzo, the Company anticipates that the Sadsbury Wastewater acquisition transaction will close by the end of the FPFTY. Based upon the criteria discussed in Section IV of my

testimony, I am removing the amounts of depreciation expense that the Company included in the FPFTY for the Sadsbury Wastewater acquisition.

As shown on Exhibit LA-2, Schedule C-8, this adjustment reduces depreciation expense by $51,847 for PAWC's Wastewater SSS General Operations.

Schedule C-9, Uncollectibles Expense

Q. How did PAWC determine its requested amounts of Uncollectibles Expense?

A. As discussed in the Direct Testimony of Company witness Swiz, PAWC used an average of net write-offs to revenues for the two one-year periods July 1, 2021 through June 30, 2022 and July 1, 2022 through June 30, 2023. Specifically, PAWC calculated an uncollectibles rate of 1.176 percent as summarized in the table below:

Description	7/1/2021 - 6/30/2022	7/1/2022 - 6/30/2023	Two-Year Average
Net Write-Off Activity	$ 10,174,929	$ 9,374,665	$ 9,774,797
Total Billed Revenues	$ 775,900,531	$ 886,675,101	$ 831,287,816
Average Write-Off Percentage	1.311%	1.057%	1.176%
Source: Table 1 on page 4 of Swiz Direct Testimony			

Q. Please explain your adjustment for Uncollectibles Expense.

A. As shown on Exhibit LA-2, Schedule C-9, I recommended using a three-year average based on the 12 months ended June 30, 2020, June 30, 2022 and June 30, 2023, which calculates to an uncollectibles write-off percentage of 1.164 percent. For the Water Operations, this reduces PAWC's proposed Uncollectibles Expense by $100,054. For PAWC's Wastewater Operations, this adjustment reduces PAWC's proposed Uncollectibles Expense by $11,591 for Wastewater SSS General

Operations, $1,438 for BASA Wastewater Operations, $221 for Brentwood Wastewater Operations, and $9,547 for CSS Wastewater Operations.

Q. Why should three-years be used for normalizing Uncollectibles Expense in this case instead of two years?

A. As noted on page 4 Mr. Swiz's testimony, three years has historically been used by PAWC for calculating pro forma Uncollectibles Expense, but Mr. Swiz states that using a two-year average eliminates the impacts of Covid-19 pandemic on customer collections. With regard to the impacts that Covid-19 had on customer collections, the period July 1, 2020 through June 30, 2021 appears to be the period impacted the most by the Covid-19 pandemic as shown in the following table:

Description	July 1, 2019 to June 30, 2020	July 1, 2020 to June 30, 2021	July 1, 2021 to June 30, 2022	July 1, 2022 to June 30, 2023
Write Offs	$ 9,514,528	$ 4,776,043	$10,736,970	$10,146,054
Bad Debt Recovery	$ 1,552,132	$ 598,751	562,041	771,389
Net Write Offs	$ 7,962,396	$ 4,177,292	10,174,929	9,374,665
Billed Revenues	$ 701,283,203	$ 762,652,071	$775,900,531	$886,675,101
Write-Off Percentage	1.135%	0.548%	1.311%	1.057%
Source: Exhibit 3-B and the response to OCA 09-030				

As shown in the above table, for the 12-months ended June 30, 2021, the uncollectibles annual write-off percentage calculates to 0.548 percent whereas for the 12-month period ended June 30, 2020, the annual write-off percentage of 1.135 percent is consistent with the write-off percentages shown for the 12-months ended June 30, 2022 and June 30, 2023. Consequently, averaging the annual write-off information using the 12 months ended June 30, 2020, June 30, 2022 and June 30,

2023, which is the HTY in this case, appears to be reasonable in the context of the current PAWC rate case.

Schedule C-10, Vacancies - Salary and Wages and Payroll Taxes

Q. Please explain your adjustment related to vacancies for Salaries and Wages Expense.

A. As shown on Exhibit LA-2, Schedule C-10, this adjustment reduces PAWC's proposed 2025 salaries and wages expense for Water Operations by $1.045 million to remove the cost associated with vacant positions. Payroll tax expense is reduced by $79,970.

Q. How many positions is PAWC proposing to add to its work force to derive its going-level payroll expense amount for its water operations?

A. The Company's workpapers for its proposed salaries and wages reflect a projected FPFTY work force of 1,076 positions for its Water Operations, consisting of 299 non-collective bargaining unit salaried positions, 547 non-collective bargaining unit hourly positions, and 230 collective bargaining unit hourly positions. That is an increase of 30 positions above the June 30, 2023 level of 1,046 positions.

Q. Are the 30 new positions for the Company's Water Operations in the FPFTY associated with PAWC's proposed acquisitions?

A. No. PAWC is proposing to add 43 additional positions pursuant to the pending acquisitions of Audubon Water, Farmington Township Water and Wastewater, BASA Wastewater and Brentwood Wastewater. As previously discussed, I am

recommending that all of the Company's proposed acquisitions be excluded from the FPFTY. Consequently, the FPFTY payroll expense associated with those 43 positions has been removed from FPFTY cost of service, for a total adjustment of $2.984 million.[9] A summary of the acquisition-related payroll expense and references to where it appears in my Schedules is shown in the table below:

Description	Amount	Comments
Audubon Water	$ 387,283	Removed on Sch. C-1
Farmington Water	$ 47,751	Removed on Sch. C-2
Farmington Wastewater	$ 65,425	Removed on Sch. C-3
Sadsbury Township Municipal Authority	$ -	No Labor for Sadsbury
BASA	$ 2,407,470	Removed on Sch. A, page 1
Brentwood	$ 76,876	Removed on Sch. A, page 1
Total	$ 2,984,805	
PAWC Source: Exhibit 3-B, pages 303-308		

Q. Have all of the 30 new positions that PAWC projects to add to its work force for Water Operations been filled?

A. No. According to PAWC's response to OCA 18-013, which reflects information through December 29, 2023 (i.e., the date of the response), PAWC anticipates that three of the 30 proposed positions for water operations will not be filled until June 30, 2024.

[9] Exhibit LA-2, Schedule C-4 relates to the removal of O&M expenses associated with the acquisition of the Sadsbury Township Municipal Authority, which did not include any amounts for labor costs.

Q. Has the Company identified other positions that became vacant subsequent to the HTY ended June 30, 2023?

A. Yes. In its response to OCA 09-070(e) and (f), which is dated December 6, 2023, the Company identified 49 positions with gross annual payroll expense totaling $3.369 million that became vacant subsequent to the HTY ended June 30, 2023.

Q. Have any of those positions been refilled since the date of the response to OCA 09-070?

A. Yes. In its response to OCA 26-001, the Company stated that 27 of the 49 positions have been refilled as of the date of that response (*i.e.*, January 16, 2024).

Q. Did the Company identify any additional positions that became vacant since the 49 positions listed in the response to OCA 09-070?

A. Yes. In its response to OCA 26-001, Attachment 2, the Company identified eight additional positions that became vacant after November 27, 2023.[10]

Q. Is it common for a utility the size of PAWC to have some level of work force vacancies at any given point in time?

A. Yes. At any given point in time, a utility the size of PAWC with a work force of more than 1,000 positions could have vacancies. Thus, for rate setting purposes, using a full utility-proposed work force complement with no provision for unfilled

[10] As shown on the OCA 09-070 Attachment (page 3), of the 49 positions that became vacant subsequent to June 30, 2023, the most recent termination date was November 27, 2023.

positions, *i.e.*, without a provision for a normal vacancy rate, would tend to overstate the actual amount of labor costs.

Q. Please explain your adjustment for salaries and wages.

A. As shown on Exhibit LA-2, Schedule C-10, using the information from the response to OCA 18-013 for the unfilled positions as of December 29, 2023, I calculated a vacancy rate of 1.76 percent, which I applied to the Company's proposed salaries and wages for the FPFTY ending June 30, 2025 for Water Operations. As shown on Schedule C-10, to remove costs for unfilled positions and reflect this vacancy rate, PAWC's requested salaries and wages for Water Operations are reduced by $1.045 million, and payroll tax expense is reduced by $79,970. There is no adjustment to this expense for Wastewater Operations.

Schedule C-11, Annualized Performance Plan Expense

Q. Please explain your adjustment to performance plan expense.

A. This adjustment is related to my recommendation to apply a vacancy adjustment to projected 2025 salaries and wages. I reduced the Company's proposed 2025 annualized performance plan expense by the percentage of my recommended vacancy adjustment for non-collective bargaining salaried, non-collective bargaining hourly and collective bargaining unit employees for Water Operations that was discussed above pursuant to my adjustment to salaries and wages on Exhibit LA-2, Schedule C-10.

Q. Please explain how this adjustment impacted PAWC's water operations.

A. As shown on Exhibit LA-2, Schedule C-11, my adjustment reduces annualized performance plan expense by $85,523 and related payroll tax expense by $6,543 for Water Operations. There is no adjustment to this expense for Wastewater Operations.

Schedule C-12, Group Insurance Expense

Q. Please explain your adjustment to group insurance expense.

A. This adjustment is related to my recommendation to apply a vacancy adjustment to 2025 work force levels. As stated on page 9 of Ms. O'Malley's Direct Testimony (Statement No. 5), employee group insurance expense is grouped into two primary categories, including (1) basic life, short-term disability, long-term disability and accidental death and disability insurance ("AD&D"), and (2) medical, dental, prescription and vision insurance.

I reduced the Company's proposed 2025 FPFTY group insurance expense to reflect my recommended vacancy factor on Exhibit LA-2, Schedule C-10. I then applied the Company's capitalization rate percentages to my adjustment to derive the amount of group insurance expense charged to operating expenses. The impact of vacancies on the 2025 work force levels results in lower group insurance expense due to some positions not being filled at any given point in time. This adjustment reduces projected 2025 group insurance expense by $200,623 for Water Operations. There is no adjustment for this expense for PAWC's Wastewater Operations.

Schedule C-13, 401K, Defined Contribution Plan and Employee Stock Purchase Plan

Q. Please explain your adjustment to 401K, Defined Contribution Plan and Employee Stock Purchase Plan expense.

A. This adjustment is also related to applying a vacancy rate for projected 2025 workforce. On Exhibit LA-2, Schedule C-13, I reduced the Company's proposed 2025 401K, Defined Contribution Plan ("DCP") and Employee Stock Purchase Plan ("ESPP") expense by applying the vacancy rate adjustment. I then applied the Company's water capitalization rate percentage to derive the amount of adjustment to 401K, DCP, and ESPP expense charged to operating expenses. As shown on Exhibit LA-2, Schedule C-13, my adjustment reduces projected 2025 expense by $72,817 for Water Operations. There is no adjustment for this expense for PAWC's Wastewater Operations.

Schedule C-14, Interest Synchronization

Q. Please explain your interest synchronization adjustment.

A. The interest synchronization adjustment applies the weighted cost of debt to the adjusted rate base in deriving the interest deduction applicable to the calculation of test year income tax expense. Utilities and utility regulators routinely accept the interest synchronization adjustment as appropriate and necessary for ratemaking purposes. The interest synchronization method is widely used by other utilities and utility regulatory commissions because it appropriately coordinates the elements of the ratemaking formula and is fair to all parties.

The calculations of the interest synchronization adjustments for PAWC's Water and Wastewater Operations are shown on pages 2 through 6 (and summarized on page 1) of Schedule C-14 on Exhibit LA-2.

Schedule C-15, PAWC External Board Members Expense

Q. Please explain your adjustment on Schedule C-15.

A. This adjustment relates to Recommendation IV-1 pursuant to the Management and Operations Audit that was issued in October 2023 in Docket No. 2022-3035217. Specifically, Recommendation IV-1 stated:

> Perform a market comparison for local board compensation to ensure PAWC Board fees are at market rates.

As it relates to Recommendation IV-1, in its Implementation Plan, the Company stated that it is in the process of evaluating whether it should continue to maintain external Board members, and if so, PAWC will re-evaluate whether its external Board compensation fees are at market rates. In its response to OCA 22-003, the Company stated that it eliminated its external Board as of December 31, 2023, but that the FPFTY includes annual expense related to external Board members in the amount of $123,250. The Company stated that it will remove this amount during the rebuttal phase of this proceeding. As a result, I have removed the $123,250 from PAWC's Water Operations.

As shown on Exhibit LA-2, Schedule C-15, this adjustment reduces pre-tax operating income by $123,250 for Water Operations.

Schedule C-16, Insurance Other Than Group

Q. How did PAWC calculate Insurance Other Than Group for the FPFTY?

A. As discussed on page 24 of the Direct Testimony of Company witness O'Malley, the HTY amount of Insurance Other Than Group was adjusted using insurance premiums that were actually incurred and projected to be incurred during the 12 months ending June 30, 2024 and then adjusted by a five-year average of actual retroactive adjustments. The Company then adjusted the FTY and FPFTY Insurance Other Than Group expense by applying an increase of 6.53 percent, which is based on a five-year average.[11] The Company also applied a capitalization rate to eliminate the portion of worker's compensation expense that is not charged to operating expenses. Finally, PAWC allocated the FPFTY Insurance Other Than Group between Water and Wastewater Operations based on Depreciated Utility Plant in Service.[12]

Q. Do you agree with PAWC's methodology for calculating Insurance Other Than Group for the FPFTY?

A. Generally, yes. However, I disagree with the Company's use of the five-year average of 6.53 percent to calculate Insurance Other Than Group for the FPFTY.

[11] Ms. O'Malley states on page 24 of her testimony that insurance claim amounts were held at HTY levels to arrive at FPFTY costs.

[12] For Wastewater Operations, PAWC allocated Insurance Other Than Group to Wastewater SSS General Operations and CSS Wastewater Operations only.

The Company's calculation of the 6.53 percent is replicated in the table below:

Per Books	12 Months Ending June 2018	12 Months Ending June 2019	12 Months Ending June 2020	12 Months Ending June 2021	12 Months Ending June 2022	12 Months Ending June 2023
55110000 Insurance Vehicle	$225,420	$207,332	$225,377	$249,451	$265,232	$278,559
55710000 Insurance General Liabilty	9,122,239	9,755,759	9,620,594	11,375,771	11,038,467	11,469,880
55711000 Insurance Casualty Reserve	(2,017,551)	(25,216)	(901,767)	(2,221,572)	(2,369,245)	183,485
55720000 Insurance Workers Compensation	2,359,754	2,514,031	2,827,264	2,375,609	1,831,039	1,545,189
55720100 Insurance WC Capitalized Credits	(840,218)	(762,997)	(1,126,401)	(1,010,742)	(724,233)	(599,816)
55730000 Insurance Other	81,462	68,282	92,858	156,984	125,215	85,815
55740000 Insurance Property	1,173,794	1,321,643	2,072,272	2,905,236	3,245,712	3,716,320
Total: Insurance other than group	$10,104,899	$13,078,835	$12,810,198	$13,830,737	$13,412,187	$16,679,432
Total Without Reserve & Retro Adjustment	$12,122,451	$13,104,051	$13,711,965	$16,052,309	$15,781,432	$16,495,948
Annual % Change		8.10%	4.64%	17.07%	-1.69%	4.53%
					5-Year Average	**6.53%**
Source: Exhibit 3-B, page 269 from PAWC's filing						

As shown in the above table, the annual percentage change for the 12-month ending periods of June 30, 2019, June 30, 2021, and June 30, 2022, were abnormally high or low as compared to the 12-month ending periods June 30, 2020, and the HTY ended June 30, 2023. As a result, I recommend that the HTY percentage change of 4.53 percent be used to calculate Insurance Other Than Group for the FPFTY.

Q. Please explain your adjustment.

A. As shown on Exhibit LA-2, Schedule C-16, page 1, this adjustment reduces pre-tax operating income by $247,905 for Water Operations, $34,694 for Wastewater SSS General Operations and $23,713 for CSS Wastewater Operations.

<u>Schedule C-17, Depreciation Expense – Water Operations</u>

Q. Has PAWC proposed drastic shortening of depreciable lives for certain water utility plant accounts in the current case?

A. Yes. As shown on Exhibit LA-2, Schedule C-17, for account 304.15, Other Water Source Structures, in PAWC's last rate case, Docket No. R-2022-3031673, a useful

life of 60 years was used for depreciation rate purposes. In the current case, PAWC proposes to shorten that useful life by 10 years, cutting it to 50 years. For account 331.00, Mains and Accessories, in PAWC's last rate case, a useful life of 110 years was used. In the current case, PAWC proposes to shorten that useful life by 20 years, cutting it to 90 years. For account 335.00, Fire Hydrants, in PAWC's last rate case, a useful life of 75 years was used. In the current case, PAWC proposes to shorten that useful life by 15 years, cutting it to 60 years. PAWC filed its current rate case less than one year after the Commission's final decision in PAWC's last water utility rate case. PAWC has not justified shortening the expected useful lives of its water utility plant in service by 10, 15 or 20 years in comparison to the depreciable lives for these three accounts that were used, and were approved by the Commission with rates effective in January 2023. Considering that relatively short time interval between PAWC's last base rate case and its current one, drastic shortening in water utility plant depreciable lives for these three water utility plant accounts by 10, 15 and 20 years, is not justified, and should not be accepted. Using drastically shortened depreciation lives for those accounts in PAWC's current rate case is unreasonable and would overstate Water Operations' depreciation expense.

Q. What adjustment are you recommending?

A. As shown on Exhibit LA-2, Schedule C-17, I recommend that the drastically shortened depreciable lives for those three accounts proposed by PAWC in the current rate case be rejected. I recommend using the depreciable lives and depreciation rates for those three accounts that were approved by the Commission on

December 8, 2022, in PAWC's last water utility rate case, at Docket No. R-2022-3031673. This reduces PAWC's proposed Water Operations' depreciation expense for the FPFTY by $15.479 million.

Schedule C-18, Stock-Based Compensation - American Water Works Executives

Q. Please explain your adjustment to stock-based compensation expense charged to PAWC from American Water Works, Inc. ("AWW" or "Parent Company").

A. PAWC's total claim for stock-based compensation is $4.934 million, as shown in the response to OCA 09-011. As shown on Exhibit LA-2, Schedule C-18, I have removed the portion of stock-based compensation projected to be paid to AWW's top executives and charged to PAWC for the 2025 FPFTY.[13] The stock-based compensation for those executives includes (1) performance stock units ("PSU"), and (2) restricted stock units ("RSU"). This adjustment reduces PAWC's operating expenses by $1.722 million to remove the stock-based compensation expense paid to AWW's top executives and charged from AWW to PAWC.

Q. Did the Company provide a copy of AWW's Long Term Performance Plan?

A. Yes. In its response to FR III.22, the Company provided a confidential copy of AWW's 2023 Long Term Performance Plan ("LTPP").

Q. What is the purpose of the AWW 2023 LTPP?

A. The Company's 2023 LTPP states at page 1: [redacted]

[13] The Company provided this information in its response to OCA 17-001.

Q. Please discuss the reasons for your recommendation to remove a portion of the expense for stock-based compensation to AWW executives that was charged to PAWC.

A. Ratepayers should not be required to pay for a portion of the expense for stock-based compensation paid to AWW's top executives, especially when such compensation is based on the performance of the Parent Company's stock price, or has the primary purpose of benefitting the Parent Company's stockholders and aligning the interests of participants with those of such stockholders. Recovering that portion of stock-based compensation expense in PAWC's revenue requirement is not reasonable nor does it promote reliable and effective public utility service.

Q. Why should the Commission adopt your recommendation to remove expense for stock-based compensation for AWW top executives when stock-based compensation was an allowed expense in Aqua Pennsylvania's rate case in Docket No. R-2018-3003558?

A. The Commission's Order in Docket No. R-2018-3003558 at pages 100-101 in the Aqua Pennsylvania rate case stated that:

> We find that Aqua has provided evidence linking the stock-based incentive compensation program with benefits to customers and improved operational efficiency.
>
> …
>
> Mr. Packer stated that "[m]any of the employee objectives focus on cost containment, quality service, productivity enhancements and compliance initiatives to ensure reasonable cost and high-quality service to our customers." Aqua St. 1-R at 17-18. Mr. Packer provided that "[s]tock compensation is an equally important form of compensation at risk, promotes retention, and emphasizes an investment interest in the business at the employee level that promotes efforts to provide safe, adequate, and reliable utility service." Aqua St. 1-R at 19.
>
> We agree with the ALJ that the stock-based compensation benefits ratepayers. We find that the stock-based compensation is linked to performance objectives that benefit consumers, including controlling costs and compliance initiatives. Accordingly, the OCA Exception No. 5 is denied.

The adjustment being recommended here is for recent AWW executives and focuses on the portion of their incentive compensation – the stock-based compensation – that directly relates to aligning the interests of those top executives with **shareholder** interests. As such, the AWW shareholders, not PAWC's ratepayers, should be responsible for bearing the cost of the stock-based compensation that the shareholders directly benefit from. Again, I am recommending removing $1.722

million of PAWC's total $4.934 million claim, the portion that is related to shareholder profit and earnings growth.

Q. How did you allocate your recommended adjustment for stock-based compensation to AWW top executives to the Company's water and wastewater operations?

A. As shown on Exhibit LA-2, Schedule C-18, I allocated my recommended adjustments for stock-based compensation to AWW executives to PAWC's Water and Wastewater Operations by using the allocation factors shown in the table below, which are reflected on Exhibit 3-B, page 301 from the Company's filing:

Description	Allocation Factors
Water Operations	95.40%
Wastewater SSS General Operations	3.00%
Wastewater CSS Operations	1.60%
Total	100.00%
Source: Exhibit 3-B, page 301	

Q. What expense adjustments does this produce for each PAWC utility group?

A. Based on the allocation factors shown in the above table, my adjustment reduces pre-tax operating expenses by (1) $1.643 million for Water Operations, (2) $51,658 for Wastewater SSS General Operations, and (3) $27,551 for Wastewater CSS Operations.

Consistent with PAWC's salaries and wages adjustment, there is no allocation to BASA or Brentwood wastewater operations.

Schedule C-19 American Water Works Executives – Dividend Equivalents

Q. Please explain your adjustment to expense for AWW executive perquisites that is charged to PAWC from AWW.

A. As shown on Exhibit LA-2, Schedule C-19, I have removed the portion of Other Compensation that relates to Dividend Equivalents projected to be paid to AWW's top executives and charged to PAWC for the 2025 FPFTY.[14] This adjustment reduces PAWC's FPFTY operating expenses by $31,371 for the AWW's top executives Other Compensation expense for Dividend Equivalents that is projected to be charged to PAWC from AWW in the FPFTY.

Q. Does AWW's 2023 Proxy Statement discuss the Dividend Equivalents component of the Other Compensation and Perquisites that is paid to the top AWW executives?

A. Yes. On page 53 of AWW's 2023 Proxy Statement under the section titled "Executive Compensation", it states the following with regard to Dividend Equivalents:

> Dividend equivalents are paid in cash with respect to PSUs and RSUs at such time, if ever, as the PSUs or RSUs are converted to common stock. Amounts in this column reflect PSU and RSU dividend equivalents that were paid out in 2022.

[14] The Company provided this information in its confidential response to OCA 17-002.

Q. Please discuss the reasons for removing the Dividend Equivalents portion of all Other Compensation paid to AWW executives that was charged to PAWC.

A. Charging the Dividend Equivalents portion of all Other Compensation received by AWW's top executives to PAWC's revenue requirement is not reasonable nor does it promote reliable and effective public utility service. This additional executive perquisite relates to stock-based compensation and is beyond the normal compensation paid to employees and it is not reasonable to charge such parent company executive perquisite costs to ratepayers.

Q. How did you allocate your recommended adjustment to remove the portion of all other compensation paid to AWW top executives to the Company's water and wastewater operations?

A. As shown on Exhibit LA-2, Schedule C-19, I allocated my recommended adjustments for a portion of all other compensation paid to AWW executives to the Company's Water and Wastewater Operations by using the allocation factors shown in the table in the preceding section, which are reflected on Exhibit 3-B, page 301 from the Company's filing.

Q. What adjustments to expense does this produce for each PAWC utility group?

A. Based on the allocation factors shown in the table in the preceding section, my adjustment reduces pre-tax operating expenses by (1) $29,928 for Water Operations, (2) $941 for Wastewater SSS General Operations, and (3) $502 for CSS Wastewater Operations.

Consistent with PAWC's salaries and wages adjustment, there is no allocation of this expense to BASA and Brentwood Wastewater Operations.

Schedule C-20, American Water Works Service Company SERP Expense

Q. Please explain your adjustment on Schedule C-20.

A. This adjustment corrects an error in PAWC's filing. Specifically, in its response to OCA 09-012, the Company stated that it does not offer a Supplemental Executive Retirement Plan ("SERP") as part of its benefits package. However, in its response to OCA 09-039, which included information regarding American Water Works Service Company ("Service Company") costs allocated to PAWC, Attachment 4 (*i.e.*, Service Company trial balance/income statement) includes the line item shown in the table below:

Description	Account Number	Company Code	6/30/2023 Amount
Pension Expense - SERP	50630000	1033	$ 152,769
Source: OCA 09-039, Attachment 4			

Pursuant to OCA's request that PAWC reconcile this apparent discrepancy, in its response to OCA 15-013, the Company stated:

> The Company does not offer SERP as a benefits plan but does offer ERP (Executive Retirement Plan). Upon further research, the amount listed under Account No. 50630000 in the HTY was recorded to the Service Company in error and should have been booked to the parent company which would not have any amounts passed down to PAWC. Therefore, the amounts will be removed from Service Company for the FTY and FPFTY in the rebuttal phase of this proceeding.

Pursuant to the Company's response in the above passage, I have removed the Service Company SERP expense from the FPFTY. As shown on Exhibit LA-2, Schedule C-20, this adjustment reduces pre-tax operating expense by $145,742 for

Water Operations, $4,583 for Wastewater SSS General Operations and $2,444 for CSS Wastewater Operations.

Q. How did you allocate this adjustment to remove Service Company SERP expense from the Company's water and wastewater operations?

A. As shown on Exhibit LA-2, Schedule C-20, I allocated the removal of the Service Company SERP expense to the Company's Water and Wastewater operations by using the allocation factors that are reflected on Exhibit 3-B, page 301 from the Company's filing.

Schedule C-21, Call Center Expense

Q. Please explain the adjustment related to Call Center Expense on Schedule C-21.

A. As shown on Exhibit LA-2, Schedule C-21, this adjustment removes the FPFTY expense proposed by PAWC for account 634.8 of $2,475,869 for Transworld and $606,386 for InterLogix identified in the response to OCA 26-022(3) based on the recommendation of OCA witness Barbara Alexander (OCA Statement 6) to eliminate expenses for the third party call centers that have routinely failed to meet reasonable call performance standards.

Schedule C-22, Arrearage Management Plan ("AMP") – Uncollectibles Expense

Q. Please explain the adjustment to uncollectibles expense related to Arrearage Management Program ("AMP") arrears shown on Schedule C-22.

A. This adjustment reduces overall FPFTY uncollectibles expense by $2.162 million in account 670.7 related to the Company's proposed AMP. With this adjustment, account 670.7 should reflect the amount of $214,728 for the AMP-related

uncollectibles expense, rather than $2,377,200 as proposed by PAWC. This adjustment is based on the recommendation of OCA witness Roger C. Colton (OCA Statement 5), in which Mr. Colton recommended that PAWC's addition of dollars to uncollectibles to reflect AMP credits should be reduced by the percentage of Bill Discount Program (BDP) dollars already historically included in uncollectibles. The allocation of Mr. Colton's recommended amount of $214,728 among PAWC's Water and Wastewater Operations is summarized in the table below:

Description	Amount
Water Operations	$ 183,485
Wastewater SSS General Operations	$ 14,967
BASA Wastewater Operations	$ 3,930
Brentwood Wastewater Operations	$ 1,052
CSS Wastewater Operations	$ 11,295
Total	$ 214,728
Source: Exhibit LA-2, Schedule C-22	

Q. Please summarize your adjustment.

A. As shown on Exhibit LA-2, Schedule C-22, this adjustment reduces pre-tax operating expense by $1.848 million for Water Operations, $150,724 for Wastewater SSS General Operations, $39,573 for BASA Wastewater Operations, $10,596 for Brentwood Wastewater Operations, and $113,746 for CSS Wastewater Operations.

VII. NEW SURCHARGES AND SINGLE-ISSUE TRACKERS

Q. Has PAWC proposed additional surcharges and trackers in the current case?

A. Yes. PAWC has proposed the following additional "ratemaking proposals" in the current case:

- Pension/OPEB cost tracker and deferral mechanism

- Production Cost Tracker

Q. Will you address each of those PAWC proposals?

A. Yes. Each of those PAWC proposals involves single-issue, piecemeal ratemaking that would shift risks onto ratepayers of fluctuating cost and revenues between rate cases that are currently borne by the Company's investors. As discussed below, I recommend that each of these PAWC "ratemaking proposals" be rejected.

Q. Has PAWC proposed implementing other surcharges and/or trackers?

A. Yes. I am not addressing PAWC's proposed implementation of a revenue decoupling mechanism ("RDM") or an Environmental Compliance Investment Charge ("ECIC") in the current case; rather, OCA witness Jerry Mierzwa will address PAWC's proposals for an RDM and ECIC.

Pension and OPEB Expense Tracker and Deferral Mechanism

Q. Please discuss the Company's proposed Pension and OPEB Tracker.

A. As described in the testimony of Company witness Swiz at pages 12-17, the Company has experienced fluctuations in its defined benefit pension plan and OPEB expense. PAWC is proposing a tracking mechanism to defer for accounting purposes and for future ratemaking treatment any variances between a "base level" for such expenses established in the current rate case and actual expenses. Annual amortization expense for deferred balances under this Company-proposed tracking mechanism would be addressed in the Company's next rate case.

Q. What is your recommendation concerning the Company's proposed Pension and OPEB Tracker?

A. The Pension and OPEB Tracker, while not proposed as a rate recovery mechanism in this proceeding, is likely to be proposed as such in its next base rate case. Company witness Swiz, in his Direct Testimony (p. 10-11) states, "In its next base rate case, the Company will address the ratemaking treatment of the deferred amounts." Isolating and tracking the Pension and OPEB expenses for eventual recovery via a special rate recovery mechanism, runs counter to a fundamental principle of ratemaking – that a utility should be afforded the opportunity to recover its costs of providing service but not guaranteed such recovery. This is particularly so for PAWC in this case given that the Company is utilizing a FPFTY that anticipates the Company's future costs of providing service. These costs include a provision for projected, future Pension and OPEB expenses. In addition, where there is certainty of recovery of expenses, any incentive to manage or reduce those expenses is diminished.

Further, by singling out these expenses for tracking and eventual recovery, PAWC is engaging in a form of single-issue, piecemeal ratemaking. Although a utility's "cost of service" is made up of dozens of individual cost components, which can and will vary from expected values, single-issue ratemaking ignores the fact that as a single cost component changes in one direction, other components may change in the opposite direction. Single-issue ratemaking denies customers the benefit of these offsetting cost reductions. It shifts the risk of fluctuations in two specific expense items, Pension and OPEBs, away from investors where the risk is currently borne, and

put that risk onto customers. I recommend that the proposed Pension and OPEB tracker be rejected.

Production Cost Tracker

Q. What has PAWC requested for a Production Cost Tracker?

A. PAWC witness Swiz addresses this PAWC proposal at pages 17-21 of his Direct Testimony. At page 17, he defines Production Expenses as "the costs incurred to provide water and wastewater services to our customers, including purchased water and wastewater treatment (NARUC Account 610 and NARUC Account 710), chemicals (NARUC Account 618 and NARUC Account 718), fuel and power (NARUC Accounts 615-616 and NARUC Accounts 715-716), and waste disposal (NARUC Account 711)." PAWC proposes that it would maintain separate regulatory asset and liability accounts for the production expense categories, including (1) Purchased Water and Wastewater Treatment, (2) Fuel & Power, (3) Chemicals, and (4) Waste Disposal PAWC proposes deferring any variance between the level for Production Costs established in the current case and the actual expenses incurred. Mr. Swiz states at page 20 that: "At the time of its next rate case, the Company will present the net amount in these accounts for return to the customers (in case of a net credit amount or regulatory liability) or for collection in rates (in the case of a net debit amount or regulatory asset) over a reasonable amortization period."

Q. What is your recommendation concerning the Company's proposed Production Cost Tracker?

A. The Company's proposed Production Cost Tracker, while not presented as a rate recovery mechanism in this proceeding, will almost surely, as explained by Mr. Swiz, be proposed as such in the Company's next base rate case. As explained in response to the Pension and OPEB tracker, establishing a Production Cost Tracker is contrary to the well-established principle of ratemaking that a utility should be allowed the opportunity to recover its costs of providing service but not guaranteed such recovery. The Production Cost Tracker is a form of single-issue, piecemeal ratemaking. This is especially so for PAWC in this case because the Company is utilizing a FPFTY that anticipates the Company's future costs of providing service. These costs include a provision for projected, future purchased water, wastewater treatment, chemicals, fuel and energy, and waste disposal costs. In addition, as I noted above, where there is certainty of recovery of various expenses, the incentive to control or minimize those expenses is reduced.

Further, by singling out Production expenses for tracking and eventual recovery, PAWC is engaging in a form of single-issue, piecemeal ratemaking. Although a utility's "cost of service" is made up of dozens of individual cost components, which can and will vary from expected values, single-issue ratemaking ignores the fact that as a single cost component changes in one direction, other components may change in the opposite direction. Single-issue ratemaking denies customers the benefit of these offsetting cost reductions. It shifts the risk of

fluctuations in the various Production Expense categories away from investors where the risk is currently borne and puts that risk onto customers.

For all of these reasons, I recommend that the proposed Production Cost Tracker be rejected.

VIII. MISCELLANEOUS REVENUE AND EXPENSES RELATED TO AMERICAN WATER RESOURCES

Q. OCA witness Barbara Alexander (OCA Statement 6) has identified concerns related to American Water Resources ("AWR"). How much revenue did PAWC include in the FPFTY related to AWR?

A. PAWC's responses to OCA 26-005, OCA 26-015 and OCA 26-016 indicate that PAWC included $659,624 of miscellaneous revenue from AWR (aka Oncourse Home Solutions) in account 471 in the FTY and FPFTY.

Q. How has PAWC treated the AWR revenue in its Application?

A. PAWC's response to OCA 26-016 states that PAWC records those amounts "above the line" for ratemaking purposes, such that the net amounts "offset PAWC's operating expenses recovered through rates."

Q. Does PAWC also have expenses related to that revenue?

A. Yes. PAWC's CONFIDENTIAL response to OCA 26-016 states that:

[redacted]

[redacted]

[redacted] incurred in providing such services.

[redacted]

Q. How has that revenue, and the related expenses, been treated in the OCA's adjusted revenue requirement for PAWC?

A. Those revenues, and the related expenses, have not been removed based on Ms. Alexander's recommendation that: "In the context of this rate case, the reliance on the revenues produced by this program is questionable but any defect associated in revenues by eliminating these revenues should be borne by shareholders and not PAWC's ratepayers." OCA St. 6 at 41.

IX. MANAGEMENT OPERATIONS AUDIT REPORT

Q. Has the PUC recently conducted a management operations audit for PAWC?

A. Yes. The PUC recently conducted a management operations audit for PAWC in Docket No. D-2022-3035217. The PUC Bureau of Audits submitted its Management and Operations Audit Report in October 2023. In addition, PAWC filed an Implementation Plan in response to the management and operations audit.

Q. Has the report been released to the public?

A. Yes. In a public meeting held on December 21, 2023, the PUC Vice Chair filed a Motion whereby the Management and Operations Audit Report and PAWC's Implementation Plan were made public.

Q. Did the Management and Operations Audit Report result in recommendations?

A. Yes. The audit staff analyzed 12 functional areas of the Company and proposed 31 recommendations. In PAWC's Implementation Plan, of the 31 recommendations, the Company accepted 23 in their entirety and partially accepted eight of the 31 recommendations.

Q. Was PAWC aware of the recommendations in the Management and Operations Audit Report when the Company prepared its application in the current rate case?

A. In its response to OCA 22-001, the Company stated that it became aware of the recommendations in the Management and Operations Audit Report during the preparation of its application in the current rate case. In terms of if and how the Company reflected the recommendations in its rate case application, the response to OCA 22-001 stated in part:

> Many of the recommendations PAWC accepted have no direct correlation to the rate case or the proposed revenue requirement. The management audit is a separate proceeding and PAWC will implement recommendations as outlined in the Implementation Plan.

As discussed above pursuant to the adjustment shown Schedule C-5, in its response to OCA 22-003, the Company stated that is has eliminated its external board and will reflect the removal of the related expenses during the rebuttal phase of this proceeding.

Q. The Management and Operations Audit Report at page 4 states that the Audit Report contains identifiable potential quantifiable cost savings of approximately $3.13 million in annual savings and $4 million of one-time savings that could be realized upon implementation of the recommendations. Has PAWC reflected such costs savings in the FPFTY?

A. No. In its response to OCA 22-008, the Company stated:

> The "potential quantifiable cost savings" estimated by the Bureau of Audits are composed of savings to inventory costs and production costs. These amounts were not specifically incorporated into the FTY or FPFTY. In the Implementation Plan, the Company noted that it continues to evaluate its inventory turnover and reduce stockpiled materials as supplier shortages and materials availability improves. Regarding unaccounted for water, the Company noted in the Implementation Plan that it continues to strive to reduce its UFW below the 20% threshold. PAWC's UFW reduction efforts include, but are not limited to, documenting UFW within the Company's Work Management Program; offering a robust UFW training program on unmetered and unbilled water loss; and repairing leaks sensed by fixed based logger systems.
>
> Please note that one-time items are not included in the revenue requirement and therefore one-time savings would not be appropriately reflected in the revenue requirement.

Q. Does this conclude your direct testimony?

A. Yes, it does. I reserve the right to supplement this testimony either in writing or orally if additional relevant information is received.

Attachment RCS-1
QUALIFICATIONS OF RALPH C. SMITH

Accomplishments

Mr. Smith's professional credentials include being a Certified Financial Planner™ professional, a Certified Rate of Return Analyst, a licensed Certified Public Accountant and attorney. He functions as project manager on consulting projects involving utility regulation, regulatory policy and ratemaking and utility management. His involvement in public utility regulation has included project management and in-depth analyses of numerous issues involving telephone, electric, gas, and water and sewer utilities.

Mr. Smith has performed work in the field of utility regulation on behalf of industry, public service commission staffs, state attorney generals, municipalities, and consumer groups concerning regulatory matters before regulatory agencies in Alabama, Alaska, Arizona, Arkansas, Barbados, California, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, New Jersey, New Mexico, New York, Nevada, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Washington DC, West Virginia, Canada, Federal Energy Regulatory Commission and various state and federal courts of law. He has presented expert testimony in regulatory hearings on behalf of utility commission staffs and intervenors on several occasions.

Project manager in Larkin & Associates' review, on behalf of the Georgia Commission Staff, of the budget and planning activities of Georgia Power Company; supervised 13 professionals; coordinated over 200 interviews with Company budget center managers and executives; organized and edited voluminous audit report; presented testimony before the Commission. Functional areas covered included fossil plant O&M, headquarters and district operations, internal audit, legal, affiliated transactions, and responsibility reporting. All of our findings and recommendations were accepted by the Commission.

Key team member in the firm's management audit of the Anchorage Water and Wastewater Utility on behalf of the Alaska Commission Staff, which assessed the effectiveness of the Utility's operations in several areas; responsible for in-depth investigation and report writing in areas involving information systems, finance and accounting, affiliated relationships and transactions, and use of outside contractors. Testified before the Alaska Commission concerning certain areas of the audit report. AWWU concurred with each of Mr. Smith's 40 plus recommendations for improvement.

Co-consultant in the analysis of the issues surrounding gas transportation performed for the law firm of Cravath, Swaine & Moore in conjunction with the case of Reynolds Metals Co. vs. the Columbia Gas System, Inc.; drafted in-depth report concerning the regulatory treatment at both state and federal levels of issues such as flexible pricing and mandatory gas transportation.

Lead consultant and expert witness in the analysis of the rate increase request of the City of Austin - Electric Utility on behalf of the residential consumers. Among the numerous ratemaking issues addressed were the economies of the Utility's employment of outside services; provided both written and oral testimony outlining recommendations and their bases. Most of Mr. Smith's recommendations were adopted by the City Council and Utility in a settlement.

Key team member performing an analysis of the rate stabilization plan submitted by the Southern Bell Telephone & Telegraph Company to the Florida PSC; performed comprehensive analysis of the Company's projections and budgets which were used as the basis for establishing rates.

Lead consultant in analyzing Southwestern Bell Telephone separations in Missouri; sponsored the complex technical analysis and calculations upon which the firm's testimony in that case was based. He has also assisted in analyzing changes in depreciation methodology for setting telephone rates.

Lead consultant in the review of gas cost recovery reconciliation applications of Michigan Gas Utilities Company, Michigan Consolidated Gas Company, and Consumers Power Company. Drafted recommendations regarding the appropriate rate of interest to be applied to any over or under collections and the proper procedures and allocation methodology to be used to distribute any refunds to customer classes.

Lead consultant in the review of Consumers Power Company's gas cost recovery refund plan. Addressed appropriate interest rate and compounding procedures and proper allocation methodology.

Project manager in the review of the request by Central Maine Power Company for an increase in rates. The major area addressed was the propriety of the Company's ratemaking attrition adjustment in relation to its corporate budgets and projections.

Project manager in an engagement designed to address the impacts of the Tax Reform Act of 1986 on gas distribution utility operations of the Northern States Power Company. Analyzed the reduction in the corporate tax rate, uncollectibles reserve, ACRS, unbilled revenues, customer advances, CIAC, and timing of TRA-related impacts associated with the Company's tax liability.

Project manager and expert witness in the determination of the impacts of the Tax Reform Act of 1986 on the operations of Connecticut Natural Gas Company on behalf of the Connecticut Department of Public Utility Control - Prosecutorial Division, Connecticut Attorney General, and Connecticut Department of Consumer Counsel.

Lead Consultant for The Minnesota Department of Public Service ("DPS") to review the Minnesota Incentive Plan ("Incentive Plan") proposal presented by Northwestern Bell Telephone Company ("NWB") doing business as U S West Communications ("USWC"). Objective was to express an opinion as to whether current rates addressed by the plan were appropriate from a Minnesota intrastate revenue requirements and accounting perspective, and to assist in developing recommended modifications to NWB's proposed Plan.

Performed a variety of analytical and review tasks related to our work effort on this project. Obtained and reviewed data and performed other procedures as necessary (1) to obtain an understanding of the Company's Incentive Plan filing package as it relates to rate base, operating income, revenue requirements, and plan operation, and (2) to formulate an opinion concerning the reasonableness of current rates and of amounts included within the Company's Incentive Plan filing. These procedures included requesting and reviewing extensive discovery, visiting the Company's offices to review data, issuing follow-up information requests in many instances, telephone and on-site discussions with Company representatives, and frequent discussions with counsel and DPS Staff assigned to the project.

Lead Consultant in the regulatory analysis of Jersey Central Power & Light Company for the Department of the Public Advocate, Division of Rate Counsel. Tasks performed included on-site review and audit of Company, identification and analysis of specific issues, preparation of data requests, testimony, and cross examination questions. Testified in Hearings.

Assisted the NARUC Committee on Management Analysis with drafting the Consultant Standards for Management Audits.

Presented training seminars covering public utility accounting, tax reform, ratemaking, affiliated transaction auditing, rate case management, and regulatory policy in Maine, Georgia, Kentucky, and Pennsylvania. Seminars were presented to commission staffs and consumer interest groups.

Previous Positions

With Larkin, Chapski and Co., the predecessor firm to Larkin & Associates, was involved primarily in utility regulatory consulting, and also in tax planning and tax research for businesses and individuals, tax return preparation and review, and independent audit, review and preparation of financial statements.

Installed computerized accounting system for a realty management firm.

Education

Bachelor of Science in Administration in Accounting, with distinction, University of Michigan, Dearborn, 1979.

Master of Science in Taxation, Walsh College, Michigan, 1981. Master's thesis dealt with investment tax credit and property tax on various assets.

Juris Doctor, cum laude, Wayne State University Law School, Detroit, Michigan, 1986. Recipient of American Jurisprudence Award for academic excellence.

Continuing education required to maintain CPA license and CFP® certificate.

Passed all parts of CPA examination in first sitting, 1979. Received CPA certificate in 1981 and Certified Financial Planning certificate in 1983. Admitted to Michigan and Federal bars in 1986.

Michigan Bar Association.

American Bar Association, sections on public utility law and taxation.

Partial list of utility cases participated in:

79-228-EL-FAC	Cincinnati Gas & Electric Company (Ohio PUC)
79-231-EL-FAC	Cleveland Electric Illuminating Company (Ohio PUC)
79-535-EL-AIR	East Ohio Gas Company (Ohio PUC)
80-235-EL-FAC	Ohio Edison Company (Ohio PUC)
80-240-EL-FAC	Cleveland Electric Illuminating Company (Ohio PUC)
U-1933	Tucson Electric Power Company (Arizona Corp. Commission)
U-6794	Michigan Consolidated Gas Co. --16 Refunds (Michigan PSC)
81-0035TP	Southern Bell Telephone Company (Florida PSC)
81-0095TP	General Telephone Company of Florida (Florida PSC)
81-308-EL-EFC	Dayton Power & Light Co.- Fuel Adjustment Clause (Ohio PUC)
810136-EU	Gulf Power Company (Florida PSC)
GR-81-342	Northern States Power Co. -- E-002/Minnesota (Minnesota PUC)
Tr-81-208	Southwestern Bell Telephone Company (Missouri PSC))
U-6949	Detroit Edison Company (Michigan PSC)
8400	East Kentucky Power Cooperative, Inc. (Kentucky PSC)
18328	Alabama Gas Corporation (Alabama PSC)
18416	Alabama Power Company (Alabama PSC)
820100-EU	Florida Power Corporation (Florida PSC)
8624	Kentucky Utilities (Kentucky PSC)
8648	East Kentucky Power Cooperative, Inc. (Kentucky PSC)
U-7236	Detroit Edison - Burlington Northern Refund (Michigan PSC)
U6633-R	Detroit Edison - MRCS Program (Michigan PSC)
U-6797-R	Consumers Power Company -MRCS Program (Michigan PSC)
U-5510-R	Consumers Power Company - Energy conservation Finance Program (Michigan PSC)
82-240E	South Carolina Electric & Gas Company (South Carolina PSC)
7350	Generic Working Capital Hearing (Michigan PSC)
RH-1-83	Westcoast Transmission Co., (National Energy Board of Canada)
820294-TP	Southern Bell Telephone & Telegraph Co. (Florida PSC)
82-165-EL-EFC (Subfile A)	Toledo Edison Company (Ohio PUC)
82-168-EL-EFC	Cleveland Electric Illuminating Company (Ohio PUC)
830012-EU	Tampa Electric Company (Florida PSC)
U-7065	The Detroit Edison Company - Fermi II (Michigan PSC)
8738	Columbia Gas of Kentucky, Inc. (Kentucky PSC)
ER-83-206	Arkansas Power & Light Company (Missouri PSC)
U-4758	The Detroit Edison Company – Refunds (Michigan PSC)
8836	Kentucky American Water Company (Kentucky PSC)
8839	Western Kentucky Gas Company (Kentucky PSC)
83-07-15	Connecticut Light & Power Co. (Connecticut DPU)
81-0485-WS	Palm Coast Utility Corporation (Florida PSC)
U-7650	Consumers Power Co. (Michigan PSC)
83-662	Continental Telephone Company of California, (Nevada PSC)
U-6488-R	Detroit Edison Co., FAC & PIPAC Reconciliation (Michigan PSC)
U-15684	Louisiana Power & Light Company (Louisiana PSC)
7395 & U-7397	Campaign Ballot Proposals (Michigan PSC)
820013-WS	Seacoast Utilities (Florida PSC)
U-7660	Detroit Edison Company (Michigan PSC)
83-1039	CP National Corporation (Nevada PSC)
U-7802	Michigan Gas Utilities Company (Michigan PSC)
83-1226	Sierra Pacific Power Company (Nevada PSC)
830465-EI	Florida Power & Light Company (Florida PSC)
U-7777	Michigan Consolidated Gas Company (Michigan PSC)
U-7779	Consumers Power Company (Michigan PSC)

U-7480-R	Michigan Consolidated Gas Company (Michigan PSC)
U-7488-R	Consumers Power Company – Gas (Michigan PSC)
U-7484-R	Michigan Gas Utilities Company (Michigan PSC)
U-7550-R	Detroit Edison Company (Michigan PSC)
U-7477-R	Indiana & Michigan Electric Company (Michigan PSC)
18978	Continental Telephone Co. of the South Alabama (Alabama PSC)
R-842583	Duquesne Light Company (Pennsylvania PUC)
R-842740	Pennsylvania Power Company (Pennsylvania PUC)
850050-EI	Tampa Electric Company (Florida PSC)
16091	Louisiana Power & Light Company (Louisiana PSC)
19297	Continental Telephone Co. of the South Alabama (Alabama PSC)
76-18788AA &76-18793AA	Detroit Edison - Refund - Appeal of U-4807 (Ingham County, Michigan Circuit Court)
85-53476AA & 85-534785AA	Detroit Edison Refund - Appeal of U-4758 (Ingham County, Michigan Circuit Court)
U-8091/U-8239	Consumers Power Company - Gas Refunds (Michigan PSC)
TR-85-179	United Telephone Company of Missouri (Missouri PSC)
85-212	Central Maine Power Company (Maine PSC)
ER-85646001 & ER-85647001	New England Power Company (FERC)
850782-EI & 850783-EI	Florida Power & Light Company (Florida PSC)
R-860378	Duquesne Light Company (Pennsylvania PUC)
R-850267	Pennsylvania Power Company (Pennsylvania PUC)
851007-WU & 840419-SU	Florida Cities Water Company (Florida PSC)
G-002/GR-86-160	Northern States Power Company (Minnesota PSC)
7195 (Interim)	Gulf States Utilities Company (Texas PUC)
87-01-03	Connecticut Natural Gas Company (Connecticut PUC))
87-01-02	Southern New England Telephone Company (Connecticut Department of Public Utility Control)
3673-	Georgia Power Company (Georgia PSC)
29484	Long Island Lighting Co. (New York Dept. of Public Service)
U-8924	Consumers Power Company – Gas (Michigan PSC)
Docket No. 1	Austin Electric Utility (City of Austin, Texas)
Docket E-2, Sub 527	Carolina Power & Light Company (North Carolina PUC)
U-87-47	Anchorage Water and Wastewater Utility (Alaska PUC)
870853	Pennsylvania Gas and Water Company (Pennsylvania PUC)
880069	Southern Bell Telephone Company (Florida PSC)
U-1954-88-102 T E-1032-88-102	Citizens Utilities Rural Company, Inc. & Citizens Utilities Company, Kingman Telephone Division (Arizona CC)
89-0033	Illinois Bell Telephone Company (Illinois CC)
U-89-2688-T	Puget Sound Power & Light Company (Washington UTC))
R-891364	Philadelphia Electric Company (Pennsylvania PUC)
F.C. 889	Potomac Electric Power Company (District of Columbia PSC)
Case No. 88/546	Niagara Mohawk Power Corporation, et al Plaintiffs, v. Gulf+Western, Inc. et al, defendants (Supreme Court County of Onondaga, State of New York)
87-11628	Duquesne Light Company, et al, plaintiffs, against Gulf+Western, Inc. et al, defendants (Court of the Common Pleas of Allegheny County, Pennsylvania Civil Division)
890319-EI	Florida Power & Light Company (Florida PSC)
891345-EI	Gulf Power Company (Florida PSC)
ER 8811 0912J	Jersey Central Power & Light Company (BPU)

6531	Hawaiian Electric Company (Hawaii PUCs)
R-901595	Equitable Gas Company (Pennsylvania Consumer Counsel)
90-10	Artesian Water Company (Delaware PSC)
89-12-05	Southern New England Telephone Company (Connecticut PUC)
900329-WS	Southern States Utilities, Inc. (Florida PSC)
90-12-018	Southern California Edison Company (California PUC)
90-E-1185	Long Island Lighting Company (New York DPS)
R-911966	Pennsylvania Gas & Water Company (Pennsylvania PUC)
I.90-07-037, Phase II	(Investigation of OPEBs) Department of the Navy and all Other Federal Executive Agencies (California PUC)
U-1551-90-322	Southwest Gas Corporation (Arizona CC)
U-1656-91-134	Sun City Water Company (Arizona RUCO)
U-2013-91-133	Havasu Water Company (Arizona RUCO)
91-174	Central Maine Power Company (Department of the Navy and all Other Federal Executive Agencies)
U-1551-89-102	Southwest Gas Corporation - Rebuttal and PGA Audit (Arizona & U-1551-89-103 Corporation Commission)
Docket No. 6998	Hawaiian Electric Company (Hawaii PUC)
TC-91-040A and TC-91-040B	Intrastate Access Charge Methodology, Pool and Rates Local Exchange Carriers Association and South Dakota Independent Telephone Coalition
9911030-WS & 911-67-WS	General Development Utilities - Port Malabar and West Coast Divisions (Florida PSC)
U-91-091	Anchorage Telephone Utility (Alaska PUC)
922180	The Peoples Natural Gas Company (Pennsylvania PUC)
7233 and 7243	Hawaiian Nonpension Postretirement Benefits (Hawaiian PUC)
R-00922314 & M-920313C006	Metropolitan Edison Company (Pennsylvania PUC)
R00922428	Pennsylvania American Water Company (Pennsylvania PUC)
E-1032-92-083 & U-1656-92-183	Citizens Utilities Company, Agua Fria Water Division (Arizona Corporation Commission)
92-09-19	Southern New England Telephone Company (Connecticut PUC)
E-1032-92-073	Citizens Utilities Company (Electric Division), (Arizona CC)
UE-92-1262	Puget Sound Power and Light Company (Washington UTC))
92-345	Central Maine Power Company (Maine PUC)
R-932667	Pennsylvania Gas & Water Company (Pennsylvania PUC)
U-93-60	Matanuska Telephone Association, Inc. (Alaska PUC)
U-93-50	Anchorage Telephone Utility (Alaska PUC)
U-93-64	PTI Communications (Alaska PUC)
7700	Hawaiian Electric Company, Inc. (Hawaii PUC)
E-1032-93-111 & U-1032-93-193	Citizens Utilities Company - Gas Division (Arizona Corporation Commission)
R-00932670	Pennsylvania American Water Company (Pennsylvania PUC)
U-1514-93-169/ E-1032-93-169	Sale of Assets CC&N from Contel of the West, Inc. to Citizens Utilities Company (Arizona Corporation Commission)
7766	Hawaiian Electric Company, Inc. (Hawaii PUC)
93-2006- GA-AIR	The East Ohio Gas Company (Ohio PUC)
94-E-0334	Consolidated Edison Company (New York DPS)
94-0270	Inter-State Water Company (Illinois Commerce Commission)
94-0097	Citizens Utilities Company, Kauai Electric Division (Hawaii PUC)
PU-314-94-688	Application for Transfer of Local Exchanges (North Dakota PSC)
94-12-005-Phase I	Pacific Gas & Electric Company (California PUC)
R-953297	UGI Utilities, Inc. - Gas Division (Pennsylvania PUC)
95-03-01	Southern New England Telephone Company (Connecticut PUC)
95-0342	Consumer Illinois Water, Kankakee Water District (Illinois CC)

94-996-EL-AIR	Ohio Power Company (Ohio PUC)
95-1000-E	South Carolina Electric & Gas Company (South Carolina PSC)
Non-Docketed	Citizens Utility Company - Arizona Telephone Operations Staff Investigation (Arizona Corporation Commission)
E-1032-95-473	Citizens Utility Co. - Northern Arizona Gas Division (Arizona CC)
E-1032-95-433	Citizens Utility Co. - Arizona Electric Division (Arizona CC)
	Collaborative Ratemaking Process Columbia Gas of Pennsylvania (Pennsylvania PUC)
GR-96-285	Missouri Gas Energy (Missouri PSC)
94-10-45	Southern New England Telephone Company (Connecticut PUC)
A.96-08-001 et al.	California Utilities' Applications to Identify Sunk Costs of Non-Nuclear Generation Assets, & Transition Costs for Electric Utility Restructuring, & Consolidated Proceedings (California PUC)
96-324	Bell Atlantic - Delaware, Inc. (Delaware PSC)
96-08-070, et al.	Pacific Gas & Electric Co., Southern California Edison Co. and San Diego Gas & Electric Company (California PUC)
97-05-12	Connecticut Light & Power (Connecticut PUC)
R-00973953	Application of PECO Energy Company for Approval of its Restructuring Plan Under Section 2806 of the Public Utility Code (Pennsylvania PUC)
97-65	Application of Delmarva Power &Light Co. for Application of a Cost Accounting Manual and a Code of Conduct (Delaware PSC)
16705	Entergy Gulf States, Inc. (Cities Steering Committee)
E-1072-97-067	Southwestern Telephone Co. (Arizona Corporation Commission)
Non-Docketed	Delaware - Estimate Impact of Universal Services Issues Staff Investigation (Delaware PSC)
PU-314-97-12	US West Communications, Inc. Cost Studies (North Dakota PSC)
97-0351	Consumer Illinois Water Company (Illinois CC)
97-8001	Investigation of Issues to be Considered as a Result of Restructuring of Electric Industry (Nevada PSC)
U-0000-94-165	Generic Docket to Consider Competition in the Provision of Retail Electric Service (Arizona Corporation Commission)
98-05-006-Phase I	San Diego Gas & Electric Co., Section 386 costs (California PUC)
9355-U	Georgia Power Company Rate Case (Georgia PUC)
97-12-020 - Phase I	Pacific Gas & Electric Company (California PUC)
U-98-56, U-98-60, U-98-65, U-98-67	Investigation of 1998 Intrastate Access charge filings (Alaska PUC)
(U-99-66, U-99-65, U-99-56, U-99-52)	Investigation of 1999 Intrastate Access Charge filing (Alaska PUC)
Phase II of 97-SCCC-149-GIT	Southwestern Bell Telephone Company Cost Studies (Kansas CC)
PU-314-97-465	US West Universal Service Cost Model (North Dakota PSC)
Non-docketed	Bell Atlantic - Delaware, Inc., Review of New Telecomm. Assistance and Tariff Filings (Delaware PSC)
Contract Dispute	City of Zeeland, MI - Water Contract with the City of Holland, MI (Before an arbitration panel)
Non-docketed Project	City of Danville, IL - Valuation of Water System (Danville, IL)
Non-docketed Project	Village of University Park, IL - Valuation of Water and Sewer System (Village of University Park, Illinois)
E-1032-95-417	Citizens Utility Co., Maricopa Water/Wastewater Companies et al. (Arizona Corporation Commission)
T-1051B-99-0497	Proposed Merger of the Parent Corporation of Qwest Communications Corporation, LCI International Telecom Corp., and US West Communications, Inc. (Arizona CC)
T-01051B-99-0105	US West Communications, Inc. Rate Case (Arizona CC)
A00-07-043	Pacific Gas & Electric - 2001 Attrition (California PUC)

T-01051B-99-0499	US West/Quest Broadband Asset Transfer (Arizona CC)
99-419/420	US West, Inc. Toll and Access Rebalancing (North Dakota PSC)
PU314-99-119	US West, Inc. Residential Rate Increase and Cost Study Review (North Dakota PSC
98-0252	Ameritech - Illinois, Review of Alternative Regulation Plan (Illinois CUB)
00-108	Delmarva Billing System Investigation (Delaware PSC)
U-00-28	Matanuska Telephone Association (Alaska PUC)
Non-Docketed	Management Audit and Market Power Mitigation Analysis of the Merged Gas System Operation of Pacific Enterprises and Enova Corporation (California PUC)
00-11-038	Southern California Edison (California PUC)
00-11-056	Pacific Gas & Electric (California PUC)
00-10-028	The Utility Reform Network for Modification of Resolution E-3527 (California PUC)
98-479	Delmarva Power & Light Application for Approval of its Electric and Fuel Adjustments Costs (Delaware PSC)
99-457	Delaware Electric Cooperative Restructuring Filing (Delaware PSC)
99-582	Delmarva Power & Light dba Conectiv Power Delivery Analysis of Code of Conduct and Cost Accounting Manual (Delaware PSC)
99-03-04	United Illuminating Company Recovery of Stranded Costs (Connecticut OCC)
99-03-36	Connecticut Light & Power (Connecticut OCC)
Civil Action No. 98-1117	West Penn Power Company vs. PA PUC (Pennsylvania PSC)
Case No. 12604	Upper Peninsula Power Company (Michigan AG)
Case No. 12613	Wisconsin Public Service Commission (Michigan AG)
41651	Northern Indiana Public Service Co Overearnings investigation (Indiana UCC)
13605-U	Savannah Electric & Power Company – FCR (Georgia PSC)
14000-U	Georgia Power Company Rate Case/M&S Review (Georgia PSC)
13196-U	Savannah Electric & Power Company Natural Gas Procurement and Risk Management/Hedging Proposal, Docket No. 13196-U (Georgia PSC)
Non-Docketed	Georgia Power Company & Savannah Electric & Power FPR Company Fuel Procurement Audit (Georgia PSC)
Non-Docketed	Transition Costs of Nevada Vertically Integrated Utilities (US Department of Navy)
Application No. 99-01-016, Phase I	Post-Transition Ratemaking Mechanisms for the Electric Industry Restructuring (US Department of Navy)
99-02-05	Connecticut Light & Power (Connecticut OCC)
01-05-19-RE03	Yankee Gas Service Application for a Rate Increase, Phase I-2002-IERM (Connecticut OCC)
G-01551A-00-0309	Southwest Gas Corporation, Application to amend its rate Schedules (Arizona CC)
00-07-043	Pacific Gas & Electric Company Attrition & Application for a rate increase (California PUC)
97-12-020 Phase II	Pacific Gas & Electric Company Rate Case (California PUC)
01-10-10	United Illuminating Company (Connecticut OCC)
13711-U	Georgia Power FCR (Georgia PSC)
02-001	Verizon Delaware § 271(Delaware DPA)
02-BLVT-377-AUD	Blue Valley Telephone Company Audit/General Rate Investigation (Kansas CC)

02-S&TT-390-AUD	S&T Telephone Cooperative Audit/General Rate Investigation (Kansas CC)
01-SFLT-879-AUD	Sunflower Telephone Company Inc., Audit/General Rate Investigation (Kansas CC)
01-BSTT-878-AUD	Bluestem Telephone Company, Inc. Audit/General Rate Investigation (Kansas CC)
P404, 407, 520, 413 426, 427, 430, 421/ CI-00-712	Sherburne County Rural Telephone Company, dba as Connections, Etc. (Minnesota DOC)
U-01-85	ACS of Alaska, dba as Alaska Communications Systems (ACS), Rate Case (Alaska Regulatory Commission PAS)
U-01-34	ACS of Anchorage, dba as Alaska Communications Systems (ACS), Rate Case (Alaska Regulatory Commission PAS)
U-01-83	ACS of Fairbanks, dba as Alaska Communications Systems (ACS), Rate Case (Alaska Regulatory Commission PAS)
U-01-87	ACS of the Northland, dba as Alaska Communications Systems (ACS), Rate Case (Alaska Regulatory Commission PAS)
U-01-84	ACS of Fairbanks dba Alaska Communications Systems (ACS), Rate Case (Alaska Regulatory Commission PAS)
U-01-82	ACS of Anchorage dba Alaska Communications Systems (ACS), Rate Case (Alaska Regulatory Commission PAS)
U-01-86	ACS of Alaska dba Alaska Communications Systems (ACS), Rate Case (Alaska Regulatory Commission PAS)
96-324, Phase II	Verizon Delaware, Inc. UNE Rate Filing (Delaware PSC)
03-WHST-503-AUD	Wheat State Telephone Company (Kansas CC)
04-GNBT-130-AUD	Golden Belt Telephone Association (Kansas CC)
Docket 6914	Shoreham Telephone Company, Inc. (Vermont BPU)
E-01345A-06-009	Arizona Public Service Company (Arizona Corporation Commission)
05-1278-E-PC-PW-42T	Appalachian Power Company and Wheeling Power Company both d/b/a American Electric Power (West Virginia PSC)
04-0113	Hawaiian Electric Company (Hawaii PUC)
U-14347	Consumers Energy Company (Michigan PSC)
05-725-EL-UNC	Cincinnati Gas & Electric Company (PUC of Ohio)
21229-U	Savannah Electric & Power Company (Georgia PSC)
19142-U	Georgia Power Company (Georgia PSC)
03-07-01RE01	Connecticut Light & Power Company (CT DPUC)
19042-U	Savannah Electric & Power Company (Georgia PSC)
2004-178-E	South Carolina Electric & Gas Company (South Carolina PSC)
03-07-02	Connecticut Light & Power Company (CT DPUC)
EX02060363, Phases I&II	Rockland Electric Company (NJ BPU)
U-00-88	ENSTAR Natural Gas Company and Alaska Pipeline Company (Regulatory Commission of Alaska)
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05-SCNT-1048-AUD	South Central Telephone Company (Kansas CC)
05-TRCT-607-KSF	Tri-County Telephone Company (Kansas CC)
05-KOKT-060-AUD	Kan Okla Telephone Company (Kansas CC)
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Docket No. 2003-35	Maine Telephone Company (Maine PUC)
Docket No. 2003-36	China Telephone Company (Maine PUC)
Docket No. 2003-37	Standish Telephone Company (Maine PUC)
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U-04-023	Anchorage Water and Wastewater Utility (Regulatory Commission of Alaska)
U-04-81	Protest by Aurora Gas, LLC against Beluga Pipe Line Company (Regulatory Commission of Alaska)
05-116-U/06-055-U	Entergy Arkansas, Inc. EFC (Arkansas Public Service Commission)
Case 04-137-U	Southwest Power Pool RTO (Arkansas Public Service Commission)
Case No. 7109/7160	Vermont Gas Systems (Department of Public Service)
ER-2006-0315	Empire District Electric Company (Missouri PSC)
ER-2006-0314	Kansas City Power & Light Company (Missouri PSC)
U-05-043,44	Golden Heart Utilities/College Park Utilities (Regulatory Commission of Alaska)
A-122250F5000	Equitable Resources, Inc. and The Peoples Natural Gas Company, d/b/a Dominion Peoples (Pennsylvania PUC)
E-01345A-05-0816	Arizona Public Service Company (Arizona CC)
Docket No. 05-304	Delmarva Power & Light Company (Delaware PSC)
05-806-EL-UNC	Cincinnati Gas & Electric Company (Ohio PUC)
U-06-45	Anchorage Water Utility (Regulatory Commission of Alaska)
03-93-EL-ATA, 06-1068-EL-UNC	Duke Energy Ohio (Ohio PUC)
PUE-2006-00065	Appalachian Power Company (Virginia Corporation Commission)
G-04204A-06-0463 et. al	UNS Gas, Inc. (Arizona CC)
U-06-134	Chugach Electric Association, Inc. (Regulatory Commission of Alaska)
2006-0386	Hawaiian Electric Company, Inc (Hawaii PUC)
E-01933A-07-0402	Tucson Electric Power Company (Arizona CC)
G-01551A-07-0504	Southwest Gas Corporation (Arizona CC)
Docket No. 07-186	Chesapeake Utilities Corporation (Delaware PSC)
UE-072300	Puget Sound Energy, Inc. (Washington UTC)
PUE-2008-00009	Virginia-American Water Company (Virginia SCC)
PUE-2008-00046	Appalachian Power Company (Virginia SCC)
E-01345A-08-0172	Arizona Public Service Company (Arizona CC)
A-2008-2063737	Babcock & Brown Infrastructure Fund North America, LP. and The Peoples Natural Gas Company, d/b/a Dominion Peoples (Pennsylvania PUC)
08-1783-G-42T	Hope Gas, Inc., dba Dominion Hope (West Virginia PSC)
08-1761-G-PC	Hope Gas, Inc., dba Dominion Hope, Dominion Resources, Inc., and Peoples Hope Gas Companies (West Virginia PSC)
2008-0083	Hawaiian Electric Company, Inc. (Hawaii PUC)
2008-0266	Young Brothers, Limited (Hawaii PUC)
G-04024A-08-0571	UNS Gas, Inc. (Arizona CC)
Docket No. 09-29	Tidewater Utilities, Inc. (Delaware PSC)
UE-090704	Puget Sound Energy, Inc. (Washington UTC)
09-0878-G-42T	Mountaineer Gas Company (West Virginia PSC)
2009-UA-0014	Mississippi Power Company (Mississippi PSC)
09-0319	Illinois-American Water Company (Illinois CC)
09-414	Delmarva Power & Light Company (Delaware PSC)
R-2009-2132019	Aqua Pennsylvania, Inc. (Pennsylvania PUC)
U-09-069, U-09-070	ENSTAR Natural Gas Company (Regulatory Commission of Alaska)
U-04-023, U-04-024	Anchorage Water and Wastewater Utility - Remand (Regulatory Commission of Alaska)
W-01303A-09-0343 & SW-01303A-09-0343	Arizona-American Water Company (Arizona CC)
09-872-EL-FAC &	

09-873-EL-FAC	Financial Audits of the FAC of the Columbus Southern Power Company and the Ohio Power Company - Audit I (Ohio PUC)
2010-00036	Kentucky-American Water Company (Kentucky PSC)
E-04100A-09-0496	Southwest Transmission Cooperative, IHnc. (Arizona CC)
E-01773A-09-0472	Arizona Electric Power Cooperative, Inc. (Arizona CC)
R-2010-2166208, R-2010-2166210, R-2010-2166212, & R-2010-2166214	Pennsylvania-American Water Company (Pennsylvania PUC)
09-0602	Central Illinois Light Company D/B/A AmerenCILCO; Central Illinois Public Service Company D/B/A AmerenCIPS; Illinois Power Company D/B/A AmerenIP (Illinois CC)
10-0713-E-PC	Allegheny Power and FirstEnergy Corp. (West Virginia PSC)
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10-0467	Commonwealth Edison Company (Illinois CC)
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U-10-51	Cook Inlet Natural Gas Storage Alaska, LLC (Regulatory Commission of Alaska)
10-0699-E-42T	Appalachian Power Company and Wheeling Power Company (West Virginia PSC)
10-0920-W-42T	West Virginia-American Water Company (West Virginia PSC)
A.10-07-007	California-American Water Company (California PUC)
A-2010-2210326	TWP Acquisition (Pennsylvania PUC)
09-1012-EL-FAC	Financial, Management, and Performance Audit of the FAC for Dayton Power and Light – Audit 1 (Ohio PUC)
10-268-EL FAC et al.	Financial Audit of the FAC of the Columbus Southern Power Company and the Ohio Power Company – Audit II (Ohio PUC)
Docket No. 2010-0080	Hawaiian Electric Company, Inc. (Hawaii PUC)
G-01551A-10-0458	Southwest Gas Corporation (Arizona CC)
10-KCPE-415-RTS	Kansas City Power & Light Company – Remand (Kansas CC)
PUE-2011-00037	Virginia Appalachian Power Company (Commonwealth of Virginia SCC)
R-2011-2232243	Pennsylvania-American Water (Pennsylvania PUC)
U-11-100	Power Purchase Agreement between Chugach Association, Inc. and Fire Island Wind, LLC (Regulatory Commission of Alaska)
A.10-12-005	San Diego Gas & Electric Company (California PUC)
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Cause No. 44022	Indiana-American Water Company, Inc. (Indiana Utility Regulatory Commission)
PSC Docket No. 10-247	Management Audit of Tidewater Utilities, Inc. Affiliate Transactions (Delaware Public Service Commission)
G-04204A-11-0158	UNS Gas, Inc. (Arizona Corporation Commission)
E-01345A-11-0224	Arizona Public Service Company (Arizona CC)
UE-111048 & UE-111049	Puget Sound Energy, Inc. (Washington Utilities and Transportation Commission)
Docket No. 11-0721	Commonwealth Edison Company (Illinois CC)
11AL-947E	Public Service Company of Colorado (Colorado PSC)
U-11-77 & U-11-78	Golden Heart Utilities, Inc. and College Utilities Corporation (The Regulatory Commission of Alaska)
Docket No. 11-0767	Illinois-American Water Company (Illinois CC)
PSC Docket No. 11-397	Tidewater Utilities, Inc. (Delaware PSC)
Cause No. 44075	Indiana Michigan Power Company (Indiana Utility Regulatory Commission)
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11-5730-EL-FAC	Financial, Management, and Performance Audit of the FAC for Dayton Power and Light – Audit 2 (Ohio PUC)
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11-281-EL-FAC et al.	Financial Audit of the FAC of the Columbus Southern Power Company and the Ohio Power Company – Audit III (Ohio PUC)
43114-IGCC-4S1	Duke Energy Indiana, Inc. (Indiana Utility Regulatory Commission)
Docket No. 12-0293	Ameren Illinois Company (Illinois CC)
Docket No. 12-0321	Commonwealth Edison Company (Illinois CC)
12-02019 & 12-04005	Southwest Gas Corporation (Public Utilities Commission of Nevada)
2012-218-E	South Carolina Electric & Gas (South Carolina PSC)
E-72, Sub 479	Dominion North Carolina Power (North Carolina Utilities Commission)
12-0511 & 12-0512	North Shore Gas Company and The Peoples Gas Light and Coke Company (Illinois CC)
E-01933A-12-0291	Tucson Electric Power Company (Arizona CC)
Case No. 9311	Potomac Electric Power Company (Maryland PSC)
43114-IGCC-10	Duke Energy Indiana, Inc. (Indiana Utility Regulatory Commission)
Docket No. 36498	Georgia Power Company (Georgia PSC)
Case No. 9316	Columbia Gas of Maryland, Inc. (Maryland PSC)
Docket No. 13-0192	Ameren Illinois Company (Illinois CC)
12-1649-W-42T	West Virginia-American Water Company (West Virginia PSC)
E-04204A-12-0504	UNS Electric, Inc. (Arizona CC)
PUE-2013-00020	Virginia and Electric Power Company (Virginia SCC)
R-2013-2355276	Pennsylvania-American Water Company (Pennsylvania PUC)
FC No. 1103	Potomac Electric Power Company (District of Columbia PSC)
U-13-007	Chugach Electric Association, Inc. (The Regulatory Commission of Alaska)
12-2881-EL-FAC	Financial, Management, and Performance Audit of the FAC for Dayton Power and Light – Audit 3 (Ohio PUC)
Docket No. 36989	Georgia Power Company (Georgia PSC)
43114-IGCC-11	Duke Energy Indiana, Inc. (Indiana Utility Regulatory Commission)
UM 1633	Investigation into Treatment of Pension Costs in Utility Rates (Oregon PUC)
13-1892-EL FAC	Financial Audit of the FAC and AER of the Ohio Power Company – Audit I (Ohio PUC)
E-04230A-14-0011 & E-01933A-14-0011	Reorganization of UNS Energy Corporation with Fortis, Inc. (Arizona CC)
14-255-EL RDR	Regulatory Compliance Audit of the 2013 DIR of Ohio Power Company (Ohio PUC)
U-14-001	Chugach Electric Association, Inc. (The Regulatory Commission of Alaska)
U-14-002	Alaska Power Company (The Regulatory Commission of Alaska)
PUE-2014-00026	Virginia Appalachian Power Company (Commonwealth of Virginia SCC)
14-0117-EL-FAC	Financial, Management, and Performance Audit of the FAC and Purchased Power Rider for Dayton Power and Light – Audit 1 (Ohio PUC)
14-0702-E-42T	Monongahela Power Company and The Potomac Edison Company (West Virginia PSC)
FC No. 1119	Merger of Exelon Corporation, Pepco Holdings, Inc., Potomac Electric Power Company, Exelon Energy Delivery Company, LLC, and New Special Purpose Entity, LLC (District of Columbia PSC)
R-2014-2428742	West Penn Power Company (Pennsylvania PUC)
R-2014-2428743	Pennsylvania Electric Company (Pennsylvania PUC)
R-2014-2428744	Pennsylvania Power Company (Pennsylvania PUC)
R-2014-2428745	Metropolitan Edison Company (Pennsylvania PUC)

43114-IGCC-12/13	Duke Energy Indiana, Inc. (Indiana Utility Regulatory Commission)
14-1152-E-42T	Appalachian Power Company and Wheeling Power Company (West Virginia PSC)
WS-01303A-14-0010	EPCOR Water Arizona, Inc. (Arizona CC)
2014-000396	Kentucky Power Company (Kentucky PSC)
15-03-45	Iberdrola, S.A. Et Al, and UIL Holdings Corporation merger (Connecticut PURA)
A.14-11-003	San Diego Gas & Electric Company (California PUC)
U-14-111	ENSTAR Natural Gas Company (Regulatory Commission of Alaska)
2015-UN-049	Atmos Energy Corporation (Mississippi PSC)
15-0003-G-42T	Mountaineer Gas Company (West Virginia PSC)
PUE-2015-00027	Virginia Electric and Power Company (Commonwealth of Virginia SCC)
2015-0022	Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., Maui Electric Company Limited, and NextEra Energy, Inc. (Hawaii PUC)
15-0676-W-42T	West Virginia-American Water Company (West Virginia PSC)
15-07-38	Iberdrola, S.A. Et Al, and UIL Holdings Corporation merger (Connecticut PURA)
15-26	Iberdrola, S.A. Et Al, and UIL Holdings Corporation merger (Massachusetts DPU)
15-042-EL-FAC	Management/Performance and Financial Audit of the FAC and Purchased Power Rider for Dayton Power and Light (Ohio PUC)
U-15-016	Cook Inlet Natural Gas Storage Alaska, LLC (Regulatory Commission of Alaska)
2015-UN-0080	Mississippi Power Company (Mississippi PSC)
Docket No. 15-00042	B&W Pipeline, LLC (Tennessee Regulatory Authority)
WR-2015-0301/ SR-2015-0302	Missouri American Water Company (Missouri PSC)
U-15-089, U-15-091, & U-15-092	Golden Heart Utilities, Inc. and College Utilities Corporation (The Regulatory Commission of Alaska)
16-00001	Kingsport Power Company d/b/a AEP Appalachian Power (Tennessee Regulatory Authority)
PUE-2015-00097	Virginia-American Water Company (Commonwealth of Virginia SCC)
15-1854-EL-RDR	Management/Performance and Financial Audit of the Alternative Energy Recovery Rider of Duke Energy Ohio, Inc. (Ohio PUC)
P-15-014	PTE Pipeline LLC (Regulatory Commission of Alaska)
P-15-020	Swanson River Oil Pipeline, LLC (Regulatory Commission of Alaska)
U-15-127 through U-15-138	Doyon Utilities, LLC (Regulatory Commission of Alaska)
Docket No. 40161	Georgia Power Company – Integrated Resource Plan (Georgia PSC)
Formal Case No. 1137	Washington Gas Light Company (District of Columbia PSC)
160021-EI, et al.	Florida Power Company (Florida PSC)
R-2016-2537349	Metropolitan Edison Company (Pennsylvania PUC)
R-2016-2537352	Pennsylvania Electric Company (Pennsylvania PUC)
R-2016-2537355	Pennsylvania Power Company (Pennsylvania PUC)
R-2016-2537359	West Penn Power Company (Pennsylvania PUC)
16-0717-G-390P	Hope Gas, Inc., dba Dominion Hope (West Virginia PSC)
15-1256-G-390P (Reopening)/16-0922-G-390P	Mountaineer Gas Company (West Virginia PSC)
16-0550-W-P	West Virginia-American Water Company (West Virginia PSC)
CEPR-AP-2015-0001	Puerto Rico Electric Power Authority (Puerto Rico Energy Commission)
E-01345A-16-0036	Arizona Public Service Company (Arizona CC)
Docket No. 4618	Providence Water Supply Board (Rhode Island PUC)

Docket No. 46238	Joint Report and Application of Oncor Electric Delivery Company LLC and NextEra Energy Inc. (Texas State Office of Administrative Hearings; Texas PUC)
U-16-066	ENSTAR Natural Gas Company (Regulatory Commission of Alaska)
2016-00370	Kentucky Utilities Company (Kentucky PSC)
2016-00371	Louisville Gas and Electric Company (Kentucky PSC)
P-2015-2508942	Metropolitan Edison Company (Pennsylvania PUC)
P-2015-2508936	Pennsylvania Electric Company (Pennsylvania PUC)
P-2015-2508931	Pennsylvania Power Company (Pennsylvania PUC)
P-2015-2508948	West Penn Power Company (Pennsylvania PUC)
E-04204A-15-0142	UNS Electric, Inc. (Arizona CC)
E-01933A-15-0322	Tucson Electric Power Company (Arizona CC)
UE-170033 & UG-170034	Puget Sound Energy, Inc. (Washington UTC)
Case No. U-18239	Consumers Energy Company (Michigan PSC)
Case No. U-18248	DTE Electric Company (Michigan PSC)
Case No. 9449	Merger of AltaGas Ltd. and WGL Holdings (Maryland PSC)
FC No. 1142	Merger of AltaGas Ltd. and WGL Holdings (District of Columbia PSC)
2017-00179	Kentucky Power Company (Kentucky PSC)
Docket No. 29849	Georgia Power Plant Vogtle Units 3 and 4, VCM 17 (Georgia PSC)
2017-AD-112	Mississippi Power Company (Mississippi PSC)
D2017.9.79	Montana-Dakota Utilities Co. (Montana PSC)
SW-01428A-17-0058 et al	Liberty Utilities (Litchfield Park Water & Sewer) Corp. (Arizona CC)
U-18-021 & U-18-033	Chugach Electric Association, Inc. (Regulatory Commission of Alaska)
Docket No. 4800	Suez Water Rhode Island Inc. (Rhode Island PUC)
GO No. 236.1	In the Matter of the Effects on Utilities of the 2017 Tax Cuts and Jobs Act (West Virginia PSC)
20180047-EI	Duke Energy Florida, LLC. (Florida PSC)
20180046-EI	Florida Power & Light Company (Florida PSC)
20180048-EI	Florida Public Utilities Company – Electric (Florida PSC)
20180052-GU	Florida Public Utilities Company – Indiantown (Florida PSC)
20180054-GU	Florida Division of Chesapeake Utilities Corporation (Florida PSC)
20180051-GU	Florida Public Utilities Company – Gas Division (Florida PSC)
20180053-GU	Florida Public Utilities Company - Fort Meade (Florida PSC)
45032 S4	Indiana American Water Company, Inc. Phase 2 (Indiana Utility Regulatory Commission)
D2018.1.6	Montana-Dakota Utilities Co. (Montana PSC)
D2018.4.24	NorthWestern Energy (Montana PSC)
D2018.4.22	Montana-Dakota Utilities Co. (Montana PSC)
18-0573-W-42T & 18-0576-S-42T	West Virginia-American Water Company (West Virginia PSC)
18-0646-E-42T & 18-0645-E-D	Appalachian Power Company and Wheeling Power Company (West Virginia PSC)
18-0049-GA-ALT, 18-0298-GA-AIR, & 18-0299-GA-ALT	Vectren Energy Delivery of Ohio, Inc. (Ohio PUC)
R-2018-3003558, R-2018-3003561	Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc. (Pennsylvania PUC)
Cause No. 45142	Indiana-American Water Company, Inc. (Indiana Utility Regulatory Commission)
U-18-043	Cook Inlet Natural Gas Storage Alaska, LLC (Regulatory Commission of Alaska)

T-03214-17-0305	Citizens Telecommunications Company of The White Mountains, Inc. d/b/a Frontier Communications of The White Mountains (Arizona CC)
D2018.9.60	Montana-Dakota Utilities Co. (Montana PSC)
Docket No. 4890	Narragansett Bay Commission (Rhode Island PUC)
PUR-2018-00131	Columbia Gas of Virginia (Virginia SCC)
EL18-152-000	Louisiana PSC v. System Energy Resources, Inc. and Entergy Services, Inc. (FERC)
PUR-2018-00175	Virginia-American Water Company (Virginia SCC)
A-2018-3006061, A-2018-3006062 and A-2018-3006063	Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company LLC, Peoples Gas Company LLC (Pennsylvania PUC)
D2018.2.12	NorthWestern Energy (Montana PSC)
Docket No. 42310	Georgia Power Company – Integrated Resource Plan (Georgia PSC)
U-18-102	Municipality of Anchorage d/b/a Municipal Light & Power Department (Regulatory Commission of Alaska)
49494	AEP Texas, Inc. (Texas PUC)
Application 18-12-009	Pacific Gas and Electric Company (California PUC)
19-0316-G-42T	Mountaineer Gas Company (West Virginia PSC)
U-19-020	Chugach Electric Association, Inc. and Municipality of Anchorage d/b/a Municipal Light & Power Department (Regulatory Commission of Alaska)
19-0051-EL-RDR	Management/Performance and Financial Audit of the Alternative Energy Recovery Rider of Duke Energy Ohio, Inc. (Ohio PUC)
A-2018-3006061, A-2018-3006062, and A-2018-3006063	Joint Application of Aqua America, Inc., Aqua Pennsylvania, Inc. Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company LLC, and Peoples Gas Company LLC (Pennsylvania PUC)
ER-18-1182-001	System Energy Resources, Inc. (FERC)
E-01933A-19-0028	Tuscon Electric Power Company (Arizona CC)
G-01551A-19-0055	Southwest Gas Corporation (Arizona CC)
2018-UN-205	Entergy Mississippi, LLC (Mississippi PSC)
W-03039A-17-0295, W-03039A-19-0092, and WS-01303A-19-0092	Brooke Water, LLC and EPCOR Water Arizona (Arizona CC)
Docket No. 4975	Block Island Utility District d/b/a Block Island Power Company (Rhode Island PUC)
A-2019-3014248	Pennsylvania-American Water Company and Wastewater System Assets of Kane Borough (Pennsylvania PUC)
Docket No. 4994	Providence Water Supply Board (Rhode Island PUC)
19-0791-GA-ALT	Plant in Service and Capital Spending Prudence Audit of Duke Energy Ohio (Ohio PUC)
U-19-070/U-19-071/ U-19-087/U-19-088	Golden Heart Utilities, Inc. and College Utilities Corporation (Regulatory Commission of Alaska)
Docket No. 42516	Georgia Power Company (Georgia PSC)
20200070-EI	Gulf Power Company (Florida PSC)
20200071-EI	Florida Power & Light Company (Florida PSC)
20200092-EI	Florida Power & Light Company and Gulf Power Company (Florida PSC)
20-GREC-01	Fitchburg Gas and Electric Light Company d/b/a Unitil (Massachusetts DPU)

20-GREC-03	Boston Gas Company and Colonial Gas Company d/b/a National Grid (Massachusetts DPU)
20-GREC-04	Liberty Utilities (New England Natural Gas Company) Corp d/b/a Liberty Utilities (Massachusetts DPU)
PUR-2020-00015	Appalachian Power Company (Virginia SCC)
20-0414-G-390P	Hope Gas, Inc. dba Dominion Energy West Virginia (West Virginia PSC)
Cause No. 45032-S16	Hamilton Southeastern Utilities, Inc. (Indiana URC)
2019.1.101	NorthWestern Energy (Montana PSC)
A-2019-3015173	Aqua Pennsylvania Wastewater Inc. and Wastewater System Assets of the Delaware County Regional Water Quality Control Authority (Pennsylvania PUC)
R-2020-3019369 and R-2020-3019371	Pennsylvania American Water Company (Pennsylvania PUC)
2020.06.076	Montana-Dakota Utilities Co. (Montana PSC)
P-20-005	Cook Inlet Pipeline LLC (Regulatory Commission of Alaska)
2020.05.055	Montana-Dakota Utilities Co. (Montana PSC)
2020.05.066	NorthWestern Energy (Montana PSC)
PUR-2020-00169	Virginia Electric and Power Company (Virginia SCC)
20-0746-G-42T	Hope Gas, Inc., d/b/a Dominion Energy West Virginia (West Virginia PSC)
20-553-EL-RDR	Management/Performance and Financial Audit of the Alternative Energy Rider of the Dayton Power and Light Company (Ohio PUC)
E-01345A-19-0236	Arizona Public Service Company (Arizona CC)
U-20-012	Cook Inlet Natural Gas Storage Alaska, LLC (Regulatory Commission of Alaska)
Docket No. 20-01-31	The Southern New England Telephone Company d/b/a Frontier Communications of Connecticut (SNET) (Connecticut PURA)
P-2020-3021191	Peoples Natural Gas Company LLC (Pennsylvania PUC)
A-2021-3026523, A-2021-3026515, and A-2021-3026522	Joint Application of Veolia Environnement S.A., Veolia North America, Inc., SUEZ S.A., SUEZ Water Pennsylvania Inc. and SUEZ Water Bethel Inc. (Pennsylvania PUC)
A-2021-3026794 and A-2021-3026796	Joint Application of Peoples Natural Gas Company LLC and Peoples Gas Company (Pennsylvania PUC)
A-2021-3026774 and A-2021-3026775	Joint Application of Aqua Pennsylvania Inc., and Aqua Pennsylvania Wastewater Inc. (Pennsylvania PUC)
A-2021-3024267	Aqua Pennsylvania Wastewater Inc. (Pennsylvania PUC)
R-2021-3027385 and R-2021-3027386	Aqua Pennsylvania, Inc, and Aqua Pennsylvania Wastewater, Inc. (Pennsylvania PUC)
21-0595-WW-AIR	Aqua Ohio, Inc. (Ohio PUC)
21-0596-ST-AIR	Aqua Ohio Wastewater, Inc. (Ohio PUC)
21-0369-W-42T	West Virginia-American Water Company (West Virginia PSC)
U-21-058	Cook Inlet Natural Gas Storage Alaska, LLC (Regulatory Commission of Alaska)
E-01345A-21-0056	Fuel and Purchased Power Audit of Arizona Public Service Company (Arizona CC)
SW-20445A-20-0214 et al	Global Water Resources, Inc. (Arizona CC)
PUR-2021-00058	Virginia Electric and Power Company (Virginia SCC)
U-21-070/U-21-071	Golden Heart Utilities, Inc. and College Utilities Corporation (Regulatory Commission of Alaska)

U-22-001	Railbelt Reliability Council for Certification of an Electric Reliability Organization (Regulatory Commission of Alaska)
Docket No. 44160	Georgia Power Company Integrated Resource Plan (Georgia PSC)
22-620-GA-RDR	Plant in Service and Capital Spending Prudence Audit of Vectren Energy Delivery of Ohio, Inc. d/b/a CenterPoint Energy Ohio (Ohio PUC)
PUR-2021-00255	Virginia-American Water Company (Virginia SCC)
RP19-73-003	El Paso Natural Gas Company, LLC (FERC)
22-0304-E-P	Appalachian Power Company and Wheeling Power Company (West Virginia PSC)
R-2022-3031672 and R-2022-3031673	Pennsylvania-American Water Company (Pennsylvania PUC)
22-0294-G-PC	Hope Gas, Inc., dba Dominion Energy West Virginia and Hope Gas Holdings (West Virginia PSC)
G-01551A-21-0368	Southwest Gas Corporation (Arizona CC)
2022.06.064	NorthWestern Energy (Montana PSC)
U-21-088, U-21-089, U-22-006, U-2-007, U-22-008, U-22-009	Sand Point Generating, LLC, North Slope Generating, LLC, TDX Manley Generating, LLC, TDX North Slope Generating, LLC, Sand Point Generating, LLC, TDX ADAK Generating, LLC. (Regulatory Commission of Alaska)
20220067-GU	Florida Public Utilities Company, Florida Division of Chesapeake Utilities Corporation, Florida Public Utilities Company – Fort Meade, and Florida Public Utilities Company – Indiantown Division (Florida PSC)
PUR-2020-00015	Appalachian Power Company – Remand (Virginia SCC)
U-22-029	Golden Valley Electric Association, Inc. (Regulatory Commission of Alaska)
22-0393-E-ENEC	Appalachian Power Company and Wheeling Power Company (West Virginia PSC)
E-01773A-21-0298	Arizona Electric Power Cooperative, Inc. (Arizona CC)
44280	Georgia Power Company (Georgia PSC)
FTC-01/2021-BL&P-RRA-20211004	Barbados Light & Power Company Limited (Barbados Fair Trading Commission)
U-22-002 and U-22-003	Municipality of Anchorage d/b/a Anchorage Water and Wastewater Utility (Regulatory Commission of Alaska)
A-2019-3015173	Aqua Pennsylvania Wastewater Inc. and Wastewater System Assets of the Delaware County Regional Water Quality Control Authority - Remand (Pennsylvania PUC)
2022.07.078	NorthWestern Energy (Montana PSC)
A.22-05-016	San Diego Gas & Electric Company (California PUC)
2022-UN-86/ 2022-UN-087	Great River Utility Operating Company, LLC (Mississippi PSC)
E-01933A-22-0107	Tucson Electric Power Company (Arizona CC)
A-2022-3035298, A-2022-3035299, A-2022-3035490, A-2022-3035492	Manwalamink Water Company, Manwalamink Sewer Company, NextEra Water Pennsylvania, LLC (Pennsylvania PUC)
PUR-2022-00052	Virginia Natural Gas, Inc. (Virginia SCC)
U-22-078	Alaska Electric Light & Power Company (Regulatory Commission of Alaska)
U-22-081	ENSTAR Natural Gas Company (Regulatory Commission of Alaska)
22-47-WW	Narragansett Bay Commission (Rhode Island PUC)
E-01345A-22-0144	Arizona Public Service Company (Arizona CC)

E-04204A-22-0251	UNS Electric, Inc. (Arizona CC)
PUR-2023-00002	Appalachian Power Company (Virginia SCC)
22-1094-WW-AIR	Aqua Ohio, Inc. (Ohio PUC)
22-1096-ST-AIR	Aqua Ohio Wastewater, Inc. (Ohio PUC)
A-2022-3037047, et al.	Pennsylvania-American Water Company, Butler Area Sewer Authority (Pennsylvania PUC)
PUR-2023-00067 and PUR-2023-00112	Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Virginia SCC)
Docket No. 54634	Southwestern Public Service Company (Texas PUC)
23-0089-EL-RDR	Duke Energy Ohio, Inc. (Ohio PUC)
23-0280-G-42T	Mountaineer Gas Company (West Virginia PSC)
2022-0208	Kauai Island Utility Cooperative (Hawaii PUC)
PUR-2023-00101	Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Virginia SCC)
23-0383-W-42T and 23-0384-S-42T	West Virginia-American Water Company (West Virginia PSC)
23-0460-E-42T	Monongahela Power Company and The Potomac Edison Company (West Virginia PSC)

Pennsylvania American Water Company
Docket Nos. R-2023-3043189 and R-2023-3043190
Exhibit LA-1
Revenue Requirement Summary Schedules
Accompanying the Direct Testimony of Ralph Smith

Number	Description	No. of Pages	Page No.
	Revenue Requirement Summary Schedules - Fully Projected Future Test Year Ending 6/30/2025		
A	Calculation of Revenue Deficiency (Sufficiency)	5	2-6
A-1	Gross Revenue Conversion Factor	5	7-11
B	Adjusted Rate Base	5	12-16
B.1	Summary of Rate Base Adjustments	5	17-21
C	Adjusted Net Operating Income	5	22-26
C.1	Summary of Net Operating Income Adjustments	6	27-32
D	Capital Structure and Cost Rates	2	33-34
	Total Pages (including Contents page)	34	

Pennsylvania American Water Company
Calculation of Revenue Deficiency (Sufficiency)
Per OCA

Exhibit LA-1
Schedule A
Docket Nos. R-2023-3043189 and R-2023-3043190

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Reference	Total Company	Water Operations	Wastewater SSS General Operations	BASA Wastewater Operations	Brentwood Wastewater Operations	CSS Wastewater Operations
			(A)	(B)	(C)	(D)	(E)	(F)
1	Adjusted rate base	B	$ 5,825,495,239	$ 4,692,127,100	$ 644,282,670	$ -	$ -	$ 489,085,469
2	Rate of return	D		6.97%	6.79%	6.79%	6.79%	6.79%
3	Net operating income required		$ 403,996,955	$ 327,041,259	$ 43,746,793	$ -	$ -	$ 33,208,903
4	Adjusted net operating income	C	$ 372,780,490	$ 315,556,896	$ 29,249,071	$ -	$ -	$ 27,974,523
5	Net operating income deficiency		$ 31,216,465	$ 11,484,363	$ 14,497,722	$ -	$ -	$ 5,234,380
6	Gross revenue conversion factor	A-1		1.400941	1.400970	1.400971	1.400970	1.400971
7	Revenue deficiency (Sufficiency)		$ 43,733,007	$ 16,088,915	$ 20,310,880	$ -	$ -	$ 7,333,212
8	Act 11 - Wastewater Allocation		$ -	$ 18,899,766	$ (15,233,160)	$ -	$ -	$ (3,666,606)
9	Total Proposed Revenues		$ 43,733,007	$ 34,988,681	$ 5,077,720	$ -	$ -	$ 3,666,606
10	Operating Revenue at Current Rates	C	$ 1,011,895,862	$ 824,117,186	$ 95,470,867	$ 11,847,402	$ 1,824,191	$ 78,636,216
	Percentage Increase							
11	Before Act 11 Shift	L7 / L10	4.3%	2.0%	21.3%	0.0%	0.0%	9.3%
12	After Act 11 Shift	L9 / L10	4.3%	4.2%	5.3%	0.0%	0.0%	4.7%

Notes and Source
Exhibit 3-A, page A

			Wastewater SSS General Operations	CSS Wastewater Operations
13	Wastewater Revenue Deficiencies	Line 7	$ 20,310,880	$ 7,333,212
14	Allocation Percentages Per OCA Witness Jerry Mierzwa		75%	50%
15	Act 11 - Wastewater Allocation	To Line 8	$ (15,233,160)	$ (3,666,606)

Pennsylvania American Water Company
Calculation of Revenue Deficiency (Sufficiency)
Per PAWC

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Reference	Total Company	Water Operations	Wastewater SSS General Operations	BASA Wastewater Operations	Brentwood Wastewater Operations	CSS Wastewater Operations
			(A)	(B)	(C)	(D)	(E)	(F)
1	Adjusted rate base	B	$ 6,096,173,421	$ 4,704,067,656	$ 649,330,622	$ 231,536,917	$ 22,053,946	$ 489,184,280
2	Rate of return	D		8.22%	7.94%	7.94%	7.94%	7.94%
3	Net operating income required		$ 497,207,558	$ 386,674,361	$ 51,556,851	$ 18,384,031	$ 1,751,083	$ 38,841,232
4	Adjusted net operating income	C	$ 351,648,856	$ 295,211,666	$ 28,865,976	$ (378,018)	$ 370,326	$ 27,578,905
5	Net operating income deficiency		$ 145,558,702	$ 91,462,695	$ 22,690,875	$ 18,762,049	$ 1,380,757	$ 11,262,327
6	Gross revenue conversion factor	A-1		1.401114	1.401143	1.401143	1.401142	1.401143
7	Revenue deficiency (Sufficiency)		$ 203,945,910	$ 128,149,690	$ 31,793,150	$ 26,288,308	$ 1,934,636	$ 15,780,126
8	Act 11 - Wastewater Allocation		$ -	$ 71,087,394	$ (31,962,411)	$ (21,552,699)	$ (1,565,232)	$ (16,007,052)
9	Total Proposed Revenues		$ 203,945,910	$ 199,237,084	$ (169,261)	$ 4,735,609	$ 369,404	$ (226,926)
10	Operating Revenue at Current Rates	C	$ 1,011,895,862	$ 824,117,186	$ 95,470,867	$ 11,847,402	$ 1,824,191	$ 78,636,216
11	Percentage Increase	L9 / L10	20.2%	24.2%	-0.2%	40.0%	20.3%	-0.3%

Notes and Source
Exhibit 3-A, page A

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Reference	Total Company	Water Operations	Wastewater SSS General Operations	BASA Wastewater Operations	Brentwood Wastewater Operations	CSS Wastewater Operations
			(A)	(B)	(C)	(D)	(E)	(F)
1	Adjusted rate base	B	$ (270,678,182)	$ (11,940,556)	$ (5,047,952)	$ (231,536,917)	$ (22,053,946)	$ (98,811)
2	Rate of return	D						
3	Net operating income required		$ (93,210,603)	$ (59,633,102)	$ (7,810,058)	$ (18,384,031)	$ (1,751,083)	$ (5,632,329)
4	Adjusted net operating income	C	$ 21,131,634	$ 20,345,230	$ 383,095	$ 378,018	$ (370,326)	$ 395,618
5	Net operating income deficiency		$ (114,342,237)	$ (79,978,332)	$ (8,193,153)	$ (18,762,049)	$ (1,380,757)	$ (6,027,947)
6	Gross revenue conversion factor	A-1						
7	Revenue deficiency (Sufficiency)		$ (160,212,903)	$ (112,060,775)	$ (11,482,270)	$ (26,288,308)	$ (1,934,636)	$ (8,446,914)
8	Act 11 - Wastewater Allocation		$ -	$ (52,187,628)	$ 16,729,251	$ 21,552,699	$ 1,565,232	$ 12,340,446
9	Total Proposed Revenues		$ (160,212,903)	$ (164,248,403)	$ 5,246,981	$ (4,735,609)	$ (369,404)	$ 3,893,532

Notes and Source
Page 1 minus Page 2 Amounts

Line No.	Description	Schedule Reference	Component	OCA Adjustments (A)	OCA Multiplier (B)	OCA Revenue Requirement Amount (C)
		D	ROR Difference		-1.2500%	
	Rate Base	A-1	GRCF		x 1.400941	
1	Rate Base per PAWC's Filing	B		$ 4,704,067,656	-1.751%	$ (82,376,521)
		D	Rate of Return		6.970%	
	Effect of OCA Adjustments to Rate Base	A-1	GRCF		x 1.400941	
2	Acquisition - Audubon Water	B-1		$ (7,406,830)	0.097646	$ (723,244)
3	Acquisition - Farmington Township Water	B-2		$ (2,773,125)	0.097646	$ (270,783)
4	Cash Working Capital	B-5		$ (1,760,601)	0.097646	$ (171,915)
5	Total OCA Rate Base Adjustments			$ (11,940,556)		
6	**OCA Adjusted Original Cost Rate Base**	B		$ 4,692,127,100		
	Net Operating Income		Pre-Tax Operating Income Amount	Net Operating Income Amount Sch C.1	OCA GRCF Sch. A-1	
	Effect of OCA Adjustments on NOI					
7	Acquisition Revenues and Expenses - Audubon Water Company	C-1	$ (615,475)	$ (447,364)	1.400941	$ 626,731
8	Acquisition O&M Expense - Farmington Township - Water	C-2	$ (92,437)	$ (67,189)	1.400941	$ 94,127
9	Depreciation Expense - Audubon Water	C-5	$ 269,599	$ 195,961	1.400941	$ (274,529)
10	Depreciation Expense - Farmington Township Water	C-6	$ 101,751	$ 73,959	1.400941	$ (103,612)
11	Uncollectibles Expense	C-9	$ 100,054	$ 72,725	1.400941	$ (101,884)
12	Vacancies - Salary and Wages Expense	C-10	$ 1,125,323	$ 817,951	1.400941	$ (1,145,902)
13	Annualized Performance Plan Expense	C-11	$ 92,066	$ 66,919	1.400941	$ (93,749)
14	Group Insurance Expense	C-12	$ 200,623	$ 145,825	1.400941	$ (204,292)
15	401K, Defined Contribution Plan and Employee Stock Purchase Plan	C-13	$ 72,817	$ 52,927	1.400941	$ (74,148)
16	Interest Synchronization	C-14	$ -	$ 3,007,699	1.400941	$ (4,213,609)
17	PAWC External Board Members Expense	C-15	$ 123,250	$ 89,586	1.400941	$ (125,504)
18	Insurance Other Than Group	C-16	$ 247,905	$ 180,192	1.400941	$ (252,438)
19	Depreciation Expense - Water Utility	C-17	$ 15,478,699	$ 11,250,840	1.400941	$ (15,761,764)
20	Stock-Based Compensation Expense - AWW Executives	C-18	$ 1,642,726	$ 1,194,031	1.400941	$ (1,672,767)
21	AWW Executives - Dividend Equivalents	C-19	$ 29,928	$ 21,754	1.400941	$ (30,476)
22	American Water Works Service Company - Supplemental Executive Retirement Plan Expense	C-20	$ 145,742	$ 105,933	1.400941	$ (148,406)
23	Call Center Expense	C-21	$ 3,082,255	$ 2,240,366	1.400941	$ (3,138,621)
24	Arrearage Management Plan Credits - Uncollectibles Expense	C-22	$ 1,847,832	$ 1,343,115	1.400941	$ (1,881,625)
25	Total OCA Adjustments to Operating Income	C.1	$ 23,852,658	$ 20,345,230		
26	Net Operating Income per Company Filing	C		$ 295,211,666		
27	**OCA Adjusted Net Operating Income**	C		$ 315,556,896		
	Gross Revenue Conversion Factor Difference:					
28	Per OCA	A-1			1.400941	
29	Per Company	A-1			1.401114	
30	Difference				-0.000173	
31	Company Adjusted NOI Deficiency	A			$ 91,462,695	
32	GRCF Difference					$ (15,842)
33	OCA REVENUE REQUIREMENT ADJUSTMENTS ABOVE					$ (112,060,773)
34	Company Requested Base Rate Revenues	A				$ 128,149,690
35	Reconciled Revenue Requirement					$ 16,088,917
36	Revenue Requirement Calculated on Schedule A OCA	A				$ 16,088,915
37	Difference from Above					$ 1

Notes and Source
Pre-tax return computed using Gross Revenue Conversion Factor

Line No.	Description	Schedule Reference	Component	OCA Adjustments (A)		OCA Multiplier (B)	OCA Revenue Requirement Amount (C)
		D	ROR Difference			-1.1500%	
	Rate Base	A-1	GRCF		x	1.400970	
1	Rate Base per PAWC's Filing	B		$ 1,392,105,765		-1.611%	$ (22,428,438)
		D	Rate of Return			6.790%	
	Effect of OCA Adjustments to Rate Base	A-1	GRCF		x	1.400970	
2	Acquisition - Farmington Township Wastewater	B-3		$ (2,878,461)		0.095126	$ (273,816)
3	Acquisition - Sadsbury Township Municipal Authority Wastewater	B-4		$ (2,018,697)		0.095126	$ (192,030)
4	Cash Working Capital	B-5		$ (249,605)		0.095126	$ (23,744)
5	Total OCA Rate Base Adjustments			$ (5,146,763)			
6	**OCA Adjusted Original Cost Rate Base**	B		$ 1,386,959,001			
	Net Operating Income		Pre-Tax Operating Income Amount	Net Operating Income Amount Sch C.1		OCA GRCF Sch. A-1	
	Effect of OCA Adjustments on NOI						
7	Acquisition O&M Expense - Farmington Township Wastewater	C-3	$ (53,051)	$ (38,561)		1.400970	$ 54,022
8	Acquisition O&M Expense - Sadsbury Township Municipal Authority	C-4	$ (307,354)	$ (223,403)		1.400970	$ 312,982
9	Depreciation Expense - Farmington Township Wastewater	C-7	$ 137,987	$ 100,297		1.400970	$ (140,513)
10	Depreciation Expense - Sadsbury Township Municipal Authority	C-8	$ 51,847	$ 37,685		1.400970	$ (52,796)
11	Uncollectibles Expense	C-9	$ 22,798	$ 16,570		1.400970	$ (23,215)
12	Interest Synchronization	C-14	$ -	$ 727,445		1.400970	$ (1,019,128)
13	Insurance Other Than Group	C-16	$ 58,407	$ 42,454		1.400970	$ (59,477)
14	Stock-Based Compensation Expense - AWW Executives	C-18	$ 79,209	$ 57,574		1.400970	$ (80,659)
15	AWW Executives - Dividend Equivalents	C-19	$ 1,443	$ 1,049		1.400970	$ (1,470)
16	American Water Works Service Company - Supplemental Executive Retirement Plan Expense	C-20	$ 7,027	$ 5,108		1.400970	$ (7,157)
17	Arrearage Management Plan Credits - Uncollectibles Expense	C-22	$ 314,640	$ 228,698		1.400970	$ (320,400)
18	Total OCA Adjustments to Operating Income	C.1	$ 312,952	$ 954,917			
19	Net Operating Income per Company Filing	C		$ 56,437,190			
20	**OCA Adjusted Net Operating Income**	C		$ 57,392,106			
	Gross Revenue Conversion Factor Difference:						
21	Per OCA	A-1				1.400970	
22	Per Company	A-1				1.401143	
23	Difference					-0.000172	
24	Company Adjusted NOI Deficiency	A				$ 54,096,007	
25	GRCF Difference						$ (9,312)
26	OCA REVENUE REQUIREMENT ADJUSTMENTS ABOVE						$ (24,265,151)
27	Company Requested Base Rate Revenues						$ 75,796,220
28	Reconciled Revenue Requirement						$ 51,531,069
29	Less Remaining BASA Revenue Requirement						$ (22,335,787)
30	Less Remaining Brentwood Revenue Requirement						$ (1,551,191)
31	Reconciled Revenue Requirement After Removing BASA and Brentwood						$ 27,644,092
32	Revenue Requirement Calculated on Schedule A P1 per OCA	A					$ 27,644,092
33	Difference from Above						$ (0)

Notes and Source
Pre-tax return computed using Gross Revenue Conversion Factor

Pennsylvania American Water Company
Gross Revenue Conversion Factor

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-1
Water Operations
Schedule A-1.B
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	Company Proposed Amounts	Company Proposed Derived Percentages	Company Proposed as Percentages	Effective Current Income Tax Rate	Revised OCA Proposed
		(A)	(B)	(C)	(D)	(E)
1	Gross Revenue	$ 128,149,690		100.00000%		100.00000%
2	Uncollectibles	$ 1,507,040	1.18%	1.17600%		1.16386%
3	Taxable Income Before Assessments	$ 126,642,650		98.82400%		98.83614%
4	General Assessment	$ 809,959	0.64%	0.63204%		0.63204%
5	Taxable Income	$ 125,832,691		98.19196%		98.20410%
6	State Income Taxes	$ 10,054,748	7.99%	7.84610%	7.99%	7.84707%
7	Income Before Federal Income Taxes	$ 115,777,943		90.34586%		90.35703%
8	Federal Income Taxes	$ 24,315,248	21.00%	18.97410%	21.00%	18.97644%
9	Change in Net Operating Income	$ 91,462,695		71.37176%		71.38059%
10	Gross Revenue Conversion Factor	1.401114		1.401114		1.400941

Notes and Source

Col. A: PAWC Filing, Exhibit 3-A, page 1
Col. B: Derived from Column A
Col. E, line 2: See Schedule C-8

Components of Revenue Requirement Increase

		PAWC	Percent	OCA	Percent
11	Net Income	$ 91,462,695	71.37%	$ 11,484,363	71.38059%
12	Uncollectibles	$ 1,507,040	1.18%	$ 187,252	1.163859%
13	General Assessment	$ 809,959	0.63%	$ 101,689	0.632041%
14	Current State Income Taxes	$ 10,054,748	7.85%	$ 1,262,508	7.84707%
15	Current Federal Income Taxes	$ 24,315,248	18.97%	$ 3,053,104	18.97644%
16	Total Revenue Increase	$ 128,149,690	100.00%	$ 16,088,916	100.0000%
17	Total Revenue Increase (From Schedule A)			$ 16,088,915	

Pennsylvania American Water Company
Gross Revenue Conversion Factor

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-1
Wastewater SSS General Operations
Schedule A-1.C
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	Company Proposed Amounts	Company Proposed Derived Percentages	Company Proposed as Percentages	Effective Current Income Tax Rate	Revised OCA Proposed
		(A)	(B)	(C)	(D)	(E)
1	Gross Revenue	$ 31,793,150		100.00000%		100.00000%
2	Uncollectibles	$ 373,888	1.18%	1.176002%		1.163859%
3	Taxable Income Before Assessments	$ 31,419,262		98.82400%		98.83614%
4	General Assessment	$ 201,554	0.64%	0.63395%		0.63403%
5	Taxable Income	$ 31,217,708		98.19004%		98.20211%
6	State Income Taxes	$ 2,494,476	7.99%	7.84595%	7.99%	7.84692%
7	Income Before Federal Income Taxes	$ 28,723,232		90.34409%		90.35519%
8	Federal Income Taxes	$ 6,032,357	21.00%	18.97376%	21.00%	18.97609%
9	Change in Net Operating Income	$ 22,690,875		71.37033%		71.37910%
10	Gross Revenue Conversion Factor	1.401143		1.401143		1.400970

Notes and Source

Col. A: PAWC Filing, Exhibit 3-A, page 76
Col. B: Derived from Column A
Col. E, line 2: See Schedule C-8

Components of Revenue Requirement Increase

		PAWC	Percent	OCA	Percent
11	Net Income	$ 22,690,875	71.37%	$ 14,497,722	71.37910%
12	Uncollectibles	$ 373,888	1.18%	$ 236,390	1.163859%
13	General Assessment	$ 201,554	0.63%	$ 128,777	0.634032%
14	Current State Income Taxes	$ 2,494,476	7.85%	$ 1,593,778	7.84692%
15	Current Federal Income Taxes	$ 6,032,357	18.97%	$ 3,854,212	18.97609%
16	Total Revenue Increase	$ 31,793,150	100.00%	$ 20,310,879	100.0000%
17	Total Revenue Increase (From Schedule A)			$ 20,310,880	

Pennsylvania American Water Company
Gross Revenue Conversion Factor

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-1
BASA Wastewater Operations
Schedule A-1.D
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	Company Proposed Amounts (A)	Company Proposed Derived Percentages (B)	Company Proposed as Percentages (C)	Effective Current Income Tax Rate (D)	Revised OCA Proposed (E)
1	Gross Revenue	$ 26,288,308		100.00000%		100.00000%
2	Uncollectibles	$ 309,151	1.18%	1.176002%		1.16386%
3	Taxable Income Before Assessments	$ 25,979,157		98.82400%		98.83614%
4	General Assessment	$ 166,658	0.64%	0.63396%		0.63404%
5	Taxable Income	$ 25,812,499		98.19004%		98.20210%
6	State Income Taxes	$ 2,062,569	7.99%	7.84596%	7.99%	7.84692%
7	Income Before Federal Income Taxes	$ 23,749,930		90.34408%		90.35518%
8	Federal Income Taxes	$ 4,987,881	21.00%	18.97376%	21.00%	18.97609%
9	Change in Net Operating Income	$ 18,762,049		71.37032%		71.37909%
10	Gross Revenue Conversion Factor	1.401143		1.401143		1.400971

Notes and Source

Col. A: PAWC Filing, Exhibit 3-A, page 139
Col. B: Derived from Column A
Col. E, line 2: See Schedule C-8

Components of Revenue Requirement Increase

		PAWC	Percent	OCA	Percent
11	Net Income	$ 18,762,049	71.37%	$ 15,943,081	71.37909%
12	Uncollectibles	$ 309,151	1.18%	$ 259,957	1.163859%
13	General Assessment	$ 166,658	0.63%	$ 141,618	0.634040%
14	Current State Income Taxes	$ 2,062,569	7.85%	$ 1,752,671	7.84692%
15	Current Federal Income Taxes	$ 4,987,881	18.97%	$ 4,238,460	18.97609%
16	Total Revenue Increase	$ 26,288,308	100.00%	$ 22,335,787	100.0000%
17	Total Revenue Increase (From Schedule A)			$ 22,335,787	

Line No.	Description	Company Proposed Amounts	Company Proposed Derived Percentages	Company Proposed as Percentages	Effective Current Income Tax Rate	Revised OCA Proposed
		(A)	(B)	(C)	(D)	(E)
1	Gross Revenue	$ 1,934,637		100.00000%		100.00000%
2	Uncollectibles	$ 22,752	1.18%	1.176035%		1.16386%
3	Taxable Income Before Assessments	$ 1,911,885		98.82397%		98.83614%
4	General Assessment	$ 12,265	0.64%	0.63397%		0.63405%
5	Taxable Income	$ 1,899,620		98.19000%		98.20209%
6	State Income Taxes	$ 151,790	7.99%	7.84592%	7.99%	7.84688%
7	Income Before Federal Income Taxes	$ 1,747,830		90.34408%		90.35521%
8	Federal Income Taxes	$ 367,073	21.00%	18.97374%	21.00%	18.97608%
9	Change in Net Operating Income	$ 1,380,757		71.37034%		71.37913%
10	Gross Revenue Conversion Factor	1.401142		1.401142		1.400970

Notes and Source

Col. A: PAWC Filing, Exhibit 3-A, page 172
Col. B: Derived from Column A
Col. E, line 2: See Schedule C-8

Components of Revenue Requirement Increase

		PAWC	Percent	OCA	Percent
11	Net Income	$ 1,380,757	71.37%	$ 1,107,227	71.37913%
12	Uncollectibles	$ 22,752	1.18%	$ 18,054	1.163859%
13	General Assessment	$ 12,265	0.63%	$ 9,835	0.634047%
14	Current State Income Taxes	$ 151,790	7.85%	$ 121,720	7.84688%
15	Current Federal Income Taxes	$ 367,073	18.97%	$ 294,355	18.97608%
16	Total Revenue Increase	$ 1,934,637	100.00%	$ 1,551,191	100.0000%
17	Total Revenue Increase (From Schedule A)			$ 1,551,191	

Pennsylvania American Water Company
Gross Revenue Conversion Factor

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-1
CSS Wastewater Operations
Schedule A-1.F
Docket Nos. R-2023-3043189 and R-2023-3043190

Line No.	Description	Company Proposed Amounts	Company Proposed Derived Percentages	Company Proposed as Percentages	Effective Current Income Tax Rate	Revised OCA Proposed
		(A)	(B)	(C)	(D)	(E)
1	Gross Revenue	$ 15,780,126		100.00000%		100.00000%
2	Uncollectibles	$ 185,574	1.18%	1.175998%		1.16386%
3	Taxable Income Before Assessments	$ 15,594,552		98.82400%		98.83614%
4	General Assessment	$ 100,040	0.64%	0.63396%		0.63404%
5	Taxable Income	$ 15,494,512		98.19004%		98.20210%
6	State Income Taxes	$ 1,238,102	7.99%	7.84596%	7.99%	7.84692%
7	Income Before Federal Income Taxes	$ 14,256,410		90.34408%		90.35518%
8	Federal Income Taxes	$ 2,994,083	21.00%	18.97376%	21.00%	18.97609%
9	Change in Net Operating Income	$ 11,262,327		71.37032%		71.37909%
10	Gross Revenue Conversion Factor	1.401143		1.401143		1.400971

Notes and Source

Col. A: PAWC Filing, Exhibit 3-A, page 204
Col. B: Derived from Column A
Col. E, line 2: See Schedule C-8

Components of Revenue Requirement Increase

		PAWC	Percent	OCA	Percent
11	Net Income	$ 11,262,327	71.37%	$ 5,234,380	71.37909%
12	Uncollectibles	$ 185,574	1.18%	$ 85,348	1.163859%
13	General Assessment	$ 100,040	0.63%	$ 46,495	0.634040%
14	Current State Income Taxes	$ 1,238,102	7.85%	$ 575,431	7.84692%
15	Current Federal Income Taxes	$ 2,994,083	18.97%	$ 1,391,557	18.97609%
16	Total Revenue Increase	$ 15,780,126	100.00%	$ 7,333,211	100.0000%
17	Total Revenue Increase (From Schedule A)			$ 7,333,212	

Pennsylvania American Water Company
Adjusted Rate Base

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-1
Water Operations
Schedule B
Docket Nos. R-2023-3043189 and R-2023-3043190

Line No.	Description	Per Company (A)	OCA Adjustments (B)	Per OCA (C)
	Utility Plant in Service			
1	Non-Depreciable Plant	$ 20,746,039	$ (37,675)	$ 20,708,364
2	Depreciable Plant	$ 7,329,946,867	$ (14,406,907)	$ 7,315,539,960
3	Total Utility Plant	$ 7,350,692,906	$ (14,444,582)	$ 7,336,248,324
	Deduct:			
4	Contributions in Aid of Construction	$ (290,552,978)	$ 4,400,468	$ (286,152,510)
5	Customer Advances for Construction	$ (63,679,220)	$ -	$ (63,679,220)
6	Excluded Property	$ (1,558,014)	$ -	$ (1,558,014)
7	Net Utility Plant in Service	$ 6,994,902,694	$ (10,044,114)	$ 6,984,858,580
8	Accumulated Depreciation	$ (1,240,368,309)	$ 7,181,074	$ (1,233,187,235)
9	**Depreciated Utility Plant in Service**	$ 5,754,534,385	$ (2,863,040)	$ 5,751,671,345
	Add:			
10	Materials and Supplies	$ 21,781,099	$ -	$ 21,781,099
11	Cash Working Capital - Expenses	$ 23,164,070	$ (824,601)	$ 22,339,469
12	Accrued and Prepaid Taxes	$ 1,694,560	$ -	$ 1,694,560
13	Acquisition Adjustments	$ 13,205,080	$ (7,316,915)	$ 5,888,165
14	Other Additions	$ 327,057	$ -	$ 327,057
15	**Total Additions to Rate Base**	$ 60,171,866	$ (8,141,516)	$ 52,030,350
	Deduct:			
16	Cash Working Capital - Int and Div	$ (8,352,730)	$ (936,000)	$ (9,288,730)
17	Unamortized ITC (3%)	$ (213,324)	$ -	$ (213,324)
18	Extension Deposits in Suspense	$ (20,895)	$ -	$ (20,895)
19	Citizens Acquisition CIAC and CAC, per settlement	$ (17,729,494)	$ -	$ (17,729,494)
20	Tax Cuts and Jobs Act - Stub Period	$ (1,508,401)	$ -	$ (1,508,401)
21	Other Deductions	$ (431,508)	$ -	$ (431,508)
22	Deferred Taxes	$ (1,082,382,243)	$ -	$ (1,082,382,243)
23	**Total Rate Base Deductions**	$ (1,110,638,595)	$ (936,000)	$ (1,111,574,595)
24	**Total Rate Base**	$ 4,704,067,656	$ (11,940,556)	$ 4,692,127,100

Notes and Source
Col.A: PAWC Company Filing, Exhibit 3-A, page 25
Col.B: Schedule B.1.B, page 1
Col.C: Col.A + Col.B

Line No.	Description	Per Company (A)	OCA Adjustments (B)	Per OCA (C)
	Utility Plant in Service			
1	Non-Depreciable Plant	$ 15,975,719	$ (719,772)	$ 15,255,947
2	Depreciable Plant	$ 995,398,807	$ (8,390,599)	$ 987,008,208
3	Total Utility Plant	$ 1,011,374,526	$ (9,110,371)	$ 1,002,264,155
	Deduct:			
4	Contributions in Aid of Construction	$ (50,089,276)	$ 1,809,039	$ (48,280,237)
5	Customer Advances for Construction	$ (833,590)	$ -	$ (833,590)
6	Excluded Property	$ -	$ -	$ -
7	Net Utility Plant in Service	$ 960,451,660	$ (7,301,332)	$ 953,150,328
8	Accumulated Depreciation	$ (256,394,760)	$ 2,539,020	$ (253,855,740)
9	**Depreciated Utility Plant in Service**	$ 704,056,900	$ (4,762,312)	$ 699,294,588
	Add:			
10	Materials and Supplies	$ 439,941	$ -	$ 439,941
11	Cash Working Capital - Expenses	$ 2,230,011	$ (50,794)	$ 2,179,217
12	Accrued and Prepaid Taxes	$ 352,072	$ -	$ 352,072
13	Acquisition Adjustments	$ 3,749,235	$ (134,846)	$ 3,614,389
14	Other Additions	$ -	$ -	$ -
15	**Total Additions to Rate Base**	$ 6,771,259	$ (185,640)	$ 6,585,619
	Deduct:			
16	Cash Working Capital - Int and Div	$ (1,186,070)	$ (100,000)	$ (1,286,070)
17	Unamortized ITC (3%)	$ -	$ -	$ -
18	Extension Deposits in Suspense	$ -	$ -	$ -
19	Citizens Acquisition CIAC and CAC, per settlement	$ -	$ -	$ -
20	Tax Cuts and Jobs Act - Stub Period	$ (84,324)	$ -	$ (84,324)
21	Other Deductions	$ -	$ -	$ -
22	Deferred Taxes	$ (60,227,143)	$ -	$ (60,227,143)
23	**Total Rate Base Deductions**	$ (61,497,537)	$ (100,000)	$ (61,597,537)
24	**Total Rate Base**	$ 649,330,622	$ (5,047,952)	$ 644,282,670

Notes and Source
Col.A: PAWC Company Filing, Exhibit 3-A, page 96
Col.B: Schedule B.1.C, page 1
Col.C: Col.A + Col.B

Line No.	Description	Per Company (A)	OCA Adjustments (B)	Per OCA (C)
	Utility Plant in Service			
1	Non-Depreciable Plant	$ 13,335,927	$ -	$ 13,335,927
2	Depreciable Plant	$ 229,732,400	$ -	$ 229,732,400
3	Total Utility Plant	$ 243,068,327	$ -	$ 243,068,327
	Deduct:			
4	Contributions in Aid of Construction	$ -	$ -	$ -
5	Customer Advances for Construction	$ -	$ -	$ -
6	Excluded Property	$ -	$ -	$ -
7	Net Utility Plant in Service	$ 243,068,327	$ -	$ 243,068,327
8	Accumulated Depreciation	$ (8,496,233)	$ -	$ (8,496,233)
9	**Depreciated Utility Plant in Service**	$ 234,572,094	$ -	$ 234,572,094
	Add:			
10	Materials and Supplies	$ 117,597	$ -	$ 117,597
11	Cash Working Capital - Expenses	$ 373,592	$ -	$ 373,592
12	Accrued and Prepaid Taxes	$ 65,338	$ -	$ 65,338
13	Acquisition Adjustments	$ 1,092,393	$ -	$ 1,092,393
14	Other Additions	$ -	$ -	$ -
15	**Total Additions to Rate Base**	$ 1,648,920	$ -	$ 1,648,920
	Deduct:			
16	Cash Working Capital - Int and Div	$ (422,915)	$ -	$ (422,915)
17	Unamortized ITC (3%)	$ -	$ -	$ -
18	Extension Deposits in Suspense	$ -	$ -	$ -
19	Citizens Acquisition CIAC and CAC, per settlement	$ -	$ -	$ -
20	Tax Cuts and Jobs Act - Stub Period	$ -	$ -	$ -
21	Other Deductions	$ -	$ -	$ -
22	Deferred Taxes	$ (4,261,182)	$ -	$ (4,261,182)
23	**Total Rate Base Deductions**	$ (4,684,097)	$ -	$ (4,684,097)
24	**Total Rate Base**	$ 231,536,917	$ -	$ 231,536,917

Notes and Source
Col.A: PAWC Company Filing, Exhibit 3-A, page 145
Col.B: Schedule B.1.D, page 1
Col.C: Col.A + Col.B

Line No.	Description	Per Company (A)	OCA Adjustments (B)	Per OCA (C)
	Utility Plant in Service			
1	Non-Depreciable Plant	$ 32,371	$ -	$ 32,371
2	Depreciable Plant	$ 22,662,888	$ -	$ 22,662,888
3	Total Utility Plant	$ 22,695,259	$ -	$ 22,695,259
	Deduct:			
4	Contributions in Aid of Construction	$ -	$ -	$ -
5	Customer Advances for Construction	$ -	$ -	$ -
6	Excluded Property	$ -	$ -	$ -
7	Net Utility Plant in Service	$ 22,695,259	$ -	$ 22,695,259
8	Accumulated Depreciation	$ (383,500)	$ -	$ (383,500)
9	**Depreciated Utility Plant in Service**	$ 22,311,759	$ -	$ 22,311,759
	Add:			
10	Materials and Supplies	$ 31,673	$ -	$ 31,673
11	Cash Working Capital - Expenses	$ 43,531	$ -	$ 43,531
12	Accrued and Prepaid Taxes	$ 3,711	$ -	$ 3,711
13	Acquisition Adjustments	$ 637,591	$ -	$ 637,591
14	Other Additions	$ -	$ -	$ -
15	**Total Additions to Rate Base**	$ 716,506	$ -	$ 716,506
	Deduct:			
16	Cash Working Capital - Int and Div	$ (40,313)	$ -	$ (40,313)
17	Unamortized ITC (3%)	$ -	$ -	$ -
18	Extension Deposits in Suspense	$ -	$ -	$ -
19	Citizens Acquisition CIAC and CAC, per settlement	$ -	$ -	$ -
20	Tax Cuts and Jobs Act - Stub Period	$ -	$ -	$ -
21	Other Deductions	$ -	$ -	$ -
22	Deferred Taxes	$ (934,006)	$ -	$ (934,006)
23	**Total Rate Base Deductions**	$ (974,319)	$ -	$ (974,319)
24	**Total Rate Base**	$ 22,053,946	$ -	$ 22,053,946

Notes and Source
Col.A: PAWC Company Filing, Exhibit 3-A, page 178
Col.B: Schedule B.1.E, page 1
Col.C: Col.A + Col.B

Line No.	Description	Per Company (A)	OCA Adjustments (B)	Per OCA (C)
	Utility Plant in Service			
1	Non-Depreciable Plant	$ 4,463,355	$ -	$ 4,463,355
2	Depreciable Plant	$ 863,395,439	$ -	$ 863,395,439
3	Total Utility Plant	$ 867,858,794	$ -	$ 867,858,794
	Deduct:			
4	Contributions in Aid of Construction	$ (12,011,932)	$ -	$ (12,011,932)
5	Customer Advances for Construction	$ -	$ -	$ -
6	Excluded Property	$ -	$ -	$ -
7	Net Utility Plant in Service	$ 855,846,862	$ -	$ 855,846,862
8	Accumulated Depreciation	$ (297,870,665)	$ -	$ (297,870,665)
9	**Depreciated Utility Plant in Service**	$ 557,976,197	$ -	$ 557,976,197
	Add:			
10	Materials and Supplies	$ 176,374	$ -	$ 176,374
11	Cash Working Capital - Expenses	$ 1,879,977	$ (15,811)	$ 1,864,166
12	Accrued and Prepaid Taxes	$ 245,310	$ -	$ 245,310
13	Acquisition Adjustments	$ 3,686,015	$ -	$ 3,686,015
14	Other Additions	$ -	$ -	$ -
15	**Total Additions to Rate Base**	$ 5,987,676	$ (15,811)	$ 5,971,865
	Deduct:			
16	Cash Working Capital - Int and Div	$ (893,553)	$ (83,000)	$ (976,553)
17	Unamortized ITC (3%)	$ -	$ -	$ -
18	Extension Deposits in Suspense	$ -	$ -	$ -
19	Citizens Acquisition CIAC and CAC, per settlement	$ -	$ -	$ -
20	Tax Cuts and Jobs Act - Stub Period	$ (64,842)	$ -	$ (64,842)
21	Other Deductions	$ -	$ -	$ -
22	Deferred Taxes	$ (73,821,198)	$ -	$ (73,821,198)
23	**Total Rate Base Deductions**	$ (74,779,593)	$ (83,000)	$ (74,862,593)
24	**Total Rate Base**	$ 489,184,280	$ (98,811)	$ 489,085,469

Notes and Source

Col.A: PAWC Company Filing, Exhibit 3-A, page 217
Col.B: Schedule B.1.F, page 1
Col.C: Col.A + Col.B

Pennsylvania American Water Company
Summary of Adjustments to Rate Base

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-1
Water Operations
Schedule B.1 B
Docket Nos. R-2023-3043189 and R-2023-3043190

Line No.	Description	OCA Adjustments	Acquisition - Audubon Water	Acquisition - Farmington Township Water	Cash Working Capital
			B-1	B-2	B-5
	Rate Year Ending December 31, 2021				
	Utility Plant in Service				
1	Non-Depreciable Plant	$ (37,675)	$ (36,518)	$ (1,157)	
2	Depreciable Plant	$ (14,406,907)	$ (9,150,964)	$ (5,255,943)	
3	Total Utility Plant	$ (14,444,582)	$ (9,187,482)	$ (5,257,100)	$ -
	Deduct:				
4	Contributions in Aid of Construction	$ 4,400,468	$ 2,725,838	$ 1,674,630	
5	Customer Advances for Construction	$ -			
6	Excluded Property	$ -			
7	Net Utility Plant in Service	$ (10,044,114)	$ (6,461,644)	$ (3,582,470)	$ -
8	Accumulated Depreciation	$ 7,181,074	$ 6,101,415	$ 1,079,659	
9	**Depreciated Utility Plant in Service**	$ (2,863,040)	$ (360,229)	$ (2,502,811)	$ -
	Add:				
10	Materials and Supplies	$ -			
11	Cash Working Capital - Expenses	$ (824,601)			$ (824,601)
12	Accrued and Prepaid Taxes	$ -			
13	Acquisition Adjustments	$ (7,316,915)	$ (7,046,601)	$ (270,314)	
14	Other Additions	$ -			
15	**Total Additions to Rate Base**	$ (8,141,516)	$ (7,046,601)	$ (270,314)	$ (824,601)
	Deduct:				
16	Cash Working Capital - Int and Div	$ (936,000)			$ (936,000)
17	Unamortized ITC (3%)	$ -			
18	Extension Deposits in Suspense	$ -			
19	Citizens Acquisition CIAC and CAC, per settlement	$ -			
20	Tax Cuts and Jobs Act - Stub Period	$ -			
21	Other Deductions	$ -			
22	Deferred Taxes	$ -			
23	**Total Rate Base Deductions**	$ (936,000)	$ -	$ -	$ (936,000)
24	**Total Rate Base**	$ (11,940,556)	$ (7,406,830)	$ (2,773,125)	$ (1,760,601)

Pennsylvania American Water Company
Summary of Adjustments to Rate Base

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-1
Wastewater SSS General Operations
Schedule B.1.C
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	OCA Adjustments	Acquisition - Farmington Township Wastewater	Acquisition - Sadsbury Township Municipal Authority Wastewater	Cash Working Capital
			B-3	B-4	B-5
	Rate Year Ending December 31, 2021				
	Utility Plant in Service				
1	Non-Depreciable Plant	$ (719,772)	$ (21,666)	$ (698,106)	
2	Depreciable Plant	$ (8,390,599)	$ (5,698,512)	$ (2,692,087)	
3	Total Utility Plant	$ (9,110,371)	$ (5,720,178)	$ (3,390,193)	$ -
	Deduct:				
4	Contributions in Aid of Construction	$ 1,809,039	$ 1,204,188	$ 604,851	
5	Customer Advances for Construction	$ -			
6	Excluded Property	$ -			
7	Net Utility Plant in Service	$ (7,301,332)	$ (4,515,990)	$ (2,785,342)	$ -
8	Accumulated Depreciation	$ 2,539,020	$ 1,689,290	$ 849,730	
9	**Depreciated Utility Plant in Service**	$ (4,762,312)	$ (2,826,700)	$ (1,935,612)	$ -
	Add:				
10	Materials and Supplies	$ -			
11	Cash Working Capital - Expenses	$ (50,794)			$ (50,794)
12	Accrued and Prepaid Taxes	$ -			
13	Acquisition Adjustments	$ (134,846)	$ (51,761)	$ (83,085)	
14	Other Additions	$ -			
15	**Total Additions to Rate Base**	$ (185,640)	$ (51,761)	$ (83,085)	$ (50,794)
	Deduct:				
16	Cash Working Capital - Int and Div	$ (100,000)			$ (100,000)
17	Unamortized ITC (3%)	$ -			
18	Extension Deposits in Suspense	$ -			
19	Citizens Acquisition CIAC and CAC, per settlement	$ -			
20	Tax Cuts and Jobs Act - Stub Period	$ -			
21	Other Deductions	$ -			
22	Deferred Taxes	$ -			
23	**Total Rate Base Deductions**	$ (100,000)	$ -	$ -	$ (100,000)
24	**Total Rate Base**	$ (5,047,952)	$ (2,878,461)	$ (2,018,697)	$ (150,794)

Line No.	Description	OCA Adjustments	
	Rate Year Ending December 31, 2021		
	Utility Plant in Service		
1	Non-Depreciable Plant	$ -	
2	Depreciable Plant	$ -	
3	Total Utility Plant	$ -	$ -
	Deduct:		
4	Contributions in Aid of Construction	$ -	
5	Customer Advances for Construction	$ -	
6	Excluded Property	$ -	
7	Net Utility Plant in Service	$ -	$ -
8	Accumulated Depreciation	$ -	
9	**Depreciated Utility Plant in Service**	$ -	$ -
	Add:		
10	Materials and Supplies	$ -	
11	Cash Working Capital - Expenses	$ -	
12	Accrued and Prepaid Taxes	$ -	
13	Acquisition Adjustments	$ -	
14	Other Additions	$ -	
15	**Total Additions to Rate Base**	$ -	$ -
	Deduct:		
16	Cash Working Capital - Int and Div	$ -	
17	Unamortized ITC (3%)	$ -	
18	Extension Deposits in Suspense	$ -	
19	Citizens Acquisition CIAC and CAC, per settlement	$ -	
20	Tax Cuts and Jobs Act - Stub Period	$ -	
21	Other Deductions	$ -	
22	Deferred Taxes	$ -	
23	**Total Rate Base Deductions**	$ -	$ -
24	**Total Rate Base**	$ -	$ -

Line No.	Description	OCA Adjustments	
	Rate Year Ending December 31, 2021		
	Utility Plant in Service		
1	Non-Depreciable Plant	$ -	
2	Depreciable Plant	$ -	
3	Total Utility Plant	$ -	$ -
	Deduct:		
4	Contributions in Aid of Construction	$ -	
5	Customer Advances for Construction	$ -	
6	Excluded Property	$ -	
7	Net Utility Plant in Service	$ -	$ -
8	Accumulated Depreciation	$ -	
9	**Depreciated Utility Plant in Service**	$ -	$ -
	Add:		
10	Materials and Supplies	$ -	
11	Cash Working Capital - Expenses	$ -	
12	Accrued and Prepaid Taxes	$ -	
13	Acquisition Adjustments	$ -	
14	Other Additions	$ -	
15	**Total Additions to Rate Base**	$ -	$ -
	Deduct:		
16	Cash Working Capital - Int and Div	$ -	
17	Unamortized ITC (3%)	$ -	
18	Extension Deposits in Suspense	$ -	
19	Citizens Acquisition CIAC and CAC, per settlement	$ -	
20	Tax Cuts and Jobs Act - Stub Period	$ -	
21	Other Deductions	$ -	
22	Deferred Taxes	$ -	
23	**Total Rate Base Deductions**	$ -	$ -
24	**Total Rate Base**	$ -	$ -

Line No.	Description	OCA Adjustments	Cash Working Capital B-5
	Rate Year Ending December 31, 2021		
	Utility Plant in Service		
1	Non-Depreciable Plant	$ -	
2	Depreciable Plant	$ -	
3	Total Utility Plant	$ -	$ -
	Deduct:		
4	Contributions in Aid of Construction	$ -	
5	Customer Advances for Construction	$ -	
6	Excluded Property	$ -	
7	Net Utility Plant in Service	$ -	$ -
8	Accumulated Depreciation	$ -	
9	**Depreciated Utility Plant in Service**	$ -	$ -
	Add:		
10	Materials and Supplies	$ -	
11	Cash Working Capital - Expenses	$ (15,811)	$ (15,811)
12	Accrued and Prepaid Taxes	$ -	
13	Acquisition Adjustments	$ -	
14	Other Additions	$ -	
15	**Total Additions to Rate Base**	$ (15,811)	$ (15,811)
	Deduct:		
16	Cash Working Capital - Int and Div	$ (83,000)	$ (83,000)
17	Unamortized ITC (3%)	$ -	
18	Extension Deposits in Suspense	$ -	
19	Citizens Acquisition CIAC and CAC, per settlement	$ -	
20	Tax Cuts and Jobs Act - Stub Period	$ -	
21	Other Deductions	$ -	
22	Deferred Taxes	$ -	
23	**Total Rate Base Deductions**	$ (83,000)	$ (83,000)
24	**Total Rate Base**	$ (98,811)	$ (98,811)

Pennsylvania American Water Company
Adjusted Net Operating Income

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-1
Water Operations
Schedule C
Docket Nos. R-2023-3043189 and R-2023-3043190

Line No.	Description	Per Company (A)	OCA Adjustments (B)	Per OCA (C)
1	Operating Revenues	$ 824,117,186	$ (3,231,395)	$ 820,885,791
	Operating Revenue Deductions			
2	Operating Expenses	$ 256,824,574	$ (10,299,717)	$ 246,524,857
3	Depreciation Expense	$ 212,799,798	$ (15,850,049)	$ 196,949,749
4	Amortizations	$ (2,099,462)	$ (785,526)	$ (2,884,988)
	Taxes Other Than Income:			
5	Local Property and Miscellaneous	$ 2,073,365	$ (27,709)	$ 2,045,656
6	Federal Environmental Tax	$ -	$ -	$ -
7	Public Utility Realty Tax	$ 2,126,732	$ -	$ 2,126,732
8	Payroll Taxes	$ 5,033,998	$ (121,052)	$ 4,912,946
9	General Assessment	$ 5,164,137	$ -	$ 5,164,137
10	Other Taxes and Licenses	$ -	$ -	$ -
11	Total Operating Revenue Deductions	$ 481,923,142	$ (27,084,052)	$ 454,839,090
12	**Operating Income Before Income Taxes**	$ 342,194,044	$ 23,852,658	$ 366,046,702
	Income Taxes:			
13	State Income Tax	$ 13,347,020	$ 1,026,079	$ 14,373,099
14	Federal Income Tax	$ 33,868,950	$ 2,481,348	$ 36,350,298
15	Amortization of ITCs and Excess Deferred	$ (233,592)	$ -	$ (233,592)
16	**Total Income Taxes**	$ 46,982,378	$ 3,507,427	$ 50,489,805
17	**NET UTILITY OPERATING INCOME**	**$ 295,211,666**	**$ 20,345,230**	**$ 315,556,896**
18	Rate Base	$ 4,704,067,656	$ (11,940,556)	$ 4,692,127,100
19	Earned Rate of Return	6.28%		6.73%

Notes and Source

Col.A & D: PAWC Filing, Exhibit 3-A, page 1
Col.B: Schedule C.1.B
Col.C: Col.A + Col.B

Line No.	Description	Per Company (A)	OCA Adjustments (B)	Per OCA (C)
1	Operating Revenues	$ 95,470,867	$ (794,154)	$ 94,676,713
	Operating Revenue Deductions			
2	Operating Expenses	$ 26,009,252	$ (758,901)	$ 25,250,351
3	Depreciation Expense	$ 27,482,122	$ (189,834)	$ 27,292,288
4	Amortizations	$ (75,633)	$ 79,715	$ 4,082
	Taxes Other Than Income:			
5	Local Property and Miscellaneous	$ 2,227,703	$ (3,547)	$ 2,224,156
6	Federal Environmental Tax	$ -	$ -	$ -
7	Public Utility Realty Tax	$ -	$ -	$ -
8	Payroll Taxes	$ 391,525	$ (5,208)	$ 386,317
9	General Assessment	$ 598,699	$ -	$ 598,699
10	Other Taxes and Licenses	$ -	$ -	$ -
11	Total Operating Revenue Deductions	$ 56,633,668	$ (877,774)	$ 55,755,894
12	**Operating Income Before Income Taxes**	$ 38,837,199	$ 83,620	$ 38,920,819
	Income Taxes:			
13	State Income Tax	$ 2,906,503	$ (87,609)	$ 2,818,894
14	Federal Income Tax	$ 7,064,720	$ (211,865)	$ 6,852,855
15	Amortization of ITCs and Excess Deferred	$ -	$ -	$ -
16	**Total Income Taxes**	$ 9,971,223	$ (299,475)	$ 9,671,748
17	**NET UTILITY OPERATING INCOME**	**$ 28,865,976**	**$ 383,095**	**$ 29,249,071**
18	Rate Base	$ 649,330,622	$ (5,047,952)	$ 644,282,670
19	Earned Rate of Return	4.45%		4.54%

Notes and Source

Col.A & D: PAWC Filing, Exhibit 3-A, page 76
Col.B: Schedule C.1.C
Col.C: Col.A + Col.B

Line No.	Description	Per Company (A)	OCA Adjustments (B)	Per OCA (C)
1	Operating Revenues	$ 11,847,402	$ -	$ 11,847,402
	Operating Revenue Deductions			
2	Operating Expenses	$ 6,600,188	$ (41,012)	$ 6,559,176
3	Depreciation Expense	$ 5,091,752	$ -	$ 5,091,752
4	Amortizations	$ 120,264	$ -	$ 120,264
	Taxes Other Than Income:			
5	Local Property and Miscellaneous	$ 589,414	$ -	$ 589,414
6	Federal Environmental Tax	$ -	$ -	$ -
7	Public Utility Realty Tax	$ -	$ -	$ -
8	Payroll Taxes	$ 191,043	$ -	$ 191,043
9	General Assessment	$ 75,107	$ -	$ 75,107
10	Other Taxes and Licenses	$ -	$ -	$ -
11	Total Operating Revenue Deductions	$ 12,667,768	$ (41,012)	$ 12,626,756
12	**Operating Income Before Income Taxes**	$ (820,366)	$ 41,012	$ (779,354)
	Income Taxes:			
13	State Income Tax	$ (143,866)	$ (33,725)	$ (177,591)
14	Federal Income Tax	$ (298,482)	$ (81,557)	$ (380,039)
15	Amortization of ITCs and Excess Deferred	$ -	$ -	$ -
16	**Total Income Taxes**	$ (442,348)	$ (115,282)	$ (557,630)
17	**NET UTILITY OPERATING INCOME**	**$ (378,018)**	**$ 156,294**	**$ (221,724)**
18	Rate Base	$ 231,536,917	$ -	$ 231,536,917
19	Earned Rate of Return	-0.16%		-0.10%

Notes and Source

Col.A & D: PAWC Filing, Exhibit 3-A, page 139
Col.B: Schedule C.1.D
Col.C: Col.A + Col.B

Line No.	Description	Per Company (A)	OCA Adjustments (B)	Per OCA (C)
1	Operating Revenues	$ 1,824,191	$ -	$ 1,824,191
	Operating Revenue Deductions			
2	Operating Expenses	$ 801,885	$ (10,818)	$ 791,067
3	Depreciation Expense	$ 455,389	$ -	$ 455,389
4	Amortizations	$ 70,194	$ -	$ 70,194
	Taxes Other Than Income:			
5	Local Property and Miscellaneous	$ 35,268	$ -	$ 35,268
6	Federal Environmental Tax	$ -	$ -	$ -
7	Public Utility Realty Tax	$ -	$ -	$ -
8	Payroll Taxes	$ 6,084	$ -	$ 6,084
9	General Assessment	$ 11,565	$ -	$ 11,565
10	Other Taxes and Licenses	$ -	$ -	$ -
11	Total Operating Revenue Deductions	$ 1,380,385	$ (10,818)	$ 1,369,567
12	**Operating Income Before Income Taxes**	$ 443,806	$ 10,818	$ 454,624
	Income Taxes:			
13	State Income Tax	$ 18,327	$ (2,659)	$ 15,668
14	Federal Income Tax	$ 55,153	$ (6,433)	$ 48,720
15	Amortization of ITCs and Excess Deferred	$ -	$ -	$ -
16	**Total Income Taxes**	$ 73,480	$ (9,092)	$ 64,388
17	**NET UTILITY OPERATING INCOME**	**$ 370,326**	**$ 19,910**	**$ 390,236**
18	Rate Base	$ 22,053,946	$ -	$ 22,053,946
19	Earned Rate of Return	1.68%		0.00%

Notes and Source

Col.A & D: PAWC Filing, Exhibit 3-A, page 172
Col.B: Schedule C.1.E
Col.C: Col.A + Col.B

Line No.	Description	Per Company (A)	OCA Adjustments (B)	Per OCA (C)
1	Operating Revenues	$ 78,636,216	$ -	$ 78,636,216
	Operating Revenue Deductions			
2	Operating Expenses	$ 21,438,527	$ (177,503)	$ 21,261,024
3	Depreciation Expense	$ 20,500,959	$ -	$ 20,500,959
4	Amortizations	$ (3,943)	$ -	$ (3,943)
	Taxes Other Than Income:			
5	Local Property and Miscellaneous	$ 1,198,060	$ -	$ 1,198,060
6	Federal Environmental Tax	$ -	$ -	$ -
7	Public Utility Realty Tax	$ -	$ -	$ -
8	Payroll Taxes	$ 535,138	$ -	$ 535,138
9	General Assessment	$ 497,945	$ -	$ 497,945
10	Other Taxes and Licenses	$ -	$ -	$ -
11	Total Operating Revenue Deductions	$ 44,166,686	$ (177,503)	$ 43,989,183
12	**Operating Income Before Income Taxes**	$ 34,469,530	$ 177,503	$ 34,647,033
	Income Taxes:			
13	State Income Tax	$ 1,984,048	$ (63,809)	$ 1,920,239
14	Federal Income Tax	$ 4,906,577	$ (154,306)	$ 4,752,271
15	Amortization of ITCs and Excess Deferred	$ -	$ -	$ -
16	**Total Income Taxes**	$ 6,890,625	$ (218,115)	$ 6,672,510
17	**NET UTILITY OPERATING INCOME**	**$ 27,578,905**	**$ 395,618**	**$ 27,974,523**
18	Rate Base	$ 489,184,280	$ (98,811)	$ 489,085,469
19	Earned Rate of Return	5.64%		5.72%

Notes and Source

Col.A & D: PAWC Filing, Exhibit 3-A, page 204
Col.B: Schedule C.1.F
Col.C: Col.A + Col.B

Pennsylvania American Water Company
Summary of Net Operating Income Adjustments

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-1
Water Operations
Schedule C.1.B
Docket Nos. R-2023-3043189 and R-2023-3043190

Line No.	Description	OCA Adjustments	Acquisition Revenues and Expenses - Audubon Water Company	Acquisition O&M Expense - Farmington Township - Water	Depreciation Expense - Audubon Water	Depreciation Expense - Farmington Township Water	Uncollectibles Expense	Vacancies - Salary and Wages Expense	Annualized Performance Plan Expense	Group Insurance Expense	401K, Defined Contribution Plan and Employee Stock Purchase Plan
			C-1	C-2	C-5	C-6	C-9	C-10	C-11	C-12	C-13
1	Operating Revenues	$ (3,231,395)	$ (2,965,024)	$ (266,371)							
	Operating Revenue Deductions										
2	Operating Expenses	$ (10,299,717)	$ (1,527,135)	$ (148,575)			$ (100,054)	$ (1,045,353)	$ (85,523)	$ (200,623)	$ (72,817)
3	Depreciation Expense	$ (15,850,049)			$ (269,599)	$ (101,751)					
4	Amortizations	$ (785,526)	$ (763,977)	$ (21,549)							
	Taxes Other Than Income:	$ -									
5	Local Property and Miscellaneous	$ (27,709)	$ (27,709)								
6	Federal Environmental Tax	$ -									
7	Public Utility Realty Tax	$ -									
8	Payroll Taxes	$ (121,052)	$ (30,729)	$ (3,810)				$ (79,970)	$ (6,543)		
9	General Assessment	$ -									
10	Other Taxes and Licenses	$ -									
11	PRE-TAX OPERATING EXPENSES	$ (27,084,052)	$ (2,349,549)	$ (173,934)	$ (269,599)	$ (101,751)	$ (100,054)	$ (1,125,323)	$ (92,066)	$ (200,623)	$ (72,817)
12	PRE-TAX OPERATING INCOME	$ 23,852,658	$ (615,475)	$ (92,437)	$ 269,599	$ 101,751	$ 100,054	$ 1,125,323	$ 92,066	$ 200,623	$ 72,817
13	PA CNI Tax - Current	$ 1,026,079	$ (49,180)	$ (7,386)	$ 21,543	$ 8,130	$ 7,995	$ 89,920	$ 7,357	$ 16,031	$ 5,819
14	Federal Income Tax - Current	$ 2,481,348	$ (118,931)	$ (17,862)	$ 52,096	$ 19,662	$ 19,334	$ 217,451	$ 17,790	$ 38,767	$ 14,071
15	Federal & State Income Taxes	$ 3,507,427	$ (168,111)	$ (25,248)	$ 73,639	$ 27,792	$ 27,329	$ 307,371	$ 25,147	$ 54,798	$ 19,890
16	Amortization of ITCs and Excess Deferred	$ -									
17	TOTAL OPERATING EXPENSES	$ (23,576,625)	$ (2,517,660)	$ (199,182)	$ (195,961)	$ (73,959)	$ (72,725)	$ (817,951)	$ (66,919)	$ (145,825)	$ (52,927)
18	OPERATING INCOME	$ 20,345,230	$ (447,364)	$ (67,189)	$ 195,961	$ 73,959	$ 72,725	$ 817,951	$ 66,919	$ 145,825	$ 52,927

Notes and Source

Line 14: State Income Tax Rate*	7.99%
Line 15: Federal Income Tax Rate*	21.00%

* Income tax rates per PAWC Exhibit 3-A, page 70

Line No.	Description	Interest Synchronization C-14	PAWC External Board Members Expense C-15	Insurance Other Than Group C-16	Depreciation Expense - Water Utility C-17	Stock-Based Compensation Expense - AWW Executives C-18	AWW Executives - Dividend Equivalents C-19	American Water Works Service Company - Supplemental Executive Retirement Plan C-20	Call Center Expense C-21	Arrearage Management Plan Credits - Uncollectibles Expense C-22
1	Operating Revenues									
	Operating Revenue Deductions									
2	Operating Expenses		$ (123,250)	$ (247,905)		$ (1,642,726)	$ (29,928)	$ (145,742)	$ (3,082,255)	$ (1,847,832)
3	Depreciation Expense				$ (15,478,699)					
4	Amortizations									
	Taxes Other Than Income:									
5	Local Property and Miscellaneous									
6	Federal Environmental Tax									
7	Public Utility Realty Tax									
8	Payroll Taxes									
9	General Assessment									
10	Other Taxes and Licenses									
11	PRE-TAX OPERATING EXPENSES	$ -	$ (123,250)	$ (247,905)	$ (15,478,699)	$ (1,642,726)	$ (29,928)	$ (145,742)	$ (3,082,255)	$ (1,847,832)
12	PRE-TAX OPERATING INCOME	$ -	$ 123,250	$ 247,905	$ 15,478,699	$ 1,642,726	$ 29,928	$ 145,742	$ 3,082,255	$ 1,847,832
13	PA CNI Tax - Current	$ (879,885)	$ 9,848	$ 19,809	$ 1,236,836	$ 131,263	$ 2,391	$ 11,646	$ 246,290	$ 147,652
14	Federal Income Tax - Current	$ (2,127,814)	$ 23,816	$ 47,904	$ 2,991,022	$ 317,432	$ 5,783	$ 28,162	$ 595,599	$ 357,065
15	Federal & State Income Taxes	$ (3,007,699)	$ 33,664	$ 67,713	$ 4,227,858	$ 448,695	$ 8,174	$ 39,808	$ 841,889	$ 504,717
16	Amortization of ITCs and Excess Deferred									
17	TOTAL OPERATING EXPENSES	$ (3,007,699)	$ (89,586)	$ (180,192)	$ (11,250,840)	$ (1,194,031)	$ (21,754)	$ (105,933)	$ (2,240,366)	$ (1,343,115)
18	OPERATING INCOME	$ 3,007,699	$ 89,586	$ 180,192	$ 11,250,840	$ 1,194,031	$ 21,754	$ 105,933	$ 2,240,366	$ 1,343,115

Notes and Source

Line 14: State Income Tax Rate*	7.99%
Line 15: Federal Income Tax Rate*	21.00%

* Income tax rates per PAWC Exhibit 3-A, page 70

Pennsylvania American Water Company
Summary of Net Operating Income Adjustments

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-1
Wastewater SSS General Operations
Schedule C.1.C
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	OCA Adjustments	Acquisition O&M Expense - Farmington Township Wastewater C-3	Acquisition O&M Expense - Sadsbury Township Municipal Authority C-4	Depreciation Expense - Farmington Township Wastewater C-7	Depreciation Expense - Sadsbury Township Municipal Authority C-8	Uncollectibles Expense C-9	Interest Synchronization C-14	Insurance Other Than Group C-16	Stock-Based Compensation Expense - AWW Executives C-18	AWW Executives - Dividend Equivalents C-19	American Water Works Service Company - Supplemental Executive Retirement Plan Expense C-20	Arrearage Management Plan Credits - Uncollectibles Expense C-22
1	Operating Revenues	$ (794,154)	$ (322,926)	$ (471,228)									
	Operating Revenue Deductions												
2	Operating Expenses	$ (758,901)	$ (258,968)	$ (245,741)			$ (11,591)		$ (34,694)	$ (51,658)	$ (941)	$ (4,583)	$ (150,724)
3	Depreciation Expense	$ (189,834)			$ (137,987)	$ (51,847)							
4	Amortizations	$ 79,715	$ (5,699)	$ 85,414									
	Taxes Other Than Income:	$ -											
5	Local Property and Miscellaneous	$ (3,547)		$ (3,547)									
6	Federal Environmental Tax	$ -											
7	Public Utility Realty Tax	$ -											
8	Payroll Taxes	$ (5,208)	$ (5,208)										
9	General Assessment	$ -											
10	Other Taxes and Licenses	$ -											
11	PRE-TAX OPERATING EXPENSES	$ (877,774)	$ (269,875)	$ (163,874)	$ (137,987)	$ (51,847)	$ (11,591)	$ -	$ (34,694)	$ (51,658)	$ (941)	$ (4,583)	$ (150,724)
12	PRE-TAX OPERATING INCOME	$ 83,620	$ (53,051)	$ (307,354)	$ 137,987	$ 51,847	$ 11,591	$ -	$ 34,694	$ 51,658	$ 941	$ 4,583	$ 150,724
13	PA CNI Tax - Current	$ (87,609)	$ (4,239)	$ (24,559)	$ 11,026	$ 4,143	$ 926	$ (94,291)	$ 2,772	$ 4,128	$ 75	$ 366	$ 12,044
14	Federal Income Tax - Current	$ (211,865)	$ (10,251)	$ (59,392)	$ 26,664	$ 10,019	$ 2,240	$ (228,024)	$ 6,704	$ 9,982	$ 182	$ 886	$ 29,125
15	Federal & State Income Taxes	$ (299,475)	$ (14,490)	$ (83,951)	$ 37,690	$ 14,162	$ 3,166	$ (322,315)	$ 9,476	$ 14,110	$ 257	$ 1,252	$ 41,169
16	Amortization of ITCs and Excess Deferred	$ -											
17	TOTAL OPERATING EXPENSES	$ (1,177,249)	$ (284,365)	$ (247,824)	$ (100,297)	$ (37,685)	$ (8,425)	$ (322,315)	$ (25,218)	$ (37,548)	$ (684)	$ (3,331)	$ (109,555)
18	OPERATING INCOME	$ 383,095	$ (38,561)	$ (223,403)	$ 100,297	$ 37,685	$ 8,425	$ 322,315	$ 25,218	$ 37,548	$ 684	$ 3,331	$ 109,555

Notes and Source

Line 14: State Income Tax Rate*	7.99%
Line 15: Federal Income Tax Rate*	21.00%

* Income tax rates per PAWC Exhibit 3-A, page 70

Line No.	Description	OCA Adjustments	Uncollectibles Expense C-9	Interest Synchronization C-14	Arrearage Management Plan Credits - Uncollectibles Expense C-22
1	Operating Revenues	$ -			
	Operating Revenue Deductions				
2	Operating Expenses	$ (41,012)	$ (1,438)		$ (39,573)
3	Depreciation Expense	$ -			
4	Amortizations	$ -			
	Taxes Other Than Income:				
5	Local Property and Miscellaneous	$ -			
6	Federal Environmental Tax	$ -			
7	Public Utility Realty Tax	$ -			
8	Payroll Taxes	$ -			
9	General Assessment	$ -			
10	Other Taxes and Licenses	$ -			
11	PRE-TAX OPERATING EXPENSES	$ (41,012)	$ (1,438)	$ -	$ (39,573)
12	PRE-TAX OPERATING INCOME	$ 41,012	$ 1,438	$ -	$ 39,573
13	PA CNI Tax - Current	$ (33,725)	$ 115	$ (37,002)	$ 3,162
14	Federal Income Tax - Current	$ (81,557)	$ 278	$ (89,482)	$ 7,647
15	Federal & State Income Taxes	$ (115,282)	$ 393	$ (126,484)	$ 10,809
16	Amortization of ITCs and Excess Deferred	$ -			
17	TOTAL OPERATING EXPENSES	$ (156,294)	$ (1,045)	$ (126,484)	$ (28,764)
18	OPERATING INCOME	$ 156,294	$ 1,045	$ 126,484	$ 28,764

Notes and Source

Line 14: State Income Tax Rate*	7.99%
Line 15: Federal Income Tax Rate*	21.00%

* Income tax rates per PAWC Exhibit 3-A, page 70

Pennsylvania American Water Company
Summary of Net Operating Income Adjustments

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-1
Brentwood Wastewater Operations
Schedule C.1.E
Docket Nos. R-2023-3043189 and R-2023-3043190

Line No.	Description	OCA Adjustments	Uncollectibles Expense C-9	Interest Synchronization C-14	Arrearage Management Plan Credits - Uncollectibles Expense C-22
1	Operating Revenues	$ -			
	Operating Revenue Deductions				
2	Operating Expenses	$ (10,818)	$ (221)		$ (10,596)
3	Depreciation Expense	$ -			
4	Amortizations	$ -			
	Taxes Other Than Income:				
5	Local Property and Miscellaneous	$ -			
6	Federal Environmental Tax	$ -			
7	Public Utility Realty Tax	$ -			
8	Payroll Taxes	$ -			
9	General Assessment	$ -			
10	Other Taxes and Licenses	$ -			
11	PRE-TAX OPERATING EXPENSES	$ (10,818)	$ (221)	$ -	$ (10,596)
12	PRE-TAX OPERATING INCOME	$ 10,818	$ 221	$ -	$ 10,596
13	PA CNI Tax - Current	$ (2,659)	$ 18	$ (3,524)	$ 847
14	Federal Income Tax - Current	$ (6,433)	$ 43	$ (8,523)	$ 2,047
15	Federal & State Income Taxes	$ (9,092)	$ 61	$ (12,048)	$ 2,894
16	Amortization of ITCs and Excess Deferred	$ -			
17	TOTAL OPERATING EXPENSES	$ (19,910)	$ (161)	$ (12,048)	$ (7,702)
18	OPERATING INCOME	$ 19,910	$ 161	$ 12,048	$ 7,702

Notes and Source

Line 14: State Income Tax Rate*	7.99%
Line 15: Federal Income Tax Rate*	21.00%

* Income tax rates per PAWC Exhibit 3-A, page 70

Pennsylvania American Water Company
Summary of Net Operating Income Adjustments

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-1
CSS Wastewater Operations
Schedule C.1.F
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	OCA Adjustments	Uncollectibles Expense C-9	Interest Synchronization C-14	Insurance Other Than Group C-16	Stock-Based Compensation Expense - AWW Executives C-18	AWW Executives - Dividend Equivalents C-19	American Water Works Service Company - Supplemental Executive Retirement Plan C-20	Arrearage Management Plan Credits - Uncollectibles Expense C-22
1	Operating Revenues	$ -							
	Operating Revenue Deductions								
2	Operating Expenses	$ (177,503)	$ (9,547)		$ (23,713)	$ (27,551)	$ (502)	$ (2,444)	$ (113,746)
3	Depreciation Expense	$ -							
4	Amortizations	$ -							
	Taxes Other Than Income:								
5	Local Property and Miscellaneous	$ -							
6	Federal Environmental Tax	$ -							
7	Public Utility Realty Tax	$ -							
8	Payroll Taxes	$ -							
9	General Assessment	$ -							
10	Other Taxes and Licenses	$ -							
11	PRE-TAX OPERATING EXPENSES	$ (177,503)	$ (9,547)	$ -	$ (23,713)	$ (27,551)	$ (502)	$ (2,444)	$ (113,746)
12	PRE-TAX OPERATING INCOME	$ 177,503	$ 9,547	$ -	$ 23,713	$ 27,551	$ 502	$ 2,444	$ 113,746
13	PA CNI Tax - Current	$ (63,809)	$ 763	$ (77,992)	$ 1,895	$ 2,201	$ 40	$ 195	$ 9,089
14	Federal Income Tax - Current	$ (154,306)	$ 1,845	$ (188,606)	$ 4,582	$ 5,324	$ 97	$ 472	$ 21,980
15	Federal & State Income Taxes	$ (218,115)	$ 2,608	$ (266,598)	$ 6,477	$ 7,525	$ 137	$ 667	$ 31,069
16	Amortization of ITCs and Excess Deferred	$ -							
17	TOTAL OPERATING EXPENSES	$ (395,618)	$ (6,939)	$ (266,598)	$ (17,236)	$ (20,026)	$ (365)	$ (1,777)	$ (82,677)
18	OPERATING INCOME	$ 395,618	$ 6,939	$ 266,598	$ 17,236	$ 20,026	$ 365	$ 1,777	$ 82,677

Notes and Source

Line 14: State Income Tax Rate*	7.99%
Line 15: Federal Income Tax Rate*	21.00%

* Income tax rates per PAWC Exhibit 3-A, page 70

Line No.	Description	Amount	Percent	Cost Rate	Weighted Cost
		(A)	(B)	(C)	(D)
	Per Company				
1	Long Term Debt	$ 2,155,515,957	44.01%	4.76%	2.09%
2	Preferred Stock	$ -	0.00%	0.00%	0.00%
3	Common Equity	$ 2,741,754,985	55.99%	10.95%	6.13%
4	Total Capital Structure	$ 4,897,270,942	100.00%		8.22%
	Per OCA Using PAWC's Capital Structure				
5	Long-Term Debt	$ 2,155,515,957	44.01%	4.76%	2.09%
6	Preferred Stock	$ -	0.00%	0.00%	0.00%
7	Common Equity	$ 2,741,754,985	55.99%	**9.10%**	5.10%
8	Total Capital Structure	$ 4,897,270,942	100.00%		7.19%
	Per OCA Using OCA Recommended Capital Structure				
9	Long-Term Debt	$ 2,399,662,762	49.00%	4.76%	2.33%
10	Preferred Stock	$ -	0.00%	0.00%	0.00%
11	Common Equity	$ 2,497,608,180	51.00%	**9.10%**	4.64%
12	Total Capital Structure	$ 4,897,270,942	100.00%		6.97%
13	Difference				-1.250%
14	Weighted Cost of Debt				2.33%

Notes and Source:
Lines 1-4: PAWC Exhibit 3-A, Master Links Tab
Lines 5-8: Per the recommendation of OCA witness David Garrett (also see calculations below)

		Amount	Reference
15	Total Capital Structure	$ 4,897,270,942	Line 4

		Capital Structure Per OCA	Reallocation of Capital Structure	Reference
16	Long-Term Debt ratio per OCA witness Garrett	49.00%	$ 2,399,662,762	To Line 9
17	Common Equity ratio per OCA witness Garrett	51.00%	$ 2,497,608,180	To Line 11
18	Total	100.00%	$ 4,897,270,942	

Line No.	Description	Amount (A)	Percent (B)	Cost Rate (C)	Weighted Cost (D)
	Per Company				
1	Long Term Debt	$ 594,902,431	42.73%	4.76%	2.03%
2	WW Financing	$ 61,227,844	4.40%	2.62%	0.12%
3	Preferred Stock	$ -	0.00%	0.00%	0.00%
4	Common Equity	$ 735,975,490	52.87%	10.95%	5.79%
5	Total Capital Structure	$ 1,392,105,765	100.00%		7.94%
	Per OCA Using PAWC's Capital Structure				
6	Long-Term Debt	$ 594,902,431	42.73%	4.76%	2.03%
7	WW Financing	$ 61,227,844	4.40%	2.62%	0.12%
8	Preferred Stock	$ -	0.00%	0.00%	0.00%
9	Common Equity	$ 735,975,490	52.87%	**9.10%**	4.81%
10	Total Capital Structure	$ 1,392,105,765	100.00%		6.96%
	Per OCA Using OCA Recommended Capital Structure				
11	Long-Term Debt	$ 652,130,181	46.84%	4.76%	2.23%
12	WW Financing	$ 61,227,844	4.40%	2.62%	0.12%
13	Preferred Stock	$ -	0.00%	0.00%	0.00%
14	Common Equity	$ 678,747,740	48.76%	**9.10%**	4.44%
15	Total Capital Structure	$ 1,392,105,765	100.00%		6.79%
16	Difference				-1.150%
17	Weighted Cost of Debt				2.35%

Notes and Source:
Lines 1-5: PAWC Exhibit 3-A, Master Links Tab
Lines 6-10: Per the recommendation of OCA witness David Garrett (also see calculations below)

		Capital Structure less WW Financing (Dollars)	Capital Structure less WW Financing (Percentage)
18	Total Capital Structure	$ 1,392,105,765	100.00%
19	WW Financing Ratio	$ 61,227,844	4.40%
20	Remaining Capital Structure (Dollars and Percentage)	$ 1,330,877,921	95.60%

		Capital Structure Per OCA	Allocation of Remaining Dollars	Allocation of Remaining Percentage	Reference
21	Long-Term Debt ratio for Water Operations per OCA witness Garrett	49.00%	$ 652,130,181	46.84%	To Line 11
22	Common Equity ratio for Water Operations per OCA witness Garrett	51.00%	$ 678,747,740	48.76%	To Line 14
23	Total	100.00%	$ 1,330,877,921	95.60%	

Pennsylvania American Water Company
Docket Nos. R-2023-3043189 and R-2023-3043190
Exhibit LA-2
Adjustment Schedules
Accompanying the Direct Testimony of Ralph Smith

Number	Description	Confidential	No. of Pages	Page No.
	Revenue Requirement Adjustment Schedules - Fully Projected Future Test Year Ending 6/30/2025			
	Rate Base Adjustments			
B-1	Acquisition - Audubon Water	No	1	2
B-2	Acquisition - Farmington Township Water	No	1	3
B-3	Acquisition - Farmington Township Wastewater	No	1	4
B-4	Acquisition - Sadsbury Township Municipal Authority Wastewater	No	1	5
B-5	Cash Working Capital	No	9	6-14
	Net Operating Income Adjustments			
C-1	Acquisition Revenues and Expenses - Audubon Water Company	No	1	15
C-2	Acquisition O&M Expense - Farmington Township - Water	No	1	16
C-3	Acquisition O&M Expense - Farmington Township Wastewater	No	1	17
C-4	Acquisition O&M Expense - Sadsbury Township Municipal Authority	No	1	18
C-5	Depreciation Expense - Audubon Water	No	1	19
C-6	Depreciation Expense - Farmington Township Water	No	1	20
C-7	Depreciation Expense - Farmington Township Wastewater	No	1	21
C-8	Depreciation Expense - Sadsbury Township Municipal Authority	No	1	22
C-9	Uncollectibles Expense	No	1	23
C-10	Vacancies - Salary and Wages Expense	No	1	24
C-11	Annualized Performance Plan Expense	No	1	25
C-12	Group Insurance Expense	No	1	26
C-13	401K, Defined Contribution Plan and Employee Stock Purchase Plan	No	1	27
C-14	Interest Synchronization	No	6	28-33
C-15	PAWC External Board Members Expense	No	1	34
C-16	Insurance Other Than Group	No	2	35-36
C-17	Depreciation Expense - Water Utility	No	1	37
C-18	Stock-Based Compensation Expense - AWW Executives	No	1	38
C-19	AWW Executives - Dividend Equivalents	Yes	1	39
C-20	American Water Works Service Company - Supplemental Executive Retirement Plan Expense	No	1	40
C-21	Call Center Expense	No	1	41
C-22	Arrearage Management Plan Credits - Uncollectibles Expense	No	1	42
	Total Pages (including Contents page)		42	

Pennsylvania American Water Company
Acquisition - Audubon Water

Exhibit LA-2
Schedule B-1
Docket Nos. R-2023-3043189 and R-2023-3043190

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Amount (A)	Reference
	Utility Plant in Service		
1	Non-Depreciable Plant	$ (36,518)	A
2	Depreciable Plant	$ (9,150,964)	A
3	Total Utility Plant in Service	$ (9,187,482)	
4	Contributions in Aid of Construction	$ 2,725,838	B
5	Net Utility Plant in Serivce	$ (6,461,644)	
6	Accumulated Depreciation	$ 6,101,415	B
7	Depreciated Utility Plant in Service	$ (360,229)	
	Acquisition Adjustments		
8	Acquisition Adjustment	$ (6,939,459)	C
9	Audubon Water Transaction Costs	$ (107,142)	C
10	Total Acquisition Adjustment Costs	$ (7,046,601)	
11	Net Adjustment to Rate Base	$ (7,406,830)	L3 + L4 + L7

Notes and Source

A: Amount from Exhibit 3-A, page 26 per PAWC's responses to OCA 21-007 and OCA 21-009
B: Amount from Exhibit 3-C, pages 21 & 23 per PAWC's response to OCA 21-007
C: Amounts from Exhibit 3-A, page 36 per PAWC's responses to OCA 21-007 and OCA 21-009

Pennsylvania American Water Company
Acquisition - Farmington Township Water

Exhibit LA-2
Schedule B-2
Docket Nos. R-2023-3043189 and R-2023-3043190

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Amount (A)	Reference
	Utility Plant in Service		
1	Intangible Plant	$ (1,157)	A
2	Depreciable Plant	$ (5,255,943)	A
3	Total Utility Plant in Service	$ (5,257,100)	
4	Contributions in Aid of Construction	$ 1,674,630	B
5	Net Utility Plant in Serivce	$ (3,582,470)	
6	Accumulated Depreciation	$ 1,079,659	B
7	Depreciated Utility Plant in Service	$ (2,502,811)	
	Acquisition Adjustments		
8	Farmington Township Water Acquisition Adjustment	$ (215,489)	C
9	Farmington Township Water Transaction Costs	$ (54,825)	C
10	Total Acquisition Adjustment Costs	$ (270,314)	
11	Net Adjustment to Rate Base	$ (2,773,125)	L3 + L4 + L7

Notes and Source

A: Amount from Exhibit 3-A, page 26 per PAWC's responses to OCA 21-005 and OCA 21-012
B: Amount from Exhibit 3-C, pages 14-15 per PAWC's response to OCA 21-005
C: Amounts from Exhibit 3-A, page 36 per PAWC's responses to OCA 21-005 and OCA 21-012

Pennsylvania American Water Company
Acquisition - Farmington Township Wastewater

Exhibit LA-2
Schedule B-3
Docket Nos. R-2023-3043189 and R-2023-3043190

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Amount (A)	Reference
	Utility Plant in Service		
1	Intangible Plant	$ (21,666)	A
2	Depreciable Plant	$ (5,698,512)	A
3	Total Utility Plant in Service	$ (5,720,178)	
4	Contributions in Aid of Construction	$ 1,204,188	B
5	Net Utility Plant in Serivce	$ (4,515,990)	
6	Accumulated Depreciation	$ 1,689,290	B
7	Depreciated Utility Plant in Service	$ (2,826,700)	
	Acquisition Costs		
8	Farmington Township Wastewater Transaction Costs	$ (51,761)	C
9	Total Acquisition Adjustment Costs	$ (51,761)	
10	Net Adjustment to Rate Base	$ (2,878,461)	L3 + L4 + L6

Notes and Source

A: Amount from Exhibit 3-A, page 97 per PAWC's responses to OCA 21-006 and OCA 21-011
B: Amount from Exhibit 3-C, pages 28-29 per PAWC's response to OCA 21-006
C: Amounts from Exhibit 3-A, page 106 per PAWC's responses to OCA 21-006 and OCA 21-011

Pennsylvania American Water Company
Acquisition - Sadsbury Township Municipal Authority Wastewater

Exhibit LA-2
Schedule B-4
Docket Nos. R-2023-3043189 and R-2023-3043190

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Amount (A)	Reference
	Utility Plant in Service		
1	Intangible Plant	$ (698,106)	A
2	Depreciable Plant	$ (2,692,087)	A
3	Total Utility Plant in Service	$ (3,390,193)	
4	Contributions in Aid of Construction	$ 604,851	B
5	Net Utility Plant in Serivce	$ (2,785,342)	
6	Accumulated Depreciation	$ 849,730	B
7	Depreciated Utility Plant in Service	$ (1,935,612)	
	Acquisition Costs		
8	Sadsbury Township Municipal Authority Transaction Costs	$ (83,085)	C
9	Total Acquisition Adjustment Costs	$ (83,085)	
10	Net Adjustment to Rate Base	$ (2,018,697)	L3 + L4 + L6

Notes and Source

A: Amount from Exhibit 3-A, page 97 per PAWC's responses to OCA 21-004 and OCA 21-010
B: Amount from Exhibit 3-C, pages 30-31 per PAWC's response to OCA 21-004
C: Amounts from Exhibit 3-A, page 106 per PAWC's responses to OCA 21-004 and OCA 21-010

Pennsylvania American Water Company
Cash Working Capital
O&M Expense
Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Water Operations
Schedule B-5.B
Docket Nos. R-2023-3043189 and R-2023-3043190

Line No.	Description	Per Company Operating Expenses 6/30/2025 (A)	OCA Adjustments to Operating Expenses (B)	Per OCA Operating Expenses 6/30/2025 (C)=(A)+(B)	Operating Expenses Per Day (D)=(C)/365	Expense Lag Days (E)	Net Lag Days (F)=50.6-(E)	OCA CWC Requirement (G)=(D)*(F)
1	Labor and Payroll Taxes	$ 69,405,426	$ (1,290,206)	$ 68,115,220	$ 186,617	12.05	38.55	$ 7,193,303
2	Group Insurance	$ 11,419,826	$ (200,623)	$ 11,219,203	$ 30,738	11.00	39.60	$ 1,217,207
3	OPEB's and VEBA	$ (5,817,327)	$ -	$ (5,817,327)	$ (15,938)	0.00	50.60	$ (806,457)
4	Pension	$ 22,219	$ -	$ 22,219	$ 61	(6.41)	57.01	$ 3,471
5	Purchased Power	$ 15,812,740	$ -	$ 15,812,740	$ 43,323	31.00	19.60	$ 848,942
6	Purchased Water	$ 3,099,741	$ -	$ 3,099,741	$ 8,492	35.22	15.38	$ 130,612
7	Chemicals	$ 23,528,121	$ -	$ 23,528,121	$ 64,461	47.20	3.40	$ 219,059
8	Miscellaneous	$ 39,493,144	$ (7,676,874)	$ 31,816,270	$ 87,168	30.46	20.14	$ 1,755,530
9	Transportation	$ 5,043,012	$ -	$ 5,043,012	$ 13,816	54.08	-3.48	$ (48,141)
10	Ins Other Than Group	$ 14,893,805	$ (247,905)	$ 14,645,900	$ 40,126	(69.48)	120.08	$ 4,818,117
11	Service Company	$ 60,645,901	$ (1,818,396)	$ 58,827,505	$ 161,171	12.05	38.55	$ 6,212,475
12	Waste Disposal	$ 3,337,122	$ -	$ 3,337,122	$ 9,143	41.96	8.64	$ 78,990
13	Telephone	$ 4,996,974	$ -	$ 4,996,974	$ 13,690	3.88	46.72	$ 639,585
14	Rents	$ 105,375	$ -	$ 105,375	$ 289	(13.36)	63.96	$ 18,464
15	Natural Gas	$ 1,232,626	$ -	$ 1,232,626	$ 3,377	33.33	17.27	$ 58,312
16	Total	$ 247,218,705	$ (11,234,004)	$ 235,984,701	$ 646,533			$ 22,339,469
17	Company CWC Requirement							$ 23,164,070
18	OCA CWC Adjustment							$ (824,601)

Notes and Source

Cols A and E: Company Exhibit 3-A Water Operations, page 32

Line No.	Description	Per Company 6/30/2025 (A)	Per OCA 6/30/2025 (B)	OCA Adjustment (C)
	I. Long Term Interest			
1	Annual Long Term Interest Expense	$ 98,315,014	$ 109,326,561	
2	Interest Expense Per Day (L1/365)	$ 269,356	$ 299,525	
3	Average Lag Days	-31.0	-31.0	
4	Cash Working Capital Requirement	$ (8,352,730)	$ (9,288,270)	$ (935,541)
	II. Short Term Debt			
5	Annual Interest Expense	$ -	$ -	
6	Interest Expense Per Day (L5/365)	$ -	$ -	
7	Average Lag Days			
8	Cash Working Capital Requirement	$ -	$ -	$ -
	III. Preferred Dividend			
9	Annual Dividend Expense			
10	Dividend Expense Per Day (L9/365)	$ -	$ -	
11	Average Lag Days			
12	Cash Working Capital Requirement	$ -	$ -	$ -
13	Total CWC Requirement-Interest and Dividend	$ (8,352,730)	$ (9,288,270)	$ (935,541)
14	Rounded to $1,000			$ (936,000)

Notes and Source

Col. A: Company filing Exhibit 3-A, Water Operations, page 35

Calculation of OCA Interest and Dividend Expenses:

		Rate Base	Weighted Cost Long Term	Short Term	Preferred Dividend
		Sch. B	Sch.D	Sch.D	Sch.D
14	OCA Adjusted Rate Base	$ 4,692,127,100	2.33%	0.00%	0.00%
15	Interest and Dividend Expense		$ 109,326,561	$ -	0

Pennsylvania American Water Company
Cash Working Capital - OCA Adjustments to Expenses

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Water Operations
Schedule B-5.B
Docket Nos. R-2023-3043189 and R-2023-3043190

Line No.	Description	Adjustment No.	O&M Expense Adjustment	Labor & Payroll Taxes	Group Insurance	OPEBS and VEBA	Pension	Purchased Power	Purchased Water	Chemicals	Miscellaneous	Transportation	Insurance Other Than Group	Service Company	Waste Disposal	Telephone	Rents	Natural Gas	Depreciation & Amortization
			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
1	Acquisition Revenues and Expenses - Audubon Water Company	C-1	$ (2,349,549)								$ (2,349,549)								
2	Acquisition O&M Expense - Farmington Township - Water	C-2	$ (173,934)								$ (173,934)								
3	Acquisition O&M Expense - Farmington Township Wastewater	C-3																	
4	Acquisition O&M Expense - Sadsbury Township Municipal Authority	C-4																	
5	Depreciation Expense - Audubon Water	C-5	$ (269,599)																$ (269,599)
6	Depreciation Expense - Farmington Township Water	C-6	$ (101,751)																$ (101,751)
7	Depreciation Expense - Farmington Township Wastewater	C-7																	
8	Depreciation Expense - Sadsbury Township Municipal Authority	C-8																	
9	Uncollectibles Expense	C-9	$ (100,054)								$ (100,054)								
10	Vacancies - Salary and Wages Expense	C-10	$ (1,125,323)	$ (1,125,323)															
11	Annualized Performance Plan Expense	C-11	$ (92,066)	$ (92,066)															
12	Group Insurance Expense	C-12	$ (200,623)		$ (200,623)														
13	401K, Defined Contribution Plan and Employee Stock Purchase Plan	C-13	$ (72,817)	$ (72,817)															
14	Interest Synchronization	C-14	$ -																
15	PAWC External Board Members Expense	C-15	$ (123,250)								$ (123,250)								
16	Insurance Other Than Group	C-16	$ (247,905)										$ (247,905)						
17	Depreciation Expense - Water Utility	C-17	$ (15,478,699)																$ (15,478,699)
18	Stock-Based Compensation Expense - AWW Executives	C-18	$ (1,642,726)											$ (1,642,726)					
19	AWW Executives - Dividend Equivalents	C-19	$ (29,928)											$ (29,928)					
20	American Water Works Service Company - Supplemental Executive Retirement Plan Expense	C-20	$ (145,742)											$ (145,742)					
21	Call Center Expense	C-21	$ (3,082,255)								$ (3,082,255)								
22	Arrearage Management Plan Credits - Uncollectibles Expense	C-22	$ (1,847,832)								$ (1,847,832)								
23	TOTAL - sum of column A		$ (27,084,052)	$ (1,290,206)	$ (200,623)	$ -	$ -	$ -	$ -	$ -	$ (7,676,874)	$ -	$ (247,905)	$ (1,818,396)	$ -	$ -	$ -	$ -	$ (15,850,049)
24	Total per Schedule C.1.B, page 1, line 11		$ (27,084,052)																
25	Difference		$ -																$ (27,084,052)
26	Cross foot columns B through Q		$ (27,084,052)																
27	Difference		$ -																

This workpaper shows how the OCA adjustments to operating expenses from Schedule C.1.B, page 1 are posted for CWC purposes

PUBLIC
Exhibit LA-2
Page 8 of 42

Line No.	Description	Per Company Operating Expenses 6/30/2025 (A)	OCA Adjustments to Operating Expenses (B)	Per OCA Operating Expenses 6/30/2025 (C)=(A)+(B)	Operating Expenses Per Day (D)=(C)/365	Expense Lag Days (E)	Net Lag Days (F)=50.6-(E)	OCA CWC Requirement (G)=(D)*(F)
1	Labor and Payroll Taxes	$ 5,242,427		$ 5,242,427	$ 14,363	12.05	38.55	$ 553,626
2	Group Insurance	$ 1,070,797		$ 1,070,797	$ 2,934	11.00	39.60	$ 116,174
3	OPEB's and VEBA	$ 9,810		$ 9,810	$ 27	0.00	50.60	$ 1,360
4	Pension	$ 216,538		$ 216,538	$ 593	(6.41)	57.01	$ 33,824
5	Purchased Power	$ 3,372,968		$ 3,372,968	$ 9,241	31.00	19.60	$ 181,085
6	Purchased Water	$ -		$ -	$ -	35.22	15.38	$ -
7	Chemicals	$ 1,827,234		$ 1,827,234	$ 5,006	47.20	3.40	$ 17,013
8	Miscellaneous	$ 5,587,735	$ (596,064)	$ 4,991,671	$ 13,676	30.46	20.14	$ 275,426
9	Transportation	$ 176,055		$ 176,055	$ 482	54.08	-3.48	$ (1,681)
10	Ins Other Than Group	$ 2,098,237	$ (34,694)	$ 2,063,543	$ 5,654	(69.48)	120.08	$ 678,851
11	Service Company	$ 1,895,820	$ (57,182)	$ 1,838,638	$ 5,037	12.05	38.55	$ 194,169
12	Waste Disposal	$ 3,087,197	$ -	$ 3,087,197	$ 8,458	41.96	8.64	$ 73,074
13	Telephone	$ 211,445	$ -	$ 211,445	$ 579	3.88	46.72	$ 27,064
14	Rents	$ 50,345	$ -	$ 50,345	$ 138	(13.36)	63.96	$ 8,822
15	Natural Gas	$ 431,432	$ -	$ 431,432	$ 1,182	33.33	17.27	$ 20,410
16	Total	$ 25,278,040	$ (687,940)	$ 24,590,100	$ 67,370			$ 2,179,217
17	Company CWC Requirement							$ 2,230,011
18	OCA CWC Adjustment							$ (50,794)

Notes and Source

Cols A and E: Company Exhibit 3-A Water Operations, page 102

Line No.	Description	Per Company 6/30/2025 (A)	Per OCA 6/30/2025 (B)	OCA Adjustment (C)
	I. Long Term Interest			
1	Annual Long Term Interest Expense	$ 13,181,412	$ 14,367,504	
2	Interest Expense Per Day (L1/365)	$ 36,113	$ 39,363	
3	Average Lag Days	-31.0	-31.0	
4	Cash Working Capital Requirement	$ (1,119,864)	$ (1,220,647)	$ (100,783)
	II. Long Term Debt - Wastewater Specific			
5	Annual Interest Expense	$ 779,197	$ 773,139	
6	Interest Expense Per Day (L5/365)	$ 2,135	$ 2,118	
7	Average Lag Days	-31.0	-31.0	
8	Cash Working Capital Requirement	$ (66,206)	$ (65,679)	$ 527
	III. Preferred Dividend			
9	Annual Dividend Expense		$ -	
10	Dividend Expense Per Day (L9/365)	$ -	$ -	
11	Average Lag Days			
12	Cash Working Capital Requirement	$ -	$ -	$ -
13	Total CWC Requirement-Interest and Dividend	$ (1,186,070)	$ (1,286,326)	$ (100,255)
14	Rounded to $1,000			$ (100,000)

Notes and Source

Col. A: Company filing Exhibit 3-A, Wastewater SSS General Operations, page 105

Calculation of OCA Interest and Dividend Expenses:

		Rate Base	Weighted Cost Long Term	Long Term - WW Specific	Preferred Dividend
		Sch. B	Sch.D	Sch.D	Sch.D
14	OCA Adjusted Rate Base	$ 644,282,670	2.23%	0.12%	0.00%
15	Interest and Dividend Expense		$ 14,367,504	$ 773,139	$ -

Pennsylvania American Water Company
Cash Working Capital - OCA Adjustments to Expenses

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Wastewater SSS General Operations
Schedule B-5.C
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Line No.	Description	Adjustment No.	O&M Expense Adjustment	Labor & Payroll Taxes	Group Insurance	OPEBS and VEBA	Pension	Purchased Power	Purchased Water	Chemicals	Miscellaneous	Transportation	Insurance Other Than Group	Service Company	Waste Disposal	Telephone	Rents	Natural Gas	Depreciation & Amortization
			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
1	Acquisition Revenues and Expenses - Audubon Water Company	C-1																	
2	Acquisition O&M Expense - Farmington Township - Water	C-2																	
3	Acquisition O&M Expense - Farmington Township Wastewater	C-3	$ (269,875)								$ (269,875)								
4	Acquisition O&M Expense - Sadsbury Township Municipal Authority	C-4	$ (163,874)								$ (163,874)								
5	Depreciation Expense - Audubon Water	C-5																	
6	Depreciation Expense - Farmington Township Water	C-6																	
7	Depreciation Expense - Farmington Township Wastewater	C-7	$ (137,987)																$ (137,987)
8	Depreciation Expense - Sadsbury Township Municipal Authority	C-8	$ (51,847)																$ (51,847)
9	Uncollectibles Expense	C-9	$ (11,591)								$ (11,591)								
10	Vacancies - Salary and Wages Expense	C-10																	
11	Annualized Performance Plan Expense	C-11																	
12	Group Insurance Expense	C-12																	
13	401K, Defined Contribution Plan and Employee Stock Purchase Plan	C-13																	
14	Interest Synchronization	C-14	$ -																
15	PAWC External Board Members Expense	C-15																	
16	Insurance Other Than Group	C-16	$ (34,694)										$ (34,694)						
17	Depreciation Expense - Water Utility	C-17																	
18	Stock-Based Compensation Expense - AWW Executives	C-18	$ (51,658)											$ (51,658)					
19	AWW Executives - Dividend Equivalents	C-19	$ (941)											$ (941)					
20	American Water Works Service Company - Supplemental Executive Retirement Plan Expense	C-20	$ (4,583)											$ (4,583)					
21	Call Center Expense	C-21									$ -								
22	Arrearage Management Plan Credits - Uncollectibles Expense	C-22	$ (150,724)								$ (150,724)								
23	TOTAL - sum of column A		$ (877,774)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (596,064)	$ -	$ (34,694)	$ (57,182)	$ -	$ -	$ -	$ -	$ (189,834)
24	Total per Schedule C.1.C, page 1, line 11		$ (877,774)																
25	Difference		$ -																$ (877,774)
26	Cross foot columns B through Q		$ (877,774)																
27	Difference		$ -																

This workpaper shows how the OCA adjustments to operating expenses from Schedule C.1.C, page 1 are posted for CWC purposes

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Exhibit LA-2
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Line No.	Description	Per Company Operating Expenses 6/30/2025 (A)	OCA Adjustments to Operating Expenses (B)	Per OCA Operating Expenses 6/30/2025 (C)=(A)+(B)	Operating Expenses Per Day (D)=(C)/365	Expense Lag Days (E)	Net Lag Days (F)=50.6-(E)	OCA CWC Requirement (G)=(D)*(F)
1	Labor and Payroll Taxes	$ 7,268,095		$ 7,268,095	$ 19,913	12.05	38.55	$ 767,547
2	Group Insurance	$ 1,327,092		$ 1,327,092	$ 3,636	11.00	39.60	$ 143,980
3	OPEB's and VEBA	$ 32,234		$ 32,234	$ 88	0.00	50.60	$ 4,469
4	Pension	$ 245,439		$ 245,439	$ 672	(6.41)	57.01	$ 38,339
5	Purchased Power	$ 1,691,208		$ 1,691,208	$ 4,633	31.00	19.60	$ 90,796
6	Purchased Water	$ -		$ -	$ -	35.22	15.38	$ -
7	Chemicals	$ 2,129,667		$ 2,129,667	$ 5,835	47.20	3.40	$ 19,828
8	Miscellaneous	$ 3,204,307	$ (123,293)	$ 3,081,014	$ 8,441	30.46	20.14	$ 170,001
9	Transportation	$ 690,475		$ 690,475	$ 1,892	54.08	-3.48	$ (6,591)
10	Ins Other Than Group	$ 1,434,260	$ (23,713)	$ 1,410,547	$ 3,865	(69.48)	120.08	$ 464,033
11	Service Company	$ 1,033,737	$ (30,497)	$ 1,003,240	$ 2,749	12.05	38.55	$ 105,947
12	Waste Disposal	$ 1,704,931	$ -	$ 1,704,931	$ 4,671	41.96	8.64	$ 40,356
13	Telephone	$ 120,976	$ -	$ 120,976	$ 331	3.88	46.72	$ 15,484
14	Rents	$ 16,425	$ -	$ 16,425	$ 45	(13.36)	63.96	$ 2,878
15	Natural Gas	$ 150,057	$ -	$ 150,057	$ 411	33.33	17.27	$ 7,099
16	Total	$ 21,048,903	$ (177,503)	$ 20,871,400	$ 57,182			$ 1,864,166
17	Company CWC Requirement							$ 1,879,977
18	OCA CWC Adjustment							$ (15,811)

Notes and Source

Cols A and D: Company Exhibit 3-A Water Operations, page 222

Line No.	Description	Per Company 6/30/2025 (A)	Per OCA 6/30/2025 (B)	OCA Adjustment (C)
	I. Long Term Interest			
1	Annual Long Term Interest Expense	$ 9,930,441	$ 10,906,606	
2	Interest Expense Per Day (L1/365)	$ 27,207	$ 29,881	
3	Average Lag Days	-31.0	-31.0	
4	Cash Working Capital Requirement	$ (843,689)	$ (926,610)	$ (82,921)
	II. Long Term Debt - Wastewater Specific			
5	Annual Interest Expense	$ 587,021	$ 586,903	
6	Interest Expense Per Day (L5/365)	$ 1,608	$ 1,608	
7	Average Lag Days	-31.0	-31.0	
8	Cash Working Capital Requirement	$ (49,864)	$ (49,864)	$ -
	III. Preferred Dividend			
9	Annual Dividend Expense		$ -	
10	Dividend Expense Per Day (L9/365)	$ -	$ -	
11	Average Lag Days			
12	Cash Working Capital Requirement	$ -	$ -	$ -
13	Total CWC Requirement-Interest and Dividend	$ (893,553)	$ (976,474)	$ (82,921)
14	Rounded to $1,000			$ (83,000)

Notes and Source

Col. A: Company filing Exhibit 3-A, CSS Wastewater Operations, page 225

Calculation of OCA Interest and Dividend Expenses:

		Rate Base	Weighted Cost Long Term	Long Term - WW Specific	Preferred Dividend
		Sch. B	Sch.D	Sch.D	Sch.D
14	OCA Adjusted Rate Base	$ 489,085,469	2.23%	0.12%	0.00%
15	Interest and Dividend Expense		$ 10,906,606	$ 586,903	$ -

Pennsylvania American Water Company
Cash Working Capital - OCA Adjustments to Expenses

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Wastewater SSS General Operations
Schedule B-5.D
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 3 of 3

Line No.	Description	Adjustment No.	O&M Expense Adjustment	Labor & Payroll Taxes	Group Insurance	OPEBS and VEBA	Pension	Purchased Power	Purchased Water	Chemicals	Miscellaneous	Transportation	Insurance Other Than Group	Service Company	Waste Disposal	Telephone	Rents	Natural Gas	Depreciation & Amortization
			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
1	Acquisition Revenues and Expenses - Audubon Water Company	C-1																	
2	Acquisition O&M Expense - Farmington Township - Water	C-2																	
3	Acquisition O&M Expense - Farmington Township Wastewater	C-3																	
4	Acquisition O&M Expense - Sadsbury Township Municipal Authority	C-4																	
5	Depreciation Expense - Audubon Water	C-5																	
6	Depreciation Expense - Farmington Township Water	C-6																	
7	Depreciation Expense - Farmington Township Wastewater	C-7																	
8	Depreciation Expense - Sadsbury Township Municipal Authority	C-8																	
9	Uncollectibles Expense	C-9	$ (9,547)								$ (9,547)								
10	Vacancies - Salary and Wages Expense	C-10																	
11	Annualized Performance Plan Expense	C-11																	
12	Group Insurance Expense	C-12																	
13	401K, Defined Contribution Plan and Employee Stock Purchase Plan	C-13																	
14	Interest Synchronization	C-14																	
15	PAWC External Board Members Expense	C-15																	
16	Insurance Other Than Group	C-16	$ (23,713)										$ (23,713)						
17	Depreciation Expense - Water Utility	C-17																	
18	Stock-Based Compensation Expense - AWW Executives	C-18	$ (27,551)											$ (27,551)					
19	AWW Executives - Dividend Equivalents	C-19	$ (502)											$ (502)					
20	American Water Works Service Company - Supplemental Executive Retirement Plan Expense	C-20	$ (2,444)											$ (2,444)					
21	Call Center Expense	C-21																	
22	Arrearage Management Plan Credits - Uncollectibles Expense	C-22	$ (113,746)								$ (113,746)								
23	TOTAL - sum of column A		$ (177,503)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (123,293)	$ -	$ (23,713)	$ (30,497)	$ -	$ -	$ -	$ -	$ -
24	Total per Schedule C.1.F, page 1, line 11		$ (177,503)																
25	Difference		$ -																$ (177,503)
26	Cross foot columns B through Q		$ (177,503)																
27	Difference		$ -																

This workpaper shows how the OCA adjustments to operating expenses from Schedule C.1.F, page 1 are posted for CWC purposes

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Pennsylvania American Water Company
Acquisition Revenues and Expenses - Audubon Water Company

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Water Operations
Schedule C-1
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	Per Company (A)	Per OCA (B)	OCA Adjustment (C)
	Revenue			
1	Operating Revenues	$ 2,965,024	$ -	$ (2,965,024)
	Production Costs			
2	Fuel & Power	$ 145,000	$ -	$ (145,000)
3	Chemicals	$ 92,000	$ -	$ (92,000)
4	Total Production Costs	$ 237,000	$ -	$ (237,000)
	Labor and Labor Related Costs			
5	Labor Expense	$ 387,283	$ -	$ (387,283)
6	Group Insurance Expense	$ 85,518	$ -	$ (85,518)
7	401-K Expense	$ 12,332	$ -	$ (12,332)
8	Defined Contribution Plan Expense	$ 18,721	$ -	$ (18,721)
9	Total Labor and Labor Related Costs	$ 503,854	$ -	$ (503,854)
	Other O&M Costs			
10	Service Company	$ 261,549	$ -	$ (261,549)
11	Contracted Services	$ 160,528	$ -	$ (160,528)
12	Insurance Other Than Group	$ 63,196	$ -	$ (63,196)
13	Rents	$ 5,622	$ -	$ (5,622)
14	General Office	$ 112,431	$ -	$ (112,431)
15	Miscellaneous	$ 102,210	$ -	$ (102,210)
16	Maintenance	$ 80,746	$ -	$ (80,746)
17	Total Other O&M Costs	$ 786,280	$ -	$ (786,280)
	Taxes Other Than Income			
18	Payroll Tax Expense	$ 30,729	$ -	$ (30,729)
19	Property Tax Expense	$ 27,709	$ -	$ (27,709)
20	Total Taxes Other Than Income	$ 58,437	$ -	$ (58,437)
21	Total Operating Expenses Related to Audubon Water Company	$ 1,585,572	$ -	$ (1,585,572)
	Amortization Expense			
22	Amortization Expense for Audubon Water	763,977	$ -	$ (763,977)
23	Net Impact on Pre-Tax Operating Income	$ 615,475	$ -	$ (615,475)

Notes and Source:
Col. A: Amounts from Exhibit 3-B, page 304 from PAWC's filing
Col. B: See the Direct Testimony of OCA witness Ralph Smith
Col. C: Col. B - Col. A

Pennsylvania American Water Company
Acquisition O&M Expense - Farmington Township - Water

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Water Operations
Schedule C-2
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	Per Company (A)	Per OCA (B)	OCA Adjustment (C)
	Revenue			
1	Operating Revenues	$ 266,371	$ -	$ (266,371)
	Production Costs			
2	Fuel & Power	$ 5,641	$ -	$ (5,641)
3	Chemicals	$ 4,468	$ -	$ (4,468)
4	Waste Disposal	$ 2,349	$ -	$ (2,349)
5	Total Production Costs	$ 12,458	$ -	$ (12,458)
	Labor and Labor Related Costs			
6	Labor Expense	$ 47,751	$ -	$ (47,751)
7	Group Insurance Expense	$ 10,474	$ -	$ (10,474)
8	401-K Expense	$ 1,587	$ -	$ (1,587)
9	Defined Contribution Plan Expense	$ 2,434	$ -	$ (2,434)
10	VEBA Expense	$ 363	$ -	$ (363)
11	Total Labor and Labor Related Costs	$ 62,608	$ -	$ (62,608)
	Other O&M Costs			
12	Service Company	$ 41,189	$ -	$ (41,189)
13	Insurance Other Than Group	$ 8,255	$ -	$ (8,255)
14	Miscellaneous	$ 5,632	$ -	$ (5,632)
15	Maintenance	$ 18,432	$ -	$ (18,432)
16	Total Other O&M Costs	$ 73,509	$ -	$ (73,509)
	Taxes Other Than Income			
17	Payroll Tax Expense	$ 3,810	$ -	$ (3,810)
18	Total Taxes Other Than Income	$ 3,810	$ -	$ (3,810)
19	Total Operating Expenses Related to Farmington Township - Water	$ 152,385	$ -	$ (152,385)
	Amortization Expense			
20	Amortization Expense for Farmington Township Water	$ 21,549	$ -	$ (21,549)
21	Net Impact on Pre-Tax Operating Income	$ 92,437	$ -	$ (92,437)

Notes and Source:
Col. A: Amounts from Exhibit 3-B, page 303 from PAWC's filing
Col. B: See the Direct Testimony of OCA witness Ralph Smith
Col. C: Col. B - Col. A

Pennsylvania American Water Company
Acquisition O&M Expense - Farmington Township Wastewater

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Wastewater SSS General Operations
Schedule C-3
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	Per Company (A)	Per OCA (B)	OCA Adjustment (C)
	Revenue			
1	Operating Revenues	$ 322,926		$ (322,926)
	Production Costs			
2	Fuel & Power	$ 30,000	$ -	$ (30,000)
3	Chemicals	$ 7,500	$ -	$ (7,500)
4	Waste Disposal	$ 5,000	$ -	$ (5,000)
5	Total Production Costs	$ 42,500	$ -	$ (42,500)
	Labor and Labor Related Costs			
6	Labor Expense	$ 65,425	$ -	$ (65,425)
7	Group Insurance Expense	$ 15,709	$ -	$ (15,709)
8	401-K Expense	$ 2,115	$ -	$ (2,115)
9	Defined Contribution Plan Expense	$ 3,210	$ -	$ (3,210)
10	Total Labor and Labor Related Costs	$ 86,459	$ -	$ (86,459)
	Other O&M Costs			
11	Service Company	$ 41,189	$ -	$ (41,189)
12	Contracted Services	$ 51,200	$ -	$ (51,200)
13	Insurance Other Than Group	$ 8,948	$ -	$ (8,948)
14	Miscellaneous	$ 8,192	$ -	$ (8,192)
15	Maintenance	$ 20,480	$ -	$ (20,480)
16	Total Other O&M Costs	$ 130,009	$ -	$ (130,009)
	Taxes Other Than Income			
17	Payroll Tax Expense	$ 5,208	$ -	$ (5,208)
18	Total Taxes Other Than Income	$ 5,208	$ -	$ (5,208)
19	Total Operating Expenses Related to Farmington Township - Wastewater	$ 264,176	$ -	$ (264,176)
	Amortization Expense			
20	Amortization Expense for Farmington Township Wastewater	$ 5,699	$ -	$ (5,699)
21	Net Impact on Pre-Tax Operating Income	$ 53,051	$ -	$ (53,051)

Notes and Source:
Col. A: Amounts from Exhibit 3-B, page 305 from PAWC's filing
Col. B: See the Direct Testimony of OCA witness Ralph Smith
Col. C: Col. B - Col. A

Pennsylvania American Water Company
Acquisition O&M Expense - Sadsbury Township Municipal Authority
Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Wastewater SSS General Operations
Schedule C-4
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	Per Company (A)	Per OCA (B)	OCA Adjustment (C)
	Revenue			
1	Operating Revenues	$ 471,228	$ -	$ (471,228)
	Production Costs			
2	Fuel & Power	$ 7,500	$ -	$ (7,500)
3	Waste Disposal	$ 185,000	$ -	$ (185,000)
4	Total Production Costs	$ 192,500	$ -	$ (192,500)
	Other O&M Costs			
5	Service Company	$ 22,418	$ -	$ (22,418)
6	Contracted Services	$ 16,500	$ -	$ (16,500)
7	Insurance Other Than Group	$ 3,822	$ -	$ (3,822)
8	Miscellaneous	$ 1,500	$ -	$ (1,500)
9	Maintenance	$ 9,000	$ -	$ (9,000)
10	Total Other O&M Costs	$ 53,241	$ -	$ (53,241)
	Taxes Other Than Income			
11	Property Tax Expense	$ 3,547		$ (3,547)
12	Total Taxes Other Than Income	$ 3,547	$ -	$ (3,547)
13	Total Operating Expenses Related to Sadsbury Township Municipal Authority	$ 249,288	$ -	$ (249,288)
	Amortization Expense			
14	Negative Acquisition Amortization	$ (94,561)	$ -	$ 94,561
15	Amortization Expense for Sadsbury Township Municipal Authority	$ 9,147	$ -	$ (9,147)
16	Total Amortization Expense for Sadsbury Township Municipal Authority	$ (85,414)		$ 85,414
17	Net Impact on Pre-Tax Operating Income	$ 307,354	$ -	$ (307,354)

Notes and Source:
Col. A: Amounts from Exhibit 3-B, page 306 from PAWC's filing
Col. B: See the Direct Testimony of OCA witness Ralph Smith
Col. C: Col. B - Col. A

Pennsylvania American Water Company
Depreciation Expense - Audubon Water

Exhibit LA-2
Schedule C-5
Docket Nos. R-2023-3043189 and R-2023-3043190

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Plant Account	Plant Amount (A)	Depreciation Rate (B)	OCA Adjustment to Depreciation Expense (C)
1	Power and Pumping Land	303.2	$ (36,518)	0.00%	$ -
2	Power and Pumping Structures	304.2	$ (40,805)	2.71%	$ (1,106)
3	Stores, Shop and Garage Buildings	304.62	$ (6,725)	2.36%	$ (159)
4	Wells and Springs	307	$ (819,979)	2.43%	$ (19,925)
5	Pumping Equipment	311	$ (384,318)	3.38%	$ (12,990)
6	Purification System	320	$ (568,166)	3.34%	$ (18,977)
7	Distribution Reservoirs and Standpipes	330	$ (726,972)	1.84%	$ (13,376)
8	Mains and Accessories	331	$ (4,251,387)	1.54%	$ (65,471)
9	Services	333	$ (289,495)	1.85%	$ (5,356)
10	Meters	334	$ (1,002,702)	5.90%	$ (59,159)
11	Fire Hydrants	335	$ (192,535)	2.26%	$ (4,351)
12	Office Furniture and Equipment	340	$ (17,653)	28.63%	$ (5,054)
13	Transportation Equipment	341	$ (761,041)	7.75%	$ (58,981)
14	Tools and Work Equipment	343	$ (61,086)	5.42%	$ (3,311)
15	Communication Equipment	346	$ (2,897)	7.90%	$ (229)
16	Miscellaneous Equipment	347	$ (25,203)	4.58%	$ (1,154)
17	Total Audubon Water Plant in Service		$ (9,187,482)		$ (269,599)

Notes and Source

Col. A: Amounts from Exhibit 3-A, page 26

Col. B: Depreciation rates from Exhibit 11-C, Water Operations, June 30, 2025 Depreciation Study, Table 2

Pennsylvania American Water Company
Depreciation Expense - Farmington Township Water

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Schedule C-6
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	Plant Account	Plant Amount (A)	Depreciation Rate (B)	OCA Adjustment to Depreciation Expense (C)
1	Miscellaneous Intangible Plant	303	$ (1,157)	0.00%	$ -
2	Purification Buildings	304.3	$ (222,374)	2.38%	$ (5,292)
3	Other Power Production Equipment	310	$ (4,200)	2.79%	$ (117)
4	Granular Activated Carbon	320.3	$ (6,526)	8.07%	$ (527)
5	Distribution Reservoirs and Standpipes	330	$ (411,560)	1.84%	$ (7,573)
6	Mains and Accessories	331	$ (3,471,882)	1.54%	$ (53,467)
7	Services	333	$ (667,488)	1.85%	$ (12,349)
8	Meters	334	$ (107,398)	5.90%	$ (6,336)
9	Fire Hydrants	335	$ (214,282)	2.26%	$ (4,843)
10	Tools and Work Equipment	343	$ (25,053)	5.42%	$ (1,358)
11	Communication Equipment	346	$ (125,179)	7.90%	$ (9,889)
12	Total Farmington Township Water Plant in Service		$ (5,257,100)		$ (101,751)

Notes and Source

Col. A: Amounts from Exhibit 3-A, page 26

Col. B: Depreciation rates from Exhibit 11-C, Water Operations, June 30, 2025 Depreciation Study, Table 2

Pennsylvania American Water Company
Depreciation Expense - Farmington Township Wastewater

Exhibit LA-2
Schedule C-7
Docket Nos. R-2023-3043189 and R-2023-3043190

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Plant Account	Plant Amount (A)	Depreciation Rate (B)	OCA Adjustment to Depreciation Expense (C)
1	Land & Land Rights	353	$ (21,666)	0.00%	$ -
2	Structures And Improvements - SPP	354.3	$ (252,055)	1.87%	$ (4,713)
3	Structures And Improvements - TDP	354.4	$ (536,916)	2.46%	$ (13,208)
4	Collection Sewers - Force Mains	360.1	$ (2,343,082)	1.68%	$ (39,364)
5	Collection Sewers - Gravity Mains	361.1	$ (1,068,952)	1.64%	$ (17,531)
6	Manholes	361.2	$ (347,289)	4.06%	$ (14,100)
7	Services	363	$ (286,835)	3.00%	$ (8,605)
8	Pumping Equipment	371	$ (248,619)	4.80%	$ (11,934)
9	Treatment Equipment	380	$ (533,623)	4.02%	$ (21,452)
10	Transportation Equipment	391	$ (36,879)	7.59%	$ (2,799)
11	Tools, Shop And Garage Equipment	393	$ (2,100)	4.51%	$ (95)
12	Laboratory Equipment	394	$ (42,162)	9.93%	$ (4,187)
13	Total Farmington Township Wastewater Plant in Service		$ (5,720,178)		$ (137,987)

Notes and Source

Col. A: Amounts from Exhibit 3-A, page 97

Col. B: Depreciation rates from Exhibit 11-F, Wastewater SSS General Operations, June 30, 2025 Depreciation Study, Table 2

Pennsylvania American Water Company
Depreciation Expense - Sadsbury Township Municipal Authority

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Schedule C-8
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	Plant Account	Plant Amount (A)	Depreciation Rate (B)	OCA Adjustment to Depreciation Expense (C)
1	Land & Land Rights	353	$ (698,106)	0.00%	$ -
2	Structures And Improvements - SPP	354.4	$ (98,829)	2.46%	$ (2,431)
3	Structures And Improvements - TDP	354.7	$ (132,948)	3.71%	$ (4,932)
4	Collection Sewers - Gravity Mains	361.1	$ (2,304,670)	1.64%	$ (37,797)
5	Manholes	361.2	$ (114,786)	4.06%	$ (4,660)
6	Services	363	$ (3,378)	3.00%	$ (101)
7	Pumping Equipment	371	$ (21,393)	4.80%	$ (1,027)
8	Tools, Shop And Garage Equipment	393	$ (5,873)	4.51%	$ (265)
9	Communication Equipment	396	$ (10,210)	6.20%	$ (633)
10	Total Sadsbury Township Municipal Authority Plant in Service		$ (3,390,193)		$ (51,847)

Notes and Source

Col. A: Amounts from Exhibit 3-A, page 97

Col. B: Depreciation rates from Exhibit 11-F, Wastewater SSS General Operations, June 30, 2025 Depreciation Study, Table 2

Pennsylvania American Water Company
Uncollectibles Expense

Exhibit LA-2
Schedule C-9
Docket Nos. R-2023-3043189 and R-2023-3043190
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Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Water Operations	Wastewater SSS General Operations	BASA Wastewater Operations	Brentwood Wastewater Operations	Wastewater CSS Operations
		(A)	(B)	(C)	(D)	(E)
	I. Per PAWC					
1	Total Sales	$ 824,117,186	$ 95,470,867	$ 11,847,402	$ 1,824,191	$ 78,636,216
2	Two-Year Average Uncollectibles Expense Rate	1.176%	1.176%	1.176%	1.176%	1.176%
3	Annualized Uncollectibles Expense	$ 9,691,618	$ 1,122,737	$ 139,325	$ 21,452	$ 924,762
	II. Per OCA					
4	Total Sales	$ 824,117,186	$ 95,470,867	$ 11,847,402	$ 1,824,191	78,636,216
5	Three-Year Average Uncollectibles Expense Rate	1.164%	1.164%	1.164%	1.164%	1.164%
6	Annualized Uncollectibles Expense	$ 9,591,564	$ 1,111,147	$ 137,887	$ 21,231	$ 915,215
	III. OCA Adjustment					
7	OCA Adjustment to Uncollectibles Expense	$ (100,054)	$ (11,591)	$ (1,438)	$ (221)	$ (9,547)

Notes and Source:
Lines 1-3: PAWC amounts per Exhibit 3-B, pages 65, 128, 164, 196 and 247
Lines 4-6: OCA amounts based on a three-year average and calculated below using information from Exhibit 3-B and the response to OCA 09-030

	Description	July 1, 2019 to June 30, 2020	July 1, 2021 to June 30, 2022	July 1, 2022 to June 30, 2023	Three-Year Average
8	Bad Debt Write-Offs	$ 9,514,528	$10,736,970	$10,146,054	$ 10,132,517
9	Bad Debt Recovery	$ 1,552,132	562,041	771,389	$ 961,854
10	Net Uncollectibles (net write-offs)	$ 7,962,396	10,174,929	9,374,665	$ 9,170,663
11	Billed Revenues	$ 701,283,203	$775,900,531	$886,675,101	$ 787,952,945
12	Uncollectibles Rate	1.135%	1.311%	1.057%	1.164%

For comparison purposes, a four-year average uncollectibles rate is calculated below using information from Exhibit 3-B and the response to OCA 09-030

	Description	July 1, 2019 to June 30, 2020	July 1, 2020 to June 30, 2021	July 1, 2021 to June 30, 2022	July 1, 2022 to June 30, 2023	Four-Year Average
13	Bad Debt Write-Offs	$ 9,514,528	$4,776,043	$10,736,970	$10,146,054	8,793,399
14	Bad Debt Recovery	$ 1,552,132	598,751	562,041	771,389	871,078
15	Net Uncollectibles (net write-offs)	$ 7,962,396	$ 4,177,292	10,174,929	9,374,665	7,922,320
16	Billed Revenues	$ 701,283,203	$762,652,071	$775,900,531	$886,675,101	781,627,726
17	Uncollectibles Rate	1.135%	0.548%	1.311%	1.057%	1.014%

Pennsylvania American Water Company
Vacancies - Salary and Wages Expense

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Water Operations
Schedule C-10
Docket Nos. R-2023-3043189 and R-2023-3043190
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Line No.	Description	Non-Collective Bargaining Unit Salary 6/30/2025 (A)	Collective Bargaining Unit 6/30/2025 (B)	Non-Collective Bargaining Unit Hourly 6/30/2025 (C)	Total Salary and Wages Expense 6/30/2025 (D)	Reference
	I. Salary and Wages					
1	Annualized Salary and Wages Per Company	$ 32,130,323	$ 48,486,288	$ 17,817,336	$ 98,433,947	Vol. 4, Exhibit 3-B
2	Annualized Salary and Wages Per OCA	$ 31,565,855	$ 47,634,476	$ 17,504,319	$ 96,704,650	Line 17
3	OCA Adjustment to Annualized Salary and Wages	$ (564,468)	$ (851,812)	$ (313,017)	$ (1,729,297)	L2 - L1
4	Capitalization Rate Percentage	39.55%	39.55%	39.55%		Vol. 4, Exhibit 3-B
5	Capitalized Portion Not Charged to Operating Expense	$ 223,250	$ 336,895	$ 123,799	$ 683,944	L3 x L4
6	OCA Adjustment to Salary and Wages Charged to Operating Expense	$ (341,219)	$ (514,917)	$ (189,217)	$ (1,045,353)	L3 + L5
	II. Payroll Taxes					
7	Adjustment to Salary and Wages Charged to Operating Expense	$ (341,219)	$ (514,917)	$ (189,217)	$ (1,045,353)	Line 6
8	FICA Social Security Rate*	6.20%	6.20%	6.20%		
9	Adjustment to FICA Social Security	$ (21,156)	$ (31,925)	$ (11,731)	$ (64,812)	L7 x L8
10	Adjustment to Salary and Wages Charged to Operating Expense	$ (341,219)	$ (514,917)	$ (189,217)	$ (1,045,353)	Line 6
11	FICA Medicare Rate	1.45%	1.45%	1.45%		
12	Adjustment to FICA Medicare	$ (4,948)	$ (7,466)	$ (2,744)	$ (15,158)	L10 x L11
13	Total Adjustment to Payroll Tax Expense	$ (26,104)	$ (39,391)	$ (14,475)	$ (79,970)	L9 + L12

Notes and Source:
Amounts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing and the responses to OCA 18-013 and OCA 26-001

		Non-Collective Bargaining Unit Salary 6/30/2025	Collective Bargaining Unit 6/30/2025	Non-Collective Bargaining Unit Hourly 6/30/2025	Total Salary and Wages Expense 6/30/2025	Reference
14	Annualized Salary and Wages Per Company	$ 32,130,323	$ 48,486,288	$ 17,817,336	$ 98,433,947	Line 1 above
15	Vacancy Rate	1.76%	1.76%	1.76%		OCA workpaper
16	OCA Adjustment to Annualized Salary and Wages	$ (564,468)	$ (851,812)	$ (313,017)	$ (1,729,297)	L14 x L15
17	Annualized Salary and Wages Per OCA	$ 31,565,855	$ 47,634,476	$ 17,504,319	$ 96,704,650	L14 + L16

* There is a maximum threshold for wages that are subject to the 6.20 percent Social Security tax (i.e., FICA Tax). To the extent that the stock-based compensation amounts are above the FICA tax threshold, this adjustment to payroll tax expense could be modified accordingly.

Pennsylvania American Water Company
Annualized Performance Plan Expense

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Water Operations
Schedule C-11
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	Non-Collective Bargaining Unit Salary 6/30/2025 (A)	Collective Bargaining Unit 6/30/2025 (B)	Non-Collective Bargaining Unit Hourly 6/30/2025 (C)	Total Annualized Performance Plan Expense 6/30/2025 (D)	Reference
	I. Annualized Performance Plan					
1	Annualized Performance Plan Expense Per Company	$ 5,669,121	$ 1,198,064	$ 1,185,929	$ 8,053,114	Vol. 4, Exhibit 3-B
2	Annualized Performance Plan Expense Per OCA	$ 5,569,525	$ 1,177,016	$ 1,165,094	$ 7,911,636	Line 17
3	OCA Adjustment to Annualized Performance Plan Expense	$ (99,596)	$ (21,048)	$ (20,835)	$ (141,478)	L2 - L1
4	Capitalization Rate Percentage	39.55%	39.55%	39.55%		Vol. 4, Exhibit 3-B
5	Capitalized Portion Not Charged to Operating Expense	$ 39,390	$ 8,324	$ 8,240	$ 55,955	L3 x L4
6	OCA Adjustment to Annual Performance Plan Charged to Operating Expense	$ (60,205)	$ (12,723)	$ (12,594)	$ (85,523)	L3 + L5
	II. Payroll Taxes					
7	Adjustment to Annualized Performance Plan Charged to Operating Expense	$ (60,205)	$ (12,723)	$ (12,594)	$ (85,523)	Line 6
8	FICA Social Security Rate*	6.20%	6.20%	6.20%		
9	Adjustment to FICA Social Security	$ (3,733)	$ (789)	$ (781)	$ (5,303)	L7 x L8
10	Adjustment to Annualized Performance Plan charged to Operating Expense	$ (60,205)	$ (12,723)	$ (12,594)	$ (85,523)	Line 6
11	FICA Medicare Rate	1.45%	1.45%	1.45%		
12	Adjustment to FICA Medicare	$ (873)	$ (184)	$ (183)	$ (1,240)	L10 x L11
13	Total Adjustment to Payroll Tax Expense	$ (4,606)	$ (973)	$ (964)	$ (6,543)	L9 + L12

Notes and Source:
Amounts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing and the responses to OCA 18-013 and OCA 26-001

		Non-Collective Bargaining Unit Salary 6/30/2025	Collective Bargaining Unit 6/30/2025	Non-Collective Bargaining Unit Hourly 6/30/2025	Total Annualized Performance Plan Expense 6/30/2025	Reference
14	Annualized Performance Plan Expense Per Company	$ 5,669,121	$ 1,198,064	$ 1,185,929	$ 8,053,114	Line 1 above
15	Salary and Wages Vacancy Rate	1.76%	1.76%	1.76%		Schedule C-10
16	OCA Adjustment to Annualized Performance Plan Expense	$ (99,596)	$ (21,048)	$ (20,835)	$ (141,478)	L14 x L15
17	Annualized Performance Plan Expense Per OCA	$ 5,569,525	$ 1,177,016	$ 1,165,094	$ 7,911,636	L14 + L16

* There is a maximum threshold for wages that are subject to the 6.20 percent Social Security tax (i.e., FICA Tax). To the extent that the stock-based compensation amounts are above the FICA tax threshold, this adjustment to payroll tax expense could be modified accordingly.

Pennsylvania American Water Company
Group Insurance Expense

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Water Operations
Schedule C-12
Docket Nos. R-2023-3043189 and R-2023-3043190
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Line No.	Description	Non-Collective Bargaining Unit Salary 6/30/2025 (A)	Collective Bargaining Unit 6/30/2025 (B)	Non-Collective Bargaining Unit Hourly 6/30/2025 (C)	Total Group Insurance Expense 6/30/2025 (D)	Reference
1	Group Insurance Expense Per Company	$ 6,011,847	$ 8,796,760	$ 4,082,750	$ 18,891,357	Vol. 4, Exhibit 3-B
2	Group Insurance Expense Per OCA	$ 5,906,230	$ 8,642,218	$ 4,011,024	$ 18,559,472	Line 10
3	OCA Adjustment to Group Insurance Expense	$ (105,617)	$ (154,542)	$ (71,726)	$ (331,885)	L2 - L1
4	Capitalization Rate Percentage	39.55%	39.55%	39.55%		Vol. 4, Exhibit 3-B
5	Capitalized Portion Not Charged to Operating Expense	$ 41,772	$ 61,122	$ 28,368	$ 131,262	L3 x L4
6	OCA Adjustment to Group Insurance Expense Charged to Operating Expense	$ (63,845)	$ (93,420)	$ (43,358)	$ (200,623)	L3 + L5

Notes and Source:
Amounts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing and the responses to OCA 18-013 and OCA 26-001

		Non-Collective Bargaining Unit Salary 6/30/2025	Collective Bargaining Unit 6/30/2025	Non-Collective Bargaining Unit Hourly 6/30/2025	Total Group Insurance Expense 6/30/2025	Reference
7	Group Insurance Expense Per Company	$ 6,011,847	$ 8,796,760	$ 4,082,750	$ 18,891,357	Line 1 above
8	Salary and Wages Vacancy Rate	1.76%	1.76%	1.76%		Schedule C-10
9	OCA adjustment to Group Insurance Expense	$ (105,617)	$ (154,542)	$ (71,726)	$ (331,885)	L x L8
10	Group Insurance Expense Per OCA	$ 5,906,230	$ 8,642,218	$ 4,011,024	$ 18,559,472	L7 + L9

Line No.	Description	Non-Collective Bargaining Unit Salary 6/30/2025 (A)	Collective Bargaining Unit 6/30/2025 (B)	Non-Collective Bargaining Unit Hourly 6/30/2025 (C)	Total (D)	Reference
	I. 401K and Defined Contribution Plan					
1	OCA Adjustment to Total 401K Expense	$ (18,143)	$ (22,169)	$ (8,625)	$ (48,938)	Line 11
2	OCA Adjustment to Total Defined Contribution Expense	$ (22,027)	$ (28,316)	$ (12,142)	$ (62,486)	Line 15
3	OCA Adjustment to Total 401K and Defined Benefit Contribution Expense	$ (40,170)	$ (50,486)	$ (20,767)	$ (111,423)	
4	Capitalization Rate Percentage	39.55%	38.82%	38.82%		Vol. 4, Exhibit 3-B
5	Capitalized Portion Not Charged to Operating Expense	$ 15,887	$ 19,597	$ 8,061	$ 23,949	L3 x L4
6	OCA Adjustment to 401K and Defined Contribution Plan Charged to Operating Expenses	$ (24,282)	$ (30,888)	$ (12,706)	$ (67,877)	L3 + L5
	II. Employee Stock Purchase Plan					
7	OCA Adjustment to Employee Stock Purchase Plan	$ (2,501)	$ (1,772)	$ (667)	$ (4,940)	Line 19
	III. 401K, DCP and ESPP Expense					
8	OCA Adjustment to 401K, DCP and ESPP Expense Charged to Operating Expense	$ (26,783)	$ (32,661)	$ (13,373)	$ (72,817)	L6 + L7

Notes and Source:
Amounts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing and the responses to OCA 18-013 and OCA 26-001

	Description	2025 Non-Collective Bargaining Unit Salary	2025 Collective Bargaining Unit	2025 Non-Collective Bargaining Unit Hourly	Total	Reference
	401K					
9	401K Expense Per Company	$ 1,032,729	$ 1,261,918	$ 490,947	$ 2,785,594	Vol. 4, Exhibit 3-B
10	Salary and Wages Vacancy Rate	1.76%	1.76%	1.76%		Schedule C-10
11	Reduction to 401K Expense Proportional to OCA Recommended Salaries and Wages	$ (18,143)	$ (22,169)	$ (8,625)	$ (48,938)	L9 x L10
12	Adjusted 401K Insurance Expense Per OCA	$ 1,014,586	$ 1,239,749	$ 482,322	$ 2,736,656	L9 + L11
	Defined Contribution Plan					
13	Defined Contribution Plan Expense Per Company	$ 1,253,793	$ 1,611,806	$ 691,165	$ 3,556,764	Vol. 4, Exhibit 3-B
14	Salary and Wages Vacancy Rate	1.76%	1.76%	1.76%		Schedule C-10
15	Reduction to Defined Contribution Expense Proportional to OCA Recommended Salaries and Wages	$ (22,027)	$ (28,316)	$ (12,142)	$ (62,486)	L13 x L14
16	Adjusted Defined Contribution Plan Expense Per OCA	$ 1,231,766	$ 1,583,490	$ 679,023	$ 3,494,278	L13 + L15
	Employee Stock Purchase Plan					
17	Employee Stock Purchase Plan Expense Per Company	$ 142,345	$ 100,890	$ 37,974	$ 281,209	Vol. 4, Exhibit 3-B
18	Salary and Wages Vacancy Rate	1.76%	1.76%	1.76%		Schedule C-10
19	Reduction to Employee Stock Purchase Plan Expense Proportional to OCA Recommended Salaries and Wages	$ (2,501)	$ (1,772)	$ (667)	$ (4,940)	L17 x L18
20	Adjusted Employee Stock Purchase Plan Expense Per OCA	$ 139,844	$ 99,118	$ 37,307	$ 276,269	L17 + L19

Line No.	Description	Water Operations	Wastewater SSS General Operations	BASA Wastewater Operations	Brentwood Wastewater Operations	CSS Wastewater Operations
		(A)	(B)	(C)	(D)	(E)
	Rate Year Ending June 30, 2025					
1	Increase (Decrease) to State Income Tax Expense	$ (879,885)	$ (94,291)	$ (37,002)	$ (3,524)	$ (77,992)
2	Increase (Decrease) to Federal Income Tax Expense	$ (2,127,814)	$ (228,024)	$ (89,482)	$ (8,523)	$ (188,606)
3	Increase (Decrease) to Income Tax Expense	$ (3,007,699)	$ (322,315)	$ (126,484)	$ (12,048)	$ (266,598)

Notes and Source:
See pages 2 through 6 of this schedule

Line No.	Description	Amount (A)	Reference
1	Adjusted Rate Base, per OCA	$ 4,692,127,100	Schedule B , page 1
2	Weighted Cost of Debt, per OCA	2.33%	Note B
3	Going-Level Interest Deduction for Tax Purposes	$ 109,326,561	L1 x L2
4	Interest Deduction per Company	$ 98,315,014	Note A
5	Decrease in Deductible Interest	$ 11,011,547	L3 - L4
6	State Income Tax Rate	7.99%	
7	Increase to State Income Tax	$ (879,885)	L5 x L6
8	Federal Taxable Income	$ 10,131,662	L5 + L7
9	Federal Income Tax Rate	21.00%	
10	Increase to Federal Income Tax Expense	$ (2,127,814)	L8 x L9
11	Overall Increase (Decrease) to Income Tax Expense	$ (3,007,699)	L7 + L10

Notes and Source:

Note A: Company filing Exhibit 3-A, page 75

Note B: Per OCA Schedule D, page 1:

Long-Term Debt Percent	49.00%
Long-Term Debt Cost Rate	4.76%
Weighted Cost of Debt	2.33%

Line No.	Description	Amount (A)	Reference
1	Adjusted Rate Base, per OCA	$ 644,282,670	Schedule B , page 2
2	Weighted Cost of Debt, per OCA	2.35%	Note B
3	Going-Level Interest Deduction for Tax Purposes	$ 15,140,643	L1 x L2
4	Interest Deduction per Company	$ 13,960,609	Note A
5	Decrease in Deductible Interest	$ 1,180,034	L3 - L4
6	State Income Tax Rate	7.99%	
7	Increase to State Income Tax	$ (94,291)	L5 x L6
8	Federal Taxable Income	$ 1,085,742	L5 + L7
9	Federal Income Tax Rate	21.00%	
10	Increase to Federal Income Tax Expense	$ (228,024)	L8 x L9
11	Overall Increase (Decrease) to Income Tax Expense	$ (322,315)	L7 + L10

Notes and Source:

Note A: Company filing Exhibit 3-A, page 138

Note B: Per OCA Schedule D, page 2:

Long-Term Debt Percent	46.84%
Long-Term Debt Cost Rate	4.76%
Weighted Cost of Long-Term Debt	2.23%
WW Financing Percent	4.40%
WW Financing Cost Rate	2.62%
Weighted Cost of WW Financing	0.12%
Total Weighted Cost of Debt	2.35%

Line No.	Description	Amount (A)	Reference
1	Adjusted Rate Base, per OCA	$ 231,536,917	Schedule B , page 3
2	Weighted Cost of Debt, per OCA	2.35%	Note B
3	Going-Level Interest Deduction for Tax Purposes	$ 5,441,118	L1 x L2
4	Interest Deduction per Company	$ 4,978,043	Note A
5	Decrease in Deductible Interest	$ 463,075	L3 - L4
6	State Income Tax Rate	7.99%	
7	Increase to State Income Tax	$ (37,002)	L5 x L6
8	Federal Taxable Income	$ 426,072	L5 + L7
9	Federal Income Tax Rate	21.00%	
10	Increase to Federal Income Tax Expense	$ (89,482)	L8 x L9
11	Overall Increase (Decrease) to Income Tax Expense	$ (126,484)	L7 + L10

Notes and Source:

Note A: Company filing Exhibit 3-A, page 171

Note B: Per OCA Schedule D, page 2:

Long-Term Debt Percent	46.84%
Long-Term Debt Cost Rate	4.76%
Weighted Cost of Long-Term Debt	2.23%
WW Financing Percent	4.40%
WW Financing Cost Rate	2.62%
Weighted Cost of WW Financing	0.12%
Total Weighted Cost of Debt	2.35%

Line No.	Description	Amount (A)	Reference
1	Adjusted Rate Base, per OCA	$ 22,053,946	Schedule B , page 4
2	Weighted Cost of Debt, per OCA	2.35%	Note B
3	Going-Level Interest Deduction for Tax Purposes	$ 518,268	L1 x L2
4	Interest Deduction per Company	$ 474,160	Note A
5	Decrease in Deductible Interest	$ 44,108	L3 - L4
6	State Income Tax Rate	7.99%	
7	Increase to State Income Tax	$ (3,524)	L5 x L6
8	Federal Taxable Income	$ 40,583	L5 + L7
9	Federal Income Tax Rate	21.00%	
10	Increase to Federal Income Tax Expense	$ (8,523)	L8 x L9
11	Overall Increase (Decrease) to Income Tax Expense	$ (12,048)	L7 + L10

Notes and Source:

Note A: Company filing Exhibit 3-A, page 203

Note B: Per OCA Schedule D, page 2:

Long-Term Debt Percent	46.84%
Long-Term Debt Cost Rate	4.76%
Weighted Cost of Long-Term Debt	2.23%
WW Financing Percent	4.40%
WW Financing Cost Rate	2.62%
Weighted Cost of WW Financing	0.12%
Total Weighted Cost of Debt	2.35%

Line No.	Description	Amount (A)	Reference
1	Adjusted Rate Base, per OCA	$ 489,085,469	Schedule B , page 5
2	Weighted Cost of Debt, per OCA	2.35%	Note B
3	Going-Level Interest Deduction for Tax Purposes	$ 11,493,509	L1 x L2
4	Interest Deduction per Company	$ 10,517,462	Note A
5	Decrease in Deductible Interest	$ 976,047	L3 - L4
6	State Income Tax Rate	7.99%	
7	Increase to State Income Tax	$ (77,992)	L5 x L6
8	Federal Taxable Income	$ 898,055	L5 + L7
9	Federal Income Tax Rate	21.00%	
10	Increase to Federal Income Tax Expense	$ (188,606)	L8 x L9
11	Overall Increase (Decrease) to Income Tax Expense	$ (266,598)	L7 + L10

Notes and Source:

Note A: Company filing Exhibit 3-A, page 256

Note B: Per OCA Schedule D, page 2:

Long-Term Debt Percent	46.84%
Long-Term Debt Cost Rate	4.76%
Weighted Cost of Long-Term Debt	2.23%
WW Financing Percent	4.40%
WW Financing Cost Rate	2.62%
Weighted Cost of WW Financing	0.12%
Total Weighted Cost of Debt	2.35%

Exhibit LA-1
PAWC External Board Members Expense

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Water Operations
Schedule C-15
Docket Nos. R-2023-3043189 and R-2023-3043190

Line No.	Description	Amount (A)	Reference
1	Adjustment to Remove Annual Expense Related to PAWC's External Board Members	$ (123,250)	A

Notes and Source

A: Amount from the response to OCA 22-003

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Water Operations (A)	Wastewater SSS General Operations (B)	CSS Wastewater Operations (C)	Reference
	I. Per PAWC				
1	Annualized Workers Compensation Premium	$ 1,290,403	$ 179,090	$ 122,418	
2	Capitalization Percentage	39.55%	22.14%	22.14%	
3	Annualized Workers Compensation Premium Not Charged to O&M Expense	$ (510,360)	$ (39,647)	$ (27,101)	L1 x L2
4	Annualized Workers Compensation Premium Charged to O&M Expense	$ 780,043	$ 139,443	$ 95,317	L1 + L3
5	Annualized Vehicle, General Liability, Property and Other Insurance	$ 14,113,762	$ 1,958,794	$ 1,338,943	
6	Pro Forma Insurance Other Than Group Expense	$ 14,893,805	$ 2,098,237	$ 1,434,260	L4 + L5
	II. Per OCA				
7	Annualized Workers Compensation Premium	$1,278,539	$ 177,443	$ 121,292	
8	Capitalization Percentage	39.55%	22.14%	22.14%	
9	Annualized Workers Compensation Premium Not Charged to O&M Expense	$ (505,668)	$ (39,283)	$ (26,852)	L7 x L8
10	Annualized Workers Compensation Premium Charged to O&M Expense	$772,871	$138,160	$ 94,440	L7 + L9
11	Annualized Vehicle, General Liability, Property and Other Insurance	$13,873,030	1,925,383	1,316,107	Page 2
12	Pro Forma Insurance Other Than Group Expense	$14,645,901	$2,063,543	$1,410,547	L10 + L11
	III. OCA Adjustment				
13	OCA Adjustment to Insurance Other Than Group Expense	$ (247,905)	$ (34,694)	$ (23,713)	L12 - L6

Notes and Source:
Col. A, lines 1-6: Amounts from Exhibit 3-A, pages 60, 123 and 243 and Exhibit 3-B, page 269
Col. A, lines 7-12: see page 2, lines 39-42

Pennsylvania American Water Company
Insurance Other Than Group

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Schedule C-16
Docket Nos. R-2023-3043189 and R-2023-3043190

Line No.	Policy Description	Account	Per Books 6/30/2023 (A)	Adjustment (B)	Present Rates 6/30/2024 (C)	Adjustment (D)	Present Rates 6/30/2025 (E)
1	Workers Compensation	55720000	$346,495	$15,688	$362,183	$16,398	$378,581
2	Workers Compensation - Claims	55720000	1,198,695	0	1,198,695	0	1,198,695
3	Total Workers Compensation		1,545,189	15,688	1,560,877	16,398	1,577,275
4	Less: Capitalized	55720100	(599,816)	33,958	(565,857)	(5,945)	(571,802)
5	Expensed Workers Compensation		$945,374	$49,646	$995,020	$10,453	$1,005,473
6	General Liability	55710000	$964,056	$43,648	$1,007,705	$45,625	$1,053,329
7	General Liability - Claims	55710000	9,247,588	0	9,247,588	0	9,247,588
8	Balance Sheet Reserve Adjustment	55711000	181,430	(181,430)	0	0	0
9	Travelers Retrospective Premium Adjustment	55711000	2,055	(7,874)	(5,819)	0	(5,819)
10	Broker Service Fee	55730000	57,282	2,593	59,875	2,711	62,586
11	Excess General Liability	55710000	1,787,698	80,939	1,868,637	84,604	1,953,241
12	Property	55740000	3,716,320	168,259	3,884,579	175,877	4,060,456
13	Surety Bonds / Risk	55730000	22,869	1,035	23,904	1,082	24,987
14	Fiduciary Responsibility	55710000	33,162	1,501	34,663	1,569	36,233
15	Comprehensive Crime	55710000	6,449	292	6,741	305	7,046
16	Employment Practices	55710000	56,433	2,555	58,988	2,671	61,659
17	Directors & Officers	55710000	101,504	4,596	106,099	4,804	110,903
18	Business Travel	55730000	4,708	213	4,921	223	5,144
19	Aviation	55730000	56	3	58	3	61
20	Other Insurance	55730000	900	(900)	0	0	0
21	It Security / Cyber Risk	55710000	182,416	8,259	190,675	8,633	199,308
22	Law Liability	55710000	10,173	461	10,633	481	11,115
23	Auto Liability	55110000	87,734	3,972	91,706	4,152	95,858
24	Auto Liability - Claims	55110000	190,825	0	190,825	0	190,825
25	Equipment Discount	55710000	(919,599)	919,599	0	0	0
26	Total Policies Other Than Workers Compensation		$15,734,058	$1,047,722	$16,781,780	$332,740	$17,114,520
27	Total Expensed Policies		$16,679,432	$1,097,368	$17,776,800	$343,193	$18,119,993
28	**Test Year change in expense, net Balance Sheet Reserves**				**4.53%**		**4.53%**
	Total Company						
29	Vehicle	55110000	$278,559	$3,972	$282,532	$4,152	$286,684
30	General Liability	55710000	11,469,880	1,061,850	12,531,730	148,692	12,680,422
31	Retro Premium Adjustment	55711000	183,485	(189,304)	(5,819)	0	(5,819)
32	Workmans Comp	55720000	1,545,189	15,688	1,560,877	16,398	1,577,275
33	Capital Credit	55720100	(599,816)	33,958	(565,857)	(5,945)	(571,802)
34	Insurance other	55730000	85,815	2,945	88,759	4,019	92,778
35	Insurance Property	55740000	3,716,320	168,259	3,884,579	175,877	4,060,456
			$16,679,432	$1,097,368	$17,776,800	$343,193	$18,119,993

Allocation of Revenue Requirement from Water to Wastewater

	As of 06/30/23	Depreciated Utility Plant in Service	Percentage		Capitalization Rate	6/30/2024	6/30/2025
36	Water Operations	$4,758,924,437	81.06%		Water	39.55%	39.55%
37	Wastewater SSS General Operations	660,270,985	11.25%		Wastewater SSS	22.14%	22.14%
38	Wastewater CSS Operations	451,444,764	7.69%		Wastewater CSS	22.14%	22.14%
39	Total Net Utility Plant in Service	$5,870,640,186	100.00%				

	Allocation of Present Rates 6/30/2025	Vehicle	General Liability	Workmans Comp	Capital Credit	Insurance other	Insurance Property	Total
40	Water Operations	$232,386	$10,274,033	$1,278,539	($505,668)	$75,206	$3,291,405	$14,645,901
41	Wastewater SSS General Operations	32,252	1,425,893	177,443	(39,283)	10,437	456,801	2,063,543
42	Wastewater CSS Operations	22,046	974,677	121,292	(26,852)	7,135	312,249	1,410,547
43	Total Company	$286,684	$12,674,603	$1,577,274	($571,802)	$92,778	$4,060,455	$18,119,992

	Per Books	12 Months Ending June 2018	12 Months Ending June 2019	12 Months Ending June 2020	12 Months Ending June 2021	12 Months Ending June 2022	12 Months Ending June 2023
44	55110000 Insurance Vehicle	$225,420	$207,332	$225,377	$249,451	$265,232	$278,559
45	55710000 Insurance General Liabilty	9,122,239	9,755,759	9,620,594	11,375,771	11,038,467	11,469,880
46	55711000 Insurance Casualty Reserve	(2,017,551)	(25,216)	(901,767)	(2,221,572)	(2,369,245)	183,485
47	55720000 Insurance Workers Compensation	2,359,754	2,514,031	2,827,264	2,375,609	1,831,039	1,545,189
48	55720100 Insurance WC Capitalized Credits	(840,218)	(762,997)	(1,126,401)	(1,010,742)	(724,233)	(599,816)
49	55730000 Insurance Other	81,462	68,282	92,858	156,984	125,215	85,815
50	55740000 Insurance Property	1,173,794	1,321,643	2,072,272	2,905,236	3,245,712	3,716,320
51	Total: Insurance other than group	$10,104,899	$13,078,835	$12,810,198	$13,830,737	$13,412,187	$16,679,432
52	Total Without Reserve & Retro Adjustment	$12,122,451	$13,104,051	$13,711,965	$16,052,309	$15,781,432	$16,495,948
53	Annual Percentage Change		8.10%	4.64%	17.07%	-1.69%	4.53%
54	Test Year Percentage Change					Test Year	**4.53%**

Notes and Source

Pennsylvania American Water Company
Depreciation Expense - Water Utility

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Schedule C-17
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Account No.	Account No.	Description	Plant Amount	Per Company Survivor Curve	Per Company Accrural Rate	Per Company Depreciation Expense	Per OCA Survivor Curve	Per OCA Accrural Rate	Per OCA Depreciation Expense	Adjustment
			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H) = (G) - (D)
1	304.15	OTHER WATER SOURCE STRUCTURES	$ 105,718,516	50-S0.5	2.83	$ 2,995,935	60-S0.5	2.15	$ 2,271,967	$ (723,968)
2	331	MAINS AND ACCESSORIES	$ 3,533,014,150	90-R2	1.54	$ 54,371,951	110-R2	1.15	$ 40,615,938	$ (13,756,013)
3	335	FIRE HYDRANTS	$ 156,182,918	60-R2	2.26	$ 3,532,857	75-R2	1.62	$ 2,534,140	$ (998,717)
4	Various	ALL OTHER ACCOUNTS	$ 3,199,987,111			$ 155,815,958			$ 155,815,958	$ -
5		TOTAL	$ 6,994,902,695			$ 216,716,701			$ 201,238,002	$ (15,478,699)

Notes and Source:

Cols. (A) - (D): PAWC Filing, Exhibit 11-C, Table 2

Cols. (E) - (G): Useful Lives per PAWC 2022 Rate Case, Docket Nos. R-2022-3031672 and R-2022-3031673, Exhibit 11-C, Table 2 and per the October 11, 2022 Settlement Agreement, page 5.
The November 8, 2022 ALJ Recommended Order recommended the Settlement to be approved on page 99. The December 8, 2022 Order approved the Settlement Agreement.

Line No.	Description	Allocation Factor	Performance Stock Units	Restricted Stock Units	Total Stock-Based Compensation for AWW Executives
		(A)	(B)	(C)	(D)
1	Water Operations	95.40%	$ (1,233,199)	$ (409,527)	$ (1,642,726)
2	Wastewater SSS General Operations	3.00%	$ (38,780)	$ (12,878)	$ (51,658)
3	Wastewater CSS Operations	1.60%	$ (20,683)	$ (6,868)	$ (27,551)
4	Total Stock-Based Compensation Expense - AWW Executives	100.00%	$ (1,292,661)	$ (429,274)	$ (1,721,935)

Notes and Source:

Col. A: Allocation factors based on number of customers from Exhibit 3-B, page 301

Cols. B&C: Amounts calculated using the amounts below from the response to OCA 17-001

	Executive Position	Performance Stock Units	Restricted Stock Units	Total Stock-Based Compensation
5	President and CEO	$ (617,600)	$ (176,461)	$ (794,061)
6	Retired President and CEO	$ -	$ -	$ -
7	Executive VP and CFO	$ (227,823)	$ (57,833)	$ (285,656)
8	Executive VP and COO	$ (222,715)	$ (57,927)	$ (280,642)
9	Executive VP and General Counsel	$ (113,617)	$ (107,157)	$ (220,774)
10	Executive VP and Chief Human Resources Officer	$ (110,906)	$ (29,896)	$ (140,802)
11	Total	$ (1,292,661)	$ (429,274)	$ (1,721,935)

CONFIDENTIAL

Line No.	Description	Water Operations	Wastewater SSS General Operations	Wastewater CSS Wastewater Operations	Total
		(A)	(B)	(C)	(D)
1	Total FPFTY Dividend Equivalents for AWW Executives	$ (31,371)	$ (31,371)	$ (31,371)	
2	Allocation Factor	95.40%	3.00%	1.60%	
3	Adjustment to Remove Divident Equivalents for AWW Executives	$ (29,928)	$ (941)	$ (502)	$ (31,371)

Notes and Source:

Line 1: Amounts calculated using the amounts below from the confidential response to OCA 17-002

Line 2: Allocation factors based on number of customers from Exhibit 3-B, page 301

	Executive Position	Dividend Equivalents
4	[redacted]	
5		
6		
7		
8		
9		
10	Total	$ (31,371)

Line No.	Description	Allocation Factor (A)	Amount (B)
1	Water Operations	95.40%	$ (145,742)
2	Wastewater SSS General Operations	3.00%	$ (4,583)
3	Wastewater CSS Operations	1.60%	$ (2,444)
4	Total Stock-Based Compensation Expense - AWW Executives	100.00%	$ (152,769)

Notes and Source:
Col. A: Allocation factors based on number of customers from Exhibit 3-B, page 301
Col. B: Amounts calculated using the amount below from the response to OCA 09-039, Attachment 4 and multiplied by the allocation factors in column A

	Description	Account Number	Amount
5	Pension Expense - Supplemental Executive Retirement Plan	50630000	$ 152,769

Pennsylvania American Water Company
Call Center Expense

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Water Operations
Schedule C-21
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	Transworld Amount (A)	InterLogix Amount (B)	Total (C)	Reference
1	Adjustment to Remove Call Center Expense*	$ (2,475,869)	$ (606,386)	$ (3,082,255)	A

Notes and Source:
A: Amounts from the response to OCA 26-022

* This adjustment is being sponsored by OCA witness Barbara R. Alexander

Pennsylvania American Water Company
Arrearage Management Plan Credits - Uncollectibles Expense

Fully Projected Future Test Year Ending June 30, 2025

Exhibit LA-2
Schedule C-22
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 1 of 1

Line No.	Description	Per PAWC	Ratio of PAWC Amounts	Per OCA	OCA Adjustment
		(A)	(B)	(C)	(D)
1	OCA Recommended AMP-Related Uncollectibles Expense			$ 214,728	
	Allocation of OCA Recommendation for AMP-Related Uncollectibles Expense				
2	Water Operations	$ 2,031,317	85.45%	$ 183,485	$ (1,847,832)
3	Wastewater SSS General Operations	$ 165,691	6.97%	$ 14,967	$ (150,724)
4	BASA Wastewater Operations	$ 43,503	1.83%	$ 3,930	$ (39,573)
5	Brentwood Wastewater Operations	$ 11,648	0.49%	$ 1,052	$ (10,596)
6	CSS Wastewater Operations	$ 125,041	5.26%	$ 11,295	$ (113,746)
7	Total	$ 2,377,200	100.00%	$ 214,728	$ (2,162,472)

Notes and Source

Col. A: Amounts from Exhibit 3-B, page 336 from PAWC's filing

Col. B: OCA recommendation is being sponsored by OCA witness Roger D. Colton

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)
Exhibit LA-3
Copies of Non-Confidential Material Referenced in the
Direct Testimony of
Ralph C. Smith

Document	Subject	Confidential	No. of Pages	Page No.
OCA 09-11	Stock-based compensation expense charged to PAWC during the HTY including accruals made pursuant ot ASC 718 and any other stock-based compensation awards that resulted in cost being charged to PAWC during the HTY; Description of each stock-based compensation program that resulted in charges to PAWC during the HTY; Breakout of stock-based compensation included in the HTY by type of plan, stock-based compensation direct charged to PAWC, and type that was allocated to PAWC from the affiliated Service Company; Explanation of the amount of stock-based compensation that the Company included in cost of service for the FPFTY; Description of each stock-based program that PAWC has requested be reflected in cost of service for the FPFTY; Breakout of stock-based compensation included in the FPFTY cost of service by type of plan, stock-based compensation direct charged to PAWC, and stock-based compensation that was allocated to PAWC from the affiliated Service Company.	No	2	3 - 4
OCA 09-012	The Company states that PAWC does not offer a Supplemental Executive Retirement Plan (SERP)	No	1	5
OCA 09-030	Bad debt expense, bad debt write-offs, collections of written-off accounts, and billed revenues related to uncollectible accounts for the HTY, for the previous three year, monthly since the end of the HTY, and projected for the FPFTY ending June 30, 2025.	No	3	6 - 8
OCA 09-039	Breakdown of AWWSC costs charged to PAWC by account for the periods 12 months ended December 31, 2021, HTY, calendar 2022, calendar 2023, 12 months ended June 30, 2024, and the FPFTY; There is a written agreement between PAWC and AWWSC; AWWSC has balance sheets, income statements and general ledgers available for periods December 2021, December 2022, and June 2023; There are no financial statements available for the forecast periods; There are no budgets available covering the 12-month periods ending June 2024 and June 2025 because AWWSC budgets on a calendar year basis; Copies of balance sheets, income statements, and general ledgers for AWWSC.	No	9	9 - 17
OCA 09-070	PAWC's work force levels by type and the annualized payroll associated with PAWC's actual work force level in total and by type as of December 31, 2021, June 30, 2022, December 31, 2022, June 30, 2023, December 31, 2023, June 30, 2024, and June 30, 2025; All positions that PAWC has filled from June 30, 2023 through November 30, 2023; Annual payroll for the positions that PAWC has filled during the period June 30, 2023 through November 30, 2023; All positions hat have become vacant from June 30, 2023 through November 30, 2023; Annual payroll for the positions that have become vacant from June 30, 2023 through November 30, 2023; Work force level PAWC reflected for the 12 month period ending June 30, 2025; Amount of FTEs that PAWC reflected for the 12 month period ending June 30, 2025 that are currently filled positions as of November 21, 2023; Annual payroll expense that PAWC is requesting for the 12 month period ending June 30, 2025; Amount of FTEs that PAWC reflected for the 12 month period ending June 30, 2025 that represent positions that are not currently filled positions; Amount of payroll expense for the 12 month period ending June 30, 2025 that PAWC is requesting for the currently unfilled positions.	No	5	18 - 22
OCA 12-006	As related to the Brentwood acquisition: Amounts of rate base for acquired plant and new utility plant relating to or caused by Brentwood system reflected its HTY, FTY, and FPFTY; Amounts of operating expenses and other taxes expenses in its HTY, FTY, and FPFTY; Amounts of revenues related to the acquisition reflected in its HTY, FTY, and FPFTY; Amounts of any other costs related to the acquisition reflected in its HTY, FTY and FPFTY; Date that PAWC assumed the acquisition would be closed; Listings of all projected plant additions that PAWC assumed that would occur after PAWC's assumed closing date; Number of customers reflected for the acquisition; Quantities of utility sales reflected for the acquisition; Copy of Commission Order approving or denying the aquisition; Complete copy of all accounting entries related to the closing; Supporting workpapers and calculations for the related rate base amounts; Itemization of all legal expenses, consulting expenses, and affiliated service company charges; Copy of each legal and consulting expense invoice to PAWC over $5,000; Number of workforce positions PAWC expects to acquire; Amounts of salary and wages for each position PAWC expects to acquire; Amounts of employee benefits for each workforce position PAWC expects to acquire; Explanation and supporting calculations concerning how the acquisition affected and projected to affect, PAWC's allocation of costs between PAWC's water and wastewater operation; Explanation and supporting calculations concerning how the acquisition affected, and is projected to affect, the allocation and charging of costs to PAWC from AWWSC; Additional information that PAWC believes should be considered in determining the impact on PAWC's calculated HTY, FTY, and FPFTY utility revenue requirements. (Attachments not included)	No	3	23 - 25
OCA 12-008	As related to the Sadsbury acquisition: Amounts of rate base for acquired plant and new utility plant relating to or caused by Brentwood system reflected its HTY, FTY, and FPFTY; Amounts of operating expenses and other taxes expenses in its HTY, FTY, and FPFTY; Amounts of revenues related to the acquisition reflected in its HTY, FTY, and FPFTY; Amounts of any other costs related to the acquisition reflected in its HTY, FTY and FPFTY; Date that PAWC assumed the acquisition would be closed; Listings of all projected plant additions that PAWC assumed that would occur after PAWC's assumed closing date; Number of customers reflected for the acquisition; Quantities of utility sales reflected for the acquisition; Copy of Commission Order approving or denying the aquisition; Complete copy of all accounting entries related to the closing; Supporting workpapers and calculations for the related rate base amounts; Itemization of all legal expenses, consulting expenses, and affiliated service company charges; Copy of each legal and consulting expense invoice to PAWC over $5,000; Number of workforce positions PAWC expects to acquire; Amounts of salary and wages for each position PAWC expects to acquire; Amounts of employee benefits for each workforce position PAWC expects to acquire; Explanation and supporting calculations concerning how the acquisition affected and projected to affect, PAWC's allocation of costs between PAWC's water and wastewater operation; Explanation and supporting calculations concerning how the acquisition affected, and is projected to affect, the allocation and charging of costs to PAWC from AWWSC; Additional information that PAWC believes should be considered in determining the impact on PAWC's calculated HTY, FTY, and FPFTY utility revenue requirements. (Attachments not included)	No	3	26 - 28
OCA 12-010	As related to the Farmington Township acquisition: Amounts of rate base for acquired plant and new utility plant relating to or caused by Brentwood system reflected its HTY, FTY, and FPFTY; Amounts of operating expenses and other taxes expenses in its HTY, FTY, and FPFTY; Amounts of revenues related to the acquisition reflected in its HTY, FTY, and FPFTY; Amounts of any other costs related to the acquisition reflected in its HTY, FTY and FPFTY; Date that PAWC assumed the acquisition would be closed; Listings of all projected plant additions that PAWC assumed that would occur after PAWC's assumed closing date; Number of customers reflected for the acquisition; Quantities of utility sales reflected for the acquisition; Copy of Commission Order approving or denying the aquisition; Complete copy of all accounting entries related to the closing; Supporting workpapers and calculations for the related rate base amounts; Itemization of all legal expenses, consulting expenses, and affiliated service company charges; Copy of each legal and consulting expense invoice to PAWC over $5,000; Number of workforce positions PAWC expects to acquire; Amounts of salary and wages for each position PAWC expects to acquire; Amounts of employee benefits for each workforce position PAWC expects to acquire; Explanation and supporting calculations concerning how the acquisition affected and projected to affect, PAWC's allocation of costs between PAWC's water and wastewater operation; Explanation and supporting calculations concerning how the acquisition affected, and is projected to affect, the allocation and charging of costs to PAWC from AWWSC; Additional information that PAWC believes should be considered in determining the impact on PAWC's calculated HTY, FTY, and FPFTY utility revenue requirements. (Attachments not included)	No	3	29 - 31
OCA 12-012	As related to the Audubon Water Company acquisition: Amounts of rate base for acquired plant and new utility plant relating to or caused by Brentwood system reflected its HTY, FTY, and FPFTY; Amounts of operating expenses and other taxes expenses in its HTY, FTY, and FPFTY; Amounts of revenues related to the acquisition reflected in its HTY, FTY, and FPFTY; Amounts of any other costs related to the acquisition reflected in its HTY, FTY and FPFTY; Date that PAWC assumed the acquisition would be closed; Listings of all projected plant additions that PAWC assumed that would occur after PAWC's assumed closing date; Number of customers reflected for the acquisition; Quantities of utility sales reflected for the acquisition; Copy of Commission Order approving or denying the aquisition; Complete copy of all accounting entries related to the closing; Supporting workpapers and calculations for the related rate base amounts; Itemization of all legal expenses, consulting expenses, and affiliated service company charges; Copy of each legal and consulting expense invoice to PAWC over $5,000; Number of workforce positions PAWC expects to acquire; Amounts of salary and wages for each position PAWC expects to acquire; Amounts of employee benefits for each workforce position PAWC expects to acquire; Explanation and supporting calculations concerning how the acquisition affected and projected to affect, PAWC's allocation of costs between PAWC's water and wastewater operation; Explanation and supporting calculations concerning how the acquisition affected, and is projected to affect, the allocation and charging of costs to PAWC from AWWSC; Additional information that PAWC believes should be considered in determining the impact on PAWC's calculated HTY, FTY, and FPFTY utility revenue requirements. (Attachment not included)	No	3	32 - 34

OCA 12-014	As related to the BASA acquisition: Amounts of rate base for acquired plant and new utility plant relating to or caused by Brentwood system reflected its HTY, FTY, and FPFTY; Amounts of operating expenses and other taxes expenses in its HTY, FTY, and FPFTY; Amounts of revenues related to the acquisition reflected in its HTY, FTY, and FPFTY; Amounts of any other costs related to the acquisition reflected in its HTY, FTY and FPFTY; Date that PAWC assumed the acquisition would be closed; Listings of all projected plant additions that PAWC assumed that would occur after PAWC's assumed closing date; Number of customers reflected for the acquisition; Quantities of utility sales reflected for the acquisition; Copy of Commission Order approving or denying the aquisition; Complete copy of all accounting entries related to the closing; Supporting workpapers and calculations for the related rate base amounts; Itemization of all legal expenses, consulting expenses, and affiliated service company charges; Copy of each legal and consulting expense invoice to PAWC over $5,000; Number of workforce positions PAWC expects to acquire; Amounts of salary and wages for each position PAWC expects to acquire; Amounts of employee benefits for each workforce position PAWC expects to acquire; Explanation and supporting calculations concerning how the acquisition affected and projected to affect, PAWC's allocation of costs between PAWC's water and wastewater operation; Explanation and supporting calculations concerning how the acquisition affected, and is projected to affect, the allocation and charging of costs to PAWC from AWWSC; Additional information that PAWC believes should be considered in determining the impact on PAWC's calculated HTY, FTY, and FPFTY utility revenue requirements. (Attachments not included)	No	3	35 - 37
OCA 15-013	PAWC offers an Executive Retirement Plan ERP instead of a SERP; The amount listed under Account No. 50630000 in the HTY should have been booked to the parent company instead of the Service Company.	No	1	38
OCA 18-013	Reconciliation of the three positions that PAWC is actively recruiting; Reconciliation of the three positions that PAWC anticipates filing by June 30, 2024; The 43 positions related to acquisitions are reflected in Exhibit 3-B of PAWC's filing.	No	2	39 - 40
OCA 21-003	Brentwood wastewater acquisition: As it relates to the amounts for acquired plant in service and new utility plant in service (post-acquisition), breakout of FPFTY plant in service amount of $22.695 million between the purchase price in the related Section 1329 proceeding and the post-acquisition costs included in PAWC's filing in the current rate case proceeding; As it relates to the amounts reflected in HTY, FTY, and FPFTY operating and tax expenses, explanation of why does Company Exhibit 3-B, page 308 not reflect the FPFTY amounts for Bad Debt expense of $63,404, Miscellaneous expense of $8,863, Transportation expense of $3,551, and Amortization of Rate Case expense of $5,370; Referring to OCA 12-06(e), the amount included in FPFTY operating revenue at current rates reflects the Present Rate revenue at the FTY and FPFTY; Pursuant to the amounts included in plant in service, the related depreciation and amortization expense included in the FTY and FPFTY; Pursuant to the amounts included in plant in service, the related ADIT included in rate base for the FTY and FPFTY; The Brentwood wastewater system was not acquired during the HTY.	No	2	41 - 42
OCA 21-004	Sadsbury Township Municpal Authority ("STMA") acquisition: All requested amounts in OCA 12-08 and OCA 12-09 are embedded in the overall Wastewater SS General Operations amounts; Reconciliation of plant in service discrepancy; Amounts in rate base in Wastewater SSS General Operations that relate specifically to the STMA acquisition for the HTY, FTY, and FPFTY; The amounts shown on Exhibit 3-B, page 306 reflect the entirety of the amounts in operating and tax expenses; The amount included in FPFTY operating revenue totals $471,228; Related depreciation expense and ADIT for Water Operations in total; Amortization expense related to STMA transaction costs claimed in the FTY and FPFTY; Amount of property tax expense projected in the FPFTY.	No	3	43 - 45
OCA 21-005	Farmington Township (water system) acquisition: All requested amounts in OCA 12-10 and OCA 12-11 are embedded in the overall Water Operations amounts; Reconciliation of plant in service discrepancy; Amounts in rate base in PAWC's Water Operations that relate specifically to the Farmington Township water system acquisition for the HTY, FTY, and FPFTY; The amounts shown on Exhibit 3-B, page 303 reflect the entirety of the amounts in operating and tax expenses; The amount included in FPFTY operating revenue totals $266,371; Related depreciation expense, property tax expense, and ADIT for Water Operations in total; Related Amortization expense included in the FTY and FPFTY pursuant to the amounts included in plant in service.	No	3	46 - 48
OCA 21-006	Farmington Township (wastewater system) acquisition: All requested amounts in OCA 12-10 and OCA 12-11 are embedded in the overall Wastewater SSS General Operations amounts; Reconciliation of plant in service discrepancy; Amounts in rate base in PAWC's Wastewater SSS General Operations that relate specifically to the Farmington Township wastewater system acquisition for the HTY, FTY, and FPFTY; The amounts shown on Exhibit 3-B, page 305 reflect the entirety of the amounts in operating and tax expenses; The amount included in FPFTY operating revenue totals $322,926; Related depreciation expense, property tax expense, and ADIT for Wastewater SSS General Operations; Related amortization expense included in the FTY and FPFTY pursuant to the amounts included in plant in service.	No	3	49 - 51
OCA 21-007	Audubon Water Company acquisition: All requested amounts in OCA 12-12 and OCA 12-13 are embedded in the overall Water Operations amounts; Reconciliation of plant in service discrepancy; Amounts in rate base in PAWC's Water Operations that relate specifically to the Audubon Water Company acquisition for the FTY and FPFTY; The amounts shown on Exhibit 3-B, page 304 reflect the entirety of the amounts in operating and tax expenses; The amount included in FPFTY operating revenue totals $2,965,024; Related depreciation expense and ADIT for Water Operations in total; Amortization expense related to Audubon transaction costs and UPAA claimed in the FPFTY; Amount of property tax expense projected in the FPFTY.	No	3	52 - 54
OCA 21-009	Amount of revenue requirement in the FPFTY that PAWC is requesting related to the Audubon Water Company acquisition.	No	1	55
OCA 21-010	Amount of revenue requirement in the FPFTY that PAWC is requesting related to the STMA acquisition.	No	1	56
OCA 21-011	Amount of revenue requirement in the FPFTY that PAWC is requesting related to the Farmington Township wastewater system acquisition.	No	1	57
OCA 21-012	Amount of revenue requirement in the FPFTY that PAWC is requesting related to the Farmington Township water system acquisition.	No	1	58
OCA 22-001	PAWC became aware of the Management and Operations Audit report in Docket No. D-2022-3035217 during the preparation of the current rate case; PAWC claims that many of the MOA recommendations that PAWC reflected have no direct correlation to the current rate case or the proposed revenue requirement.	No	1	59
OCA 22-003	Annual expense reflected in account 675.8 in the HTY, FTY, and FPFTY; PAWC has eliminated its external board as of December 31, 2023; Cost of American Water Works board member allocated to PAWC.	No	2	60 - 61
OCA 22-008	Amount of identifiable and quantifiable cost savings contained in the MOA that PAWC reflected in the FTY and FPFTY.	No	1	62
OCA 26-001	Reconciliation of each of the 49 positions from OCA 09-070 Attachment to the Volume 4, 4c Compensation Adjustment Excel file; For each of the 49 terminated/vacant positions, the number of positions filled to date and for each such position, the annual payroll amount in the FPFTY and the date which each position was filled; Identification of any additional positions that became vacant after November 27, 2023 and for each such position, the related annual payroll amounts in the FPFTY.	No	5	63 - 67
OCA 26-005	Amounts budgeted/forecasted by PAWC's books related to Oncourse Home Solutions for the FTY and FPFTY.	No	1	68
OCA 26-015	Amounts of (1) revenue and (2) expenses PAWC recorded related to warranty services for the HTY, calendar year 2022, and calendar year 2023.	No	1	69
OCA 26-022	For each third party call center contractor: Amounts recorded in PAWC's books by month in 2022 and 2023; Amounts recorded in PAWC's books by month in the HTY; Amounts budgeted/forecasted by PAWC for the FTY and FPFTY.	No	2	70 - 71
OCA 26-027	Neither Gannett Fleming nor PAWC proposed depreciation rates in the BASA acquisition proceeding, Docket No. A-2022-3037047. The Gannett Fleming Exhibit 7 from that proceeding reflects the survivor curves for each account.	No	1	72
OCA 26-028	BASA depreciation rates that are being proposed in the current PAWC rate case based on the Gannett Fleming depreciation rate study for each period HTY, FTY, and FPFTY.	No	2	73 - 74
OCA 26-029	Neither Gannett Fleming nor PAWC proposed depreciation rates in the Brentwood acquisition proceeding, Docket No. A-2021-3024058. The Gannett Fleming Exhibit 7 from that proceeding reflects the survivor curves for each account.	No	1	75
OCA 26-030	BASA depreciation rates that are being proposed in the current PAWC rate case based on the Gannett Fleming depreciation rate study for each period FTY, and FPFTY.	No	1	76
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OCA 09-011

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Stock-Based Compensation.

a. Please list, by amount and account, all stock-based compensation expense charged to PAWC during the HTY, including but not limited to executive stock options, performance share awards, accruals made pursuant to Accounting Standard Codification (ASC) 718 and any other stock-based compensation awards that resulted in cost being charged to PAWC during the HTY.
b. Provide a description of each distinct stock-based compensation program that resulted in charges to PAWC during the HTY.
c. Please break out the stock-based compensation included in the HTY by (1) type of plan (e.g., stock options, performance shares, etc.), (2) stock-based compensation direct charged to PAWC, and (3) each type of stock-based compensation that was allocated to PAWC from the affiliated Service Company.
d. Please explain fully and in detail the amount of stock-based compensation that the Company has included in cost of service for the FPFTY ending June 30, 2025.
e. Provide a description of each stock-based compensation program that PAWC has requested be reflected in cost of service for the FPFTY ending June 30, 2025.
f. Please break out the stock-based compensation included in the FPFTY ending June 30, 2025 cost of service by (1) type of plan (e.g., stock options, performance shares, etc.), (2) stock-based compensation direct charged to PAWC, and (3) stock-based compensation that was allocated to PAWC from the affiliated Service Company.

Response:

a. Please refer to the table below for the breakdown of stock-based compensation expense charged to PAWC during the HTY ended June 30, 2023:

Description	GL Account	Expense Amount
Restricted Stock Units	50171800	$71,980
Performance Stock Units	50171800	250,479
Total - GL 50171800		**$322,459**

b. Please refer to Confidential Volume 6b – FR III.22 for a description of the 2022 & 2023 Long Term Performance Plan, which is a stock-based compensation program.

c. Please refer to the table below for the stock-based compensation included in the HTY ended June 30, 2023, as well as pro forma expenses for the 12 months ended June 30, 2024 and June 30, 2025. Please note that the amounts projected in the FTY and FPFTY are not available by type of stock-based compensation (i.e., restricted stock units and performance stock units) so an allocation was performed based on actual data from the HTY to break out these costs.

	GL Account Name	GL Account	12 Months Ended 6/30/2023	12 Months Ended 6/30/2024	12 Months Ended 6/30/2025
PAWC	Restricted Stock Units	50171800	$71,980	$180,590	$186,357
PAWC	Performance Stock Units	50171800	250,479	628,427	648,491
	Total - PAWC		**$322,459**	**$809,017**	**$834,848**
AWWSC to PAWC	Restricted Stock Units	50171800	$759,261	$831,673	$915,119
AWWSC to PAWC	Performance Stock Units	50171800	2,642,110	2,894,092	3,184,471
	Total - AWWSC to PAWC		**$3,401,371**	**$3,725,765**	**$4,099,590**
	Grand Total		**$3,723,830**	**$4,534,782**	**$4,934,438**

d. Please refer to the response provided in part c. Employees in salary grade 50 and above are eligible for Long Term Performance Plan awards. The pro forma expenses for 2024 & 2025 were calculated by taking annualized base salary for each year for eligible employees and multiplying it by the target award percentage by salary level.

e. Please refer to Confidential Volume 6b – FR III.22 for the 2022 and 2023 Long Term Performance Plan documents.

f. Please refer to the response provided in part c.

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OCA 09-012

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Supplemental Executive Retirement Plan (SERP).

a. Please provide the level of SERP expense, by account, included in the Company's cost of service for the HTY. Include with your response all charges to PAWC from the affiliated Service Company for SERP.
b. Please provide the level of SERP expense, by account, included in the Company's proposed cost of service for the FPFTY ending June 30, 2025.
c. Provide the two most recent actuarial reports for SERP.
d. Identify and provide all actuarial studies, reports and estimates used for SERP for the HTY, as well as for calendar years 2022, 2023 and the FPFTY ending June 30, 2025.

Response:

The Company does not offer SERP as a benefits plan; therefore, there is no information to report.

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R-2023-3043190 (Wastewater)
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OCA 09-030

Responsible Witness: Cas Swiz, Senior Director of Rates and Regulatory

Question:

Uncollectibles Expense. Please provide the following monthly data related to uncollectible accounts for the HTY, for the previous three years, monthly since the end of the HTY, and projected for the FPFTY ending June 30, 2025:

a. Bad debt expense;
b. Bad debt write-offs;
c. Collections of written-off accounts; and
d. Billed revenues

Response:

Please refer to OCA 09-030_Attachment for the requested data related to uncollectible accounts. For the HTY ended June 30, 2023, and previous three years, please refer to page 1 of the attachment. For the monthly data since the end of the HTY, please refer to page 2 of the attachment. Please note that October 2023 is the last month of actual data available at the time of this response. The Company does not project uncollectible expense at the level of detail requested in items a, b, and c. The Company projected total uncollectible expense to be reflected in rates as a percentage of forecasted revenue, as explained in the direct testimony of Company witness Swiz (PAWC Statement No. 8, pages 3-5), using a two-year historic average for the July 1, 2021 through June 30, 2023 period to normalize the rate of uncollectible accounts to pre-pandemic levels and account for the application of Low-Income Household Water Assistance Program ("LIHWAP") funds to reduce unpaid balances.

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Response to Office of Consumer Advocate Set 09-030

	2022	2022	2022	2022	2022	2022	2023	2023	2023	2023	2023	2023	HTY
HTY	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
[b] Bad debt write-offs	864,046	1,311,600	1,054,744	726,123	966,428	849,385	911,836	741,985	671,212	381,646	712,449	954,600	**10,146,054**
[c] Collections of written-off accounts	48,629	80,926	30,252	62,704	88,409	113,593	84,031	45,017	29,008	39,547	44,013	105,259	**771,389**
** Bad debt allowance	(64,026)	(128,697)	(103,492)	304,957	(102,939)	120,774	(1,636,042)	(199,651)	(380,633)	259,126	(51,912)	(355,317)	**(2,337,851)**
[a] Bad debt expense	**751,391**	**1,101,977**	**920,999**	**968,376**	**775,080**	**856,566**	**(808,237)**	**497,317**	**261,570**	**601,225**	**616,524**	**494,024**	**7,036,814**
[d] Billed revenues	**73,949,510**	**72,084,709**	**73,041,802**	**69,595,840**	**65,712,181**	**66,169,321**	**73,288,265**	**71,958,098**	**74,060,314**	**79,356,343**	**78,959,354**	**88,499,365**	**886,675,101**

	2021	2021	2021	2021	2021	2021	2022	2022	2022	2022	2022	2022	1 Year Previous to HTY
1 Year Previous to HTY	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
[b] Bad debt write-offs	684,084	1,540,881	1,438,477	796,048	989,454	1,126,002	877,895	778,408	675,613	542,909	502,507	784,691	**10,736,970**
[c] Collections of written-off accounts	87,428	38,304	33,254	75,576	46,769	22,998	47,881	30,531	89,708	59,690	23,797	6,106	**562,041**
** Bad debt allowance	249,643	(261,409)	(1,276,998)	223,325	(187,278)	(268,179)	52,136	(41,019)	76,418	(46,409)	194,984	(39,513)	**(1,324,299)**
[a] Bad debt expense	**846,299**	**1,241,168**	**128,225**	**943,797**	**755,407**	**834,825**	**882,150**	**706,858**	**662,323**	**436,811**	**673,694**	**739,073**	**8,850,630**
[d] Billed revenues	**70,049,613**	**68,571,123**	**59,343,626**	**65,069,036**	**60,145,484**	**62,149,388**	**65,137,526**	**64,398,426**	**60,878,397**	**67,365,388**	**63,462,738**	**69,329,785**	**775,900,531**

	2020	2020	2020	2020	2020	2020	2021	2021	2021	2021	2021	2021	2 Years Previous to HTY
2 Years Previous to HTY	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
[b] Bad debt write-offs	457,720	280,152	302,402	232,689	396,523	463,589	375,697	318,460	544,632	353,174	480,228	570,779	**4,776,043**
[c] Collections of written-off accounts	46,781	79,268	34,132	43,333	36,891	76,867	26,110	20,745	60,293	47,451	55,919	70,961	**598,751**
** Bad debt allowance	332,908	637,945	992,106	901,336	512,777	578,609	643,988	498,426	261,643	186,263	334,478	332,607	**6,213,084**
[a] Bad debt expense	**743,847**	**838,829**	**1,260,376**	**1,090,691**	**872,409**	**965,331**	**993,574**	**796,140**	**745,981**	**491,985**	**758,788**	**832,425**	**10,390,376**
[d] Billed revenues	**65,766,049**	**68,744,247**	**64,256,823**	**61,494,808**	**60,713,141**	**59,919,247**	**63,753,279**	**62,450,681**	**59,381,254**	**65,592,972**	**63,743,897**	**66,835,674**	**762,652,071**

	2019	2019	2019	2019	2019	2019	2020	2020	2020	2020	2020	2020	3 Years Previous to HTY
3 Years Previous to HTY	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
[b] Bad debt write-offs	830,044	1,192,193	927,472	952,018	762,580	1,055,531	857,366	619,444	705,405	525,096	482,901	604,477	**9,514,528**
[c] Collections of written-off accounts	271,444	93,120	104,740	120,807	78,413	178,838	92,538	272,822	99,028	120,982	64,166	55,235	**1,552,132**
** Bad debt allowance	160,969	(266,568)	45,577	(537,716)	171,223	3,337,630	(67,358)	245,260	410,359	232,704	789,405	(300,014)	**4,221,469**
[a] Bad debt expense	**719,569**	**832,504**	**868,309**	**293,495**	**855,390**	**4,214,322**	**697,469**	**591,882**	**1,016,737**	**636,818**	**1,208,140**	**249,229**	**12,183,865**
[d] Billed revenues	**58,954,327**	**61,294,296**	**60,524,011**	**57,211,805**	**57,536,948**	**56,850,599**	**57,495,681**	**57,890,779**	**55,003,450**	**57,445,646**	**57,903,383**	**63,172,278**	**701,283,203**

Moratorium Period - Pennsylvania-American Water Company ceased service terminations for non-payment from March 12, 2020 through March 31, 2021

** Bad Debt Allowance represents the required establishment of the provision for uncollectible accounts, and the necessary adjustments to this balance monthly. It also includes the net activity associated with the COVID-19 Emergency deferral, authorized under Docket No. P-2020-3022426.

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Post-HTY Jul 2023-Oct 2023	2023 Jul	2023 Aug	2023 Sep	2023 Oct	Post-HTY Jul 2023-Oct 2023 Total
[b] Bad debt write-offs	902,299	1,015,116	979,007	1,128,323	**4,024,745**
[c] Collections of written-off accounts	38,476	43,377	34,912	36,683	**153,449**
** Bad debt allowance	494,928	78,726	(259,659)	(75,180)	**238,815**
[a] Bad debt expense	**1,358,751**	**1,050,465**	**684,436**	**1,016,459**	**4,110,111**
[d] Billed revenues	**83,679,568**	**85,388,974**	**88,163,902**	**81,308,124**	**338,540,568**

** Bad Debt Allowance represents the required establishment of the provision for uncollectible accounts, and the necessary adjustments to this balance monthly. It also includes the net activity associated with the COVID-19 Emergency deferral, authorized under Docket No. P-2020-3022426.

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Office of Consumer Advocate Set 9

OCA 09-039

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

American Water Works Service Company (AWWSC).

a. During each of the following periods were any costs actually charged, or are any projected to be charged, to PAWC from AWWSC? If so, identify all AWWSC costs charged to PAWC by account for each period: (1) the 12 months ended December 31, 2021, (2) the HTY (3) calendar 2022, (4) calendar 2023, (5) the 12 months ending June 30, 2024 and (6) the FPFTY ending June 30, 2025.
b. Is there any written agreement between PAWC and AWWSC? If so, identify and provide it.
c. Does AWWSC have a balance sheet, income statement, statement of cash flows, general ledger, trial balance, budgets or forecasts for any of the following periods: (1) the 12 months ended December 31, 2021, (2) the HTY (3) calendar 2022, (4) calendar 2023, (5) the 12 months ending June 30, 2024 and (6) the FPFTY ending June 30, 2025.
d. If the answer to part c is "yes", identify which of those items that AWWSC has and provide a complete copy of each.

Response:

a. Please see OCA 09-039_Attachment 1 for the breakdown of AWWSC costs charged to PAWC by account for the periods requested. Please note that we did not forecast charges for the calendar year 2023 and included YTD actual charges through October 2023 in their place.

b. Yes, please see OCA 09-039_Attachment 2.

c. Yes, AWWSC has balance sheets, income statements and general ledgers available for the periods Dec 2021, Dec 2022, June 2023. There are no financial statements available for the forecast periods. Also, AWWSC budgets on a calendar year basis and no budgets are available covering the 12-month periods ending June 2024 and June 2025.

d. Please see OCA 09-039_Attachment 3 for the balance sheets; OCA 09-039_Attachment 4 for the income statements; OCA 09-039_Attachment 5 for the general ledger for the periods noted in part c above.

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American Water Works Service Company
Trial Balance - Income Statement
For the 12 Months Ending December 2021, December 2022 and June 2023

Text for B/S P&L item	Account Number	Company Code	December 2021	December 2022	June 2023
45000000 Service Company Revenue OPEX Interco	45000000	1033	(283,240,934)	(282,270,173)	(279,121,428)
45000001 Service Company Revenue CAPEX Interco	45000001	1033	(87,323,378)	(116,584,020)	(123,399,974)
45000002 Servco Company Revenue Market Based COs Interco	45000002	1033	(15,071,731)	(11,007,346)	(18,400,477)
Total: Management revenues			**(385,636,043)**	**(409,861,539)**	**(420,921,879)**
Total: Operating revenues			**(385,636,043)**	**(409,861,539)**	**(420,921,879)**
51510000 Purchased Power - Natural Account	51510000	1033	0	20,102	30
51520000 Fuel for Power Production	51520000	1033			36
Total: Fuel and power			**0**	**20,102**	**65**
Total: Production costs			**0**	**20,102**	**65**
50100000 Labor Natural Account	50100000	1033	123,099,772	122,447,794	129,318,491
50100001 Labor Expense Accrual	50100001	1033	451,746	47,488	(4,104,462)
50100002 Labor Expense - Intercompany	50100002	1033	0	37,178	42,897
50109900 Labor Capitalized Credits	50109900	1033	269,001	(24,047)	(30,385)
50110000 Labor Non-scheduled Overtime - Natural Account	50110000	1033	1,624,830	1,869,370	1,805,854
50120000 Labor Overtime - Natural Account	50120000	1033	76,528	60,284	61,978
50171000 Annual Performance Plan	50171000	1033	21,047,143	20,905,730	21,959,431
50171800 Compensation Expense - RSU/PSU	50171800	1033	11,742,422	15,676,734	18,100,080
50185000 Severance	50185000	1033	1,919,459	3,082,139	2,123,674
Total: Salaries and wages			**160,230,902**	**164,102,670**	**169,277,559**
50610000 Pension Expense	50610000	1033	7,475,304	6,615,560	5,082,383
50630000 Pension Expense - SERP	50630000	1033	59,858	152,769	152,769
Total: Pension expense			**7,535,162**	**6,768,329**	**5,235,152**
50510000 OPEB Expense	50510000	1033	174,995	218,759	185,140
50550000 Group Insurance Expense	50550000	1033	20,092,159	19,282,641	19,463,857
50550100 Group Insurance Capitalized Credits	50550100	1033	30,938	(2,058)	(3,441)
50560000 Health Savings Account Expense	50560000	1033	249,638	227,873	244,613

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American Water Works Service Company
Trial Balance - Income Statement
For the 12 Months Ending December 2021, December 2022 and June 2023

Text for B/S P&L item	Account Number	Company Code	December 2021	December 2022	June 2023
Total: Group insurance expense			**20,547,729**	**19,727,216**	**19,890,169**
50421000 401k Expense	50421000	1033	3,918,428	3,873,550	4,036,675
50421100 401k Expense Cap Credits	50421100	1033	7,839	(805)	(1,059)
50422000 Defined Contribution Expense	50422000	1033	4,830,238	4,828,243	5,057,993
50422100 Defined Contribution Plan Exp Cap Credits	50422100	1033	10,241	(1,253)	(1,586)
50423000 Employee Stock Purchase Plan Expense	50423000	1033	585,296	582,908	565,506
50424000 DCP Restoration Expense	50424000	1033	300,018	0	0
50425000 401k Restoration Expense	50425000	1033	151,355	0	0
50426000 Retiree Medical Expense	50426000	1033	154,650	111,843	147,328
50450000 Other Welfare - Natural Account	50450000	1033	498,605	1,058,414	1,031,776
50451000 Employee Awards	50451000	1033	207,974	211,010	288,912
50452000 Employee Physical Exams	50452000	1033	19,778	6,810	44,806
50456000 Tuition Aid	50456000	1033	430,456	260,034	190,821
50457000 Training	50457000	1033	673,484	650,883	662,225
50458000 Referral Bonus	50458000	1033	52,327	16,063	27,260
Total: Other benefits			**11,840,689**	**11,597,700**	**12,050,657**
Total: Employee-related costs			**200,154,482**	**202,195,916**	**206,453,537**
Management fees			0	0	0
53110000 Contract Svc-Eng - Natural Account	53110000	1033	74,228	60,232	124,140
53150000 Contract Svc-Other - Natural Account	53150000	1033	63,509,956	66,789,896	75,951,976
53151000 Contract Svc-Temp Empl - Natural Account	53151000	1033	1,303,731	1,399,513	1,536,375
53152000 Contract Svc-Lab Testing - Water Treatment	53152000	1033	(276,291)	(219,579)	(135,306)
53153000 Contract Services - Accounting	53153000	1033	1,700,866	813,745	486,711
53154000 Contract Services - Audit Fees	53154000	1033	1,771,153	1,791,037	1,802,272
53155000 Contract Services - Legal	53155000	1033	1,653,423	1,518,232	1,627,387
53157000 Contract Services - Outplacement	53157000	1033	6,000	4,200	29,150

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Text for B/S P&L item	Account Number	Company Code	December 2021	December 2022	June 2023
53159100 Contract Services - Hardware Services	53159100	1033	176,313	4,257,214	6,765,873
53185000 Contract Services - Interco	53185000	1033	2,016,584	1,858,168	1,918,583
Total: Contracted services			**71,935,962**	**78,272,657**	**90,107,161**
52532000 Electricity - Natural Account	52532000	1033	655,740	588,476	441,311
52546000 Grounds Keeping - Natural Account	52546000	1033	9,766	22,910	19,238
52548000 Heating Oil/Gas - Natural Account	52548000	1033	26,822	16,315	1,602
52550000 Janitorial - Natural Account	52550000	1033	175,029	107,375	62,612
52571000 Security Service - Natural Account	52571000	1033	116,183	181,692	142,316
52578000 Trash Removal - Natural Account	52578000	1033	16,340	34,020	25,458
52583000 Water & WW - Natural Account	52583000	1033	22,357	6,620	2,174
Total: Building Maintenance and Services			**1,022,237**	**957,408**	**694,712**
52574000 Telephone - Natural Account	52574000	1033	2,404,169	4,670,575	4,460,809
52574100 Cell Phone - Natural Account	52574100	1033	901,304	1,174,348	1,243,105
52574200 Data Lines - Admin & General	52574200	1033	3,974,593	451,371	483,672
52574300 Wireless - Service First - Natural Account	52574300	1033	284,088	214,290	194,555
Total: Telecommunication expenses			**7,564,154**	**6,510,583**	**6,382,140**
52562500 Overnight Shipping - Natural Account	52562500	1033	252,759	258,250	302,407
52566000 Postage - Natural Account	52566000	1033	124,393	215,039	176,009
52566700 Printing	52566700	1033	21,111	14,098	11,674
Total: Postage, printing and stationary			**398,263**	**487,386**	**490,089**
52510000 Bank Service Charges - Natural Account	52510000	1033	250	0	0
52512500 Books & Publications	52512500	1033	21,761	58,593	113,426
52526100 Credit Line Fees Interco	52526100	1033	0	1,403,024	1,731,797
52542000 Forms - Natural Account	52542000	1033			40
52562000 Office & Admin Supplies - Natural Account	52562000	1033	183,620	612,995	414,550
52571500 Software Licenses	52571500	1033	12,336,071	19,134,854	16,665,995

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52582000 Uniforms - Natural Account	52582000	1033	(5,240)	(17,697)	(23,271)
52599800 PCard Undistributed	52599800	1033	15,059	784	9,845
Total: Office supplies and services			**12,551,520**	**21,192,554**	**18,912,383**
52534000 Employee Expenses	52534000	1033	524,371	1,834,965	2,220,062
52534200 Conferences & Registration	52534200	1033	42,384	114,366	99,704
52535000 Meals Deductible	52535000	1033	420,218	776,330	767,135
52535100 Meals Non-Deductible	52535100	1033	374	6,313	2,329
52567000 Relocation Expenses	52567000	1033	190,432	660,003	699,989
Total: Employee related expense travel & entertainme			**1,177,779**	**3,391,977**	**3,789,219**
52000000 M & S (O&M) - Natural Account	52000000	1033	584,711	261,731	318,154
52001600 M & S Oper - Admin & General	52001600	1033	2,257	5,311	5,445
52500000 Misc Exp (O&M) - Natural Acct	52500000	1033	(1,325,300)	(2,771,500)	(2,402,836)
52513200 Business Development	52513200	1033	28,176	120,819	117,139
52514000 Charitable Contribution Deductible	52514000	1033	86,916	500	3,500
52514700 Community Partnerships	52514700	1033	1,838	2,350	6,658
52514900 Customer Education	52514900	1033	20	0	3,807
52514901 Customer Education Communication - Reg	52514901	1033	3,614	1,625	75
52514905 Customer Education Communication - Printed	52514905	1033	85,152	65,073	67,554
52514907 Customer Education - Press Releases	52514907	1033	89,740	90,858	93,063
52514910 Customer Education - Online Development/Production	52514910	1033	1,378	55,548	50,963
52515000 Community Relations - Events	52515000	1033	5,020	12,392	13,142
52515001 Community Relations - Specialty	52515001	1033	0	1,213	2,782
52522000 Community Relations	52522000	1033	49,206	20,551	15,551
52524000 Co Dues/Membership Deductible	52524000	1033	868,695	1,022,779	1,083,968
52524100 Co Dues/Membership Nondeductible	52524100	1033	250	0	0
52527000 Directors Fees	52527000	1033	1,244,725	1,154,247	1,218,523

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Text for B/S P&L item	Account Number	Company Code	December 2021	December 2022	June 2023
52527100 Directors Expenses	52527100	1033	105,269	189,533	192,536
52540000 Amort Bus Services Proj Exp	52540000	1033	0	12,500	0
52548100 Hiring Costs	52548100	1033	52,125	125,938	126,559
52549000 Injuries and Damages	52549000	1033	(3,554,561)	205,334	43,000
52554500 Lab Supplies	52554500	1033	874,861	1,076,085	1,076,672
52564000 Penalties Nondeductible	52564000	1033	3,273	815	8,346
52568000 Research & Development	52568000	1033	4,007	(338,487)	(134,955)
52585000 Discounts Available	52585000	1033	(51,874)	(81,671)	(67,077)
Total: Miscellaneous expenses			**(840,504)**	**1,233,544**	**1,842,570**
54110000 Rents-Real Property - Natural Account	54110000	1033	1,569,828	3,029,168	2,413,648
54115000 Rents-Real Property Interco	54115000	1033	4,781,194	5,111,404	5,252,608
54140000 Rents-Equipment - Natural Account	54140000	1033	105,096	224,239	62,816
Total: Rents			**6,456,118**	**8,364,810**	**7,729,072**
55000000 Transportation (O&M) - Natural Account	55000000	1033	3,298	(11,390)	(12,694)
55010100 Transportation Lease Costs	55010100	1033	34,925	(15,303)	16,308
55010200 Transportation Lease Fuel	55010200	1033	26,153	40,240	23,471
55010300 Transportation Lease Maint	55010300	1033	(19,369)	26,953	(454)
55010400 Transportation - Employee Reimbursement to Company	55010400	1033	89	953	514
55010500 Transportation - Reimburse Non-AW Vehicle Use	55010500	1033	77,631	162,070	194,231
Total: Transportation			**122,728**	**203,523**	**221,376**
Total: Operating supplies and services			**100,388,258**	**120,614,442**	**130,168,722**
57010000 Uncollectible Accounts Exp - Natural Account	57010000	1033	(61,010)	2,216	(7,742)
Total: Uncollectible accounts expense			**(61,010)**	**2,216**	**(7,742)**
52573000 Customer Accounting-Collection Agencies	52573000	1033	12,469,859	11,861,486	12,287,620
52573100 Customer Accounting-Forms	52573100	1033	4,694,744	4,486,139	4,657,357
52573200 Customer Accounting-Postage	52573200	1033	13,664,475	13,850,464	14,856,047

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Total: Customer accounting, other			**30,829,078**	**30,198,089**	**31,801,024**
55110000 Insurance Vehicle	55110000	1033	16,552	41,064	49,582
55710000 Insurance General Liabilty	55710000	1033	3,254,986	4,574,690	4,591,708
55711000 Insurance Casualty Reserve	55711000	1033	(381,367)	0	0
55720000 Insurance Workers Compensation	55720000	1033	1,225,531	1,209,617	1,208,074
55730000 Insurance Other	55730000	1033	382,160	287,268	293,659
55735000 Insurance Other - Intercompany	55735000	1033	588,692	1,544,014	2,017,394
55740000 Insurance Property	55740000	1033	187,551	213,891	215,688
Total: Insurance other than group			**5,274,105**	**7,870,545**	**8,376,105**
62502600 Misc Maint - Admin & General	62502600	1033	15,336,703	18,305,202	19,848,627
62520800 Misc Maint Permits - Natural Account	62520800	1033	3,967	0	0
Total: Maintenance supplies and services			**15,340,671**	**18,305,202**	**19,848,627**
88121000 Capital Movements - Non-Utility Property	88121000	1033	(23,751)	(35,327)	(35,327)
88121800 Capital Movements - Non-Utility Property - CWIP	88121800	1033	(76,475)	(23,207)	(23,180)
88900000 Capital Movements - Settlement	88900000	1033	100,225	58,534	58,507
Total: Capital movements			**0**	**0**	**0**
Total: Operation and maintenance expense			**351,925,583**	**379,206,511**	**396,640,338**
68011100 Depreciation Expense - Vehicles	68011100	1033	0	1,125	1,257
68011200 Depreciation Exp - Non-Utility Property	68011200	1033	20,198,234	20,293,448	16,527,639
Total: Depreciation			**20,198,234**	**20,294,573**	**16,528,896**
Total: Depreciation and amortization			**20,198,234**	**20,294,573**	**16,528,896**
69011000 FIT - Current	69011000	1033	(1,630,673)	1,626,232	1,215,262
69012000 FIT - Prior Year Adjustment	69012000	1033	49,076	0	0
Total: Current federal income taxes - operating			**(1,581,597)**	**1,626,232**	**1,215,262**
69021000 SIT - Current	69021000	1033	527,873	626,406	473,166
69022000 SIT - Prior Year Adjustment	69022000	1033	(116,939)	0	0

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Total: Current state income taxes - operating			**410,934**	**626,406**	**473,166**
Total: Current income taxes - operating			**(1,170,663)**	**2,252,638**	**1,688,428**
69062000 Deferred FIT - Prior Year Adjustment	69062000	1033	(93,693)	0	0
69065000 Deferred FIT - Other	69065000	1033	1,849,064	(1,823,373)	(1,417,368)
Total: Deferred federal income tax expense			**1,755,371**	**(1,823,373)**	**(1,417,368)**
69072000 Deferred SIT - Prior Year Adjustment	69072000	1033	131,063	0	0
69073500 Deferred SIT - Other	69073500	1033	(442,855)	(776,005)	(658,254)
Total: Deferred state income tax expense			**(311,792)**	**(776,005)**	**(658,254)**
Total: Deferred taxes			**1,443,579**	**(2,599,379)**	**(2,075,622)**
Total: Incomes Taxes -Operating			**272,916**	**(346,741)**	**(387,194)**
68520000 Property Taxes	68520000	1033	86,198	58,784	66,597
68532000 FUTA	68532000	1033	124,316	53,902	65,784
68532100 FUTA Cap Credits	68532100	1033	135	3	0
68533000 FICA	68533000	1033	10,254,953	9,930,529	10,307,629
68533100 FICA Cap Credits	68533100	1033	18,181	(1,821)	(2,284)
68535000 SUTA	68535000	1033	643,774	684,813	571,142
68535100 SUTA Cap Credits	68535100	1033	2,015	(139)	(162)
68543000 Other Taxes and Licenses	68543000	1033	1,419,403	843,625	641,274
Total: General taxes			**12,548,973**	**11,569,697**	**11,649,980**
Total: Operating expenses, net			**384,945,706**	**410,724,041**	**424,432,021**
Total: Operating Income (loss)			**(690,337)**	**862,502**	**3,510,142**
81815100 Interest Income - STD Intercompany	81815100	1033	(164,798)	(2,095,767)	(4,680,906)
Total: Interest income			**(164,798)**	**(2,095,767)**	**(4,680,906)**
Total: Other Income			**(164,798)**	**(2,095,767)**	**(4,680,906)**
75810000 Donations Deductible	75810000	1033	600	0	0
Total: Other miscellaneous deductions			**600**	**0**	**0**

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Text for B/S P&L item	Account Number	Company Code	December 2021	December 2022	June 2023
Total: Other Deductions			**600**	**0**	**0**
81035000 Interest Capital Lease Intercompany	81035000	1033	854,890	1,233,250	1,170,765
Total: Interest on long-term debt			**854,890**	**1,233,250**	**1,170,765**
Total: Interest Charges			**854,890**	**1,233,250**	**1,170,765**
Total: Other Income (Expenses)			**690,692**	**(862,517)**	**(3,510,141)**
Total: Income (loss) before income taxes			**355**	**(15)**	**1**
Total: Net income (loss)			**355**	**(15)**	**1**
Total: Net Income Available to common stockholders			**355**	**(15)**	**1**
Total: PROFIT & LOSS STATEMENT			**355**	**(15)**	**1**
Total: Net Profit			**0**	**(15)**	**(15)**
Total: Net Loss			**355**	**0**	

Pennsylvania-American Water Company
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Office of Consumer Advocate Set 9

OCA 09-070

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Payroll.

a. Identify PAWC's work force levels by type as of each of the following dates, in total, and by salaried, non-union hourly and union employees respectively: (1) December 31, 2021, (2) 6/30/2022 (3) 12/31/2022, (4) June 30, 2023, (5) 12/31/2023, (6) June 30, 2024 and (7) June 30, 2025.
b. Identify the annualized payroll associated with PAWC's actual work force level in total, and by salaried, non-union hourly and union employees respectively, as of each of the following dates: (1) December 31, 2021, (2) 6/30/2022 (3) 12/31/2022, (4) June 30, 2023, (5) 12/31/2023, (6) June 30, 2024 and (7) June 30, 2025.
c. Identify all positions that PAWC has filled from June 30, 2023 through November 30, 2023.
d. Identify the annual payroll for the positions that PAWC has filled during the period June 30, 2023 through November 30, 2023.
e. Identify all positions that have become vacant from June 30, 2023 through November 30, 2023.
f. Identify the annual payroll for the positions that have become vacant from June 30, 2023 through November 30, 2023.
g. What work force level has PAWC reflected for the 12 month period ending June 30, 2025?
h. How many of the FTE's that PAWC reflected for the 12 month period ending June 30, 2025 are currently filled positions as of the date of PAWC's response to this request?
i. What is the annual payroll expense that PAWC is requesting for the 12 month period ending June 30, 2025
j. How many of the FTE's that PAWC reflected for the 12 month period ending June 30, 2025 represent positions that are not currently filled positions?
k. What amount of payroll expense for the 12 month period ending June 30, 2025 is PAWC is requesting for the currently unfilled positions (that are identified in the response to part j)?

Response:

a-b. Please refer to OCA 09-070_Attachment for work force levels by type as well as the gross annualized payroll as of the dates requested. Please note that information as of 10/31/2023 has been provided for (5) above as data as of 12/31/2023 is not available.

c-d. Please refer to OCA 09-070_Attachment for the positions that PAWC has filled from June 30, 2023 through the date of this response.

e-f. Please refer to OCA 09-070_Attachment for the positions that have become vacant from June 30, 2023 through the date of this response.

g. Please refer to the response provided in part a which includes the work force level for the 12-month period ending June 30, 2025.

h. Please refer to the response provided in parts c & d above.

i. The annual payroll expense for the 12-month period ended June 30, 2025 that PAWC is requesting for the 1,294 FTE's is $78,940,092. This total is made up of $75,955,287 that is part of the Company's compensation adjustment and the remaining $2,984,805 is related to BASA WW Operations, Brentwood WW Operations, Farmington Water, Farmington Wastewater, and Audubon Water, which are included in the Company's Acquisition O&M expense adjustment.

j-k. As of the date of this response, there are 49 positions that are currently not filled. Of the 49 positions, there are 3 for which the Company is actively recruiting and 3 that the Company will be posting and anticipates filling the vacant positions before June 30, 2024. The remaining 43 positions are related to positions that will be added to staff upon time of closing of acquired systems (BASA WW, Brentwood WW, Farmington Water & WW, and Audubon Water).

Please refer to the table below for the annual payroll expense that PAWC is requesting for the currently unfilled positions for the 12-month period ended June 30, 2025:

	Count	6/30/2025 Payroll Expense
Positions Actively Being Recruited	3	$239,032
Positions Anticipated To Be Filled by 6/30/2024	3	116,498
Positions To Be Added To Staff - Acquisitions	43	2,984,805
Total	**49**	**$3,340,335**

Employee Subgroup	Employee Count	Annualized Gross Payroll
Hourly FT Non-Union	248	$18,385,493
Hourly FT Union	627	50,077,478
Hourly PT Non-Union	1	11,197
Salaried Exempt FT	288	31,733,257
Total - 12/31/2021	**1,164**	**$100,207,424**

Employee Subgroup	Employee Count	Annualized Gross Payroll
Hourly FT Non-Union	263	$19,593,258
Hourly FT Union	656	52,550,746
Hourly PT Non-Union	1	47,022
Salaried Exempt FT	306	34,611,261
Total - 06/30/2022	**1,226**	**$106,802,287**

Employee Subgroup	Employee Count	Annualized Gross Payroll
Hourly FT Non-Union	259	$19,206,808
Hourly FT Union	652	53,756,896
Hourly PT Non-Union	1	47,022
Salaried Exempt FT	308	34,966,461
Total - 12/31/2022	**1,220**	**$107,977,186**

Employee Subgroup	Employee Count	Annualized Gross Payroll
Hourly FT Non-Union	265	$20,711,347
Hourly FT Union	643	54,282,890
Hourly PT Non-Union	1	24,221
Salaried Exempt FT	311	36,373,729
Total - 06/30/2023	**1,220**	**$111,392,186**

Employee Subgroup	Employee Count	Annualized Gross Payroll
Hourly FT Non-Union	257	$20,159,357
Hourly FT Union	638	54,541,848
Hourly PT Non-Union	1	24,221
Salaried Exempt FT	317	36,933,540
Total - 10/31/2023	**1,213**	**$111,658,967**

Employee Subgroup	Employee Count	Annualized Gross Payroll
Hourly FT Non-Union	278	$22,889,464
Hourly FT Union	677	58,867,175
Hourly PT Non-Union	1	24,983
Salaried Exempt FT	331	40,247,145
Total - 06/30/2024	**1,287**	**$122,028,766**

Employee Subgroup	Employee Count	Annualized Gross Payroll
Hourly FT Non-Union	284	$23,618,394
Hourly FT Union	677	60,327,003
Hourly PT Non-Union	1	25,776
Salaried Exempt FT	332	41,532,053
Total - 06/30/2025	**1,294**	**$125,503,227**

Pennsylvania American Water Company
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Cost Center	Cost Center Description	Job	Current Status	Employee Subgroup	Gross Annual Payroll
240114	CORP-Engineering	Sr Project Engineer	Position has been filled.	Non-Collective Bargaining Unit Salary	$115,024
240114	CORP-Engineering	Sr Project Engineer	Position has been filled.	Non-Collective Bargaining Unit Salary	115,024
247201	PHBG-Production	Plant Operator	Position has been filled.	Non-Collective Bargaining Unit Hourly	76,108
240114	CORP-Engineering	Sr Project Engineer	Position has been filled.	Non-Collective Bargaining Unit Salary	115,024
245401	SUSQ-Production	Plant Operator	Position has been filled.	Non-Collective Bargaining Unit Hourly	76,108
246201	HSHY-Production	Sr Supvr Operations	Position has been filled.	Non-Collective Bargaining Unit Salary	98,488
242203	MONVAL-Cust Service	Sr Supvr Operations	Position has been filled.	Non-Collective Bargaining Unit Salary	98,488
249106	WILK-Field Services	Sr Supt Field Ops	Position has been filled.	Non-Collective Bargaining Unit Salary	115,024
245706	POCO-Field Services	Sr Supvr Operations	Position has been filled.	Non-Collective Bargaining Unit Salary	98,488
240117	CORP-Water Quality	WQ & Env Compliance Specialist	Position has been filled.	Non-Collective Bargaining Unit Salary	98,488
240113	CORP-Info Systems	Specialist, Technology Field Services	Position has been filled.	Non-Collective Bargaining Unit Salary	98,488
240121	CORP-Com Relations	Dir Govt Affairs (state)	Position has been filled.	Non-Collective Bargaining Unit Salary	172,765
245106	NORR-Field Services	Operations Specialist	Position has been filled.	Non-Collective Bargaining Unit Hourly	76,108
246801	LEHP-Production	Utility Person	Position has been filled.	Non-Collective Bargaining Unit Hourly	76,108
241152	PITT-Production	Assistant Operator/Maintenance (Rotating)	Position has been filled.	Collective Bargaining Unit Hourly	66,920
241152	PITT-Production	Maintenance Relief Person	Position has been filled.	Collective Bargaining Unit Hourly	66,753
244301	CLAR-Production	Operator U537O	Position has been filled.	Collective Bargaining Unit Hourly	77,924
244506	WARR-Field Services	Utility Person U537O	Position has been filled.	Collective Bargaining Unit Hourly	64,749
244506	WARR-Field Services	Utility Person U537O	Position has been filled.	Collective Bargaining Unit Hourly	64,749
242106	MCMR-Field Services	Utility Person U537O	Position has been filled.	Collective Bargaining Unit Hourly	62,661
243152	NEWC-Ellwood	Operator U537O	Position has been filled.	Collective Bargaining Unit Hourly	65,709
244301	CLAR-Production	Maintenance Person U537O	Position has been filled.	Collective Bargaining Unit Hourly	68,925
249158	WILK-Lake Scranton	Plant Operator U648S	Position has been filled.	Collective Bargaining Unit Hourly	62,932
240117	CORP-Water Quality	Lab Technician II UWUA 433	Position has been filled.	Collective Bargaining Unit Hourly	74,082
245101	NORR-Production	Working Maint Foreperson F473N	Position has been filled.	Collective Bargaining Unit Hourly	74,625
					$2,179,762

Pennsylvania American Water Company
Docket Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)
OCA 09-070 (Subparts e & f)

Cost Center	Cost Center Description	Job	Terminated Date	Employee Subgroup	Gross Annual Payroll
240121	CORP-Com Relations	Community Public Relations Rep	7/18/2023	Non-Collective Bargaining Unit Hourly	$48,442
245406	SUSQ-Field Services	Utility Technician	7/20/2023	Non-Collective Bargaining Unit Hourly	68,549
240106	CORP-Field Services	Admin Support Rep (N)	7/20/2023	Non-Collective Bargaining Unit Hourly	37,814
245106	NORR-Field Services	Utility Person A F473N	7/21/2023	Collective Bargaining Unit Hourly	64,248
245506	BNGR-Field Services	Utility Technician	7/21/2023	Non-Collective Bargaining Unit Hourly	68,570
246106	MECH-Field Services	Supvr Field Operations	7/21/2023	Non-Collective Bargaining Unit Salary	87,493
242106	MCMR-Field Services	Subforeperson U537O	7/31/2023	Collective Bargaining Unit Hourly	75,732
249106	WILK-Field Services	Leak Detection Specialist U648S	7/31/2023	Collective Bargaining Unit Hourly	67,275
245103	NORR-Cust Service	Serviceperson F473N	7/31/2023	Collective Bargaining Unit Hourly	67,839
245206	YARD-Field Services	Utility B F473Y	7/31/2023	Collective Bargaining Unit Hourly	55,144
245601	NAZA-Production	Lead Plant Operator	8/4/2023	Non-Collective Bargaining Unit Hourly	75,147
246206	HSHY-Field Services	Supvr Field Operations	8/9/2023	Non-Collective Bargaining Unit Salary	80,176
246152	MECH-Silver Springs	Maint & Relief U648R	8/11/2023	Collective Bargaining Unit Hourly	61,888
241106	PITT-Field Services	Auto Mechanic U537P	8/18/2023	Collective Bargaining Unit Hourly	72,495
241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	8/18/2023	Collective Bargaining Unit Hourly	65,041
241201	MCKEWW-Production	Operator UWUA 433	8/21/2023	Collective Bargaining Unit Hourly	76,358
241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	8/31/2023	Collective Bargaining Unit Hourly	75,857
249161	WILK-Huntsville	Plant Operator U648S	8/31/2023	Collective Bargaining Unit Hourly	71,284
249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	8/31/2023	Collective Bargaining Unit Hourly	69,196
246106	MECH-Field Services	Utility A U648R	8/31/2023	Collective Bargaining Unit Hourly	69,259
241103	PITT-Cust Service	Field Service Representative U537P	8/31/2023	Collective Bargaining Unit Hourly	73,790
242306	UNTN-Field Services	Utility Person U537O	8/31/2023	Collective Bargaining Unit Hourly	75,189
241106	PITT-Field Services	Utility Equipment Operator U537P	8/31/2023	Collective Bargaining Unit Hourly	64,164
245101	NORR-Production	Maint&Relief F473N	9/1/2023	Collective Bargaining Unit Hourly	60,322
240117	CORP-Water Quality	Supvr WQ & Env Compliance	9/3/2023	Non-Collective Bargaining Unit Salary	78,660
246151	MECH-ProdWestShore	Supvr Production	9/12/2023	Non-Collective Bargaining Unit Salary	76,808
249201	Scranton WW-Prod	Maintenance Relief Operator	9/22/2023	Collective Bargaining Unit Hourly	60,510
241301	EXTRWW-Production	Wastewater Operator	9/22/2023	Non-Collective Bargaining Unit Hourly	75,377
246206	HSHY-Field Services	Utility Person	9/29/2023	Non-Collective Bargaining Unit Hourly	71,451
249206	Scrntn-WW-Fld Svc	Operations Specialist	9/29/2023	Non-Collective Bargaining Unit Hourly	60,218
241106	PITT-Field Services	Supvr Field Operations	9/29/2023	Non-Collective Bargaining Unit Salary	80,000
245206	YARD-Field Services	Utility A F473Y	9/30/2023	Collective Bargaining Unit Hourly	65,166
240116	CORP-Maint Services	Sr Automation & Controls Tech	9/30/2023	Non-Collective Bargaining Unit Hourly	87,195
240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/4/2023	Non-Collective Bargaining Unit Salary	82,000
249150	WILK-Other	Operations Specialist	10/6/2023	Non-Collective Bargaining Unit Hourly	64,728
240114	CORP-Engineering	Engineering Project Manager	10/9/2023	Non-Collective Bargaining Unit Salary	81,510
248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	10/20/2023	Non-Collective Bargaining Unit Hourly	69,029
240114	CORP-Engineering	GIS Analyst	10/27/2023	Non-Collective Bargaining Unit Hourly	54,288
241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	10/31/2023	Collective Bargaining Unit Hourly	74,040
243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/31/2023	Collective Bargaining Unit Hourly	75,419
241106	PITT-Field Services	Utility Person U537P	10/31/2023	Collective Bargaining Unit Hourly	73,706
249103	WILK-Cust Service	Serviceperson U648S	10/31/2023	Collective Bargaining Unit Hourly	69,155
249106	WILK-Field Services	Regulation Utility Person U648S	11/7/2023	Collective Bargaining Unit Hourly	65,960
245801	POWW-Production	Maintenance/Relief Operator	11/8/2023	Non-Collective Bargaining Unit Hourly	59,445
249152	WILK-Ceasetown	Plant Operator U648S	11/19/2023	Collective Bargaining Unit Hourly	66,064
240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	11/20/2023	Non-Collective Bargaining Unit Hourly	50,718
247150	MILT-Prod Other	Maintenance/Relief Operator	11/20/2023	Non-Collective Bargaining Unit Hourly	62,661
249152	WILK-Ceasetown	Plant Operator U648S	11/24/2023	Collective Bargaining Unit Hourly	67,108
247150	MILT-Prod Other	Maintenance/Relief Operator	11/27/2023	Non-Collective Bargaining Unit Hourly	66,837
					$3,369,328

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 12

OCA 12-006

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of Borough of Brentwood (wastewater)

For purposes of PAWC's historic test year (HTY), future test year (FTY), and fully projected future test year (FPFTY) utility revenue requirement presentations in its current rate case, concerning the impact on such revenue requirements for the acquisition of the Borough of Brentwood wastewater utility system by PAWC, please provide the following information:

a. The amounts of rate base for acquired plant, by account, reflected by PAWC in its HTY, FTY and FPFTY rate base related to this acquisition.
b. The amounts of rate base for new utility plant for, relating to, or caused by Brentwood system (assuming post-acquisition), by account, reflected by PAWC in its HTY, FTY and FPFTY.
c. The amounts of operating expenses, by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses relating to this acquisition.
d. The amounts of other taxes expenses (such as but not limited to property taxes), by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses for this acquisition.
e. The amounts of revenues by account, reflected by PAWC in its HTY, FTY and FPFTY revenues related to this acquisition.
f. The amounts of any other costs related to this acquisition, by account, that have been reflected by PAWC in its HTY, FTY and FPFTY utility revenue requirement calculations.
g. The date that PAWC assumed this acquisition transaction would be closed.
h. Detailed listings of all projected utility plant additions, by account, that PAWC has assumed would occur, by month, after PAWC's assumed acquisition closing date.
i. The number of customers by type by month that PAWC has reflected for this acquisition.
j. The quantities of utility sales by type by month that PAWC has reflected for this acquisition.
k. A citation to, and copy of, the Commission Order approving or denying this acquisition.
l. A complete copy of all accounting entries related to closing this acquisition.
m. All supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n. A detailed itemization of all legal expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
o. A detailed itemization of all consulting expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
p. A detailed itemization of all affiliated service company charges to PAWC to date, by amount and account, related to this acquisition.

q. A copy of each legal and consulting expense invoice to PAWC over $5,000 related to this acquisition.
r. The number of work force positions that PAWC expects to acquire from this acquisition, including job titles for each position.
s. The amounts of salary and wages for each workforce position that PAWC expects to acquire from this acquisition.
t. The amounts for employee benefits for each workforce position that PAWC expects to acquire from this acquisition.
u. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, PAWC's allocation of costs between PAWC's water and wastewater utility operations.
v. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, the allocation and charging of costs to PAWC from the affiliate American Water Works Service Company.
w. Any and all additional information that PAWC believes should be considered in determining the impact on PAWC's calculated HTY, FTY and FPFTY utility revenue requirements from this acquisition.

Response:

a-b. Please refer to Volume 03, Exhibit No. 3-A, page 179.
c. Please refer to Volume 03, Exhibit No. 3-A, page 187-190, as well as Volume 04, Exhibit No. 3-B, page 308.
d. Please refer to Volume 03, Exhibit No. 3-A, page 172, lines 6-19.
e. Please refer to Volume 03, Exhibit No. 3-A, page 173-174.
f. Please refer to parts c-d.
g. The Brentwood Wastewater acquisition is anticipated to close Q1 of 2024.
h. Please refer to Volume 05, Exhibit No. 3-C, pages 50 and 52.
i-j. Please refer to Volume 06 - Filing Requirements I-V, page 78 for customer counts and utility sales.
k. The acquisition of Brentwood Borough wastewater assets is currently pending before the Commission, with an order anticipated to be issued by March 2024.
l. Please see the response to part k. The Company therefore does not have any accounting entries related to the closing of this acquisition at this time.
m. Please refer to Volume 03, Exhibit No. 3-A, page 178-186, and Volume 5, Exhibit No. 3-C, pages 69 and 86-89 for all supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n-p. Please refer to OCA 12-006_Attachment 1 for the requested costs incurred through October 2023 YTD.
q. Please refer to OCA 12-006_Attachment 2.
r-t. Please refer to OCA 12-006_Attachment 3.
u-v. PAWC's allocation of costs between PAWC's water and wastewater utility operations is affected by the number of customers for each respective operation. Acquisitions will result in a new proportioned allocation of cost based on the new level of customers. Please refer to Volume 08 - Statements Nos. 1-9, PAWC Statement No. 4, Schedule SDG-1, Page 1. Factor 1 has the

allocations percentages as of 06/30/2023 and Factor 2 has the allocation percentages as of 06/30/2025 including the acquisitions reflected in the filing.

w. The Company has provided all information relevant to the calculated revenue requirement for the Brentwood wastewater system.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 12

OCA 12-008

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of Sadsbury Township Municipal Authority (wastewater)

For purposes of PAWC's historic test year (HTY), future test year (FTY), and fully projected future test year (FPFTY) utility revenue requirement presentations in its current rate case, concerning the impact on such revenue requirements for the acquisition of the Sudbury Township Municipal Authority wastewater utility system by PAWC, please provide the following information:

a. The amounts of rate base for acquired plant, by account, reflected by PAWC in its HTY, FTY and FPFTY rate base related to this acquisition.
b. The amounts of rate base for new utility plant for, relating to, or caused by the Sadsbury system (assuming post-acquisition), by account, reflected by PAWC in its HTY, FTY and FPFTY.
c. The amounts of operating expenses, by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses relating to this acquisition.
d. The amounts of other taxes expenses (such as but not limited to property taxes), by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses for this acquisition.
e. The amounts of revenues by account, reflected by PAWC in its HTY, FTY and FPFTY revenues related to this acquisition.
f. The amounts of any other costs related to this acquisition, by account, that have been reflected by PAWC in its HTY, FTY and FPFTY utility revenue requirement calculations.
g. The date that PAWC assumed this acquisition transaction would be closed.
h. Detailed listings of all projected utility plant additions, by account, that PAWC has assumed would occur, by month, after PAWC's assumed acquisition closing date.
i. The number of customers by type by month that PAWC has reflected for this acquisition.
j. The quantities of utility sales by type by month that PAWC has reflected for this acquisition.
k. A citation to, and copy of, the Commission Order approving or denying this acquisition.
l. A complete copy of all accounting entries related to closing this acquisition.
m. All supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n. A detailed itemization of all legal expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
o. A detailed itemization of all consulting expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
p. A detailed itemization of all affiliated service company charges to PAWC to date, by amount and account, related to this acquisition.

q. A copy of each legal and consulting expense invoice to PAWC over $5,000 related to this acquisition.
r. The number of work force positions that PAWC expects to acquire from this acquisition, including job titles for each position.
s. The amounts of salary and wages for each workforce position that PAWC expects to acquire from this acquisition.
t. The amounts for employee benefits for each workforce position that PAWC expects to acquire from this acquisition.
u. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, PAWC's allocation of costs between PAWC's water and wastewater utility operations.
v. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, the allocation and charging of costs to PAWC from the affiliate American Water Works Service Company.
w. Any and all additional information that PAWC believes should be considered in determining the impact on PAWC's calculated HTY, FTY and FPFTY utility revenue requirements from this acquisition.

Response:

a. Please refer to Volume 03, Exhibit No. 3-A, page 97.
b. The rate base claims in this case do not include any post-acquisition capital investment for the Sadsbury Township Municipal Authority ("STMA") Wastewater acquisition in this case.
c-d. STMA costs are included in the Wastewater SSS General Operations totals in Volume 03, Exhibit No. 3-A, pages 109-112 and page 76, lines 6-19. For specific incremental expenses related to STMA, please refer to Volume 04, Exhibit No. 3-B, page 306.
e. The revenue adjustment for the STMA acquisition is included in Wastewater SSS General Operations in Volume 03, Exhibit No. 3-A, page 79, line 19 and page 94.
f. Please refer to parts c-d.
g. The STMA acquisition is anticipated to close in Q3 2024.
h. Please refer to part b.
i-j. Please refer to Volume 06 - Filing Requirements I-V, page 54.
k. The Company filed an application of acquisition for STMA on August 3, 2023. An order approving or denying this acquisition has not yet been issued by the Commission.
l. Please see the response to part k. The Company therefore does not have any accounting entries related to the closing of this acquisition at this time.
m. Please refer to Volume 03, Exhibit No. 3-A, pages 96-108 and Volume 05, Exhibit No. 3-C, pages 80-81 for supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n-o. Please refer to OCA 12-008_Attachment 1 for the requested cost incurred through October 2023 YTD.
p. There are no affiliated service company charges to PAWC to date related to this acquisition.
q. Please refer to OCA 12-008_Attachment 2.
r-t. PAWC does not expect to acquire any workforce positions from this acquisition.

u-v. PAWC's allocation of costs between PAWC's water and wastewater utility operations is affected by the number of customers for each respective operation. Acquisitions will result in a new proportioned allocation of cost based on the new level of customers. Please refer to Volume 08 - Statements Nos. 1-9, PAWC Statement No. 4, Schedule SDG-1, Page 1. Factor 1 has the allocations percentages as of 06/30/2023 and Factor 2 has the allocation percentages as of 06/30/2025 including the acquisitions reflected in the filing.

w. The Company has provided all information relevant to the calculated revenue requirement for the STMA wastewater system.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 12

OCA 12-010

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of Farmington Township (water and wastewater)

For purposes of PAWC's historic test year (HTY), future test year (FTY), and fully projected future test year (FPFTY) utility revenue requirement presentations in its current rate case, concerning the impact on such revenue requirements for the acquisition of the Farmington Township water and wastewater utility system by PAWC, please provide the following information:

a. The amounts of rate base for acquired plant, by account, reflected by PAWC in its HTY, FTY and FPFTY rate base related to this acquisition.
b. The amounts of rate base for new utility plant for, relating to, or caused by the Farmington systems (assuming post-acquisition), by account, reflected by PAWC in its HTY, FTY and FPFTY.
c. The amounts of operating expenses, by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses relating to this acquisition.
d. The amounts of other taxes expenses (such as but not limited to property taxes), by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses for this acquisition.
e. The amounts of revenues by account, reflected by PAWC in its HTY, FTY and FPFTY revenues related to this acquisition.
f. The amounts of any other costs related to this acquisition, by account, that have been reflected by PAWC in its HTY, FTY and FPFTY utility revenue requirement calculations.
g. The date that PAWC assumed this acquisition transaction would be closed.
h. Detailed listings of all projected utility plant additions, by account, that PAWC has assumed would occur, by month, after PAWC's assumed acquisition closing date.
i. The number of customers by type by month that PAWC has reflected for this acquisition.
j. The quantities of utility sales by type by month that PAWC has reflected for this acquisition.
k. A citation to, and copy of, the Commission Order approving or denying this acquisition.
l. A complete copy of all accounting entries related to closing this acquisition.
m. All supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n. A detailed itemization of all legal expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
o. A detailed itemization of all consulting expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
p. A detailed itemization of all affiliated service company charges to PAWC to date, by amount and account, related to this acquisition.

q. A copy of each legal and consulting expense invoice to PAWC over $5,000 related to this acquisition.
r. The number of work force positions that PAWC expects to acquire from this acquisition, including job titles for each position.
s. The amounts of salary and wages for each workforce position that PAWC expects to acquire from this acquisition.
t. The amounts for employee benefits for each workforce position that PAWC expects to acquire from this acquisition.
u. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, PAWC's allocation of costs between PAWC's water and wastewater utility operations.
v. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, the allocation and charging of costs to PAWC from the affiliate American Water Works Service Company.
w. Any and all additional information that PAWC believes should be considered in determining the impact on PAWC's calculated HTY, FTY and FPFTY utility revenue requirements from this acquisition.

Response:

a. Please refer to Volume 03, Exhibit No. 3-A, page 26 for acquired plant for Farmington Water and Volume 03, Exhibit No. 3-A, page 97 for acquired plant for Farmington Wastewater.
b. The rate base claims in this case do not include any post-acquisition capital investment for the Farmington Water and Wastewater acquisition in this case.
c-d. Farmington Water costs are included in the Water Operations totals in Volume 03, Exhibit No. 3-A, pages 44-47 and page 1, lines 6-19. For specific incremental expenses related to Farmington Water, please refer to Volume 04, Exhibit No. 3-B, page 303.
Farmington Wastewater costs are included in the Wastewater SSS General Operations totals in Volume 03, Exhibit No. 3-A, page 109-112 and page 76, lines 6-19. For specific incremental expenses related to Farmington Wastewater, please refer to Volume 04, Exhibit No. 3-B, page 305.
e. The revenue adjustment for Farmington Water is included in Water Operations in Volume 03, Exhibit No. 3-A, page 4, line 15 and page 23.
The revenue adjustment for Farmington Wastewater is included in the Wastewater SSS General Operations in Volume 03, Exhibit No. 3-A, page 79, line 18 and page 93.
f. Please refer to parts c-d.
g. The acquisition of Farmington Water and Wastewater assets is anticipated to close in Q2 2024.
h. Please refer to part b.
i-j. Please refer to Volume 06 - Filing Requirements I-V, page 52 for Farmington Water customer counts and utility sales and page 53 for Farmington Wastewater customer counts and utility sales.
k. The Company filed an application for acquisition of Farmington Township Water and Wastewater assets on August 28, 2023. An order approving or denying this acquisition has not yet been issued by the Commission.
l. Please see the response to part k. The Company therefore does not have any accounting entries related to the closing of this acquisition at this time.

m. Please refer to Volume 03, Exhibit No. 3-A, page 25-43 and Volume 05, Exhibit No. 3-C, pages 74-75 for supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for the acquisition of the Farmington Water system. Please refer to Volume 03, Exhibit No. 3-A, pages 96-108 and Volume 05, Exhibit No. 3-C, pages 74 and 76 for supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for the acquisition the Farmington Wastewater assets.

n-o. Please refer to OCA 12-010_Attachment 1 for the requested cost incurred through October 2023 YTD.

p. There are no affiliated service company charges to PAWC to date related to this acquisition.

q. Please refer to OCA 12-010_Attachment 2.

r-t. Please refer to OCA 12-010_Attachment 3.

u-v. PAWC's allocation of costs between PAWC's water and wastewater utility operations is affected by the number of customers for each respective operation. Acquisitions will result in a new proportioned allocation of cost based on the new level of customers. Please refer to Volume 08 - Statements Nos. 1-9, PAWC Statement No. 4, Schedule SDG-1, Page 1. Factor 1 has the allocations percentages as of 06/30/2023 and Factor 2 has the allocation percentages as of 06/30/2025 including the acquisitions reflected in the filing.

w. The Company has provided all information relevant to the calculated revenue requirement for the Farmington water and wastewater system acquisition.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 12

OCA 12-012

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of Audubon Water Company (water)

For purposes of PAWC's historic test year (HTY), future test year (FTY), and fully projected future test year (FPFTY) utility revenue requirement presentations in its current rate case, concerning the impact on such revenue requirements for the acquisition of Audubon Water Company by PAWC, please provide the following information:

a. The amounts of rate base for acquired plant, by account, reflected by PAWC in its HTY, FTY and FPFTY rate base related to this acquisition.
b. The amounts of rate base for new utility plant for, relating to, or caused by the Audubon system (assuming post-acquisition), by account, reflected by PAWC in its HTY, FTY and FPFTY.
c. The amounts of operating expenses, by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses relating to this acquisition.
d. The amounts of other taxes expenses (such as but not limited to property taxes), by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses for this acquisition.
e. The amounts of revenues by account, reflected by PAWC in its HTY, FTY and FPFTY revenues related to this acquisition.
f. The amounts of any other costs related to this acquisition, by account, that have been reflected by PAWC in its HTY, FTY and FPFTY utility revenue requirement calculations.
g. The date that PAWC assumed this acquisition transaction would be closed.
h. Detailed listings of all projected utility plant additions, by account, that PAWC has assumed would occur, by month, after PAWC's assumed acquisition closing date.
i. The number of customers by type by month that PAWC has reflected for this acquisition.
j. The quantities of utility sales by type by month that PAWC has reflected for this acquisition.
k. A citation to, and copy of, the Commission Order approving or denying this acquisition.
l. A complete copy of all accounting entries related to closing this acquisition.
m. All supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n. A detailed itemization of all legal expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
o. A detailed itemization of all consulting expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
p. A detailed itemization of all affiliated service company charges to PAWC to date, by amount and account, related to this acquisition.

q. A copy of each legal and consulting expense invoice to PAWC over $5,000 related to this acquisition.
r. The number of work force positions that PAWC expects to acquire from this acquisition, including job titles for each position.
s. The amounts of salary and wages for each workforce position that PAWC expects to acquire from this acquisition.
t. The amounts for employee benefits for each workforce position that PAWC expects to acquire from this acquisition.
u. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, PAWC's allocation of costs between PAWC's water and wastewater utility operations.
v. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, the allocation and charging of costs to PAWC from the affiliate American Water Works Service Company.
w. Any and all additional information that PAWC believes should be considered in determining the impact on PAWC's calculated HTY, FTY and FPFTY utility revenue requirements from this acquisition.

Response:

a. Please refer to Volume 03, Exhibit No. 3-A, page 26.
b. The rate base claims in this case do not include any post-acquisition capital investment for the Audubon Water acquisition in this case.
c-d. Audubon Water costs are included in the total PAWC Water Operations in Volume 03, Exhibit No. 3-A, page 44-47 and on page 1, lines 6-19. For specific incremental expenses related to Audubon, please refer to Volume 04, Exhibit No. 3-B, page 304.
e. The revenue adjustment for the Audubon Water acquisition is included in Water Operations in Volume 03, Exhibit No. 3-A, page 4, line 14 and page 22.
f. Please refer to parts c-d.
g. The acquisition of the Audubon Water Company system is anticipated to close in Q4 2024.
h. Please refer to part b.
i-j. Please refer to Volume 06 - Filing Requirements I-V, pages 50-51 for Audubon customer counts and utility sales.
k. The Company filed an application for acquisition of the Audubon Water Company on September 21, 2023. An order approving or denying this acquisition has not yet been issued by the Commission.
l. Please see the response to part k. The Company therefore does not have any accounting entries related to the closing of this acquisition at this time.
m. Please refer to Volume 03, Exhibit No. 3-A, page 25-43 and Volume 05, Exhibit No. 3-C, pages 77-78 for supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n. Please refer to OCA 12-012_Attachment 1 for the requested costs incurred through October 2023 YTD.

o-p. There are no consulting expenses or affiliated service company charges to PAWC to date related to this acquisition.

q. PAWC has not received any legal or consulting expense invoice to over $5,000 to date related to this acquisition.

r-t. Please refer to OCA 12-012_Attachment 2.

u-v. PAWC's allocation of costs between PAWC's water and wastewater utility operations is affected by the number of customers for each respective operation. Acquisitions will result in a new proportioned allocation of cost based on the new level of customers. Please refer to Volume 08 - Statements Nos. 1-9, PAWC Statement No. 4, Schedule SDG-1, Page 1. Factor 1 has the allocations percentages as of 06/30/2023 and Factor 2 has the allocation percentages as of 06/30/2025 including the acquisitions reflected in the filing.

w. The Company has provided all information relevant to the calculated revenue requirement for the Audubon water system acquisition.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 12

OCA 12-014

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of BASA (wastewater)

For purposes of PAWC's historic test year (HTY), future test year (FTY), and fully projected future test year (FPFTY) utility revenue requirement presentations in its current rate case, concerning the impact on such revenue requirements for the acquisition of the BASA wastewater utility system by PAWC, please provide the following information:

a. The amounts of rate base for acquired plant, by account, reflected by PAWC in its HTY, FTY and FPFTY rate base related to this acquisition.
b. The amounts of rate base for new utility plant for, relating to, or caused by BASA system (assuming post-acquisition), by account, reflected by PAWC in its HTY, FTY and FPFTY.
c. The amounts of operating expenses, by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses relating to this acquisition.
d. The amounts of other taxes expenses (such as but not limited to property taxes), by account, reflected by PAWC in its HTY, FTY and FPFTY operating expenses for this acquisition.
e. The amounts of revenues by account, reflected by PAWC in its HTY, FTY and FPFTY revenues related to this acquisition.
f. The amounts of any other costs related to this acquisition, by account, that have been reflected by PAWC in its HTY, FTY and FPFTY utility revenue requirement calculations.
g. The date that PAWC assumed this acquisition transaction would be closed.
h. Detailed listings of all projected utility plant additions, by account, that PAWC has assumed would occur, by month, after PAWC's assumed acquisition closing date.
i. The number of customers by type by month that PAWC has reflected for this acquisition.
j. The quantities of utility sales by type by month that PAWC has reflected for this acquisition.
k. A citation to, and copy of, the Commission Order approving or denying this acquisition.
l. A complete copy of all accounting entries related to closing this acquisition.
m. All supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n. A detailed itemization of all legal expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
o. A detailed itemization of all consulting expenses, by amount and account, that PAWC has incurred to date related to this acquisition.
p. A detailed itemization of all affiliated service company charges to PAWC to date, by amount and account, related to this acquisition.

q. A copy of each legal and consulting expense invoice to PAWC over $5,000 related to this acquisition.
r. The number of work force positions that PAWC expects to acquire from this acquisition, including job titles for each position.
s. The amounts of salary and wages for each workforce position that PAWC expects to acquire from this acquisition.
t. The amounts for employee benefits for each workforce position that PAWC expects to acquire from this acquisition.
u. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, PAWC's allocation of costs between PAWC's water and wastewater utility operations.
v. A detailed explanation and supporting calculations concerning how this acquisition has affected, and is projected to affect, the allocation and charging of costs to PAWC from the affiliate American Water Works Service Company.
w. Any and all additional information that PAWC believes should be considered in determining the impact on PAWC's calculated HTY, FTY and FPFTY utility revenue requirements from this acquisition.

Response:

a-b. Please refer to Volume 03, Exhibit No. 3-A, page 146.
c. Please refer to Volume 03, Exhibit No. 3-A, page 155-158, as well as Volume 04, Exhibit No. 3-B, page 307.
d. Please refer to Volume 03, Exhibit No. 3-A, page 139, lines 6-19.
e. Please refer to Volume 03, Exhibit No. 3-A, page 140-141.
f. Please refer to parts c-d.
g. The BASA Wastewater system acquisition is anticipated to close December 2023.
h. Please refer to Volume 05, Exhibit No. 3-C, pages 32 and 34.
i-j. Please refer to Volume 06 - Filing Requirements I-V, page 79.
k. Please see OCA 12-014_Attachment 1 for the Commission Order of the BASA Wastewater system acquisition.
l. The acquisition of BASA Wastewater assets is anticipated to close December 2023, and therefore any accounting entries related to the closing of this acquisition are not available at this time.
m. Please refer to Volume 03, Exhibit No. 3-A, page 145-154 and Volume 05, Exhibit No. 3-C, page 68 and pages 82-85 for supporting workpapers and calculations for the related rate base amounts that PAWC has assumed for this acquisition.
n-p. Please refer to OCA 12-014_Attachment 2 for the requested costs incurred through October 2023 YTD.
q. Please refer to OCA 12-014_Attachment 3.
r-t. Please refer to OCA 12-014_Attachment 4.
u-v. PAWC's allocation of costs between PAWC's water and wastewater utility operations is affected by the number of customers for each respective operation. Acquisitions will result in a new proportioned allocation of cost based on the new level of customers. Please refer to Volume 08 - Statements Nos. 1-9, PAWC Statement No. 4, Schedule SDG-1, Page 1. Factor 1 has the

allocations percentages as of 06/30/2023 and Factor 2 has the allocation percentages as of 06/30/2025 including the acquisitions reflected in the filing.

w. The Company has provided all information relevant to the calculated revenue requirement for the BASA wastewater system.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 15

OCA 15-013

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

SERP Expense. Refer to the responses to OCA 09-012 and OCA 09-039, Attachment 4. The response to OCA 09-012 states that the Company does not offer SERP as a benefits plan and that there is no information to report. However, Attachment 4, page 1 to the response to OCA 09-039 indicates the line item "Pension Expense – SERP in Account No. 50630000. Please explain and reconcile this discrepancy. Identify, quantify and explain each reconciling item, including whether the Company's filing reflects SERP expense charged to PAWC from the Service Company.

Response:

The Company does not offer SERP as a benefits plan but does offer ERP (Executive Retirement Plan). Upon further research, the amount listed under Account No. 50630000 in the HTY was recorded to the Service Company in error and should have been booked to the parent company which would not have any amounts passed down to PAWC. Therefore, the amounts will be removed from Service Company for the FTY and FPFTY in the rebuttal phase of this proceeding.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 18

OCA 18-013

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Payroll Expense. Refer to the response to OCA 09-070 and the Volume 4, 4c Compensation Adjustment Excel file. According to the response to OCA 09-070, there are 49 unfilled positions remaining in the Company's filing, including: (1) 3 positions that PAWC is actively recruiting, (3) 3 positions that the Company believes will be filled by June 30, 2024, and (3) 43 positions that relate to positions that PAWC states will be added upon the time of the closing of the BASA wastewater, Brentwood wastewater, Farmington water and wastewater and Audubon water acquisitions.

a. Please reconcile the three positions that PAWC is actively recruiting to Volume 4, 4c Compensation Adjustment Excel file. Identify, quantify and explain each reconciling item and state the current status of each position.

b. Please reconcile the three positions that PAWC anticipates filing by June 30, 2024 to Volume 4, 4c Compensation Adjustment Excel file. Identify, quantify and explain each reconciling item and state the current status of each position.

c. Please confirm that the 43 positions related to the acquisitions are not reflected in the 4c Compensation Adjustment Excel file and are instead reflected on Exhibit 3-B, pages 303-308. If not confirmed, explain fully why not, including where the 43 positions are reflected in the 4c Compensation Adjustment Excel file.

Response:

a. Please refer to the table below for the three positions that PAWC is actively recruiting:

Position Title	Location in 4c Compensation Adjustment file	Status
Operator UWUA 433	'3B Wastewater CSS Salary&Wage' tab, Collective Bargaining Unit section - line 86	Offer extended to candidate
Sr Mgr Business Dev	'3B Water Salary&Wages' tab, Non-Collective Bargaining Unit Salary section - line 298	Recruiting, job posted internally
Environmental Program Lead	'3B Water Salary&Wages' tab, Non-Collective Bargaining Unit Salary section - line 299	Creating offer for internal candidate

b. Please refer to the table below for the three positions that PAWC anticipates filling by June 30, 2024:

Position Title	Location in 4c Compensation Adjustment file	Status
Compliance Analyst	'3B Water Salary&Wages' tab, Non-Collective Bargaining Unit Hourly section - line 228	Vacant - expected to be filled by 6/30/2024
Compliance Analyst	'3B Water Salary&Wages' tab, Non-Collective Bargaining Unit Hourly section - line 229	Vacant - expected to be filled by 6/30/2024
Compliance Representative	'3B Water Salary&Wages' tab, Non-Collective Bargaining Unit Hourly section - line 230	Vacant - expected to be filled by 6/30/2024

c. The 43 positions related to acquisitions are reflected in Exhibit 3-B, pages 303-308. The labor & labor related amounts for each acquisition are broken out on the pages referenced below:

Acquisition	Exhibit 3-B Location	# of Employees
Farmington Water	page 303	1
Audubon Water	page 304	7
Farmington Wastewater	page 305	1
BASA WW Operations	page 307	33
Brentwood WW Operations	page 308	1
Total		43

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 21

OCA 21-003

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of the Brentwood wastewater system. Refer to the responses to OCA 12-06 and OCA 12-07, which requested information specific to the acquisition of the Brentwood Wastewater system in the HTY, FTY and FPFTY.

a. As it relates to the amounts for acquired plant in service and new utility plant in service (post-acquisition), the response to OCA 12-06(a) refers to Volume 3, Exhibit 3-A, page 179, which reflects plant in service of $22.695 million for the Brentwood wastewater system acquisition in the FPFTY. Please provide a breakout of FPFTY plant in service amount of $22.695 million between (1) the purchase price in the related Section 1329 proceeding (Docket No. A-2021-3024058), and (2) the post-acquisition costs included in PAWC's filing in the current rate case proceeding.

b. As it relates to the amounts reflected in HTY, FTY and FPFTY operating and tax expenses for the Brentwood wastewater system acquisition, the response to OCA 12-06(c) refers to Exhibit 3-A, page 172 (lines 6-19), Exhibit 3-A, pages 187-190 and Exhibit 3-B, page 308. Why does Exhibit 3-B, page 308 not reflect the FPFTY amounts for (1) Bad Debt expense of $63,404, (2) Miscellaneous expense of $8,863, (3) Transportation expense of $3,551, and (3) Amortization of Rate Case expense of $5,370? Explain fully.

c. Referring to the response to OCA 12-06(e), which referenced Exhibit 3-A, pages 173-174, is the amount that is included in FPFTY operating revenue for the Brentwood wastewater system acquisition at current rates the $1,824,191 that is shown on Exhibit 3-A, page 173, column 9, line 26? If not, explain fully why not and provide the amount included in FPFTY operating revenue for the Brentwood wastewater system acquisition.

d. Pursuant to the amounts included in plant in service for the Brentwood wastewater acquisition, please provide the related depreciation and amortization expense included in the HTY, FTY and FPFTY.

e. Pursuant to the amounts included in plant in service for the Brentwood wastewater acquisition, please provide the related ADIT included in rate base for the HTY, FTY and FPFTY.

Response:

a. In Exhibit 3-A, page 179, the purchase price in the related Section 1329 proceeding in the amount of $19,364,443, is shown in the "Acquisition" column, line 10, and the post-acquisition

costs are shown in the "Additions" columns, line 10. The total of the purchase price, plus additions, less retirements, equals the FPFTY amount of $22.695 million.

b. Exhibit 3-B, page 308 only reflects certain incremental O&M expenses related to the Brentwood acquisition that are not otherwise included in other exhibits. To include the referenced adjustments for Bad Debt, Miscellaneous expense, Transportation expense, or Amortization of Rate Case expense in this schedule would lead to double counting when rolled into the full revenue requirement calculation. For (1) Bad Debt expense, there are three separate adjustments included in the filing; one for uncollectible expense related to the revenues billed by PAWC for the collection system (Exhibit 3-A page 196), a second for the incremental uncollectible expense associated with the billing of the ALCOSAN treatment charges (Exhibit 3-B, page 337), and a third, related to the costs associated with the Company's Arrearage Management Plan (Exhibit 3-B, page 336). For (2) Miscellaneous expense, the amount of $8,863 related specifically to the expense for credit card and echeck transaction costs (Exhibit 3-B, page 326). For (3) Transportation expense, please refer to Exhibit 3-B, page 265 for Transportation expenses calculated for Brentwood. Finally, for (4) Amortization of Rate Case expense $5,370, please refer to Exhibit 3-B, page 295.

c. Yes, the amount reflects the Present Rate revenue at the FTY and FPFTY.

d. Please refer to Exhibit 3-A, pages 197 and 198 and Exhibit 3-B, pages 348 and 354 for the FTY and FPFTY amounts. The Brentwood wastewater system was not acquired during the HTY.

e. Please refer to Exhibit 3-A, page 178, line 24 and page 186 for the FTY and FPFTY amounts. The Brentwood wastewater system was not acquired during the HTY.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 21

OCA 21-004

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of Sadsbury Township Municipal Authority (STMA). Refer to the responses to OCA 12-08 and OCA 12-09, which requested information specific to the acquisition of the STMA in the HTY, FTY and FPFTY. Many of the documents referred to in the Company's response to OCA 12-08 relate to *overall* Wastewater SSS General Operations as a whole, and the amounts related to the STMA acquisition are presumably embedded in the overall amounts.

a. Please confirm that all requested amounts in OCA 12-08 and OCA 12-09 for the STMA acquisition are embedded in the overall Wastewater SSS General Operations amounts shown in the Company's Exhibit 3-A references.

b. As it relates to plant in service, the response to OCA 12-08(a) refers to Volume 3, Exhibit 3-A, page 97, which reflects plant in service of $3.390 million for the STMA acquisition. However, Exhibit 3-C, pages 80-81 (referred to part "m" of OCA 12-08) reflects plant in service for the STMA acquisition of $1.936 million, or a difference of $1.454 million. Please explain and reconcile this discrepancy, including identifying with specificity, the amount included in plant in service for the STMA acquisition. Identify, quantify and explain each reconciling item.

c. As it relates to the amounts included in rate base for the STMA acquisition, the response to OCA 12-08(m) refers to Exhibit 3-A, pages 96-108 for the supporting workpapers and calculations. However, the amounts shown on pages 96-108 of Exhibit 3-A relate to Wastewater SSS General Operations in which the STMA acquisition amounts are embedded. In a format similar to Exhibit 3-A, pages 96-108, provide the amounts in rate base in Wastewater SSS General Operations that relate specifically to the STMA acquisition for the HTY, FTY and FPFTY.

d. As it relates to the amounts reflected in HTY, FTY and FPFTY operating and tax expenses for the STMA acquisition, the response to OCA 12-08(c) refers to Exhibit 3-A, page 76 (lines 6-19), Exhibit 3-A, pages 109-112 and Exhibit 3-B, page 306. The amounts shown on the referenced pages of Exhibit 3-A pertain to *overall* Wastewater SSS General Operations in which the STMA acquisition amounts are presumably embedded, but the amounts shown on Exhibit 3-B, page 306 are specific to the STMA acquisition.

    1. Do the amounts shown on Exhibit 3-B, page 306 (which total $244,841 for the FTY and $249,288 for the FPFTY) reflect the entirety of the amounts in operating and tax expenses for the STMA acquisition? If not, explain fully why not.

    2. If the answer to part 1 is no, in a format similar to Exhibit 3-A, page 76 (lines 6-19) and pages 109-112, provide the amounts included in operating and tax expenses for Wastewater SSS

General Operations that relate specifically to the STMA acquisition for the HTY, FTY and FPFTY.

e. Referring to the response to OCA 12-08(e), which referenced Exhibit 3-A, pages 79 (line 19) and page 94, please confirm that the amount included in FPFTY operating revenue for the STMA acquisition totals $471,228. If not confirmed, explain fully why not and provide the amount included in FPFTY operating revenue for the STMA acquisition.

f. Pursuant to the amounts included in plant in service for the STMA acquisition, please provide the related depreciation and amortization expense included in the HTY, FTY and FPFTY.

g. Pursuant to the amounts included in plant in service for the STMA acquisition, please provide the related property tax expense included in the HTY, FTY and FPFTY.

h. Pursuant to the amounts included in plant in service for the STMA acquisition, please provide the related ADIT included in rate base for the HTY, FTY and FPFTY.

Response:

a. Yes, all requested amounts for the STMA acquisition are included in the Wastewater SSS General Operations amounts.

b. Please refer to Exhibit 3-C, pages 30-31. The difference between the $3.390 million of plant in service (original cost) and $1.936 million (total depreciated original cost) is equal to $849,730 of accumulated depreciation, plus $604,851 of CIAC.

c. All amounts that are specifically related to STMA are found on the pages referenced. Page 97 shows the original cost of plant expected to be recorded upon close of the acquisition, page 98 shows the amount of acquired contributions, and page 106 shows the projected transaction costs all associated with STMA. As discussed in the response to OCA 21-010, the Company did not calculate a separate revenue requirement for STMA, and therefore all workpapers used to calculate rate base were not broken out specifically for STMA.

d. Yes, the O&M expense amounts shown in Exhibit 3-B, page 306 reflect the projected level of incremental expense related specifically to STMA. Expense amounts such as income taxes are not separately calculated for this system but are included in the Wastewater SSS General Operations amounts.

e. Yes, the amount included in FPFTY operating revenue for the STMA acquisition totals $471,228.

f. Refer to part c. Since a separate revenue requirement was not completed for STMA, depreciation expense was calculated for WW SSS General Operations in total. Please refer to Exhibit 3-A, page 130 and Exhibit 3-B, page 344 for amortization expense related to STMA transaction costs claimed in the FTY and FPFTY. The STMA wastewater system was not acquired during the HTY.

g. Please refer to Exhibit 3-B, page 306 for the amount of property tax expense projected in the FPFTY. The STMA wastewater system was not acquired during the HTY.

h. Refer to part c. Since a separate revenue requirement was not completed for STMA, the related ADIT included in rate base was calculated for WW SSS General Operations in total, as shown in Exhibit 3-A, page 96, line 24 and page 108.

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Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 21

OCA 21-005

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of Farmington Township (water system). Refer to the responses to OCA 12-10 and OCA 12-11, which requested information specific to the acquisition of the Farmington Township water system in the HTY, FTY and FPFTY. Many of the documents referred to in the Company's response to OCA 12-10 relate to PAWC's *overall* Water Operations, and the amounts related to the Farmington Township water system acquisition are presumably embedded in the overall amounts.

a. Please confirm that all requested amounts in OCA 12-10 and OCA 12-11 for the Farmington Township (water system) acquisition are embedded in the overall Water Operations amounts shown in the Company's Exhibit 3-A references.

b. As it relates to plant in service, the response to OCA 12-10(a) refers to Volume 3, Exhibit 3-A, page 26, which reflects plant in service of $5.257 million for the Farmington Township water system acquisition. However, Exhibit 3-C, page 74 (referred to part "m" of OCA 12-10) reflects plant in service for the Farmington Township water system acquisition of $2.503 million, or a difference of $2.754 million. Please explain and reconcile this discrepancy, including identifying with specificity, the amount included in plant in service for the Farmington Township water system acquisition. Identify, quantify and explain each reconciling item.

c. As it relates to the amounts included in rate base for the Farmington Township water system acquisition, the response to OCA 12-10(m) refers to Exhibit 3-A, pages 25-43 for the supporting workpapers and calculations. However, the amounts shown on pages 25-43 of Exhibit 3-A relate to PAWC's overall Water Operations in which the Farmington Township water system acquisition amounts are embedded. In a format similar to Exhibit 3-A, pages 25-43, provide the amounts in rate base in PAWC's Water Operations that relate specifically to the Farmington Township water system acquisition for the HTY, FTY and FPFTY.

d. As it relates to the amounts reflected in HTY, FTY and FPFTY operating and tax expenses for the Farmington Township water system acquisition, the response to OCA 12-10(c) refers to Exhibit 3-A, page 1 (lines 6-19), Exhibit 3-A, pages 44-47 and Exhibit 3-B, page 303. The amounts shown on the referenced pages of Exhibit 3-A pertain to PAWC's *overall* Water Operations in which the Farmington Township water system acquisition amounts are presumably embedded, but the amounts shown on Exhibit 3-B, page 303 are specific to the Farmington Township water system acquisition.

1. Do the amounts shown on Exhibit 3-B, page 303 (which total $149,338 for the FTY and $152,385 for the FPFTY) reflect the entirety of the amounts in operating and tax expenses for the Farmington Township water system acquisition? If not, explain fully why not.

2. If the answer to part 1 is no, in a format similar to Exhibit 3-A, page 1 (lines 6-19) and pages 44-47, provide the amounts included in operating and tax expenses for PAWC's Water Operations that relate specifically to the Farmington Township water system acquisition for the HTY, FTY and FPFTY.

e. Referring to the response to OCA 12-10(e), which referenced Exhibit 3-A, page 4 (line 15) and page 23, please confirm that the amount included in FPFTY operating revenue for the Farmington Township water system acquisition totals $266,371. If not confirmed, explain fully why not and provide the amount included in FPFTY operating revenue for the Farmington Township water system acquisition.

f. Pursuant to the amounts included in plant in service for the Farmington Township water system acquisition, please provide the related depreciation and amortization expense included in the HTY, FTY and FPFTY.

g. Pursuant to the amounts included in plant in service for the Farmington Township water system acquisition, please provide the related property tax expense included in the HTY, FTY and FPFTY.

h. Pursuant to the amounts included in plant in service for the Farmington Township water system acquisition, please provide the related ADIT included in rate base for the HTY, FTY and FPFTY.

Response:

a. Yes, all requested amounts for the Farmington Township (water system) acquisition are included in the Water Operations amounts.

b. Please refer to Exhibit 3-C, pages 14-15. The difference between the $5.257 million of plant in service (original cost) and $2.502 million (total depreciated original cost) is equal to $1.079 million of accumulated depreciation, plus $1.675 million of CIAC.

c. All amounts that are specifically related to Farmington Township are found on the pages referenced. Page 26 shows the original cost of plant expected to be recorded upon close of the acquisition, page 27 shows the amount of acquired contributions, and page 36 shows the projected transaction costs and UPAA all associated with the Farmington Township water system acquisition. As discussed in the response to OCA 21-012, the Company did not calculate a separate revenue requirement for Farmington Township Water, and therefore all workpapers used to calculate rate base were not broken out specifically for this acquisition.

d. Yes, the O&M expense amounts shown in Exhibit 3-B, page 303 reflect the projected level of incremental expense related specifically to the Farmington Township water system acquisition. Expense amounts such as income taxes are not separately calculated for this system, but are included in the Water Operations amounts.

e. Yes, the amount included in FPFTY operating revenue for the Farmington Township water system acquisition totals $266,371.

f. Refer to part c. Since a separate revenue requirement was not completed for the Farmington Township water system acquisition, depreciation expense was calculated for Water Operations in total. Please refer to Exhibit 3-A, page 67 and Exhibit 3-B, page 341 for amortization expense related to Farmington Township water transaction costs and UPAA claimed in the FTY and FPFTY. The Farmington Township water system was not acquired during the HTY.

g. Refer to part c. Property tax amounts were not separately identified for the Farmington Township water acquisition. Please refer to Exhibit 3-A, page 69 and Exhibit 3-C, page 101 for Water Operations total property taxes. The Farmington Township water system was not acquired during the HTY.

h. Refer to part c. Since a separate revenue requirement was not completed for the Farmington Township water system acquisition, the related ADIT included in rate base was calculated for Water Operations in total, as shown in Exhibit 3-A, page 25, line 25 and page 43.

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R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 21

OCA 21-006

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of Farmington Township (wastewater system). Refer to the responses to OCA 12-10 and OCA 12-11, which requested information specific to the acquisition of the Farmington Township wastewater system in the HTY, FTY and FPFTY. Many of the documents referred to in the Company's response to OCA 12-10 relate to *overall* Wastewater SSS General Operations, and the amounts related to the Farmington Township wastewater system acquisition are presumably embedded in the overall amounts.

a. Please confirm that all requested amounts in OCA 12-10 and OCA 12-11 for the Farmington Township (wastewater system) are embedded in the overall Wastewater SSS General Operations amounts shown in the Company's Exhibit 3-A references.

b. As it relates to plant in service, the response to OCA 12-10(a) refers to Volume 3, Exhibit 3-A, page 97, which reflects plant in service of $5.720 million for the Farmington Township water system acquisition. However, Exhibit 3-C, page 74 (referred to part "m" of OCA 12-10) reflects plant in service for the Farmington Township wastewater system acquisition of $2.827 million, or a difference of $2.893 million. Please explain and reconcile this discrepancy, including identifying with specificity, the amount included in plant in service for the Farmington Township wastewater system acquisition. Identify, quantify and explain each reconciling item.

c. As it relates to the amounts included in rate base for the Farmington Township wastewater system acquisition, the response to OCA 12-10(m) refers to Exhibit 3-A, pages 96-108 for the supporting workpapers and calculations. However, the amounts shown on pages 96-108 of Exhibit 3-A relate to Wastewater SSS General Operations in which the Farmington Township wastewater system acquisition amounts are embedded. In a format similar to Exhibit 3-A, pages 96-108, provide the amounts in rate base in Wastewater SSS Generation Operations that relate specifically to the Farmington Township wastewater system acquisition for the HTY, FTY and FPFTY.

d. As it relates to the amounts reflected in HTY, FTY and FPFTY operating and tax expenses for the Farmington Township water system acquisition, the response to OCA 12-10(c) refers to Exhibit 3-A, page 76 (lines 6-19), Exhibit 3-A, pages 109-112 and Exhibit 3-B, page 305. The amounts shown on the referenced pages of Exhibit 3-A pertain to PAWC's overall Water Operations in which the Farmington Township water system acquisition amounts are embedded, but the amounts shown on Exhibit 3-B, page 305 are specific to the Farmington Township wastewater system acquisition.

1. Do the amounts shown on Exhibit 3-B, page 305 (which total $259,725 for the FTY and $264,176 for the FPFTY) reflect the entirety of the amounts in operating and tax expenses for the Farmington Township wastewater system acquisition? If not, explain fully why not.

2. If the answer to part 1 is no, in a format similar to Exhibit 3-A, page 76 (lines 6-19) and pages 109-112, provide the amounts included in operating and tax expenses for PAWC's Water Operations that relate specifically to the Farmington Township water system acquisition for the HTY, FTY and FPFTY.

e. Referring to the response to OCA 12-10(e), which referenced Exhibit 3-A, page 79 (line 18) and page 93, please confirm that the amount included in FPFTY operating revenue for the Farmington Township water system acquisition totals $322,926. If not confirmed, explain fully why not and provide the amount included in FPFTY operating revenue for the Farmington Township water system acquisition.

f. Pursuant to the amounts included in plant in service for the Farmington Township wastewater system acquisition, please provide the related depreciation and amortization expense included in the HTY, FTY and FPFTY.

g. Pursuant to the amounts included in plant in service for the Farmington Township wastewater system acquisition, please provide the related property tax expense included in the HTY, FTY and FPFTY.

h. Pursuant to the amounts included in plant in service for the Farmington Township wastewater system acquisition, please provide the related ADIT included in rate base for the HTY, FTY and FPFTY.

Response:

a. Yes, all requested amounts for the Farmington Township wastewater system acquisition are included in the Wastewater SSS General Operations amounts.

b. Please refer to Exhibit 3-C, pages 28-29. The difference between the $5.720 million of plant in service (original cost) and $2.827 million (total depreciated original cost) is equal to $1.689 million of accumulated depreciation, plus $1.204 million of CIAC.

c. All amounts that are specifically related to the Farmington Township wastewater acquisition are found on the pages referenced. Page 97 shows the original cost of plant expected to be recorded upon close of the acquisition, page 98 shows the amount of acquired contributions, and page 106 shows the projected transaction costs associated with the Farmington Township wastewater system acquisition. As discussed in the response to OCA 21-011, the Company did not calculate a separate revenue requirement for Farmington Township Wastewater, and therefore all workpapers used to calculate rate base were not broken out specifically for this acquisition.

d. Yes, the O&M expense amounts shown in Exhibit 3-B, page 305 reflect the projected level of incremental expense related specifically to the Farmington Township wastewater system

acquisition. Expense amounts such as income taxes are not separately calculated for this system, but are included in the Wastewater SSS General Operations amounts.

e. Yes, the amount included in FPFTY operating revenue for the Farmington Township wastewater system acquisition totals $322,926.

f. Refer to part c. Since a separate revenue requirement was not completed for the Farmington Township wastewater system acquisition, depreciation expense was calculated for WW SSS General Operations in total. Please refer to Exhibit 3-A, page130 and Exhibit 3-B, page 344 for amortization expense related to Farmington Township wastewater transaction costs claimed in the FTY and FPFTY. The Farmington Township wastewater system was not acquired during the HTY.

g. Refer to part c. Property tax amounts were not separately identified for the Farmington Township wastewater acquisition. Please refer to Exhibit 3-A, page 132 and Exhibit 3-C, page 101 for WW SSS General Operations total property taxes. The Farmington Township wastewater system was not acquired during the HTY.

h. Refer to part c. Since a separate revenue requirement was not completed for the Farmington Township wastewater system acquisition, the related ADIT included in rate base was calculated for WW SSS General Operations in total, as shown in Exhibit 3-A, page 96, line 25 and page 108.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 21

OCA 21-007

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of Audubon Water Company. Refer to the responses to OCA 12-12 and OCA 12-13, which requested information specific to the acquisition of the Audubon Water Company in the HTY, FTY and FPFTY. Many of the documents referred to in the Company's response to OCA 12-12 relate to PAWC's *overall* Water Operations, and the amounts related to the Audubon Water Company system acquisition are presumably embedded in the overall amounts.

a. Please confirm that all requested amounts in OCA 12-12 and 12-13 for the Audubon Water Company acquisition are embedded in the overall Water Operations amounts shown in the Company's Exhibit 3-A references.

b. As it relates to plant in service, the response to OCA 12-12(a) refers to Volume 3, Exhibit 3-A, page 26, which reflects plant in service of $9.187 million for the Audubon Water Company acquisition. However, Exhibit 3-C, page 77 (referred to part "m" of OCA 12-12) reflects plant in service for the Audubon Water Company acquisition of $360,229, or a difference of $8.827 million. Please explain and reconcile this discrepancy, including identifying with specificity, the amount included in plant in service for the Audubon Water Company acquisition. Identify, quantify and explain each reconciling item.

c. As it relates to the amounts included in rate base for the Audubon Water Company acquisition, the response to OCA 12-12(m) refers to Exhibit 3-A, pages 25-43 for the supporting workpapers and calculations. However, the amounts shown on pages 25-43 of Exhibit 3-A relate to PAWC's overall Water Operations in which the Audubon Water Company acquisition amounts are embedded. In a format similar to Exhibit 3-A, pages 25-43, provide the amounts in rate base in PAWC's Water Operations that relate specifically to the Audubon Water Company acquisition for the HTY, FTY and FPFTY.

d. As it relates to the amounts reflected in HTY, FTY and FPFTY operating and tax expenses for the Audubon Water Company acquisition, the response to OCA 12-12(c) refers to Exhibit 3-A, page 1 (lines 6-19), Exhibit 3-A, pages 44-47 and Exhibit 3-B, page 304. The amounts shown on the referenced pages of Exhibit 3-A pertain to PAWC's *overall* Water Operations in which the Audubon Water Company acquisition amounts are embedded, but the amounts shown on Exhibit 3-B, page 304 are specific to the Audubon Water Company acquisition.

    1. Do the amounts shown on Exhibit 3-B, page 304 (which total $1.542 million for the FTY and $1.586 million for the FPFTY) reflect the entirety of the amounts in

operating and tax expenses for the Audubon Water Company acquisition? If not, explain fully why not.

2. If the answer to part 1 is no, in a format similar to Exhibit 3-A, page 1 (lines 6-19) and pages 44-47, provide the amounts included in operating and tax expenses for PAWC's Water Operations that relate specifically to the Audubon Water Company acquisition for the HTY, FTY and FPFTY.

e. Referring to the response to OCA 12-12(e), which referenced Exhibit 3-A, page 4 (line 14) and page 22, please confirm that the amount included in FPFTY operating revenue for the Audubon Water Company acquisition totals $2,965,024. If not confirmed, explain fully why not and provide the amount included in FPFTY operating revenue for the Audubon Water Company acquisition.

f. Pursuant to the amounts included in plant in service for the Audubon Water Company acquisition, please provide the related depreciation and amortization expense included in the HTY, FTY and FPFTY.

g. Pursuant to the amounts included in plant in service for the Audubon Water Company acquisition, please provide the related property tax expense included in the HTY, FTY and FPFTY.

h. Pursuant to the amounts included in plant in service for the Audubon Water Company acquisition, please provide the related ADIT included in rate base for the HTY, FTY and FPFTY.

Response:

a. Yes, all requested amounts for the Audubon Water acquisition are included in the Water Operations amounts.

b. Please refer to Exhibit 3-C, pages 16-23. The difference between the $9.817 million of plant in service (original cost) and $360,229 (total depreciated original cost) is equal to $6.101 million of accumulated depreciation, plus $2.726 million of CIAC.

c. All amounts that are specifically related to the Audubon Water Company acquisition are found on the pages referenced. Page 26 shows the original cost of plant expected to be recorded upon close of the acquisition, page 27 shows the amount of acquired contributions, and page 36 shows the projected transaction costs and UPAA associated with the Audubon Water Company acquisition. As discussed in the response to OCA 21-009, the Company did not calculate a separate revenue requirement for Audubon Water, and therefore all workpapers used to calculate rate base were not broken out specifically for this acquisition.

d. Yes, the O&M expense amounts shown in Exhibit 3-B, page 304 reflect the projected level of incremental expense related specifically to Audubon Water Company. Expense

amounts such as income taxes are not separately calculated for this system but are included in the Water Operations amounts.

e. Yes, the amount included in FPFTY operating revenue for the Audubon Water Company acquisition totals $2,965,024.

f. Refer to part c. Since a separate revenue requirement was not completed for Audubon Water Company, depreciation expense was calculated for Water Operations in total. Please refer to Exhibit 3-A, page67 and Exhibit 3-B, page 341 for amortization expense related to Audubon transaction costs and UPAA claimed in the FPFTY.

g. Please refer to Exhibit 3-B, page 304 for the amount of property tax expense projected in the FPFTY. The Audubon Water Company was not acquired during the HTY.

h. Refer to part c. Since a separate revenue requirement was not completed for Audubon, the related ADIT included in rate base was calculated for Water Operations in total, as shown in Exhibit 3-A, page 25, line 25 and page 43.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 21

OCA 21-009

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

What amount of revenue requirement in the FPFTY is PAWC requesting related to the Audubon Water Company acquisition? Explain in detail and show calculations.

Response:

The Company has not performed a revenue requirement calculation that includes only the Audubon system. The revenue requirements calculated in this case include Water, Wastewater Sanitary Sewer Systems, Wastewater Combined Sewer Systems, BASA Wastewater and Brentwood Wastewater. The separation of the wastewater revenue requirements into sanitary and combined sewer was required by a prior rate case settlement. The separate revenue requirements for BASA and Brentwood are the result of commitments made by the Company in each acquisition proceeding. PAWC does not calculate a separate revenue requirement for each individual operating area and the Commission typically does not require a separate revenue requirement for its non-Fair Market Value ("FMV") acquisitions. For example, refer to the recent non-FMV acquisitions which did not require the calculation of a separate revenue requirement: Docket Nos. A-2018-3004191, A-2018-3004189, I-2018-3006498, I-2016-2526085, A-2020-3023369, A-2021-3028676, and A-2022-3031020.

This rate case filing includes a revenue requirement calculation for PAWC's water operations which includes Audubon. Specific adjustments for the inclusion of Audubon in the revenue requirement include rate base-Volume 03, Exhibit 3-A, pages 26, 27, 36, and operating expenses-Volume 03, Exhibit 3-A, pages 63 & 67.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 21

OCA 21-010

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

What amount of revenue requirement in the FPFTY is PAWC requesting related to the Sadsbury Township Municipal Authority wastewater acquisition? Explain in detail and show calculations.

Response:

The Company has not performed a revenue requirement calculation that includes only the Sadsbury Township Municipal Authority ("STMA") wastewater system. The revenue requirements calculated in this case include Water, Wastewater Sanitary Sewer Systems, Wastewater Combined Sewer Systems, BASA Wastewater and Brentwood Wastewater. The separation of the wastewater revenue requirements into sanitary and combined sewer was required by a prior rate case settlement. The separate revenue requirements for BASA and Brentwood are the result of commitments made by the Company in each acquisition proceeding. PAWC does not calculate a separate revenue requirement for each individual operating area and the Commission typically does not require a separate revenue requirement for its non-Fair Market Value ("FMV") acquisitions. For example, refer to the recent non-FMV acquisitions which did not require the calculation of a separate revenue requirement: Docket Nos. A-2018-3004191, A-2018-3004189, I-2018-3006498, I-2016-2526085, A-2020-3023369, A-2021-3028676, and A-2022-3031020.

This rate case filing includes a revenue requirement calculation for PAWC's Wastewater SSS Operations which includes STMA. Specific adjustments for the inclusion of STMA in the revenue requirement include rate base-Volume 03, Exhibit 3-A, pages 97, 98, 106, and operating expenses-Volume 03, Exhibit 3-A, pages 126 & 130.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 21

OCA 21-011

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

What amount of revenue requirement in the FPFTY is PAWC requesting related to the Farmington Township wastewater system acquisition? Explain in detail and show calculations.

Response:

The Company has not performed a revenue requirement calculation that includes only the Farmington wastewater system. The revenue requirements calculated in this case include Water, Wastewater Sanitary Sewer Systems, Wastewater Combined Sewer Systems, BASA Wastewater and Brentwood Wastewater. The separation of the wastewater revenue requirements into sanitary and combined sewer was required by a prior rate case settlement. The separate revenue requirements for BASA and Brentwood are the result of commitments made by the Company in each acquisition proceeding. PAWC does not calculate a separate revenue requirement for each individual operating area and the Commission typically does not require a separate revenue requirement for its non-Fair Market Value ("FMV") acquisitions. For example, refer to the recent non-FMV acquisitions which did not require the calculation of a separate revenue requirement: Docket Nos. A-2018-3004191, A-2018-3004189, I-2018-3006498, I-2016-2526085, A-2020-3023369, A-2021-3028676, and A-2022-3031020.

This rate case filing includes a revenue requirement calculation for PAWC's Wastewater SSS Operations which includes Farmington wastewater. Specific adjustments for the inclusion of Farmington wastewater in the revenue requirement include rate base-Volume 03, Exhibit 3-A, pages 97, 98, 106, and operating expenses-Volume 03, Exhibit 3-A, pages 126 & 130.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 21

OCA 21-012

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

What amount of revenue requirement in the FPFTY is PAWC requesting related to the Farmington Township water system acquisition? Explain in detail and show calculations.

Response:

The Company has not performed a revenue requirement calculation that includes only the Farmington water system. The revenue requirements calculated in this case include Water, Wastewater Sanitary Sewer Systems, Wastewater Combined Sewer Systems, BASA Wastewater and Brentwood Wastewater. The separation of the wastewater revenue requirements into sanitary and combined sewer was required by a prior rate case settlement. The separate revenue requirements for BASA and Brentwood are the result of commitments made by the Company in each acquisition proceeding. PAWC does not calculate a separate revenue requirement for each individual operating area and the Commission typically does not require a separate revenue requirement for its non-Fair Market Value ("FMV") acquisitions. For example, refer to the recent non-FMV acquisitions which did not require the calculation of a separate revenue requirement: Docket Nos. A-2018-3004191, A-2018-3004189, I-2018-3006498, I-2016-2526085, A-2020-3023369, A-2021-3028676, and A-2022-3031020.

This rate case filing includes a revenue requirement calculation for PAWC's water operations which includes Farmington water. Specific adjustments for the inclusion of Farmington water in the revenue requirement include rate base-Volume 03, Exhibit 3-A, pages 26, 27, 36, and operating expenses-Volume 03, Exhibit 3-A, pages 63 & 67.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 22

OCA 22-001

Responsible Witness: Ashley E. Everette, Senior Director of Rates and Regulatory for PAWC

Question:

Refer to the Management and Operations Audit ("MOA") report in Docket No. D-2022-3035217.

a. Was PAWC aware of the recommendations in the MOA report when PAWC prepared its application in the current PAWC rate case?

b. Show in detail and explain fully how PAWC has reflected the recommendations in the MOA report in PAWC's rate case application.

c. Were any of the recommendations in the MOA report not reflected by PAWC in PAWC's development of its rate case application? If so, which ones?

d. To the extent that any of the recommendations in the MOA report not reflected by PAWC in PAWC's development of its rate case application, please quantify and explain the impact of each of those recommendations on the FTY and FPFTY being used by PAWC in the rate case.

Response:

A. PAWC became aware of recommendations of the MOA report during the preparation of this rate case.

B-D. It is unclear what this question is referencing regarding "how PAWC has reflected the recommendations." Many of the recommendations PAWC accepted have no direct correlation to the rate case or the proposed revenue requirement. The management audit is a separate proceeding and PAWC will implement recommendations as outlined in the Implementation Plan. PAWC has provided extensive support for this rate filing through its initial filing and direct testimony, as well as through responses to a voluminous number of data requests.

As noted in the response to OCA 22-003, PAWC has eliminated its external board and will reflect the removal of these expenses in the rebuttal stage of this proceeding.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 22

OCA 22-003

Responsible Witness: Ashley E. Everette, Senior Director of Rates and Regulatory for PAWC

Question:

Refer to the PAWC Implementation Plan concerning: Recommendation IV-1 "Perform a market comparison for local board compensation to ensure PAWC Board fees are at market rates." Also refer to PAWC's Response which states that: "The Company accepts this recommendation." And states in the discussion that: "PAWC is in the process of evaluating whether it should continue to maintain external Board members. If PAWC continues with external Board members, PAWC will re-evaluate whether its external Board compensation fees are at market rates."

a. How much expense has PAWC reflected in the HYT, FTY and FPFTY for external PAWC board members? Show the amounts by account for each period.

b. How many external PAWC board members did PAWC have in the HTY?

c. Provide the amount of compensation (by type of compensation recorded in each account) of each PAWC external board member in the HTY.

d. Explain the functioning of each PAWC external board member in the HTY.

e. Identify the amount of compensation (by type of compensation recorded in each account) of each PAWC external board member in the FTY and FPFTY.

f. How many external PAWC board members would PAWC have in the FPFTY if PAWC determines that having external board members is not necessary?

g. Do any of the other American Water Works operating utilities have external board members? If so, which ones and how many external board members does each have?

h. Were any of the PAWC external board members in the HTY also board members of American Water Works? If so, identify each PAWC external board member who was also an American Water Works board member.

i. Is the cost of American Water Works board members allocated to PAWC? If so, identify the amount of expense by account for AWW board members charged and allocated to PAWC for each period: (1) HTY, (2) FTY and (3) FPFTY.

Response:

A. The annual expense reflected in account 675.8 is $123,250 for each of the test years. PAWC has eliminated its external board as of December 31, 2023 and will reflect the removal of the $123,250 annual expense in the rebuttal stage of this proceeding.

B-H. As noted in the response to part A, PAWC no longer has an external board and therefore will not be claiming any costs associated with an external board.

I. Please see below table for the cost of American Water Works board members allocated to PAWC.

Account	Account Description	HTY	FTY	FPFTY
52527000	Directors Fees	$252,356	$263,190	$274,488
52527100	Directors Expenses	41,374	43,151	45,003
Total		$293,731	$306,340	$319,491

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 22

OCA 22-008

Responsible Witness: Ashley E. Everette, Senior Director of Rates and Regulatory for PAWC

Question:

Refer to the MOA report, which states at page 4 that: " The audit report contains identifiable potential quantifiable cost savings of approximately $3.13 million in annual savings and $4 million in one-time savings from effective implementation of the recommendations."

a. How much of those identifiable and quantifiable cost savings has PAWC reflected in the FTY? Explain fully and show the amounts in detail.

b. How much of those identifiable and quantifiable cost savings has PAWC reflected in the FPFTY? Explain fully and show the amounts in detail.

Response:

The "potential quantifiable cost savings" estimated by the Bureau of Audits are composed of savings to inventory costs and production costs. These amounts were not specifically incorporated into the FTY or FPFTY. In the Implementation Plan, the Company noted that it continues to evaluate its inventory turnover and reduce stockpiled materials as supplier shortages and materials availability improves. Regarding unaccounted for water, the Company noted in the Implementation Plan that it continues to strive to reduce its UFW below the 20% threshold. PAWC's UFW reduction efforts include, but are not limited to, documenting UFW within the Company's Work Management Program; offering a robust UFW training program on unmetered and unbilled water loss; and repairing leaks sensed by fixed based logger systems.

Please note that one-time items are not included in the revenue requirement and therefore one-time savings would not be appropriately reflected in the revenue requirement.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 26

OCA 26-001

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Payroll and Vacant Positions

Vacant Positions. Refer to the responses to OCA 09-070, OCA 18-013, OCA 18-015 and the table below.

Line No.	Cost Center	Cost Center Description	Job	Terminated Date	Employee Subgroup	Gross Annual Payroll
1	240121	CORP-Com Relations	Community Public Relations Rep	7/18/2023	Non-Collective Bargaining Unit Hourly	$ 48,442
2	245406	SUSQ-Field Services	Utility Technician	7/20/2023	Non-Collective Bargaining Unit Hourly	$ 68,549
3	240106	CORP-Field Services	Admin Support Rep (N)	7/20/2023	Non-Collective Bargaining Unit Hourly	$ 37,814
4	245106	NORR-Field Services	Utility Person A F473N	7/21/2023	Collective Bargaining Unit Hourly	$ 64,248
5	245506	BNGR-Field Services	Utility Technician	7/21/2023	Non-Collective Bargaining Unit Hourly	$ 68,570
6	246106	MECH-Field Services	Supvr Field Operations	7/21/2023	Non-Collective Bargaining Unit Salary	$ 87,493
7	242106	MCMR-Field Services	Subforeperson U5370	7/31/2023	Collective Bargaining Unit Hourly	$ 75,732
8	249106	WILK-Field Services	Leak Detection Specialist U648S	7/31/2023	Collective Bargaining Unit Hourly	$ 67,275
9	245103	NORR-Cust Service	Serviceperson F473N	7/31/2023	Collective Bargaining Unit Hourly	$ 67,839
10	245206	YARD-Field Services	Utility B F473Y	7/31/2023	Collective Bargaining Unit Hourly	$ 55,144
11	245601	NAZA-Production	Lead Plant Operator	8/4/2023	Non-Collective Bargaining Unit Hourly	$ 75,147
12	246206	HSHY-Field Services	Supvr Field Operations	8/9/2023	Non-Collective Bargaining Unit Hourly	$ 80,176
13	246152	MECH-Silver Springs	Maint & Relief U648R	8/11/2023	Collective Bargaining Unit Hourly	$ 61,888
14	241106	PITT-Field Services	Auto Mechanic U437P	8/18/2023	Collective Bargaining Unit Hourly	$ 72,495
15	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating)	8/18/2023	Collective Bargaining Unit Hourly	$ 65,041
16	241201	MCKEWW-Production	Operator UWUA 433	8/21/2023	Collective Bargaining Unit Hourly	$ 76,358
17	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	8/31/2023	Collective Bargaining Unit Hourly	$ 75,857
18	249161	WILK-Huntville	Plant Operator U648S	8/31/2023	Collective Bargaining Unit Hourly	$ 71,284
19	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	8/31/2023	Collective Bargaining Unit Hourly	$ 69,196
20	245106	MECH-Field Services	Utility A U648R	8/31/2023	Collective Bargaining Unit Hourly	$ 69,259
21	241103	PITT-Cust Service	Field Representative U537P	8/31/2023	Collective Bargaining Unit Hourly	$ 73,790
22	242306	UNTN-Field Services	Utility Person U537O	8/31/2023	Collective Bargaining Unit Hourly	$ 75,189
23	241106	PITT-Field Services	Utility Equipment Operator U537P	8/31/2023	Collective Bargaining Unit Hourly	$ 64,164
24	245101	NORR-Production	Maint & Relief F473N	9/1/2023	Collective Bargaining Unit Hourly	$ 60,322
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	9/3/2023	Non-Collective Bargaining Unit Salary	$ 78,660
26	246151	MECH-ProdWestShore	Supvr Production	9/12/2023	Non-Collective Bargaining Unit Salary	$ 76,808
27	249201	Scranton WW-Prod	Maintenance Relief Operator	9/22/2023	Collective Bargaining Unit Hourly	$ 60,510
28	241301	EXTRWW-Production	Wastewater Operator	9/22/2023	Non-Collective Bargaining Unit Hourly	$ 75,377
29	246206	HSHY-Field Services	Utility Person	9/29/2023	Non-Collective Bargaining Unit Hourly	$ 71,451
30	249206	Scrntn-WW-Fld Svc	Operations Specialist	9/29/2023	Non-Collective Bargaining Unit Hourly	$ 60,218
31	241106	PITT-Field Services	Supvr Field Operations	9/29/2023	Non-Collective Bargaining Unit Salary	$ 80,000
32	245206	YARD-Field Services	Utility A F437Y	9/30/2023	Collective Bargaining Unit Hourly	$ 65,166
33	240116	CORP-Maint Services	Sr Automation & Controls Tech	9/30/2023	Non-Collective Bargaining Unit Hourly	$ 87,195
34	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/4/2023	Non-Collective Bargaining Unit Salary	$ 82,000
35	249150	WILK-Other	Operations Specialist	10/6/2023	Non-Collective Bargaining Unit Hourly	$ 64,728
36	240114	CORP-Engineering	Engineering Project Manager	10/9/2023	Non-Collective Bargaining Unit Salary	$ 81,510
37	248701	Nw Cmbrnind WW Prod	Lead Plant Operator	10/20/2023	Non-Collective Bargaining Unit Hourly	$ 69,029
38	240114	CORP-Engineering	GIS Analyst	10/27/2023	Non-Collective Bargaining Unit Hourly	$ 54,288
39	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	10/31/2023	Collective Bargaining Unit Hourly	$ 74,040
40	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	10/31/2023	Collective Bargaining Unit Hourly	$ 75,419
41	241106	PITT-Field Services	Utility Person U537P	10/31/2023	Collective Bargaining Unit Hourly	$ 73,706
42	249103	WILK-Cust Service	Serviceperson U648S	10/31/2023	Collective Bargaining Unit Hourly	$ 69,155
43	249106	WILK-Field Services	Regulation Utility Person U648S	11/7/2023	Collective Bargaining Unit Hourly	$ 65,960
44	245801	POWW-Production	Maintenance/Relief Operator	11/8/2023	Non-Collective Bargaining Unit Hourly	$ 59,445
45	249152	WILK-Ceasetown	Plant Operator U648S	11/19/2023	Collective Bargaining Unit Hourly	$ 66,064
46	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	11/20/2023	Non-Collective Bargaining Unit Hourly	$ 50,718
47	247150	MILT-Prod Other	Maintenance/Relief Operator	11/20/2023	Non-Collective Bargaining Unit Hourly	$ 62,661
48	249152	WILK-Ceasetown	Plant Operator U648S	11/24/2023	Collective Bargaining Unit Hourly	$ 67,108
49	247150	MILT-Prod Other	Maintenance/Relief Operator	11/27/2023	Non-Collective Bargaining Unit Hourly	$ 66,837
50					Total	$ 3,369,328

Source: OCA 09-070_Attachment, page 3 of 3

a. Referring to the above table (from page 3 of the OCA 09-070 Attachment), please reconcile each of the 49 positions listed to the Volume 4, 4c Compensation Adjustment Excel file. Identify, quantify and explain each reconciling item.

b. For each of the 49 terminated/vacant positions listed in the above table, which positions have been filled to date? For each such position, identify the annual payroll amount in the FPFTY and the date upon which each position was filled.

c. Please identify in a manner similar to page 3 of the OCA 09-070 Attachment, any additional positions that became vacant after November 27, 2023. For each additional position that has become vacant, provide the related annual payroll amounts in the FPFTY.

Response:

a. Please refer to OCA 26-001_Attachment 1 which provides the location in Volume 4, 4c Compensation Adjustment file where each of the 49 positions can be found. Please note that there have been updates made to the termination dates as several were incorrect when provided in the response to OCA 09-070.

b. Of the 49 positions, there have been 27 filled as of the date of this response. Please refer to OCA 26-001_Attachment 1 which provides the status of each position along with the FPFTY annualized payroll amount as well as the dates for when each position had been filled.

c. Please refer to OCA 26-001_Attachment 2.

Line No	Cost Center	Cost Center Description	Job	Terminated Date	Employee Subgroup	Gross Annual Payroll	FPFTY Annual Payroll	Status	Location in Volume 4, 4c Compensation Adjustment File		
									Tab	Section	Line #
1	240121	CORP-Com Relations	Community Public Relations Rep	9/1/2023	Non-Collective Bargaining Unit Hourly	$48,442	$25,776	Position anticipated to be filled by 6/30/24 (part time in filing)	3B Water Salary&Wages	Non-Collective Bargaining Unit Hourly	223
2	245406	SUSQ-Field Services	Utility Person	11/30/2023	Non-Collective Bargaining Unit Hourly	68,549	72,955	Position has been filled; employee starting 1/29/24	3B Water Salary&Wages	Non-Collective Bargaining Unit Hourly	8
3	240106	CORP-Field Services	Admin Support Rep (N)	9/30/2023	Non-Collective Bargaining Unit Hourly	37,814	40,257	Position has been filled; employee starting 1/29/24	3B Water Salary&Wages	Non-Collective Bargaining Unit Hourly	102
4	245106	NORR-Field Services	Utility Person A F473N	11/20/2023	Collective Bargaining Unit Hourly	64,248	65,480	Position actively being recruited	3B Water Salary&Wages	Collective Bargaining Unit	459
5	245506	BNGR-Field Services	Utility Person	11/19/2023	Non-Collective Bargaining Unit Hourly	68,570	72,976	Position actively being recruited	3B Water Salary&Wages	Non-Collective Bargaining Unit Hourly	44
6	246106	MECH-Field Services	Supvr Field Operations	10/31/2023	Non-Collective Bargaining Unit Salary	87,493	93,142	Position anticipated to be filled by 6/30/24	3B Water Salary&Wages	Non-Collective Bargaining Unit Salary	22
7	242106	MCMR-Field Services	Subforeperson U537O	11/30/2023	Collective Bargaining Unit Hourly	75,732	77,256	Position actively being recruited	3B Water Salary&Wages	Collective Bargaining Unit	33
8	249106	WILK-Field Services	Leak Detection Specialist U648S	8/31/2023	Collective Bargaining Unit Hourly	67,275	69,301	Position anticipated to be filled by 6/30/24	3B Water Salary&Wages	Collective Bargaining Unit	90
9	245103	NORR-Cust Service	Serviceperson F473N	8/31/2023	Collective Bargaining Unit Hourly	67,839	71,096	Position anticipated to be filled by 6/30/24	3B Water Salary&Wages	Collective Bargaining Unit	111
10	245206	YARD-Field Services	Utility B F473Y	10/6/2023	Collective Bargaining Unit Hourly	55,144	56,397	Position has been filled; employee started 12/11/23	3B Water Salary&Wages	Collective Bargaining Unit	436
11	245601	NAZA-Production	Lead Plant Operator	8/18/2023	Non-Collective Bargaining Unit Hourly	75,147	79,970	Position actively being recruited	3B Water Salary&Wages	Non-Collective Bargaining Unit Hourly	31
12	246206	HSHY-Field Services	Supvr Field Operations	8/21/2023	Non-Collective Bargaining Unit Salary	80,176	85,342	Position has been filled; employee started 10/2/23	3B Water Salary&Wages	Non-Collective Bargaining Unit Salary	152
13	246152	MECH-Silver Springs	Maint & Relief U648R	9/3/2023	Collective Bargaining Unit Hourly	61,888	65,626	Position has been filled; employee started 12/11/23	3B Water Salary&Wages	Collective Bargaining Unit	515
14	241106	PITT-Field Services	Auto Mechanic U537P	8/11/2023	Collective Bargaining Unit Hourly	72,495	76,275	Position has been filled; employee started 1/2/24	3B Water Salary&Wages	Collective Bargaining Unit	336
15	241151	PITT-Production Haye	Assistant Operator/Maintenance (Rotating	10/9/2023	Collective Bargaining Unit Hourly	65,041	68,841	Position has been filled; employee started 1/8/24	3B Water Salary&Wages	Collective Bargaining Unit	524
16	241201	MCKEWW-Production	Operator UWUA 433	9/29/2023	Collective Bargaining Unit Hourly	76,358	79,866	Position has been filled; employee started 1/2/24	3B Wastewater CSS Salary&Wage	Collective Bargaining Unit	83
17	241152	PITT-Production Aldr	Head Maintenance Person (Non-Rotating) U	8/31/2023	Collective Bargaining Unit Hourly	75,857	80,200	Position has been filled; employee started 10/2/23	3B Water Salary&Wages	Collective Bargaining Unit	13
18	249161	WILK-Huntsville	Plant Operator U648S	11/7/2023	Collective Bargaining Unit Hourly	71,284	71,284	Position actively being recruited	3B Water Salary&Wages	Collective Bargaining Unit	50
19	249158	WILK-Lake Scranton	Maintenance/Relief Operator U648S	7/31/2023	Collective Bargaining Unit Hourly	69,196	71,284	Position has been filled; employee started 8/28/23	3B Water Salary&Wages	Collective Bargaining Unit	75
20	246106	MECH-Field Services	Utility A U648R	9/30/2023	Collective Bargaining Unit Hourly	69,259	72,955	Position has been filled; employee started 7/1/23	3B Water Salary&Wages	Collective Bargaining Unit	146
21	241103	PITT-Cust Service	Field Service Representative U537P	9/22/2023	Collective Bargaining Unit Hourly	73,790	77,527	Position has been filled; employee started 1/2/24	3B Water Salary&Wages	Collective Bargaining Unit	257
22	242306	UNTN-Field Services	Utility Person U537O	7/21/2023	Collective Bargaining Unit Hourly	75,189	76,692	Position has been filled; employee started 10/16/24	3B Water Salary&Wages	Collective Bargaining Unit	262
23	241106	PITT-Field Services	Utility Equipment Operator U537P	7/21/2023	Collective Bargaining Unit Hourly	64,164	67,902	Position has been filled; employee started 1/2/24	3B Water Salary&Wages	Collective Bargaining Unit	498
24	245101	NORR-Production	Maint&Relief F473N	9/1/2023	Collective Bargaining Unit Hourly	60,322	65,187	Position has been filled; employee started 12/18/24	3B Water Salary&Wages	Collective Bargaining Unit	480
25	240117	CORP-Water Quality	Supvr WQ & Env Compliance	10/27/2023	Non-Collective Bargaining Unit Salary	78,660	83,741	Position actively being recruited	3B Water Salary&Wages	Non-Collective Bargaining Unit Salary	258
26	246151	MECH-ProdWestShore	Supvr Production	11/20/2023	Non-Collective Bargaining Unit Salary	76,808	81,765	Position has been filled; employee started 1/2/24	3B Water Salary&Wages	Non-Collective Bargaining Unit Salary	254
27	249201	Scranton WW-Prod	Maintenance Relief Operator	7/20/2023	Collective Bargaining Unit Hourly	60,510	62,911	Position has been filled; employee started 9/26/23	3B Wastewater CSS Salary&Wage	Collective Bargaining Unit	74
28	241301	EXTRWW-Production	Wastewater Operator	7/21/2023	Non-Collective Bargaining Unit Hourly	75,377	80,242	Position has been filled; employee started 1/2/24	3B Wastewater SSS Salary&Wage	Non-Collective Bargaining Unit Hourly	22
29	246206	HSHY-Field Services	Utility Person	8/18/2023	Non-Collective Bargaining Unit Hourly	71,451	76,066	Position has been filled; employee started 11/6/23	3B Water Salary&Wages	Non-Collective Bargaining Unit Hourly	87
30	249206	Scrntn-WW-Fld Svc	Operations Specialist	8/9/2023	Non-Collective Bargaining Unit Hourly	60,218	64,102	Position has been filled; employee started 12/11/23	3B Wastewater CSS Salary&Wage	Non-Collective Bargaining Unit Hourly	1
31	241106	PITT-Field Services	Supvr Field Operations	9/22/2023	Non-Collective Bargaining Unit Salary	80,000	85,155	Position actively being recruited	3B Water Salary&Wages	Non-Collective Bargaining Unit Salary	255
32	245206	YARD-Field Services	Utility A F473Y	11/30/2023	Collective Bargaining Unit Hourly	65,166	68,319	Position has been filled; employee starting 1/29/24	3B Water Salary&Wages	Collective Bargaining Unit	375
33	240116	CORP-Maint Services	Sr Automation & Controls Tech	7/31/2023	Non-Collective Bargaining Unit Hourly	87,195	92,791	Position anticipated to be filled by 6/30/24	3B Water Salary&Wages	Non-Collective Bargaining Unit Hourly	2
34	240117	CORP-Water Quality	Supvr WQ & Env Compliance	9/12/2023	Non-Collective Bargaining Unit Salary	82,000	87,277	Position has been filled; employee started 11/13/23	3B Water Salary&Wages	Non-Collective Bargaining Unit Salary	277
35	249150	WILK-Other	Operations Specialist	11/24/2023	Non-Collective Bargaining Unit Hourly	64,728	68,904	Position actively being recruited	3B Water Salary&Wages	Non-Collective Bargaining Unit Hourly	72
36	240114	CORP-Engineering	Engineering Project Manager	11/8/2023	Non-Collective Bargaining Unit Salary	81,510	86,757	Position actively being recruited	3B Water Salary&Wages	Non-Collective Bargaining Unit Salary	259
37	248701	Nw Cmbrnlnd WW Prod	Lead Plant Operator	11/27/2023	Non-Collective Bargaining Unit Hourly	69,029	73,477	Position actively being recruited	3B Wastewater SSS Salary&Wage	Non-Collective Bargaining Unit Hourly	19
38	240114	CORP-Engineering	GIS Analyst	7/18/2023	Non-Collective Bargaining Unit Hourly	54,288	57,796	Position anticipated to be filled by 6/30/24	3B Water Salary&Wages	Non-Collective Bargaining Unit Hourly	163
39	241106	PITT-Field Services	Maintenance Mechanic/Welder U537P	10/31/2023	Collective Bargaining Unit Hourly	74,040	78,404	Position anticipated to be filled by 6/30/24	3B Water Salary&Wages	Collective Bargaining Unit	12
40	243103	NEWC-Cust Service	Distribution System Serviceperson U537O	11/30/2023	Collective Bargaining Unit Hourly	75,419	76,922	Position has been filled; employee started 12/4/23	3B Water Salary&Wages	Collective Bargaining Unit	41
41	241106	PITT-Field Services	Utility Person U537P	7/31/2023	Collective Bargaining Unit Hourly	73,706	78,049	Position anticipated to be filled by 6/30/24	3B Water Salary&Wages	Collective Bargaining Unit	156
42	249103	WILK-Cust Service	Serviceperson U648S	8/31/2023	Collective Bargaining Unit Hourly	69,155	71,222	Position anticipated to be filled by 6/30/24	3B Water Salary&Wages	Collective Bargaining Unit	317
43	249106	WILK-Field Services	Regulation Utility Person U648S	8/31/2023	Collective Bargaining Unit Hourly	65,960	67,944	Position anticipated to be filled by 6/30/24	3B Water Salary&Wages	Collective Bargaining Unit	73
44	245801	POWW-Production	Maintenance/Relief Operator	10/20/2023	Non-Collective Bargaining Unit Hourly	59,445	63,287	Position has been filled; employee started 12/18/23	3B Wastewater SSS Salary&Wage	Non-Collective Bargaining Unit Hourly	31
45	249152	WILK-Ceasetown	Plant Operator U648S	9/29/2023	Collective Bargaining Unit Hourly	66,064	66,064	Position actively being recruited	3B Water Salary&Wages	Collective Bargaining Unit	438
46	240106	CORP-Field Services	Spec Bill/Pymt Collection (N)	7/20/2023	Non-Collective Bargaining Unit Hourly	50,718	53,975	Position anticipated to be filled by 6/30/24	3B Water Salary&Wages	Non-Collective Bargaining Unit Hourly	112
47	247150	MILT-Prod Other	Maintenance/Relief Operator	8/4/2023	Non-Collective Bargaining Unit Hourly	62,661	66,691	Position has been filled; employee started 8/21/23	3B Water Salary&Wages	Non-Collective Bargaining Unit Hourly	115
48	249152	WILK-Ceasetown	Plant Operator U648S	9/29/2023	Collective Bargaining Unit Hourly	67,108	67,108	Position has been filled; employee started 10/11/23	3B Water Salary&Wages	Collective Bargaining Unit	489
49	247150	MILT-Prod Other	Maintenance/Relief Operator	8/31/2023	Non-Collective Bargaining Unit Hourly	66,837	71,138	Position has been filled; employee starting 1/22/24	3B Water Salary&Wages	Non-Collective Bargaining Unit Hourly	15
					Total	$3,369,328	$3,513,695				

Line No.	Cost Center	Cost Center Description	Job	Terminated Date	Employee Subgroup	FPFTY Annualized Payroll
1	249152	WILK-Ceasetown	Plant Operator U648S	12/10/2023	Collective Bargaining Unit Hourly	$67,108
2	240113	CORP-Info Systems	Specialist, Technology Field Services	12/15/2023	Non-Collective Bargaining Unit Salary	101,629
3	245206	YARD-Field Services	Utility B F473Y	12/18/2023	Collective Bargaining Unit Hourly	63,041
4	245106	NORR-Field Services	Operations Specialist	12/29/2023	Non-Collective Bargaining Unit Hourly	75,815
5	241151	PITT-Production Haye	Head Maintenance Person (Non-Rotating) U	12/31/2023	Collective Bargaining Unit Hourly	79,678
6	249106	WILK-Field Services	Supvr Field Operations	12/31/2023	Non-Collective Bargaining Unit Salary	94,827
7	241106	PITT-Field Services	Utility Person U537P	12/31/2023	Collective Bargaining Unit Hourly	78,050
8	249106	WILK-Field Services	Supv Facilities/Inventory	12/31/2023	Non-Collective Bargaining Unit Salary	83,554
					Total	$643,702

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 26

OCA 26-005

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

Accounting Information Related to Oncourse Home Solutions and American Water Resources

Refer to the responses to OCA 20-016, OCA 20-018, OCA 20-010 and OCA 20-023.

Identify by amount and account all amounts budgeted/forecasted by PAWC's books by related to Oncourse Home Solutions for the FTY and the FPFTY.

Response:

PAWC included $659,624 of revenue from Oncourse Home Solutions/American Water Resources in Account 471 for the FTY and the FPFTY.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 26

OCA 26-015

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

Accounting Information Related to Oncourse Home Solutions and American Water Resources

Refer to the responses to OCA 20-016, OCA 20-018, OCA 20-010 and OCA 20-023.

For the HTY and separately for calendar 2022 and calendar 2023, what amounts of (1) revenue and (2) expenses did PAWC record related to warranty services?

Response:

PAWC records revenue related to the Utility Fee as described in OCA 26-004. The amounts recorded for this revenue for the HTY, calendar year 2022, and calendar year 2023 amounted to $659,624, $663,147 and $659,197, respectively. Except for this Utility Fee revenue, PAWC records no other revenue or expenses related to Oncourse Home Solutions' warranty services.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 26

OCA 26-022

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

Call Center Related Accounting Information Requests

Refer to pages 80-84 of the Management Audit Report and to PAWC's responses to the following DRs: OCA set 6, items 5, 6. 7, 8 and OCA set 20, items 1, 3, 8 and 10.

For each third party call center contractor listed in the responses to OCA 06-005 and OCA 06-006 provide the following information:

1. by amount and account all amounts recorded in PAWC's books by month in 2022 and 2023.
2. by amount and account all amounts recorded in PAWC's books by month in the HTY.
3. by amount and account all amounts budgeted/forecasted by PAWC for (1) the FTY and (2) the FPFTY.

Response:

1. Please see below the expenses recorded to account 634.8 for 2022 and year-to-date 2023.

	Penn Credit		Transworld		InteLogix	
	2022	2023	2022	2023	2022	2023
Jan	7,864	7,073	136,504	153,605	56,513	35,701
Feb	12,327	6,936	189,184	168,491	45,153	35,568
Mar	9,455	38,752	172,232	145,174	53,971	30,493
Apr	10,870	12,584	164,503	178,549	35,522	44,747
May	6,684	5,435	60,792	209,036	53,300	36,914
Jun	8,682	8,085	135,750	271,055	44,549	45,400
Jul	6,591	10,213	159,779	219,922	60,553	46,624
Aug	8,829	11,342	123,831	205,836	63,473	41,654
Sep	11,185	11,044	130,485	238,802	55,194	43,331
Oct	7,323	9,360	185,333	198,318	59,236	15,477
Nov	10,268	6,202	214,575	199,271	53,948	27,752
Dec	7,998		224,632		36,298	
	108,075	127,026	1,897,600	2,188,058	617,710	403,661

2. Please see the below amounts recorded to account 634.8 for the HTY. Please refer to part 1 for the costs by month.

	Penn Credit	Transworld	InteLogix
HTY	131,058	2,276,367	557,524

3. Please see below FTY and FPFTY amounts forecasted to be included in account 634.8.

	Penn Credit	Transworld	InteLogix
FTY	136,681	2,374,023	581,442
FPFTY	142,544	2,475,869	606,386

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 26

OCA 26-027

Responsible Witness: John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants

Question:

Depreciation Rates and Depreciation Expense

For PAWC's proposed acquisition of BASA in Docket No. A-2022-3037047, please confirm that Gannett Fleming used the following depreciation rates for each of the accounts listed in the following table. If any of this cannot be confirmed, please show what PAWC believes were the Gannett Fleming depreciation rates in the BASA acquisition case for each of the following accounts:

Account No.	Description	Survivor Curve
353.00	LAND AND LAND RIGHTS	NONDEPRECIABLE
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	65-R3
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	70-R2.5
355.00	POWER GENERATION EQUIPMENT	30-S2
360.10	FORCE MAINS	70-R2.5
361.10	GRAVITY MAINS	65-R2.5
361.12	MANHOLES	60-R3
363.20	SERVICES TO CUSTOMERS	55-R2.5
364.30	METERS	30-L3
371.30	PUMPING EQUIPMENT	40-R1.5
371.40	GRINDER PUMP EQUIPMENT	10-R1.5
380.00	TREATMENT AND DISPOSAL EQUIPMENT	45-S0.5
382.00	OUTFALL SEWERS	70-R2.5
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ
390.70	COMPUTERS AND PRINTERS	5-SQ
391.70	TRANSPORTATION EQUIPMENT	11-S1.5
395.70	POWER OPERATED EQUIPMENT	15-L2.5
396.00	COMMUNICATION EQUIPMENT	15-SQ
397.70	MISCELLANEOUS EQUIPMENT	15-SQ

Notes and Source:
PAWC-BASA Section 1329, Docket No. A-2022-3037047, Gannett Fleming Exhibit 7, page 3

Response:

Neither Gannett Fleming nor PAWC proposed depreciation rates in the BASA acquisition proceeding. Additionally, the table above does not represent depreciation rates. The table sets forth the survivor curve for each account. The survivor curves set forth in the table are the confirmed life estimates used in Docket No. A-2022-3037047.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 26

OCA 26-028

Responsible Witness: John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants

Question:

Depreciation Rates and Depreciation Expense

For PAWC's current rate case, for BASA sewer depreciation rates, please confirm that Gannett Fleming shows the following depreciation rates for each of the accounts listed in the following table. If any of this cannot be confirmed, please show what PAWC believes are the BASA depreciation rates that are being proposed in the current PAWC rate case based on the Gannett Fleming depreciation rate study for each of the following accounts in each period (HTY, FTY and FPFTY):

		2023 Rate Case	
Account No.	Description	June 30, 2024	June 30, 2025
		(A)	(B)
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	45-R3	45-R3
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	55-S0
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	55-S0
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	35-S1	35-S1
355.00	POWER GENERATING EQUIPMENT	35-S0.5	35-S0.5
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	75-R3
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	80-R2.5
361.20	MANHOLES	50-S2.5	50-S2.5
363.00	SERVICES	47-R3	47-R3
364.00	FLOW MEASURING DEVICES	15-L2.5	15-L2.5
371.00	PUMPING EQUIPMENT	30-S0.5	30-S0.5
380.00	TREATMENT EQUIPMENT	35-S1.5	35-S1.5
382.00	OUTFALL SEWER LINES	50-R3	50-R3
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	20-SQ
390.20	COMPUTER AND PERIPHERAL EQUIPMENT	5-SQ	5-SQ
391.00	TRANSPORTATION EQUIPMENT	14-L4	14-L4
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	20-SQ
395.00	POWER OPERATED EQUIPMENT	22-R2	22-R2
396.00	COMMUNICATION EQUIPMENT	15-SQ	15-SQ
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	

Notes and Source:
Col. A: 2023 PAWC Rate Case, Exhibit 11-G
Col. B: 2023 PAWC Rate Case, Exhibit 11-H

Response:

The table above does not represent depreciation rates. The table sets forth the survivor curve for each account. The survivor curves set forth in the table are the confirmed life estimates proposed for the FTY

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 26

OCA 26-029

Responsible Witness: John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants

Question:

Depreciation Rates and Depreciation Expense

For PAWC's proposed acquisition of Brentwood in Docket No. A-2021-3024058, please confirm that Gannett Fleming used the following depreciation rates for each of the accounts listed in the following table. If any of this cannot be confirmed, please show what PAWC believes were the Gannett Fleming depreciation rates in the Brentwood acquisition case for each of the following accounts:

Account No.	Description	Survivor Curve
353.20	LAND AND LAND RIGHTS	NONDEPRECIABLE
361.10	GRAVITY MAINS	70-R2.5
361.12	COLLECTION SEWERS - GRAVITY - MAINS RELINING	50-R2.5
361.20	GRAVITY MAINS MANHOLES	65-R3
363.20	SERVICES TO CUSTOMERS	60-R2.5

Notes and Source:
PAWC-Brentwood Section 1329, Docket No. A-2021-3024058, Gannett Fleming Exhibit 7, page 3

Response:

Neither Gannett Fleming nor PAWC proposed depreciation rates in the Brentwood acquisition proceeding. Additionally, the table above does not represent depreciation rates. The table sets forth the survivor curve for each account. The survivor curves set forth in the table are the confirmed life estimates used in Docket No. A-2021-3024058.

and FPFTY. BASA was not owned by PAWC during the HTY, so there were no rates in the place during that time period.

The depreciation rates for BASA wastewater operations in the current rate case can be found in Volume 14, Exhibits 11-G and 11-H, on Table 2, column 7 for the FTY and FPFTY, respectively.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 26

OCA 26-030

Responsible Witness: John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants

Question:

Depreciation Rates and Depreciation Expense

For PAWC's current rate case, for BASA sewer depreciation rates, please confirm that Gannett Fleming shows the following depreciation rates for each of the accounts listed in the following table. If any of this cannot be confirmed, please show what PAWC believes are the BASA depreciation rates that are being proposed in the current PAWC rate case based on the Gannett Fleming depreciation rate study for each of the following accounts in each period (FTY and FPFTY):

		2023 Rate Case	
Account No.	Description	June 30, 2024	June 30, 2025
		(A)	(B)
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	80-R2.5
361.20	MANHOLES	50-S2.5	50-S2.5
363.00	SERVICES	47-R3	47-R3
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	20-SQ
391.00	TRANSPORTATION EQUIPMENT	14-L4	14-L4
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	20-SQ

Notes and Source:
Col. A: 2023 PAWC Rate Case, Exhibit 11-I
Col. B: 2023 PAWC Rate Case, Exhibit 11-J

Response:

The table above does not represent depreciation rates. The table sets forth the survivor curve for each account. The survivor curves set forth in the table are the confirmed life estimates proposed in the current rate case for each of the two test years.

For BASA depreciation rates being proposed in the current rate case, please refer to OCA 26-028.

Pennsylvania-American Water Company
Docket Nos. R-2022-3031672 (Water) and R-2022-3032487 (Wastewater)
Exhibit LA-4
Copies of Confidential Material Referenced in the
Direct Testimony of
Ralph C. Smith

Document	Subject	Confidential	No. of Pages	Page No.
OCA 17-001	For each executive position, as it relates to the amounts for the 2022 Stock Awards, identification of the PSU and RSU amounts that were allocated to PAWC; For each AWWC executive, identification of the PSU and RSU amounts in total, and allocated to PAWC for the HTY, FTY, and FPFTY; For each AWWC executive position, identification and quantification of the amounts of Stock Awards that are included in PAWC's filing for the FTY and the FPFTY, and how they are allocated to PAWC; Identification of each other AWWC executive position by name and job title, and the compensation information for calendar year 2022, HTY, FTY, and FPFTY; For each amount and component of each AWWC executive's compensation, presentation of how the amounts are allocated and charged to PAWC for calendar year 2022, HTY, FTY, and FPFTY; Identification of each PAWC officer position in 2022 and compensation information; For each amount and component of each other PAWC officer's compensation, presentation of how the amount are recorded or estimated to PAWC for calendar year 2022, HTY, FTY, and FPFTY.	Yes	5	2 - 6
OCA 17-002	For each AWWC executive position as it relates to the amounts for All Other Compensation in 2022, the amounts that were allocated to PAWC; Comparative amounts in total, and as allocated to PAWC in calendar year 2022; HTY, FTY, and FPFTY; For each executive position, the breakout by plan and the amounts for calendar year 2022, HTY, FTY, and FPFTY; For each AWWC executive position, amounts of All Other Compensation, broken out by plan, that are included in the HTY, FTY, and FPFTY; Identification and compensation of each other AWWC executive position in 2022, how such amounts are allocated and charged to PAWC in calendar year 2022, HTY, FTY, and FPFTY; Identification and compensation of each PAWC officer position in 2022; For each amount and component of each PAWC officer, how such amounts are being recorded ore estimated by PAWC for calendar year 2022, HTY, FTY, and FPFTY.	Yes	4	7 - 10
OCA 26-016	Amounts that PAWC budgeted/forecasted for revenue and expenses related to warranty service in each account for the FTY and FPFTY.	Yes	1	11
	Total Pages Including this Page		11	

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 17

OCA 17-001

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Executive Compensation. Refer to American Water Works Company's 2023 Proxy Statement and the table below.

Name and Principal Position	Year	Salary	Bonus	Stock Awards	Non-Equity Incentive Plan Compensation	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation	Total
M. Susan Hardwick President and CEO	2022	$ 975,096	$ 100,000	$ 4,067,077	$ 1,335,400	$ -	$ 243,180	$ 6,720,753
Walter J. Lynch Retired President and CFO	2022	$ 108,407		$ 290,791	$ -	$ -	$ 1,123,635	$ 1,522,833
John C. Griffith Executive VP and CFO	2022	$ 460,099	$ 950,000	$ 1,812,518	$ 554,618	$ -	$ 234,602	$ 4,011,837
Cheryl Norton Executive VP and COO	2022	$ 613,750	$ -	$ 1,099,808	$ 557,974	$ -	$ 37,887	$ 2,309,419
James H. Gallegos Executive VP and General Counsel	2022	$ 452,305	$ 100,000	$ 1,960,109	$ 411,593	$ -	$ 643,096	$ 3,567,103
Melanie M. Kennedy Executive VP and Chief Human Resource Officer	2022	$ 435,545	$ -	$ 536,434	$ 343,585	$ -	$ 101,460	$ 1,417,024

The amounts shown below reflect the grant date fair value of PSUs and RSUs granted in 2022:

Name and Principal Position	PSUs	RSUs	Total
M. Susan Hardwick - President and CEO	$ 2,867,085	$ 1,199,992	$ 4,067,077
Walter J. Lynch - Retired President and CEO	$ 290,791	$ -	$ 290,791
John C. Griffith - Executive VP and CFO	$ 1,268,780	$ 543,738	$ 1,812,518
Cheryl Norton - Executive VP and COO	$ 784,840	$ 314,968	$ 1,099,808
James H. Gallegos - Executive VP and General Counsel	$ 672,029	$ 1,288,080	$ 1,960,109
Melanie M. Kennedy - Executive VP and Chief Human Resource Officer	$ 383,500	$ 152,934	$ 536,434

Source: American Water Works Company, Inc. 2023 Proxy Statement

a. For each AWWC executive position listed in the above table, as it relates to the amounts shown for the 2022 Stock Awards, identify and provide a breakout of the PSU and RSU amounts that were allocated to PAWC.

b. For each AWWC executive, identify the PSU and RSU amounts in total, and allocated to PAWC for each period: (1) HTY ended June 30, 2023, (2) FTY ending June 30, 2024, and (3) FPFTY ending June 30, 2025.

c. For each AWWC executive position, please identify and quantify the amounts of Stock Awards (broken out between PSUs and RSUs) that are included in the Company's filing for the FTY ending June 30, 2024 and the FPFTY ending June 30, 2025, and show the amounts for June 30,

2024 and June 30, 2025, and show in detail how they are allocated to PAWC, and show the PAWC amounts by account.

d. Please identify each other AWWC executive position by name and job title and provide compensation information in similar detail to the table above from the AWWC 2023 Proxy Statement. Provide this information for each period: (1) calendar 2022, (2) HTY ended June 30, 2023, (3) FTY ending June 30, 2024, and (4) FPFTY ending June 30, 2025.

e. For each amount and component of each AWWC executive's compensation, show in detail how such amounts are being allocated and charged to PAWC for each period: (1) calendar 2022, (2) HTY ended June 30, 2023, (3) FTY ending June 30, 2024, and (4) FPFTY ending June 30, 2025.

f. Please identify each PAWC officer position by name and job title in 2022 and provide compensation information in similar detail to the table above from the AWWC 2023 Proxy Statement.

g. For each amount and component of each other PAWC officer's compensation, show in detail how such amounts are recorded (if actual) or estimated (if forecast) to PAWC for each period: (1) calendar 2022, (2) HTY ended June 30, 2023, (3) FTY ending June 30, 2024, and (4) FPFTY ending June 30, 2025.

Response:

a. Please refer to the table below for the amounts of AWWC executive stock-based compensation broken out by PSU and RSU amounts allocated to PAWC in 2022. Please note that the Proxy statement lists amounts granted to executives in 2022 whereas the table below shows the amount of expense allocated to PAWC during 2022.

	Expense Allocated to PAWC		
Position	**PSU**	**RSU**	**Total**
President and CEO	$618,100	$152,783	$770,883
Retired President and CEO	487,228	4,682	491,909
Executive VP and CFO	127,042	25,476	152,518
Executive VP and COO	220,655	44,829	265,483
Executive VP and General Counsel	64,131	62,246	126,377
Executive VP and Chief Human Resources Officer	126,304	25,639	151,943
	$1,643,459	$315,654	$1,959,113

b. Please refer to the table below for the amounts of AWWC executive stock-based compensation allocated to PAWC in the HTY, FTY and FPFTY. The amounts are allocated based on the percentage of labor hours charged to PAWC during the HTY ended June 30, 2023.

Stock Awards Allocated to PAWC
HTY ended 06/30/2023

Position	PSU	RSU	Total
President and CEO	$580,568	$165,881	$746,448
Retired President and CEO	225,574	-	225,574
Executive VP and CFO	214,162	54,365	268,527
Executive VP and COO	209,361	54,454	263,814
Executive VP and General Counsel	106,804	100,732	207,536
Executive VP and Chief Human Resources Officer	104,256	28,103	132,359
	$1,440,725	$403,535	$1,844,260

Stock Awards Allocated to PAWC
FTY ended 06/30/2024

Position	PSU	RSU	Total
President and CEO	$598,798	$171,089	$769,887
Retired President and CEO	-	-	-
Executive VP and CFO	220,887	56,072	276,959
Executive VP and COO	215,935	56,163	272,098
Executive VP and General Counsel	110,158	103,895	214,053
Executive VP and Chief Human Resources Officer	107,530	28,986	136,515
	$1,253,307	$416,206	$1,669,512

Stock Awards Allocated to PAWC
FPFTY ended 06/30/2025

Position	PSU	RSU	Total
President and CEO	$617,600	$176,461	$794,061
Retired President and CEO	-	-	-
Executive VP and CFO	227,823	57,833	285,656
Executive VP and COO	222,715	57,927	280,642
Executive VP and General Counsel	113,617	107,157	220,774
Executive VP and Chief Human Resources Officer	110,906	29,896	140,802
	$1,292,661	$429,274	$1,721,935

c. Please refer to the response in part (b) above.
d. There are no other AWWC executives beyond those listed in the chart.
e. Please refer to the table below for the percentages allocated to PAWC for each AWWC executive. Amounts for the FTY and FPFTY are allocated based on the percentage of labor hours charged to PAWC during the HTY ended June 30, 2023.

Principal Position	2022 % Allocated to PAWC	6/30/2023 % Allocated to PAWC	6/30/2024 % Allocated to PAWC	6/30/2025 % Allocated to PAWC
President and CEO	21.90%	20.50%	20.50%	20.50%
Retired President and CEO	19.86%	19.86%	0.00%	0.00%
Executive VP and CFO	20.52%	20.88%	20.88%	20.88%
Executive VP and COO	21.50%	21.58%	21.58%	21.58%
Executive VP and General Counsel	18.49%	20.90%	20.90%	20.90%
Executive VP and Chief Human Resources Officer	19.60%	20.13%	20.13%	20.13%

f. Please refer to OCA 17-001_Attachment CONFIDENTIAL. Refer to OCA 17-002 part h for the allocation of each officer's compensation to PAWC.
g. There are no other PAWC officers beyond those listed in the response to part (f).

PAGE 6 IS CONFIDENTIAL AND HAS BEEN REDACTED

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 17

OCA 17-002

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Executive Compensation. Refer to American Water Works Company's 2023 Proxy Statement and the table below.

Name	Savings Plan Company Match	Savings Plan Company Defined Contribution Account	Company Contributions to Employee Deferred Compensation Plan	Executive Physical	Dividend Equivalents	Company Paid Life Insurance	Severance Payments	Relocation	Total All Other Compensation
M. Susan Hardwick	$ 12,200	$ 16,013	$ 184,792	$ -	$ 29,714	$ 461	$ -	$ -	$ 243,180
Walter J. Lynch	$ 2,439	$ -	$ -	$ -	$ 91,324	$ 53	$ 1,029,819		$ 1,123,635
John C. Griffith	$ 11,154	$ 16,013	$ -	$ -	$ -	$ 266	$ -	$ 207,169	$ 234,602
Cheryl Norton	$ 7,625	$ -	$ 7,654	$ 2,850	$ 19,297	$ 461	$ -	$ -	$ 37,887
James H. Gallegos	$ 11,077	$ 16,013	$ -	$ -	$ -	$ 319	$ -	$ 615,687	$ 643,096
Melanie M. Kennedy	$ 12,200	$ 16,013	$ 43,814	$ -	$ 28,972	$ 461	$ -	$ -	$ 101,460

Source: American Water Works Company, Inc. 2023 Proxy Statement

a. For each AWWC executive position listed in the above table, as it relates to the amounts shown for All Other Compensation in 2022, identify the amounts that were allocated to PAWC.

b. Also show the comparative amounts in total, and as allocated to PAWC in each period: (1) calendar 2022, (2) HTY ended June 30, 2023, (3) FTY ending June 30, 2024, and (4) FPFTY ending June 30, 2025.

c. For each executive position, break out the amounts by (1) Savings Plan Company Match, (2) Savings Plan Company Defined Contribution Account, (3) Company Contributions to Employee Deferred Compensation Plan, (4) Executive Physical, (5) Dividend Equivalents, (6) Company Paid Life Insurance, (7) Severance Payments, and (8) Relocation, and show the amounts for each period: (1) calendar 2022, (2) HTY ended June 30, 2023, (3) FTY ending June 30, 2024, and (4) FPFTY ending June 30, 2025, and for each period show in detail how such amounts are allocated to PAWC.

d. For each AWWC executive position listed in the above table, please identify and quantify the amounts of All Other Compensation (broken out between the eight categories listed in part "a") that are included in each period: (1) HTY ended June 30, 2023, (2) FTY ending June 30, 2024, and (3) FPFTY ending June 30, 2025.

e. Please identify each other AWWC executive position by name and job title in 2022 and provide compensation information in similar detail to the table above from the AWWC 2023 Proxy Statement.

f. For each amount and component of each other AWWC executive position, show in detail how such amounts are being allocated and charged to PAWC in each period: (1) calendar 2022, (2) HTY ended June 30, 2023, (3) FTY ending June 30, 2024, and (4) FPFTY ending June 30, 2025.

g. Please identify each PAWC officer position by name and job title in 2022 and provide compensation information in similar detail to the table above from the AWWC 2023 Proxy Statement.

h. For each amount and component of each PAWC officer, show in detail how such amounts are being recorded (if actual) or estimated (if forecast) by PAWC for each period: (1) calendar 2022, (2) HTY ended June 30, 2023, (3) FTY ending June 30, 2024, and (4) the FPFTY ending June 30, 2025.

Response:

a. Please refer to the table below for the amounts that were allocated to PAWC for All Other Compensation in 2022:

Position	% Allocated to PAWC	401(k) Company Match	Company Defined Contribution Account	Company Contributions to Employee Deferred Compensation Plan	Executive Physical	Dividend Equivalents	Company-Paid Life Insurance	Severance	Relocation	Total All Other Compensation
President and CEO	21.90%	$2,672	$3,507	$40,469	$0	$6,507	$101	$0	$0	$53,255
Retired President and CEO	19.86%	484	-	-	-	18,141	11	204,564	-	223,200
Executive VP and CFO	20.52%	2,289	3,286	-	-	-	55	-	42,511	48,140
Executive VP and COO	21.50%	1,639	-	1,646	613	4,149	99	-	-	8,145
Executive VP and General Counsel	18.49%	2,048	2,961	-	-	-	59	-	113,851	118,920
Executive VP and Chief Human Resources Officer	19.60%	2,391	3,138	8,587	-	5,678	90	-	-	19,885

b. Please refer to part (a) above for 2022. Please refer to OCA 17-002_Attachment CONFIDENTIAL for HTY ended June 30, 2023, FTY ending June 30, 2024, and FPFTY ending June 30, 2025.
c. Please refer to part (b) above.
d. Please refer to part (b) above.
e. There are no other AWWC executives beyond those listed in the chart.
f. Please refer to the response in part (e) above.
g. Please refer to the Company's response to OCA 17-001.
h. Please refer to the table below for the percentages allocated to PAWC for each officer in the calendar year 2022, and the HTY ended June 30, 2023. Amounts for the FTY ending June 30, 2024, and the FPFTY ending June 30, 2025 are allocated based on the percentage of labor hours charged to PAWC during the HTY ended June 30, 2023.

Principal Position	2022 % Allocated to PAWC	06/30/2023 % Allocated to PAWC	06/30/2024 % Allocated to PAWC	06/30/2025 % Allocated to PAWC
President (elected Nov 2022)	100.00%	100.00%	100.00%	100.00%
Former President (resigned Nov 2022)	67.45%	49.78%	49.78%	49.78%
VP - Engineering	100.00%	100.00%	100.00%	100.00%
VP - Operations	100.00%	100.00%	100.00%	100.00%
VP, General Counsel & Secretary	80.71%	83.63%	83.63%	83.63%
VP, Treasurer and Comptroller	68.11%	54.99%	54.99%	54.99%
VP, Business Development	100.00%	100.00%	100.00%	100.00%
Assistant Treasurer	84.98%	85.20%	85.20%	85.20%
Assistant Comptroller	20.48%	21.48%	21.48%	21.48%
Assistant Comptroller (resigned April 2022)	0.00%	0.00%	0.00%	0.00%
Assistant Comptroller (elected April 2022)	19.66%	20.90%	20.90%	20.90%
Assistant Comptroller	17.44%	0.00%	0.00%	0.00%
Assistant Secretary	100.00%	0.00%	0.00%	0.00%
Assistant Secretary	100.00%	100.00%	100.00%	100.00%

PAGES 10-11 ARE CONFIDENTIAL AND HAVE BEEN REDACTED

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)
Exhibit LA-5
Copies of BASA and Brentwood Depreciation Related Material Referenced in the Direct Testimony of
Ralph C. Smith

Document	Subject	Confidential	No. of Pages	Page No.
PAWC-BASA Section 1329 Gannett Fleming Exhibit 7	Excerpt from the Gannett Fleming valuation in the PAWC-BASA Section 1329 Case, Docket No. A-2022-3037047, which shows the survivor curves proposed by plant account for BASA Wastewater	No	2	2 - 3
PAWC-Brentwood Section 1329 Gannett Fleming Exhibit 7	Excerpt from the Gannett Fleming valuation in the PAWC-BASA Section 1329 Case, Docket No. A-2021-3024058, which shows the survivor curves proposed by plant account for Brentwood Wastewater	No	2	4 - 5
OCA 26-027	Confirms the survivor curves proposed by Gannett Fleming in the PAWC-BASA Section 1329 Case	No	1	6
OCA 26-028	Confirms the survivor curves proposed by Gannett Fleming for BASA in the current PAWC rate case	No	2	7 - 8
OCA 26-029	Confirms the survivor curves proposed by Gannett Fleming in the PAWC-Brentwood Section 1329 Case	No	1	9
OCA 26-030	Confirms the survivor curves proposed by Gannett Fleming for Brentwood in the current PAWC rate case	No	1	10
	Total Pages Including this Page		10	

BUTLER AREA SEWER AUTHORITY

WASTEWATER SYSTEM ASSETS

FAIR MARKET VALUE APPRAISAL

AT

JANUARY 19, 2023

Prepared by:

GANNETT FLEMING

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

SUMMARY OF SERVICE LIFE ESTIMATES AND CALCULATED ACCRUED DEPRECIATION RELATED TO ORIGINAL COST AS OF JANUARY 19, 2023

ACCOUNT	DESCRIPTION	SURVIVOR CURVE	ORIGINAL COST	ACCRUED DEPRECIATION
(1)	(2)	(3)	(4)	(5)
353.00	LAND AND LAND RIGHTS	NONDEPRECIABLE	592,540.92	
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	65-R3	29,543,057.09	4,196,580
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	70-R2.5	19,347,446.15	7,381,375
355.00	POWER GENERATION EQUIPMENT	30-S2	1,703,692.16	743,169
360.10	FORCE MAINS	70-R2.5	4,551,561.31	1,359,641
361.10	GRAVITY MAINS	65-R2.5	42,602,048.00	17,921,924
361.12	MANHOLES	60-R3	7,927,848.70	3,859,382
363.20	SERVICES TO CUSTOMERS	55-R2.5	8,568,747.97	4,002,410
364.30	METERS	30-L3	300,000.00	179,200
371.30	PUMPING EQUIPMENT	40-R1.5	6,954,252.18	3,391,997
371.40	GRINDER PUMP EQUIPMENT	10-R1.5	38,624.00	6,131
380.00	TREATMENT AND DISPOSAL EQUIPMENT	45-S0.5	18,483,489.84	5,586,844
382.00	OUTFALL SEWERS	70-R2.5	25,662.14	17,091
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	12,178.00	1,654
390.70	COMPUTERS AND PRINTERS	5-SQ	87,162.00	70,653
391.70	TRANSPORTATION EQUIPMENT	11-S1.5	784,172.00	407,230
395.70	POWER OPERATED EQUIPMENT	15-L2.5	1,134,169.60	489,405
396.00	COMMUNICATION EQUIPMENT	15-SQ	1,111,618.35	744,501
397.70	MISCELLANEOUS EQUIPMENT	15-SQ	3,059.83	3,060
	TOTAL COMPANY		**143,771,330.24**	**50,362,247**

BOROUGH OF BRENTWOOD
WASTEWATER SYSTEM ASSETS

FAIR MARKET VALUE APPRAISAL

AT

JANUARY 13, 2023

Prepared by:

GANNETT FLEMING

BRENTWOOD BOROUGH
BRENTWOOD BOROUGH WASTEWATER SYSTEM ASSETS

SUMMARY OF SERVICE LIFE ESTIMATES AND CALCULATED ACCRUED DEPRECIATION RELATED TO ORIGINAL COST AS OF JANUARY 13, 2023

ACCOUNT	DESCRIPTION	SURVIVOR CURVE	ORIGINAL COST	ACCRUED DEPRECIATION
(1)	(2)	(3)	(4)	(5)
353.20	LAND AND LAND RIGHTS	NONDEPRECIABLE	30.00	
361.10	GRAVITY MAINS	70-R2.5	5,431,257.44	2,001,926
361.12	COLLECTION SEWERS - GRAVITY - MAINS RELINING	50-R2.5	2,541,613.32	399,740
361.20	GRAVITY MAINS MANHOLES	65-R3	1,485,457.73	382,816
363.20	SERVICES TO CUSTOMERS	60-R2.5	483,826.79	232,401
	TOTAL COMPANY		**9,942,185.28**	**3,016,883**

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 26

OCA 26-027

Responsible Witness: John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants

Question:

Depreciation Rates and Depreciation Expense

For PAWC's proposed acquisition of BASA in Docket No. A-2022-3037047, please confirm that Gannett Fleming used the following depreciation rates for each of the accounts listed in the following table. If any of this cannot be confirmed, please show what PAWC believes were the Gannett Fleming depreciation rates in the BASA acquisition case for each of the following accounts:

Account No.	Description	Survivor Curve
353.00	LAND AND LAND RIGHTS	NONDEPRECIABLE
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	65-R3
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	70-R2.5
355.00	POWER GENERATION EQUIPMENT	30-S2
360.10	FORCE MAINS	70-R2.5
361.10	GRAVITY MAINS	65-R2.5
361.12	MANHOLES	60-R3
363.20	SERVICES TO CUSTOMERS	55-R2.5
364.30	METERS	30-L3
371.30	PUMPING EQUIPMENT	40-R1.5
371.40	GRINDER PUMP EQUIPMENT	10-R1.5
380.00	TREATMENT AND DISPOSAL EQUIPMENT	45-S0.5
382.00	OUTFALL SEWERS	70-R2.5
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ
390.70	COMPUTERS AND PRINTERS	5-SQ
391.70	TRANSPORTATION EQUIPMENT	11-S1.5
395.70	POWER OPERATED EQUIPMENT	15-L2.5
396.00	COMMUNICATION EQUIPMENT	15-SQ
397.70	MISCELLANEOUS EQUIPMENT	15-SQ

Notes and Source:
PAWC-BASA Section 1329, Docket No. A-2022-3037047, Gannett Fleming Exhibit 7, page 3

Response:

Neither Gannett Fleming nor PAWC proposed depreciation rates in the BASA acquisition proceeding. Additionally, the table above does not represent depreciation rates. The table sets forth the survivor curve for each account. The survivor curves set forth in the table are the confirmed life estimates used in Docket No. A-2022-3037047.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 26

OCA 26-028

Responsible Witness: John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants

Question:

Depreciation Rates and Depreciation Expense

For PAWC's current rate case, for BASA sewer depreciation rates, please confirm that Gannett Fleming shows the following depreciation rates for each of the accounts listed in the following table. If any of this cannot be confirmed, please show what PAWC believes are the BASA depreciation rates that are being proposed in the current PAWC rate case based on the Gannett Fleming depreciation rate study for each of the following accounts in each period (HTY, FTY and FPFTY):

		2023 Rate Case	
Account No.	Description	June 30, 2024	June 30, 2025
		(A)	(B)
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	45-R3	45-R3
354.30	STRUCTURES AND IMPROVEMENTS - SPP	55-S0	55-S0
354.40	STRUCTURES AND IMPROVEMENTS - TDP	55-S0	55-S0
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	35-S1	35-S1
355.00	POWER GENERATING EQUIPMENT	35-S0.5	35-S0.5
360.10	COLLECTION SEWERS - FORCE MAINS	75-R3	75-R3
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	80-R2.5
361.20	MANHOLES	50-S2.5	50-S2.5
363.00	SERVICES	47-R3	47-R3
364.00	FLOW MEASURING DEVICES	15-L2.5	15-L2.5
371.00	PUMPING EQUIPMENT	30-S0.5	30-S0.5
380.00	TREATMENT EQUIPMENT	35-S1.5	35-S1.5
382.00	OUTFALL SEWER LINES	50-R3	50-R3
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	20-SQ
390.20	COMPUTER AND PERIPHERAL EQUIPMENT	5-SQ	5-SQ
391.00	TRANSPORTATION EQUIPMENT	14-L4	14-L4
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	20-SQ
395.00	POWER OPERATED EQUIPMENT	22-R2	22-R2
396.00	COMMUNICATION EQUIPMENT	15-SQ	15-SQ
397.00	MISCELLANEOUS EQUIPMENT	15-SQ	

Notes and Source:
Col. A: 2023 PAWC Rate Case, Exhibit 11-G
Col. B: 2023 PAWC Rate Case, Exhibit 11-H

Response:

The table above does not represent depreciation rates. The table sets forth the survivor curve for each account. The survivor curves set forth in the table are the confirmed life estimates proposed for the FTY

and FPFTY. BASA was not owned by PAWC during the HTY, so there were no rates in the place during that time period.

The depreciation rates for BASA wastewater operations in the current rate case can be found in Volume 14, Exhibits 11-G and 11-H, on Table 2, column 7 for the FTY and FPFTY, respectively.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 26

OCA 26-029

Responsible Witness: John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants

Question:

Depreciation Rates and Depreciation Expense

For PAWC's proposed acquisition of Brentwood in Docket No. A-2021-3024058, please confirm that Gannett Fleming used the following depreciation rates for each of the accounts listed in the following table. If any of this cannot be confirmed, please show what PAWC believes were the Gannett Fleming depreciation rates in the Brentwood acquisition case for each of the following accounts:

Account No.	Description	Survivor Curve
353.20	LAND AND LAND RIGHTS	NONDEPRECIABLE
361.10	GRAVITY MAINS	70-R2.5
361.12	COLLECTION SEWERS - GRAVITY - MAINS RELINING	50-R2.5
361.20	GRAVITY MAINS MANHOLES	65-R3
363.20	SERVICES TO CUSTOMERS	60-R2.5

Notes and Source:
PAWC-Brentwood Section 1329, Docket No. A-2021-3024058, Gannett Fleming Exhibit 7, page 3

Response:

Neither Gannett Fleming nor PAWC proposed depreciation rates in the Brentwood acquisition proceeding. Additionally, the table above does not represent depreciation rates. The table sets forth the survivor curve for each account. The survivor curves set forth in the table are the confirmed life estimates used in Docket No. A-2021-3024058.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 26

OCA 26-030

Responsible Witness: John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants

Question:

Depreciation Rates and Depreciation Expense

For PAWC's current rate case, for BASA sewer depreciation rates, please confirm that Gannett Fleming shows the following depreciation rates for each of the accounts listed in the following table. If any of this cannot be confirmed, please show what PAWC believes are the BASA depreciation rates that are being proposed in the current PAWC rate case based on the Gannett Fleming depreciation rate study for each of the following accounts in each period (FTY and FPFTY):

		2023 Rate Case	
Account No.	Description	June 30, 2024	June 30, 2025
		(A)	(B)
361.10	COLLECTION SEWERS - GRAVITY MAINS	80-R2.5	80-R2.5
361.20	MANHOLES	50-S2.5	50-S2.5
363.00	SERVICES	47-R3	47-R3
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	20-SQ
391.00	TRANSPORTATION EQUIPMENT	14-L4	14-L4
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	20-SQ

Notes and Source:
Col. A: 2023 PAWC Rate Case, Exhibit 11-I
Col. B: 2023 PAWC Rate Case, Exhibit 11-J

Response:

The table above does not represent depreciation rates. The table sets forth the survivor curve for each account. The survivor curves set forth in the table are the confirmed life estimates proposed in the current rate case for each of the two test years.

For BASA depreciation rates being proposed in the current rate case, please refer to OCA 26-028.

Exhibit LA-6

Alternative Rate of Return and Revenue Requirement Impact Calculations

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Water Operations	Wastewater SSS General Operations	BASA Wastewater Operations	Brentwood Wastewater Operations	CSS Wastewater Operations
		(A)	(B)	(C)	(D)	(E)
	25 Basis Point ROE Impact					
1	Adjusted rate base	$ 4,704,067,656	$ 649,330,622	$ 231,536,917	$ 22,053,946	$ 489,184,280
2	Rate of return (25 basis points ROE change)	0.25%	0.25%	0.25%	0.25%	0.25%
3	Net operating income required	$ 11,760,169	$ 1,623,327	$ 578,842	$ 55,135	$ 1,222,961
4	Weighted cost of equity in capital structure	55.99%	52.87%	52.87%	52.87%	52.87%
5	Net operating income deficiency	$ 6,584,519	$ 858,253	$ 306,034	$ 29,150	$ 646,579
6	Gross revenue conversion factor	1.40111	1.40114	1.40114	1.40114	1.40114
7	Revenue deficiency	$ 9,225,663	$ 1,202,534	$ 428,797	$ 40,843	$ 905,950
	Combined Impact					
8	Water Operations	$ 9,225,663				
9	Wastewater Operations	$ 2,578,124				
10	Total	$ 11,803,788				

Notes and Source

Cols. A-E: Exhibit LA-1, Schedule A, page 2, line 1 (PAWC's request)

Pennsylvania American Water Company
Revenue Requirement Impact from Comparing PAWC and OCA Capital Structure

Exhibit LA-6
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 2 of 7

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Amount	Percent	Cost Rate	Weighted Cost
		(A)	(B)	(C)	(D)
	WATER OPERATIONS				
	Per Company				
1	Long Term Debt	$ 2,155,515,957	44.01%	4.76%	2.09%
2	Preferred Stock	$ -	0.00%	0.00%	0.00%
3	Common Equity	$ 2,741,754,985	55.99%	10.95%	6.13%
4	Total Capital Structure	$ 4,897,270,942	100.00%		8.22%
	Per OCA Using OCA Recommended Capital Structure				
5	Long-Term Debt	$ 2,399,662,762	49.00%	4.76%	2.33%
6	Preferred Stock	$ -	0.00%	0.00%	0.00%
7	Common Equity	$ 2,497,608,180	51.00%	**10.95%**	5.58%
8	Total Capital Structure	$ 4,897,270,942	100.00%		7.91%
9	Difference				-0.31%

	RATE BASE REVENUE REQUIREMENT IMPACT - WATER			
10	Rate of Return Difference		-0.31%	Rev Req
11	GRCF		1.400941	Impact
12	Rate Base per PAWC's Filing	$ 4,704,067,656	-0.434%	$ (20,429,377)

	NOI REVENUE REQUIREMENT IMPACT - WATER Description	Net Operating Income Amount	GRCF	Rev Req Impact
13	Interest Synchronization	$ 3,083,691	1.400941	$ (4,320,069)
14			Combined Revenue Requirement Impact	$ (24,749,446)

	Interest Synchronization Calculation	Amount	
15	Adjusted Rate Base, per PAWC	$ 4,704,067,656	
16	Difference in Weighted Cost of Debt	0.24%	(Col. D, line 5 - line 1)
17	Change in Interest Deduction for Tax Purposes	$ 11,289,762	
18	State Income Tax Rate	7.99%	
19	Decrease to State Income Tax	$ (902,116)	
20	Change in Federal Taxable Income	$ 10,387,646	
21	Federal Income Tax Rate	21.00%	
22	Decrease to Federal Income Tax Expense	$ (2,181,574)	
23	Overall Increase (Decrease) to Income Tax Expense	$ (3,083,691)	
24	Impact on Net Operating Income	$ 3,083,691	(Col. A, line 13)

Pennsylvania American Water Company
Revenue Requirement Impact from Comparing PAWC and OCA Capital Structure

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Amount	Percent	Cost Rate	Weighted Cost
		(A)	(B)	(C)	(D)
	WASTEWATER OPERATIONS				
	Per Company				
1	Long Term Debt	$ 594,902,431	42.73%	4.76%	2.03%
2	WW Financing	$ 61,227,844	4.40%	2.62%	0.12%
3	Preferred Stock	$ -	0.00%	0.00%	0.00%
4	Common Equity	$ 735,975,490	52.87%	10.95%	5.79%
5	Total Capital Structure	$ 1,392,105,765	100.00%		7.94%
	Per OCA Using OCA Recommended Capital Structure				
6	Long-Term Debt	$ 652,130,181	46.84%	4.76%	2.23%
7	WW Financing	$ 61,227,844	4.40%	2.62%	0.12%
8	Preferred Stock	$ -	0.00%	0.00%	0.00%
9	Common Equity	$ 678,747,740	48.76%	**10.95%**	5.34%
10	Total Capital Structure	$ 1,392,105,765	100.00%		7.69%
11	Difference				-0.25%

	RATE BASE REVENUE REQUIREMENT IMPACT - WASTEWATER			
12	Rate of Return Difference		-0.25%	Rev Req
13	GRCF		1.400970	Impact
14	Rate Base per PAWC's Filing	$ 1,392,105,765	-0.00350	$ (4,875,747)

	Wastewater Rate Base Breakout	
15	Wastewater SSS General Operations	$ 649,330,622
16	BASA Wastewater Operations	$ 231,536,917
17	Brentwood Wastewater Operations	$ 22,053,946
18	CSS Wastewater Operations	$ 489,184,280
19	Total Wastewater Rate Base	$ 1,392,105,765

	NOI REVENUE REQUIREMENT IMPACT - WASTEWATER Description	Net Operating Income Amount	GRCF	Rev Req Impact
20	Interest Synchronization	$ 760,481	1.400970	$ (1,065,411)
21			Combined Revenue Requirement Impact	$ (5,941,158)

	Interest Synchronization Calculation	Wastewater SSS General Operations	BASA Wastewater Operations	Brentwood Wastewater Operations	CSS Wastewater Operations	Total Wastewater Operations
22	Adjusted Rate Base, per PAWC	$ 649,330,622	$ 231,536,917	$ 22,053,946	$ 489,184,280	$ 1,392,105,765
23	Difference in Weighted Cost of Debt	0.20%	0.20%	0.20%	0.20%	
24	Change in Interest Deduction for Tax Purposes	$ 1,298,661	$ 463,074	$ 44,108	$ 978,369	
25	State Income Tax Rate	7.99%	7.99%	7.99%	7.99%	
26	Decrease to State Income Tax	$ (103,770)	$ (37,002)	$ (3,524)	$ (78,177)	
27	Change in Federal Taxable Income	$ 1,194,891	$ 426,072	$ 40,583	$ 900,191	
28	Federal Income Tax Rate	21.00%	21.00%	21.00%	21.00%	
29	Decrease to Federal Income Tax Expense	$ (250,946)	$ (89,482)	$ (8,523)	$ (189,055)	
30	Overall Increase (Decrease) to Income Tax Expense	$ (354,717)	$ (126,484)	$ (12,048)	$ (267,232)	$ (760,481)
31	Impact on Net Operating Income	$ 354,717	$ 126,484	$ 12,048	$ 267,232	$ 760,481

Pennsylvania American Water Company
Revenue Requirement Impact from Comparing PAWC and OCA ROE

Exhibit LA-6
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 4 of 7

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description		Amount	Percent	Cost Rate	Weighted Cost
			(A)	(B)	(C)	(D)
	WATER OPERATIONS					
	Per Company					
1	Long Term Debt	$	2,155,515,957	44.01%	4.76%	2.09%
2	Preferred Stock	$	-	0.00%	0.00%	0.00%
3	Common Equity	$	2,741,754,985	55.99%	10.95%	6.13%
4	Total Capital Structure	$	4,897,270,942	100.00%		8.22%
	Per OCA Using OCA Recommended Capital Structure					
5	Long-Term Debt	$	2,155,515,957	44.01%	4.76%	2.09%
6	Preferred Stock	$	-	0.00%	0.00%	0.00%
7	Common Equity	$	2,741,754,985	55.99%	**9.10%**	5.10%
8	Total Capital Structure	$	4,897,270,942	100.00%		7.19%
9	Difference					-1.03%
	RATE BASE REVENUE REQUIREMENT IMPACT - WATER					
10	Rate of Return Difference			-1.03%		Rev Req
11	GRCF			1.400941		Impact
12	Rate Base per PAWC's Filing	$	4,704,067,656	-1.443%		$ (67,878,253)

Pennsylvania American Water Company
Revenue Requirement Impact from Comparing PAWC and OCA ROE

Exhibit LA-6
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 5 of 7

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description		Amount	Percent	Cost Rate	Weighted Cost
			(A)	(B)	(C)	(D)
	WASTEWATER OPERATIONS RATE BASE					
	Per Company					
1	Long Term Debt	$	594,902,431	42.73%	4.76%	2.03%
2	WW Financing	$	61,227,844	4.40%	2.62%	0.12%
3	Preferred Stock	$	-	0.00%	0.00%	0.00%
4	Common Equity	$	735,975,490	52.87%	10.95%	5.79%
5	Total Capital Structure	$	1,392,105,765	100.00%		7.94%
	Per OCA Using OCA Recommended Capital Structure					
6	Long-Term Debt	$	594,902,431	42.73%	4.76%	2.03%
7	WW Financing	$	61,227,844	4.40%	2.62%	0.12%
8	Preferred Stock	$	-	0.00%	0.00%	0.00%
9	Common Equity	$	735,975,490	52.87%	**9.10%**	4.81%
10	Total Capital Structure	$	1,392,105,765	100.00%		6.96%
11	Difference					-0.98%
	RATE BASE REVENUE REQUIREMENT IMPACT - WASTEWATER					
12	Rate of Return Difference			-0.98%		Rev Req
13	GRCF			1.400970		Impact
14	Rate Base per PAWC's Filing	$	1,392,105,765	-0.01373		$ (19,112,930)
	Wastewater Rate Base Breakout					
15	Wastewater SSS General Operations	$	649,330,622			
16	BASA Wastewater Operations	$	231,536,917			
17	Brentwood Wastewater Operations	$	22,053,946			
18	CSS Wastewater Operations	$	489,184,280			
19	Total Wastewater Rate Base	$	1,392,105,765			

Pennsylvania American Water Company — Exhibit LA-6
Revenue Requirement Impact from Comparing PAWC and OCA Capital Structure/ROE — Docket Nos. R-2023-3043189 and R-2023-3043190
Page 6 of 7

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Amount	Percent	Cost Rate	Weighted Cost
		(A)	(B)	(C)	(D)
	WATER OPERATIONS				
	Per Company				
1	Long Term Debt	$ 2,155,515,957	44.01%	4.76%	2.09%
2	Preferred Stock	$ -	0.00%	0.00%	0.00%
3	Common Equity	$ 2,741,754,985	55.99%	10.95%	6.13%
4	Total Capital Structure	$ 4,897,270,942	100.00%		8.22%
	Per OCA Using OCA Recommended Capital Structure				
5	Long-Term Debt	$ 2,399,662,762	49.00%	4.76%	2.33%
6	Preferred Stock	$ -	0.00%	0.00%	0.00%
7	Common Equity	$ 2,497,608,180	51.00%	**9.10%**	4.64%
8	Total Capital Structure	$ 4,897,270,942	100.00%		6.97%
9	Difference				-1.25%

	RATE BASE REVENUE REQUIREMENT IMPACT - WATER			
10	Rate of Return Difference		-1.25%	Rev Req
11	GRCF		1.400941	Impact
12	Rate Base per PAWC's Filing	$ 4,704,067,656	-1.751%	$ (82,376,521)

	NOI REVENUE REQUIREMENT IMPACT - WATER	Net Operating		Rev Req
	Description	Income Amount	GRCF	Impact
13	Interest Synchronization	$ 3,083,691	1.400941	$ (4,320,069)
14			Combined Revenue Requirement Impact	$ (86,696,590)

	Interest Synchronization Calculation	Amount	
15	Adjusted Rate Base, per PAWC	$ 4,704,067,656	
16	Difference in Weighted Cost of Debt	0.24%	(Col. D, line 5 - line 1)
17	Change in Interest Deduction for Tax Purposes	$ 11,289,762	
18	State Income Tax Rate	7.99%	
19	Decrease to State Income Tax	$ (902,116)	
20	Change in Federal Taxable Income	$ 10,387,646	
21	Federal Income Tax Rate	21.00%	
22	Decrease to Federal Income Tax Expense	$ (2,181,574)	
23	Overall Increase (Decrease) to Income Tax Expense	$ (3,083,691)	
24	Impact on Net Operating Income	$ 3,083,691	

Pennsylvania American Water Company
Revenue Requirement Impact from Comparing PAWC and OCA Capital Structure/ROE

Exhibit LA-6
Docket Nos. R-2023-3043189 and R-2023-3043190
Page 7 of 7

Fully Projected Future Test Year Ending June 30, 2025

Line No.	Description	Amount	Percent	Cost Rate	Weighted Cost
		(A)	(B)	(C)	(D)
	WASTEWATER OPERATIONS RATE BASE				
	Per Company				
1	Long Term Debt	$ 594,902,431	42.73%	4.76%	2.03%
2	WW Financing	$ 61,227,844	4.40%	2.62%	0.12%
3	Preferred Stock	$ -	0.00%	0.00%	0.00%
4	Common Equity	$ 735,975,490	52.87%	10.95%	5.79%
5	Total Capital Structure	$ 1,392,105,765	100.00%		7.94%
	Per OCA Using OCA Recommended Capital Structure				
6	Long-Term Debt	$ 652,130,181	46.84%	4.76%	2.23%
7	WW Financing	$ 61,227,844	4.40%	2.62%	0.12%
8	Preferred Stock	$ -	0.00%	0.00%	0.00%
9	Common Equity	$ 678,747,740	48.76%	**9.10%**	4.44%
10	Total Capital Structure	$ 1,392,105,765	100.00%		6.79%
11	Difference				-1.15%

	RATE BASE REVENUE REQUIREMENT IMPACT - WASTEWATER			
12	Rate of Return Difference		-1.15%	Rev Req
13	GRCF		1.400970	Impact
14	Rate Base per PAWC's Filing	$ 1,392,105,765	-0.01611	$ (22,428,438)

	Wastewater Rate Base Breakout	
15	Wastewater SSS General Operations	$ 649,330,622
16	BASA Wastewater Operations	$ 231,536,917
17	Brentwood Wastewater Operations	$ 22,053,946
18	CSS Wastewater Operations	$ 489,184,280
19	Total Wastewater Rate Base	$ 1,392,105,765

	NOI REVENUE REQUIREMENT IMPACT - WASTEWATER	Net Operating		Rev Req
	Description	Income Amount	GRCF	Impact
20	Interest Synchronization	$ 760,481	1.400970	$ (1,065,411)
21			Combined Revenue Requirement Impact	$ (23,493,849)

	Interest Synchronization Calculation	Wastewater SSS General Operations	BASA Wastewater Operations	Brentwood Wastewater Operations	CSS Wastewater Operations	Total Wastewater Operations
22	Adjusted Rate Base, per PAWC	$ 649,330,622	$ 231,536,917	$ 22,053,946	$ 489,184,280	$ 1,392,105,765
23	Difference in Weighted Cost of Debt	0.20%	0.20%	0.20%	0.20%	
24	Change in Interest Deduction for Tax Purposes	$ 1,298,661	$ 463,074	$ 44,108	$ 978,369	
25	State Income Tax Rate	7.99%	7.99%	7.99%	7.99%	
26	Decrease to State Income Tax	$ (103,770)	$ (37,002)	$ (3,524)	$ (78,177)	
27	Change in Federal Taxable Income	$ 1,194,891	$ 426,072	$ 40,583	$ 900,191	
28	Federal Income Tax Rate	21.00%	21.00%	21.00%	21.00%	
29	Decrease to Federal Income Tax Expense	$ (250,946)	$ (89,482)	$ (8,523)	$ (189,055)	
30	Overall Increase (Decrease) to Income Tax Expense	$ (354,717)	$ (126,484)	$ (12,048)	$ (267,232)	$ (760,481)
31	Impact on Net Operating Income	$ 354,717	$ 126,484	$ 12,048	$ 267,232	$ 760,481

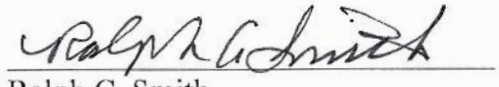
BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Ralph C. Smith, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 2, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: February 1, 2024

Signature: 

Ralph C. Smith

Consultant Address: Larkin & Associates, PLLC
15728 Farmington Road
Livonia, MI 48154

*4871-5379-8047

OCA Statement 2SR

BEFORE THE
COMMONWEALTH OF PENNSYLVANIA
PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
v.	:	R-2023-3043190 (Wastewater)
Pennsylvania-American Water Company	:	
	:	

Surrebuttal Testimony of
Ralph C. Smith

on Behalf of the
Pennsylvania Office of Consumer Advocate

March 4, 2024

SURREBUTTAL TESTIMONY OF RALPH C. SMITH
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EXHIBITS:

LA-7, Selected Non-Confidential Documents Referenced in the Testimony

I. INTRODUCTION

Q. Please state your name, position and business address.

A. Ralph C. Smith. I am a Senior Regulatory Consultant at Larkin & Associates, PLLC, 15728 Farmington Road, Livonia, Michigan 48154.

Q. Have you previously submitted testimony in this proceeding?

A. Yes. My direct testimony concerning the rate request of Pennsylvania American Water Company ("PAWC" or "Company") on behalf of the Pennsylvania Office of Consumer Advocate ("OCA") was served on February 1, 2024 and pre-marked OCA Statement 2. My qualifications were set forth in that statement.

Q. What is the purpose of your surrebuttal testimony?

A. My surrebuttal testimony responds to the rebuttal testimony of PAWC witnesses Ashley E. Everette, James Runzer, Stacey D. Gress, Lori, O'Malley, E. Christopher Abruzzo, J. Cas Swiz, John J. Spanos, Paul Hibbard, and Justin L. Lander on various issues.

Q. What exhibits are being filed with your surrebuttal testimony?

A. Exhibits LA-7 is being filed with my surrebuttal testimony.

Q. What is shown on that exhibit?

A. Exhibit LA-7 presents selected non-confidential documents that are referenced in my testimony.

II. PAWC ADOPTED AND CONTESTED ADJUSTMENTS

Q. What adjustments recommended by the OCA has PAWC adopted in its rebuttal filing?

A. As described at PAWC Statement No. 5-R, the rebuttal testimony of Company witness O'Malley, PAWC has adopted the following adjustments:

- Vacancies – Salaries and Wages Expense[1]
- Annualized Performance Plan Expense
- Group Insurance Expense
- 401K, Defined Contribution Plan and Employee Stock Purchase Plan
- PAWC external Board Members expense[2]
- American Water Works Service Company – Supplemental Executive Retirement Plan expense[3]

Q. What issues and adjustments that you addressed in your direct testimony has PAWC contested?

A. As discussed in the rebuttal testimonies of various Company rebuttal witnesses, PAWC is contesting these issues:

- Excluding from the base rate revenue requirement costs related to PAWC's proposed acquisition of Audubon Water
- Excluding from the base rate revenue requirement costs related to PAWC's proposed acquisitions of the Farmington Township Water and Wastewater utilities.

[1] PAWC witness Lori O'Malley's rebuttal testimony at page 3. The Company's acceptance of my recommended vacancy rate also impacts my adjustments to (1) Annualized Performance Expense, (2) Group Insurance Expense, and (3) 401K, Defined Contribution Plan and Employee Stock Purchase Plan Expense.
[2] PAWC witness Lori O'Malley's rebuttal testimony at page 7.
[3] PAWC witness Lori O'Malley's rebuttal testimony at page 6 states that the Company removed the AWWSC related SERP expense that was erroneously included in PAWC's filing and her Exhibit LNO-3R reflects the removal of $31,348. OCA had removed $152,769 as shown on Exhibit LA-2, Schedule C-20. In response to OCA 35-008, PAWC stated that the $152,769 was the total Service Company amount of SERP expense, and that the $31,348 amount reflects the amount that was allocated to PAWC.

- Excluding from the base rate revenue requirement costs related to PAWC's proposed acquisition of the Sadsbury Township Municipal Authority Wastewater utility
- Excluding from the base rate revenue requirement costs related to PAWC's proposed acquisition of the Butler Area Sewer Authority ("BASA") Wastewater utility
- Excluding from the base rate revenue requirement costs related to PAWC's proposed acquisition of the Brentwood Wastewater utility
- Cash Working Capital
- Audubon Water related O&M expense and depreciation expense
- Farmington Township Water and Wastewater related O&M expense and depreciation expense
- Sadsbury Township Municipal Authority Wastewater related O&M expense and depreciation expense
- Uncollectibles Expense
- Interest Synchronization
- Insurance Other Than Group
- Depreciation expense – Water Operations
- Stock-Based Compensation Expense/Long-Term Performance Plan Costs for American Water Works ("AWW") executives
- Expense allocated to PAWC for AWW executives dividend equivalents
- Call Center Expense
- Arrearage Management Plan Credits – Uncollectibles Expense
- American Water Resources – Revenues
- Pension and OPEB Expense Tracker and Production Cost Tracker

Q. If some point raised in PAWC's rebuttal is not specifically addressed in your surrebuttal testimony, should it be presumed that you agree with the Company?

A. No.

III. PAWC REBUTTAL CONCERNING PROPOSED ACQUISITIONS

Revenue Requirements for Acquisitions Not Yet Completed

Q. In its initial filing dated November 8, 2023, did the Company include ratemaking claims for costs related to certain pending but not yet completed acquisitions in the FPFTY?

A. Yes. In its initial filing dated November 8, 2023, the Company made ratemaking claims in the FPFTY related to the following six pending acquisitions:

1. Audubon Water,
2. Farmington Water,
3. Farmington Wastewater,
4. Sadsbury Wastewater,
5. BASA Wastewater, and
6. Brentwood Wastewater.

PAWC's ratemaking claims through the end of the FPFTY seek to include rate base for all six pending acquisitions based on the purchase prices of the systems as originally reflected in the asset purchase agreements ("APAs") and post-acquisition capital investments for the Brentwood and BASA systems. The claims also include transaction costs, return on the anticipated rate base, and expenses (i.e. depreciation and O&M).

Q. As a result of PAWC's rebuttal testimony have you changed your position on whether the ratemaking claims for any of those not yet completed acquisitions should be included in the Company's revenue requirement in the current case?

A. No. For the reasons discussed in my direct testimony, I recommend that PAWC's ratemaking claims related to each of the six acquisitions listed above not be included in PAWC's FPFTY for rate setting purposes. More specifically, given that there is no reasonable certainty that the acquisitions will likely close in the FPFTY, I recommend for ratemaking purposes that: (1) the rate base values for each not yet acquired system be removed from the FPFTY; and (2) all expenses associated with these systems be removed from the FPFTY, including removal of (i) the transaction costs related to the acquisitions and (ii) expenses related to owning the (not yet acquired) systems (*i.e.*, depreciation and O&M expenses).

Q. In its rebuttal filing, did PAWC agree with your recommendations to remove PAWC's ratemaking claims associated with the six not yet completed acquisitions from the Company's FPFTY revenue requirement?

A. No. In its rebuttal filing, PAWC did not agree with my recommendations to remove its ratemaking claims associated with the six not yet completed acquisitions from its FPFTY revenue requirement. PAWC witness Mr. Abruzzo and I disagree over the issue of the likelihood of the utility plant that is targeted by PAWC for acquisition will be acquired and used and useful in the FPFTY. The two objective and bright line criteria that I discussed in my direct testimony for determining the likelihood of the utility plant being used and useful in the FPFTY are as follows: by the close of the record in this base rate proceeding, (1) the Commission has issued a final,

unappealable order approving the transaction, and (2) there is no uncertainty as to whether the closing will occur.

On pages 11-12 of his rebuttal testimony, Company witness, Mr. Abruzzo disagrees with my two criteria, stating:

> The relevant cut-off date should not be when the record closes. After the record closes, any party can petition to reopen the record to introduce additional evidence. 52 Pa. Code § 5.571(a). Instead, the test should be whether the acquisition is likely to close within the FPFTY.

Q. Do you agree with Mr. Abruzzo's assertion that the only relevant question is whether the acquisitions are likely to close during the FPFTY?

A. No. I do not agree with Mr. Abruzzo's assertion that the only relevant question is whether the acquisitions will or are likely to close during the FPFTY based on events that may (or may not) likely occur after the record closes in this base rate proceeding. In my opinion, that is a flawed premise for several reasons.

First, including the pending acquisitions in the FPFTY for purposes of establishing a revenue requirement is fundamentally different from including capital expenditures for systems that are already owned by a utility and the O&M expense related to the utility's existing operations and maintenance of utility-owned plant. This is the case because (1) the assets proposed to be acquired are not owned by PAWC, and (2) the Commission has to issue an order granting Certificate of Public Convenience ("CPC") authority in accordance with Sections 1102-1103 of the Public Utility Code.

Next, in order for Mr. Abruzzo's assertion that the acquisitions are certain enough to include them in FPFTY rate base and operating expense, the parties and the Commission would have to assume that (1) the transactions will at some point inevitably be determined to meet the requirements of Code Sections 1102-1103, and potentially Section 1329 (for relevant acquisitions), based on the applications as filed, regardless of the positions of parties in the separate application dockets, and (2) none of the things that could prevent the acquisitions from closing by the end of the FPFTY will occur. PAWC has not demonstrated, and it is not entitled to the presumption, that its desire to acquire a system will mean that the acquisition will be determined to satisfy the requirements of the Public Utility Code and all impediments to closing will be resolved.

Finally, Mr. Abruzzo argues that the close of the record in this proceeding should not be the cut-off point because PAWC can petition to reopen the record before and after the Commission issues an order. However, petitioning to reopen a record should not be presumed to produce PAWC's desired outcome because other parties to a base rate case have due process rights, and the outcome may not be the straightforward, predictable path Mr. Abruzzo assumes. Indeed, in petitioning to reopen the record, PAWC would have to (1) prevail in its petition to reopen the record, and (2) prevail in making its case to the Commission on the merits that the acquisitions should be included in the FPFTY revenue requirement for ratemaking purposes.

Q. Please discuss other reasons as to why Mr. Abruzzo's assertion that the only relevant question for including the acquisitions in the FPFTY is whether they will likely close during the FPFTY is flawed.

A. Mr. Abruzzo's assertion that the only relevant question for including the acquisitions in the FPFTY is whether they will likely close during the FPFTY is flawed for several reasons. First, it is speculative and uncertain whether a particular attempted acquisition transaction will be approved by the Commission, or if such approval is granted, whether it will be upheld on appeal. The following examples illustrate this point:

- PAWC has attempted to include costs related to its proposed acquisition of the Brentwood Wastewater utility in PAWC's proposed rate base and operating expenses. However, the Commission recently rejected PAWC's application for the Brentwood acquisition on a 5-0 vote on the grounds that the transaction did not meet the requirements of Public Utility Code Sections 1102/1103.

- PAWC's application to acquire the BASA acquisition was modified by a settlement of the parties in that application proceeding, and the Commission approved that settlement; however, the Commission's final order was appealed to the Commonwealth Court by Center and Summit Townships, Butler County, on due process grounds.

- A settlement was filed on February 21, 2024 in the Sadsbury acquisition proceeding (A-2023-3042058), however, there is no statutory deadline for the Administrative Law Judge to issue a recommendation and for the Commission to enter an Order, and it is not known whether the Commission will ultimately approve or modify the settlement.

- The evidentiary records for the proposed Audubon Water and Farmington Water and Wastewater acquisitions have not yet been developed. The parties are in the early phases of litigation in Audubon Water, and no litigation schedule has been determined for Farmington.

Second, it is speculative whether and when PAWC's proposed acquisition transactions will close. The APAs for the six acquisitions at issue include

contractual rights that permit PAWC and the sellers to terminate the APAs for various reasons prior to closing. Even if a final, unappealable Commission or Court Order existed for each of those six PAWC proposed acquisitions, and such Orders do not currently exist for any of those acquisitions, such termination rights give discretion to PAWC, as buyer, and to the system seller as to whether to exercise these rights prior to closing.

Q. Can you describe the termination rights under the APAs for the six transactions?

A. Yes. I have reviewed the APAs for all of those PAWC acquisitions except Audubon since it is not publicly available. The following termination rights exist in all the transactions:

- **By mutual agreement**: Prior to closing, and for any reason, PAWC and Farmington Water and Wastewater, Sadsbury, BASA and Brentwood can mutually agree to terminate their respective APAs. See Farmington APA 14.01(a); Sadsbury APA 10.1(a); BASA APA 14.01(a); and Brentwood APA 14.01(a).

- **Failure to obtain Governmental Approvals**: Prior to actual closing, PAWC or any of the sellers in the not completed acquisitions (i.e., Farmington, Sadsbury, BASA, or Brentwood) can terminate their respective APAs if any "Governmental Authority" issues an order, decree or ruling or taken any other action, in each case permanently restraining, enjoining or otherwise prohibiting the material transactions contemplated by the APA and such order, decree, ruling or other action becomes final and non-appealable, but only if the terminating party is not then in material breach of the APA. See Farmington APA 14.01(b)(ii); Sadsbury APA 10.1 (e); BASA APA 14.01 (c)(ii); and Brentwood APA 14.01 (b)(ii).

    - The term "Governmental Approval" is defined more broadly than just PUC approval to include any consent, approval, authorization, notice, filing, registration, submission, reporting, order, adjudication or similar item of, to or with any "Governmental Authority." See Brentwood APA, Article I; BASA APA, Article I; Farmington APA, Article I; Sadsbury Wastewater APA 11.14. Additionally, the term

"Governmental Authority" is defined more broadly than just the PUC to include also the EPA, PADEP, any court, any municipality or municipality authority, and the Seller itself. See Brentwood APA, Article I; BASA APA, Article I; Farmington APA, Article I; Sadsbury Wastewater APA 11.14.

Additionally, in the Sadsbury Wastewater APA, the following specific termination rights exist:

- **Timing:** Prior to the actual closing, and for any reason, PAWC or Sadsbury Wastewater can terminate the APA if the closing does not occur on or prior to June 30, 2024, provided that the terminating party is not in material breach of the APA. See Sadsbury Wastewater APA 10.1(b).

- **Material Breach:** Sadsbury Wastewater can terminate the APA (if Sadsbury is not then in material breach of any of its representations, warranties, covenants and agreements under the APA) and PAWC committed a material breach of any representation, warranty, covenant or agreement contained in the APA and PAWC has not cured such breach within five (5) business days after receipt of notice of such breach (provided, however, that, no cure period shall be required for a breach which by its nature cannot be cured). See Sadsbury Wastewater APA 10.1(d).

- Likewise, PAWC can terminate the APA with Sadsbury Wastewater (if PAWC is not then in material breach of any of its representations, warranties, covenants and agreements under the APA) and Sadsbury has committed a breach of representation, warranty, covenant or agreement contained in the APA and Sadsbury has not cured such breach within five (5) business days after receipt of notice of such breach (provided, however, that, no cure period shall be required for a breach which by its nature cannot be cured). See Sadsbury Wastewater APA 10.1(c).

In the Brentwood, BASA and Farmington APAs, the following additional specific termination rights exist:

- **Timing:** Prior to the actual closing, and for any reason, PAWC or Brentwood/ BASA/ Farmington can terminate their respective APA if the closing does not occur 365 days after the date the application to the PUC is accepted as complete by the PUC and the statutory 6-month consideration period is initiated (the term for this is the "Outside Date"). See Brentwood APA 14.01(b)(i); BASA APA 14.01(c)(i); Farmington APA 14.01(b)(i).

- **Material Breach:** Brentwood/ BASA/ Farmington can terminate the APA (if not then in material breach of any provision of the APA Agreement) if PAWC commits a material breach of any covenant or agreement to be

performed or complied with by PAWC pursuant to the terms of the APA or of any representation or warranty of PAWC contained in the APA, which breach (i) has continued without cure for a period of sixty (60) days following notice thereof by Seller to Buyer or if such breach cannot be cured and (ii) would result in a condition precedent to Closing not being satisfied (which condition has not been waived by Seller in writing). See Brentwood APA 14.01(c); BASA APA 14.01(d); Farmington APA 14.01(c).

- Likewise, PAWC can terminate the APA (if PAWC is not then in material breach of any provision of the APA) if Brentwood/ BASA/ Farmington commits a material breach of any covenant or agreement to be performed or complied with by Seller pursuant to the terms of the APA or of any representation or warranty of Seller contained in the APA, which breach (i) has continued without cure for a period of sixty (60) days following notice thereof by PAWC to Seller or if such breach cannot be cured and (ii) would result in a condition precedent to Closing not being satisfied (which condition has not been waived by PAWC in writing). See Brentwood APA 14.01(d); BASA APA 14.01(e); Farmington APA 14.01(d).

Q. Are you aware of an example where an acquisition had been approved by the Commission but the parties terminated the agreement prior to closing?

A. Yes. An example is Aqua's attempted acquisition of the Willistown Township wastewater system (A-2021-3027268). Aqua PA had a Commission order approving its acquisition of the Township's wastewater system assets. While the order was on appeal, Aqua filed a letter notifying the Commission that the Township had exercised the seller's rights under the APA to terminate the transaction and that the transaction would not close as a result.[4] This example illustrates that a transaction can fail to close even if the transaction had been approved by the Commission. Indeed, while I defer to the lawyers and their legal Briefs, I am advised by OCA counsel that a Commission final order granting CPC authority to PAWC to acquire a system does not mean that PAWC and the buyer must close the acquisition. Rather,

[4] https://www.puc.pa.gov/pcdocs/1785100.pdf

the order granting CPC authority functions as permission for the utility to proceed with closing the transaction. Typically, the Commission order would require the utility to notify the Commission after the closing takes place and only after that notice is given can the Secretary then issue the CPC evidencing the utility's authority to acquire the assets and serve the customers of the acquired system. Hence, the existence of a final, unappealable Commission Order is not sufficient alone to determine the likelihood of utility plant being acquired and used and useful in the FPFTY. This is the purpose of my second criterion: that there is no uncertainty as to whether the closing will occur.

Q. Can you provide examples of other acquisitions that have not followed a predictable straight path to closing?

A. Yes. Even where the parties do not exercise termination rights, there is uncertainty whether a transaction will close by the end of the FPFTY. This point is illustrated by Aqua PA's attempted acquisition of the Delaware County Regional Water Quality Control Authority (DELCORA) system (A-2019-3015173). DELCORA, the seller, signed an APA with Aqua PA on September 17, 2019, and jointly they filed an application with the Commission on March 3, 2020 for approval of the acquisition. The filing was "accepted" by the Commission on July 27, 2020. As of the date of my surrebuttal testimony, there is no Commission order approving the transaction. That proceeding has been stayed multiple times due in part to civil litigation brought by Delaware County, DELCORA, and Aqua PA, and due in part to an order of the

Bankruptcy Court for the Eastern District of Pennsylvania.[5] The Bankruptcy Court stayed the application before the Commission relating to the City of Chester's unresolved reversionary interest in the same DELCORA assets which Aqua proposed to acquire in the acquisition application before the Commission. In short, the separate but related litigation has been a major pitfall for that acquisition, causing significant delay and a great deal of uncertainty as to whether and when the Commission will approve it or whether that transaction will proceed to closing.

As another example of significant delay, the City of Beaver Falls, as the seller, signed an APA on October 20, 2021 and filed its application with the Commission on February 17, 2023. The application was conditionally accepted on June 28, 2023, but as of February 29, 2024, that application has not been finally accepted (Docket No. A-2024-3033138).

Q. Are there reasons that an attempted acquisition can fail prior to closing that do not relate to the existence of a final, unappealable Commission or Court Order?

A. Yes. As I discussed in my direct testimony, there are many reasons that an attempted acquisition can fail prior to closing that do not relate to the existence of a final, unappealable Commission or Court Order. To expand, an attempted acquisition can fail to close for any of the following reasons:

- Unrealistic expectations by either party as to the value, benefits, or challenges of the potential acquisition.
- Financial concerns of either party as to valuation and financing related to the acquisition.

[5] The status of civil and bankruptcy litigation is addressed in the status reports filed with the Commission in A-2019-3015173, most recently on February 5, 2024. https://www.puc.pa.gov/pcdocs/1815422.pdf, https://www.puc.pa.gov/pcdocs/1815375.pdf, https://www.puc.pa.gov/pcdocs/1815374.pdf

- Changes in leadership at PAWC or changes in political leadership as to the seller.

- Insufficient or inadequate due diligence that led to the signing of the APA, where further due diligence may reveal additional issues and/or create a desire on either party not to proceed to closing.

- External economic downturns that may impact the viability of the deal due to unaffordability of service post-acquisition.

- Lack of stakeholder buy-in – opposition by key stakeholders (community, consumers, employees) can create resistance and hinder the ability of an acquisition to take place.

- Failure of PAWC or seller to obtain other necessary governmental approvals by government authorities other than the Commission.

All one has to do to understand the level of uncertainty with regard to these transactions is to logically combine any of the above-noted factors with the seller's or buyer's contractual rights that allow a party to terminate the APA by mutual agreement with the other party, based on timing, or due to the material breach of the other party, and it becomes clear that there is no reasonable certainty that the transactions at issue in this case will close, despite PAWC's strong desire for a predictable straight path to acquisition closing.

Q. Did PAWC discuss an alternative proposal with regard to rate case treatment for the yet completed BASA and Brentwood acquisitions in the Company's rebuttal testimony?

A. Yes. PAWC discussed an alternative proposal with regard to rate case treatment for the BASA and Brentwood acquisitions in its rebuttal. Specifically, on pages 4-5 of her rebuttal, Company witness Everette states as follows:

> The Company maintains that the BASA and Brentwood acquisitions are likely to close prior the end of the FPFTY and therefore should be reflected in this rate case on the effective date of new rates. Alternatively, if the Commission agrees with OCA, I&E and OSBA with respect to the certainty of closing the BASA and Brentwood acquisitions before the end of the FPFTY, rather than disallowing recovery in this rate case which would factor into the timing of the Company's next rate case, the Company proposes that the Commission approve revenue requirements in this proceeding as follows: (1) a revenue requirement that excludes BASA and Brentwood acquisitions; (2) a revenue requirement that excludes the Brentwood acquisition but includes the BASA acquisition; and (3) a revenue requirement that includes the Brentwood and BASA acquisitions.

On page 5 of her rebuttal, Ms. Everette refers to the three scenarios for PAWC's alternative revenue requirement treatments that are listed in the above passage as "Step 1", "Step 2" and "Step 3."

Q. How does PAWC propose to apply its three-step alternative proposal for the BASA and Brentwood acquisitions?

A. As discussed on page 5 of Ms. Everette's rebuttal, under the Step 1 scenario, in which BASA and Brentwood are excluded from the FPFTY revenue requirement, rates would become effective on August 7, 2024. Under the Step 2 scenario, in which Brentwood only would be excluded from the FPFTY revenue requirement, rates would become effective on one day's notice, no earlier than August 7, 2024, and only after the Company has certified to the Commission that the BASA acquisition has closed. In addition, if, for any reason, BASA does not close, the Step 2 rates would never become effective.

Under PAWC's Step 3 scenario, in which PAWC proposes that both BASA and Brentwood would be included in the FPFTY revenue requirement, rates would become effective on one day's notice, no earlier than August 7, 2024, and only after the Company has certified to the Commission that both the BASA and Brentwood acquisitions have closed. In addition, if, for any reason, Brentwood does not close, the Step 3 rates would never become effective.

Q. Do you agree with the Company's alternative proposal as it relates to the BASA and Brentwood acquisitions?

A. No. I do not agree with the Company's alternative proposal as it relates to the BASA and Brentwood acquisitions. The Company's alternative proposal should be rejected for several reasons, including the following:

First, it is not known under what terms or conditions any of these transactions would ultimately close. This applies to all of the pending acquisitions since none of them have a final, unappealable order. For example, BASA could be remanded and conditions and/or renegotiations could impact rate base or result in other costs (e.g., transaction and closing costs) not being recovered in rates. Furthermore, the matter could be remanded and the parties to the underlying settlement in that case could withdraw from the settlement thus causing the matter to return to a state of litigation. Under PAWC's proposed alternative Step 2 scenario, rates would increase with no recognition of any such changes.

Second, as it relates to Brentwood, OCA requested that the Commission condition approval on the requirement that Allegheny County Sanitary Authority ("ALCOSAN") treatment costs should be recovered in base rates rather than through

pass-through bills. Moreover, as discussed in more detail below, the Commission recently rejected the Company's application to acquire Brentwood. If PAWC appeals the case, it could be remanded to the Commission again. Under PAWC's proposed alternative Step 3 scenario, rates for Brentwood would go into effect as proposed by PAWC in its filing (*i.e.*, with a pass-through).

Third, as it relates to the Commission's recent rejection of PAWC's proposed acquisition of the Brentwood Wastewater system under Section 1329, PAWC could consider renegotiating the APA with Brentwood and could file under Public Utility Code Section 1102/1103 for Commission approval of a renegotiated acquisition transaction. If this were to occur, the rate base and expense claims for Brentwood could differ significantly from those that PAWC would receive approval for if its proposed Step 3 alternative is not rejected.

PAWC's alternative proposal should be rejected because it asks the Commission to put rates into effect despite the parties having no reasonable opportunity to litigate the underlying revenue requirement, Act 11 shift, or class revenue allocation and rate design issues.

Q. How has the OCA treated PAWC's proposed acquisitions?

A. As it relates to BASA and Brentwood, the OCA simply removed the Company's claimed revenue requirement. Since there are no final, unappealable orders for any of the six pending acquisitions (the first of my two criteria), OCA has excluded the related costs from the revenue requirement for PAWC.

Q. Are there additional reasons why PAWC's alternative proposal regarding the BASA and Brentwood acquisitions should be rejected?

A. Yes. As noted above, the Company argues that the close of the record in this proceeding should not be the cut-off point because PAWC can petition to reopen the record before and after the Commission issues an order. However, as I discuss above, PAWC would need to: (1) prevail in its petition to reopen the record, and (2) prevail in making its case to the Commission on the merits that the acquisitions should be included in the revenue requirement. The Company's alternative proposal would circumvent those procedural rules as well as the due process provided by those rules. For these reasons, and those discussed above, PAWC's alternative proposal for BASA and Brentwood should be rejected.

Additionally, there are related issues that would need to be addressed if either BASA or Brentwood were to be included in PAWC's wastewater utility revenue requirement in the current case include the Act 11 shift, the proposed class revenue allocation and the rate design.

Q. You stated above that the Company's application for the Brentwood acquisition was recently rejected by the Commission. Please elaborate.

A. In Docket No. A-2021-3024058, in the Recommended Decision dated January 17, 2024, the Administrative Law Judge ("ALJ") in that proceeding recommended that the Commission deny the Company's application to acquire the Brentwood wastewater utility due to PAWC not meeting its burden of establishing that there is an affirmative public benefit resulting from that proposed acquisition. In a public meeting held on February 22, 2024, the Commission considered Exceptions that

were filed both by PAWC and by the Borough of Brentwood and ultimately voted 5-0 to reject the Company's application for the Brentwood acquisition. While an official Order in that other proceeding has not yet been issued, in her Motion filed on February 22, 2024 in response to the Exceptions filed by PAWC and the Borough of Brentwood, Vice Chair Kimberly Barrow stated:[6]

> I agree with the ALJ's recommendation to deny the Application because PAWC failed to present sufficient evidence to sustain a finding that substantial affirmative public benefits will result from the acquisition of the Brentwood System and the issuance of a Certificate of Public Convenience, pursuant to 66 Pa. C.S. §§ 507, 1102, 1103 and 1329. I also agree with the ALJ's conclusion that because there is not sufficient proof of a public benefit, the request to approve the APA, with the First Amendment, became moot because the APA is relevant only if the acquisition is approved. Furthermore, the ALJ determined that the other corollary issues became moot and so decided not to address them. I agree. Specifically, based upon the analyses under 66 Pa. C.S. §§ 1102 and 1103, that the alleged benefits to be realized from the proposed acquisition do not outweigh the resulting harms from it, it is not necessary to consider the additional approval requests under 66 Pa. C.S. §§ 507 and 1329.
>
> For the above-mentioned reasons: (1) the Exceptions of PAWC and the Exceptions of Brentwood are denied; (2) the Recommended Decision is adopted; and (3) the Application of PAWC is denied, consistent with this Motion.

In addition, Chairman Stephen M. DeFrank issued a Statement on February 22, 2024, which included the following on page 2:[7]

> In summary, balancing the numerous variables on the record with a particular focus on the issues highlighted above support denial of this application. While no single concern in the Application individually disqualifies the transaction from approval, the collective aggregate of each of these

[6] https://www.puc.pa.gov/pcdocs/1817353.pdf.
[7] https://www.puc.pa.gov/pcdocs/1817412.pdf.

circumstances warrant a denial. More specifically, the 1329 premium is not warranted when balanced with the operational circumstances and asset condition of the Borough of Brentwood's wastewater conveyance system. Therefore, I must concur with the Recommended Decision and vote to deny the Application.

Finally, I encourage PAWC and Brentwood to consider filing an 1102 application should they wish to further pursue this transaction.

Q. How does PAWC's alternative proposal address the Audubon, Farmington and Sadsbury acquisitions?

A. It does not address those acquisitions. The Company's alternative proposal does not address the ratemaking treatment for the Audubon, Farmington and Sadsbury acquisitions.

Q. Has the Commission already ruled on the merits of those PAWC-proposed acquisitions?

A. No. The Commission has not yet ruled on the merits of any of these acquisitions under Section 1102/1103, including the reasonableness of the purchase price that PAWC has *already* included in its proposed rate base and amortization claims in the current base rate case. That is a concern because it appears that PAWC is attempting to usurp the Commission's authority by including the Audubon, Farmington and Sadsbury acquisitions in the FPFTY as if the Commission's approval has already been obtained.

Q. What is your conclusion regarding the proposed acquisitions based on the Company's rebuttal filing?

A. There are virtually no boundaries if PAWC were to prevail with its argument that the only criteria to consider for including the proposed acquisitions in the FPFTY revenue requirement is whether "it is likely the transactions will close within the FPFTY" especially when the sole criteria of likelihood that can be gleaned from PAWC is that PAWC has a signed APA that it believes will result in a final order before the end of the FPFTY. In contrast, the two criteria I offered in my direct testimony for determining the reasonable certainty of an acquisition are both objective and bright lines; none of PAWC's six proposed acquisition transactions has met those criteria. Therefore, as of the close of the record, there is no reasonable certainty that the property that PAWC wishes to acquire will actually be acquired and would be used and useful in the FPFTY. Therefore, PAWC's claims for all of its pending acquisitions should be removed from the FPFTY revenue requirements that are being used to set rates in this proceeding. In addition, for the reasons discussed above, the Company's alternative proposal should be rejected.

<u>Not Yet Completed Acquisitions and Other Capital Improvements</u>

Q. Are you responding to any other witnesses with regard to the inclusion of the not yet completed acquisitions in the FPFTY?

A. Yes. I am responding to PAWC witness, Mr. Hibbard but mainly for clarification purposes.

Q. What is Mr. Hibbard's testimony to which you are responding?

A. On page 15 of his rebuttal testimony (PAWC St. 16-R), Mr. Hibbard states that "no one in this case has challenged these investments as not used and useful for reliable water and wastewater services, and no one has alleged that the Company's investments or management of construction projects has been imprudent." In terms of "these investments" I believe Mr. Hibbard is referring to the plant additions in excess of $1 billion through the FPFTY ending June 30, 2025 that PAWC witness Aiton had described in his direct testimony.

Q. What is your response to Mr. Hibbard's statement?

A. I agree with Mr. Hibbard's statement. Even though the OCA has proposed to remove the rate base and related expense claims associated with the six acquisitions, the OCA has not proposed to exclude any of the utility plant additions in excess of $1 billion that PAWC has planned through the FPFTY ending June 30, 2025, to improve PAWC's existing water and wastewater utility operations. However, I believe additional clarification is required given the OCA's recommendations regarding the exclusion of the acquisitions and concerning PAWC's presentation of its revenue requirement in PAWC's Exhibit 3-A.

Q. Please explain.

A. PAWC witness Aiton stated in his direct testimony (PAWC St. 3) that PAWC has reflected plant additions in excess of $1 billion through the FPFTY ending June 30, 2025. Specifically, as discussed on page 9 of his direct testimony, Mr. Aiton stated that for the FTY ending June 30, 2024, the Company included gross utility plant

additions totaling $742,020,740. For the FPFTY ending June 30, 2025, the Company included gross utility plant additions totaling $797,874,110, for overall gross utility plant additions totaling $1,539,894,850 through June 30, 2025, the end of the FPFTY.

Q. Were the gross plant additions totaling $1,539,894,850 offset by projected retirements?

A. Yes. Page 9 of Mr. Aiton's direct testimony indicates that the gross plant additions totaling $1,539,894,850 are offset by projected retirements in the FTY and the FPFTY totaling $253,536,706. After consideration of the projected retirements, the increase in utility plant through June 30, 2025 reflected by PAWC totals $1,286,358,144.

Q. Were you able to break out the Company's proposed utility plant additions and projected retirements between PAWC's Water Operations and Wastewater Operations?

A. Yes. I was able to break out the Company's gross utility plant additions and projected retirements between PAWC's Water Operations and Wastewater Operations. Using the information shown on PAWC's Exhibit 3-A, I compiled the gross plant additions and projected retirements as shown in the following table:

PAWC's Projected Utility Plant Additions Before and After Associated Projected Retirements

Line No.	Description	FTY Ending 6/30/2024	FPFTY Ending 6/30/2025	Total
		(A)	(B)	(C)
	Gross Plant Additions			
1	Water Operations	$ 615,681,581	$ 676,288,188	$ 1,291,969,769
2	Wastewater SSS General Operations	$ 43,782,754	$ 46,408,989	$ 90,191,743
3	BASA Wastewater Operations	$ 839,400	$ 15,405,600	$ 16,245,000
4	Brentwood Wastewater Operations	$ 227,010	$ 3,484,490	$ 3,711,500
5	CSS Wastewater Operations	$ 81,489,995	$ 56,286,842	$ 137,776,837
6	Total Gross Additions	$ 742,020,740	$ 797,874,110	$ 1,539,894,850
	Retirements			
7	Water Operations	$ (102,089,453)	$ (125,966,017)	$ (228,055,470)
8	Wastewater SSS General Operations	$ (4,231,348)	$ (5,444,755)	$ (9,676,103)
9	BASA Wastewater Operations	$ (91,206)	$ (1,085,468)	$ (1,176,674)
10	Brentwood Wastewater Operations	$ (22,494)	$ (358,189)	$ (380,683)
11	CSS Wastewater Operations	$ (8,459,041)	$ (5,788,735)	$ (14,247,776)
12	Total Retirements	$ (114,893,542)	$ (138,643,164)	$ (253,536,706)
	Net Plant Additions			
13	Water Operations	$ 513,592,128	$ 550,322,171	$ 1,063,914,299
14	Wastewater SSS General Operations	$ 39,551,406	$ 40,964,234	$ 80,515,640
15	BASA Wastewater Operations	$ 748,194	$ 14,320,132	$ 15,068,326
16	Brentwood Wastewater Operations	$ 204,516	$ 3,126,301	$ 3,330,817
17	CSS Wastewater Operations	$ 73,030,954	$ 50,498,107	$ 123,529,061
18	Total Net Plant Additions	$ 627,127,198	$ 659,230,945	$ 1,286,358,144
	Source: Exhibit 3-A, pages 26, 97, 146, 179 and 218			

As shown in the above table, PAWC's projected utility plant additions and retirements tie to the amounts that were discussed on page 9 of Mr. Aiton's direct testimony.

Q. Does the revenue requirement proposed by the Company in PAWC's Exhibit 3-A reflect in FPFTY utility plant in service the purchase prices of the six not yet completed acquisitions?

A. Yes. PAWC's revenue requirement as presented in PAWC's Exhibit 3-A reflects in "utility plant in service" in the FPFTY the purchase prices of each of the six not yet completed acquisitions.

Q. Does the $1.286 billion amount of proposed utility plant additions that Mr. Aiton references in his direct testimony include the purchase prices of the six acquisitions?

A. No. The $1.286 billion amount of proposed utility plant additions that Mr. Aiton references in his direct testimony does not include the purchase prices for utility plant associated with the six acquisitions.

Q. Please explain.

A. Based on the manner in which PAWC presented its utility plant in service on Exhibit 3-A for Water and Wastewater Operations, from which the information in the above table was compiled, the amounts shown in the above table do not include the purchase price for any of the acquisitions that PAWC proposes to include in FPFTY rate base as utility plant in service. For example, Exhibit 3-A, page 26 (*i.e.*, FTY and FPFTY plant in service for Water Operations) from PAWC's filing includes separate columns for the purchase prices related to the Audubon Water and Farmington Township Water acquisitions.[8] Specifically, the purchase price for Audubon Water (shown in a separate column on Exhibit 3-A) is $9.187 million, and the purchase price for Farmington Water (also shown in a separate column on Exhibit 3-A) is $5.257 million.[9] However, these amounts are not reflected in the amounts for PAWC's utility plant additions mentioned in Mr. Aiton's direct

[8] The purchase price amounts included in plant in service do not reflect what is included in rate base for the acquisitions as such amounts are offset by accumulated depreciation and CIAC.
[9] Exhibit 3-A, page 97 shows separate columns for the purchase prices related to Farmington Township Wastewater and Sadsbury Wastewater. Exhibit 3-A, pages 146 and 179 show separate columns for the purchase prices related to BASA and Brentwood, respectively.

testimony at page 9, and thus are not included in the $1.286 billion of plant additions net of retirements through June 30, 2025 shown in the above table.

Q. Does Mr. Aiton's referenced $1.286 billion of utility plant additions, as shown in the above table, include projected post-acquisition utility plant additions for any of the Company's proposed acquisitions?

A. Yes, but only as it relates to BASA and Brentwood. In its response to OCA 21-008(a), the Company indicated that the FPFTY amount of $15.406 million shown in column B, line 3 in the above table reflects post-acquisition costs for the BASA acquisition. In PAWC's response to OCA 21-003, the Company indicated that the FPFTY amount of $3.484 million shown in column B, line 4 in the above table reflects post-acquisition costs for the Brentwood acquisition. According to PAWC's responses to OCA 12-008, OCA 12-010 and OCA 12-012, there are no post-acquisition costs for Audubon Water, Farmington Township Water and Wastewater, or Sadsbury Township Wastewater included in the Company's proposed FPFTY plant in service.[10]

Q. How were PAWC's projected post-acquisition utility plant additions for BASA and Brentwood treated in the OCA's revenue requirement presentation?

A. The OCA's revenue requirement presentation on Exhibits LA-1 and LA-2 filed with my direct testimony removes PAWC's projected costs for BASA and Brentwood,

[10] See the responses to OCA 12-008, OCA 12-010 and OCA 12-012, which are included in Exhibit LA-3, which was attached to my Direct Testimony.

which includes the removal of PAWC's projected post-acquisition utility plant additions for those systems.

Q. Please summarize how much of the FTY and FPFTY plant additions discussed in Mr. Aiton's direct testimony that total $1.540 billion before retirements and $1.286 billion after retirements relate to the not yet completed acquisitions.

A. The only amounts included in the $1.540 billion of FTY and FPFTY plant additions that relate to the acquisitions are the amounts shown for BASA and Brentwood in the above table, which are (1) $839,400 and $15.406 million for BASA in the FTY and FPFTY for a total of $16.245 million before retirements, respectively, and (2) $227,010 and $3.484 million for Brentwood in the FTY and FPFTY for a total of $3.712 million before retirements, respectively. As previously noted, each acquisition purchase price is shown in a separate column on the respective pages of PAWC's Exhibit 3-A, and thus has not been included in the $1.540 billion or the $1.286 billion utility plant addition amounts.

Q. What is the dollar impact of your recommendation to exclude the Brentwood and BASA post-acquisition plant additions?

A. It reduces PAWC's proposed $1.286 billion amount of plant additions net of retirements through June 30, 2025 by $18.89 million. Thus, with the OCA's recommendations to remove the acquisitions, the increase in utility plant additions through the end of the FPFTY June 30, 2025, is $1.267 billion for PAWC's existing Water Operations, Wastewater SSS General Operations, and CSS Wastewater Operations.

IV. RESPONSE CONCERNING CONTESTED ADJUSTMENTS

Organization of Surrebuttal Testimony Addressing Contested Issues

Q. How is your surrebuttal testimony organized to address these issues?

A. My surrebuttal addresses the issues that are being contested by PAWC generally in the same order that such issues were addressed in my direct testimony. As noted in my direct testimony, a FPFTY ending June 30, 2025 is being used to determine PAWC's revenue requirement. I address revenue requirement issues with respect to PAWC's Water and Wastewater operations.

Acquisition – Audubon Water

Q. Are you revising your adjustment to remove the costs related to the Audubon Water acquisition from rate base as a result of PAWC's rebuttal?

A. No. As discussed in Section III of my surrebuttal testimony, I am still recommending that the costs related to the not-yet-completed Audubon acquisition be excluded from the FPFTY in the current proceeding.

Acquisition – Farmington Township Water

Q. Are you revising your adjustment to remove the costs related to the Farmington Township Water acquisition from rate base as a result of PAWC's rebuttal?

A. No. As discussed in Section III of my surrebuttal testimony, I am still recommending that the costs related to the not-yet-completed Farmington Township Water acquisition be excluded from the FPFTY in the current proceeding.

Acquisition – Farmington Township Wastewater

Q. Are you revising your adjustment to remove the costs related to the Farmington Township Wastewater acquisition from rate base as a result of PAWC's rebuttal?

A. No. As discussed in Section III of my surrebuttal testimony, I am still recommending that that the costs related to the not-yet-completed Farmington Township Wastewater acquisition be excluded from the FPFTY in the current proceeding.

Acquisition – Sadsbury Township Municipal Authority Wastewater

Q. Are you revising your adjustment to remove the costs related to the Sadsbury Township Wastewater acquisition from rate base as a result of PAWC's rebuttal?

A. No. As discussed in Section III of my surrebuttal testimony, I am still recommending that the costs related to the not-yet-completed Sadsbury Township Wastewater acquisition be excluded from the FPFTY in the current proceeding.

Cash Working Capital

Q. How did the Company respond to your adjustment to cash working capital?

A. Pages 6-7 of Company witness Stacey Gress's rebuttal testimony (PAWC St. 4-R) states that while she agrees that cash working capital needs to be adjusted for the Company's updates to labor expense and rate case expense, the Company disagrees with most of OCA's adjustments to expenses, and thus disagrees with the amounts my adjustments to cash working capital for the Company's Water and Wastewater Operations.

Q. Are you revising your adjustments to cash working capital for Water and Wastewater Operations as a result of PAWC's rebuttal?

A. No. Since no cash expenses are being revised at this time in OCA's revenue requirement presentation, I am not revising my adjustments to cash working capital.

Acquisition Revenues and Expenses – Audubon Water Company

Q. Are you revising your adjustment to remove the revenues and expenses related to the Audubon Water acquisition as a result of PAWC's rebuttal?

A. No. As discussed in Section III of my surrebuttal testimony, I am still recommending that the revenues and costs related to the not-yet-completed Audubon acquisition be excluded from the FPFTY in the current proceeding.

Acquisition Revenues and Expenses – Farmington Township – Water

Q. Are you revising your adjustment to remove the revenues and expenses related to the Farmington Township Water acquisition as a result of PAWC's rebuttal?

A. No. As discussed in Section III of my surrebuttal testimony, I am still recommending that the revenues and costs related to the not-yet-completed Farmington Township Water acquisition be excluded from the FPFTY in the current proceeding.

Acquisition Revenues and Expenses – Farmington Township Wastewater

Q. Are you revising your adjustment to remove the revenues and expenses related to the Farmington Township Wastewater acquisition as a result of PAWC's rebuttal?

A. No. As discussed in Section III of my surrebuttal testimony, I am still recommending that the revenues and costs related to the not-yet-completed

Farmington Township Wastewater acquisition be excluded from the FPFTY in the current proceeding.

Acquisition Revenues and Expenses – Sadsbury Township Municipal Authority

Q. Are you revising your adjustment to remove the revenues and expenses related to the Sadsbury Wastewater acquisition as a result of PAWC's rebuttal?

A. No. As discussed in Section III of my surrebuttal testimony, I am still recommending that the revenues and costs related to the not-yet-completed Sadsbury Township Wastewater acquisition be excluded from the FPFTY in the current proceeding.

Depreciation Expense – Audubon Water

Q. Are you revising your adjustment to remove the depreciation expense related to the Audubon Water acquisition as a result of PAWC's rebuttal?

A. No. As discussed in Section III of my surrebuttal testimony, I am still recommending that the depreciation expense related to the not-yet-completed Audubon acquisition be excluded from the FPFTY in the current proceeding.

Depreciation Expense – Farmington Township Water

Q. Are you revising your adjustment to remove the depreciation expense related to the Farmington Township Water acquisition as a result of PAWC's rebuttal?

A. No. As discussed in Section III of my surrebuttal testimony, I am still recommending that the depreciation expense related to the not-yet-completed Farmington Township Water acquisition be excluded from the FPFTY in the current proceeding.

Depreciation Expense – Farmington Township Wastewater

Q. Are you revising your adjustment to remove the depreciation expense related to the Farmington Township Wastewater acquisition as a result of PAWC's rebuttal?

A. No. As discussed in Section III of my surrebuttal testimony, I am still recommending that the depreciation expense related to the not-yet-completed Farmington Township Wastewater acquisition be excluded from the FPFTY in the current proceeding.

Depreciation Expense – Sadsbury Township Municipal Authority

Q. Are you revising your adjustment to remove the depreciation expense related to the Sadsbury Wastewater acquisition as a result of PAWC's rebuttal?

A. No. As discussed in Section III of my surrebuttal testimony, I am still recommending that the depreciation expense related to the not-yet-completed Sadsbury Township Wastewater acquisition be excluded from the FPFTY in the current proceeding.

Uncollectibles Expense

Q. How did the Company respond to your adjustment to uncollectibles expense?

A. On pages 2-3 of Company witness J. Cas Swiz's rebuttal testimony (PAWC St. 8-R), the Company disagrees with my recommendation of using a three-year historic average ratio of net write-offs to calculate going level uncollectibles expense. Rather, Mr. Swiz maintains that a two-year percentage of net write-offs ending June 30, 2023, which he states eliminates the impacts of the Covid-19 pandemic from July

1, 2020 through June 30, 2021, should be used to calculate going level uncollectibles expense.

Q. Did you include the period July 1, 2020 through June 30, 2021 in the calculation of your recommended three-year average historic ratio?

A. No. As shown on Exhibit LA-2, Schedule C-9, which was filed in conjunction with my Direct Testimony, my recommended three-year average historic ratio was calculated based on the following periods: (1) July 1, 2019 through June 30, 2020, (2) July 1, 2021 through June 30, 2022, and (3) July 1, 2022 through June 30, 2023. To eliminate the impacts of the Covid-19 pandemic on customer collections, the period July 1, 2020 through June 30, 2021 should not be used in the calculation of going level Uncollectibles Expense, and I did not use that period.

Q. Did Mr. Swiz discuss an alternative calculation for determining going level Uncollectibles Expense in his rebuttal?

A. Yes. On page 3 of his rebuttal, Mr. Swiz states that if the Commission wishes to maintain historical practice and utilize a three-year average ratio of net write-offs for determining going level Uncollectibles Expense, the Company suggests removing the 12-month period ending June 30, 2021 from the three-year average calculation and instead use the three-year average shown in the following table:

Description	7-1-2018/ 6/30/2019	7-1-2021/ 6/30/2022	7-1-2022/ 6/30/2023	3-Year Average
Net Write-Off Activity	$ 8,505,570	$ 10,174,929	$ 9,374,665	$ 9,351,721
Total Billed Revenues	$ 683,968,732	$ 775,900,531	$ 886,675,101	$ 782,181,455
Average Write-Off Percentage	1.244%	1.311%	1.057%	1.196%

Source: Table 1 on page 3 of Swiz Rebuttal Testimony

As shown in the above table, the Company's alternative three-year average is 1.196 percent, which is calculated based on the following periods: (1) July 1, 2018 through June 30, 2019, (2) July 1, 2021 through June 30, 2022, and (3) July 1, 2022 through June 30, 2023. Mr. Swiz does not explain why the Company's alternative three-year average calculation did not use the 12 months ended June 30, 2020 as I did in my adjustment shown on Exhibit LA-2, Schedule C-9, and instead attempted to use older information from the 12 months ended June 30, 2019.

Q. Are you revising your adjustment to Uncollectibles Expense as a result of PAWC's rebuttal?

A. No. Three years has historically been used by PAWC for calculating pro forma Uncollectibles Expense. Averaging the annual write-off information using the 12 month periods ended June 30, 2020, June 30, 2022 and June 30, 2023, is reasonable in the context of the current PAWC rate case. Mr. Swiz's attempt to substitute older data for the 12 month period ended June 30, 2019 for the 12 month period ended June 30, 2020 to set a higher uncollectible percentage is not an improvement to my calculation and should be rejected.

Interest Synchronization

Q. How did the Company respond to your interest synchronization adjustment?

A. On page 7 of Company witness Stacey Gress's rebuttal testimony (PAWC St. 4-R), the Company disagrees with OCA's adjustments to rate base and the weighted cost of debt, and states that my adjustment to income tax expense for interest synchronization should be rejected.

Q. Does the use of a different rate base or weighted cost of debt have an impact on interest synchronization?

A. Yes. The interest synchronization adjustment is the result of applying the weighted cost of debt to the adjusted rate base. The resulting amount of interest is reflected for ratemaking purposes as the "synchronized" interest deduction used to compute income tax expense.

Q. With regard to the weighted cost of debt that is reflected in your interest synchronization adjustment shown on Exhibit LA-2, Schedule C-14, which was filed in conjunction with your Direct Testimony, does OCA witness Garrett continue to support his recommendations regarding PAWC's weighted cost of debt for its Water and Wastewater Operations in his surrebuttal testimony?

A. Yes. In his surrebuttal testimony, OCA witness Garrett continues to support his recommendations regarding PAWC's weighted cost of debt for its Water and Wastewater Operations.

Q. Please discuss the appropriateness of interest synchronization as a regulatory method to assure proper matching of various components that are used to compute a utility's revenue requirement.

A. The interest synchronization is a standard ratemaking approach used to assure that the amount of income taxes allowed for ratemaking purposes is properly matched with the rate base and weighted cost of debt. To not make the interest synchronization adjustment within the context of OCA's overall revenue requirement presentation would result in those elements – income taxes, rate base

and the weighted cost of debt – not matching. The interest synchronization method is appropriate and well-established. In adopting the OCA's proposed rate base and weighted cost of debt, the Commission should use its interest synchronization adjustment for purposes of calculating the income tax allowance for each PAWC utility in the current rate case.

Insurance Other Than Group

Q. How did PAWC respond to your adjustment to Insurance Other Than Group?

A. As discussed in the rebuttal testimony of Company witness O'Malley at pages 7-8, PAWC disagrees with my adjustment to Insurance Other Than Group in which I used the actual percentage change from the test year ended June 30, 2023 rather than the Company proposed five-year average percentage change, which was calculated based on the 12 month periods from June 30, 2019 through June 30, 2023. Ms. O'Malley states that it is common for averages to be used to normalize costs that fluctuate from year to year to forecast them for ratemaking purposes.

Q. Are you revising your adjustment to Insurance Other Than Group as a result of PAWC's rebuttal?

A. No. While I generally agree that averages can be used to normalize costs, consideration should also be given to trends and to current information. As discussed in my direct testimony, the annual percentage change for the 12-month ending periods of June 30, 2019, June 30, 2021, and June 30, 2022, were abnormally high or low as compared to the 12-month ending periods June 30, 2020, and the HTY ended June 30, 2023, which is the most recent 12 month period ending June 30 for which actual information is available. Consequently, I continue to recommend

that the HTY percentage change be used to calculate Insurance Other Than Group for the FPFTY.

Depreciation Expense – Water Utility

Q. How did PAWC respond to your adjustment to Depreciation Expense for the Water Utility?

A. On pages 1-2 of his rebuttal testimony (PAWC St 11-R), Company witness Spanos states that my adjustment to Depreciation Expense related to the following three water utility accounts: (1) Account 304.15 – Other Water Source Structures, (2) Account 331 – Mains and Accessories, and (3) Account 335 – Fire Hydrants uses the life parameters from a service life study completed as of December 31, 2016 ("2016 Service Life Study") when instead the life parameters from PAWC's 2021 Service Life Study should have been utilized. Specifically, Mr. Spanos states that the standard practice in Pennsylvania is for each regulated utility to conduct a life service study every five years and that for PAWC, the 2021 Service Life Study was completed as of December 31, 2021 and filed in August 2022.

Q. Has PAWC made substantial changes to its plant investment subsequent to the 2016 Service Life Study being conducted?

A. On page 5 of his rebuttal, Mr. Spanos states that PAWC had made significant acquisitions and considerable amounts of capital improvements to all of its asset classes over the last 5-6 years and that such investments are expected to continue going forward.

Q. Did PAWC identify each water utility acquisition that it has made since the 2016 Gannett Fleming depreciation rate study?

A. Yes. PAWC identified each water utility acquisition that is has made since the 2016 Gannett Fleming depreciation rate study. Those water utility acquisitions are summarized in the table below:

Water Utility Acquisition	Docket Number	Closing Date
Turbotville Water	A-2018-3004191	7/24/2019
Steelton Borough Authority	A-2019-3006880	10/9/2019
Winola Water Company	P-2018-3006216, C-2018-2644592, I-2018-3006498	12/17/2020
Valley Township Water	A-2020-3019859	11/19/2021
SLIBCO Inc. (GCC) Water	A-2020-3023369	11/19/2021
Creekside (Lancaster Home Builders) Water System	A-2022-3031020	6/21/2023
Source: OCA 35-002		

According to the response to OCA 35-002(b), of the water utility acquisitions listed in the above table, the Steelton Borough Authority ("Steelton") and Valley Township Water ("Valley Township") acquisitions were acquired pursuant to Section 1329. As it relates to the depreciation rates, depreciation lives and survivor curves proposed by PAWC's sponsored witness in the Section 1329 acquisitions (*i.e.*, Steelton and Valley Township) listed above, the Company's response to OCA 35-002(c) stated:

> The Company and its witness in these § 1329 water utility acquisition cases did not propose any depreciation lives, depreciation rates or survivor curves as part of the acquisition proceedings. The independent appraiser utilized depreciation lives, depreciation rates and survivor curves in order to compute their appraisal of each system.

Notably, the depreciable lives for at least three water utility plant accounts that the appraiser sponsored by PAWC used in the Valley Township Water Section 1329

acquisition case, Mr. Jerome Weinert, are consistent with and support the useful lives that I have recommended by used in the current PAWC rate case for those accounts, rather than the significantly shortened lives proposed by Mr. Spanos.

Q. Was Mr. Spanos aware of the depreciation lives, depreciation rates and survivor curves that were proposed by PAWC in Docket No. A-2020-3019859, the Section 1329 acquisition case involving the Valley Township Water System?

A. Yes. PAWC's response to OCA 35-003[11] stated that Mr. Spanos is aware of the depreciation lives, depreciation rates, and survivor curves that were proposed by PAWC in Docket No. A-2020-3019859, the Section 1329 acquisition case involving the Valley Township Water System:

> Mr. Spanos is aware of how the average service lives and survivor curves were determined by Valley Township Water System. The average lives and survivor curves were based on a range of lives and curves utilized by other water companies, including PAWC, in the region. Mr. Spanos is also aware of PAWC's sponsored witness average lives, however, he was not directly involved in the determination of those parameters. However, neither of these life and curve parameters are consistent with how depreciable lives and curves should be determined for the assets in the rate case because there are different components for determining the future life characteristics under PAWC management, as well as different depreciation methods and procedures for depreciating the remaining net plant.

[11] The response to OCA 35-003 is included in Exhibit LA-7 attached to my surrebuttal testimony.

Q. What proposed/used depreciation lives, depreciation rates and survivor curves did the PAWC's sponsored witness in Docket No. A-2020-3019859 use for each of the following water utility plant accounts: (1) Water Treatment Plant – Large Structures, (2) Distribution-Mains-Ductile Iron, and (3) Fire Hydrants?

A. According to the response to OCA 35-004,[12] the depreciation lives, depreciation rates and survivor curves that PAWC's witness sponsored in Docket No. A-2020-3019859 for the referenced water utility plant accounts are as follows:

- Account 354.40 , 304.3 – Water Treatment Plant – Large Structures: 60 year normal service life, 63.73 year total life expectancy, and R2.5 survivor curve shape.
- Account 363.20 , 331.4 – Distribution-Mains-Ductile Iron: 110 year normal service life, 112.58 year total life expectancy and R2.0 survivor curve shape.
- Account 363.20, 335.00 – Fire Hydrants: 75 year normal service life, 76.89 total life expectancy and R2.5 survivor curve shape.

Q. How much water utility plant in service has PAWC proposed as of (1) the HTY ended June 30, 2023, (2) December 31, 2023, (3) the FTY ending June 30, 2024, and (4) the FPFTY ending June 30, 2025 for those three water utility plant accounts?

A. According to the response to OCA 35-005,[13] for the period ending dates referenced, the amount of water utility plant in service that PAWC has proposed for the three water utility plant accounts are as follows:

[12] The response to OCA 35-004 is included in Exhibit LA-7 attached to my surrebuttal testimony.
[13] The response to OCA 35-005 is included in Exhibit LA-7 attached to my surrebuttal testimony.

Account Number	Account Title	Estimated Book Cost 12/31/2023	Estimated Book Cost 6/30/2024	Estimated Book Cost 6/30/2025
304.30	Purification Buildings	$ 341,412,320	$ 341,634,694	$ 341,634,694
331.00	Mains and Accessories	$ 3,494,952,338	$ 3,629,756,124	$ 3,841,993,932
335.00	Fire Hydrants	$ 147,080,419	$ 152,728,748	$ 163,733,934
Source: OCA 35-005				

In its response to OCA 35-005, PAWC also stated that accounts 354.40 and 363.20 are wastewater utility plant accounts and that there is no associated water utility plant in these accounts.

Q. What specific depreciation rates has PAWC used and how much depreciation expense has PAWC reflected as of (1) the HTY ended June 30, 2023, (2) the FTY ending June 30, 2024, and (3) the FPFTY ending June 30, 2025 for those three water utility plant accounts?

A. According to the response to OCA 35-006,[14] for the period ending dates referenced, the specific depreciation rates and depreciation expense that PAWC has proposed for each of the referenced water utility plant accounts is as follows:

Account Number	Account Title	HTY 6/30/2023 Rate	HTY 6/30/2023 Expense	FTY 6/30/2024 Rate	FTY 6/30/2024 Expense	FPFTY 6/30/2025 Rate	FPFTY 6/30/2025 Expense
304.30	Purification Buildings	2.35	$ 7,848,433	2.37	$ 8,202,208	2.38	$ 8,684,270
331.00	Mains and Accessories	1.52	$ 46,324,768	1.53	$ 50,981,834	1.54	$ 54,371,951
335.00	Fire Hydrants	2.28	$ 3,065,466	2.27	$ 3,298,422	2.26	$ 3,532,857
Source: OCA 35-006							

As shown in the above table, the depreciation rates that PAWC used for each of the referenced accounts were relatively consistent in the noted periods.

[14] The response to OCA 35-006 is included in Exhibit LA-7 attached to my surrebuttal testimony.

Q. How have the useful lives for those three water utility accounts changed from PAWC's 2016 depreciation rate study, to the useful lives used by PAWC's witness in the Valley Township water utility acquisition Section 1329 case (A-2020-3019859), to what PAWC is currently proposing in this rate case?

A. The following table shows the respective estimated service lives for utility plant in those three accounts in each of those three PAWC filings:

		PAWC Proposed Service Lives				
			Service Lives Used PAWC's Sponsored Witness in Docket No.			OCA Proposed Service Life
Account Number	Account Title	2016 Service Life Study Survivor Curve	A-2020-3019859 Valley Township § 1329 Acquisition	PAWC Current Case Proposed Service Life		In PAWC's Current Rate Case
304.30	Purification Buildings	60-S0.5	60-R2.5	50-S0.5		60-S0.5
	Difference in Years		0	(10)		
331.00	Mains and Accessories	110-R2	110-R2.0	90-R2		110-R2
	Difference in Years		0	(20)		
335.00	Fire Hydrants	75-R2	75-R2.5	60-R2		75-R2
	Difference in Years		0	(15)		

Q. Is there a drastic shortening of the estimated useful lives for each of those PAWC water utility accounts that PAWC has used to compute depreciation expense in the current rate case?

A. Yes. For the Purification Buildings account, the service life proposed by PAWC in the current case is 10 years shorter than the life used in those previous PAWC filings.

For the Mains and Accessories account, the service life proposed by PAWC in the current case is 20 years shorter than the life used in those previous PAWC filings.

For the Fire Hydrants account, the service life proposed by PAWC in the current case is 15 years shorter than the life used in those previous PAWC filings.

Q. What is the concern about PAWC's proposal to use significantly shortened estimated useful lives for those three water utility plant accounts?

A. There are two concerns. One concern is that PAWC has used drastically different and much shorter service lives for the three water utility plant accounts noted above. The second concern is that by drastically shortening the useful lives, that causes the depreciation rate and the depreciation expense to be significantly higher. Because depreciation expense is a component of the Company's cost of providing water utility service, the increases in that expense that PAWC has proposed in its current rate case related to the significant shortening of the expected useful lives of those water utility plant assets are contributing to the rate increases that PAWC has requested.

Q. Are you revising your adjustment to Water Utility Depreciation Expense based on a review of PAWC's rebuttal and of the additional information noted above on the PAWC-sponsored use of estimated useful lives for those three water utility plant accounts?

A. No. Based on a review of PAWC's rebuttal testimony and the useful life information for those three water utility plant accounts discussed above, I do not agree with PAWC's proposal to significantly increase Depreciation Expense in the current rate case by shortening the expected lives of those water utility assets by 10, 20 and 15 years, respectively.

Lead Service Line Inventory Plant Account Reclassification

Q. Has PAWC corrected the classification of the water utility plant account for the rate base item Lead Service Line Inventory?

A. Yes. As discussed on pages 8-9 of her rebuttal testimony, Company witness Gress, citing the Company's response to OCA 24-003[15], states that the Company identified that Project No. I24-610022 PA Lead Service Line Inventory, in the amount of $11,163,718, was incorrectly classified in utility plant account 348 – Other Tangible Equipment in PAWC's filing, and the Company has reclassified this item into utility plant account 340.3 – Computer Software.

Q. Does the reclassification of that Lead Service Line Inventory from utility plant account 348 to 340.3 impact Depreciation Expense and Accumulated Depreciation?

A. Yes. The reclassification of Lead Service Line Inventory from utility plant account 348 and into account 340.3 impacts Depreciation Expense and Accumulated Depreciation. Specifically, on page 8 of her rebuttal, Ms. Gress states that the reclassification from utility plant account 348 to utility plant account 340.3 results in an increase to FPFTY Depreciation Expense in the amount of $1,660,367 for Water Operations. In addition, Ms. Gress states that this reclassification results in an increase to FPFTY Accumulated Depreciation (thus decreasing rate base) in the amount of $1,258,893 for PAWC's Water Operations.

[15] The response to OCA 24-003 is included in Exhibit LA-7 attached to my surrebuttal testimony.

Q. Did PAWC provide calculations that show how the $1,660,367 increase to Depreciation Expense and $1,258,893 increase to Accumulated Depreciation were derived?

A. Yes. The Company provided where those calculations can be found in its response to OCA 35-007.[16]

Q. Do you agree with PAWC's correction of the classification of the Lead Service Line Inventory from utility plant account 348 to utility plant account 340.3?

A. Yes. I agree with the Company's reclassification of Project No. I24-610022 PA Lead Service Line Inventory from utility plant account 348 to utility plant account 340.3. At this time, I am not updating my recommended revenue requirement for PAWC's Water Operations to reflect this reclassification; however, I do agree with PAWC that the related adjustments identified above for water utility Depreciation Expense and Accumulated Depreciation should be made.

Stock-Based Compensation Expense – AWW Executives

Q. How did PAWC respond to your adjustment to remove expenses related to the stock-based compensation associated with the Company's Long-Term Performance Plan ("LTPP") for American Water Works top executive officers?

A. PAWC witness Runzer's rebuttal testimony (PAWC St. 2-R) at page 9 claims that the Company's total compensation expense for its employees, including that of top American Water executives, is reasonable and market-based and should therefore be allowed. Mr. Runzer's rebuttal testimony at pages 4-7 asserts that the LTPP consists

[16] The response to OCA 35-007 is included in Exhibit LA-7 attached to my surrebuttal testimony.

of restricted stock units (RSUs) and performance stock units (PSUs). He acknowledges that RSUs are not based on financial metrics. He states that PSUs are directly tied to the parent company, AWW's financial performance and that RSUs are based on continued employment with the Company rather than upon customer-related goals such as drinking water quality or customer satisfaction. (PAWC St. 2-R at 4).

Q. Are you revising your position on whether ratepayers should be required to pay for the Company's stock-based compensation for top American Water Works executives as a result of PAWC's rebuttal?

A. No. I continue to recommend that shareholders, and not ratepayers, bear the costs of the stock-based compensation for the parent company's top executives. The purpose of those stock-based incentive plans is to align the interests of the participants with those of AWW shareholders. As PAWC witness Runzer has conceded, the stock-based compensation expense referred to as the LTPP consists of RSUs and PSUs. Mr. Runzer acknowledges that performance under the LTPP is stock-based. Receiving American Water Works stock puts the recipients in the same position as other AWW stockholders. Consequently, this stock-based compensation should be paid for by stockholders, not by ratepayers.

Additionally, the PSUs are comprised of two components, Total Shareholder Return and adjusted compounded earnings per share, both of which relate to AWW shareholder returns and earnings for AWW's common shareholders. As such, the stock-based compensation in the form of PSUs should be paid for by the stockholders who benefit from the total shareholder return and earnings per share on

AWW's common stock. It is unreasonable to charge this stock-based compensation expense to ratepayers. For the reasons stated in my direct testimony and above, the portion of stock-based compensation paid to top American Water Works executives and charged from AWW to PAWC should be removed from operating expenses.

AWW Executives – Dividend Equivalents

Q. How did PAWC respond to your adjustment to remove expenses related to the executive perquisites associated with Dividend Equivalents for top American Water Works executives?

A. PAWC disagrees with my adjustment to remove executive perquisites associated with Dividend Equivalents. Company witness Runzer, at page 9 of his rebuttal testimony, provides the same arguments as he did with regard to my adjustment to remove stock-based compensation for top AWW executives.

Q. Are you revising your position on whether ratepayers should be required to pay for the executive perquisites in the form of Dividend Equivalents for top American Water Works executives as a result of PAWC's rebuttal?

A. No. As discussed in my direct testimony, dividend equivalents, which are tied to PSUs and RSUs, are paid in cash at such time, if ever, when the executive compensation provided in the form of PSUs or RSUs are converted to American Water Works common stock. I maintain that charging the Dividend Equivalents portion of all Other Compensation received by AWW's top executives to PAWC's ratepayers is not reasonable, nor does it promote reliable and effective public utility service. This is an additional executive perquisite that relates to stock-based compensation and is beyond the normal compensation paid to PAWC's own, non-

management employees. It is not reasonable to charge such parent company executive perquisite costs to ratepayers.

Call Center Expense

Q. Are you revising the adjustment to remove Call Center Expense as a result of PAWC's rebuttal?

A. No. As discussed in my direct testimony, this adjustment is based on the recommendation of OCA witness Barbara Alexander to eliminate expenses totaling $3.082 million related to the third party call centers that have routinely failed to meet reasonable call performance standards. As discussed in her surrebuttal testimony (OCA Statement 6-SR), Ms. Alexander has not changed her position and continues to recommend the elimination of third party call center expenses from PAWC's FPFTY revenue requirement.

Arrearage Management Plan (AMP) Credits – Uncollectible Expense

Q. Are you revising the adjustment to reduce uncollectibles expense as a result of PAWC's rebuttal?

A. No. As discussed in my direct testimony, this adjustment is based on the recommendation of OCA witness Roger C. Colton, in which Mr. Colton recommended that PAWC's addition of dollars to uncollectibles to reflect AMP credits should be reduced by the percentage of Bill Discount Program (BDP) dollars already historically included in uncollectibles. As discussed in his surrebuttal testimony (OCA Statement 5-SR), Mr. Colton has not changed his position with regard to his recommendation to reduce PAWC's FPFTY expense by $2.162 million related to the Company's proposed AMP.

American Water Resources – Revenues

Q. Did Ms. Everette respond to OCA testimony concerning American Water Resources?

A. Yes. Ms. Everette on page 21 of her rebuttal states that the PAWC's $659,624 miscellaneous revenue claim related to revenues it receives from American Water Resources for billing and marketing services that PAWC provides to this entity should be removed from PAWC's revenue requirement in the event the Commission determines that PAWC is not allowed to continue to bill for AWR in this proceeding.

Q. Are you revising your testimony on American Water Resources?

A. No. Ms. Alexander recommended in direct and maintains her recommendation in surrebuttal that the Commission should open an investigation into PAWC's existing billing and marketing arrangement with American Water Resources and suspend new customer enrollments while such investigation is ongoing. Further, Ms. Alexander's recommendation is that existing PAWC customers should not be harmed if her recommendation for an investigation is adopted. As stated in my direct testimony, I did not remove PAWC's $659,624 miscellaneous revenue that is associated with PAWC's billing and marketing arrangement with American Water Resources. As a general matter, amounts that a utility has been receiving for other revenue offset the amount of revenue requirement that is to be recovered in the utility's base rates. This is essentially the opposite of utility expense claims that add to the overall revenue requirement to be recovered in rates. The $659,624 revenue from AWR is being received by PAWC and is fully substantiated by PAWC for the FPFTY and reflecting that miscellaneous revenue benefits consumers by offsetting

the Company's proposed base rate revenue requirement. In rebuttal, no PAWC witness testified that PAWC should stop the billing and marketing arrangement with American Water Resources based on the concerns stated in Ms. Alexander's direct testimony. Hence, if the Commission adopts Ms. Alexander's recommendation to open an investigation, it would be speculative to say what the outcome of that Commission investigation would be, how it would impact rates, or when the outcome will occur. Given this uncertainty and given that the amount of miscellaneous revenue that PAWC has been collecting from AWR is fully substantiated and benefits consumers, I have not changed my position.

V. NEW PENSION AND OPEB EXPENSE TRACKER AND PRODUCTION COST TRACKER

Q. How did PAWC respond to your recommendation that PAWC's proposed new Pension and OPEB Expense Tracker and Production Cost Tracker be rejected?

A. PAWC witness Swiz's rebuttal testimony at pages 4-6 continues to advocate for having both a Pension/OPEB Tracker and a Production Cost Tracker. Mr. Swiz states at page 5 of his rebuttal that the Company is requesting defer Pension/OPEB and Production costs for accounting purposes and is not requesting recovery of these amounts at this time. He states that Pension, OPEB and production costs will still be subject to a detailed ratemaking review in the Company's next base rate case.

Q. Please respond.

A. As discussed in my direct testimony, isolating and tracking the Pension and OPEB expenses as well as Production costs for eventual recovery via a special rate recovery mechanism or in future base rates, runs counter to a fundamental principle of ratemaking – that a utility should be afforded the opportunity to recover its costs of providing service but not guaranteed such recovery. This is particularly so for PAWC in this case given that the Company is utilizing a FPFTY that anticipates the Company's future costs of providing service.

Q. At page 5 of his rebuttal testimony, PAWC witness Swiz asserts that deferral mechanisms are not single-issue ratemaking. Please respond.

A. Deferrals of fluctuations in one particular cost or cost category in isolation from all other cost fluctuations is by definition single-issue ratemaking because it focuses only on one cost or a single group of costs, typically where the utility expects such costs to increase, and ignores fluctuations between rate cases in other costs.

Q. At page 6 of his rebuttal testimony, PAWC witness Swiz asserts that the principles that justify natural gas and electric utilities' Section 1307 mechanisms also applies to the Company's proposed Pension/OPEB Tracker and Production Cost Tracker. Please respond.

A. On pages 5-6 of his rebuttal, Mr. Swiz states that electric utilities in Pennsylvania (and other states) are afforded the opportunity to adjust rates for variations in purchased power, transmission services, and fuel costs to generate electricity and that in Pennsylvania, such adjustment clauses are explicitly authorized by Section

1307 of the Public Utilities Code. However, there is no specific similar statute that applies to PAWC's pension, OPEB and production cost recovery. Mr. Swiz's attempt to bootstrap electric utility default service cost recovery mechanisms to apply to PAWC's pension, OPEB and production costs is therefore off point, lacks merit and should be rejected.

Q. Are there additional concerns that deferring Pension/OPEB expense and Production costs into the future could result in over-earnings for PAWC?

A. Yes. The Company's single-issue proposal for deferring Pension/OPEB expense and Production costs into the future is not even bounded by an earnings test. PAWC could be earning in excess of its authorized rate of return during the same accounting periods in which it is recording additional build-ups of deferred Pension/OPEB expense and Production cost, thus increasing profits for shareholders and placing an unreasonable burden upon ratepayers who have already been subject to multiple rounds of rate increases from PAWC, with no end in sight. All of these considerations should result in denial of PAWC's request for deferring Pension/OPEB expense and Production cost fluctuations between rate cases.

Q. Has the West Virginia Public Service Commission recently rejected requests for expense trackers and deferred accounting similar to those that PAWC has requested?

A. Yes. In its Decision dated February 23, 2024, the West Virginia PSC rejected similar requests that were made by PAWC's affiliate, West Virginia American

Water Company in that case. At page 36 of that Decision, the West Virginia Commission stated as follows:

> The Company proposed what it called "fair and reasonable mechanisms to combat the negative effects of volatility in (1) production costs and (2) pension and OPEB expense." (Company Initial Brief at 000066.) This included a production cost tracker that it argued would protect both its customers and the Company against sustained volatility in production expenses, including chemical expense. Id.
>
> In addition, the Company proposed a Pension and OPEB Tracker. The Company argued through Dr. Chard that this tracker would allow the Company to address fluctuations in pension and OPEB expense. (Company initial Brief at 000069.)
>
> Staff and CAD objected to these cost trackers. Staff witness Mr. Cooke recommended the Commission deny the Company's proposed production cost tracker because the Company's "production costs" do not compare in nature or magnitude to the costs utilities pass through in the current ENEC and PGA rate mechanisms. (Staff Initial Brief at 000020.) Mr. Cooke further noted "both the Company and Staff have included adjustments to the Company's per books amounts related to these costs." (Direct Testimony of Geoffrey M. Cooke, Cooke Direct, at 19.) Staff asserted that this proposed tracker does not encourage the Company "to reign in cost and to efficiently seek to keep the cost of certain items in check." (Staff Initial Brief at 000020.)
>
> Similarly, Staff recommended the Commission deny the Company's proposed pension and OPEB tracker. Mr. Cooke noted that "the Company and Staff have included adjustments to the Company's per books amounts related to these costs." (Cooke Direct at 20.) Moreover, CAD stated that "[t]hese trackers are part of a slew of mechanisms the Company has proposed in this case that are designed to benefit stockholders with little to no benefit to ratepayers." (CAD Initial Brief at 000027.)
>
> The Commission has reviewed the positions of the parties, and agrees with Staff and CAD. The Commission will deny the Company's request to include the production cost tracker and pension and OPEB expense tracker.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does. I reserve the right to supplement this testimony either in writing or orally if additional relevant information is received.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)
Exhibit LA-7
Copies of Non-Confidential Material Referenced in the
Surrebuttal Testimony of
Ralph C. Smith

Document	Subject	Confidential	No. of Pages	Page No.
OCA 21-003	As related to the Brentwood wastewater system: As it relates to the amounts for acquired plant in service and new utility plant in service, the breakout of FPFTY plant in service amount of $22.695 million between the purchase price in the related §1329 proceeding and the post-acquisition costs included in PAWC's filing in the current rate case proceeding; As it relates to the amounts reflected in HTY, FTY, and FPFTY operating and tax expenses, the reasoning of why Exhibit 3-B, page 308 does not reflect the FPFTY amounts for Bad Debt expense of $63,404, Miscellaneous expense of $8,863, Transportation expense of $3,551, and Amortization of Rate Case expense of $5,370; Referring to the response to OCA 12-06(e), the amount that is included in FPFTY operating revenue at current rates is the $1,824,191 that is shown on Exhibit 3-A, page 173; Pursuant to the amounts included in plant in service, the related depreciation and amortization expense included in the FTY and FPFTY; Pursuant to the amounts included in plant in service, the related ADIT included in rate base for the FTY and FPFTY; The Brentwood wastewater system was not acquired during the HTY.	No	2	2 - 3
OCA 21-008	As related to the BASA wastewater system: As it relates to the amounts for acquired plant in service and new utility plant in service, the breakout of FPFTY plant in service amount of $243.068 million between the approved purchase price in the related §1329 proceeding and the post-acquisition costs included in PAWC's filing in the current rate case proceeding; As it relates to the amounts reflected in HTY, FTY, and FPFTY operating and tax expenses, the reasoning of why Exhibit 3-B, page 307 does not reflect the FPFTY amounts for Bad Debt expense of $191,749, Transportation expense of $58,011, and Amortization of Rate Case expense of $20,057; Referring to the response to OCA 12-14(e), the amount of amount of Present Rate revenues at the FPFTY of $11,847,402 is shown in Exhibit 3-A, page 141; Reconciliation of the amounts for the acquisition in the Settlement that were approved in Docket No. A-2022-30374047 to the amounts that are included in PAWC's filing in the current proceeding is located in the response to I&E RB-016; Pursuant to the amounts included in plant in service, the related depreciation and amortization expense included in the FTY and FPFTY; Pursuant to the amounts included in plant in service, the related ADIT included in rate base for the FTY and FPFTY; The BASA wastewater system was not acquired during the HTY.	No	2	4 - 5
OCA 24-003	PAWC included Project Number 124-610022, which has the title "PA Lead Service Line Inventory", in utility account 348 - Other Tangible Equipment for the FPFT. The correct account should have been 340.3 - Computer Software.	No	1	6
OCA 35-002	Identification of each water utility acquisition that PAWC has made since the 2016 Gannett Fleming depreciation rate study; For each such water utility acquisition, identification of which were pursuant to §1329; For each §1329 water utility acquisition identified, identification of the depreciation lives, depreciation rates and survivor curve that were proposed by PAWC sponsored witnesses in each such §1329 water utility acquisition case.	No	1	7
OCA 35-003	Company witness Spanos' explanation of the depreciation lives, depreciation rates and survivor curves that were proposed by PAWC's sponsored witness in Docket No. A-2020-3019859, the §1329 Valley Township Water System acquisition case.	No	1	8
OCA 35-004	Confirmation that PAWC's sponsored witness in Docket No. A-2020-3019859 used the following depreciation lives, depreciatin rates and survivor curves for each of the water utility plant accounts: 60 year normal service life (NSL), 63.73 year total life expectancy, and R2.5 survivor curve shape for account 354.40, 304.3, Water Treatment Plant – Large Structures; 110 year normal service life (NSL), 112.58 year total life expectancy, and R2.0 survivor curve shape for account 363.20, 331.4, Distribution – Mains – Ductle Iron; 75 year normal service life (NSL), 76.89 year total life expectancy, and R2.5 survivor curve shape for account 363.20, 335.00, Fire Hydrants.	No	1	9
OCA 35-005	Amount of water utility plant in service that PAWC proposed as of 12/31/23, end of the FTY, and end of the FPFTY for each of the following accounts: Account 354.40, Account 304.3, Account 363.20, Account 331.4, Account 335, and Account 331.	No	1	10
OCA 35-006	Specific depreciation rates PAWC used and the amount of deprection expense PAWC reflected for the HTY, calendar year 2023, FTY, and the FPTY for each of the following water utility plant accounts: Account 354.40, Account 304.3, Account 363.20, Account 331.4, Account 335, and Account 331.	No	1	11
OCA 35-007	Referring the the Rebuttal Testimony of Company witness Gress: Explantion showing how the $1,660,367 increase to depreciation expense was derived; Explanation showing how the $1,258,893 increase to accumulated depreciation was derived.	No	1	12
OCA 35-008	Referring to the Rebuttal Testimony of Company witness O'Malley, Exhibit LNO-3R: Based on the responses to OCA 09-039 and OCA 15-013, explanation of why PAWC only removed SERP expense of $31,348 and not $152,169.	No	1	13
	Total Pages Including this Page		13	

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 21

OCA 21-003

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of the Brentwood wastewater system. Refer to the responses to OCA 12-06 and OCA 12-07, which requested information specific to the acquisition of the Brentwood Wastewater system in the HTY, FTY and FPFTY.

a. As it relates to the amounts for acquired plant in service and new utility plant in service (post-acquisition), the response to OCA 12-06(a) refers to Volume 3, Exhibit 3-A, page 179, which reflects plant in service of $22.695 million for the Brentwood wastewater system acquisition in the FPFTY. Please provide a breakout of FPFTY plant in service amount of $22.695 million between (1) the purchase price in the related Section 1329 proceeding (Docket No. A-2021-3024058), and (2) the post-acquisition costs included in PAWC's filing in the current rate case proceeding.

b. As it relates to the amounts reflected in HTY, FTY and FPFTY operating and tax expenses for the Brentwood wastewater system acquisition, the response to OCA 12-06(c) refers to Exhibit 3-A, page 172 (lines 6-19), Exhibit 3-A, pages 187-190 and Exhibit 3-B, page 308. Why does Exhibit 3-B, page 308 not reflect the FPFTY amounts for (1) Bad Debt expense of $63,404, (2) Miscellaneous expense of $8,863, (3) Transportation expense of $3,551, and (3) Amortization of Rate Case expense of $5,370? Explain fully.

c. Referring to the response to OCA 12-06(e), which referenced Exhibit 3-A, pages 173-174, is the amount that is included in FPFTY operating revenue for the Brentwood wastewater system acquisition at current rates the $1,824,191 that is shown on Exhibit 3-A, page 173, column 9, line 26? If not, explain fully why not and provide the amount included in FPFTY operating revenue for the Brentwood wastewater system acquisition.

d. Pursuant to the amounts included in plant in service for the Brentwood wastewater acquisition, please provide the related depreciation and amortization expense included in the HTY, FTY and FPFTY.

e. Pursuant to the amounts included in plant in service for the Brentwood wastewater acquisition, please provide the related ADIT included in rate base for the HTY, FTY and FPFTY.

Response:

a. In Exhibit 3-A, page 179, the purchase price in the related Section 1329 proceeding in the amount of $19,364,443, is shown in the "Acquisition" column, line 10, and the post-acquisition

costs are shown in the "Additions" columns, line 10. The total of the purchase price, plus additions, less retirements, equals the FPFTY amount of $22.695 million.

b. Exhibit 3-B, page 308 only reflects certain incremental O&M expenses related to the Brentwood acquisition that are not otherwise included in other exhibits. To include the referenced adjustments for Bad Debt, Miscellaneous expense, Transportation expense, or Amortization of Rate Case expense in this schedule would lead to double counting when rolled into the full revenue requirement calculation. For (1) Bad Debt expense, there are three separate adjustments included in the filing; one for uncollectible expense related to the revenues billed by PAWC for the collection system (Exhibit 3-A page 196), a second for the incremental uncollectible expense associated with the billing of the ALCOSAN treatment charges (Exhibit 3-B, page 337), and a third, related to the costs associated with the Company's Arrearage Management Plan (Exhibit 3-B, page 336). For (2) Miscellaneous expense, the amount of $8,863 related specifically to the expense for credit card and echeck transaction costs (Exhibit 3-B, page 326). For (3) Transportation expense, please refer to Exhibit 3-B, page 265 for Transportation expenses calculated for Brentwood. Finally, for (4) Amortization of Rate Case expense $5,370, please refer to Exhibit 3-B, page 295.

c. Yes, the amount reflects the Present Rate revenue at the FTY and FPFTY.

d. Please refer to Exhibit 3-A, pages 197 and 198 and Exhibit 3-B, pages 348 and 354 for the FTY and FPFTY amounts. The Brentwood wastewater system was not acquired during the HTY.

e. Please refer to Exhibit 3-A, page 178, line 24 and page 186 for the FTY and FPFTY amounts. The Brentwood wastewater system was not acquired during the HTY.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 21

OCA 21-008

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Acquisition of the BASA wastewater system. Refer to the responses to OCA 12-14 and OCA 12-15, which requested information specific to the acquisition of the BASA Wastewater system in the HTY, FTY and FPFTY.

a. As it relates to the amounts for acquired plant in service and new utility plant in service (post-acquisition), the response to OCA 12-14(a) refers to Volume 3, Exhibit 3-A, page 146, which reflects plant in service of $243.068 million for the BASA wastewater system acquisition in the FPFTY. Please provide a breakout of FPFTY plant in service amount of $243.068 million between (1) the approved purchase price in the related Section 1329 proceeding (Docket No. A-2022-3037047), and (2) the post-acquisition costs included in PAWC's filing in the current rate case proceeding.

b. As it relates to the amounts reflected in HTY, FTY and FPFTY operating and tax expenses for the BASA wastewater system acquisition, the response to OCA 12-14(c) refers to Exhibit 3-A, page 139 (lines 6-19), Exhibit 3-A, pages 155-158 and Exhibit 3-B, page 307. Why does Exhibit 3-B, page 307 not reflect the FPFTY amounts for (1) Bad Debt expense of $191,749, (2) Transportation expense of $58,011, and (3) Amortization of Rate Case expense of $20,057? Explain fully.

c. Referring to the response to OCA 12-14(e), which referenced Exhibit 3-A, pages 140-141, is the amount that is included in FPFTY operating revenue for the BASA wastewater system acquisition at current rates the $11,720,908 that is shown on Exhibit 3-A, page 140, column 9, line 26? If not, explain fully why not and provide the amount included in FPFTY operating revenue for the BASA wastewater system acquisition.

d. Please reconcile the amounts for the BASA wastewater acquisition in the Settlement was approved in Docket No. A-2022-3037047 to the amounts for the BASA wastewater system that are included in PAWC's filing in the current rate case proceeding. Identify, quantify and explain each reconciling item.

e. Pursuant to the amounts included in plant in service for the BASA wastewater acquisition, please provide the related depreciation and amortization expense included in the HTY, FTY and FPFTY.

f. Pursuant to the amounts included in plant in service for the BASA wastewater acquisition, please provide the related ADIT included in rate base for the HTY, FTY and FPFTY.

Response:

a. In Volume 3, Exhibit 3-A, page 146, the approved ratemaking rate base in the related Section 1329 proceeding in the amount of $228 million is shown in the "Acquisition" column, line 24, and the post-acquisition costs are shown in the "Additions" columns, line 24. The total of the purchase price, plus additions, less retirements, equals the FPFTY amount of $243.068 million.

b. Exhibit 3-B, page 307 only reflects certain incremental O&M expenses related to the BASA acquisition that are not otherwise included in other exhibits. To include the referenced adjustments for Bad Debt, Transportation expense, or Amortization of Rate Case expense in this schedule would lead to double counting when rolled into the full revenue requirement calculation. For (1) Bad Debt expense, there are two separate adjustments included in the filing; one for uncollectible expense related to the incremental revenues billed by PAWC (Exhibit 3-A page 164) and a second related to the costs associated with the Company's Arrearage Management Plan (Exhibit 3-B, page 336). For (2) Transportation expenses, please refer to Exhibit 3-B, page 264 for Transportation expenses calculated for BASA. For (3) Amortization of Rate Case expense $20,057, please refer to Exhibit 3-B, page 295.

c. The amount of $11,720,908 reflects the Present Rate revenue at the FTY. Present Rate revenues at the FPFTY are shown in Exhibit 3-A, page 141, column 16, line 26, in the amount of $11,847,402.

d. Please refer to the Company's response to I&E RB-016.

e. Please refer to Exhibit 3-A, pages 165 and 166 and Exhibit 3-B, pages 347 and 354 for the FTY and FPFTY amounts. The BASA wastewater system was not acquired during the HTY.

f. Please refer to Exhibit 3-A, page 145, line 24 and page 154 for the FTY and FPFTY amounts. The BASA wastewater system was not acquired during the HTY.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 24

OCA 24-003

Responsible Witness: Bruce W. Aiton, Vice President of Engineering for PAWC

Question:

Lead Service Line Inventory. Refer to Exhibit 3-C – Plant Additions and Retirements by Month for water operations. On page 9 of Exhibit 3-C, the Company has included Project Number 124-610022, which has the title "PA Lead Service Line Inventory", in utility account 348 – Other Tangible Equipment in the amount of $11,163,718 for the FPFTY ending June 30, 2025.

What accounting guidance did PAWC follow for recording costs for the lead service lines inventory as utility plant in Account 348?

Response:

The Company misidentified the utility account as 348 – Other Tangible Equipment. The correct utility plant account should be 340.3 – Computer Software. The Company will provide updated schedules to reflect this change during the rebuttal phase of this proceeding.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 35

OCA 35-002

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Refer to Mr. Spanos rebuttal testimony at page 5, lines 17-18.

a. Identify each water utility acquisition that PAWC has made since the 2016 Gannett Fleming depreciation rate study.

b. For each such water utility acquisition, identify which were pursuant to §1329.

c. For each §1329 water utility acquisition identified in response to part b, identify the depreciation lives, depreciation rates and survivor curve that were proposed by PAWC sponsored witnesses in each such §1329 water utility acquisition case.

Response:

a. Since the 2016 Gannett Fleming depreciation rate study, the following water utility acquisitions were closed by PAWC:

Water Utility Acquisition	**Docket Number**	**Close Date**
Turbotville Water	A-2018-3004191	07/24/19
Steelton Borough Authority	A-2019-3006880	10/09/19
Winola Water Company	P-2018-3006216, C-2018-2644592, and I-2018-3006498	12/17/20
Valley Twp Water	A-2020-3019859	11/19/21
SLIBCO Inc. (GCC) Water	A-2020-3023369	11/19/21
Creekside (Lancaster Home Builders) Water System	A-2022-3031020	06/21/23

b. Steelton Borough Authority and Valley Township water system acquisitions were both pursuant to §1329.

c. The Company and its witness in these §1329 water utility acquisition cases did not propose any depreciation lives, depreciation rates or survivor curves as part of the acquisition proceedings. The independent appraiser utilized depreciation lives, depreciation rates and survivor curves in order to compute their appraisal of each system. Please refer to the Docket Numbers listed above for the appraisals of the Valley and Steelton water systems.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 35

OCA 35-003

Responsible Witness: John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants

Question:

Is Mr. Spanos aware of the depreciation lives, depreciation rates and survivor curves that were proposed by PAWC's sponsored witness in Docket A-2020-3019859, the §1329 Valley Township Water System acquisition case? Explain fully.

Response:

Mr. Spanos is aware of how the average service lives and survivor curves were determined by Valley Township Water System. The average lives and survivor curves were based on a range of lives and curves utilized by other water companies, including PAWC, in the region. Mr. Spanos is also aware of PAWC's sponsored witness average lives, however, he was not directly involved in the determination of those parameters. However, neither of these life and curve parameters are consistent with how depreciable lives and curves should be determined for the assets in the rate case because there are different components for determining the future life characteristics under PAWC management, as well as different depreciation methods and procedures for depreciating the remaining net plant.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 35

OCA 35-004

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Please confirm that PAWC's sponsored witness in Docket A-2020-3019859 proposed/used the following depreciation lives, depreciation rates and survivor curves for each of the water utility plant accounts listed below.

a. 60 year normal service life (NSL), 63.73 year total life expectancy, and R2.5 survivor curve shape for account 354.40, 304.3, Water Treatment Plant – Large Structures.

b. 110 year normal service life (NSL), 112.58 year total life expectancy, and R2.0 survivor curve shape for account 363.20, 331.4, Distribution – Mains – Ductle Iron.

c. 75 year normal service life (NSL), 76.89 year total life expectancy, and R2.5 survivor curve shape for account 363.20, 335.00, Fire Hydrants.

d. If any of the above, a, b and c, cannot be confirmed explain fully why not.

Response:

a-c. Confirmed to reflect the depreciation lives, depreciation rates and survivor curves that were used by the independent appraiser to complete the appraisal included at Docket A-2020-3019859.

d. N/A

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 35

OCA 35-005

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

How much water utility plant in service has PAWC proposed as of each of these dates: (1) 12/31/2023, (2) end of the FTY, and (3) end of the FPFTY for each of the following accounts:

a. Account 354.40
b. Account 304.3
c. Account 363.20
d. Account 331.4
e. Account 335
f. Account 331

Response:

a, c. Accounts 354.40 and 363.20 are wastewater utility accounts and therefore there is no associated water utility plant in these accounts.

b, e, f. See table below.

ACCT. NO.	ACCOUNT TITLE	ESTIMATED BOOK COST 12/31/2023	ESTIMATED BOOK COST 6/30/2024	ESTIMATED BOOK COST 6/30/2025
304.30	Purification Buildings	$ 341,412,320	$ 341,634,694	$ 341,634,694
331.00	Mains and Accessories	3,494,952,338	3,629,756,124	3,841,993,932
335.00	Fire Hydrants	147,080,419	152,728,748	163,733,934

d. Account 331.40 Distribution Mains – Ductile Iron has no proposed water utility plant in service for the specified dates.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 35

OCA 35-006

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

What specific depreciation rates has PAWC used and how much depreciation expense has PAWC reflected for each of these periods: (1) the HTY, (2) calendar 2023, (3) the FTY, and (4) the FPFTY for each of the following water utility plant accounts:

a. Account 354.40
b. Account 304.3
c. Account 363.20
d. Account 331.4
e. Account 335
f. Account 331

Response:

Depreciation rates and the associated depreciation expense were calculated by test year and annualized. Therefore, calendar year 2023 data was not used as part of this filing.

a, c. Accounts 354.40 and 363.20 are wastewater utility accounts and therefore there is no associated water utility plant depreciation rate or expense in these accounts.

b, e, f. See table below.

ACCT. NO.	ACCOUNT TITLE	(1) HTY 6/30/2023 Depreciation Rate	(1) HTY 6/30/2023 Depreciation Expense	(3) FTY 6/30/2024 Depreciation Rate	(3) FTY 6/30/2024 Depreciation Expense	(4) FPFTY 6/30/2025 Depreciation Rate	(4) FPFTY 6/30/2025 Depreciation Expense
304.30	Purification Buildings	2.35	$ 7,848,433	2.37	$ 8,202,208	2.38	$ 8,684,270
331.00	Mains and Accessories	1.52	46,324,768	1.53	50,981,834	1.54	54,371,951
335.00	Fire Hydrants	2.28	3,065,466	2.27	3,298,422	2.26	3,532,857

d. Account 331.40 Distribution Mains – Ductile Iron has no proposed water utility plant in service for the specified dates, and therefore no associated depreciation rates or expense.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 35

OCA 35-007

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Depreciation Expense - Lead Service Line Inventory. Refer to the Rebuttal Testimony of Company witness Gress. On page 8 of her rebuttal, Ms. Gress states that the reclassification of Project Number 124-610022 PA Lead Service Line Inventory (in the amount of $11,163,718) from plant account 348 – Other Tangible Equipment to plant account 340.3 – Computer Software results in an increase to FPFTY depreciation expense in the amount of $1,660,367. In addition, on pages 8-9 of her rebuttal, Ms. Gress states that this reclassification results in an increase to FPFTY accumulated depreciation in the amount of $1,258,893.

a. Please provide a schedule in Excel with formulas intact that shows how the $1,660,367 increase to depreciation expense was derived. Show detailed calculations.

b. Please provide a schedule in Excel with formulas intact that shows how the $1,258,893 increase to accumulated depreciation was derived. Show detailed calculations.

Response:

a. The increase of $1,660,367 was derived by taking the difference between the total depreciable plant in column 6 found in the depreciation schedule in Exhibit 11-C 2025 – Table 2, provided as part of the direct testimony of witness John Spanos and the revised depreciation schedule in Exhibit JSS-1R-Table 1, provided in the rebuttal testimony of witness John Spanos. The Excel files can be accessed on the MLB ClientSite.

b. The increase of $1,258,893 was derived by taking the difference between the total depreciable plant in column 4 found in the depreciation schedule in Exhibit 11-C 2025 – Table 2, provided as part of the direct testimony of witness John Spanos and the revised depreciation schedule in Exhibit JSS-1R-Table 1, provided in the rebuttal testimony of witness John Spanos. The Excel files can be accessed on the MLB ClientSite.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 35

OCA 35-008

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Service Company SERP Expense. Refer to the Rebuttal Testimony of Company witness O'Malley, Exhibit LNO-3R and the responses to OCA 09-039 and OCA 15-013. On page 6 of her rebuttal, Ms. O'Malley states that as part of the update to Service Company labor and labor related expenses, the Company removed SERP expense that was erroneously included in the Company's filing. Exhibit LNO-3R shows that the Company removed SERP expense totaling $31,348 in its Service Company expense update. However, the response to OCA 09-039, Attachment 4 reflects the line item "Pension Expense – SERP in Account 50630000 in the amount of $152,769 as of the test year ended June 30, 2023. In addition, the response to OCA 15-013 (in reference to the $152,769 of SERP expense recorded in Account 50630000 in the HTY) stated that that amount was recorded to the Service Company in error and would be removed from the FTY and FPFTY in the rebuttal phase of this proceeding.

a. Based on the responses to OCA 09-039 and OCA 15-013, why did the Company only remove SERP expense of $31,348 and not $152,169? Explain fully.

Response:

a. The Pension Expense – SERP amount of $152,169 provided in the response to OCA 09-039_Attachment 4 was reflected on the AWWSC income statement and therefore was the total expense for Service Company, not the amount that was allocated to PAWC. The Pension Expense – SERP amount that was allocated to PAWC for the historical test year is $31,348. The Service Company expenses allocated to PAWC were provided in the response to OCA 09-039_Attachment 1, which reflects the HTY amount of $31,348 plus adjustments for merit increases into the future test years.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Ralph C. Smith, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 2SR, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: March 4, 2024

Signature: Ralph C. Smith

Ralph C. Smith

Consultant Address: Larkin & Associates, PLLC
15728 Farmington Road
Livonia, MI 48154

OCA Statement 3

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:		
v.	:	Docket Nos.	R-2023-3043189 (Water)
Pennsylvania-American Water Company	:		R-2023-3043190 (Wastewater)

DIRECT TESTIMONY

OF

DAVID J. GARRETT

ON BEHALF OF

THE PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

February 1, 2024

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Exhibit DJG-13	Proxy Company Debt Ratios
Exhibit DJG-14	Competitive Industry Debt Ratios
Exhibit DJG-15	Hamada Model

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is David J. Garrett. My business address is 101 Park Avenue, Suite 1125, Oklahoma Borough, Oklahoma 73102.

Q. By whom are you employed and in what capacity?

A. I am the managing member of Resolve Utility Consulting, PLLC. I am an independent consultant specializing in public utility regulation.

Q. Please summarize your educational background and professional experience.

A. I received a B.B.A. degree with a major in Finance, an M.B.A. degree, and a J.D. degree from the University of Oklahoma. I worked in private legal practice for several years before working as assistant general counsel at the Oklahoma Corporation Commission in 2011. At the commission, I worked in the Office of General Counsel in regulatory proceedings. In 2012, I worked for the Public Utility Division as a regulatory analyst providing testimony in regulatory proceedings. After leaving the Oklahoma commission I formed Resolve Utility Consulting PLLC, where I have represented numerous consumer groups and state agencies in utility regulatory proceedings, primarily in the areas of cost of capital and depreciation. I am a Certified Depreciation Professional with the Society of Depreciation Professionals. I am also a Certified Rate of Return Analyst with the Society of Utility and Regulatory Financial Analysts. A more complete description of my qualifications and regulatory experience is included in my curriculum vitae.[1]

[1] Exhibit DJG-1.

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of the Pennsylvania Office of Consumer Advocate ("OCA").

Q. Describe the purpose and scope of your testimony in this proceeding.

A. The primary purpose of my testimony is to provide my opinion on the estimated cost of capital and awarded rate of return recommendation for Pennsylvania-American Water Company ("PAWC" or the "Company"). I am responding to the direct testimony of Company witness Ann Bulkley and Company witness Ashley Everette.

Q. Please describe the organization of your testimony.

A. In the executive summary below, I provide an overview of cost of capital issues, my recommendations, and my response to the Company's testimony on these issues. In the sections that follow, I discuss the legal standards governing the awarded return issue as well as the general concepts involved in estimating the cost of equity. I discuss the concepts of risk and return, and in this context, I address the Company's proposed Environmental Compliance Infrastructure Charge ("ECIC") and Revenue Decoupling Mechanism ("RDM"). I provide detailed analysis of the Discounted Cash Flow ("DCF") Model, the Capital Asset Pricing Model ("CAPM"), including my results for these models and my responses to Ms. Bulkley's results. I also address capital structure, which is a key component to the cost of capital.

II. EXECUTIVE SUMMARY

Q. Please summarize your recommendation to the Commission.

A. My testimony can be distilled to the following recommendations and conclusions:

- The Commission should reject the Company's proposed return on equity ("ROE") of 10.95% as excessive and unsupported. An objective cost of equity analysis shows that the Company's market-determined cost of equity is notably lower than the Company's proposed ROE.

- Based on the results of my financial modeling using the DCF and CAPM models, I recommend that the Commission set the Company's market-determined cost of equity at 9.1%, which is based on the average of my CAPM result (8.7%) and my DCF Model result (9.4%). However, if the Commission accepts the Company's proposed capital structure and/or adopts either of the Company's proposed alternative ratemaking proposals, then I recommend the Commission grant only the 8.7% ROE supported by my models. If the Commission were to adopt the Company's proposed 10.95% ROE over my recommended 9.1% ROE, at PAWC's claimed rate base, it would cost consumers an additional $87 million per year in rates.[2]

- The Commission should reject the Company's request for a performance-based adder of up to 25 basis points to its market-determined ROE[3] as an award for its managerial performance. The requested increment in return on equity is unsupported and excessive, and at the Company's as filed request it would impose up to $11.8 million of additional costs on ratepayers per year.[4]

[2] *See* Exhibit LA-6 at 5-6, attached to the Direct Testimony of OCA witness Ralph Smith (OCA Statement 2).

[3] PAWC witness Everette states: "[I]f the Commission were to approve a rate of return on equity that is lower than the upper end of Ms. Bulkley's recommended range [of 10.95%], it should add no less than 25 basis points to its market-determined rate of return." [fn. 11]: Of course, if the Commission's market-determined rate of return on equity is greater than 10.70%, then the performance-based increment could be less than 25 basis points to achieve a final equity return rate of 10.95%." PAWC St. 1 at 33, n. 11.

[4] *See* OCA Statement 2, Exhibit LA-6 at 2.

- I recommend the Commission reject the Company's proposed capital structure consisting of 44.7% debt and 55.3% equity (total company). The average debt ratio of PAWC's proxy group is 49%. In order for the results of the CAPM to be accurate, any discrepancy between the utility's capital structure and the proxy group's capital structure must be reconciled either through a capital structure adjustment for ratemaking purposes or a lower authorized ROE as estimated through the Hamada model. In this case, since I am proposing an ROE that exceeds the results of the CAPM; thus, it is even more imperative that the Commission adjust the Company's proposed ratemaking capital structure so that the overall rate of return is not unfairly high.

- PAWC's proposed capital structure deviates from the average debt ratio of its own proxy group, and it substantially deviates from the debt ratio of its parent (55%). If the Commission were to adopt PAWC's proposed capital structure, it would unreasonably increase the revenue requirement by $30.7 million per year, at PAWC's claimed rate base and ROE, for water and wastewater operations combined.[5]

- I propose the Commission impute a capital structure that is equal to the average capital structure of the total proxy group, which consists of 51% debt and 49% equity.[6]

- My proposed adjustments to the Company's ROE and capital structure result in an overall weighted average rate of return of 6.97% for water operations and 6.79% for wastewater operations,[7] which better balances the interests of consumers and shareholders in contrast to the Company's excessive rate of return proposal.

[5] *See id.* at 3-4.

[6] *See id*. at 7-8. OCA witness Ralph Smith incorporates this recommended capital structure adjustment into the overall rate of return calculations for both water and wastewater operations. Wastewater operations also include a 4.46% debt ratio for specific wastewater debt issuances, which is incorporated into the total imputed debt ratio recommendation.

[7] *See id*.

III. LEGAL STANDARDS AND THE AWARDED RETURN

Q. Discuss the legal standards governing the awarded rate of return on capital investments for regulated utilities.

A. In *Wilcox v. Consolidated Gas Co. of New York*, the U.S. Supreme Court first addressed the meaning of a fair rate of return for public utilities.[8] The Court found that "the amount of risk in the business is a most important factor" in determining the appropriate allowed rate of return.[9] As referenced earlier, in two subsequent landmark cases, the Court set forth the standards by which public utilities are allowed to earn a return on capital investments. First, in *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia*, the Court held:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public. . . but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.[10]

Then, in *Federal Power Commission v. Hope Natural Gas Company*, the Court expanded on the guidelines set forth in *Bluefield* and stated:

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[8] *Wilcox v. Consolidated Gas Co. of New York*, 212 U.S. 19 (1909).

[9] *Id.* at 48.

[10] *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679, 692–93 (1923).

> From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.[11]

The cost of capital models I have employed in this case are designed to be in accordance with the foregoing legal standards.

Q. Is it important that the awarded rate of return be based on the Company's actual cost of capital?

A. Yes. The U.S. Supreme Court in *Hope* makes it clear that the allowed return should be based on the actual cost of capital. Moreover, the awarded return must also be fair, just, and reasonable under the circumstances of each case. Among the circumstances that must be considered in each case are the broad economic and financial impacts to the cost of equity and awarded return caused by market forces and other factors. Scholars agree that the actual cost of capital must be considered:

> Since by definition the cost of capital of a regulated firm represents precisely the expected return that investors could anticipate from other investments while bearing no more or less risk, and since investors will not provide capital unless the investment is expected to yield its opportunity cost of capital, the correspondence of the definition of the cost of capital with the court's definition of legally required earnings appears clear.[12]

The models I have employed in this case closely estimate the Company's market-based cost of equity. The rate of return that I calculated more closely aligns with the U.S.

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[11] *Federal Power Commission v. Hope Natural Gas Co*., 320 U.S. 591, 603 (1944) (emphasis added) (internal citations omitted).

[12] A Lawrence Kolbe, James A. Read, Jr. & George R. Hall, *The Cost of Capital: Estimating the Rate of Return for Public Utilities* 21 (The MIT Press 1984).

Supreme Court's standards, will allow the Company to maintain its financial integrity, and achieve reasonable returns for its investors. On the other hand, if the Commission sets the allowed rate of return much higher than the market-based cost of capital, as requested by the Company, it will result in an inappropriate transfer of wealth from ratepayers to the Company.[13]

Q. What does this legal standard mean for determining the awarded return and the cost of capital?

A. The awarded return and the cost of capital are different but related concepts. On the one hand, the legal and technical standards encompassing this issue require that the awarded return reflect the market-based cost of capital. Yet on the other hand, the two concepts differ in that the legal standards do not mandate that awarded returns exactly match the cost of capital. Instead, awarded returns are set through the regulatory process and may be influenced by various factors other than objective market drivers. By contrast, the cost of capital should be evaluated objectively and be closely tied to economic realities, such as stock prices, dividends, growth rates, and, most importantly, risk. The cost of capital can be estimated by financial models used by firms, investors, and academics around the world for decades. The problem is, with respect to regulated utilities, there has been a trend in which awarded returns fail to closely track with market-based cost of capital, as further discussed below. To the extent this occurs, the results are detrimental to ratepayers and the state's economy.

[13] Roger A. Morin, *New Regulatory Finance* 23–24 (Public Utilities Reports, Inc. 2006) (1994) ("[I]f the allowed rate of return is greater than the cost of capital, capital investments are undertaken and investors' opportunity costs are more than achieved. Any excess earnings over and above those required to service debt capital accrue to the equity holders, and the stock price increases. In this case, the wealth transfer occurs from ratepayers to shareholders.").

Q. Describe the economic impact that occurs when the awarded return deviates significantly from the U.S. Supreme Court's applicable cost of equity standards.

A. When the awarded ROE is divorced from the cost of equity, it runs the risk of violating the U.S. Supreme Court's standards. Ratepayers pay too much to support the utilities' essential operations with the net effect of diverting dollars from ratepayers for their internal or business uses that would otherwise support the local or state economy. Moreover, establishing an awarded return that far exceeds the cost of capital effectively prevents the awarded returns from changing along with economic conditions. This is especially true given that regulators may be influenced by the awarded returns in other jurisdictions, regardless of the various unknown factors influencing those awarded returns. If regulators rely too heavily on the awarded returns from other jurisdictions, they can create a self-perpetuating cycle over time that bears little relation to the market-based cost of equity.

Q. Please summarize the legal standards governing the awarded ROE issue.

A. The Commission should strive to move the awarded return to a level more closely aligned with the Company's actual, market-derived cost of capital while keeping in mind the following two legal principles outlined below.

1. Risk is the most important factor when determining the awarded return. The awarded return should be commensurate with those returns on investments of corresponding risk.

The legal standards articulated in *Hope* and *Bluefield* demonstrate that the U.S. Supreme Court understands one of the most basic, fundamental concepts in financial theory: the more (or less) risk an investor assumes, the more (or less) return the investor requires. Since utility stocks are low risk, the return required by equity investors should be relatively low. I have used financial models to closely estimate the Company's cost of equity, and these financial models account for risk. The cost of equity models confirm the industry

experiences relatively low levels of risk by producing relatively low cost of equity results. In turn, the awarded ROE in this case should reflect the Company's relatively low market risk.

2. The awarded return should be sufficient to assure financial soundness and integrity under efficient management.

Because awarded returns in the regulatory environment have not closely tracked market-based trends and commensurate risk, utility companies have been able to remain more than financially sound, perhaps despite management inefficiencies. In fact, the transfer of wealth from ratepayers to utilities has been so far removed from actual cost-based drivers that a utility could remain financially sound, even under relatively inefficient management. Therefore, regulatory commissions should strive to set utilities' returns based on actual market conditions to promote prudent and efficient management and minimize economic waste.

IV. GENERAL CONCEPTS AND METHODOLOGY

Q. Discuss your approach to estimating the cost of equity in this case.

A. While a competitive firm must estimate its own cost of capital to assess the profitability of competing capital projects, regulators determine a utility's cost of capital to establish a fair rate of return. The legal standards set forth above do not include specific guidelines regarding the models that must be used to estimate the cost of equity for utilities. Over the years, however, regulatory commissions have consistently relied on several models. The models I have employed in this case have been the two most widely used and accepted in regulatory proceedings for many years. The specific inputs and calculations for these models are described in more detail below.

Q. Please explain why you used multiple models to estimate the cost of equity.

A. These models attempt to measure the return on equity required by investors by estimating several different inputs. It is preferable to use multiple models because the results of any one model may contain a degree of imprecision, especially depending on the reliability of the inputs used at the time of conducting the model. By using multiple models, the analyst can compare the results of the models and look for outlying results and inconsistencies. Likewise, if multiple models produce a similar result, it may indicate a narrower range for the cost of equity estimate. For the results of any cost of equity model to be considered reasonable, it is necessary to use reasonable inputs and apply the models properly.

Q. Please discuss the benefits of choosing a proxy group of companies in conducting cost of capital analyses.

A. The cost of equity models in this case can be used to estimate the cost of capital of any individual, publicly traded company. There are advantages, however, to conducting cost of capital analysis on a proxy group of companies that are comparable to the target company. First, it is better to assess the financial soundness of a utility by comparing it to a group of other financially sound utilities. Second, using a proxy group provides more reliability and confidence in the overall results because there is a larger sample size. Finally, the use of a proxy group is often a pure necessity when the target company is a subsidiary that is not publicly traded. This is because the financial models used to estimate the cost of equity require information from publicly traded firms, such as stock prices and dividends.

Q. Describe the proxy group you selected in this case.

A. In this case, I chose to use the same group of water utilities used by Ms. Bulkley. In addition to water utilities, Ms. Bulkley included six additional electric and natural gas

utilities. According to Ms. Bulkley, her inclusion of non-water utilities in the proxy group was due to the relatively small number of water utilities available for analysis. I do not believe it is necessary to include non-water utilities in the proxy group when analyzing the cost of equity of a water utility. I based my recommendation on the modeling results from the water utility group. However, I have included the same non-water utilities selected by Ms. Bulkley in my analyses and exhibits in order to contrast the different results I obtained when using reasonable inputs to the models. Thus, for my DCF and CAPM results, I present three different calculations: (1) the water group; (2) the non-water group; and (3) the entire group combined. However, I believe it is reasonable for the Commission to focus on the results of the water utility group. In this particular case, the results of my CAPM and DCF Models were not materially different when applied to the water-only proxy group and total proxy group.[14]

V. RISK AND RETURN CONCEPTS

Q. Discuss the general relationship between risk and return.

A. Risk is among the most important factors for the Commission to consider when determining the allowed return. Thus, it is necessary to understand the relationship between risk and return. There is a direct relationship between risk and return: the more (or less) risk an investor assumes, the larger (or smaller) return the investor will demand. There are two primary types of risk: firm-specific risk and market risk. Firm-specific risk

[14] See Exhibit DJG-12.

affects individual companies, while market risk affects all companies in the market to varying degrees.

Q. Discuss the differences between firm-specific risk and market risk.

A. Firm-specific risk affects individual companies, rather than the entire market. For example, a competitive firm might overestimate customer demand for a new product, resulting in reduced sales revenue. This is an example of a firm-specific risk called "project risk."[15] There are several other types of firm-specific risks, including: (1) "financial risk" – the risk that equity investors of leveraged firms face as residual claimants on earnings; (2) "default risk" – the risk that a firm will default on its debt securities; and (3) "business risk" – which encompasses all other operating and managerial factors that may result in investors realizing less than their expected return in that particular company. While firm-specific risk affects individual companies, market risk affects all companies in the market to varying degrees. Examples of market risk include interest rate risk, inflation risk, and the risk of major socio-economic events. When there are changes in these risk factors, they affect all firms in the market to some extent.[16]

Analysis of the U.S. market in 2001 provides a good example for contrasting firm-specific risk and market risk. During that year, Enron Corp.'s stock fell from $80 per share to its low when the company filed for bankruptcy at the end of the year. If an investor's portfolio had held only Enron stock at the beginning of 2001, this irrational investor would have lost the entire investment by the end of the year due to assuming the full exposure of

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[15] Aswath Damodaran, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* 62–63 (3rd ed., John Wiley & Sons, Inc. 2012).

[16] *See* Zvi Bodie, Alex Kane & Alan J. Marcus, *Essentials of Investments* 149 (9th ed., McGraw-Hill/Irwin 2013).

Enron's firm-specific risk (in that case, imprudent management). On the other hand, a rational, diversified investor who invested the same amount of capital in a portfolio holding every stock in the S&P 500 would have had a much different result that year. The rational investor would have been relatively unaffected by the fall of Enron because his or her portfolio included about 499 other stocks. Each of those stocks, however, would have been affected by various market risk factors that occurred that year. Thus, the rational investor would have incurred a relatively minor loss due to market risk factors, while the irrational investor would have lost everything due to firm-specific risk factors.

Q. Can equity investors reasonably minimize firm-specific risk?

A. Yes. A fundamental concept in finance is that firm-specific risk can be eliminated through diversification.[17] If someone irrationally invested all his or her funds in one firm, he or she would be exposed to all the firm-specific risk and the market risk inherent in that single firm. Rational investors, however, are risk-averse and seek to eliminate risk they can control. Investors can eliminate firm-specific risk by adding more stocks to their portfolio through a process called "diversification." There are two reasons why diversification eliminates firm-specific risk.

First, each stock in a diversified portfolio represents a much smaller percentage of the overall portfolio than it would in a portfolio of just one or a few stocks. Thus, any firm-

[17] *See* John R. Graham, Scott B. Smart & William L. Megginson, *Corporate Finance: Linking Theory to What Companies Do* 179–80 (3rd ed., South Western Cengage Learning 2010).

specific action that changes the stock price of one stock in the diversified portfolio will have only a small impact on the entire portfolio.[18]

The second reason why diversification eliminates firm-specific risk is that the effects of firm-specific actions on stock prices can be either positive or negative for each stock. Thus, in large, diversified portfolios, the net effect of these positive and negative firm-specific risk factors will be essentially zero and will not affect the value of the overall portfolio.[19] Firm-specific risk is also called "diversifiable risk" because it can be easily eliminated through diversification.

Q. Is it well-known and accepted that, because firm-specific risk can be easily eliminated through diversification, the market does not reward such risk through higher returns?

A. Yes. Because investors eliminate firm-specific risk through diversification, they know they cannot expect a higher return for assuming the firm-specific risk in any one company. Thus, the risks associated with an individual firm's operations are not rewarded by the market. In fact, firm-specific risk is also called "unrewarded" risk for this reason. Market risk, on the other hand, cannot be eliminated through diversification and as such investors expect a return for assuming this type of risk. Market risk is also called "systematic risk." Scholars recognize the fact that market risk, or systematic risk, is the only type of risk for which investors expect a return for bearing:

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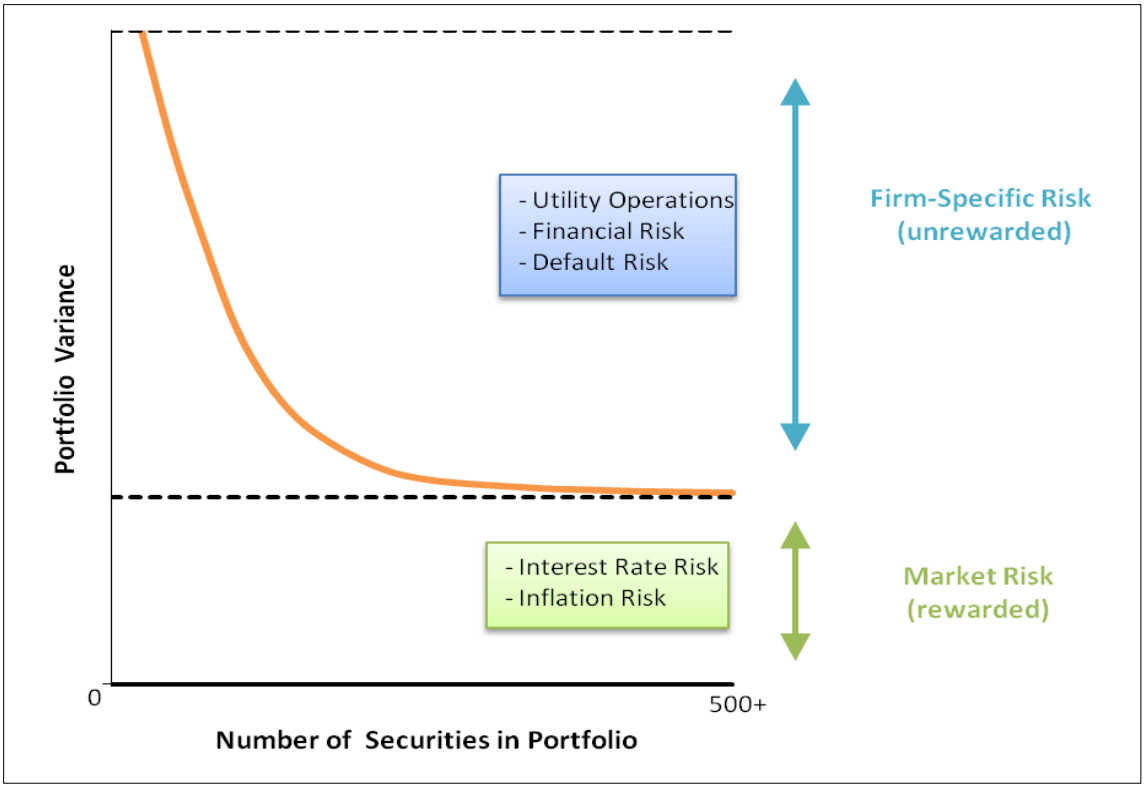
[18] *See* Aswath Damodaran, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* 64 (3rd ed., John Wiley & Sons, Inc. 2012).

[19] *See* Aswath Damodaran, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* 64 (3rd ed., John Wiley & Sons, Inc. 2012).

> If investors can cheaply eliminate some risks through diversification, then we should not expect a security to earn higher returns for risks that can be eliminated through diversification. Investors can expect compensation only for bearing systematic risk (i.e., risk that cannot be diversified away).[20]

These important concepts are illustrated in the figure below. Some form of this figure is found in many financial textbooks.

Figure 1:
Effects of Portfolio Diversification



This figure shows that as stocks are added to a portfolio, the amount of firm-specific risk is reduced until it is essentially eliminated. No matter how many stocks are added, however, there remains a certain level of fixed market risk. The level of market risk will

[20] *See* John R. Graham, Scott B. Smart & William L. Megginson, *Corporate Finance: Linking Theory to What Companies Do* 180 (3rd ed., South Western Cengage Learning 2010) (emphasis added).

vary from firm to firm. Market risk is the only type of risk that is rewarded by the market and is thus the primary type of risk the Commission should consider when determining the allowed return.

Q. Describe how market risk is measured.

A. Investors who want to eliminate firm-specific risk must hold a fully diversified portfolio. To determine the amount of risk that a single stock adds to the overall market portfolio, investors measure the covariance between a single stock and the market portfolio. The result of this calculation is called "beta."[21] Beta represents the sensitivity of a given security to the market as a whole. The market portfolio of all stocks has a beta equal to one. Stocks with betas greater than 1.0 are relatively more sensitive to market risk than the average stock. For example, if the market increases (or decreases) by 1.0%, a stock with a beta of 1.5 will, on average, increase (or decrease) by 1.5%. In contrast, stocks with betas of less than 1.0 are less sensitive to market risk, such that if the market increases (or decreases) by 1.0%, a stock with a beta of 0.5 will, on average, only increase (or decrease) by 0.5%. Thus, stocks with low betas are relatively insulated from market conditions. The beta term is used in the CAPM to estimate the cost of equity, which is discussed in more detail later.[22]

[21] *See* John R. Graham, Scott B. Smart & William L. Megginson, *Corporate Finance: Linking Theory to What Companies Do* 180–81 (3rd ed., South Western Cengage Learning 2010).

[22] Though it will be discussed in more detail later, Exhibit DJG-8 shows that the average beta of the proxy group was less than 1.0. This confirms the well-known concept that utilities are relatively low-risk firms.

Q. Are public utilities characterized as defensive firms that have low betas, have low market risk, and are relatively insulated from overall market conditions?

A. Yes. Although market risk affects all firms in the market, it affects different firms to varying degrees. Firms with high betas are affected more than firms with low betas, which is why firms with high betas are riskier. Stocks with betas greater than one are generally known as "cyclical stocks." Firms in cyclical industries are sensitive to recurring patterns of recession and recovery known as the "business cycle."[23] Thus, cyclical firms are exposed to a greater level of market risk. Securities with betas less than one, on the other hand, are known as "defensive stocks." Companies in defensive industries, such as public utility companies, "will have low betas and performance that is comparatively unaffected by overall market conditions."[24] In fact, financial textbooks often use utility companies as prime examples of low-risk, defensive firms.[25] The figure below compares the betas of several industries and illustrates that the utility industry is one of the least risky industries in the U.S. market.[26]

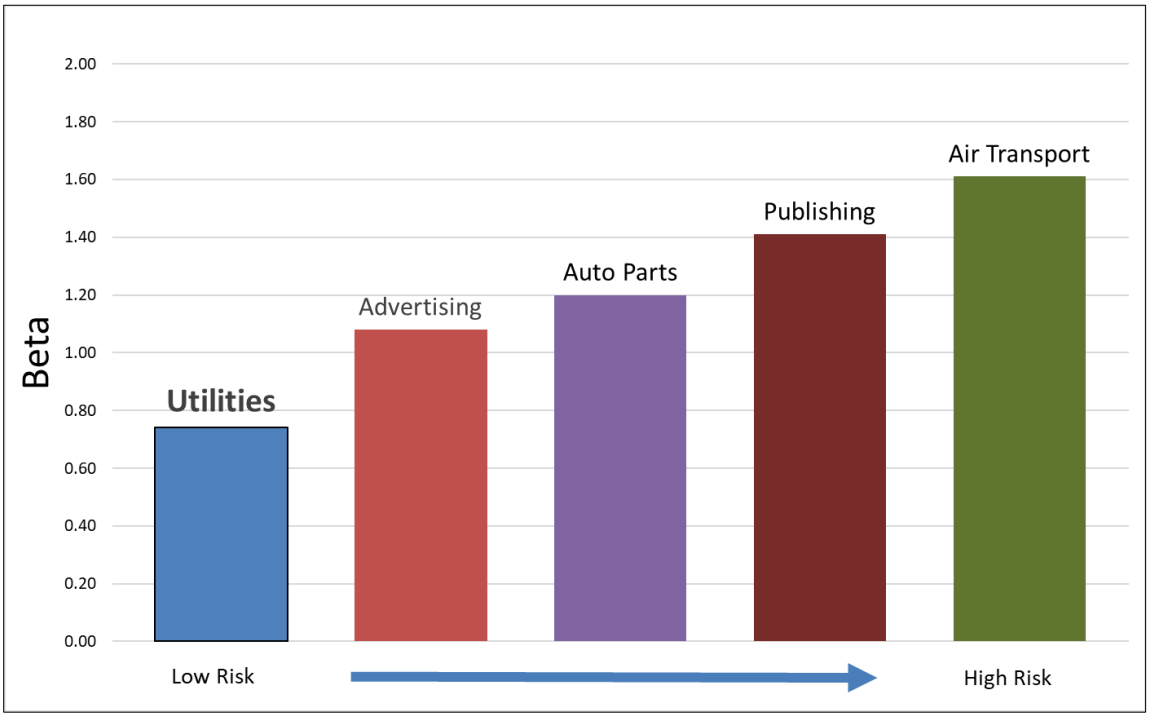
[23] *See* Zvi Bodie, Alex Kane & Alan J. Marcus, *Essentials of Investments* 382 (9th ed., McGraw-Hill/Irwin 2013).

[24] Zvi Bodie, Alex Kane & Alan J. Marcus, *Essentials of Investments* 383 (9th ed., McGraw-Hill/Irwin 2013).

[25] *See e.g.*, Zvi Bodie, Alex Kane & Alan J. Marcus, *Essentials of Investments* 382 (9th ed., McGraw-Hill/Irwin 2013); *see also* Aswath Damodaran, Investment Valuation: Tools and Techniques for Determining the Value of Any Asset 196 (3rd ed., John Wiley & Sons, Inc. 2012).

[26] *See* Betas by Sector (US) at http://pages.stern.nyu.edu/~adamodar/. The exact beta calculations are not as important as illustrating the well-known fact that utilities are low-risk companies. The fact that the utility industry is one of the lowest risk industries in the country should not change from year to year.

Figure 2:
Beta by Industry



The fact that utilities are defensive firms that are exposed to little market risk is beneficial to society. When the business cycle enters a recession, consumers can be assured that their utility companies will be able to maintain normal business operations and provide safe and reliable service under prudent management. Likewise, utility investors can be confident that utility stock prices will not fluctuate widely. So, while it is preferable for utilities to be defensive firms that experience little market risk and relatively insulated from market conditions, this should also be appropriately reflected in the Company's awarded return.

Q. The Company has proposed an Environmental Compliance Investment Charge and a Revenue Decoupling Mechanism. What is the effect of these proposals?

A. These proposals shift the risk of operating a water/wastewater utility from investors to ratepayers. The ECIC and RDM are discussed in the testimony of OCA witnesses Hoover (OCA Statements 1), Mierzwa (OCA Statement 4) and Colton (OCA Statement 5).

Q. Should the Commission adopt the Company's proposed ECIC and RDM?

A. No. These proposals improperly shift the risk from the Company, which is compensated for risk, to ratepayers who would be forced to bear this risk for no compensation. As such, these proposals represent an unjust and unreasonable shifting of risk and should be rejected. If the Commission would decide to adopt these proposals, PAWC's risk would greatly decrease. This decrease in risk would then need to be reflected in the cost of equity estimate and awarded ROE. Thus, if the Commission decides to adopt these proposals, then it should adopt an ROE at the lower end of my modeling range at the 8.7% ROE, , which is the result of my CAPM applied to the water utility group only.[27] However, the OCA's primary recommendation is that these proposals be rejected.

Q. Have other state commissions addressed similar regulatory mechanisms and their effects on risk and the authorized ROE?

A. Yes. In the application of Aquarion Water Company of Connecticut ("Aquarion"), the Public Utilities Regulatory Authority ("Authority") of Connecticut addressed Aquarion's revenue adjustment mechanism, which reconciles in rates the difference between actual revenues and allowed revenues.[28] The Authority found that there "must be a reduction in

[27] Exhibit DJG-12.

[28] Decision, Docket No. 13-02-20 before the Public Utilities Regulatory Authority of Connecticut, Sep. 24, 2013, p. 110.

risk from the revenue adjustment mechanism"[29] and deducted 10 basis points from the company's allowed ROE accordingly.[30] Likewise, if the Commission adopts ECIC or RDM, there should be a corresponding reduction to the allowed ROE.

VI. DISCOUNTED CASH FLOW (DCF) ANALYSIS

Q. Describe the DCF Model.

A. The DCF Model is based on a fundamental financial model called the "dividend discount model," which maintains that the value of a security is equal to the present value of the future cash flows it generates. Cash flows from common stock are paid to investors in the form of dividends.

Q. Describe the inputs to the DCF Model.

A. There are three primary inputs in the DCF Model: (1) stock price; (2) dividend; and (3) the long-term growth rate. The stock prices and dividends are known inputs based on recorded data, while the growth rate projection must be estimated. I discuss each of these inputs separately below.

A. Stock Price

Q. How did you determine the stock price input of the DCF Model?

A. For the stock price (P_0), I used 30-day averages of adjusted closing stock prices for each company in the proxy group.[31] Analysts sometimes rely on average stock prices for longer periods (e.g., 60, 90, or 180 days). According to the efficient market hypothesis, however,

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[29] *Id*.

[30] *Id*. at 115.

[31] Exhibit DJG-3.

markets reflect all relevant information available at a particular time, and prices adjust instantaneously to the arrival of new information.[32] Past stock prices, in essence, reflect outdated information. The DCF Model used in utility rate cases is a derivation of the dividend discount model, which is used to determine the current value of an asset. Thus, according to the dividend discount model and the efficient market hypothesis, the value for the "P_0" term in the DCF Model should technically be the current stock price, rather than an average.

Q. Why did you use a 30-day average for the current stock price input?

A. Using a short-term average of stock prices for the current stock price input adheres to market efficiency principles while avoiding any irregularities that may arise from using a single current stock price. In the context of a utility rate proceeding there is a significant length of time from when an application or advice letter is filed and testimony is due. Choosing a current stock price for one particular day could raise a separate issue concerning which day was chosen to be used in the analysis. In addition, a single stock price on a particular day may be unusually high or low. It is arguably ill-advised to use a single stock price in a model that is ultimately used to set rates for several years, especially if a stock is experiencing some volatility. Thus, it is preferable to use a short-term average of stock prices, which represents a good balance between adhering to well-established principles of market efficiency while avoiding any unnecessary contentions that may arise from using a

[32] Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, Vol. 25, No. 2 The Journal of Finance 383 (1970); *see also Corporate Finance: Linking Theory to What Companies Do*, p. 357. The efficient market hypothesis was formally presented by Eugene Fama in 1970 and is a cornerstone of modern financial theory and practice.

single stock price on a given day. The stock prices I used in my DCF analysis are based on 30-day averages of adjusted closing stock prices for each company in the proxy group.[33]

B. Dividend

Q. Please describe how you determined the dividend input of the DCF Model.

A. The dividend term in the DCF Model represents dividends per share (d_0). I used forward-looking annualized dividends published by Yahoo! Finance for the dividend input to my constant growth DCF Model.[34] Dividing these dividends by the stock prices for each proxy company results in the dividend yield for each company.

Q. Are the stock price and dividend inputs for each proxy company a significant issue in this case?

A. No. Although my stock price and dividend inputs are more recent than those used by Ms. Bulkley, there is not a statistically significant difference between them because utility stock prices and dividends are generally quite stable because of their low-risk nature. This is another reason that cost of capital models such as the CAPM and the DCF Model are well-suited to be conducted on utilities. The differences between the DCF Model results in this case are primarily affected by the difference in growth rate estimates.

[33] Exhibit DJG-3. Adjusted closing prices, rather than actual closing prices, are ideal for analyzing historical stock prices. The adjusted price provides an accurate representation of the firm's equity value beyond the mere market price because it accounts for stock splits and dividends.

[34] Exhibit DJG-3.

C. Growth Rate

Q. Please Summarize the growth rate input in the DCF Model.

A. The most critical input in the DCF Model is the growth rate. Unlike the stock price and dividend inputs, the growth rate input (g) must be estimated. As a result, the growth rate is often the most contentious issue related to DCF model inputs in utility rate cases. The DCF model used in this case is based on the sustainable growth valuation model. Under this model, a stock is valued by the present value of its future cash flows in the form of dividends. Before future cash flows are discounted by the cost of equity, however, they must be "grown" into the future by a sustainable growth rate. As stated above, one of the inherent assumptions of this model is that these cash flows in the form of dividends grow at a sustainable rate forever. For young, high-growth firms, estimating the growth rate to be used in the model can be especially difficult, and may require the use of multi-stage growth models. For mature, low-growth firms such as utilities, however, estimating the sustainable growth rate is more transparent. The growth term of the DCF Model is one of the most important, yet least understood, aspects of cost of equity estimations in utility regulatory proceedings. I provide a more detailed explanation on the various determinants of growth below.

Q. Describe the various determinants of growth that can be considered for the growth rate input in the DCF Model.

A. Although the DCF Model directly considers the growth of dividends, there are a variety of growth determinants that should be considered when estimating growth rates. It should be noted that these various growth determinants are used primarily to determine the short-term growth rates in multi-stage DCF models. For utility companies, it is necessary to

focus primarily on a long-term growth rate in dividends. This is also known as a "sustainable" growth rate, since this is the growth rate assumed for the company's dividends in perpetuity. That is not to say that these growth determinants cannot be considered when estimating sustainable growth; however, as discussed below, sustainable growth must be constrained much more than short-term growth, especially for young firms with high growth opportunities. Additionally, I briefly discuss these growth determinants here because it may reveal some of the sources of confusion in this area.

(1) Historical Growth

Looking at a firm's actual historical experience may theoretically provide a good starting point for estimating short-term growth. However, past growth is not always a good indicator of future growth. Some metrics that might be considered here are a historical growth in revenues, operating income, and net income. Since dividends are paid from earnings, estimating historical earnings growth may provide an indication of future earnings and dividend growth.

(2) Analyst Growth Rates

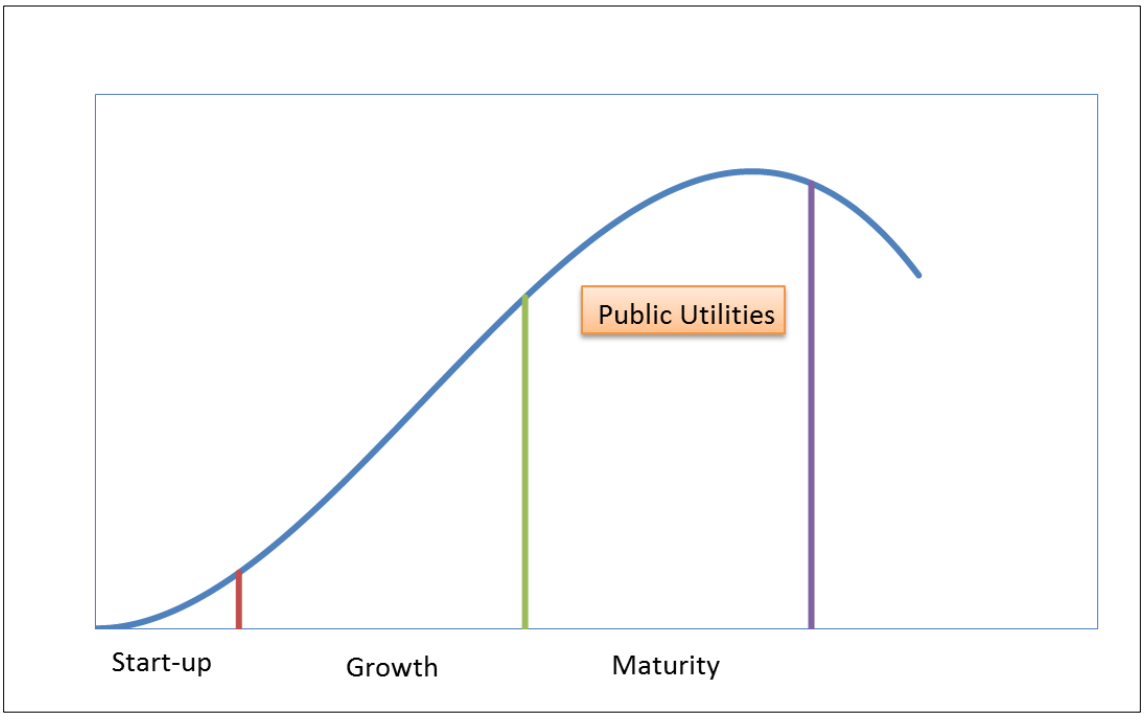
Analyst growth rates refer to short-term projections of earnings growth published by institutional research analysts such as Value Line and Bloomberg. Analyst growth rates, including the limitations with using them in the DCF Model to estimate utility cost of equity, are discussed in more detail below.

(3) Sustainable Growth Rates

In order to make the DCF Model a viable, practical model, an infinite stream of future cash flows must be estimated and then discounted back to the present. Otherwise, each annual cash flow would have to be estimated separately. Some analysts use "multi-

stage" DCF Models to estimate the value of high-growth firms through two or more stages of growth, with the final stage of growth being sustainable. However, it is not necessary to use multi-stage DCF Models to analyze the cost of equity of regulated utility companies. This is because regulated utilities are already in their "sustainable," low growth stage. Unlike most competitive firms, the growth of regulated utilities is constrained by physical service territories and limited primarily by ratepayer and load growth within those territories. The Figure below illustrates the well-known business/industry life-cycle pattern.

Figure 3:
Industry Life Cycle



In an industry's early stages, there are ample opportunities for growth and profitable reinvestment. In the maturity stage however, growth opportunities diminish, and firms choose to pay out a larger portion of their earnings in the form of dividends instead of

reinvesting them in operations to pursue further growth opportunities. Once a firm is in the maturity stage, it is not necessary to consider higher short-term growth metrics in multi-stage DCF Models; rather, it is sufficient to analyze the cost of equity using a stable growth DCF Model with one sustainable growth rate.

Q. Is the aggregate growth rate of the economy typically a limiting factor for the terminal growth rate in the DCF Model?

A. Yes. A fundamental concept in finance is that no firm can grow forever at a rate higher than the growth rate of the economy in which it operates.[35] Thus, the terminal growth rate used in the DCF Model should not exceed the aggregate economic growth rate. This is especially true when the DCF Model is conducted on public utilities because these firms have defined service territories. As stated by Dr. Damodaran: "[i]f a firm is a purely domestic company, either because of internal constraints . . . or external constraints (such as those imposed by a government), the growth rate in the domestic economy will be the limiting value."[36]

In fact, it is reasonable to assume that a regulated utility would grow at a rate that is less than the U.S. economic growth rate. Unlike competitive firms, which might increase their growth by launching a new product line, franchising, or expanding into new and developing markets, utility operating companies with defined service territories cannot do any of these things to grow. Gross Domestic Product ("GDP") is one of the most widely used measures of economic production and is used to measure aggregate economic growth.

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[35] *See* Aswath Damodaran, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* 306 (3rd ed., John Wiley & Sons, Inc. 2012).

[36] Aswath Damodaran, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* 306 (3rd ed., John Wiley & Sons, Inc. 2012).

According to the Congressional Budget Office's Budget Outlook, the long-term forecast for nominal U.S. GDP growth is about 4%, which includes an inflation rate of 2%.[37] For mature companies in mature industries, such as utility companies, the terminal growth rate will likely fall between the expected rate of inflation and the expected rate of nominal GDP growth.

Q. Do water utilities have unique growth opportunities that most electric and gas utilities do not have?

A. Yes. Water utilities are in a unique position to adopt growth strategies which include the potential acquisition of many smaller water and wastewater systems from various municipalities and other localized government entities. My analysis of the dividend yields of the proxy group shows that these companies are likely retaining more capital in order to pursue these types of growth strategies.

Q. Given these unique growth opportunities, did you also consider a variation of the DCF Model that incorporates analysts' growth rate projections?

A. Yes. In this case, I present the results of analyst growth variation of my DCF Model because it is commonly presented in rate proceedings and because of the unique growth opportunities of water utilities.

Q. Please describe the results of your DCF Models?

A. For my DCF Models, I considered two variations: one using a sustainable growth rate and one using analysts' growth rates. These results are summarized in the following table.

[37] Congressional Budget Office Long-Term Budget Outlook, https://www.cbo.gov/publication/59014.

Figure 4:
DCF Results Summary

	DCF Result (Analyst Growth)	DCF Result (Sustainable Growth)
Average (Total)	9.4%	7.3%
Average (Water Group)	9.4%	6.3%
Average (Non-Water Group)	9.3%	8.3%

The sustainable growth rate DCF model produced a cost of equity indication as high as 8.3% for the non-water group. As discussed above, however, given the unique growth opportunities of water utilities, I gave more consideration to the results of the analyst growth variation of the DCF Model in this case. Applying the analyst growth variation of the DCF Model to the water group indicates of cost of equity of 9.4%. However, this does not mean that PAWC's cost of equity is as high as 9.4%. In order to get an accurate assessment of the cost of equity, a model that measures market risk and its impact on individual companies must be used. This is exactly what the CAPM does. As discussed below, the results of the CAPM indicate a lower cost of equity for PAWC, and these results must be considered in the overall analyses.

D. Response to Ms. Bulkley's DCF Model

Q. Please summarize the results of Ms. Bulkley's DCF Model.

A. Ms. Bulkley conducted several variations of the DCF Model, which produced results ranging from 8.5% - 11.3%.[38] The results of Ms. Bulkley's DCF Model are overstated primarily because her reliance on several non-sustainable growth rate assumptions that are unreasonably high. Ms. Bulkley also considered flotation costs in making her final ROE recommendation. Flotation costs increased Ms. Bulkley's cost of equity estimates by 6 basis points.[39] Despite the fact that the high-end of Ms. Bulkley's DCF Model results are unreasonably high and exceed PAWC's cost of equity, it is worth noting that my proposed ROE for PAWC falls within Ms. Bulkley's overall DCF Model range.

1. Growth Rates

Q. Do you believe the results of Ms. Bulkley's DCF Models indicate a reasonable cost of equity estimate for PAWC?

A. The results of some of Ms. Bulkley's DCF Model variations overlap with my DCF results and ranges. In fact, several of her DCF results are lower than my proposed ROE in this case. I believe several of these results are reflective of reasonable cost of equity estimates for PAWC, including results such as 8.9%, 8.91%, and 9.28%, among other results.[40] However, the results toward the upper end of her range of results clearly exceed any reasonable estimate for PAWC's cost of equity.

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[38] Direct Testimony of Ann Bulkley, p. 36, Fig. 6.

[39] Direct Testimony of Ann Bulkley, p. 49, lines 1-2.

[40] *See id*.

Q. Ms. Bulkley's DCF Model yielded much higher results. Did you find any errors in her analysis?

A. Yes. Ms. Bulkley's DCF Model produced cost of equity results as high as 11%. The results of Ms. Bulkley's DCF Model are overstated primarily because her reliance on non-sustainable growth rate assumptions.

Q. Describe the problems with Ms. Bulkley's long-term growth input.

A. Ms. Bulkley used long-term growth rates in her proxy group as high as 9.5%,[41] which is more than two times as high as projected, long-term nominal U.S. GDP growth. This means Ms. Bulkley's growth rate assumption violates the basic principle that no company can grow at a greater rate than the economy in which it operates over the long term, especially a regulated utility company with a defined service territory. Furthermore, Ms. Bulkley used short-term, quantitative growth estimates published by analysts. These analysts' estimates are inappropriate to use in the DCF Model as long-term growth rates because they are estimates for *short-term* growth. For example, Ms. Bulkley considered a growth rate estimate of 9.5% for NiSource, as reported by Value Line.[42] This means that an analyst at Value Line apparently thinks that Ni Source's earnings will quantitatively increase by 9.5% *each year* over the next *several* years (*i.e.*, the short-term). However, it is Ms. Bulkley, not the commercial analyst, who is suggesting to the Commission that NiSource's earnings will grow by more than two times the amount of U.S. GDP each and every year over the long run. This demonstrates why it is important not to utilize long-term growth rates that are unreasonably high in a DCF Model.

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[41] *Id.*

[42] Direct Testimony of Ann Bulkley, Exhibit No. 13-A, Sch. 3.

2. Flotation Costs

Q. What are flotation costs?

A. When companies issue equity securities, they typically hire at least one investment bank as an underwriter for the securities. "Flotation costs" generally refer to the underwriter's compensation for the services it provides in connection with the securities offering.

Q. Did Ms. Bulkley consider flotation costs as part of her awarded ROE recommendation?

A. Yes. Ms. Bulkley considered flotation costs when assessing her final ROE recommendation (though she did not make an explicit adjustment for flotation costs).

Q. Do you believe flotation costs should have any impact on PAWC's cost of equity estimate or awarded ROE determination?

A. No. I do not believe flotation costs should have any impact on PAWC's cost of equity estimate or awarded ROE determination for several reasons, as further discussed below.

(1) Flotation costs are not actual, "out-of-pocket" costs.

It is my understanding that the Company has not experienced any out-of-pocket expense for flotation cost; if it has, those costs should be included in the Company's expense schedules in this case. Underwriters are not typically compensated in this fashion. Instead, underwriters are compensated through an "underwriting spread." An underwriting spread is the difference between the price at which the underwriter purchases the shares from the firm, and the price at which the underwriter sells the shares to investors.[43] Furthermore, PAWC is a wholly owned subsidiary of American Water Works Company ("AWK"), which means it does not issue securities to the public and thus would have no

[43] *Corporate Finance: Linking Theory to What Companies Do*, p. 509.

need to retain an underwriter. Accordingly, the Company has not experienced any out-of-pocket flotation costs, and if it has, those costs should be included in the Company's expense schedules.

(2) The market already accounts for flotation costs.

When an underwriter markets a firm's securities to investors, the investors are well aware of the underwriter's fees. In other words, the investors know that a portion of the price they are paying for the shares does not go directly to the company, but instead goes to compensate the underwriter for its services. In fact, federal law requires that the underwriter's compensation be disclosed on the front page of the prospectus.[44] Thus, investors have already considered and accounted for flotation costs when making their decision to purchase shares at the quoted price. As a result, there is no need for the Company's shareholders to receive additional compensation to account for costs they have already considered and agreed to. We see similar compensation structures in other kinds of business transactions. For example, a homeowner may hire a realtor and sell a home for $100,000. After the realtor takes a six percent commission, the seller nets $94,000. The buyer and seller agreed to the transaction notwithstanding the realtor's commission. Obviously, it would be unreasonable for the buyer or seller to demand additional funds from anyone after the deal is completed to reimburse them for the realtor's fees. Likewise, investors of competitive firms do not expect additional compensation for flotation costs. Thus, it would not be appropriate for a commission standing in the place of competition to

[44] Regulation S-K, 17 C.F.R. § 229.501(b)(3) (requiring that the underwriter's discounts and commissions be disclosed on the outside cover page of the prospectus). A prospectus is a legal document that provides details about an investment offering.

award a utility's investors with this additional compensation that shareholders of competitive firms never expect to receive.

(3) It is inappropriate to add any additional basis points to an awarded ROE proposal that is already far above the Company's cost of equity.

For the reasons discussed above, flotation costs should be disallowed from a technical standpoint; they should also be disallowed from a practical standpoint. the Company is asking this Commission to award it a cost of equity that is at least 200 basis points above its market-based cost of equity. Under these circumstances, it is especially unreasonable to consider any additional premiums to the cost of equity estimate or awarded ROE to account for flotation costs.

VII. CAPITAL ASSET PRICING MODEL (CAPM) ANALYSIS

Q. Describe the CAPM.

A. The CAPM is a market-based model founded on the principle that investors expect higher returns for incurring additional risk.[45] The CAPM estimates this expected return. The various assumptions, theories, and equations involved in the CAPM are discussed further in Appendix B. Using the CAPM to estimate the cost of equity of a regulated utility is consistent with the legal standards governing the fair rate of return. The U.S. Supreme Court has recognized that "the amount of risk in the business is a most important factor" in determining the allowed rate of return,[46] and that "the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding

[45] William F. Sharpe, *A Simplified Model for Portfolio Analysis* 277–93 (Management Science IX 1963).

[46] *Wilcox*, 212 U.S. at 48.

risks."[47] The CAPM is a useful model because it directly considers the amount of risk inherent in a business. It is arguably the strongest of the models usually presented in rate cases because, unlike the DCF Model, the CAPM directly measures the most important component of a fair rate of return analysis – risk.

Q. Describe the inputs for the CAPM.

A. The basic CAPM equation requires only three inputs to estimate the cost of equity: (1) the risk-free rate; (2) the beta coefficient; and (3) the equity risk premium. Here is the CAPM formula:

Equation 1:
Basic CAPM

Cost of Equity = Risk-free Rate + (Beta × Equity Risk Premium)

Each input is discussed separately below.

A. The Risk-Free Rate

Q. Explain the risk-free rate.

A. The first term in the CAPM is the risk-free rate (R_F). The risk-free rate is simply the level of return investors can achieve without assuming any risk. The risk-free rate represents the bare minimum return that any investor would require on a risky asset. Even though no investment is technically void of risk, investors often use U.S. Treasury securities to represent the risk-free rate because they accept that those securities essentially contain no default risk. The Treasury issues securities with different maturities, including short-term Treasury Bills, intermediate-term Treasury Notes, and long-term Treasury Bonds.

[47] *Hope Natural Gas Co.*, 320 U.S. at 603.

Q. Is it preferable to use the yield on long-term Treasury bonds for the risk-free rate in the CAPM?

A. Yes. In valuing an asset, investors estimate cash flows over long periods of time. Common stock is viewed as a long-term investment, and the cash flows from dividends are assumed to last indefinitely. Thus, short-term Treasury Bill yields are rarely used in the CAPM to represent the risk-free rate. Short-term rates are subject to greater volatility and thus can lead to unreliable estimates. Instead, long-term Treasury Bonds are usually used to represent the risk-free rate in the CAPM. I considered a 30-day average of daily Treasury yield curve rates on 30-year Treasury Bonds in my risk-free rate estimate, which resulted in a risk-free rate of 4.42%.[48]

B. The Beta Coefficient

Q. How is the beta coefficient used in this model?

A. As discussed above, beta represents the sensitivity of a given security to movements in the overall market. The CAPM states that in efficient capital markets, the expected risk premium on each investment is proportional to its beta. Recall that a security with a beta greater (or less) than one is more (or less) risky than the market portfolio. An index such as the S&P 500 Index is used as a proxy for the market portfolio. The historical betas for publicly traded firms are published by various institutional analysts. Beta may also be calculated through a linear regression analysis, which provides additional statistical information about the relationship between a single stock and the market portfolio. As discussed above, beta also represents the sensitivity of a given security to the market as a

[48] Exhibit DJG-7.

whole. The market portfolio of all stocks has a beta equal to one. Stocks with betas greater than 1.0 are relatively more sensitive to market risk than the average stock. For example, if the market increases (or decreases) by 1.0%, a stock with a beta of 1.5 will, on average, increase (or decrease) by 1.5%. In contrast, stocks with betas of less than 1.0 are less sensitive to market risk. For example, if the market increases (or decreases) by 1.0%, a stock with a beta of 0.5 will, on average, only increase (or decrease) by 0.5%.

Q. Describe the source for the betas you used in your CAPM analysis.

A. I used betas recently published by Value Line Investment Survey. The beta for each proxy company used in Ms. Bulkley's proxy group is less than 1.0. Thus, we have an objective measure to prove the well-known concept that utility stocks are less risky than the average stock in the market. While there is evidence suggesting that betas published by sources such as Value Line may actually overestimate the risk of utilities (and thus overestimate the CAPM), I used the betas published by Value Line to be conservative.[49]

C. The ERP

Q. Describe the Equity Risk Premium ("ERP").

A. The final term of the CAPM is the ERP, which is the required return on the market portfolio less the risk-free rate ($R_M - R_F$). In other words, the ERP is the level of return investors expect above the risk-free rate in exchange for investing in risky securities. Many experts would agree that "the single most important variable for making investment decisions is

[49] Exhibit DJG-8; *see also* Appendix B for a more detailed discussion of raw beta calculations and adjustments.

the equity risk premium."[50] Likewise, the ERP is arguably the single most important factor in estimating the cost of capital in this matter. There are three basic methods that can be used to estimate the ERP: (1) calculating a historical average; (2) taking a survey of experts; and (3) calculating the implied ERP. I will discuss each method in turn, noting advantages and disadvantages of these methods.

1. Historical Average

Q. Describe the historical ERP.

A. The historical ERP may be calculated by simply taking the difference between returns on stocks and returns on government bonds over a certain period of time. Many practitioners rely on the historical ERP as an estimate for the forward-looking ERP because it is easy to obtain. However, there are disadvantages to relying on the historical ERP.

Q. What are the limitations of relying solely on a historical average to estimate the current or forward-looking ERP?

A. Many investors use the historic ERP because it is convenient and easy to calculate. What matters in the CAPM model, however, is not the actual risk premium from the past, but rather the current and forward-looking risk premium.[51] Some investors may think that a historic ERP provides some indication of the prospective risk premium; however, there is empirical evidence to suggest the prospective, forward-looking ERP is actually lower than the historical ERP. In a landmark publication on risk premiums around the world, *Triumph of the Optimists*, the authors suggest through extensive empirical research that the

[50] Elroy Dimson, Paul Marsh & Mike Staunton, *Triumph of the Optimists: 101 Years of Global Investment Returns* 4 (Princeton University Press 2002).

[51] *See* John R. Graham, Scott B. Smart & William L. Megginson, *Corporate Finance: Linking Theory to What Companies Do* 330 (3rd ed., South Western Cengage Learning 2010).

prospective ERP is lower than the historical ERP.[52] This is due in large part to what is known as "survivorship bias" or "success bias" – a tendency for failed companies to be excluded from historical indices.[53] From their extensive analysis, the authors make the following conclusion regarding the prospective ERP: "[t]he result is a forward-looking, geometric mean risk premium for the United States . . . of around 2½ to 4 percent and an arithmetic mean risk premium . . . that falls within a range from a little below 4 to a little above 5 percent."[54] Indeed, these results are lower than many reported historical risk premiums. Other noted experts agree:

> The historical risk premium obtained by looking at U.S. data is biased upwards because of survivor bias. . . . The true premium, it is argued, is much lower. This view is backed up by a study of large equity markets over the twentieth century (*Triumph of the Optimists*), which concluded that the historical risk premium is closer to 4%.[55]

Regardless of the variations in historic ERP estimates, many scholars and practitioners agree that simply relying on a historic ERP to estimate the risk premium going forward is not ideal. Fortunately, "a naïve reliance on long-run historical averages is not the only approach for estimating the expected risk premium."[56]

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[52] *See* John R. Graham, Scott B. Smart & William L. Megginson, *Corporate Finance: Linking Theory to What Companies Do* 194 (3rd ed., South Western Cengage Learning 2010).

[53] Elroy Dimson, Paul Marsh & Mike Staunton, *Triumph of the Optimists: 101 Years of Global Investment Returns* 34 (Princeton University Press 2002).

[54] Elroy Dimson, Paul Marsh & Mike Staunton, *Triumph of the Optimists: 101 Years of Global Investment Returns* 194 (Princeton University Press 2002).

[55] Aswath Damodaran, *Equity Risk Premiums: Determinants, Estimation and Implications – The 2015 Edition* 17 (New York University 2015).

[56] *See* John R. Graham, Scott B. Smart & William L. Megginson, *Corporate Finance: Linking Theory to What Companies Do* 330 (3rd ed., South Western Cengage Learning 2010).

Q. Did you rely on the historical ERP as part of your CAPM analysis in this case?

A. No. Due to the limitations of this approach, I relied on the ERP reported in expert surveys and the implied ERP method discussed below.

2. Expert Surveys

Q. Describe the expert survey approach to estimating the ERP.

A. As its name implies, the expert survey approach to estimating the ERP involves conducting a survey of experts including professors, analysts, chief financial officers, and other executives around the country and asking them what they think the ERP is. The IESE Business School conducts a periodic survey that asks experts around the country about their opinions on the ERP. Their 2023 expert survey reported an average ERP of 5.7%.[57]

3. Implied ERP

Q. Describe the implied ERP approach.

A. The implied ERP relies on the stable growth model proposed by Gordon, often called the "Gordon Growth Model," which is a basic stock valuation model widely used in finance for many years.[58] This model is a mathematical derivation of the DCF Model. In fact, the underlying concept in both models is the same: the current value of an asset is equal to the present value of its future cash flows. Instead of using this model to determine the discount rate of one company, we can use it to determine the discount rate for the entire market by

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[57] Pablo Fernandez, et al., Survey: Market Risk Premium and Risk-Free Rate used for 80 countries in 2023, IESE Business School, p. 3 (2015), copy available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4407839. IESE Business School is the graduate business school of the University of Navarra. IESE offers Master of Business Administration (MBA), Executive MBA and Executive Education programs. IESE is consistently ranked among the leading business schools in the world.

[58] Myron J. Gordon and Eli Shapiro, *Capital Equipment Analysis: The Required Rate of Profit* 102–10 (Management Science Vol. 3, No. 1 Oct. 1956).

substituting the inputs of the model. Specifically, instead of using the current stock price (P_0), we will use the current value of the S&P 500 (V_{500}). Similarly, instead of using the dividends of a single firm, we will consider the dividends paid by the entire market. Additionally, we should consider potential dividends. In other words, stock buybacks should be considered in addition to paid dividends, as stock buybacks represent another way for the firm to transfer free cash flow to shareholders. Focusing on dividends alone without considering stock buybacks could understate the cash flow component of the model, and ultimately understate the implied ERP. The market dividend yield plus the market buyback yield gives us the gross cash yield to use as our cash flow in the numerator of the discount model. This gross cash yield is increased each year over the next five years by the growth rate. These cash flows must be discounted to determine their present value. The discount rate in each denominator is the risk-free rate (R_F) plus the discount rate (K). The following formula shows how the implied return is calculated. Since the current value of the S&P is known, we can solve for K: the implied market return.[59]

Equation 2:
Implied Market Return

$$V_{500} = \frac{CY_1(1+g)^1}{(1+R_F+K)^1} + \frac{CY_2(1+g)^2}{(1+R_F+K)^2} + \cdots + \frac{CY_5(1+g)^5 + TV}{(1+R_F+K)^5}$$

where:
- V_{500} = *current value of index (S&P 500)*
- $CY_{1\text{-}5}$ = *average cash yield over last five years (includes dividends and buybacks)*
- g = *compound growth rate in earnings over last five years*
- R_F = *risk-free rate*
- K = *implied market return (this is what we are solving for)*
- TV = *terminal value* $= CY_5 (1+R_F) / K$

[59] *See* Exhibit DJG-9 for detailed calculation.

The discount rate is called the "implied" return here because it is based on the current value of the index as well as the value of free cash flow to investors projected over the next five years. Thus, based on these inputs, the market is "implying" the expected return; or in other words, based on the current value of all stocks (the index price), and the projected value of future cash flows, the market is telling us the return expected by investors for investing in the market portfolio. After solving for the implied market return (K), we simply subtract the risk-free rate from it to arrive at the implied ERP.

Equation 3:
Implied Equity Risk Premium

$$Implied\ Expected\ Market\ Return - R_F = Implied\ ERP$$

Q. Discuss the results of your implied ERP calculation.

A. After collecting data for the index value, operating earnings, dividends, and buybacks for the S&P 500 over the past six years, I calculated the dividend yield, buyback yield, and gross cash yield for each year. I also calculated the compound annual growth rate (g) from operating earnings. I used these inputs, along with the risk-free rate and current value of the index to calculate a current expected return on the entire market of 7.5%. I subtracted the risk-free rate to arrive at the implied equity risk premium of 5.0%.[60] Dr. Damodaran, one of the world's leading experts on the ERP, promotes the implied ERP method discussed above. He calculates monthly and annual implied ERPs with this method and publishes

[60] Exhibit DJG-9.

his results. Dr. Damodaran's highest ERP estimate for December 2023 using several implied ERP variations was 4.5%.[61]

Q. What are the results of your final ERP estimate?

A. For the final ERP estimate I used in my CAPM analysis, I considered the results of the ERP surveys along with the implied ERP calculations and the ERP reported by Duff & Phelps.[62] The results are presented in the following figure:

Figure 5:
Equity Risk Premium Results

IESE Business School Survey	5.7%
Kroll (Duff & Phelps) Report	5.5%
Damodaran (average)	4.5%
Garrett	5.3%
Average	**5.3%**

In my CAPM analysis, I used the average ERP result of 5.3%.

Q. Please explain the final results of your CAPM analysis.

A. Using the inputs for the risk-free rate, beta coefficient, and ERP discussed above, I estimate that the Company's CAPM cost of equity is 8.7% (assuming the proxy group's average debt ratio is implemented).[63] The CAPM can be displayed graphically through what is known as the Security Market Line ("SML"). The following figure shows the expected

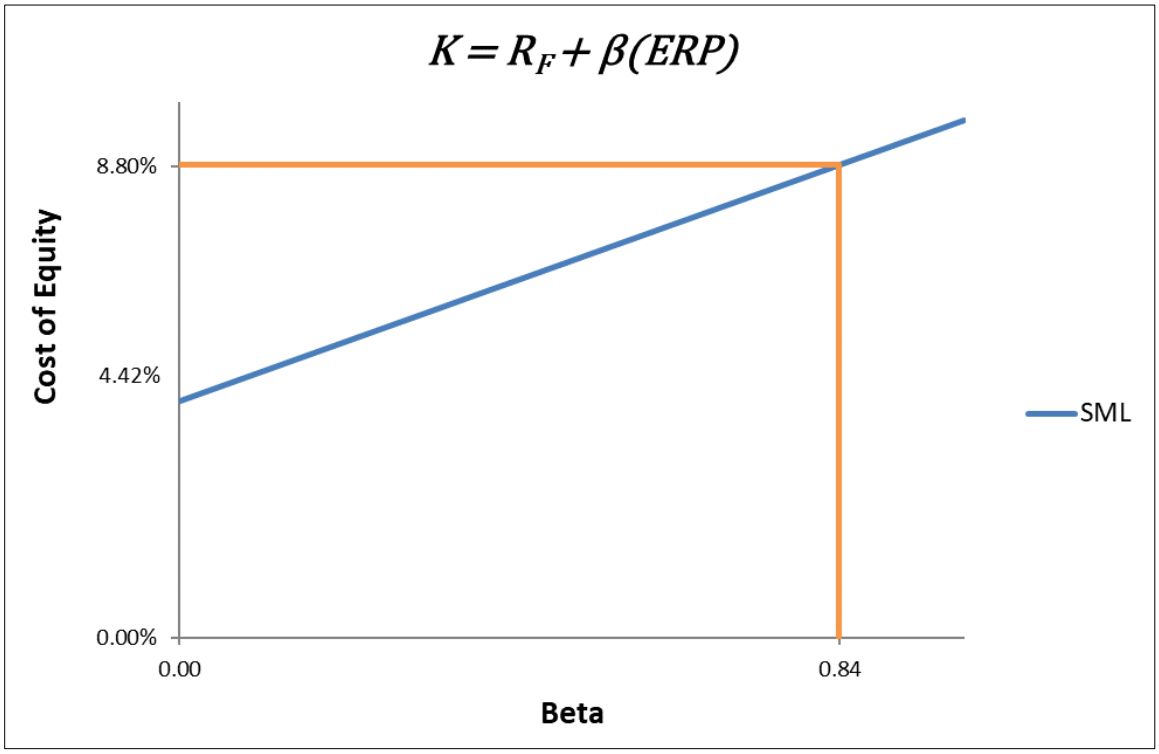
[61] Aswath Damodaran, *Implied Equity Risk Premium Update*, DAMODARAN ONLINE http://pages.stern.nyu.edu/~adamodar/.

[62] Exhibit DJG-10.

[63] Exhibit DJG-12.

return (cost of equity) on the y-axis, and the average beta for the proxy group on the x-axis. The SML intercepts the y-axis at the level of the risk-free rate. The slope of the SML is the equity risk premium.

Figure 6:
CAPM Graph



The SML provides the rate of return that will compensate investors for the beta risk of that investment. Thus, at an average beta of 0.84 for the proxy group, the estimated CAPM cost of equity for the Company is 8.8%.

D. Response to Ms. Bulkley's CAPM Analysis

Q. Please summarize the results of Ms. Bulkley's CAPM analyses.

A. Ms. Bulkley presented several variations of the CAPM, with results ranging as high as 11.5%.[64]

Q. Do you believe the results of Ms. Bulkley's CAPM analyses indicate a reasonable cost of equity estimate for PAWC?

A. No. The primary problem with Ms. Bulkley's CAPM cost of equity result stems from her ERP estimate. In this section, I also discuss Ms. Bulkley's empirical CAPM variation.

1. Equity Risk Premium

Q. Did Ms. Bulkley rely on a reasonable measure for the ERP?

A. No. Ms. Bulkley used an input as high as 8.69% for the ERP. This estimate is not reasonable. The ERP is one of only three inputs in the CAPM equation, and it is one of the single most important factors for estimating the cost of equity in this case. As discussed above, I used three widely accepted methods for estimating the ERP, including consulting expert surveys, calculating the implied ERP based on aggregate market data, and considering the ERPs published by reputable analysts. The average ERP calculated from my sources is 5.3%. This means that Ms. Bulkley's ERP is significantly higher than the ERP estimate reported by thousands of expert survey respondents and other sources.

Q. Why is Ms. Bulkley's ERP so much higher than the ERPs estimated and reported by thousands of survey respondents and other experts around the country?

A. Instead of relying on one of the three reasonable approaches for estimating the ERP discussed above, Ms. Bulkley instead chose to essentially conduct a DCF analysis on every

[64] Direct Testimony of Ann Bulkley, p. 45, Fig. 8.

company in the S&P 500. This means that Ms. Bulkley made 500 separate growth rate inputs for each company in her market portfolio. If her growth inputs for each company were reasonable, then Ms. Bulkley's model could theoretically produce reasonable results for the ERP. Instead, however, many of Ms. Bulkley's growth rate inputs were not realistic. For example, Ms. Bulkley estimated an annual long-term growth rate of 83% for Marathon Petroleum Corp. That level of annual growth is simply not possible to sustain over the long-run, which is what Ms. Bulkley's model assumes. Many of Ms. Bulkley's other long-term growth estimates are similarly too high to be considered realistic. Thus, the Commission should reject her CAPM results.

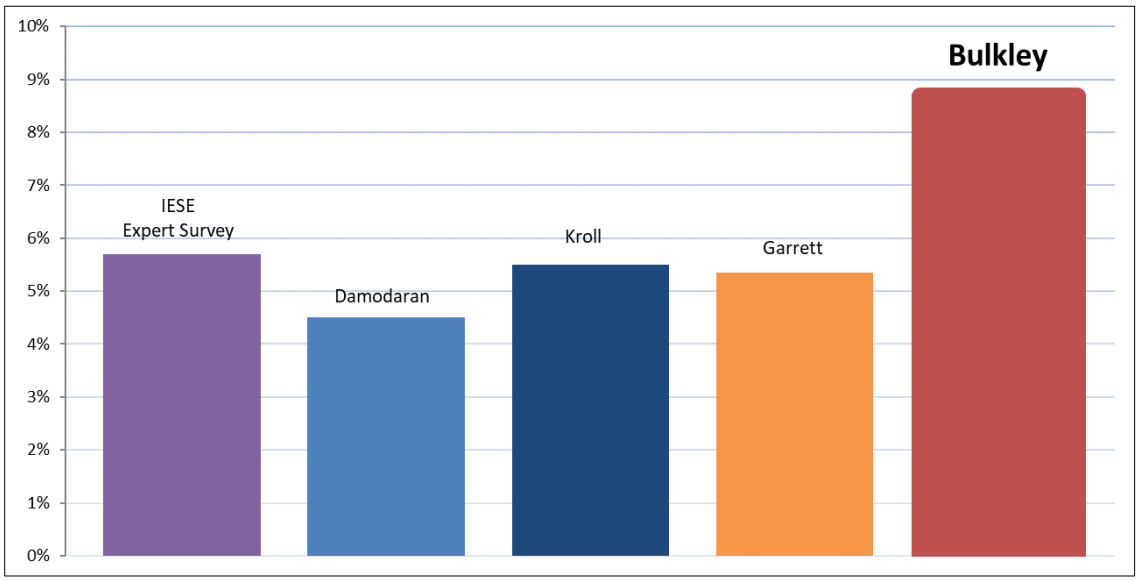
Q. Please discuss and illustrate how Ms. Bulkley's ERP compares with other estimates for the ERP.

A. As discussed above, the 2023 IESE Business School expert survey reports an average ERP of 5.7%. Similarly, Kroll (formerly Duff & Phelps) recently estimated an ERP of 5.5%.[65] Dr. Damodaran, one of the leading experts on the ERP, recently estimated an average ERP of 5.3%.[66] The following chart illustrates that Ms. Bulkley's ERP estimate is far out of line with other reasonable, objective estimates for the ERP.

[65] Exhibit DJG-10.

[66] Damodaran Online, http://pages.stern.nyu.edu/~adamodar/. Dr. Damodaran estimates several ERPs using various assumptions.

Figure 7:
Equity Risk Premium Comparison



When compared with other independent sources for the ERP (as well as my estimate), Ms. Bulkley's ERP estimate is clearly not within the range of reasonableness. As a result, her CAPM cost of equity estimate is overstated.

2. Empirical CAPM

Q. Please summarize Ms. Bulkley's Empirical CAPM ("ECAPM") analysis.

A. Ms. Bulkley offers another version of the CAPM called ECAPM. The premise of the ECAPM is that the standard CAPM underestimates the return required from low-beta securities, such as those of the proxy group. The results of Ms. Bulkley's ECAPM are even higher than her traditional CAPM results.

Q. Do you agree with Ms. Bulkley's ECAPM results?

A. No. The premise of Ms. Bulkley's ECAPM is that the standard CAPM underestimates the return required from low-beta securities. There are several problems with this concept, however. First, the Value Line betas both Ms. Bulkley and I used in the real CAPM have

already been adjusted upward to account for the theory that low-beta stocks might have a tendency to be underestimated.[67] Second, there is empirical evidence suggesting that the type of beta-adjustment method used by Value Line actually overstates betas from consistently low-beta industries like utilities.[68] According to this research, it is better to employ an adjustment method that adjusts raw betas toward an industry average, rather than the market average, which ultimately would result in betas that are lower than those published in Value Line.[69] Finally (and most pertinently), Ms. Bulkley's ECAPM still suffers from the same overestimated ERP input discussed above. Regardless of the differing theories regarding the mean reversion tendencies of low-beta securities, Ms. Bulkley's ECAPM should be disregarded for its ERP inputs alone.

Q. What is the monetary value of Ms. Bulkley's recommendation of a 10.95% ROE compared to your recommendation of a 9.1% ROE?

A. If the Commission were to adopt Ms. Bulkley's proposed 10.95% ROE over my recommended 9.1% ROE, at PAWC's claimed rate base, it would cost consumers an additional $87 million per year in rates.[70]

[67] *See* Appendix B for further discussion on adjusted betas.

[68] *Id*.

[69] *See* Appendix B for further discussion on these theories.

[70] *See* OCA Statement 2, Exhibit LA-6 at 5-6.

VIII. MANAGEMENT PERFORMANCE

Q. Ms. Bulkley suggests that management performance was taken into account in selecting her final authorized ROE recommendation. Do you agree with this approach?

A. No. According to Ms. Bulkley, she took into consideration "superior management performance" in proposing a 10.95% authorized ROE for the Company.[71] Managerial performance should not have an increasing effect on a utility's authorized ROE. As discussed in my testimony, the primary driver of the cost of equity and required rate of return is how market risk impacts individual firms. Managerial performance and the risk of imprudent management is related to firm-specific risks, which are not rewarded by the market because investors can eliminate such risk through diversification of portfolio, and do not have a material effect on the cost of equity. As investors in competitive firms in the marketplace cannot expect an additional return on equity simply due to prudent managerial performance, the Company as a regulated firm should not receive any premium in addition to an authorized market-based ROE due to prudent managerial performance.

Q. What does Ms. Everette recommend regarding the ROE and the Company's management performance?

A. Ms. Everette recommends an incremental increase in the ROE of up to 25 basis points for the Company's management performance. PAWC witness Everette states: "[I]f the Commission were to approve a rate of return on equity that is lower than the upper end of Ms. Bulkley's recommended range [of 10.95%], it should add no less than 25 basis points to its market-determined rate of return." [fn. 11]: Of course, if the Commission's market-

[71] Direct Testimony of Ann E. Bulkley, p. 8, lines 10-13.

determined rate of return on equity is greater than 10.70%, then the performance-based increment could be less than 25 basis points to achieve a final equity return rate of 10.95%." PAWC St. 1 at 33, n. 11.

Q. Do you agree with Ms. Everette's recommendation?

A. No. While Section 523 of the Public Utility Code gives the Commission the discretion to consider the efficiency, effectiveness and adequacy of service when determining just and reasonable rates, it requires the Commission to "give effect to this section by making such adjustments to specific components of the utility's claimed cost of service as it may determine to be proper and appropriate." In my opinion, it would be neither proper nor appropriate for the Commission to award an ROE bump for prudent managerial performance when investors themselves cannot expect an additional return on equity simply due to prudent managerial performance when they invest in competitive firms in the marketplace. For all the reasons I have explained in my testimony, and despite any contrary notion advocated for by regulated utilities, ROE is not a "quid-pro-quo" concept. Increments to cost of equity should not be awarded in return for a utility's management operating the public utility company in a prudent manner as required by law.

Q. What is the monetary value of Ms. Everette's recommendation for an ROE increase for managerial performance?

A. Ms. Everette's recommendation for a performance-based increment of up to 25 basis points in the Company's ROE would cost consumers up to an additional $11.8 million per year in rates, which is excessive and unsupported.[72]

Q. What is your conclusion?

A. In conclusion, for the reasons stated above, the Commission should reject the Company's request for an ROE at 10.95% or a performance-based adder of up to 25 basis points to its market-determined ROE as an award for its managerial performance. The request for the 25-basis point increment to return on equity is unsupported, excessive, and inappropriate. An objective cost of equity analysis shows that the Company's market-determined return of equity is notably lower than the Company's proposed ROE at 10.95%. Based on the results of my financial modeling using the DCF and CAPM models, I recommend that the Commission set the Company's market-determined cost of equity at 9.1%, which is based on the average of my CAPM result (8.7%) and my DCF Model result (9.4%).

IX. CAPITAL STRUCTURE

Q. Describe in general the concept of a company's "capital structure."

A. "Capital structure" refers to the way a company finances its overall operations through external financing. The primary sources of long-term, external financing are debt capital and equity capital. Debt capital usually comes in the form of contractual bond issues that

[72] *See* OCA Statement 2, Exhibit LA-6 at 2.

require the firm to make payments, while equity capital represents an ownership interest in the form of stock. Because a firm cannot pay dividends on common stock until it satisfies its debt obligations to bondholders, stockholders are referred to as "residual claimants." The fact that stockholders have a lower priority to claims on company assets increases their risk and the required return relative to bondholders. Thus, equity capital has a higher cost than debt capital. Firms can reduce their WACC by recapitalizing and increasing their debt financing. In addition, because interest expense is deductible, increasing debt also adds value to the firm by reducing the firm's tax obligation.

Q. Please explain the concept of the "weighted average cost of capital."

A. The term "cost of capital" refers to the weighted average cost of all the components of a company's capital structure, including debt and equity. Determining the cost of debt is relatively straightforward. Interest payments on bonds are contractual, "embedded costs" that are generally calculated by dividing total interest payments by the book value of outstanding debt. Determining the cost of equity, on the other hand, is more complex. Unlike the known, contractual cost of debt, there is no explicit "cost" of equity; the cost of equity must be estimated through various financial models. Thus, the overall weighted average cost of capital includes the cost of debt and the estimated cost of equity. It is a "weighted average" because it is based upon the Company's relative levels of debt and equity, or "capital structure." Companies in the competitive market often use their WACC as the discount rate to determine the value of capital projects, so it is important that this figure be closely estimated. The basic WACC equation used in regulatory proceedings is presented as follows:

Equation 4:
Weighted Average Cost of Capital

$$WACC = \left(\frac{D}{D+E}\right) C_D + \left(\frac{E}{D+E}\right) C_E$$

where: $WACC$ = *weighted average cost of capital*
D = *book value of debt*
C_D = *embedded cost of debt capital*
E = *book value of equity*
C_E = *market-based cost of equity capital*

Thus, the three components of the weighted average cost of capital include the following:

(1) Cost of Equity

(2) Cost of Debt

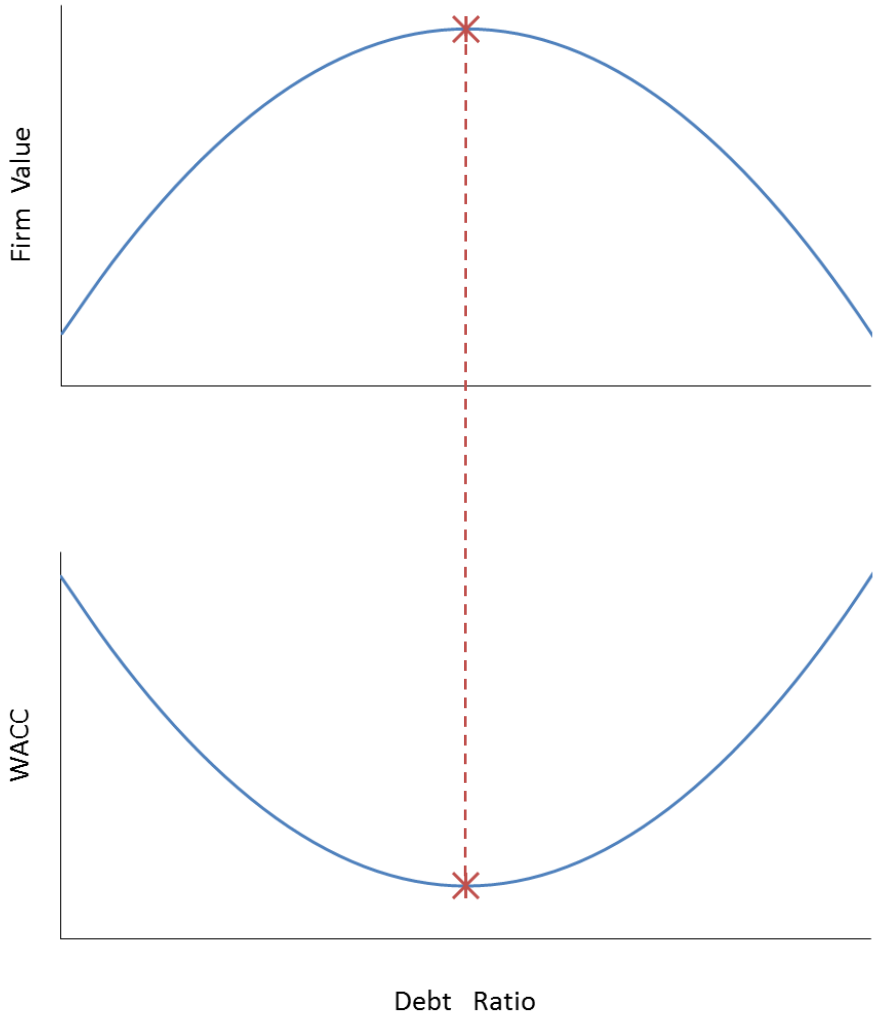
(3) Capital Structure

The term "cost of capital" is necessarily synonymous with the "weighted average cost of capital," and the terms are used interchangeably throughout this testimony.

Q. Is it true that, by increasing debt, competitive firms can add value and reduce their WACC?

A. Yes, it is. A competitive firm can add value by increasing debt. After a certain point, however, the marginal cost of additional debt outweighs its marginal benefit. This is because the more debt the firm uses, the higher interest expense it must pay, and the likelihood of loss increases. This also increases the risk of non-recovery for both bondholders and shareholders, causing both groups of investors to demand a greater return on their investment. Thus, if debt financing is too high, the firm's WACC will increase instead of decrease. The following Figure illustrates these concepts.

Figure 8:
Optimal Debt Ratio



As shown in this figure, a competitive firm's value is maximized when the WACC is minimized. In both graphs, the debt ratio is shown on the x-axis. By increasing its debt ratio, a competitive firm can minimize its WACC and maximize its value. At a certain point, however, the benefits of increasing debt do not outweigh the costs.

Q. Does the rate base rate of return model effectively incentivize utilities to operate at the optimal capital structure?

A. No. While it is true that competitive firms maximize their value by minimizing their WACC, this is not the case for regulated utilities. Under the rate base rate of return model,

a higher WACC results in higher rates, all else held constant. The basic revenue requirement equation is as follows:

Equation 5:
Revenue Requirement for Regulated Utilities

$$RR = O + d + T + \boldsymbol{r}(A - D)$$

where:	*RR*	=	*revenue requirement*
	O	=	*operating expenses*
	d	=	*depreciation expense*
	T	=	*corporate tax*
	r	=	***weighted average cost of capital (WACC)***
	A	=	*plant investments*
	D	=	*accumulated depreciation*

As shown in this equation, utilities can increase their revenue requirement by *increasing* their WACC, not by minimizing it. Thus, because there is no incentive for a regulated utility to minimize its WACC, a commission standing in the place of competition must ensure that the regulated utility is operating at the lowest reasonable WACC. Left unrestrained, utilities will increase their equity and decrease their debt to unreasonably increase their profits that flow through to shareholders.

Q. Can utilities generally afford to have higher debt levels than other industries?

A. Yes. Because regulated utilities have large amounts of fixed assets, stable earnings, and low risk relative to other industries, they can afford to have relatively higher debt ratios (or "leverage"). As aptly stated by Dr. Damodaran:

> Since financial leverage multiplies the underlying business risk, it stands to reason that firms that have high business risk should be reluctant to take on financial leverage. It also stands to reason that firms that operate in stable businesses should be much more willing to take on financial leverage. *Utilities*, for instance, have historically had high debt ratios but have not had high betas, mostly because their underlying businesses have been stable and fairly predictable.[73]

Note that Dr. Damodaran explicitly contrasts utilities with firms that have high underlying business risk. Because utilities have low levels of risk and operate a stable business, they should generally operate with relatively high levels of debt to achieve their optimal capital structure.

A. Proxy and Parent Utility Debt Ratios

Q. Please describe the debt ratios of the proxy group.

A. According to the debt ratios recently reported in Value Line for the utility proxy group, the average debt ratio of the proxy group is 49%.[74] This is notably higher than PAWC's proposed debt ratio of only 45%.

Q. What is the debt ratio of PAWC's parent company, AWK?

A. AWK, has a debt ratio of 55% as reported by Value Line.

B. Competitive Industry Debt Ratios

Q. Please describe the debt ratios recently observed in competitive U.S. industries.

A. There are nearly 2,000 firms in U.S. industries with higher debt ratios than 50%, and with an average debt ratio of about 61%.[75] The following figure shows a sample of these industries with debt ratios higher than 56%.

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[73] *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset*, p. 196 (emphasis added).

[74] Exhibit DJG-13.

[75] *See* Exhibit DJG-14.

Figure 9:
Industries with Debt Ratios Greater than 56%

Industry	# Firms	Debt Ratio
Air Transport	21	84%
Hotel/Gaming	69	82%
Hospitals/Healthcare Facilities	34	82%
Retail (Automotive)	30	78%
Brokerage & Investment Banking	30	76%
Computers/Peripherals	42	71%
Bank (Money Center)	7	68%
Cable TV	10	68%
Food Wholesalers	14	67%
Advertising	58	67%
Oil/Gas Distribution	23	66%
Rubber& Tires	3	65%
Transportation (Railroads)	4	65%
Real Estate (Operations & Services)	60	64%
Retail (Grocery and Food)	13	64%
Retail (Special Lines)	78	64%
Recreation	57	62%
Insurance (Life)	27	61%
Trucking	35	61%
Packaging & Container	25	61%
Power	48	60%
Telecom. Services	49	60%
Telecom (Wireless)	16	60%
R.E.I.T.	223	60%
Auto & Truck	31	59%
Utility (General)	15	59%
Household Products	127	58%
Office Equipment & Services	16	58%
Environmental & Waste Services	62	57%
Utility (Water)	16	57%
Retail (Distributors)	69	57%
Transportation	18	57%
Green & Renewable Energy	19	57%
Total / Average	**1,349**	**65%**

Many of the industries shown here, like public utilities, are generally well-established industries with large amounts of capital assets. The shareholders of these industries

generally prefer these higher debt ratios in order to maximize their profits. There are several notable industries that are relatively comparable to public utilities. For example, the Cable TV, Telecom, Power, and Water Utility industries all have an average debt ratio of about 60%.

Q. Please summarize the results of your capital structure analyses.

A. As described above, I analyzed PAWC's proposed debt ratio under several approaches. The results of my analyses are summarized in the following table:

Figure 10:
Capital Structure Analysis – Summary of Results

Source	Debt Ratio
Cable TV	68%
Power	60%
Telecom (Wireless)	60%
PAWC Parent Company (AWK)	**55%**
Proxy Group of Utilities	**49%**
PAWC Proposed	**45%**

As shown in this figure, PAWC's proposed debt ratio is clearly too low. This results in excessively high capital costs and utility rates. Specifically, PAWC's excessive equity ratio alone would impose $30.7 million per year of additional expense to ratepayers, at PAWC's claimed rate base and ROE.[76] Moreover, customers do not receive an additional benefit from the utility's excessively high capital costs; rather, it exclusively benefits the

[76] *See* OCA Statement 2, Exhibit LA-6 at 3-4 for detailed calculations.

Company's shareholders. Thus, there is no fair or reasonable basis on which to authorize PAWC's proposed capital structure. My analysis indicates that PAWC's debt ratio for ratemaking should be at least 49%. Thus, I recommend the Commission adopt a capital structure for PAWC consisting of 49% debt.

C. The Hamada Model: Capital Structure's Effect on ROE

Q. Have you considered the impact that your capital structure recommendation could have on the company's indicated cost of equity?

A. Yes. I assessed the impact of my capital structure proposal on the Company's cost of equity estimate by using the Hamada model.

Q. What is the premise of the Hamada model?

A. The Hamada formula can be used to analyze changes in a firm's cost of capital as it adds or reduces financial leverage, or debt, in its capital structure by starting with an "unlevered" beta and then "relevering" the beta at different debt ratios. As leverage increases, equity investors bear increasing amounts of risk, leading to higher betas. Before the effects of financial leverage can be accounted for, however, the effects of leverage must first be removed, which is accomplished through the Hamada formula. The Hamada formula for unlevering beta is stated as follows:[77]

[77] Damodaran *supra* n. 22 at 197. This formula was originally developed by Hamada in 1972.

Equation 6:
Hamada Formula

$$\beta_U = \frac{\beta_L}{\left[1 + (1 - T_c)\left(\frac{D}{E}\right)\right]}$$

where: β_U = *unlevered beta (or "asset" beta)*
β_L = *average levered beta of proxy group*
T_C = *corporate tax rate*
D = *book value of debt*
E = *book value of equity*

Using this equation, the beta for the firm can be unlevered, and then "relevered" based on various debt ratios (by rearranging this equation to solve for β_L).

Q. Please summarize the results of the Hamada formula based on your proposed capital structure for the company.

A. The average capital structure of the proxy group consists of 49% debt and 51% equity. Because PAWC's water and wastewater debt ratios are so much lower than that of the proxy group, when we "relever" PAWC relative to the proxy group, it results in a much lower ROE than if PAWC had been operating with a capital structure equal to that of the proxy group. This makes sense because PAWC is much less risky relative to the proxy group due to the decreased amount of debt in its capital structure. The results of my Hamada model are presented in the following figure.

Figure 11:
Hamada Model ROE

Unlevering Beta	
Proxy Debt Ratio	49%
Proxy Equity Ratio	51%
Debt / Equity Ratio	96%
Tax Rate	26%
Equity Risk Premium	5.3%
Risk-free Rate	4.4%
Proxy Group Beta	0.84
Unlevered Beta	0.49

Relevered Betas and Cost of Equity Estimates

Debt Ratio	D/E Ratio	Levered Beta	Cost of Equity
0%	0%	0.49	7.0%
20%	25%	0.58	7.5%
30%	43%	0.65	7.8%
45%	81%	0.78	8.5%
49%	96%	0.84	8.8%
53%	113%	0.90	9.2%
60%	150%	1.04	9.9%

According to the results of the Hamada model, if the Commission were to adopt my capital structure recommendation, PAWC's indicated cost of equity estimate (under the CAPM) would be 8.8%. However, if the Commission's accepts the PAWC's proposed capital structure, the Company's cost of equity estimate would be 8.5% under the CAPM.[78]

[78] *See* Exhibit DJG-15.

X. CONCLUSION

Q. Please summarize your recommendation to the Commission.

A. I recommend the Commission authorize a ROE of 9.1% for PAWC. This is based on the average of my CAPM and DCF Model results (8.7% and 9.4%, respectively). I also recommend the Commission impute a ratemaking capital structure for PAWC that is equal to the proxy group average, which consists of 49% debt and 51% equity.

Q. What is the monetary value of your above proposed adjustments?

A. As quantified by OCA witness Ralph Smith in Exhibit LA-6, the monetary value of my proposed adjustments are as follows:

- If the Commission were to adopt the Company's proposed 10.95% ROE over my recommended 9.1% ROE, at PAWC's claimed rate base, it would cost consumers an additional $87 million per year in rates.

- The Commission should reject the Company's request for a performance-based adder of up to 25 basis points to its market-determined ROE as an award for its managerial performance. The requested increment in return on equity is unsupported and excessive, and at the Company's as filed request it would impose up to $11.8 million of additional costs on ratepayers per year.

- If the Commission were to adopt PAWC's proposed capital structure, it would unreasonably increase the revenue requirement by $30.7 million per year, at PAWC's claimed rate base and ROE, for water and wastewater operations combined.

Q. Does this conclude your testimony?

A. Yes. I reserve the right to update or supplement my testimony, if necessary and appropriate. Also, to the extent I have not addressed an issue or proposal raised by the Company in this proceeding, it should not be construed that I agree with the same.

APPENDIX A:

DISCOUNTED CASH FLOW MODEL THEORY

The Discounted Cash Flow ("DCF") Model is based on a fundamental financial model called the "dividend discount model," which maintains that the value of a security is equal to the present value of the future cash flows it generates. Cash flows from common stock are paid to investors in the form of dividends. There are several variations of the DCF Model. In its most general form, the DCF Model is expressed as follows:[1]

Equation 1:
General Discounted Cash Flow Model

$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \cdots + \frac{D_n}{(1+k)^n}$$

where: P_0 = *current stock price*
$D_1 \ldots D_n$ = *expected future dividends*
k = *discount rate / required return*

The General DCF Model would require an estimation of an infinite stream of dividends. Since this would be impractical, analysts use more feasible variations of the General DCF Model, which are discussed further below.

The DCF Models rely on the following four assumptions:

1. Investors evaluate common stocks in the classical valuation framework; that is, they trade securities rationally at prices reflecting their perceptions of value;
2. Investors discount the expected cash flows at the same rate (K) in every future period;

[1] *See* Zvi Bodie, Alex Kane & Alan J. Marcus, *Essentials of Investments* 410 (9th ed., McGraw-Hill/Irwin 2013).

3. The K obtained from the DCF equation corresponds to that specific stream of future cash flows alone; and

4. Dividends, rather than earnings, constitute the source of value.

The General DCF can be rearranged to make it more practical for estimating the cost of equity. Regulators typically rely on some variation of the Constant Growth DCF Model, which is expressed as follows:

Equation 2:
Constant Growth Discounted Cash Flow Model

$$K = \frac{D_1}{P_0} + g$$

where: K = *discount rate / required return on equity*
D_1 = *expected dividend per share one year from now*
P_0 = *current stock price*
g = *expected growth rate of future dividends*

Unlike the General DCF Model, the Constant Growth DCF Model solves directly for the required return (K). In addition, by assuming that dividends grow at a constant rate, the dividend stream from the General DCF Model may be essentially substituted with a term representing the expected constant growth rate of future dividends (g). The Constant Growth DCF Model may be considered in two parts. The first part is the dividend yield (D_1/P_0), and the second part is the growth rate (g). In other words, the required return in the DCF Model is equivalent to the dividend yield plus the growth rate.

In addition to the four assumptions listed above, the Constant Growth DCF Model relies on four additional assumptions as follows:[2]

[2] *Id.* at 254-56.

1. The discount rate (K) must exceed the growth rate (g);
2. The dividend growth rate (g) is constant in every year to infinity;
3. Investors require the same return (K) in every year; and
4. There is no external financing; that is, growth is provided only by the retention of earnings.

Because the growth rate in this model is assumed to be constant, it is important not to use growth rates that are unreasonably high. In fact, the constant growth rate estimate for a regulated utility with a defined service territory should not exceed the growth rate for the economy in which it operates.

APPENDIX B:

CAPITAL ASSET PRICING MODEL THEORY

The Capital Asset Pricing Model ("CAPM") is a market-based model founded on the principle that investors demand higher returns for incurring additional risk.[1] The CAPM estimates this required return. The CAPM relies on the following assumptions:

1. Investors are rational, risk-adverse, and strive to maximize profit and terminal wealth;
2. Investors make choices based on risk and return. Return is measured by the mean returns expected from a portfolio of assets; risk is measured by the variance of these portfolio returns;
3. Investors have homogenous expectations of risk and return;
4. Investors have identical time horizons;
5. Information is freely and simultaneously available to investors.
6. There is a risk-free asset, and investors can borrow and lend unlimited amounts at the risk-free rate;
7. There are no taxes, transaction costs, restrictions on selling short, or other market imperfections; and,
8. Total asset quality is fixed, and all assets are marketable and divisible.[2]

[1] William F. Sharpe, *A Simplified Model for Portfolio Analysis* 277-93 (Management Science IX 1963); *see also* John R. Graham, Scott B. Smart & William L. Megginson, *Corporate Finance: Linking Theory to What Companies Do* 208 (3rd ed., South Western Cengage Learning 2010).

[2] *Id*.

While some of these assumptions may appear to be restrictive, they do not outweigh the inherent value of the model. The CAPM has been widely used by firms, analysts, and regulators for decades to estimate the cost of equity capital.

The basic CAPM equation is expressed as follows:

Equation 1:
Capital Asset Pricing Model

$$K = R_F + \beta_i(R_M - R_F)$$

where: K = *required return*
R_F = *risk-free rate*
β = *beta coefficient of asset i*
R_M = *required return on the overall market*

There are essentially three terms within the CAPM equation that are required to calculate the required return (K): (1) the risk-free rate (R_F); (2) the beta coefficient (β); and (3) the equity risk premium ($R_M - R_F$), which is the required return on the overall market less the risk-free rate.

Raw Beta Calculations and Adjustments

A stock's beta equals the covariance of the asset's returns with the returns on a market portfolio, divided by the portfolio's variance, as expressed in the following formula:[3]

Equation 2:
Beta

$$\beta_i = \frac{\sigma_{im}}{\sigma_m^2}$$

where: β_i = *beta of asset i*
σ_{im} = *covariance of asset i returns with market portfolio returns*
σ^2_m = *variance of market portfolio*

[3] John R. Graham, Scott B. Smart & William L. Megginson, *Corporate Finance: Linking Theory to What Companies Do* 180-81 (3rd ed., South Western Cengage Learning 2010).

Betas that are published by various research firms are typically calculated through a regression analysis that considers the movements in price of an individual stock and movements in the price of the overall market portfolio. The betas produced by this regression analysis are considered "raw" betas. There is empirical evidence that raw betas should be adjusted to account for beta's natural tendency to revert to an underlying mean.[4] Some analysts use an adjustment method proposed by Blume, which adjusts raw betas toward the market mean of one.[5] While the Blume adjustment method is popular due to its simplicity, it is arguably arbitrary, and some would say not useful at all. According to Dr. Damodaran: "While we agree with the notion that betas move toward 1.0 over time, the [Blume adjustment] strikes us as arbitrary and not particularly useful."[6] The Blume adjustment method is especially arbitrary when applied to industries with consistently low betas, such as the utility industry. For industries with consistently low betas, it is better to employ an adjustment method that adjusts raw betas toward an industry average, rather than the market average. Vasicek proposed such a method, which is preferable to the Blume adjustment method because it allows raw betas to be adjusted toward an industry average, and also accounts for the statistical accuracy of the raw beta calculation.[7] In other words, "[t]he Vasicek adjustment seeks to overcome one weakness of the Blume model by not applying the same adjustment to every security; rather, a security-specific adjustment is made depending on the

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[4] *See* Michael J. Gombola and Douglas R. Kahl, *Time-Series Processes of Utility Betas: Implications for Forecasting Systematic Risk* 84-92 (Financial Management Autumn 1990).

[5] See Marshall Blume, *On the Assessment of Risk*, Vol. 26, No. 1, The Journal of Finance 1 (1971).

[6] *See* Aswath Damodaran, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* 187 (3rd ed., John Wiley & Sons, Inc. 2012).

[7] Oldrich A. Vasicek, *A Note on Using Cross-Sectional Information in Bayesian Estimation of Security Betas* 1233-1239 (Journal of Finance, Vol. 28, No. 5, December 1973).

statistical quality of the regression."[8] The Vasicek beta adjustment equation is expressed as follows:

Equation 3:
Vasicek Beta Adjustment

$$\beta_{i1} = \frac{\sigma^2_{\beta i0}}{\sigma^2_{\beta 0} + \sigma^2_{\beta i0}} \beta_0 + \frac{\sigma^2_{\beta 0}}{\sigma^2_{\beta 0} + \sigma^2_{\beta i0}} \beta_{i0}$$

where:	β_{i1}	=	*Vasicek adjusted beta for security i*
	β_{i0}	=	*historical beta for security i*
	β_0	=	*beta of industry or proxy group*
	$\sigma^2_{\beta 0}$	=	*variance of betas in the industry or proxy group*
	$\sigma^2_{\beta i0}$	=	*square of standard error of the historical beta for security i*

The Vasicek beta adjustment is an improvement on the Blume model because the Vasicek model does not apply the same adjustment to every security. A higher standard error produced by the regression analysis indicates a lower statistical significance of the beta estimate. Thus, a beta with a high standard error should receive a greater adjustment than a beta with a low standard error. As stated in Ibbotson:

> While the Vasicek formula looks intimidating, it is really quite simple. The adjusted beta for a company is a weighted average of the company's historical beta and the beta of the market, industry, or peer group. How much weight is given to the company and historical beta depends on the statistical significance of the company beta statistic. If a company beta has a low standard error, then it will have a higher weighting in the Vasicek formula. If a company beta has a high standard error, then it will have lower weighting in the Vasicek formula. An advantage of this adjustment methodology is that it does not force an adjustment to the market as a whole. Instead, the adjustment can be toward an industry or some other peer group. *This is most useful in looking at companies in industries that on average have high or low betas*.[9]

[8] 2012 Ibbotson Stocks, Bonds, Bills, and Inflation Valuation Yearbook 77-78 (Morningstar 2012).

[9] *Id*. at 78 (emphasis added).

Thus, the Vasicek adjustment method is statistically more accurate, and is the preferred method to use when analyzing companies in an industry that has inherently low betas, such as the utility industry. The Vasicek method was also confirmed by Gombola, who conducted a study specifically related to utility companies. Gombola concluded that "[t]he strong evidence of auto-regressive tendencies in *utility* betas lends support to the application of adjustment procedures such as the . . . adjustment procedure presented by Vasicek."[10] Gombola also concluded that adjusting raw betas toward the market mean of 1.0 is *too high*, and that "[i]nstead, they should be adjusted toward a value that is less than one."[11] In conducting the Vasicek adjustment on betas in previous cases, it reveals that utility betas are even lower than those published by Value Line.[12] Gombola's findings are particular important here, because his study was conducted specifically on utility companies. This evidence indicates that using Value Line's betas in a CAPM cost of equity estimate for a utility company may lead to overestimated results. Regardless, adjusting betas to a level that is *higher* than Value Line's betas is not reasonable, and it would produce CAPM cost of equity results that are too high.

[10] Michael J. Gombola and Douglas R. Kahl, *Time-Series Processes of Utility Betas: Implications for Forecasting Systematic Risk* 92 (Financial Management Autumn 1990) (emphasis added).

[11] *Id*. at 91-92.

[12] *See e.g.* Responsive Testimony of David J. Garrett, filed March 21, 2016 in Cause No. PUD 201500273 before the Corporation Commission of Oklahoma (the Company's 2015 rate case), at pp. 56 – 59.

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University of Oklahoma — Norman, OK
Master of Business Administration — 2014
Areas of Concentration: Finance, Energy

University of Oklahoma College of Law — Norman, OK
Juris Doctor — 2007
Member, American Indian Law Review

University of Oklahoma — Norman, OK
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PROFESSIONAL DESIGNATIONS

Society of Depreciation Professionals
Certified Depreciation Professional (CDP)

Society of Utility and Regulatory Financial Analysts
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WORK EXPERIENCE

Resolve Utility Consulting PLLC — Oklahoma City, OK
Managing Member — 2016 – Present
Provide expert analysis and testimony specializing in depreciation and cost of capital issues for clients in utility regulatory proceedings.

Oklahoma Corporation Commission — Oklahoma City, OK
Public Utility Regulatory Analyst — 2012 – 2016
Assistant General Counsel — 2011 – 2012
Represented commission staff in utility regulatory proceedings and provided legal opinions to commissioners. Provided expert analysis and testimony in depreciation, cost of capital, incentive compensation, payroll and other issues.

Perebus Counsel, PLLC — Oklahoma City, OK
Managing Member — 2009 – 2011
Represented clients in the areas of family law, estate planning, debt negotiations, business organization, and utility regulation.

Moricoli & Schovanec, P.C. — Oklahoma City, OK
Associate Attorney — 2007 – 2009
Represented clients in the areas of contracts, oil and gas, business structures and estate administration.

TEACHING EXPERIENCE

University of Oklahoma — Norman, OK
Adjunct Instructor – "Conflict Resolution" — 2014 – 2021
Adjunct Instructor – "Ethics in Leadership"

Rose State College — Midwest City, OK
Adjunct Instructor – "Legal Research" — 2013 – 2015
Adjunct Instructor – "Oil & Gas Law"

PROFESSIONAL ASSOCIATIONS

Oklahoma Bar Association — 2007 – Present

Society of Depreciation Professionals — 2014 – Present
Board Member – President — 2017
Participate in management of operations, attend meetings, review performance, organize presentation agenda.

Society of Utility Regulatory Financial Analysts — 2014 – Present

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Maryland Public Service Commission	Washington Gas Light Company	9704	Cost of capital, awarded rate of return, capital structure	Maryland Office of People's Counsel
Delaware Public Service Commission	Veolia Water Delaware Inc.	23-0598	Cost of capital, awarded rate of return, capital structure	Division of the Public Advocate
Connecticut Public Utilities Regulatory Authority	United Illuminating Company	22-08-08	Depreciation rates, service lives, net salvage	PURA Staff
Public Utility Commission of Texas	Southwestern Public Service Company	PUC 54634	Depreciation rates, service lives, net salvage	Alliance of Xcel Municipalities
Railroad Commission of Texas	SiEnergy, LP	OS-23-00013504	Depreciation rates, service lives, net salvage	Texas municipal intervenor group
Pennsylvania Public Utility Commission	Aqua Pennsylvania, Inc.	A-2022-3034143	Fair market value review	Pennsylvania Office of Consumer Advocate
Wyoming Public Service Commission	Rocky Mountain Power	20000-633-ER-23	Cost of capital and authorized rate of return	Wyoming Industrial Energy Consumers
Maryland Public Service Commission	Potomac Electric Power Company	9702	Depreciation rates, service lives, net salvage	Maryland Office of People's Counsel
Public Utilities Commission of Nevada	Nevada Power Company d/b/a NV Energy	23-06007 23-06008	Depreciation rates, service lives, net salvage	Bureau of Consumer Protection
Public Utilities Commission of Ohio	Northeast Ohio Natural Gas Corp.	23-0154-GA-AIR	Cost of capital, awarded rate of return, capital structure	Office of the Ohio Consumers' Counsel
New York State Public Service Commission	The Brooklyn Untion Gas Company and Keyspan Gas East Corporation d/b/a Nation Grid	23-G-0225 23-G-0226	Depreciation rates, service lives, net salvage, depreciation reserve	The City of New York
Idaho Public Utilities Commission	Idaho Power Company	IPC-E-23-11	Cost of capital, awarded rate of return, capital structure	Micron Technology, Inc.
Indiana Utility Regulatory Commission	Indiana Michigan Power Company	45933	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Massachusetts Department of Public Utilities	Fitchburg Gas and Electric Company d/b/a Unitil	D.P.U. 23-80; D.P.U. 23-81	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Kansas Corporation Commission	Evergy Kansas Central, Evergy Kansas South, and Evergy Metro	23-EKCE-775-RTS	Depreciation rates, service lives, net salvage	The Citizens' Utility Ratepayer Board

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Delaware Public Service Commission	Delmarva Power & Light Company	22-0897	Cost of capital, awarded rate of return, capital structure	Division of the Public Advocate
Connecticut Public Utilities Regulatory Authority	Connecticut Water Company	23-08-32	Depreciation rates, service lives, net salvage	PURA Staff
Connecticut Public Utilities Regulatory Authority	Connecticut Natural Gas Corporation and The Southern Connecticut Gas Company	23-11-02	Depreciation rates, service lives, net salvage	PURA Staff
Railroad Commission of Texas	Atmos Pipeline – Texas	OS-23-00013758	Depreciation rates, service lives, net salvage	Atmos Texas Municipalities
Wyoming Public Service Commission	Black Hills Wyoming Gas	30026-78-GR-23	Depreciation rates, service lives, net salvage	Wyoming Office of Consumer Advocate
Indiana Utility Regulatory Commission	Indianapolis Power & Light Company d/b/a AES Indiana	45911	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
New Mexico Public Regulation Commission	Southwestern Public Service Company	22-00286-UT	Cost of capital, depreciation rates, net salvage	The New Mexico Large Customer Group; Occidental Permian
Public Utilities Commission of the State of California	Southern California Gas Company San Diego Gas & Electric Company	A.22-05-015 A.22-05-016	Depreciation rates, service lives, net salvage	The Utility Reform Network
Public Utilties Commission of the State of Colorado	Public Service Company of Colorado	22AL-0530E 22AL-0478E	Cost of capital, awarded rate of return, capital structure	Colorado Energy Consumers
New Mexico Public Regulatory Commission	Public Service Company of New Mexico	22-00270-UT	Cost of capital, depreciation rates, net salvage	The Albuquerque Bernalillo County Water Utility Authority
Florida Public Service Commission	Peoples Gas System	20230023-GU 20220219-GU 20220212-GU	Cost of capital, depreciation rates, net salvage	Florida Office of Public Counsel
Maryland Public Service Commission	Potomac Edison Company	9695	Cost of capital, depreciation rates, net salvage	Maryland Office of People's Counsel
Public Service Commission of the State of Montana	Montana-Dakota Utilities Company	2022.11.099	Depreciation rates, service lives, net salvage	Montana Consumer Counsel and Denbury Onshore
Indiana Utility Regulatory Commission	Indiana-American Water Company	45870	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Public Service Commission of South Carolina	Dominion Energy South Carolina	2023-70-G	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Maryland Public Service Commission	Columbia Gas of Maryland	9701	Cost of capital, awarded rate of return, capital structure	Maryland Office of People's Counsel

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Pennsylvania Public Utility Commission	Columbia Water Company	R-2023-3040258	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Maryland Public Service Commission	Baltimore Gas and Electric Company	9692	Depreciation rates, service lives, net salvage	Maryland Office of People's Counsel
Arizona Corporation Commission	Arizona Public Service Company	E-01345A-22-0144	Cost of capital, awarded rate of return, capital structure	Residential Utility Consumer Office
Oklahoma Corporation Commission	Public Service Company of Oklahoma	PUD 2022-000093	Cost of capital, depreciation rates, net salvage	Oklahoma Industrial Energy Consumers
Public Service Commission of the State of Montana	NorthWestern Energy	2022.07.078	Cost of capital, depreciation rates, net salvage	Montana Consumer Counsel and Montana Large Customer Group
Indiana Utility Regulatory Commission	Northern Indiana Public Service Company	45772	Cost of capital, depreciation rates, net salvage	Indiana Office of Utility Consumer Counselor
Public Service Commission of South Carolina	Duke Energy Progress	2022-254-E	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Wyoming Public Service Commission	Cheyenne Light, Fuel and Power Company D/B/A Black Hills Energy	20003-214-ER-22	Depreciation rates, service lives, net salvage	Wyoming Office of Consumer Advocate
Railroad Commission of Texas	Texas Gas Services Company	OS-22-00009896	Depreciation rates, service lives, net salvage	The City of El Paso
Public Utilities Commission of Nevada	Sierra Pacific Power Company	22-06014	Depreciation rates, service lives, net salvage	Bureau of Consumer Protection
Washington Utilities & Transportation Commission	Puget Sound Energy	UE-220066 UG-220067 UG-210918	Depreciation rates, service lives, net salvage	Washington Office of Attorney General
Public Utility Commission of Texas	Oncor Electric Delivery Company LLC	PUC 53601	Depreciation rates, service lives, net salvage	Alliance of Oncor Cities
Florida Public Service Commission	Florida Public Utilities Company	20220067-GU	Cost of capital, depreciation rates	Florida Office of Public Counsel
Public Utility Commission of Texas	Entergy Texas, Inc.	PUC 53719	Depreciation rates, decommissioning costs	Texas Municipal Group
Florida Public Service Commission	Florida City Gas	2020069-GU	Cost of capital, depreciation rates	Florida Office of Public Counsel
Connecticut Public Utilities Regulatory Authority	Aquarion Water Company of Connecticut	22-07-01	Depreciation rates, service lives, net salvage	PURA Staff

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Washington Utilities & Transportation Commission	Avista Corporation	UE-220053 UG-220054 UE-210854	Cost of capital, awarded rate of return, capital structure	Washington Office of Attorney General
Federal Energy Regulatory Commission	ANR Pipeline Company	RP22-501-000	Depreciation rates, service lives, net salvage	Ascent Resources - Utica, LLC
Pennsylvania Public Utility Commission	Columbia Gas of Pennsylvania, Inc.	R-2022-3031211	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Public Service Commission of South Carolina	Piedmont Natural Gas Company	2022-89-G	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Pennsylvania Public Utility Commission	UGI Utilities, Inc. - Gas Division	R-2021-3030218	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Public Utilities Commission of the State of California	Pacific Gas & Electric Company	A.21-06-021	Depreciation rates, service lives, net salvage	The Utility Reform Network
Pennsylvania Public Utility Commission	PECO Energy Company - Gas Division	R-2022-3031113	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Oklahoma Corporation Commission	Oklahoma Gas & Electric Company	PUD 202100164	Cost of capital, depreciation rates, net salvage	Oklahoma Industrial Energy Consumers
Massachusetts Department of Public Utilities	NSTAR Electric Company D/B/A Eversource Energy	D.P.U. 22-22	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Michigan Public Service Company	DTE Electric Company	U-20836	Cost of capital, awarded rate of return, capital structure	Michigan Environmental Council and Citizens Utility Board of Michigan
New York State Public Service Commission	Consolidated Edison Company of New York, Inc.	22-E-0064 22-G-0065	Depreciation rates, service lives, net salvage, depreciation reserve	The City of New York
Pennsylvania Public Utility Commission	Aqua Pennsylvania Wastewater / East Whiteland Township	A-2021-3026132	Fair market value estimates for wastewater assets	Pennsylvania Office of Consumer Advocate
Public Service Commission of South Carolina	Kiawah Island Utility, Inc.	2021-324-WS	Cost of capital, awarded rate of return, capital structure	South Carolina Office of Regulatory Staff
Pennsylvania Public Utility Commission	Aqua Pennsylvania Wastewater / Willistown Township	A-2021-3027268	Fair market value estimates for wastewater assets	Pennsylvania Office of Consumer Advocate
Indiana Utility Regulatory Commission	Northern Indiana Public Service Company	45621	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Arkansas Public Service Commission	Southwestern Electric Power Company	21-070-U	Cost of capital, depreciation rates, net salvage	Western Arkansas Large Energy Consumers

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Federal Energy Regulatory Commission	Southern Star Central Gas Pipeline	RP21-778-002	Depreciation rates, service lives, net salvage	Consumer-Owned Shippers
Railroad Commission of Texas	Participating Texas gas utilities in consolidated proceeding	OS-21-00007061	Securitization of extraordinary gas costs arising from winter storms	The City of El Paso
Public Service Commission of South Carolina	Palmetto Wastewater Reclamation, Inc.	2021-153-S	Cost of capital, awarded rate of return, capital structure, ring-fencing	South Carolina Office of Regulatory Staff
Public Utilties Commission of the State of Colorado	Public Service Company of Colorado	21AL-0317E	Cost of capital, depreciation rates, net salvage	Colorado Energy Consumers
Pennsylvania Public Utility Commission	City of Lancaster - Water Department	R-2021-3026682	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Public Utility Commission of Texas	Southwestern Public Service Company	PUC 51802	Depreciation rates, service lives, net salvage	The Alliance of Xcel Municipalities
Pennsylvania Public Utility Commission	The Borough of Hanover - Hanover Municipal Waterworks	R-2021-3026116	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Maryland Public Service Commission	Delmarva Power & Light Company	9670	Cost of capital and authorized rate of return	Maryland Office of People's Counsel
Oklahoma Corporation Commission	Oklahoma Natural Gas Company	PUD 202100063	Cost of capital, awarded rate of return, capital structure	Oklahoma Industrial Energy Consumers
Indiana Utility Regulatory Commission	Indiana Michigan Power Company	45576	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Public Utility Commission of Texas	El Paso Electric Company	PUC 52195	Depreciation rates, service lives, net salvage	The City of El Paso
Pennsylvania Public Utility Commission	Aqua Pennsylvania	R-2021-3027385	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Public Service Commission of the State of Montana	NorthWestern Energy	D2021.02.022	Cost of capital, awarded rate of return, capital structure	Montana Consumer Counsel
Pennsylvania Public Utility Commission	PECO Energy Company	R-2021-3024601	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
New Mexico Public Regulation Commission	Southwestern Public Service Company	20-00238-UT	Cost of capital and authorized rate of return	The New Mexico Large Customer Group; Occidental Permian
Oklahoma Corporation Commission	Public Service Company of Oklahoma	PUD 202100055	Cost of capital, depreciation rates, net salvage	Oklahoma Industrial Energy Consumers

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Pennsylvania Public Utility Commission	Duquesne Light Company	R-2021-3024750	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Maryland Public Service Commission	Columbia Gas of Maryland	9664	Cost of capital and authorized rate of return	Maryland Office of People's Counsel
Indiana Utility Regulatory Commission	Southern Indiana Gas Company, d/b/a Vectren Energy Delivery of Indiana, Inc.	45447	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Public Utility Commission of Texas	Southwestern Electric Power Company	PUC 51415	Depreciation rates, service lives, net salvage	Cities Advocating Reasonable Deregulation
New Mexico Public Regulatory Commission	Avangrid, Inc., Avangrid Networks, Inc., NM Green Holdings, Inc., PNM, and PNM Resources	20-00222-UT	Ring fencing and capital structure	The Albuquerque Bernalillo County Water Utility Authority
Indiana Utility Regulatory Commission	Indiana Gas Company, d/b/a Vectren Energy Delivery of Indiana, Inc.	45468	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Public Utilities Commission of Nevada	Nevada Power Company and Sierra Pacific Power Company, d/b/a NV Energy	20-07023	Construction work in progress	MGM Resorts International, Caesars Enterprise Services, LLC, and the Southern Nevada Water Authority
Massachusetts Department of Public Utilities	Boston Gas Company, d/b/a National Grid	D.P.U. 20-120	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Public Service Commission of the State of Montana	ABACO Energy Services, LLC	D2020.07.082	Cost of capital and authorized rate of return	Montana Consumer Counsel
Maryland Public Service Commission	Washington Gas Light Company	9651	Cost of capital and authorized rate of return	Maryland Office of People's Counsel
Florida Public Service Commission	Utilities, Inc. of Florida	20200139-WS	Cost of capital and authorized rate of return	Florida Office of Public Counsel
New Mexico Public Regulatory Commission	El Paso Electric Company	20-00104-UT	Cost of capital, depreciation rates, net salvage	City of Las Cruces and Doña Ana County
Public Utilities Commission of Nevada	Nevada Power Company	20-06003	Cost of capital, awarded rate of return, capital structure, earnings sharing	MGM Resorts International, Caesars Enterprise Services, LLC, Wynn Las Vegas, LLC, Smart Energy Alliance, and Circus Circus Las Vegas, LLC
Wyoming Public Service Commission	Rocky Mountain Power	20000-578-ER-20	Cost of capital and authorized rate of return	Wyoming Industrial Energy Consumers
Florida Public Service Commission	Peoples Gas System	20200051-GU 20200166-GU	Cost of capital, depreciation rates, net salvage	Florida Office of Public Counsel
Wyoming Public Service Commission	Rocky Mountain Power	20000-539-EA-18	Depreciation rates, service lives, net salvage	Wyoming Industrial Energy Consumers

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Public Service Commission of South Carolina	Dominion Energy South Carolina	2020-125-E	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Pennsylvania Public Utility Commission	The City of Bethlehem	2020-3020256	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Railroad Commission of Texas	Texas Gas Services Company	GUD 10928	Depreciation rates, service lives, net salvage	Gulf Coast Service Area Steering Committee
Public Utilities Commission of the State of California	Southern California Edison	A.19-08-013	Depreciation rates, service lives, net salvage	The Utility Reform Network
Massachusetts Department of Public Utilities	NSTAR Gas Company	D.P.U. 19-120	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Georgia Public Service Commission	Liberty Utilities (Peach State Natural Gas)	42959	Depreciation rates, service lives, net salvage	Public Interest Advocacy Staff
Florida Public Service Commission	Florida Public Utilities Company	20190155-El 20190156-El 20190174-El	Depreciation rates, service lives, net salvage	Florida Office of Public Counsel
Illinois Commerce Commission	Commonwealth Edison Company	20-0393	Depreciation rates, service lives, net salvage	The Office of the Illinois Attorney General
Public Utility Commission of Texas	Southwestern Public Service Company	PUC 49831	Depreciation rates, service lives, net salvage	Alliance of Xcel Municipalities
Public Service Commission of South Carolina	Blue Granite Water Company	2019-290-WS	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Railroad Commission of Texas	CenterPoint Energy Resources	GUD 10920	Depreciation rates and grouping procedure	Alliance of CenterPoint Municipalities
Pennsylvania Public Utility Commission	Aqua Pennsylvania Wastewater / East Norriton Township	A-2019-3009052	Fair market value estimates for wastewater assets	Pennsylvania Office of Consumer Advocate
New Mexico Public Regulation Commission	Southwestern Public Service Company	19-00170-UT	Cost of capital and authorized rate of return	The New Mexico Large Customer Group; Occidental Permian
Indiana Utility Regulatory Commission	Duke Energy Indiana	45253	Cost of capital, depreciation rates, net salvage	Indiana Office of Utility Consumer Counselor
Maryland Public Service Commission	Columbia Gas of Maryland	9609	Depreciation rates, service lives, net salvage	Maryland Office of People's Counsel
Washington Utilities & Transportation Commission	Avista Corporation	UE-190334	Cost of capital, awarded rate of return, capital structure	Washington Office of Attorney General

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Indiana Utility Regulatory Commission	Indiana Michigan Power Company	45235	Cost of capital, depreciation rates, net salvage	Indiana Office of Utility Consumer Counselor
Public Utilities Commission of the State of California	Pacific Gas & Electric Company	18-12-009	Depreciation rates, service lives, net salvage	The Utility Reform Network
Oklahoma Corporation Commission	The Empire District Electric Company	PUD 201800133	Cost of capital, authorized ROE, depreciation rates	Oklahoma Industrial Energy Consumers and Oklahoma Energy Results
Arkansas Public Service Commission	Southwestern Electric Power Company	19-008-U	Cost of capital, depreciation rates, net salvage	Western Arkansas Large Energy Consumers
Public Utility Commission of Texas	CenterPoint Energy Houston Electric	PUC 49421	Depreciation rates, service lives, net salvage	Texas Coast Utilities Coalition
Massachusetts Department of Public Utilities	Massachusetts Electric Company and Nantucket Electric Company	D.P.U. 18-150	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Oklahoma Corporation Commission	Oklahoma Gas & Electric Company	PUD 201800140	Cost of capital, authorized ROE, depreciation rates	Oklahoma Industrial Energy Consumers and Oklahoma Energy Results
Public Service Commission of the State of Montana	Montana-Dakota Utilities Company	D2018.9.60	Depreciation rates, service lives, net salvage	Montana Consumer Counsel and Denbury Onshore
Indiana Utility Regulatory Commission	Northern Indiana Public Service Company	45159	Depreciation rates, grouping procedure, demolition costs	Indiana Office of Utility Consumer Counselor
Public Service Commission of the State of Montana	NorthWestern Energy	D2018.2.12	Depreciation rates, service lives, net salvage	Montana Consumer Counsel
Oklahoma Corporation Commission	Public Service Company of Oklahoma	PUD 201800097	Depreciation rates, service lives, net salvage	Oklahoma Industrial Energy Consumers and Wal-Mart
Nevada Public Utilities Commission	Southwest Gas Corporation	18-05031	Depreciation rates, service lives, net salvage	Nevada Bureau of Consumer Protection
Public Utility Commission of Texas	Texas-New Mexico Power Company	PUC 48401	Depreciation rates, service lives, net salvage	Alliance of Texas-New Mexico Power Municipalities
Oklahoma Corporation Commission	Oklahoma Gas & Electric Company	PUD 201700496	Depreciation rates, service lives, net salvage	Oklahoma Industrial Energy Consumers and Oklahoma Energy Results
Maryland Public Service Commission	Washington Gas Light Company	9481	Depreciation rates, service lives, net salvage	Maryland Office of People's Counsel
Indiana Utility Regulatory Commission	Citizens Energy Group	45039	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Public Utility Commission of Texas	Entergy Texas, Inc.	PUC 48371	Depreciation rates, decommissioning costs	Texas Municipal Group
Washington Utilities & Transportation Commission	Avista Corporation	UE-180167	Depreciation rates, service lives, net salvage	Washington Office of Attorney General
New Mexico Public Regulation Commission	Southwestern Public Service Company	17-00255-UT	Cost of capital and authorized rate of return	HollyFrontier Navajo Refining; Occidental Permian
Public Utility Commission of Texas	Southwestern Public Service Company	PUC 47527	Depreciation rates, plant service lives	Alliance of Xcel Municipalities
Public Service Commission of the State of Montana	Montana-Dakota Utilities Company	D2017.9.79	Depreciation rates, service lives, net salvage	Montana Consumer Counsel
Florida Public Service Commission	Florida City Gas	20170179-GU	Cost of capital, depreciation rates	Florida Office of Public Counsel
Washington Utilities & Transportation Commission	Avista Corporation	UE-170485	Cost of capital and authorized rate of return	Washington Office of Attorney General
Wyoming Public Service Commission	Powder River Energy Corporation	10014-182-CA-17	Credit analysis, cost of capital	Private customer
Oklahoma Corporation Commission	Public Service Co. of Oklahoma	PUD 201700151	Depreciation, terminal salvage, risk analysis	Oklahoma Industrial Energy Consumers
Public Utility Commission of Texas	Oncor Electric Delivery Company	PUC 46957	Depreciation rates, simulated analysis	Alliance of Oncor Cities
Nevada Public Utilities Commission	Nevada Power Company	17-06004	Depreciation rates, service lives, net salvage	Nevada Bureau of Consumer Protection
Public Utility Commission of Texas	El Paso Electric Company	PUC 46831	Depreciation rates, interim retirements	City of El Paso
Idaho Public Utilities Commission	Idaho Power Company	IPC-E-16-24	Accelerated depreciation of North Valmy plant	Micron Technology, Inc.
Idaho Public Utilities Commission	Idaho Power Company	IPC-E-16-23	Depreciation rates, service lives, net salvage	Micron Technology, Inc.
Public Utility Commission of Texas	Southwestern Electric Power Company	PUC 46449	Depreciation rates, decommissioning costs	Cities Advocating Reasonable Deregulation
Massachusetts Department of Public Utilities	Eversource Energy	D.P.U. 17-05	Cost of capital, capital structure, and rate of return	Sunrun Inc.; Energy Freedom Coalition of America

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Railroad Commission of Texas	Atmos Pipeline - Texas	GUD 10580	Depreciation rates, grouping procedure	City of Dallas
Public Utility Commission of Texas	Sharyland Utility Company	PUC 45414	Depreciation rates, simulated analysis	City of Mission
Oklahoma Corporation Commission	Empire District Electric Company	PUD 201600468	Cost of capital, depreciation rates	Oklahoma Industrial Energy Consumers
Railroad Commission of Texas	CenterPoint Energy Texas Gas	GUD 10567	Depreciation rates, simulated plant analysis	Texas Coast Utilities Coalition
Arkansas Public Service Commission	Oklahoma Gas & Electric Company	160-159-GU	Cost of capital, depreciation rates, terminal salvage	Arkansas River Valley Energy Consumers; Wal-Mart
Florida Public Service Commission	Peoples Gas	160-159-GU	Depreciation rates, service lives, net salvage	Florida Office of Public Counsel
Arizona Corporation Commission	Arizona Public Service Company	E-01345A-16-0036	Cost of capital, depreciation rates, terminal salvage	Energy Freedom Coalition of America
Nevada Public Utilities Commission	Sierra Pacific Power Company	16-06008	Depreciation rates, net salvage, theoretical reserve	Northern Nevada Utility Customers
Oklahoma Corporation Commission	Oklahoma Gas & Electric Co.	PUD 201500273	Cost of capital, depreciation rates, terminal salvage	Public Utility Division
Oklahoma Corporation Commission	Public Service Co. of Oklahoma	PUD 201500208	Cost of capital, depreciation rates, terminal salvage	Public Utility Division
Oklahoma Corporation Commission	Oklahoma Natural Gas Company	PUD 201500213	Cost of capital, depreciation rates, net salvage	Public Utility Division

Proxy Group Summary

Company	Ticker	Market Cap. ($ millions)	Market Category	Value Line Safety Rank	Financial Strength
American States Water Company	AWR	3,000	Mid Cap	2	A
California Water Service Group	CWT	3,000	Mid Cap	3	B++
Essential Utilities, Inc.	WTRG	10,100	Large Cap	3	B++
Middlesex Water Company	MSEX	1,200	Small Cap	2	B++
SJW Group	SJW	2,100	Mid Cap	3	B+
Atmos Energy Corp	ATO	16,500	Large Cap	1	A+
Eversource Energy	ES	18,600	Large Cap	2	A
NiSource Inc.	NI	10,300	Large Cap	3	B+
Northwest Natural Gas Company	NWN	1,300	Small Cap	3	A
ONE Gas, Inc.	OGS	3,300	Mid Cap	2	B++
Spire Inc.	SR	3,000	Mid Cap	2	B++

Value Line Investment Survey

DCF Stock and Index Prices

Ticker	^GSPC	AWR	CWT	WTRG	MSEX	SJW	ATO	ES	NI	NWN	OGS	SR
30-day Average	4570	80.81	51.53	35.56	66.38	65.72	113.08	58.66	26.03	37.48	60.86	60.86
Standard Deviation	103.8	1.78	1.41	0.92	2.72	2.00	1.76	2.63	0.53	1.04	1.80	2.48
11/08/23	4383	78.17	49.75	34.24	63.16	62.50	108.49	55.10	24.98	36.71	59.06	56.38
11/09/23	4347	77.62	49.41	33.87	63.02	62.10	110.50	53.66	24.82	36.11	59.54	56.48
11/10/23	4415	77.07	49.01	33.67	61.38	61.75	110.62	53.23	25.00	36.20	59.67	56.25
11/13/23	4412	77.24	48.73	33.49	61.67	61.61	110.33	52.47	24.81	35.75	59.02	56.55
11/14/23	4496	81.44	51.90	35.45	66.18	65.46	113.33	55.63	25.97	37.26	61.46	58.94
11/15/23	4503	80.57	51.30	35.42	65.73	64.97	112.72	56.64	25.75	37.36	61.79	59.20
11/16/23	4508	80.40	51.03	35.31	65.64	64.82	113.24	56.87	25.77	37.15	61.75	59.03
11/17/23	4514	80.75	51.44	35.57	65.63	65.39	113.09	57.89	26.08	37.22	61.68	60.64
11/20/23	4547	79.47	50.35	35.03	63.50	64.57	112.12	57.68	26.06	36.73	60.41	60.24
11/21/23	4538	79.21	50.14	34.77	64.45	64.24	110.81	58.20	26.01	36.30	59.07	59.05
11/22/23	4557	80.85	50.77	34.96	65.33	64.86	112.25	58.90	26.19	36.65	59.31	59.81
11/24/23	4559	80.67	51.15	35.33	65.51	65.17	112.00	58.63	26.10	36.47	58.99	60.01
11/27/23	4550	80.60	50.93	35.24	65.58	65.08	112.64	58.41	26.20	36.73	58.78	60.19
11/28/23	4555	79.88	50.57	35.37	63.79	64.70	112.50	59.29	26.18	36.70	59.02	60.61
11/29/23	4551	79.23	50.14	35.37	63.82	64.42	112.05	59.08	25.81	36.37	58.87	60.20
11/30/23	4568	79.90	50.57	35.61	63.90	65.64	113.81	58.78	25.64	36.62	57.63	60.29
12/01/23	4595	81.26	51.69	36.03	65.98	66.92	113.85	60.13	26.20	37.30	59.74	61.15
12/04/23	4570	82.85	53.05	36.26	68.61	68.23	114.92	60.05	26.44	38.18	61.88	61.83
12/05/23	4567	81.79	52.83	35.83	67.88	67.55	113.88	59.55	26.14	37.73	60.31	61.11
12/06/23	4549	82.39	52.73	36.37	68.40	67.67	114.73	59.96	26.41	38.31	61.33	62.70
12/07/23	4586	82.30	52.75	36.33	68.25	67.97	114.53	59.73	26.43	38.58	61.09	63.15
12/08/23	4604	81.58	52.33	36.00	67.59	67.56	113.46	59.02	26.30	38.63	61.55	62.88
12/11/23	4622	81.53	52.50	35.74	67.49	66.44	113.32	60.14	26.34	38.60	61.11	63.38
12/12/23	4644	81.69	52.55	35.59	68.01	66.68	113.70	59.57	26.18	38.38	61.04	63.90
12/13/23	4707	84.19	53.91	37.11	71.57	69.19	116.85	62.42	27.03	39.76	64.16	65.30
12/14/23	4720	83.61	53.82	37.10	71.01	68.17	115.39	62.86	26.68	39.28	64.46	64.66
12/15/23	4719	82.09	52.64	36.09	69.69	66.97	114.82	61.82	26.48	38.43	63.23	62.93
12/18/23	4741	81.75	52.25	36.08	69.28	66.52	114.28	61.98	26.39	38.04	63.02	62.80
12/19/23	4768	83.05	53.59	36.76	70.45	67.77	115.15	61.60	26.54	38.62	63.72	63.58
12/20/23	4698	81.24	52.21	36.67	68.76	66.63	113.16	60.53	26.08	38.20	63.01	62.70

All prices are adjusted closing prices reported by Yahoo! Finance, http://finance.yahoo.com

DCF Dividend Yields

Exhibit DJG-4

Company	Ticker	[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield
American States Water Company	AWR	1.72	80.81	2.13%
California Water Service Group	CWT	1.04	51.53	2.02%
Essential Utilities, Inc.	WTRG	1.23	35.56	3.46%
Middlesex Water Company	MSEX	1.30	66.38	1.96%
SJW Group	SJW	1.52	65.72	2.31%
Atmos Energy Corp	ATO	3.22	113.08	2.85%
Eversource Energy	ES	2.70	58.66	4.60%
NiSource Inc.	NI	1.00	26.03	3.84%
Northwest Natural Gas Company	NWN	1.95	37.48	5.20%
ONE Gas, Inc.	OGS	2.60	60.86	4.27%
Spire Inc.	SR	3.02	60.86	4.96%
Average		**$1.94**	**$59.72**	**3.42%**

[1] Yahoo Finance

[2] Average stock price from Exhibit DJG-3

[3] = [1] / [2]

DCF Terminal Growth Rate Determinants

Terminal Growth Determinants	Rate	
Nominal GDP	3.8%	[1]
Real GDP	1.7%	[2]
Average	2.8%	
Highest	**3.8%**	

CBO, The 2023 Long-Term Budget Outlook, p. 28

DCF Final Result

Company	Ticker	[1] Dividend Yield	[2] Analyst Growth	[3] Sustainable Growth	[4] DCF Result (Analyst Growth)	[5] DCF Result (Sustainable Growth)
American States Water Company	AWR	2.13%	8.5%	3.8%	10.8%	6.0%
California Water Service Group	CWT	2.02%	6.5%	3.8%	8.6%	5.9%
Essential Utilities, Inc.	WTRG	3.46%	8.0%	3.8%	11.7%	7.4%
Middlesex Water Company	MSEX	1.96%	6.5%	3.8%	8.6%	5.8%
SJW Group	SJW	2.31%	5.0%	3.8%	7.4%	6.2%
Atmos Energy Corp	ATO	2.85%	7.5%	3.8%	10.6%	6.8%
Eversource Energy	ES	4.60%	6.0%	3.8%	10.9%	8.6%
NiSource Inc.	NI	3.84%	4.5%	3.8%	8.5%	7.8%
Northwest Natural Gas Company	NWN	5.20%	0.5%	3.8%	5.7%	9.2%
ONE Gas, Inc.	OGS	4.27%	5.5%	3.8%	10.0%	8.2%
Spire Inc.	SR	4.96%	5.0%	3.8%	10.2%	9.0%
Average (Total)		**3.42%**	**5.8%**	**3.8%**	**9.4%**	**7.3%**
Average (Water Group)		**2.38%**	**6.9%**	**3.8%**	**9.4%**	**6.3%**
Average (Non-Water Group)		**4.29%**	**4.8%**	**3.8%**	**9.3%**	**8.3%**

[1] Dividend Yield from Exhibit DJG-4
[2] Forecasted dividend growth rates - Value Line
[3] Sustainable growth rate from Exhibit DJG-5
[4] Annual Compounding DCF = $D_0 (1 + g) / P_0 + g$ (using analyst short-term growth rates)
[5] Annual Compounding DCF = $D_0 (1 + g) / P_0 + g$ (using maximum sustainable growth rate)

CAPM Risk-Free Rate

Date	Rate
11/08/23	4.64%
11/09/23	4.77%
11/10/23	4.73%
11/13/23	4.75%
11/14/23	4.61%
11/15/23	4.68%
11/16/23	4.63%
11/17/23	4.59%
11/20/23	4.57%
11/21/23	4.57%
11/22/23	4.55%
11/24/23	4.60%
11/27/23	4.53%
11/28/23	4.52%
11/29/23	4.44%
11/30/23	4.54%
12/01/23	4.40%
12/04/23	4.43%
12/05/23	4.30%
12/06/23	4.22%
12/07/23	4.25%
12/08/23	4.31%
12/11/23	4.32%
12/12/23	4.30%
12/13/23	4.19%
12/14/23	4.03%
12/15/23	4.00%
12/18/23	4.05%
12/19/23	4.03%
12/20/23	3.98%
Average	**4.42%**

*Daily Treasury Yield Curve Rates on 30-year T-bonds, http://www.treasury.gov/resources-center/data-chart-center/interest-rates/

CAPM Beta Coefficient

Company	Ticker	Beta
American States Water Company	AWR	0.70
California Water Service Group	CWT	0.75
Essential Utilities, Inc.	WTRG	1.00
Middlesex Water Company	MSEX	0.75
SJW Group	SJW	0.85
Atmos Energy Corp	ATO	0.85
Eversource Energy	ES	0.90
NiSource Inc.	NI	0.90
Northwest Natural Gas Company	NWN	0.85
ONE Gas, Inc.	OGS	0.85
Spire Inc.	SR	0.85
Average		0.84

Betas from Value Line Investment Survey

CAPM Implied
Equity Risk Premium Estimate

Year	[1] Market Value	[2] Operating Earnings	[3] Dividends	[4] Buybacks	[5] Earnings Yield	[6] Dividend Yield	[7] Buyback Yield	[8] Gross Cash Yield
2012	12,742	870	281	399	6.83%	2.20%	3.13%	5.33%
2013	16,495	956	312	476	5.80%	1.89%	2.88%	4.77%
2014	18,245	1,004	350	553	5.50%	1.92%	3.03%	4.95%
2015	17,900	885	382	572	4.95%	2.14%	3.20%	5.33%
2016	19,268	920	397	536	4.77%	2.06%	2.78%	4.85%
2017	22,821	1,066	420	519	4.67%	1.84%	2.28%	4.12%
2018	21,027	1,282	456	806	6.10%	2.17%	3.84%	6.01%
2019	26,760	1,305	485	729	4.88%	1.81%	2.72%	4.54%
2020	31,659	1,019	480	520	3.22%	1.52%	1.64%	3.16%
2021	40,356	1,739	511	882	4.31%	1.27%	2.18%	3.45%
2022	32,133	1,656	565	923	5.15%	1.76%	2.87%	4.63%

Cash Yield	4.65%	[9]
Growth Rate	6.64%	[10]
Risk-free Rate	4.42%	[11]
Current Index Value	4,570	[12]

Year	[13] 1	[14] 2	[15] 3	[16] 4	[17] 5
Expected Dividends	227	242	258	275	293
Expected Terminal Value					5727
Present Value	206	201	195	189	3779

Intrinsic Index Value	4570	[18]
Required Return on Market	9.8%	[19]
Implied Equity Risk Premium	**5.3%**	[20]

[1-4] S&P Quarterly Press Releases, data found at https://us.spindices.com/indices/equity/sp-500 (additional info tab) (all dollar figures are in $ billions)
[1] Market value of S&P 500
[5] = [2] / [1]
[6] = [3] / [1]
[7] = [4] / [1]
[8] = [6] + [7]
[9] = Average of [8]
[10] = Compund annual growth rate of [2] = (end value / beginning value)^ $^{1/10}$-1
[11] Risk-free rate from DJG risk-free rate exhibit
[12] 30-day average of closing index prices from DJG stock price exhibit
[13-16] Expected dividends = [9]*[12]*(1+[10])^{n} ; Present value = expected dividend / (1+[11]+[19])^{n}
[17] Expected terminal value = expected dividend * (1+[11]) / [19] ; Present value = (expected dividend + expected terminal value) / (1+[11]+[19])^{n}
[18] = Sum([13-17]) present values.
[19] = [20] + [11]
[20] Internal rate of return calculation setting [18] equal to [12] and solving for the discount rate

CAPM Equity Risk Premium Results

IESE Business School Survey	5.7%	[1]
Kroll (Duff & Phelps) Report	5.5%	[2]
Damodaran (average)	4.5%	[3]
Garrett	5.3%	[4]
Average	**5.3%**	

CAPM Results

Company	Ticker	[1] Beta	[2] CAPM Result
American States Water Company	AWR	0.70	8.1%
California Water Service Group	CWT	0.75	8.4%
Essential Utilities, Inc.	WTRG	1.00	9.7%
Middlesex Water Company	MSEX	0.75	8.4%
SJW Group	SJW	0.85	8.9%
Atmos Energy Corp	ATO	0.85	8.9%
Eversource Energy	ES	0.90	9.2%
NiSource Inc.	NI	0.90	9.2%
Northwest Natural Gas Company	NWN	0.85	8.9%
ONE Gas, Inc.	OGS	0.85	8.9%
Spire Inc.	SR	0.85	8.9%
Average (Total)		0.84	8.8%
Average (Water Group)		0.81	8.7%
Average (Non-Water Group)		0.87	9.0%

Risk-free Rate	[3]	4.4%
Equity Risk Premium	[4]	5.3%

[1] From Exhibit DJG-8

[2] = [3] + [1] * [4]

[3] From Exhibit DJG-7

[4] From Exhibit DJG-10

Cost of Equity Summary

Model	Water Group	Non-Water Group	Total Group
CAPM (at Proxy Debt Ratio)	8.7%	9.0%	8.8%
Hamada CAPM (at Company-Proposed Debt Ratio)			8.5%
DCF Model (Analyst Growth)	9.4%	9.3%	9.4%
DCF Model (Sustainable Growth)	6.3%	8.3%	7.3%
Average	**8.1%**	**8.8%**	**8.5%**
Range	**6.3%**	**-** **9.4%**	

Proxy Company Debt Ratios

Company	Ticker	Debt Ratio
American States Water Company	AWR	44%
California Water Service Group	CWT	42%
Essential Utilities, Inc.	WTRG	52%
Middlesex Water Company	MSEX	44%
SJW Group	SJW	56%
Atmos Energy Corp	ATO	38%
Eversource Energy	ES	57%
NiSource Inc.	NI	58%
Northwest Natural Gas Company	NWN	54%
ONE Gas, Inc.	OGS	42%
Spire Inc.	SR	55%
Average		49%

Debt ratios from Value Line Investment Survey - 2023

Competitive Industry Debt Ratios

Industry	# Firms	Debt Ratio
Air Transport	21	84%
Hotel/Gaming	69	82%
Hospitals/Healthcare Facilities	34	82%
Retail (Automotive)	30	78%
Brokerage & Investment Banking	30	76%
Computers/Peripherals	42	71%
Bank (Money Center)	7	68%
Cable TV	10	68%
Food Wholesalers	14	67%
Advertising	58	67%
Oil/Gas Distribution	23	66%
Rubber& Tires	3	65%
Transportation (Railroads)	4	65%
Real Estate (Operations & Services)	60	64%
Retail (Grocery and Food)	13	64%
Retail (Special Lines)	78	64%
Recreation	57	62%
Insurance (Life)	27	61%
Trucking	35	61%
Packaging & Container	25	61%
Power	48	60%
Telecom. Services	49	60%
Telecom (Wireless)	16	60%
R.E.I.T.	223	60%
Auto & Truck	31	59%
Utility (General)	15	59%
Household Products	127	58%
Office Equipment & Services	16	58%
Environmental & Waste Services	62	57%
Utility (Water)	16	57%
Retail (Distributors)	69	57%
Transportation	18	57%
Green & Renewable Energy	19	57%
Computer Services	80	56%
Broadcasting	26	56%
Retail (Online)	63	56%
Apparel	39	56%
Aerospace/Defense	77	56%
Paper/Forest Products	7	55%
Beverage (Soft)	31	55%
Farming/Agriculture	39	54%
Reinsurance	1	53%
Chemical (Diversified)	4	52%
Construction Supplies	49	52%
Retail (General)	15	52%
Business & Consumer Services	164	52%
Real Estate (Development)	18	51%
Furn/Home Furnishings	32	51%
Total / Average	**1,994**	**61%**

http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/dbtfund.htm

Hamada Model

Unlevering Beta

Proxy Debt Ratio	49%	[1]
Proxy Equity Ratio	51%	[2]
Debt / Equity Ratio	96%	[3]
Tax Rate	26%	[4]
Equity Risk Premium	5.3%	[5]
Risk-free Rate	4.4%	[6]
Proxy Group Beta	0.84	[7]
Unlevered Beta	0.49	[8]

Relevered Betas and Cost of Equity Estimates

[9] Debt Ratio	[10] D/E Ratio	[11] Levered Beta	[12] Cost of Equity
0%	0%	0.49	7.0%
20%	25%	0.58	7.5%
30%	43%	0.65	7.8%
45%	81%	0.78	8.5%
49%	96%	0.84	8.8%
53%	113%	0.90	9.2%
60%	150%	1.04	9.9%

[1] Company proposed debt ratio

[2] Company proposed equity ratio

[3] = [1] / [2]

[4] Company assumed tax rate

[5] Equity risk premium from Exhibit DJG-11

[6] Risk-free rate from Exhibit DJG-11

[7] Average proxy beta from Exhibit DJG-11

[8] = [7] / (1 + (1 - [4]) * [3])

[9] Various debt ratios (Garrett proposed highlighted)

[10] = [9] / (1 - [9])

[11] = [8] * (1 + (1 - [4]) * [10])

[12] = [6] + [11] * [5]

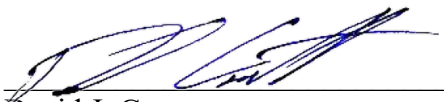
BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, David J. Garrett, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 3, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: February 1, 2024

Signature: 

David J. Garrett

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*4895-3563-8687

OCA Statement 3R

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:		
v.	:	Docket Nos.	R-2023-3043189 (Water)
Pennsylvania-American Water Company	:		R-2023-3043190 (Wastewater)

REBUTTAL TESTIMONY

OF

DAVID J. GARRETT

ON BEHALF OF

THE PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

February 21, 2024

Q. Please state your name and business address.

A. My name is David J. Garrett. My business address is 101 Park Avenue, Suite 1125, Oklahoma Borough, Oklahoma 73102.

Q. By whom are you employed and in what capacity?

A. I am the managing member of Resolve Utility Consulting, PLLC.

Q. Did you file direct testimony in this proceeding?

A. Yes. I submitted direct testimony (OCA Statement 3) in this proceeding on February 1, 2024 on behalf of the Pennsylvania Office of Consumer Advocate ("OCA"). My direct testimony addressed my opinion on the estimated cost of capital and awarded rate of return recommendation for Pennsylvania-American Water Company ("PAWC" or the "Company").

Q. What is the purpose of your rebuttal testimony?

A. My rebuttal testimony addresses portions of the direct testimony of Kevin Higgins, who submitted direct testimony on behalf of the Pennsylvania Office of Small Business Advocate ("OSBA"), D.C. Patel, who submitted testimony on behalf of the Bureau of Investigation & Enforcement ("I&E"), and Billie S. LaConte, who submitted testimony on behalf of the Pennsylvania-American Water Large Users Group ("PAWLUG").

Q. Please summarize the issues in Mr. Higgins's testimony you are addressing.

A. In his direct testimony, Mr. Higgins recommends a reduction to the Company's total revenue requirement, which includes a "proxy" return on equity ("ROE") of 9.65%.

Q. Does Mr. Higgins make any recommendations in his testimony regarding the Company's estimated cost of equity or an appropriate authorized rate of return?

A. No. My understanding of Mr. Higgins's testimony is that he used an ROE of 9.65% as a proxy for calculating a revenue requirement for PAWC, which was based on the ROE

authorized for PAWC's Distribution System Improvement Charges ("DSIC").[1] However, Mr. Higgins does not make any recommendations regarding an appropriate authorized ROE or capital structure for PAWC in this proceeding.

Q. Please summarize the issues in Ms. LaConte's testimony you are addressing.

A. In her direct testimony, Ms. LaConte states that PAWC's requested ROE is excessive.[2] Like Mr. Higgins, she references the 9.65% ROE approved by the Commission for calculating the DSIC where the utility has not had an equity return rate – specific to that utility – approved in a fully litigated base rate proceeding within a certain timeframe.[3] It is my understanding of Ms. LaConte's testimony that she does not recommend what ROE is appropriate for PAWC, only that the most recent DSIC ROE of 9.65% is one of several indicators that show PAWC's proposed ROE is excessive.

Q. Does your analysis of PAWC's cost of equity indicate that its authorized ROE should be lower than 9.65%?

A. Yes. As discussed in my direct testimony (OCA Statement 3), PAWC's estimated cost of equity is only 9.1% based on my analyses. However, if the Commission accepts the Company's proposed capital structure and/or adopts either of the Company's proposed alternative ratemaking proposals, then a fair authorized ROE for the Company would be 8.7%.

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[1] Direct Testimony of Kevin Higgins, p. 8, lines 1-8.

[2] Direct Testimony of Billie S. LaConte, p. 5, line 1 through p. 7, line 8.

[3] 66 Pa. C.S. § 1357(b)(2).

Q. Please summarize the issues in Mr. Patel's testimony you are addressing.

A. In his direct testimony, Mr. Patel recommends "using the Company's claimed capital structures"[4] which consists of 44% debt for water operations and 43% debt for wastewater operations.

Q. Do you agree with Mr. Patel's recommendation regarding PAWC's capital structure?

A. No. I disagree with Mr. Patel's recommended capital structure because it would result in an unreasonably high authorized rate of return and would be unfair to ratepayers. The average debt ratio of PAWC's proxy group of utilities is 49%, as discussed in my direct testimony. In order for costs of equity estimates produced by financial modeling which relies on a proxy group to be accurate, any discrepancy between the average debt ratio of the proxy group and the debt ratio of the subject utility (PAWC) must be mathematically reconciled by adjusting the modeling results and/or imputing a ratemaking capital structure that is commensurate with the proxy group. According to Mr. Patel, PAWC's proposed capital structure falls within the "range" of his proxy group's capital structures. In my experience, cost of capital analysts almost always rely on proxy group averages (or medians) for their financial modeling (e.g., average stock price, average dividend yield, average beta, etc.). It is only for the capital structure that analysts (typically representing utility companies) will switch to emphasizing that their proposed capital structure falls within the proxy's "range." Clearly, it would be more fair and objective to use an average rather than a range for this analysis. Otherwise, it sends a signal to regulated utilities that they can simply add to their proxy group just one outlier utility with a low current debt

[4] Direct Testimony of D. C. Patel, p. 16, line 20 through p. 17, line 4.

ratio to justify their unfairly low debt ratio. In this case, for example, Atmos Energy recently reported a low debt ratio of 38%, which is much lower than the proxy group average of 49%.[5] It is not reasonable to conclude that PAWC's proposed capital structure is fair simply because it falls within the proxy group range. A fairer and more objective approach would be to use the average proxy debt ratio, as averages (and medians) are used for other inputs to the financial modeling.

Q. What is your recommendation to the Commission regarding PAWC's capital structure?

A. I recommend the Commission reject the Company's proposed capital structure. In order for the results of the ROE models to be accurate, any discrepancy between the utility's capital structure and the proxy group's capital structure must be reconciled either through a capital structure adjustment for ratemaking purposes or a lower authorized ROE. PAWC's proposed capital structure deviates from the average debt ratio of its own proxy group. As discussed further in my direct testimony, if the Commission were to adopt PAWC's proposed capital structure, it would result in an unreasonably high and unfair authorized rate of return.

Q. Does this conclude your rebuttal testimony?

A. Yes. I reserve the right to update or supplement my testimony, if necessary and appropriate. Also, to the extent I have not addressed an issue or proposal raised by the other parties in this proceeding, it should not be construed that I agree with the same.

[5] *See* Exhibit DJG-13.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, David J. Garrett, hereby state that the facts above set forth in my Rebuttal Testimony, OCA Statement 3R, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: February 21, 2024

Signature:

David J. Garrett

Consultant Address: Resolve Utility Consulting PLLC
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Oklahoma City, OK 73102

*4890-1068-6117

OCA Statement 3SR

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:		
v.	:	Docket Nos.	R-2023-3043189 (Water)
Pennsylvania-American Water Company	:		R-2023-3043190 (Wastewater)

SURREBUTTAL TESTIMONY

OF

DAVID J. GARRETT

ON BEHALF OF

THE PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

March 4, 2024

I. INTRODUCTION

Q. State your name and occupation.

A. My name is David J. Garrett. I am a consultant specializing in public utility regulation. I am the managing member of Resolve Utility Consulting PLLC.

Q. Have you previously filed testimony in this proceeding?

A. Yes. I filed direct testimony in OCA Statement 3 on February 1, 2024, on behalf of the Pennsylvania Office of Consumer Advocate ("OCA"). A summary of my qualifications is included in my direct testimony.

Q. What is the purpose of your surrebuttal testimony?

A. My surrebuttal testimony responds to the rebuttal testimony of Pennsylvania-American Water Company ("PAWC" or the "Company") witness Ann Bulkley regarding cost of capital and rate of return issues, including the Company's claim for a management adder. I will also respond to PAWC witness Ashely Everette and Justin Ladner regarding the management adder.

Q. Did the Company's rebuttal testimony cause you to change any of your positions or recommendations discussed in your direct testimony?

A. No. Additionally, to the extent I do not specifically address a statement made in the company's rebuttal testimony filed in this case, it should not constitute my agreement with such testimony.

Q. Are you sponsoring any exhibits to your surrebuttal testimony?

A. No.

Q. Please summarize your surrebuttal testimony directed to the rebuttal testimony of Ms. Bulkley.

A. In my surrebuttal testimony to Ms. Bulkley, I will address the assertions made in her rebuttal testimony regarding the Discounted Cash Flow ("DCF") Model, the Capital Asset Pricing Model ("CAPM"), and capital structure.

II. DCF Analysis

Q. Please summarize Ms. Bulkley's updated DCF results.

A. In her rebuttal testimony, Ms. Bulkley updated her cost of equity results. Her updated DCF results range from 8.65% - 11.34%.

Q. Do you believe the results of Ms. Bulkley's updated DCF Model indicated a reasonable cost of equity estimate for PAWC?

A. As stated in my direct testimony, I believe a reasonable cost of equity estimate for PAWC is 9.1%. The results of my CAPM analysis indicate PAWC's cost of equity could be as low as 8.7% for the water group. Thus, I believe the results of some of Ms. Bulkley's DCF Model variations do indicate a reasonable cost of equity for PAWC. Specifically, any of her modeling results ranging from 8.65% (the bottom of her range) to 9.1% would be reasonable cost of equity indication for the Company, and they would also equate to much more reasonable authorized ROEs than the one proposed by Ms. Bulkley (10.95%). The variation in outcomes of Ms. Bulkley's DCF Model variations are primarily due to the wide range in her long-term growth rate estimates. As discussed in my direct testimony, any long-term growth projection in earnings or dividends that exceed long-term growth

projections of the aggregate economy's growth rate (measured in U.S. GDP) should be viewed with caution if not rejected outright. Using analysts' long-term dividend growth rate projections, the "analyst growth" variation of my DCF Model produced a result of 9.4% (both water and total proxy groups).[1] This DCF result was based on an average long-term growth rate of 6.9% for the water group. Even an annual growth rate of 6.9% in earnings and/or dividends is not sustainable from a qualitative perspective (a concept discussed in my direct testimony), as it exceeds long-term GDP annual growth estimates by nearly 300 basis points. Accordingly, any of Ms. Bulkley's DCF Model variations exceeding these results should be rejected by the Commission as unreasonably high.

III. CAPM Analysis

Q. Please summarize Ms. Bulkley's criticisms of your CAPM analysis.

A. The primary contentious issue under the CAPM is the equity risk premium ("ERP") (referred to as the "market risk premium" in Ms. Bulkley' testimony). Ms. Bulkley disagrees with the ERP of 5.3% that I used in my CAPM. She also disagrees with my rejection of her ECAPM analysis.

Q. Please briefly reiterate the sources you considered for the ERP estimate.

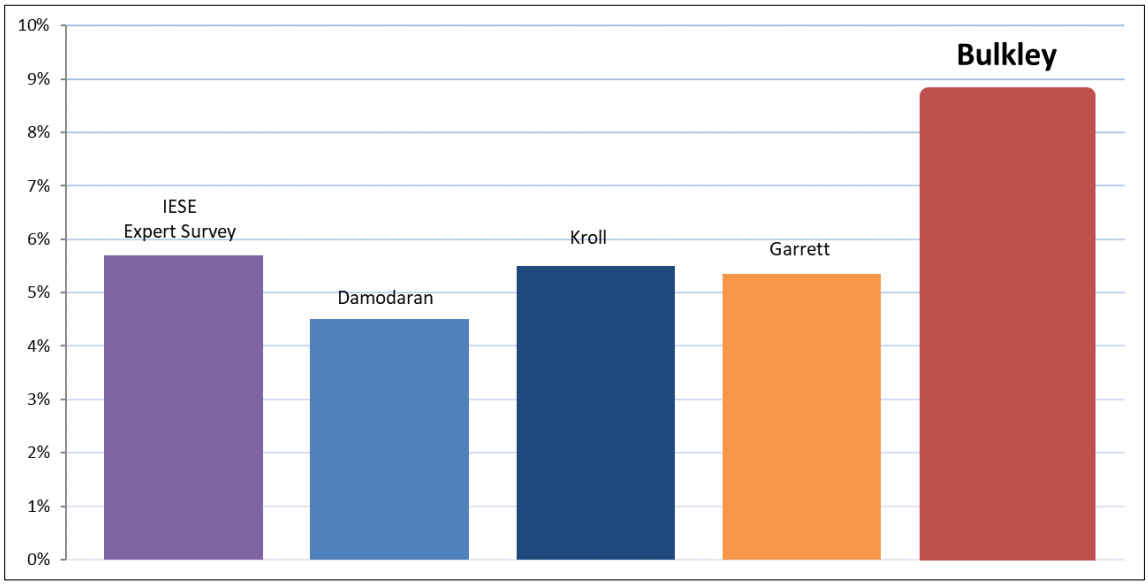
A. The ERP is an important figure for financial and market analysts in all industries, not just utility regulation. Thus, many analysts, managers, investors, and academics are constantly

[1] Exhibit DJG-6.

studying and are concerned with obtaining a reliable and accurate estimate of this important number, which can be used in a variety of financial analyses, including the CAPM. All else held constant, a higher ERP will result in a higher indicated higher cost of equity and apply upward pressure on the authorized ROE. I considered three reliable and objective sources to include in my overall ERP estimate, including the result of the IESE Business School survey of experts, the estimate published by Kroll (formerly Duff & Phelps), and the estimate published by one of the world's leading experts on the issue, Dr. Aswath Damodaran. I also conducted and presented my own ERP estimate, the result of which is similar to those from the other sources. The figure below contrasts the ERP estimates from these sources with the ERP estimated by Ms. Bulkley.[2]

[2] *See also* Exhibit DJG-10.

Figure 1:
Equity Risk Premium Comparison



When compared with other independent sources for the ERP (as well as my estimate), which do not have a wide variance, Ms. Bulkley' ERP estimate is clearly not within the range of reasonableness.[3] In her rebuttal testimony, Ms. Bulkley offers various criticisms of the ERP estimate from these other sources. Ultimately, however, Ms. Bulkley is suggesting to the Commission that her ERP estimate is more accurate than the aggregate opinions of more than 1,300 expert survey respondents, a leading global provider of risk management and valuation, and one of the world's leading academics on the ERP.

[3] Ms. Bulkley's ERP estimate in her initial cost of equity estimate filed in her direct testimony was as high as 8.69%. In her updated cost of equity analysis, her ERP results range is as high as 8.12%. *See* PAWC Exhibit No. 13-R, Sch. 3. The graph in Figure 1 is from my direct testimony, which represents an ERP estimate of 8.69% from Ms. Bulkley's direct testimony.

Q. Are the ERP estimates from the IESE Business School survey of experts, Kroll, and Dr. Damodaran immune to any criticism?

A. No, of course not. The ERP cannot be directly measured; thus, it must be estimated, which can be done through a variety of different methods. Nonetheless, the end result will necessarily be an estimate. Thus, any estimate of the ERP can be criticized. In her rebuttal testimony, Ms. Bulkley offers various critiques of the ERP estimates from each of these sources. Ultimately, however, Ms. Bulkley is asking the Commission to accept her ERP estimate over the estimates published by these other sources. In my opinion, the ERP estimates provided by the survey of experts, Kroll, and Dr. Damodaran are more objective, reasonable, and unbiased than Ms. Bulkley' ERP estimate. Moreover, the ERP results from these sources do not have a wide variance, which provides further indication of a fairly tight, reasonable range for the ERP, from which Ms. Bulkley's ERP estimate clearly and significantly diverges.

IV. Capital Structure

Q. Please summarize Ms. Bulkley's criticisms of your capital structure adjustment.

A. Ms. Bulkley disagrees with my recommendation to impute a capital structure for the Company that is equal to the proxy group average. Ms. Bulkley suggests that capital structure comparisons should be made to the operating subsidiaries of the proxy group rather than the proxy companies themselves (i.e., the holding companies).

Q. What is your response to Ms. Bulkley's rebuttal testimony on this issue?

A. I disagree with Ms. Bulkley's argument that it is more appropriate to consider the operating subsidiaries of the proxy group companies rather than the holding companies. The reason she is incorrect is because all of the other inputs to the financial models employed in this case (the CAPM and DCF Model) are derived directly from the proxy holding companies. There is a direct relationship between risk and cost of equity. The more financial risk (or debt) a company has in its capital structure, it will have an increasing effect on its cost of equity. The fact that PAWC has less debt in its capital structure relative to the proxy group is significant, and it means that PAWC has less financial risk than the proxy group. Since we are obtaining all of the other metrics used to estimate PAWC's cost of equity from the proxy group, it would be inaccurate to reject the capital structure of that same proxy group as part of the analyses.

Q. Please summarize your recommendation to the Commission regarding PAWC's authorized rate of return.

A. None of the arguments raised in Ms. Bulkley's rebuttal testimony caused me to change my recommendations as stated in my direct testimony. That is, the Commission should adopt a 9.1% for PAWC and a ratemaking capital structure for PAWC consisting of 49% debt and 51% equity.

V. Management Performance Adder

Q. Please summarize your direct testimony regarding PAWC's claim for a management performance adder of up to 25 basis points to the market-based return on equity.

A. In my direct testimony, I stated that managerial performance should not have an increasing effect on a utility's authorized ROE because the primary driver of the cost of equity and required rate of return is how market risk impacts individual firms. Managerial performance and the risk of imprudent management is related to firm-specific risks, which are not rewarded by the market because investors can eliminate such risk through diversification of portfolio, and do not have a material effect on the cost of equity. As investors in competitive firms in the marketplace cannot expect an additional return on equity simply due to prudent managerial performance, the Company as a regulated firm should not receive any premium in addition to an authorized market-based ROE due to prudent managerial performance.[4]

I also stated that while Section 523 of the Public Utility Code gives the Commission the discretion to consider the efficiency, effectiveness and adequacy of service when determining just and reasonable rates, it requires the Commission to "give effect to this section by making such adjustments to specific components of the utility's claimed cost of service as it may determine to be proper and appropriate." In my opinion, it would be *neither proper nor appropriate* for the Commission to award an ROE bump for prudent

[4] OCA St. 3 at 48.

managerial performance when investors themselves cannot expect an additional return on equity simply due to prudent managerial performance when they invest in competitive firms in the marketplace.[5]

Q. Please summarize PAWC's rebuttal testimony regarding the management performance adder.

A. In rebuttal, Ms. Bulkley criticized my direct testimony stating that there is a range of results that occur when using multiple analytical approaches to estimating the cost of equity and the analyst needs to determine where best within that range of results the authorized ROE should fall, and considering management performance is one factor that reasonably should be considered when setting the authorized ROE.[6] Ms. Everette responds to my testimony by saying that Section 523 of the Code would serve "no point" and be contrary to legislative intent if it were neither proper nor appropriate to reward a utility with an ROE bump for superior performance.[7] Mr. Ladner states that the Company has focused its attention on many areas where superior performance has not necessarily yielded a direct economic benefit to shareholders, but where superior performance will deliver direct benefits to customers, such as the Company's recognized excellence in addressing water quality and environmental issues, its success in streamlining field operations and reducing response

[5] OCA St. 3 at 49 (emphasis added).

[6] PAWC St. No. 13-R at 84.

[7] PAWC St. 1-R at 9.

times, and the Company's unwavering commitment to employee safety and employee training and development.[8]

Q. How do you respond?

A. In response to Ms. Bulkley, within the range of results of my analyses, I maintain my recommendation that a reasonable and fair return on equity is the market-determined cost of equity at 9.1%. In response to Ms. Everette, I will defer to the attorneys and their legal Briefs about the issue of the interpretation of Section 523, but I do not change my direct testimony, and I add in response that the request by the Company for an up to 25 basis point adder is completely arbitrary and not market based. The Company could have asked for any amount of adder, including one that would have set the Company's return on equity at the top of Ms. Bulkley's range at 11.34%. However, one can only guess why the Company asked for 25 basis points – one can surmise that it was for the sake of optics so as to appear as capping itself at the 10.95% ROE rather than at the top of Ms. Bulkley's range of 11.34%. However, because it is not supported, I can only guess, which demonstrates that the specific request for 25 basis points is arbitrary. The Company has not substantiated the specific amount of 25 basis points other than to say that adopting it would place the Company's return on equity within Ms. Bulkley's range, but this does not explain the specific request for 25 basis points. Given the arbitrary nature of the Company's requested amount of the adder, it would likewise be arbitrary for the

[8] PAWC St. 15-R *passim*.

Commission to award that requested amount. Mr. Ladner's testimony explains how PAWC is behaving in order to comply with its public service obligations under the law. However, Ms. Everette's and Mr. Ladner's testimonies about how the Company is going about meeting its public service obligations do not demonstrate why it would be appropriate or proper for the Commission to add an arbitrary adder to the return on equity as a reward to the Company. As discussed in my direct testimony, the legal standards of *Bluefield* and *Hope* do not establish the fair rate of return as a "quid-pro-quo" concept where arbitrary increments to cost of equity are awarded in return for a utility's management operating the public utility company in a prudent manner as required by law.

OCA witnesses Hoover, Colton, and Alexander (OCA Statements 1SR, 5SR, 6SR) provide further response to PAWC regarding the management performance adder.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does at this time.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, David J. Garrett, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 3SR, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: March 4, 2024

Signature:

David J. Garrett

Consultant Address: Resolve Utility Consulting PLLC
101 Park Avenue, Suite 1125
Oklahoma City, OK 73102

OCA STATEMENT 4

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	**)**	**Docket Nos.**	**R-2023-3043189 (Water)**
	)		**R-2023-3043190 (Wastewater)**
v.	**)**		
	)		
Pennsylvania-American Water Company	**)**		

DIRECT TESTIMONY OF

JEROME D. MIERZWA

ON BEHALF OF THE

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

FEBRUARY 1, 2024

EXETER
ASSOCIATES, INC.
10480 Little Patuxent Parkway, Suite 300
Columbia, Maryland 21044

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I. INTRODUCTION

Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is Jerome D. Mierzwa. I am a Principal and Vice President of Exeter Associates, Inc. ("Exeter"). My business address is 10480 Little Patuxent Parkway, Suite 300, Columbia, Maryland 21044. Exeter specializes in providing public utility-related consulting services.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I graduated from Canisius College in Buffalo, New York, in 1981 with a Bachelor of Science Degree in Marketing.[1] In 1985, I received a Master's Degree in Business Administration with a concentration in finance, also from Canisius College. In July 1986, I joined National Fuel Gas Distribution Corporation ("NFG Distribution") as a Management Trainee in the Research and Statistical Services Department ("RSS"). I was promoted to Supervisor RSS in January 1987. While employed with NFG Distribution, I conducted various financial and statistical analyses related to the Company's market research activity and state regulatory affairs. In April 1987, as part of a corporate reorganization, I was transferred to National Fuel Gas Supply Corporation's ("NFG Supply") rate department where my responsibilities included utility cost of service and rate design analysis, expense and revenue requirement forecasting, and activities related to federal regulation. I was also responsible for preparing NFG Supply's Federal Energy Regulatory Commission ("FERC") Purchase Gas Adjustment ("PGA") filings and developing interstate pipeline and spot market

[1] Effective August 1, 2023, Canisius College became Canisius University.

supply gas price projections. These forecasts were utilized for internal planning purposes as well as in NFG Distribution's Pennsylvania purchased gas cost proceedings under Section 1307(f) of the Public Utility Code.

In April 1990, I accepted a position as a Utility Analyst with Exeter. In December 1992, I was promoted to Senior Regulatory Analyst. Effective April 1, 1996, I became a principal of Exeter. Since joining Exeter, my assignments have included water and wastewater utility class cost of service and rate design analysis, evaluating the gas purchasing practices and policies of natural gas utilities, sales and rate forecasting, performance-based incentive regulation, revenue requirement analysis, the unbundling of utility services and the evaluation of customer choice natural gas transportation programs.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY PROCEEDINGS ON UTILITY RATES?

A. Yes. I have provided testimony on more than 450 occasions in proceedings before FERC, utility regulatory Commissions in Arkansas, Connecticut, Delaware, Georgia, Illinois, Indiana, Louisiana, Maine, Maryland, Massachusetts, Montana, Nevada, New Jersey, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas, and Virginia, as well as before the Pennsylvania Public Utility Commission ("Commission").

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. On November 8, 2023 the Pennsylvania-American Water Company ("PAWC" or "Company") filed an application to increase rates for water utility service by $199.2 million, or 24.2%, and to increase rates for wastewater service by $4.7 million, or 2.5%. These amounts are not cost of service based, rather they reflect PAWC's decision to shift $71 million in PAWC's calculated wastewater revenue requirement to water customers. Thus, realistically, at PAWC's calculated revenue requirement, an actual

cost of service based proposal would have increased water rates by approximately $128 million and wastewater rates by $75 million. Exeter was retained by the Pennsylvania Office of Consumer Advocate ("OCA") to review and analyze the water and wastewater class cost of service ("CCOS") studies and the rate design proposals included in PAWC's application. My testimony addresses the Company's water and wastewater CCOS studies, its revenue allocations, and rate design proposals.

Q. HAVE YOU PREPARED EXHIBITS TO ACCOMPANY YOUR TESTIMONY?

A. Yes, I have. Schedules JDM-1 through JDM-7 are attached to my testimony.

Q. PLEASE DESCRIBE THE REVENUE REQUIREMENT PRESENTATION BY PAWC IN THIS CASE.

A. As discussed in the direct testimony of OCA witness Ralph Smith (OCA Statement 2), PAWC has presented revenue increases for one water utility operations (Water Operations) revenue requirement and for four wastewater utility operations (Wastewater Operations) revenue requirement. The Company's four separate Wastewater Operations revenue requirements in this proceeding reflect a wastewater sanitary sewer system ("Wastewater SSS General Operations") general group and a combined sewer system ("CSS Wastewater Operations") group. PAWC is also presenting separate revenue requirements for the wastewater systems that the Company expects to acquire from the Butler Area Sewer Authority ("BASA Wastewater Operations") and for the Borough of Brentwood ("Brentwood Wastewater Operations"), pursuant to the pending acquisition applications.

Q. PLEASE DESCRIBE THE SERVICES AND RATES ZONES CURRENTLY PROVIDED BY PAWC?

A. PAWC currently provides water utility service through its Water Operations in five different rate zones. Those rate zones are as follows:

- Rate Zone 1 - General Statewide Rate
- Rate Zone 2 - Valley
- Rate Zone 3 - SLIBCO
- Rate Zone 4 - Turbotville
- Rate Zone 5 - Steelton

The largest of these rate zones by far is Rate Zone 1, with over 99% of the Company's total water revenue. PAWC has filed applications with the Commission to acquire two water systems, the Audubon Water Company ("Audubon Water") and Farmington Township Water System ("Farmington Water"), and proposes to establish those systems as separate rate zones. These acquisitions are included in PAWC's revenue requirement claim for its Water Operations in this proceeding. Consistent with the testimony of OCA witness Ralph Smith (OCA Statement 2), the OCA believes that these systems should be excluded from ratemaking rate base and revenue requirement because it is premature to judge what the PUC will do with the pending applications.

PAWC currently provides Sanitary Sewer System ("SSS") wastewater service through its Wastewater SSS General Operations in six different rate zones. Those rate zones are as follows:

- Rate Zone 1 – General Statewide Rate
- Rate Zone 2 – New Cumberland
- Rate Zone 5 – Valley
- Rate Zone 7 – York
- Rate Zone 8 – Foster Township

- Rate Zone 9 – Royersford

The largest of these rate zones is Rate Zone 1, with approximately 60% of the Company's total current SSS wastewater revenue. PAWC has filed applications to acquire four wastewater systems, the Farmington Township Wastewater System ("Farmington Wastewater"), Sadsbury Township Municipal Authority ("Sadsbury Wastewater"), Butler Area Sewer Authority ("BASA Wastewater"), and the wastewater operations of the Borough of Brentwood ("Brentwood Wastewater"). As filed, each acquisition would be established as a separate rate zone. Farmington Wastewater and Sadsbury Wastewater are included in PAWC's revenue requirement for Wastewater SSS General Operations. However, BASA Wastewater and Brentwood Wastewater are presented by PAWC as separate revenue requirement claims in this proceeding. I would note Brentwood Wastewater and Sadsbury Wastewater are collection systems that convey wastewater to third-party-owned and operated treatment facilities (*i.e.*, facilities that are not owned by PAWC). PAWC has requested fair market valuation of the BASA Wastewater and Brentwood Wastewater assets under Section 1329 of the Public Utility Code, 66 Pa. C.S. § 1329. Like the pending water acquisitions, consistent with the testimony of OCA witness Ralph Smith, the inclusion of these systems into the ratemaking rate base and revenue requirement for PAWC is premature as it is too early to know whether the PUC will allow the acquisitions to occur and whether any legal challenges will be resolved.

PAWC currently provides combined sanitary sewer system and stormwater ("CSS") wastewater service through its CSS Wastewater Operations in three different rate zones. Those rate zones are as follows:

- Rate Zone 3 - Scranton
- Rate Zone 4 - Kane

- Rate Zone 6 – McKeesport

The largest of these rate zones is Rate Zone 3, with approximately 70% of the Company's total current CSS wastewater revenue.

Q. HOW MANY CCOS STUDIES DID PAWC FILE IN ITS APPLICATION?

A. PAWC filed one CCOS study for its Water Operations (PAWC Exhibit No. 12-A), and four CCOS studies for its Wastewater Operations. PAWC filed a CCOS study for its General SSS Wastewater Operations (PAWC Exhibit No. 12-B), for its CSS Wastewater Operations (PAWC Exhibit No. 12-C), and it prepared separate wastewater service CCOS studies for the Brentwood Wastewater Operations (PAWC Exhibit No. 12-D) and the BASA Wastewater Operations (PAWC Exhibit No. 12-E). PAWC submitted a separate CCOS study for BASA Wastewater Operations to comply with the settlement filed in the acquisition proceeding on August 14, 2023. According to PAWC, a separate COSS was submitted for Brentwood Wastewater Operations to be consistent with PAWC's past practice for systems acquired under Section 1329 of the Public Utility Code.

Regarding its separate CCOS study for its CSS Wastewater Operations (PAWC Exhibit No. 12-C), as part of the settlement that was approved in PAWC's last base rate proceeding at Docket No. R-2022-3031673, the Company agreed to provide in its next base rate filing a separate revenue requirement study for its CSS operations and a CCOS study that separately identified all stormwater costs for CSS customers. The CCOS study for the CSS Wastewater Operations separately identifies the costs of providing stormwater service to be $41.0 million out of a total CSS cost of service of $93.7 million. The Company's CCOS studies for its Water and Wastewater Operations are sponsored by Constance E. Heppenstall of Gannett Fleming Valuation and Rate Consultants, LLC.

Q. DOES THE OCA AGREE WITH PAWC'S PROPOSAL TO INCLUDE THE ACQUISITIONS OF AUDUBON WATER, FARMINGTON WATER, FARMINGTON WASTEWATER, SADSBURY WASTEWATER, BRENTWOOD WASTEWATER, AND BASA WASTEWATER IN ITS REVENUE REQUIREMENT CLAIM IN THIS PROCEEDING?

A. No. As explained in greater detail in the direct testimony of OCA witness Ralph Smith (OCA Statement 2), the acquisitions of Audubon Water, Farmington Water, Farmington Wastewater, Sadsbury Wastewater, and Brentwood Wastewater have not been approved by the Commission, and there is lack of certainty whether the acquisition will be approved or close by the close of the record in this proceeding. Furthermore, in the case of BASA Wastewater, while that acquisition has been approved, the matter is currently on appeal and, thus, there remains significant regulatory uncertainty. Therefore, the revenue requirement claims of PAWC in this proceeding should be adjusted to remove the costs associated with serving these acquisitions.

Q. IS PAWC PROPOSING TO RECOVER ANY PORTION OF ITS WASTEWATER REVENUE REQUIREMENT FROM WATER CUSTOMERS IN THIS PROCEEDING?

A. Yes. PAWC is proposing to recover $71.1 million, or 27.0%, of its total wastewater revenue requirement through the rates for water service, subject to Commission approval under Section 1311(c) of the Public Utility Code. This also represents 94% of its total revenue requirement increase for wastewater that PAWC claims is necessary in this case.

Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

A. A summary of my findings and recommendations are as follows, and consistent with the OCA's position just discussed, are based on excluding the Audubon Water, Farmington Water, Farmington Wastewater, Sadsbury, Brentwood Wastewater, and BASA Wastewater acquisitions from this proceeding:

- While the water CCOS study initially filed by PAWC in this proceeding is generally reasonable, the system-wide maximum day and maximum hour extra capacity demand factors used in that CCOS study are outdated and should be modified as discussed in my testimony;

- The revised water CCOS study filed by PAWC in response to OCA 04-012 to exclude interruptible Industrial usage from the extra capacity factor allocations is unreasonable and should be rejected;

- PAWC has not updated its analysis of system wide *maximum hour* extra capacity demands since 1988. PAWC should be required to update this analysis prior to its next base rate proceeding and include the results of that analysis in the CCOS study filed in the next base rate proceeding;

- In its next base rate proceeding, the Company should include Rider Demand Industrial Sales ("DIS") and Rider Demand Resale Sales ("DRS") customers as separate customer classes in its water CCOS study. This will assist in ensuring that the rates charged to Rider DIS and DRS customers are reasonable;

- PAWC should continue to prepare separate CCOS studies for its existing Section 1329 acquisitions, either individually for each acquisition or as a group, and separate CCOS studies for new acquisitions not included in the current rate case;

- Any Act 11 shift that is authorized by the PUC should be made based on the OCA's adjusted revenue requirement. Consistent with the recommendation of OCA witness Smith (OCA Statement 2), the OCA recommends a pre-Act 11 revenue increase for water operations of $16.1 million, an increase of $20.3 million for wastewater SSS, and an increase of $7.3 million for wastewater

CSS for a total increase of no more than $43.7 million;

- If the Commission determines that it is appropriate to shift any wastewater revenue requirement to water customers, I recommend a few options that the Commission could utilize that focus on the principles of fairness and efficiency in its determination about how much to shift from each of the SSS and CSS classes so as not to overburden those classes with rate increases and not to overburden PAWC's water customers;

- If the Commission determines in this proceeding that it is appropriate to assign a portion of the wastewater revenue requirement to water customers, the Company's proposed method for allocating the shifted wastewater revenue requirement to the various water customer classes is generally reasonable, with the exception that the allocation should be based on the water CCOS study that I sponsor rather than the CCOS sponsored by the Company;

- I recommend that the existing $17.50 monthly charge for Residential water customers with a 5/8-inch, 3/4-inch, 1-inch or 1 1/2-inch meters be maintained, unless, as explained in my testimony, the increase authorized by the Commission is sufficient to justify a higher charge;

- To provide for gradualism and reduce rate shock, I recommend that the usage charge for Valley water customers currently in Rate Zone 2 be established at 70% of the proposed usage charge;

- The Rate Zone 1 Residential water usage charge established in this proceeding should be designed to recover the Residential water revenue requirement approved by the Commission in this proceeding not recovered through my recommended Residential customer charges, and my proposed usage charge for current Valley Rate Zone 2 Residential customers;

- The monthly wastewater customer service charge for all SSS Residential customers in Rate Zones 1, 2, and 5, and all CSS Residential customers in Rate Zones 3, 4, 7, and 9 should be set at $14.30;

- I generally recommend that PAWC's volumetric rate proposals be proportionately adjusted to recover the cost of service approved by the Commission for each current SSS and CSS customer class, and for Residential

customers, any revenue deficiency resulting from the adoption of my monthly Residential customer charge recommendation;

- PAWC's proposal to adopt winter average billing for Residential wastewater customers should be rejected;

- If the Commission approves a delayed effective date for any acquired systems, it should also adopt PAWC's proposal and require the Company to impute revenues to customers in those systems by calculating the proof of revenue based on the new rates that will become effective after the delay;

- The Revenue Decoupling Mechanism ("RDM") proposed by PAWC should be rejected; and

- The Environmental Compliance Investment Charge ("ECIC") proposed by PAWC should be rejected.

The OCA objects to the inclusion of any of the contested acquisitions to be included in this proceeding. However, if the Commission elects to nonetheless include speculative acquisitions, I have the following recommendations for purposes of cost allocation and rate setting:

- For the Farmington Water and Audubon Water systems, my recommended rate design would be consistent with my proposals for all water systems. That is, Residential customer charges should not exceed $17.50 for customers with 5/8-inch, 3/4-inch, 1-inch or 1½-inch meters, and any additional revenue to be recovered from Residential customers should be recovered through increases in volumetric usage charges; and

- For Farmington Wastewater, BASA Wastewater, and Brentwood Wastewater, my recommended rate design would be consistent with my proposals for Rate Zones 1, 2, 5 and 6, i.e. Residential customer charges should not exceed $14.30 for customers with 5/8-inch, ¾-inch, 1-inch, or 1½-inch meters, and any additional revenue to be recovered from Residential customers should be recovered through increases in volumetric usage charges.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A. The remainder of my testimony is divided into eight additional sections. The second section of my testimony describes and evaluates the Company's water CCOS study. The third section describes and evaluates the Company's wastewater CCOS studies. The fourth section addresses PAWC's proposal to recover a portion of the costs associated with providing wastewater service through the rates for water utility service pursuant to Section 1311(c) of the Public Utility Code. The next section presents my recommended distribution of the revenue increase authorized by the Commission for water service in this proceeding and rate design for water service. The sixth section of my testimony addresses wastewater service rate design, including PAWC's proposal to determine the volumetric component of the monthly wastewater bill for Residential customers based on average water usage during the winter months of January, February, and March ("winter averaging"). The seventh section of my testimony addresses PAWC's proposal to delay the effective date of the rate increase in certain rate zones where the system was recently acquired. Next, I address PAWC's proposed Revenue Decoupling Mechanism ("RDM"). The last section of my testimony addresses PAWC's proposed Environmental Compliance Investment Charge ("ECIC").

II. WATER CLASS COST OF SERVICE STUDY

Q. WHAT IS THE OBJECTIVE OF A CCOS STUDY?

A. A CCOS study is conducted to assist a utility or Commission in determining the level of costs properly recoverable from each of the various classes of customers to which the utility provides service. Allocation of recoverable costs to each class of service is generally based on cost causation principles.

Q. WHAT ARE THE PRIMARY CCOS STUDY METHODOLOGIES UTILIZED FOR WATER UTILITIES?

A. The two most commonly used and widely recognized methods of allocating costs to customer classes for water utilities are the base-extra capacity method and the commodity-demand method. Both methods are set forth in the American Water Works Association's ("AWWA") Manual, M1, *Principles of Water Rates, Fees, and Charges* ("AWWA M1 Manual").

Q. WHAT METHODOLOGY HAS THE COMPANY UTILIZED FOR ITS WATER CCOS STUDY?

A. PAWC has utilized the base-extra capacity method in preparing its water CCOS study. Under the base-extra capacity method, investment and costs are first classified into four primary functional cost categories: base or average capacity, extra capacity, customer, and fire protection. Once investment and costs are classified to these functional categories, they are allocated to the various customer classes.

Q. PLEASE DESCRIBE IN GREATER DETAIL THE FOUR PRIMARY FUNCTIONAL COST CATEGORIES AND HOW THEY ARE ALLOCATED TO THE VARIOUS CUSTOMER CLASSES UNDER THE BASE-EXTRA CAPACITY METHOD.

A. **Base Costs** are costs that tend to vary with the quantity of water used, plus costs associated with supplying, treating, pumping, and distributing water to customers under average load conditions. Base costs were allocated to customer classes on the basis of average daily usage in PAWC's CCOS study.

Extra Capacity Costs are costs associated with meeting usage requirements in excess of average usage. This includes operating and capital costs for additional plant and system capacity beyond that required for average usage. Extra capacity costs in the

Company's study have been subdivided into costs necessary to meet maximum day extra demand and maximum hour extra demand. These extra capacity costs were allocated to customer classes on the basis of each class's maximum day and maximum hour usage in excess of average usage.

Customer Costs are costs associated with serving customers regardless of their usage or demand characteristics. Customer costs include the operating costs related to meters and services, meter reading costs, and billing and collection costs. Customer costs were allocated on the basis of capital cost of meters and services and the number of customer bills.

Fire Protection Costs are costs associated with providing the facilities to meet the potential peak demand of fire protection service. In the Company's study, fire protection costs have been subdivided into the costs associated with meeting Public Fire Protection and Private Fire Protection demands. The extra capacity costs assigned to fire protection were allocated to Public and Private Fire Protection on the basis of the total relative demands of hydrants and fire service lines. In accordance with Section 1328 of the Public Utility Code, public fire costs exceeding 25% of the public fire cost of service were reallocated to other customer classes.

Q. PLEASE IDENTIFY THE CUSTOMER CLASSES THAT THE COMPANY HAS INCLUDED IN ITS WATER CCOS STUDY.

A. The Company has separately identified the cost of serving eight customer classes in its water CCOS study: Residential; Commercial; Industrial; Public (Municipal), Other Water Utilities Group A, Other Water Utilities Group B, Private Fire Protection; and Public Fire Protection.

Q. HAS PAWC REVISED THE WATER CCOS STUDY THAT IT INITIALLY FILED IN THIS PROCEEDING?

A. Yes. In response to OCA 04-012, PAWC indicated that it developed extra capacity factor (maximum day and maximum hour) allocations for the Industrial class in its water CCOS study which included interruptible usage. The Company claims that the usage of certain Industrial customers that are subject to curtailment should have been excluded from the extra capacity factor allocations since these customers can be interrupted during periods of peak demand. The response to OCA 04-012 includes a revised water CCOS study which excludes interruptible Industrial usage from the extra capacity factor allocations.

Q. DO YOU AGREE THAT THE WATER CCOS STUDY INITIALLY FILED BY PAWC SHOULD BE REVISED TO EXCLUDE INTERRUPTIBLE INDUSTRIAL USAGE FROM THE EXTRA CAPACITY FACTOR ALLOCATIONS?

A. No. If these interruptible Industrial customers were regularly interrupted during periods of peak demand, I would agree with PAWC's proposal to revise its initial CCOS study. However, the response to OCA 04-012 indicates that these interruptible Industrial customers are not regularly interrupted and have not been interrupted in at least three years. Therefore, since these interruptible Industrial customers are regularly served during periods of peak demand, PAWC's CCOS study should not be revised as proposed by PAWC, and interruptible Industrial customers should not be excluded from the extra capacity factor allocations.

Q. DO YOU AGREE WITH THE FUNCTIONALIZATION AND ALLOCATION OF COSTS IN THE INITIAL WATER CCOS STUDY FILED BY PAWC?

A. I generally agree with PAWC's use of the base-extra capacity methodology in its initial CCOS study. However, I believe that modifications to the system-wide maximum day and maximum hour extra capacity factors utilized to allocate functionalized costs to the various customer classifications are necessary.

Q. WHAT SYSTEM-WIDE MAXIMUM DAY AND MAXIMUM HOUR EXTRA CAPACITY DEMAND FACTORS DID THE COMPANY USE IN ITS INITIAL WATER CCOS STUDY?

A. The Company used a maximum day extra-capacity demand factor of 1.4 and a maximum hour extra capacity factor of 2.1 in both its initial and revised water CCOS study.

Q. WHAT WAS THE BASIS FOR THE SELECTION OF THESE EXTRA-CAPACITY FACTORS?

A. Ms. Heppenstall claims that the *maximum day* extra-capacity demand factor of 1.4 is reflective of actual maximum day to average day demands observed for the years 1988, 1995, 1996, 1999 and 2003. The actual *maximum day* extra-capacity demand factors experienced by the Company for the years 1987 through 2022 are identified in PAWC Exhibit No. 12-A, Schedule G. Ms. Heppenstall claims the *maximum hour* extra capacity demand factor of 2.1 is based on an analysis of peak hour consumption experienced by the Company in its three largest operating districts. This peak hour analysis was conducted in 1988. As indicated in Schedule G and confirmed by the Company's response to OCA 04-015, PAWC does not have recent actual maximum peak hour demand data for its water system.

Q. WHAT IS YOUR CONCERN WITH THE SYSTEM-WIDE MAXIMUM DAY AND MAXIMUM HOUR DEMAND FACTORS USED IN THE COMPANY'S WATER CCOS STUDY?

A. My concern with the system-wide demand factors used by the Company is that they are outdated. The system-wide *maximum day* extra capacity demand factor used in PAWC's CCOS study was last experienced in 2003, which was over 20 years ago. Since 2003, water demand on the PAWC system has changed due to aggressive water conservation, legislation, development, and changing land uses. As shown on Schedule G, since 2011, PAWC's recent actual *maximum day* extra capacity demand factor has been approximately 1.2. The system-wide *maximum hour* extra capacity demand factor used in PAWC's water CCOS study is based on an analysis from 1988, which is 35 years old.

Q. WHAT DO YOU RECOMMEND WITH RESPECT TO THE SYSTEM-WIDE DEMAND FACTORS THAT SHOULD BE USED IN THE COMPANY'S WATER CCOSS STUDY?

A. With respect to the *maximum day* extra capacity demand factor, for the reasons just discussed, I recommend that a demand factor of 1.2 be utilized in the Company's water CCOS study. As just indicated, recent actual *maximum hour* demand usage data is not available for PAWC.

Presented as Schedule JDM-1 is maximum day and maximum hour demand data for the York Water Company ("York Water"). This data is the most recent demand factor data filed with the Commission in a base rate proceeding by a major water utility of which I am aware. Based on this demand data for York Water, I believe it would be reasonable to utilize a *maximum day* extra capacity demand factor of 1.35, and a maximum hour extra-capacity demand factor of 1.65. Based on these factors, the

maximum hour extra capacity factor for York Water is approximately 125% of the maximum day extra-capacity factor (1.65/1.35). Applying this 125% ratio to PAWC's maximum day extra-capacity factor of 1.2 results in a *maximum hour* demand factor of 1.50, and I recommend that this factor be used in PAWC's CCOS study.

Q. HAVE YOU REVISED THE COMPANY'S INITIAL WATER CCOS STUDY TO REFLECT YOUR RECOMMENDED SYSTEM-WIDE DEMAND FACTORS?

A. Yes. Schedule JDM-2 presents a summary of the Company's initial CCOS study revised to reflect my recommended system-wide demand factors.

Q. HOW DO THE RESULTS OF YOUR CCOS STUDY COMPARE WITH THE RESULTS OF THE COMPANY'S INITIAL CCOSS?

A. A comparison of the results of the Company's CCOS study and my revised study is presented in Table 1. This comparison is based on PAWC's claimed level of revenue requirement but excludes any assignment of the wastewater revenue requirement to water service customers. I subsequently discuss that assignment in Section IV of my testimony.

Table 1. Water Cost of Service Study Comparison			
Classification	**Initial Company**	**OCA**	**Difference**
Residential	$603,126,055	$596,775,486	($6,350,570)
Commercial	232,115,036	228,424,759	(3,690,276)
Industrial	45,115,631	49,544,130	4,428,498
Public (Municipal)	35,175,459	37,856,691	2,681,233
Other Water Utilities – Group A	11,335	11,913	578
Other Water Utilities – Group B	624,708	449,960	(174,748)
Private Fire Protection	5,777,625	7,063,962	1,286,336
Public Fire Protection	11,847,471	13,666,421	1,818,949
Total:	**$933,793,321**	**$933,793,321**	**($0)**

It is the OCA's recommendation that costs associated with serving the Audubon Water and Farmington Water systems should be excluded from PAWC's revenue requirement claim in this proceeding. I address excluding the costs associated with serving Audubon Water and Farmington Water from PAWC's revenue requirement later in Section V of my testimony in which I discuss the allocation of the water revenue increase authorized by the Commission in this proceeding to the various customer classes served by PAWC.

Q. DO YOU HAVE ANY RECOMMENDATIONS CONCERNING THE WATER CCOS STUDY TO BE FILED BY PAWC IN ITS NEXT BASE RATE PROCEEDINGS?

A. Yes. First, as discussed above, PAWC has not conducted an analysis of its system wide *maximum hour* extra capacity demands since 1988. PAWC should be required to update its analysis of system wide *maximum hour* extra capacity demands prior to its next base rate proceeding and include the results of its updated analysis in the CCOS study filed in its next base rate proceeding . Second, as explained by Ms. Heppenstall in PAWC

Exhibit No. 12-A, page 13, lines 12 -18, PAWC currently provides contract sales service under Rider Demand Industrial Sales ("DIS") and Rider Demand Resale Sales ("DRS"). In the water CCOS study filed by PAWC in this proceeding, the Company did not separately determine the costs associated with serving Rider DIS and DRS customers. The revenues from Rider DIS and DRS customers were simply reflected as a credit to the overall cost of service. In its next base rate proceeding, I recommend that the Company include Rider DIS and DRS customers as separate customer classes and determine the cost of providing service to Rider DIS and DRS customers. This will assist in ensuring that the rates charged to Rider DIS and DRS customers are reasonable.

III. WASTEWATER COST OF SERVICE STUDIES

Q. WHAT METHODOLOGY DID THE COMPANY UTILIZE IN PREPARING ITS FOUR WASTEWATER CCOS STUDIES?

A. Ms. Heppenstall used the functional cost allocation methodology described in *Financing and Charges for Wastewater Systems; Manual of Practice No. 27* published by the Water Environment Federation ("WEF Manual of Practice No. 27"). This method allocates the cost of providing wastewater service to customer classifications in proportion to each classification's use of the service provider's facilities and services. Costs are assigned to cost components using predominant operational purposes as cost-causative factors. The functional cost allocation method is generally accepted as a sound method for allocating the cost of wastewater service.

Q. PLEASE IDENTIFY THE CUSTOMER CLASSES INCLUDED IN PAWC'S SSS AND CSS CCOS STUDIES.

A. PAWC has separately identified the cost of serving five customer classes in its SSS and CSS wastewater CCOS studies: Residential, Commercial, Industrial, Public (Municipal), and Bulk.

Q. IS EACH CUSTOMER CLASS CURRENTLY ASSESSED A SEPARATE SET OF RATES?

A. No. For most rate zones, a separate set of rates is currently assessed to Residential customers, and a separate set of rates is assessed to Commercial, Industrial, and Municipal customers (Non-Residential customers). A separate set of rates is also assessed to Bulk customers in those rate zones with Bulk customers. PAWC is not proposing to change the current rate structure in this proceeding.

Q. HAS PAWC REVISED ANY OF THE WASTEWATER CCOS STUDIES THAT IT INITIALLY PRESENTED IN ITS APPLICATION?

A. Yes. As discussed in the response to OSBA 02-003, there was a formula error in the CCOS study for SSS wastewater service presented by PAWC (PAWC Exhibit No. 12-B). This formula error was corrected in the revised SSS CCOS study included in the response to OSBA 02-003.

Q. ARE YOU RECOMMENDING ANY ADJUSTMENTS TO THE WASTEWATER CCOS STUDIES PRESENTED BY PAWC, INCLUDING THE REVISED SSS CCOS STUDY PRESENTED IN OSBA 02-003?

A. PAWC's wastewater revenue requirement claim in this proceeding includes the costs associated with the Farmington Wastewater, Sadsbury Wastewater, Brentwood Wastewater, and BASA Wastewater acquisitions. The SSS CCOS study includes the costs associated with serving Farmington Wastewater and Sadsbury. Separate CCOS

studies have been performed for Brentwood and BASA. I am not recommending any adjustments directly to the Company's SSS or CSS wastewater CCOS studies. However, I address excluding the costs associated with serving Farmington Wastewater and Sadsbury Wastewater from PAWC's revenue requirement later in Section VI of my testimony in which I discuss the allocation of the wastewater revenue increase authorized by the Commission in this proceeding to the rate zones and customer classes served by PAWC. I am not recommending any adjustments to the Brentwood Wastewater and BASA Wastewater CCOS studies as these two acquisitions should be excluded from PAWC's revenue requirement claim in this proceeding. However, as previously explained, the Company is proposing to recover 27.0% of its total wastewater cost of service, or revenue requirement, from water customers. I address this issue in the next section of my testimony.

Q. SHOULD PAWC CONTINUE TO PREPARE SEPARATE CCOS STUDIES FOR ITS SECTION 1329 ACQUISITIONS AS IT DID IN THIS PROCEEDING?

A. Yes. PAWC should continue to prepare separate CCOS studies for new Section 1329 acquisitions in the first base rate proceeding where those systems are included in PAWC's wastewater system. For Section 1329 acquisitions that are included in the current base rate case, PAWC should continue to prepare separate CCOS studies either individually for each acquisition or as a group.[2] This requirement is reasonable given the amount of revenue requirement at issue and the principle that rates should be reasonably cost-based.[3] This recommendation should be read to require PAWC to

[2] The group should not include Section 1329 acquisitions that are combined sewer systems. The combined systems (whether or not acquired under Section 1329) should be included in the separate CCOS study for CSS.
[3] PAWC claims that the full cost of service for the two Section 1329 systems (BASA and Brentwood) is $41.9 million. See PAWC Exhibit Nos. 12-D and 12-E.

provide the CCOS studies for all of the proposed acquisitions excluded in this case in any future rate case, if finally approved by the PUC and without reasonable risk of appeal or other challenge, in which they are properly included.

IV. ASSIGNMENT OF WASTEWATER AND STORMWATER COST OF SERVICE TO WATER CUSTOMERS

Q. PLEASE DESCRIBE PAWC'S PROPOSAL IN THIS PROCEEDING WITH RESPECT TO THE RECOVERY OF ITS WASTEWATER REVENUE REQUIREMENT FROM WATER CUSTOMERS.

A. PAWC is proposing to recover a portion of its wastewater revenue requirement from water customers pursuant to Section 1311(c) of the Public Utility Code. PAWC is proposing to increase wastewater rates – after its shift – by 2.5%, or $4.7 million. Essentially this entire increase has been assigned to the Brentwood and BASA Section 1329 acquisition systems, and no increases have been proposed for SSS or CSS wastewater customers. The unrecovered wastewater revenue requirement proposed to be allocated to water service is $71.1 million. Absent an allocation of any portion of the wastewater revenue requirement to PAWC's water service, on average, rates to wastewater customers, including CSS customers, would need to increase by 40.4%.[4]

Q. WHAT DOES SECTION 1311(c) PROVIDE?

A. Section 1311 reads as follows:

> § 1311 Valuation of and return on the property of a public utility.
>
> * * *
>
> (c) Segregation of property. When any public utility furnishes more than one of the different types of

[4] As discussed below, according to PAWC's filing, the indicated cost for serving the three systems in CSS is $94.4 million, or 31% of the Company's entire wastewater revenue requirement. Also see Table 2.

> utility service, the Commission shall segregate the property used and useful in furnishing each type of such service, and shall not consider the property of such public utility as a unit in determining the value of the rate base of such public utility for the purpose of fixing base rates. A utility that provides water and wastewater service shall be exempt from this subsection upon petition of a utility to combine water and wastewater revenue requirements. The Commission, when setting base rates, after notice and an opportunity to be heard, may allocate a portion of the wastewater revenue requirement to the combined water and wastewater customer base **if in the public interest**.
>
> * * *
>
> (e) Definition. As used in this section, the term "utility that provides both water and wastewater service" shall include separate Companies that individually provide water and wastewater service so long as the Companies are wholly owned by a common parent company.

66 Pa. C.S. § 1311 (effective April 16, 2012) (emphasis added).

Q. SPECIFICALLY, HOW MUCH OF THE WASTEWATER REVENUE REQUIREMENT OF EACH OF THE COMPANY'S SERVICE AREAS DOES PAWC PROPOSE TO ASSIGN TO WATER CUSTOMERS?

A. As shown in Table 2, 27.0% of the total wastewater cost of service is being assigned to water customers. This includes $41 million for stormwater costs.

Table 2. PAWC Wastewater and Stormwater Cost of Service and Allocation to Water Service

Service Area	COST OF SERVICE			Water Allocation	Net Revenue Requirement
	Wastewater	Stormwater	Total		
Sanitary Systems	$127,264,017	$0	$127,264,017	$31,962,411	**$95,301,606**
Combined Systems	53,389,162	41,027,181	94,416,343	16,007,052	**78,409,291**
Brentwood	3,758,828	0	3,758,828	1,565,232	**2,193,596**
BASA	38,135,710	0	38,135,710	21,552,699	**16,583,011**
Total	**$222,547,717**	**$41,027,181**	**$263,574,898**	**$71,087,394**	**$192,487,504**
Percent	**84.4%**	**15.6%**	**100.0%**	**27.0%**	**73.0%**

Q. HOW HAS PAWC ALLOCATED THE WASTEWATER/STORMWATER COSTS ASSIGNED TO WATER CUSTOMERS TO EACH OF THE CUSTOMER CLASSES INCLUDED IN THE COMPANY'S WATER CCOS STUDY?

A. PAWC has assigned the wastewater/stormwater costs to the Residential, Commercial, Industrial, Public (Municipal), and Private Fire Protection classes based on the cost of providing water service as indicated by its water CCOS study. None of the costs assigned to water customers have been assigned to the Other Water Utilities Group A or Group B classes. However, such assignments would have been immaterial. PAWC has also not assigned any of the wastewater revenue requirement to the Public Fire Protection classes. This is consistent with the requirement of Section 1328 of the Public Utility Code which limits Public Fire Protection charges to 25% of the indicated cost of service.

Q. BASED ON YOUR EXPERIENCE AS EXPERT WITNESS ON RATE DESIGN AND COST ALLOCATION, DO YOU HAVE ANY RECOMMENDATIONS TO THE COMMISSION FOR HOW TO DETERMINE WHETHER SUCH AN ALLOCATION IS IN THE PUBLIC INTEREST?

A. Yes. At the outset, I recognize that defining the "public interest" can be difficult. There can be more than one aspect of "the public" that is interested in, and affected by, any public policy issue including recent rate increases approved by the PUC for PAWC and allocated to wastewater customers. Furthermore, there are at least two distinct elements of the affected public: the utility's wastewater customers and the utility's water customers that must be considered. So the "public interest" should remain a flexible concept, but could include a consideration of policies that promote the cost-effective provision of safe and reliable water and wastewater service throughout the Commonwealth as well as questions about rate shock and affordability.

Q. IS THERE A RANGE OF OPTIONS THAT THE COMMISSION COULD CHOOSE TO IMPLEMENT 1311(c)?

A. Yes, the Commission can choose from a wide variety of options that would be consistent with the language in Section 1311(c), but that might not be consistent with well-established regulatory principles. At one extreme, the Commission could do nothing. As I understand it, Section 1311(c) is discretionary, not mandatory. So the Commission could choose to allocate none of the wastewater revenue requirement to water customers. Such a decision would be lawful, but would not accomplish an important purpose of Act 11, which is to provide some relief to wastewater customers in relatively small or overburdened service areas.

At the other extreme, the Commission could allocate almost the entire wastewater revenue requirement to water customers as was proposed by PAWC. This subsidy would benefit SSS and CSS customers, but it would come at the expense of PAWC's water customers who would be required to pay not only for their own wastewater service but that of others because of the Act 11 shift.

Q. IS PAWC'S PROPOSAL TO ALLOCATE A PORTION OF THE WASTEWATER REVENUE REQUIREMENT TO WATER CUSTOMERS REASONABLE, AND IS THE PROPOSED AMOUNT ALLOCATED TO THE WATER CUSTOMER CLASSES REASONABLE?

A. It is reasonable to allocate a portion of the revenue requirement increase to water customers, but not at the percentage (94%) chosen by PAWC. PAWC proposes – at its cost of service – to allocate $71.1 million of the $75.8 million total revenue requirement for wastewater to water customers. At the OCA's calculated revenue requirement, the total revenue requirement authorized for wastewater is $20,310,880 for SSS and $7,333,212 for CSS for a combined total of $27,644,092. Allocating PAWC's percentage would shift approximately $25.9 million of this amount to water. I do not believe this significant of a shift is necessary or reasonable as wastewater service may only be assigned to water customers if doing so is in the public interest.

Q. PLEASE EXPLAIN WHY AN ASSIGNMENT OF 94% OF THE WASTEWATER REVENUE REQUIREMENT INCREASE TO WATER CUSTOMERS IS NOT REASONABLE.

A. Most of PAWC's water customers do not obtain wastewater service from PAWC. PAWC currently has more than nine times as many water customers as wastewater customers. Further, there are several PAWC wastewater systems whose customers do not purchase their water from PAWC. Allocating such a significant percentage of the

wastewater revenue requirement to water operations moves all customers further from paying rates that reflect their indicated cost of service and would result in wastewater rates that have no reasonable relationship to the utility's cost of serving those customers. In addition, Exhibit 3-A of the Company's filing (attached to my testimony as Schedule JDM-3), indicates that at the Company's proposed rates, PAWC is proposing a 24.2% increase in revenues for water customers, a 0.2% decrease in revenues for SSS wastewater customers, and a 0.3% decrease in revenues for CSS wastewater customers. Without the $71.1 million assignment of the wastewater revenue requirement, the revenue increase for water customers would be 15.5%. It is not reasonable to increase the revenue increase assigned to water customers *by over 50%* by assigning a portion of the wastewater revenue requirement to water customers, and to then essentially assign no revenue increase to wastewater customers.

Q. HAS THE COMMISSION PREVIOUSLY ADDRESSED THE RECOVERY OF WASTEWATER REVENUE REQUIREMENTS FROM WATER CUSTOMERS?

A. Yes. In Aqua Pennsylvania, Inc.'s ("Aqua") most recent base rate case at Docket No. R-2021-3027385, Aqua proposed to recover approximately 30% of its wastewater revenue requirement from water customers.[5] In its Order in that proceeding, the Commission found Aqua's proposal to assign 30% of its wastewater revenue requirement to water customers not to be in the public interest.[6] In that proceeding, the Commission adopted a proposal presented by the Bureau of Investigation and Enforcement ("I&E") that assigned approximately 20% of the proposed wastewater revenue requirement to water customers.

[5] Order entered May 16, 2022, at 225-226.
[6] Id., at 227.

Q. IN YOUR OPINION, IN THIS PROCEEDING, WHAT IS A REASONABLE ALLOCATION OF THE WASTEWATER/ STORMWATER REVENUE REQUIREMENT TO WATER CUSTOMERS?

A. In my opinion, it would be reasonable to shift up to 75% of the OCA's calculated SSS wastewater revenue requirement increase and up to 50% of the OCA's calculated CSS wastewater revenue requirement increase to water customers. At the OCA's calculated revenue requirement increase, this would shift $15,233,160 from SSS and $3,666,606 from CSS to water service and would result in an approximate 4.2% increase for water customers, a 5.3% increase for SSS customers, and a 4.7% increase for CSS customers.[7]

To the extent that the Commission authorizes a wastewater revenue requirement increase which is more than the OCA's calculated amount, the Commission will have to determine what amount of that increase is reasonable for wastewater customers to bear given the recent PAWC rate increases and the relatively few wastewater customers. Regardless, I do not think it is reasonable – as proposed by PAWC – for the wastewater customers to be assigned no increase, as wastewater cost of service is a significant driver of the rate increase request in this proceeding.

Q. IS THE METHOD THAT PAWC USES TO ASSIGN WASTEWATER REVENUE REQUIREMENT TO THE WATER CLASSES REASONABLE?

A. If the Commission determines in this proceeding that it is in the public interest to assign any portion of the wastewater revenue requirement to water customers, the Company's proposed allocation to the various water customer classes based on the water cost of service is generally reasonable; however, my water CCOS study rather than the Company's CCOS study should be utilized for this allocation.

[7] See OCA Exhibit LA-1, Schedule A.

V. WATER SERVICE REVENUE DISTRIBUTION AND RATE DESIGN

Q. WHAT ARE SOME OF THE PRINCIPLES OF A SOUND REVENUE ALLOCATION?

A. A sound revenue allocation should:

- Utilize class cost-of-service study results as a guide;
- Provide stability and predictability of the rates themselves, with a minimum of unexpected changes that are seriously adverse to ratepayers or the utility (gradualism);
- Yield the total revenue requirement;
- Provide for simplicity, certainty, convenience of payment, understandability, public acceptability, and feasibility of application; and
- Reflect fairness in the apportionment of the total cost of service among the various customer classes.[8]

Q. WHAT IS YOUR RECOMMENDATION WITH RESPECT TO THE ALLOCATION OF THE WASTEWATER REVENUE REQUIREMENT ASSIGNED TO WATER SERVICE TO THE VARIOUS WATER CUSTOMER CLASSES?

A. As previously explained, the Company allocated the wastewater revenue requirement it has proposed to assign to water service to the Residential, Commercial, Industrial, Public Authority and Private Fire Protection customer classes based on the direct cost of service for each class indicated by its water CCOS study. I recommend that the wastewater revenue requirement that the Commission determines should be assigned to water service be allocated to the Residential, Commercial, Industrial, Public

[8] *Principles of Public Utility Rates*, Second Edition, James C. Bonbright; Albert L. Danielsen; David R. Kamerschen; Public Utility Reports, Inc., 1988, pages 383-384.

(Municipal), and Private Fire Protection customer classes based on the direct cost of service indicated by the water CCOS study I presented earlier in my testimony.[9]

Q. HOW SHOULD THE RESULTS OF YOUR WATER CCOS STUDY BE ADJUSTED TO REFLECT A LOWER THAN REQUESTED WATER REVENUE REQUIREMENT INCREASE AUTHORIZED BY THE COMMISSION IN THIS PROCEEDING?

A. I recommend that the direct cost of service, which would exclude the Act 11 shift, indicated by my water CCOS study for each customer class be proportionately scaled-back to reflect the actual water revenue increase authorized by the Commission in this proceeding. The water increase authorized by the Commission should exclude any increase for the proposed Audubon and Farmington Water acquisitions. To determine the total cost of service for each customer class, as previously explained, the wastewater revenue requirement assigned to water service should be allocated to the customer classes to which it was initially assigned by the Company based on the direct cost of service indicated by my cost of service study.

[9] See Schedule JDM-2 and Table 1.

Q. PLEASE SUMMARIZE THE RESULTS OF THE COMPANY'S WATER CCOS STUDY, THE PRESENT RATE REVENUES FOR EACH CUSTOMER CLASS, AND THE COMPANY'S PROPOSED REVENUE FOR EACH CUSTOMER CLASS BASED ON PAWC'S CLAIMED COST OF SERVICE IN ITS REVISED CCOS STUDY FILED IN RESPONSE TO OCA 04-012.

A. Table 3 summarizes the results of the Company's revised water CCOS study at present and proposed rate revenues based on PAWC's claimed cost of service.

Table 3. Summary of PAWC Cost of Service Study and Present and Proposed Rates for Water Service

Classification	Direct Cost of Service	Wastewater to Water Allocation	Total Cost of Service	Present Rates	Proposed Rates	Increase	Percent
Residential	$603,782,117	$46,505,573	$650,287,690	$528,290,043	$657,085,231	$128,795,188	24.4%
Commercial	232,462,967	18,320,153	250,783,120	202,779,636	254,604,000	51,824,364	25.6%
Industrial	44,092,705	3,939,176	48,031,881	37,580,738	48,143,784	10,563,046	28.1%
Public (Municipal)	35,192,089	1,635,240	36,827,329	22,559,539	26,209,929	3,650,390	16.2%
Other Water Utilities - Group A	11,343	0	11,343	51,822	53,666	1,844	3.6%
Other Water Utilities - Group B	627,003	0	627,003	202,436	277,021	74,585	36.8%
Private Fire Protection	5,777,625	341,990	6,119,615	5,301,032	6,304,285	1,003,253	18.9%
Public Fire Protection	11,847,471	0	11,847,471	9,519,368	11,847,068	2,327,700	24.5%
Other	18,473,554	345,262	18,818,816	17,832,568	18,829,276	996,708	5.6%
Total	**$952,266,876**	**$71,087,394**	**$1,023,354,270**	**$824,117,182**	**$1,023,354,261**	**$199,237,079**	**24.2%**

Q. DID THE COMPANY REVISE ITS PROPOSED CLASS RATES OR PROPOSED REVENUES AS A RESULT OF ITS MODIFICATION TO ITS INITIAL STUDY TO EXCLUDE INTERRUPTIBLE USAGE FROM THE EXTRA CAPACITY FACTOR ALLOCATIONS, OR OTHERWISE INDICATE THAT IT WOULD BE REVISING ITS PROPOSED CLASS RATES AND PROPOSED REVENUES?

A. No. The Company did not revise its proposed class rates or proposed revenues in its revised CCOS study that excluded interruptible Industrial usage from the extra capacity factor allocations. However, as indicated in Table 3, the rates proposed by PAWC significantly under-recover the cost of service indicated for the Public (Municipal) customer class. In response to discovery request OSBA 03-004, the Company recognized that a larger increase than the proposed increase for the Public (Municipal) class may be warranted. In the proposed revenue distribution I subsequently discuss, I assign an increase to the Public (Municipal) class consistent with the results of my CCOS study.

Q. PLEASE SUMMARIZE THE RESULTS OF YOUR WATER CCOS STUDY, THE PRESENT RATE REVENUES FOR EACH CUSTOMER CLASS, AND YOUR PROPOSED REVENUES FOR EACH CUSTOMER CLASS BASED ON PAWC'S CLAIMED COST OF SERVICE, ADJUSTED TO REFLECT THE OCA'S RECOMMENDED ACT 11 SHIFT.

A. Table 4 summarizes the results of my CCOS study, at present and proposed rate revenues based on PAWC's claimed cost of service, adjusted to reflect the OCA's recommended Act 11 shift.

Table 4. Summary of OCA Cost of Service Study and Present and Proposed Rates for Water Service

Classification	Direct Cost of Service	Wastewater to Water Allocation	Total Cost of Service	Present Rates	Proposed Rates	Increase	Percent
Residential	$596,775,486	$11,844,282	$608,619,768	$528,290,043	$615,589,568	$87,299,525	16.5%
Commercial	288,424,759	4,533,576	232,958,335	202,779,636	235,626,131	32,846,495	16.2%
Industrial	49,544,130	983,309	50,527,439	37,580,738	50,527,439	12,946,701	34.5%
Public (Municipal)	37,856,691	751,347	38,608,038	22,559,539	30,331,382	7,771,843	34.5%
Other Water Utilities - Group A	11,915	236	12,151	51,822	53,666	1,844	3.6%
Other Water Utilities - Group B	449,960	8,930	458,890	202,436	272,176	69,740	34.5%
Private Fire Protection	7,063,962	140,199	7,204,161	5,301,032	7,127,257	1,826,225	34.5%
Public Fire Protection	13,666,421	271,239	13,937,660	9,519,368	12,798,825	3,279,457	34.5%
Other	18,473,554	366,647	18,840,201	17,832,568	18,840,201	1,007,633	5.7%
Total	**$952,266,878**	**$18,899,766**	**$971,166,644**	**$824,117,182**	**$971,166,644**	**$147,049,462**	**17.8%**

Q. PLEASE EXPLAIN HOW YOU DETERMINED YOUR PROPOSED REVENUE DISTRIBUTION?

A. In this proceeding, PAWC claims it is proposing rates for water service for each customer class based on the CCOS study sponsored by Ms. Heppenstall, with the exception of the Other Water Utilities - Group B class. The Company capped the rate increase for that class at 30% to provide for gradualism. While there is no hard and fast rule with respect to applying the concept of gradualism, typically an increase of 1.5 to 2.0 times the system average increase is consistent with the concept of gradualism.

The revenue distribution I have proposed for water service is based on the CCOS study I am sponsoring in this proceeding, adjusted to provide for gradualism. More specifically, I initially set the proposed revenues for each class equal to the cost of service indicated by the water CCOS study I presented in this proceeding. I then limited the increase to the Industrial, Public (Municipal), Other Water Utilities Group B, and Public Fire Protection classes to 34.5% which is the increase indicated as

appropriate for the Industrial class by my CCOS study. An increase of 34.5% results in an increase of 1.9 times the system average increase of 17.8% for each of these classes which is consistent with the concept of gradualism. I maintained the increase proposed by the Company for the Other Water Utilities - Group A class as a significant decrease was indicated by both the Company's revised and my CCOS study. The revenue deficiency resulting from limiting the increase to 34.5% was then assigned to the Residential and Commercial customer classes based on the indicated cost of service for each class.

Q. PLEASE DESCRIBE PAWC'S WATER RATE DESIGN PROPOSAL FOR THE RESIDENTIAL CLASS IN THIS PROCEEDING.

A. As indicated in Section I of this testimony, PAWC currently serves five water rate zones (Rate Zones 1-5), and the largest of these rate zones is Rate Zone 1. The Company is proposing to consolidate the rates for all customer classes for all five rate zones into Rate Zone 1. The Company is also proposing to move rates for its Farmington Township water acquisition toward Rate Zone 1 rates, and a new Rate Zone 2 will be established to serve Farmington Township. No rate changes to current rates are proposed for the Audubon acquisition, and PAWC is proposing to establish a new Rate Zone 3 to serve former Audubon customers. As shown in PAWC Exhibit CBR-3, for Residential customers in each rate zone, except for Audubon, the Company is proposing a monthly customer charge of $20.00 for those Residential customers served by a 5/8-inch, 3/4-inch, 1-inch, or 1½-inch meter. The current monthly customer charge for Residential customers served by these meters in Rate Zones 1-5 is $17.50. Most Residential water customers in PAWC's service territory are served by a 5/8-inch meter. For most rate zones, the current Residential usage charge is $1.6108 per 100

gallons, and the Company is proposing to increase the Rate Zone 1 Residential usage charge to $2.1319 per 100 gallons.

Q. IS PAWC'S PROPOSED RESIDENTIAL RATE DESIGN REASONABLE?

A. PAWC's proposal to increase the current Residential customer charge of $17.50 to $20.00 for customers in Rate Zones 1-5 is not reasonable. Only those costs that vary directly with the addition or subtraction of a customer should be included in the calculation of a customer charge. It is the OCA's recommendation that the revenue requirement and rates for Audubon and Farmington Water be excluded from consideration in this proceeding. Therefore, I do not address the rate design for these two pending acquisitions. Generally, however, my recommendations for those rate zones would be consistent with my proposals for all water systems. That is, Residential customer charges should not exceed $17.50, and any additional revenue to be recovered from Residential customers should be recovered through increases in volumetric usage charges.

Q. DOES PAWC PRESENT A CUSTOMER COST ANALYSIS BASED ON DIRECT COSTS?

A. The Company presents a direct customer cost analysis which it claims only reflects direct costs in PAWC Exhibit No. 12-A, Attachment RS1j, pages 2 and 3. That analysis indicates that a cost-based monthly customer charge for a 5/8-inch meter would be $19.31. This is less than PAWC's proposed charge of $20.00.

Q. DOES THIS ANALYSIS JUSTIFY INCREASING THE MONTHLY CUSTOMER CHARGE FOR A 5/8-INCH METER TO $19.31?

A. No. PAWC's direct customer cost analysis includes costs that are not direct customer costs and do not change with the addition or subtraction of a customer. For example, PAWC's direct customer cost analysis includes office building and furniture expenses.

In addition, the calculated direct cost of $19.31 is based on the Company's requested revenue requirement increase. Under the revenue increase authorized by the Commission in this proceeding, a cost-based charge would certainly be further reduced. For example, adjusting PAWC's overall requested pre-tax rate of return to reflect the OCA's recommended pre-tax return of 8.71% would further reduce the calculated customer charge. A calculation adjusting the Company's calculated direct customer charge to remove the improperly included office building and furniture costs and to reflect the OCA's recommended rate of return is presented on Schedule JDM-4. As shown there, these adjustments reduce the calculated charge to $18.21. Other Commission-approved adjustments to PAWC's revenue requirement claim are likely to further reduce the calculated direct customer charge. Therefore, I recommend that the existing $17.50 monthly charge for Residential customers with a 5/8-inch, 3/4-inch, 1-inch or 1 1/2-inch meter be maintained, unless the increase authorized by the Commission is sufficient to justify a higher charge which under no circumstances should be higher than $19.31.

Q. DO YOU HAVE ANY CONCERNS REGARDING THE RESIDENTIAL WATER USAGE RATES PROPOSED BY PAWC IN THIS PROCEEDING?

A. Yes. I have a concern regarding the Residential usage charge proposed for Valley customers currently in Rate Zone 2. In this proceeding, PAWC is proposing to assess current customers in Rate Zone 2 the proposed consolidated Rate Zone 1 usage charge. As shown in PAWC Exhibit 10-A, page 77, this results in a significant 63.64% rate increase for a Residential customer using 3,201 gallons per month, which PAWC states is the average monthly usage. As previously indicated, there is no hard and fast rule with respect to applying the concept of gradualism, and typically an increase of 1.5 to

2.0 times the system average increase is considered consistent with this concept. As shown on PAWC Exhibit 12-A, Schedule A, PAWC is proposing an increase of 24.4% for a Residential customer using 3,201 gallons per month, and as shown on Table 4, based on the Company's proposed revenue requirement claim, I have proposed an increase of 17.4%. To provide for gradualism and to reduce rate shock, I recommend that the usage charge for Valley customers currently served under Rate Zone 2 be set at 70% of the Rate Zone 1 usage charge established in this proceeding. This reduction in the usage charge would limit the increase for a Valley Residential customer currently in Rate Zone 2 using 3,201 gallons per month to approximately 1.70 times my proposed system average increase, which is consistent with the concept of gradualism. The Rate Zone 1 Residential usage charge in this proceeding should be designed to recover the Residential revenue requirement approved by the Commission in this proceeding not recovered through my recommended Residential customer charges and my proposed usage charge for current Valley Rate Zone 2 Residential customers.

VI. WASTEWATER SERVICE REVENUE DISTRIBUTION AND RATE DESIGN

Q. HOW ARE YOU RECOMMENDING THAT THE WASTEWATER REVENUE DISTRIBUTION PROPOSED BY PAWC BE ADJUSTED TO REFLECT THE OCA'S WASTEWATER REVENUE REQUIREMENT RECOMMENDATION AND ACT 11 SHIFT?

A. The wastewater revenue allocations proposed by PAWC for SSS and CSS customers are presented on page 1 of PAWC Exhibits 10-B and 10-C. As indicated in Section IV of my testimony, the OCA is recommending a SSS revenue requirement increase of $20.3 million, and a CSS revenue requirement increase of $7.3 million for a combined total increase of $27.6 million. As also indicated in Section IV of my testimony, I am

recommending that 75% of the SSS revenue requirement increase and 50% of the CSS revenue requirement increase be assigned to water service. My proposed assignment of the initial revenue requirement increase of $27.6 million to each rate zone and my proposed assignment of the revenue requirement increase to water service are presented in Table 5 below. I have allocated the initial revenue requirement increase to all current SSS and CSS customers based on PAWC's revenues at proposed rates. Consistent with the OCA's recommendation that the revenue requirement and rates for Farmington Wastewater, Sadsbury, Brentwood, and BASA be excluded from consideration in this proceeding, I have excluded these pending acquisitions from Table 5.

Table 5. OCA Wastewater Revenue Allocation

Service Type	OCA-Pre-Act 11 Present Rates	Increase	Proposed Rates	Percent	OCA Revenue Distribution Act 11 Reduction	Proposed Rates	Total Increase	Percent
Sanitary Sewer Service								
Zone 1 - Most WW Areas	$54,207,581	$11,370,577	$65,578,158	21.0%	($8,527,932)	$57,050,225	$2,842,644	5.2%
Zone 2 - New Cumberland	3,421,549	810,327	4,231,876	23.7%	(607,745)	3,624,131	202,582	5.9%
Zone 5 - Valley WW	4,200,644	868,433	5,069,077	20.7%	(651,325)	4,417,752	217,108	5.2%
Zone 7 - York WW	27,048,738	6,656,077	33,704,815	24.6%	(4,992,058)	28,712,757	1,664,019	6.2%
Zone 8 - Foster Township	1,198,710	251,287	1,449,997	21.0%	(188,465)	1,261,532	62,822	5.2%
Zone 9 - Royersford WW	1,366,765	354,180	1,720,945	25.9%	(265,635)	1,455,310	88,545	6.5%
Zone XX - Farmington WW	322,926	-		0.0%	-	-	-	0.0%
Zone XX - Sadsbury WW	471,228	-		0.0%	-	-	-	0.0%
Subtotal:	*$92,238,141*	*$20,310,880*	*$112,549,021*	*22.0%*	*($15,233,160)*	*$96,521,707*	*$5,077,720*	*5.6%*
IPP Surcharge	$1,835,040	$0	$1,835,040	0.0%	0	$1,835,040	$0	0.0%
Oher Revenues	1,397,685	8,332	1,406,017	0.6%	0	$1,406,017	8,332	0.6%
Total Sanitary Sewer Service:	**$95,470,866**	**$20,319,212**	**$115,790,078**	**21.3%**	**($15,233,160)**	**$99,762,764**	**$5,086,052**	**5.4%**
Combined Sewer Service								
Zone 3 - Scranton WW	$53,064,842	$4,988,245	$58,053,087	9.4%	($2,494,123)	$55,558,965	$2,494,123	4.7%
Zone 4 - Kane WW	2,752,606	258,644	3,011,250	9.4%	(129,322)	2,881,928	129,322	4.7%
Zone 6 - McKeesport WW	22,145,403	2,086,323	24,231,726	9.4%	(1,043,161)	23,188,564	1,043,161	4.7%
Subtotal:	*$77,962,851*	*$7,333,212*	*$85,296,063*	*9.4%*	*($3,666,606)*	*$81,629,457*	*$3,666,606*	*4.7%*
IPP Surcharge	$226,040	$0	$226,040	0.0%	$0	$226,040	$0	0.0%
Other Revenues	447,331	(4)	447,326	0.0%	0	$447,326	(4)	0.0%
Total Combined Sewer Service:	**$78,636,222**	**$7,333,208**	**$85,969,429**	**9.3%**	**($3,666,606)**	**$82,302,823**	**$3,666,602**	**4.7%**
Other Sanitary Sewer Acquisitions								
Brentwood	$0	$0	$0	0.0%	$0	$0	$0	0.0%
BASA	0	0	0	0.0%	0	0	0	0.0%
Subtotal:	*$0*	*$0*	*$0*	*0.0%*	*$0*	*$0*	*$0*	*0.0%*
TOTAL WASTEWATER:	**$174,107,088**	**$27,652,420**	**$201,759,507**	**15.9%**	**($18,899,766)**	**$182,065,587**	**$8,752,654**	**5.1%**

Q. WHY DID PAWC PROPOSE NO INCREASE FOR SCRANTON IN RATE ZONE 3, ITS LARGEST CSS SERVICE AREA?

A. In the Scranton application proceeding, the Commission approved an Amended Asset Purchase Agreement. As described in PAWC Statement No. 4 (Gress), page 40, lines 10-23, PAWC is proposing no increase for Scranton to comply with the Amended Asset Purchase Agreement.

Q. CAN THE COMMISSION AUTHORIZE A RATE INCREASE FOR RATE ZONE 3 WHICH IS GREATER THAN THE INCREASE IDENTIFIED IN PAWC'S AMENDED ASSET PURCHASE AGREEMENT?

A. Counsel for OCA informs me that the Commission has authority to approve rates that exceed or otherwise differ from those identified in PAWC's Amended Asset Purchase Agreement with Scranton. Therefore, as shown in Table 5, based on the OCA's calculated revenue requirement, I have proposed an increase of 4.7% for Scranton, which is consistent with the OCA's recommended increase for all CSS systems and less than the OCA's recommended increase for the SSS systems.

Q. IS THE COMPANY PROPOSING ANY CHANGES TO ITS WASTEWATER RATE DESIGN IN THIS PROCEEDING?

A. Yes. The Company is proposing to change the way it determines the volumetric component of bills for Residential customers from the method currently utilized. Under the current method, volumetric charges are based on total monthly metered water usage. The Company is proposing to adopt a volumetric billing method referred to as winter averaging.

Q. PLEASE DESCRIBE THE CONCEPT OF WINTER AVERAGING.

A. Winter averaging is a method of determining the volumetric component of a wastewater bill that attempts to separately meter water usage that is likely to go through the wastewater system from water usage that is used for outdoor purposes in the summer (e.g., watering lawns, filling pools, etc.). Under winter averaging, a customer's bill in the winter is determined by actual metered water usage for the month, and in the summer the customer's bill is determined by the lesser of actual metered water usage for the month or the average water consumption for that customer in the winter months.

For example, in the winter period, if a customer's metered water usage is 4,000 gallons, the customer is billed for 4,000 gallons of water usage on their wastewater bill. In the summer period, if a customer's metered water usage is 6,000 gallons and their average winter usage over the previous winter months was 4,000 gallons per month, the customer would only be billed for 4,000 gallons on their wastewater bill. If that customer's metered usage during a summer month was 3,000 gallons and their average winter usage over the previous winter months was 5,000 gallons per month, they would be billed for 3,000 gallons of usage on their wastewater bill.

Q. HOW IS THE COMPANY DEFINING WINTER MONTHS UNDER ITS WINTER AVERAGING PROPOSAL?

A. The Company is defining the winter months for the winter averaging period to be January, February, and March. These three months are the months for which the baseline usage will be determined for the purposes of billing for the rest of the year.

Q. WILL THE WINTER AVERAGE CALCULATION BE THE SAME FOR EVERY CUSTOMER?

A. No. The winter averaging calculation will be customized for each individual customer.

Q. WHAT HAPPENS IN CASES WHERE THE CUSTOMER IS NEW OR OTHERWISE DOES NOT HAVE ANY WINTER BILLING HISTORY TO DETERMINE WINTER AVERAGE USAGE?

A. In cases where the customer is new or there is no winter average billing data upon which to base a calculation, the Company would assume a standard usage level of 3,000 gallons per month for a comparison point for billed summer usage.

Q. WHY IS THE COMPANY PROPOSING A WINTER AVERAGE RATE DESIGN FOR RESIDENTIAL WASTEWATER SERVICE?

A. The Company claims that the winter averaging methodology will more closely align summertime wastewater bills with cost-causation rate design principles. Under the current rate structure, the Company claims that customers are charged for wastewater service in the summer based on metered water usage that is not actually going through the wastewater system, and the winter averaging methodology remedies that inconsistency.

Q. WHAT EFFECT DOES WINTER AVERAGING HAVE ON THE VOLUMETRIC RATES FOR WASTEWATER SERVICE?

A. The winter average methodology results in volumetric rates that are higher than they otherwise would have been for the same revenue requirement. This is because the volumetric billing determinants used for wastewater rate design will be lower than they otherwise would have been as the Company claims that water usage that would have been included in the summer that was being used for outdoor purposes will now be excluded from the rate calculation.

Q. SHOULD PAWC'S PROPOSAL FOR WINTER AVERAGING BE APPROVED BY THE COMMISSION?

A. No. In response to OCA 04-005, the OCA requested and was provided the monthly number of customers served by PAWC and billed water consumption for each customer class. Table 6 below provides a comparison of the average monthly water usage of a Residential customer during the months of January through March that PAWC proposes to utilize under its winter averaging methodology, and the average monthly usage for the remaining months of the year. As shown in Table 6, the difference between the winter average period usage and usage during the remaining months of PAWC's Residential customers is de minimus, and for the last two years ranged from 100 to 173 gallons per month. I would expect that during the summer months customers are likely to take more showers and wash clothes more often. The average shower uses 17.2 gallons of water.[10] A standard washing machine uses 20 gallons of water per load.[11] A few extra showers and clothes washing loads per month would totally account for the historic difference between Residential winter and summer water usage. Therefore, it does not necessarily follow that PAWC's Residential customer outdoor water usage during the summer is sufficiently significant to justify adopting winter averaging and the resulting increase in volumetric rates and should be rejected.

OCA witness Roger Colton (OCA Statement 5) also addresses PAWC's winter averaging proposal. Mr. Colton demonstrates that the Company's winter averaging proposal will disproportionately harm low-income customers, and he found that the

[10] https://www.thewaterscrooge.com/blog/how-many-gallons-of-water-does-a-shower-use#.~.text=The%20average%20American%20shower%20uses,the%20rise%20across%20the%20US.

[11] https://www.whirlpool.com/blog/washers-and-dryers/he-washing-machine-water-usage.html#:~:text=ENERGY%20STAR%20states%20that%2C%20on,compared%20to%20a%20regular%20washer.

number of Residential customers that have no water consumption because they are away from their homes ("snowbirds") increases substantially in the months PAWC proposes to utilize in its winter averaging calculation. For such snowbird customers, it would be unreasonable to bill customers that are away from their homes during the winter months for wastewater service during the non-winter months of the year based on the assumption that any water usage by these customers in excess of their winter average usage did not flow through PAWC's wastewater system.

Table 6. Average Residential Customer Water Usage Comparison (gallons)

Period	Usage
January - March 2021	3,425
April - December 2021	3,525
Difference	*100*
Ratio	103%
January - March 2022	3,308
April - December 2022	3,481
Difference	*173*
Ratio	105%

Q. PLEASE DESCRIBE PAWC'S WASTEWATER RATE DESIGN PROPOSAL FOR THE RESIDENTIAL CLASS IN THIS PROCEEDING, IN ADDITION TO ADOPTING WINTER AVERAGING, AND PAWC'S RATE DESIGN PROPOSAL FOR NON-RESIDENTIAL CUSTOMERS.

A. The current Residential monthly customer charge for most Rate Zones is $14.30 per month. As discussed on pages 41 and 42 of Mr. Rea's testimony (PAWC Statement No. 10), PAWC is proposing:

- To set all Residential monthly customer service charges at $20 per month,

with the exception of:

a. BASA where the Residential service charge is proposed at $10 per month;

b. Brentwood where the Residential service charge is proposed at $10 per month, and the non-residential service charge is proposed at $20 per month; and

c. PAWC is proposing to set the Scranton Rate Zone 3 Residential customer charge at $19.72 per month.

- No changes are proposed for Scranton rates except for the roll-in of the Distribution System Improvement Charge ("DSIC") mechanism, which results in the same percentage increase for all rate components in Scranton.

- The Company is proposing to merge rates for Kane and McKeesport customers into a single rate design that results in Residential bills at average usage levels of approximately $110 per customer, which is approximately $10 higher per customer than SSS rates, which PAWC claims recognizes the differences in operating systems between CSS and SSS systems. Volumetric rates for non-residential customers for Kane and McKeesport are set at $1.90 per hundred gallons. No increase is proposed for McKeesport bulk customers.

- SSS volumetric rates are increased to a level that brings Residential bills for average levels of usage for Zone 1 customers to approximately $100 per month with proportional increases to non-residential volumetric rates.

- The Company is proposing to phase-out the allowance for the first 2,000 gallons in York rates by setting the volumetric rates for York at $0.75 per hundred gallons for the first 2,000 gallons for Residential customers. Volumetric rates above 2,000 gallons are set equal to Rate Zone 1 rates; and

- Royersford volumetric rates are increased to a level that results in Residential bills for average usage at approximately $65 per month, which is a $15 increase and is consistent with average bills and increases for York customers. Non-residential volumetric rates in Royersford are increased to $0.75 per 100 gallons.

Q. DOES PAWC'S PROPOSAL TO SET ALL RESIDENTIAL MONTHLY CUSTOMER SERVICE CHARGES AT $20.00 REFLECT AN INCREASE IN THAT CHARGE FOR EACH WASTEWATER RATE ZONE?

A. No. The current Residential monthly service charge in SSS Rate Zones 1, 2, and 5 and CSS Rate Zone 6 is $14.30, and PAWC's proposal to set that charge at $20.00 reflects an increase for each of those rate zones. The current Residential monthly service charge for SSS Rate Zone 7 is $18.00, and PAWC's proposal to set that charge at $20.00 also reflects an increase. In SSS Rate Zone 8 all customers are currently assessed a flat charge, and PAWC does not assess separate customer service and usage charges. In SSS Rate Zone 8, PAWC is proposing to reduce the flat rate charge from $106.00 to $100.00. In SSS Rate Zone 9, the current Residential monthly customer charge is $48.00, and PAWC is proposing to reduce that charge to $20.00. In CSS Rate Zone 3, as indicated above, PAWC is proposing to increase the customer service charge from $19.50 to $19.72. Finally, in CSS Rate Zone 4, the current Residential monthly service charge is $40.00, and the Company is proposing to reduce that charge to $20.00.

Q. DOES PAWC PRESENT A CUSTOMER COST ANALYSIS TO JUSTIFY A MONTHLY RESIDENTIAL CUSTOMER CHARGE OF $20.00?

A. The Company presents a customer cost analysis which it claims only reflects direct costs in PAWC Exhibit No. 12-B, Attachment RS1j, page 2. That analysis indicates that a cost-based monthly customer charge for a 5/8-inch meter would be $43.50.

Q. DOES THIS ANALYSIS JUSTIFY A MONTHL RESIDENTIAL CUSTOMER CHARGE OF $20.00 AS PROPOSED BY PAWC?

A. No. As shown on Attachment RS1j, page 2, PAWC's direct customer charge calculation includes the costs associated with collecting and treating Infiltration and

Inflow ("I/I"). As defined in the WEF Manual of Practice No. 27, Infiltration is the flow entering the sanitary sewer system resulting from high groundwater or precipitation that occurred days or weeks before the observed flow in the sanitary system, and inflow results from the rainfall that enters the sanitary collection system through a number of direct connections such as catch basins, roof drains, foundation drains, and manhole covers. PAWC's calculation of I&I related costs is presented in Schedule JDM-5. As just explained, I/I is largely a function of precipitation. Therefore, I/I does not vary directly with the addition or subtraction of a customer. As previously explained in addressing PAWC's proposed water customer charges, only costs that vary directly with the addition or subtraction of a customer should be included in the calculation of customer charges.

Q. WHAT IS YOUR RECOMMENDATION CONCERNING MONTHLY RESIDENTIAL CUSTOMER CHARGES?

A. For most wastewater rate zones, the current monthly Residential customer charge is $14.30. Exclusive of I/I costs, the Company's calculation of customer costs would indicate a direct cost of $13.87 at the Company's proposed revenue requirement. Therefore, I recommend that the current monthly Residential customer charges in Rate Zones 1, 2, 5, and 6 be maintained, and the current Residential customer service charges in Rate Zones 3, 4, 7, and 9 be reduced to $14.30. While I do not address rate design for the Rate Zones where acquisitions are pending, my objection to PAWC's proposed customer charges and my recommendation that those charges should not exceed $14.30 for Residential customers with 5/8-inch, ¾-inch, 1-inch or 1½-inch meters would apply.

Q. DO YOU AGREE WITH PAWC'S VOLUMETRIC RATE PROPOSALS AS DESCRIBED BY MR. REA?

A. PAWC is proposing to increase SSS volumetric rates to a level that brings the Residential bill for a customer using 3,201 gallons per month to approximately $100, and to increase CSS volumetric rates to a level that brings the Residential bill for the same usage to approximately $110 with proportional increases to non-residential rates; to maintain the existing Scranton volumetric rate; to merge the volumetric rates for Kane and McKeesport; to phase out the allowance for York; and to increase Royersford volumetric rates to a level that results in bills for the average Residential customer of approximately $65 per month, and increase non-residential volumetric rates to $0.75 per 100 gallons.

I agree with PAWC's proposal to phase out the allowance for York customers. The remainder of PAWC's volumetric rate proposals are based on the Company-proposed assignment of a significant 27% of the wastewater revenue requirement to water service customers. Under this proposed assignment, SSS and CSS wastewater customers receive no rate increase and, in fact, a slight decrease in rates. As previously explained in Section IV of my testimony, this is unreasonable. I recommend that PAWC's volumetric rate proposals be proportionately adjusted to recover the cost of service approved by the Commission for each current SSS and CSS customer class, and for SSS and CSS Residential customers, any revenue deficiency resulting from the adoption of my monthly Residential customer charge recommendations.

Q. ARE YOU PROPOSING ANY OTHER MODIFICATIONS TO PAWC'S WASTEWATER RATE DESIGN THAT WERE NOT DISCUSSED BY MR. REA IN HIS TESTIMONY?

A. No.

Q. IN THIS SECTION OF YOUR TESTIMONY, YOU DISCUSS WASTEWATER RATE DESIGN AND IN THE PRIOR SECTION YOU DISCUSS WATER RATE DESIGN. DO ANY OTHER OCA WITNESSES DISCUSS RATE DESIGN IN THEIR DIRECT TESTIMONY?

A. Yes. OCA witness Roger Colton (OCA Statement 5) addresses PAWC's low-income bill discount.

VII. IMPUTED REVENUES FOR ACQUIRED SYSTEMS

Q. IS PAWC PROPOSING TO DELAY THE EFFECTIVE DATE FOR THE RATE INCREASES IT HAS PROPOSED FOR CERTAIN CUSTOMERS?

A. Yes. The Company proposes to delay the effective date for rate changes to customers in certain rate zones where the system was recently acquired (Foster and York) or the acquisition is still pending (Brentwood and BASA).[12] However, PAWC has calculated revenues as if those customers were paying the new rates without any delay to the effective date.[13]

Q. HAS THE COMPANY ACTUALLY PROPOSED A RATE INCREASE FOR EACH OF THESE FOUR RATE ZONES?

A. No. Effective January 1, 2025, the currently approved tariff for Foster provides for a rate of $106 per equivalent dwelling unit ("EDU") per month.[14] In this proceeding,

[12] PAWC Statement No. 4, p. 42.
[13] PAWC Statement No. 4, p. 42.
[14] PAWC Statement No. 10, p.38.

PAWC is proposing to decrease this rate to $100 per EDU.[15] This rate is equal to the flat rate in Rate Zone 1.[16]

Q. IF THE COMMISSION APPROVES A DELAYED EFFECTIVE DATE FOR THESE RATE ZONES, SHOULD IT ALSO ADOPT PAWC'S PROPOSAL AND REQUIRE THE COMPANY TO IMPUTE REVENUES BY CALCULATING THE PROOF OF REVENUES BASED ON THE NEW RATES THAT WILL BECOME EFFECTIVE AFTER THE DELAY?

A. Yes. While the BASA and Brentwood Wastewater systems should not be included in revenue requirement at all in this proceeding for the reasons outlined in OCA witnesses Hoover and Smith (OCA Statements 1 and 2), if the Commission does include them they need to impute revenues for these systems to prevent existing PAWC customers from subsidizing the revenue requirement required to keep the acquired system rates lower than the new rates established for those systems in this base rate case. For the same reason, to avoid subsidization by existing PAWC customers, the Commission should adopt PAWC's proposal and require the Company to impute revenues for the Foster and York systems by calculating the proof of revenues based on the new rates that will become effective after the delay.

VIII. REVENUE DECOUPLING MECHANISM

Q. IS THE COMPANY PROPOSING A REVENUE DECOUPLING MECHANISM ("RDM") IN THIS PROCEEDING?

A. Yes. PAWC is proposing an RDM for both water and wastewater service. As discussed in the testimony of PAWC witness Mr. Rea (PAWC Statement No. 10), the Company

[15] PAWC Exhibit 10-B, p. 21.
[16] PAWC Statement No. 10, p. 38.

claims that RDM is an alternative rate design mechanism that will more reliably recover the revenue requirement and associated fixed costs approved by the Commission in this proceeding.

Q. WHAT IS THE COMPANY'S RATIONALE FOR PROPOSING THE RDM?

A. According to Mr. Rea, approximately 81% of the Company's water and wastewater service revenues will be collected through volumetric rates under the Company's proposed rate structure in this case, which means that revenues will vary up or down depending on how much water customers use. Mr. Rea contends that over 95% of the Company's costs are fixed costs, and do not vary depending on how much water customers use. Given the nature of the Company's fixed costs, Mr. Rea believes that the RDM will provide the Company with a better opportunity to recover the revenue requirement and fixed costs authorized in this case as the difference between those amounts and actual revenues will be charged or credited back to customers in the subsequent year under the RDM.

Q. PLEASE DESCRIBE THE COMPANY'S PROPOSED RDM.

A. As discussed by Mr. Rea, the RDM is an administrative rate design mechanism that couples traditional rate design with Straight Fixed Variable ("SFV") pricing. SFV pricing is a rate design that collects fixed costs through fixed charges and variable costs through volumetric changes. The RDM compares the revenues collected under the actual Commission approved rates customers pay with the revenues that would have been collected through an SFV rate design on a forward-looking basis and accrues the differences, which are either credited to customers or collected from customers at a later time. The proposed RDM identifies three cost components as the basis for

revenues that would be collected through the SFV rate design that form the basis of the revenue comparisons going forward. These three cost components are:

- Volumetric Charge (VC): A charge in dollars per hundred gallons that applies to all water volumes sold to customers.
- Residential Fixed Charge (RC): A flat dollar charge per month that applies to all Residential customers.
- Non-Residential Fixed Charge (NC): A flat dollar amount that applies to all non-residential customers.

Q. HOW IS THE COMPANY PROPOSING TO DETERMINE THE COST COMPONENTS OF ITS PROPOSED RDM?

A. As discussed by Mr. Rea, the three different cost components are calculated based on the allocated revenue requirements to customer class, the level of production costs identified in the Company's class cost of service studies and the total volumes of water and wastewater approved in this proceeding that form the basis of the billing determinants for water and wastewater service. The calculation for the different cost components is as follows:

- Volumetric Charge (VC): Total Production Costs allocated to eligible customers divided by total volumetric sales associated with eligible customers.
- Residential Fixed Charge (RC)**:** Total revenue requirement allocated to Residential customers for rate design purposes less the Volumetric Charge multiplied by total volumetric sales associated with residential customers divided by the total number of residential customers in the case.
- Non-Residential Fixed Charge (NC): Total revenue requirement allocated to eligible non-residential customers for rate design purposes less the Volumetric Charge multiplied by total volumetric sales associated with eligible non-residential eligible customers divided by the total number of non-residential customers in the case.

Q. HOW WOULD THE RDM WORK ON A FORWARD-LOOKING BASIS?

A. As described by Mr. Rea, the proposed RDM would compare actual revenues recovered from eligible customers in a given month or year to the revenues that would result from applying the RDM cost-components previously described above. If actual revenues are higher than would have been collected under the RDM formula, the difference is credited to customers in the following year. If actual revenues are lower than would have been collected under the RDM formula, the difference is collected from customers in the following year. The calculation of the proposed RDM is presented on page 93 of Mr. Rea's Direct Testimony.

Q. HOW DOES THE COMPANY PROPOSE TO IMPLEMENT THE RDM?

A. The Company's proposed RDM will apply to both water and wastewater service, with separate tariffs and a separate recovery/credit mechanism for each service. The recovery/credit mechanisms are proposed to be volumetric and apply separately for each customer class. Amounts accrued over the course of the year that will be credited to or collected from customers will be applied in the following year to forecasted sales volumes and a volumetric credit or surcharge, as applicable, will be calculated on a dollars per hundred gallons basis.

Q. ARE THE COST COMPONENTS OF THE RDM CALCULATION FIXED OR DO THEY CHANGE OVER TIME DEPENDING ON CHANGES IN REVENUE REQUIREMENTS?

A. The cost components of the RDM are fixed and will not change until a future rate case with a different set of revenue requirements and calculations for cost components.

Q. WHAT CUSTOMER CLASSES ARE INCLUDED IN THE COMPANY'S PROPOSED RDM?

A. The RDM will apply to all customers in the Residential, Commercial, Industrial, Public (Municipal), and Sales for Resale classes except for those customers taking service under contract rates.

Q. HAS THE COMMISSION ADOPTED A STATEMENT OF POLICY RELATED TO ALTERNATIVE RATE MAKING MECHANISMS SUCH AS PAWC'S PROPOSED RDM?

A. Yes. In its Order dated July 18, 2019, in Docket No. M-2015-2518883, the Commission set forth its Statement of Policy as it relates to alternative ratemaking methodologies. Specifically, the Commission identified 14 factors that it would consider in its evaluation of alternative ratemaking mechanisms. The Statement of Policy requires a utility proposing an alternative ratemaking mechanism to explain how each of these 14 factors impact the rates of each customer class.

Q. DID MR. REA SPECIFICALLY ADDRESS THE 14 FACTORS AS THEY RELATE TO PAWC'S PROPOSED RDM IN HIS DIRECT TESTIMONY?

A. Yes. Mr. Rea claims that the 14 factors are satisfied (PAWC Exhibit CBR-10).

Q. IN YOUR OPINION, DOES THE RDM SATISFY THE 14 FACTORS OF THE PUC'S POLICY STATEMENT?

A. No. In my opinion, the RDM does not meet the 14 factors of the PUC's Policy Statement for the following reasons:

1. The RDM provides for the recovery of fixed costs on a volumetric basis; therefore, it does not align utility revenues with cost causation principles as to both fixed and variable costs.

2. The proposed RDM is unlikely to impact the fixed utility's capacity utilization.

3. The RDM adjustment or "true-up" mechanism creates the anomaly where customers see rate increases when they reduce consumption and rate decreases when they increase consumption.

4. OCA witness Roger Colton explains that, with respect to interclass cost shifting, the RDM could shift revenue within the residential class from customers who are financially able to invest in water conservation measures to low-income customers who are not financially able to make those same investments.

5. The Company has not demonstrated that the lack of an RDM has been a major obstacle for the promotion of water conservation and efficiency. The Company has been able to implement methods to improve water efficiency without an RDM. Moreover, there has been a long-term trend of per-customer declining water consumption (i.e. improved water efficiency use) without an RDM.

6. The proposed RDM could provide a disincentive to ratepayers to undertake water conservation efforts because they would be required to pay for water they did not use. Revenue savings to individual customers that would ordinarily be achieved through usage reductions would be offset by surcharges to all customers under the RDM. Hence, if customers save money on their monthly water bill due to efficient consumption, customers will be forced to share their bill savings with the utility. Moreover, with the high and apparently never-ending rate increases that PAWC has implemented and will apparently continue to seek, customers are already incented to conserve water without a new RDM surcharge.

7. OCA witness Colton addresses how the RDM could affirmatively harm low-income customers that do not have the financial means to pursue investments in water conservation measures.

8. Under the current regulatory standard in Pennsylvania, base rate cost under and over recoveries are currently not tracked and are not eligible for recovery in future base rate proceedings. The proposed RDM would add another surcharge to customers' bills and would not reduce the frequency of PAWC base rate or DSIC rate filings. Thus, it does not appear that a new RDM surcharge would improve rate stability. In contrast, under traditional cost-of-service ratemaking, if a utility experiences sales reductions and under-recovery, it cannot simply achieve the same result as an RDM true-up by filing another base rate case with adjusted sales forecasts. When a utility files a general rate increase, all relevant information is reviewed to determine just and reasonable rates, not just sales forecasts. Traditional ratemaking produces rate stability.

9. The RDM adjustment or true-up mechanism creates the anomaly where customers see rate increases when they reduce consumption due to weather variations and rate decreases when they increase consumption due to weather variations.

10. The RDM will have no impact on the magnitude of base rate increases requested by the Company in the future. The RDM does not affect future revenue requirements and does not recover fixed costs that are incurred after a rate case that are over and above those approved by the Commission. Therefore, if future rate cases are driven by future investment needs and associated cost recovery, the RDM would not reduce the need for such cases.

11. The RDM will interact with the Company's DSIC because the DSIC is a percentage applied to the total bill and the RDM will impact a customer's total bill.

12. The proposed RDM does not include appropriate consumer protections and should be rejected for the reasons discussed in my testimony and the testimony of OCA witness Colton.

13. PAWC has not provided any evidence that the proposed RDM will be understandable to customers. When combined with the rate changes that occur under PAWC's DSIC and potentially the proposed ECIC, significant customer confusion is likely.

14. The proposed RDM does not provide a direct incentive to increase the safety and reliability of the PAWC system.

My detailed analysis of the 14 factors is presented in Schedule JDM-6.

Q. AT PAGE 99 OF PAWC STATEMENT NO. 10, MR. REA CLAIMS THAT IF A CUSTOMER TAKES ACTIONS TO USE LESS WATER IN AN ATTEMPT TO REDUCE THEIR BILL, THE RDM WILL NOT TAKE THOSE SAVINGS AWAY FROM THE CUSTOMER.

A. Mr. Rea states that where an average customer uses 4,000 gallons per month and reduces that usage to 3,800 gallons per month, or a 5% reduction in usage, the customer's bill would decrease by $4.26 for the usage reduction. The RDM adjustment that month would be a bill increase by $1.01 for the RDM ($0.0266 x 38) for a net bill savings of $3.25 per month. Rea, pp. 99-100, OCA-4-30 (Rea corrected the number from $4.16 to $4.26).

Q. DO YOU AGREE WITH THIS CLAIM?

A. No. If a customer reduces their consumption in an attempt to reduce their bill but the reduction is less than the reduction in usage of all other customers, the RDM will take those savings away from the customer, and in fact, the customer's bill will be higher. This is because the RDM charges all customers for usage reductions based on the aggregate reduction in usage by all customers. For a customer to continually experience bill savings under the RDM, the customer would need to ***continuously*** reduce their consumption by a ***greater amount*** than the average customer.

Q. SO WHAT DOES THIS MEAN FOR MOST CONSUMERS?

A. It means that under traditional ratemaking, a consumer can save money on their monthly water bill by improving their water efficiency and reducing consumption, and the consumer keeps those savings. In contrast, under the RDM, the consumer will be forced to share some of their bill savings with the utility, if enough customers reduce their usage such that the company does not meet its revenue target. For many consumers, it could mean being forced to return nearly all of their bill savings to the utility.

Q. DOES RDM REDUCE RISK FOR THE COMPANY?

A. Yes. The RDM, if approved, would remove the risk of not achieving allowed revenues, a risk which the Company faces under traditional ratemaking. Removing the risk of recovery lowers overall business risk for the Company.

Q. SHOULD THE RDM PROPOSED BY PAWC BE APPROVED BY THE COMMISSION?

A. No. As discussed in Schedule JDM-6, the proposed RDM provides a disincentive to ratepayers to undertake water conservation efforts because they would be required to

pay for water they did not use. PAWC has not provided any evidence that the proposed RDM will be understandable to customers, and when combined with the quarterly rate changes that occur under PAWC's DSIC and potentially the proposed ECIC, significant confusion is likely. In addition, PAWC's proposal to implement the proposed RDM will likely result in increases in customer rates between rate cases and potentially increases in customer bills for customers who have actually reduced their consumption. It would shift the risk of revenue fluctuations between rate cases away from investors, where it is currently borne, and place that risk onto ratepayers. In addition, as explained in greater detail in the direct testimony of OCA witness Colton, the RDM disproportionately adversely affects low-income customers. I recommend that PAWC's proposed RDM be rejected for the following additional reasons:

- The proposed RDM would lock in a revenue stream that would inure to the benefit of the Company's investors;
- The risk associated with fluctuations in water sales and revenue levels between rate cases would shift from the Company's investors, where it lies now, to ratepayers;
- If the proposed RDM was implemented and if revenues decreased as a result of a downturn in the economy, ratepayers would be required to make up the resultant shortfall in revenues. Under traditional ratemaking, utilities and their investors bear the risks of such economic downturns, as is the case with many other types of business and industries;
- PAWC has not proposed to reduce its equity return to reflect the reduction in risk associated with implementation of an RDM. In fact, PAWC affirmatively opposes any reduction related to the RDM.[17] This is also addressed in the testimony of OCA witness David Garrett (OCA Statement 3); and

[17] See pages 53-54 of the Direct Testimony of Company witness Bulkley.

- Ratepayers would be inappropriately held fully responsible for decreases in revenues due to a downturn in the economy and changes in revenues due to weather variations.

Q. WAS A SIMILAR REVENUE DECOUPLING MECHANISM PROPOSAL BY AN AFFILIATE OF PAWC RECENTLY REJECTED BY THE WEST VIRGINIA PUBLIC SERVICE COMMISSION?

A. Yes. In an Order dated February 24, 2022, the West Virginia Public Service Commission ("WV PSC") rejected a revenue decoupling mechanism proposed by West Virginia American Water Company, an affiliate of PAWC, stating as follows from page 55 of that Order.[18]

> WVAWC is proposing a radical change in regulatory policy in West Virginia that would, based on WVAWC's evidence on declining usage and customer count and Mr. Rea's testimony, guarantee annual rate increases for customers. As pointed out by Staff and the WVEUG, the Commission has addressed declining usage and customer count by approving WVAWC's proposed declining usage and customer attrition adjustments. A RSM implicitly shifts risk from investors to customers that would require an adjustment to the authorized rate of return. Additional surcharge mechanisms such as the RSM and, as discussed below, the UEX should not be approved at this time.

Q. DOES WEST VIRGINIA HAVE A STATUTE THAT ALLOWS CONSIDERATION OF A UTILITY PROPOSAL FOR ALTERNATIVE RATEMAKING?

A. Yes. The West Virginia Code (W.Va. Code §24-1-1) and the West Virginia Commission's Tariff Rules permit the use of alternative ratemaking approaches where

[18] West Virginia-American Water Co., Rule 42t Tariff Filing to Increase Water and Sewer Rate and Charges, 2022 W. Va PUC LEXIS 102, *55-57.

application would appropriately balance the interests of current and future utility customers, the general interests in that state's economy and the interests of the regulated public utility. W.Va. Code §24-1-1(b) and (c) state as follows:

> (b) The Legislature creates the Public Service Commission to exercise the legislative powers delegated to it. The Public Service Commission is charged with the responsibility for appraising and balancing the interests of current and future utility service customers, the general interests of the state's economy and the interests of the utilities subject to its jurisdiction in its deliberations and decisions. (c) The Legislature directs the Public Service Commission to identify, explore and consider the potential benefits or risks associated with emerging and state-of-the-art concepts in utility management, rate design and conservation. The commission may conduct inquiries and hold hearings regarding such concepts in order to provide utilities subject to its jurisdiction and other interested persons the opportunity to comment and shall report to the Governor and the Legislature regarding its findings and policies to each of these areas not later than the first day of the regular session of the Legislature in the year 1985, and every two years thereafter.

IX. ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE

Q. PLEASE DESCRIBE THE COMPANY'S PROPOSAL TO IMPLEMENT AN ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE ("ECIC").

A. As explained by witness J. Cas Swiz (PAWC Statement No. 8), PAWC seeks approval to establish an ECIC pursuant to Sections 1307 and 1330(b)(2) of the Public Utility Code. The ECIC is an alternative rate adjustment clause designed to reflect and recover, between rate cases, the costs imposed on the Company to address and comply with government-mandated environmental standards. Under PAWC's proposal, for

inclusion in the ECIC, the costs must be consistent with the set of projects and activities set forth in PAWC's annual environmental compliance plan ("Environmental Plan") that is subject to Commission review and approval.

Q. WHY DOES THE COMPANY BELIEVE IT APPROPRIATE TO RECOVER ENVIRONMENTAL PLAN COSTS THROUGH AN ALTERNATIVE RATEMAKING MECHANISM?

A. The Company contends that its proposed ECIC will provide a reasonable mechanism for adjusting the Company's rates between base rate cases to ensure full and timely rate recognition of PAWC's investments and measures undertaken to comply with new environmental regulatory mandates as they emerge. PAWC claims it has no control over the need for or timing of costs to comply with these new or changed regulatory requirements. PAWC claims that the ECIC will also help avoid customer exposure to less frequent but more significant rate increases in a general base rate case by producing smaller, more gradual increases to customer bills, and permitting PAWC to recover ECIC-eligible capital costs and expenses through an automatic adjustment clause, which will reduce a major driver of the need for rate relief that would otherwise trigger a base rate case filing. PAWC believes that the ECIC will help ensure that it receives adequate revenue to maintain safe, reliable, and compliant water and wastewater service that both meets government requirements and advances environmental policy objectives.

Q. HAS PAWC PROVIDED AN ESTIMATE OF THE COSTS THAT WILL BE REQUESTED FOR RECOVERY THROUGH THE ECIC?

A. No, not specifically. PAWC is a subsidiary of American Water Works Company, Inc. ("Parent Company"). The Parent Company has subsidiaries that operate in 13

jurisdictions. PAWC claims its compliance with new drinking water regulations will require significant capital investment, currently estimated at over $1 billion of capital expenditures for all of the Parent Company's 13 regulated jurisdictions, along with ongoing annual operating expenses estimated at approximately $50 million.

Q. HOW WILL THE ECIC REVENUE REQUIREMENT BE CALCULATED?

A. Mr. Swiz claims that the ECIC will capture the fixed costs of the Environmental Plan capital investments placed in-service after the end of the fully projected future test year ("FPFTY") in this case. The fixed costs will include the pre-tax return on the capital investment, the annual depreciation expense associated with the capital investment, incremental operating expenses within the Environmental Plan, and any associated deferrals associated with the capital investments. The fixed costs will be captured quarterly, with the ECIC effective one month after this date, as shown in the table below:

Environmental Plan Plant Additions As of	ECIC Rate Effective Date
March 31	May 1
June 30	August 1
September 30	November 1
December 31	February 1

Q. IS PAWC REQUESTING AUTHORIZATION TO DEFER ANY ECIC-RELATED COSTS UNTIL INCLUSION IN THE ECIC RIDER?

A. Yes. Until such point as the Environmental Plan investments and the associated fixed costs are included for recovery in the ECIC, PAWC is requesting authorization to defer depreciation expense and post-in-service carrying costs ("PISCC") from the period the investment is placed in-service until it is included in the ECIC rates for recovery. The depreciation expense deferred will be calculated consistent with the recoverable

depreciation expense in the quarterly revenue requirement. The PISCC will be calculated using the Company's actual after-tax rate of return for the previous ECIC quarter, applied to the net plant value (gross plant less accumulated depreciation) of eligible Environmental Plan investments in-service.

Q. HOW WILL THESE ECIC DEPRECIATION EXPENSE DEFERRALS BE RECOVERED?

A. Mr. Swiz claims PAWC will amortize the deferred balances over the remaining life of the investments, with only the annual amortization expense recovered within the ECIC. The Company is not seeking a return on these deferred balances.

Q. PLEASE DESCRIBE THE PROPOSED SCHEDULE FOR ECIC RIDER UPDATES.

A. The ECIC will be updated quarterly, with supporting data for each quarterly update filed with the Commission and served upon the Commission's Bureau of Investigation and Enforcement, Commission's Bureau of Audits, the Office of Consumer Advocate, and the Office of Small Business Advocate at least ten (10) days prior to the effective date of the update.

Q. HOW WILL THE ECIC RIDER BE ASSESSED TO CUSTOMERS?

A. The ECIC will be expressed as a percentage carried to two decimal places and will be applied to the total amount billed to each customer for service under the Company's otherwise applicable rates and charges, excluding amounts billed for public fire protection service, the State Tax Adjustment Surcharge ("STAS"), and the DSIC (collectively, "excluded amounts"). One-fourth of the annual fixed costs associated with the Environmental Plan projects will be divided by the Company's projected revenue for sales for water (including all applicable clauses and riders and

less the excluded amounts) for the quarterly period during which the charge will be collected. The ECIC will be applied equally to all customer classes.

Q. WILL THE ECIC BE AUDITED AND RECONCILED?

A. Yes, the ECIC will be subject to audit at intervals determined by the Commission and to reconciliation annually for the twelve (12) months ending December 31 of each year. With respect to reconciliation, the revenue received under the ECIC for the reconciliation period will be compared to the Company's eligible costs for that period, with any difference between revenues and costs recouped from or credited to customers, as appropriate, over a one-year period commencing on May 1 of each year. The Company may elect to reconcile the ECIC quarterly, but only upon request and approval by the Commission.

Any over- or under-collection of revenues compared to ECIC eligible costs will be subject to interest, calculated at the Residential mortgage lending specified by the Secretary of Banking in accordance with the Loan Interest and Protection Law (41 P.S. § 101, et seq.). Interest will be refunded to or collected from customers in the same manner as any over- or under-recovery collection.

Q. WILL THE ECIC RESET WITH THE IMPLEMENTATION OF FUTURE BASE RATES?

A. Yes. Under the Company's proposal, the ECIC will be reset to zero upon application of new base rates to customer billings that provide for prospective recovery of the annual costs that had theretofore been recovered under the ECIC.

Q. WILL THE ECIC BE SUBJECT TO AN EARNINGS EVALUATION?

A. Under the Company's proposal, the ECIC *may* be reset to zero if, in any quarter, data filed with the Commission in the Company's then most recent Annual or Quarterly

Earnings reports show that the Company will earn a rate of return that would exceed the allowable rate of return used to calculate its fixed costs under the ECIC.

Q. IN ADDRESSING THE REVENUE DECOUPLING MECHANISM PROPOSED BY PAWC, YOU REFERENCE THE COMMISSION STATEMENT OF POLICY RELATED TO ALTERNATIVE RATEMAKING METHODOLOGIES, AND THE 14 FACTORS THE COMMISSION INDICATED IT WOULD CONSIDER IN EVALUATING AN ALTERNATIVE RATEMAKING MECHANISM SUCH AS THE ECIC. DID MR. SWIZ ADDRESS THE 14 FACTORS AS THEY RELATE TO PAWC'S PROPOSED ECIC IN HIS DIRECT TESTIMONY?

A. Yes. The 14 factors are addressed in PAWC Exhibit JCS-1. The Company's response to the 14 factors, and my response to the 14 factors are presented in Schedule JDM-7.

Q. DID MR. SWIZ SPECIFICALLY ADDRESS THE 14 FACTORS AS THEY RELATE TO PAWC'S PROPOSED RDM IN HIS DIRECT TESTIMONY?

A. Yes. Mr. Swiz claims that the 14 factors are satisfied. PAWC Exhibit JCS-1.

Q. IN YOUR OPINION, DOES THE ECIC SATISFY THE 14 FACTORS OF THE PUC'S POLICY STATEMENT?

A. No. In my opinion, the ECIC does not meet the 14 factors of the PUC's Policy Statement for the following reasons:

1. The ECIC does not align revenues with cost causation principles as to both fixed and variable costs. The ECIC will be assessed as a percentage applied to each customer's total bill. Over 80% of the Company's water and wastewater revenues will be collected under volumetric rates under the Company's proposed rate structure in this case. However, 95% of the

Company's costs associated with providing water and wastewater service are fixed.

2. It is unlikely that the ECIC will impact PAWC's capacity utilization.

3. As explained in factor one above, the ECIC does not align revenues with cost causation principles as to both fixed and variable costs.

4. The costs PAWC is proposing to recover through the ECIC would ordinarily be assigned to each customer class based on the results of a cost of service study. In a cost-of-service study, costs are assigned to each customer class based on class responsibility for the incurrence of those costs. The ECIC will be assessed to each customer as a percentage applied to each customer's total bill, without consideration as to the extent that customer's class is responsible for the incurrence of those costs. Therefore, interclass cost shifting is likely to result.

5. The proposed ECIC is unlikely to impact efficiency programs or incentives.

6. Same answer as for factor 5 above.

7. In his Direct Testimony, OCA witness Colton addresses the adverse impact the ECIC would have on low-income customers and concludes that the ECIC will harm low-income customers.

8. Under the ECIC, the number of rate increases experienced by customers will increase significantly.

9. The ECIC is not designed to address weather impacts on utility revenue.

10. While the ECIC *may* reduce base rate case frequency, it is almost certainly going to lead to more frequent rate changes as the ECIC moves predominantly upward. The ECIC will provide for the recovery of certain Environmental Compliance investments made by the Company without consideration of any

potential cost of service reductions that PAWC may experience. The proposed ECIC does not permit parties to investigate cost reductions that may have been experienced by the Company. Cost reductions are currently investigated and evaluated in base rate proceedings.

11. The proposed ECIC will interact with the Company's DSIC because the DSIC is a percentage applied to the total bill and the ECIC will impact a customer's total bill.

12. The proposed ECIC does not include appropriate consumer protections and should be rejected for the reasons discussed in my testimony and the testimony of OCA witness Colton.

13. PAWC has not provided any evidence that the proposed ECIC will be understandable to customers. When combined with the rate changes that occur under PAWC's DSIC and potentially the proposed RDM, significant customer confusion is likely.

14. The proposed ECIC does not provide PAWC a direct incentive to increase the reliability of its systems.

My detailed analysis of the 14 factors is presented in Schedule JDM-7.

Q. SHOULD THE COMMISSION APPROVE PAWC'S PROPOSED ECIC?

A. No. The Commission should reject the proposed ECIC. I have two major concerns. The first major concern is that the ECIC unreasonably shifts the risk of recovery from shareholders to consumers. The challenges that PAWC faces in complying with new and emerging environmental regulations or regulatory policy objectives is typical of any of the challenges faced by any utility management. As OCA witness Christine Hoover discusses in her Direct Testimony, for water utilities, delivering safe drinking water that complies with environmental mandates is part and parcel of PAWC's

statutory obligation to provide safe and reasonable service and is a key underpinning of the regulatory compact. The ECIC unreasonably places greater risk onto consumers for the benefit of stakeholders because through the ECIC, PAWC would be able to immediately recover costs, including a return to investors, under the surcharge subject to a reconciliation. Such risk is and can be in the future appropriately addressed under traditional ratemaking. Indeed, should PAWC's management find in the future that its existing rates are insufficient to comply with any environmental rules or regulations, the Company may elect to file a rate case.

Q. WHAT IS YOUR SECOND MAJOR CONCERN?

A. My second major concern is the very broad and ambiguous scope of the qualifying costs under the ECIC. PAWC states that investments under ECIC would represent a significant portion of the Company's annual capital budget. ECIC is a broad capital investment rate surcharge that would provide PAWC with authority to recover very large and wide-ranging capital investments in new infrastructure in water production, treatment, storage infrastructures to address vague environmental concerns. Investments in infrastructure can provide positive economic results that benefit consumers, but only if those investments are reasonable, prudent, and used and useful. Determinations of whether such utility plant investments meet these legal standards for the protection of consumers are made in the context of base rate proceedings, in which the OCA as a statutory advocate devotes substantial resources. While PAWC has proposed an entire set of procedural rules to enable parties to review and potentially challenge their ECIC filings, PAWC's proposal misses the point that consumers and statutory advocates have very limited resources and cannot realistically expect to

review these recurring filings with the same type of scrutiny given to base rate case filings.

Q. DO YOU HAVE ANY OTHER CONCERNS?

A. Yes. My other concerns with the ECIC, in support of the Commission's rejection of the ECIC, are as follows:

- The ECIC does not align revenues with cost causation as to both fixed and variable costs;
- The proposed ECIC is likely to result in interclass and intraclass cost shifting. These shifts will occur because the ECIC will be assessed as a percentage increase to the total amount billed to each customer, and will not be assigned based on cost causation principles;
- The ECIC could affirmatively harm low-income customers that do not have the financial means to pursue investment in water conservation measures;
- The number of rate increases experienced by customers will increase significantly under the ECIC and PAWC has not provided any evidence that the proposed ECIC will be understandable to customers. When combined with the rate changes that occur under PAWC's DSIC and potentially the proposed RDM, significant customer confusion is likely;
- The ECIC will provide for the recovery of certain environmental compliance investments made by the Company without consideration of any potential cost of service reductions that PAWC may experience. The proposed ECIC does not permit parties to investigate cost reductions that may have been experienced by the Company; and
- As discussed in greater detail in the direct testimony of OCA witness Colton, the ECIC will harm low-income customers.

Q. DOES MR. SWIZ CLAIM THAT OTHER JURISDICTIONS HAVE APPROVED ENVIRONMENTAL COMPLIANCE RIDERS OR ALTERNATIVE RATEMAKING MECHANISMS SIMILAR TO THE ECIC?

A. Yes. Mr. Swiz claims that utility Commissions in 30 states have approved various forms of environmental compliance riders or similar alternative ratemaking mechanisms. Witness Swiz claims that these riders and mechanisms are more prevalent for fully-integrated energy utilities often for electric utilities with generating assets to comply with Environmental Protection Agency ("EPA") mandates under the Clean Air Act.

Q. HAS PENNSYLVANIA ADOPTED SUCH RIDERS OR MECHANISMS?

A. No.[19]

Q. HAVE ANY OF AMERICAN WATER'S 13 SUBSIDIARIES PROPOSED ADJUSTMENT CLAUSES SIMILAR TO THE ECIC WHICH WERE REJECTED BY THEIR COMMISSION?

A. Yes. In Docket No. 22-0210, the Illinois-American Water Company proposed an Environmental Surcharge Rider ("Rider ESR") to provide for the recovery between rate cases of the revenue requirement associated with capital investments made to comply with new and emerging state and federal environmental standards or to advance state and federal environmental regulatory policy objectives.

In an order issued December 15, 2022, the Illinois Commerce Commission ("ICC") rejected Rider ESR for many of the reasons I have explained above, stating:

[19] https://www.spglobal.com/marketintelligence/en/documents/adjustment-clauses-state-by-state-overview.pdf.

Compliance with state and federal regulations is a requirement for all public utilities and is not unique to IAWC. As parties indicate, these regulations are on some level always in flux. Regulations governing the treatment of contaminants in water do change, as do federal and state environmental policy objectives. While specific changes themselves may be unpredictable, they are not unexpected. As the AG notes, two of the 'emerging contaminants' that IAWC refers to have been under consideration by the EPA for over a decade.

The Commission agrees with Staff, the AG, and the Municipalities that the challenges that IAWC faces in complying with new and emerging regulations or regulatory policy objectives is typical of any of the challenges faced by any utility management. The Commission finds it unreasonable to approve a rider mechanism that would arguably place greater risk on the ratepayer for the benefit of stakeholders because IAWC would be able to immediately recover costs, including a return to investors, under the rider subject to a reconciliation. Should IAWC's management find in the future that its existing rates are insufficient to comply with any environmental rules or regulations, the Company may elect to file a rate case.

Also concerning is the potential scope of the qualifying costs under Rider ESR. IAWC states that investments under Rider ESR would represent a significant portion of the Company's annual capital budget. As Staff correctly notes, Rider ESR is a broad capital investment rider that would provide IAWC with authority to make large capital investments in new infrastructure to address vague environmental concerns. While investments in infrastructure provide positive economic results that benefit ratepayers, that does not mean that such investments are reasonable or prudent, especially considering the broad scope and ambiguity of Rider ESR. Accordingly, the Commission rejects IAWC's proposed Rider ESR. (Order, page 173).

Q. DOES PAWC CURRENTLY HAVE AN ADJUSTMENT CLAUSE MECHANISM IN PLACE WHICH AUTHORIZES THE COMPANY TO RECOVER THE COSTS ASSOCIATES WITH CERTAIN INVESTMENTS OUTSIDE A BASE RATE PROCEEDING?

A. Yes. PAWC's water and wastewater customers are assessed a Distribution System Improvement Charge ("DSIC") which is generally designed to recover the fixed costs (depreciation and pre-tax return) associated with non-revenue producing, non-expense reducing, distribution system improvement projects between rate cases. The DSIC is a percentage which is applied to a customer's bill.

Q. ARE PAWC'S WATER AND WASTEWATER DSICS SUBJECT TO A RATE CAP?

A. Yes. The water DSIC is subject to a 7.5% rate cap and the wastewater DSIC is subject to a 5% rate cap. These rate caps are generally applied to all water and wastewater DSICs in Pennsylvania.

Q. HAS THE COMMISSION INDICATED WHY THESE RATE CAPS HAVE BEEN ADOPTED?

A. The Commission has indicated that the rate caps have been adopted to prevent any long-term evasion of a base rate review of the costs which are eligible for recovery (cite). The Commission also found that the rate caps will not evade the Section 1308 base rate process and its extensive top-to-bottom review of all of a Company's revenue, expense, rate base, and return claims (cite). In other words, that rate caps will ensure that the DSIC will not allow a company to avoid a base rate review of the eligible property in perpetuity (cite).

Q. HAS PAWC PROPOSED A RATE CAP FOR ITS ECIC?

A. No.

Q. ARE THERE REASONS WHY AN AUTOMATIC ADJUSTMENT CLAUSE LIKE THE ECIC IS DISFAVORED?

A. Yes. In a base rate case all of a utility's revenues, expenses, and capital costs are simultaneously reviewed so that increases in one category that are offset by decreases in another are considered in determining rates that are just and reasonable. An adjustment clause like PAWC's proposed ECIC, on the other hand, singles out a line item in a utilities base rate to account for expense attributable to capital investment, while ignoring the other components of the base rate. This may result in the establishment of an unjust and unreasonable rate.

Q. PLEASE PROVIDE AN EXAMPLE OF THE COSTS FOR WHICH PAWC IS SEEKING RECOVERY IN THIS PROCEEDING WHICH MAY DECLINE AND WOULD NOT BE TAKEN INTO CONSIDERATION UNDER THE ECIC?

A. PAWC's debt costs may decline from those approved in this proceeding. Interest rates are currently at higher levels compared to those in recent years and are likely to decline. Any decline in interest rates and PAWC's debt costs would not be taken into consideration in the rate setting process under the ECIC.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does. I reserve the right to update my testimony based on additional information received in the course of discovery.

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	**)**	**Docket Nos. R-2023-3043189 (Water)**
v.	**)**	**R-2023-3043190 (Wastewater)**
Pennsylvania-American Water Company	**)**	
	)	

SCHEDULES ACCOMPANYING THE

DIRECT TESTIMONY OF

JEROME D. MIERZWA

ON BEHALF OF THE

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

FEBRUARY 1, 2024

EXETER
ASSOCIATES, INC.
10480 Little Patuxent Parkway, Suite 300
Columbia, Maryland 21044

Schedule JDM-1

THE YORK WATER COMPANY
WATER OPERATIONS

SUMMARY OF AVERAGE DAILY SEND-OUT AND MAXIMUM DAILY AND HOURLY USAGE
FOR THE YEARS 1983-2021

		Maximum Daily Usage			Maximum Hour Usage			
Year	Average Daily Send-out	MGD	Ratio to Average	Date	MGD	Ratio to Average	Date	Hour
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1983	17.10	24.10	1.41	19-Jul	32.20	1.88	17-Jul	8 p.m.
1984	16.60	19.70	1.19	12-Jun	29.10	1.75	12-Jan	10 a.m.
1985	16.70	21.40	1.28	14-Aug	28.50	1.71	20-Apr	10 a.m.
1986	18.00	22.10	1.23	27-Jun	32.50	1.81	31-Mar	2 p.m.
1987	17.90	23.20	1.30	18-Aug	27.90	1.56	03-Aug	11 a.m.
1988	19.00	24.60	1.29	07-Jul	28.50	1.50	15-Aug	12 p.m.
1989	19.20	22.20	1.16	27-Jun	28.90	1.51	28-Mar	9 a.m
1990	19.50	22.60	1.16	18-Jul	29.00	1.49	07-Sep	7 a.m
1991	19.30	24.30	1.26	27-Jun	29.10	1.51	17-Jun	11 a.m.
1992	18.70	21.60	1.16	25-Aug	28.00	1.50	28-Jan	4 p.m.
1993	19.50	23.60	1.21	03-Aug	26.20	1.34	24-Nov	9 a.m
1994	19.90	24.50	1.23	15-Jun	27.20	1.37	15-Jun	8 a.m
1995	19.80	23.90	1.21	17-Aug	28.90	1.46	31-Aug	8 p.m.
1996	18.60	22.40	1.20	20-May	28.10	1.51	20-May	7 a.m
1997	18.70	25.10	1.34	15-Jul	29.90	1.60	17-Jul	9 a.m
1998	18.90	23.50	1.24	22-Jul	28.70	1.52	20-Jul	8 p.m.
1999	20.70	26.00	1.26	08-Jun	30.70	1.48	21-Oct	9 p.m.
2000	19.80	23.10	1.17	12-Jul	30.00	1.52	26-Apr	9 p.m.
2001	19.65	26.00	1.32	24-Jul	32.00	1.63	10-May	9 p.m.
2002	17.90	22.40	1.25	01-Aug	29.40	1.64	01-Aug	1 p.m.
2003	17.50	21.60	1.23	17-Jul	27.70	1.58	08-Oct	10 a.m.
2004	18.20	21.40	1.18	02-Sep	29.10	1.60	05-May	9 p.m.
2005	18.66	23.90	1.28	26-Jun	30.40	1.63	26-Jun	8 p.m.
2006	18.77	26.94	1.44	16-Aug	34.50	1.84	16-Aug	8 p.m.
2007	19.06	25.28	1.33	31-May	33.40	1.75	30-Jul	8 p.m.
2008	18.35	23.28	1.27	13-Jun	30.90	1.68	13-Jun	8 p.m.
2009	18.23	22.73	1.25	15-Jul	28.60	1.57	12-Jun	8 p.m.
2010	18.23	27.76	1.52	06-Jul	32.30	1.77	05-Jul	9 p.m.
2011	18.46	26.33	1.43	21-Jul	32.40	1.75	21-Jul	9 p.m.
2012	18.60	25.30	1.36	07-Jul	32.30	1.74	07-Jul	6 p.m.
2013	19.09	23.89	1.25	31-May	31.10	1.63	18-Jul	8 p.m.
2014	18.33	22.27	1.21	7-Jul	28.60	1.56	19-May	8 p.m.
2015	18.51	24.80	1.34	24-Jul	28.80	1.56	13-May	8 p.m.
2016	18.80	24.35	1.30	22-Jul	31.00	1.65	22-Jul	8 p.m.
2017	18.38	24.45	1.33	21-May	30.40	1.65	19-Jun	8 p.m.
2018	19.46	24.47	1.26	23-May	31.60	1.62	2-Jul	N/A
2019	20.16	24.00	1.19	30-Jul	30.70	1.52	22-Apr	N/A
2020	19.99	24.73	1.24	20-Jul	30.60	1.53	9-Jul	N/A
2021	20.32	25.50	1.25	28-Mar	31.90	1.57	28-Apr	N/A

Schedule JDM-2

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

COMPARISON OF PRO FORMA COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

	Pro Forma Cost of Service, as of June 30, 2025				Pro Forma Revenues Under Present Rates		Pro Forma Revenues Under Proposed Rates		Proposed Increase	
Customer Classification	Cost of Service	Allocation of Other COS*	Total Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Residential	$596,775,486	$ 46,505,573	$ 643,281,059	64.0%	$ 528,290,043	65.5%	$ 657,085,231	65.4%	$ 128,795,188	24.4%
Commercial	228,424,759	18,320,153	246,744,912	24.6%	202,779,636	25.1%	254,604,000	25.3%	51,824,364	25.6%
Industrial	49,544,130	3,939,176	53,483,306	5.3%	37,580,738	4.7%	48,143,784	4.8%	10,563,046	28.1%
Public (Municipal)	37,856,691	1,635,240	39,491,931	3.9%	22,559,539	2.8%	26,209,929	2.6%	3,650,390	16.2%
Other Water Utilities - Group A	11,913		11,913	0.0%	51,822	0.0%	53,666	0.0%	1,844	3.6%
Other Water Utilities - Group B	449,960		449,960	0.0%	202,436	0.0%	277,021	0.0%	74,585	36.8%
Private Fire Protection	7,063,962	341,990	7,405,952	0.7%	5,301,032	0.7%	6,304,285	0.6%	1,003,253	18.9%
Public Fire Protection	13,666,421	-	13,666,421	1.4%	9,519,368	1.2%	11,847,068	1.2%	2,327,700	24.5%
Total Sales of Water	$933,793,321	$ 70,742,132	$ 1,004,535,453	100.0%	$ 806,284,614	100.0%	$1,004,524,984	100.0%	$ 198,240,370	24.6%
Other Water Revenues	$ 10,675,369	345,262	11,020,631		10,034,363		11,031,091		996,708	9.9%
Contract Sales - Industrial	4,482,099		4,482,099		4,482,099		4,482,099		-	0.0%
Contract Sales - Resale	3,316,086		3,316,086		3,316,086		3,316,086		0	0.0%
Total	$952,266,876	$ 71,087,394	$ 1,023,354,270		$ 824,117,182		$1,023,354,261		$ 199,237,079	24.2%

Pennsylvania-American Water Company

3-A Combined Water and Wastewater Revenue Requirement - Summary

		Total Company	Water Operations	Wastewater SSS General Operations	BASA Wastewater Operations	Brentwood Wastewater Operations	CSS Wastewater Operations
Present Rate Revenue	(1)	$1,011,895,862	$824,117,186	$95,470,867	$11,847,402	$1,824,191	$78,636,216
Additional Revenue Requirement	(2)	203,945,911	$128,149,690	$31,793,150	$26,288,308	$1,934,637	$15,780,126
Act 11 - Wastewater Allocation	(3)	0	71,087,394	(31,962,411)	(21,552,699)	(1,565,232)	(16,007,052)
Proposed Revenues		$1,215,841,773	$1,023,354,270	$95,301,606	$16,583,011	$2,193,596	$78,409,290
Rate Increase/(Decrease)		$203,945,911	$199,237,084	($169,261)	$4,735,609	$369,405	($226,926)
		20.2%	24.2%	-0.2%	40.0%	20.3%	-0.3%

Notes:

(1) Present Rate Revenue: Present Rate Revenues are developed in the sections of Exhibit 3-A that relate to each of these operations.

(2) Additional Revenue Requirement: The Additional Revenue Requirement are developed in subsequent sections of this Exhibit 3-A for each of the operations.

(3) Act 11 - Wastewater Allocation is the allocation between wastewater operations and water operations achieved by the proposed consolidation of water and wastewater revenue requirements to derive the water and wastewater rates proposed by the Company in this case.

Schedule JDM-3

Schedule JDM-4

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

CALCULATION OF THE 5/8-INCH CUSTOMER COSTS PER MONTH
INCLUDING THE UNRECOVERED PUBLIC FIRE COSTS

Cost Function	Cost of Service*	Number of Units	Unit Cost Per Month
Meters	38,545,799	1,028,826 5/8 Equivalents	$ 3.12
Services	71,193,457	766,889 3/4 Equvalents	7.74
Billing/Collecting	31,160,580	9,040,521 Bills	3.45
Meter Reading	5,238,395	9,040,521 Bills	0.58
Subtotal	146,138,230		14.89
Unrecovered Public Fire	40,999,262	1,028,826 5/8 Equivalents	3.32
Total	187,137,492		$ 18.21

* Includes only direct customer costs.

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025 ALLOCATED TO COST FUNCTIONS

Account		Factor Ref.	Cost of Service	Flow	I&I	Customer Facilities	Customer Accounting
(1)		(2)	(3)	(4)	(5)	(6)	(7)
OPERATION AND MAINTENANCE EXPENSES							
	SEWAGE TREATMENT						
601.3	Salary and Wages	1	$ 3,023,499	$ 2,274,578	$ 748,921	$ -	$ -
601.4	Salary and Wages	1	226,565	170,445	56,120	0	0
604.3	Employee Benefits	1	225	169	56	0	0
615.3	Purchased Power	1	3,234,166	2,433,063	801,103	0	0
618.3	Chemicals	1	1,810,725	1,362,209	448,517	0	0
620.3	Materials and Supplies - Operation	1	911,627	685,817	225,810	0	0
631.3	Contractual Services - Engineering	1	11,497	8,649	2,848	0	0
635.3	Contract Services Test	1	336,086	252,837	83,249	0	0
636.3	Contract Services - Operation	1	1,054,403	793,227	261,176	0	0
641.3	Rental of Building	1	(8,355)	(6,285)	(2,070)	0	0
650.3	Transportation	1	21,621	16,265	5,356	0	0
620.4	Materials and Supplies - Maintenance	1	58,189	43,776	14,413	0	0
636.4	Contract Sevices - Maintenance	1	55,494	41,748	13,746	0	0
650.4	Transportation	1	0	0	0	0	0
675.4	Misc. Operating Expense - Waste Disposal	1	2,572,562	1,935,338	637,223	0	0
675.4	Misc. Operating Expense	1	2,018,277	1,518,349	499,927	0	0
	TOTAL SEWAGE TREATMENT EXPENSE		15,326,581	11,530,187	3,796,394	0	0
	COLLECTION						
601.1	Salary and Wages	2	0	0	0	0	0
601.5	Salary and Wages	2	336,184	59,572	276,612	0	0
601.6	Salary and Wages	2	249,834	44,271	205,563	0	0
615.5	Purchased Power	2	92,962	16,473	76,489	0	0
615.1	Purchased Power	2	0	0	0	0	0
620.5	Materials and Supplies	2	15,075	2,671	12,404	0	0
636.5	Contract Services	2	47,222	8,368	38,854	0	0
642.5	Rental of Buildings	2	40,700	7,212	33,488	0	0
675.1	Miscellaneous Operating Expense	2	0	0	0	0	0
675.5	Miscellaneous Operating Expense	3	0	0	0	0	0
	TOTAL COLLECTION EXPENSE OPERATION		781,977 #	138,566 #	643,410 #	0 #	0
620.6	Materials and Supplies	2	125,874	22,305	103,569	0	0
636.6	Contract Services	2	131,144	23,239	107,905	0	0
650.6	Transportation	2	0	0	0	0	0
675.6	Miscellaneous Maintenance Expense	2	0	0	0	0	0
675.5&6	Miscellaneous Operating Expense	2	125,429	22,226	103,203	0	0
	TOTAL T & D EXPENSE - MAINTENANCE		382,447	67,770	314,677	0	0
	TOTAL COLLECTION EXPENSE		1,164,423	206,336	958,088	0	0
	CUSTOMER ACCOUNTS						
601.7	Salary and Wages	5	3,303	0	0	0	3,303
641.7	Rental of Building	5	18,000	0	0	0	18,000
670.7	Bad Debts	5	1,696,295	0	0	0	1,696,295
675.7	Miscellaneous Expense	5	84,053	0	0	0	84,053
	TOTAL CUSTOMER ACCOUNTING EXPENSE		1,801,650	0	0	0	1,801,650

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025 ALLOCATED TO COST FUNCTIONS

	ADMINISTRATIVE AND GENERAL EXPENSES						
601.8	Salaries and Wages	10	1,076,942	609,538	284,052	0	183,352
603.8	Salaries of Officiers	10	0	0	0	0	0
604.8	Employee Pension & Benefits	6	1,463,981	940,508	467,891	0	55,582
615.8	Purchased Power	10	107,349	60,758	28,314	0	18,276
620.8	Materials and Supplies	10	9,769	5,529	2,577	0	1,663
631.8	Contractual Services	10	14,445	8,176	3,810	0	2,459
632.8	Contractual Services - Accounting	10	115,507	65,376	30,466	0	19,665
634.8	Contractual Services - Management						
	Customer Related	5	487,535	0	0	0	487,535
	Employee Related	6	318,593	204,674	101,823	0	12,096
	Lab Testing	1	22,696	17,074	5,622	0	0
	Other	10	1,130,604	639,910	298,206	0	192,488
636.8	Contractual Services	10	12,226	6,920	3,225	0	2,082
642.8	Rental of Equipment	10	0	0	0	0	0
650.8	Transportation	10	154,433	87,408	40,733	0	26,293
656.8	Insurance Vehicles	10	32,669	18,490	8,617	0	5,562
657.8	Insurance	10	1,453,593	822,719	383,397	0	247,478
658.8	Advertising	10	139,443	78,923	36,779	0	23,740
659.8	Workers Compensation	6	485,302	311,773	155,104	0	18,425
666.8	Amortization of Rate Case	9	76,393	49,524	21,549	3,001	2,319
675.8	Miscellaneous Expense	10	989,005	559,767	260,858	0	168,380
	TOTAL A & G EXPENSE		8,090,486	4,487,068	2,133,022	3,001	1,467,396
	Total Operation & Maintenance Expenses		26,383,140	16,223,590	6,887,503	3,001	3,269,046
	DEPRECIATION EXPENSE						
354.20	Structures and Improvements - Collection	2	306,681	54,344	252,337	0	0
354.30	Structures and Improvements -Pumping	2	435,157	77,110	358,047	0	0
354.40	Structures and Improvements - Treatment	1	6,728,371	5,061,754	1,666,618	0	0
354.40	Structures and Improvements - Treatment - Bulk	1	124,544	93,694	30,850	0	0
354.70	Structures and Improvements - General	2	528,271	93,610	434,661	0	0
355.00	Power Generation Equipment	2	197,036	34,915	162,121	0	0
360.10	Force Mains	3	1,044,283	785,614	258,669	0	0
361.10	Gravity Mains	3	4,305,155	3,238,768	1,066,387	0	0
361.10	Gravity Mains - Bulk	3	26,858	20,206	6,653	0	0
361.20	Manholes	3	1,851,538	1,392,912	458,626	0	0
361.20	Manholes - Bulk	3	185	139	46	0	0
363.00	Service Laterals	4	1,867,929	0	0	1,867,929	0
364.00	Flow Measuring Devices	2	51,836	9,185	42,651	0	0
365.00	Flow Measuring Devices - Installations	2	8,174	1,448	6,726	0	0
370.00	Receiving Wells	2	16,143	2,861	13,282	0	0
371.00	Pumping Equipment	2	1,266,314	224,391	1,041,923	0	0
380.00	Treatment Equipment	1	7,189,190	5,408,428	1,780,762	0	0
380.00	Treatment Equipment - Bulk	1	59,827	45,008	14,819	0	0
381.00	Plant Sewers	1	148,466	111,691	36,775	0	0
382.00	Outfall Sewers	1	61,464	46,239	15,225	0	0
389.10	Other Plant and Misc. Equip. - Intangible	10	204,555	115,776	53,953	0	34,826
390.00	Office Furniture and Equipment	10	80,935	45,808	21,347	0	13,779
391.00	Transportation Equipment	10	277,526	157,077	73,200	0	47,249
392.00	Stores Equipment	10	4,301	2,434	1,134	0	732
393.00	Tools, Shop and Garage Equipment	10	71,873	40,679	18,957	0	12,237
394.00	Laboratory Equipment	1	58,132	43,733	14,399	0	0
395.00	Power Operated Equipment	10	107,639	60,923	28,391	0	18,326
396.00	Communication Equipment	10	280,271	158,631	73,924	0	47,717
397.00	Miscellaneous Equipment	10	178,874	101,241	47,179	0	30,454
398.00	Other Tangible Plant	10	594	336	157	0	101
	Total Depreciation Expense		27,482,122	17,428,954	7,979,818	1,867,929	205,421

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025 ALLOCATED TO COST FUNCTIONS

	Amortization Expense	8	(75,633)	(50,402)	(21,672)	(3,252)	(307)
	Taxes Other Than Income						
685100	Utility Reg Assessment Fee	9	800,253	518,788	225,738	31,432	24,295
685200	Property Taxes	8	2,227,703	1,484,545	638,333	95,773	9,052
685320	Payroll Taxes	6	391,525	251,528	125,132	0	14,865
	Total Taxes, Other Than Income		3,419,481	2,254,861	989,203	127,206	48,212
	Total Operating Expense		57,209,110	35,857,003	15,834,852	1,994,884	3,522,371
4091	Income Taxes	8	18,498,056	12,327,136	5,300,489	795,267	75,164
	Utility Income Available for Return	8	51,556,851	34,357,574	14,773,255	2,216,529	209,493
	Total Cost of Service		127,264,017	82,541,713	35,908,595	5,006,680	3,807,029
	Less: Other Revenues	9	1,406,017	911,493	396,613	55,226	42,685
	Less: IPP Surcharge	1	1,835,040	1,380,500	454,539	0	0
	Less: Cost of Service Recovered from Water Rates -	9	31,962,411	20,720,591	9,016,048	1,255,422	970,349
	Total Cost of Service Related to Sales of Wastewater Services		92,060,549	59,529,129	26,041,395	3,696,032	2,793,994

PENNSYLVANIA AMERICAN WATER COMPANY
WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
COST OF SERVICE FOR THE TWELVE MONTHS ENDING JUNE 30, 2025 ALLOCATED TO COST FUNCTIONS

RATE BASE						
352.00 Franchises	7	221,140	147,407	63,386	9,540	807
353.20 Land and Land Rights - Collection	2	3,611,014	639,872	2,971,142	0	0
353.30 Land and Land Rights - Pumping	2	953,051	168,881	784,170	0	0
353.40 Land and Land Rights - Treatment	1	10,757,369	8,092,769	2,664,600	0	0
354.40 Land and Land Rights - Treatment - Bulk User	1	180,167	135,539	44,627	0	0
354.20 Structures and Improvements - Collection	2	9,257,960	1,640,511	7,617,449	0	0
354.30 Structures and Improvements - Pumping	2	12,975,165	2,299,199	10,675,966	0	0
354.40 Structures and Improvements - Treatment	1	178,593,404	134,355,818	44,237,586	0	0
354.40 Structures and Improvements - Treatment - Bulk	1	3,310,181	2,490,249	819,932	0	0
354.70 Structures and Improvements - General	2	8,844,490	1,567,244	7,277,246	0	0
355.00 Power Generation Equipment	2	3,795,967	672,645	3,123,322	0	0
360.10 Force Mains	3	44,055,119	33,142,666	10,912,453	0	0
361.10 Gravity Mains	3	185,176,934	139,308,607	45,868,326	0	0
361.10 Gravity Mains - Bulk	3	1,158,572	871,594	286,978	0	0
361.20 Manholes	3	29,690,250	22,335,975	7,354,275	0	0
361.20 Manholes - Bulk	3	3,735	2,810	925	0	0
363.00 Service Laterals	4	30,363,053	0	0	30,363,053	0
364.00 Flow Measuring Devices	2	240,267	42,575	197,692	0	0
365.00 Flow Measuring Devices - Installations	2	29,703	5,263	24,440	0	0
370.00 Receiving Wells	2	596,803	105,753	491,050	0	0
371.00 Pumping Equipment	2	19,996,897	3,543,450	16,453,447	0	0
380.00 Treatment Equipment	1	136,477,542	102,672,055	33,805,487	0	0
380.00 Treatment Equipment - Bulk	1	1,191,483	896,353	295,130	0	0
381.00 Plant Sewers	1	4,665,176	3,509,612	1,155,564	0	0
382.00 Outfall Sewer Lines	1	2,423,145	1,822,932	600,213	0	0
389.10 Other Plant and Misc. Equip. - Intangible	10	3,271,432	1,851,597	862,866	0	556,969
390.00 Office Furniture and Equipment	10	1,049,106	593,783	276,710	0	178,613
391.00 Transportation Equipment	10	2,735,161	1,548,073	721,420	0	465,667
392.00 Stores Equipment	10	63,283	35,818	16,691	0	10,774
393.00 Tools, Shop and Garage Equipment	10	1,059,761	599,814	279,520	0	180,427
394.00 Laboratory Equipment	1	390,333	293,648	96,685	0	0
395.00 Power Operated Equipment	10	1,504,869	851,741	396,921	0	256,207
396.00 Communication Equipment	10	3,136,445	1,775,196	827,262	0	533,987
397.00 Miscellaneous Equipment	10	2,266,643	1,282,897	597,845	0	385,901
398.00 Other Tangible Plant	7	11,280	7,519	3,233	487	41
TOTAL SEWER UTILITY PLANT IN SERVICE		$ 704,056,899	$ 469,309,864	$ 201,804,562	$ 30,373,080	$ 2,569,393
Other Rate Base Items:						
Cash Working Capital	11	2,230,011	1,371,068	582,024	0	276,919
Cash Working Capital - - Int and Div	7	(1,186,070)	(790,610)	(339,964)	(51,167)	(4,328)
Materials and Supplies	7	439,941	293,256	126,101	18,979	1,606
PrePaid Deposit - Fairview Nitrogen	7	(84,324)	(56,209)	(24,170)	(3,638)	(308)
Acquistion Adjustment	7	3,749,235	2,499,163	1,074,647	161,742	13,683
Deferred, Accrued and Prepaid Taxes	7	(59,875,071)	(39,911,492)	(17,162,054)	(2,583,016)	(218,509)
Total Other Rate Base Elements		(54,726,278)	(36,594,824)	(15,743,417)	(2,457,100)	69,062
Total Original Cost Measure of Value		$ 649,330,621	$ 432,715,040	$ 186,061,146	$ 27,915,980	$ 2,638,455

Pennsylvania-American Water Company
Response to Distribution Rates – Statement of Policy
Proposed Revenues Stabilization Mechanism

52 Pa. Code § 69.3302. Distribution rate considerations.

(a) In determining just and reasonable alternative distribution ratemaking mechanisms and rate designs that promote the purpose and scope of this statement of policy and the objectives of 66 Pa. C.S. § 1330 (relating to alternative ratemaking for utilities), the Commission may consider, among other relevant factors, the following:

(1) How the ratemaking mechanism and rate design align revenues with cost causation principles as to both fixed and variable costs.

PAWC
The RDM better aligns actual revenue collection with authorized revenues for all customer classes. The RDM specifically treats fixed and variable costs separately by customer class using rate design concepts associated with Straight-Fixed Variable ("SFV") pricing. The RDM is calculated and administered separately for residential and non-residential customer classes and treats fixed cost and variable cost separately so that fixed cost recovery is aligned with approved fixed costs (per customer) and variable cost recovery is aligned with approved variable costs (per hundred gallons of water). The recovery mechanism is on a volumetric basis.

OCA
The RDM provides for the recovery of fixed costs on a volumetric basis and, therefore, does not align revenues with cost causation principles as to both fixed and variable costs.

(2) How the ratemaking mechanism and rate design impact the fixed utility's capacity utilization.

PAWC
The Company's proposed RDM is not expected to impact the fixed utility's capacity utilization.

OCA
The Company's proposed RDM is unlikely to impact the fixed utility's capacity utilization.

(3) Whether the ratemaking mechanism and rate design reflect the level of demand associated with the customer's anticipated consumption levels.

PAWC
The Company's proposed RDM directly reflects changing consumption levels in variable cost recovery. As consumption levels increase, the Company's variable

cost recovery increases, but only by the approved level of production cost per unit delivered or billed. The opposite is true whereas consumption levels decrease, the Company's variable cost recovery decreases, but only by the approved level of production cost per unit delivered or billed.

OCA
The adjustment mechanism creates the anomaly where customers see rate increases when they reduce consumption and rate decreases when they increase consumption.

(4) How the ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting.

PAWC
The proposed RDM would apply to both water and wastewater service with separate tariffs and separate recovery/credit mechanisms for residential nonresidential customers. The proposed RDM will not affect interclass or intraclass cost shifting between residential and non-residential customer classes.

OCA
It does not appear that the proposed RDM will cause interclass shifting between residential and non-residential customers. With respect to intraclass cost shifting, as explained in the Direct Testimony of OCA witness Colton (OCA Statement 5), the RDM could shift revenue within the residential class from customers who are financially able to invest in water conservation measures to low-income customers who are not financially able to make those investments.

(5) How the ratemaking mechanism and rate design limit or eliminate disincentives for the promotion of efficiency programs.

PAWC
The proposed RDM reduces the throughput incentive, which gives the Company an incentive to collect more revenue when customers increase consumption. By connecting variable cost recovery directly to approved levels of production cost but not to fixed cost, the RDM removes this incentive from the Company and therefore eliminates any disincentives for the promotion of water efficiency efforts.

OCA
PAWC has not proposed any new efficiency or conservation programs for customers in this proceeding. Furthermore, the Company has not demonstrated that the lack of an RDM has been a major obstacle to the promotion of water efficiency. The Company has been able to implement methods to improve water efficiency without an RDM. Moreover, there has been a long-term trend of per-customer declining water consumption (i.e. improved water efficiency use) without an RDM.

(6) How the ratemaking mechanism and rate design impact customer incentives to employ efficiency measures and distributed energy resources.

PAWC

See response to item (5). The proposed mechanism encourages water efficiency by reducing the throughput incentive. In addition, if customers employ efficiency measures, those measures will far outweigh any surcharges that may result from the proposed RDM.

OCA

The proposed RDM could provide a disincentive to ratepayers to undertake water conservation efforts because they would be required to pay for water they did not use. Revenue savings to individual customers that would ordinarily be achieved through usage reductions would be offset by surcharges to all customers under the RDM. Hence, under the RDM, if customers improve their water efficiency and reduced their consumption, customers will be forced to share their bill savings with the utility, and in many cases, return all, or nearly all, of those savings to the utility. Moreover, with the high and apparently never-ending rate increases that PAWC has implemented and will apparently continue to seek, customers are already incented to conserve water without a new RDM surcharge.

(7) How the ratemaking mechanism and rate design impact low-income customers and support consumer assistance programs.

PAWC

The proposed RDM does not have any specific impacts on low-income customers that do not apply to residential customers generally. Because the recovery mechanism is volumetric in nature, lower-use low-income customers will not be adversely impacted.

OCA

In his Direct Testimony, OCA witness Colton addresses how the RDM could affirmatively harm low-income customers that do not have the financial means to pursue investments in water conservation measures.

(8) How the ratemaking mechanism and rate design impact customer rate stability principles.

PAWC

The proposed RDM will, by definition, improve rate stability. In years where revenues are relatively low relative to SFV pricing and fixed costs are under recovered, rates would increase slightly in the next year to bring actual revenues back up. The opposite would be true in years where usage resulted in revenues that were higher than that implied by SFV pricing, which represents a scenario where fixed costs are over-recovered. In higher revenue years, the RDM will reduce rates which would offset higher revenues from the year before

and "smooth out" revenues over the longer term.

OCA

Under the current regulatory standard in Pennsylvania, base rate cost under and over recoveries are currently not tracked and are not eligible for recovery in future base rate proceedings. The proposed RDM would add another surcharge to customers' bills and would not reduce the frequency of PAWC base rate or DSIC rate filings. Thus, it does not appear that a new RDM surcharge would improve rate stability. In contrast, under traditional cost-of-service ratemaking, if a utility experiences sales reductions and under-recovery, it cannot simply achieve the same result as an RDM true-up by filing another base rate case with adjusted sales forecasts. When a utility files a general rate increase, all relevant information is reviewed to determine just and reasonable rates, not just sales forecasts. Traditional ratemaking produces rate stability.

(9) How weather impacts utility revenue under the ratemaking mechanism and rate design.

PAWC

Weather will still have an impact on revenues but only to the extent that variable costs are impacted. Under the proposed RDM, volatility of utility revenue and customer bills would be reduced over the long term. Increases in fixed cost recovery revenue due to abnormal weather variations (e.g., drought conditions) would be returned to customers in the following year, and reductions in fixed cost recovery due to abnormal weather variations (e.g., excessive rainfall) would be collected from customers in the following year.

OCA

The RDM adjustment or true-up mechanism creates the anomaly where customers see rate increases when they reduce consumption due to weather variations and rate decreases when they increase consumption due to weather variations.

(10) How the ratemaking mechanism and rate design impact the frequency of rate case filings and affect regulatory lag.

PAWC

To the extent that future rate cases are driven by lower-than-expected usage, the RDM likely would result in fewer rate cases, or at least rate cases seeking lower rate increases. However, the RDM does not affect future revenue requirements and does not recover fixed costs that are incurred after a rate case that are over and above those approved by the Commission. Therefore, if future rate cases are driven by future investment needs and associated cost recovery, the RDM would not reduce the need for such cases.

OCA
The RDM will have no impact on the magnitude of base rate increases requested by the Company in the future. The RDM does not affect future revenue requirements and does not recover fixed costs that are incurred after a rate case that are over and above those approved by the Commission. Therefore, if future rate cases are driven by future investment needs and associated cost recovery, the RDM would not reduce the need for such cases.

(11) If or how the ratemaking mechanism and rate design interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa. C.S. § 1307(relating to sliding scale of rates; adjustments), riders such as 66 Pa. C.S. § 2804(9)(relating to standards for restructuring of electric industry) or system improvement charges, 66 Pa. C.S. § 1353 (relating to distribution system improvement charge).

PAWC
The Company's proposed RDM does not interact with other revenue sources.

OCA
The proposed RDM will interact with the Company's DSIC because the DSIC is a percentage applied to the total bill and the RDM will impact a customer's total bill.

(12) Whether the alternative ratemaking mechanism and rate design include appropriate consumer protections.

PAWC
The RDM proposal includes consumer protections through the formal reconciliation process which includes audits and external stakeholder review. Tariff administration of the mechanism will contain consumer protections to make sure that the appropriate levels of revenue are being collected. Customers still can control their bill through controlling usage because the standard rate design still applies.

OCA
The proposed RDM does not include appropriate consumer protections and should be rejected for the reasons discussed in my testimony and the testimony of OCA witness Colton.

(13) Whether the alternative ratemaking mechanism and rate design are understandable to consumers.

PAWC
The Company does not anticipate that there would be any issues related to customer confusion over the proposed RDM. Revenue reconciliation riders are not new to the utility industry. There is no reason to think that customers would be more confused about an RDM surcharge or credit on their bill than they

would be for any other rate design element that makes up a part of the customer's bill.

OCA
PAWC has not provided any evidence that the proposed RDM will be understandable to customers. When combined with the rate changes that occur under PAWC's DSIC and potentially the proposed ECIC, significant customer confusion is likely.

(14) How the ratemaking mechanism and rate design will support improvements in utility reliability.

PAWC
The proposed RDM will support improvements in utility reliability by permitting the Company to more reliably recover fixed costs that can't be avoided by customers using less water, and will therefore enhance the Company's ability to prudently invest in and manage the business.

OCA
The proposed RDM does not provide a direct incentive to increase the safety and reliability of the PAWC system.

Pennsylvania-American Water Company
Response to Distribution Rates – Statement of Policy
Proposed Revenues Compliance Investment Charge (ECIC)

52 Pa. Code § 69.3302. Distribution rate considerations.

(a) In determining just and reasonable alternative distribution ratemaking mechanisms and rate designs that promote the purpose and scope of this statement of policy and the objectives of 66 Pa. C.S. § 1330 (relating to alternative ratemaking for utilities), the Commission may consider, among other relevant factors, the following:

(1) How the ratemaking mechanism and rate design align revenues with cost causation principles as to both fixed and variable costs.

PAWC
The ECIC recovers the costs associated with eligible environmental compliance costs from all customer classes via a percentage applied to the total amount billed. The ECIC is thus applied consistent with PAWC's base rates.

OCA
The ECIC does not align revenues with cost causation principles as to both fixed and variable costs. The ECIC will be assessed as a percentage applied to each customer's total bill. Over 80% of the Company's water and wastewater revenues will be collected under volumetric rates under the Company's proposed rate structure in this case. However, 95% of the Company's costs associated with providing water and wastewater service are fixed.

(2) How the ratemaking mechanism and rate design impact the fixed utility's capacity utilization.

PAWC
This factor is not applicable to water and wastewater utilities.

OCA
In response to this same question concerning PAWC's proposed RDM, the Company responded that the RDM is unlikely to impact the fixed utility's capacity utilization. It is unlikely that the ECIC will impact PAWC's capacity utilization.

(3) Whether the ratemaking mechanism and rate design reflect the level of demand associated with the customer's anticipated consumption levels.

PAWC
See the response to item (1).

OCA
See the response to item (1).

(4) How the ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting.

PAWC
The proposed ECIC will be applied equally to all customer classes and will not affect interclass or intraclass cost shifting.

OCA
The costs PAWC is proposing to recover through the ECIC would ordinarily be assigned to each customer class based on the results of a cost of service study. In a cost of service study, costs are assigned to each customer class based on class responsibility for the incurrence of those costs. The ECIC will be assessed to each customer as a percentage applied to each customer's total bill, without consideration as to the extent that customer's class is responsible for the incurrence of those costs. Therefore, interclass cost shifting is likely to result.

(5) How the ratemaking mechanism and rate design limit or eliminate disincentives for the promotion of efficiency programs.

PAWC
The proposed ECIC will not impact efficiency programs or incentives.

OCA
The proposed ECIC is unlikely to impact efficiency programs or incentives.

(6) How the ratemaking mechanism and rate design impact customer incentives to employ efficiency measures and distributed energy resources.

PAWC
See response to item (5).

OCA
See response to item (5).

(7) How the ratemaking mechanism and rate design impact low-income customers and support consumer assistance programs.

PAWC
The proposed ECIC does not have any specific impacts on low-income customers that do not apply to residential customers (or other customers) generally. Without the ECIC, the same costs for environmental projects would be borne by the same ratepayers effective after the next base rate case. The ECIC will allow for rates to increase as certain environmental projects are undertaken, and thus those increases will be more gradual than if deferred between base rate cases.

OCA
In his Direct Testimony, OCA witness Colton addresses the adverse impact the

ECIC would have on low-income customers, and concludes that the ECIC will harm low-income customers.

(8) How the ratemaking mechanism and rate design impact customer rate stability principles.

PAWC
The proposed ECIC, updated quarterly and reconciled annually, will provide gradual changes to customer rates and bills as opposed to more significant increases typically experienced in base rate cases.

OCA
Under the ECIC, the number of rate increases experienced by customers will increase significantly.

(9) How weather impacts utility revenue under the ratemaking mechanism and rate design.

PAWC
The ECIC, like the Company's existing DSIC mechanism, will be reconciled annually whereby actual recoveries are compared to authorized/required recoveries, with any variances recovered from or credited to customers in subsequent ECIC charges. Specific to any weather variability in customer usage, this reconciliation ensures that no more or less than what the Company is required or authorized to recover is actually recovered in rates and charges to customers.

OCA
The ECIC is not designed to address weather impacts on utility revenue.

(10) How the ratemaking mechanism and rate design impact the frequency of rate case filings and affect regulatory lag.

PAWC
The company's environmental compliance requirements are continuously evolving and is one of the drivers that increases the costs of water and wastewater service and the need for rate relief. As discussed in more detail in PAWC Statement Nos. 3 and 8, the need for and timing of measures to comply with new or changed government mandates under applicable environmental laws are outside of the Company's control The Company's proposed ECIC will provide a reasonable mechanism for gradually adjusting the Company's rates between base rate cases to ensure full and timely rate recognition of PAWC's investments and related operating costs undertaken to comply with new environmental mandates in a prudent and efficient manner as they emerge. Permitting PAWC to recover ECIC-eligible capital costs and expenses through an automatic adjustment clause will reduce a major driver of the need for rate relief that would otherwise trigger a base rate case filing.

OCA

While the ECIC *may* reduce base rate case frequency, it is almost certainly going to lead to more frequent rate changes as the ECIC moves predominantly upward. The ECIC will provide for the recovery of certain Environmental Compliance investments made by the Company without consideration of any potential cost of service reductions that PAWC may experience. The proposed ECIC does not permit parties to investigate cost reductions that may have been experienced by the Company. Cost reductions are currently investigated and evaluated in base rate proceedings.

(11) If or how the ratemaking mechanism and rate design interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa. C.S. § 1307(relating to sliding scale of rates; adjustments), riders such as 66 Pa. C.S. § 2804(9) (relating to standards for restructuring of electric industry) or system improvement charges, 66 Pa. C.S. § 1353 (relating to distribution system improvement charge).

PAWC

The Company's proposed ECIC does not interact with other revenue sources. The proposed ECIC excludes assets that are currently eligible for recovery under the existing DSIC mechanism, and will function similar to the DSIC in design, applicability, and recovery. The proposed ECIC will be reset to zero at the implementation of new base rates in future proceedings.

OCA

The proposed ECIC will interact with the Company's DSIC because the DSIC is a percentage applied to the total bill and the ECIC will impact a customer's total bill.

(12) Whether the alternative ratemaking mechanism and rate design include appropriate consumer protections.

PAWC

The proposed ECIC incorporates consumer protection by:

(1) Requiring that costs recoverable through the ECIC be consistent with the set of projects and activities set forth in an annual environmental compliance plan to be filed by the Company and approved by the Commission; and

(2) Requiring the audit and reconciliation annually of the ECIC, to ensure that all costs included for recovery are eligible and appropriate, and that customers in total pay no more or less over the course of a year than the authorized level of costs associated with the Environmental Plan.

OCA

The proposed ECIC does not include appropriate consumer protections and

should be rejected for the reasons discussed in my testimony and the testimony of OCA witness Colton.

(13) Whether the alternative ratemaking mechanism and rate design are understandable to consumers.

PAWC

The Company does not anticipate that there would be any issues related to customer confusion over the proposed ECIC. Infrastructure mechanisms like the ECIC exist today and are not new to the utility industry. The ECIC is separate and distinct from other existing mechanisms. An explanatory bill insert will be included with the first billing, and customers will be notified of changes in the ECIC by including appropriate information of the first bill they receive following any change.

OCA

PAWC has not provided any evidence that the proposed ECIC will be understandable to customers. When combined with the rate changes that occur under PAWC's DSIC and potentially the proposed RDM, significant customer confusion is likely.

(14) How the ratemaking mechanism and rate design will support improvements in utility reliability.

PAWC

The proposed ECIC will support improvements in the ability of PAWC to continue providing safe, adequate, and reliable water quantity and quality, while complying with applicable drinking water and environmental regulation. The ECIC will support investment in PAWC's water and wastewater system to address emerging contaminants in a cost-effective manner.

OCA

The proposed ECIC does not provide PAWC a direct incentive to increase the reliability of its systems.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Jerome D. Mierzwa, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 4, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: February 1, 2024

Signature: Jerome D. Mierzwa

Jerome D. Mierzwa

Consultant Address: Exeter Associates, Inc. 10480
Little Patuxent Parkway, Suite 300
Columbia, MD 21044-3575

OCA STATEMENT 4R

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	**)**	**Docket Nos.**	**R-2023-3043189 (Water)**
	)		**R-2023-3043190 (Wastewater)**
v.	**)**		
	)		
Pennsylvania-American Water Company	**)**		

REBUTTAL TESTIMONY OF

JEROME D. MIERZWA

ON BEHALF OF THE

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

FEBRUARY 21, 2024

EXETER
ASSOCIATES, INC.
10480 Little Patuxent Parkway, Suite 300
Columbia, Maryland 21044

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I. INTRODUCTION

Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is Jerome D. Mierzwa. I am a Principal and Vice President of Exeter Associates, Inc. ("Exeter"). My business address is 10480 Little Patuxent Parkway, Suite 300, Columbia, Maryland 21044. Exeter specializes in providing public utility-related consulting services.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony was filed as OCA Statement 4 on February 1, 2024.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to respond to certain aspects of the direct testimony presented by Bureau of Investigation and Enforcement ("I&E") witnesses Ethan H. Cline and Joseph Kubas; Office of Small Business Advocate ("OSBA") witness Kevin Higgins; Pennsylvania-American Water Large Users Group ("PAWLUG") witness Billie S. LaConte; and Cleveland-Cliffs Steel witness Richard A. Baudino.

II. WITNESS: ETHAN H. CLINE

Bureau of Investigation and Enforcement

Q. MR. CLINE RECOMMENDS A CUSTOMER CHARGE OF $19.50 FOR A 5/8-INCH METER, AND FOR 3/4-INCH, 1-INCH, AND 1 1/2 INCH METERS. WHAT IS THE BASIS FOR THIS RECOMMENDATION?

A. The Company presents a direct customer cost analysis which it claims only reflects direct costs in PAWC Exhibit No. 12-A, Attachment RS1j, pages 2 and 3. That analysis indicates that a cost-based monthly customer charge for a 5/8-inch meter would be $19.31. Mr.

Cline's recommended $19.50 per month customer adopts the Company's customer cost analysis rounded to the nearest half dollar. Currently, the monthly customer charge for a 5/8-inch meter, and 3/4-inch, 1-inch, and 1 1/2-inch meters are the same, and Mr. Cline has proposed to keep the charge for each of these four meter sizes the same.

Q. SHOULD THE COMPANY'S DIRECT CUSTOMER COST ANALYSIS BE RELIED UPON TO ESTABLISH MONTHLY CUSTOMER CHARES IN THIS PROCEEDING AND SHOULD THE $19.50 CHARGE PROPOSED BY MR. CLINE BE ADOPTED?

A. No. As explained in my direct testimony, only those costs that vary directly with the addition or subtraction of a customer should be included in the calculation of a customer charge. PAWC's direct customer cost analysis includes costs that are not direct customer costs and do not change with the addition or subtraction of a customer. For example, PAWC's direct customer cost analysis includes office building and furniture expenses. In addition, the calculated direct cost of $19.31 is based on the Company's requested revenue requirement increase. Under the revenue increase authorized by the Commission in this proceeding, a cost-based charge would certainly be further reduced. For example, adjusting PAWC's overall requested pre-tax rate of return to reflect the OCA's recommended pre-tax return of 8.17% would further reduce the calculated customer charge. A calculation adjusting the Company's calculated direct customer charge to remove the improperly included office building and furniture costs and to reflect the OCA's recommended rate of return was presented on Schedule JDM-4 in my direct testimony. As shown there, these adjustments reduce the calculated charge to $17.77. Other Commission-approved adjustments to PAWC's revenue requirement claim are likely to further reduce the calculated direct customer charge. Therefore, I recommend that the existing $17.50

monthly charge for Residential customers with a 5/8-inch, 3/4-inch, 1-inch or 1 1/2-inch meter should be maintained, unless the increase authorized by the Commission is sufficient to justify a higher charge which under no circumstances should be higher than $19.31.

Q. WHAT ARE MR. CLINE'S RECOMMENDATIONS CONCERNING WATER USAGE CHARGES?

A. With the exception of the Rate Zone 2 Residential and Commercial usage charges and the Rate Zone 4 Commercial usage charge which I subsequently discuss, Mr. Cline accepts the Company's proposed usage charges, subject to adjustment for the reduction in revenue resulting from his recommended decrease in customer charges.

Q. IS MR. CLINE'S USAGE CHARGE RECOMMENDATION REASONABLE?

A. No. The usage charges proposed by the Company are based on the water class cost-of service ("CCOS") study initially filed by the Company in this proceeding.[1] As explained in my direct testimony, while the CCOS study initially filed by PAWC in this proceeding is generally reasonable, the system-wide maximum day and maximum hour extra capacity factor used in that CCOS study are outdated and should be revised. In my direct testimony I presented a CCOS study that reflects updated and revised extra capacity factors. The CCOS study I presented in my direct testimony should be utilized to determine rates in this proceeding, not the CCOS study initially presented by the Company. Therefore, since Mr. Cline's usage charges are based on the Company's initial CCOS study, his recommendation should not be adopted. I would note that with respect to Mr. Cline's concerns related to Rate Zone 2 and Rate Zone 4 usage charges, I share and subsequently discuss those concerns.

[1] In discovery, the Company subsequently modified the CCOS study it initially presented in this proceeding. However, PAWC did not modify its proposed allocation of the revenue increase customer class or its proposed rates.

Q. IN YOUR DIRECT TESTIMONY YOU EXPRESSED A CONCERN WITH RESPECT TO THE RESIDENTIAL USAGE CHARGE PROPOSED FOR VALLEY CUSTOMERS IN RATE ZONE 2. WHAT WAS THAT CONCERN?

A. In my direct testimony I noted that PAWC is proposing to consolidate Residential usage charges in this proceeding and assess all Residential customers the Rate Zone 1 usage charge. This would result in a significant 63.64% increase for the average Residential Rate Zone 2 customer. To mitigate this significant increase, I recommended that the Rate Zone 2 usage charge be set at 70% of the Rate Zone 1 usage charge established in this proceeding.

Q. DOES MR. CLINE EXPRESS A SIMILAR CONCERN REGARDING THE RATE ZONE 2 RESIDENTIAL USAGE CHARGE?

A. Yes, and he also expresses a concern regarding Rate Zone 2 and Rate Zone 4 Commercial usage charges. With respect to the Rate Zone 2 Residential usage charge and based on PAWC's proposed revenue increase, Mr. Cline is proposing a Rate Zone 2 usage charge of $1.60 per 100 gallons. Based on my recommendation and PAWC's proposed revenue requirement, the Rate 2 usage charge would be $1.50 per 100 gallons. Mr. Cline's proposal would result in establishing a Rate Zone 2 usage charge that is 75% of the Rate Zone 1 usage charge and, therefore, I would not consider Mr. Cline's proposal to be unreasonable. With respect to the Rate Zone 2 and Rate Zone 4 Commercial usage charges, Mr. Cline has proposed similar adjustments to mitigate the magnitude of the rate increase for Rate Zone 2 and Rate 4 Commercial customers. The impact of these adjustments appears to result in overall percentage increases for Commercial customers in Rate Zones 2 and 4 that are reasonable. Any revenue shortfall resulting from the adoption of my Rate Zone 2 or Mr. Cline's Rate Zone 2 and Rate Zone 4 usage charge modifications should be recovered from the customer class responsible for generating the revenue shortfall.

Q. PURSUANT TO ACT 11, PAWC IS PROPOSING TO ASSIGN A PORTION OF THE WASTEWATER REVENUE REQUIREMENT TO WATER CUSTOMERS. WHAT IS MR. CLINE'S RECOMMENDATION WITH RESPECT TO THE ACT 11 ASSIGNMENT IN THE EVENT THAT THE COMMISSION GRANTS PAWC LESS THAN THE FULL REVENUE REQUIREMENT INCREASE IT IS REQUESTING FOR WASTEWATER OPERATIONS?

A. Mr. Cline recommends that any reduction to the wastewater revenue requirement increase be netted against the Act 11 assignment. I would note that the amount of the wastewater revenue requirement which PAWC has proposed to assign to water customers is $71.1 million. As shown on Exhibit No. 3, Schedule 1, I&E witness Mr. Kubas has proposed to essentially eliminate the Act 11 assignment of the wastewater revenue requirement, reducing the assignment to $357,517 at PAWC's filed-for revenue requirement increase for SSS and CSS operations. If Mr. Kubas' proposal is adopted, Mr. Cline's recommendation would effectively have no impact on water or wastewater rates.

Q. IF MR. KUBAS' RECOMMENDATION TO ESSENTIALLY ELIMINATE THE ACT 11 ASSIGNMENT IS NOT ADOPTED, IS MR. CLINE'S RECOMMENDATION THAT ANY REDUCTION TO THE WASTEWATER REVENUE REQUIREMENT BE NETTED AGAINST THE ACT 11 ASSIGNMENT REASONABLE?

A. Without knowing the water and wastewater revenue increases authorized by the Commission in this proceeding, the reasonableness of Mr. Cline's recommendation cannot be assessed. In my direct testimony, I present a recommendation concerning the Act 11 assignment of the wastewater revenue requirement to water customers based on the OCA's

calculated water and wastewater revenue requirement increases. To the extent that the Commission authorizes a pre-Act 11 assignment wastewater revenue requirement increase which is more than the OCA's calculated amount, the Commission will have to determine what amount of that increase is in the public interest to shift and is reasonable for both water and wastewater customers to bear given the recent PAWC rate increases and the relatively few wastewater customers. Regardless, as the wastewater cost of service is a significant driver of the rate increase request in this proceeding, it would unreasonable for the Commission to assign no increase to those customers as proposed by PAWC.

III. WITNESS: JOSEPH KUBAS

Bureau of Investigation and Enforcement

Q. THE CURRENT MONTHLY RESIDENTIAL CUSTOMER CHARGE IN MOST SANITARY SEWER SYSTEM ("SSS") RATE ZONES IS $14.30, AND PAWC IS PROPOSING TO INCREASE THE MONTHLY CHARGE TO $20.00. WHAT IS MR. KUBAS' RECOMMENDATION?

A. Mr. Kubas recommends increasing the current monthly Residential SSS customer charge to $15.00.

Q. DO YOU AGREE WITH MR. KUBAS' RECOMMENDATIONS?

A. No. As explained in detail in my direct testimony, exclusive of Infiltration and Inflow ("I/I") costs which should be excluded from a direct customer cost analysis, the Company's calculation of direct customer costs indicates a cost of $13.87 at the Company's proposed revenue requirement. At the Commission approved revenue requirement authorized in this proceeding, the cost based charge will certainly be less than $13.81. Therefore, in those rate zones with a current Residential SSS customer charge of $14.30, the $14.30 customer

charge should be maintained. In those rate zones with a current Residential SSS customer charge which exceeds $14.30, the charge should be reduced to $14.30.

Q. AS PREVIOUSLY DISCUSSED, MR. KUBAS IS PROPOSING TO ESSENTIALLY ELIMINATE THE ELIMINATE ACT 11 ASSIGNMENT OF THE WASTEWATER REVENUE REQUIREMENT TO WATER CUSTOMERS AND HAS PROPOSED A REVENUE ALLOCATION AND RATES THAT REFLECT THIS RECOMMENDATION. IS THIS RECOMMENDATION REASONABLE?

A. I agree with Mr. Kubas that it is not reasonable for the wastewater customers to be assigned no increase, as I have stated above and in my direct testimony. However, the determination of whether to assign any portion of the wastewater revenue requirement to water customers is a public policy consideration and is not a cost-based consideration. Given the recent rate increases that PAWC has proposed and been granted, given the relatively small CSS and SSS populations over which to spread an increase, I maintain that the shift I proposed in direct would, at the OCA calculated water and wastewater revenue requirement, allow the Commission to meet its public interest determination. Thus, at the level of water and wastewater revenue requirement increases that the OCA calculated for water and for wastewater SSS and CSS, I maintain that it would be reasonable to shift up to 75% of the SSS wastewater revenue requirement increase and up to 50% of the CSS wastewater revenue requirement increase to water customers ($15,233,160 + $3,666,606 = $18,899,766). This results in an approximate increase in revenue requirement of 5.4% for SSS operations and 4.7% for CSS operations. This is comparable to a post-assignment increase of 4.3% for water customers. Mr. Kubas' recommendations for wastewater rate design and elimination of any Act 11 assignment result in an approximate increase in

revenue requirement of 33% for SSS operations and 22% for CSS operations, at the Company's proposed revenue requirement. While those percentage increases will be smaller at the wastewater revenue requirement increase that I&E or the OCA recommended,[2] I disagree with Mr. Kubas' position that essentially zero relief should be provided to wastewater customers through an Act 11 assignment.

Q. DOES MR. KUBAS OPPOSE PAWC'S WINTER AVERAGING PROPOSAL FOR RESIDENTIAL CUSTOMERS?

A. No.

Q. SHOULD PAWC'S WINTER AVERAGING PROPOSAL BE ADOPTED?

A. No. PAWC's winter averaging proposal assumes that outdoor Residential winter usage during the summer is sufficiently significant to justify adopting winter averaging. As explained in greater detail in my direct testimony, it does not necessarily follow that Residential customer outdoor during the summer usage is sufficiently significant to justify winter averaging. In addition, as explained by OCA witness Roger Colton (OCA Statement 5) and CAUSE-PA witness Harry S. Geller (CAUSE-PA Statement 1), winter averaging will also disproportionately harm low-income customers, and the number of Residential customers that have no water consumption because they are away from their homes ("snowbirds") increases substantially in the months PAWC proposes to utilize in its winter averaging calculation. For such snowbird customers, it would be unreasonable to bill customers that are away from their homes during the winter months for wastewater service during the non-winter months of the year based on the assumption that any water usage by

[2] As summarized in the testimony of I&E witness Vanessa Okum, I&E recommends a total increase of $26.6 million for wastewater operations ($19,863,234 for SSS + 6,733,087 for CSS = $26,596,321) compared to the OCA's $27.7 million recommendation.

these customers in excess of their winter average usage did not flow through PAWC's wastewater system.

Q. FOR COMBINED SEWER SYSTEM ("CSS") RESIDENTIAL CUSTOMERS IN RATE ZONES 4 AND 6, MR. KUBAS RECOMMENDS THAT THE COMPANY'S PROPOSED MONTHLY CUSTOMER CHARGE OF $20.00 BE ADOPTED AND THAT THE CUSTOMER CHARGE FOR RATE ZONE 3 ALSO BE INCREASED. WHAT IS YOUR RESPONSE?

A. As previously explained and explained in detail in my direct testimony, exclusive of I/I costs, the Company's calculation of direct customer costs which includes both SSS and CSS customers indicates a cost of $13.87 at the Company's proposed revenue requirement. At the Commission approved revenue requirement authorized in this proceeding, the cost based charge will certainly be less than $13.81. Therefore, in those rate zones with a current Residential CSS customer charge of $14.30, the $14.30 customer charge should be maintained. In those rate zones with a current Residential customer charge which exceeds $14.30, the charge should be reduced to $14.30.

Q. WHAT DID MR. KUBAS RECOMMEND WITH RESPECT TO PROVIDING WASTEWATER COST-OF-SERVICE STUDIES IN ITS NEXT BASE RATE CASE?

A. Mr. Kubas recommends that the Company continue to provide separate cost-of-service studies for Water Operations, SSS Operations, and CSS Operations. He also recommends that the Company provide separate studies for the BASA and Brentwood systems in the next case if these systems are acquired. Mr. Kubas also recommends that the Company continue to separate the Bulk User class and the Bulk Contract classes from the other classes.

Q. DO YOU AGREE WITH THESE RECOMMENDATIONS?

A. Yes. I will add a clarification that, if PAWC includes the BASA and Brentwood systems in its next base rate filing, whether or not those systems have been "acquired," the Company should provide separate cost of service studies. As indicated in my direct testimony, I also recommend that in its next base rate proceeding, PAWC should include Rider Demand Industrial Sales and Rider Demand Resale Sales customers as separate customer classes in its next water cost-of-service study. This will assist in ensuring that the rates charged to Rider DIS and DRS customers are reasonable and meet PAWC's tariffed requirements for discounted rates.

IV. WITNESS: KEVIN HIGGINS

Office of Small Business Advocate

Q. MR. HIGGINS RECOMMENDS THAT TO THE EXTENT THAT THE COMMISSION APPROVES THE RECOVERY OF A PORTION OF THE WASTEWATER REVENUE REQUIREMENT FROM WATER CUSTOMERS PURSUANT TO ACT 11, COST RESPONSIBILITY TO WATER CUSTOMERS SHOULD CORRESPOND TO THE WASTEWATER CLASSES THAT CREATE THE REVENUE SHORTFALL. DO YOU AGREE WITH THIS RECOMMENDATION?

A. No. As stated above the determination about whether to shift wastewater revenue requirement to water customers is a public policy determination not a cost causation determination. Water customers do not cause the wastewater revenue requirement. Moreover, most of PAWC's water customers do not obtain wastewater service from PAWC. PAWC currently has seven times as many water customers as wastewater

customers.[3] Further, there are several PAWC wastewater systems whose customers do not purchase water service from PAWC. There is simply no cost causation basis to assign wastewater cost responsibility to water customers based on the wastewater class responsible for the revenue shortfall. The majority of the water customers to whom the wastewater revenue requirement would be assigned pursuant to Act 11 do not purchase wastewater service from PAWC and have no responsibility for PAWC's wastewater revenue requirement.

Q. HAS THE COMMISSION PREVIOUSLY ADDRESSED THIS RECOMMENDATION?

A. Yes. OSBA made the same recommendation in the most recent Aqua Pennsylvania, Inc. base rate case at Docket Nos. R-2021-3027385 and R-2021-3027386. There, the Commission agreed with the ALJ and the other parties who took a position that the revenue shifted under Act 11 should be allocated to water customers based on the results of the adopted *water* class cost allocation study.[4]

[3] In my direct testimony I indicated that PAWC serves nine times as many water customers as wastewater customer (page 26, line 23). That number should be revised to seven.
[4] Pa. PUC v. Aqua Pennsylvania, Inc., May 16, 2022 Order at pp. 228-229. OSBA filed an appeal of the Order that is pending.

Q. MR. HIGGINS CONTENDS THAT PAWC HAS PROPOSED INCREASES FOR THE RESIDENTIAL, COMMERCIAL, INDUSTRIAL, AND PUBLIC FIRE PROTECTION CLASS THAT ARE CLOSE TO THE SYSTEM AVERAGE INCREASE, BUT IS PROPOSING SIGNIFICANTLY BELOW AVERAGE INCREASES FOR THE PUBLIC (MUNICIPAL) AND PRIVATE FIRE CLASSES. WHAT IS MR. HIGGIN'S RECOMMENDED ALLOCATION OF THE WATER REVENUE INCREASE?

A. Mr. Higgins notes that PAWC had proposed a revenue allocation which results in an increase to the Public class which is below the increase suggested by that class's cost of service. Mr. Higgins recommends a revenue allocation that he claims will improve the alignment of revenues with the cost of service. Specifically, at PAWC's proposed revenue requirement, Mr. Higgins recommends that the Commercial class increase be reduced by $5.3 million, and the Public class increase be increased by $5.3 million. Mr. Higgins does not specifically address modifying the increase to the Private Fire class.

Q. DO YOU AGREE WITH MR. HIGGIN'S PROPOSED ADJUSTMENTS TO PAWC'S REVENUE ALLOCATIONS?

A. No. As noted in my direct testimony, PAWC has recognized that a larger increase than the proposed increase for the Public class may be warranted. Under PAWC's proposed revenue distribution and CCOS study, both the Residential and Commercial customer classes will be paying rates which exceed the cost-of-service. There is no basis to limit the allocation of the additional revenue assignment to the Public class to the Commercial class only as Mr. Higgins has proposed.

In my direct testimony, I recommended that the allocation of the revenue increase to customer classes be based on the OCA's CCOS study, and presented a revenue allocation

based on the OCA CCOS study. That allocation is presented in Table 4 of my direct testimony, and significantly increases the allocation of the revenue increase to the Public class and, therefore, addresses Mr. Higgins' concern with respect to the increase proposed for the Public class. As shown in Table 1 in my direct testimony and shown below, my recommended allocation also decreases the allocation of the revenue increase to the Commercial class.

Table 1. Water Cost of Service Study Comparison

Classification	Initial Company	OCA	Difference
Residential	$603,126,055	$596,775,486	($6,350,570)
Commercial	232,115,036	228,424,759	(3,690,276)
Industrial	45,115,631	49,544,130	4,428,498
Public (Municipal)	35,175,459	37,856,691	2,681,233
Other Water Utilities – Group A	11,335	11,913	578
Other Water Utilities – Group B	624,708	449,960	(174,748)
Private Fire Protection	5,777,625	7,063,962	1,286,336
Public Fire Protection	11,847,471	13,666,421	1,818,949
Total:	**$933,793,321**	**$933,793,321**	**($0)**

Q. WHILE MR. HIGGINS RECOMMENDS THAT PAWC'S PROPOSED REVENUE DECOUPLING MECHANISM ("RDM") BE REJECTED, HE CLAIMS IT IS PARTICULARLY PROBLEMATIC FOR NON-RESIDENTIAL CUSTOMERS. WHAT IS THE BASIS FOR MR. HIGGINS' CLAIM?

A. Mr. Higgins contends that under the RDM formula proposed by PAWC, all Non-Residential revenues will be consolidated through a single straight-fixed variable ("SFV") rate design irrespective of customer size or type of usage. Mr. Higgins recommends that if the RDM is not rejected by the Commission it should not apply to Non-Residential

customers. This is because Non-Residential customers are not homogenous, and range from "mom and pop" retail stores to golf courses to industrial operations. Mr. Higgins claims that average usage for Non-Residential customers will be sensitive not only to the consumption patterns of the existing set of customers, but also to changes in the composition of the group. Mr. Higgins notes that under PAWC's proposal, the loss in revenue from the shutdown of a large industrial customer will immediately be shifted to all other Non-Residential customers through the RDM deferral calculation.

Mr. Higgins contends that while the logic of targeting "revenues per customer" may be defensible when dealing with classes that have large numbers of similarly sized customers within the class, such as target makes little sense for classes populated by a broad range of heterogeneous customers. He further contends that revenues per customer in such classes are susceptible to change simply by a change in the composition of the customers in the group, irrespective of whether customers are modifying their own water consumption. He further claims that changes in revenues per customer for Commercial and Industrial customers will be particularly sensitive to changes in economic activity. Therefore, Mr. Higgins recommends that the RDM should not apply to Non-Residential customers.

Q. WHAT IS YOUR RESPONSE TO MR. HIGGINS RECOMMENDATION TO ELIMINATE NON-RESIDENTIAL CUSTOMERS FROM THE RDM?

A. I agree with Mr. Higgins that Non-Residential customers are not homogeneous. However, Residential customers are also not homogeneous. Residential customers can range from apartment dwellers with little to no outdoor irrigation requirements to customers with large homes with extensive irrigation requirements which would result in significant cost shifting. For this reason and the additional reasons discussed in my direct testimony and

the direct testimony of Roger Colton (OCA Statement 5), the RDM should be rejected in its entirety.

V. WITNESS: BILLIE S. LACONTE

Pennsylvania American Water Large Users Group

Q. DOES MS. LACONTE EXPRESS ANY CONCERNS WITH THE WATER CCOS STUDY FILED BY PAWC IN THIS PROCEEDING?

A. Yes. Ms. LaConte disagrees with the maximum day and maximum hour extra capacity factors (demand statistics) used to allocate certain costs in PAWC's water CCOS study. First Ms. LaConte notes that the demand statistics reflected in PAWC's water CCOS study are almost a decade old, and post pandemic, it is likely that Residential demand has increased due to more people working at home. As such the demand statistics utilized in PAWC's water CCOS study are too low, and under assign costs to the Residential class. Second, Ms. LaConte claims that PAWC has used the incorrect maximum demand hour ratio for the Residential class, resulting in an under allocation of costs to the Residential class.

Q. DO YOU AGREE WITH MS. LACONTE THAT BECAUSE MORE PEOPLE ARE NOW WORKING FROM HOME, THE DEMAND STATISTICS OF THE RESIDENTIAL CLASS ARE UNDERSTATED IN PAWC'S WATER CCOS STUDY?

A. No. I agree with Ms. LaConte that it is likely that total Residential demand has increased due to more people working and home. However, when people work at home, the days and number of hours that water can be used increases significantly. Because of this the maximum day and maximum hour demands of Residential customers are likely to decrease.

This is because Residential customer no longer need to concentrate their use of water to days and hours they are not at work.

Q. WHY DOES MS. LACONTE CLAIM THAT PAWC HAS USED THE INCORRECT MAXIMUM HOUR DEMAND RATIO FOR THE RESIDENTIAL CLASS IN ITS WATER CCOS STUDY?

A. The maximum hour demand ratios utilized in PAWC's CCOS study are based on the results of a demand study that was conducted over the period 2013-2015. Ms. LaConte claims that the maximum hour demand ratio in that study for the Residential class was 6, but PAWC opted to use a ratio of 5 due to what it claimed were certain anomalies in the data for the Residential class. Ms. LaConte contends that a maximum hour demand ratio of 6 should have been utilized for the Residential class in the water CCOS study, and has revised the Company's CCOS study to include a ratio of 6.

Q. DO YOU AGREE WITH MS. LACONTE'S PROPOSAL TO MODIFY PAWC'S CCOS STUDY TO REFLECT A MAXIMUM HOUR DEMAND RATIO OF 6 FOR THE RESIDENTIAL CLASS?

A. No. The demand study referenced by Ms. LaConte included the following with respect to utilization of a maximum hour demand ratio of 5 rather 6 for the Residential class:

- The maximum hour ratios exhibit considerably greater variation than the maximum day ratios. Maximum hour ratios were available for six of the monitored system. Four of the systems used tanks or had substantial non-residential deductions that made hourly flow data unreliable. As shown in Table 11-4 and Figure 11-4, the average of the maximum hour ratios ranged from 5.32 in 201 to 6.17 in 2015. Some of the monitored system ratios are very high. An examination of the pattern of hourly peaks over each day of the study period, presented in the daily flow graphs in Appendix B, indicated that some of these high hours were very anomalous events. Based on the study results, the maximum hour ratio for the residential class is estimated as 5.0.

(Response to PAWLUG 01-002 Attachment at 21).

As explained above, the ratio of 6 was based on unreliable flow data and anomalous events. Therefore, the ratio of 6 should not be relied upon as recommended by Mr. LaConte.

Q. MS. LACONTE RECOMMENDS THAT PRIOR TO ITS NEXT BASE RATE CASE, PAWC SHOULD CONDUCT A NEW DEMAND STUDY TO ENSURE CURRENT USAGE AND DEMAND PATTERNS ARE PROPERLY REFLECT IN PAWC'S NEXT PROCEEDING. DO YOUI AGREE WITH THIS RECOMMENDATION?

A. Yes, and I presented the same recommendation in my direct testimony.

Q. MS. LACONTE FINDS THAT THE $71.1 MILLION WASTEWATER COST OF SERVICE WHICH PAWC PROPOSES TO ASSIGN TO WATER PURSUANT TO ACT 11 CUSTOMERS SHOULD BE REDUCED. DO YOU AGREE?

A. Yes, and in my direct testimony, based on the OCA revenue requirement recommendations, I recommended that $18.9 million of the wastewater revenue requirements should be assigned to water customers. Ms. LaConte recommends that the $71.1 million be reduced by the amount which the Commission determines that the wastewater cost of service should be reduced. Whether this recommendation is reasonable, as previously explained in responding to Mr. Cline, will depend on the water and wastewater revenue requirement increases approved by the Commission in this proceeding, if any.

Q. PAWC HAS PROPOSED TO ASSIGN THE WASTEWATER REVENUE REQUIREMENT ASSIGNED TO THE WATER CUSTOMER CLASSES BASED ON EACH WATER CUSTOMER CLASSES' COST OF SERVICE. DOES MS. LACONTE AGREE WITH THIS APPROACH?

A. No. Ms. LaConte proposes that the water customer classes should pay their share of the Act 11 subsidy based on the wastewater class that causes the subsidy.

Q. DO YOU AGREE WITH THIS APPROACH?

A. No, I do not and I previously responded to the same argument presented by OSBA witness Mr. Higgins. However, as shown on Table 2 of Ms. LaConte's testimony, the Residential class is unaffected by this recommendation.

VI. WITNESS: RICHARD A. BAUDINO

Cleveland – Cliffs Steel

Q. MR. BAUDINO HAS PROPOSED TO ASSIGN THE ACT 11 SHIFT BASED ON EACH WATER SERVICE CLASS'S PROPORTIONATE SHARE OF TOTAL WATER SERVICE COST RESPONSIBILITY UNDER CURRENT RATES. IS THIS THE APPROACH USED BY PAWC?

A. No. PAWC is proposing to assign the Act 11 shift to the water customer classes based on each class's total water cost of service as established in this proceeding.

Q. DO YOU AGREE WITH MR. BAUDINO'S PROPOSAL?

A. No. The present rates for each customer class are generally based on a cost of service which is now outdated. Therefore, I agree with PAWC's proposal to assign the Act 11 shift based on each water class's total cost of service. However, as explained in my direct testimony,

the cost of service for each water class should be based on the OCA's water CCOS study rather than the Company's.

Q. HAS MR. BAUDINO RERUN THE COMPANY'S WATER CCOS STUDY TO REFLECT HIS ACT 11 ALLOCATION?

A. Yes.

Q. UNDER MR. BAUDINO'S RERUN WATER CCOS AND UNDER THE COMPANY'S REVISED CCOS STUDY, THE RETURN OF THE PUBLIC (MUNICIPAL) CLASS IS SIGNIFICANTLY BELOW THE SYSTEM AVERAGE RATE OF RETURN. THAT IS, THE RELATIVE RATE OF RETURN ("RROR") IS SIGNIFICANTLY LESS THAN 1.0. IS THIS A SIGNIFICANT CHANGE FROM PAWC'S LAST BASE RATE PROCEEDING?

A. Yes. In PAWC's last base rate proceeding the RROR of the Public customer class was greater than 1.0, meaning the return of this class was higher than the system average return. Mr. Baudino attributes this change to a significant increase in the allocation of meters and services costs to the Public class. Mr. Baudino found this significant increase to be highly unusual. Therefore, Mr. Baudino recommends a revenue allocation which limited the increase for the Public class to 1.25 times the system average.

Q. DO YOU AGREE WITH MR. BAUDINO'S PROPOSAL TO LIMIT THE INCREASE TO THE PUBLIC CLASS TO 1.25 TIMES THE SYSTEM AVERAGE INCREASE?

A. No. As previously explained in responding to Mr. Higgins, the amount of the revenue increase assigned to the Public class should be increased, and I present a revenue distribution which moves each rate class toward the CCOS indicated by the OCA's CCOS

study. Under Mr. Baudino's proposal to limit the increase to the Public class to 1.25 times the system average increase, the return of the Public class would be significantly less than the system average return. Under my proposed revenue distribution, which is consistent with the concept of gradualism, the return of the Public class would move closer to the system average return.

Q. MR. BAUDINO RECOMMENDS THAT PAWC'S RDM BE REJECTED; HOWEVER, IF IT IS APPROVED, HE RECOMMENDS THE INDUSTRIAL CLASS SHOULD BE EXCLUDED FROM THE RDM. WHAT IS THE BASIS FOR MR. BAUDINO'S RECOMMENDATION?

A. The RDM is designed to recover reductions in the revenues collected by PAWC due to factors such as customer conservation measures, weather, or declining numbers of customers. Mr. Baudino recommends that the Industrial class be excluded from the RDM because he claims there is no evidence in this case that the Industrial class is affected by conservation measures, weather, or declining number of customers. Mr. Baudino also claims that the RDM presents significant problems with interclass allocations of lost revenues.

Q. WHY DOES MR. BAUDINO CLAIM THAT THE PROPOSED RDM WOULD CAUSE PROBLEMS WITH INTER-CLASS REVENUE ALLOCATIONS?

A. As explained by Mr. Baudino, the RDM would be applied to all customers in the Residential, Commercial, Industrial, Municipal, and Sales for Resale classes except for those customers taking service under contract rates. For purposes of the RDM, any revenue shortfall would be collected from all customers. According to Mr. Baudino, what this means is that if due to continued conservation the Residential class's revenue declined from the Commission authorized level in this case, that revenue shortfall would be collected

from all customers, not just from the Residential class. Commercial and Industrial customers would have to pay a portion of the Residential class revenue shortfall, even though Commercial and Industrial customers were not responsible for it. Likewise, if both Commercial and Residential classes experienced revenue shortfalls due to declining usage, once again the Industrial customers would have to pay a portion of that revenue shortfall. Mr. Baudino concludes that it is unfair and unreasonable to expect Industrial customers to pay for usage declines in the Residential and Commercial classes.

Q. IF THE RDM IS APPROVED BY THE COMMISSION, SHOULD THE INDUSTRIAL CLASS BE EXCLUDED FROM THE RDM AS RECOMMENDED BY MR. BAUDINO?

A. I previously responded to a similar recommendation presented by OSBA witness Mr. Higgins. For the reasons presented in that response the RDM should be rejected for all customer classes. Specifically, with respect to Mr. Baudino's recommendation that the Industrial class be excluded from the RDM, he has presented no evidence that Industrial class usage is not affected by conservation, weather, or a decline in the number of customers. However, Mr. Baudino is correct that under the RDM declines in usage experienced by one customer class will be recovered from all customer classes and this is unreasonable. Therefore, the RDM should be rejected in its entirety.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does. I reserve the right to update my testimony based on additional information received in the course of discovery. Also, to the extent I have not addressed an issue or proposal raised by the other parties in this proceeding, it should not be construed that I agree with the same.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Jerome D. Mierzwa, hereby state that the facts above set forth in my Rebuttal Testimony, OCA Statement 4R, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: February 21, 2024

Signature: _____
Jerome D. Mierzwa

Consultant Address: Exeter Associates, Inc. 10480
Little Patuxent Parkway, Suite 300
Columbia, MD 21044-3575

OCA STATEMENT 4SR

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	**)**	**Docket Nos.**	**R-2023-3043189 (Water)**
	)		**R-2023-3043190 (Wastewater)**
v.	**)**		
	)		
Pennsylvania-American Water Company	**)**		

SURREBUTTAL TESTIMONY OF

JEROME D. MIERZWA

ON BEHALF OF THE

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

MARCH 4, 2024

EXETER
ASSOCIATES, INC.
10480 Little Patuxent Parkway, Suite 300
Columbia, Maryland 21044

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I. INTRODUCTION

Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is Jerome D. Mierzwa. I am a Principal and Vice President of Exeter Associates, Inc. ("Exeter"). My business address is 10480 Little Patuxent Parkway, Suite 300, Columbia, Maryland 21044. Exeter specializes in providing public utility-related consulting services.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?

A. Yes. My direct testimony was served as OCA Statement 4 on February 1, 2024, and my rebuttal testimony was served as OCA Statement 4R on February 21, 2024.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to certain aspects of the rebuttal testimony presented by Pennsylvania American Water Company ("PAWC" or "Company") witnesses Constance E. Heppenstall, Charles B. Rea, J. Cas Swiz, and Ashley E. Everette; Bureau of Investigation and Enforcement ("I&E") witness Joseph Kubas; Office of Small Business Advocate ("OSBA") witness Kevin C. Higgins; Cleveland-Cliffs Steel witness Richard A. Baudino; and Pennsylvania American Water Large Users Group ("PAWLUG") witness Billie S. LaConte.

II. PAWC WITNESS: CONSTANCE E. HEPPENSTALL

Q. MS. HEPPENSTALL HAS REVISED THE WATER CLASS COST-OF-SERVICE ("CCOS") STUDY INITIALLY PRESENTED IN HER DIRECT TESTIMONY TO INCORPORATE SEVERAL REVISIONS. PLEASE DESCRIBE THOSE REVISIONS.

A. As discussed in her rebuttal testimony in additional detail, Ms. Heppenstall has revised the water CCOS study initially presented in her direct testimony to reflect an adjustment to the calculation of maximum day and maximum hour demands for allocation Factors 2, 3, and 4 to account for interruptible usage. In addition, Ms. Heppenstall's revised the allocation factors for meters and services for the Public class due to an error in linking to PAWC Exhibit 10-A. Finally, Ms. Heppenstall has corrected the amounts of the Act 11 wastewater revenue requirement that were re-allocated to the water rate classes in PAWC Exhibit 12-A, Schedule A, column 3 to tie to the data presented in PAWC Exhibit 3-A, Schedule.[1]

Q. DO YOU AGREE WITH THESE REVISIONS?

A. I do not agree that the revision to interruptible customer usage is appropriate. I agree with the revision to the allocation factors for meters and services for the Public class. Finally, I agree that the Act 11 wastewater revenue requirement re-allocated to the water rate classes in Exhibit 12-A and Exhibit 3-A should match, but I disagree with the total amount of the wastewater revenue requirement to be re-allocated to the water rate classes. I address the revisions to PAWC's water CCOS study to reflect interruptible usage and the re-allocation of the Act 11 wastewater revenue requirement to the water rate classes later in this surrebuttal testimony.

[1] PAWC Statement No. 12-R, p. 3, lines 6-21.

Q. ON PAGES 9 THROUGH 11 OF YOUR DIRECT TESTIMONY, YOU FOUND THE SYSTEMWIDE MAXIMUM DAY AND MAXIMUM HOUR EXTRA CAPACITY DEMAND FACTORS USED IN THE COMPANY'S WATER CLASS CCOS STUDY TO BE OUTDATED AND RECOMMENDED ALTERNATIVES TO THOSE FACTORS. DOES MS. HEPPENSTALL AGREE THAT THE ALTERNATIVE MAXIMUM DAY EXTRA CAPACITY FACTOR YOU HAVE PROPOSED IS REASONABLE?

A. No. My alternative maximum day extra capacity factor was based on the highest factor experienced by PAWC in the last 12 years. Ms. Heppenstall claims that water systems must be designed to meet the highest peak demand that potentially could be experienced, not just the highest peak demand that was experienced within a recent historical period. She claims it is not reasonable to ignore the maximum day ratios that the Company has actually experienced by proposing a limit (12 years) on the data set that is examined to determine the system maximum day ratio.[2]

Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL?

A. As shown in PAWC Exhibit No. 12-A, Schedule G (page 42), PAWC's actual annual maximum day extra capacity demand factor has been approximately 1.2 for the last 12 years, and the maximum day extra capacity demand factor of 1.4 utilized by the Company has not been experienced since 2003, which was 20 years ago. With respect to the developing demand factors to be used in a CCOS Study, the American Water Works Association ("AWWA") M1 Manual indicates that "demand data over a representative number of recent years" should be utilized.[3] I believe that 12 years meets

[2] PAWC Statement No. 12-R, p. 5, line 19-p. 6, line 15.
[3] AWWA M1 Manual, p. 373.

the standard identified in the AWWA M1 Manual, and the 20 years relied upon by PAWC does not. Demands experienced 20 years ago are not representative of current demands.

With respect to the need to meet the highest peak demand ever actually experienced by the Company, I would note that PAWC witness Mr. Rea presents an analysis in his direct testimony that indicates that there has been a pervasive decline in customer usage over the last 10 years, and Mr. Rea believes that this trend will continue.[4] Given the declines in customer usage estimated by Mr. Rea, it is unreasonable to assume that extra capacity demand factors and usage will return to historic levels experienced 20 years ago.

Q. ON PAGE 6 OF HER REBUTTAL TESTIMONY, MS. HEPPENSTALL NOTES THAT WATER USAGE ON THE MAXIMUM DAY OF 2022 IN SEVERAL AREAS WITHIN THE COMPANY'S OVERALL WATER OPERATIONS WAS MORE THAN 1.4 TIMES THE AVERAGE USAGE FOR THAT YEAR. WHAT IS YOUR RESPONSE?

A. It is not surprising that maximum day usage in several areas was more than 1.4 times the average usage. Under the base-extra capacity method set forth in the AWWA M1 Manual, the maximum day usage in specific areas are not considered, the system-wide maximum day usage is considered. Also considered are the maximum day usage of the individual customer classes. Therefore, maximum day usage in individual areas is not relevant.

[4] PAWC Statement No. 10, p. 72, lines 1-8.

Q. ON PAGE 5 OF HER REBUTTAL TESTIMONY, MS. HEPPENSTALL ALSO NOTES THAT WITH RESPECT TO A SYSTEM-WIDE MAXIMUM DAY EXTRA CAPACITY FACTOR, THE AWWA M1 MANUAL SETS FORTH A METHOD TO ASSESS THE REASONABLENESS OF EXTRA CAPACITY FACTORS. PLEASE DESCRIBE THIS METHOD.

A. The AWWA M1 Manual sets forth a calculation of a diversity ratio which provides for the assessment of the reasonableness of extra capacity factors. The diversity ratio is calculated by dividing the non-coincident peaking factor of the customer classes served by the water utility by the system peaking factor. Ms. Heppenstall claims that the AWWA M1 Manual recommends that a diversity ratio should be between 1.1 and 1.4.[5]

Q. ACCORDING TO MS. HEPPENSTALL, HOW DOES THE DIVERSITY RATIO FOR THE MAXIMUM DAY EXTRA CAPACITY FACTOR YOU HAVE PROPOSED COMPARE TO THE DIVERSITY RATIO OF THE COMPANY'S FACTOR?

A. Ms. Heppenstall claims that the diversity ratio for the maximum day extra capacity factor of 1.2 which I have proposed is 1.64, while the diversity ratio for the factor of 1.4 utilized in the Company's CCOS study is 1.41. Because the diversity factor of the maximum day factor I have proposed is not within the 1.1 to 1.4 range suggested in the AWWA M1 Manual, Ms. Heppenstall finds my proposed 1.2 maximum day demand factor to be unreasonable.[6]

[5] PAWC Statement No. 12-R, p. 6, lines 22-23.
[6] PAWC Statement No. 12-R, p. 8, lines 1-6.

Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL?

A. First, with respect to the diversity ratio, the AWWA M1 Manual states that: "[t]he system diversity ratio is *often* in the range of 1.1 to 1.4, though different system diversity measures may arise for communities with more atypical customer usage patterns."[7] Therefore, because the diversity ratio associated with my maximum day demand factors is outside the 1.1 to 1.4 range does not mean my demand factor is unreasonable.

In addition, to calculate the maximum day diversity ratio, the projected non-coincident peak demands of each customer class are totaled and divided by the system coincident maximum day demand. The non-coincident peak demands of each customer class reflected in the Company's CCOS study are based on a demand analysis prepared by the Company for the years 2013-2015 and, therefore, do not reflect the declines in customer usage estimated by Mr. Rea's analysis previously discussed. Adjusting the non-coincident maximum day peak demands of each customer class would certainly reduce the diversity ratio of 1.64 associated with my maximum day demand factor recommendation.

Q. WHAT IS MS. HEPPENSTALL'S RESPONSE TO YOUR PROPOSAL TO USE A SYSTEM-WIDE MAXIMUM HOUR EXTRA CAPACITY DEMAND FACTOR OF 1.5 IN LIEU OF THE 2.1 FACTOR REFLECTED IN THE COMPANY'S CCOS STUDY?

A. Ms. Heppenstall claims that the 2.1 factor was calculated by PAWC based on a detailed analysis of actual maximum hour demands. Ms. Heppenstall claims that I have not identified any errors or inaccuracies in PAWC's analysis, and rather than addressing

[7] AWWA M1 Manual, p. 377 (emphasis added).

the results of that analysis which has been accepted in a number of prior cases, I reject that analysis because it was conducted too long ago. She claims my recommended maximum hour factor should be rejected because it was based on demand data for another company, the York Water Company ("York Water"), and not on an analysis of PAWC demand data.[8]

Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL CONCERNING YOUR SYSTEM-WIDE MAXIMUM HOUR DEMAND FACTOR RECOMMENDATION?

A. First, the concern I have with PAWC's maximum hour demand factor is that it was based on an analysis of customer demands conducted in 1988 and, therefore, does not reflect the declines in customer usage that have occurred since the analysis was conducted. When asked for maximum hour demand data for the last three years in order to evaluate the reasonableness of the 2.1 demand factor used by PAWC in its water CCOS study in OCA-04-015, the Company indicated that it did not have actual maximum hour demand data.

In addition, with respect to utilizing York Water data to develop my maximum hour demand hour ratio recommendation, I would note that Ms. Heppenstall was the cost allocation and rate design witness in York Water's most recent base rate proceeding (Docket No. R-2022-3031340). In that proceeding, Ms. Heppenstall used data from other water utilities to support her class maximum day and maximum hour demand factor recommendations.

[8] PAWC Statement No. 12-R, p. 8, lines 7-18.

Q. ON PAGE 18 OF YOUR DIRECT TESTIMONY, YOU RECOMMEND THAT THE COMMISSION REQUIRE PAWC TO PERFORM AN ANALYSIS OF ITS SYSTEMWIDE MAXIMUM HOUR EXTRA CAPACITY DEMANDS PRIOR TO ITS NEXT RATE CASE. DOES MS. HEPPENSTALL AGREE WITH THIS RECOMMENDATION?

A. No. Ms. Heppenstall claims that I have not contended that the Company's 1988 study of system-wide maximum hour demands was inaccurate. In addition, she claims that the Company faces challenges in accurately measuring maximum hour demands in certain districts.[9]

Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL'S CLAIMS?

A. Ms. Heppenstall is correct that I have not contended that the 1988 study of system-wide maximum hour demands was inaccurate. My point is that the 1988 study is over 35 years old and out of date. As shown on Exhibit 12-A, Schedule G (page 42), since 1988, PAWC's system-wide maximum day ratio has declined from 1.4 to 1.2, and it is almost certain that PAWC's system-wide maximum hour ratio has also declined. I agree with Ms. Heppenstall that there may be challenges to updating the Company's analysis. However, because a task may be challenging is not a reason to not undertake the task.

[9] PAWC Statement No. 12-R, p. 10, lines 1-8.

Q. ON PAGE 14 OF YOUR DIRECT TESTIMONY, YOU RECOMMENDED THE INITIAL WATER CCOS STUDY FILED BY PAWC NOT BE MODIFIED AS PROPOSED BY MS. HEPPENSTALL TO EXCLUDE INDUSTRIAL CURTAILMENT USAGE FROM THE EXTRA CAPACITY FACTOR ALLOCATIONS. WHAT IS MS. HEPPENSTALL'S RESPONSE?

A. Ms. Heppenstall claims that PAWC's water system was built so that in the event of a water shortage, these customers could be curtailed. In addition, Ms. Heppenstall claims this adjustment to the cost of service for interruptible Industrial customers has been reflected in the Company's CCOS studies since 2007, and has long been accepted by the Commission.[10]

Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL?

A. As explained on page 14 of my direct testimony, these interruptible Industrial customers are not regularly interrupted, and are regularly served during periods of peak demand. In fact, based on recent additional discovery (OCA-35-009), the Company has acknowledged that these customers have not been required to curtail their usage in the last 20 years. As subsequently discussed in responding to PAWLUG witness Ms. LaConte, in the most recent Philadelphia Gas Works ("PGW") rate case, the Commission found that interruptible demand should be included with firm industrial in PGW's CCOS study based on a record showing no interruptions over 20 years.[11] My recommendation is consistent with this Commission finding.

[10] PAWC Statement No. 12-R, p. 10, lines 9-21.
[11] PAWLUG Statement No. 1-R, p.7, lines 8-16.

Q. IN HIS DIRECT TESTIMONY, MR. HIGGINS RECOMMENDS DIRECT ASSIGNMENT OF $2.8 MILLION OF AMP COSTS AND CUSTOMER ASSISTANCE-RELATED ADMINISTRATIVE COSTS TO THE RESIDENTIAL CLASS IN THE COMPANY'S WATER CCOS STUDY.12 HAS MS. HEPPENSTALL ACCEPTED THESE RECOMMENDATIONS?

A. Yes, and the revised water CCOS study presented in Exhibit CEH-1R reflects this modification.

Q. ARE THESE PROPOSED MODIFICATIONS REASONABLE?

A. No. For the reasons explained in the rebuttal testimony of OCA Witness Roger Colton, Mr. Higgins' direct assignments are not reasonable.[13]

Q. ON PAGES 18-19 OF YOUR DIRECT TESTIMONY, YOU RECOMMENDED THAT THE COMPANY INCLUDE NEGOTIATED RATE RIDER DEMAND INDUSTRIAL SALES ("DIS") AND RIDER DEMAND RESALE SALES ("DRS") CUSTOMERS AS SEPARATE CUSTOMER CLASSES IN THE WATER CCOS STUDY PRESENTED IN PAWC'S NEXT BASE RATE PROCEEDING. DOES MS. HEPPENSTALL AGREE WITH THIS RECOMMENDATION?

A. No. Ms. Heppenstall claims that Rider DIS and DRS customers have competitive alternatives to service from PAWC and provide benefits for all other water customers by preserving or attracting incremental sales. Therefore, revenues derived from Rider DIS and DRS customers should continue to be reflected as a reduction to the cost of service to all other customer classes.[14]

[12] PAWC Statement No. 12-R, p. 10, line 22 – p. 11, line 2.
[13] OCA Statement 5R, p. 1-6. Mr. Colton also recommended an adjustment to the *amount* of AMP costs (OCA Statement 5), which is reflected in the expense adjustments made by OCA Witness Ralph Smith (OCA Statement 2 and 2SR).
[14] PAWC Statement 12-R, p. 11, lines 3-16.

Q. DO YOU AGREE WITH MS. HEPPENSTALL THAT RIDER DIS AND DRS CUSTOMERS SHOULD NOT BE REFLECTED AS SEPARATE CUSTOMER CLASSES IN THE WATER CCOS STUDY PRESENTED BY PAWC IN ITS NEXT BASE RATE PROCEEDING?

A. No. Including Rider DIS and DRS customers as a separate customer class in the CCOS study filed in PAWC's next base rate proceeding will assist in ensuring that the rates charged to Rider DIS and DRS customers are reasonable. Including Rider DIS and DRS customers in the water COSS study will not prejudge whether negotiated rates for these customers should be discontinued.

Q. HAVE YOU MODIFIED THE WATER CCOS STUDY PRESENTED BY MS. HEPPENSTALL IN HER REBUTTAL TESTIMONY TO REFLECT YOUR RECOMMENDATIONS?

A. Yes. Schedule JDM-2SR presents a summary of the Company's rebuttal CCOS study modified to reflect my system wide maximum demand factors, include interruptible Industrial customer usage, and provided for the allocation of AMP costs and customer assistance-related administrative costs as recommended by Mr. Colton. A comparison of the results of the Company's CCOS study and my modified study is presented in Table 1-SR. This comparison is based on PAWC's claimed level of revenue requirement but excludes the Act 11 assignment of the wastewater revenue requirement to water service customers. I subsequently discuss the Act 11 assignment in Section III of this surrebuttal testimony.

Table 1SR. Water Cost of Service Study Comparison			
Classification	**Company**	**OCA**	**Difference**
Residential	$612,997,598	$606,110,184	($6,887,414)
Commercial	233,858,828	230,359,742	(3,499,086)
Industrial	44,198,427	49,618,335	5,419,908
Public (Municipal)	24,425,618	26,459,930	2,034,312
Other Water Utilities - Group A	11,845	12,399	554
Other Water Utilities - Group B	628,455	450,547	(177,908)
Private Fire Protection	5,808,618	7,115,758	1,307,140
Public Fire Protection	11,863,933	13,666,426	1,802,493
Total:	**$933,793,321**	**$933,793,321**	**$0**

Q. DID MS. HEPPENSTALL PROPOSE ANY CHANGES TO THE COMPANY'S INITIAL WASTEWATER CCOS STUDIES IN HER REBUTTAL TESTIMONY?

A. Yes. Ms. Heppenstall modified the Company's wastewater CCOS study initially presented in her direct testimony. Those modified studies are presented in Exhibits 12-B Revised, 12-C Revised, 12-D Revised, and 12-E Revised. The modified CCOS studies reflect the AMP and customer assistance program administrative cost allocations recommendations presented by Mr. Higgins which provided for the direct assignment of these costs to Residential customers.

Q. SHOULD THE MODIFICATIONS RECOMMENDED BY MR. HIGGINS AND REFLECTED IN THE REVISED CCOS STUDIES PRESENTED BY MS. HEPPENSTALL BE ADOPTED?

A. No. As with PAWC's water CCOS study, for the reasons presented in Mr. Colton's rebuttal testimony, Mr. Higgins' recommendations should not be adopted.

Q. ON PAGE 23 OF YOUR DIRECT TESTIMONY, MS. HEPPENSTALL CLAIMS THAT YOU INFER THAT $41 MILLION OF STORMWATER COSTS ARE BEING ASSIGNED TO WATER CUSTOMERS. DOES SHE AGREE WITH THIS CLAIM AND WHAT IS YOUR RESPONSE?

A. Ms. Heppenstall claims that no stormwater costs are reallocated to water customers in this case.[15] As shown on Table 2 of my direct testimony, the stormwater cost of service is $41.0 million, the total wastewater cost of service is $222.5 million, and PAWC has proposed to reallocate $71.1 million to water customers. It is unreasonable to contend that the $71.1 million reallocated to water customers does not include any stormwater costs.

Q. ON PAGES 35-36 OF YOUR DIRECT TESTIMONY, YOU RECOMMEND THAT THE EXISTING CUSTOMER CHARGES FOR RESIDENTIAL WATER CUSTOMERS WITH A 5/8-INCH, 3/4-INCH, 1-INCH, OR 1 1/2-INCH METER BE MAINTAINED. WHAT WAS THE BASIS FOR THIS RECOMMENDATION?

A. As explained on pages 35-36 of my direct testimony, this recommendation was based on an analysis of direct customer costs.

Q. DOES MS. HEPPENSTALL AGREE WITH YOUR RESIDENTIAL CUSTOMER CHARGE RECOMMENDATION?

A. No. Ms. Heppenstall claims that my analysis improperly omits office building and furniture expenses and is based on an unreasonable pre-tax return. Therefore, she recommends my analysis not be used to determine Residential water customer charges.[16]

[15] PAWC Statement 12-R, p. 12, line 22-23.
[16] PAWC Statement No. 12-R, p. 14, lines 2-11.

Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL?

A. As explained on pages 35-36 of my direct testimony, office building and furniture expenses do not vary with the addition and subtraction of a customer and, therefore, should not be included in an analysis of direct customer costs. With respect to the pre-tax return used in my calculation, I would agree that the actual pre-tax return approved by the Commission in this proceeding should be reflected in the Residential customer charge calculation, in addition to all other adjustments to the Company's revenue requirement claim determined to be appropriate by the Commission.

The Residential customer charge approved in this proceeding should be based on my customer charge calculation presented in Schedule JDM-4SR of my direct testimony, adjusted to reflect the water revenue requirement determined to be appropriate by the Commission. Schedule JDM-4SR modifies the customer charge calculation initially presented in Schedule JDM-4 of my direct testimony, which already reflected my maximum demand, interruptible Industrial usage, and AMP customer assistance cost recommendations, to reflect Ms. Heppenstall's revised allocations for meters and services for the Public class.

III. PAWC WITNESS: CHARLES B. REA

Q. WITH RESPECT TO THE ACT 11 ALLOCATION TO WATER CUSTOMER CLASSES, WHAT RECOMMENDATION DID YOU PRESENT IN YOUR DIRECT TESTIMONY?

A. On page 28 of my direct testimony, I recommended that the Act 11 allocation should be assigned to various water customer classes based on the cost of service indicated by my water CCOS study.

Q. DOES MR. REA GENERALLY SUPPORT THIS RECOMMENDATION?

A. No. Mr. Rea claims it is appropriate to match a class for class reallocation as much as possible.[17]

Q. DO YOU AGREE THAT A CLASS FOR CLASS REALLOCATION IS APPROPRIATE?

A. No. As already previously explained on pages 10 and 11 of my rebuttal testimony, such a reallocation is not appropriate. In addition, in the most recent Aqua Pennsylvania, Inc. base rate proceeding at Docket No. R-2021-3027385 and R-20217386, the Commission found that the Act 11 reallocation should be based on the results of the adopted water CCOS study. Finally, I note that in PAWC's most recent prior water and wastewater base rate proceedings (Docket Nos. R-2022-3031672 and R-2022-3031673), Mr. Rea agreed with the Company's Act 11 reallocation to water customer classes, which was based on a cost of service approach.[18]

Q. TABLE 4 IN YOUR DIRECT TESTIMONY PRESENTED A SUMMARY OF THE OCA'S COST OF SERVICE STUDY AND PRESENT AND PROPOSED RATES FOR WATER SERVICE, INCLUSIVE OF THE ACT 11 REALLOCATION. HAVE YOU REVISED TABLE 4 TO REFLECT THE WATER CCOS STUDY YOU HAVE PRESENTED IN YOUR SURREBUTTAL TESTIMONY?

Yes, Table 4-SR (below) revises Table 4 in my direct testimony to reflect the water CCOS study I present in this surrebuttal testimony and includes revenues at present and proposed rates at PAWC's requested water revenue requirement increase. The amount of the Act 11 reallocation reflected in Table 4-SR has not changed from the amount of

[17] PAWC Statement 10-R, p. 34, lines 19-21.
[18] Docket Nos. R-2022-3031672 and R-2022-3031673; PAWC Statement No. 10-R, p. 27, line 21 - p. 28, line 3.

the Act 11 reallocation presented in Table 4 as the wastewater revenue requirement recommendation presented by the OCA has not changed.

Table 4-SR. Summary of OCA Cost of Service Study and Present and Proposed Rates for Water Service

Classification	Direct Cost of Service	Wastewater to Water Allocation	Total Cost of Service	Present Rates	Proposed Rates	Increase	Percent
Residential	$606,110,184	$12,306,954	$618,417,138	$528,290,043	$619,195,214	$90,905,171	17.2%
Commercial	230,359,742	4,677,412	235,037,154	202,779,636	235,332,871	32,553,235	16.1%
Industrial	49,618,335	1,007,491	50,625,826	37,580,738	50,625,826	13,045,088	34.7%
Public (Municipal)	26,459,930	543,497	26,997,194	22,559,539	27,031,161	4,471,622	19.8%
Other Water Utilities - Group A	12,399	252	12,651	51,822	53,666	1,844	3.6%
Other Water Utilities - Group B	450,547	9,148	459,696	202,436	272,706	70,270	34.7%
Private Fire Protection	7,115,758	144,484	7,260,242	5,301,032	7,141,135	1,840,103	34.7%
Public Fire Protection	13,666,426	0	13,666,426	9,519,368	12,823,747	3,304,379	34.7%
Other	18,473,554	216,761	18,690,315	17,832,568	18,690,315	857,747	4.8%
Total	**$952,266,876**	**$18,899,766**	**$971,166,642**	**$824,117,182**	**$971,166,642**	**$147,049,460**	**17.8%**

Q. WHAT IS THE COMPANY'S POSITION ON THE SCALE BACK OF RATES?

A. The Company's position for the scale back of rates is that in the event that the Commission approves a revenue requirement that is less than that proposed by the Company, the Company proposes to proportionally reduce the revenue requirements for water service and wastewater service, and to proportionally reduce the proposed amount of reallocation from wastewater to water under Act 11 so that the same relative percentage to the total of water service revenue requirement, wastewater service revenue requirement, and Act 11 reallocation amounts be maintained at proposed levels.[19]

[19] PAWC Statement No. 10-R, p. 37, lines 11-18.

Q. DO YOU AGREE WITH THE COMPANY'S SCALE BACK PROPOSAL?

A. To a certain extent. For water service, the Company is proposing a scale back of the revenue increases it has proposed for each class. I am proposing a scale back of the revenue increases I have proposed for each class which is based on my CCOS study and, therefore, differs from the Company's proposed revenue increases for each class. I have accepted the Company's proposed CCOS for wastewater service and, consistent with the Company's allocation proposal, a scale back would be appropriate. With respect to the Act 11 reallocation, for the reasons expressed on pages 26-27 of my direct testimony, the Act 11 reallocation should be reduced. As discussed on page 28 of my direct testimony, a scale back of the Act 11 reallocation will need to be determined by the Commission based on the wastewater revenue requirement authorized by the Commission in this proceeding.

Q. MR. REA CONTENDS THAT A RUNNING THEME OF ALL THE SCALE BACK PROPOSALS IS THAT ANY REDUCTION IN THE WASTEWATER REVENUE REQUIREMENT FIRST BE APPLIED TO THE ACT 11 REALLOCATION. HAVE YOU MADE THIS RECOMMENDATION?[20]

A. No, I have not made that recommendation. As explained on page 25 of my direct testimony, an important purpose of Act 11 is to provide some relief to wastewater customers in relatively small or overburdened areas. On page 28 of my direct testimony, I presented an Act 11 recommendation to shift 75% of the OCA's calculated SSS revenue requirement and up to 50% of the OCA's calculated CSS revenue requirement increase to water customers. To the extent that the Commission authorizes

[20] PAWC Statement No. 10-R, p. 40, lines 20-22.

a wastewater revenue requirement increase which is more than the OCA's calculated amount, the Commission will have to determine what amount of that increase is reasonable for wastewater customers to bear given the recent PAWC rate increases and the relatively few wastewater customers. Under a scale back proposal in which any reduction in the wastewater revenue requirement is first applied to the Act 11 reallocation may not provide an adequate level of relief to wastewater customers.

Q. ON PAGES 36 AND 37 OF YOUR DIRECT TESTIMONY, CITING GRADUALISM, YOU RECOMMEND THAT THE RESIDENTIAL VOLUMETRIC WATER RATES IN RATE ZONE 2 (VALLEY) BE SET AT 70% OF RATE ZONE 1 RATES. DOES MR. REA AGREE WITH YOUR RECOMMENDATION?

A. No. Mr. Rea contends the proposed increase in the rates for Rate Zone 2 (Valley) Residential customers is not unreasonable.[21]

Q. DO YOU AGREE WITH MR. REA?

A. No. As explained on page 36 of my direct testimony, PAWC's proposed volumetric rates for Rate Zone 2 would increase the rates of the average Residential customer by nearly 65%. This is more than two times the system average increase and cannot be considered reasonable. Finally, I would note that in PAWC's prior water and wastewater base rate proceeding, Mr. Rea found that an increase of 40% for a rate zone moved too quickly toward cost of service rates without sufficiently recognizing the importance of gradualism.[22]

[21] PAWC Statement No. 10-R, p. 47, lines 13-15.
[22] Docket Nos. R-2022-3031672 and R-2022-3031673; PAWC Statement No. 10-R, p. 15, lines 19-20.

Q. ON PAGES 51-55 OF HIS REBUTTAL TESTIMONY, MR. REA SUMMARIZES THE POSITIONS OF THE VARIOUS PARTIES CONCERNING THE COMPANY'S WINTER AVERAGING PROPOSAL. BASED ON THOSE POSITIONS, WHAT DOES HE CONCLUDE CONCERNING WINTER AVERAGING?

A. Mr. Rea concedes that the beneficiaries of the Company's winter averaging proposal are likely to be higher income customers because it is these customers that are more likely to have seasonal water usage in the summertime that would no longer be billed for wastewater service. However, he contends that cost causation principles clearly indicate that water used by customers that does not enter the wastewater system in the summertime should not be charged for wastewater service. Based on that, he concludes that cost causation principles indicate that it is not appropriate to charge customers for wastewater usage in the summertime based on water that does not go through the sewer system.[23]

Q. WHAT IS YOUR RESPONSE TO MR. REA'S CONCLUSIONS CONCERNING WINTER AVERAGING?

A. I agree that basing wastewater rates on water that does not go through the sewer system is not a cost-based method for setting wastewater rates. However, the "snowbird" example shows that for some customers, PAWC's proposal has the effect of understating summer months usage that flows through the sewer system, which is counter to cost-causation principles. Mr. Rea does not dispute this effect.[24] He also concedes that the Company's winter averaging proposal will disproportionately harm low-income customers.[25] Under the methodology proposed by PAWC, any benefits are

[23] PAWC Statement No. 10-R, p. 55, lines 1-6.
[24] PAWC Statement No. 10-R, p. 55, lines 12-15.
[25] PAWC Statement No. 10-R, p. 55, lines 1-4.

outweighed by the disproportionate harm that PAWC's method would cause to low-income customers. OCA Witness Colton provides additional response in his surrebuttal testimony.[26]

Q. ON PAGE 47 OF YOUR DIRECT TESTIMONY, YOU RECOMMENDED THAT THE SSS AND CSS RESIDENTIAL CUSTOMER CHARGE FOR A 5/8-INCH METER BE ESTABLISHED AT $14.30, WHICH IS THE CURRENT RATE FOR MOST WASTEWATER RATE ZONES. DOES MR. REA AGREE WITH THIS RECOMMENDATION?

A. No. Mr. Rea contends that the Company's proposed 5/8-inch meter charge of $20 for wastewater service is consistent with the Company's proposed charge for water service.[27]

Q. SHOULD PAWC'S PROPOSED 5/8-INCH METER CHARGE OF $20 BE ADOPTED BY THE COMMISSION?

A. No. As explained on page 46 of my direct testimony, the proposed $20 customer charge is based on an analysis of customer costs that include the costs associated with collecting and treating Infiltration and Inflow ("I/I"). I/I does not vary directly with the addition or subtraction of a customer, and only costs that vary directly with the addition or subtraction of a customer should be included in the calculation of customer charges. Exclusive of I/I costs, the Company's calculation of customer costs would indicate a direct cost of $13.87 at the Company's proposed revenue requirement. Since monthly customer charges should be based on direct customer costs and those costs are less than the current charges, the current $14.30 should be maintained.

[26] OCA Statement 5SR, p. 9, lines 9 – p. 11, line 14.
[27] PAWC Statement No. 10-R, p. 58, lines 8-10; p. 61, lines 14-17.

Q. IN THIS PROCEEDING, PAWC HAS PROPOSED A REVENUE DECOUPLING MECHANISM ("RDM"), AN ALTERNATIVE RATEMAKING MECHANISM. HAS THE COMMISSION ADOPTED A STATEMENT OF POLICY RELATED TO ALTERNATIVE RATEMAKING MECHANISMS SUCH AS PAWC'S PROPOSED RDM?

A. Yes. In its Order dated July 18, 2019, in Docket No. M-2015-2518883, the Commission set for its Statement of Policy as it relates to alternative ratemaking methodologies. Specifically, the Commission identified 14 factors that it would consider in its evaluation of alternative ratemaking mechanisms. The Statement of Policy requires a utility proposing an alternative ratemaking mechanism to explain how each of these 14 factors impact the rates of each customer class.

Q. DID MR. REA SPECIFICALLY RESPOND TO THE 14 FACTORS AS THEY RELATE TO PAWC'S PROPOSED RDM IN HIS DIRECT TESTIMONY?

A. Yes, Mr. Rea responded to the 14 factors in PAWC Exhibit CBR-10. In Schedule JDM-6 of my direct testimony, I addressed each of Mr. Rea's responses and found for the reasons presented on pages 54 through 57 of my direct testimony that the RDM did not satisfy the 14 factors of the Commission's Statement of Policy.

Q. IN HIS REBUTTAL TESTIMONY, DID MR. REA RESPOND TO YOUR RESPONSES PRESENTED IN SCHEDULE JDM-6?

A. Yes. In Exhibit CBR-10R, Mr. Rea responded to Schedule JDM-6. Exhibit CBR-10R also responds to arguments presented by I&E witness Mr. Cline with respect to the 14 factors.

Q. HAVE YOU RESPONDED TO MR. REA'S RESPONSES PRESENTED IN SCHEDULE JDM-6SR.

A. Yes. My responses to Mr. Rea's responses in Exhibit CBR-10R are presented in Schedule JDM-6SR.

Q. MR. REA CLAIMS THAT THE RDM DOES NOT DISCOURAGE CONSERVATION.[28] DO YOU AGREE?

A. No. The proposed RDM provides a disincentive to ratepayers to undertake water conservation efforts because they would be required to pay for water they did not use. If a customer reduces their consumption in an attempt to reduce their bill, but the reduction is less than the reduction in usage of all other customers, the RDM will take those savings away from the customer, and in fact, the customer's bill will be higher.

Q. MR. REA CLAIMS THAT THE RDM WILL NOT RESULT IN RATE INSTABILITY AND RATE CONFUSION.[29] DO YOU AGREE?

A. No. The proposed RDM would add another surcharge to customers' bills, which would change on a monthly basis, and is unlikely to reduce the frequency of PAWC base rate or Distribution System Improvement Charge ("DSIC") rate filings. Therefore, it does not appear that a new RDM surcharge would improve rate stability. PAWC has not provided any evidence that the proposed RDM will be understandable to customers. When combined with the rate changes that occur under PAWC's DSIC and potentially the proposed ECIC, significant customer confusion is likely.

[28] PAWC Statement No. 10-R, p. 72, lines 14-2_.
[29] PAWC Statement No. 10-R, p. 73, lines 3-13.

Q. MR. REA CLAIMS THAT THE RDM DOES NOT IMPROPERLY SHIFT REVENUE RISK FROM THE COMPANY TO CUSTOMERS.[30] DO YOU AGREE?

A. No. Under the RDM, the risk of recovery of PAWC's revenue requirement due to declines in customer consumption is shifted to customers. Currently, between rate cases, that risk is borne by the Company. Customers receive no compensation under the RDM for now bearing the cost recovery risk. The risks associated with declines and consumption can now and in the future be appropriately addressed under traditional ratemaking. PAWC's fully projected future test year ("FPFTY") consumption projections in this proceeding reflect declining per-customer water usage.

Q. MR. REA CONTENDS THAT PARTIES HAVE CLAIMED THAT THE RDM IS NOT NEEDED BECAUSE PAWC HAS ACCESS TO A DSIC, THE FPFTY, AND OTHER MECHANISMS THAT ADDRESS REVENUE REGULATORY LAG.[31] DOES MR. REA AGREE WITH THESE CLAIMS?

A. No. Mr. Rea acknowledges that the DSIC mechanism helps the Company recover the cost of ongoing system improvements in a timely manner between rate cases. He contends that it does not address declines in consumption that affect revenues or the volatility in revenues that occur from year to year. With respect to the FPFTY, Mr. Rea claims that the FPFTY only allows for the recognition of declining use through the end of the FPFTY.

Q. WHAT IS YOUR RESPONSE TO THESE CLAIMS?

A. The point of tools like the DSIC and FPFTY is to make recovery more timely, not to eliminate regulatory risk. For PAWC, investors already benefit from the reduction in

[30] PAWC Statement No. 10-R, p. 73, line 17 p. 74, line 3.
[31] PAWC Statement No. 10-R, p. 75, line 14; p. 76, line 6.

regulatory lag associated with investments in DSIC-eligible infrastructure projects (DSIC) and investments and expenses generally (FPFTY), by increasing revenues between and through base rate cases. The RDM would reduce another form of risk that is currently borne by investors, and for which investors are being compensated to bear, by shifting the risk of revenue fluctuations between rate cases onto ratepayers.

Q. MR. REA BELIEVES THAT THE RDM IS NOT OVERLY COMPLEX.[32] DO YOU AGREE?

A. No. The RDM calculation formula and components are identified and discussed on pages 93 and 91-92, respectively, of Mr. Rea's direct testimony. Clearly, as shown there, the RDM calculation is not a simple calculation.

Q. MR. REA BELIEVES THAT THE RDM WILL NOT NEGATIVELY IMPACT CROSS-SUBSIDIZATION OF COSTS BETWEEN CUSTOMER CLASSES.[33] DO YOU AGREE?

A. No. As OCA witness Mr. Roger Colton has explained, with respect to class cost shifting, the RDM could shift revenue within the Residential class for customers who are financially able to invest in water conservation measures to low-income customers who are not financially able to make similar investments.

Q. ON PAGES 77-78 OF HIS REBUTTAL TESTIMONY, MR. REA PRESENTS A RECAP OF WHY THE RDM SHOULD BE APPROVED. WHAT DOES HE CLAIM IN THE RECAP?

A. Mr. Rea claims that adoption of the Company's proposed RDM is in the long-term best interest of the Company and its customers, and that rate designs that tie a utility's revenue recovery directly to sales volume have prompted concerns in modern utility

[32] PAWC Statement No. 10-R, p. 76, lines 13-18.
[33] PAWC Statement No. 10-R, p. 76, line 22; p. 77, line 3.

regulation. Because of seasonal variability and declining use per customer, Mr. Rea claims that volumetric rates that collect the majority of a Company's fixed cost do not give water utilities a reasonable opportunity to recover the fixed costs associated with providing service to customers. Mr. Rea contends that an alternative rate design mechanism that couples elements of SFV pricing with traditional rate designs brings the best of both worlds to both the Company and its customers. Mr. Rea believes that implementing the RDM: (1) makes the Company indifferent to selling less water; (2) promotes water efficiency and conservation; (3) reduces the adverse impact of weather variability for both the utility and its customers; and (4) reasonably ensures that sufficient revenue for continued investment in the system are available. Mr. Rea concludes that the RDM results in a better alignment of all stakeholder interests, and the Company respectfully urges the Commission to authorize its proposed RDM.

Q. WHAT IS YOUR RESPONSE TO MR. REA'S RECAP?

A. I agree with Mr. Rea that the RDM makes the Company indifferent to selling less water. However, as just explained, the RDM: (1) provides a disincentive to ratepayers to undertake water conservation measures; (2) would not reduce the frequency of PAWC base rate or DSIC rate filings; (3) would likely result in significant customer confusion; (4) improperly shifts the risk of recovery of PAWC's revenue requirement to customers with customers receiving no compensation for bearing this risk; and (5) will likely shift costs to low income Residential customers. Simply put, the RDM should not be adopted.

IV. PAWC WITNESS: J. CAS SWIZ

Q. IN ADDITION TO THE RDM, PAWC IS ALSO PROPOSING ANOTHER ALTERNATIVE RATE MECHANISM, THE ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE ("ECIC"). HAVE THE PARTIES TO THIS PROCEEDING GENERALLY OPPOSED THE ECIC?

A. Yes. Several parties to this proceeding, including the OCA, have recommended that the ECIC not be adopted. Mr. Swiz summarizes the reasons for the parties' opposition as follows:

- Recovery of environmental compliance costs through an automatic rate adjustment mechanism would improperly shift the risk of recovery of those costs that are incurred as part of the Company's obligation to provide and maintain adequate, safe and reliable service to customers;
- The ECIC proposal is premature because PAWC does not have detailed forecasts of the costs that will be requested for recovery through the ECIC at this time to justify alternative ratemaking treatment;
- The proposed ECIC will unfairly impact low-income customers and create intra- and interclass subsidies; and
- The ECIC proposal does not satisfy the 14 factors set forth in the Commission's Policy Statement on alternative ratemaking.[34]

Q. WHAT IS MR. SWIZ'S RESPONSE TO THE PARTIES' CLAIM THAT THE ECIC UNFAIRLY SHIFTS RISKS AWAY FROM THE COMPANY TO CUSTOMERS?

A. Mr. Swiz agrees that the provision of service that complies with environmental regulations to help ensure safe, clean drinking water is a requirement for PAWC. However, he claims emerging regulations or re-interpretations of existing regulations often result in new environmental compliance obligations that disrupt PAWC's five-

[34] PAWC Statement No. 8-R, p. 9, line 15 – p. 10, line 2.

year plan of construction work and require the Company to undertake additional projects on an expedited basis to comply with those changes that increase the cost of water and wastewater service. Mr. Swiz claims that the impending federal per and polyfluoroalkyl substances ("PFAS") regulations will require American Water's utilities to spend over $1 billion within three years. As discussed by PAWC witness Mr. Aiton, Mr. Swiz contends that for the Company, these new requirements will require investments in the range of $200 million before the end of 2027 based on preliminary estimates. He concludes that the ECIC will provide the Company a reasonable opportunity to recover the capital costs and expenses incurred after June 30, 2025, to meet the challenges of removing PFAS from drinking water systems across the Commonwealth in an efficient and prudent manner.[35]

Q. WHAT IS YOUR RESPONSE TO MR. SWIZ'S CLAIM CONCERNING THE UNFAIR SHIFTING OF RISK?

A. Under the ECIC, the risk of recovery of environmental compliance costs is shifted 100% to customers. Currently, a portion of that risk is borne by the Company. Customers receive no compensation under the ECIC for now bearing 100% of the cost recovery risk. The Company's current risks associated with environmental compliance cost recovery can now and in the future be appropriately addressed under traditional ratemaking.

[35] PAWC Statement No. 8-R, p. 10, lines 7-23.

Q. MR. SWIZ CONTENDS THAT SEVERAL PARTIES HAVE CLAIMED THAT THE ECIC MECHANISM WILL LESSEN THE SCRUTINY OF THE COMPANY'S ENVIRONMENTAL COMPLIANCE COSTS. WHAT IS MR. SWIZ'S RESPONSE TO THIS CLAIM?

A. Mr. Swiz claims that if the Company's proposed ECIC is approved, the Commission and all parties will have the opportunity to proactively evaluate PAWC's proposed investments and measures to comply with new environmental mandates before any costs are incurred.[36]

Q. WHAT IS YOUR RESPONSE TO THE CLAIM THAT SCRUTINY OF ENVIRONMENTAL COMPLIANCE COSTS WILL NOT BE LESSENED UNDER THE ECIC?

A. PAWC has proposed an entire set of new procedural rules to impose on parties to review its ECIC filings. While the Company treats this as beneficial to parties, Mr. Swiz misses the point that consumers and statutory advocates have very limited resources and cannot realistically expect to review recurring ECIC filings with the same degree of scrutiny given to base rate filings. Nor would they be afforded the time to do so. PAWC proposes for quarterly updates to go into effect on only 10 days-notice. The proposed Plans would require review and discovery in an "expedited" timeframe, during which consumers and statutory advocates would also be required to respond to two different sets of revisions the Company has the option of filing within the same period.[37]

[36] PAWC Statement No. 8-R, p. 11, lines 1-10.
[37] PAWC Statement No. 8-R, p. 25-26.

Q. ON PAGE 74 OF YOUR DIRECT TESTIMONY, YOU POINT TO DEBT COSTS AS AN EXAMPLE OF A PAWC COST THAT MAY DECLINE AND WOULD NOT BE TAKEN INTO CONSIDERATION OUTSIDE OF A GENERAL BASE RATE CASE UNDER THE ECIC. DOES MR. SWIZ FIND THIS TO BE A VALID CRITICISM OF THE ECIC?

A. No. Specifically, Mr. Swiz claims that any changes in PAWC's debt costs would be included in the ECIC. He notes that in the ECIC Tariff, the determination of the pre-tax return "will be calculated using the state and federal income tax rates, *the Company's actual capital structure and actual cost rates for long-term debt preferred stock as of the last day for the three-month period ending one month prior to the effective date* of the ECIC and subsequent updates" (emphasis added).[38]

Q. DOES MR. SWIZ'S RESPONSE REASONABLY ADDRESS YOUR CONCERN?

A. No. Mr. Swiz misses the point of my concern. In a base rate case, ***all*** of a utility's revenues, expenses, and capital costs are simultaneously reviewed so that increases in one category that are offset by decreases in another are taken into account in determining rates that are just and reasonable. An adjustment clause like PAWC's proposed ECIC, on the other hand, changes a line item in a utilities' base rate to account for expenses attributable to capital investment, while ignoring the other components of base rate. This may result in the establishment of unjust and unreasonable rates. PAWC's debt costs may decline from those approved in this proceeding. Interest rates are currently at higher levels compared to those in recent years and are likely to decline. While the ECIC would take into consideration the cost of the debt utilized to finance

[38] PAWC Statement No. 8-R, p. 11, lines 11-19.

environmental compliance investment, any decline in interest rates and PAWC's remaining debt costs would not be taken into consideration in the rate setting process under the ECIC.

Q. ON PAGE 70 OF YOUR DIRECT TESTIMONY, YOU EXPRESS CONCERN REGARDING THE POTENTIAL FOR INTERCLASS CROSS-SUBSIDIZATION UNDER THE ECIC. WHAT IS MR. SWIZ'S RESPONSE?

A. Mr. Swiz claims I have raised these concerns about interclass cost shifting because the ECIC will be assessed as a flat percentage increase across PAWC's customer base. However, he claims I cite no evidence supporting his assertions that the ECIC will necessarily result in subsidization among customers classes.

Mr. Swiz further notes that the ECIC is modeled upon the DSIC, with a similar formula and customer safeguards. He claims that the Commission-approved DSICs of PAWC and other utilities do not draw a distinction between customer classes in calculating their percentage of billed revenues charged to customers, and all customers are charged the same percentage on the theory that the revenue requirement was fairly allocated between customers classes in setting rates in the prior base rate. Mr. Swiz does not believe the Commission has found that the DSIC causes cross-subsidization or is discriminatory.

Q. WHAT IS YOUR RESPONSE TO MR. SWIZ'S CLAIM THAT THE ECIC WILL NOT RESULT IN CROSS-SUBSIDIZATION?

A. Cross-subsidization occurs when the rates of a particular customer class do not recover the cost of serving that customer class. Under the ECIC, revenues will be assessed as a percentage increase to each customer's non-ECIC billed charges. It is

unlikely that customer class cost responsibility will match current class revenue responsibility. With respect to DSICs under which charges are assessed as a percentage increase to each customer's non-DSIC billed charges, rate caps are in place to minimize any potential cross-subsidization. No rate cap has been proposed for the ECIC.

Q. ALSO ON PAGE 70 OF YOUR DIRECT TESTIMONY, YOU CLAIM THAT THE ECIC WILL NOT PROMOTE RATE STABILITY AND COULD RESULT IN CUSTOMER CONFUSION. WHAT IS MR. SWIZ'S RESPONSE TO THIS CLAIM?

A. Mr. Swiz claims that the ECIC will promote rate stability through gradual changes to customers' rates and bills as opposed to more significant increases typically experienced in base rate cases. He further claims that rate adjustment mechanisms for infrastructure investments are not new to the utility industry, and there is no reason to think that customers would be more confused about an ECIC surcharge or credit on their bill than they would be for any other rate design element that makes up a part of the customer's bill, including the DSIC.[39]

Q. WHAT IS YOUR RESPONSE TO MR. SWIZ'S CLAIM THAT THE ECIC WILL PROMOTE RATE STABILITY AND WILL NOT RESULT IN CUSTOMER CONFUSION?

A. Gradual increases in rates through the ECIC that do not receive the same scrutiny of a rate case are not a benefit to consumers in the abstract. While I agree that gradual increases are typically better than abrupt ones, there is no indication that the ECIC will reduce base rate frequency, and it is almost certainly going to lead to more frequent rate changes as the ECIC moves predominantly upward. When combined with the rate

[39] PAWC Statement No. 8-R, p. 13, lines 3-12.

changes that occur under PAWC's DSIC and potentially the RDM, the number of rate changes a customer will experience will increase significantly, and significant customer confusion is likely.

Q. MR. SWIZ CLAIMS THAT ON PAGES 66-68 OF YOUR DIRECT TESTIMONY YOU ASSERT THAT THE COMPANY'S ECIC PROPOSAL DOES NOT SATISFY THE 14 FACTORS OF THE COMMISSION'S ALTERNATIVE RATEMAKING POLICY STATEMENT. WHAT IS MR. SWIZ'S RESPONSE?

A. Mr. Swiz claims that the Commission's Policy Statement on alternative ratemaking mechanisms lists a number of factors that may be considered when evaluating an alternative ratemaking mechanism such as the ECIC, but it does not prescribe how or the extent to which each factor must be "satisfied." He claims that the Company provided a detailed analysis of how the specific factors listed by the Commission apply to the Company's proposed ECIC to aid in the Commission's review and consideration of these factors as it pertains to the ECIC.[40]

Q. WHAT IS YOUR RESPONSE TO MR. SWIZ'S CLAIM THAT THE COMPANY PROVIDED A DETAIL ANALYSIS OF HOW THE SPECIFIC FACTORS LISTED BY THE COMMISSION APPLIED TO THE COMPANY'S PROPOSED ECIC?

A. The analysis of Commission factors was presented by Mr. Swiz in Exhibit JSC-1. Schedule JDM-7, included in my direct testimony addresses the analysis referenced by Mr. Swiz, and demonstrates that the ECIC does not meet the 14 factors of the Commission's Policy statement on alternative ratemaking.

[40] PAWC Statement No. 8-R, p. 14, lines 3-11.

Q. MR. SWIZ CONTENDS THAT YOU HAVE RECOMMENDED THAT THE COMMISSION IMPOSE AN ANNUAL PERCENTAGE CAP ON ECIC REVENUES IF THE COMPANY'S PROPOSAL IS ADOPTED. DOES MR. SWIZ FIND A REVENUE CAP TO BE APPROPRIATE IF THE ECIC IS ADOPTED?

A. No, he does not. Mr. Swiz notes that the Company's existing DSIC does have applicable water and wastewater revenues caps; however, the DSIC investments are ongoing and programmatic, with ratable plans. He contends that, in contrast, the ECIC would have costs and investments that could be similar in magnitude, but greater in scope and potentially over a much shorter time period. As such, he finds that the application of rate caps for the ECIC presents challenges as each Environmental Plan could be different. Mr. Swiz offers, as an option that could be considered, a limitation on the Environmental Plan and ECIC recovery that requires a base rate proceeding to be filed within a certain time period, and absent the base rate proceeding, the ECIC would be set to zero.

Q. WHAT IS YOUR RESPONSE TO MR. SWIZ'S RECOMMENDATION THAT AN ANNUAL PERCENTAGE CAP ON ECIC REVENUE SHOULD NOT BE ADOPTED?

A. It is my recommendation that the ECIC not be adopted. It is not my recommendation that the ECIC should be adopted with a revenue cap. While a rate cap would reduce the potential impact of the ECIC, a rate cap would not address the concerns raised by adopting an ECIC, including:

- The unreasonable shifting of the risk of recovery from shareholders to consumers;
- The very broad and ambiguous scope of the qualifying cost under the ECIC;

- The failure of the ECIC to align revenues with cost causation;
- The resulting interclass and intraclass cost shifting;
- The potential harm the ECIC would cause low-income customers;
- The significant customer confusion that is likely to result; and
- The failure to consider potential cost of service reductions.

V. PAWC WITNESS: ASHLEY E. EVERETTE

Q. MS. EVERETTE FINDS THAT THE PROPOSALS BY SEVERAL OF THE PARTIES TO THIS PROCEEDING TO REDUCE THE ACT 11 REALLOCATION ARE NOT IN THE PUBLIC INTEREST.[41] WHAT IS THE BASIS FOR HER CLAIM?

A. Ms. Everette claims that the proposals would result in large increases in the rates of wastewater customers, which the Company believes may result in rate shock.[42]

Q. WHAT IS YOUR RESPONSE TO MS. EVERETTE'S CLAIM?

A. Under the Company's proposed Act 11 reallocation, at the Company's proposed water and wastewater revenue requirement, water customers would essentially receive a 24% rate increase, while wastewater customers would receive a slight rate decrease.[43] I do not believe it is in the public interest to essentially maintain wastewater revenue at the current level, and reallocate the entire increase in the wastewater revenue requirement to water customers. Remember that PAWC argues for a winter averaging proposal to more align rates with cost-causation while simultaneously recommending an Act 11 shift to decrease wastewater rates and increase water customer rates to recover $71 million to subsidize the wastewater revenue deficiency.

[41] PAWC Statement No. 1-R, p. 23, lines 19-20.
[42] PAWC Statement No. 1-R, p. 24, lines 1-2.
[43] Exhibit 10-A, B, C.

Under the OCA's proposed Act 11 reallocation, as explained on page 28 of my direct testimony, at the OCA's proposed revenue requirement recommendations, water and wastewater customers would receive comparable percentage increases. I believe this is in the public interest. If the Commission determines to approve a revenue requirement higher than recommended by the OCA, I continue to recommend that an Act 11 reallocation that maintains comparable percentage increases for water and wastewater customers would be in the public interest.

Q. ON PAGE 21 OF YOUR DIRECT TESTIMONY, YOU RECOMMENDED THAT PAWC PREPARE SEPARATE CCOS STUDIES FOR FUTURE SECTION 1329 ACQUISITIONS IN THE FIRST BASE RATE CASE THAT INCLUDES THOSE SYSTEMS. DOES MS. EVERETTE AGREE WITH THIS RECOMMENDATION?

A. No. Ms. Everette claims that the current base rate proceeding is not the appropriate place to determine whether or not PAWC should be required to provide separate CCOS studies for future acquisitions. She claims there are circumstances when a separate CCOS study is inappropriate or unnecessary, and the Commission should have the flexibility to only require a separate CCOS study when the situation merits it.[44]

Q. WHAT IS YOUR RESPONSE TO MS. EVERETTE'S RECOMMENDATION CONCERNING CCOS STUDIES FOR FUTURE SECTION 1329 ACQUISITIONS?

A. I recommend that PAWC be required to prepare separate CCOS studies for each future Section 1329 acquisition, unless the Commission determines in the Section 1329

[44] PAWC Statement No. 1-R, p. 29, line 29 – p. 30, line 3.

proceeding that a separate CCOS study should not be required. This would maintain flexibility for the Commission.

Q. ON PAGE 21 OF YOUR DIRECT TESTIMONY, YOU ALSO RECOMMEND THAT PAWC SHOULD CONTINUE TO PREPARE SEPARATE CCOS STUDIES EITHER INDIVIDUALLY FOR EACH ACQUISITION OR AS A GROUP FOR SECTION 1329 ACQUISITIONS THAT ARE INCLUDED IN THE CURRENT CASE. DOES MS. EVERETTE AGREE?

A. No. If the Commission rejects the inclusion of BASA and Brentwood in the current rate case, and PAWC claims them in a future rate case, the Company should be required to provide a separate CCOS study for each. Valley Township notwithstanding, it is consistent with common and current practice in the application proceedings for the buyer to be required to provide a separate CCOS for acquired systems in the "first" base rate case in which they are included. As demonstrated in the current rate case, having the revenue requirement associated with those acquisitions separately calculated does three things: (1) provides information to establish rates that reflect the costs for the system, (2) shows the magnitude of the subsidy proposed for those systems (see below, Table 5 from PAWC Statement No. 10, page 47), and (3) facilitates the review and recommended removal of those systems from revenue requirement by parties challenging their inclusion in the FPFTY.

TABLE 5
Wastewater Reallocation by

Wastewater System	Amount
Group SSS	$31,962,411
Group CSS	$16,007,052
Brentwood	$1,565,232
BASA	$21,552,699

If PAWC does not provide a separate CCOS study for BASA and Brentwood in its next base rate case, those systems will be rolled into the Group SSS CCOS study and (1) the parties and Commission will not have system-specific information to determine rates that reflect the costs for the systems, (2) the magnitude of the proposed subsidy for those Section 1329 acquisitions will be disguised and (3) if there is any challenge to their inclusion in the FPFTY, the parties will have to overcome the same obstacles faced in the current case to isolate the revenue requirement for the Audubon, Farmington and Sadsbury systems that were rolled into group CCOS studies.

Q. OTHER THAN FOR BASA AND BRENTWOOD, DO YOU MAINTAIN YOUR RECOMMENDATION THAT PAWC SHOULD CONTINUE TO PREPARE SEPARATE CCOS STUDIES EITHER INDIVIDUALLY FOR EACH ACQUISITION OR AS A GROUP FOR SECTION 1329 ACQUISITIONS THAT ARE INCLUDED IN THE CURRENT RATE CASE?

A. Yes, with two clarifications responsive to Ms. Everette's rebuttal. I do not recommend that PAWC be required to provide separate or group CCOS studies for the ten systems acquired under Section 1329 that have already been consolidated into Water Operations, Wastewater SSS Operations and Wastewater CSS Operations. My recommendation, the details of which are provided in my direct testimony, applies going-forward.[45] This would remove one issue from every Section 1329 application proceeding and provide some certainty for all parties.

[45] After the initial case in which the Section 1329 system is properly included, the non-CSS Section 1329 systems could be grouped into one separate CCOS study rather than individual CCOS studies. OCA Statement 4, page 21, lines 16-22, page 22, lines 1-3.

Also, I agree with I&E Witness Kubas that the Company should continue to provide separate CCOS studies for Water Operations, SSS Operations, and CSS Operations. Ms. Everette agrees that approach should continue.[46]

VI. I&E WITNESS: JOSEPH KUBAS

Q. AS SHOWN ON PAGE 33, TABLE 4 OF YOUR DIRECT TESTIMONY, AND AS DESCRIBED ON PAGE 28, THE OCA IS RECOMMENDING AN ACT 11 REALLOCATION OF $18.9 MILLION BASED ON THE OCA'S REVENUE REQUIREMENT RECOMMENDATIONS. DOES MR. KUBAS FIND THIS RECOMMENDATION TO BE REASONABLE?

A. No. Mr. Kubas believes the OCA was not aggressive enough in reducing the wastewater subsidy. Therefore, he recommends that the OCA's proposed Act 11 reallocation or wastewater subsidy of $18.9 million be rejected.[47] As explained on page 5 of my rebuttal testimony, Mr. Kubas has proposed that at I&E's proposed revenue requirement, the Act 11 subsidy essentially be eliminated and reduced to $357,577. As noted on page 8 of my rebuttal testimony, the OCA's and I&E's wastewater revenue requirement recommendations are comparable (I&E – $26.6 million; OCA – $27.7 million).

Q. WHAT IS YOUR RESPONSE TO MR. KUBAS' CLAIM THAT THE OCA WAS NOT AGGRESSIVE ENOUGH IN ELIMINATING THE ACT 11 SUBSIDY?

A. As shown on Table 5 of my direct testimony, at the OCA's recommended revenue requirement, completely eliminating the Act 11 reallocation would have resulted in a rate increase of 22.0% for SSS wastewater customers, and a rate increase of 9.3% for

[46] PAWC Statement No. 1-R, page 31, lines 12-15.
[47] I&E Statement No. 3-R, p. 3, lines 19-22.

CSS wastewater customers. With the Act 11 reallocation, the increases are 5.4% and 4.7%, respectively. As shown on page 2 of Exhibit LA-1 which is sponsored by OCA witness Ralph Smith, the rate increase to water customers based on the OCA's water revenue requirement recommendation with the Act 11 reallocation is 4.2%. Without the Act 11 reallocation, the increase would be 2.0%. As explained in my direct testimony, the basis for the OCA's proposed $18.9 million shift, at the OCA's recommended revenue requirement, is to maintain comparable percentage increases for water and wastewater customers and also provide some relief to wastewater customers.

Q. FOR MOST WASTEWATER RATE ZONES, THE CURRENT MONTHLY CUSTOMER CHARGE FOR A 5/8-INCH METER IS $14.30, AND ON PAGE 47 OF YOUR DIRECT TESTIMONY, YOU RECOMMENDED THAT THAT CURRENT CHARGE IN RATE ZONES, 1, 2, 5, AND 6 BE MAINTAINED AT $14.30, AND THE CHARGE IN RATE ZONES 3, 4, 7, AND 9 BE REDUCED TO $14.30. DOES MR. KUBAS AGREE WITH YOUR CUSTOMER CHARGE RECOMMENDATIONS?

A. No. Mr. Kubas disagrees with the recommended $14.30 monthly charge for the CSS customers in Rate Zones 3, 4, and 6. As explained on pages 46-47 of my direct testimony, under my recommendation, the present Rate Zone 3 customer charge would be reduced from $19.50 per month to $14.30 per month, the Rate Zone 4 customer charge be reduced from $40.00 per month to $14.30 per month, and the Rate Zone 6 customer charge of $14.30 would remain at $14.30 per month. Mr. Kubas disagrees with my CSS customer charge recommendations for several reasons. First, 72% of present rate CSS revenues are generated by Rate Zone 3 (PAWC Volume 9, Ex. 10-C, p. 2). Therefore, granting a $5.20 per month reduction in the Rate Zone 3 Residential

customer charge will have a large impact on total CSS Operations revenue. Second, for Rate Zone 4, Residential customers currently pay a charge of $40.00 per month and would experience a decrease of $25.70 ($40.00 -$14.30) per month under the OCA proposal, which he believes is too large of a decrease and will also reduce CSS revenue. Third, for Rate Zone 6, Mr. Kubas believes these customers can absorb a larger increase in the customer charge because under present rates, Rate Zone 6 customers pay the highest CSS Residential usage rates.

Q. DO ANY OF THE REASONS PRESENTED BY MR. KUBAS JUSTIFY NOT ADOPTING A $14.30 MONTHLY CUSTOMER CHARGE FOR ALL CSS 5/8-INCH METERS?

A. No. First, Mr. Kubas has proposed a monthly customer charge of $20 for all CSS Rate Zones. As previously explained in responding to Mr. Rea, the $20 charge is not cost-based and maintaining the $14.30 charge would set the charge at a level that was comparable to a cost-based rate. Second, in Rate Zone 3, the reduction in the charge would decrease CSS revenues by approximately 6%. This would only require a small increase in volumetric usage charges of approximately $0.16 per 100 gallons, or 7%. Third, in Rate Zone 4, customers would experience a decrease of $5.70 from the $20 rate proposed by the Company. This would only require a small increase in volumetric usage charges of approximately $0.20 per 100 gallons, or 10%. Finally, in Rate Zone 6, under my recommendation, customers would also experience a decrease of $5.70 in the customer charge from the $20 rate proposed by the Company. This would only require a small increase in the volumetric charge of approximately $0.22 per 100 gallons, or 8%.

VII. OSBA WITNESS: KEVIN C. HIGGINS

Q. MR. HIGGINS DISAGREES WITH YOUR POSITION THAT INTERRUPTIBLE USAGE SHOULD NOT BE EXCLUDED FROM THE MEASUREMENTS OF EXTRA CAPACITY BECAUSE NO INTERRUPTIONS HAVE OCCURRED FOR AT LEAST THREE YEARS.[48] WHAT IS YOUR RESPONSE?

A. Ms. Heppenstall also disagreed with my position, and I have already addressed Mr. Higgins' position in responding to Ms. Heppenstall. I incorporate my response to Ms. Heppenstall by reference and will not reiterate the position.

Q. ON PAGE 16 OF YOUR DIRECT TESTIMONY, YOU NOTED THAT THE SYSTEM-WIDE MAXIMUM DAY AND MAXIMUM HOUR BASE-EXTRA CAPACITY FACTORS REFLECTED IN PAWC'S WATER CCOS STUDY WERE OUTDATED AND RECOMMENDED ALTERNATIVES. DOES MR. HIGGINS AGREE WITH THESE ALTERNATIVES?

A. Mr. Higgins agrees with my alternative maximum day factor. He does not agree with my alternative maximum hour factor, and recommends an alternative.[49]

Q. WHAT DOES MR. HIGGINS RECOMMEND CONCERNING THE MAXIMUM HOUR FACTOR?

A. While Mr. Higgins agrees that the 2.1 maximum hour factor utilized by PAWC is outdated, he recommends utilizing a maximum hour factor of 1.8 rather than the 1.5 factor I have proposed. Mr. Higgins claims that the 1.8 factor scales the maximum hour factor in proportion to my recommended adjustment to the maximum day factor which he has accepted.[50]

[48] OSBA Statement No. 1-R, p. 8, lines 1-14.
[49] OSBA Statement No. 1-R, p. 10, lines 13-18; p. 13, lines 9-17.
[50] OSBA Statement No. 1-R, p. 13, lines 9-17.

Q. DO YOU AGREE WITH MR. HIGGINS' PROPOSED MAXIMUM HOUR EXTRA CAPACITY FACTOR?

A. No. Mr. Higgins' recommendation assumes that maximum day and maximum hour factors are proportionately related. He has made no such demonstration. My recommended maximum hour factor of 1.5 is based on the maximum day to maximum hour ratio actually experienced by a water utility with a service territory in close proximity to PAWC's service territory.

Q. WHAT IS MR. HIGGINS' RECOMMENDATION WITH RESPECT TO HOW THE ACT 11 ALLOCATION APPROVED BY THE COMMISSION SHOULD BE ALLOCATED TO THE VARIOUS WATER CUSTOMER CLASSES?

A. Mr. Higgins recommends that the Act 11 reallocation approved by the Commission in this proceeding be allocated to water customer classes utilizing the approach offered in PAWC's response to OSBA03-001.[51] Under this approach, the Act 11 reallocation would be based on the corresponding wastewater classes that gives rise to the Act 11 shortfall.

Q. WHAT IS YOUR RESPONSE TO THIS RECOMMENDATION?

A. Mr. Higgins is recommending the Act 11 reallocation approach recommended by PAWC. I have previously addressed PAWC's approach in responding to Mr. Rea, and shown why this approach should be rejected. PAWC's water customer classes have little, if any, responsibility for the Act 11 wastewater revenue requirement being reallocated to water customers.

[51] OSBA Statement No. 1-R, p. 16, lines 1-5.

Q. MR. HIGGINS HAS PRESENTED AN UPDATED WATER CCOS STUDY AND REVENUE ALLOCATION WHICH HE CLAIMS REFLECTS HIS CORRECTIONS AND RECOMMENDATIONS TO THE COMPANY'S STUDY.[52] DO YOU AGREE WITH HIS CCOS STUDY AND REVENUE ALLOCATION?

A. No. Mr. Higgins' CCOS study fails to include interruptible usage, inappropriately reflects a direct assignment of AMP costs and customer assistance-related administrative costs to the Residential class, and utilizes an unsupported systemwide maximum hour extra capacity factor. Therefore, Mr. Higgins' CCOS study, and revenue allocation which is based on his CCOS study, should be rejected.

VIII. CLEVELAND CLIFFS STEEL WITNESS: RICHARD A. BAUDINO

Q. MR. BAUDINO RECOMMENDS THAT THE ACT 11 ASSIGNMENT OF THE WASTEWATER SUBSIDY TO WATER CUSTOMERS BE BASED ON THE COST OF SERVICE PERCENTAGES FROM PAWC'S WATER CCOS STUDY.[53] DO YOU AGREE WITH THIS RECOMMENDATION?

A. Not entirely. The wastewater Act 11 reallocation should be based on percentages from the CCOS study approved by the Commission in this proceeding. The CCOS study approved in this proceeding should be the study I sponsor rather than the study sponsored by the Company.

[52] OSBA Statement No. 1-R, p. 16, lines 8-12.
[53] Cleveland Cliffs Steel Statement No. 1-R, p. 3, lines 8-10.

Q. LIKE PAWC AND THE OSBA, MR. BAUDINO DISAGREES WITH YOUR RECOMMENDATION THAT INTERRUPTIBLE INDUSTRIAL CUSTOMERS SHOULD BE INCLUDED IN THE EXTRA CAPACITY FACTOR ALLOCATIONS. WHAT IS YOUR RESPONSE?

A. I have previously addressed this issue in responding to PAWC witness Ms. Heppenstall, and for the reasons presented in responding to Ms. Heppenstall, continue to recommend that interruptible Industrial customers be included in the extra capacity factor allocations.

Q. MR. BAUDINO RECOMMENDS THAT THE COMMISSION REJECT YOUR LOWER SYSTEM-WIDE MAXIMUM DAY AND MAXIMUM HOUR EXTRA CAPACITY FACTORS BECAUSE THEY ARE BASED ON DATA FROM YORK WATER.[54] WHAT IS YOUR RESPONSE?

A. First, I have not proposed the use of a system-wide maximum day extra capacity factor based on data from York Water. I have based my maximum day recommendation on PAWC's actual experience over the last 12 years. With respect to the maximum hour extra capacity factor, the factor used by PAWC is based on an analysis that is 35 years old. As shown on Exhibit 12-A, Schedule G, PAWC's maximum day extra capacity factor has steadily declined since 1987, and my recommended maximum hour factor reflects similar declines.

[54] Cleveland Cliffs Steel Statement No. 1-R, p. 6, line 21 – p. 7, line 2.

IX. PAWLUG WITNESS: BILLIE S. LACONTE

Q. MS. LACONTE DISAGREES WITH YOUR PROPOSED ADJUSTMENT TO THE MAXIMUM DAY AND MAXIMUM HOUR EXTRA CAPACITY FACTOR UTILIZED IN PAWC'S WATER CCOS STUDY.[55] WHAT IS YOUR RESPONSE?

A. Although Ms. LaConte concedes that my proposed maximum day factor is reflective of more current data, she disagrees with my proposed maximum day and maximum hour factors for reasons similar to those presented by PAWC witness Ms. Heppenstall and OSBA witness Mr. Higgins. I have previously addressed the positions expressed by Ms. Heppenstall and Mr. Higgins on this issue, and for the reasons presented in responding to Ms. Heppenstall and Mr. Higgins, my maximum day and maximum hour extra capacity factors should be adopted.

Q. LIKE PAWC WITNESS MS. HEPPENSTALL, OSBA WITNESS MR. HIGGINS, AND CLEVELAND CLIFFS STEEL WITNESS MR. BAUDINO, MS. LACONTE DOES NOT AGREE WITH YOUR RECOMMENDATION TO INCLUDE INTERRUPTIBLE INDUSTRIAL USAGE IN THE DEVELOPMENT OF EXTRA CAPACITY FACTORS.[56] DOES MS. LACONTE OFFER ANY REASONS TO REJECT YOUR RECOMMENDATION NOT PREVIOUSLY PROVIDED BY OTHER WITNESSES?

A. No. However, Ms. LaConte does recognize that in the most recent Philadelphia Gas Works ("PGW") rate case, the Commission found that interruptible demand should be

[55] PAWLUG Statement No. 1-R, p. 3, lines 17-20.
[56] PAWLUG Statement No. 1-R, p. 7, lines 1-7.

included with the firm industrial demand in PGW's CCOS study based on a record showing no interruptions over 20 years.[57]

Q. MS. LACONTE RECOMMENDS THAT THE COMMISSION REJECT YOUR PROPOSAL TO REQUIRE PAWC TO INCLUDE RIDER DIS AND RIDER DRS AS SEPARATE CUSTOMERS IN PAWC'S CCOS STUDY IN THE NEXT BASE RATE PROCEEDING.[58] HAVE ANY OTHER WITNESSES ALSO RECOMMENDED THAT THIS PROPOSAL BE REJECTED?

A. Yes. Ms. Heppenstall also made the recommendation, and Ms. LaConte essentially presents the same arguments as Ms. Heppenstall. Since I have previously responded to Ms. Heppenstall's recommendation, there is no need to separately respond to Ms. LaConte's recommendation.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, it does. I reserve the right to update my testimony based on additional information received in the course of discovery.

[57] PAWLUG Statement No. 1-R, p. 7, lines 8-16.
[58] PAWLUG Statement No. 1-R, p. 8, lines 18-21.

OCA STATEMENT 4SR

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	**)**	**Docket Nos. R-2023-3043189 (Water)**
	)	**R-2023-3043190 (Wastewater)**
v.	**)**	
	)	
Pennsylvania-American Water Company	**)**	

SCHEDULES ACCOMPANYING THE

SURREBUTTAL TESTIMONY OF

JEROME D. MIERZWA

ON BEHALF OF THE

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

MARCH 4, 2024

EXETER
ASSOCIATES, INC.
10480 Little Patuxent Parkway, Suite 300
Columbia, Maryland 21044

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

COMPARISON OF PRO FORMA COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Customer Classification	Pro Forma Cost of Service, as of June 30, 2025				Pro Forma Revenues Under Present Rates		Pro Forma Revenues Under Proposed Rates		Proposed Increase	
	Cost of Service	Allocation of Other COS*	Total Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Residential	$606,110,184	$ 46,505,573	$ 652,615,757	65.0%	$ 528,290,043	65.5%	$ 657,085,231	65.4%	$ 128,795,188	24.4%
Commercial	230,359,742	18,320,153	248,679,895	24.8%	202,779,636	25.1%	254,604,000	25.3%	51,824,364	25.6%
Industrial	49,618,335	3,939,176	53,557,511	5.3%	37,580,738	4.7%	48,143,784	4.8%	10,563,046	28.1%
Public (Municipal)	26,459,930	1,635,240	28,095,170	2.8%	22,559,539	2.8%	26,209,929	2.6%	3,650,390	16.2%
Other Water Utilities - Group A	12,399		12,399	0.0%	51,822	0.0%	53,666	0.0%	1,844	3.6%
Other Water Utilities - Group B	450,547		450,547	0.0%	202,436	0.0%	277,021	0.0%	74,585	36.8%
Private Fire Protection	7,115,758	341,990	7,457,748	0.7%	5,301,032	0.7%	6,304,285	0.6%	1,003,253	18.9%
Public Fire Protection	13,666,426	-	13,666,426	1.4%	9,519,368	1.2%	11,847,068	1.2%	2,327,700	24.5%
Total Sales of Water	$933,793,321	$ 70,742,132	$ 1,004,535,453	100.0%	$ 806,284,614	100.0%	$1,004,524,984	100.0%	$ 198,240,370	24.6%
Other Water Revenues	$ 10,675,369	345,262	11,020,631		10,034,383		11,031,091		996,708	9.9%
Contract Sales - Industrial	4,482,099		4,482,099		4,482,099		4,482,099		-	0.0%
Contract Sales - Resale	3,316,086		3,316,086		3,316,086		3,316,086		0	0.0%
Total	$952,266,876	$ 71,087,394	$ 1,023,354,270		$ 824,117,182		$1,023,354,261		$ 199,237,079	24.2%

* Includes unrecovered Wastewater Cost of Service.

Schedule JDM-2SR
Page 1 of 1

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

CALCULATION OF THE 5/8-INCH CUSTOMER COSTS PER MONTH
INCLUDING THE UNRECOVERED PUBLIC FIRE COSTS

Cost Function	Cost of Service*	Number of Units	Unit Cost Per Month
Meters	37,554,013	912,985 5/8 Equivalents	$ 3.43
Services	68,034,896	753,124 3/4 Equvalents	7.53
Billing/Collecting	31,107,628	9,021,253 Bills	3.45
Meter Reading	5,227,356	9,021,253 Bills	0.58
Subtotal	141,923,894		14.99
Unrecovered Public Fire	40,999,279	912,985 5/8 Equivalents	3.74
Total	182,923,173		$ 18.73

* Includes only direct customer costs.

Pennsylvania-American Water Company

Response to Distribution Rates – Statement of Policy
Proposed Revenue Stabilization Mechanism
Summary of Positions

52 Pa. Code § 69.3302. Distribution rate considerations.

(a) In determining just and reasonable alternative distribution ratemaking mechanisms and rate designs that promote the purpose and scope of this statement of policy and the objectives of 66 Pa. C.S. § 1330 (relating to alternative ratemaking for utilities), the Commission may consider, among other relevant factors, the following:

(1) How the ratemaking mechanism and rate design align revenues with cost causation principles as to both fixed and variable costs.

The RDM better aligns actual revenue collection with authorized revenues for all customer classes. The RDM specifically treats fixed and variable costs separately by customer class using rate design concepts associated with Straight-Fixed Variable ("SFV") pricing. The RDM is calculated and administered separately for residential and non-residential customer classes and treats fixed cost and variable cost separately so that fixed cost recovery is aligned with approved fixed costs (per customer) and variable cost recovery is aligned with approved variable costs (per hundred gallons of water). The recovery mechanism is on a volumetric basis.

Mierzwa Direct: The RDM provides for the recovery of fixed costs on a volumetric basis; therefore, it does not align utility revenues with cost causation principles as to both fixed and variable costs.

Company Response: *As explained in the direct testimony of Charles Rea, PAWC Statement No. 10, the RDM cost components continue to reflect cost of service allocation as determined by the Company, which take into account cost causation principles. Further, although the costs are recovered on a volumetric basis, the surcharge or credit takes into account the Company's fixed costs as part of the RDM calculation.*

Mierzwa Surrebuttal: The Company concedes that fixed costs will be recovered on a volumetric basis under the RDM and, therefore, the RDM does not align utility revenues with cost causation principles as to both fixed and variable costs.

(2) How the ratemaking mechanism and rate design impact the fixed utility's capacity utilization.

The Company's proposed RDM is not expected to impact the fixed utility's capacity utilization.

Mierzwa Direct: The proposed RDM is unlikely to impact the fixed utility's capacity utilization.

Company Response: *N/A*

Mierzwa Surrebuttal: N/A

(3) Whether the ratemaking mechanism and rate design reflect the level of demand associated with the customer's anticipated consumption levels.

The Company's proposed RDM directly reflects changing consumption levels in variable cost recovery. As consumption levels increase, the Company's variable cost recovery increases, but only by the approved level of production cost per unit delivered or billed. The opposite is true whereas consumption levels decrease, the Company's variable cost recovery decreases, but only by the approved level of production cost per unit delivered or billed.

Mierzwa Direct: The RDM adjustment or "true-up" mechanism creates the anomaly where customers see rate increases when they reduce consumption and rate decreases when they increase consumption.

Company Response: *It is not clear what Mr. Mierzwa's concern is with the alleged anomaly he cites. This is a symmetrical mechanism that considers and stabilizes the impacts of changing consumption levels for both customers and the Company.*

Mierzwa Surrebuttal: The proposed RDM provides a disincentive to ratepayers to undertake water conservation efforts because they would be required to pay for water they did not use. If a customer reduces their consumption in an attempt to reduce their bill, but the reduction is less than the reduction in usage of all other customers, the RDM will take those savings away from the customer, and in fact, the customer's bill will be higher.

(4) How the ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting.

The proposed RDM would apply to both water and wastewater service with separate tariffs and separate recovery/credit mechanisms for residential and nonresidential customers. The proposed RDM will not affect interclass or intraclass cost shifting between residential and non-residential customer classes.

Mierzwa Direct: OCA witness Roger Colton explains that, with respect to interclass cost shifting, the RDM could shift revenue within the residential class from customers who are financially able to invest in water conservation measures to low-income customers who are not financially able to make those same investments.

Company Response: *Please see the rebuttal testimony of Charles Rea, PAWC Statement No. 10-R, pp. 74-75.*

Mierzwa Surrebuttal: Please see the Surrebuttal Testimony of Roger Colton, OCA Statement 5SR, pp. 11-13.

(5) How the ratemaking mechanism and rate design limit or eliminate disincentives for the promotion of efficiency programs.

The proposed RDM reduces the throughput incentive, which gives the Company an incentive to collect more revenue when customers increase consumption. By connecting variable cost recovery directly to approved levels of production cost but not to fixed cost, the RDM removes this incentive from the Company and therefore eliminates any disincentives for the promotion of water efficiency efforts.

Mierzwa Direct: The Company has not demonstrated that the lack of an RDM has been a major obstacle for the promotion of water conservation and efficiency. The Company has been able to implement methods to improve water efficiency without an RDM. Moreover, there has been a long-term trend of per-customer declining water consumption (i.e. improved water efficiency use) without an RDM.

Company Response: *While the Company has been able to improve water efficiency in the past, the bulk of these efficiencies have been achieved through supply-side practices (as discussed by Mr. Runzer and Mr. Aiton in their direct testimonies). To encourage additional demand-side strategies beyond those currently employed by the Company, it is critical to reduce the throughput incentive for the Company to sell more water.*

Mierzwa Surrebuttal: The Company has experienced a trend in declining per-customer water consumption without any RDM or revenue decoupling mechanism. Although there is some disagreement about how to properly quantify the impact of declining water usage on 2025 FPFTY test year revenue at current rates, both PAWC and the OCA have reflected declining per-customer water usage in projecting 2025 water sales and associated revenue. Per-customer water usage is declining without the RDM. Consequently, there is no compelling need for an RDM to promote water conservation.

(6) How the ratemaking mechanism and rate design impact customer incentives to employ efficiency measures and distributed energy resources.

See response to item (5). The proposed mechanism encourages water efficiency by reducing the throughput incentive. In addition, if customers employ efficiency measures, those measures will far outweigh any surcharges that may result from the proposed RDM.

Mierzwa Direct: The proposed RDM could provide a disincentive to ratepayers to undertake water conservation efforts because they would be required to pay for water they did not use. Revenue savings to individual customers that would ordinarily be achieved through usage reductions would be offset by surcharges to all customers under the RDM. Hence, if customers save money on their monthly water bill due to efficient consumption, customers will be forced to share their bill savings with the utility. Moreover, with the high and apparently never-ending rate increases that PAWC has implemented and will apparently continue to seek, customers are already incented to conserve water without a new RDM surcharge.

Cline: Q. WILL THE RDM ENCOURAGE WATER EFFICIENCY AND CONSERVATION FROM CUSTOMERS?

A. Not at all. From the perspective of a customer, the RDM will appear as a random surcharge or credit on their bill that is completely removed from their own usage. Specifically, by calculating the RDM based on a total class-wide (or multiple classes in the case of non-residential customers) basis, a single customer, particularly low-usage customers, will have zero ability to affect whether they are assessed an additional surcharge or a credit on their bill in the subsequent year. Therefore, it is the bill based on base charges that would encourage water efficiency and conservation. The only thing the RDM provides customers is the worry that the next year's RDM would erode the savings derived from conservation efforts.

Company Response: *Customers will continue to be encouraged to engage in water efficiency measures. Regardless of what the volumetric rate happens to be, customers who use less water will have lower bills. See the rebuttal testimony of Charles Rea, PAWC Statement No. 10-R, p. 72 for further discussion.*

Mierzwa Surrebuttal: See the response to Item 3.

(7) How the ratemaking mechanism and rate design impact low-income customers and support consumer assistance programs.

The proposed RDM does not have any specific impacts on low-income customers that do not apply to residential customers generally. Because the recovery mechanism is volumetric in nature, lower-use low-income customers will not be adversely impacted.

Mierzwa Direct: OCA witness Colton addresses how the RDM could affirmatively harm low- income customers that do not have the financial means to pursue investments in water conservation measures.

Cline: Q. COULD THE RDM NEGATIVELY IMPACT LOW-INCOME CUSTOMERS?

A. Yes. As I stated above, there are potentially many customers, who cannot

themselves enact cost-saving water conservation measures, whose ability to pay may be compromised as their rates increase to address conservation efforts undertaken by more affluent customers or from more low-income customers enrolling in the BDP than was originally anticipated.

Company Response: *Mr. Mierzwa and Mr. Cline have provided no evidence that low-income customers will be harmed or negatively impacted by the RDM. RDM credits or surcharges will be subject to discounts through the Company's BDP because it is applied after the BDP discount is applied to the bill, which further dampens the effects on lower income customers. In other words, a customer eligible for the BDP will have the discount applied to all base charges (Service Charge per Month and Consumption Charge) before the RDM would be applied. This will result in a reduced RDM charge (in dollars) compared to the RDM absent the BDP.*

Mierzwa Surrebuttal: Please see the direct testimony of OCA witness Roger Colton, OCA Statement 5, pp. 79-90.

(8) How the ratemaking mechanism and rate design impact customer rate stability principles.

The proposed RDM will, by definition, improve rate stability. In years where revenues are relatively low relative to SFV pricing and fixed costs are under recovered, rates would increase slightly in the next year to bring actual revenues back up. The opposite would be true in years where usage resulted in revenues that were higher than that implied by SFV pricing, which represents a scenario where fixed costs are over-recovered. In higher revenue years, the RDM will reduce rates which would offset higher revenues from the year before and "smooth out" revenues over the longer term.

Mierzwa Direct: Under the current regulatory standard in Pennsylvania, base rate cost under and over recoveries are currently not tracked and are not eligible for recovery in future base rate proceedings. The proposed RDM would add another surcharge to customers' bills and would not reduce the frequency of PAWC base rate or DSIC rate filings. Thus, it does not appear that a new RDM surcharge would improve rate stability. In contrast, under traditional cost-of-service ratemaking, if a utility experiences sales reductions and under-recovery, it cannot simply achieve the same result as an RDM true-up by filing another base rate case with adjusted sales forecasts. When a utility files a general rate increase, all relevant information is reviewed to determine just and reasonable rates, not just sales forecasts. Traditional ratemaking produces rate stability.

Cline: Q. COULD THE RDM RESULT IN RATE INSTABILITY AND RATE CONFUSION FOR CUSTOMERS?

A. Yes. As I described above, the Company's proposal to determine the credit or surcharge based on a total class basis result in customers being completely unaware and unable to control or predict whether they will be receiving a surcharge or credit

from the RDM for the following year. Additionally, the entire concept of the RDM introduces rate confusion for customers. Essentially, PAWC is telling customers that it will charge one set of rates from January through March, but that in April their rates will be adjusted based on the comparison of their revenues (but not just theirs, the revenue from all of the other customers as well) from the previous year to the revenues generated by some other rate that was not included or mentioned on their bill at all.

Company Response: *As discussed above, the RDM smooths out revenues over the long term, improving rate stability for both the Company and the customer. Further, all else being equal, it would be inefficient to file a rate case for the sole purpose of reconciling variations in revenue. As discussed on page 99 of the direct testimony of Charles Rea, PAWC Statement No. 10, "[a]n analysis of the historical data shows that in any given year water revenues at the Company's proposed rates in this proceeding can swing from the projected amount by as much as plus or minus approximately $11.1 million." Alternative regulatory mechanisms such as the RDM have been recognized in the regulatory community as effective means to address policy concerns recognized by NARUC after a recognition that traditional cost of service ratemaking no longer adequately addresses current challenges. See the direct testimony of Charles Rea, PAWC Statement No. 10, pp. 103-105.*

Mierzwa Surrebuttal: Please see the direct testimony of Jerome D. Mierzwa, OCA Statement No. 4, pp. 60-61, which discusses the regulatory community's (West Virginia Public Service Commission) rejection of a PAWC revenue decoupling mechanism similar to the RDM proposed by PAWC in this proceeding.

(9) How weather impacts utility revenue under the ratemaking mechanism and rate design.

Weather will still have an impact on revenues but only to the extent that variable costs are impacted. Under the proposed RDM, volatility of utility revenue and customer bills would be reduced over the long term. Increases in fixed cost recovery revenue due to abnormal weather variations (*e.g.*, drought conditions) would be returned to customers in the following year, and reductions in fixed cost recovery due to abnormal weather variations (*e.g.*, excessive rainfall) would be collected from customers in the following year.

Mierzwa Direct: The RDM adjustment or true-up mechanism creates the anomaly where customers see rate increases when they reduce consumption due to weather variations and rate decreases when they increase consumption due to weather variations.

Company Response: *Again, it is not clear what Mr. Mierzwa's concern is with the alleged anomaly he refers to. This is a symmetrical mechanism that stabilizes the impacts of weather for both customers and the Company.*

Mierzwa Surrebuttal: See the response to Item 3.

(10) How the ratemaking mechanism and rate design impact the frequency of rate case filings and affect regulatory lag.

To the extent that future rate cases are driven by lower-than-expected usage, the RDM likely would result in fewer rate cases, or at least rate cases seeking lower rate increases. However, the RDM does not affect future revenue requirements and does not recover fixed costs that are incurred after a rate case that are over and above those approved by the Commission. Therefore, if future rate cases are driven by future investment needs and associated cost recovery, the RDM would not reduce the need for such cases.

Mierzwa Direct: The RDM will have no impact on the magnitude of base rate increases requested by the Company in the future. The RDM does not affect future revenue requirements and does not recover fixed costs that are incurred after a rate case that are over and above those approved by the Commission. Therefore, if future rate cases are driven by future investment needs and associated cost recovery, the RDM would not reduce the need for such cases.

Company Response: *It is true that there may be various factors that contribute to rate case timing. As noted above, the RDM could result in fewer rate cases, or at least rate cases seeking lower rate increases, to the extent that future rate cases are driven by lower-than-expected usage. See also response to #8 above.*

Mierzwa Surrebuttal: As explained on p. 98, lines 19-23, of Mr. Rea's direct testimony, PAWC Statement No. 10, at proposed rates in this proceeding, water service revenues will be expected to decline by approximately $5.8 million per year based on the current trends in declining usage. In this proceeding, PAWC is requesting a water revenue increase of nearly $200 million. Clearly, usage reductions are not a significant factor in PAWC's determinations to file a rate case, and adoption of the RDM is unlikely to result in fewer rate cases, or significantly impact the amount of the rate increases requested by PAWC in is rate cases.

(11) If or how the ratemaking mechanism and rate design interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa. C.S. § 1307 (relating to sliding scale of rates; adjustments), riders such as 66 Pa. C.S. § 2804(9) (relating to standards for restructuring of electric industry) or system improvement charges, 66 Pa. C.S. § 1353 (relating to distribution system improvement charge).

The Company's proposed RDM does not interact with other revenue sources.

Mierzwa Direct: The RDM will interact with the Company's DSIC because the DSIC is a percentage applied to the total bill and the RDM will impact a customer's total bill.

Company Response: *The RDM and DISC would each be applied to the total bill prior to the application of either surcharge.*

Mierzwa Surrebuttal: With this clarification, the proposed RDM would not interact with other revenue sources.

(12) Whether the alternative ratemaking mechanism and rate design include appropriate consumer protections.

The RDM proposal includes consumer protections through the formal reconciliation process which includes audits and external stakeholder review. Tariff administration of the mechanism will contain consumer protections to make sure that the appropriate levels of revenue are being collected. Customers still can control their bill through controlling usage because the standard rate design still applies.

Mierzwa Direct: The proposed RDM does not include appropriate consumer protections and should be rejected for the reasons discussed in my testimony and the testimony of OCA witness Colton.

Company Response: *In addition to the protections previously described, it is also important to specifically note that the RDM is a symmetrical mechanism that may result in a surcharge, or a credit to customers – an additional protection to ensure customers don't only get charged in the event of an under-collection but receive the benefits of an over-collection of revenues.*

Mierzwa Surrebuttal: The proposed RDM does not include appropriate consumer protections and should be rejected for the reasons discussed in my direct and this surrebuttal testimony, and the direct and surrebuttal testimony of OCA witness Colton.

(13) Whether the alternative ratemaking mechanism and rate design are understandable to consumers.

The Company does not anticipate that there would be any issues related to customer confusion over the proposed RDM. Revenue reconciliation riders are not new to the utility industry. There is no reason to think that customers would be more confused about an RDM surcharge or credit on their bill than they would be for any other rate design element that makes up a part of the customer's bill.

Mierzwa Direct: PAWC has not provided any evidence that the proposed RDM will be understandable to customers. When combined with the rate changes that occur under PAWC's DSIC and potentially the proposed ECIC, significant customer confusion is likely.

Cline: See response to #8 above.

Company Response: *The Company does not believe that the proposed RDM will cause*

rate confusion for customers. Revenue reconciliation riders are not new to the utility industry. There is no reason to think that customers would be more confused about an RDM surcharge or credit on their bill than they would be for any other rate design element that makes up a part of the customer's bill.

Mierzwa Surrebuttal: The RDM calculation formula and components are identified and discussed on pages 93 and 91-92, respectively, of Mr. Rea's direct testimony. Clearly, as shown there, the RDM calculation is not a simple calculation.

(14) How the ratemaking mechanism and rate design will support improvements in utility reliability.

The proposed RDM will support improvements in utility reliability by permitting the Company to more reliably recover fixed costs that can't be avoided by customers using less water, and will therefore enhance the Company's ability to prudently invest in and manage the business.

Mierzwa Direct: The proposed RDM does not provide a direct incentive to increase the safety and reliability of the PAWC system.

Company Response: *The RDM gives the Company a tool to reliably collect the revenues necessary to invest in the safety and reliability of the system more effectively through more consistent planning and deployment of the most efficient resources.*

Mierzwa Surrebuttal: The proposed RDM does not provide a direct incentive to increase the safety and reliability of the PAWC system.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Jerome D. Mierzwa, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 4SR, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: March 4, 2024

Signature: Jerome D. Mierzwa

Jerome D. Mierzwa

Consultant Address: Exeter Associates, Inc. 10480
Little Patuxent Parkway, Suite 300
Columbia, MD 21044-3575

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2023-30343189 (water)
v.	:	Docket No. R-2023-30343190 (wastewater)
	:	
Pennsylvania American Water Company	:	

Direct Testimony of Roger Colton

on behalf of

Pennsylvania Office of Consumer Advocate

OCA Statement 5

PUBLIC VERSION

February 1, 2024

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Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Roger D. Colton. My business address is 34 Warwick Road, Belmont, MA.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?

A. I am owner of the firm of Fisher Sheehan & Colton, Public Finance and General Economics of Belmont, Massachusetts. In that capacity, I provide technical assistance to a variety of federal and state agencies, consumer organizations and public utilities on rate and customer service issues involving water/sewer, natural gas and electric utilities.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of the Office of Consumer Advocate.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL BACKGROUND.

A. I work primarily on low-income utility issues. This involves regulatory work on rate and customer service issues, as well as research into low-income usage, payment patterns, and affordability programs. At present, I am working on various projects in the states of Connecticut, Maryland, Pennsylvania, Ohio, Michigan, Wisconsin and Illinois, as well as in the Canadian province of Nova Scotia. My clients include state agencies (e.g., Pennsylvania Office of Consumer Advocate, Maryland Office of People's Counsel, Connecticut Office of Consumers Counsel), federal agencies (e.g., the U.S. Department of Health and Human Services), community-based organizations (e.g., Cleveland Legal Aid Society, Legal Action of Chicago, Sierra Club), and private utilities (e.g., Toledo Water, Entergy Services, Xcel Energy d/b/a Public Service of Colorado). In addition to state-specific and utility-specific work, I engage in national work throughout the United States. For example, in 2020, I represented a coalition of major national consumer

organizations to comment on the Environmental Protection Agency's proposed framework by which to judge community financial capability. I have recently completed a project with the Natural Resources Defense Council to develop a tool by which to assess the financial impact of differing types of low-income bill assistance. In 2020, I completed a study of water affordability in twelve U.S. cities for the London-based newspaper, The Guardian. In 2021, I authored a Water Affordability Plan for the City of Toledo (OH) under contract with the City. I continue to be of counsel to the National Coalition for Legislation on Affordable Water (NCLA-Water). A brief description of my professional background is provided in Exhibit RDC-1.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. After receiving my undergraduate degree in 1975 (Iowa State University), I obtained further training in both law and economics. I received my law degree in 1981 (University of Florida). I received my Master's Degree (Regulatory Economics) from the MacGregor School (Antioch University) in 1993.

Q. HAVE YOU EVER PUBLISHED ON PUBLIC UTILITY REGULATORY ISSUES?

A. Yes. I have authored three books and more than 80 articles in scholarly and trade journals, primarily on low-income utility and housing issues. I have authored more than 200 technical reports for various clients on energy, water, telecommunications and other associated low-income utility issues. A summary of my publications is included in Exhibit RDC-1.

Q. HAVE YOU EVER TESTIFIED BEFORE THIS OR OTHER UTILITY COMMISSIONS?

A. Yes. I have testified before the Pennsylvania Public Utility Commission ("PUC" or "Commission") on numerous occasions regarding utility issues affecting low-income customers and customer service. My testimony has specifically included testimony in various proceedings involving low-income issues relating to Pennsylvania American Water Company (PAWC), Pittsburgh Water and Sewer Authority (PWSA), and Aqua Pennsylvania, Inc. (Aqua PA). In addition to this PUC testimony, I have testified on issues related to customer service and low-income bill affordability for the City of Philadelphia's Public Advocate in each rate case involving the Philadelphia Water Department since 1990. I have also testified in regulatory proceedings in 43 states and various Canadian provinces on a wide range of utility issues. A list of the jurisdictions in which I have testified is listed in Exhibit RDC-1.

Q. PLEASE EXPLAIN THE PURPOSE OF YOUR DIRECT TESTIMONY.

A. The purpose of my Direct Testimony is to review the impact of PAWC rates on low-income customers. I will further review the reasonableness of the design and implementation of the low-income bill payment assistance programs offered by PAWC. More specifically, I will examine:

- The reasonableness of PAWC's "affordability analysis" presented by Company witness Rea;
- A series of recommendations regarding the appropriate PAWC rate response to the unaffordability of water and wastewater bills;

- The adverse impact that the proposed increases in the water and wastewater customer charges will have on low-income customers;
- The adverse impact that PAWC's proposed Revenue Decoupling Mechanism (RDM) will have on low-income customers;
- The adverse impact that PAWC's proposed Environmental Compliance Investment Charge (ECIC) will have on low-income customers;
- The adverse impact that PAWC's proposed "winter averaging" mechanism will have on low-income customers;
- The reasonableness of PAWC's request to place the Company's allowed Return on Equity (ROE) at the high end of the ROE range to compensate PAWC its claims of exemplary management; and
- Modifications that should reasonably be made to PAWC's proposed recovery of costs associated with implementation of the Company's Arrearage Management Program (AMP).

Q. PLEASE SUMMARIZE THE RECOMMENDATIONS YOU MAKE FOR PAWC.

A. Based on the data and discussion presented throughout my Direct Testimony, I make the following findings and recommendations:

1. I find that Mr. Rea's "enterprise level" affordability analysis is fatally flawed and recommend that it not be relied upon to assess the impact of PAWC rates on the affordability of rates to the Company's residential customers.

2. I recommend that the concerns I identify with respect to the unaffordability of PAWC rates should be considered in the balancing of consumer and investor interests in setting a return on equity, even outside the consideration of the specific proposals I advance with respect to PAWC's Bill Discount Program (BDP), AMP, and other specific low-income initiatives.

3. I recommend that the tiered discounts offered by PAWC should be increased to reflect the discounts set forth in Table 10 of my Direct Testimony.

4. I recommend that PAWC's proposal to adopt a "fourth tier" to its low-income discounts should be approved, with the modest increase to the discount that I present in Table 10 of my Direct Testimony.

5. I recommend that PAWC be required to make personal contact with any Confirmed Low-Income customer facing the imminent disconnection of service for nonpayment. At the time of that personal contact, the Confirmed Low-Income customer should be informed of the customer's right to enroll in the BDP *and* enroll in the AMP as an alternative to the disconnection of service for nonpayment. Disconnections to these customers should be frozen until PAWC has received a response to the offer of BDP/AMP participation.

6. I recommend that customers enrolled in the BDP in the future should also be enrolled in the Company's Arrearage Management Program. Moreover, the Company should not be disconnecting customers that it not only knows to be low-income, but knows sufficient information to be able to identify which BDP tier they would fall into, without first attempting to enroll these customers in AMP.

7. I recommend that PAWC be directed to enroll a customer in its BDP and AMP where doing so would be more favorable to a customer and only offer a payment arrangement if a customer rejects BDP and AMP enrollment, after being informed of the benefits of the programs.

8. I recommend that PAWC be directed to regularly report to its Low-income Advisory Group (LIAG) on the progress of the review of options for speech pattern and linguistic analysis, and how that review is incorporating such options into potential low-income outreach. PAWC should seek regular LIAG input into how such analysis can be incorporated and utilized.

9. I recommend that PAWC increase the maximum income eligibility for its hardship grants to 250% of Federal Poverty Level.

10. I recommend that PAWC adopt a process that would allow multiple hardship grants in a given twelve month period, so long as those grants do not exceed the annual maximum benefit amount of $500.

11. I recommend that PAWC should develop a written "universal service plan" and file that plan with the PUC's Bureau of Consumer Services. That written plan should include not only a description of each low-income program component PAWC offers, but should also identify: (1) the objectives which PAWC is seeking to accomplish through its various program components (including but not limited to participation levels); (2) the metrics by which PAWC will seek to measure whether those objectives are being accomplished; (3) the manner in which, if at all, the differing program components interact with each other; and (4) the evaluation process by which PAWC proposes to determine whether its objectives are being met and what remedies the Company will pursue in the event they are not. The plan should further include: (5) the qualifications for each program; (6)

the proposed means of outreach and intake; (7) the current and projected participation levels; and (8) the expected annual budgets. The plan should be subject to review and comment not only by BCS, but by other stakeholders who request to be involved in a review process.

12. I recommend that the customer charge recommendations of OCA witness Mierzwa (OCA Statement 4) be adopted.

13. I recommend that PAWC be directed to develop and submit to BCS, no later than six months after a final order in this proceeding, a plan through which the Company will use the federal WAP agencies, as well as the natural gas and/or electric LIURP agencies, as partners through which to deliver water conservation investments to low-income customers.

14. I recommend that the recommendation of OCA witness Mierzwa (OCA Statement 4) and OCA witness Hoover (OCA Statement 1) be adopted with respect to PAWC's proposed RDM and that the proposed RDM should be denied. If the RDM is not denied in its entirety, the RDM should exempt both BDP revenues and BDP customers from its application. Also, if the RDM is approved, it should be made subject to the same low-income discounts that all other PAWC volumetric charges are subject to. Finally, if the RDM *is* approved, it should not be used to collect revenue reductions attributable to either the BDP or the AMP.

15. I recommend that the testimony of OCA witness Mierzwa (OCA Statement 4) and OCA witness Hoover (OCA Statement 1) be adopted with respect to the proposed ECIC: the ECIC should be rejected. In the alternative, if the ECIC is approved, I recommend that it be made subject to the same low-income bill discounts that PAWC's other volumetric charges are subject to.

16. I recommend that the winter averaging proposal of PAWC be disapproved. The recommendation of OCA witness Mierzwa (OCA Statement 4) should instead be adopted. In the alternative, should the winter averaging proposal be adopted, it should be made subject to the same low-income discounts that other PAWC volumetric charges are made subject to.

17. I recommend that the return on equity recommendation of OCA witness David Garrett (OCA Statement 3) should be adopted, and that PAWC should not be rewarded with a higher return based on its management performance.

18. With respect to customer satisfaction surveys, I recommend that the population targeted by PAWC's "targeted surveys" be expanded to include: (1) customers seeking to enroll in the BDP and/or AMP; (2) customers seeking to enroll in a deferred payment arrangement; (3) customers expressing a difficult paying, or an inability-to-pay their bills in a full and timely manner; and (4) customers responding to the pending (or already completed) disconnection of service for nonpayment. The results of these targeted surveys should be compiled, provided to the PAWC LIAG at each quarterly meeting, and subject to discussion at LIAG

should a member of the group have questions or identify issues flowing from the targeted surveys.

19. I recommend that the total AMP credit cost recovery be reduced to $214,728 based on (1) known and measurable data for historic AMP credits versus the unreasonable assumption that 100% of the possible AMP credits will be provided each year and (2) eliminating double-recovery of dollars added to uncollectibles to reflect AMP credits where those dollars are already historically included in uncollectibles for the BDP.

Part 1. The Continuing Unaffordability of PAWC Rates.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. I will explain below how the affordability analysis presented by PAWC witness Rea is inadequate to support the conclusion he reached that PAWC bills are affordable when viewed from both the community level and the household level.

A. PAWC's "Enterprise Level" Affordability Analysis.

Q. PLEASE EXPLAIN THE "ENTERPRISE LEVEL" AFFORDABILITY ANALYSIS PRESENTED BY PAWC WITNESS REA.

A. PAWC Witness Rea explains his Enterprise Level affordability analysis as follows:

> The Enterprise-Level analysis of affordability for water and wastewater service is a historical comparison of average monthly bills for PAWC residential customers to household income for the Company's residential customers. The metric used to describe affordability is the Bill-to-Income (BTI) Ratio, which is defined as annual water bills divided by estimated annual household income. This view looks at average residential monthly bills for all customers over time compared to MHI [Median Household Income] for the Company's residential customer base.

(PAWC St. 10, at 6). There are two elements to Mr. Rea's analysis that I will address. First, I will address whether it is meaningful to use Median Household Income (MHI) to address affordability issues. Second, I will address whether it is

meaningful to use Mr. Rea's "Bill-to-Income" (BTI) Ratio to address affordability issues.

Q. IS MR. REA'S "ENTERPRISE LEVEL" ANALYSIS BASED ON MEDIAN INCOME SUPPORTED BY THE ACADEMIC LITERATURE HE CITES IN HIS DIRECT TESTIMONY?

A. No. In fact, the academic article cited by Mr. Rea himself in his Direct Testimony concluded that Mr. Rea's approach was wrong.[1] That article stated:

> The conventional approach measures affordability as a community's average cost of water and sewer service as a percentage of that community's median household income (%MHI), with values <2.0 or 2.5%—4.0 or 4.5% combined—deemed "affordable." Originally intended as a means of gauging a community's overall financial capability for purposes of negotiating regulatory compliance, this standard has been *widely misapplied to household affordability*. As a result, evaluations of household water and sewer utility affordability *are inaccurate at best and misleading at worst*.

(Teodoro, at 13) (emphasis added) (internal citations omitted). (OCA-06-031, Attachment 1). An article finding that use of Median Household Income involves "misapplying" that standard, thus yielding results that "are inaccurate at best and misleading at worst," can hardly be said to be academic research that supports Mr. Rea's use of precisely that standard.

[1] PAWC Statement 10, at footnote 1, citing Teodoro (January 2018). Measuring Household Affordability for Water and Sewer Utilities, Journal of the AWWA. 110:13-24.

Q. IS IT APPROPRIATE TO USE THE MEDIAN HOUSEHOLD INCOME OF HOMEOWNERS IN PARTICULAR TO CONSIDER THE AFFORDABILITY OF WATER OVER A PERIOD OF YEARS?

A. It is particularly inappropriate to use the Median Household Income of homeowners (MHI-HO) as a basis for assessing the affordability of water service over time. I reach that conclusion based on several lines of analysis.

First, when one considers the growth in MHI-HO over time, it would also be necessary to consider *why* MHI-HO is growing as it is and whether such growth represents a real improvement in financial circumstances. In fact, the growth in MHI-HO frequently does not represent an improvement in financial circumstances, but instead represents a growth in the underlying cost of housing. As a general rule, becoming a homeowner requires a household to have income that is sufficiently high so that the home purchase price is no more than 30% of income. To the extent that housing values in a particular jurisdiction sharply increase, therefore, it requires an ever-increasing income for a household to afford to become a homeowner. The question is not merely one of the "affordability" of housing. The question is one of gaining access to the funds necessary to purchase the home with which to begin.

I have examined the zip codes that comprise the PAWC service territory. In doing so, I looked at both the MHI-HO for each year from 2012 through 2021 and the housing value by year for the same time period. I calculated the growth in MHI-HO along with the growth in housing values. I found that, while not true in every zip code, a substantial growth in housing values from 2012 to 2021 was matched by a corresponding substantial growth in the Median Household Income for homeowners in that same time period (and

vice versa). I found further that high housing values in 2021 were matched by a corresponding growth in Median Household Income for homeowners from 2012 to 2021. The same conclusion is bolstered by an examination of the changes in Median Household Income for homeowners and for renters in the PAWC service territory as well.

In nearly 160 of the 304 PAWC zip codes for which the Census reported housing value data from 2012 through 2021, housing values increased by more than $25,000 from 2012 to 2021. In nearly 60 zip codes, housing values increased by more than $50,000 in that same time period.

In sum, an increase in the MHI-HO is not an indicator of improved financial circumstances for PAWC customers as whole. It instead simply indicates that, because of sharply increasing housing price, home ownership is becoming increasingly limited to households with higher and higher incomes. So while it may be true that PAWC customers who are homeowners have higher incomes, it is not true that PAWC customers who are homeowners represent the income trend for PAWC customers as a whole.

Q. DO YOU HAVE A SECOND CONCERN ABOUT USING MEDIAN HOUSEHOLD INCOME AS AN INDICATOR OF THE AFFORDABILITY OF WATER IN A COMMUNITY?

A. Yes. Over time, Median Household Income for homeowners becomes less and less representative of the total population of households in a community. I examined the change in Median Household Incomes for homeowners in the zip codes comprising the PAWC service territory for 2012 through 2021, along with the change in Median Household Incomes for renters in those same zip codes in that same time period. The

results are set forth in Table 1 below. The data shows, for example, that while MHI for homeowners increased by more than $20,000 in 112 PAWC zip codes, MHI for renters increased by more than $20,000 in only 45 zip codes from 2012 to 2021. In contrast, while MHI for homeowners either decreased, or increased by less than $10,000, in 69 of PAWC's zip codes, MHI decreased, or increased by less than $10,000 in 136 of PAWC's zip codes during the same time period.

Table 1. Change in Median Household Income (MHI) by Owner/Renter Status (PAWC Zip Codes) (2012 vs. 2021)

	Number of PAWC Zip Codes	
	Homeowners	Renters[2]
MHI declined	22	34
MHI increased		
Less than $10,000	47	102
$10,000 - $20,000	120	90
$20,000 - $50,000	103	39
Greater than $50,000	9	6

Overall, to base an assessment of water affordability entirely, or in large part, on the MHI-HO, as PAWC has largely done, has the impact of asserting that as owner-occupied housing in a community becomes increasingly less affordable, thereby limiting ownership to increasingly higher income households in that community, water service becomes increasingly more affordable when measured by bills as a percentage of homeowner income. That conclusion does not reasonably flow, given that what is *really*

[2] Data not reported for all zip codes. For some zip codes, data is withheld for privacy reasons due to an insufficient number of renters reporting data.

being measured is only the affordability of water to an increasingly more wealthy population.

Q. WHY DO YOU FOCUS ON THE MEDIAN INCOME OF HOMEOWNERS?

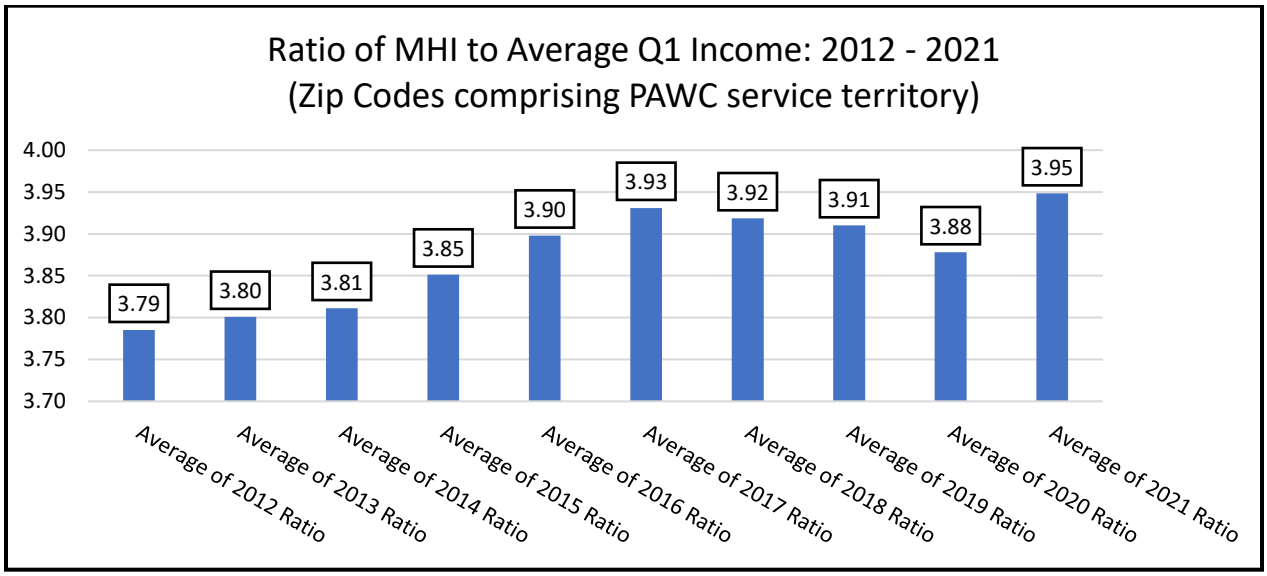
A. Mr. Rea asserts that he uses the "median household income in each of [PAWC's] communities for 1-family owner-occupied and single-unit, renter-occupied homes as reported by data in the ACS based on the most recent year's available data (2021 in this proceeding). (PAWC St. 10, at 6 – 7). That is, however, not correct. The American Community Survey (ACS) data cited by Mr. Rea (OCA-06-027)[3] does not report median incomes of occupants of single-unit, renter-occupied homes. Mr. Rea does weight the median income of renters and homeowners. However, in his weighting, homeowners represented more than 60% of the households in 354 of the 362 zip codes he used and, they represented more than 80% of the households in 292 of the 362 zip codes he used. (OCA-06-027, Attachment 1).

Q. IS THERE ANY OTHER COMMONLY USED METRIC BY WHICH TO MEASURE THE RELATIONSHIP BETWEEN TWO MEASURES OF INCOME?

A. Yes. One common way to measure the relationship between two different levels of income is to examine the ratio of higher incomes to lower incomes. If the ratio becomes bigger over time, the disparities between the two income levels are increasing. In this instance, I have examined the ratio of Median Household Income by year to the average

[3] While PAWC's response to OCA discovery references ACS Table S2053 (OCA-06-027), I assume that was a typographical error and the intent was to reference ACS Table S2503. Table S2503 was the ACS Table provided in the PAWC attachment.

First Quintile (Q1) income by year[4] for the period 2012 through 2021.[5] The results can be seen in the Chart below. There is a noticeable upward trend from 2012 through 2021. From 2012 through 2014, the ratio of the MHI to the average Q1 income stayed reasonably constant (3.79, 3.80, 3.81). The ratio increased to about 3.9 for the years 2016 through 2020, before increasing further (to 3.95) by 2021. What this data reveals is that the MHI income (for all households, not merely for homeowners) in the zip codes comprising the PAWC service territory is nearly four times higher than the average Q1 income within those zip codes. Moreover, the gap between the MHI and the average Q1 income has become increasingly larger over time.



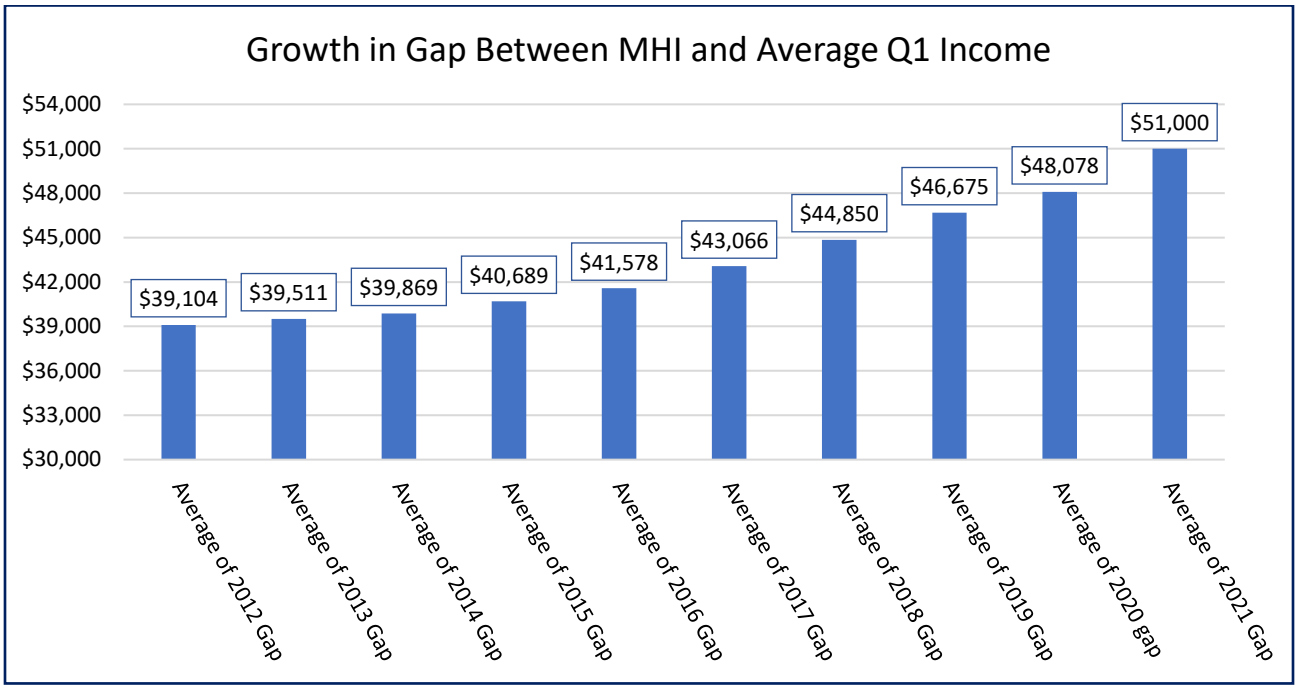
To base any "community" analysis of water "affordability" on the MHI, in other words, reveals little about the impact of water bills on the community as a whole. The

[4] Mean income for each income quintile is obtained from the American Community Survey (ACS) (5-year data), Table B19081. Median Household Income is obtained from the ACS, Table B19013. ACS data for Pennsylvania zip codes is available at https://data.census.gov/advanced?g=040XX00US42$8600000&y=2021&d=ACS%205-Year%20Estimates%20Detailed%20Tables

[5] Q1 is households with the bottom one-fifth of income (1 – 20%).

households in a community that are most likely to face unaffordable burdens are not only well behind households with median income, but they are also falling further and further behind every year.

The growing mismatch between MHIs and average Q1 incomes can be dollarized as well. The Chart below shows the dollar amount by which the average MHI of zip codes comprising the PAWC service territory exceeds the average Q1 income of PAWC zip codes. The data shows that the dollar gap between MHI and average Q1 incomes has grown by more than 30% from 2012 to 2021. This growth, remember, is *not* the growth in the underlying MHI. It is instead the growth in the dollar amount by which the MHI *exceeds* the average Q1 income. Given this disparate growth in the MHI over time, to base an analysis of community affordability on MHI yields a misleading, if not outright erroneous, conclusion.



Q. DO YOU HAVE FURTHER REASON TO BELIEVE THAT THE MEDIAN HOUSEHOLD INCOME IN A COMMUNITY DOES NOT ACCURATELY REFLECT THE AFFORDABILITY OF WATER SERVICE WITHIN THE COMMUNITY OVER TIME?

A. Yes. It is generally accepted, including by the Pennsylvania PUC, that as a household's income increases, the household not only has an increased ability to pay a higher dollar amount for their home utility bills, but they also have an increased ability to pay a higher percentage of their income for their home utility bills. Table 2 below shows the average MHI for the zip codes that comprise the PAWC service territory. The Table further shows, for each year, what that MHI represents as a percentage of Federal Poverty Level (FPL). In the time frame that was examined by PAWC, not only has the MHI increased in absolute dollar terms, it has increased as a percentage of FPL by more than 35% (from 275% FPL to 311% FPL). In contrast, not only has the average Q1 income in the PAWC service territory increased only $3,544, but the average Q1 income as a percentage of FPL (3-person household) increased only 6% (from 76% FPL to 82% FPL).

Table 2. Growth in MHI (in dollars) Q1 Incomes and MHI and Q1 Incomes as Federal Poverty Level (3-person household) (PAWC Zip Codes) (2012 – 2021)

	Median Household Income			First Quintile (Q1) Income		
	MHI	100% FPL (3-person)	MHI as % FPL	Avg Q1 Income	100% FPL (3-person)	Avg Q1 as % FPL
Avg Income (2012)	$52,494	$19,090	275%	$14,559	$19,090	76%
Avg Income (2013)	$53,057	$19,530	272%	$14,631	$19,530	75%
Avg Income (2014)	$53,931	$19,790	273%	$14,779	$19,790	75%
Avg Income (2015)	$55,263	$20,090	275%	$14,866	$20,090	74%
Avg Income (2016)	$56,570	$20,160	281%	$15,057	$20,160	75%
Avg Income (2017)	$58,071	$20,420	284%	$15,480	$20,420	76%
Avg Income (2018)	$60,851	$20,780	293%	$16,082	$20,780	77%
Avg Income (2019)	$63,081	$21,330	296%	$16,827	$21,330	79%
Avg Income (2020)	$64,547	$21,720	297%	$17,460	$21,720	80%
Avg Income (2021)	$68,346	$21,960	311%	$18,104	$21,960	82%

What I conclude is that to use the MHI as the measure of the affordability of water service in a community over time, without adjusting the definition of what represents an affordable burden, as well as without considering how representative the MHI is of the community as a whole, is unreasonable.

Q. DO YOU SEE ANY OTHER FLAW IN THE "ENTERPRISE LEVEL" AFFORDABILITY ANALYSIS PRESENTED BY MR. REA?

A. Yes. Mr. Rea's "enterprise level" analysis compares non-comparable years. Rather than examining the impact of increasing rates given a uniform consumption from year to year, Mr. Rea instead applies the annual PAWC rates to a decreasing level of consumption. The constant level of Bill-to-Income Ratio that he reports would not have occurred in the absence of this declining consumption.

Q. DID MR. REA MAKE ANY TECHNICAL MISTAKES IN HIS ANALYSIS?

A. Yes. Mr. Rea made several technical mistakes in his analysis. For example, in nearly ten percent of the calculations where he weighted the homeowner and renter median incomes, he multiplied the percentage of renters times a renter median income even though the renter median income was not reported. As a result, the renter income in those instances was calculated as being $0.

Moreover, although Mr. Rea stated that he excluded rental multi-family housing since residents of multi-family homes were not likely to have individual meters (and thus be direct customers of PAWC), he did not exclude the corresponding owner-occupied multi-family housing units.

Finally, the reason Mr. Rea excluded multi-family housing does not withstand closer scrutiny. He excluded all multi-family housing because he reasoned that these units would be master-metered by landlords, with PAWC bills included in rent rather than being directly paid by the occupants of the residence. This reasoning may be reasonable for large apartment complexes, but breaks down when applied to other multi-family housing. "Multi-family housing," in other words, includes not only apartment complexes, but includes housing structures with 2 units and 3 to 4 units as well. These structures with from two to four housing units are more likely to be individually metered. By excluding them, Mr. Rea reduces the penetration of rental housing that should have been included in his weighting of renter and homeowner median incomes. As a result, Mr. Rea's calculated median household income is systematically artificially high given that it includes a disproportionate (and erroneous) percentage of the higher homeowner median household incomes. Indeed, in 65 of PAWC's zip codes served with water

service, the percentage of renters living in housing structures with two to four units is greater than the percentage of renters living in single-family homes. In eleven of PAWC's zip codes, the occupants of housing structures with two to four units is more than 65% of all rental units. I conclude that Mr. Rea's decision to exclude renters who live in any type of housing unit other than a single-family home, particularly while not applying the same restriction to owner-occupied homes, artificially and substantially inflates the Median Household Income which he calculates for purposes of his "Enterprise Level" affordability analysis.

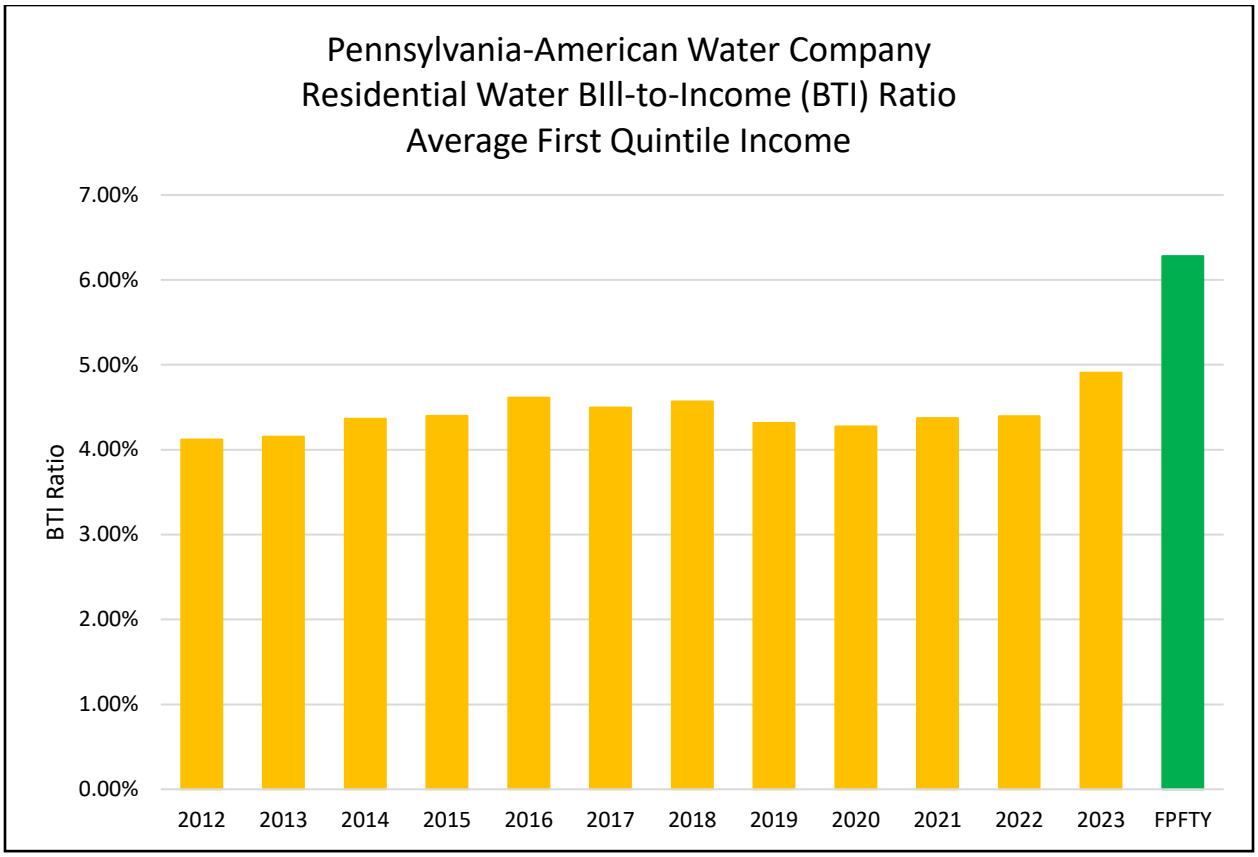
Q. WHAT DO YOU CONCLUDE?

A. I conclude that Mr. Rea's "enterprise level" affordability analysis is fatally flawed. It should not be relied upon to assess the impact of PAWC rates on the affordability of rates to the Company's residential customers.

B. An Appropriate Enterprise Level Affordability Analysis.

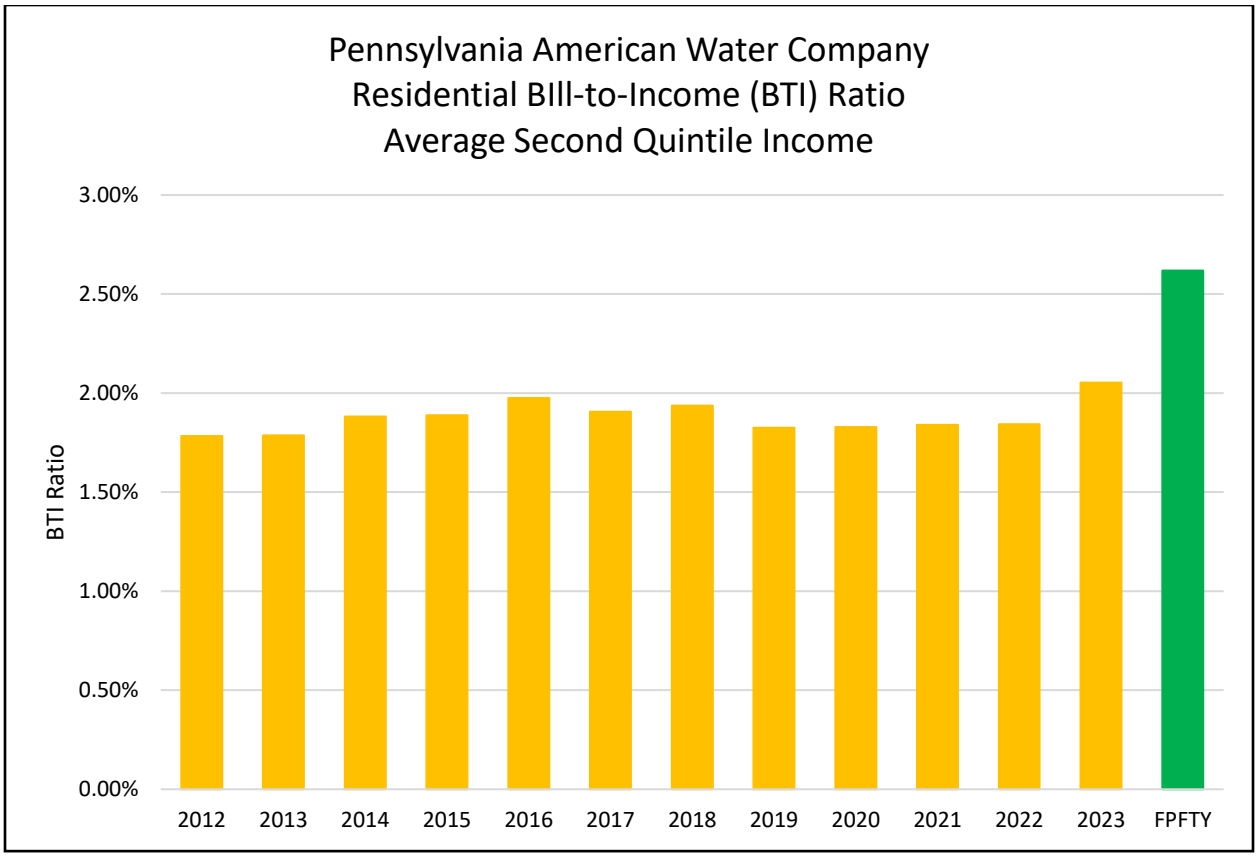
Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I examine the affordability of PAWC bills while avoiding the analytic errors that I identified above with respect to Mr. Rea's "enterprise level" affordability analysis. The question of affordability is not presented by reference to the "median" household. The question of affordability is instead presented by reference to customers who would likely face difficulties in paying their bills. I have examined this question from two different perspectives. First, I examine the BTI Ratios at the average income in the First Quintile and Second Quintile given a constant usage over the years. Second, I determine what income would be needed in order to achieve a BTI Ratio of 2.0% each year and examine the number of zip codes within the PAWC service territory that have those incomes at the average Q1 and average Q2 income levels. The Chart below shows, for water bills, the BTI Ratio for average Q1 incomes by year for the years 2012 through 2023. The Chart shows that the households in the PAWC service territory with incomes in the First Quintile, on average, have BTI Ratios of more than two times higher than the affordable BTI Ratio of 2.0%. Given the proposed rates in 2024, the BTI Ratio will increase to more than three times the affordable level. The Chart uses the same water bills used by Mr. Rea in his "enterprise level" affordability analysis. (OCA-06-029).



This lack of affordability is not, however, simply a question of unaffordability at the *lowest* income level. The Chart below instead looks at the BTI Ratios for households with average income in the *second* quintile (the 21st to 40th percentiles).[6] The data shows that while households falling in the Second Quintile had BTI Ratios of between 1.5% and 2.0% through 2022, beginning in 2023, even PAWC households in the Second Quintile were experiencing BTI Ratios exceeding the 2.0% demarcation of affordability.

[6] Just as the First Quintile examines households with the bottom one-fifth of income (1% - 20%), the Second Quintile examines households examines households with the second one-fifth of income (21% – 40%).



The implication of this data is that at least 40% of PAWC's residential customers face a BTI Ratio exceeding the affordable 2.0% mark. Moreover, both Charts identify the dramatic jump in BTI Ratios subsequent to 2022 for both Q1 PAWC households and Q2 PAWC households. This corresponds to the recent rate increases granted to PAWC and would continue a significant upward trajectory if the current request is granted.

Q. DOES YOUR INCOME ANALYSIS TAKE INTO ACCOUNT THE DIFFERENCE BETWEEN HOMEOWNERS AND RENTERS?

A. No. But contrary to the assertion by Mr. Rea, neither does his analysis take into account those differences. While Mr. Rea asserts that his analysis includes only the income of renters of single-family homes, the Census data he uses reports the income of renters as a whole. In reporting median incomes, the Census does not distinguish between the types

of unit that a household rents. There is no separate median income data, in other words, for a household who rents a single-family housing unit and a household who rents an apartment in a multi-family building.

Q. PLEASE EXPLAIN YOUR SECOND AFFORDABILITY ANALYSIS AT THE "ENTERPRISE LEVEL."

A. In my second tier of community affordability analysis, I begin with the monthly water bills identified by Mr. Rea for 2023 and for the Fully Projected Future Test Year (FPFTY) at Mr. Rea's reported rates and Mr. Rea's reported usage levels. I convert those monthly bills into an annual bill (monthly bill x 12 months = annual bill). Accordingly, using Mr. Rea's data, the annual 2023 bill is $811.12 ($67.59/month x 12 months), while the annual FPFTY bill is $1,038.35 ($86.53/month x 12 months). I then determine what income is required in order for a customer to be able to afford that bill. In 2023, a residential customer would need an annual income of $40,556 to achieve an affordable burden of 2% of income for water ($40,556 x 0.02 = $811.12), while that residential customer would need an income of $51, 187 in the FPFTY to achieve a 2% burden. I next compare those two income levels to the average Q1 and average Q2 incomes for each of PAWC's zip codes to assess how many zip codes have average Q1 and/or Q2 incomes at those levels. I finally compared these two incomes to the average Third Quintile (Q3) income within each zip code.

Q. WHAT DID YOU FIND?

A. The Census reported average Q1 income for 265 zip codes in PAWC's water service territory. Of those 265 zip codes, only one (1) had an average Q1 income sufficiently high for Q1 households to afford the PAWC water bill reported by Mr. Rea either in 2023

or in the FPFTY. Similarly, the Census reported average Q2 incomes for 265 zip codes. Of those zip codes, only half (n=133) had average Q2 incomes sufficient to afford the PAWC water bill in 2023, and only one-fifth (n=57) (21%) had average Q2 incomes sufficient to afford the PAWC water bill in the FPFTY. Indeed, in one of every five (n=51) (20%) PAWC zip codes, PAWC FPFTY water bills would be unaffordable at the average *third* quintile (Q3) income (i.e., households at the 41st to 60th percentiles of income).

Table 3. Number and Percent of Zip Codes where Average Income at First, Second and Third Quintiles of Income are Insufficient to Result in PAWC Water Bills Affordable at 2% of Income

	Q1 (1 - 20 percentiles)	Q2 (21 - 40 percentiles)	Q3 (41 - 60 percentiles)
Number of zip codes	265	265	265
# of zip codes with unaffordable PAWC water bills in 2023	264	132	8
# of zip codes with unaffordable PAWC water bills in FPFTY	264	208	51
Pct zip codes with unaffordable PAWC water bills in 2023	99.6%	49.8%	3.0%
Pct zip codes with unaffordable PAWC water bills in FPFTY	99.6%	78.5%	19.2%

Contrary to Mr. Rea's conclusion that PAWC has affordable bills at a community level (PAWC St. 10, at 22) ("The Company's water and wastewater service. . .is, and is expected to continue to be, affordable for the majority of its residential customers, including under the rates proposed in this case"), I conclude that a water utility charging bills that would be unaffordable to people with income between the 21st and 40th percentiles of income in four out of every five (208 of 265) of the zip codes comprising

its service territory, or at one out of every five (51 of 265) of its zip codes at the 41st to 60th percentiles of income, has a serious community affordability problem.

Q. PLEASE EXPLAIN WHY IT IS IMPORTANT TO APPROPRIATELY CONSIDER THE AFFORDABILITY OF PAWC BILLS IN THIS RATE PROCEEDING.

A. A consideration of affordability is a critical task to undertake within the structure of a utility rate case. As bills become increasingly unaffordable, the payment difficulties of those customers who face unaffordability become increasingly substantial as well. As I demonstrate later in this testimony, this conclusion can be well-documented for PAWC as I discuss throughout my testimony below. One impact of the unaffordability I discuss, in other words, is its impact on the operating costs (e.g., collection costs, working capital, uncollectible expenses) that are then normalized and passed on to other ratepayers. Also, PAWC proposals such as increasing the residential customer charge, and adoption of the Revenue Decoupling Mechanism (RDM), Environmental Compliance Investment Charge (ECIC), and Winter Averaging proposal, all have disproportionate adverse effects on low-income customers who already are facing substantial unaffordability.

Moreover, establishing a return on equity is fundamentally predicated on balancing customer and investor interests. It is necessary for the Pennsylvania PUC to understand the customer interests in order to appropriately balance them against the competing investor interests. The obligation of the Commission in deciding on the appropriate return on equity (ROE) and the reasonable mix of debt and equity securities should balance consumer and investor interests. (*FPC v. Natural Gas Pipeline Co.*, 315 U.S. 575, 606-607 - 608). Indeed, of the consumer issues that are important drivers of the just and reasonable ROE determination, one of the most significant is the concern about

affordability. If a significant portion of customers cannot afford to pay the rates imposed by the PUC, the PUC can hardly be said to have approved just and reasonable rates. Such concerns should bear directly on the determination of the fair ROE. In addition, as a utility such as PAWC adds more and more expensive plant, this increases rates, which may in turn put downward pressure on the just and reasonable ROE not for financial reasons, but because of affordability concerns.

In sum, the concerns I identify with respect to the unaffordability of PAWC rates can (and should) be considered even outside the consideration of the specific proposals I advance with respect to PAWC's Bill Discount Program, Arrearage Management Program, and other specific low-income initiatives.

C. PAWC's "Community Affordability" Analysis.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I review the "Affordability Index" analysis presented by PAWC witness Rea. I find that Mr. Rea's analysis substantially *under*states the unaffordability of PAWC bills at the household level.

Q. PLEASE EXPLAIN MR. REA'S "AFFORDABILITY INDEX" ANALYSIS AND CONCLUSIONS.

A. PAWC witness Rea asserts that his Affordability Index is designed to determine the extent to which customers in PAWC's service territory receive an affordable water (or wastewater) bill. He states that "The Affordability Index ("AI") is a metric that reflects the percentage of a group of customers for whom Basic Water Service is expected to be

less than a given percentage of annual household income." (PAWC St. 10, at 17). Mr. Rea uses a Bill-to-Income (BTI) Ratio of 2% of household income, limited to his definition of "Basic Water Service," as the benchmark for affordability. Using that limited Affordability Index, Mr. Rea explains that "As an example, if, for a certain group of customers, it is estimated that 80% of those customers will have bills for Basic Water Service less than 2% of annual household income, the AI value for that group of customers is 80%." (Id.)

Q. DOES MR. REA MIS-STATE THE EXTENT OF HIS AFFORDABILITY ANALYSIS?

A. Yes. Mr. Rea describes his "community level" analysis as one which "takes a deeper dive into the affordability of water and wastewater service at a local level *across different customer demographics and proposed rates* for each community that the Company serves." (PAWC St. 10, at 12) (emphasis added). He asserts that his "goal" is to "identify customer groups where affordability of service may be an issue." (Id.) Mr. Rea subsequently concedes in discovery, however, that the "different customer demographics" he uses are quite limited. "The customer demographics considered specifically in the Company's Community-Level analysis other than the communities themselves is (sic) household income and household size." (OCA-06-035). Thus, in other words, while Mr. Rea is quick to use a plural ("demographics," "customer groups"), in fact, his analysis does not extend that far.

Q. DOES MR. REA MIS-STATE THE EXTENT OR NATURE OF HIS ANALYSIS IN ANY ADDITIONAL IMPORTANT WAY?

A. Yes. Mr. Rea unequivocally states in his Direct Testimony that his "goal" is "to analyze affordability at the individual customer level and identify customer groups where affordability of service may be an issue." (PAWC St. 10, at 12). Mr. Rea's analysis, however, does not consider "affordability at the individual level" in any fashion, let alone doing so by considering "different customer demographics." Instead, Mr. Rea considers affordability, both at the community level and at the "individual customer level," using only *one* customer attribute. And that attribute is provided by assumption, not by empirical inquiry related to PAWC customers. Mr. Rea's analysis looks only at what he refers to as "basic water service" in relation to income.

Q. PLEASE COMMENT ON PAWC'S USE OF "BASIC WATER SERVICE" AS THE FOUNDATION FOR THE COMPANY'S AFFORDABILITY ANALYSIS.

A. PAWC witness Everette asserts that the Company defines "basic water service" to be the "service that is necessary and reasonable to meet basic household needs for drinking, cooking, sanitation, and general health service that does not include seasonal discretionary water use." (PAWC St. 1, at 11). Mr. Rea, however, admits that PAWC makes *no* effort to identify what water is needed for drinking, cooking, sanitation, and general health service, let alone to assess which of those uses are "necessary and reasonable to meet basic household needs." He concedes that, contrary to Ms. Everette's testimony, "the definition of basic service is *not* built from the ground up by identifying end uses and the water consumption associated with those end uses. . ." (OCA-011-005) (emphasis added). Not identifying any particular end uses, also contrary to Ms. Everette's testimony, PAWC thus does not attempt to base its determination of what represents the level of service "necessary and reasonable to meet" particular end

household needs. When asked to describe all "standards and/or metrics applied to determine what service is 'necessary and reasonable,'" PAWC witness Rea conceded that the Company does not use a process "identifying end uses and the water consumption associated with those end uses and thus *does not rely on standards or metrics as described*. . ." (OCA-011-005) (emphasis added).

The fact that Mr. Rea did not consider "affordability at the individual level," let alone consider "different customer demographics" is evident from the fact that, according to Mr. Rea's analysis, each of the following families would have an identical "basic water and/or wastewater service" of 3,600 gallons per month: (1) a three-person household with one adult, one school-age child, and one teen-age child; (2) a three-person household with two adults, and one school-age child; (3) a three-person household with one adult, and two teen-age children; (4) a three-person household with one adult, one infant, and one school-age child; (5) a three-person household with one adult, and two infants; and (6) a three-person household with one adult, and two school-age children. (OCA-011-03).

Mr. Rea did not consider "affordability at the individual level," let alone consider "different customer demographics." He instead asserts that "basic water and/or wastewater use" is comprised of 40 gallons of water consumption per day, irrespective of any individual or demographic characteristic of the household. Mr. Rea was asked to explain the relationship between his "basic water and/or wastewater service" and: (1) the age of children in a household; (2) the age of adults in a household; (3) the number of children in a household; (4) the number of adults in a household; (5) the income of a household; (6) the size of a housing unit; (7) the owner/renter status of a household; and

(8) the housing unit type occupied by a household. (OCA-011-002). He responded that ". . . Basic Water Service is defined as 40 gallons of water per household member per day. . . Mr. Rea did not make adjustments to this definition based on the factors listed in this request." (Id.).

Even though Ms. Everette asserted that "basic water and/or wastewater service" was the service "that is necessary and reasonable to meet basic household needs" (PAWC St. 1, at 11), Mr. Rea's analysis did not consider that definition. Mr. Rea was asked how the "service that is necessary and reasonable varies" based on: (1) the age of children in a household; (2) the number of children in a household; (3) the age of adults in a household; and (4) the number of adults in a household. (OCA-011-006). Mr. Rea said that such factors were not considered. He defined "basic water service" to be 40 gallons per household member per day. Period. "The definition of basic water service, as described in Mr. Rea's Direct Testimony, is *assumed* to be 40 gallons per household member per day. That definition does not depend on the age or number of children in the household, or the age or number of adults in the household." (Id.) (emphasis added). Note not merely that Mr. Rea concedes that he does not consider individual circumstances, let alone "different customer demographics," he also concedes that his number is *not* a measurement of PAWC consumption, but rather merely an assumption ("basic water service. . .is *assumed to be* 40 gallons per household member per day") (emphasis added).

Mr. Rea's "assumption" of a basic water use of 40 gallons per household member per day does not even consider how many household members are at home at any given time, or for how long. When asked, for example, what increase would occur in "basic water

service" during the summer months when school age children are not in school, but are instead at home all day, Mr. Rea again asserted that "basic water usage. . .instead is based on 40 gallons of water per household member per day. . ." (OCA-011-007). He conceded that "the Company is not able to identify usage amounts in summer months that occur over and above winter usage levels that is specifically caused by school-age children being home in the summer." (Id.).

Q. HOW DOES MR. REA'S ASSUMED USAGE OF 40 GALLONS PER HOUSEHOLD MEMBER PER DAY COMPARE TO GENERALLY-ACCEPTED USAGE ESTIMATES?

A. Mr. Rea's assumed consumption of 40 gallons per household member per day is significantly lower than the daily water consumption generally reported on a per-person basis. What is perhaps considered to be the seminal study on residential water consumption is the 2016 Water Research Foundation's report "Residential End Uses of Water, Version 2." That WRF report found that "per capita water use has decreased 15 percent, from 69.3 gpcd[7] to 58.6 gpcd. This does *not* include the outdoor water usage which Mr. Rea references as "seasonal usage" that would exceed his "basic water service." The WRF research found water consumption by end use as follows:

Table 4. Average Daily Indoor Per Capita Water Use by End Use[8]	
Toilet	14.2
Clothes washer	9.6
Shower	11.1

[7] "GPCD" is "gallons per capita per day."

[8] Water Research Foundation (2016). Residential End Uses of Water, Version 2, Executive Report, at 8, available at https://www.waterrf.org/research/projects/residential-end-uses-water-version-2

Faucet	11.1
Leak	7.9
Other	2.5
Bath	1.5
Dishwasher	0.7
Total	58.6

Remember that Mr. Rea stated that he made no effort to build his "basic water service" up by identifying individual end uses. (OCA-11-005) ("the definition of basic service is not built from the ground up by identifying end uses and the water consumption associated with those end uses. . ."). If he had, he would have discovered that his assumption of 40 gallons of water use per person per day would have allowed a person to use the toilet (14.2 gppd), take a shower (11.1 gppd), and use a home's faucets (11.1 gppd), but would not allow that person to wash their clothes (9.6 gppd). Even if one were to exclude "leaks" from the discussion (7.9 gppd), the WRF research found a usage of 50.7 gppd.[9]

The WRF estimated consumption of 50 gppd is aligned with other authoritative estimates of average consumption per person per day. The U.S. Environmental Protection Agency (EPA), for example, reports that "each American uses an average of 82 gallons of water a day at home," but reports, further, that "more than 30%" of that usage is for "outdoor" consumption.[10] If we set EPA's "more than 30%" ***equal*** to 30%, the indoor water use would be 57.4 gppd consumption. If we set EPA's "more than 30%" equal to 35%, the indoor water use would be 53.3 gppd.

[9] "Gppd" is "gallons per person per day."

[10] U.S. EPA, Water Sense, Statistics and Facts, at 1, 3, available at https://www.epa.gov/watersense/statistics-and-facts

Q. DOES PAWC'S USAGE DATA OTHERWISE SUPPORT THE CONCLUSION THAT BASIC WATER SERVICE IS EQUAL TO 40 GALLONS PER PERSON PER DAY (GPPD)?

A. No. Basic Water Service of 40 gppd yields a monthly consumption of 1,200 gallons per person per month.[11] That would mean that a 1-person household has a usage of 1,200 gallons per month; a 2-person household has a usage of 2,400 gallons per month; and a 3-person household has a usage of 3,600 gallons per month. Mr. Rea reports that 28.2% of PAWC's customers are 1-person households, while an additional 34.8% of PAWC's customers are 2-person households (63.0% of PAWC customers are either 1-person or 2-person households). PAWC's residential winter usage (for customers having 12 complete months of usage), however, shows that the distribution of consumption using Mr. Rea's assumption of 40 gppd breaks down when applied to PAWC's real world data. The data is set forth in the Table below. The percentage of customers comprised of 1-person households far exceeds the percentage of customers with monthly consumption of only 1,200 gallons. Similarly, the percentage of customers comprised of 2-person households consistently exceeds the percentage of customers with 2,400 gallons of consumption.[12] The percentage of bills with usage at 2,400 gallons or less is substantially less than would be expected given the percentage of customers with either one or two household members.

[11] 40 gppd x 30 days/month = 1,200 gallons per person per month; 40 gppd x 365 days per year = 14,600 gallons per year / 12 months per year = 1,217 gallons per person per month.

[12] The amount by which the percentage of 2-person households exceeds the percentage of customers with usage of 2,400 gallons would be even greater when one recognizes that part of the percentage of bills with monthly usage of 2,00 gallons would, in fact, be 1-person households with usage of more than 40 gppd.

Table 5. Percent of PAWC Customers by 1-person and 2-person HH size vs. Percent of Bills with Usage at Gallons Per Person Per Day (OCA_05-003, Attachment 1) (confidential)[13]

	Pct Customers by HH Size	Percent of Bills by Gallons of Usage Per Month			
		December	January	February	March
1-person (0 - 1200 gals)	28.2%	10.9%	8.9%	12.1%	13.4%
2-person (>1200 - 2400 gals)	34.8%	25.7%	22.1%	26.8%	28.7%
Total 1+2-person (0 - 2400 gals)	63.0%	36.6%	31.0%	38.9%	42.1%

The same conclusion can be drawn at the high end of the spectrum as well. The data is set forth in the Table below. At each household size, the percentage of accounts with usage that would correspond to Mr. Rea's 40 gppd far exceeds the percentage of customers at that household size. Overall, while Mr. Rea's own estimate is that 9.1% of PAWC's customers are comprised of households with 5 or more household members, the smallest percentage of bills with usage corresponding to his 40 gppd of "basic water service" is 18.8% (February), while the highest percentage of bills with usage corresponding to his 40 gppd is March (24.4%).

[13] The response to this OCA request was marked "confidential." By agreement with the Company, however, only the underlying personal account identifiers were deemed to be confidential. Data that was aggregated or used in calculations was agreed to be public.

Table 6. Percent of PAWC Customers by 5-person, 6-person and 7+-person HH size vs. Percent of Bills with Usage at 40 Gallons Per Person Per Day (OCA_05-003, Attachment 1)

	Pct Customers by HH Size	Percent of Bills by Gallons of Usage Per Month			
		December	January	February	March
5-person (>4800 – 6000 gals)	5.7%	9.7%	11.6%	9.0%	10.9%
6-person (>6000 – 7200 gals)	2.2%	5.0%	6.6%	4.6%	6.0%
7+ persons (>7,200 gals)	1.2%	5.8%	8.7%	5.2%	7.5%
5 + 6 + 7+ persons (>4800 gals)	9.1%	20.5%	26.9%	18.8%	24.4%

Whether viewed from the bottom of the continuum of usage (1-person/2-person households with usage from 0 to 2,400 gallons per month), or from the top of the continuum (5-person/6-person/7+-person households with usage of >4,800 gallons per month), Mr. Rea's estimate of "basic water consumption" does not hold water.

Q. DOES MR. REA CITE LITERATURE IN HIS OWN DIRECT TESTIMONY THAT REACHES ANY CONCLUSION ABOUT HIS APPROACH TO MEASURING COMMUNITY AFFORDABILITY?

A. Yes. Mr. Rea cites one article that he asserts is "academic research that supports the Company's approach to assessing affordability of service."[14] Rather than supporting "the Company's approach," Cardoso and Wichman disagree with Mr. Rea's definition of the consumption level which represents basic water service. Mr. Rea asserted that his use of

[14] PAWC Statement 10, at footnote 2, page 12, citing Cardoso, Diego S. and Wichman, Casey J., "*Water Affordability in the United States*," Water Resources Research, vol. 58, issue 12 (2020).

40 gallons per person per day is supported by his review of "the relevant literature on the subject," (PAWC St. 10, at 14), "all of which supports the definition of 40 gallons of water per household member per day." (Id.) When Mr. Rea was asked to provide copies of "all the relevant literature" he had reviewed, his response was "Literature reviewed at Rea 14:1-3 is referenced in Footnotes 1 and 2 in Mr. Rea's Direct Testimony." (OCA-06-040). It was the Cardoso and Wichman report that Mr. Rea cited in footnote 1 of his Direct Testimony.

Cardoso and Wichman, however, *disagree* with the "basic water service level" of 40 gallons per household member per day. They also establish what they reference as "a fixed level of water consumption deemed essential." (Id., at 6). They define that level, however, as *fifty* gallons per person per day (50 GPPD). They go on to "consider alternative scenarios for levels at 25, 75, and 100 gppd." (Id.) (emphasis added). The usage of 50 gppd is important in that it is virtually identical to the usage (in gppd) reported by the WRF report discussed above and close to the EPA estimate.

In short, Mr. Rea provides no "support" for his suppositions and methodology in the articles which he, himself, cites in his Direct Testimony.

Q. IS THERE ANY ADDITIONAL SHORTCOMING YOU FIND IN MR. REA'S COMMUNITY AFFORDABILITY TESTIMONY?

A. Yes. Mr. Rea's community affordability testimony considers the unaffordability of PAWC bills from only one dimension, the breadth of unaffordability. Through his community affordability testimony, he identifies the percentage of residential customers with water bills greater than 2% of household income by Federal Poverty Level (PAWC

St. 10, at 25, Chart 7), as well as the percentage of residential customers with wastewater bills greater than 2% of income by FPL (PAWC St. 10, at 26, Chart 8). What he does *not* do, however, is to identify by how much – the depth of unaffordability – water and wastewater burdens exceed the affordable 2% burden at each Poverty Level.[15]

D. An Appropriate Community Affordability Analysis.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I examine the affordability of PAWC water and wastewater bills while avoiding the errors that I identified above with respect to Mr. Rea's community affordability analysis. More specifically, I examine not merely the breadth of unaffordability within the Company's low-income population, I examine the depth of unaffordability as well. Both attributes of unaffordability must be considered for there to be an appropriate analysis. The "breadth" of unaffordability considers how many customers face unaffordable bills. The "depth" of unaffordability considers how unaffordable a bill is. Under this second measure, a BTI Ratio of 15% is a "deeper" unaffordability than a BTI Ratio of 5%.

The data for a more appropriate analysis is presented in Table 7 below. Using data provided by PAWC witness Rea (OCA-06-050), the table disaggregates BTI Ratios by Federal Poverty Level within the population of water and wastewater customers that are

[15] Conversely, when on an "enterprise level" (looking at the service territory as a whole, Mr. Rea identifies the percentage of customers with varying Bill-to-Income (BTI) Rates, he does so only for the population of water (PAWC St. 10, at 16, Chart 5) and wastewater (PAWC St. 10, at 16, Chart 6) customers as a whole. Again, he fails to identify the BTI ratios by FPL.

likely to have difficulty paying their bills. Limited to an examination of bills without PAWC's low-income discounts being applied - the Bill Discount Program reaches a small fraction of income-eligible customers - the data shows that zero customers with income at or below 100% FPL have affordable PAWC bills. Indeed, only 72 of the 51,175 customers with income between 100% and 150% FPL have an affordable bill without the PAWC discount, while only 4,785 of the 51,252 (9.3%) with income between 150% and 200% FPL do.

While the PAWC data demonstrates that 446,206 of PAWC's total number of 623,083 customers (72%) have BTI Ratios at or below 2% of income without any discount, in making that observation, Mr. Rea fails to go on to explain that 441,348 of those 446,206 customers with affordable bills have income greater than 200% FPL.

Table 7. Water Bill-to-Income (BTI) Ratio by Federal Poverty Level (without discount) (OCA-06-050)

BTI Ratio	0 – 50% FPL	51- 100% FPL	101 -1 50% FPL	151 -200% FPL	Grand Total
<2%					
Sum Customers			72	4,785	446,206
Average of FPL Ratio			142%	189%	512%
Average of BTI			1.9%	1.9%	1.1%
2% - <5%					
Sum Customers		12,860	50,927	46,467	132,573
Average of FPL Ratio		90%	124%	173%	153%
Average of BTI		4.5%	3.7%	2.7%	3.2%
5% – <8%					
Sum Customers	620	19,782	176		20,578
Average of FPL Ratio	49%	76%	102%		76%
Average of BTI	7.4%	6.3%	5.1%		6.3%
8% - <11%					
Sum Customers	4,232	2,440			6,672
Average of FPL Ratio	45%	56%			50%
Average of BTI	9.8%	8.8%			9.3%
11% - <14%					
Sum Customers	3,510				3,510
Average of FPL Ratio	37%				37%
Average of BTI	12.3%				12.3%
14% - <17%					
Sum Customers	2,497				2,497
Average of FPL Ratio	29%				29%
Average of BTI	15.4%				15.4%
17% - <23%					
Sum Customers	1,455				1,455
Average of FPL Ratio	24%				24%
Average of BTI	18.8%				18.8%
23% or more					
Sum Customers	9,593				9,593
Average of FPL Ratio	11%				11%
Average of BTI	79.1%				79.1%
Sum Customers	**21,906**	**35,081**	**51,175**	**51,252**	**623,083**
Average of FPL Ratio	**25%**	**76%**	**124%**	**174%**	**299%**
Average of BTI	**43%**	**6%**	**4%**	**3%**	**7%**

Table 7 shows that by disaggregating PAWC's population by FPL ranges, I have examined the varying depth of PAWC water bill unaffordability as well. For example, it

becomes clear that 13,544 of the 21,906 customers with income less than 50% FPL (62%) not only have BTI Ratio greater than 2% of income, but have BTI Ratios greater than 14% of income, seven times higher than Mr. Rea's demarcation of affordability. More than 22,000 of the 35,081 customers with income between 50% and 100% FPL do not merely have BTI Ratios higher than 2%, but have BTI Ratios of between 5% and 11%, three to six times higher than the 2% affordability marker. The data shows that 19,782 PAWC customers with incomes between 50% and 100% FPL have an average BTI Ratio of 6.3%, with an additional 2,440 having an average BTI Ratio of 8.8%. Of the 21,906 PAWC customers with income less than 50% FPL, 9,593 have BTI Ratios averaging 79.1% of income, 40 times higher than the affordable 2% level.

To report, as Mr. Rea does, that 100% of PAWC customers with income less than 50% FPL have BTI Ratios (water) greater than 2% provides a very limited insight into unaffordability. In contrast, it is a very different insight to recognize that of those 21,906 customers (with income less than 50% FPL and BTI Ratios greater than 2%):

- 4,232 have an average BTI Ratio of 9.8%;
- An additional 3,510 have an average BTI Ratio of 12.3%;
- An additional 2,497 have an average BTI Ratio of 15.4%;
- An additional 1,455 have an average BTI Ratio of 18.8%; and
- An additional 9,593 have an average BTI Ratio of 79.1%;

As can be seen from Table 7 above, an appropriate affordability analysis documents that PAWC is facing a much more serious problem with the lack of affordability than the problem articulated by PAWC witness Rea.

Part 2. Modifications to Specific PAWC Low-Income Initiatives.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. Given the problems I identified above with respect to PAWC's affordability analysis, in this section of my testimony, I recommend a series of necessary modifications to PAWC's low-income initiatives.

A. The Levels of PAWC Bill Discounts.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I examine the level of the bill discount proposed by PAWC for the differing levels of PAWC's Bill Discount Program (BDP). PAWC does not propose any changes to its bill discounts; it proposes only to expand eligibility to customers at the 151% to 200% FPL level. (PAWC St. 10, at 24). I find that the bill discounts should be modestly increased.

Q. DOES PAWC'S DISCOUNT PROVIDE ADEQUATE RATE RELIEF TO LOW-INCOME CUSTOMERS?

A. No. Table 8 shows the affordability impacts of PAWC's bill discounts at the rates the Company proposes in this proceeding. Several observations stand out.

First, while the vast majority of PAWC customers may have bills that represent a BTI Ratio of less than 2% of income given the discounts proposed by PAWC in this proceeding (487,980 of 623,083), a relatively small number of those have incomes less than 200% of Federal Poverty Level. Fewer than 10% of the 487,980 customers with a

BTI Ratio of less than 2% (46,632 of 487,980) have income at or below 200% FPL. In contrast, more than 25% of *all* PAWC customers have income at or below 200% FPL (159,414 of 623,083). Of the 46,632 customers with income under 200% FPL and an affordable 2% BTI Ratio, 27,249 (58%) have incomes in the highest FPL tier (151% to 200% FPL).[16]

Second, the PAWC discounts help very few of the lowest income customers achieve an affordable BTI Ratio. Only 3,319 of the 21,906 (16%) customers with income at or below 50% FPL achieve an affordable BTI Ratio, even after receiving the PAWC discount. Indeed, there are more customers in this FPL tier with BTI Ratios of 11% or more than there are with an affordable BTI Ratio of 2% or less. Moreover, there are: (1) only 6,935 of the 35,081 (20%) customers with income at 51 – 100% FPL who achieve an affordable BTI Ratio; and (2) only 9,129 of 51,175 (18%) customers with income of 101 to 150% FPL who achieve an affordable 2% BTI Ratio. Even for customers with income at 151 to 200% FPL, only somewhat more than half (27,249 of 51,252) (53%) achieve the 2% affordable BTI Ratio with the discounts proposed by PAWC in this proceeding.

[16] Note the difference between this discussion of the data in Table 8 (BTI Ratios after applying the discounts proposed by PAWC in this proceeding) and the discussion of the data in Table 7 (BTI Ratios with no discount applied).

Table 8. Water Bill-to-Income (BTI) Ratio by Federal Poverty Level (with PAWC proposed discount) (OCA-06-050)

Row Labels	1	2	3	4	Grand Total
<2%					
Sum of Customers	3,319	6,935	9,129	27,249	487,980
Average of FPL Ratio	45%	90%	138%	178%	465%
Average of BTI	2%	2%	2%	2%	1%
2% - <5%					
Sum of Customers	10,848	28,143	42,047	24,003	127,360
Average of FPL Ratio	32%	75%	122%	172%	116%
Average of BTI	3%	3%	3%	2%	3%
5% - <8%					
Sum of Customers	2,585	4			2,589
Average of FPL Ratio	15%	51%			15%
Average of BTI	6%	5%			6%
8% - <11%					
Sum of Customers	1,485				1,485
Average of FPL Ratio	10%				10%
Average of BTI	9%				9%
11% - <14%					
Sum of Customers	642				642
Average of FPL Ratio	7%				7%
Average of BTI	13%				13%
14% - <17%					
Sum of Customers	894				894
Average of FPL Ratio	6%				6%
Average of BTI	15%				15%
17% - <23%					
Sum of Customers	198				198
Average of FPL Ratio	5%				5%
Average of BTI	19%				19%
23% or more					
Sum of Customers	1,936				1,936
Average of FPL Ratio	2%				2%
Average of BTI	46%				46%
Total Sum of Customers	**21,906**	**35,081**	**51,175**	**51,252**	**623,083**
Total Average FPL Ratio	**25%**	**76%**	**124%**	**174%**	**299%**
Total Average of BTI	**8.6%**	**2.9%**	**2.7%**	**2.2%**	**2.5%**

Third, the PAWC discounts fail to achieve, *even on average*, an affordable 2% BTI Ratio in all four of the discount tiers, including the new fourth tier (151 – 200% FPL). At

PAWC's discounts, the average BTI Ratio would be: (1) 8.6% at 0 – 50% FPL; (2) 2.9% at 51 – 100% FPL; (3) 2.7% at 101 – 150% FPL; and (4) 2.2% at 151 – 200% FPL. Even if the discounts would have been effective at PAWC's *current* rates, given the 25.60% increase in water bills (at 2025-FPFTY rates) as proposed in this case, the efficacy of the bill discounts would be severely degraded.[17]

Q. DOES THIS SAME ANALYSIS APPLY TO PAWC'S WASTEWATER BILLS?

A. Yes. The wastewater data corresponding to the water data I discussed above is presented in the Table below. As can be seen, each of the conclusions I reached with respect to the unaffordability of water bills applies with equal force to PAWC wastewater bills. Again, as I concluded with respect to PAWC's water discounts, I conclude with respect to PAWC's wastewater discounts that even if PAWC's discounts would have been effective at the time PAWC's existing wastewater rates were adopted, the rate increases proposed in this proceeding result in the efficacy of the wastewater bill discounts being severely degraded.

[17] Even if PAWC's water rates were kept at the current customer charge, with the volumetric charge increased by only half of what PAWC has requested, the existing discounts would result in unaffordable BTI ratios for each income range below 150% FPL. Of the low-income population (0% - 200% FPL), only the income tier at 150% to 200% FPL would have a BTI Ratio of less than 2% of income (1.9%).

Table 9: Wastewater Bill-to-Income (BTI) Ratio by Federal Poverty Level (with discount) (OCA-06-050)

Row Labels	0 50%	51 – 100%	101 – 150%	151 – 200%	Grand Total
<2%					
Sum of Customers	779	1,783	2,406	6,880	78,853
Average of FPL Ratio	43%	85%	130%	177%	459%
Average of BTI	1.6%	1.6%	1.6%	1.6%	1.2%
2% - <5%					
Sum of Customers	2,262	5,985	8,443	3,472	27,482
Average of FPL Ratio	33%	75%	123%	171%	125%
Average of BTI	3.1%	3.2%	2.9%	2.3%	2.9%
5% - <8%					
Sum of Customers	630	91	10		730
Average of FPL Ratio	16%	56%	108%		23%
Average of BTI	6.3%	5.5%	5.3%		6.2%
8% - <11%					
Sum of Customers	311	18			330
Average of FPL Ratio	10%	55%			11%
Average of BTI	9.5%	8.7%			9.5%
11% - <14%					
Sum of Customers	109				109
Average of FPL Ratio	8%				8%
Average of BTI	12.5%				12.5%
14% - <17%					
Sum of Customers	168				168
Average of FPL Ratio	6%				6%
Average of BTI	15.5%				15.5%
17% - <20%					
Sum of Customers	72				72
Average of FPL Ratio	6%				6%
Average of BTI	18.4%				18.4%
20% - <26%					
Sum of Customers	37				37
Average of FPL Ratio	5%				5%
Average of BTI	21.6%				21.6%
26% or more					
Sum of Customers	375				328
Average of FPL Ratio	2%				2%
Average of BTI	50.0%				54.2%
Total Sum of Customers	**4,743**	**7,877**	**10,859**	**10,353**	**108,157**
Total Average of FPL Ratio	**26%**	**76%**	**124%**	**174%**	**293%**
Total Average of BTI	**8.7%**	**3.0%**	**2.8%**	**2.0%**	**2.7%**

Again, as I concluded with respect to PAWC's water discounts, I conclude with respect to PAWC's wastewater discounts that even if PAWC's discounts would have been effective at PAWC's current wastewater rates, the rate increases proposed in this proceeding result in the efficacy of the wastewater bill discounts being severely degraded.

Q. WHAT DO YOU RECOMMEND?

A. I recommend the modified discounts set forth in Table 10 be incorporated into the PAWC Bill Discount Program. That Table compares the recommended modified discounts to PAWC's proposed discounts.

Table 10. Comparison of PAWC Proposed Discounts to Recommended Discounts for PAWC's Bill Discount Program (water and wastewater)

Water	PAWC Proposed Discounts[18]		Recommended Modified Discounts	
Discount Tier	Fixed Charge	Volumetric Charge	Fixed Charge	Volumetric Charge
Tier 1 (0 – 50% FPL)	80%	80%	90%	80%
Tier 2 (51 – 100% FPL)	65%	50%	75%	65%
Tier 3 (101 – 150% FPL)	40%	25%	60%	40%
Tier 4 (151 – 200% FPL)	30%	15%	30%	20%
Wastewater	PAWC Proposed Discounts		Recommended Modified Discounts	
Discount Tier	Total Bill		Total bill	
Tier 1 (0 – 50% FPL)	80%		85%	
Tier 2 (51 – 100% FPL)	55%		73%	
Tier 3 (101 – 150% FPL)	30%		55%	
Tier 4 (151 – 200% FPL)	20%		37%	

[18] PAWC's proposed discounts for Tier 1 through Tier 3 can be found at PAWC St. 10, at 23. PAWC's proposed discounts for Tier 4 can be found at PAWC St. 10, page 24.

Q. WHAT IS THE IMPACT OF YOUR PROPOSED MODIFICATIONS ON THE AFFORDABILITY OF LOW-INCOME BILLS?

A. The proposed modifications to the PAWC rate discounts result in substantially more affordable BTI Ratios for low-income customers. When my modifications are applied, the data in Table 11 shows that more than 70% of customers with income less than 50% FPL have BTI Ratios less than or equal to 5% and one-third have BTI Ratios of 2% or less. In the remaining three FPL tiers, roughly three-quarters of customers have BTI Ratios of 2% or less, and 100% have BTI Ratios of 5% or less.

Table 11. Impacts of Modified Water Discounts on BTI Ratios by Federal Poverty Level

Row Labels	0-50%	51 – 100%	101 – 150%	151 – 200%	Grand Total
<2%					
Average of BTI	1.7%	1.7%	1.7%	1.8%	1.3%
Sum of Customers	6,878	26,357	37,218	37,159	555,250
2% - <5%					
Average of BTI	3.1%	2.5%	2.4%	2.3%	2.5%
Sum of Customers	8,520	8,725	13,957	14,093	61,325
5% - <8%					
Average of BTI	6.3%				6.3%
Sum of Customers	2,178				2,178
8% - <11%					
Average of BTI	9.2%				9.2%
Sum of Customers	818				818
11% - <14%					
Average of BTI	12.1%				12.1%
Sum of Customers	1,256				1,256
14% - <17%					
Average of BTI	15.9%				15.9%
Sum of Customers	256				256
17% - <20%					
Average of BTI	18.8%				18.8%
Sum of Customers	400				400
20% - <23%					
Average of BTI	21.5%				21.5%
Sum of Customers	93				93
0.23% or more					
Average of BTI	46.7%				46.7%
Sum of Customers	1,507				1,507
Total Average of BTI	**7.5%**	**2.1%**	**2.1%**	**2.1%**	**2.2%**
Total Sum of Customers	**21,906**	**35,081**	**51,175**	**51,252**	**623,082**

Similarly, the data in Table 12 shows that nearly 40% of customers with income at or below 50% FPL have an affordable 2% burden, and nearly three-quarters have BTI Ratios of less than 5%. In the remaining three FPL tiers, nearly 85% of customers with income in the Tier 2 FPL range (51 – 100%) have an affordable 2% BTI, while nearly

90% in Tier 3 (101 – 150%) and Tier 4 (151 – 200%) ranges do. In all three FPL tiers above 50% of FPL, 100% of customers have BTI Ratios of less than 5% of income.

Table 12: Impacts of Modified Wastewater Discounts on BTI Ratios by Federal Poverty Level

	0-50%	51 – 100%	101 – 150%	151 – 200%	Grand Total
<2%					
Sum of Customers	1,804	6,579	9,535	9,147	95,438
Average of BTI	1.6%	1.6%	1.6%	1.6%	1.3%
2% - <5%					
Sum of Customers	1,702	1,289	1,324	1,206	11,473
Average of BTI	3.2%	2.5%	2.4%	2.3%	2.6%
5% - <8%					
Sum of Customers	468	9			477
Average of BTI	6.5%	5.4%			6.5%
8% - <11%					
Sum of Customers	169				169
Average of BTI	9.6%				9.6%
11% - <14%					
Sum of Customers	168				168
Average of BTI	12.5%				12.5%
14% - <17%					
Sum of Customers	56				56
Average of BTI	15.6%				15.6%
17% - <20%					
Sum of Customers	64				64
Average of BTI	18.6%				18.6%
20% - <23%					
Sum of Customers	37				37
Average of BTI	21.4%				21.4%
23% or more					
Sum of Customers	274				274
Average of BTI	44.2%				44.2%
Total Sum of Customers	**4,743**	**7,877**	**10,859**	**10,353**	**108,157**
Total Average of BTI	**6.5%**	**1.8%**	**1.8%**	**1.8%**	**2.1%**

In sum, I conclude that it is not reasonable simply to continue the discount levels adopted in PAWC's last rate case if the Commission is to take seriously its role of only approving rates that are just and reasonable. Contrary to the discount levels carried over from

PAWC's existing rates, the discounts I recommend generate reasonably affordable BTI Ratios for all four FPL tiers.

B. The Proposed Tier 4 Discount.

Q. PLEASE EXPLAIN THE RECOMMENDATION TO WHICH YOU RESPOND IN THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I respond to PAWC's proposal to add a "fourth tier" to the Company's BDP. (PAWC St. 1, at 34; PAWC St. 10, at 24). This fourth tier would expand the PAWC BDP to include customers with income above 150% but at or below 200% of FPL. (PAWC St. 10, at 24). According to PAWC witness Rea, PAWC proposes this discount because 91% of PAWC's water customers with income at 151% to 200% FPL would have unaffordable bills (PAWC St. 10, at 25), while 81% of wastewater customers with income in this tier would receive unaffordable bills. (Id., at 26). Mr. Rea explains:

> For water customers in this fourth tier of eligibility, the Company is proposing to offer discounts of 30% on the 5/8" meter charge and 15% on the volumetric rate. For wastewater customers in this fourth tier of eligibility, the Company is proposing to offer a discount of 20% on the total wastewater bill.

(PAWC St. 10, at 24). According to Mr. Rea, with the proposed "fourth tier:"

> For water service, more than half of the customers in the 151% to 200% FPL group whose bills were 1 expected to be more than 2% of household income will now be below that threshold. For wastewater service, approximately one third of the customers in the 151% to 200% FPL group whose bills were expected to be more than 2% of household income will now be below that threshold.

(PAWC St. 10, at 27-28). Mr. Rea stated that without the discount, 9% of water customers falling into the fourth tier would have an affordable bill, while 53% would

with the discount. (OCA-06-057). He stated that without the discount, 19% of wastewater customers falling into the fourth tier would have an affordable bill, while 66% would with the discount. (OCA-06-058).

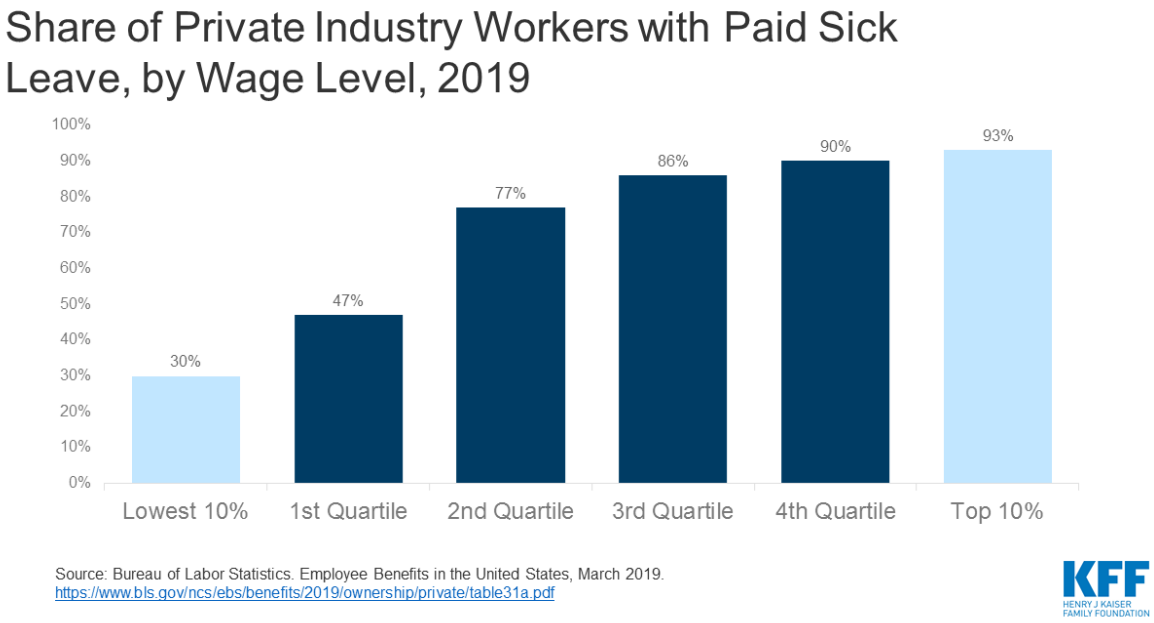
I support the proposed expansion of the BDP to include a fourth tier as defined by PAWC should be approved with the modification I present in Table 10 above. I explained the basis for that modification in my discussion of that Table. Without adoption of the discount, I reach the same conclusion that Mr. Rea reached with respect to the Tier 4 water and wastewater customers. The Tier 4 water customers would face the level of unaffordability I present in Table 7 above. Without a discount, even at existing rates, Tier 4 customers would face unaffordable water and wastewater bills. To the extent that rates are increased above existing rates, even if those increases do not reflect the full level of increase requested by PAWC, the water and wastewater unaffordability to this tier of customers would increase.

Q. IS THERE ANY ADDITIONAL REASON WHY PAWC'S PROPOSED EXPANSION TO A FOURTH TIER IS REASONABLE?

A. Yes. One attribute of the income of households who may not traditionally be considered "low-income" is not merely the level of income, but also what is known as the "fragility" of income. Customers who fall into PAWC's "fourth tier" are those customers who tend to be known as the "working poor." Low-income workers can have their ability to pay utility bills threatened due to unavoidable disruptions in their economic lives. A personal illness requiring time off or the illness of a child requiring time off generally represents a permanent loss of income. The jobs of low-wage workers simply do not provide the paid

leave required to respond to such circumstances.[19] The Chart below, for example, shows the percentage of workers with paid sick leave by wage level as reported by the U.S. Census Bureau.

Figure 1



The vulnerabilities faced by low wage workers to economic disruptions due to the lack of paid leave have been well-documented.[20] The difference is particularly evident for

[19] Claxton and Levitt (March 2020). Paid Sick Leave is Much Less Common for Lower-Wage Workers in Private Industry, Kaiser Family Foundation.

[20] Claxton (March 2020). Paid Sick Leave is much less common for lower-wage workers in private industry, Kaiser Family Foundation (Lower wageworkers are much more likely to lack access to paid sick leave. "Among the 25% of private industry occupations with the lowest wages ($13.25 per hour or less) 47% have access to paid sick leave; for the 10% of private industry occupations with the lowest wages ($10.48 per hour or less), the percentage with access to paid sick leave falls to 30%. Workers in higher-wage occupations are much more likely to have access to this benefit. For example, 77% of private industry workers with occupations in the second wage quartile ($13.25 to $19.00 per hour) have access to paid sick leave, with the percentage rising up to 90% of private industry workers with occupations in the top wage quartile.") See also, Ranji, et al. (Dec. 2020). Coronavirus puts a spotlight on paid leave policies, Kaiser Family Foundation; Boyens, Karpman, and Smalligan (July 2022). Access to paid leave is lowest among workers with the greatest needs: Findings from the December 2021 well-being and basic needs survey, Urban Institute.

women. The Kaiser Family Foundation (KFF) reports that "across the board, low-income women and those with part-time employment are less likely to be offered any of these benefits compared to their higher income and full-time counterparts."[21] The KFF data is set forth in the Table below. KFF reports that "low-income mothers who must miss work when their child is sick are far more likely to lose pay (75%) compared to higher income mothers (33%).[22]

Table 13. Working Women who are low-income or in part-time jobs are less likely to be offered employer benefits such as paid sick leave and parental leave[23]

	Paid Vacation	Paid Sick Leave	Paid Parental Leave	Paid Family and Medical Leave
Income				
<200% FPL	51%	46%	27%	28%
=>200% FPL	74%	73%	48%	45%
Work Status				
Part-time	37%	35%	20%	19%
Full-time	78%	75%	50%	48%

It is not, however, simply the lack of paid leave that presents situations leading to a potential inability to pay utility bills at a particular time. It is the lack of flexible work arrangements. One study reports that "many lower-wage workers are caring for multiple children, generally in homes where both parents are working or in single parent homes.

[21] Ranji, et al. (April 2021). Difficulty Tradeoffs: Key Findings on Workplace Benefits and Family Health Care Responsibilities from the 2020 KFF Women's Health Survey, Kaiser Family Foundation.

[22] Id.

[23] Id.

Many also provide care to elderly relatives or other family members with significant health conditions. Yet others have acute or chronic medical conditions themselves that often require medical treatment or time away from work. Thus, like higher-wage worker, many lower-wage workers need flexible scheduling, alternative start and end times, compressed workweeks, and the ability to work some hours at home (providing the job can be done at home)."[24] Nonetheless, "lower wage and lower-income workers have fewer options and less access to flexible work arrangements than higher-wage and higher-income workers."[25]

The point where the vulnerability to these income disruptions may routinely occur can be set at what is known as the Self-Sufficiency Standard. In Pennsylvania, the Self-Sufficiency Standard generally reaches to between 200% and 300% of Poverty.[26] While households at this income range may not always require a discount to reduce their bills to an affordable burden as a percentage of income, a minimum level of assistance is appropriate to reflect the affordability needs of these households as reflected in their income fragility. Accordingly, PAWC's proposal to include a minimum, but appropriate, discount for households with income in the income range of up to 200% of Poverty should be approved.

[24] Danziger and Boots (2008). Lower-Wage Workers and Flexible Work Arrangements, Urban Institute, Georgetown University Law Center.

[25] Id.

[26] The Self Sufficiency Standard for Pennsylvania, 2021 data, Center for Women's Welfare: University of Washington, https://selfsufficiencystandard.org/pennsylvania

C. BDP and AMP Outreach and Intake.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I consider different ways in which PAWC can, and should, improve the outreach and intake for its Bill Discount Program and Arrearage Management Program (AMP).

Q. IS RELYING ON THE FEDERAL LOW-INCOME HOUSEHOLD WATER AFFORDABILITY PROGRAM (LIHWAP) A REASONABLE OUTREACH STRATEGY FOR BDP AND AMP?

A. No. While PAWC does not rely exclusively on LIHWAP as an outreach tool for its BDP and AMP (PAWC St. 9, at 14-16), it largely uses LIHWAP for such outreach. (PAWC St. 9, at 18). PAWC notes that the Pennsylvania Department of Human Services indicated that it will make supplemental LIHWAP payments in December 2023, the Company did not know whether it would receive any of those payments or how much those grants would be. Moreover, it further conceded that it was not aware of any future LIHWAP funding. (OCA-06-021). Indeed, PAWC agreed with both the statement that: (1) "the federal government has ended the Low-Income Household Water Assistance Program (LIHWAP) program, with no plans or promises of future ongoing funding"; and the statement that (2) "LIHWAP was established in December 2020 to help low-income customers manage their water bills during the COVID-19 pandemic." (OCA-06-023).

There is no question but that LIHWAP was an important source of assistance while it existed. From January 2022 through December 2022, 11,706 PAWC customers received nearly $7.7 million in LIHWAP grants. (OCA-06-021). From January 2023 through June

2023, however, PAWC customers received *nothing*. (Id.) There was a slight uptick in LIHWAP distribution in July through September, 2023 (2,000 customers received roughly $1.1 million in grants). By October, however, LIHWAP was virtually exhausted, and only 65 PAWC customers received grants, totaling $41,532.50. (Id.) This limited receipt of LIHWAP grants in 2023 occurred despite the fact that PAWC mailed 37,153 letters in July 2023, and sent 39,375 e-mails customers in July and August 2023, to customers who were in arrears and potentially eligible to receive help from the LIHWAP program. (OCA-06-024).

Q. PLEASE EXPLAIN THE EXTENT TO WHICH PAWC HAS ENROLLED CUSTOMERS IN ITS BDP AND AMP?

A. First, I acknowledge that PAWC's AMP was just recently approved by the Pennsylvania PUC. Accordingly, it is too soon to assess the extent to which, if at all, PAWC has enrolled AMP participants.[27]

Regarding the BDP, I have examined the new enrollments for the past 24 months. This time period considers new enrollments after the COVID-19 economic shutdown that may have impeded new program enrollment. From November 2021 to October 2023 (the most recent month available), PAWC enrolled 10,715 low-income water customers in its BDP.

[27] "The proposed settlement of the AMP proceeding provides that the Company will implement the plan no later than twelve months after the Commission issues a Final Order in the AMP proceeding. The Company anticipates implementing the AMP as close to the effective date of new rates as possible, dependent on when Commission approval of the settlement is received." (PAWC St. 1, at 16). "If the Company receives approval of the AMP in 2023, the Company anticipates the AMP being available to customers in late 2024." (PAWC St. 1, at 13). The Final Order in the AMP proceeding, Docket P-2021-3028195, was entered December 7, 2023.

Table 14. New Bill Discount Program (BDP) Enrollment by Month for Most Recent 24 Months (OCA-05-008)

	Water Only	Wastewater Only	Combination		Water Only	Wastewater Only	Combination
202111	248	2	46	202301	106	11	22
202112	250	2	36	202302	206	6	45
202201	178	4	20	202303	174	9	50
202202	216	7	20	202304	167	8	45
202203	1,003	51	248	202305	152	30	47
202204	1,306	91	253	202306	184	22	37
202205	861	41	147	202307	131	29	33
202206	763	80	169	202308	752	84	208
202207	798	60	120	202309	565	58	162
202208	593	39	121	202310	429	8	123
202209	559	21	96	Total	10,715	730	2,254
202210	500	35	125				
202211	425	24	67				
202212	149	8	14				

The success of this enrollment can be reviewed by comparing the BDP enrollment to the total number of Confirmed Low-Income customers that PAWC has identified on its system. For purposes of identifying Confirmed Low-Income customers, PAWC states that "the company defines 'confirmed low-income customer' as a customer that *has provided income information to the company* indicating that the customer has a household income at or below 150% of the Federal Poverty Level." (OCA-05-001) (emphasis added). Using this definition, PAWC reports that it has 48,765 Confirmed Low-Income customers receiving only water service, 2,351 Confirmed Low-Income customers receiving only wastewater service, and 9,544 Confirmed Low-Income customers receiving combination water/wastewater service. (OCA-05-001). Of the 60,660 customers who, according to the Company's own definition, have "provided

income information to the company indicating that the customer has a household income at or below 150% of the Federal Poverty Level," PAWC has enrolled fewer than 13,700 (17.6%) in its BDP in the past 24 months.

In contrast to this lack of enrollment of Confirmed Low-Income customers into BDP, from January 2021 through October 2023, PAWC disconnected 35,488 Confirmed Low-Income customer accounts (OCA-05-025, Revised) (with a total arrearage of $14,550,181 at the time of disconnection), and provided 412,518 disconnection notices to Confirmed Low-Income customers. (OCA-05-025). These numbers, of course, do not necessarily reflect unique customers; some customers may have received more than one disconnect notice or have had service disconnected more than once. As shown in Table 15 below, the Confirmed Low-Income customers who had service disconnected for nonpayment were substantially further in arrears than the overall arrears of Confirmed Low-Income accounts in arrears. PAWC, in other words, disconnected nearly 10,000 more customers who had provided information establishing their low-income status than it enrolled in its BDP.

Table 15. Average Arrears of Confirmed Low-Income Accounts Experiencing a Nonpayment Disconnection Compared to Average Arrears of All Confirmed Low-Income Customers Having Arrears (OCA-05-024)

Year-Month	Average arrears at the time of a confirmed low-income account disconnection for nonpayment	Average arrearage of confirmed low-income accounts in arrears	Year-Month	Average arrears at the time of a confirmed low-income account disconnection for nonpayment	Average arrearage of confirmed low-income accounts in arrears
202101	$0.00	$546.04	202206	$818.78	$418.50
202102	$0.00	$564.52	202207	$754.93	$400.33
202103	$0.00	$598.33	202208	$606.45	$375.63
202104	$1,670.75	$544.58	202209	$667.06	$351.56
202105	$891.27	$334.06	202210	$532.34	$341.62
202106	$604.35	$243.60	202211	$505.90	$317.01
202107	$651.38	$239.33	202212	$503.36	$298.38
202108	$481.03	$236.99	202301	$696.54	$307.66
202109	$503.60	$224.34	202302	$766.46	$314.96
202110	$551.84	$224.47	202303	$907.69	$320.71
202111	$602.18	$264.59	202304	$652.89	$292.32
202112	$688.16	$217.54	202305	$561.30	$280.64
202201	$663.33	$234.38	202306	$582.59	$245.42
202202	$568.57	$247.20	202307	$411.38	$246.47
202203	$931.24	$283.65	202308	$524.24	$258.72
202204	$744.61	$280.68	202309	$555.65	$250.89
202205	$710.32	$447.29	202310	$566.96	$266.22

I conclude that PAWC has substantial opportunity to enroll additional customers in its BDP and/or AMP where the Company has stated the customer already "*has provided income information to the company* indicating that the customer has a household income at or below 150% of the Federal Poverty Level." This opportunity presents itself to an

even greater extent now that PAWC will offer an AMP in addition to offering its Bill Discount Program.

Q. WHAT DO YOU RECOMMEND?

a. I recommend that PAWC be required to make personal contact with any Confirmed Low-Income customer facing the imminent disconnection of service for nonpayment. At the time of that personal contact, the Confirmed Low-Income customer should be informed of the customer's right to enroll in the BDP *and* enroll in the AMP as an alternative to the disconnection of service for nonpayment. Disconnections to these customers should be paused until PAWC has received a response to the offer of BDP/AMP participation.

Q. IS THERE A SECOND WAY BY WHICH YOU REVIEW THE ENROLLMENT IN PAWC'S BILL DISCOUNT AND ARREARAGE MANAGEMENT PROGRAMS?

A. Yes. Again acknowledging that the AMP is a new program and my recommendation is forward-looking, I have reviewed the number of Confirmed Low-Income customers who "received a payment arrangement" by month for the same time period I examined BDP new enrollment above (November 2021 through October 2023). As the data shows, PAWC continues to enroll Confirmed Low-Income customers (i.e., customers who "*ha[ve] provided income information to the company* indicating that the customer has a household income at or below 150% of the Federal Poverty Level") into deferred payment arrangements with*out* also enrolling those Confirmed Low-Income customers into the Company's BDP.

Table 16. Number of Confirmed Low-Income Customers who Received a Payment Arrangement by Month Compared to Number of New BDP Enrollees by Month (CAUSE-PA-01-032, OCA-05-008)

Year and Month	Confirmed low income customers Receiving Payment Arrangement	BDP New Enrollee	Year and Month	Confirmed low income customers Receiving Payment Arrangement	BDP New Enrollee
202111	2,474	296	202211	4,275	516
202112	1,871	288	202212	4,030	171
202201	1,551	202	202301	3,133	139
202202	1,603	243	202302	3,575	257
202203	2,633	1,302	202303	3,784	233
202204	3,612	1,650	202304	3,777	220
202205	6,127	1,049	202305	5,130	229
202206	4,413	1,012	202306	5,299	243
202207	3,598	978	202307	5,142	193
202208	4,209	753	202308	5,537	1,044
202209	4,302	676	202309	4,702	785
202210	4,074	660	202310	4,336	560

Particularly now that PAWC will offer a low-income AMP in addition to its BDP, there should be no reason that PAWC would enroll a Confirmed Low-Income customer into a Payment Arrangement without also in the case of BDP (or alternatively the case of AMP) enrolling that customer into the BDP and/or AMP. Recognizing that water utilities do not report data exclusive to Confirmed Low-Income customers, PAWC reports that the average arrearage subject to payment agreements for all customers was: (1) $994.63 (15.96 bills behind) in 2022; (2) $1,203.27 (19.08 bills behind) in 2021; and (3)

$1,044.99 (17.89 bills behind) in 2020.[28] Based on this data, I conclude that it is reasonable to expect Confirmed Low-Income customers who have received payment arrangements to have arrears of sufficient size and age to be qualified for PAWC's AMP.

Q. WHAT DO YOU RECOMMEND?

A. I recommend that, particularly given that extending a payment arrangement requires contact with the customer receiving that payment arrangement, PAWC be directed to enroll a customer in its BDP and AMP where doing so would be more favorable to a customer and only offer a payment arrangement if a customer rejects BDP and AMP enrollment after being informed of its benefits..

Q. PLEASE EXPLAIN YOUR NEXT RECOMMENDATION REGARDING OUTREACH AND INTAKE FOR THE COMPANY'S BDP AND AMP.

A. When PAWC was asked to "provide a detailed description of any software used within the immediately preceding 36 months, or intended to be used in the coming 36 months, by the Company which engages in speech pattern analytics or linguistic analytics, used to review call center conversations" for either its in-house call center or for any third party contractor call center staff, PAWC responded that: "PAWC and the CSO do not currently use any software that engages in speech pattern or linguistic analytics." (OCA-06-013). However, PAWC continued to state that "The CSO is evaluating options to utilize speech and linguistic analytics in the future." (Id.) Similarly, when asked for a "description of all terms, phrases, or other speech patterns searched for or otherwise," PAWC reiterated

[28] PA PUC, Collections Data for the Major Electric, Gas, and Water Companies (annual). https://www.puc.pa.gov/filing-resources/reports/quinquennial-report-pursuant-to-section-1415/

that it "does not utilize any speech pattern analytics or linguistic software to review call center calls." (OCA-06-014). Since PAWC does not utilize any speech pattern analytics or linguistic software to review call center calls, it thus does not have any "internal processes, procedures, or practices employed to determine what terms, phrases, or other speech patterns will be employed in the application of the speech pattern analytics or linguistic analytics software to the review of call center calls. . ." (OCA-06-016).

As can be seen, while PAWC does not *currently* use speech pattern or linguistic analysis, it *is* currently evaluating options to do so in the future. PAWC's discovery response refers to its evaluation of options in the present tense ("the CSO *is evaluating* options. . ."). (OCA-06-013) (emphasis added).

In its ongoing evaluation of "options to utilize speech and linguistics analysis in the future," PAWC should be directed to incorporate searches of speech pattern and linguistics analysis to help direct Call Center engagement of customers toward identifying the potential need for and eligibility for the Company's BDP and/or AMP. Speech patterns regarding inability to pay, income constraints, payment difficulties, or the utilization of programs and/or agencies that can reasonably be associated with the provision of low-income assistance, all could be indicators of the potential eligibility for, and need for, enrollment in the BDP and/or AMP. PAWC should be directed to regularly report to its Low-income Advisory Group (LIAG) on the progress of the review of options for speech pattern and linguistic analysis, and how that review is incorporating such options into potential low-income outreach. It should seek regular LIAG input into how such analysis can be incorporated and utilized.

Q. WHY DO YOU SUGGEST THAT PAWC NEEDS TO BE DIRECTED TO REPORT TO THE LIAG AND TO SOLICIT LIAG INPUT?

A. While PAWC routinely argues that it relies on its LIAG to provide input on issues affecting low-income customers, that opportunity to provide input is substantially more limited than the Company indicates. While LIAG meetings unquestionably serve a useful function to a limited degree, given the limited time allotted for each meeting and the infrequency of the meetings (OCA-05-012, Attachment), they have not historically been used to allow members of the LIAG to introduce new issues to PAWC or to the group. In particular, PAWC does not seek input into what items should be put before the LIAG or added to the agenda. (OCA-05-012(b)). Moreover, issues are not introduced to the LIAG with an opportunity for LIAG members to consider those issues outside the meeting and to provide feedback or input to PAWC. (OCA-05-013). Without overstating this critique of how PAWC interacts with its LIAG, I offer these observations simply to explain why it is necessary for the Commission to direct PAWC to present to LIAG the issue of how to use linguistic and speech pattern analysis to advance the identification of low-income customers and their enrollment in the BDP and/or AMP.

D. PAWC's Hardship Grant Program.

Q. DO YOU RECOMMEND MODIFICATIONS TO THE PAWC HARDSHIP GRANT PROGRAM?

A. Yes. I recommend that PAWC increase the maximum income eligibility for its hardship grants to 250% of Federal Poverty Level. The current maximum income eligibility is 200% of FPL. (CAUSE-PA-01-007).

In addition, I recommend that PAWC adopt a process that would allow multiple hardship grants in a given twelve-month period, so long as those grants do not exceed the annual maximum benefit amount of $500. Current PAWC program rules allow a customer to receive only one grant per year, with that single grant being no more than $500 (the $500 cap being applied separately for water and wastewater service). (CAUSE-PA-01-007). The Settlement of PAWC's 2022 rate proceeding provided in relevant part that "PAWC agrees to work with its CAAG members to develop a solution to allow an eligible customer to receive multiple Hardship Fund grant awards each year, up to the maximum grant amount of $500 for water and $500 for wastewater." (Pennsylvania PUC v. PAWC, Docket R-2022-3031672 & R-2022-3031673 (cons.), Joint Petition for Settlement, at ¶52, page 14). PAWC's description of its hardship fund in this proceeding, however, documents that this modification has yet to be made. PAWC's description of its hardship fund states that "Each customer account is eligible for *one grant award per year*." (CAUSE-PA-01-007) (emphasis added). I recommend that PAWC be directed to continue to comply with the 2022 Settlement until the referenced "solution" is achieved.

Q. WHY SHOULD PAWC EXPAND ITS HARDSHIP ELIGIBILITY FROM 200% TO 250% OF FEDERAL POVERTY LEVEL?

A. Expanding the eligibility for hardship grants to 250% FPL has three foundations. First, as I explain in detail in my response to PAWC's proposed addition of a Tier 4 rate discount, one attribute of customers at this level of income is not merely the *level* of their income, but is also the *fragility* of their income. As I explained above with respect to customers having income between 150% and 200% FPL, and which is equally true for customers with income up to 250% FPL, these customers are frequently, if not generally, the working poor. They lack paid leave, and work for hourly wages that can easily be subject to disruptions that would give rise to a reasonable need for a hardship grant.

Second, while income at between 200% and 250% FPL may by sufficiently high to no longer merit a rate discount, those income levels do not provide sufficient income to allow households to comfortably meet their basic needs. The income needed to meet basic household needs is measured by Pennsylvania's "self-sufficiency standard" (SSS).[29] The SSS varies by county and by household size and composition. Within each county, for example, a three-person household comprised of an adult with two infants would have a different self-sufficiency income than a three-person household with two adults and a school age child. To illustrate, I have selected nine different counties served by PAWC[30] and examined the SSS for a three-person household with three different household compositions (one-adult, two infants; one adult, two school-age; one adult, one infant, one school-age).[31] The data is set forth in Table 17 below.

[29] Self-Sufficiency Standard: Pennsylvania (2021). https://selfsufficiencystandard.org/pennsylvania/

[30] I have tried to select counties in the following regions of PAWC's service territory: Northeast, Central, Northwest, Southeast, and Southwest.

[31] Overall, the SSS sets forth income levels for households with 719 different sizes and composition.

Table 17. 2021 Self-Sufficiency Standard (SSS) In Dollars and FPL Percent for Selected PAWC Counties And 3-Person Households with Selected Compositions

Counties	100% FPL (2023)	1 Adult—2 Infant		1 Adult-2 Pre-School		1 Adult-2 School Age	
		SSS	As % FPL	SSS	As % FPL	SSS	As % FPL
Adams	$24,860	$62,212	250%	$60,931	245%	$55,756	224%
Armstrong	$24,860	$53,292	214%	$52,414	211%	$46,949	189%
Berks	$24,860	$69,627	280%	$64,232	258%	$57.505	231%
Dauphin	$24,800	$68,084	275%	$56,956	230%	$64,520	260%
Fayette	$24,860	$52,213	210%	$51,399	207%	$44,778	180%
Luzerne	$24,860	$55,546	223%	$54,086	218%	$48,317	194%
Monroe	$24,800	$61,575	248%	$58,864	237%	$53,394	215%
Union	$24,860	$66,017	266%	$63,837	257%	$57,183	230%
Washington	$24,860	$62,042	250%	$60,753	244%	$52,695	212%

The data shows that, in the 27 scenarios examined, SSS incomes fall between 200% and 250% FPL 18 times. SSS incomes fall above 250% FPL in an additional six (6) instances. These are all instances where a minor or temporary economic disruption to the household might result in such households having difficulties in making a PAWC payment. And, once behind, their incomes are sufficiently low that it would be difficult to catch-up without external assistance such as through PAWC's hardship fund.

I conclude that it is reasonable for PAWC to extend the maximum income eligibility for hardship grants from 200% to 250% FPL. I recommend that PAWC do so.

E. Developing a Written "Universal Service" Plan.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I explain why PAWC should develop a written "universal service plan" and file that plan with the PUC's Bureau of Consumer Services. That written plan should include not only a description of each low-income program component PAWC offers, but should also identify: (1) the objectives which PAWC is seeking to accomplish through its various program components (including but not limited to participation levels); (2) the metrics by which PAWC will seek to measure whether those objectives are being accomplished; (3) the manner in which, if at all, the differing program components interact with each other; and (4) the evaluation process by which PAWC proposes to determine whether its objectives are being met and what remedies the Company will pursue in the event they are not. The plan should further include: (5) the qualifications for each program; (6) the proposed means of outreach and intake; (7) the current and projected participation levels; and (8) the expected annual budgets. The plan should be subject to review and comment not only by BCS, but by other stakeholders who request to be involved in a review process. These elements of a written universal service plan are no less than the fundamental components of prudent, and successful, utility program planning.

Q. DOES PAWC PREPARE A WRITTEN LOW-INCOME PLAN AT PRESENT?

A. No. When asked whether it prepares such a plan, PAWC responded:

> Unlike electric and gas utilities, water and wastewater utilities are not required to have a written plan identifying their universal service programs and related outreach efforts. Nevertheless, PAWC voluntarily provides

> quarterly presentations to all Customer Assistance Advisory Group members, including the Commission's Bureau of Consumer Services, the Office of Consumer Advocate, [and] the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania, among others, which provides extensive updates regarding each of its customer assistance programs and outreach efforts.

(OCA-05-014). PAWC's rationale for not preparing such a plan, however, should be rejected. The need to prepare and file this written plan is not dependent upon a specific PUC regulation or statute requiring such preparation. The need to prepare and file this plan is based on reasonably prudent planning for any expenditures by PAWC. Note that whether or not it is "required to have a written plan" akin to the state's electric and gas utilities, PAWC's response indicates that it does not even have an ***internal*** Company document or process that addresses the fundamental planning issues identified above.

The extent to which failing to engage in this fundamental planning process evidences a lack of prudent planning is apparent within the context of PAWC's Bill Discount Program. When asked to identify "all metrics used to measure the outcomes of the Bill Discount Program" along with "all data collected and evaluated using these outcome metrics," PAWC responded by stating: "PAWC does not have specific "outcome" metrics for the Bill Discount Program (BDP). However, the Company does collect and share a range of BDP ***operational*** information. . ." (OCA-05-015) (emphasis added).

PAWC can tell you what it is doing, in other words ("a range of BDP operational information"), but cannot tell you why it is doing this or what it is seeking to accomplish by engaging in those activities (OCA-05-015), let alone what, if anything, those activities are accomplishing in fact. (OCA-05-016).

Q. CAN YOU ILLUSTRATE THE FAILURE OF THE LACK OF A COMPREHENSIVE WRITTEN UNIVERSAL SERVICE PLAN?

A. Yes. PAWC has not laid out in any written form a plan identifying how the Company intends to use its universal service programs to address the payment difficulties of its Confirmed Low-Income customers. Remember, PAWC has said that "the company defines 'confirmed low-income customer' as a customer that *has provided income information to the company* indicating that the customer has a household income at or below 150% of the Federal Poverty Level." (OCA-05-001, emphasis added). Indeed, the Company states in response to CAUSE-PA:

> The Company defines "confirmed low income customer" to mean a customer for which the Company has received income information indicating that the customer has an annual income at or below 150 percent of the Federal Poverty Guidelines. The customer segments included in the designation of confirmed low income customers are the same as the tier levels in the tariff: 0-50%, 51%-100%, and 101%-150%.

(CAUSE-PA-01-04). According to the Company, in other words, not only has the Company *received* income information about the customer, but, in addition, that information has been sufficient to determine the tier of Poverty into which the customer falls. Given that knowledge about what the Company knows about a customer deemed to be a "Confirmed Low-Income" customer, I note:

- From January 2023 through October 2023, PAWC disconnected 8,724 Confirmed Low-Income customers (OCA-05-025, Revised). During that same time period, PAWC enrolled only 2,866 Confirmed Low-Income customers into its Bill Discount Program. (OCA-05-008). In no month in 2023 did the number of Confirmed Low-Income customers enrolling in the BDP equal or exceed the number of Confirmed Low-Income Disconnections.

Table 18. Number of Confirmed Low-Income Disconnections Compared to Number of New BDP Enrollees by Month (January through October 2023)
(OCA-05-025 Revised, OCA-05-008)

	Number Nonpayment Disconnections of Confirmed Low-Income	New Bill Discount Program Water Enrollees
202301	606	106
202302	317	206
202303	344	174
202304	920	167
202305	1,192	152
202306	1,366	184
202307	1,077	131
202308	1,431	752
202309	748	565
202310	723	429

Customers enrolled in the BDP in the future, of course, should also be enrolled in the Company's Arrearage Management Program. The Company should not be disconnecting customers that it not only knows to be low-income, but knows sufficient information to be able to identify which BDP tier they would fall into, without first attempting to enroll these customers in AMP.

- In similar fashion, PAWC reports that it disconnected service for nonpayment to 14,562 Confirmed Low-Income water accounts in 2022; and to 8,724 Confirmed Low-Income water accounts in 2023 (YTD). (OCA-05-025 [Revised]). Despite these nonpayment disconnections, PAWC further reports that it provided only 961 hardship grants to water accounts in 2022; and 1,916 hardship grants to water accounts in 2023 (YTD). (OCA-05-031 [Revised], see also, OCA-011-012, OCA-011-008). PAWC reports, however, that for its hardship funds:

  > During the 2020-2021 program year: No applications were denied for insufficient funds.

> During the 2021-2022 program year: Records indicate one application was denied for insufficient funds, but this appears to be an error because sufficient funds remained available throughout the program year. PAWC's assumption is that this customer's application was denied for ineligibility.
>
> During the 2022-2023 program year: Forty (40) applications were denied for insufficient funds.
>
> During the 2023-2024 program year: No applications were denied for insufficient funds.

(OCA-011-009). As can be seen, in other words, PAWC is disconnecting service to customers from whom PAWC had already received information establishing their low-income status despite the fact that the Company had sufficient funds in nearly every year to provide additional hardship grants.

- From January through October 2023, PAWC averaged 2,546 BDP participants who had consumption falling in PAWC's highest usage range (3,000 gallons or more). Nonetheless, during 2023, PAWC distributed only 959 water conservation kits. (OCA-011-018).

- From November 2021 through October 2023 (the most recent 24 months available), PAWC had an average of 37,620 Confirmed Low-Income customers. (OCA-11-001) During the same time period, on average, 53.91% of those Confirmed Low-Income customers were in arrears, carrying an average arrears of $303. (OCA-05-025). Despite having information that established not only the ***fact*** of their income eligibility for each of these customers, but also their specific FPL tier (CAUSE-PA-01-01), PAWC had enrolled fewer than half of those customers in its Bill Discount Program.

As can be seen, even setting aside the opportunities for improved outreach and intake, innumerable opportunities exist to use each component of PAWC's suite of universal service programs to help advance the objective of improving affordability, as well as improving bill payment patterns and even controlling the cost of the programs.

Moreover, as can be seen, the Company's suite of universal service programs as a whole can be better coordinated so that the synergistic impact of the programs as a whole will

be amplified, if not maximized, in contrast to the sum of each program's impacts when viewed individually.

PAWC says that it should not be ordered to prepare such a plan because there is no specific PUC regulation mandating such a plan. The plan, however, should not be required based on a specific mandatory regulation. It should instead be required as an element of fundamental prudent program planning and management.

Part 3. Impact of Increasing Customer Charges on Low-Income Customers.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. PAWC proposes to increase its residential water customer charge by 14.3%, from $17.50 to $20.00 per month. It also proposes to set its residential wastewater service charge at $20 per month. The increase in customer charge impedes the ability of low-income customers to pursue an improvement in bill affordability by reducing their bills through the implementation of conservation efforts. Given PAWC's proposed increased water customer charge of $20, when coupled with a volumetric charge of $2.1319/100 gallons, the customer charge imposes an irreducible portion of the low-income, low-use customer bill. Table 19 shows that PAWC's proposed increase in its water customer charge, even at a monthly usage of 3,600 gallons, results in more than one-fifth of the low-income bill being irreducible.

Table 19. Percentage of Monthly Water Bill Attributable to Fixed Customer Charge Given PAWC's Proposed Customer Charge and Volumetric Charge

Monthly Usage	Pct fixed	Pct Volumetric	Total
1,200	42%	58%	100%
2,400	27%	73%	100%
3,600	19%	81%	100%
4,800	15%	85%	100%

This impediment is particularly important to PAWC's Confirmed Low-Income customers. According to PAWC, for the period November 2021 through October 2023, 31% of its Confirmed Low-Income customers (11,536 of 37,620) have monthly water usage of 1,500 gallons or less, while an additional 52% (19,700 of 37,620) have monthly water usage of between 1,500 and 3,000 gallons. (OCA-011-001).

Q. DOES PAWC PROVIDE MEANINGFUL ASSISTANCE TO HELP LOW-INCOME CUSTOMERS CONSERVE WATER?

A. No. PAWC does not contract with third parties to provide conservation assistance to low-income customers, nor does it provide any funding to third parties to deliver water conservation assistance. (OCA-011-013). The significance of that is that PAWC does not piggy-back any water conservation efforts on top of low-income weatherization delivered through Community Action Agencies as funded by the U.S. Department of Energy's Weatherization Assistance Program (WAP), nor does it seek to partner with agencies providing low-income usage reduction investments through the PUC's Low-Income Usage Reduction Program (LIURP) delivered through Pennsylvania's natural gas and electric distribution utilities.

The only "conservation" investments that PAWC makes in low-income households involve the provision of "water conservation kits." (OCA-011-014). PAWC does not develop annual budgets for any water conservation investments. (OCA-011-015). Indeed, for the year ending June 30, 2025, it "anticipates" spending $32,500 on "conservation kits" for its low-income population. (OCA-011-015).

From November 2021 through October 2023, PAWC averaged 36,884 Confirmed Low-Income customers per month. (OCA-011-001). From 2020 through 2023 (YTD), PAWC distributed: (1) 1,639 conservation kits in 2020; (2) 1,556 conservation kits in 2021; (3) 1,788 conservation kits in 2022; and (4) 959 conservation kits in 2023 (YTD). (CAUSE-PA-1-016). In 2020 through 2023, PAWC has not separately budgeted for its conservation kit. (OCA-011-015, OCA-011-020). The most that PAWC can say is that it "anticipates" that its projected expenditure of $32,500 will be a "normal level" of expenditure. (OCA-011-015).

Indeed, PAWC does not even attempt to serve its confirmed low-income population; PAWC states that it provides water conservation kits only to BDP participants. (OCA-011-018(e)). Even then, PAWC serves but a small fraction of this population. In 2022, PAWC averaged 16,849 BDP participants per month, (OCA-011-001), compared to the 1,788 water conservation kits it delivered to BDP participants in 2022. (OCA-011-018). PAWC did even less in 2023. In 2023 (YTD), PAWC averaged 23,122 BDP participants each month (OCA-005-002), compared to the 959 water conservation kits it delivered in 2023 (YTD). (OCA-011-018). PAWC does not track the dollar investment per household. (OCA-011-018). Nor does PAWC track either the total usage reduction or the

per household usage reduction achieved through its "water conservation kit." (OCA-011-018).

Q. IS THERE ANY FINAL REASON WHY IMPEDING LOW-INCOME INVESTMENT IN WATER CONSERVATION THROUGH AN INCREASE IN RESIDENTIAL CUSTOMER CHARGES IS TO THE DETRIMENT OF PAWC'S LOW-INCOME CUSTOMERS?

A. The failure of PAWC to deliver meaningful water conservation assistance to low-income customers means that, to the extent that water conservation occurs at all, it must occur through low-income customers making out-of-pocket expenditures on that conservation. As I discuss elsewhere in my testimony, however, PAWC's low-income customers bear unaffordable bills as a percentage of income. Customers who are facing water bill burdens of 6% to nearly 80% of income do not have the discretionary income to "invest" in bill-reducing conservation with the hopes that that conservation will generate bill reductions greater than the cost of the investment. Moreover, as I discuss elsewhere in my testimony, Pennsylvania's low-income customers have reported through the Census PULSE Survey that they are facing moderate to extreme difficulties in paying their "usual household expenses" in the past seven days. These households also do not have the discretionary income to invest in water conservation on their own.

Q. DO YOU HAVE ANY FINAL OBSERVATION ABOUT THE IMPACTS THAT INCREASING RESIDENTIAL CUSTOMER CHARGES WILL HAVE ON LOW-INCOME CUSTOMERS?

A. Yes. PAWC is proposing to increase the irreducible portion of the bill to customers who have a demonstrable inability to pay their bills with which to begin. Table 20 shows that,

since January 2022, consistently more than 50% of Confirmed Low-Income customers (not distinguishing between water and wastewater customers) have arrears on their PAWC bills. In only one of those 22 months (April 2022), did the percentage of Confirmed Low-Income customers in arrears fall below 50%. The Table further shows that not only were low-income accounts in arrears, they were ***deeply*** in arrears, with the average monthly arrears since January 2022 being more than $300.

Table 20. Percentage of Confirmed Low-Income Customers in Arrears and Average Arrears of Confirmed Low-Income Accounts in Arrears (OCA-05-025)

Year-Month	The percentage of confirmed low-income accounts in arrears	The average arrearage of confirmed low-income accounts in arrears
202201	51.88%	$234.38
202202	54.70%	$247.20
202203	52.36%	$283.65
202204	46.58%	$280.68
202205	52.18%	$447.29
202206	53.92%	$418.50
202207	54.10%	$400.33
202208	57.84%	$375.63
202209	53.73%	$351.56
202210	53.74%	$341.62
202211	55.86%	$317.01
202212	57.26%	$298.38
202301	53.59%	$307.66
202302	56.89%	$314.96
202303	57.71%	$320.71
202304	53.38%	$292.32
202305	56.87%	$280.64
202306	54.72%	$245.42
202307	51.95%	$246.47
202308	55.41%	$258.72
202309	50.94%	$250.89
202310	56.94%	$266.22

Despite these demonstrated difficulties in paying their bills, PAWC is proposing to increase the irreducible part of the bill by increasing fixed monthly customer charges for PAWC water and wastewater customers in most rate divisions.

Q. WHAT DO YOU RECOMMEND?

A. I recommend that the customer charge recommendations of OCA witness Mierzwa (OCA Statement 4) be adopted. In addition, I recommend that PAWC be directed to develop and submit to BCS, no later than six months after a final order in this proceeding, a plan through which the Company will use the federal WAP agencies, as well as the natural gas and/or electric LIURP agencies, as partners through which to deliver water conservation investments to low-income customers.

Part 4. Impact of the Revenue Decoupling Mechanism on Low-Income Customers.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I examine the impact of PAWC's proposed Revenue Decoupling Mechanism (RDM) on low-income customers. I find that the proposed RDM will disproportionately adversely affect low-income customers.

Q. WHAT IS PAWC'S RATIONALE FOR THE RDM?

A. According to the Company:

> Seasonal weather conditions can cause water sales to either increase or decrease from expected going-forward levels, which, in turn, cause revenues to increase or decrease from expected going-forward levels. Cold winters and hot, dry summers tend to increase water sales, and warmer winters and cooler, wetter summers tend to decrease water sales. Weather volatility in either direction causes volatility in revenues.

(PAWC St. 10, at 87).

Q. HOW WOULD THE RDM OPERATE?

A. According to Mr. Rea, PAWC would first calculate a residential fixed charge. It would do so by determining the "Total revenue requirement allocated to residential customers for rate design purposes less the Volumetric Charge multiplied by total volumetric sales associated with residential customers divided by the total number of residential customers in the case." (PAWC St. 10, at 91). Mr. Rea then explained:

> The proposed RDM works by comparing actual revenues recovered from eligible customers in a given month or year to the revenues that would result from applying the RDM cost-components that I described above. If actual revenues are higher than would have been collected under the RDM formula, the difference is credited to customers in the following year. If actual revenues are lower than would have been collected under the RDM formula, the difference is collected from customers in the following year.

(Id., at 92). The RDM would apply to both water and wastewater bills. (Id.)

Q. HOW AND WHY WOULD THE RDM DISPROPORTIONATELY ADVERSELY AFFECT LOW-INCOME CUSTOMERS?

A. The RDM results in a transfer of costs from higher income customers to lower income households. This occurs because the actions that customers take to reduce water consumption, thus resulting in a readjustment of rates to that consumption which remains, are actions that are disproportionately taken by higher income households. I base this conclusion on the following observations.

First, as I discuss in more detail below, income is associated with different housing attributes. Higher income households in the PAWC service territory tend disproportionately to be homeowners. Moreover, higher income households in the

PAWC service territory tend also disproportionately to live in single-family homes. As a result, in addition to having basic indoor water use, these customers will also tend disproportionately to have outdoor water use (and non-basic water consumption). This consumption is the consumption that would be more discretionary in nature and subject to reduction. As usage varies downward, the resulting unrecovered costs are passed on to that consumption which remains. The customers who will bear these costs are those who have irreducible consumption. These customers will most likely include lower-income customers.

Second, as I discuss in detail above, low-income households tend to have extremely high BTI Ratios. When households are devoting a high percentage of income to paying their basic bills, they will be less likely to invest in water conservation measures, even if those measures might be cost-effective in the long-term. These customers are not looking for ways to invest in water conservation measures.

Third, as I establish below, although PAWC does not distinguish between homeowner and tenant customers (OCA-05-011), there is a relationship in the PAWC service territory between income and tenant status. For these tenants, in addition to the barriers presented by the lack of available income to invest in water conservation measures, there is the barrier which is referred to as the lack of "dominion interest" over their housing unit. The lack of dominion interest refers to the fact that tenants, even if they had the financial wherewithal to make water conservation investments, do not have the authority to make decisions about replacing the major water consuming systems in the home. Tenants, for

example, would not be authorized to replace older toilets with newer water-conserving toilets.

Q. HOW DOES THIS DISCUSSION RELATE TO PAWC'S PROPOSED RDM?

A. PAWC's proposed RDM in essence takes revenue that has historically been billed to all customers and, as more customers take steps to reduce their consumption (and thus reduce the revenue billed to them) reallocates those dollars to the customers (and their consumption) that remain. The data above shows that the customers who are left behind by such a reallocation process are disproportionately low-income customers. In other words, PAWC proposes to take those revenues that had been billed to higher income households and to reallocate those dollars to those low-income households who do not have the financial capacity to pursue investments in water conservation measures.

Q. COULD NOT PAWC APPLY ITS RDM ONLY TO NON-BDP REVENUES?

A. PAWC could and should exempt BDP revenues, and BDP customers from the operation of the RDM should it be adopted. I recommend such an exemption. However, the issues I describe above apply to low-income customers generally, not to BDP customers in particular. As I document in detail above, BDP customers represent a small portion of the low-income customer base of PAWC. Exempting BDP billings and usage from the RDM, while necessary if the PUC permits PAWC to shift risk to customers through approving the RDM, does not address the shortcomings I have identified.

Q. IS THERE ANY OTHER REASON WHY THE RDM OPERATION BREAKS DOWN AS APPLIED TO LOW-INCOME CUSTOMERS?

A. Yes. The RDM proposed by PAWC examines only one aspect of the ratemaking process, the determination of revenues. Rates, however, are not set simply through an examination of the level of revenues, but rather through an examination of the relationship between revenues and expenses. With low-income customers in particular, reducing usage would not only reduce billed revenue, but would reduce the expenses associated with billed revenue. The Table below shows the difference between payment patterns for residential customers and for low-income customers. The percentage of accounts in arrears is from 270% to 320% higher for PAWC's low-income customers than for its residential customers as a whole. In the three years examined (2021, 2022, 2023), the average low-income arrears (for accounts having arrears) were from 150% to 185% times the average arrears for residential customers as a whole. Over the three year period, the rate of nonpayment service disconnections for low-income customers having received a disconnect notice was from four times to nearly eight times higher for low-income customers than it was for residential customers as a whole.

Table 21. Payment Patterns of Low-Income and Residential Customers (OCA-5-24, OCA-5-25)

	2021		2022		2023 (YTD)	
	Residential	Low-Income	Residential	Low-Income	Residential	Low-Income
Percent accounts in arrears	18.6%	49.9%	18.3%	53.7%	17.0%	54.8%
Average arrears	$196.19	$353.20	$180.67	$333.02	$179.86	$278.40
Percent of accounts receiving disconnection notices actually disconnected	1.6%	7.6%.	1.6%	4.9%.	2.0%	4.2%.

By reducing low-income usage, PAWC will not only reduce its revenue, but it will reduce its expenses as well. Usage reduction is a particularly effective mechanism to use to

control utility expenses because arrears do not have to be reduced to $0 in order to achieve expense reductions. For example, with working capital, PAWC would experience a reduction in expenses by decreasing the level of arrears; by decreasing the percentage of either accounts or billings in arrears; or by accelerating payments. A $200 arrearage imposes fewer working capital costs than a $300 arrearage all other things equal. Moreover, a 90-day arrears will impose fewer working capital costs than a 150-day arrears all other things equal. It does not matter whether the usage reduction can be attributed to energy efficiency investments, to weather, or to some other cause. The results are the same.

By implementing the proposed RDM to take into consideration the reduction in revenue, without also considering the corresponding reduction in expenses, PAWC is not making an accurate adjustment to maintain stability in earnings. While reductions in expenses are allocated to all customers, reductions in revenues are disproportionately allocated to those customers left behind (with no opportunity to engage in conservation). Accordingly, even if expenses are incorporated as an offset, low-income customers will bear the costs imposed by the RDM without being allowed the corresponding savings.

Q. IS THERE AN ADDITIONAL REASON WHY THE RATIONALE FOR A REVENUE DECOUPLING ADJUSTMENT DOES NOT APPLY TO LOW-INCOME CUSTOMERS IN PARTICULAR?

A. Yes. Particularly when applied to low-income customers, the RDM formula compares non-comparable dollar figures. The Company proposes to begin the process by determining the RDM "cost components." The "Residential Fixed Charge" cost component is calculated as follows: "Total *revenue requirement* allocated to residential customers for rate design purposes less the Volumetric Charge multiplied by the total volumetric sales associated with residential customers divided by the total number of residential customers in the case." (PAWC St. 10, at 91) (emphasis added). The RDM then works by "comparing *actual revenues* recovered from eligible customers in a given month or year to the revenue that would result from applying the RDC cost-components. . ." (Id., at 92) (emphasis added).

As can be seen, the "cost components" that form the basis for the RDM do *not* consider the collectability of dollars actually billed to customers. In contrast, the revenues that form the basis for the RDM *do* consider collectability. The difference is not simply a question of taking write-offs or uncollectibles into account. The write-offs (or uncollectibles) that have been incorporated into rates would be included in the "actual revenues recovered" from customers. What is not included in the "actual revenues recovered," however, are outstanding arrearages.[32] By comparing "actual revenues recovered" to the RDM fixed cost component of the revenue requirement, PAWC is

[32] Arrearages that have been written off as uncollectible are not included in the level of active arrears.

recovering not merely revenues that have been reduced due to weather or conservation investments, but it is *also* recovering the revenues the payment of which have merely been delayed to a future period.

As I explained in more detail in my discussion of collections above, the PUC's annual report on collections for major electricity, gas and water utilities[33] reports that in 2022, PAWC had 6.3% of its residential billings in debt. Indeed, the percentage of PAWC residential billings in debt increased from 4.4% in 2018 to 6.3% in 2022. Had PAWC been operating its RDM during that period, its collection of dollars through the RDM would have increased not because its revenues were permanently lost due to conservation or weather, but rather because its rate of collections was declining.

This reasoning is particularly applicable to billings to low-income customers. Table 22 below shows the average arrears (of accounts in arrears) for all residential water customers compared to the average arrears (of accounts in arrears) for confirmed low-income customers. As can be seen, the average arrears of confirmed low-income customers is consistently nearly two-times higher than the average arrears of residential customers generally. To the extent that PAWC is proposing to base its RDM recovery on the use of "actual revenues recovered," it is clear that it will be transferring proportionately more low-income arrearages into its RDM than residential arrears overall.

[33] Collections Data for Major Electric, Gas, and Water Companies (annual). Available at https://www.puc.pa.gov/filing-resources/reports/quinquennial-report-pursuant-to-section-1415/

Table 22. Average Arrears of Water Accounts in Arrears
(Residential vs. Confirmed Low-Income [LI])
January 2021 to October 2023
(OCA-05-24(e) and OCA-05-25(e))

Year-Month	Average arrearage of res accts in arrears	Average arrearage of conf'd LI accts in arrears	Ratio: LI arrs to res arrs	Year-Month	Average arrearage of res accts in arrears	Average arrearage of conf'd LI accts in arrears	Ratio: LI arrs to Res arrs
202101	$279.39	$546.04	1.95	202206	$208.67	$418.50	2.01
202102	$293.88	$564.52	1.92	202207	$208.45	$400.33	1.92
202103	$293.08	$598.33	2.04	202208	$187.72	$375.63	2.00
202104	$275.07	$544.58	1.98	202209	$187.26	$351.56	1.88
202105	$189.45	$334.06	1.76	202210	$188.14	$341.62	1.82
202106	$156.83	$243.60	1.55	202211	$172.48	$317.01	1.84
202107	$156.43	$239.33	1.53	202212	$169.51	$298.38	1.76
202108	$148.60	$236.99	1.59	202301	$181.30	$307.66	1.70
202109	$140.49	$224.34	1.60	202302	$184.08	$314.96	1.71
202110	$140.52	$224.47	1.60	202303	$193.35	$320.71	1.66
202111	$143.77	$264.59	1.84	202304	$185.88	$292.32	1.57
202112	$136.79	$217.54	1.59	202305	$180.32	$280.64	1.56
202201	$147.56	$234.38	1.59	202306	$168.48	$245.42	1.46
202202	$152.23	$247.20	1.62	202307	$176.04	$246.47	1.40
202203	$169.68	$283.65	1.67	202308	$175.33	$258.72	1.48
202204	$161.53	$280.68	1.74	202309	$173.25	$250.89	1.45
202205	$214.82	$447.29	2.08	202310	$180.57	$266.22	1.47

By transferring these unpaid arrears to the RDM, low-income customers will remain responsible for paying their arrears. However, being the customer left behind and disproportionately bearing the costs of the RDM, they will also be called upon to bear a disproportionate burden of paying the RDM. The low-income customers thus get hit twice.

Q. IS THERE ANY FINAL WAY IN WHICH THE RATIONALE OF THE PROPOSED RDM BREAKS-DOWN WHEN CONSIDERING LOW-INCOME CUSTOMERS?

A. There are two final ways in which the rationale for the RDM breaks down when applied to low-income customer accounts. First, as discussed, the Pennsylvania PUC recently approved the implementation of a PAWC Arrearage Management Program. Under this program, the arrears of program participants will be frozen and will, as participants make full and timely payments, be "forgiven" over time. After a participant's eligible arrears are frozen, they will no longer generate "actual revenues recovered" to PAWC. As low-income customers enter the program, there will be a reduction in gross revenues to PAWC. While PAWC has yet to implement its AMP, according to PAWC, new BDP participants (which are expected to represent the bulk of AMP participants) brought substantial pre-program arrears into the program. From November 2021 through October 2023 (the most recent 24 months available), PAWC reported that new BDP participants had a total of $2,478,461.26 in preprogram arrears (that would be subject to the AMP once implemented). Under the RDM, however, those unrecovered preprogram arrears will be recovered as lost revenues through the RDM since they would be one component of any reduction in "actual revenues collected" as described by Mr. Rea. PAWC has proposed a specific dollar amount ($2,864,700, PAWC St. 1, at 16) to be recovered for the AMP in this proceeding.[34] To the extent that the frozen arrears will reduce "actual revenues collected," however, those costs would already be recovered through the RDM. It would be inappropriate to recover the AMP credits once through the RDM as a

[34] A portion of this recovery would be for set-up and administrative costs.

reduction in "actual revenues collected" and then again through a specific AMP revenue requirement adjustment.

The same reasoning would apply to bill credits provided through increasing participation in PAWC's Bill Discount Program. As BDP participation increases, PAWC will provide increasingly higher levels of bill credits. The BDP tiered discount was implemented on January 28, 2023, and PAWC began to report costs by tier in April 2023. (OCA-V-019). From April 2023 through October 2023, PAWC had provided $6,380,938 of BDP credits. (OCA-V-19). As participation in the BDP increases, the total reduction of "actual revenues recovered" would increase as well. Unless those lost revenues are excluded from the calculation of the RDM, and there is no indication that they would be, to reflect those lost revenues in the RDM would be to double-collect the BDP discount credits, once through the RDM and again through a specific recovery of BDP credits. The Company concedes this result, noting that "the RDM does not specifically account for low-income participants. The fixed RDM fixed component (sic) and the RDM volumetric component applies the same way to Bill Discount Program participants as it does to other customers." (OCA-06-059). The Company states that:

> If participation in the bill discount program is higher than assumed in the development of billing determinants, revenues would be reduced from expected levels and the difference would be reflected in the RDM as the RDM does not contain a specific low-income discount component. The same is true if participation in the bill discount program is lower than assumed in the development of billing determinants, in which case revenues would be increased from expected levels and the difference would be reflected in the RDM.

(OCA-06-060). The Company finally states that "*Any* increase or decrease in the number of customers participating in the Bill Discount Program would cause reductions or

increases in revenues that would be reflected in the RDM calculation. This is one of a number of factors that could cause revenue fluctuations that would be reflected in the proposed RDM." (OCA-06-61) (emphasis added).

What the RDM does, in other words, is to take the revenue associated with low-income bill discounts and charge that lost revenue back to ratepayers through the RDM. Since low-income customers are bearing a disproportionate share of the RDM, since they are the customers left behind, they are, in essence, being charged the costs of their own discounts.

Q. WHAT DO YOU CONCLUDE?

A. I conclude that the RDM collects some "lost revenues" that are not lost at all as a function of a reduction in "actual revenues recovered." Revenues not recovered because they are being paid late rather than not being paid at all skew the amount of revenue included in the RDM upwards. Revenues that are not being collected because they represent frozen arrears subject to PAWC's new AMP would also skew the amount of revenue included in the RDM upwards. Revenues that are not being collected because they represent BDP discounts of new BDP enrollees would also skew the amount of revenue included in the RDM upwards. Because low-income customers do not have the same capacity for conservation as higher income customers have, they bear the brunt of paying each of these costs.

Q. WHAT DO YOU RECOMMEND?

A. I recommend, consistent with the testimony of OCA witness Mierzwa (OCA Statement 4) and OCA witness Hoover (OCA Statement 1) that the proposed RDM should be

denied. If the RDM is not denied in its entirety, the RDM should exempt both BDP revenues and BDP customers from its application. Also, if the RDM is approved, it should be made subject to the same low-income discounts that all other PAWC volumetric charges are subject to. Finally, if the RDM *is* approved, it should not be used to collect revenue reductions attributable to BDP discounts, AMP frozen arrearages, or customer arrearages.

Part 5. The Impact of the Environmental Compliance Investment Charge (ECIC) on Low-Income Customers.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I examine the impacts of PAWC's proposed Environmental Compliance Investment Charge (ECIC) on low-income customers in particular. I conclude that the ECIC will harm low-income customers.

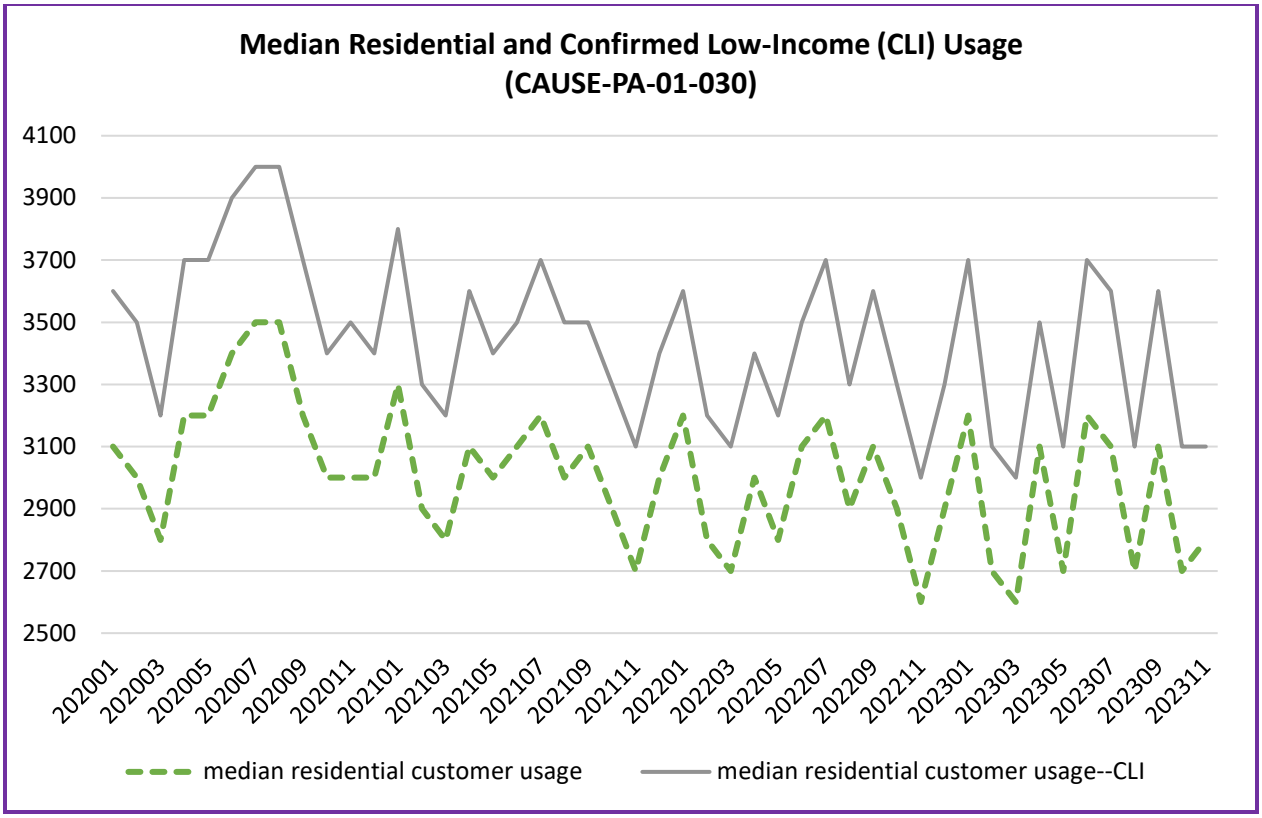
Q. UPON WHAT DO YOU BASE THIS CONCLUSION?

A. As PAWC concedes, the proposed ECIC is a charge that would be imposed above and beyond the normal fixed and volumetric charges imposed on residential customers. (OCA-11-021, OCA-11-022). By creating the ECIC, in other words, PAWC is removing those environmental compliance costs from the set of charges that would otherwise be subject to reduction through the Company's Bill Discount Program. At the same time, PAWC proposes to maintain the low-income bill discounts at their historic levels even though the Company is proposing to substantially increase its fixed and volumetric charges. To impose a non-discounted ECIC is simply to increase low-income bills even further. To that extent, the unaffordable Bill-to-Income (BTI) Ratios identified both by

myself, and by PAWC's own witness, would be even higher than determined both by myself and by Mr. Rea. Those BTI Ratios do not include the additional environmental compliance costs proposed by PAWC to be collected through the ECIC.

Q. WILL LOW-INCOME CUSTOMERS PAY A GREATER PROPORTION OF THE ENVIRONMENTAL COMPLIANCE CHARGES THAN RESIDENTIAL CUSTOMERS GENERALLY?

A. Yes. To the extent that low-income customers have monthly consumption greater than residential customers overall, they will also pay a higher amount of the environmental compliance costs. According to PAWC's data, low-income customers do have somewhat higher monthly usage than do residential customers overall. The Chart below shows the median use of residential and low-income customers by month for January 2020 through November 2023. While low-income median usage fluctuated somewhat between 3,300 gallons and 3,700 gallons per month, residential consumption overall fluctuated between 2,700 and 3,100 gallons per month. (CAUSE-PA-01-030).



In no month since January 2020 did the median usage for residential customers overall exceed the median usage for Confirmed Low-Income customers in particular. Given that higher monthly usage equates to a higher monthly bill, and given that PAWC proposes to apply the ECIC charge as a percentage of a customer's monthly bill, low-income customers will pay a higher amount of the environmental compliance costs compared to residential customers overall given that low-income customers have monthly consumption greater than residential customers overall.

Q. DO LOW-INCOME CUSTOMERS BEAR THE IMPACTS OF ENVIRONMENTAL DEGRADATION IN ANY OTHER WAY?

A. Yes, there are two ways in which environmental degradation imposes harms on the lowest income communities. First, low-income households have the least ability to take steps to protect themselves from the environmental contamination of their water through

the installation of water infiltration. Customers who do not have the financial resources to afford to pay their day-to-day household bills as I described in detail above, also lack the financial resources to install the technologic fixes to improve their water quality through infiltration systems.

Q. UPON WHAT DO YOU BASE YOUR OBSERVATION THAT LOW-INCOME CUSTOMERS LACK THE FINANCIAL RESOURCES TO PAY THEIR DAY-TO-DAY BILLS?

A. The U.S. Census Bureau publishes its short-term "Household PULSE Survey" that considers, amongst other things, the extent of difficulty consumers have had in paying their "usual household expenses" in the "past seven days." The most recent period for which data is published is "Week 64," the period of October 18 through October 30, 2023.[35] While the PULSE Survey is not specific to individual utility service territories, it does provide state-specific data. The most recent Pennsylvania data is presented in the Table below. The PULSE Survey shows that more than 60% of households with income less than $25,000 have had either a "somewhat difficult" or "very difficult" time paying for their usual household expenses, while roughly 45% to more than 50% of households with income at or below $75,000 have. More than half of households with income between $25,000 and $50,000 have had either a "somewhat difficult" or "very difficult" time paying their usual household expenses in Pennsylvania.

[35] U.S. Census Bureau, Household PULSE Survey, Week 63, October 18 – 30, 2023, available at https://www.census.gov/data/tables/2023/demo/hhp/hhp63.html

Table 23. Difficulty paying for usual household expenses in the last 7 days (Pennsylvania) (October 18 – 30, 2023) (PULSE Survey Week 63)

	Not at all difficult	A little difficult	Somewhat difficult	Very difficult	Total of reporting
Less than $25,000	9.6%	30.2%	21.3%	38.8%	100.0%
$25,000 - $34,999	10.3%	29.0%	38.4%	22.4%	100.0%
$35,000 - $49,999	20.7%	30.1%	19.4%	29.9%	100.0%
$50,000 - $74,999	32.8%	21.6%	22.4%	23.2%	100.0%
$75,000 - $99,999	29.6%	39.2%	16.3%	14.9%	100.0%
$100,000 - $149,999	40.4%	30.7%	22.4%	6.5%	100.0%
$150,000 - $199,999	42.3%	29.8%	25.7%	2.2%	100.0%
$200,000 and above	71.6%	23.0%	3.1%	2.4%	100.0%

Given their difficulties simply in paying their "usual household expenses," these households could not reasonably be expected to invest in water infiltration systems to protect against high levels of water contaminants.

Q. WHAT IS THE SECOND WAY IN WHICH LOW-INCOME CUSTOMERS BEAR THE IMPACT OF WATER CONTAMINATION?

A. Second, there are the health impacts of environmental degradation. In reaching this conclusion, it is inappropriate to measure the "health impacts" exclusively in terms of violations of the Safe Drinking Water Act (SDWA). In its seminal study of the relationship between environmentally degraded water and low-income households, the Natural Resources Defense Council (NRDC) reported:

> Although our analysis identified disproportionate risk from drinking water contamination in counties with high racial, economic, and housing/transportation vulnerability, it is likely that our research underestimates the true burden that Environmental Justice communities across the country face. The EPA regulates only a small subset of drinking water contaminants, and the agency has failed to adopt a single new standard for an unregulated contaminant since 1996. Therefore, many serious drinking

water contamination threats (including polyfluoroalkyl and perfluoroalkyl substances or PFASs) are not violations of the law. In addition, monitoring and compliance data on regulated substances are woefully incomplete and occasionally even falsified. Finally, for most contaminants, drinking water is monitored at the point of entry into the distribution system, which does not detect contamination that enters the water or multiplies after that (as is the case with some microbial contaminants that can grow in the distribution system and certain chemical contaminants that can infiltrate into or leach from system pipes). For all of these reasons, it is likely that the true scope and severity of drinking water contamination, and the full picture of disproportionate effects, is greater than this study found.[36]

Q. DOES THIS CONCLUSION APPLY TO THE PAWC SERVICE TERRITORY?

A. Yes. Using the Environmental Working Group's (EWG) Tap Water Database (Sources, Transport, Exposure and Effects of PFAs [STEEP], a partnership between Harvard and the University of Rhode Island),[37] and the zip code specific data provided by PAWC witness Rea (PAWC St. 10, Exh. 10A), I examined data for the PAWC operations serving the 30 zip codes with the highest percentage of customers with income below 100% of FPL. The PAWC data as reported by STEEP is presented in the Table below. The data compares the total number of contaminants detected along with the total number of contaminants that exceed the EWG's health guidelines. The STEEP database reports:

- Legal does not necessarily equal safe. Getting a passing grade from the federal government does not mean the water meets the latest health guidelines.
- Legal limits for contaminants in tap water have not been updated in almost 20 years.

(Id.).

[36] NRDC (2019). Watered Down Justice, at 9-10, NRDC: Washington D.C.

[37] TAP Water Database, available at https://www.ewg.org/tapwater/?gad_source=1&gclid=EAIaIQobChMI8srTtZ64gwMVsU5HAR2SZA5FEAAYASAAEgJmufD_BwE; see also, New Data Show Severity of Water Contamination in Poor Neighborhoods, available at https://web.uri.edu/steep/new-data-show-severity-of-water-contamintion-in-poor-neighborhoods/

Table 24. URI/Harvard Report of Water Contaminants Identified and Water Contaminants Exceeding EWG Health Guidelines
(PAWC areas serving 30 lowest income PAWC zip codes)

PAWC Office	No. Contaminants Detected	No. Exceeding EWG Health Guidelines
PA American Water Punxsy	13	9
PA American Water Brownsville	17	10
PA American Water Brownell	14	8
PA American Water Nesbitt	13	9
PA American Water Clarion	19	11
PA American Water West	17	10
PA American Water Lake Scranton	30	14
PA American Water White Deer	17	12

As can be seen, water contamination has been found to exist in the PAWC service territory irrespective of whether SDWA violations have been found. This water contamination has been found to disproportionately affect low-income communities in particular. Through its proposed ECIC, PAWC proposes to charge those customers who bear the brunt of the contamination, and who have the least capacity to absorb additional costs, the ***most*** for remediating this contamination in the future.

Q. WHAT DO YOU RECOMMEND?

A. I recommend, consistent with the testimony of OCA witness Mierzwa (OCA Statement 4) and OCA witness Hoover (OCA Statement 1) that the ECIC should be rejected. In the alternative, if the ECIC is approved, I recommend that it be made subject to the same low-income bill discounts that PAWC's other volumetric charges are subject to.

Part 6. The Impact of Winter Averaging on Low-Income Customers.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. PAWC's Winter Averaging rate design proposal is likely to result in a transfer of costs from higher-income customers to lower-income customers served by PAWC. The proposal involves placing a cap on non-winter wastewater bills equal to the average water bill for the three months of January, February, and March. The stated theory underlying the proposal is that consumption above that used in these three months is likely to involve outdoor water usage that would not flow through the household's sewer system. Before turning to the distributional impacts of the proposal, however, I first examine the need for the recommendation.

Q. HAVE YOU HAD OCCASION TO REVIEW PAWC WATER BILLS DURING THE WINTER AND NON-WINTER MONTHS?

A. Yes. Data provided by PAWC indicates that there is not a substantial variability in residential water bills (and thus in residential consumption) between the three winter months (as defined by PAWC) and the remaining nine months (deemed to be "non-winter months"). PAWC provided median residential water bills by month for the most recent twelve months available (along with the bills for each individual PAWC account upon which the median was calculated). (OCA-V-003).[38]

[38] The response to this OCA request was marked "confidential." By agreement with the Company, however, only the underlying personal account identifiers were deemed to be confidential. Data that was aggregated or used in calculations was agreed to be public.

The three-month average median bill (i.e., the average of the median bills for January through March) ($62.06) did not substantially differ from the average of the median bills for the remaining nine months ($63.49). In fact, the January 2023 median residential bill ($67.43) was identical to the median residential bills in both June 2023 and July 2022 and *higher* than the median residential bills in each of the other seven non-winter months.

The same is true for low-income customers. The winter average bill ($35.10) is higher than two of the nine non-winter months (November and May: $33.45) and nearly identical to August and December ($35.12). The January median low-income bill ($38.29) is identical to the September median bill, and nearly identical to the July median bill ($38.24). It is higher than each of the bills in the seven other non-winter months. The February median low-income bill ($34.31) was higher than the November and May low-income median bills ($33.45) and nearly identical to the low-income median bill in October ($33.45).

Table 25. Median Residential and Confirmed Low-Income Residential Water Bills by Month for Most Recent Twelve Months
(OCA-05-003, Attachment 1, **CONFIDENTIAL**)[39]
(winter months marked by dashed lines)

	Residential		Confirmed Low-Income[40]	
07-2022	$67.43		$38.34	
08-2022	$62.60		$35.12	
09-2022	$65.82		$38.29	
10-2022	$62.60		$35.87	
11-2022	$57.77		$33.45	
12-2022	$62.60		$35.12	
01-2023	$67.43	Winter average: $62.06	$38.29	Winter average: $35.10
02-2023	$60.99		$34.31	
03-2023	$57.77		$32.70	
04-2023	$65.82		$37.08	
05-2023	$59.38		$33.45	
06-2023	$67.43		$36.73	

Even the data above does not tell the entire story of the failure of the Winter Averaging proposal. Table 26 below shows the number of residential accounts, by month, that are active accounts (represented by receiving a bill), but which have zero consumption (represented by the fact that they receive a bill equal to the monthly service charge but no bill for any volumetric charges). As can be seen, the number of residential accounts that have no volumetric charges on their bills substantially increases during the winter months. While in February 2022, there were 26,701 accounts with no volumetric

[39] While the Attachment to the discovery response was marked as "confidential," by agreement with the Company, only the personal account identifiers were considered confidential, and not aggregated data.
[40] The fact that the median *bills* by Confirmed Low-Income customers are lower than the median bills of residential customers overall does not reflect upon the relative *usage*. A significant proportion of Confirmed Low-Income customers are Bill Discount Program participants who are receiving discounted bills.

charges, in March 2022, there were 27,690 accounts with no volumetric charges. The average winter bill for such accounts, in other words, will be less than the non-winter charges not because the account has usage limited to what PAWC refers to as "Basic Water Service," but rather because the account receives a bill, but *has no usage at all*, in at least one of the three winter months.[41]

Table 26. Number of Residential Water Bills with Zero Usage (Only Meters Charge) By Month for Most Recent Twelve Months (OCA-05-003, Attachment 1, **CONFIDENTIAL**) [42] (winter months marked by dashed lines)	
07-2022	21,471
08-2022	23,017
09-2022	21,256
10-2022	22,305
11-2022	23,206
12-2022	23,173
01-2023	22,381
02-2023	26,701
03-2023	27,690
04-2023	24,265
05-2023	23,465
06-2023	20,635
0 consumption in all 3 winter months (Jan/Feb/Mar)	13,038

Capping warm weather wastewater bills based on the water bills experienced in the winter months of January-February-March will, in other words, involve a direct transfer

[41] It is not the case that the same accounts have zero usage in each month of the winter months. Usage data derived from PAWC bills found that only 13,038 accounts had zero usage during all three months of January-February-March 2023. (OCA-V-003, Attachment 1).

[42] While the Attachment to the discovery response was marked as "confidential," by agreement with the Company, only the personal account identifiers were considered confidential, and not aggregated data.

of costs from those households who can afford to be away from their homes during those months. By being absent from a home, and thus having no volumetric charge, a customer's winter charges will be artificially lower than they are during the non-winter months. As a result, the non-winter bills are capped at a lower level, with the previously billed revenues being reallocated to those customers who are not absent from their homes.

Being able to afford extended absence, in turn, has two aspects to it. On the one hand, the household needs to have sufficient income to be able to afford the out-of-pocket expenses of being away from home, including another place to live. On the other hand, the household needs to have a source of income that provides paid leave. Neither of those two attributes counsels that low-income households will be amongst the households who have extended, but temporary, winter absences from their homes.

Q. IS THERE A SECOND WAY IN WHICH THE WINTER AVERAGING PROPOSAL WILL ADVERSELY AFFECT LOW-INCOME CUSTOMERS?

A. Yes. According to PAWC witness Rea, when a customer is "new" or has "no winter averaging billing data upon which to base a calculation," "the Company will assume a standard usage level of 3,000 gallons per month for a comparison point for billed summer usage." (PAWC St. 10, at 44). This use of a "standard usage level of 3,000 gallons per month" will harm low use customers. If monthly usage during the three winter months is lower than 3,000 gallons, no adjustment will be made to the customer's bill. While these customers will pay the increase in charges due to the reduction in non-winter billed revenue attributable to the use of winter averaging, they will receive none of the benefits of the winter averaging process.

There are a substantial number of low use customers on the PAWC system. Table 27 below shows, for the most recent twelve months available, the usage level by deciles of consumption at or below the 50th percentile (i.e., the median). The Table shows that in only five of these twelve months did the 50th percentile (median) usage reach 3,000 gallons. In only one of the three winter months did the median usage reach 3,000 gallons. The average mean usage for the three winter months was only 2,767.

Table 27. PAWC Residential Usage by Percentile by Month for Most Recent Twelve Months[43]
(of customers have consumption greater than zero in a given month)
(OCA-05-03, Attachment 1 **CONFIDENTIAL**) [44]

Pctile	07/2022	08/2022	09/2022	10/2022	11/2022	12/2022	01/2023	02/2023	03/2023	04/2023	05/2023	06/2023
10th	800	700	800	700	700	700	800	700	600	700	700	800
20th	1,500	1,300	1,400	1,300	1,200	1,300	1,500	1,200	1,200	1,400	1,200	1,400
30th	2,000	1,800	2,000	1,800	1,700	1,800	2,000	1,700	1,600	1,900	1,700	2,000
40th	2,600	2,300	2,500	2,300	2,100	2,300	2,600	2,200	2,100	2,400	2,100	2,500
50th	3,100	2,800	3,000	2,800	2,600	2,800	3,100	2,700	2,500	3,000	2,600	3,100
n=	626,880	627,770	627,381	627,880	627,989	627,648	622,903	628,145	628,640	627,692	629,722	629,323

Applying a "standard usage level of 3,000 gallons per month for a comparison point for billed summer usage," in other words, would deny more than half of PAWC's customers a summer adjustment based on average usage during the three winter months being less than the non-winter month consumption. In all twelve months, customers with

[43] Residential usage by account was calculated from the residential bills provided by PAWC. For accounts with a monthly bill exceeding the standard service charge (of $17.50/month), usage was determined by subtracting the monthly service charge from the bill, and dividing the remainder by the volumetric charge of $1.6108 per hundred gallons).

[44] While the Attachment to the discovery response was marked as "confidential," by agreement with the Company, only the personal account identifiers were considered confidential, and not aggregated data.

consumption *less* than the 50th percentile would not receive a winter averaging adjustment. In only two of the twelve months (July 2022, June 2023) would there be an adjustment even for customers *with* the median usage (given that their usage in those two months is more than the 3,000 "standard usage level").

This result works to disproportionately disadvantage low-income customers who are more likely to be new or have no winter averaging data. In the PAWC service territory, low-income customers are more likely to have changed residences within the last twelve months, thus falling within the category of customers who PAWC labels as being "new" or having "no winter averaging billing data upon which to base a calculation." The mobility of low-income households is 75% higher than the mobility of higher income households. While 14% of households in the PAWC service territory with income of less than $15,000 did not live in the same house they had lived in one year previously, only 8% of households with income more than $75,000 did not do so (0.14 / 0.08 = 1.75).[45]

Q. DO YOU HAVE REASON TO BELIEVE THAT HOUSEHOLDS WITH MOBILITY HAVE A LOWER WATER CONSUMPTION?

A. Yes. I again begin with the population of all PAWC accounts that have received a bill within the most recent twelve months. (OCA-05-003, Attachment 1). From those customers, I delete all accounts that had at least some usage in each of the three winter months. The remaining accounts either did not receive a bill in at least one winter month, or received a bill with zero gallons of consumption in at least one winter month. I deemed these customers to be "new" or as having "no winter averaging billing data upon

[45] American Community Survey (5-year data), Table B07010, 2021.

which to base a calculation." For these customers, PAWC states that it will assign a standard usage of 3,000 gallons per month in the implementation of its winter averaging proposal.

Table 28. Median Consumption (gallons) in April, May and June
For Accounts Missing One or More Winter Months of Usage
(OCA-05-003, Attachment 1 **CONFIDENTIAL**) [46]

Number of winter months missing usage data	April 2022	May 2022	June 2022
1 month missing	2,100	2,000	2,400
2 months missing	1,300	1,509	2,000
3 months missing	800	1,300	1,800
1, 2 or 3 months missing	1,600	1,700	2,000

As can be seen, households that are either "new" or having "no winter averaging billing data upon which to base a calculation" have median consumption that is substantially lower than the 3,000 gallons that PAWC proposes to apply to such households to determine whether they should have their non-winter bills capped under the Company's winter averaging proposal. These low-use customers, which are likely to be disproportionately low-income, are unfairly and unreasonably excluded from receiving PAWC's proposed winter averaging adjustments.

Q. IS THERE ANOTHER WAY IN WHICH THE WINTER AVERAGING PROCEDURE WILL DISPROPORTIONATELY HARM LOW-INCOME CUSTOMERS?

[46] While the Attachment to the discovery response was marked as "confidential," by agreement with the Company, only the personal account identifiers were considered confidential, and not aggregated data.

A. Yes. As I demonstrate below, low-income customers are less likely to be residents of homes with substantial outdoor summer consumption. As a result, low-income customers will be less likely to have their summer wastewater bills capped at a lower level than those bills historically have been. These customers, in other words, will fall within that population of customers who are called upon to bear the burden of the foregone revenue from having non-water bills capped, with little opportunity to be a recipient of any of the reduced bills. There is little question but that low-income customers in the PAWC service territory are less likely to be residents of single family homes with substantial outdoor water consumption affected by the winter averaging proposal. While the Census Bureau does not directly report the number of units per housing structure disaggregated by income, it does provide data that allows me to reach conclusions about the relationship between dwelling types and income. Within the PAWC service territory, nearly 95% of homeowner units are comprised of single-family homes (82% single-family detached homes; 12% single-family attached homes).[47] When two-family homes are also considered, the percentage increases to more than 95%. In contrast, fewer than 40% of rental units are single-family homes (including both attached homes and detached homes).

I then examined the relationship between rental status and income. Only 4.2% of owner-occupied homes are occupied by households with an annual income less than $15,000.[48] In contrast, more than 62% of households with an annual income of less than $15,000

[47] American Community Survey (5-year data), Table B25032, 2021.

[48] American Community Survey (5-year data), Table B25118, 2021.

live in rental housing.[49] Clearly, when PAWC identifies its population of customers who have "water usage that is used for outdoor purposes in the summertime (e.g., watering lawns, filling pools, etc.)," it is identifying a higher income population. Even if incomes are considered up to $35,000, more than half of those households are renters rather than homeowners.[50]

Q. IS THERE A FINAL WAY IN WHICH YOU QUESTION THE LEGITIMACY OF THE RATIONAL FOR A WINTER AVERAGING PROCESS?

A. Yes. PAWC data supports the conclusion that customers who have non-winter usage capped at no more than their winter usage have substantial upward variability in their consumption. The customers who would not benefit from the winter averaging process, however, have extremely low usage. In reaching this conclusion, I began by looking at the usage implicit in the residential bills provided by PAWC at existing rates. (OCA-05-003, Attachment 1).[51] For the most recent 12 months from these accounts provided, I deleted any account that had one or more months with no bills as well as any account that reported receiving only a service charge (but no volumetric charges). The end result was the population of customers with twelve full months of bills with at least some reported volumetric usage (n=521,003 bills). For each of these accounts, for each non-winter month, I determined whether the non-winter month bill was more or less than the 3-month average winter bill. I finally compared: (1) the usage for the months in which the

[49] Id.

[50] Id.

[51] In looking at this consumption, I could not, of course, determine which months involved a unit with a full month of occupancy and which months might have had partial months of occupancy.

non-winter bill would be higher than the 3-month winter average, to (2) the usage in months where the non-winter bill would be lower. The first look at this data is set forth in Table 29 below.

Table 29. Average Median Usage of Accounts where Non-Winter Usage is Higher or Lower than 3-month Winter Average Usage (12 most recent months) (accounts with 12 complete months of bills with usage >0 gallons) (OCA-05-003, Attachment 1 **CONFIDENTIAL**)[52]

Month	Total No. Bills with 12 Months Use >0	Median Use All Accounts	Median Use For Accounts with:	
			Non-Winter Usage Higher than Winter Avg	Non-Winter Usage Lower than Winter Avg
Jul 2022	521,003	3,400	3,900	2,500
Aug 2022	521,003	3,000	3,700	2,500
Sep 2022	521,003	3,200	3,700	2,600
Oct 2022	521,003	3,000	3,500	2,600
Nov 2022	521,003	2,700	3,200	2,500
Dec 2022	521,003	3,000	3,300	2,700
Jan 2023	521,003	3,300	---	---
Feb 2023	521,003	2,800	---	---
Mar 2023	521,003	2,700	---	---
Apr 2023	521,003	3,200	3,500	2,500
May 2023	521,003	2,800	3,300	2,500
Jun 2023	521,003	3,300	4,000	2,400
All months	521,003	2,967	---	---

The data in the Table above shows that accounts that would not benefit from the winter averaging procedure have median usage below the median usage for all accounts. They

[52] While the Attachment to the discovery response was marked as "confidential," by agreement with the Company, only the personal account identifiers were considered confidential, and not aggregated data.

have median consumption each month substantially below the median consumption of customers that would benefit from winter averaging.

Overall, as I discussed above, by capping non-winter bills at no more than winter consumption, what PAWC is doing is redistributing dollars from higher use customers to lower use customers. Moreover, as I discussed above, these chronically low use customers are disproportionately likely to be low-income customers.

Q. WHAT DO YOU RECOMMEND?

A. I recommend that the winter averaging proposal of PAWC be disapproved. The recommendation of OCA witness Mierzwa (OCA Statement 4) should instead be adopted. In the alternative, should the winter averaging proposal be adopted, it should be made subject to the same low-income discounts that other PAWC volumetric charges are made subject to.

Part 7. An Increased Return on Equity for Exemplary Management is Not Warranted.

Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I review PAWC's management performance with respect to customer service and credit and collection to assess whether the Company merits a higher return on equity to compensate it for exemplary management. Company witnesses Everette and Buckley have argued that PAWC should be granted an equity return at the "upper end" of the range determined by PAWC's witness to be reasonable. (PAWC St. 1, at 3, 33-46 and PAWC St. 13, at 57-59). If an equity return lower than that "upper end" is approved, Everette and Buckley recommended an equity adder of "no less than" 0.25%

be approved to reflect claims of superior management. (PAWC St. 1, at 33 and PAWC St. 13, at 59). I conclude that such additional compensation is not warranted.

Q. IS THE CONTROL OF COLLECTIBLES AN ELEMENT OF MANAGEMENT PERFORMANCE?

A. Yes. PAWC has been cautioned for years about its need to improve management in particular areas. Consider, for example, its need to control long-term receivables. The Commission staff's Performance Management Audit issued in December 2018, noted that PAWC had previously been told that it needed to "explore additional strategies to accelerate the recovery of overdue customer accounts receivable and continue collection measures already in place."[53] The Audit stated that "[g]enerally, older accounts receivable balances are less likely to be collected and increase the risk of incurring bad debt expense."[54] Staff added that "Due to the constantly changing size of total receivables, the amounts within a category are less important than the percentage of total receivables that category represents."[55] Staff examined the percent of total receivables by the age of those receivables.[56] Based on this examination, Staff concluded that "although PAWC and AWWSC improved aged receivable balances, *more work is necessary*."[57] It

[53] 2018 Management Audit, at 80 (Finding X-2), Docket No. D-2018-2646503.

[54] Id., at 81 – 82.

[55] Id., at 81.

[56] The aging buckets Staff used were: (1) current to 30 days; (2) 31 – 60 days; (3) 61 – 90 days; and (4) 91 days or more. Id., at 81.

[57] Id. (emphasis added).

recommended that PAWC "implement *additional strategies* to reduce customer accounts receivables more than 90 days overdue."[58]

Q. DID PAWC PROPOSE OR ADOPT "ADDITIONAL STRATEGIES" IN RESPONSE TO THE PUC AUDIT RECOMMENDATION?

A. No. Rather than proposing any specific "additional strategies," PAWC merely indicated that it would "meet with local state operations monthly to review [accounts receivable] and collections strategies." [59] This agreement to hold "monthly meetings" was the same response PAWC had made to the previous PUC management efficiency audit. However, those "monthly meetings" were discontinued in 2018. PAWC asserted that "management believes these efforts have helped to reduce long-term overdue balances."[60] The Staff findings, however, showed this "belief" to be in error, with reductions in short-term receivables being more than offset by increases in long-term (i.e., 90+ day) receivables.[61]

Q. DID THE 2023 PUC MANAGEMENT AUDIT OF PAWC ADDRESS THE COMPANY'S TREATMENT OF RECEIVABLES?

A. Yes. The 2023 Management Audit stated that "despite measures to address payment difficulties, customer account balances aged more than 150 days increased significantly since early-2020. . . Although PAWC's efforts are commendable, as of February 2023, the company's over 150-day customer receivables continue to reflect substantially higher

[58] Id. (emphasis added).

[59] PAWC (January 2019). Implementation Plan in Response to the 2018 Management Efficiency Investigation, at 43.

[60] 2018 Audit, at 80.

[61] Id., at 81-82.

balances than those experienced prior to the pandemic."[62] While "this trend" is "not caused by the company," the 2023 Audit stated, "its effects must be addressed by PAWC."[63] In response to this Audit language, PAWC chose not to adopt any new or additional strategies to address its long-term receivables. Instead, as in response to the prior PUC Management Audit, PAWC committed simply to continue doing what it has previously been doing.[64]

Q. HAVE YOU REVIEWED PAWC'S LONG-TERM ARREARS WITHIN THE RESIDENTIAL CLASS OVER TIME?

A. Yes. While the Staff's last management audit did not focus exclusively on residential arrears, I have focused exclusively on long-term residential arrears. The issues which Staff raised in the 2018 Management Audit regarding long-term arrears remain valid concerns with respect to the residential class today. In my examination, I use the same data used by Staff's 2018 Management Audit, in that I examine: (1) the percentage of receivables by age (rather than the absolute dollar amounts); (2) the arrears that are 90 days old or more; and (3) the arrears over a multi-year period. While Staff examined arrears for the four years (2014, 2015, 2016, 2017) preceding 2018, I examine arrears for the five years following the Staff Management Audit (2018, 2019, 2020, 2021, 2022, 2023 YTD).

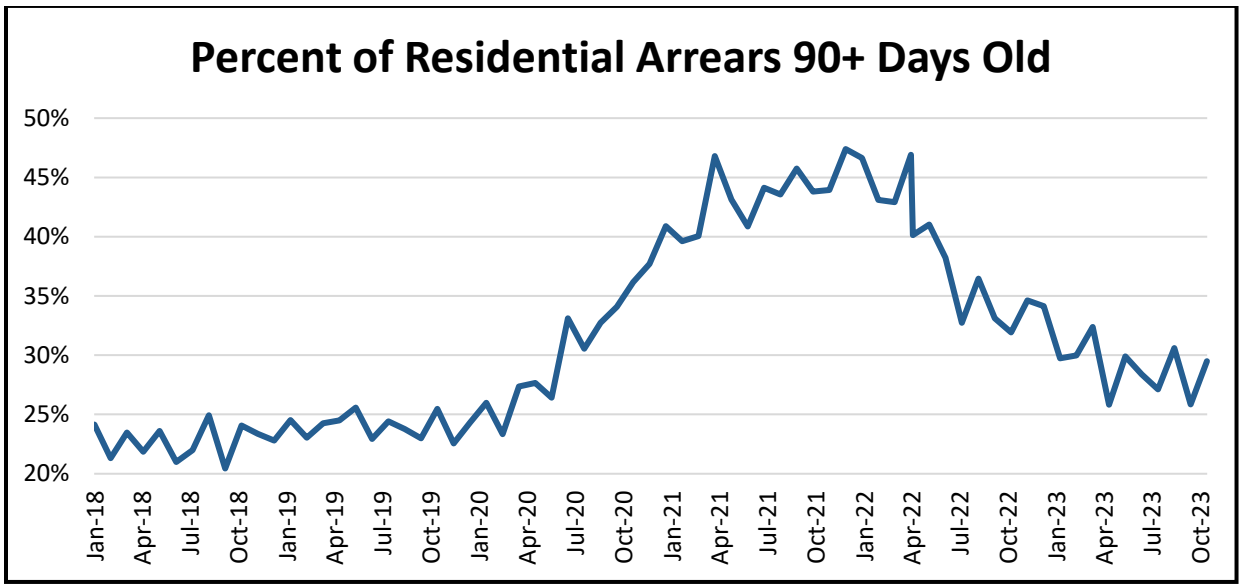
Q. WHAT DO YOU FIND?

[62] PAPUC, Bureau of Audits (October 2023). Pennsylvania-American Water Company, Management and Operations Audit, at 83 – 84, Docket No. D-2022-3035217.

[63] Id.

[64] PAWC (October 2023). Implementation Plan in Response to the 2022-2023 Focused Management and Operations Audit, at 39.

A. I reach the same conclusion that the Staff reached in its 2018 Management Audit. While PAWC has seen a decline in long-term arrears from the spike it experienced during the economic crisis associated with the COVID-19 pandemic (in 2020 and 2021), it has not reduced its long-term arrears to pre-pandemic levels. Prior to March 2020, 90+ day arrears consistently represented less than 25% of PAWC's total accounts receivable. Beginning in March 2020, and continuing through March 2022, long-term arrears spiked to more than 45% of total accounts receivable. The average 2023 long-term arrears, however, of 29% (through October), while lower than the 38% in 2022 and 44% in 2021, are nonetheless substantially in excess of the 2018 level of 23% and the 2019 level of 24%.



On a month-over-month basis, the average percentage of total accounts receivable comprised of long-term arrears is higher in 2023 (YTD) than it was in either 2018 or 2019 (prior to the COVID-19 pandemic). For example, the percentage of long-term arrears in January 2023 (30%) was higher than either January 2018 (24%) or 2019 (25%),

while June 2023 (28%) was higher than either June 2018 (21%) or June 2019 (23%). October 2023 (29%) was higher than either October 2018 (24%) or October 2019 (25%).

Q. DO YOU HAVE OTHER REASON TO CONCLUDE THAT PAWC HAS EXHIBITED LESS THAN EXEMPLARY MANAGEMENT IN ITS CONTROL OF RESIDENTIAL ARREARS?

A. Yes. The PUC reports annual data on collections performance for the major electric, gas, and water companies. Table 30 presents a comparison of PAWC's collections metrics for 2018 through 2022 to the metrics for Aqua PA, Pennsylvania's other large water utility.

Table 30. Selected Collections Metrics (2018 – 2022) [65]
PAWC vs. Aqua PA
(Penn PUC, Collections Data for Major Electric, Gas, and Water Companies [annual])

	Net Write-Off Ratio		Pct Nonpayment Disconnections per Customer		Pct Accounts Overdue		Percent Billings in Debt	
	PAWC	Aqua	PAWC	Aqua	PAWC	Aqua	PAWC	Aqua
2018	1.82%	0.66%	4.06%	1.85%	18.15%	14.23%	4.44%	3.47%
2019	1.73%	0.55%	4.16%	1.76%	17.02%	13.83%	4.52%	3.32%
2020	0.92%	0.25%	0.38%	0.31%	18.37%	13.82%	6.22%	3.93%
2021	1.55%	0.81%	3.21%	1.75%	16.73%	13.00%	7.56%	4.70%
2022	1.35%	0.58%	3.83%	1.35%	17.36%	13.76%	6.29%	4.03%

The PUC's annual report on collections data documents that:

- In 2022, PAWC had 6.3% of its residential billings in debt, more than two percent higher than Aqua (the next highest). The percentage of PAWC residential billings in debt has increased from 4.4% in 2018 to 6.3% in 2022.
- PAWC had over 17% of its residential customers in debt, nearly 4% higher than Aqua (the next highest) (17.4% vs. 13.8%). After dipping somewhat in 2021, the

[65] Collections Data for Major Electric, Gas, and Water Companies (annual). Available at https://www.puc.pa.gov/filing-resources/reports/quinquennial-report-pursuant-to-section-1415/

percentage of residential customers in debt were, in 2022, nearly as high as it was before the COVID pandemic.

- PAWC's percentage of gross residential write-offs (1.35%) was nearly two-and-a-half times higher than Aqua PA's percentage of residential gross write-offs (0.58%).

- PAWC had nearly 80% (78%) of all Class A water utility shutoffs in Pennsylvania, despite having only somewhat over half (52%) of residential customers. It had more than 60% of the residential accounts in arrears in the state.

- Not only does PAWC have a disproportionate number of disconnections, it disconnects service to its residential customers at a disproportionate rate. PAWC disconnects roughly 4% (3.83%) of its residential customers, a rate that is nearly three times higher than Aqua PA, the next highest water utility (1.35%).

Overall, PAWC's collections performance has been declining since 2018. The Pennsylvania PUC measures arrearages by a metric called "weighted arrears" (also known as "bills behind"). Measuring "bills behind" allows a utility not only to compare its collection performance between time periods (which may have differing bill levels), but between utilities as well. The PAWC weighted residential arrears has increased from 2.85 bills behind in 2018 to 4.20 in 2022, an increase of nearly 50% in just four years.

Based on this data and discussion, I conclude that a water utility that has such poor collections performance, a critical function of management, does not merit a higher return on equity for superior management performance.

Q. DO YOU HAVE ANY FINAL CONCERNS ABOUT PAWC'S MANAGEMENT OF ITS RESIDENTIAL COLLECTIBLES?

A. Yes. PAWC is experiencing a continuing growth in the dollars of arrears on residential accounts at the time those accounts are disconnected for nonpayment. While in 2018 and 2019, the average arrears at the time of a nonpayment disconnection were roughly $350

($342.98 and $347.98 respectively), by 2022, the average arrears at the time of disconnection had grown to $549.29. In the first ten months of 2023, the average arrears at the time of disconnection were $495.26. (OCA-V-24).[66] Controlling the growth of arrears at the time of disconnection relates to management performance in much the same way that controlling the growth of long-term arrears does, as considered in the Commission's Management Performance Audit of PAWC. Minimizing the level of arrears at the time of disconnection is a management strategy relating to both the control of costs to be paid by all other ratepayers and the retention of revenue. To the extent that the level of arrears at the time of disconnection is growing over time, the risk of the permanent loss of revenue from the payment of those arrears is growing as well. To the extent that the level of arrears at the time of disconnection is growing over time, future revenue stability is growing as well, due to the increased risk of future lost revenue occurring when accounts are disconnected and thus not contributing to future sales.

Q. HAVE YOU EXAMINED ANY ASPECT OF PAWC'S CUSTOMER SERVICE PERFORMANCE, NOT RELATED TO CREDIT AND COLLECTION?

A. Yes. The first metric I examined involves the handling of complaints by PAWC. In 2022, the most recent year for which complete data is available, the PUC's Bureau of Consumer Services (BCS) received 681 consumer complaints from PAWC customers. Of those complaints, BCS found 25% to be to be "justified." That rate of justified complaints is 25% higher than Aqua PA (which had a 2022 justified complaint rate of

[66] Due to COVID-related restrictions, PAWC (as with other Pennsylvania utilities) did not disconnect service for nonpayment during much of 2020 and 2021.

20%) and nearly two times higher than the justified complaint rate of other Class A water utilities.[67]

A "justified complaint" is a "consumer complaint where, prior to BCS intervention, the company did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, tariffs or guidelines when the consumer brought the complaint to the company's attention."[68] A water utility that has one of the highest percentages of justified consumer complaints in the state amongst water utilities, after having a disproportionate number of complaints in the first instance, cannot be found to be exhibiting exemplary management.

In the first three quarters of 2023, the total number of justified complaints actually increased over the corresponding quarters of 2022. The 686 PAWC complaints found to be justified in the first three quarters of 2023 represented a 29% increase from the 532 justified complaints in the first three quarters of 2022, a rate of growth far higher than the growth in its overall customer count.

Q. IS THERE ANY OTHER ASPECT OF CUSTOMER SERVICE THAT YOU HAVE EXAMINED?

A, Yes. Not only does PAWC lead the state in residential complaints, the Company also leads the state in forcing residential customers to seek BCS relief in the provision of payment arrangements. In 2022, the last year for which complete data is available,

[67] UCARE Report, January through December 2022, at 12, available at https://www.puc.pa.gov/filing-resources/reports/consumer-activities-report-evaluation/.

[68] 2022 UCARE Quarterly Update, 4th Quarter [January – December], at 20, Glossary of Terms.

customers of Pennsylvania Class A water utilities filed a total of 1,940 Payment Arrangement Requests (PARs) with BCS. Of those, 1,499 (77%) were filed by PAWC residential customers. While the percentage of justified PARs by PAWC customers (18%) was lower than the percentage of justified PAR requests by Aqua PA (28%), the *number* of PAWC's justified PAR requests to BCS was more than four times higher than the number of Aqua PA requests.

A justified Payment Arrangement Request is one, "where, prior to BCS intervention, the company did not comply with Commission regulations, reports, Secretarial Letters, tariffs or guidelines."[69]

The difference in numbers does not simply reflect the relative size of the respective utilities. According to the PUC's data on collection performance, PAWC had just over half (53%) of all residential water customers (642,776 of 1,209,856).[70]

Q. PLEASE EXPLAIN THE NEXT METRIC OF CUSTOMER SERVICE THAT YOU HAVE EXAMINED.

A. I have examined the number of "verified infractions" for PAWC. Pennsylvania's BCS tracks the number of "verified infractions" by year and by utility. A "verified infraction" involves a finding by BCS that the utility engaged in a "misapplication or infringement of a Commission regulation, particularly the standards and billing practices for residential utility service."[71] Through the first three quarters of 2023, PAWC had 191 "verified

[69] Id.

[70] Pennsylvania PUC (updated October 18, 2023). 2022 Collections Data for the Major Electric, Gas and Water Companies, available at https://www.puc.pa.gov/media/2603/2022-master-collections-data-website-version.pdf.

[71] 2023 UCARE Quarterly Update, at 20.

infractions," 50% more than Aqua PA had (130). Of those "verified infractions," 185 (97%) involved Chapter 56 infractions.

PAWC's performance with respect to verified infractions demonstrates a sharp decline in recent years. In the first three quarters of 2019,[72] BCS reported that PAWC had only 34 verified infractions. That number fell to 27 in 2020 before climbing to 88 in the first three quarters of 2021. In 2022, however, the number of PAWC verified infractions more than tripled (from 88 to 295) with the 2023 data (191) remaining at a level nearly six times higher than prior to the COVID pandemic.

A water utility that has half again more "verified infractions" than the next largest water provider cannot be found to have superior management regarding customer service.

Q. HAVE YOU EXAMINED PAWC'S "CUSTOMER SATISFACTION" AS AN ELEMENT OF ITS CUSTOMER SERVICE?

A. Yes. According to PAWC witness Deborah Degillio, PAWC and the Customer Service Organization (CSO):

> leverage multiple sources of customer feedback to monitor overall customer satisfaction and satisfaction with individual service experiences, including targeted surveys taken immediately after phone, field and customer portal interactions and a customer satisfaction survey of all PAWC customers conducted quarterly. This approach allows the Company and the CSO to stay abreast of changing customer expectations and align performance goals to meet those customer needs.

(PAWC St. 9, at 8). Very few results are compiled from the "targeted and quarterly surveys" referenced by Ms. Degillio, however. When asked for "the results of all 'targeted

[72] I examine the first three quarters to make the data comparable to the 2023 data.

surveys' (as that phrase is used by Ms. Degillio) since January 1 2020," no separate results for targeted surveys were provided. (OCA-06-018(b), referencing the same confidential attachment provided for OCA-06-018(a)). When asked for the "results of each 'quarterly customer satisfaction survey' undertaken since January 1, 2020," the "results" were limited to the **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** (OCA-06-018(a), Attachment 1, Confidential). **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

As such, based on what was provided by PAWC regarding the "quarterly surveys" or "targeted surveys" referenced by Ms. Degillio, PAWC has not compiled information that could have been used to assess how PAWC might improve its customer satisfaction, or even improve its collections outcomes from customers, (OCA-006-018(a) – (b), Attachment 1 (Confidential)).

Q. DOES PAWC MEASURE CUSTOMER SATISFACTION WITH RESPECT TO LOW-INCOME CUSTOMERS SEEKING TO ENROLL IN THE BDP OR SEEKING OTHER RELIEF FROM AN INABILITY-TO-PAY?

A. No. No quarterly survey is directed either toward Confirmed Low-Income customers or toward Bill Discount Program participants. (OCA-06-019, OCA-06-020). Moreover, of the quarterly survey that is performed, or the "targeted survey" directed toward customers having particular transactions with PAWC, no survey questions are included with respect to a

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]** (OCA-06-018(b), Attachment 1, confidential, OCA-06-018, Attachment 2, Confidential). **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

Q. DO YOU HAVE A RESPONSE TO THE COMPANY'S CHARACTERIZATION OF ITS MANAGEMENT PERFORMANCE ON UNIVERSAL SERVICE?

A. Yes. PAWC witness Everette asserts that "the Company's H2O program ranks at the top of the Pennsylvania water utility customer assistance programs for the types of benefits provided under the program." (PAWC St. 1, at 34). This observation was reasserted by PAWC witness Bulkley. (PAWC St. 13, at 58).

These statements are indicative of nothing and should be disregarded in assessing PAWC's management performance. In fact, no such "ranking" has occurred by anyone. When asked to "provide a complete listing of ranking of Pennsylvania water customer assistance programs, which listing has PAWC ranked 'at the top,'" the Company responded that it "is not aware of any such 'listing' and the referenced statement is not based on a list." (OCA-011-023). [73] When asked what Pennsylvania water utilities were

[73] PAWC did not explain how it could be "ranked at the top" given the lack of a "listing."

not included in the comparisons which had PAWC "rank[ed] at the top," PAWC further conceded that:

> there is no such list. The statement that "The Company's H2O Program ranks at the top of the Pennsylvania water utility customer assistance programs for the types of benefits provided under the program" was based on the fact that the Company's hardship grant amount ($500) is the highest of any Pennsylvania water utility. PAWC also offers a bill discount program which provides discounts to both fixed and volumetric charges to customers up to 150% of the federal poverty level.

(OCA-11-025). Contrary to the assertions of PAWC witnesses Everette and Bulkley, in other words, there is no-one who has made a comparison of Pennsylvania water utilities and "rank[ed] [PAWC] at the top" with respect to the "types of benefits provided" under its customer assistance program. Other Pennsylvania water companies offer low-income bill discount programs (e.g., Aqua PA, PWSA, CUPA). Other water utilities offer arrearage forgiveness (e.g., Aqua PA, PWSA). The statements are nothing more than spin and marketing rather than an assessment of relative ranking between programs.

Finally, Ms. Everette's citation of the size of its hardship grant amount is hardly reason to find superior management when it is viewed in light of a comparison of PAWC's collections problems. According to the PUC's 2022 "Collections Data for the Major Electric, Gas and Water Companies," PAWC had 52% of the residential customers of Pennsylvania's water companies. In contrast, it had 78% of the residential nonpayment disconnections. A comparison of the total terminations shows that while PAWC disconnected 24,625 residential accounts in 2022, Aqua PA disconnected only 5,585 accounts and all other Class A water companies combined disconnected only 1,226 residential accounts. Indeed, in 2023 (YTD--October), PAWC issued 129,379 disconnect notices to water customers who had already provided information to the Company establishing their low-income status (OCA-05-025), disconnected 8,724 residential water customers who had provided information to the

Company establishing their low-income status (OCA-05-025, Revised), and yet provided only 1,916 hardship grants in that same time period (CAUSE-PA-1-013). In 2022, PAWC issued 182,239 disconnect notices to customers known by PAWC to be low-income (OCA-05-025), disconnected 14,562 accounts known by PAWC to be low-income (OCA-05-025, Revised.), and yet provided only 961 hardship grants. (AUSE-PA-01-013). PAWC's use of its hardship grants to respond to the arrears of low-income customers, and to prevent the loss of service due to nonpayment disconnections of those customers, is hardly indicative of exemplary management.

Q. WHAT DO YOU RECOMMEND?

A. My testimony and that of OCA witness Alexander (OCA Statement 6) support the recommendation by OCA witness David Garrett (OCA Statement 3) that PAWC should not be rewarded with a higher return on equity based on its management performance. (OCA St. 6, OCA St. 3).

In addition, with respect to customer satisfaction surveys, I recommend that the population targeted by PAWC's "targeted surveys" be expanded to include: (1) customers seeking to enroll in the BDP and/or AMP; (2) customers seeking to enroll in a deferred payment arrangement; (3) customers expressing a difficult paying, or an inability-to-pay their bills in a full and timely manner; and (4) customers responding to the pending (or already completed) disconnection of service for nonpayment. The results of these targeted surveys should be compiled, provided to the PAWC LIAG at each quarterly meeting, and subject to discussion at LIAG should a member of the group have questions or identify issues flowing from the targeted surveys. By compiling information that can be used to assess how PAWC might improve its customer satisfaction or improve its collections outcomes from customers,

PAWC will improve its management control of costs and revenues, improve the stability of its earnings, and thus control the need for future rate relief.

Part 8. Arrearage Management Program (AMP) Cost Recovery.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I explain why PAWC should modify its request for the recovery of costs associated with its implementation of the Arrearage Management Program. PAWC has included $2,864,700 in its cost of service to fund the AMP. (PAWC St. 1, at 16). Of that, $2,377,200 is PAWC's claim of costs associated with the AMP credits. (OCA-11-029). PAWC claims 100% of the AMP credits as an "uncollectible expense." (Id.) In calculating its claim of AMP credit expenses, PAWC assumes that there will be 7,924 BDP participants with arrears in excess of $150, that 100% of those customers will have arrears exceeding the AMP threshold of $150, and that 100% of the credits will be grant each year. (OCA-11-029).[74] The adjustment I make to PAWC's claimed cost recovery for AMP occurs in two steps.

Q. WHAT IS THE FIRST ADJUSTMENT YOU PROPOSE TO THE AMP COST RECOVERY?

A. PAWC assumes that 100% of the possible AMP credits that might be earned each year will, in fact, be provided each year. It is possible to see that assumption in PAWC's claim of a $300 credit per participant. A $300 annual credit assumes 100% of the credits are earned because PAWC's AMP provides a $25/month credit for each full and timely payment made ($25/month x 12 months = $300). This is an unreasonable assumption. PAWC

[74] 7,924 BDP participants with arrears greater than $150 x 100% participation x 100% grant of $300 credit per year. 7,924 x 1 x $300 = $2,377,200.

reports that from November 2021 through October 2023 (the most recent 24 months available), it issued a monthly average of 3,853 bills to BDP water participants with pre-program arrears, while issuing an additional 264 bills to BDP wastewater participants with pre-program arrears (a combined total of 4,116 BDP participants with pre-program arrears). During that same 24-month period, PAWC received a monthly average of 426 full and timely payments from BDP water participants with pre-program arrears, and a monthly average of 17 full and timely payments from wastewater participants with pre-program arrears (a combined total of 443 BDP participants with pre-program arrears making full and timely payments). (OCA-05-010). Rather than having 100% compliance with PAWC's requirement that AMP participants make "full and timely" payments in order to receive an AMP credit, PAWC had a payment compliance of only 10.8%) (443 / 4,116 = 0.10754). Rather than merely *assuming* a 100% compliance in calculating its AMP credit costs, therefore, PAWC should use the known and measurable historic payment compliance it has experienced rounding the historic experienced rate up from 10.8% to 11%).

Q. WHAT IS THE SECOND STEP UNDERLYING THE ADJUSTMENT YOU PROPOSE TO THE RECOVERY OF AMP ARREARS?

A. According to PAWC, from November 2021 through October 2023 (the most recent 24 months available), PAWC billed BDP participants $20,407,449 for water service and $181,826 for wastewater service ($20,589,275 total) (OCA-05-010). During that same time period, PAWC reports that it wrote-off $3,682,087 from H2O program participants (CAUSE-PA-033), a write-off rate of 17.9% ($3,682/087 / $20,589,275 – 0.179). PAWC, however, did not adjust its proposed addition to uncollectibles for those dollars that would have already been in uncollectibles even without the AMP. Using this known and measurable historic data, PAWC's addition of dollars to uncollectibles to reflect AMP credits should be reduced by the percentage of BDP dollars already historically included in uncollectibles.

Q. WHAT IS THE RESULT OF THE TWO STEP ADJUSTMENT YOU EXPLAIN ABOVE?

A. Based on the two steps I explain above, I recommend that the total AMP credit cost recovery be reduced to $214,728.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does at this time. However, I reserve the right to supplement my testimony as necessary should new information or issues be provided.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Roger D. Colton, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 5, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: February 1, 2024

Signature: _____
Roger D. Colton

Consultant Address: Fisher, Sheehan, & Colton
34 Warwick Road
Belmont, MA 02478

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2023-30343189 (water)
v.	:	Docket No. R-2023-30343190 (wastewater)
	:	
Pennsylvania American Water Company	:	

Rebuttal Testimony of Roger Colton

on behalf of

Pennsylvania Office of Consumer Advocate

OCA Statement 5R

February 21, 2024

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Roger D. Colton. My business address is 34 Warwick Road, Belmont, MA.

Q. ARE YOU THE SAME ROGER COLTON WHO PREVIOUSLY PREPARED DIRECT TESTIMONY ON BEHALF OF THE OFFICE OF CONSUMER ADVOCATE IN THIS PROCEEDING?

A. Yes, I am.

Q. PLEASE EXPLAIN THE PURPOSE OF YOUR REBUTTAL TESTIMONY.

A. The purpose of my testimony is to respond to the Direct Testimony of Kevin Higgins as it relates to universal service costs. Mr. Higgins argues that these costs should be allocated exclusively to the residential class through a "direct assignment." (OSBA St. 1, at 31-32).

Q. HOW DOES PAWC ALLOCATE ITS AMP COSTS?

A. According to Mr. Higgins, PAWC allocates its AMP costs (credits, administrative costs) among its water customer classes based on the historical incurrence of net charge offs. It allocates its wastewater AMP costs based on customer count. (OSBA St. 1, at 31). [1] PAWC allocates its H2O Grant and Discount administrative costs among customer classes using an operations and maintenance (O&M) composite factor. (Id.).

Q. HOW DO YOU RESPOND?

A. PAWC's inter-class allocation of the costs of its AMP, as well as the allocation of its administrative costs for the H2O Grant and Discount programs should be based on the allocation of uncollectibles. Several reasons support this conclusion.

[1] While I proposed an adjustment to this figure in my Direct Testimony, the nature of that adjustment does not affect the reasoning I present here with respect to cost allocation.

Arrears that will be written off as "bad debt" through the AMP are caused by the pre-program nonpayment of bills. That nonpayment of bills by low-income customers is not caused by the existence of the Company's program. They are part of the uncollectible costs historically incurred by the residential class as a whole. They do not represent *new* costs.

Further, by isolating these credits for different treatment than the rest of PAWC's uncollectible expense, Mr. Higgins is treating these amounts as if they were known rather than projections. As I discuss in my Direct Testimony, PAWC's estimate of AMP annual credits is based on the assumption that the participation rate will be 100% and all participants will earn 12 months of forgiveness in every year. As I demonstrated, the actual credits will very likely be less.

Finally, if anything, the Company's program will *reduce* overall residential uncollectibles after it is in place. The program certainly does not *cause* new uncollectibles that would not have existed in the absence of the program. What it does is to trade-off a more immediate write-off of *pre-program* arrears in exchange for future in-full BDP payments.

The Table below shows the average arrears of PAWC's BDP participants at the time those program participants enroll in the BDP. While there will likely not be a complete overlap between BDP participants and arrearage forgiveness, there is expected to be a substantial overlap. The Table shows that the arrears that would be made subject to arrearage forgiveness are substantial. While in 2022, those arrears may be somewhat smaller due to the receipt of temporary emergency assistance through various federal COVID relief

programs (LIHWAP, ERAP), those programs are recognized as being temporary. They will not provide future relief to low-income PAWC customers.

Table 1. Average Arrears of Bill Discount Participants at Time of Enrollment
(Water-only, Wastewater-Only, Combined Water/Wastewater)
(OCA-05-008)

Month	Water Only	Wastewater Only	Combined Water/Wastewater
202111	$578.69	$472.74	$668.70
202112	$561.27	$232.78	$540.81
202201	$432.56	$400.33	$405.37
202202	$535.71	$1247.48	$544.71
202203	$320.08	$564.18	$468.69
202204	$292.97	$382.30	$407.98
202205	$327.83	$370.36	$363.51
202206	$307.59	$511.45	$329.69
202207	$245.95	$258.41	$313.04
202208	$229.72	$336.84	$220.38
202209	$213.17	$238.92	$190.78
202210	$191.08	$289.32	$248.66
202211	$317.14	$480.12	$262.94
202212	$301.32	$268.42	$334.15
202301	$287.50	$387.29	$450.71
202302	$318.05	$669.89	$276.65
202303	$348.16	$631.92	$504.55
202304	$381.49	$558.22	$481.14
202305	$401.89	$697.32	$519.71
202306	$240.05	$595.72	$578.48
202307	$337.32	$327.23	$470.21
202308	$253.20	$527.80	$328.55
202309	$272.23	$394.15	$388.41
202310	$533.27	$625.65	$488.03

The importance of this Table is that it shows that the arrears carried by customers who are likely to participate are consistently sufficiently high that PAWC will have already contributed to its reserve for write-offs *before* these low-income customers enter the

arrearage forgiveness program. To the extent that the program succeeds in prompting future in-full payments toward current bills (plus a copayment toward arrears), PAWC will *reduce* the dollars that will ultimately be found to be uncollectible. Contrary to what Mr. Higgins says, in other words, there would be no new, and no incremental, arrearage forgiveness program costs to be directly assigned to the residential customer class.

If Mr. Higgins wishes there to be a direct assignment of AMP costs, there would also need to be a direct assignment of additional new revenue as generated by the program to the residential class. Moreover, if AMP costs were to be directly assigned to the residential class, the current allocation of existing uncollectibles included within the dollars directly assigned would need to be identified and removed from the current allocation of uncollectibles to residential customers.

Q. WHAT DO YOU CONCLUDE?

A. Bad debt expenses associated with low-income AMP participants are not separate, new or incremental costs. They are simply part of bad debt expenses associated with the residential class as a whole. There is no reason, and certainly no cause-related reason, to isolate the bad debt Mr. Higgins discusses and directly assign it to the residential class. I conclude that the AMP costs identified by Mr. Higgins should be allocated as part of total uncollectible expenses for both its water and wastewater programs.

Q. DO YOU AGREE WITH MR. HIGGINS THAT THE AMORTIZATION OF THE REGULATORY LIABILITY FOR AMP COSTS ANTICIPATED IN THE LAST RATE CASE, BUT NEVER INCURRED, SHOULD BE DIRECTLY CREDITED TO THE RESIDENTIAL CLASS?

A. Yes. As Mr. Higgins notes, while the AMP costs anticipated in the last PAWC base rate case were not directly assigned to the residential class, as proposed by OSBA, in the settlement of PAWC's last base rate proceeding those costs were collected from residential customers. Having been collected from residential customers, these costs – which were included in rates but never incurred – should be refunded to residential customers.

Q. PLEASE ADDRESS THE ALLOCATION OF THE ADMINISTRATIVE COSTS OF THE H2O AND DISCOUNT PROGRAMS.

A. The Company's proposed allocation of administrative costs by PAWC based on an O&M composite factor is reasonable. These administrative costs do not differ in-kind from the O&M costs associated with providing other types of payment options. For example, the costs of working with customers in order to defer payment, or to provide budget billing or deferred payment plans, are not directly assigned to particular customer classes.

Moreover, just as the forgiveness of arrears through AMP is expected to generate new revenues to PAWC, which would need to be identified as directly assigned to residential customers should the overall AMP costs be directed assigned, the administration of the H2O and Discount programs are expected to result in a corresponding decrease in PAWC's administrative costs associated in addressing the nonpayment of bills. OSBA's

proposal to directly assign the administrative expenses associated with these programs, without also identifying and directly assigning the administrative savings, would impose the costs without also crediting the benefits. The fact that there are both costs and cost reductions associated with these programs demonstrates how inextricably interrelated the programs are with other aspects of PAWC operations. The only way to appropriately capture, and to allocate, both the costs and the cost reductions, is to allocate the costs as PAWC has proposed to do.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Roger D. Colton, hereby state that the facts above set forth in my Rebuttal Testimony, OCA Statement 5R, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: February 21, 2024

Signature: _____
Roger D. Colton

Consultant Address: Fisher, Sheehan, & Colton
34 Warwick Road
Belmont, MA 02478

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket No. R-2023-30343189 (water)
v.	:	Docket No. R-2023-30343190 (wastewater)
Pennsylvania American Water Company	:	

Surrebuttal Testimony of Roger Colton

on behalf of

Pennsylvania Office of Consumer Advocate

OCA Statement 5SR

PUBLIC

March 4, 2024

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Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Roger D. Colton. My business address is 34 Warwick Road, Belmont, MA.

Q. ARE YOU THE SAME ROGER COLTON WHO PREVIOUSLY PREPARED DIRECT AND REBUTTAL TESTIMONY ON BEHALF OF THE OFFICE OF CONSUMER ADVOCATE IN THIS PROCEEDING?

A. Yes, I am.

Q. PLEASE EXPLAIN THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY.

A. The purpose of my testimony is to respond to the Rebuttal Testimony of the following PAWC witnesses: (1) Charles Rea (PAWC St. 10-R); (2) Ashley Everette (PAWC St. 1-R); (3) J. Cas Swiz (PAWC St. 8-R); (4) Deborah Degillio (PAWC St. 9-R); (5) Kori O'Malley (PAWC St. 5-R); and (6) Tawana Dean (PAWC St. 14-R).

Part 1. Response to PAWC Rebuttal Witness Charles Rea.

Q. PLEASE RESPOND TO MR. REA'S REBUTTAL TESTIMONY REGARDING HIS "ENTERPRISE AFFORDABILITY" ANALYSIS.

A. Mr. Rea continues to testify that PAWC rates are "generally affordable" on an enterprise level. He defines "general affordability" to exist when average bills are affordable to households at the median household income (MHI). He asserts that he "believe[s] that the Company's proposed rate design in this proceeding results in water and wastewater service that is affordable for our customers." (PAW St. 10-R, at 8). He continues to assert that:

> Company's proposed rates in this proceeding are affordable, not only because the BTI [Bill-to-Income] Ratio at MHI falls below the 2% level, but because the Company's proposed rate design in this case, which includes the bill

> Discount Program ("BDP"), give virtually every residential customer the opportunity for Basic Water Service for both water and wastewater service at an affordable level.

(Id., at 9). He then almost immediately backs away from this assertion that PAWC's rates give "virtually every residential customer" the opportunity to receive service "at an affordable level." He instead asserts that "there are, and will always be, groups of customers for whom affordability of water and wastewater service may be challenging." (Id.) He asserts that:

> The question of affordability is not one of whether that percentage of customers falls below a certain level. . .The question of affordability instead depends on whether a robust sustainable tariff program, like the BDP, is in place to help customers with affordability issues, gives these customers the opportunity for Basic Water Service at a level deemed to be affordable. . ., and whose existence improves the overall affordability of service for all customers as measured by an index like the Affordability Index.

(Id.) Given this conflicting testimony by Mr. Rea (e.g., virtually every residential customer has the opportunity to receive affordable service, but "there will always be groups of customers for whom affordability may be challenging," but "the question of affordability is not one of whether those groups of customers fall below a certain level"), when all is said and done, after presenting his testimony, Mr. Rea's ultimate conclusion is that "while PAWC continues to support its BDP, as proposed by the Company, *it does not oppose the modifications recommended by Mr. Colton or Mr. Geller*. The proposed discounts to the BDP offered by Mr. Colton and Mr. Geller would provide greater levels of affordability for customers at the lowest end of the income scale." (PAWC St. 10-R, at 31) (emphasis added).

This ultimate conclusion is well supported by my Direct Testimony, which Mr. Rea does not dispute. As my Direct Testimony demonstrated, rather than Mr. Rea's assertion that the Company's proposed rates "give virtually every residential customer the opportunity for Basic Water Service for both water and wastewater service at an affordable level," the current information before the Commission supports the undisputed observations that, even *after applying PAWC's existing discounts*:

- fewer than 10% of customers with an affordable bill have income less than 200% of Poverty Level. (OCA St. 5, at 40 – 41).
- 84% of customers with income less than 50% of Poverty Level fail to achieve an affordable water bill. (OCA St. 5, at 41).
- 80% of customers with income between 50% and 100% of Poverty Level, and 82% of customers with income between 100% and 150% of Poverty, fail to achieve an affordable water bill. (OCA St. 5, at 41).
- The same impacts arise for wastewater customers. (OCA St. 5, at 45).

There are not merely, in Mr. Rea's words, "groups of customers for whom affordability of water and wastewater may be challenging." More than 80% of PAWC's customers with income less than 150% of Poverty face unaffordable bills even if they all were to receive the PAWC discount. Stated another way, what Mr. Rea dismisses as "groups of customers for whom affordability may be challenging," *even after receiving PAWC's proposed discount*, nearly 113,000 (112,785) customers with income less than 200% of Poverty Level would face unaffordable PAWC bills.

Moreover, not only does the discount (as proposed by PAWC) fail to result in an affordable bill for these low-income customers, in addition, PAWC fails to enroll the vast majority of its low-income customers in its Bill Discount Program.

Q. DO YOU HAVE SPECIFIC RESPONSES TO THE VARIOUS RESPONSES THAT MR. REA OFFERS TO YOUR ANALYSIS?

A. As stated above, the ultimate conclusion of Mr. Rea was that PAWC "does not oppose the modifications recommended by Mr. Colton or Mr. Geller. The proposed discounts to the BDP offered by Mr. Colton and Mr. Geller would provide greater levels of affordability for customers at the lowest end of the income scale." (PAWC St. 10-R, at 31).

However, Mr. Rea and I have identified a number of areas in which he and I disagree with the appropriate way to determine the general affordability of water and wastewater rates on an enterprise level. Most importantly:

- Mr. Rea in rebuttal continues to assert that rates are "generally affordable" if they are affordable at average bills and at Median Household Income. (PAWC St. 9-R, at 8). He does not dispute my data showing that the households in the PAWC service territory with incomes in the First Quintile, on average, have BTI Ratios of more than two times higher than the affordable BTI Ratio of 2.0%. Given the proposed rates in 2024, the BTI Ratio will increase to more than three times the affordable level. Moreover, while households falling in the Second Quintile had BTI Ratios of between 1.5% and 2.0% through 2022, beginning in 2023, even PAWC households in the Second Quintile were experiencing BTI Ratios exceeding the 2.0% demarcation of affordability. The implication of this data is that at least 40% of PAWC's residential customers face a BTI Ratio exceeding the affordable 2.0% mark.

- Mr. Rea continues to assert that using the MHI as the demarcation of affordability "is a commonly used standard for affordability" and "serves as a general standard of affordability." (PAWC St. 9-R, at 8). When asked for the "literature" which he asserts supports these assertions, however, the only literature he cites were the two publications in his footnotes on page 14. (OCA-06-040). Those two publications are significant because they ***both*** criticized the use of MHI. Indeed, the conclusion that affordability analyses using MHI are "misleading at best and inaccurate at worst," was not ***my*** language, but rather was the conclusion of the very article that Mr. Rea cites in his own footnote. (OCA St. 5, at 8). Even Mr. Rea ultimately acknowledges that "use of the 2% standard at MHI as a single point estimate

can be misleading because it may not be representative of affordability generally." (PAWC St. 9-R, at 8) (emphasis added).

- Mr. Rea disagrees with my critique of his primary reliance on homeowner income in his analysis, arguing that this critique "would only be relevant if these conditions would result in systematic and significant changes in the calculated multiplier over time." (PAWC St. 9-R, at 11). He attributes a purpose to my testimony, however, that I did not assert. My testimony was not that the difference between the rate of owner-occupied and tenant-occupied housing would change over time. My testimony was that his primary reliance on homeowner median income overstates the median income he uses in his affordability analysis (and thus understates the extent of unaffordability). Moreover, it results in reaching the conclusion that as homeownership becomes less and less affordable, water bills using his analysis will correspondingly become more and more affordable given that higher income would be needed to become a homeowner.

- Mr. Rea disagrees with my critique that he seeks to limit his consideration of median household income to PAWC customers, but does so by limiting his analysis to single family homeowners. (PAWC St. 9-R, at 12 – 13). In his response, he asserts that my critique would actually increase his median household income because the median income of renters of single family homes would exceed the median income of renters of apartments. His critique, however, makes an erroneous comparison. The correct comparison is not between renters of single family homes and renters of apartments, but rather between owners of single family homes and renters of housing units that are likely to be PAWC customers (e.g., renters of single-family homes, renters of two-family homes, renters of housing units of 3 – 4 units). The income of residents of these rental properties would be less than the income of owners of single-family homes, thus lowering his calculation of median household income and decreasing the "general affordability" which he purports to find.

- Finally, in responding to my critique of his "community analysis," Mr. Rea states that considering various demographic factors that might affect Basic Water Service would be "nearly impossible to perform." (PAWC St. 9-R, at 19). In responding to my critique, however, Mr. Rea assigns a statement to me that I did not make. He asserts that I recommend developing a "water usage per household per day" to be used in an affordability analysis. (PAWC St. 9-R, at 19). That is not what I suggested or recommended. I merely noted that Mr. Rea's use of what he claims is a single level of water consumption

> that reflects "Basic Water Service" for all households is a meaningless number, given that there are, as he concedes, a multitude of factors that result in actual household consumption differing from his single number. My affordability analysis more closely tracks how the level of water service differs by various demographics.

Mr. Rea acknowledges that the incomes of higher income households are increasing faster than the incomes of lower income households (PAWC St. 9-R, at 13), but dismisses this as being unimportant. (Id.) He does not attempt to respond to my observation that his analysis based on median homeowner incomes simply indicates that, because of sharply increasing housing price, home ownership is becoming increasingly limited to households with higher and higher incomes. So, while it may be true that PAWC customers who are homeowners have higher incomes, it is not true that PAWC customers who are homeowners represent the income trend for PAWC customers as a whole. (OCA St. 5, at 10).

Nor does Mr. Rea attempt to respond to my conclusion that his analysis based on median homeowner income leads to the strained conclusion that as owner-occupied housing in a community becomes increasingly less affordable, thereby limiting ownership to increasingly higher income households in that community, water service becomes increasingly more affordable when measured by bills as a percentage of homeowner income. That conclusion does not reasonably flow, given that what is *really* being measured is only the affordability of water to an increasingly more wealthy population. (OCA St. 5, at 11 – 12).

Moreover, Mr. Rea does not even attempt to respond to my observation that using median incomes in an affordability analysis does not reflect affordability to the community as a

whole. Median household incomes are nearly four times higher than First Quintile incomes, and the difference has been growing over time. (OCA St. 5, at 12 – 13).

Finally, Mr. Rea does not even attempt to respond to my observation that MHI in the PAWC service territory equals nearly 300% of Federal Poverty Level, an inappropriate income level by which to assess the "general affordability" of water service to a community. (OCA St. 5, at 15 – 16).

Q. ARE THERE ARGUMENTS RAISED BY MR. REA THAT YOU DO NOT RESPOND TO?

A. Yes. My failure to respond to each and every one of Mr. Rea's responses should not be construed as agreement with his responses. It should instead be construed as an observation on my part that his response lacks sufficient merit to individually address.

Q. DOES MR. REA'S REBUTTAL RESPOND DIRECTLY TO YOUR CONCLUSIONS IN YOUR DIRECT TESTIMONY?

A. No. Mr. Rea continues to assert that PAWC rates are "generally affordable" because they are affordable given his calculations of Median Household Income (and primarily the MHI of homeowners). His responses serve to further that basic approach to reach his conclusion. Despite his responses, he does not, at any point, dispute my conclusions that: (1) households in the PAWC service territory with incomes in the First Quintile, on average, have BTI Ratios of more than two times higher than the affordable BTI Ratio of 2.0%; (2) given the proposed rates in 2024, the BTI Ratio will increase to more than three times the affordable level; (3) while households falling in the Second Quintile had BTI Ratios of between 1.5% and 6 2.0% through 2022, beginning in 2023, even PAWC

households in the Second Quintile were experiencing BTI Ratios exceeding the 2.0% demarcation of affordability; and (4) the implication of this data is that at least 40% of PAWC's residential customers face a BTI Ratio exceeding the affordable 2.0% mark. (OCA St. 5, at 19 – 21).

Q. WHAT DO YOU ULTIMATELY CONCLUDE WITH RESPECT TO MR. REA'S REBUTTAL TESTIMONY REGARDING HIS ASSESSMENT OF AFFORDABILITY?

A. For the reasons detailed in my direct and surrebuttal testimonies, the affordability analysis presented by PAWC witness Rea at the enterprise level and community level is inadequate and unreasonable and, therefore, Mr. Rea's conclusion that PAWC bills are generally affordable when viewed from both the community level and the household level is unreasonable and not supported.

My recommended affordability analysis, at a high level, is as follows:

- Enterprise level: First, examine BTI Ratios at the average income in the First Quintile and Second Quintile given a constant usage over the years. Second, rather than measuring affordability using Median Household Income (and primarily Median Household Income of homeowners), determine what income would be needed in order to achieve a BTI Ratio of 2.0% each year and examine the number of zip codes within the PAWC service territory that have those incomes at the average Q1 and average Q2 income levels.

- Community level: First, reject the limitation of any "affordability analysis" to use of a minimal "Basic Water Service." Second, do not examine affordability only for the PAWC population as whole, but rather measure it at different income levels. Finally, do not consider only the ***breadth*** of affordability (i.e., the number of customers with Bill-to-Income Ratios exceeding 2% of income), but also consider the ***depth*** of affordability (i.e., recognizing that a substantial number of the customers with unaffordable bills, do not merely have a Bill-to-Income Ratio "over 2%," but have a Bill-to-Income Ratio of over 20%.

I fully supported my recommendations for this affordability analysis in my direct testimony. Mr. Rea in his rebuttal did not credibly respond to the affordability analysis that I recommend be adopted.

Further, as stated in my direct testimony and below in this surrebuttal testimony, the concerns I identify with respect to the unaffordability of PAWC rates should be considered in the balancing of consumer and investor interests in setting a return on equity, even outside the consideration of the specific proposals I advance with respect to PAWC's BDP, AMP, and other specific low-income initiatives.

Q. HOW DOES MR. REA RESPOND TO YOUR CONCLUSION THAT PAWC'S WINTER AVERAGING PROPOSAL WILL ADVERSELY AFFECT LOW-INCOME CUSTOMERS?

A. Mr. Rea concedes each of my observations that lead to the conclusion that PAWC's winter averaging proposal will disproportionately affect low-income customers. He argues that the PAWC proposal should nonetheless be adopted.

- Mr. Rea states that he "concede[s] that the beneficiaries of the Company's winter averaging proposal are likely to be higher income customers because it is these customers that are more likely to have seasonal water usage in the summertime that would no longer be billed for wastewater service." (PAWC St. 10-R, at 55). He argues, however, that "introducing a stronger cost causation element" merits the imposition of these adverse impacts. He does not acknowledge all the ways in which the averaging of costs in the development of rates works to the detriment of low-income customers and the multitude of ways in which a deaveraging could occur to benefit low-income customers.

- Mr. Rea characterizes my Direct Testimony as claiming "that there are a significant number of residential customers that have usage in the summer but

no usage in the winter" whom he labels 'snowbirds.'[1] Mr. Colton claims that usage for these customers in the summer is higher than in the winter, not because this usage is outdoor usage, but that [sic] because these customers aren't home during the winter and, therefore, it is incorrect to assume that their summer usage does not go through the wastewater system." (PAWC St. 10-R, at 52, footnote added). Mr. Rea dismisses that argument by asserting that "there will always be a group of customers whose usage patterns may provide advantages under certain rate structures and disadvantages under other rate structures." (Id., at 55). He does not dispute the data I present indicating that the "group of customers" whose usage patterns will provide disadvantages is not only large, but is disproportionately low-income. (OCA St. 5, at 100 – 103).

- Mr. Rea acknowledges my observation that PAWC's assumption of using a standard usage level of 3,000 gallons per month for new customers with no winter usage history unfairly penalizes new customers as those customers are likely to have usage levels lower than 3,000 gallons per month. (Id., at 56). He does not dispute that PAWC's use of a standard usage level of 3,000 gallons per month would unfairly penalize new customers (which would disproportionately affect low-income customers). He merely states that "if it is determined that the most likely levels of usage for new customers is less than 3,000 gallons per month, the Company is open to proposing a lower standard." (Id., at 55 – 56). He does not, however, make that proposal for a lower standard and does not recommend either a process or timeframe for making the determination that would lead to such a proposal. Given the unreasonably adverse impacts on low-income customers I have identified, with no remedy proposed by PAWC, the PAWC proposal should be denied.

- Mr. Rea acknowledges my argument that lower-income customers are less likely to be residents of homes with substantial outdoor summer consumption. As a result, low-income customers will be less likely to have their summer wastewater bills capped at a lower level than those bills historically have been and these customers will be called upon to bear the burden of the foregone revenue from having non-winter bills capped, with little opportunity to be a recipient of any of the reduced bills. (Id., at 56). He does not respond specifically to this argument, merely noting (as he did above) that under any proposal, there will be winners and losers (without acknowledging that PAWC's winter deaveraging proposal systematically makes low-income customers the losers).

[1] While Mr. Rea attributes this "snowbird" label to me, that term does not appear in my Direct Testimony.

- Mr. Rea acknowledges my testimony that by capping non-winter bills at no more than winter consumption, the Company is redistributing dollars from higher use customers to "chronically" lower use customers which are disproportionately likely to be low-income customers (Id., at 56). He does not dispute my observation, instead explicitly "concede[s] that the beneficiaries of the Company's winter averaging proposal are likely to be higher income customers."

Q. WHAT DO YOU CONCLUDE?

A. I conclude that neither the criticisms of my Direct Testimony advanced by Mr. Rea, nor the countervailing arguments that he propounds, present a legitimate basis to overcome the findings in my Direct Testimony that PAWC's winter averaging proposal should be rejected because of its adverse impact on low-income customers. Particularly given the systematic unaffordability of PAWC's rates to customers in the bottom two quintiles of income (OCA St. 5, at 19 – 20), unnecessarily adding to those burdens is unreasonable.

Q. PLEASE RESPOND TO MR. REA'S REBUTTAL TESTIMONY REGARDING THE ADVERSE IMPACT THAT THE PAWC PROPOSED REVENUE DECOUPLING MECHANISM WILL HAVE ON LOW-INCOME CUSTOMERS.

A. Mr. Rea asserts that the Rate Decoupling Mechanism (RDM) will not have an adverse impact on low-income customers for two reasons. First, Mr. Rea asserts that, "Regarding affordability, I do not expect that any surcharges or credits that result from the Company's RDM will be of the magnitude that *overall affordability* of service will be significantly affected." (PAWC St. 10-R, at 74) (emphasis added). It is unclear how Mr. Rea reached this conclusion given that he previously declined to assess "overall affordability" with respect to low-income households. Instead, even Mr. Rea's Rebuttal Testimony asserts that his "Enterprise-Level Analysis provided a long-term view of the *overall affordability* of the Company's water and wastewater service. . .by *comparing*

average residential bills by year for all residential customers to estimated median household income." (PAWC St. 10-R, at 3) (emphasis added). His testimony about the lack of impact on "overall affordability" should not be used as a basis for assessing the impacts on low-income customers in particular.

Moreover, his argument that "surcharges will be subject to discounts through the Company's BDP" fails to address the broader impact on low-income customers. The PAWC Bill Discount Program (BDP) reaches a fraction of the total number of low-income customers on the PAWC system. Even if RDM credits are subject to BDP discounts, that impact is limited to a very small portion of PAWC's low-income population.

Q. DOES MR. REA ACCURATELY ASSESS THE IMPACT OF IMPLEMENTING WATER REDUCTION MEASURES ON LOW-INCOME HOUSEHOLDS?

A. No. Mr. Rea asserts that "there is no evidence to suggest that the fundamental dynamics that are causing usage to decline over time for residential customers is more concentrated in higher income households than lower income households. The move toward more efficient appliances, showerheads, toilets, faucet aerators, etc. that use less water over time affects all customers, not just higher income customers. . ." (PAWC St. 10-R, at 75). To the contrary, in making this assertion, Mr. Rea simply chooses to ignore the testimony establishing that low-income customers are less likely to be those customers who are implementing water reduction strategies. (OCA St. 5, at 79 – 81).

Finally, Mr. Rea acknowledges that "It is true that higher income customers tend to use more water for outdoor seasonal purposes and that water usage is dependent on weather

which can fluctuate from year-to-year and cause variations in revenue as compared to lower-income customers," but asserts that "there is no evidence, however, to suggest that seasonal use of water is trending upward or downward over time as there is with non-seasonal usage." (PAWC St. 10-R, at 75).

This argument is at fundamental odds with PAWC's definition of "basic water consumption" upon which Mr. Rea bases so much of his Direct Testimony. Mr. Rea argues in his Direct Testimony that this seasonal usage is of particular importance in his justification of the proposed RDM. There, he stated that PAWC's proposed rates designs "provide price signals that better reflect cost-causation principles for customers that use more water for seasonal discretionary purposes. Implementing these beneficial alternative rate designs *normally could have significant short-term and longer-term impacts on usage and revenues* that may be detrimental to the Company's legitimate financial objectives without an RDM mechanism. . ." (PAWC St. 10, at 103) (emphasis added). Contrary to his Rebuttal Testimony, in other words, Mr. Rea's Direct Testimony is that this "seasonal use" is precisely the usage which PAWC is seeking to reduce through its rate design.

Q. DO YOU HAVE ANY FINAL OBSERVATION ABOUT MR. REA'S REBUTTAL TESTIMONY?

A. Yes. The Rebuttal Testimony of Mr. Rea with respect to the modified discounts that I recommended in my Direct Testimony was also rearticulated by, and supported by, the Rebuttal Testimony of PAWC witness Justin Ladner (PAWC St. 15-R, at 6). Mr. Ladner states: "as discussed in Company witness Rea's rebuttal testimony, the Company is not opposed to the proposals of OCA witness Roger D. Colton and CAUSE-PA witness Harry

S. Geller that would increase the BDP's existing discount levels to provide greater levels of affordability for qualifying customers." (PAWC St. 15-R, at 6).

Part 2. Response to PAWC Rebuttal Witness Ashley Everette.

Q. PLEASE RESPOND TO THE REBUTTAL TESTIMONY OF PAWC WITNESS ASHLEY EVERETTE.

A. PAWC Rebuttal Witness Ashley Everette (PAWC St. 1-R) offers rebuttal testimony with respect to PAWC's request for an additional equity return based on its claim of superior company management. Ms. Everette seeks to minimize my concerns by describing them simply as based on the observation that PAWC has not reduced its collectibles to pre-COVID levels. (PAWC St. 1-R, at 16). She notes that the Commission recognized that this concern was not unique to PAWC. (Id.) These two assertions, however, do not capture the full range of concerns I identified with respect to PAWC's credit and collection performance. First, I noted that the Commission's management audit noted that the effects of COVID on long-term arrears "must be addressed by PAWC." (OCA St. 5, at 111 – 112). Despite this Commission directive, PAWC chose not to respond to the ongoing adverse impacts of long-term arrears. This came after the December 2018 PUC Management Audit (in pre-COVID days) concluded that PAWC should "implement *additional strategies* to reduce customer accounts receivables more than 90 days overdue," with PAWC not doing so. (OCA St. 5, at 110 – 111).

In addition, the management issue is not simply that all utilities are facing long-term post-COVID arrears higher than pre-COVID long-term arrears. I noted in my Direct Testimony that, based on the Commission's Chapter 14 data reporting, "Overall, PAWC's collections performance has been declining *since 2018*." (OCA St. 5, at 115).

PAWC's poor performance, in other words, did not begin with the impacts of COVID. Moreover, even if PAWC had reduced its long-term arrears to pre-COVID levels, it was those pre-COVID levels which the PUC's 2018 Management Audit had found to present management concerns. It was those pre-COVID levels of long-term arrears which gave rise to the PUC Management Audit's conclusion that "*more work is necessary*" and its conclusion that PAWC should "implement *additional strategies* to reduce customer accounts receivables more than 90 days overdue." (OCA St. 5, at 110).

Finally, I noted in my Direct Testimony that it is not simply PAWC's poor performance relative to its pre-COVID performance that is of concern.

Rather than rebutting the concerns I expressed in my Direct Testimony, the Rebuttal Testimony of PAWC witness Everette is instead further evidence that PAWC did not respond, and is not responding, to the issues relating to long-term arrears that have now been presented in the last two PUC Management Audits.

Additionally, I noted in my Direct Testimony, PAWC's collections performance is poor when compared to the performance of Pennsylvania's other large water utility. When compared to Aqua PA, PAWC has a higher percentage of its residential billing in debt; a higher percentage of its residential customers in debt; and a disproportionate number of residential disconnections. PAWC disconnects its residential customers at a rate three times higher than Aqua PA, the next highest water utility, while its percentage of write-offs is nearly two-and-a-half times higher than Aqua PA's. None of these indicators relate to whether long-term arrears have been reduced to pre-COVID levels, the only issue that Ms. Everette addressed. (OCA St. 5, at 113 – 114).

Q. DID MS. EVERETTE ADDRESS YOUR CONCERNS WITH RESPECT TO VERIFIED INFRACTIONS?

A. Yes, but not adequately. Ms. Everette dismisses my concerns with respect to the number of verified infractions by asserting that such "infractions occasionally occur." She refers to the number of verified infractions as "occasional lapses." (PAWC St. 1-SR, at 18). PAWC's problems, however, are not merely "occasional lapses." In 2022, PAWC's rate of "justified complaints" was 25% higher than Aqua PA's (the next largest water utility) and more than two times higher than the rate of other Class A water utilities. Moreover, in the first three quarters of 2023 (the most recent time period for which data is available), PAWC's rate of verified infractions *grew further* by nearly 30% over the first three quarters of 2022. These were not "occasional lapses." In the first three quarters of 2023, PAWC had 686 justified complaints. (OCA St. 5, at 117). Remember, a "justified complaint" represents an instance where, prior to BCS intervention, the company did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, tariffs or guidelines when the consumer brought the complaint to the company's attention."

Q. PLEASE RESPOND TO MS. EVERETTE'S REBUTTAL TESTIMONY REGARDING THE NUMBER OF RESIDENTIAL DISCONNECTIONS.

A. Ms. Everette responds to my Direct Testimony regarding the very high rate of residential disconnections by asserting that "with respect to its number of disconnections, the company has an obligation to collect amounts billed to mitigate uncollectible expense." (PAWC St. 1-R, at 19). She makes no effort to draw a connection between PAWC's rate of disconnections and any reduction in uncollectibles. Indeed, as I note above, precisely the opposite can be seen. PAWC disconnects its residential customers at a rate three times higher than Aqua PA, the next highest water utility, while its percentage of write-offs is nearly two-and-a-half times higher than Aqua PA's.

Q. PLEASE RESPOND TO MS. EVERETTE'S TESTIMONY REGARDING PAWC'S LOW-INCOME PROGRAMS.

A. Ms. Everette's Rebuttal Testimony does nothing more than to repeat her Direct Testimony with respect to PAWC's low-income programs. Ms. Everette continues to make assertions about PAWC's low-income programs that are nothing more than spin. She cites PAWC's low-income discount program, even though other Pennsylvania water utilities offer similar programs. (OCA St. 5, at 122). She also cites PAWC's arrearage management program, even though, again, other Pennsylvania water utilities offer similar programs. (Id.)

Finally, Ms. Everette's testimony regarding what she refers to as "significant shareholder contributions" to PAWC's hardship fund simply repeats her direct testimony rather than responding to my critiques. She does not dispute, for example, that:

> in 2023 (YTD-October), PAWC issued 129,379 disconnect notices to water customers who had already provided information to the Company establishing their low-income status (OCA-05-025), disconnected 8,724 residential water customers who had provided information to the Company establishing their low-income status (OCA-05-025, Revised), and yet provided only 1,916 hardship grants in that same time period (CAUSE-PA-1-013). In 2022, PAWC issued 182,239 disconnect notices to customers known by PAWC to be low-income (OCA-05-025), disconnected 14,562 accounts known by PAWC to be low-income (OCA-05-025, Revised.), and yet provided only 961 hardship grants. (CAUSE-PA-01-013).

(OCA St. 5, at 122 – 123).

Q. WHAT DO YOU CONCLUDE?

A. I conclude that Ms. Everette failed to rebut the information, data and analysis presented in my Direct Testimony and, accordingly, the findings and recommendations in my Direct Testimony regarding management performance should be adopted.

Part 3. Response to PAWC Rebuttal Witness J. Cas Swiz.

Q. PLEASE RESPOND TO MR. SWIZ'S REBUTTAL TESTIMONY REGARDING IMPLEMENTATION OF PAWC'S PROPOSED ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE (ECIC).

A. Mr. Swiz's only response to my Direct Testimony regarding PAWC's proposed Environmental Compliance Investment Charge (ECIC) is that "for BDP-eligible customers the discount will be applied in a manner that reduces the ECIC impact to these customers compared to non-BDP customers." (PAWC St. 8-R, at 13). He does not, however, respond to my fundamental objections to the ECIC, including the fact that the proposed ECIC is a charge that would be imposed above and beyond the normal fixed and volumetric charges imposed on residential customers. (OCA-11-021, OCA-11-022). Correspondingly, in addition to the substantial proposed increases in its fixed and

volumetric charges, to impose a non-discounted ECIC is simply to increase low-income bills even further. Nor does he respond to the fact that, as I established in my Direct Testimony, to the extent that low-income customers have monthly consumption greater than residential customers overall, they will also pay a higher amount of the environmental compliance costs (as my Direct Testimony established, according to PAWC's own data, low-income customers do have somewhat higher monthly usage than do residential customers overall). Finally, he does not respond to the fact that, as I established in my Direct Testimony, through its proposed ECIC, PAWC proposes to charge those customers who bear the brunt of the contamination, and who have the least capacity to absorb additional costs, the ***most*** for remediating this contamination in the future.

Q. DO YOU HAVE ANY FINAL RESPONSE TO MR. SWIZ'S REBUTTAL TESTIMONY REGARDING THE IMPACT OF THE PROPOSED ECIC ON LOW-INCOME CUSTOMERS?

A. Yes. Mr. Swiz seeks to equate "low-income" customers with "Bill Discount Program participants." He thus makes a factually incorrect statement based on this effort to equate those two populations (i.e, low-income and BDP participants). He asserts that "for BDP-eligible customers the discount will be applied in a manner that reduces the ECIC impact to these customers compared to non-BDP customers." (PAWC St. 8-R, at 13) (emphasis added). That statement is not accurate. It may well be true that for BDP participants, the BDP will be applied in a manner that reduces the ECIC impact. . However, as I discuss in detail in my Direct Testimony, BDP serves a relatively small percentage of PAWC's total low-income customer population. The majority of PAWC's low-income customers,

customers who are merely "BDP-eligible," and not BDP participants, will not be protected in the way Mr. Swiz asserts.

Part 4. Response to PAWC Rebuttal Witness Deborah Degillio.

Q. PLEASE RESPOND TO PAWC WITNESS DEBORAH DEGILLIO'S REBUTTAL TESTIMONY REGARDING THE USE OF CUSTOMER SATISFACTION SURVEYS.

A. In my Direct Testimony, I recommended that "PAWC be required to make personal contact with any Confirmed Low-Income customer facing the imminent disconnection of service for nonpayment. At the time of that personal contact, the Confirmed Low-Income customer should be informed of the customer's right to enroll in the BDP *and* enroll in the AMP as an alternative to the disconnection of service for nonpayment. Disconnections to these customers should be paused until PAWC has received a response to the offer of BDP/AMP participation." (OCA St. 5, at 59).

PAWC rebuttal witness Degillio states that this requirement is not necessary. She asserts that "PAWC already trains its CCAs to advise customers having trouble paying their bills about the BDP and the Company's other assistance programs and to facilitate enrollment of eligible customers in those programs." (PAWC St. 9-R, at 9). Ms. Degillio's rebuttal fails to address the issue which I raised in my Direct Testimony. PAWC concedes that from January 2021 through October 2023, PAWC disconnected service for nonpayment to 21,950 Confirmed Low-Income customers. (OCA-05-025).[2] A Confirmed Low-Income customer is a customer that PAWC *knows* to be low-income. The Table below

[2] The number of customers disconnected may be fewer than this number to the extent that some customers may have had service disconnected more than once during that time period.

shows the disconnections of Confirmed Low-Income customers by month during that time period (January 2021 – October 2023).

Number of Confirmed PAWC Low-Income Disconnections by Month (January 2021 – October 2023) (OCA-05-025)

Month	The number of confirmed low-income disconnections for nonpayment;	Month	The number of confirmed low-income disconnections for nonpayment;
202101	0	202207	646
202102	0	202208	1,361
202103	0	202209	894
202104	932	202210	993
202105	744	202211	894
202106	683	202212	367
202107	749	202301	371
202108	1,488	202302	195
202109	1,076	202303	217
202110	952	202304	565
202111	742	202305	699
202112	283	202306	852
202201	242	202307	675
202202	259	202308	911
202203	285	202309	470
202204	1,151	202310	500
202205	913		
202206	841		

What Ms. Degillio asserts PAWC does and what I recommend are distinctly different things. Ms. Degillio's testimony limits the Company's efforts to those instances where a

Confirmed Low-Income customer contacts the Company prior to a disconnection. If this were not the case, her testimony would imply that PAWC has offered to enroll customers in the low-income Bill Discount Program, and offered to facilitate that enrollment, and that customers instead *chose* to have their service disconnected rather than receiving a bill discount. Moreover, on a going-forward basis, PAWC would have the option of offering Confirmed Low-Income customers an opportunity to enroll in the Arrearage Management Program (AMP) rather than having their service disconnected.

The difference between my recommendation and the existing PAWC process is the difference between proactive outreach and only being responsive if a customer makes contact. The Company's existing process is simply backward. A customer who doesn't know about the BDP and/or the AMP may well choose not to contact PAWC and, as a result, would never learn about the BDP and/or AMP. My recommendation is that PAWC be directed to: (1) affirmatively make personal contact with a customer in imminent danger of having service disconnected; (2) affirmatively offer enrollment in the BDP and/or AMP as an alternative to that service disconnection; and (3) to freeze collection activities pending completion of the Confirmed Low-Income customer's application for the BDP and/or AMP. Having done that, if the Confirmed Low-Income customer chooses to have service disconnected rather than to have their arrears forgiven, so be it. It would be likely, however, that some substantial number of these Confirmed Low-Income customers would choose program enrollment as an alternative to losing their PAWC service.

Ms. Degillio's rebuttal testimony does not respond to my recommendation, let alone demonstrate a lack of need for my recommendation.

My recommendation would not impose a substantial burden on PAWC. It is important to remember that PAWC, itself, states that "the company defines 'confirmed low-income customer' as a customer that *has provided income information to the company* indicating that the customer has a household income at or below 150% of the Federal Poverty Level." (OCA-05-001) (emphasis added).

Q. IS THERE ANY OTHER ASPECT OF MS. DEGILLIO'S REBUTTAL TESTIMONY TO WHICH YOU WISH TO RESPOND?

A. Yes. Ms. Degillio asserts that my Direct Testimony "contends that [PAWC's] transaction surveys are inadequate because they do not include specific questions for customers seeking bill assistance, requesting payment arrangements, raising inability to pay issues, or responding to disconnection notices and cannot sufficiently be used to improve customer satisfaction." (PAWC St. 9-R, at 10). She responds by asserting that "The CSO's targeted surveys are performed immediately after all phone and myWater portal interactions and *do not exclude the four categories of customer contacts* highlighted by Mr. Colton." (Id.) (emphasis added).

Ms. Degillio's rebuttal, however, doesn't respond to my Direct Testimony. My Direct Testimony stated:

> No quarterly survey is directed either toward Confirmed Low-Income customers or toward Bill Discount Program participants. (OCA-06-019, OCA-06-020). Moreover, of the quarterly survey that is performed, or the "targeted survey" directed toward customers having particular transactions with PAWC, no survey questions are included with respect to a **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** (OCA-06-018(b), Attachment 1, confidential, OCA-06-018, Attachment 2, Confidential). **[BEGIN CONFIDENTIAL]** [redacted]

[redacted] **[END CONFIDENTIAL]**

The surveys cited in my Direct Testimony demonstrate that, whether or not PAWC "excludes the four categories of customer contacts" Ms. Degillio cites, my Direct Testimony remains accurate. The survey does not include any of the questions my Direct Testimony discusses.

Finally, Ms. Degillio asserts "PAWC and the CSO identify trends from customer feedback provided via phone surveys, field service representative surveys, and the net promoter score surveys. . ." (PAWC St. 9-R, at 10). But, if the surveys do not include the appropriate questions as I have identified, no "trends" can be derived. My Direct Testimony also indicates that no such "trends" have been identified, and no compilation or assessment of surveys has been made. (OCA St. 5, at 119 – 120).

In sum, Ms. Degillio's Rebuttal Testimony does not respond to, let alone rebut the need for, my recommendation that with respect to the questions asked in customer satisfaction surveys, the population targeted by PAWC's "targeted surveys" should be expanded to include: (1) customers seeking to enroll in the BDP and/or AMP; (2) customers seeking to enroll in a deferred payment arrangement; (3) customers expressing a difficult paying, or an inability-to-pay their bills in a full and timely manner; and (4) customers responding to the pending (or already completed) disconnection of service for nonpayment. The results of these targeted surveys should be compiled, provided to the PAWC LIAG at each quarterly meeting, and subject to discussion at LIAG should a member of the group have questions or identify issues flowing from the targeted surveys.

Part 5. Response to PAWC Rebuttal Witness Lori O'Malley.

Q. PLEASE RESPOND TO THE REBUTTAL TESTIMONY OF PAWC WITNESS LORI O'MALLEY.

A. Ms. O'Malley argues that the Company's claim for cost recovery of its Arrearage Management Program (AMP) is "consistent with the cost recovery permitted by the Further Amended Joint Petition for Full Settlement of the Arrearage Management Plan." (PAWC St. 5-R, at 8). She argues that the terms of the Settlement provide that the Company will record a regulatory asset or liability for amounts over or under the amount included in rates for recovery or refund in the next base rate case. (Id., at 8 – 9).

That argument does not address the issue I raise with respect to the unreasonable amount of dollars that PAWC claims for its AMP cost recovery. The Settlement which Ms. O'Malley cites explicitly states that "The Company will propose a dollar amount to be included in base rates to fund the AMP. This amount will be subject to review and approval by the Commission." As can be seen, the Settlement did not provide that whatever amount proposed by the Company would be accepted. Rather, the dollar amount which the Company "propose[s]" is "subject to review and approval by the Commission."

The Recommended Decision approving the Joint Settlement which Ms. O'Malley noted specifically that: "OCA's ability to review the costs in the regulatory asset or liability is not restricted by this provision. OCA's position on cost recovery included the position that the costs recovered should be the incremental costs related to implementing the program. *OCA asserts that these issues are not resolved here and will be addressed in a future base rate case*." (Recommended Decision, at 25) (emphasis added). Not only that,

but the Recommended Decision noted that PAWC agreed with this resolution of cost recovery. (Id., at 20) ("PAWC also maintains that the clarifications and modifications regarding the implementation and cost recovery for the program directly address the concerns raised by the OCA and CAUSE-PA witnesses and represent a reasonable compromise of the parties' position on these issues. For these reasons, PAWC believes that the modifications are in the public interest and should be approved.")

PAWC witnesses provided no justification for assuming that AMP participants will make 100% of their payments in a full and timely fashion. Given the near complete overlap between AMP participants and BDP participants, it is more reasonable to expect AMP payment patterns to reflect the historic payment patterns of BDP participants.

The same issue is presented by Ms. O'Malley's testimony with respect to uncollectibles. Ms. O'Malley states that "The AMP Settlement allows the cost of the AMP to be included in rates." (PAWC St. 5-R, at 9). That is not correct. As the Recommended Decision stated (citing OCA's Statement of Position in Support of the Joint Settlement), "OCA's position on cost recovery included the position that *the costs recovered should be the incremental costs* related to implementing the program." (Recommended Decision, at 25). The Settlement provided that these issues were to be "addressed in a future rate case." The Settlement thus provided that PAWC could "propose a dollar amount" which could be disputed by OCA and which, accordingly, would be "subject to review and approval by the Commission."

Ms. O'Malley argues that my proposed adjustment "is unsubstantiated as it cannot be determined at this time what impact, if any, AMP will have on uncollectible expense."

(PAWC St. 5-R, at 9). That argument does not respond to the issue I raised in my Direct Testimony. I did ***not*** argue that the AMP would reduce future uncollectibles. I argued that ***past*** uncollectibles include the uncollectibles associated with the arrears of Confirmed Low-Income customers. The arrears that will be subject to AMP credits are part of those arrears that are already included in rates and would thus not be "incremental costs" of the AMP. The AMP does not create those costs, in other words, it simply moves those pre-existing costs into the dollars known as AMP credits. AMP arrears that are already included in rates to again be collected as AMP credits would allow PAWC to collect those costs in both places (i.e., through their inclusion in past uncollectibles and again through their inclusion in AMP credits). Whether the AMP results in future changes in the level of uncollectibles is not a consideration in this calculus. The impact of improved bill payment patterns, if any, by Confirmed Low-Income customers will be captured in future rate cases. In sum, Ms. O'Malley's argument responds to an argument that I did not make.

Part 6. Response to PAWC Rebuttal Witness Tawana Dean.

Q. PLEASE RESPOND TO THE TESTIMONY OF PAWC REBUTTAL WITNESS DEAN WITH RESPECT TO YOUR RECOMMENDED MODIFICATIONS TO PAWC'S RATE DISCOUNT LEVELS.

A. Ms. Dean's Rebuttal Testimony specifically defers to the Rebuttal Testimony of Charles Rea with respect to the proposed modifications to PAWC's discount levels. (PAWC St. 1-R, at 4) ("PAWC Witness Rea will be addressing Mr. Geller and Mr. Colton's recommended changes to the BDP discount amounts in his Direct Testimony"). Moreover, in turn, as noted above, Mr. Rea's Rebuttal Testimony states that "While PAWC continues to support its BDP, as proposed by the Company, it does not oppose the modifications recommended by Mr. Colton or Mr. Geller. The proposed discounts to the BDP offered by Mr. Colton and Mr. Geller would provide greater levels of affordability for customers at the lowest end of the income scale." (PAWC St. 10-R, at 31). This lack of opposition was reiterated by PAWC Rebuttal Witness Ladner. (PAWC St. 15-R, at 6).

Despite the explicit testimony by two different PAWC witnesses that the Company does not oppose the modified discounts proposed for PAWC, Ms. Dean asserts that:

> . . .the Company notes that it would be useful to have implementation data on the BDP (with the Company's proposed changes) and the AMP to allow the Company and stakeholders to evaluate the impact of these changes before additional changes to the Company's assistance programs are considered.

(PAWC St. 14-R, at 5). This comment appears simply to undo the statements of Mr. Rea and Mr. Ladner regarding the lack of opposition to the proposed modifications to PAWC's discount levels. The current information before the Commission, none of which PAWC has disputed, supports the undisputed observations that:

- After applying the PAWC BDP discounts, fewer than 10% of customers with an affordable bill have income less than 200% of Poverty Level. (OCA St. 5, at 40 – 41).

- After applying the PAWC BDP discounts, 84% of customers with income less than 50% of Poverty Level fail to achieve an affordable water bill. (OCA St. 5, at 41).

- After applying the PAWC BDP discounts, 80% of customers with income between 50% and 100% of Poverty Level, and 82% of customers with income between 100% and 150% of Poverty, fail to achieve an affordable water bill. (OCA St. 5, at 41).

- The same impacts arise for wastewater customers. (OCA St. 5, at 45).

In contrast, the modified discounts that I propose, and which PAWC witnesses Rea and Ladner state that PAWC does not oppose, would generate affordable water and wastewater bills for more than 70% of customers with income less than 50% of Poverty Level, and affordable water and wastewater bills for roughly three-quarters of all customers with income between 50% and 200% of Poverty.

Moreover, PAWC's data shows that *before* increasing rates without increasing its corresponding BDP discount levels:

- From January 2021 through October 2023, PAWC disconnected service to 8,299 BDP participants (OCA-05-026);

- From January 2021 through October 2023, the average arrears of a BDP participant who had service disconnected was $1,060. (OCA-05-026);

- From January 2021 through October 2023, more than 55% of all BDP participants were in arrears, with an average arrears of $546.

Despite these results, PAWC proposes to increase its residential rates to these program participants while leaving the discount levels the same. It thus comes as no surprise that the two PAWC witnesses who assessed the reasonableness of my recommended

modifications to the bill discount levels testified in their Rebuttal Testimony that PAWC does not oppose those recommended modifications.

Q. PLEASE RESPOND TO MS. DEAN'S REBUTTAL TESTIMONY REGARDING BDP OUTREACH AND ACCESSIBILITY.

A. In her Rebuttal Testimony, Ms. Dean opposes my recommendation that PAWC make personal contact with any Confirmed Low-Income customer facing the imminent disconnection of service for nonpayment, inform them of their right to enter into PAWC's BDP and AMP as an alternative to that disconnection of service, and pause collection efforts while the customer undertakes the process of enrolling in those programs. (PAWC St. 14-R, at 7). Her testimony, however, mirrors the rebuttal testimony of Deborah Degillio (PAWC St. 14-R, at 10, citing PAWC St. 9-R, at 9) ("PAWC witness Deb Degillio addresses this recommendation in her Rebuttal Testimony"). I responded to those arguments in my response to the Rebuttal Testimony of Ms. Degillio.

In addition, while Ms. Dean opposes my recommendation that PAWC develop a comprehensive written "universal service" plan (PAWC St. 14-R, at 12), her only rationale for this opposition is that, unlike Pennsylvania's natural gas and electric distribution utilities, PAWC is not required to prepare such a plan (PAWC St. 14-R, at 12) ("PAWC should not be required to adopt a universal service plan unless Pennsylvania law is modified to expand this requirement. . ."). Ms. Dean mischaracterizes the recommendation that I made in my Direct Testimony. I did not recommend that PAWC be directed to develop the same comprehensive Universal Service and Energy Conservation Plan (USECP) required of natural gas and electric utilities. Rather, my Direct Testimony stated:

> PAWC has not laid out in any written form a plan identifying how the Company intends to use its universal service programs to address the payment difficulties of its Confirmed Low-Income customers. . . .
>
> As can be seen, even setting aside the opportunities for improved outreach and intake, innumerable opportunities exist to use each component of PAWC's suite of universal service programs to help advance the objective of improving affordability, as well as improving bill payment patterns and even controlling the cost of the programs. Moreover, as can be seen, the Company's suite of universal service programs as a whole can be better coordinated so that the synergistic impact of the programs as a whole will be amplified, if not maximized, in contrast to the sum of each program's impacts when viewed individually. . .
>
> The plan, however, should not be required based on a specific mandatory regulation. It should instead be required as an element of fundamental prudent program planning and management.

(OCA St. 5, at 69, 71 – 72). My Direct Testimony discussed in detail how the synergistic impacts would be "amplified" by developing a written plan. (OCA St. 5, at 69 – 71). Ms. Dean did not respond to, let alone rebut, these beneficial impacts of developing a written plan as I recommended.

Q. PLEASE RESPOND TO MS. DEAN'S REBUTTAL TESTIMONY REGARDING YOUR RECOMMENDED INCREASE IN PAWC'S HARDSHIP FUND ELIGIBILITY THRESHOLD.

A. Ms. Dean responded to my recommended increase in the income eligibility for PAWC's hardship fund by stating that, in the settlement of PAWC's acquisition of the Butler Area Sewer Authority's ("BASA") wastewater system assets (Docket A-2022-3037047), "the Company has already agreed to increase eligibility for hardship grants to include customers up to 250% of FPL. . ." (PAWC St. 1-R, at 16). Review of the Settlement shows that the increase in hardship eligibility will apply to all customers (i.e., existing

customers as well as customers in the acquired BASA system). I understand from counsel that parties who did not join the BASA settlement have filed an appeal of that case to the Commonwealth Court creating uncertainty about the acquisition and the settlement reached in that proceeding. However, Ms. Dean's Rebuttal Testimony appears to be an agreement for that increase in the hardship fund income eligibility to be applicable systemwide and she appears to accept the premise that such an increase is needed. Thus, to the extent that any increase in rates is approved in this proceeding, despite the uncertainty surrounding the BASA settlement, the Commission should condition that increase in rates on an increase in the hardship fund eligibility system wide so as to benefit additional households in need of assistance.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Roger D. Colton, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 5SR, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: March 4, 2024

Signature: _____
Roger D. Colton

Consultant Address: Fisher, Sheehan, & Colton
34 Warwick Road
Belmont, MA 02478

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket Nos.: R-2023-3043189 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	
Pennsylvania American Water Company	:	

DIRECT TESTIMONY

OF

BARBARA R. ALEXANDER

Barbara Alexander Consulting LLC

ON BEHALF OF THE

OFFICE OF CONSUMER ADVOCATE

PUBLIC VERSION

Date Served: February 1, 2024

Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

A. My name is Barbara R. Alexander. I am the sole member of Barbara Alexander Consulting LLC. My address is 44 Beech St., Hallowell, ME 04347. I appear in this case as a witness on behalf of the Office of Consumer Advocate (OCA).

Q. PLEASE DESCRIBE YOUR BACKGROUND AND QUALIFICATIONS.

A. I have over 30-years' experience as an expert in consumer protection, service quality, and low-income customer programs for public utilities and the regulation of retail alternative energy suppliers in markets that have adopted restructuring for electric and/or natural gas supply service. I was the Director of the Consumer Assistance Division for the Maine Public Utilities Commission from 1986-1996 and have operated my own consulting practice for public advocates and consumers since that time. I have testified in over 30 U.S. state jurisdictions, including Pennsylvania, and Canadian jurisdictions, in many proceedings. My C.V. is attached to this testimony as Exhibit BA-1, and it lists all my publications and testimony associated with my consulting practice.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION?

A. Yes. I have filed testimony on behalf of the OCA before the Pennsylvania Public Utility Commission (Commission) in investigations, base rate proceedings, mergers and acquisitions, and default service proceedings, on issues relating to customer service, service quality and reliability of service, low-income customer programs, and retail market programs. With regard to Pennsylvania's water and wastewater utilities, I have evaluated customer service and consumer protection programs in proceedings before the

Commission involving Pennsylvania American Water Company (PAWC), Pittsburgh Water and Sewer Authority, York Water, and Aqua Water.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY REGARDING PAWC?

A. Yes. I filed Direct and Surrebuttal Testimony on behalf of the OCA in PAWC's immediately prior base rate case that resulted in a $138 million revenue increase and that took effect only nine months prior to PAWC's filing in this proceeding (Docket Nos. R-2022-3031672 and R-2022-3031673) (2022 BRC). I also filed Direct and Surrebuttal Testimony on behalf of the OCA in the pending proceeding in which PAWC seeks to acquire the wastewater system currently operated by the Borough of Brentwood (Docket No. A-2021-3024058).

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I am filing Testimony on my review of PAWC's customer service policies and programs and, specifically, the following topics in the following order:

- The Company's service quality and call center's customer service performance quality is directly related to the Company's general rate increase request;
- The Company's consumer protection policies and programs to ensure that the Service Company's call center representatives are complying with Chapter 14 of the Public Utility Code and Chapter 56 of the Commission's regulations, particularly with regard to handling and evaluating customer complaints;
- The Service Company's call center's customer service performance, including performance trends, internal training, management oversight, including the findings of the most recent Management Audit conducted by the Commission;

- The Company's program to terminate water service provided by PAWC for nonpayment of charges related to non-Company, third-party providers of sewer services;
- The Company's billing arrangement with a non-affiliated, third-party provider of what are labeled on PAWC's customer bills as "protection" services for customer-owned service lines and in-home plumbing and PAWC's billing of charges for such services on PAWC customer bills; and
- The Company's request for a reward in its rate of return in light of the Company's customer service performance;

These issues are important themselves, but particularly so in this case given the magnitude of PAWC's proposed rate increases and the fact that PAWC's customers have seen rate increases in 2021, 2022, and 2023 resulting from a two-stage significant rate increase from its 2020 rate case and the increase that just took effect in January 2023 from the 2022 rate case. This is in addition to its proposed rate design changes, and the proposal for various trackers and rate increases outside of the normal base rate case (*i.e.*, Section 1308(d) general rate increase request) review process.

Q. DO YOU INCLUDE EXHIBITS WITH YOUR TESTIMONY?

A. Yes. I attach the following Exhibits to my Testimony:

- Exhibit BA-1: Barbara Alexander C.V.
- Exhibit BA-2 CONFIDENTIAL: PAWC Response to OCA-08-028 and 20-024, Attachment CONFIDENTIAL
- Exhibit BA-3: PAWC Response to OCA-08-010 and 20-001.
- Exhibit BA-4 CONFIDENTIAL: PAWC Response to OCA-08-007 and Attachment CONFIDENTIAL

- Exhibit BA-5: PAWC Response OCA-08-038 and Attachment.
- Exhibit BA-6: PAWC Response to OCA-08-021, Attachment
- Exhibit BA-7 CONFIDENTIAL: PAWC Response to OCA-25-003 CONFIDENTIAL
- Exhibit BA-8 CONFIDENTIAL: PAWC Response to OCA-20-016, Attachment 1 and 2 CONFIDENTIAL
- Exhibit BA-9 CONFIDENTIAL PAWC Response to OCA-08-023. Attachment CONFIDENTIAL

Q. PLEASE SUMMARIZE PAWC'S GENERAL RATE INCREASE PROPOSALS.

A. As of November 10, 2023, PAWC serves 779,292 water and wastewater customers located in 37 counties across Pennsylvania. PAWC's proposed tariffs would increase the Company's total annual operating revenues by approximately $203.9 million, or 20.2% ($199.2 million from water operations and $4.7 million from wastewater operations) based on a fully projected future test year (FPFTY) ending June 30, 2025. For water service, according to the Company's customer notices provided as part of the filing, if the Company's entire request is approved as filed, a residential water customer using 3,201 gallons per month would see increases in their monthly bill ranging by Rate Zone between approximately 25% to 64%. For wastewater service, according to the Company's customer notices provided as part of the filing, if the Company's entire request is approved as filed, a residential wastewater customer using 3,122 gallons of water per month would see increases to their monthly bill ranging by Rate Zone between approximately 3% to 121%, although some customers in certain Rate Zones would see a decrease by approximately 5%. The actual bill impacts vary widely based on the location of the customer in PAWC's

service territory as well as proposals to change the structure of several rate zones.

Q. HAVE CUSTOMERS COMPLAINED IN THIS CASE?

A. Yes. According to OCA's most recent compilation of customer response to this rate increase, 286 formal consumer complaints with approximately 149 different complainants and 535 informal complaints have been submitted to the Commission. This level of customer opposition to the rate increase proposed by PAWC is highly unusual based on my extensive experience in base rate cases in Pennsylvania and it far exceeds complaints submitted in prior PAWC rate cases. As a result of these significant bill increases, the Commission should carefully examine the adequacy and quality of customer service provided by PAWC, as well as the specific investments that form the basis for most of PAWC's proposed rate increases.

I. PAWC'S SERVICE QUALITY AND CUSTOMER SERVICE PERFORMANCE IS DIRECTLY RELATED TO THIS RATE CASE

Q. WHAT IS THE CONNECTION BETWEEN YOUR DISCUSSION OF SERVICE QUALITY AND CUSTOMER SERVICE PERFORMANCE AND THE RATE INCREASE PROPOSED BY PAWC?

A. As explained in OCA witness Christine Maloni Hoover's Direct Testimony (OCA Statement 1), under the regulatory compact, a public utility in Pennsylvania is statutorily obligated to provide adequate and reasonable service to its customers. A public utility must justify its rates based on, among other things, its ability to perform its essential quality of service and customer service functions at an adequate and reasonable performance level. Accordingly, where a public utility is seeking a rate increase – especially a significant one, and, where, as in this case, the utility is asking for a reward in the form of a higher rate of return based on its performance, it is appropriate to review

the performance of that utility and to compare such performance to other Pennsylvania utilities. Therefore, my evaluation of PAWC's customer service and consumer protection policies is directly related to the Commission's consideration of Company's general rate increase. In effect, it is part of the consideration of the Commission about whether PAWC is upholding its end of the bargain.

Furthermore, PAWC seeks an incentive in this case under Section 523 of the Public Utility Code in the form of the Commission's adoption of the higher end of the Company's requested return on equity of 10.95% based on its management performance in offering low-income and payment-troubled customer programs and in its community engagement and consumer education. PAWC St. 1 at 33-36, 40-41; PAWC St. 13 at 57-59. My evaluation of PAWC's customer service and consumer protection policies is directly related to the Commission's consideration of Company's request for the higher return on equity.

My analysis and findings should inform the Commission on the reasonableness of PAWC's significant rate increase request. Where I identify deficiencies in PAWC's customer service performance, I recommend that the Commission order improvements in specific areas as a condition of any rate increase and consider adopting any rate increase and rate of return that reflects the inadequate customer service I have documented. In some areas, I recommend that the Commission disallow certain incurred costs on the basis of the Company's continuing poor management performance or management negligence. This approach is mandated by the statutory guidelines of Section 523 governing public utility rate cases in which the Commission must evaluate the

"efficiency, effectiveness, and adequacy of service."[1] I address the implications for customer service performance below.

II. PAWC'S CONSUMER PROTECTION POLICIES AND COMPLIANCE WITH CHAPTER 14 OF THE PUBLIC UTILITY CODE AND CHAPTER 56 OF THE COMMISSION'S REGULATIONS AND RELATED OBLIGATIONS

Q. HAVE YOU EXPLORED HOW PAWC ENSURES COMPLIANCE WITH PENNSYLVANIA-SPECIFIC CONSUMER PROTECTION POLICIES?

A. I have explored how PAWC, ensures that its interactions with Pennsylvania customers complies with the Pennsylvania consumer protection and customer rights laws and regulations. In order to evaluate PAWC's compliance programs and management oversight, it is important to understand the corporate organization and the various means by which Pennsylvania customers interact with PAWC and its affiliate, American Water Works Service Company, Inc. (Service Company).

Q. CAN YOU PLEASE EXPLAIN YOUR UNDERSTANDING OF THIS STRUCTURE?

A. Yes, based on the Company's filing, the Company's responses to discovery, and Section XI of the PUC's 2023 Management Audit Report[2] and the Company's filed response to the Management Audi[3]t, my understanding of the corporate structure is as follows:

- PAWC is the subsidiary of American Water Works Company, Inc. (Parent Company), a parent company headquartered in Camden, New Jersey, that manages and operates many geographically disparate water and sewer utility subsidiary companies

[1] 66 Pa. C.S. 523.
[2] Pennsylvania-American Water Company, Pennsylvania Public Utility Commission's 2023 Management Audit Report, Docket No. D-2022-3035217 (Issued October 2023) (Released to Public on December 28, 2023). Section XI of the Management Audit Report presented call center performance from 2019-2022.
[3] Pennsylvania-American Water Company, Implementation Plan in Response to the 2022-23 Focused Management and Operations Audit, Docker No. D-2022-3035217 (Issued October 2023) (Released to public on December 28, 2023).

with service territories in 14 states and 1,600 communities[4], primarily in Pennsylvania, Illinois, New Jersey, Missouri, Indiana, West Virginia, and in other states.

- The Parent Company, through the Service Company, provides PAWC with call answering and customer service with a management structure that is responsible for multiple state activities. The Service Company's Customer Service Organization (CSO) provides call handling, billing, field services coordination, and other customer service functions for all the Parent Company's regulated operations, including PAWC.
- The Service Company's CSO is led and overseen by a Vice President and Chief Customer Officer of the Service Company; this executive is not dedicated to PAWC's customer service operations, instead performing the management and oversight functions for the CSO for all the regulated utility subsidiaries of the Parent Company, including PAWC.
- There is no physical customer service office in Pennsylvania where PAWC's customers can go to and interact in a personal manner with employees to resolve questions or complaints or engage in payment arrangements related to PAWC's service.
- PAWC customer calls are answered by call centers staffed by Service Company employees, and such employees are located at multiple locations, most of which are not located in Pennsylvania. The vast majority of Service Company's customer service representatives work virtually from home (telework). In addition, the Service Company has contracted with several third-party entities to handle customer calls, both outbound and inbound calls, and most of those contractors rely on agents who telework as well.[5]

[4] American Water Works 2022 Annual Report, https://s26.q4cdn.com/750150140/files/doc_financials/2022/ar/American-Water-Works-Company-Inc-2022-Annual-Report.pdf

[5] PAWC Response to OCA-20-001 confirms that, "There is no physical location of calls centers as vast majority of

- The Service Company employees and contractors are not dedicated to PAWC's customer service operations, instead performing their duties for all the regulated utility subsidiaries of the Parent Company, including PAWC.
- The calls handled by Service Company's employees and third-party contractors make use of internal software that tracks interactions with customers across all utility subsidiaries of the Parent Company, including PAWC. The software reflects service issues, billing issues, collection issues, and related policies in all state utility subsidiaries' operations.
- Calls from PAWC customers are directed to a customer service representative (whether to an employee or third-party contractor) who has passed a "test" that is intended to reflect the individual representative's passing knowledge of Pennsylvania specific collection rights and remedies.
- As a result of this corporate structure, where the Service Company – not PAWC – performs the call center operations on behalf of PAWC and is led by an executive of the Service Company, it is my opinion that PAWC's management oversight and compliance is needed and necessarily requires audits or root cause analysis of customer complaints to identify any failure by the Service Company to properly comply with or implement Pennsylvania laws, regulations, or policies.

Q. DOES PAWC CONDUCT THE PROPER LEVEL OF MANAGERIAL OVERSIGHT OF THE SERVICE COMPANY FOR COMPLIANCE WITH PENNSYLVANIA REGULATIONS AND POLICIES VIA AUDITS AND ROOT CAUSE COMPLAINT

our agents work remotely from home." This response also confirms that all Intelogix agents are working remotely and all but 13 of Transworld systems agents are remote. The latter two entities are third party contractors for call services that serve PAWC and other American Water Works customers in multiple states.

ANALYSIS?

A. No. PAWC does not conduct audits or root cause analyses of the Service Company's call center operations to affirmatively evaluate whether the call center performance complies with Pennsylvania specific consumer protection regulations and policies. Had PAWC entered an arms-length contract with a non-affiliated, third-party contractor to "contract out" or "farm out" its call center operations, it would seem reasonable, necessary, and appropriate that PAWC obtain contractual protection that would allow PAWC to audit the performance of the contractor from time-to-time to ensure compliance with PAWC's statutory and regulatory obligations and to impose contractual remedies, including termination of the contract, should the contractor's performance not be satisfactory. In contrast, the fact that PAWC does not audit the performance of the Service Company's call center operations and has undertaken no actions under its contracts to respond to inadequate or unreasonable performance, as outlined in my testimony below, indicates that this affiliated arrangement is lacking a very important arms-length protection for PAWC and PAWC's customers.

Q. WHAT DOES PAWC DO TO OVERSEE SERVICE COMPANY'S CALL CENTER OPERATIONS?

A. PAWC's complaint spreadsheet reflects a very short summary of the complaint and what steps were taken in response. The complaint data is organized by date and is capable of being sorted by complaint categories. There is no internal documentation of any analysis done of this complaint data or whether any steps were taken to respond to any analysis of the complaint trends or findings. The spreadsheet does contain a column that states whether the complaint is the "fault" of the Company but there is no analysis of what steps

have been taken in response to these determinations. PAWC's reaction to any complaint that PAWC determines is due to a "fault" of the Company is to discuss the matter with the customer service representative or that individual's manager, relying on counseling.

Q. DO YOU HAVE CONCERNS WITH PAWC'S OVERSIGHT OF SERVICE COMPANY'S CALL CENTER OPERATIONS?

A. Yes. PAWC's complaint analysis is seriously inadequate and does not reflect any root cause analysis or actions taken to reflect the analysis of customer complaints, whether they are internally handled disputes or the Commission's Bureau of Consumer Services (BCS) informal complaints. While PAWC enters customer disputes and complaints into a database, there is no analysis of the database to identify trends, underlying causes, or track performance. Finally, there are no performance standards that are applicable internally or with the third-party contractors that reflect compliance with Pennsylvania policies and programs or that tracks noncompliance in a manner that could be relied upon to determine acceptable performance or that is used to determine rewards or penalties. The reliance on "counseling" a particular customer service representative is not a reflection of any root cause analysis of complaint data and may or may not satisfy the occurrence or reoccurrence of a "fault."

Q. PLEASE DESCRIBE THE IMPORTANCE OF UTILITY TRACKING AND EVALUATING ALL COMPLAINTS.

A. Every Pennsylvania public utility is required to educate customers about how to register informal and formal complaints. Informal complaints get resolved informally by the Commission's BCS. Formal complaints get initiated by a customer or group of customers' filing a formal complaint with the Secretary's Bureau and the formal

complaints get formally adjudicated by an Administrative Law Judge (ALJ) and ultimately the Commission. Utilities also receive "disputes" directly from customers and are obligated to investigate and respond to those issues or indications of dissatisfaction. Customer complaints as a group form a hierarchy or pyramid, where at the bottom level of the pyramid is a large volume or majority of disputes that are handled and resolved by the utility call center representatives; at the next level up the pyramid is a smaller group of informal complaints that get resolved by BCS; and, at the top of the pyramid is yet a relatively smaller number of formal complaints that get resolved through a formal adjudication of the Commission. Tracking and evaluating disputes and informal or formal complaints are key to ensuring ongoing improvements in customer service because that evaluation is likely to spot the "red flag" that indicates a systemic issue or concern that requires PAWC's management's attention and, in some cases, a change in policy or procedure. In addition, of course, this type of evaluation may also identify violations of the Public Utility Code or the Commission's regulations.

Q. PLEASE SUMMARIZE THE COMMISSION'S BCS REPORTS ON COMPLAINTS AND COMPLIANCE FOR PAWC.

A. The Commission's BCS publishes a quarterly Consumer Activities and Report Evaluation for Pennsylvania electric, gas, telephone, and water utilities.[6] These reports typically include historical information to allow for a trend analysis. The BCS reports show that PAWC's complaint rate was 3.89 in 2021 and 4.22 in 2022, which exceeds any other Class A water utilities with the exception of one other smaller Class A utility.[7]

[6] http://www.puc.state.pa.us/filing_resources/consumer_activities_report_evaluation.aspx
[7] Utility Consumer Activities Report and Evaluation 2022, BCS, Pennsylvania Public Utility Commission, page 59.

PAWC's "justified"[8] residential complaint numbers and rates reflect a similar pattern of exceeding other Class A water utilities.[9] PAWC's residential payment arrangement request (PAR) rate is above average and 18.2% were determined to be "justified."[10] The BCS 2022 reports show that PAWC's "infraction rate"[11]of 0.58 exceeds all other major Class A water utilities.[12] According to the BCS reports, PAWC's infractions are categorized as 30% relating to reconnection of service, 23% dispute handling, 13% termination procedures, and 10% for credit standards and deposits.[13] The 3rd Quarter UCARE report for 2023 to date indicates an increase in residential complaints and PARs, justified complaints, and PARs compared to the same period in 2022.[14] A total of 158 verified infractions relating primarily to Chapter 56 are identified for PAWC, far in excess of other Class A water utilities.[15] This data evidences significant concern with PAWC's customer service performance, yet, there is no record or other indication of PAWC's management performing any root cause analysis of these complaints or other complaint trends of the issues reflected in BCS reports.

Q. DOES PAWC ANALYZE CUSTOMER COMPLAINTS TO ENSURE COMPLIANCE?

A. No. The Company compiles large spreadsheets of customer disputes and complaints but there is no record of any analysis that identifies trends or "root cause." According to the Company, a 699-page PDF document that lists customer complaints and their results in a

[8] The BCS deems a complaint "justified" if it is found by BCS that the utility did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters or tariffs. Ibid, page 20.
[9] Ibid., page 60 and 61.
[10] Ibid., Page 63 and 64.
[11] A verified infraction is a violation of a statute or regulation and provides written clarifications of Chapters 14, 30, 56, 63 or 64 and the policies of the Commission and BCS. Ibid., Page 19.
[12] Ibid., Page 70.
[13] Ibid, page 71.
[14] UCARE, 3rd Quarter, page 12.
[15] Ibid., page 19.

spreadsheet format is a "root cause" analysis.[16] The Company has implemented a "new quality assurance program."[17] However, "There has been no changes, reforms, or revisions to the Company's internal training programs and/or policies as a result of Pennsylvania specific results or complaint data. Any training or mentoring discussions as a result of feedback from quality assurance review is performed on an individual basis with identified call agents."[18] When asked to identify changes, reforms, or revision to internal training programs and/or policies that occurred due to any analysis of complaint data, the response was similar and failed to identify any specific response or change.[19] As a result, PAWC does not conduct a proper root cause analysis and has no record of any evaluation or analysis other than spreadsheets that list customer complaints with columns that identify its internal response on an individual complaint basis.[20]

Q. PLEASE EXPLAIN WHAT A PROPER ROOT CAUSE ANALYSIS LOOKS LIKE.

A. A root cause analysis is a fact-based exercise in which the underlying cause or causes of an undesirable outcome are identified and specific remedial steps are identified and determined to result in correcting or improving the previously identified undesirable result. A list of customer complaints with notations on how that particular complaint was resolved is not a root cause analysis.

> A root cause is defined as a factor that caused a nonconformance and should be permanently eliminated through process improvement. The root cause is the core

[16] PAWC Response to OCA-08-017, narrative response. At no point in the Confidential Attachment listing these complaints is there any summary, identification of trends, determination of a root cause of any trend or a reflection of the data in the spreadsheet. Listing and identifying the results of an individual complaint is not a root cause analysis.
[17] PAWC Response to OCA-08-005.
[18] PAWC Response to OCA-20-010.
[19] PAWC Response to OCA-20-014.
[20] PAWC Response to OCA-08-17 includes a Confidential 699-page PDF document listing customer complaints from 7/1/2022 through 10/31/2023.

issue—the highest-level cause—that sets in motion the entire cause-and-effect reaction that ultimately leads to the problem(s).

Root cause analysis (RCA) is defined as a collective term that describes a wide range of approaches, tools, and techniques used to uncover causes of problems. Some RCA approaches are geared more toward identifying true root causes than others, some are more general problem-solving techniques, and others simply offer support for the core activity of root cause analysis.

There are many methodologies, approaches, and techniques for conducting root cause analysis, including:

1. **Events and causal factor analysis:** Widely used for major, single-event problems, such as a refinery explosion, this process uses evidence gathered quickly and methodically to establish a timeline for the activities leading up to the accident. Once the timeline has been established, the causal and contributing factors can be identified.
2. **Change analysis:** This approach is applicable to situations where a system's performance has shifted significantly. It explores changes made in people, equipment, information, and more that may have contributed to the change in performance.
3. **Barrier analysis:** This technique focuses on what controls are in place in the process to either prevent or detect a problem, and which might have failed.
4. **Management oversight and risk tree analysis:** One aspect of this approach is the use of a tree diagram to look at what occurred and why it might have occurred.
5. **Kepner-Tregoe Problem Solving and Decision Making:** This model provides four distinct phases for resolving problems:
    1. Situation analysis
    2. Problem analysis
    3. Solution analysis
    4. Potential problem analysis[21]

According to the publications developed by the American Society for Quality, and other comparable publications[22], a proper analysis of any "root cause" requires the identification of "symptoms," which are not actual causes but signs of existing problems, and "first level causes," which are the causes that directly lead to a problem; and "higher

[21] https://asq.org/quality-resources/root-cause-analysis

[22] There is an extensive body of literature used in the medical community to conduct root cause analysis and develop plans to prevent adverse events. See, e.g., https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/guidanceforrca.pdf

level causes," which are links in the chain of cause-and-effect relationships that ultimately create the problem. PAWC compilation of individual customer complaints and their identification of the individual complaint resolution reflects "symptoms" and not the actual underlying cause of that reflects identification of patterns and the underlying facts that contributed to the complaint and complaint patterns.

Q. PLEASE DISCUSS PAWC'S RESPONSE TO OCA-20-024 AS AN EXAMPLE OF THE FAILURE TO CONDUCT APPROPRIATE ROOT CAUSE ANALYSIS OF ITS COMPLAINT DATA.

A. As a clear example of PAWC's failure to track and evaluate customer complaints or determine the root cause of verified infractions, PAWC was requested to provide information in OCA-08-028 as follows, "In calendar years 2021, 2022, and 2023, how many times has PAWC restored service after identifying that an account was not properly coded as being tenant-occupied at the time of termination?" PAWC's response stated, "PAWC does not track the requested information." In data request OCA-20-024, PAWC was asked to confirm that there is no root cause analysis of disputes or complaints that reflect the lack of proper coding of a tenant-occupied building. PAWC's response provided a Confidential attachment "for the analysis of informal complaints received from 2021, 2022, and 2023." This Confidential attachment consisted of 4 pages of a PDF document that was also provided in electronic spreadsheet format. I attach PAWC's response to OCA-08-028 and 20-024 with the **CONFIDENTIAL** Attachment as Exhibit BA-2. This document purports to reflect a root cause analysis but it was apparently created in response to this data request and not as a result of any routine business practice

to analyze PAWC complaint activity.[23] More importantly, this document reflects a listing of **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** specific instances of clear violations without any root cause analysis that would identify trends, point to the ultimate cause of the complaints or occurrences, and fails to document any internal reaction to infractions other than **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

Q. WERE THERE ANY OTHER FINDINGS OR RECOMMENDATIONS FROM THE 2023 MANAGEMENT AUDIT RELEVANT TO YOUR TESTIMONY?

A. Yes. The 2023 Management Audit Report recommended that PAWC file a new or amended affiliated interest agreement (AIA) that accurately reflects the current company structure and intercompany transactions occurring between PAWC and the Service Company. PAWC has stated that it believes the AIA does not need to be updated. However, in its Opinion and Order releasing the 2023 Management Audit Report to the public, the Commission directed PAWC to file a new or amended AIA that accurately reflects the current company structure and the intercompany transactions occurring between PAWC and the Service Company.

Q. WHAT IS YOUR RECOMMENDATION IN RESPONSE TO YOUR FINDINGS?

A. My recommendations are as follows:

1. Any rate increase granted in this proceeding should reflect PAWC's failure to structure its arrangements with the Service Company in an arms-length manner that protects PAWC and its customers from poor call center performance and PAWC's failure to properly manage and oversee the call center performance

[23] The electronic version of this Confidential document reflects a creation date of **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** in the "properties" tab.

by tracking and evaluating its customer disputes and BCS findings or respond to the obvious trends of infractions and verified violations. These failures refute PAWC's claim of superior management performance and should be considered by the Commission under Section 523 in setting just and reasonable rates. I note that OCA witness Colton also identifies concerns with PAWC's management performance in OCA Statement 5. Specifically, in my opinion, these failures support adoption of OCA witness David Garrett's recommended return on equity in this proceeding (OCA Statement 3).

2. PAWC should conduct root cause analysis of all customer complaint data on a regular basis and track complaints and analysis for specific call centers, whether operated by the parent company or a third-party contractor.

3. Any new or amended AIA approved by the Commission should contain an arms-length contractual provision that grants PAWC the contractual protection to perform audits of the Service Company's CSO's performance based on defined call center metrics and to use specific call center complaint data to determine, in part, penalties and payments under the contract.

4. Any new or amended AIA approved by the Commission should contain an arms-length contractual provision that (1) will require the Service Company in its contracts with third-party contractors to reduce the fees it owes to the third-party contractor so that Service Company is not responsible for the payment of fees related to services that fail to meet the metrics; and (2) the Service Company will not allocate costs to PAWC for services that fail to meet the call center metrics.

5. PAWC should be required to provide managerial oversight of the Service

Company's CSO's call center performance, including but not limited to conducting audits of the Service Company's CSO's performance based on defined metrics and conducting a proper root cause analysis of its internal disputes and BCS related findings and update its findings and conclusions on a quarterly basis.

III. PAWC'S CALL CENTER CUSTOMER SERVICE PERFORMANCE

Q. PLEASE DISCUSS THE IMPORTANCE OF THE CALL CENTER FOR PAWC'S CUSTOMER SERVICE QUALITY.

A. As I described above, PAWC relies on employees and agents who handle calls from PAWC customers working from their home as the main method by which customers can communicate individually with PAWC. Therefore, the performance of these call centers and the supervision of the disparately located employees and agents is crucial to the Company's ability to deliver a reasonable level of customer service that complies with Pennsylvania's customer service and consumer protection requirements.

Q. PLEASE DISCUSS THE PERFORMANCE OF PAWC'S CUSTOMER CALL CENTER.

A. I attach the PAWC customer call center data showing the combined results provided in response to OCA-08-010 and separate results for two third-party contractors as provided in response to OCA-20-001, attached as Exhibit BA-3. This data shows the percentage of calls answered by a customer service representative within 60 seconds or 1 minute (reflecting how long the customer waits in the queue once the customer asks to speak to a live agent) and the call abandonment rate (referring to the percentage of calls in which the customer abandons the calls after entering the queue to speak to a customer representative).

During the period January 2022 through November 2023 the percentage of calls answered within 60 seconds NEVER met their internal standard of answering 80% of the customer calls within 60 seconds. The call abandonment rate improved from double digit percentages routinely experienced in 2022 and early 2023, but only recorded 8% or lower in five of these months. While there is some evidence of gradual improvement in call answering performance in 2023 compared to 2022, the overall historical pattern continues to reflect a poor performance. For example, the October 2023 results reflected that only 61% of calls were answered within 60 seconds and a 13% abandonment rate. Furthermore, as documented in Exhibit BA-3, the call center performance results for the two third-party contractors are very poor and far below the call center average as a whole. These results do not reflect the contractual performance standards included in the Service Company's contracts[24] with these entities **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**, but neither the Service Company nor PAWC has undertaken any actions to enforce those standards.[25,26] For example, **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** The Service Company's failure to enforce this provision of the contract in turn impacts the costs allocated by the Service Company to PAWC for poor

[24] See, e.g., PAWC Response to OCA-06-006, Attachment 1 (Confidential), **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

[25] PAWC Response to OCA-06-010 provided the Confidential Attachments with these contracts.

[26] PAWC Response to OCA-20-003 requested documentation of any performance penalties or failures to achieve the required performance metrics and response to those failures. PAWC's response merely referred to the contract terms. PAWC Response to OCA-20-005 confirms that PAWC has not conducted any audit or evaluation of the third-party contractors and states, "We interact with the third party contractors on a daily basis including any concerns regarding performance." Also, see PAWC Response to OCA-20-007 that documents that PAWC does not track complaints based on whether an employee or third-party contractor's agent handled the call.

call center performance.

Furthermore, the monthly results reflect a dramatic swing in call center performance that indicates the annual average masks poor performance that should not be tolerated. The key variable in predicting reasonable versus unreasonable call center performance is the volume of calls and the number of available call center representatives on hand to answer the calls. Performance can be improved with better prediction of call volume and ensuring sufficiently trained personnel are available to respond to call volumes at predicted high call volumes days and times. Both these criteria are within the ability of PAWC and the Service Company to predict and control.

Q. IS THIS POOR CALL CENTER PERFORMANCE CONSISTENT WITH PRIOR EVALUATIONS OF THE CALL CENTER?

A. Yes. I documented PAWC's below average call center performance in the last base rate case. This performance was also the subject of the Commission's most recent Management Audit that documented poor call center performance for 2019-2022.[27]

Q. WHAT WERE THE FINDINGS OF THE 2023 MANAGEMENT AUDIT REPORT IN RELATION TO CALL CENTER PERFORMANCE?

A. The Commission's Bureau of Audits found that since 2019, PAWC experienced a sustained decline in call handling performance and recommend that the PAWC "initiate or devote additional efforts to improve the efficiency and/or effectiveness of its customer service function" and "improve customer service performance at minimum to pre-pandemic levels." The Bureau of Audits evaluated the Service Company's call center

[27] Pennsylvania Public Utility Commission, Pennsylvania American Water Company Management and Operations Audit, Docket No. D-2022-3035217 (Issued October 2023), Section XI, Customer Service. The report presented call center performance from 2019-2022.

performance using the following metrics of: (1) percentage of calls answered within 30 seconds, and (2) call abandonment rate. According to the Report, the call center's performance when evaluated against both of these metrics declined significantly. As the Table below shows, and as the Report indicated, the percentage of calls answered within 30 seconds declined by 28% between 2019 and 2020 and the call abandonment rate more than doubled in the same period.

Exhibit XI-1, Management Audit at page 82.

	2019	2020	2021	2022
Calls answered within 30 seconds	24%	16%	8%	14%
Call abandonment rate	6%	15%	24%	22%

Q. DID THE COMPANY RESPOND TO THE FINDINGS IN THE MANAGEMENT AUDIT REPORT?

A. Yes, however, my concern about the relatively poor performance of the customer call center(s) is heightened by PAWC's response to the Commission's Management Audit that documented PAWC's poor call center performance. The Company's response was to state that it would "strive" to achieve a performance of answering 80% of the calls within 60 seconds by December 31, 2024, but without any mention of how to address the documented high abandonment call rate in the Management Audit.[28] Ms. Degillio's Direct testimony in support of this rate increase stated that the Company's internal standard was to answer 80% or less

[28] PAWC Implementation Plan, page 38, Docket No. D-2022-3035217 (October 2023).

abandonment rate.[29] While Ms. Degillio characterized this standard as an "industry standard," the Company is not able to defend this reference based on any "industry standard."[30] All Pennsylvania electric and gas utilities are evaluated based on answering 80% of customer calls within 30 seconds as reflected in the annual BCS Reports and that standard has been routinely relied upon for PAWC's own presentation of call center results as reflected in my Exhibit BA-3.

Q. HOW DOES PAWC ENSURE THAT PENNSYLVANIA CUSTOMER CALLS ARE HANDLED IN COMPLIANCE WITH PENNSYLVANIA CONSUMER PROTECTION AND CUSTOMER RIGHTS POLICIES?

A. PAWC has developed a "test" that any customer call agent must pass to handle PAWC calls. I attach this "test" as provided in response to OCA-08-007 (**CONFIDENTIAL**) as Exhibit BA-4. **[BEGIN CONFIDENTIAL]** [redacted]

[29] PAWC Statement No. 9, pages 9-10.

[30] PAWC Response to OCA-20-012 states when asked to identify the "industry data" relied upon for this performance standard as stated in Ms. Degillio's Testimony (PAWC Statement No. 9), "The "industry data" referenced is knowledge obtained during industry conferences and networking with other call center executives."

[redacted] **[END CONFIDENTIAL]**

Q. HOW DOES PAWC MEASURE CUSTOMER SATISFACTION GENERALLY WITH PAWC'S SERVICES?

A. PAWC conducts customer satisfaction surveys and Ms. Degillio's Direct Testimony in support of this rate increase specifically mentioned these surveys as a key performance metric for her customer service operations, referencing a 70% response rate of "good" or "very good" from PAWC customers.[31] However, the actual survey results data reflects a different story. When asked to rate the overall customer phone customer service, the top two box response has **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**.[32] The results of the survey of those interacting with PAWC's "myWater" web portal reflects **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**.[33] The results of customer satisfaction with field services is **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** in most results.[34] The survey results for the call center are below those reflected in customer satisfaction surveys conducted pursuant to a BCS-supervised survey instrument by electric and gas utilities in Pennsylvania, who regularly reflect a satisfaction rating for

[31] PAWC Statement No. 9 at 8.
[32] PAWC Response to OCA-06-018, Attachment 1 (confidential).
[33] Ibid.
[34] Ibid.

recent call center transactions at over 80%.[35] As a result, there is no evidence that PAWC's customer satisfaction rating is anything other than below average.

Q. AS A RESULT OF YOUR EVALUATION OF PAWC'S CALL CENTER PERFORMANCE, WHAT DO YOU RECOMMEND?

A. I recommend the following:

1. The Commission should adopt specific performance standards as a condition of any rate increase approved in this proceeding. Specifically, the Commission should require PAWC to comply with the monthly and annual average of answering 80% of PAWC calls within 30 seconds and a 4% call abandonment rate, performance that is routinely met by Pennsylvania's electric and natural gas utilities. In light of the historical documentation of poor performance and the lack of managerial attention to this issue with inadequate oversight and enforcement of any reasonable standard, PAWC should be held to specific performance standards. Reporting results alone is insufficient in light of this history.

2. PAWC should be required to reform its Pennsylvania-specific "test" and training for its customer representatives to address the full scope of Chapter 56 and Chapter 14 rights and remedies that I have identified are lacking, as well as more detailed monitoring programs that reflect Pennsylvania-specific rights and remedies. This condition should require PAWC to routinely audit and evaluate the performance of its third-party contractors.

3. PAWC's revenue requirement should also be adjusted as recommended by

[35] BCS, Customer Service Performance Report, Appendix A and B, https://www.puc.pa.gov/media/2566/2022-customer-service-performance-report-final-092623.pdf

OCA Witness Ralph Smith (OCA Statement 2) to eliminate expenses for third party call centers that have routinely failed to meet reasonable call performance standards for PAWC's customers.

4. Finally, any rate increase granted in this proceeding should reflect the poor performance of the call center operations since 2019. These failures refute PAWC's claim of superior management performance and should be considered by the Commission under Section 523 in setting just and reasonable rates. Specifically, in my opinion, the poor performance coupled with PAWC's failure to oversee and evaluate the Service Company's performance should be reflected in the return on equity granted in this proceeding. These failures – in addition to the poor performance identified by OCA witness Colton (OCA Statement 5) – support rejection of PAWC's proposal for a higher return on equity based on its management performance and support adoption of OCA witness Garrett's recommended return on equity.

IV. PAWC'S POLICY TO TERMINATE SERVICE TO PAWC CUSTOMERS ON BEHALF OF "NON-COMPANY" WASTEWATER PROVIDERS NEEDS MORE OVERSIGHT.

Q. PLEASE DESCRIBE WHY PAWC DISCONNECTS ITS WATER CUSTOMERS FOR NONPAYMENT OF "NON-COMPANY" WASTEWATER SERVICE PROVIDERS.

A. I understand there is a Pennsylvania law referred to as the Water Services Act or Act of April 14, 2006, codified at 53 P.S. §§ 3102.501 – 3102.507, that authorizes water public utilities, like PAWC, to enter into long-term agreements with municipalities, municipal authorities, cities, boroughs, or townships (non-utility sewer providers) for shut-off services for sewer services. This law obligates water public utilities, including PAWC, to

terminate water service to a customer at the request and direction of non-utility sewer provider until all overdue amounts owed to the non-utility sewer provider are paid. I understand based on advice of OCA counsel that the shut-off services that PAWC provides on behalf of non-utility sewer providers are governed by the provisions of the Water Services Act, and not by Chapter 56 of the Commission's regulations or Chapter 14 of the Public Utility Code.

Q. PLEASE DESCRIBE PAWC'S PROPOSAL IN THIS CASE RELATED TO THE SHUT-OFF SERVICES IT PROVIDES PURSUANT TO THE WATER SERVICES ACT.

A. PAWC has various agreements with approximately 178 non-utility sewer providers to terminate service to PAWC water customers for nonpayment of sewer services at the request and direction of non-utility sewer providers.[36] The Company's PUC-approved form of shut-off agreement was provided by PAWC in response to OCA-08-038 and is attached as Exhibit BA-5. While this practice has been in effect for many years, PAWC in this case has submitted a specific amendment to Rule 12.1 in its Tariff to recognize this situation. PAWC's proposed addition to Tariff Rule 12.1(H) authorizes termination of service by the Company: "In accordance with the terms of any agreement with a non-Company wastewater provider for non-payment of wastewater service when due."

Q. DOES PAWC COLLECT FEES FOR SHUT-OFF SERVICES IT PROVIDES PURSUANT TO THE WATER SERVICES ACT?

A. Yes. PAWC charges a fee for this service and in 2023 these fees totaled $414,595.[37]

[36] PAWC Response to OCA-08-037 asking to identify the "non-Company" entities for whom PAWC has such agreements consists of a 5-page PDF that lists approximately 178 municipalities and sewer authorities.
[37] PAWC Response to OCA-08-40.

For January 2023 through November 2023, PAWC received 3,613 requests to terminate service from these "non-Company" entities and PAWC terminated water service for 1,950 customers or 54% of those requests.[38] This is a very high termination rate.

Q. DOES PAWC MONITOR COMPLIANCE WITH ITS OWN SHUT OFF AGREEMENT?

A. No. PAWC has not conducted an audit, investigation, or evaluation of whether these providers have correctly or properly identified the landlord/tenant services, have not included non-basic services in the amounts submitted for termination of water service by PAWC, or any other aspect of the conditions of the Shut-Off Agreement.[39] Nor has PAWC evaluated or investigated compliance with the "Shut Off Agreement."[40]

Q. PLEASE DESCRIBE THE PROCESS BY WHICH CUSTOMERS ARE GIVEN NOTICE OF THESE SHUT-OFFS,

A. The notices that are given to customers prior to a shut-off are governed by the Water Services Act and the agreements that PAWC has in place with the non-utility service providers. Pursuant to the law and the agreements, the non-utility service provider is required to give prior notice to their sewer customers prior to PAWC shutting off the water service. However, once the notice is issued, if a customer disputes the shut-off for non-payment, the non-utility service provider is obligated under the Water Services Act and the agreements to inform PAWC to stop the shut-off until the customer's claim has been judicially determined (the jurisdiction for such disputes between sewer customers and the non-utility service provider is with the Court of Common Pleas not with the

[38] PAWC Response to OCA-08-037.
[39] PAWC Response to OCA-20-025.
[40] PAWC Response to OCA-20-028.

Commission).

Given the very high termination rate that I note above, to protect consumers from unauthorized water shut-offs under the Water Services Act, I recommend that PAWC should be required to have a process to confirm that no customer dispute is filed – it can be as simple as taking the step of verifying with the non-utility sewer provider that no customer dispute has been filed.

Q. DO YOU HAVE OTHER RECOMMENDATIONS?

A. Yes. I have three additional recommendations. My first recommendation is like my recommendation above. Upon review of PAWC's shut-off agreements, there is a common provision that requires the non-utility service provider to not direct the Company to terminate service if the customer produces a medical certification. That provisions states:

> "AND FURTHER PROVIDED that no occupant of said premises has produced a medical certification by a physician to be seriously ill or affected with a medical condition which will be aggravated by a cessation of water service or failure to restore water service, as provided for in 52 Pa. Code §§ 56.111-56.118, as amended."[41]

Given the very high termination rate that I note above, to protect consumers from unauthorized water shut-offs under the Company's agreements, I recommend that PAWC should be required to have a process to confirm that a customer did not produce a medical certification to the sewer provider – it can be as simple as taking the step of verifying with the non-utility sewer provider that no medical certification has been produced.

[41] [Provide U-dockets]

Q. WHAT IS YOUR NEXT RECOMMENDATION?

A. My next recommendation is that PAWC should be required to post notice at the customer's premises at the time it performs the water shut-off. The notice should make it clear to customers that the water service has been shut off due to the customer's non-payment of sewer services owed to its non-utility service provider, not due to non-payment of water services provided by PAWC. The notice should name the non-utility service provider and provide the number to contact that provider. Additionally, the posted shut-off notice should direct the customer to PAWC's tariff provisions governing shut-offs pursuant to the Water Services Act (as I discuss below). Based on advice of OCA counsel, while I understand shut offs done pursuant to the Water Services Acts are not subject to Chapter 56 or Chapter 14, I understand that nothing prevents PAWC from providing this type of reasonable notice to customers as "reasonable service" under the Public Utility Code.

Q. WHAT IS YOUR FINAL RECOMMENDATION?

A. My final recommendation is that PAWC's Proposed Tariff Rule 12.1(H) should be rejected. The placement of this rule in Section 12.1 of the Company's Tariff is misleading and confusing. Section 12.1 governs terminations upon prior notice; however, except for the newly proposed (H), all of the subsections relate to terminations with prior notices provided by PAWC, not by some third-party. Accordingly, I recommend that the Company craft a new Section 12.3 that governs solely the process of PAWC's termination of water service performed pursuant to the Water Services Act and agreements in place between PAWC and the non-utility service provider due to the customer's non-payment of sewer charges owed to the customers non-utility service

provider. The tariff section should explain the PAWC customer's right that once notice is issued by the non-utility service provider, that the Company cannot go forward with the termination if a customer dispute is filed in accordance with the Water Services Act or if the customer produces a medical certification. It should further state that the Company will post notice at the customer's premises at the time of shut-off.

V. PAWC COLLECTS CHARGES FOR THIRD-PARTY WARRANTY SERVICES ON PAWC CUSTOMER BILLS. PLEASE DISCUSS YOUR CONCEERNS WITH THIS PROGRAM.

Q. DOES PAWC BILL CUSTOMERS FOR NON-UTILITY SERVICES?

A. Yes. PAWC provides billing services for a third-party, non-affiliated company, named American Water Resources, LLC (American Water Resources) for insurance products or warranty services (Warranty Services) provided by this company in return for a service fee.[42] American Water Resources is not an affiliate of PAWC nor a subsidiary of the Parent Company. American Water Resources provides the Warranty Services to PAWC customers with whom it has a service contract. The Warranty Services offered by American Water Resources include repair and maintenance services for covered water service lines owned by customers, sewer service laterals owned by customers, and in-home plumbing.

Q. PLEASE EXPLAIN HOW THESE CHARGES APPEAR ON THE CUSTOMER BILL.

A. The sample bill provided by PAWC shows such charges listed on the first page as "protection programs" and that charge is included in the "total amount due."[43] I attach the PAWC response to OCA-08-021 and associated customer bill as Exhibit BA-6. On

[42] PAWC Response to OCA-08-021, narrative.
[43] PAWC Response to OCA-08-021, Attachment consisting of 9 pages.

page 2 of this bill in fine print and as the 7th of 8 items under "explanation of fees and other terms," it states, "Protection programs for water, sewer, and in home plumbing are offered by American Water Resources" and states that these charges are not regulated by the Commission and that regulated services will not be disconnected for nonpayment of "protection program charges" or charged late fees. The toll-free telephone number for American Water Resources is provided. On page 3 the Account Detail states a line item, "Protection Programs: For inquiries, please call [toll free number]." These charges are then included in "total current period charges." This page also repeats the explanation quoted above that is on page 2 of the bill in the "understanding your bill" section.

Q. WHAT IS THE RELATIONSHIP BETWEEN ONCOURSE HOME SOLUTIONS AND AMERICAN WATER RESOURCES?

A. American Water Resources appears to be owned by and controlled by Oncourse Home Solutions, but this entity is not identified in any PAWC bills or other information that PAWC provides to its customers. Rather, the web portal for Oncourse Home Solutions provides a link to one of their "brands," as American Water Resources.[44] A hot link to American Water Resources is provided and that web portal identifies water line protection programs, sewer line protection programs, and a combination water and sewer line protection program.[45] The web portal for American Water Resources includes the following disclosure that is headed by the logo used by American Water Works with the title, "American Water Resources, An Oncourse Company," with emphasis in the original:

> American Water Resources (AWR) offers service line protection contracts to homeowners in 43 states and Washington, D.C., and currently services more than

[44] https://oncoursehome.com/
[45] https://www.awrusa.com/

2 million contracts. The company has been providing protection contracts since the year 2000 with more than 9 out of 10 customers satisfied and an A- Rating from the Better Business Bureau. American Water Resources also provides its protection contracts to homeowners through municipal partnerships with the New York City Department of Environmental Protection, Orlando Utilities Commission, Nashville Metro Water Services and others. **American Water Resources is a trademark of American Water and used under license, but is not owned by American Water. As such, AWR's optional programs are not provided or guaranteed by American Water or its affiliates, and any changes in AWR's prices are not determined or controlled by American Water or its affiliates.** American Water Resources conducts business in California as American Water Resources Insurance Services and administers home protection contracts, provided by Virginia Surety Company, Inc., CA Lic. No. 0F65279. In Virginia, American Water Resources administers insurance policies, underwritten by Virginia Surety Company, Inc., VA Lic. No. 109751.

Q. WHAT IS THE RELATIONSHIP BETWEEN AMERICAN WATER WORKS OR PAWC AND AMERICAN WATER RESOURCES?

A. While there is no formal corporate relationship between American Water Resources and PAWC or the Parent Company, there are pertinent contractual relationships. The first is a trademark license agreement between the Parent Company and American Water Resources (and its affiliates) giving American Water Resources (and its affiliates) the right to use the "American Water" name, logo, and branding when marketing to PAWC's consumers its warranty services for consumer-owned service lines and in-home plumbing. The second relevant contractual relationship is a utility billing agreement between PAWC and American Water Resources. I attach (1) the Trademark License Agreement between the Parent Company and American Water Resources dated December 9, 2021 ("License Agreement") as provided by PAWC in response to OCA-03-025 **(CONFIDENTIAL)** as Exhibit BA-7, and (2) the Utility Agreement executed by and between PAWC and American Water Resources dated December 9, 2021 ("Utility Billing Agreement") as provided in response to OCA-20-016 **(CONFIDENTIAL)** as

Exhibit BA-8.

Q. PLEASE DESCRIBE THE LICENSE AGREEMENT BETWEEN THE PARENT COMPANY AND AMERICAN WATER RESOURCES AND YOUR CONCERNS.

A. When the Parent Company sold its non-regulated subsidiary business that marketed and sold warranty services to PAWC customers on or around December 9, 2021, the Parent Company and American Water Resources (and its affiliates) entered into the License Agreement that allows American Water Resources (and its affiliates) to use the Parent Company's logos and other trademarked insignia when marketing and selling warranty services for consumer-owned service lines and in-home plumbing. **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

I have concerns with the License Agreement because American Water Resources' use of the "American Water" name and logo undoubtedly gives consumers the false impression that American Water Resources is an affiliate of PAWC and a subsidiary of the Parent Company. This presentation is misleading to consumers about the true nature of the relationship and has no doubt induced PAWC's consumers to purchase warranty services products from this company under the false impression of buying from a recognized brand and that the product's price is regulated or approved by the Commission. In my experience, consumers are not usually aware of the differences between regulated and unregulated services when they appear on the customer's

regulated utility bill and the cost of the product or service is included in the total amount due.

Q. PLEASE DESCRIBE THE UTILITY BILLING AGREEMENT BETWEEN PAWC AND AMERICAN WATER RESOURCES AND YOUR CONCERNS.

A. This Utility Billing Agreement allows American Water Resources to **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**.

A. I have concerns because these contractual provisions would explain the high rate of enrollment in these services by PAWC customers, and would indicate that consumers are being induced to buy American Water Resources' services as a result of this **[BEGIN CONFIDENTIAL]** [redacted]. **[END CONFIDENTIAL]**

Q. CAN YOU SUMMARIZE AND FULLY DESCRIBE THIS ARRANGEMENT?

A. Yes.

a. PAWC bills for warranty services (Warranty Services) that are offered and provided by this third party, non-affiliated company, named American Water Resources, in return for a service fee.

b. PAWC provides these billing services on behalf of American Water Resources pursuant to the Utility Billing Agreement.

c. American Water Resources provides the Warranty Services to PAWC customers with whom it has a service contract. The Warranty Services offered by

American Water Resources include repair and maintenance services for covered water service lines owned by customers, sewer service laterals owned by customers, and in-home plumbing.

d. The Warranty Services appear as a line item on PAWC's customer bills as "Protection Programs" and these fees are included in the total amount due on the bill. In fine print on the customer bill, a disclaimer states that the "Protection programs for water, sewer, and in-home plumbing are offered by American Water Resources" and explains that the charges are not regulated by the Commission and that PAWC's regulated services will not be disconnected for nonpayment or charged late fees in connection with non-payment of the Protection Programs charges.

e. American Water Resources uses the American Water name, logo, and branding; however, American Water Resources has no legal affiliation with PAWC or its Parent Company.

f. The Parent Company previously owned American Water Resources as a subsidiary, which means American Water Resources was once an affiliate of PAWC. However, the Parent Company sold American Water Resources to Oncourse Home Solutions in December 2021 and, therefore, American Water Resources is currently neither a subsidiary of Parent Company nor an affiliate of PAWC.

g. **[BEGIN CONFIDENTIAL]** [redacted]

[redacted] **[END CONFIDENTIAL]**

h. **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

i. **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

j. **[BEGIN CONFIDENTIAL]** [redacted]

[redacted] **[END CONFIDENTIAL]**

k. **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

Q. DOES PAWC RECEIVE REVENUES FOR PROVIDING THIS BILLING SERVICE?

A. Yes. PAWC received $663,147.12 from Oncourse Home Services in 2022 and has received payments of $548,412.24 to date in 2023.[47]

Q. HOW MANY PAWC CUSTOMERS ARE ENROLLED IN THESE PROTECTION PLANS?

A. As of October 2023, **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

[46] No arrangement for legal services can be valid or effective unless it receives written approval from the Commission. 66 Pa.C.S. § 2012.
[47] PAWC Response to OCA-08-025.

residential customers were enrolled in one or more protection services with an average monthly fee of **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**.[48]

Q. WHAT INSTRUCTIONS ARE GIVEN TO CUSTOMER SERVICE REPRESENTATIVES IF A CUSTOMER CALLS TO DISCUSS OR QUESTION THESE PROTECTION SERVICES?

A. PAWC's training materials state **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** I attach these materials provided in response to OCA-08-023 **CONFIDENTIAL** as Exhibit BA-9.

Q. PLEASE IDENTIFY YOUR CONCERNS AND RECOMMENDATIONS CONCERNING THIS PROGRAM.

A. Yes, I have four specific concerns. My first concern is that I believe that the use of the shared name and logo by American Water Resources would mislead the average PAWC consumer to believe that American Water Resources is legally affiliated with PAWC under the common ownership and management of the Parent Company, but in fact there is no affiliation. American Water Resources stands to benefit from this false impression as it gives it an unfair advantage over competitors offering similar warranty services to customers in the unregulated market for warranty services and induces consumers to buy from American Water Resources under the false impression that they are buying from a trusted brand. Likewise, PAWC stands to benefit from this false impression as PAWC's collects additional service fees from American Water Resources under the Utility Billing

[48] PAWC Response to OCA-08-022, Attachment (Confidential).

Agreement as the number of customers being billed for Warranty Services increases.

Q. WHAT IS YOUR SECOND CONCERN?

A. My second concern is that American Water Resources' exclusive marketing and billing arrangement with PAWC is discriminatory to any other provider of these services in PAWC's service territory. The potential effect of discriminatory practices is that consumers pay more for warranty services than might be available from other competitive providers of warranty services in PAWC's service territory. Clearly, American Water Resources is able to promote its services to PAWC customers and collect the fees for its services in a manner not available to any other provider for these non-basic services. The corporate policy that allows this unregulated entity to **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** raises serious concerns about the impact on customer expectations about the privacy of their customer relationship with PAWC.

Q. WHAT IS YOUR THIRD CONCERN?

A. My third concern is that, while I have no basis to assume that these charges are included in PAWC's termination notices, these charges are presented on the bill in a manner that does not conspicuously explain that the charges are "non-basic" or that they are not related to PAWC's regulated services except in small print. Pursuant to the Utility Agreement, **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** but it would appear that PAWC is *not* verifying whether American Water Resources is charging the rates it advertises to PAWC's customers via marketing

materials approved by PAWC.

Q. WHAT IS YOUR FINAL CONCERN?

A. My final concern is that pursuant to the Utility Agreement **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** yet there does not appear to be an affiliated interest agreement in place between PAWC and the Parent Company as to these legal services that PAWC is performing on behalf of the Parent Company. PAWC is required under the Public Utility Code to document and file all of its affiliated interest arrangements. PAWC's failure to be transparent with the Commission while at the same time engaging in a program that is overall misleading to its captive consumer base is a problem.

Q. BASED ON YOUR CONCERNS, WHAT IS YOUR RECOMMENDATION?

A. As a result of my concerns, I recommend that the Commission promptly initiate an investigation of this program and its implementation and direct PAWC to suspend this program until the Commission concludes its investigation. In the context of this rate case, the reliance on the revenues produced by this program is questionable but any defect associated in revenues by eliminating these revenues should be borne by shareholders and not PAWC's ratepayers. I refer to the direct testimony of Ralph Smith (OCA St. 2), as he explains that removal of the revenues that PAWC receives from American Water Services would serve to increase the revenue requirement and costs that consumers ultimately must pay. My recommendations regarding American Water Resources are intended to benefit consumers, not harm them, by ending the misleading practice of giving utility consumers the false impression that American Water Resources

is affiliated with PAWC and ensuring consumer access to competitive pricing and terms of warranty services by ending PAWC's discriminatory billing practices.

VI. CUSTOMER NOTICES REGARDING PRESSURE REDUCING VALVES

Q. CAN YOU EXPLAIN THE RECOMMENDATION OF OCA WITNESS FOUGHT WITH RESPECT TO PRESSURE REDUCING VALVES AND CONSUMERS?

A. OCA witness Fought (OCA St. 7) recommends that for water customers who have been identified by PAWC as having normal operating pressure that exceeds 125 psi, that PAWC should inform customers when to replace their pressure reducing valve and describe how to determine when a pressure reducing valve is nearing the end of its service life. Mr. Fought recommends that such information also be provided to households with pressures below 125 psi where PAWC has identified that household as utilizing a pressure reducing valve. OCA St. 7 at 10.

Q. DO YOU SUPPORT HIS SUGGESTIONS FOR CUSTOMER EDUCATION ON PRESSURE REDUCING VALVES?

A. Yes. I support his recommendation for informing consumers on pressure reducing valves and offer my recommendations as to how PAWC should inform customers. A public utility – while not responsible for the consumer side equipment or plumbing – is in a unique position to and should educate consumers regarding equipment that is used to support the customer's connection to the utility's system. In this instance, this relates to utility system pressure and the consumer's use of pressure reducing valves.

Q. WHAT IS YOUR RECOMMENDATION AS TO THE CUSTOMER EDUCATION THAT SHOULD BE OFFERED BY PAWC REGARDING PRESSURE REDUCING VALVES?

A. I recommend that PAWC develop a customer education program concerning pressure reducing values, when they are appropriate, how they work, and what consumers should do to monitor their performance for safety and reliability of water service from PAWC. This program should include a consideration of customer-specific communications relating to complaints about water pressure, general customer information on PAWC's website, and potentially bill inserts. PAWC should develop this outreach and education program as a compliance filing in this proceeding after review and input from stakeholders.

VII. SUMMARY OF CONDITIONS THAT SHOULD BE ATTACHED TO ANY RATE INCREASE

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS FOR PAWC'S CUSTOMER SERVICE PERFORMANCE AS A CONDITION OF ANY RATE INCREASE.

A. PAWC's failure to include any customer service or consumer protection performance goals and criteria for its claim of management excellence and reward of a higher rate of return is a serious defect and should contribute to the overall rejection of this proposal by the Company. In addition, there are certain areas that need to be addressed as requiring improvement and reform as conditions for allowing PAWC to increase its rates:

- After years of poor call center performance as documented in the last rate case and the Commission's Management Audit, PAWC should be required to meet specific monthly and annual performance standards. Specifically, PAWC's internal metrics do not reflect reasonable performance and I recommend that PAWC must meet a call performance standard of answering 80% of its calls within 30 seconds with an abandonment rate that is 4% or less. The Service Company's contracts with third-party call operators should be revised to impose automatic penalties for the failure to

meet these standards to avoid ratepayer funding for poor performance in the future. A plan to promptly achieve this objective should be required as a condition of any rate increase at no additional expense to PAWC customers due to the long-standing failure to reach reasonable performance requirements.

- PAWC's analysis of customer complaints, whether handled internally as disputes, or externally by BCS as informal complaints, needs to improve. PAWC should be required to conduct a regular and proper root cause analysis of its complaint trends, both for internal disputes and BCS informal complaints that document infractions and verified violations. This recommendation should require a professionally conducted root cause analysis and report on findings, including identification of trends, evaluation, steps to reform or avoid repeated trends, and internal steps taken to take proper internal enforcement action where needed within 3 months and quarterly updates to stakeholders.
- PAWC should be required to reform its Pennsylvania-specific "test" and training for its customer representatives to address the full scope of Chapter 56 and Act 14 rights and remedies that I have identified are lacking, as well as more detailed monitoring programs that reflect Pennsylvania-specific rights and remedies. This condition should require PAWC to routinely audit and evaluate the performance of its third-party contractors.
- In line with the suggestion made my OCA Witness Terry Fought (OCA St. 7) PAWC should be required to provide customer education to water customers about the lifespan of pressure reducing valves, consistent with my recommendations in my testimony above.

- I recommend that the Commission require PAWC to undertake certain reforms in its implementation of termination of water service to its customers on behalf of "non-Company" sewer service providers. PAWC should post a notice upon termination of service to explain the basis for the termination and how to get water service reconnected. In addition, PAWC should explicitly obtain information from the sewer authority that no dispute has been filed and that a medical emergency has not been declared. Finally, PAWC should reform its proposed tariff amendment to make clear these essential consumer protections associated with the disconnection of PAWC's water service to its customers for nonpayment of a sewer bill incurred by a municipality or sewer authority.
- As a result of my documentation of seriously misleading and improper conduct in the implementation of PAWC's billing for "protection services" provided by American Water Resources, I recommend that the Commission promptly initiate an investigation of PAWC's program to bill for non-basic services and direct PAWC to suspend the program until the investigation is complete and that such program require substantial reforms if allowed to proceed in the future. In the context of this rate case, the reliance on the revenues produced by this program is questionable but any defect associated in revenues by eliminating these revenues should be borne by shareholders and not PAWC's ratepayers.

Q. WHAT SHOULD OCCUR IF PAWC FAILS TO MEET ONE OR MORE PERFORMANCE STANDARDS?

A. At a minimum, the Commission should open an investigation of persistent failure to meet reasonable performance standards or conditions I have identified and recommended in my

testimony. The Commission should make clear as well that the failure to address these concerns and recommendations may have an impact on PAWC's future revenues and earnings.

Q. DOES THIS COMPLETE YOUR TESTIMONY AT THIS TIME?

A. Yes. However, I reserve the right to supplement this testimony based on pending discovery.

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket Nos.: R-2023-3043189 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	
Pennsylvania American Water Company	:	

DIRECT TESTIMONY

OF

BARBARA R. ALEXANDER

Barbara Alexander Consulting LLC

ON BEHALF OF THE

OFFICE OF CONSUMER ADVOCATE

CONFIDENTIAL VERSION

Date Served: February 1, 2024

Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

A. My name is Barbara R. Alexander. I am the sole member of Barbara Alexander Consulting LLC. My address is 44 Beech St., Hallowell, ME 04347. I appear in this case as a witness on behalf of the Office of Consumer Advocate (OCA).

Q. PLEASE DESCRIBE YOUR BACKGROUND AND QUALIFICATIONS.

A. I have over 30-years' experience as an expert in consumer protection, service quality, and low-income customer programs for public utilities and the regulation of retail alternative energy suppliers in markets that have adopted restructuring for electric and/or natural gas supply service. I was the Director of the Consumer Assistance Division for the Maine Public Utilities Commission from 1986-1996 and have operated my own consulting practice for public advocates and consumers since that time. I have testified in over 30 U.S. state jurisdictions, including Pennsylvania, and Canadian jurisdictions, in many proceedings. My C.V. is attached to this testimony as Exhibit BA-1, and it lists all my publications and testimony associated with my consulting practice.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION?

A. Yes. I have filed testimony on behalf of the OCA before the Pennsylvania Public Utility Commission (Commission) in investigations, base rate proceedings, mergers and acquisitions, and default service proceedings, on issues relating to customer service, service quality and reliability of service, low-income customer programs, and retail market programs. With regard to Pennsylvania's water and wastewater utilities, I have evaluated customer service and consumer protection programs in proceedings before the

Commission involving Pennsylvania American Water Company (PAWC), Pittsburgh Water and Sewer Authority, York Water, and Aqua Water.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY REGARDING PAWC?

A. Yes. I filed Direct and Surrebuttal Testimony on behalf of the OCA in PAWC's immediately prior base rate case that resulted in a $138 million revenue increase and that took effect only nine months prior to PAWC's filing in this proceeding (Docket Nos. R-2022-3031672 and R-2022-3031673) (2022 BRC). I also filed Direct and Surrebuttal Testimony on behalf of the OCA in the pending proceeding in which PAWC seeks to acquire the wastewater system currently operated by the Borough of Brentwood (Docket No. A-2021-3024058).

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I am filing Testimony on my review of PAWC's customer service policies and programs and, specifically, the following topics in the following order:

- The Company's service quality and call center's customer service performance quality is directly related to the Company's general rate increase request;
- The Company's consumer protection policies and programs to ensure that the Service Company's call center representatives are complying with Chapter 14 of the Public Utility Code and Chapter 56 of the Commission's regulations, particularly with regard to handling and evaluating customer complaints;
- The Service Company's call center's customer service performance, including performance trends, internal training, management oversight, including the findings of the most recent Management Audit conducted by the Commission;

- The Company's program to terminate water service provided by PAWC for nonpayment of charges related to non-Company, third-party providers of sewer services;
- The Company's billing arrangement with a non-affiliated, third-party provider of what are labeled on PAWC's customer bills as "protection" services for customer-owned service lines and in-home plumbing and PAWC's billing of charges for such services on PAWC customer bills; and
- The Company's request for a reward in its rate of return in light of the Company's customer service performance;

These issues are important themselves, but particularly so in this case given the magnitude of PAWC's proposed rate increases and the fact that PAWC's customers have seen rate increases in 2021, 2022, and 2023 resulting from a two-stage significant rate increase from its 2020 rate case and the increase that just took effect in January 2023 from the 2022 rate case. This is in addition to its proposed rate design changes, and the proposal for various trackers and rate increases outside of the normal base rate case (*i.e.*, Section 1308(d) general rate increase request) review process.

Q. DO YOU INCLUDE EXHIBITS WITH YOUR TESTIMONY?

A. Yes. I attach the following Exhibits to my Testimony:

- Exhibit BA-1: Barbara Alexander C.V.
- Exhibit BA-2 CONFIDENTIAL: PAWC Response to OCA-08-028 and 20-024, Attachment CONFIDENTIAL
- Exhibit BA-3: PAWC Response to OCA-08-010 and 20-001.
- Exhibit BA-4 CONFIDENTIAL: PAWC Response to OCA-08-007 and Attachment CONFIDENTIAL

- Exhibit BA-5: PAWC Response OCA-08-038 and Attachment.
- Exhibit BA-6: PAWC Response to OCA-08-021, Attachment
- Exhibit BA-7 CONFIDENTIAL: PAWC Response to OCA-25-003 CONFIDENTIAL
- Exhibit BA-8 CONFIDENTIAL: PAWC Response to OCA-20-016, Attachment 1 and 2 CONFIDENTIAL
- Exhibit BA-9 CONFIDENTIAL PAWC Response to OCA-08-023. Attachment CONFIDENTIAL

Q. PLEASE SUMMARIZE PAWC'S GENERAL RATE INCREASE PROPOSALS.

A. As of November 10, 2023, PAWC serves 779,292 water and wastewater customers located in 37 counties across Pennsylvania. PAWC's proposed tariffs would increase the Company's total annual operating revenues by approximately $203.9 million, or 20.2% ($199.2 million from water operations and $4.7 million from wastewater operations) based on a fully projected future test year (FPFTY) ending June 30, 2025. For water service, according to the Company's customer notices provided as part of the filing, if the Company's entire request is approved as filed, a residential water customer using 3,201 gallons per month would see increases in their monthly bill ranging by Rate Zone between approximately 25% to 64%. For wastewater service, according to the Company's customer notices provided as part of the filing, if the Company's entire request is approved as filed, a residential wastewater customer using 3,122 gallons of water per month would see increases to their monthly bill ranging by Rate Zone between approximately 3% to 121%, although some customers in certain Rate Zones would see a decrease by approximately 5%. The actual bill impacts vary widely based on the location of the customer in PAWC's

service territory as well as proposals to change the structure of several rate zones.

Q. HAVE CUSTOMERS COMPLAINED IN THIS CASE?

A. Yes. According to OCA's most recent compilation of customer response to this rate increase, 286 formal consumer complaints with approximately 149 different complainants and 535 informal complaints have been submitted to the Commission. This level of customer opposition to the rate increase proposed by PAWC is highly unusual based on my extensive experience in base rate cases in Pennsylvania and it far exceeds complaints submitted in prior PAWC rate cases. As a result of these significant bill increases, the Commission should carefully examine the adequacy and quality of customer service provided by PAWC, as well as the specific investments that form the basis for most of PAWC's proposed rate increases.

I. PAWC'S SERVICE QUALITY AND CUSTOMER SERVICE PERFORMANCE IS DIRECTLY RELATED TO THIS RATE CASE

Q. WHAT IS THE CONNECTION BETWEEN YOUR DISCUSSION OF SERVICE QUALITY AND CUSTOMER SERVICE PERFORMANCE AND THE RATE INCREASE PROPOSED BY PAWC?

A. As explained in OCA witness Christine Maloni Hoover's Direct Testimony (OCA Statement 1), under the regulatory compact, a public utility in Pennsylvania is statutorily obligated to provide adequate and reasonable service to its customers. A public utility must justify its rates based on, among other things, its ability to perform its essential quality of service and customer service functions at an adequate and reasonable performance level. Accordingly, where a public utility is seeking a rate increase – especially a significant one, and, where, as in this case, the utility is asking for a reward in the form of a higher rate of return based on its performance, it is appropriate to review

the performance of that utility and to compare such performance to other Pennsylvania utilities. Therefore, my evaluation of PAWC's customer service and consumer protection policies is directly related to the Commission's consideration of Company's general rate increase. In effect, it is part of the consideration of the Commission about whether PAWC is upholding its end of the bargain.

Furthermore, PAWC seeks an incentive in this case under Section 523 of the Public Utility Code in the form of the Commission's adoption of the higher end of the Company's requested return on equity of 10.95% based on its management performance in offering low-income and payment-troubled customer programs and in its community engagement and consumer education. PAWC St. 1 at 33-36, 40-41; PAWC St. 13 at 57-59. My evaluation of PAWC's customer service and consumer protection policies is directly related to the Commission's consideration of Company's request for the higher return on equity.

My analysis and findings should inform the Commission on the reasonableness of PAWC's significant rate increase request. Where I identify deficiencies in PAWC's customer service performance, I recommend that the Commission order improvements in specific areas as a condition of any rate increase and consider adopting any rate increase and rate of return that reflects the inadequate customer service I have documented. In some areas, I recommend that the Commission disallow certain incurred costs on the basis of the Company's continuing poor management performance or management negligence. This approach is mandated by the statutory guidelines of Section 523 governing public utility rate cases in which the Commission must evaluate the

"efficiency, effectiveness, and adequacy of service."[1] I address the implications for customer service performance below.

II. PAWC'S CONSUMER PROTECTION POLICIES AND COMPLIANCE WITH CHAPTER 14 OF THE PUBLIC UTILITY CODE AND CHAPTER 56 OF THE COMMISSION'S REGULATIONS AND RELATED OBLIGATIONS

Q. HAVE YOU EXPLORED HOW PAWC ENSURES COMPLIANCE WITH PENNSYLVANIA-SPECIFIC CONSUMER PROTECTION POLICIES?

A. I have explored how PAWC, ensures that its interactions with Pennsylvania customers complies with the Pennsylvania consumer protection and customer rights laws and regulations. In order to evaluate PAWC's compliance programs and management oversight, it is important to understand the corporate organization and the various means by which Pennsylvania customers interact with PAWC and its affiliate, American Water Works Service Company, Inc. (Service Company).

Q. CAN YOU PLEASE EXPLAIN YOUR UNDERSTANDING OF THIS STRUCTURE?

A. Yes, based on the Company's filing, the Company's responses to discovery, and Section XI of the PUC's 2023 Management Audit Report[2] and the Company's filed response to the Management Audit[3], my understanding of the corporate structure is as follows:

- PAWC is the subsidiary of American Water Works Company, Inc. (Parent Company), a parent company headquartered in Camden, New Jersey, that manages and operates many geographically disparate water and sewer utility subsidiary companies

[1] 66 Pa. C.S. 523.
[2] Pennsylvania-American Water Company, Pennsylvania Public Utility Commission's 2023 Management Audit Report, Docket No. D-2022-3035217 (Issued October 2023) (Released to Public on December 28, 2023). Section XI of the Management Audit Report presented call center performance from 2019-2022.
[3] Pennsylvania-American Water Company, Implementation Plan in Response to the 2022-23 Focused Management and Operations Audit, Docker No. D-2022-3035217 (Issued October 2023) (Released to public on December 28, 2023).

with service territories in 14 states and 1,600 communities[4], primarily in Pennsylvania, Illinois, New Jersey, Missouri, Indiana, West Virginia, and in other states.

- The Parent Company, through the Service Company, provides PAWC with call answering and customer service with a management structure that is responsible for multiple state activities. The Service Company's Customer Service Organization (CSO) provides call handling, billing, field services coordination, and other customer service functions for all the Parent Company's regulated operations, including PAWC.
- The Service Company's CSO is led and overseen by a Vice President and Chief Customer Officer of the Service Company; this executive is not dedicated to PAWC's customer service operations, instead performing the management and oversight functions for the CSO for all the regulated utility subsidiaries of the Parent Company, including PAWC.
- There is no physical customer service office in Pennsylvania where PAWC's customers can go to and interact in a personal manner with employees to resolve questions or complaints or engage in payment arrangements related to PAWC's service.
- PAWC customer calls are answered by call centers staffed by Service Company employees, and such employees are located at multiple locations, most of which are not located in Pennsylvania. The vast majority of Service Company's customer service representatives work virtually from home (telework). In addition, the Service Company has contracted with several third-party entities to handle customer calls, both outbound and inbound calls, and most of those contractors rely on agents who telework as well.[5]

[4] American Water Works 2022 Annual Report, https://s26.q4cdn.com/750150140/files/doc_financials/2022/ar/American-Water-Works-Company-Inc-2022-Annual-Report.pdf

[5] PAWC Response to OCA-20-001 confirms that, "There is no physical location of calls centers as vast majority of

- The Service Company employees and contractors are not dedicated to PAWC's customer service operations, instead performing their duties for all the regulated utility subsidiaries of the Parent Company, including PAWC.
- The calls handled by Service Company's employees and third-party contractors make use of internal software that tracks interactions with customers across all utility subsidiaries of the Parent Company, including PAWC. The software reflects service issues, billing issues, collection issues, and related policies in all state utility subsidiaries' operations.
- Calls from PAWC customers are directed to a customer service representative (whether to an employee or third-party contractor) who has passed a "test" that is intended to reflect the individual representative's passing knowledge of Pennsylvania specific collection rights and remedies.
- As a result of this corporate structure, where the Service Company – not PAWC – performs the call center operations on behalf of PAWC and is led by an executive of the Service Company, it is my opinion that PAWC's management oversight and compliance is needed and necessarily requires audits or root cause analysis of customer complaints to identify any failure by the Service Company to properly comply with or implement Pennsylvania laws, regulations, or policies.

Q. DOES PAWC CONDUCT THE PROPER LEVEL OF MANAGERIAL OVERSIGHT OF THE SERVICE COMPANY FOR COMPLIANCE WITH PENNSYLVANIA REGULATIONS AND POLICIES VIA AUDITS AND ROOT CAUSE COMPLAINT

our agents work remotely from home." This response also confirms that all Intelogix agents are working remotely and all but 13 of Transworld systems agents are remote. The latter two entities are third party contractors for call services that serve PAWC and other American Water Works customers in multiple states.

ANALYSIS?

A. No. PAWC does not conduct audits or root cause analyses of the Service Company's call center operations to affirmatively evaluate whether the call center performance complies with Pennsylvania specific consumer protection regulations and policies. Had PAWC entered an arms-length contract with a non-affiliated, third-party contractor to "contract out" or "farm out" its call center operations, it would seem reasonable, necessary, and appropriate that PAWC obtain contractual protection that would allow PAWC to audit the performance of the contractor from time-to-time to ensure compliance with PAWC's statutory and regulatory obligations and to impose contractual remedies, including termination of the contract, should the contractor's performance not be satisfactory. In contrast, the fact that PAWC does not audit the performance of the Service Company's call center operations and has undertaken no actions under its contracts to respond to inadequate or unreasonable performance, as outlined in my testimony below, indicates that this affiliated arrangement is lacking a very important arms-length protection for PAWC and PAWC's customers.

Q. WHAT DOES PAWC DO TO OVERSEE SERVICE COMPANY'S CALL CENTER OPERATIONS?

A. PAWC's complaint spreadsheet reflects a very short summary of the complaint and what steps were taken in response. The complaint data is organized by date and is capable of being sorted by complaint categories. There is no internal documentation of any analysis done of this complaint data or whether any steps were taken to respond to any analysis of the complaint trends or findings. The spreadsheet does contain a column that states whether the complaint is the "fault" of the Company but there is no analysis of what steps

have been taken in response to these determinations. PAWC's reaction to any complaint that PAWC determines is due to a "fault" of the Company is to discuss the matter with the customer service representative or that individual's manager, relying on counseling.

Q. DO YOU HAVE CONCERNS WITH PAWC'S OVERSIGHT OF SERVICE COMPANY'S CALL CENTER OPERATIONS?

A. Yes. PAWC's complaint analysis is seriously inadequate and does not reflect any root cause analysis or actions taken to reflect the analysis of customer complaints, whether they are internally handled disputes or the Commission's Bureau of Consumer Services (BCS) informal complaints. While PAWC enters customer disputes and complaints into a database, there is no analysis of the database to identify trends, underlying causes, or track performance. Finally, there are no performance standards that are applicable internally or with the third-party contractors that reflect compliance with Pennsylvania policies and programs or that tracks noncompliance in a manner that could be relied upon to determine acceptable performance or that is used to determine rewards or penalties. The reliance on "counseling" a particular customer service representative is not a reflection of any root cause analysis of complaint data and may or may not satisfy the occurrence or reoccurrence of a "fault."

Q. PLEASE DESCRIBE THE IMPORTANCE OF UTILITY TRACKING AND EVALUATING ALL COMPLAINTS.

A. Every Pennsylvania public utility is required to educate customers about how to register informal and formal complaints. Informal complaints get resolved informally by the Commission's BCS. Formal complaints get initiated by a customer or group of customers' filing a formal complaint with the Secretary's Bureau and the formal

complaints get formally adjudicated by an Administrative Law Judge (ALJ) and ultimately the Commission. Utilities also receive "disputes" directly from customers and are obligated to investigate and respond to those issues or indications of dissatisfaction. Customer complaints as a group form a hierarchy or pyramid, where at the bottom level of the pyramid is a large volume or majority of disputes that are handled and resolved by the utility call center representatives; at the next level up the pyramid is a smaller group of informal complaints that get resolved by BCS; and, at the top of the pyramid is yet a relatively smaller number of formal complaints that get resolved through a formal adjudication of the Commission. Tracking and evaluating disputes and informal or formal complaints are key to ensuring ongoing improvements in customer service because that evaluation is likely to spot the "red flag" that indicates a systemic issue or concern that requires PAWC's management's attention and, in some cases, a change in policy or procedure. In addition, of course, this type of evaluation may also identify violations of the Public Utility Code or the Commission's regulations.

Q. PLEASE SUMMARIZE THE COMMISSION'S BCS REPORTS ON COMPLAINTS AND COMPLIANCE FOR PAWC.

A. The Commission's BCS publishes a quarterly Consumer Activities and Report Evaluation for Pennsylvania electric, gas, telephone, and water utilities.[6] These reports typically include historical information to allow for a trend analysis. The BCS reports show that PAWC's complaint rate was 3.89 in 2021 and 4.22 in 2022, which exceeds any other Class A water utilities with the exception of one other smaller Class A utility.[7]

[6] http://www.puc.state.pa.us/filing_resources/consumer_activities_report_evaluation.aspx
[7] Utility Consumer Activities Report and Evaluation 2022, BCS, Pennsylvania Public Utility Commission, page 59.

PAWC's "justified"[8] residential complaint numbers and rates reflect a similar pattern of exceeding other Class A water utilities.[9] PAWC's residential payment arrangement request (PAR) rate is above average and 18.2% were determined to be "justified."[10] The BCS 2022 reports show that PAWC's "infraction rate"[11]of 0.58 exceeds all other major Class A water utilities.[12] According to the BCS reports, PAWC's infractions are categorized as 30% relating to reconnection of service, 23% dispute handling, 13% termination procedures, and 10% for credit standards and deposits.[13] The 3rd Quarter UCARE report for 2023 to date indicates an increase in residential complaints and PARs, justified complaints, and PARs compared to the same period in 2022.[14] A total of 158 verified infractions relating primarily to Chapter 56 are identified for PAWC, far in excess of other Class A water utilities.[15] This data evidences significant concern with PAWC's customer service performance, yet, there is no record or other indication of PAWC's management performing any root cause analysis of these complaints or other complaint trends of the issues reflected in BCS reports.

Q. DOES PAWC ANALYZE CUSTOMER COMPLAINTS TO ENSURE COMPLIANCE?

A. No. The Company compiles large spreadsheets of customer disputes and complaints but there is no record of any analysis that identifies trends or "root cause." According to the Company, a 699-page PDF document that lists customer complaints and their results in a

[8] The BCS deems a complaint "justified" if it is found by BCS that the utility did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters or tariffs. Ibid, page 20.
[9] Ibid., page 60 and 61.
[10] Ibid., Page 63 and 64.
[11] A verified infraction is a violation of a statute or regulation and provides written clarifications of Chapters 14, 30, 56, 63 or 64 and the policies of the Commission and BCS. Ibid., Page 19.
[12] Ibid., Page 70.
[13] Ibid, page 71.
[14] UCARE, 3rd Quarter, page 12.
[15] Ibid., page 19.

spreadsheet format is a "root cause" analysis.[16] The Company has implemented a "new quality assurance program."[17] However, "There has been no changes, reforms, or revisions to the Company's internal training programs and/or policies as a result of Pennsylvania specific results or complaint data. Any training or mentoring discussions as a result of feedback from quality assurance review is performed on an individual basis with identified call agents."[18] When asked to identify changes, reforms, or revision to internal training programs and/or policies that occurred due to any analysis of complaint data, the response was similar and failed to identify any specific response or change.[19] As a result, PAWC does not conduct a proper root cause analysis and has no record of any evaluation or analysis other than spreadsheets that list customer complaints with columns that identify its internal response on an individual complaint basis.[20]

Q. PLEASE EXPLAIN WHAT A PROPER ROOT CAUSE ANALYSIS LOOKS LIKE.

A. A root cause analysis is a fact-based exercise in which the underlying cause or causes of an undesirable outcome are identified and specific remedial steps are identified and determined to result in correcting or improving the previously identified undesirable result. A list of customer complaints with notations on how that particular complaint was resolved is not a root cause analysis.

> A root cause is defined as a factor that caused a nonconformance and should be permanently eliminated through process improvement. The root cause is the core

[16] PAWC Response to OCA-08-017, narrative response. At no point in the Confidential Attachment listing these complaints is there any summary, identification of trends, determination of a root cause of any trend or a reflection of the data in the spreadsheet. Listing and identifying the results of an individual complaint is not a root cause analysis.
[17] PAWC Response to OCA-08-005.
[18] PAWC Response to OCA-20-010.
[19] PAWC Response to OCA-20-014.
[20] PAWC Response to OCA-08-17 includes a Confidential 699-page PDF document listing customer complaints from 7/1/2022 through 10/31/2023.

issue—the highest-level cause—that sets in motion the entire cause-and-effect reaction that ultimately leads to the problem(s).

Root cause analysis (RCA) is defined as a collective term that describes a wide range of approaches, tools, and techniques used to uncover causes of problems. Some RCA approaches are geared more toward identifying true root causes than others, some are more general problem-solving techniques, and others simply offer support for the core activity of root cause analysis.

There are many methodologies, approaches, and techniques for conducting root cause analysis, including:

1. **Events and causal factor analysis:** Widely used for major, single-event problems, such as a refinery explosion, this process uses evidence gathered quickly and methodically to establish a timeline for the activities leading up to the accident. Once the timeline has been established, the causal and contributing factors can be identified.
2. **Change analysis:** This approach is applicable to situations where a system's performance has shifted significantly. It explores changes made in people, equipment, information, and more that may have contributed to the change in performance.
3. **Barrier analysis:** This technique focuses on what controls are in place in the process to either prevent or detect a problem, and which might have failed.
4. **Management oversight and risk tree analysis:** One aspect of this approach is the use of a tree diagram to look at what occurred and why it might have occurred.
5. **Kepner-Tregoe Problem Solving and Decision Making:** This model provides four distinct phases for resolving problems:
    1. Situation analysis
    2. Problem analysis
    3. Solution analysis
    4. Potential problem analysis[21]

According to the publications developed by the American Society for Quality, and other comparable publications[22], a proper analysis of any "root cause" requires the identification of "symptoms," which are not actual causes but signs of existing problems, and "first level causes," which are the causes that directly lead to a problem; and "higher

[21] https://asq.org/quality-resources/root-cause-analysis

[22] There is an extensive body of literature used in the medical community to conduct root cause analysis and develop plans to prevent adverse events. See, e.g., https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/guidanceforrca.pdf

level causes," which are links in the chain of cause-and-effect relationships that ultimately create the problem. PAWC compilation of individual customer complaints and their identification of the individual complaint resolution reflects "symptoms" and not the actual underlying cause of that reflects identification of patterns and the underlying facts that contributed to the complaint and complaint patterns.

Q. PLEASE DISCUSS PAWC'S RESPONSE TO OCA-20-024 AS AN EXAMPLE OF THE FAILURE TO CONDUCT APPROPRIATE ROOT CAUSE ANALYSIS OF ITS COMPLAINT DATA.

A. As a clear example of PAWC's failure to track and evaluate customer complaints or determine the root cause of verified infractions, PAWC was requested to provide information in OCA-08-028 as follows, "In calendar years 2021, 2022, and 2023, how many times has PAWC restored service after identifying that an account was not properly coded as being tenant-occupied at the time of termination?" PAWC's response stated, "PAWC does not track the requested information." In data request OCA-20-024, PAWC was asked to confirm that there is no root cause analysis of disputes or complaints that reflect the lack of proper coding of a tenant-occupied building. PAWC's response provided a Confidential attachment "for the analysis of informal complaints received from 2021, 2022, and 2023." This Confidential attachment consisted of 4 pages of a PDF document that was also provided in electronic spreadsheet format. I attach PAWC's response to OCA-08-028 and 20-024 with the **CONFIDENTIAL** Attachment as Exhibit BA-2. This document purports to reflect a root cause analysis but it was apparently created in response to this data request and not as a result of any routine business practice

to analyze PAWC complaint activity.[23] More importantly, this document reflects a listing of [redacted] specific instances of clear violations without any root cause analysis that would identify trends, point to the ultimate cause of the complaints or occurrences, and fails to document any internal reaction to infractions other than [redacted]

Q. WERE THERE ANY OTHER FINDINGS OR RECOMMENDATIONS FROM THE 2023 MANAGEMENT AUDIT RELEVANT TO YOUR TESTIMONY?

A. Yes. The 2023 Management Audit Report recommended that PAWC file a new or amended affiliated interest agreement (AIA) that accurately reflects the current company structure and intercompany transactions occurring between PAWC and the Service Company. PAWC has stated that it believes the AIA does not need to be updated. However, in its Opinion and Order releasing the 2023 Management Audit Report to the public, the Commission directed PAWC to file a new or amended AIA that accurately reflects the current company structure and the intercompany transactions occurring between PAWC and the Service Company.

Q. WHAT IS YOUR RECOMMENDATION IN RESPONSE TO YOUR FINDINGS?

A. My recommendations are as follows:

1. Any rate increase granted in this proceeding should reflect PAWC's failure to structure its arrangements with the Service Company in an arms-length manner that protects PAWC and its customers from poor call center performance and PAWC's failure to properly manage and oversee the call center performance

[23] The electronic version of this Confidential document reflects a creation date of [redacted] in the "properties" tab.

by tracking and evaluating its customer disputes and BCS findings or respond to the obvious trends of infractions and verified violations. These failures refute PAWC's claim of superior management performance and should be considered by the Commission under Section 523 in setting just and reasonable rates. I note that OCA witness Colton also identifies concerns with PAWC's management performance in OCA Statement 5. Specifically, in my opinion, these failures support adoption of OCA witness David Garrett's recommended return on equity in this proceeding (OCA Statement 3).

2. PAWC should conduct root cause analysis of all customer complaint data on a regular basis and track complaints and analysis for specific call centers, whether operated by the parent company or a third-party contractor.

3. Any new or amended AIA approved by the Commission should contain an arms-length contractual provision that grants PAWC the contractual protection to perform audits of the Service Company's CSO's performance based on defined call center metrics and to use specific call center complaint data to determine, in part, penalties and payments under the contract.

4. Any new or amended AIA approved by the Commission should contain an arms-length contractual provision that (1) will require the Service Company in its contracts with third-party contractors to reduce the fees it owes to the third-party contractor so that Service Company is not responsible for the payment of fees related to services that fail to meet the metrics; and (2) the Service Company will not allocate costs to PAWC for services that fail to meet the call center metrics.

5. PAWC should be required to provide managerial oversight of the Service

Company's CSO's call center performance, including but not limited to conducting audits of the Service Company's CSO's performance based on defined metrics and conducting a proper root cause analysis of its internal disputes and BCS related findings and update its findings and conclusions on a quarterly basis.

III. PAWC'S CALL CENTER CUSTOMER SERVICE PERFORMANCE

Q. PLEASE DISCUSS THE IMPORTANCE OF THE CALL CENTER FOR PAWC'S CUSTOMER SERVICE QUALITY.

A. As I described above, PAWC relies on employees and agents who handle calls from PAWC customers working from their home as the main method by which customers can communicate individually with PAWC. Therefore, the performance of these call centers and the supervision of the disparately located employees and agents is crucial to the Company's ability to deliver a reasonable level of customer service that complies with Pennsylvania's customer service and consumer protection requirements.

Q. PLEASE DISCUSS THE PERFORMANCE OF PAWC'S CUSTOMER CALL CENTER.

A. I attach the PAWC customer call center data showing the combined results provided in response to OCA-08-010 and separate results for two third-party contractors as provided in response to OCA-20-001, attached as Exhibit BA-3. This data shows the percentage of calls answered by a customer service representative within 60 seconds or 1 minute (reflecting how long the customer waits in the queue once the customer asks to speak to a live agent) and the call abandonment rate (referring to the percentage of calls in which the customer abandons the calls after entering the queue to speak to a customer representative).

During the period January 2022 through November 2023 the percentage of calls answered within 60 seconds NEVER met their internal standard of answering 80% of the customer calls within 60 seconds. The call abandonment rate improved from double digit percentages routinely experienced in 2022 and early 2023, but only recorded 8% or lower in five of these months. While there is some evidence of gradual improvement in call answering performance in 2023 compared to 2022, the overall historical pattern continues to reflect a poor performance. For example, the October 2023 results reflected that only 61% of calls were answered within 60 seconds and a 13% abandonment rate. Furthermore, as documented in Exhibit BA-3, the call center performance results for the two third-party contractors are very poor and far below the call center average as a whole. These results do not reflect the contractual performance standards included in the Service Company's contracts[24] with these entities [redacted] but neither the Service Company nor PAWC has undertaken any actions to enforce those standards.[25,26] For example, [redacted] The Service Company's failure to enforce this provision of the contract in turn impacts the costs allocated by the Service Company to PAWC for poor

[24] See, e.g., PAWC Response to OCA-06-006, Attachment 1 (Confidential), [redacted]

[25] PAWC Response to OCA-06-010 provided the Confidential Attachments with these contracts.

[26] PAWC Response to OCA-20-003 requested documentation of any performance penalties or failures to achieve the required performance metrics and response to those failures. PAWC's response merely referred to the contract terms. PAWC Response to OCA-20-005 confirms that PAWC has not conducted any audit or evaluation of the third-party contractors and states, "We interact with the third party contractors on a daily basis including any concerns regarding performance." Also, see PAWC Response to OCA-20-007 that documents that PAWC does not track complaints based on whether an employee or third-party contractor's agent handled the call.

call center performance.

Furthermore, the monthly results reflect a dramatic swing in call center performance that indicates the annual average masks poor performance that should not be tolerated. The key variable in predicting reasonable versus unreasonable call center performance is the volume of calls and the number of available call center representatives on hand to answer the calls. Performance can be improved with better prediction of call volume and ensuring sufficiently trained personnel are available to respond to call volumes at predicted high call volumes days and times. Both these criteria are within the ability of PAWC and the Service Company to predict and control.

Q. IS THIS POOR CALL CENTER PERFORMANCE CONSISTENT WITH PRIOR EVALUATIONS OF THE CALL CENTER?

A. Yes. I documented PAWC's below average call center performance in the last base rate case. This performance was also the subject of the Commission's most recent Management Audit that documented poor call center performance for 2019-2022.[27]

Q. WHAT WERE THE FINDINGS OF THE 2023 MANAGEMENT AUDIT REPORT IN RELATION TO CALL CENTER PERFORMANCE?

A. The Commission's Bureau of Audits found that since 2019, PAWC experienced a sustained decline in call handling performance and recommend that the PAWC "initiate or devote additional efforts to improve the efficiency and/or effectiveness of its customer service function" and "improve customer service performance at minimum to pre-pandemic levels." The Bureau of Audits evaluated the Service Company's call center

[27] Pennsylvania Public Utility Commission, Pennsylvania American Water Company Management and Operations Audit, Docket No. D-2022-3035217 (Issued October 2023), Section XI, Customer Service. The report presented call center performance from 2019-2022.

performance using the following metrics of: (1) percentage of calls answered within 30 seconds, and (2) call abandonment rate. According to the Report, the call center's performance when evaluated against both of these metrics declined significantly. As the Table below shows, and as the Report indicated, the percentage of calls answered within 30 seconds declined by 28% between 2019 and 2020 and the call abandonment rate more than doubled in the same period.

Exhibit XI-1, Management Audit at page 82.

	2019	2020	2021	2022
Calls answered within 30 seconds	24%	16%	8%	14%
Call abandonment rate	6%	15%	24%	22%

Q. DID THE COMPANY RESPOND TO THE FINDINGS IN THE MANAGEMENT AUDIT REPORT?

A. Yes, however, my concern about the relatively poor performance of the customer call center(s) is heightened by PAWC's response to the Commission's Management Audit that documented PAWC's poor call center performance. The Company's response was to state that it would "strive" to achieve a performance of answering 80% of the calls within 60 seconds by December 31, 2024, but without any mention of how to address the documented high abandonment call rate in the Management Audit.[28] Ms. Degillio's Direct testimony in support of this rate increase stated that the Company's internal standard was to answer 80% or less

[28] PAWC Implementation Plan, page 38, Docket No. D-2022-3035217 (October 2023).

abandonment rate.[29] While Ms. Degillio characterized this standard as an "industry standard," the Company is not able to defend this reference based on any "industry standard."[30] All Pennsylvania electric and gas utilities are evaluated based on answering 80% of customer calls within 30 seconds as reflected in the annual BCS Reports and that standard has been routinely relied upon for PAWC's own presentation of call center results as reflected in my Exhibit BA-3.

Q. HOW DOES PAWC ENSURE THAT PENNSYLVANIA CUSTOMER CALLS ARE HANDLED IN COMPLIANCE WITH PENNSYLVANIA CONSUMER PROTECTION AND CUSTOMER RIGHTS POLICIES?

A. PAWC has developed a "test" that any customer call agent must pass to handle PAWC calls. I attach this "test" as provided in response to OCA-08-007 (**CONFIDENTIAL**) as Exhibit BA-4. [redacted]

[29] PAWC Statement No. 9, pages 9-10.

[30] PAWC Response to OCA-20-012 states when asked to identify the "industry data" relied upon for this performance standard as stated in Ms. Degillio's Testimony (PAWC Statement No. 9), "The "industry data" referenced is knowledge obtained during industry conferences and networking with other call center executives."

[redacted]

Q. HOW DOES PAWC MEASURE CUSTOMER SATISFACTION GENERALLY WITH PAWC'S SERVICES?

A. PAWC conducts customer satisfaction surveys and Ms. Degillio's Direct Testimony in support of this rate increase specifically mentioned these surveys as a key performance metric for her customer service operations, referencing a 70% response rate of "good" or "very good" from PAWC customers.[31] However, the actual survey results data reflects a different story. When asked to rate the overall customer phone customer service, the top two box response has [redacted][32] The results of the survey of those interacting with PAWC's "myWater" web portal reflects [redacted][33] The results of customer satisfaction with field services is [redacted] in most results.[34] The survey results for the call center are below those reflected in customer satisfaction surveys conducted pursuant to a BCS-supervised survey instrument by electric and gas utilities in Pennsylvania, who regularly reflect a satisfaction rating for

[31] PAWC Statement No. 9 at 8.
[32] PAWC Response to OCA-06-018, Attachment 1 (confidential).
[33] Ibid.
[34] Ibid.

recent call center transactions at over 80%.[35] As a result, there is no evidence that PAWC's customer satisfaction rating is anything other than below average.

Q. AS A RESULT OF YOUR EVALUATION OF PAWC'S CALL CENTER PERFORMANCE, WHAT DO YOU RECOMMEND?

A. I recommend the following:

1. The Commission should adopt specific performance standards as a condition of any rate increase approved in this proceeding. Specifically, the Commission should require PAWC to comply with the monthly and annual average of answering 80% of PAWC calls within 30 seconds and a 4% call abandonment rate, performance that is routinely met by Pennsylvania's electric and natural gas utilities. In light of the historical documentation of poor performance and the lack of managerial attention to this issue with inadequate oversight and enforcement of any reasonable standard, PAWC should be held to specific performance standards. Reporting results alone is insufficient in light of this history.

2. PAWC should be required to reform its Pennsylvania-specific "test" and training for its customer representatives to address the full scope of Chapter 56 and Chapter 14 rights and remedies that I have identified are lacking, as well as more detailed monitoring programs that reflect Pennsylvania-specific rights and remedies. This condition should require PAWC to routinely audit and evaluate the performance of its third-party contractors.

3. PAWC's revenue requirement should also be adjusted as recommended by

[35] BCS, Customer Service Performance Report, Appendix A and B, https://www.puc.pa.gov/media/2566/2022-customer-service-performance-report-final-092623.pdf

OCA Witness Ralph Smith (OCA Statement 2) to eliminate expenses for third party call centers that have routinely failed to meet reasonable call performance standards for PAWC's customers.

4. Finally, any rate increase granted in this proceeding should reflect the poor performance of the call center operations since 2019. These failures refute PAWC's claim of superior management performance and should be considered by the Commission under Section 523 in setting just and reasonable rates. Specifically, in my opinion, the poor performance coupled with PAWC's failure to oversee and evaluate the Service Company's performance should be reflected in the return on equity granted in this proceeding. These failures – in addition to the poor performance identified by OCA witness Colton (OCA Statement 5) – support rejection of PAWC's proposal for a higher return on equity based on its management performance and support adoption of OCA witness Garrett's recommended return on equity.

IV. PAWC'S POLICY TO TERMINATE SERVICE TO PAWC CUSTOMERS ON BEHALF OF "NON-COMPANY" WASTEWATER PROVIDERS NEEDS MORE OVERSIGHT.

Q. PLEASE DESCRIBE WHY PAWC DISCONNECTS ITS WATER CUSTOMERS FOR NONPAYMENT OF "NON-COMPANY" WASTEWATER SERVICE PROVIDERS.

A. I understand there is a Pennsylvania law referred to as the Water Services Act or Act of April 14, 2006, codified at 53 P.S. §§ 3102.501 – 3102.507, that authorizes water public utilities, like PAWC, to enter into long-term agreements with municipalities, municipal authorities, cities, boroughs, or townships (non-utility sewer providers) for shut-off services for sewer services. This law obligates water public utilities, including PAWC, to

terminate water service to a customer at the request and direction of non-utility sewer provider until all overdue amounts owed to the non-utility sewer provider are paid. I understand based on advice of OCA counsel that the shut-off services that PAWC provides on behalf of non-utility sewer providers are governed by the provisions of the Water Services Act, and not by Chapter 56 of the Commission's regulations or Chapter 14 of the Public Utility Code.

Q. PLEASE DESCRIBE PAWC'S PROPOSAL IN THIS CASE RELATED TO THE SHUT-OFF SERVICES IT PROVIDES PURSUANT TO THE WATER SERVICES ACT.

A. PAWC has various agreements with approximately 178 non-utility sewer providers to terminate service to PAWC water customers for nonpayment of sewer services at the request and direction of non-utility sewer providers.[36] The Company's PUC-approved form of shut-off agreement was provided by PAWC in response to OCA-08-038 and is attached as Exhibit BA-5. While this practice has been in effect for many years, PAWC in this case has submitted a specific amendment to Rule 12.1 in its Tariff to recognize this situation. PAWC's proposed addition to Tariff Rule 12.1(H) authorizes termination of service by the Company: "In accordance with the terms of any agreement with a non-Company wastewater provider for non-payment of wastewater service when due."

Q. DOES PAWC COLLECT FEES FOR SHUT-OFF SERVICES IT PROVIDES PURSUANT TO THE WATER SERVICES ACT?

A. Yes. PAWC charges a fee for this service and in 2023 these fees totaled $414,595.[37]

[36] PAWC Response to OCA-08-037 asking to identify the "non-Company" entities for whom PAWC has such agreements consists of a 5-page PDF that lists approximately 178 municipalities and sewer authorities.
[37] PAWC Response to OCA-08-40.

For January 2023 through November 2023, PAWC received 3,613 requests to terminate service from these "non-Company" entities and PAWC terminated water service for 1,950 customers or 54% of those requests.[38] This is a very high termination rate.

Q. DOES PAWC MONITOR COMPLIANCE WITH ITS OWN SHUT OFF AGREEMENT?

A. No. PAWC has not conducted an audit, investigation, or evaluation of whether these providers have correctly or properly identified the landlord/tenant services, have not included non-basic services in the amounts submitted for termination of water service by PAWC, or any other aspect of the conditions of the Shut-Off Agreement.[39] Nor has PAWC evaluated or investigated compliance with the "Shut Off Agreement."[40]

Q. PLEASE DESCRIBE THE PROCESS BY WHICH CUSTOMERS ARE GIVEN NOTICE OF THESE SHUT-OFFS,

A. The notices that are given to customers prior to a shut-off are governed by the Water Services Act and the agreements that PAWC has in place with the non-utility service providers. Pursuant to the law and the agreements, the non-utility service provider is required to give prior notice to their sewer customers prior to PAWC shutting off the water service. However, once the notice is issued, if a customer disputes the shut-off for non-payment, the non-utility service provider is obligated under the Water Services Act and the agreements to inform PAWC to stop the shut-off until the customer's claim has been judicially determined (the jurisdiction for such disputes between sewer customers and the non-utility service provider is with the Court of Common Pleas not with the

[38] PAWC Response to OCA-08-037.
[39] PAWC Response to OCA-20-025.
[40] PAWC Response to OCA-20-028.

Commission).

Given the very high termination rate that I note above, to protect consumers from unauthorized water shut-offs under the Water Services Act, I recommend that PAWC should be required to have a process to confirm that no customer dispute is filed – it can be as simple as taking the step of verifying with the non-utility sewer provider that no customer dispute has been filed.

Q. DO YOU HAVE OTHER RECOMMENDATIONS?

A. Yes. I have three additional recommendations. My first recommendation is like my recommendation above. Upon review of PAWC's shut-off agreements, there is a common provision that requires the non-utility service provider to not direct the Company to terminate service if the customer produces a medical certification. That provisions states:

> "AND FURTHER PROVIDED that no occupant of said premises has produced a medical certification by a physician to be seriously ill or affected with a medical condition which will be aggravated by a cessation of water service or failure to restore water service, as provided for in 52 Pa. Code §§ 56.111-56.118, as amended."[41]

Given the very high termination rate that I note above, to protect consumers from unauthorized water shut-offs under the Company's agreements, I recommend that PAWC should be required to have a process to confirm that a customer did not produce a medical certification to the sewer provider – it can be as simple as taking the step of verifying with the non-utility sewer provider that no medical certification has been produced.

[41] [Provide U-dockets]

Q. WHAT IS YOUR NEXT RECOMMENDATION?

A. My next recommendation is that PAWC should be required to post notice at the customer's premises at the time it performs the water shut-off. The notice should make it clear to customers that the water service has been shut off due to the customer's non-payment of sewer services owed to its non-utility service provider, not due to non-payment of water services provided by PAWC. The notice should name the non-utility service provider and provide the number to contact that provider. Additionally, the posted shut-off notice should direct the customer to PAWC's tariff provisions governing shut-offs pursuant to the Water Services Act (as I discuss below). Based on advice of OCA counsel, while I understand shut offs done pursuant to the Water Services Acts are not subject to Chapter 56 or Chapter 14, I understand that nothing prevents PAWC from providing this type of reasonable notice to customers as "reasonable service" under the Public Utility Code.

Q. WHAT IS YOUR FINAL RECOMMENDATION?

A. My final recommendation is that PAWC's Proposed Tariff Rule 12.1(H) should be rejected. The placement of this rule in Section 12.1 of the Company's Tariff is misleading and confusing. Section 12.1 governs terminations upon prior notice; however, except for the newly proposed (H), all of the subsections relate to terminations with prior notices provided by PAWC, not by some third-party. Accordingly, I recommend that the Company craft a new Section 12.3 that governs solely the process of PAWC's termination of water service performed pursuant to the Water Services Act and agreements in place between PAWC and the non-utility service provider due to the customer's non-payment of sewer charges owed to the customers non-utility service

provider. The tariff section should explain the PAWC customer's right that once notice is issued by the non-utility service provider, that the Company cannot go forward with the termination if a customer dispute is filed in accordance with the Water Services Act or if the customer produces a medical certification. It should further state that the Company will post notice at the customer's premises at the time of shut-off.

V. PAWC COLLECTS CHARGES FOR THIRD-PARTY WARRANTY SERVICES ON PAWC CUSTOMER BILLS. PLEASE DISCUSS YOUR CONCEERNS WITH THIS PROGRAM.

Q. DOES PAWC BILL CUSTOMERS FOR NON-UTILITY SERVICES?

A. Yes. PAWC provides billing services for a third-party, non-affiliated company, named American Water Resources, LLC (American Water Resources) for insurance products or warranty services (Warranty Services) provided by this company in return for a service fee.[42] American Water Resources is not an affiliate of PAWC nor a subsidiary of the Parent Company. American Water Resources provides the Warranty Services to PAWC customers with whom it has a service contract. The Warranty Services offered by American Water Resources include repair and maintenance services for covered water service lines owned by customers, sewer service laterals owned by customers, and in-home plumbing.

Q. PLEASE EXPLAIN HOW THESE CHARGES APPEAR ON THE CUSTOMER BILL.

A. The sample bill provided by PAWC shows such charges listed on the first page as "protection programs" and that charge is included in the "total amount due."[43] I attach the PAWC response to OCA-08-021 and associated customer bill as Exhibit BA-6. On

[42] PAWC Response to OCA-08-021, narrative.
[43] PAWC Response to OCA-08-021, Attachment consisting of 9 pages.

page 2 of this bill in fine print and as the 7th of 8 items under "explanation of fees and other terms," it states, "Protection programs for water, sewer, and in home plumbing are offered by American Water Resources" and states that these charges are not regulated by the Commission and that regulated services will not be disconnected for nonpayment of "protection program charges" or charged late fees. The toll-free telephone number for American Water Resources is provided. On page 3 the Account Detail states a line item, "Protection Programs: For inquiries, please call [toll free number]." These charges are then included in "total current period charges." This page also repeats the explanation quoted above that is on page 2 of the bill in the "understanding your bill" section.

Q. WHAT IS THE RELATIONSHIP BETWEEN ONCOURSE HOME SOLUTIONS AND AMERICAN WATER RESOURCES?

A. American Water Resources appears to be owned by and controlled by Oncourse Home Solutions, but this entity is not identified in any PAWC bills or other information that PAWC provides to its customers. Rather, the web portal for Oncourse Home Solutions provides a link to one of their "brands," as American Water Resources.[44] A hot link to American Water Resources is provided and that web portal identifies water line protection programs, sewer line protection programs, and a combination water and sewer line protection program.[45] The web portal for American Water Resources includes the following disclosure that is headed by the logo used by American Water Works with the title, "American Water Resources, An Oncourse Company," with emphasis in the original:

> American Water Resources (AWR) offers service line protection contracts to homeowners in 43 states and Washington, D.C., and currently services more than

[44] https://oncoursehome.com/
[45] https://www.awrusa.com/

2 million contracts. The company has been providing protection contracts since the year 2000 with more than 9 out of 10 customers satisfied and an A- Rating from the Better Business Bureau. American Water Resources also provides its protection contracts to homeowners through municipal partnerships with the New York City Department of Environmental Protection, Orlando Utilities Commission, Nashville Metro Water Services and others. **American Water Resources is a trademark of American Water and used under license, but is not owned by American Water. As such, AWR's optional programs are not provided or guaranteed by American Water or its affiliates, and any changes in AWR's prices are not determined or controlled by American Water or its affiliates.** American Water Resources conducts business in California as American Water Resources Insurance Services and administers home protection contracts, provided by Virginia Surety Company, Inc., CA Lic. No. 0F65279. In Virginia, American Water Resources administers insurance policies, underwritten by Virginia Surety Company, Inc., VA Lic. No. 109751.

Q. WHAT IS THE RELATIONSHIP BETWEEN AMERICAN WATER WORKS OR PAWC AND AMERICAN WATER RESOURCES?

A. While there is no formal corporate relationship between American Water Resources and PAWC or the Parent Company, there are pertinent contractual relationships. The first is a trademark license agreement between the Parent Company and American Water Resources (and its affiliates) giving American Water Resources (and its affiliates) the right to use the "American Water" name, logo, and branding when marketing to PAWC's consumers its warranty services for consumer-owned service lines and in-home plumbing. The second relevant contractual relationship is a utility billing agreement between PAWC and American Water Resources. I attach (1) the Trademark License Agreement between the Parent Company and American Water Resources dated December 9, 2021 ("License Agreement") as provided by PAWC in response to OCA-03-025 **(CONFIDENTIAL)** as Exhibit BA-7, and (2) the Utility Agreement executed by and between PAWC and American Water Resources dated December 9, 2021 ("Utility Billing Agreement") as provided in response to OCA-20-016 **(CONFIDENTIAL)** as

Exhibit BA-8.

Q. PLEASE DESCRIBE THE LICENSE AGREEMENT BETWEEN THE PARENT COMPANY AND AMERICAN WATER RESOURCES AND YOUR CONCERNS.

A. When the Parent Company sold its non-regulated subsidiary business that marketed and sold warranty services to PAWC customers on or around December 9, 2021, the Parent Company and American Water Resources (and its affiliates) entered into the License Agreement that allows American Water Resources (and its affiliates) to use the Parent Company's logos and other trademarked insignia when marketing and selling warranty services for consumer-owned service lines and in-home plumbing. [redacted]

I have concerns with the License Agreement because American Water Resources' use of the "American Water" name and logo undoubtedly gives consumers the false impression that American Water Resources is an affiliate of PAWC and a subsidiary of the Parent Company. This presentation is misleading to consumers about the true nature of the relationship and has no doubt induced PAWC's consumers to purchase warranty services products from this company under the false impression of buying from a recognized brand and that the product's price is regulated or approved by the Commission. In my experience, consumers are not usually aware of the differences between regulated and unregulated services when they appear on the customer's

regulated utility bill and the cost of the product or service is included in the total amount due.

Q. PLEASE DESCRIBE THE UTILITY BILLING AGREEMENT BETWEEN PAWC AND AMERICAN WATER RESOURCES AND YOUR CONCERNS.

A. This Utility Billing Agreement allows American Water Resources to [redacted]

A. I have concerns because these contractual provisions would explain the high rate of enrollment in these services by PAWC customers, and would indicate that consumers are being induced to buy American Water Resources' services as a result of this [redacted]

Q. CAN YOU SUMMARIZE AND FULLY DESCRIBE THIS ARRANGEMENT?

A. Yes.

a. PAWC bills for warranty services (Warranty Services) that are offered and provided by this third party, non-affiliated company, named American Water Resources, in return for a service fee.

b. PAWC provides these billing services on behalf of American Water Resources pursuant to the Utility Billing Agreement.

c. American Water Resources provides the Warranty Services to PAWC customers with whom it has a service contract. The Warranty Services offered by

American Water Resources include repair and maintenance services for covered water service lines owned by customers, sewer service laterals owned by customers, and in-home plumbing.

d. The Warranty Services appear as a line item on PAWC's customer bills as "Protection Programs" and these fees are included in the total amount due on the bill. In fine print on the customer bill, a disclaimer states that the "Protection programs for water, sewer, and in-home plumbing are offered by American Water Resources" and explains that the charges are not regulated by the Commission and that PAWC's regulated services will not be disconnected for nonpayment or charged late fees in connection with non-payment of the Protection Programs charges.

e. American Water Resources uses the American Water name, logo, and branding; however, American Water Resources has no legal affiliation with PAWC or its Parent Company.

f. The Parent Company previously owned American Water Resources as a subsidiary, which means American Water Resources was once an affiliate of PAWC. However, the Parent Company sold American Water Resources to Oncourse Home Solutions in December 2021 and, therefore, American Water Resources is currently neither a subsidiary of Parent Company nor an affiliate of PAWC.

g. [redacted]

[redacted]

h. [redacted]

[redacted]

i. [redacted]

[redacted]

j. [redacted]

[redacted]

[redacted]

k. [redacted]

[redacted]

Q. DOES PAWC RECEIVE REVENUES FOR PROVIDING THIS BILLING SERVICE?

A. Yes. PAWC received $663,147.12 from Oncourse Home Services in 2022 and has received payments of $548,412.24 to date in 2023.[47]

Q. HOW MANY PAWC CUSTOMERS ARE ENROLLED IN THESE PROTECTION PLANS?

A. As of October 2023, [redacted]

[46] No arrangement for legal services can be valid or effective unless it receives written approval from the Commission. 66 Pa.C.S. § 2012.
[47] PAWC Response to OCA-08-025.

residential customers were enrolled in one or more protection services with an average monthly fee of [redacted].[48]

Q. WHAT INSTRUCTIONS ARE GIVEN TO CUSTOMER SERVICE REPRESENTATIVES IF A CUSTOMER CALLS TO DISCUSS OR QUESTION THESE PROTECTION SERVICES?

A. PAWC's training materials state [redacted] I attach these materials provided in response to OCA-08-023 **CONFIDENTIAL** as Exhibit BA-9.

Q. PLEASE IDENTIFY YOUR CONCERNS AND RECOMMENDATIONS CONCERNING THIS PROGRAM.

A. Yes, I have four specific concerns. My first concern is that I believe that the use of the shared name and logo by American Water Resources would mislead the average PAWC consumer to believe that American Water Resources is legally affiliated with PAWC under the common ownership and management of the Parent Company, but in fact there is no affiliation. American Water Resources stands to benefit from this false impression as it gives it an unfair advantage over competitors offering similar warranty services to customers in the unregulated market for warranty services and induces consumers to buy from American Water Resources under the false impression that they are buying from a trusted brand. Likewise, PAWC stands to benefit from this false impression as PAWC's collects additional service fees from American Water Resources under the Utility Billing

[48] PAWC Response to OCA-08-022, Attachment (Confidential).

Agreement as the number of customers being billed for Warranty Services increases.

Q. WHAT IS YOUR SECOND CONCERN?

A. My second concern is that American Water Resources' exclusive marketing and billing arrangement with PAWC is discriminatory to any other provider of these services in PAWC's service territory. The potential effect of discriminatory practices is that consumers pay more for warranty services than might be available from other competitive providers of warranty services in PAWC's service territory. Clearly, American Water Resources is able to promote its services to PAWC customers and collect the fees for its services in a manner not available to any other provider for these non-basic services. The corporate policy that allows this unregulated entity to [redacted] raises serious concerns about the impact on customer expectations about the privacy of their customer relationship with PAWC.

Q. WHAT IS YOUR THIRD CONCERN?

A. My third concern is that, while I have no basis to assume that these charges are included in PAWC's termination notices, these charges are presented on the bill in a manner that does not conspicuously explain that the charges are "non-basic" or that they are not related to PAWC's regulated services except in small print. Pursuant to the Utility Agreement, [redacted] but it would appear that PAWC is *not* verifying whether American Water Resources is charging the rates it advertises to PAWC's customers via marketing

materials approved by PAWC.

Q. WHAT IS YOUR FINAL CONCERN?

A. My final concern is that pursuant to the Utility Agreement [redacted] yet there does not appear to be an affiliated interest agreement in place between PAWC and the Parent Company as to these legal services that PAWC is performing on behalf of the Parent Company. PAWC is required under the Public Utility Code to document and file all of its affiliated interest arrangements. PAWC's failure to be transparent with the Commission while at the same time engaging in a program that is overall misleading to its captive consumer base is a problem.

Q. BASED ON YOUR CONCERNS, WHAT IS YOUR RECOMMENDATION?

A. As a result of my concerns, I recommend that the Commission promptly initiate an investigation of this program and its implementation and direct PAWC to suspend this program until the Commission concludes its investigation. In the context of this rate case, the reliance on the revenues produced by this program is questionable but any defect associated in revenues by eliminating these revenues should be borne by shareholders and not PAWC's ratepayers. I refer to the direct testimony of Ralph Smith (OCA St. 2), as he explains that removal of the revenues that PAWC receives from American Water Services would serve to increase the revenue requirement and costs that consumers ultimately must pay. My recommendations regarding American Water Resources are intended to benefit consumers, not harm them, by ending the misleading practice of giving utility consumers the false impression that American Water Resources

is affiliated with PAWC and ensuring consumer access to competitive pricing and terms of warranty services by ending PAWC's discriminatory billing practices.

VI. CUSTOMER NOTICES REGARDING PRESSURE REDUCING VALVES

Q. CAN YOU EXPLAIN THE RECOMMENDATION OF OCA WITNESS FOUGHT WITH RESPECT TO PRESSURE REDUCING VALVES AND CONSUMERS?

A. OCA witness Fought (OCA St. 7) recommends that for water customers who have been identified by PAWC as having normal operating pressure that exceeds 125 psi, that PAWC should inform customers when to replace their pressure reducing valve and describe how to determine when a pressure reducing valve is nearing the end of its service life. Mr. Fought recommends that such information also be provided to households with pressures below 125 psi where PAWC has identified that household as utilizing a pressure reducing valve. OCA St. 7 at 10.

Q. DO YOU SUPPORT HIS SUGGESTIONS FOR CUSTOMER EDUCATION ON PRESSURE REDUCING VALVES?

A. Yes. I support his recommendation for informing consumers on pressure reducing valves and offer my recommendations as to how PAWC should inform customers. A public utility – while not responsible for the consumer side equipment or plumbing – is in a unique position to and should educate consumers regarding equipment that is used to support the customer's connection to the utility's system. In this instance, this relates to utility system pressure and the consumer's use of pressure reducing valves.

Q. WHAT IS YOUR RECOMMENDATION AS TO THE CUSTOMER EDUCATION THAT SHOULD BE OFFERED BY PAWC REGARDING PRESSURE REDUCING VALVES?

A. I recommend that PAWC develop a customer education program concerning pressure reducing values, when they are appropriate, how they work, and what consumers should do to monitor their performance for safety and reliability of water service from PAWC. This program should include a consideration of customer-specific communications relating to complaints about water pressure, general customer information on PAWC's website, and potentially bill inserts. PAWC should develop this outreach and education program as a compliance filing in this proceeding after review and input from stakeholders.

VII. SUMMARY OF CONDITIONS THAT SHOULD BE ATTACHED TO ANY RATE INCREASE

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS FOR PAWC'S CUSTOMER SERVICE PERFORMANCE AS A CONDITION OF ANY RATE INCREASE.

A. PAWC's failure to include any customer service or consumer protection performance goals and criteria for its claim of management excellence and reward of a higher rate of return is a serious defect and should contribute to the overall rejection of this proposal by the Company. In addition, there are certain areas that need to be addressed as requiring improvement and reform as conditions for allowing PAWC to increase its rates:

- After years of poor call center performance as documented in the last rate case and the Commission's Management Audit, PAWC should be required to meet specific monthly and annual performance standards. Specifically, PAWC's internal metrics do not reflect reasonable performance and I recommend that PAWC must meet a call performance standard of answering 80% of its calls within 30 seconds with an abandonment rate that is 4% or less. The Service Company's contracts with third-party call operators should be revised to impose automatic penalties for the failure to

meet these standards to avoid ratepayer funding for poor performance in the future. A plan to promptly achieve this objective should be required as a condition of any rate increase at no additional expense to PAWC customers due to the long-standing failure to reach reasonable performance requirements.

- PAWC's analysis of customer complaints, whether handled internally as disputes, or externally by BCS as informal complaints, needs to improve. PAWC should be required to conduct a regular and proper root cause analysis of its complaint trends, both for internal disputes and BCS informal complaints that document infractions and verified violations. This recommendation should require a professionally conducted root cause analysis and report on findings, including identification of trends, evaluation, steps to reform or avoid repeated trends, and internal steps taken to take proper internal enforcement action where needed within 3 months and quarterly updates to stakeholders.
- PAWC should be required to reform its Pennsylvania-specific "test" and training for its customer representatives to address the full scope of Chapter 56 and Act 14 rights and remedies that I have identified are lacking, as well as more detailed monitoring programs that reflect Pennsylvania-specific rights and remedies. This condition should require PAWC to routinely audit and evaluate the performance of its third-party contractors.
- In line with the suggestion made my OCA Witness Terry Fought (OCA St. 7) PAWC should be required to provide customer education to water customers about the lifespan of pressure reducing valves, consistent with my recommendations in my testimony above.

- I recommend that the Commission require PAWC to undertake certain reforms in its implementation of termination of water service to its customers on behalf of "non-Company" sewer service providers. PAWC should post a notice upon termination of service to explain the basis for the termination and how to get water service reconnected. In addition, PAWC should explicitly obtain information from the sewer authority that no dispute has been filed and that a medical emergency has not been declared. Finally, PAWC should reform its proposed tariff amendment to make clear these essential consumer protections associated with the disconnection of PAWC's water service to its customers for nonpayment of a sewer bill incurred by a municipality or sewer authority.
- As a result of my documentation of seriously misleading and improper conduct in the implementation of PAWC's billing for "protection services" provided by American Water Resources, I recommend that the Commission promptly initiate an investigation of PAWC's program to bill for non-basic services and direct PAWC to suspend the program until the investigation is complete and that such program require substantial reforms if allowed to proceed in the future. In the context of this rate case, the reliance on the revenues produced by this program is questionable but any defect associated in revenues by eliminating these revenues should be borne by shareholders and not PAWC's ratepayers.

Q. WHAT SHOULD OCCUR IF PAWC FAILS TO MEET ONE OR MORE PERFORMANCE STANDARDS?

A. At a minimum, the Commission should open an investigation of persistent failure to meet reasonable performance standards or conditions I have identified and recommended in my

testimony. The Commission should make clear as well that the failure to address these concerns and recommendations may have an impact on PAWC's future revenues and earnings.

Q. DOES THIS COMPLETE YOUR TESTIMONY AT THIS TIME?

A. Yes. However, I reserve the right to supplement this testimony based on pending discovery.

EXHIBIT BA-1

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AARP
The Utility Reform Network (TURN) (California)
Pennsylvania Office of Consumer Advocate
Public Counsel Unit, Attorney General, Washington
Arkansas Attorney General
The Public Utility Project of New York
Ohio Office of Consumer Counsel
District of Columbia Office of People's Counsel
Delaware Division of Public Advocate
Maryland Office of People's Counsel

Areas of Expertise:

- Default Service, Consumer Protection, Service Quality, and Universal Service policies and programs associated with the alternative rate plans and mergers;
- Consumer Protection and Service Quality policies and programs associated with the regulation of competitive energy and telecommunications providers;
- The regulatory policies associated with the regulation of Credit, Collection, Consumer Protection, Low Income, and Service Quality programs and policies for public utilities;
- Customer Education and Rate design and pricing policies applicable to residential customers; and
- Advanced Metering Infrastructure and Grid Modernization costs and benefits, time-based pricing proposals, and performance standards.

Prior Employment

DIRECTOR

1986-96

Consumer Assistance Division

Maine Public Utilities Commission *Augusta, Maine*

One of five division directors appointed by a three-member regulatory commission and part of commission management team. Direct supervision of 10 employees, oversight of public utility consumer complaint function, appearance as an expert witness on customer services, consumer protection, service quality and low income policy issues before the PUC. Chair, NARUC Staff Subcommittee on Consumer Affairs.

SUPERINTENDENT

1979-83

Bureau of Consumer Credit Protection
Department of Professional and Financial Regulation *Augusta, Maine*

Director of an independent regulatory agency charged with the implementation of Maine Consumer Credit Code and Truth in Lending Act. Investigations and audits of financial institutions and retail creditors, enforcement activities, testimony before Maine Legislature and U.S. Congress.

Education

JURIS DOCTOR

1973-76

University of Maine School of Law *Portland, Maine*

Admitted to the Bar of the State of Maine, September 1976. Currently registered as "inactive."

B.A. (WITH DISTINCTION) IN POLITICAL SCIENCE 1964-68
University of Michigan *Ann Arbor, Michigan*

Boards and Commissions

Councilor, Winthrop (ME) City Council 2020-2022

Member, Board of Trustees, University of Maine System May 2022

Publications and Testimony

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Comments and Reply Comments on behalf of AARP before the Arizona Corporation Commission, Generic, In The Matter of The Commission's Inquiry Into Retail Electric Competition, Docket No. E-00000W-13-0135 (July and August 2013) [implementation of retail electric competition]

Comments on behalf of AARP before the Delaware Public Service Commission, Rulemaking for Retail Electric Competition, PSC Regulation Docket No. 49 (September 2013) [consumer protection regulations for retail electric competition]

Direct Testimony on behalf of AARP before the New Jersey Board of Public Service, In the Matter of the Petition of Public Service Electric and Gas Co. for Approval of the Energy Strong Program, Docket No. EO13020155 and GO13020156 (October 2013) [reliability programs; cost recovery mechanism]

Direct Testimony on behalf of Canadian Office and Professional Employee's Union, Local 378, before the British Columbia Utilities Commission, Re: Fortis BC Energy, Inc. Application for Approval of a Multi-Year Performance Based Ratemaking Plan for 2014 through 2018, Project No. 3698719 (December 2013) [Service Quality Index]

Direct Testimony on behalf of Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PPL Electric Corp. for Approval of a New Pilot Time-of-Use Program, Docket No. P-2013-2389572 (January 2014) [Design of pilot TOU program; bid out to competitive energy supplier]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of FirstEnergy Companies (Met-Ed, Penelec, Penn Power, and West Penn) for Approval of a Default Service Programs, Docket Nos. P-2013-2391368, et al. (January-March 2014) [Retail market enhancement programs, referral program]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PPL Electric Utilities for Approval of a Default Service Program and Procurement Plan for June 2013-May 2015, Docket No. P-2013-2389572 (January-May 2014) [Retail market enhancement programs, referral program]

Direct and Rebuttal Testimony on behalf of AARP before the Corporation Commission of Oklahoma, Application of Public Service Company of Oklahoma for Adjustment to Rates and Charges and Terms and Conditions of Service for Electric Service in the State of Oklahoma, Cause No. PUD-201300217 (March and May 2014) [AMI cost/benefit analysis and cost recovery; riders and surcharges; customer charge; low income program]

Direct and Reply Testimony on behalf of the District of Columbia Government through its Department of Environment before the Public Service Commission of the District of Columbia, In the Matter into the Investigation into the Issues Regarding the Implementation of Dynamic Pricing in the District of Columbia, Formal Case No. 1114 (April and May 2014) [Dynamic pricing policies and programs for residential customers]

Comments on behalf of AARP before the Delaware Public Service Commission, Rulemaking for Retail Electric Competition, PSC Regulation Docket No. 49 (Revised) (June 2, 2014) [consumer protection regulations for retail electric competition]

Direct and Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of Duquesne Light Company for Approval of Default Service Plan For the Period June 1, 2015 through May 31, 2017, Docket No. P-2014-2418242 (July and August 2014) [retail market enhancement programs, referral program]

Direct and Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PECO Energy Co. for Approval of its Default Service Plan for the Period June 1, 2015 through May 31, 2017, Docket No. P-2014-2409362 (June 2014) [retail market enhancement programs, referral program]

Alexander, Barbara, "An Analysis of State Renewable Energy and Distributed Generation Mandates on Low Income Consumers: Recommendations for Reform" (Oak Ridge National Laboratory, DOE, September 2014)

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania PUC v. West Penn Power, Metropolitan Edison, Penn Power, and Penelec, Dockets Nos. R-2014-2428742-24287245 (November 2014 and January 2015) [FirstEnergy rate cases: customer service; reliability of service; estimated billing protocols; proposed Storm Damage Expense Rider; tariff revisions]

Comments on behalf of Delaware Division of the Public Advocate before the Delaware Public Service Commission, Rulemaking for Retail Electric Competition, PSC Regulation Docket No. 49 (Revised) (January 2015) [consumer protection regulations for retail electric competition]

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Direct, Surrebuttal and Supplemental Surrebutal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. Respond Power, Docket No. C-2014-2427659 (May-October 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

Direct Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission, on behalf of the Pennsylvania Office of Consumer Advocate and Bureau of Consumer Protection, Attorney General, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. IDT Energy, Inc., Docket No. C-2014-2427657 (April 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

Affidavit of Barbara Alexander before the Pennsylvania Public Utility Commission, on behalf of the Pennsylvania Office of Consumer Advocate and Bureau of Consumer Protection, Attorney General, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. Blue Pilot Energy, LLC, Docket No. C-2014- 2427655 (June 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

Direct Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission, on behalf of the Pennsylvania Office of Consumer Advocate and Bureau of Consumer Protection, Attorney General, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. Blue Pilot Energy, LLC, Docket No. C-2014- 2427655 (September 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

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Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Co., Pennsylvania Power Co., and West Penn Power Co. [FirstEnergy] for Approval of their Default Service Program and Procurement Plan for the Period June 1,2017 through May 31, 2019, Docket Nos. P-2015-2511333, et. al. (January-February 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

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Program and Procurement Plan for the Period June 1, 2017 through May 31, 2021, Docket No. P-2015-2526627 (April-May 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Petition of PECO Energy Co. for Approval of its Default Service Program for the Period from June 1, 2017 through May 31, 2019, Docket No. P-2016-2534980 (June-July 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

Direct, Rebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Petition of Duquesne Light Co. for Approval of Default Service Plan for the Period June 1, 2017 through May 31, 2021, Docket No. P-2016-2543140 (July-August 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

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Direct Testimony of Barbara Alexander before the Washington Utilities and Transportation Commission on behalf of the Public Counsel and The Energy Project, Washington UTC v. Avista Corp. d/b/a Avista Utilities, Dockets UE-160228 and UG-160229 (August 2016) [Base Rate Case and AMI Project analysis of costs and benefits]

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Direct Testimony of Barbara Alexander before the Public Utilities Commission of Ohio on behalf of the Office of Consumer Counsel, In the Matter of the Application of Ohio Power Co. for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143, in the Form of an Electric Security Plan, Case No. 16-1852-EL-SSO (May 2017) [Response to proposal for new surcharge for certain distribution grid investments]

Alexander, Barbara, Analysis and Evaluation of PEPCO's Root-Cause Analysis Report: District of Columbia Customer Satisfaction, prepared for the District of Columbia Office of People's Counsel and submitted to the D.C. Public Service Commission in Formal Case No. 1119 (May 2017)

Direct Testimony of Barbara Alexander before the Arkansas Public Service Commission on behalf of the Attorney General of Arkansas, Application of Entergy Arkansas, Inc. for an Order to find Advanced Metering Infrastructure to be in the Public Interest, Docket No. 16-06-U (June 2017) [Analysis of AMI business case; consumer protection policies]

Rebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utilities Commission on behalf of the Office of Consumer Advocate, Pennsylvania PUC, et al., v. Philadelphia Gas Works, Docket No. R-2017-2586783 (June 2017) [Purchase of Receivables Program, customer shopping issues]

Direct and Surrebuttal Testimony of Barbara Alexander before the Maryland Public Service Commission on behalf of the Office of People's Counsel, In the Matter of the Application of Potomac Electric Power Co. for Adjustments to its Retail Rates for the Distribution of Electric Energy, Case No. 9443 (June and August 2017) [Service Quality and Reliability of Service]

Direct Testimony of Barbara Alexander before the Washington Utilities and Transportation Commission, on behalf of the Washington State Office of Attorney General, Public Counsel Unit, W.U.T.C. v. Puget Sound Energy, Dockets UE-170033 and UG_170034 (June 2017) [Base Rate Case: Service Quality Index; customer services]

Direct and Surrebuttal Testimony of Barbara Alexander before the Maryland Public Service Commission on behalf of the Office of Peoples Counsel, In the Matter of the Merger of AltaGas Ltd. And WGL Holdings, Inc., Case No. 9449 (August and September 2017) [Merger: conditions for service quality and reliability of service]

Supplemental Testimony in Opposition to Joint Stipulation and Recommendations of Barbara Alexander before the Public Utilities Commission of Ohio on behalf of the Office of Consumer Counsel, In the Matter of the Application of Ohio Power Co. for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143, in the Form of an Electric Security Plan, Case No. 16-1852-EL-SSO (October 11, 2017) [Response to Stipulation approving new surcharge for certain distribution grid investments]

Direct and Rebuttal Testimony of Barbara Alexander on behalf of The Public Utility Project of New York, before the New York Public Service Commission, Case 15-M-0127 In the Matter of Eligibility Criteria for Energy Service Companies, Case 12-M-0476 Proceeding on Motion of the Commission to Assess Certain Aspects of the Residential and Small Non-residential Retail Energy Markets in New York State, and Case 98-M-1343 In the Matter of Retail Access Business Rules (November and December 2017) [Analysis of New York retail energy market for residential customers; recommendations for reform]

Comments of Barbara Alexander before the Delaware Public Service Commission, on behalf of the Delaware Division f the Public Advocate, In the Matter of the Review of Customer Choice in the State of Delaware, Docket No. 15-1693 (December 22, 2017) [Proposals for retail market enhancement programs]

Alexander, Barbara, Analysis and Evaluation of PEPCO's Supplemental Root-Cause Analysis Report: District of Columbia Customer Satisfaction prepared for the District of Columbia Office of People's Counsel and submitted to the D.C. Public Service Commission in Formal Case No. 1119 (January 2018)

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander on behalf of the Office of Consumer Advocate, before the Pennsylvania Utility Commission, Joint Petition of Metropolitan Edison Company Pennsylvania Electric Company, Pennsylvania Power Company, and West Penn Power Company For Approval of their Default Service Program and Procurement Plan for the Period June 1, 2019 Through May 31, 2023, Docket Nos. P-2017-2637855, et seq. (February, March, and April 2018) [Retail Market Enhancement Programs in a default service proceeding]

Direct Testimony of Barbara Alexander on behalf of the Arizona Corporation Commission Staff, before the Arizona Corporation Commission, In the Matter of the Application of Brooke Water, LCC for increase in water rates, Docket No. W-03039A-17-0295 (May 15, 2018) [Analysis of customer service, call center performance, and compliance with prior Commission orders]

Alexander, Barbara, "Residential Demand Charges: A Consumer Perspective," EUCI Conference, Nashville, TN (May 2018)

Direct Testimony of Barbara Alexander in Opposition to the Joint Stipulation and Recommendation on behalf of the Office of the Ohio Consumers' Counsel, before the Public Utility Commission of Ohio, Case No. 17-0032-EL-AIR et seq. (June 15, 2018) [Analysis of the prudence of Duke Energy Ohio's Advanced Metering Infrastructure Deployment and request for inclusion of costs in rate base]

Alexander, Barbara, "Time to End the Retail Energy Market Experiment for Residential Customers," Harvard Electricity Policy Group (June 2018)

Rebuttal Testimony of Barbara Alexander on behalf of the Office of Consumer Advocate, before the Pennsylvania Public Utility Commission, PUC v. Columbia Gas of Pennsylvania, Inc., Docket No. R-2018-2647577 (July 3, 2018) [Analysis of gas utility billing policies for non-commodity services and retail natural gas suppliers]

Direct Testimony of Barbara Alexander on behalf of TURN and Center for Accessible Technology before the California Public Utility Commission, 2018 Rate Design Window, Docket No. A.17-12-011, et al. (October 26, 2018) [Consumer Protections to Accompany the Transition to Default Time of Use Rates for residential customers; analysis of customer education and messaging]

Direct and Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Utility Commission, PUC vs. Pittsburgh Water and Sewer Authority, Docket Nos. R-2018-3002645, R-2018-3002647 (September and October 2018) [Analysis of compliance with Pennsylvania consumer protection and service quality performance of a large water and sewer utility; base rate case]

Direct Testimony of Barbara Alexander on behalf of TURN before the California Public Utility Commission, Southern California Edison Charge Ready 2 Infrastructure and Market Education Programs, Docket No. A.18-06-015 (November 30, 2018) [Analysis of proposed mass market customer education proposal]

Direct, Surrebuttal and Supplemental Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Implementation of Chapter 32 of The Public Utility Code Regarding Pittsburgh Water and Sewer Authority – Stage 1, Docket Nos. M-2018-2640802 and M-2018-2640803 (April, May and August 2019) [Analysis of consumer protection, customer service, and customer education programs of large water and wastewater utility]

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Application of Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company, LLC and Peoples Gas Company, LLC for all of the Authority and the Necessary Certificates of Public Convenience to Approve a Change in Control of Peoples Natural Gas Company, LLC and Peoples Gas Company LLC by Way of the Purchase of All of LDC Funding, LLC's Membership Interests by Aqua America, Inc., Docket Nos. A-2018-3006061, A-2018-3006062, and A-2018-3006063 (April and May 2019) [Customer Service, Consumer Protection, and Universal Service conditions for merger]

Testimony in Opposition to Settlement on behalf of The Office of the Ohio Consumers' Council, before the Ohio Public Utilities Commission, In the Matter of the Commission's Investigation of PALMco Power OH, LLC dba Indra Energy and PALMco Energy OH, LLC dba Indra Energy, Case No. 19-957-GE-COI (September 4, 2019) [Analysis of proposed settlement for consumer protections and customer remedies]

Testimony in Opposition to Settlement on behalf of The Office of the Ohio Consumers' Council, before the Ohio Public Utilities Commission, In the Matter of the Commission's Investigation of Verde Energy USA Ohio LLC, Case No. 19-0958-GE-COI (October 2, 2019) [Analysis of proposed settlement for consumer protections and customer remedies]

Direct Testimony and Supplemental Direct Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Joint Petition of Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co. and West Penn Power Co. for Approval of Their Involuntary Remote Disconnect Procedures, Docket No. P-2019-3013979 et al. (March 20, 2020 and July 15, 2022) [Criteria for remote disconnection of service with AMI]

Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Interstate Gas Supply, Inc., Direct Energy Services LLC and Shipley Choice LLC v. Metropolitan Edison Co., Pennsylvania Electric Col, Pennsylvania Power Col, West Penn Power Co., Docket Nos. C-2019-30138-5 et al. (May 2020) [Complaint by retail suppliers seeking to bill non-basic services on utility bill]

Alexander, Barbara, "An Evaluation of Arizona Public Service Company's Customer Education Plan and its Implementation," prepared on behalf of the Staff of the Arizona Corporation Commission, Docket Nos. E-01345A-19-0236 and E-01345A-19-0003 (May 15, 2020)

Direct and Supplemental Testimony, Rebuttal Testimony, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program for the Period of June 1, 2021 through May 31, 2025, Docket No. P-2020-3019356 (June-August 2020) [Standard Offer Program and low income shopping program for retail market programs]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PECO Energy for Approval of Default Service Program for the Period June 1, 2021 through May 31, 2025, Docket No. P-2020-3019290 (June-July 2020),) [Standard Offer Program and low income shopping program for retail market programs]

Direct, Rebuttal, and Surrebuttal Testimony, on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of Duquesne Light Co. for Approval of Default Service Program for the Period June 1, 2021 through May 31, 2025, Docket No. P-2020-3019522 (July-September 2020), [Standard Offer Program and low income shopping program for retail market programs]

Direct and Surrebuttal Testimony, on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Pittsburgh Water and Sewer Authority, Docket Nos. R-2020-3017951 (water), C-2020-3019348, R-2020-3017970 (wastewater), C-2020-3019349 (July-September 2020) [Base rate case; analysis of customer service and consumer protection programs and policies]

Affidavit of Barbara R. Alexander, Analysis of Washington Gas Light Co. Root Cause Analysis Report, on behalf of the Office of the People's Counsel of the District of Columbia, submitted to the Public Service Commission in Formal Case No. 1142 (October 2020).

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Pennsylvania American Water Co, Docket R-2020-3019369, et al., (September-October 2020) [Base rate case; analysis of customer service and consumer protection programs and policies]

Direct and Surrebuttal Testimony, on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Pittsburgh Water and Sewer Authority, Docket Nos. R-2021-3024773, et al. (July-September 2021) [Base rate case; analysis of customer service and consumer protection programs and policies]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc, Docket Nos. R-2021-3027385 et al. (November-December 2021) [Base rate case; analysis of customer service and consumer protection programs and policies]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Joint Petition of Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co. and West Penn Power Co. for Approval of their Default Service Programs, Docket Nos. P-2021-3030012 et al. (February, March, and April 2022) [Standard Offer program; retail market policies; Time of Use rate option; low income consumer protections]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania American Water Co., Docket Nos. R-2022-3031672, et al (July and September 2022) [Base rate case: analysis of customer service and consumer protection performance]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, York Water Company base rate increase, Docket Nos. R-2022-3031340, R-2022-3032806 (August and September 2022) [Base rate case: analysis of customer service and consumer protection performance]

Direct, Rebuttal and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Columbia Gas of Pennsylvania Proposal for Green Path Tariff, Docket Nos. R-2022-3032167 and C-2022-3032404 (December 2022 and January and February 2023) [Proposal to offer an optional "green" product to residential customers with Renewable Natural Gas and Carbon Offsets]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of AARP Maine before the Maine Public Utilities Commission, Central Maine Power Company Request for Distribution Rate Increase and Rate Design Changes, Docket No. 2022-00152 (December 2022, March and April 2023) [Rate impacts; multi-year rate plan; rate design]

Direct and Surrebuttal Testimony on behalf of AARP Maine before the Maine Public Utilities Commission, Versant Power Request for Approval of Rate Change, Docket No. 2022-00255 (January and April 2023) [Rate impacts, AMI costs and benefits]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Application of Manwalamink Water and Sewer and NextEra Water Pennsylvania, Docket Nos. A-2022-3035298, et al. (January and March 2023) [consumer protection; service quality; acquisition of small water and sewer utility]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, National Fuel Gas Distribution Corp. Base Rate Case, Docket No. R-2022-3035730 (January and March 2023) [analysis of consumer protection and service quality performance in base rate case]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Philadelphia Gas Works Base Rate Case, Docket No.R-2023-3037933 (May and July 2023) [analysis of consumer protection and service quality performance in base rate case]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, FirstEnergy Pennsylvania Electric Distribution Companies Application for Merger, Docket No. A-2023-3038771 et.al (June and August 2023) [analysis of implication of proposed merger for customer service performance and low income programs]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Pittsburgh Water and Sewer Authority Base Rate Case, Docket No. R-2023-3039920, et al., (August and September 2023) [customer service performance; compliance with statutory and regulatory rules; multi-year rate plan conditions]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Application of Pennsylvania-American Water Co. to Acquire Wastewater Assets of Borough of Brentwood, Docket No. A-2021-3024058 (October and November 2023) [analysis of public benefits of acquisition]

Presentations and Training Programs:

- Presentation on Consumer Protection Policies for Solar Providers, New Mexico Public Regulatory Commission, Santa Fe, NM, January 2017
- Presentation on Residential Rate Design Policies, National Energy Affordability and Energy Conference, Denver, CO., June 2016
- Presentation on "Regulatory-Market Arbitrage: From Rate Base to Market and Back Again," before the Harvard Electricity Policy Group, Washington, D.C., March 2016.
- Presentation on Residential Rate Design and Demand Charges, NASUCA, November 2015.
- Alexander, Barbara, "Residential Demand Charges: A Consumer Perspective," presentation for Harvard Electricity Policy Group, Washington, D.C., June 2015.
- Presentation on "Future Utility Models: A Consumer Perspective," for Kleinman Center for Energy Policy, U. of Pennsylvania, August 2015.
- Presentation, EUCI Workshop on Demand Rates for Residential Customers, Denver, CO [May 2015]
- Presentation, Smart Grid Future, Brookings Institute, Washington, DC [July 2010]
- Participant, Fair Pricing Conference, Rutgers Business School, New Jersey [April 2010]
- Presentation on Smart Metering, National Regulatory Conference, Williamsburg, VA [May 2010]
- Presentation on Smart Metering, Energy Bar Association Annual Meeting, Washington, DC [November 2009]
- Presentation at Workshop on Smart Grid policies, California PUC [July 2009]
- National Energy Affordability and Energy Conference (NEAUC) Annual Conference
- NARUC annual and regional meetings
- NASUCA annual and regional meetings
- National Community Action Foundation's Annual Energy and Community Economic Development Partnerships Conference
- Testimony and Presentations to State Legislatures: Virginia, New Jersey, Texas, Kentucky, Illinois, and Maine
- Training Programs for State Regulatory Commissions: Pennsylvania, Georgia, Kentucky, Illinois, New Jersey
- DOE-NARUC National Electricity Forum
- AIC Conference on Reliability of Electric Service
- Institute of Public Utilities, MSU (Camp NARUC) [Instructor 1996-2006]
- Training Programs on customer service and service quality regulation for international regulators (India and Brazil) on behalf of Regulatory Assistance Project
- Georgia Natural Gas Deregulation Task Force [December 2001]
- Mid Atlantic Assoc. of Regulatory Utility Commissioners [July 2003]
- Illinois Commerce Commission's Post 2006 Initiative [April 2004]
- Delaware Public Service Commission's Workshop on Standard Offer Service [August 2004]

PUBLIC VERSION EXHIBIT BA-2

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 8

OCA 08-028

Responsible Witness: Jim Runzer, Vice President of Operations for PAWC

Question:

In calendar years 2021, 2022, and 2023, how many times has PAWC restored service after identifying that an account was not properly coded as being tenant-occupied at the time of termination?

Response:

PAWC does not track the requested information.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 20

OCA 20-024

Responsible Witness: Jim Runzer, Vice President of Operations for PAWC

Question:

Is it correct to interpret the response to OCA-08-028 as meaning that there has been no "root cause" analysis of disputes or complaints that reflect the lack of proper coding of a tenant-occupied dwelling? If this is not a correct assumption, identify any internal analysis of disputes and/or informal and formal complaints that have resulted from an improper coding of a tenant occupied dwelling in 2021, 2022, and 2023.

Response:

Please see OCA-20-024_Attachment_1_Confidential for the analysis of informal complaints received from 2021, 2022 and 2023.

EXHIBIT BA-3

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 8

OCA 08-010

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

Reference PAWC Statement No. 9 (Degillio):

Reference, page 9, Table 1: Please provide the monthly results relied upon to provide the annual averages reflected in the Table 1 in native electronic spreadsheet format. Please update this information during the pendency of this proceeding.

Response:

Please see OCA 08-010_Attachment.

OCA 08-010_Attachment

Month/Year	Percentage of Calls Answered in 60 seconds	First Contact Resolution	Average Speed of Answer (Minutes)	Abandonment Rate
Jan 2020	49%		00:03:39	13%
Feb 2020	80%		00:01:19	6%
Mar 2020	83%		00:00:54	4%
Apr 2020	92%		00:00:16	2%
May 2020	87%		00:00:37	4%
Jun 2020	72%		00:01:52	7%
Jul 2020	42%		00:08:28	21%
Aug 2020	51%		00:11:25	24%
Sep 2020	56%		00:09:20	15%
Oct 2020	46%		00:09:45	22%
Nov 2020	53%		00:13:33	29%
Dec 2020	48%		00:13:16	27%
Jan 2021	44%		00:19:50	37%
Feb 2021	48%		00:17:00	31%
Mar 2021	40%		00:20:43	33%
Apr 2021	43%		00:15:02	26%
May 2021	55%		00:04:29	12%
Jun 2021	37%		00:07:16	16%
Jul 2021	38%		00:10:47	24%
Aug 2021	33%		00:08:01	17%
Sep 2021	39%		00:08:41	19%
Oct 2021	34%		00:13:00	25%
Nov 2021	42%		00:09:53	22%
Dec 2021	57%	50%	00:04:36	20%
Jan 2022	39%	50%	00:09:55	32%
Feb 2022	60%	55%	00:03:28	12%
Mar 2022	41%	58%	00:08:57	20%
Apr 2022	47%	48%	00:06:34	18%

OCA 08-010_Attachment

Month/Year	Percentage of Calls Answered in 60 seconds	First Contact Resolution	Average Speed of Answer (Minutes)	Abandonment Rate
May 2022	34%	53%	00:09:32	23%
Jun 2022	27%	51%	00:14:09	29%
Jul 2022	30%	52%	00:12:03	27%
Aug 2022	43%	51%	00:11:06	28%
Sep 2022	45%	54%	00:07:10	19%
Oct 2022	44%	54%	00:06:08	16%
Nov 2022	61%	62%	00:03:00	10%
Dec 2022	60%	54%	00:04:28	13%
Jan 2023	57%	57%	00:02:40	8%
Feb 2023	53%	59%	00:05:46	18%
Mar 2023	62%	54%	00:03:52	13%
Apr 2023	68%	53%	00:02:28	7%
May 2023	76%	53%	00:01:22	5%
Jun 2023	79%	56%	00:01:18	4%
Jul 2023	68%	56%	00:02:24	9%
Aug 2023	67%	54%	00:02:19	8%
Sep 2023	64%	56%	00:02:38	8%
Oct 2023	61%	57%	00:03:56	13%

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 20

OCA 20-001

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

With regard to the third-party contractors that handle "all types of inbound calls" from Pennsylvania residential customers, please provide the following information separately for Transworld Systems, Inc. and Intelogix for each month of 2022 and 2023:

1. The location of each call center handling calls for Pennsylvania PAWC customers;
2. the call volumes handled from Pennsylvania customers of PAWC;
3. the percentage of all calls from Pennsylvania PAWC customers;
4. the percentage of calls answered by a live operator within 30 seconds;
5. the call abandonment rate.

Response:

1. There is no physical location of call centers as vast majority of our agents work remotely from home. We have a handful of agents who work in Camden, NJ office at 1 Water Street (less than five agents as of Dec 2023). Intelogix agents are all remote. All but 13 of Transworld Systems agents are remote. Please refer to response for OCA 06-005 to obtain the business address of the third party contractors.

2 – 5. Please refer to OCA 20-001_Attachment. The customer care data is combined in total for American Water agents and third-party contractors. The collection data is provided for each third-party contractor.

Customer Care				
Month/Year	Calls Handled	Percentage of Handled Calls from PAWC Customers	Percentage of Calls Answered in 30 seconds	Abandonment Rate
Jan 2022	31,163	20%	35%	32%
Feb 2022	30,523	20%	55%	12%
Mar 2022	33,659	19%	39%	20%
Apr 2022	34,579	21%	42%	18%
May 2022	33,876	20%	31%	23%
Jun 2022	32,092	19%	24%	29%
Jul 2022	33,574	19%	26%	27%
Aug 2022	39,914	20%	39%	28%
Sep 2022	39,670	21%	40%	19%
Oct 2022	39,441	20%	40%	16%
Nov 2022	37,530	20%	55%	10%
Dec 2022	34,140	18%	54%	13%
Jan 2023	35,901	20%	51%	8%
Feb 2023	33,699	19%	49%	18%
Mar 2023	39,846	20%	57%	13%
Apr 2023	36,841	22%	64%	7%
May 2023	42,191	22%	72%	5%
Jun 2023	39,916	20%	75%	4%
Jul 2023	38,993	20%	64%	9%
Aug 2023	41,417	20%	63%	8%
Sep 2023	37,288	20%	61%	8%
Oct 2023	37,896	20%	58%	13%
Nov 2023	35,762	20%	59%	8%

Transworld Systems, Inc. - Collections				
Month/Year	Calls Handled	Percentage of Calls from PAWC Customers	Percentage of Calls Answered in 30 seconds	Abandonment Rate
Jan 2022	3,983	22%	25%	40%
Feb 2022	3,354	23%	41%	19%
Mar 2022	4,991	24%	40%	16%
Apr 2022	6,239	28%	27%	17%
May 2022	5,872	24%	27%	16%
Jun 2022	6,266	25%	55%	11%
Jul 2022	6,368	25%	42%	12%
Aug 2022	7,367	26%	25%	17%
Sep 2022	6,864	26%	49%	14%
Oct 2022	5,741	23%	46%	13%
Nov 2022	4,646	22%	50%	13%
Dec 2022	5,209	23%	50%	11%
Jan 2023	5,121	23%	54%	9%
Feb 2023	4,192	19%	49%	11%
Mar 2023	4,765	21%	40%	15%
Apr 2023	5,083	25%	45%	17%
May 2023	5,557	24%	56%	9%
Jun 2023	6,405	21%	31%	12%
Jul 2023	4,560	25%	58%	13%
Aug 2023	5,156	20%	51%	14%
Sep 2023	6,523	22%	26%	18%
Oct 2023	4,061	22%	45%	20%
Nov 2023	4,445	21%	33%	18%

Intelogix - Collections				
Month/Year	Calls Handled	Percentage of Calls from PAWC Customers	Percentage of Calls Answered in 30 seconds	Abandonment Rate
Jan 2022	551	5%	3%	34%
Feb 2022	2,789	20%	42%	20%
Mar 2022	6,588	22%	18%	23%
Apr 2022	6,167	26%	38%	33%
May 2022	5,606	23%	37%	21%
Jun 2022	6,891	24%	44%	10%
Jul 2022	6,775	21%	42%	18%
Aug 2022	9,697	27%	34%	25%
Sep 2022	8,244	26%	40%	21%
Oct 2022	7,144	24%	40%	22%
Nov 2022	5,955	22%	38%	17%
Dec 2022	6,013	22%	46%	22%
Jan 2023	5,236	21%	53%	17%
Feb 2023	4,549	20%	46%	18%
Mar 2023	5,065	21%	33%	18%
Apr 2023	4,949	25%	24%	19%
May 2023	5,595	23%	56%	12%
Jun 2023	4,957	24%	45%	27%
Jul 2023	6,179	20%	45%	11%
Aug 2023	6,691	20%	49%	13%
Sep 2023	2,335	24%	30%	23%
Oct 2023	3,862	14%	41%	17%
Nov 2023	5,908	19%	39%	24%

PUBLIC VERSION EXHIBIT BA-4

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 8

OCA 08-007

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

Reference PAWC Statement No. 9 (Degillio):

Provide the materials used to "certify" agents can handle Pennsylvania related calls.

Response:

See OCA 08-007_Attachment_CONFIDENTIAL.

EXHIBIT BA-5

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 8

OCA 08-038

Responsible Witness: Jim Runzer, Vice President of Operations for PAWC

Question:

Reference PAWC Statement No. 4 (Gress):

Provide the termination notice issued to a PAWC customer for disconnection of water service as a result of nonpayment of wastewater service to a "non-Company" entity.

Response:

PAWC only issues termination notices to "non-Company" Landlord/Ratepayer customers as outlined in the company's Commission-approved form of shut off agreement (Please refer to OCA 08-038_Attachment). Refer to Exhibit A for a copy of said termination notice. The "non-Company" entity is responsible for providing termination notices to all non-Landlord/Ratepayer customers for disconnection of water service as a result of nonpayment of wastewater services, pursuant to the attached shut off agreement.

SHUT-OFF AGREEMENT

THIS AGREEMENT, made this day of , 20___, by and between the _____, a municipal _____ of the Commonwealth of Pennsylvania, having an office for the transaction of business at _____ (hereinafter called the "Municipality") and PENNSYLVANIA-AMERICAN WATER COMPANY, a public utility corporation of the Commonwealth of Pennsylvania, with its principal place of business at 852 Wesley Drive, Mechanicsburg, Pennsylvania 17055, (hereinafter called the "Water Company").

W I T N E S S E T H

THAT WHEREAS, the Municipality is engaged in supplying sewage service to the citizens and residents of the _____, _____ County, Pennsylvania; and

WHEREAS, the Water Company, a corporation as aforesaid, is the owner and operator of a water distribution system serving the customers in the aforesaid area, under the applicable Rules and Regulations of the Pennsylvania Public Utility Commission; and

WHEREAS, the Water Company is authorized and required at the request and direction of the Municipality pursuant to the provisions of the Act of April 14, 2006, P.L. 85, 53 P.S. Sections 3102.501 et. seq., to shut-off the supply of water from its system to any premises in which the rentals, rates and charges for sewer, sewage or sewage treatment service supplied by the Municipality are unpaid and the claim or lien for such service has been assigned to the Municipality.

WHEREAS, certain notice requirements relating to the shut-off of the supply of water are set forth therein and the Utility Service Tenants Rights Act of November 26, 1978, P.L. 1255, No. 299, 68 P.S. Sections 399.1 et seq. ("USTRA"); and

WHEREAS, both parties believe that they should enter into a written agreement specifically setting forth the duties, obligations, responsibilities and liabilities of each party to each other and such agreement is specifically authorized by the Act of April 14, 2006, P.L. 85, 53 P.S. Section 3102.501 et seq.

NOW THEREFORE, in consideration of the sum of ONE DOLLAR ($1.00) and other good and valuable consideration, and the covenants hereinafter expressed, the parties hereto do mutually agree as follows:

1. Upon written request by the Municipality specifying a premises in the Municipality's service area with regard to which the rentals, rates and charges for sewer, sewage or sewage treatment service shall not have been paid for a period of at least thirty days from the due date thereof, the Water Company shall proceed to shut-off the supply of water to such premises until it is advised in writing by the Municipality that all such overdue rentals, rates and charges, together with any interest thereon, have been paid or the Municipality directs otherwise; PROVIDED HOWEVER:

A. For any premises other than a residential building for which the landlord is the party responsible for the payment of sewer service, said written request must be accompanied by a statement in writing by a responsible officer of the Municipality setting forth:

i. that the Municipality has given ten (10) days' written notice of its intention to request the Water Company to shut-off the supply of water from its system to such premises has been mailed to the person liable for the payment of such rentals and charges and the owner of the property or property manager,

ii. that the Municipality has posted, at least ten days, a written notice to this effect at the main entrance to the premises, and

iii. that the Municipality has not received, during the ten day period, a written statement under oath or affirmation from the person liable for the payment of the said rentals and charges stating that the said owner has a just defense to the claim or part thereof;

B. For any residential building for which the landlord is responsible for the payment of sewer service, said written request must:

i. Be provided to an agent of the Water Company at least 45 days in advance of the proposed date for service to be shut-off;

ii. Be accompanied by a 37-day notice and 30-day notice in the form attached hereto as Exhibit A on the Municipality's letterhead for each customer for which shut-off of service is being requested to be posted by the Water Company;

iii. Be accompanied by a copy of the bill for the prior billing period for each customer for which shut-off of service is being requested; and

iv. Provide the agency names, addresses and phone numbers for: (i) the Department of Licenses and Inspections of any city of the first class; (ii) the Department of Public Safety of any city of the second class, second class A, or third class; and (iii) the city or county Public Health Department or in the event that such a department does not exist, the Department of Health office responsible for that county.

AND FURTHER PROVIDED that no occupant of said premises has produced a medical certification by a physician to be seriously ill or affected with a medical condition which will be aggravated by a cessation of water service or failure to restore water service, as provided for in 52 Pa. Code §§56.111-56.118, as amended.

2. The Water Company shall invoice the Municipality on a monthly basis for each of the premises for which shut-off was requested in the previous month and the Municipality shall pay to the Water Company the invoiced amount within thirty (30) days of receipt. Shut-off of service to any premises other than a residential building for which the landlord is the party responsible for the payment of sewer service under Section 1.A, above, shall be charged the sum

of Thirty Dollars ($30.00). Shut-off of service to a residential building for which the landlord is responsible for the payment of sewer service under Section 1.B, above, shall be charged the sum of One Hundred and Twenty Dollars ($120.00) each for multi-dwellings and Seventy- Five Dollars ($75.00) for single dwellings, provided that such request for shut-off of service is completed. For shut-off requests that are not able to be completed because the 37-day notice sent by certified mail is unclaimed, the sum of Seventy-Five Dollars ($75.00) will be charged. All of the aforementioned amounts are intended to cover the Water Company's cost of providing required notice, where applicable, and shutting off the water supply to each premises listed in such request. The Municipality shall also pay to the Water Company, upon its request therefore, the further sum of Thirty Dollars ($30.00) to cover the Water Company's cost of restoring water service to each such premises. In the event that the actual cost incurred by the Water Company in discontinuing and restoring water service to any such premises is more than the charges described above, the Municipality shall remit the actual cost thereof to the Water Company based on time, material, transportation and other fixed charges. The fees fixed hereunder may be amended from time to time as agreed by the parties hereto.

3. The Water Company shall not be liable for any loss, damage or other claim asserted by the owner, person or corporation based on or arising out of the shutting off of such supply of water. The Municipality shall indemnify and save harmless the Water Company, its agents, officers, servants or employees from any such loss, damage or other claim arising out of said activity pursuant to the terms of the Agreement. Notwithstanding the aforementioned language, the Municipality shall not be responsible for any loss, damage or claim asserted by said owner, person or corporation due to negligence on the part of the Water Company, its agents, officers, servants or employees, while performing any services for the Municipality pursuant to this agreement.

4. If a dispute shall arise between the parties hereto regarding any of the provisions of this Agreement, such dispute may be submitted by either of the parties to the Pennsylvania Public Utility Commission whose decision, unless reversed on appeal, shall be final.

5. This Agreement may be terminated by either of the parties hereto by ten (10) days' written notice given to the other party at its principal place of business.

6. This Agreement shall become effective thirty (30) days after the Water Company has filed a copy thereof with the Pennsylvania Public Utility Commission or, in the event that the said Commission institutes an investigation, at such time as the said Commission grants its approval thereof.

7. The Water Company shall have the right to increase the charged amounts in Section 2, above, from time to time, in the event that the cost to the Water Company for performing the service hereunder increases, upon sixty (60) days' written notice to the Municipality. It is further understood and agreed that the aforesaid amount of Thirty Dollars ($30.00) for the shutting off and restoring of water service under the provisions of this Agreement shall be automatically increased to coincide with the charges for shutting off water service and restoring water service contained in the Company's tariff as on file with and approved by the Pennsylvania Public Utility Commission from time to time.

8. Notwithstanding the provisions of this Agreement, it is understood and agreed by the parties hereto that the Water Company shall be required to comply with any existing regulations of the Pennsylvania Public Utility Commission, including but not limited to those

relating to notice before termination, and in addition to providing any notice that might otherwise be required under this contract or any applicable law or ordinance.

9. This Agreement supersedes and repeals any prior agreement, contracts, and understanding, written or oral, by or among the parties hereto with respect to the subject matter contained herein. This Agreement contains the entire agreement among the parties hereto, and no oral statements or representations or prior written matter not contained in this instrument shall have any force and effect.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be signed and attested by their proper officers and their respective seals to be hereto affixed the day and year first above written.

This Agreement will be effective on the _____ day of _____, 20__.

ATTEST: _____

_____ BY: _____
Secretary _____
(SEAL) (Title)

ATTEST: PENNSYLVANIA-AMERICAN WATER COMPANY

_____ BY: _____
Secretary (Vice) President
(SEAL)

Rev. 02/21

EXHIBIT A
Form of Notices

Today's Date _____ (PAWC to fill in)

Landlord Ratepayer Name: _____

Landlord Ratepayer Address: _____

City, State, Zip _____

For Service to Property Located at:

_____

Sewer Account Number _____

Pay Before _____ (PAWC to fill in)

Pay This Amount: $_____

IMPORTANT: 37 DAY SHUT OFF NOTICE

Please read and take the steps needed to prevent your water service from being shut off. Payment on your sewer account is overdue. If payment is not received, your water service may be shut off on or after _____ (PAWC to fill in). You can prevent discontinuation of water service by paying the amount printed above.

TO STOP THE SHUT OFF, YOU MUST PAY THE AMOUNT OVERDUE OR YOU MUST CALL US AT _____. You may also contact us for payment options.

YOUR TENANTS WILL BE NOTIFIED. We will notify your tenants on or after _____ (PAWC to fill in) that service will be shut off. At that time, we will also inform them of their rights under the Utility Service Tenants Rights Act ("USTRA"). USTRA states that within seven (7) days of the date you receive this notice, you must give us the names and addresses of the affected tenants, unless you pay the total past due amount or make satisfactory payment arrangements with us. You may have to pay liquidated damages of not less than $500 for each day you do not give us this tenant information. To provide the names and addresses of the affected tenants, call us at _____ or write to us at _____. To avoid the notification of your tenants, you may file a petition in court to dispute the right to discontinue service.

If we shut off your tenants' service, you will have to pay the past due amount and a Turn-On Charge of $_____.

Please Note: We may not be able to restore your service until 5:00 p.m. the next business day after receiving payment. If you have questions about this notice or your bill, please call us at the number listed above.

Sincerely,
Sewer Municipal Entity's Name

Today's Date: _____ (PAWC to fill in)

For Service to Property Located at _____

City, State, Zip _____

Sewer Account Number _____

30 DAY SHUT OFF NOTICE TO OCCUPANT

Please read and take the steps needed to prevent your water service from being shut off.

IMPORTANT NOTICE TO TENANTS WARNING: YOUR WATER SERVICE MAY BE SHUT OFF ON OR AFTER _____ (PAWC to fill in) BECAUSE OF NON-PAYMENT OF SEWER CHARGES.

TO STOP THE SHUTOFF OF YOUR UTILITY SERVICE, YOU MUST DO ONE OF THE FOLLOWING THINGS:

1. You can join with the other tenants to apply to have service continued or resumed. Service will not be discontinued or will be resumed if the tenants pay the amount equal to your landlord's sewer bill for the 30-day period preceding this notice. A copy of that bill is enclosed. Payments may be made only by check or money order payable to: _____.

2. By law, you may deduct the amount that you made for the sewer bill from your rent due now or in the future. We will tell your landlord how much you paid for the utility service. Your landlord may not retaliate against you for exercising your right to make payment to prevent the shut-off. You have the right to recover monetary damages from the landlord for any retaliation that the landlord takes against you for exercising your rights as a result of this notice.

ADDITIONAL INFORMATION:

1. The amount of the bill which must be paid to continue service is $_____.
2. Your landlord cannot punish you if you pay the utility bill. Your landlord cannot raise your rent, cannot evict you and cannot retaliate against you in any other way for paying the utility bill and deducting it from your rent.
3. You have the right to dispute the accuracy of the bill and have certain other rights.

FOR MORE INFORMATION

If you have any questions about this notice or bill, please call us at _____.

Sincerely,

Sewer Municipal Entity's Name

EXHIBIT BA-6

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 8

OCA 08-021

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

Does PAWC include non-basic service charges on its residential customer bills? If so, provide a sample bill that identifies each such non-basic service are presented and disclosed as non-basic on the customer bills.

Response:

Yes. For the convenience of its customers and at their election, PAWC provides on-bill billing for utility related insurance products provided by Oncourse Home Solutions ("Oncourse"). PAWC includes non-basic service charges for Oncourse on residential customer bills. Please see OCA 08-021_Attachment, page 3, for a sample and explanation of the charges.

PENNSYLVANIA AMERICAN WATER

WE KEEP LIFE FLOWING™

Service Address:

[redacted]
CANONSBURG, PA 15317-2514

Statement

Account No. [redacted]

Total Amount Due:	**$135.69**
Payment Due By:	**September 8, 2023**

Thank you for using AutoPay. Payment will be automatically deducted on the bill due date.

Billing Date:	August 17, 2023
Service Period:	Jul 19 to Aug 16 (29 Days)
Total Gallons:	5,600

THANK YOU FOR BEING OUR CUSTOMER

Important Account Messages

- Want to get to know us better? Visit www.pennsylvaniaamwater.com to learn more about the services we provide.
- Thank you for being a long time customer! We work hard every day to deliver water service that is safe, reliable, and affordable -- our customers deserve nothing less.

For more information, visit www.pennsylvaniaamwater.com

Account Summary – *See page 3 for Account Detail*

Prior Billing:		$169.52
Payments - Thank You!	-	$169.52
Balance Forward:	=	**$0.00**
Service Related Charges:	+	$107.70
Protection Programs:	+	$27.99
Total Amount Due:	=	**$135.69**

View your account information or pay your bill anytime at: www.amwater.com/MyAccount

Pay by Phone*: Pay anytime at 1-855-748-6066

Customer Service: 1-800-565-7292
M-F 7:00am to 7:00pm – Emergencies 24/7

PENNSYLVANIA AMERICAN WATER
PO BOX 371412
PITTSBURGH, PA. 15250-7412

▾ Please return bottom portion with your payment. DO NOT send cash. Retain upper portion for your records. ▾

PENNSYLVANIA AMERICAN WATER

WE KEEP LIFE FLOWING™

P.O. BOX 91623
RANTOUL, IL 61866-8623

Account No. [redacted]

Total Amount Due:	**$135.69**
Payment Due By:	**September 8, 2023**

If paying after 9/8/23, pay this amount: $137.31

Service to: [redacted]
CANONSBURG, PA 15317-2514

Amount Enclosed $ **Paid Electronically on Due Date**

[redacted]
PITTSBURGH, PA 15219

PENNSYLVANIA AMERICAN WATER
PO BOX 371412
PITTSBURGH, PA. 15250-7412

0001024210028082494000000000013569019

Messages from Pennsylvania American Water

- Effective July 1, 2023, the Water Distribution System Improvement Charge decreased from 0.02% to 0.00%. This charge funds the replacement of water distribution system facilities.
- ***IMPORTANT WATER QUALITY MESSAGE: Your annual Water Quality Report can be viewed electronically at www.amwater.com/ccr/greaterpgh.pdf. If you prefer a paper copy to be sent to you, please contact our Customer Service Center at 800-565-7292.
- Approximately 3.64 percent, or $4.94 of state taxes are included in your current bill.

CUSTOMER SERVICE: 1-800-565-7292
HOURS: M-F, 7am-7pm ▪ Emergencies: 24/7
TTY/TDD FOR THE HEARING IMPAIRED: 711
(and then reference Customer Service number listed above)

SERVICES

Go Paperless: Save time. Save money. Sign up for **Paperless Billing** and **Auto Pay** on MyWater at amwater.com/mywater. Not registered? Log in and be sure to have your account number handy.

Water Quality: We take water quality seriously. When it comes to complying with federal drinking water standards, we consistently score better than the industry average. For a copy of the annual water quality report for your area, visit pennsylvaniaamwater.com. Under Water Quality, select Water Quality Reports.

H2O Help To Others: This program helps low-income customers who qualify with their water bills. For more information, contact our program administrator, the Dollar Energy Fund, at 1-888-282-6816.

EXPLANATION OF FEES AND OTHER TERMS

Distribution System Improvement Charge (DSIC): A charge to replace aging facilities, such as mains, meters, fire hydrants, valves, etc. This charge, as approved by the Pennsylvania Public Utility Commission (PUC), will change every three months based on work completed. It will not exceed 7.5% of your bill.

Payment by Check: Paying by check authorizes American Water to send the information from your check electronically to your bank for payment. The transaction will appear on your bank statement. The physical check will not be presented to your financial institution or returned to you.

State Tax Surcharges: This PUC-approved charge allows the company to recover costs specific to state taxes.

Estimated Bill: This occurs when we are unable to read the water meter. Your usage from the same billing period the prior year is used to calculate the estimated bill. The next actual meter reading corrects any over or under estimates.

Inquiries/Disputes: For inquiries about your bill, please register any question or complaint about the bill prior to the due date. Contact customer service Monday–Friday from 7 a.m. to 7 p.m. by calling 1-800-565-7292. To register your complaint by mail, send written correspondence to PO Box 2798, Camden, NJ 08101.

Rates: A detailed listing of charges that make up your bill is available upon request by contacting Customer Service or visiting us online at pennsylvaniaamwater.com. Under Customer Service & Billing, select Your Water and Wastewater Rates.

Protection programs for water, sewer and in-home plumbing are offered by American Water Resources. Charges for these services are not regulated by the Pennsylvania Public Utility Commission. Regulated services will not be disconnected as a result of non-payment of protection program charges. Customers with protection program charges will not be assessed a late payment charge for late or unpaid protection plan charges. For inquiries about protection programs, please contact American Water Resources at 1-888-378-4458.

Correspondence: Please send written correspondence to PO Box 2798, Camden, NJ 08101. Be sure to include your name, account number, service address, mailing address and phone number including area code. Please do not send correspondence with your payment, as it may delay processing your payment and correspondence.

H2O HELP TO OTHERS PROGRAM - lend a hand to customers in need

☐ I'm adding a one time contribution of $_____ with my payment.

☐ I'd like to add a recurring contribution to each bill of $_____. I understand this amount will be added to each bill.

Address Change(s)

Name

Address

City

State Zip Code

( ) ☐ Mobile Number
Phone Number

E-mail Address

Other ways to pay your bill

Auto Pay

Save time and money. Enroll in Auto Pay, and your bill will be paid on time, every time, directly from your bank account on the due date. No stamps required!

Online

With My Account, you can pay your bill anytime, anywhere. Registration is fast and easy. Visit www.amwater.com/MyAccount or pay without registration at www.amwater.com/billpay (fee may apply).

In Person

We have agreements with several authorized payment locations in our service areas. Visit our website to find one near you.

PENNSYLVANIA AMERICAN WATER
WE KEEP LIFE FLOWING™

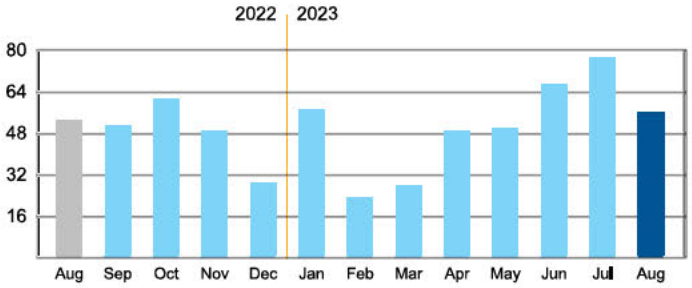
Meter Reading and Usage Summary

Meter No.	Measure	Size	From Date	To Date	Previous Read	Current Read	Meter Units	Billing Units	Total Gallons
N083592445	100 gal	5/8"	07/19/2023	08/16/2023	12,280 (A)	12,336 (A)	56	56.00	5,600

A = Actual E = Estimate 1 Billing Unit = 100 gallons Total Gallons: 5,600

Billed Usage History (graph shown in 100 gallons)

5,600 gallons = usage for this period
5,300 gallons = usage for same period last year



Next Scheduled Read Date: on or about September 19, 2023
Account Type: Residential

Average daily use for this period is: (29 days)

193 gallons

Year to Date Billed Usage: 40,700 gallons

Account Detail

Account No. [redacted]
Service To: [redacted] CANONSBURG, PA 15317-2514

Prior Billing		**169.52**
Payments		**-169.52**
Total payments as of Aug 11. Thank you!		-169.52
Balance Forward		**0.00**
Service Related Charges - 07/19/23 to 08/16/23		
Water Service		**107.70**
Water Service Charge		17.50
Water Usage Charge	(56 x $1.6108)	90.20
Total Service Related Charges		**107.70**
Protection Programs: For inquiries, please call 1-888-378-4458		**27.99**
1 Protection Program		27.99
Total Current Period Charges		**135.69**

Total Amount Due **$135.69**

Understanding Your Bill

The information below defines some of the new terms you may find on your bill:

- **Service Related Charges:** This section includes charges for services related to water, wastewater and fire protection. If applicable, credits and debits for correction to previously billed charges are itemized in this section.
- **Fees and Adjustments:** This section provides details related to additional charges or adjustments for the service period referenced. Fees, when applicable, would include items such as service activation and late payment charges.
- **Billing Units:** One billing unit equals 100 gallons of water used. If the meter serving your property measures your water use in cubic feet or a different unit of measure, we convert the usage to gallons to make it easier to understand.
- **Average Daily Use:** The gallons shown in the water droplet above represent your average daily water use for the current billing period. Tracking the amount of water you use can help you manage your overall water use from month to month.
- **Protection programs for water, sewer and in-home plumbing** are offered by American Water Resources. Charges for these services are not regulated by the Pennsylvania Public Utility Commission. Regulated services will not be disconnected as a result of non-payment of protection program charges. Customers with protection program charges will not be assessed a late payment charge for late or unpaid protection plan charges. For inquiries about protection programs, please contact American Water Resources at 888-378-4458.
- **Still have questions?** We are here to help. Our customer service representatives are available M–F, 7 a.m. to 7 p.m. More information on understanding your bill and charges can also be found on our website. See the link below.

Para obtener asistencia de traducción en la lectura de su factura, comuníquese con nuestro Centro de Atención al Cliente al 1-800-565-7292 de lunes a viernes de 7 a. m. a 7 p. m.

PA.01.22

For more information about your charges and rates, please visit:
https://amwater.com/paaw/rates

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WATERsource

PENNSYLVANIA AMERICAN WATER

LESS PAPER. MORE TREES.

We'll plant one tree for every customer who converts to paperless billing during the month of August for National Water Quality Month!

Last year, Pennsylvania American Water launched a campaign to reduce paper usage and plant trees across the Commonwealth. Because of the program's success, we're doing it again this year.

Keystone
10 MILLION TREES
PARTNERSHIP

We're pledging to donate $12 to the Chesapeake Bay Foundation's Keystone 10 Million Trees Partnership for every customer (up to 2,000) who switches from paper to electronic bills this month.

Each contribution underwrites the full cost of planting one tree, including a reusable stake and shelter.

This collaborative project provides sustainable benefits to watersheds across Pennsylvania: Limiting the impact on forests; reducing waste, energy and fuel use; and improving water quality and aquatic life in streams near tree plantings.

Enroll in Paperless on MyWater Today

Not registered for MyWater? Visit **amwater.com/mywater** and click on **Sign Up**. Have your account number handy.

Let's beat 2022's results!

1,947 customers switched to paperless billing

$19,470 contributed to the Chesapeake Bay Foundation by Pennsylvania American Water

1,947 new trees planted across the Commonwealth

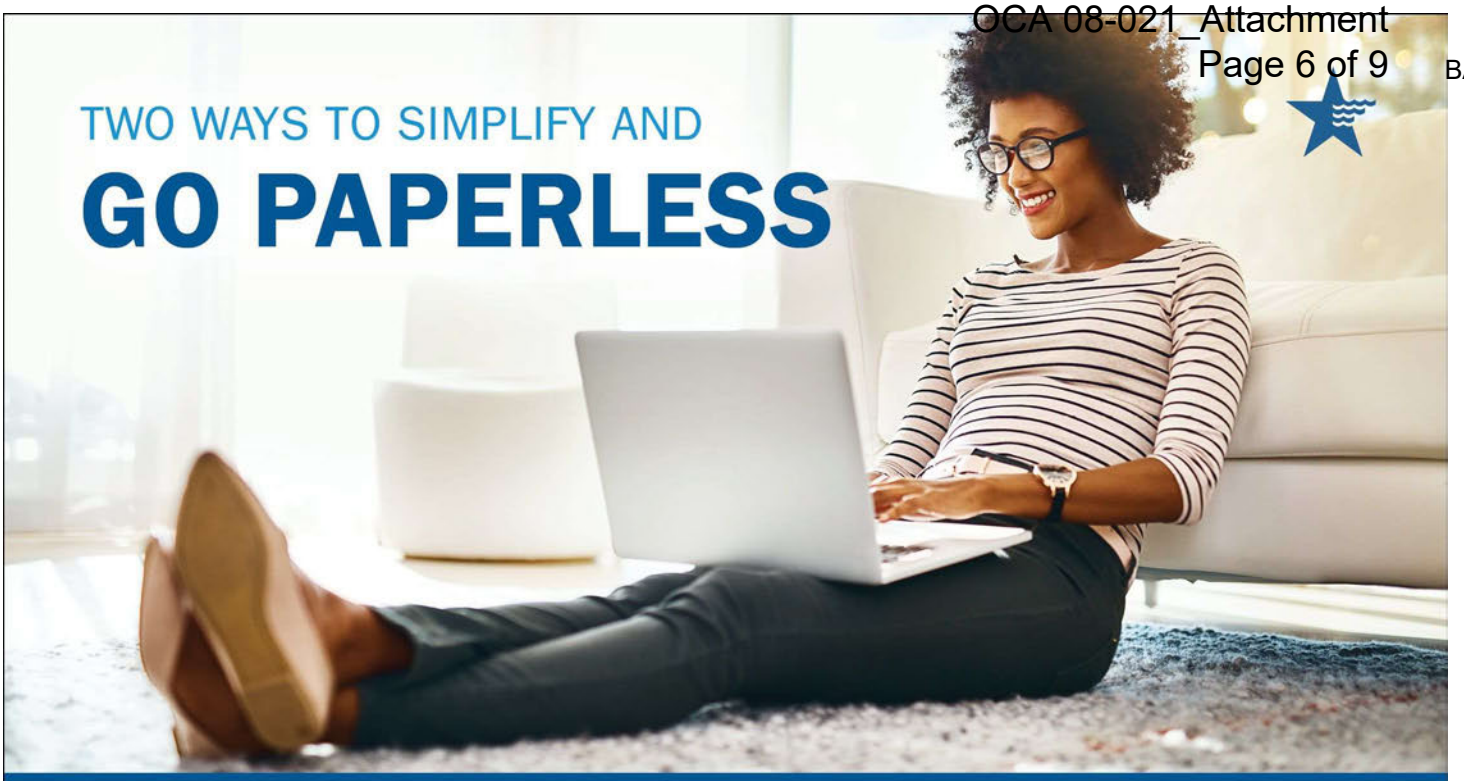
Pennsylvania American Water received the 2023 Governor's Award for Environmental Excellence for its 2022 paperless billing/tree planting campaign.

Request trees for your property

Take your environmental commitment a step further and request free trees to plant on your property! Trees can help clean your local water, improve your living conditions, create natural shade and privacy, and increase your property value. Visit: https://tenmilliontrees.org/get-involved/landowners. Be sure to note that you are a Pennsylvania American Water customer on the online request form at https://tenmilliontrees.org/contact/landowners.

TWO WAYS TO SIMPLIFY AND

GO PAPERLESS



MORE CONVENIENCE. LESS CLUTTER. SECURE.

Receive your bill electronically with

PAPERLESS BILLING

We'll send you an email with the amount due, the due date and a link to view your bill online (along with any materials that would have been included with your paper bill). We'll also email service-related communications to you. **It's simple, secure and clutter-free!**

Enroll in **Paperless Billing** and **Auto Pay** on MyWater at **amwater.com/mywater**.

Pay your bill electronically with

AUTO PAY

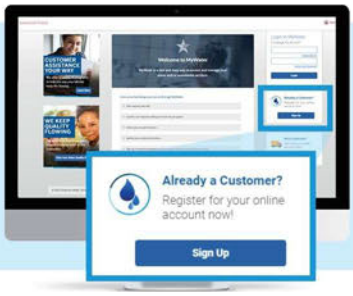
Take it one step further and go entirely paperless. Enroll in **Auto Pay**, and your bill will be paid on time, every time, automatically on the due date.

NEW **Customers can now enroll in Auto Pay using their credit card!**

Now, you can choose to have your monthly bill automatically applied to your credit card or deducted directly from your checking or savings account. **No stamps required!**

NOT ENROLLED IN MYWATER?

Visit **amwater.com/mywater** and click on **Sign Up**. Have your account number handy.



NOTICE OF PROPOSED WASTEWATER ACQUISITION AND RATE BASE ADDITION (Docket No. A-2021-3024058)

PENNSYLVANIA AMERICAN WATER

Dear Customer:

On July 20, 2023, the Pennsylvania Public Utility Commission ("PUC") conditionally accepted for filing the application of Pennsylvania-American Water Co. ("Pennsylvania-American") for approval to acquire the Borough of Brentwood ("Brentwood") wastewater system assets. Brentwood serves approximately 3,980 customers in Allegheny County. Pennsylvania-American's application also requests that the PUC authorize an addition of $19,364,443 to Pennsylvania-American's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of many components used to establish customer rates.

This acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Pennsylvania-American customers, including Brentwood wastewater customers. Pennsylvania-American is not requesting a rate increase as part of the acquisition. Your current rates will not change as a result of this acquisition until the conclusion of Pennsylvania-American's first base rate case where Pennsylvania-American requests and receives PUC approval to increase its rates. Based on a non-binding estimate of the potential rate impacts, Pennsylvania-American anticipates that the potential rate impact could be as follows:

PAWC WASTEWATER				
Rate Class	**Average Usage**	**Average Monthly Bill at PAWC Zone 1 Current Rates**	**Average Monthly Bill at PAWC Zone 1 Rate Adjusted for Potential Impact of Acquisition**	**Potential Increase**
Residential	3,212 gal/month	$106.65	$106.97	$0.32 or 0.3%
Commercial	22,561 gal/month	$509.46	$510.99	$1.53 or 0.3%
Industrial	528,207 gal/month	$11,143.19	$11,176.62	$33.43 or 0.3%

PAWC WATER				
Rate Class	**Average Usage**	**Average Monthly Bill at PAWC Zone 1 Current Rates**	**Average Monthly Bill at PAWC Zone 1 2023 Rate Adjusted for Potential Impact of Acquisition**	**Potential Increase**
Residential	3,212 gal/month	$69.24	$69.24	$0.00 or 0.0%
Commercial	22,561 gal/month	$371.82	$371.82	$0.00 or 0.0%
Industrial	528,207 gal/month	$5,985.09	$5,985.08	$0.00 or 0.0%

These amounts could change and will depend on how the PUC chooses to apportion any increase among different types of utility service, rate zones and classes of customers. For Pennsylvania-American customers in a rate zone other than Rate Zone 1, the potential rate impact could vary from the chart above.

PUC ROLE

The state agency that approves acquisitions and rates for regulated public utilities is the PUC. The PUC will review and investigate the proposed acquisition. After examining the evidence, the PUC may approve, modify or deny the acquisition and may approve, modify or deny the requested addition to rate base.

ACTIONS YOU CAN TAKE

You can support or challenge Pennsylvania-American's request by:

1. **Sending a letter to the PUC.** You can tell the PUC why you support or object to the application in your letter. This information can be helpful when the PUC investigates the application. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.
2. **Attending or presenting testimony at a PUC public input hearing.** You can attend or be a witness at a PUC public input hearing. The PUC holds public input hearings if it opens an investigation of Pennsylvania-American's transaction and if there is enough interest in the case. At these hearings, you can present your views in person to the PUC judge and to company representatives. Testimony under oath becomes part of the application case record. The PUC holds these hearings in the service area of the company. For more information, call the PUC at 1-800-692-7380.
3. **Filing a protest or a petition to intervene.** If you want to be a party to the case, you must file a protest or a petition to intervene. You then have an opportunity to take part in all the hearings about the proposed acquisition. You can receive copies of all materials distributed by the other parties. Protests and petitions to intervene must be filed in accordance with 52 Pa. Code (relating to public utilities) on or before October 16, 2023. Filings must be made with the Secretary of the Pennsylvania Public Utility Commission at P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on Pennsylvania-American's counsel at:

   David P. Zambito, Esq.
   Cozen O'Connor
   17 North Second Street, Suite 1410
   Harrisburg, PA 17101

The documents filed in support of the application are available on the PUC's website at www.puc.pa.gov, and for inspection and copying at the Office of the Secretary of the PUC between 8 a.m. and 4:30 p.m., Monday through Friday, and at Pennsylvania-American's offices at 852 Wesley Drive, Mechanicsburg, PA 17055. The PUC docket number is A-2021-3024058. For more information, you may contact the PUC's Bureau of Consumer Services at 1-800-692-7380.

Bill Inserts and Important Notices

We encourage you to click the link(s) below to view any bill inserts and other important notices you would have received with your printed bill.

https://amwater.com/files/OAPASB.pdf
https://amwater.com/files/OAPA84.pdf
https://amwater.com/files/OAPA83.pdf

PUBLIC
VERSION
EXHIBIT BA-7

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 25

OCA 25-003

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

Provide the documentation that allows American Water Resources to use this name under license.

Response:

Please refer to OCA 25-003_Attachment_CONFIDENTIAL.

PUBLIC VERSION EXHIBT BA-8

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 20

OCA 20-016

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

With regard to the non-basic services identified in OCA-08-019, provide any disclosures or documents in PAWC's possession that allow the service provider to use PAWC's name and authorize the use of the PAWC bill as a means to collect for the service.

Response:

Please see OCA-20-016-Attachment-CONFIDENTIAL for the agreement and OCA-20-016-Attachment 2-CONFIDENTIAL for addendum to the contract.

PUBLIC VERSION EXHIBIT BA-9

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 8

OCA 08-023

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

General:

Provide the internal sales and/or training materials used by American Water Works call centers to market, discuss, or handle calls relating to non-basic services for PAWC customers.

Response:

Neither PAWC nor other American Water employees market or sell any non-basic services to PAWC customers. Training materials on how to discuss and handle calls related to non-basic services are included in OCA 08-023_Attachment_CONFIDENTIAL.

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BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Barbara R. Alexander, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 6, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: February 1, 2024

Signature: DocuSigned by: Barbara R. Alexander 8D0E58CA47E24C2...

Barbara R. Alexander

Consultant Address: Barbara Alexander Consulting, LLC
44 Beech Street
Hallowell, ME 04347

*4858-3147-8431

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket Nos.: R-2023-3043189 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	
Pennsylvania American Water Company	:	

SUPPLEMENTAL DIRECT TESTIMONY

OF

BARBARA R. ALEXANDER

Barbara Alexander Consulting LLC

ON BEHALF OF THE

OFFICE OF CONSUMER ADVOCATE

Date Served: February 13, 2024

Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

A. My name is Barbara R. Alexander. I am the sole member of Barbara Alexander Consulting LLC. My address is 44 Beech St., Hallowell, ME 04347. I appear in this case as a witness on behalf of the Office of Consumer Advocate (OCA).

Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

A. I am submitting Supplemental Direct Testimony to highlight certain testimony by PAWC's customers submitted at the public input hearings on PAWC's proposed rate increase. Specifically, I will supplement my Direct Testimony on PAWC's inconsistent billing cycle and PAWC's billing for non-basic protection services on behalf of American Water Resources.

Q. IS YOUR TESTIMONY INTENDED TO BE A FULL AND COMPLETE SUMMARY OF THE PUBLIC INPUT HEARINGS ON THE TOPICS DESCRIBED ABOVE?

A. No. My supplemental Direct Testimony is not intended to be a full and complete summary of the consumer testimony provided at the public input hearings held in this case on the topics of PAWC's billing periods or PAWC's billing and marketing of American Water Resources protection plan services. The sworn consumer testimony has been transcribed and is evidence in this record. To the extent that I do not discuss or make a specific recommendation here, PAWC should respond to all of the customer service concerns raised by customers during the Public Input Hearings, and provide its response in Rebuttal Testimony.

Q. CAN YOU SUMMARIZE THE RELEVANT CONSUMER TESTIMONY AT THE PUBLIC INPUT HEARINGS REGARDING THE INCONSISTENT BILLING CYCLES?

A. Consumers complained about PAWC's inconsistent billing periods, ranging from 35 days to 27 days, and how some bill amounts appear less than other bill amounts but that it is due to the billing period being shorter, making it difficult for consumes to budget. (Transcript at pages 824, 835, 867 1045, 1072, 1092, 1705, 1845-1846, 1879).

Q. WHAT DO YOU RECOMMEND AS A RESULT OF THIS PATTERN OF TESTIMONY CONCERNING INCONSISTENT BILLING PERIODS FOR PAWC BILLS?

A. I recommend that PAWC respond to this concern in its Rebuttal Testimony and specifically document the frequency of such inconsistent billing periods and what steps can be taken to avoid this pattern, as well as how customers can avoid the payment and budgeting difficulties with this pattern.

Q. CAN YOU SUMMARIZE THE RELEVANT CONSUMER TESTIMONY AT THE PUBLIC INPUT HEARINGS REGARDING PAWC'S BILLING FOR AMERCIAN WATER RESOURCES' PROTECTION PLAN SERVICES?

A. The following testimony submitted by members of the public described PAWC bills that contain unregulated charges on behalf of American Water Resources:

- Jodi Asay testified at the public input hearing held on February 6, 2024, at 1PM (starting at Transcript, page 1473) that PAWC's system is over-pressurized in her neighborhood resulting in multiple breakages of consumer-owned service line and that PAWC simultaneously sends direct marketing mailings to these consumers to purchase

service line protection plans from American Water Resources. (Transcript at page 1513, line 8 through page 1514, line 9; page 1515, line 13, through page 1517, line 4). Ms. Asay testified that she received mailings as a PAWC customer from "American Water Service Line Protection." She stated. "*Everybody thinks that it's American Water Company, but then they found out that it was not American Water Company."* ((Transcript at 1517, lines 20-21). She also described complaints associated with the quality and timing of the work done under this program. This testimony confirms that PAWC issues marketing materials or provides PAWC's customer list to American Water Resources. Even more troubling, the attorney for PAWC attending this hearing directed Ms. Asay to discuss her concerns with a representative of American Water Resources in attendance at the hearing, stating, "*He may be able to clear up some of the concerns and confusion surrounding homeowner services and the protection they offer*". (Transcript at 1522). Ms. Asay's testimony and the statement by PAWC's attorney confirm my concern about the misrepresentation of the relationship between PAWC, American Water Works, and American Water Resources to PAWC's customers.

- William Clark testified at the public input hearing on January 31, 2024, held at 6PM concerning the communications and billing for AWR services on the PAWC bill:

> *One of the subsidiaries they offer is American Water resources. They're the ones the insurance company basically to handle the sewage pipe going across my property, across the road to the main sewer lines. Insurance. It's not regulated by the PUC at all, but the rates are increasing just as well. Twenty-one (21), 20 years ago it was $9 a pay period. I'd say monthly. American Water - Pennsylvania-American Water doesn't bill by the month. They bill by whatever days they want to.*

But anyway, it was $9. The following year in March it went up to $10.50. And then it jumped up to $12.25 in six - June of '22. And this February it's going to go up to $17.99. It almost sounds like they're in the same group categories of Pennsylvania American Water. As far as just, oh, let everybody pay for it. We'll just keep going. And that's the way you feel. Doing, you're digging into your pocket and loving every minute of it. And they don't care. (Transcript at pages 1072-1073)

Mr. Clark also recognized that this service is billed by PAWC and that PAWC receives a benefit from billing for this service. (Transcript at page 1074)

- Mary Tanealian testified at the public input hearing held on January 30, 2024, at 1PM that she assumed that American Water Resources was a subsidiary of American-Water (Transcript at pages 453, 454 ["*I was told it was."])* and noted that the charges had increased and that other customers based on her knowledge had stopped those payments due to the failure to repair their pipes. (Id., at page 454). Ms. Tanealian could not remember if she had received marketing materials for this program from PAWC, but she also confirmed that the charges on the bill were identified as "protection services" and not American Water Resources.

- James McDermott testified at the public input hearing held on January 30, 2024, at 1PM, explaining that American Water Resources did not respond timely to his service call for work needed on his sewer line and he had to call a competitor of American Water Resources, which did timely respond and take care of his sewer line problem. He said that while he waited on the phone line with American Water Resources, representatives attempted to sell him additional interior sewer line protection services. (Transcript at page 529, lines 2 -18).

- Pauline Bryner testified at the public input hearing held on January 29, 2024, at 6PM, that the payment protection plan that is on her bill started at $4.99 but then increased significantly to $12.99 the following year, then to $16.99 within two months, and eventually it went to $21 and then to $27 and that she has seen advertisements through PAWC's marketing bill inserts for $30.99 She said consumers should be aware that Duquesne Light offers a competitive service for consumer-owned outside lines for $4.99. She also said she is paying a higher price than her friend who also is a customer of American Water Resources. She implied that the common knowledge among some consumers is to call and complain and American Water Resources will give the consumer a deep discount on the $30.99 price. She asked the Office of Consumer Advocate to look into this practice, which she referred to as "*not really ethical*". She also testified that PAWC is allowing American Water Resources to use the American Water name, "*but they're not affiliated*." She said that the use of the name should make PAWC responsible for the overbilling, making the argument that "*[i]f they are allowing their name to be used in a service that is not really ethical, then they also have some form of liability*." She asked for "*some to look into that*." During cross-examination conducted by the PAWC's attorney, the consumer asked the PAWC attorney if she could explain how Duquesne Light can offer a $4.99 plan for the same service, and American Water Resources is offering a $30.99 plan with an increase. The PAWC attorney said she could not explain it, and she further directed the consumer to "*folks at the back of the room*." (Transcript at page 316, line 25, through page 320, line 5; page 324, lines 20-25 through page 325, lines 1-14).

Q. DOES THIS TESTIMONY CONFIRM YOUR CONCERNS AND RECOMMENDATIONS CONCERNING PAWC'S RELATIONSHIP WITH AMERICAN WATER RESOURCES?

A. Yes. These statements by PAWC customers support my recommendation that the Commission halt PAWC's participation in this billing program until or unless significant reforms are required to prevent improper interactions between PAWC, American Water Resources, and consumers.

Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL TESTIMONY?

A. Yes.

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BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Barbara R. Alexander, hereby state that the facts above set forth in my Supplemental Direct Testimony, OCA Statement 6 - Supp, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: February 13, 2024

Signature: DocuSigned by: Barbara R. Alexander 8D0E58CA47E24C2...

Barbara R. Alexander

Consultant Address: Barbara Alexander Consulting, LLC
44 Beech Street
Hallowell, ME 04347

*4858-2765-8149

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket Nos.: R-2023-3043189 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	
Pennsylvania American Water Company	:	

SURREBUTTAL TESTIMONY

OF

BARBARA R. ALEXANDER

Barbara Alexander Consulting LLC

ON BEHALF OF THE

OFFICE OF CONSUMER ADVOCATE

PUBLIC VERSION

March 4, 2024

Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

A. My name is Barbara R. Alexander. I am the sole member of Barbara Alexander Consulting LLC. My address is 44 Beech St., Hallowell, ME 04347. I appear in this case as a witness on behalf of the Office of Consumer Advocate (OCA).

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?

A. Yes. I have filed Direct Testimony on behalf of the OCA in response to Pennsylvania American Water's (PAWC) base rate case filing on February 1, 2024.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I am filing Surrebuttal Testimony in response to PAWC's Rebuttal Testimony on the following topics in the following order:

- The Company's service quality and customer service performance quality should be considered given the Company's request for a significant rate increase and additional profits due to its management performance.
- The Company's lack of consumer protection policies and programs to ensure that the Service Company's call center representatives are complying with Chapter 14 of the Public Utility Code and Chapter 56 of the Commission's regulations, particularly with regard to handling and evaluating customer complaints.
- The Service Company's call center's customer service performance, including below average performance trends and lack of management oversight of its third-party call center contractors.

- The Company's program and proposed tariff to terminate water service provided by PAWC for nonpayment of charges related to non-Company, third-party providers of sewer services.
- The Company's billing arrangement with American Water Resources, a non-affiliated, third-party provider, which uses the American Water name and logo, of charges that are labeled on PAWC's customer bills as "protection" services for customer-owned service lines and in-home plumbing and PAWC's billing of charges for such services on PAWC customer bills.
- The Company's lack of reasonable customer education concerning high water pressure and pressure reducing valve operations.
- The Company's inability to document the volatility of the number of days included in customer bills.

These issues are important themselves, but particularly so in this case given the magnitude of PAWC's proposed rate increases and the fact that PAWC is proposing its fourth increase in rates in four years.[1] This is in addition to its proposed rate design changes, and the proposal for various trackers and automatic rate increases outside of the normal base rate case (*i.e.*, Section 1308(d) general rate increase request) review process.

Q. DO YOU INCLUDE EXHIBITS WITH YOUR TESTIMONY?

A. Yes. I attach the following Exhibits to my Testimony:

- Exhibit BA-10: PAWC Response to OCA-34-001

[1] OCA Witness Hoover provided a detailed analysis of the number and amount of PAWC's recent rate increases in here Direct Testimony (OCA Statement 1).

- Exhibit BA-11: PAWC Response to OCA-34-003, 2 Confidential Attachments
- Exhibit BA-12: PAWC Response to OCA-34-016, 2 Confidential Attachments

I. PAWC'S SERVICE QUALITY AND CUSTOMER SERVICE PERFORMANCE IS DIRECTLY RELATED TO THIS RATE CASE AND ITS PROPOSAL FOR AN ADDITIONAL PROFIT IN ITS RATE OF RETURN

Q. PLEASE RESPOND TO PAWC'S REBUTTAL TESTIMONY THAT REJECTS THE CONNECTION BETWEEN SERVICE QUALITY, CUSTOMER SERVICE PERFORMANCE, AND CUSTOMER COMPLAINTS AND ITS PROPOSAL FOR THIS RATE INCREASE AND AN ADDER FOR MANAGEMENT PERFORMANCE.

A. PAWC's Rebuttal generally rejects the notion that the Commission should consider criteria for its rate increase and its request for an additional profit due to its management performance other than those it has self-selected for this purpose. According to Mr. Justin Ladner, PAWC has supported its request for high profits through a "management efficiency adder" with "extensive evidence."[2] Mr. Ladner then summarizes this "evidence" as its Customer Assistance Programs, programs paid for by ratepayers,[3] its environmental protection and water quality program and infrastructure spending, and its "industry leader in buying small and troubled systems," again, all of which are reflected in higher rates paid by its customers. Moreover, with regard to acquisitions, Mr. Ladner omits mention of the pending litigation concerning some of these acquisitions or that on February 22, 2024, the Commission voted 5-0 to reject PAWC's proposed purchase of

[2] PAWC St. No. 15-R, page 6, lines 14-20.

[3] Ratepayers, specifically residential ratepayers, fund PAWC's bill discount program and arrearage management program and grants from the Low Income Household Water Assistance Program are taxpayer-funded. PAWC St. 10, page 27, lines 18-19; OSBA Sch. KCH-13; PAWC St. 01, page 13, lines 19-20, page 14, lines 1-4.

the Borough of Brentwood wastewater system. Also, Mr. Ladner points to positive testimony by about a dozen people at the Public Input Hearings, most of whom do not receive service from PAWC or pay its rates (as they are not ratepayers), without the context that most customer testimony was negative and that approximately 498 formal and 614 informal complaints have been filed against PAWC's in this docket.[4] At no time has the Company accepted that its customer service performance as measured and reported to the Commission and that has been summarized by myself and OCA Witness Roger Colton concerning call answering performance, complaint handling, collection efficiency, and compliance with essential consumer protection rules are reasonable criteria to consider in justifying the significant rate increase or that should factor into the request for additional profits in this "management efficiency adder." In fact, PAWC Witness Ashley Everette states that the assertions of OCA Witnesses Colton and Alexander "…should have no bearing on the Commission's decision to approve a management performance adjustment for the Company."[5]

Q. DO YOU AGREE WITH PAWC'S POSITION THAT ONLY PAWC CAN IDENTIFY THE CRITERIA TO JUSTIFY A MANAGEMENT PERFORMANCE ADJUSTMENT?

A. I firmly reject such an approach and there is no basis for the Company's position on this matter. I understand that PAWC has selected certain criteria to justify its request to increase its rate of return. However, those self-selected criteria should not be the controlling factors. The Commission should take into consideration the full range of customer experiences and interactions with PAWC in considering this request. The

[4] These numbers are based on the OCA's most recent count of complaints.
[5] PAWC St. No. 1-R, page 16, lines 18-19.

unprecedented volume of customer opposition to this rate increase and the poor performance in several key areas as documented with actual evidence must: (1) counter the high-level assertions reflected in the Company's testimony relating to expenditures that it recovers in rates (2) reduce the Company's overall rate increase; and (3) result in a denial of the request for an additional profit (*i.e.*, the management adder) beyond what is absolutely necessary to achieve the public service obligations. The suggestion that ratepayers should incur higher rates to make sure that their publicly regulated utility does its job in a responsible and efficient manner should be rejected.

Q. WHAT IS YOUR RESPONSE TO PAWC'S STATEMENTS THAT THE COMMISSION DOES NOT HAVE THE AUTHORITY OR SHOULD NOT ADOPT ANY SPECIFIC CUSTOMER SERVICE PREFORMANCE STANDARDS OR REFORM POOR PERFORMANCE IN THIS BASE RATE CASE?

A. According to PAWC Witness Everette, my recommendations for certain improvement in customer service performance as a condition of any rate increase is not within the Commission's authority in a base rate case, claiming that any such proposals must be done in the context of a specific alternative rate plan pursuant to Act 58.[6] I defer to OCA counsel's analysis of this claim in its Briefs. However, the suggestion that the Commission cannot consider and react to evidence of poor or less than acceptable customer service performance in its evaluation of PAWC's current or proposed rates is on its face unreasonable and inconsistent with Section 523 governing public utility rate cases in which the Commission must evaluate the "efficiency, effectiveness, and

[6] Ibid., page 33, lines 7-11.

adequacy of service" and Section 1501 which requires all changes and improvements to service "necessary to make such service adequate, efficient, safe and reasonable."[7] It frankly is also inconsistent with the Company's claim for a management adder due to its superior management performance.

My analysis and findings should inform the Commission on the reasonableness of PAWC's significant rate increase request. Where I identify deficiencies in PAWC's customer service performance, I continue to recommend that the Commission order improvements in specific areas as a condition of any rate increase and consider adopting any rate increase and rate of return that reflects the inadequate customer service I have documented. In some areas, I also recommend that the Commission disallow certain incurred costs on the basis of the Company's continuing poor management performance or management negligence.

II. PAWC'S CALL CENTER PERFORMANCE HAS BEEN BELOW AVERAGE AND SHOULD BE IMPROVED AS A CONDITION OF ANY RATE INCREASE.

Q. IN LIGHT OF PAWC'S BELOW AVERAGE CALL CENTER PERFORMANCE, DO YOU STILL RECOMMEND A SPECIFIC LEVEL OF IMPROVEMENT AS A CONDITION OF ANY RATE INCREASE?

A. Yes. I recommended that PAWC be held to improve its call center performance to the level typically achieved by Pennsylvania's electric and natural gas utilities and that the poor performance of the third-party contractors hired by PAWC result in a disallowance of their costs in rates.

[7] 66 Pa. C.S. §§ 523, 1501.

Q. HOW DID PAWC RESPOND TO YOUR FINDINGS ABOUT PAWC'S CALL CENTER PERFORMANCE AND ITS OVERSIGHT OF ITS THIRD-PARTY CALL CENTER PERFORMANCE?

A. As I documented in my Direct, the call center performance in general is below average and the performance of its third-party call centers is even worse. See Exhibit BA-3. However, rather than focus on the actual performance in terms of answering customer calls, PAWC responded by providing general testimony about how difficult it is to staff a call center to answer calls in a timely manner and alleging that improving call center performance would necessarily raise expenses and rates.[8] Ms. Degillio's focus on "daily and hourly call volumes" that would require substantially more costs and higher rates does not reflect the tools available to any large call center to allocate full and parttime staffing to reflect call volume trends.[9] However, Ms. Degillio has not provided any actual plan or analysis of costs and benefits to improve PAWC's call center performance.

Q. HAS PAWC'S CALL CENTER PERFORMANCE IMPROVED RECENTLY?

A. Yes. PAWC Witness Degillio documented the improvement in recent months in her Rebuttal, but she only provided the average of both Service Company call centers and the third-party contractors.[10] Improvement is a welcome development, and my proposal would only ensure that this improvement continues and is implemented in the future rate year in which these new rate increases will occur. That seems to be a reasonable approach given the poor performance I documented in PAWC's prior rate cases and in

[8] PAWC St. No. 09-R, pages 5-6.
[9] PAWC Response to OCA-34-008 confirms the PAWC experience that reflects the normal irregularities of all large call centers in call volumes (e.g., higher volume on Mondays).
[10] Ibid., pages 3-4.

the Commission's Management Audit of PAWC.

Q. PLEASE COMMENT ON MS. DEGILLIO'S CLAIM THAT THE MEASUREMENT OF THE COMMISSION'S CALL CENTER DATA INCLUDES CUSTOMERS WHO REACH THE COMPANY'S AUTOMATED VOICE RESPONSE MENU.

Q. The Commission's Customer Service Performance Report (September 2023) correctly states the measurement that is reported:

> For the calls that are "received" by the company, the caller has several options. One option is to choose to speak to a company representative. When a caller chooses this option, the caller enters a queue to begin a waiting period until a company representative is available to take the call. Once a call enters the queue, it can take one of three routes: it will either be abandoned (the caller chooses not to wait and disconnects the call); it will be answered within 30 seconds; or it will be answered in a time period that is greater than 30 seconds. The percent of those calls answered within 30 seconds is reported to the Commission.[11]

Ms. Degillio's source for her understanding is from a statement from the Commission's Management Audit of Aqua Pa, Peoples Natural Gas Co., and Peoples Gas Co. published in April 2021 (as identified in fn. 1 in Ms. Degillio's Rebuttal, page 5). Ms. Degillio's statement that suggests measuring call center performance under the "answer within 30 second" standard using calls answered by interactive voice response (IVR) automated system rather than a live agent is nonsensical and incorrect. It would not make any sense to count the "answer" of the call by the interactive voice response (IVR) for any purpose in this performance area. It would make sense to count the customer who uses the IVR to select the option to speak to a customer representative as the start of the 30 second period in the performance data, which appears to be how BCS and the electric and gas utilities measure it. Nonetheless, the data in the Commission's September 2023 Report

[11] Customer Service Performance Report (September 2023), page 4.

(reflecting 2022 and prior year performance) shows that Pennsylvania electric and natural gas utilities typically answer by agent (not IVR) over 80% of the calls within 30 seconds on an annual average. There is no basis for holding PAWC, a multi-state utility with access to multiple call centers to a different standard. The same, 80% of calls answered by an agent in 30-seconds standard that the Commission relies upon to monitor the call center performance for Pennsylvania electric and natural gas utilities is a reasonable objective for PAWC to meet and, in so doing, to manage its call center resources to achieve this objective with reasonable costs and expenses. A public utility that does not currently meet the standard should not be rewarded with a higher profit without at least establishing a commitment that ensures a reasonable level of performance when the higher rates are in effect.

Q. HOW DOES PAWC RESPOND TO YOUR SUPPORT FOR THE DISALLOWANCE OF THE COSTS OF ITS THIRD-PARTY CALL CENTERS DUE TO THE DOCUMENTED LACK OF OVERSIGHT AND ACHIEVEMENT OF REASONABLE PERFORMANCE RESULTS?

Q. PAWC Witness Degillio claims that the Company oversees the third-party call centers in the same manner as if they were employees. Putting aside the analysis of complaints, a related issue that I will discuss below, the actual performance of the third-party call centers in answering calls is below the performance of the corporate call centers operated by American Water Works via employees. And, as I documented, the performance level in the contracts themselves has been ignored.[12] Ms. Degillio's claim that the current

[12] OCA St. No. 6, page 20 (Confidential).

contracts allow PAWC to reduce staffing levels, seek damages, or terminate the contract is not responsive to this concern.[13] What would be responsive is if PAWC ever exercised these contractual remedies to address the very poor performance. However, these contractual remedies have not been implemented. Moreover, the contracts do not allow PAWC to reduce payments in response to poor performance. Further, PAWC's contractual remedies are cumbersome, time consuming, and would require litigation to resolve.

The more prudent approach is to build in actual performance requirements that are linked to payment for performance. PAWC's Rebuttal ignores this evidence and provided no updated information on the actual performance of its third-party call centers compared to Service Company call operations. PAWC refuses to agree to any changes in its current call center contracts. [14] Instead, PAWC continues to emphasize meetings, staffing levels, tools related to use of the Company's software, changes in call routing, and training of agents,[15] as opposed to concrete steps to ensure adequate performance. As a result, incurring expenses for the use of the contractors who are allowed to perform at less than reasonable levels and below the level tolerated for in-house call centers is imprudent and unreasonable. PAWC's refusal to recognize the limitations of its current contracts and its continuing acceptance of poor performance supports my recommendation to eliminate these expenses from the revenue requirement.

[13] PAWC St. No. 09-R, page 8, lines 11-14.
[14] Ibid., page 8, lines 15-16: Ms. Degillio rejects any suggestion that the Service Company contracts with the call center contractors should be revised or reformed.
[15] OAWC's Response to OCA-34-009 lists these steps taken to support her Rebuttal testimony that "monitoring and improving CSO performance" occurs. None of these steps link performance to revenues paid to the contractor.

Q. DO YOU AGREE THAT MAINTAINING YOUR RECOMMENDED CUSTOMER CALL CENTER PERFORMANCE STANDARD WOULD BE DIFFICULT TO ACHIEVE ON A MONTHLY BASIS AND, IF SO, WHAT IS YOUR RESPONSE?

A. I agree that maintaining a customer call center performance standard is difficult to achieve every single month. The Commission's reports only provide an annual average performance result for answering calls within 30 seconds and the call abandonment rate. I will modify my recommendation to eliminate the requirement for monthly compliance and instead recommend that performance be reflected in PAWC's annual average. However, it is important to recognize that customers who experience a very poor answering experience in some months do not benefit from an improved or above average result in other months. PAWC should strive to achieve a more balanced experience every month.

III. PAWC'S COMPLAINT HANDLING PRACTICES ARE DEFICIENT AND DO NOT COMPLY WITH STANDARD ROOT CAUSE ANALYSIS

Q. HOW DID PAWC REPOND TO YOUR EVIDENCE CONCERNING THE LACK OF PERFORMANCE STANDARDS, COMPLIANCE AUDITS AND ROOT CAUSE COMPLAINT ANALYSIS?

A. PAWC's Rebuttal continues to allege that the Company conducts a "root cause analysis" of its customer complaints as the primary method to detect the failure to comply with the Commission's consumer protection and service quality regulations or to monitor for compliance with the Company's training materials. See, e.g., Rebuttal Testimony of Ms. Degillio who continues to rely on "coaching" as the Company's primary method of

responding to indicators of customer dissatisfaction[16] and the Rebuttal Testimony of Ms. Dean who continues to describe the Company's response to complaints and BCS findings as a "root cause analysis."[17] This Rebuttal testimony repeats the process reflected in the Company's responses to the OCA's prior data requests on this issue that I described in my Direct Testimony.[18] PAWC has not provided any new information.

Q. DO YOU AGREE THAT THE PAWC RESPONSE TO CUSTOMER COMPLAINTS AND BCS FINDINGS OF INFRACTION AND POTENTIAL VIOLATIONS REFLECTS A ROOT CAUSE ANALYSIS?

A. No. As I explained in my Direct Testimony, the review of individual complaints and the lack of any documentation that identifies trends or reflects any systemic response to an analysis of complaint trends is not a "root cause analysis." PAWC provides no professional basis for the process it describes, which fails to provide any internal reporting on customer complaint trends or identification of underlying causes and does not reflect any management response other than "coaching" individual customer service personnel as a proper root cause analysis would provide. When asked to provide references to professional publications or other resources to support PAWC's definition of a "root cause analysis," the Company is unable to do so.[19] I attach PAWC's Response to OCA-34-001 as Exhibit BA-10. When asked to provide the documentation that reflects any analysis of "root cause trends," the Company responded with a document previously

[16] PAWC St. No. 09-R, page 9, lines 5-13.
[17] PAWC St. No. 14-R, page 21, line 6-7: "PAWC analyzes customer complaints to ensure compliance and perform root cause analyses on its customer complaints."
[18] OCA St. 6, page
[19] PAWC Response to OCA-34-001.

provided that purports to show the root cause analysis of complaints reflected in internal documents since June 1, 2022 and another document that is a "running log" that is updated continuously to track root cause determinations by various regulation categories.[20] I attach PAWC's Response to OCA-34-003 and both attachments as Exhibit BA-11. Neither document is a proper root cause analysis. The first document previously provided in response to OCA-08-017 is a list of complaints by categories without any information on the underlying causes of the complaints or any action undertaken to respond to any analysis of the complaints themselves. The second document is another spreadsheet that includes basic information about the complaint. There is a column listed as **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** I provided a summary of a proper root cause analysis in my Direct Testimony that PAWC's Rebuttal ignores. It bears repeating that a spreadsheet that counts customer complaints and reflects an opaque process to determine "fault" and without any summary of trends and management response to the data is not a root cause analysis. As stated in response to a request to document actions taken in response to its complaint monitoring program, PAWC stated, "There has been no changes, reforms, or revisions to the Company's internal training programs and/or policies as a result of Pennsylvania specific results or complaint data. Any training or mentoring discussions as a result of feedback from quality assurance review is performed on an individual basis

[20] PAWC Response to OCA-34-002, Confidential Attachment to OCA-08-017 and Confidential Attachment to OCA-34-002.

with identified call agents."[21]

Q. DID THE PAWC'S REBUTTAL RESPOND TO THE SUMMARY OF THE BCS COMPLAINT DATA AND FINDINGS OF INFRACTIONS AND POTENTIAL VIOLATIONS CAUSE YOU TO CHANGE YOUR RECOMMENDATIONS?

A. No. There is no record or other indication of PAWC's management performing any root cause analysis of customer complaints or other complaint trends identified in the BCS reports. Furthermore, PAWC's Rebuttal to my interpretation of PAWC's Response to OCA-20-024[22] confirms my overall conclusion and supports my recommendation.

This so-called example of root cause analysis was created for the purposes of responding to the OCA data request. And as I documented in my Direct, this document reflects a listing of **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** [redacted] **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

Q. PLEASE RESPOND TO PAWC'S REBUTTAL THAT RELIES ON ITS RESPONSE TO OCA-08-017 AS THE BASIS FOR ITS CLAIM THAT IT CONDUCTS A ROOT CAUSE ANALYSIS OF COMPLAINTS.

A. PAWC provided two attachments of complaints logs in this data response, reflecting the Company's tracking of BCS complaints and internal customer disputes. According to the

[21] PAWC Response to OCA-20-010.
[22] PAWC St. No. 14-R, page 23.

response, these spreadsheets reflect their root cause analysis. I agree that each complaint is identified, categorized, and the internal determination of whether the complaint is "true" or "false" is recorded. Each document contains a column entitled "what can we do better?" However, the conclusion that these documents constitute a root cause analysis is not correct. There is no analysis of the trends of the information reflected in these tracking logs. There is no evidence that a summary of complaint trends results in a review and potential change of how its policies are being applied or whether the policies should be amended or changed. In fact, every attempt to obtain that type of actual use of the raw data in these tracking logs did not result in any further internal documents. PAWC's policy to have the Compliance Supervisor "analyze the Complaint Log," and schedule "periodic meetings with Senior Operations Managers to discuss the root cause of the trends identified through the analysis of informal complaints."[23] However, PAWC is not able to provide any internal documents to support this description and the only results that the Company can document is that employees or contractors are "coached" to assure further compliance. This approach is far too informal and without any evidentiary basis for actual auditing or monitoring by management for improper handling of a customer complaint.

When asked to document reports to management of "root cause trends," PAWC's response included several presentations provided to Operations Senior Management to discuss "root cause trends."[24] These materials present a compilation of **[BEGIN CONFIDENTIAL]** [redacted]

[23] PAWC St. No. 14-R, page 22, lines 7-9.
[24] PAWC Response to OCA-34-003, Attachment 2 Confidential.

[redacted] **[END CONFIDENTIAL].** There is no evidence that PAWC routinely or indeed ever produces summaries of complaint trends (such as, complaints related to coding of tenant-occupied buildings for a specific time frame) and then investigates the underlying reasons for the complaints to determine if policies or procedures should be changes or updated. The management reports provide raw data without any identification of underlying cause(s) or that identifies management's response.

Q. HOW DID PAWC RESPOND TO YOUR CONCERNS ABOUT THE TRAINING MATERIALS AND "TEST" USED TO ALLOW CALL CENTER STAFF TO ANSWER AND RESPOND TO PAWC CALLS?

A. Ms. Dean's Rebuttal emphasized its lengthy 80-page training materials[25] but the Company did not respond to my testimony concerning the actual "test" that is used to allow its customer service representatives to handle PAWC calls.

Q. DID PAWC RESPOND TO THE CUSTOMER SATISFACTION SURVEY DATA YOU INCLUDED IN YOUR TESTIMONY AND THAT SUPPORTS YOUR OVERALL RECOMMENDATION TO ELIMINATE ANY MANAGEMENT EFFICIENCY ADDER TO THE RATE OF RETURN?

A. No. While OCA Witness Degillio responded to the design of the surveys and their content in response to OCA Witness Colton, she did not respond to my documentation that the actual customer satisfaction results reflect a below average level of customer

[25] PAWC St. No. 09-R, pages 8-9.

satisfaction with key interactions with PAWC. I see no basis for ignoring PAWC's poor results compared to other Pennsylvania public utilities. I certainly would not agree that the PAWC results should be relied upon to support the Company's claim for additional profit due to its management efficiency.

IV. PAWC'S RESPONSE TO MY RECOMMENDATIONS ON THE TERMINATION OF SERVICE TO PAWC CUSTOMERS ON BEHALF OF "NON-COMPANY" WASTEWATER PROVIDERS IS GENERALLY REASONABLE.

Q. HOW DID PAWC RESPOND TO YOUR RECOMMENDATIONS CONCERNING THE TERMINATION OF PAWC WATER CUSTOMERS FOR NONPAYMENT OF "NON-COMPANY" WASTEWATER SERVICE PROVIDERS?

A. In general, PAWC agrees with my recommendations by either confirming that its current practice already complies or agreeing to implement certain new procedures.[26] In addition, the Company has agreed to revise its proposed Tariff language to reflect my recommendations with one exception.

Q. WHAT IS YOUR REMAINING CONCERN?

A. PAWC's proposed tariff does not limit its right to terminate water service on behalf of the entities named in the Water Services Act but injects the term "non-Company wastewater provider."[27] PAWC's justification for this broader term is that it has a Joint Services Agreement with Aqua that is approved by the Commission.[28] I do not

[26] PAWC St. No. 14-R, pages 19-20.
[27] PAWC St. No. 4-R, PAWC Exhibit SDG-4R.
[28] PAWC Response to OCA-34-006.

recommend, however, the broader language proposed by PAWC. Rather, I recommend that the Tariff refer to entities named in the Water Services Act and other non-Company entities as approved by the Commission. Additionally, I find the language in Ms. Gress' proposed Section 12.8 to not be clear enough to be understood by the average consumer. Finally, the Company must follow its own tariff rules and regulations, and the tariff should specify the required content of the termination notice that gets posted at the customer's premise. This will provide future guidance to PAWC management of what the notice should state.

As a result, I recommend revision to Ms. Gress' proposed Section 12.8 as follows (strikeouts represent recommended deletions and underline text represents recommended language):

> **12.8 Termination by Company for Non-Payment of Wastewater Service to a Non-Company Wastewater Provider**
>
> ~~The Company may also terminate service in accordance with the terms of any agreement between the Company and a non-Company wastewater provider for non-payment of wastewater service when due upon prior notice by the non-Company wastewater provider.~~
> The Company may terminate a customer's water service due to the customer's non-payment of charges owed to a non-Company wastewater provider, provided that: (1) the Company has an effective agreement with the non-Company wastewater provider pursuant to the Water Services Act or Act of April 14, 2006, codified at 53 P.S. §§ 3102.501 – 3102.507, or a Commission-approved agreement with the non-Company wastewater provider; and (2) the customer received prior notice from the non-Company wastewater provider of the past due amounts owed to the non-Company wastewater provider.
>
> Following the issuance of termination notice by the non-Company wastewater provider, the Company will not ~~move forward with termination of~~ terminate the customer's water service upon notification to the Company by the non-Company wastewater provider that the customer does either of the following: (1) disputes the termination for non-payment; or (2) ~~if the customer~~ produces a medical certification.

Upon termination, the Company will post the termination notice at the customer's premises. The Company's termination notice shall provide the following information in conspicuous format and plain language: (1) a statement that PAWC terminated the customer's water service due to the customer's non-payment of non-Company wastewater charges; (2) a statement that the termination of service is not the result of customer's non-payment of water charges owed to PAWC; (3) the name and contact number of the non-Company wastewater provider; (4) the contact information for the Company; and (5) a citation to Section 12.8 of PAWC's Water Tariff and the weblink for accessing the Company's tariff webpage.

V. THE COMMISSION SHOULD OPEN AN INVESTIGATION OF PAWC'S RELATIONSHIP WITH AMERICAN WATER RESOURCES AND ITS BILLING FOR NON-BASIC WARRANTY SERVICES ON PAWC CUSTOMER BILLS.

Q. DOES PAWC'S REBUTTAL PROVIDE ANY BASIS FOR CHANGING YOUR RECOMMENDATIONS CONCERNING THE BILLING OF AMERICAN WATER RESOURCE SERVICES ON ITS CUSTOMER BILLS?

A. No. PAWC's Rebuttal from Ms. Degillio confirms that it has a contractual relationship with American Water Resources (AWR) to bill non-basic warranty or insurance services in return for a fee.[29] This relationship is exclusive between PAWC and AWR in that no other provider of these services appears on PAWC bills.[30] The nature of this relationship is akin to one of an affiliated interest, but the actual legal relationship is not one of corporate affiliation. I documented the close nature of this relationship in the interactions between PAWC's representative and an AWR representative who attended the public input hearings in my Supplemental Direct Testimony. **[BEGIN CONFIDENTIAL]**

[redacted]

[29] PAWC St. No. 09-R, page 12.
[30] PAWC Response to OCA-34-013.

[redacted]

[END CONFIDENTIAL]

Q. PLEASE COMMENT ON THE NATURE OF THE MARKETING MATERIALS SENT TO PAWC CUSTOMERS BY AWR.

A. **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** These materials raise several concerns, and I do not purport to make recommendations about the content of these marketing materials in this proceeding but rather recommend their consideration by the Commission in the investigation that I recommended in my direct testimony and maintain in my surrebuttal. However, I point out the following significant issues that

[31] PAWC St. No. 09-R, page 14.

[32] [redacted]

should raise red flags and support my recommendation for an investigation:

- **[BEGIN CONFIDENTIAL]** [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]

[redacted] **[END CONFIDENTIAL]**

Q. MS. DEGILLIO POINTED TO A COMMISSION APPROVAL OF A PRIOR CONTRACT WITH AWR. IS THAT PRIOR CONTRACT AND COMMISSION APPROVAL RELEVANT TO THE CURRENT CONTRACTUAL RELATIONSHIP?

A. No. The prior contract cited by Ms. Degillio reflects the affiliated interest contract with AWR. The current contract and interactions between PAWC and AWR post-date that contract and reflect an attempt to continue a relationship based on a contract between unaffiliated entities that raises serious consumer protection implications as I have

documented in my Direct and in this Surrebuttal. I am not aware of any Commission approval of the current contract between PAWC and AWR.

Q. MS. DEGILLIO CLAIMS THAT THE RELATIONSHIP BETWEEN PAWC AND AWR IS TYPICAL OF OTHER PUBLIC UTILITIES WHO BILL FOR NON-BASIC HOME REPAIR SERVICES. IS THIS CORRECT?

A. Not necessarily. Ms. Degillio's Rebuttal pointed to the relationship between another home services repair provider, HomeServe, and another Pennsylvania water utility to support the relationship between PAWC and AWR.[33] According to HomeServe's web portal, one of their "partners" is Aqua (a unit of Essential Utilities), but the information on that program states that HomeServe's products will not appear on Aqua's customer bills.[34] According to this web portal, HomeServe does provide non-basic utility services to several FirstEnergy companies in Pennsylvania[35] but FirstEnergy does not include HomeServe charges on its bills.[36] Even if that were not the case, this attempt to point to other relationships that allow a favored partner to bill for repair services on the utility bill does not resolve the specific nature of the relationship between PAWC and AWR. In particular, the products and services marketed by HomeServe do not attempt to improperly link the corporate entity by using the logo and marketing language of their partner public utilities as exists between PAWC and AWR. **[BEGIN CONFIDENTIAL]**

[redacted]

[33] Ibid., page 14. This information about HomeServe is marked Confidential in her testimony but the publicly available website for HomeServe and what it sells, and the identity of its utility "partners" is not confidential.
[34] "If I'm an Aqua customer, will HomeServe charges show up on my Aqua bill? No. Customers who sign up for these plans will be billed directly by HomeServe." https://www.homeserve.com/en-us/partners/aqua/
[35] https://www.homeserve.com/en-us/partners/firstenergy/
[36] *Interstate Gas Supply, Inc. v. Metropolitan Edison Co., et al*, C-2019-3013805 et al., April 14, 2022 Opinion and Order, page 18. https://www.puc.pa.gov/pcdocs/1740689.pdf

[redacted] **[END CONFIDENTIAL]** and, thus, obtain a marketing advantage that is potentially deceptive and misleading as I documented by comments from several customers at the public input hearings in my Supplemental Direct Testimony, many of whom had originally assumed these entities were connected legally.

Q. MS. DEGILLIO TESTIFIES AS TO THE VALUE OF AWR'S SERVICES AND BENEFIT TO PAWC'S CUSTOMERS. PLEASE COMMENT ON HER DESCRIPTIONS.

A. Ms. Degillio waxes enthusiastic on AWR's services and value to PAWC's customers, describes how customers avoid significant costs, and asserts that customers view this service favorably.[37] I find it difficult to understand how Ms. Degillio has this information or on what it is based. It is certainly inconsistent with the testimony by State Representative Donahue and customers at the Public Input Hearing who complained about the cost and value of the line protection plans billed by PAWC.[38] This type of speculative opinion supports my concern about the integrated nature of the relationship between PAWC and AWR that is reflected in the contract terms and that makes clear that PAWC treats this company as if it was still an affiliated interest.

Q. TURNING TO THE RATEMAKING ISSUE, IS THERE ANY IMPACT ON PAWC'S REVENUES OR REVENUE REQUIREMENT WITH YOUR RECOMMENDATION?

A. No. The OCA's proposed revenue requirement includes the current level of revenues associated with this program and if, as I have recommended, PAWC is directed to

[37] PAWC St. No. 09-R, page 12, lines 9-17.
[38] PAWC St. No. 02-R, page 17, lines 17-20; Tr. pages 1516-1518.

suspend marketing activities under the Billing Agreement and not bill additional (new) enrollees for AWR services pending a full Commission investigation of this billing and marketing arrangement, PAWC has presented no evidence to demonstrate that the current level of revenue will not continue until or unless there is any future order. I do not recommend that PAWC immediately halt the use of its billing system for currently enrolled customers. My recommendation is to bring this matter to the Commission's attention and propose that a fuller investigation occur, particularly with regard to the use of the American Water Works logo and trademark symbols, whether or under what conditions customer information is provided to AWR, whether or under what conditions PAWC can provide marketing or billing services for AWR, and the need for additional disclosures provided to PAWC's customers about their ability to select other providers of these services. I refer to the surrebuttal testimony of OCA witness Ralph C. Smith for this recommendation to keep PAWC's claimed revenues from AWR for the FPFTY.

VI. THE RECOMMENDATION THAT PAWC DEVELOP A CUSTOMER EDUCATION PROGRAM REGARDING PRESSURE REDUCING VALVES IS REASONABLE

Q. DID PAWC ACCEPT YOUR RECOMMENDATION TO DEVELOP A CUSTOMER EDUCATION PROGRAM FOR ITS CUSTOMERS ABOUT PRESSURE REDUCING VALVES?

A. No. PAWC Witness Runzer's Rebuttal points to the Company's tariff language and states that field representatives educate customers about this tariff language and its only impacts a small percentage of customers.[39]

[39] PAWC St. No. 2-R, page 11, lines 11-17.

Q. DO YOU AGREE WITH PAWC'S REFUSAL TO CREATE A CUSTOMER EDUCATION PROGRAM ON HIGH PRESSURE SITUATIONS AND THE ROLE OF PRESSURE REDUCING VALVES?

A. No. I don't understand why a publicly regulated water utility would not want to educate its customers on the causes and remedies associated with high water pressure, when pressure reducing valves are appropriate, how they work, and what consumers should do to monitor their performance. The Company has a unique ability to educate customers on the distinctions between customer and utility responsibilities and the opportunity, through that education, to avoid preventable to damages to customer property and reduce the burden and cost on PAWC to respond to questions and complaints after a problem occurs. There is also the concern that some customers may not have the opportunity or cause to interact with field service representatives and, thus, do not receive information about pressure reducing valves through that conduit. PAWC's view is that it has an obligation to provide information to customers only when a field representative responds to a customer who calls about a pressure complaint.[40] I am surprised that the utility that is claiming management efficiency and excellence in its pursuit of customer satisfaction would take such a narrow view of this issue and summarily reject my modest proposal.

[40] PAWC Response to OCA-34-005.

VII. PAWC RESPONSE TO CUSTOMER CONCERNS ABOUT THE IRREGULAR BILLING CYCLES AT THE PUBLIC INPUT HEARINGS IS UNREASONABLE.

Q. HOW DID PAWC RESPOND TO THE CUSTOMER CONCERNS ABOUT IRREGULAR BILLING CYCLES YOU DOCUMENTED IN YOUR SUPPLEMENTAL DIRECT TESTIMONY?

A. PAWC's Rebuttal merely recited the Commission's regulations that require that monthly bills reflect a billing system of not less than 26 days and not more than 35 days. PAWC evidently interprets this regulation to allow customers to receive bills that differ significantly in the number of days within their billing period as opposed to an internal system that routinely uses the same billing period or at least a practice of not deviating significantly in the number of days for billing. When asked to document the volume of customer bills that reflect each of these billing periods (26 days to 35 days), PAWC is unable to provide this information.[41] As a result, I recommend that PAWC conduct an analysis of how widely its customer billing cycles vary and consider steps to reduce the volatility of billing cycles to respond to a legitimate public concern. When customers are faced with widely divergent billing cycles, the billed amount will naturally vary, resulting in customer billing inquires to the call center as well as concerns about making payment in full to avoid late fees or collection action. I realize that budget billing is an option for some customers, but that should not be the sole response to this concern.

[41] PAWC Response to OCA-34-004.

VIII. SUMMARY OF CONDITIONS THAT SHOULD BE ATTACHED TO ANY RATE INCREASE

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS BASED ON YOUR REVIEW OF THE COMPANY'S REBUTTAL TESTIMONY.

A. The majority of my recommendations have not changed. For ease of reference the updates are italicized:

1. Any rate increase granted in this proceeding should reflect PAWC's failure to structure its arrangements with the Service Company in an arms-length manner that protects PAWC and its customers from poor call center performance and PAWC's failure to properly manage and oversee the call center performance by tracking and evaluating its customer disputes and BCS findings or respond to the obvious trends of infractions and verified violations. These failures refute PAWC's claim of superior management performance and should be considered by the Commission under Section 523 in setting just and reasonable rates as recommended by OCA witness David Garrett's recommended return on equity in this proceeding (OCA Statement 3-R).

2. PAWC should conduct root cause analysis of all customer complaint data on a regular basis and track complaints and analysis for specific call centers, whether operated by the parent company or a third-party contractor.

3. Any new or amended affiliate interest agreements approved by the Commission should contain an arms-length contractual provision that grants PAWC the contractual protection to perform audits of the Service Company's CSO's performance based on defined call center metrics and to use specific call center complaint data to determine, in part, penalties and payments under the contract.

4. Any new or amended affiliate interest agreements approved by the Commission should contain an arms-length contractual provision that (1) will require the Service Company in its contracts with third-party contractors to reduce the fees it owes to the third-party contractor so that Service Company is not responsible for the payment of fees related to services that fail to meet the metrics; and (2) the Service Company will not allocate costs to PAWC for services that fail to meet the call center metrics.

5. PAWC should be required to provide managerial oversight of the Service Company's CSO's call center performance, including but not limited to conducting audits of the Service Company's CSO's performance based on defined metrics and conducting a proper root cause analysis of its internal disputes and BCS related findings and update its findings and conclusions on a quarterly basis.

6. The Commission should adopt specific performance standards as a condition of any rate increase approved in this proceeding. Specifically, the Commission should require PAWC to comply with an annual average of answering 80% of PAWC calls within 30 seconds and a 4% call abandonment rate, performance that is routinely met by Pennsylvania's electric and natural gas utilities. *The original recommendation for a monthly standard is eliminated.* In light of the historical documentation of poor performance and the lack of managerial attention to this issue with inadequate oversight and enforcement of any reasonable standard, PAWC should be held to specific performance standards. Reporting results alone is insufficient in light of this history.

7. PAWC should be required to reform its Pennsylvania-specific "test" and training for its customer representatives to address the full scope of Chapter 56 and Chapter 14 rights and remedies that I have identified are lacking, as well as more detailed monitoring programs that reflect Pennsylvania-specific rights and remedies. This condition should require PAWC to routinely audit and evaluate the performance of its third-party contractors.

8. PAWC's revenue requirement should also be adjusted as recommended by OCA Witness Ralph Smith (OCA Statement 2-R) to eliminate expenses for third party call centers that have routinely failed to meet reasonable call performance standards for PAWC's customers and in part due to PAWC's failure to implement reasonable measures to respond to poor performance.

9. Finally, any rate increase granted in this proceeding should reflect the poor performance of the call center operations since 2019. These failures refute PAWC's claim of superior management performance and should be considered by the Commission under Section 523 in setting just and reasonable rates. Specifically, in my opinion, the poor performance coupled with PAWC's failure to oversee and evaluate the Service Company's performance should be reflected in the return on equity granted in this proceeding. These failures – in addition to the poor performance identified by OCA witness Colton (OCA Statement 5-R) – support rejection of PAWC's proposal for a higher return on equity based on its management performance and support adoption of OCA witness Garrett's recommended return on equity.

10. PAWC should be required to provide customer education to water customers about high water pressure situations and the lifespan of pressure reducing valves, consistent with my recommendations in my testimony above.

11. The Commission should adopt PAWC's proposed tariff revision with respect to the implementation of termination of water service to its customers on behalf of only those entities providing wastewater service identified in the Water Services Act.

12. As a result of my documentation of seriously misleading and improper conduct in the implementation of PAWC's billing for "protection services"

provided by American Water Resources, I recommend that the Commission promptly initiate an investigation of PAWC's program to bill for non-basic services and direct PAWC to suspend the billing for this program for any new customers and cease marketing activities until the investigation is complete and that such program require substantial reforms if allowed to proceed in the future. In the context of this rate case, the reliance on the revenues produced by this program is questionable, however, *the current level of revenues should remain in the revenue requirement pending any results of the Commission's investigation*.

13. [New] *I recommend that PAWC conduct an analysis of how widely its customer billing cycles vary and consider steps to reduce the volatility of billing cycles to respond to a legitimate public concern.*

Q. DOES THIS COMPLETE YOUR TESTIMONY AT THIS TIME?

A. Yes. However, I reserve the right to supplement this testimony based on pending discovery. Also, to the extent that I did not respond to a specific argument or statement made by other witnesses in Rebuttal does not indicate my agreement.

EXHIBIT BA-10

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 34

OCA 34-001

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Ms. Dean states that PAWC conducts a "root cause" of its customer complaints (PAWC St. 14-R, page 2, line 7). Please provide Ms. Dean's definition of a "root cause analyses" with citations to any professional publication or resource that supports her definition.

Response:

The Company assumes that the intended testimony citation is PAWC St. 14-R, page 21, line 7. When Ms. Dean refers to a "root cause analysis" of customer complaints, she is referring to a process that is designed to determine: (1) the basis of the customer complaint; (2) any regulatory non-compliance associated with the basis of the customer complaint; and (3) any changes that could be made to better address the basis of the customer complaint. Ms. Dean specifically describes the activities that contribute to PAWC's "root cause analysis" of customer complaints on pages 21-24 of her rebuttal testimony (including cited exhibits and attachments).

PUBLIC VERSION
EXHIBIT BA-11

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 34

OCA 34-003

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Provide any internal documentation that reflects a discussion of "root cause trends with the CSO and other appropriate business units." [PAWC St. 14-R, page 24, lines 7-8]

Response:

After a PUC Informal Complaint is investigated, a PAWC Compliance Analyst will complete entries into the Root Cause Log. This log is provided to the CSO monthly and they are tasked with further review of the root cause the PAWC Compliance Analyst identified. See OCA 34-003_Attachment_1_CONFIDENTIAL. On a monthly basis, the CSO meets with Compliance to review any trends that require further action such as mentoring, process change, or system enhancement.

In addition, Compliance periodically meets with Operations Senior Management to discuss root cause trends. Presentations created to discuss these trends are provided in OCA 34-003_Attachment 2_CONFIDENTIAL.

PUBLIC VERSON
EXHIBIT BA-12

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 34

OCA 34-016

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

Provide the marketing materials that explain that AWR is not affiliated with PAWC. [PAWC St. 09-R, page 13, lines 19-20]

Response:

Please see OCA 34-016_A CONFIDENTIAL and OCA 34-016_B CONFIDENTIAL.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Barbara R. Alexander, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 6SR, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: March 4, 2024

Signature: Barbara Alexander

Barbara R. Alexander

Consultant Address: Barbara Alexander Consulting, LLC
44 Beech Street
Hallowell, ME 04347

*4858-3060-0361

OCA Statement 7
No Confidential Attachments

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	
	:	
Pennsylvania-American Water Company	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)

DIRECT TESTIMONY

OF

TERRY L. FOUGHT

ON BEHALF OF

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

FEBRUARY 1, 2024

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Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.

A. Terry L. Fought, 780 Cardinal Drive, Harrisburg, Pennsylvania, 17111.

Q BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am a self-employed consulting engineer retained by the Office of Consumer Advocate (OCA) for the purposes of providing testimony in this proceeding.

Q. PLEASE DESCRIBE YOUR BACKGROUND AND QUALIFICATIONS.

A. Exhibit TLF-1, which is attached to this testimony, describes my educational background and applicable experience.

Q. WHAT ISSUES HAVE YOU BEEN ASKED TO INVESTIGATE REGARDING THIS PENNSYLVANIA AMERICAN WATER COMPANY'S (PAWC) RATE CASE?

A. The OCA requested that I investigate: (1) quality of service issues, and (2) customer complaints.

Q. WHAT DID YOUR INVESTIGATION CONSIST OF?

A. My investigation included: (1) reviewing portions of PAWC's filing applicable to Quality of Service; (2) reviewing informal and formal complaints filed by PAWC customers with the PUC; (3) reviewing customer complaints received by PAWC; (4) reviewing customer complaints received by OCA; (5) reviewing the Direct Testimony of PAWC witnesses Ashley E. Everette, PAWC Statement No.1; Jim Runzer, PAWC Statement No. 2; Bruce W. Aiton, PAWC Statement No. 3; E. Christopher Abruzzo, PAWC Statement No. 6, and Constance E. Heppenstall,

PAWC Statement No. 12; (6) reviewing the Management Audit made public in December 2023 and PAWC's Implementation Plan where they address PAWC's quality of service, in Docket No. D-2022-3035217; and (7) reviewing PAWC's responses to the OCA's interrogatories regarding quality of service issues. My investigation will also include reviewing the transcripts of the attending the twelve (12) Public Input Hearings (PIH) when those are available.

PAWC'S WATER SUPPLY & WASTEWATER SYSTEMS

Q. BRIEFLY DESCRIBE PAWC'S WATER AND WASTEWATER OPERATIONS.

A. PAWC owns, operates, and maintains potable water production, treatment, storage, transmission and distribution systems, and wastewater collection, pumping, and/or treatment systems, for furnishing water and wastewater services to approximately 780,000 residential, commercial, industrial, and governmental customers in communities located in 37 of the 67 counties across Pennsylvania.[1]

PAWC's utility plant accounts include land and land rights, structures and improvements, wells, pumping equipment and associated facilities, purification plant equipment, sludge disposal facilities, transmission and distribution mains, collection pipes, distribution storage facilities, service lines, meters, hydrants, and other facilities, including material and supplies.[2]

[1] PAWC Statement No. 2, pp. 2-3.
[2] PAWC Statement No. 2, p. 4.

Q. WHAT QUALITY OF SERVICE ISSUES ARE ADDRESSED IN YOUR TESTIMONY?

A. Pressures and pressure surveys, and customer complaints including PAWC's listing of customer complaints (Complaint Log), formal complaints and letters to the PUC. Because my testimony will be finalized before the PIHs are concluded, I will address the PIH testimony in Supplemental Direct testimony that is currently due by February 13, 2024.

PRESSURES AND PRESSURE SURVEYS

Q. WHAT ARE THE PUC'S REQUIREMENTS FOR PRESSURES AND PRESSURE SURVEYS?

A. According to 52 Pa. Code § 65.6. Pressures:

> (a) *Variations in pressure.* The utility shall maintain normal operating pressures of not less than 25 p.s.i.g. nor more than 125 p.s.i.g. at the main, except that during periods of peak seasonal loads the pressures at the time of hourly maximum demand may be not less than 20 p.s.i.g. nor more than 150 p.s.i.g. and that during periods of hourly minimum demand the pressure may be not more than 150 p.s.i.g. A utility may undertake to furnish a service which does not comply with the foregoing specifications where compliance with such specifications would prevent it from furnishing adequate service to any customer or where called for by good engineering practices. The Company of the Commission to require service improvements incorporating standards other than those set forth in this subsection when, after investigation, it determines that such improvements are necessary is not hereby restricted.
>
> (b) *Pressure gauges.* Within 2 years after the effective date of this section, each utility shall obtain one or more recording pressure gauges for each separately operated pressure zone for the purpose of making pressure surveys as required by this section. These gauges shall be able to record the pressure experienced on the zones and shall be able to record a continuous 24-hour test. Each utility serving 1,000 or more customers or 1,000 or more customers in any separately operated zone of a multi-zone utility shall maintain one or more of these recording pressure gauges in service at some representative point or points in each of the pressure zones of the utility.

(c) Telemetering. An utility may make the pressure surveys required by this section by means of telemetered information electronically transferred to printed copy instead of using recording pressure gauges.

(d) Pressure surveys. At regular intervals, but not less than once each year, each utility shall make a survey of pressures in its distribution system of sufficient magnitude to indicate the pressures maintained at representative points on its system. The surveys should be made at or near periods of maximum and minimum usage. Records of these surveys shall show the date and time of beginning and end of the test and the location at which the test was made. Records of these pressure surveys shall be maintained by the utility for a period of at least three years and shall be made available to representatives, agents, or employes of the Commission upon request.

Notes of Decisions

Adequate Pressure

The 25 p.s.i.g. minimum expressed in subsection (a) is not intended to restrict the Company of the PUC to order improvements where service is inadequate; therefore, the PUC has the power to order needed improvements notwithstanding that the pressure in a utility's main meets the standard of the regulation. *Barone v. Pennsylvania Public Utility Commission*, 485 A.2d 519 (Pa. Cmwlth. 1984).

Q. WHAT ARE DEP'S REQUIREMENTS FOR SYSTEM PRESSURES?

A. According to DEP's Public Water Supply Manual, Part II, Community System Design Standards:

1. Pressure[3]

All water mains, including those not designed to provide fire protection, shall be sized after a hydraulic analysis based on flow demands and pressure requirements. The pipe system and its appurtenances shall be designed to maintain a minimum pressure of 20 pounds per square inch, gauge (psig) at ground level at all points in the distribution system under all conditions of flow. The normal working pressure in the distribution system should be approximately 60 psig.

[3] Public Water Supply Manual, Part II, Community System Design Standards, May 6, 2006, pp. 186-187.

Q. WHAT ARE THE DIFFERENCES BETWEEN THE PUC AND DEP PRESSURE REQUIREMENTS?

A. The PUC has a maximum and minimum pressure criterion while DEP has a minimum and normal working pressure criterion. The PUC has a minimum criterion of 25 psi at the main while DEP's minimum criteria is 20 psi at ground level. Assuming the main is buried 4.5 feet below ground, the DEP minimum criteria is equivalent to 22 psi at the main.

Instead of having a pressure survey requirement for all water systems, DEP imposes a pressure survey requirement on specific systems with known pressure problems.

Q. WHAT ARE THE REPRESENTATIVE POINTS ON THE SYSTEM WHERE PRESSURE SURVEYS SHOULD BE CONDUCTED?

A. In general, the representative points are highest and lowest ground elevations of each distribution system in each pressure zone.

Q. HOW HAVE PRESSURE SURVEYS CHANGED SINCE 1984?

A. The latest modification to 52 Pa. Code § 65.6. Pressures occurred in 1984 when the typical technology consisted of either: (1) installing one or more recording pressure gauges in each separately operated pressure zone or (2) transferring electronic telemetered pressure information to printed copy. In both options, it was intended that the highest and lowest pressures experienced by a customer in each pressure zone would be determined by recording the pressures at representative points. Generally, the highest pressures will be located in the portion of the

pressure zone with a water main at the lowest ground elevation, and the lowest pressures will be located in the portion of the pressure zone with a water main at the highest ground elevation.[4]

PAWC, like most water supply utilities, now has Supervisory Control and Data Acquisition (SCADA) systems and hydraulic computer models capable of checking pressures throughout its distribution systems. The OCA has accepted utility-provided pressures at fire hydrants, from hydraulic models and/or SCADA data in lieu of "pressure surveys" if there haven't been any customer complaints that indicate non-compliance with 52 Pa. Code § 65.6. Having utilities provide this data is more cost effective than conducting pressure surveys, assuming the utility provides a complete Customer Complaint Log that includes all customer complaints regarding pressure.

For example, if the complaint log shows that a customer has complained about water pressure, the pressure taken at a nearby fire hydrant can be used to determine compliance with 52 Pa. Code § 65.6 by adjusting the pressure for the difference in ground elevation. If the change in elevation estimated by on-line mapping indicates a possible violation, a field survey can resolve the issue.

[4] This statement may not consider low pressures due to pressure drops in mains with pipe sizes under 4-inches.

Q. HAS PAWC PROVIDED INFORMATION REGARDING CUSTOMER PRESSURE COMPLAINTS?

A. Yes, in response to OCA-7-005, the PAWC submitted in Attachment 5 a Confidential Customer Complaint Log that contained 1,809 customer contacts regarding pressure for the period July 12, 2022 through July 31 2023.[5]

Q. DID YOU REVIEW PAWC'S LISTING OF CUSTOMER PRESSURE COMPLAINTS?

A. Yes. I reviewed each listing in the Complaint Log.

Q. IS THE INFORMATION PROVIDED BY THE PAWC SUITABLE TO REPLACE PRESSURE SURVEYS?

A. Yes.

Q. DO YOU HAVE ANY COMMENTS REGARDING THE COMPLETENESS OF THE COMPLAINT LOG REGARDING PRESSURES?

A. In its response to many complaints, PAWC did not always report the pressure available to the customer at the water main once PAWC decided that the customer had a leak or needed to install, adjust, or replace a pressure reducing valve (prv). In a few cases, the customer was advised to install an expansion tank. A statement that a customer's pressure is within an acceptable range should not be considered sufficient for either low- or high-pressure complaints. In all pressure cases, PAWC

[5] The number of contacts include rescheduling contacts due to customers not being available and follow up contacts by the Company.

should provide the pressure available at its water main to the customer and record it in the Complaint log. This would allow the customer to make sure that their plumber is providing an acceptable prv and/or expansion tank and the reviewer of the Complaint Log to determine if PAWC's advice is reasonable.

Q. DO YOU HAVE ANY COMMENTS REGARDING THE COMPLETENESS OF THE COMPLAINT LOG REGARDING PRESSURES HIGHER THAN 125 PSI?

A. Yes, ten customers reported pressures ranging from 130 psi to 180 psi. PAWC reported pressures ranging from 130 psi to 176 psi in nine complaints and did not report pressure available at its water main in 15 cases.

Q. ACCORDING TO THE COMPLAINT LOGS, HOW WERE CUSTOMERS INSTRUCTED TO ADDRESS HIGH PRESSURES?

A. According to the Complaint Log, the customers were instructed to either install, adjust, or replace their prv and sometimes an expansion tank regardless of what pressures are provided by PAWC.

Q. CAN A PRV FAIL IN SUCH A MANNER TO CAUSE CONSIDERABLE DAMAGE TO THE CUSTOMER'S HOME?

A. Yes. A prv is a mechanical device that does not have a permanent life span. PAWC's Pressure Complaint Log indicated that high pressure complaints are resolved by the customers either installing, adjusting, or replacing the pvc. Considerable damage can be caused by a prv failing to reduce a pressure exceeding 125 psi.

Q. DO YOU HAVE ANY SUGGESTIONS FOR PAWC TO PROTECT WATER CUSTOMERS FROM DAMAGE DUE TO HIGH PRESSURES?

A. Yes. Where PAWC has identified a household with normal operating pressure that exceeds 125 psi, PAWC should inform customers when to replace their prv and describe how to determine when a prv is nearing the end of its service life. This information would also be valuable for customers with prvs that have pressures less than 125 psi where PAWC has identified that household as utilizing a prv. I refer to the Direct Testimony of OCA witness Barbara R. Alexander (OCA Statement 6) for her recommendations on how PAWC should inform water customers about prvs.

Q. DID THE COMPLAINT LOG INDICATE THAT PAWC ACTED IN A RESPONSIBLE MANNER WHEN THE CAUSE OF THE PRESSURE COMPLAINT WAS PAWC'S PROBLEM?

A. Yes.

CUSTOMER COMPLAINTS

Q. WHAT ARE THE PUC'S REQUIREMENTS FOR CUSTOMER COMPLAINTS?

A. According to 52 Pa. Code § 65.3. Complaints:

(a) *Investigations.* A public utility shall make a full and prompt investigation of complaints made by the Commission or by others, including customers, relating to service or facilities.

(b) *Records of complaints.* A public utility shall preserve for a period of at least 5 years, written service complaints showing the name and address of the complainant, the date and character of the complaint and the final disposition of the complaint.

Q. WHAT INFORMATION HAS PAWC SUBMITTED CONCERNING WATER AND WASTEWATER CUSTOMER COMPLAINTS?

A. In response to OCA-7-005[6], in addition to the 1,806 pressure complaints, PAWC provided the following Confidential customer contacts regarding the water system: 4191 water quality[7]; and 1,325 restoration[8] contacts received during from January 1, 2020 through June 30, 2022.

In response to OCA-7-25, the PAWC provided a listing of 36 customer contacts from wastewater customers received during July 2022 and July 2023 that were categorized as follows: 17 water quality, 6 restoration, and 13 pressure. I reviewed the 36 contacts and found that PAWC addressed them responsibly.

Q. DESCRIBE YOUR PROCESS FOR REVIEWING PAWC'S LISTING OF CUSTOMER COMPLAINTS FOR ISSUES OTHER THAN PRESSURE?

A. I sorted the complaints by date, category, and zip code to find if there were any concentrations of similar nearby complaints occurring around the same time.

Q. DID YOU NOTICE ANY CONCENTRATIONS OF SIMILAR NEARBY WATER SYSTEM WATER QUALITY COMPLAINTS OCCURING AROUND THE SAME TIME?

A. No.

[6] The attachments to PAWC's response to OCA-7-005 is marked confidential. My discussion and Exhibit TLF-1 do not disclose customer specific information from that attachment.
[7] During July 15, 2022 through July 31, 2023.
[8] During July 12, 2022 through July 31, 2023.

Q. DID YOU NOTICE ANY CONCENTRATIONS OF SIMILAR NEARBY WATER SYSTEM RESTORATION COMPLAINTS OCCURING AROUND THE SAME TIME?

A. Yes. This would be considered normal because construction projects can affect many nearby customers around the same time. I checked to make sure the restoration complaints were addressed by PAWC, and they were.

Q. DID YOU NOTICE ANY CONCENTRATIONS OF SIMILAR NEARBY WASTEWATER SYSTEM COMPLAINTS OCCURING AROUND THE SAME TIME?

A. No.

Q. DID PAWC PROVIDE OTHER CUSTOMER COMPLAINT INFORMATION?

A. Yes. PAWC provided information on 4,537 water and 222 wastewater complaints submitted to the PUC during February 2022 through October 2023. Excluding the customer complaints for high rates, billing and payment issues, the number of PUC complaints amounted to 262 for the water system and two for the wastewater system.

Q. ARE YOU AWARE OF OTHER CUSTOMER COMPLAINTS TO THE PUC THAN THOSE PAWC LISTED?

A. Yes. During the rate case, more customers have submitted Formal and Informal Complaints and letters to the PUC, and I expect that more will testify at public input hearings (PIHs).

In its Rebuttal Testimony, PAWC should respond to the customer complaints regarding quality of service contained in Formal and Informal Complaints and PIH testimony that have occurred during this rate case.

For example, there are a number of formal complaints from customers in the Exeter Township area that raise concerns about their unwillingness to drink the water due to taste and/or hardness. See, for example, C-2023-3044218, C-2023-3044354, C-2023-3044365, C-2023-3044380, C-2023-3044565 and C-2024-3045278, which are attached as Exhibit TLF-2 (Confidential).

Where PAWC filed an answer to these complaints, the answer did not specifically address the customers' quality concerns. In response to C-2023-304454, for example, PAWC stated:

> "In further answer to Complainant's averment that water quality is undrinkable and hard, the Company provides safe, adequate, and reliable service in accordance with Commission requirements. Additionally, the Company has taken steps to improve water quality. As fully described in the Direct Testimony of Jim Runzer (PAWC Statement No. 2), the Company has received multiple awards and been recognized for its dedication to and achievements in attaining exemplary water quality. To date, PAWC has received nine Phase IV Presidents Award recognitions, the highest honor under the Partnership for Safe Water Treatment Optimization. In addition, since the Company's last base rate case filing, PAWC's Clarion Water Treatment Plant was presented with the Directors 15-year Longevity Award, and Shady Lane Water Treatment Plant was recognized with the Directors 10-year Longevity Award."

PAWC's Rebuttal Testimony should provide a more specific response to the concentration of water quality complaints in the Exeter service area.

As another example, I noticed complaints from the Scranton area where customers said that the water is periodically discolored, brown, or rust-colored in appearance, and sometimes related to main breaks. PAWC's Rebuttal Testimony should provide a more specific response to dirty water complaints in the Scranton service area.

In its Rebuttal Testimony, PAWC should also provide a response to the informal complaint attached to my Direct Testimony as Exhibit TLF-3 (Confidential) that asks PAWC to extend water service.

Finally, the OCA has an outstanding interrogatory, OCA-29-001 (Confidential), that addresses an event in February 2023 that was identified in its Complaint Log.[9] As that discovery response is not likely to be received soon enough for me to review and discuss in this Direct Testimony, PAWC should address the requested information in its Rebuttal Testimony.

Q. DOES THIS COMPLETE YOUR WRITTEN DIRECT TESTIMONY?

A. Yes, at this time. I reserve the right to supplement this testimony either in writing or orally if additional relevant information is received. As noted above, because my testimony will be finalized before the PIHs are concluded, I will address the PIH testimony in Supplemental Direct testimony that is currently due by February 13, 2024.

[9] PAWC response to OCA-7-005_Attachment 5 (Confidential).

EXHIBIT TLF-1

BACKGROUND AND QUALIFICATIONS

TERRY L. FOUGHT, P.E.

Education

Cleveland State University, Cleveland, Ohio, Bachelor of Civil Engineering, 1967

Professional Registrations

Professional Engineer, Pennsylvania, PE-023343-E, 1975

Professional Engineer, New Jersey, GE 25392, 1978 (Inactive)

Professional Engineer, Virginia, 10850, 1979 (Inactive)

Professional Land Surveyor, Pennsylvania, SU-000194-A, 1980 (Inactive)

Employment

From March 1983 to date, I have been a self-employed consulting engineer engaged in providing consulting engineering services to water and wastewater utilities, both private and municipal.

From May 1969 to March 1983, I was employed be E. H. Bourquard & Associates, Inc. as a project engineer to water and wastewater clients. At the time I left the firm I was a vice-president.

From 1962 to 1969, I was employed by the State of Ohio, Department of Highways and the Geauga County Ohio Sanitary Engineers Office as an engineer's assistant to assistant sanitary engineer with breaks in employment to attend college and 1½ years active duty military service.

Experience

I have prepared studies related to and designed water supply, treatment, transmission, distribution and storage facilities. I have provided services to the following private and municipal water suppliers: Amber Hill Mobile Home Park, Brockway Borough Municipal Authority, Dallas Water Company, Eastern Gas and Water Investment Company, Haddonfield Hills Development, Halifax Borough, Langhorne Spring Water Company, Mifflintown Municipal Authority, Neshaminy Water Resources Authority, Newberry Water Company, Pleasant View Mobil Home Park, H. B. Reese Candy Company, Shavertown Water Company, Smethport Water Company, Tunkhannock Water Company, and Watts Business Center.

I have prepared studies related to and designed wastewater collection and interceptor sewers, pumping stations and force mains, and treatment plants. I have provided services to the following private and municipal sewerage utilities: Brockway Glass Company, Central Dauphin School District, Clean Waste Technologies, Inc., Dauphin Borough, Dauphin Borough Municipal Authority, Halifax Area School District, Halifax Municipal Authority, Mercersburg Borough, Middle Paxton Township, Newberry Sewer Company, Newberry Township Municipal Authority, Park-a-way Park Family Campground, Reading Township Municipal Authority, Reynoldsville Borough, Saint Thomas Township, and Watts Business Center.

I have prepared over 100 stormwater management and drainage plans for land development and subdivision plans in Cumberland, Dauphin, and York Counties. Most of these plans included the design of storm sewer collection systems.

List of Public Utility cases which I have testified or provided substantial assistance:

NEW JERSEY BUREAU OF PUBLIC UTILITIES

Docket Number	Company Name
7712-1140	City of Trenton
787-847	Hackensack Water Company
814-119	City of Trenton
8310-862	City of Trenton

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket Number	Company Name
C-2010-2175673	Pennsylvania-American Water Company
C-2011-2259004	Endsley v PAWC
C-2012-2332951	Tschachler v UGI
C-2014-2447138	Hidden Valley Utility Services - Water
C-2014-2447169	Hidden Valley Utility Services - Wastewater
C-2018-2644592	Winola Water Company
C-2020-3022354	McKercher v Borough of Hanover
F-2011-2280415	Lynette Lugo Lopez v PGW
F-2012-2311590	Belinda Lyles v Aqua
F-2012-2330753	Scott v PGW
I-840377	Pennsylvania Gas and Water Company
I-00050109	PAWC High Fluoride Incident
I-00072313	WP Water & Sewer Co.
I-2009-2109324	Clean Treatment Sewer Company
I-2016-2526085	Delaware Sewer Company
P-2008-2075142	Pennsylvania-American Water Company
P-2014-2404341	Delaware Sewer Company
P-2017-2584953	Aqua Pennsylvania, Inc.
P-2017-2594725	Newtown Artesian Water Company
P-2017-2585707	Pennsylvania-American Water Company
P-2017-2589724	Suez Water Pennsylvania, Inc.
P-2020-3020914	Twin Lakes Utilities, Inc.
R-00850174	Philadelphia Suburban Water Company
R-00932785	Meadows Water Company
R-00963708 (Sewer)	Wynnewood Water & Sewer Corporation
R-00963709 (Water)	Wynnewood Water & Sewer Corporation
R-00984257	Consumers Pa. Water Company
R-00984334	National Utilities, Inc.
R-00984375	City of Bethlehem
R-00994672	Superior Water Company
R-00005031	Penn Estates Utilities, Inc.
R-00005050	Emporium Water Company
R-00005212 (Sewer)	Pennsylvania-American Water Company
R-00005997	Jackson Sewer Corporation
R-00027982 (Sewer)	Pennsylvania-American Water Company
R-00049862	City of Lancaster – Sewer Fund
R-00050607	Glendale Yearound Sewer Co.
R-00050659	Wonderview Water Co.
R-00050673	Pocono Water Co.
R-00050678	Mesco, Inc.

PENNSYLVANIA PUBLIC UTILITY COMMISSION (Continued)

Docket Number	Company Name
R-00050814	Marietta Gravity Water Co.
R-00051030	Aqua Pennsylvania, Inc.
R-00051167	City of Lancaster – Water Fund
R-00061297	Emporium Water Co.
R-00061492	Reynolds Disposal Co.
R-00061496	Columbia Water Co.
R-00061617	Allied Utilities Services
R-00061618	Imperial Point Water Co.
R-00061625	Phoenixville Sewer Fund
R-00061645	Eaton Water Co.
R-00062017	Borough of Ambler Water Department
R-00072074 (Sewer)	Aqua PA, Little Washington Division
R-00072075 (Sewer)	Aqua PA, Chesterdale/Williamstown Division
R-00072351	Village Water Company
R-00072491	Clarendon Water Company
R-00072492	City of Bethlehem, Bureau of Water
R-00072493 (Water)	Total Environmental Solutions, Inc., Treasure Lake
R-00072711	Aqua PA
R-2008-2020729	Blue Knob Water Company
R-2008-2020873	Warwick Drainage Company
R-2008-2020885	Warwick Water Works, Inc.
R-2008-2032689	PAWC Coatesville Wastewater Operations
R-2008-2039261	Superior Water Company
R-2008-2045157	Columbia Water Company
R-2008-2047291	Rock Spring Water Company
R-2008-2079310	AQUA, PA
R-2008-2081738	Little Washington Wastewater Company
R-09-2097323	Pennsylvania-American Water Company
R-2009-2102464	Reynoldsville Water Company
R-2009-2103937	PA Utility Company, Inc (Water)
R-2009-2103980	PA Utility Company, Inc (Sewer)
R-2009-2105601	Fryburg Water Company
R-2009-2110093	Birch Acres Water Company
R-2009-2115743	Lake Spangerberg Water Company
R-2009-2116908	Hanover Borough Water
R-2009-2117289	Utilities Inc, Westgate (Water)
R-2009-2117532	Penn Estates Utilities Inc (Water)
R-2009-2117750	Newtown Artesian Water Company
R-2009-2121928	Clean Treatment Sewage Company
R-2009-2122887	United Water Pennsylvania, Inc
R-2009-2132019	AQUA, PA
R-2010-2157062	Tri-Valley Water Supply Company, Inc
R-2010-2166208	Pennsylvania American Water Company (Wastewater)
R-2010-2171339	Reynolds Disposal Company
R-2010-2171918	TESI, Treasure Lake, Water Division
R-2010-2171924	TESI, Treasure Lake, Sewer Division
R-2010-2174643	City of Lock Haven
R-2010-2179103	City of Lancaster Water Department
R-2010-2191376	Superior Water Company
R-2010-2194499	Dear Haven Water Company
R-2010-2194577	Dear Haven Sewer Company

PENNSYLVANIA PUBLIC UTILITY COMMISSION (Continued)

Docket Number	Company Name
R-2010-2207833	Little Washington Waste Water, Masthope Division
R-2010-2207853	Little Washington Waste Water, SE Consolidated Division
R-2011-2218562	CMV Sewage Company, Inc.
R-2011-2232243	Pennsylvania-American Water Company
R-2011-2232985	United Water Company
R-2011-2244756	City of Bethlehem- Bureau of Water
R-2011-2246415	Twin Lakes Utilities, Inc.
R-2011-2248531	Wonderview Sanitary Facilities
R-2011-2248937	Fairview Sanitation Company
R-2011-2251181	Borough of Quakertown, Water
R-2011-2255159	Penn Estates Utility Inc - Water
R-2012-2286118	Audubon Water Company
R-2012-2330887	North Heidelberg Sewer Company
R-2012-2310366	City of Lancaster Sewer Fund
R-2012-2311725	Borough of Hanover - Sewer
R-2012-2315536	Imperial Point Water Company
R-2012-2336662	Rock Springs Water Company
R-2013-2350509	City of DuBois, Bureau of Water
R-2013-2355276	Pennsylvania-American Water Company
R-2013-2360798	Columbia Water Company
R-2013-2370455	Penn Estates Utilities, Inc. - Sewer Division
R-2013-2367108	Fryburg Water Company
R-2013-2367125	Cooperstown Water Company
R-2013-2390244	City of Bethlehem – Bureau of Water
R-2014-2400003	Borough of Ambler – Water Department
R-2014-2420204	Pocono Waterworks Company, Inc. (Water)
R-2014-2420211	Pocono Waterworks Company, Inc. (Sewer)
R-2014-2402324	Emporium Water Company
R-2014-2430945	Plumer Water Company
R-2014-2428304	Borough of Hanover Water Department
R-2014-2410003	City of Lancaster-Bureau of Water
R-2014-2427035	Venango Water Company
R-2014-2427189	B E Rhodes Sewer Company
R-2014-2447138	Hidden Valley Utilities Services - Water
R-2014-2447169	Hidden Valley Utilities Services – Sewer
R-2014-2452705	Delaware Sewer Company
R-2015-2462723	United Water Pennsylvania
R-2015-2470184	Borough of Schuylkill Haven Water Department
R-2015-2479962	Corner Water Supply
R-2015-2506337	Twin Lakes Utilities, Inc.
R-2016-2538600	Community Utilities of Pennsylvania, Inc.
R-2016-2554150	City of DuBois – Bureau of Water
R-2017-2595853	Pennsylvania-American Water Company
R-2017-2598203	Columbia Water Company
R-2017-2631441	Reynolds Water Company
R-2018-3000022	York Water Company
R-2018-3000834	Suez Water Company
R-2018-3002645 (Water)	Pittsburgh Water & Sewer Authority
R-2018-3002645 (Sewer)	Pittsburgh Water & Sewer Authority
R-2018-3001306 (Water)	Hidden Valley Utility Services
R-2018-3001307 (Sewer)	Hidden Valley Utility Services

PENNSYLVANIA PUBLIC UTILITY COMMISSION (Continued)

Docket Number	Company Name
R-2019-3008947 (Water)	Community Utilities of PA
R-2019-3008948 (Sewer)	Community Utilities of PA
R-2019-3010955	City of Lancaster Sewer Fund
R-2019-3010958	Twin Lakes Utilities, Inc.
R-2020-3017951	Pittsburgh Water and Sewer Authority
R-2020-3017970	Pittsburgh Water and Sewer Authority
R-2020-3019369	Pennsylvania-American Water Company
R-2020-3020256	City of Bethlehem
R-2020-3020917	Audubon Water Company
R-2020-3026116	Hanover Borough Water Department
R-2021-3024773	Pittsburgh Water and Sewer Authority (W)
R-2020-3024774	Pittsburgh Water and Sewer Authority (WW)
R-2020-3024779	Pittsburgh Water and Sewer Authority (SW)
R-2021-3025206	Community Utilities of Pennsylvania, Inc. (W)
R-2021-3025207	Community Utilities of Pennsylvania, Inc. (WW)
R-2021-3026682	City of Lancaster Water Department
R-2021-3027385	Aqua Water Company (W) (WW)
R-2022-3031672&73	PAWC (W) (WW)
R-2022-3031340	York Water Company (W) (WW)
R-2022-3031734	Borough of Ambler (W)
R-2023-3040258	Columbia Water Company

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Terry L. Fought, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 7, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: February 1, 2024

Signature: _____
Terry L. Fought

Consultant Address: 780 Cardinal Drive
Harrisburg, PA 17111

*4871-2620-7135

OCA Statement 7 Supp.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	
	:	
Pennsylvania-American Water Company	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)

SUPPLEMENTAL DIRECT TESTIMONY

OF

TERRY L. FOUGHT

ON BEHALF OF

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

February 13, 2024

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EXHIBITS

EXHIBIT TLF-4 – Jefferson Township Municipal Authority Complaint

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.

A. Terry L. Fought, 780 Cardinal Drive, Harrisburg, Pennsylvania, 17111.

Q MR. FOUGHT, DID YOU SUBMIT DIRECT TESTIMONY IN THE PROCEEDING ON BEHALF OF THE OFFICE OF CONSUMER ADVOCATE?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL DIRECT TESTIMONY?

A. To address testimony by customers at the twelve Public Input Hearings (PIH) on January 29, 30, 31, and February 5, 6, and 7, 2024 regarding quality of service and main extensions.

QUALITY OF SERVICE

The Company should respond to the testimony regarding quality of service issues by customers who testified at the PIHs, including:

1. The customer testified that there are many metal plates in their street containing Company sewer lines and sinkholes. Tr. 236-243. East 28th Street, McKeesport.
2. The customer testified about (1) people's water getting shut off without notice and (2) how bills are generated for new customers. Tr. 298-309. Greenwood, Port Vue.
3. A Borough manager testified about lack of cooperation with the Company in fixing water mains and the Borough road repairing. Tr. 444-449. Pleasant Avenue, Peckville.
4. The customer testified that they drink and make ice with bottled water because the water tastes horrible. Tr. 450-444. Westwood Drive, Tobyhanna.
5. The customer testified that (1) the water is not good to drink; (2) water is not clear in coffee pot; (3) there is so much chlorine in the water. Tr. 513–517 South 9th Avenue, Scranton.
6. The customer testified that that they make ice and drink bottled water. Tr. 528-530. Woodlawn Street, Scranton.
7. The customer testified that in November they had a whole wash load ruined by water with rust and stains. The claim for damages was denied by the Company's insurance company. Tr. 537- 540. Cedar Avenue, Scranton.
8. The customer testified that they filled pool with cloudy water and took a sample to a pool place that said the PH and chlorine were off. A company employee said the water looks fine but would not drink the water. Tr. 552-556. Harrison Avenue, Scranton.

9. The customer testified that (1) the water is dirty and has been dirty for a long time; and (2) stomachaches stopped when they quit drinking coffee made with Company water. Tr. 573-580. Church Avenue, Scranton.

10. The customer (Dunmore Borough Council member) testified that: (1) “when the water main burst on Grove Street in Dunmore on Thanksgiving Day, 11/23/23, the water inundated houses on the 1200 block of Monroe Avenue, destroying basements and driveways; (2) a family of four with two toddlers was displaced for two months; (3) flooding had occurred several times previously in that exact location in 2021 and 2022; (4) on those occasions, the homeowner said that the representative from PAWC told them it would never be fixed because it was too expensive; (5) when PAWC finally put dye down the manhole behind the garage, the dye came right back up because it had no place to go; (6) the family still has not been made whole; (7) the back fence is still broken; (8) the finished basement is still without walls or flooring; (9) they have no washer or dryer or playroom; (10) the homeowner also questioned how much the value of his house has declined. Tr. 611-617. Monroe Avenue, Dunmore.

11. The customer (Scranton City Council member) testified that: (1) just recently, she knows specifically on East Mountain, there was a water outage, pipes broke or what have you, and some people went anywhere from 10 to 48 hours without water; (2) and then once the water was turned on, it took anywhere from four to five days of running brown water; (3) you couldn't drink it, so they suffered with brown water; (4) every time she would go to Gary's on Meadow Avenue, people were buying jugs of water for a week; (5) you had to run the water to get all that filth through it; (6) and then what's happening when you're running that water? It's ticking. Tr. 626-638. Ridgewood Avenue, Scranton.

12. The customer (Scranton City Council member) testified that (1) “I've had numerous streets that I've had to bring up as concerns because they were Pennsylvania American Water projects and the paving was not done properly”; (2) “I have dirty water. Just last week, my daughter was bathing in the tub. My mother-in-law was giving her a bath, and as the water was running, it started to come out dirty”; (3) she sees complaints in the Hill section of Scranton about dirty water at least weekly; (4) after replacing water and sewage lines the entire length of Myrtle Street, the repaving does not appear to have been done properly, quickly develops potholes and is difficult to drive on; (5) when they contacted Pennsylvania American Water, they corrected one block of Myrtle Avenue, which does have a lot of traffic, but the rest of Myrtle Street is still in disrepair until they have better weather; (6) doesn’t think that a project is Southside that went on for many years that had large bumps causing trouble driving over is still up to par. Tr. 641-649 . East Gibson Street, Scranton.

13. The customer testified that their water on East Mountain has been really dirty. His wife and daughter won’t drink the water and buy bottled water by the case. Tr. 652-655. East Locust Street, Scranton, East Mountain.

14. The customer testified that: (1) they removed all the black top curbs and they never came back and put them back in; (2) now when it rains, the water just pours down their sidewalk and goes in their basements; (3) the Company refuses to come back and put the blacktop curbs in front of these homes; (4) he had to get his sidewalk done over because they did such a terrible job and he had to fight for months to get that. Tr. 656-664. Railroad Avenue, Scranton.

15. The customer testified that he lived on East Mountain and last month he had terrible water for four days. After some difficulty, he got $20 credit for four days of dirty water. Customer buys bottled water in 5 gallon jugs. Tr. 665-669. Froude Avenue, Scranton.

16. The customer (School Board Director) testified that multiple times throughout the summer, he had dirty water. Also, the Company was working on changing pipes every day for weeks at the bottom of his street. Tr. 669-675. North Garfield Ave., Scranton.

17. The customer testified that the Company is digging up the streets and she has been having a lot of dirt in the water. She has two filters. If she runs unfiltered water in the sink, on certain days, it's all cloudy, it's dirty, it's yellowing. If she runs filtered water, it's fine. Also, she has had (1) expensive plumbing bills when the Company's mains break and they were replacing pipes because her filters were so clogged with dirt that it affected and broke the main filter under the sink, which is much more expensive filter; (2) an only three-year old toilet that started making noise that the plumbers said that also was from the dirt, from the water; (3) on the 1700 block of Olive Street, last year the pipes were replaced, potholes paved, fixed and then within two weeks, the street was blocked off again to re-dig up the streets because the pipe was leaking again. And then maybe about five months later, they were digging it up again. Tr. 675-681. Colfax Avenue, Scranton.

18. The customer testified that there has been no compensation for getting brown and unusable water, being required to buy drinking water, and delaying clothes washing and showering that occurs every other week. The brown water causes the whole house filter to be changed more often. Tr. 684-691. 17th Avenue, Scranton.

19. The customer testified that he has installed a $12,000 whole house filter system for cold water and still had to install carbon filter under every sink in his house and still gets dirty hot water. He has had to put a backflow preventer on his home. Tr. 691-698. Alpine Drive, Moosic.

20. The customer testified that she wants to wash her dishes, clothes, body, and expects to be clean, not dirty after using the water. Tr. 699-703. Jordan Hollow Road, Dalton.

21. The customer testified that when Pennsylvania American Water is contacted about outages or flushing these groundwaters, the Company will not give you any kind of a discount. Tr. 715-720. Whitetail Drive, Scranton.

22. The customer testified that the water has a strong chlorine smell and has experienced shut offs, line breaks and notices to flush pipes. Tr. 725-730. Oak Avenue, Scranton.

23. The witness (a renter) testified that she, like a ratepayer, has to drink the same unpalatable water; buy bottled water; take the same stinky shower; wash clothes in the same stinky water, and so on and so forth. The witness also defined the smell as chlorine and testified that after flushing the toilet, the water still looks yellow; and the dirty water occurs for a couple of days two or three times per month. Tr 745-750. Penn Avenue, Scranton.

24. The customer previously testified and added the following: (1) In 2017, he applied for a water hookup in a garage he built and he still doesn't have water in that garage and (2) every couple of months he has to change the filter in his filter system. Tr. 750-753. Alpine Drive, Moosic.

25. The customer previously testified and added the following: the Company should provide a warning prior to doing something in your area. Tr. 758-760. Colfax Avenue, Scranton.

26. The customer previously testified and added the following: because of the brown water, yellow water issue white fabric or clothing, towels or anything become dingy and yellow another example of damage by the Company. Tr. 761-762. 17th Avenue, Scranton.

27. The customer testified that her community has had issues with water quality and in some areas of Exeter Township the water is undrinkable, and people are supplementing undrinkable water with bottled water. Tr. 797-806. Pond View Drive, Birdsboro.

28. The customer testified that: (1) they buy drinking water (bottled) because the water quality is absolute garbage; (2) Exeter has extremely hard water. There is calcium and lime buildup on everything; (3) having a water softener is a must, but had to turn it off because the water is so hard that his softener cycles constantly, which of course, counts towards wastewater. He also testified that the water pressure is abysmal and cuts off in the middle of a laundry cycle for no reason. If the washer is running, it's not possible to take a shower or use the sink. Tr. 806-811. Constitution Avenue, Reading.

29. The customer testified that: (1) the water quality is pretty darn hard and they have to buy bottled water for a baby to drink; (2) they have a water softener because in preparation to retire, they thought ahead and saved up to upgrade their water heater, their air conditioner, heater, doing everything responsible so they can age in place in this house that they saved a lifetime of savings for; and (3) they have to use the water softener to protect the washer, the dishwasher and their tankless hot water heater. Tr. 816-819. Stonehenge Drive in Farming Ridge, Exeter.

30. The customer testified that: the water pressure varies from hour to hour; (2) they should be able to not wash clothes and still get full water pressure out of your sink; (3) they don't know about the water quality because they spent $4,000 to install a water system because of the hard and unusable water. Tr 827-832 Eden Drive, Reading.

31. The customer testified that they replaced two toilets, three faucets, two shower heads, one hot water heater, one dishwasher and one washing machine. They also added an over $3,000 water softener system and drinking filtration system due to the extremely hard water destroying all the faucets and things they had to replace and because of the less appealing taste of the water. Tr. 832-839. Warwick Court, Reading.

32. The customer testified that her water is fine except for the hardness. Her appliances wear out way too soon. But she doesn't have any of the other problems. Tr. 844-849. Arrowhead Trail, Spring Township.

33. The customer testified that the water was atrocious before installing the water softener. Now they have a water softener and have extra water going through that. Tr 866-868. Kerr Road, Reading.

34. The customer testified that many of her neighbors, as well as herself, experience periods of poor water quality. This has led many of them to be forced to purchase expensive filtration systems or buy bottled water for safety concerns. Tr. 868-875. Escoll Drive, East Stroudsburg.

35. The customer testified that they replaced the dishwasher and two faucets in the last couple of years just because of the quality of the water. Tr. 901-907. Craig Drive, Reading.

36. The customer (township supervisor) testified that her big problem is the water quality and she gets white rings around her dishes and pans. She also testified that the water quality is terrible and uses plastic bottles for the dogs and herself because "You can't drink the water." It tastes horrible." The customer also testified that the water tastes moldy and smells musty and the water pressure goes up and down. Tr. 955-961. Stonehenge Drive, Exeter Township.

37. The customer testified about the difficulties he had when the Company delayed replacing a faulty meter after they contacted the Company numerous times and the Company ended up billing the customer $1,800. After some difficulty, the customer got the Company to admit that it was their mistake and drop the $1,800 bill. Tr. 1016-1023. Winchester Court, Reading.

38. The customer testified that the quality of water is also an issue. They moved in 2013, and in 2015 installed water softener because the water is hard. Tr. 1034-1041. Bent Brook Circle, Reading.

39. The customer testified that they have bad water that has a bad taste and hardness, which is not only unpleasant but also damaging to appliances requiring additional expenses for repairs, changing filters before it's time. They are compelled to buy bottled water for drinking because they cannot drink the water out of the faucets. The witness also testified that the water has many minerals, has an odor and low pressure. Tr. 1041-1047. Scotland Drive, Reading.

40. The witness, a wastewater customer, testified that they use well water and the Company wanted to check their water meter (that doesn't exist) and billed them for water they didn't use because the Company was not allowed to check the water meter. With great difficulty, the customer succeeded in getting a resolution from PAWC. Tr. 1077-1081. West 37th Street, Reading.

41. The customer testified that she doesn't use the water for cooking, drinking and there is a lot of dirt in the water. The customer also testified that she has been smelling chlorine for a year now. Tr. 1167-1174. Foote Avenue, Duryea.

42. The customer testified that there's no way they can drink the tap water because it tastes bad and reeks of chlorine as if it's coming from an indoor swimming pool. Also, they use a well rated filter for any water that they consume, even if it's to boil pasta. The hardness of the water damages their appliances. The witness also stated that the taste and smell is getting worse. Tr. 1267-1277. Winding Brook Lane, Reading.

43. The customer testified that she had her water softener removed to try to save on the water usage. Now the water is so hard and her faucets and washing machine have calcium buildup and she has to spend money on lotion because now she is really dry too. The witness said she hasn't drank the water for years, it tastes terrible, even the ice cubes taste terrible. Tr. 1277-1286. Holly Drive, Reading.

44. The customer testified that in the Saw Creek Estates community in Bushkill there are documented broken service lines causing water bills from $1,000 a month to $6,000 a month. The Company raised pressure on existing customers to serve additional customers on higher ground. The normal higher pressure on some of the existing customers now exceeds 130 psi (a photo of a gauge indicates 147 psi) which is greater than PUC regulations. The higher pressures caused a current event of flooded basements, broken water pipes, some being replaced twice or more within three years. All repairs were at the homeowners' expense, and they were additionally billed for the unused and wasted water. Tr. 1472-1524. Manchester Drive, Bushkill.

45. The customer testified that water quality levels seem to only decline. They stated that their direct experience with the water quality has been an odor and mineral deposits in their toilet water tanks, which result in so much caking that at times the automatic fill and flush mechanism's operation is impeded. The witness also testified that this is the first time the mineral buildup in the toilet tanks impedes the operation of the flushing mechanism and the chlorine odor is quite new. Tr. 1695-1703. East 38th Street, Reading.

46. The customer testified that in early 2022 they requested the Company to investigate a sudden and intense increase in the chlorine odor and taste. The Company field rep took samples and determined their chlorine levels were within the approved parameter and the intensity was likely due to colder temperatures. After no change in the spring, they had a water filtration system installed to remove the chlorine taste. The witness also testified that they filter just the water they drink but still have chlorine smell from faucets and showers. The filter system cost $750 and every replacement filter costs $200. Tr. 1703-1715. Mint Tier, Reading.

47. The customer testified that they do not drink the water here because it tastes nasty. They are going on 14 years at their home, and drink bottled water. It's hard water. It's also on the skin, also on the appliances. She testified that since they moved here, they had to replace four toilets, a water heater, and a dishwasher. They are on their second washing machine. The witness also testified that the water has a funny taste and they even give bottled water to their pets. Tr. 1742-1746. Apple Drive, Reading.

48. The witness testified that he is part of the Jefferson Township Municipal Authority formal complaint requesting water main extensions in Washington County; he depends solely on a cistern for all of his water needs. He stated that he tried to have a well drilled but the driller drilled into an abandoned coal mine and told him that he cannot have a well through a coal mine. He also testified that a vast majority of the people on Bethel Ridge Road struggle with reliable water supply, a lot with quantity and some with quality; "Many people have coyote cisterns, which is a holding tank for their wells since they flow so little." He stated that he contacted PA-American Water about extending the mainline; they said it is feasible, yet they will only provide funding as required by the tariffs, which will not cover the entire project cost. Tr. 1838-1843. Bethel Ridge Road, Avella. (This customer's testimony is discussed below and the Jefferson Township Municipal Authority Formal Complaint is included in Exhibit TLF-4.)

49. The customer testified their area is plagued with hard water. People who run water softeners are plagued with excessive water consumption due to the regeneration cycle. Because he opted to not install a softener, his water heater only lasted ten years and replaced all faucets, shower heads and went through two dishwashers. In 2018, he had to have a meter replaced because mineral deposits locked up the device and it would not read. Upon replacement PA-American back billed him what they thought he would have used all at once. The water has a strong chlorine smell and taste to it. They do not even drink tap water from PA-American. Tr. 1843-1855. Farming Ridge Boulevard, Reading.

50. The Customer testified within a few years, in their newly constructed home, they began noticing hard water, white residue all over their glasses, a dishwasher stopped working, faucets being replaced; refrigerators being replaced because of the waterline being clogged due to the hard water. They put in a water softener at that time. They have now replaced two water softeners. Tr. 1856-1861. Pickwick Place, Reading.

This summary may not be exhaustive and PAWC should respond to all of the customer complaints regarding quality of service that were raised in PIH testimony. While this supplemental testimony is limited to PIH testimony, I am aware that since I finalized my Direct Testimony, additional customers have filed Formal and Informal Complaints with the PUC and, as stated in my Direct Testimony, PAWC should respond to complaints regarding quality of service.

MAIN EXTENSIONS

Q. IN YOUR LIST ABOVE, YOU MENTION A REQUEST FOR PAWC TO EXTEND WATER SERVICE. DO YOU HAVE ANY COMMENTS?

A. Yes. Mr. Phil Choff owns a home on Bethel Ridge Road in Avella, PA. He stated that he solely depends on a cistern and rainwater and/or water hauling for all his water needs since the well driller drilled into an abandoned coal mine and told Mr. Choff he cannot have a well through a coal mine. He testified that an online map shows there is a prevalence of coal mines under his property and a large majority of the street. He also testified that many of his neighbors struggle with reliable water supply, a lot with quantity and some with quality. According to Mr. Choff, PAWC already serves customers on Bethel Ridge Road and his home is about two and a half miles away from that existing PAWC water line. He also testified that PAWC said the extension is feasible "yet they will only provide funding as required by the tariffs, which will not cover the entire project cost." Tr. 1840-1841.

According to PAWC's Tariff Rule 27.1(F), "Where substantial public need exists and the public health and safety may be compromised by the absence of a public water supply in a portion of the Company's authorized service territory, the Company, subject to the Commission's prior approval, may install main extensions and Special Utility Service facilities without the payment of the Customer Contribution …".

Based on the information provided by Mr. Choff and in the Formal Complaint that he testified in support of, it appears that there may be a "substantial public need" for the extension of water service. The referenced Complaint is attached as Exhibit

TLF-4. I am aware, and it was also discussed during the PIHs that PAWC has a current project to extend water service in Avella PA. Tr. 175-178 (Paris); Tr. 1216-1220 (Midler); Tr. 1681-1686 (Powers). I testified in support of that extension in PAWC's last base rate case.[1] In Settlement, PAWC committed to construct a water main extension on Route 50 on Avella Road in Cross Creek Township, Washington County pursuant to Rule 27.1(F) of its water tariff."[2]

I recommend that PAWC (1) evaluate whether the above main extension is eligible for construction under the requirements of Tariff Rule 27.1(F); (2) allow the OCA to survey the potential customers and submit pertinent information to PAWC prior to starting the evaluation; (3) submit the conclusions of its evaluation to OCA and other parties within six months of receiving the survey data from the OCA and (4) submit an estimated construction cost and remaining contribution required for those main extensions that are determined not eligible under Tariff Rule 27.1(F). PAWC should also seek grant funding or contributions from other sources to help offset the costs of the main extension project, whether or not the extension is funded under Rule 27.1(F).

The OCA has sent interrogatories to PAWC (OCA Set 32) that seek additional information about the requested extension. As those discovery responses will not

[1] Pa. PUC v. PAWC, Docket No. R-2022-3031672, OCA Statement No. 7 at 14-19, OCA Statement 7SR at 7-15.
[2] Pa. PUC v. PAWC, Docket No. R-2022-3031672, Joint Petition for Settlement of Rate Investigation, Paragraphs 57-58.

be received soon enough for me to review and discuss in this testimony, PAWC should address the requested information in its Rebuttal Testimony.

Q. DOES THIS COMPLETE YOUR WRITTEN SUPPLEMENTAL DIRECT TESTIMONY?

A. Yes, at this time. I reserve the right to supplement this testimony either in writing or orally if additional relevant information is received.

EXHIBIT TLF-4

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Formal Complaint to Proposed Rate Increase

Filing this form will make you a party to a legal proceeding or case.
If you do not wish to be a party to the case, consider filing a Comment to Proposed Rate Increase.

To complete this form, please type or print legibly in ink.

1. Customer (Complainant) Information (required)

Provide your name, mailing address, county, telephone number(s), e-mail address and utility account number. It is your responsibility to update the Commission with any changes to your address and to where you want documents mailed to you. Failure to provide this information may cause your complaint to be considered as deficient.

Name Jefferson Township Municipal Authority, Patricia Lawrence, Secretary

Street/P.O. Box 670 Cedar Grove Rd Apt # _____

City Burgettstown, State PA Zip 15021

County Washington

Telephone Number(s) Where We Can Contact You During the Day (**required**):

(724) 947-3771 (home) (724) 747-8391 (mobile)

E-mail Address (**required**): pattylawrence2@icloud.com

Utility Account Number (from your bill): Municipal Authority for residents, no number

If your complaint involves utility service provided to a different address or in a different name than your mailing address, please list this information below.

Name _____

Street/P.O. Box _____

City _____ State _____ Zip _____

2. Name of Utility

Provide the full name of the utility who filed the proposed rate increase about which you are complaining. The name of your utility is on your bill.

Pennsylvania American Water Company

3. PUC Case Docket Number

Provide the Public Utility Commission case docket number (if known). It begins with the letter "R" and contains the year of filing and a 7-digit code, such as R-2014-1234567.

R-2023-3043189

4. **Type of Utility Service**

Check the box listing the type of utility service that is the subject of your complaint (check only one):

□ ELECTRIC	□ STORM WATER
□ GAS	□ WASTEWATER/SEWER
X WATER	□ TELEPHONE/TELECOMMUNICATIONS (local, long distance)
□ STEAM HEAT	□ MOTOR CARRIER (*e.g.* taxi, moving company, limousine)

5. **Reason for Complaint**

Explain why you oppose the company's proposed rate increase. Use additional paper if you need more space.

The Pennsylvania American Water Company (PAWC) has notified us of a very large rate increase that will affect all township residents who currently obtain their water from the PAWC. The PAWC states in their notice that the increase is needed to "improve service reliability, water quality, and fire protection for your community".

We complain that this rate increase is very high and we support the formal complaints entered by the Office of the Consumer Advocate (C-2023-3044289) and the Office of the Small Business Advocate (C-2023-3044375) Additionally, we complain that there is no provision to help our community, as we have no lead service lines requiring replacement, no new service will be included, resident requests for service have not been acted upon, and there are significant unprotected fire risks that are not served by hydrants.

Numerous residents have requested water line extensions due to water quantity, quality and fire fighting concerns. The specific areas are shown on the map included with this submission and include extending an existing water line on Bethel Ridge Road to the state line with West Virginia, with spurs to serve Shades of Death Road, Locust and Carter lanes and Penobscot Road (all off Bethel Ridge). Three large natural gas well pads are located on Bethel Ridge and Shades of Death. A list of residents interested in water with their signatures is included in this package. Several of these residents have sent applications for water service directly to the PAWC and not been served.

Range Resources requests service at the three large natural gas well pads that pose significant fire hazard and are not served by hydrants. Their letters of support and service request are included in this package.

The Jefferson Township Municipal Authority makes this request on behalf of the township residents who need water and on behalf of Range Resources, which operates several natural gas well pads in the area, and our letter is in this package.

The Jefferson Township Volunteer Fire Department supports our request and their letter stating their concerns is in this package.

The Jefferson Township Board of Supervisors recognizes the water issues of the residents and the increased difficulty of fighting both residential and well pad fires in the area of concern and have provided their letter of support for the project, which is in this package.

Our State representative and State Congresswoman have expressed support, and a letter from Senator Bartolotta is included in this package.

We have worked with PAWC's Michael Ricciuti to specify the project and obtain preliminary cost information, and he has stated that they will not fund the project.

Jefferson Township does not operate its own water plant and Is not eligible for the grants/loans for small water projects including those made available by the state and county, or PENNVEST.

We requested that the PAWC fund this project using PENNVEST funding as they have for the previous projects in our Township, or by whatever means they prefer. The PAWC, specifically Michael Ricciuti, has stated that the PAWC does not intend to finance this project.

Enclosures:

Map of project
Resident signatures on service request petition
Range Resources service request and support letters
Support letters from the JTVFD and JT Board of Supervisors
Support letter from State Senator Bartolotta

6. **Requested Relief**

How do you want your complaint to be resolved? Use additional paper if you need more space.

We request that the PA PUC moderate the rate increase request to no more than a 10% increase, and require the PAWC to fund and build our requested project, or failing that, to reject their rate increase in its entirety.

7. Legal Representation

If you are filing a Formal Complaint to Proposed Rate Increase as an individual on your own behalf, you are not required to have a lawyer. You may represent yourself at the hearing.

If you are represented by a lawyer **in this matter**, provide your lawyer's name, address, telephone number, and e-mail address, (all required contact information). Please make sure your lawyer is aware of your complaint. If represented by a lawyer, both you and your lawyer must be present at your hearing.

Lawyer's Name Makel and Associates, LLC

Street/P.O. Box 98 E. Maiden St

City Washington State PA Zip 15301

Area Code/Phone Number (724) 222-7639

E-mail Address dennis@makelandassociates.com

Note: Corporations, associations, partnerships, limited liability companies and political subdivisions are required to have a lawyer represent them at a hearing and to file any motions, answers, briefs or other legal pleadings.

8. Verification and Signature

You must sign your complaint. Individuals filing a Formal Complaint to Proposed Rate Increase **must** print or type their name on the line provided in the verification paragraph below and **must** sign and date this form in **ink.** **If you do not sign the Formal Complaint to Proposed Rate Increase, the PUC will not accept it.** By filing this Formal Complaint to Proposed Rate Increase, you will be a party to the case. If you efile your formal rate complaint, an electronic signature is acceptable.

Verification:

I, Patricia Lawrence, hereby state that the facts above set forth are true and correct (or are true and correct to the best of my knowledge, information and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Patricia Lawrence 1/2/2024

(Signature of Complainant) **(Date)**

_Secretary_____

Title of authorized employee or officer (only applicable to corporations, associations, partnerships, limited liability companies or political subdivisions)

Note: If the Complainant is a corporation, association, partnership, limited liability company or political subdivision, the verification must be signed by an authorized officer or authorized employee. If the Formal Complaint to Proposed Rate Increase is not signed by one of these individuals, the PUC will not accept it.

9. How to File and Receive Service

You should electronically file your Formal Complaint to the Proposed Rate Increase with the Secretary. To do so, establish an account free of charge on the PUC's eFiling system, which may be accessed at http://www.puc.pa.gov/efiling/default.aspx.

If you do not electronically file your Formal Complaint to Proposed Rate Increase, mail the completed form (along with any attachments) to the address listed below:

By overnight delivery, certified, priority mail – retain tracking information as proof of submission.

Secretary
Pennsylvania Public Utility Commission
400 North Street 2nd Floor
Harrisburg, Pennsylvania 17120

Note: Formal Rate Complaints sent by fax or e-mail will not be accepted.

Methods of Service by the Commission

You have three options on how you would like to receive all communication from the Commission about your Complaint. By selecting one of the following three options, you are agreeing to receive all hearing notices, orders, and related documents about your Complaint in the manner selected.

Select one of the following options for receiving all communications from the Commission:

a. **eFiling**: You agree to open and use an eFiling account – free of charge through the Commission's website. By selecting this method you will be eServed. (This is the best way to receive, file, and submit documents).

Initial here if you are selecting eFiling: DKL
(And create an eFiling account at http://www.puc.pa.gov/efiling/default.aspx.

b. **Email:** You agree to receive all documents by email (using the email you provided on page 1). Please note that you will only be able to receive documents from the Commission by email and will not be able to file documents by Email or Fax. To submit documents to the Commission you must create an eFiling account accessed at http://www.puc.pa.gov/efiling/default.aspx or mail your submissions.

Initial here if you are selecting Email service:_____

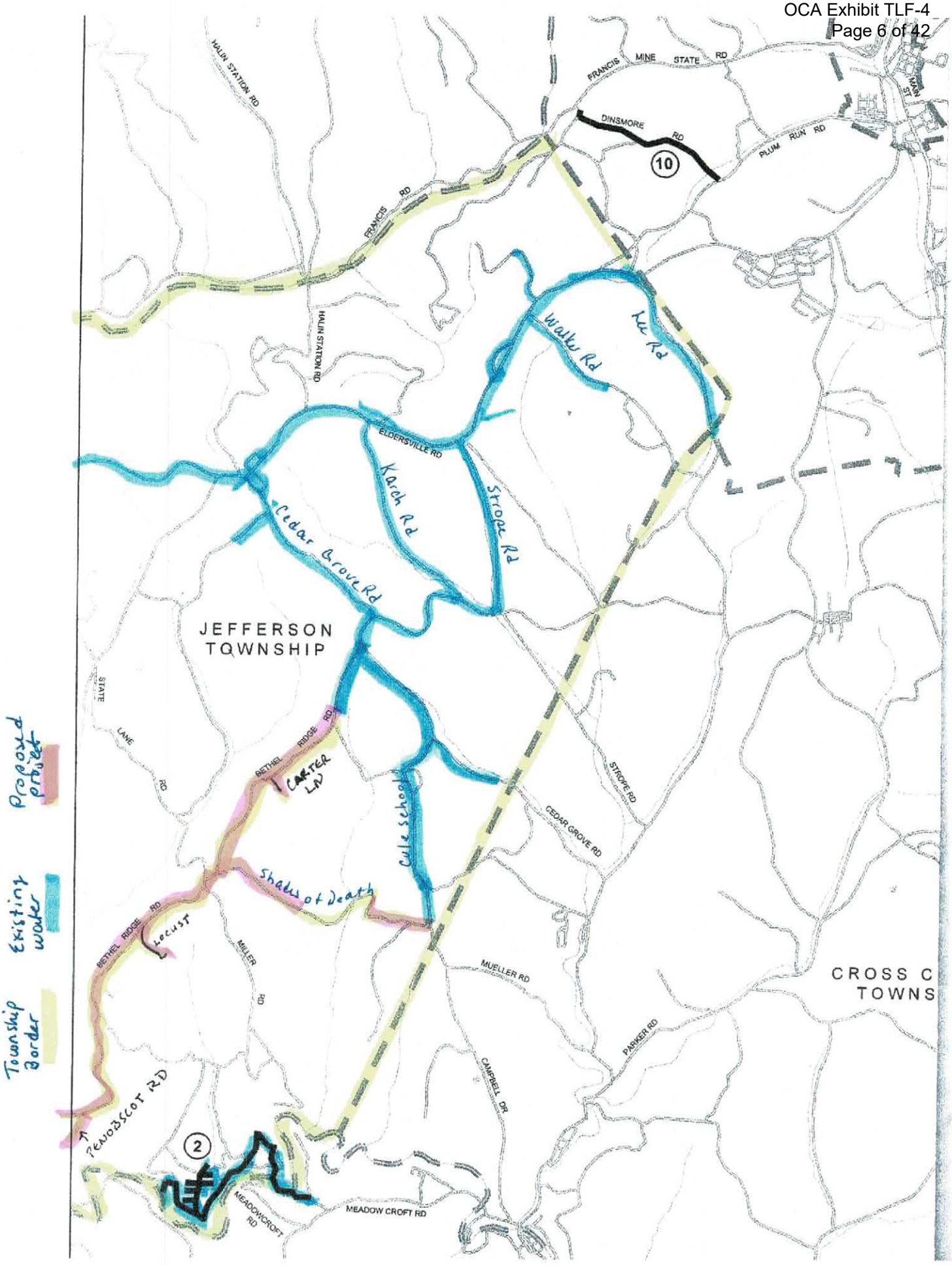
c. **First Class Mail:** You agree to be served only by First Class Mail (at the address on page 1 of this form).

Initial here if you are selecting First Class Mail service:_____

***If you do not select one of the three options above, the Commission will serve all documents to you by First Class Mail at the address listed on page 1 of this form.**

If you have any questions about filling out this form, please contact the Secretary's Bureau at 717-772-7777.

Keep a copy of your Formal Complaint to Proposed Rate Increase for your records.


HALIN STATION RD
FRANCIS MINE STATE RD
MAIN ST
DINSMORE RD
10
PLUM RUN RD
FRANCIS RD
HALIN STATION RD
Walker Rd
Lee Rd
ELDERSVILLE RD
Karch Rd
Strope Rd
Cedar Grove Rd
JEFFERSON TOWNSHIP
STATE
LANE
RD
BETHEL RIDGE RD
CARTER LN
Culdesac
STROPE RD
CEDAR GROVE RD
Shades of Death
BETHEL RIDGE RD
Locust
MILLER RD
MUELLER RD
CROSS C
TOWNS
PARKER RD
CAMPBELL DR
PENOBSCOT RD
2
MEADOWCROFT RD
MEADOW CROFT RD
Proposed project
Existing water
Township Border

Jefferson Township Municipal Authority
670 Cedar Grove Rd
Burgettstown, PA 15021

December 19, 2023

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

Dear Pennsylvania PUC,

The Pennsylvania American Water Company (PAWC) has requested a significant rate increase, citing service reliability, water quality and fire protection for our community. We wish to register a formal complaint regarding this rate increase. There will be no benefit to Jefferson Township, as we have no lead water lines to be replaced, and there is no extension of water lines and fire hydrants to unserved residents. We request that the Pennsylvania PUC join in our request to the PAWC to extend their lines and service to our most seriously water-challenged residents along Bethel Ridge Road, Carter Lane, Locust Lane, Penobscot Road, and Shades of Death Road, and to provide fire hydrants along these roads to enable efficient fire fighting for the benefit of the residents and the three major natural gas well pads located here. Only in this way will we receive any benefit of water quality and fire protection to justify any rate increase.

Jefferson Township is a small rural township without a municipal water or sewer plant. We depend on the PAWC to provide clean drinking water and sufficient water to fight fires. We will not benefit from this proposed rate increase, as the Township has no lead pipes (PA American ran all water lines in this Township within the past 20 years and Congress banned lead pipes in 1986). The last extension of water service to a group of Township residents in dire need of service was in 2014, when the PAWC ran water to Meadowcroft Village and the village of Jefferson. There are other areas of our Township where residents are patiently awaiting the extension of service, and have not gotten it yet. We have requested that the PAWC extend service to our most seriously water-challenged residents along Bethel Ridge Road, Carter Lane, Locust Lane, Penobscot Road, and Shades of Death Road. There are three producing natural gas well pads (Galaran, Walasik, Miller) located along these roads, and large quantities of water would be needed in the event of fires at these locations. Trucking it in is not acceptable.

The residents here do not enjoy reliable water service, good water quality or good fire protection. They do not have access to public water and are in fact struggling with carrying on the daily activities. The area is also undermined, and some wells drilled there hit voids from the mine shafts and cannot obtain water. Several have had to install cisterns and have to rely on hauled water to fill them, as their wells do not produce enough. Some also struggle with serious water quality issues and have had to install and maintain expensive softening and purifying systems. The residents are rightly concerned that, should a fire start, the Jefferson Township Volunteer Fire Department (JTVFD) would not be able to access sufficient water under

sufficient pressure to successfully fight a fire, thus putting lives and property at significantly higher risk than areas served by public water and fire hydrants. Some of these residents have already submitted applications for service and not gotten a positive response.

Therefore, we are seeking your assistance in obtaining an extension of service to a group of our unserved citizens, specifically those residing along Bethel Ridge Road, Carter Lane, Locust Lane, Penobscot Road, and Shades of Death Road. The JTVFD has also expressed their concern about the lack of fire hydrants in this area. The Board of Supervisors concurs with these residents' and fire department concerns.

Would you please assist us in requesting the PAWC to add these streets to their water line extension plans immediately and at their expense?

Sincerely yours,

Alan Gould, Chairman
The Jefferson Township Municipal Authority

Members: Dawn Bartoletti, Phil Choff, Bob Maltony, Patty Lawrence

Attachments:
Map of current water lines with requested extension
List of residents requesting service with signatures
Letters of support – Jefferson Township Supervisors and JTVFD, Range Resources

RANGE RESOURCES®

December 15, 2023

Jefferson Township Municipal Authority
670 Cedar Grove Road
Burgettstown, PA 15021

RE: *PA American Water Line Extension*

Dear Mrs. Lawrence:

Range Resources-Appalachia, LLC ("Range Resources") is writing this letter to confirm it's support of the PA American water line extension in Jefferson Township along Bethel Ridge Road and Shades of Death Road. Range Resources has a number of well site locations within Jefferson Township including several within close proximity of these two roads: the Miller, Walasik, Galaran, and Burkett. There are also several well site locations within the neighboring Smith Township in close proximity to Bethel Ridge Road and Shades of Death Road. Thank you for being a wonderful partner to work with. Please let me know how Range Resources can be of any assistance in this process.

RANGE RESOURCES—APPALACHIA, LLC

Leah Valentic

Leah Valentic
Local Government and Land Representative III

RANGE RESOURCES®

December 20, 2023

Jefferson Township Municipal Authority
670 Cedar Grove Road
Burgettstown, PA 15021

RE: *PA American Water Line Extension – Commitment to being a Customer*

Dear Mrs. Lawrence:

Range Resources-Appalachia, LLC ("Range Resources") is writing this letter to confirm its support of the PA American water line extension in Jefferson Township along Bethel Ridge Road and Shades of Death Road and commit to being a customer in the area. The existing wells in the area and future proposed development shows that there is a need great enough to warrant this commitment. If installed, we would be able to use the water line extension for two wells that are currently on our five-year planning schedule and two additional proposed wells. Please let me know how Range Resources can be of any assistance in this process. We hope that this project in partnership with PA American Water will be successful.

RANGE RESOURCES—APPALACHIA, LLC

Leah Valentic

Leah Valentic
Local Government and Land Representative III

Jefferson Township Volunteer Fire Department
15 Fire Road
Burgettstown, PA 15021

December 19,2023

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

Dear Pennsylvania PUC,

We have been notified that the Pennsylvania American Water Company has requested a significant rate increase, citing service reliability, water quality and fire protection for our community. We depend on Pennsylvania American Water to provide clean drinking water for our residents without good wells, and fire hydrants to support effective fire fighting.

We object to this rate increase, as there is no direct benefit to our residents or our ability provide better fire fighting. The Jefferson Township Municipal Authority has requested that the Pennsylvania American Water Company run additional water line service to a specific group of unserved residents with significant water quantity and quality issues, and we support this request. Our department has challenges trying to move water from the existing fire hydrants to the unserved areas, and this is complicated by the manpower available at any time to carry on the operation of refilling the tankers at a distance from the fire. There are also three large gas well pads along these roads that pose heightened risk for which fire hydrants are needed. Statistics show that fire damage is higher when there are no nearby hydrants. Property owners also have to pay higher insurance rates due to the lack of nearby hydrants and distance to transport water. The areas in which the residents are requesting the extension of public water lines is an area of significant concern for the JTVFD, in that there is a significant distance from these homes to the nearest fire hydrant, and there are no nearby alternate sources of water.

JTVFD supports the Jefferson Township Municipal Authority and residents in seeking an extension of the water lines along Bethel Ridge Road, Carter Lane, Locust Lane, Penobscot Road, and Shades of Death Road. Because the Pennsylvania American Water Company has not agreed to run the additional lines, we join in the Township's objections to the Pennsylvania American Water Company's rate increase.

Sincerely,

Brady Mermon, Chief

Frank Karch, President

Dave Stiffler, Secretary

Jefferson Township Board of Supervisors
670 Cedar Grove Road
Burgettstown, PA 15021

December 19, 2023

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

Dear Pennsylvania PUC,

We have been notified that the Pennsylvania American Water Company has requested a significant rate increase, citing service reliability, water quality and fire protection for our community. We depend on Pennsylvania American Water to provide clean drinking water for our residents without good wells, and fire hydrants to support fire fighting.

It has been several years since the Pennsylvania American Water Company has added service lines in our Township, most recently the extension of service to Meadowcroft Village and to the village of Jefferson, along with some residences along the path of those lines. We have additional residents who have been waiting for a long time to have service extended to them. The most pressing areas at this time are those along Bethel Ridge Road, Carter Lane, Locust Lane, Penobscot Road, and Shades of Death Road, areas where residents report water quantity and quality issues, and some are entirely dependent on cisterns because wells do not produce at all. The ability to fight fire is seriously jeopardized due to the need to haul water significant distances with limited manpower. Our fire department is concerned that, without fire hydrants, any fire emergency at the three natural gas well pads in the area would be disastrous, due to lack of sufficient water readily available through hydrants. We have requested that the Pennsylvania American Water Company extend their water lines to provide service to these residents, and for them to use PENNVEST funding, with the repayment cost borne by the Pennsylvania American Water Company. To date, they have not agreed to do so.

Because the Pennsylvania American Water Company has not agreed to provide the requested service, the Jefferson Township Board of Supervisors objects to the Pennsylvania American Water Company's rate increase request, as there are no benefits to any of our residents or fire department and the company has not met its obligations to add service to our unserved areas.

Sincerely,

Chris Lawrence, Chairman

Brady Mermon, Supervisor

Dave Stiffler, Supervisor

46TH DISTRICT
CAMERA BARTOLOTTA

SENATE BOX 203046
HARRISBURG, PA 17120-3046
(717) 787-1463 • FAX (717) 772-2108

WASHINGTON OFFICE
95 WEST BEAU STREET, SUITE 107
WASHINGTON, PA 15301
(724) 225-4380 • FAX (724) 225-4386

GREENE COUNTY OFFICE BUILDING
93 EAST HIGH STREET, SUITE 308
WAYNESBURG, PA 15370
(724) 627-9802 • FAX (724) 627-5066

Majority Caucus Secretary

Senate of Pennsylvania

COMMITTEES

LABOR & INDUSTRY, VICE CHAIR
JUDICIARY
TRANSPORTATION
RULES & EXECUTIVE NOMINATIONS
VETERANS AFFAIRS & EMERGENCY PREPAREDNESS

senatorbartolotta.com

December 26, 2023

Jefferson Township Municipal Authority
670 Cedar Grove Road
Burgettstown, PA 15021

Dear Mrs. Lawrence:

I am writing to share my support of a Pennsylvania American Water (PAW) line extension in Jefferson Township along Bethel Ridge Road and Shades of Death Road. The township depends on PAW to provide clean drinking water for their residents without good wells and hydrants for fighting fire.

The residents that PAW serves are located within my senatorial district. Having clean, reliable drinking water is essential for their well-being, and for future planned growth and economic vitality of these communities. The most pressing areas for service extension are those along Bethel Ridge Road, Carter Lane, Locust Lane, Penobscot Road, and Shades of Death Road. These are areas where residents report water quantity and quality issues, and some are entirely dependent on cisterns because wells do not produce at all. It is of great importance that the quality and reliability of drinking water for residents be held to high standards for years to come.

Sincerely,

Camera Bartolotta
State Senator
46th Senatorial District

CB/bt

2023 Water initiative	Resident list	Jefferson Township, Washington County 2023 Water Line Extension Project		I support the water line extension project and am interested in having public water at my residence.	Water Concerns
Street	Parcel	Street #	Name	Water P or W	
Shades of Death Road	380-013-00-00-0010-02	14	FONTANA JAMES R & DEBRA L	W	James R Fontana — Disagree
Shades of Death Road	380-013-00-00-0004-00	542	ELDERSVILLE METH CHURCH	W	
Shades of Death Road	380-013-00-00-0011-00	45	FARABEE AUSTIN & MAGHAN K CUPP	W	Maghan K Cupp — gravity
Shades of Death Road	380-013-00-00-0011-01	53	ROEDLER JENNIFER MARIE & DAVID LI	W	
Shades of Death Road	380-012-00-00-0005-00	229	KUBACKA MICHAEL A JR & DENISE	W	Michael Kubacka. Denise Kubacka
Shades of Death Road	380-012-00-00-0002-01	284	STEFKOVICH JAMES PAUL	W	James Stefkovich
Shades of Death Road	380-012-00-00-0002-02	328	WELL PAD - GALARAN	W	
Shades of Death Road	380-012-00-00-0002-00	346	ROBERTS MARGARET CASS & LEE DA	W	

Cole School Road	380-010-00-00-0009-01	242	MILLER LEVI T & ALYSSA M RESTANIO	W	
Cole School Road	380-010-00-00-0007-03	247	SNYDER LISA	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0018-00	1010	HODGES SHAWN & TERESA K	P	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0017-00	911	MOORE PAULINE ANN	P	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0015-00	885	CORNELL GUY A & TRICIA L	P	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0006-10	888	MERMON BRADLEY & LINDSAY	P	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0014-00	873	GRIFFITH GEORGE W JR&CATHERINE&	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0014-01	863	ORIENT GREGORY P & ANNA MARIE &	P	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0013-06	857	BROWN DALE J & LAUREN R	P	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0013-07	851	DEER NICOLE M BROWN	NONE	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0008-01	822	THOMSON MATTHEW W & AMY E	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0008-02	788	LECKER PAUL J II		
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0013-00	785	MERMON BRADY SR & BRADY JR & LA	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0013-01	773	MERMON BRADY B SR & PAULETTE &	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0013-02	767	BROWN DALE V & RENDELL MARIE	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0008-03	762	WELL PAD MILLER WILLIAM L JR & BAF	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0006-00	732	CARTER LARRY G & CAROL L	W	
Carter Lane	380-013-00-00-0006-00	7	CARTER LARRY G & CAROL L	W	
Carter Lane	380-013-00-00-0006-00	8	CARTER LARRY G & CAROL L	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0013-03	737	MERMON MEL & BETTY JO	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0005-00	678	IVANAC MARSHA ANN	W	Marsha Ann Ivanac
Bethel Ridge Road, Avella PA 15312		622	This address shows from street but not on parcel viewer		
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0003-01	620	WARGO GEORGE R & DIANE M	W	George R Wargo
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0003-00	594	BERTOVICH DAVID D	W	David D Bertovich
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0003-03	571	BERTOVICH DAVID D & LINDA L	W	Linda L Bertovich
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0002-00	490	WELL PAD - WALASIK Trust	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0001-03	420	WALASIK TERRY ALAN FAMILY TRUST	W	Terry Walasik
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0001-00	400	CAMPBELL HARRY THOMAS & SONDRA	W	Harry Campbell
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0001-05	382	PAVKOVICH JEFFREY S & LORA L	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0001-01	362	LEININGER JOHN J III & LINDSAY A	W	John J Leininger III
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0001-07	361	CHOFF PHILLIP FRANK III	W	Phillip Choff
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0001-07	357	CHOFF PHILLIP FRANK III	W	Phil Choff

Cole School Road	380-010-00-00-0009-01	242	MILLER LEVI T & ALYSSA M RESTANIC	W	
Cole School Road	380-010-00-00-0007-03	247	SNYDER LISA	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0018-00	1010	HODGES SHAWN & TERESA K	P	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0017-00	911	MOORE PAULINE ANN	P	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0015-00	885	CORNELL GUY A & TRICIA L	P	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0006-10	888	MERMON BRADLEY & LINDSAY	P	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0014-00	873	GRIFFITH GEORGE W JR&CATHERINE&	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0014-01	863	ORIENT GREGORY P & ANNA MARIE &	P	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0013-06	857	BROWN DALE J & LAUREN R	P	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0013-07	851	DEER NICOLE M BROWN	NONE	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0008-01	822	THOMSON MATTHEW W & AMY E	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0008-02	788	LECKER PAUL J II		
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0013-00	785	MERMON BRADY SR & BRADY JR & LA	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0013-01	773	MERMON BRADY B SR & PAULETTE &	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0013-02	767	BROWN DALE V & RENDELL MARIE	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0008-03	762	WELL PAD MILLER WILLIAM L JR & BAF	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0006-00	732	CARTER LARRY G & CAROL L	W	
Carter Lane	380-013-00-00-0006-00	7	CARTER LARRY G & CAROL L	W	
Carter Lane	380-013-00-00-0006-00	8	CARTER LARRY G & CAROL L	W	
Bethel Ridge Road, Avella PA 15312	380-010-00-00-0013-03	737	MERMON MEL & BETTY JO	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0005-00	678	IVANAC MARSHA ANN	W	
Bethel Ridge Road, Avella PA 15312		622	This address shows from street but not on parcel viewer		
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0003-01	620	WARGO GEORGE R & DIANE M	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0003-00	594	BERTOVICH DAVID D	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0003-03	571	BERTOVICH DAVID D & LINDA L	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0002-00	490	WELL PAD - WALASIK Trust	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0001-03	420	WALASIK TERRY ALAN FAMILY TRUST	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0001-00	400	CAMPBELL HARRY THOMAS & SONDR/	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0001-05	382	PAVKOVICH JEFFREY S & LORA L	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0001-01	362	LEININGER JOHN J III & LINDSAY A	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0001-07	361	CHOFF PHILLIP FRANK III	W	
Bethel Ridge Road, Avella PA 15312	380-013-00-00-0001-07	357	CHOFF PHILLIP FRANK III	W	

Bethel Ridge Road, Avella PA 15312	380-014-00-00-0016-00	319	HOBEREK OTHA & PHYLLIS	W	Margaret Hoberek	
Bethel Ridge Road, Avella PA 15312	380-014-00-00-0016-00	312	HOBEREK OTHA & PHYLLIS	W	Phyllis Hoberek + Otha	
Locust Rd, Avella PA 15312	380-015-00-00-0001-01	51	MCNEELY JERRY DEAN & LINDA LOU	W		
Locust Rd, Avella PA 15312	380-015-00-00-0001-00	37	MCNEELY JERRY DEAN & LINDA LOU	W		
Bethel Ridge Road, Avella PA 15312	380-015-00-00-0023-00	195	WERNER MATTHEW E & STRAIN CASS	W		
Bethel Ridge Road, Avella PA 15312	380-015-00-00-0018-02	133	PUSKARICH ROBERT D & RACHEL E		Rachel	
Bethel Ridge Road, Avella PA 15312	380-015-00-00-0016-00	130	ROTELLINI SHAWN	W		
Penobscot Rd, Avella PA 15312	380-015-00-00-0017-00	135	BLACK HARRY MICHAEL &KELLI LYNN	W		
Penobscot Rd, Avella PA 15312	380-015-00-00-0018-00	101	ROTELLINI ROBERT & ANDREA L & ROI	W		
Penobscot Rd, Avella PA 15312	380-015-00-00-0015-00	84	MAYS KEVIN M	W		
Penobscot Rd, Avella PA 15312	380-015-00-00-0013-02	64	OBRIEN CARLOS JAMES & BRENDA KA	W		
Bethel Ridge Road, Avella PA 15312	380-015-00-00-0018-01	74	ROTELLINI WILLIAM & CAROLYN R	W	William Rotellini	
Bethel Ridge Road, Avella PA 15312	380-015-00-00-0021-00	61	SIH PROJECTS LLC	W		
Bethel Ridge Road, Avella PA 15312	380-015-00-00-0020-01	57	SCHMIDT SCOTT	W		
Bethel Ridge Road, Avella PA 15312	380-015-00-00-0020-00	53	JANNEY GREGORY A & KIMBERLY J	W	5	

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a X well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

___ The quantity of water produced by my well is insufficient for my needs
Comments:

___ The quality of water produced by my well is poor
Comments:

___ I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

modern infrastructure (water, electric, internet, natural gas, etc.) is vital + important for community and business development.

Sincerely,

Signature: _____

Printed Name: MARGARET C. ROBERTS

Property Address ~~where service is needed:~~ 346 SHADES OF DEATH ROAD

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

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Our drinking water is currently obtained from a ✓ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

___ The quantity of water produced by my well is insufficient for my needs
Comments:

___ The quality of water produced by my well is poor
Comments:

✓ I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: Dale Brown

Printed Name: DALE BROWN

Property Address where service is needed: 762 Bethel Ridge
Avella, PA. 15312

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

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Our drinking water is currently obtained from a X well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

X The quantity of water produced by my well is insufficient for my needs
Comments:

X The quality of water produced by my well is poor
Comments:

X I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: Betty Jo Mermon

Printed Name: Betty Jo Mermon

Property Address where service is ~~needed~~ wanted: 737 Bethel Ridge Rd 15312

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ✓ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

✓ The quantity of water produced by my well is insufficient for my needs
Comments:

✓ The quality of water produced by my well is poor
Comments:

✓ I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: Marsha Ann Ivanac

Printed Name: Marsha Ann Ivanac

Property Address where service is needed: 678 Bethel Ridge Rd Avella Pa 15312

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

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Our drinking water is currently obtained from a X well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

___ The quantity of water produced by my well is insufficient for my needs
Comments:

___ The quality of water produced by my well is poor
Comments:

✓ I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: George Wargo

Printed Name: George Wargo

Property Address where service is needed: 620 Bethel Ridge Rd. A well A

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ✓ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

___ The quantity of water produced by my well is insufficient for my needs
Comments:

___ The quality of water produced by my well is poor
Comments:

✓ I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: D Bert

Printed Name: DAVID BERTOVICH

Property Address where service is needed: 594 Bethel Ridge

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ✓ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

___ The quantity of water produced by my well is insufficient for my needs
Comments:

___ The quality of water produced by my well is poor
Comments:

✓ I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: _____

Printed Name: DAVID BERTOVICH

Property Address where service is needed: 571 Bethel Ridge

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ✓ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

✓ The quantity of water produced by my well is insufficient for my needs
Comments:

___ The quality of water produced by my well is poor
Comments:

✓ I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: _____

Printed Name: Terry A. WALASIK

Property Address where service is needed: 420 Bethel Ridge Rd.

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ___ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

___ The quantity of water produced by my well is insufficient for my needs
Comments:

___ The quality of water produced by my well is poor
Comments:

✓ I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: Harry Caughell

Printed Name: Harry Caughell

Property Address where service is needed: 400

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ✓ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

✓ The quantity of water produced by my well is insufficient for my needs
Comments:

✓ The quality of water produced by my well is poor
Comments:

✓ I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

✓ Additional comments or reasons
We have approximately 4,000 gallons of water delivered every other month.

Sincerely,

Signature: _____

Printed Name: John Leininger

Property Address where service is needed: 362 Bethel Ridge Rd. Avella PA 15312

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ✓ well ✓ cistern (trucked in). I wish to express my support for the requested water line extension because: COYOTE SYSTEM / HAVE TO GET WATER TRUCKED IN.

✓ The quantity of water produced by my well is insufficient for my needs
Comments:

✓ The quality of water produced by my well is poor
Comments:

✓ I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: Lora Pavkovich / Jeffrey S. Pavkovich

Printed Name: Lora Pavkovich / Jeffrey S. Pavkovich

Property Address where service is needed: 382 Bethel Ridge Rd. Avella PA. 15312

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ___ well X cistern (trucked in). I wish to express my support for the requested water line extension because:

X The quantity of water produced by my well is insufficient for my needs
Comments:

X The quality of water produced by my well is poor
Comments:

X I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: Phil Choff

Printed Name: Phil Choff

Property Address where service is needed: 357 Bethel Ridge Rd. Avella, PA 15312

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ___ well X cistern (trucked in). I wish to express my support for the requested water line extension because:

X The quantity of water produced by my ~~well~~ cistern is insufficient for my needs
Comments:
I survive on rain water and having water hauled in by truck.

X The quality of water produced by my well is poor
Comments:
I have a rain diverter barrel which breeds mosquitos in the summer that then goes into my cisterns.

X I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

X Additional comments or reasons
I don't have a well due to the coal mines under my property. The mines are very prevalent in the area and my neighbors that do have wells still struggle with quantity

Sincerely,

Signature: Phil Chaff

Printed Name: Phil Chaff

Property Address where service is needed: 361 Bethel Ridge Rd. Avella, PA 1531

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ___ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

X The quantity of water produced by my well is insufficient for my needs
Comments:

X The quality of water produced by my well is poor
Comments:

X I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: Margaret Hoberek

Printed Name: Margaret Hoberek

Property Address where service is needed: 319 Bethel Ridge Rd. Avella

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a X well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

___ The quantity of water produced by my well is insufficient for my needs
Comments:

___ The quality of water produced by my well is poor
Comments:

X I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: Phyllis Hoberek

Printed Name: Phyllis Hoberek

Property Address where service is needed: 312 Bethel Ridge Rd

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ✓ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because: crappy

X The quantity of water produced by my well is insufficient for my needs
Comments:

X The quality of water produced by my well is poor
Comments: Everything is red. I smell like metal after a shower. Pets don't get this water. Won't brush teeth with it. So ... BAD!

X I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

X Additional comments or reasons HELP

Sincerely,

Signature: [signature]

Printed Name: Lori Escobar

Property Address where service is needed: 37 Locust Road.

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a X well X cistern (trucked in). I wish to express my support for the requested water line extension because:

X The quantity of water produced by my well is insufficient for my needs
Comments:

X The quality of water produced by my well is poor
Comments:

X I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk. ///

___ Additional comments or reasons

Sincerely,

Signature: Linda McNeely

Printed Name: Linda McNeely

Property Address where service is needed: 51 Locust Road

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ___ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

X The quantity of water produced by my well is insufficient for my needs
Comments:

X The quality of water produced by my well is poor
Comments:

X I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: Matt Werner

Printed Name: Matt Werner

Property Address where service is needed: 195 Bethel Ridge Rd Avella PA 15312

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

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Our drinking water is currently obtained from a ___ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

X The quantity of water produced by my well is insufficient for my needs
Comments:

___ The quality of water produced by my well is poor
Comments:

X I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: Robert Puskarich

Printed Name: Robert Puskarich

Property Address where service is needed: 133 Bethel Ridge

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

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Our drinking water is currently obtained from a X well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

___ The quantity of water produced by my well is insufficient for my needs
Comments:

X The quality of water produced by my well is poor
Comments:

X I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: _____

Printed Name: Shawn Rotellini

Property Address where service is needed: 130 Bethel Ridge Road
Avella, PA 15312

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

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Our drinking water is currently obtained from a ___ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

___ The quantity of water produced by my well is insufficient for my needs
Comments:

___ The quality of water produced by my well is poor
Comments:

___ I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: Robert Rathbun

Printed Name: _____

Property Address where service is needed: 101 _____

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ___ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

✓ The quantity of water produced by my well is insufficient for my needs
Comments:

✓ The quality of water produced by my well is poor
Comments:

✓ I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: William Rotelli

Printed Name: William Rotelli, Jr.

Property Address where service is needed: 44 Bethel Ridge Rd
Avella PA 15312

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

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Our drinking water is currently obtained from a ___ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

___ The quantity of water produced by my well is insufficient for my needs
Comments:

___ The quality of water produced by my well is poor
Comments:

X I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: [signature]

Printed Name: [illegible]

Property Address where service is needed: 53 Bethel Ridge Rd Avella

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a ~~resident~~ OWN PROPERTY of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ___ well ___ cistern (trucked in). BOUGHT IN BOTTLES I wish to express my support for the requested water line extension because:

✓ The quantity of water produced by my well is insufficient for my needs
Comments: DRY

✓ The quality of water produced by my well is poor
Comments: DRY

___ I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

✓ Additional comments or reasons WATER TABLE TO LOW TO DRILL

Sincerely,

Signature: Carlos J O'Brien

Printed Name: CARLOS J. O'BRIEN

Property Address where service is needed: 64 PENOBSCOT Rd AVELLA. PA 15312

BRENDA K STARINSKY 2nd OWNER

Pennsylvania American Water Company
852 Wesley Dr
Mechanicsburg, PA 17055

Pennsylvania PUC
PO Box 3265
Harrisburg, PA 17105-3265

12/9/2023

To whom it may concern:

I am a resident of Jefferson Township, Washington County, PA. The Jefferson Township Municipal Authority has requested that Pennsylvania American Water extend their water lines to enable us to access public water.

Our drinking water is currently obtained from a ___ well ___ cistern (trucked in). I wish to express my support for the requested water line extension because:

X The quantity of water produced by my well is insufficient for my needs
Comments:

X The quality of water produced by my well is poor
Comments:

X I am concerned that there is insufficient water to effectively fight a fire, thus increasing my insurance rates and putting my family and property at higher risk.

___ Additional comments or reasons

Sincerely,

Signature: Jacoulyne Mays

Printed Name: Jacoulyne Mays

Property Address where service is needed: 84 penobscot Rd Avella, PA

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2023-3043189 (Water)
	:	C-2023-3044289 (Water)
v.	:	R-2023-3043190 (Wastewater)
	:	C-2023-3044292 (Wastewater)
Pennsylvania-American Water Company	:	

VERIFICATION

I, Terry L. Fought, hereby state that the facts above set forth in my Supplemental Direct Testimony, OCA Statement 7 Supp., are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: February 13, 2024

Signature: _____
Terry L. Fought

Consultant Address: 780 Cardinal Drive
Harrisburg, PA 17111

*4871-2620-7135

OCA Hearing Exhibit 1
updated 3/6/2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket Nos. R-2023-3043189 (Water)
v.	:	R-2023-3043190 (WW)
	:	
Pennsylvania-American Water Company	:	

LIST OF THE EVIDENCE TO BE ADMITTED INTO THE EVIDENTIARY RECORD
BY THE OFFICE OF CONSUMER ADVOCATE

The Office of Consumer Advocate (OCA) intends to submit the following evidence into the evidentiary record in this matter at the evidentiary hearings scheduled for March 7-8, 2024. Verifications by the sponsoring witness are included with all OCA testimony.

OCA Statement 1 **Corrected**, Direct Testimony of Christine Maloni Hoover
Appendix A
Exhibit CMH-1
Exhibit CMH-2
Exhibit CMH-3
Exhibit CMH-4
Exhibit CMH-5

OCA Statement 1 Supp., Supplemental Direct Testimony of Christine Maloni Hoover

OCA Statement 1R, Rebuttal Testimony of Christine Maloni Hoover
Exhibit CMH-6

OCA Statement 1SR, Surrebuttal Testimony of Christine Maloni Hoover

OCA Statement 2, Direct Testimony of Ralph C. Smith (**Confidential** and Public versions)
Exhibit RCS-1
Exhibit LA-1
Exhibit LA-2
Exhibit LA-3
Exhibit LA-4 (**Confidential**)
Exhibit LA-5
Exhibit LA-6

OCA Statement 2SR, Surrebuttal Testimony of Ralph C. Smith
Exhibit LA-7

OCA Statement 3, Direct Testimony of David J. Garrett
Appendix A
Appendix B
Exhibits DJG-1 through DJG-15

OCA Statement 3R, Rebuttal Testimony of David J. Garrett

OCA Statement 3SR, Surrebuttal Testimony of David J. Garrett

OCA Statement 4, Direct Testimony of Jerome D. Mierzwa
Schedules JDM-1 through JDM-7

OCA Statement 4R, Rebuttal Testimony of Jerome D. Mierzwa

OCA Statement 4SR, Surrebuttal Testimony of Jerome D. Mierzwa
Schedule JDM-2SR
Schedule JDM-4SR
Schedule JDM-6SR

OCA Statement 5, Direct Testimony of Roger D. Colton (**Confidential** and Public versions)
Exhibit RDC-1

OCA Statement 5R, Rebuttal Testimony of Roger D. Colton

OCA Statement 5SR, Surrebuttal Testimony of Roger D. Colton (**Confidential** and Public versions)

OCA Statement 6, Direct Testimony of Barbara R. Alexander (**Confidential** and Public versions)
Exhibit BA-1
Exhibit BA-3
Exhibit BA-5
Exhibit BA-6
Exhibit BA-2 (**Confidential**)
Exhibit BA-4 (**Confidential**)
Exhibits BA-7 through 9 (**Confidential**)

OCA Statement 6 Supp., Supplemental Direct Testimony of Barbara R. Alexander

OCA Statement 6SR, Surrebuttal Testimony of Barbara R. Alexander (**Confidential** and Public versions)
Exhibit BA-10
Exhibit BA- 11 (Confidential)
Exhibit BA-12 (Confidential)

OCA Statement 7, Direct Testimony of Terry L. Fought (**Confidential** and Public versions)
Exhibit TLF-1
Exhibit TLF-2 (**Confidential**)
Exhibit TLF-3 (**Confidential**)

OCA Statement 7 Supp., Supplemental Direct Testimony of Terry L. Fought
Exhibit TLF-4

OCA Statement 7SR, Surrebuttal Testimony of Terry L. Fought

OCA Hearing Exhibit 1
List of the Evidence Offered by the Office of Consumer Advocate

OCA Hearing Exhibit 2
Verifications for Responses to Discovery Attached to OCA Testimony

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket Nos. R-2023-3043189 (Water)
v.	:	R-2023-3043190 (WW)
	:	
Pennsylvania-American Water Company	:	

OFFICE OF CONSUMER ADVOCATE

HEARING EXHIBIT 2

Verifications for Responses to Discovery Attached to OCA Testimony

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS.:** **R-2023-3043189 (Water)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	**R-2023-3043190 (Wastewater)**

VERIFICATION

I, Bruce Aiton, hereby state that the facts set forth in the response and attachment, if any, listed below, are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing if held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATA REQUEST	**ATTACHMENT**
OCA 23-003	N/A

Date: March 5, 2024

Bruce Aiton
Vice President – Engineering
Pennsylvania-American Water Company

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS.:** **R-2023-3043189 (Water)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	**R-2023-3043190 (Wastewater)**

VERIFICATION

I, Tawana Dean, hereby state that the facts set forth in the responses and attachments, if any, listed below, are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing if held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATA REQUEST	**ATTACHMENT**
OCA 34-001	N/A
OCA 34-003	Confidential Attachment

Date: March 5, 2024

Tawana Dean
Senior Manager, Customer Compliance
Pennsylvania-American Water Company

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS.:** **R-2023-3043189 (Water)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	**R-2023-3043190 (Wastewater)**

VERIFICATION

I, Deborah A. Degillio, hereby state that the facts set forth in the responses and attachments, if any, listed below, are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing if held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATA REQUEST	ATTACHMENT
OCA 26-005	N/A
OCA 26-015	N/A
OCA 26-022	N/A
OCA 26-016 *(Confidential)*	N/A
OCA 08-010	Attachment
OCA 20-001	Attachment
OCA 08-007	Confidential Attachment
OCA 08-021	Attachment
OCA 25-003	Confidential Attachment
OCA 20-016	Confidential Attachment
OCA 08-023	Confidential Attachment
OCA 34-016	Confidential Attachment

Date: March 5, 2024

Deborah A. Degillio
Vice President and Chief Customer Officer
American Water Works Service Company, Inc.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS.:** **R-2023-3043189 (Water)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	**R-2023-3043190 (Wastewater)**

VERIFICATION

I, Ashley E. Everette, hereby state that the facts set forth in the responses and attachments, if any, listed below, are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing if held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATA REQUEST	**ATTACHMENT**
OCA 22-001	N/A
OCA 22-003	N/A
OCA 22-008	N/A

Date: March 5, 2024

Ashley E. Everette

Ashley E. Everette
Sr. Director, Rates & Regulatory
American Water Works Service Company, Inc.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS.:** **R-2023-3043189 (Water)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	**R-2023-3043190 (Wastewater)**

VERIFICATION

I, Stacey D. Gress, hereby state that the facts set forth in the responses and attachments, if any, listed below, are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing if held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATA REQUEST	ATTACHMENT
OCA 12-006	N/A
OCA 12-008	N/A
OCA 12-010	N/A
OCA 12-012	N/A
OCA 12-014	N/A
OCA 21-003	N/A
OCA 21-004	N/A
OCA 21-005	N/A
OCA 21-006	N/A
OCA 21-007	N/A
OCA 21-009	N/A
OCA 21-010	N/A
OCA 21-011	N/A
OCA 21-012	N/A
OCA 21-003	N/A
OCA 21-008	N/A
OCA 35-002	N/A
OCA 35-004	N/A
OCA 35-005	N/A
OCA 35-006	N/A
OCA 35-007	N/A

Date: March 5, 2024

Stacey D. Gress
Director of Rates and Regulatory
Pennsylvania-American Water Company

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:		
v.	:	**DOCKET NOS.:**	**R-2023-3043189 (Water)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:		**R-2023-3043190 (Wastewater)**

VERIFICATION

I, Connie Heppenstall, hereby state that the facts set forth in the response and attachment, if any, listed below, are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing if held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATA REQUEST	**ATTACHMENT**
OCA 36-001	N/A

Date: March 5, 2024

Connie Heppenstall
Senior Project Manager
Gannett Fleming

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS.:** **R-2023-3043189 (Water)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	**R-2023-3043190 (Wastewater)**

VERIFICATION

I, Lori O'Malley, hereby state that the facts set forth in the responses and attachments, if any, listed below, are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing if held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATA REQUEST	ATTACHMENT
OCA 09-011	N/A
OCA 09-012	N/A
OCA 09-039	Attachment
OCA 09-070	Attachment
OCA 15-013	N/A
OCA 18-013	N/A
OCA 26-001	Attachment
OCA 17-001	Confidential Attachment
OCA 17-002	Confidential Attachment
OCA 35-008	N/A

Date: March 5, 2024

Lori O'Malley
Sr. Manager Regulatory Services
American Water Works Service Company, Inc.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:		
v.	:	**DOCKET NOS.:**	**R-2023-3043189 (Water)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:		**R-2023-3043190 (Wastewater)**

VERIFICATION

I, James Runzer, hereby state that the facts set forth in the response and attachment, if any, listed below, are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing if held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATA REQUEST	**ATTACHMENT**
OCA 20-024	Confidential Attachment
OCA 08-038	Attachment

Date: March 5, 2024

James Runzer
Vice President - Operations
Pennsylvania-American Water Company

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:		
v.	:	**DOCKET NOS.:**	**R-2023-3043189 (Water)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:		**R-2023-3043190 (Wastewater)**

VERIFICATION

I, John J. Spanos, hereby state that the facts set forth in the responses and attachments, if any, listed below, are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing if held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATA REQUEST	ATTACHMENT
OCA 26-027	N/A
OCA 26-028	N/A
OCA 26-029	N/A
OCA 26-030	N/A
OCA 35-003	N/A

Date: March 5, 2024

John J. Spanos
President
Gannett Fleming Valuation and Rate Consultants, LLC

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**DOCKET NOS.:** **R-2023-3043189 (Water)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	**R-2023-3043190 (Wastewater)**

VERIFICATION

I, J. Cas Swiz, hereby state that the facts set forth in the response and attachment, if any, listed below, are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing if held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATA REQUEST	**ATTACHMENT**
OCA 09-030	Attachment

Date: March 5, 2024

J. Cas Swiz
Sr. Director, Enterprise-Wide Regulatory Strategy
American Water Works Service Company, Inc.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission v. Pennsylvania-American Water Company	Docket Nos. R-2023-3043189 (Water) R-2023-3043190 (Wastewater)

THE CITY OF SCRANTON'S RESPONSES TO INTERROGATORIES OF THE OFFICE OF CONSUMER ADVOCATE TO THE CITY OF SCRANTON SET I

THE CITY OF SCRANTON'S RESPONSES TO INTERROGATORIES OF THE OFFICE OF CONSUMER ADVOCATE TO THE CITY OF SCRANTON SET I

Filed on behalf of:

The City of Scranton

Counsel of Record for this Party:

KATIE KENNEDY
First Assistant Solicitor
PA ID No. 317237
kkennedy@scrantonpa.gov

JESSICA ESKRA
Solicitor
PA ID No. 319426
jeskra@scrantonpa.gov

Law Department
City of Scranton
340 North Washington Avenue
Scranton, PA 18503
P: 570-348-4105
F: 570-348-4263

Dated: February 16, 2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	
	Docket Nos. R-2023-3043189 (Water)
v.	R-2023-3043190 (Wastewater)
Pennsylvania-American Water Company	

VERIFICATION

I, the Hon. Paige G. Cognetti, Mayor of the City of Scranton, hereby state that the facts set forth in my Responses to Interrogatories in the above-captioned proceedings are true and correct to the best of my knowledge, information and belief. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to sworn falsification to authorities).

Date: February 16, 2024

Paige Gilbert Cognetti

The Hon. Paige G. Cognetti,
Mayor of the City of Scranton

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	
	Docket Nos. R-2023-3043189 (Water)
v.	R-2023-3043190 (Wastewater)
Pennsylvania-American Water Company	

VERIFICATION

I, Katherine Kennedy, Esquire, Attorney for Intervenor, verify that the statements made in these Responses to Interrogatories in the above-captioned proceedings are true based upon information provided to me, and are true and correct to the best of my personal knowledge, information or belief. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 16, 2024

Katie Kennedy, Esq.
First Assistant Solicitor, City of Scranton

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	**Docket Nos. R-2023-3043189 (Water)**
v.	:	**R-2023-3043190 (Wastewater)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

LIST OF WRITTEN STATEMENTS AND EXHIBITS BY THE OFFICE OF SMALL BUSINESS ADVOCATE

The Office of Small Business Advocate ("OSBA") intends to introduce the following evidence into the record in the above-captioned proceedings at the evidentiary hearings scheduled for March 7th and 8th, 2024:

- OSBA Statement No. 1 with Schedules KCH-1 through KCH-10, Direct Testimony, Exhibits, and signed Verification of Kevin C. Higgins
- OSBA Statement No. 1-R with Schedules KCH-11 through KCH-13, Rebuttal Testimony, Exhibits and signed Verification of Kevin C. Higgins
- OSBA Statement No. 1-S, with Schedule KCH-14, Surrebuttal Testimony and signed Verification of Kevin C. Higgins
- OSBA Executed Appendix A by Kevin C. Higgins to Protective Order dated January 5, 2024

Please note, the OSBA will not be submitting Confidential Testimony at the evidentiary hearings.

COMMONWEALTH OF PENNSYLVANIA

February 1, 2024

The Honorable Christopher P. Pell
Deputy Chief Administrative Law Judge
Pennsylvania Public Utility Commission
801 Market Street, Suite 4063
Philadelphia, PA 19107

The Honorable John Coogan
Administrative Law Judge
Pennsylvania Public Utility Commission
400 North Street
Commonwealth Keystone Building
Harrisburg, PA 17120

Re: Pennsylvania Public Utility Commission v. Pennsylvania American Water Company / Docket Nos. R-2023-3043189 (Water) / R-2023-3043190 (Wastewater)

Dear Presiding Judges:

Enclosed please find the Direct Testimony and Exhibits of Kevin Higgins labelled OSBA Statement No. 1 with Schedules KCH-1 through KCH-10 on behalf of the Office of Small Business Advocate ("OSBA"), in the above-captioned proceedings.

As evidenced by the enclosed Certificate of Service, all known parties will be served, as indicated.

If you have any questions, please do not hesitate to contact me.

Sincerely,

/s/ Steven C. Gray

Steven C. Gray
Senior Supervising
Assistant Small Business Advocate
Attorney ID No. 77538

Enclosures
cc: PA PUC Secretary Rosemary Chiavetta (Cover Letter & Certificate of Service only)
Brian Kalcic
Kevin Higgins
Parties of Record

BEFORE THE
PUBLIC UTILITIES COMMISSION OF PENNSYLVANIA

Pennsylvania Public Utility Commission	:	Docket Nos:
v.	:	R-2023-3043189 (Water)
Pennsylvania-American Water Company	:	R-2023-3043190 (Wastewater)

OSBA STATEMENT NO. 1

Direct Testimony of Kevin C. Higgins

on behalf of

Pennsylvania Office of Small Business Advocate

February 1, 2024

Topics:

Revenue Requirement

Cost Allocation

Revenue Allocation

Revenue Decoupling Mechanism

Environmental Compliance Investment Charge

Deferred Accounting Treatment for Production Expenses

DIRECT TESTIMONY OF KEVIN C. HIGGINS

INTRODUCTION

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. My testimony is being sponsored by the Pennsylvania Office of Small Business Advocate ("OSBA").

Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE AND QUALIFICATIONS.

A. My academic background is in economics, and I have completed all coursework and field examinations toward the Ph.D. in Economics at the University of Utah. In addition, I have served on the adjunct faculties of both the University of Utah and Westminster College, where I taught undergraduate and graduate courses in economics. I joined Energy Strategies in 1995, where I assist private and public sector clients in the areas of energy-related economic and policy analysis, including evaluation of electric and gas utility rate matters.

Prior to joining Energy Strategies, I held policy positions in state and local government. From 1983 to 1990, I was an economist, then assistant director, for the Utah Energy Office, where I helped develop and implement state energy policy. From 1991 to 1994, I was chief of staff to the chairman of the Salt Lake County Commission, where I was responsible for development and implementation of a broad spectrum of public policy at the local government level. My qualifications are attached in the Appendix to this testimony.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

A. Yes. In 2006, I testified in a proceeding concerning the rate transition plans filed by Metropolitan Edison Company and Pennsylvania Electric Company, Docket Nos. P-00062213 *et al*. In 2022, I filed testimony on behalf of the Pennsylvania OSBA on revenue requirement issues in the Leatherstocking Gas Company LCC general rate case, Docket No. R-2022-3032764. In 2023, I testified in National Fuel Gas Distribution Corporation's general rate case, Docket No. R-2022-3035730, Pennsylvania-American Water Company's ("PAWC") Butler Area Sewer Authority acquisition case, Docket No. A-2022-3037047, and Pittsburg Water and Sewer Authority's general rate case, Docket Nos. R-2023-3039920, *et al.*

Q. HAVE YOU TESTIFIED BEFORE UTILITY REGULATORY COMMISSIONS IN OTHER STATES?

A. Yes. I have testified in approximately 285 proceedings on the subjects of utility rates and regulatory policy before state utility regulators in Alaska, Arizona, Arkansas, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Kansas, Kentucky, Michigan, Minnesota, Missouri, Montana, Nevada, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, South Carolina, Texas, Utah, Virginia, Washington, West Virginia, and Wyoming. I have also filed affidavits in proceedings before the Federal Energy Regulatory Commission and prepared expert reports in state and federal court proceedings involving utility matters.

OVERVIEW AND CONCLUSIONS

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?

A. My testimony responds to the general rate case filed by PAWC on the topics of revenue requirement, cost allocation, and revenue allocation, as well as PAWC's proposed Revenue Decoupling Mechanism ("RDM") and Environmental Compliance Investment Charge ("ECIC") and request for deferred accounting for production expenses.

Q. WHAT CONCLUSIONS AND RECOMMENDATIONS DO YOU OFFER IN YOUR TESTIMONY?

A. (1) I recommend that PAWC's revenue requirement be reduced by $94.9 million relative to the $203.9 million rate increase proposed by the Company. My recommended adjustments are itemized in Tables KCH-1 and KCH-2, presented later in my testimony. My recommended reduction does not take into account or incorporate any other adjustments that may be offered by other parties that are not addressed in my testimony.

(2) I recommend that all costs associated with PAWC's proposed residential Arrearage Management Plan ("AMP") and administrative costs associated with its residential low-income programs be directly assigned to the residential class in the Company's water and wastewater class cost-of-service studies.

(3) I recommend that any approved Act 11 revenues be allocated among the Water customer classes based on the corresponding wastewater classes that give rise to the Act 11 revenue shortfall.

(4) I recommend adopting a revenue allocation among Water customer classes that will improve alignment with cost. Specifically, I recommend a lower revenue requirement increase for the Commercial class and a greater revenue requirement increase for the Public (Municipal) class than proposed by PAWC. Under my recommendation, the Public class would still receive a subsidy relative to cost, and the resulting Public rates would be lower than the corresponding Commercial rates. My recommended revenue allocation, at PAWC's requested revenue requirement, is presented in Schedule KCH-9, page 1.

(5) If the Commission approves a lower revenue requirement increase than proposed by PAWC, I recommend that the decrease be applied principally to the Water rates. So long as the cost-based wastewater increase associated with the approved revenue requirement is greater than PAWC's proposed wastewater rates, the incremental revenue requirement reduction should not reduce PAWC's proposed wastewater rates. This means that a lower revenue requirement will reduce Act 11 revenues and PAWC's proposed Water rates generally.

At a lower revenue requirement, I recommend scaling each Water class's revenues in proportion to each class's share of the total proposed non-Act 11 revenues in my revenue allocation from Schedule KCH-9, page 1, which I calculated at PAWC's requested revenue requirement. I present OSBA's recommended Water revenue allocation, at OSBA's recommended revenue requirement, in Schedule KCH-9, page 2.

(6) I recommend that the Commission reject PAWC's proposed RDM, ECIC, and request for deferred accounting for production expenses.

PROPOSED REVENUE INCREASE

Q. PLEASE SUMMARIZE THE REVENUE REQUIREMENT INCREASE REQUESTED BY PAWC IN THIS CASE.

A. PAWC proposes to increase its water and wastewater revenues by $203.9 million, or 20.2% over current annualized revenues including projected Distribution System Improvement Charge ("DSIC") revenue. The Company's proposed revenue requirement is based on a fully projected future test year ("FPFTY") ending June 30, 2025.[1]

Q. HAS PAWC CALCULATED SEPARATE REVENUE REQUIREMENTS FOR ITS WATER AND WASTEWATER OPERATIONS?

A. Yes. PAWC produced five separate revenue requirement studies, one for its water operations and four for its wastewater operations. These five studies are: Water Operations ("Water"), Wastewater Sanitary Sewer Systems General Operations ("WW SSS"), Butler Area Sewer Authority Wastewater Operations ("BASA"), Brentwood Wastewater Operations ("Brentwood') and Wastewater Combined Sewer System Operations ("WW CSS").[2] The Company has also separately calculated five class cost-of-service studies corresponding to its respective revenue requirement studies.[3]

Q. PLEASE PROVIDE A BREAKDOWN OF THE REVENUE REQUIREMENT INCREASES CALCULATED IN THE FIVE SEPARATE STUDIES.

[1] Direct Testimony of Ashley E. Everette (PAWC Statement No. 1), pp. 7-8.
[2] The CSSs consist of the Scranton, McKeesport, and Kane combined sewer (wastewater and stormwater) systems. Direct Testimony of Ashley E. Everette (PAWC Statement No. 1), pp. 17-19.
[3] Direct Testimony of Constance E. Heppenstall (PAWC Statement No. 12), p. 3.

A. Of PAWC's requested $203.9 million revenue requirement increase, $128.1 million is related to Water, $31.8 million is related to WW SSS, $26.3 million is related to BASA, $1.9 million is related to Brentwood, and $15.8 million is related to WW CSS. On a percentage basis, PAWC's calculated revenue requirements represent increases over present rates of 15.5% for Water, 33.3% for WW SSS, 221.9% for BASA, 106.1% for Brentwood, and 20.1% for WW CCS.[4]

Q. IS PAWC PROPOSING TO RECOVER THESE RESPECTIVE REVENUE REQUIREMENTS FROM THE CUSTOMERS ASSOCIATED WITH EACH STUDY?

A. No. PAWC is proposing to recover $71.1 million of its wastewater revenue requirement from its water customers based on Act 11 of 2012 ("Act 11"),[5] which provides that the Commission may approve a utility's request to allocate a portion of its wastewater revenue requirement to its combined water and wastewater customer base, if deemed in the public interest.[6] After accounting for its proposed Act 11 revenue shift, PAWC proposes to increase water revenues by $199.2 million and wastewater revenues by $4.7 million in total. The proposed wastewater revenue changes consist of a $169 thousand decrease for WW SSS, a $4.7 million increase for BASA, a $369 thousand increase for Brentwood, and a $227 thousand decrease for WW CSS.[7] I will further address PAWC's Act 11 proposal later in my testimony.

[4] Based Volume 03, Exhibit No. 3-A.
[5] Direct Testimony of Ashley E. Everette (PAWC Statement No. 1), p. 20.
[6] See 66 Pa. C.S. § 1311(c).
[7] Volume 03, Exhibit No. 3-A.

Q. DO YOU HAVE ANY RECOMMENDED ADJUSTMENTS TO PAWC'S REVENUE REQUIREMENT?

A. Yes. I am recommending an overall reduction of **$94,857,413** to the total revenue requirement increase requested by PAWC. As explained in greater detail later in my testimony, this reduction includes a "proxy" return on equity ("ROE") of 9.65%, based on the ROE authorized for PAWC's DSIC in the Bureau of Technical Utility Services' most recent Report on the Quarterly Earnings of Jurisdictional Utilities.[8]

The impact of my recommended adjustments is summarized in Table KCH-1, below, and is also provided in Schedule KCH-1, page 1.

Table KCH-1
Summary of OSBA Adjustments to PAWC Revenue Requirement

	Total Company	
	Adjustment Impact	Increase
PAWC As-Filed Revenue Req. Increase		$203,945,911
OSBA Recommended Adjustments		
Annual Performance Plan Expense	($5,153,394)	$198,792,517
Long Term Performance Plan Expense	($5,230,156)	$193,562,362
Employee Stock Purchase Plan Expense	($457,009)	$193,105,353
Service Co. Executive Retirement Plan	($35,106)	$193,070,247
External Board Expense	($126,792)	$192,943,455
Proxy Return on Equity	($61,540,957)	$131,402,498
BASA Mitigation Adjustment	($19,091,395)	$112,311,103
Brentwood Mitigation Adjustment	($1,309,219)	$111,001,884
Audubon Water Acquisition Adjustment	($1,913,386)	$109,088,498
Total OSBA Adjustments	($94,857,413)	$109,088,498

I summarize the impact of my proposed revenue requirement adjustments relative to PAWC's calculated revenue requirement for each of the five studies in

[8] Docket Number: M-2023-3044811, Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended September 30, 2023, Public Meeting Held January 18, 2024, p. 15, Attachment D.

Table KCH-2, below. I provide greater detail of these impacts in Schedule KCH-1, pages 1-6. These impacts are presented relative to the revenue requirement increase calculated by PAWC in its five studies, prior to the effects of the proposed Act 11 revenue shift, which I will discuss later in my testimony.

I will discuss my recommendations regarding the pending acquisitions associated with BASA, Brentwood, and Audubon Water Company in the section of my testimony called Adjustments Related to the Acquisitions of Other Utilities. I have included the impact of my adjustments on the BASA and Brentwood revenue requirements for completeness, and I recommend that such adjustments be reflected in PAWC's revenue requirement if the proposed acquisitions ultimately close.

Table KCH-2
Summary of OSBA Adjustment Impacts
to PAWC Revenue Requirements

	Water	WW SSS	BASA	Brentwood	WW CSS
PAWC As-Filed Rev. Req. Increase	$128,149,690	$31,793,150	$26,288,308	$1,934,637	$15,780,126
OSBA Recommended Adjustments					
APP Expense	($4,597,034)	($235,832)	($127,579)	($17,090)	($175,859)
LTPP Expense	($4,899,767)	($140,063)	($92,987)	($25,040)	($72,299)
ESPP Expense	($422,185)	($16,760)	($3,163)	($769)	($14,132)
Service Co. ERP	($33,492)	($1,046)	$0	$0	($568)
External Board Expense	($120,953)	($3,778)	$0	$0	($2,061)
Proxy ROE	($48,087,598)	($6,275,122)	($2,237,574)	($213,115)	($4,727,548)
BASA Mitigation	$0	$0	($19,091,395)	$0	$0
Brentwood Mitigation	$0	$0	$0	($1,309,219)	$0
Audubon Water Acquisition Adj.	($1,913,386)	$0	$0	$0	$0
Total OSBA Adjustments	($60,074,414)	($6,672,602)	($21,552,698)	($1,565,232)	($4,992,466)
Rev. Req. Increase with OSBA Adj.	$68,075,276	$25,120,548	$4,735,610	$369,405	$10,787,660

Annual Performance Plan Expense

Q. DOES THE COMPANY OFFER PERFORMANCE-BASED COMPENSATION TO ITS EMPLOYEES?

A. Yes. According to the Direct Testimony of Mr. Jim Runzer, the Company provides performance-based compensation under two plans: the Annual Performance Plan ("APP"), applicable to all full-time employees, and the Long-Term Performance Plan ("LTPP"), which is limited to certain exempt employees.[9] I will first address the APP.

Q. PLEASE DESCRIBE THE APP.

A. The Company provides cash awards to employees for achievement of business objectives under the APP. As Mr. Runzer explains, the APP's goals are related to financial performance, safety, customer satisfaction, environment (drinking water quality), and workforce diversity.[10]

Q. PLEASE EXPLAIN THE FINANCIAL PERFORMANCE COMPONENT OF THE APP.

A. As described the 2023 Proxy Statement of PAWC's parent company, American Water Works Company, Inc. ("American Water"), APP awards are determined using a corporate performance multiplier. The largest single component, 50%, of this calculation is based on Adjusted Earnings Per Share ("EPS"). Each year, the APP sets out the threshold, target and maximum EPS levels that are used in the

[9] Direct Testimony of Jim Runzer (PAWC Statement No. 2), pp. 40-41. PAWC provided copies of the plans in Confidential Filing Requirement III.22 (Volume 6b).
[10] Direct Testimony of Jim Runzer (PAWC Statement No. 2), p. 41.

performance calculation. In addition, no APP awards are paid out at all if the actual EPS is less than 90% of the target.[11]

Q. IN YOUR OPINION, IS IT APPROPRIATE TO RECOVER THE COST OF ANNUAL PERFORMANCE PROGRAMS IN UTILITY RATES?

A. It can be appropriate to recover the cost of annual performance programs in utility rates to the extent that the compensation in such plans is not excessive and to the extent the goals of such plans are not tied to utility financial performance, but rather to goals such as customer satisfaction, operating efficiency, and safety. While rewarding employees for financial performance can be entirely appropriate, the responsibility for funding such awards rests most appropriately with shareholders, who are the primary beneficiaries of meeting or exceeding financial targets.

Q. WHAT DO YOU RECOMMEND REGARDING THE APP?

A. I recommend that 50% of the APP expense be removed from the revenue requirement, based on the weight of the EPS goal included in the APP corporate performance calculation.

Q. WHAT IS THE REVENUE REQUIREMENT IMPACT OF YOUR ADJUSTMENT?

A. This adjustment decreases the FPFTY revenue requirement by approximately **$5,153,394** in total, comprised of decreases of **$4,597,034** for Water, **$235,832** for WW SSS, **$127,579** for BASA, **$17,090** for Brentwood, and **$175,859** for WW CSS. These impacts include the estimated reduction to payroll tax as a result of

[11] American Water Works Company, Inc. 2023 Proxy Statement (March 28, 2023), pp. 42-43.

removing 50% of APP expense from the revenue requirement. Additional details of this adjustment are provided in Schedule KCH-2.

Long-Term Performance Plan Expense

Q. PLEASE DESCRIBE THE LTPP.

A. Under the LTPP, eligible employees are awarded restricted stock units ("RSUs") and performance stock units ("PSUs"). RSU awards are based on a three-year vesting period while the participant remains employed with the Company and PSU awards are based on performance vesting conditions. The PSU component of the LTPP is determined based on a combination of compounded EPS growth and relative total shareholder return compared to a peer group over a three-year performance period.[12]

Q. WHAT IS THE BREAKDOWN BETWEEN RSU AND PSU AWARDS UNDER THE LTPP?

A. According to American Water's 2023 Proxy Statement, LTPP awards are generally allocated 30% to RSUs and 70% to PSUs.[13] The actual breakdown of LTPP awards for the historic test year ended June 30, 2023 (which PAWC assumes for the FPFTY) was approximately 22% RSUs and 78% PSUs.[14]

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE LTPP?

A. I recommend that LTPP expense be removed from the revenue requirement and instead funded by shareholders. The majority of the LTPP cost, the PSU

[12] Direct Testimony of Jim Runzer (PAWC Statement No. 2), p. 41; American Water Works Company, Inc. 2023 Proxy Statement (March 28, 2023), p. 44.
[13] American Water Works Company, Inc. 2023 Proxy Statement (March 28, 2023), pp. 44.
[14] PAWC response to OCA 09-011 c., included in Schedule KCH-10.

component, is directly based on American Water's financial performance. The time-based RSU component is based on continued employment with the Company, rather than any explicit customer-related goals such as customer satisfaction or drinking water quality. I recommend that the costs of the Company's LTPP awards are most appropriately borne by shareholders rather than ratepayers.

Q. WHAT IS THE REVENUE REQUIREMENT IMPACT OF YOUR ADJUSTMENT?

A. This adjustment decreases the FPFTY revenue requirement by approximately **$5,230,156** in total, comprised of decreases of **$4,899,767** for Water, **$140,063** for WW SSS, **$92,987** for BASA, **$25,040** for Brentwood, and **$72,299** for WW CSS. These impacts include the estimated reduction to payroll tax as a result of removing LTPP expense from the revenue requirement. Additional details of this adjustment are provided in Schedule KCH-3.

Employee Stock Purchase Plan Expense

Q. WHAT IS THE COMPANY'S EMPLOYEE STOCK PURCHASE PLAN ("ESPP")?

A. The Company provides a 15% discount on purchases of American Water stock by employees who are enrolled in the ESPP.[15] Participating employees elect to purchase American Water stock at a discount through payroll deductions. PAWC

[15] Direct Testimony of Lori O'Malley (PAWC Statement No. 5), p. 14.

proposes to include the cost of providing this employee benefit in its revenue requirement.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE ESPP?

A. I do not believe that ratepayers should fund the stock purchase discount provided by the ESPP. The ESPP incentivizes employees to purchase stock rather than receive cash compensation, for the portion of compensation eligible for the ESPP. The stock purchase discount provided under the ESPP increases payroll costs for the portion of an employee's compensation that is used to purchase stock. This provides no tangible benefit for customers. If the Company wishes to provide this stock purchase incentive, it is most appropriately funded by (fellow) shareholders, who may benefit from the closer alignment of employee interests with their own. Therefore, I recommend that the ESPP expense be removed from the revenue requirement.

Q. WHAT IS THE REVENUE REQUIREMENT IMPACT OF YOUR ADJUSTMENT?

A. This adjustment decreases the FPFTY revenue requirement by approximately **$457,009** in total, comprised of decreases of **$422,185** for Water, **$16,760** for WW SSS, **$3,163** for BASA, **$769** for Brentwood, and **$14,132** for WW CSS.[16] Additional details of this adjustment are provided in Schedule KCH-4.

[16] My ESPP adjustment does not include a payroll tax component because PAWC did not identify the ESPP as contributing to its payroll tax expense calculation in its response to Bureau of Investigation and Enforcement ("I&E") RE-023-D (included in Schedule KCH-10). However, it is possible that FICA and Medicare taxes do apply to this compensation.

Service Company Executive Retirement Plan Expense

Q. PLEASE EXPLAIN YOUR ADJUSTMENT FOR EXECUTIVE RETIREMENT PLAN ("ERP") EXPENSE.

A. In response to discovery, PAWC indicated that Executive Retirement Plan expense in Account No. 50630000 was erroneously recorded to its Service Company rather than its parent company in the historic test year, and then allocated to PAWC. PAWC explains that these costs will be removed in its rebuttal filing.[17] My adjustment estimates the revenue requirement impact of removing this improperly booked expense.

Q. WHAT IS THE REVENUE REQUIREMENT IMPACT OF YOUR ADJUSTMENT?

A. This adjustment decreases the FPFTY revenue requirement by approximately **$35,106** in total, comprised of decreases of **$33,492** for Water, **$1,046** for WW SSS, **$0** for BASA and Brentwood, and **$568** for WW CSS.[18] Additional details of this adjustment are provided in Schedule KCH-5.

PAWC External Board Expense

Q. PLEASE DESCRIBE THE BOARDS THAT GOVERN PAWC.

A. As explained in the PAWC Management and Operations Audit conducted by the Commission's Bureau of Audits in Docket No. D-2022-3035217, PAWC is governed by both a corporate board (American Water board) and a local board

[17] PAWC response to OCA 15-013, included in Schedule KCH-10.
[18] My adjustment is based on the Account No. 50630000 amount provided by PAWC in OCA 09-039 Attachment 1, included in Schedule KCH-10. My adjustment may require revision if PAWC identifies other components of this expense, including costs allocated to its acquisitions.

(PAWC Board). The PAWC Board consists of three independent directors and a former president of PAWC, as well as officers of PAWC. PAWC officers are not specifically compensated for their board participation, while non-officer board members are compensated through a retainer and a per-meeting fee. The audit staff questioned whether the level of compensation for PAWC's independent board members was at market rates and recommended that a market comparison be performed. [19]

Q. HOW DID PAWC RESPOND TO THE AUDIT STAFF'S CONCERNS REGARDING ITS BOARD?

A. In response to discovery, PAWC indicates that it has eliminated its external board as of December 31, 2023, and that it will remove $123,250 in external board expense in the rebuttal stage of this proceeding.[20]

Q. HAVE YOU ESTIMATED THE IMPACT OF REMOVING THE EXTERNAL BOARD EXPENSE FROM PAWC'S REVENUE REQUIREMENT?

A. Yes. I estimate that this adjustment decreases the FPFTY revenue requirement by approximately **$126,792** in total, comprised of decreases of **$120,953** for Water, **$3,778** for WW SSS, **$0** for BASA and Brentwood, and **$2,061** for WW CSS.[21] Additional details of this adjustment are provided in Schedule KCH-6.

[19] Report Issued October 2023, pp. 23-25.
[20] PAWC Response to OCA 22-003, included in Schedule KCH-10.
[21] I allocated this adjustment between Water, WW SSS and WW CSS based on the method used by PAWC in its workpaper "4p Service Company Costs."

Proxy Return on Equity Adjustment

Q. WHAT RETURN ON EQUITY IS PAWC REQUESTING IN THIS PROCEEDING?

A. Ms. Ann E. Bulkley recommends an ROE of 10.95%, which is at the higher end of the 10.00% to 11.25% range that she argues is reasonable.[22] According to the Direct Testimony of Ms. Ashley E. Everette, PAWC is requesting an ROE at the higher end of this range in recognition of PAWC's "superior management performance." In addition, Ms. Everette argues that if the Commission were to approve an ROE that is lower than the upper end of Ms. Bulkley's recommended range, it should add no less than 25 basis points to its market-determined rate of return.[23]

Q. HAVE YOU CONDUCTED AN ORIGINAL ANALYSIS OF THE APPROPRIATE ROE FOR PAWC?

A. No. Rather, I am utilizing the 9.65% ROE authorized for PAWC's DSIC in the Bureau of Technical Utility Services' most recent Report on the Quarterly Earnings of Jurisdictional Utilities as a proxy in my revenue requirement calculation.[24] The use of this proxy ROE is not intended to supplant the Commission's consideration of traditional cost of capital analyses that has been presented by the Company and will be offered by other parties in this proceeding such as the Office of Consumer Advocate ("OCA"). Based on my experience in

[22] Direct Testimony of Ann E. Bulkley (PAWC Statement No. 13), p. 8.
[23] Direct Testimony of Ashley E. Everette (PAWC Statement No. 1), p. 33.
[24] Docket Number: M-2023-3044811, Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended September 30, 2023, Public Meeting Held January 18, 2024, p. 15, Attachment D.

other proceedings, I would not be surprised if other parties present credible analyses indicating that PAWC's ROE should be set lower than 9.65%.

Q. WHAT IS YOUR REASON FOR PRESENTING THE OSBA'S RECOMMENDED REVENUE REQUIREMENT USING THE PROXY ROE OF 9.65%?

A. The proxy ROE is useful as it provides context for the OSBA's overall revenue requirement recommendation in this case. Absence of an ROE adjustment in my testimony could be mistaken for implicit endorsement of PAWC's proposed ROE. The use of the proxy ROE as a placeholder helps to avoid that misimpression. Moreover, the cost of capital has implications for the adjustments I am recommending regarding PAWC's acquisitions of other utilities, discussed below. Using the proxy ROE in the calculation of the revenue requirement impacts of my acquisition-related adjustments provides a more realistic measurement of their impact.[25]

Q. WHAT IS THE REVENUE REQUIREMENT IMPACT OF CALCULATING PAWC'S REVENUE REQUIRMENT USING A 9.65% ROE?

A. This adjustment decreases the FPFTY revenue requirement by approximately **$61,540,957** in total, comprised of decreases of **$48,087,598** for Water, **$6,275,122** for WW SSS, **$2,237,574** for BASA, **$213,115** for Brentwood, and **$4,727,548** for WW CSS.

[25] All things being equal, using PAWC's requested ROE to measure the revenue requirement impact of my acquisition-related adjustments would make my adjustments larger.

Adjustments Related to the Acquisitions of Other Utilities

Q. PLEASE DESCRIBE YOUR ADJUSTMENTS RELATED TO PAWC'S ACQUISITIONS OF OTHER UTILITIES.

A. PAWC is seeking to recover certain costs related to its proposed acquisitions of other utilities. I am recommending adjustments related to three of these proposed acquisitions:

(1) PAWC's proposed acquisition of BASA's wastewater assets;

(2) PAWC's proposed acquisition of the Borough of Brentwood's wastewater assets; and

(3) PAWC's proposed acquisition of Audubon's water assets.

Q. AT THE TIME OF YOUR DIRECT TESTIMONY, HAS PAWC FINALIZED THE ACQUISITION OF ANY OF THESE THREE UTILITIES?

A. No, not at this time. It is my understanding that the Commission approved PAWC's acquisition of BASA on a 3-2 vote, but the acquisition is being challenged in the Commonwealth Court.

Regarding PAWC's proposed acquisition of Brentwood's wastewater assets, on January 17, 2024, Administrative Law Judge Katrina L. Dunderdale recommended that PAWC's application be denied. As of the date my direct testimony was filed, the Commission had not yet acted on Judge Dunderdale's recommendation.

PAWC's proposed acquisition of Audubon's water assets is currently before the Commission in Docket Nos. A-2023-3043194 and A-2023-3043196.

Q. HOW SHOULD YOUR ADJUSTMENTS BE INTERPRETED IN RELATION TO THE APPROVAL STATUS OF THESE PROPOSED ACQUISITIONS?

A. If, after receiving final approval from the Commission, or Commonwealth Court, as applicable, any of these three proposed acquisitions ultimately close, I recommend that my adjustment for that acquisition as described below be adopted. On the other hand, if any of the proposed acquisitions do not proceed to closure, then 100% of the costs associated with such acquisitions should be removed from the revenue requirement.

BASA Acquisition

Q. PLEASE DESCRIBE YOUR ADJUSTMENT RELATED TO THE BASA ACQUISITION.

A. One of the conditions to which PAWC agreed in the Settlement Agreement approved in Docket No. A-2022-3037047 ("BASA Settlement"), is that the Company would propose to move BASA rates to 1.4 times the current BASA rates or PAWC's proposed Rate Zone 1 system-average wastewater rates, whichever is lower, upon the later of (a) the first anniversary of Closing or (b) January 1, 2025.[26] PAWC has adhered to this condition in its filing in this case but is seeking to recover $21.6 million in annual Act 11 revenues from water customers associated with the acquisition of BASA. I recommend that the portion

[26] Docket Nos. A-2022-3037047 et al., Joint Petition for Approval of Unanimous Settlement of All Issues (August 14, 2023), III. C. 19. e.

of the acquisition cost that PAWC is proposing to recover from water customers be excluded from the revenue requirement in this case.

Q. PLEASE EXPLAIN THE REASONS FOR YOUR RECOMMENDATION.

A. PAWC has agreed to acquire BASA at a substantial premium above net book value. Pursuant to the BASA Settlement, PAWC seeks to include $228.0 million in rate base associated with the acquisition,[27] whereas the original cost of the BASA assets as of June 30, 2024 is $146.0 million, and the original cost less accumulated depreciation ("net book value") is approximately $90.1 million.[28] Thus, the proposed rate base addition exceeds the original cost of the BASA assets by $82.0 million and exceeds the net book value by $137.9 million.

Recovery of this substantial premium would have a dramatic impact on BASA customers' rates if the entirety of that cost were recovered from BASA wastewater customers. Indeed, in its acquisition application, PAWC estimated that the potential impact of the proposed transaction on BASA wastewater customer rates would be an increase of 94.4%.[29] That dramatic increase does not include the cost of future needed investments in BASA's system.[30]

Specifically, in its acquisition application, PAWC calculated that the revenue requirement increase to support the transaction would be $17,895,000 – which would more than double the current BASA wastewater revenues of $12,698,000. At the same time, PAWC indicated that it would propose to shift

[27] Docket Nos. A-2022-3037047 et al., Joint Petition for Approval of Unanimous Settlement of All Issues (August 14, 2023), III. E. 21.
[28] PAWC Exhibit 11-G 2024, Table 2. Net Book Value calculated as June 30, 2024 Original Cost minus Book Depreciation Reserve.
[29] Docket Nos. A-2022-3037047 et al., PAWC Exhibit AEE-1, p. 3.
[30] Docket Nos. A-2022-3037047 et al., Direct Testimony of Duane McKee, pp. 8-10.

33% of the resulting revenue requirement increase ($5,905,350) to water customers, resulting in a net increase to BASA wastewater rates of $11,989,650 (*i.e.*, 94.4%).[31]

In the current case, PAWC calculates that the cost-based increase related to BASA is $26,288,308 (rather than the projected $17,895,000) and has proposed to shift $21,552,699 of that increase to water customers (rather than $5,905,350).[32]

As I noted above, in the BASA Settlement, PAWC agreed to limit the rate impact on BASA wastewater customers in this case to a 40% increase over current rates. While such an increase will recover a portion of the premium above net book value that PAWC agreed to pay to acquire BASA, it will not recover all of it. PAWC proposes in this case to recover the majority of the BASA-related increase from water customers.

In my opinion, it is unreasonable to shift this cost burden to water customers in this case. PAWC negotiated the BASA acquisition price, not its customers, and further agreed to mitigate the impact on BASA customers in this rate case. In agreeing to an acquisition price significantly greater than the net book value of BASA's assets, PAWC is able to build up its rate base separate and apart from making needed investments in new facilities required for safe and reliable service. The burden of funding the rate mitigation for BASA wastewater customers – which is necessitated by the acquisition price PAWC agreed to –

[31] Docket Nos. A-2022-3037047 et al., PAWC Exhibit AEE-1, p. 3.
[32] Volume 03, Exhibit No. 3-A.

most appropriately rests with PAWC shareholders until such time that BASA rates can be revisited consistent with the BASA Settlement.

Q. IS THE OSBA SIGNATORY TO THE BASA SETTLEMENT?

A. Yes.

Q. IS THE OSBA OBLIGATED TO SUPPORT PAWC'S PROPOSED RECOVERY OF ITS BASA ACQUISITION COSTS FROM WATER CUSTOMERS IN THIS CASE?

A. No. The BASA Settlement reserves the rights of the OSBA (as well as OCA and I&E) to address PAWC's rate case proposals fully, and to make other rate proposals.[33] Thus, while PAWC is free to seek recovery of the BASA acquisition costs from its water customers in this case, the OSBA is not obligated to support that position. Indeed, I recommend against it.

Q. DID YOU PARTICIPATE IN THE BASA ACQUISITION CASE?

A. Yes. In my direct testimony, in that case I recommended that the proposed acquisition be rejected by the Commission, due to the large potential rate impacts caused by the proposed acquisition price of $231.5 million, which was later reduced to $230 million.[34] In my testimony I pointed out that, normally, in a pricing negotiation, the economic incentives for each party to the transaction are opposite one another: the seller is incentivized to attain the highest price possible, whereas the buyer has an incentive to attain the lowest price possible. A price

[33] Docket Nos. A-2022-3037047 et al., Joint Petition for Approval of Unanimous Settlement of All Issues (August 14, 2023), III. E. 21.

[34] As noted above, PAWC agreed in the BASA Settlement to use $228.0 million as the ratemaking rate base for the acquisition. Docket Nos. A-2022-3037047 et al., Joint Petition for Approval of Unanimous Settlement of All Issues (August 14, 2023), III. C. 19. g.

resulting from negotiations between sophisticated and informed parties conducted under such conditions may be presumed to represent a fair and genuine compromise.

However, perversely, the parties to BASA transaction struck me as having similar, if not identical, incentives, which was to attain as *high* a "negotiated" price as possible, so long as the acquisition price is approved for inclusion in rate base. In my opinion, a negotiated price arranged between parties that each have an incentive for the price to be as high as possible does not represent a fair and genuine compromise in a normal economic sense. Rather, the result of such an arrangement can be expected to be biased towards the upper end of plausible prices.

In the case of the seller, BASA, the incentive to obtain as high a price as possible is the normal economic incentive for a selling party, although one would expect that to be tempered somewhat by a concern for the impacts on its customers. The perverse incentive to attain a high acquisition price occurred for the buyer in this case, PAWC, which would be rewarded with an increase in rate base based on the acquisition price, so long as it does not exceed the fair market value of the assets as established by the required appraisals. Since the basic building block for a public utility to earn profits is the size of its rate base, PAWC was incentivized to attain as high an acquisition price as possible within this constraint. Indeed, that is exactly what occurred in this case, as the final negotiated price of $230.0 million is nearly 99% of the lesser of the appraised

values.[35] The stipulated rate base value of $228.0 million is 98% of the lesser of the appraised values.

In the absence of the normal economic incentive for PAWC to negotiate as low a price as possible for the BASA assets, the rate mitigation provision in the BASA Settlement takes on a critical role in assuring that customers are treated equitably. The rate impact cap of 1.4 times the current rates provides temporary relief for BASA customers from the full rate impact of the acquisition cost that PAWC negotiated. It is reasonable and appropriate for this temporary relief to be provided by PAWC's shareholders, not its water customers.

Q. HOW DOES YOUR ADJUSTMENT IMPACT PAWC'S REVENUE REQUIREMENT?

A. For the purposes of this case, I recommend setting the BASA-related revenue requirement increase at the 40% capped increase for BASA wastewater customers, or $4,735,610, with no Act 11 revenue shift to water customers. Considered in isolation, this adjustment would decrease PAWC's proposed revenue requirement by $21.6 million, which is equal to PAWC's proposed Act 11 revenue shift related to BASA. Taking account of my recommended revenue requirement adjustments described above, including my proxy ROE adjustment, the revenue requirement decrease from this adjustment is **$19,091,395,** which will limit the BASA-related revenue requirement increase to $4,735,610, with no Act 11 revenue shift.

[35] Based on BASA's utility valuation expert appraisal of $232,429,000. Docket Nos. A-2022-3037047 et al., Joint Petition for Approval of Unanimous Settlement of All Issues (August 14, 2023), Attachment 6, Proposed Findings of Fact, 39.

Q. IS YOUR RECOMMENDED ADJUSTMENT INTENDED TO BE A PERMANENT DISALLOWANCE OF A PORTION OF THE ACQUISITION COST?

A. No. I recognize that in approving the BASA Settlement, the Commission has allowed PAWC to include $228 million in rate base for the BASA acquisition. At the same time, the Commission has approved the BASA rate mitigation to which PAWC agreed, which limits the increase to BASA wastewater customers in this proceeding. My recommended revenue requirement adjustment related to BASA is intended to correspond to the period for which PAWC has committed to mitigate the rate impact on BASA wastewater customers and can be revisited in PAWC's next general rate case.

Brentwood Acquisition

Q. PLEASE EXPLAIN YOUR RECOMMENDATION CONCERNING THE BRENTWOOD ACQUISITION.

A. PAWC is proposing to recover the revenue requirement associated with the Brentwood acquisition from water customers that exceeds the targeted increase to Brentwood wastewater customers. In the Brentwood acquisition case, PAWC projected that the Brentwood acquisition would result in a revenue requirement increase of $664,000, of which $444,880 would be recovered from Brentwood wastewater customers. This represented an increase of 11.0% over current Brentwood wastewater revenues, including ALCOSAN charges.[36] In addition,

[36] Docket No. A-2021-3024058, Direct Testimony of Ashley E. Everette, p. 13, footnote 6; PAWC Exhibit AEE-1 (Revised), p. 3.

the Asset Purchase Agreement provides for a base "rate freeze" period for Brentwood customers for two years following the closing.[37] In the Brentwood acquisition case, PAWC projected that 33%, or $219,120, of the Brentwood-related revenue requirement increase would be allocated to water customers.[38]

In the current case, PAWC's proposed Brentwood-related revenue requirement increase is $1,934,637 (rather than $664,000). PAWC proposes to increase Brentwood wastewater rates by $369,405 (close to the $444,880 increase projected in the acquisition case) and to recover the remaining $1,565,232 as Act 11 revenue from water customers.[39]

Q. HOW DOES THE BRENTWOOD PURCHASE PRICE COMPARE TO THE NET BOOK VALUE OF THE ASSETS?

A. Similar to the BASA system, the Brentwood purchase price greatly exceeds the net book value of the assets. PAWC has agreed to pay $19.4 million for the Brentwood acquisition, which the Company proposes to add to rate base in this case.[40] The original cost of the assets as of June 30, 2024 is $10.1 million and the net book value is $7.4 million.[41] This means that the purchase price exceeds the original cost by $9.2 million and the net book value by $11.9 million.

Q. PLEASE EXPLAIN YOUR ADJUSTMENT FOR PAWC'S PROPOSED BRENTWOOD ACQUISITION.

[37] APA Section 7.03(a).
[38] Docket No. A-2021-3024058, PAWC Exhibit AEE-1 (Revised), p. 3.
[39] Volume 03, Exhibit No. 3-A. In this case, PAWC's proposed increase to Brentwood customers is presented as 20.3% over current revenues excluding ALCOSAN charges.
[40] Direct Testimony of E. Christopher Abruzzo, Esq. (PAWC Statement No. 6), p. 6.
[41] PAWC Exhibit 11-I 2024, Table 2. Net Book Value calculated as June 30, 2024 Original Cost minus Book Depreciation Reserve.

A. My recommendation in this case mirrors that which the OSBA recommended in the Brentwood acquisition docket, namely that if the Commission approves the rate freeze provision of the Brentwood acquisition, PAWC should be required to impute the revenues to its Brentwood service area to make up for any revenue shortfall associated with the two-year rate freeze. This ensures that general ratepayers do not bear the cost associated with PAWC's commitment to freeze Brentwood's rates.[42] In this case, I recommend that the incremental Brentwood revenue requirement that exceeds the targeted increase to Brentwood customers should be absorbed by shareholders rather than shifted to water customers.

Like my recommended BASA adjustment, my Brentwood adjustment should not be viewed as a permanent disallowance but rather a temporary mitigation of the cost shift from the acquisition on water customers.

Q. HOW DOES YOUR ADJUSTMENT IMPACT PAWC'S REVENUE REQUIREMENT?

A. For the purposes of this case, I recommend setting the Brentwood-related revenue requirement increase equal to the increase PAWC proposes for Brentwood wastewater customers, or $369,405, with no Act 11 revenue shift. Considered in isolation, this adjustment would decrease PAWC's proposed revenue requirement by $1.6 million, which is equal to PAWC's proposed Act 11 revenue shift related to Brentwood. Taking account of my recommended revenue requirement adjustments described above, including my proxy ROE adjustment, the revenue requirement decrease from this adjustment is **$1,309,219,** which will limit the

[42] Docket No. A-2021-3024058, Direct Testimony of Brian Kalcic (OSBA Statement No. 1), p. 7.

Brentwood-related revenue requirement increase to $369,405, with no Act 11 revenue shift.

Audubon Water Company Acquisition

Q. PLEASE EXPLAIN PAWC'S AUDUBON ACQUISITION ADJUSTMENT PROPOSAL.

A. Audubon is a privately owned water utility regulated by the Commission. PAWC is proposing to acquire Audubon's assets through a merger transaction valued at $8.0 million[43] even though the net book value of the Audubon assets is only $360,229 as of December 31, 2024.[44] PAWC proposes to amortize the difference between the purchase price and the net book value, $7,639,771, over ten years as a utility plant acquisition adjustment and to include the unamortized balance in rate base.[45]

Q. WHAT DO YOU RECOMMEND REGARDING THE AUDUBON ACQUISITION ADJUSTMENT?

A. The Audubon acquisition case is still before the Commission, but at this time, I find the great disparity between the net book value of the Audubon assets and the proposed acquisition price to be of great concern for customers. Therefore, I recommend against any recovery of Audubon acquisition adjustment costs in this rate case. Instead, PAWC's proposed Audubon acquisition adjustment

[43] Direct Testimony of E. Christopher Abruzzo, Esq. (PAWC Statement No. 6), pp. 11-12, 18.
[44] Volume 05, Exhibit No. 3-C, Plant Additions and Retirements by Month, p. 23. This amount is net of Contributions in Aid of Construction.
[45] Direct Testimony of Stacey D. Gress (PAWC Statement No. 4), p. 6; Volume 05, Exhibit 3-B, p. 341.

amortization expense and rate base should be removed from the revenue requirement.

Q. WHAT IS THE REVENUE REQUIREMENT IMPACT OF YOUR ADJUSTMENT?

A. This adjustment is presented in Schedule KCH-10. This adjustment decreases the FPFTY revenue requirement by approximately **$1,913,386**, the entirety of which is related to Water operations.[46] Additional details of this adjustment are provided in Schedule KCH-7.

CLASS COST OF SERVICE STUDIES

Q. DO YOU HAVE ANY RECOMMENDED ADJUSTMENTS TO PAWC'S COST-OF-SERVICE STUDIES?

A. Yes. I recommend that all costs associated with PAWC's proposed residential Arrearage Management Plan ("AMP")[47] and administrative costs associated with its residential low-income programs be directly assigned to the residential class.

Q. HOW DOES PAWC ALLOCATE THE COSTS OF ITS RESIDENTIAL LOW-INCOME PROGRAMS?

[46] This adjustment impact is calculated based on the information provided in PAWC's responses to OSBA 06-001, OSBA 06-001_Attachment and OSBA 06-002, OSBA 06-002_Attachment (included in Schedule KCH-10) and is calculated including my preceding recommended adjustments, including my proxy ROE adjustment. My adjustment removes the associated ADIT as originally filed by PAWC, which the Company has acknowledged contains an error. I further note that PAWC claims its acquisition adjustment amortization expense is tax deductible in response to OSBA 06-004 (included in Schedule KCH-10), yet its revenue requirement calculation in OSBA 06-001_Attachment does not reflect the tax deductibility of the amortization expense. My adjustment attempts to remove the associated revenue requirement as-filed based on PAWC's responses.

[47] Under the AMP, qualifying residential customers will receive $25 of arrearage forgiveness monthly. Direct Testimony of Ashley E. Everette (PAWC Statement No. 1), pp. 15-16.

A. The direct revenue shortfall from residential low-income discounts is recovered from the residential class in the Company's rate design. However, PAWC allocates $3,180,090 in AMP costs and administrative costs associated with its H2O Grant and Discount and Dollar Energy programs among both residential and non-residential customer classes in its cost-of-service studies.[48]

Specifically, PAWC allocates $2,031,317 for its proposed AMP and $416,569 in Dollar Energy administrative costs among its Water classes based on the historical incurrence of net charge offs (bad debt).[49] For wastewater, PAWC allocates a total of $345,883 in AMP expense and $70,931 in Dollar Energy administrative costs among classes within its four wastewater cost-of-service studies based on customer count.[50]

In addition, PAWC allocates $315,390 in administrative costs for its H2O Grant and Discount program among water customer classes using an operations & maintenance ("O&M") composite factor.[51]

Q. DID PAWC INTEND TO ALLOCATE THESE COSTS IN THIS MANNER?

A. It is unclear. In response to discovery, PAWC initially claimed that costs associated with its AMP are recovered in base rates from residential customers.[52]

[48] See Volume 04, Exhibit 3-B, page 336; PAWC responses to OSBA 01-005 and OSBA 03-002, included in Schedule KCH-10.
[49] See Volume 04, Exhibit 3-B, page 336; PAWC responses to OSBA 01-005 and OSBA 03-002, included in Schedule KCH-10. Exhibit 12-A under Proposed Rates
[50] Exhibit 12-B, 12-C, 12-D, and 12-E under Proposed Rates.
[51] Exhibit 12-A under Proposed Rates.
[52] PAWC response to OCA 11-028, included in Schedule KCH-10.

However, the Company later acknowledged that these costs are not directly assigned to the residential class in its cost-of-service study.[53]

Q. WHAT DO YOU RECOMMEND REGARDING RESIDENTIAL AMP AND LOW-INCOME PROGRAM ADMINISTRATIVE COSTS?

A. I recommend that these costs be directly assigned to the residential class since these programs are designed to benefit residential customers.

Q. ARE THERE ANY POTENTIAL OFFSETS TO YOUR AMP ALLOCATION RECOMMENDATION IN THIS CASE?

A. Yes. PAWC has recorded a regulatory liability of $3,091,875 through June 30, 2024, associated with the AMP expense claimed in its last base rate case, Docket No. R-2022-3031672, since the AMP has not yet been implemented. This liability was recorded pursuant to the settlement in the AMP case, Docket No. P-2021-3028195. The Company proposes to refund this amount through amortization expense over two years.[54]

In the last rate case, the OSBA recommended the AMP expense be directly assigned to the residential class, which was subsequently accepted by PAWC.[55] Although the settlement in that case did not adopt a specific cost allocation approach, I recommend that the accrued liability associated with the AMP be directly credited to the residential class in order to be consistent with my recommended allocation of AMP expense.

[53] PAWC response to OSBA 03-002, included in Schedule KCH-10.
[54] Direct Testimony of Stacey D. Gress (PAWC Statement No. 4), p. 27.
[55] Docket No. R-2022-3031672, Recommended Decision (November 8, 2022), III. Findings of Fact 39-40, pp. 15-16.

Q. DO YOU PRESENT YOUR COST-OF-SERVICE RESULTS INCLUDING YOUR RECOMMENDED AMP AND LOW-INCOME PROGRAM ADMINISTRATIVE COST ALLOCATION?

A. Yes. These results are summarized in Schedule KCH-8, pages 1 through 5, for Water, WW SSS, WW CSS, Brentwood, and BASA, respectively.[56]

ACT 11 REVENUE ALLOCATION

Q. HOW DOES PAWC PROPOSE TO ALLOCATE ACT 11 REVENUE AMONG WATER CUSTOMER CLASSES IN THIS CASE?

A. PAWC's approach has evolved throughout this case. In Exhibit 12-A, Schedule A, PAWC spread the Act 11 revenue responsibility among its water classes but did not demonstrate how these amounts were derived. In response to discovery, PAWC provided a corrected allocation of Act 11 revenue among water classes that is based on the corresponding wastewater classes that give rise to the Act 11 revenue shortfall.[57]

Q. WHAT DO YOU RECOMMEND REGARDING THE ALLOCATION OF ACT 11 REVENUE AMONG WATER CLASSES?

A. To the extent that the Commission approves the recovery of a portion of the wastewater revenue requirement from water customers in this case, I recommend that the allocation of Act 11 cost responsibility to water customers should

[56] PAWC provided corrected versions of its CCOSS for WW SSS (Exhibit 12-B) and Brentwood (Exhibit 12-D) in response to OSBA 04-011. In addition, PAWC provided updated versions of its CCOSS for WW CSS (Exhibit 12-C) and BASA (Exhibit 12-E) in response to OSBA 04-016 and OSBA 04-012, respectively. These responses are the basis for my CCOSS analysis and PAWC's narrative responses are included in Schedule KCH-10.

[57] PAWC response to OSBA 03-001, OSBA 03-001_Attachment, included in Schedule KCH-10.

correspond to the wastewater classes that create the revenue shortfall. For example, the revenue shortfall that is caused by residential wastewater rates being set below residential wastewater costs should be allocated to the residential water class.

This allocation exercise is complicated by the fact that PAWC's non-residential water classes do not match the non-residential class categories used in each of its wastewater systems. However, the Act 11 allocation approach offered in PAWC response to OSBA 03-001 represents a reasonable estimation of this allocation by class. I recommend that this approach be adopted in this case, incorporating the adjustments to revenue requirement and cost allocation that I described above.

Q. HAVE YOU CALCULATED THIS REALLOCATION OF ACT 11 REVENUE?

A. Yes. This is shown in Schedule KCH-8, page 1 at PAWC's proposed revenue requirement and Act 11 revenue level, and in Schedule KCH-9, page 2 at OSBA's recommended revenue requirement and Act 11 revenue level.

REVENUE ALLOCATION

Q. PLEASE DESCRIBE PAWC'S PROPOSED REVENUE ALLOCATION AMONG WATER CUSTOMER CLASSES.

A. PAWC presents its proposed revenue allocation in Exhibit 12-A, Schedule A. As shown in this Schedule, PAWC proposes increases for the Residential, Commercial, Industrial, and Public Fire Protection classes that are close to or

somewhat above the proposed system average increase. PAWC proposes significantly below-average increases for the Public (Municipal) and Private Fire Protection classes.[58]

Q. WHAT IS YOUR RECOMMENDATION REGARDING WATER REVENUE ALLOCATION?

A. I recommend adopting a revenue allocation among water customer classes that will improve alignment with cost of service. Specifically, at PAWC's proposed revenue requirement, I recommend that the Commercial class increase be reduced by $5.3 million in order to equal its cost-based increase, including its allocation of Act 11 revenue. Concomitantly, I recommend a $5.3 million greater increase to the Public (Municipal) class, which will still result in this class receiving a significant subsidy relative to cost. My recommended revenue allocation for water customer classes is shown in Schedule KCH-9, page 1, at PAWC's proposed revenue requirement.

Q. DID OSBA ASK PAWC TO EXPLAIN WHY ITS PROPOSED INCREASE TO THE PUBLIC CLASS IS SIGNFICANTLY BELOW COST?

A. Yes. In response to discovery, PAWC indicated, "the Company reviewed the proposed increase in comparison to the cost of service and determined that a larger increase than proposed may be warranted."[59]

Q. HOW DO THE WATER RATES OF THE COMMERCIAL CLASS COMPARE TO THE PUBLIC CLASS?

[58] PAWC's proposes a below-average increase for the Other Water Utilities – Group A class and an above-average increase for the Other Water Utilities – Group B class. These classes are small and thus do not have a significant impact on the overall cost recovery.
[59] PAWC response to OSBA 03-004, included in Schedule KCH-10.

A. For Rate Zone 1 (comprising the bulk of customers), the Commercial and Municipal customer charges are the same, varying by meter size. The current average usage charge for the Commercial class is significantly greater than for the Public class. Based on PAWC's 6/30/25 billing determinants, the current average Rate Zone 1 base usage rates per 100 gallons are $1.2643 for the Commercial class and $0.9910 for the Public class.[60]

Q. WOULD THE WATER RATES FOR THE PUBLIC CLASS STILL BE LOWER THAN FOR THE COMMERCIAL CLASS UNDER YOUR RECOMMENDED REVENUE ALLOCATION?

A. Yes. While I am not advocating for a particular rate design for the Public class, at PAWC's proposed revenue requirement (and assuming PAWC's proposed Commercial and Public customer charges are adopted), the average Rate Zone 1 usage rates per 100 gallons under my proposed revenue allocation would be $1.6407 for the Commercial class and $1.4844 for the Public class.

Q. WHAT REVENUE ALLOCATION DO YOU RECOMMEND IF THE COMMISSION APPROVES A LOWER REVENUE REQUIREMENT THAN REQUESTED BY PAWC?

A. If the Commission approves a lower revenue requirement increase than proposed by PAWC, I recommend that the decrease be applied principally to the water rates. So long as the cost-based wastewater increase associated with the approved revenue requirement is greater than PAWC's proposed wastewater rates, the incremental revenue requirement reduction should not reduce PAWC's proposed

[60] Derived from Exhibit 10-A Water Operations.

wastewater rates. This means that a lower revenue requirement will reduce Act 11 revenues and PAWC's proposed water rates generally.

At a lower revenue requirement, I recommend scaling each water class's revenues in proportion to each class's share of the total proposed non-Act 11 revenues in my revenue allocation from Schedule KCH-9, page 1, which I calculated at PAWC's requested revenue requirement. I also recommend that each applicable water class be allocated its share of the Act 11 revenue consistent with the allocation approach described in the prior section of my testimony. I present OSBA's recommended water revenue allocation, at OSBA's recommended revenue requirement, in Schedule KCH-9, page 2.

REVENUE DECOUPLING

Q. PLEASE DESCRIBE PAWC'S REVENUE DECOUPLING PROPOSAL.

A. PAWC is requesting approval of a Revenue Decoupling Mechanism ("RDM") for both water and wastewater service in this proceeding. If approved, PAWC would use the RDM to compare the difference between actual revenue collected from eligible customers under the rates approved in this case against hypothetical revenues that would have been recovered using a Straight Fixed Variable ("SFV") rate design. If actual revenues are greater than would have been collected under the RDM formula, PAWC indicates that it intends to credit the difference to customers in the subsequent year through the mechanism. If actual revenues are less than would have been collected under the RDM formula, PAWC states that it

intends to collect the difference from customers in the subsequent year through the mechanism.[61]

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE RDM?

A. I recommend that the RDM proposal be rejected.

Q. PLEASE EXPLAIN YOUR REASONING.

A. Fundamentally, customers do not have an obligation to backstop a utility's fixed cost recovery in between general rate cases. Mechanisms to provide such broad "revenue assurance" to utilities shift the risks associated with changes in consumption for any and all reasons, including weather and economic conditions, from shareholders to customers, even though shareholders are compensated for accepting such risks in the utility's approved return on equity.

In the specific case of PAWC, an RDM is particularly concerning given the Company's aggressive acquisition of other utilities at prices well above net book value. As is evident in this rate case, such acquisitions add to rate base and put upward pressure on rates separate and apart from the cost pressures associated with investing in needed system improvements. It is in the public interest for PAWC shareholders to bear the risk in between rate cases that customers will reduce their water consumption in response to PAWC's rate increases. A negative price response from customers should be one of the factors that PAWC takes into account when the Company contemplates the acquisition of another water or wastewater company at a substantial premium above net book value that

[61] Direct Testimony of Charles Rea (PAWC Statement No. 10), pp. 89-97.

puts upward pressure on PAWC customers' rates. It would be counterproductive to shield PAWC from this risk through the adoption of the RDM proposal.

Q. ASIDE FROM THESE GENERAL CONCERNS, DO YOU HAVE OTHER CONCERNS SPECIFIC TO PAWC'S RDM PROPOSAL?

A. Yes. PAWC's proposed RDM would apply to all customers, excluding those taking service under special contracts. While I recommend rejection of the RDM for *all* customers, the Company's proposal is particularly problematic for non-residential customers. The RDM formula proposed by PAWC attempts to reflect all non-residential revenues through a single SFV rate design irrespective of customer size or type of usage. Non-residential customers are not homogenous; they range from "mom and pop" retail stores to golf courses to industrial operations. Average usage for non-residential customers will be sensitive not only to the consumption patterns of the existing set of customers, but also to changes in the composition of the group. Under PAWC's proposal, the loss in revenue from the shutdown of a large industrial customer will immediately be shifted to all other non-residential customers through the RDM deferral calculation.

Thus, while the logic of targeting "revenues per customer" may be defensible when dealing with classes that have large numbers of similarly sized customers within the class, such a target makes little sense for classes populated by a broad range of heterogeneous customers. Revenues per customer in such classes are susceptible to change simply by a change in the composition of the customers in the group, irrespective of whether customers are modifying their

own water consumption. Further, changes in revenues per customer for commercial and industrial customers will be particularly sensitive to changes in economic activity. Clearly, PAWC's RDM proposal would have its customers backstop the normal economic risks that should be assigned to its shareholders.

Q. ARE YOU AWARE OF ANY ATTEMPTS TO INCLUDE NON-RESIDENTIAL CUSTOMERS IN A DECOUPLING MECHANISM THAT RESULTED IN FAILURE?

A. Yes. I am most familiar with these mechanisms in the context of electric utilities. Although many jurisdictions in my experience wisely exclude non-residential customers from revenue decoupling mechanisms, Michigan did not. In 2009, Detroit Edison in Michigan proposed an RDM that was applicable to all non-residential customers. I strongly opposed the proposal, arguing that Detroit Edison's proposal was fraught with peril, and should be rejected for many of the same reasons I argue in this case:

> Although I am recommending against adoption of any part of the proposal, I wish to emphasize the particular inappropriateness of its application to non-residential customers. Whereas decoupling mechanisms for residential customers can target metrics such as average usage per customer, there is no reasonable "common denominator" for setting a decoupling baseline for non-residential customers. Detroit Edison's attempt to use a target revenue requirement for this purpose creates problems far greater than the "utility disincentive problem" it is attempting to solve.[62]

Although the Proposed Decision by the Administrative Law Judge agreed with the thrust of my arguments,[63] the final Commission Order adopted a version of

[62] Michigan Public Service Commission, Case No. U-15768, Direct Testimony of Kevin C. Higgins, p. 13.
[63] Michigan Public Service Commission, Case Nos. U-15768 and U-15751, Notice of Proposal for Decision, PP. 97, 101. (November 10, 2009).

revenue decoupling that targeted average usage per customer for non-residential customers that I and others had warned against.[64]

Just nine months after issuance of that order, Detroit Edison realized that the adoption of a broad-based decoupling mechanism targeting average usage per customer for non-residential customers had been a big mistake. In the words of Detroit Edison's witness in that subsequent case:

> Based on our experience, it is clear that Edison's current RDM does not meet the requirements of a well designed RDM. Edison's current RDM is highly sensitive to changes in the number of customers, *particularly relative to Commercial and Industrial (C&I) customer classe*s, which have far fewer absolute numbers of customers than the residential class. More specifically, *small changes in numbers of customers, due to such things as plant closing, customer additions, migration among customer classes*, including migration to Electric Choice, and the like, *have a huge impact on changes in average use per customer*. As I indicated earlier, this is particularly true for the C&I customer classes which tend to have relatively low customer counts and high average electric use per customer.[65]

Q. BASED ON YOUR EXPERIENCE, WHAT DO YOU RECOMMEND IF A VERSION OF THE RDM IS ADOPTED?

A. While my primary recommendation is that the RDM should be rejected, if the Commission elects to approve a version of the RDM, it should exclude all non-residential customers.

Q. DO YOU HAVE ANY OTHER CONCERNS SPECIFIC TO PAWC'S RDM PROPOSAL?

[64] Michigan Public Service Commission, Case Nos. U-15768 and U-15751, Opinion and Order, pp. 61-68 (January 11, 2010).
[65] Michigan Public Service Commission, Case No. U-16472, Direct Testimony of Don M. Stanczak, p. 15 (emphasis added).

A. Yes, I believe that the RDM formula PAWC has proposed will have the opposite effect of what is intended. Instead of accruing revenue when actual revenues fall short of the SFV calculation, as PAWC intends, the formula proposed by PAWC will produce a negative value in such a situation, suggesting a credit to customers. Conversely, instead of calculating a negative value (or credit) when actual revenues exceed the SFV calculation, PAWC's formula will produce a positive value, indicating a charge.

Q. PLEASE EXPLAIN FURTHER.

A. For example, the RDM formula proposed by PAWC for non-residential customers is:

NON Acc = NONREV – (VC * NONUSE) – (NC * NRCUST)

Where: NON Acc = amount of non-residential revenue to be accrued
NONREV = Total revenue in the month from non-residential customers, excluding revenues from adjustments
VC = Volumetric Charge
NONUSE = Number of 100-gallon units sold to non-residential customers
NC = Non-Residential Fixed Charge
NRCUST = Average number of non-residential customers for the month [66]

Effectively, PAWC proposes to calculate the monthly revenue accrual by subtracting its monthly SFV target revenue [(VC * NONUSE) + (NC * NRCUST)] from its monthly actual revenue. It is intuitive that if the actual monthly revenue falls short of the SFV target, this formula will produce a negative deferral, *i.e.*, a *credit* to customers, which is the opposite of the additional charge that PAWC intends.

[66] Direct Testimony of Charles Rea (PAWC Statement No. 10), p. 93. *See also*, Supplement No. 45 to Tariff Water-PA P.U.C. No. 5.

What I believe PAWC intends is to subtract the monthly actual revenue from the monthly SFV target revenue [(VC * NONUSE) + (NC * NRCUST) – NONREV], *i.e.*, to reverse the sequence of the components. With this formulation, if the actual monthly revenue falls short of the SFV target, the calculation will produce a positive deferral, which I understand to be PAWC's intention.

Q. DID YOU ATTEMPT TO CLARIFY THIS QUESTION WITH PAWC?

A. Yes. OSBA queried PAWC about the proposed formula and asked PAWC to consider whether the formula was producing results that were opposite of what was intended. To ensure clarification, OSBA asked PAWC to illustrate how the Water Non-Residential RDM adjustment would be calculated, assuming that: (a) PAWC's proposed Non-Residential rates are approved, (b) Non-Residential 100-gallon units are 5% lower than those used to design rates in this case, and (c) customer counts do not change from those used to design rates in this case.

Q. HOW DID PAWC RESPOND?

A. PAWC failed to respond in a meaningful or cogent way. First, PAWC obfuscated the issue by stating:

> The adjustment amount is not dependent on whether sales increase or decrease from those used to design rates in this case. The RDM calculates an adjustment based on the difference between actual revenues and revenues that would result from a straight fixed-variable rate design.[67]

While I agree with the second sentence in this response, the first sentence makes little sense. Contrary to what the first sentence states, if sales decrease because usage-per-customer has declined below what was anticipated when rates were set,

[67] PAWC response to OSBA 04-017.b, which is included in Schedule KCH-10.

the RDM adjustment amount is very much implicated. Indeed, addressing such situations is the stated purpose of the RDM, as explained in Mr. Rea's testimony:

> Seasonal weather conditions can cause *water sales to either increase or decrease* from expected going-forward levels, which, in turn, causes revenues to increase or decrease from expected going-forward levels.[68]
>
> Continuing trends in declining use per customer in the residential, commercial, and municipal classes also cause volatility in revenues. I have previously testified to both the impact of weather conditions on annual water sales and on the continuing trends in declining use and the associated *impact of declining use on water sales*. The Company expects that water consumption per customer will continue to decline over the next several years. Both of these conditions cause declines in revenues and both total consumption on a per customer basis and revenue on a per customer basis are expected to continue to decline well beyond the period of time for which rates are set in this case.[69]

Secondly, PAWC refused to provide the illustration OSBA requested, claiming incongruously that:

> The Company cannot make the requested calculation based on the scenario provided as the scenario is not detailed enough to develop a meaningful calculation. As stated in b), The RDM calculates an adjustment based on the difference between actual revenues and revenues that would result from a straight fixed-variable rate design. Sales being higher or lower than levels approved in the case is not a relevant factor.[70]

Thus, PAWC declined to take the opportunity to provide a clarification in response to discovery. Its discovery response was unhelpful in supporting the RDM formula it is proposing to use.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS CONCERNING PAWC'S RDM PROPOSAL.

[68] Direct Testimony of Charles Rea (PAWC Statement No. 10), p. 87. Emphasis added.
[69] *Id*., pp. 87-88. Emphasis added.
[70] PAWC response to OSBA 04-017.d, which is included in Schedule KCH-10

A. I recommend that the Commission reject PAWC's RDM proposal for the reasons stated in my testimony. If, however, the Commission elects to adopt a version of the RDM proposal, I recommend that non-residential customers be excluded from the mechanism. Finally, I note that the formula PAWC proposes to use to calculate the RDM adjustment appears to have an error that would cause the calculation to have the opposite effect of the Company's stated intent. PAWC was not cooperative when asked to clarify this issue through the discovery process.

ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE ("ECIC")

Q. PLEASE DESCRIBE PAWC'S PROPOSED ECIC.

A. PAWC is proposing to implement an ECIC to recover the costs of complying with government-mandated environmental standards between rate cases. The proposed ECIC would allow for recovery of capital costs and incremental O&M expenses for projects and activities included in an annual environmental compliance plan that is subject to Commission approval.[71]

The ECIC is designed as a percentage surcharge, calculated separately for water and wastewater, to be updated quarterly for the costs incurred in a preceding period, beginning November 1, 2025.[72]

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE ECIC?

[71] Direct Testimony of J. Cas Swiz (PAWC Statement No. 8), pp. 21-22.
[72] Supplement No. 45 to Tariff - Water – PA PUC No. 5, pages 40.2 through 40.5; Supplemental No. 47 to Tariff – Wastewater – PA PUC No. 16, pages 19 through 19.3.

A. I recommend that the proposed ECIC be rejected. While I recognize the importance of compliance with environmental regulations, cost recovery is best addressed in the context of a general rate case.

The proposed ECIC is a classic example of single-issue ratemaking. Single-issue ratemaking occurs when utility rates are adjusted, or costs are deferred, in response to a change in a single cost item considered in isolation. It ignores the multitude of other factors that otherwise influence rates, some of which could, if properly considered, move rates in the opposite direction from the single-issue change. Setting rates based on a single cost item runs contrary to the basic principles of traditional utility regulation. When regulatory commissions determine the appropriateness of a rate or charge that a utility seeks to impose on its customers, the standard practice is to review and consider all relevant factors, rather than just a single factor. To consider some costs in isolation might cause a commission to allow a utility to increase rates (or defer costs) to recover higher expenses in one area without recognizing counterbalancing savings in another area, or vice versa. For these reasons, single-issue ratemaking, absent a compelling public interest, is generally not sound regulatory practice.

DEFERRED ACCOUNTING FOR PRODUCTION EXPENSES

Q. WHAT ACCOUNTING TREATMENT IS PAWC REQUESTING FOR ITS PRODUCTION EXPENSES?

A. PAWC is requesting deferred accounting treatment for its production expenses. In accordance with this request, PAWC would maintain separate regulatory asset

and liability accounts for each production expense category, including (1) Purchased Water and Wastewater Treatment, (2) Fuel & Power, (3) Chemicals, and (4) Waste Disposal. Beginning the first month after rates are in effect in this proceeding, the Company would record the difference between the expense authorized in this case and the actual expense. If the actual expense is lower than the authorized amount in rates, a regulatory liability would be set up to record the difference. If the actual expense is higher than the authorized amount in rates, a regulatory asset would be recorded. At the time of its next rate case, the Company would present the net amount in these accounts for return to the customers (in the case of a net credit amount or regulatory liability) or for collection in rates (in the case of a net debit amount or regulatory asset) over a reasonable amortization period.[73]

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE REQUESTED DEFERRED ACCOUNTING TREATMENT FOR PRODUCTION EXPENSES?

A. I recommend that the requested deferred accounting treatment be denied. Ratemaking is not intended to be a simple exercise in expense reimbursement. Rates are set with the expectation that utility management will run the business as efficiently as possible, while providing safe and reliable service to customers and meeting its other regulatory responsibilities. In so doing, the Company is given the opportunity to achieve or exceed its authorized return to its shareholders. As part of this arrangement, utility management should be expected to cope with normal

[73] Direct Testimony of J. Cas Swiz (PAWC Statement No. 8), pp. 19-20.

business risks and the operation of economic forces, without resorting to single-issue ratemaking, such as the requested deferred accounting treatment, except in circumstances of compelling public interest.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

OSBA Revenue Requirement Adjustment Impact Summary

Line No.		Total Company		Water Operations		Wastewater SSS General Op.	
		Adjustment Impact	Increase	Adjustment Impact	Increase	Adjustment Impact	Increase
1	**PAWC As-Filed Revenue Req. Increase**		$203,945,911		$128,149,690		$31,793,150
2	**OSBA Recommended Adjustments**						
3	Annual Performance Plan Expense	($5,153,394)	$198,792,517	($4,597,034)	$123,552,656	($235,832)	$31,557,318
4	Long Term Performance Plan Expense	($5,230,156)	$193,562,362	($4,899,767)	$118,652,889	($140,063)	$31,417,254
5	Employee Stock Purchase Plan Expense	($457,009)	$193,105,353	($422,185)	$118,230,705	($16,760)	$31,400,494
6	Service Co. Executive Retirement Plan	($35,106)	$193,070,247	($33,492)	$118,197,212	($1,046)	$31,399,448
7	External Board Expense	($126,792)	$192,943,455	($120,953)	$118,076,260	($3,778)	$31,395,670
8	Proxy Return on Equity	($61,540,957)	$131,402,498	($48,087,598)	$69,988,662	($6,275,122)	$25,120,548
9	BASA Mitigation Adjustment	($19,091,395)	$112,311,103	$0	$69,988,662	$0	$25,120,548
10	Brentwood Mitigation Adjustment	($1,309,219)	$111,001,884	$0	$69,988,662	$0	$25,120,548
11	Audubon Water Acquisition Adjustment	($1,913,386)	$109,088,498	($1,913,386)	$68,075,276	$0	$25,120,548
12	Total OSBA Adjustments	($94,857,413)	$109,088,498	($60,074,414)	$68,075,276	($6,672,602)	$25,120,548

		BASA Wastewater Op.		Brentwood Wastewater Op.		CSS Wastewater Op.	
		Adjustment Impact	Increase	Adjustment Impact	Increase	Adjustment Impact	Increase
13	**PAWC As-Filed Revenue Req. Increase**		$26,288,308		$1,934,637		$15,780,126
14	**OSBA Recommended Adjustments**						
15	Annual Performance Plan Expense	($127,579)	$26,160,729	($17,090)	$1,917,547	($175,859)	$15,604,267
16	Long Term Performance Plan Expense	($92,987)	$26,067,742	($25,040)	$1,892,508	($72,299)	$15,531,968
17	Employee Stock Purchase Plan Expense	($3,163)	$26,064,579	($769)	$1,891,739	($14,132)	$15,517,837
18	Service Co. Executive Retirement Plan	$0	$26,064,579	$0	$1,891,739	($568)	$15,517,269
19	External Board Expense	$0	$26,064,579	$0	$1,891,739	($2,061)	$15,515,208
20	Proxy Return on Equity	($2,237,574)	$23,827,005	($213,115)	$1,678,624	($4,727,548)	$10,787,660
21	BASA Mitigation Adjustment	($19,091,395)	$4,735,610	$0	$1,678,624	$0	$10,787,660
22	Brentwood Mitigation Adjustment	$0	$4,735,610	($1,309,219)	$369,405	$0	$10,787,660
23	Audubon Water Acquisition Adjustment	$0	$4,735,610	$0	$369,405	$0	$10,787,660
24	Total OSBA Adjustments	($21,552,698)	$4,735,610	($1,565,232)	$369,405	($4,992,466)	$10,787,660

WATER OPERATIONS - OSBA ADJUSTED FPFTY INCOME STATEMENT

	Income Statement with OSBA Adjustments			Impact of OSBA Adjustments		
DESCRIPTION	6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT
Operating Revenue	$824,117,186	$68,075,276	$892,192,462	$0	($60,074,414)	($60,074,414)
Operating Revenue Deductions:						
Operating Expenses	$247,672,339	$800,565	$248,472,904	($9,152,235)	($706,475)	($9,858,710)
Depreciation	$212,799,798	$0	$212,799,798	$0	$0	$0
Amortizations	($2,863,439)	$0	($2,863,439)	($763,977)	$0	($763,977)
Taxes, Other Than Income:						
Local Property And Miscellaneous	$2,073,365	$0	$2,073,365	$0	$0	$0
Federal Environmental Tax	$0	$0	$0	$0	$0	$0
Public Utility Realty Taxes	$2,126,732	$0	$2,126,732	$0	$0	$0
Payroll Taxes	$4,401,701	$0	$4,401,701	($632,297)	$0	($632,297)
General Assessment	$5,164,137	$429,113	$5,593,250	$0	($380,846)	($380,846)
Other Taxes and Licenses	$0	$0	$0	$0	$0	$0
Total Taxes Other Than Income	$13,765,935	$429,113	$14,195,048	($632,297)	($380,846)	($1,013,143)
Utility Operating Income Before Income Taxes	**$352,742,553**	**$66,845,598**	**$419,588,151**	**$10,548,509**	**($58,987,093)**	**($48,438,584)**
Income Taxes:						
State Income Tax	$14,145,083	$5,341,344	$19,486,427	$798,063	($4,713,404)	($3,915,341)
Federal Income Tax	$35,798,894	$12,916,894	$48,715,788	$1,929,944	($11,398,354)	($9,468,410)
Amortization Of ITC & Excess Deferred Taxes	($233,592)	$0	($233,592)	$0	$0	$0
Total Income Taxes	$49,710,385	$18,258,238	$67,968,623	$2,728,007	($16,111,758)	($13,383,751)
Total Operating Revenue Deductions	$521,085,018	$19,487,916	$540,572,934	($7,820,502)	($17,199,079)	($25,019,581)
Utility Operating Income	**$303,032,168**	**$48,587,360**	**$351,619,528**	**$7,820,502**	**($42,875,335)**	**($35,054,833)**
Income Deductions:						
Interest On Long Term Debt	$98,120,229	($4,767)	$98,115,462	($203,736)	$4,184	($199,552)
Amortization Of Debt Discount Expense	$0	$0	$0	$0	$0	$0
Interest On Notes Payable To Others	$0	$0	$0	$0	$0	$0
Total Income Deductions	$98,120,229	($4,767)	$98,115,462	($203,736)	$4,184	($199,552)
Net Income	**$204,911,939**	**$48,592,127**	**$253,504,066**	**$8,024,238**	**($42,879,519)**	**($34,855,281)**
Preferred Dividends	$0		$0	$0		$0
Net Income To Common	**$204,911,939**		**$253,504,066**	**$8,024,238**		**($34,855,281)**

WASTEWATER SSS GENERAL OPERATIONS - OSBA ADJUSTED FPFTY INCOME STATEMENT

	Income Statement with OSBA Adjustments			Impact of OSBA Adjustments		
DESCRIPTION	6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT
Operating Revenue	$95,470,867	$25,120,548	$120,591,415	$0	($6,672,602)	($6,672,602)
Operating Revenue Deductions:						
Operating Expenses	$25,648,666	$295,418	$25,944,084	($360,586)	($78,470)	($439,056)
Depreciation	$27,482,122	$0	$27,482,122	$0	$0	$0
Amortizations	($75,633)	$0	($75,633)	$0	$0	$0
Taxes, Other Than Income:						
Local Property And Miscellaneous	$2,227,703	$0	$2,227,703	$0	$0	$0
Federal Environmental Tax	$0	$0	$0	$0	$0	$0
Public Utility Realty Taxes	$0	$0	$0	$0	$0	$0
Payroll Taxes	$366,083	$0	$366,083	($25,442)	$0	($25,442)
General Assessment	$598,699	$159,253	$757,952	$0	($42,301)	($42,301)
Other Taxes and Licenses	$0	$0	$0	$0	$0	$0
Total Taxes Other Than Income	$3,192,485	$159,253	$3,351,738	($25,442)	($42,301)	($67,743)
Utility Operating Income Before Income Taxes	**$39,223,226**	**$24,665,877**	**$63,889,103**	**$386,027**	**($6,551,831)**	**($6,165,804)**
Income Taxes:						
State Income Tax	$2,937,421	$1,970,947	$4,908,368	$30,918	($523,529)	($492,611)
Federal Income Tax	$7,139,489	$4,766,313	$11,905,802	$74,769	($1,266,044)	($1,191,275)
Amortization Of ITC & Excess Deferred Taxes	$0	$0	$0	$0	$0	$0
Total Income Taxes	$10,076,910	$6,737,260	$16,814,170	$105,687	($1,789,573)	($1,683,886)
Total Operating Revenue Deductions	$66,324,551	$7,191,931	$73,516,482	($280,340)	($1,910,344)	($2,190,684)
Utility Operating Income	**$29,146,316**	**$17,928,617**	**$47,074,933**	**$280,340**	**($4,762,258)**	**($4,481,918)**
Income Deductions:						
Interest On Long Term Debt	$13,182,680	($1,699)	$13,180,981	($882)	$451	($431)
Amortization Of Debt Discount Expense	$0	$0	$0	$0	$0	$0
Interest On Notes Payable To Others	$779,272	($101)	$779,171	($52)	$26	($26)
Total Income Deductions	$13,961,952	($1,800)	$13,960,152	($934)	$477	($457)
Net Income	**$15,184,364**	**$17,930,417**	**$33,114,781**	**$281,274**	**($4,762,735)**	**($4,481,461)**
Preferred Dividends	$0		$0	$0		$0
Net Income To Common	**$15,184,364**	**$0**	**$33,114,781**	**$281,274**		**($4,481,461)**

BASA WASTEWATER OPERATIONS - OSBA ADJUSTED FPFTY INCOME STATEMENT

	Income Statement with OSBA Adjustments			Impact of OSBA Adjustments		
DESCRIPTION	6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT
Operating Revenue [1]	$30,810,490	$4,735,610	$35,546,100	$18,963,088	($21,552,698)	($2,589,610)
Operating Revenue Deductions:						
Operating Expenses	$6,619,955	$55,691	$6,675,646	$19,767	($253,460)	($233,693)
Depreciation	$5,091,752	$0	$5,091,752	$0	$0	$0
Amortizations	$120,264	$0	$120,264	$0	$0	$0
Taxes, Other Than Income:						
Local Property And Miscellaneous	$589,414	$0	$589,414	$0	$0	$0
Federal Environmental Tax	$0	$0	$0	$0	$0	$0
Public Utility Realty Taxes	$0	$0	$0	$0	$0	$0
Payroll Taxes	$176,089	$0	$176,089	($14,954)	$0	($14,954)
General Assessment	$75,107	$30,023	$105,130	$0	($136,635)	($136,635)
Other Taxes and Licenses	$0	$0	$0	$0	$0	$0
Total Taxes Other Than Income	$840,610	$30,023	$870,633	($14,954)	($136,635)	($151,589)
Utility Operating Income Before Income Taxes	**$18,137,909**	**$4,649,896**	**$22,787,805**	**$18,958,275**	**($21,162,603)**	**($2,204,328)**
Income Taxes:						
State Income Tax	$1,371,144	$371,554	$1,742,698	$1,515,010	($1,691,015)	($176,005)
Federal Income Tax	$3,365,245	$898,523	$4,263,768	$3,663,727	($4,089,358)	($425,631)
Amortization Of ITC & Excess Deferred Taxes	$0	$0	$0	$0	$0	$0
Total Income Taxes	$4,736,389	$1,270,077	$6,006,466	$5,178,737	($5,780,373)	($601,636)
Total Operating Revenue Deductions	$17,408,970	$1,355,791	$18,764,761	$5,183,550	($6,170,468)	($986,918)
Utility Operating Income	**$13,401,520**	**$3,379,819**	**$16,781,339**	**$13,779,538**	**($15,382,230)**	**($1,602,692)**
Income Deductions:						
Interest On Long Term Debt	$4,699,095	($320)	$4,698,775	($2,882)	$1,458	($1,424)
Amortization Of Debt Discount Expense	$0	$0	$0	$0	$0	$0
Interest On Notes Payable To Others	$277,779	($19)	$277,760	($170)	$86	($84)
Total Income Deductions	$4,976,874	($339)	$4,976,535	($3,052)	$1,544	($1,508)
Net Income	**$8,424,646**	**$3,380,158**	**$11,804,804**	**$13,782,590**	**($15,383,774)**	**($1,601,184)**
Preferred Dividends	$0		$0	$0		$0
Net Income To Common	**$8,424,646**	**$0**	**$11,804,804**	**$13,782,590**		**($1,601,184)**

Note: 1. OSBA's BASA Mitigation adjustment is effectuated by revenue imputation.

BRENTWOOD WASTEWATER OPERATIONS - OSBA ADJUSTED FPFTY INCOME STATEMENT

	Income Statement with OSBA Adjustments			Impact of OSBA Adjustments		
DESCRIPTION	6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT
Operating Revenue [1]	$3,133,454	$369,405	$3,502,859	$1,309,263	($1,565,232)	($255,969)
Operating Revenue Deductions:						
Operating Expenses	$778,256	$4,345	$782,601	($23,629)	($18,407)	($42,036)
Depreciation	$455,389	$0	$455,389	$0	$0	$0
Amortizations	$70,194	$0	$70,194	$0	$0	$0
Taxes, Other Than Income:						
Local Property And Miscellaneous	$35,268	$0	$35,268	$0	$0	$0
Federal Environmental Tax	$0	$0	$0	$0	$0	$0
Public Utility Realty Taxes	$0	$0	$0	$0	$0	$0
Payroll Taxes	$3,252	$0	$3,252	($2,832)	$0	($2,832)
General Assessment	$19,906	$2,343	$22,249	$8,341	($9,922)	($1,581)
Other Taxes and Licenses	$0	$0	$0	$0	$0	$0
Total Taxes Other Than Income	$58,426	$2,343	$60,769	$5,509	($9,922)	($4,413)
Utility Operating Income Before Income Taxes	**$1,771,188**	**$362,717**	**$2,133,905**	**$1,327,382**	**($1,536,903)**	**($209,521)**
Income Taxes:						
State Income Tax	$124,397	$28,983	$153,380	$106,070	($122,807)	($16,737)
Federal Income Tax	$311,660	$70,090	$381,750	$256,507	($296,983)	($40,476)
Amortization Of ITC & Excess Deferred Taxes	$0	$0	$0	$0	$0	$0
Total Income Taxes	$436,057	$99,073	$535,130	$362,577	($419,790)	($57,213)
Total Operating Revenue Deductions	$1,798,323	$105,761	$1,904,084	$344,458	($448,119)	($103,661)
Utility Operating Income	**$1,335,131**	**$263,644**	**$1,598,775**	**$964,805**	**($1,117,113)**	**($152,308)**
Income Deductions:						
Interest On Long Term Debt	$447,681	($24)	$447,657	($145)	$107	($38)
Amortization Of Debt Discount Expense	$0	$0	$0	$0	$0	$0
Interest On Notes Payable To Others	$26,464	($2)	$26,462	($8)	$5	($3)
Total Income Deductions	$474,145	($26)	$474,119	($153)	$112	($41)
Net Income	**$860,986**	**$263,670**	**$1,124,656**	**$964,958**	**($1,117,225)**	**($152,267)**
Preferred Dividends	$0		$0	$0		$0
Net Income To Common	**$860,986**	**$0**	**$1,124,656**	**$964,958**		**($152,267)**

Note: 1. OSBA's Brentwood Mitigation adjustment is effectuated by revenue imputation.

WASTEWATER COMBINED SEWER SYSTEM OPERATIONS - OSBA ADJUSTED FPFTY INCOME STATEMENT

	Income Statement with OSBA Adjustments			Impact of OSBA Adjustments		
DESCRIPTION	6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT	6/30/25 AMOUNT	RATE INCREASE	PROPOSED RATES AMOUNT
Operating Revenue	$78,636,216	$10,787,660	$89,423,876	$0	($4,992,466)	($4,992,466)
Operating Revenue Deductions:						
Operating Expenses	$21,197,711	$126,863	$21,324,574	($240,816)	($58,711)	($299,527)
Depreciation	$20,500,959	$0	$20,500,959	$0	$0	$0
Amortizations	($3,943)	$0	($3,943)	$0	$0	$0
Taxes, Other Than Income:						
Local Property And Miscellaneous	$1,198,060	$0	$1,198,060	$0	$0	$0
Federal Environmental Tax	$0	$0	$0	$0	$0	$0
Public Utility Realty Taxes	$0	$0	$0	$0	$0	$0
Payroll Taxes	$518,240	$0	$518,240	($16,898)	$0	($16,898)
General Assessment	$497,945	$68,388	$566,333	$0	($31,652)	($31,652)
Other Taxes and Licenses	$0	$0	$0	$0	$0	$0
Total Taxes Other Than Income	$2,214,245	$68,388	$2,282,633	($16,898)	($31,652)	($48,550)
Utility Operating Income Before Income Taxes	**$34,727,244**	**$10,592,409**	**$45,319,653**	**$257,714**	**($4,902,103)**	**($4,644,389)**
Income Taxes:						
State Income Tax	$2,004,682	$846,395	$2,851,077	$20,634	($391,707)	($371,073)
Federal Income Tax	$4,956,475	$2,046,826	$7,003,301	$49,898	($947,257)	($897,359)
Amortization Of ITC & Excess Deferred Taxes	$0	$0	$0	$0	$0	$0
Total Income Taxes	$6,961,157	$2,893,221	$9,854,378	$70,532	($1,338,964)	($1,268,432)
Total Operating Revenue Deductions	$50,870,129	$3,088,472	$53,958,601	($187,182)	($1,429,327)	($1,616,509)
Utility Operating Income	**$27,766,087**	**$7,699,188**	**$35,465,275**	**$187,182**	**($3,563,139)**	**($3,375,957)**
Income Deductions:						
Interest On Long Term Debt	$9,931,007	($730)	$9,930,277	($501)	$337	($164)
Amortization Of Debt Discount Expense	$0	$0	$0	$0	$0	$0
Interest On Notes Payable To Others	$587,055	($44)	$587,011	($29)	$19	($10)
Total Income Deductions	$10,518,062	($774)	$10,517,288	($530)	$356	($174)
Net Income	**$17,248,025**	**$7,699,962**	**$24,947,987**	**$187,712**	**($3,563,495)**	**($3,375,783)**
Preferred Dividends	$0		$0	$0		$0
Net Income To Common	**$17,248,025**	**$0**	**$24,947,987**	**$187,712**		**($3,375,783)**

OSBA Annual Performance Plan Expense Adjustment

Total [1]				
	FPFTY 6/30/2025 AMOUNT			Payroll Tax Estimate (FICA + Medicare)
	50%			
	PAWC Proposed	**OSBA Recommended**	**OSBA Adj.**	**OSBA Payroll Tax Adj.**
PAWC APP Expense	$4,909,951	$2,454,976	($2,454,976)	($184,534)
PAWC APP Expense (Acquisition O&M)	$191,259	$95,630	($95,630)	($7,292)
Allocated Service Co. APP Expense	$4,086,046	$2,043,023	($2,043,023)	($153,368)
Service Co. APP Expense for Acquisitions	$130,632	$65,316	($65,316)	($4,982)
Total	$9,317,888	$4,658,944	($4,658,944)	($350,176)

Water Operations				
	FPFTY 6/30/2025 AMOUNT			
	PAWC Proposed	**OSBA Recommended**	**OSBA Adj.**	**OSBA Payroll Tax Adj.**
				7.50%
PAWC APP Expense	$4,363,442	$2,181,721	($2,181,721)	($163,630)
Farmington Water PAWC APP (Acquisition)	$1,391	$695	($695)	($52)
Audubon Water PAWC APP (Acquisition)	$30,701	$15,351	($15,351)	($1,151)
Allocated Service Co. APP Expense	$3,898,088	$1,949,044	($1,949,044)	($146,179)
Farmington Water Service Co. APP (Acquisition)	$2,647	$1,324	($1,324)	($99)
Audubon Water Service Co. APP (Acquisition)	$16,810	$8,405	($8,405)	($630)
Total	$8,313,079	$4,156,540	($4,156,540)	($311,742)

Wastewater SSS				
	FPFTY 6/30/2025 AMOUNT			
	PAWC Proposed	**OSBA Recommended**	**OSBA Adj.**	**OSBA Payroll Tax Adj.**
				7.65%
PAWC APP Expense	$294,045	$147,023	($147,023)	($11,247)
Farmington WW PAWC APP (Acquisition)	$4,280	$2,140	($2,140)	($164)
Allocated Service Co. APP Expense	$122,581	$61,291	($61,291)	($4,689)
Farmington WW Service Co. APP (Acquisition)	$2,647	$1,324	($1,324)	($101)
Sadsbury WW Service Co. APP (Acquisition)	$1,441	$720	($720)	($55)
Total	$424,994	$212,497	($212,497)	($16,256)

Wastewater CSS				
	FPFTY 6/30/2025 AMOUNT			
	PAWC Proposed	**OSBA Recommended**	**OSBA Adj.**	**OSBA Payroll Tax Adj.**
PAWC APP Expense	$252,464	$126,232	($126,232)	($9,657)
Allocated Service Co. APP Expense	$65,377	$32,689	($32,689)	($2,501)
Total	$317,841	$158,921	($158,921)	($12,157)

BASA WW Operations				
	FPFTY 6/30/2025 AMOUNT			
	PAWC Proposed	**OSBA Recommended**	**OSBA Adj.**	**OSBA Payroll Tax Adj.**
PAWC APP Expense (Acquisition)	$146,650	$73,325	($73,325)	($5,609)
Allocated Service Co. APP (Acquisition)	$84,364	$42,182	($42,182)	($3,227)
Total	$231,014	$115,507	($115,507)	($8,836)

Brentwood WW Operations				
	FPFTY 6/30/2025 AMOUNT			
	PAWC Proposed	**OSBA Recommended**	**OSBA Adj.**	**OSBA Payroll Tax Adj.**
PAWC APP Expense (Acquisition)	$8,237	$4,118	($4,118)	($315)
Allocated Service Co. APP (Acquisition)	$22,722	$11,361	($11,361)	($869)
Total	$30,959	$15,479	($15,479)	($1,184)

Data Sources:
1. PAWC Response to OSBA 04-002_Attachment.

OSBA Long Term Performance Plan Adjustment

Total [1]				
	FPFTY 6/30/2025 AMOUNT			Payroll Tax Estimate (FICA + Medicare)
				7.23%
	PAWC Proposed	**OSBA Recommended**	**OSBA Adj.**	**OSBA Payroll Tax Adj.**
PAWC LTPP Expense	$504,666	$0	($504,666)	($36,475)
Allocated Service Co. LTPP Expense	$4,099,590	$0	($4,099,590)	($296,299)
Service Co. LTPP Expense for Acquisitions	$131,065	$0	($131,065)	($9,473)
Total	$4,735,321	$0	($4,735,321)	($342,247)

Water Operations				
	FPFTY 6/30/2025 AMOUNT			
	PAWC Proposed	**OSBA Recommended**	**OSBA Adj.**	**OSBA Payroll Tax Adj.**
PAWC LTPP Expense	$504,666	$0	($504,666)	($36,475)
Allocated Service Co. LTPP Expense	$3,911,009	$0	($3,911,009)	($282,670)
Farmington Water Service Co. LTPP (Acquisition)	$2,656	$0	($2,656)	($192)
Audubon Water Service Co. LTPP (Acquisition)	$16,866	$0	($16,866)	($1,219)
Total	$4,435,197	$0	($4,435,197)	($320,555)

Wastewater SSS				
	FPFTY 6/30/2025 AMOUNT			
	PAWC Proposed	**OSBA Recommended**	**OSBA Adj.**	**OSBA Payroll Tax Adj.**
Allocated Service Co. LTPP Expense	$122,988	$0	($122,988)	($8,889)
Farmington WW Service Co. LTPP (Acquisition)	$2,656	$0	($2,656)	($192)
Sadsbury WW Service Co. LTPP (Acquisition)	$1,446	$0	($1,446)	($105)
Total	$127,090	$0	($127,090)	($9,185)

Wastewater CSS				
	FPFTY 6/30/2025 AMOUNT			
	PAWC Proposed	**OSBA Recommended**	**OSBA Adj.**	**OSBA Payroll Tax Adj.**
Allocated Service Co. LTPP Expense	$65,593	$0	($65,593)	($4,741)
Total	$65,593	$0	($65,593)	($4,741)

BASA WW Operations				
	FPFTY 6/30/2025 AMOUNT			
	PAWC Proposed	**OSBA Recommended**	**OSBA Adj.**	**OSBA Payroll Tax Adj.**
Allocated Service Co. LTPP (Acquisition)	$84,644	$0	($84,644)	($6,118)
Total	$84,644	$0	($84,644)	($6,118)

Brentwood WW Operations				
	FPFTY 6/30/2025 AMOUNT			
	PAWC Proposed	**OSBA Recommended**	**OSBA Adj.**	**OSBA Payroll Tax Adj.**
Allocated Service Co. LTPP (Acquisition)	$22,797	$0	($22,797)	($1,648)
Total	$22,797	$0	($22,797)	($1,648)

Data Sources:
1. PAWC Response to OSBA 04-002_Attachment.

OSBA Employee Stock Purchase Plan Expense Adjustment

Total			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
PAWC ESPP Expense [1]	$304,915	$0	($304,915)
Allocated Service Co. ESPP Expense [2]	$134,729	$0	($134,729)
PAWC ESPP Expense for Acquisitions [2]	$306	$0	($306)
Service Co. ESPP Expense for Acquisitions [2]	$4,307	$0	($4,307)
Total	$444,258	$0	($444,258)

Water Operations			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
PAWC ESPP Expense [1]	$281,209	$0	($281,209)
Allocated Service Co. ESPP Expense [2]	$128,521	$0	($128,521)
Farmington Water ESPP (Acquisition) [2]	$87	$0	($87)
Audubon Water ESPP (Acquisition) [2]	$554	$0	($554)
Total	$410,372	$0	($410,372)

Wastewater SSS			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
PAWC ESPP Expense [1]	$12,153	$0	($12,153)
Allocated Service Co. ESPP Expense [2]	$4,018	$0	($4,018)
Farmington WW ESPP (Acquisition) [2]	$87	$0	($87)
Sadsbury WW ESPP (Acquisition) [2]	$48	$0	($48)
Total	$16,305	$0	($16,305)

Wastewater CSS			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
PAWC ESPP Expense [1]	$11,553	$0	($11,553)
Allocated Service Co. ESPP Expense [2]	$2,191	$0	($2,191)
Total	$13,744	$0	($13,744)

BASA WW Operations			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
PAWC ESPP Expense [1]	$306	$0	($306)
Allocated Service Co. ESPP (Acquisition) [2]	$2,782	$0	($2,782)
Total	$3,088	$0	($3,088)

Brentwood WW Operations			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
PAWC ESPP Expense [1]	$0	$0	$0
Allocated Service Co. ESPP (Acquisition) [2]	$749	$0	($749)
Total	$749	$0	($749)

Data Sources:
1. Exhibit No. 3-B, p. 130; "4g 401K DCP Expense."
2. PAWC Response to OSBA 04-007, OSBA 04-007_Attachment.

OSBA Executive Retirement Plan Expense Adjustment

Total			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
Remove Allocated Service Co. ERP Expense [1]	$34,129	$0	($34,129)

Water Operations			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
Remove Allocated Service Co. ERP Expense [2]	$32,556	$0	($32,556)

Wastewater SSS			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
Remove Allocated Service Co. ERP Expense [2]	$1,018	$0	($1,018)

Wastewater CSS			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
Remove Allocated Service Co. ERP Expense [2]	$555	$0	($555)

Data Source:

1. PAWC Responses to OCA 15-013, OCA 09-039 Attachment 1.
2. Allocated between operations based on the method used in "4p Service Company Costs."

OSBA External Board Expense Adjustment

Total			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
Remove Allocated Service Co. ERP Expense [1]	$123,250	$0	($123,250)

Water Operations			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
Remove Allocated Service Co. ERP Expense [2]	$117,571	$0	($117,571)

Wastewater SSS			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
Remove Allocated Service Co. ERP Expense [2]	$3,675	$0	($3,675)

Wastewater CSS			
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
Remove Allocated Service Co. ERP Expense [2]	$2,004	$0	($2,004)

Data Source:

1. PAWC Response to OCA 22-003.
2. Allocated between operations based on the method used in "4p Service Company Costs."

OSBA Adjustment to Audubon Water Acquisition Adjustment

	Water Operations		
	FPFTY 6/30/2025 AMOUNT		
	PAWC Proposed	OSBA Recommended	OSBA Adj.
Adjustments to Amortization Expense:			
Audubon Water Acquisition Adj. Amortization Exp [1]	$763,977	$0	($763,977)
Adjustment to Rate Base:			
Audubon Water Acquisition Adj. Regulatory Asset [2]	$6,939,459	$0	($6,939,459)
Audubon Water Acquisition ADIT [3]	$1,776,548	$0	($1,776,548)

Data Sources:
1. PAWC Electronic Files (3A-3B-3C) - Operating Expenses - 4u Amortization Expense.
2. PAWC Electronic Files (3A-3B-3C) - Rate Base - 3n Acquisition Adjustments.
3. PAWC response to OSBA 06-002 Attachment.
PAWC indicates in response to OSBA 06-002 that its as-filed ADIT amount was erroneous and will be corrected in rebuttal. This adjustment removes the ADIT as originally included in PAWC's revenue requirement study.

WATER OPERATIONS
OSBA CLASS COST OF SERVICE STUDY RESULTS
AT PAWC'S REQUESTED REVENUE REQUIREMENT
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

	OSBA Adjusted Cost of Service at PAWC Proposed Revenue Requirement as of June 30, 2025				Pro Forma Revenues Under Present Rates		OSBA Adjusted Increase at Equalized COS + Act 11 Revenue		Impact of OSBA COS Allocation Compared to PAWC's Exhibit 12-A, Schedule A as of June 30, 2025		
Customer Classification	Cost of Service [1]	Allocation of Other COS [2]	Total Amount	Percent of Total	Amount	Percent of Total	$	%	Cost of Service	Allocation of Other COS*	Total Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Residential	$ 603,485,092	$ 45,721,582	$ 649,206,674	64.6%	$ 528,290,043	65.5%	$ 120,916,631	22.9%	$ 359,037	$ (783,991)	$ (424,954)
Commercial	231,685,578	17,644,620	249,330,197	24.8%	202,779,636	25.1%	46,550,561	23.0%	(429,458)	(675,533)	(1,104,991)
Industrial	45,152,785	4,255,818	49,408,602	4.9%	37,580,738	4.7%	11,827,864	31.5%	37,153	316,642	353,795
Public (Municipal)	35,212,242	2,681,680	37,893,922	3.8%	22,559,539	2.8%	15,334,383	68.0%	36,783	1,046,440	1,083,223
Other Water Utilities - Group A	11,351		11,351	0.0%	51,822	0.0%	(40,471)	-78.1%	16	-	16
Other Water Utilities - Group B	625,570		625,570	0.1%	202,436	0.0%	423,133	209.0%	861	-	861
Private Fire Protection	5,756,777	438,422	6,195,200	0.6%	5,301,032	0.7%	894,168	16.9%	(20,848)	96,432	75,584
Public Fire Protection	11,863,927	-	11,863,927	1.2%	9,519,368	1.2%	2,344,560	24.6%	16,456	-	16,456
Total Sales of Water	$ 933,793,321	$ 70,742,121	$ 1,004,535,443	100.0%	$ 806,284,614	100.0%	$ 198,250,829	24.6%	$ -	$ (11)	$ (11)
Other Water Revenues	$ 10,675,369	345,262	11,020,631		10,034,383		986,248	9.8%	$ -	-	-
Contract Sales - Industrial	4,482,099		4,482,099		4,482,099		-	0.0%	-	-	-
Contract Sales - Resale	3,316,086		3,316,086		3,316,086		0	0.0%	-	-	-
Total	$ 952,266,876	$ 71,087,383	$ 1,023,354,259		$ 824,117,182		199,237,077	24.2%	$ -	$ (11)	$ (11)

Data Sources:

1. OSBA workpaper: Water CCCOS (12-A)- OSBA Direct WP, Sch A.
2. Includes unrecovered Wastewater Cost of Service (i.e., Act 11 revenue). Based on OSBA Act 11 WP.

WASTEWATER SANITARY SEWER SYSTEM GENERAL OPERATIONS
OSBA CLASS COST OF SERVICE STUDY RESULTS
AT PAWC'S REQUESTED REVENUE REQUIREMENT
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Customer Classification	OSBA Adjusted Cost of Service at PAWC Proposed Rev. Req. [1] $	% of Total	Revenues, Present Rates $	% of Total	OSBA Adjusted Increase at Equalized COS $	%	Impact of OSBA Cost Allocation [2] $
(1)	(2)	(3)	(4)	(5)			
Residential	$ 71,095,386	57.3%	$ 62,061,414	67.3%	$ 9,033,972	14.6%	$ (7,090)
Non-Residential	26,856,451	21.7%	19,828,485	21.5%	7,027,966	35.4%	(13,848)
Large Industrial	1,370,038	1.1%	903,713	1.0%	466,325	51.6%	1,229
Bulk Users/VA Hospital	2,239,585	1.8%	2,019,421	2.2%	220,164	10.9%	1,677
Bulk Users - Contract	22,461,501	18.1%	7,425,108	8.0%	15,036,393	202.5%	18,033
Total Sales	124,022,960	100.0%	92,238,141	100.0%	31,784,819	34.5%	(0)
Other Revenue + IPP Surcharge	3,241,057		3,232,725		8,332	0.3%	0
Total	127,264,017		95,470,866		31,793,151	33.3%	(0)

Data Sources:
1. OSBA workpaper: "Wastewater SSS CCOSS (12-B Corrected)- OSBA Direct WP," Sch-D COS, row 141 (COS) less rows 143-144 (Other Rev, IPP Surcharge).
2. Column (2) to compared to PAWC's response to OSBA 04-011, OSBA 04-011_Attachment 1, Sch-D COS, row 139 (cost of service)

WASTEWATER COMBINED SEWER SYSTEM OPERATIONS
OSBA CLASS COST OF SERVICE STUDY RESULTS
AT PAWC'S REQUESTED REVENUE REQUIREMENT
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Customer Classification	OSBA Adjusted Cost of Service at PAWC Proposed Rev. Req. [1] $	% of Total	Revenues, Present Rates $	% of Total	OSBA Adjusted Increase at Equalized COS $	%	Impact of OSBA Cost Allocation [2] $
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Residential	$ 52,897,409	56.4%	46,175,290	59.2%	6,722,119	14.6%	$ 20,562
Non-Residential	29,370,884	31.3%	21,188,954	27.2%	8,181,930	38.6%	$ (25,324)
Industrial	4,500,508	4.8%	2,268,788	2.9%	2,231,720	98.4%	$ 3,270
Bulk	6,974,175	7.4%	8,329,819	10.7%	(1,355,644)	-16.3%	$ 1,492
Total Sales	93,742,976	100.0%	77,962,851	100.0%	15,780,125	20.2%	$ 0
Other Revenue + IPP Surcharge	673,366		673,371		(4)	0.0%	$ -
Total	94,416,343		78,636,222		15,780,121	20.1%	$ 0

Data Sources:
1. OSBA workpaper: Wastewater CSS CCOSS (12-C)- OSBA Direct WP,
Sch C, row 139 (cost of service) plus row 148 (CSO Stormwater reallocation) less rows 141-142 (Other Rev, IPP Surcharge).
2. Column (2) compared to PAWC Exhibit 12-C under Proposed Rates,
Sch C, row 137 (cost of service) plus row 146 (CSO Stormwater reallocation) less rows 139-140 (Other Rev, IPP Surcharge).

WASTEWATER SEWER SANITARY SYSTEM BRENTWOOD OPERATIONS
OSBA CLASS COST OF SERVICE STUDY RESULTS
AT PAWC'S REQUESTED REVENUE REQUIREMENT
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Customer Classification	OSBA Adjusted Cost of Service at PAWC Proposed Rev. Req. [1]		Revenues, Present Rates		OSBA Adjusted Increase at Equalized COS		Impact of OSBA Cost Allocation [2]
	$	% of Total	$	%	$	%	$
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Residential	$ 2,960,583	79.0%	$ 1,434,460	79.0%	$ 1,526,123	106.4%	$ 1,673
Non-Residential	787,273	21.0%	380,607	21.0%	406,666	106.8%	(1,673)
Total Sales	3,747,856	100.0%	1,815,067	100.0%	1,932,789	106.5%	0
Other Revenue	10,972		9,124		1,848	20.3%	0
Total	3,758,828		1,824,191		1,934,636	106.1%	0

Data Sources:
1. OSBA workpaper: Wastewater SSS Brentwood CCOSS (12-D Corrected)- OSBA Direct WP, Sch D COS, row 79 (cost of service) less row 81 (Misc Rev.)
2. Column (2) compared to OSBA 04-011, OSBA 04-011_Attachment 2, Sch-D COS, row 78 (cost of service) less row 80 (Misc. Rev.)

WASTEWATER SEWER SANITARY SYSTEM BUTLER AREA OPERATIONS
OSBA CLASS COST OF SERVICE STUDY RESULTS
AT PAWC'S REQUESTED REVENUE REQUIREMENT
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Customer Classification	OSBA Adjusted Cost of Service at PAWC Proposed Rev. Req. [1]		Revenues, Present Rates		OSBA Adjusted Increase at Equalized COS		Impact of OSBA Cost Allocation [2]
	$	% of Total	$	%	$	%	$
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Residential	$ 30,290,814	79.6%	$ 8,694,030	73.8%	$ 21,596,784	248.4%	$ 6,915
Non-Residential	7,753,492	20.4%	3,085,655	26.2%	4,667,837	151.3%	(6,915)
Total Sales	38,044,307	100.0%	11,779,685	100.0%	26,264,622	223.0%	(0)
Misc Revenue	91,403		67,716		23,687	35.0%	0
Total	38,135,710		11,847,401		26,288,309	221.9%	(0)

Data Sources:
1. OSBA workpaper: Wastewater SSS Butler CCOSS (12-E)- OSBA Direct WP,
Sch D - COS, row 93 (cost of service) less row 95 (Misc. Rev.).
2. Column (2) compared to PAWC Exhibit 12-E under Proposed Rates,
Sch D - COS, row 92 (cost of service) less row 94 (Misc. Rev.).

WATER OPERATIONS
OSBA CLASS COST OF SERVICE STUDY RESULTS AND RECOMMENDED REVENUE ALLOCATION
AT PAWC'S REQUESTED REVENUE REQUIREMENT
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

	OSBA Cost of Service at PAWC Proposed Rev. Req. as of June 30, 2025				Pro Forma Revenues Under Present Rates		Increase at Equalized COS + Act 11 Revenue		Pro Forma Revenues Under Proposed Rates		Proposed Increase	
Customer Classification	Cost of Service [1]	Allocation of Other COS [2]	Total Amount	Percent of Total	Amount	Percent of Total	$	%	Amount	Percent of Total	$	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Residential	$ 603,485,092	$ 45,721,582	$ 649,206,674	64.6%	$ 528,290,043	65.5%	$ 120,916,631	22.9%	$ 657,085,231	65.4%	$ 128,795,188	24.4%
Commercial	231,685,578	17,644,620	249,330,197	24.8%	202,779,636	25.1%	46,550,561	23.0%	249,330,197	24.8%	46,550,561	23.0%
Industrial	45,152,785	4,255,818	49,408,602	4.9%	37,580,738	4.7%	11,827,864	31.5%	48,143,784	4.8%	10,563,046	28.1%
Public (Municipal)	35,212,242	2,681,680	37,893,922	3.8%	22,559,539	2.8%	15,334,383	68.0%	31,483,730	3.1%	8,924,191	39.6%
Other Water Utilities - Group A	11,351	-	11,351	0.0%	51,822	0.0%	(40,471)	-78.1%	53,666	0.0%	1,844	3.6%
Other Water Utilities - Group B	625,570	-	625,570	0.1%	202,436	0.0%	423,133	209.0%	277,021	0.0%	74,585	36.8%
Private Fire Protection	5,756,777	438,422	6,195,200	0.6%	5,301,032	0.7%	894,168	16.9%	6,304,285	0.6%	1,003,253	18.9%
Public Fire Protection	11,863,927	-	11,863,927	1.2%	9,519,368	1.2%	2,344,560	24.6%	11,847,068	1.2%	2,327,700	24.5%
Total Sales of Water	$ 933,793,321	$ 70,742,121	$ 1,004,535,443	100.0%	$ 806,284,614	100.0%	$ 198,250,829	24.6%	$ 1,004,524,983	100.0%	$ 198,240,369	24.6%
Other Water Revenues	10,675,369	345,262	11,020,631		10,034,383		986,248	9.8%	11,031,091		996,708	9.9%
Contract Sales - Industrial	4,482,099	-	4,482,099		4,482,099		-	0.0%	4,482,099		-	0.0%
Contract Sales - Resale	3,316,086	-	3,316,086		3,316,086		0	0.0%	3,316,086		0	0.0%
Total	$ 952,266,876	$ 71,087,383	$ 1,023,354,259		$ 824,117,182		199,237,077	24.2%	$ 1,023,354,259		$ 199,237,077	24.2%

Data Sources:

WATER OPERATIONS
OSBA CLASS COST OF SERVICE STUDY RESULTS AND RECOMMENDED REVENUE ALLOCATION
AT OSBA'S RECOMMENDED REVENUE REQUIREMENT
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

	OSBA Cost of Service - Scaled to OSBA Rev. Req. as of June 30, 2025				Pro Forma Revenues Under Present Rates		Increase at Equalized COS + Act 11 Revenue		Pro Forma Revenues Under Proposed Rates		Proposed Increase	
Customer Classification	Cost of Service [1]	Allocation of Other COS [2]	Total Amount	Percent of Total	Amount	Percent of Total	$	%	Amount	Percent of Total	$	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Residential	$ 564,855,811	$ 18,598,689	$ 583,454,500	64.1%	$ 528,290,043	65.5%	$ 55,164,457	10.4%	$ 590,835,158	64.9%	$ 62,545,115	11.8%
Commercial	216,855,307	12,165,681	229,020,988	25.2%	202,779,636	25.1%	26,241,352	12.9%	229,023,417	25.2%	26,243,781	12.9%
Industrial	42,262,540	3,207,164	45,469,704	5.0%	37,580,738	4.7%	7,888,966	21.0%	44,286,308	4.9%	6,705,570	17.8%
Public (Municipal)	32,958,294	1,848,975	34,807,270	3.8%	22,559,539	2.8%	12,247,731	54.3%	28,807,698	3.2%	6,248,159	27.7%
Other Water Utilities - Group A	10,624		10,624	0.0%	51,822	0.0%	(41,198)	-79.5%	50,231	0.0%	(1,591)	-3.1%
Other Water Utilities - Group B	585,527		585,527	0.1%	202,436	0.0%	383,090	189.2%	259,292	0.0%	56,855	28.1%
Private Fire Protection	5,388,284	302,285	5,690,569	0.6%	5,301,032	0.7%	389,537	7.3%	5,792,734	0.6%	491,702	9.3%
Public Fire Protection	11,104,513	-	11,104,513	1.2%	9,519,368	1.2%	1,585,146	16.7%	11,088,857	1.2%	1,569,489	16.5%
Total Sales of Water	$ 874,020,901	$ 36,122,794	$ 910,143,695	100.0%	$ 806,284,614	100.0%	$ 103,859,081	12.9%	$ 910,143,695	100.0%	$ 103,859,081	12.9%
Other Water Revenues	$ 10,373,375	181,589	10,554,964		10,034,383		520,581	5.2%	10,554,964		520,581	5.2%
Contract Sales - Industrial	4,482,099		4,482,099		4,482,099		-	0.0%	4,482,099		-	0.0%
Contract Sales - Resale	3,316,086		3,316,086		3,316,086		0	0.0%	3,316,086		0	0.0%
Total	$ 892,192,462	$ 36,304,383	$ 928,496,845		$ 824,117,182		104,379,663	12.7%	$ 928,496,845		$ 104,379,663	12.7%

Data Sources:

Docket Nos. R-2023-3043189
R-2023-3043190

SCHEDULE KCH-10

Pennsylvania-American Water Company's
Responses to
OSBA, OCA and I&E Data Requests
(With Select Attachments)

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 1

OSBA 01-005

Responsible Witness: Charles Rea, Senior Director of Rates and Regulatory

Question:

Please provide a detailed breakdown of the total amount of the Company's pro forma FPFTY test year cost claim for each of its low-income residential customer assistance programs for water service. Identify the line item(s) in the Company's WCOSS wherein such low-income customer assistance costs are recovered.

Response:

The total discounts assumed for rate making purposes under proposed rates and the Company's proposed low-income discount tariff for water service by zone are as follows:

Rate Zone 1:	$15,864,342
Rate Zone 2:	$4,712
Rate Zone 4:	$2,467
Rate Zone 6:	$52,100

These costs do not appear as a line item in the Company's WCOSS. These amounts are offsets to proposed rate revenues and reallocated back to the residential class for the purposes of rate design. Please see excel file Exhibit 10-A_Water Operations CONFIDENTIAL (WTR Res).

The total costs associated with the H2O grant and discount programs for water and wastewater services are below. The costs are charged to account 636.8 – Contract Services – Other – Admin & General and not allocated to wastewater on the Company's books.

H2O Grant and Discount Programs	FPFTY
Monthly Fees for Service	$219,225
Amortization of Funding & Operating Fees	77,579
Utility Admin Fees	18,211
Accruals	375
Total	$315,390

Please refer to Volume 04, Exhibit 3-B, page 336, for the costs associated with the Arrearage Management Plan and Low Income Program included in Water Operations for the FPFTY.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 3

OSBA 03-001

Responsible Witness: Charles Rea, Senior Director of Rates and Regulatory

Question:

Reference the Attachment provided in the Company's response to OSBA-I-018.

a. Please reconcile the totals shown in the Act 11 column of the referenced attachment with the Act 11 subsidies shown in Exhibit 3-A, page A, by wastewater operating division.
b. Please provide a detailed derivation of all figures shown in lines 9-12 of the referenced attachment. Include an electronic copy of all workpapers.

Response:

a-b. Please see OSBA 03-001_Attachment for a corrected calculation of Act 11 revenues shown in Exhibit 3-A, page A, by wastewater operating division and customer class, including the derivation of all figures sourced to the applicable revenue and cost of service exhibits for each operating division. The data originally provided in OSBA-01-018 was not correct and did not tie to Exhibit 3-A, Page A.

Pennsylvania-American Water Company
Act 11 Water Allocation Worksheet - BASA
OSBA 03-001_Attachment

BASA Act 11

Total Revenue Requirement	$	38,135,710	BASA Cost of Service - Total Cost of Service
BASA WW Total Revenue	$	16,583,011	Exhibit 10-E
Total Act 11	$	21,552,699	
Residential Cost of Service	$	30,356,662	BASA Cost of Service - Residential Cost of Service
Residential Proposed Revenue	$	12,170,706	Exhibit 10-E
Residential Act 11	$	18,185,956	
Nonresidential Act 11	$	3,366,743	

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 3

OSBA 03-002

Responsible Witnesses: Charles Rea, Senior Director of Rates and Regulatory
Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Reference the Company's response to OSBA-I-005.

a. Please confirm that the additional pro forma uncollectible expense associated with the Company's Arrearage Management Plan ("AMP") program is $2.377 million. If incorrect, please explain.
b. Please confirm that the water service portion ($2.031 million) of the additional pro forma uncollectible expense associated with the Company's AMP program is included in the line labeled Account 670.7 – Bad Debt on Schedule D, page 3 of 6, in PAWC's WCOSS (Exhibit 12-A). If incorrect, please explain where such costs are included.
c. Please confirm that the additional pro forma uncollectible expense associated with the Company's AMP program is not directly assigned to the Residential class in PAWC's WCOSS. If incorrect, please explain.
d. Please confirm that the annual administrative costs associated with the Dollar Energy Costs program, in the amount of $487,500, is separate from/in addition to the administrative costs associated with the Company's H2O Grant and Discount Programs, which total $315,390. If incorrect, please explain.

Response:

a. Yes, the additional pro forma uncollectible expense associated with the Company's AMP program is $2.377 million.
b. Yes, the water service portion of the additional pro forma uncollectible expense associated with the Company's AMP program is included in Account 670.7 – Bad Debt on Schedule D in PAWC's WCOSS (Exhibit 12-A).
c. Yes, the pro forma uncollectible expense associated with the Company's AMP program is not directly assigned to the Residential class in PAWC's WCOSS.
d. Yes, the annual administrative costs associated with the Dollar Energy Costs program are separate from/in addition to the administrative costs associated with the Company's H2O Grant and Discount Programs.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 3

OSBA 03-004

Responsible Witness: Charles Rea, Senior Director of Rates and Regulatory

Question:

Reference Schedule A of Exhibit No. 12-A. Please explain in detail why the Company is proposing to limit the increase to the Public (Municipal) class to 16.2%, with the result that proposed Public revenues would remain ($36.8 m. minus $26.2 m. or) $10.6 m. below the Company's adjusted class cost-of-service benchmark.

Response:

In response to this data request, the Company reviewed the proposed increase in comparison to the cost of service and determined that a larger increase than proposed may be warranted.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 4

OSBA 04-002

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Please refer to "4c Compensation Adjustment," "4p Service Company Costs," and "4q Acquisition O&M" (Initial Filing – Excel Files – Volume 03-04-05 [Exhibit 3-A, 3-B, 3-C] – Operating Expenses) and PAWC's responses to OCA 09-009 and OCA 09-010.

a. Please reconcile the 6/30/24 and 6/30/25 Annualized Performance Plan amounts shown in "4c Compensation Adjustment" with the 2024 Performance Pay – Forecasted and the 2025 Performance Pay – Forecasted shown in PAWC's response to OCA 09-009.

b. Are the Service Company performance pay amounts shown in OCA 09-010_Attachment included in the "4c Compensation Adjustment?" If so, please cite to where these amounts are included in the "4c Compensation Adjustment."

c. Are the Service Company performance pay amounts shown in OCA 09-010_Attachment included in "4p Service Company Costs"? If so, please cite to where these amounts are included in "4p Service Company Costs."

d. PAWC's response to OCA 09-010 states that Service Company employee compensation costs (including performance pay) for Farmington Water, Audubon Water, Farmington Wastewater, Sadsbury Wastewater, BASA Wastewater Operations and Brentwood Wastewater Operations were calculated as part of Service Company costs which can be referenced in Volume 4, Exhibit 3-B, pages 303-308 under Acquisition O&M Expense Adjustments. Please provide the specific performance pay amounts for 6/30/24 and 6/30/25 that are included in "4q Acquisition O&M" for Farmington Water, Audubon Water, Farmington Wastewater, Sadsbury Wastewater, BASA Wastewater Operations and Brentwood Wastewater Operations.

Response:

a. The amounts for Annualized Performance Plan listed in "4c Compensation Adjustment" include both APP & LTPP and are gross amounts whereas the amounts provided in PAWC's response to OCA 09-009 represent the expense after factoring in the capitalized amounts. Please refer to OSBA 04-002_Attachment which provides both the gross and net expense amounts for both periods.

b. No.

c. Yes, the Service Company performance pay amounts are included in “4p Service Company Costs” under Labor and Related Costs.

d. Please refer to OSBA 04-002_Attachment which provides the amounts of performance pay allocated to PAWC from the Service Company for both periods.

Pennsylvania American Water Company
Docket Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)
Performance Pay (APP & LTPP) - 6/30/2024

OSBA 04-002_Attachment
Page 1 of 3

	Water Operations	Wastewater SSS General Operations	BASA WW Operations	Brentwood WW Operations	Wastewater CSS Operations	Farmington Water Operations	Farmington WW Operations	Audubon Water Operations	Total Company
Collective Bargaining Unit - APP	$1,168,524	$39,497	$49,029	$0	$170,149	$2,256	$0	$0	$1,429,455
Non-Collective Bargaining Unit Hourly - APP	1,149,248	201,069	21,312	10,250	4,348	-	5,328	31,968	1,423,523
Non-Collective Bargaining Unit Salary - APP	4,684,729	125,568	112,279	-	141,432	-	-	17,254	5,081,262
Total Gross Annual Performance Plan (APP) - 6/30/2024	$7,002,501	$366,134	$182,620	$10,250	$315,929	$2,256	$5,328	$49,222	$7,934,240
Long Term Performance Plan (LTPP) - 6/30/2024	809,017	-	-	-	-	-	-	-	809,017
Total Gross Performance Pay (APP & LTPP) - 6/30/2024	**$7,811,518**	**$366,134**	**$182,620**	**$10,250**	**$315,929**	**$2,256**	**$5,328**	**$49,222**	**$8,743,257**
Capitalization Rate	39.55%	22.14%	22.14%	22.14%	22.14%	39.55%	22.14%	39.55%	
Collective Bargaining Unit - APP	$462,151	$8,745	$10,855	$0	$37,671	$892	$0	$0	$520,314
Non-Collective Bargaining Unit Hourly - APP	454,528	44,517	4,718	2,269	963	-	1,180	12,643	520,818
Non-Collective Bargaining Unit Salary - APP	1,852,810	27,801	24,859	-	31,313	-	-	6,824	1,943,607
Total Capitalized Annual Performance Plan (APP) - 6/30/2024	$2,769,489	$81,062	$40,432	$2,269	$69,947	$892	$1,180	$19,467	$2,984,738
Capitalized Long Term Performance Plan (LTPP) - 6/30/2024	319,966	-	-	-	-	-	-	-	319,966
Total Capitalized Performance Pay (APP & LTPP) - 6/30/2024	**$3,089,455**	**$81,062**	**$40,432**	**$2,269**	**$69,947**	**$892**	**$1,180**	**$19,467**	**$3,304,705**
Collective Bargaining Unit - APP	$706,373	$30,752	$38,174	$0	$132,478	$1,364	$0	$0	$909,141
Non-Collective Bargaining Unit Hourly - APP	694,720	156,552	16,594	7,981	3,385	-	4,148	19,325	902,705
Non-Collective Bargaining Unit Salary - APP	2,831,919	97,767	87,420	-	110,119	-	-	10,430	3,137,655
Total Annual Performance Plan (APP) Expense - 6/30/2024	$4,233,012	$285,072	$142,188	$7,981	$245,982	$1,364	$4,148	$29,755	$4,949,502
Long Term Performance Plan (LTPP) - 6/30/2024	489,051	-	-	-	-	-	-	-	489,051

Pennsylvania American Water Company
Docket Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)
Performance Pay (APP & LTPP) - 6/30/2025

	Water Operations	Wastewater SSS General Operations	BASA WW Operations	Brentwood WW Operations	Wastewater CSS Operations	Farmington Water Operations	Farmington WW Operations	Audubon Water Operations	Total Company
Collective Bargaining Unit - APP	$1,198,064	$40,597	$50,501	$0	$173,823	$2,301	$0	$0	$1,465,286
Non-Collective Bargaining Unit Hourly - APP	1,185,929	207,487	21,988	10,579	4,487	-	5,497	32,982	1,468,949
Non-Collective Bargaining Unit Salary - APP	4,834,273	129,575	115,862	-	145,944	-	-	17,806	5,243,460
Total Gross Annual Performance Plan (APP) - 6/30/2025	$7,218,266	$377,659	$188,351	$10,579	$324,254	$2,301	$5,497	$50,788	$8,177,695
Long Term Performance Plan (LTPP) - 6/30/2025	834,848	-	-	-	-	-	-	-	834,848
Total Gross Performance Pay (APP & LTPP) - 6/30/2025	**$8,053,114**	**$377,659**	**$188,351**	**$10,579**	**$324,254**	**$2,301**	**$5,497**	**$50,788**	**$9,012,543**
Capitalization Rate	39.55%	22.14%	22.14%	22.14%	22.14%	39.55%	22.14%	39.55%	
Collective Bargaining Unit - APP	$473,834	$8,988	$11,181	$0	$38,484	$910	$0	$0	$533,398
Non-Collective Bargaining Unit Hourly - APP	469,035	45,938	4,868	2,342	993	-	1,217	13,044	537,438
Non-Collective Bargaining Unit Salary - APP	1,911,955	28,688	25,652	-	32,312	-	-	7,042	2,005,649
Total Capitalized Annual Performance Plan (APP) - 6/30/2025	$2,854,824	$83,614	$41,701	$2,342	$71,790	$910	$1,217	$20,087	$3,076,485
Capitalized Long Term Performance Plan (LTPP) - 6/30/2025	330,182	-	-	-	-	-	-	-	330,182
Total Capitalized Performance Pay (APP & LTPP) - 6/30/2025	**$3,185,007**	**$83,614**	**$41,701**	**$2,342**	**$71,790**	**$910**	**$1,217**	**$20,087**	**$3,406,667**

Pennsylvania American Water Company **OSBA 04-002_Attachment**
Docket Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater) **Page 3 of 3**
Performance Pay (APP & LTPP) - Service Company Allocated to PAWC

	APP		LTPP	
	6/30/2024	6/30/2025	6/30/2024	6/30/2025
Water Operations	$3,775,674	$3,898,088	$3,554,380	$3,911,009
Wastewater SSS General Operations	118,732	122,581	111,773	122,988
BASA WW Operations	81,715	84,364	76,926	84,644
Brentwood WW Operations	22,008	22,722	20,719	22,797
Wastewater CSS Operations	63,324	65,377	59,612	65,593
Farmington Water Operations	2,564	2,647	2,414	2,656
Farmington WW Operations	2,564	2,647	2,414	2,656
Audubon Water Operations	16,963	16,810	15,968	16,866
Sadsbury WW	1,396	1,441	1,314	1,446
Performance Pay - Allocated to PAWC 6/30/2025	**$4,084,940**	**$4,216,678**	**$3,845,520**	**$4,230,655**

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 4

OSBA 04-007

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Please refer to the Direct Testimony of Lori O'Malley (PAWC Statement No. 5), page 14, lines 15-21, regarding the Employee Stock Purchase Plan (ESPP).

a. Please provide, in Excel format, the 6/30/25 ESPP operating expense that is included in the Company's requested revenue requirement, separately identifying the ESPP operating expense related to PAWC employees and that allocated to PAWC from the Service Company. Please provide these amounts by USOA account for each revenue requirement study: Water Operations, Wastewater Sanitary Sewer System General Operations, Wastewater Sanitary Sewer System Butler Operations, Wastewater Sanitary Sewer System Butler Operations, and Wastewater Combined Sewer System Operations. Please cite to the specific locations where these amounts are included in PAWC's filing (including references to the tabs and cells within the Excel files).

b. Please provide, in Excel format, the projected 6/30/25 ESPP cost prior to applying the capitalization percentage (if applicable), the applicable capitalization percentage, and the projected 6/30/25 ESPP amount charged to operating expense, separately for the ESPP cost related to PAWC employees and that allocated to PAWC from the Service Company.

Response:

a. Please refer to OSBA 04-007_Attachment. The ESPP amounts for Water Operations, Wastewater SSS General Operations, and Wastewater CSS Operations can be located at "4g 401K DCP Expense" in the respective 3B tabs. The ESPP amount for BASA can be located at "4q Acquisition O&M" in the '3B BASA WW O&M' tab. Please note that ESPP expense related to PAWC employees is recorded to USOA (NARUC) account 604.8, and ESPP expense allocated from Service Company is recorded to account 634.8.
b. Please refer to the response in part a above. ESPP is not capitalized by the Company.

Pennsylvania American Water Company
Docket Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)
Employee Stock Purchase Plan (ESPP) - 6/30/2025

	Water Operations	Wastewater SSS General Operations	BASA WW Operations	Brentwood WW Operations	Wastewater CSS Operations	Farmington Water Operations	Farmington WW Operations	Audubon Water Operations	Total Company
Employee Stock Purchase Plan (ESPP)	$281,209	$12,153	$306	$0	$11,553	$0	$0	$0	$305,221

Pennsylvania American Water Company
Docket Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)
ESPP - Service Company Allocated to PAWC - 6/30/2025

OSBA 04-007_Attachment
Page 2 of 2

	Water Operations	Wastewater SSS General Operations	BASA WW Operations	Brentwood WW Operations	Wastewater CSS Operations	Farmington Water Operations	Farmington WW Operations	Audubon Water Operations	Sadsbury WW	Total Company
Employee Stock Purchase Plan (ESPP)	$128,521	$4,018	$2,782	$749	$2,191	$87	$87	$554	$48	$139,037

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 4

OSBA 04-011

Responsible Witness: Connie Heppenstall, Senior Project Manager, Gannett Fleming

Question:

Please refer to the Direct Testimony of Constance E. Heppenstall (PAWC Statement No. 12) page 22, lines 9 through 12.

a. Please provide the workpapers in Excel format that were used determine that the maximum day volumes were 3.0 times total average flow for PAWC's WW SSS General Operations.

b. Please cite to where in the Excel file "Exhibit 12-B under Proposed Rates" this 3.0 ratio is reflected.

c. Please cite to where in the Excel files "Exhibit 12-C under Proposed Rates," "Exhibit 12-D under Proposed Rates", and "Exhibit 12-E under Proposed Rates" this 3.0 ratio is reflected.

Response:

a. See Appendix R, PDF pages 63 and 65 of the Coatesville Wastewater Operations Infiltration and Inflow Study supplied in response to data request OCA 04-040. These pages show the following GPD for average day and peak day flows. The ratio is calculated to be 2.79 which was rounded up to 3.0.

	Average Flow GPD	Peak Flow GPD
Valley Township	1,242,890	2,979,257
West Banrdywine Township	864,500	2,229,515
Caln Township	612,269	839,099
Sadsbury Township	520,175	1,491,817
Direct and I&I	4,082,477	12,867,416
	7,322,311	20,407,104

Ratio of Average Flow to Peak Flow	2.79

b. The ratio is used in the calculation of Factor 2, column 3, where the Peak I&I Flow equals 3.0X the Total I&I and Average Flow from column 4 in Factor 1, less the Total Adjusted Average Daily Customer Flow in column 2 of Factor 1, or 377,163 GPD. However, this amount included the Total I&I and Average Flow of Bulk Users – Contract customers, which are not included in the calculation of Factor 2. Instead of 377,163 GPD, the number should have been 275,952 GPD. The corrected Exhibit 12-B under Proposed Rates is attached as

OSBA 04-011_Attachment 1.xlsx. This correction lowers the residential cost of service by 0.10% from 52.5% to 52.4% and raised the commercial cost of service from 19.7% to 19.8%. or by 0.10%.

c. This ratio is not used in Exhibit 12-C under Proposed Rates. In Exhibit 12-C, the I&I Peak Day in column 3 of Factors 3 and 4 is equal to the total peak sanitary plant capacity of Scranton (25 MGD), McKees Rocks (20 MGD) and Kane (2 MGD) less the Total Average Daily Customer Flow in column 2. These amounts were then allocated by class based on Factor 1A.

In Exhibit 12-D, the ratio was used in calculating the Peak I&I in Factor 2. However, this amount should have been equal to 3.0 X Ave. Flow Consumption in column 2, less the Ave. Flow Consumption. Unfortunately, the calculation of the Peak I&I Flow in Exhibit 12-D did not exclude the Ave. Flow Consumption in column 2. OSBA 04-011_Attachment 2.xlsx reflects this correction. A similar problem occurred in calculating Factor 1 and is also corrected in this file. See response to OSBA 04-12 for further discussion.

This ratio is not used in Exhibit 12-E under Proposed Rates. In Exhibit 12-E, the I&I Peak Day in column 3 of Factor 2 was equal the experienced peak day of 11.557 MGD less Ave. Flow Consumption in column 2. These amounts were then allocated by class based on Factor 1A.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 4

OSBA 04-012

Responsible Witness: Connie Heppenstall, Senior Project Manager, Gannett Fleming

Question:

Please refer to the Direct Testimony of Constance E. Heppenstall (PAWC Statement No. 12) page 21, lines 19 through 23.

a. Please cite to which inputs in the allocation factor calculations in Excel file "Exhibit 12-B under Proposed Rates" reflect that 32.9% of the average daily flow was from I&I.

b. Please cite to which inputs in the allocation factor calculations in Excel file "Exhibit 12-D under Proposed Rates" reflect that 32.9% of the average daily flow was from I&I for WW SSS Brentwood Operations.

c. Please cite to which inputs in the allocation factor calculations in Excel file "Exhibit 12-E under Proposed Rates" reflect that 62.5% of the average daily flow was from I&I for WW SSS Butler Area Operations.

Response:

a. The inputs are used in developing Factor 1. See OSBA 04-011_Attachment 1 which clarifies the use of this factor.

b. The inputs are used in developing Factor 1. Excel file "Exhibit 12-D under Proposed Rates" used 1.31% rather than 32.9%. See correction in OSBA 04-011_Attachment 2.

c. The inputs are used in developing Factor 1. See detail in OSBA 04-012_Attachment.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 4

OSBA 04-016

Responsible Witness: Connie Heppenstall, Senior Project Manager, Gannett Fleming

Question:

Please refer to the Excel files "Exhibit 12-A under Proposed Rates," "Exhibit 12-B under Proposed Rates," "Exhibit 12-C under Proposed Rates," "Exhibit 12-D under Proposed Rates", and "Exhibit 12-E under Proposed Rates." Please provide the workpapers in Excel format used to derive any internally-calculated cost allocation inputs or factors utilized in the cost-of-service studies. For example, in "Exhibit 12-B under Proposed Rates," "Factor 1-3" tab, Excel column E (labeled column [3]), rows 15-19 contain pasted values with footnotes explaining how the values were derived. Please provide the Excel-format workpapers used to derive these and any other derived values used to calculate the allocation factors.

Response:

Please refer to the Excel files provided in response to OSBA 04-011 and OSBA 04-012 for Exhibits 12-B, 12-D and 12-E under proposed rates.

Please see OSBA 04-016_Attachment for the Excel file for Exhibit 12-C under proposed rates.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 4

OSBA 04-017

Responsible Witness: Charles Rea, Senior Director of Rates and Regulatory

Question:

Please refer to the proposed Revenue Decoupling Mechanism ("RDM") tariff (SUPPLEMENT NO. 45 TO TARIFF WATER - PA PUC NO. 5 [CLEAN])

a. Please identify where in the proposed RDM tariff the defined terms "Previous Amortization Period" and "Upcoming Amortization Period" are utilized. What is the relevance of these terms to the calculation or function of the proposed RDM?

b. Please confirm that the formula presented in Section B would result in a negative adjustment (i.e., credit) if sales volumes decrease from those used to design rates in this case and a positive adjustment (i.e., charge) if sales volumes increase from those used to design rates in this case (and actual customer counts equal those used in the RDM cost component calculations in PAWC Statement No. 10 – REA Exhibit CBR-8).

c. If subpart b. is confirmed, is the Determination of Adjustment formula in Section B in error? If yes, please provide a corrected Determination of Adjustment formula.

d. Please illustrate, in Excel format, how the Water Non-Residential RDM adjustment would be calculated, assuming that PAWC's proposed Non-Residential rates are approved, Non-Residential 100-gallon units are 5% lower than those used to design rates in this case and customer counts do not change from those used to design rates in this case. Please explain any other inputs or assumptions used in this illustration.

e. Please explain what is meant by the provision that "The adjustment components above shall be summed together for billing purposes." To which "adjustment components above" does this provision refer?

f. Has PAWC developed a proposed Plan of Administration for the RDM? If so, please cite to or provide this proposed Plan of Administration.

Response:

a. The terms "Previous Amortization Period" and "Upcoming Amortization Period" are not utilized in the tariff and should be removed as definitions.

b. The adjustment amount is not dependent on whether sales increase or decrease from those used to design rates in this case. The RDM calculates an adjustment based on the difference between actual revenues and revenues that would result from a straight fixed-variable rate design.

c. N/A

d. The Company cannot make the requested calculation based on the scenario provided as the scenario is not detailed enough to develop a meaningful calculation. As stated in b), The RDM calculates an adjustment based on the difference between actual revenues and revenues that would result from a straight fixed-variable rate design. Sales being higher or lower than levels approved in the case is not a relevant factor.

e. The term "The adjustment components above shall be summed together for billing purposes" refers to the three components in the numerator of the two equations in Section B of the tariff.

f. Please see page 95 (lines 1-8) of Mr. Rea's direct testimony describing the reporting and reconciliation filings proposed for administering the RDM.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 6

OSBA 06-001

Responsible Witness: Stacey D. Gress, Director of Rates and Regulatory for PAWC

Question:

Please refer to "4u Amortization Expense" (Volume 03-04-05 [Exhibit 3A, 3B, 3C], Operating Expenses), 3A Water tab, the $763,977 amortization expense for Audubon Water on numbered row 19 (6/30/25 Amount).

a. Please provide the 6/30/25 revenue requirement impact of this amortization expense as included in the Company's revenue requirement calculation, including any state or federal income-tax related revenue requirement components. Please provide the derivation of this revenue requirement impact in Excel format.

b. Please provide the amounts and cell locations of any revenue requirement components of the $763,977 Audubon Water acquisition amortization expense included in Income Statement Revenue Requirement 2023_As Filed.

Response:

a. Please see OSBA 06-001_Attachment for an illustrative example of the revenue requirement impact of the above referenced amortization expense, applying the gross revenue conversion factor provided in I&E-RR-020.

b. The $763,977 Audubon Water acquisition amortization expense included in Income Statement Revenue Requirement 2023_As Filed, tab Water Operations, cell T20, V20 for the amortization expense, cell EH16 for tax impacts, plus columns DM and DT which calculate the uncollectible expense and general assessment impacts, respectively, on the revenue requirement.

Pennsylvania-American Water Company **OSBA 06-001_Attachment**
Revenue Requirement - Illustrative Example

		Audubon Amortization - Revenue Requirement
1	Amortization Expense	763,977
2	Gross Revenue conversion factor	1.4011
3	Revenue Increase (Decrease) requested	$1,070,408

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 6

OSBA 06-002

Responsible Witnesses: Stacey D. Gress, Director of Rates and Regulatory for PAWC
Melissa Ciullo, Vice President, Tax Reporting and Compliance

Question:

Please refer to "3n Acquisition Adjustments Expense" (Volume 03-04-05 [Exhibit 3A, 3B, 3C], Rate Base), 3A Water tab, the $6,939,459 rate base element for Audubon Water shown on numbered line 11 (6/30/25 amount).

a. Is there any Accumulated Deferred Income Tax (ADIT) included in rate base associated with this $6,939,459 rate base element? If so, please provide the amounts of associated state and federal ADIT included in the 6/30/25 rate base.

b. Please provide the proposed 6/30/25 revenue requirement impact of the net Audubon Water acquisition adjustment rate base, including any ADIT components. Please provide the derivation of this revenue requirement impact in Excel format.

Response:

a. ADIT related to the plant acquired from Audubon is included in rate base. For tax purposes in the filing, the original cost was put into service and depreciation started in 2024. The Company recognized that the net book plant of $360,229 should have been utilized to calculate the ADIT instead of the original cost of $9.1 million. See OSBA 06-002_Attachment for the calculation of ADIT as filed, as well as the revised amount to be included during rebuttal.
b. Please see OSBA 06-002_Attachment. The revenue requirement impact is presented with the as filed versus revised ADIT explained in part a.

AUDUBON WATER COMPANY
Asset Detail - Acquisition
Estimated Close 12/31/2024

OSBA 06-002_Attachment
Part a

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
303.20	311.13	Other Source of Supply Land	1980	$ 20,505	n/a	n/a	$ -	$ 20,505	$ -	$ -	$ 20,505
303.20	311.13	Other Source of Supply Land	1998	15,000	n/a	n/a	-	15,000	-	-	15,000
		Total - Account 311.13		$ 35,505			$ -	$ 35,505	$ -	$ -	$ 35,505
311.20	311.2	Power and Pumping Land	1963	$ 6,000	n/a	n/a	$ -	$ 6,000	$ -	$ -	$ 6,000
303.40	311.5	Distribution Reservoir & Standpipe L	1976	$ 546	n/a	n/a	$ -	$ 546	$ -	$ -	$ 546
303.40	311.5	Distribution Reservoir & Standpipe L	1978	467	n/a	n/a	-	467	-	-	467
		Total Account - 311.5		$ 1,013			$ -	$ 1,013	$ -	$ -	$ 1,013
304.20	312.1	Source of Supply Structures	1965	$ 39,947	30	3.33%	$ 39,947	$ -	$ -	$ 39,947	$ -
304.20	312.1	Source of Supply Structures	1979	476	30	3.33%	476	-	-	476	-
304.20	312.1	Source of Supply Structures	1985	382	30	3.33%	382	-	-	382	-
		Total Account - 312.1		$ 40,805			$ 40,805	$ -	$ -	$ 40,805	$ -
307.00	312.13	Springs & Wells	1966	$ 67,127	30	3.33%	$ 67,127	$ -	$ -	$ 67,127	$ -
307.00	312.13	Springs & Wells	1973	6,465	30	3.33%	6,465	-	-	6,465	-
307.00	312.13	Springs & Wells	1974	1,254	30	3.33%	1,254	-	-	1,254	-
307.00	312.13	Springs & Wells	1977	623	30	3.33%	623	-	-	623	-
307.00	312.13	Springs & Wells	1978	10,160	30	3.33%	10,160	-	-	10,160	-
307.00	312.13	Springs & Wells	1979	25,648	30	3.33%	25,648	-	-	25,648	-
307.00	312.13	Springs & Wells	1980	71,673	30	3.33%	71,673	-	-	71,673	-
307.00	312.13	Springs & Wells	1981	6,939	30	3.33%	6,939	-	-	6,939	-
307.00	312.13	Springs & Wells	1982	4,138	30	3.33%	4,138	-	-	4,138	-
307.00	312.13	Springs & Wells	1983	2,219	30	3.33%	2,219	-	-	2,219	-
307.00	312.13	Springs & Wells	1984	6,717	30	3.33%	6,717	-	-	6,717	-
307.00	312.13	Springs & Wells	1985	7,392	30	3.33%	7,392	-	-	7,392	-
307.00	312.13	Springs & Wells	1986	8,719	30	3.33%	8,719	-	-	8,719	-
307.00	312.13	Springs & Wells	1986	10,375	30	3.33%	10,375	-	-	10,375	-
307.00	312.13	Springs & Wells	1987	72,521	30	3.33%	72,521	-	-	72,521	-
307.00	312.13	Springs & Wells	1990	1,473	30	3.33%	1,473	-	-	1,473	-
307.00	312.13	Springs & Wells	1996	13,316	30	3.33%	12,141	1,175	887	13,028	288
307.00	312.13	Springs & Wells	1997	55,583	30	3.33%	48,760	6,823	3,702	52,462	3,121
307.00	312.13	Springs & Wells	1998	37,325	30	3.33%	31,456	5,869	2,486	33,942	3,383
307.00	312.13	Springs & Wells 10/15 Worthing	2006	84,300	50	2.00%	28,672	55,628	3,372	32,044	52,256
307.00	312.13	Springs & Wells VFTP & Wren Road	2007	3,400	15	6.67%	3,394	6.29	6.29	3,400.00	-
307.00	312.13	Springs & Wells Well #14	2010	230,633	50	2.00%	59,346	171,287	9,225	68,571	162,062
307.00	312.13	Springs & Wells AWC#1	2012	1,183	15	6.67%	851	332	158	1,009	174
307.00	312.13	Springs & Wells AWC#2	2012	28,337	15	6.67%	20,398	7,939	3,780	24,178	4,159
307.00	312.13	Springs & Wells Wells 6&9	2012	10,959	15	6.67%	7,888	3,071	1,462	9,350	1,609
307.00	312.13	Springs & Wells Well#14	2012	5,655	15	6.67%	4,071	1,584	754	4,825	830

AUDUBON WATER COMPANY
Asset Detail - Acquisition
Estimated Close 12/31/2024

OSBA 06-002_Attachment
Part a

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
307.00	312.13	Springs & Wells Well #15	2012	6,459	15	6.67%	4,649	1,810	862	5,511	948
307.00	312.13	Springs & Wells	2014	7,938	15	6.67%	4,619	3,319	1,059	5,678	2,260
307.00	312.13	Springs & Wells Wells 7&8	2018	20,878	15	6.67%	6,386	14,492	2,785	9,171	11,707
307.00	312.13	Springs & Wells Wells 6&9	2018	1,800	15	6.67%	551	1,249	240	791	1,009
307.00	312.13	Springs & Wells VFCC #2	2019	700	15	6.67%	166	534	93	259	441
307.00	312.13	Springs & Wells	2021	8,070	15	6.67%	807	7,263	1,077	1,884	6,186
		Total Account - 312.13		$ 819,979			$ 537,599	282,380	31,948	569,547	250,432

AUDUBON WATER COMPANY
Asset Detail - Acquisition
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OSBA 06-002_Attachment
Part a

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
311.20	312.2	Power and Pumping Structure	1966	$ 19,856	40	2.50%	$ 19,856	$ -	$ -	$ 19,856	$ -
311.20	312.2	Power and Pumping Structure	1972	5,235	40	2.50%	5,235	-	-	5,235	-
311.20	312.2	Power and Pumping Structure	1974	2,761	40	2.50%	2,761	-	-	2,761	-
311.20	312.2	Power and Pumping Structure	1977	3,948	40	2.50%	3,948	-	-	3,948	-
311.20	312.2	Power and Pumping Structure	1978	1,782	40	2.50%	1,782	-	-	1,782	-
311.20	312.2	Power and Pumping Structure	1987	3,349	40	2.50%	3,070	279	167	3,238	111
311.20	312.2	Power and Pumping Structure	1997	21,912	40	2.50%	14,418	7,494	1,096	15,513	6,399
		Total - Account 312.2		$ 58,843			$ 51,070	$ 7,773	$ 1,263	$ 52,333	$ 6,510
330.00	312.5	Distribution Reservoirs & Standpipes	1967	$ 10,333	40	2.50%	$ 10,333	$ -	$ -	$ 10,333	$ -
330.00	312.5	Distribution Reservoirs & Standpipes	1976	49,399	40	2.50%	49,399	-	-	49,399	-
330.00	312.5	Distribution Reservoirs & Standpipes	1977	136	40	2.50%	136	-	-	136	-
330.00	312.5	Distribution Reservoirs & Standpipes	1979	6,736	40	2.50%	6,736	-	-	6,736	-
330.00	312.5	Distribution Reservoirs & Standpipes	1981	826	40	2.50%	826	-	-	826	-
330.00	312.5	Distribution Reservoirs & Standpipes	1982	157,868	40	2.50%	157,789	79	79	157,868	-
330.00	312.5	Distribution Reservoirs & Standpipes	1986	144,024	40	2.50%	135,761	8,263	7,201	142,962	1,062
330.00	312.5	Distribution Reservoirs & Standpipes	1987	10,606	40	2.50%	9,722	884	530	10,253	353
330.00	312.5	Distribution Reservoirs & Standpipes	1988	34,053	40	2.50%	30,337	3,716	1,703	32,040	2,013
330.00	312.5	Distribution Reservoirs & Standpipes	1991	2,655	40	2.50%	2,159	496	133	2,292	363
330.00	312.5	Distribution Reservoirs & Standpipes	1996	21,000	40	2.50%	14,362	6,638	1,050	15,412	5,588
330.00	312.5	Distribution Reservoirs & Standpipes	2000	194,349	40	2.50%	112,798	81,551	9,717	122,516	71,833
330.00	312.5	Distribution Reservoirs & Standpipes	2002	1,800	40	2.50%	952	848	90	1,042	758
330.00	312.5	Distribution Reservoirs & Standpipes	2005	89,750	40	2.50%	40,479	49,271	4,488	44,966	44,784
330.00	312.5	Distribution Reservoirs & Standpipes	2021	3,437	40	2.50%	129	3,308	172	301	3,136
		Total - Account 312.5		$ 726,972			$ 571,918	$ 155,054	$ 25,163	$ 597,081	$ 129,891
304.62	312.62	Stores, Shop and Garage Buildings	1967	$ 5,143	30	3.33%	$ 5,143	$ -	$ -	$ 5,143	$ -
304.62	312.62	Stores, Shop and Garage Buildings	1988	1,161	30	3.33%	1,161	-	-	1,161	-
304.62	312.62	Stores, Shop and Garage Buildings	2005	421	30	3.33%	253	168	28	281	140
		Total - Account 312.62		$ 6,725			$ 6,557	$ 168	$ 28	$ 6,585	$ 140
311.20	316	Electric Pumping Equipment	1974	$ 5,101	10	10.00%	5,101	$ -	$ -	$ 5,101	$ -
311.20	316	Electric Pumping Equipment	1977	10,669	10	10.00%	10,669	-	-	10,669	-
311.20	316	Electric Pumping Equipment	1978	19,466	10	10.00%	19,466	-	-	19,466	-
311.20	316	Electric Pumping Equipment	1979	2,217	10	10.00%	2,217	-	-	2,217	-
311.20	316	Electric Pumping Equipment	1981	6,701	10	10.00%	6,701	-	-	6,701	-
311.20	316	Electric Pumping Equipment	1984	1,419	10	10.00%	1,419	-	-	1,419	-
311.20	316	Electric Pumping Equipment	1989	517	10	10.00%	517	-	-	517	-
311.20	316	Electric Pumping Equipment	1990	7,455	10	10.00%	7,455	-	-	7,455	-
311.20	316	Electric Pumping Equipment	1991	3,895	10	10.00%	3,895	-	-	3,895	-
311.20	316	Electric Pumping Equipment	1992	7,222	10	10.00%	7,222	-	-	7,222	-

AUDUBON WATER COMPANY
Asset Detail - Acquisition
Estimated Close 12/31/2024

OSBA 06-002_Attachment
Part a

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
311.20	316	Electric Pumping Equipment	1993	5,904	10	10.00%	5,904	-	-	5,904	-
311.20	316	Electric Pumping Equipment	1995	1,239	10	10.00%	1,239	-	-	1,239	-
311.20	316	Electric Pumping Equipment	1996	13,105	10	10.00%	13,105	-	-	13,105	-
311.20	316	Electric Pumping Equipment	1997	16,692	10	10.00%	16,692	-	-	16,692	-
311.20	316	Electric Pumping Equipment	1998	15,203	10	10.00%	15,203	-	-	15,203	-
311.20	316	Electric Pumping Equipment	2000	1,885	10	10.00%	1,885	-	-	1,885	-
311.20	316	Electric Pumping Equipment	2001	3,332	10	10.00%	3,332	-	-	3,332	-
311.20	316	Electric Pumping Equipment	2002	9,849	10	10.00%	9,849	-	-	9,849	-
311.20	316	Electric Pumping Equipment	2003	22,660	15	6.67%	22,660	-	-	22,660	-
311.20	316	Electric Pumping Equipment-Genera	2007	47,669	15	6.67%	47,581	88	88	47,669	-
311.20	316	Electric Pumping Equipment-VPTP	2009	14,252	15	6.67%	13,209	1,043	1,043	14,252	-
311.20	316	Electric Pumping Equipment	2011	19,014	15	6.67%	14,999	4,015	2,536	17,536	1,478
311.20	319	Electric Pumping Equipment	2012	907	15	6.67%	653	254	121	774	133
311.20	316	Electric Pumping Equipment - VF Trl	2013	40,000	25	4.00%	15,618	24,382	3,200	18,818	21,182
311.20	316	Electric Pumping Equipment	2014	5,475	15	6.67%	3,186	2,289	730	3,916	1,559
311.20	316	Electric Pumping Equipment	2017	3,300	15	6.67%	1,237	2,063	440	1,677	1,623
311.20	316	Electric Pumping Equipment	2021	1,759	15	6.67%	176	1,583	235	411	1,348
		Total Account 316		$ 286,907			$ 251,191	$ 35,716	$ 8,393	$ 259,584	$ 27,323
311.50	319	Other Power Pumping Equipment	1972	$ 183	10	10.00%	$ 183	$ -	$ -	$ 183	$ -
311.50	319	Other Power Pumping Equipment	1988	352	10	10.00%	352	-	-	352	-
311.50	319	Other Power Pumping Equipment	1990	171	10	10.00%	171	-	-	171	-
311.50	319	Other Power Pumping Equipment	1998	1,537	10	10.00%	1,537	-	-	1,537	-
311.50	319	Other Power Pumping Equipment	1999	3,900	10	10.00%	3,900	-	-	3,900	-
311.50	319	Other Power Pumping Equipment	2004	26,425	15	6.67%	26,425	-	-	26,425	-
		Total - Account 319		$ 32,568			$ 32,568	$ -	$ -	$ 32,568	$ -
320.00	320	Purification System	1968	$ 58,309	15	6.67%	$ 58,309	$ -	$ -	$ 58,309	$ -
320.00	320	Purification System	1973	1,136	15	6.67%	1,136	-	-	1,136	-
320.00	320	Purification System	1978	515	15	6.67%	515	-	-	515	-
320.00	320	Purification System	1979	1,133	15	6.67%	1,133	-	-	1,133	-
320.00	320	Purification System	1980	1,409	15	6.67%	1,409	-	-	1,409	-
320.00	320	Purification System	1981	327	15	6.67%	327	-	-	327	-
320.00	320	Purification System	1985	1,865	15	6.67%	1,865	-	-	1,865	-
320.00	320	Purification System	1986	67,713	15	6.67%	67,713	-	-	67,713	-
320.00	320	Purification System	1988	830	15	6.67%	830	-	-	830	-
320.00	320	Purification System	1989	1,050	15	6.67%	1,050	-	-	1,050	-
320.00	320	Purification System	1989	264,491	15	6.67%	264,491	-	-	264,491	-
320.00	320	Purification System	1989	1,074	15	6.67%	1,074	-	-	1,074	-
320.00	320	Purification System	1990	211	15	6.67%	211	-	-	211	-
320.00	320	Purification System	1991	2,178	15	6.67%	2,178	-	-	2,178	-
320.00	320	Purification System	1996	89,850	20	5.00%	89,850	-	-	89,850	-

AUDUBON WATER COMPANY
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Part a

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
320.00	320	Purification System	2000	66,295	20	5.00%	66,295	-	-	66,295	-
320.00	320	Purification System	2006	1,605	20	5.00%	1,364	241	161	1,525	80
320.00	320	Purification System	2021	8,175	20	5.00%	613	7,562	818	1,430	6,745
		Total - Account 320		$ 568,166			$ 560,363	$ 7,803	$ 978	$ 561,341	$ 6,825
331.00	322	Mains & Accessories	1969	$ 578,668	60	1.67%	$ 533,385	$ 45,283	$ 19,328	$ 552,712	$ 25,956
331.00	322	Mains & Accessories	1973	40,021	60	1.67%	34,128	5,893	1,337	35,464	4,557
331.00	322	Mains & Accessories	1974	35,067	60	1.67%	29,299	5,768	1,171	30,470	4,597
331.00	322	Mains & Accessories	1975	7,687	60	1.67%	6,291	1,396	257	6,547	1,140
331.00	322	Mains & Accessories	1976	40,120	60	1.67%	32,136	7,984	1,340	33,476	6,644
331.00	322	Mains & Accessories	1977	9,361	60	1.67%	7,337	2,024	313	7,650	1,711
331.00	322	Mains & Accessories	1978	44,947	60	1.67%	34,452	10,495	1,501	35,954	8,993
331.00	322	Mains & Accessories	1979	31,486	60	1.67%	23,591	7,895	1,052	24,642	6,844
331.00	322	Mains & Accessories	1980	72,506	60	1.67%	53,074	19,432	2,422	55,496	17,010
331.00	322	Mains & Accessories	1981	121,315	60	1.67%	86,710	34,605	4,052	90,762	30,553
331.00	322	Mains & Accessories	1982	21,403	60	1.67%	14,929	6,474	715	15,643	5,760
331.00	322	Mains & Accessories	1983	7,284	60	1.67%	4,956	2,328	243	5,199	2,085
331.00	322	Mains & Accessories	1984	11,530	60	1.67%	7,645	3,885	385	8,030	3,500
331.00	322	Mains & Accessories	1985	4,827	60	1.67%	3,116	1,711	161	3,278	1,549
331.00	322	Mains & Accessories	1986	(14,117)		0.00%	(14,117)	-	-	(14,117)	-
331.00	322	Mains & Accessories	1987	6,927	60	1.67%	4,234	2,693	231	4,466	2,461
331.00	322	Mains & Accessories	1990	616	60	1.67%	344	272	21	365	251
331.00	322	Mains & Accessories	1992	193,349	60	1.67%	101,511	91,838	6,458	107,969	85,380
331.00	322	Mains & Accessories	1993	138,501	60	1.67%	70,325	68,176	4,626	74,951	63,550
331.00	322	Mains & Accessories	1993	315,314	60	1.67%	160,104	155,210	10,531	170,636	144,678
331.00	322	Mains & Accessories	1993	113,132	60	1.67%	57,444	55,688	3,779	61,223	51,909
331.00	322	Mains & Accessories	1994	15,694	60	1.67%	7,698	7,996	524	8,222	7,472
331.00	322	Mains & Accessories	1995	148,671	60	1.67%	70,361	78,310	4,966	75,327	73,344
331.00	322	Mains & Accessories	1996	32,825	60	1.67%	14,968	17,857	1,096	16,065	16,760
331.00	322	Mains & Accessories	1997	402,970	60	1.67%	176,810	226,160	13,459	190,269	212,701
331.00	322	Mains & Accessories	1998	362,740	60	1.67%	152,901	209,839	12,116	165,016	197,724
331.00	322	Mains & Accessories	1999	275,858	60	1.67%	111,521	164,337	9,214	120,734	155,124
331.00	322	Mains & Accessories	2000	210,756	60	1.67%	81,567	129,189	7,039	88,606	122,150
331.00	322	Mains & Accessories	2001	237,924	60	1.67%	87,977	149,947	7,947	95,923	142,001
331.00	322	Mains & Accessories	2002	43,289	60	1.67%	15,260	28,029	1,446	16,706	26,583
331.00	322	Mains & Accessories	2003	243,826	60	1.67%	81,748	162,078	8,144	89,891	153,935
331.00	322	Mains & Accessories	2004	76,377	60	1.67%	24,290	52,087	2,551	26,841	49,536
331.00	322	Mains & Accessories	2005	23,907	60	1.67%	7,190	16,717	798	7,989	15,918
331.00	322	Mains & Accessories	2006	120,084	60	1.67%	34,046	86,038	4,011	38,057	82,027
331.00	322	Mains & Accessories	2007	118,409	60	1.67%	31,529	86,880	3,955	35,484	82,925
331.00	322	Mains & Accessories	2008	18,204	60	1.67%	4,533	13,671	608	5,141	13,063
331.00	322	Mains & Accessories	2010	1,365	60	1.67%	293	1,072	46	339	1,026

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331.00	322	Mains & Accessories	2012	2,716	60	1.67%	489	2,227	91	580	2,136
331.00	322	Mains & Accessories	2021	70,270	60	1.67%	1,759	68,511	2,347	4,106	66,164
331.00	322	Mains & Accessories	2022	65,558	60	1.67%	547	65,011	2,190	2,737	62,821
		Total - Account 322		$ 4,251,387			$ 2,156,380	$ 2,095,007	$ 142,468	$ 2,298,848	$ 1,952,539
333.00	323	Services	1972	$ 4,035	60	1.67%	$ 3,510	$ 525	$ 135	$ 3,645	$ 390
333.00	323	Services	1973	5,819	60	1.67%	4,962	857	194	5,157	662
333.00	323	Services	1974	4,976	60	1.67%	4,157	819	166	4,323	653
333.00	323	Services	1976	5,382	60	1.67%	4,311	1,071	180	4,490	892
333.00	323	Services	1977	6,882	60	1.67%	5,393	1,489	230	5,623	1,259
333.00	323	Services	1978	8,591	60	1.67%	6,585	2,006	287	6,872	1,719
333.00	323	Services	1979	4,202	60	1.67%	3,149	1,053	140	3,289	913
333.00	323	Services	1980	19,674	60	1.67%	14,401	5,273	657	15,059	4,615
333.00	323	Services	1981	15,963	60	1.67%	11,409	4,554	533	11,942	4,021
333.00	323	Services	1982	23,356	60	1.67%	16,291	7,065	780	17,071	6,285
333.00	323	Services	1983	11,691	60	1.67%	7,953	3,738	390	8,344	3,347
333.00	323	Services	1984	5,164	60	1.67%	3,424	1,740	172	3,596	1,568
333.00	323	Services	1985	13,021	60	1.67%	8,408	4,613	435	8,843	4,178
333.00	323	Services	1986	458	60	1.67%	288	170	15	304	154
333.00	322	Services	1987	(3,705)		0.00%	(3,705)	-	-	(3,705)	-
333.00	323	Services	1989	1,168	60	1.67%	674	494	39	713	455
333.00	323	Services	1992	160	60	1.67%	84	76	5	89	71
333.00	323	Services	1993	3,305	60	1.67%	1,679	1,626	110	1,789	1,516
333.00	323	Services	1999	91,952	60	1.67%	37,173	54,779	3,071	40,244	51,708
333.00	323	Services	2000	50,129	60	1.67%	19,401	30,728	1,674	21,075	29,054
333.00	323	Services	2003	2,282	60	1.67%	765	1,517	76	841	1,441
333.00	323	Services	2004	9,981	60	1.67%	3,174	6,807	333	3,508	6,473
333.00	323	Services	2005	1,872	60	1.67%	563	1,309	63	625	1,247
333.00	323	Services	2021	3,137	60	1.67%	79	3,058	105	183	2,954
		Total - Account 323		$ 289,495			$ 154,129	$ 135,366	$ 9,793	$ 163,922	$ 125,573
334.00	324	Meters	1987	$ 206,795	30	3.33%	$ 206,795	-	-	206,795	-
334.00	324	Meters	1989	9,622	30	3.33%	9,622	-	-	9,622	-
334.00	324	Meters	1990	754	30	3.33%	754	-	-	754	-
334.00	324	Meters	1991	4,942	30	3.33%	4,942	-	-	4,942	-
334.00	324	Meters	1992	6,367	30	3.33%	6,363	4	4	6,367	-
334.00	324	Meters	1993	9,164	30	3.33%	9,159	5	5	9,164	-
334.00	324	Meters	1994	7,169	30	3.33%	7,031	138	138	7,169	-
334.00	324	Meters	1995	4,293	30	3.33%	4,063	230	230	4,293	-
334.00	324	Meters	1996	6,870	30	3.33%	6,264	606	458	6,722	148
334.00	324	Meters	1997	8,176	30	3.33%	7,172	1,004	545	7,717	459
334.00	324	Meters	1998	16,129	30	3.33%	13,593	2,536	1,074	14,668	1,461

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334.00	324	Meters	1999	24,926	30	3.33%	20,146	4,780	1,660	21,806	3,120
334.00	324	Meters	2000	12,667	30	3.33%	9,801	2,866	844	10,645	2,022
334.00	324	Meters	2001	20,387	30	3.33%	15,071	5,316	1,358	16,429	3,958

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334.00	324	Meters	2002	12,604	30	3.33%	8,882	3,722	839	9,722	2,882
334.00	324	Meters	2003	2,752	25	4.00%	2,214	538	220	2,434	318
334.00	324	Meters	2004	6,200	25	4.00%	4,731	1,469	496	5,227	973
334.00	324	Meters	2005	118,657	25	4.00%	85,627	33,030	9,493	95,120	23,537
334.00	324	Meters	2006	34,396	25	4.00%	23,398	10,998	2,752	26,149	8,247
334.00	324	Meters	2007	71,077	25	4.00%	45,406	25,671	5,686	51,092	19,985
334.00	324	Meters	2008	20,468	25	4.00%	12,228	8,240	1,637	13,866	6,602
334.00	324	Meters	2009	125,997	25	4.00%	70,060	55,937	10,080	80,139	45,858
334.00	324	Meters	2010	77,307	25	4.00%	39,786	37,521	6,185	45,970	31,337
334.00	324	Meters	2011	50,187	25	4.00%	23,750	26,437	4,015	27,765	22,422
334.00	324	Meters	2012	73,750	25	4.00%	31,849	41,901	5,900	37,749	36,001
334.00	324	Meters	2013	5,968	25	4.00%	2,330	3,638	477	2,807	3,161
334.00	324	Meters	2014	25,953	25	4.00%	9,059	16,894	2,076	11,135	14,818
334.00	324	Meters	2015	12,237	25	4.00%	3,765	8,472	979	4,744	7,493
334.00	324	Meters	2016	8,411	25	4.00%	2,240	6,171	673	2,913	5,498
334.00	324	Meters	2017	3,493	25	4.00%	785	2,708	279	1,065	2,428
334.00	324	Meters	2021	14,984	25	4.00%	899	14,085	1,199	2,097	12,887
		Total - Account 324		$ 1,002,702			$ 687,785	$ 314,917	$ 59,301	$ 747,086	$ 255,616
335.00	325	Fire Hydrants	1968	$ 18,664	40	2.50%	$ 18,664	$ -	$ -	$ 18,664	$ -
335.00	325	Fire Hydrants	1973	3,430	40	2.50%	3,430	-	-	3,430	-
335.00	325	Fire Hydrants	1974	78	40	2.50%	78	-	-	78	-
335.00	325	Fire Hydrants	1975	1,383	40	2.50%	1,383	-	-	1,383	-
335.00	325	Fire Hydrants	1976	822	40	2.50%	822	-	-	822	-
335.00	325	Fire Hydrants	1977	1,089	40	2.50%	1,089	-	-	1,089	-
335.00	325	Fire Hydrants	1978	6,762	40	2.50%	6,762	-	-	6,762	-
335.00	325	Fire Hydrants	1979	2,040	40	2.50%	2,040	-	-	2,040	-
335.00	325	Fire Hydrants	1980	4,261	40	2.50%	4,261	-	-	4,261	-
335.00	325	Fire Hydrants	1991	798	40	2.50%	649	149	40	689	109
335.00	325	Fire Hydrants	1992	2,192	40	2.50%	1,726	466	110	1,836	356
335.00	325	Fire Hydrants	1993	3,454	40	2.50%	2,630	824	173	2,803	651
335.00	325	Fire Hydrants	1997	4,153	40	2.50%	2,733	1,420	208	2,940	1,213
335.00	325	Fire Hydrants	1999	94,412	40	2.50%	57,238	37,174	4,721	61,959	32,453
335.00	325	Fire Hydrants	2000	27,044	40	2.50%	15,696	11,348	1,352	17,048	9,996
335.00	325	Fire Hydrants	2001	1,429	40	2.50%	793	636	71	864	565
335.00	325	Fire Hydrants	2002	2,701	40	2.50%	1,428	1,273	135	1,563	1,138
335.00	325	Fire Hydrants	2003	3,915	40	2.50%	1,968	1,947	196	2,164	1,751
335.00	325	Fire Hydrants	2004	3,220	40	2.50%	1,536	1,684	161	1,697	1,523
335.00	325	Fire Hydrants	2006	2,736	40	2.50%	1,164	1,572	137	1,301	1,435
335.00	325	Fire Hydrants	2021	763	40	2.50%	29	734	38	67	696
335.00	325	Fire Hydrants	2022	7,189	40	2.50%	90	7,099	359	449	6,740
		Total - Account 325		$ 192,535			$ 126,209	$ 66,326	$ 7,700	$ 133,909	$ 58,626

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340.50	328	Office Furniture & Equipment - Ret 2	2000	$ 58	5	20.00%	$ 58	$ -	$ -	$ 58	$ -
340.50	328	Office Furniture & Equipment	2002	2,585	3	33.33%	2,585	-	-	2,585	-
340.50	328	Office Furniture & Equipment	2003	4,266	5	20.00%	4,266	-	-	4,266	-
340.50	328	Office Furniture & Equipment	2004	776	7	14.29%	776	-	-	776	-
340.50	328	Office Furniture & Equipment	2004	3,125	7	14.29%	3,125	-	-	3,125	-
340.50	328	Office Furniture & Equipment	2013	6,843	7	14.29%	6,830	13	13	6,843	-
		Total - Account 328		$ 17,653			$ 17,640	$ 13	$ 13	$ 17,653	$ -
341.20	329	Transportation Equipment	2000	$ 58,209	5	20.00%	$ 58,209	$ -	$ -	$ 58,209	$ -
341.30	329	Atkins Auto Sales Transp. Equip.	2007	5,276	7	14.29%	5,276	-	-	5,276	-
341.30	329	2013 Auto	2013	57,943	7	14.29%	57,827	116	116	57,943	-
341.10	329	2010 F150 Truck	2015	29,864	7	14.29%	28,551	1,313	1,313	29,864	-
341.10	329	2016 GMC Truck	2016	(1,000)	7	14.29%	-	(1,000)	-	-	(1,000)
341.30	329	2018 Auto	2018	62,186	7	14.29%	40,752	21,434	17,773	58,525	3,661
341.10	329	2019 GMC Truck	2019	65,641	7	14.29%	33,311	32,330	18,760	52,071	13,570
341.20	329	Transportation Equipment	2020	145,401	7	14.29%	42,524	102,877	41,556	84,079	61,322
341.20	329	Transportation Equipment	2021	164,921	7	14.29%	65,951	98,970	47,134	113,086	51,835
341.20	329	Transportation Equipment	2022	172,600	7	14.29%	24,104	148,496	49,329	73,433	99,167
		Total - Account 329		$ 761,041			$ 356,505	$ 404,536	$ 175,981	$ 532,485	$ 228,556
343.00	332	Tools and Work Equipment	1996	$ 34,935	15	6.67%	$ 34,935	$ -	$ -	$ 34,935	$ -
343.00	332	Tools and Work Equipment	1998	12,500	15	6.67%	12,500	-	-	12,500	-
343.00	332	Tools and Work Equipment	2006	4,768	15	6.67%	4,768	-	-	4,768	-
343.00	332	Tools and Work Equipment	2012	5,783	15	6.67%	4,163	1,620	771	4,934	849
343.00	332	Tools and Work Equipment	2013	3,100	15	6.67%	2,018	1,082	414	2,431	669
		Total - Account 332		$ 61,086			$ 58,384	$ 2,702	$ 1,185	$ 59,568	$ 1,518
346.00	333	Communication Equipment	1984	$ 2,141	10	10.00%	$ 2,141	$ -	$ -	$ 2,141	$ -
346.00	333	Communication Equipment	1985	51	10	10.00%	51	-	-	51	-
346.00	333	Communication Equipment	1990	705	10	10.00%	705	-	-	705	-
		Total - Account 333		$ 2,897			$ 2,897	$ -	$ -	$ 2,897	$ -
347.00	334	Miscellaneous Equipment	1978	3,700	10	10.00%	$ 3,700	$ -	$ -	$ 3,700	$ -
347.00	334	Miscellaneous Equipment	1987	1,255	10	10.00%	1,255	-	-	1,255	-
347.00	334	Miscellaneous Equipment	1991	248	10	10.00%	248	-	-	248	-
347.00	334	Miscellaneous Equipment	1995	20,000	10	10.00%	20,000	-	-	20,000	-
		Total - Account 334		$ 25,203			$ 25,203	$ -	$ -	$ 25,203	$ -
		Grand Total		$ 9,187,482			$ 5,637,201	$ 3,550,281	$ 464,214	$ 6,101,415	$ 3,086,067

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	Contributions in Aid of Construction:										
303.40	311.13	Other Source of Supply Land	1980	(20,505)	n/a	n/a	$ -	$ (20,505)	$ -	$ -	$ (20,505)
304.20	312.1	Source of Supply Structures	1965	(14,422)	30	3.33%	$ (14,422)	$ -	$ -	$ (14,422)	$ -
307.00	312.13	Springs & Wells	1966	$ (5,605)	30	3.33%	$ (5,605)	$ -	$ -	$ (5,605)	$ -
307.00	312.13	Springs & Wells	1979	(3,359)	30	3.33%	(3,359)	-	-	(3,359)	-
307.00	312.13	Springs & Wells	1980	(70,106)	30	3.33%	(70,106)	-	-	(70,106)	-
307.00	312.13	Springs & Wells	1981	(4,304)	30	3.33%	(4,304)	-	-	(4,304)	-
307.00	312.13	Springs & Wells Well #14	2010	(99,490)	50	2.00%	(16,297)	(83,193)	(3,980)	(20,277)	(79,213)
307.00	312.13	Springs & Wells AWC#1	2012	(1,183)	15	6.67%	(553)	(630)	(158)	(711)	(472)
307.00	312.13	Springs & Wells AWC#2	2012	(28,337)	15	6.67%	(13,249)	(15,088)	(3,780)	(17,029)	(11,308)
307.00	312.13	Springs & Wells Wells 6&9	2012	(10,959)	15	6.67%	(5,124)	(5,835)	(1,462)	(6,586)	(4,373)
307.00	312.13	Springs & Wells Well#14	2012	(5,655)	15	6.67%	(2,644)	(3,011)	(754)	(3,398)	(2,257)
307.00	312.13	Springs & Wells Well #15	2012	(6,459)	15	6.67%	(3,020)	(3,439)	(862)	(3,881)	(2,578)
		Total Account - 312.13		$ (235,457)			$ (124,261)	$ (111,196)	$ (10,996)	$ (135,257)	$ (100,200)
330.00	312.5	Distribution Reservoirs & Standpipes	2000	$ (194,349)	40	2.50%	$ (68,423)	$ (125,926)	$ (9,717)	$ (78,140)	$ (116,209)
311.20	316	Electric Pumping Equipment	1981	$ (4,054)	10	10.00%	$ (4,054)	$ -	$ -	$ (4,054)	$ -
311.20	316	Electric Pumping Equipment	2011	(5,573)	15	6.67%	(2,825)	(2,748)	(743)	(3,568)	(2,005)
		Total Account 316		(9,627)			$ (6,879)	$ (2,748)	$ (743)	$ (7,622)	$ (2,005)
320.00	320	Purification System	1968	$ (1,812)	15	6.67%	$ (1,812)	$ -	$ -	$ (1,812)	$ -
320.00	320	Purification System	1980	(1,230)	15	6.67%	(1,230)	-	-	(1,230)	-
320.00	320	Purification System	2000	(39,153)	20	5.00%	(22,781)	(16,372)	(3,915)	(26,696)	(12,457)
		Total - Account 320		(42,195)			$ (25,823)	$ (16,372)	$ (3,915)	$ (29,738)	$ (12,457)
331.00	322	Mains & Accessories	1969	$ (165,635)	60	1.67%	$ (89,312)	$ (76,323)	$ (5,532)	$ (94,844)	$ (70,791)
331.00	322	Mains & Accessories	1979	(3,484)	60	1.67%	(1,536)	(1,948)	(116)	(1,653)	(1,831)
331.00	322	Mains & Accessories	1980	(33,930)	60	1.67%	(14,630)	(19,300)	(1,133)	(15,764)	(18,166)
331.00	322	Mains & Accessories	1981	(98,744)	60	1.67%	(41,608)	(57,136)	(3,298)	(44,906)	(53,838)
331.00	322	Mains & Accessories	1982	(4,747)	60	1.67%	(1,954)	(2,793)	(159)	(2,112)	(2,635)
331.00	322	Mains & Accessories	1983	(7,020)	60	1.67%	(2,820)	(4,200)	(234)	(3,055)	(3,965)
331.00	322	Mains & Accessories	1985	(113,945)	60	1.67%	(43,537)	(70,408)	(3,806)	(47,343)	(66,602)
331.00	322	Mains & Accessories	1985	(119,839)	60	1.67%	(45,789)	(74,050)	(4,003)	(49,792)	(70,047)
331.00	322	Mains & Accessories	1992	(193,349)	60	1.67%	(60,586)	(132,763)	(6,458)	(67,043)	(126,306)
331.00	322	Mains & Accessories	1993	(138,501)	60	1.67%	(42,039)	(96,462)	(4,626)	(46,665)	(91,836)
331.00	322	Mains & Accessories	1993	(315,314)	60	1.67%	(95,706)	(219,608)	(10,531)	(106,238)	(209,076)
331.00	322	Mains & Accessories	1993	(113,132)	60	1.67%	(34,339)	(78,793)	(3,779)	(38,117)	(75,015)
331.00	322	Mains & Accessories	1995	(148,671)	60	1.67%	(42,206)	(106,465)	(4,966)	(47,172)	(101,499)

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331.00	322	Mains & Accessories	1996	(32,825)	60	1.67%	(8,996)	(23,829)	(1,096)	(10,092)	(22,733)
331.00	322	Mains & Accessories	1997	(402,970)	60	1.67%	(106,484)	(296,486)	(13,459)	(119,943)	(283,027)
331.00	322	Mains & Accessories	1998	(389,996)	60	1.67%	(99,226)	(290,770)	(13,026)	(112,252)	(277,744)
331.00	322	Mains & Accessories	1999	(221,290)	60	1.67%	(54,129)	(167,161)	(7,391)	(61,520)	(159,770)
331.00	322	Mains & Accessories	2000	(210,756)	60	1.67%	(49,483)	(161,273)	(7,039)	(56,522)	(154,234)
331.00	322	Mains & Accessories	2001	(196,336)	60	1.67%	(44,169)	(152,167)	(6,558)	(50,727)	(145,609)
331.00	322	Mains & Accessories	2004	(71,147)	60	1.67%	(13,910)	(57,237)	(2,376)	(16,286)	(54,861)
331.00	322	Mains & Accessories	2005	(5,481)	60	1.67%	(1,018)	(4,463)	(183)	(1,201)	(4,280)
331.00	322	Mains & Accessories	2007	(167,502)	60	1.67%	(27,813)	(139,689)	(5,595)	(33,408)	(134,094)
331.00	322	Mains & Accessories	2008	(21,861)	60	1.67%	(3,415)	(18,446)	(730)	(4,145)	(17,716)
331.00	322	Mains & Accessories	2009	(112,527)	60	1.67%	(16,475)	(96,052)	(3,758)	(20,233)	(92,294)
331.00	322	Mains & Accessories	2010	(99,490)	60	1.67%	(13,589)	(85,901)	(3,323)	(16,912)	(82,578)
		Total - Account 322		$ (3,388,492)			$ (954,769)	$ (2,433,723)	$ (113,176)	$ (1,067,945)	$ (2,320,547)

AUDUBON WATER COMPANY
Asset Detail - Acquisition
Estimated Close 12/31/2024

OSBA 06-002_Attachment
Part a

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024
333.00	323	Services	1972	$ (3,090)	60	1.67%	$ (1,575)	$ (1,515)	$ (103)	$ (1,678)	$ (1,412)
333.00	323	Services	1973	(929)	60	1.67%	(465)	(464)	(31)	(496)	(433)
333.00	323	Services	1980	(11,865)	60	1.67%	(5,116)	(6,749)	(396)	(5,513)	(6,352)
333.00	323	Services	1981	(13,605)	60	1.67%	(5,733)	(7,872)	(454)	(6,187)	(7,418)
333.00	323	Services	1982	(5,508)	60	1.67%	(2,267)	(3,241)	(184)	(2,451)	(3,057)
333.00	323	Services	1983	(9,267)	60	1.67%	(3,723)	(5,544)	(310)	(4,032)	(5,235)
333.00	323	Services	1999	(73,763)	60	1.67%	(18,043)	(55,720)	(2,464)	(20,507)	(53,256)
333.00	323	Services	2000	(2,329)	60	1.67%	(547)	(1,782)	(78)	(625)	(1,704)
		Total - Account 323		$ (120,356)			$ (37,468)	$ (82,888)	$ (4,020)	$ (41,488)	$ (78,868)
334.23	324	Meters	2011	$ (50,187)	25	4.00%	$ (23,587)	$ (26,600)	$ (4,015)	$ (27,602)	$ (22,585)
334.23	324	Meters	2012	(13,643)	25	4.00%	(5,866)	(7,777)	(1,091)	(6,958)	(6,685)
334.23	324	Meters	2014	(20,398)	25	4.00%	(7,140)	(13,258)	(1,632)	(8,772)	(11,626)
		Total - Account 324		$ (84,228)			$ (36,593)	$ (47,635)	$ (6,738)	$ (43,332)	$ (40,896)
335.00	325	Fire Hydrants	1968	$ (6,328)	40	2.50%	$ (6,328)	$ -	$ -	$ (6,328)	$ -
335.00	325	Fire Hydrants	1999	$ (73,763)	40	2.50%	(43,797)	(29,966)	(3,688)	(47,485)	(26,278)
335.00	325	Fire Hydrants	2000	(20,650)	40	2.50%	(11,745)	(8,905)	(1,033)	(12,777)	(7,873)
		Total - Account 325		$ (100,741)			$ (61,870)	$ (38,871)	$ (4,721)	$ (66,591)	$ (34,150)
		Grand Total		$ (4,210,372)			$ (1,330,508)	$ (2,879,864)	$ (154,026)	$ (1,484,534)	$ (2,725,838)
		Total Plant Net of CIAC		**$ 4,977,110**			**$ 4,306,693**	**$ 670,417**	**$ 310,188**	**$ 4,616,881**	**360,229**

AUDUBON WATER COMPANY
Asset Detail - Acquisition
Estimated Close 12/31/2024

OSBA 06-002_Attachment
Part a

Utility Account	Audubon Account	Description	Date Acquired	Original Cost 12/31/22	Life	Depr. Rate %	Annual Report Accum Depr. 12/31/22	DOC 12/30/22	Calculated 2 Years of Depreciation Expense	Calculated Accum Depr. 12/31/2024	Calculated DOC 12/31/2024

As Originally Filed:

Tax Basis	9,187,482	CIAC is non-taxable and therefore does not reduce tax basis
Yr 1 Tax depreciation rate	2.0%	Assumption is to use the 25 yr life water property depreciation rates. Yr 1 uses half year convention
2024 Tax Depreciation	183,750	
Yr 2 Tax depreciation rate	4.0%	Assumption is to use the 25 yr life water property depreciation rates
2025 Full Yr Tax Depreciation	367,499	
6 months Tax Depreciation through 06/30	183,750	
Cumulative Tax Depreciation	367,499	
Net Tax Basis @ 06/30/2025	8,819,983	
Net Book Basis @ 06/30/2025	360,229	
Difference	8,459,754	
Federal Tax Rate	21.0%	
Federal ADIT @ 06/30/2025	1,776,548	Deferred tax asset

Revised ADIT:

Tax Basis	-	
Yr 1 Tax depreciation rate	2.0%	
2024 Tax Depreciation	-	
Yr 2 Tax depreciation rate	4.0%	
2025 Full Yr Tax Depreciation	-	
6 months Tax Depreciation through 06/30	-	
Cumulative Tax Depreciation	-	
Net Tax Basis @ 06/30/2025	-	
Net Book Basis @ 06/30/2025	360,229	
Difference	(360,229)	
Federal Tax Rate	21.0%	
Federal ADIT @ 06/30/2025	(75,648)	Deferred tax liability

Pennsylvania-American Water Company **OSBA 06-002_Attachment**
Revenue Requirement - Illustrative Example **Part b**

	Audubon Acquisition - Rate Base Impact	**As Filed ADIT**	**Revised ADIT**
1	Rate Base including ADIT	$ 8,716,007	$ 6,863,811
2	Rate of Return/Cost of Capital	8.22%	8.22%
3	Required Utility Operating Income (UOI)	716,456	564,205
4	Income Deficiency	716,456	564,205
5	Gross Revenue conversion factor	1.4011	1.4011
6	Revenue Increase (Decrease) requested	$ 1,003,827	$ 790,508

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 6

OSBA 06-004

Responsible Witness: Melissa Ciullo, Vice President, Tax Reporting and Compliance

Question:

Is the amortization/depreciation expense associated with the Audubon Water Company acquisition adjustment deductible by the Company for (a) federal or (b) state income tax purposes? If so, please provide the amount of this amortization/depreciation expense that the Company expects to deduct for (a) federal and (b) state income tax purposes for each tax year beginning in 2024 until the asset is fully amortized/depreciated for income tax purposes. If not, please explain why this amortization/depreciation expense is not tax deductible.

Response:

The amortization expense associated with the Audubon acquisition adjustment is tax deductible for federal and state income tax purposes if it is approved as a regulatory asset. However, the timing of the deduction is different for book accounting and for tax accounting. Book accounting will amortize and deduct the regulatory asset over 10 years. For income tax purposes, the full amount of the regulatory asset, less year 1 book amortization, would be tax deductible in year 1. Each year thereafter, the book amortization would be added back to taxable income.

In 2024, the Company expects to deduct $6,939,459, as shown on the schedule below, for both federal and state purposes. Each year after, the Company will add back the book amortization until the cumulative balance is zero in 2034. The book amounts were provided in OCA 09-059.

Year Ending	UPAA	Amortization	Net Book Balance	Tax (Deduction)/ Add Back
6/30/2024	7,639,771	(700,312)	6,939,459	(6,939,459)
6/30/2025	6,939,459	(763,977)	6,175,482	763,977
6/30/2026	6,175,482	(763,977)	5,411,505	763,977
6/30/2027	5,411,505	(763,977)	4,647,528	763,977
6/30/2028	4,647,528	(763,977)	3,883,551	763,977
6/30/2029	3,883,551	(763,977)	3,119,574	763,977
6/30/2030	3,119,574	(763,977)	2,355,597	763,977
6/30/2031	2,355,597	(763,977)	1,591,620	763,977
6/30/2032	1,591,620	(763,977)	827,643	763,977
6/30/2033	827,643	(763,977)	63,666	763,977
6/30/2034	63,666	(63,666)	-	63,666
Total		(7,639,771)		-

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 9

OCA 09-011

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Stock-Based Compensation.

a. Please list, by amount and account, all stock-based compensation expense charged to PAWC during the HTY, including but not limited to executive stock options, performance share awards, accruals made pursuant to Accounting Standard Codification (ASC) 718 and any other stock-based compensation awards that resulted in cost being charged to PAWC during the HTY.
b. Provide a description of each distinct stock-based compensation program that resulted in charges to PAWC during the HTY.
c. Please break out the stock-based compensation included in the HTY by (1) type of plan (e.g., stock options, performance shares, etc.), (2) stock-based compensation direct charged to PAWC, and (3) each type of stock-based compensation that was allocated to PAWC from the affiliated Service Company.
d. Please explain fully and in detail the amount of stock-based compensation that the Company has included in cost of service for the FPFTY ending June 30, 2025.
e. Provide a description of each stock-based compensation program that PAWC has requested be reflected in cost of service for the FPFTY ending June 30, 2025.
f. Please break out the stock-based compensation included in the FPFTY ending June 30, 2025 cost of service by (1) type of plan (e.g., stock options, performance shares, etc.), (2) stock-based compensation direct charged to PAWC, and (3) stock-based compensation that was allocated to PAWC from the affiliated Service Company.

Response:

a. Please refer to the table below for the breakdown of stock-based compensation expense charged to PAWC during the HTY ended June 30, 2023:

Description	GL Account	Expense Amount
Restricted Stock Units	50171800	$71,980
Performance Stock Units	50171800	250,479
Total - GL 50171800		**$322,459**

b. Please refer to Confidential Volume 6b – FR III.22 for a description of the 2022 & 2023 Long Term Performance Plan, which is a stock-based compensation program.

c. Please refer to the table below for the stock-based compensation included in the HTY ended June 30, 2023, as well as pro forma expenses for the 12 months ended June 30, 2024 and June 30, 2025. Please note that the amounts projected in the FTY and FPFTY are not available by type of stock-based compensation (i.e., restricted stock units and performance stock units) so an allocation was performed based on actual data from the HTY to break out these costs.

	GL Account Name	GL Account	12 Months Ended 6/30/2023	12 Months Ended 6/30/2024	12 Months Ended 6/30/2025
PAWC	Restricted Stock Units	50171800	$71,980	$180,590	$186,357
PAWC	Performance Stock Units	50171800	250,479	628,427	648,491
	Total - PAWC		**$322,459**	**$809,017**	**$834,848**
AWWSC to PAWC	Restricted Stock Units	50171800	$759,261	$831,673	$915,119
AWWSC to PAWC	Performance Stock Units	50171800	2,642,110	2,894,092	3,184,471
	Total - AWWSC to PAWC		**$3,401,371**	**$3,725,765**	**$4,099,590**
	Grand Total		**$3,723,830**	**$4,534,782**	**$4,934,438**

d. Please refer to the response provided in part c. Employees in salary grade 50 and above are eligible for Long Term Performance Plan awards. The pro forma expenses for 2024 & 2025 were calculated by taking annualized base salary for each year for eligible employees and multiplying it by the target award percentage by salary level.

e. Please refer to Confidential Volume 6b – FR III.22 for the 2022 and 2023 Long Term Performance Plan documents.

f. Please refer to the response provided in part c.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 9

OCA 09-039

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

American Water Works Service Company (AWWSC).

a. During each of the following periods were any costs actually charged, or are any projected to be charged, to PAWC from AWWSC? If so, identify all AWWSC costs charged to PAWC by account for each period: (1) the 12 months ended December 31, 2021, (2) the HTY (3) calendar 2022, (4) calendar 2023, (5) the 12 months ending June 30, 2024 and (6) the FPFTY ending June 30, 2025.
b. Is there any written agreement between PAWC and AWWSC? If so, identify and provide it.
c. Does AWWSC have a balance sheet, income statement, statement of cash flows, general ledger, trial balance, budgets or forecasts for any of the following periods: (1) the 12 months ended December 31, 2021, (2) the HTY (3) calendar 2022, (4) calendar 2023, (5) the 12 months ending June 30, 2024 and (6) the FPFTY ending June 30, 2025.
d. If the answer to part c is "yes", identify which of those items that AWWSC has and provide a complete copy of each.

Response:

a. Please see OCA 09-039_Attachment 1 for the breakdown of AWWSC costs charged to PAWC by account for the periods requested. Please note that we did not forecast charges for the calendar year 2023 and included YTD actual charges through October 2023 in their place.

b. Yes, please see OCA 09-039_Attachment 2.

c. Yes, AWWSC has balance sheets, income statements and general ledgers available for the periods Dec 2021, Dec 2022, June 2023. There are no financial statements available for the forecast periods. Also, AWWSC budgets on a calendar year basis and no budgets are available covering the 12-month periods ending June 2024 and June 2025.

d. Please see OCA 09-039_Attachment 3 for the balance sheets; OCA 09-039_Attachment 4 for the income statements; OCA 09-039_Attachment 5 for the general ledger for the periods noted in part c above.

Pennsylvania-American Water Company - Water Operations
Docket Nos. R-2023-3043189 and R-2023-3043190
Response to Office of Consumer Advocate Set 09-039 subpart (a)

PA-American Service Company Actual OPEX Costs

Account	Account Name	Actual 12 Months Dec 2021	Actual 12 Months Dec 2022	Actual 12 Months Jun 2023	Actual YTD Oct 2023	Forecast 12 Months Jun 2024	Forecast 12 Months Jun 2025
50100000	Labor Natural Account	$18,326,178	$17,477,392	$19,224,924	$14,987,492	$19,872,568	$20,540,549
50100001	Labor Expense Accrual	5,127	18,181	(663,223)	$587,612	(683,475)	(704,363)
50110000	Labor Non-scheduled Overtime - Natural Account	289,921	325,062	308,357	$184,478	318,226	328,406
50120000	Labor Overtime - Natural Account	12,306	12,193	13,050	$8,846	13,460	13,883
50171000	Annual Performance Plan	3,462,756	3,561,678	3,833,319	$3,377,556	3,957,729	4,086,046
50171800	Compensation Expense - RSU/PSU	2,210,562	2,899,109	3,401,371	$2,918,039	3,725,765	4,099,590
50185000	Severance	380,942	653,530	0	$346,475	0	0
50421000	401k Expense	589,051	537,086	583,599	$519,462	603,553	624,133
50422000	Defined Compensation Plan Expense	695,339	651,299	713,137	$616,244	737,552	762,734
50423000	Employee Stock Purchase Plan Expense	122,561	126,841	126,651	$81,801	130,628	134,729
50424000	DC Restoration Expense	49,676	430				
50425000	401k Restoration Expense	26,252	233				
50426000	Retiree Medical Expense	31,199	24,794	33,333	$36,642	34,379	35,459
50450000	Other Welfare - Natural Account	61,998	183,388	188,421	$111,895	196,510	204,947
50451000	Employee Awards	43,789	44,992	62,950	$47,729	65,164	67,472
50452000	Employee Physical Exams	3,324	908	9,539	$14,020	9,805	10,084
50456000	Tuition Aid	73,748	39,980	26,054	$25,357	27,117	28,226
50457000	Training	123,717	106,773	101,728	$50,070	106,064	110,587
50458000	Referral Bonus	10,886	3,676	0	$6,100	0	0
50510000	PBOP Expense	28,780	30,055	26,614	$17,079	185,564	192,083
50550000	Group Insurance Expense	3,064,394	2,809,456	2,909,132	$2,474,746	3,007,763	3,109,490
50560000	Health Savings Account Expense	36,964	33,311	38,761	$37,708	39,964	41,205
50610000	Pension Expense	1,225,518	1,055,848	834,300	$474,603	1,417,384	1,464,429
50630000	Pension Expense - ERP	48,126	31,348	32,083		33,090	34,129
51510000	Purchased Power - Natural Account		4,374	3	($0)	3	3
52000000	M & S (O&M) - Natural Account	60,518	69,409	62,861	$21,643	65,552	68,359
52001600	M & S Oper - Admin & General	471	1,147	1,178	$57	1,228	1,281
52500000	Misc Exp (O&M) - Natural Acct	(294,741)	(2,097,156)	(1,236,459)	($268,396)	(969,378)	(1,011,231)
52510000	Bank Service Charges - Natural Account	47					
52512500	Books & Publications	3,687	12,639	22,480	$18,412	23,327	24,209
52513200	Business Development	26,335	27,083	25,945	$24,731	27,058	28,220

Pennsylvania-American Water Company - Water Operations
Docket Nos. R-2023-3043189 and R-2023-3043190
Response to Office of Consumer Advocate Set 09-039 subpart (a)

PA-American Service Company Actual OPEX Costs

Account	Account Name	Actual 12 Months Dec 2021	Actual 12 Months Dec 2022	Actual 12 Months Jun 2023	Actual YTD Oct 2023	Forecast 12 Months Jun 2024	Forecast 12 Months Jun 2025
52514000	Charitable Contribution Deductible	17,579		0	$627	0	0
52514100	Charitable Contribution Nondeductible	0	0	0	$175	0	0
52514700	Community Partnerships	641	880	1,684	$804	1,756	1,831
52514900	Customer Education	4		770	$1,069	803	838
52514901	Customer Education Communication - Reg	649	323	15		16	16
52514905	Customer Education Communication - Printed	28		9	$9	9	10
52514907	Customer Education - Press Releases	16,078	18,081	18,675	$19,137	19,477	20,313
52514910	Customer Education - Online Development/Production	169	11,054	10,252	$13,516	10,692	11,151
52515000	Community Relations - Events	616	1,361	0	$157	0	0
52515001	Community Relations - Specialty		264	0	$2,047	0	0
52522000	Community Relations	9,632	4,180	0	$1,103	0	0
52524000	Co Dues/Membership Deductible	161,761	207,795	217,861	$186,544	224,563	231,554
52526100	Credit Line Fees Interco		264,427	328,234	$206,137	325,859	323,382
52527000	Directors Fees	234,401	236,852	252,356	$274,794	263,190	274,488
52527100	Directors Expenses	20,060	40,338	41,374	$44,138	43,151	45,003
52532000	Electricity - Natural Account	97,924	84,245	69,056	$36,740	38,694	40,356
52534000	Employee Expenses	96,620	334,610	394,047	$359,206	410,658	427,982
52534200	Conferences & Registration	6,278	23,127	20,835	$26,271	21,700	22,602
52535000	Meals Deductible	72,291	155,203	150,797	$105,998	157,053	163,578
52535100	Meals Non-Deductible	(49)	1,319	568	$1,108	572	576
52540000	Amort Bus Services Proj Exp		2,488				
52542000	Forms - Natural Account			9	$136	9	10
52546000	Grounds Keeping - Natural Account	1,429	3,994	3,385	$1,379	21,144	22,052
52548000	Heating Oil/Gas - Natural Account	5,374	3,488	468	($726)	2,560	2,670
52548100	Hiring Costs	9,794	25,901	30,213	$16,054	31,510	32,863
52549000	Injuries and Damages	(744,549)	44,868	0	$552	0	0
52550000	Janitorial - Natural Account	31,705	21,821	12,250	$3,738	15,205	15,858
52554500	Lab Supplies	147,820	165,672	185,151	$156,964	193,099	201,389
52562000	Office & Admin Supplies - Natural Account	33,717	126,451	85,091	$46,258	87,770	90,564
52562500	Overnight Shipping - Natural Account	46,778	45,408	57,210	$53,213	59,663	62,221
52564000	Penalties Nondeductible	653	172	0	$963	0	0

Pennsylvania-American Water Company - Water Operations
Docket Nos. R-2023-3043189 and R-2023-3043190
Response to Office of Consumer Advocate Set 09-039 subpart (a)

PA-American Service Company Actual OPEX Costs

Account	Account Name	Actual 12 Months Dec 2021	Actual 12 Months Dec 2022	Actual 12 Months Jun 2023	Actual YTD Oct 2023	Forecast 12 Months Jun 2024	Forecast 12 Months Jun 2025
52566000	Postage - Natural Account	12,525	66,494	46,040	$47,319	48,016	50,078
52566700	Printing	3,549	2,893	2,430	$1,434	2,534	2,643
52567000	Relocation Expenses	37,794	139,232	143,929	$53,849	150,108	156,552
52568000	Research & Development	852	(73,281)	(32,989)	($32,993)	(34,406)	(35,883)
52571000	Security Service - Natural Account	20,113	31,007	28,050	$12,415	31,373	32,720
52571500	Software Licenses	1,991,633	2,523,991	2,164,814	$1,591,458	2,256,937	2,353,015
52573000	Customer Accounting-Collection Agencies	3,084,776	2,620,834	2,926,516	$2,417,110	3,052,150	3,183,176
52573100	Customer Accounting-Forms	958,916	1,055,052	1,116,190	$1,073,937	1,164,108	1,214,082
52573200	Customer Accounting-Postage	3,021,743	3,266,829	3,538,276	$3,002,307	3,746,678	3,746,678
52574000	Telephone - Natural Account	424,591	783,923	838,370	$505,990	305,651	318,772
52574100	Cell Phone - Natural Account	154,303	193,891	196,506	$120,771	204,921	213,697
52574200	Data Lines - Admin & General	547,839	47,629	51,744	$34,266	53,893	56,207
52574300	Wireless - Service First - Natural Account	58,938	39,343	22,889	$28,934	23,872	24,897
52578000	Trash Removal - Natural Account	2,448	6,048	5,722	$4,875	6,438	6,714
52582000	Uniforms - Natural Account	490	(650)	(237)	$882	(247)	(258)
52583000	Water & WW - Natural Account	3,844	1,473	485	($29)	507	530
52585000	Discounts Available	(10,862)	(17,772)	(14,658)	($7,251)	(15,288)	(15,944)
52599800	PCard Undistributed	2,587	1,073	(839)	$666	(875)	(912)
53110000	Contract Svc-Eng - Natural Account	1,767	4,946	19,755	$20,496	20,603	21,488
53150000	Contract Svc-Other - Natural Account	4,807,226	4,746,439	4,295,618	$3,105,826	4,473,165	4,658,333
53151000	Contract Svc-Temp Empl - Natural Account	200,565	250,853	236,327	$230,791	246,472	257,053
53152000	Contract Svc-Lab Testing - Water Treatment	(36,345)	(32,149)	(20,570)	($19,241)	(21,453)	(22,374)
53153000	Contract Services - Accounting	329,900	169,785	103,437	$90,337	107,877	112,509
53154000	Contract Services - Audit Fees	336,488	364,371	371,756	$320,120	387,715	404,360
53155000	Contract Services - Legal	270,945	303,588	336,087	$270,213	348,829	362,117
53157000	Contract Services - Outplacement	1,256	914	0	$8,456	0	0
53159000	Contract Services - Centrally Sponsored Projects		0				
53159100	Contract Services - Hardware Services	8,058	348,183	386,172	$248,862	402,750	420,040
53185000	Contract Services - Interco	322,030	325,373	347,565	$326,018	362,486	378,047
54110000	Rents-Real Property - Natural Account	196,023	628,800	491,116	$10,852	(134)	(140)
54115000	Rents-Real Property Interco	921,013	1,048,697	1,095,250	$932,603	1,183,116	1,233,907

Pennsylvania-American Water Company - Water Operations
Docket Nos. R-2023-3043189 and R-2023-3043190
Response to Office of Consumer Advocate Set 09-039 subpart (a)

PA-American Service Company Actual OPEX Costs

Account	Account Name	Actual 12 Months Dec 2021	Actual 12 Months Dec 2022	Actual 12 Months Jun 2023	Actual YTD Oct 2023	Forecast 12 Months Jun 2024	Forecast 12 Months Jun 2025
54140000	Rents-Equipment - Natural Account	19,857	51,592	12,617	$5,773	5,903	6,156
55000000	Transportation (O&M) - Natural Account	691	475	430	$485	449	468
55010100	Transportation Lease Costs	(82)	(2,855)	4,319	($4,185)	4,504	4,697
55010200	Transportation Lease Fuel	1,952	2,531	1,705	$1,377	1,778	1,855
55010300	Transportation Lease Maint	874	1,409	(820)	($403)	(855)	(892)
55010400	Transportation - Employee Reimbursement to Company	4	196	158	$353	164	171
55010500	Transportation - Reimburse Employee Personal Use	11,004	24,494	28,165	$21,088	29,374	30,635
55110000	Insurance Vehicle	2,551	6,427	8,391	$8,543	8,739	9,103
55710000	Insurance General Liabilty	492,672	737,466	785,595	$687,095	812,158	839,861
55711000	Insurance Casualty Reserve	(75,861)					
55720000	Insurance Workers Compensation	189,351	189,953	202,093	$176,464	210,493	219,253
55730000	Insurance Other	56,727	45,106	49,189	$42,722	51,233	53,365
55735000	Insurance Other - Intercompany	153,587	357,098	459,301	$409,266	479,018	499,582
55740000	Insurance Property	28,278	33,612	36,118	$31,641	33,889	35,294
57010000	Uncollectible Accounts Exp - Natural Account	(12,775)	482	(1,775)	($4,636)	(1,852)	(1,931)
62502600	Misc Maint - Admin & General	2,603,923	2,887,638	2,698,550	$2,202,169	2,814,397	2,935,217
68011200	Depreciation Exp - Non-Utility Property	3,855,781	4,306,625	3,539,423	$2,600,013	3,550,123	3,815,309
68520000	Property Taxes	14,108	11,208	14,285	$11,790	26,660	27,804
68532000	FUTA	20,571	8,604	11,778	$12,604	12,163	12,561
68533000	FICA	1,617,690	1,467,398	1,564,702	$1,376,073	1,617,129	1,671,202
68535000	SUTA	101,160	100,436	79,566	$75,897	82,343	85,207
68543000	Other Taxes and Licenses	279,555	166,667	135,607	$137,581	140,393	145,384
69011000	FIT - Current	622,373	340,813	264,388	$218,436	275,738	287,576
69012000	FIT - Prior Year Adjustment	17,261					
69021000	SIT - Current	46,608	126,821	102,768	$62,865	107,180	111,781
69022000	SIT - Prior Year Adjustment	(23,261)					
69062000	Deferred FIT - Prior Year Adjustment	(26,136)					
69065000	Deferred FIT - Other	(579,829)	(388,900)	(307,785)	($178,911)	(320,998)	(334,778)
69072000	Deferred SIT - Prior Year Adjustment	26,071					
69073500	Deferred SIT - Other	(29,923)	(160,922)	(142,683)	($49,121)	(148,809)	(155,197)
71810000	Pension NonServ Cost			(921,079)		(951,668)	(983,217)

Pennsylvania-American Water Company - Water Operations
Docket Nos. R-2023-3043189 and R-2023-3043190
Response to Office of Consumer Advocate Set 09-039 subpart (a)

PA-American Service Company Actual OPEX Costs

Account	Account Name	Actual 12 Months Dec 2021	Actual 12 Months Dec 2022	Actual 12 Months Jun 2023	Actual YTD Oct 2023	Forecast 12 Months Jun 2024	Forecast 12 Months Jun 2025
71820000	OPEB NonServ Cost			(521,045)		(539,316)	(558,161)
75810000	Donations Deductible	113					
81035000	Interest Capital Lease Intercompany	152,575	246,461	244,591	$156,490	271,828	370,028
81815100	Interest Income - STD Intercompany	(27,755)	(391,819)	(892,653)	($682,972)	(930,975)	(970,941)
Grand Total		$58,201,549	$59,486,207	$58,712,062	$49,998,280	$61,024,736	$63,575,463

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 11

OCA 11-028

Responsible Witness: Charles Rea, Senior Director of Rates and Regulatory

Question:

Please provide a detailed description of how PAWC proposes to allocate, between customer classes, the cost of PAWC's:

a. Low-income Bill Discount Program;
b. Low-income Arrearage Forgiveness Program.

Response:

a-b. The Company is not proposing a change to its current approach. Costs of discounts offered through the Bill Discount Program and the costs associated with the Arrearage Forgiveness Program are recovered in base rates from residential customers.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 15

OCA 15-013

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

SERP Expense. Refer to the responses to OCA 09-012 and OCA 09-039, Attachment 4. The response to OCA 09-012 states that the Company does not offer SERP as a benefits plan and that there is no information to report. However, Attachment 4, page 1 to the response to OCA 09-039 indicates the line item "Pension Expense – SERP in Account No. 50630000. Please explain and reconcile this discrepancy. Identify, quantify and explain each reconciling item, including whether the Company's filing reflects SERP expense charged to PAWC from the Service Company.

Response:

The Company does not offer SERP as a benefits plan but does offer ERP (Executive Retirement Plan). Upon further research, the amount listed under Account No. 50630000 in the HTY was recorded to the Service Company in error and should have been booked to the parent company which would not have any amounts passed down to PAWC. Therefore, the amounts will be removed from Service Company for the FTY and FPFTY in the rebuttal phase of this proceeding.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 22

OCA 22-003

Responsible Witness: Ashley E. Everette, Senior Director of Rates and Regulatory for PAWC

Question:

Refer to the PAWC Implementation Plan concerning: Recommendation IV-1 "Perform a market comparison for local board compensation to ensure PAWC Board fees are at market rates." Also refer to PAWC's Response which states that: "The Company accepts this recommendation." And states in the discussion that: "PAWC is in the process of evaluating whether it should continue to maintain external Board members. If PAWC continues with external Board members, PAWC will re-evaluate whether its external Board compensation fees are at market rates."

a. How much expense has PAWC reflected in the HYT, FTY and FPFTY for external PAWC board members? Show the amounts by account for each period.

b. How many external PAWC board members did PAWC have in the HTY?

c. Provide the amount of compensation (by type of compensation recorded in each account) of each PAWC external board member in the HTY.

d. Explain the functioning of each PAWC external board member in the HTY.

e. Identify the amount of compensation (by type of compensation recorded in each account) of each PAWC external board member in the FTY and FPFTY.

f. How many external PAWC board members would PAWC have in the FPFTY if PAWC determines that having external board members is not necessary?

g. Do any of the other American Water Works operating utilities have external board members? If so, which ones and how many external board members does each have?

h. Were any of the PAWC external board members in the HTY also board members of American Water Works? If so, identify each PAWC external board member who was also an American Water Works board member.

i. Is the cost of American Water Works board members allocated to PAWC? If so, identify the amount of expense by account for AWW board members charged and allocated to PAWC for each period: (1) HTY, (2) FTY and (3) FPFTY.

Response:

A. The annual expense reflected in account 675.8 is $123,250 for each of the test years. PAWC has eliminated its external board as of December 31, 2023 and will reflect the removal of the $123,250 annual expense in the rebuttal stage of this proceeding.

B-H. As noted in the response to part A, PAWC no longer has an external board and therefore will not be claiming any costs associated with an external board.

I. Please see below table for the cost of American Water Works board members allocated to PAWC.

Account	Account Description	HTY	FTY	FPFTY
52527000	Directors Fees	$252,356	$263,190	$274,488
52527100	Directors Expenses	41,374	43,151	45,003
Total		$293,731	$306,340	$319,491

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Bureau of Investigation and Enforcement

I&E RE-023-D

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services for AWWC

Question:

Reference PAWC Exhibit No. 3-B, p. 74 and PAWC Statement No. 5, p. 15 concerning payroll taxes, specify components of employee compensation (salaries and wages, overtime, and performance pay) considered in the calculation of payroll taxes.

Response:

The following components of employees' compensation are considered in the calculation of payroll taxes: annualized base salary, overtime, meals, shift pay, Annual Performance Plan, and Long Term Performance Plan.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	**Docket Nos:**
v.	:	**R-2023-3043189 (Water)**
Pennsylvania-American Water Company	:	**R-2023-3043190 (Wastewater)**

VERIFICATION

I, Kevin C. Higgins, hereby state that the facts set forth in my Direct Testimony labelled OSBA Statement No. 1 and in Schedules KCH-1 through KCH-10 are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 19 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 1, 2024

Kevin C. Higgins

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	**Docket Nos. R-2023-3043189 (Water)**
v.	:	**R-2023-3043190 (Wastewater)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the foregoing have been served via email (*unless other noted below*) upon the following persons, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

The Honorable Christopher P. Pell
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DATE: February 1, 2024

/s/ Steven C. Gray
Steven C. Gray
Senior Supervising
Assistant Small Business Advocate
Attorney ID No. 77538

COMMONWEALTH OF PENNSYLVANIA

February 21, 2024

The Honorable Christopher P. Pell
Deputy Chief Administrative Law Judge
Pennsylvania Public Utility Commission
801 Market Street, Suite 4063
Philadelphia, PA 19107

The Honorable John Coogan
Administrative Law Judge
Pennsylvania Public Utility Commission
400 North Street
Commonwealth Keystone Building
Harrisburg, PA 17120

Re: Pennsylvania Public Utility Commission v. Pennsylvania American Water Company / Docket Nos. R-2023-3043189 (Water) / R-2023-3043190 (Wastewater)

Dear Presiding Judges:

Enclosed please find the Rebuttal Testimony of Kevin C. Higgins labelled OSBA Statement No. 1-R with Schedules, on behalf of the Office of Small Business Advocate ("OSBA"), in the above-captioned proceedings.

As evidenced by the enclosed Certificate of Service, all known parties will be served, as indicated.

If you have any questions, please do not hesitate to contact me.

Sincerely,

/s/ Steven C. Gray

Steven C. Gray
Senior Supervising
Assistant Small Business Advocate
Attorney ID No. 77538

Enclosures
cc: PA PUC Secretary Rosemary Chiavetta (Cover Letter & Certificate of Service only)
Brian Kalcic
Kevin C. Higgins
Parties of Record

OSBA STATEMENT NO. 1-R

BEFORE THE
PUBLIC UTILITIES COMMISSION OF PENNSYLVANIA

Pennsylvania Public Utility Commission	:	Docket Nos:
v.	:	R-2023-3043189 (Water)
Pennsylvania-American Water Company	:	R-2023-3043190 (Wastewater)

Rebuttal Testimony of Kevin C. Higgins

on behalf of

Pennsylvania Office of Small Business Advocate

February 21, 2024

Topics:

Cost Allocation

Revenue Allocation

REBUTTAL TESTIMONY OF KEVIN C. HIGGINS

INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Kevin C. Higgins. My business address is 111 East Broadway, Suite 1200, Salt Lake City, Utah, 84111.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am a Principal in the firm of Energy Strategies, LLC. Energy Strategies is a private consulting firm specializing in economic and policy analysis applicable to energy production, transportation, and consumption.

Q. ARE YOU THE SAME KEVIN C. HIGGINS WHO FILED DIRECT TESTIMONY IN THIS PROCEEDING ON BEHALF OF THE PENNSYLVANIA OFFICE OF SMALL BUSINESS ADVOCATE ("OSBA")?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. My testimony responds to the concerns raised in the Direct Testimony of Mr. Richard A. Baudino on behalf of Cleveland-Cliffs Steel regarding cost allocation to the Public (Municipal) class in the water class cost-of-service study ("CCOSS"). I also address the exclusion of interruptible usage from the extra capacity component of certain allocation factors in the water CCOSS in response

to Mr. Baudino and the Direct Testimony of Mr. Jerome D. Mierzwa on behalf of the Pennsylvania Office of Consumer Advocate ("OCA").

I also respond to Mr. Mierzwa regarding the appropriate maximum day and maximum hour extra capacity weightings to utilize in certain allocation factors in the water CCOSS.

In addition, I address the appropriate allocation of the Act 11 subsidy among water classes in response to Mr. Baudino, Mr. Mierzwa, and Ms. Billie S. LaConte on behalf of Pennsylvania-American Water Large Users Group ("PAWLUG").

Finally, I utilize the results of my recommended water CCOSS to allocate the proposed revenues among water customer classes and address the appropriate scale back of revenues at a reduced revenue requirement.

Q. WHAT CONCLUSIONS AND RECOMMENDATIONS DO YOU OFFER IN YOUR REBUTTAL TESTIMONY?

A. (1) Mr. Baudino correctly observes that the water CCOSS results for the Public (Municipal) class were anomalous compared to the results from the previous general rate case, Docket No. R-2022-3031672. In response to PAWLUG 05-001, Pennsylvania-American Water Company ("PAWC") has acknowledged that its Public Authority meter count was erroneous and provided a revised water CCOSS correcting this and other errors.[1]

(2) I agree with Mr. Baudino that it is appropriate to exclude interruptible usage from the extra capacity component of the base-extra capacity allocation factors.

[1] The narrative response to PAWLUG 05-001 is included in Schedule KCH-13.

PAWC's revised water CCOSS provided in response to PAWLUG 05-001 reflects the exclusion of interruptible usage from the extra capacity component of the base-extra capacity allocation factors.

(3) I agree with Mr. Mierzwa that the weightings applied by PAWC to the maximum day and maximum hour extra capacity in the water CCOSS are outdated. I recommend adopting Mr. Mierzwa's recommended maximum day factor of 1.2 rather than PAWC's proposed 1.4 maximum day factor. In the absence of recent data concerning the maximum hour, I recommend adopting a maximum hour factor of 1.8, based on scaling PAWC's proposed 2.1 maximum hour factor by the ratio of 1.2 to 1.4. This scales the maximum hour factor proportionately to my recommended adjustment to the maximum day factor.

(4) Opinions differ regarding the appropriate allocation of the Act 11 subsidy among water classes. I continue to recommend that the allocation approach utilized by PAWC in response to OSBA 03-001 is reasonable, as updated for the Act 11 subsidy level and cost-of-service studies ultimately approved in this case.

(5) I summarize the results of the water CCOSS incorporating my recommendations in Schedule KCH-11, at PAWC's proposed Direct revenue requirement. I present my recommended revenue allocation among water classes at PAWC's proposed Direct revenue requirement in Schedule KCH-12, page 1. On page 2 of Schedule KCH-12, I present my recommended revenue allocation among water classes, scaled back to OSBA's recommended revenue requirement.

PUBLIC (MUNICIPAL) CLASS COST ALLOCATION

Q. WHAT ISSUE DOES MR. BAUDINO RAISE REGARDING COST ALLOCATION TO THE PUBLIC CLASS?

A. Mr. Baudino explains that there has been a large shift in costs allocated to the Public class since the last rate case, Docket No. R-2022-3031672. Specifically, he notes that the Public class's allocated share of meter and services costs increased dramatically since the last rate case.

Q. HAS PAWC ADDRESSED THIS ISSUE WITH THE PUBLIC CLASS ALLOCATION?

A. Yes. In response to PAWLUG 05-001, PAWC acknowledged that there was a "linking error" in the Public Authority meter count that was used as an input in the water CCOSS. The Company provided a revised water CCOSS that corrects this error, as well as several other errors, which I will discuss below.[2]

Q. DO YOU INCORPORATE PAWC'S CORRECTION TO THE PUBLIC CLASS METER COUNT IN YOUR REBUTTAL WATER CCOSS ANALYSIS AND REVENUE ALLOCATION?

A. Yes. I utilize the revised water CCOSS provided by PAWC in response to PAWLUG 05-001 as the starting point for my rebuttal CCOSS analysis. In my direct testimony, I recommended a larger increase for the Public class based on the results of PAWC's CCOSS. The correction to the Public class meter counts reduces the increase required for the Public class to recover its cost of service. I have adjusted my recommended revenue allocation to reflect this correction, as

[2] The narrative response to PAWLUG 05-001 is included in Schedule KCH-13.

well as the other corrections to PAWC errors and adjustments I discuss in my rebuttal testimony.

INTERRUPTIBLE USAGE COST ALLOCATION

Q. WHAT ISSUE DOES MR. BAUDINO RAISE REGARDING INTERRUPTIBLE USAGE?

A. Mr. Baudino explains that PAWC's original water CCOSS did not exclude interruptible usage from the extra capacity portion of Factors 2, 3, and 4.[3]

Q. WHAT IS INTERRUPTIBLE USAGE?

A. PAWC provides service under an Industrial Curtailment Rate that applies a reduced tail block rate to participating customers' usage over 15,000,000 gallons a month. In exchange, participants must curtail usage of Company-supplied water for industrial purposes when requested or be subject to penalties for failure to curtail.[4]

Q. HOW WAS INTERRUPTIBLE USAGE TREATED IN PAWC'S ORIGINAL WATER CCOSS IN THIS CASE?

A. Interruptible usage was included in extra capacity components of the base-extra capacity allocators (Factors 2, 3, and 4), as well as its weighted maximum day / maximum hour allocators (Factors 5 and 8). This increased the cost allocated to the Industrial class.

[3] Direct Testimony of Richard A. Baudino (Cleveland-Cliffs Steel Statement No. 1), pp. 3-4.
[4] Supplement No. 2 to Tariff Water-PA P.U.C. No. 5, First Revised Pages 18-19.

Q. WAS THIS TREATMENT IN ERROR?

A. Yes, according to PAWC. In response to OCA 04-012, PAWC explained that its failure to exclude interruptible usage was erroneous and provided corrected versions of its water CCOSS.[5] As discussed above, PAWC subsequently provided a further revision to its water CCOSS in response to PAWLUG 05-001. This revised CCOSS corrected the error related to interruptible usage as well as the Public class meter count error I previously discussed.[6]

In addition, PAWC's revised water CCOSS also adopts the recommendation in my direct testimony to directly assign Arrearage Management Plan costs and residential low-income program administrative costs to the Residential class. I continue to support direct assignment of these costs to the Residential class.

Q. DO YOU AGREE WITH MR. BAUDINO THAT INTERRUPTIBLE USAGE SHOULD BE EXCLUDED FROM THE MEASUREMENT OF EXTRA CAPACITY USED IN COST ALLOCATION?

A. Yes. Since interruptible customers must be prepared to curtail their water usage during peak periods when requested, it is appropriate to exclude interruptible usage from the extra capacity components of PAWC's allocation factors. Including interruptible loads in the extra capacity components of these factors would over-allocate costs to the Industrial class by failing to recognize the value of curtailment.

[5] The narrative response to OCA 04-012 is included in Schedule KCH-13.
[6] The narrative response to PAWLUG 05-001 is included in Schedule KCH-13.

Q. DO YOU WISH TO RESPOND TO ANY OTHER PARTY REGARDING THIS ISSUE?

A. Yes. OCA witness Mr. Mierzwa disagrees with PAWC's position that interruptible usage should be excluded from the measurements of extra capacity because no interruptions have occurred for at least three years.[7] I disagree with Mr. Mierzwa's contention that interruptible usage should be allocated maximum day and maximum hour cost responsibility. Although curtailment has not occurred for several years, participating customers must be prepared to curtail their usage when requested or face penalties for failure to curtail. Participants may also be subject to additional metering costs and must permit inspection of their facilities to determine compliance with the Industrial Curtailment Rate.[8] PAWC's tariff provides a reduced rate for customers served on the Industrial Curtailment Rate and it is appropriate to also reflect the value of this demand-side resource in the cost allocation process.

MAXIMUM DAY AND MAXIMUM HOUR WEIGHTING FACTORS

Q. DOES MR. MIERZWA RAISE ANY OTHER CONCERNS REGARDING THE MAXIMUM DAY AND MAXIMUM HOUR FACTORS IN PAWC'S WATER CCOSS?

A. Yes. Mr. Mierzwa explains that the maximum day and maximum hour weightings utilized by PAWC in its base-extra capacity allocation factors are outdated. Specifically, PAWC utilizes a maximum day factor of 1.4, which is

[7] Direct Testimony of Jerome D. Mierzwa (OCA Statement 4), p. 14.
[8] Supplement No. 2 to Tariff Water-PA P.U.C. No. 5, First Revised Page 19

based on the ratio of the maximum day to the average day observed in 1988, 1995, 1996, 1999 and 2003.[9] As Mr. Mierzwa explains, PAWC's maximum hour factor of 2.1 is based on a 1988 analysis of PAWC's three largest operating districts,[10] and the Company does not have recent actual maximum hour data for its water system.[11]

Q. PLEASE EXPLAIN HOW THE MAXIMUM DAY FACTOR IS UTILIZED IN PAWC'S WATER CCOSS.

A. In the base-maximum day extra capacity allocator, Factor 2, PAWC weights the average day by 1/1.4 (or 71.43%) and weights the maximum day extra capacity by 0.4/1.4 (or 28.57%). In this calculation, the maximum day component is intended to represent each class's share of the maximum day extra capacity, which is calculated using ratios from PAWC's Customer Class Demand Study conducted in 2013 to 2015. The Customer Class Demand Study identifies the highest maximum day to average day ratio for each customer class sample in 2013 to 2015, (*i.e.*, the class peaking factor). PAWC then applies each class's peaking factor to its pro forma future test year average daily consumption to develop an estimate of each class's noncoincident demand. Each class's maximum day extra capacity represents the difference between its noncoincident maximum daily demand and its average daily demand.

Factor 3 is another variation of the base-maximum day extra capacity factor which includes an additional weighting for Fire Protection.

[9] As shown in PAWC's Schedule G, the actual ratios range from 1.37 to 1.38 in the cited years.
[10] Appendix A to PAWC's Exhibit 12-A, pages A-4-A-5, RS1c.
[11] Direct Testimony of Jerome D. Mierzwa (OCA Statement 4), p. 15-16.

Factors 2 and 3 are used to allocate a variety of costs in PAWC's water CCOSS, including Purification Buildings, Purification System plant, Other Water Source Structures, Mains 10-inches and over, and certain operations & maintenance ("O&M") expenses related to purification and Source of Supply.

Q. WHAT DOES MR. MIERZWA RECOMMEND REGARDING THE MAXIMUM DAY FACTOR?

A. Mr. Mierzwa recommends utilizing a maximum day extra capacity factor of 1.2 based the actual maximum day ratios since 2011. He explains that the system-wide maximum day extra capacity factor used by PAWC of 1.4 was last experienced over twenty years ago in 2003. Mr. Mierzwa argues that water demand has changed on PAWC's system since then due to water conservation, legislation, development, and changing land uses.[12]

Q. DO YOU AGREE WITH MR. MIERZWA THAT A MAXIMUM DAY FACTOR OF 1.2 IS APPROPRIATE FOR PAWC?

A. Yes. As shown in PAWC's Schedule G, PAWC's system-wide maximum day ratios have been trending downward over time. In the most recent ten-year period available, 2013-2022, the highest annual ratio is 1.16. Based on this data, a maximum day ratio of 1.2 is more representative of PAWC's system.

Q. PLEASE EXPLAIN THE CONCEPT OF DIVERSITY OF DEMAND.

A. As explained in the American Water Works Association *Principles of Water Rates, Fees and Charges* ("AWWA Manual"), the system diversity of demand is a measurement of the relationship between noncoincident demand and coincident

[12] Direct Testimony of Jerome D. Mierzwa (OCA Statement 4), p. 16.

demand. According to the AWWA Manual, the system diversity ratio is often in the range of 1.1 to 1.4, though different system diversity measures may arise for communities with more atypical usage patterns.[13]

Q. WHAT SYSTEM DIVERSITY RATIO RESULTS FROM THE NONCOINCIDENT DEMAND USED BY PAWC AND A MAXIMUM DAY FACTOR OF 1.2?

A. The resulting ratio is 1.63, for the non-Fire Protection classes included in PAWC's Factor 2 calculation. This is calculated by first dividing the noncoincident demand used in PAWC's revised water CCOSS by the average daily demand, resulting in a ratio of noncoincident daily demand to average daily demand of 1.96.[14] Then, this ratio is divided by 1.2, resulting in a system diversity ratio of 1.63.

Q. DO YOU BELIEVE THAT THE MAXIMUM DAY FACTOR SHOULD BE SET HIGHER THAN 1.2 TO ACHIEVE A SYSTEM DIVERSITY RATIO CALCULATION NO GREATER THAN 1.4?

A. No. If anything, the resulting diversity ratio suggests that the class peaking factors from PAWC's 2013-2015 Customer Class Demand Study may not be an accurate representation of class noncoincident demand. PAWC's system maximum day ratios for 2013-2015 were 1.15, 1.14, and 1.16, respectively.[15] If PAWC does not believe that the resulting diversity ratio can be explained by

[13] AWWA Manual, Seventh Edition, (2017) Appendix A, p. 377.
[14] Noncoincident peaking ratio (excluding Fire Protection classes and Demand-Based Service) is calculated as such: (in 100 gallons) Average Daily Consumption of 1,169,719 plus Maximum Day Extra Capacity of 1,119,862, divided by Average Daily Consumption of 1,169,719. (1,169,719 + 1,119,862) / 1,169,719 = 1.96. From PAWLUG 05-001_Attachment, F1 and F2B tabs.
[15] PAWC Schedule G.

atypical class usage patterns, this suggests that the class peaking factors may be unreliable. This means that giving the maximum day extra capacity component an outsized weighting could be especially problematic.

I also note that by selecting the highest peaking factor experienced by each class sample during the 2013-2015 three-year period, the resulting noncoincident demand will skew higher than experienced in a single year. In any case, I do not recommend utilizing an inflated maximum day factor based on a targeted diversity ratio. I support utilizing the maximum day factor of 1.2, consistent with that experienced in the last decade, as recommended by Mr. Mierzwa.

Q. TURNING NOW TO THE MAXIMUM HOUR FACTOR, CAN YOU EXPLAIN HOW THIS FACTOR IS USED IN PAWC'S WATER CCOSS?

A. Yes. PAWC utilizes a base-maximum hour extra capacity allocator, Factor 4, to allocate various cost items such as Mains under 10 inches and Distribution Reservoirs and Standpipes. This factor is calculated by weighting average hourly consumption, maximum hour extra capacity, and a Fire Protection component. PAWC uses a maximum hour factor of 2.1 to weight the average hourly usage and maximum hour extra capacity components.

In addition, PAWC utilizes Factors 5 and 8, which are weighted combinations Factors 3 and 4 to allocate certain pumping-related plant and mains-related O&M expenses.

Q. WHAT DOES MR. MIERZWA RECOMMEND REGARDING THE MAXIMUM HOUR FACTOR?

A. Mr. Mierzwa explains that the 2.1 maximum hour factor utilized by PAWC is based on a 1988 analysis and recommends that PAWC should be required to update its analysis of system-wide maximum hour extra capacity demands prior to its next base rate proceeding. In this case, Mr. Mierzwa recommends utilizing a maximum hour factor of 1.5, based the ratio of the maximum hour factor to the maximum day factor from a study conducted by York Water Company.[16]

Q. HOW DO YOU RESPOND TO MR. MIERZWA'S RECOMMENDATIONS REGARDING THE MAXIMUM HOUR FACTOR?

A. I agree that the 2.1 maximum hour factor utilized by PAWC is outdated and that a new maximum hour study should be conducted prior to the next rate case. In this case, I recommend utilizing a maximum hour factor of 1.8, which scales the maximum hour factor in proportion to my recommended adjustment to the maximum day factor (*i.e.*, 1.2 / 1.4). This will maintain the same proportionate relationship between the maximum hour and the maximum day as the factors utilized by PAWC.

[16] Direct Testimony of Jerome D. Mierzwa (OCA Statement 4), pp. 16-18.

ACT 11 SUBSIDY ALLOCATION

Q. TO WHICH PARTIES ARE YOU RESPONDING REGARDING THE ALLOCATION OF THE ACT 11 SUBSIDY AMONG WATER CLASSES?

A. I am responding to Cleveland-Cliffs Steel witness Mr. Baudino, OCA witness Mr. Mierzwa, and PAWLUG witness Ms. LaConte.

Q. HOW DO MR. BAUDINO AND MR. MIERZWA RECOMMEND ALLOCATING THE ACT 11 SUBSIDY?

A. Mr. Baudino recommends that the Act 11 subsidy be allocated based on each applicable water class's share of the water cost-of-service under present rates, arguing that the wastewater subsidy cannot be tracked to specific water classes.[17] Similarly, Mr. Mierzwa recommends that if the Commission determines that any portion of the wastewater revenue requirement should be assigned to water customers, it is reasonable to allocate these costs among water classes based on the water CCOSS.[18] However, Mr. Mierzwa indicates that his recommendation is consistent with the Company's approach and may not have been aware that PAWC updated its approach in the course of this proceeding.

Q. WHAT APPROACHES DID PAWC TAKE TO ALLOCATING THE ACT 11 SUBSIDY?

A. PAWC's approach evolved throughout this case. In its original Exhibit 12-A, Schedule A, PAWC spread the Act 11 revenue responsibility among its water classes but did not demonstrate how these amounts were derived. In response to OSBA 03-001, PAWC provided a corrected allocation of Act 11 revenue among

[17] Direct Testimony of Richard A. Baudino (Cleveland-Cliffs Steel Statement No. 1), pp. 8-9.
[18] Direct Testimony of Jerome D. Mierzwa (OCA Statement 4), p. 28.

water classes that is based on the corresponding wastewater classes that give rise to the Act 11 revenue shortfall.[19] However, since the non-residential water classes do not match the non-residential class categories used in each of its wastewater systems, PAWC's updated approach also utilizes the results of the water CCOSS to allocate Act 11 cost responsibility among non-residential classes. In its revised water CCOSS provided in response to PAWLUG 05-001, PAWC presented the revised Act 11 spread from its response to OSBA 03-001 but did not further update this calculation based on its water cost allocation corrections.

Q. HOW DOES MS. LACONTE RECOMMEND ALLOCATING THE ACT 11 SUBSIDY?

A. Ms. LaConte's approach uses a combination of direct assignment, reallocation among non-residential classes based on present revenues for wastewater classes, and allocation of the "Other" Act 11 subsidy component based on a version of PAWC's Act 11 allocation that has since been revised.[20]

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE ALLOCATION OF THE ACT 11 SUBSIDY AMONG WATER CLASSES?

A. The allocation of any subsidy is, by its nature, imperfect, since it is a departure from cost causation. This particular situation is further complicated by the fact that PAWC's non-residential wastewater class categories do not match those for

[19] PAWC response to OSBA 03-001, OSBA 03-001_Attachment, included in Schedule KCH-10.
[20] Direct Testimony of Billie S. LaConte (PAWLUG Statement No. 1), page 27; Ms. LaConte's Table 2 workpaper. Ms. LaConte's allocation of the "Other" component appears to be based on PAWC response to OSBA 01-018, OSBA 01-018_Attachment, which was subsequently revised in PAWC response to OSBA OSBA 03-001, OSBA 03-001_Attachment.

its water system. To the extent that the Commission approves the recovery of a portion of the wastewater revenue requirement from water customers in this case, I believe that the allocation approach offered in PAWC response to OSBA 03-001 is reasonable, as updated for the Act 11 subsidy level and cost-of-service studies ultimately approved in this case.

CCOSS SUMMARY AND REVENUE ALLOCATION

Q. HAVE YOU UPDATED THE WATER CCOSS FOR THE CORRECTIONS AND RECOMMENDATION YOU DISCUSS ABOVE?

A. Yes. These results are summarized in Schedule KCH-11, at PAWC's requested Direct revenue requirement. These results are compared to PAWC's revised water CCOSS from PAWLUG 05-001 in columns (10) – (12) of this schedule.

Q. HAVE YOU UPDATED YOUR RECOMMENDED REVENUE ALLOCATION AMONG WATER CLASSES BASED ON YOUR CCOSS RESULTS?

A. Yes. These results are summarized in Schedule KCH-12, page 1, at PAWC's requested Direct revenue requirement. My recommended revenue allocation brings most water classes close to cost, including their allocated share of the Act 11 subsidy, under my recommended water CCOSS.[21] At PAWC's requested Direct revenue requirement, my recommendation results in lower increases for the Commercial and Residential classes, and greater increases for the Industrial,

[21] I reallocated 75% of the cost associated with the Public Fire Protection class to other classes, in accordance with Section 1328 of the Public Utility Code. I also accepted PAWC's proposed increases for the Other Water Utilities classes.

Public (Municipal) and Public and Private Fire Protection classes than PAWC recommended in its Direct filing.

Q. WHAT SCALE BACK APPROACH DO YOU RECOMMEND IF THE COMMISSION APPROVES A LOWER REVENUE REQUIREMENT THAN REQUESTED BY PAWC?

A. As I explained in my direct testimony, if the Commission approves a lower revenue requirement increase than proposed by PAWC, I recommend that the decrease be applied principally to the water rates. So long as the cost-based wastewater increase associated with the approved revenue requirement is greater than PAWC's proposed wastewater rates, the incremental revenue requirement reduction should not reduce PAWC's proposed wastewater rates. This means that a lower revenue requirement will reduce Act 11 revenues and PAWC's proposed water rates generally.

At a lower revenue requirement, I recommend scaling back each water class's revenues in proportion to each class's share of the total proposed non-Act 11 revenues in my revenue allocation from Schedule KCH-12, page 1. I further recommend that each applicable water class bear its allocated share of the Act 11 subsidy.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

WATER OPERATIONS
OSBA REBUTTAL CLASS COST-OF-SERVICE STUDY RESULTS
AT PAWC REQUESTED DIRECT REVENUE REQUIREMENT
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Customer Classification	OSBA Rebuttal Cost of Service at PAWC Direct Proposed Revenue Requirement as of June 30, 2025				Pro Forma Revenues Under Present Rates		OSBA Rebuttal Increase at Equalized COS + Act 11 Revenue		Impact of OSBA COS Allocation Compared to PAWC's Response to PAWLUG 05-001 as of June 30, 2025 [3]		
	Cost of Service [1]	Allocation of Other COS [2]	Total Amount	Percent of Total	Amount	Percent of Total	$	%	Cost of Service	Allocation of Other COS	Total Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Residential	$ 609,768,615	$ 46,024,470	$ 655,793,086	65.3%	$ 528,290,043	65.5%	$ 127,503,043	24.1%	$ (3,228,983)	$ 160,072	$ (3,068,911)
Commercial	231,138,009	18,121,178	249,259,187	24.8%	202,779,636	25.1%	46,479,551	22.9%	(2,720,819)	549,440	(2,171,378)
Industrial	47,259,397	4,407,549	51,666,946	5.1%	37,580,738	4.7%	14,086,208	37.5%	3,060,970	(139,521)	2,921,449
Public (Municipal)	25,852,990	2,026,870	27,879,860	2.8%	22,559,539	2.8%	5,320,321	23.6%	1,427,372	(637,840)	789,532
Other Water Utilities - Group A	12,303	-	12,303	0.0%	51,822	0.0%	(39,520)	-76.3%	458	-	458
Other Water Utilities - Group B	494,510	-	494,510	0.0%	202,436	0.0%	292,073	144.3%	(133,945)	-	(133,945)
Private Fire Protection	6,470,881	507,316	6,978,197	0.7%	5,301,032	0.7%	1,677,165	31.6%	662,264	67,848	730,112
Public Fire Protection	12,796,616	-	12,796,616	1.3%	9,519,368	1.2%	3,277,249	34.4%	932,683	-	932,683
Total Sales of Water	$ 933,793,321	$ 71,087,383	$ 1,004,880,705	100.0%	$ 806,284,614	100.0%	$ 198,596,091	24.6%	$ -	$ (1)	$ (1)
Other Water Revenues	10,675,369	-	10,675,369		10,034,383		640,986	6.4%	-	-	-
Contract Sales - Industrial	4,482,099	-	4,482,099		4,482,099		-	0.0%	-	-	-
Contract Sales - Resale	3,316,086	-	3,316,086		3,316,086		0	0.0%	-	-	-
Total	$ 952,266,876	$ 71,087,383	$ 1,023,354,259		$ 824,117,182		$ 199,237,077	24.2%	$ -	$ (1)	$ (1)

Data Sources:
1. OSBA workpaper: Water CCOSS - OSBA Rebuttal WP, Sch A.
2. Includes unrecovered Wastewater Cost of Service (i.e., Act 11 revenue). Based on OSBA Act 11 WP - Rebuttal.
3. OSBA results compared to PAWC's corrected Water CCOSS, provided in PAWLUG 05-001_Attachment, Sch A.

WATER OPERATIONS
OSBA REBUTTAL CLASS COST-OF-SERVICE STUDY RESULTS AND RECOMMENDED REVENUE ALLOCATION
AT PAWC REQUESTED DIRECT REVENUE REQUIREMENT
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

	OSBA Rebuttal Cost of Service at PAWC Direct Proposed Revenue Requirement as of June 30, 2025				Pro Forma Revenues Under Present Rates		OSBA Rebuttal Increase at Equalized COS + Act 11 Revenue		Pro Forma Revenues Under Proposed Rates		Proposed Increase	
Customer Classification	Cost of Service [1]	Allocation of Other COS [2]	Total Amount	Percent of Total	Amount	Percent of Total	$	%	Amount	Percent of Total	$	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Residential	$ 609,768,615	$ 46,024,470	$ 655,793,086	65.3%	$ 528,290,043	65.5%	$ 127,503,043	24.1%	$ 655,793,086	65.3%	$ 127,503,043	24.1%
Commercial	231,138,009	18,121,178	249,259,187	24.8%	202,779,636	25.1%	46,479,551	22.9%	249,259,187	24.8%	46,479,551	22.9%
Industrial	47,259,397	4,407,549	51,666,946	5.1%	37,580,738	4.7%	14,086,208	37.5%	51,573,520	5.1%	13,992,782	37.2%
Public (Municipal)	25,852,990	2,026,870	27,879,860	2.8%	22,559,539	2.8%	5,320,321	23.6%	27,829,447	2.8%	5,269,908	23.4%
Other Water Utilities - Group A	12,303	-	12,303	0.0%	51,822	0.0%	(39,520)	-76.3%	53,666	0.0%	1,844	3.6%
Other Water Utilities - Group B	494,510	-	494,510	0.0%	202,436	0.0%	292,073	144.3%	277,021	0.0%	74,585	36.8%
Private Fire Protection	6,470,881	507,316	6,978,197	0.7%	5,301,032	0.7%	1,677,165	31.6%	6,965,579	0.7%	1,664,547	31.4%
Public Fire Protection	12,796,616	-	12,796,616	1.3%	9,519,368	1.2%	3,277,249	34.4%	12,773,477	1.3%	3,254,109	34.2%
Total Sales of Water	$ 933,793,321	$ 71,087,383	$ 1,004,880,705	100.0%	$ 806,284,614	100.0%	$ 198,596,091	24.6%	$ 1,004,524,983	100.0%	$ 198,240,369	24.6%
Other Water Revenues	10,675,369	-	10,675,369		10,034,383		640,986	6.4%	11,031,091		996,708	9.9%
Contract Sales - Industrial	4,482,099	-	4,482,099		4,482,099		-	0.0%	4,482,099		-	0.0%
Contract Sales - Resale	3,316,086	-	3,316,086		3,316,086		0	0.0%	3,316,086		0	0.0%
Total	$ 952,266,876	$ 71,087,383	$ 1,023,354,259		$ 824,117,182		199,237,077	24.2%	1,023,354,259		$ 199,237,077	24.2%

Data Sources:
1. OSBA workpaper: Water CCOSS - OSBA Rebuttal WP, Sch A.
2. Includes unrecovered Wastewater Cost of Service (i.e., Act 11 revenue). Based on OSBA Act 11 WP - Rebuttal.

WATER OPERATIONS
OSBA REBUTTAL CLASS COST-OF-SERVICE STUDY RESULTS AND RECOMMENDED REVENUE ALLOCATION
AT OSBA RECOMMENDED REVENUE REQUIREMENT
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

Customer Classification	OSBA Rebuttal Cost of Service - Scaled to OSBA Rev. Req. as of June 30, 2025				Pro Forma Revenues Under Present Rates		OSBA Rebuttal Increase at Equalized COS + Act 11 Revenue		Pro Forma Revenues Under Proposed Rates		Proposed Increase	
	Cost of Service [1]	Allocation of Other COS [2]	Total Amount	Percent of Total	Amount	Percent of Total	$	%	Amount	Percent of Total	$	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Residential	$ 570,737,124	$ 18,664,876	$ 589,402,000	64.8%	$ 528,290,043	65.5%	$ 61,111,957	11.6%	$ 589,619,501	64.8%	$ 61,329,458	11.6%
Commercial	216,342,789	12,436,411	228,779,200	25.1%	202,779,636	25.1%	25,999,564	12.8%	228,861,645	25.1%	26,082,009	12.9%
Industrial	44,234,307	3,282,317	47,516,624	5.2%	37,580,738	4.7%	9,935,886	26.4%	47,446,002	5.2%	9,865,264	26.3%
Public (Municipal)	24,198,132	1,391,024	25,589,155	2.8%	22,559,539	2.8%	3,029,616	13.4%	25,551,173	2.8%	2,991,634	13.3%
Other Water Utilities - Group A	11,515	-	11,515	0.0%	51,822	0.0%	(40,307)	-77.8%	50,250	0.0%	(1,572)	-3.0%
Other Water Utilities - Group B	462,856	-	462,856	0.1%	202,436	0.0%	260,420	128.6%	259,388	0.0%	56,951	28.1%
Private Fire Protection	6,056,678	348,167	6,404,845	0.7%	5,301,032	0.7%	1,103,813	20.8%	6,395,338	0.7%	1,094,306	20.6%
Public Fire Protection	11,977,501	-	11,977,501	1.3%	9,519,368	1.2%	2,458,133	25.8%	11,960,399	1.3%	2,441,031	25.6%
Total Sales of Water	$ 874,020,901	$ 36,122,794	$ 910,143,695	100.0%	$ 806,284,614	100.0%	$ 103,859,081	12.9%	$ 910,143,695	100.0%	$ 103,859,081	12.9%
Other Water Revenues	10,373,375	181,589	10,554,964		10,034,383		520,581	5.2%	10,554,964		520,581	5.2%
Contract Sales - Industrial	4,482,099	-	4,482,099		4,482,099		-	0.0%	4,482,099		-	0.0%
Contract Sales - Resale	3,316,086	-	3,316,086		3,316,086		0	0.0%	3,316,086		0	0.0%
Total	$ 892,192,462	$ 36,304,383	$ 928,496,845		$ 824,117,182		104,379,663	12.7%	$ 928,496,845		$ 104,379,663	12.7%

Data Sources:
1. Based on Water CCOSS - OSBA Rebuttal WP, Sch A, scaled to OSBA recommended revenue requirement.
2. Includes unrecovered Wastewater Cost of Service (i.e., Act 11 revenue). Based on OSBA Act 11 WP - Rebuttal.

Docket Nos. R-2023-3043189
R-2023-3043190

SCHEDULE KCH-13

Pennsylvania-American Water Company's Responses to Discovery Referenced in the Rebuttal Testimony of Kevin C. Higgins

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 4

OCA 04-012

Responsible Witness: Connie Heppenstall, Senior Project Manager, Gannett Fleming

Question:

Reference PAWC Statement No. 12 (Heppenstall).

a. Page 13, lines 11-23, Page 14, lines 1-8, first adjustment. Please identify the specific adjustment made to each allocation factor and revenues for this adjustment;
b. Page 14, lines 9-20, second adjustment. Please identify what the extra-capacity factors of interruptible customers would have been if not excluded based on actual/estimated maximum day and maximum hour demands. Also provide a three history of the daily volumes actually curtailed.

Response:

a. The specific adjustments made to allocation Factor 1 and factors that are dependent on Factor 1. The annual consumption of the DIS customers, equaling 8,318,938 100-gallon units, was excluded from the industrial class, and the annual consumption for DRS customers, equaling 9,122,335 100-gallon units, was excluded from the sales for resale class. These volumes were excluded from the cost allocation study as these customers have contract rates, and as such, their usage should not factor into the development of the base tariff rates. Revenues were included in the cost of service study and were not adjusted. The revenues from the DIS and DRS customers are shown in other water revenues as revenues from Contract Sales.

b. Exhibit 12-A, erroneously, did not include the adjustment for interruptible customer usage. Please see OCA 04-012_Attachment1 for the revised cost of service study under proposed rates and OCA 04-012_Attachment2 for the revised cost of service study under present rates. These studies show the extra-capacity factor allocations if the usage of the curtailment industrial customer was excluded in maximum day and maximum hour demands for Factors 2, 3 and 4 in Exhibit 12-A. Exhibit 12-A in the filing shows the extra-capacity functions if the usage was not excluded. The revised cost of service study under proposed rates lowers the cost of service for the Industrial class from $45,115,631 to $44,092,705 or a difference of $1,022,926.

The Company maintains that the usage of the curtailment industrial customer should be excluded from the extra-capacity factors as the customer can be interrupted during peak demands.
The Company has not requested its curtailment customer to curtail its usage during the past three years.

Finally, both adjustments described above are consistent with adjustments made in the Company's cost of service studies in previous rate cases filed with the Commission.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Pennsylvania-American Water Large Users Group Set 5

PAWLUG 05-001

Responsible Witness: Connie Heppenstall, Senior Project Manager, Gannett Fleming

Question:

Referring to PAWC's Response to OSBA 3-1 and OCA 4-12, provide a revised Schedule 12-A showing the proposed rate increase for each customer class.

Response:

Please see PAWLUG 05-001_Attachment for the revised Exhibit 12-A which incorporates the changes from OSBA 3-1 and OCA 4-12 as well as other changes that were identified during discovery and in reviewing non-Company direct testimony. These include the following:

1. Correction to the Public Authority meter count due to a linking error.
2. Arrearage Management Plant ("AMP") costs being directly allocated to the Residential class.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	**Docket Nos:**
v.	:	**R-2023-3043189 (Water)**
Pennsylvania-American Water Company	:	**R-2023-3043190 (Wastewater)**

VERIFICATION

I, Kevin C. Higgins, hereby state that the facts set forth in my Rebuttal Testimony labelled OSBA Statement No. 1-R and attached Schedules are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 19 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: February 21, 2024

Kevin C. Higgins

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	**Docket Nos. R-2023-3043189 (Water)**
v.	:	**R-2023-3043190 (Wastewater)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the foregoing have been served via email (*unless otherwise noted below*) upon the following persons, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

The Honorable Christopher P. Pell
Deputy Chief Administrative Law Judge
Pennsylvania Public Utility Commission
801 Market Street, Suite 4063
Philadelphia, PA 19107
cpell@pa.gov
pmcneal@pa.gov

The Honorable John Coogan
Administrative Law Judge
Pennsylvania Public Utility Commission
400 North Street
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DATE: February 21, 2024

/s/ Steven C. Gray
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COMMONWEALTH OF PENNSYLVANIA

March 4, 2024

The Honorable Christopher P. Pell
Deputy Chief Administrative Law Judge
Pennsylvania Public Utility Commission
801 Market Street
Suite 4063
Philadelphia, PA 19107

The Honorable John Coogan
Administrative Law Judge
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Re: Pennsylvania Public Utility Commission v. Pennsylvania American Water Company / Docket Nos. R-2023-3043189 (Water) / R-2023-3043190 (Wastewater)

Dear Presiding Judges:

Enclosed please find the Surrebuttal Testimony of Kevin C. Higgins labelled OSBA Statement No. 1-S with Schedule KCH-14, on behalf of the Office of Small Business Advocate ("OSBA"), in the above-captioned proceedings.

As evidenced by the enclosed Certificate of Service, all known parties will be served, as indicated.

If you have any questions, please do not hesitate to contact me.

Sincerely,

/s/ Steven C. Gray

Steven C. Gray
Senior Supervising
Assistant Small Business Advocate
Attorney ID No. 77538

Enclosures
cc: PA PUC Secretary Rosemary Chiavetta (Cover Letter & Certificate of Service only)
Brian Kalcic
Kevin C. Higgins
Parties of Record

OSBA STATEMENT NO. 1-S

BEFORE THE
PUBLIC UTILITIES COMMISSION OF PENNSYLVANIA

Pennsylvania Public Utility Commission	:	Docket Nos:
v.	:	R-2023-3043189 (Water)
Pennsylvania-American Water Company	:	R-2023-3043190 (Wastewater)

Surrebuttal Testimony of Kevin C. Higgins

on behalf of

Pennsylvania Office of Small Business Advocate

March 4, 2024

Topics:

Revenue Requirement

Cost Allocation

Revenue Allocation

Revenue Decoupling Mechanism

Date Served: March 4, 2024
Date Submitted for the Record: _____

SURREBUTTAL TESTIMONY OF KEVIN C. HIGGINS

INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Kevin C. Higgins. My business address is 111 East Broadway, Suite 1200, Salt Lake City, Utah, 84111.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am a Principal in the firm of Energy Strategies, LLC. Energy Strategies is a private consulting firm specializing in economic and policy analysis applicable to energy production, transportation, and consumption.

Q. ARE YOU THE SAME KEVIN C. HIGGINS WHO FILED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING ON BEHALF OF THE PENNSYLVANIA OFFICE OF SMALL BUSINESS ADVOCATE ("OSBA")?

A. Yes. I submitted OSBA Statement Nos. 1 and 1-R.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN THIS PROCEEDING?

A. My testimony responds to the Rebuttal testimony of Pennsylvania-American Water Company ("PAWC") witnesses Mr. James Runzer, Ms. Lori O'Malley, and Ms. Stacey D. Gress on certain revenue requirement issues. I also respond to the Rebuttal Testimony of Mr. D.C. Patel on behalf of the Bureau of Investigation & Enforcement ("I&E") regarding my use of a 9.65% proxy return on equity ("ROE") in my revenue requirement calculations.

I address the allocation of residential Arrearage Management Plan ("AMP") and low-income program administrative costs in response to the Rebuttal Testimony of Mr. Roger Colton on behalf of the Pennsylvania Office of Consumer Advocate ("OCA") and Ms. Constance E. Heppenstall on behalf of PAWC. I also respond to PAWC witness Mr. Charles B. Rea and OCA witness Mr. Jerome D. Mierzwa regarding revenue allocation among water customer classes.

I also respond to Mr. Rea regarding the proposed Revenue Decoupling Mechanism ("RDM").

Q. WHAT CONCLUSIONS AND RECOMMENDATIONS DO YOU OFFER IN YOUR REBUTTAL TESTIMONY?

A. (1) I continue to recommend that the expenses associated with the Annual Performance Plan, the Long-Term Performance Plan, and the Employee Stock Purchase Plan be removed from the revenue requirement.

(2) I explain my use of a 9.65% proxy ROE in my direct revenue requirement calculation and provide the results of my revenue requirement calculation using the costs of capital recommended by I&E and OCA in Schedule KCH-14.

(3) I continue to recommend that the portion of the revenue requirement associated with PAWC's acquisitions of Butler Area Sewer Authority ("BASA") and Borough of Brentwood's ("Brentwood") wastewater assets that PAWC is proposing to recover from water customers be excluded from the revenue requirement in this case.

(4) I continue to recommend that amortization expense and rate base associated with the Audubon Water Company ("Audubon") acquisition premium be excluded from the revenue requirement.

(5) If the Commission approves the inclusion of incremental AMP expense in the revenue requirement, I continue to recommend that the AMP expense be directly assigned to the residential class. However, if the AMP expense is not truly incremental to the general uncollectible expense, then it should be removed from the revenue requirement rather than directly assigned to the residential class. I continue to recommend that the residential low-income program administrative costs be directly assigned to the residential class.

(6) I revised my recommended Water CCOSS in my rebuttal testimony to incorporate corrections to PAWC's errors as well as my recommended maximum day and maximum hour weightings. My recommended revenue allocation is guided by the results of my rebuttal Water CCOSS and is summarized in my rebuttal Schedule KCH-12.

(7) I continue to recommend that the Commission reject PAWC's proposed RDM, ECIC, and deferred accounting treatment for production expenses.

REVENUE REQUIREMENT ADJUSTMENTS

Revenue Requirement Adjustments Summary

Q. PLEASE SUMMARIZE THE IMPACTS OF YOUR RECOMMENDED REVENUE REQUIREMENT ADJUSTMENTS.

A. These impacts are summarized in Table KCH-1-S, below, relative to PAWC's direct requested revenue requirement. I note that PAWC's rebuttal filing provides a number of revisions to its revenue requirement, which have the combined effect of increasing its calculated revenue requirement deficiency by $345,253 compared to PAWC's direct filing.[1] However, PAWC did not file updated versions of its class cost-of-service studies ("CCOSS"), revenue allocation, or rate design corresponding to its revised revenue requirement in rebuttal. Due to the incomplete nature of PAWC's rebuttal request and time constraints of the procedural schedule, I continue to present the impacts of my adjustments relative to PAWC's direct revenue requirement.

Table KCH-1-S
Summary of OSBA Adjustments to PAWC Revenue Requirement

	Total Company	
	Adjustment Impact	Increase
PAWC Direct Revenue Req. Increase		$203,945,911
OSBA Recommended Adjustments		
Annual Performance Plan Expense	($5,153,394)	$198,792,517
Long Term Performance Plan Expense	($5,230,156)	$193,562,362
Employee Stock Purchase Plan Expense	($457,009)	$193,105,353
Service Co. Executive Retirement Plan	($35,106)	$193,070,247
External Board Expense	($126,792)	$192,943,455
Proxy Return on Equity	($61,540,957)	$131,402,498
BASA Mitigation Adjustment	($19,091,395)	$112,311,103
Brentwood Mitigation Adjustment	($1,309,219)	$111,001,884
Audubon Water Acquisition Adjustment	($1,913,386)	$109,088,498
Total OSBA Adjustments	($94,857,413)	$109,088,498

Q. DO YOU CONTINUE TO RECOMMEND THE ADJUSTMENTS IN TABLE KCH-1-S?

[1] PAWC's rebuttal revenue requirement increase including BASA and Brentwood is $204,291,164 (Rebuttal Testimony of Ashley E. Everette [PAWC Statement No. 1, p. 6] compared to $203,945,911 in its direct filing (Schedule AEE-2).

A. Yes. PAWC's rebuttal filing includes adjustments to remove to the Service Company Executive Retirement Plan (i.e., "SERP") expense and the External Board expense.[2] PAWC contests the remainder of my adjustments in its rebuttal filing. As I will explain in greater detail later in my testimony, the Proxy ROE adjustment shown in Table KCH-1-S is simply a placeholder based on the 9.65% ROE authorized for PAWC's Distribution System Improvement Charge ("DSIC") in the Bureau of Technical Utility Services' most recent Report on the Quarterly Earnings of Jurisdictional Utilities.[3] Incorporating the cost of capital recommendations of I&E or OCA would further reduce my recommended revenue requirement.

Annual Performance Plan ("APP") and Long-Term Performance Plan ("LTPP") Expenses

Q. PLEASE DESCRIBE YOUR ADJUSTMENTS FOR APP AND LTPP EXPENSES.

A. In my direct testimony, I recommended that 50% of the APP expense be removed from the revenue requirement, based on the weight of the earnings per share ("EPS") goal included in the APP calculation of corporate performance.[4]

I also recommended that LTPP expense be excluded from the revenue requirement.[5] The majority of the LTPP expense is comprised of performance stock units ("PSUs"), which are tied to financial performance, and the remaining

[2] Statement No. 05-R_Exhibit LNO-3R; Statement No. 05-R_Exhibit LNO-5R.
[3] Docket Number: M-2023-3044811, Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended September 30, 2023, Public Meeting Held January 18, 2024, p. 15, Attachment D.
[4] Direct Testimony of Kevin C. Higgins (OSBA Statement No. 1), p. 11.
[5] Direct Testimony of Kevin C. Higgins (OSBA Statement No. 1), pp. 12-13.

portion is comprised of restricted stock units ("RSUs") based on a three-year vesting period.

Q. HOW DID PAWC RESPOND TO YOUR RECOMMENDED ADJUSTMENTS?

A. Mr. Runzer disagrees with my adjustments in his rebuttal testimony, arguing that the Company's performance pay is part of a reasonable compensation package designed to attract and retain qualified employees. He argues that the financial goals of the APP and LTPP benefit customers by increasing operating efficiency, thereby aligning the interests of customers, employees, and investors. Mr. Runzer contends that every dollar of operating expense saved can fund $8 of investment, allowing PAWC to increase infrastructure investment without increasing rates. He also notes that the Commission approved APP and LTPP expenses in PAWC's 2020 base rate proceeding.[6]

Q. HOW DO YOU RESPOND TO MR. RUNZER REGARDING APP AND LTPP EXPENSES?

A. I continue to believe that the portion of the APP expense tied to financial performance and LTPP expense should be removed from the revenue requirement. While rewarding employees for financial performance can be entirely appropriate, the responsibility for funding such awards rests most appropriately with shareholders, who are the primary beneficiaries of meeting or exceeding financial targets.

[6] Rebuttal Testimony of James Runzer (PAWC Statement No. R-2), pp. 4-8.

I am not alone in my view that shareholders are the primary beneficiaries of financial targets in performance plans. For example, the Arkansas Public Service Commission, in its February 23, 2016 Order in Docket No. 15-015-U, ordered that shareholders fund 50% of Entergy Arkansas' short-term incentive compensation that was tied to an "Entergy Achievement Multiplier" – a mechanism used to determine the funding available for the annual incentive plans based on financial performance.[7]

Similarly, in its Opinion and Order issued December 31, 2020 in Docket No. E-01933A-19-0028, the Arizona Corporation Commission disallowed 40% of the costs of Tucson Electric Power's Performance Enhancement Plan, finding that "incentive compensation based on profitability benefits shareholders – not ratepayers."[8]

I am also unpersuaded by Mr. Runzer's argument that PAWC can fund increased infrastructure investments with reductions to operating expenses. PAWC enjoys both a fully projected future test year and a DSIC for eligible incremental investments. While reduced operating expenses might increase PAWC's cash flow, prudent infrastructure investments increase the Company's rate base and are not funded by reduced operating expenses from a ratemaking perspective.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING APP AND LTPP EXPENSES.

[7] Arkansas Public Service Commission, Docket No. 15-015-U, Order No. 18 at 18-20.
[8] Arizona Corporation Commission, Docket No. E-01933A-19-0028, Decision No. 77856 at 82-84.

A. I continue to recommend that 50% of the APP expense be removed from the revenue requirement, based on the weight of the EPS goal included in the APP corporate performance calculation. I also continue to recommend that the LTPP expense be removed from the revenue requirement, which includes a PSU component tied to financial performance and an RSU component, based on a three-year vesting period. The time-based RSU component is based on continued employment with the Company, rather than any direct customer-related goals. It is appropriate for shareholders to fund these stock awards based on corporate financial performance and continued employment.

Employee Stock Purchase Plan ("ESPP") Expense

Q. PLEASE DESCRIBE YOUR ADJUSTMENT FOR ESPP EXPENSE.

A. I recommend that the ESPP expense be removed from the revenue requirement. This expense is associated with the 15% stock purchase discount provided to employees who elect to receive a portion of their compensation in the form of a stock purchase rather than cash.

Q. HOW DOES PAWC RESPOND YOUR ESPP ADJUSTMENT?

A. Ms. O'Malley disagrees with my adjustment, arguing that employees who become stockholders of American Water have an additional incentive to establish efficiencies, which benefits customers and stockholders.[9]

Q. DO YOU CONTINUE TO RECOMMEND THAT ESPP EXPENSE BE EXCLUDED FROM THE REVENUE REQUIREMENT?

[9] Rebuttal Testimony of Lori O'Malley (PAWC Statement No. 05-R), p. 5.

A. Yes. Incentivizing employees to become shareholders clearly aligns those individuals' interests with other shareholders. If the Company wishes to provide this stock purchase incentive, it is most appropriately funded by shareholders.

Proxy ROE Adjustment

Q. PLEASE DESCRIBE YOUR PROXY ROE ADJUSTMENT.

A. I utilized the 9.65% ROE authorized for PAWC's DSIC in the Bureau of Technical Utility Services' most recent Report on the Quarterly Earnings of Jurisdictional Utilities as a placeholder in my direct revenue requirement calculation.[10]

Q. DOES ANY PARTY TAKE ISSUE WITH YOUR USE OF THIS PLACEHOLDER ROE?

A. Yes. I&E witness Mr. Patel disagrees with my use of the DSIC ROE of 9.65% in this proceeding, arguing that the DSIC rate should be viewed as an incentive rate that is higher than the ROE granted in a base rate proceeding. Mr. Patel argues that it is inappropriate to suggest that the ROE must be at the DSIC rate absent a detailed ROE analysis in a base rate proceeding.[11]

Q. HOW DO YOU RESPOND TO MR. PATEL'S CONCERNS?

A. Mr. Patel appears to misconstrue the purpose of my use of a placeholder ROE. I am not suggesting that the DSIC ROE be adopted in this proceeding in the absence of a detailed ROE analysis. As I explained in my direct testimony, my use of the 9.65% DSIC ROE is not intended to supplant the Commission's

[10] Direct Testimony of Kevin C. Higgins (OSBA Statement No. 1), pp. 17-18.
[11] Rebuttal Testimony of D.C. Patel (I&E Statement No. 2-R), pp. 4-6.

consideration of traditional cost of capital analyses offered by other parties in this proceeding.[12]

Q. HAVE YOU ANALYZED THE IMPACT OF OTHER PARTIES' COST OF CAPITAL RECOMMENDATIONS ON YOUR REVENUE REQUIREMENT CALCULATIONS?

A. Yes. In Schedule KCH-14, I provide a summary of the total revenue requirements and increases that would result from utilizing I&E's and OCA's recommended costs of capital in my revenue requirement calculations (Tables 4 and 5). For comparison purposes, I also summarize the total revenue requirements and increases I recommend in my direct testimony, as well as those recommended by I&E, OCA and PAWC. Since OCA's and I&E's revenue requirement calculations exclude the costs associated with BASA and Brentwood, I also exclude the associated costs in Schedule KCH-14, column (e) to allow for apples-to-apples comparisons.

Utilizing I&E's recommended 8.45% ROE would incrementally reduce my revenue requirement calculation by $54.1 million (Table 4 compared to Table 3). I note that incorporating I&E's 8.45% ROE into my revenue requirement calculation results in a revenue requirement, excluding BASA and Brentwood, that is very close to that recommend in I&E's direct filing (Table 1).

Utilizing OCA's recommended 9.1% ROE and capital structure would reduce my revenue requirement by $46.8 million (Table 5 compared to Table 3).

[12] Direct Testimony of Kevin C. Higgins (OSBA Statement No. 1), pp. 17-18.

Adjustments Related to the Acquisitions of Other Utilities

Q. PLEASE EXPLAIN YOUR BASA AND BRENTWOOD MITIGATION ADJUSTMENTS.

A. I recommend that the portion of the revenue requirement related to BASA and Brentwood that PAWC is proposing to recover from water customers be excluded from the revenue requirement in this case.

Q. HOW DID PAWC RESPOND TO YOUR RECOMMENDED BASA AND BRENTWOOD MITIGATION ADJUSTMENTS?

A. Ms. Gress cites to the Commission's decision in PAWC's 2020 base rate case, Docket No. R-2020-3019369, which rejected the OCA's recommendation that shareholders should pay $16.7 million in revenue requirement relating to four acquired wastewater systems. The Commission found that the proposal would have violated PAWC's rights under the Pennsylvania and Federal Constitutions against taking private property without compensation. The Commission also found that, under Section 1329, once a selling utility's rate base is incorporated into the acquiring utility's rate base, that rate base is no different than any other portion of the Company's rate base and the Company is entitled to earn a reasonable rate of return on the new rate base. Ms. Gress argues that the Commission should reach the same result in this case.[13]

Q. WHAT IS YOUR RESPONSE TO PAWC REGARDING YOUR BASA AND BRENTWOOD MITIGATION ADJUSTMENTS?

[13] Rebuttal Testimony of Stacey D. Gress (PAWC Statement No. 4-R), pp. 3-5.

A. I acknowledge that my recommended mitigation adjustments differ from the Commission's disposition of similar issues in the 2020 base rate case. However, I believe that the Commission should consider my recommendations within the context of the facts of this case, which include:

(1) PAWC's voluntary commitment in the Settlement Agreement approved in Docket No. A-2022-3037047 to limit its proposed BASA rate increase to 1.4 times the current BASA rates or PAWC's proposed Rate Zone 1 system-average wastewater rates, whichever is lower;

(2) The magnitude of the premiums in excess of net book values included in the purchase prices for the BASA and Brentwood wastewater systems; and

(3) ALJ Dunderdale's Recommended Decision in Docket No. A-2021-3024058 to deny the Brentwood acquisition because PAWC failed to meet its burden of proof that the public interest will benefit from the acquisition.

While I am not an attorney, I believe that if a utility voluntarily agrees to mitigate provisionally the rate impact on customers of another utility it acquires so as to shield those customers temporarily from the full costs associated with that acquisition, it does not follow that the utility's other customers must absorb the cost of that mitigation for rates to be just and reasonable. In such a situation, it may be reasonable to view the utility's agreement to mitigate the rate impact on the acquired utility's customers as a short-term cost to shareholders that is incurred in exchange for the long-term benefit to those same shareholders of acquiring the other utility's assets at the price the acquiring utility agreed to pay. I believe that the voluntary and provisional nature of the rate mitigation to which

PAWC agreed is a factor that warrants the Commission's favorable consideration of my recommendation in this case.

Q. PLEASE EXPLAIN YOUR RECOMMENDED ADJUSTMENT RELATED TO THE AUDUBON ACQUISITION.

A. I recommend that amortization expense and rate base associated with the Audubon acquisition premium be excluded from the revenue requirement. My adjustment is limited to the acquisition cost in excess of the net book value of Audubon's assets. PAWC is proposing to acquire Audubon's assets through a merger transaction valued at $8.0 million[14] even though the net book value of the Audubon assets is only $360,229 as of December 31, 2024.[15] PAWC proposes to amortize the difference between the purchase price and the net book value, $7,639,771, over ten years as a utility plant acquisition adjustment and to include the unamortized balance in rate base.[16]

Q. HOW DID PAWC RESPOND TO YOUR RECOMMENDED AUDUBON ADJUSTMENT?

A. Ms. Gress argues that there is no statutory basis for disallowing recovery of any acquisition costs in excess of the net book value of Aububon's assets because there is allegedly too great of a difference between the purchase price and the system's original cost less depreciation.[17]

[14] Direct Testimony of E. Christopher Abruzzo, Esq. (PAWC Statement No. 6), pp. 11-12, 18.
[15] Volume 05, Exhibit No. 3-C, Plant Additions and Retirements by Month, p. 23. This amount is net of Contributions in Aid of Construction.
[16] Direct Testimony of Stacey D. Gress (PAWC Statement No. 4), p. 6; Volume 05, Exhibit 3-B, p. 341.
[17] Rebuttal Testimony of Stacey D. Gress (PAWC Statement No. 4-R), pp. 5-6.

Q. WHAT IS YOUR RESPONSE TO PAWC REGARDING YOUR AUDUBON ADJUSTMENT?

A. The Audubon acquisition case is still before the Commission. I anticipate that the great disparity between the proposed purchase price and the net book value of Audubon's assets – which PAWC intends to recover from customers – to be an issue of contention in that proceeding. The practice of building rate base through the payment of acquisition prices greatly in excess of net book value requires careful Commission scrutiny. The burden is on PAWC to prove its case that the acquisition under the proposed terms is in the public interest and at this time it has not done so. Given these circumstances, in particular the proposed acquisition price that is many times greater than the net book value of the utility assets being acquired, I cannot recommend that the proposed amortization costs be included in rates in this case.

ALLOCATION OF ARREARAGE MANAGEMENT PLAN ("AMP") AND LOW-INCOME PROGRAM ADMINISTRATIVE EXPENSE

Q. PLEASE EXPLAIN YOUR RECOMMENDATION REGARDING RESIDENTIAL AMP EXPENSE AND LOW-INCOME PROGRAM ADMINISTRATIVE EXPENSE.

A. In my direct testimony, I recommend that these costs be directly assigned to the residential class since these programs are designed to benefit residential customers.[18]

Q. HOW DID PAWC RESPOND TO YOUR RECOMMENDATION?

[18] Direct Testimony of Kevin C. Higgins (OSBA Statement No. 1), pp. 30-32.

A. PAWC accepted my recommendation and reflected this change in its rebuttal CCOSSs.[19]

Q. DID ANY PARTY DISAGREE WITH YOUR RECOMMENDATION?

A. Yes. OCA witness Mr. Colton recommends that the costs of the AMP be allocated consistent with the allocation of uncollectible cost generally, as PAWC did in its direct filing. He argues that the AMP costs are part of the historically-incurred uncollectible cost and do not represent incremental costs. Mr. Colton argues that if AMP costs are directly assigned to the residential class, the current allocation of existing uncollectible costs would need to be adjusted to account for this direct assignment. He also argues that if the AMP succeeds in prompting future in-full payments toward current bills, this will reduce the dollars ultimately found to be uncollectible.[20]

Mr. Colton also disagrees that administrative costs of H2O Grant and Discount programs should be directly assigned to the residential class, arguing that these costs do not differ in-kind from other O&M costs associated with providing other types of payment options, and are expected to result in a decrease in administrative costs related to nonpayment of bills.[21]

Q. HOW DO YOU RESPOND TO MR. COLTON REGARDING THE AMP EXPENSE?

A. I am concerned with Mr. Colton's assertion that the AMP costs do not represent incremental costs, because I believe that the AMP costs are being treated as

[19] Rebuttal Testimony of Constance E. Heppenstall (PAWC Statement No. 12-R), pp. 10-11.
[20] Rebuttal Testimony of Roger Colton (OCA Statement 5R), pp. 1-4.
[21] Rebuttal Testimony of Roger Colton (OCA Statement 5R), p. 5.

incremental in PAWC's revenue requirement calculation. It does not appear that PAWC has adjusted its uncollectible costs downward to account for bad debt that will be "forgiven" through the AMP. PAWC calculates its uncollectible expense by applying the historical two-year average uncollectible percentage of 1.176% to total proposed sales revenue.[22] To this amount, PAWC *adds* $2,377,200 in AMP-related uncollectible expense plus $487,500 in Dollar Energy administrative costs.[23]

If AMP expense is not incremental and instead represents a subset of uncollectible expense, as Mr. Colton asserts, then AMP expense should not be treated as additive in PAWC's revenue requirement.

On the other hand, if the AMP expense represents new costs that would not otherwise be accounted for as uncollectible expense, then Mr. Colton's critique is misplaced. If the Commission approves the inclusion of incremental AMP expense in the revenue requirement, I continue to recommend that the AMP expense be directly assigned to the residential class. However, if the AMP expense is not truly incremental to the general uncollectible expense, then it should be removed from the revenue requirement rather than directly assigned to the residential class. PAWC should not be permitted to recover the same uncollectible "dollar" twice: once through uncollectible expense and again through AMP expense.

I agree with Mr. Colton that if the AMP results greater in-full payments towards current bills in the future, this will reduce future uncollectibles. This

[22] Volume 04, Exhibit No. 3-B, p. 339; Income Statement_Revenue Requirement 2023_As Filed.
[23] Volume 04, Exhibit No. 3-B, p. 336.

impact should properly be reflected in the uncollectible expense and class uncollectible allocation in a future base rate case.

Q. HOW DO YOU RESPOND TO MR. COLTON REGARDING THE H2O GRANT AND DISCOUNT PROGRAMS ADMINISTRATIVE COSTS?

A. I continue to recommend that these costs be directly assigned to the residential class, on whose behalf they are incurred. PAWC appropriately adopted my recommendation in rebuttal.[24]

REVENUE ALLOCATION

Q. HOW DID PAWC RESPOND TO YOUR RECOMMENDED REVENUE ALLOCATION AMONG WATER CLASSES?

A. In my direct testimony, I recommended a higher increase to the Public (Municipal) class and a lower increase to the Commercial class based on the Water CCOSS.[25] In his rebuttal testimony, Mr. Rea states that the Company is not opposed to higher increases for the Municipal class with offsetting decreases to other customer classes.[26]

Q. HOW DID OCA ADDRESS YOUR RECOMMENDED REVENUE ALLOCATION AMONG WATER CLASSES?

A. Mr. Mierzwa agrees that the Public class should receive a greater increase, but argues that both the Residential and Commercial classes should receive lower increases.[27]

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[24] Rebuttal Testimony of Constance E. Heppenstall (PAWC Statement No. 12-R), pp. 10-11.
[25] Direct Testimony of Kevin C. Higgins (OSBA Statement No. 1), p. 35.
[26] Rebuttal Testimony of Charles Rea (PAWC Statement No. 10-R), p. 43.
[27] Rebuttal Testimony of Jerome D. Mierzwa (OCA Statement 4R), pp. 12-13.

Q. DID YOU UPDATE YOUR RECOMMENDED REVENUE ALLOCATION IN YOUR REBUTTAL TESTIMONY?

A. Yes. The revenue allocation I recommended in my direct testimony was based on a Water CCOSS that contained significant errors made by PAWC, which the Company corrected in discovery and its rebuttal filing. PAWC's original Water CCOSS overallocated the cost of meters and services to the Public class and included interruptible usage in the extra capacity component of certain allocators.[28] In addition to correcting these errors, PAWC's rebuttal CCOSS adopted my recommendation to directly assign AMP costs and residential low-income program administrative costs to the residential class, as discussed above.[29]

As I explained in my rebuttal testimony, I have revised my recommended Water CCOSS to incorporate PAWC's corrections as well as my recommended maximum day and maximum hour weightings in the base-extra capacity allocation factors. My recommended revenue allocation is guided by the results of my rebuttal Water CCOSS and is summarized in my rebuttal Schedule KCH-12. At PAWC's requested direct revenue requirement, I recommend a reduction to PAWC's proposed increases to both the Commercial and Residential class.

REVENUE DECOUPLING MECHANISM ("RDM")

Q. HOW DID PAWC RESPOND TO YOUR RECOMMENDATION TO REJECT THE RDM?

[28] Rebuttal Testimony of Constance E. Heppenstall (PAWC Statement No. 12-R), p. 2.
[29] Rebuttal Testimony of Constance E. Heppenstall (PAWC Statement No. 12-R), pp. 10-11.

A. Despite opposition from numerous parties, Mr. Rea continues to recommend that the Commission authorize PAWC's proposed RDM. He argues that collecting the majority of fixed costs in volumetric rates does not give water utilities a reasonable opportunity to recover fixed costs. Mr. Rea contends that the RDM will reduce the adverse impact of weather variability and promote conservation.[30]

Q. WHAT IS YOUR RESPONSE TO MR. REA REGARDING PAWC'S RDM PROPOSAL?

A. I continue to recommend that the proposed RDM be rejected. Such mechanisms that provide broad "revenue assurance" to utilities shift the risks associated with changes in consumption for any and all reasons, including weather and economic conditions, from shareholders to customers, even though shareholders are compensated for accepting such risks in the utility's approved return on equity. In the specific case of PAWC, an RDM is particularly concerning given the Company's aggressive acquisition of other utilities at prices well above net book value. It is in the public interest for PAWC shareholders to bear the risk in between rate cases that customers will reduce their water consumption in response to PAWC's rate increases.

While my primary recommendation is that the RDM should be rejected, if the Commission elects to approve a version of the RDM, it should exclude all non-residential customers due to the greater heterogeneity of non-residential usage.

[30] Rebuttal Testimony of Charles Rea (PAWC Statement No. 10-R), pp. 77-78.

Q. DO YOU CONTINUE TO HAVE CONCERNS ABOUT THE SPECIFIC RDM FORMULA ITSELF?

A. Yes. As I explained in my direct testimony, the RDM formula in PAWC's proposed tariff would produce a *positive* value (*i.e.,* surcharge, presumably) when actual revenue falls *above* the straight fixed-variable target and a *negative* value (*i.e.* credit, presumably) when actual revenue falls *below* the straight fixed-variable target.

Q. HOW DID PAWC RESPOND REGARDING THE RDM FORMULA?

A. Mr. Rea insists that there is no error in the RDM formula, but clearly misses the point of my testimony regarding the formulaic error. He responds that the Company is proposing a symmetrical mechanism that may result in a surcharge or credit depending on the actual revenues collected in any given year – as if I were confused by the intended *symmetry* in the Company's proposal.[31] I fully understand that the RDM is intended to be symmetrical. The problem is that it is symmetrical in the wrong direction. It is obvious that Mr. Rea has failed to read my testimony carefully because he misstates it the question he uses in his testimony to provide his response:

> "Q. Does the RDM formula have an error that would cause the calculation to have the opposite effect of PAWC's stated intent (e.g., if actual revenues exceed the straight fixed variable ("SFV") target, the RDM formula will produce a negative result or credit to customers) as Mr. Higgins asserts?"[32]

The parenthetical Mr. Rea inserted into his question is <u>not</u> my contention. My contention is that under PAWC's formula, if actual revenues exceed the straight

[31] Rebuttal Testimony of Charles Rea (PAWC Statement No. 10-R), p. 71.
[32] *Id.*, lines 4-7.

fixed variable ("SFV") target, the RDM formula presented by PAWC will produce a *charge* to customers, not a credit. That is the error I am pointing out. PAWC has had multiple opportunities – in its direct case, in response to discovery from the OSBA, and in rebuttal – to provide a simple example that would demonstrate to parties and the Commission how its RDM formula would operate. And at each juncture PAWC has failed to do so. The RDM should be rejected.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, it does.

Revenue Requirements Comparison

Including OSBA Revenue Requirements Using Alternative Costs of Capital [1]

Line No.	(a)	(b)	(c)	(d)	(e)
1	**Table 1 - I&E Direct [2]**				
2		Total	Water	Wastewater	Total Excluding BASA & Brentwood
3	Rev. Req. Increase	$54,036,090	$27,439,769	$26,596,321	$54,036,090
4	Rev. Req. Total	$1,048,234,810	$848,325,560	$199,909,250	$1,048,234,810
5	**Table 2 - OCA Direct [3]**				
6		Total	Water	Wastewater	Total Excluding BASA & Brentwood
7	Rev. Req. Increase	$43,733,007	$16,088,915	$27,644,092	$43,733,007
8	Rev. Req. Total	$1,041,957,276	$840,206,101	$201,751,175	$1,041,957,276
9	**Table 3 - OSBA Direct [4]**				
10		Total	Water	Wastewater	Total Excl. BASA & Brentwood
11	Rev. Req. Increase	$109,088,498	$68,075,276	$41,013,222	$103,983,483
12	Rev. Req. Total	$1,120,984,360	$892,192,462	$228,791,898	$1,102,207,753
13	**Table 4 - OSBA with I&E Cost of Capital [5]**				
14		Total	Water	Wastewater	Total Excluding BASA & Brentwood
15	Rev. Req. Increase	$54,985,491	$24,018,800	$30,966,691	$49,880,476
16	Rev. Req. Total	$1,066,881,353	$848,135,986	$218,745,367	$1,048,104,746
17	**Table 5 - OSBA with OCA Cost of Capital [6]**				
18		Total	Water	Wastewater	Total Excluding BASA & Brentwood
19	Rev. Req. Increase	$62,285,396	$29,494,085	$32,791,311	$57,180,381
20	Rev. Req. Total	$1,074,181,258	$853,611,271	$220,569,987	$1,055,404,651
21	**Table 6 - PAWC Direct [7]**				
22		Total	Water	Wastewater	Total Excluding BASA & Brentwood
23	Rev. Req. Increase	$203,945,911	$128,149,690	$75,796,221	$175,722,966
24	Rev. Req. Total	$1,215,841,773	$952,266,876	$263,574,897	$1,173,947,235
25	**Table 7 - PAWC Rebuttal [8]**				
26		Total	Water	Wastewater	Total Excluding BASA & Brentwood
27	Rev. Req. Increase	$204,291,164	$129,343,180	$74,947,984	$177,033,198
28	Rev. Req. Total	$1,217,153,817	$953,460,366	$263,693,451	$1,175,257,467

Data Sources/Notes:

1. Revenue requirements prior to Act 11 revenue shift.
2. Direct Testimony of Vanessa Okum (I&E Statement No. 1), pp. 8-11 (8.45% ROE).
3. OCA Exhibit LA-1, Schedule A, p. 1 (9.1% ROE, Imputed capital structure).
4. Includes placeholder 9.65% ROE. From OSBA WP: Income Statement_Revenue Requirement 2023_OSBA WP.
5. Includes 8.45% ROE.
   From OSBA WP: Income Statement_Revenue Requirement 2023_OSBA WP I&E ROE.
6. Includes 9.1% ROE and imputed capital structure (51% Equity/49% Debt for Water).
   From OSBA WP: Income Statement_Revenue Requirement 2023_OSBA WP OCA Cost of Cap.
7. Income Statement_Revenue Requirement 2023_As Filed (10.95% ROE).
8. Income Statement_Revenue Requirement 2023_Rebuttal (10.95% ROE).

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	**Docket Nos:**
v.	:	**R-2023-3043189 (Water)**
Pennsylvania-American Water Company	:	**R-2023-3043190 (Wastewater)**

VERIFICATION

I, Kevin C. Higgins, hereby state that the facts set forth in my Surrebuttal Testimony labelled OSBA Statement No. 1-S and the attached Schedule KCH-14 are true and correct to the best of my knowledge, information, and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 19 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: March 4, 2024

Kevin C. Higgins

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	**Docket Nos. R-2023-3043189 (Water)**
v.	:	**R-2023-3043190 (Wastewater)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the foregoing have been served via email (*unless otherwise noted below*) upon the following persons, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

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DATE: March 4, 2024

/s/ Steven C. Gray
Steven C. Gray
Senior Supervising
Assistant Small Business Advocate
Attorney ID No. 77538

APPENDIX "A"

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	**Docket Nos. R-2023-3043189 (Water)** **R-2023-3043190 (Wastewater)**
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

NON-DISCLOSURE CERTIFICATE

TO WHOM IT MAY CONCERN:

The undersigned is the expert, counsel, employee, member or officer of the Office of Small Business Advocate.

The undersigned has read and understands the Stipulated Protective Agreement entered into by Pennsylvania-American Water Company and the Office of Small Business Advocate in the above-captioned proceeding deals with the treatment of Proprietary Information. The undersigned agrees to be bound by, and comply with, the terms and conditions of said Agreement. The undersigned agrees that any Proprietary Information shall be used or disclosed only for purposes of preparation for, and conduct of the above-captioned proceeding, and any administrative or judicial review thereof, and shall not be disclosed or used for purposes of business or competition.

Signature

KEVIN HIGGINS

Print Name

111 E Broadway, Suite 1200
Salt Lake City, UT 84111

Address

Date: 11-9-23

ENERGY STRATEGIES LLC

Employer

COMMISSION ON ECONOMIC OPPORTUNITY

CEO Statement No. 1

Direct Testimony of Jennifer Warabak

Pennsylvania Public Utility Commission

v.

Pennsylvania-American Water Company

Docket Numbers:
R-2023-3043189 (Water)
R-2022-3043190 (Wastewater)

Q. Please state your full name and business address.

A. Jennifer Warabak, 165 Amber Lane, PO Box 1127, Wilkes-Barre, Pennsylvania 18703-1127.

Q. By whom are you employed and in what capacity?

A. I am employed by the Commission on Economic Opportunity (CEO) as Executive Director.

Q. What are the interests of the Commission on Economic Opportunity in this rate case?

A. The Commission on Economic Opportunity is a non-profit organization serving the low-income and elderly in Luzerne County, PA. In a typical year, the Commission serves more than 25,000 Luzerne County residents, of which 98% are at or below 150% of the federal poverty level. It is part of our responsibility to our constituency to advocate for their interests in regulatory proceedings and this proposed request will certainly have an impact upon those low-income ratepayers. In addition to the affordability of rates, CEO is particularly interested in the ability of our clients to save money through conserving energy.

Q. **What background and experience qualify you and the Commission on Economic Opportunity to participate in this case?**

A. I was appointed as the acting Executive Director of the Commission on Economic Opportunity in October 2022. I have been employed at CEO for over 20 years and during

my tenure I have been involved in numerous energy related programs that CEO operates. From 2004 to 2016, I was CEO's Energy Services Coordinator where I supervised CEO's energy programs. During that time, I managed eight hardship utility programs and managed the LIHEAP Crisis program for Luzerne County on behalf of the Pennsylvania Department of Human Services as well as other utility customer assistance programs for a number of utility companies. In 2016 I became CEO's Program and Planning Coordinator where I evaluated program effectiveness and recommended modifications and/or improvements across the spectrum of programs offered by CEO, in the areas of energy, housing, job training etc.

During my tenure in those positions, CEO's experience and the expertise of its staff in energy programs has been recognized on state and national levels. CEO's energy related programs have been acknowledged by receipt of a Superior Achievement Award from the United States Department of Energy. CEO has weatherized more than 27,000 homes under the U.S. Department of Energy Weatherization Assistance Program. CEO also serves as a subcontractor for universal programs operated by several Pennsylvania gas and electric utility companies. CEO is also the PA Department of Public Welfare's contracted operator of the crisis component of the Low-Income Home Energy Assistance Program (LIHEAP) in Luzerne and Wyoming Counties. CEO was also a major contractor for PPL in the Low-Income Renewable Energy Pilot, and secured funding and installed several solar thermal water heating systems for the former PG Energy and UGI Gas Division.

Additionally, CEO has been an active party in many restructuring and rate cases before the PUC including both PG Energy's (R-00994783) and UGI's (R-00994786) restructuring

cases, and prior PPL Electric rate proceedings and participated in those matters to address universal service issues. CEO also has participated in prior rate cases concerning this Company including its last rate case in 2022 (R-2022-3031672, R-2022-3031673).

Q. Please describe CEO's most recent involvement in a rate case involving this Company.

A. In this Company's 2022 request for a rate increase CEO addressed many of the same issues in that case that we address now. Specifically, in that prior case CEO addressed the proposed increase in the fixed residential monthly service charge, the discount offered to low-income customers on that monthly charge and the adequacy of the Company's hardship fund in light of the requested and expected increase in residential rates.

Q. Please describe the areas of your testimony in this case.

A. My testimony will address the Company's proposal to increase its monthly service charge because the proposal to increase fixed monthly charges affects a customer's ability to conserve. Similarly, I will address the Company's proposed Revenue Decoupling Mechanism as that discourages conservation in that a customer's bill would not necessarily be a reflection of the water used by that customer. I will also address funding for the Company's hardship program, Help to Others (H2O).

Q. Before addressing the specifics of your testimony, do you have general concerns regarding this rate case?

A. Yes. My main concern is the impact of the Company's proposal on the residential

class, particularly those residential customers who are low-income. Under the Company's proposal, a typical residential water customer, and most residential customers, will see their monthly bill increase by 24.9% with some residential customers seeing their bills increase by as high as 63.9%. Additionally, part of the residential water customer's increase will be due to an increase of the monthly service charge, from $17.50 to $20.00 and most residential wastewater customers will see theirs increase from $14.30 to $20.00. This increase in the monthly service charge has concerned the Commission in recent cases, because it discourages conservation; the more a Company moves towards fixed charges and away from consumption a customer has less incentive, and ability, to conserve. One way that a family, particularly a poor family, can lessen their energy burden is to conserve – lower the thermostat, seal air leaks, change filters regularly, add more insulation, get a more efficient heating unit, use less water etc. The Company's proposal to increase a residential customer's fixed costs greatly impacts a customer's ability to lessen the impact of any rate increase through conservation.

Q. How does the effect of the Company's proposed rate increase on the residential class impact upon your testimony in this case?

A. Should a rate increase be granted, I believe there should be greater measures to provide aid to the Company's low-income customers. For a typical residential customer, a 24.9% increase is substantial, but for a low-income customer, the effects can be dramatic. Low-income customers face many financial challenges beyond high utility costs. Our agency knows firsthand from the people we serve that they face many financial challenges with housing, energy, food and health care costs and a dramatic increase in any of those

areas can have a dramatic impact. In light of that and the impact of the Company's proposal on its residential customers, greater relief is needed for the Company's low-income customers.

Q: Apart from rate design and low-income programs, does CEO take a position on whether the Company's rate increase should be granted?

A: Yes. CEO rarely takes a position on whether a rate increase should be granted but, in this case, we believe that Company's rate increase requests should be denied. CEO takes this position in light of the fact that this Company's customers had their rates increase just over a year ago as a result of the Company's late rate case and should now not be subjected to another, substantial rate increase just a short time later.

Q: What issue regarding rate design would you like to address?

A: I want to address the Company's proposal to increase the monthly service charge for residential customers. For most residential water customers, the Company is proposing to increase the fixed monthly service charge from $17.50 to $20.00, an increase of over 14%. Most wastewater residential customers will see their fixed monthly charge increase from $14.30 to $20.00, an increase of nearly 40%. CEO opposes any increase to the fixed monthly service charge.

As indicated the Company's proposal to increase those fixed cost would negatively impact a customer's motive to conserve and the ability to save money. In prior cases, the Commissioners have expressed concerns about proposals to increase the fixed portion of a customer's bill or any proposal that would impact a customer's motive and ability to

conserve. We share those concerns and believe that the Company's requests to increase the monthly customer charge for residential water and wastewater customers should be denied.

For many of the same reasons, CEO contends that the Company's proposed Revenue Decoupling Mechanism should be rejected in that it discourages conservation due to the fact that a customer's bill would not necessarily be a reflection of the water used by that customer. Further, the Revenue Decoupling Mechanism would effectively guarantee the Company's recovery of its authorized revenue requirement and shift to consumers the risks associated with recovery that are currently borne by the Company.

Q. What would you like to address concerning the Company's hardship fund, H2O?

A. I am proposing an increase in funding for the Company's hardship grant program. As a result of the 2022 rate case the Company increased the Company's annual contribution to its hardship grant program by $150,000. Should a rate increase be granted in this case I am proposing that the Company increase its contribution by $300,000.

Q. Can you summarize your recommendations?

A. I am recommending the following:

1. That the Company requested rate increase be denied;
2. That the Company's requests to increase the fixed monthly service charges for residential customers be denied;
3. That the Company's Revenue Decoupling Mechanism proposal be denied;
4. That the Company distribute its hardship funds based upon the percentage of

low-income customers within the service region or county;

5. That the Company increase its contribution to its hardship fund by $300,000 should a rate increase be granted in this case.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION,	:	
V.	:	Docket No. R-2023-3043189 (Water)
	:	R-2023-3043190 (Wastewater)
PENNSYLVANIA-AMERICAN WATER COMPANY	:	

CERTIFICATE OF SERVICE

The undersigned certified that he served a copy of the foregoing Commission on Economic Opportunity's Statement No. 1 – Direct Testimony of Jennifer Warabak upon the following participants this 1st day of February, 2024, via electronic mail:

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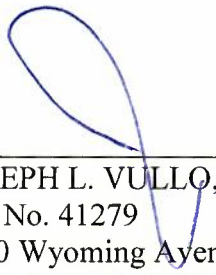

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Cleveland-Cliffs Steel Statement No. 1
Witness: Richard A. Baudino

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	**:**	
	:	**Docket Nos.**
V.	**:**	**R-2023-3043189**
	:	**C-2023-3044289**
	:	**C-2023-3044375**
PENNSYLVANIA-AMERICAN WATER COMPANY	**:**	

DIRECT TESTIMONY

AND EXHIBITS

OF

RICHARD A. BAUDINO

ON BEHALF OF

CLEVELAND-CLIFFS STEEL

J. KENNEDY AND ASSOCIATES, INC.

FEBRUARY 1, 2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	**:**	
	:	**Docket Nos.**
V.	**:**	**R-2023-3043189**
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PENNSYLVANIA-AMERICAN WATER COMPANY	**:**	

DIRECT TESTIMONY OF RICHARD A. BAUDINO

Q. Please state your name and business address.

A. My name is Richard A. Baudino. My business address is J. Kennedy and Associates, Inc. ("Kennedy and Associates"), 570 Colonial Park Drive, Suite 305, Roswell, Georgia 30075.

Q. What is your occupation and by whom are you employed?

A. I am a consultant to Kennedy and Associates.

Q. Please describe your education and professional experience.

A. I received my Master of Arts degree with a major in Economics and a minor in Statistics from New Mexico State University in 1982. I also received my Bachelor of Arts Degree with majors in Economics and English from New Mexico State in 1979. In October 1989, I joined the utility consulting firm of Kennedy and Associates as a Senior Consultant where my duties and responsibilities covered substantially the same areas as those during my tenure with the New Mexico Public Service Commission Staff. I became Manager in July 1992 and was named Director of Consulting in January 1995. Currently, I am a consultant with Kennedy and Associates. Exhibit ____(RAB-1) summarizes my expert testimony experience.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of Cleveland-Cliffs Steel.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to address the following issues in Pennsylvania American Water Company's ("PAWC" or "Company") current rate proceeding:

1. Cost allocation and the Company's class cost of service study ("CCOSS").
2. PAWC's proposed allocation of its rate increase to customer classes.
3. Rate design for the Industrial class.
4. The Company's proposed Revenue Decoupling Mechanism ("RDM").

In addressing these issues I will respond to the Direct Testimony PAWC witnesses Constance Heppenstall and Charles Rea.

<u>Customer Class Cost Allocation</u>

Q. Please summarize Ms. Heppenstall's approach to the Company's proposed CCOSS.

A. Ms. Heppenstall described her approach to the Company's CCOSS beginning on page 5, line 8 of her Direct Testimony. Ms. Heppenstall utilized the base-extra capacity method as described in the 2017 and prior editions of the Water Rates Manual published by the American Water Work Association ("AWWA"). This approach to cost allocation has consistently been accepted by the Pennsylvania Public Utilities Commission ("PPUC" or "Commission") in past PAWC cases. Ms. Heppenstall provided a CCOSS for Water Operations, which is included in her Exhibit No. 12-A. In this case, Ms. Heppenstall performed CCOSS for the fully projected test year ending

June 30, 2025 and includes a portion of the Company's wastewater revenue requirement.

The extra capacity factors in the CCOSS were developed from the results of customer demand study that the Company submitted in its 2017 base rate case. Ms. Heppenstall also described several adjustments to her CCOSSs beginning on page 13 of her Direct Testimony. These changes include:

- Exclusion of contract sales under Riders DIS (Demand Industrial Sales) and DRS (Demand Resale Sales) in developing the allocation factors for the Industrial class and sales for resale – Group A class.
- Exclusion of interruptible curtailment volumes from the extra capacity portion of allocation factors 2, 3, and 4.
- Reallocation of the unrecovered portion of public fire protection costs from the residential, commercial, industrial, and public classes. Ms. Heppenstall explained that this adjustment was performed in order to comply with Section 1328 of the Public Utility Code, which provides that public fire hydrant rates may only recover 25% of the cost of public fire protection service. The unrecovered balance is then recovered in the fixed charges of other customer classes.
- Allocation of a portion of the wastewater revenue requirement to the water operations revenue requirement of its Water Operations. In this case, the wastewater cost of service allocated to the cost of service for PAWC's Water Operations totaled $71,087,394. Mr. Rea provided the basis for the allocation of this revenue requirement to water service classes in his Direct Testimony. I

will address this proposed allocation in detail later in my Direct Testimony.

Q. Were there any errors in the Company's filed water service CCOSS?

A. Yes, there was a significant error. The Company's response to OCA 04-012 indicated that the CCOSS originally filed in Exhibit 12-A erroneously did not include the adjustments for interruptible customer volumes I described above. Exhibit ___(RAB-2) includes PAWC's response to OCA 04-012 that describes the error and refers to Attachments 1 and 2 of the response that provide corrected CCOSS results. The corrected CCOSS shows that the Industrial class's cost responsibility declined by $1,022,926.

Q. What do the results of Ms. Heppenstall's proposed revenue allocation now show?

A. Please refer to Exhibit ___(RAB-3), pages 1 and 2, which show the revised customer class cost responsibilities and returns at present and proposed rates that were included in Attachments 1 and 2 to OCA 04-12. Table 1 below provides a summary of the class relative rates of return from this exhibit. The relative rate of return ("RROR") shows how close the customer classes are to the system average rate of return. For example, a class RROR of 1.0 shows that this class is returning the system average rate of return. A class RROR under 1.0 indicates a class is returning less than the system average return, while a RROR above 1.0 shows a class that is returning more than the system average rate of return.

Table 1
Corrected Class Relative Rates of Return

	RROR Current	RROR Proposed
RESIDENTIAL	1.03	1.02
COMMERCIAL	1.03	1.03
INDUSTRIAL	0.97	1.00
PUBLIC	0.33	0.34
OTHER WATER UTILITIES		
GROUP A	8.73	6.77
GROUP B	(0.17)	0.09
FIRE PROTECTION		
PRIVATE	1.17	1.05
PUBLIC	0.98	1.00

The revised CCOSS shows that the Industrial class relative rate of return under present rates increases to 0.97 from 0.93 in Ms. Heppenstall's filed Exhibit 12-A. Under proposed rates, the Industrial RROR is 1.0, or the same as they system average rate of return.

Q. Are there other issues with PAWC's CCOSS that affect customer class cost responsibility and class rates of return?

A. Yes, there are two other major issues I will discuss that affected customer class cost responsibility. These issues are:

1. The reallocation of a portion of the Company's wastewater revenue requirement to water customers.
2. The significant change in cost responsibility for the Public class of customers from PAWC's last water service rate case (Docket No. R-2022-3031672).

Q. Please describe how PAWC reallocated a portion of its wastewater revenue requirement in its CCOSS for water customers.

A. PAWC witness Rea presented the Company's position on this issue on pages 46 through 52 of his Direct Testimony. Mr. Rea explained the reasoning and rationale for the Company's proposed reallocation and presented the amounts to be paid by the water service customer classes in Table 4, page 47 of his Direct Testimony.

Q. Did Mr. Rea adequately explain the methodology for the Company's allocation of its wastewater revenue requirement to the water service rate classes?

A. No. Mr. Rea presented the results of the reallocation but did not explain how the allocation was performed. OSBA 01-018 requested a detailed explanation as to how this allocation was performed and the Company provided its explanation in its response. Please refer to Exhibit ___(RAB-4), which includes PAWC's response to OSBA-01-018. The Company's explanation was:

> Please see OSBA 01-018_Attachment. Where possible, Act 11 reallocations are directly assigned to water customer classes based on wastewater class contributions to Act 11. Where wastewater contributions are not class specific, those amounts are allocated to water customers based on relative levels of water cost of service. Act 11 revenues are calculated in Exhibits 10-B through 10-E.

The attachment to this response was in error, as noted in PAWC's response to OSBA 03-001. The Company explained the error and provided corrected numbers in OSBA 03-001_Attachment, which I have included in Exhibit ___(RAB-5).

Q. Is this a change in PAWC's method of reallocating its wastewater revenue

requirement from its last rate case?

A. Yes. In Docket R-2022-3031672, Ms. Heppenstall described the reallocation of wastewater revenue requirement as follows[1]:

> Q. How are the Wastewater Operations revenue requirements allocated to the customer classes in Exhibit No. 12-A?
>
> A. The wastewater operations revenue requirements are allocated to the customer classes in Exhibit No. 12-A based on the cost-of-service allocation of each class revenue contribution shown in the cost-of-service studies.

I should add that Private Fire was not allocated any of the wastewater revenue requirement in the Company's last rate case, whereas in the current case Private Fire receives an allocated share of the wastewater revenue requirement.

Q. Do you agree with PAWC's customer class reallocation of wastewater costs in the CCOSS for water operations?

A. No. PAWC's proposal inappropriately links wastewater class subsidies to the water service classes. The fact is that the cost of water services and wastewater services are separate and distinct and have nothing whatsoever to do with each other. Quite simply, a Residential water service customer is not directly responsible for a Residential wastewater service customer's subsidy. The same is true for Commercial and Industrial water service customers having to subsidize Commercial and Industrial wastewater customers, respectively.

For example, page 2 of Exhibit ___(RAB-5) shows that PAWC directly

[1] Heppenstall Direct Testimony, 2022 General Base Rate Case, R-2022-3031672 Water) and R-2022-3031673 (Wastewater), page 13, lines 18 – 22.

assigned a subsidy of $2,557,322 to Industrial water service customers from Industrial customers in the Combined Sewer Systems ("CSS") group. CSS includes customers in Rate Zones 3, 4, and 6. What this approach implies is that Industrial customers in Rate Zone 1 are somehow directly responsible and must pay for wastewater service subsidies created by the Company's pricing decisions in Zones 3, 4, and 6. Obviously, this is incorrect and unreasonable. I recommend that the Commission reject PAWC's proposed reallocation of its wastewater revenue requirements to water service customers.

Q. What is your recommendation for the reallocation of wastewater revenue subsidy to water service customers, assuming the Commission approves such a reallocation in this proceeding?

A. Since the total wastewater subsidy cannot be tracked to specific water service classes, I recommend that the total wastewater subsidy reallocation be based on each water service class's proportionate share of total water service cost responsibility under current rates. This is consistent with PAWC's approach in the last rate case but modified to include the Private Fire class. The water service classes included in the reallocation should be Residential, Commercial, Industrial, Public, and Private Fire. I did not include the Public Fire class as its revenue recovery is limited by statute. I also did not include the Other Water Utilities classes as they are very small and would not have contributed significantly to the wastewater subsidy recovery.

Table 2 shows the basis for my recommended reallocation of the wastewater subsidy. Column (1) shows water service class allocated costs to serve under present

rates from the Company's response to OCA 04-012, Attachment 2. Column (2) shows each class's percentage share of the allocated cost to serve. Column (3) shows each class's share of the reallocated wastewater subsidy based on the percentages in Column (2).

Table 2
Recommended Reallocation of Wastewater Subsidy

	(1) Class Cost of Service	(2) Current COS Percentage	(3) Wastewater Subsidy
Residential	$ 522,526,457	65.67%	$ 46,682,147
Commercial	$ 199,747,181	25.10%	$ 17,845,273
Industrial	$ 38,060,255	4.78%	$ 3,400,276
Public (Municipal)	$ 30,509,381	3.83%	$ 2,725,687
Private Fire Protection	$ 4,858,010	0.61%	$ 434,011
Totals	$ 795,701,284	100.00%	$ 71,087,394

Q. Did you rerun the Company's revised CCOSS with your recommended wastewater subsidy allocation?

A. Yes. I reran the revised CCOSS provided by PAWC in Attachment 1 to OCA 04-012, which shows class rates of return and relative rates of return at proposed rates. Please refer to Exhibit ___(RAB-6) with a further revised Schedule B.

Exhibit ___(RAB-6) shows that under PAWC's proposed rates, Residential, Commercial, and Industrial classes are all above the system average rate of return at the Company's proposed rates, meaning that they are contributing more than their allocated cost to serve. The Public class, which received an increase significantly below the system average increase of 24.6% is far below the system average rate of return, with a RROR of only 0.27.

Q. Please discuss your analysis of the change in the allocated cost to serve for the Public water service class from the last rate case.

A. The water service CCOSS filed by Ms. Heppenstall in this case shows a significantly higher cost of service responsibility for the Public class than the CCOSS that was filed in Docket R-2022-3031672. Please refer to Exhibit ___(RAB-7), pages 1 and 2, which show the water service class cost responsibilities and relative rates of return from Ms. Heppenstall's CCOSS filed in Docket R-2022-3031672. Note that the Public share of cost responsibility, including the reallocation of the wastewater subsidy, was 2.8%. On page 2 of Exhibit ___(RAB-7), the Public class's RROR was 1.30 under present rates and was much higher than the RRORs for the Residential, Commercial, and Industrial classes. What this means is that the Public class was paying much more than its share of costs at present rates in the last case.

Please refer to the Public class RROR on page 1 of Exhibit ___(RAB-3), the revised CCOSS results from OCA 04-012. The Public class RROR is significantly lower at 0.33, indicating that this class is significantly under recovering its allocated cost of service at present rates. This represents a dramatic shift in RROR from the last rate case for the Public class of customers.

Q. What caused such a large shift in cost responsibility for the Public class from the last rate case?

A. Based on a comparison between the two CCOSSs prepared by Ms. Heppenstall, the primary cause of the shift in cost responsibility is a huge change in the allocation of

meters and services. Please refer to page 3 of Exhibit ___(RAB-7). This page presents the allocation factors for meters and services used in the water service CCOSS from Docket R-2022-3031672. With respect to meters, the Public class allocation factor was 1.863%. With respect to services, the Public class allocation factor was 0.612%. In Ms. Heppenstall's water service CCOSS in this case, these allocation factors are substantially greater. The Public class's meter allocator is now 12.67% and its services allocator is 2.3%. Table 3 below provides a comparison between meter and services allocators from the last case and this case.

Table 3
Meters and Services Allocation Factors

	Meters		Services	
	R-2022-3031672	R-2023-3043189	R-2022-3031672	R-2023-3043189
Residential	0.77691	0.70039	0.88781	0.88575
Commercial	0.18989	0.16057	0.08705	0.07895
Industrial	0.00783	0.00636	0.00214	0.00166
Public	0.01836	0.12669	0.00612	0.02309
Other Water Utilities A	0.00017	0.00008	0.00002	0.00001
Other Water Utilities B	0.00013	0.00009	0.00002	0.00002
Private Fire Protection	0.00671	0.00583	0.01684	0.01052
Total	1.00000	1.00000	1.00000	1.00000

Sources: Exhibit 12-A, Dockets R-2022-3031672 and R-2023-3043189

With respect to the allocation of meters, the Residential class's allocator declined significantly from 77.69% in the last case to 70.04% in this case. Commercial customers also saw a decline from 18.99% to 16.06%. This table also shows the significant increase to the allocator for services for the Public class. Commercial and Industrial allocation factors for services declined from the last case.

Q. In your experience, is it unusual for a customer class to experience such a large

change in cost responsibility from one case to the next?

A. Yes, it is highly unusual. Given the large and unexpected shift in cost responsibility for the Public class, I recommend a conservative approach to revenue allocation and the increase that the Public class should bear.

Q. What is your recommended revenue allocation approach for the Commission to adopt in this case?

A. I recommend the following approach for the Commission's consideration in this case:

1. Apply a factor of 1.25 times the overall system average increase for the Public class.
2. Apply the same percentage increase to the Residential, Commercial, Industrial, and Private Fire classes.
3. Accept PAWC's proposed increases to the remaining classes.

Exhibit ___(RAB-8) presents the results of my recommended approach. At PAWC's requested percentage increase of 24.6%, the Public class receives an increase of 30.8%. Residential, Commercial, Industrial, and Private Fire receive an increase near the system average of 24.4%.

Q. Mr. Baudino, do you support PAWC's requested total revenue increase in this proceeding?

A. No. Cleveland-Cliffs takes no position with respect to the Company's requested rate increase. If the Commission reduces PAWC's rate increase request, then the percentage class increases I recommended should be adjusted downward in proportion to the Commission's reduction in total revenue requirement. For example, if the Commission reduces PAWC's requested increase of 24.6% by 50%, the resulting overall increase would be about 12%. The reduction to the Residential, Commercial, Industrial, and Private Fire class increases of 50% would result in a revised increase of 12% as well.

Industrial Class Rate Design

Q. Please describe Mr. Rea's proposal for Industrial class rate design.

A. On page 35 of his Direct Testimony, Mr. Rea explained that no increases were proposed to the existing Industrial meter charges. The entire Industrial revenue increase was collected through increases to the volumetric charges.

Q. Should the Commission adopt Mr. Rea's proposal to keep Industrial meter charges constant?

A. No. As Mr. Rea noted on page 86 of his Direct Testimony, over 95% of the Company's costs are fixed and do not vary with water consumption. Volumetric rates collect these costs based on the volumes of water consumed by the water service rate classes. As consumption varies month to month and year to year, PAWC's collection of its fixed costs will vary as well, introducing more variability in its revenues and

earnings than if more of these costs were collected from fixed charges, such as meter charges.

To the extent practicable, fixed costs should be collected by fixed charges. Mr. Rea's rate design would collect even more of the Company's fixed costs through volumetric rates, which is the opposite direction of proper rate design. I recommend that Mr. Rea's Industrial rate design proposal be rejected. I also recommend that the Commission apply an equal percentage increase to both meter charges and volumetric charges for the Industrial water service class.

Revenue Decoupling Mechanism

Q. Please describe PAWC's proposed RDM.

A. Company witness Charles B. Rea described the proposed RDM beginning on page 86 of his Direct Testimony. According to Mr. Rea, the purpose of the proposed RDM is to alternative rate design mechanism whose purpose is to "more reliably recover the revenue requirement and associated fixed costs approved by the Commission in this case."[2] Mr. Rea cited concerns relating to seasonal weather conditions and declining usage for residential, commercial, and municipal customers as reasons for the Commission to approve the RDM.

According to Mr. Rea:

> This mechanism compares the revenues collected under the actual Commission approved rates customers pay with the revenues that would have been collected through an SFV rate design on a forward-looking basis and accrues the differences, which are either credited to customers or collected from customers at a later time. The proposed RDM identifies three cost components as the basis for revenues that would

[2] Rea Direct Testimony, page 86, lines 16 – 18.

be collected through the SFV rate design that form the basis of the revenue comparisons going forward.[3]

Q. Should the Commission approve PAWC's proposed RDM?

A. No. I recommend that the Commission reject the proposed RDM.

Q. Why should the Commission reject the proposed RDM in this case?

A. The Company's proposed RDM should be rejected for the following reasons.

First, the Commission has already approved the Company's Distribution System Improvement Charge ("DSIC"), a mechanism designed to provide accelerated cost recovery to PAWC for certain system improvements. The DSIC has been and will continue to be an important ongoing source of additional revenue collection outside of traditional rate case proceedings for PAWC.

Second, the Company also has the opportunity to include forecasted costs and investments through the use of a forecasted test year. In this case, PAWC proposed using a fully projected future test year through June 30, 2025. This provides a significant benefit to PAWC compared to using an historic test period, which is this case would be a 12-month period ending June 30, 2023.

Both the DSIC and the use of a future test year serve to reduce regulatory lag and enhance PAWC's revenue stream between rate proceedings.

Q. Are there other problems with PAWC's proposed RDM?

[3] Rea Direct Testimony, page 90, lines 4 – 9.

A. Yes. The industrial class should not be included in the RDM. First, Mr. Rea only provided analysis of conservation-related revenue losses from the Residential, Commercial, and Public (Municipal) classes. There is no evidence in this case that the Industrial class is affected by conservation measures, weather, or declining numbers of customers. Second, the proposed RDM presents significant problems with interclass allocations of lost revenues.

Q. Based on your experience, would water conservation and loss of revenues be an issue for Industrial customers in the way it is with the Company's Residential customers?

A. No. Industrial customers already have an incentive to be as cost efficient as possible due to competition in the markets in which they operate. This being the case, industrial customers likely have already made investments in efficient water use, as well as use of electricity and natural gas. It is unlikely that there would be concerns with ongoing declines in consumption as there are in the Residential class. Indeed, if there were, the Company would likely have already analyzed this trend and presented it to the Commission.

Q. Did Mr. Rea present any analysis suggesting that weather influences industrial water consumption?

A. No.

Q. Did Mr. Rea propose any revenue adjustments for the Industrial class based on weather or expected declines in consumption?

A. No. Mr. Rea presented Usage Trend Adjustments on pages 78 and 79 of his Direct Testimony. He explained on page 78 that the Usage Trend Adjustments "incorporate weather normalization, COVID-19 normalization, and adjustments for trends in declining use" that he described and quantified earlier in his Direct Testimony. These adjustments were applied to the Residential, Commercial, and Public (Municipal) classes. The Industrial class was not included.

Q. Please explain how the proposed RDM would cause problems with inter-class revenue allocations.

A. The RDM would be applied to all customers in the residential, commercial, industrial, municipal, and sales for resale classes except for those customers taking service under contract rates. For purposes of the RDM, any revenue shortfall would be collected from all customers. What this means is that if due to continued conservation the residential class's revenues declined from the Commission authorized level in this case, that revenue shortfall would be collected from all customers, not just from the Residential class. Commercial and industrial customers would have to pay a portion of the residential class revenue shortfall, even though commercial and industrial customers were not responsible for it. Likewise, if both commercial and residential classes experienced revenue shortfalls due to declining usage, once again the industrial customers would have to pay a portion of that revenue shortfall.

Clearly the RDM has built-in customer class allocation inequities. It is unfair and unreasonable to expect Industrial customers to pay for usage declines in the residential and commercial classes.

Q. If the RDM were modified to confine the declines in revenue from each class to the class in which the declines occur, would this work for the Industrial class?

A. No. Industrial class revenues could rise or fall based on market conditions and on the general economy. Further, if a single industrial customer left PAWC's system, the loss in revenues from that customer would be confined to the rest of the industrial customers and would have to be picked up by those customers. This could have a devastating rate impact on those customers depending on the volumes that were lost from the departing industrial customer. Industrial customers must not be placed in such a risky and potentially damaging position by the operation of an RDM.

Q. If the Commission decides to approve some form of a RDM in this proceeding, what is your recommendation?

A. I recommend that the Commission exclude the Industrial class of customers if it decides to implement a RDM in this case. PAWC provided no support or analysis showing that the factors the Company cited in support of its proposed RDM apply to the Industrial class.

Q. Does this conclude your Direct Testimony?

A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	**:**	
	:	**Docket Nos.**
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	:	**C-2023-3044289**
	:	**C-2023-3044375**
PENNSYLVANIA-AMERICAN WATER COMPANY	**:**	

EXHIBITS

OF

RICHARD A. BAUDINO

ON BEHALF OF

CLEVELAND-CLIFFS STEEL

J. KENNEDY AND ASSOCIATES, INC.

FEBRUARY 1, 2024

RESUME OF RICHARD A. BAUDINO

EDUCATION

New Mexico State University, M.A.
Major in Economics
Minor in Statistics

New Mexico State University, B.A.
Economics
English

Thirty-nine years of experience in utility ratemaking and the application of principles of economics to the regulation of electric, gas, and water utilities. Broad based experience in revenue requirement analysis, cost of capital, rate of return, cost and revenue allocation, and rate design.

REGULATORY TESTIMONY

Preparation and presentation of expert testimony in the areas of:

Cost of Capital for Electric, Gas and Water Companies
Electric, Gas, and Water Utility Cost Allocation and Rate Design
Revenue Requirements
Gas and Electric industry restructuring and competition
Fuel cost auditing
Ratemaking Treatment of Generating Plant Sale/Leasebacks

RESUME OF RICHARD A. BAUDINO

EXPERIENCE

1989 to Present: **Kennedy and Associates: Director of Consulting, Consultant** - Responsible for consulting assignments in revenue requirements, rate design, cost of capital, economic analysis of generation alternatives, electric and gas industry restructuring/competition and water utility issues.

1982 to 1989: **New Mexico Public Service Commission Staff: Utility Economist** - Responsible for preparation of analysis and expert testimony in the areas of rate of return, cost allocation, rate design, finance, phase-in of electric generating plants, and sale/leaseback transactions.

CLIENTS SERVED

Regulatory Commissions

Louisiana Public Service Commission
Georgia Public Service Commission
New Mexico Public Service Commission

Other Clients and Client Groups

Ad Hoc Committee for a Competitive Electric Supply System
Air Products and Chemicals, Inc.
Arkansas Electric Energy Consumers
Arkansas Gas Consumers
AK Steel
Armco Steel Company, L.P.
Aqua Large Users Group
Assn. of Business Advocating Tariff Equity
Atmos Cities Steering Committee
Canadian Federation of Independent Businesses
CF&I Steel, L.P.
Cities of Midland, McAllen, and Colorado City
Cities Served by Texas-New Mexico Power Co.
Cities Served by AEP Texas
City of New York
Climax Molybdenum Company
Connecticut Industrial Energy Consumers
Crescent City Power Users Group
Cripple Creek & Victor Gold Mining Co.
Dearborn Industrial Generation, LLC
General Electric Company
Holcim (U.S.) Inc.
IBM Corporation
Industrial Energy Consumers
Kentucky Industrial Utility Consumers
Kentucky Office of the Attorney General
Lexington-Fayette Urban County Government
Large Electric Consumers Organization
Newport Steel
North Carolina Attorney General's Office
Northwest Arkansas Gas Consumers
Maryland Energy Group
Occidental Chemical
PSI Industrial Group
Large Power Intervenors (Minnesota)
Tyson Foods
West Virginia Energy Users Group
The Commercial Group
Wisconsin Industrial Energy Group
South Florida Hospital and Health Care Assn.
PP&L Industrial Customer Alliance
Philadelphia Area Industrial Energy Users Gp.
Philadelphia Large Users Group
West Penn Power Intervenors
Duquesne Industrial Intervenors
Met-Ed Industrial Users Gp.
Penelec Industrial Customer Alliance
Penn Power Users Group
Columbia Industrial Intervenors
U.S. Steel & Univ. of Pittsburg Medical Ctr.
Multiple Intervenors
Maine Office of Public Advocate
Missouri Office of Public Counsel
University of Massachusetts - Amherst
WCF Hospital Utility Alliance
West Travis County Public Utility Agency
Steering Committee of Cities Served by Oncor
Steering Committee of Cities Served by CoServ Gas, Ltd.
Utah Office of Consumer Services
Healthcare Council of the National Capital Area
Vermont Department of Public Service
South Carolina Office of Regulatory Staff
Texas Industrial Energy Consumers

Expert Testimony Appearances
of
Richard A. Baudino
As of February 2024

Date	Case	Jurisdict.	Party	Utility	Subject
10/83	1803, 1817	NM	New Mexico Public Service Commission	Southwestern Electric Coop.	Rate design.
11/84	1833	NM	New Mexico Public Service Commission Palo Verde	El Paso Electric Co.	Service contract approval, rate design, performance standards for nuclear generating system
1983	1835	NM	New Mexico Public Service Commission	Public Service Co. of NM	Rate design.
1984	1848	NM	New Mexico Public Service Commission	Sangre de Cristo Water Co.	Rate design.
02/85	1906	NM	New Mexico Public Service Commission	Southwestern Public Service Co.	Rate of return.
09/85	1907	NM	New Mexico Public Service Commission	Jornada Water Co.	Rate of return.
11/85	1957	NM	New Mexico Public Service Commission	Southwestern Public Service Co.	Rate of return.
04/86	2009	NM	New Mexico Public Service Commission	El Paso Electric Co.	Phase-in plan, treatment of sale/leaseback expense.
06/86	2032	NM	New Mexico Public Service Commission	El Paso Electric Co.	Sale/leaseback approval.
09/86	2033	NM	New Mexico Public Service Commission	El Paso Electric Co.	Order to show cause, PVNGS audit.
02/87	2074	NM	New Mexico Public Service Commission	El Paso Electric Co.	Diversification.
05/87	2089	NM	New Mexico Public Service Commission	El Paso Electric Co.	Fuel factor adjustment.
08/87	2092	NM	New Mexico Public Service Commission	El Paso Electric Co.	Rate design.
10/87	2146	NM	New Mexico Public Service Commission	Public Service Co. of New Mexico	Financial effects of restructuring, reorganization.
07/88	2162	NM	New Mexico Public Service Commission	El Paso Electric Co.	Revenue requirements, rate design, rate of return.

Expert Testimony Appearances
of
Richard A. Baudino
As of February 2024

Date	Case	Jurisdict.	Party	Utility	Subject
01/89	2194	NM	New Mexico Public Service Commission	Plains Electric G&T Cooperative	Economic development.
1/89	2253	NM	New Mexico Public Service Commission	Plains Electric G&T Cooperative	Financing.
08/89	2259	NM	New Mexico Public Service Commission	Homestead Water Co.	Rate of return, rate design.
10/89	2262	NM	New Mexico Public Service Commission	Public Service Co. of New Mexico	Rate of return.
09/89	2269	NM	New Mexico Public Service Commission	Ruidoso Natural Gas Co.	Rate of return, expense from affiliated interest.
12/89	89-208-TF	AR	Arkansas Electric Energy Consumers	Arkansas Power & Light Co.	Rider M-33.
01/90	U-17282	LA	Louisiana Public Service Commission	Gulf States Utilities	Cost of equity.
09/90	90-158	KY	Kentucky Industrial Utility Consumers	Louisville Gas & Electric Co.	Cost of equity.
09/90	90-004-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Cost of equity, transportation rate.
12/90	U-17282 Phase IV	LA	Louisiana Public Service Commission	Gulf States Utilities	Cost of equity.
04/91	91-037-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Transportation rates.
12/91	91-410-EL-AIR	OH	Air Products & Chemicals, Inc., Armco Steel Co., General Electric Co., Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Cost of equity.
05/92	910890-EI	FL	Occidental Chemical Corp.	Florida Power Corp.	Cost of equity, rate of return.
09/92	92-032-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Cost of equity, rate of return, cost-of-service.
09/92	39314	ID	Industrial Consumers for Fair Utility Rates	Indiana Michigan Power Co.	Cost of equity, rate of return.

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09/92	92-009-U	AR	Tyson Foods	General Waterworks	Cost allocation, rate design.
01/93	92-346	KY	Newport Steel Co.	Union Light, Heat & Power Co.	Cost allocation.
01/93	39498	IN	PSI Industrial Group	PSI Energy	Refund allocation.
01/93	U-10105	MI	Association of Businesses Advocating Tariff Equality (ABATE)	Michigan Consolidated Gas Co.	Return on equity.
04/93	92-1464-EL-AIR	OH	Air Products and Chemicals, Inc., Armco Steel Co., Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Return on equity.
09/93	93-189-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Transportation service terms and conditions.
09/93	93-081-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Cost-of-service, transportation rates, rate supplements; return on equity; revenue requirements.
12/93	U-17735	LA	Louisiana Public Service Commission Staff	Cajun Electric Power Cooperative	Historical reviews; evaluation of economic studies.
03/94	10320	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Co.	Trimble County CWIP revenue refund.
4/94	E-015/ GR-94-001	MN	Large Power Intervenors	Minnesota Power Co.	Evaluation of the cost of equity, capital structure, and rate of return.
5/94	R-00942993	PA	PG&W Industrial Intervenors	Pennsylvania Gas & Water Co.	Analysis of recovery of transition costs.
5/94	R-00943001	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania charge proposals.	Evaluation of cost allocation, rate design, rate plan, and carrying
7/94	R-00942986	PA	Armco, Inc., West Penn Power Industrial Intervenors	West Penn Power Co.	Return on equity and rate of return.
7/94	94-0035-E-42T	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Return on equity and rate of return.

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8/94	8652	MD	Westvaco Corp. Co.	Potomac Edison	Return on equity and rate of return.
9/94	930357-C	AR	West Central Arkansas Gas Consumers	Arkansas Oklahoma Gas Corp.	Evaluation of transportation service.
9/94	U-19904	LA	Louisiana Public Service Commission	Gulf States Utilities	Return on equity.
9/94	8629	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Transition costs.
11/94	94-175-U	AR	Arkansas Gas Consumers	Arkla, Inc.	Cost-of-service, rate design, rate of return.
3/95	RP94-343-000	FERC	Arkansas Gas Consumers	NorAm Gas Transmission	Rate of return.
4/95	R-00943271	PA	PP&L Industrial Customer Alliance	Pennsylvania Power & Light Co.	Return on equity.
6/95	U-10755	MI	Association of Businesses Advocating Tariff Equity	Consumers Power Co.	Revenue requirements.
7/95	8697	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Cost allocation and rate design.
8/95	95-254-TF U-2811	AR	Tyson Foods, Inc.	Southwest Arkansas Electric Cooperative	Refund allocation.
10/95	ER95-1042 -000	FERC	Louisiana Public Service Commission	Systems Energy Resources, Inc.	Return on Equity.
11/95	I-940032	PA	Industrial Energy Consumers of Pennsylvania	State-wide - all utilities	Investigation into Electric Power Competition.
5/96	96-030-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Revenue requirements, rate of return and cost of service.
7/96	8725	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.,Potomac Electric Power Co. and Constellation Energy Corp.	Return on Equity.
7/96	U-21496	LA	Louisiana Public Service Commission	Central Louisiana Electric Co.	Return on equity, rate of return.
9/96	U-22092	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.

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1/97	RP96-199-000	FERC	The Industrial Gas Users Conference	Mississippi River Transmission Corp.	Revenue requirements, rate of return and cost of service.
3/97	96-420-U	AR	West Central Arkansas Gas Corp.	Arkansas Oklahoma Gas Corp.	Revenue requirements, rate of return, cost of service and rate design.
7/97	U-11220	MI	Association of Business Advocating Tariff Equity	Michigan Gas Co. and Southeastern Michigan Gas Co.	Transportation Balancing Provisions.
7/97	R-00973944	PA	Pennsylvania American Water Large Users Group	Pennsylvania-American Water Co.	Rate of return, cost of service, revenue requirements.
3/98	8390-U	GA	Georgia Natural Gas Group and the Georgia Textile Manufacturers Assoc.	Atlanta Gas Light	Rate of return, restructuring issues, unbundling, rate design issues.
7/98	R-00984280	PA	PG Energy, Inc. Intervenors	PGE Industrial	Cost allocation.
8/98	U-17735	LA	Louisiana Public Service Commission	Cajun Electric Power Cooperative	Revenue requirements.
10/98	97-596	ME	Maine Office of the Public Advocate	Bangor Hydro-Electric Co.	Return on equity, rate of return.
10/98	U-23327	LA	Louisiana Public Service Commission	SWEPCO, CSW and AEP	Analysis of proposed merger.
12/98	98-577	ME	Maine Office of the Public Advocate	Maine Public Service Co.	Return on equity, rate of return.
12/98	U-23358	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity, rate of return.
3/99	98-426	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Co	Return on equity.
3/99	99-082	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co.	Return on equity.
4/99	R-984554	PA	T. W. Phillips Users Group	T. W. Phillips Gas and Oil Co.	Allocation of purchased gas costs.
6/99	R-0099462	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Balancing charges.
10/99	U-24182	LA	Louisiana Public Service Commission	Entergy Gulf States,Inc.	Cost of debt.

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10/99	R-00994782	PA	Peoples Industrial Intervenors	Peoples Natural Gas Co.	Restructuring issues.
10/99	R-00994781	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Restructuring, balancing charges, rate flexing, alternate fuel.
01/00	R-00994786	PA	UGI Industrial Intervenors	UGI Utilities, Inc.	Universal service costs, balancing, penalty charges, capacity Assignment.
01/00	8829	MD	Maryland Industrial Gr.	Baltimore Gas & Electric Co.	Revenue requirements, cost allocation, rate design.
02/00	R-00994788	PA	Penn Fuel Transportation	PFG Gas, Inc., and	Tariff charges, balancing provisions.
05/00	U-17735	LA	Louisiana Public Service Comm.	Louisiana Electric Cooperative	Rate restructuring.
07/00	2000-080	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric Co.	Cost allocation.
07/00	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket E)	LA	Louisiana Public Service Commission	Southwestern Electric Power Co.	Stranded cost analysis.
09/00	R-00005654	PA	Philadelphia Industrial And Commercial Gas Users Group.	Philadelphia Gas Works	Interim relief analysis.
10/00	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket B)	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Restructuring, Business Separation Plan.
11/00	R-00005277 (Rebuttal)	PA	Penn Fuel Transportation Customers	PFG Gas, Inc. and North Penn Gas Co.	Cost allocation issues.
12/00	U-24993	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
03/01	U-22092	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Stranded cost analysis.
04/01	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket B) (Addressing Contested Issues)	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Restructuring issues.

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04/01	R-00006042	PA	Philadelphia Industrial and Commercial Gas Users Group	Philadelphia Gas Works	Revenue requirements, cost allocation and tariff issues.
11/01	U-25687	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
03/02	14311-U	GA	Georgia Public Service Commission	Atlanta Gas Light	Capital structure.
08/02	2002-00145	KY	Kentucky Industrial Utility Customers	Columbia Gas of Kentucky	Revenue requirements.
09/02	M-00021612	PA	Philadelphia Industrial And Commercial Gas Users Group	Philadelphia Gas Works	Transportation rates, terms, and conditions.
01/03	2002-00169	KY	Kentucky Industrial Utility Customers	Kentucky Power	Return on equity.
02/03	02S-594E	CO	Cripple Creek & Victor Gold Mining Company	Aquila Networks – WPC	Return on equity.
04/03	U-26527	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
10/03	CV020495AB	GA	The Landings Assn., Inc.	Utilities Inc. of GA	Revenue requirement & overcharge refund
03/04	2003-00433	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric	Return on equity, Cost allocation & rate design
03/04	2003-00434	KY	Kentucky Industrial Utility Customers	Kentucky Utilities	Return on equity
4/04	04S-035E	CO	Cripple Creek & Victor Gold Mining Company, Goodrich Corp., Holcim (U.S.) Inc., and The Trane Co.	Aquila Networks – WPC	Return on equity.
9/04	U-23327, Subdocket B	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Fuel cost review
10/04	U-23327 Subdocket A	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Return on Equity
06/05	050045-EI	FL	South Florida Hospital and Health Care Assoc.	Florida Power & Light Co.	Return on equity
08/05	9036	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Revenue requirement, cost allocation, rate design, Tariff issues.
01/06	2005-0034	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	Return on equity.

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03/06	05-1278-E-PC-PW-42T	WV	West Virginia Energy Users Group	Appalachian Power Company	Return on equity.
04/06	U-25116 Commission	LA	Louisiana Public Service	Entergy Louisiana, LLC	Transmission Issues
07/06	U-23327 Commission	LA	Louisiana Public Service	Southwestern Electric Power Company	Return on equity, Service quality
08/06	ER-2006-0314	MO	Missouri Office of the Public Counsel	Kansas City Power & Light Co.	Return on equity, Weighted cost of capital
08/06	06S-234EG	CO	CF&I Steel, L.P. & Climax Molybdenum	Public Service Company of Colorado	Return on equity, Weighted cost of capital
01/07	06-0960-E-42T	WV	West Virginia Energy Users Group	Monongahela Power & Potomac Edison	Return on Equity
01/07	43112	AK	AK Steel, Inc.	Vectren South, Inc.	Cost allocation, rate design
05/07	2006-661	ME	Maine Office of the Public Advocate	Bangor Hydro-Electric	Return on equity, weighted cost of capital.
09/07	07-07-01	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power	Return on equity, weighted cost of capital
10/07	05-UR-103	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Electric Power Co.	Return on equity
11/07	29797	LA	Louisiana Public Service Commission	Cleco Power :LLC & Southwestern Electric Power	Lignite Pricing, support of settlement
01/08	07-551-EL-AIR	OH	Ohio Energy Group	Ohio Edison, Cleveland Electric, Toledo Edison	Return on equity
03/08	07-0585, 07-0585, 07-0587, 07-0588, 07-0589, 07-0590, (consol.)	IL	The Commercial Group	Ameren	Cost allocation, rate design
04/08	07-0566	IL	The Commercial Group	Commonwealth Edison	Cost allocation, rate design
06/08	R-2008-2011621	PA	Columbia Industrial Intervenors	Columbia Gas of PA	Cost and revenue allocation, Tariff issues

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07/08	R-2008-2028394	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy	Cost and revenue allocation, Tariff issues
07/08	R-2008-2039634	PA	PPL Gas Large Users Group	PPL Gas	Retainage, LUFG Pct.
08/08	6680-UR-116	WI	Wisconsin Industrial Energy Group	Wisconsin P&L	Cost of Equity
08/08	6690-UR-119	WI	Wisconsin Industrial Energy Group	Wisconsin PS	Cost of Equity
09/08	ER-2008-0318	MO	The Commercial Group	AmerenUE	Cost and revenue allocation
10/08	R-2008-2029325	PA	U.S. Steel & Univ. of Pittsburgh Med. Ctr.	Equitable Gas Co.	Cost and revenue allocation
10/08	08-G-0609	NY	Multiple Intervenors	Niagara Mohawk Power	Cost and Revenue allocation
12/08	27800-U	GA	Georgia Public Service Commission	Georgia Power Company	CWIP/AFUDC issues, Review financial projections
03/09	ER08-1056	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Capital Structure
04/09	E002/GR-08-1065	MN	The Commercial Group	Northern States Power	Cost and revenue allocation and rate design
05/09	08-0532	IL	The Commercial Group	Commonwealth Edison	Cost and revenue allocation
07/09	080677-EI	FL	South Florida Hospital and Health Care Association	Florida Power & Light	Cost of equity, capital structure, Cost of short-term debt
07/09	U-30975	LA	Louisiana Public Service Commission	Cleco LLC, Southwestern Public Service Co.	Lignite mine purchase
10/09	4220-UR-116	WI	Wisconsin Industrial Energy Group	Northern States Power	Class cost of service, rate design
10/09	M-2009-2123945	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities	Smart Meter Plan cost allocation
10/09	M-2009-2123944	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Company	Smart Meter Plan cost allocation
10/09	M-2009-2123951	PA	West Penn Power Industrial Intervenors	West Penn Power	Smart Meter Plan cost allocation
11/09	M-2009-2123948	PA	Duquesne Industrial Intervenors	Duquesne Light Company	Smart Meter Plan cost allocation

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11/09	M-2009-2123950	PA	Met-Ed Industrial Users Group Penelec Industrial Customer Alliance, Penn Power Users Group	Metropolitan Edison, Pennsylvania Electric Co., Pennsylvania Power Co.	Smart Meter Plan cost allocation
03/10	09-1352-E-42T	WV	West Virginia Energy Users Group	Monongahela Power	Return on equity, rate of return Potomac Edison
03/10	E015/GR-09-1151	MN	Large Power Intervenors	Minnesota Power	Return on equity, rate of return
04/10	2009-00459	KY	Kentucky Industrial Utility Consumers	Kentucky Power	Return on equity
04/10	2009-00548 2009-00549	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric, Kentucky Utilities	Return on equity.
05/10	10-0261-E-GI	WV	West Virginia Energy Users Group	Appalachian Power Co./ Wheeling Power Co.	EE/DR Cost Recovery, Allocation, & Rate Design
05/10	R-2009-2149262	PA	Columbia Industrial Intervenors	Columbia Gas of PA	Class cost of service & cost allocation
06/10	2010-00036	KY	Lexington-Fayette Urban County Government	Kentucky American Water Company	Return on equity, rate of return, revenue requirements
06/10	R-2010-2161694	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities	Rate design, cost allocation
07/10	R-2010-2161575	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Co.	Return on equity
07/10	R-2010-2161592	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Co.	Cost and revenue allocation
07/10	9230	MD	Maryland Energy Group	Baltimore Gas and Electric	Electric and gas cost and revenue allocation; return on equity
09/10	10-70	MA	University of Massachusetts-Amherst	Western Massachusetts Electric Co.	Cost allocation and rate design
10/10	R-2010-2179522	PA	Duquesne Industrial Intervenors	Duquesne Light Company	Cost and revenue allocation, rate design
11/10	P-2010-2158084	PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Transmission rate design
11/10	10-0699-E-42T	WV	West Virginia Energy Users Group	Appalachian Power Co. & Wheeling Power Co.	Return on equity, rate of Return
11/10	10-0467	IL	The Commercial Group	Commonwealth Edison	Cost and revenue allocation and rate design

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04/11	R-2010-2214415	PA	Central Pen Gas Large Users Group	UGI Central Penn Gas, Inc.	Tariff issues, revenue allocation
07/11	R-2011-2239263	PA	Philadelphia Area Energy Users Group	PECO Energy	Retainage rate
08/11	R-2011-2232243	PA	AK Steel	Pennsylvania-American Water Company	Rate Design
08/11	11AL-151G	CO	Climax Molybdenum	PS of Colorado	Cost allocation
09/11	11-G-0280	NY	Multiple Intervenors	Corning Natural Gas Co.	Cost and revenue allocation
10/11	4220-UR-117	WI	Wisconsin Industrial Energy Group	Northern States Power	Cost and revenue allocation, rate design
02/12	11AL-947E	CO	Climax Molybdenum, CF&I Steel	Public Service Company of Colorado	Return on equity, weighted cost of capital
07/12	120015-EI	FL	South Florida Hospitals and Health Care Association	Florida Power and Light Co,	Return on equity, weighted cost of capital
07/12	12-0613-E-PC	WV	West Virginia Energy Users Group	American Electric Power/APCo	Special rate proposal for Century Aluminum
07/12	R-2012-2290597	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities Corp.	Cost allocation
09/12	05-UR-106	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Co.	Class cost of service, cost and revenue allocation, rate design
09/12	2012-00221 2012-00222	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric, Kentucky Utilities	Return on equity.
10/12	9299	MD	Maryland Energy Group	Baltimore Gas & Electric	Cost and revenue allocation, rate design Cost of equity, weighted cost of capital
10/12	4220-UR-118	WI	Wisconsin Industrial Energy Group	Northern States Power Company	Class cost of service, cost and revenue allocation, rate design
10/12	473-13-0199	TX	Steering Committee of Cities Served by Oncor	Cross Texas Transmission, LLC	Return on equity, capital structure
01/13	R-2012-2321748 et al.	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Cost and revenue allocation
02/13	12AL-1052E	CO	Cripple Creek & Victor Gold Mining, Holcim (US) Inc.	Black Hills/Colorado Electric Utility Company	Cost and revenue allocations
06/13	8009	VT	IBM Corporation	Vermont Gas Systems	Cost and revenue allocation, rate design
07/13	130040-EI	FL	WCF Hospital Utility Alliance	Tampa Electric Co.	Return on equity, rate of return

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08/13	9326	MD	Maryland Energy Group	Baltimore Gas and Electric	Cost and revenue allocation, rate design, special rider
08/13	P-2012-2325034	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities, Corp.	Distribution System Improvement Charge
09/13	4220-UR-119	WI	Wisconsin Industrial Energy Group	Northern States Power Co.	Class cost of service, cost and revenue allocation, rate design
11/13	13-1325-E-PC	WV	West Virginia Energy Users Group	American Electric Power/APCo	Special rate proposal, Felman Production
06/14	R-2014-2406274	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Cost and revenue allocation, rate design
08/14	05-UR-107	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Co.	Cost and revenue allocation, rate design
10/14	ER13-1508 et al.	FERC	Louisiana Public Service Comm.	Entergy Services, Inc.	Return on equity
11/14	14AL-0660E	CO	Climax Molybdenum Co. and CFI Steel, LP	Public Service Co. of Colorado	Return on equity, weighted cost of capital
11/14	R-2014-2428742	PA	AK Steel	West Penn Power Company	Cost and revenue allocation
12/14	42866	TX	West Travis Co. Public Utility Agency	Travis County Municipal Utility District No. 12	Response to complain of monopoly power
3/15	2014-00371 2014-00372	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric, Kentucky Utilities	Return on equity, cost of debt, weighted cost of capital
3/15	2014-00396	KY	Kentucky Industrial Utility Customers	Kentucky Power Co.	Return on equity, weighted cost of capital
6/15	15-0003-G-42T	WV	West Virginia Energy Users Gp.	Mountaineer Gas Co.	Cost and revenue allocation, Infrastructure Replacement Program
9/15	15-0676-W-42T	WV	West Virginia Energy Users Gp.	West Virginia-American Water Company	Appropriate test year, Historical vs. Future
9/15	15-1256-G-390P	WV	West Virginia Energy Users Gp.	Mountaineer Gas Co.	Rate design for Infrastructure Replacement and Expansion Program
10/15	4220-UR-121	WI	Wisconsin Industrial Energy Gp.	Northern States Power Co.	Class cost of service, cost and revenue allocation, rate design
12/15	15-1600-G-390P	WV	West Virginia Energy Users Gp.	Dominion Hope	Rate design and allocation for Pipeline Replacement & Expansion Prog.

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12/15	45188	TX	Steering Committee of Cities Served by Oncor	Oncor Electric Delivery Co.	Ring-fence protections for cost of capital
2/16	9406	MD	Maryland Energy Group	Baltimore Gas & Electric	Cost and revenue allocation, rate design, proposed Rider 5
3/16	39971	GA	GA Public Service Comm. Staff	Southern Company / AGL Resources	Credit quality and service quality issues
04/16	2015-00343	KY	Kentucky Office of the Attorney General	Atmos Energy	Cost of equity, cost of short-term debt, capital structure
05/16	16-G-0058 16-G-0059	NY	City of New York	Brooklyn Union Gas Co., KeySpan Gas East Corp.	Cost and revenue allocation, rate design, service quality issues
06/16	16-0073-E-C	WV	Constellium Rolled Products Ravenswood, LLC	Appalachian Power Co.	Complaint; security deposit
07/16	9418	MD	Healthcare Council of the National Capital Area	Potomac Electric Power Co.	Cost of equity, cost of service, Cost and revenue allocation
07/16	160021-EI	FL	South Florida Hospital and Health Care Association	Florida Power and Light Co.	Return on equity, cost of debt, capital structure
07/16	16-057-01	UT	Utah Office of Consumer Svcs.	Dominion Resources, Questar Gas Co.	Credit quality and service quality issues
08/16	8710	VT	Vermont Dept. of Public Service	Vermont Gas Systems	Return on equity, cost of debt, cost of capital
08/16	R-2016-2537359	PA	AK Steel Corp.	West Penn Power Co.	Cost and revenue allocation
09/16	2016-00162	KY	Kentucky Office of the Attorney General	Columbia Gas of Ky.	Return on equity, cost of short-term debt
09/16	16-0550-W-P	WV	West Va. Energy Users Gp.	West Va. American Water Co.	Infrastructure Replacement Program Surcharge
01/17	46238	TX	Steering Committee of Cities Served by Oncor	Oncor Electric Delivery Co.	Ring fencing and other conditions for acquisition, service quality and reliability
02/17	45414	TX	Cities of Midland, McAllen, and Colorado City	Sharyland Utilities, LP and Sharyland Dist. and Transmission Services, LLC	Return on equity
02/17	2016-00370 2016-00371	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric, Kentucky Utilities	Return on equity, cost of debt, weighted cost of capital
03/17	10580	TX	Atmos Cities Steering Committee	Atmos Pipeline Texas	Return on equity, capital structure, weighted cost of capital

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03/17	R-3867-2013	Quebec, Canada	Canadian Federation of Independent Businesses	Gaz Metro	Marginal Cost of Service Study
05/17	R-2017-2586783	PA	Philadelphia Industrial and Commercial Gas Users Gp.	Philadelphia Gas Works	Cost and revenue allocation, rate design, Interruptible tariffs
08/17	R-2017-2595853	PA	AK Steel	Pennsylvania American Water Co.	Cost and revenue allocation, rate design
8/17	17-3112-INV	VT	Vt. Dept. of Pubic Service	Green Mountain Power	Return on equity, cost of debt, weighted cost of capital
9/17	4220-UR-123	WI	Wisconsin Industrial Energy Group	Northern States Power	Cost and revenue allocation, rate design
10/17	2017-00179	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	Return on equity, cost of short-term debt
12/17	2017-00321	KY	Office of the Attorney General	Duke Energy Kentucky, Inc.	Return on equity
1/18	2017-00349	KY	Office of the Attorney General	Atmos Energy	Return on equity, cost of debt, weighted cost of capital
5/18	Fiscal Years 2019-2021 Rates	PA	Philadelphia Large Users Group	Philadelphia Water Department	Cost and revenue allocation
8/18	18-0974-TF	VT	Vt. Dept. of Public Service	Green Mountain Power	Return on equity, cost of debt, weighted cost of capital
8/18	48401	TX	Cities Served by Texas-New Mexico Power Company	Texas-New Mexico Power Co.	Return on equity, capital structure
8/18	18-05-16	CT	Connecticut Industrial Energy Consumers	Connecticut Natural Gas Co.	Cost and revenue allocation
9/18	9484	MD	Maryland Energy Group	Baltimore Gas & Electric	Cost and revenue allocation, rate design
9/18	2017-370-E	SC	South Carolina Office of Regulatory Staff	South Carolina Electric & Gas, Dominion Resources, SCANA	Return on equity, service quality standards, credit quality conditions
10/18	18-1115-G-390P	WV	West Va. Energy Users Group	Mountaineer Gas Company	Customer protections for Infrastructure Replacement and Expansion Program
12/18	R-2018-3003558, R-2018-3003561	PA	Aqua Large Users Group	Aqua Pennsylvania, Inc.	Cost and revenue allocation
02/19	UD-18-07	CCNO	Crescent City Power Users' Gp.	Entergy New Orleans, LLC	Return on equity, Reliability Incentive Mechanism, other proposed riders
03/19	2018-00358	KY	Office of the Attorney General	Kentucky American Water Co.	Return on equity, Qualified Infrastructure Program rider

Expert Testimony Appearances
of
Richard A. Baudino
As of February 2024

Date	Case	Jurisdict.	Party	Utility	Subject
05/19	19-E-0065 19-G-0066	NY	City of New York	Consolidated Edison Co.	Cost and revenue allocation, rate design, tariff issues, fast-charging station incentives
05/2019	19-0513-TF	VT	Vt. Dept. of Public Service	Vermont Gas Systems	Return on equity, capital structure
06/2019	5-TG-100	WI	Wisconsin Industrial Energy Group	WEPCO, Wisconsin Gas, Wisconsin PS	Transportation and balancing issues
07/2019	49494	TX	Cities Served by AEP Texas	AEP Texas, Inc.	Return on equity, capital structure
08/2019	19-G-0309 19-G-0310	NY	City of New York	Brooklyn Union Gas Co.., KeySpan Gas East Corp.	Cost and revenue allocation, rate design, tariff issues and modifications
08/2019	19-0316-G-42T	WV	West Virginia Energy Users Gp.	Mountaineer Gas Company	Cost and revenue allocation
8/2019	5-UR-109	WI	Wisconsin Industrial Energy Gp.	Wisconsin Electric Power Co., Wisconsin Gas, LLC	Cost Allocation, Class cost of service study
8/2019	6690-UR-126	WI	Wisconsin Industrial Energy Gp.	Wisconsin Public Service Corp.	Cost Allocation, Class cost of service study
9/2019	9610	MD	Maryland Energy Group	Baltimore Gas and Electric Co.	Cost and revenue allocation, rate design
12/2019	2019-00271	KY	Office of the Attorney General	Duke Energy Kentucky, Inc.	Return on equity
2/2020	49831	TX	Texas Industrial Energy Consumers	Southwestern Public Service Co.	Return on equity, capital structure, rate of return
2/2020	E-7. Sub 1214	NC	NC Attorney General's Office	Duke Energy Carolinas	Return on equity, capital structure, rate of return, economic conditions
2/2020	E-2. Sub 1219	NC	NC Attorney General's Office	Duke Energy Progress	Return on equity, capital structure, rate of return, economic conditions
5/2020	R-2019- 3015162	PA	Industrial Energy Consumers of Pennsylvania	UGI Utilities, Inc.	Return on equity, cost of debt, revenue allocation, rate design
6/2020	20-G-0101	NY	Multiple Intervenors	Corning Natural Gas Corp.	Cost and revenue allocation
9/2020	R-2020- 2019369	PA	AK Steel	Pennsylvania-American Water Company	Cost and revenue allocation, rate design
9/2020	20-035-04	UT	The Kroger Co.	Rocky Mountain Power	Cost and revenue allocation, rate design
10/2020	2020-00174	KY	Ky. Office of the Attorney General, Ky. Industrial Utility Customers	Kentucky Power Co.	Return on equity
3/2021	2020-00349	KY	Ky. Office of the Attorney General, Ky. Industrial Utility Customers	Kentucky Utilities Co.	Return on equity

Expert Testimony Appearances
of
Richard A. Baudino
As of February 2024

Date	Case	Jurisdict.	Party	Utility	Subject
3/2021	2020-00350	KY	Ky. Office of the Attorney General, Ky. Industrial Utility Customers	Louisville Gas and Electric Co.	Return on equity
3/2021	20-0746-G-42T	WV	West Va. Energy Users Group	Dominion Energy West Va.	Cost and revenue allocation, cost of equity
4/2021	17-12-03RE11	CT	Connecticut Industrial Energy Consumers	PURA Investigation Into Distribution System Planning	Economic development rates
6/2021	U-20940	MI	Dearborn Industrial Generation, LLC	DTE Gas Company	Cost and revenue allocation, rate design
7/2021	21-0043-G-PC	WV	West Va. Energy Users Group	Mountaineer Gas Co., UGI Corporation	Hold harmless conditions for utility acquisition
07/2021	U-35441	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Return on equity, cost of capital, service quality
08/2021	51802	TX	Texas Industrial Energy Consumers	Southwestern Public Service Company	Return on equity
09/21	2021-00190	KY	Kentucky Office of the Attorney General	Duke Energy Kentucky, Inc.	Return on equity, cost of debt
09/21	2021-00183	KY	Kentucky Office of the Attorney General	Columbia Gas of Kentucky, Inc.	Return on equity, cost of debt, capital structure
09/21	21-0369-W-42T	WV	West Va. Energy Users Group	West Virginia-American Water Company	Revenue stabilization mechanism
09/21	2021-00185	KY	Kentucky Office of the Attorney General	Delta Natural Gas Company, Inc.	Return on equity, cost of debt, capital structure
09/21	2021-00214	KY	Kentucky Office of the Attorney General	Atmos Energy Corporation	Return on equity, common equity ratio
11/21	R-2021-3027385, R-2021-3027386	PA	Aqua Large Users Group	Aqua Pennsylvania, Inc.	Cost and revenue allocation, Rate design
11/21	21-G-0394	NY	Multiple Intervenors	Corning Natural Gas Corp.	Cost and revenue allocation
06/22	21-G-0577	NY	Multiple Intervenors	Liberty Utilities (St. Lawrence Gas) Corp.	Cost of revenue allocation, rate design
07/22	2022-89-G	SC	South Carolina Office of Regulatory Staff	Piedmont Natural Gas Co.	Return on equity, capital structure cost of capital
07/22	R-2022-3031672, R-2022-3031673	PA	Cleveland-Cliffs Steel	Pennsylvania American Water Company	Cost and revenue allocation, rate design

Expert Testimony Appearances
of
Richard A. Baudino
As of February 2024

Date	Case	Jurisdict.	Party	Utility	Subject
10/22	2022-00147	KY	Kentucky Office of the Attorney General and the City of Clinton	Water Service Corporation of Kentucky	Cost of equity
12/22	2022-254-E	SC	South Carolina Office of Regulatory Staff	Duke Energy Progress	Cost of equity
12/22	22-08-08	CT	Connecticut Industrial Energy Consumers	United Illuminating Co.	Cost and revenue allocation, rate design, economic development rates
03/23	2022-00372	KY	Kentucky Office of the Attorney General	Duke Energy Kentucky, Inc.	Cost of equity, capital structure, weighted cost of capital
08/23	23-0280-G-42-T	WV	West Va. Energy Users Group	Mountaineer Gas Co.	Cost and revenue allocation, Rate design
09/23	6680-UR-124	WI	Wisconsin Industrial Energy Group	Wisconsin Power and Light Co.	Cost and revenue allocation, rate design
09/23	6690-UR-127	WI	Wisconsin Industrial Energy Group	Wisconsin Public Service Corp.	Revenue allocation, rate design
09/23	5-UR-110	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Co.	Cost and revenue allocation, rate design
09/23	2023-00191	KY	Kentucky Office of the Attorney General	Kentucky-American Water Co.	Return on equity, capital structure, and weighted cost of capital
10/23	2023-00159	KY	Ky. Office of the Attorney General, Kentucky Industrial Utility Customers	Kentucky Power Co.	Return on equity
11/23	23-0460-E-42T	WV	West Virginia Energy Users Group	Monongahela Power Co. and The Potomac Edison Company	Return on equity, cost of capital
02/24	R-2023-3043189 C-2023-3044289 C-2023-3044375	PA	Cleveland-Cliffs Steel	Pennsylvania American Water Co.	Cost and revenue allocation, rate design, revenue decoupling rider

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 4

OCA 04-012

Responsible Witness: Connie Heppenstall, Senior Project Manager, Gannett Fleming

Question:

Reference PAWC Statement No. 12 (Heppenstall).

a. Page 13, lines 11-23, Page 14, lines 1-8, first adjustment. Please identify the specific adjustment made to each allocation factor and revenues for this adjustment;
b. Page 14, lines 9-20, second adjustment. Please identify what the extra-capacity factors of interruptible customers would have been if not excluded based on actual/estimated maximum day and maximum hour demands. Also provide a three history of the daily volumes actually curtailed.

Response:

a. The specific adjustments made to allocation Factor 1 and factors that are dependent on Factor 1. The annual consumption of the DIS customers, equaling 8,318,938 100-gallon units, was excluded from the industrial class, and the annual consumption for DRS customers, equaling 9,122,335 100-gallon units, was excluded from the sales for resale class. These volumes were excluded from the cost allocation study as these customers have contract rates, and as such, their usage should not factor into the development of the base tariff rates. Revenues were included in the cost of service study and were not adjusted. The revenues from the DIS and DRS customers are shown in other water revenues as revenues from Contract Sales.

b. Exhibit 12-A, erroneously, did not include the adjustment for interruptible customer usage. Please see OCA 04-012_Attachment1 for the revised cost of service study under proposed rates and OCA 04-012_Attachment2 for the revised cost of service study under present rates. These studies show the extra-capacity factor allocations if the usage of the curtailment industrial customer was excluded in maximum day and maximum hour demands for Factors 2, 3 and 4 in Exhibit 12-A. Exhibit 12-A in the filing shows the extra-capacity functions if the usage was not excluded. The revised cost of service study under proposed rates lowers the cost of service for the Industrial class from $45,115,631 to $44,092,705 or a difference of $1,022,926.

The Company maintains that the usage of the curtailment industrial customer should be excluded from the extra-capacity factors as the customer can be interrupted during peak demands.
The Company has not requested its curtailment customer to curtail its usage during the past three years.

Finally, both adjustments described above are consistent with adjustments made in the Company's cost of service studies in previous rate cases filed with the Commission.

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PRESENT RATES

ITEM	COST OF SERVICE	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	PUBLIC	OTHER WATER UTILITIES		FIRE PROTECTION	
						GROUP A	GROUP B	PRIVATE	PUBLIC
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. REVENUES FROM SALES	$ 806,284,614	$ 528,290,043	$ 202,779,636	$ 37,580,738	$ 22,559,539	$ 51,822	$ 202,436	$ 5,301,032	$ 9,519,368
2. OTHER REVENUES	17,832,568	13,508,099	2,894,952	509,464	355,331	2,759	16,100	105,591	440,272
3. TOTAL OPERATING REVENUES	824,117,182	541,798,142	205,674,588	38,090,202	22,914,870	54,581	218,536	5,406,623	9,959,640
4. LESS: OPERATING EXPENSES (INCLUDES REALLOCATION OF FIRE & WW ALLOC.)	481,923,142	331,340,313	115,518,860	21,970,233	19,803,258	7,606	284,247	2,468,428	(9,469,802)
5. RETURN AND INCOME TAXES	342,194,041	210,457,829	90,155,728	16,119,969	3,111,612	46,975	(65,711)	2,938,196	19,429,442
6. LESS: TAXABLE EXCLUSIONS (FACTOR 19)	98,323,965	58,815,605	25,033,474	4,769,596	3,178,331	1,457	76,045	716,948	5,732,509
7. TAXABLE INCOME	243,870,076	151,642,225	65,122,255	11,350,373	(66,719)	45,518	(141,756)	2,221,247	13,696,933
8. LESS: INCOME TAXES (TAX. INC.)	46,982,378	29,214,377	12,546,018	2,186,687	(12,854)	8,769	(27,310)	427,931	2,638,760
9. NET RETURN (Line 5 - Line 8)	295,211,663	181,243,453	77,609,710	13,933,282	3,124,466	38,206	(38,401)	2,510,265	16,790,682
10. ORIGINAL COSTS MEASURE OF VALUE	4,704,067,662	2,813,887,589	1,197,664,832	228,189,550	152,059,417	69,725	3,638,197	34,300,616	274,257,735
11. RATE OF RETURN, PERCENT	6.28	6.44	6.48	6.11	2.05	54.80	(1.06)	7.32	6.12
12. RELATIVE RATE OF RETURN	1.00	1.03	1.03	0.97	0.33	8.73	(0.17)	1.17	0.98

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PROPOSED RATES

ITEM	COST OF SERVICE	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	PUBLIC	OTHER WATER UTILITIES		FIRE PROTECTION	
						GROUP A	GROUP B	PRIVATE	PUBLIC
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. REVENUES FROM SALES	$ 1,004,524,984	$ 657,085,231	$ 254,604,000	$ 48,143,784	$ 26,209,929	$ 53,666	$ 277,021	$ 6,304,285	$ 11,847,068
2. OTHER REVENUES	18,818,816	14,258,792	3,066,627	543,540	367,402	3,164	17,787	112,627	448,876
3. TOTAL OPERATING REVENUES	1,023,343,801	671,344,024	257,670,627	48,687,324	26,577,331	56,830	294,808	6,416,913	12,295,944
4. LESS: OPERATING EXPENSES (INCLUDES REALLOCATION OF FIRE & WW ALLOC.)	555,327,535	384,453,216	134,758,428	25,892,422	22,080,760	7,577	283,126	2,820,133	(14,968,128)
5. RETURN AND INCOME TAXES	468,016,266	286,890,807	122,912,199	22,794,903	4,496,571	49,253	11,682	3,596,780	27,264,072
6. LESS: TAXABLE EXCLUSIONS (FACTOR 19)	98,315,014	58,837,180	25,016,658	4,764,855	3,174,883	1,456	75,972	716,757	5,727,253
7. TAXABLE INCOME	369,701,252	228,053,627	97,895,541	18,030,048	1,321,688	47,797	(64,290)	2,880,022	21,536,819
8. LESS: INCOME TAXES (TAX. INC.)	81,352,374	50,182,962	21,541,811	3,967,493	290,836	10,518	(14,147)	633,746	4,739,155
9. NET RETURN (Line 5 - Line 8)	386,663,892	236,707,845	101,370,387	18,827,410	4,205,735	38,735	25,829	2,963,034	22,524,917
10. ORIGINAL COSTS MEASURE OF VALUE	4,704,067,662	2,815,176,094	1,196,969,272	227,983,486	151,908,299	69,651	3,635,029	34,294,610	274,031,221
11. RATE OF RETURN, PERCENT	8.22	8.41	8.47	8.26	2.77	55.61	0.71	8.64	8.22
12. RELATIVE RATE OF RETURN	1.00	1.02	1.03	1.00	0.34	6.77	0.09	1.05	1.00

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 1

OSBA 01-018

Responsible Witness: Charles Rea, Senior Director of Rates and Regulatory

Question:

Reference Table 4, shown on page 47 of PAWC Statement No. 10. Please explain in detail how the Company arrived at its proposed reallocation of wastewater revenue requirements to water customers, by customer class, shown in the referenced table. Include an electronic copy of all associated workpapers.

Response:

Please see OSBA 01-018_Attachment. Where possible, Act 11 reallocations are directly assigned to water customer classes based on wastewater class contributions to Act 11. Where wastewater contributions are not class specific, those amounts are allocated to water customers based on relative levels of water cost of service. Act 11 revenues are calculated in Exhibits 10-B through 10-E.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Small Business Advocate Set 3

OSBA 03-001

Responsible Witness: Charles Rea, Senior Director of Rates and Regulatory

Question:

Reference the Attachment provided in the Company's response to OSBA-I-018.

a. Please reconcile the totals shown in the Act 11 column of the referenced attachment with the Act 11 subsidies shown in Exhibit 3-A, page A, by wastewater operating division.
b. Please provide a detailed derivation of all figures shown in lines 9-12 of the referenced attachment. Include an electronic copy of all workpapers.

Response:

a-b. Please see OSBA 03-001_Attachment for a corrected calculation of Act 11 revenues shown in Exhibit 3-A, page A, by wastewater operating division and customer class, including the derivation of all figures sourced to the applicable revenue and cost of service exhibits for each operating division. The data originally provided in OSBA-01-018 was not correct and did not tie to Exhibit 3-A, Page A.

Pennsylvania-American Company	$ 603,126,055	$ 232,115,036	$ 45,115,631	$ 35,175,459	$ 5,777,625	$ 921,309,806	
Act 11 Water Allocation Worksheet	0.6546	0.2519	0.0490	0.0382	0.0063		
OSBA 03-001_Attachment							
Water Cost of Service Allocators	0.6546	0.2519	0.0490	0.0382	0.0063		(relative allocation of revenue requirements in water cost of service not including OWU and Public Fire)
		0.7293	0.1419	0.1106	0.0182		(relative allocation of non-residential revenue requirements in water cost of service)
		0.8499	-	0.1289	0.0213		(relative allocation of non-residential revenue requirements in water cost of service excluding industrial)

	Act 11	Residential	Nonresidential	Commercial	Industrial	Municipal	Fire	Other	Variance
SSS	$ 31,962,404	$ 12,870,804	$ 6,827,101					$ 12,264,499	$ -
CSS	$ 16,007,049	$ 6,723,694	$ 8,639,969		$ 2,557,322			$ (1,913,936)	$ -
Brentwood	$ 1,565,232	$ 1,308,466	$ 256,766						$ -
BASA	$ 21,552,699	$ 18,185,956	$ 3,366,743						$ -
Total	$ 71,087,384								
Direct Allocation		$ 39,088,920		$ -	$ 2,557,322	$ -			
SSS Non-Residential Reallocation				$ 4,979,000	$ 968,523	$ 755,053	$ 124,524		
CSS Non-Residential Reallocation				$ 7,342,808	$ -	$ 1,113,518	$ 183,643		
Brentwood Non-Residential Reallocation				$ 187,259	$ 36,426	$ 28,397	$ 4,683		
BASA Non-Residential Reallocation				$ 2,455,364	$ 477,621	$ 372,350	$ 61,408		
Other Reallocation		$ 6,775,479		$ 2,607,307	$ 507,178	$ 395,392	$ 65,209		
Total	**$ 71,087,384**	**$ 45,864,399**		**$ 17,571,738**	**$ 4,547,070**	**$ 2,664,710**	**$ 439,468**		**$ -**

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PROPOSED RATES

ITEM	COST OF SERVICE	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	PUBLIC	OTHER WATER UTILITIES		FIRE PROTECTION	
						GROUP A	GROUP B	PRIVATE	PUBLIC
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. REVENUES FROM SALES	$ 1,004,524,984	$ 657,085,231	$ 254,604,000	$ 48,143,784	$ 26,209,929	$ 53,666	$ 277,021	$ 6,304,285	$ 11,847,068
2. OTHER REVENUES	18,818,816	14,258,792	3,066,627	543,540	367,402	3,164	17,787	112,627	448,876
3. TOTAL OPERATING REVENUES	1,023,343,801	671,344,024	257,670,627	48,687,324	26,577,331	56,830	294,808	6,416,913	12,295,944
4. LESS: OPERATING EXPENSES (INCLUDES REALLOCATION OF FIRE & WW ALLOC.)	555,327,535	384,402,816	134,194,135	25,334,297	23,163,226	7,577	283,126	2,910,485	(14,968,128)
5. RETURN AND INCOME TAXES	468,016,266	286,941,207	123,476,491	23,353,028	3,414,106	49,253	11,682	3,506,427	27,264,072
6. LESS: TAXABLE EXCLUSIONS (FACTOR 19)	98,315,014	58,837,180	25,016,658	4,764,855	3,174,883	1,456	75,972	716,757	5,727,253
7. TAXABLE INCOME	369,701,252	228,104,027	98,459,834	18,588,173	239,222	47,797	(64,290)	2,789,670	21,536,819
8. LESS: INCOME TAXES (TAX. INC.)	81,352,374	50,194,053	21,665,983	4,090,308	52,641	10,518	(14,147)	613,864	4,739,155
9. NET RETURN (Line 5 - Line 8)	386,663,892	236,747,155	101,810,508	19,262,720	3,361,465	38,735	25,829	2,892,563	22,524,917
10. ORIGINAL COSTS MEASURE OF VALUE	4,704,067,662	2,815,176,094	1,196,969,272	227,983,486	151,908,299	69,651	3,635,029	34,294,610	274,031,221
11. RATE OF RETURN, PERCENT	8.22	8.41	8.51	8.45	2.21	55.61	0.71	8.43	8.22
12. RELATIVE RATE OF RETURN	1.00	1.02	1.03	1.03	0.27	6.77	0.09	1.03	1.00

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

COMPARISON OF PRO FORMA COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2023

Customer Classification	Pro Forma Cost of Service, as of December 31, 2023				Pro Forma Revenues Under Present Rates		Pro Forma Revenues Under Proposed Rates		Proposed Increase	
	Cost of Service	Allocation of Other COS*	Total Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Residential	$ 510,855,495	$ 48,509,221	$ 559,364,716	65.7%	$ 457,907,960	65.5%	$ 559,366,395	65.6%	$ 101,458,435	22.2%
Commercial	199,068,741	18,902,935	217,971,676	25.6%	175,141,809	25.1%	217,967,237	25.6%	42,825,428	24.5%
Industrial	33,678,149	1,967,039	35,645,188	4.2%	30,550,032	4.4%	37,250,055	4.4%	6,700,023	21.9%
Public (Municipal)	20,715,090	3,567,458	24,282,548	2.8%	21,180,396	3.0%	22,678,754	2.7%	1,498,358	7.1%
Other Water Utilities - Group A	279,034		279,034	0.0%	244,982	0.0%	271,466	0.0%	26,484	10.8%
Other Water Utilities - Group B	50,471		50,471	0.0%	54,566	0.0%	59,162	0.0%	4,596	8.4%
Private Fire Protection	5,267,167		5,267,167	0.6%	4,925,568	0.7%	5,268,028	0.6%	342,460	7.0%
Public Fire Protection	9,449,695	-	9,449,695	1.1%	8,842,466	1.3%	9,448,871	1.1%	606,405	6.9%
Total Sales of Water	779,363,842	72,946,653	852,310,495	100.0%	698,847,779	100.0%	852,309,968	100.0%	153,462,189	22.0%
Other Water Revenues	11,115,826		11,115,826		10,157,762		11,115,826		958,064	9.4%
Contract Sales - Industrial	3,891,115		3,891,115		3,891,115		3,891,115		-	0.0%
Contract Sales - Resale	2,733,803		2,733,803		2,733,803		2,733,803		-	0.0%
Total	$ 797,104,586	$ 72,946,653	$ 870,051,239		$ 715,630,458		$ 870,050,711		$ 154,420,253	21.6%

* Includes unrecovered Wastewater Cost of Service.

Exhibit ___(RAB-7)
Page 1 of 3
Schedule A
Page 1 of 1

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PRESENT RATES

ITEM	COST OF SERVICE	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	PUBLIC	OTHER WATER UTILITIES		FIRE PROTECTION	
						GROUP A	GROUP B	PRIVATE	PUBLIC
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. REVENUES FROM SALES	$ 698,847,779	$ 457,907,960	$ 175,141,809	$ 30,550,032	$ 21,180,396	$ 244,982	$ 54,566	$ 4,925,568	$ 8,842,466
2. OTHER REVENUES	16,782,679	12,367,276	3,060,656	460,853	328,450	17,409	860	160,911	386,266
3. TOTAL OPERATING REVENUES	715,630,458	470,275,236	178,202,465	31,010,885	21,508,846	262,391	55,426	5,086,479	9,228,732
4. LESS: OPERATING EXPENSES (INCLUDES REALLOCATION OF FIRE & WW ALLOC.)	402,972,735	283,501,423	99,450,804	16,576,003	10,530,891	142,247	12,017	2,273,024	(9,513,676)
5. RETURN AND INCOME TAXES	312,657,723	186,773,813	78,751,661	14,434,882	10,977,955	120,144	43,409	2,813,455	18,742,408
6. LESS: TAXABLE EXCLUSIONS (FACTOR 19)	76,378,768	45,934,191	19,881,393	3,421,769	2,039,313	30,552	7,638	618,668	4,445,244
7. TAXABLE INCOME	236,278,955	140,839,622	58,870,267	11,013,113	8,938,642	89,592	35,771	2,194,787	14,297,164
8. LESS: INCOME TAXES (TAX. INC.)	49,183,089	29,316,736	12,254,251	2,292,455	1,860,640	18,649	7,446	456,860	2,976,053
9. NET RETURN (Line 5 - Line 8)	263,474,634	157,457,077	66,497,410	12,142,427	9,117,315	101,495	35,963	2,356,595	15,766,355
10. ORIGINAL COSTS MEASURE OF VALUE	4,034,404,744	2,426,483,617	1,049,988,406	180,772,131	107,654,432	1,667,380	206,029	32,840,354	234,792,378
11. RATE OF RETURN, PERCENT	6.53	6.49	6.33	6.72	8.47	6.09	17.46	7.18	6.72
12. RELATIVE RATE OF RETURN	1.00	0.99	0.97	1.03	1.30	0.93	2.67	1.10	1.03

Exhibit ___(RAB-7)
Page 2 of 3
Schedule B
Page 1 of 1

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 9. ALLOCATION OF COSTS ASSOCIATED WITH FIRE HYDRANTS.

These costs are assigned directly to Public Fire Protection.

Customer Classification	Allocation Factor
(1)	(2)
Public Fire Protection	1.0000

FACTOR 10. ALLOCATION OF COSTS ASSOCIATED WITH METERS.

Factors are based on the relative cost of meters by size and customer classification, as developed on the following page and summarized below.

Customer Classification	5/8" Dollar Equivalents	Allocation Factor
(1)	(2)	(3)
Residential	648,508	0.77691
Commercial	158,500	0.18989
Industrial	6,532	0.00783
Public	15,322	0.01836
Other Water Utilities A	140	0.00017
Other Water Utilities B	105	0.00013
Private Fire Protection	5,597	0.00671
Total	834,704	1.00000

FACTOR 11. ALLOCATION OF COSTS ASSOCIATED WITH SERVICES.

Factors are based on the relative cost of services by size and customer classification, as developed on the second of the following pages, and summarized below.

Customer Classification	3/4" Dollar Equivalents	Allocation Factor
(1)	(2)	(3)
Residential	614,030	0.88781
Commercial	60,206	0.08705
Industrial	1,478	0.00214
Public	4,232	0.00612
Other Water Utilities A	13	0.00002
Other Water Utilities B	16	0.00002
Private Fire Protection	11,650	0.01684
Total	691,625	1.00000

CLEVELAND-CLIFFS RECOMMENDED WATER SERVICE CLASS REVENUE ALLOCATION
PAWC REQUESTED REVENUE INCREASE

Customer Classification	Pro Forma Revenues Under Present Rates		Pro Forma Revenues Under Proposed Rates		Proposed Increase	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent Increase
(1)	(6)	(7)	(8)	(9)	(10)	(11)
Residential	$ 528,290,043	65.5%	$ 657,230,376	65.4%	128,940,333	24.4%
Commercial	202,779,636	25.1%	$ 252,272,285	25.1%	49,492,649	24.4%
Industrial	37,580,738	4.7%	$ 46,753,110	4.7%	9,172,372	24.4%
Public (Municipal)	22,559,539	2.8%	$ 29,496,597	2.9%	6,937,058	30.8%
Other Water Utilities - Group A	51,822	0.0%	53,666	0.0%	1,844	3.6%
Other Water Utilities - Group B	202,436	0.0%	277,021	0.0%	74,585	36.8%
Private Fire Protection	5,301,032	0.7%	$ 6,594,861	0.7%	1,293,829	24.4%
Public Fire Protection	9,519,368	1.2%	11,847,068	1.2%	2,327,700	24.5%
Total Sales of Water	$ 806,284,614	100.0%	$ 1,004,524,984	100.0%	$ 198,240,370	24.6%
Other Water Revenues	10,034,383		11,031,091		996,708	9.9%
Contract Sales - Industrial	4,482,099		4,482,099		-	0.0%
Contract Sales - Resale	3,316,086		3,316,086		0	0.0%
Total	$ 824,117,182		$ 1,023,354,261		$ 199,237,079	24.2%

Cleveland-Cliffs Steel Statement No. 1-R
Witness: Richard A. Baudino

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	**:**	
	:	**Docket Nos.**
V.	**:**	**R-2023-3043189**
	:	**C-2023-3044289**
	:	**C-2023-3044375**
PENNSYLVANIA-AMERICAN WATER COMPANY	**:**	

REBUTTAL TESTIMONY

AND EXHIBITS

OF

RICHARD A. BAUDINO

ON BEHALF OF

CLEVELAND-CLIFFS STEEL

J. KENNEDY AND ASSOCIATES, INC.

FEBRUARY 21, 2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	**:**	
	:	**Docket Nos.**
V.	**:**	**R-2023-3043189**
	:	**C-2023-3044289**
	:	**C-2023-3044375**
PENNSYLVANIA-AMERICAN WATER COMPANY	**:**	

REBUTTAL TESTIMONY OF RICHARD A. BAUDINO

Q. Please state your name and business address.

A. My name is Richard A. Baudino. My business address is J. Kennedy and Associates, Inc. ("Kennedy and Associates"), 570 Colonial Park Drive, Suite 305, Roswell, Georgia 30075.

Q. What is your occupation and by whom are you employed?

A. I am a consultant to Kennedy and Associates.

Q. Did you submit Direct Testimony in this case?

A. Yes. I submitted Direct Testimony on behalf of Cleveland-Cliffs Steel.

Q. What is the purpose of your Rebuttal Testimony?

A. The purpose of my Rebuttal Testimony is to respond to certain issues that were raised in the Direct Testimonies of the following witnesses:

- Ms. Billie LaConte, witness for the Pennsylvania American Water Large Users Group ("PAWLUG")
- Mr. Jerome Mierzwa, witness for the Office of Consumer Advocate ("OCA"); and,
- Mr. Kevin Higgins, witness for the Office of Small Business Advocate ("OSBA").

Response to the Allocation of Wastewater Subsidy

Q. Please briefly describe how witnesses LaConte, Mierzwa, and Higgins approached the proposed allocation of the subsidy from Pennsylvania American Water Company's ("PAWC" or "Company") wastewater operations.

A. These three witnesses proposed versions of allocating PAWC's proposed subsidy from its wastewater operations that are based in part on a direct allocation from wastewater rate classes to the corresponding water service classes.

Mr. Mierzwa simply accepted PAWC's approach to allocating the wastewater subsidy, although he incorrectly described the Company's approach as being "based on the water cost of service".[1] I described PAWC's approach in my Direct Testimony, which is partly based on direct assignment to water service classes and partly based on allocated water cost of service. Mr. Higgins adopted an approach that was similar to the Company's, in which he allocated the wastewater subsidy to water service classes in a manner that corresponds to the wastewater classes that created the revenue shortfall.[2]

Ms. LaConte also assigned the wastewater subsidy to water service classes based on the corresponding wastewater service classes that created the subsidy.[3] Regarding Ms. LaConte's subsidy calculation, I note that her subsidy numbers were taken from PAWC's response to OSBA 01-18, which were incorrect. The Company corrected those numbers in its response to OSBA 03-001 and I provided those corrected numbers in my Exhibit ___(RAB-5). These numbers show a higher

[1] Mierzwa Direct Testimony, page 28, lines 20 through 23.
[2] Higgins Direct Testimony, page 33, line 18 through page 34, line 4.
[3] LaConte Direct Testimony, page 26, lines 7 through 12.

assignment of the wastewater subsidy to the Industrial water service class largely due to the direct assignment of $2,557,322 from the CSS wastewater system. I also mentioned this direct assignment in my Direct Testimony.

Q. Please address the proposed assignment of the wastewater subsidy to water service customers by these three witnesses.

A. Consistent with my position in my Direct Testimony, the direct assignment of wastewater subsidies from wastewater service classes to the corresponding water service classes should be rejected by the Commission. Instead, it is appropriate to allocate any subsidy approved by the Commission based on the underlying water cost of service percentages from PAWC's class cost of services study ("CCOSS").

It is critically important to distinguish the fact that water service customers are in no way responsible for PAWC's costs to serve its wastewater customers. These are two separate and distinct services provided by the Company. As a result, water service customers are not directly responsible for any subsidy that the Company seeks to collect from them. PAWC is requesting the collection of $71.1 million of wastewater subsidies pursuant to Act 11 as it has done in past cases before the Commission. This subsidy is not a cost that can be directly assigned or even allocated using water cost of service principles. In other words, the wastewater subsidy cannot be allocated based on the usual base/extra capacity allocations that one would use to allocate PAWC's water cost of service because there is no cost causation principle that can be applied to that subsidy.

Therefore, the wastewater subsidy should be allocated based on each water service class's percentage of total cost of service as I have done in my Direct

Testimony. A direct assignment approach could skew the final revenue allocation for water service customers. For example, assume that the Residential class's underlying water service cost responsibility is 65%. Further assume that a direct assignment of the wastewater subsidy based on residential wastewater customers would give the Residential water service class a 70% share of that subsidy. This would result in a higher revenue allocation to the Residential class due solely to the direct assignment of the wastewater subsidy. Clearly, this would be unfair to Residential water service customers who had nothing to do with generating the residential wastewater subsidy. This would also be the case of other water service classes.

Q. Mr. Baudino, does Cleveland-Cliffs take a position on whether the Commission should assign any wastewater subsidy to its water service customers?

A. No. Cleveland-Cliffs does not take a position regarding the reasonableness of assigning a subsidy of wastewater service customers to water service customers. However, if the Commission decides to assign such a subsidy, then it should be assigned to water service customers in the manner I have recommended.

Response to Mr. Mierzwa

Q. On page 14 of his Direct Testimony, Mr. Mierzwa recommended that interruptible Industrial customers be included in the extra capacity factor allocations in PAWC's class cost of service study ("CCOSS"). Is this recommendation appropriate?

A. No, it is not appropriate and is inconsistent with PAWC's past practice. Mr. Mierzwa based his recommendation on the grounds that interruptible customers have not been

interrupted in at least three years. However, it is irrelevant whether or not interruptible customers have been interrupted over the last three years. What is relevant is that PAWC may interrupt these customers if system constraints justify a curtailment of service. This is a benefit to all of PAWC's customers, enabling the Company to avoid or postpone the costs of additional capacity investments to serve the system peak or during other events that could constrain the system's capacity to serve customers.

PAWC's Terms and Conditions for the Industrial Curtailment Rate specifies the following with respect to curtailment:

> **Curtailment**. The Company may request the customer to curtail its water usage to assist the Company in addressing a system emergency, including insufficiency, for any reason, of the Company's source of supply, treatment/purification, pumping, transmission, storage or distribution capacity to serve customers' demands. However, the maximum continuous period of each requested curtailment may not exceed six (6) hours and the number of curtailments requested may not exceed three (3) in any one calendar month nor exceed a total of six (6) curtailments in any year, measured in twelve-month intervals commencing on the effective date of the Service Agreement. The customer will be provided not less than one hour's notice before a requested curtailment is expected to begin. Notice may be by telephone to the customer contact identified in the Service Agreement.
>
> **Amount of Curtailment**. When a curtailment is requested, the customer shall curtail all usage of Company-supplied water for industrial purposes. Company-supplied water may continue to be used for sanitary purposes, fire suppression and boiler feed-water make-up, provided, however, that such permitted usage shall not exceed, in aggregate, 15% of the customer's average daily usage during the preceding month, prorated for the period of the requested curtailment.

PAWC obviously saw the value to its system of being able to curtail large Industrial customers when it deems it necessary. Otherwise it would not have agreed to the Interruptible tariff in the first place.

Regarding availability of the Industrial Curtailment Rate, the customer must have "fully operational non-fire protection water storage capability, available for use

during periods of curtailment, equal to ten (10) times the customer's average hourly usage." Unlike customers that take service under the standard service schedules, an interruptible industrial customer must invest in water storage capability in the event of an interruption. This is an additional cost directly borne by the interruptible customer in addition to reduced reliability of service compared to standard tariff customers. The exclusion of Interruptible usage from the extra capacity allocators fairly recognizes the reduced reliability and extra storage costs that interruptible Industrial customers must take on in order to qualify for the Interruptible Industrial Rate.

In conclusion, Mr. Mierzwa's proposal to include the usage of interruptible Industrial customers in extra capacity factor allocations is inappropriate, inconsistent with past practice, and should be rejected by the Commission.

Q. On page 16, line 16 through page 17, line 4 Mr. Mierzwa took issue with the maximum day and maximum hour extra capacity factors used in the Company's CCOSS as filed by Ms. Heppenstall. Please summarize Mr. Mierzwa's recommended extra capacity factors.

A. Mr. Mierzwa disagreed with the maximum day extra capacity factor of 1.4 and the maximum hour extra capacity factor of 2.1 used by Ms. Heppenstall in the Company's CCOSS. His concern with the Company's extra capacity factors is that, in his opinion, they are outdated. Mr. Mierzwa recommended lower maximum day factors based on maximum day and maximum hour demands from York Water Company.

Q. Should the Commission use Mr. Mierzwa's lower recommended extra capacity factors based on data from York Water Company?

A. No, the Commission should not use data from York Water Company as proxies for PAWC's maximum day and maximum hour estimates. Mr. Mierzwa provided no evidence that his lower recommended numbers are correct or otherwise reflective of PAWC's maximum day and maximum hour system demands. One should not assume that the demand data from York Water Company is reflective of PAWC's system and Mr. Mierzwa presented no evidence to support such an assumption. The maximum day and maximum hour numbers used by Ms. Heppenstall are based on PAWC's historical experience and have been consistently used by the Company in past rate cases. I recommend that the Commission reject Mr. Mierzwa's unsupported maximum day and maximum hour demand factors. Such factors merely shifted cost responsibility away from the Residential class to other rate classes.

Q. Should the Commission reject Mr. Mierzwa's proposed class revenue allocation?

A. Yes. Mr. Mierzwa's proposed revenue allocation is based on a deeply flawed CCOSS that improperly allocates costs to customer classes. I recommend that the Commission reject his revenue allocation proposal.

<u>Response to Mr. Higgins</u>

Q. Mr. Higgins presented his recommended revenue allocation for water service customers in Schedule KCH-8, page 1. Please respond to Mr. Higgins' revenue allocation proposal.

A. First, Mr. Higgins used the incorrect CCOSS filed by Ms. Heppenstall in her Direct Testimony. I pointed out that this CCOSS failed to exclude interruptible usage from the extra capacity factors, which had the effect of allocating too much cost

responsibility to the Industrial class. Both the Company and I support the CCOSS that the Company provided in response to OCA 04-012, the results of which are shown in my Exhibit ___(RAB-3).

Second, as I described earlier in my Rebuttal Testimony, Mr. Higgins relied on the Company's assignment of the wastewater subsidy to water service classes. Due to the direct assignment of costs to classes, the Industrial class's portion of the subsidy is $4.256 million in Mr. Higgins' KCH-8, page 1. An allocation of the subsidy based on class water service costs would be $3.4 million as I showed in Table 2 of my Direct Testimony.

Mr. Higgins' proposed revenue allocation should be rejected. His CCOSS failed to exclude interruptible Industrial usage from the extra capacity factors and overstated the wastewater service subsidy that is properly allocable to the Industrial water service class.

Q. Do you agree with Mr. Higgins' proposal to directly assign costs associated with the Company's Arrearage Management Plan ("AMP") and residential low-income programs to the Residential class?

A. Yes. I agree with Mr. Higgins that since these programs benefit residential customers, their costs should be assigned to the Residential class.

<u>Response to Ms. LaConte</u>

Q. Ms. LaConte presented her recommended approach to rate design for the Industrial class beginning on page 28 of her Direct Testimony. Do you agree with Ms. LaConte's recommended approach?

A. Yes. Mr. LaConte's recommended rate design would approximately double the Industrial customer charges and provide for smaller percentage increases to the volumetric charges. I agree with the recommended approach to increasing customer charges, as more of the Company's fixed costs would be collected in a fixed charge. I also recommend as I did in my Direct Testimony that the Industrial volumetric charges be increased at the same percentage rates.

Corrected PAWC Class Cost of Service Study

Q. Did PAWC submit a corrected CCOSS in response to discovery after Direct Testimony was filed on February 1, 2024?

A. Yes. PAWC provided a further corrected CCOSS in response to PAWLUG 05-001. Please refer to Exhibit ___(RAB-R1), which contains the Company's response. In addition to the corrections included in OSBA 03-001 and OCA 04-012, the Company also included a correction to the Public class meter counts and the direct assignment of Arrearage Management Plant costs to the Residential class. I highlighted the change in meter cost responsibility for the Public class in my Direct Testimony. As it turns out, that change was in error and the Company presented corrected allocations in its response to PAWLUG 05-001.

Q. What are the CCOSS results for the water service classes at present rates?

A. Exhibit ___(RAB-R2) presents the water service class rates of return on rate base and relative rates of return ("RROR") at present rates. This presentation came from the CCOSS attachment included in response to PAWLUG 05-001. I chose the option of

showing class CCOSS results at present rates in order to generate Exhibit ___(RAB-R2).

In my Direct Testimony, Exhibit ___(RAB-3), page 1 presented class rates of return and RRORs from the corrected CCOSS included in the Company's response to OCA 04-012. The major changes in RRORs from that CCOSS to the one included in Exhibit ___(RAB-R2) are the results for the Residential and Public classes. The Residential RROR declined from 1.03 to 0.99. This means that the Residential class is near the system average rate of return in the newly corrected CCOSS. The Public class RROR increased from 0.33 to 1.16. This means that the Public class is now above the system average rate of return.

Q. Does this change affect your recommended revenue allocation in this case?

A. Yes. I no longer recommend that the Public class receive a larger than system average increase. Given the large change from the Company's filed case at this stage of the proceeding, I continue to recommend a conservative approach to revenue allocation and would now recommend an equal percentage increase for the Residential, Commercial, Industrial, and Public classes. The Residential, Commercial, and Industrial classes are all within a reasonable range of the system average increase based on the most recently corrected CCOSS. Although the Public class is above the system average rate of return (RROR of 1.16), the very large swing in its CCOSS results warrants some caution in terms of its revenue increase percentage and I believe that a percentage increase equal to the other major rate classes is reasonable for this case.

Q. Does this conclude your Rebuttal Testimony?

A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	**:**	
	:	**Docket Nos.**
V.	**:**	**R-2023-3043189**
	:	**C-2023-3044289**
	:	**C-2023-3044375**
PENNSYLVANIA-AMERICAN WATER COMPANY	**:**	

REBUTTAL EXHIBITS

OF

RICHARD A. BAUDINO

ON BEHALF OF

CLEVELAND-CLIFFS STEEL

J. KENNEDY AND ASSOCIATES, INC.

FEBRUARY 21, 2024

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Pennsylvania-American Water Large Users Group Set 5

PAWLUG 05-001

Responsible Witness: Connie Heppenstall, Senior Project Manager, Gannett Fleming

Question:

Referring to PAWC's Response to OSBA 3-1 and OCA 4-12, provide a revised Schedule 12-A showing the proposed rate increase for each customer class.

Response:

Please see PAWLUG 05-001_Attachment for the revised Exhibit 12-A which incorporates the changes from OSBA 3-1 and OCA 4-12 as well as other changes that were identified during discovery and in reviewing non-Company direct testimony. These include the following:

1. Correction to the Public Authority meter count due to a linking error.
2. Arrearage Management Plant ("AMP") costs being directly allocated to the Residential class.

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PRESENT RATES

ITEM	COST OF SERVICE	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	PUBLIC	OTHER WATER UTILITIES		FIRE PROTECTION	
						GROUP A	GROUP B	PRIVATE	PUBLIC
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. REVENUES FROM SALES	$ 806,284,614	$ 528,290,043	$ 202,779,636	$ 37,580,738	$ 22,559,539	$ 51,822	$ 202,436	$ 5,301,032	$ 9,519,368
2. OTHER REVENUES	17,832,568	13,582,082	2,898,257	509,581	277,668	2,764	16,105	105,843	440,268
3. TOTAL OPERATING REVENUES	824,117,182	541,872,124	205,677,893	38,090,319	22,837,207	54,586	218,541	5,406,875	9,959,636
4. LESS: OPERATING EXPENSES (INCLUDES REALLOCATION OF FIRE & WW ALLOC.)	481,923,142	337,875,597	116,486,044	22,059,198	12,180,674	7,947	285,502	2,481,478	(9,453,299)
5. RETURN AND INCOME TAXES	342,194,041	203,996,527	89,191,849	16,031,121	10,656,533	46,639	(66,961)	2,925,397	19,412,935
6. LESS: TAXABLE EXCLUSIONS (FACTOR 19)	98,323,965	59,298,065	25,099,552	4,772,162	2,623,400	1,492	76,087	720,722	5,732,484
7. TAXABLE INCOME	243,870,076	144,698,462	64,092,297	11,258,960	8,033,134	45,146	(143,048)	2,204,674	13,680,451
8. LESS: INCOME TAXES (TAX. INC.)	46,982,378	27,876,638	12,347,593	2,169,076	1,547,610	8,698	(27,559)	424,738	2,635,584
9. NET RETURN (Line 5 - Line 8)	295,211,663	176,119,889	76,844,256	13,862,045	9,108,923	37,941	(39,402)	2,500,659	16,777,351
10. ORIGINAL COSTS MEASURE OF VALUE	4,704,067,662	2,836,969,718	1,200,826,176	228,312,307	125,510,085	71,402	3,640,218	34,481,185	274,256,570
11. RATE OF RETURN, PERCENT	6.28	6.21	6.40	6.07	7.26	53.14	(1.08)	7.25	6.12
12. RELATIVE RATE OF RETURN	1.00	0.99	1.02	0.97	1.16	8.47	(0.17)	1.16	0.97

Cleveland-Cliffs Steel Statement No. 1-SR
Witness: Richard A. Baudino

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	**:**	
	:	**Docket Nos.**
V.	**:**	**R-2023-3043189**
	:	**C-2023-3044289**
	:	**C-2023-3044375**
PENNSYLVANIA-AMERICAN WATER COMPANY	**:**	

SURREBUTTAL TESTIMONY

AND EXHIBIT

OF

RICHARD A. BAUDINO

ON BEHALF OF

CLEVELAND-CLIFFS STEEL

J. KENNEDY AND ASSOCIATES, INC.

MARCH 4, 2024

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	**:**	
	:	**Docket Nos.**
V.	**:**	**R-2023-3043189**
	:	**C-2023-3044289**
	:	**C-2023-3044375**
PENNSYLVANIA-AMERICAN WATER COMPANY	**:**	

SURREBUTTAL TESTIMONY OF RICHARD A. BAUDINO

Q. Please state your name and business address.

A. My name is Richard A. Baudino. My business address is J. Kennedy and Associates, Inc. ("Kennedy and Associates"), 570 Colonial Park Drive, Suite 305, Roswell, Georgia 30075.

Q. What is your occupation and by whom are you employed?

A. I am a consultant to Kennedy and Associates.

Q. Did you submit Direct and Rebuttal Testimony in this case?

A. Yes. I submitted Direct and Rebuttal Testimony on behalf of Cleveland-Cliffs Steel.

Q. What is the purpose of your Surrebuttal Testimony?

A. The purpose of my Rebuttal Testimony is to respond to certain issues that were raised in the Rebuttal Testimonies of the following witnesses:

- Ms. Constance Heppenstall, witness for Pennsylvania American Water Company ("PAWC" or "Company").
- Mr. Jerome Mierzwa, witness for the Office of Consumer Advocate ("OCA"); and,
- Mr. Kevin Higgins, witness for the Office of Small Business Advocate ("OSBA").

Response to Ms. Heppenstall

Q. Did Ms. Heppenstall submit a revised class cost of service study ("CCOSS") with her Rebuttal Testimony?

A. Yes. Ms. Heppenstall filed a revised Exhibit 12-A as part of her Rebuttal Testimony. This CCOSS included the following corrections:

- Adjustment to extra capacity factors to properly exclude interruptible customer usage.
- Correction to Public class meters and services allocations, a concern I noted in my Direct Testimony.
- Reallocation of wastewater revenue requirements.

A summary of CCOSS results at present rates is included in my Exhibit ___(RAB-S1). These results are very close to the CCOSS results I presented in my Rebuttal Testimony. Relative rates of return ("RROR") for the Residential, Commercial, and Industrial classes range from 0.98 to 1.03. The Public class RROR is now at 1.17. Note that these RRORs are before the Company's assignment of the Act 11 wastewater revenue requirement to rate classes.

Based on this revised CCOSS, I continue to recommend the water service class revenue allocation contained in my Rebuttal Testimony.

Q. Did you update your recommended wastewater CCOSS allocations to water service classes based on the revised CCOSS presented in Exhibit 12-A?

A. Yes. Please refer to Table S1 for the revised wastewater CCOSS allocations based on the water CCOSS share for the Residential, Commercial, Industrial, Public, and

Private Fire classes. Table S1 compares my recommendation to the Company's revised wastewater allocations in Exhibit 12-A.

TABLE S1

Revised PAWC Wastewater Allocations to Water Service Classes

	Revised CCOSS Percentages	Cleveland Cliffs Allocation	PAWC Allocation
Residential	66.8%	$ 47,500,965	$ 45,864,399
Commercial	25.2%	$ 17,889,912	$ 17,571,738
Industrial	4.8%	$ 3,391,448	$ 4,547,070
Public (Municipal)	2.6%	$ 1,869,402	$ 2,664,710
Private Fire Protection	0.6%	$ 435,657	$ 439,468
Total	100.0%	$ 71,087,384	$ 71,087,384

PAWC's proposed wastewater allocation assigns far too much of the wastewater subsidy to Industrial and Public customers and too little to the Residential and Commercial customers. As I clearly explained in my Direct and Rebuttal Testimonies, allocation of any wastewater subsidy the Commission may allow should follow the water service class cost of service percentages. PAWC's approach, which relies partly on direct assignment from wastewater customer classes to water service customer classes is inappropriate and unreasonable and should be rejected by the Pennsylvania Public Utility Commission ("PPUC" or "Commission").

Response to Mr. Mierzwa

Q. Beginning on page 19 of his Rebuttal Testimony, Mr. Mierzwa disagreed with your proposal of 1.25 times the system average increase for the Public class of

water customers. Please respond to Mr. Mierzwa's Rebuttal Testimony on this point.

A. I presented a corrected CCOSS provided by the Company in its response to PAWLUG 05-001 in my Rebuttal Testimony. This CCOSS corrected an error in the allocation of services and meters in the originally filed Exhibit 12-A. The OCA CCOSS upon which Mr. Mierzwa relies for his response to me still contains the allocation error, thereby understating the CCOSS responsibility for the Residential class and overstating the CCOSS responsibility for the Public class. Now that the Public class has a RROR of 1.17, Mr. Mierzwa's proposed revenue increase of 34.5%, compared to a system average increase of 17.8%, is inappropriate and would move the Public class further away from its allocated cost to serve. Of course, Mr. Mierzwa's revenue allocation shown in Table 4 of his Direct Testimony fails to adhere to proper cost allocation and should be rejected by the Commission.

Q. On page 18, line 13 through page 19, line 2 Mr. Mierzwa expressed his disagreement with your proposed allocation of the Act 11 wastewater subsidy to customer classes. Please address this section of Mr. Mierzwa's Rebuttal Testimony.

A. Mr. Mierzwa continued to state that PAWC's Act 11 allocation is based on each water class's total cost of service as established in this proceeding. This is plainly incorrect as shown by the Company's response to OSBA 03-001 and included in my Exhibit ___(RAB-5), page 2. This response shows the PAWC's assignment of its Act 11 wastewater subsidy relies on a combination of direct assignments to water service classes and allocations based on class water cost of service. Particularly objectionable

is PAWC's direct assignment of $2,557,322 from the CSS wastewater system to Industrial water service customers. Contrary to Mr. Mierzwa's description of PAWC's approach, this direct assignment has nothing to do with the Industrial class's total water cost of service. This direct assignment inflated the Act 11 subsidy that would have been allocated to the Industrial class using its share of the Company's water CCOSS.

Second, Mr. Mierzwa stated the following in response to my Act 11 allocation proposal:

"Q. DO YOU AGREE WITH MR. BAUDINO'S PROPOSAL?
A. No. The present rates for each customer class are generally based on a cost of service which is now outdated. Therefore, I agree with PAWC's proposal to assign the Act 11 shift based on each water class's total cost of service."[1]

Based on my understanding of this testimony, I believe Mr. Mierzwa has confused "class share of cost of service at present rates" with present rates and revenues. In fact, the percentage class share of total cost of service at present revenues that I showed in Table S1 above is based on each class's allocated share of the Company's total cost of service before the Company included the assignment of its proposed wastewater subsidy in its CCOSS. It is not based on each class's total revenue at present rates. The presentation of class cost of service at present rates enables the presentation of water service class rates of return and RRORs that are

[1] Mierzwa Rebuttal Testimony, page 18, lines 20 through 22.

shown in Exhibit ___(RAB-S1). This shows how close each water service class is to the current system rate of return and may be used to guide revenue allocation. Thus, the use of each water service class's percentage share of total allocated cost of service is the appropriate measure to use to allocate the Act 11 subsidy, assuming the Commission allows it in this case.

Response to Mr. Higgins

Q. Did Mr. Higgins present a revised CCOSS in his Rebuttal Testimony?

A. Yes. Mr. Higgins presented a revised CCOSS that incorporated corrections the Company made in its response to PAWLUG 05-001. Mr. Higgins also decided to change the system maximum day and maximum hour numbers in response to the Direct Testimony recommendations of Mr. Mierzwa. Mr. Higgins recommended lowering PAWC's maximum day ratio to 1.20 and its maximum hour ratio to 1.8. Mr. Higgins also continues to recommend collection of the Act 11 wastewater subsidy based on PAWC's approach.

Q. Do you agree with the adjustments Mr. Higgins recommends to the maximum day and maximum hour ratios in PAWC's CCOSS?

A. No. Ms. Heppenstall addressed Mr. Mierzwa's recommended changes to the maximum day and maximum hour ratios in her Rebuttal Testimony, pages 4 through 8. Ms. Heppenstall's support for the Company's proposed maximum day ratio of 1.4 and maximum hour ratio of 2.1 is reasonable based on PAWC's actual experience and her analysis of the system. I recommend that the Commission adopt the Company's recommended extra capacity ratios in this proceeding and reject Mr. Higgins' recommended CCOSS.

Q. Is Mr. Higgins' proposed allocation of the Act 11 wastewater subsidy reasonable?

A. No, it is not. I have already explained why the Company's approach is unreasonable and this is the approach Mr. Higgins relied on. However, Mr. Higgins provided a CCOSS summary in his Schedule KCH-12, page 2, that shows the allocation of Act 11 revenues at the OSBA proposed revenue requirement. Table S2 below shows the allocated class cost of service percentages and the allocated Act 11 subsidy as a percentage of the total for the Residential, Commercial, Industrial, Public, and Private Fire classes.

TABLE S2

OSBA Water Class CCOSS and Act 11 Percentages

	OSBA Class CCOSS	CCOSS Percentage	Act 11 Allocation	Act 11 Percentage
Residential	$ 570,737,124	66.2%	$ 18,664,876	51.7%
Commercial	$ 216,342,789	25.1%	$ 12,436,411	34.4%
Industrial	$ 44,234,307	5.1%	$ 3,282,317	9.1%
Public (Municipal)	$ 24,198,132	2.8%	$ 1,391,024	3.9%
Private Fire Protection	$ 6,056,678	0.7%	$ 348,167	1.0%
Total	$ 861,569,030	100.0%	$ 36,122,795	100.0%

Table S2 demonstrates the unreasonableness of Mr. Higgins' allocation of the Act 11 subsidy at the OSBA's revenue requirement. In Mr. Higgins' CCOSS, the Industrial class's allocated share of the CCOSS is 5.1%. However, Mr. Higgins proposed allocating 9.1% of the wastewater subsidy to the Industrial water service class. The prime beneficiary of Mr. Higgins' proposed Act 11 allocation is the Residential class, whose Act 11 allocation is only 51.7% while its CCOSS share is

66.2%. There simply is no sound reason to assign the Act 11 subsidy to water classes on the basis Mr. Higgins recommends.

Finally, page 2 of KCH-12 shows a proposed increase to Industrial customers of 26.3%, with a system average increase of 12.9%. This proposal is double the system increase for Industrial customers and violates the principle of gradualism. I strongly recommend that the Commission reject this radical proposal.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	**:**	
	:	**Docket Nos.**
V.	**:**	**R-2023-3043189**
	:	**C-2023-3044289**
	:	**C-2023-3044375**
PENNSYLVANIA-AMERICAN WATER COMPANY	**:**	

SURREBUTTAL EXHIBIT

OF

RICHARD A. BAUDINO

ON BEHALF OF

CLEVELAND-CLIFFS STEEL

J. KENNEDY AND ASSOCIATES, INC.

MARCH 4, 2024

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION
UNDER PRESENT RATES

ITEM	COST OF SERVICE	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	PUBLIC	OTHER WATER UTILITIES		FIRE PROTECTION	
						GROUP A	GROUP B	PRIVATE	PUBLIC
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. REVENUES FROM SALES	$ 806,284,614	$ 528,290,043	$ 202,779,636	$ 37,580,738	$ 22,559,539	$ 51,822	$ 202,436	$ 5,301,032	$ 9,519,368
2. OTHER REVENUES	17,832,568	13,594,845	2,891,165	507,483	276,534	2,763	16,073	105,764	437,942
3. TOTAL OPERATING REVENUES	824,117,182	541,884,888	205,670,801	38,088,221	22,836,073	54,585	218,509	5,406,796	9,957,310
4. LESS: OPERATING EXPENSES (INCLUDES REALLOCATION OF FIRE & WW ALLOC.)	483,430,182	339,842,776	116,218,730	21,948,283	12,119,247	7,905	283,743	2,483,648	(9,474,150)
5. RETURN AND INCOME TAXES	340,687,001	202,042,113	89,452,071	16,139,938	10,716,826	46,680	(65,233)	2,923,147	19,431,459
6. LESS: TAXABLE EXCLUSIONS (FACTOR 19)	98,323,965	59,323,942	25,085,195	4,767,858	2,621,105	1,491	76,021	720,604	5,727,750
7. TAXABLE INCOME	242,363,036	142,718,171	64,366,876	11,372,080	8,095,721	45,189	(141,255)	2,202,544	13,703,709
8. LESS: INCOME TAXES (TAX. INC.)	46,982,378	27,666,096	12,477,600	2,204,492	1,569,366	8,760	(27,382)	426,966	2,656,481
9. NET RETURN (Line 5 - Line 8)	293,704,623	174,376,016	76,974,472	13,935,446	9,147,460	37,920	(37,851)	2,496,181	16,774,978
10. ORIGINAL COSTS MEASURE OF VALUE	4,704,067,662	2,838,207,709	1,200,139,312	228,106,397	125,400,285	71,326	3,637,046	34,475,501	274,030,085
11. RATE OF RETURN, PERCENT	6.24	6.14	6.41	6.11	7.29	53.16	(1.04)	7.24	6.12
12. RELATIVE RATE OF RETURN	1.00	0.98	1.03	0.98	1.17	8.51	(0.17)	1.16	0.98

DEPARTMENT OF LAW

City Hall | 340 North Washington Avenue | Scranton, PA 18503 |570.348.4105

February 1, 2024

Via Electronic Mail

Deputy Chief ALJ Christopher P. Pell
ALJ John M. Coogan
Pamela McNeal, Legal Assistant
Pennsylvania Public Utility Commission
Office of Administrative Law Judge
cpell@pa.gov
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pmcneal@pa.gov

Re: Pennsylvania Public Utility Commission v.
Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
City of Scranton Direct Testimony and Exhibits

Your Honors,

Enclosed please find the following prepared Direct Testimony and Exhibits of the City of Scranton (COS) witnesses in the above-captioned proceedings:

- The Hon. Paige G. Cognetti, Mayor, City of Scranton – C.O.S. Statement 1
- Asset Purchase Agreement dated March 29, 2016 – C.O.S. Exhibit 1
- Consent Decree docketed to U.S.A. v. Scranton Sewer Authority, Civil Action No. 3:09–cv–1873, (M.D. Pa. December 13, 2012) – C.O.S. Exhibit 2
- S&P Rating of the City of Scranton dated June 7, 2023 – C.O.S. Exhibit 3
- Teri Ooms, Executive Director of The Institute – C.O.S. Statement 2
- Curriculum Vitae of Teri Ooms, MBA – C.O.S. Exhibit 4

Thank you for your time and consideration of the same. Please do not hesitate to contact our office with any questions, concerns, or technical difficulties.

Respectfully,

K. Kennedy

Katie Kennedy, Esq.
First Assistant City Solicitor for the City of Scranton

cc: Secretary Rosemary Chiavetta (*Cover Letter and Certificate of Service only – via e-file*)
Per Certificate of Service

DEPARTMENT OF LAW

City Hall | 340 North Washington Avenue | Scranton, PA 18503 | 570.348.4105

February 1, 2024

VIA E-File
Secretary Rosemary Chiavetta
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

RE: Pennsylvania Public Utility Commission v. Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water) & R-2023-3043190 (Wastewater)
Testimonies and Exhibits of the City of Scranton

Dear Secretary Chiavetta,

Enclosed please find the following prepared Direct Testimony and Exhibits of the City of Scranton (COS) witnesses in the above-captioned proceedings:

- The Hon. Paige G. Cognetti, Mayor, City of Scranton – C.O.S. Statement 1
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- Curriculum Vitae of Teri Ooms, MBA – C.O.S. Exhibit 4

Copies will be served on all known parties in these proceedings, as indicated on the attached Certificate of Service.

Respectfully,

K. Kennedy

Katie Kennedy, Esq.
First Assistant City Solicitor for the City of Scranton

cc: ALJs Pell and Coogan, and per the Attached Certificate of Service

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket Nos. R-2023-3043189 (Water)
	:	R-2023-3043190 (Wastewater)
Pennsylvania-American Water Company	:	

CERTIFICATE OF SERVICE

I hereby certify that I am serving the foregoing **Direct Testimony and Exhibits** dated February 1, 2024, in the manner and upon the persons listed below:

Served via Electronic Mail Only

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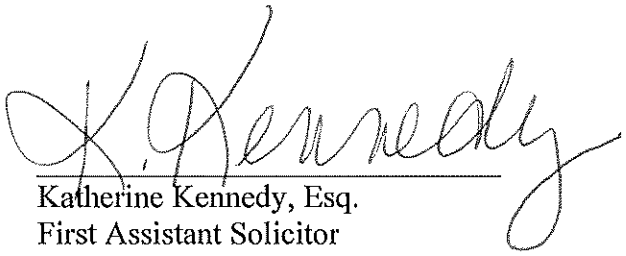

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BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

CITY OF SCRANTON

Docket Nos. R-2023-3043189 and R-2023-3043190

DIRECT TESTIMONY
OF
THE HON. PAIGE G. COGNETTI,
MAYOR OF THE CITY OF SCRANTON

February 1, 2024

Q. PLEASE STATE YOUR NAME AND ADDRESS FOR THE RECORD.

A. My name is Paige G. Cognetti and I reside at 1511 Euclid Avenue, Scranton, PA 18504.

Q. WHERE ARE YOU EMPLOYED?

A. I am the Mayor of the City of Scranton. My office is located at City Hall, 340 N. Washington Ave, Scranton PA, 18503.

Q. IS THE CITY OF SCRANTON A WATER AND/OR WASTEWATER RATEPAYER OF PENNSYLAVNIA AMERICAN WATER COMPANY?

A. Yes, the City of Scranton is both a water and wastewater ratepayer of the Pennsylvania American Water Company, which I will also refer to as "the Water Company" and/or "PAWC."

Q. ARE YOU A WATER AND/OR WASTEWATER RATEPAYER OF PENNSYLVANIA AMERICAN WATER COMPANY?

A. Yes, I am both a water and wastewater ratepayer of the Pennsylvania American Water Company.

Q. ARE YOU TESTIFYING ON BEHALF OF YOURSELF AND/OR OTHERS TODAY?

A. I am testifying on behalf of my constituency, the City of Scranton and its residents, and my own household.

Q. WANT TO ADD BACKGROUND INFORMATION AND PRIOR EXPERIENCES? ANYTHING ABOUT UTILITIES AND/OR MUNICIPAL FINANCE IN PARTICULAR?

A. In addition to government administration, I have a background in investment management.

Q. WHAT IS YOUR UNDERSTANDING OF PAWC'S RATE INCREASE REQUESTS?

A. According to the Company, if the entire rate request is approved as filed, the total bill for a Scranton residential water customer would increase by almost twenty-five percent (24.9%), meaning that a customer who uses approximately 3,201 gallons of water per month would see a price increase of approximately $70.65 to $88.24 on a monthly bill. (Volume I, Notice of Proposed Water and Wastewater Rate Changes).

Q. HOW MANY RESIDENTS, WHO WOULD BE AFFECTED BY THESE RATE INCREASES, ARE WITHIN THE CITY OF SCRANTON?

A. Scranton is the home of roughly 80,000 residents, many of whom are residential customers of the Water Company.

Q. WHY DID THE CITY OF SCRANTON INTERVENE AS AN ACTIVE PARTY IN THIS PROCEEDING?

A. Scranton has a significant interest in the impact that the Water Company's proposed rate increase will have on itself and its residents. These interests are not adequately represented by other participants in this matter. More specifically, it is my understanding that there are only

three other areas/municipalities situated in a combined system like Scranton, and the total number of consumers, including Scranton, is 95,000 ratepayers. Scranton makes up the majority of those ratepayers and has a unique, weighted, and specific interest in this matter. It is imperative that our residents are not charged at the rate proposed for many reasons.

Q. WHY IS THE CITY OF SCRANTON CONCERNED WITH THE PROPOSED WATER RATE INCREASE?

A. Our office has engaged Teri Ooms. Ms. Ooms is the Executive Director of The Institute, an applied social science research and economic consulting organizations formed through a collaborative of higher education and business. Based in NEPA, The Institute produces community-based research and client solutions that provide strategies for growing organizational impact and sustainability. She has a master's degree in finance and a bachelor's degree in public administration, both from the University of Scranton, and she is intimately aware of the demographics and finances of the City of Scranton. She has been engaged by the City of Scranton as an expert in another proceeding and has provided us with information that demonstrates that our current population already struggles to pay their bills without a rate increase. I am seriously concerned that residents of the City will be forced to choose which bills to pay when, and that there will be increased suffering in my City.

Q. WHAT WERE SOME OF THE MOST COMPELLING DATA POINTS THAT HELPED YOU BETTER UNDERSTAND WHY A WATER RATE INCREASE WOULD BE SO DETRIMENTAL TO THE CITY OF SCRANTON?

A. Scranton has a high poverty rate of 19.6%, with one in four households living on less that $25,000. The median household income is $43, 893, compared to the U.S. average of $69,021. One-quarter of Scranton households receive SNAP benefits. A $216 annual rate increase is extremely challenging if not impossible for these households to manage.

Q. WHO ARE THE WATER AND WATSEWATER UTILITY PROVIDERS IN THE CITY OF SCRANTON?

A. All wastewater customers referred to in the Asset Purchase Agreement are residents of the City of Scranton. There are no other water or wastewater providers operating within city limits. The City is at the mercy of the PAWC.

Q. WHY IS THE CITY OF SCRANTON CONCERNED WITH WASTEWATER RATES IF PAWC IS ONLY REQUESTING 2.5% INCREASE ON WASTEWATER RATES AS OF TODAY?

A. Scranton's position is particularly unique in this matter in that the Scranton Sewer Authority, a municipal authority of the City of Scranton incorporated and existing pursuant to the Municipal Authorities Act, as amended, 53 Pa. Cons. Stat. Ann. §§ 5601-5623, sold its combined sewer system to the Water Company on or about March 29, 2016. We are formally entering into this record a true and accurate copy of the Asset Purchase Agreement (also referred to as "the APA" or "APA") as Exhibit 1.

This APA contains reference to and material terms in relation to a Consent Decree issued in the matter of U.S.A. v. Scranton Sewer Authority, Civil Action No. 3:09–cv–1873, (M.D. Pa. December 13, 2012), a copy of which we are also formally entering into the record as Exhibit 2.

While the City of Scranton was not a party to the APA, residents and ratepayers will feel the effects of an increase, particularly if the PUC determines that wastewater rates should increase even more. While the City of Scranton appreciates the majority of the challenges that the Office of the Consumer Advocate, also referred to as "OCA," has articulated and put forward against the PAWC, the City of Scranton (along with the Borough of Dunmore) does not support shifting the burden of a rate hike onto wastewater consumers due to the deleterious and devastating effects it would have on our City's ratepayers.

Q. CAN YOU EXPLAIN WHY THE CITY OF SCRANTON HAS CONCERN ABOUT AN INCREASE OF WASTEWATER RATES IN THE CONTEXT OF THE OCA'S ARGUMENTS?

A. For example, Paragraph J on p. 6 states "However, the OCA submits that shifting so much of its wastewater revenue requirement to water customers is unfair to PAWC water customers, most of whom are not PAWC wastewater customers and receive no benefit from PAWC's wastewater service."

Scranton and its residents are located within the PAWC's service territory and will be directly affected by the outcome of this proceeding. Particularly, this proceeding will impact the price that Scranton and its residents pay for water and wastewater, as well as the reliability and quality of those services.

Scranton will be disproportionately and negatively affected if the PUC is so persuaded by the arguments in line with paragraph J on page 6 of OCA's complaint due to its contractual relationships and positions from the APA Sewer Sale.

Q. HAS PAWC RAISED RATES BEFORE?

A. Yes, just last year the PAWC sought a combined total revenue increase of $173.2 million, for a 20.8% gain, but the PUC curbed it by approving $138 million, or a 16.6% increase, according to the PUC.

Q. WHAT WAS PAWC'S RATIONALE FOR LAST YEAR'S INCREASE?

A. It is my understanding that in April 2022, the PAWC requested a rate increase because they said it was necessary and that the company needed $1 billion in system investments needed to address aging water and wastewater infrastructure.

Q. TO YOUR KNOWLEDGE, HOW DID THIS AFFECT RATEPAYERS IN THE CITY OF SCRANTON?

A. As a result of the settlement, the water bill for the typical residential customer was estimated to increase by $8.76 per month, going from $60.48 to $69.24, which was a 14.5% increase, and instead of the $15.01 increase (a 24.8% hike) that was sought by PAWC at that time. The

wastewater bill for a typical residential customer will increase by $30 a month, from $76.65 to $106.65, a 39.1% rise, instead of the $19.01 increase (a 24.9% rise) that PAWC initially proposed.

Q. BEING THAT THERE WAS AN INCREASE JUST LAST YEAR, WHY IS THE CITY CONCERNED ABOUT ANOTHER INCREASE, PARTICULARLY IN THE CONTEXT OF THE APA?

A. I know that some residents have cited the 1.9% compound annual growth rate (CAGR) figure in their appeals to the PUC and PAWC against the rate increase that is before the commission right now. This figure is from our APA which was signed in March of 2016. It is my understanding that if the PAWC had truly frozen its wastewater rates in accordance with the APA over the last nine years, then an increase in wastewater rates could balloon and occur but within the contemplated ratios of the APA. That 1.9% CAGR is akin to spreading out a larger rate increase over the ten years contemplated in the APA. However, and now, the City is potentially facing a rate increase that would offend the APA, particularly in the event that any portion of the proposed water increase is shifted to the wastewater consumers, as suggested by the OCA, and therefore harm ratepayers outside of the context of the PAWC's contractual agreement and promises made by and through the APA.

Q. WHAT, IF ANYTHING, DOES THE APA BIND THE PAWC TO DO BEFORE INCREASING WASTEWATER RATES AT OR BEFORE THE TEN YEAR TERM IN THE APA?

A. It is my understanding that if the PAWC wanted to increase its wastewater rates, it would have to "show their homework" to justify an increase that would also have to be in conformity with their other ratepayers. All of their obligations in this arena are governed by Section 7.07 of the APA.

Q. HAS THE CITY OF SCRANTON CONFERENCED ABOUT ITS POSITION WITH THE OFFICE OF THE CONSUMER ADVOCATE?

A. Yes.

Q. HOW HAS THE OCA RESPONDED TO THE CITY'S CONCERNS?

A. They have stated that since the City of Scranton is doing better financially, the terms of the APA are negotiable to permit the relief that they are seeking.

Q. WHAT IS THE CITY'S RESPONSE TO THAT POSITION?

While the City as an entity has exited from "financially distressed status" pursuant to Act 47, the City remains reliant on the tax base and economic conditions that are susceptible to fluctuations. While the City is on a better financial trajectory than years past, and we are proud of our upgraded bond rating, we still face significant financial burdens with our $70 million in outstanding debt, unfunded OPEB liabilities exceeding $230 million, and a pension fund designated as "moderately distressed" by the Commonwealth. Furthermore, our health as an entity does not correlate to financial health at the individual household level. The cost of living

continues to rise for our residents and our local businesses have struggled with high inflation for years now. Regardless of the City's financial position, this rate increase is a burden on our residents.

Q. DOES THE CITY HAVE A POSITION AS TO THE PAWC'S PROPOSAL FOR RATE DECOUPLING?

A. Yes, we oppose a surcharge for residents who conserve water and try to minimize their bills.

Q. ARE THERE ANY OTHER MUNICIPALITIES OR PARTIES THAT ARE SIMILARLY SITUATED TO THE CITY OF SCRANTON?

A. Yes, the Borough of Dunmore is also an affected party by and through the APA and it is our understanding and position that we have the same position as the Borough of Dunmore.

Q. HAVE ANY SMALL BUSINESSES RAISED CONCERNS TO YOU REGARDING THE PROPOSED INCREASE?

A. Yes, our local businesses are concerned about this, from hair salons to laundromats to our larger manufacturers for which water is a large input cost. We are working to bring new business to Scranton to help our economy grow, and do not welcome utility rates to add another barrier to adding jobs and opportunity to our City.

Q. HOW WOULD YOU DESCRIBE THE QUALITY OF SERVICE FROM THE PAWC TO DATE?

A. Unfortunately, just recently, PAWC seemingly failed to issue bills to residents for the month of December (2023). As a result, residents recently received a bill that included services for both December 2023 and January 2024, with a late fee. It is our understanding that a resident is only able to ameliorate the "late fee" with PAWC if the resident calls and requests the same. Our residents deserve relief from the "late fee," especially since our residents have also been experiencing "dirty" water that has been discolored and/or chemical in taste on a periodic basis.

Q. DO YOU HAVE ANY IDEAS OR RECOMMENDATIONS AS TO HOW THE PAWC MIGHT BE ABLE TO FIND FUNDING ANOTHER WAY?

A. I was disheartened to learn that PAWC has not taken advantage of programs like Pennvest.

Q. WHAT IS THE CITY OF SCRANTON ASKING OF THE PUC AT THIS TIME?

A. We are asking that the PUC reject the PAWC's proposal for a rate hike for water customers. If the PUC is at all persuaded by the OCA, we then ask that the PUC consider Scranton's unique position and the information that we are providing to avoid a burden shift to wastewater customers. We appreciate the opportunity to participate in these proceedings and advocate for our residents who are already struggling to make ends meet and implore the PUC to regulate with our residents in mind.

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission v. Pennsylvania-American Water Company	Docket Nos. R-2023-3043189 (Water) R-2023-3043190 (Wastewater)

VERIFICATION

I, the Hon. Paige G. Cognetti, Mayor of the City of Scranton, hereby state that the facts set forth in my Direct Testimony, C.O.S. St. 1, in the above-captioned proceedings are true and correct to the best of my knowledge, information and belief. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to sworn falsification to authorities).

Date: February 1, 2024

The Hon. Paige G. Cognetti,

Mayor of the City of Scranton

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

CITY OF SCRANTON

Docket Nos. R-2023-3043189 and R-2023-3043190

EXHIBIT 1

February 1, 2024

ASSET PURCHASE AGREEMENT

By and Between

THE SEWER AUTHORITY OF THE CITY OF SCRANTON

AS SELLER

and

PENNSYLVANIA-AMERICAN WATER COMPANY

AS BUYER

Dated as of March 29, 2016

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ASSET PURCHASE AGREEMENT

THIS ASSET PURCHASE AGREEMENT ("Agreement"), dated as of March 29, 2016 (the "Effective Date"), is made and entered into by and between THE SEWER AUTHORITY OF THE CITY OF SCRANTON (the "Seller"), and PENNSYLVANIA-AMERICAN WATER COMPANY ("Buyer").

WITNESSETH:

WHEREAS, the Seller, acting by and through the Authority Board, owns and operates a wastewater collection and treatment system (the "System"); and

WHEREAS, Buyer owns and operates a public utility water system operating in or near the Seller's wastewater service area (the "Water System") which includes the City of Scranton (the "City") and the Borough of Dunmore (the "Borough") (the City and the Borough, together, the "Service Area"); and

WHEREAS, the Seller issued on March 3, 2015 a Request for Proposals ("RFP") regarding the management and/or sale of the System, as it explored ways to achieve operating efficiencies, to improve customer wastewater service, to keep future customer rates as low as possible and to raise capital to fund important infrastructure needs; and

WHEREAS, Buyer, among other parties, responded to the RFP and, subsequently, to Seller's request for Best and Final Offers ("BAFO"), and engaged in extensive discussions with the Seller including the Seller's response to Buyer's questions related to the RFP, the Seller's requests for clarification related to the BAFO, and Buyer's and the Seller's responses to such correspondence (collectively, the "Clarifying Correspondence"), which resulted in the Seller and Buyer entering into a Memorandum of Understanding, dated December 15, 2015, as modified on March 14, 2016 (the "MOU"), for the sale and transfer of the System; and

WHEREAS, Buyer, in reliance upon the representations, warranties and covenants of the Seller herein, desires to purchase and acquire from the Seller, and the Seller, in reliance upon the representations, warranties and covenants of Buyer herein, desires to sell, transfer, assign, convey and deliver to Buyer all of the assets of the System (other than the Excluded Assets), and in connection therewith, Buyer has agreed to assume certain ongoing obligations and liabilities of the Seller related to the operation of the System (including the Seller's obligations under the Consent Decree subject to the limitations contained herein), all on the terms and subject to the conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the foregoing and of the mutual representations, warranties, covenants, and agreements herein contained, the receipt and sufficiency of which hereby are acknowledged, intending to be legally bound, the Parties hereto agree as follows:

ARTICLE I.

DEFINITIONS

In addition to the capitalized terms defined elsewhere in this Agreement, the following terms, as used in this Agreement shall have the meanings set forth in this Article I:

"**Abstract Completion Date**" has the meaning specified in Section 6.01(a).

"Abstractor" has the meaning specified in Section 6.01(a).

"Abstractor Search Result Chart" has the meaning specified in Section 6.01(a).

"**Accrued PTO**" has the meaning specified in Section 7.04(c).

"**Accrued Sick Bank**" means the portion of the Accrued PTO comprising the total amount of accrued but unused paid sick days with respect to all Union Personnel as of the Closing Date.

"**Acquired Assets**" has the meaning specified in Section 2.01.

"**Acquired Authorizations**" has the meaning specified in Section 2.01(j).

"**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such Person. The term "control" (including the terms "controlled by" and "under common control with") means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise.

"**Agreement**" has the meaning specified in the Preamble of this Agreement.

"**Allocation Schedule**" has the meaning specified in Section 3.03.

"**Amended CBA**" has the meaning specified in Section 7.04(f).

"**Amended Consent Decree**" has the meaning specified in Section 7.06(d).

"**Approved Revised CSO Control Measures Plan**" means any Revised CSO Control Measures Plan approved in accordance with Subsection XIX of the Consent Decree, or established through Dispute Resolution pursuant to Section XII of the Consent Decree.

"**Assignable Outstanding Indebtedness**" has the meaning specified in Section 7.11(a).

"**Assigned Contracts**" has the meaning specified in Section 2.01(c).

"**Assignment and Assumption Agreement**" has the meaning specified in Section 13.02(b).

"**Assumed Liabilities**" has the meaning specified in Section 2.04(a).

"**Authority Board**" has the meaning set forth in the Municipality Authorities Act of 1945 and the bylaws of the Seller.

"**Average System Rates**" means the "Rates for Rate Zone 1" contained in Buyer's Supplement No. 2 to Tariff Wastewater PA P.U.C. No. 15, 1st Revised Page No. 4 through 1st Revised Page No. 4.1 on file with the PaPUC, as amended.

"**Base Amount**" has the meaning specified in Section 3.01.

"**Borough**" has the meaning specified in the recitals to this Agreement.

"**Business Day**" means any day other than Saturday, Sunday, and any day on which commercial banks in Pennsylvania are authorized by Law to be closed.

"**Buyer**" has the meaning specified in the Preamble of this Agreement.

"**Buyer Fundamental Representations**" has the meaning specified in Section 8.01.

"**Buyer Indemnified Persons**" has the meaning specified in Section 8.02.

"**Buyer Parent**" means American Water Works Company, Inc.

"**Buyer Post-Signing Event**" has the meaning specified in Section 10.04.

"**Buyer Schedule Supplement**" has the meaning specified in Section 10.04.

"**CAGR**" has the meaning specified in Section 7.07(d).

"**CERCLA**" means the Comprehensive Environmental Response Compensation and Liability Act of 1980, 42 U.S.C. §9601 et seq., as amended.

"**City**" has the meaning specified in the recitals to this Agreement.

"**City NPDES Permit**" means the National Pollutant Discharge Elimination System Permit No. PAI132203 issued by PaDEP to the City with respect to the MS4 System which became effective on November 1, 2014 and expires on October 31, 2019, including any revision or modification thereto.

"**City-Owned Real Property**" has the meaning specified in Section 6.02(d).

"**Clarifying Correspondence**" has the meaning specified in the recitals to this Agreement.

"**Closing**" means the consummation of the sale and purchase of the Acquired Assets and assumption of the Assumed Liabilities and the other transactions contemplated hereby, all in accordance with the terms and conditions of this Agreement.

"**Closing Cash Balance**" means the sum of (a) the aggregate amount of cash and cash equivalents in the bank accounts included in the Acquired Assets as of the Closing Effective Time *plus* (b) the lesser of (i) the aggregate amount paid by the Seller to cash-out the Accrued Sick Bank in accordance with Section 7.04(c), and (ii) $450,000.

"**Closing Cash Statement**" has the meaning specified in Section 3.02(b).

"**Closing Date**" has the meaning specified in Section 13.01.

"**Closing Effective Time**" has the meaning specified in Section 13.01.

"**Closing Outstanding Indebtedness Amount**" has the meaning specified in Section 3.01(a).

"**COBRA**" means Title X of the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended, including Sections 2201 through 2208 of the Public Health Service Act and Part 6 of Subtitle B of the Employee Retirement Income Security Act of 1974, as amended.

"**Code**" means the Internal Revenue Code of 1986, as amended.

"**Collective Bargaining Agreement**" means the Agreement between the Seller and the Union dated as of April 1, 2013 for the period April 1, 2013 to March 31, 2017, as may be amended from time to time.

"**Combined Sewer Overflow**" or "**CSO**" means any discharge from the Seller's Combined Sewer System at a CSO Outfall designated in the currently applicable Seller NPDES Permit.

"**Combined Sewer System**" means the portion of the Seller's System designed to convey municipal sewage, wastewaters (domestic, commercial, and industrial) and stormwater runoff in the same system of pipes to the Wastewater Treatment Plant.

"**Combined Sewer System Assets**" means the assets of the System designed and constructed to collect and convey municipal sewage (i.e., domestic, commercial and industrial) and stormwater through a single pipe-system to the Wastewater Treatment Plant or Combined Sewer Overflow structures, including (i) wastewater collection pipes, pumping stations and other assets used for wastewater collection, (ii) stormwater drains, pipes, collection basins, pumping stations and all other stormwater drainage assets used for stormwater collection, and (iii) catch basins, inlets, pipes and all other stormwater lateral facilities, in each case that connect wastewater and surface stormwater drains to the combined sewer mains that discharge to the Wastewater Treatment Plant or combined sewer overflow structures, but excluding the Municipal Separate Storm Sewer System. The term "Combined Sewer System Assets" also includes facilities constructed in accordance with Exhibit A of the Consent Decree.

"**Compliance Schedule**" has the meaning specified in Section 7.06(a).

"**Consent Decree**" means the order of the United States District Court for the Middle District of Pennsylvania dated January 31, 2013, among the EPA, PaDEP and the Seller,

including, among other requirements, the Long-Term Control Plan and Nine Minimum Controls Plan (as defined in the Consent Decree), as modified by the Notice of Non-Material Modification of Consent Decree filed December 18, 2015, and as may be further modified in accordance with the terms of this Agreement and approved in accordance with the terms of the Consent Decree.

"**Consent Decree Required Information**" has the meaning specified in Section 7.03(b).

"**Contract**" means any contract, agreement, purchase order, lease, sublease, license, sublicense, plan, indenture, loan agreement, security agreement, instrument or other document, commitment, arrangement, undertaking, practice or authorization that is binding on any Person or its property under applicable Law.

"**CSO Control Measures**" means the construction, control measures, actions and other activities set forth in Appendix A of the Consent Decree, including the Seller's Long-Term Control Plan, as approved by Federal and State regulatory authorities and as may be amended from time to time in accordance with the terms of the Consent Decree.

"**CSO Outfall**" means an outfall in the Combined Sewer System from which combined sewage and stormwater are discharged and so designated in the currently applicable Seller NPDES Permit.

"**Cured**" has the meaning specified in Section 6.02(a).

"**Damages**" means any and all losses, liabilities, obligations, damages, penalties, interest, Taxes, claims, actions, demands, causes of action, judgments, reasonable attorneys', consultants' and other professional fees, and all other reasonable costs and expenses sustained or incurred in investigating, preparing or defending or otherwise incident to any such claim, action, demand, cause of action or judgment or the enforcement of a Party's rights under Article VIII; *provided, however,* that "**Damages**" shall not include punitive damages, except in the case of fraud or to the extent actually awarded to a Governmental Authority or other third party in respect of a Third Party Claim.

"**Easements**" means all easements, rights of way, licenses, use agreements, occupancy agreements, leases and other agreements and appurtenances for and over the real property of third parties.

"**Effective Date**" has the meaning specified in the Preamble.

"**Eligible Easement**" means any Easement that is either:

(a) a Held Easement which is not subject to any Objection Notice or, if same was subject to an Objection Notice, the applicable Title Objection Items have been Cured pursuant to Section 6.02(a); or

(b) an Easement with respect to which the Seller has instituted condemnation proceedings in order to obtain the necessary right and title to such Easement, the period for making preliminary objections thereto has expired without any preliminary objections being made or, if preliminary objections were made, all such preliminary objections have been resolved and, in

any case, the only remaining issue is the fair value that will be paid to the landowner for the taking of such Easement.

"**Environment**" means any surface water, ground water, soil or subsurface strata, sediments or ambient air.

"**Environmental Claims**" means all notices of investigations, warnings, notice letters, notices of violations, Liens, orders, claims, demands, suits or administrative or judicial actions for any injunctive relief, fines, penalties, third party claims, or other claims asserting violations of Environmental Requirements or responsibility for Environmental Liabilities.

"**Environmental Conditions**" means the Release of Hazardous Materials or the presence of Hazardous Materials on, in, under or within any property (including the presence in the Environment), other than the presence of Hazardous Materials .in locations and at concentrations that are naturally occurring.

"**Environmental Liabilities**" means .any legal obligation or liability arising under Environmental Requirements or related to or arising out of any Environmental Condition, including those consisting of or relating to any (a) duty imposed by, breach of or noncompliance with any Environmental Requirements; (b) environmental, health or safety matters or conditions (including on-site or off-site contamination, occupational safety and health and regulation of Hazardous Materials); (c) Remedial Action undertaken by any Person; (d) bodily injury (including illness, disability and death, and regardless of when any such bodily injury occurred, was incurred or manifested itself), property damage (including trespass, nuisance, wrongful eviction and deprivation of the use of real or personal property), or other losses or damages incurred by any other Person (including any employee or former employee of such Person); (e) any injury to, destruction of, or loss of natural resources, or costs of any natural resource damage assessments; (f) exposure of any Person to any Hazardous Materials; and (g) the presence or Release of any Hazardous Materials.

"**Environmental Requirements**" mean all present Laws (including common law), regulations, legally binding or otherwise enforceable requirements and Licenses and Permits relating to human health, pollution, or protection of the Environment (including ambient air, surface water, ground water, land surface or surface strata), including (i) those relating to emissions, discharges, Releases, or threatened Releases of Hazardous Materials, and (ii) those relating to the identification, generation, manufacture, processing, distribution, use, treatment, storage, disposal, release, recovery, transport or other handling of Hazardous Materials. Without limiting the foregoing, the term "**Environmental Requirements**" includes (1) CERCLA; the Superfund Amendments and Reauthorization Act, Public Law 99-499, 100 Stat. 1613; the Emergency Planning and Community Right to Know Act, 42 U.S.C. Sections 11001-11050; the Resource Conservation and Recovery Act, 42 U.S.C. Sections 6901-6992k ("RCRA"); the Safe Drinking Water Act, 42 U.S.C. Sections 300f to 300j-26; the Toxic Substances Control Act, 15 U.S.C. Sections 2601-2692; the Hazardous Materials Transportation Act, 49 U.S.C. Sections 5101-5127; the Federal Water Pollution Control Act, 33 U.S.C. Sections 1251-1387; the Oil Pollution Act of 1990, 33 U.S.C. Sections 2701--2761; the Clean Air Act, 42 U.S.C. Sections 7401-7671q; the Atomic Energy Act of 1954, as amended, 42 U.S.C. Sections 2011 et seq.; the Low Level Radioactive Waste Policy Act, as amended, 42 U.S.C. Section 2021b et seq.; the

Occupational Safety and Health Act, 29 U.S.C. Sections 651-678, and the regulations promulgated pursuant to the above-listed federal statutes, and (2) counterpart Laws and regulations promulgated or issued by any state or local Governmental Authority.

"**EPA**" means the United States Environmental Protection Agency, or a successor Governmental Authority with substantially similar power and authority thereto.

"**Equipment and Machinery**" means (i) all equipment, tangible personal property, machinery, office furniture and equipment, fixtures, tooling, spare maintenance or replacement parts, environmental testing equipment, and vehicles, (ii) any rights to warranties applicable to the foregoing, and licenses received from manufacturers of any such item, and (iii) any related claims, credits, and rights of recovery with respect thereto.

"**ERISA**" means the Employee Retirement Income Security Act of 1974, as amended.

"**Escrow Account**" has the meaning specified in Section 3.01(b).

"**Escrow Agent**" means Delaware Trust Company.

"**Escrow Agreement**" means the Escrow Agreement, in substantially the form attached hereto as Exhibit C, dated as of the Closing Date, among Buyer, the Seller and the Escrow Agent.

"**Escrow Amount**" has the meaning specified in Section 3.01(b).

"**Escrow Fund**" means, at any given time, the portion of the Escrow Amount (together with any interest or other earnings thereon) then remaining in the Escrow Account.

"**Escrow Release Date**" means the date that is eighteen (18) months following the Closing Date.

"**Essential Easement**" means any Easement that is necessary for or used in connection with the use and operation of any Essential System Asset or to provide continuous and unimpeded rights of way for the Essential System Assets (including access thereto).

"**Essential System Assets**" means (a) the Waste Water Treatment Plant, (b) all pumping stations, outfalls and other "above ground" Combined Sewer System Assets and all appurtenances relating thereto, and (c) easements for all Combined Sewer System Assets which in any way relate to railroad properties and rights-of-way, and collection system mains and laterals and other lines comprising the System, wherever located, which have a diameter of twelve (12) inches or more, including those Essential System Assets at the locations identified on Schedule 6.01.

"**Estimated Closing Cash Balance**" has the meaning specified in Section 3.02(a).

"**Estimated Closing Cash Increase**" has the meaning specified in Section 3.02(a).

"**Estimated Closing Cash Reduction**" has the meaning specified in Section 3.02(a).

"**Estimated Closing Cash Statement**" has the meaning specified in Section 3.02(a).

"**Estimated Withdrawal Liability Amount**" has the meaning specified in Section 2.07(b).

"**Excess Offsets and Credits**" has the meaning specified in Section 7.06(e).

"**Excluded Accounts Receivable**" has the meaning specified in Section 2.02(l).

"**Excluded Assets**" has the meaning specified in Section 2.02.

"**Excluded Liability**" or "**Excluded Liabilities**" means any and all liabilities, debts or obligations of any nature, whether known or unknown, absolute, accrued, contingent, liquidated, unliquidated, due or to become due or otherwise and whether or not required to be reflected on a balance sheet prepared in accordance with GASB, in each case which are not Assumed Liabilities.

"**Executive Officers**" of the Seller are the Executive Director, the Director of Compliance, the Director of Engineering and the Chief Financial Officer.

"**Files and Records**" means all files and records of or relating to the Seller or the System, whether in hard copy or magnetic or other format including customer and supplier records, customer lists (both current and prospective), records of sales calls, manuals, books, files, records, engineering data, procedures, systems, instructions, drawings, blueprints, plans, designs, specifications, equipment lists, parts lists, equipment maintenance records, equipment warranty information, plant plans, specifications and drawings, sales and advertising material, computer software, and records relating to Transferred Personnel, and whether stored on-site or off-site.

"**Final Order**" means a Governmental Approval by a Governmental Authority as to which (a) no request for stay of the action is pending, no such stay is in effect and if any time period is permitted by statute or regulation for filing any request for such stay, such time period has passed, (b) no petition for rehearing of the action is pending and the time for filing any such petition or application has passed, (c) such Governmental Authority does not have the action under reconsideration on its own motion and (d) no appeal to a court or administrative tribunal or a request for stay by a court or administrative tribunal of the Governmental Authority's action is pending or in effect and the deadline for filing any such appeal or request for stay has passed.

"**Financial Statements**" has the meaning specified in Section 4.05.

"**GASB**" means the Government Accounting Standards Board.

"**Governmental Approval**" means any consent, approval, authorization, order, adjudication, award, decision, judgment, writ, decree, ruling, or verdict entered, issued, made, or rendered by any court, administrative agency, or other Governmental Authority of competent jurisdiction.

"**Governmental Authority**" means any government, court, department, commission, board, bureau, municipality, agency or instrumentality of the United States, or of any state,

county, city or political subdivision thereof, or any foreign governmental body, including the PaPUC, the EPA, PaDEP and the Authority Board.

"**Hazardous Materials**" means: (a) any substance that is a "hazardous substance," "hazardous waste," "solid waste," "municipal waste," "industrial waste," "flammable material, " "radioactive material," "hazardous material," "pollutant," or "contaminant" or words of similar meaning and regulatory effect under any applicable Environmental Requirements, (b) petroleum or petroleum product (including crude oil and any fraction thereof) or waste oil, (c) any natural or synthetic gas (whether in liquid or gaseous state), (d) any asbestos or polychlorinated byphenyls, (e) Mold, and (f) any mixture or solution of the foregoing, and all derivatives or synthetic substitutes of the foregoing.

"**Held Easement**" means, as of any particular date, each Easement that has been obtained by the Seller prior such date.

"**Indemnified Party**" means any Buyer Indemnified Person or Seller Indemnified Person, as applicable, entitled to indemnification pursuant to Article VIII.

"**Indemnifying Party**" means a Party which is obligated to indemnify an Indemnified Party pursuant to Article VIII.

"**Independent Third Party**" has the meaning specified in Section 7.05(b).

"**Industrial Pretreatment Program**" means the program for regulation and management of discharges to the System from Industrial Users as defined in 40 C.F.R. §403.3 which is sufficient to satisfy the requirements of the Amended Consent Decree (including the revised Nine Minimum Controls Plan) and the Seller NPDES Permit as transferred to Buyer, including any amendments or revisions thereto.

"**Intellectual Property**" means any and all of the following in any jurisdiction throughout the world: (a) trademarks and service marks, including all applications and registrations and the goodwill connected with the use of and symbolized by the foregoing; (b) copyrights, including all applications and registrations, and works of authorship, whether or not copyrightable; (c) trade secrets and confidential know-how; (d) patents and patent applications; (e) websites and internet domain name registrations; and (f) all other intellectual property and industrial property rights and assets, and all rights, interests and protections that are associated with, similar to, or required for the exercise of, any of the foregoing.

"**Intellectual Property Assets**" has the meaning specified in Section 2.01(g).

"**Knowledge**", "**to the Knowledge of**", and phrases of similar import, means the actual knowledge, after reasonable inquiry, of (A) with respect to Seller, the Executive Officers, or (B), with respect to Buyer, Kathy L. Pape.

"**Law**" means any law, statute, regulation, ordinance, rule, order, judicial, administrative or regulatory decree, judgment, adjudication, consent decree, settlement agreement, governmental requirement or common law doctrine enacted, promulgated, entered into, agreed or imposed by any Governmental Authority.

"**Leased Real Property**" means any parcel of land, building, fixtures or other real property leased, subleased, licensed or occupied pursuant to any leasehold or other real property right or interest.

"**Liability Cap**" has the meaning specified in Section 8.05(c).

"**Licenses and Permits**" mean all licenses, permits, franchises, authorizations, certificates, registrations, consents, orders, adjudications, variances, waivers, privileges, approvals or other Governmental Approvals issued, granted, approved or allowed by or obtained from, or required to be obtained from, any Governmental Authority, including environmental permits, operating permits and approvals.

"**Lien**" means any lien, pledge, mortgage, deed of trust, security interest, charge, claim, option, warrant, lease, sublease, right to possession, hypothecation, easement, right-of-way, encroachment, or other encumbrance, right or restriction which affects, by way of a conflicting ownership interest or otherwise, the right, title or interest in or to any property.

"**Long Term Control Plan**" means the plan submitted and approved by EPA and PaDEP under Section V.B. of the Consent Decree.

"**Material Adverse Effect**" means any event, occurrence, fact, condition or change that, individually or in the aggregate, is materially adverse to (a) the business, condition (financial or otherwise), assets, liabilities or results of operations of the System, taken as a whole, or (b) the ability of the Seller to consummate the transactions contemplated hereby; *provided, however,* that for purposes of the foregoing clause (a), a "Material Adverse Effect" shall not include any event, occurrence, fact, condition or change arising out of or attributable to: (i) general economic or political conditions; (ii) conditions generally affecting the sewer system industry (including sewer system owners, operators and service providers); (iii) any changes in financial, banking or securities markets in general, including any disruption thereof and any decline in the price of any security or any market index or any change in prevailing interest rates; (iv) acts of war (whether or not declared), armed hostilities or terrorism, or the escalation or worsening thereof; (v) any action by the Seller required or permitted by this Agreement or any action taken (or omitted to be taken) by the Seller with the written consent of or at the written request of Buyer; (vi) any changes in applicable Laws or accounting rules or the enforcement, implementation or interpretation thereof; (vii) any natural or man-made disaster or acts of God; or (viii) any failure, in and of itself, by the Seller to meet any internal or published projections, forecasts or revenue or earnings predictions with respect to the System (*provided* that the underlying causes of such failure shall not (subject to the other provisions of this definition) be excluded from the determination of a Material Adverse Effect), except, in the case of the foregoing clauses (i), (ii), (iii), (iv), (vi) and (vii), to the extent such event, occurrence, fact, condition or change has a materially disproportionate effect on the Seller as compared to other similar situated Persons engaged in the industry in which the Seller operates.

"**Material Change**" has the meaning specified in Section 7.05(h).

"**Material Contracts**" has the meaning specified in Section 4.18.

"**Material Terms**" has the meaning specified in Section 7.05(b).

"**Maximum Liability Cap**" has the meaning specified in Section 8.05(c).

"**Missing Easements**" means, as of any particular date, each Easement that is appurtenant to any Combined Sewer System Asset or necessary for access to any Combined Sewer System Asset or for the operation of any Combined Sewer System Asset (including Easements for utilities and power to any Combined Sewer System Asset) or otherwise is necessary for or used in connection with the operation of the System or to provide continuous and unimpeded rights of way for the Combined Sewer System Assets (including access thereto) that either (a) has not been obtained by the Seller prior such date or (b) if such Easement has been obtained by the Seller prior such date, such Easement is unrecorded or such Easement is not sufficient to operate the System as currently conducted.

"**Mold**" means any mold, fungus, bacteria, viral, or microbial matter or pathogenic organisms of a type or quantity that (a) results in or could reasonably result in a significant risk to human health or the Environment or obligations under Environmental Requirements to undertake Remedial Actions, or (b) would materially and negatively impact the value of any of the Acquired Assets.

"**MOU**" has the meaning specified in the recitals to this Agreement.

"**Multiemployer Plan**" has the meaning specified in Section 4.12(c).

"**Municipal Separate Storm Sewer System**" or "**MS4 System**" means the current and any future assets and facilities, built, operated or maintained, or real property ("**MS4 System Real Property**") and Stormwater System Assets owned by the City, the Borough or the Seller, and used for the purpose of capturing, conveying and discharging stormwater separate from any sewage or wastewaters.

"**Nine Minimum Controls Plan**" means the plan set forth in Appendix A of the Consent Decree as may be revised and updated in accordance with the Nine Minimum Controls requirements referenced in Section V.A of the Consent Decree.

"**Non-Union Personnel**" means Personnel who are not members of the Union.

"**Nonassignable Assets**" has the meaning specified in Section 2.06(a).

"**Noticed Proposal**" has the meaning specified in Section 7.05(g).

"**Noticed Proposal Period**" has the meaning specified in Section 7.05(g).

"**Objection Notice**" has the meaning specified in Section 6.02(a).

"**Off-Site Location**" means a location other than property on which the System is located.

"**Outside Date**" means October 15, 2016, as may be extended pursuant to Section 14.01(f).

"**Outstanding Indebtedness**" means the aggregate amount of outstanding indebtedness and other obligations of the Seller (including all principal and accrued but unpaid interest, fees, indemnities, compensation, expenses and other amounts payable, and including any termination fees, prepayment penalties, redemption premium, "breakage" costs or similar payments associated with the payment, prepayment or redemption of such amounts of Outstanding Indebtedness), as of the Closing Effective Time, and all arbitrage rebate amounts and trustee or paying agent fees and expenses payable under or with respect to the following bonds, notes and other debt instruments (including any and all indentures, debentures, mortgages or other Contracts relating to any of the following): (i) Sewer Revenue Bonds, Series of 2011A, (ii) Sewer Revenue Bonds, Series of 2011B, (iii) Sewer Revenue Bonds, Series of 2014, (iv) Sewer Revenue Bonds, Series of 2015, (v) PENNVEST Promissory Note #71192, (vi) PENNVEST Promissory Note #71162, (vii) PENNVEST Promissory Note #71281, (viii) PENNVEST Promissory Note #27682, (ix) PENNVEST Promissory Note #79906, (x) PENNVEST Promissory Note #71375, , (xi) PENNVEST Promissory Note #27881, (xii) $4,000,000 line of credit from First National Commonwealth Bank and (xiii) $2,000,000 line of credit from First National Commonwealth Bank.

"**Owned Real Property**" means all land owned in fee simple, together with all buildings, structures, improvements and fixtures located thereon, and all easements, rights of way, licenses, privileges, air rights and other rights and interests appurtenant thereto.

"**PaDEP**" means the Pennsylvania Department of Environmental Protection.

"**PaPUC**" means the Pennsylvania Public Utility Commission.

"**Party**" means Buyer or the Seller, and the term "**Parties**" means collectively Buyer and the Seller.

"**PCB Equipment**" means PCB equipment as defined in 40 C.F.R. Part 761.

"**Permitted Liens**" means (a) Liens securing the Outstanding Indebtedness which (i) will be will be repaid and fully and unconditionally released, satisfied and discharged of record at the Closing or (ii) secure only that portion of the Outstanding Indebtedness that is assumed by Buyer at Closing, if any, pursuant to and in accordance with Section 3.01 and Section 7.11; (b) statutory Liens for Taxes not yet due and payable or which are being contested in good faith by appropriate procedures and for which appropriate reserves have been recorded in the Interim Financial Statements; (c) Liens in the nature of zoning restrictions, easements, rights-of-way or other restrictions of record on the use of the Real Property that, in the reasonable judgment of Buyer will not materially impair the continued use of the Real Property, the System and the Acquired Assets including the easements and rights-of-way for all wastewater lines and other facilities comprising the System, as the System and other Acquired Assets are currently being and have historically been used; (d) the Liens set forth on Schedule 1.01; and (e) mechanic's, materialman's, carrier's, repairer's and other similar Liens arising or incurred in the ordinary course of business under applicable Law or that are not yet due and payable or are being contested in good faith and by appropriate proceedings, in any case (i) for which reserves have been established on the Interim Financial Statements and (ii) that do not, and would not reasonably be expected to, individually or in the aggregate, materially and adversely affect the

value, or materially impair the continued use, of such Acquired Assets in the same or similar manner as currently being used; *provided, however*, that nothing contained in herein shall be construed as relieving the Seller of its obligation hereunder to deliver the Acquired Assets to Buyer on the Closing Date in the condition required under Article XIII of this Agreement.

"**Person**" means any individual, corporation, partnership, joint venture, association, limited liability company, joint-stock company, trust, or unincorporated organization, or any Governmental Authority or other entity.

"**Personnel**" means the employees of the Seller, and includes Union Personnel and Non-Union Personnel.

"**Policies**" and "**Policy**" have the meanings specified in Section 4.17(a).

"**Post-Closing Withdrawal Liability Payoff Amount**" has the meaning specified in Section 2.07(d).

"**Proposal**" means any written agreement, offer or proposal (including a letter of intent, term sheet, form of definitive agreement or definitive agreement) for a Sale Transaction.

"**Proposal Notice**" has the meaning specified in Section 7.05(b).

"**Purchase Price**" has the meaning specified in Section 3.01.

"**R&W Insurance Policy**" has the meaning specified in Section 10.01.

"**R&W Premium**" has the meaning specified in Section 10.01.

"**Rate Increase(s)**" has the meaning specified in Section 7.07(a).

"**RCRA**" means the Resource Conservation and Recovery Act, as amended.

"**Real Property**" has the meaning specified in Section 4.08(a).

"**Real Property Lease**" has the meaning specified in Section 4.08(b).

"**Regulated Asbestos Containing Material**" means regulated asbestos containing material as defined by 40 C.F.R. § 61.141.

"**Related Agreements**" means all agreements, instruments, ordinances and other documents contemplated by or executed and delivered by Buyer or Seller pursuant to this Agreement or in connection with the transactions contemplated hereby.

"**Release**" means any actual or threatened spilling, leaking, pumping, pouring, injecting, emptying, discharging, emitting, escaping, leaching, dumping, disposal, or release or migration of Hazardous Materials into the Environment, including the abandonment or discarding of barrels, containers and other receptacles containing any Hazardous Materials.

"**Remedial Action**" means any and all actions to (a) investigate, clean up, remediate, remove, treat, contain or in any other way address any Hazardous Materials in the Environment, (b) prevent the Release or threat of Release or minimize the further Release of any Hazardous Materials so it does not migrate or endanger public health or welfare or the indoor or outdoor Environment, and (c) perform pre-remedial studies and investigations and post-remedial monitoring, maintenance and care. The term "**Remedial Action**" includes any action which constitutes (i) a "removal", "remedial action" or "response" as defined by Section 101 of CERCLA, 42 U.S.C. §§ 9601(23), (24), and (25); (ii) a "corrective action" as defined in RCRA, 42 U.S.C. § 6901 et seq.; or (iii) a "response" or "interim response" as defined in the Pennsylvania Hazardous Sites Cleanup Act, 35 P.S. §6020.103.

"**Representative**" means, with respect to any Person, any director, officer, agent, employee, general partner, member, shareholder, advisor or other authorized representative of such Person.

"**Retained Equipment and Machinery**" has the meaning specified in Section 2.02(i).

"**Review Period**" has the meaning specified in Section 3.02(c).

"**Revised CSO Control Measures Plan**" means any revisions, amendments or changes to the CSO Control Measures Plan that is submitted and approved by EPA and PaDEP in accordance with the Consent Decree.

"**RFP**" has the meaning specified in the recitals to this Agreement.

"**ROFR Sale Transaction**" has the meaning specified in Section 7.05(d).

"**ROFR Sale Transaction Negotiation Period**" has the meaning specified in Section 7.05(d).

"**Sale Proposal Review Period**" has the meaning specified in Section 7.05(b).

"**Sale Transaction**" means any proposed sale, lease, liquidation or transfer of all or substantially all of the System or the Acquired Assets by Buyer, and including any other assets of Buyer or its Affiliates included in such proposed transaction; *provided*, that the term "Sale Transaction" excludes any sale or transfer of the equity interests, or all or substantially all the assets, of Buyer, Buyer Parent or any of their respective Affiliates.

"**Schedules**" means the disclosure schedules delivered by the Seller and Buyer respectively, concurrently with the execution and delivery of this Agreement, and as may be updated by a Seller Schedule Supplement or a Buyer Schedule Supplement, respectively.

"**Seller**" has the meaning specified in the Preamble of this Agreement.

"**Seller Indemnified Persons**" has the meaning specified in Section 8.03.

"**Seller NPDES Permit**" means the National Pollutant Discharge Elimination System Permit No. PA0026492 issued by PaDEP to the Seller with respect to the System.

"**Seller Post-Signing Event**" has the meaning specified in Section 9.03.

"**Seller Proposal Notice**" has the meaning specified in Section 7.05(c).

"**Seller Schedule Supplement**" has the meaning specified in Section 9.03.

"**Seller Successor**" has the meaning specified in Section 15.13(c).

"**Seller's Benefit Obligations**" have the meaning specified in Section 4.12.

"**Seller's Plans**" have the meaning specified in Section 4.12.

"**Service Area**" has the meaning specified in the recitals to this Agreement.

"**Stormwater System Assets**" means all assets owned by the Seller, the City or the Borough and used exclusively in the operation or maintenance of the MS4 System, including (i) drains, pipes and collection basins and all other stormwater drainage assets used exclusively for stormwater collection, conveyance and discharge; (ii) catch basins, inlets, pipes and all other stormwater lateral facilities (the "**Stormwater Lateral Facilities**") that connect surface stormwater drains to storm conveyances which discharge to surface waters, and (iii) the City NPDES Permit. Stormwater System Assets shall not include the Combined Sewer System Assets or any other property that is jointly used for (a) the collection, transportation and treatment of stormwater or otherwise in the operation of the stormwater system and (b) the operation of the System, including the Stormwater Lateral Facilities that connect surface stormwater drains to Combined Sewer System Assets mains.

"**Straddle Period**" has the meaning specified in Section 7.01.

"**Substantially Comparable Compensation and Benefits**" means wages, health/welfare, including holidays, vacation time, sick time, bereavement benefits and any personal days, as applicable, and retirement benefits that are, on an actuarial basis, substantially comparable to the aggregate value of Seller's then current wages, health/welfare plans and retirement benefit plans for current employees as of the Closing Date; provided however that any changes to Seller's wages, health/welfare and retirement benefits shall only be as allowed for by Section 9.01.

"**Supplies**" means all lubricants, spare parts, fuel, chemicals, raw materials, and other supplies and inventory, and all rights to warranties received from suppliers with respect to the foregoing, and related claims, credits, and rights of recovery with respect thereto.

"**System**" has the meaning specified in the recitals to this Agreement.

"**Target Cash**" means $38,340,626.

"**Tax**" or "**Taxes**" means all federal, state, local, foreign and other income, gross receipts, sales, use, production, ad valorem, transfer, franchise, registration, profits, license, lease, service, service use, withholding, payroll, employment, unemployment, estimated, excise, severance, environmental, stamp, occupation, premium, property (real or personal), real property gains,

windfall profits, customs, duties or other taxes, fees, assessments or charges of any kind whatsoever, together with any interest, additions or penalties with respect thereto and any interest in respect of such additions or penalties.

"**Tax Return**" means any return, declaration, form, report, claim, informational return (including all Forms 1099), election, disclosure, estimate or statement required to be filed with any Governmental Authority with respect to Taxes, including any schedule or attachment thereto or amendment thereof.

"**Taxing Authority**" means, with respect to any Tax or Tax Return, the Governmental Authority that imposes such Tax or requires a Person to file such Tax Return and the agency (if any) charged with the collection of such Tax or the administration of such Tax Return, in each case, for such Governmental Authority.

"**Threshold Amount**" has the meaning specified in Section 8.05(a).

"**Title Commitment**" has the meaning specified in Section 6.02(a).

"**Title Company**" has the meaning specified in Section 6.02(a).

"**Title Objection Items**" has the meaning specified in Section 6.02(a).

"**Title Policy**" has the meaning specified in Section 2.03.

"**Transaction Expense Amount**" means the sum of (a) the R&W Premium, *plus* (b) the aggregate amount of Transfer Taxes for which the Seller is responsible pursuant to Section 3.04 being paid by Buyer at the Closing, if any.

"**Transfer Taxes**" has the meaning specified in Section 3.04.

"**Transferred Personnel**" has the meaning specified in Section 7.04(a).

"**Transition Plan**" has the meaning specified in Section 7.06(d).

"**Trustees**" has the meaning specified in Section 2.07(a).

"**UCC Search**" has the meaning specified in Section 6.03.

"**Union**" means Teamsters Union Local 229.

"**Union Personnel**" means Personnel who are members of the Union.

"**Variance Adjustment**" has the meaning specified in Section 7.07(d).

"**WARN Act**" has the meaning specified in Section 4.13(d)(i).

"**Wastewater Treatment Plant**" means the wastewater treatment plant owned and operated by the Seller located at Cedar Avenue and Breck Street, Scranton, PA, with a permitted

average flow capacity of 20 million gallons per day, as authorized by PaDEP Water Quality Management Part II Permit No. 3510401.

"**Water System**" has the meaning specified in the Preamble of this Agreement.

"**Withdrawal Liability**" has the meaning specified in Section 2.07(a).

"**Withdrawal Liability Escrow Account**" has the meaning specified in Section 3.01(c).

"**Withdrawal Liability Escrow Amount**" has the meaning specified in Section 2.07(b).

"**Withdrawal Liability Escrow Release Date**" has the meaning specified in Section 2.07(c).

"**Withdrawal Liability Payoff Amount**" has the meaning specified in Section 2.07(a).

Other Defined Terms	**Defined in Section:**
Act 11	Section 7.09(a)(x)
Accounting Referee	Section 3.02(c)(iii)
Disputed Amounts	Section 3.02(c)(iii)
DOJ	Section 7.06(c)
Excluded Intellectual Property	Section 2.02(d)
Interim Financial Statements	Section 4.05
Post-Closing Adjustment	Section 3.02(b)(ii)
Resolution Period	Section 3.02(c)(ii)
Statement of Objections	Section 3.02(c)(ii)

ARTICLE II.

TERMS OF PURCHASE AND ASSUMPTION OF LIABILITIES

Section 2.01. **Purchase and Sale of Acquired Assets.** Subject to the terms and conditions set forth in this Agreement, at the Closing, Buyer shall purchase from the Seller and the Seller shall sell, transfer, assign, convey and deliver to Buyer, free and clear of all Liens other than Permitted Liens, all of the Seller's right, title and interest in and to all assets, properties, business, goodwill and rights of the Seller of every kind and description, whether tangible or intangible, real, personal or mixed, wherever situated, in each case used in, held for use in, or acquired or developed for use in, the System, or otherwise related to, or arising out of, the operation or conduct of the System (whether or not any such assets have any value for accounting purposes or are carried or reflected on the books or financial statements of the Seller), but in all cases other than the Excluded Assets (the foregoing, collectively, the "Acquired Assets"), including:

(a) all real property and appurtenant interests, Easements, rights of way, property rights and privileges owned, licensed or leased by the Seller including the Real Property, leases or licenses or other arrangements by or between the Seller and third Persons of the Real Property or other Acquired Assets (and any guaranties or other credit enhancement in connection therewith), and fixtures;

(b) all cash and cash equivalents, including accounts receivable;

(c) subject to Section 2.06, all rights in, to and under the Contracts listed on Schedule 2.01(c) (including any Contracts which may be added to Schedule 2.01(c) by the Seller following the date hereof and prior to the Closing at the written request or with the prior written consent of Buyer in accordance with Section 2.06(c)) (collectively, the "Assigned Contracts");

(d) all Supplies;

(e) all personal property and fixed assets, including all Equipment and Machinery owned, leased or licensed or otherwise used or usable by the Seller, and all system pipes, auxiliary equipment and plant equipment, other than the Retained Equipment and Machinery;

(f) all prepaid expenses and security deposits (including letters of credit and other noncash deposits);

(g) all Intellectual Property owned, licensed or otherwise used by the Seller, other than the Excluded Intellectual Property (the "Intellectual Property Assets");

(h) all other intangible assets, including, the benefit of third party representations, warranties and guarantees, correspondence and the computer software and programs (whether proprietary or not), including the intangible assets listed on Schedule 2.01(h);

(i) subject to Section 2.02(p), all Files and Records;

(j) subject to Section 2.06, all Licenses and Permits of or held by the Seller (to the extent transferrable to Buyer under applicable Law) (the "Acquired Authorizations"), including all Licenses and Permits which are environmental permits, the Seller NPDES Permit, other operating permits and those items listed or described on Schedule 4.16 hereto;

(k) all rights to any action, suit, claim or proceeding of any nature available to or being pursued by the Seller in respect of the System or any other Acquired Asset, whether arising by way of claim, counterclaim, right of recoupment or otherwise;

(l) the Combined Sewer System Assets; and

(m) all goodwill of the System.

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE SELLER MAKES NO EXPRESS OR IMPLIED REPRESENTATION OR WARRANTY OF ANY KIND WHATSOEVER, INCLUDING ANY REPRESENTATION AS TO THE PHYSICAL CONDITION OR VALUE OF ANY OF THE ACQUIRED ASSETS OR THE SYSTEM, OR

THE FUTURE PROFITABILITY OR FUTURE EARNINGS PERFORMANCE OF THE ACQUIRED ASSETS OR THE SYSTEM OR ANY FUTURE RATEMAKING THAT MAY BE ALLOWED BY THE PAPUC FOR ANY OF THE ACQUIRED ASSETS. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

Section 2.02. **Excluded Assets.** Notwithstanding anything herein to the contrary, the Acquired Assets shall not include the following assets, properties and rights of Seller (the "Excluded Assets"):

(a) the Stormwater System Assets;

(b) the Seller's telephone numbers and fax numbers;

(c) all Contracts other than the Assigned Contracts;

(d) all Intellectual Property set forth on Schedule 2.02(d) (the "Excluded Intellectual Property");

(e) the corporate seals, organizational documents, minute books, Tax Returns, books of account or other records having to do with the organization of Seller, all employee-related or employee benefit-related files or records, other than personnel files of Transferred Personnel, and any other books and records which Seller is prohibited from disclosing or transferring to Buyer under applicable Law and is required by applicable Law to retain;

(f) all insurance policies of Seller and rights to applicable claims and proceeds thereunder, except as otherwise provided in Section 7.13 and Section 15.04;

(g) all Seller's Plans and trusts or other assets attributable thereto;

(h) the assets, properties and rights specifically set forth on Schedule 2.02(h);

(i) the Equipment and Machinery specifically set forth on Schedule 2.02(i) (the "Retained Equipment and Machinery");

(j) the City NPDES Permit;

(k) any unamortized debt expenses;

(l) the accounts receivable set forth on Schedule 2.02(l) (the "Excluded Accounts Receivable"), which Schedule shall be delivered by Buyer to the Seller not less than three (3) Business Days prior to the Closing Date, and which Excluded Accounts Receivable shall be written off by the Seller concurrently with the Closing, and all Liens related thereto;

(m) all Liens held by the Seller with respect to accounts of customers of the System which are not transferrable to Buyer under applicable Law, other than Liens relating to the Excluded Accounts Receivable;

(n) the rights which accrue or will accrue to the Seller under this Agreement and the Related Agreements;

(o) the MS4 System Real Property, including the MS4 System Real Property listed on Schedule 2.02(o); and

(p) all privileged materials, documents and records of the Seller related solely to the sale of the System, including all such privileged materials, documents and records related solely to the negotiation, execution, delivery, or performance of this Agreement.

Section 2.03. **Conveyance of Title.** At the Closing, the Seller shall (i) sell, transfer, assign, convey and deliver to Buyer good and valid title to the Acquired Assets (other than Owned Real Property, Leased Real Property and Easements), (ii) grant, bargain, sell, transfer, assign and convey to Buyer all of the Seller's right, title and interest in and to a valid fee simple estate in the Owned Real Property included in the Acquired Assets, (iii) assign, transfer and convey to Buyer all of the Seller's right, title and interest in and to a valid leasehold estate in the Leased Real Property included in the Acquired Assets, and (iv) assign, transfer and convey to Buyer all of the Seller's right, title and interest in and to any and all Easements included in the Acquired Assets, including all Easements that are necessary for or used in connection with the operation of the System or to provide continuous and unimpeded rights of way for the Combined Sewer System Assets (including access thereto), in each case free and clear of all Liens, other than Permitted Liens. The Acquired Assets shall be conveyed by special warranty deeds, bills of sale, assignments and other instruments of transfer or conveyance reasonably satisfactory to Buyer and the Title Company. Title to the Real Property shall be insurable by the Title Company, at regular rates, as a good and marketable title, free and clear of all Liens and exceptions to coverage, except for Permitted Liens and otherwise as provided for in Section 6.02(a) below, pursuant to an owner's policy of title insurance on the American Land Title Association's ("ALTA") Owner's Form 2006 (the "Title Policy").

Section 2.04. **Assumption of Liabilities.**

(a) On the terms and subject to the conditions set forth in this Agreement and excluding the Excluded Liabilities, Buyer shall assume and agrees to pay, perform and discharge when due, only the following liabilities and obligations of the Seller and no others (the "Assumed Liabilities"): (1) liabilities and obligations arising under the Consent Decree (whether arising from, related to, or based on events or circumstances occurring prior to, on or after the Closing Date, and including the Seller's obligations and covenants set forth in the Consent Decree regarding implementation of the CSO Control Measures to be performed on or after the Closing) but excluding any Environmental Liabilities arising from the non-compliance events and conditions described in Schedule 4.14, (2) in the event that Buyer and the Union have agreed prior to the Closing to enter into the Amended CBA effective as of immediately following the Closing, liabilities and obligations under the Amended CBA (*provided*, that for the avoidance of doubt, in no event shall the Assumed Liabilities include any liabilities or obligations with respect to the Accrued PTO, which shall be cashed-out and paid in full to the applicable Union Personnel by the Seller in accordance with Section 7.04(c) (and in any event shall constitute an Excluded Liability)), (3) all liabilities and obligations related to the System or the Acquired Assets to the extent arising from, related to, or based on events or circumstances occurring after

the Closing, (4) all liabilities and obligations of the Seller arising under or to be performed under the executory portions of the Assigned Contracts after the Closing; *provided, however*, that Buyer will not assume or be responsible for any liabilities or obligations that arise from the Seller's breach of or default under any Assigned Contracts on or prior to the Closing Date, all of which liabilities and obligations constitute Excluded Liabilities, and (5) in the event that Buyer elects to assume any portion of the Outstanding Indebtedness at the Closing pursuant to Section 3.01, the Seller's obligations relating to such portion of the Outstanding Indebtedness so assumed by Buyer (but only to the extent of the Outstanding Indebtedness actually assumed by Buyer).

(b) Buyer shall not assume or be liable to pay any liabilities or obligations relating to the Excluded Liabilities or any other liabilities or obligations that are not Assumed Liabilities.

Section 2.05. **Subsequent Documentation; Further Acts.** At any time and from time to time after the Closing Date, the Seller shall, upon the request of Buyer, and Buyer shall, upon the request of the Seller, at the cost of requesting Party, promptly execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate, (a) the sale, transfer, assignment, conveyance and delivery hereunder of the Acquired Assets to Buyer, (b) the assumption by Buyer of any of the Assumed Liabilities, and (c) the vesting in Buyer of all right, title and interest in the Acquired Assets and the System as provided herein.

Section 2.06. **Certain Transfers; Assignment of Contracts.**

(a) Notwithstanding anything to the contrary in this Agreement, and subject to the provisions of this Section 2.06(a) and Section 2.06(b), to the extent that the sale, transfer, assignment, conveyance and delivery, or attempted sale, transfer, assignment, conveyance and delivery, to Buyer of any Assigned Contract or other Acquired Asset would result in a violation of applicable Law, or would require the consent, authorization, approval or waiver of any Person (other than the Parties hereto), including any Governmental Authority, and such consent, authorization, approval or waiver shall not have been obtained prior to the Closing, this Agreement shall not constitute a sale, transfer, assignment, conveyance and delivery, or an attempted sale, transfer, assignment, conveyance and delivery, thereof (any such Acquired Asset, a "Nonassignable Asset"). For a period of six (6) months following the Closing, the Seller and Buyer shall use commercially reasonable efforts (at the Seller's cost and expense), and shall cooperate with each other, to obtain any such required consent, authorization, approval or waiver, or any release, substitution, novation or amendment required to sell, transfer, assign, convey and deliver any such Nonassignable Asset to Buyer; *provided, however,* that in no event shall Buyer be required to pay any consideration therefor. Once such consent, authorization, approval, waiver, release, substitution or amendment is obtained, the Seller shall sell, transfer, assign, convey and deliver to Buyer the relevant Nonassignable Asset to which such consent, authorization, approval, waiver, release, substitution or amendment relates for no additional consideration, and such Nonassignable Asset shall thereafter constitute and be deemed an "Acquired Asset" for all purposes hereunder . Any applicable sales, transfer and other similar

Taxes in connection with such sale, transfer, assignment, conveyance and delivery shall be paid by Buyer and Seller pursuant to the provisions of Section 3.04(a).

(b) Until such time as a Nonassignable Asset is transferred to Buyer pursuant to this Section 2.06, Buyer and the Seller shall cooperate in any commercially reasonable and economically feasible arrangements (such as subleasing, sublicensing or subcontracting) to provide to the Parties the economic and, to the extent permitted under applicable Law, operational equivalent of the transfer of such Nonassignable Asset to Buyer at the Closing and the performance by Buyer of its obligations with respect thereto, and to the extent that the Seller transfers and turns over the economic and beneficial rights with respect to each such Nonassignable Asset, Buyer shall, to such extent and to the extent permitted under applicable Law and the terms of any applicable Contract that constitutes a Nonassignable Asset, as agent or subcontractor for the Seller, pay, perform and discharge the liabilities and obligations of the Seller thereunder from and after the Closing Date, but only to the extent that such liabilities and obligations would constitute Assumed Liabilities if the applicable consent or approval had been obtained on or prior to the Closing Date and such Nonassignable Asset had been assigned to Buyer at Closing. To the extent permitted under applicable Law, the Seller shall, at Buyer's expense, hold in trust for and pay to Buyer promptly upon receipt thereof, such Nonassignable Asset and all income, proceeds and other monies received by the Seller with respect to such Nonassignable Asset in connection with the arrangements under this Section 2.06.

(c) If, following the date hereof and prior to the Closing, Buyer identifies any Contract to which the Seller is a party which is not set forth on Schedule 2.01(c) as of the date hereof and Buyer desires for such Contract to be included in the Acquired Assets as an Assigned Contract, and Buyer reasonably determines that such Contract is used in, held for use in, or acquired or developed for use in, the System, or otherwise related to, or arising out of, the operation or conduct of the System, Buyer shall give notice of such determination to the Seller and, unless the Seller disagrees in good faith with Buyer's determination that such Contract is used in, held for use in, or acquired or developed for use in, the System, or otherwise related to, or arising out of, the operation or conduct of the System (in which case the Seller shall give Buyer notice of such disagreement and the Parties shall work together in good faith to resolve such dispute), the Seller shall, promptly following receipt of such notice, deliver to Buyer an updated Schedule 2.01(c) reflecting the addition of such Contract, and such Contract shall thereafter constitute and be deemed an "Assigned Contract" for all purposes hereunder (including, for the avoidance of doubt, the provisions of Section 2.06(a) and Section 2.06(b) to the extent applicable to such Contract from and after the Closing).

(d) In the event that, during the twelve (12) month period following the Closing, Buyer identifies any Contract to which the Seller was a party as of the Closing and which was not set forth on Schedule 2.01(c) (as may be updated pursuant to Section 2.06(c)) and (i) Buyer desires for such Contract to be assigned to Buyer and deemed an Assigned Contract as provided in this Section 2.06(d), and (ii) Buyer reasonably determines such Contract was, prior to the Closing, used in, held for use in, or acquired or developed for use in, the System, or otherwise related to, or arising out of, the operation or conduct of the System, unless the Seller disagrees in good faith with Buyer's determination that such Contract was not, as of or prior to the Closing, used in, held for use in, or acquired or developed for use in, the System, or otherwise related to, or arising out of, the operation or conduct of the System (in which case the Seller shall give

Buyer notice of such disagreement and the Parties shall work together in good faith to resolve such dispute) and Seller has not otherwise terminated such Contract on or after Closing, the Seller shall, promptly following Buyer's written request therefor, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate the assignment of such Contract to Buyer for no additional consideration, and upon such assignment, such Contract shall be deemed an "Assigned Contract" for all purposes hereunder. From the time that Buyer delivers written notice to the Seller in accordance with this Section 2.06(d) requesting that the Seller assign or cause the assignment of such Contract to Buyer until such Contract is assigned to Buyer, the provisions of Section 2.06(a) and Section 2.06(b) shall apply to such Contract as a Nonassignable Asset.

(e) For the avoidance of doubt, nothing contained in this Section 2.06 shall be applicable to the Easements or other matters with respect to the Real Property as of and following the Closing (including the transfer thereof following the Closing), which shall be governed exclusively by the terms of Article VI.

Section 2.07. **Withdrawal Liability.**

(a) Following the date hereof, and except as otherwise provided in Section 2.07(g) below, the Seller shall, and Buyer shall reasonably cooperate with the Seller to, request from the trustees of the Multiemployer Plan (the "Trustees") consent and agreement of the Trustees to the payment of an amount at Closing in full and final satisfaction of the withdrawal liability that would be assessed against the Seller for withdrawal from the Multiemployer Plan as of the Closing (the "Withdrawal Liability"). In the event that the Seller obtains the written consent of the Trustees, on terms reasonably acceptable to Buyer, to the payment at the Closing of an aggregate amount in full and final satisfaction of the Withdrawal Liability and the Seller's obligations with respect to the Multiemployer Plan (the "Withdrawal Liability Payoff Amount"), (i) the Seller shall deliver written evidence of such consent to Buyer prior to the Closing Date, which written evidence include instructions for the payment by Buyer at the Closing on behalf of the Seller, and shall otherwise be in form and substance reasonably acceptable to Buyer, and, (ii) subject to the foregoing clause (i), Buyer shall pay the Withdrawal Liability Payoff Amount on behalf of the Seller out of the proceeds of the sale at the Closing pursuant to Section 3.01(c).

(b) In the event that the Seller is unable to obtain the consent of the Trustees to the payment at Closing of the amount required to fully pay, satisfy and discharge the entire amount of the Withdrawal Liability as described in Section 2.07(a), then (i) the Seller and Buyer shall, each acting reasonably and in good faith (and taking into account the most recent estimate obtained by the Trustees of the amount required to fully and finally satisfy the Withdrawal Liability and the Seller's obligations with respect to the Multiemployer Plan as of a date reasonably proximate to the Closing Date), agree in writing prior to the Closing Date, on an estimate of the amount required to fully pay, satisfy and discharge the entire amount of the Withdrawal Liability (such amount, the "Estimated Withdrawal Liability Amount"), and (ii) Buyer shall, at the Closing, deliver to the Escrow Agent an amount equal to one hundred and ten percent (110%) of the Estimated Withdrawal Liability Amount (the "Withdrawal Liability Escrow Amount") pursuant to Section 3.01(c).

(c) The Escrow Agent shall hold the Withdrawal Liability Escrow Amount in the Withdrawal Liability Escrow Account until the date on which Buyer and the Seller, after having obtained the written consent of the Trustees to the payment of an aggregate amount in full and final satisfaction of the Withdrawal Liability and the Seller's obligations with respect to the Multiemployer Plan, on terms reasonably acceptable to Buyer, jointly instruct the Escrow Agent in writing to disburse the Withdrawal Liability Escrow Amount as provided herein (such date, the "Withdrawal Liability Escrow Release Date").

(d) On the Withdrawal Liability Escrow Release Date, the Seller and Buyer shall jointly instruct the Escrow Agent in writing to make payment by wire transfer of immediately available funds from the Withdrawal Liability Escrow Account directly to the account or accounts specified in the written consent of the Trustees, in the amount (such amount, the "Post-Closing Withdrawal Liability Payoff Amount") equal to the amount set forth in the written consent of the Trustees as described in Section 2.07(c).

(e) If the Post-Closing Withdrawal Liability Payoff Amount is an amount that exceeds the aggregate amount of funds in the Withdrawal Liability Escrow Account on the Withdrawal Liability Escrow Release Date, the Seller shall, concurrently with the disbursement by the Escrow Agent of the entire balance of the Withdrawal Liability Escrow Account, pay (by wire transfer of immediately available funds) to the account or accounts specified in the written consent of the Trustees, the amount of such excess.

(f) If the Post-Closing Withdrawal Liability Payoff Amount is an amount that is less than the aggregate amount of funds in the Withdrawal Liability Escrow Account on the Withdrawal Liability Escrow Release Date, the Seller and Buyer shall jointly instruct the Escrow Agent in writing to make payment, by wire transfer of immediately available funds from the Withdrawal Liability Escrow Account to the Seller in an amount, if any, of the balance of any funds remaining in the Withdrawal Liability Escrow Account immediately following the payment of the Post-Closing Withdrawal Liability Payoff Amount.

(g) Notwithstanding the foregoing provisions of this Section 2.07, following the Effective Date, it is agreed that the Seller and Buyer shall enter into good faith discussions surrounding the possible application of the asset sale exception pursuant to Section 4204 of ERISA as an alternative to the payment of the Withdrawal Liability as provided in the foregoing provisions of this Section 2.07, *provided* that the Parties acknowledge and agree that unless and only in the event that the Seller and Buyer agree in writing prior to the Closing Date to mutually satisfactory terms regarding the implementation of the asset sale exception pursuant to Section 4204 of ERISA in connection with the transactions contemplated by this Agreement, the foregoing provisions of this Section 2.07 shall be applicable.

ARTICLE III.

PURCHASE PRICE

Section 3.01. **Purchase Price.** The purchase price for the sale, transfer, assignment, conveyance and delivery hereunder of the Acquired Assets to Buyer hereunder shall be One Hundred Ninety Five Million Dollars ($195,000,000) (the "Base Amount"), which, subject to

any adjustment pursuant to Section 3.02 (the "Purchase Price") shall be paid as follows at Closing:

(a) Buyer shall (i) pay in full (in the case of Outstanding Indebtedness then subject to prepayment or redemption) or make provision for the payment in full so as to effect a legal defeasance of (in the case of Outstanding Indebtedness not then subject to prepayment or redemption), on behalf of the Seller, the total amount of Outstanding Indebtedness as of the Closing Effective Time (the "Closing Outstanding Indebtedness Amount"), *less* any amount of the Outstanding Indebtedness actually assumed by Buyer pursuant to clause (ii) of this Section 3.01(a), and (ii) subject to Section 7.11 and at Buyer's sole and absolute discretion, assume such portion of the Outstanding Indebtedness (if any) as Buyer, in its sole and absolute discretion, elects to assume and which may be lawfully assigned to and assumed by Buyer pursuant to applicable Law and the terms of the Contracts governing the Outstanding Indebtedness, subject to obtaining the written release of the Seller and the City from all obligations thereunder in such form and terms reasonably acceptable to the Seller.

(b) Buyer shall pay to the Escrow Agent an amount equal to Five Million Dollars ($5,000,000) (the "Escrow Amount"), to be held by the Escrow Agent pursuant to the terms of the Escrow Agreement in a segregated account (the "Escrow Account") for a period of up to the Escrow Release Date, to be utilized to fund any payments required to be made in connection with any claim made pursuant to Article VIII;

(c) subject to Section 2.07, Buyer shall pay (i) to the account or accounts specified in the written consent of the Trustees as described in Section 2.07, on behalf of the Seller, the Withdrawal Liability Payoff Amount, or (ii) to the Escrow Agent, an amount equal to the Withdrawal Liability Escrow Amount, to be held by the Escrow Agent pursuant to the terms of the Escrow Agreement in a segregated account (the "Withdrawal Liability Escrow Account") for a period of up to the Withdrawal Liability Escrow Release Date, to be utilized as provided in Section 2.07; and

(d) Buyer shall pay to the Seller by wire transfer of immediately available funds an amount equal to the Base Amount (i) *plus* the Estimated Closing Cash Increase (if any) or *minus* the Estimated Closing Cash Reduction (if any), (ii) *minus* the Closing Outstanding Indebtedness Amount, (iii) *minus* the Escrow Amount, (iv) *minus* (x) the Withdrawal Liability Payoff Amount or (y) the Withdrawal Liability Escrow Amount, as the case may be, and (v) *minus* the Transaction Expense Amount, to one or more accounts that the Seller designates in writing and provides to Buyer at least three (3) Business Days prior to the Closing Date.

Section 3.02. **Purchase Price Adjustment.**

(a) Estimated Closing Cash. No less than three (3) Business Days prior to the Closing Date, the Seller shall prepare a statement (the "Estimated Closing Cash Statement") setting forth the estimated aggregate amount of the Closing Cash Balance, as determined in good faith by the Seller (the "Estimated Closing Cash Balance") and prepared and calculated accordance with the manner of determination and calculation (as applicable), using the same line items, accounting principles, practices, procedures, policies and methods (with consistent classifications, judgments, elections, inclusions, exclusions and valuation and estimation

methodologies) used and applied in preparing the Interim Financial Statements, and which Estimated Closing Cash Statement shall set forth the actual amount paid by the Seller prior to the Closing to cash-out the Accrued PTO in accordance with Section 7.04(c), and the portion thereof attributable to the cash-out of the Accrued Sick Bank. In the event that the Estimated Closing Cash Balance exceeds the Target Cash, then the Purchase Price will be increased by the amount of such difference and such increase shall be paid to the Seller at Closing in the manner provided in Section 3.01 above (the amount of any such increase, the "Estimated Closing Cash Increase"). In the event that the Target Cash exceeds the Estimated Closing Cash Balance, then the Purchase Price (and the amount payable by Buyer at Closing) will be reduced by the amount of such difference (the amount of any such reduction, the "Estimated Closing Cash Reduction"). The Purchase Price, as adjusted pursuant to this Section 3.02(a), shall be subject to further adjustment following the Closing as provided in Section 3.02(b).

(b) Post-Closing Adjustments.

(i) Within ninety (90) days after the Closing Date, Buyer shall prepare and deliver to the Seller a statement (the "Closing Cash Statement") setting forth Buyer's good faith calculation of the Closing Cash Balance, prepared and calculated accordance with the manner of determination and calculation (as applicable), using the same line items, accounting principles, practices, procedures, policies and methods (with consistent classifications, judgments, elections, inclusions, exclusions and valuation and estimation methodologies) used and applied in preparing the Interim Financial Statements.

(ii) The "Post-Closing Adjustment" shall be an amount equal to the Estimated Closing Cash Balance minus the Closing Cash Balance, as finally determined pursuant to Section 3.02(c). If the Post-Closing Adjustment is a positive number, Buyer shall pay to the Seller an amount equal to the Post-Closing Adjustment in accordance with Section 3.02(c)(vi) below. If the Post-Closing Adjustment is a negative number, the Seller shall pay to Buyer an amount equal to the Post-Closing Adjustment (expressed as a positive number) in accordance with Section 3.02(c)(vi) below.

(c) Examination and Review.

(i) After receipt of the Closing Cash Statement, the Seller shall have forty-five (45) days (the "Review Period") to review the Closing Cash Statement. During the Review Period, the Seller and the Seller's Representatives shall have reasonable access (during normal business hours upon reasonable advance notice) to, including by being furnished copies of, such financial information (to the extent in Buyer's or its Representatives' possession) and documents to the extent used in or directly relating to the preparation of the Closing Cash Statement as the Seller may reasonably request for the purpose of reviewing the Closing Cash Statement and to prepare a Statement of Objections.

(ii) The Seller may object to the Closing Cash Statement by delivering to Buyer, no later than the last day of the Review Period, a written statement setting forth the Seller's objections in reasonable detail, indicating each disputed item or amount and the basis for the Seller's disagreement therewith (the "Statement of Objections");

provided that the Seller's grounds for any such objections shall be limited to fixing manifest errors and omissions, including mathematical errors or omissions, in Buyer's calculations and claims that the items in dispute were not calculated and determined in accordance with the accounting principles and procedures set forth in this Agreement. If the Seller fails to deliver the Statement of Objections before the expiration of the Review Period, the Closing Cash Statement (as prepared by Buyer) and the Post-Closing Adjustment reflected in the Closing Cash Statement shall be deemed to have been accepted by the Seller and shall be deemed final and binding on the Parties for all purposes hereunder. If the Seller delivers the Statement of Objections before the expiration of the Review Period, Buyer and the Seller shall negotiate in good faith to resolve such objections within thirty (30) days after the delivery of the Statement of Objections (the "Resolution Period"), and, if each disputed item properly included in the Statement of Objections is resolved in writing within the Resolution Period, the Post-Closing Adjustment and the Closing Cash Statement, with such changes as are agreed in writing by Buyer and the Seller during the Resolution Period, shall be final and binding upon the Parties for all purposes hereunder.

(iii) If the Seller and Buyer fail to reach an agreement with respect to all of the matters set forth in the Statement of Objections before expiration of the Resolution Period, then any amounts remaining in dispute ("Disputed Amounts") shall be submitted for resolution to RSM US LLP or such other regionally recognized firm of independent certified public accountants mutually agreed upon by the Parties other than the accountants of Buyer or the Seller or their Affiliates (the "Accounting Referee") who, acting as experts and not arbitrators, shall resolve the Disputed Amounts only and make any adjustments to the Closing Cash Statement and the Post-Closing Adjustment to reflect the resolution of such Disputed Amounts. The Accounting Referee shall only decide the specific Disputed Amount, and the scope of the disputes to be resolved by such Accounting Referee shall be limited to fixing mathematical errors and determining whether the items in dispute were calculated and determined in accordance with the accounting principles and procedures set forth in this Agreement, and the Accounting Referee's decision for each Disputed Amount must be within the range of values assigned to each such item in the Closing Cash Statement and the Statement of Objections, respectively.

(iv) All fees and costs of the Accounting Referee will be borne pro rata by Buyer and the Seller in proportion to the difference between the Accounting Referee's determination of Post-Closing Adjustment and the Seller's and Buyer's determination of such Post-Closing Adjustment. For example, if the Seller's determination differs by $20,000 from the Accounting Referee's determination, but Buyer's determination only differs by $5,000, the Seller will bear 20/25 (or 80%) of such fees and costs and Buyer will bear 5/25 (or 20%) of such fees and costs.

(v) The Accounting Referee shall make a determination as soon as practicable within thirty (30) days (or such other time as the Parties shall agree in writing) after their engagement, and their resolution of the Disputed Amounts and their adjustments to the Closing Cash Statement and the Post-Closing Adjustment shall be conclusive and binding upon the Parties.

(vi) Payment of the Post-Closing Adjustment shall (A) be due (x) within five (5) Business Days following the expiration of the Review Period (if the Seller does not timely deliver a Statement of Objections) or (y) if the Seller timely delivers a Statement of Objections, then within five (5) Business Days following the earlier to occur of (1) written agreement of the Parties with respect to the resolution of all items in dispute, or (2) final resolution by the Accounting Referee; and (B) be paid by wire transfer of immediately available funds to such accounts as are directed in writing by Buyer or the Seller, as the case may be.

(d) Any payments made pursuant to this Section 3.02 shall be treated as an adjustment to the Purchase Price by the Parties for Tax purposes, unless otherwise required by applicable Law.

(e) Any payment or distribution to customers of the Variance Adjustment made pursuant to Section 7.07 shall be treated as an adjustment to the Purchase Price by the Parties for Tax purposes and any other purposes under applicable Law, unless otherwise required by applicable Law.

Section 3.03. **Allocation of the Purchase Price.** Buyer and the Seller agree that the Purchase Price (which for purposes of this Section 3.03 shall include any liabilities required to be treated as part of the Purchase Price for U.S. federal income Tax purposes), as may be adjusted pursuant to Section 3.02, shall be allocated among the Acquired Assets in accordance with the allocation reflected in a schedule prepared by Buyer in accordance with this Section 3.03 (the "Allocation Schedule") as required by the Code. Within sixty (60) days following the final determination of the Purchase Price pursuant to Section 3.02, Buyer shall deliver to the Seller a draft of the Allocation Schedule setting forth Buyer's proposed allocation for the Seller's review. The Seller shall have the right to review and reasonably comment upon Buyer's proposed Allocation Schedule, *provided*, that (a) such proposed Allocation Schedule shall be deemed approved by the Seller and shall be final and binding upon the Parties unless the Seller provides written notice of the Seller's comments to one or more items reflected in the proposed Allocation Schedule within twenty (20) Business Days after delivery of the proposed Allocation Schedule to the Seller, and (b) upon receipt of any such written comments from the Seller with respect to the proposed Allocation Schedule, Buyer may make such adjustments or revisions to the proposed Allocation Schedule based on the Seller's comments as Buyer determines in good faith to be necessary and appropriate, *provided further*, that Buyer shall have no obligation to make any such adjustments or revisions absent manifest error. The Parties shall adhere to the Allocation Schedule (as finally determined pursuant to this Section 3.03) for all purposes relevant to the calculation of federal or state Taxes, and will report the transactions contemplated herein in a manner consistent with such Allocation Schedule. Except as required by applicable Law, Buyer and the Seller shall not take any position on their respective Tax Returns that is inconsistent with the Allocation Schedule.

Section 3.04. **Transfer Taxes; Bulk Sales.**

(a) Any and all deed stamps or transfer Taxes which may be due the Commonwealth of Pennsylvania or any political subdivision in connection with the sale, transfer, assignment, conveyance and delivery hereunder of the Acquired Assets to Buyer (collectively, "Transfer

Taxes"), shall, except as otherwise provided below, be borne seventy five percent (75%) by Buyer and twenty five percent (25%) by the Seller, and in the event that Buyer pays the full amount of any such Transfer Taxes following the Closing, the Seller shall promptly, and in any event within five (5) Business Days, following Buyer's request therefor, pay to Buyer an amount equal to twenty five percent (25%) of any such Transfer Taxes so paid by Buyer, *provided, that*, the Seller's obligation to pay such Transfer Taxes hereunder is limited to an aggregate amount of $100,562.28 and in no event shall the Seller be required to pay any Transfer Taxes in excess of such amount. Without limiting the foregoing, in the event that Buyer is required under applicable Law, or elects in its sole discretion, to pay any Transfer Taxes at the Closing, then Buyer shall give written notice to the Seller prior to the Closing Date of such payment, which notice shall include the aggregate amount of such Transfer Taxes being paid at Closing and the portion for which the Seller is responsible (which, for the avoidance of doubt, shall be the lesser of (x) twenty five percent (25%) of such Transfer Taxes being paid at the Closing or (y) $100,562.28), and upon Buyer's delivery of such notice, the Seller's portion of such Transfer Taxes shall be included in the Transaction Expense Amount for purposes of Section 3.01(d). The terms hereof shall survive Closing.

(b) The Parties hereby waive compliance with the provisions of any bulk sales, bulk transfer or similar Laws of any jurisdiction that may otherwise be applicable with respect to the sale of any or all of the Acquired Assets to Buyer.

ARTICLE IV.

REPRESENTATIONS AND WARRANTIES OF THE SELLER

The Seller makes only the representations and warranties which are set forth in this Article IV. Any matter, information or item disclosed on any particular Schedule delivered by the Seller which is numbered to correspond to the representations and warranties contained in this Article IV shall be deemed to have been disclosed in response to such other representations or warranties in this Article IV in respect of which such disclosure is reasonably apparent on its face notwithstanding the omission of an appropriate cross-reference.

As a material inducement to Buyer to enter into this Agreement and to consummate the transactions contemplated hereby, the Seller represents and warrants to Buyer, as of the date hereof and as of the Closing Date, as follows:

Section 4.01. **Existence and Power.** The Seller is a municipal authority under the Municipality Authorities Act, as enacted by the Commonwealth of Pennsylvania, as amended, and in good standing under the Laws of the Commonwealth of Pennsylvania. The Seller has all requisite power and authority to own, lease and operate the Acquired Assets and the System, to sell and transfer in the manner described herein the Acquired Assets to Buyer and to enter into, execute and deliver this Agreement and the Related Agreements and perform its obligations hereunder and thereunder.

Section 4.02. **Authorization and Validity of Agreement.** The execution and delivery of this Agreement and the Related Agreements by the Seller and the consummation by the Seller of the transactions contemplated by this Agreement and the Related Agreements have been duly

and validly authorized by all necessary action on the part of the Seller, and no other proceedings on the part of the Seller are necessary to authorize the execution, delivery and performance of this Agreement or any applicable Related Agreement. This Agreement has been duly executed and delivered by the Seller and constitutes, and the Related Agreements, when executed and delivered, will constitute legal, valid and binding obligations of the Seller, enforceable against the Seller in accordance with their respective terms and conditions, except to the extent that enforceability may be limited by applicable bankruptcy, insolvency, reorganization or other Laws affecting the enforcement of creditors' rights generally. A true, correct and complete copy of the authorizing resolutions duly adopted by the Authority Board is attached hereto as Exhibit D, which resolutions have not been, and as of the Closing will not have been, revoked, rescinded or amended.

Section 4.03. **No Conflict or Violation.** Except as set forth on Schedule 4.03, the execution, delivery and performance of this Agreement and the Related Agreements by the Seller do not and shall not: (a) violate or conflict with, or result in a breach or constitute a default under, any provision of the charter, bylaws or other similar organizational or governing documents of the Seller, (b) violate, conflict with, result in a breach or constitute a default under any provision of, or require any Governmental Approval or any notice, filing, consent, authorization or approval under, any Licenses and Permits held by the Seller or any applicable Law of any Governmental Authority having jurisdiction over the Seller, the System or any of the Acquired Assets, or the City, the Borough, or their respective assets or properties, (c) violate, conflict with, or result in a breach of or constitute (with due notice or lapse of time or both) a default under any provision of, or require any notice, filing, consent, authorization or approval under, or give rise to any rights of termination, amendment, modification, acceleration or cancellation of or loss of any benefit under, or result in the creation of any Lien on any of the Acquired Assets or any other material assets or properties of Seller (other than Permitted Liens) pursuant to, any Contract to which the Seller is a party, or by which any of the Acquired Assets or any other material assets and properties of the Seller are bound or subject, or (d) result in the imposition of any Liens or other restrictions on the System or any of the Acquired Assets, other than Permitted Liens, except, in the case of the foregoing clauses (b), (c) and (d), where such violation, conflict, breach, default, requirement, or resulting Lien or other restriction would not reasonably be expected to have a material and adverse effect on the System or any of the Acquired Assets (or Buyer's ownership or operation thereof following the Closing) or materially impair the Seller's ability to timely consummate the transactions contemplated hereby or perform its obligations hereunder.

Section 4.04. **Consents and Approvals.** Schedule 4.04 sets forth a list of each consent, waiver, authorization or approval of any Governmental Authority, or of any other Person, and each declaration or notice to or filing or registration with any Governmental Authority required to be obtained, given or made by the Seller in connection with the execution and delivery of this Agreement and each Related Agreement by the Seller and the performance by the Seller of its obligations hereunder and thereunder.

Section 4.05. **Financial Statements.**

(a) Schedule 4.05 sets forth the following financial statements of the Seller (collectively, the "Financial Statements"): (i) the audited financial statements of the Seller for

the fiscal years ended March 31, 2015, March 31, 2014 and March 31, 2013, which consist of the statements of net position and statements of revenues, expenses and changes in net position for the fiscal years then ended (the "Audited Financial Statements"), and (ii) the unaudited balance sheet as of January 31, 2016 and the related unaudited income statement for the ten-month period then ended (the "Interim Financial Statements"). Except as set forth on Schedule 4.05, the Financial Statements have been prepared and presented in accordance with the applicable standards for financial reporting of the GASB, consistently applied, and fairly present, in all material respects, the financial condition and results of operations of the Seller as of the respective dates of, and for the periods referred to in, the Financial Statements, subject in the case of the Interim Financial Statements, to the absence of footnote disclosures and normal year-end adjustments which, if presented, would not be material in amount or differ materially from those presented in the Audited Financial Statements.

(b) The Seller has established and maintains, adheres to and enforces a system of internal accounting controls which are, in all material respects, effective in providing assurance regarding the reliability of financial reporting and the preparation of financial statements (including the Financial Statements) in accordance with GASB, including policies and procedures that (i) require the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Seller and the System, (ii) provide assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GASB, and that receipts and expenditures of the Seller and the System are being made only in accordance with appropriate authorizations of management and (iii) provide assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the assets of the Seller and the System.

(c) There are no liabilities, obligations, indebtedness, debts, or commitments of any nature whatsoever, whether asserted or unasserted, known or unknown, absolute or contingent, accrued or unaccrued, matured or unmatured or otherwise, of the Seller or the System, other than liabilities (i) adequately reflected in or reserved against in the Interim Financial Statements, (ii) incurred in the ordinary course of business since the date of the Interim Financial Statements consistent with past practice and which are not, individually or in the aggregate material (in amount or otherwise), (iii) incurred under Contracts to which the Seller is a party on the Effective Date with respect to the performance by the Seller of its obligations thereunder in the ordinary course of business (other than any liabilities or obligations that arise from the Seller's breach of, or default under, any such Contracts), (iv) related to undrawn amounts under Outstanding Indebtedness or (v) disclosed in Schedule 4.05(c).

Section 4.06. **Absence of Certain Changes or Events.** Except as reflected in the Financial Statements, or as set forth on Schedule 4.06, since March 31, 2015, (x) the Seller has operated the System in the ordinary course of business consistent with past practice, and (y) there has not been any:

(a) change, event or condition (whether or not covered by insurance) that has had, or would reasonably be expected to have, a Material Adverse Effect;

(b) (i) increase in the compensation payable or to become payable to any Personnel, except for normal periodic increases in the ordinary course of business consistent with past

practice or obligations of the Seller pursuant to the terms of the Collective Bargaining Agreement, (ii) bonus, incentive compensation, service award or other like benefit granted, made or accrued, contingently or otherwise, for or to the credit of any Personnel, (iii) employee welfare, pension, retirement, profit sharing, or similar payment or arrangement made or agreed to by the Seller for any Personnel, or (iv) entry by the Seller into any employment agreement or similar Contract with any Personnel;

(c) establishment of, addition or amendment to or modification of any employee benefit plan, arrangement, or practice described in Schedules 4.12(b), (c), or (d);

(d) sale, assignment or transfer of any assets or properties of the Seller used in, or necessary or important to, the operation of the System, except for the disposal of obsolete assets in the ordinary course of business;

(e) failure to repay or discharge any material obligation or liability of the Seller;

(f) failure to operate the System in the ordinary course or to preserve the System intact;

(g) material damage, destruction or loss involving or affecting the Acquired Assets or the System, or any material interruption in use of any Acquired Assets, in either case whether or not covered by insurance;

(h) action to incur, increase or modify any indebtedness, obligations or liabilities with respect to the System or the Acquired Assets (including any Assumed Liabilities) or that subject any Acquired Assets to any Liens, other than Permitted Liens;

(i) agreements, waivers, permits, fees, charges, or other burdens of any nature imposed on the System by the Seller, the City or the Borough for the benefit of the Seller, the City or the Borough;

(j) action taken, or failure to take any action, by or on the part of the Seller, the City or the Borough which, had such action been taken or such failure occurred after the date of this Agreement, would have violated the covenants in Section 9.01; or

(k) agreement by the Seller, the City or the Borough to do any of the foregoing.

Section 4.07. **Tax Matters.** Except as set forth in Schedule 4.07, (i) the Seller has timely paid all Taxes that may have been or may be due and payable by the Seller arising from the ownership or operation of the Acquired Assets or the System; (ii) all Tax Returns required to be filed by the Seller or with respect to the System have been timely (within any applicable extension periods) filed, and all such Tax Returns are true, complete and correct in all material respects; (iii) the Seller has established reserves or accruals on the Financial Statements that are adequate for the payment of Taxes, if any, for all periods through the Closing Date; (iv) no Taxing Authority has asserted any claim against the Seller for the assessment of any additional Tax liability or initiated any action or proceeding which could result in such an assertion; and (v) the Seller has made all withholding of Taxes required to be made under all applicable Laws and

regulations, including withholding with respect to compensation paid to employees, and the amounts withheld have been properly paid over to the appropriate Taxing Authorities.

Section 4.08. **Real Property.**

(a) Schedule 4.08 contains a description of (i) each Owned Real Property included in the Acquired Assets and (ii) each Leased Real Property included in the Acquired Assets. Such Owned Real Property and such Leased Real Property, together with the Held Easements are collectively referred to herein as the "Real Property". As of the Effective Date, there are no pending condemnation proceedings relating to any of the Owned Real Property included in the Acquired Assets or any of the Leased Real Property included in the Acquired Assets, nor written threats of any condemnation proceedings with respect to such Owned Real Property or Leased Real Property. As of the Closing, there are no pending condemnation proceedings relating to any of the Real Property nor written threats of any condemnation proceedings with respect to the Real Property. To the Knowledge of the Seller, (1) as of the Effective Date, the Seller is not in violation of any Law, the Seller has not received any written notice from any Governmental Authority that it is in violation of an applicable Law with respect to any of the Owned Real Property included in the Acquired Assets or any of the Leased Real Property included in the Acquired Assets, or its interests thereunder, except for such violation that has been cured in all material respects by the Seller and for which the Seller has received confirmation of cure from the Governmental Authority, and (2) as of the Closing, the Seller is not in violation of any Law, the Seller has not received any written notice from any Governmental Authority that it is in violation of an applicable Law with respect to the Real Property or its interests thereunder, except for such violation that has been cured in all material respects by the Seller and for which the Seller has received confirmation of cure from the Governmental Authority.

(b) The Seller has valid and subsisting leasehold estate in and to each Leased Real Property included in the Acquired Assets, free and clear of all liens, other than Permitted Liens. Schedule 4.08 contains a description of each real property lease or sublease or other similar Contract under which the Seller has a leasehold or subleasehold estate or otherwise uses or occupies or has the right to use or occupy the Leased Real Property included in the Acquired Assets (each such lease, sublease or other Contract including all amendments thereto, a "Real Property Lease"). True and correct copies of each Real Property Lease has been provided by the Seller to Buyer. Neither the Seller nor, to the Knowledge of Seller, the landlord under any Real Property Lease is in default or breach of any obligations under any Real Property Lease, nor is there any condition which, with the passage of time, the giving of notice, or both, would reasonably be expected to result in a default or breach by the Seller or, to the Knowledge of Seller, the landlord of any obligations thereunder.

(c) With respect to each Held Easement, as of the Closing: (i) each such Held Easement is in appropriate form, has been duly recorded, and is sufficient for the right of way and other interests necessary for the operation of the System, or access thereto, at the locations to which it relates, (ii) each such Held Easement is free and clear of any Liens, except for any Permitted Liens, and is assignable by Seller to Buyer without consent of the owner of the land to which the Easement relates or that any such consent has been obtained, (iii) the Seller is not in breach of or in default under such Easement, (iv) no party to such Easement has given the Seller written notice of or made a claim with respect to any breach or default thereunder, and (v) to the

Knowledge of Seller, no condition currently exists and there is no condition which, with the passage of time, the giving of notice, or both, could result in a default or breach by any party (including the Seller) under or with respect to such Easement. True and correct copies of each Held Easement will be provided by Seller to Buyer prior to the Closing.

Section 4.09. **Equipment and Machinery.**

(a) All Equipment and Machinery included in the Acquired Assets that is material to the operation of the System as currently and historically operated and conducted is set forth and otherwise described on Schedule 4.09(a). Except as set forth in Schedule 4.09(a), the Seller (i) has good and marketable title, free and clear of all Liens (other than the Permitted Liens and Liens which will be fully and unconditionally released at or prior to Closing) to the Equipment and Machinery owned by the Seller, and (ii) holds good and transferable leasehold interests in or a valid license to use, all Equipment and Machinery leased or licensed by it or otherwise used by it in the operation of the System, in each case under valid and enforceable leases or other Contracts. Except as set forth on Schedule 4.09(a), the Seller is not required to obtain the approval or consent of the lessor or any other Person in connection with the assignment to Buyer of the Equipment and Machinery leased or licensed by the Seller, and such assignment will not result in any change in terms of the applicable Contract or any increased costs or tax recapture. For the avoidance of doubt, this Section 4.09(a) does not apply to any Retained Equipment and Machinery.

(b) Except for Equipment and Machinery which is obsolete and except as otherwise set forth on Schedule 4.09(a), the Equipment and Machinery and all other tangible assets and properties that are included in the Acquired Assets are in good operating condition and repair (except for ordinary wear and tear) and are usable in the ordinary course of the business and are being operated in conformity in all material respects with all applicable Laws and the terms of any Contracts to which the Seller is a party or by which such Equipment and Machinery is subject or bound.

Section 4.10. **Supplies.** All Supplies included in the Acquired Assets consist of a quality and quantity usable in the ordinary course of business, consistent with past practice. As of the Closing, the levels of Supplies included in the Acquired Assets will be consistent with the levels of Supplies historically maintained by the Seller and will be sufficient for the continued conduct and operation of the System by Buyer immediately following the Closing in substantially the same manner as currently and historically conducted and operated by the Seller.

Section 4.11. **Intellectual Property Assets.** Schedule 4.11 sets a complete and accurate list of all Intellectual Property Assets (whether owned by the Seller or licensed to the Seller by any third party) that are material to the operation of the System as currently and historically operated and conducted. All Intellectual Property Assets are owned by or licensed to the Seller free and clear of all Liens, except for Permitted Liens and Liens which will be fully and unconditionally released at or prior to Closing, and are valid, issued and enforceable, have not been canceled, and, to the Knowledge of Seller, are not the subject of any legal challenge. To the Knowledge of Seller, no facts exist that would invalidate or render unenforceable any Intellectual Property Assets. Except as disclosed on Schedule 4.11, (a) there are no licenses now outstanding or other rights granted to third parties under any Intellectual Property Assets, and (b)

the Seller is not a party to any Contract or other agreement or understanding with respect to any Intellectual Property Assets. There are no unresolved claims made, and no Person or Governmental Authority has communicated to the Seller, the threat of any such claim, that any of the Intellectual Property Assets or activities of the Seller in connection with the Intellectual Property Assets constitutes unfair competition or is in violation or infringement of any patent, trademark, trade name, service mark, trade dress, right of publicity, copyright or registration therefor, of any other Person. To the Knowledge of Seller, (x) the Intellectual Property Assets do not infringe the patent, trademark, copyright, trade secret or other proprietary right of any third party and (y) no Intellectual Property Asset is being infringed or misappropriated by any third party. All filings or recordations necessary or appropriate to protect the interests of the Seller in any Intellectual Property Assets have been duly made and are in full force and effect.

Section 4.12. **Employee Benefit Plans.**

(a) As used in this Agreement, the following terms have the meanings set forth below:

"Seller's Benefit Obligations" means all material obligations, arrangements, or practices, whether or not legally enforceable, to provide benefits, other than salary or wages to present or former directors, employees or agents, (other than obligations, arrangements and practices that are Seller's Plans), that are owed, adopted or followed by the Seller. Seller's Benefit Obligations also include consulting agreements under which the compensation paid does not depend upon the amount of service rendered, sabbatical policies, severance payment policies and fringe benefits within the meaning of Code §132.

"Seller's Plans" means each voluntary employees' beneficiary association under Section 501(c)(9) of the Code whose members include any Personnel and any employee benefit plans or any other retirement, profit sharing, stock option, stock bonus, deferred compensation (including any "nonqualified deferred compensation plan" within the meaning of Section 409A of the Code), severance, sick leave or other material plan or arrangement providing benefits to current or former Personnel, in each case, if either currently in effect or terminated within the last six (6) years, to which the Seller is a plan sponsor or to which the Seller otherwise contributes or has contributed within the last six (6) years, or in which the Seller otherwise participates or has participated within the last six (6) years.

(b) Schedule 4.12(b) contains a true and complete list of all Seller's Plans and the Seller's Benefit Obligations. All such Seller's Plans and Seller's Benefit Obligations are in full force and effect and are in material compliance both as to form and operation, with applicable provisions of the Code, ERISA and any other applicable Laws, and with any applicable collective bargaining agreement. To Seller's Knowledge, no event has occurred which has resulted or could reasonably be expected to result in the imposition of any liability on the Seller under the Code or other applicable Law with respect to any Seller's Plans or Seller's Benefit Obligations.

(c) Except as set forth in Schedule 4.12(c), the Seller does not sponsor, maintain, contribute to, nor is it required to contribute to, any "multiemployer plan" within the meaning of Section 414(f)(1) of the Code, and has no liability of any nature, whether known or unknown,

fixed or contingent, with respect to any such multiemployer plan (the multiemployer plan set forth in Schedule 4.12(c), the "Multiemployer Plan"). Schedule 4.12(c) sets forth an estimate obtained by the trustee of the Multiemployer Plan, based on the most recent valuation of the Multiemployer Plan, of the withdrawal liability that would be assessed against the Seller for withdrawal from the Multiemployer Plan.

(d) Except as set forth on Schedule 4.12(d), the Seller does not sponsor, maintain, contribute to, nor is it required to contribute to, any medical, health, life or other welfare plan or benefits for present or future terminated or retired Personnel or their spouses or dependents, other than as required by COBRA, or any comparable state Law, and has no liability of any nature, whether known or unknown, fixed or contingent, with respect to any such post-termination welfare benefits.

(e) The Seller is and has been in compliance in all material respect with the requirements of COBRA and is not subject to any excise Tax under Code Section 4980B for the current or any prior taxable year.

(f) Except as set forth in Schedule 4.12(f), the Seller has not entered into any severance or similar arrangement with respect to any present or former Personnel that will result in any obligation (absolute or contingent) of Buyer to make any payment to any present or former Personnel following termination of employment, including the termination of employment effected by the transactions contemplated by this Agreement. The consummation of the transactions contemplated by this Agreement will not trigger any severance or other obligation of the Seller for which Buyer shall have any liability.

Section 4.13. **Personnel; Labor Relations**.

(a) Schedule 4.13(a) sets forth all collective bargaining agreements and relationships to which the Seller is a party, including the identification of the parties thereto and the expiration dates. Other than the collective bargaining agreements and relationships set forth in Schedule 4.13(a), there are no commitments, Contracts, agreements, arrangements or understandings (whether written or oral, formal or informal) of the Seller with respect to the Union or the Union Personnel, and the collective bargaining agreements described on Schedule 4.13(a) constitute the entire agreement between the Seller and the other parties thereto, with respect to the subject matter thereof.

(b) With respect to all Personnel:

(i) except as set forth in Schedule 4.13(b)(i), there is no labor strike, lockout, dispute, slowdown or stoppage pending or, to the Knowledge of the Seller threatened against or involving the operation of the System, nor has any such event or labor difficulty occurred within the past five (5) years;

(ii) except as set forth in Schedule 4.13(b)(ii), the Seller is in compliance in all material respects with all applicable Laws respecting employment and employment practices, terms and conditions of employment, wages, hours of work, classification of Personnel and independent contractors, and occupational safety and health;

(iii) except as set forth in Schedule 4.13(b)(iii), there is no unfair labor practice charge or complaint against the Seller with respect to the System pending or, to the Knowledge of the Seller threatened before the Pennsylvania Labor Relations Board or any other Governmental Authority;

(iv) the Seller has no present intention to terminate the employment of any Personnel due to misconduct or unsatisfactory performance and, to the Knowledge of the Seller, no event has occurred or circumstance exists with respect to any Personnel, including any event or circumstance involving misconduct (whether or not involving any actual or potential violation of Law) or other wrongful or improper acts or omissions by any Personnel, which would in any case give the Seller grounds for terminating the employment of any such Personnel; and

(v) the Seller has not received notice of any assertion or allegation of any wrongful employment action or practice, including discrimination and harassment, by any present or former Personnel or any applicant for employment with respect to the System.

(c) Except as set forth on Schedule 4.13(c), the Seller has, and as of the Closing shall have timely paid, or cause to be timely paid, the Personnel as required under its policies and/or by applicable Law for accrued but unused and unpaid vacation, sick leave and other accrued benefits as of the Closing Date.

(d) The Seller has not, in the past five (5) years, effectuated:

(i) a "plant closing" (as defined in the Worker Adjustment and Retraining Notification Act ("WARN Act")) affecting any site of employment or one or more facilities or operating units within any site of employment or facility of the System; or

(ii) a "mass layoff" (as defined in the WARN Act) affecting any site of employment or facility of the System; nor has the System been affected by any transaction or engaged in layoffs or employment terminations sufficient in number to trigger application of any similar state or local Law.

(e) None of the Personnel has suffered an "employment loss" (as defined in the WARN Act) during the previous six months.

Section 4.14. **Environmental Compliance.** Except as set forth in Schedule 4.14:

(a) The System as currently operated by the Seller and all operations and activities conducted by the Seller with respect to the System are in compliance in all material respects with all applicable Environmental Requirements.

(b) The Seller has generated, used, handled, treated, stored and disposed of all Hazardous Materials in (i) compliance in all material respects with all applicable Environmental Requirements and (ii) a manner that has not given, and could not reasonably be anticipated to give, rise to Environmental Liabilities.

(c) The Seller has not received notice of any Environmental Claims related to the System that have not been fully and finally resolved, and to the Knowledge of Seller no claims of Environmental Liabilities have been threatened allegedly arising from or relating to the System that have not been fully and finally resolved.

(d) Hazardous Materials are not present at or on the System or Acquired Assets, there has been no Release of Hazardous Materials at, on or from any part of the System or the Acquired Assets, and there has been no Release of Hazardous Materials for which the Seller is responsible at any Off-Site Location, in each case in a manner that violates any Environmental Requirements or has resulted in, or could reasonably be anticipated to give rise to, Environmental Liabilities.

(e) No Lien or activity use limitation or institutional control has been recorded affecting any Acquired Assets by any Governmental Authority due to either the presence of any Hazardous Material on or off the Acquired Assets or a violation of any Environmental Requirement.

(f) There are no underground storage tanks on or at any of the Acquired Assets. Any underground storage tanks previously located at the Acquired Assets have been removed or otherwise closed, plugged and abandoned in compliance with applicable Environmental Requirements in effect at the time of such closure.

(g) There is no PCB Equipment on or at any of the Acquired Assets. Any PCB Equipment that previously existed at the Acquired Assets has been flushed of polychlorinated byphenyls or has been removed and properly disposed of, in compliance with applicable Environmental Requirements, and any remaining PCB Equipment is labeled to the extent required under applicable Environmental Requirements and being managed in compliance with applicable Environmental Requirements.

(h) No Regulated Asbestos Containing Material exists in or on the Acquired Assets in an aggregate amount that would reasonably be expected to result in an Environmental Liability; and any Regulated Asbestos Containing Material is being managed in compliance with all applicable Environmental Requirements.

(i) The Seller has delivered to Buyer (1) all material environmental site assessments or reasonable and accurate summaries thereof pertaining to the System, (2) all material compliance audits or compliance assurance reviews prepared within the previous five (5) years or reasonable and accurate summaries thereof relating to compliance with Environmental Requirements by the System, and (3) reasonable and accurate summaries of, or all material documents pertaining to, any known and unresolved Environmental Liabilities incurred in relation to the System, to the extent possessed by or under the reasonable control of the Seller.

Section 4.15. **Consent Decree Matters.**

(a) The Seller is in compliance with all terms, conditions and requirements of the Consent Decree and no claims, actions, suits, proceedings, arbitral actions or investigations are pending, or to the Knowledge of the Seller, have been threatened against the Seller with respect to the Consent Decree. The Seller has not incurred or accrued any liabilities for payment of

stipulated penalties under the terms of the Consent Decree with respect to any conditions, events, circumstances, actions or inactions prior to the date hereof or prior to the Closing (whether or not EPA or PaDEP have asserted demands for such stipulated penalties).

(b) The Seller has completed all requirements or undertaken all actions required to be performed by the Seller prior to the date hereof and prior to the Closing Date pursuant to:

(i) the Consent Decree, including all control, operation, maintenance and mitigation requirements and the implementation of the CSO Control Measures and the Approved Revised CSO Control Measures Plan;

(ii) the Compliance Schedule; and

(iii) the Acquired Authorizations.

(c) The CSO Control Measures are being implemented in accordance with the Consent Decree. All work performed by or on behalf of the Seller pursuant to the Consent Decree, including work performed by architects, design professionals, and civil, mechanical or other engineers, whether by contract or pursuant to employment with the Seller or as an agent of the Seller is being performed and has been performed in accordance with the terms and conditions of the Consent Decree and on schedule in a manner sufficient to achieve the completion of the CSO Control Measures by the dates required under the Consent Decree.

(d) As of the Effective Date and as of the Closing, (i) the Seller is in compliance in all material respects with its obligations under the Long Term Control Plan and (ii) all planning, engineering, design, procurement, financing and construction activities on all Phase A and Phase B Projects within the Long Term Control Plan are on schedule with the milestones set forth the Compliance Schedule attached as Schedule 7.06 to this Agreement.

Section 4.16. **Licenses and Permits.** Schedule 4.16 sets forth a complete and accurate list of all Licenses and Permits held by the Seller, all of which are in full force and effect and no appeals or other proceedings are pending or threatened with respect to the issuance, terms or conditions of any such Licenses and Permits. The Seller has provided to Buyer true and complete copies of all Licenses and Permits set forth on Schedule 4.16. Except as set forth on Schedule 4.16, (i) the Seller holds all Licenses and Permits which are necessary or required under applicable Law for the ownership, operation and maintenance of the System and the Acquired Assets as currently or previously operated and maintained, (ii) the Seller is, and for the past five (5) years has been, in compliance in all material respects with all terms, conditions and requirements of all Licenses and Permits held by it (whether or not set forth on Schedule 4.16) and all applicable Laws relating thereto, and (iii) the Seller has not received any written notice or other written communication from any Governmental Authority or other Person regarding (1) any actual or alleged violation or failure to comply with any such Licenses and Permits, or (2) any revocation, withdrawal, non-renewal, suspension, cancellation or termination of any such Licenses and Permits. With respect to any Licenses and Permits held by the Seller that are scheduled to expire within six (6) months following the date of this Agreement, any applications for renewal of such Licenses and Permits have been or will be duly filed by the Seller with the applicable Governmental Authority within the time frame required under applicable Law.

Section 4.17. **Insurance; Bonds.**

(a) (i) Schedule 4.17(a) lists all of the Seller's policies of liability, fire, casualty, business interruption, workers' compensation and other forms of insurance and fidelity bonds insuring the properties, assets or operations of the System or the Acquired Assets (collectively, the "Policies" and individually, a "Policy"); (ii) the Seller has provided true and complete copies of the Policies to Buyer; (iii) the Policies, with respect to their amounts and types of coverage, are reasonably adequate to protect the insured properties against the insured risks, subject to reasonable deductibles, and the risks insured against are normal and customary for the industry. and (iv) all premiums with respect to each Policy are currently paid and such policies are in full force and effect. There are no material claims by the Seller pending under any of the Policies as to which coverage has been questioned, denied or disputed by the underwriters of such Policies or in respect of which such underwriters have reserved their rights, and no notice of cancellation, termination or non-renewal has been received with respect to any Policy.

(b) Except as set forth on Schedule 4.17(b), (i) the Seller has no outstanding surety bonds or other surety arrangements issued or entered into in connection with the Acquired Assets or the System; and (ii) no surety bond is required to satisfy any contractual, statutory, or regulatory requirement applicable to the Seller with respect to the System.

Section 4.18. **Contracts and Commitments.**

(a) Schedule 4.18 lists all of the following Contracts (x) by which any of the Acquired Assets are bound or affected or (y) to which the Seller is a party or by which it is bound in connection with the System or the Acquired Assets (collectively, the "Material Contracts"):

(i) Contracts with any Personnel, consultant or other Person providing services to the Seller or with respect to the System;

(ii) Contracts which are notes, mortgages, agreements, swaps or other derivatives or commitments for the repayment or borrowing of money by the Seller, including those related to the Outstanding Indebtedness, or for a line of credit including borrowings by the Seller in the form of a guarantee of, indemnification for, or agreement to acquire any obligation of others, and all security or pledge agreements related thereto;

(iii) Contracts, including management, operating, engineering, design, or service agreements (including professional services agreements), providing for payments in excess of Ten Thousand Dollars ($10,000) by the Seller in any twelve (12) month period;

(iv) Contracts relating to any joint venture or partnership to which the Seller is a party or is bound;

(v) Contracts containing covenants purporting to limit the freedom of Seller or any Personnel to compete in any business or in any geographic area;

(vi) Contracts relating to ongoing construction, including related to CSO Control Measures, insurance Contracts, surety bonds, management agreement, architect agreement or consultant agreement;

(vii) Contracts for any capital expenditure or leasehold improvements;

(viii) Contracts involving any resolution or settlement of any actual or threatened litigation, arbitration, claim or other dispute involving Seller, the City, the Borough or the System, and any other Person; and

(ix) Contracts, including inter-municipal agreements, between the Seller and any Governmental Authority.

(b) The Seller has provided to Buyer true and complete copies of all the foregoing Material Contracts, together with all amendments, supplements or modifications thereto, and accurate descriptions of all material terms of all oral Contracts, set forth or required to be set forth on Schedule 4.18.

(c) All of the Material Contracts are in full force and effect. Each Material Contract is a legal, valid and binding obligation enforceable against the Seller and, to the Knowledge of Seller, the other party or parties thereto, except to the extent that enforceability may be limited by applicable bankruptcy, insolvency, reorganization or other Laws affecting the enforcement of creditors' rights generally. The Seller is not and, to the Knowledge of Seller, no other party to any Material Contract is, in any material respect, in breach or violation of, or default under, or has delivered a notice of termination of, any Material Contract, nor does any condition exist which, with notice or lapse of time, or both, would cause the Seller, or to the Knowledge of Seller, any other party, to be in default under any Material Contract. The Seller has not received any communication from any Person that is party to a Material Contract indicating that such Person intends to (i) terminate such Material Contract, (ii) allow such Material Contract to expire without renewal, or (iii) seek an amendment or modification to such Material Contract that would increase in any material respect any amounts required to be paid by the Seller thereunder.

Section 4.19. **Compliance with Law.** Except as set forth on Schedule 4.19:

(a) the Seller is, and for the last five (5) years has been, in compliance in all material respects with all Laws applicable to Seller, the System, the Personnel and any of the Acquired Assets, and to the Knowledge of the Seller there are no factual circumstances that are likely to result in any such failure to be in compliance in any material respect;

(b) within the last five (5) years, the Seller has not received any written or, to the Knowledge of the Seller, verbal notices and, to the Knowledge of the Seller, no claims have been filed against the Seller, alleging a violation of any such Laws;

(c) to the Knowledge of Seller, neither Seller nor any Personnel is, or within the last five (5) years was, under investigation with respect to, and has not been threatened to be charged with or given notice of any violation of, any Law applicable to Seller, the System, the Personnel and any of the Acquired Assets; and

(d) except for the Consent Decree, there is no judgment, decree, injunction, rule or order of any arbitrator or Governmental Authority outstanding against the Seller, the System, the Personnel or any of the Acquired Assets.

Section 4.20. **Litigation.** Except as set forth on Schedule 4.20, (a) there are no claims, actions, suits, proceedings, arbitral actions, inquiries or investigations (whether judicial, administrative or otherwise) before or by any Governmental Authority pending or, to the Knowledge of the Seller, threatened against the Seller or with respect to the System or any of the Acquired Assets or which in any manner challenge or seek to prevent, enjoin, alter or materially delay the transactions contemplated by this Agreement, and no event has occurred, and no claim has been asserted, that could reasonably be expected to result in any such claims, actions, suits, proceedings, arbitral actions, inquiries or investigations, and (b) there are no unsatisfied judgments of any kind against the Seller with respect to the System or the Acquired Assets. All pending or threatened claims, actions, suits, proceedings, arbitral actions, inquiries or investigations against the Seller or with respect to the System or the Acquired Assets are fully covered by insurance except to the extent described in Schedule 4.20.

Section 4.21. **Title to the Acquired Assets; Sufficiency.**

(a) Except as set forth on Schedule 4.21(a), the Seller has good and marketable title to, valid leasehold interest in or valid licenses to use, all of the Acquired Assets, free and clear of all Liens, other than Permitted Liens and Liens which will be fully and unconditionally released at or prior to Closing. The use of the Acquired Assets is not subject to any Liens, other than Permitted Liens, and such use does not encroach on the property or the rights of any Person.

(b) The Acquired Assets are sufficient for, and constitute all the assets, properties, business, goodwill and rights of every kind and description, and services required for, the continued conduct and operation of the System by Buyer in substantially the same manner as currently conducted and operated by the Seller. Except for the Excluded Assets, (i) the Acquired Assets, taken as a whole, comprise all the assets, properties, business, goodwill and rights of every kind and description used or held for use in, or useful or necessary to the operation of the System as currently operated by the Seller, and (ii) there are no assets, properties, business, goodwill, rights or services used in the conduct or operation of the System that are owned by any Person other than the Seller that will not be licensed or leased to Buyer under valid, current license arrangements or leases. None of the Excluded Assets are material to the System.

Section 4.22. **Broker's and Finder's Fees.** Except as set forth on Schedule 4.22, no broker, finder, or Person is, or will be, entitled to any commission or broker's or finder's fees from any of the Parties or from any of their Affiliates by reason of any agreement or action of Seller, the City or the Borough (or any Person acting on their behalf) or otherwise in connection with this Agreement or the transactions contemplated by this Agreement. The Seller is solely responsible for the fees and expenses of any Person set forth on Schedule 4.22 and any other financial or technical advisor engaged by or on behalf of Seller, the City or the Borough.

ARTICLE V.

REPRESENTATIONS AND WARRANTIES OF BUYER

Buyer makes only the representations and warranties which are set forth in this Article V. Any matter, information or item disclosed on any particular Schedule delivered by Buyer which is numbered to correspond to the representations and warranties contained in this Article V shall be deemed to have been disclosed in response to such other representations or warranties in this Article V in respect of which such disclosure is reasonably apparent on its face notwithstanding the omission of an appropriate cross-reference.

As a material inducement to the Seller to enter into this Agreement and to consummate the transactions contemplated hereby, Buyer hereby represents and warrants to the Seller, as of the date hereof and as of the Closing Date, as follows:

Section 5.01. **Existence and Power.** Buyer is a corporation duly organized and in good standing under the Laws of the Commonwealth of Pennsylvania. Buyer has all requisite power and authority to execute and deliver this Agreement and all Related Agreements and to perform its obligations hereunder and thereunder.

Section 5.02. **Authorization and Validity of Agreement.** The execution and delivery of this Agreement and the Related Agreements and the performance of the obligations of Buyer hereunder and the consummation by Buyer of the transactions contemplated by this Agreement and the Related Agreements have been duly and validly authorized by all necessary action of Buyer, including Buyer's board of directors and the board of directors of Buyer Parent, and no other proceeding on the part of Buyer is necessary to authorize the execution, delivery and performance of this Agreement or any Related Agreement to which Buyer is or will be a party. This Agreement has been duly executed and delivered by Buyer and constitutes, and the Related Agreements, when executed and delivered, will constitute legal, valid and binding obligations of Buyer, enforceable against Buyer in accordance with their respective terms and conditions, except to the extent that enforceability may be limited by applicable bankruptcy, insolvency, reorganization or other Laws affecting the enforcement of creditors' rights generally. A true, correct and complete copy of the authorizing resolutions duly adopted by the board of directors of Buyer is attached hereto as Exhibit E, which resolutions of the board of directors of Buyer, and the resolutions of the board of directors of Buyer Parent with respect to this Agreement and the transactions contemplated hereby, in each case have not been, and at the Closing will not have been, revoked, rescinded or amended.

Section 5.03. **No Conflict or Violation.** Except as set forth on Schedule 5.03, the execution, delivery and performance of this Agreement and the Related Agreements by Buyer do not and shall not: (a) violate or conflict with, or result in a breach or constitute a default under, any provision of the charter, bylaws or other similar organizational or governing documents of Buyer, (b) violate, conflict with, result in a breach or constitute a default under any provision of, or require any Governmental Approval or any notice, filing, consent, authorization or approval under, any Licenses and Permits held by Buyer or any applicable Law of any Governmental Authority having jurisdiction over Buyer or its assets or properties, or (c) violate, conflict with, or result in a breach of or constitute (with due notice or lapse of time or both) a default under any

provision of, or require any notice, filing, consent, authorization or approval under, or give rise to any rights of termination, amendment, modification, acceleration or cancellation of or loss of any benefit under, or result in the creation of any Lien on any assets or properties of Buyer pursuant to, any Contract to which Buyer is a party, or by which any material assets and properties of Buyer are bound or subject, or (d) result in the imposition of any Liens or other restrictions on the material assets and properties of Buyer, except, in the case of the foregoing clauses (b), (c) and (d), where such violation, conflict, breach, default, requirement, or resulting Lien or other restriction would not reasonably be expected to have a material adverse effect on Buyer, Buyer Parent and their business, or materially impair Buyer's ability to timely consummate the transactions contemplated hereby or perform its obligations hereunder.

Section 5.04. **Consents and Approvals.** Schedule 5.04 sets forth a list of each consent, waiver, authorization or approval of any Governmental Authority, or of any other Person, and each declaration or notice to or filing or registration with any Governmental Authority required to be obtained, given or made by Buyer in connection with the execution and delivery of this Agreement and each Related Agreement by Buyer and the performance by Buyer of its obligations hereunder and thereunder, except for any such consent, waiver, authorization, approval, declaration, notice, filing or registration, which if not obtained, given or made, would not reasonably be expected, individually or in the aggregate, to materially impair Buyer's ability to performs its obligations hereunder or thereunder and to consummate the transactions contemplated hereby or thereby.

Section 5.05. **Broker's and Finder's Fees.** No broker, finder, or Person is, or will be, entitled to any commission or broker's or finder's fees from any of the Parties or from any of their Affiliates by reason of any agreement or action of Buyer or its Affiliates (or any Person acting on Buyer's or Buyer's Affiliates' behalf) or otherwise in connection with this Agreement or the transactions contemplated by this Agreement.

Section 5.06. **Financial Ability.** Immediately after giving effect to the transactions contemplated hereby, Buyer will have the financial ability and will have adequate capital to carry on its business and to operate the System as a certificated public utility system regulated by the PaPUC authorized, among things, to provide wastewater utility services to retail residential, commercial and industrial customers in the Service Area, in each case assuming (i) the accuracy of the Seller's representations and warranties set forth in this Agreement (without regard to any materiality, Material Adverse Effect or other similar qualifiers contained therein) and (ii) material compliance by the Seller with the covenants required to be performed prior to the Closing set forth herein in all material respects.

Section 5.07. **Sufficient Funds.** Buyer will have at the Closing (a) sufficient immediately available funds available and the financial ability to pay the Purchase Price in accordance with Section 3.01 and any fees and expenses incurred by Buyer in connection with the transactions contemplated by this Agreement and (b) the resources and capabilities (financial and otherwise) to perform its obligations hereunder.

Section 5.08. **Independent Decision.** Except as expressly set forth in this Agreement, or any of the Related Agreements, Buyer acknowledges that (a) neither the Seller nor any other Person has made any representation or warranty, express or implied, as to the accuracy or

completeness of any information provided to Buyer regarding the System, and (b) neither the Seller nor any other Person shall have or be subject to any liability to Buyer (except in the case of fraud) or any other Person resulting from the distribution to Buyer, or Buyer's use of, any information regarding the System or Acquired Assets that has been furnished or made available to Buyer and its Representatives. Buyer acknowledges that other than as expressly set forth in this Agreement or any Related Agreement, Buyer is acquiring the Acquired Assets without any other representation or warranty, whether express or implied, including any representation or warranty as to merchantability or fitness for any particular purpose, except as otherwise expressly represented or warranted in Article IV of this Agreement; *provided, however*, that nothing in this Section 5.08 is intended to limit or modify the representations and warranties contained in Article IV.

Section 5.09. **Independent Investigation.** Buyer acknowledges that it has conducted an independent investigation of the financial condition, assets, liabilities, properties and projected capital needs and operations of the System in making its determination as to the propriety of the transactions contemplated by this Agreement and, in entering into this Agreement and Related Agreements, has relied solely on the results of its investigation and on the representations and warranties of the Seller expressly contained in Article IV of this Agreement; *provided*, that nothing in this Section 5.09 will limit, in any way, any rights that Buyer may have to bring, pursue or prosecute a claim or action grounded in or based upon fraud.

Section 5.10. **Litigation**. There are no claims, actions, suits, proceedings, arbitral actions, inquiries or investigations (whether judicial, administrative or otherwise) pending or, to the Knowledge of Buyer, threatened, against Buyer, Buyer Parent or any of their Affiliates which in any manner challenge or seek to prevent, enjoin, alter or materially delay the transactions contemplated by this Agreement.

ARTICLE VI.

COVENANTS REGARDING REAL PROPERTY AND EASEMENTS

Section 6.01. **Title Examination; Missing Easements.**

(a) Prior to the Closing, the Seller will, at its sole cost and expense, cause David Durkovic, or another abstractor selected by the Seller and reasonably acceptable to Buyer and the Title Company (the "Abstractor"), to perform, at the Seller's sole cost and expense, a search of the public land records of Lackawanna County, based on the Seller's and Labella Associates', Seller's outside consulting engineering company, records and plans of the System (and such other sources of information as are reasonably related thereto), by means of searching the grantee index in the names of the City, the Scranton Redevelopment Authority, Seller and the Borough, and such other searches as the Abstractor may reasonably make, to (i) identify and provide Buyer with title information on any and all recorded Held Easements, such information to be provided in the form of the chart attached hereto as Exhibit F (the "Abstractor Search Result Chart"), and (ii) together with the Seller, identify all Missing Easements. During such process, as the Abstractor provides written search results to Seller (including updated versions of the Abstractor Search Result Chart), the Seller will promptly provide the same to Buyer for its review, and, without limiting the foregoing, the Seller shall, or shall cause the Abstractor to, provide Buyer

with periodic updates (which shall occur no less frequently than bi-weekly) on the status of the activities set forth in the previous sentence.

(b) In the event that during the process of Abstractor's review and investigation of the Lackawanna County land records, Seller determines, based on the Abstractor's investigation, that there is a Missing Easement, the Seller shall take any and all actions (including the use of its power of condemnation) to obtain any such Missing Easements so that the same may be sold, assigned, transferred and conveyed to Buyer at the Closing pursuant to the terms and conditions of this Agreement. All costs and expenses incurred in connection with obtaining each Missing Easement (including any consideration payable to the landowner in connection with condemnation, in lieu of condemnation or otherwise to obtain Missing Easements) shall be paid by the Seller. In the event Seller has not obtained all Missing Easements by the date that is sixty (60) days after the date that Abstractor has completed his review of the County land records and delivered the last results of the same to Seller (the "Abstract Completion Date"), then, no later than thirty (30) days after the Abstract Completion Date (but in any event no later than thirty (30) days prior to the Closing), the Seller shall commence and file in the Court of Common Pleas, Lackawanna County, a condemnation or eminent domain proceeding to obtain any and all such Missing Easements. For the purposes of clarity, upon obtaining each Missing Easement (including upon the final resolution of a condemnation proceeding), each Missing Easement that has been acquired or obtained by the Seller shall be considered a Held Easement.

(c) The Seller shall take any and all actions to ensure that, as of the Closing, (i) all Essential Easements are Eligible Easements and (ii) no more than ten (10) other Easements (whether Held Easements or Missing Easements) that are appurtenant to any Combined Sewer System Asset or necessary for access to any Combined Sewer System Asset or for the operation of any Combined Sewer System Asset (including Easements for utilities and power to any Combined Sewer System Asset) or otherwise are necessary for or used in connection with the operation of the System or to provide continuous and unimpeded rights of way for the Combined Sewer System Assets (including access thereto) are not Eligible Easements.

(d) With respect to any Easement that is described in clause (b) of the definition of Eligible Assets that is conveyed to Buyer at the Closing, the Seller shall complete the condemnation proceedings with respect to such Easement at its sole cost and expense following the Closing and pay the fair value to the landowner for the taking of such Easement.

Section 6.02. **Objections to Title; Conveyance by the City.**

(a) Notice of Title Objections. With respect to all Real Property including any title information provided by the Abstractor with respect to any Held Easements, Buyer shall have the right to obtain, at its sole cost and expense, one or more commitments for an owner's policy or policies of title insurance on ALTA's Owner's Form 2006 (each, a "Title Commitment"), issued by a title insurance company selected by Buyer and licensed by the Commonwealth of Pennsylvania (the "Title Company") covering any such Real Property. Within thirty (30) days of Buyer's receipt from the Title Company of any such Title Commitment, Buyer shall deliver to the Seller a complete copy of such Title Commitment and copies of any and all exception documents listed in the same, each as received from the Title Company, along with Buyer's written notice to the Seller of any of the exceptions to title set forth on Schedule B of the Title

Commitment to which Buyer objects (such written notice of Buyer being referred to as the "Objection Notice") provided such exceptions (i) are not Permitted Liens, (ii) are not Schedule B-I exceptions to be satisfied by Buyer prior to Closing, (iii) being matters of record and set forth in the Title Commitment, do not adversely restrict or prevent the use of the Real Property in the operation of the System as currently operated, and (iv) are not the Title Company's pre-printed standard "survey", "unrecorded easement" or "discrepancy in boundary line" exceptions do not adversely restrict or prevent the use of the Real Property in the operation of the System as currently operated (such exceptions objected to in the Objection Notice, provided the same are not any as described in clauses (i) through and including (iv) as aforesaid, being referred to as the "Title Objection Items"). Buyer acknowledges and agrees that for purposes of any Real Property Lease, the term Permitted Lien shall also include (v) any Lien which was created or suffered to exist by the lessor, or any predecessor in title to such lessor, encumbering the title to any real property which is subject to a Real Property Lease. In the event that Buyer provides the Seller with an Objection Notice, the Seller shall use commercially reasonable efforts to have all of the Title Objection Items cured, satisfied or released of record, or insured over, by the Title Company (individually, "Cure" and collectively, "Cured") prior to or as of the Closing. At or prior to the Closing, the Seller shall deliver written evidence to Buyer, in form and substance reasonably satisfactory to Buyer, evidencing that Seller has Cured all such Title Objection Items. For avoidance of doubt, Buyer acknowledges that no item listed in clauses (i) through and including (v) aforesaid, may be objected to by Buyer as a Title Objection Item.

(b) Liens. Without limiting the Seller's obligations pursuant to Section 6.02(a) above, prior to or as of the Closing, the Seller shall be obligated, at its sole cost and expense, to Cure any Lien encumbering the Real Property which can be Cured by the payment of money (other than Permitted Liens).

(c) Title Endorsements/Survey. Any endorsements required by Buyer or any mortgagee of Buyer to Buyer's title insurance policy, except for available endorsements necessary to Cure any Title Objection Items, shall be paid for solely by Buyer. In the event any survey is required by Buyer or its mortgagee, either as a condition to any such endorsement or otherwise, the same shall be obtained solely at Buyer's cost and expense. In the event Buyer obtains a survey of any or all of the Real Property and desires the deed to contain the legal description based on such survey, if the same is not identical to the legal description contained in the Seller's deed of record, the Seller shall not be obligated to include the same in the deed to Buyer unless the survey is certified to the Seller and such description is included in the deed on a "quitclaim" basis only and without warranty of title, so long as such title is insurable by the Title Company.

(d) Conveyance by the City. With respect to the parcels of Real Property described on Schedule 4.08 as being owned by the City as of the Effective Date (such parcels of Real Property, the "City-Owned Real Property"), following the Effective Date the Seller shall take any and all action necessary to cause the conveyance by the City to the Seller of such City-Owned Real Property and to ensure that, as of the Closing, such City-Owned Real Property constitutes Owned Real Property of the Seller included in the Acquired Assets and with respect to which the Seller holds a valid fee simple estate capable of being conveyed to Buyer at Closing pursuant to Section 2.03(ii).

Section 6.03. **UCC Search; Releases.** Not later than sixty (60) days after the Effective Date, Buyer shall obtain, at its sole cost and expense, a Uniform Commercial Code search against the Seller covering any of the personal property or fixtures included among the Acquired Assets from the Office of the Secretary of the Commonwealth of Pennsylvania and the Recorder of Lackawanna County, Pennsylvania (the "UCC Search"). On or prior to the Closing Date, the Seller shall, at its sole cost and expense, obtain releases of any and all security interests in any of the Acquired Assets which are not Permitted Liens. The form of the releases of such security interests shall be provided by the Seller to Buyer on or prior to the Closing Date and the form and substance thereof shall be reasonably satisfactory to Buyer.

Section 6.04. **Consents**. The Seller shall, prior to the Closing, at the Seller's sole cost and expense, obtain any required consents or satisfy any preconditions necessary to assign or transfer a Real Property Lease or an Easement to Buyer at the Closing and, at or prior to the Closing, the Seller shall deliver written evidence to Buyer, in form and substance reasonably satisfactory to Buyer, evidencing that the Seller has obtained all such consents and satisfied all such preconditions. If, prior to the Closing, Buyer identifies any consents required to be obtained or preconditions necessary to assign or transfer a Real Property Lease or an Easement to Buyer at the Closing and Buyer delivers written notice to the Seller of such consent or precondition, the Seller shall use good faith efforts to obtain any such consent or satisfy any such precondition, as the case may be, and, so long as the Seller in good faith seeks to obtain any such consents or satisfy such preconditions as may be identified by Buyer and with respect to which Buyer delivers notice to the Seller prior to the Closing, the Parties acknowledge and agree that the Seller shall not be deemed to have intentionally or willfully breached this Section 6.04 as a result of the Seller's failure, prior to the Closing, to (x) obtain any such consent or satisfy any such condition so identified by Buyer, or (y) to seek to obtain any other required consent or satisfy any other necessary precondition with respect to which Buyer does not identify or deliver written notice to the Seller prior to the Closing. If after the Closing Date, Buyer determines that a third-party consent or precondition must be satisfied in order to assign or transfer a Real Property Lease or an Easement, the Seller shall obtain such third-party consent or satisfy such precondition and execute any documents necessary to effectuate such transfer pursuant to the Seller's obligations in Section 2.03.

ARTICLE VII.

OTHER AGREEMENTS

Section 7.01. **Taxes.** The Seller shall prepare and file or cause to be filed all Tax Returns arising out of the ownership of the Acquired Assets and out of the operation of the System before the Closing for all taxable periods ending on or before the Closing Date whether filed before or after the Closing Date. The Seller shall pay all Taxes arising out of the ownership of the Acquired Assets and out of the operation of the System before the Closing for all taxable periods ending on or before the Closing Date. Buyer shall prepare or cause to be prepared and file or cause to be filed any Tax Returns arising out of the ownership of the Acquired Assets and out of the operation of the System for periods which begin before the Closing Date and end after the Closing Date (a "Straddle Period"). In the case of Taxes arising in a Straddle Period, the allocation of such Taxes between the pre-Closing taxable period portion and the post-Closing taxable period portion of the Straddle Period shall be made on the basis of an interim closing of

the books as of the end of the Closing Date based on a schedule prepared by Buyer and provided to the Seller. The Seller shall pay to Buyer its allocable share of the Straddle Period Taxes as reasonably determined by Buyer within ten (10) days of the delivery of a notice requiring such payment.

Section 7.02. **Cooperation on Tax Matters.** The Seller shall furnish or cause to be furnished to Buyer, as promptly as practicable, whether before or after the Closing Date, such information and assistance relating to the System as is reasonably necessary for the preparation and filing by Buyer of any filings relating to any Tax matters.

Section 7.03. **Files and Records.**

(a) During the seven (7) year period following the Closing Date (or such longer period as may be required under applicable Law), the Seller shall preserve and keep any and all files, documents and records held by the Seller relating to the System (including any copies of any Files and Records in the possession of the Seller and not otherwise delivered or required to be delivered to Buyer at the Closing), and the Seller shall, upon reasonable notice and during normal business hours, make all such files, documents and records available to Buyer as may be reasonably requested or required by Buyer to enable Buyer or its Affiliates to prepare for, file, prove, answer, prosecute, or defend any return, filing, audit, protest, claim, suit, inquiry or other proceeding against or involving Buyer or any of its Affiliates (including any matter pertaining to Taxes), or any governmental investigation of or involving Buyer or any of its Affiliates, or in order to enable Buyer to comply with its obligations under this Agreement and any Related Agreement or other agreement, document or instrument contemplated hereby or thereby. In the event the Seller desires to destroy such records after such seven (7) year period, the Seller shall first give sixty (60) days prior written notice to Buyer and Buyer shall have the right, at its option and expense, upon prior written notice given to Seller within such sixty (60) day period, to take possession of the records within ninety (90) days after the date of such notice.

(b) Without limiting anything contained in Section 7.03(a), on the Closing Date, the Seller shall transfer to Buyer all Files and Records relating to operation of the System, including all documents, records, electronically stored data and other information referenced in Sections 77 and 78 of the Consent Decree ("Consent Decree Required Information"). To the extent that the Seller retains any such Consent Decree Required Information following the Closing (including any copies of any Files and Records in the possession of the Seller and not otherwise delivered or required to be delivered to Buyer at the Closing), at the conclusion of the record retention period specified in Section 79 of the Consent Decree, the Seller or its successor shall notify Buyer, EPA and PaDEP at least ninety (90) days prior to the destruction of any such Consent Decree Required Information, and upon the request of Buyer, EPA or PaDEP (or other applicable Governmental Authority), the Seller shall deliver such Consent Decree Required Information to Buyer, EPA or PaDEP, subject to the provisions set forth in Section 80 of the Consent Decree relating to privileged information.

(c) For the avoidance of doubt, nothing contained in this Section 7.03 shall be deemed to (i) limit the Seller's obligation to deliver all Files and Records to Buyer at the Closing as provided in Section 13.02 or (ii) permit the Seller, the City or the Borough to refuse to deliver

to Buyer, upon Buyer's reasonable request therefor, any Files and Records that are or remain in the possession of the Seller, the City or the Borough as of or following the Closing.

Section 7.04. **Personnel Matters.**

(a) Subject to the obligations of Seller under the Collective Bargaining Agreement and applicable Law and Buyer's obligations set forth in Section 7.04(h) with respect to Union Personnel, Buyer shall, or shall cause an Affiliate of Buyer to, offer employment effective on the Closing Date, to all active Union and Non-Union Personnel employed by the Seller as of the Closing Date, subject to Buyer's existing standard hiring policies and procedures applicable to new employees, which shall be limited to a criminal background check and drug screening of all Union and Non-Union Personnel, except with respect to benefits as otherwise provided in Section 7.04(c). The active Union and Non-Union Personnel who accept such offer of employment and commence employment with Buyer (or its Affiliate) on the Closing Date, shall be referred to in this Agreement as the "Transferred Personnel." For purposes of clarity, nothing contained in this Section 7.04 shall be deemed to limit, restrict or prohibit Buyer from interviewing the applicable Union and Non-Union Personnel for informational purposes only in connection with the transfer of employment of the Union and Non-Union Personnel to Buyer as provided in this Section 7.04.

(b) Subject to the obligations of Seller under the Collective Bargaining Agreement and applicable Law and Buyer's obligations set forth in Section 7.04(h) with respect to Union Personnel, Transferred Personnel who are Non-Union Personnel shall be employees-at-will of Buyer. Buyer shall provide each of the Transferred Personnel who are Non-Union Personnel compensation and benefits which are substantially comparable to (i) in the aggregate to Seller's compensation and benefits as of the Effective Date and (ii) the compensation and benefits then provided to similarly situated employees of Buyer. Nothing in this Agreement shall require Buyer to provide any particular form or type of employee benefit program, plan or policy to any Transferred Personnel who are Non-Union Personnel as a result of the transactions contemplated by this Agreement.

(c) The Seller shall make a payment to each Union Personnel equal to such Union Personnel's accrued but unused paid sick days and paid vacation days as of the Closing Date (collectively, the "Accrued PTO"). The Accrued PTO shall be paid to the applicable Union Personnel through the Seller's payroll system and shall be included in the last payroll period that ends prior to the Closing Date. Subject to the obligations of Seller under the Collective Bargaining Agreement and Law and Buyer's obligations set forth in Section 7.04(h) with respect to Union Personnel, with respect to any employee benefit plan maintained by Buyer or an Affiliate of Buyer for the benefit of any Transferred Personnel, effective as of the Closing, Buyer shall, or shall cause its Affiliate to, recognize all service of the Transferred Personnel with Seller, as if such service were with Buyer for eligibility and vesting under Buyer's employee benefit plans and programs.

(d) Subject to the obligations of Seller under the Collective Bargaining Agreement and applicable Law and Buyer's obligations set forth in Section 7.04(h) with respect to Union Personnel, effective as of the Closing, the Transferred Personnel who are Non-Union Personnel shall cease active participation in the Seller's Plans. The Seller shall remain liable for all eligible

claims for benefits under the Seller's Plans that are incurred by the Non-Union Personnel prior to the Closing Date. Subject to the obligations of Seller under the Collective Bargaining Agreement and applicable Law and Buyer's obligations set forth in Section 7.04(h) with respect to Union Personnel, the Seller shall remain liable to make any contributions to Seller's Plans related to, and/or to fund any retirement benefits accrued by, the Transferred Personnel prior to Closing. For purposes of this Agreement, the following claims shall be deemed to be incurred as follows: (i) life, accidental death and dismemberment, short-term disability, and workers' compensation insurance benefits, on the event giving rise to such benefits; (ii) medical, vision, dental, and prescription drug benefits, on the date the applicable services, materials or supplies were provided; and (iii) long-term disability benefits, on the eligibility date determined by the long-term disability insurance carrier for the plan in which the applicable Personnel participates.

(e) This Section 7.04 shall be binding upon and inure solely to the benefit of each of the Parties to this Agreement, and nothing in this Section 7.04, express or implied, shall confer upon any other Person any rights or remedies of any nature whatsoever under or by reason of this Section 7.04. The Parties acknowledge and agree that the terms set forth in this Section 7.04 shall not create any right in any Transferred Personnel or any other Person to any continued employment with Buyer or any of its Affiliates or compensation or benefits of any nature or kind whatsoever, and shall not be deemed to restrict Buyer in the exercise of its independent business judgment in establishing or modifying any of the terms or conditions of the employment of the Transferred Personnel. Nothing contained in this Section 7.04 shall constitute an amendment of, or an undertaking to amend, any employee benefit plan, program or arrangement maintained by Buyer or its Affiliates or is intended to prevent Buyer or its Affiliates from amending or terminating any such employee benefit plan, program or arrangement in accordance with its terms.

(f) Subject to applicable Law and Buyer's obligations set forth in Section 7.04(h) with respect to Union Personnel, it is expressly understood that Buyer will not acquire any asset, or assume any liability or obligation in connection with the transactions contemplated by this Agreement relating to any of the Seller's Benefit Plans, Seller's Benefit Obligations or Contracts described in Section 4.18(a)(i) of this Agreement. Subject to Buyer's obligations set forth in Section 8.03(c), the Seller shall be solely responsible for any liability, funding obligation, claim or expense arising from the Seller's Plans, Seller's Benefit Obligations or Contracts described in Section 4.18(a)(i) of this Agreement, both prior to, and after, the Closing Date, except as provided in Section 7.04(c).

(g) No later than the Closing Date, the Seller shall transfer all records pertaining to the employment of the Transferred Personnel to Buyer including all personnel and human resources Files and Records.

(h) Prior to the Closing, Buyer shall bargain in good faith with the Union regarding amendments to the Collective Bargaining Agreement that are intended to allow Buyer and the Union to enter into an amended Collective Bargaining Agreement in a form that is consistent with Buyer's existing compensation and benefits strategy (the "Amended CBA"). Buyer shall offer to provide Union Personnel Substantially Comparable Compensation and Benefits. In the event that Buyer and the Union do not reach an agreement on the terms of an Amended CBA prior to the Closing Date, Buyer shall have the right to set the initial terms and conditions of

employment of the Union Personnel, and Buyer shall recognize and bargain with the Union in good faith to reach agreement on the terms of a successor agreement to the Collective Bargaining Agreement.

Section 7.05. **Restrictions on Sale or Lease of System; Right of First Refusal.**

(a) Buyer hereby acknowledges and agrees that for a period of twenty (20) years following the Closing Date (the "ROFR Period"), the Seller (or any Person to which the Seller assigns its rights under this Section 7.05) shall have a right of first refusal with respect to a Sale Transaction, as set forth in this Section 7.05.

(b) Buyer agrees that, during the ROFR Period, it shall not enter into any legally binding written agreement or consummate a Sale Transaction, except in compliance with the terms and conditions of this Section 7.05. Upon Buyer's or any Affiliate of Buyer's receipt of a bona fide Proposal from a Person that is not a direct or indirect Affiliate of Buyer (such Person, the "Independent Third Party") which Buyer desires to accept, Buyer shall, within five (5) Business Days of Buyer's determination of its desire to accept such Proposal, deliver to the Seller written notice of such Proposal (the "Proposal Notice"), which Proposal Notice shall include (i) a true and correct copy of the Proposal, including all schedules, exhibits and ancillary documents related thereto, if any, (ii) identify or describe any other assets of Buyer or its Affiliates, in addition to the System, to be included in such Sale Transaction, and (iii) the expected date of consummation of the Sale Transaction contemplated by such Proposal (such date, together with any other dates or deadlines reflected in the Proposal and the financial and other material terms and conditions of such Proposal, collectively the "Material Terms"). During the twenty (20) Business Day period following the Seller's receipt of the Proposal Notice (such twenty (20) Business Day period, the "Sale Proposal Review Period") (x) Buyer and Buyer's Affiliates shall, and shall direct their Representatives to, cease any and all discussions and communications with the Independent Third Party and its Representatives, and (y) the Seller shall have the exclusive right to determine whether to elect to pursue the Sale Transaction; *provided* that the Seller, in making such determination, shall act reasonably and in good faith and take into account the Seller's capability (financial or otherwise) to purchase the System and any other assets to be included in the Sale Transaction on terms substantially the same as (and in any event no less favorable to Buyer than) the Material Terms and within a time period reasonably proximate to the anticipated date of consummation set forth in the Proposal Notice; and *provided further*, that the Seller shall only be permitted to exercise its right of first refusal pursuant to this Section 7.05(b) with respect to all (and not less than all) of the assets of Buyer or its Affiliates identified or described in the Proposal Notice (including, for the avoidance of doubt, any assets of Buyer or its Affiliates in addition to the System identified or described in such Proposal Notice). During the Sale Proposal Review Period, Buyer shall, reasonably promptly following the Seller's reasonable written request and subject to the Seller's execution of a customary confidentiality agreement containing commercially reasonable terms, provide the Seller and its authorized Representatives access to, and, if requested, copies of, such documents and other written materials that were supplied by or on behalf of Buyer to the Independent Third Party and its Representatives, if any, prior to delivery of the Proposal Notice.

(c) If the Seller elects to exercise its right of first refusal hereunder pursuant to Section 7.05(b) with respect to the Proposal Notice and all assets described therein (including

any assets in addition to the System), the Seller shall deliver a written notice (the "Seller Proposal Notice") to Buyer of such election no later than 5:00 p.m. (Eastern time) on the last Business Day of the Sale Proposal Review Period. The Seller's failure to provide a Seller Proposal Notice prior to the expiration of the Sale Proposal Review Period shall be deemed to constitute a decision not to exercise its right of first refusal hereunder pursuant to Section 7.05(b) with respect to the Proposal Notice, and the Seller shall be deemed to have waived its rights with respect to the Sale Transaction contemplated by the Proposal, but not with respect to any future Proposal, subject to the other restrictions contained herein.

(d) If the Seller timely delivers a Seller Proposal Notice, then following such delivery and until expiration of the ROFR Sale Transaction Negotiation Period (as defined below), the Seller and Buyer shall, acting reasonably and in good faith, engage in exclusive discussions and negotiations regarding the term and conditions of a Sale Transaction between Buyer and the Seller (a "ROFR Sale Transaction") which terms and conditions (financial and otherwise) shall be substantially the same as (and in any event no less favorable to Buyer than) the Material Terms as set forth in the Proposal Notice, unless otherwise agreed by Buyer in its sole and absolute discretion and set forth in a definitive binding agreement duly executed by Buyer. The ROFR Sale Transaction shall be conditioned upon obtaining required approvals from the PaPUC. The "ROFR Sale Transaction Negotiation Period" means the period commencing on the date of delivery of the Seller Proposal Notice and ending on the date that is the earlier of (i) ninety (90) days following delivery of the Seller Proposal Notice, (ii) such date as the Seller notifies Buyer that the Seller is unwilling, unable or no longer interested in pursuing discussions and negotiations concerning a ROFR Sale Transaction, or (iii) such date as the Seller ceases to engage in good faith negotiations concerning a ROFR Sale Transaction, as determined by Buyer acting reasonably and in good faith.

(e) If Buyer and the Seller have not entered into a definitive agreement (containing terms and conditions (financial and otherwise) substantially the same as (and in any event no less favorable to Buyer than) the Material Terms as set forth in the Proposal Notice (unless otherwise agreed by Buyer in its sole and absolute discretion and set forth in a definitive binding agreement duly executed by Buyer) and such other terms as are reasonably acceptable to each of Buyer and the Seller in their respective reasonable, good faith discretion) with respect to the ROFR Sale Transaction prior to expiration of the ROFR Sale Transaction Negotiation Period, the Seller shall be deemed to have waived its rights with respect to the Sale Transaction contemplated by the Proposal, but not with respect to any future Proposal, subject to the other restrictions contained herein.

(f) For the avoidance of doubt, unless and until Buyer and the Seller duly execute and deliver a definitive agreement in respect of a ROFR Sale Transaction, Buyer shall (1) have the right, in its sole and absolute discretion, to terminate negotiations and discussions with the Seller concerning a ROFR Sale Transaction at any time and retain ownership of the System, and (2) not be obligated or required to enter into any definitive agreement with the Seller or consummate a ROFR Sale Transaction, *provided, that*, in the event that Buyer exercises its right to terminate negotiations and discussions with the Seller concerning a ROFR Sale Transaction by giving notice of such termination to the Seller prior to expiration of the ROFR Sale Transaction Negotiation Period, the Seller shall not be deemed to have waived its rights with respect to the Sale Transaction contemplated by the Proposal giving rise to such negotiations and discussions

concerning a ROFR Sale Transaction, nor with respect to any future Proposal, and subject to the other restrictions contained herein.

(g) With respect to each Proposal for which Buyer delivered a Proposal Notice and otherwise complied in all material respects with all of the applicable procedures and requirements of this Section 7.05 (the "Noticed Proposal"), in the event that (i) the Seller does not deliver a Seller Proposal Notice to Buyer prior to the expiration of the applicable Sale Proposal Review Period or (ii) Buyer and the Seller, acting reasonably and in good faith, have not executed and delivered a definitive agreement with respect to the ROFR Sale Transaction prior to the expiration of the ROFR Sale Transaction Negotiation Period, then, and only then, Buyer and Buyer's Affiliates, as applicable, shall be free, for a period of one hundred twenty (120) days following expiration of the Sale Proposal Review Period or the ROFR Sale Transaction Negotiation Period, as applicable (the "Noticed Proposal Period"), to enter into a definitive agreement with respect to the Sale Transaction contemplated by the Proposal Notice with respect to such Noticed Proposal with Independent Third Party on terms and conditions substantially similar to, and in any event not more favorable in any material respect to the Independent Third Party than, the terms and conditions described in the Proposal Notice; *provided, however*, that no such definitive agreement shall impose limitations or restrictions on the ability of Buyer or any of its Affiliates to comply with the terms of this Section 7.05 in the event of a Material Change with respect thereto.

(h) If, during a Sale Proposal Review Period or a Noticed Proposal Period, the Independent Third Party proposes in writing to any changes or amendments to the applicable Proposal or Noticed Proposal which (i) individually or in the aggregate are more favorable in any material respect to the Independent Third Party than the original Material Terms as set forth in the Proposal Notice, and (ii) Buyer desires to accept (such changes or amendments, collectively a "Material Change"), then such Proposal or Noticed Proposal, as changed or amended, shall constitute a new Proposal which shall be subject to the terms and conditions of this Section 7.05.

(i) Buyer acknowledges and agrees that irreparable damage would occur and Seller would not have an adequate remedy at law in the event that any of the provisions of this Section 7.05 were not performed by it in accordance with their specific terms or were otherwise breached, and that monetary damages would not be an adequate remedy therefor, and therefore fully intend for specific performance to be the principal remedy for breaches of this Section 7.05. It is accordingly agreed that the Seller shall be entitled to an injunction or injunctions to prevent breaches of this Section 7.05 and to enforce specifically the performance of terms and provisions of this Section 7.05 in any action instituted in any court having jurisdiction over the Parties and the matter, without proof of actual damages, in addition to any other remedy to which the Seller is entitled at law or in equity. Buyer further agrees not to assert that a remedy of specific performance is unenforceable, invalid, contrary to applicable Law or inequitable for any reason, nor to object to a remedy of specific performance on a basis that a remedy of monetary damages would provide an adequate remedy for any such breach.

(j) The Seller's rights and obligations under this Section 7.05 may be assigned (in whole, but not in part) by the Seller at any time prior to the earlier of the expiration of the ROFR Period or the consummation of a Sale Transaction with any Person other than the Seller (subject to Buyer's compliance with the terms of this Section 7.05); *provided* that the Seller shall deliver

to Buyer written notice of any such assignment prior to the effectiveness of such assignment. For the avoidance of doubt, each reference to "the Seller" in this Section 7.05 shall mean the Seller or any Person to which the Seller assigns its rights under this Section 7.05 in compliance with this Section 7.05(j).

Section 7.06. **Consent Decree.**

(a) Consent Decree Obligations; Compliance Schedule. Between the Effective Date and the Closing, (i) the Seller shall diligently perform and implement the CSO Controls, the Nine Minimum Control Plan, and the Long Term Control Plan in accordance with the requirements of the Consent Decree, and (ii) the Seller shall continue to implement activities relating to the Consent Decree and Long Term Control Plan projects in accordance with, and shall comply with, the schedule set forth in Schedule 7.06 (the "Compliance Schedule"), which Compliance Schedule sets out and requires the Seller to continue to perform certain activities during the period between the Effective Date and the Closing Date relating to the Seller's obligations under the Consent Decree and the Long Term Control Plan. The Seller shall confer with Buyer prior to proposing any revisions to the deadlines or projects contained in Appendix B of the Consent Decree proposed by the Seller, which require approval by parties to the Consent Decree; and the Seller shall not agree to the expansion or acceleration of any such project without the prior written approval of Buyer. Any change to the deadlines or projects contained in Appendix B of the Consent Decree following the Effective Date that has been agreed to by Buyer and has been separately approved by the parties to the Consent Decree before the Closing Date shall be included in the Amended Consent Decree.

(b) Acknowledgment of Seller Notice to Buyer the Consent Decree. Buyer acknowledges that it has received from the Seller a true, correct and complete copy of the Consent Decree and that Buyer understands and agrees to assume, as of the Closing Date, all obligations set forth in the Consent Decree, as amended in accordance with Section 7.06(d).

(c) Notice to the United States, EPA and PaDEP. Buyer and the Seller shall, on the Effective Date, cause notice of execution of this Agreement and Buyer's agreement to assume the Seller's obligations under the Consent Decree, which shall become effective as of the Closing Date, to be sent to the United States Department of Justice ("DOJ"), EPA and PaDEP as required under Section II and Section XVI of the Consent Decree.

(d) Transition Plan and Amended Consent Decree. Buyer, in consultation with the Seller, shall prepare a transition plan ("Transition Plan") setting forth (i) Buyer's financial and technical ability to assume the Seller's obligations and liabilities under the Consent Decree, (ii) Buyer's plans for implementation of the obligations under the Consent Decree after Closing (including plans for organization and management of the CSO Controls and implementation of the Long Term Control Plan). The Seller and Buyer shall jointly seek the agreement of the DOJ, EPA and PaDEP to an amendment to the Consent Decree that contains the following elements: (1) any necessary updates to the factual recitals of the Consent Decree; (2) substitution of Buyer for the Seller as the "Defendant" under the Consent Decree; (3) release of the Seller in accordance with Article II, Section 5 of the Consent Decree; (4) recognition that the System will continue to be governed by the provisions of the Consent Decree, implementing the EPA CSO Policy; (5) modification of the Nine Minimum Controls Plan to reflect the manner and methods

by which Buyer, as a public utility, would implement the Nine Minimum Controls Plan, including identification of those activities (such as street sweeping and enforcement of ordinances) that would continue to be performed by the City; (6) incorporation of the element previously agreed to pursuant to the Notice of Non-Material Modification of Consent Decree dated December 18, 2015; (7) updates to the notice provisions in Sections 83-84 of the Consent Decree; and (8) such other amendments as agreed to by the Parties to the Consent Decree (the "Amended Consent Decree"). Assuming the accuracy of the Seller's representations set forth in Section 4.15 and the Seller's compliance with and performance of its obligations under Section 7.06(a), the Seller and Buyer, in seeking approval to the Amended Consent Decree, do not anticipate requesting any material modification to the substantive obligations set forth in the Consent Decree, including the schedule for implementation of the Long Term Control Plan; *provided, however*, that in the event that Buyer, reasonably and in good faith, determines that the Seller has breached any of its representations and warranties set forth in Section 4.15 or that the Seller has failed to comply with and perform its obligations under Section 7.06(a)Section 7.06(a), Buyer shall have the right to negotiate with the DOJ, EPA and PaDEP an adjustment to the schedules for the Long Term Control Plan and Nine Minimum Controls Plan so as to allow Buyer sufficient time to complete such work after the Closing Date without incurring fines or penalties. The Parties acknowledge and agree that the release of the Seller pursuant to the provisions of Article II, Section 5 of the Consent Decree shall require approval by the United States District Court for the Middle District of Pennsylvania of the substitution of Buyer as a Defendant and the Amended Consent Decree. For the avoidance of doubt, in no event shall any release of the Seller under or with respect to the Consent Decree constitute, or be deemed to constitute a release or waiver, or in any way affect the Seller's obligations under this Agreement with respect to the Consent Decree and the performance of the Seller's obligations with respect to the Consent Decree prior to the Closing.

(e) Cooperation. The Seller and Buyer shall cooperate and act in good faith in negotiating and securing agreements with the City, the Borough and municipalities served by intermunicipal agreements under which the City, the Borough, and such other municipalities commit to undertake and perform those actions required to implement obligations under the revised Nine Minimum Control Plan to be approved by EPA and PaDEP and the Industrial Pretreatment Program, including activities relating to street sweeping, and the adoption, maintenance and enforcement of ordinances relating to prohibited or regulated discharges to the System. The Seller and Buyer shall also cooperate and act in good faith in evaluating the feasibility of transferring and allowing the City and the Borough to utilize, in relation to operation of their MS4 System, nutrient and sediment reduction offsets or credits generated through operation of the existing wastewater treatment plant at loadings less than the sediment and nutrient cap loads established in the NPDES Permit in excess of those offsets or credits required by Buyer in relation to operation of the System ("Excess Offsets and Credits"), and if determined to be feasible, negotiating in good faith arrangements on reasonable terms for transferring to the City and the Borough such Excess Offsets and Credits to the extent required to meet the nutrient and sediment loading limitations applicable to the MS4 System.

Section 7.07. **Current and Future Rates.**

(a) The Parties acknowledge that following the Closing, (i) the initial customer charge and consumption charge applicable to wastewater customers in the Service Area shall be

the customer charge and consumption charge being paid by those customers for wastewater service being provided by the Seller immediately prior to the Closing Date and said charges shall continue in full force and effect until changed in accordance with this Agreement and applicable Law, (ii) Buyer may, subject to PaPUC approval and applicable Law, bill wastewater customers in the Service Area a monthly customer charge, provided that the aggregate amount of the customer charge does not change until changed in accordance with this Agreement and applicable Law, and (iii) the base rate and non-base rate increases (collectively, "Rate Increase(s)") for Service Area wastewater customers, subject to PaPUC approval and applicable Law, will likely vary each year or more frequently and, in some years, there may be no Rate Increase. The Parties further acknowledge that tariffed rates, as set by the PaPUC, are subject to applicable Law and binding upon the Parties. The Parties agree, subject to PaPUC approval and applicable Law, that wastewater customers in the Service Area will immediately following the Closing be subject to Buyer's prevailing wastewater tariff on file with and as approved by the PaPUC with respect to all rates other than the customer charge (known under Buyer's current tariff as "monthly service charge") and consumption charge, including but not limited to capacity reservation fees, tapping fees and the like, as well as non-rate related terms and conditions of service, including but not limited to billing frequency, termination procedures and the like.

(b) Notwithstanding anything to the contrary in Section 7.07(a), Buyer shall not implement a Rate Increase for the Service Area wastewater customers that would be effective prior to January 1, 2018. Buyer shall not propose or implement a distribution improvement system charge for the Service Area wastewater customers before January 1, 2019.

(c) In the first base rate case filed by Buyer after the Effective Date of this Agreement, subject to PaPUC approval and applicable Law, Buyer shall not propose or request any rate increase to the base rates or change in rate design to be applicable to wastewater customers in the Service Area. However, the Parties acknowledge that Buyer shall have the reasonable discretion to address and agree to base rate increases and changes in rate design for wastewater customers in the Service Area in the context of settlement of the base rate case, subject to PaPUC approval and applicable Law.

(d) Not later than ninety (90) days after the end of year ten (10) following the Closing Date, Buyer shall provide to Seller a written statement and calculation showing as accurately as possible the cumulative positive difference, if any, over that ten-year period between (i) the annual revenues associated with the provision of wastewater service to customers in the Service Area calculated at PaPUC rates in accordance with Schedule 7.07(d) and (ii) a 1.9% Compound Annual Growth Rate ("CAGR") rate increase in annual revenues associated with the provision of wastewater service to customers in the Service Area over that ten-year period relative to the starting amount of annual revenues calculated in accordance with Schedule 7.07(d) ("Variance Adjustment"). Seller shall review and advise Buyer within 30 days of Seller's receipt of such statement of any problems or suggested modifications to the calculation of the Variance Adjustment and written statement. The Parties shall timely and in good faith, resolve any problems or suggested modifications to the Variance Adjustment identified by Seller or Buyer. Any dispute regarding the calculation of the Variance Adjustment shall be timely submitted for resolution to the office of a mutually acceptable nationally recognized firm specializing in utility ratemaking, other than consultants of Buyer or Seller or their Affiliates who, acting as experts and not arbitrators, shall resolve the dispute. The dispute shall be resolved within thirty (30)

days and the costs of retaining the firm and resolving the dispute shall be shared equally by Buyer and Seller. Buyer shall make an adjustment, without interest or other penalty, to the Purchase Price in the amount of the Variance Adjustment, if any, in accordance with the procedures and timing set forth in Section 7.07(e).

(e) Within thirty (30) days of final resolution of the calculation of the Variance Adjustment, Seller shall notify Buyer whether the adjustment to the Purchase Price in the amount of the Variance Adjustment shall be paid directly to Seller or distributed to Buyer's then-current wastewater customers in the Service Area. If Seller elects direct payment to itself, Buyer shall make such payment within thirty (30) days without further obligation. If Seller elects distribution of the adjustment of the Purchase Price for the Variance Adjustment to Buyer's then-current wastewater customers in the Service Area, Buyer shall at its sole cost and expense, subject to PaPUC approval and applicable Law, timely implement procedures and protocols reasonably acceptable to Seller and then make a one-time equal, flat-rate distribution to all customers then being served by Buyer in the Service Area their proportionate share of the Variance Adjustment as mutually agreed-upon by Buyer and Seller. Buyer shall timely certify in writing to Seller when the distribution of the Variance Adjustment has commenced and been completed. In the event the PaPUC fails to allow Buyer to timely implement procedures and protocols and make distributions to customers in the Service Area as aforesaid, Buyer shall pay the Variance Adjustment as an adjustment to the Purchase Price directly to Seller within thirty (30) days of final resolution of the calculation of the Variance Adjustment. If Buyer fails to pay the Variance Adjustment as an adjustment to the Purchase Price within thirty (30) days of the final resolution of the calculation of the Variance Adjustment (whether where Seller initially requests direct payment or the PaPUC fails to allow distribution to customers), Buyer shall pay Seller an amount of $2,500.00 per day for each day that all or any portion of the Variance Adjustment has been unpaid after 30 days following resolution of the calculation of the Variance Adjustment. The Parties intend that such damages constitute compensation, and not a penalty, and acknowledge and agree that the harm caused by the Buyer's breach of its obligations under this Section would be impossible or very difficult to accurately estimate, and that such damages are a reasonable estimate of the anticipated or actual harm that might arise from Buyer's breach of its obligations under this Section. In the event the PaPUC fails to allow distribution by Buyer to then-current Service area wastewater customers, Buyer shall also timely pay Seller the reasonable costs of (i) hiring a third party to administer and pay the Variance Adjustment to wastewater customers in the Service Area and (ii) establishing the processes and protocols to make such payment as described herein. Notwithstanding anything in this subparagraph to the contrary, Buyer shall have the right to reasonably approve the third party selected by Seller to administer and pay any Variance Adjustment to wastewater customers in the Service Area, but in no event shall such approval be unreasonably delayed, conditioned, withheld or denied.

(f) The Variance Adjustment shall be calculated in accordance with Schedule 7.07(d).

(g) If requested by the Seller (not more than once per year), no later than (60) days after such request, Buyer shall provide to the Seller a written statement showing (i) for the 12 month period ending on the most recently completed anniversary of the Closing Date, the projected Variance Adjustment calculated in accordance with Schedule 7.07(d) and (ii) the then-current Annual Variance (as defined in Schedule 7.07(d)). The written statement shall be

provided for informational purposes only and shall not trigger an affirmative duty of Buyer to take a specific action, or be deemed to be any agreement or acquiescence of Seller to any of the data and information contained therein. The written statement referenced herein shall be substantially in the form of the Hypothetical Example contained in Schedule 7.07(d), along with reasonable supporting workpapers.

(h) At the end of year ten (10) following the Closing Date, if the wastewater base rates for the Service Area are lower by customer class than the Average System Rates for wastewater service charged to Buyer's non-Service Area wastewater customers, Buyer may seek from the PaPUC base rate increases for Service Area wastewater customers that would be effective during years eleven (11) through thirteen (13) following the Closing that would equalize the base rates charged by Buyer to Service Area wastewater customers with Average System Rates effective for Buyer's non-Service Area wastewater customers throughout Pennsylvania. Buyer will attempt to implement the base rate increases over the three-year period in approximately one-third (1/3) increments each year, subject to PaPUC approval and applicable Law. However, the Parties acknowledge that Buyer shall have the reasonable discretion to address and agree to base rate increases for wastewater customers in the Service Area in the context of settlement of a base rate case, subject to PaPUC approval and applicable Law.

(i) If during years eleven (11) through thirteen (13) wastewater base rates in the Service Area are higher by customer class than the Average System Rates for wastewater service charged to Buyer's other wastewater customers, Buyer shall not seek a base rate increase for the Service Area wastewater customers during this period. However, the Parties acknowledge that Buyer shall have the reasonable discretion to address and agree to base rate increases for wastewater customers in the Service Area in the context of settlement of a base rate case, subject to PaPUC approval and applicable Law.

(j) If at the end of year ten (10) following the Closing Buyer's wastewater customers in the Service Area are not paying the same non-base rates (including the distribution system improvement charge) as Buyer's other customers being served under Average System Rates, Buyer will attempt to bring the non-base rates of customers in the Service Area into conformity with the non-base rates of the other customers being served under Average System Rates by the end of year thirteen (13) following the Closing, subject to PaPUC approval and applicable Law.

(k) After year thirteen (13) following the Closing, the Parties acknowledge that Buyer may, subject to PaPUC restrictions and applicable Law, propose rate adjustments reasonably necessary to make the total rates (inclusive of base rates and non-base rates such as the distribution system improvement charge) for wastewater customers of the Service Area consistent with the total rates (inclusive of base rates and non-base rates such as the distribution system improvement charge) of Buyer's customers who are subject to Average System Rates.

(l) Solely for the purposes of any calculation of the projected or actual Variance Adjustment and the provisions of written statements related thereto pursuant to this Section 7.07, the "Closing Date" shall be deemed to have occurred on the date that is the last day of the month in which the Closing actually occurs.

Section 7.08. **Operation and Maintenance of the MS4 System.**

(a) General operation and maintenance obligations. Subject to applicable Law, the Seller, the City and the Borough, as the case may be, shall at all times maintain ownership of the MS4 System, the Stormwater System Assets and the City's NPDES Permit.

(b) Community-based Public-Private Partnership Approach for Integration of the MS4 System and the System. Following the Closing, Buyer shall cooperate with the City and the Borough, and use commercially reasonable good faith efforts to evaluate the feasibility of and develop a mutually-acceptable plan for financing, management and operation of the MS4 System in a manner that is consistent with the community-based public-private partnership approach described in Section 6 of Buyer's response to the Request for Best and Final Offers for the Purchase of the Seller's Sewer System and Sewage Treatment Works dated as of October 5, 2015, and in compliance with applicable Law.

Section 7.09. **Additional Agreements.**

(a) From and after the Closing Date and for a period of no less than ten (10) years following the Closing (except, in the case of clause (xi) of this Section 7.09(a), for such shorter period set forth therein), Buyer shall comply with the following covenants and agreements, subject to applicable Law and subject in all cases to Section 7.09(b):

(i) Buyer will establish, in consultation with the Seller, within a reasonable period of time following the Closing, and maintain, a public outreach program, pursuant to which Buyer will, in good faith, use commercially reasonable efforts to explore and consider the formation of a citizens' advisory council comprising representatives from the communities served by the System and the adoption of other public outreach practices established in the Service Area;

(ii) Buyer shall, within a reasonable period of time following Closing, establish and maintain or caused to be maintained (either directly by Buyer, by Buyer's Affiliates or by a third party engaged by Buyer, in any case at Buyer's sole discretion) a local, publicly accessible facility that accepts bill payment from the System's customers;

(iii) Buyer shall, within a reasonable period of time following Closing, establish and maintain or caused to be maintained a 24-hour toll-free customer service telephone number for emergencies with respect to the System, and will use commercially reasonable efforts to dispatch service requests for the efficient provision of customer services;

(iv) Buyer shall, within a reasonable period of time following Closing, establish policies, procedures and systems designed to (1) ensure that billing, account and service questions with respect to the System will be answered by live customer service representatives between the hours of 7:00 am to 7:00 pm (ET) and (2) enable customers of the System to pay their bills by mail, direct debit, online or at a local payment station;

(v) Buyer shall, within a reasonable period of time following Closing, establish policies, procedures and systems designed to provide (1) that each customer of the System that receives both water and sewer services from Buyer will receive a single bill that incorporates such customer's charges for both water and sewer utilities and (2) a

single point of contact for customer service requests for both water and sewer utilities provided by Buyer within the Service Area;

(vi) Buyer will maintain a website or similar service for customers to access for information related to the System, provided that the content and scope of such information shall be determined by Buyer in its sole discretion;

(vii) Buyer and Buyer's Affiliates shall, after the Closing Date and no later than the end of the calendar year 2020, hire or offer to hire in the City or otherwise in connection with the System no less than one hundred (100) individuals (expressly excluding Transferred Personnel) for positions with Buyer or Buyer's Affiliates that do not exist on, and are created by Buyer and its Affiliates following, the Closing Date, and the compensation and benefits of such newly-created positions will be substantially comparable in the aggregate to the compensation and benefits of Buyer's water system employees in similar positions as of the date hereof, and Buyer and Buyer's Affiliates shall continue to offer to hire such individuals for such positions until the earlier of (x) such time as Buyer and Buyer's Affiliates hire one hundred (100) individuals for such positions or (y) the end of the calendar year 2020;

(viii) Buyer will ensure its Building Better Communities program, building trails, parks and playgrounds within the community, its H2O – Help to Others Program for low-income customers, fire fighter grant program and other charitable programs (or substantially similar equivalents) will be either continued within or expanded into, as applicable, the communities served by the System;

(ix) to the extent consistent with policies and initiatives of Buyer in effect as of the date hereof and otherwise permitted under applicable Law, Buyer will, within a reasonable period of time following the Closing, establish policies and procedures designed to provide minority business enterprises, women-owned business enterprises, veteran-owned business enterprises and locally-based businesses the opportunity to compete for work related to the System and contract with Buyer;

(x) in Buyer's first base rate proceeding with respect to the System following the Closing, Buyer shall include a request in such proceeding to combine partially, under Pennsylvania's System Improvement Charges Act 11 of 2012 ("Act 11"), Buyer's water and wastewater revenue requirements for ratemaking purposes to ensure the System's customers benefit from Act 11 in the same manner as its other customers throughout Pennsylvania and to the extent permitted by the PaPUC and applicable Law; *provided*, that Buyer shall nonetheless have the reasonable discretion to address and agree to base rate increases for wastewater customers in the Service Area in the context of settlement of a base rate case, and nothing contained in this clause (x) shall be deemed to restrict or limit Buyer in the context of any such settlement, subject to PaPUC approval and applicable Law; and

(xi) subject to applicable Law, during the one (1) year period following the Closing Date, Buyer's collection standards and practices with respect to customers of the System will be consistent in all material respects with the collection standards and

practices utilized by Buyer as of the date hereof with respect to customers of the Water System.

(b) Notwithstanding anything in this Section 7.09 to the contrary, neither Buyer nor any of Buyer's Affiliates shall be liable or responsible to the Seller or any other Person, nor be deemed to have defaulted under or breached this Section 7.09, for any failure or delay by Buyer or its Affiliates in fulfilling or performing any obligation under any provision of Section 7.09(a), when and to the extent such failure or delay is directly or reasonably proximately caused by, or a direct or reasonably proximate result of, any of the following events, states of facts, occurrences, non-occurrences, circumstances, developments or changes, in each case beyond the reasonable control of Buyer (but not including, for the avoidance of doubt, any such event, state of facts, occurrence, non-occurrence, circumstance, development or change which results from any intentional or willful act by Buyer or Buyer's Affiliates or their respective Representatives (in their capacities as such) designed or intended to result in Buyer being relieved of its obligations under Section 7.09(a)): (i) flood, earthquake, hurricane, tornado, fire, explosion, landslide, natural disaster or other "acts of God", (ii) war, invasion, hostilities (whether war is declared or not), sabotage, terrorist threats or acts, riot or other civil unrest, (iii) enactment of or changes in applicable Law or the interpretation or enforcement thereof, (iv) action by any Governmental Authority, (v) national or regional emergency, (vi) strikes, labor stoppages or slowdowns or other industrial disturbances, (vii) shortage of adequate power or transportation facilities, (viii) breakage or accidents to machinery, pipelines, dams or canals or partial or entire failure or contamination of water supply, and (ix) other similar events and circumstances beyond the reasonable control of Buyer. In the event of a failure or delay by Buyer in fulfilling or performing any term of this Section 7.09 due to any such event, state of facts, occurrence, non-occurrence, circumstance, development or change beyond Buyer's reasonable control, Buyer shall use commercially reasonable efforts to end the failure or delay and commence or resume the performance of its obligations as soon as reasonably practicable after the end of such event, state of facts, occurrence, non-occurrence, circumstance, development or change (including through the use of alternate sources, workaround plans or other commercially reasonable means to permit Buyer to perform such obligations), and Buyer and its Affiliates shall use commercially reasonable efforts and act in good faith in the performance of their obligations under this Section 7.09; *provided* that (1) Buyer's commercially reasonable efforts under this Section 7.09(b) shall in no event require Buyer to incur any extraordinary costs or expend resources which are not reasonably proportional to the costs that would be incurred or resources that would be expended in Buyer's performance of the applicable obligation Section 7.09(a), and (2) in the event that Buyer's performance of any obligation under this this Section 7.09 is prevented, delayed or otherwise adversely impacted by the enactment of or change in applicable Law or the interpretation or enforcement thereof or an action by any Governmental Authority, in no event shall this Section 7.09(b) be deemed to require Buyer to violate any such Law or take any action with respect to a Governmental Authority (including requesting any unique or extraordinary concession or other Governmental Approval) which Buyer, acting reasonably and in good faith and based on the advice of counsel, determines would reasonably be expected to adversely affect Buyer's or its Affiliates' standing or relationship with such Governmental Authority.

(c) Buyer acknowledges that, upon conveyance of the Acquired Assets to Buyer, Buyer will be subject to, among other Taxes, real estate Taxes, which shall be paid by Buyer. During the two (2) year period following the Closing Date, in the event of any real property Tax

assessment of the Real Property owned in fee by Buyer that would result in Buyer being required to pay an aggregate amount of real estate Taxes equal to or less than $400,000 for such year, Buyer shall not appeal any such assessment during such two (2) year period.

Section 7.10. **Exclusivity.** From and after the Effective Date and until the earlier of the Closing Date or the termination of this Agreement in accordance with its terms, except for the transactions contemplated by this Agreement, (a) without the prior written consent of Buyer, the Seller, the City and the Borough and their respective Affiliates will not, and will cause their respective Representatives and other advisors not to, directly or indirectly, (i) solicit, initiate or encourage submission of any inquiry, proposal or offer from any Person relating to any transaction involving any sale or transfer of any of the Acquired Assets or the System, (ii) enter into or participate in any discussions or negotiations regarding, or furnish any information to or cooperate with any Person with respect to, any transaction involving any of the Acquired Assets or the System, or (iii) enter into any negotiation, discussion, Contract, agreement, instrument, arrangement or understanding with any Person relating in any manner to any transaction involving any sale, transfer or other disposition of any of the Acquired Assets or the System; and (b) in the event that the Seller, the City, the Borough, their respective Affiliates or any of their respective Representatives or other advisors receives any proposal with respect to any of the matters described in the foregoing clause (a), the Seller shall promptly (but in no event later than two (2) Business Days after receipt thereof) communicate to Buyer the existence of any such proposal.

Section 7.11. **Outstanding Indebtedness.**

(a) As provided in Section 3.01(a), Buyer has the option, upon reasonable advance written notice to the Seller, in lieu of paying (on behalf of the Seller) in full the total amount of Outstanding Indebtedness at the Closing, to assume any of the Seller's and the City's obligations under the Outstanding Indebtedness which may be lawfully assigned to and assumed by Buyer pursuant to applicable Law and the terms of the Contracts governing the Outstanding Indebtedness (such portion of the Outstanding Indebtedness, the "Assignable Outstanding Indebtedness").

(b) Not less than forty five (45) days prior to the Closing Date, Buyer shall notify the Seller in writing which items of the Outstanding Indebtedness Buyer desires to assume as Assignable Outstanding Indebtedness. Recognizing that it may be necessary for Buyer and the Seller to obtain consents and approvals from third parties and take other actions in order for Buyer to assume Assignable Outstanding Indebtedness, the Seller and Buyer shall cooperate with respect to the giving of all notices and the making of all requests and the furnishing of all information and documents as Buyer shall reasonably determine to be necessary or appropriate in order to qualify any portions of Outstanding Indebtedness as Assignable Outstanding Indebtedness. Notwithstanding anything herein contained to the contrary, in connection with any Assignable Outstanding Indebtedness which Buyer elects to assume, in no event may such Assignable Outstanding Indebtedness be assumed by Buyer unless in connection with such assignment and assumption, the Seller and the City are released from any and all obligations under such Assignable Outstanding Indebtedness.

(c) With respect to all Outstanding Indebtedness other than Assignable Outstanding Indebtedness (if any), the Seller shall take all such action as shall be required under the terms of such Outstanding Indebtedness (including any indentures and loan agreements relating thereto) to call such Outstanding Indebtedness for prepayment or redemption on the Closing Date (if such Outstanding Indebtedness is then subject to prepayment or redemption) and to terminate and cancel all commitments to lend as of the Closing Date (in the case of lines of credit under which the Seller is the borrower) or to arrange for the legal defeasance of such Outstanding Indebtedness (if such Outstanding Indebtedness is not then subject to prepayment or redemption) as of the Closing Date, which arrangements may be required to include the creation of a defeasance escrow, the subscription for investment securities for the defeasance escrow, the obtaining of an accountant's verification report and the delivery of legal opinions. All such action of the Seller shall be subject to the reasonable review and approval of Buyer.

Section 7.12. **PaPUC Approval.** Commencing on the Effective Date, Buyer covenants and agrees to timely initiate and faithfully prosecute, along with Seller as co-applicant, the necessary proceedings to obtain from the PaPUC (i) the issuance of certificates of public convenience to Buyer to provide wastewater services in the Service Area and the acquisition of the System by Buyer, (ii) approval of this Agreement and any other contractual arrangements between Buyer and municipalities for the provision of wastewater services in the Service Area in accordance with Section 507 of the Public Utility Code, 66 Pa. C.S. § 507, (iii) approval to allow Buyer to implement procedures and protocols and then distribute the Variance Adjustment to wastewater customers being served by Buyer in the Service Area as provided in and limited by Section 7.07(e), (iv) approval of Buyer's initial pro forma tariff applicable to Service Area customers, and (v) approval of a tariff supplement incorporating Buyer's Industrial Pretreatment Program applicable to the System into Buyer's tariff to be filed by Buyer during the course of the PaPUC proceeding. The Seller shall assist and cooperate with Buyer in connection with Buyer's performance of its obligations under this Section 7.12(a) in accordance with the Seller's obligations pursuant to Section 9.02 and Section 9.04.

(b) The Parties acknowledge and agree that Buyer shall be primarily responsible for prosecuting the PaPUC proceedings referenced in Section 7.12(a), that Buyer may establish reasonable processes and procedures for prosecuting the PaPUC proceedings to which Seller and its representatives shall be required to comply, and that Seller shall act with due diligence and dispatch in addressing all matters pertinent to the prosecution of the PaPUC proceedings so as to not prejudice the Parties' participation in that proceeding or the potential outcome thereof. Notwithstanding the foregoing, the Parties shall in good faith timely cooperate with each other in developing and implementing procedures and protocols for addressing all aspects of the PaPUC proceedings referenced in Section 7.12(a) including developing case strategy, pre-filing meetings with regulators and stakeholders, preparing all pleadings, responding to discovery, developing testimony, conducting evidentiary hearings, preparing briefs and other pleadings, etc. In the event of a good faith dispute between the Parties regarding strategy, tactics or other aspects of the PaPUC proceeding that cannot in the exercise of good faith and due diligence be resolved timely, Buyer shall have the right in such circumstances to take such action as it reasonably deems necessary consistent with this Agreement.

(c) Nothing contained herein shall preclude, consistent with Section 7.12(b), the filing for reconsideration of or appealing a PaPUC Final Order if the order contains terms or conditions that are not reasonably satisfactory.

(d) Notwithstanding anything to the contrary in this Agreement, in the event the PaPUC issues an order approving the transaction as contemplated by this Section 7.12 and if all other conditions precedent to Closing have been fully satisfied in accordance with the terms of this Agreement, the Parties may elect in their discretion and by mutual agreement to close on the transaction (i) notwithstanding a pending appeal or request for reconsideration with respect to such order or (ii) during the otherwise applicable appeal/reconsideration periods if no party has been aggrieved by the PaPUC order and the Parties reasonably believe there is little likelihood of a successful legal or other challenge to said PaPUC order.

Section 7.13. **Insurance**. To the extent that the Seller (with respect to the System or any Acquired Assets), the System or any Acquired Assets were insured under any occurrence-based insurance policies of the City or the Borough (or with respect to any Acquired Assets, any occurrence-based insurance policies of the Seller) prior to the Closing Date, following the Closing, at Buyer's written request, the Seller shall, and shall cause the City or the Borough, as applicable, to, make claims under such policies with respect to occurrences, events, conditions, or circumstances to the extent relating to the System or any Acquired Asset that occurred or existed prior to the Closing. The Seller does not represent, warrant or covenant that (i) such insurance policies will provide coverage for any claims reported after the Closing that Buyer may elect to make, (ii) issuers of such policies will not wrongfully refuse to honor any such claims, or (iii) it, the City or the Borough will maintain any such insurance policies following the Closing Date. The Seller, the City or the Borough, as the case may be, shall provide reasonable assistance to Buyer (at Buyer's sole cost and expense) in connection with the tendering of such claims to the applicable insurers under such insurance policies, including providing Buyer with a copy of the applicable policy following the request of Buyer. The Seller, the City or the Borough, as the case may be, shall remit any recoveries with respect to any claims asserted by Buyer under any such insurance policies in excess of reasonable costs of recovery of the Seller, the City or the Borough, as the case may be, including deductibles and the amount of any increased premiums retroactively applied as a result of the payment by the applicable insurers of such claims, or any increases in premiums for the year following the year in which any such claims were paid by the applicable insurers, in either case to the extent the Seller, the City or the Borough, as the case may be, can demonstrate to Buyer that the amount of any such increased premiums was attributable to such claims. In the event of any dispute regarding the date of any loss or occurrence, the terms of the applicable policies shall govern.

ARTICLE VIII.

INDEMNIFICATION

Section 8.01. **Survival.** All representations and warranties contained in this Agreement shall survive until the Escrow Release Date, except that (a) the representations and warranties of the Seller set forth in Section 4.01 (Existence and Power), Section 4.02 (Authorization and Validity of Agreement), Section 4.14 (Environmental Compliance), Section 4.15 (Consent Decree Matters), Section 4.21 (Title to the Acquired Assets; Sufficiency) and Section 4.22

(Brokers' and Finders' Fees) (collectively, the "Seller Fundamental Representations") shall survive the Closing indefinitely or until the latest date permitted by applicable Law, and (b) the representations and warranties of Buyer set forth in Section 5.01 (Existence and Power), Section 5.02 (Authorization and Validity of Agreement), and Section 5.05 (Brokers' and Finders' Fees) (collectively, the "Buyer Fundamental Representations") shall survive the Closing indefinitely or until the latest date permitted by applicable Law. The covenants and agreements of the Parties contained herein shall survive the Closing indefinitely or for the shorter period explicitly specified therein, except that for such covenants and agreements that survive for such shorter period, breaches thereof shall survive indefinitely or until the latest date permitted by applicable Law. Notwithstanding the preceding sentences, (x) any breach of representation, warranty, covenant or agreement in respect of which indemnity may be sought under this Agreement shall survive the time at which it would otherwise terminate pursuant to the preceding sentences, if notice of the inaccuracy or breach thereof giving rise to such right of indemnity shall have been given to the party against whom such indemnity may be sought prior to such time, and (y) nothing contained in this Section 8.01 shall limit in any way any rights a Party may have to bring claims grounded in fraud, intentional misrepresentation or willful misconduct, which rights shall survive the Closing indefinitely.

Section 8.02. **Indemnification by the Seller.** Subject to the terms and conditions of this Article VIII, the Seller shall indemnify, defend and hold harmless, Buyer and its successors and Affiliates and their respective employees, officers, directors, trustees and agents (the "Buyer Indemnified Persons"), from and against any and all Damages arising from or relating to: (a) any misrepresentation as to, or any inaccuracy in, any of the representations and warranties of the Seller contained in this Agreement, in any of the Related Agreements or in any exhibit, schedule, certificate or other instrument or document furnished by or on behalf of the Seller pursuant to this Agreement (*provided*, that for purposes of determining the existence of any inaccuracy in or breach of any representation or warranty and calculating the amount of any Damages with respect thereto under this Article VIII, any materiality, Material Adverse Effect or similar qualifications shall be disregarded and deemed deleted therefrom for such purposes (except with respect to (i) the representations and warranties contained in Section 4.06(a) and (ii) where such provision requires disclosure of lists of items of a material nature or above a specified threshold)); (b) any breach or nonfulfillment of any of the covenants or agreements of the Seller contained in this Agreement, in any of the Related Agreements or in any exhibit, schedule, certificate or other instrument or document furnished by or on behalf of the Seller pursuant to this Agreement; or (c) any Excluded Liability (regardless of whether or not the Seller disclosed any such Excluded Liability in any Schedule or otherwise, including any Excluded Liability imposed on Buyer as a result of transferee, successor or similar liability (including bulk sales, bulk transfer or similar Laws) or otherwise, and including any Taxes arising out of the ownership of the Acquired Assets and out of the operation of the System before the Closing and the Seller's portion of any Straddle Period Taxes, and including the matters set forth on Schedule 4.14) or any Excluded Asset.

Section 8.03. **Indemnification by Buyer.** Subject to the terms and conditions of this Article VIII, Buyer shall defend, indemnify and hold harmless the Seller and its successors and Affiliates and each of their respective employees, officers, directors and agents (the "Seller Indemnified Persons") from and against any and all Damages arising from or relating to: (a) any misrepresentation as to, or any inaccuracy in, any of the representations and warranties of Buyer

contained in this Agreement, in any of the Related Agreements or in any exhibit, schedule, certificate or other instrument or document furnished by or on behalf of Buyer pursuant to this Agreement (*provided*, that for purposes of determining the existence of any inaccuracy in or breach of any representation or warranty and calculating the amount of any Damages with respect thereto under this Article VIII, any materiality, material adverse effect or similar qualifications shall be disregarded and deemed deleted therefrom for such purposes (except where such provision requires disclosure of lists of items of a material nature or above a specified threshold)); (b) any breach or nonfulfillment of any of the covenants or agreements of Buyer contained in this Agreement, any of the Related Agreements or in any exhibit, schedule certificate or other instrument or document furnished by or on behalf of Buyer pursuant to this Agreement; (c) any unfair labor practice charges or other claims that Seller violated Article 16, *Transfer of Authority*, of the Collective Bargaining Agreement, or failed to condition the sale of the Acquired Assets on Buyer's assumption of the Collective Bargaining Agreement, including any and all awards of lost contractual wages or benefits against the Seller which Union Personnel would have received had the Buyer adopted all complete terms and conditions of the Collective Bargaining Agreement; provided, however that no Seller Indemnified Person have the right to assert a claim seeking indemnification pursuant to this Section 8.03(c) (and Buyer shall have no obligation to indemnify any Seller Indemnified Person pursuant to this Section 8.03(c)) unless and only in the event that Buyer, in bargaining with the Union, fails to offer to provide Substantially Comparable Compensation and Benefits in breach of Buyer's obligation pursuant to Section 7.04(h); (d) any Assumed Liability as and when payment and performance is due, including any liability related to any CSO Control Measures to the extent arising after the Closing and any claims by any Governmental Authority for any events, circumstances or liabilities arising after the Closing; (e) Buyer's violation of Environmental Requirements with respect to the System after the Closing Date; (f) Buyer's management of Hazardous Materials in connection with the System after the Closing Date; (g) any Environmental Claims resulting from Buyer's operation of the System after the Closing Date; or (h) the ownership, operation or control of the Acquired Assets or the System after the Closing Date.

Section 8.04. **Indemnification Procedure.**

(a) Third Party Claims. If any Indemnified Party receives notice of the assertion or commencement of any action, suit, claim or other legal proceeding made or brought by any Person who is not a party to this Agreement (or a successor to a Party to this Agreement) (a "Third Party Claim") against such Indemnified Party with respect to which the Indemnifying Party may be obligated to provide indemnification under this Agreement, the Indemnified Party shall give the Indemnifying Party prompt written notice thereof. The failure to give such prompt written notice shall not, however, relieve the Indemnifying Party of its indemnification obligations, except and only to the extent that the Indemnifying Party forfeits material rights or material defenses by reason of such failure. Such notice by the Indemnified Party shall describe the Third Party Claim in reasonable detail and shall indicate the estimated amount, if reasonably practicable, of the Damage that has been or may be sustained by the Indemnified Party. The Indemnifying Party shall have the right to participate in, or by giving written notice to the Indemnified Party (and subject to the other requirements contained herein) to assume the defense of any Third Party Claim at the Indemnifying Party's expense and by the Indemnifying Party's own counsel (which counsel shall be reasonably acceptable to the Indemnified Party), so long as (i) the Indemnifying Party notifies the Indemnified Party, within ten (10) Business Days after the

Indemnified Party has given notice of the Third Party Claim to the Indemnifying Party (or by such earlier date as may be necessary under applicable procedural rules in order to file a timely appearance and response) that the Indemnifying Party is assuming the defense of such Third Party Claim, *provided*, that if the Indemnifying Party assumes control of such defense it must first agree and acknowledge in such notice that the Indemnifying Party is fully responsible (with no reservation of any rights other than the right to be subrogated to the rights of the Indemnified Party) for all Damages relating to such Third Party Claim, (ii) the Indemnifying Party conducts the defense of the Third Party Claim actively and diligently and at its own cost and expense, and (iii) the Third Party Claim (A) does not involve injunctive relief, specific performance or other similar equitable relief, any claim in respect of Taxes, any Governmental Authority, any criminal allegations or any potential damage to the goodwill or reputation of Buyer, (B) is not one in which the Indemnifying Party is also a party and joint representation would be inappropriate or there may be legal defenses available to the Indemnified Party which are different from or additional to those available to the Indemnifying Party, or (C) does not involve a claim which, upon petition by the Indemnified Party, the appropriate court rules that the Indemnifying Party failed or is failing to vigorously prosecute or defend, and *provided further*, that notwithstanding anything to the contrary contained herein, if the Seller is the Indemnifying Party with respect to a Third Party Claim and (i) Buyer or any insurer under the R&W Insurance Policy is required to assume such defense pursuant to the terms thereof or (ii) the Seller's assumption of the defense could cause a Buyer Indemnified Person to lose coverage under the R&W Insurance Policy, the Seller shall not be permitted to assume the defense of such Third Party Claim. The Indemnified Party shall reasonably cooperate in good faith in such defense. In the event that the Indemnifying Party assumes the defense of any Third Party Claim, subject to Section 8.04(b), it shall have the right to take such action as it deems necessary to avoid, dispute, defend, appeal or make counterclaims pertaining to any such Third Party Claim in the name and on behalf of the Indemnified Party. The Indemnified Party shall have the right, at its own cost and expense, to participate in the defense of any Third Party Claim with counsel selected by it subject to the Indemnifying Party's right to control the defense thereof. If the Indemnifying Party elects not to compromise or defend such Third Party Claim or fails to promptly notify the Indemnified Party in writing of its election to defend as provided in this Agreement, the Indemnified Party may, subject to Section 8.04(b), pay, compromise, defend such Third Party Claim and seek indemnification for any and all Damages based upon, arising from or relating to such Third Party Claim. The Seller and Buyer shall reasonably and in good faith cooperate with each other in all reasonable respects in connection with the defense of any Third Party Claim, including making available records relating to such Third Party Claim and furnishing, without expense (other than reimbursement of actual out-of-pocket expenses) to the defending party, management employees of the non-defending party as may be reasonably necessary for the preparation of the defense of such Third Party Claim.

(b) Settlement of Third Party Claims. Notwithstanding any other provision of this Agreement, the Indemnifying Party shall not enter into or agree to settlement of any Third Party Claim without the prior written consent of the Indemnified Party (which consent shall not be unreasonably withheld or delayed), except as provided in this Section 8.04(b). If a firm offer is made to settle a Third Party Claim without leading to liability or the creation of a financial or other obligation on the part of the Indemnified Party and provides for the unconditional release of each Indemnified Party from all liabilities and obligations in connection with such Third Party Claim, and the Indemnifying Party desires to accept and agree to such offer, the Indemnifying

Party shall give prompt written notice to that effect to the Indemnified Party. If the Indemnified Party fails to consent to such firm offer within fifteen (15) days after its receipt of such notice, the Indemnified Party may continue to contest or defend such Third Party Claim and in such event, provided that the Indemnifying Party continues to diligently contest or defend such Third Party Claim in good faith and otherwise complies with its obligations hereunder, the maximum liability of the Indemnifying Party as to such Third Party Claim shall not exceed the amount of such settlement offer. If the Indemnified Party fails to consent to such firm offer and also fails to assume defense of such Third Party Claim, the Indemnifying Party may settle the Third Party Claim upon the terms set forth in such firm offer to settle such Third Party Claim. If the Indemnified Party has assumed the defense of a Third Party Claim pursuant to Section 8.04(a), it shall not agree to any settlement without the written consent of the Indemnifying Party (which consent shall not be unreasonably withheld or delayed).

(c) Direct Claims. Any claim by an Indemnified Party with respect to any Damages which do not arise or result from a Third Party Claim (a "Direct Claim") shall be asserted by the Indemnified Party giving the Indemnifying Party prompt written notice thereof. The failure to give such prompt written notice shall not, however, relieve the Indemnifying Party of its indemnification obligations, except and only to the extent that the Indemnifying Party forfeits material rights or material defenses by reason of such failure. Such notice by the Indemnified Party shall describe the Direct Claim in reasonable detail and shall indicate the estimated amount, if reasonably practicable, of the Damage that has been or may be sustained by the Indemnified Party. The Indemnifying Party shall have thirty (30) days after its receipt of such notice to respond in writing to such Direct Claim. During such thirty (30) day period, the Indemnified Party shall reasonably cooperate and assist the Indemnifying Party and its Representatives with respect to Indemnifying Party's investigation of such Direct Claim including determining the validity and amount of such Direct Claim. If the Indemnifying Party does not so respond within such thirty (30) day period by delivery of written notice disputing the basis or amount of the Direct Claim, the Indemnifying Party shall be deemed to have rejected such claim, in which case the Indemnified Party shall be free to pursue such remedies as may be available to the Indemnified Party on the terms and subject to the provisions of this Agreement. If the Indemnifying Party has timely disputed its indemnity obligation for any Damages with respect to such Direct Claim, the Parties shall proceed in good faith to negotiate a resolution of such dispute and, if not resolved through negotiations, such dispute shall be resolved by litigation in an appropriate court of jurisdiction determined pursuant to this Agreement.

Section 8.05. **Limitations on Indemnification Obligations.**

(a) Subject to the other limitations contained in this Section 8.05, neither Buyer nor any other Buyer Indemnified Persons shall be entitled to indemnification pursuant to Section 8.02(a) unless the aggregate amount of Damages incurred by Buyer and any other Buyer Indemnified Persons that would otherwise be subject to indemnification pursuant to Section 8.02(a) exceeds One Million Two Hundred Fifty Dollars ($1,250,000) in the aggregate (the "Threshold Amount"), in which case the Seller shall then be liable for Damages in respect thereof in excess of the Threshold Amount; *provided, however*, that the foregoing limitations contained in this Section 8.05(a) shall not apply to any claims for indemnification based on (x) a breach of any of the Seller Fundamental Representations or (y) fraud, intentional misrepresentation or willful misconduct.

(b) Subject to the other limitations contained in this Section 8.05, neither Seller nor the Seller Indemnified Persons shall be entitled to indemnification pursuant to Section 8.03(a) unless the aggregate amount of Damages incurred by the Seller and any other Seller Indemnified Persons that would otherwise be subject to indemnification pursuant to Section 8.03(a) exceeds the Threshold Amount, in which case Buyer shall then be liable for Damages in excess of the Threshold Amount; *provided, however*, that the foregoing limitations contained in this Section 8.05(b) shall not apply to any claims for indemnification based on (x) a breach of any of the Buyer Fundamental Representations or (y) fraud, intentional misrepresentation or willful misconduct.

(c) Except in the case of fraud, intentional misrepresentation or willful misconduct (for which all applicable legal and equitable remedies will be available to Buyer), the Buyer Indemnified Persons shall only be entitled to assert (i) claims under Section 8.02(a) (other than claims with respect to breaches of any of the Seller Fundamental Representations, which shall not be limited by this Section 8.05(c)(i) but shall be limited by Section 8.05(c)(ii)) against the Escrow Funds up to the aggregate amount of the Escrow Amount (the "Liability Cap"), which shall represent the sole and exclusive remedy of Buyer and the other Buyer Indemnified Persons for any such claims under Section 8.02(a) (other than claims with respect to breaches of any of the Seller Fundamental Representations or in the case of fraud, intentional misrepresentation or willful misconduct which shall not be subject to the Liability Cap, and subject to recourse to the R&W Insurance Policy), and (ii) claims under Section 8.02(a) with respect to breaches of any of the Seller Fundamental Representations and claims under Sections 8.02(b) or 8.02(c) up to the aggregate amount equal to the Purchase Price (the "Maximum Liability Cap"), which shall represent the maximum aggregate liability of the Seller for all claims under Section 8.02 (other than claims in the case of fraud, intentional misrepresentation or willful misconduct, which shall not be subject to the Maximum Liability Cap). Following the release of the Escrow Funds, the R&W Insurance Policy shall be the sole recourse for any Damages to which a Buyer Indemnified Person is entitled pursuant to Section 8.02(a), other than claims with respect to breaches of any of the Seller Fundamental Representations or in the case of fraud, intentional misrepresentation or willful misconduct; *provided*, that Buyer shall first seek recovery from the R&W Insurance Policy, if coverage is available, with respect to any Damages in respect of breaches of the Seller Fundamental Representations, prior to seeking recovery from the Seller in respect of such Damages. In the case of Damages to which a Buyer Indemnified Person is entitled (x) pursuant to Section 8.02(a) with respect to breaches of any Seller Fundamental Representations (provided that Buyer has first sought recovery from the R&W Insurance Policy to the extent available in accordance with the proviso of the immediately preceding sentence, or to the extent of any Damages for which recovery is not available under the R&W Insurance Policy for any reason in respect of any such breaches of any Seller Fundamental Representations), (y) pursuant to any clause of Section 8.02(b) or Section 8.02(c), or (z) in the event of fraud, intentional misrepresentation or willful misconduct, Buyer may seek recourse for such Damages from the Escrow Funds or from the Seller directly pursuant to this Article VIII, at Buyer's sole and absolute discretion.

(d) Payments by an Indemnifying Party pursuant to Section 8.02 or Section 8.03 in respect of any Damage shall be limited to the amount of any liability or damage that remains after deducting therefrom any insurance proceeds actually received and any indemnity, contribution or other similar payment actually received by the Indemnified Party in respect of

any such claim (other than the R&W Insurance Policy) (in any case, net of expenses incurred in collecting such amount, including any deductible amount paid by such Indemnified Party or increased cost of insurance in connection with such insurance recovery).

(e) Payments by an Indemnifying Party pursuant to Section 8.02 or Section 8.03 in respect of any Damages shall be reduced by an amount equal to any net Tax benefit actually realized by the Indemnified Party in the year such Damages were incurred to the extent attributable to such Damages.

(f) Except with respect to claims (i) relating to the adjustments to the Purchase Price pursuant to Section 3.02, (ii) for equitable relief or specific performance pursuant to Section 7.05 or Section 15.15, and (iii) grounded in fraud, intentional misrepresentation or willful misconduct, the Parties acknowledge and agree that their sole and exclusive remedy with respect to any and all claims for any breach of any representation, warranty, covenant, agreement or obligation set forth herein or otherwise relating to the subject matter of this Agreement and the Related Agreements, shall be pursuant to the indemnification provisions set forth in this Article VIII. For the avoidance of doubt, nothing in this Section 8.05(f) shall limit any Person's right to seek and obtain any equitable relief or specific performance to which any Person shall be entitled pursuant to this Agreement.

(g) Each Indemnified Party shall use, and cause its Affiliates to use, commercially reasonable efforts to mitigate any Damages which form the basis of an indemnification claim hereunder.

(h) Notwithstanding anything to the contrary in this Agreement, including anything this Article VIII, with respect to any claims for indemnity by Buyer for or with respect to any Real Property, Buyer shall, to the extent available, first proceed to recover under the Title Policy of the Title Company for any Damages prior to seeking indemnification under this Article VIII. Buyer acknowledges and agrees that it shall not have a claim under the warranty of title of any deed, assignment or other instrument of transfer or conveyance, which is separate and apart from the provisions and limitations of this Article VIII.

Section 8.06. **Insurance Policy.** The Seller acknowledges that Buyer will, effective as of the Closing, enter into the R&W Insurance Policy and that, in connection therewith, a Buyer Indemnified Person may, subject to the provisions of this Article VIII, make claims for the same Damages or series of related Damages under both this Article VIII and the R&W Insurance Policy. The Seller further acknowledges and agrees that the denial of any claim by any Buyer Indemnified Person under the R&W Insurance Policy shall not be construed as, or used as evidence that, such Buyer Indemnified Person is not entitled to indemnification under this Article VIII.

ARTICLE IX.

PRE-CLOSING COVENANTS OF THE SELLER

Section 9.01. **Operation of the System Prior to Closing.**

(a) Except as otherwise expressly contemplated by this Agreement, as required by applicable Law or with the prior written consent of Buyer (which consent shall not be unreasonably withheld, delayed or conditioned), from the Effective Date until the Closing, the Seller shall (i) operate and manage the System only in the ordinary course of business in accordance with past practices and procedures, (ii) comply in all material respects with all applicable Laws and all Licenses and Permits, (iii) comply in all respects on a timely basis with the Seller's obligations under the Consent Decree and the Compliance Schedule, (iv) in the event of any loss, damage, impairment, confiscation or condemnation of any Acquired Assets, including any of the Real Property (and regardless of whether any such any loss, damage, impairment, confiscation or condemnation is of the type or magnitude contemplated by Section 15.04), apply the proceeds of any insurance policy, judgment or award with respect thereto to repair, replace or restore such Acquired Assets as soon as possible to their prior condition, and (v) use commercially reasonable efforts to maintain and preserve intact the business and assets of the System and to preserve the rights, franchises, goodwill and relationships of the Seller and the System and their customers, lenders, suppliers, regulators and others having business relationships with the Seller and the System.

(b) Without limiting anything contained in Section 9.01(a), except as expressly permitted by the terms of this Agreement or a Related Agreement, from the Effective Date and until the Closing, the Seller shall not, without the prior written consent of Buyer:

(i) amend its charter, bylaws or other similar organizational documents;

(ii) sell, rent, lease or otherwise dispose of any of the Acquired Assets, other than in the ordinary course of business consistent with past practice with respect to assets which are not, individually or in the aggregate, material to the business or operations of the Seller;

(iii) incur, create or assume any Lien with respect to the System or any Acquired Asset, other than Permitted Liens, or give or agree to give or become a party to or bound by any guarantee, surety or indemnity in respect of indebtedness or other obligations or liabilities of any other Person;

(iv) hire any new employees (including as a result of the retirement, resignation, or other termination of any Personnel employed by the Seller prior to or as of the Effective Date), or increase the number of System employees or the base compensation of any employee of the System or grant any bonuses, benefits or other forms of direct or indirect compensation to any employee, officer, director or consultant of the System, except (x) as required by the Collective Bargaining Agreement, (y) as required under the terms of any Seller's Plan in existence as of the date hereof, or (z) as required by applicable Law; *provided* that in the event of a vacancy following the date

hereof in a non-administrative position of employment with the Seller which is critical to the operation and maintenance of the System, the Seller shall be permitted to hire individuals on a temporary basis to perform such critical functions;

(v) enter into, amend or modify any employment or severance agreement, plan or arrangement or increase, terminate, amend or otherwise modify in any material respect any plan or arrangement for the benefit of employees of the System, except as required by the Collective Bargaining Agreement;

(vi) amend, waive, terminate, otherwise modify the Collective Bargaining Agreement or any term or condition thereof, or enter into any agreement, arrangement or understanding, whether oral or in writing, formal or informal, or otherwise, with the Union or any other Person with respect to the foregoing, except as to settle any forthcoming grievances in accordance with the Seller's obligations under the Collective Bargaining Agreement;

(vii) incur any or increase any of the Assumed Liabilities, or the other liabilities or obligations of the System other than (1) as expressly required to comply with the Compliance Schedule, (2) obligations or liabilities in respect of capital expenditures expressly contemplated by the capital expenditure budget provided to Buyer prior to the date hereof and attached to Schedule 9.01(b)(vii) or (3) undrawn amounts under Outstanding Indebtedness;

(viii) make any changes to its method of accounting, except as required by GASB or applicable Law;

(ix) pay, settle or offer to settle or dismiss any litigation or other claim involving or against the Seller or the System, except such claims related to grievances and arbitrations under the Collective Bargaining Agreement and any such claims (or series of related claims) seeking solely monetary damages; *provided*, that in no event shall the Seller, the City, the Borough or any of their respective Affiliates make any agreement in connection with the foregoing which would, or would reasonably be expected to, limit the conduct of Buyer's or its Affiliates' business on or after the Closing Date;

(x) amend, modify or waive performance in any material respect or terminate any Material Contract (other than the expiration of such Material Contract in accordance with its terms) or enter into any Contract that, had such Contract been entered into prior to the date hereof, would have been a Material Contract;

(xi) make any material change in the manner of billing of any customers of the System;

(xii) cancel or fail to renew any insurance policy or fail to give all notices and present all claims (if any) under all such policies in a timely fashion;

(xiii) cause or permit any material change in cash management practices of the System and the Seller's and the System's policies, practices and procedures with respect

to collection of accounts receivable, establishment of reserves for uncollectible accounts, accrual of accounts receivable, inventory control, prepayment of expenses, payment of trade accounts payable, accrual of other expenses, deferral of revenue and acceptance of customer deposits (including any such changes intended to or having the effect of, accelerating the collection of accounts receivable or postponing payments of accounts payable);

(xiv) enter into any commitment or transaction that would constitute a breach of the representations, warranties or agreements contained in this Agreement, or take any action or fail to take any action or, to the extent within the Seller's control, permit to occur any event that, individually or in the aggregate, would reasonably be expected to result in a Material Adverse Effect; or

(xv) agree, resolve or commit to do any of the foregoing.

Section 9.02. **Cooperation.** The Seller shall reasonably cooperate with Buyer and its employees, attorneys, accountants and other agents and, generally, act in reasonably good faith to timely effectuate the purposes of this Agreement and the consummation of the transactions contemplated by this Agreement.

Section 9.03. **Updates to Seller's Schedules.** Following the date hereof and prior to the Closing, the Seller shall promptly deliver written notice (any such notice, a "Seller Schedule Supplement") to Buyer (i) if any of the representations and warranties contained in Article IV of this Agreement was inaccurate or untrue when made, or (ii) of any event, condition or circumstance first occurring after the date of this Agreement that would cause or constitute a breach of any of the representations and warranties of the Seller contained in Article IV if any such representation or warranty had been made at the time of such event, condition or circumstance (any such event, condition or circumstance referenced in this clause (ii), a "Seller Post-Signing Event"). Without limiting the foregoing, at least three (3) Business Days prior to the Closing Date, the Seller shall advise Buyer of any facts which would constitute a breach of a representation or warranty as of the date made or a default under any covenant contained herein. Any disclosure in any Seller Schedule Supplement shall be for informational purposes only and shall not be deemed to have cured any inaccuracy in or breach of any representation or warranty contained in this Agreement, including for purposes of the indemnification or termination rights contained in this Agreement or for purposes of determining whether or not the conditions set forth in Article XII have been satisfied; *provided, however,* that in the event that the Seller delivers a Seller Schedule Supplement with respect to a Seller Post-Signing Event and such Seller Post-Signing Event would give Buyer the right to terminate this Agreement pursuant to Section 14.01(b), and Buyer does not deliver notice of termination of this Agreement pursuant to Section 14.01(b) (i) within five (5) Business Days of the later of (x) Buyer's receipt of such Seller Schedule Supplement and (y) the expiration of any applicable cure period a provided in Section 14.01(b) or (ii) prior to Closing if such Seller Schedule Supplement is delivered less than five (5) Business Days prior to the Closing Date, then Buyer shall be deemed to have irrevocably waived any right to terminate this Agreement with respect to such Seller Post-Signing Event and, further, Buyer shall have irrevocably waived its right to indemnification under Section 8.02(a) with respect to such Seller Post-Signing Event.

Section 9.04. **Governmental Approvals.** Promptly after the execution of this Agreement, upon the terms and subject to the conditions set forth in this Agreement, the Seller shall file all applications and reports that are required to be filed by the Seller with any Governmental Authority, and shall use commercially reasonable efforts to take, or cause to be taken, all actions and to do, or cause to be done, all things necessary or desirable under applicable Law to consummate the transactions contemplated hereby and by the Related Agreement, including (a) preparing and filing as promptly as practicable with any Governmental Authority all documentation to effect all necessary, proper or advisable filings, notices, petitions, statements, registrations, submissions of information, applications and other documents and (b) obtaining and maintaining as promptly as practicable all consents, approvals, registrations, permits, authorizations and other confirmations required to be obtained from any Governmental Authority or other Person that are necessary, proper or advisable to consummate the transactions contemplated by this Agreement or the other Related Agreements. In furtherance and not in limitation of the foregoing, the Seller shall (x) provide or cause to be provided to any Governmental Authority information and documents requested by any such Governmental Authority or necessary, proper or advisable to permit consummation of the transactions contemplated by this Agreement or the other Related Agreement as promptly as possible after the execution of this Agreement, including by supplying as promptly as practicable any additional information and documentary material that may be requested by the DOJ, the EPA, the PaDEP or any other Governmental Authorities, and (y) assist, consult with and cooperate with Buyer in doing all things necessary, proper or advisable to consummate and make effective, in the most expeditious manner practicable, the transactions contemplated by this Agreement, including by (1) furnishing to Buyer all information required or reasonably necessary for any filing to be made with any Governmental Authority (including Buyer's filing with PaPUC), (2) promptly informing Buyer of any communication with any such Governmental Authority regarding any such filings, (3) cooperating with Buyer in the filing and prosecution of any applications required for any Governmental Approvals, and (4) at the request of Buyer, executing such application forms and other documents as necessary to apply for the transfer and/or reissuance of any necessary Governmental Approvals.

ARTICLE X.

PRE-CLOSING COVENANTS OF BUYER

Section 10.01. **R&W Insurance Policy.** Buyer shall use commercially reasonable efforts to procure and cause to be bound as promptly as practicable following the date hereof, a representations and warranties insurance policy containing customary terms consistent with transactions of the size and type contemplated by this Agreement, with a base liability limit of no more than $12,500,000 and an initial retention equal to the Escrow Amount (subject to reduction to a retention amount equal to the Threshold Amount at the Escrow Release Date, and containing such other customary terms, conditions and exclusions as are reasonably acceptable to Buyer (the "R&W Insurance Policy"). The R&W Insurance Policy shall provide that the insurer shall waive and not pursue any subrogation rights against the Seller. The Seller and its Representatives shall reasonably cooperate with Buyer in connection with Buyer's procurement of the R&W Insurance Policy and, subject to the provision of such cooperation, Buyer shall in good faith seek to minimize the number and scope of any exclusions from coverage under the R&W Insurance Policy. Buyer shall not intentionally take any actions to cause the R&W Insurance Policy to not

be effective as of the Closing. The aggregate cost of the premium for the R&W Insurance Policy (including, for the avoidance of doubt, any underwriting fees and any portion of the premium cost for the R&W Insurance Policy paid by Buyer prior to the Closing, to the extent such fees or payments are credited against the aggregate premium cost pursuant to the terms of the R&W Insurance Policy) (the "R&W Premium") shall be borne by the Seller, and the R&W Premium shall be included in the Transaction Expense Amount (with the effect that the net payment to the Seller at Closing shall be reduced by the R&W Premium (and any other amounts included in the Transaction Expense Amount), as provided in Section 3.01(d)). Notwithstanding the foregoing, the R&W Premium required to be paid by Seller hereunder shall not exceed $550,000.

Section 10.02. **Governmental Approvals.** Promptly after the execution of this Agreement, upon the terms and subject to the conditions set forth in this Agreement (including the PaPUC approvals in Article VII), Buyer shall file all applications and reports that are required to be filed by Buyer with any Governmental Authority, and shall use commercially reasonable efforts to take, or cause to be taken, all actions and to do, or cause to be done, all things necessary or desirable under applicable Law to consummate the transactions contemplated hereby and by the Related Agreement, including (a) preparing and filing as promptly as practicable with any Governmental Authority all documentation to effect all necessary, proper or advisable filings, notices, petitions, statements, registrations, submissions of information, applications and other documents and (b) obtaining and maintaining as promptly as practicable all consents, approvals, registrations, permits, authorizations and other confirmations required to be obtained from any Governmental Authority or other Person that are necessary, proper or advisable to consummate the transactions contemplated by this Agreement or the other Related Agreements. In furtherance and not in limitation of the foregoing, Buyer shall (x) provide or cause to be provided to any Governmental Authority information and documents requested by any such Governmental Authority or necessary, proper or advisable to permit consummation of the transactions contemplated by this Agreement or the other Related Agreement as promptly as possible after the execution of this Agreement, including by supplying as promptly as practicable any additional information and documentary material that may be requested by the DOJ, the EPA, the PaDEP or any other Governmental Authorities, and (y) assist, consult with and cooperate with the Seller in doing all things necessary, proper or advisable to consummate and make effective, in the most expeditious manner practicable, the transactions contemplated by this Agreement, including by (1) furnishing to the Seller all information required or reasonably necessary for any filing to be made with any Governmental Authority (including the filing with PaPUC), (2) promptly informing the Seller of any communication with any such Governmental Authority regarding any such filings, (3) cooperating with the Seller in the filing and prosecution of any applications required for any Governmental Approvals, and (4) at the reasonable request of the Seller and subject to Buyer's reasonable approval thereof, executing such application forms and other documents as necessary to apply for the transfer or reissuance of any Governmental Approvals to Buyer which are necessary for Buyer's ownership or operation of the System from and after the Closing.

Section 10.03. **Cooperation.** Buyer shall reasonably cooperate with the Seller and its employees, attorneys, accountants and other agents and, generally, do such other acts and things in good faith as may be reasonable to timely effectuate the purposes of this Agreement and the consummation of the transactions contemplated in accordance with the provisions of this Agreement.

Section 10.04. **Updates to Buyer's Schedules.** Following the date hereof and prior to the Closing, Buyer shall promptly deliver written notice (any such notice, a "Buyer Schedule Supplement") to the Seller (i) if any of the representations and warranties contained in Article V of this Agreement was inaccurate or untrue when made, or (ii) of any event, condition or circumstance first occurring after the date of this Agreement that would cause or constitute a breach of any of the representations and warranties of the Seller contained in Article V if any such representation or warranty had been made at the time of such event, condition or circumstance (any such event, condition or circumstance referenced in this clause (ii), a "Buyer Post-Signing Event"). Without limiting the foregoing, at least three (3) Business Days prior to the Closing Date, Buyer shall advise the Seller of any facts which would constitute a breach of a representation or warranty as of the date made or a default under any covenant contained herein. Any disclosure in any Buyer Schedule Supplement shall be for informational purposes only and shall not be deemed to have cured any inaccuracy in or breach of any representation or warranty contained in this Agreement, including for purposes of the indemnification or termination rights contained in this Agreement or for purposes of determining whether or not the conditions set forth in Article XI have been satisfied; *provided, however,* that in the event that Buyer delivers a Buyer Schedule Supplement with respect to a Buyer Post-Signing Event and such Buyer Post-Signing Event would give the Seller the right to terminate this Agreement pursuant to Section 14.01(a), and the Seller does not deliver notice of termination of this Agreement pursuant to Section 14.01(a) (i) within five (5) Business Days of the later of (x) the Seller's receipt of such Buyer Schedule Supplement and (y the expiration of any applicable cure period as provided in Section 14.01(a) or (ii) prior to Closing if such Buyer Schedule Supplement is delivered less than five (5) Business Days prior to the Closing Date, then the Seller shall be deemed to have irrevocably waived any right to terminate this Agreement with respect to such Buyer Post-Signing Event and, further, the Seller shall have irrevocably waived its right to indemnification under Section 8.03(a) with respect to such Buyer Post-Signing Event.

ARTICLE XI.

CONDITIONS PRECEDENT TO OBLIGATIONS OF THE SELLER

The obligation of the Seller to consummate the transactions provided for in this Agreement is subject to the satisfaction, at or before the Closing, of the following conditions, any one or more of which may be waived in writing by the Seller in its sole discretion:

Section 11.01. **Consents and Approvals.**

(a) The PaPUC shall have issued a Final Order approving the transactions contemplated hereby without a material modification to the rate-related provisions of Section 7.07.

(b) The DOJ, EPA and PaDEP shall have agreed to the lodging of the Amended Consent Decree, and the United States District Court for the Middle District of Pennsylvania shall have issued a Final Order approving the Amended Consent Decree, to be effective as of the Closing; *provided* that subject to the issuance of each such Final Order, this condition shall be satisfied so long as the Amended Consent Decree contains the complete release of the Seller and

sole substitution of Buyer in Seller's place as described in clause (3) of the definition of Amended Consent Decree set forth in Section 7.06(d).

Section 11.02. **Representations and Warranties of Buyer.** The representations and warranties made by Buyer in Article V which are (a) not qualified by materiality shall be true and correct in all material respects on and as of the Closing Date (except for representations or warranties that speak of a specific date or time other than the Closing Date which shall be true and correct in all material respects as of such specified date) and (b) qualified by materiality shall be true and correct in all respects on and as of the Closing Date (except for representations or warranties that speak of a specific date or time other than the Closing Date which shall be true and correct in all respects as of such specified date), and the Seller shall have received a certificate to the effect of the foregoing from a duly authorized officer of Buyer dated as of the Closing Date.

Section 11.03. **No Injunctions.** Neither the Seller nor Buyer shall be subject to any injunction, writ, temporary or preliminary restraining order or other similar decree of a court of competent jurisdiction restraining or prohibiting the consummation of the transactions contemplated by this Agreement, and no action or proceeding (or any investigation or other inquiry that would reasonably be expected to result in such action or proceeding) shall have been instituted or shall be pending which seeks to restrain or prohibit, the transactions contemplated by this Agreement.

Section 11.04. **Performance of the Obligations of Buyer.** Buyer shall have complied with and performed in all material respects all covenants and obligations required under this Agreement to be complied with and performed by Buyer on or before the Closing Date, and the Seller shall have received a certificate from Buyer dated as of the Closing Date certifying that the conditions set forth in this Section 11.04 have been satisfied.

Section 11.05. **Deliveries by Buyer.** Buyer shall have made delivery to the Seller of the documents and items specified in Section 13.03 herein.

ARTICLE XII.

CONDITIONS PRECEDENT TO OBLIGATIONS OF BUYER

The obligation of Buyer to consummate the transactions provided for in this Agreement is subject to the satisfaction, at or before the Closing, of the following conditions, any one or more of which may be waived in writing by Buyer in its sole discretion:

Section 12.01. **Consents and Approvals.**

(a) Buyer shall have received all of the third party consents and other approvals set forth in Schedule 12.01(a), each of which shall (i) be in form and substance and contain terms and conditions reasonably satisfactory to Buyer, (ii) not be subject to the satisfaction of any condition that has not been satisfied or waived, and (iii) be in full force and effect.

(b) The PaPUC shall have issued a Final Order approving the transactions contemplated hereby on terms and conditions reasonably satisfactory to Buyer.

(c) The PaPUC shall have issued a Final Order approving a tariff supplement incorporating Buyer's Industrial Pretreatment Program applicable to the System into Buyer's tariff, and Buyer's Industrial Pretreatment Program shall have been approved, to the extent required, by PaDEP and EPA.

(d) The DOJ, EPA and PaDEP shall have agreed to the lodging of the Amended Consent Decree and the United States District Court for the Middle District of Pennsylvania shall have issued a Final Order approving the Amended Consent Decree, to be effective as of the Closing, on terms and conditions reasonably satisfactory to Buyer.

(e) All Governmental Approvals and other actions of, filings with and notices to any Governmental Authority (other than the Governmental Approvals set forth in Section 12.01(b), Section 12.01(c) and Section 12.01(d)) necessary to permit Buyer and the Seller to perform their respective obligations under this Agreement and the Related Agreements and to consummate the transactions contemplated hereby and thereby (including with respect to the transfer of any Licenses and Permits by the Seller to Buyer) (i) shall have been duly obtained, made or given, (ii) shall be in substance reasonably satisfactory to Buyer, (iii) shall not be subject to the satisfaction of any condition that has not been satisfied or waived, (iv) shall be in full force and effect, and all terminations or expirations of waiting periods imposed by any Governmental Authority necessary for the consummation of the transactions shall have occurred, and (v) to the extent permitted by applicable Laws and Environmental Laws, all Licenses and Permits, including Environmental Requirements, shall have been transferred or issued to Buyer, as applicable, effective from and after the Closing Date, in form and substance and containing terms and conditions reasonably satisfactory to Buyer.

(f) The Authority Board shall have approved: (i)(A) defeasance and redemption of any outstanding bonds issued by the Seller on the System included in the Outstanding Indebtedness and (B) discharge of any other outstanding debt issued to the Seller and payable to any current lender and (ii) the transfer to Buyer or for its benefit of related funds held in any construction fund or account under any indenture(s) being held by the Seller or any lender to the Seller on any outstanding debt (it being understood that any debt service funds or debt service reserve funds will be applied to the defeasance, redemption and discharge of outstanding debt).

Section 12.02. **Representations and Warranties of Seller.** The representations and warranties made by Seller in Article IV which are (a) not qualified by materiality shall be true and correct in all material respects on and as of the Closing Date (except for representations or warranties that speak of a specific date or time other than the Closing Date which shall be true and correct in all material respects as of such specified date) and (b) qualified by materiality shall be true and correct in all respects on and as of the Closing Date (except for representations or warranties that speak of a specific date or time other than the Closing Date which shall be true and correct in all respects as of such specified date), and Buyer shall have received a certificate to the effect of the foregoing from a duly authorized officer of the Seller dated as of the Closing Date.

Section 12.03. **No Injunctions.** Neither the Seller nor Buyer shall be subject to any injunction, writ, temporary or preliminary restraining order or other similar decree of a court of competent jurisdiction restraining or prohibiting the consummation of the transactions

contemplated by this Agreement, and no action or proceeding (or any investigation or other inquiry that would reasonably be expected to result in such action or proceeding) shall have been instituted or shall be pending which seeks to restrain or prohibit, the transactions contemplated by this Agreement.

Section 12.04. **No Material Adverse Effect.** There shall not have occurred any event, development or condition which has had, or would reasonably be expected to have, a Material Adverse Effect, the effect of which has not been cured by the Seller.

Section 12.05. **Deliveries by Seller.** The Seller shall have made delivery to Buyer of the documents and items specified in Section 13.02 herein.

Section 12.06. **Performance of the Obligations of Seller.** The Seller shall have complied with and performed in all material respects all covenants and obligations required under this Agreement to be complied with and performed by the Seller on or before the Closing Date, other than the covenants and obligations contained in Article VI and Section 9.01(a)(iii), with respect to which the Seller shall have complied with and performed in all respects on or prior to the Closing Date, and Buyer shall have received a certificate from the Seller dated as of the Closing Date certifying that the conditions set forth in this Section 12.06 have been satisfied.

Section 12.07. **R&W Insurance Policy**. The R&W Insurance Policy shall be in full force and effect; *provided*, that this condition shall be deemed satisfied if Buyer shall have breached its obligations in Section 10.01 and such breach shall have proximately caused the R&W Insurance Policy to not have been bound prior to, and issued effective as of, the Closing.

Section 12.08. **Assignment of Easements**. As to Easements: (i) All Essential Easements shall be Eligible Easements and (ii) there are to be no more than ten (10) other Easements (whether Held Easements or Missing Easements) that are appurtenant to any Combined Sewer System Asset or necessary for access to any Combined Sewer System Asset or for the operation of any Combined Sewer System Asset (including Easements for utilities and power to any Combined Sewer System Asset) or otherwise which are necessary for or used in connection with the operation of the System or to provide continuous and unimpeded rights of way for the Combined Sewer System Assets (including access thereto) which are not Eligible Easements.

ARTICLE XIII.

CLOSING

Section 13.01. **Closing Date.**The Closing shall take place at the offices of Reed Smith LLP, 1717 Arch Street, Suite 3100, Philadelphia, PA 19103, at 10:00 a.m. Eastern time on the earliest agreed upon date or within five (5) Business Days after the date upon which all the conditions precedent to Closing described in this Agreement have been fulfilled or waived, or at such other place and time, by such other method, or on such other date, as may be mutually agreed to by the Parties (the "Closing Date"). The Closing shall be effective at 12:01 a.m., Eastern time, on the Closing Date (the "Closing Effective Time").

Section 13.02. **Deliveries by the Seller.** At or prior to the Closing, the Seller shall have delivered or cause to be delivered to Buyer executed copies of the following:

(a) a duly executed Bill of Sale transferring all of the Acquired Assets comprising tangible personal property, in substantially the form attached hereto as Exhibit A;

(b) a duly executed counterpart to an Assignment and Assumption Agreement with respect to the Assumed Liabilities and the Acquired Assets (other the Acquired Assets comprising tangible personal property to be conveyed pursuant to the Bill of Sale) (the "Assignment and Assumption Agreement"), in substantially the form attached hereto as Exhibit B;

(c) a duly executed counterpart to the Escrow Agreement;

(d) the consents to transfer all of the Assigned Contracts, Intellectual Property Assets and all Licenses and Permits held by the Seller (including environmental Licenses and Permits) which are set forth on Schedule 12.01(a), each of which shall (i) be in form and substance and contain terms and conditions reasonably satisfactory to Buyer, (ii) not be subject to the satisfaction of any condition that has not been satisfied or waived, and (iii) be in full force and effect;

(e) title certificates to any motor vehicles included in the Acquired Assets, duly executed by the Seller (together with any transfer forms necessary to transfer title to such vehicles);

(f) all such special warranty deeds, bills of sale, realty transfer tax statements of value, assignments and other instruments of transfer or conveyance in order to sell, transfer, assign, convey and deliver title to the Real Property and the other Acquired Assets duly executed by Seller pursuant to the terms and provisions of Section 2.03;

(g) to the extent requested by Buyer prior to the Closing to be delivered by the Seller to Buyer at or prior to the Closing, copies or originals of all Files and Records, materials, documents and records in possession of the Seller relating to the System, the Acquired Assets or the Assumed Liabilities, including the Real Property and the Assigned Contracts;

(h) any documents duly executed by the Seller required by the Title Company to issue final owner's title policies in accordance with the procedures set forth in Article VI;

(i) such documents, instruments and information, in each case in form and substance reasonably acceptable to Buyer, evidencing the Seller's compliance with its obligations pursuant to Section 7.11(c) and the Seller's performance of its other obligations under this Agreement with respect to the prepayment, redemption, cancellation, termination or legal defeasance, as applicable, of all Outstanding Indebtedness at the Closing (other than any such Outstanding Indebtedness being lawfully assumed by Buyer as provided in this Agreement), including any and all such documents, instruments or information (i) necessary to enable Buyer to effect the payment in full (in the case of Outstanding Indebtedness then subject to prepayment or redemption) or make provision for the payment in full so as to effect a legal defeasance (in the case of Outstanding Indebtedness not then subject to prepayment or redemption), on behalf of the Seller, of such Outstanding Indebtedness at the Closing, pursuant to Section 3.01(a), (ii) evidencing the full and unconditional release, satisfaction and discharge of any Liens in

connection therewith, or (iii) that are otherwise reasonably requested by Buyer in connection with any of the foregoing; and

(j) all such other instruments of conveyance or other documents as shall, in the reasonable opinion of Buyer and its counsel, be necessary to transfer to Buyer the Acquired Assets in accordance with this Agreement or to carry out the terms of this Agreement, duly executed and acknowledged by the Seller, if necessary, and in a recordable form.

Section 13.03. **Deliveries by Buyer.** At the Closing, Buyer shall have delivered or caused to be delivered to the Seller the following:

(a) payment in full of the Purchase Price pursuant to Section 3.01 (including delivery to the Escrow Agent and the other payees thereof);

(b) a duly executed counterpart to the Assignment and Assumption Agreement;

(c) the Escrow Agreement, duly executed by each of Buyer and the Escrow Agent; and

(d) such other instruments of assumption as shall, in the reasonable opinion of Seller and its counsel, be necessary for Buyer to assume the Assumed Liabilities in accordance with this Agreement.

ARTICLE XIV.

TERMINATION

Section 14.01. **Events of Termination.** This Agreement may be terminated at any time prior to the Closing:

(a) subject to Section 10.04, by the Seller (if the Seller is not then in material breach of any of its representations, warranties, covenants or agreements under this Agreement so as to cause any of the conditions set forth in Article XII not to be satisfied), upon written notice to Buyer, if there has been a material violation, breach or inaccuracy of any representation, warranty, covenant or agreement of Buyer contained in this Agreement, which violation, breach or inaccuracy would cause any of the conditions set forth in Article XI not to be satisfied, and such violation, breach or inaccuracy has not been waived by the Seller or cured by Buyer, as applicable, within thirty (30) days after receipt by Buyer of written notice thereof from the Seller or is not reasonably capable of being cured prior to the Outside Date;

(b) subject to Section 9.03, by Buyer (if Buyer is not then in material breach of any of its representations, warranties, covenants or agreements under this Agreement so as to cause any of the conditions set forth in Article XI not to be satisfied), upon written notice to the Seller, if there has been a material violation, breach or inaccuracy of any representation, warranty, covenant or agreement of the Seller contained in this Agreement, which violation, breach or inaccuracy would cause any of the conditions set forth in Article XII not to be satisfied, and such violation, breach or inaccuracy has not been waived by Buyer or cured by the Seller, as

applicable, within thirty (30) days after receipt by the Seller of written notice thereof from Buyer or is not reasonably capable of being cured prior to the Outside Date;

(c) by Buyer if, in the reasonable judgment of Buyer, a Material Adverse Effect has occurred since the Effective Date, and (x) such Material Adverse Effect is not reasonably capable of being cured prior to the Outside Date or (y) the effect of such Material Adverse Effect, if capable of being cured, has not been cured by the Seller within thirty (30) days after receipt by the Seller of notice specifying with particularity such Material Adverse Effect;

(d) by Buyer, as provided in Section 15.04(a) or Section 15.04(b), as applicable;

(e) by Buyer, as provided in Article VI;

(f) by the Seller or Buyer at any time after the Outside Date, if the Closing has not occurred and the Party seeking to terminate this Agreement is not in breach or default of any provisions of this Agreement; *provided* that the right to terminate this Agreement pursuant to this Section 14.01(f) shall not be available to any Party whose breach of any provision of this Agreement results in the failure of the Closing to be consummated by such time; and *provided further*, that if (i) on October 15, 2016, any of the conditions set forth in Article XI or Article XII have not been satisfied or waived (other than those conditions which, by their terms, are to be satisfied or waived at the Closing), then either Party shall have the right (which right pursuant to this clause (i) may only be exercised on one (1) occasion by Buyer and on one (1) occasion by the Seller) to extend the Outside Date to a date that is not later than December 31, 2016, and which right shall be exercised by written notice to the other Party on or before October 15, 2016 (and which written notice shall specify the new Outside Date as extended pursuant to this Section 14.01(f)(i)), and (ii) the Outside Date has been extended by either Party pursuant to Section 14.01(f)(i), and on such new Outside Date, any of the conditions set forth in Section 11.01(a), Section 11.01(b), Section 12.01(b), Section 12.01(c) or Section 12.01(d) have not been satisfied, and all of the other conditions to Closing set forth in Article XI or Article XII (other than those conditions which, by their terms, are to be satisfied or waived at the Closing), then either Party shall have the right (which right pursuant to this clause (ii) may only be exercised on one (1) occasion by Buyer and on one (1) occasion by the Seller) to extend the Outside Date to a date that is not later than March 31, 2017, and which right shall be exercised by written notice to the other Party on or before the then-current Outside Date (and which written notice shall specify the new Outside Date as extended pursuant to this Section 14.01(f)(ii));

(g) by the Seller or Buyer if (i) any Governmental Authority, the consent from or approval by which is a condition to the obligations of the Parties to consummate the transactions contemplated hereby shall have determined not to grant its consent or approval (or conditioned its consent or approval in such manner that is not reasonably acceptable to the Parties or constitutes a material deviation from the consent or approval contemplated hereunder) as applicable and all appeals of or other legal challenges to such determination have been taken and have been unsuccessful; or (ii) any court of competent jurisdiction shall have issued an order, judgment or decree (other than a temporary restraining order) restraining, enjoining or otherwise prohibiting the transactions contemplated hereby and such order, judgment or decree shall have become final and non-appealable; or

(h) by mutual agreement of the Seller and Buyer.

For the avoidance of doubt, this Agreement may not be terminated after completion of the Closing.

Section 14.02. **Effect of Termination.** In the event of termination of this Agreement as expressly permitted under Section 14.01, this Agreement shall forthwith become void and of no further force and effect and there shall be no liability on the part of any Party hereto (or any of its Affiliates) except that:

(a) the provisions of this Article XIV and Section 15.01 (Confidentiality), Section 15.02 (Public Announcements), Section 15.03 (Expenses; Brokers) Section 15.13 (Successors and Assigns), Section 15.14 (Governing Law), Section 15.15 (Specific Performance) and Section 15.16 (Limitations of Liability) shall continue in full force and effect; and

(b) notwithstanding anything to the contrary herein, no Party shall be relieved from liability for (i) fraud or (ii) any intentional or willful breach of any of its representations, warranties covenants or agreement set forth in this Agreement prior to such termination, all of which claims will survive and remain actionable, and such Party shall be fully liable for any and all Damages incurred or suffered by the other Party as a result of such fraud or intentional or willful breach.

ARTICLE XV.

MISCELLANEOUS

Section 15.01. **Confidentiality.** Except as and to the extent required by applicable Law (including the Pennsylvania Right-To-Know Act at 65 Pa § 67.101) or pursuant to an order of a court of competent jurisdiction and as required hereunder to obtain any and all required Governmental Approvals, neither Party hereto shall, directly or indirectly, disclose or use (and no party shall permit its Representatives to disclose or use) any Confidential Information (as defined below) with respect to the other Party furnished by such other Party hereto or its shareholders, directors, officers, agents, or other Representatives to the other Party hereto or its employees, directors, officers, agents or other Representatives in connection herewith at any time or in any manner other than in connection with the completion of the transactions contemplated by this Agreement and the Related Agreements. For purposes of this paragraph, the term "Confidential Information" means all information of a confidential or proprietary nature (whether or not specifically labeled or identified as "confidential"), in any form or medium, that relates to Buyer or its Affiliates or their respective business, products, services or research or development, or to the Seller or the System; *provided, however*, that Confidential Information of a Party does not include information which the receiving Party can demonstrate (a) is generally available to or known by the public other than as a result of improper disclosure by the receiving Party, (b) is obtained by the receiving Party from a source other than the disclosing Party, provided that such source was not bound by a duty of confidentiality to the disclosing Party with respect to such information, or (c) is legally in the public domain. After the execution of this Agreement, the Parties shall timely and in good faith execute a common interest agreement applicable to the

transactions contemplated by this Agreement, in form and substance and containing terms and conditions reasonably acceptable to each Party in its reasonable and good faith discretion.

Section 15.02. **Public Announcements.** Subject to applicable Law or listing rules of an exchange on which Buyer Parent's stock is listed, the initial public announcement relating to the transactions contemplated herein shall be mutually agreed upon and jointly made by the Parties; *provided*, that for the avoidance of doubt, the foregoing shall not be deemed to restrict or prohibit Buyer or its Affiliates from issuing or causing publication of any press release or public announcement regarding this Agreement to the extent that Buyer or its Affiliates reasonably determine that such disclosure is required by applicable Law (including securities Laws) or listing rules of an exchange on which Buyer Parent's stock is listed, in which case Buyer will, if practicable in the circumstances, use commercially reasonable efforts to allow the Seller reasonable time to comment on such release or announcement in advance of its issuance. The Seller shall cause the City and the Borough to provide to Buyer and the Seller contact information for a designated individual who will receive prior notice of any subsequent public announcement relating to the transactions contemplated herein. Subject to applicable Law or listing rules of an exchange on which Buyer Parent's stock is listed, following the initial public announcement relating to the transactions contemplated hereby as provided in the first sentence of this Section 15.02, and until the Closing, neither Buyer nor the Seller, nor any of their respective Affiliates or Representatives (or any Representative of the City or the Borough), shall make or issue any press release regarding this Agreement, the contents hereof, or the transactions contemplated hereby, without the prior written consent of Buyer (in the case of announcements by the Seller, the City, the Borough or their respective Affiliates or Representatives) or the Seller (in the case of announcements by Buyer or its Affiliates or their respective Representatives), which consent shall not be unreasonably withheld, conditioned or delayed.

Section 15.03. **Expenses; Brokers.**

(a) Except as otherwise provided in this Section 15.03, Buyer and the Seller shall be responsible for and bear all of their respective costs and expenses incurred in connection with this Agreement, including any legal, accounting or other representative or advisor costs and expenses.

(b) Each Party will be responsible for and shall defend and indemnify the other Party against any claims relating to, any fees or expenses of any financial advisor, broker or finder retained by such Party payable upon consummation of the transactions contemplated by this Agreement.

(c) Except as otherwise expressly provided herein, the Parties agree that the prevailing party in any action brought with respect to or to enforce any right or remedy under this Agreement shall be entitled to recover from the other Party all reasonable costs and expenses of any nature whatsoever incurred by the prevailing party in connection with such action, including attorneys' fees and expert fees.

Section 15.04. **Casualty and Condemnation**.

(a) Condemnation. If, prior to the Closing Date, there occurs any condemnation with respect to any material portion of the Real Property, or any Real Property that is material to the operation of the System, the Seller shall give Buyer prompt written notice thereof, and Buyer shall have the right, exercisable by delivering written notice to Seller within ten (10) Business Days after the later of the final determination of the scope of such taking or Buyer's receipt of written notice from the Seller of such condemnation, to either (i) terminate this Agreement in accordance with Section 14.01(d), in which case neither Party shall have any further rights or obligations hereunder except as otherwise provided in Section 14.02, or (ii) accept that portion of the Real Property which has not been taken by, or is not subject to taking by, a condemnation action in their then-existing condition and proceed with the Closing, subject to the final sentence of this Section 15.04(a). Buyer's failure to deliver such notice within the ten (10) Business Day period specified above shall be deemed to constitute a waiver of Buyer's right to terminate this Agreement as provided in this Section 15.04(a) with respect to such condemnation (but not any subsequent condemnation). In the event that Buyer elects to proceed with the Closing as provided in clause (ii) of the foregoing sentence, or in the event of any condemnation of any of the Real Property not covered by the first sentence of this Section 15.04(a), the Seller shall assign to Buyer any and all rights of the Seller to any condemnation award received as a result of such event, and to the extent the Seller receives such condemnation award (x) prior to the Closing, then the amount of such condemnation award, less the aggregate amount thereof expended by the Seller prior to the Closing in compliance with its obligations under Section 9.01(a)(iv), shall not be included as part of the calculation of the Closing Cash Balance, or (y) following the Closing, the Seller shall (but in no event later than ten (10) days after receipt thereof) deliver such amount to Buyer.

(b) Casualty. If, prior to the Closing Date, there occurs any destruction of, or damage or loss to any of the Acquired Assets from any cause whatsoever and the cost to repair or replace such destruction, damage or loss exceeds by at least One Million Dollars ($1,000,000.00) the insurance coverage covering such destruction, damage or loss, then, except as hereinafter provided, Buyer shall have the right, exercisable by delivering written notice to the Seller within ten (10) Business Days after the final determination of the scope of such casualty event and completion of an appraisal and insurance coverage determination of such casualty event by the Seller's insurance provider and delivery of written copies of such final appraisal and insurance coverage determination to Buyer, to terminate this Agreement in accordance with Section 14.01(d), in which case neither Party shall have any further rights or obligations hereunder except as otherwise provided in Section 14.02; *provided, however*, that Buyer shall have the option, but not the obligation, to consummate the Closing of the transactions contemplated in this Agreement and acquire the Acquired Assets in their then-existing condition, with an equitable adjustment of the Purchase Price to compensate Buyer for such destruction, damage or loss, as agreed to by the Parties acting reasonably and in good faith, and in which case the Seller shall assign to Buyer any and all rights of the Seller to any insurance proceeds received as a result of such casualty event, and to the extent the Seller receives such insurance proceeds (x) prior to the Closing, then the amount of such insurance proceeds, less the aggregate amount thereof expended by the Seller prior to the Closing in compliance with its obligations under Section 9.01(a)(iv), shall not be included as part of the calculation of the Closing Cash Balance, or (y) following the Closing, the Seller shall (but in no event later than ten (10) days after receipt

thereof) deliver such amount to Buyer. Buyer's failure to deliver such notice within such ten (10) Business Day period following Buyer's receipt of written copies of such final appraisal and insurance coverage determination with respect to such casualty event shall be deemed to constitute a waiver of Buyer's right to terminate this Agreement as provided in this Section 15.04(b) with respect to such casualty event (but not any subsequent casualty event).

Section 15.05. **Reasonable Efforts; Cooperation.** Subject to the terms and conditions of this Agreement, each Party will use its commercially reasonable efforts to take, or cause to be taken, all actions and to do, or cause to be done, all things necessary or desirable to consummate the transactions contemplated by this Agreement and the Related Agreements. The Parties each agree to execute and deliver such other documents, certificates, agreements and other writings and to take such other actions as may be necessary or desirable in order to consummate or implement expeditiously the transactions contemplated by this Agreement and the Related Agreements, and from time to time, upon the request of the other Parties to this Agreement and without further consideration, to execute, acknowledge and deliver in proper form any further instruments, and take such other action as the other Parties may reasonably require, in order to effectively carry out the intent of this Agreement and the Related Agreements.

Section 15.06. **Notices.** All notices, requests, demands and other communications that are required or may be given pursuant to the terms of this Agreement or any of the Related Agreements shall be in writing, and delivery shall be deemed effective in all respects and to have been duly given as follows: (a) when delivered by hand (with written confirmation of receipt); (b) when received by the addressee if sent by a nationally recognized overnight courier (receipt requested); (c) on the date sent by facsimile (with confirmation of transmission) if sent during normal business hours of the recipient, and on the next Business Day if sent after normal business hours of the recipient or (d) on the third day after the date mailed, by certified or registered mail, return receipt requested, postage prepaid. Such communications must be sent to the respective Parties at the following addresses (or at such other address for a party as shall be specified in a notice given in accordance with this Section):

If to Buyer, to:

Pennsylvania-American Water Company
800 West Hershey Park Drive
Hershey, PA 17033
Attention: General Counsel
facsimile: 717-531-3399

With a copy to:

American Water Works Company, Inc.
1025 Laurel Oak Road
Voorhees, NJ 08043
Attention: Senior Vice President, Strategy and Business Development
Facsimile: 856-346-5827

and

Reed Smith LLP
1717 Arch Street, Suite 3100
Philadelphia, PA 19103
Attention: Brian C. Miner
Facsimile: (215) 851-1420

If to the Seller, to:

The Sewer Authority of the City of Scranton
312 Adams Ave
Scranton, PA 18503
Attn: Executive Director
Facsimile No.: (570) 348-5317

With a copy to:

Jeff Belardi, Esq.
Co-Solicitor
The Sewer Authority of the City of Scranton
The Jones Building
410 Spruce Street, 4th Floor
Scranton, PA 18503
Facsimile No.: (570) 961-3985

Paul J. Walker, Esq.
Co-Solicitor
The Sewer Authority of the City of Scranton
205-207 N. Washington Avenue, Suite C
Scranton, PA 18503
Facsimile No.: (570) 344-1061

Buchanan Ingersoll & Rooney PC
Two Liberty Place
50 S. 16th Street, Suite 3200
Philadelphia, PA 19102-2555
Attn: Steven W. Smith, Esquire
Facsimile No.: (215) 665-8760

Any Party may change its address and preferred recipient or other contact information for notice by giving notice to each other Party in accordance with the terms of this Section 15.06. In no event will delivery to a copied Person alone constitute delivery to the Party represented by such copied Person.

Section 15.07. **Headings.** The article, section and paragraph headings in this Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Agreement.

Section 15.08. **Construction.**

(a) The Parties have participated jointly in the negotiation and drafting of this Agreement, and, in the event of an ambiguity or a question of intent or a need for interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement.

(b) Words of any gender used in this Agreement shall be held and construed to include any other gender; words in the singular shall be held to include the plural; and words in the plural shall be held to include the singular; unless and only to the extent the context indicates otherwise.

(c) Reference to any Law means such Law as amended, modified, codified, replaced or reenacted, in whole or in part, and in effect from time to time, including rules and regulations promulgated thereunder, and reference to any section or other provision of any Law means that provision of such Law from time to time in effect and constituting the substantive amendment, modification, codification, replacement or reenactment of such section or other provision.

(d) Wherever the word "include," "includes," or "including" is used in this Agreement, it shall be deemed to be followed by the words "without limitation".

(e) References in this Agreement to documents, instruments or agreements shall be deemed to refer as well to all addenda, appendices, exhibits, schedules or amendments thereto.

(f) The words "hereof," "herein," and "hereunder" and words of similar import, when used in this Agreement, shall refer to this Agreement as a whole and not to any particular provision of this Agreement.

(g) References in this Agreement to a specific Section, Subsection, recital, Schedule or Exhibit shall refer, respectively, to Sections, Subsections, recitals, Schedules or Exhibits of this Agreement.

(h) As used in this Agreement, the term "or" has the inclusive meaning represented by the phrase "and/or".

(i) When calculating the period of time before which, within which or following which any act is to be done or step taken pursuant to this Agreement, if the last day of such period is not a Business Day, the period shall end on the next succeeding Business Day.

Section 15.09. **Severability.** If any term, provision, covenant or restriction contained in this Agreement is held by a court of competent jurisdiction or the PaPUC to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions contained in this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

Section 15.10. **Entire Agreement.** This Agreement and the Related Agreements represent the entire agreement among the Parties with respect to the subject matter hereof thereof

and supersede all prior or contemporaneous written or oral agreements or understandings of any kind among the Parties hereto and thereto with respect to the subject matter hereof and thereof, including the MOU, the RFP, the BAFO and the Clarifying Correspondence. All Exhibits and Schedules hereto are expressly made a part of this Agreement as fully as though completely set forth herein.

Section 15.11. **Amendments; Waivers.** Except as hereinafter provided or allowed by statute, this Agreement may be amended or modified, and any of the terms, covenants, representations, warranties or conditions hereof may be waived, only by a written instrument executed by the Parties hereto, or in the case of a waiver, by the Party waiving compliance. Any waiver by any Party of any condition, or of the breach of any provision, term, covenant, representation or warranty contained in this Agreement, in any one or more instances, shall not be deemed to be or construed as a further or continuing waiver of any condition or of the breach of any other provision, term, covenant, representation or warranty of this Agreement.

Section 15.12. **Parties in Interest; Third Party Beneficiary.** Except as hereinafter provided, this Agreement is not intended to and shall not be construed to create upon any Person other than the Parties any rights or remedies hereunder. Notwithstanding the prior sentence, the City and the Borough are intended third party beneficiaries, with rights, among others, to enforce the covenants and agreements of Buyer contained in Article VII of this Agreement and to provide any notices on behalf of Seller, subject to Section 15.13(c).

Section 15.13. **Successors and Assigns.**

(a) Except as otherwise set forth herein and subject to Sections 15.13(b) and (c), neither Party hereto shall assign or delegate this Agreement or any rights or obligations hereunder without the prior written consent of the other Parties hereto, and any attempted assignment or delegation without prior written consent shall be void and of no force or effect. Subject to Section 15.13(b), this Agreement shall inure to the benefit of and shall be binding upon the successors and permitted assigns of the Parties hereto.

(b) With respect to any assignment or delegation permitted pursuant to Section 15.13(a) or in connection with any proposed sale, lease, liquidation or transfer of all or substantially all of the System or the Acquired Assets by Buyer, Buyer shall cause such assignee or successor to acknowledge and agree in writing for the benefit of Buyer and the Seller, to fully perform and be liable for all of Buyer's obligations set forth in Article VII, which obligations shall continue to be subject to the Seller's rights and remedies hereunder. In the event of any assignment or delegation by Buyer of its rights and obligations under this Agreement to any Person, Buyer shall be fully liable to the Seller to the extent that such Person fails to pay or assist Seller in distributing to customers the Variance Adjustment as provided under this Agreement, and such assignment or delegation by Buyer to such Person shall in no event relieve Buyer of its obligations pursuant to this Section 15.13(b) in the event of any failure by such Person to pay or assist Seller in distributing to customers the Variance Adjustment in breach of this Agreement.

(c) The Parties hereto acknowledge and agree that the limitation on assignment or delegation contained in Section 15.13(a) in no way limits the rights or obligations of the City and the Borough, as the municipalities creating the Seller, under the Municipality Authorities Act. In

the event of the termination of the Seller in accordance with the Municipality Authorities Act and other applicable Law following the Closing:

(i) the City and the Borough shall (x) obtain all property of the Seller and succeed to all of the Seller's rights under this Agreement, and (y) assume and be jointly and severally liable for all of the Seller's obligations under this Agreement (including with respect to the System), in each case as if the City and the Borough were originally direct parties hereto;

(ii) the City, or such other Person as may be designated by mutual written agreement of the City and the Borough (the City or such other Person, the "Seller Successor"), is hereby appointed to act as agent for and on behalf of the City and the Borough in connection with, and to facilitate, any and all transactions arising from, in connection with and incident to this Agreement;

(iii) a decision, act, consent or instruction of the Seller Successor shall constitute a decision of the Seller and shall be final, binding and conclusive upon each of the City and the Borough, and Buyer and the Escrow Agent may rely upon any decision, act, consent or instruction of the Seller Successor as being the decision, act, consent or instruction of the Seller, the City and the Borough;

(iv) Buyer and the Escrow Agent are hereby irrevocably relieved from any liability to any Person for any acts done by them in accordance with such decision, act, consent or instruction of the Seller Successor; and

(v) the Seller or the Seller Successor, as the case may be, shall constitute the sole point of contact for purposes of any notices to be given, consents to be obtained or other communications, by Buyer or Buyer's Affiliates pursuant to or in connection with this Agreement or any matters arising out of or relating hereto, and in no event shall Buyer be required or obligated in any way to give notice to, obtain the consent of or otherwise communicate with any Person other than the Seller or the Seller Successor.

Section 15.14. **Governing Law; Jurisdiction.** This Agreement shall be construed and enforced in accordance with, and governed by, the Laws of the Commonwealth of Pennsylvania (without giving effect to the principles of conflicts of laws thereof). The Parties hereto irrevocably agree and consent to the jurisdiction of the United States District Court for the Middle District of Pennsylvania, the Court of Common Pleas of Lackawanna County, Pennsylvania, and the PaPUC for the adjudication of any matters arising under or in connection with this Agreement. Any action initiated shall be filed and litigated (including all discovery proceedings) exclusively in the United States District Court for the Middle District of Pennsylvania, the Court of Common Pleas of Lackawanna County, Pennsylvania and the PaPUC, and each Party irrevocably submits to the jurisdiction of such courts and the PaPUC in any such suit, action or proceeding. Service of process, summons, notice or other document by mail to such Party's address set forth herein shall be effective service of process for any suit, action or other proceeding brought in any such court. EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT OR THE OTHER TRANSACTION DOCUMENTS IS LIKELY TO INVOLVE

COMPLICATED AND DIFFICULT ISSUES AND, THEREFORE, EACH SUCH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LEGAL ACTION ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY. EACH PARTY TO THIS AGREEMENT CERTIFIES AND ACKNOWLEDGES THAT (A) NO REPRESENTATIVE OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT SEEK TO ENFORCE THE FOREGOING WAIVER IN THE EVENT OF A LEGAL ACTION, (B) SUCH PARTY HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (C) SUCH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (D) SUCH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION. Notwithstanding the foregoing, this Section 15.14 shall not apply to the dispute resolution procedures set forth in (i) Section 3.02, which shall be the exclusive manner to resolve any dispute surrounding the determination of the Post-Closing Adjustment, *provided*, that, any dispute arising out of a breach of any of the provisions of Section 3.02 or a Party's failure to pay an amount determined to be due under Section 3.02 (and not out of a disagreement relating to the determination of such amounts) shall be resolved pursuant to this Section 15.14 or (ii) Section 7.07(d), which shall be the exclusive manner to resolve any dispute regarding the calculation of the Variance Adjustment as set forth in Section 7.07(d), *provided*, that, any dispute arising out of a breach of any of the provisions of Section 7.07(d) (other than a disagreement relating to the calculation of the Variance Adjustment) shall be resolved pursuant to this Section 15.14.

Section 15.15. **Specific Performance**. The Parties agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed by them in accordance with the terms hereof or were otherwise breached and that each Party shall be entitled to an injunction or injunctions to prevent breaches of the provisions hereof and to specific performance of the terms hereof, in addition to any other remedy at law or in equity.

Section 15.16. **Limitations of Liability**.

(a) No present or future officer, director, manager, employee, advisor, agent or attorney of or in the Seller or Buyer shall have any personal liability, directly or indirectly, under or in connection with this Agreement or the Related Agreements, or any amendments thereto, and the Parties and their successors and assigns and all other Persons shall look solely to the Parties for the payment of any claim or for any performance, and the Parties hereby waive any and all such personal liability.

(b) No officer, director, employee, agent or other Representative of the Seller or Buyer shall have any personal liability or obligation whatsoever with respect to any of the matters set forth in this Agreement, the Related Agreements and any other documents, agreements, or instruments related thereto or any of the representations made by the Seller or Buyer being or becoming untrue, inaccurate or incomplete in any respect.

(c) The limitations on liability contained in this Section 15.16 are in addition to, and not in limitation of, any limitation on liability applicable to Seller or Buyer provided in any other provisions of this Agreement or by Law or by any other contract.

Section 15.17. **Attorney-Client Privilege.** Buyer understands and agrees that the Seller will be entitled to retain the services of Buchanan Ingersoll & Rooney PC as its attorney even in the event of any dispute of Buyer with the Seller concerning this Agreement or any of the Related Agreements or any of the transactions contemplated hereby and thereby notwithstanding any result of prior representation of Seller. Notwithstanding the sale of the Acquired Assets to Buyer, Buyer agrees that Buyer shall not have the right to assert the attorney/client privilege as to pre-Closing and post-Closing communications between Seller, on one hand, and its counsel, Buchanan Ingersoll & Rooney PC, on the other hand, to the extent that the privileged communications relate to this Agreement or any of the Related Agreements or to the transactions contemplated hereby and thereby. The Parties agree that only the Seller shall be entitled to assert such attorney/client privilege in connection with such communications following the Closing. The files generated and maintained by Buchanan Ingersoll & Rooney PC as a result of their representation of the Seller in connection with this Agreement or any of the Related Agreements or any of the transactions contemplated hereby are and will remain the exclusive property of the Seller.

Section 15.18. **Counterparts.** This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, but all of which shall together constitute the same instrument. A signed copy of this Agreement delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

[THIS SPACE INTENTIONALLY LEFT BLANK;

SIGNATURES NEXT PAGE]

IN WITNESS WHEREOF, the Parties hereto have executed, or caused to be executed by their duly authorized representatives, this Agreement as of the Effective Date.

"SELLER"	**"BUYER"**
THE SEWER AUTHORITY OF THE CITY OF SCRANTON	PENNSYLVANIA-AMERICAN WATER COMPANY
By: Michael F. McHale	By: _____
Printed: Michael F. McHale	Printed: _____
Its: Chairman	Its: _____

IN WITNESS WHEREOF, the Parties hereto have executed, or caused to be executed by their duly authorized representatives, this Agreement as of the Effective Date.

"SELLER"	**"BUYER"**
THE SEWER AUTHORITY OF THE CITY OF SCRANTON	PENNSYLVANIA-AMERICAN WATER COMPANY
By: _____	By: _____
Printed: _____	Printed: Kathy L. Pape
Its: _____	Its: President

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

CITY OF SCRANTON

Docket Nos. R-2023-3043189 and R-2023-3043190

EXHIBIT 2

February 1, 2024

UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF PENNSYLVANIA

UNITED STATES OF AMERICA, Plaintiff, PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION Plaintiff-Intervenor, v. SCRANTON SEWER AUTHORITY, Defendant.	CIVIL ACTION NO. 3:CV-09-1873 (Judge Jones)

CONSENT DECREE

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WHEREAS, Plaintiff, the United States of America ("United States"), on behalf of the United States Environmental Protection Agency (the "EPA"), filed a Complaint in this matter against Defendant Scranton Sewer Authority, (the "Defendant" or the "SSA") seeking injunctive relief and civil penalties, and alleging, *inter alia*, that the SSA violated the Clean Water Act (the "CWA"), 33 U.S.C. §§ 1251-1387, and certain terms and conditions of the National Pollutant Discharge Elimination System (NPDES) permit issued to the SSA pursuant to the CWA relating to the municipal wastewater treatment plant and collection system owned and operated by the SSA;

WHEREAS, Plaintiff-Intervenor, the Commonwealth of Pennsylvania Department of Environmental Protection ("PADEP") filed a Complaint in Intervention against the SSA seeking injunctive relief and civil penalties, and alleging, *inter alia*, that the SSA violated the Clean Water Act, 33 U.S.C. §§ 1251-1387, Sections 201, 202 and 401 of the Clean Streams Law, 35 Pa. Stat. Ann. §§ 691.201, 691.202 and 695.401, and certain terms and conditions of the NPDES Permit issued to the SSA pursuant to the CWA relating to the municipal wastewater treatment plant and collection system owned and operated by the SSA;

WHEREAS, the SSA is a municipal authority organized under the Municipal Authorities Act, as amended, 53 Pa. Cons. Stat. Ann. §§ 5601-5623, that owns, operates, and maintains a publicly owned treatment works ("POTW"), which includes a wastewater treatment plant known as the Scranton Sewer Authority Wastewater Treatment Plant ("WWTP") and a collection system ("Collection System") which collects stormwater and wastewater from residential, commercial and industrial sources for the purpose of transporting that wastewater to the WWTP. Certain portions of the Collection System are a Combined Sewer System and other portions are a Sanitary Sewer System. The WWTP and Collection System are authorized to discharge

pollutants in accordance with the SSA's NPDES permit into the Lackawanna River, Roaring Brook, Stafford Meadow Brook, Little Roaring Brook, Keyser Creek, Leggetts Creek, and Meadow Brook; all of which are located within the jurisdiction of the U.S. District Court for the Middle District of Pennsylvania;

WHEREAS, the United States and the PADEP allege the SSA has violated and continues to violate Sections 301 and 402 of the Clean Water Act, 33 U.S.C. §§ 1311 and 1342, Sections 3, 201, 202 and 401 of the Clean Streams Law, 35 Pa. Stat. Ann. §§ 691.3, 691.201, 691.202 and 691.401, by impermissibly discharging untreated sewage from the Collection System to the Lackawanna River and several smaller water tributaries to the Lackawanna;

WHEREAS, the United States brings its claims pursuant to Section 309 of the CWA, 33 U.S.C. § 1319. In its complaint, the United States seeks the imposition of civil penalties and injunctive relief against the SSA for alleged violations of Section 301(a) of the CWA, 33 U.S.C. § 1311(a), and terms and conditions of the NPDES permit last issued by the PADEP as NPDES Permit No. PA-0026492, effective on October 1, 2009 and amended on May 13, 2011;

WHEREAS, the SSA has demonstrated through disclosure of its financial records to Plaintiffs that it has, and will likely continue to have for the foreseeable future, limited ability to pay civil or stipulated penalties and simultaneously meet the compliance requirements of this Consent Decree;

WHEREAS, nothing in this Consent Decree will be construed as an admission by the SSA of violations of any provisions of the CWA, or of the SSA's current or past NPDES permits, or of the Clean Streams Law; and

WHEREAS, the United States, the PADEP, and the SSA ("Parties") recognize, and this Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in

good faith and will avoid prolonged and complicated litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest;

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I (Jurisdiction and Venue) below, and with the consent of the Parties, it is hereby ORDERED, ADJUDGED and DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the Parties and the subject matter of this action pursuant to Section 309(b) of the CWA, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1331, 1345, 1355, and 1367. Venue is proper in this District pursuant to Section 309(b) of the CWA, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1391(b) and 1395(a). For purposes of this Consent Decree, or any action to enforce this Consent Decree, Defendant consents to the Court's jurisdiction over this Decree and any such action and over Defendant and consents to venue in this judicial district.

2. For purposes of this Consent Decree, Defendant agrees that the Complaint and the Complaint in Intervention state claims upon which relief may be granted pursuant to Sections 301 and 402 of the Clean Water Act, 33 U.S.C. §§ 1311 and 1342, and Sections 3, 201, 202, 401, 601, and 605 of the Clean Streams Law, 35 Pa. Stat. Ann. §§ 691.3, 691.201, 691.202, 691.401, 691.601, and 691.605.

II. APPLICABILITY AND BINDING EFFECT

3. This Consent Decree will apply to and be binding upon the United States, on behalf of the EPA, the PADEP, and upon Defendant and its successors, assigns, and all other entities and persons provided for in Fed. R. Civ. P. 65(d).

4. Defendant shall notify the following of the existence of this Consent Decree and make a copy available to them: all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Consent Decree, as well as to any contractor retained to perform work required under this Consent Decree.

5. Effective from the Date of Lodging of this Consent Decree until its termination, in the event that the SSA transfers any ownership or operation of its WWTP, the Collection System, or any portion of the WWTP or Collection System, and includes in such transfer, the transfer of any obligations under this Consent Decree, the SSA will give written notice and a copy of this Consent Decree to any successors in interest at least 30 Days prior to such transfer. The SSA will condition any transfer, in whole or in part, of ownership, operation, or other interest in its WWTP, the Collection System, or any other portion of the SSA WWTP and/or Collection System upon the successful execution of the terms and conditions of this Consent Decree. Simultaneously with notice to any successor in interest, the SSA will provide written notice of such transfer to the United States and the PADEP as provided in Section XVI (Notices and Submissions). In the event of any such transfer of ownership or other interest, the SSA will not be released from the obligations or liabilities of this Consent Decree unless: (i) the transferee has the financial and technical ability to assume these obligations and liabilities; (ii) the United States and the PADEP have agreed to release the SSA from the obligations and liabilities; (iii) the United States, the PADEP, and the transferee have jointly moved to substitute the transferee as Defendant to this Consent Decree; and (iv) the Court has approved the substitution.

6. In any action to enforce this Consent Decree, Defendant will not raise as a defense the failure of its officers, directors, agents, contractors, employees, successors, assigns or any other persons or entities provided for in Fed. R. Civ. P. 65(d) to take any actions necessary to

comply with the provisions hereof. Nothing in this Paragraph prevents the Defendant from invoking Section XI of this Decree (Force Majeure), provided that the event meets the definition of a Force Majeure provided in Paragraph 53.

III. OBJECTIVES

7. The objectives of this Consent Decree are for the Defendant to take the steps necessary to achieve full compliance with the CWA, the regulations promulgated thereunder, including, but not limited to, 33 U.S.C. § 1342(q) and the regulations promulgated thereunder, and the Clean Streams Law and the regulations promulgated thereunder. All plans, reports, construction, remedial maintenance, and other obligations in this Consent Decree or resulting from the activities required by this Consent Decree shall have the objective of causing Defendant to come into and remain in full compliance with the terms and conditions of Defendant's NPDES Permit, the Clean Water Act, and the Clean Streams Law, as these terms are defined in Section IV (Definitions).

IV. DEFINITIONS

8. Unless otherwise defined herein, terms used in this Consent Decree shall have the meaning given to those terms in the CWA, 33 U.S.C. § 1251-1387 the regulations promulgated thereunder, or, if not defined in the Clean Water Act or its regulations, then as defined in the Pennsylvania Clean Streams Law, 35 Pa. Stat. Ann. §§ 691.1-691.1001 and the regulations promulgated thereunder. The following definitions shall apply to the terms used in the Consent Decree:

a. "BNR Project" shall mean the wastewater treatment plant upgrades that the SSA is constructing pursuant to requirements in the NPDES Permit, which, as of the Effective Date, are described in Part C § SEVEN.

b. "Building/Private Property Backup" shall mean a wastewater release or backup into a building or private property that is caused by blockages, flow conditions, or other malfunctions of the Collection System. A wastewater backup or release that is caused by blockages, flow conditions, or other malfunctions of a Private Lateral is not a Building/Private Property Backup.

c. "Clean Water Act" or "CWA" shall mean the Federal Water Pollution Control Act found at 33 U.S.C. §§ 1251-1387, and the regulations promulgated thereunder.

d. "Collection System" shall mean the current and future municipal wastewater collection and transmission system owned or operated by the SSA, including all pipes, interceptors, force mains, gravity sewer lines, lift stations, pumping stations, manholes and appurtenances thereto designed to collect and convey municipal sewage and wastewaters (domestic, commercial, and industrial) to the SSA's WWTP or to a CSO Outfall. "Collection System" includes both the "Combined Sewer System" and the "Sanitary Sewer System."

e. "Combined Sewer Overflow Control Policy" or "CSO Policy" shall mean the policy issued by the EPA regarding combined sewer overflows, entitled "Combined Sewer Overflow (CSO) Control Policy," 59 Fed. Reg. 18688 (April 19, 1994) and as identified in Section 402(q) of the Clean Water Act, 33 U.S.C. § 1342(q).

f. "Combined Sewer Overflow" or "CSO" shall mean any discharge from the SSA's Combined Sewer System at a CSO Outfall designated in the currently applicable NPDES Permit.

g. "Combined Sewer System" shall mean the portion of the SSA's Collection System designed to convey municipal sewage and wastewaters (domestic,

commercial, and industrial) and stormwater in the same system of pipes to the WWTP or to a CSO Outfall.

h. "Consent Decree" shall mean this Consent Decree, all Appendices hereto, and all plans, schedules, reports, memoranda, or other submittals approved by the Plaintiffs pursuant to the requirements of this Consent Decree or any Appendix hereto. In the event of any conflict between the Consent Decree and any Appendix, this Consent Decree shall control.

i. "CSO Outfall" shall mean an outfall in the Combined Sewer System from which combined sewage and stormwater are discharged and so designated in the currently applicable NPDES Permit.

j. "Date of Lodging" shall mean the date that this Consent Decree is lodged with the Clerk of the Court for the United States District Court for the Middle District of Pennsylvania.

k. "Day" shall mean a calendar day unless expressly stated to be a working day. When the day a report or other deliverable is due under this Consent Decree falls on a Saturday, Sunday, federal holiday, or legal holiday for the SSA, the SSA shall have until the next calendar day that is not one of the aforementioned days for submission of such report or other deliverable.

l. "Dry Weather Overflow" shall mean a discharge that occurs at a permitted CSO Outfall that is not caused by precipitation-related Inflow or Infiltration.

m. "Effective Date" shall mean the date set forth in Section XVII (Effective Date) of this Consent Decree.

n. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

o. "Green Infrastructure Measures" shall mean the range of stormwater control measures that use plant systems, soil systems, permeable pavement, or stormwater management, harvest and reuse, to store, infiltrate, evapotranspirate, or reuse stormwater and reduce flows to the Combined Sewer System. Green Infrastructure Measures may include, but shall not be limited to, extended detention wetland areas, green roofs, and cisterns.

p. "Infiltration" shall mean water entering the Collection System and service connections from the ground through means that include, but are not limited to, defective pipes and sewer walls, pipe and sewer joints, connections, and manhole walls.

q. "Inflow" shall mean water introduced into the Collection System, including service connections, from sources including, but not limited to, roof leaders, cellars, basement sump pumps, area drains in yards and driveways, foundation drains, cooling water discharges, drains from springs and other wet areas, cracked or broken manhole covers, cross connections from separate storm sewers, catch basins, stormwater, surface run-off, street wash waters, and drainage.

r. "Long Term Control Plan" or "LTCP" shall mean the currently applicable plan that the SSA develops pursuant to Section V.B.

s. "MGD" shall mean million gallons per day.

t. "Nine Minimum Controls" or "NMCs" shall mean those controls identified in Section II.B. of the EPA's April 19, 1994, Combined Sewer Overflow (CSO) Control Policy.

u. "Nine Minimum Controls Plan" or "NMC Plan" shall mean the plan attached hereto as Appendix A, as the same may be revised and updated in accordance with

Section V.A. (Nine Minimum Controls) of this Consent Decree and in accordance with the CSO Policy.

v. "NPDES Permit" shall mean the currently effective NPDES Permit No. PA-0026492, effective on October 1, 2009 and amended on May 13, 2011, issued to the SSA by the PADEP. This definition includes any subsequent modification or reissuance of the Permit in accordance with 40 C.F.R Part 123.

w. "Operating Protocols" shall mean the procedures described, as of the Effective Date, in Part C, § TWELVE of the NPDES Permit.

x. "PADEP" shall mean the Pennsylvania Department of Environmental Protection and any successor departments or agencies of the Commonwealth of Pennsylvania.

y. "Paragraph" shall mean a provision of this Consent Decree identified by an Arabic number.

z. "Parties" shall mean the United States, the PADEP, and the SSA.

aa. "Plaintiffs" shall mean the United States and the PADEP.

bb. "Private Lateral" shall mean that portion of the Collection System not owned by the SSA and used to convey wastewater from a building(s) to a portion of the Collection System owned by the SSA.

cc. "Sanitary Sewer System" shall mean the current and future portion of the Collection System Sewer designed to convey municipal sewage and wastewaters (domestic, commercial, and industrial) to the WWTP in one system and stormwater in a separate system.

dd. "Sanitary Sewer Overflow" or "SSO" shall mean an overflow, spill, diversion, or release of wastewater from or caused by the Sanitary Sewer System. This term shall include: (i) discharges to waters of the Commonwealth of Pennsylvania or United States from the

Sanitary Sewer System and (ii) any release of wastewater from the Sanitary Sewer System to public or private property that does not reach waters of the United States or the Commonwealth of Pennsylvania, including Building/Private Property Backups.

ee. "Section" shall mean a portion of this Consent Decree identified by an uppercase Roman Number.

ff. "Semi-annual Progress Report" shall mean the reports due on a semi-annual basis under Section VII (Reporting).

gg. "Six-month Period" shall mean a six month period ending on June 30 and December 31.

hh. "SSA" shall mean Defendant Scranton Sewer Authority, a municipal corporation located in Scranton, Pennsylvania.

ii. "Subparagraph" shall mean a provision of this Consent Decree identified by one or two lowercase letters followed immediately by a period. All Subparagraphs are incorporated into and a part of the Paragraph immediately preceding the Subparagraph.

jj. "Unpermitted Discharge" shall mean a Dry Weather Overflow or any discharge to waters of the United States or the Commonwealth of Pennsylvania from the Collection System at a location other than an Outfall designated in the NPDES Permit.

kk. "Waste Water Treatment Plant" or "WWTP" shall mean the waste water treatment plant owned and operated by the SSA located in Scranton, Pennsylvania.

V. COMPLIANCE MEASURES

A. NINE MINIMUM CONTROLS

9. The SSA shall implement the NMC Plan attached hereto as Appendix A in accordance with the provisions and schedules set forth therein.

10. Ongoing Review of the Nine Minimum Control Plan. The SSA shall, on at least an annual basis, evaluate the efficacy of the measures implemented under its Nine Minimum Controls Plan, as well as other measures undertaken by the SSA pursuant to this Consent Decree, in reducing the impacts of Combined Sewer Overflows on receiving waters. Based on such evaluation, the SSA shall submit to Plaintiffs for review and approval additional proposed changes to its NMC Plan, to the extent any are necessary, which the SSA shall implement, upon approval by Plaintiffs, in accordance with the provisions and schedules set forth therein.

B. LONG-TERM CONTROL PLAN

11. The SSA shall complete and submit a Long Term Control Plan ("LTCP") to both the EPA and the PADEP by December 1, 2012 for review and approval. This LTCP must:

a. Meet the requirements of the EPA's CSO Policy, including but not limited to those requirements set forth in Section II.C. of the CSO Policy;

b. Select a remedy for CSOs that will result in no more than 4 overflows in a typical year to non-channelized tributaries of the Lackawanna River and no more than 9 overflows in a typical year to the Lackawanna River and its channelized tributaries;

c. Include a schedule for implementation with appropriate interim milestones that concludes no later than December 1, 2037;

d. Include a deadline for substantial completion (plant fully operational) of the BNR Project that concludes no later than August 1, 2014;

e. Include a schedule for constructing CSO controls such as box culverts and storage tanks that is consistent with Appendix B; and

f. Include a post construction monitoring plan ("PCMP"), which must also meet the requirements of the CSO Policy, including the Policy's requirements that it be "adequate to verify compliance with water quality standards and protection of designated uses as

well as to ascertain the effectiveness of the CSO controls" and that it "details the monitoring protocols to be followed, including the necessary effluent and ambient monitoring and, where appropriate, other monitoring protocols such as biological assessments, whole effluent toxicity testing, and sediment sampling."

12. The SSA shall complete implementation of the LTCP as soon as practicable, but no later than December 1, 2037.

13. The SSA shall undertake a study (the "GI Study") to evaluate the feasibility of implementing Green Infrastructure Measures as part of its long term controls for reducing CSOs from the Collection System. The evaluation in the GI Study must address at least the following criteria: GI site selection, identification and resolution of institutional issues and obstacles, public outreach, design and construction, and monitoring and evaluation. No later than December 1, 2017, the SSA shall submit the completed GI Study to the EPA and to the PADEP.

14. Following completion of the GI Study, Defendant may submit to the EPA and the PADEP for review and approval pursuant to Section VI (Review and Approval of Submittals) a modification of the LTCP that alters the CSO controls in the LTCP by incorporating Green Infrastructure Measures. Defendant shall include the following information with any such submission: (1) a description of the specific technology to be applied; (2) the locations where the technology will be used; (3) the design limits of the proposed use of the technology; and (4) the costs of installation and maintenance and who will bear those costs. If the proposed modification seeks to alter the size of any CSO control in the LTCP, the proposed modification must also include reliable computer modeling and other evidence sufficient to demonstrate that (1) the proposed Green Infrastructure Measures will result in a reduction of wet weather flows into the Combined Sewer System; (2) during future wet weather events the SSA will continue to achieve

such flow reductions; and (3) as a result of the flow reductions achieved as a result of the proposed Green Infrastructure Measures, the proposed modification of the LTCP will achieve the same or better performance, in terms of gallons controlled and the number of CSO activations in a typical year, as the unmodified LTCP.

C. GENERAL COMPLIANCE

15. Effluent Limits.

a. Commencing on the Day that Defendant signs this Consent Decree, the SSA shall comply with all final effluent limits set forth in the NPDES Permit.

b. If, on October 1, 2014, the SSA is not in compliance with its annual effluent limitation for the compliance period ending on September 30, 2014, it shall, on or before November 28, 2014, purchase nutrient credits to the extent required in the NPDES Permit in a quantity costing up to the amount of $100,000. The SSA shall use reasonable diligence in obtaining the best value for any money it spends purchasing credits.

16. Dry Weather Overflows.

a. All Dry Weather Overflows from the Collection System are prohibited.

b. The SSA must report all Dry Weather Overflows to the PADEP by telephone at 570-826-2511 within twenty-four hours of when the SSA becomes aware of the Dry Weather Overflow and must provide written notification to the PADEP and the EPA within five Days of when the SSA becomes aware of the Dry Weather Overflow.

c. Should the SSA detect a Dry Weather Overflow, the SSA shall begin corrective action immediately. The SSA shall inspect the outfall(s) from which the Dry Weather Overflow occurred each subsequent Day until the overflow has been eliminated.

d. The SSA shall summarize all such Dry Weather Overflows in the Semi-Annual Progress Report required under Section VII (Reporting). Nothing in this Section shall eliminate or minimize any additional notification or reporting required by the NPDES Permit.

17. Compliance with Operating Protocols.

a. Commencing on the Day Defendant signs this Consent Decree, the SSA shall comply with the Operating Protocols regarding flows to the WWTP, which, as of the Effective Date, are described in Part C, § TWELVE of the NPDES Permit.

b. Should the SSA fail to comply with the Operating Protocols described in Subparagraph a. above for more than ten minutes in any 24-hour period, it shall report such failure within 10 Days in writing in accordance with Section XVI (Notices and Submissions).

c. The SSA shall, within 14 Days of a request by the EPA or the PADEP, provide a report in comma-delimited format of the measurements of influent to the WWTP and discharges from Outfall 003 recorded by its supervisory control and data acquisition (SCADA) system in increments of no more than five minutes. To the extent practicable, the data shall be provided in a single table with each measurement being taken simultaneously. The SSA may not limit its production of SCADA data to the data available from one server or storage location, unless that server or storage location contains all of data available to the SSA for the time period covered by the request.

d. Nothing in this Paragraph shall limit the United States' or the PADEP's authority to request other information or information in other formats.

18. Identification of Outfalls.

a. Prior to the Date of Lodging, the SSA identified the following outfalls that are not currently included in its NPDES Permit:

(i) McNichols (#083);

(ii) 600 Elm East (#084);

(iii) 600 Elm West (#085);

(iv) Cedar/Maple (#086);

(v) Leggetts/Kelly (#087); and

(vi) Prospect/Locust (#088).

b. The SSA plugged the Prospect/Locust outfall (#088) and submitted an application to the PADEP on November 28, 2011 requesting an amendment to the NPDES Permit to authorize discharges from the remaining outfalls and to permanently remove the following outfalls from the NPDES Permit: #010, #039, #041, #042, #046, #054, and #064.

c. The SSA hereby affirms that it has conducted a thorough study of its collection system and has identified to the United States and the PADEP, to the best of its knowledge, all of the outfalls from which pollutants may enter waters of the United States or the Commonwealth of Pennsylvania.

d. The SSA shall not discharge pollutants into waters of the United States or the Commonwealth of Pennsylvania from any outfall not identified in its NPDES Permit or in Subparagraph 18.a. above.

e. Should the SSA discover an outfall that is not identified in Subparagraph 18.a or in its NPDES Permit, it shall notify the United States and the PADEP in writing in accordance with Section XVI (Notices and Submissions) within five Days of the discovery of the outfall. The notice shall include a description of the outfall, its location, the portion of the collection system that drains to the outfall, the description of any pathway by which discharges from the outfall might reach waters of the United States or the Commonwealth of Pennsylvania,

any information as to whether stormwater is included in the discharges from the outfall, and any information that might indicate whether pollutants have been discharged from the outfall. Within 60 Days of the discovery of the outfall, Defendant shall submit to the EPA and the PADEP for review and approval pursuant to Section VI (Review and Approval of Submittals) a plan that addresses how the newly discovered outfall(s) will be addressed consistent with SSA's applicable NPDES Permit.

19. Elimination of Sanitary Sewer Overflows. SSOs are prohibited.

20. Reporting Planned Changes and Non-Compliance.

a. The SSA shall comply with the provisions of the NPDES Permit requiring the reporting of anticipated and unanticipated non-compliance with the NPDES Permit, which, as of the Effective Date, are described in Part A, § III.C of the NPDES Permit.

b. Whenever written notice of non-compliance is required to be given to the PADEP pursuant to the NPDES Permit, the SSA shall simultaneously notify the EPA in accordance with Section XVI (Notices and Submissions).

VI. REVIEW AND APPROVAL OF SUBMITTALS

21. For each plan, report, schedule or other document submitted by the SSA for EPA and PADEP approval (other than a request to modify this Consent Decree submitted pursuant to Section XIX (Modification)) the EPA, after consultation with the PADEP, may (a) approve the submittal, in whole or in part; (b) disapprove the submittal, in whole or in part; (c) approve the submittal upon specified conditions, directing the SSA to modify its submission; or (d) any combination of the above. If the EPA approves the submittal, the EPA shall notify the SSA in writing. If the submittal is disapproved in whole or in part, or approved with conditions, the EPA shall describe the deficiencies or conditions in writing so that the SSA can make the required modifications and provide the EPA with a modified submittal. The SSA may request a meeting

and/or conference call with the EPA to discuss the deficiencies, but no such request or meeting shall extend any deadlines set forth in this Section.

22. Within 60 Days following receipt of any notice from the EPA disapproving a submittal or directing modification of a submittal pursuant to the preceding Paragraph (or within such longer time set forth in the notice or agreed to by the parties), the SSA shall submit a modified submittal to the EPA and the PADEP for approval, subject only to the SSA's right to invoke the dispute resolution procedures set forth in Section XII (Dispute Resolution). The modified submittal shall correct any deficiencies identified by the EPA, and conform to any directions set forth in the notice provided pursuant to the preceding Paragraph. If the SSA fails to submit a modified document to the EPA within the 60-Day period, the EPA retains the right to modify or develop any disapproved or conditionally approved portion of the submittal. The SSA shall implement any such plan, report, schedule or other submittal as modified or developed by the EPA, subject only to the SSA's right to invoke the dispute resolution procedures set forth in Section XII (Dispute Resolution).

23. In the event that a resubmitted plan, report, schedule or other document or portion thereof is disapproved in whole or in part or approved with conditions by the EPA, the EPA shall provide the SSA with a written notice describing the remaining deficiencies or conditions for approval. The EPA may require the SSA to correct the deficiencies or satisfy the conditions for approval of the submittal within a specified time frame, or the EPA may modify or develop any disapproved or conditionally approved portion of the submittal. The SSA may request a meeting and/or conference call with the EPA to discuss the deficiencies, but no such request or meeting shall extend any deadlines set forth in this Section. Following receipt of a notice requiring the SSA to correct deficiencies or satisfy conditions for approval, the SSA shall submit a modified

document in accordance with the EPA's directions, subject only to the SSA's right to invoke the dispute resolution procedures set forth in Section XII (Dispute Resolution).

24. Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 21 or 23, above, the SSA shall proceed, if directed by the EPA, to take any action required by any non-deficient portion of the SSA's submission, if such action can be undertaken independent of the deficient portion of the SSA's submission. Implementation of any non-deficient portion of a submission shall not relieve the SSA of any liability for stipulated penalties under Section X (Stipulated Penalties) for the deficient portion(s).

25. Other than a modification of the LTCP, all plans and studies submitted pursuant to this Consent Decree shall be incorporated herein as part of this Consent Decree upon approval by the EPA. A modification of the LTCP shall be incorporated into this Consent Decree only if the Parties enter into a written agreement pursuant to Paragraph 88.

26. The SSA shall take all lawful and appropriate actions to facilitate the implementation of this Consent Decree, including prompt review and approval of any appropriate and responsive bids, contracts, or other documents, and, if applicable, prompt review and approval of any appropriate schedule of work necessary to maintain compliance with this Consent Decree.

27. If the EPA fails to take action under Paragraph 21 with respect to a submittal or modified submittal, other than the LTCP or a proposal to modify this Consent Decree, within 90 Days of receiving the submittal or modified submittal, the EPA shall extend any subsequent deadlines dependent upon approval of the submittal by the number of Days in excess of 90 that elapsed between: (i) the date that the EPA and the PADEP received the submittal or modified submittal; and (ii) the date that the EPA took action under Paragraph 21. Such extension will not

be effective unless the EPA grants it in writing. Defendant may invoke dispute resolution under Section XII (Dispute Resolution) with respect to any disputes under this Paragraph.

VII. REPORTING

A. REPORTS

28. The SSA will provide to the EPA copies of all written notifications and reports that the SSA is required to submit to the PADEP relevant to this Consent Decree.

29. On January 31 and July 31 of every year commencing with the first full Six-month Period after Entry of this Consent Decree and continuing until termination of this Consent Decree, the SSA will submit to the EPA and the PADEP a progress report ("Semi-annual Progress Report") regarding the implementation of the requirements of this Consent Decree in the previous Six-month Period. The Semi-Annual Progress Report will include at a minimum:

a. A statement setting forth the deadlines and other terms that the SSA was required by this Consent Decree to meet since the date of the last Semi-annual Progress Report, whether and to what extent the SSA has met these requirements, and the reasons for any noncompliance;

b. A general description of the work completed within the prior Six-month Period, and a projection of work to be performed pursuant to this Consent Decree during the next or succeeding Six-month Period;

c. A summary of all contacts with the EPA and the PADEP during the reporting period relating to CSOs, SSOs, or implementation of the BNR Project;

d. A statement of any exceedances of NPDES Permit limitations; and,

e. A summary of all CSOs, SSOs and Unpermitted Discharges occurring within the Six-month Period including the actual or estimated frequency, duration, and volume of each CSO, SSO, and Unpermitted Discharge.

B. CERTIFICATION AND ADMISSIBILITY

30. Any report or plan relating to monitoring data or any representation made by the SSA as to its compliance with this Consent Decree that the SSA is required by this Consent Decree to submit, including reports or plans, shall be signed by an official or authorized agent of the SSA and shall include the following certification:

> I certify under penalty of law that the document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

31. The SSA shall not object to the authenticity of any report, plan, or other submission prepared in accordance with Paragraph 30 or the information contained in said report, plan or submission in any proceeding to enforce this Consent Decree.

VIII. FUNDING

32. Compliance with the terms of this Consent Decree by the SSA is not conditioned on the receipt of federal or state grant or loan funds or upon the SSA's financial capabilities. In addition, the SSA's failure to comply is not excused by the lack of federal or state grant or loan funds, or by the processing of any applications for the same, or by the SSA's financial capabilities.

IX. CIVIL PENALTY

33. The SSA shall pay the sum of $170,000 plus an additional sum for interest as explained below, to the United States as a civil penalty. Payment shall be made in two installments. The first installment of $70,000 shall be made within 30 Days after the Effective Date. The second installment of $100,000 plus interest shall be made within six months of the

Effective Date. Interest shall accrue from the Date of Lodging at the rate specified in 28 U.S.C. § 1961 as of the Date of Lodging.

34. Defendant shall pay the civil penalty due to the United States by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instruction to be provided to the SSA, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney's Office for the Middle District of Pennsylvania, 235 N. Washington Ave., Suite 311, Scranton, PA 18503, Phone: 570-348-2800. At the time of payment, Defendant shall send a copy of the EFT authorization form and the EFT transaction record, together with a transmittal letter, which shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States v. Scranton Sewer Authority*, and shall reference the civil action number 3:09-cv-1873 and DOJ case number 90-5-1-1-08778, to the United States in accordance with Section XVI (Notices and Submissions) and to:

EPA Region III Docket Clerk
Office of Enforcement and Compliance Assistance (3EC00)
1650 Arch Street
Philadelphia, PA 19103.

35. The SSA shall pay the sum of $170,000, plus an additional sum for interest as explained below, to the PADEP as a civil penalty. Payment shall be made in two installments. The first installment of $70,000 shall be made within 30 Days after the Effective Date. The second installment of $100,000 plus interest shall be made within six months of the Effective Date. Interest shall accrue from the Date of Lodging at the rate specified in 28 U.S.C. § 1961 as of the Date of Lodging. The payment shall be made by corporate check or the like made payable to "Commonwealth of Pennsylvania, Clean Water Fund" and sent to Program Manager, Clean Water Program, Department of Environmental Protection, Northeast Regional Office, 2 Public Square, Wilkes-Barre, Pennsylvania 18701-1915.

X. STIPULATED PENALTIES

36. The SSA shall be liable for stipulated penalties to the United States and the PADEP for violations of this Consent Decree specified below. A violation includes failing to perform any obligation required by the terms of this Consent Decree, including any work plan or schedule approved under this Consent Decree, according to all applicable requirements of this Consent Decree, and within the specified time schedules established by or approved under this Consent Decree.

37. Late Payment of Civil Penalty. If Defendant fails to pay the civil penalty required to be paid under Section IX of this Decree (Civil Penalty) when due, Defendant shall pay a stipulated penalty of $500 per Day for each Day that the payment is late.

38. Reporting Requirements. For each failure to submit a timely and adequate plan, report, schedule, written notice, or other submission required by this Decree, the SSA shall pay the following stipulated penalties to Plaintiffs per violation per Day:

Period of Noncompliance	Penalty per Day per Violation
Days 1-30	$500
Days 31-60	$750
Days 61-90	$1,000
Days 91 and over	$1,500

39. Compliance Milestones.

a. For each failure to comply with any deadline for completion of construction or for achievement of full operation set forth in the implementation schedule developed and approved pursuant to Paragraph(s) 11 and 12, the SSA shall pay the following stipulated penalties to Plaintiffs per violation per Day:

Period of Noncompliance	Penalty per Day per Violation
Days 1-30	$500
Days 31-60	$750
Days 61-90	$1,000
Days 91 and over	$2,000

b. For each failure to comply with a requirement of, or meet a deadline in, the Nine Minimum Controls Plan pursuant to Paragraph 9 of Section V.A (Nine Minimum Controls), the SSA shall pay the following stipulated penalties to Plaintiffs per violation per Day:

Period of Noncompliance	Penalty per Day per Violation
Days 1-30	$500
Days 31-60	$750
Days 61-90	$1,000
Days 91 and over	$2,000

40. General Compliance.

a. For each discharge in violation of Subparagraph 16.a or for each discharge in violation of Paragraph 19 that reaches waters of the United States or the Commonwealth of Pennsylvania, the SSA shall pay the following stipulated penalties based on the volume of the discharge:

Volume:	The penalty shall be:
Less than 100 gallons	$100
100 to 2,499 gallons	$750
2,500 to 9,999 gallons	$1,250
10,000 to 99,999 gallons	$3,000
100,000 to 999,999 gallons	$5,000
1 million gallons or greater	$10,000

b. For each discharge in violation of Subparagraph 17.a, the SSA shall pay the following stipulated penalties based on the difference between the volume of combined sewage that the SSA would have taken into the WWTP while it was discharging from Outfall 003 if it had complied with Paragraph 17.a., and the volume of combined sewage that it actually took into the WWTP while it was discharging from Outfall 003:

Difference in Volume:	The penalty shall be:
Up to two million gallons	$2,500
More than two million gallons, but not more than four million gallons	$5,000
More than four million gallons, but not more than six million gallons	$7,500
More than six million gallons	$10,000

c. For each failure to comply with Subparagraph 18.d., the SSA shall pay the following stipulated penalties to Plaintiffs per violation per Day:

Period of Noncompliance	Penalty per Day per Violation
Days 1-30	$500
Days 31-60	$1,000
Days 61-90	$2,000
Days 91 and over	$3,000

d. For failure to comply with Subparagraph 15.b, the SSA shall pay to the Plaintiffs a stipulated penalty equal to the difference between $100,000 and the amount paid for nutrient credits. The unavailability of credits is not a defense to liability for penalties under this Subparagraph. Thus, if the SSA were to need 10,000 pounds of credits and were to purchase that amount for $50,000 in accordance with Subparagraph 15.b, then this Subparagraph would have no effect. However, if the SSA were to need 10,000 pounds of credits and were to purchase only 5,000 pounds at a cost of $25,000, it would have to pay a stipulated penalty equal to $100,000 minus the $25,000 it actually spent, or $75,000.

e. For each failure to comply with Paragraph 15, other than a failure to comply with an annual effluent limit, the SSA shall pay the following stipulated penalties to Plaintiffs:

Type of Permit Limit:	Penalty per violation:
Daily or Instantaneous	$500
Weekly	$1,500
Monthly	$3,000

f. For each failure to provide telephonic notification in compliance with Paragraph 16.b, the SSA shall pay a stipulated penalty of $1,000 per occurrence.

g. For each failure to comply with Subparagraphs 16.c or 17.c, the SSA shall pay the following stipulated penalties to Plaintiffs per violation per Day:

Period of Noncompliance	Penalty per Day per Violation
Days 1-30	$500
Days 31-60	$750
Days 61-90	$1,000
Days 91 and over	$2,000

41. If any person discovers an outfall that existed as of the Effective Date, but that is not included in the SSA's NPDES Permit or identified in Subparagraph 18. a, the SSA shall pay a stipulated penalty of $2,500.

42. Access Requirements. For each failure to allow access to the WWTP in accordance with Section XV (Information Collection and Retention), below, the SSA shall pay stipulated penalties of $1,000 to Plaintiffs per Day.

43. Stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

44. For stipulated penalties incurred more than one year after the Effective Date, the amount of penalties for which Defendant is liable shall be multiplied by the quotient of: (i) the maximum penalty under 33 U.S.C. § 1319(d) as adjusted pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, Pub. L. 101-410, 104 Stat. 890, as amended; and (ii) $37,500

45. Defendant shall pay stipulated penalties to the United States and the PADEP within 30 Days of a written demand by either Plaintiff. Defendant shall pay 50% of the total stipulated penalty amount due to the United States and 50% percent to the PADEP. The Plaintiff making a demand for payment of a stipulated penalty shall simultaneously send a copy of the demand to the other Plaintiff.

46. Each Plaintiff may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.

47. Stipulated penalties shall continue to accrue as provided in Paragraph 43, during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of the EPA that is not appealed to the Court, Defendant shall pay accrued penalties determined to be owing, together with interest, to the United States within 30 Days of the effective date of the agreement or the receipt of the EPA's decision or order.

b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Defendant shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in Subparagraph c, below.

c. If any Party appeals the District Court's decision, Defendant shall pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.

48. Obligations Prior to the Effective Date. Upon the Effective Date, the stipulated penalty provisions of this Decree shall be retroactively enforceable to the date the SSA signed this Decree, with regard to any and all violations that have occurred after the SSA signed, provided that stipulated penalties that may have accrued prior to the Effective Date may not be collected unless and until this Consent Decree is entered by the Court.

49. Defendant shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 34, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

50. Defendant shall pay stipulated penalties owing to the PADEP by corporate check or the like made payable to "Commonwealth of Pennsylvania, Clean Water Fund" and sent to Program Manager, Clean Water Program, Department of Environmental Protection, Northeast Regional Office, 2 Public Square, Wilkes-Barre, Pennsylvania 18701-1915. The check shall be accompanied by a transmittal letter which shall state that the payment is for stipulated penalties and for which violation(s) the penalties are being paid.

51. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States or the PADEP from seeking any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.

52. Subject to the provisions of Section XIII (Effect of Settlement), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States or the PADEP for Defendant's violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Clean Water Act, 33 U.S.C. §§ 1251-1387, or the Pennsylvania Clean Streams Law, 35 Pa. Stat. Ann. §§ 691.1-691.1001, Defendant shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

XI. FORCE MAJEURE

53. "Force Majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Defendant; its agents, consultants, or contractors; or any entity controlled by Defendant; that delays or prevents the performance of any obligation under this Consent Decree despite Defendant's best efforts to fulfill the obligation. The requirement that Defendant exercise "best efforts to fulfill the obligation" includes using best

efforts to anticipate any potential Force Majeure and best efforts to address the effects of any such event (a) as it is occurring and (b) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. "Force Majeure" does not include Defendant's financial inability to perform any obligation under this Consent Decree.

54. Any delays in implementation of this Consent Decree shall not be excused merely because the SSA notified the EPA and/or the PADEP of the anticipated delay, regardless of whether such notification is contained in a report required under Section VII (Reporting) or any other communication.

55. When the SSA knows, or should have known by the exercise of reasonable diligence, of an event that might delay completion of any requirement of this Consent Decree, whether or not the event is a Force Majeure, the SSA will notify the EPA and the PADEP, in writing, within 14 Days after the SSA first knew, or in the exercise of reasonable diligence under the circumstances, should have known of such event. The notice will indicate whether the SSA claims that the delay should be excused due to a Force Majeure. The notice shall describe in detail the basis for the SSA's contention that it experienced a Force Majeure delay, the anticipated duration of the delay, the cause or causes of the delay, all actions taken or to be taken to prevent or minimize the delay, and the timetable by which those measures will be implemented. Failure to timely notify the EPA and the PADEP may, at the EPA's option, in consultation with the PADEP, preclude SSA from asserting Force Majeure for the period beyond 14 Days it took SSA to provide the required notice.

56. If, after consultation with the PADEP, the EPA finds that a delay in performance is, or was, caused by a Force Majeure, it will extend the time for performance, in writing, for a period to compensate for the delay resulting from such event and stipulated penalties will not be

due to the United States or the PADEP for such period. If the EPA does not grant such an extension within 30 days of receiving the SSA's written notice of the Force Majeure, the SSA may consider the request for an extended time for performance to have been denied, and the SSA may invoke dispute resolution.

57. In proceedings on any dispute regarding a delay in performance, the dispute resolution provisions of Section XII (Dispute Resolution) will apply, and the SSA will have the burden of proving that the delay is, or was, caused by a Force Majeure and that the amount of additional time requested is necessary to compensate for that event.

58. Compliance with a requirement of this Consent Decree shall not by itself constitute compliance with any other requirement. An extension of one compliance date based on a particular event will not extend any other compliance date. The SSA will make an individual showing of proof regarding the cause of each delayed incremental step or other requirement for which an extension is sought. The SSA may petition for the extension of more than one compliance date in a single request.

XII. DISPUTE RESOLUTION

59. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree.

60. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Defendant sends the United States and the PADEP a written "Notice of Dispute." Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 30 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal

negotiations, then the position advanced by the United States, in consultation with the PADEP, shall be considered binding unless, within 30 Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.

61. Formal Dispute Resolution. Defendant shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States and the PADEP a written "Statement of Position" regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Defendant's position and any supporting documentation relied upon by Defendant.

62. The United States, in consultation with the PADEP, shall serve its Statement of Position within 30 Days of receipt of Defendant's Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.

63. Defendant may seek judicial review of the dispute by filing with the Court and serving on the United States and the PADEP, in accordance with Section XVI (Notices and Submissions), a motion requesting judicial resolution of the dispute. The motion must be filed within 30 Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Defendant's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

64. The United States, in consultation with the PADEP, shall respond to Defendant's motion within the time period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent permitted by the Local Rules.

65. Standard of Review.

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 63 pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by the EPA and/or the PADEP under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Defendant shall have the burden of demonstrating, based on the administrative record, that the position of the United States and/or the PADEP is arbitrary and capricious or otherwise not in accordance with law.

b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 63, Defendant shall bear the burden of demonstrating by a preponderance of the evidence that its position complies with this Consent Decree and that Defendant is entitled to relief under applicable law.

66. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendant under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 47. If

Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section X (Stipulated Penalties).

XIII. EFFECT OF SETTLEMENT

67. SSA hereby knowingly waives its right to appeal or challenge the validity of Part C.I.SEVEN.I.B.(5) (Compliance with effluent limitations) of the NPDES Permit, including rights that may be available under Section 4 of the Pennsylvania Environmental Hearing Board Act, Act of July 13, 1988, P.L. 530, 35 P.S. Section 7514; the Pennsylvania Administrative Agency Law, 2 Pa. C.S. Section 103(a) and Chapters 5A and 7A; or any other provision of law. This Paragraph, and the SSA's waiver hereunder, shall expire at midnight on September 30, 2014.

68. This Consent Decree resolves the civil claims of the United States for the violations alleged in the United States' Complaint through the Date of Lodging of this Consent Decree and the civil claims of the PADEP for the violations alleged in the PADEP's Complaint in Intervention through the Date of Lodging of this Consent Decree.

69. The United States and the PADEP reserve any and all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 68. This Consent Decree shall not be construed to limit the rights of the United States or the PADEP to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal or state laws, regulations, or permit conditions, except as expressly specified in Paragraph 68. The United States and the PADEP further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, the POTW, whether related to the violations addressed in this Consent Decree or otherwise.

70. In any subsequent administrative or judicial proceeding initiated by the United States or the PADEP for injunctive relief, civil penalties, or other appropriate relief relating to

the Facility, Defendant shall not assert, and may not maintain, any defense or claim against Plaintiffs based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or the PADEP in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 67 of this Section.

71. This Consent Decree does not limit or affect the rights of Defendant or of the United States or the PADEP against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against Defendant, except as otherwise provided by law.

72. This Consent Decree does not create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

XIV. NOT A PERMIT

73. This Consent Decree is not a permit, or a modification of any permit, under any federal, state, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, state, and local laws, regulations, and permits; and Defendant's compliance with this Consent Decree shall be no defense to any action commenced by the United States or the PADEP pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and the PADEP do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant's compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 33 U.S.C. §§ 1251-1387, or with any other provisions of federal, state, or local laws, regulations, or permits.

74. This Consent Decree does not authorize or approve the construction of any physical structure or facilities, or the modification of any existing treatment works or sewer system.

XV. INFORMATION COLLECTION AND RETENTION

75. The United States and the PADEP, and their representatives, contractors, consultants, and attorneys shall have the right of entry into and upon the SSA's WWTP and Sewer System, at all reasonable times, upon proper presentation of credentials, to:

a. monitor the progress of activities required under this Consent Decree;

b. verify any data or information submitted to the United States or the PADEP in accordance the terms of to this Consent Decree;

c. obtain samples and, upon request, splits of any samples taken by the SSA or its representatives, contractors or consultants;

d. obtain documentary evidence, including photographs and similar data;

e. inspect and evaluate any portion or portions of the POTW;

f. inspect and review any records required to be kept under the terms and conditions of the Consent Decree, the SSA's NPDES Permit, any future modifications or renewals thereof, and the CWA; and

g. assess the SSA's compliance with this Consent Decree.

76. Upon request, Defendant shall provide the EPA and the PADEP or their authorized representatives splits of any samples taken by Defendant. Upon request, the EPA and the PADEP shall provide Defendant splits of any sample taken by the EPA or the PADEP.

77. Defendant shall retain the following documents and electronically stored data for at least five years from the date they are created:

a. All complaints received by Defendant or its contractors or agents from any person or entity pertaining to the matters addressed by this Consent Decree;

b. All documents required to be created, submitted, or maintained pursuant to Appendix A (Nine Minimum Controls Plan);

c. Documentation of all measures undertaken by Defendant to comply with the terms of this Consent Decree; and

d. SCADA data or other data regarding compliance with Paragraph 17 (Compliance with Operating Protocols).

78. Defendant shall retain the following documents and electronically stored data for at least five years after termination of this Consent Decree:

a. All reports, plans, permits, and documents submitted to the EPA or the PADEP pursuant to this Consent Decree, including all underlying research and data;

b. All data developed by, or on behalf of, Defendant pursuant to any post-construction monitoring activities; and

c. All reports and data regarding water quality;

79. The information-retention requirements in this Section establish minimum retention periods that shall apply regardless of any contrary corporate or institutional policies or procedures but do not excuse Defendant from any legal requirement to retain documents or data for longer periods of time. At any time during this information-retention period, upon request by the United States or the PADEP, Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

80. At the conclusion of the information-retention period provided in Paragraph 79, Defendant shall notify the United States and the PADEP at least 90 Days prior to the destruction

of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States or the PADEP, Defendant shall deliver any such documents, records, or other information to the EPA or the PADEP. Defendant may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Defendant asserts such a privilege, it shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Defendant. However, no final documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

81. Defendant may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that Defendant seeks to protect as CBI, Defendant shall follow the procedures set forth in 40 C.F.R. Part 2.

82. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or the PADEP pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendant to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XVI. NOTICES AND SUBMISSIONS

83. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-1-1-08778

As to the EPA:

Chief
NPDES Enforcement Branch (3WP42)
Water Protection Division
U.S. Environmental Protection Agency, Region 3
1650 Arch St.
Philadelphia, PA 19103-2029

And

Christopher A. Day
Office of Regional Counsel (3RC20)
U.S. Environmental Protection Agency, Region 3
1650 Arch St.
Philadelphia, PA 19103-2029

As to the PADEP:

Program Manager – Clean Water Program
Department of Environmental Protection
Northeast Regional Office
2 Public Square
Wilkes-Barre, PA 18701-1915

As to the SSA:

Executive Director
Scranton Sewer Authority
312-314 North Adams Avenue
Scranton, PA 18503-1501

Jeffrey Belardi
Belardi Law Offices
410 Spruce Street, 4th Floor
Scranton, PA 18503

84. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

85. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XVII. EFFECTIVE DATE

86. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court; provided, however, that Defendant hereby agrees that it shall be bound to perform duties scheduled to occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Consent Decree before entry, or the Court declines to enter the Consent Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall be void.

XVIII. RETENTION OF JURISDICTION

87. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XII (Dispute Resolution) and XIX (Modification), or effectuating or enforcing compliance with the terms of this Decree.

XIX. MODIFICATION

88. Except as otherwise expressly set forth in this Consent Decree, the terms of this Consent Decree, including the attached appendices and the LTCP approved pursuant to this Consent Decree, may be modified only by a subsequent written agreement signed by all of the Parties or their successors in interest. Where the modification constitutes a material change to this Consent Decree, it shall be effective only upon approval by the Court.

89. Any disputes concerning modification of this Consent Decree shall be resolved pursuant to Section XII (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 65, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

XX. TERMINATION

90. After Defendant has: (i) completed implementation of the requirements of Section V (Compliance Measures); (ii) certified that all construction required by the Long-Term Control Plan is complete and that the Long-Term Control Plan has been fully implemented; (iii) completed post construction monitoring as required by the Long-Term Control Plan; (iv) submitted a PCMP report to the EPA and the PADEP; (v) demonstrated in the PCMP report that any remaining CSOs will not cause the SSA to violate the CSO Policy or its NPDES Permit; (vi) satisfactorily complied, as determined by the EPA, with its NPDES Permit for a period of 12 months; and (vii) paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree; Defendant may serve upon the United States and the PADEP a "Request for Termination" stating that Defendant has satisfied those requirements, together with all necessary supporting documentation.

91. Following receipt by the United States and the PADEP of Defendant's Request for Termination, the Parties shall confer informally concerning the request and any disagreement that the Parties may have as to whether Defendant has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States after consultation with the PADEP agrees that the Consent Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Consent Decree.

92. If the United States after consultation with the PADEP does not agree that the Consent Decree may be terminated, Defendant may invoke Dispute Resolution under Section XII (Dispute Resolution). However, Defendant shall not seek formal dispute resolution under Paragraph 61 of any dispute regarding termination until at least 90 Days after service of its Request for Termination.

XXI. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

93. This Consent Decree will be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the public comments regarding this Consent Decree disclose facts or considerations which indicate that this Consent Decree is inappropriate, improper, or inadequate. Defendant consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Consent Decree, unless the United States has notified Defendant in writing that it no longer supports entry of the Consent Decree.

XXII. SIGNATORIES/SERVICE

94. Each undersigned representative of Defendant and the PADEP and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

95. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Defendant agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXIII. COSTS OF SUIT

96. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and the PADEP shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Defendant.

XXIV. INTEGRATION

97. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than deliverables that are subsequently submitted and approved pursuant to this Decree, no other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Consent Decree or the settlement it represents, nor shall it be used in construing the terms of this Consent Decree.

XXV. APPENDICES

98. The following Appendices are attached to, and a part of, this Consent Decree:

"Appendix A" is the Nine Minimum Controls Plan; and

"Appendix B" is the SSA's schedule for constructing CSO controls.

XXVI. FINAL JUDGMENT

99. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, the PADEP and Defendant. The Court finds that there is no just reason for delay and, therefore, enters this judgment as a final judgment under Federal Rules of Civil Procedure 54 and 58.

SO ORDERED THIS _____ DAY OF _____, 2012

HON. JOHN E. JONES
UNITED STATES DISTRICT JUDGE

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Sewer Authority of the City of Scranton.*

FOR THE UNITED STATES OF AMERICA:

[redacted]

IGNACIA S. MORENO
Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice

12/13/2012
Dated

/s/ Daniel S. Smith

DANIEL S. SMITH
Trial Attorney
Environmental Enforcement Section
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THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Sewer Authority of the City of Scranton.*

[redacted]

PAMELA J. MAZAKAS
Deputy Director
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency

[redacted]

MARK POLLINS
Director, Water Enforcement Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency

[redacted]

SUSHILA NANDA
Senior Attorney Advisor
Office of Civil Enforcement
U.S. Environmental Protection Agency

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Sewer Authority of the City of Scranton.*

[redacted]

SHAWN M. GARVIN
Regional Administrator
U.S. EPA Region III
1650 Arch Street
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[redacted]

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U.S. EPA Region III
1650 Arch Street
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[redacted]

CHRISTOPHER DAY
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Office of Regional Counsel
U.S. EPA Region III
1650 Arch Street
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THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Sewer Authority of the City of Scranton.*

FOR THE COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION:

[redacted]

MICHAEL V. BRUNAMONTI, P.E.
Program Manager
Clean Water Program
Department of Environmental Protection
Northeast Regional Office
2 Public Square
Wilkes-Barre, PA 18701-1915

[redacted]

Dated 11/21/12

JOSEPH S. CIGAN III
Assistant Counsel
Office of Chief Counsel
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(570) 820-4838 (fax)
jcigan@state.pa.us
PA 74927

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Sewer Authority of the City of Scranton.*

FOR THE SEWER AUTHORITY OF THE CITY OF SCRANTON.

[redacted]

11/15/2012
Date

EUGENE P. BARRETT
Executive Director
Scranton Sewer Authority
312-314 North Adams Avenue
Scranton, PA 18503-1501

[redacted]

JEFFREY BELARDI, ESQ.
Belardi Law Offices
410 Spruce Street, 4th Floor
Scranton, PA 18503

APPENDIX A

Background

The City of Scranton owns the wastewater collection, conveyance and treatment system serving the City of Scranton and the Borough of Dunmore. The Scranton Sewer Authority (SSA or the Authority) was appointed by the City of Scranton to act as the City's agent to maintain the wastewater system.

The wastewater system consists of over 275 miles of collection sewers and large interceptors, 80 combined sewer overflows (CSOs), 7 pumping stations and a wastewater treatment plant (WWTP). Approximately 63% (172 miles) of the collection sewers are combined sewers, which convey the combined storm water and sanitary sewage flow to regulator chambers prior to connection with an interceptor sewer. Under high wet-weather flow conditions that exceed the capacities of downstream facilities, the regulators direct combined sanitary sewage and storm water to the receiving streams. The SSA's NPDES Permit, No 0026492, lists permitted discharge points including: Treatment Plant Outfall – 001, Treatment Plant Headworks Bypass – 003 and CSOs – 004 through 082, totaling 80 CSO regulators. An additional five outfalls (numbers 83-87) have been requested to be added to the permit. Accordingly, there are 85 total designated CSO outfalls in the sewer system. SSA is currently working to permanently seal a number of these outfalls and will provide an update in the next annual report.

This document summarizes SSA's program to implement the Nine Minimum Controls pursuant to our discharge permit and the National CSO Policy.

1.0 Proper Operation and Regular Maintenance Program – NMC No. 1

1.1 Introduction

The first minimum control, proper operation and regular maintenance of the Combined Sewer System (CSS) and CSO outfalls consists of a program that establishes operation, maintenance and inspection procedures to ensure that a CSS and treatment facility will function in a way to maximize treatment of combined sewage and still comply with NPDES Permit Limitations. Implementation of this control is intended to ensure that the collection and treatment systems perform effectively. The essential elements of a proper operation and maintenance (O&M) program include maintenance of suitable records and identification of O&M as a high management priority.

The steps involved in implementing this minimum control are:

1. Assess how well the O&M program is implemented.

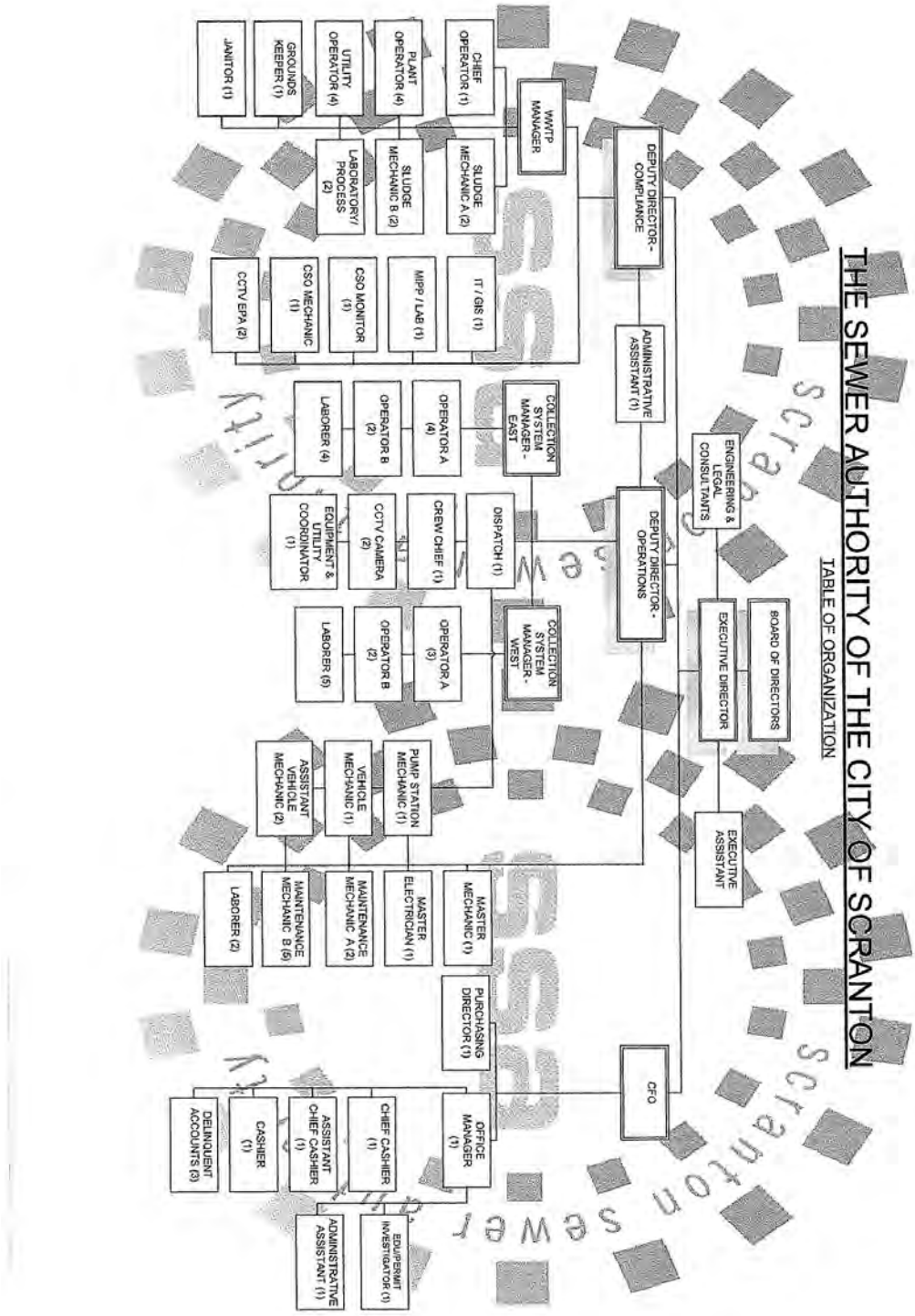
2. Determine if the O&M program needs to be improved to satisfy the intent of the CSO control policy.

3. Develop and implement the improvements to address CSOs.

4. Document any actions and report them to the PADEP.

1.2 Organizational Structure

The combined sewer system of the City of Scranton is owned and operated by the SSA. The SSA is a municipal Authority established by the City of Scranton and the Borough of Dunmore. Its Board consists of four members from the City of Scranton which are appointed by the Mayor and confirmed by City Council, and a fifth member who is appointed by the Borough Council of Dunmore. The Authority sewer system serves the City of Scranton and the Borough of Dunmore. The Authority has also entered into agreements with other adjoining municipalities and their sewer authorities for the treatment of additional municipal wastewaters. The Authority provides conveyance and treatment of wastewater from portions of the Boroughs of Taylor, Dickson City, and Moosic. The Authority holds an NPDES permit to discharge treated effluent and CSOs into the Lackawanna River and its tributaries. The organizational structure of the Authority is shown in Figure 1.


THE SEWER AUTHORITY OF THE CITY OF SCRANTON
TABLE OF ORGANIZATION
BOARD OF DIRECTORS
EXECUTIVE DIRECTOR
EXECUTIVE ASSISTANT
ENGINEERING & LEGAL CONSULTANTS
DEPUTY DIRECTOR - OPERATIONS
DEPUTY DIRECTOR - COMPLIANCE
ADMINISTRATIVE ASSISTANT (1)
CFO
WWTP MANAGER
CHIEF OPERATOR (1)
PLANT OPERATOR (4)
UTILITY OPERATOR (4)
GROUNDS KEEPER (1)
JANITOR (1)
SLUDGE MECHANIC A (2)
SLUDGE MECHANIC B (2)
LABORATORY/ PROCESS (2)
IT / GIS (1)
MIPP / LAB (1)
CSO MONITOR (1)
CSO MECHANIC (1)
CCTV EPA (2)
COLLECTION SYSTEM MANAGER - EAST
OPERATOR A (4)
OPERATOR B (2)
LABORER (4)
DISPATCH (1)
CREW CHIEF (1)
CCTV CAMERA (2)
EQUIPMENT & UTILITY COORDINATOR (1)
COLLECTION SYSTEM MANAGER - WEST
OPERATOR A (3)
OPERATOR B (2)
LABORER (5)
PUMP STATION MECHANIC (1)
VEHICLE MECHANIC (1)
ASSISTANT VEHICLE MECHANIC (2)
MASTER ELECTRICIAN (1)
MAINTENANCE MECHANIC A (2)
MAINTENANCE MECHANIC B (6)
LABORER (2)
MASTER MECHANIC (1)
PURCHASING DIRECTOR (1)
OFFICE MANAGER (1)
CHIEF CASHIER (1)
ASSISTANT CHIEF CASHIER (1)
CASHIER (1)
DELINQUENT ACCOUNTS (3)
EQUIPERMIT INVESTIGATOR (1)
ADMINISTRATIVE ASSISTANT (1)

Scranton is a Class 2A City with a Home Rule/Mayor-Council form of municipal government. The elected mayor has the power and responsibility to administer government operations. The elected SSA Board of Directors has the power and responsibility to enact legislation, approve agreements, and adopt an annual budget. Typically the budget is prepared by the SSA staff and submitted to SSA Board of Directors for approval. The City director of public works, appointed by the mayor and confirmed by council, is responsible for the O&M of the public streets and the public storm water drainage system in the City. The Manager of the Borough of Dunmore is responsible for the O&M of the public streets and the public storm water drainage system in the Borough. The SSA maintains the responsibility to set user rates that are sufficient to meet the obligations of the Authority, operating and capital wise.

SSA is the permittee for the Combined Sewer System and is responsible for routine O&M. Figure 1 shows the current SSA organization chart.

1.3 Budget

Normal O&M expenses for the facilities are the responsibility of SSA. Non-routine and extraordinary maintenance expenses, as well as capital improvements are also the responsibility of the SSA.

SSA prepares an annual operating budget of revenues and expenses. The budget for the fiscal year beginning each April 1 will include the funds budgeted for resources and staff for the O&M program. The Authority sets rates for customers in the City of Scranton and the Borough of Dunmore and outside municipalities for bulk treatment of sewage. These various revenues support operation of facilities and the debt service. The Authority has the power, to float tax-exempt bonds or otherwise obtain funds for the design and construction of facilities.

The City is responsible for highway operations including streets maintenance. Highway operations are supported through the City general and the liquid fuels fund. The general fund obtains revenue through property taxes, other taxes, state grants, and various fees. The liquid fuels fund obtains revenue from proceeds of the state motor vehicle liquid fuels tax.

The Authority as owner and operator of the sewer system provides long-term planning and day-to-day operation of the facilities. The Authority operates, maintains, and repairs facilities, conducts measurements and testing, and provides reports to comply with environmental requirements. The Authority retains a consulting engineer and legal counsel.

1.4 Critical Facilities

The critical elements of the combined sewer system are listed in general order of priority below. These facilities and their roles in the operation of the combined sewer system were previously characterized in the 1970 “Design Report” and the October 1994 “Combined Sewer Overflow Minimization Final Plan of Action” reports.

PRIORITY	CRITICAL ELEMENTS OF THE COMBINED SEWER SYSTEM
1	Wastewater Treatment Plant
2	NPDES Outfall 003
3	Pump Stations
4	Diversion Chambers and CSO Outfalls
5	Sanitary Sewer Collection System
6	Combined Sewer Collection System

The operation, maintenance, inspection, and reporting requirements for the above-identified facilities (except the Treatment Plant) are outlined in the Collection System Operation and Maintenance Manual. This manual is to receive annual review to determine if revisions are needed. Requirements for the Treatment plant are listed in Wet Weather Operating Plan.

A list of the CSO regulators and their locations is included in the Collection System Operation and Maintenance Manual.

Trained SSA personnel will use the National Association of Sewer Service Companies (NASCO) ratings (numeric grades from 1-5, where 5 is the most significant defect) to rank its major trunk sewers, interceptors and each pump station by December 31, 2013.

1.5 Procedures for Routine Maintenance

The procedures for routine O&M are included in the Collection System Operation and Maintenance Manual. Typical O&M procedures that are part of the SSA manual include inspection with a CCTV camera, flow measurement, cleaning and removal of foreign materials, chemical treatment of roots, repair/rehabilitation of defects, and maintaining adequate records of inspections and findings.

SSA will use its JOBPLUS/CATS electronic work order management systems to identify and track all collection system routine maintenance. The JOBPLUS database contains all of SSA's Standard Operating Procedures for performing system maintenance. SSA inputs work orders from O & M manuals for new equipment in the JOBPLUS system, making modification as necessary to best fit SSA's process and applications. The JOBPLUS database generates work orders every Monday for each department, which complete tasks as they are able, depending upon the demands of the tasks, task priorities and available staffing. Consequently, tasks are not always completed within a given week, although SSA makes best efforts to perform assigned tasks within a weeks' time. All completed collection system inspection and cleaning is recorded in the CATS system. SSA managers use a map at the plant to direct crews' proactive maintenance through different areas of the collection system, generally working from north to south, and east to west, since the CATS system cannot generate work orders. CATS data is annually provided to SSA's regulators as part of its CSO Report. Although SSA currently cleans its system from north to south, SSA will evaluate cleaning from south to north, starting at the plant and working upstream.

In 2011, SSA rededicated itself to maximizing the utility and use of the JOBPLUS database to memorialize SOPs and to schedule/track maintenance required and performed. SSA presently schedules and prioritizes maintenance in JOBPLUS. When SSA acquires new equipment for the plant, the manufacturer's recommendations contained in the accompanying O& M manuals are entered into the JOBPLUS database and adjusted to meet SSA's application of the equipment. Every Monday, managers print out preventive maintenance work orders from JOBSPLUS and distribute the work orders to each department, as appropriate. Work crews proceed with work based on these work orders. In addition, as needed, corrective action work orders are delivered to managers and distributed to work crews.

1.6 Non-Routine Maintenance and Emergency Situations

A call out list of private contractors is maintained for both the plant and the collection system to insure that repairs can be arranged outside of normal working hours to the extent outside assistance is necessary.

The Authority recognizes that the operation of the sewer utility may require the expenditure of funds that have not been budgeted. The Authority has secured a $2 million revolving line of credit for extraordinary problems and expenditures for emergencies that can be accessed upon authorization by the Executive Director.

Management of emergencies in the collection system is also critical. Pipe failures can result in dry weather overflows. Upon notification by outside parties or upon discovery, the Authority takes immediate and appropriate steps to respond to the collection system problem, repair the problem and maintain or restore service to the customers. SSA's target response time for complaints and emergencies relating to collection system releases is as soon as possible. Typical response times are within an hour or two, depending upon the circumstances. Procedures are in place for arranging for bypass pumping between manholes if required to perform the work and SSA maintains a variety of pumps on hand, in addition to its call out list of private contractors, and is well equipped to respond to pump stations as necessary.

1.7 Inspections

Manual onsite inspections of all CSO discharge points will occur at least monthly; however, most outfalls are inspected several times each month in response to significant rain events and SSA will continue its practice of reviewing rainfall data and its correlation to activations at certain "problem" regulators. The result is that most outfalls are visited frequently each month whether due to (1) routinely scheduled inspections, (2) inspection following rain events, (3) in connection with outfall flow meter inspections, or (4) in connection with other visits/inspections. SSA will also regularly deploy a Vactor truck dedicated to CSOs, which it acquired and put into service in 2011.

Inspections include the following: (1) recording time of arrival and departure, (2) noting the inspection type (biweekly or rain event), (3) noting the condition of the outfall, (4) noting infiltration from the river, (5) nothing it the gate was moving freely, (6) noting the weather

conditions, (7) noting whether the wooden block was in or out, (8) noting whether discharge is present, and if so, (9) estimating rainfall, (10) noting the receiving waters, (11) estimating flow, (12) determining the cause of the discharge, (13) noting whether the discharge is wet weather or dry weather related, (14) estimating the duration of the discharge, (15) noting any erosion, (16) dispatching necessary equipment, (17) noting if solids and floatables being discharged, (18) noting whether a plume is present, and (19) performing sampling, noting any other maintenance needs for the regulator. Inspection forms will be completed for each CSO inspection. SSA will continue to employ a wooden block system to assist in verifying CSO activations.

These frequent physical inspections are supported by 1 permanent Sigma 950 flow meter, 4 permanent Sigma 940 flow meters, and 17 portable Sigma 910 flow meters thus providing monitoring at approximately one-third of the regulators in the system. Normal O&M of the wastewater facility occurs with records of operation maintained daily. A Computerized Managed Maintenance Program (CMMP) for preventative maintenance was initiated in January 2003. SSA is utilizing JOBPLUS. This program generates work orders and maintains inventory records. The program also tracks orders for parts and equipment. Historical records are stored in the CMMP database.

Pump stations will be inspected five days per week with logbooks and log sheets maintaining the O&M activities. This includes observations of blocks of wood placed in the emergency overflows and recording of storm pump operation.

Beginning in 2011, SSA undertook a grit cleaning program (televise, clean, re-televise). On a three-year, rolling basis, SSA will clean and inspect 150,000 feet of sewer lines per year, which effectively puts SSA on a 10-year cleaning schedule. SSA will conduct more frequent inspections for areas which warrant them. As appropriate, inspections will be digitally recorded and log sheets and digital recordings of the work will be maintained at the Treatment Plant and the SSA Board of Directors will be updated monthly on the progress of the program.

SSA inspects and cleans catch basins, manhole structures, and sewer lines each year. In our annual reports we will identify the following:

- Catch basins inspected – three-year rolling average of at least 2,000 per year. Catch basins will be inspected: (1) for the presence of a hood or trap (to retain floatables); (2) to determine the rate of solids accumulation (to facilitate a targeted cleanup schedule); and (3) to determine the physical condition of the basin (e.g., cracked, broken outlet pipe, adjacent street collapse) and to assign it a rating based on a consistent rating system.
- Catch basins cleaned – three-year rolling average of at least 2,000 per year.
- Catch basins repaired – as necessary consistent with the rating assigned to each catch basin, as follows: 1 – Excellent; Minor defects; 2 – Good; Defects that have not begun to deteriorate; 3 – Fair; Moderate defects that will continue to deteriorate; 4 – Poor; Severe defects that will become Grade 5 defects within the foreseeable future; or 5 – Attention required; Defects requiring a high priority for repair or attention to be made consistent with NASSCO standards, to return the catch basin to Good (2) or Excellent (1) condition, including the installation/replacement of hoods or traps.

- Manhole structures inspected – SSA's manholes are not labeled; however, SSA will assign identifiers to its manholes by January 1, 2013, and will update this section by March 1, 2013. In the meantime, SSA will inspect and clean all manhole structures at the same time it inspects and cleans the corresponding sewer segments.
- Manhole structures cleaned – see above.
- Manhole structures repaired/replaced – as necessary, consistent with the NASSCO rating assigned to each manhole; repairs to be consistent with NASSCO standards to return the manhole to Good (2) or Excellent (1) condition
- New manholes installed – as necessary.
- Sewer lines inspected – three-year rolling average of at least 150,000 feet per year.
- Sewer lines televised – three-year rolling average of at least 150,000 feet per year.
- Sewer line cleaned/jetted – three-year rolling average of at least 150,000 feet per year.
- Sewer lines replaced/repaired – as necessary, consistent with the NASSCO rating assigned to each sewer segment; repairs to be consistent with NASSCO standards to return the sewer line to Good (2) or Excellent (1) condition.

SSA maintains a network of rain gauges, which are inspected at least monthly, with many being inspected twice a month. The SSA rain gauges are supplemented by other area rain gauges, such as the Wilkes-Barre-Scranton Airport. These other rain gauges are maintained by the gauge owners (such as the Airport Authority).

1.8 Training

The Authority provides and promotes training of operators and maintenance personnel. The Authority supports operator certification for all personnel. At present the SSA has 6 certified "A" Wastewater Operators. The Authority provides direct training in various aspects of sewer operations on an as needed basis. The State operator certification Act as well as other training requirements such as those needed for PENNVEST loan compliance will be accomplished.

1.9 Periodic Review of O&M Plans

The operations manual and other operational instructions will be reviewed annually, during the 4th quarter of each calendar year. SSA is scanning all key O&M Manuals into a central electronic database, searchable by title, and anticipates completion of this effort in FY 2012. During the annual review of O&M manuals, a summary report will be developed which will identify any modifications to the previous O&M plans and document the benefits realized from the specific revisions. SSA will also make best efforts to obtain electronic versions of O&M manuals and will incorporate them into the database.

In particular, SSA now requires that all O&M activities be logged in the JOBPLUS database. This will facilitate our recording and reporting of the extensive collection system O&M that is performed annually.

SSA has developed a wet weather operations plan for the WWTP (April 2011), and will develop plans that identify pre-event, during-event-, and post-event/recovery actions for the

collection system components during the first quarter of 2012. The collection system component plans will present the necessary activities in two ways: (i) organized by event stage (pre-, during-, and post-event), and (ii) organized by collection system component. Upon completion of their development, those plans are incorporated herein by reference.

2.0 Maximum Use of the Collection System for Storage – NMC No. 2

2.1 Introduction

The second of the nine minimum controls is to maximize the use of the collection system for storage of wet weather flows. The goal of this control is to enable the sewer system to store wet weather flows, as much as possible, until downstream sewers and treatment facilities can handle them. Control measures to obtain the goal include: inspection and removal of obstructions; tide and control gate maintenance and repair; regulator adjustment (including float mechanisms); reduction or retardation of inflows and infiltration; upgrade and adjustment of pumps; raising existing weirs and installation of new weirs. Any attempt to implement the typical measures to maximize the use of the collection system for storage must be tempered with the prevention of upstream basement and street flooding.

SSA has developed a hydraulic model and has worked extensively with Gannett Fleming and EPA/PADEP to evaluate and take full advantage of available collection system storage. This has included a number of weir height adjustments and modeling runs looking to fine-tune collection system performance. These evaluations will continue with the ongoing development of the LTCP.

By way of additional background, following the completion of the hydraulic model calibration in 2010, an evaluation of the CSO regulator settings, including pump station settings, was completed by Gannett Fleming using the calibrated model. The evaluation identified a number of CSO regulators that could be adjusted to reduce the number of CSO activations and improve capture of wet weather flows. The CSO regulators that were identified include the following:

- #004 Wells Street – The regulator sluice gate was removed in 2010. The intercepting capacity was increased from 1.0 MGD to 3.25 MGD.

- #006 Gardner Street – Recommendations include removal of the sluice gate and increasing the opening in the side of the regulator chamber. The intercepting capacity would increase from 2.28 MGD to 4.40 MGD.

- #016 Pettibone Street - Recommendations include removal of the sluice gate and increase the opening in the side of the regulator chamber. The intercepting capacity would increase from 1.94 MGD to 5.02 MGD.

- #034 East Parker Street – The regulator weir height was increased from 3.5 inches to 7 inches in 2010. The intercepting capacity was increased from 0.25 MGD to 0.89 MGD

Gannett Fleming has used the hydraulic model to evaluate other locations where SSA can increase weir heights without causing in-system problems and these adjustments have been made. SSA will continue to work with Gannett Fleming to identify opportunities to safely and appropriately raise weirs throughout the system.

The weir at the Outfall 003 bypass has been analyzed by Gannett Fleming extensively. The existing weir elevation at Outfall 003 results in significant surcharging along the main interceptor and interceptor backflow at a number of other CSOs during heavy precipitation events. This weir is raised to the greatest extent possible.

2.2 Procedures in Place

2.2.1 O&M Manual

The SSA has existing procedures to maximize the available storage in the collection system. A Collection System O&M Manual is in place to provide procedures for the O&M of the regulator chambers and pumping stations by SSA employees.

SSA is scanning all O&M manuals for both the treatment plant and collection system into a central database so all manuals will be available to all staff. SSA will finish scanning the manuals and saving them to a dedicated location on SSA's server by April 1, 2013, where they will be accessible on SSA's network.

The JOBPLUS database (includes all permitted CSOs, but not pump stations, which will be added April 1, 2013) provides the appropriate instructions for each required collection system O&M task.

2.2.2 Pumping Stations

Pumping stations will be inspected by a dedicated inspection team five days each week. In order to monitor overflows, each pumping station has a block of wood or other suitable indicator device placed in the overflow pipe. During the inspection, the operators will record if the block is present or absent. Rainfall data from rain gauges will also be recorded. Correlation between precipitation and the presence/absence of the wood blocks, or other suitable indicator device, will be reported monthly as part of the Discharge Monitoring Reports (DMRs) and annually in the SSA Chapter 94 Wasteload Management Report. Anomalous information will be investigated and appropriate follow-up measures are implemented. Two pumping stations (Middle Street and Shawnee) are equipped with storm overflow pumps. Runtime meters are installed on the storm water pumps to monitor the quantity of flow pumped into the Lackawanna River. The Myrtle Street pumping station has two main pumps plus a larger capacity storm pump that conveys flow to the force main, maintaining flow in the system.

2.2.3 Main Interceptor

The current configuration of the influent structure maximizes storage in the main interceptor. The flow that is allowed forward into the WWTP is 25-million-gallons-per-day (MGD) and a peak hourly flow of 39 MGD. The Bypass 003 elevation is set at approximately the crown of the 6.5-foot-diameter interceptor. The invert elevation of the interceptor is 644.86 feet and the invert elevation of the bypass is 650.68 feet. Therefore, the main interceptor must be flowing at nearly full capacity into the plant headworks before any discharge backs up to the point of overflow.

SSA is presently cleaning several major sections of the main interceptor and will report on removed volumes in the FY 2012 annual report. Reports of future scheduled cleaning activities will be integrated into annual budgetary forecasts of extraordinary maintenance & repairs. In the Annual CSO Report a Sediment and Debris Report will be included and submitted to the agencies.

Modeling of the main interceptor for hydraulic capacity and storage capability has been conducted as a part of the LTCP and is an ongoing effort toward optimizing wet weather storage in the interceptor. Weir height adjustments and other system refinements will be made in accordance with the modeling results and associated engineering evaluations.

2.2.4 Sewer Condition Assessment

A television inspection program is necessary to determine lines that are damaged, have root intrusion or silt build-up and may be limiting the upstream storage in the line. A television inspection program, which consists of a goal of inspecting sewers at a rate of 150,000 feet each year, has been established. SSA owns two television camera trucks. The cameras have been typically used to support maintenance activities. The length of lines to be televised will be a combination of those televised in support of normal maintenance activities and those of exploratory nature. Exploratory work will focus on priority areas tributary and those where CSOs have been identified for possible elimination.

2.2.5 Inlets and Catch Basins

Routine maintenance activities including inlet and catch basin cleaning and sewer flushing are performed by SSA. SSA has Vactor and clam trucks available for cleaning. All inlets and catch basins in the system will be cleaned on a maximum 3-year cycle. In priority areas cleaning will be scheduled as needed at a greater frequency interval with priority areas being cleaned twice annually. SSA will identify priority areas and inform EPA and PaDEP of the same by January 15, 2013. Additional cleaning will occur when problems are reported. As defects are observed, they will be reported to the City, Borough or State (PennDOT) for corrective action. Copies of daily work reports and monthly Board reports are maintained.

2.3 Control Measures

SSA will televise and utilize the equipment for routine scheduled inspections. Where it is documented that sediment or other obstructions in non-major sewer lines are present, SSA will flush and/or schedule repair of the sewer. The removal of obstructions increases the storage capacity of the system and can reduce the volume of overflows. Where televising documents excessive clear water flow during dry weather, investigations will be performed to discover/identify the source of the inflow and/or infiltration, since the removal of extraneous flow increases the capacity of the system. Depending on the magnitude and severity, the SSA will schedule the repair/rehabilitation as a part of major capital or extraordinary repair under its annual budgetary program. In the case of storm sewer separation, projects may be referred to the appropriate party (City or Borough) for action. SSA enjoys acceptable levels of cooperation from the City and the Borough, and all known locations of clear water addition have been cooperatively addressed.

SSA personnel generally inspect flap tide gates monthly from topside and specific gates will be inspected as required from the interior. Certain gates, based on experience, are also inspected at least twice a year from the riverside to clean debris. Inspection of the downstream side of the tide gates will be completed monthly. The Collection System Operation and Maintenance Manual contains more specifics on regulator/gate inspection protocol. The function of tide gates is to minimize the receiving stream from flowing back into the sewer system during high river water levels. Proper maintenance is required to ensure that leaks and cracks are not present and that the gate is operating as designed. Leaks and cracks permit water to pass into the overflow and reduce the available downstream storage capacity of the system.

Per discussions with USEPA and PADEP, SSA is evaluating five outfalls where the hydraulic model suggests the possibility of inflows to the combined system. If any material inflow is confirmed to be occurring, SSA will evaluate the need and appropriateness of the installation of a gate or duckbill to prevent river water intrusion. SSA will report on its findings in the next annual report.

SSA continues to work with Red Valve, Inc. to identify a solution to the duckbill regulator for outfall 003. This regulator has allowed some river water intrusion into the treatment plant. Red Valve has already replaced the initial valve twice at SSA's request. As of the date of this plan, a third valve had been installed and appeared to be working properly.

Regulator settings will be adjusted and overflow weirs will be raised as practicable. Regulators are an important component of the CSO system as they regulate the amount of flow permitted into the downstream sewer and provide an outlet for excessive flows. Adjusting the regulator settings and increasing the overflow weirs may permit an additional amount of flow into the downstream sewer and will control the amount of flow discharged into the overflow line. Evaluation of the settings of the regulators was completed as part of the hydraulic modeling of the Lackawanna Watershed 2000 program. Further evaluation is ongoing as part of the CSO LTCP efforts and in response to evaluation requests from PADEP and USEPA.

Catch basins in the City of Scranton and Borough of Dunmore will be evaluated. The design standards including the hood structure, sump and capacity of storm water discharge to the collection system will be investigated. The use of the hood and sump accomplish isolation of sewer odors, prevention of solids and floatables from entering the sewers, enable an effective means of capture of solids, and provide a reservoir for extracting the solids using non-labor-intensive equipment. The City of Scranton and Borough of Dunmore bear the responsibility to ensure that adequate storm water management is provided under their respective NPDES permits for the EPA Storm Water Phase II program, through a prescribed implementation of Best Management Practice (BMPs) and regulatory reporting. The SSA attempts to limit the amount of storm water discharging into the combined sewer system through a storm water policy. For new connections, the SSA adopted a "Policy on the Connection of Stormwater Discharges into the Combined Sewer System" on November 25, 2003, which includes requirements for effective inlet and catch basin design. This policy sets limits on peak storm water flow into the combined system by requiring storm water management at new developments, as well as requiring developers to look for storm water separation if existing storm conveyance systems or streams are nearby. The policy was provided to the City of Scranton, Borough of Dunmore and adjoining municipalities for incorporation into their storm water management policies and for enforcement. This activity is dependent upon the cooperative adoption of design standards by the municipalities. SSA estimates there are between 10,000 and 14,000 catch basins in its system, of which approximately 75% to 80% contain solids and floatables controls.

Wet wells at all pump stations will be cleaned once per year or more frequently if identified to be necessary by SSA staff through the every weekday pump station inspections. SSA has a pump station SCADA system in place which assists in evaluating dry and wet weather flows to each station. In-line flow meters will document flow, real-time recording rain gauges will document rainfall information (which can be used to correlate pump station flow), wet well levels will be continuously recorded (providing for monitoring of overflows) and storm pump operation will be documented.

Comprehensive CSO regulator and tide gate inspections are performed each year. Detailed assessment of all regulators and appropriate remedial measures are recorded and will be summarized in our annual reports.

Based on the urban setting and the lack of unused facilities, it is not feasible to provide additional in-system storage without significant capital additions to the system, which will be further evaluated in the LTCP.

SSA is working cooperatively with PADEP and USEPA to identify distributed storage solutions along the main interceptor and in other strategic locations as part of the LTCP effort.

2.4 Additional Measures

The LTCP will include evaluation of additional measures for maximum use of the collection system for storage.

The pumping stations will be evaluated based on the monitoring being performed. Improvements required at the pumping stations will be determined.

3.0 Review and Modification of Pretreatment Requirements – NMC No. 3

3.1 Introduction

The third minimum control is the review and assessment of non-domestic source discharges on CSO impacts. The objective of this control is to minimize the impacts of discharges into combined sewer systems from non-domestic sources during wet weather events.

SSA has relatively few industrial users which collectively contribute an insignificant amount of flow to the collection system.

3.2 Pretreatment Requirements

SSA has worked closely with USEPA to maintain an updated pretreatment program. In 2011, SSA has issued new discharge permits to each of our significant industrial users. These permits reflect updated headworks analysis associated with our newly reissued NPDES discharge permit.

SSA's pretreatment program includes the identification and location of all possible industries, which may be subject to the program.

All permits will be enforced and industries that are in significant noncompliance with the pretreatment requirements will be published in the local paper as required by federal regulations.

The largest non-domestic user is the local landfill, which has already cooperatively agreed to hold waste within their lagoons during periods of wet weather. This will avoid potential non-domestic discharge through a permitted CSO. The SSA on-site inspections will support determination of compliance of industrial users.

Appropriate enforcement action will be taken to bring industrial users into compliance and the Enforcement Response Guide shall be fully implemented. The SSA will prepare quarterly reports and an annual report in accordance with NPDES permitting requirements. In addition, an educational letter concerning the impacts of wet weather discharges will be developed and sent to industries in the service area. The educational letter is being developed in an attempt to encourage industries to voluntarily act to reduce flows during wet weather periods.

During inspections of sewers, if oil and grease build-up is observed SSA will attempt to determine where it is originating and contact the source for resolution. All inspections and follow-up investigations will be documented. SSA does not have any chronic Food, Oils and Grease (FOG) areas that have not been addressed.

4.0 Maximization of Flow to the WWTP for Treatment – NMC No. 4

4.1 Introduction

The fourth minimum control is to maximize the volume of combined wastewater that is processed at the municipal WWTP. The objective of this control is to minimize the amount of combined wastewater that is discharged untreated into receiving waters. The discussion below pertains to the WWTP as it is currently constructed and will have to be amended before completion of the expansion of the WWTP.

4.2 Measures to Increase Treated Flow Volumes

4.2.1 Collection and Conveyance Facilities

SSA has developed an O&M Program and has implemented the program. SSA will implement simple modifications to the collection and conveyance facilities based upon the results of the flow monitoring and modeling tasks being undertaken. CSOs in the system will be inspected on at least a monthly basis. The main interceptor will be probed at manholes to determine the depth of sediment, which will be documented. The main interceptor was cleaned in 2011.

SSA is maximizing flow to the WWTP. The current configuration of the influent structure maximizes storage in the main interceptor. The flow that is allowed forward into the WWTP is approximately 25 mgd with short-term peak flows of 39 mgd in accordance with the Wet Weather Operating Plan. The Bypass 003 elevation is set at approximately the crown of the 6.5-foot-diameter interceptor. The invert elevation of the interceptor is 644.86 feet and the invert elevation of the bypass is 650.68 feet. Therefore, the main interceptor must be flowing at nearly full capacity into the plant headworks before any discharge backs up to the point of overflow.

Based on staff comments, O&M experience and engineering observations, the existing system has no inoperative or unused facilities in the service area. Retaining flow, during wet weather events by utilizing unused facilities, is not applicable and the construction of additional facilities to retain flow is not feasible in this system, unless otherwise determined through the development of the LTCP. Hydraulic modeling of the collection and conveyance system to determine the hydraulic capacities is ongoing and will be included in the LTCP.

4.2.2 Pumping Stations

SSA will conduct and document draw down tests at each pumping station annually in conjunction with the PADEP Chapter 94 Report. The tests will be used to determine if adequate capacity is available at each of the stations. The results of the draw down tests will be utilized to further calibrate and adjust the sewer system model. Simple modifications (*i.e.*, wet well pump operation level adjustments) will be performed and more complex modifications will be evaluated. Pumping stations with storm water pumps are equipped with run hour meters. During inspection of these pumping stations, storm water pumps frequency and quantity of flow is recorded.

The LTCP will include modeling of wet weather events to determine required capacity and complex modifications that are required to pumping stations based on achieving and maintaining the necessary capacity.

4.2.3 WWTP

A peak flow hydraulic capacity study of the WWTP has been performed to determine the capacity and capabilities of the WWTP under high-flow conditions. The analysis identified that the WWTP should be capable of properly treating a peak hourly flow of 34 to 39 mgd. After the peak hourly flow, the WWTP should be able to properly treat a flow between 25 to 30 mgd for the next 23 hours. The flows should then be sustained between 20 to 30 mgd with a maximum monthly WWTP flow of 20 mgd. SSA will not divert flow, unless an emergency situation occurs, less than what can be properly treated as documented by the Peak Flow Hydraulic Capacity Study. If flow is diverted before the WWTP peak and sustained capacities are reached, the reason why the flow could not be treated and the quantity of flow bypassed will be documented.

SSA has a Wet Weather Operating Plan, which consists of an operating protocol for the use of the Outfalls 001 (main plant outfall), and 003 (upstream of headworks). The WWTP hydraulic capacity goals and guidelines through the secondary treatment system were established as follows:

Permit Flow Parameter	Goal (mgd)	Guidelines for Acceptable Performance (mgd)
Annual Average Flow/ Average Monthly Flow	20	Up to 20
Maximum Average 24 hr Flow	25	23 to 30
Peak Hourly Flow	39	34 to 42

The WWTP Wet Weather SOP, including proposed protocols for accepting peak flows, remains under development. The plans will reflect SSA's experience, which has strongly indicated the need for flexibility in implementing the peak flow goals. These goals must be viewed in the context of tradeoffs between overall plant maintenance parameters and total amounts of wastewater required to be bypassed. When the flows entering the treatment plant exceed 25 mgd, the headworks are negatively impacted by heavy loadings of grit. SSA continues to address influent flow measurement and is working with its consultants, as well as its state and federal regulators, to address this issue.

The plant headworks has been a continuing limitation on our ability to process peak wet weather flows. After years of grit-related problems, we upgraded the grit removal systems using a Eutek/Hydro International system of grit snails. This new grit system has been unsuccessful in handling the grit which we are experiencing. This has led to major operational problems and the need to use Outfall 003 while the grit systems have been chronically down for cleaning. As a result, SSA is currently in litigation with Eutek/Hydro International, as well as the design engineering firm. In the meantime, SSA is evaluating other grit removal options in conjunction

with the LTCP effort. Notwithstanding the ongoing litigation, in 2011, SSA cleaned the main interceptor and the branch interceptors.

We have worked daily to try to find a solution to the inability of the new grit system to handle incoming grit. Based upon performance testing, it was established that the grit snails could not handle the specified capacity of grit. SSA is in settlement negotiations with the grit snail manufacturer over this performance deficiency. In the interim, SSA has implemented a grit box system that is working well and will continue to be used in the indefinite future. PADEP has been notified of this situation.

In some instances, such as successive peak flow events, the operator has an obligation to exercise engineering judgment to reduce wet weather flows in order to protect the mechanical integrity of the system and to prevent the need for even more extensive bypasses. Such engineering judgment cannot be replaced by an inflexible peak flow requirement of 39 mgd. Thus, it may be necessary from time to time to discharge to outfall 003 during peak flows of less than 39 mgd, in order to protect the biological or mechanical integrity or general operating capability of the plant. Such decision must rest in the sole discretion of the plant operator and will be meticulously documented. In the event of such discharges, the reporting requirements of the NPDES permit will be followed, and where an SSA operator exercises professional judgment in managing flows inconsistent with flow thresholds in the NPDES permit, SSA will provide appropriate notifications to PaDEP per applicable permit requirements.

The SSA will implement the following operating and monitoring protocols:

- Operating mechanisms will be set to convey a peak flow of 39 mgd to the treatment plant for one hour and 25 mgd thereafter;
- Outfall 003 may discharge if the combined sewage flows to the WWTP exceed 39 mgd for more than one hour in a twenty-four hour period and the SSA is in compliance with the EPA Notice of Compliance Order and all permit conditions. The discharge from Outfall 003 may continue for as long as the combined sewage flows to the WWTP equal or exceed 25 mgd.
- If flow is discharged from Outfall 003 when combined flows have not exceeded 39 mgd for more than one hour in a twenty-four hour period, or have not sustained 25 mgd thereafter, SSA will notify DEP and EPA within 24 hours of the discharge.
- SSA will collect data from Outfall 003 using the flow chart meter.
- SSA will collect data on the flow through the WWTP measured in Mgal on an hourly basis.
- SSA will submit monitoring information on a monthly basis to DEP for each instance in which there is a discharge through Outfall 003.

The grit system has been a major source of frustration for SSA. Despite the daily challenges to keep this system operating, SSA has redoubled its efforts and dedicates plant personnel to directly monitor the system during wet weather events. SSA is evaluating options for a long-term solution as part of the LTCP.

5.0 Elimination of CSOs During Dry Weather – NMC No. 5

5.1 Introduction

The fifth minimum control is to minimize CSOs during dry weather periods when the sewer system is not conveying significant quantities of storm water. The collection, conveyance and treatment facilities must have sufficient capacity to be able to handle peak dry weather flow. In addition, the facilities are operated and maintained to minimize the potential for overflows during dry weather (i.e. blockages, pump malfunctions, etc.).

5.2 Measures Necessary

SSA will inspect all CSOs at least on a monthly basis. See Section 1.7, above. These inspections coupled with SSA's extensive metering program allow the detection – usually at an early stage – of any dry weather overflows.

SSA will document all overflow inspections conducted and maintenance performed. SSA will document all overflows on the CSO Discharge Monitoring Reports and submit the reports to the Pennsylvania Department of Environmental Protection.

Dry weather overflows are identified by SSA's practice of chalking or placing a block of wood in the overflow pipe at the pumping stations and CSO Regulators. Generally, historic dry weather overflows have been due to blockages. Any lines that experience chronic blockages will be televised, cleaned and repaired or replaced as necessary to attempt to eliminate the occurrence of future blockages in these lines. Evaluation of other potential modifications to eliminate DWOs will be performed on a case-by-case basis as potential future chronic locations are identified.

Comprehensive CSO regulator and tide gate inspections were performed during September/October 2004, October/November 2009 and re-inspections are ongoing as part of SSA's daily inspection program and CSO LTCP effort.

The permanent signage located at each CSO was revised to the following language, "NOTICE Scranton Sewer Authority Combined Sewer Outfall Untreated Sewage CSO # _____. This site is at or downstream of a Combined Sewer Overflow. Avoid water-related activities during discharges or heavy rains. To report a discharge call 570-348-5337." The signage will enable the general public to report malfunctions.

CSO signs will be maintained and replaced promptly in the event a sign is missing or damaged.

6.0 Control of Solids and Floatable Material – NMC No. 6

6.1 Introduction

The sixth minimum control is intended to reduce visible floatables and solids from CSO discharges and receiving waters. Controls such as baffles, screens or racks can be included in the combined system to remove solids and floatables before reaching the receiving water. Floatables can be removed from larger receiving water with the use of booms and skimmer vessels. In addition, pollution prevention measures can be utilized to reduce the amount of extraneous floatables and solids entering the combined system.

6.2 Study

SSA performed a study of available controls for solids and floatables and determined that baffles in certain outfalls, coupled with pipe hoods in system catch basins would be the most effective approach for SSA to control solids and floatables. Baffles in CSOs continue to be evaluated and implemented.

6.3 Combined Sewage Control Methods

6.3.1 Collection System Control

The catch basin design will be evaluated to ensure adequate storm water control while attempting to reduce the amount of storm water and debris entering the combined system. Catch basins can be modified to prevent floatables from entering the combined system. Inlet grates can be installed at the top of the catch basins to reduce the street debris that can enter. Trash buckets can be installed in the basin below the grate to retain floatables while letting the stormwater pass to the combined system. Hoods are vertical cast iron baffles that are installed in basins. Hoods are effective for retaining debris within catch basins. A basin can be modified with a vortex valve, which is a throttling device to reduce the frequency and volume of a CSO event and control floatables.

Due to the fact that there are thousands of catch basins in the contributing municipalities, the plan of action to modify the basins will be limited to hoods. It would be cost prohibitive to the contributing municipalities to enact a more elaborate retrofit program. On November 25, 2003, the SSA adopted an updated policy for storm water discharges into the combined sewer system, which included requirements for effective inlet and catch basin design. This policy sets limits on peak storm water flow into the combined system by requiring storm water management at new developments, as well as requiring developers to look for storm water separation if existing storm conveyance systems or streams are nearby. The policy will be provided to the City of Scranton, Borough of Dunmore and adjoining municipalities for incorporation into their storm water management policies and for enforcement. This activity is dependent upon the cooperative adoption of design standards by the municipalities.

The effectiveness of a catch basin in controlling floatables is dependent on regular maintenance and cleaning. All inlets and catch basins in the system will be cleaned on a maximum six-year cycle. In priority areas, cleaning will be scheduled generally twice annually. Additional cleaning will occur when problems are reported. SSA will document cleaning and input information onto a map and into a database. Through marking/updating inlet and catch basin locations, the map data will be retained for later incorporation into electronic mapping of the sewer system. As defects are observed, they will be reported to the City, Borough or State for corrective action.

SSA has an extensive catch basin hood program. The hoods (bent pipe elbows) are reported to be quite effective at catching solids and floatables. Based upon the experience of SSA's collection system crews in direct response to queries from SSA's Deputy Director for Compliance, SSA believes that 75-80% of all SSA catch basins have some form of hood in place. SSA is currently installing PVC hoods in all remaining catch basins as it performs maintenance on catch basins.

6.3.2 CSO Control

Screens and trash racks are a series of vertical and horizontal bars or wires designed to remove coarse and floating debris from CSOs. The efficiency of this control is based on the design size and typically ranges from 25-90 percent of the total solids. Fine screens are more effective at removing smaller particles but they are also more susceptible to clogging and require additional maintenance. The effectiveness of screening units is reduced significantly by the presence of oil and grease. In order for trash racks or screens to be utilized, the outfall pipe must be an adequate length or land space available for a small structure and outfall must be high enough above the receiving water to permit regular maintenance. Trash racks and screens require regular inspection and maintenance. Application of any of these devices is capital intensive and would be further considered in the floatable control study and the LTCP.

Baffles are floatable control devices that can be installed in a discharge chamber in front of the overflow weir. Baffles are simpler than many of the other control methods and they have lower operating and maintenance costs. The design of the diversion chamber flow regulator and overflow weir determines the effectiveness of the baffles. The discharge chamber and overflow weir must be designed to provide reasonably uniform flow at a low velocity to ensure that floatables are not entrained.

Baffles have been installed at five diversion chambers on a pilot basis. The basic design of the baffle is the same for all of the regulators in the pilot project, but each baffle was customized to fit to the specific regulator such that they are not interchangeable among regulators. The baffles will continue to be monitored during and after storm events. SSA is evaluating the installation of baffles at approximately 10 more sites for FY 2012 and will report on those installations during the next annual report. These sites will be drawn from sites identified by EPA and will include outfalls where SSA staff can perform the installation (which means it will definitely occur in FY 2012) along with other installations that will require an engineering analysis and outside resources to implement (which means a longer schedule may be necessary than FY 2012).

Regulator and diversion chambers will be inspected monthly and cleaned as required. The inspection and cleaning will be documented in a form similar to the one located in the Collection System O&M Manual.

6.3.3 End-of-Pipe Controls

End-of-Pipe Controls are not currently in place in the SSA system. We have not found these controls to be effective for the SSA system.

6.4 Receiving Water Removal Methods

Receiving water removal methods are not currently utilized in the SSA receiving waters.

6.5 Source Control Methods

Street sweeping can be effective method to control the amount of street debris entering the combined system. SSA has obtained documentation from the City and Borough regarding the schedules for street sweeping. SSA has purchased its own street sweeper to facilitate effective street sweeping.

SSA will enforce the industrial pretreatment program to reduce the amount of extraneous material entering the combined system.

SSA has developed a website to inform the public about the combined sewer system. The website will include educational information addressing street litter. SSA will endeavor to support the City and Borough relative to disseminating educational messages that will advise residents of the importance of proper trash disposal related to the sewer system.

Labeling of specific catch basins is being implemented to identify that the combined sewer system interconnects directly to the receiving streams and that no dumping is allowed. Note that labeling within our GIS has been implemented and documented, but the physical labeling of each basin is still ongoing and is subject to availability of resources.

SSA has also approved a proposal from the Lackawanna River Corridor Association (LRCA) to develop a Public Education and Outreach Program. Among the tasks of the proposed program, SSA is working with LRCA to develop educational materials, identify target audiences and stakeholders, and utilize communication channels to reach and involve target audiences. SSA will conduct educational events for schools and community groups, develop volunteer opportunities for public involvement, and conduct public education meetings. A Household Hazardous Waste program will also be evaluated under the LRCA proposal.

Pollution Prevention Programs – NMC No. 7

7.1 Introduction

The seventh minimum control is the implementation of pollution prevention programs to reduce contaminants in CSOs. The objective of this control is to reduce to the greatest extent possible, the amount of contaminants that enter the combined sewer system.

7.2 Measures Necessary

SSA will provide information regarding pollution prevention on the website. In addition, pollution prevention information is included in sewer bill mailings.

SSA is evaluating continuation of a marking program to further raise public awareness of the connection between urban impervious area runoff and local water quality.

SSA has developed a website that will be used to provide educational information regarding recycling, proper disposal of waste, proper fertilizer and lawn care products application, and spent oil drop-off programs. The stakeholders involved with the LTCP development will be involved in determining the educational material to be placed on the website and any additional programs to inform residents.

SSA contacted the Lackawanna County Solid Waste Management Authority and determined that there is no collection of household hazardous waste in the area.

SSA is utilizing a clam truck for cleaning. All inlets and catch basins in the system will be cleaned within six years. Additional cleaning will occur when problems are reported.

Street sweeping can be effective method to control the amount of street debris entering the combined system. In concert with NMC No. 6, SSA will obtain documentation from the City and Borough when streets were swept. SSA has purchased its own street sweeper to facilitate street sweeping.

A Household Hazardous Waste program will also be evaluated under the LRCA Public Education and Outreach Program. SSA would like to have such a program, but it must be prioritized in light of all other regulatory commitments.

8.0 Public Notification – NMC No. 8

8.1 Introduction

The eighth minimum control is public notification to inform the public of the location of CSO outfalls, the actual occurrences of CSOs, and the potential health and environmental effects of CSOs.

8.2 Communications Strategy

SSA currently provides educational materials in sewer bill mailings. SSA will continue to provide educational material to residents.

The permanent signage located at each CSO was revised to the following language, "NOTICE Scranton Sewer Authority Combined Sewer Outfall Untreated Sewage CSO # ____. This site is at or downstream of a Combined Sewer Overflow. Avoid water-related activities during discharges or heavy rains. To report a discharge call 570-348-5337." The signage will enable the general public to report malfunctions.

SSA has developed a website to inform residents about the about the sewer system and proper operation of the system. Also, the site includes appropriate precautions, risks, potential health hazards, locations of the CSO discharges and incidents of DWOs.

SSA is also working with the Lackawanna River Corridor Association (LRCA) to develop and implement a Public Education and Outreach Program. Among the tasks of the proposed program, SSA will coordinate with LRCA to develop educational materials, identify target audiences and stakeholders, and utilize communication channels to reach and involve target audiences. SSA will conduct educational events for schools and community groups, develop volunteer opportunities for public involvement, and conduct public education meetings. A Household Hazardous Waste program will also be evaluated under the LRCA proposal.

SSA has also implemented additional controls at selected outfalls to prevent public access to CSO facilities (such as large diameter outfalls) and to ensure public safety. Recent fencing at Outfall 023 is a good example of these activities.

9.0 Monitoring to Characterize CSO Impacts – NMC No. 9

9.1 Introduction

The ninth minimum control is monitoring through visual inspections and other simple methods to determine the occurrence and apparent impacts of CSOs.

9.2 Characterization Measures

9.2.1 Mapping

The SSA has a comprehensive set of sewer system index drawings. Additionally, the details of most sewers are contained in original "spur books" obtained from the City Engineer's office for sewers constructed generally prior to 1960, "ward book" sewer mapping for expanded information on all sewers, and engineer's design or record drawings for construction since 1970. GIS mapping was performed as part of the Lackawanna Watershed 2000 program and has been updated by SSA during 2010 and 2011. The SSA has purchased a GPS grade survey unit to continually update this GIS system, as was done through 2010 into 2011.

9.2.2 Water Quality and Uses

SSA has compiled existing water quality data for the following receiving waters: Lackawanna River, Leggetts Creek, Roaring Brook, Stafford Meadow Brook and Keyser Creek.

As discussed below, using Hawk Mountain Labs, SSA has obtained ambient water quality data at key locations in our CSO receiving waters during the past several years.

The designated uses of some of the local waters in the Scranton area that receive CSO discharges include (as well as the universal designated uses of: Public Water Supply, Boating, Fishing, Water Contact Sports and Esthetics):

- Lackawanna River Warm Water Fishes
- Meadow Brook Cold Water Fishes
- Leggetts Creek Trout Stocking
- Roaring Brook Cold Water Fishes
- Keyser Creek Cold Water Fishes

However, actual uses of these water bodies may be different, which will be inventoried as part of the LTCP.

SSA has developed a comprehensive 3-year water quality monitoring program built upon previously performed water quality studies conducted by SSA as presented in the December 2006 Draft LTCP Report. The Water Quality Monitoring Program began in 2009 and is intended to establish baseline conditions and includes both dry weather and wet weather characterization:

- Dry weather river and stream characterization is intended to provide a baseline water quality description of the existing conditions of the SSA receiving waters to characterize water quality without inputs from CSO or stormwater discharges from the SSA service area. Dry weather monitoring occurs at 14 locations along the Lackawanna River and its six (6) tributaries (Leggetts Creek, Meadow Brook, Roaring Brook, Little Roaring Brook, Stafford Meadow Brook, and Keyser Creek), as well as the SSA WWTP Effluent Outfall No. 001.

- Wet weather river and stream characterization is intended to provide information, that when analyzed in conjunction with the other characterizations, will define the CSO contribution to, and stormwater impact on, water quality of the SSA receiving waters. Wet weather monitoring is conducted at the 14 dry weather monitoring locations, as well as five (5) CSOs (CSO Outfall Nos. 003, 004, 016, 023, and 029), and two (2) stormwater outfalls. Wet weather samples are taken on an hourly basis to depict changes in water quality during and following a wet weather event.

Laboratory analysis of the river and stream samples includes biochemical oxygen demand (BOD), total suspended solids (TSS), total dissolved solids (TDS), oil and grease,

dissolved oxygen (DO), pH, temperature, microbiological parameters (fecal coliform and E. coli), metals (total chromium, total copper, total lead, total mercury, total nickel, and total zinc), and nutrients (ammonia nitrogen, total nitrogen, and total phosphorus). The initial 3 year program includes approximately 20 dry weather sampling events and 2 wet weather sampling events. A benthic macro-invertebrate characterization was also conducted in 2011 to supplement the water quality data in assessing the effects of CSO discharges on receiving water quality in the SSA service area, and to serve as a benchmark for measuring improvements through long-term monitoring. The biota characterization analysis includes EPT Index (%), Hilsenhoff Biotic Index (HBI), Taxa Evenness, and Taxa Richness determinations. The results of this study will be used to assess and quantify the general aquatic health of the ecosystems and compared with previous and future studies to identify trends in the biotic community.

The planning incorporated into the initial 3-year Water Quality Monitoring Program has established the groundwork for on-going water quality monitoring throughout the SSA service area. At the completion of the initial monitoring program in summer 2012, a comprehensive report will be developed detailing the findings of the program and outlining recommendations for future water quality monitoring activities. This information will be included in the LTCP.

9.2.3 System Monitoring

SSA employs flow meters and its updated and calibrated hydraulic model to monitor CSO activations and volumes. SSA has rotated the meters and believes the model is adequately calibrated. SSA will continue to evaluate appropriate locations for in-system meters

SSA visually inspects CSO discharges and documents apparent impacts. This activity will continue in the future. Observations of debris discharged from the CSOs is recorded on inspection forms and inputted into the Authority's electronic database. Also in 2010 the SSA has put their CSO and flowmeter teams on a wireless system allowing direct communication with the Authority's JOBPLUS database. This approach allows more a more efficient and productive CSO inspection program.

SSA is evaluating several outfalls for the potential installation of baffles in an effort to minimize post-activation accumulation of debris.

SSA characterizes the frequency, duration and volume of CSO discharges on a monthly basis in the DMRs. Meters and wooden blocks are used to determine whether regulators have been active. Inspections document the dates the regulators were checked and presence/absence of previous overflows. This information is provided with the monthly DMR.

SSA will monitor flow with permanent and portable flow metering equipment at 15 CSO regulators. SSA installed flow-monitoring devices at the pumping stations as part of the improvements under Phase III of the Capital Improvements Program. Continuous flow monitoring at these select sites will provide information and documented data on frequency, duration and volumes of wet weather overflows. Rain gauges have been installed throughout the sewer system.

Dry weather overflows will be recorded when observed or when determined from public calls to the SSA office. SSA will document and track public complaints after receiving them.

9.2.4 Impact Data and Trends

SSA will compile trends on an annual basis of:

- frequency of measured overflow volumes where monitored
- rainfall data
- observations of debris discharged
- incidents of DWOs
- reports of water quality problems attributed to CSO discharges
- public complaints
- weir adjustments – dates, previous elevation, new adjusted elevation

These data are being evaluated as part of the development of the LTCP.

APPENDIX B

SCRANTON SEWER AUTHORITY
CSO LONG TERM CONTROL PLAN
CSO CONTROL IMPROVEMENT SCHEDULE

1	2	3	4	5	11	12	13	24	25
PHASE	YEAR	OUTFALL #	LOCATION	DISTANCE FROM OFBH (RIVER MILES)	CSO CONTROL TYPE	RECEIVING STREAM	STORAGE VOLUME, ESTIMATED (MG)	TOTAL CAPITAL COST, ESTIMATE	EXISTING OVERFLOW VOLUME (mg)	SCORING Total Score	Ranking
A	1	#066	Burke Street	10.045	Offline Box Culvert	Roaring Brook-Natural	0.134	$1,740,000	1.841	16	2
A	1	#080	Keyser Valley PS	7.192	Inline Box Culvert	Keyser Creek	0.025	$790,000	0.801	16	3
A	1	#067	Keyser Creek	7.102	Combined With Other	Keyser Creek	N/A	$1,100,000	0.325	0	
A	2	#087	Leggetts-Kelly	12.881	Inline Box Culvert	Leggetts Creek	0.047	$880,000	0.684	17	1
A	2	#072	Leggetts Street	12.805	Offline Box Culvert	Leggetts Creek	0.300	$2,340,000	4.711	15	5
A	2	#065	Drinker Street	11.705	Inline Box Culvert	Little Roaring Brook	0.023	$780,000	0.171	14	8
A	3	#035	Sanderson Avenue	10.788	Sewer Separation	Lackawanna River-Upper	N/A	$190,000	1.475	15.5	4
A	3	#037	Brown Avenue	10.599	Offline Box Culvert	Lackawanna River-Upper	0.017	$1,120,000	0.879	14.5	7
A	3	#011	Von Storch Avenue	9.160	Offline Box Culvert	Lackawanna River-Upper	0.372	$2,760,000	8.283	13.5	9
A	3	#017	Vine Street	8.201	Offline Box Culvert	Lackawanna River-Lower	0.042	$1,490,000	1.282	13.5	10
A	4	#020	E Lackawanna Avenue	7.802	Offline Box Culvert	Lackawanna River-Lower	0.302	$2,870,000	8.812	13.5	11
A	4	#052	Wyoming Avenue	6.394	Inline Box Culvert	Lackawanna River-Lower	0.023	$790,000	0.477	13.5	12
A	4	#081	Pittston - Brook	6.710	Inline Box Culvert	Stafford Meadow Brook	0.081	$1,020,000	0.934	15	6
A	4	#084	639 E Elm St	6.974	Offline Box Culvert	Stafford Meadow Brook	0.288	$2,370,000	0.693	13	13
A	4	#083	Irving-Elm	7.166	Replace Regulator	Stafford Meadow Brook	N/A	$90,000	0.684	0	
A	4	#085	644 E Elm St	6.971	Replace Regulator	Stafford Meadow Brook	N/A	$80,000	1.393	0	
B	5	#079	Myrtle Street PS	9.516	Offline Box Culvert	Roaring Brook-Natural	0.182	$1,860,000	2.663	13	14
B	5	#033	W Parker Street	11.424	Inline Box Culvert	Lackawanna River-Upper	0.013	$740,000	0.324	12.5	15
B	5	#038	Wurtz Avenue	10.486	Offline Box Culvert	Lackawanna River-Upper	0.117	$1,590,000	4.012	12.5	16
B	5	#078	Shawnee Avenue PS	11.046	Inline Box Culvert	Lackawanna River-Upper	0.009	$720,000	0.46	12.5	17
B	5	#040	W Market Street	10.087	Inline Box Culvert	Lackawanna River-Upper	0.017	$870,000	0.81	11.5	19
B	5	#012	Grove Street	9.102	Offline Box Culvert	Lackawanna River-Upper	0.087	$1,640,000	2.234	11.5	20
B	6	#018	Love Road	8.087	Offline Box Culvert	Lackawanna River-Lower	0.160	$1,850,000	4.536	11.5	21
B	6	#019	Linden Street	7.986	Offline Box Culvert	Lackawanna River-Lower	0.897	$5,430,000	19.26	11.5	22
B	7	#021	W Scranton Street	7.621	Offline Box Culvert	Lackawanna River-Lower	0.750	$4,960,000	1.757	11.5	23
B	7	#022	Washburn Street	7.468	Combined With Other	Lackawanna River-Lower	N/A	$120,000	18.944	0	
B	8	#030	Prescott Avenue	8.095	Offline Box Culvert	Roaring Brook-Natural	1.357	$6,700,000	23.747	12	18
B	8	#024	Hickory Street	7.021	Offline Box Culvert	Lackawanna River-Lower	0.245	$2,430,000	4.157	11.5	24
B	9	#025	Willow Street	7.031	Offline Box Culvert	Roaring Brook-Channel	0.360	$2,740,000	6.049	11.5	25
B	9	#049	River Street	7.285	Inline Box Culvert	Roaring Brook-Channel	0.014	$770,000	0.291	11.5	28
B	9	#073	Front Street	7.835	Replace Regulator	Roaring Brook-Channel	N/A	$80,000	0.128	0	
C	10	#027	Washington-Locust	6.394	Offline Box Culvert	Lackawanna River-Lower	0.211	$2,090,000	5.294	11.5	26
C	10	#047	Broadway Street	7.063	Inline Box Culvert	Lackawanna River-Lower	0.013	$830,000	0.345	11.5	27
C	10	#068	S Sixth Avenue	6.156	Offline Box Culvert	Lackawanna River-Lower	0.020	$1,140,000	1.523	11.5	29
C	10	#053	Cedar Avenue	6.580	Replace Regulator	Stafford Meadow Brook	N/A	$80,000	0.145	0	
C	10	#082	Locust - Cedar	6.606	Inline Box Culvert	Stafford Meadow Brook	0.045	$1,120,000	0.564	11	30
C	11	#086	414 Maple St	6.610	Replace Regulator	Stafford Meadow Brook	N/A	$80,000	0.278	0	
C	11	#004	Wells Street	11.590	Offline Box Culvert	Lackawanna River-Upper	0.482	$3,690,000	7.467	10.5	31
C	11	#031	Leggetts Creek	11.690	Combined With Other	Lackawanna River-Upper	N/A	$120,000	1.112	0	
C	12	#006	Gardner Avenue	9.479	Offline Box Culvert	Lackawanna River-Upper	0.296	$2,390,000	3.905	10.5	32
C	13	#013	Poplar Street 24-inch	8.969	Offline Box Culvert	Lackawanna River-Upper	1.559	$7,520,000	3.49	10.5	33
C	13	#014	Poplar Street 90-inch	8.967	Combined With Other	Lackawanna River-Upper	N/A	$120,000	23.985	0	
C	14	#015	Gordon Avenue (Pinebrook)	8.279	Precast, Post-Tensioned Tank	Lackawanna River-Lower	1.360	$10,967,000	36.524	10.5	34
D	15	#023	Luzerne Street	6.775	Offline Box Culvert	Lackawanna River-Lower	0.466	$3,620,000	19.385	10.5	35
D	16	#029	Genet Street	5.978	Offline Box Culvert	Lackawanna River-Lower	0.867	$5,030,000	19.074	10.5	39
D	17	#003A	WWTP Overflow	5.374	Precast, Post-Tensioned Tank	Lackawanna River-Lower	2.850	$17,753,000	93.295	10.5	40
E	19	#045	Emmett Street	7.131	Inline Box Culvert	Lackawanna River-Lower	0.008	$1,130,000	0.33	10.5	36
E	19	#048	Washington-Alder	6.940	Inline Box Culvert	Lackawanna River-Lower	0.014	$740,000	0.374	10.5	37
E	20	#051	Birch Street	6.915	Inline Box Culvert	Lackawanna River-Lower	0.017	$860,000	0.34	10.5	38
E	20	#005	Love Place	9.935	Offline Box Culvert	Lackawanna River-Upper	0.086	$1,850,000	2.483	9.5	41
E	21	#043	Olive Street	8.319	Offline Box Culvert	Lackawanna River-Upper	0.059	$1,390,000	1.315	9.5	42
E	21	#028	Fig Street	6.191	Offline Box Culvert	Lackawanna River-Lower	0.075	$1,800,000	2.611	9.5	43
E	22	#016	Pettibone Street	8.138	Offline Box Culvert	Lackawanna River-Lower	0.921	$4,700,000	17.86	9.5	44
E	23	#007	Philo Street	9.441	Offline Box Culvert	Lackawanna River-Upper	0.685	$3,770,000	4.341	8.5	45
E	23	#008	Hawk Street	9.379	Combined With Other	Lackawanna River-Upper	N/A	$120,000	14.291	0	
E	23	#026	W Elm Street	6.549	Offline Box Culvert	Lackawanna River-Lower	0.263	$2,740,000	1.826	8.5	46
E	24	#055	Drinker Place	10.804	Offline Box Culvert	Lackawanna River-Upper	0.761	$7,670,000	5.989	7.5	47
E	24	#056	Boulevard Avenue	10.801	Combined With Other	Lackawanna River-Upper	N/A	$120,000	2.562	0	
E	24	#057	Richmont Street	10.807	Combined With Other	Lackawanna River-Upper	N/A	$120,000	0.019	0	
E	24	#058	Grandview Street	10.850	Combined With Other	Lackawanna River-Upper	N/A	$120,000	0.129	0	
E	24	#059	Woodlawn Street	10.924	Combined With Other	Lackawanna River-Upper	N/A	$120,000	1.287	0	
E	24	#060	Park Avenue	10.999	Combined With Other	Lackawanna River-Upper	N/A	$120,000	0.496	0	
E	24	#061	Morel Street	0.000	None	Lackawanna River-Upper	N/A	$0	0	0	
E	24	#062	Fisk Street	0.000	Combined With Other	Lackawanna River-Upper	N/A	$120,000	0.268	0	
E	24	#063	Olyphant South 24-inch	11.153	Combined With Other	Lackawanna River-Upper	N/A	$120,000	1.936	0	
E	24	#064	Olyphant North 12-inch	11.148	None	Lackawanna River-Upper	N/A	$0	0	0	
E	25	#075	Capouse Avenue	9.730	Offline Box Culvert	Meadow Brook-Channel	0.158	$2,030,000	2.7	6.5	48
E	25	#032	Watkins Street	11.634	Replace Regulator	Lackawanna River-Upper	N/A	$80,000	0.06	0	
E	25	#034	E Parker Street	11.288	Replace Regulator	Lackawanna River-Upper	N/A	$80,000	0.175	0	
E	25	#036	Tioga Street	10.658	Replace Regulator	Lackawanna River-Upper	N/A	$80,000	0.535	0	
E	25	#069	Crane Street	4.346	Replace Regulator	Lackawanna River-Lower	N/A	$80,000	0.485	0	
E	25	#074	Marion Street	9.597	Replace Regulator	Meadow Brook-Channel	N/A	$80,000	0.076	0	
E	25	#076	Sanderson-Marion	9.525	Replace Regulator	Meadow Brook-Channel	N/A	$100,000	0.093	0	
						Total	17.078	$139,600,000	401.784		

*Note: the Scoring and Ranking columns and the color coding indicate how the projects were evaluated and grouped by the SSA in developing the LTCP.

IMPLEMENTATION OF APPENDIX B PROJECTS

The projects in Appendix B shall be implemented in accordance with the following schedule:

All of the projects in Phase A shall be complete by December 1, 2016.

All of the projects in Phase B shall be complete by December 1, 2021. Moreover, as interim milestones:

- at least 5 of the projects in this phase will be complete by December 1, 2017;
- at least 7 of the projects in this phase will be complete by December 1, 2018;
- at least 9 of the projects in this phase will be complete by December 1, 2019; and
- at least 12 of the projects in this phase will be complete by December 1, 2020.

All of the projects in Phase C shall be complete by December 1, 2026. Moreover, as interim milestones:

- at least 4 of the projects in this phase will be complete by December 1, 2022;
- at least 7 of the projects in this phase will be complete by December 1, 2023;
- at least 9 of the projects in this phase will be complete by December 1, 2024; and
- at least 11 of the projects in this phase will be complete by December 1, 2025.

All of the projects in Phase D shall be complete by December 1, 2029. Moreover, as interim milestones:

- at least 1 of the projects in this phase will be complete by December 1, 2027; and
- at least 2 of the projects in this phase will be complete by December 1, 2028.

All of the projects in Phase E shall be complete by December 1, 2037. Moreover, as an interim milestone, at least 13 of the projects in this phase will be complete by December 1, 2033.

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

CITY OF SCRANTON

Docket Nos. R-2023-3043189 and R-2023-3043190

EXHIBIT 3

February 1, 2024

S&P Global
Ratings

RatingsDirect®

Summary:

Scranton, Pennsylvania; General Obligation

Primary Credit Analyst:
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Summary:

Scranton, Pennsylvania; General Obligation

Credit Profile		
Scranton gtd lse rev bnds ser 2016AA due 05/15/2036		
Long Term Rating	BBB-/Positive	Upgraded, Removed from CreditWatch
Scranton gtd lse rev bnds ser 2016 A due 12/01/2026		
Long Term Rating	BBB-/Positive	Upgraded, Removed from CreditWatch

Credit Highlights

- S&P Global Ratings raised its rating to 'BBB-' from 'BB+' on Scranton, Pa.'s general obligation (GO) debt and removed the rating from CreditWatch with negative implications, where it was placed on March 13, 2023, following our receipt and review of financial information, including 2021 audited financial statements.
- The outlook is positive.
- The upgrade to 'BBB-' reflects the city's continued improvement in its liquidity position and balanced financial operations, without reliance on federal stimulus.
- The positive outlook reflects our expectation that we could raise the rating in the next two years if the city's reserve and liquidity position continues to improve, decreasing the need for cash flow borrowing, while maintaining structural balance.

Security

The city's series 2016 and 2017 GO debt is secured by its full-faith-and-credit pledge. The city's series 2016A and AA (taxable) guaranteed lease revenue bonds, issued by the Redevelopment Authority of the City of Scranton, are secured by a pledge of payments from the city pursuant to the sublease and guaranty agreement between the authority and the city. The sublease constitutes a GO of the city and the full-faith-and-credit and taxing power is pledged for debt service. The city may levy ad valorem tax without limit to rate or amount on all taxable property within its borders.

Credit overview

The upgrade reflects the city's improved cash position and ability to maintain balanced operations without federal stimulus. The city allocated a small portion of the $68 million in American Rescue Plan Act (ARPA) funding toward revenue replacement in 2022, but due to stronger than budgeted revenue growth, the city did not use any ARPA funds for operations, and most of the funds will go toward one-time projects. Management estimates 2022 closed with a $4.1 million (3.8%) general fund surplus. The 2023 budget is break-even, and again includes a small amount of ARPA funding, but management expects it will not need to utilize the ARPA funds for revenue replacement as revenue continues to outpace budget.

Scranton exited the Commonwealth's Act 47 program in January 2022, after having adopted measures to address

legacy costs related to pensions, health care, wages, and debt service, putting it on a path toward fiscal stability. While the city's financial and debt profiles have improved significantly, we believe Scranton's lower wealth and income ratios, coupled with high fixed costs, will remain credit pressures. If, over the next two years, the city continues to demonstrate structural balance and improve its liquidity position, eliminating the need for cash flow borrowing, we would likely raise the rating. Over the longer term, further upward rating potential is possible if the city's pension and other postemployment benefits (OPEB) liability improves and it addresses its high fixed costs.

The rating further reflects our opinion of the city's:

- Very low wealth and income levels, which have made it difficult for the city to generate revenue and have spurred high delinquency rates during past recessions;
- Standard financial policies and practices and a strong institutional framework score, but overall weak management score due to the city's very high fixed costs;
- Structurally balanced financial performance and improving reserve and liquidity position; and
- Very weak debt and liability profile, with a large overall net debt burden relative to its tax base and very high fixed costs related to pensions and OPEB.
- The city has engaged a new auditor for its 2022 financial statements, and expects these statements to be released on a timelier basis, with a target of early fall 2023. Upward rating potential may be limited, if audited financial statements continue to be delayed.

Environmental, social, and governance

We view social capital risks as a negative consideration in our credit analysis because the city's weak sociodemographic profile has inhibited its ability to collect revenue and may cause greater demand for services in the future. We view the city's governance and environmental risks as neutral in our credit analysis, though we note that the city is addressing environmental risks and is working toward adopting a sustainability and climate action plan.

Outlook

The positive outlook reflects there is a one-in-three chance that we could raise the city's rating over the next two years.

Downside scenario

If the city's general fund operations become imbalanced or if our understanding of the city's financial position is limited because of material delays in providing audited information, we could revise the outlook to stable or take downward rating action.

Upside scenario

If the city can continue to improve its liquidity position, decrease its reliance on cash flow borrowing, maintain structural balance without reliance on one-time revenue, and provide timely audited financial information, we could raise the rating.

Credit Opinion

Very weak economic base has posed challenges to revenue generation but shows signs of improvement

Scranton, the county seat for Lackawanna County, has experienced very little assessed value (AV) growth over the last 20 years, due to both a stagnant economy and the absence of reevaluations of properties. Lackawanna County recently embarked on its first comprehensive reassessment since 1968, but the county does not expect new valuations to go into effect until Jan. 1, 2026. Pennsylvania requires revenue neutrality following a reassessment, so we do not expect the city's property tax revenue to change materially; however, it will likely need to plan for a higher level of appeals. The city has very weak wealth and income metrics, which has resulted in a high level of tax delinquencies in the past. Favorably, management reports that tax collections are improving, as Scranton has changed some of its collection methods and economic conditions improve. Current-year property tax collections are around 89%.

The county's primary industries include manufacturing, education, and health care. While manufacturing has been waning over the last 20 years, the local services sector has remained steady. The metro area has above-average concentrations of employment in hospitals, nursing homes, and social services organizations. The city has seen some momentum in new residents moving to the city in search of greater affordability. Officials report continued development in downtown, bolstered by state and local investments and small business loans. There is also some longer-term upside potential as Amtrak and the Pennsylvania Northeast Regional Railroad Authority explore potential rail service between Scranton and New York City. Despite recent developments, given the city's weak wealth and income levels, we expect our assessment of the local economy to remain very weak.

Standard policies and practices, but weak management assessment due to its very high debt, pension, and OPEB burden

We view the city's management as weak because of its sizable fixed costs (debt, pensions, and retiree health care), which represented 35.8% of total governmental expenditures in 2021. Should these costs come down as the city debt is retired and pension reforms improve annual required costs, our assessment could also improve.

Key financial policies and practices include:

- Monthly budget-to-actual reports presented to the city council and regular budget adjustments;
- A five-year, rolling capital projects list that identifies projects, costs, and funding sources;
- An investment policy that aligns with state statutes and Government Finance Officers Association (GFOA) best practices and requires monthly reports on investments, but the city has not begun its monthly reporting because it does not have investments beyond cash in checking accounts;
- A policy that sets a target unassigned general fund balance of 8% of the upcoming year's expenditures and a minimum of 3%, with a replenishment mechanism;
- A debt policy, adopted in September 2022, that includes affordability metrics such as limiting general fund-supported debt service to 10% of expenditures, targets no less than 60% of par amortized in 10 years, limits variable-rate debt to 15% of debt outstanding, and prohibits derivatives; and
- No long-term financial planning.

Surplus projected for 2022, break-even budget in 2023, and improving reserve and liquidity position

After adjustments for significant one-time expenditures and transfers related to the sale of the Scranton Sewer Authority and funding its pension plans, the city achieved general fund surpluses of 1% to 6% in the last three audited fiscal years (2019-2021) due to conservative budgeting and to cost reductions put in place as part of the city's Act 47 Exit Plan. Preliminary 2022 results indicate the year closed with a 3.8% surplus. The original 2022 budget included $4 million of ARPA funds to be used for revenue replacement; however, due to stronger than budgeted tax revenue, the city did not use any ARPA funds toward general operating expenses, which we view as a credit positive. Still, these stimulus funds may offset some capital spending that might have come out of the general fund or would have been deferred.

The 2023 general fund budget is break-even, inclusive of $2.3 million of ARPA for revenue replacement; however, management expects it will not need to use any ARPA funds for operations as revenues are trending better than budget. The 2023 budget assumes a 5% increase in total general fund revenue over the 2022 budget, mostly due to increases in earned income tax revenue and intergovernmental reimbursements related to grants. We view the city's revenue assumptions as reasonable, and the city's year-to-date estimates show the city meeting their estimates in their largest revenue streams, which include Act 511 taxes (37.5% of budgeted revenue), real estate taxes (33%), and landfill fees (7%). Budgeted 2023 expenditures also increased by 5% over the 2022 budget, with the largest increase in public works administration. The city recently settled its firefighters' union contract through 2026, with annual increases that we believe the city can absorb into its budget. Its clerical and public works unions are under active contract, but the city's police contract is in the arbitration process. We will be watching how the city is able to contain costs, given the pressures of inflation and a tight labor market. Additionally, we believe that the city's capacity to cut spending is somewhat limited due to its high fixed costs.

With a $4 million surplus in 2022, the city expects its total general fund balance to increase to $26.2 million (24% of estimated expenditures). However, the city still has a high level of general fund receivables, which, in our opinion, overstates reserves. In 2021, the general fund reported receivables of $16.7 million for real estate taxes and $7 million for garbage fees. These receivables are offset by $13.3 million of unavailable revenue; however, $10.4 million of receivables have no offset on the balance sheet. We adjusted our 2021 available general fund reserves by this amount, as we believe this more accurately reflects the city's available reserve position.

Scranton typically issues tax revenue anticipation notes (TRANs) each year for cash flow purposes. It issued $4.9 million in January 2023, which was $5.1 million less than in 2022, reflecting continued improvement in the city's cash position. The city pays down its TRANs monthly, and is projected to pay down the 2023 notes by June or July this year, well before the final maturity date of Dec. 31, 2023. Due to the city's improved financial performance, we now view its liquidity position as very strong.

Very weak but improving debt and contingent liability profile

Although Scranton's debt and contingent liability profile remains very weak, it continues to improve from previous years, due largely to management reducing debt and refinancing variable-rate debt into fixed-rate. Still, the city's overall liability remains very high relative to its tax base, at 20.3% of market value. Amortization of its approximately $76.4 million of net direct debt is rapid, with 100% of par scheduled to be retired in the next 10 years. Due to above-average amortization and limited additional debt plans, we expect annual debt costs will likely continue to

decrease and contribute to an improving debt profile.

Scranton's series 2021 GO bonds were privately placed with M&T Bank, but we do not view this as a contingent liquidity risk. The city no longer has any variable-rate debt outstanding.

Pension and other postemployment benefits:

As part of its Act 47 Exit Plan, the city implemented corrective measures to reduce its unfunded pension liabilities, including freezing pension cost of living adjustments (COLAs) and increasing employee contributions, resulting in improved funded ratios and lower actuarially determined contributions; however, the unfunded liabilities remain large, and contributions still make up a significant portion of the budget.

OPEB liabilities are very high and are funded on a pay-as-you-go basis, which, given claims volatility as well as medical cost and demographic trends, is likely to lead to escalating costs.

Scranton participated in the following plans as of Dec. 31, 2021:

- Scranton Fireman Pension Plan: 61.6% funded, with a net pension liability (NPL) of $34.6 million;
- Scranton Police Pension Plan: 83.4% funded, with an NPL of $14.4 million;
- Scranton Non-Uniformed Pension Plan: 84.4% funded, with an NPL of $1.7 million;
- Scranton Fireman OPEB Plan: 0% funded, with a net OPEB liability of $72.9 million;
- Scranton Police OPEB Plan: 0% funded, with a net OPEB liability of $90.6 million; and
- Scranton Non-Uniformed OPEB Plan: 0% funded, with a net OPEB liability of $31.9 million.

Funded ratios of each of the city's pension plans improved in 2021 as the plans built off prior-year reforms and contributions were well above both our static and minimum funding progress thresholds. The plans updated their mortality tables with this most recent actuarial valuation, which we view as favorable. However, we still view some of the plans' assumptions to be optimistic, such as 4.5% salary growth. We also view the plans' 7.25% assumed rate of return as aggressive relative to S&P Global Ratings' guideline of 6.0%, which could lead to contribution volatility. Additionally, a lawsuit was filed against the city and police pension fund in 2021 to retroactively reinstate the COLAs because of the improved funded levels. The matter is pending, but could weaken plan funding if the court rules in favor of the plaintiffs.

Under the terms of collective bargaining agreements with its police and firefighters and clerical and public works employees, the city is required to provide health insurance to retiring employees who meet the criteria specified in each contract. Scranton funds this OPEB obligation on a pay-as-you-go basis, but did recently deposit $2 million into a newly created OPEB trust fund. The city does not have a set amount it will add to the trust at this time, but plans to make contributions the budget allows. Given the size of these liabilities ($195.4 million across the three OPEB plans) relative to the trust, we believe future costs will likely be a budgetary stress for the city.

Scranton--Key credit metrics

	Most recent	Historical information		
		2021	2020	2019
Very weak economy				
Projected per capita EBI % of U.S.	63			
Market value per capita ($)	34,327			
Population		71,999	72,584	72,686
County unemployment rate (%)	4.7			
Market value ($000)	2,471,521	2,471,521	2,481,348	2,365,108
Ten largest taxpayers % of taxable value	7.0			
Adequate budgetary performance				
Operating fund result % of expenditures		5.8	3.4	1.5
Total governmental fund result % of expenditures		8.0	(2.4)	1.7
Adequate budgetary flexibility				
Available reserves % of operating expenditures		11.8	6.9	1.8
Total available reserves ($000)		11,110	6,101	1,561
Very strong liquidity				
Total government cash % of governmental fund expenditures		19	15	10
Total government cash % of governmental fund debt service		149	81	74
Weak management				
Financial Management Assessment	Standard			
Very weak debt & long-term liabilities				
Debt service % of governmental fund expenditures		12.6	18.1	12.9
Net direct debt % of governmental fund revenue	68			
Overall net debt % of market value	20.3			
Direct debt 10-year amortization (%)	100			
Required pension contribution % of governmental fund expenditures		12.8		
OPEB actual contribution % of governmental fund expenditures		10.3		
Very strong institutional framework				

EBI--Effective buying income. OPEB--Other postemployment benefits.
Data points and ratios may reflect analytical adjustments.

Related Research

- Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

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BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

CITY OF SCRANTON

Docket Nos. R-2023-3043189 and R-2023-3043190

DIRECT TESTIMONY

OF

TERI OOMS, President & CEO

OF THE INSTITUTE [FOR PUBLIC POLICY & ECONOMIC DEVELOPMENT]

February 1, 2024

Q. PLEASE STATE YOUR NAME AND ADDRESS FOR THE RECORD.

A. Teri Ooms

Q. WHERE ARE YOU EMPLOYED?

A. The Institute

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I have a BS in Public Administration and an MBA in Finance. I have served as the President & CEO of The Institute, a nonprofit collaborative data and analytics organization. Prior to that I served as the President & CEO of the Inland Empire Economic Partnership, a regional, economic development corporation in Southern California.

Q. HAVE YOU EVER TESTIFIED AS AN EXPERT BEFORE?

A. Yes.

Q. IN WHAT CAPACITY?

A. As a subject matter expert in regional socio-economic data.

Q. HOW MANY TIMES?

A. Twice (2).

Q. IN WHAT VENUES?

A. City of Scranton policy and fire binding arbitration.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of the City of Scranton.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. To educate and inform the PUC about the City of Scranton residents from a socio-economic perspective.

Q. WHAT IS YOUR UNDERSTANDING OF THE PURPOSE OF THIS PROCEEDING?

A. The purpose of this proceeding is to present data to the PUC regarding the economic vulnerability of the residents of Scranton in hopes of avoiding another rate hike.

Q. WHAT CAN YOU TELL US ABOUT THE OVERALL POPULATION WITHIN THE CITY OF SCRANTON?

A. The City of Scranton is the county seat of Lackawanna County. It has the largest urban core, it is a government center, and home to many higher education institutions and health systems. The City has very distinct neighborhoods surrounding the downtown. Despite this, the City has an older and poorer population. In the 1970s and 1980s major housing development in the City's

first tier suburbs saw much of the wealth leave the City and move elsewhere. As a result, much of the housing became rental and a community where those with low incomes remained.

Q. HOW MANY FAMILIES REQUIRE FOOD ASSISTANCE?

A. 24.5 percent of the households are SNAP recipients. This is much higher than the Commonwealth and National averages. Nearly 1:4 households are SNAP recipients.

Q. WHAT IS THE MEDIAN OR AVERAGE – YOU CAN ANSWER BOTH – HOUSEHOLD INCOME FOR THE CITY?

A. Median household income is $45,893 and per capita income is $25,540. Both are significantly less than state and national averages, which explain why so many social supports are needed for families in the City. A total of 26.2 percent of households in the City of Scranton earn less than $25,000 per year.

Q. HOW MANY SCRANTONIANS ARE ELDERLY?

A. 17.8 percent of City residents are 65 and older and 15.4 percent of them live in poverty.

Q. HOW MANY SCRANTONIANS LIVE ON A FIXED INCOME?

A. The following data identifies the number and percentage of people on various social programs. This data came from the US Census Bureau.

	Estimate	Percent
With Social Security	12070	37.7
With retirement income	7126	22.3
With Supplemental Security Income	2116	6.6
With cash public assistance income	1632	5.1

Q. HOW MANY SCRANTONIANS ARE DISABLED?

A. 15.1 percent of the population has some sort of disability.

Q. HOW MANY FEMALE-LED SINGLE FAMILY HOMES EXIST IN THE CITY OF SCRANTON?

A. 45.6 percent of children in the City live in single parent homes.

Q. WHY DOES THAT DATA POINT MATTER?

A. Single parent households face more challenges than two parent households. Incomes are generally less, especially in single parent households headed by women. They are generally employed in lower wage careers. The cost of child care as well as availability is also an issue.

Q. HOW MANY SCRANTONIANS RENT VERSUS OWN THEIR HOMES?

A. Nearly 50 percent (49.6%) are renters.

Q. WHY DOES THAT DATA POINT MATTER?

A. Home ownership is a sign of generational wealth building and financial security. Further, renters face ongoing rent increases that historically are higher than increases in wages. This is especially true in the COVID years as both rents and purchase prices have increased dramatically across the country.

Q. HOW MANY SCRANTONIANS LIVE IN POVERTY?

A. 19.6 percent of all Scranton residents live in poverty. This is nearly 1:5 residents.

Q. HOW WOULD YOU DESCRIBE DIVERSITY IN THE CONTEXT OF SCRANTON'S POPULATION?

A. Current US Census data demonstrate the City is more racially and ethnically diverse than other communities in the County and disaggregated data shows these individuals are economically challenged.

Q. WHERE/HOW DID YOU OBTAIN YOUR DATA AND METRICS?

A. All the data is pulled from various surveys from the U.S. Census Bureau.

Q. HOW WOULD YOU DESCRIBE THE COST OF LIVING IN SCRANTON?

A. The cost of living may appear to be less than other communities, however when you compare the cost of living with current income levels, you will see there is a challenge to meet basic needs.

Q. HOW DOES THE COST OF LIVING COMPARE TO THE COMMONWEALTH AVERAGE AND WHY, IF AT ALL, DOES THIS MATTER?

A. In real dollars, the cost of living shows up as being a little less than the Commonwealth. However, that savings does not mean much when income levels are more than $10,000 less than average Commonwealth income.

Q. ARE YOU ABLE TO INFORM US AS TO WHAT THE LIVING WAGE WOULD HAVE TO BE FOR AN AVERAGE FAMILY OF FOUR TO AFFORD A WATER BILL OF OVER $100 PER MONTH?

A. Without considering the increase in water bills, a family of four with one working adult need would need to earn $71,614 to meet their basic needs. The same family with two working adults would need $90,605. The difference includes increased costs for transportation and childcare.

Q. ARE YOU ABLE TO DISCUSS IF THE PROPOSED RATE INCREASE IS REASONABLE?

A. I believe any rate increase will be a challenge for residents who are already making difficult choices to meet basic needs.

Q. WOULD UTILITY REIMBURSEMENT COVER THE RATES AT ISSUE HERE?

A. Not unless it covers the entire increase in perpetuity. A short-term fix is merely a band aid and does not address a person's long term income challenges.

Q. ARE YOU ABLE TO DISCUSS THE NEGATIVE EFFECTS OF PEOPLE TRYING TO KEEP THEIR UTILITY BILLS LOWER, SPECIFICALLY AS TO THE WATER AND/OR WASTEWATER BILL?

A. I do not have specific medical or environmental experience. However, logic dictates if people use less water there is an increased risk of illnesses whether they be food borne, bacterial, or viral due to cleaning less. Even drinking less water could lead to dehydration and this is a considerable risk to senior citizens.

Q. WHY, IF AT ALL, WOULD A RATE INCREASE BE SO DETRIMENTAL TO RESIDENTS WITHIN THE CITY OF SCRANTON?

A. The data tells the story. There are a large number of people living in poverty. This means that they are having challenges meeting basic needs. Increased costs further exacerbate the situation.

Q. ARE YOU ABLE TO SPEAK TO INFORMATION ABOUT AREAS SURROUNDING THE CITY OF SCRANTON, LIKE DUNMORE AND MOOSIC?

A. Dunmore has some similar statistics to Scranton. 19 percent of the population is 65 and over. Median household income is more than $11,000 less than the state and median per capita income is about $7,000 less than the state average. A total of 9.3 percent of all Dunmore residents live in poverty and nearly 14 percent are SNAP recipients. A total of 37 percent of children live in single parent households and over 17 percent have a disability. 13.1 percent of all households earn less than $25,000 per year.

Q. ARE YOU ABLE TO SPEAK TO HOW RATE INCREASES WOULD AFFECT SMALL BUSINESSES IN THE SCRANTON AREA?

A. I do not have specific data on small businesses or their challenges, however I can tell you that many small businesses are in retail and hospitality. These sectors were strongly affected by the pandemic. Many have already closed.

Q. HOW HAS THE PANDEMIC AFFECTED THE CITY OF SCRANTON RESIDENTS' ECONOMY/ABILITY TO PAY, IF AT ALL?

A. Yes, many people left the workforce or worked in industries that were closed during the pandemic. People who had young children or elderly family members were unlikely to work because of care demands. People with disabilities were unlikely to be able to work because of the higher risk. Seniors themselves, at high risk for the disease, were likely unable to work.

Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?

A. Yes

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission v. Pennsylvania-American Water Company	Docket Nos. R-2023-3043189 (Water) R-2023-3043190 (Wastewater)

VERIFICATION

I, Teri Ooms, Executive Director of the Institute, hereby state that the facts set forth in my Direct Testimony, C.O.S. St. 2, in the above-captioned proceedings are true and correct to the best of my knowledge, information and belief. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to sworn falsification to authorities).

Date: February 1, 2024

Teri Ooms, Executive Director

The Institute [for Public Policy & Economic Development]

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

CITY OF SCRANTON

Docket Nos. R-2023-3043189 and R-2023-3043190

EXHIBIT 4

February 1, 2024

Teri Ooms
570.417.5972
ooms@institutepa.org

PROFESSIONAL PROFILE

Results-oriented senior executive leader with proven ability to manage organizations in different phases of its life cycle and leverage data and information into executable strategies with measurable results.

Senior leadership experience in a variety of types and sizes of non-profit organizations. Produced successes in growth organizations, startups, and turnaround situations. In all organizations responsibilities included board and staff engagement, operations, financial management, planning and reporting, marketing and community relations.

Exceptional project/program development and management with a track record of on-time and on-budget delivery. In-depth management experience including organizational and regional strategic planning, budgeting, staffing, performance management, mentoring and professional development of staff.

Extensive board of director and executive committee member in a number of organizations including Chairperson of the grants committee in a regional health care foundation.

PROFESSIONAL ACCOMPLISHMENTS

Driving High Performance

Started a research center within a higher education collaborative that includes 13 academic partners and the business community. Mentored over 350 students in practicums since 2004. Developed methodology, project management and research for over 175 community based and client driven studies, plans and reports. These studies have influenced state public policy, increased a variety of organizations capacity and outcomes, and educated the community at-large on how leveraging data can improve decision making.

Responsible for a corporate turnaround of a multi-million dollar regional non-profit. Achieved solvency in 12 months.

Strategic Vision

Created the strategic vision for a health care foundation grant program using funds from the sale of a hospital. Managed the process as Chairperson of the grants committee for the last six years.

Created the strategic vision for The Institute from inception to present. Also, led the development and implementation of organizational strategic plans in two organizations, attaining all stated goals ahead of schedule. Also led the development and implementation of a region-wide economic development strategic plans involving extensive stakeholder engagement and key constituency groups.

Success Through Collaboration
Strong working relationships with board members, staff, and committee members are indicative of positive outcomes and success. These relationships have been the cornerstone of all my work in the non-profit sector.

Developed relationships with a number of non-profit, public, and private organizations and representatives in northeastern Pennsylvania to assist them in their data, information and decision making needs not only for their own organization outcomes, but also to change community and systems outcomes to improve the quality of life and standard of living for residents of Northeast Pennsylvania.

Fostered and maintained professional working partnerships with all local governments in the California's Inland Empire region, state and federal departments and agencies, elected officials at federal, state, and local levels, and with business and community leaders due to commitment of trust, honesty and transparency in all interactions.

Professional Experience

The Institute for Public Policy & Economic Development
President & CEO – January 2022 - President
Executive Director – March 2004 to December 2021

- Reporting directly to the President of the University, developed and implemented the long-term strategic plan, goals, structure, and budget; defines measurable results for the successful achievement of the strategy; and works effectively with the regional, volunteer Advisory Board.

- Coordinates and develop high quality research, analysis, planning and consulting capabilities that are being implemented by various public, private, and non-profit groups in several states.

- Developed and implements a grant and program evaluation service center within The Institute that provides services using an integrated approach that includes site visits, stakeholder interviews, and analytics on multiple datasets and report metrics.

- Establishes effective relationships with a broad range of constituents engaged in improving health outcomes and the revitalization of communities, economic, workforce, and community development.

- Works to develop effective public private partnership to implement programs and initiatives and encourage resource sharing and collaboration.

- Responsible for fundraising, business development, and financial management of the organization.

- Establishes and markets a portfolio of consulting and technical assistance services for business, government, non-profits, and institutional clients.

- Plans and executes public relations and marketing efforts to promote The Institute as a visible, respected, and self-sustaining source of expertise.

- Conducts annual regional indicators initiative complete with research. Coordinates seven issue task forces comprised of volunteers to address regional issues through research, policy, and advocacy.

Inland Empire Economic Partnership
President & CEO – June 1997 to June 2004

- Responsible company management and planning including fiscal, personnel, and programming.
- Responsible for business attraction and expansion activities nationally and internationally resulting in company locations/expansions and the creation of new direct jobs and investment for the Inland Empire.
- Led organization's legislative advocacy division which included active missions to Washington, D.C. and Sacramento, California.
- Developed and oversaw the implementation of marketing and public relations activities designed to promote the attributes of the Inland Empire nationally and internationally.
- Established and built relationships with Inland Empire community and business leaders to encourage involvement in business attraction and expansion efforts and investment in the organization.
- Responsible for company's eight operating divisions, several corporate entities, multiple contracts, grants, and financial administration.
- Executed an organization restructuring from bankruptcy through solvency.
- Developed and implemented a strategy that created over 10,000 jobs in seven years through business attraction.
- Served as a voting member of the Executive Committee and Board of Directors.

Inland Empire Economic Partnership
Small Business Development Center Program
Executive Director – September 1991 to September 1997

- Established SBDC program in 1991 with one staff person and $100,000 budget which grew to and 21 staff and $1.2 million in budget by 1997.
- Responsible for all program operations, management, marketing, grant/contractual obligations and financial/fundraising.

- Managed staff of 21 in four full time and five part time locations operating under four federal grants, one state grant, and nine local public/private grants and contracts.
- Provided business consulting assistance to clients in all stages of business including start up entrepreneurs.
- Conducted business workshops and training events.
- Responsible for all public and media relations and marketing.

Murray Insurance
Corporate Controller – December 1989 – July 1991

- Responsible for all accounting and finance functions and staff for company's operations in two states
- Provided pro forma financials and analysis for business lines and acquisitions
- Organization strategic planning

Education

University of Scranton
Masters of Business Administration, Finance

University of Scranton
Bachelor of Science, Public Administration

Computer Skills

MS Office Products, SPSS, and multiple licensed and public databases

Community and Industry Leadership

- Appleseed Foundation (formerly Wilke-Barre General Hospital Foundation), Board Member and Grants Committee, Chair
- Circle 200, Member
- Diamond City Partnership, Board Member
- Greater Wyoming Valley Chamber of Business & Industry, Board Member
- Luzerne County Head Start, Board Member
- Penn's Northeast, Board Member
- Scranton Tomorrow, Economic Restructuring Committee, Member
- United Way of Wyoming Valley, Board Member
- Volunteers in Medicine, Chairperson

Awards and Recognition

- Outstanding Community Partner, Scranton Area Community Foundation, 2019
- Innovator of the Year, Greater Wilkes-Barre Chamber of Business & Industry, 2016
- Research Liaison for the Pennsylvania Legislative Office of Research, 2007-2012
- Gary Anderson Non-Profit Leader of the Year, 2001
- Women in Southern California Business, 1999 – 2003
- Women of Distinction, The Business Press, 1998 - 2003

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:		
	:		
v.	:	Docket Nos.	R-2023-3043189
	:		R-2023-3043190
Pennsylvania-American Water Company	:		

DIRECT TESTIMONY OF HARRY S. GELLER, ESQ.

ON BEHALF OF

THE COALITION FOR AFFORDABLE UTILITY SERVICES AND ENERGY EFFICIENCY IN PENNSYLVANIA ("CAUSE-PA")

February 1, 2024

Topics Addressed:

Rate Affordability / Rate Impact on Low Income Consumers

Low Income Programming

Security Deposit Policies

DSLPA

Water Services Act

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CAUSE-PA Exhibit 1 – Water and Wastewater Burden Tables

CAUSE-PA Appendix A – Resume of Harry S. Geller

CAUSE-PA Appendix B – Cited Discovery Responses

PREPARED DIRECT TESTIMONY OF HARRY S. GELLER

I. INTRODUCTION

Q: Please state your name, occupation, and business address.

A: My name is Harry S. Geller. I am an attorney. I am retired from my former position as the Executive Director of the Pennsylvania Utility Law Project (PULP), but have maintained an office at 118 Locust St., Harrisburg, PA, 17101, for the purpose of providing consulting services and assistance to low income individuals and the organizations which represent them in utility and energy matters.

Q: Briefly outline your education and professional background.

A: I received my B.A. degree from Harpur College, State University of New York at Binghamton in 1966, and a J.D. degree from Washington College of Law, American University in 1969. Upon graduation from law school, I entered the Volunteers in Service to America (VISTA) program, where I was assigned to the New York University Law School. I took courses in the Law School's Urban Affairs and Poverty Law program and worked with the Community In Action Program on the West Side of Manhattan in New York City from 1969-1971. In 1971, I started as a Staff Attorney for the New York City Legal Aid Society, Criminal Court, and Supreme Court Branches in New York County. In 1974, I moved to Pennsylvania and began working for Legal Services, Incorporated (LSI). LSI was a civil legal aid program serving Adams, Cumberland, Franklin, and Fulton Counties. I worked at LSI from 1974-1987 first as a Staff Attorney, then as Managing Attorney, and ultimately became Executive Director. Through a restructuring with other legal services programs, LSI became part of what is now known as MidPenn Legal Services and Franklin County Legal Services.

In 1988, I was hired to be the Executive Director of PULP, a statewide legal aid project dedicated to protecting the rights of low income utility customers. At PULP, I represented low income individuals with utility and energy concerns and supported organizations advocating for low income households in utility and energy matters. As the Executive Director, I consulted and co-counseled on a wide variety of individual utility consumer cases, and I participated in task forces, work groups and advisory panels, including serving as chair of the Department of Human Services' LIHEAP Advisory Committee and the Pennsylvania Public Utility Commissions' Consumer Advisory Committee. I frequently trained communities, legal aid staff, and advocacy groups across Pennsylvania about the various utility and energy matters affecting Pennsylvania's low income population. I retired from PULP on June 30, 2015. Since that time, I have continued to provide consulting services for PULP and its clients, as well as other organizations serving the low income community.

In sum, I have 50 years of experience working on behalf of households in poverty, including the past 30 years focusing specifically on utility and energy issues affecting low income consumers. My resume is attached as Appendix A.

Q: Please describe the focus of your work over the past fifty years, including relevant work experience on issues of low income families' ability to afford essential services such as utilities?

A: I have represented low income individuals and organizations serving low income populations in a wide variety of legal matters, including family law, public benefits, unemployment compensation, utility shut-offs, debtor/creditor, and housing-related disputes. Over the past 30 years, my focus has been to ensure that low income households can connect to, afford, and maintain utility and energy services.

In all of these legal matters, I worked almost exclusively on behalf of individuals and households that subsist on incomes at or below 150% of the Federal Poverty Level (FPL). Through this work, I have had a close view of the daily lives of countless of our poorest citizens. I have spent hundreds, if not thousands, of hours assisting clients, combing through their budgets to see whether it is even possible to make ends meet. Over the years, I have consistently seen the near total absence of the ability of low income families to afford the most basic monthly necessities with the incomes they have, even assuming heroic self-control and conscientious budgeting and spending. Almost every month, my clients faced the stark reality of having to choose which bills they can forgo with the least drastic consequences.

In addition to my deep understanding of the daily monetary struggles facing poor families, I have an extensive knowledge of the array of programs designed to allow low income individuals to afford utility service. While at PULP, I was involved in hundreds of proceedings evaluating the effectiveness of programs that are intended to reduce low income households' utility burdens and help them conserve energy and water through efficiency and weatherization– thereby reducing utility costs and improving bill affordability. I have spent thousands of hours identifying the problems in Universal Service programs and making recommendations for changes to these programs to better serve low income consumers. This advocacy ultimately led to the recognition of the need to develop integrated and coordinated programs for low income consumers.

Over my decades of service, I played an instrumental role in the development, oversight, and monitoring of the initial pilot and then the statutorily required low income Universal Service Programs, each of which is structured to provide a different form of complimentary assistance – working in tandem to enable low income customers to afford and maintain basic service. For example, the Customer Assistance Program (CAP) provides alternatives to traditional collection

methods for low income, payment troubled utility customers, allowing participants to receive a more affordable bill and earn forgiveness on arrears in exchange for making in-full payments on their discounted bill. In turn, the Low Income Usage Reduction Program (LIURP) is a targeted weatherization program designed to assist low income households with the highest energy consumption, payment problems, and arrearages to reduce their overall energy consumption. CAP and LIURP work in tandem and are designed to assist low income households in maintaining affordable utility services and safe living environments while reducing utility collection, thereby benefitting other ratepayers and the communities in which they live and work.

Q: Have you testified in any proceeding before the Pennsylvania PUC?

A: Yes. I have presented testimony in many proceedings before the PUC. A complete list is attached to my resume, which is attached as Appendix A.

Q: For whom are you testifying in this proceeding?

A: I am testifying on behalf of the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA).

Q: What is the purpose of your testimony?

A: CAUSE-PA intervened in this proceeding to ensure that the rates proposed by Pennsylvania American Water Company (PAWC or the Company), together with all attendant policies, programs, and procedures governing the provision of water and wastewater services, will not adversely affect the ability of PAWC's low income customers to connect to, maintain, and afford water and wastewater services, which is a critical component to a safe and healthy home. The bulk of my testimony will discuss the impact of PAWC's proposals on low income customers.

Q: How is your testimony organized?

A: My testimony is divided into nine sections. In Section I, I have provided an introduction to this direct testimony. In Section II, I discuss PAWC's residential rate increase proposal, PAWC's existing and proposed rate design, and the financial challenges that PAWC's proposed rates will pose to low income customers and residential customers as a whole. In Section III, I analyze PAWC's rate proposals, including proposed alternative rate mechanisms, and discuss impacts on residential customers already struggling to afford services, and provide recommendations related to these proposals. In Section IV, I will provide an overview of PAWC's low income customers and their households. In Section V, I will analyze the affordability of PAWC's current rates for its low income customers, and resulting unaffordability if PAWC is permitted to implement its rate increase proposal. In Section VI, I will discuss concerns raised by PAWC's Affordability Analyses described in PAWC's expert witness, Charles Rea. In Section VII, I will assess the effectiveness and accessibility of PAWC's low income assistance programs, and provide recommendations related to these programs. In Section VIII, I will assess PAWC's compliance with certain aspects of the Discontinuance of Service to Leased Premises Act (DSLPA) and Water Services Act. Finally, I will conclude my direct testimony in Section IX, and will provide a summary of recommendations offered throughout my direct testimony.

II. PAWC'S RATE INCREASE PROPOSAL

Q: Please summarize PAWC's requested rate increase as it applies to residential customers.

A: On November 8, 2023, PAWC submitted a rate filing, Supplement No. 45 to Tariff Water-PA P.U.C. No. 5 and Supplement No. 47 to Tariff Wastewater-PA P.U.C. No. 16, which proposes to increase rates by approximately $203.9 million, or approximately 20.2%, based on a fully projected future test year ending June 30, 2025.[1] PAWC indicates that $130,938,997 of its proposed rate increases will be allocated to the residential class.[2] According to the Company, if the entire rate request is approved as filed, the total bill for a residential water customer in Rate Zone 1 - Water who uses approximately 3,201 gallons per month would increase from $70.65 to $88.24 per month, or by 24.9%, while the total bill for a residential wastewater customer in Rate Zone 1 – Wastewater using approximately 3,122 gallons per month would decrease from $105.18 to $100.08 per month, or by 4.8%.[3] However, the proposed decrease in projected wastewater bills is as a result of PAWC's proposal to reallocate a portion of its wastewater revenue to water operations, increasing residential water bills by approximately $6.08.[4]

Q: As a preliminary matter, do you support the Company's proposal to increase rates?

A: No, I do not support the Company's proposal to dramatically increase the cost of basic services, and I recommend substantial revision and mitigation of PAWC's proposals. I do not believe that it is appropriate to raise rates for water and wastewater service without first ensuring that low income customers are able to access affordable service under just and reasonable terms.

[1] Volume I, Statement of Specific Reasons.
[2] CAUSE-PA I-1.
[3] Volume I, Notice of Proposed Water and Wastewater Rate Changes.
[4] PAWC St. 1 at 20-21.

This is especially true as Pennsylvania's consumers have struggled profoundly in recent years with the impacts of the COVID-19 pandemic, and more recent economic harms as a result of steep inflation in the cost of basic goods.[5] Most significantly, as my testimony will demonstrate, recent, multiple PAWC rate increases have resulted in the inability of its low income customers to reasonably afford existing rates. Continued access to affordable water and wastewater service is vital to the health and safety of consumers in PAWC's service territory to staying in their homes. Without access to running water, basic tasks of living – including brushing your teeth, cooking, cleaning, etc. – become impossible. Lack of stable water/wastewater services to a home creates significant threats to customers, their families, and their communities. It is imperative that rates – and attendant policies and procedures – are designed to address the disparities in water and wastewater burdens, and the ability of low income families to maintain services.

As discussed below, PAWC customers have shouldered a series of steep rate increases in their monthly bills for basic water/wastewater services in recent years, with PAWC's most recent approved rate increase taking effect on January 28, 2023.[6] As a result, PAWC's water and wastewater services are already unaffordable for its residential customers, particularly its low income customers. Regardless of whether PAWC is approved to increase rates through the context of this proceeding, the Commission should require PAWC to take necessary steps to ensure that all households in its service territory are able to afford service under just and reasonable terms. Throughout my direct testimony, I provide a number of recommendations for how PAWC can better structure its services and assistance programs so that its low income customers can

[5] Rob Wile and J.J. McCorvey, Inflation ticked up to 3.4% in December thanks in part to outsized housing costs, NBC News (Jan. 11, 2024), available at: https://www.nbcnews.com/business/economy/inflation-rate-december-2023-falling-prices-impacting-consumers-rcna133050.Paul Davidson, Another record month for inflation: New level driven by gas, grocery prices and high rent, USA Today (June 10, 2022), available at: https://www.usatoday.com/story/money/2022/06/10/inflation-rate-cpi-may-consumer-price-index/7577577001/.

[6] Pa. PUC v. PAWC, Opinion and Order, Docket Nos. R-2020-3019369, et al (Opinion and Order, Feb. 25, 2021). Pa. PUC v. PAWC, Order, Docket Nos. R-2022-3031672, et al. (Order, Dec. 8, 2022).

reasonably afford to maintain water and wastewater services to their home. While these recommendations are designed to address rate unaffordability at *existing* rates, they are also vital to mitigate financial harm for PAWC's low income customers if the Commission allows PAWC to increase its rates.

Q: What is the estimated economic impact of PAWC's proposed rate increase on residential water customers?

A: The impact of PAWC's proposed residential water rate increases depends on usage and varies between rate zones. Table 1 shows the dollar and percentage impact:

Table 1: Residential Water Bill Impact by Rate Zone at 4,000K[7]

Zone	Currently Monthly	Proposed Monthly	Dollar Increase	% Increase
Rate Zone 1 – Most Areas	$81.93	$105.28	$23.35	28.50%
Rate Zone 2 – Valley*	$33.16	$105.28	$72.12	217.49%
Rate Zone 3 – SLIBCO*	$139.31	$105.28	($34.03)	-24.43%
Rate Zone 4 – Turbotville*	$81.93	$105.28	$23.35	28.50%
Rate Zone 5 – Steelton*	$81.93	$105.28	$23.35	28.50%
Rate Zone XX – Audubon	$51.28	$62.44	$11.16	21.76%
Rate Zone XX – Farmington	$67.50	$105.28	$37.78	55.97%

* To move to Rate Zone 1 rates

(assuming 5/8 meter)

As shown by Table 1, the impact of PAWC's proposed rate increases will vary by rate zone. For example, a typical water customer using 4,000 gallons/month and located in Zone 2 (water) will experience a monthly rate increase of more than 217% for their water service. I note that, while I have used 4,000 gallons/month for illustrative purposes, the impacts of PAWC's rate

[7] PAWC St. 10 at 31-35.

proposal will also vary by a customer's usage which, in turn, varies substantially by household size and condition of the home. These factors drive disproportionate bill impacts for larger families and low income households. I will discuss PAWC residential customer usage, and the corresponding impact on monthly bills, in detail below.

Q: What is the estimated financial impact of PAWC's proposed rate increase on residential wastewater customers?

A: The residential monthly bill impact for PAWC's wastewater customers varies widely between rate zones, as shown by Table 2:

Table 2: Residential Wastewater Bill Impact by Rate Zone (4,000 gal/month)

Zone	Currently Monthly[8]	Proposed Monthly[9]	Dollar Increase	Percent Increase
Rate Zone 1 – Statewide	$129.30	$122.60	($6.70)	-5.20%
Rate Zone 2 - New Cumberland	$112.30	$122.60	$10.30	9.20%
Rate Zone 3 – Scranton	$113.54	$114.77	$1.23	1.10%
Rate Zone 4 – Kane	$124.00	$135.00	$11.00	8.90%
Rate Zone 5 – Valley	$129.30	$122.60	($6.70)	-5.20%
Rate Zone 6 – McKeesport	$129.30	$135.00	$5.70	4.40%
Rate Zone 7 – York	$36.74	$86.30[10]	$49.56	134.89%
Rate Zone 8 – Foster Twp.	$85.00[11]	$100.00[12]	$15.00	17.60%
Rate Zone 9 – Royersford	$57.40	$76.60	$19.20	33.45%
Farmington	--	$74.00	--	--
Sadsbury Twp - unmetered		$128.33[13]		
Brentwood Acquisition	--	$40.21[14]	--	--
BASA Acquisition	$45.50	$92.32	$46.82	102.90%

[8] PAWC St. 10 at 36:19 – 40:16.

[9] Supplement No. 47 to Tariff Wastewater PA PUC No. 16 Eighteenth Revised Page 8 – Fourth Revised Page 13.
[10] Effective 5/27/2025 - Supplement No. 47 to Tariff Wastewater PA PUC No. 16 Fifth Revised Page 11.4.
[11] Effective 1/1/2025, Flat rate bill will increase to $106 per EDU as of May 27, 2025 – PAWC St. 10 at 38: 17-19 and Supplement No. 47 to Tariff Wastewater PA PUC No. 16 Fifth Revised Page 11.5.
[12] Per EDU, effective 1/1/2025 - Supplement No. 47 to Tariff Wastewater PA PUC No. 16 Fourth Revised Page 11.5
[13] Per EDU - Supplement No. 47 to Tariff Wastewater PA PUC No. 16 Fifth Revised Page 11.8.
[14] Bill at 4,000 gallons of usage will be $49.24 as of 2nd anniversary of acquisition date – Supplement No. 47 to Tariff Wastewater PA PUC No. 16 Fourth Revised Page 13.

As with its water rate impacts, the impacts of PAWC's wastewater proposal vary by rate zone, as illustrated in Table 2 – though the variations between rate zone are far more pronounced. As this Table shows, customers in Rate Zone 7 (York) will see an increase of more than 134% - while customers in Zones 1 and 5 will see a decrease of 5.2%. Like water, the impact of PAWC's wastewater rate proposal will also vary by usage, falling disproportionately on larger families and low income households. I note that I am using PAWC's current rate zones for the sake of simplicity in illustrating the percent changes related to PAWC's proposal. However, PAWC has proposed several rate zone designation changes pursuant to this proceeding, which is reflected in the proposed monthly rates.

III. RATE DESIGN AND ALTERNATIVE RATE MECHANISM PROPOSALS

Q: Please briefly describe PAWC's current rate structure for water and wastewater service for residential customers.

A: The Company currently offers water service in five different rate zones. [15] The largest of these rate zones is Rate Zone 1, with over 99% of the Company's total water revenue.[16] Rate Zone 1 offers service to residential and non-residential customer classes through a monthly fixed charge that varies by meter size and a volumetric charge that varies by customer class and rate zone.[17] While a great majority of the Company's customers are now being billed under the same set of rates for metered service, the following water rate zones continue to have separate rate schedules:

[15] PAWC St. 10 at 31.
[16] Id.
[17] Supplement No. 45 to Tariff Water – PA PUC No. 5 (Redline); Supplement No. 47 to Tariff Wastewater – PA PUC No. 16 (Redline). PAWC St. 10 at 31.

Water Rate Zone 2 (Valley), Rate Zone 3 (SLIBSCO), Rate Zone 4 (Turbotville), and Rate Zone 5 (Steelton).[18]

For its wastewater rates, PAWC provides service under a variety of different rate schedules and for a variety of different rate zones – including 9 different Sanitary Sewer System rate zones and 3 different combined sewer system rate zones.[19] While PAWC operates Rate Zone 1 as a statewide rate zone for wastewater, the following wastewater rate zones continue to have separate rate schedules: Wastewater Rate Zone 2 (New Cumberland), Rate Zone 3 (Scranton), Rate Zone 4 (Kane), Rate Zone 5 (Valley) Rate Zone 6 (McKeesport), Rate Zone 7 (York), Rate Zone 8 (Foster), and Rate Zone 9 (Royersford).[20] Since the last rate proceeding, no new PAWC rate zones have been created.[21] However, upon completion of several planned acquisitions, PAWC plans to add two water rate zones and four additional wastewater rate zones.[22]

PAWC is also proposing, through the present proceeding, to reallocate a portion of its wastewater revenue requirements to its water service customers, citing Act 11 of 2012 to support this cross-service subsidization proposal.[23] Specifically, PAWC proposes a revenue requirement for wastewater of $263,574,897, and to recover $192,487,503 (or 73% of the total amount) of that revenue requirement from wastewater customers.[24]

While I will not take a position at this time related to the proposed Act 11 modifications, counsel for CAUSE-PA has advised me that, pursuant to 66 Pa. C.S. 1311(c), certain equity

[18] PAWC St. 10 at 31, 38.
[19] Id. at 36- 37.
[20] Id. at 37-38.
[21] PAWC St. 4 at 39.
[22] Id.
[23] PAWC St. 10 at 36.
[24] Id. at 46: 16-22.

considerations are inherent in PAWC's proposal to reallocate portions of its wastewater revenue requirements. I therefore reserve the right to respond to other parties' positions related to PAWC's Act 11 proposal, and to provide further analyses related to whether this proposal or any proposed modifications thereto is reasonable and in the public interest.

A. Winter Averaging Proposal

Q: Please summarize the Company's proposed winter averaging methodology.

A: PAWC is proposing to change its current methodology of determining volumetric components of wastewater customer bills – whereby volumetric charges are based on total metered usage – to a "winter averaging" methodology.[25] This method is alleged to be an attempt to separate metered water usage that is likely to go through wastewater systems from outdoor water usage – like landscaping and swimming pools - that is not passed through wastewater systems.[26] Under PAWC's proposed winter averaging method, a customer's wastewater bill in the winter averaging months (January-March) would be determined by actual metered water usage for the month.[27] In non-winter months, a customer's wastewater bill would be based on the lesser of actual metered water usage for the month or the average water consumption for that customer in the winter months.[28] For new customers or those without winter billing history, PAWC proposes to assume a standard usage level of 3,000 gallons/month for comparison purposes to billed non-winter usage.[29] PAWC, through its expert witness, acknowledges that the effect of winter averaging on

[25] Id. at 42: 19-23.
[26] Id. at 43.
[27] Id. at 43, 44: 3-6.
[28] Id. at 43.
[29] Id. at 44: 13-17.

wastewater volumetric rates is that rates would be slightly higher than they otherwise would have been for the same revenue requirement.[30]

Q: Do you have any concerns about the rate design proposals that you have described above?

A: Yes. I am concerned that PAWC's proposed winter averaging methodology improperly favors customers residing in single family homes with higher incomes. As proposed, the winter averaging methodology will benefit residential customers who use significant amounts of water in non-winter months over and above their winter average.[31] During non-winter months, outdoor water usage for activities such as landscape irrigation and swimming pools makes up a sizable share of residential water use.[32] Similarly, higher income families who have the sufficient funds to practice outdoor discretionary water usage during non-winter months will use more water compared to lower income families, and those who live in apartments or smaller properties.[33] As proposed, I am concerned that the winter averaging methodology improperly shifts the revenue burden from higher income customers who reside in single-family homes to customers with lower income, and those that live in apartments or smaller properties.

Q: Do you have any recommendations related to the rate design proposals that you have described above?

A: Yes. I recommend that the ALJ and the Commission reject PAWC's proposed winter averaging methodology. As discussed, PAWC's proposed winter averaging methodology

[30] Id. at 45: 3-10.
[31] OCA 16-1.
[32] NRDC, Water Affordability Advocacy Toolkit - Equitable Water Rates, at p. 97, available at, https://www.nrdc.org/sites/default/files/water-affordability-toolkit-section-9.pdf.
[33] Id.

improperly shifts the revenue burden from higher income customers who reside in single-family homes and have the luxury of discretionary water use to customers with lower income, and those that live in smaller homes. This is inequitable, unjust, and unreasonable. Lower income customers who cannot afford to engage in higher discretionary water use in non-winter months, and customers residing in smaller homes, should not be penalized for lower water use in non-winter months compared to their higher income counterparts. As such, PAWC's winter averaging proposal should be rejected in its entirety.

B. Revenue Decoupling Mechanism (RDM)

Q: Please describe PAWC's proposal to implement a Revenue Decoupling Mechanism.

A: PAWC is proposing to implement a Revenue Decoupling Mechanism (RDM) as an alternative rate mechanism pursuant to 66 Pa. C.S. § 1330.[34] PAWC cites concerns related to recovery of fixed costs, and argues that the RDM will provide a better opportunity to recover revenue requirements and account for any differences between revenue requirements and actual revenues.[35] PAWC indicates that the two primary factors of revenue volatility are seasonal weather conditions and the ongoing trend of declining usage across certain customer segments.[36] The Company's projections show that water service revenues, at proposed rates, are expected to decline by approximately $5.8 million/year.[37] Based on these projections, PAWC asserts that gaps in revenues will amount to an estimated $6.5 million/year for residential water service.[38]

[34] Volume I, Notice of Proposed Water and Wastewater Rate Changes.
[35] PAWC St. 10 at 87.
[36] Id.
[37] Id. at 98.
[38] Id. at 99.

The proposed RDM compares actual revenues collected under Commission-approved rates to revenue that would have been recovered pursuant to certain set rate designs on a forward-looking basis.[39] Differences in these amounts would either be credited to customers or collected from customers at a later time.[40] The proposed RDM would apply to both water and wastewater services.[41] Recoveries and credits under the proposed RDM would to apply to volumetric rates for each customer class.[42] The RDM will apply to all customers in the following classes: residential; commercial; industrial; municipal; and sales for resale classes, except for those customers with service under contract rates.[43]

PAWC argues that customers who practice conservation or install water-efficiency measures will still see corresponding bill reductions, though the Company appears to acknowledge through provided examples that the amount of achievable bill savings will be reduced by the RDM.[44] PAWC also argues several other customer benefits, including that the RDM would reduce the Company's throughput incentive – whereby the Company has a financial incentive to sell more water through volumetric customer use.[45]

Q: Do you have concerns related to the proposed RDM?

A: Yes. Counsel for CAUSE-PA has advised me that there are certain legal issues related to whether the RDM is proper pursuant to statute, regulation, and Commission policy that Counsel for CAUSE-PA reserves for briefing.

[39] Id. at 90.
[40] Id.
[41] Id. at 93-94.
[42] Id.
[43] Id. at 94.
[44] See PAWC St. 10 at 99-100.
[45] Id. at 102, 105-106.

I am concerned that the RDM, as proposed, unreasonably prejudices and disadvantages residential customers who practice conservation to lower their monthly bills. As discussed, the RDM is projected to account for revenue shortfalls in part because of continued reduction in customer usage. While PAWC argues that savings through conservation can outpace increases in monthly bills as a result of the RDM, it appears that the RDM will detract from savings that may be achieved through customers' conservation efforts. I am concerned that the proposed RDM improperly affects customer consumption and demand level so that customers are disincentivized to practice conservation. PAWC's customers should not be punished for practicing conservation by lowering their consumption levels. This is particularly problematic for low income customers who already face steep water/wastewater burdens. Low income customers have very little, if any, expendable income to invest in efficiency upgrades, and should not be penalized for any conservation they are able to achieve. It is unreasonable and inequitable to detract from conservation efforts and resulting bill savings by imposing an RDM over and above any rate increase ultimately granted through this proceeding.

I am also concerned that the proposed RDM does not contain appropriate consumer protections. As discussed, the proposed RDM is designed to apply to both water and wastewater services[46] – and to all customers in the residential, commercial, industrial, municipal, and sales for resale classes (except for those customers with service under contract rates) classes.[47] Low income customers will have to bear the additional costs of the RDM, if implemented, without any specified mitigation set forth in the RDM proposal. This only exacerbates any increases in unaffordability if PAWC is permitted to increase its base rates, or implement its additional ECIC proposal. The

[46] Id. at 93-94.
[47] Id. at 94.

RDM, as proposed, does not insulate low income customers from this additional and inequitable unaffordability. Instead, low income customers will be placed in greater risk of arrears and termination as a result of this increased unaffordability, jeopardizing their ability to access consistent and reliable services.

I am also concerned that the proposed RDM will not be understandable to individual residential customers, if implemented. The proposed RDM is a highly complex design and formula underpinned by rate design principles.[48] It is unclear what consumer education efforts PAWC intends to make, if any, related to the RDM, if approved. Without a plan and successful delivery of meaningful education, it is unclear whether customers will have the ability to dispute any portion of RDM charges.

Finally, as discussed below in the context of the proposed Environmental Compliance Investment Charge (ECIC), it is unclear to me whether implementation of the RDM will lessen the severity or frequency of rate increases submitted by the Company. As discussed by PAWC's expert witnesses, PAWC's justification for its instant rate increase proposal stems from various factors.[49] With these multiple alleged drivers for raising rates, it is unclear whether implementation of the RDM will ultimately reduce the level or pace at which PAWC's customer bills are raised.

Q: What is your recommendation related to the proposed RDM?

A: For the forgoing reasons, I recommend that the Commission reject the proposed RDM in its entirety. If the Commission ultimately approves PAWC to implement an RDM, I recommend that PAWC exempt Bill Discount Program (BDP) participants from RDM charges. As discussed,

[48] Supplement No. 45 to Tariff Water-PA P.U.C. No. 5 Seventh Revised Page 40.
[49] PAWC St. 1 at 7-8.

it is imperative that low income customers are insulated from additional rate unaffordability that would result if an RDM were implemented so that they can realize bill savings achieved through assistance programming and conservation efforts.

C. ***Environmental Compliance Investment Charge (ECIC) Proposal***

Q: Please summarize PAWC's Environmental Compliance Investment Charge (ECIC).

A: In addition to an RDM, PAWC is also proposing to implement an Environmental Compliance Investment Charge (ECIC) as an alternative rate mechanism pursuant to 66 Pa. C.S. § 1330.[50] PAWC alleges its proposed ECIC is designed to reflect and recover capital costs and expenses related to compliance with federal and state environmental mandates between rate proceedings.[51] Specifically, PAWC cites to several new and adjusted requirements related to acceptable limits of polyfluoroalkyl substances (PFAS).[52] PAWC expert witness Ashley Everette argues that that proposed ECIC would provide a mechanism for adjusting PAWC's rates to comply with new environmental mandates while mitigating exposure to less frequent but more significant general base rate increases by producing smaller increases to customer bills.[53]

PAWC proposes that recoverable costs under the ECIC would be consistent with set projects and activities approved by the Commission through an annual environmental compliance plan.[54] PAWC proposes a process for plan submission that would include the filing of answers and comments, but no ability to conduct discovery or otherwise assess the prudency of PAWC's compliance plan or the reasonableness and justness of the expenditures necessitated by the plan.[55]

[50] Volume I, Notice of Proposed Water and Wastewater Rate Changes.
[51] PAWC St. 1 at 26.
[52] PAWC St. 8 at 24.
[53] PAWC St. 1 at 27.
[54] Id. at 26.
[55] PAWC St. 8 at 25-26.

PAWC proposes to apply the ECIC "equally" to all customer classes.[56] However, until PAWC files its proposed ECIC plan, most details about how PAWC will allocate its ECIC remain unclear – including whether application of PAWC's ECIC will be *equitable*. PAWC's ECIC proposal does provide that, for low income residential customers enrolled in PAWC's Bill Discount Program (BDP), PAWC intends to apply the ECIC *after* the BDP rate discount has been applied to the bill.[57] In other words, the BDP rate discount would be applied to all base charges (service charge per month and consumption charge) before the ECIC is calculated.[58] PAWC argues that this will result in a reduced ECIC charge for BDP participants.[59]

Q: Do you have any concerns about PAWC's proposed ECIC?

A: Yes. I am concerned that the proposed ECIC would improperly increase PAWC's customers rates outside of the context of base rates approved through this proceeding. Environmental remediation costs are part of PAWC's cost of doing business and should be included for consideration and analysis within base rate proceedings.

I am also concerned that the ECIC will improperly and unjustly shift the burden of mitigating PFAS and meeting other environmental standards to low income customers and their communities. While PAWC's proposal to apply the ECIC for BDP participants after application of the bill discount will modestly reduce the cost impact to low income customers enrolled in the program, its proposal nevertheless falls woefully short of remediating the negative financial impacts on the vast majority of non-BDP participating low income households across PAWC's

[56] PAWC St. 8 at 29. CAUSE-PA III-29.
[57] OCA 11-21.
[58] Id.
[59] Id.

service territory – as well as those enrolled in the BDP, who would still shoulder a significant additional fee.

The design of rate recovery for environmental mitigation should account for broad disparities and impacts that low income communities have experienced from exposures to environmental toxins. Low income communities are disproportionately impacted by PFAS contaminant. Low income communities and communities of color disproportionately live near PFAS contamination sites due to historical racial discrimination in housing and occupational sectors, and inequitable enforcement of environmental regulations that concentrates sources of PFAS pollution within close proximity of these communities.[60]

In 2019, the Center for Science Democracy observed that low income households and people of color had high prevalence of living within a five (5) mile radius of contaminated sites.[61] While PFAS contamination does not remain within five (5) miles of a site, households will face higher PFAS concentrations the closer they are located to the primary source - usually an industrial site, mining or other fossil fuel extraction, or a military base where firefighting foam is used with some frequency. Low income communities and communities of color therefore find themselves subject to disproportionate PFAS levels compared to other communities and suffer the costliest

[60] See The True Cost of PFAS and the Benefits of Acting Now (July 7, 2021), available at: https://pubs.acs.org/doi/pdf/10.1021/acs.est.1c03565

[61] Joint Subcommittee on Environment, Innovation, and Public Health, Per- and Polyfluoroalkyl Substances Strategy Team of the National Science and Technology Council, Per- And Polyfluoroalkyl Substances (PFAS) Report, at p. 39, available at: https://www.whitehouse.gov/wp-content/uploads/2023/03/OSTP-March-2023-PFAS-Report.pdf. Jha G, Kankarla V, McLennon E, Pal S, Sihi D, Dari B, Diaz D, Nocco M., Per- and Polyfluoroalkyl Substances (PFAS) in Integrated Crop-Livestock Systems: Environmental Exposure and Human Health Risks, Int J Environ Res Public Health (2021 Nov 28),18(23):12550. doi: 10.3390/ijerph182312550. PMID: 34886275; PMCID: PMC8657007, available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8657007/#B154-ijerph-18-12550; Harvard T.H. Chan School of Public Health, Communities of color disproportionately exposed to PFAS pollution in drinking water, (May 15, 2023), available at: https://www.hsph.harvard.edu/news/press-releases/communities-of-color-disproportionately-exposed-to-pfas-pollution-in-drinking-water/.

health consequences as result of these contaminants. They should not, at the same time, shoulder disproportionate and/or unaffordable financial burden for remediation through their water and wastewater bills. As discussed throughout, PAWC's low income customers and their households already face disproportionately high water/wastewater burdens. On top of this existing unaffordability, PAWC proposes to raise base rates and require these households to devote additional funds through its proposed ECIC. PAWC's low income customers should not have to make the untenable choice between accessing safe drinking water and being able to afford basic water/wastewater services. If the ECIC is approved, it would be the sanctioned equivalent of "adding insult to injury." Instead, it is imperative that low income customers who have already been most impacted by PFAS contamination are not further negatively impacted.

Q: What is your recommendation related to the proposed ECIC?

A: Counsel for CAUSE-PA has advised me that there are certain legal issues related to whether the proposed ECIC is ultimately proper under Commission regulation and policy that Counsel for CAUSE-PA reserves for briefing.

Based on the concerns outlined above, I recommend that the ECIC is rejected in its entirety.

Ultimately, in order to holistically alleviate PFAS contamination and its significant impacts on the health and wellbeing of communities, I believe the responsibility for PFAS mitigation should rest with the source – chemical manufacturers; paint, paper, plastics, electrical components, textiles, leather tanning, metal finishing, electroplating companies; and any other designated site that discharges PFAS.[62] Residential customers – especially low income customers – already bear

[62] Environmental Health News, available at: https://www.ehn.org/what-are-pfas-2656619391/what-can-you-do-to-avoid-pfas, describes industries listed in the proposed Clean Water Standards for PFAS Act.

the harsh consequences of PFAS contamination caused by these commercial and industrial uses, and it is inequitable, unjust, and unreasonable to shift the financial burden of PFAS mitigation and compliance to residential customers.

If PAWC is permitted to implement an ECIC, I recommend that BDP participants are exempt from ECIC charges. As discussed, low income customers and their communities have suffered disproportionate environmental and health impacts as a result of PFAS contamination, and other environmental inequities. Low income households should not be penalized again through imposition of an ECIC that further exacerbates unaffordability of their basic water/wastewater services at both present and proposed rates.

IV. LOW INCOME CONSUMERS IN PAWC SERVICE TERRITORY

Q: How many low income customers reside in PAWC's service territory?

A: That is a difficult question to answer with specificity, especially in light of the last several years during which the pandemic and related financial pressures – including rapid inflation in the cost of basic goods and services – not only fell disproportionately on low income families and other uniquely vulnerable households, but also negatively affected working families on the margin. Nevertheless, there are a number of metrics to assess poverty levels in PAWC's service territory and, in turn, the likely impact of PAWC's proposed rate increase. Based on these metrics, there are likely well over 100,000 low income households that receive water and wastewater services from PAWC.

Pennsylvania's large public utilities track and classify their low income customer populations in two ways – estimated low income customers and confirmed low income.[63] A household must have income at or below 150% of the federal poverty level (FPL) to be considered low income.[64] PAWC defines confirmed low income customers to mean a customer for which the Company has received income information indicating that the customer has an annual income at or below 150% FPL.[65] PAWC identifies confirmed low income customers through (1) weekly reports of BDP enrollment; (2) LIHWAP grant remittance lists (though the program has been closed to new applicants since August 2023, with no certain pathway to reopen[66]); (3) its Ability to Pay (ATP) process[67]; and (4) through information provided to the Commission related to informal complaints and Commission-issued payment arrangement requests.[68] As of December 2023 (the most recent data provided), PAWC indicates that it has 64,803 confirmed low income customers.[69]

When asked through discovery to identify its "estimated low income customer count," PAWC points to analysis of its expert witness, Charles B. Rea, estimating the number of customers served by household income in PAWC's service territory, as provided in Exhibits CBR-1 and CBR-2.[70] While it does appear that a portion of the CBR-1 (water) calculates customers in owned and rented units under 150% as 109,463 and CBR-2 (wastewater) calculates customers in owned and rented units under 150% as 12,916 – for a total of 122,379 for water and wastewater customers,

[63] See Pa. PUC, BCS, 2022 Report on Universal Service Programs & Collections Performance, at 3,4 (Sep. 2023).
[64] 52 Pa. Code § 54.72.
[65] CAUSE-PA I-4.
[66] Shapiro Administration Extends Deadline to Apply For Low-Income Household Water Assistance Program To Help Pennsylvanians Pay Utility Bills, available at: https://www.media.pa.gov/pages/dhs_details.aspx?newsid=946.
[67] CAUSE-PA I-4.
[68] CAUSE-PA I-5.
[69] CAUSE-PA I-3, Attachment.
[70] CAUSE-PA I-6.

it is unclear whether these figures were derived from U.S. census data, or from other sources. Previously, in its 2022 rate proceeding, PAWC estimated that it had approximately 100,000 low income water customers and 14,343 wastewater customers according to data from the U.S. Census Bureau.[71] PAWC has therefore indicated that, in the past year, its estimated number of low income customers increased by 8,036. While I do not question the conclusion of an increase in the past year, I am unable to rely on PAWC numbers. As the sources of the calculations provided in CBR-1 and CBR-2 are unclear, I will instead rely on 114,343 as the estimated count for low income customers. As discussed below, it appears that PAWC's estimated low income count requires further adjustment and clarification. However, the census-based estimates provided in the 2022 rate proceeding likely provide the most accurate available accounting of PAWC's low income customers.

As discussed in detail below, I recommend that PAWC improve its screening and tracking of its low income customers, including through updating its estimated low income customer count to more appropriately assess estimated needs across its service territory. However, regardless of the measure, there are a substantial number of low income customers in PAWC's service territory who need to be considered in any decision regarding just, reasonable, and affordable rates.

Q: How much income must a household earn each month to be considered low income?

A: The Commission considers a "low income" customer to be any customer whose income is at or below 150% of the federal poverty level (FPL).[72] The FPL is a measure of poverty based exclusively on the size of the household, but not the household composition (i.e., whether the

[71] 2022 PAWC Rate Proceeding, Pa. PUC v. PAWC, Docket Nos. R-2022-3031672, et. al, CAUSE-PA St.1 (Geller), p. 11, fn 19 (Direct Testimony Dated July 29, 2022).
[72] See 52 Pa. Code §§ 54.72, 62.2.

household consists of adults or children) or geographic location. The Table below provides a breakdown of the maximum income threshold for various income tiers under the Federal Poverty Guidelines:

Table 3: 2024 Annual Income by FPL and Household Size[73]

Household/ Family Size	50%	100%	150%	200%
1	7,530	15,060	22,590	30,120
2	10,220	20,440	30,660	40,880
3	12,910	25,820	38,730	51,640
4	15,600	31,200	46,800	62,400
5	18,290	36,580	54,870	73,160

As the above Table shows, a family of four with household income at or below 150% FPL has a maximum gross annual income of $46,800 ($3,900 per month) – while a family of four with income at or below 50% FPL has a maximum gross annual income of just $15,600 ($1,300 per month).[74] For comparison, a full time (40 hour/week) Pennsylvania worker making minimum wage ($7.25/hour) has a gross annual income of $15,080, assuming no time off. These income levels are much less than a household needs to meet their basic expenses in any of the counties in PAWC's expansive service territory.[75]

The Self Sufficiency Standard is a benchmark often used to assess how much income a household needs to live without assistance in Pennsylvania. This tool measures the income that a family must earn to meet their basic needs and consists of the combined cost of 6 basic needs –

[73] US Dept. of Health & Human Services, HHS Poverty Guidelines for 2024, available at: https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines.
[74] See US Dept. of Health & Human Services, HHS Poverty Guidelines for 2024, available at: https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines.
[75] Self Sufficiency Standard, http://www.selfsufficiencystandard.org/Pennsylvania.

housing, child care, food, health care, transportation, and taxes – without the help of public subsidies.[76] Unlike the federal poverty level, which does not change based on geographic location or family composition, the Self Sufficiency Standard accounts for the varied costs of these six basic needs in different geographical areas and for differently aged household members.[77] In 2021 (the last year of the datasets provided under the Self-Sufficiency Standard), the Self Sufficiency Standard for a family of four in Pennsylvania -- consisting of 2 adults, 1 school age child, and 1 preschooler – ranges across PAWC's service territory from a low of $52,666 in McKean County to a high of $84,976 in Chester County. [78]

PAWC's identified low income customers and H2O participants do not have income that is even close to either of these figures. The average annual household income for the Company's currently identified H2O participants is just $19,585.47,[79] while the average annual income of confirmed low income customers is only $9,247.20.[80]

Q: What is the income threshold for PAWC's residential customers to receive assistance?

A: PAWC's Help to Others (H2O) Bill Discount Program (BDP) is currently available to customers at or below 150% FPL, while its H2O hardship grants are available to customers at or below 200% FPL.[81]

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[76] See PathWays PA, Overlooked and Undercounted 2019 Brief: Struggling to Make Ends Meet in Pennsylvania, available at: https://pathwayspa.org/wp-content/uploads/2020/01/PA2019_OverlookedUndercounted_Web.pdf

[77] See PathWays PA, Overlooked and Undercounted, How the Great Recession Impacted Household Self-Sufficiency in Pennsylvania, available at: http://www.selfsufficiencystandard.org/sites/default/files/selfsuff/docs/PA2012.pdf.

[78] Average Self Sufficiency Standard of all counties served by Columbia. See Sufficiency Standard – PA, available at: https://selfsufficiencystandard.org/pennsylvania/.

[79] CAUSE-PA I-19.

[80] CAUSE-PA I-20.

[81] PAWC, "H2O Help to Others Program", available at https://www.amwater.com/paaw/customer-service-billing/Customer-Assistance-Programs/h2o-help-to-others-program.

V. ANALYSIS OF RATE AFFORDABILITY, LOW INCOME HOUSEHOLDS

Q: How is water and wastewater affordability measured?

A: The accepted metric used to determine the affordability of utility service is referred to as the household's utility bill burden - meaning the percentage of household income required to cover the cost of the bill.[82] In the context of water and wastewater affordability, the household utility bill burden is referred to as the household water and wastewater burden. While Pennsylvania has not adopted statewide water and wastewater burden standards, it is generally accepted that the combined cost for water and wastewater service should not exceed 4% of household income.[83] As I will explain in more detail below, PAWC's proposed rates exceed these levels of affordability for many customers, especially those at the lowest levels of income. It is therefore critical that PAWC take necessary steps to address this affordability gap. I will discuss recommended improvements to its low income programing later in my testimony.

Q: What are the current water and wastewater burdens for PAWC's low income customers?

A: Even at current rates, PAWC's lowest income customers are subject to excessive and unaffordable water and wastewater burdens. CAUSE-PA Exhibit 1, attached to my testimony, provides a snapshot of the applicable water and wastewater burdens for low income customers,

[82] Roger Colton, The Affordability of Water and Wastewater Service in Twelve U.S. Cities: A Social, Business and Environmental Concern, The Guardian, (May 2020), available at: https://www.theguardian.com/environment/2020/jun/23/full-report-read-in-depth-water-poverty-investigation.

[83] NRDC, Water Affordability Toolkit: Affordability and Assistance Programs, at 73, available at: https://www.nrdc.org/sites/default/files/water-affordability-toolkit-section-8.pdf; Roger Colton, The Affordability of Water and Wastewater Service in Twelve US Cities, The Guardian (May 2020), available at: https://www.theguardian.com/environment/2020/jun/23/full-report-read-in-depth-water-poverty-investigation; NAACP Legal Defense and Educational Fund, Inc., Water/Color: A Study of Race & The Water Affordability Crisis in America's Cities (2019), available at: https://www.naacpldf.org/wp-content/uploads/Water_Report_FULL_5_31_19_FINAL_OPT.pdf.

both at present and proposed rates in Water Rate Zone 1 and Wastewater Rate Zone 1. CAUSE-PA Exhibit 1 breaks down the relative water and wastewater burden for households at different income and usage levels. For example, at current rates in Rate Zone 1, a four-person household at 50% FPL using 4,000 gallons of water each month has a combined water and wastewater burden of 16%. If PAWC's rate increase proposal is approved, this same household will face a combined water and wastewater burden of 17%. Low income customers devote large portions of their incomes each month to afford basic water/wastewater services – leaving insufficient funds to pay for housing, energy, food, medicine, childcare, and other basic needs.

As discussed more fully below, these excessive water/wastewater burdens pose significant obstacles for low income families to afford their monthly bills and stay connected to essential and life-sustaining water and wastewater services in their homes – creating a cascade of consequences to the health, safety, and stability of Pennsylvania's economically vulnerable families.

Q: In addition to high water and wastewater burdens, is there other evidence that PAWC's low income customers already struggle to afford water and wastewater services at existing rates – even before any rate increase is approved?

A: Yes. In addition to facing demonstrably unaffordable water and wastewater burdens, PAWC's low income customers also carry a disproportionate amount of residential customer debt and are far more likely than general residential customers to have their service involuntarily terminated for nonpayment. These indicators demonstrate that PAWC's low income customers already struggle to afford water/wastewater services under existing rates. If PAWC's proposed rate increase is approved, low income consumers will likely experience even greater rates of payment trouble and involuntary termination, ultimately increasing the risk of consequences to the

health and safety of low income customers and the corresponding level of uncollectible expenses recovered from other ratepayers.

First, PAWC's confirmed low income customers have markedly higher rates of termination for nonpayment compared to residential customers as a whole:

Table 4: Involuntary Terminations for Nonpayment (Confirmed Low Income (CLI) v. Residential Customers) (2020-2023)[84]

	Res.	Res. Term.	Res. Term. Rate	CLI	CLI Term.	CLI Term. Rate.
2020	632,429	2,261	0.36%	62,888	1,304	2.07%
2021	637,269	20,426	3.21%	65,548	12,202	18.62%
2022	653,016	23,185	3.55%	69,495	14,562	20.95%
2023 (thru Nov.)	655,959	15,156	2.31%	71,352	9,658	13.54%

In 2023, the termination rate amongst confirmed low income customers was more than *six times higher* than the termination rate for residential customers as a whole. This disparity in termination rates for low income customers, as Table 4 illustrates, underscores the vital need to address rate affordability to ensure all Pennsylvanians can afford to maintain running water in their home.

PAWC's confirmed low income customers also carry substantially higher level of arrears compared to residential customers as a whole:

Table 5: Average Arrearage: Residential, Confirmed Low Income, H2O (2020-2023)[85]

	All Res.	CLI	H2O
Dec. 2020	$305.20	$572.27	$617.06
Dec. 2021	$256.46	$497.65	$553.02
Dec. 2022	$185.02	$316.89	$310.49
Nov. 2023	$186.94	$262.18	$252.29

[84] CAUSE-PA I-22, Attachment; CAUSE-PA I-24, Attachment; CAUSE-PA I-2, Attachment; CAUSE-PA I-3, Attachment.
[85] CAUSE-PA I-28, Attachment.

In November 2023 (the last reported month), confirmed low income customers carried an average arrearage level of $262.18, and H2O program participants carried an average arrearage level of $252.29. By comparison, residential customers as a whole (inclusive of low income customers) carried an average arrearage level of $186.94. These disproportionate arrearage levels further underscore the existing hardship that PAWC's confirmed low income and H2O customers face to afford basic water/wastewater services – even before any rate increase is approved.

I am advised by counsel that, on December 7, 2023, the Commission approved a Settlement related to PAWC's Petition for approval for an Arrearage Management Program (AMP).[86] I understand that CAUSE-PA was a party to the approved Settlement, which requires PAWC to implement an AMP for its low income customers. I am highly supportive of comprehensive AMPs, as they are an integral component to an effective low income assistance program design. Nevertheless, PAWC's approved AMP has yet to be implemented. Meanwhile, low income customers continue to accrue disproportionately high levels of arrears – without the availability of comprehensive debt management programming. If PAWC's rates increase even further, these debt levels will increase at even greater rates and may weaken the effectiveness of PAWC's recently-approved AMP before the program is even launched. It is essential that the underlying unaffordability of PAWC's rates is addressed in a comprehensive manner to prevent the unreasonable accrual of arrears, and to help low income customers to reasonably afford their monthly payments.

Q: Above, you explained that PAWC's low income customers face unaffordable water and wastewater burdens at <u>existing</u> rates. What would the applicable water and wastewater burdens be for low income customers at PAWC's <u>proposed</u> rates?

[86] Petition of Pennsylvania-American Water Company for Approval of an Arrearage Management Plan, <u>Order</u>, Docket No. P-2021-3028195 (Order, Dec. 7, 2023).

A: PAWC's proposed rate increases would exacerbate existing levels of unaffordability for PAWC's low income customers. The impact of the proposed increase on low income water and wastewater rates varies not only between rate zone and across income levels, but also according to customer usage. In addition to showing residential water and wastewater burdens at existing rates, CAUSE-PA Exhibit 1 also provides a snapshot of residential water and wastewater burdens at proposed rates for Rate Zone 1 Water and Rate Zone 1 Wastewater – broken down by income tier and at various usage levels, ranging from 2,000 to 5,000 gallons. As shown by CAUSE-PA Exhibit 1, low income customers will face exorbitant combined water/wastewater burdens at proposed rates. For example, at proposed rates, a family of three at 50% FPL using 4,000 gallons/month would have a combined water/wastewater burden of 21%, and a family of four at 50% FPL using 4,000 gallons/per month would have a combined water/wastewater burden of 17%.

The varied rate impacts by usage levels detailed in CAUSE-PA Exhibit 1 are particularly important in the context of examining rate impact for low income households, as low income households are more likely to live in aging housing stock with leaky pipes and fixtures, and are less able to afford repairs and efficiency upgrades to control usage levels.[87] Overall, the detailed water and wastewater burden charts in CAUSE-PA Exhibit 1 reveal the significant water/wastewater burdens that many low income customers will bear at proposed rates.

Q: How would PAWC's proposed rate increase impact vulnerable households?

A: As I noted above, the substantial rate increase proposed by PAWC is likely to cause increased terminations of economically vulnerable consumers or, in the alternative, will cause economically vulnerable households to go without other critical life necessities such as housing,

[87] See US Dep't of Health, Office of Disease Prevention & Health Promotion, Social Determinants of Health: Quality of Housing (2020), available at: https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/quality-housing.

energy, food, medicine, childcare, and other essential services to afford water and wastewater services to their home.

Water terminations pose a serious threat to public health and human dignity. Without access to running water, families are unable to cook, bathe, clean, or flush the toilet.[88] Access to water service is tied directly to the health and well-being of the household, and the habitability of the home.[89] Water terminations are akin to eviction from a home, as the home may be deemed uninhabitable or even condemned following termination of water service, forcing families to vacate with little to no notice.[90] Termination of service to the home can also jeopardize a parent's custody of their children, can result in the loss of housing assistance, and is often cited as a catalyst for homelessness.[91] Even before COVID-19 and recent historically high levels of inflation, approximately one-third of households experienced income volatility.[92] Analysis of material hardship for low and moderate income consumers experiencing income volatility found much higher rates of inability to afford bills, medical care, housing payments and food,[93] and a higher

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[88] Water/Color Report at 28.
[89] Id.
[90] Coty Montag, Water/Color: A Study of Race and the Water Affordability Crisis in America's Cities, NAACP Legal Defense and Educational Fund, Inc, May 2019, at p. 28, (hereinafter "Water/Color Report") available at: https://www.naacpldf.org/wp-content/uploads/Water_Report_FULL_5_31_19_FINAL_OPT.pdf
[91] See Joint State Government Commission, General Assembly of the Commonwealth of Pennsylvania, Homelessness in Pennsylvania: Causes, Impacts, and Solutions: A Task Force and Advisory Committee Report (2016), available at: http://jsg.legis.state.pa.us/resources/documents/ftp/documents/HR550%201%20page%20summary%204-6-2016.pdf.
[92] Daniel Schneider and Kristen Harknett, Income Volatility in the Service Sector: Contours, Causes and Consequences (July 2017) at p.3, available at: https://www.aspeninstitute.org/publications/income-volatility-service-sector-contours-causes-consequences/#:~:text=Income%20Volatility%20in%20the%20Service%20Sector%3A%20Contours%2C%20Causes%2C%20and%20Consequences,-July%207%2C%202017&text=This%20new%20EPIC%20research%20brief,outcomes%20for%20hourly%20retail%20workers; Board of Governors of the Federal Reserve, Report on the Economic Well-Being of U.S. Households in 2018 (May 2019) at p.2, (hereinafter "Income Volatility in the Service Sector"), available at: https://www.federalreserve.gov/consumerscommunities/files/2018-report-economic-well-being-us-households-201905.pdf.
[93] Stephen Roll, David S. Mitchell, Krista Holub et al., Responses to and Repercussions from Income Volatility in Low- and Moderate-Income Households: Results from a National Survey, Aspen Institute EPIC, Center for Social

likelihood to resort to expensive payday loans to pay for basic living expenses.[94] Even at PAWC's current rates, many families already must make difficult choices between paying for utility services and other basic necessities – raising rates for such consumers will make their ability to afford and/or obtain and retain such necessities more difficult.

Q: Are low income customers enrolled in PAWC's Bill Discount Program (BDP) protected from the financial impact of the proposed rate increase?

A: PAWC's BDP will reduce (though not eliminate) the financial impact of PAWC's proposed rate increases for BDP participants. Unlike a Percentage of Income Program, which ties rates directly to each participant's household income, PAWC's BDP is designed as a tiered rate discount program which provides an aggregated group of participants a percentage discount on rates. When rates increase, without a corresponding increase in the BDP discount, the resulting BDP charges necessarily increase. The effectiveness of PAWC's BDP at offsetting the impact of an approved rate increase is dependent on approval of robust enhancements to the structure and discounts provided under the BDP, and the ability of customers to enroll.

As it stands, PAWC's BDP enrollment remains very low – reaching just 25% of PAWC's estimated low income customers and 40% of PAWC's confirmed low income customers (those *already known* by the Company to be income eligible for BDP) as of November 2023. [95] Low income customers that are not enrolled in the BDP will shoulder the full, unmitigated financial burden of the rate increase – compounding existing high levels of rate unaffordability.

Development, Intuit Tax & Financial Center (Dec. 2-17) at pp 6-7, available at: https://www.aspeninstitute.org/publications/responses-repercussions-income-volatility-low-moderate-income-households-results-national-survey/.

[94] Income Volatility in the Service Sector at p. 9 (almost a quarter of consumers reporting week-to-week volatility report using payday lenders).

[95] CAUSE-PA I-3, Attachment. CAUSE-PA I-11, Attachment.

Q: What is your overarching conclusion about the impact of PAWC's proposed rate increase on low income water and wastewater customers?

A: PAWC's current rates are already unaffordable for its low income customers, especially for those at the lowest end of the poverty scale (at or below 50% FPL) and those with higher usage and/or larger family sizes. Increasing rates at the rapid pace proposed by PAWC will not only push rates further out of reach of customers who currently cannot afford service, it will also push service out of reach for many customers who already struggle to make ends meet.

VI. PAWC'S AFFORDABILITY ANALYSES

Q: Has PAWC conducted any analysis of the affordability of its rates for residential customers?

A: Yes. However, PAWC's analysis is flawed, especially regarding its low income customers. In his direct testimony, PAWC expert witness Charles Rea explained that PAWC conducted two types of affordability analyses for its water and wastewater services.[96] First, an Enterprise-Level analysis considered affordability of service at high level over a muti-year period.[97] This analysis was a historical comparison of average monthly bills of PAWC residential customers, based on household income.[98] The metric used in this analysis was called a Bill-to-Income (BTI) Ratio – defined as annual water bills divided by estimated annual income.[99] This analysis looked at average residential monthly bills for all customers over time, compared to the median household

[96] PAWC St. 10 at 5.
[97] Id.
[98] Id. at 6: 1-9.
[99] Id.

income (MHI) for residential customers.[100] The Enterprise-Level Analysis also allegedly examined customer bills, rates, and household income over time.[101]

In his direct testimony, Mr. Rea described the results of PAWC's Enterprise-Level Analysis. According to Mr. Rea, the BTI ratios for water service for PAWC have allegedly held steady from 2012 through 2023 between 0.8%-1.0% of MHI.[102] Mr. Rea similarly alleged that the monthly bills for PAWC wastewater services between 2012 and 2022 have held steady between 0.9% and 1.2% for MHI and rose to 1.55% in 2023.[103]

Second, PAWC's Community-Level analysis allegedly considered affordability at the individual customer level under current and proposed rates, and current economic conditions.[104] PAWC's Community-Level analysis allegedly considered a number of factors impacting the ability of a household to access "basic water service" at current and proposed rates.[105] Basic water service, as used in this analysis, is "a water usage level that reflects the level of water consumption for basic human services" – which PAWC sets at 40 gallons per household member per day.[106] Despite the assertion that their analysis is reliant on a metric that varies by household size, PAWC's analysis then goes on to apply a static usage threshold of 3,000 gallons/month or less..[107] If PAWC's analysis were utilizing a 40 gallon/household member threshold for basic service as claimed, usage would be closer to 5,000 (4,960) gallons/month for a family of 4.

According to Mr. Rea, 71% of PAWC residential water customers and 65% of PAWC residential wastewater customers can expect bills for basic water and wastewater service to be less

[100] Id.
[101] Id. at 6: 10-20.
[102] Id. at 7: 8-17.
[103] PAWC St. 10 at 9.
[104] Id. at 5, 11: 7-17, CBR-1; CBR-2.
[105] PAWC St. 10 at 12-13.
[106] Id. at 13: 12-14: 5.
[107] Id. at 14: 15-21.

than 4% of their household income, combined.[108] Approximately 176,900 (29%) of water customers and 38,400 (35%) of wastewater customers will face combined water and wastewater burdens exceeding 4%.[109] In other words, based on PAWC's own analysis, roughly one-third of its residential customers will receive rates that exceed widely accepted water and wastewater affordability standards.

Mr. Rea also provides the Affordability Index (the percent of customers for whom basic water service is expected to be less than 2% of annual household income) for customers by various income brackets.[110] Mr. Rea describes how the following percent of the lowest tiered households meet the affordability index threshold:

Table 6 (partially reproduced): PAWC Affordability Index[111]

	Water Affordability Index	**Wastewater Affordability Index**
$0k - $5k	0%	0%
$5k - $10k	0%	0%
$10k - $15k	0%	1%
$15k - $20k	0%	5%
$20k - $25k	0%	14%

As this Table shows, Mr. Rea's Affordability Index assessment reveals that the Affordability index for customers between $0-$10,000 household annual income is 0%. While the Affordability Index for wastewater for customers between $10,000-$25,000 household annual income is slightly higher, the water Affordability Index for these customers remains at 0%. As this assessment reveals, the affordability of PAWC's rates is extremely low for customers with the lowest incomes, who experience the most profound need.

[108] Id. at 16-17.
[109] Id. at 17: 1-6.
[110] Id. at 20: Table 1.
[111] Id.

As a whole, Mr. Rea concludes that (1) affordability of PAWC's water/wastewater service from 2012 through the forecast test period indicates that PAWC has managed its systems for long-term customer benefits; (2) PAWC's water/wastewater services has been – and is projected to continue to be – affordable for the majority of residential customers; and (3) there are groups of customers for whom affordability of service remains a challenge.[112]

Q: Do you have any concerns about this needs assessment?

A: Yes, very much so. I disagree strongly with Mr. Rea's methodology and conclusions related to the Enterprise-Level and Community-Level Analyses (collectively, affordability analyses).

First, Mr. Rea's affordability analyses rely heavily on the use of MHI, which relies on the median income of all households. MHI is not an appropriate standard for which to assess affordability for all customers. By definition, half of all households have income at or below the median. Low income families have significantly lower incomes than MHI. PAWC's reliance on MHI masks the extreme levels of unaffordability experienced by the lowest income households.

While I acknowledge that the Community-Level Analysis attempts to conduct an analysis of individualized water and wastewater burdens, I am concerned the metrics applied in PAWC's Affordability Index conceal the true depth and breadth of need amongst PAWC's low income customers. For example, PAWC's analysis indicates that 0% of water customers and 20% of wastewater customers with household income between $0-$25K meet PAWC's Affordability Index, but it does not quantify the number of households facing acute unaffordability or the level of unaffordability experienced by each household. These non-quantified metrics are key to assessing both the depth and breadth of unaffordability.

[112] PAWC St. 10 at 22: 8-19.

I note here that, even with PAWC's flawed Community-Level Analysis masking the true extent of PAWC's affordability gap, Mr. Rea concludes that roughly one-third of PAWC's customers will receive bills that exceed broadly accepted affordability standards. He inexplicably declares that this identified affordability gap is acceptable, and that PAWC's rates are affordable. I strongly disagree.

As discussed above and illustrated in CAUSE-PA Exhibit 1, the water and wastewater burden levels and the relative depth and breadth of unaffordability for PAWC's low income customers are excessive at both existing and proposed rates, particularly when different usage levels are factored into the analysis. Mr. Rea's conclusion that the majority of PAWC customers have and will continue to have affordable water/wastewater service improperly ignores the critical affordability challenges of PAWC's low income customers. It is neither just, reasonable, nor in the public interest to obscure the underlying affordability for PAWC's low income customers – as PAWC's affordability analyses appear to do. It is essential that the needs of low income customers for greatly improved affordability are reasonably and specifically considered and addressed.

Mr. Rea's definition of basic water service also fails to properly account for varied usage levels of PAWC's low income customers. As illustrated by the Tables below, the *average* usage rate for confirmed low income customers regularly exceeds the 3,000 gallon/mo. usage rate for "basic water service" in PAWC's affordability analyses:

Table 7: Mean Usage by Customer Segment - Water only[113]

Year-Month	All residential customers	Confirmed low income customers	H2O participants
Dec. 2020	3,507	4,036	3,861
Dec. 2021	3,493	3,991	3,835
Dec. 2022	3,385	3,911	3,889
Nov. 2023 (last reported date)	3,262	3,759	3,776

[113] CAUSE-PA I-30, Attachment.

Table 8: Mean Usage by Customer Segment - Wastewater only[114]

Year-Month	All residential customers	Confirmed low income customers	H2O participants
Dec. 2020	3,603	4,456	4,326
Dec. 2021	3,534	4,353	4,054
Dec. 2022	4,037	4,342	4,339
Nov. 2023 (last reported date)	3,163	3,823	3,702

Table 9: Mean Usage by Customer Segment - Combined[115]

Year-Month	All residential customers	Confirmed low income customers	H2O participants
Dec. 2020	3,442	4,000	3,977
Dec. 2021	3,534	4,077	4,201
Dec. 2022	3,344	3,948	4,070
Nov. 2023 (last reported date)	3,179	3,764	4,162

Even on an average basis, low income customer usage rates far exceed the 3,000 gallon usage rate PAWC utilizes in its analysis. In reality, many low income customers have far greater usage, either because they have a larger family or system inefficiencies. PAWC's definition of basic water service is improperly restrictive and not reflective of actual usage rates amongst residential customers. PAWC's definition of basic water services does not account for variations in household size and, in turn, consumption. PAWC's definition also fails to account for households with higher usage resulting from inefficiencies or leaks in their systems. This is particularly concerning for low income families who may not be able to afford repairs and upgrades to remediate these conditions, and stem higher usage levels. It is imperative that an affordability analysis of PAWC's customers account for these realities.

[114] Id.
[115] Id.

I also firmly contest Mr. Rea's proposition that PAWC's rates have remained consistently low over time. CAUSE-PA was a party to PAWC's rate proceedings in 2020 and 2022. During these proceedings, numerous experts (myself included) described in extensive detail how PAWC's rate proposals – and subsequent rate increases – have come in quick succession over the last several years. In 2020, PAWC was approved to increase rates by $70.5 million (inclusive of a $10.5 million rate EADIT credit).[116] In 2022, the Commission approved a rate increase of $138 million.[117] These rate increases have represented fast-paced surges in the costs of life-sustaining services, without any corresponding increase in incomes to accommodate these increases. Contrary to Mr. Rea's position, PAWC's rate unaffordability has increased both in depth and breadth in recent years, causing significant hardship for low income customers.

VII. PAWC LOW INCOME ASSISTANCE PROGRAMS

Q: Please summarize PAWC's current low income assistance programs.

A: PAWC offers customer assistance through its Help to Others (H2O) programs, which are administered by the Dollar Energy Fund (DEF).[118] Through its H2O programs, PAWC currently offers three forms of assistance to low income customers: (1) grant assistance of up to $500 per year for customers with temporary hardship, conditional on the availability of funds; (2) monthly bill discounts (through the Bill Discount Program – or BDP) for water and wastewater services; and (3) usage reduction assistance through the availability of water-saving devices and education available to BDP customers.[119] To qualify for a hardship grant, a customer's total household

[116] Pa. PUC v. PAWC, Opinion and Order, Pa. PUC v. PAWC, Docket Nos. R-2020-3019369, et al. (Opinion and Order, Feb. 25, 2021).
[117] Pa. PUC v. PAWC, Order, Docket Nos. R-2022-3031672, et al. (Order, Dec. 8, 2022). See also, Joint Statement of Chairman DeFrank and Commissioner Yanora (Dec. 21, 2023).
[118] CAUSE-PA I-7, Attachment.
[119] Id. OCA 11-18, E.

income must be at or below 200% FPL.[120] To qualify for the BDP, a customer must have income at or below 150% FPL.[121] PAWC's Petition to implement an Arrearage Management Plan (AMP) was approved by the Commission on December 7, 2023, and as a result, it is anticipated that PAWC will implement an AMP within 12 months of the date of the Commission's Order.[122]

A. H2O Bill Discount Program

Q: Is PAWC's BDP producing an affordable bill for program participants?

A: No. As currently structured, PAWC's BDP includes the following tiered discount structure for water and wastewater customers:

Table 10: Existing BDP Discounts[123]

Eligible Customers	Water Service Charge Discount	Water Volumetric Discount	Wastewater Total Bill Discount
0-50% FPL	80%	80%	80%
51-100% FPL	65%	50%	55%
101-150% FPL	40%	25%	30%

As illustrated in CAUSE-PA Exhibit 1, the existing BDP discount rates do not produce consistent levels of affordability – especially for BDP participants with the lowest income and the highest usage. Analysis provided by PAWC similarly shows that average bills for BDP customers continue to be high. For example, PAWC reports the following ranges for average bills for BDP

[120] CAUSE-PA I-7, Attachment.
[121] Id.
[122] Petition of Pennsylvania-American Water Company for Approval of an Arrearage Management Plan, Docket No. P-2021-3028195 (Further Amended AMP Settlement at ¶ 45; Order Dec. 7, 2023).
[123] PAWC St. 10 at 23: 9-10.

participants between October 2022 and November 2023, assuming usage between 4,000 and 5,000 gallons:

Table 11: Average BDP Bill Ranges, 4,000-5,000 gal./month (Oct. 2022-Nov. 2023)[124]

	Average BDP Bill Ranges
0-50% FPL	$29.45 to $74.96
51-100% FPL	$55.55 to $71.66
101-150%	$66.46 to $87.24
Unknown FPIG	$69.80 to $91.86

As Table 11 illustrates, average bills of BDP participants span a considerable range – and reached an averaged high of $91.86 between October 2022 and November 2023. These figures represent average monthly bills, so many H2O participants' monthly bills would have exceeded these average amounts. These ranges underscore that (1) many customers continue to receive unaffordable bills even while enrolled in the BDP; and (2) the affordability of BDP participants' bills varies greatly, even within FPL ranges.

As currently structured, the BDP is not providing affordable bills or precise levels of affordability for its participants. As discussed, the continued unaffordability of the BDP is particularly pronounced for higher usage customers. This is extremely problematic, as low income households often have higher usage as a result of plumbing and fixture leaks from living in older homes – yet most often lack the discretionary income to invest in repairs themselves and/or are unable to force their landlord to make such repairs.[125]

[124] CAUSE-PA II-12, Attachment.
[125] Water/Color Report at 28.

It is imperative that additional improvements are made so that these customers can achieve affordable water and wastewater burdens. Utility assistance programs are most successful at achieving programmatic goals (improved affordability and bill payment and reducing uncollectible expenses) when they are designed to deliver consistent and targeted levels of affordability across income and usage levels in tandem with meaningful arrearage management.[126]

Q: Is PAWC proposing any changes to its BDP?

A: Yes. The Company is proposing to amend its BDP to include a fourth tier of eligibility to the current BDP and expand the program to customers whose household incomes are between 150-200% FPL.[127] For water customers in this fourth tier, PAWC proposes a 30% discount on its fixed charge, and a 15% discount on the volumetric rate.[128] For wastewater customers in this expanded income tier, PAWC proposes to offer a discount of 20% on the total wastewater bill.[129] PAWC does not propose any changes to the discount tiers for existing income tiers.[130] Mr. Rea estimates that if this proposal were approved, approximately 51,252 residential water customers and 10,353 residential wastewater customers with income between 151-200% FPL would become eligible for the BDP.[131]

Q: Do you support PAWC's proposed BDP changes?

A: Yes and no. While I recognize the need amongst customers with household incomes between 150%-200% FPL, I am concerned that neither PAWC's current nor proposed BDP is

[126] See e.g., Water Research Foundation, Best Practices in Customer Assistance Programs, at 78-80, (2010), available at https://www.waterrf.org/research/projects/best-practices-customer-payment-assistance-programs; see also, American Water Works Association, Thinking Outside the Bill: A Utility Manager's Guide to Assisting Low income Water Customers, at 8 (2d ed. 2014), available at: https://www.awwa.org/Portals/0/AWWA/ETS/Resources/Technical%20Reports/ThinkingOutsidetheBill-2Ed.pdf?ver=2021-05-21-125045-420.
[127] PAWC St. 10 at 24.
[128] Id.
[129] Id.
[130] Id.
[131] Id. at 26.

adequately meeting the affordability needs of low income customers currently eligible for the program. PAWC's proposed rate increase will impact all customers, *including current BDP participants*, yet PAWC is not proposing to improve the affordability or accessibility of the program for existing program participants. Customers who fall lower on the poverty scale experience the most pronounced need and struggle most profoundly with unaffordability, both at current and proposed rates. As discussed above, even with BDP enrollment, BDP participants will be faced with unaffordable monthly bills – especially those customers with higher usage levels that correspond to larger family sizes and/or low quality housing stock. I submit that the BDP must be correctly structured to provide consistent levels of affordability for its currently eligible population and active participants. PAWC's BDP should adequately focus on and address current goals of affordability for its participants before expanding to an additional customer segment. Thus, my support of expansion of BDP eligibility to 200% FPL is conditioned on PAWC being required to first make improvements to the affordability and accessibility of its BDP for customers between 0-150% FPL, as outlined below.

Q: What further reforms do you recommend to the structure and discount levels of the BDP, and why?

A: As discussed above, PAWC's current discount levels for customers between 0-150% FPL do not provide adequate or equitable discounts levels, particularly for customers with higher usage levels. Additional improvements are necessary to ensure that BDP participants are receiving consistent and equitable levels of affordability.

In the context of past rate proceedings, I have recommended that PAWC implement a tiered percentage of income payment (PIP) structure – as have other experts for CAUSE-PA and OCA.[132]

[132] Pa. PUC v. PAWC, CAUSE-PA St. 1, Docket No. R-2022-3031672, at al (Direct Testimony Dated July 29, 2022). Pa. PUC v. PAWC, OCA St. 5, Docket No. R-2022-3031672, at al (July 29, 2022).

I stand by past analyses which determined that implementing a PIP structure would, in the long term, ensure that those with the lowest levels of FPL and/or with larger families are not paying a disproportionate level of their incomes for critical and life-sustaining water/wastewater services. This is particularly true as rates for basic water and wastewater services are likely to continue to rise in the short term, further increasing the exigency that PAWC's program structure deliver accessible, consistent, and equitable levels of affordability to economically vulnerable households. While I continue to support adoption of a PIP structure as the preferred method of targeting and achieving affordability for low income customers, I recognize there are current system constraints that complicate adoption of a PIP at this time. Thus, in the context of the present case, I recommend that PAWC adopt shorter-term revisions to the BDP discount levels. Nevertheless, I continue to believe that PAWC should ultimately transition to a PIP. Should PAWC undergo any systems upgrades, it should be required to ensure the upgrades will support implementation of a PIP structure in the future.

In the interim, prior to PAWC transition to a PIP or to expansion to 200% FPL eligibility, I recommend the following BDP structure and discount levels to better ensure the program produces affordable water/wastewater burdens and participants stay connected to services:

Table 12: Recommended BDP Levels and Discounts

	Water		Wastewater	
	Fixed Charge	**Volumetric Charge**	**Fixed Charge**	**Volumetric Charge**
Tier 1 (0-50% FPL)	90%	80%	85%	85%
Tier 2 (51-100% FPL)	75%	65%	73%	73%
Tier 3 (101-150% FPL)	60%	40%	55%	55%

Pursuant to this proposal, customers between 0%-150% would see marked improvements to affordability and reductions in water/wastewater burdens. Under PAWC's BDP proposal, a family of four at 150% FPL and using 40 gallons per person/day, or approximately 5,000

gallons/month (PAWC's estimated usage, discussed above), will see combined water/wastewater burdens of 5%. This burden level exceeds the 4% affordability burden standard discussed above. By comparison, the same BDP participant – with the same household size, usage, and FPL – will see a 3% combined water/wastewater burden under the above-described BDP proposal. CAUSE-PA Exhibit 1 provides additional information related to the resulting burdens under the proposed BDP structure I have recommended above.

At the proposed discount levels I have outlined above, low income customers will be able to realize more consistent levels of affordability, regardless of income level, household size, and usage levels.

I note that my recommendations within the context of this proceeding should not be read as preclusive of the need for longer term improvements, including transition to a PIP, to ensure that PAWC's BDP provides consistent affordability to its participants.

Q: Do you have any concerns about the accessibility of the BDP?

A: Yes. I am concerned that only a very small portion of PAWC customers are currently enrolled in the BDP – far fewer than those who PAWC has already identified in its system as income eligible for the program. Specifically, in November 2023 (the last reported period), PAWC reports that 28,844 customers were enrolled in the BDP, representing just 4.40% of total residential customers (28,844 out of 655,959 residential customers).[133] During that same period, PAWC reported having 71,352 confirmed low income customers identified in its system – or 10.88% of total residential customers.[134]

[133] CAUSE-PA I-2, Attachment; CAUSE-PA I-11, Attachment.
[134] CAUSE-PA I-2, Attachment; CAUSE-PA I-3, Attachment.

Table 13: BDP Enrollment v. Confirmed & Estimated Low Income Customers[135]

	CLI Customers	ELI Customers	BDP Participants	CLI % Enrollment	ELI % Enrollment
Dec. 2020	62,888	114,343	22,185	35%	19%
Dec. 2021	65,548	114,343	23,555	36%	21%
Dec. 2022	69,495	114,343	29,460	42%	26%
Nov. 2023	71,352	114,343	28,844	40%	25%

As the above Table shows, BDP enrollment remains low, even amongst customers who PAWC has confirmed to be low income. Indeed, roughly 60% of households *known* to be eligible for PAWC's BDP are not enrolled. Tens of thousands of other low income consumers, not previously identified by the Company, remain unenrolled. Based on PAWC's estimated low income customer count in its 2022 rate case of 114,343, PAWC's BDP reached only between 19-25% of its estimated eligible households since 2020. Critical improvements are needed to ensure the program is accessible to all eligible households.

Q: Do you have recommendations to improve accessibility of the BDP for PAWC's low income customers?

A: Yes. As discussed, PAWC's low rates of enrollment in the BDP evidence a need for more systematic solutions to ensure that eligible low income customers can enroll in the BDP.

First, as discussed above, it is unclear whether PAWC has updated its estimated low income customer count since its 2022 rate proceeding utilizing appropriate data from the U.S. Census Bureau.[136] An accurate count of estimated low income customers is essential to determining existing need in PAWC's service territory. I therefore recommend that PAWC be required to update its estimated low income customer count on an annual basis, and work with BCS to identify an appropriate method for updating this count based on U.S. Census data.

[135] CAUSE-PA I-3, Attachment. CAUSE-PA I-11, Attachment.
[136] CAUSE-PA I-6.

Second, I recommend that PAWC set target enrollment benchmarks for the BDP. I recommend enrollment targets set at 20% per year of PAWC's estimated low income customer counts until the Company reaches at least 75% enrollment of this estimated group.

Third, PAWC should be required to establish quantitative goals related to affirmative customer outreach for the purpose of enrolling low income customers in the BDP. This affirmative outreach should include telephone contacts, mailings, and forms of electronic communication (with customer consent). PAWC should also be required to track and report relevant data regarding its progress to its Customer Assistance Advisory Group – known as the CAAG – to help refine outreach efforts based on CAAG feedback. PAWC should in turn expand membership of its CAAG to include a broader array of community voices from all corners of PAWC's expansive service territory.

In addition, as detailed below, I will discuss several recommended enhancements to improve the accessibility of the H2O program.

B. Hardship Fund Analysis and Recommendations

Q: Is PAWC proposing any changes to its Hardship Fund in the context of this proceeding?

A: No. As currently structured, PAWC customers at or below 200% FPL may receive a Hardship Fund grant of up to $500 annually toward their water bill and $500 annually toward their wastewater bill.[137] PAWC's Hardship Fund is administered by Dollar Energy Fund (DEF).[138] Currently, PAWC contributes $750,000/annually to its Hardship Fund.[139] PAWC's Hardship Fund

[137] PAWC St. 1 at 12: 18-23.
[138] Id.
[139] PAWC St. 1 at 12: 18-23.

is funded through annual corporate donations (currently $625,000 for water and $125,000 for wastewater) as well as customer and employee donations.[140]

Pursuant to its acquisition proceeding of the BASA wastewater system, PAWC and other settling parties submitted a Joint Petition for Unanimous Settlement of All Issues on August 14, 20023 (hereinafter, BASA Settlement).[141] In the BASA Settlement, the Company agreed to increase shareholder donations to its Hardship Fund by $700,000 per year for five years, for a total of $3.5 million.[142] The BASA Settlement also provides that Hardship Fund eligibility will be increased from 200% to 250% FPL.[143] Counsel for CAUSE-PA has advised me that, subsequent to the filing of PAWC's current rate increase proposal, the BASA Settlement was approved by Commission Order.[144] While PAWC committed in the context of the approved Settlement in the last proceeding to increase its hardship funding on an ongoing basis by $150,000/annually,[145] there is no commitment that PAWC maintain this level of contributions, plus the increase from the BASA case, on an ongoing basis. PAWC does not propose any additional changes to its Hardship Fund, separate and apart from its obligations under the BASA Settlement.

Q: Do you have any concerns related to PAWC's Hardship Fund?

A: Yes. First, I am concerned about the low number of customers who have been awarded a grant through PAWC's Hardship Fund. The following number of customers received a Hardship Fund grant, by year and across PAWC's divisions: 1,065 in 2020; 2,016 in 2021; 1,441 in 2022;

[140] PAWC St. 9 at 13.
[141] PAWC St. 1 at 23: 6-13.
[142] Id. at 23: 6-13.
[143] Id.
[144] Id. See Application of Pennsylvania-American Water Company-Wastewater Section 1329 of the Pennsylvania Public Utility Code, 66 Pa. C.S.§ 1329, for the Acquisition of Butler Area Sewer Authority's Wastewater System Assets, Joint Petition for Settlement, Docket No. A-2022-3037047 (Joint Petition for Settlement filed Aug. 14, 2023, pp. 26-27).
[145] Pa. PUC v. PAWC, Order, Docket Nos. Docket Nos. R-2022-3031672, et al. (Order entered Dec. 8, 2022).

and 3,443 between January and November 2023 (the last period reported). [146] Despite the low number of customers awarded PAWC's Hardship Fund grants, the need for grant assistance for low income customers remains significant. The following Table compares the number of PAWC Hardship Fund grants issued, by year and across service types, compared to the termination rate for nonpayment for confirmed low income customers:

Table 14: Hardship Fund Grants issued v CLI Termination for Nonpayment, By Year

	Hardship Fund Grants[147]	**CLI Termination for Non-Payment[148]**
2020	1,065	1,304
2021	2,016	12,202
2022	1,441	14,562
2023 (Jan.-Nov.)	3,443	9,658

As shown in the above Table, a substantial number of confirmed low income customers have been terminated for nonpayment in recent years, compared to the number of Hardship Fund grants that have been issued – with the exception of 2020, which coincided with the Commission's moratorium on terminations as a result of the COVID-19 emergency.

Notably, the average arrearage amount held by Hardship Fund grant recipients regularly exceeds the maximum Hardship Fund grant limit of $500. For example, between January 2020 and November 2023, the average arrearage amount held by Hardship Fund grant recipients reached a high of approximately $1,216 in September 2021, and is – as of the most recent date of November 2023 – reported as $587.47.[149] As discussed, low income customers carry substantial levels of arrears that are disproportionate to the average arrears carried by residential customers as a whole.

[146] CAUSE-PA I-13, Attachment.
[147] Id.
[148] CAUSE-PA I-24, Attachment.
[149] CAUSE-PA II-6, Attachment.

As of November 2023, the average arrearage level of confirmed low income customers was $262.18 and the average arrearage level of H2O participants was $252.29—compared to the residential average arrearage level during this same period of $186.94.[150] By definition, a significant portion of low income customers in these segments will have arrearage levels exceeding these averages, which places these customers at risk of termination of life-sustaining water/wastewater services.

The consistent underspending of PAWC's Hardship Fund, coupled with the clear and substantial unmet need for grant assistance amongst PAWC's low income customers, underscores the need for PAWC to improve it accessibility and benefits provided under its Hardship Fund program.

While PAWC projects certain improvements to the funding and expansion of eligibility to its Hardship Fund, it appears that these commitments are in the context of its BASA Settlement. However, the BASA Settlement was predicated on the need for Hardship Fund improvements at current rates. PAWC has not committed to increasing its hardship funding in the context of the present case, separate and apart from its obligations under the BASA Settlement and to address the increased unaffordability that will result if PAWC is permitted to implement any rate increases.

Finally, I am concerned that PAWC's Hardship Fund continues to require an upfront payment requirement of $50.[151] Upfront payment requirements, imposed as a condition precedent to receipt of emergency assistance, pose insurmountable barriers to receiving Hardship Fund assistance for those customers facing the most acute financial distress. Customers unable to make payments for several months due to an acute financial hardship are essentially disqualified from

[150] CAUSE-PA I-28, Attachment.
[151] Pennsylvania American Water's H20 – Help to Others Program - Dollar Energy Fund, available at: https://www.dollarenergy.org/program/pennsylvania-american-water-h20-help-to-others-program/; CAUSE-PA II-7, Attachment.

receiving critical grant assistance – precisely when Hardship Fund grant assistance is most needed. In my experience working with low income families, most have already exhausted their resources, including obtaining support from family and friends, before applying for grant assistance programs. I have personally assisted clients facing similar up-front payment requirements, who have resorted to borrowing from predatory payday lenders to make them eligible to receive grant assistance to prevent termination – compounding financial strain.

Ultimately, up-front payment requirements are not a reasonable test of a customer's good faith, but instead pose a significant obstacle to assistance. Families experiencing an acute financial hardship should not be required to make an up-front financial payment to secure financial assistance.

Q: Do you have any recommendations related to PAWC's Hardship Fund?

A: Yes. In light of the underutilization of PAWC's Hardship Fund, coupled with the substantial need for Hardship Fund grants to prevent the loss of water and wastewater service, I recommend that PAWC be required to take several immediate steps to improve the accessibility and funding of its Hardship Fund.

First, I recommend the Company increase annual hardship funding by an additional $1 million, over existing funding levels. Any unspent funds should be rolled over and added to the budget for the following year. As discussed, the BASA Settlement was agreed to *before* PAWC's rate increase proposals at issue in the present proceeding and does not account for increased unaffordability that may result if PAWC is permitted to implement rate increases through the present proceeding. PAWC should be required to increase funding for its Hardship Fund to help offset increased unaffordability driven by its proposed rate increase irrespective of the BASA Settlement.

I also recommend that PAWC eliminate any upfront or "good faith" payment requirements for its Hardship Fund. PAWC should be required to work with its program administrator to update customer-facing materials to reflect this change in policy without delay. If a customer meets all required eligibility criteria for PAWC's Hardship Fund, they should be able to receive a Hardship Fund grant without the requirement of an upfront payment.

Finally, I recommend that PAWC increase the maximum amount of its Hardship Fund grant from $500 for water and wastewater, respectively. As discussed, the average arrearage held by Hardship Fund recipients far outpaced the maximum Hardship Fund grant – reaching a high of approximately $1,216 in September 2021, and is – as of the most recent date of November 2023 – reported as $587.47. [152] To better address the high levels of arrears carried by PAWC's low income customers, I recommend an increase of the maximum Hardship Fund grant to $600 for water and $600 for wastewater. PAWC indicates that it is currently working with DEF to develop IT enhancements to process multiple Hardship Fund grants per year, up to the maximum grant amount.[153] I therefore recommend that PAWC be required to allow income-qualified water and wastewater customers to receive multiple Hardship Fund grants per year, up to the maximum $600 for water and wastewater, respectively. This is similar to how the LIHEAP Crisis Grant has functioned in Pennsylvania for decades.

C. Consumer Education and Outreach, and Customer Screening

Q: Do you have any other concerns related to PAWC's low income assistance programs in the context of this testimony?

[152] CAUSE-PA II-6, Attachment.
[153] PAWC St. 1 at 30.

A: Yes. As discussed, I am concerned that PAWC's low income assistance programs remain woefully undersubscribed - reaching just a fraction of PAWC's low income customers. Again, as of November 2023, only approximately 25% of estimated low income customers and 40% of customers known to be income eligible for the BDP were actually enrolled in the BDP. [154] Further, as described above, between January and November 2023, while 9,658 confirmed low income customers were terminated for nonpayment, only 3,443 Hardship Fund grants were issued during that period. [155] I anticipate that the true level of need amongst PAWC's low income customers may be shown to be higher, based upon PAWC assessment of its estimated low income count consistent with the method utilized by the Bureau of Consumer Services, as discussed above. However, since the currently available customer data evidences wide discrepancies between need and actual assistance provided, additional systematic solutions are imperative to ensure that PAWC's low income customers can enroll in assistance programs.

I am similarly concerned that PAWC's low income customers are not being referred to the BDP and Hardship Fund in a timely manner to prevent the buildup of unmanageable arrears that lead to termination of services. Between November 2021 and October 2023, approximately 87% (11,912 out of 13,699) of BDP enrollees had unpaid arrears at the time of enrollment.[156] It does not appear that PAWC has systems in place to reasonably ensure that customers are being timely matched to available rate assistance through the BDP, and other H2O assistance programming, prior to the accrual of arrears. PAWC's policies, procedures, and training materials for its frontline customer service staff do not ensure that payment troubled customers are given the opportunity to enroll in the BDP and access hardship funding prior to being placed in potentially unaffordable

[154] CAUSE-PA I-3, Attachment. CAUSE-PA I-11, Attachment.
[155] CAUSE-PA I-13, Attachment.
[156] OCA 5-8, Attachment.

payment arrangements. This apparent deficiency inappropriately prevents low income customers from enrolling in available assistance programs *before* debts are accrued.

PAWC appears to have conducted certain consumer outreach and education efforts related to its low income assistance programs in recent years. PAWC expert witness Deborah A. Degillio described in her direct testimony how PAWC engages in such outreach and education through a variety of methods, including direct customer communications, Commission events, local community events, and certain DEF outreach.[157] Moreover, it appears that PAWC has targeted several specific communities identified by percentages of customer at or below 150% FPL throughout 2022 and 2023.[158] PAWC also reports on its efforts to use U.S. Census data to identify certain zip codes and districts which have high percentages of low income consumers, including consumers at/below 50% FPL, and to conduct targeted outreach campaigns to in these areas.[159]

While I acknowledge that PAWC appears on its face to have improved efforts to conduct outreach and engagement related to its low income assistance programs, I am concerned that PAWC's low income assistance programs nevertheless remain severely undersubscribed. The test of success must rest on measurable results. It is essential that additional systematic approaches are implemented so that eligible low income customers can learn about and ultimately enroll in assistance to combat unaffordability, both at existing and proposed rates. To address the continued low enrollment rates of PAWC's assistance programs, I therefore recommend that PAWC implement several overarching and systematic enhancements concerning its consumer outreach and education efforts related to its low income assistance programs.

[157] PAWC St. 9 at 14-16. See also CAUSE-PA II-1, Attachment.
[158] CAUSE-PA II-2.
[159] CAUSE-PA I-5.

Q: Do you have any recommendations related to the undersubscription of PAWC's low income assistance programs you outline above?

A: Yes. As an overarching matter, I recommend that the Commission require PAWC to develop and submit a comprehensive Universal Service Plan for periodic Commission review and approval. Currently, as a jurisdictional water/wastewater utility, PAWC is not required to submit periodic plans related to their low income assistance programming for Commission review and approval. This leaves a substantial gap for consumers and utility advocates, who must rely on PAWC's tariffs and the information that can be pieced together from websites and outreach materials, to determine important program rules, polices, and procedures for the Company's low income assistance programs. This is a customer service issue, and it both engenders consumer confusion and hampers consumers' ability to learn about and ultimately enroll in assistance. I therefore recommend that the Commission require PAWC to file a Universal Service Plan and an accompanying Petition for Commission review and approval within one year of the final Order in this case, and every five years thereafter, in line with the requirements of regulated EDCs and NGDCs in the Commonwealth.

I similarly recommend that PAWC be directed to develop a detailed consumer education and outreach plan (CEOP) for inclusion in the Universal Service Plan I recommend above. I note that this CEOP would be an outgrowth of PAWC's previous efforts related to LIHWAP outreach, where PAWC developed a consumer communication and outreach plan to help maximize LIHWAP for eligible customers.[160] The continued undersubscription of PAWC's low income assistance programs, as described, evidences a need for a more coordinated and comprehensive approach to consumer outreach and education related to PAWC's low income assistance programs.

[160] PAWC St. 1 at 35.

PAWC's CEOP should be developed with input from parties and stakeholders through PAWC's CAAG and should set forth how PAWC will specifically promote and coordinate each of its low income programs. This Plan should be tailored to the demographics of the Company's service territories; should include how PAWC will perform targeted outreach to specific at-need consumers and communities, and consumers who have historically faced pervasive unaffordability and barriers to accessing and maintaining utility services, including customers with Limited English Proficiency; should identify efforts to educate and enroll customers at or below 50% FPL in assistance programming; and should include measurable goals and associated metrics to assess those goals.

Additionally, I recommend that PAWC begin screening all new and moving customers for income level and eligibility for assistance at the time their service is established. Currently, PAWC obtains information for a residential customer through the Ability to Pay process. Through this process, income information is voluntarily provided by customers under certain circumstances, including (1) when a residential customer expresses an inability to pay their bill; (2) when a customer requests an extension of their current bill; (3) when a customer requests an installment plan on a high current bill; (4) when a customer requests an installment plan on a past due balance; (5) when a customer does not pay their past due balance over the phone at the end of a call addressing a balance; (6) when a customer has received a disconnection notice; and (7) when a customer requests information about hardship grants.[161] In addition, PAWC has identified low income customers by reviewing LIHWAP grant remittance lists, and enrolled accounts identified through this process in its BDP.[162]

[161] CAUSE-PA I-9.
[162] CAUSE-PA I-5.

While I am supportive of identification of low income customers through PAWC's Ability to Pay Process, I believe that given the broad disparities in access to service for low income families across PAWC's service territory, documented throughout, more systematic approaches must be taken to affirmatively identify households eligible for assistance through the BDP or other programs. I recommend that PAWC implement regular income screening for all new or moving customers, so that low income customers are more routinely identified so that they may enroll in available assistance programming. For existing customers, PAWC should routinely screen for income on any non-emergency calls, and/or should inquire whether there has been updates to any income information already noted on accounts. Customers should be able to opt out of disclosing their income if they choose, but should first be informed that they may be eligible for a lower rate, debt forgiveness, or energy efficiency measures. When establishing an account, all applicants for new service should be informed of the availability of low income assistance programming and requested to voluntarily self-disclose any changes to income information.

I recommend that PAWC develop call scripting and checklists for its Customer Service Representatives (CSRs) to assist in screening customers for eligibility in its low income assistance programs, in line with my above recommendation. Developing call scripting and checklists that require CSRs to routinely screen for eligibility for low income assistance programming will help to systematize PAWC's enrollment efforts for these programs. All customers identified as low income through this process should be referred for enrollment in PAWC's low income assistance programs through a warm referral process that does not require the customer to provide duplicative information.

As discussed, I am also concerned that low income customers are not directed to the BDP and Hardship Fund *prior to* being required to enter into payment arrangements. While payment

arrangements can be an important tool to manage accrued arrears, they can also serve to exacerbate unaffordability when the terms do not establish a reasonably affordable monthly bill. For low income customers, unaffordable payment arrangements can exacerbate payment trouble – causing them to fall further into utility debt. The BDP and H20 programs have been specifically developed in recognition of the limitations of the traditional payment arrangements. Low income customers should be directed *first* to low income assistance programming, prior to being placed in a payment arrangement.

I therefore recommend that PAWC be required to revise its policies, procedures, and training materials to reflect that customers who provide information related to payment troubles, inability to pay, or low income status should be assisted to apply for PAWC's H2O program *before* they are provided with the option to enroll in payment arrangements. Similarly, PAWC should be required to review its policies, procedures, and training materials to ensure that entrance into a payment arrangement is not required prior to qualifying for assistance through any PAWC assistance program. PAWC should not enter into any payment arrangements with a potential income-eligible customer unless and until they have received that customer's explicit confirmation that they are declining to enroll in the BDP, the AMP (once approved), and Hardship Fund program. Similarly, PAWC should ensure that DEF's policies, procedures, and training materials related to its administration of PAWC's assistance programming reflect these policy and procedural revisions.

D. Water Conservation and Line Repair/Replacement Assistance

Q: Please describe PAWC's current water efficiency assistance programming?

A: PAWC's H2O program offers certain water conservation assistance to H2O participants.[163] Specifically, the water conservation component of the H2O program includes water conservation kits containing basic, self-installed water-saving devices (low-flow showerhead, sink aerator, and toilet fill cycle diverter), leak detection kit, conservation tips and materials, and a water use calculator for qualifying customers.[164] Between, 2020 and 2023, PAWC reports 5,942 customers received water conservation assistance through this program component.[165]

Q: Does PAWC currently operate a low income line replacement and/or repair program?

A: Apart from its lead service line replacement program,[166] the Company currently does not provide service line and/or leak repair assistance to any customers.[167] PAWC also notes in response to discovery that the Company is currently in the process of developing an inventory of lead service lines, with the target to have all lead service lines replaced over the next 10 years.[168]

Q: Do you have any concerns about PAWC's water efficiency programming?

A: Yes. I am concerned that PAWC does not have a comprehensive conservation assistance program that includes line repairs and replacement assistance for its low income customers to help control high usage.

As shown the Tables 7-9 (Mean Usage by Customer Segment), *supra*, PAWC's low income customers have higher average usage levels compared to residential customers as a whole.

[163] PAWC St. 1 at 12.
[164] PAWC St. 1 at 13. FR IX.6 "Quality of Service", initial filing, p. 135.
[165] CAUSE-PA I-16, Attachment.
[166] CAUSE-PA II-25.
[167] CAUSE-PA I-15.
[168] CAUSE-PA II-25.

For example, in November 2023, PAWC reported that – for combined services – the mean usage level for confirmed low income customers was 3,764 gallons and the mean usage level for H2O participants was 4,162 gallons – compared to the mean usage level for residential customers generally of 3,179 gallons during this same period.[169]

The higher usage levels amongst low income customers compared to residential customers as a whole is likely due to a number of factors. First, low income customers with higher usage levels may enroll in the BDP at higher rates – or report their income to seek a payment arrangement – thus resulting in higher average usage rates for these groups.

Second, as I have referenced throughout, low income households are more likely to live in older homes with inadequate, damaged, or leaky plumbing/ fixtures – and may experience higher usage levels as a result. [170] These households are less likely to be able to afford to fix leaks, damaged plumbing or customer-side service lines, or purchase and install water efficiency devices.[171] The amount of water necessary to meet basic needs therefore varies significantly for each family – based not only on household composition and income, but also on the quality and condition of their home.

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[169] Table 7-9, *supra*.

[170] Gary Adamkiwicz et al., Moving Environmental Justice Indoors: Understanding Structural Influences on Residential Exposure Patterns in Low Income Communities, 101 Am. J. Public Health 238-245 (2016), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3222513/ (finding that low income households have a higher likelihood of inside water leaks, which in turn leads to increased mold and moisture in the home that can cause or complicate the health of family members); see also US Dep't of Health, Office of Disease Prevention & Health Promotion, Social Determinants of Health: Quality of Housing (2020), available at: https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/quality-housing.

[171] Gary Adamkiwicz et al., Moving Environmental Justice Indoors: Understanding Structural Influences on Residential Exposure Patterns in Low Income Communities, 101 Am. J. Public Health 238-245 (2016), available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3222513/ (finding that low income households have a higher likelihood of inside water leaks, which in turn leads to increased mold and moisture in the home that can cause or complicate the health of family members); see also US Dep't of Health, Office of Disease Prevention & Health Promotion, Social Determinants of Health: Quality of Housing (2020), available at: https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/quality-housing.

Low income customers most often lack any discretionary income, and cannot reasonably afford the high costs of necessary repairs – including to customer-side service lines. When faced with a high-cost repair, many low income households, unable to make repairs, see their bills increase and soon face involuntary termination. According to PAWC policies, customers with a damaged customer-side service line can access no cost repairs if the customer-side line is determined to be a lead service line. [172] However, if the customer-side service line does not contain lead, no such cost assistance is available – even though the leak (and the correspondingly high bills) remain. [173] Customers must either rely on their own funding sources, or third-party protection plans that come at additional monthly costs,[174] to afford the costs of needed repairs. This is particularly concerning as PAWC has a policy to terminate service to customers who do not make repairs to leaking customer-side service lines, or do not make arrangements with the Company for needed repairs, after notices are provided to customers. [175] Between 2020 and December 2023, 1,037 customers had their service disconnected as a result of damaged customer-side service line leaks, underscoring the need for more comprehensive efficiency and service line repair programs. [176]

I am also concerned that it does not appear that PAWC tracks water savings as a result of the provision of its water conservation kits to BDP customers.[177] While PAWC's outreach materials indicate that replacing a showerhead with a water-saving model can save 2,900 gallons/year, and a fill cycle diverter can save 0.5-1.5 gallons/flush, there is no indication whether

[172] CAUSE-PA II-26.
[173] Id.
[174] CAUSE-PA II-30.
[175] CAUSE-PA II-27; CAUSE-PA II-26.
[176] CAUSE-PA II-29.
[177] OCA 11-18.

provision of conservation kits results in these savings, or even if customers have installed these measures.[178]

Q: Do you have any recommendations related to the need for line repair and additional conservation assistance amongst PAWC's low income customers?

A: Yes. I recommend that PAWC develop and implement a comprehensive conservation and line repair/replacement program available all customers at or below 200% FPL. A comprehensive conservation and line repair/replacement assistance program will help to reduce inefficiencies in low income participants' homes and control H2O program costs. With the substantial rate increase that PAWC is proposing, and the preexisting unaffordability at existing rates, a comprehensive water efficiency and line repair program is essential to mitigate the costs of unaffordability both at existing and proposed rates for low income customers with higher usage levels.

I further recommend that PAWC be required to work with its CAAG to develop this comprehensive assistance program no later than 6 months after the final order in this proceeding. This program should include conservation measures, including provision of water conservation kits, but also include deeper savings measures – including line repair and replacement. Low income customers most often lack the discretionary income to participate in a rebate program, so the program should – at a minimum – be designed to deliver line repair and efficiency measures with no out-of-pocket or up-front costs – either for the measures or for installation. Services should be coordinated with energy reduction programs provided through the local electric and gas utilities to ensure coordinated program delivery. The proposed program should also include proposed annual reporting parameters of water savings achieved and any associated reduction in low income assistance program costs as a result of these programs. This program should be available to all low

[178] See OCA 11-18.

income customers with income at or below 200% FPL, but should target high usage low income customers enrolled in PAWC's BDP. This targeting will have the added benefit of helping to reduce the cost of PAWC's BDP.

Finally, PAWC should be required to coordinate its service delivery with other utilities in its service territories that operate energy efficiency and conservation programs, such as Low Income Usage Reduction Programs (LIURP) and Act 129 programs. Many utility conservation programs already provide a number of measures that increase water efficiency in customer's households, such as low flow faucets and shower heads.[179] Partnering with other energy efficiency programs will not only allow PAWC to leverage other utility conservation programs, it will also ensure that customers can obtain comprehensive conservation measures to reduce their overall water and energy usage.

E. Administration of PAWC's Low Income Assistance Programs

Q: Do you have any concerns about PAWC's administration and oversight of its low income assistance programs?

A: Yes. I am concerned that PAWC does not exercise appropriate levels of oversight over PAWC's low income assistance program administrator, DEF. It appears that PAWC has access to DEF's grant management system so that it can review information regarding fund balances, application processing, application status, and standard reports.[180] Additionally, information related to applications and grant activities is available through a standard set of reports, and PAWC has the authority to request additional reports.[181]

[179] See 52 Pa. Code § 58.14.
[180] CAUSE-PA II-19.
[181] CAUSE-PA II-19.

Despite these available tools, it appears PAWC does not have systems in place to regularly monitor program administration to ensure that standards are being met and customers can easily enroll in assistance programming. Indeed, it appears PAWC does not have any formal policies, assessments, or audits related to DEF's administration of PAWC's low income assistance programs.[182]

PAWC's failure to regularly assess administration of its low income assistance programs on a systematic and regular basis is a deficiency in oversight. Without systematic and regular assessments to ensure sound administration of PAWC's programs, it is impossible to accurately assess whether PAWC's low income assistance programs are administered in a manner that is compliant with the program rules and parameters developed by PAWC and required by Commission Orders – and that allows low income customers to enroll in assistance without facing unnecessarily restrictive barriers.

Similarly, while PAWC provides certain data related to DEF's call centers, including data related to hold times and hours/days of call center operations,[183] it is impossible to accurately assess the extent to which low income customers may be experiencing call-in related barriers without more regular monitoring. This is particularly concerning as DEF only assigns a small number of employees to PAWC's program – 2.5 full-time equivalents for PAWC's BDP, and 5 full-time equivalents for PAWC's Hardship Fund.[184] By comparison, as of December 2023, PAWC indicates that it has 64,803 confirmed low income customers.[185] DEF's low staffing numbers dedicated to PAWC's programs raise additional questions and concerns related to whether PAWC's low income customers are facing access barriers to program enrollment.

[182] CAUSE-PA II-19-20.
[183] CAUSE-PA II-21; CAUSE-PA II-23; OCA 8-10.
[184] CAUSE-PA II-23, Attachment.
[185] CAUSE-PA I-3, Attachment.

Finally, I note that PAWC does not have adequate tracking mechanisms in place to facilitate cross program referrals and enrollment. In response to discovery, DEF conducts cross-program referrals, whereby at the end of calls with DEF, customers are asked about their other utilities. If the customer indicates a utility DEF manages, they are transferred to a different person at DEF and permitted to use the same income verification documents for enrollment across programs – though they must complete a separate application for the other utility.[186] PAWC describes how its MyApp portal was launched in October 2022 for Hardship Fund grant applications, which allows customers to apply online for programs offered by partnering utility rather than by calling DEF or a Community Based Organization.[187] However, PAWC does not track cross-program referrals and enrollment.[188] Without regular and accurate tracking of cross-program enrollment, it is impossible to determine the success of cross program enrollment efforts – or the extent to which cross enrollments are actually occurring.

Q: Do you have any recommendations related to DEF's administration of PAWC's low income assistance programs?

A: Yes. PAWC should be required to implement systematic and regular processes for monitoring and oversight of DEF's administration of its low income assistance programming. First, PAWC should establish and implement clear metrics for auditing DEF-handled accounts. I recommend that these performance metrics are implemented within 6 months of the final order in this proceeding, and are developed through a special meeting of PAWC's CAAG, where CAAG members and all parties to this proceeding are given the opportunity to attend and provide feedback. These metrics should include, but certainly not be limited to, requirements that DEF

[186] CAUSE-PA II-14.
[187] CAUSE-PA II-16.
[188] CAUSE-PA II-15.

track and regularly report its efforts related to cross enrollments and referrals related to PAWC's assistance programs. Metric data and auditing reports should be reviewed on a monthly basis by PAWC to ensure that DEF is meeting or exceeding prescribed standards of performance and benchmarks for program enrollment and/or recertification. Regular training and remedial action should be taken to correct errors or assess issues as those issues are discovered.

I also recommend that the Commission require PAWC to conduct and submit periodic third-party evaluations to the Commission on its low income assistance programs in line with the 6-year program evaluation period required of Electric Distribution Companies (EDCs) and Natural Gas Distribution Companies (NGDCs),[189] with the first evaluation due a year from the date of the final order in this proceeding. PAWC should work with BCS to identify an appropriately qualified third party universal service program evaluator to conduct the evaluation. This evaluation should include – at minimum – analysis of data from the specific metrics implemented by PAWC for monitoring of DEF's program administration, relevant enrollment, collections and bill payment data, and all other relevant program metrics maintained by PAWC and DEF - together with participant surveys and other proven evaluative tools. PAWC I should be required to present the findings from these periodic evaluations to its CAAG and other interested parties to this proceeding.

VIII. POLICIES AND PROCEDURES: DSLPA AND WATER SERVICES ACT

Q: Please summarize tenants' rights to service under the Public Utility Code.

A: The Discontinuance of Services to Leased Premises Act ("DSLPA") sets forth the rights of tenants who receive services by a regulated utility for which service is listed in a landlord's

[189] 52 Pa. Code § 54.76 (Electric); 52 Pa. Code § 62.6 (Natural Gas).

name.[190] DSLPA protects a tenant's right to continued utility service where: (1) the utility terminates service to a leased premises due to nonpayment by the landlord ratepayer;[191] or, (2) the landlord ratepayer seeks to voluntarily disconnect service to a leased premises and tenants are still residing at the property.[192] Tenants have the right to enforce DSLPA rights through the Commission's informal and formal complaint process.[193] Thus, DSLPA ensures that tenants are notified of a pending termination and allows them to maintain service.

The provisions set forth in DSLPA are designed to protect tenants from both involuntary termination of service to an occupied leased premises as a result of landlord nonpayment and voluntary disconnection to an occupied leased premise without consent of the tenant.

First, DSLPA requires utilities to provide specific notices to landlord ratepayers and their tenants prior to termination of service for non-payment. Utilities must serve landlords with written notice no less than thirty-seven days prior to the termination of utility service to a leased premise.[194] This thirty-seven day landlord notice is meant to notify the property owner or manager of the pending termination, obtain contact information to be used to notify affected tenants, and inform landlords that they are subject to fines and penalties for failure to provide contact information for tenants.[195] The notice also must inform landlords of their right to formally dispute the debt, and that – if a dispute is filed – the utility will hold off on notifying tenants until the dispute is resolved.[196]

[190] 66 Pa. C.S. Ch. 15 Subch. B.
[191] 66 Pa. C.S. § 1527.
[192] 66 Pa. C.S. § 1523(b).
[193] 66 Pa. C.S. § 1523(a)(3).
[194] See 66 Pa. C.S. § 1523(a)(1); see also 66 Pa. C.S. § 1525 (both prescribing the means and content of the required landlord notice.).
[195] 66 Pa. C.S. § 1525.
[196] 66 Pa. C.S. § 1525(a)(5).

Additionally, notice to tenants under the DSLPA is required no less than seven days after the landlord notice, and at least thirty days before service to the premises is terminated.[197] Utilities are required to provide notice to any dwelling units that are "reasonably likely" to be tenant occupied.[198] The notice to tenants must be mailed or hand-delivered to tenants and conspicuously posted at the premises in common areas.[199]

The 30-day notice provided to affected tenants must inform them of their rights to continue service by paying an amount equal to the bill for the thirty-day period preceding the notice or the billing month preceding the notice.[200] A tenant may then continue to keep service on at the residence if they pay for each 30-day period of service thereafter.[201] The tenant may then deduct the amount of their payments from their rental payments,[202] and are protected from retribution by the landlord.[203] Under DSLPA, the utility must return any partial payments if service is subsequently terminated due to the tenant's inability to pay the full 30-day bill.[204] The notice must inform tenants that they may, but cannot be required to, apply for service in their own name without being held responsible for the landlord's debt.[205]

As discussed, DSLPA also provides protections to tenants if a landlord ratepayer elects to voluntarily discontinue service.[206] Before a utility may disconnect service at the request of a landlord ratepayer: (1) the landlord must submit a form bearing a notarized signature and swearing under penalty of law that the unit is unoccupied;[207] (2) the utility must obtain consent from all of

[197] 66 Pa. C.S. § 1523(a)(3).
[198] Id.
[199] 66 Pa. C.S. § 1526.
[200] 66 Pa. C.S. § 1523(b).
[201] 66 Pa. C.S. § 1527(b).
[202] 66 Pa. C.S. § 1529.
[203] 66 Pa. C.S. § 1531.
[204] 66 Pa. C.S. § 1527(c).
[205] 66 Pa. C.S. § 1527(a).
[206] 66 Pa. C.S. § 1523(b).
[207] 66 Pa. C.S. § 1523(b)(1).

the affected tenants;[208] or (3) the utility must obtain the names and addresses of the affected tenants and provide notice to each dwelling unit.[209] Under the third scenario, the utility must provide any affected tenants with the same rights they would have if their service were being terminated due to nonpayment by a landlord ratepayer as detailed above.[210]

DSLPA allows affected tenants to pay the ongoing charges and deduct that amount from their rent or other money owed to the landlord ratepayer,[211] and provides anti-retaliatory provisions meant to prevent the landlord ratepayer from acting against the affected tenants.[212] DSLPA provides that any waivers of a tenant's rights granted by the statute are void and unenforceable.[213]

Q: Do you have any concerns about PAWC's policies or practices regarding DSLPA?

A: Yes. I am concerned that PAWC does not have adequate policies and processes in place to monitor its compliance with DSLPA requirements, and to ensure appropriate service to tenants.

First, it is unclear whether PAWC is complying with notice requirements in the DSLPA because the Company does not properly track notices provided to tenants. As discussed, the DSLPA requires that specific notices be provided to landlord ratepayers and their tenants prior to termination of service for a landlord's non-payment, or where a landlord seeks to voluntarily discontinue services. In response to discovery, PAWC indicates that the Company does not track and cannot report on the number of tenant-occupied accounts that received a notice pursuant to DSLPA related to voluntary requests for disconnection or involuntary termination because of

[208] 66 Pa. C.S. § 1523(b)(2).
[209] 66 Pa. C.S. § 1523(b)(3).
[210] 66 Pa. C.S. § 1523(c).
[211] 66 Pa. C.S. § 1529.
[212] 66 Pa. C.S. § 1531.
[213] 66 Pa. C.S. § 1530.

nonpayment.[214] This is particularly concerning as PAWC reports a large number of accounts between 2020 and 2023 which were coded as tenant-occupied and were terminated for non-payment (1,011) or had services terminated at the request of a landlord or property owner (13,222).[215] Without accurate tracking, it is impossible to determine whether notices and attendant procedures required by the DSLPA were observed—and to what extent.

It is also unclear whether PAWC is properly coding tenant accounts because the Company does not track issues related to identification and coding of tenant accounts. In response to discovery, PAWC indicates that it has a process to update an account status from a non-tenant to tenant account.[216] However, PAWC does not track finer details related to coding of tenant accounts, and does not track accounts that were miscoded as non-tenant despite PAWC having received information that the account and/or property was tenant occupied.[217] Again, given the significant number of tenant-occupied accounts that had their service involuntarily terminated or disconnected at the request of a landlord/property owner in the last several years, it is concerning that PAWC does not have processes in place to determine whether tenant accounts are being accurately and precisely coded, and to remediate issues related to tenant-coding to ensure all accounts that are reasonably likely to be tenant occupied are receiving appropriate notices under DSLPA prior to termination. It is also impossible to determine whether PAWC is consistently and accurately coding tenant-occupied accounts, in a manner that comports with its stated policies and procedures and DSLPA requirements.

[214] CAUSE-PA III-13.
[215] CAUSE-PA III-13, Attachment.
[216] CAUSE-PA III-14.
[217] Id.

Further, it is unclear whether PAWC is properly managing partial payments made by tenants seeking to exert their rights under the DSLPA. When asked through discovery about partial payments by tenants seeking to exert their rights under the DSLPA, PAWC indicates that they are not aware of any such payments.[218] It is unclear based on this response whether no partial payments were made by the approximately 14,000 tenants terminated or voluntarily disconnected at the request of a landlord/property owner between 2020 and 2023 – or whether PAWC does not regularly track these partial payments. This is concerning because, without this data, it is impossible to determine whether certain tenants are attempting to submit partial payments to continue services pursuant to the DSLPA – and whether PAWC is returning partial payments if they do not form sufficient grounds for tenants continuing services.

Q: Do you have any recommendations related to PAWC's policies and procedures pursuant to the DSLPA?

A: Yes. Under DSLPA, PAWC has a duty to determine what service addresses are "reasonably likely" to be occupied by tenants and a corresponding duty to notify those tenants of their rights.[219] It is imperative that PAWC has adequate processes in place to monitor its compliance with requirements under the DSLPA.

To better monitor its compliance related to DSLPA requirements, I recommend that PAWC be required to implement tracking, and be able to report on the following metrics:

- What notices are provided to each tenant-occupied account prior to termination for nonpayment by a landlord/property owner, or voluntary disconnection at the request of a landlord/property owner.

[218] CAUSE-PA III-21.
[219] 66 Pa. C.S. §§ 1523(a)(3), 1524(a).

- When these notices are provided, and how the notices are provided.
- Whether – and how many – tenants exerted their rights to continued services pursuant to the DSLPA.
- The number of accounts improperly coded as non-tenant accounts, despite PAWC receiving information that the property is reasonably likely to be tenant occupied.
- Notices of termination/disconnection provided to any accounts improperly coded as non-tenant, and if the account was terminated for nonpayment or voluntarily disconnected while coded as a non-tenant account. I also recommend that PAWC be required to track what remediation is taken on affected accounts.
- Partial payments made by tenants seeking to continue services pursuant to the DSLPA. Specifically, PAWC should be required to track (1) the number of partial payments made by tenants seeking to continue services pursuant to the DSLPA; (2) the amounts of these partial payments; (3) whether these partial payments were sufficient so that tenants could maintain services pursuant to the DSLPA; and (4) if insufficient to maintain services, whether and to what extent these payments were returned to tenants.

I recommend that data from the additional tracking I have recommended above be reported to the CAAG on a quarterly basis and included in PAWC's next rate filing.

Q: Do you have concerns about PAWC's policies and procedures for water customers who are facing loss of service as a result of a request by a sewer authority?

A: Yes. PAWC provides water service to a number of households that receive wastewater from separate wastewater utilities, such as a local municipal authority. For these customers, I am concerned that PAWC's process for terminating water service to residential units at the request of a sewer authority does not adequately protect tenant occupants and customers.

Under Pennsylvania's Water Services Act,[220] a water utility is required to terminate service to a water customer at the request of the wastewater utility due to an overdue balance on the

[220] 53 P.S. § 3102.101 et seq.

wastewater bill.[221] However, prior to terminating water service at the request of a sewer utility, certain steps are required to protect customers and tenant occupants. Specifically, PAWC may not shut off service to the property until at least ten days after written notice has been mailed to the billing address and posted at the main entrance of the service address.[222]

Whether PAWC serves notices to properties prior to terminating water services at the request of a sewer utility depends on whether the account is coded as landlord ratepayer.[223] If a sewer utility (referred to by PAWC as a "non-Company" entity) requests to disconnect water services, the sewer utility is responsible for providing termination notices to all non-landlord/ratepayer customers for termination for nonpayment of wastewater services, pursuant to a Shut Off Agreement.[224] The sewer utility must confirm that they have complied with notice requirements set forth in the Water Service Act, including the requirements to mail and post written notices of termination to premises.[225] For landlord/ratepayer customers, PAWC sets forth a process under its Shut Off Agreement, whereby PAWC will post a 37-day notice and a 30-day notice on the municipality's letterhead for each customer for which shut-off of service is being requested.[226]

I am concerned that PAWC does not actually confirm that notices were properly provided before services are terminated pursuant to the Water Services Act. Section 501 of the Water Services Act (53 P.S. § 3102.501 et seq.) prohibits termination of water supply to premises prior to 10 days after written notice is posted at a main entrance and maintained to a person liable for payment of the rentals and charges, and the owner of the property or property manager. PAWC

[221] 53 P.S. § 3102.502(a)(1).
[222] 53 P.S. § 3102.502(b)(1).
[223] OCA 8-38, Attachment.
[224] Id.
[225] CAUSE-PA III-25, Attachment.
[226] OCA 8-38, Attachment, at p.2

has an affirmative duty to confirm that the law has been followed prior to terminating service. As the entity performing the actual termination of service, the Company should not be relying on the sewer utility to monitor their own compliance with the provisions of the Water Services Act. PAWC should require actual proof of notice before terminating service in these situations, including proof of mailing and proof of posting.

I am also concerned that it is unclear whether a tenant can assert their rights to continued service pursuant to the Water Services Act and the Utility Service Tenants Rights Act (USTRA) when faced with a PAWC water termination as a result of a request by a sewer authority. According to the Water Services Act, prior to discontinuing service in any residential building, PAWC must comply with USTRA.[227] USTRA is very similar to DSLPA, but applies to municipal corporations and municipal authorities rather than regulated utilities.[228] It applies to the same situations, provides for the same right to notice and right to continued service, and provides the same protections against voluntary disconnection and landlord retaliation.[229]

When asked for its process if informed that a property is tenant occupied and termination is due to nonpayment by landlord/account holder on a sewage account, PAWC indicates that if the municipality/municipal authority informs PAWC of improper coding, termination will be cancelled.[230] It is unclear whether tenants who face PAWC water termination as a result of a landlord's nonpayment to a sewage utility can inform PAWC that they are tenants and exercise their rights under USTRA to prevent shut-off by PAWC. Instead, under current PAWC policies, tenants may be required to rely on the municipal authority to contact PAWC on behalf of the

[227] See 53 P.S. § 502(c).
[228] 68 Pa. C.S. § 399.1, et seq.
[229] 68 Pa. C.S. § 399.3-7.
[230] CAUSE-PA III-23.

tenant. This creates unnecessary barriers to tenants asserting their rights to continued service and does not constitute acceptable compliance with these statutory mandates.

Q: Do you have any recommendations related to PAWC's policies and procedures pursuant to the Water Services Act?

A: Yes. As discussed, it is improper for PAWC to rely on sewer utilities to monitor their own compliance with the Water Service Act. I recommend that PAWC revise its policies and procedures regarding termination of service at the request of a sewer utility to ensure compliance under the Water Service Act. PAWC should be required to consult with its CAAG related to its recommended revisions, and to consider members' feedback in good faith. I similarly recommend that PAWC update any training materials and agreements to reflect updates in these policies and procedures.

I also recommend that PAWC undertake review of its policies and procedures for discontinuance of water service at the request of a sewer utility. As discussed, it is unclear whether tenants facing loss of PAWC water services because of landlord nonpayment to a sewer utility can assert their rights under the Water Services Act and USTRA. These tenants should not have to rely on the municipal authority to act on their behalf to maintain services. Instead, if a tenant informs PAWC that their residence is tenant occupied, and termination of PAWC water services is scheduled at the request of a sewer utility, PAWC should be required to immediately suspend the termination, and follow requirements set forth under the Water Services Act and USTRA. PAWC should be required to amend its polices, procedures, training materials, and forms and agreement used for municipal sewer utilities to reflect these important changes. PAWC should be required to consult with its CAAG related to its recommended revisions, and to consider members' feedback in good faith.

IX. SUMMARY OF RECOMMENDATIONS

Q: Please summarize the recommendations you have made throughout your direct testimony.

A: In my direct testimony, I have made several recommendations to address unaffordability of PAWC's rates for water/wastewater services at both present and proposed rates for low income customers. I recommend that the Commission order the following:

- Reject PAWC's proposed winter averaging methodology.
- Reject the proposed RDM in its entirety. If the Commission ultimately approves PAWC to implement an RDM, BDP participants should be exempt from RDM charges.
- Reject the proposed ECIC in its entirety. If PAWC is permitted to implement an ECIC, BDP participants should be exempt from ECIC charges.
- Implement changes to the BDP structure and discount levels, as I have outlined above.
- Update PAWC's estimated low income customer count on an annual basis, and work with BCS to identify an appropriate method for updating this count based on available U.S. Census data.
- Set target enrollment benchmarks for the BDP, so that enrollment targets are set at 20% per year of PAWC's estimated low income customer counts until the Company reaches at least 75% enrollment of this estimated group.
- Establish quantitative goals related to affirmative customer outreach for the purpose of enrolling low income customers in the BDP, as outlined above.
- Increase annual hardship funding by an additional $1 million over existing funding levels.
- Eliminate upfront payment requirements for PAWC's Hardship Fund.
- Increase of the maximum Hardship Fund grant to $600 for water and $600 for wastewater.
- Allow income-qualified water and wastewater customers to receive multiple Hardship Fund grants per year, up to the maximum $600 for water and wastewater, respectively.

- Develop and submit a comprehensive Universal Service Plan for periodic Commission review and approval, as outlined above.

- Develop and submit a detailed consumer education and outreach plan (CEOP) for inclusion in the Universal Service Plan.

- Screen all new and moving customers for income level and eligibility for assistance at the time their service is established.

- Develop call scripting and checklists for its Customer Service Representatives (CSRs) to assist in screening customers for eligibility in its low income assistance programs, in line with my above recommendations.

- Revise PAWC policies, procedures, and training materials to reflect that customers who provide information related to payment troubles, inability to pay, or low income status should be assisted to apply for PAWC's H2O program *before* they are provided with the option to enroll in payment arrangements, as outlined above.

- Develop and implement a comprehensive conservation and line repair/replacement program available to all customers at or below 200% FPL, as outlined above, no later than 6 months after the final order in this proceeding.

- Implement systematic and regular processes for monitoring and oversight of DEF's administration of its low income assistance programming.

    - Establish and implement clear metrics for auditing DEF-handled accounts, within 6 months of the final order in this proceeding, to be developed through a special meeting of PAWC's CAAG.

    - Conduct and submit periodic third-party program evaluations to the Commission on administration of its low income assistance programs in line with the 6-year evaluation period required of Electric Distribution Companies (EDCs) and Natural Gas Distribution Companies (NGDCs).

- Implement additional tracking and reporting related to tenants, including notices provided to tenants, and PAWC's policies and procedures related to DSLPA compliance, as outlined above. Recommended data should be reported to the CAAG on a quarterly basis and included in PAWC's next rate filing.

- Review and revise PAWC policies and procedures for customers facing termination of service at the request of a sewer utility to ensure compliance under the Water Service Act, in consultation with PAWC's CAAG.

Q: Does that conclude your direct testimony?

A: Yes; however, I reserve the right to submit rebuttal and surrebuttal testimony in response to testimony submitted by other parties in this proceeding.

CAUSE-PA St. 1, Geller

CAUSE-PA Exhibit 1 - a, b

Water/ Wastewater Burden Tables (Zone 1)

CAUSE-PA Exhibit 1 - a

Water - Current Full Tariff, 2024 Proposed Full Tariff, PAWC 2024 Proposed BDP, and CAUSE-PA Recommended BDP Discounts (Zone 1)

*income levels represent 50%, 100%, 150%, and 200% FPL, using 2024 federal poverty guidelines.

See HHS Poverty Guidelines for 2024, https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines

2 Person Household

	Income	Monthly Full Tariff CURRENT	Annual Full Tariff CURRENT	Burden - Full Tariff CURRENT	Monthly Full Tariff PROPOSED 2024	Annual Full Tariff PROPOSED 2024	Burden - Full Tariff PROPOSED 2024	Monthly BDP PROPOSED 2024	Annual BDP PROPOSED 2024	Burden - BDP PROPOSED 2024	Monthly -- CAUSE-PA Recommended BDP Discounts (2024)	Annual -- CAUSE-PA Recommended BDP Discounts (2024)	Burden - CAUSE-PA Recommended BDP Discounts (2024)
2000 Gal.													
50% FPL	$ 10,220	$ 49.72	$ 596.64	6%	$ 62.64	$ 751.68	7%	$ 12.53	$ 150.36	1%	$ 10.53	$ 126.36	1%
100% FPL	$ 20,440	$ 49.72	$ 596.64	3%	$ 62.64	$ 751.68	4%	$ 28.32	$ 339.84	2%	$ 19.92	$ 239.04	1%
150% FPL	$ 30,660	$ 49.72	$ 596.64	2%	$ 62.64	$ 751.68	2%	$ 43.98	$ 527.76	2%	$ 33.58	$ 402.96	1%
200% FPL	$ 40,880	$ 49.72	$ 596.64	1%	$ 62.64	$ 751.68	2%	$ 50.24	$ 602.88	1%			
3000 Gal.													
50% FPL	$ 10,220	$ 65.82	$ 789.84	8%	$ 83.96	$ 1,007.52	10%	$ 16.79	$ 201.48	2%	$ 14.79	$ 177.48	2%
100% FPL	$ 20,440	$ 65.82	$ 789.84	4%	$ 83.96	$ 1,007.52	5%	$ 38.98	$ 467.76	2%	$ 27.38	$ 328.56	2%
150% FPL	$ 30,660	$ 65.82	$ 789.84	3%	$ 83.96	$ 1,007.52	3%	$ 59.97	$ 719.64	2%	$ 46.37	$ 556.44	2%
200% FPL	$ 40,880	$ 65.82	$ 906.72	2%	$ 83.96	$ 1,007.52	2%	$ 68.37	$ 820.44	2%			
4000 Gal.													
50% FPL	$ 10,220	$ 81.93	$ 983.16	10%	$ 105.28	$ 1,263.36	12%	$ 21.06	$ 252.72	2%	$ 19.06	$ 228.72	2%
100% FPL	$ 20,440	$ 81.93	$ 983.16	5%	$ 105.28	$ 1,263.36	6%	$ 49.64	$ 595.68	3%	$ 34.85	$ 418.20	2%
150% FPL	$ 30,660	$ 81.93	$ 983.16	3%	$ 105.28	$ 1,263.36	4%	$ 75.96	$ 911.52	3%	$ 59.17	$ 710.04	2%
200% FPL	$ 40,880	$ 81.93	$ 1,145.40	3%	$ 105.28	$ 1,263.36	3%	$ 86.49	$ 1,037.88	3%			
5000 Gal.													
50% FPL	$ 10,220	$ 98.04	$ 1,176.48	12%	$ 126.60	$ 1,519.20	15%	$ 25.32	$ 303.84	3%	$ 23.32	$ 279.84	3%
100% FPL	$ 20,440	$ 98.04	$ 1,176.48	6%	$ 126.60	$ 1,519.20	7%	$ 60.30	$ 723.60	4%	$ 42.31	$ 507.72	2%
150% FPL	$ 30,660	$ 98.04	$ 1,176.48	4%	$ 126.60	$ 1,519.20	5%	$ 91.95	$ 1,103.40	4%	$ 50.64	$ 607.68	2%
200% FPL	$ 40,880	$ 98.04	$ 1,384.08	3%	$ 126.60	$ 1,519.20	4%	$ 104.61	$ 1,255.32	3%			

3 Person Household

	Income	Monthly Full Tariff CURRENT	Annual Full Tariff CURRENT	Burden - Full Tariff CURRENT	Monthly Full Tariff PROPOSED 2024	Annual Full Tariff PROPOSED 2024	Burden - Full Tariff PROPOSED 2024	Monthly BDP PROPOSED 2024	Annual BDP PROPOSED 2024	Burden - BDP PROPOSED 2024	Monthly -- CAUSE-PA Recommended BDP Discounts (2024)	Annual -- CAUSE-PA Recommended BDP Discounts (2024)	Burden - CAUSE-PA Recommended BDP Discounts (2024)
2000 Gal.													
50% FPL	$ 12,910	$ 49.72	$ 596.64	5%	$ 62.64	$ 751.68	6%	$ 12.53	$ 150.36	1%	$ 10.53	$ 126.36	1%
100% FPL	$ 25,820	$ 49.72	$ 596.64	2%	$ 62.64	$ 751.68	3%	$ 28.32	$ 339.84	1%	$ 19.92	$ 239.04	1%
150% FPL	$ 38,730	$ 49.72	$ 596.64	2%	$ 62.64	$ 751.68	2%	$ 43.98	$ 527.76	1%	$ 33.58	$ 402.96	1%
200% FPL	$ 51,640	$ 49.72	$ 596.64	1%	$ 62.64	$ 751.68	1%	$ 50.24	$ 602.88	1%			
3000 Gal.													
50% FPL	$ 12,910	$ 65.82	$ 789.84	6%	$ 83.96	$ 1,007.52	8%	$ 16.79	$ 201.48	2%	$ 14.79	$ 177.48	1%
100% FPL	$ 25,820	$ 65.82	$ 789.84	3%	$ 83.96	$ 1,007.52	4%	$ 38.98	$ 467.76	2%	$ 27.38	$ 328.56	1%
150% FPL	$ 38,730	$ 65.82	$ 789.84	2%	$ 83.96	$ 1,007.52	3%	$ 59.97	$ 719.64	2%	$ 46.37	$ 556.44	1%
200% FPL	$ 51,640	$ 65.82	$ 789.84	2%	$ 83.96	$ 1,007.52	2%	$ 68.37	$ 820.44	2%			
4000 Gal.													
50% FPL	$ 12,910	$ 81.93	$ 983.16	8%	$ 105.28	$ 1,263.36	10%	$ 21.06	$ 252.72	2%	$ 19.06	$ 228.72	2%
100% FPL	$ 25,820	$ 81.93	$ 983.16	4%	$ 105.28	$ 1,263.36	5%	$ 49.64	$ 595.68	2%	$ 34.85	$ 418.20	2%
150% FPL	$ 38,730	$ 81.93	$ 983.16	3%	$ 105.28	$ 1,263.36	3%	$ 75.96	$ 911.52	2%	$ 59.17	$ 710.04	2%
200% FPL	$ 51,640	$ 81.93	$ 983.16	2%	$ 105.28	$ 1,263.36	2%	$ 86.49	$ 1,037.88	2%			
5000 Gal.													
50% FPL	$ 12,910	$ 98.04	$ 1,176.48	9%	$ 126.60	$ 1,519.20	12%	$ 25.32	$ 303.84	2%	$ 23.32	$ 279.84	2%
100% FPL	$ 25,820	$ 98.04	$ 1,176.48	5%	$ 126.60	$ 1,519.20	6%	$ 60.30	$ 723.60	3%	$ 42.31	$ 507.72	2%
150% FPL	$ 38,730	$ 98.04	$ 1,176.48	3%	$ 126.60	$ 1,519.20	4%	$ 91.95	$ 1,103.40	3%	$ 50.64	$ 607.68	2%
200% FPL	$ 51,640	$ 98.04	$ 1,176.48	2%	$ 126.60	$ 1,519.20	3%	$ 104.61	$ 1,255.32	2%			

4 Person Household

	Income	Monthly Full Tariff CURRENT	Annual Full Tariff CURRENT	Burden - Full Tariff CURRENT	Monthly Full Tariff PROPOSED 2024	Annual Full Tariff PROPOSED 2024	Burden - Full Tariff PROPOSED 2024	Monthly BDP PROPOSED 2024	Annual BDP PROPOSED 2024	Burden - BDP PROPOSED 2024	Monthly -- CAUSE-PA Recommended BDP Discounts (2024)	Annual -- CAUSE-PA Recommended BDP Discounts (2024)	Burden - CAUSE-PA Recommended BDP Discounts (2024)
2000 Gal.													
50% FPL	$ 15,600	$ 49.72	$ 596.64	4%	$ 62.64	$ 751.68	5%	$ 12.53	$ 150.36	1%	$ 10.53	$ 126.36	1%
100% FPL	$ 31,200	$ 49.72	$ 596.64	2%	$ 62.64	$ 751.68	2%	$ 28.32	$ 339.84	1%	$ 19.92	$ 239.04	1%
150% FPL	$ 46,800	$ 49.72	$ 596.64	1%	$ 62.64	$ 751.68	2%	$ 43.98	$ 527.76	1%	$ 33.58	$ 402.96	1%
200% FPL	$ 62,400	$ 49.72	$ 596.64	1%	$ 62.64	$ 751.68	1%	$ 50.24	$ 602.88	1%			
3000 Gal.													
50% FPL	$ 15,600	$ 65.82	$ 789.84	5%	$ 83.96	$ 1,007.52	6%	$ 16.79	$ 201.48	1%	$ 14.79	$ 177.48	1%
100% FPL	$ 31,200	$ 65.82	$ 789.84	3%	$ 83.96	$ 1,007.52	3%	$ 38.98	$ 467.76	1%	$ 27.38	$ 328.56	1%
150% FPL	$ 46,800	$ 65.82	$ 789.84	2%	$ 83.96	$ 1,007.52	2%	$ 59.97	$ 719.64	2%	$ 46.37	$ 556.44	1%
200% FPL	$ 62,400	$ 65.82	$ 789.84	1%	$ 83.96	$ 1,007.52	2%	$ 68.37	$ 820.44	1%			
4000 Gal.													
50% FPL	$ 15,600	$ 81.93	$ 983.16	6%	$ 105.28	$ 1,263.36	8%	$ 21.06	$ 252.72	2%	$ 19.06	$ 228.72	1%
100% FPL	$ 31,200	$ 81.93	$ 983.16	3%	$ 105.28	$ 1,263.36	4%	$ 49.64	$ 595.68	2%	$ 34.85	$ 418.20	1%
150% FPL	$ 46,800	$ 81.93	$ 983.16	2%	$ 105.28	$ 1,263.36	3%	$ 75.96	$ 911.52	2%	$ 59.17	$ 710.04	2%
200% FPL	$ 62,400	$ 81.93	$ 983.16	2%	$ 105.28	$ 1,263.36	2%	$ 86.49	$ 1,037.88	2%			
5000 Gal.													
50% FPL	$ 15,600	$ 98.04	$ 1,176.48	8%	$ 126.60	$ 1,519.20	10%	$ 25.32	$ 303.84	2%	$ 23.32	$ 279.84	2%
100% FPL	$ 31,200	$ 98.04	$ 1,176.48	4%	$ 126.60	$ 1,519.20	5%	$ 60.30	$ 723.60	2%	$ 42.31	$ 507.72	2%
150% FPL	$ 46,800	$ 98.04	$ 1,176.48	3%	$ 126.60	$ 1,519.20	3%	$ 91.95	$ 1,103.40	2%	$ 50.64	$ 607.68	1%
200% FPL	$ 62,400	$ 98.04	$ 1,176.48	2%	$ 126.60	$ 1,519.20	2%	$ 104.61	$ 1,255.32	2%			

CAUSE-PA Exhibit 1 - b

Wastewater - Current Full Tariff, 2024 Proposed Full Tariff, PAWC 2024 Proposed BDP, and CAUSE-PA Recommended BDP Discounts (Zone 1)

*income levels represent 50%, 100%, 150%, and 200% FPL, using 2024 federal poverty guidelines.

See HHS Poverty Guidelines for 2024, https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines

2 Person Household

	Income	Monthly Full Tariff CURRENT	Annual Full Tariff CURRENT	Burden - Full Tariff CURRENT	Monthly Full Tariff PROPOSED 2024	Annual Full Tariff PROPOSED 2024	Burden - Full Tariff PROPOSED 2024	Monthly BDP PROPOSED 2024	Annual BDP PROPOSED 2024	Burden - BDP PROPOSED 2024	Monthly -- CAUSE-PA Recommended BDP Discounts (2024)	Annual -- CAUSE-PA Recommended BDP Discounts (2024)	Burden - CAUSE-PA Recommended BDP Discounts (2024)
2000 Gal.													
50% FPL	$ 10,220	$ 71.80	$ 861.60	8%	$ 71.30	$ 855.60	8%	$ 14.26	$ 171.12	2%	$ 10.70	$ 128.40	1%
100% FPL	$ 20,440	$ 71.80	$ 861.60	4%	$ 71.30	$ 855.60	4%	$ 32.10	$ 385.20	2%	$ 19.25	$ 231.00	1%
150% FPL	$ 30,660	$ 71.80	$ 861.60	3%	$ 71.30	$ 855.60	3%	$ 49.91	$ 598.92	2%	$ 32.09	$ 385.08	1%
200% FPL	$ 40,880	$ 71.80	$ 861.60	2%	$ 71.30	$ 855.60	2%	$ 57.04	$ 684.48	2%			
3000 Gal.													
50% FPL	$ 10,220	$ 100.55	$ 1,206.60	12%	$ 96.95	$ 1,163.40	11%	$ 19.39	$ 232.68	2%	$ 14.52	$ 174.24	2%
100% FPL	$ 20,440	$ 100.55	$ 1,206.60	6%	$ 96.95	$ 1,163.40	6%	$ 43.68	$ 524.16	3%	$ 26.18	$ 314.16	2%
150% FPL	$ 30,660	$ 100.55	$ 1,206.60	4%	$ 96.95	$ 1,163.40	4%	$ 67.87	$ 814.44	3%	$ 43.63	$ 523.56	2%
200% FPL	$ 40,880	$ 100.55	$ 906.72	2%	$ 96.95	$ 1,163.40	3%	$ 77.56	$ 930.72	2%			
4000 Gal.													
50% FPL	$ 10,220	$ 129.30	$ 1,551.60	15%	$ 122.60	$ 1,471.20	14%	$ 24.41	$ 292.92	3%	$ 18.39	$ 220.68	2%
100% FPL	$ 20,440	$ 129.30	$ 1,551.60	8%	$ 122.60	$ 1,471.20	7%	$ 55.17	$ 662.04	3%	$ 33.10	$ 397.20	2%
150% FPL	$ 30,660	$ 129.30	$ 1,551.60	5%	$ 122.60	$ 1,471.20	5%	$ 85.82	$ 1,029.84	3%	$ 55.17	$ 662.04	2%
200% FPL	$ 40,880	$ 129.30	$ 1,145.40	3%	$ 122.60	$ 1,471.20	4%	$ 98.08	$ 1,176.96	3%			
5000 Gal.													
50% FPL	$ 10,220	$ 158.05	$ 1,896.60	19%	$ 148.25	$ 1,779.00	17%	$ 29.65	$ 355.80	3%	$ 22.24	$ 266.88	3%
100% FPL	$ 20,440	$ 158.05	$ 1,896.60	9%	$ 148.25	$ 1,779.00	9%	$ 66.71	$ 800.52	4%	$ 40.03	$ 480.36	2%
150% FPL	$ 30,660	$ 158.05	$ 1,896.60	6%	$ 148.25	$ 1,779.00	6%	$ 103.76	$ 1,245.12	4%	$ 66.71	$ 800.52	3%
200% FPL	$ 40,880	$ 158.05	$ 1,384.08	3%	$ 148.25	$ 1,779.00	4%	$ 118.60	$ 1,423.20	3%			

3 Person Household

	Income	Monthly Full Tariff CURRENT	Annual Full Tariff CURRENT	Burden - Full Tariff CURRENT	Monthly Full Tariff PROPOSED 2024	Annual Full Tariff PROPOSED 2024	Burden - Full Tariff PROPOSED 2024	Monthly BDP PROPOSED 2024	Annual BDP PROPOSED 2024	Burden - BDP PROPOSED 2024	Monthly -- CAUSE-PA Recommended BDP Discounts (2024)	Annual -- CAUSE-PA Recommended BDP Discounts (2024)	Burden - CAUSE-PA Recommended BDP Discounts (2024)
2000 Gal.													
50% FPL	$ 12,910	$ 71.80	$ 861.60	7%	$ 71.30	$ 855.60	7%	$ 14.26	$ 171.12	1%	$ 10.70	$ 128.40	1%
100% FPL	$ 25,820	$ 71.80	$ 861.60	3%	$ 71.30	$ 855.60	3%	$ 32.10	$ 385.20	1%	$ 19.25	$ 231.00	1%
150% FPL	$ 38,730	$ 71.80	$ 861.60	2%	$ 71.30	$ 855.60	2%	$ 49.91	$ 598.92	2%	$ 32.09	$ 385.08	1%
200% FPL	$ 51,640	$ 71.80	$ 861.60	2%	$ 71.30	$ 855.60	2%	$ 57.04	$ 684.48	1%			
3000 Gal.													
50% FPL	$ 12,910	$ 100.55	$ 1,206.60	9%	$ 96.95	$ 1,163.40	9%	$ 19.39	$ 232.68	2%	$ 14.52	$ 174.24	1%
100% FPL	$ 25,820	$ 100.55	$ 1,206.60	5%	$ 96.95	$ 1,163.40	5%	$ 43.68	$ 524.16	2%	$ 26.18	$ 314.16	1%
150% FPL	$ 38,730	$ 100.55	$ 1,206.60	3%	$ 96.95	$ 1,163.40	3%	$ 67.87	$ 814.44	2%	$ 43.63	$ 523.56	1%
200% FPL	$ 51,640	$ 100.55	$ 1,206.60	2%	$ 96.95	$ 1,163.40	2%	$ 77.56	$ 930.72	2%			
4000 Gal.													
50% FPL	$ 12,910	$ 129.30	$ 1,551.60	12%	$ 122.60	$ 1,471.20	11%	$ 24.41	$ 292.92	2%	$ 18.39	$ 220.68	2%
100% FPL	$ 25,820	$ 129.30	$ 1,551.60	6%	$ 122.60	$ 1,471.20	6%	$ 55.17	$ 662.04	3%	$ 33.10	$ 397.20	2%
150% FPL	$ 38,730	$ 129.30	$ 1,551.60	4%	$ 122.60	$ 1,471.20	4%	$ 85.82	$ 1,029.84	3%	$ 55.17	$ 662.04	2%
200% FPL	$ 51,640	$ 129.30	$ 1,551.60	3%	$ 122.60	$ 1,471.20	3%	$ 98.08	$ 1,176.96	2%			
5000 Gal.													
50% FPL	$ 12,910	$ 158.05	$ 1,896.60	15%	$ 148.25	$ 1,779.00	14%	$ 29.65	$ 355.80	3%	$ 22.24	$ 266.88	2%
100% FPL	$ 25,820	$ 158.05	$ 1,896.60	7%	$ 148.25	$ 1,779.00	7%	$ 66.71	$ 800.52	3%	$ 40.03	$ 480.36	2%
150% FPL	$ 38,730	$ 158.05	$ 1,896.60	5%	$ 148.25	$ 1,779.00	5%	$ 103.76	$ 1,245.12	3%	$ 66.71	$ 800.52	2%
200% FPL	$ 51,640	$ 158.05	$ 1,896.60	4%	$ 148.25	$ 1,779.00	3%	$ 118.60	$ 1,423.20	3%			

4 Person Household

	Income	Monthly Full Tariff CURRENT	Annual Full Tariff CURRENT	Burden - Full Tariff CURRENT	Monthly Full Tariff PROPOSED 2024	Annual Full Tariff PROPOSED 2024	Burden - Full Tariff PROPOSED 2024	Monthly BDP PROPOSED 2024	Annual BDP PROPOSED 2024	Burden - BDP PROPOSED 2024	Monthly -- CAUSE-PA Recommended BDP Discounts (2024)	Annual -- CAUSE-PA Recommended BDP Discounts (2024)	Burden - CAUSE-PA Recommended BDP Discounts (2024)
2000 Gal.													
50% FPL	$ 15,600	$ 71.80	$ 861.60	6%	$ 71.30	$ 855.60	5%	$ 14.26	$ 171.12	1%	$ 10.70	$ 128.40	1%
100% FPL	$ 31,200	$ 71.80	$ 861.60	3%	$ 71.30	$ 855.60	3%	$ 32.10	$ 385.20	1%	$ 19.25	$ 231.00	1%
150% FPL	$ 46,800	$ 71.80	$ 861.60	2%	$ 71.30	$ 855.60	2%	$ 49.91	$ 598.92	1%	$ 32.09	$ 385.08	1%
200% FPL	$ 62,400	$ 71.80	$ 861.60	1%	$ 71.30	$ 855.60	1%	$ 57.04	$ 684.48	1%			
3000 Gal.													
50% FPL	$ 15,600	$ 100.55	$ 1,206.60	8%	$ 96.95	$ 1,163.40	7%	$ 19.39	$ 232.68	1%	$ 14.52	$ 174.24	1%
100% FPL	$ 31,200	$ 100.55	$ 1,206.60	4%	$ 96.95	$ 1,163.40	4%	$ 43.68	$ 524.16	2%	$ 26.18	$ 314.16	1%
150% FPL	$ 46,800	$ 100.55	$ 1,206.60	3%	$ 96.95	$ 1,163.40	2%	$ 67.87	$ 814.44	2%	$ 43.63	$ 523.56	1%
200% FPL	$ 62,400	$ 100.55	$ 1,206.60	2%	$ 96.95	$ 1,163.40	2%	$ 77.56	$ 930.72	1%			
4000 Gal.													
50% FPL	$ 15,600	$ 129.30	$ 1,551.60	10%	$ 122.60	$ 1,471.20	9%	$ 24.41	$ 292.92	2%	$ 18.39	$ 220.68	1%
100% FPL	$ 31,200	$ 129.30	$ 1,551.60	5%	$ 122.60	$ 1,471.20	5%	$ 55.17	$ 662.04	2%	$ 33.10	$ 397.20	1%
150% FPL	$ 46,800	$ 129.30	$ 1,551.60	3%	$ 122.60	$ 1,471.20	3%	$ 85.82	$ 1,029.84	2%	$ 55.17	$ 662.04	1%
200% FPL	$ 62,400	$ 129.30	$ 1,551.60	2%	$ 122.60	$ 1,471.20	2%	$ 98.08	$ 1,176.96	2%			
5000 Gal.													
50% FPL	$ 15,600	$ 158.05	$ 1,896.60	12%	$ 148.25	$ 1,779.00	11%	$ 29.65	$ 355.80	2%	$ 22.24	$ 266.88	2%
100% FPL	$ 31,200	$ 158.05	$ 1,896.60	6%	$ 148.25	$ 1,779.00	6%	$ 66.71	$ 800.52	3%	$ 40.03	$ 480.36	2%
150% FPL	$ 46,800	$ 158.05	$ 1,896.60	4%	$ 148.25	$ 1,779.00	4%	$ 103.76	$ 1,245.12	3%	$ 66.71	$ 800.52	2%
200% FPL	$ 62,400	$ 158.05	$ 1,896.60	3%	$ 148.25	$ 1,779.00	3%	$ 118.60	$ 1,423.20	2%			

CAUSE-PA St. 1, Geller

Appendix A

Resume - Harry S. Geller, Esq.

RESUME OF HARRY S. GELLER

EDUCATIONAL BACKGROUND:
Harpur College, State University of New York at Binghamton, B.A. 1966
Washington College of Law, American University, J.D. 1969
New York University Law School, courses in Urban Affairs and Poverty Law, as part of Volunteers in Service to America (VISTA) Program 1969-1971

EMPLOYMENT:
1988 – 2015 Executive Director, Pennsylvania Utility Law Project (PULP), a project of the civil non-profit Pennsylvania Legal Aid Network. PULP is dedicated to providing technical support, information sharing, and representation to low-income individuals and organizations, assisting and advocating for the low income in utility and energy matters. Responsibilities include project oversight, case consultation, co-counseling, and participation on task forces, work groups and advisory panels, community education and training in utility and energy matters affecting the low income.

While at PULP, served in the following capacities:

- Chairman, Low-Income Home Energy Assistance Program (LIHEAP) Advisory Committee to the Secretary, Pennsylvania Department of Human Services
- Member, Pennsylvania Public Utility Commission, Consumer Advisory Council Coordinator, Pennsylvania Legal Services Utility/Energy Work Groups
- Member, Weatherization Policy Advisory Committee to the Department of Community and Economic Development
- Member, PECO Universal Service Advisory Committee and LIURP Subcommittee

1974-1987 Staff Attorney, Managing Attorney and ultimately, Executive Director of Legal Services, Incorporated (LSI), a civil legal services program serving Adams, Cumberland, Franklin and Fulton Counties. Through a restructuring with other legal services programs, LSI became part of what is now known as MidPenn Legal Services and Franklin County Legal Services.

1971-1972 Staff Attorney, New York City Legal Aid Society, Criminal Court and Supreme Court Branches, New York County.

1969-1971 Volunteer in Service to America (VISTA) assigned to the New York University Law School Project on Urban Affairs and Poverty Law.

BAR ADMISSIONS
New York State
Commonwealth of Pennsylvania
United States District Court, Middle District of Pennsylvania

Cases in which Harry S. Geller has participated as a witness before the Pennsylvania Public Utility Commission since July 1, 2015

- Pennsylvania Public Utility Commission v. Philadelphia Gas Works, R-2022-3034229, P- 2022-3034264
- Pennsylvania Public Utility Commission v. National Fuel Gas Distribution Corporation, R-2022-3035730
- Pennsylvania Public Utility Commission v. Columbia Gas of Pa., Docket No.
- R-2022-3031211
- Pennsylvania Public Utility Commission v. Pa. American Water Co., Docket Nos.
- R-2022-3031672 & -3031673
- Pennsylvania Public Utility Commission v. UGI Utilities, Inc. – Gas Division, R-2021- 3030218.
- Joint Petition of MetEd, Penelec, Penn Power, and West Penn Power for Approval of their Default Service Programs for the Period Commencing June 1, 2023 through May 31, 2027, Docket Nos. P-2021-3030012, -13, -14, -21
- Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc., Docket Nos. R-2021-3027385, R- 2021-3027386.
- Pennsylvania Public Utility Commission v. Pittsburgh Water and Sewer Authority, R-2021-3024773, R-2021-3024774, R-2021-3024779.
- Pennsylvania Public Utility Commission v. Duquesne Light Company, R-2021- 3024750.
- Pennsylvania Public Utility Commission v. PECO Energy – Electric Division, R-2021-3024601.
- Pennsylvania Public Utility Commission v. Columbia Gas of Pennsylvania, Inc., R-2021-3024296.
- Tenant Union Representative Network v. PECO Energy Company, C-2020-3021557
- Pennsylvania Public Utility Commission v. Philadelphia Gas Works, R-2020-3017206.
- Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program for the Period of June 1, 2021 through May 31 , 2025, Docket No. P-2020-3019356.
- Petition of PECO Energy Company for Approval of Its Default Service Program for the Period from June 1, 2021 through May 31, 2025, Docket No. P-2020-3019290.
- Petition of Duquesne Light Company For Approval of Default Service Plan For The Period June 1, 2021 Through May 31, 2025, Docket No. P-2020-3019522.
- Joint Application of Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company LLC and Peoples Gas Company LLC for all of the Authority and Necessary Certificates of Public Convenience to Approve a Change in Control of Peoples Natural Gas Company LLC, and Peoples Gas Company LLC by way of the Purchase of all of LDC Funding LLC's Membership Interests by Aqua America, Inc., Docket Nos. A-2018-3006061, A-2018-3006062, A-2018-3006063.
- Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc. et al. Docket Nos. R2018-3003558 et seq.

- Pennsylvania Public Utility Commission v. Duquesne Light Company, Docket No. R-2018-3000124.
- Pennsylvania Public Utility Commission v. PECO Energy Company- Electric Division, Docket No. R-2018-3000164.
- Joint Petition of MetEd, Penelec, Penn Power, and West Penn Power for Approval of their Default Service Programs for the period commencing June 1, 2019 through May 31, 2023, Docket Nos. P-2017-2637855, P-2017-2637857, P-2017-2637858; P-2017-2637866.
- Pennsylvania Public Utility Commission et al. v. Philadelphia Gas Works, Docket No. R-2017-2586783.
- PECO Energy Company's Pilot Plan for an Advance Payments Program and Petition for Temporary Waiver of Portions of the Commission's Regulations with Respect to that Plan, Docket No. P-2016-2573023.
- Petition of PECO Energy Company for Approval of a Default Service Program for the Period of June 1, 2017 through May 31, 2019, Docket No. P-2016-2534980.
- Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program and Procurement Plan for the Period of June 1, 2017 through May 31, 2021, Docket No. P-2016-2526627.
- Petition of Duquesne Light Company for Approval of a Default Service Program for the Period of June 1, 2017 through May 31, 2021, Docket No. P-2016-2543140.
- Pennsylvania Public Utility Commission et al. v. Columbia Gas of Pennsylvania, Inc., Docket No. R-2016-2529660.
- Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company,
- Pennsylvania Power Company, and West Penn Power Company for Approval of their Default Service Programs for the period commencing June 1, 2017 through May 31, 2019, Docket Nos. P-2015-2511333, P-2015-25113351, P-2015-2511355, P-2015-2511356.
- Petition of PPL Electric Utilities Corporation for Approval of its Energy Efficiency and Conservation Plan, Docket No. M-2015-2515642.
- Pa. PUC v. PGW, Docket No. R-2023-3037933.
- Pa. PUC v. PWSA, Docket Nos. R-2023-3039920; R-2023-3039921; R-2023-3039919

CAUSE-PA St. 1, Geller

Appendix B

Cited Discovery Responses

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-001

Responsible Witness: Charles Rea, Senior Director of Rates and Regulatory

Question:

How much of PAWC's proposed $203.9 million total proposed increase will be allocated to an increase in residential rates? Please disaggregate between water and wastewater divisions.

Response:

The Company's proposed residential increase is as follows:

Water	SSS	CSS	Brentwood	BASA	Total
$ 128,795,188	$ (1,784,057)	$ 172,192	$ 278,998	$ 3,476,676	$ 130,938,997

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-002

Responsible Witness: Charles Rea, Senior Director of Rates and Regulatory

Question:

From January 2018 to present, how many residential customers does/ did PAWC serve? Please disaggregate this data by service type (i.e. water only, wastewater only, combined), month, and year as of the last day of the month.

If this data is unavailable as of the last day of the month/ year, please provide this data, disaggregated as requested, and specify at which point in the month/year these customer counts were calculated.

Please provide this data in a live Excel spreadsheet.

Response:

Please see CAUSE-PA 01-002_Attachment for the count of residential customers from January 2020 through November 2023. As discussed with CAUSE-PA on December 13, 2023, the Company is limiting the time frame of the data requests back to January 2020.

Pennsylvania-American Water Company **CAUSE-PA 01-002_Attachment**
Docket Nos. R-2023-3043189 (Water) R-2023-3043190 (Wastewater)
CAUSE-PA 01-002 Residential Customer Count

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Water Only Customers												
2020	557,187	557,464	558,256	558,402	558,787	559,571	560,304	560,921	561,379	559,957	560,324	560,664
2021	561,073	561,321	561,728	562,164	560,756	560,973	561,042	561,109	561,160	561,186	561,143	561,347
2022	561,512	561,751	562,199	562,328	562,509	562,509	562,482	562,729	562,908	563,012	562,997	563,058
2023	563,392	563,688	564,013	564,037	564,344	564,530	564,658	564,919	565,098	565,668	565,676	
Wastewater Only Customers												
2020	12,215	12,182	12,365	12,243	12,199	12,280	12,266	12,304	12,343	12,372	12,395	12,384
2021	12,410	12,394	12,397	12,370	12,292	12,248	12,286	12,260	12,244	12,242	13,090	13,095
2022	13,043	13,031	13,052	13,071	13,036	25,294	26,788	26,687	26,583	27,134	27,083	27,020
2023	26,820	26,788	26,951	26,867	26,862	26,880	26,933	26,863	26,769	26,747	26,850	
Combined Water & Wastewater Customers												
2020	56,668	56,684	56,684	56,928	57,024	57,159	57,267	57,388	57,431	59,301	59,351	59,381
2021	59,404	59,469	59,508	59,566	60,789	60,752	60,756	60,815	60,808	60,808	62,800	62,827
2022	62,877	62,904	62,937	62,892	62,913	62,939	62,887	62,868	62,869	62,920	62,940	62,938
2023	63,046	63,100	63,153	63,148	63,172	63,174	63,208	63,289	63,284	63,374	63,433	

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-003

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

From January 2018 to present, how many confirmed low-income customers did PAWC serve? Please disaggregate this data by month and year, as of the last day of the month, and by the following Federal Poverty Level (FPL) ranges:

A. 0-50% FPL;
B. 51-100% FPL;
C. 101-150% FPL; and
D. 151-200% FPL.

If this data is unavailable as of the last day of the month/ year, please provide this data, disaggregated as requested, and specify at which point in the month/ year these customer counts were calculated.

Please provide this data in a live Excel spreadsheet.

Response:

As discussed with CAUSE-PA on December 13, 2023, the Company is limiting the time frame of the data requests back to January 2020. Please refer to CAUSE-PA 01-003_Attachment. The Company did not capture FPL ranges in the system prior to October 2022, and therefore, total confirmed low-income customer counts have been provided for the period January 2020 through September 2022. For part D, the Company does not define 151%-200% as confirmed low income.

Month	0-50% FPL	>50%, up to 100% FPL	>100%-150% FPL	>150 % - 200%FPL	Unknown FPL
202001	-	-	-	-	63334
202002	-	-	-	-	61496
202003	-	-	-	-	64199
202004	-	-	-	-	63512
202005	-	-	-	-	63340
202006	-	-	-	-	63380
202007	-	-	-	-	63268
202008	-	-	-	-	63089
202009	-	-	-	-	63390
202010	-	-	-	-	62770
202011	-	-	-	-	62393
202012	-	-	-	-	62888
202101	-	-	-	-	60909
202102	-	-	-	-	62720
202103	-	-	-	-	63258
202104	-	-	-	-	63946
202105	-	-	-	-	64666
202106	-	-	-	-	66138
202107	-	-	-	-	66157
202108	-	-	-	-	66408
202109	-	-	-	-	66250
202110	-	-	-	-	66500
202111	-	-	-	-	67217
202112	-	-	-	-	65548
202201	-	-	-	-	66833
202202	-	-	-	-	67654
202203	-	-	-	-	68094
202204	-	-	-	-	68705
202205	-	-	-	-	68525
202206	-	-	-	-	67917
202207	-	-	-	-	69043
202208	-	-	-	-	68970
202209	-	-	-	-	67821
202210	5167	7252	5520	617	50955
202211	5150	7198	5510	607	51064
202212	5154	7213	5525	609	50994
202301	4867	6790	5190	-	49168
202302	5218	7261	5586	-	51347
202303	5225	7285	5605	-	51386
202304	4996	6895	5277	-	49722
202305	5315	7323	5629	-	51975
202306	5164	7099	5440	-	51043
202307	5310	7257	5603	-	51918
202308	5392	7321	5672	-	53025
202309	5377	7272	5665	-	53034
202310	5336	7156	5605	-	52949
202311	5399	7179	5682	-	53092
202312	4655	6181	4766	-	49201

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-004

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

How does PAWC define the term "confirmed low income customer"? Please also indicate what customer segments are included in PAWC's designation of "confirmed low income customers."

Response:

The Company defines "confirmed low income customer" to mean a customer for which the Company has received income information indicating that the customer has an annual income at or below 150 percent of the Federal Poverty guidelines. The customer segments included in the designation of confirmed low income customers are the same as the tier levels in the tariff: 0-50%, 51%-100%, and 101%-150%.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-005

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Please indicate what steps PAWC has taken to identify low income customers as confirmed low income customers, and what information and/or documentation PAWC relied on to identify such customers.

Response:

PAWC identifies confirmed low income customers by examining weekly reports of customers who are enrolled in the Company's bill discount program. When these customers are enrolled into the discount program, their account is flagged in the Company's MyWater customer platform as low-income. Additionally, the Company reviews LIHWAP grantee remittance lists to identify customers who have been awarded a LIHWAP grant but are not enrolled in the company's H2O discount. The company enrolls these customers into the H2O discount program and as a result, these accounts are flagged as low-income in the Company's MyWater customer platform.

PAWC identifies confirmed low income customers by the income information customers provided to the Company through the Ability to Pay process, as well as through information provided to the Pennsylvania Public Utility Commission when an informal complaint is filed with the Bureau of Consumer Services or when a payment arrangement is requested through the Commission. Please refer to the Company's response to CAUSE-PA-I-9 for additional information.

Furthermore, consistent with the targeted low-income community outreach plan presented to the Customer Assistance Advisory Group during its February 22, 2022, and August 21, 2023 meetings, the Company analyzed U.S. Census Bureau household income data to evaluate which areas have the highest percentages of customers at or below 50% of FPIG. Through this evaluation, which was conducted by the Company's external affairs and customer advocacy teams in Q2 2023 (similar to the analysis conducted in 2022), the Company identified target zip codes and districts in which to further amplify its community outreach efforts in Q3 and Q4. These efforts included social media campaigns, direct mail, and in-person events working directly with local nonprofits, elected officials and other external stakeholders to promote all of the various assistance programs currently available to customers.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-006

Responsible Witness: Charles Rea, Senior Director of Rates and Regulatory

Question:

As of the most recent date available, how many estimated low income customers does PAWC serve? Please explain how PAWC arrived at these estimates, and provide a copy of any supporting documentation used to determine these estimates.

Response:

The number of customers served by levels of household income stated in terms of multiples of Federal Poverty Level are provided in the Summary tabs of PAWC Exhibit CBR-1 and Exhibit CBR-2.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-007

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Please describe all low income customer assistance programs offered by PAWC, and the eligibility criteria and enrollment procedures for each program or program component. Please also provide a copy of any internal or external policy, memorandum, training materials, outreach materials, or other documents describing the eligibility, benefits, and other terms and conditions for PAWC's low income customer assistance programs.

Response:

H2O Help to Others™ – Bill Discount Program (BDP)	
Eligibility Requirements	• Gross monthly income at or below 150% of the Federal Poverty Income Guidelines (FPIG) • Account holder must reside in the household
Benefits	• 20% to 60% discount on the monthly service fee and a 20% to 75% discount on the monthly volumetric water charges • 30% to 80% discount on the total wastewater charges
Program Rules	• No income certification or reverification
Primary Enrollment	• Call Dollar Energy Fund at 1-888-282-6816
Conservation and Education Kit	
Eligibility Requirements/Rules	• Enrollment in the Company's Bill Discount Program
Benefits	• Water saving devices and conservation education* * Kits include a WaterSense showerhead, water-saving faucet aerators, fill cycle diverters, and leak detection dye tablets. The kit also includes a pamphlet filled with money saving tips and information about water conservation.

Enrollment	• Bill Discount Program participants are called and offered a conservation kit and educational materials • When the customer affirms they want the kit, a kit is mailed out

H2O Help to Others™ – Hardship Grants	
Eligibility Requirements	• Residential • Single home or apartment • No "cooking only", commercial, industrial, or apartments with shared utility service • Maximum household income at or below 200% of the FPIG • Good faith payment of $50 in the previous 90 days • The name on the account must that of an adult currently living in the home
Benefits	• Grant of up to $500 for water. • Grant of up to $500 for wastewater.
Program Rules	• Each customer account is eligible for one grant award per year. • Income verification
Enrollment	• Visit a participating Community Based Organization (CBO) - to locate a CBO near you visit DollarEnergy.org and select Agency Finder or call DEF at 1-888-282-6816 • Apply online using the MyApp customer portal which is accessible through Dollar Energy's Website: https://www.dollarenergy.org/myapp/ • If unable to visit a CBO and cannot access the online application, call Dollar Energy Fund at 1-888-282-6816 to apply

Refer to the following attachments for the requested materials:

CAUSE-PA 01-007_Attachment_01 for copies of the tariff pages for the low-income discount.
CAUSE-PA 01-007_Attachment_02 for 2023 Federal Poverty Guidelines.
CAUSE-PA 01-007_Attachment_03_Confidential for DEF internal training documents.
CAUSE-PA 01-007_Attachment_04_Confidential for PAWC's CSO low-income bulletins.
CAUSE-PA 01-007_Attachment_05_Confidential for PAWC field service rep training.
CAUSE-PA 01-007_Attachment_06_Confidential for PAWC internal procedure for adding discount.
CAUSE-PA 01-007_Attachment_07_Confidential for PAWC internal discount analysis procedure.
CAUSE-PA 01-007_Attachment_08_Confidential for DEF letters of agreement.
CAUSE-PA 01-007_Attachment_09_Confidential for DEF internal/CBO grant training.
CAUSE-PA 01-007_Attachment_10 for grant application process.

Refer to the Company's response to OCA-08-004 for additional internal training materials.
Refer to the Company's response to CAUSE-PA 01-010 for outreach materials.

Supplement No. 40 to
Tariff Water-PA P.U.C. No. 5
Fifth Revised Page 17

PENNSYLVANIA-AMERICAN WATER COMPANY Canceling Third and Fourth Revised Page 17

SCHEDULE OF RATES

LOW-INCOME RIDER – ALL RATE ZONES FOR QUALIFYING RESIDENTIAL CUSTOMERS

APPLICABILITY

This rider applies throughout the territories served under this tariff for service rendered on and after the Effective Date shown at the bottom of this page.

AVAILABILITY

This rider is available for a customer in the Residential Class that meets the low-income criteria of 150% based on the Federal Poverty Level ("FPL"). **(C)**

RATE

The rates for the service charge or minimum bill under this tariff will be **as follows**: **(C)**

Tier 1 (0%-50% of FPL): **20%** of the prevailing service charge or minimum bill in the rate zone where service is rendered. **(C)(I)**

Tier 2 (51%-100% of FPL): **35%** of the prevailing service charge or minimum bill in the rate zone where service is rendered. **(C)(I)**

Tier 3 (101%-150% of FPL): **60%** of the prevailing service charge or minimum bill in the rate zone where service is rendered. **(C)(I)**

The rate for water usage shall be billed as follows: **(C)**

Tier 1 (0%-50% of FPL): **20%** of the existing rates applicable to the rate zone where service is rendered. **(C)(D)**

Tier 2 (51%-100% of FPL): **50%** of the existing rates applicable to the rate zone where service is rendered. **(C)(D)**

Tier 3 (101%-150% of FPL): **75%** of the existing rates applicable to the rate zone where service is rendered. **(C)(D)**

(I) means Increase, (C) means Change and (D) means Decrease

Issued: January 26, 2023 Effective Date: January 28, 2023

Supplement No. 43 to
Tariff Wastewater PA P.U.C. No. 16
Fifth Revised Page 16
Canceling Third and Fourth Revised Page 16

PENNSYLVANIA-AMERICAN WATER COMPANY

SCHEDULE OF RATES

LOW-INCOME RIDER – ALL RATE ZONES FOR QUALIFYING RESIDENTIAL CUSTOMERS

APPLICABILITY

This rider applies throughout the territories served under this tariff for service rendered on and after the Effective Date shown at the bottom of this page.

AVAILABILITY

This rider is available for a customer in the Residential Class that meets the low-income criteria of 150% based on the Federal Poverty Level. **(C)**

RATE

Customers under this rate schedule will receive a discount off their total wastewater bill as follows: **(C)**

Tier 1 (0%-50% of FPL):	**80%**	**(C)(D)**
Tier 2 (51%-100% of FPL):	**55%**	**(C)(D)**
Tier 3 (101%-150% of FPL):	**30%**	**(C)**

(C) means Change and (D) means Decrease

Federal Poverty Guidelines

INCOME LEVELS BASED ON FEDERAL POVERTY INCOME GUIDELINES - 2023

Household Size		1	2	3	4	5	6	7	8	Plus One
Income Level[1]	FPIG Range	Gross Monthly Income								
Level 1	135%[2] 0-150%[3,4]	$1,640.25 $ - $1,822.50	$2,218.50 $ - $2,465.00	$2,796.75 $ - $3,107.50	$3,375.00 $ - $3,750.00	$3,953.25 $ - $4,392.50	$4,531.50 $ - $5,035.00	$5,109.75 $ - $5,677.50	$5,688.00 $ - $6,320.00	$578.25 $642.50
Level 2A	150.00%	$1,822.51	$2,465.01	$3,107.51	$3,750.01	$4,392.51	$5,035.01	$5,677.51	$6,320.01	$642.50
	200%[3,4]	$2,430.00	$3,286.67	$4,143.33	$5,000.00	$5,856.67	$6,713.33	$7,570.00	$8,426.67	$856.67
Level 2B	200.00%	$2,430.01	$3,286.68	$4,143.34	$5,000.01	$5,856.68	$6,713.34	$7,570.01	$8,426.68	$856.67
	250%	$3,037.50	$4,108.33	$5,179.17	$6,250.00	$7,320.83	$8,391.67	$9,462.50	$10,533.33	$1,070.83
Level 3	250.00%	$3,037.51	$4,108.34	$5,179.18	$6,250.01	$7,320.84	$8,391.68	$9,462.51	$10,533.34	$1,070.83
	300%	$3,645.00	$4,930.00	$6,215.00	$7,500.00	$8,785.00	$10,070.00	$11,355.00	$12,640.00	$1,285.00
Level 4	300.00% and above	$3,645.01	$4,930.01	$6,215.01	$7,500.01	$8,785.01	$10,070.01	$11,355.01	$12,640.01	$1,285.00
LIHEAP eligibility for the 2022 - 2023 heating season	150% FPIG	$1,698.75	$2,288.75	$2,878.75	$3,468.75	$4,058.75	$4,648.75	$5,238.75	$5,828.75	$590.00

1. These levels apply to all Chapter 14 requirements that are dependant on a customer/applicant's income level.
2. PGW reinstatement requirement in accordance with 66 Pa.C.S.A. § 1407(c)(2).
3. 150% is the maximum income for CAP eligibility with the exception of Peoples Natural Gas Company and Peoples Gas LLC (formerly Peoples TWP).
The maximum income for hardship fund and LIURP eligibility can range from 150%-250%. NOTE: Duquesne Light has temporarily increased the maximum income for its hardship fund to 300% FPIG through 2023.
4. 200% is the maximum income for CAP eligibility for Peoples Natural Gas Company and Peoples Gas LLC (formerly Peoples TWP).

Effective: 01/17/2023

At the first CAAG meeting after the final order in this proceeding (Q1 2023), PAWC agrees to provide a written description of its Hardship Fund application process, including its eligibility rules, grant calculation steps, and the grant issuance process.

Pennsylvania American Water (PAW) Hardship Grant Fund

PAW hardship program is administered by the Dollar Energy Fund (DEF).

Hardship Fund Application Process:

To apply for a hardship grant:

- Visit a participating Community Based Organization (CBO) - to locate a CBO near you visit DollarEnergy.org and select Agency Finder or call DEF at 1-888-282-6816

- Apply online using the MyApp customer portal which is accessible through Dollar Energy's Website: https://www.dollarenergy.org/myapp/

- If unable to visit a CBO and cannot access the online application, MyApp, call Dollar Energy Fund at 1-888-282-6816 to apply

Basic Information captured during the application process:

- Account holder name, phone number, address, and email
- Social Security number of ratepayer (required in MyAPP/can be waived at CBO or DEF CSR)
- Utility Company and Account Number (copy of bill/shut off notice)
- Household size (name and date of birth of each occupant
- Monthly household income total (before taxes for everyone in household)
- Proof of Sincere Effort of Payment

- Proof of Household Income

Proof of Household Income/Supporting documents:

- Program applicants applying at a CBO are asked to bring proof of income and supporting documents, at the time the appointment is made
- Applicants applying via MyApp will receive an email indicating the next steps in the application process. The applicant can provide proof of income and supporting documents via DEF website upload, email, or fax to DEF
- Applicants applying via DEF customer service representative are advised at the time of application of the required documents for income verification. The applicant can provide documents via DEF website upload, email or fax

Incomplete Applications:

- The CBO works directly with the grant applicant and will submit the application when it is complete
- Reminders are sent to applicants who apply through MyApp or a DEF representative weekly, subject to application volume.

Eligibility Rules:

To be eligible for a grant the account must be:

- Residential
- Single home or apartment
- No "cooking only," commercial, industrial, or apartments with shared utility service.
- The name on the account must be that of an adult who is currently living in the home.
- The customer must be at or below 200% of the Federal Poverty Level to qualify for a hardship grant.
- Customers must have also made a payment or payments totaling **$50** in the previous 3 months (Good Faith Effort/Sincere Effort of Payment).

Grant Calculation Steps:

Effective January 28, 2023, PAW provides a grant amount of $500 if the customer's account balance is equal to or exceeds $500. If the customer's account balance is less than $500, PAW provides a grant amount equal to the account balance. The amount granted will not exceed the total account balance.

Approval process:

- Applications are processed through DEF iPartner system
- Typical process timeframe is 1-2 business days
- If there is no pending term, the application is reviewed and processed by DEF
- If applicant has a pending termination or if the service is off, the application is forwarded to PAWC for review and processing.
- PAW will stop the pending termination or restore service where the grant amount is sufficient to stop termination or restore service.

Grant Issuance:

- Weekly, DEF, remits payment via EFT to Pennsylvania American Water for the grants approved the prior week (Monday-Sunday)
- A list of grant recipients is emailed to Pennsylvania American Water and the cash management team applies the funds directly to the customers' accounts.
- The customer will see the grant award on their next billing statement.

Denial process

- Customers who are denied can rectify the denial reason and can be reconsidered without applying again

- If a customer is denied, they will be notified by text message and/or email, based on contact information they provided in their application.
- If the text message or email is not opened in 2 weeks, a letter is sent to the customer with the denial reason
- To be reconsidered, the customer must contact the CBO where they applied, or they can contact Dollar Energy Fund
- Customers who provided an email address can simply reply to their grant decision email from granthelp@dollarenergy.org
- Once the updated information is received, DEF or the CBO will add to the existing application, which will be sent for review again.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-009

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Please provide a detailed description of all circumstances under which (1) the Company would obtain the income information of a residential customer; and (2) the Company screens for income information from residential customers.

Response:

The Company obtains income information of a residential customer through the Ability to Pay Process. Any income information the Company receives is voluntarily provided by the customer. This can occur during the following circumstances:

- When a residential customer expresses an inability to pay their bill, whether their account is current or past due.
- The customer requests more time to pay their current bill (extension).
- The customer requests an arrangement on a high current bill (installment plan).
- The customer requests an arrangement on a past due balance (installment plan).
- At the end of the call when addressing the balance, the customer is not paying their past due balance over the phone.
- Customer has received a disconnection notice.
- The customer requests information about hardship grants

The Company also obtains residential customer income information from the Pennsylvania Public Utility Commission's Bureau of Consumer Services, when a customer requests a payment arrangement through the Commission or when an informal complaint is filed.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-011

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

From January 2018 to present, how many customers were enrolled in PAWC's BDP? Please disaggregate this data by service type (i.e. water only, wastewater only, combined), month, and year as of the last day of the month/year.

If this data is unavailable as of the last day of the month/ year, please provide this data, disaggregated as requested, and specify at which point in the month/ year these customer counts were calculated.

Please provide this data in a live Excel spreadsheet.

Response:

Please refer to CAUSE-PA 01-011_Attachment. As discussed with CAUSE-PA on December 13, 2023, the Company is limiting the time frame of the data requests back to January 2020 through November 2023.

CAUSE-PA 01-011_Attachment

Water Only

Year and Month	customers enrolled in PAWC's BDP
202001	17818
202002	17940
202003	18006
202004	17896
202005	17810
202006	17751
202007	17874
202008	18016
202009	18217
202010	18400
202011	19001
202012	19113
202101	19202
202102	19413
202103	19615
202104	19830
202105	20092
202106	20114
202107	19889
202108	20156
202109	20094
202110	20158
202111	20313
202112	20283
202201	20496
202202	20512
202203	20,594
202204	21,315
202205	22420
202206	23044
202207	23398
202208	23893
202209	24228
202210	24490
202211	24669
202212	24778
202301	24553
202302	23680
202303	23723
202304	23579
202305	23560
202306	23430
202307	23252
202308	23187
202309	23604
202310	23908
202311	23967

Wastewater only

Year and Month	customers enrolled in PAWC's BDP
202001	145
202002	122
202003	165
202004	158
202005	159
202006	127
202007	158
202008	148
202009	187
202010	167
202011	192
202012	230
202101	214
202102	237
202103	246
202104	246
202105	277
202106	279
202107	263
202108	285
202109	224
202110	287
202111	226
202112	231
202201	250
202202	268
202203	305
202204	310
202205	381
202206	433
202207	479
202208	567
202209	629
202210	595
202211	656
202212	708
202301	581
202302	677
202303	691
202304	595
202305	693
202306	719
202307	653
202308	752
202309	741
202310	857
202311	747

Both

Year and Month	customers enrolled in PAWC's BDP
202001	2511
202002	2590
202003	2586
202004	2582
202005	2567
202006	2566
202007	2583
202008	2625
202009	2689
202010	2703
202011	2815
202012	2842
202101	2863
202102	2907
202103	2950
202104	3004
202105	3043
202106	3047
202107	3030
202108	3057
202109	3081
202110	3108
202111	3166
202112	3041
202201	3168
202202	3147
202203	3138
202204	3306
202205	3545
202206	3643
202207	3741
202208	3781
202209	3820
202210	3893
202211	3962
202212	3974
202301	3947
202302	3835
202303	3865
202304	3857
202305	3865
202306	3845
202307	3816
202308	3801
202309	3942
202310	4061
202311	4130

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-013

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

From January 2018 to present, how many customers received a hardship grant through PAWC's H2O program? Please disaggregate this data by service type (i.e. water only, wastewater only, combined), month, and year as of the last day of the month/year.

If this data is unavailable as of the last day of the month/ year, please provide this data, disaggregated as requested, and specify at which point in the month/year these customer counts were calculated.

Please provide this data in a live Excel spreadsheet.

Response:

Please refer to CAUSE-PA 01-013_Attachment. As discussed with CAUSE-PA on December 13, 2023, the Company is limiting the time frame of the data requests back to January 2020.

Water Only	
Month	Count of customers received hardship grant
202001	24
202002	66
202003	103
202004	81
202005	93
202006	91
202007	86
202008	59
202009	75
202010	14
202011	58
202012	106
202101	146
202102	140
202103	386
202104	203
202105	45
202106	51
202107	29
202108	59
202109	24
202110	128
202111	163
202112	19
202201	8
202202	35
202203	111
202204	88
202205	67
202206	86
202207	104
202208	126
202209	106
202210	79
202211	123
202212	28
202301	94
202302	91
202303	407
202304	311
202305	191
202306	189
202307	117
202308	161
202309	169
202310	186
202311	275

WasteWater Only	
Month	Count of customers received hardship grant
202001	0
202002	2
202003	4
202004	4
202005	4
202006	0
202007	0
202008	4
202009	1
202010	1
202011	0
202012	4
202101	2
202102	2
202103	8
202104	7
202105	6
202106	2
202107	5
202108	0
202109	1
202110	2
202111	3
202112	0
202201	0
202202	0
202203	3
202204	4
202205	4
202206	2
202207	5
202208	8
202209	11
202210	4
202211	10
202212	2
202301	4
202302	9
202303	24
202304	11
202305	19
202306	34
202307	13
202308	11
202309	5
202310	13
202311	19

Combined	
Month	Count of customers received hardship grant
202001	9
202002	7
202003	16
202004	22
202005	24
202006	26
202007	24
202008	9
202009	5
202010	4
202011	13
202012	26
202101	86
202102	75
202103	170
202104	54
202105	8
202106	14
202107	6
202108	0
202109	4
202110	88
202111	75
202112	5
202201	3
202202	8
202203	70
202204	49
202205	29
202206	44
202207	39
202208	36
202209	43
202210	37
202211	41
202212	28
202301	58
202302	62
202303	199
202304	166
202305	60
202306	43
202307	24
202308	59
202309	118
202310	113
202311	188

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-015

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Please describe in detail what water conservation, service line, and/or leak repair assistance, if any, is provided to each of the following customer segments:

A. Residential customers;
B. Confirmed low income customers; and
C. H2O program participants.

Response:

The company does not provide service line and/or leak repair assistance to any customers. The company provides water conservation kits and conservation education materials to H2O program participants who affirm they want to receive a kit. Refer to the Company's response to OCA 11-018 for kit and conservation information provided.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-016

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

From January 2018 to present, how many customers received each of the following assistance types, disaggregated by year, as of the last day of the year:

A. Water conservation assistance;
B. Service line assistance; and
C. leak repair assistance.

If this data is unavailable as of the last day of the year, please provide this data, disaggregated as requested, and specify at which point in the year these customer counts were calculated.

Please provide this data in a live Excel spreadsheet.

Response:

A. Please refer to the Company's response to OCA 11-018, part F and CAUSE-PA 01-016_Attachment for the data in Excel format. As discussed with CAUSE-PA on December 13, 2023, the Company is limiting the time frame of the data requests back to January 2020.
B. PAWC does not provide service line assistance.
C. PAWC does not provide leak repair assistance.

CAUSE-PA 01-016_Attachment

Customers Receiving Conservation Kits

Year	Number of Kits
2020	1,639
2021	1,556
2022	1,788
2023-YTD	959

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-019

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

What is the average annual income of PAWC's currently identified H2O program customers for which it has obtained income information?

Response:

As of November 2023, the average annual income of the Bill Discount Program customers for which the Company has obtained income information is $19,585.47.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-020

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

What is the average annual income of PAWC's currently identified confirmed low income customers for which it has obtained income information?

Response:

The average annual income of PAWC's confirmed low-income customers is $9,247.20.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-022

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

From January 2018 to present, how many residential customers were terminated for nonpayment? Please disaggregate this data by service type (i.e. water only, wastewater only, combined), month, and year as of the last day of the month/year.

If this data is unavailable as of the last day of the month/ year, please provide this data, disaggregated as requested, and specify at which point in the month/year these customer counts were calculated.

Please provide this data in a live Excel spreadsheet.

Response:

Please refer to CAUSE-PA 01-022_Attachment. As discussed with CAUSE-PA on December 13, 2023, the Company is limiting the time frame of the data requests back to January 2020.

Water Only

Year and Month	Residential customers terminated for nonpayment
202001	812
202002	642
202003	368
202004	0
202005	0
202006	0
202007	0
202008	0
202009	0
202010	0
202011	0
202012	0
202101	0
202102	0
202103	0
202104	1,580
202105	1,345
202106	1,540
202107	1,580
202108	3,608
202109	2,398
202110	2,261
202111	1,710
202112	482
202201	446
202202	505
202203	615
202204	2,240
202205	1,961
202206	1,721
202207	1,415
202208	2,871
202209	1,864
202210	2,128
202211	1,861
202212	771
202301	717
202302	381
202303	360
202304	1,054
202305	1,289
202306	1,524
202307	1,180
202308	1,740
202309	875
202310	858
202311	1,222

Wastewater only

Year and Month	Residential customers terminated for nonpayment
202001	22
202002	24
202003	15
202004	0
202005	0
202006	0
202007	0
202008	0
202009	0
202010	0
202011	0
202012	0
202101	0
202102	0
202103	0
202104	23
202105	44
202106	45
202107	36
202108	26
202109	20
202110	26
202111	8
202112	11
202201	5
202202	8
202203	3
202204	47
202205	69
202206	38
202207	31
202208	35
202209	17
202210	37
202211	38
202212	30
202301	30
202302	17
202303	44
202304	95
202305	109
202306	99
202307	81
202308	72
202309	30
202310	3
202311	1

Combined

Year and Month	Residential customers terminated for nonpayment
202001	150
202002	150
202003	78
202004	0
202005	0
202006	0
202007	0
202008	0
202009	0
202010	0
202011	0
202012	0
202101	0
202102	0
202103	0
202104	326
202105	389
202106	348
202107	498
202108	701
202109	442
202110	389
202111	427
202112	163
202201	147
202202	91
202203	130
202204	600
202205	510
202206	465
202207	293
202208	660
202209	507
202210	484
202211	356
202212	186
202301	152
202302	101
202303	139
202304	288
202305	462
202306	470
202307	436
202308	456
202309	292
202310	246
202311	333

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-024

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

From January 2018 to present, how many confirmed low income customers were terminated for nonpayment? Please disaggregate this data by service type (i.e. water only, wastewater only, combined), month, and year as of the last day of the month/year.

If this data is unavailable as of the last day of the month/ year, please provide this data, disaggregated as requested, and specify at which point in the month/year these customer counts were calculated.

Please provide this data in a live Excel spreadsheet.

Response:

Please refer to CAUSE-PA 01-024_Attachment. As discussed with CAUSE-PA on December 13, 2023, the Company is limiting the time frame of the data requests back to January 2020.

Water Only

Year and Month	Confirmed low income customers terminated for nonpayment
202001	475
202002	375
202003	204
202004	0
202005	0
202006	0
202007	0
202008	0
202009	0
202010	0
202011	0
202012	0
202101	0
202102	0
202103	0
202104	1124
202105	814
202106	850
202107	875
202108	1,980
202109	1,419
202110	1,320
202111	985
202112	310
202201	289
202202	320
202203	370
202204	1,404
202205	1,207
202206	1057
202207	906
202208	1,785
202209	1114
202210	1,278
202211	1,183
202212	480
202301	483
202302	238
202303	244
202304	686
202305	830
202306	985
202307	747
202308	1,092
202309	529
202310	549
202311	722

Waterwater only

Year and Month	Confirmed low income customers terminated for nonpayment
202001	14
202002	12
202003	6
202004	0
202005	0
202006	0
202007	0
202008	0
202009	0
202010	0
202011	0
202012	0
202101	0
202102	0
202103	0
202104	13
202105	27
202106	25
202107	14
202108	9
202109	11
202110	18
202111	5
202112	5
202201	1
202202	5
202203	2
202204	28
202205	32
202206	23
202207	23
202208	29
202209	12
202210	28
202211	26
202212	23
202301	20
202302	12
202303	18
202304	32
202305	51
202306	51
202307	50
202308	49
202309	23
202310	2
202311	1

Combined

Year and Month	Confirmed low income customers terminated for nonpayment
202001	85
202002	87
202003	46
202004	0
202005	0
202006	0
202007	0
202008	0
202009	0
202010	0
202011	0
202012	0
202101	0
202102	0
202103	0
202104	221
202105	274
202106	227
202107	331
202108	427
202109	287
202110	246
202111	275
202112	110
202201	106
202202	66
202203	86
202204	410
202205	327
202206	314
202207	206
202208	417
202209	345
202210	305
202211	236
202212	119
202301	103
202302	67
202303	82
202304	202
202305	311
202306	330
202307	280
202308	290
202309	196
202310	172
202311	211

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-028

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

From January 2018 to present, please provide the median and mean arrearages, disaggregated by month and year, as of the last day of the month, for each of the following groups:

A. All residential customers;

B. Residential customers, excluding confirmed low income customers;

C. Confirmed low income customers;

D. Confirmed low income customers, excluding H2O program participants; and

E. H2O program participants.

If this data is unavailable as of the last day of the month/ year, please provide this data, disaggregated as requested, and specify at which point in the month/year these customer counts were calculated.

Please provide this data in a live Excel spreadsheet.

Response:

Please refer to CAUSE-PA 01-028_Attachment, which for part D excludes BDP participants and for part E provides the requested information for BDP participants. The BDP is the bill discount component of the overall H20 program. As discussed with CAUSE-PA on December 13, 2023, the Company is limiting the time frame of the data requests back to January 2020.

	A. All residential customers		B. Residential customers, excluding confirmed low income customers;		C. Confirmed low income customers;		D. Confirmed low income customers, excluding H2O program participants;		E. H2O program participants.	
Year-Month	Mean Arrearages	Median Arrearages	Mean Arrearages	Median Arrearages	Mean Arrearages	Median Arrearages	Mean Arrearages	Median Arrearages	Mean Arrearages	Median Arrearages
202001	$189.99	$81.01	$105.97	$68.09	$357.42	$121.51	$293.71	$107.22	$407.60	$122.24
202002	$199.26	$83.12	$109.63	$69.79	$368.88	$123.77	$301.01	$107.58	$422.91	$124.44
202003	$197.10	$79.66	$107.75	$67.79	$374.49	$118.55	$303.88	$103.44	$428.15	$120.71
202004	$225.99	$85.52	$118.47	$68.98	$421.74	$142.99	$344.25	$119.80	$468.36	$143.44
202005	$247.00	$91.59	$125.22	$73.03	$467.88	$164.58	$385.36	$131.53	$511.73	$168.15
202006	$248.90	$90.70	$128.04	$73.52	$472.66	$161.49	$382.31	$128.03	$520.64	$165.80
202007	$272.16	$98.45	$138.40	$77.46	$508.28	$178.43	$415.89	$140.82	$551.15	$181.76
202008	$254.53	$93.39	$133.70	$75.93	$485.87	$158.04	$389.02	$126.71	$539.58	$167.45
202009	$279.57	$101.71	$148.51	$80.69	$517.53	$178.99	$417.12	$142.33	$560.19	$180.47
202010	$286.22	$98.95	$148.63	$77.41	$539.53	$183.89	$432.91	$140.25	$597.28	$203.46
202011	$300.42	$99.81	$154.05	$76.80	$561.82	$193.69	$451.25	$143.79	$610.96	$213.57
202012	$305.20	$100.35	$156.27	$78.01	$572.27	$192.85	$458.29	$143.47	$617.06	$209.94
202101	$330.63	$103.40	$163.88	$77.80	$624.34	$226.14	$499.71	$159.77	$681.49	$261.98
202102	$345.44	$108.06	$171.06	$81.52	$645.83	$233.63	$519.81	$164.20	$690.94	$262.48
202103	$344.65	$97.96	$165.61	$74.73	$669.47	$245.78	$538.01	$160.77	$730.13	$284.78
202104	$355.94	$92.15	$170.08	$69.79	$675.35	$258.57	$555.88	$159.70	$716.10	$272.99
202105	$308.21	$93.37	$148.94	$73.85	$598.23	$213.64	$488.05	$150.29	$631.88	$223.33
202106	$281.52	$93.64	$135.94	$75.45	$561.93	$190.20	$448.18	$143.00	$599.22	$184.51
202107	$292.42	$100.02	$137.41	$77.88	$573.78	$200.74	$460.20	$154.94	$617.31	$193.95
202108	$276.19	$90.71	$128.15	$73.38	$543.54	$172.07	$434.92	$132.02	$589.47	$171.43
202109	$272.09	$87.57	$120.64	$70.85	$534.18	$161.29	$421.94	$125.30	$591.24	$162.04
202110	$265.50	$87.65	$120.05	$71.64	$521.79	$161.09	$406.37	$124.43	$585.24	$162.72
202111	$260.21	$84.40	$113.46	$69.39	$528.46	$150.56	$428.34	$116.84	$558.95	$153.52
202112	$256.46	$84.21	$113.60	$68.10	$497.65	$154.01	$386.55	$118.09	$553.02	$158.01
202201	$270.87	$90.60	$118.82	$72.15	$519.98	$171.13	$402.53	$128.17	$578.24	$175.05
202202	$263.21	$91.74	$120.93	$73.85	$510.38	$171.11	$396.54	$129.51	$553.36	$169.43
202203	$273.73	$89.44	$128.73	$71.97	$521.34	$169.33	$413.81	$128.84	$547.87	$161.52
202204	$259.50	$82.99	$122.31	$67.52	$488.40	$149.40	$403.93	$118.91	$487.50	$137.96
202205	$226.17	$84.47	$116.06	$70.89	$430.76	$135.88	$363.07	$115.42	$426.55	$128.85
202206	$220.80	$83.24	$113.85	$69.20	$409.86	$133.74	$355.72	$112.35	$392.71	$136.27
202207	$221.64	$88.44	$119.07	$73.16	$400.06	$144.13	$350.85	$123.05	$388.62	$143.00
202208	$199.19	$86.79	$112.91	$72.70	$373.84	$138.73	$329.27	$121.36	$363.99	$138.00
202209	$200.64	$85.45	$114.00	$71.18	$361.67	$132.62	$324.16	$116.62	$348.33	$136.01
202210	$202.68	$88.12	$119.25	$73.82	$351.22	$132.93	$319.55	$119.82	$344.20	$130.47
202211	$186.80	$84.42	$112.24	$72.00	$330.50	$128.00	$299.32	$114.21	$314.76	$127.92
202212	$185.02	$84.45	$112.85	$71.60	$316.89	$127.17	$284.33	$111.92	$310.49	$129.06
202301	$199.88	$90.40	$118.57	$74.53	$331.81	$140.66	$303.88	$124.70	$317.42	$138.56
202302	$202.15	$92.98	$126.87	$78.37	$339.37	$142.20	$310.13	$126.19	$330.14	$145.29
202303	$212.91	$95.63	$134.71	$79.89	$351.68	$152.64	$324.21	$138.98	$317.49	$132.08
202304	$207.91	$99.65	$133.53	$82.70	$334.97	$151.10	$314.33	$136.98	$310.41	$144.49
202305	$201.16	$106.00	$137.13	$91.62	$318.55	$156.30	$294.99	$149.58	$297.86	$135.52
202306	$198.14	$102.89	$135.14	$86.68	$305.54	$155.78	$280.85	$145.26	$293.21	$141.72
202307	$203.06	$110.66	$142.96	$92.21	$296.84	$161.19	$277.52	$153.34	$276.87	$141.67
202308	$196.53	$106.09	$138.96	$89.54	$292.73	$157.81	$277.45	$152.02	$281.75	$140.00
202309	$188.20	$102.89	$137.83	$86.47	$269.57	$149.11	$260.22	$145.69	$256.66	$132.69
202310	$190.50	$107.07	$145.45	$92.47	$266.05	$151.96	$260.99	$150.10	$246.06	$134.36
202311	$186.94	$99.92	$143.24	$85.77	$262.18	$136.46	$254.07	$133.45	$252.29	$127.60

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 1

CAUSE-PA 01-030

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

From January 2018 to present, please provide the median and mean residential customer usage, disaggregated by service type (i.e. water only, wastewater only, combined), month, and year, as of the last day of the month/year, for each of the following groups:

A. All residential customers;

B. Residential customers, excluding confirmed low income customers;

C. Confirmed low income customers;

D. Confirmed low income customers, excluding H2O program participants; and

E. H2O program participants.

If this data is unavailable as of the last day of the month/ year, please provide this data, disaggregated as requested, and specify at which point in the month/year these customer counts were calculated.

Please provide this data in a live Excel spreadsheet.

Response:

A-E. Please refer to CAUSE-PA 01-030_Attachment. As discussed with CAUSE-PA on December 13, 2023, the Company is limiting the time frame of the data requests back to January 2020.

CAUSE-PA 01-030 Attachment

Water only

	A. All residential customers		B. Residential customers, excluding confirmed low income customers;		C. Confirmed low income customers;		D. Confirmed low income customers; excluding H2O program participants;		E. H2O program participants.	
Year-Month	mean residential customer usage	median residential customer usage	mean residential customer usage	median residential customer usage	mean residential customer usage	median residential customer usage	mean residential customer usage	median residential customer usage	mean residential customer usage	median residential customer usage
202001	3586	3100	3459	3000	4152	3600	4069	3500	3910	3200
202002	3517	3000	3388	2900	4075	3500	3989	3400	3822	3100
202003	3232	2800	3113	2700	3751	3200	3660	3200	3623	2900
202004	3702	3200	3580	3100	4247	3700	4168	3700	3966	3300
202005	3751	3200	3623	3100	4326	3700	4258	3700	3944	3200
202006	4134	3400	4002	3300	4737	3900	4676	3900	4307	3400
202007	4349	3500	4230	3400	4894	4000	4833	4000	4388	3500
202008	4409	3500	4286	3400	4966	4000	4931	4000	4362	3500
202009	3990	3200	3870	3100	4514	3700	4458	3700	4104	3300
202010	3668	3000	3557	2900	4140	3400	4065	3400	3847	3100
202011	3602	3000	3473	3000	4163	3500	4064	3500	3928	3200
202012	3507	3000	3382	2900	4036	3400	3931	3400	3861	3100
202101	3932	3300	3790	3200	4567	3800	4466	3800	4283	3400
202102	3466	2900	3342	2800	3991	3300	3907	3300	3748	3000
202103	3274	2800	3155	2700	3795	3200	3685	3100	3642	2900
202104	3660	3100	3534	3000	4240	3600	4146	3500	3980	3100
202105	3527	3000	3416	2900	4012	3400	3923	3300	3728	3000
202106	3832	3100	3709	3000	4390	3500	4310	3500	4013	3200
202107	4030	3200	3895	3100	4616	3700	4527	3700	4270	3300
202108	3785	3000	3664	2900	4313	3500	4215	3400	4035	3200
202109	3804	3100	3683	3000	4334	3500	4217	3500	4158	3300
202110	3494	2900	3371	2800	4023	3300	3909	3200	3877	3100
202111	3262	2700	3146	2700	3776	3100	3662	3100	3662	2900
202112	3493	3000	3376	2900	3991	3400	3877	3300	3835	3100
202201	3773	3200	3650	3100	4297	3600	4169	3600	4163	3300
202202	3383	2800	3247	2700	3933	3200	3786	3100	3905	3000
202203	3254	2700	3131	2600	3755	3100	3630	3000	3689	3000
202204	3585	3000	3459	2900	4129	3400	3991	3400	4060	3300
202205	3381	2800	3261	2700	3907	3200	3793	3100	3830	3000
202206	3814	3100	3695	3000	4347	3500	4235	3500	4273	3300
202207	4126	3200	4003	3100	4672	3700	4569	3700	4501	3500
202208	3690	2900	3574	2800	4213	3300	4130	3300	4001	3100
202209	3921	3100	3802	3000	4455	3600	4340	3500	4331	3400
202210	3551	2900	3433	2800	4063	3300	3939	3200	4028	3200
202211	3186	2600	3069	2600	3690	3000	3576	2900	3663	2900
202212	3385	2900	3268	2800	3911	3300	3790	3200	3889	3200
202301	3861	3200	3713	3100	4517	3700	4355	3600	4552	3500
202302	3279	2700	3148	2700	3857	3100	3715	3000	3892	3000
202303	3114	2600	3000	2500	3628	3000	3487	2900	3684	2900
202304	3643	3100	3523	3000	4184	3500	4047	3400	4242	3400
202305	3255	2700	3151	2600	3717	3100	3624	3000	3659	3000
202306	4139	3200	4028	3100	4667	3700	4611	3600	4179	3400
202307	3830	3100	3707	3000	4426	3600	4321	3500	4307	3300
202308	3424	2700	3313	2700	3961	3100	3851	3100	3896	3000
202309	3890	3100	3768	3000	4498	3600	4388	3500	4613	3400
202310	3266	2700	3169	2600	3785	3100	3664	3000	3772	3000
202311	3262	2800	3172	2700	3758	3100	3666	3100	3776	3100

CAUSE-PA 01-030 Attachment

Wastewater only

	A. All residential customers		B. Residential customers, excluding confirmed low income customers;		C. Confirmed low income customers;		D. Confirmed low income customers; excluding H2O program participants;		E. H2O program participants.	
Year-Month	mean residential customer usage	median residential customer usage	mean residential customer usage	median residential customer usage	mean residential customer usage	median residential customer usage	mean residential customer usage	median residential customer usage	mean residential customer usage	median residential customer usage
202001	3739	3000	3578	3000	4814	4000	4795	4000	4460	3350
202002	4426	3000	4278	3000	5212	4000	5202	4000	5062	4000
202003	3289	2800	3128	2500	4114	3600	4080	3000	4389	3050
202004	3538	3000	3421	3000	4376	4000	4356	3800	4478	3600
202005	4333	3000	4155	3000	5201	4000	5194	4000	5193	4000
202006	3860	3000	3687	3000	4671	4000	4662	4000	4758	3300
202007	3782	3000	3601	3000	4859	4000	4606	4000	5000	3000
202008	4946	3500	4809	3300	5837	4000	5743	4000	5297	4000
202009	3751	3000	3588	3000	4701	4000	4584	4000	4510	3800
202010	3585	3000	3407	3000	4343	3800	4193	3350	4123	3200
202011	4503	3000	4358	3000	5425	4000	5413	4000	4658	3000
202012	3603	3000	3444	3000	4456	3900	4355	3200	4326	3400
202101	3865	3000	3628	3000	5667	4000	6194	3600	4339	3000
202102	4142	3000	4011	3000	4844	4000	4843	3900	4141	3000
202103	3273	2800	3094	2500	4229	3000	4138	3000	3915	3000
202104	3509	3000	3363	3000	4338	4000	4177	3600	3952	3000
202105	3340	2900	3228	2600	3973	3200	3819	3100	3515	3000
202106	3752	3000	3572	3000	4698	4000	4452	3900	4410	3200
202107	3809	3000	3646	3000	4757	4000	4607	4000	4308	3000
202108	3537	3000	3343	2900	4580	4000	4387	3800	4146	3350
202109	3741	3000	3566	3000	4792	4000	4577	4000	4313	3000
202110	3477	3000	3332	2800	4326	3700	4199	3200	3915	3000
202111	3499	3000	3288	2800	4683	4000	4458	3600	4627	4000
202112	3534	3000	3419	3000	4353	3800	4251	3400	4054	3000
202201	3577	3000	3382	3000	4622	4000	4494	3500	4084	3000
202202	3729	3000	3537	2900	4886	3550	4631	3300	4707	3000
202203	3232	2500	3077	2200	4071	3000	3917	3000	3864	3000
202204	3379	3000	3205	2700	4371	3000	4148	3000	4405	3000
202205	3176	2500	3008	2200	4081	3000	4035	3000	3722	3000
202206	4387	3200	4295	3100	4586	4000	4397	3700	4745	3800
202207	4410	3200	4313	3100	4744	4000	4425	4000	4584	3400
202208	4301	3000	4210	3000	4395	4000	4313	3500	4438	4000
202209	4446	3100	4337	3000	4380	3700	4382	3100	4366	3400
202210	3996	3000	3915	3000	3987	3300	3824	3100	3808	3000
202211	4080	3000	3989	3000	4143	3500	3942	3000	4176	3500
202212	4037	3000	3933	3000	4342	3700	4117	3500	4329	3500
202301	4549	3100	4394	3000	4883	4000	4768	3900	5160	4000
202302	4349	3000	4238	3000	4544	3400	4590	3200	4140	3100
202303	3818	3000	3720	2900	4316	3200	4327	3000	3810	3000
202304	4150	3000	4048	3000	4714	4000	4697	4000	4007	3200
202305	4044	3000	3949	3000	4504	3900	4524	4000	3893	3000
202306	4272	3000	4185	3000	4742	4000	4832	4000	4143	3000
202307	4330	3100	4253	3000	4762	4000	4874	4000	4178	3000
202308	4367	3000	4241	3000	4864	4000	4959	4000	4240	3100
202309	4385	3100	4253	3000	5153	4000	5173	4000	4634	3100
202310	4150	3000	4082	3000	4744	3700	4764	3900	4310	3000
202311	3183	2500	3063	2400	3823	3000	3801	3000	3702	3000

CAUSE-PA 01-030 Attachment

Combined

	A. All residential customers		B. Residential customers, excluding confirmed low income customers;		C. Confirmed low income customers;		D. Confirmed low income customers, excluding H2O program participants;		E. H2O program participants.	
Year-Month	mean residential customer usage	median residential customer usage	mean residential customer usage	median residential customer usage	mean residential customer usage	median residential customer usage	mean residential customer usage	median residential customer usage	mean residential customer usage	median residential customer usage
202001	3550	3000	3325	2800	4223	3500	4104	3400	4149	3400
202002	3679	3000	3481	2992	4240	3600	4109	3500	4137	3400
202003	3363	2800	3169	2700	3947	3300	3781	3200	3959	3300
202004	3734	3100	3508	3000	4346	3800	4211	3600	4256	3700
202005	3990	3300	3761	3100	4619	4000	4482	3900	4516	3700
202006	4046	3300	3820	3100	4692	3900	4543	3800	4551	3800
202007	3976	3200	3765	3000	4965	3800	4609	3700	4447	3700
202008	4455	3600	4218	3400	5099	4200	4957	4100	4996	4000
202009	3754	3000	3536	2900	4350	3600	4209	3500	4394	3500
202010	3686	3000	3435	2800	4327	3500	4133	3400	4395	3500
202011	3868	3200	3637	3000	4470	3700	4314	3600	4481	3600
202012	3442	2900	3227	2700	4000	3300	3857	3200	3977	3200
202101	4088	3400	3840	3200	4725	4000	4568	3900	4685	3800
202102	3529	2900	3300	2700	4100	3300	3974	3200	4062	3300
202103	3330	2800	3144	2600	3839	3200	3713	3100	3855	3200
202104	3825	3100	3606	3000	4409	3700	4240	3600	4410	3600
202105	3642	3000	3428	2900	4250	3500	4089	3300	4139	3400
202106	3651	3000	3440	2800	4365	3500	4154	3400	4204	3500
202107	4049	3200	3797	3000	4775	3900	4577	3700	4796	3900
202108	3587	2900	3349	2800	4215	3400	4040	3200	4218	3400
202109	3794	3000	3536	2900	4444	3600	4233	3500	4631	3700
202110	3621	3000	3370	2800	4246	3400	4011	3200	4471	3500
202111	3241	2700	3030	2500	3784	3100	3566	3000	3980	3200
202112	3534	3000	3322	2800	4077	3400	3892	3100	4201	3500
202201	3718	3000	3435	2900	4330	3600	4169	3500	4401	3700
202202	3426	2800	3216	2600	3984	3200	3737	3000	4166	3300
202203	3214	2600	3032	2500	3708	3000	3528	2900	3864	3100
202204	3735	3000	3514	2900	4329	3600	4128	3500	4452	3700
202205	3290	2700	3094	2600	3848	3100	3694	3000	3953	3300
202206	3581	2900	3345	2700	4285	3500	4091	3300	4376	3600
202207	3995	3100	3742	3000	4717	3800	4496	3600	4892	3900
202208	3490	2800	3268	2600	4123	3200	3950	3100	4227	3400
202209	3834	3000	3592	2900	4502	3700	4233	3400	4821	3900
202210	3451	2800	3229	2700	4062	3300	3825	3100	4349	3500
202211	3096	2600	2950	2500	3751	3100	3537	3000	4012	3300
202212	3344	2800	3098	2600	3948	3200	3764	3100	4070	3400
202301	3818	3000	3591	2900	4425	3600	4115	3500	4790	3700
202302	3370	2800	3134	2600	4029	3200	3770	3100	4289	3500
202303	3148	2600	2951	2400	3687	3100	3482	2900	3935	3200
202304	3590	3000	3374	2900	4196	3500	4047	3400	4473	3700
202305	3123	2600	2936	2500	3663	3000	3486	2900	3864	3200
202306	3561	2900	3348	2700	4186	3500	3991	3300	4425	3600
202307	3670	3000	3440	2900	4347	3600	4101	3400	4688	3900
202308	3269	2700	3063	2500	3888	3200	3649	3000	4288	3400
202309	3705	3000	3475	2900	4401	3600	4123	3400	4858	3900
202310	3110	2600	2929	2400	3681	3000	3455	2900	4050	3300
202311	3179	2600	2938	2500	3764	3100	3544	3000	4162	3500

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-001

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Please describe all outreach events that PAWC has participated in from 2020 to present to promote its low-income assistance programs, and provide the date, location, and audience for each event.

Response:

The Company's external affairs team and Compliance staff maintain a robust program of outreach events throughout the year in support of promoting its low-income customer assistance programs. These events were not tracked and recorded in a consistent, statewide fashion until 2021. See attachment CAUSE-PA 02-001_Attachment for a list and details about these events by year.

Event Date	Event Name/Description	Location	Audience
Tuesday, February 4, 2020	Rainbow Kitchen Volunteer Day	Homestead	Community members served by Rainbow Kitchen
Wednesday, February 5, 2020	Rainbow Kitchen Volunteer Day	Homestead	Community members served by Rainbow Kitchen
Tuesday, February 11, 2020	Rainbow Kitchen Volunteer Day	Homestead	Community members served by Rainbow Kitchen
Tuesday, February 18, 2020	Rainbow Kitchen Volunteer Day	Homestead	Community members served by Rainbow Kitchen
Thursday, May 21, 2020	Pittsburgh Black Elected Officials Coalition PA Public Utilities During & After COVID-19	Virtual	Consumers
Thursday, December 17, 2020	PAAW Bill Paying Assistance Programs Webinar	Virtual	Approximately 100 virtual attendees (all customers and CBOs invited)

Event Date	Event Name/Description	Event Type	City	District	Area
Wednesday, March 22, 2021	Pittsburgh Metropolitan Area Hispanic Chamber of Commerce - Latino Pittsburgh Digital Speaker Series	Educational Presentation/Workshop	Pittsburgh	Pittsburgh	Pittsburgh
Thursday, April 29, 2021	Washington County Chamber of Commerce Breakfast Briefing Presentation	Educational Presentation/Workshop	Canonsburg	McMurray	Southwest
Saturday, July 24, 2021	Glassport Community Days	Community Event	Glassport	Mon Valley	Southwest
Monday August 9, 2021	International Children's Village	Community Event	McKeesport	McKeesport	Southwest
Wednesday, August 11, 2021	Clairton School District Reopening	Community Event	Clairton	Mon Valley	Southwest
Saturday, August 28, 2021	Glassport Community Car Show	Community Event	Glassport	Mon Valley	Southwest
Thursday, September, 30, 2021	Clarion County Township Officials Convention	Community Event	Clarion	Clarion	Northwest
Thursday, October 14, 2021	Dollar Energy H2O Program 30th Anniversary	Community Event	Pittsburgh	Pittsburgh	Pittsburgh
Sunday, October 24, 2021	Preston Park 5K	Community Event	Butler	Butler	Northwest
Saturday, October 30, 2021	Jack-O-Lantern Jog 5K	Community Event	Canonsburg	McMurray	Southwest
Thursday, November 4, 2021	Dollar Energy H2O Program 30th Anniversary	Community Event	McKeesport	McKeesport	Southwest
August 30 - September 6, 2021	York Revolution Sponsorship Marketing Table	Community Event	York	York	Central
Tuesday, August 1, 2021	Hershey National Night Out	Community Event	Hershey	Hershey	Central
Saturday, September 11, 2021	Royersford Community Day	Community Event	Royersford	Royersford	Southeast
Saturday, September 19, 2021	Capital Region Heart Walk	Charitable Event/Fundraiser	Harrisburg	Mechanicsburg/Hershey	Central
Wednesday, October 13, 2021	Swedesburg Volunteer Fire Company Annual Fire Prevention Night	Community Event	Swedesburg	Norristown	Southeast
Saturday, October 16, 2021	Upper Providence Community Day Event	Community Event	Phonexville		Southeast
Tuesday, October 26, 2021	H2O Program Anniversary Event at PA Capitol	Community Event	Harrisburg	Mechanicsburg/Hershey	Central
Saturday, October 30, 2021	Coatesville Youth Initiative Fall Fest	Community Event	Coatesville	Coatesville	Southeast
Wednesday, December 15, 2021	Central Pennsylvania Food Bank Volunteer Event	Volunteer/Service Project	Steelton	Hershey	Central
**Highlights denote joint outreach efforts with Dollar Energy Fund*					

Event Date	Event Name/Description	Event Type or Speaker	City	District	Area
Monday, March 21, 2022	Milton Rotary	Jeremy Resseguie, Susan T.	Milton	Milton	Central
Monday, April 4, 2022	Valley Community Library Program	Educational Presentation/Workshop	Peckville	Scranton/Wilkes-Barre	Scranton/WB
Tuesday, April 19, 2022	University of Scranton Earth Day Fair	Educational Presentation/Workshop	Scranton	Scranton/Wilkes-Barre	Scranton/WB
Wednesday, April 20, 2022	New Cumberland Borough BPC Group	David Misner	New Cumberland	New Cumberland	Central
Friday, April 22, 2022	Earth Day along the Susquehanna	Educational Presentation/Workshop	Wilkes-Barre	Scranton/Wilkes-Barre	Scranton/WB
Saturday, April 23, 2022	Lackawanna County Earth Day on Courthouse Square 2022	Community Event	Scranton	Scranton/Wilkes-Barre	Scranton/WB
Sunday, May 22, 2022	Healthy Kids Running Series	Volunteer/Service Project	Coatesville	Coatesville	Southeast
Thursday, June 16, 2022	City of Coatesville Palmer Park Rededication/Phase II unveiling	Kara Rahn	Coatesville	Coatesville	Central
Saturday, June 18, 2022	Riverfront Parks Riverfest	Community Event	Wilkes-Barre	Scranton/Wilkes-Barre	Scranton/WB
Monday, June 20, 2022	Penn-Cumberland Garden Club	David Misner, Kristi English	Mechancisburg	Mechanicsburg	Central
Friday, June 24, 2022	East Fallowfield Community Concert in the Park	Community Event	East Fallowfield	Coatesville	Southeast
Monday, June 27, 2022	City of Coatesville - Council Meeting Presentation	Kara Rahn, Joe Woodward, Tawana Dean	Coatesville	Coatesville	Central
Friday, July 15, 2022	Royersford Borough Community Day	Community Event	Royersford	Royersford	Southeast
Sunday, July 17, 2022	Caln Township Community Day	Community Event	Coatesville	Coatesville	Southeast
Wednesday, July 20, 2022	YMCA Power Scholars Program - Kistler Elementary School	Educational Presentation/Workshop	Wilkes-Barre	Scranton/Wilkes-Barre	Scranton/WB
Wednesday, July 20, 2022	Berks Nature Trails, Ales & Tails	Community Event	Reading	Exeter/Glen Alsace	Southeast
Wednesday, July 27, 2022	Camp Hill Borough StormFest	Community Event	Camp Hill	Mechanicsburg	Central
Wednesday, July 27, 2022	City of Coatesville Grand Prix	Community Event	Coatesville	Coatesville	Southeast
Thursday, July 28, 2022	YMCA Power Scholars Program - Kistler Elementary School	Educational Presentation/Workshop	Wilkes-Barre	Scranton/Wilkes-Barre	Scranton/WB
Monday, August 1, 2022	Wonderful World of Water Camp	Educational Presentation/Workshop	Peckville	Scranton/Wilkes-Barre	Scranton/WB
Tuesday, August 2, 2022	Schylkill River Greenway Ride the River	Community Event	Pottstown	Royersford	Southeast
Thursday, August 4, 2022	Fayette County Fair	Community Event	Dunbar	Uniontown	Southwest
Saturday, August 6, 2022	Electric City Flower Show	Community Event	Scranton	Scranton/Wilkes-Barre	Scranton/WB
Friday, August 12, 2022	Pop-Up City Hall	Community Event	Scranton	Scranton/Wilkes-Barre	Scranton/WB
Friday, August 12, 2022	Western Chester County Chamber of Commerce Annual Dinner	Chamber Event	Honey Brook	Coatesville	Southeast
Saturday, August 13, 2022	Upper Providence Township Community Day	Community Event	Upper Providence	Royersford	Southeast
Monday, August 15, 2022	Willow School Lessons	Educational Presentation/Workshop	Norristown	Norristown	Southeast
Friday, August 19, 2022	Amity Township Harvest Fest	Community Event	Amity	Glen Alcase/Exeter	Southeast
Sunday, August 21, 2022	Healthy Kids Running Series Fall finale	School Presentation/Activity	Valley Twp	Coatesville	Southeast
Monday, August 22, 2022	Greater Reading Chamber of Commerce Taste of Berks	Chamber Event	Reading	Glen Alcase/Exeter	Southeast
Wednesday, September 7, 2022	York Revolution game	Community Event	York	York	Central
Thursday, September 8, 2022	York Revolution game	Community Event	York	York	Central
Friday, September 9, 2022	Sen. Flynn, Reps Welby, Mullins, Kosieroski Senior Fair	Community Event	Scranton	Scranton/Wilkes-Barre	Scranton/WB
Saturday, September 10, 2022	Steelton Borough National Night Out	Community Event	Steelton	Steelton	Central
Sunday, September 11, 2022	York Revolution game	Community Event	York	York	Central
Saturday, September 17, 2022	Greater Philadelphia Chamber of Commerce	Congressional Staffer Reception	Chamber Event	Philadelphia	Southeast
Monday, September 19, 2022	York Revolution game	Community Event	York	York	Central
Wednesday, September 21, 2022	Greater Valley Forge Transportation Management Assoc Legislative Breakfast	Chamber Event	King of Prussia	South	Southeast
Saturday, September 24, 2022	Western Chester County Chamber of Commerce Legislative Breakfast	Chamber Event	Coatesville	Southeast	Southeast
Saturday, September 24, 2022	York Revolution game	Community Event	York	York	Central
Sunday, September 25, 2022	West Shore Chamber Business and Industry Night	Chamber Event	Camp Hill	Mechanicsburg	Central
Tuesday, September 27, 2022	Butler Area Sanitation Authority (BASA) Open Houses - Butler City	PAW Open House	Butler	Butler	Northwest
Tuesday, September 27, 2022	Senator Stefano Senior Fair	Community Event	Uniontown	Uniontown	Southwest
Thursday, September 22, 2022	Butler Area Sanitation Authority (BASA) Open Houses - Butler Township	PAW Open House	Butler	Butler	Northwest
Thursday, September 29, 2022	Capital Area Greenbelt Association Tour de Belt and Finish Line Fest	Community Event	Harrisburg	Steelton/Mechanicsburg/Hershey	Central
Wednesday, October 5, 2022	Chester County Chamber of Business & Industry, Women's Professional Development Conference	Cheryl Norton & Mike Doran	Exton	Coatesville	Southeast
Wednesday, October 5, 2022	PSATS conference (3 days) Annual Conference @ Hershey Lodge	Community Event	Hershey	Statewide	Central
Thursday, October 6, 2022	York Revolution game	Community Event	York	York	Central
Thursday, October 6, 2022	Scottish Rite Community Day	Community Event	Harrisburg	Steelton/Mechanicsburg/Hershey	Central
Saturday, October 8, 2022	Pennsylvania American Water VIP event	Community Event	Mechanicsburg	Mechanicsburg	Central
Saturday, October 8, 2022	PPL Breakfast with PPL President event	Community Event	Harrisburg	Mechanicsburg/Hershey	Central
Sunday, October 9, 2022	Lisburn Fire Department Community Fair	Community Event	Mechanicsburg	Mechanicsburg	Central
Wednesday, October 12, 2022	Midwest Food Bank load out day	Charitable Event/Fundraiser	Middletown	Steelton/Mechanicsburg/Hershey	Central
Wednesday, October 12, 2022	Chester County Chamber of Business & Industry Gals on the Green golf outing	Chamber Event	Downingtown	Southeast	Southeast
Thursday, October 13, 2022	H2O Program Webinar – Fayette County CBOs	Educational Presentation/Workshop	Fayette	Uniontown	Southwest
Friday, October 14, 2022	City of Coatesville Unity Day	Community Event	Coatesville	Coatesville	Southeast
Friday, October 14, 2022	Royersford National Night Out	Community Event	Royersford	Royersford	Southeast
Saturday, October 15, 2022	Western Chester County Chamber of Commerce Breakfast with the Commissioners	Chamber Event	Exton	Southeast	Southeast
Monday, October 17, 2022	SE PA VIP Reception	Mike Doran	Norristown	Norristown	Southeast
Tuesday, October 18, 2022	Central VIP Recption	Mike Doran	Mechancisburg	Mechanicsburg	Central
Tuesday, October 18, 2022	Pennsylania American Water, Norristown VIP event	Community Event	Norristown	Norristown	Southeast
Thursday, October 20, 2022	Sen. Pittman Senior Fair	Community Event	Indiana	Indiana	Northwest
Thursday, October 20, 2022	Downtown York FestivICE	Community Event	York	York	Central
Thursday, October 20, 2022	Department of Environmental Protection Networking & Project Updates	Educational Presentation/Workshop	Norristown	Norristown	Southeast
Saturday, October 22, 2022	Rep Nick Pisciottano Trunk or Treat Senior Fair	Community Event	Pittsburgh	Pittsburgh	Southwest
Saturday, October 22, 2022	Sen. Brewster Senior Fair	Community Event	Pittsburgh	Pittsburgh	Pittsburgh
Monday, October 24, 2022	Downtown Inc. York Go Green In the City Event	Community Event	York	York	Central
Wednesday, October 26, 2022	York Revolution game	Community Event	York	York	Central
Thursday, October 27, 2022	Warren County CBO Meeting	Educational Presentation/Workshop	Warren	Warren	Northwest
Thursday, October 27, 2022	NE PA VIP Reception	Mike Doran	Scranton	Scranton	Northeast
Friday, October 28, 2022	Rep. Kathy Rapp Senior Fair	Community Event	Warren	Warren	Northwest
Saturday, October 29, 2022	Greater Reading Chamber of Commerce Taste of Berks	Community Event	Reading	Exeter/Penn/Glen	Southeast
Monday, October 31, 2022	York Rainbow Rose Center York County Pride event	Community Event	York	York	Central
Wednesday, November 2, 2022	Western Chester County Chamber Regional Planning Committee	Kara Rahn, Justin Brame, Jim Kelly & Gerry DeBalko	Coatesville	Coatesville	Southeast
Thursday, November 3, 2022	Mechanicsburg Earth Day Festival	Community Event	Mechanicsburg	Mechanicsburg	Central
Thursday, November 3, 2022	Western Chester County Chamber of Commerce Gala on the Greene	Chamber Event	Coatesville	Coatesville	Southeast
Thursday, November 3, 2022	Fayette County Utility Fair	Community Event	Fayette	Brownsville	Southwest
Thursday, November 3, 2022	York Revolution game	Community Event	York	York	Central
Friday, November 4, 2022	Western Chester COunty Chamber Municipal Luncheon	Thom Chiomento	Valley Twp	Coatesville	Southeast
Friday, November 4, 2022	Norristown National Night Out	Community Event	Norristown	Norristown	Southeast
Thursday, November 10, 2022	Limerick Township / Spring-Ford Chamber Community Day	Chamber Event	Limerick	Royersford	Southeast
Monday, November 14, 2022	Coatesville Youth Initiative Backpack Giveaway	Community Event	Coatesville	Coatesville	Southeast
**Highlights denote joint outreach efforts with Dollar Energy Fund*					

Event Date	Event Name/Description	Event Type or Speaker	City	District	Area
Saturday, January 14, 2023	Festivelce York	Community Event	York	York	Central
Friday, January 27, 2023	Keystone Business Alliance	Chamber Event	Harrisburg	Harrisburg	Mechanicsburg
Thursday, February 9, 2023	Interagency Connection of Norristown (ICN)	Kara Rahn, DeeAnn Foster	Norristown	Norristown	Southeast
Friday, February 10, 2023	Butler County CAP Partnership Initiative	Educational Presentation/Workshop	Butler	Butler	Southwest
Tuesday, February 21, 2023	Rep Greg Scott new office kick off	Community Event	Norristown	Norristown	Southeast
Wednesday, February 22, 2023	Exeter Twp Meeting and Plant Tour	Plant/PAW Facility Tour	Exeter	Exeter	Southeast
Thursday, February 23, 2023	Rainbow Kitchen Resource Fair	Community Event	Homestead	Pittsburgh	Southwest
Tuesday, February 28, 2023	Fayette County Utility Fair	Community Event	Connellsville	Connellsville	Southwest
Friday, March 3, 2023	Heights Elementary School	School Presentation/Activity	Wilkes-Barre	Scranton/WB	Scranton/WB
Tuesday, March 7, 2023	Salvation Army CAP Fair	Community Event	Scranton	Scranton/WB	Scranton/WB
Tuesday, March 14, 2023	Nescopeck Elementary School	School Presentation/Activity	Nescopeck	Berwick	Northeast
Wednesday, March 22, 2023	Rainbow Kitchen Resource Event	Volunteer/Service Project	Homestead	pittsburgh	Southwest
Tuesday, March 28, 2023	Forest City Elementary School	School Presentation/Activity	Forest City	Northeast	Northeast
Wednesday, March 29, 2023	Lower Makefield Twp Fire, Police, Admin meeting & plant tour	Plant/PAW Facility Tour	Yardley	Yardley	Southeast
Tuesday, April 11, 2023	Middlesex Elementary School	School Presentation/Activity	Carlisle	Mechanicsburg	Central
Saturday, April 15, 2023	Mechanicsburg Earth Day Festival	Community Event	Mechanicsburg	Mechanicsburg	Central
Sunday, April 16, 2023	New Cumberland Earth and Art Festival	Community Event	New Cumberland	Mechanicsburg	Central
Wednesday, April 19, 2023	Rainbow Kitchen Assistance Fair	Community Event	Homestead	Pittsburgh	Southwest
Thursday, April 20, 2023	Towamencin Twp Open House #1	Open House	Towamencin	Norristown	Southeast
Saturday, April 22, 2023	Go Green in the City - York	Community Event	York	York	Central
Saturday, April 22, 2023	Scranton Earth Day Fair	Community Event	Scranton	Scranton/WB	Scranton/WB
Sunday, April 23, 2023	PA State Association of Township Supervisors (3-day event)	Community Event	Hershey	Hershey	Central
Thursday, April 27, 2023	Towamencin Twp Open House #2	Open House	Towamencin	Norristown	Southeast
Saturday, April 29, 2023	Lemoyne Arbor Day Celebration	Community Event	Lemoyne	Mechanicsburg	Central
Tuesday, May 2, 2023	Middlesex Elementary School	School Presentation/Activity	Carlisle	Mechanicsburgc	Central
Saturday, May 20, 2023	Saw Creek Safety Day	Community Event	Bushkill	Poconos	Northeast
Monday, May 22, 2023	Whittier Elementary School	School Presentation/Activity	Scranton	Scranton/WB	Scranton/WB
Thursday, May 25, 2023	VIPs in Norristown for lunch and tour	Open House	Norristown	Norristown	Southeast
Wednesday, May 31, 2023	Rotary Club of York - Presentation	Educational Presentation/Workshop	York	York	Central
Thursday, June 1, 2023	Watershed Protection Day Event	School Presentation/Activity	Wilkes-Barre	Scranton/WB	Scranton/WB
Friday, June 2, 2023	Scranton City Pride Kick-off Event	Community Event	Scranton	Scranton/WB	Scranton/WB
Saturday, June 3, 2023	Tour of Norristown WTP with ACLAMO Students	Plant/PAW Facility Tour	Norristown	Norristown	Southeast
Monday, June 5, 2023	Whittier Elementary School	School Presentation/Activity	Scranton	Scranton/WB	Scranton/WB
Thursday, June 8, 2023	Assistance Fair Port Vue	Community Event	Port Vue	McKeesport	Southwest
Saturday, June 10, 2023	York County Pride	Community Event	York	York	Central
Tuesday, June 13, 2023	City of York - Dinner with Mayor of York	Community Event	York	York	Central
Tuesday, June 20, 2023	Assistance Fair Duquesne Borough	Community Event	Duquesne	Pittsburgh	Pittsburgh
Tuesday, June 20, 2023	Camp Hill Farmers Market	Community Event	Camp Hill	Mechanicsburg	Central
Sunday, June 25, 2023	NEPA Rainbow Alliance Pride Fest	School Presentation/Activity	Wilkes-Barre	Scranton/WB	Scranton/WB
Wednesday, June 28, 2023	YMCA Power Scholars Program	Educational Presentation/Workshop	Wilkes-Barre	Scranton/WB	Scranton/WB
Thursday, June 29, 2023	VIP Stakeholder meetings in Coatesville/Chester County	Educational Presentation/Workshop	Coatesville	Coatesville	Southeast
Thursday, June 29, 2023	YMCA Power Scholars Program	Educational Presentation/Workshop	Wilkes-Barre	Scranton/WB	Scranton/WB
Friday, June 30, 2023	Harrisburg Senators Marketing Table	Community Event	Harrisburg	Mechanicsburg/Steelton	Central
Monday, July 3, 2023	YMCA Power Scholars Program	Educational Presentation/Workshop	Wilkes-Barre	Scranton/WB	Scranton/WB
Monday, July 10, 2023	Salvation Army CAP Fair	Community Event	Scranton	Scranton/WB	Northeast
Tuesday, July 11, 2023	Whittier Elementary School	Educational Presentation/Workshop	Scranton	Scranton/WB	Scranton/WB
Wednesday, July 12, 2023	YMCA Power Scholars Program	Educational Presentation/Workshop	Wilkes-Barre	Scranton/WB	Scranton/WB
Thursday, July 13, 2023	York Revolution Marketing Table	Community Event	York	Mechanicsburg/Steelton	Central
Thursday, July 13, 2023	Whittier Elementary School	Educational Presentation/Workshop	Scranton	Scranton/WB	Scranton/WB
Monday, July 17, 2023	Luzerne County Water Camp (4-day event)	Educational Presentation/Workshop	Wilkes-Barre	Scranton/WB	Scranton/WB
Saturday, July 22, 2023	New Cumberland Pride Picnic	Community Event	New Cumberland	Mechanicsburg	Central
Sunday, July 23, 2023	Steelton Borough Community Garden Kickoff	Community Event	Steelton	Steelton	Central
Tuesday, July 25, 2023	Whittier Elementary School	Educational Presentation/Workshop	Scranton	Scranton/WB	Scranton/WB
Wednesday, July 26, 2023	East Coventry Open House	Open House	Spring City	Royersford	Southeast
Wednesday, July 26, 2023	Camp Hill Stormfest	Educational Presentation/Workshop	Camp Hill	Mechanicsburg	Central
Thursday, July 27, 2023	Whittier Elementary School	Educational Presentation/Workshop	Scranton	Scranton/WB	Scranton/WB
Friday, July 28, 2023	Sporting Hill Elementary School	Educational Presentation/Workshop	Mechanicsburg	Mechanicsburg	Central
Monday, July 31, 2023	Lackawanna County Water Camp (4-day event)	Educational Presentation/Workshop	Peckville	Scranton/WB	Scranton/WB
Tuesday, August 1, 2023	National Night Out York	Community Event	York	York	Central
Tuesday, August 1, 2023	National Night Out Steelton	Community Event	Steelton	Steelton	Central
Tuesday, August 1, 2023	National Night Out Hershey	Community Event	Hershey	Hershey/Palmyra	Central
Tuesday, August 1, 2023	Royersford Borough National Night Out	Community Event	Royersford	Royersford	Southeast
Tuesday, August 1, 2023	Norristown Borough National Night Out	Community Event	Norristown	Norristown	Southeast
Thursday, August 3, 2023	City of Coatesville, WCCC & CCEDC ACE Economic Development Forum	Chamber Event	Coatesville	Coatesville	Southeast
Tuesday, August 8, 2023	Kane Fair	Community Event	Kane	Northwest	Northwest
Wednesday, August 9, 2023	New Castle, CAP Fair	Community Event	New Castle	New Castle	Northwest
Friday, August 11, 2023	One Voice One Community	Community Event	Uniontown	Uniontown	Southwest
Wednesday, August 16, 2023	Clarion CAP Fair	Community Event	Clarion	Clarion	Northwest
Wednesday, August 16, 2023	Warren CAP Fair	Community Event	Warren	Warren	Northwest
Wednesday, August 16, 2023	Vendor Dinner	Educational Presentation/Workshop	Blue Bell	Norristown	Southeast
Thursday, August 17, 2023	DEP Secretary Negrin tour Exeter WWTP	Plant/PAW Facility Tour	Exeter	Exeter	Southeast
Saturday, August 26, 2023	Lower Makefield Twp Community Day	Community Event	Yardley	Yardley	Southeast
Friday, September 8, 2023	Rep Causer Senior Fair Expo Event	Community Event	Kane	Kane	Northwest
Friday, September 8, 2023	Senior Fair - Flynn/Kosieroski/Mullins	Community Event	Scranton	Scranton/WB	Scranton/WB
Saturday, September 9, 2023	American Heart Association York/Adams Heart Walk	Charitable Event/Fundraiser	York	York	Central
Saturday, September 9, 2023	Glassport Car Show	Community Event	Glassport	Valley	Southwest
Saturday, September 9, 2023	Royersford Borough Community Day	Community Event	Royersford	Royersford	Southeast
Saturday, September 9, 2023	Caln Township Community Day	Community Event	Caln	Coatesville	Southeast
Saturday, September 16, 2023	City of Coatesville Grand Prix	Community Event	Coatesville	Coatesville	Southeast
Wednesday, September 20, 2023	West Reading/Wymossing Rotary	Educational Presentation/Workshop	Exeter	Exeter	Southeast
Thursday, September 21, 2023	American Heart Association Capital Region Heart Walk	Charitable Event/Fundraiser	Harrisburg	Mechanicsburg	Central
Friday, September 22, 2023	Senior Fair Expo	Community Event	New Castle	Butler	Northwest
Friday, September 22, 2023	Rep Miller Senior Resource Fair Salvation Army	Community Event	Pittsburgh	Pittsburgh	Pittsburgh
Thursday, September 28, 2023	Butler County Chamber of Commerce	Chamber Event	Butler	Butler	Northwest
Saturday, September 30, 2023	New Cumberland Apple Festival	Community Event	New Cumberland	Mechanicsburg	Central
Friday, October 6, 2023	Sen Stefano Senior Citizen Expo Fair	Community Event	Connellsville	Connellsville	Southwest
Saturday, October 7, 2023	CAP Utility Fair at Salvation Army	Community Event	Coatesville	Coatesville	Southeast
Saturday, October 7, 2023	York Police Fall Fest	Community Event	York	York	Central
Tuesday, October 10, 2023	York Wastewater presentation for Creation Care group	Educational Presentation/Workshop	York	York	Central
Wednesday, October 11, 2023	Swedesburg Fire Company Fire Prevention Night	Community Event	King of Prussia, PA	Norristown	Southeast
Thursday, October 12, 2023	Senior Fair - Kaufer/Rincavage/Cabell/Baker	Community Event	Kingston	Scranton/WB	Scranton/WB
Tuesday, October 17, 2023	Lock 57 - New Plant Groundbreaking	Plant/PAW Facility Tour	Royersford	Royersford	Southeast
Wednesday, October 18, 2023	Homestead Rainbow Kitchen Resource Fair	Community Event	Homestead	Pittsburgh	Southwest
Saturday, October 21, 2023	AKA Wellness Fair	Community Event	Harrisburg	Mechanicsburg/Steelton	Central
Tuesday, October 24, 2023	Mckeesport CAP Event	Community Event	McKeesport	McKeesport	Southwest
Tuesday, October 24, 2023	BeWise Reading Area (Berks County)	Community Event	Reading	Exeter/Glen/Penn	Southeast
Saturday, October 28, 2023	Coatesville Youth Initiative Trunk or Treat	Community Event	Coatesville	Coatesville	Southeast
Friday, November 3, 2023	Scranton Salvation Army Utility Fair	Community Event	Scranton	Scranton/WB	Northeast
Friday, November 3, 2023	Brownsville Sons of Italy	Community Event	Brownsville	Brownsville	Southwest
Friday, November 3, 2023	Western Chester County Chamber Municipal Update	Chamber Event	Valley	Coatesville	Southeast
Tuesday, November 14, 2023	Human Services Corporation Center	Community Event	Turtle Creek	Mon Valley	Pittsburgh
Wednesday, November 15, 2023	West Scranton HS Career Fair	School Presentation/Activity	Scranton	Scranton/WB	Scranton/WB
Friday, November 17, 2023	Be Utility Wise event	Community Event	Harrisburg	Mechanicsburg/Steelton	Central
Wednesday, November 29, 2023	United Way Dental Kit Activity	Volunteer/Service Project	Mechanicsburg	Mechanicsburg	Central
Friday, December 8, 2023	Shopping for Women Destined for Change Toy Drive	Volunteer/Service Project	Coatesville	Coatesville	Southeast
**Highlights denote joint outreach efforts with Dollar Energy Fund*					

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-002

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Has PAWC targeted any specific communities in its outreach related to its low income assistance programs since 2020? If the answer to this question is yes or in the affirmative, please indicate which specific communities PAWC has targeted, and how PAWC determined it would target such communities.

Response:

Yes. In 2022, following an analysis of customer household income data by district and municipality, the Company selected eight communities to target low-income program outreach throughout the year. The analysis utilized publicly available data from the U.S. Census Bureau, and the communities selected reflected communities with higher percentages of customers at or below 150% of FPL. The Company's 2022 low-income program outreach communities were Brownsville, Coatesville, Indiana, New Castle/Ellwood, Steelton, Uniontown/Connell, Warren and Wilkes-Barre/Scranton. In all target communities, the Company conducted outreach to offices of elected officials and their staff, with a focus on sharing customer assistance program information that elected officials could share with and promote to their constituents.

While not one of the originally identified target communities, the Company also focused on communicating low-income program information in Spanish to several of its communities with higher concentrations of Spanish-speaking customers.

In 2023, the Company reviewed an updated analysis of customer household income data by district and municipality utilizing publicly available data from the U.S. Census Bureau. The Company determined it would target its 2023 low-income program outreach to communities with higher percentages of customers at or below 50% of FPL as well as at or below 150% of FPL, which included Berwick, Brownsville, Clarion, Coatesville, Foster, Frackville, Kane, Koppel, Lehman Pike, McKeesport, portions of McMurray, Milton, New Castle/Ellwood, Nittany, portions of Pittsburgh, Pocono, Punxsutawney, Shippenville, Steelton, Uniontown/Connellsville, Warren, portions of Wilkes Barre/Scranton, and York.

The Company launched a targeted social media campaign promoting its assistance programs in these areas in Q3, promoting the outreach in more than 120 zip codes representing areas covering approximately 230K customers.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-006

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

From January 2020 to present, disaggregated by month and year, as of the last day of the month/year, for customers who received a Hardship Fund grant, please indicate the average amount of arrears customers had at the time they received a Hardship Fund grant.

If this data is unavailable as of the last day of the month/ year, please provide this data, disaggregated as requested, and specify at which point in the month/ year these customer counts were calculated.

Please provide this data in a live Excel spreadsheet.

Response:

Please refer to CAUSE-PA 02-006_Attachment.

CAUSE-PA 02-006_Attachment

Month	Average amount of arrears
202001	$393.42
202002	$493.23
202003	$436.17
202004	$478.71
202005	$450.06
202006	$493.15
202007	$491.22
202008	$597.56
202009	$547.22
202010	$561.20
202011	$655.55
202012	$509.44
202101	$603.63
202102	$556.59
202103	$723.79
202104	$823.62
202105	$816.61
202106	$669.64
202107	$682.81
202108	$797.97
202109	$1,216.53
202110	$824.97
202111	$855.05
202112	$812.26
202201	$275.75
202202	$550.80
202203	$687.12
202204	$965.11
202205	$606.52
202206	$578.81
202207	$585.15
202208	$521.63
202209	$397.05
202210	$542.78
202211	$617.86
202212	$678.02
202301	$529.00
202302	$521.11
202303	$434.95
202304	$482.31
202305	$488.67
202306	$459.05
202307	$385.71
202308	$443.17
202309	$473.07
202310	$747.03
202311	$587.47

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-007

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Please specifically describe all program requirements for a customer to receive a Hardship Fund grant through the H2O program, including, (1) what income information and documentation a customers must provide to qualify for a Hardship Fund grant through the H2O program; and (2) the amount of any good faith payment requirements a customer must make to qualify for a Hardship Fund grant.

Response:

To receive a Hardship Fund grant through the H2O program, a customer must complete a Hardship Grant application, which requires income documentation. Refer to CAUSE-PA 02-007_Attachment for Income Documentation Guidelines effective January 2024. Additionally, a copy of the utility bill or termination notice is required. Refer to CAUSE-PA 01-007 for eligibility requirements, benefits, program rules and enrollment options. Refer to CAUSE-PA 01-007 for the good faith payment requirement.

Revised DEF Income Guide – 6-8-23

Income Type	Acceptable Proof of Income	Grant Exceptions	IS Clarifications
Family member: Include as a household member. Include their gross income they receive. **Non-family member**: Include boarders and roomers, including friends or romantic partners residing at the location, as a household member. DO NOT include their gross income. Use 50% of the amount they pay for room/board. List that amount as *Rental Income* under the RP.	Non-family members can send: • Copy of the lease or rental agreement • Copy of a receipt for the rent • Other income form (last resort)		Divide amount on lease, rental agreement or receipt by 2 Put the rental income under the ratepayer.
Black Lung Benefits	Coal mine worker's compensation of expected benefit statement Bank statement from the last 30 days		
Cash Assistance *Public Assistance*	Benefits statement (both sides) Printout from DPW website Email or letter (on letterhead) from caseworker		CRM verification is good for up to 6 months SNAP benefits/Food Stamps are not counted as income
Spousal Support	Court order (only if receiving amount ordered) Domestic relations printout (last 30 days) –www.humanservices.state.pa.us Eppicard/Way2Go card printout (last 30 days) www.GoProgam.com Bank Statement (last 30 days) Passthrough Welfare: Benefits statement from welfare both sides Voluntary spousal support: Use other income form Child support payments are excluded from income calculation		It is ok to accept PACES screenshots that show "Payee" as long as you can make a reasonable determination for both CAP and grant. The Eppicard system has made some changes, so you may see some new documentation labeled Eppicard or way2go card.

Revised DEF Income Guide – 6-8-23

Investment Income *Interest*	Dividend Statement Bank Statement showing payment	.	This is typically a payment they receive for investments (dividends) Do not count small amounts of checking/savings account interest on bank statements.
Long Term or Short-Term Disability *Disability*	Benefits statement Copy of disability checks/check stubs (last 30 days) Bank statement (last 30 days)		

Other Income (includes long-term and recurring (as opposed to short-term or one-time) cash contributions)	Other Income Form		If CSR forgot to verify, verify it. If you complete the other income form, verify the income.
Pension	Pension board letter Copy of 1099 Copy of pension check with stub attached Bank statement from current year		Pension Board letter is typically only received once. We can accept pension board letters from previous years. 1099's must be from the previous year at the time of application or recertification (e.g., 2022 1099 will be accepted in 2023). Checks stubs can be from the current year, or the last 30 days.
Rental Income	Copy of the lease or rental agreement Copy of a receipt for the rent Verify as rental income. We have a confirmed signed statement from a renter stating they pay RP rental income. This is a verifiable document.		Nonfamily member
Retirement Savings *Pension*	Copy of 1099 Copy of Form 5498 for Roth IRA		
Royalties	Monthly Royalty Statement Copy of royalty check (last 30 days) Bank Statement (last 30 days) Other Income Form (last resort)		

Revised DEF Income Guide – 6-8-23

Salary & Wages *(Employment)*	Paystubs for the last 30 days Letter from employer Handwritten Paystubs? Complete other income form School teachers for CAP: Advise to send last paystubs received Other seasonal workers, laid off, for CAP: If not receiving UEC, treat as 0 income Uber/Lyft/DoorDash/Instacart/ETC: Last 30 days of payment summary	Seasonal/school employee: Only request income received in last 30 days if applying for only a grant 1099 is not acceptable	If missing one paystub from the last 30 days, try to use the missing paycheck method. Acceptable for CAP and Grants. If customer does not send a full 30 days or is a seasonal employee, calculate using YTD. Acceptable POI for CAP only. There is no need to do YTD if customer sends Paystubs covering the last 30 days, even if one is for $0.
	Military Pay: Military LES (Leave & Earnings Statement) from last 30 days **17-year-old and younger/18-year-old still in high school: Wages are not counted as income for any program including Hardship. Do not verify salary/wages for minors, enter as Zero Income.**	YTD calculation is not acceptable for grant- the last 30 days POI is required.	Verify as usual. $0 paystubs are acceptable for CAP/WARM and Hardship. Checks stubs can be from the current year, or the last 30 days. If review the CSR states we are expecting to see less than 30 days' worth of paystubs for a documentation aligns, verify it. Acceptable POI for grant only. Put in note additional paystub Military Pay: On LES, take YTD Entitle field subtract YTD Deduct field divide by week of the year multiply by 4.

Revised DEF Income Guide – 6-8-23

Self-Employment (Includes *subcontractors*)	Quarterly statement from accountant QuickBooks or other type of online ledger Statement from Accountant on letterhead stating the income from the last 30 days Tax Return 1040 and schedule C Copy of 1099 If in partnership, Schedule K1 & Schedule E Other Income Form (last resort) Subcontractor: 1099 for previous tax year is acceptable if they don't have paystubs	1040 and Schedule C can only be accepted up to 30 days after filing 1099 can only be accepted up to 30 days after filing	For CAP, deduct the following lines on the Schedule C: Start with Line 7 8. advertising 10 commissions and fees 11 contract labor 12 Depletion 14 employee benefit programs 17 legal and professional fees 18 office expense 22 supplies 25 utilities 26 wages Divide by 12 For grant (if received during tax season) , start with line 7 and divide by 12 for the amount to verify. No deductions taken. 1040 and 1099 are acceptable when it is outside of the tax filing season. Follow guidance in Teams Knowledgebase on other Schedules.
Social Security *Social Security* *SS Disability*	Social Security Benefit Statement (also called award letter) Current year or previous year w/increase factored in.		CRM verification is good for the rest of the year.
SSI Survivor Benefits list under *Social Security*	www.socialsecurity.gov/myaccount or call 1-800-772-1213 Bank Statement Letter from bank on letterhead confirming direct deposits Copy of 1099 from previous year NOTE: Medicare is deducted for seniors.		Bank Statement can be from the CURRENT year for SS and SSD. It does not have to be from the last 30 days. As long as bank statement shows all deposits for that month, it is verifiable. We cannot accept a previous

	SSI State Supplement of $22.10 or less- No verification needed		year's letter or a 1099 for SSI only for SS/SSD. SSI received for children is excluded from the income calculation. You can verify the net amount after all deductions (except tax withholdings) **SSI State Supplement of $22.10 or less:** received, it needs to be verified. If POI is Verify in CRM *Public Assistance* Add to SSI total in SCAR and/or
Stipends	1099/W2/Letter stating the pay frequency and amount of payment We do not consider loans and scholarships paid to the institution as income. If a student receives the loan or scholarship amount and then pays it directly to the institution, this amount is also excluded from the income calculation.		DO NOT complete an "Other Income" Form. Proof of Income is needed. For now, Stipends must be entered as "Salary and Wages" until further notice. Take the amount of the stipend received for the semester and divide by 5 to get the monthly amount. We consider any stipend for living expenses received as income.
Unemployment Compensation	Notice of financial determination Unemployment printout – www.uc.pa.gov Bank statement from last 30 days		

Utility Checks	Copy of utility check If reimbursed on a card, printout from the card (last 30 days) Document from housing that lists the utility reimbursement		
Veterans Benefits *Veteran's Income*	Letter from VA Benefit statement (current year) Bank Statement from last 30 days		Verify in CRM under Veteran's Income
Workman's Compensation	Letter of determination		
Worker's Comp	Benefits statement from last 30 days Copy of checks (last 30 days) Bank statement from last 30 days		
Zero Income	Zero Income Form	Hardship always looks at last 30 days. If income has been received in last 30 days and customer is applying for a grant document/request POI.	A new zero income form is requested every six months.
Public Housing Benefit	■ Lease or lease addendum issued by a housing authority OR ■ Oral or written verification by a landlord or housing authority that the individual or household is receiving public housing		
Public Benefits	■ receipt of LIHEAP letter, printout, or verification by receiving utility ■ letter or communication (electronic or print) by government agency of receipt of TANF or Cash Assistance funds		• Initially, customer shall be placed in BDP/AMP at the lowest discount amount. DEF will subsequently request sufficient information from the customer to determine the appropriate discount level. If the customer does not provide such information, the customer will remain on the lowest discount amount.

Revised DEF Income Guide – 6-8-23

Proof of Enrollment in BDP	■ Confirmation by DEF's system or utility system that customer is enrolled in BDP.		Customer will be enrolled in AMP upon request if already enrolled in BDP.

NOTES:

- Emailed receipts confirming deposits to a bank account are unacceptable as POI
- Pre-paid debit/credit card statements showing direct deposits from valid sources (Social Security, Department of Public Assistance, etc.) are acceptable in lieu of a bank statement
- **Proof of loss of income for wages, social security, unemployment, etc. is NOT required for any program. If a customer contacts us and says they are now Zero Income, we can proceed with a CAP application immediately. Grants do require the last 30 days POI.**

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-012

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

As of the most current date available, please provide the average monthly bill amounts of H2O BDP participants, disaggregated by usage levels (i.e. 1,000; 2,000; 3,000; 4,000; and 5,000 gallons) and Federal Poverty Level (FPL) range (i.e. 0-50%; 51-100%; 101-150%).

Please provide this data in a live Excel spreadsheet.

Response:

Please refer to CAUSE-PA 02-012_Attachment. Please note that the Company did not capture FPL ranges in the system prior to October 2022, and therefore, the average monthly bill amounts have been provided for the period October 2022 – November 2023.

CAUSE-PA 02-012_Attachment

	Average Bill Amounts																			
Usage Gallons	0 - 1000	0 - 1000	0 - 1000	0 - 1000	1000 - 2000	1000 - 2000	1000 - 2000	1000 - 2000	2000 - 3000	2000 - 3000	2000 - 3000	2000 - 3000	3000 - 4000	3000 - 4000	3000 - 4000	3000 - 4000	4000 - 5000	4000 - 5000	4000 - 5000	4000 - 5000
BILL_PERIOD \ FPIG Levels	0% - 50%	51% - 100%	101% - 150%	Unknown FPIG	0% - 50%	51% - 100%	101% - 150%	Unknown FPIG	0% - 50%	51% - 100%	101% - 150%	Unknown FPIG	0% - 50%	51% - 100%	101% - 150%	Unknown FPIG	0% - 50%	51% - 100%	101% - 150%	Unknown FPIG
2022/10	$15.23	$14.04	$14.02	$16.56	$26.30	$25.37	$27.30	$34.21	$46.98	$40.33	$39.40	$43.41	$61.78	$58.31	$53.27	$60.11	$74.96	$69.85	$67.49	$74.47
2022/11	$14.44	$16.27	$15.06	$17.02	$26.17	$25.40	$24.76	$31.07	$44.62	$43.40	$39.37	$42.64	$61.91	$56.13	$51.16	$58.85	$70.83	$70.70	$70.47	$74.22
2022/12	$16.24	$14.25	$15.88	$22.09	$27.34	$24.99	$24.80	$32.69	$43.61	$40.14	$37.91	$42.94	$65.65	$56.42	$52.73	$55.83	$67.46	$71.66	$67.13	$73.27
2023/01	$14.14	$14.46	$14.42	$16.85	$26.90	$24.19	$26.69	$34.88	$42.30	$41.61	$38.30	$41.34	$58.81	$56.12	$54.45	$55.90	$69.25	$70.76	$66.46	$69.80
2023/02	$11.45	$14.37	$18.73	$19.96	$20.50	$23.49	$29.86	$33.23	$34.68	$40.60	$44.31	$47.95	$41.70	$51.09	$59.30	$63.55	$52.24	$63.85	$72.80	$78.18
2023/03	$9.39	$13.54	$21.79	$22.21	$15.09	$22.64	$34.23	$36.57	$24.08	$35.84	$48.40	$53.66	$27.67	$49.76	$65.42	$63.93	$33.20	$58.35	$80.31	$91.86
2023/04	$10.34	$16.92	$24.17	$22.91	$15.99	$22.58	$33.80	$35.80	$18.20	$34.51	$48.17	$52.25	$31.26	$48.46	$65.19	$66.02	$33.34	$59.20	$87.24	$82.20
2023/05	$9.14	$14.83	$22.19	$21.92	$14.94	$23.25	$39.81	$35.93	$18.61	$37.80	$49.28	$51.11	$27.90	$45.84	$64.02	$64.65	$30.81	$58.25	$80.15	$85.80
2023/06	$8.84	$13.58	$23.49	$22.71	$14.37	$22.76	$34.11	$36.07	$18.56	$33.81	$56.49	$51.71	$26.71	$43.80	$63.13	$64.97	$33.81	$56.92	$78.64	$78.47
2023/07	$8.09	$13.51	$22.25	$21.31	$12.20	$23.72	$40.30	$36.28	$18.04	$32.88	$48.62	$50.73	$25.48	$43.80	$62.03	$64.76	$33.88	$57.28	$80.58	$81.59
2023/08	$8.35	$13.47	$22.06	$21.46	$14.24	$23.05	$39.69	$36.01	$20.31	$34.06	$48.33	$50.37	$27.16	$44.16	$64.78	$66.05	$29.59	$55.56	$80.22	$83.86
2023/09	$8.42	$13.46	$22.42	$21.78	$14.06	$22.86	$33.21	$36.20	$18.56	$33.65	$48.63	$51.18	$24.77	$45.67	$63.31	$66.41	$31.50	$56.34	$78.97	$82.46
2023/10	$9.03	$13.71	$21.96	$21.65	$13.39	$22.84	$33.96	$35.56	$18.38	$34.19	$49.71	$48.18	$27.86	$44.75	$65.12	$63.94	$31.44	$56.54	$82.07	$79.40
2023/11	$8.10	$13.65	$21.71	$21.17	$12.37	$22.93	$34.06	$34.93	$18.82	$34.69	$50.16	$49.15	$26.62	$45.08	$64.20	$64.26	$29.45	$55.55	$82.31	$79.69

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-014

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Does Dollar Energy Fund (DEF), as PAWC's low-income assistance program administrator, currently conduct cross-program referrals between PAWC's programs and other utility assistance programs which DEF administers? If the answer to this question is yes or in the affirmative, please describe in detail to what extent DEF currently conducts cross-program referrals and enrollments related to PAWC's programs.

Response:

Yes, Dollar Energy Fund, PAWC's program administrator, conducts cross-program referrals and/or enrollment in other utility assistance programs it administers.

Dollar Energy Fund administers customer assistance programs for First Energy, Columbia Gas, Peoples Gas, National Fuel Gas, ALCOSAN and Verizon.

<u>Process for cross referrals/enrollments:</u>

1. Customers calling Dollar Energy Fund's main call center phone number select a program from its interactive voice response system and speak with a DEF customer service representative for that program.
2. Customer contact records are created within Dollar Energy's customer relationship management ("CRM") system, which enables a single customer record for multiple programs.
3. At the end of every call, customers are asked about their other utilities.
4. If the program for the customer's other utilities are managed within Dollar Energy's call center, they are transferred to a DEF CSR for that program and an application is completed.
5. Any documents required as part of an application process for a program are scanned into Dollar Energy's document imaging system with a notation in its CRM system. This enables a customer to use the same income verification documents for enrollment into multiple programs.*

*PAWC currently accepts verbal income information for enrollment into the discount program, therefore no documents would be requested, and enrollment is completed on the initial phone call with the customer.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-015

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Does PAWC, or DEF as PAWC's low income assistance program administrator, track the number of cross-program referrals and/or enrollments it conducts? If so, please indicate the number of cross-program referrals and enrollments, respectively, conducted by PAWC, or by DEF as PAWC's program administrator, from January 2020 to date, disaggregated by month and year, as of the last day of the month/year.

If this data is unavailable as of the last day of the month/ year, please provide this data, disaggregated as requested, and specify at which point in the month/ year this data was calculated.

Please provide this data in a live Excel spreadsheet.

Response:

No. PAWC and DEF systems do not track the number of cross-program referrals and enrollments conducted.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-016

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Please specifically describe what steps, if any, PAWC has taken to conduct joint outreach efforts with other utilities through DEF.

Response:

In October 2022, the MyApp portal was launched for hardship grant applications. MyApp is DEF's online application which allows customers to apply online for programs offered by partnering utilities rather than by calling DEF or through a Community Based Organization. MyApp will facilitate joint outreach efforts, cross-enrollments and enhance the customer experience. Since the beginning of the current program year, October 1, 2023 through December 27, 2023, 61% of completed grant applications for a water grant were submitted through MyApp. Additionally, during the same timeframe, 64% of completed applications for a wastewater grant were submitted through MyApp.

Please refer to the Company's response to CAUSE-PA 02-001 for joint outreach efforts conducted with Dollar Energy Fund.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-019

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Please describe in detail PAWC's policies and procedures for monitoring DEF's administration of PAWC's low-income assistance programs, and provide a copy of the most recent assessment, report, or other document related to PAWC's monitoring of DEF's administration of PAWC's low income assistance program, and indicate when the assessment, report, or other document is dated.

Response:

PAWC is granted access to DEF *iPartner*© Grant Management System to review information regarding fund balances, application processing, application status and standard reports. Reports are available on all application and grant activities through a standard set of reports. PAWC can request DEF provide reports other than the standard iPartner© reports.

PAWC does not have any formal policies or assessments related to DEF's administration of PAWC's low-income program.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-020

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Please specifically describe:

A. How often PAWC conducts assessments and/ or audits of DEF's administration of PAWC's low-income assistance programs;

B. Any and all metrics established to track and measure customer service performance, call center performance, or related customer interactions (including customer complaints) related to DEF's administration of PAWC's programs. Please also provide a copy of the data that reflect these tracking and performance metrics from 2020 to present, disaggregated by month and year, as of the last day of the month/ year.

If this data is unavailable as of the last day of the month/ year, please provide this data, disaggregated as requested, and specify at which point in the month/ year this data was calculated.

Please provide this data in a live Excel spreadsheet.

Response:

A-B. PAWC does not conduct assessments or audits of DEF's administration of PAWC's low-income program.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-021

Responsible Witnesses: **Deb Degillio, VP, Customer Service**
Tawana Dean, Senior Manager, Customer Compliance

Question:

Please indicate as of the most recent date available:

A. On what days and within what hours are PAWC's call center(s) available to residential consumers;

B. On what days and within what hours are calls to PAWC's call center(s) handled by a live representative or an automated system recording, respectively;

C. On what days and within what hours can a consumer call DEF related to PAWC's low-income assistance programs;

D. On what days and within what hours are calls to DEF related to PAWC's low-income assistance programs handled by a live representative or an automated system recording, respectively.

Response:

A. Call center operations are open every day, 24-hours a day, 365 days a year for all customers, including residential customers, who have an emergency. Normal hours of operation for PAWC customers for calls for all non-emergencies are Monday through Friday from 7 am to 7 pm.

B. PAWC customers can utilize the automated system (IVR) every day, 24-hours a day, 365 days a year. Live representatives are available per the times provided in A above.

C. Customers can contact Dollar Energy Fund representatives Monday – Friday 8AM – 5PM ET. Dollar Energy Fund's interactive voice response (IVR) can be reached 24 hours a day.

Consumers seeking a hardship grant can begin the application process 24 hours a day/7 days a week using the MyApp portal. Consumers can upload eligibility documentation 24 hours a day/7 days a week**.**

D. Refer to the response to part C.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-023

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

Please provide the following data related to Dollar Energy Fund's administration of PAWC's low-income assistance programs:

A. The number of DEF full time and part time staff, respectively, available to answer consumer calls related to PAWC's low-income assistance programs, as of the most current date available;

B. Average speed of answer by DEF for calls related to PAWC's low-income assistance programs directed to a customer service representative from 2020 to present, disaggregated by month and year, as of the last day of the month/ year;

C. The mean and median hold time for consumer to speak to a live DEF customer service representative related to PAWC's low-income assistance programs from 2020 to present, disaggregated by month and year, as of the last day of the month/ year;

D. Abandonment rate for calls directed to a DEF customer service representative related to PAWC's programs from 2020 to present, disaggregated by month and year, as of the last day of the month/ year.

If this data is unavailable as of the last day of the month/ year, please provide this data, disaggregated as requested, and specify at which point in the month/ year this data was calculated.

Please provide this data in a live Excel spreadsheet.

Response:

A. PAWC's bill discount program is staffed by DEF with 2.5 full-time equivalents. These 2.5 full-time equivalents are responsible for all aspects of PAWC's bill discount program.

PAWC's grant program is staffed by DEF with 5 full-time equivalents. These individuals are responsible for all activity related to PAWC's grant program including, but not limited to, processing applications from MyApp and verifying income/eligibility, processing applications in iPartner, answering questions from consumers/utility company representatives, answering questions from partnering community-based organizations.

B-D. Please refer to CAUSE-PA 02-023 Attachment. Please note that Dollar Energy fund does not maintain median data.

CAUSE-PA 02-023_Attachment

Year - Month	Avg Queue Time (C)	Avg Speed of Answer (B)	Abandoned Rate (D)
Overall Mean	**0:03:27**	**0:03:12**	**9.0013%**
Overall Median	**0:02:17**	**0:02:02**	**4.0865%**
2020 - January	0:03:47	0:03:33	0.0620%
2020 - February	0:03:47	0:03:30	0.0000%
2020 - March	0:02:35	0:02:26	0.0000%
2020 - April	0:03:55	0:03:22	0.0000%
2020 - May	0:01:27	0:01:20	1.3921%
2020 - June	0:01:05	0:01:00	2.5484%
2020 - July	0:00:41	0:00:32	1.0695%
2020 - August	0:01:09	0:01:04	2.3904%
2020 - September	0:00:47	0:00:43	2.5641%
2020 - October	0:01:26	0:01:21	3.0162%
2020 - November	0:07:44	0:07:05	18.9826%
2020 - December	0:06:40	0:05:44	14.3735%
2021 - January	0:07:33	0:06:31	19.9811%
2021 - February	0:10:19	0:09:36	34.5506%
2021 - March	0:13:54	0:13:56	33.7310%
2021 - April	0:08:33	0:08:01	20.0275%
2021 - May	0:04:02	0:03:52	5.9952%
2021 - June	0:00:48	0:00:42	1.8939%
2021 - July	0:01:03	0:00:51	2.9348%
2021 - August	0:01:30	0:01:12	3.0939%
2021 - September	0:00:26	0:00:19	2.0906%
2021 - October	0:06:29	0:06:44	10.6777%
2021 - November	0:08:53	0:09:32	13.1296%
2021 - December	0:03:24	0:02:54	7.6995%
2022 - January	0:05:50	0:05:44	9.6907%
2022 - February	0:06:32	0:06:38	10.8479%
2022 - March	0:01:50	0:01:31	3.6048%
2022 - April	0:02:04	0:01:48	6.3599%
2022 - May	0:01:18	0:00:55	5.6417%
2022 - June	0:00:27	0:00:23	1.3029%
2022 - July	0:01:22	0:01:12	2.9024%
2022 - August	0:00:47	0:00:41	2.7451%
2022 - September	0:00:40	0:00:32	2.3041%
2022 - October	0:01:03	0:00:53	2.8369%
2022 - November	0:02:29	0:02:19	7.0677%
2022 - December	0:01:59	0:01:39	4.9470%
2023 - January	0:01:27	0:01:17	4.3750%
2023 - February	0:06:43	0:06:18	13.1687%
2023 - March	0:05:35	0:05:22	9.6648%
2023 - April	0:03:46	0:03:21	8.9552%
2023 - May	0:03:49	0:03:33	6.9791%
2023 - June	0:03:57	0:03:37	10.0990%
2023 - July	0:01:49	0:01:32	4.2090%
2023 - August	0:01:40	0:01:28	5.9002%
2023 - September	0:01:33	0:01:18	4.3887%
2023 - October	0:01:40	0:01:22	5.5422%
2023 - November	0:02:42	0:02:16	7.5512%
2023 - December	0:02:47	0:02:26	7.6205%

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-025

Responsible Witness: Bruce W. Aiton, Vice President of Engineering for PAWC

Question:

Has PAWC taken any steps to evaluate the need for a service repair line and/or replacement assistance program? If so, please describe what steps PAWC has taken to evaluate this need, and provide a copy of any needs assessment, written documents, work papers, contracts, or memoranda used in this evaluation.

Response:
There are three scenarios. First: a standard non-lead water service line. Second: a "lead" service line, which may also include a galvanized service line. And third: a wastewater service lateral.

For the non-lead water service line: No, due to limitations in the Company's ability to spend capital or operational money on assets not owned by the Company, no specific efforts or evaluation of the need for service line repair has taken place.

For the "lead" containing service line: the Company has petitioned and been approved by the PUC a lead service line replacement program. The Company is now in process of developing an inventory of customer and company side lead service lines. Consistent with recent EPA guidance, the target is to have all lead service lines replaced over the next ten years. Documentation for the ruling is available on the PUC website.

For the third, wastewater service laterals: the PUC has provided guidance through regulation as to when a utility may seek PUC approval of a sewer lateral replacement program. The Company is evaluating whether it is able to seek such permission in conformance with the regulations. No papers, needs assessment or other documentation exist at this time.

I./Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-026

Responsible Witness: Bruce W. Aiton, Vice President of Engineering for PAWC

Question:

As of the most recent data available, what is the average cost for a PAWC customer to have a damaged customer-side service line repaired?

Response:

There are two scenarios. If a customer service line is determined to be a lead service line, which may be lead or possibly galvanized that had been connected to lead historically, then there is no cost to the customer for the Company to replace that lead service line. Alternatively, if the service line is not lead or lead containing, then the Company is not allowed to repair the customer-side, customer owned service line. The Company employees may dig to find the leak, then depending on if the damage is on the customer side or Company side, the Company will either show the customer or if on the Company side, the Company will complete repairs at no direct cost to the customer.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-027

Responsible Witness: Jim Runzer, Vice President of Operations for PAWC

Question:

Please describe any and all steps that PAWC takes prior to disconnection of water service to a property or unit with a damaged customer-side service line.

Response:

PAWC will send the customer a letter advising the customer of the damaged service line and notifying them they have 10 days to repair the damaged line. PAWC will send a field service representative on the 11th day or after to verify the leak has been repaired. If not repaired, PAWC will send a 10-day termination notice with a potential shut off date. 3 days prior to shut off date, PAWC will send a field service representative to leave a 3-day door hanger notice. A Company termination shut off order is issued on the shut off date and service is disconnected if the leak is still not repaired and shut off notice is left.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-029

Responsible Witness: Jim Runzer, Vice President of Operations for PAWC

Question:

Between 2020 and present, disaggregated by year, please indicate how many PAWC customers had their service disconnected as a result of a damaged customer-side service line. If possible, please additionally disaggregate by the following:

A. All residential customers;

B. Confirmed low income customers; and

C. Customers enrolled in the H2O program.

If this data is unavailable as of the last day of the year, please provide this data, disaggregated as requested, and specify at which point in the year these customer counts were calculated.

Please provide this data in a live Excel spreadsheet.

Response:

Below are the totals of the number of customers that had their service disconnected as a result of a damaged customer-side service line leak. The company does not track this information by confirmed low-income or customers enrolled in the H2O program.

Year	Non-Residential	Residential
2020	23	156
2021	33	258
2022	49	373
2023 (as of 12/21/2023)	24	250
Grand Total	**129**	**1037**

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 2

CAUSE-PA 02-030

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

Does PAWC or its affiliates offer insurance for customer side service lines? If so:

A. How much does the insurance cost?

B. Please provide a copy of any applications, agreements, and marketing materials used in relation to this insurance.

Response:

PAWC and its affiliates do not offer insurance and/or protection plans for customer side service lines. However, Oncourse Home Solutions (marketed as American Water Resources) offers protection plans for PAWC customers and for the convenience of customers, charges for these services can be included in PAWC bills. This is voluntary and at the discretion of customers.

A. Protection plans, including pricing of products/services is determined by Oncourse. Please refer to the response to OCA-08-022 for payments collected by PAWC from its customers on behalf of Oncourse.

B. PAWC does not create, pay for, or send any marketing materials for non-basic services to Pennsylvania customers. Please refer to the response to OCA-20-017 for the contractual arrangement with Oncourse.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 3

CAUSE-PA 03-013

Responsible Witness: Jim Runzer, Vice President of Operations for PAWC

Question:

From 2020 to present, disaggregated by year, as of the last day of the year, please indicate:

a. The number of PAWC residential accounts coded as tenant-occupied;

b. The number of PAWC residential accounts coded as tenant-occupied that received a notice pursuant to the DSLPA for voluntary requests for disconnection;

c. The number of PAWC residential accounts coded as tenant-occupied that received a notice pursuant to the DSLPA for involuntary termination for nonpayment;

d. The number of PAWC residential accounts coded as tenant-occupied that were terminated for nonpayment;

e. The number of PAWC residential accounts coded as tenant-occupied that had service voluntarily disconnected at the request of a landlord and/or property owner.

If this data is unavailable as of the last day of the year, please provide this data, disaggregated as requested, and specify at which point in the year this data was calculated.

Response:

Please see CAUSE-PA 03-013_Attachment for a. d. and e. The company does not track the information requested in b. and c.

Year	a. The number of PAWC residential accounts coded as tenant-occupied;	d. The number of PAWC residential accounts coded as tenant-occupied that were terminated for non payment	e. The number of PAWC residential accounts coded as tenant-occupied that had service voluntarily disconnected at the request of a landlord and/or property owner.
2020	18,621	23	2,873
2021	18,917	474	3,763
2022	20,513	199	3,478
2023	20,527	315	3,108

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 3

CAUSE-PA 03-014

Responsible Witness: Jim Runzer, Vice President of Operations for PAWC

Question:

From 2020 to present, has PAWC identified any accounts that were coded as non-tenant accounts, despite having received information that the account and/or property was tenant-occupied? If so, please indicate, disaggregated by year, as of the last day of the year:

a. The number of accounts coded as non-tenant accounts, despite having received information that the account and/or property was tenant-occupied;

b. The number of accounts set forth in response to CAUSE-PA III-14a. who had services voluntarily disconnected;

c. The number of accounts set forth in response to CAUSE-PA III-14a. who had services involuntarily terminated for nonpayment;

If this data is unavailable as of the last day of the year, please provide this data, disaggregated as requested, and specify at which point in the year this data was calculated.

Please provide this data in a live Excel spreadsheet.

Response:
PAWC has a process in place to update an account status from non-tenant to tenant upon receipt of appropriate information. The Company does not track the accounts that have been updated from non-tenant to tenant.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 3

CAUSE-PA 03-021

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

From 2020 to present, disaggregated by year, as of the last day of the year, please indicate:

a. How many partial payments have been made by tenants who sought to continue service pursuant to DSLPA 66 Pa. C.S. § 1527, but were unable pay the full amount of current charges needed?

b. What was the total amount of these partial payments?

c. Did PAWC refund these partial payments?

d. The number and amount of refunds PAWC issued, for the partial payments provided in response to CAUSE-PA III-21.a.

If this data is unavailable as of the last day of the year, please provide this data, disaggregated as requested, and specify at which point in the year this data was calculated.

Please provide this data in a live Excel spreadsheet.

Response:

a. The Company is not aware of any partial payments made by tenants who sought to continue service pursuant to DSLPA 66 Pa. C.S. § 1527, but who were unable to pay the full amount of current charges needed during this period.
b. Not applicable.
c. Not applicable.
d. Not applicable.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 3

CAUSE-PA 03-023

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

When PAWC receives a request to terminate water service from a municipality or municipal authority, as defined by the Pennsylvania Water Services Act (53 P.S. § 3102.101 et seq.) because the owner or occupant of the premises neglected or failed to pay, for a period of 30 days from the due date, a rental, rate or charge for sewer, sewerage or sewage treatment service imposed by that municipality or municipal authority:

a. What notice(s) does PAWC serve on the property and how are these notice(s) served?

b. What process does PAWC follow when informed that the customer has formally disputed the sewer charges?

c. What process does PAWC follow if informed that the property is tenant occupied and the termination is due to nonpayment by a landlord/ account holder?

Please provide copies of any and all notices, policies, procedures, or other documents utilized regarding such termination requests under the Water Services Act.

Response:

a. Please refer to OCA 08-038.
b. If a municipality or municipal authority informs the Company of a dispute, the termination would be canceled.
c. If a municipality or municipal authority informs the company of an improper coding, the Company would cancel the termination and code the customer's account accordingly.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 3

CAUSE-PA 03-025

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

What is PAWC's process for confirming with a municipality or municipal authority that the municipality or municipal authority complied with the requirements of the Pa. Water Services Act? Please provide a copy of any current policies, procedures, SOPs, training materials, or other documents which describe PAWC's process for confirming these requirements.

Response:

When the municipality or municipal authority has a request for shut off, they utilize a managed file transfer site. They must indicate by marking an "x" in the template to confirm that every element of the following statement is true and correct regarding the requested shut-off of water service to this premise:
"A responsible officer of the municipality is hereby requesting the termination of water service to the premise for unpaid and overdue wastewater charges. I hereby also confirm that the account for the premise is not a tenant occupied property where the landlord is the ratepayer. I hereby confirm that the municipality has lawfully complied with all notice requirements required by The Pennsylvania Water Services Act (P.L. 85) 53 P.S. 3102.501 et seq. prior to requesting termination of water services to this premise including the requirements to mail and post written notices of termination to this premise within the applicable time frames. Additionally in accordance with its agreement with PA American Water the municipality hereby affirms that it has not received a written statement from the person(s) liable for the payment of such wastewater charges stating that there is a "just defense" to the claim for wastewater charges or any part thereof for this premise. The municipality agrees to immediately notify PA American Water if such a statement of "just defense" is received prior to shut off."

Please see CAUSE-PA 03-025_Attachment 1 for training materials provided to municipalities and municipal authorities.

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MFT-
Managed File Transfer

Reference Guide

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- Gaining Access Pg. 4
- Logging In/My Account Page Pg. 5-6
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- Retrieving Usage Data Files Pg. 9-13
- Formatting Usage Data Pg. 14-15
- Uploading Disconnects/Reconnects Pg. 17-29
- Response Files Pg. 30
- Order Status Files Pg. 31
- Premise Change Files Pg. 32
- Logs Pg. 33

Navigate to MFT

Navigate to the MFT Portal: https://mft.amwater.com/

MFT is the site designed to provide usage data files, premise change files, and allows you to upload disconnect and reconnect requests.

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Gaining Access to MFT

To set up a profile in MFT, email the American Water Special Accounts team at specialaccts@amwater.com.

Provide the information shown to the right of this statement.

A profile will be created. The email address(s) you provide will serve as the username for future logins, and a *temporary* password will be provided for each user. This information will be sent by email. Do not copy/paste this data.

A separate email with additional log in instructions from *Notifications-MFT@amwater.com* will follow.

User Info

First and last name of each individual needing MFT access

Email

Email address for each individual needing MFT access

Municipal Code

The municipal code(s) or name of the municipality(s) the user needs access to.

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Logging into MFT

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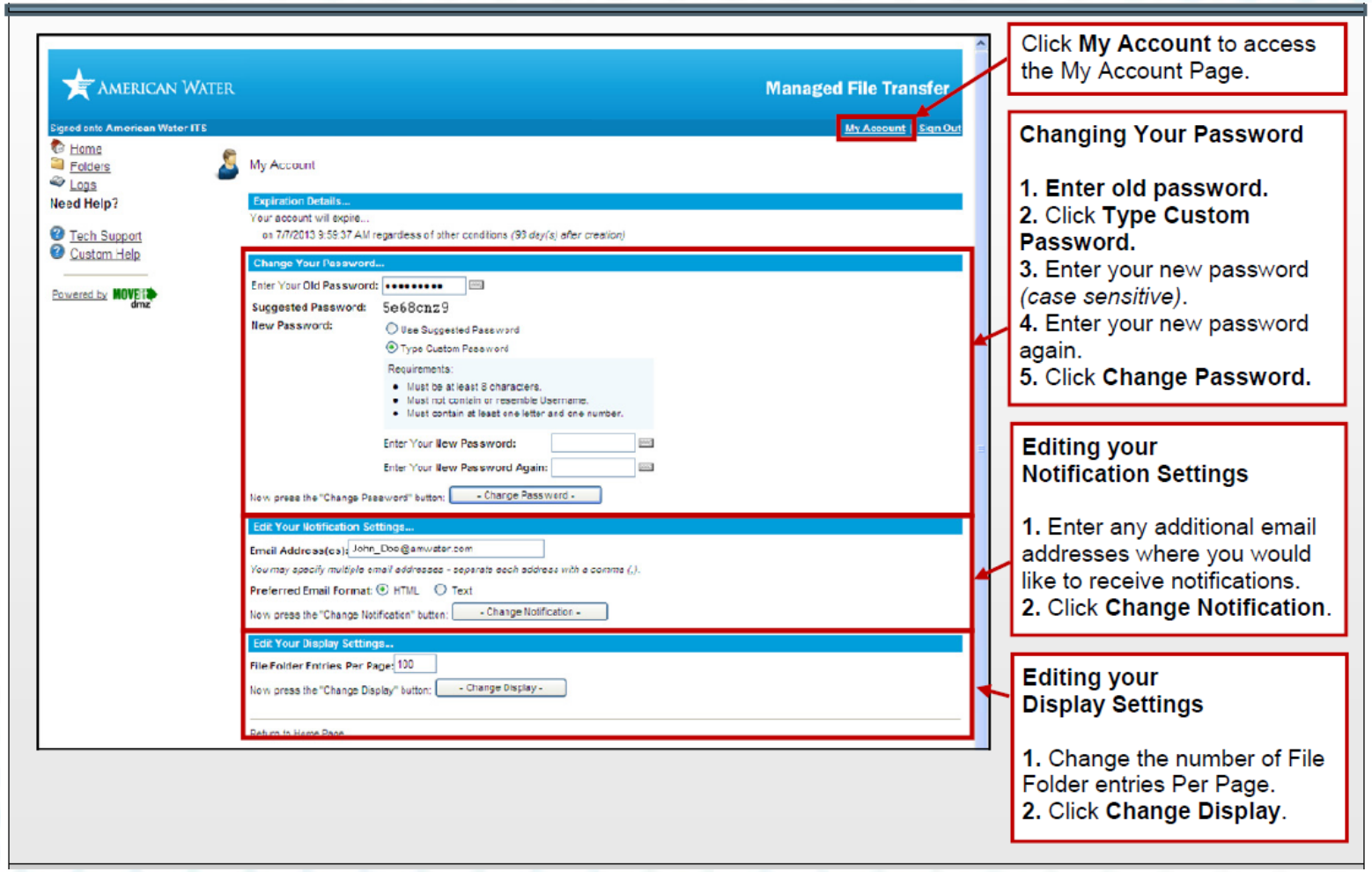
My Account Page



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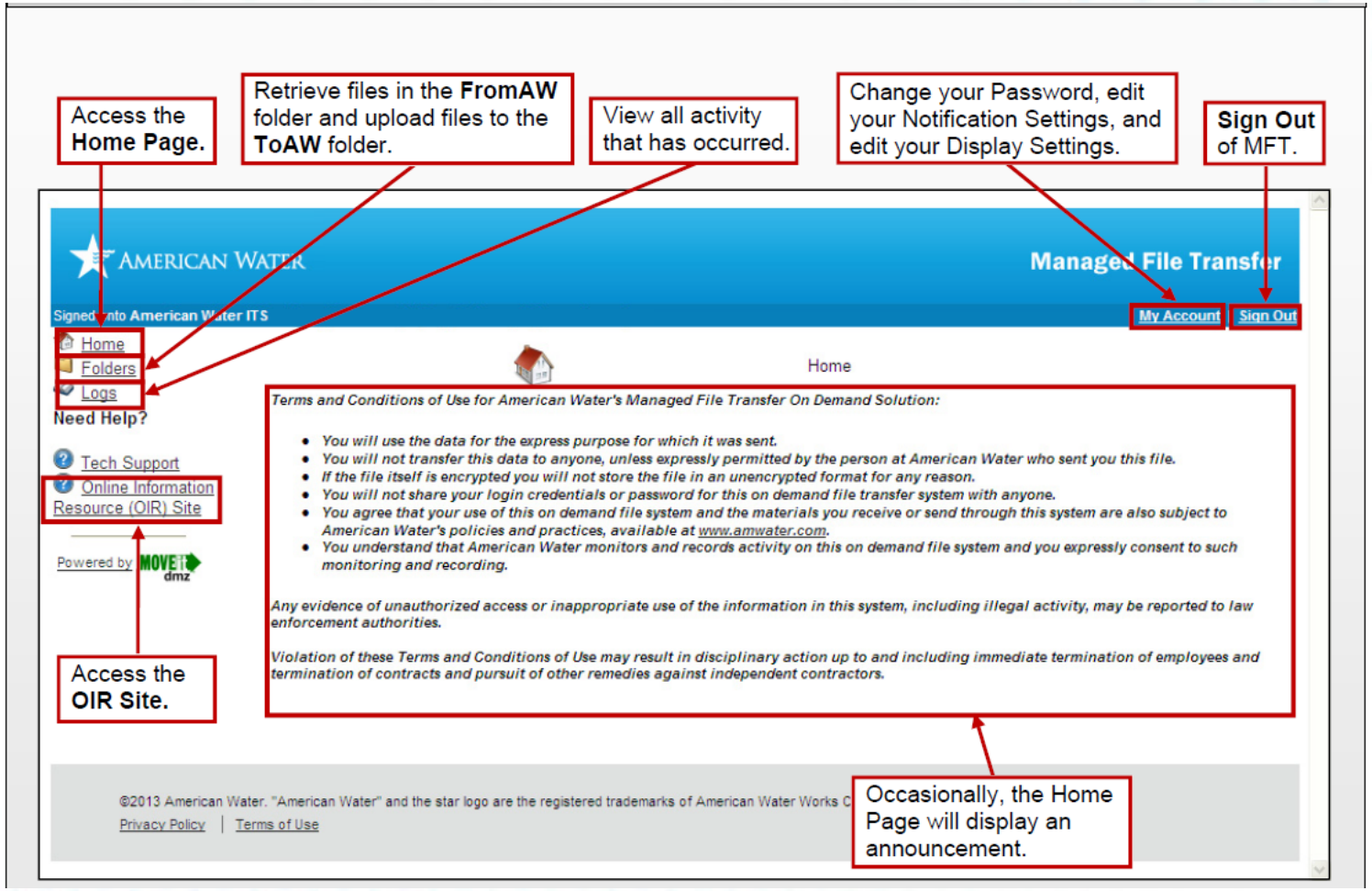
Home Page Tour

An alert banner will display important usage data impacting events such as latency, and invoicing blocks.



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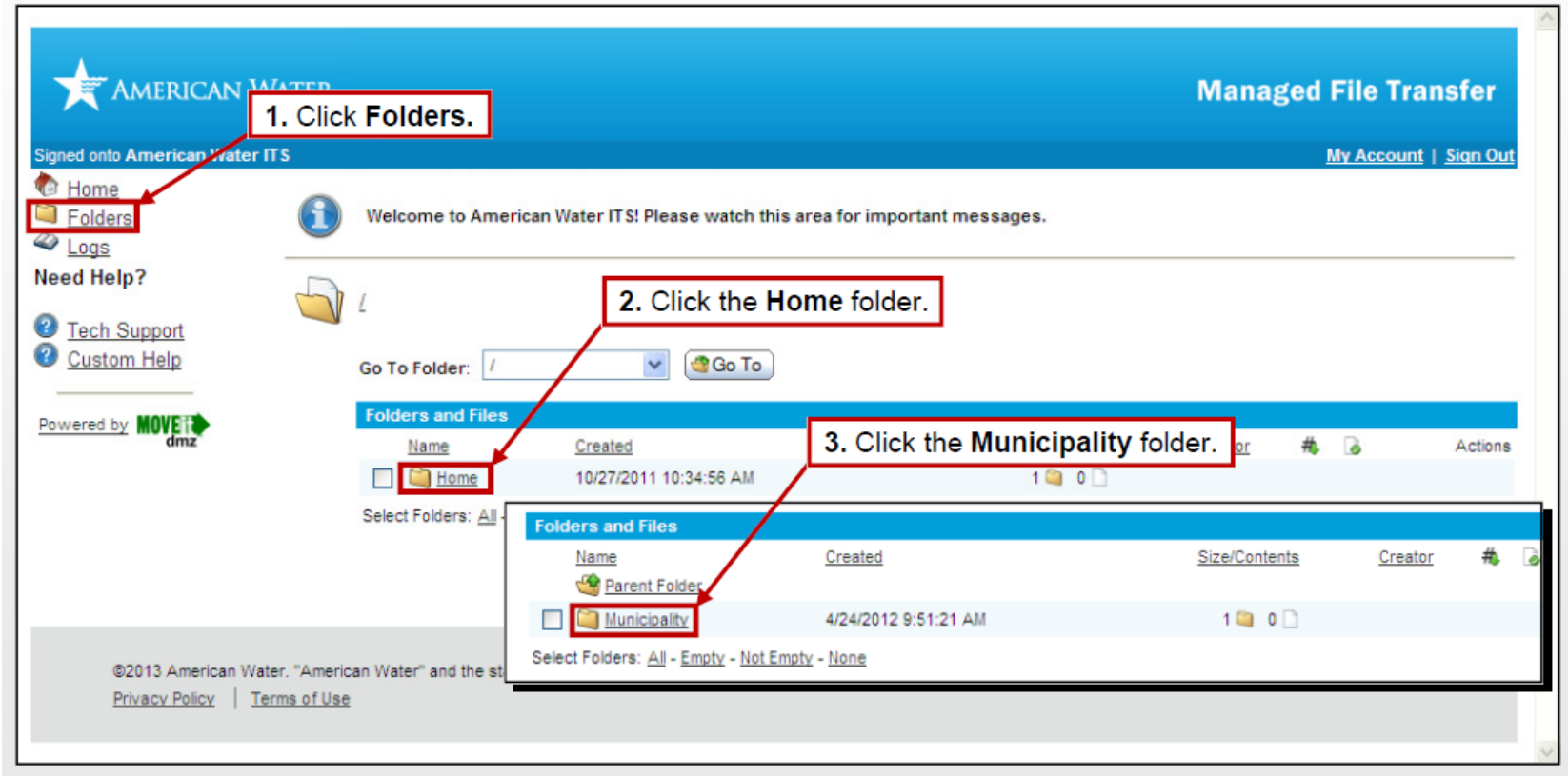
Retrieving Usage Data Files

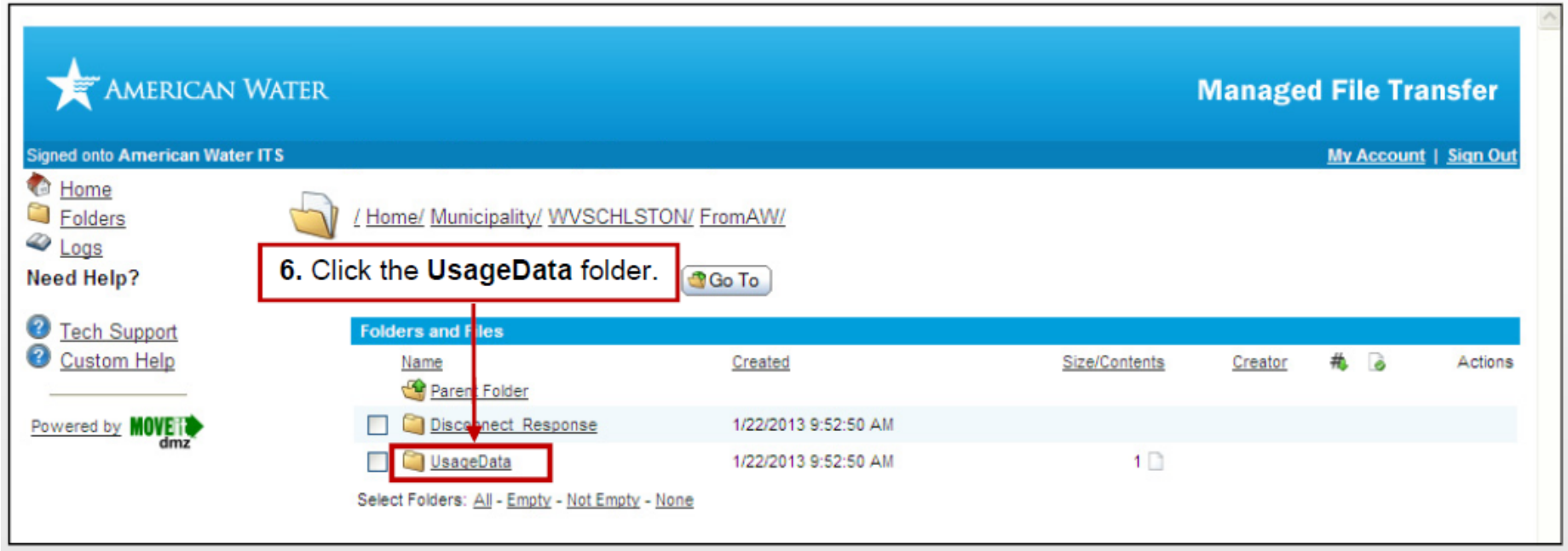
Retrieving Usage Data Files

Premises must be coded by American Water and accounts must be invoiced to appear in usage data reporting.



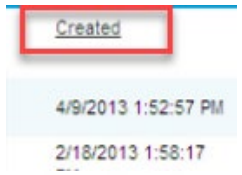
Retrieving Usage Data Files (cont'd)

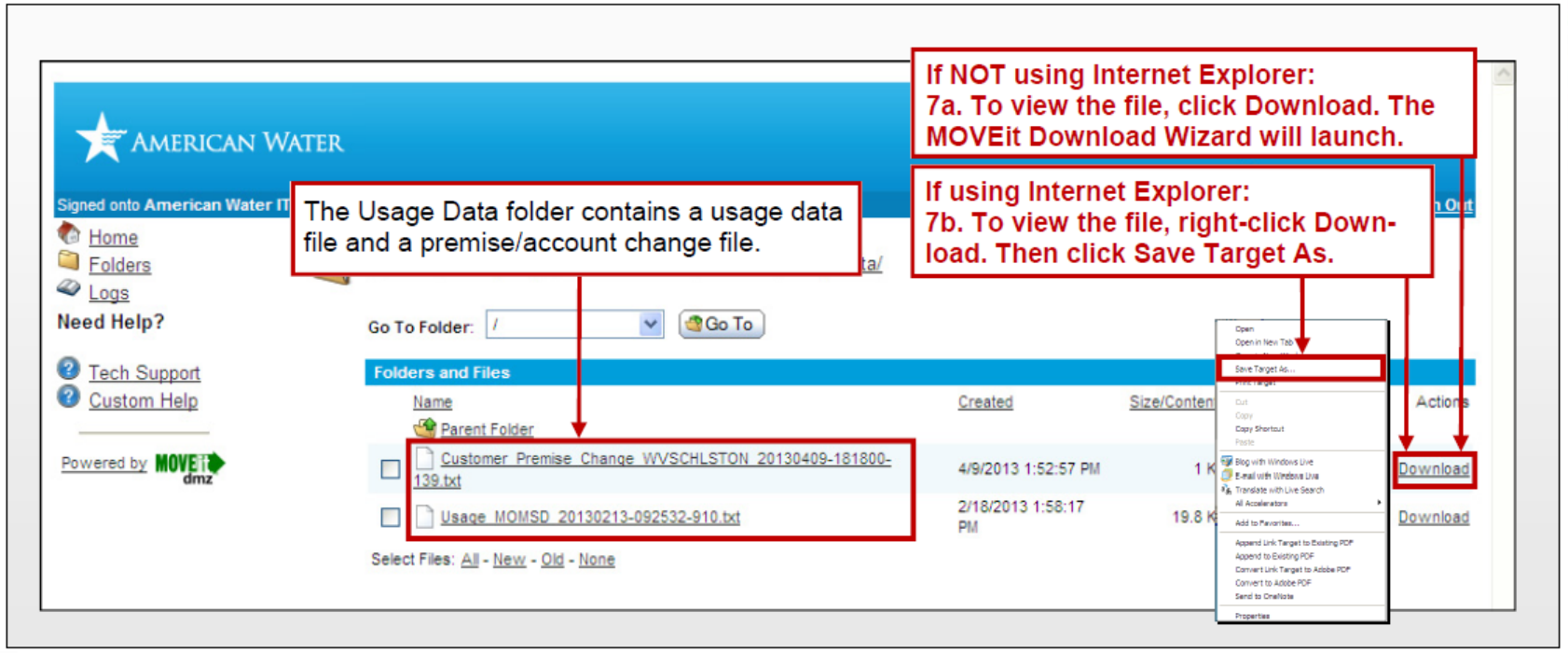
Retrieving Usage Data Files (cont'd)



Retrieving Usage Data Files (cont'd)

Tip: To sort usage data or premise change files ascending or descending by date, click the "Created" Header.





NOTE: *Usage data and Premise change files will expire from MFT **30 days** after their original posting date (created). Please download your usage data file immediately to avoid expiry.*

The download button may appear in this format.

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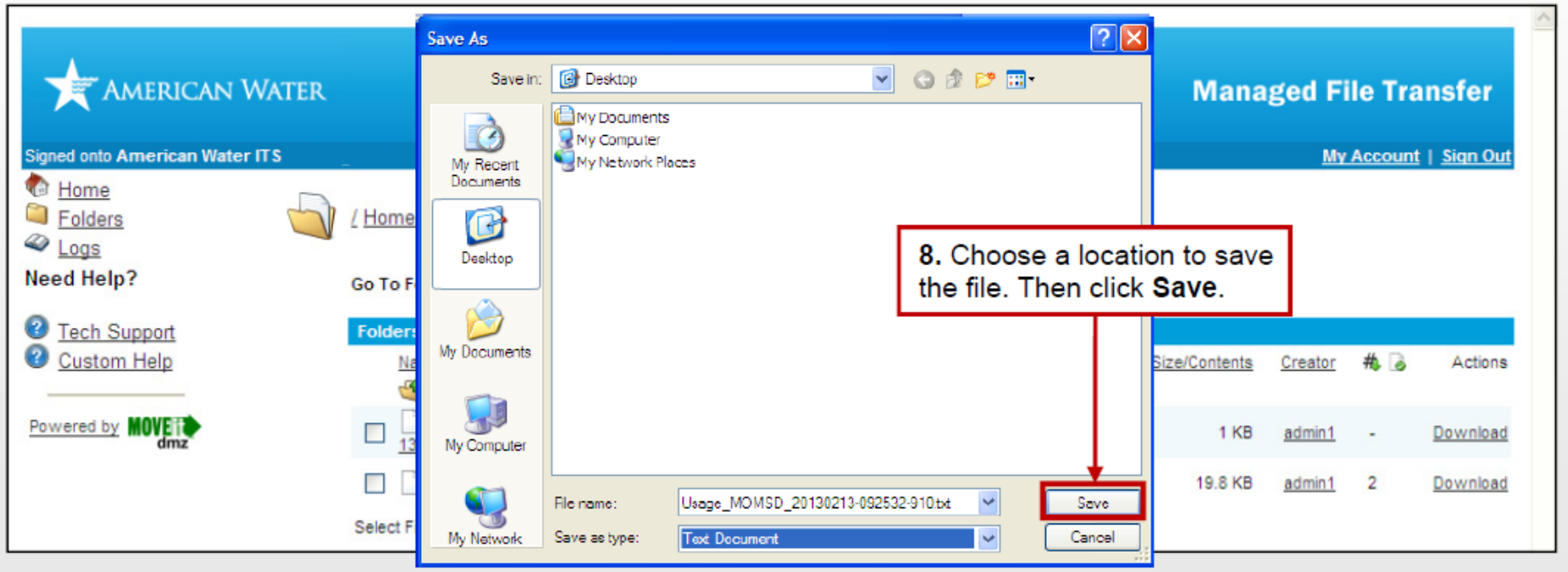
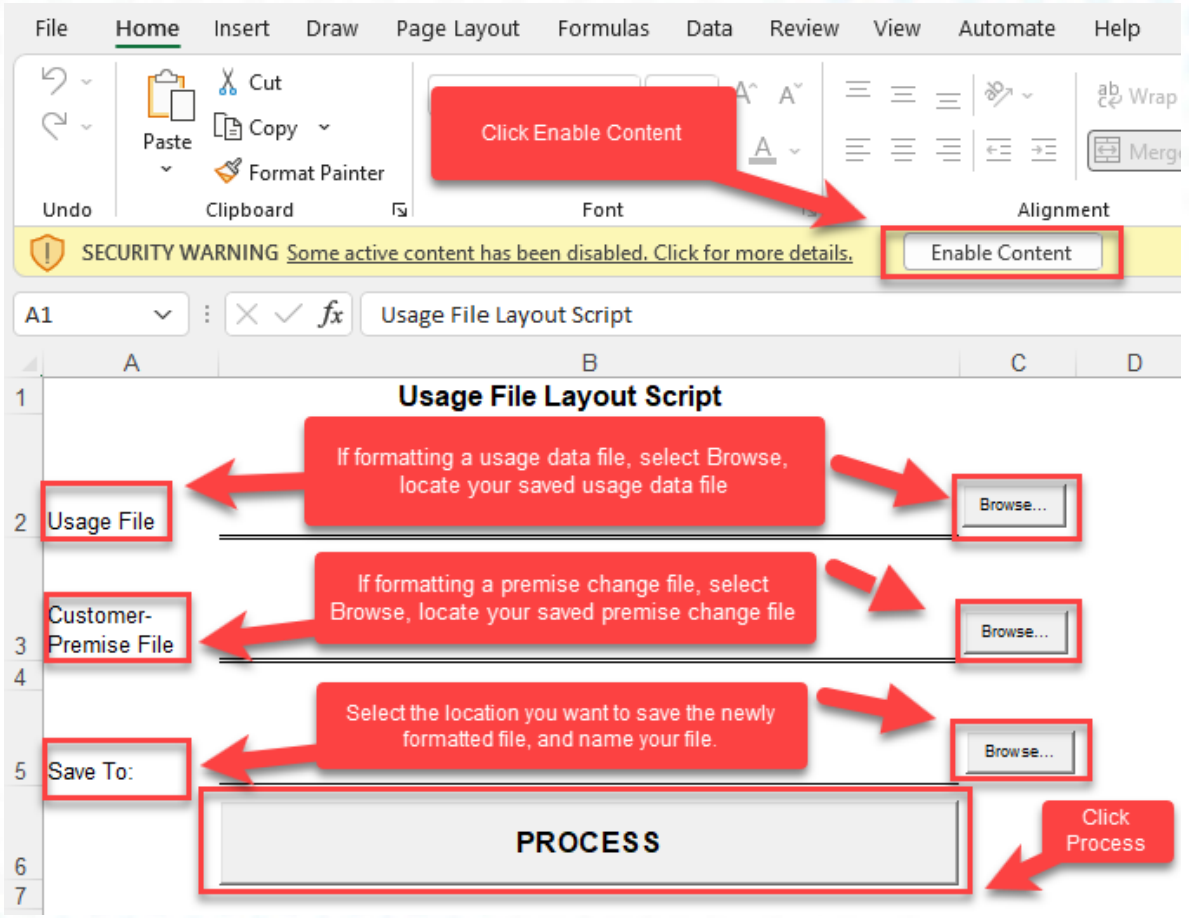
Retrieving Usage Data Files (cont'd)



Usage Data Files Formatting

Your Welcome Packet includes a formatting tool that we refer to as the macro. This tool will format usage data files and premise change files from a .txt format to an .xls format. This format includes headers makes viewing the data more comprehensive.

"**Usage_File_Macro_v4-2019_2023**" file is the tool name.



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Usage Data Files Formatting

The macro tool creates individual columns for each data set.

Reference the **Welcome Packet Materials 2023** file for the *Usage File Layout 0123* and *Premise Change Layout 0123* tabs for a breakdown of each column and the data provided in those columns.

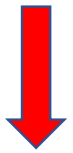
.txt format

Usage_NJNRTHFLD_20221222-061848 - Notepad

File Edit View

```
NJNRTHFLD WTAA 12N20211208AC          361DCG20220110AC          362
NJNRTHFLD WTAA 12N20220110AC          362DCG20220208AC          363
NJNRTHFLD WTAA 12N20220208AC          363DCG20220308AC          363
NJNRTHFLD WTAA 12N20220308AC          363DCG20220408AC          364
NJNRTHFLD WTAA 12N20220408AC          364DCG20220509AC          378
NJNRTHFLD WTAA 12N20220509AC          378DCG20220608AC          447
```

.xls format



Sewer Auth Code	Division	Service Type	Transaction Type	Bill Periods	Bill class code	Previous Read Date	Previous Read Type	Previous Reading	Previous MR UOM	Current Meter Read Date	Current Read Type	Current Reading
NJNRTHFLD	WT	A	A	12	N	20211208	AC	361	DCG	20220110	AC	362
NJNRTHFLD	WT	A	A	12	N	20220110	AC	362	DCG	20220208	AC	363
NJNRTHFLD	WT	A	A	12	N	20220208	AC	363	DCG	20220308	AC	363
NJNRTHFLD	WT	A	A	12	N	20220308	AC	363	DCG	20220408	AC	364
NJNRTHFLD	WT	A	A	12	N	20220408	AC	364	DCG	20220509	AC	378
NJNRTHFLD	WT	A	A	12	N	20220509	AC	378	DCG	20220608	AC	447

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Manual Adjustment Identification

Division	Service Type	Transaction Type	Bill Periods	Bill class code	Previous Read Date	Previous Read Type	Previous Reading	Previous MR UOM	Current Meter Read Date	Current Read Type	Current Reading	Usage from Reading	Current Bill Date	No. of Bill Days	NEGVAL	Usage Billed	Billing UOM	Reason Code
WT	A	A	12	R	20150406	AC	341	DCG	20150505	AC	346	5	20150506	29	+	50	CGL	A
WT	A	A	12	R	20150505	AC	346	DCG	20150604	AC	350	4	20150608	30	+	40	CGL	A
WT	A	A	12	R	20150604	AC	350	DCG	20150706	AC	355	5	20150708	32	+	50	CGL	A
WT	A	A	12	R	20150706	AC	355	DCG	20150805	AC	359	4	20150807	30	+	40	CGL	A
WT	A	A	12	R	20150805	AC	359	DCG	20150903	AC	363	4	20150904	29	+	40	CGL	A
WT	A	A	12	R	20150903	AC	363	DCG	20151005	AC	363	0	20151007	32	+	0	CGL	A
WT	A	A	12	R	20151005	AC	363	DCG	20151103	AC	363	0	20151104	29	+	0	CGL	A
WT	A	A	12	R	20151103	AC	363	DCG	20151204	AC	363	0	20151207	31	+	0	CGL	A
WT		M		R	20150903				20151204				20151220		+	115	CGL	18

M code for manual bill not joint invoiced

Prior service dates covered by the manual bill

Date billed

Total Consumption billed – can be positive or negative. See NEGVAL field

Reason Code – will vary, ref. list of codes….18 = stopped meter

Note: Manual adjustments are always at the bottom of the report.

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Uploading Disconnects (DMS)/ Delinquency Letters

Uploading Disconnect DMS Orders

To upload a disconnect request, use the template provided in this welcome packet communication.

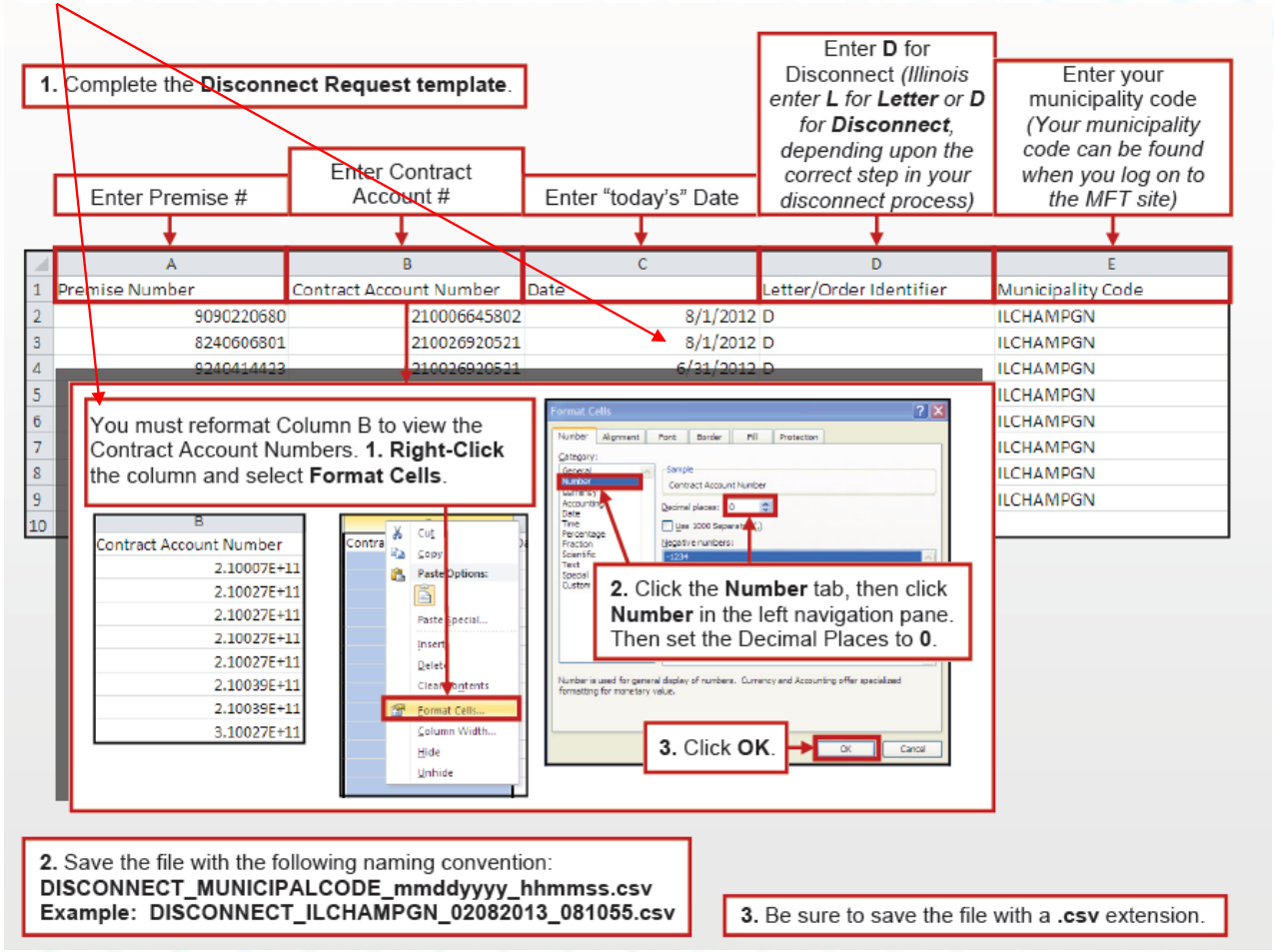
Pennsylvania municipalities have their own template entitled "*Disconnect_Upload_Template_PA Only_2023*".

NOTE: PA municipalities are required to populate column I with an "x".
All other states do not.

All other states use "*Disconnect_Upload_Template 2023*".

Delinquent letters are also uploaded through this process. **(IL only)**

Following formatting and naming convention instructions (below) is imperative to a successful upload.



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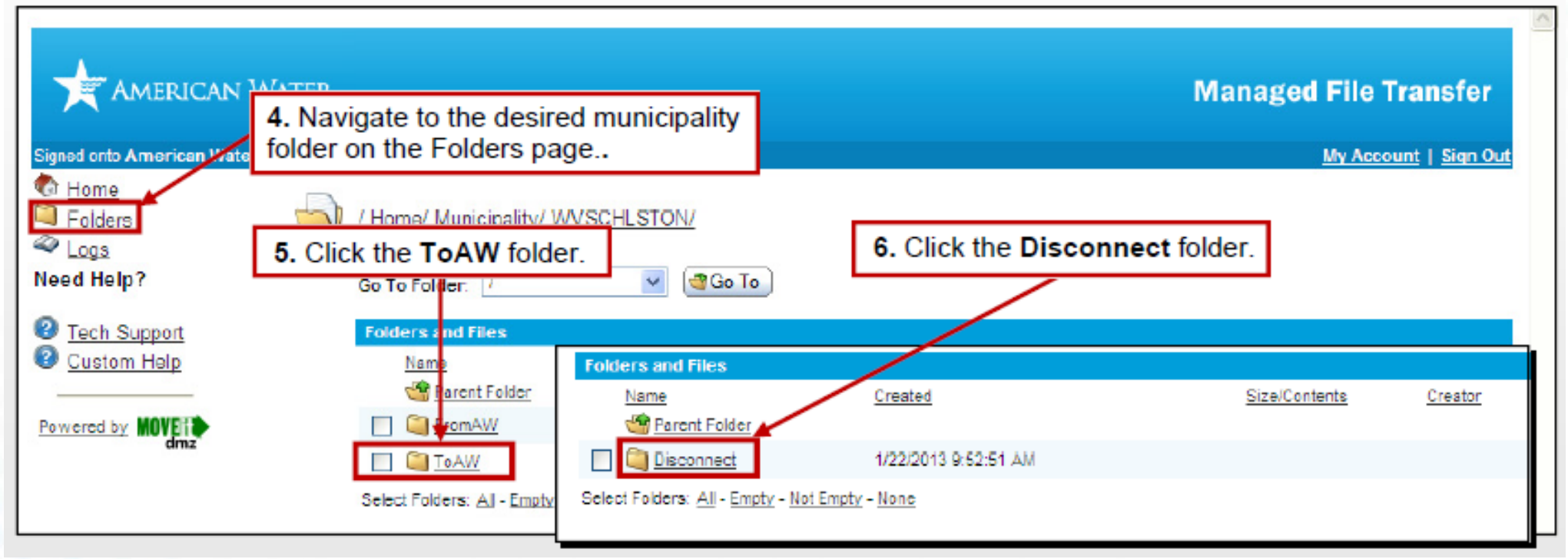
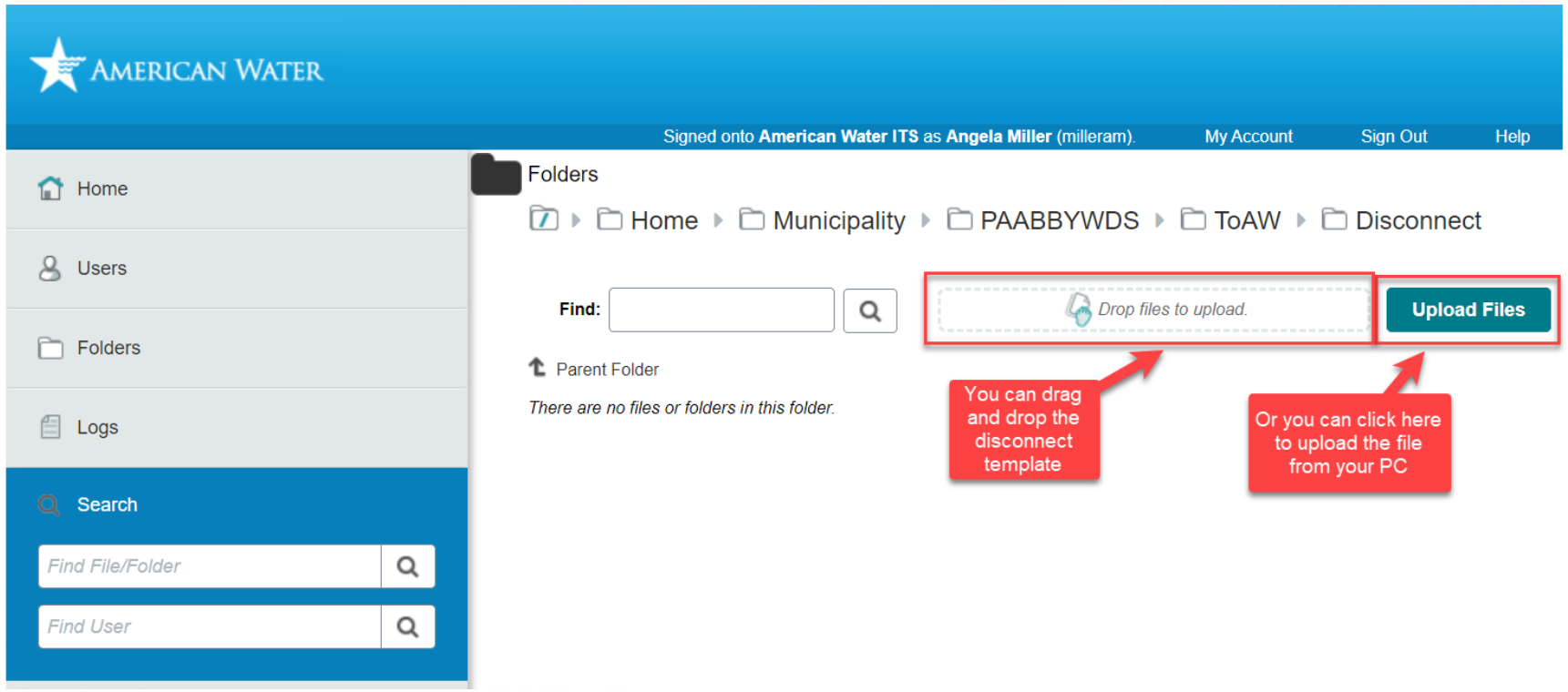
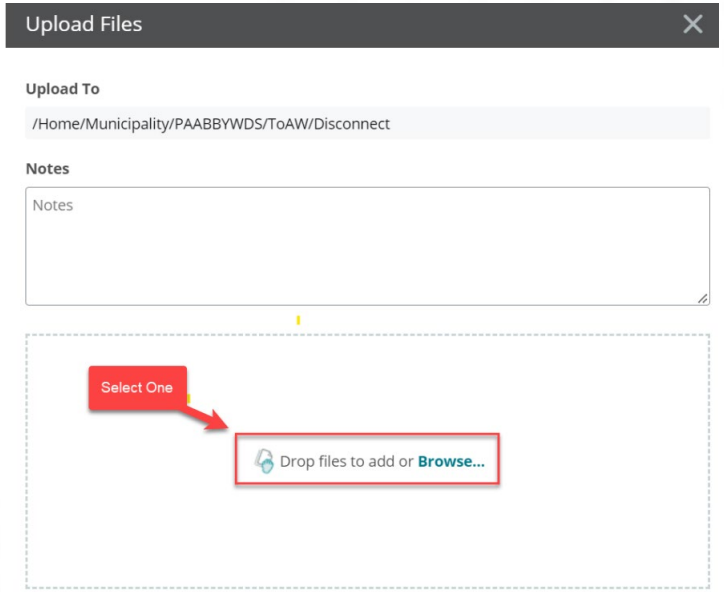
Uploading Disconnect DMS Orders (cont'd)

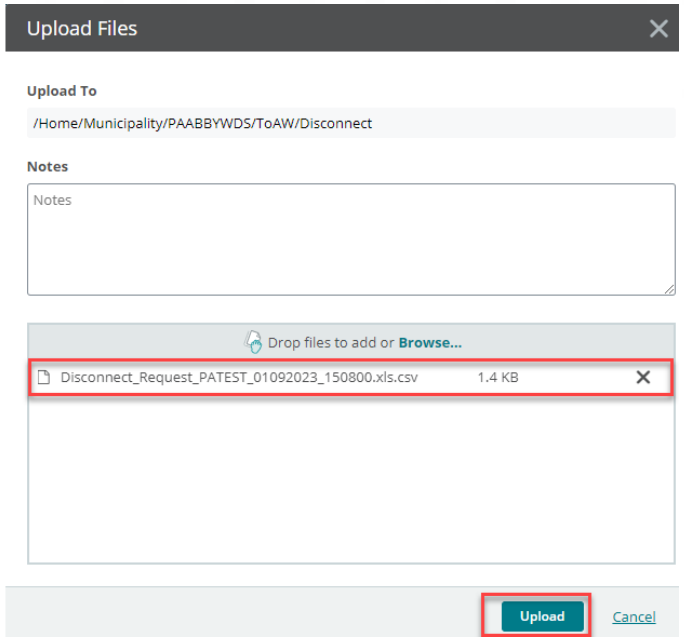


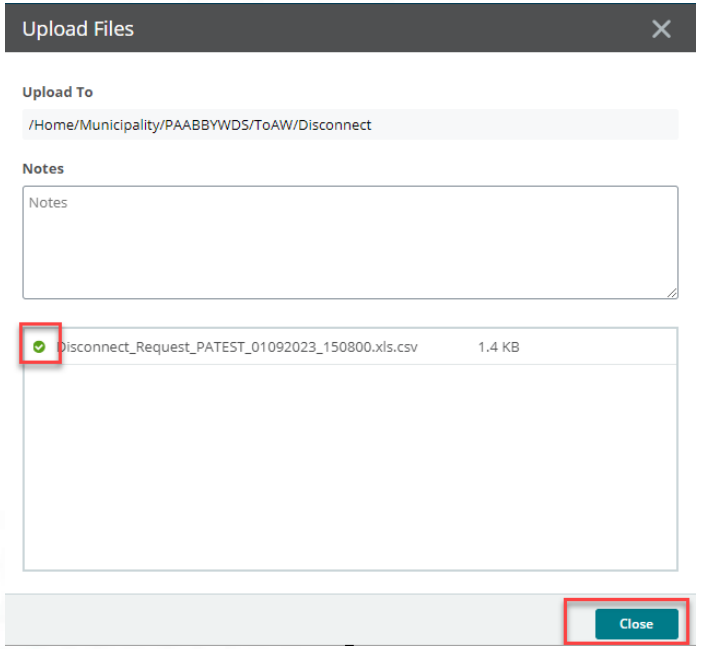
Uploading Disconnect DMS Orders (cont'd)



Uploading Disconnect DMS Orders (cont'd)







As you progress through the drop file or upload file process, you will receive the success icon.

NOTE – always check response files to ensure successful upload.

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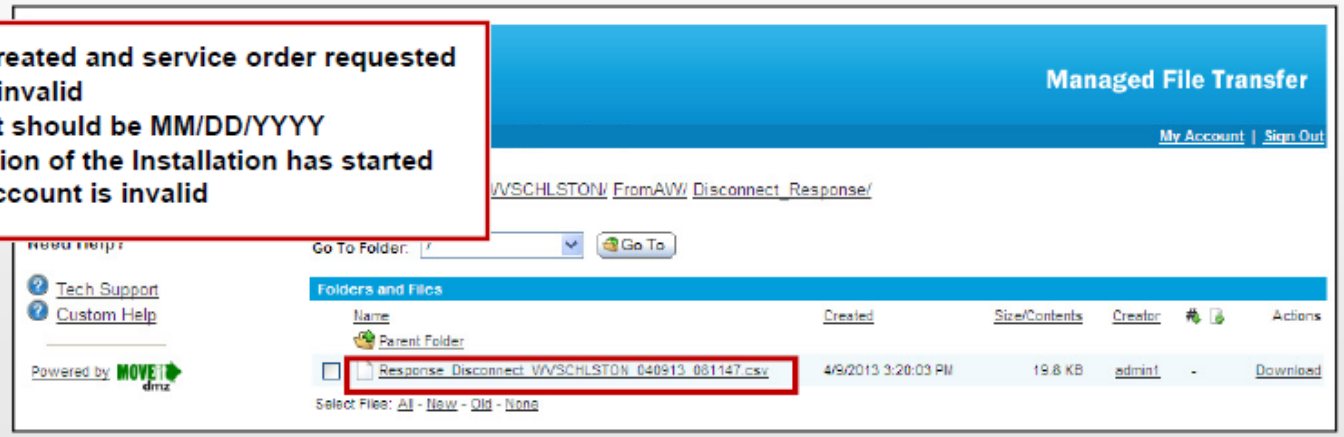
Response Files

Disconnect Requests (Cont'd)

After you upload a disconnect request file, you will automatically receive a **Disconnect Response** file .The disconnect response file will be housed in the **Disconnect Response** folder within the **FromAW** folder. You will receive one of the following responses for the Disconnect file you have uploaded. The comments will be found in the last column of the response spreadsheet.

- **No Letter created and service order requested**
- **Premise is invalid**
- **Date format should be MM/DD/YYYY**
- **Disconnection of the Installation has started**
- **Contract Account is invalid**



Note: Response files can take up to 60 minutes to post. Please do not re-upload disconnects, as this could result in duplicate service order creation. If you do not see a response file after 60 minutes, please email Special Accounts to review.

A complete list of disconnect responses can be found in the **Welcome Packet Materials 2023** file.

AMERICAN WATER

Uploading Reconnects (OMS)

Uploading Reconnect OMS Orders

To upload a reconnect request, use the template provided in this welcome packet communication.

The template is entitled "*Reconnect_Upload_Template 2023*".

NOTE: If it has been 10 days or more since the DMS (disconnect) was completed, the account will be finaled in our billing system. When this occurs, reconnect orders cannot be processed through MFT so you will need to email Special Accounts at specialaccts@amwater.com to request the premise release and reconnect, if applicable.

Following formatting and naming convention instructions (below) is imperative to a successful upload.

1. If you need to cancel a disconnect request that you have already uploaded or you need to request a restoration, complete the **Reconnect Request template**.

Enter Premise # | Enter Contract Account # | Enter "today's" Date | Enter **R** for Reconnect/Release | Enter your municipality code *(Your municipality code can be found when you log on to the MFT site)* | Enter **X** after you have read the liability scripting to the customer.

	A	B	C	D	E	F
1	Premise Number	Account Number	Date	Reconnection Identifier	Municipality Code	Liability Acceptance Flag
2	6000000001	210000000000	5/7/2012	R	ILALTON	X
3	5000000002	210000000000	5/7/2012	R	ILALTON	X
			2012	R	ILALTON	X
			2012	R	ILALTON	X

Follow the instructions for reformatting Column B in the **Disconnect Requests** section.

If you are requesting a restoration and the customer will not be home, the following statement will need to be read to the customer and an **X** will need to placed in the file in the "Liability Acceptance Flag" column. If there is not an **X** in the spot, the customer's water may not get restored. If the customer will be home, there is no need to put an **X** in the field.

Liability Scripting:

"(Customer's Name), to proceed I would like to make you aware of your liability in the unlikely event of any property damage associated with service activation without you being present."

Do you agree to shut off your main water valve and accept full responsibility for any possible damage that may occur due to any uncontrolled water flow inside the premise – such as a faucet being left on, a leak with plumbing, fixtures, or appliances, etc.?"

"Please respond by stating YES if you agree to this statement."

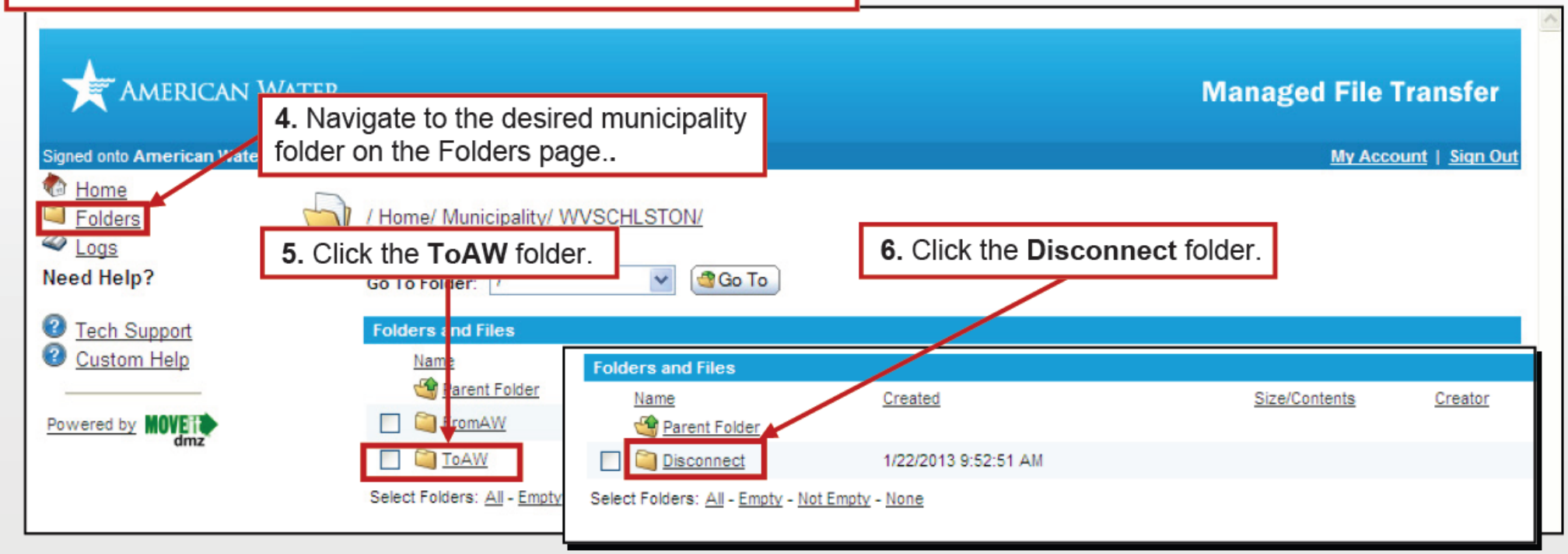
Reminder: Please alter your collection notices accordingly. Remove reference to American Water's toll free number. Note in your collection notice that once payment is made, an order will be auto-generated for restoration and there is no need to contact American Water's Customer Service Center.

AMERICAN WATER

Uploading Reconnect OMS Orders (cont'd)

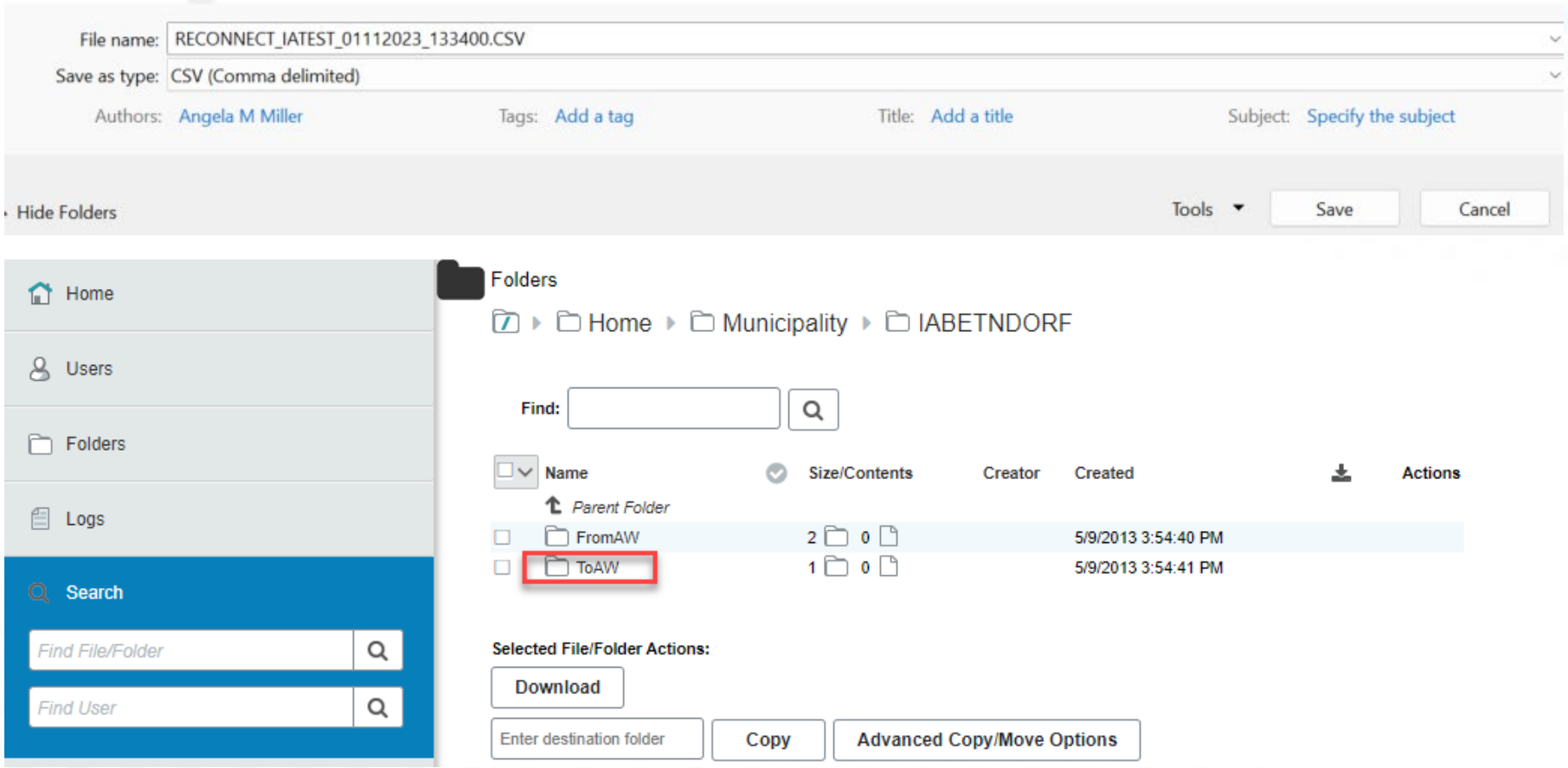
2. Save the file with the following naming convention:
RECONNECT_MUNICIPALCODE_mmddyyyy_hhmmss.csv
Example: RECONNECT_ILCHAMPGN_02082013_081055.csv

3. Be sure to save the file with a **.csv** extension.



AMERICAN WATER

Uploading Reconnect OMS Orders (cont'd)



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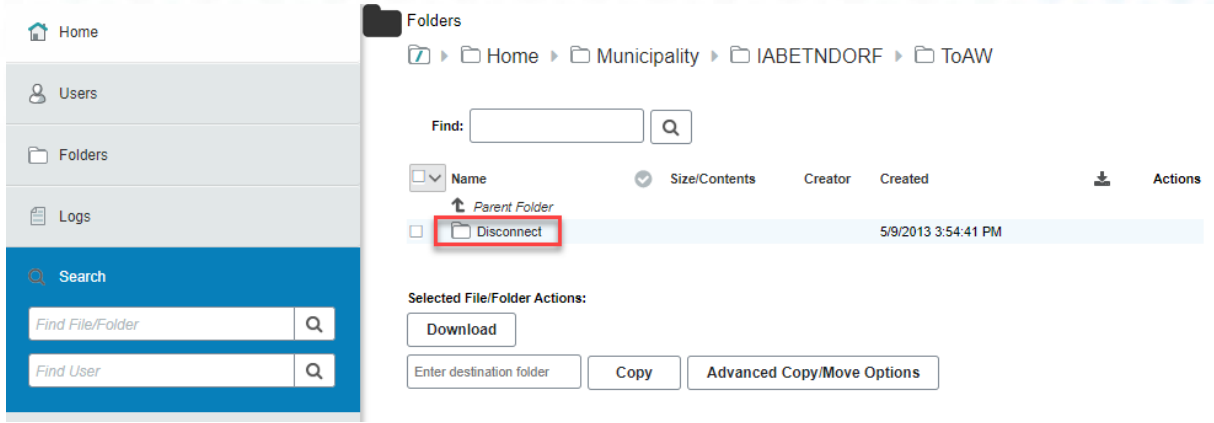
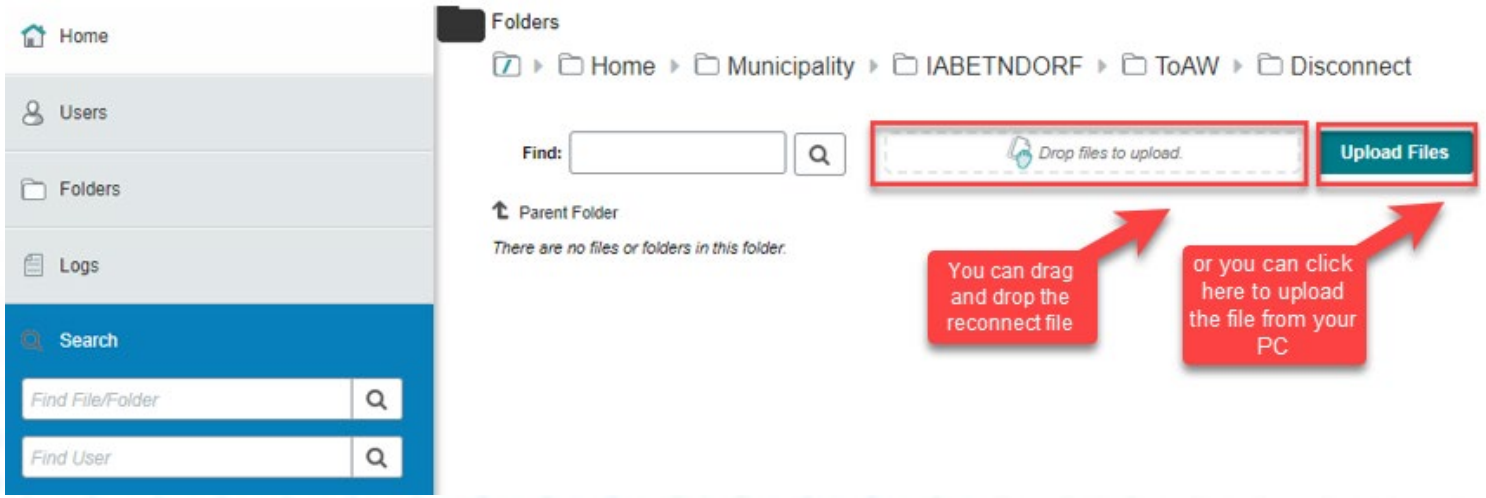
Uploading Reconnect OMS Orders (cont'd)

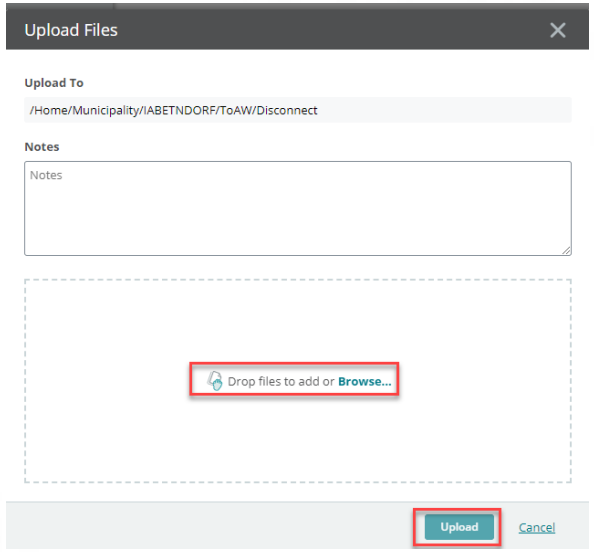
Select the **Disconnect** folder to upload a reconnect file.

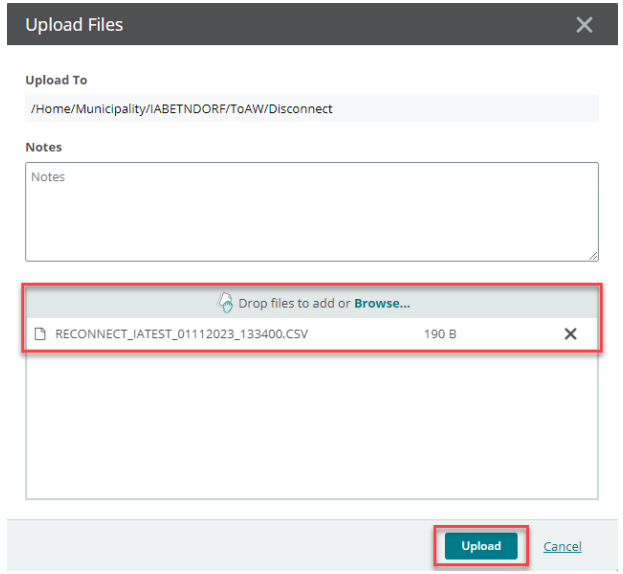




AMERICAN WATER

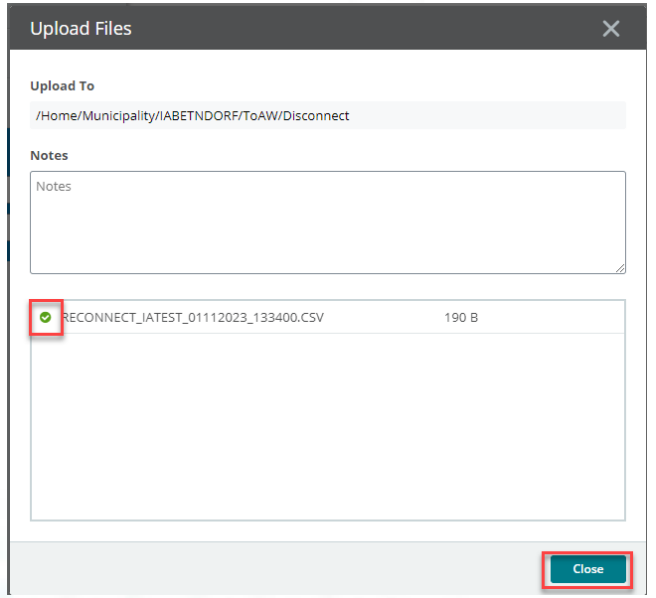
Uploading Reconnect OMS Orders (cont'd)





As you progress through the drop file or upload file process, you will receive the success icon.

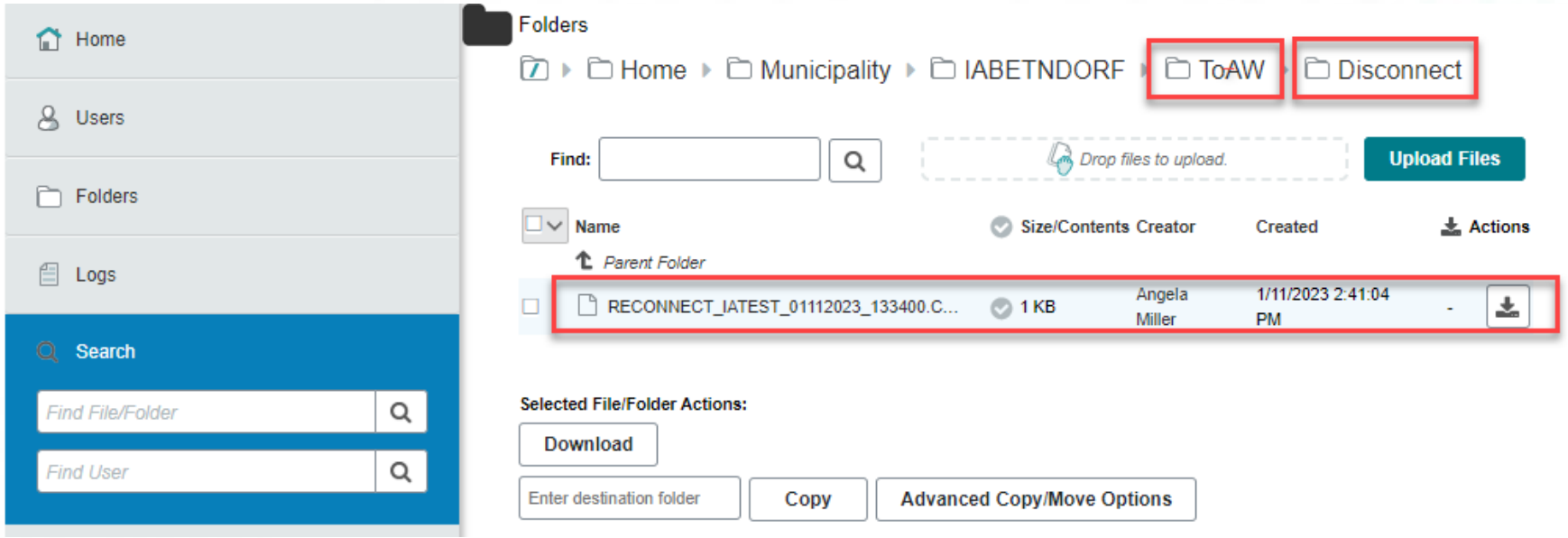
NOTE – always check response files to ensure successful upload.



AMERICAN WATER

Uploading Reconnect OMS Orders (cont'd)

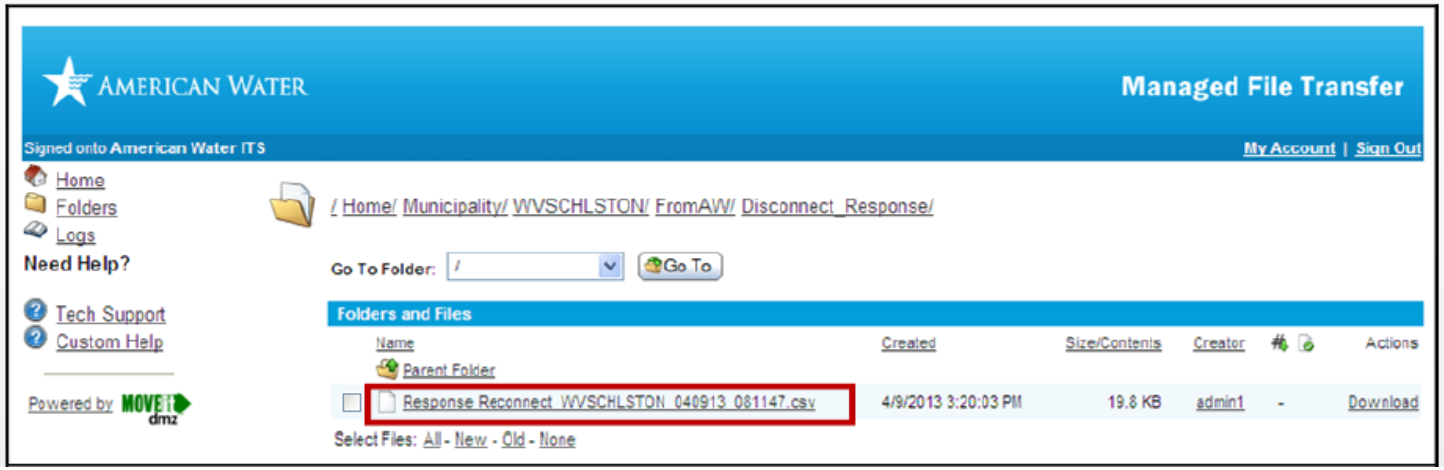
Once uploaded, you will see the reconnect file in the **ToAW>Disconnect** folder



AMERICAN WATER

Response Files

After you upload a reconnect request file, you will automatically receive a **Reconnect Response** file .The reconnect response file will be housed in the **Disconnect Response** folder within the **FromAW** folder. You will receive one of the following responses for the Disconnect file you have uploaded. The comments will be found in the last column of the response spreadsheet.



Note: Response files can take up to 60 minutes to post. Please do not re-upload reconnects, as this could result in duplicate service order creation. If you do not see a response file after 60 minutes, please email Special Accounts to review.

A complete list of reconnect responses can be found in the **Welcome Packet Materials 2023** file.

AMERICAN WATER

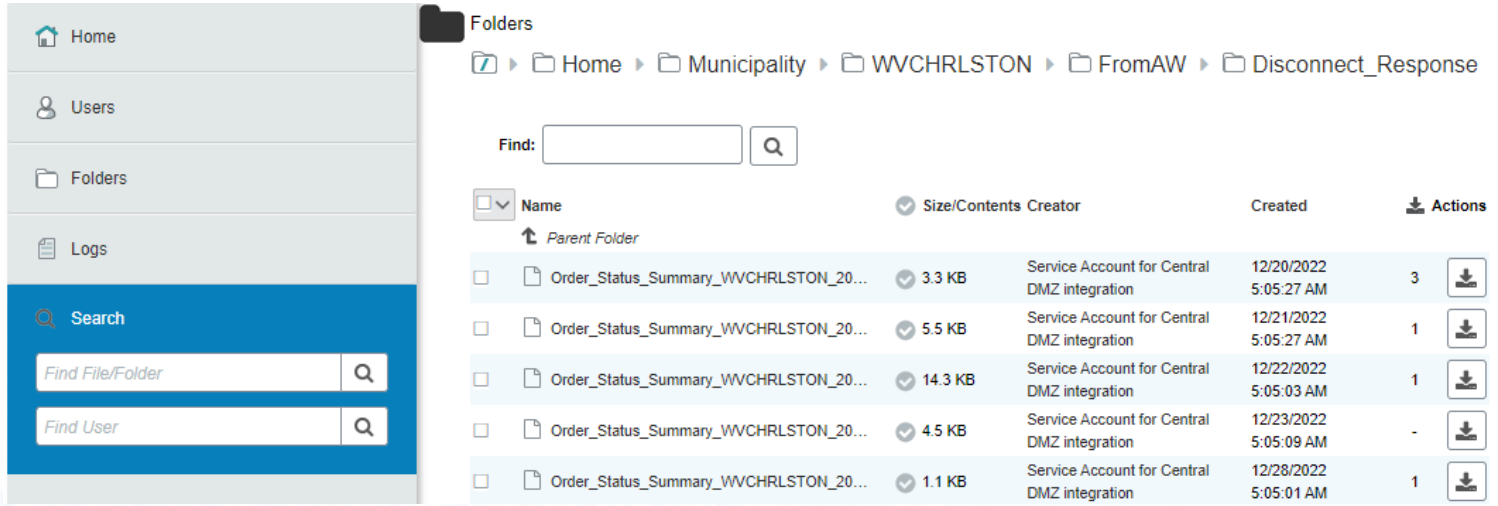
Service Order Status Files and Order Summary Status Files

You will also receive a "Service Order Status" Report on an hourly basis which will be in the **From AW** folder. The order status report will provide any change in the service order status of those service orders entered for your municipality. For example, you will be able to identify which premises have been shut off. **NOTE: If a service order expires, you must re-submit.**

Column E, Service Order Number
Column F, Service Order Status
- Complete (shut off)
- Cancelled

Column G, Service Order Comments
- Order was completed in selected date range
- Order was cancelled due to reason XXXXXX (ex., Expired)

A daily order status summary file will post each morning and summarizes the status of all disconnect/reconnect orders issued from the previous day.



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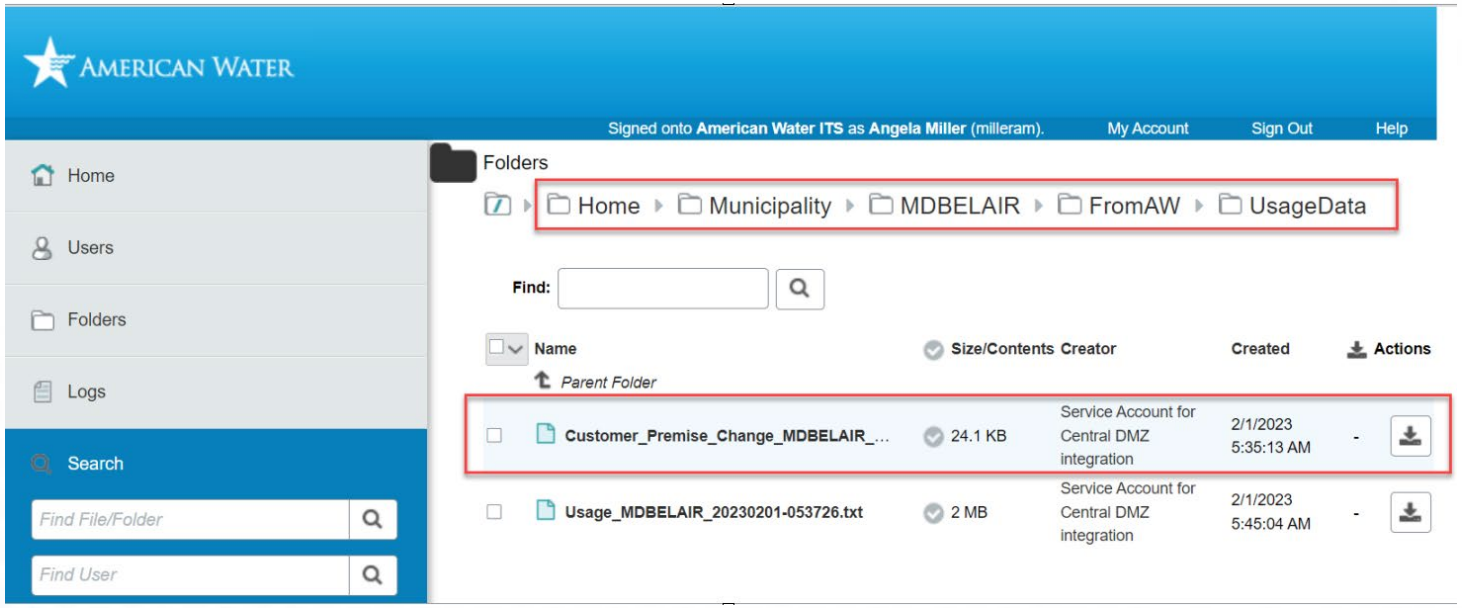
Customer Premise Change Files

The customer premise change file displays changes made to a customer or premise that may impact your records. These changes include mailing address, name spelling corrections, phone number, or changes to the technical master data of the premise, itself. This is informational only and is located in the UsageData folder in MFT.

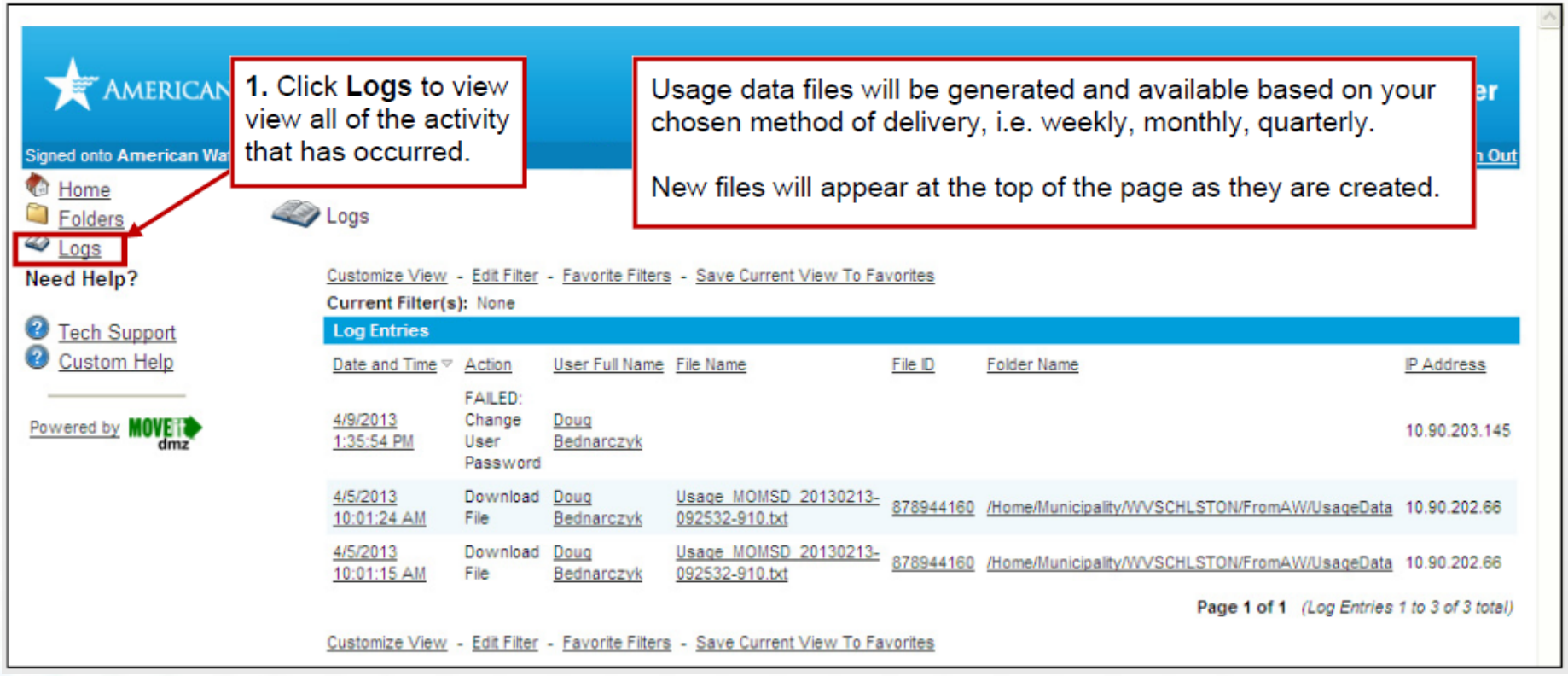


Download the file and save it to your desktop. Using the macro formatting instructions on page 14, save an excel version of the data to your desktop for better comprehension.

Reference the Welcome Packet Materials 2023 document for a list of change codes and what they represent.

AMERICAN WATER

Logs


1. Click Logs to view view all of the activity that has occurred.
Usage data files will be generated and available based on your chosen method of delivery, i.e. weekly, monthly, quarterly.
New files will appear at the top of the page as they are created.
Signed onto American Wa
Home
Folders
Logs
Need Help?
Tech Support
Custom Help
Powered by MOVEit dmz
Logs
Customize View - Edit Filter - Favorite Filters - Save Current View To Favorites
Current Filter(s): None
Log Entries
Date and Time | Action | User Full Name | File Name | File ID | Folder Name | IP Address
4/9/2013 1:35:54 PM | FAILED: Change User Password | Doug Bednarczyk | | | | 10.90.203.145
4/5/2013 10:01:24 AM | Download File | Doug Bednarczyk | Usage_MOMSD_20130213-092532-910.txt | 878944160 | /Home/Municipality/WVSCHLSTON/FromAW/UsageData | 10.90.202.66
4/5/2013 10:01:15 AM | Download File | Doug Bednarczyk | Usage_MOMSD_20130213-092532-910.txt | 878944160 | /Home/Municipality/WVSCHLSTON/FromAW/UsageData | 10.90.202.66
Page 1 of 1 (Log Entries 1 to 3 of 3 total)
Customize View - Edit Filter - Favorite Filters - Save Current View To Favorites

Thank you!

AMERICAN WATER

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
CAUSE-PA Set 3

CAUSE-PA 03-029

Responsible Witness: Cas Swiz, Senior Director of Rates and Regulatory

Question:

Will the projected amounts billed to residential customers as a result of the Environmental Compliance Investment Charge (ECIC), if approved, vary by rate zone? If so, please provide a detailed explanation how and to what extent the projected amounts billed to residential customers as a result of the proposed ECIC would vary by rate zone.

Response:

No, the ECIC will not vary by rate zone. Please reference the ECIC Tariff, which states (1) the ECIC shall be applied equally to all customer classes, and (2) the ECIC will be applied to the total amount billed to each customer for service under the Company's otherwise applicable rates and charges, excluding amounts billed for public fire protection services, the STAS, and the DSIC.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 5

OCA 05-008

Responsible Witness: Tawana Dean, Senior Manager, Customer Compliance

Question:

In Excel format, by month for the most recent 24 months available, disaggregated by water-only, wastewater-only, and combined water/wastewater, provide:

a. The number of new Bill Discount Program enrollees;
b. The number of new Bill Discount Program enrollees with pre-program arrears;
c. The sum of pro-program arrears for new Bill Discount Program enrollees; and
d. The average pre-program arrears for new Bill Discount Program enrollees (of new enrollees having pre-program arrears).

Response:

a-d. Please refer to OCA 05-008_Attachment.

OCA 05-08_Attachment

Water Only

Month-Year	a.number of new Bill Discount Program enrollees	b. number of new Bill Discount Program enrollees with pre-program arrears	c. sum of pre-program arrears for new Bill Discount Program enrollees	d. average pre-program arrears for new Bill Discount Program enrollees (of new enrollees having pre-program arrears).
202111	248	174	$100,691.86	$578.69
202112	250	172	96,539.26	561.27
202201	178	117	50,609.94	432.56
202202	216	150	80,356.98	535.71
202203	1003	763	244,218.18	320.08
202204	1306	1036	303,517.69	292.97
202205	861	700	229,477.63	327.83
202206	763	616	189,475.57	307.59
202207	798	635	156,177.99	245.95
202208	593	426	97,861.28	229.72
202209	559	411	87,613.34	213.17
202210	500	335	64,013.16	191.08
202211	425	280	88,798.66	317.14
202212	149	84	25,311.17	301.32
202301	106	63	18,112.32	287.50
202302	206	118	37,529.51	318.05
202303	174	108	37,601.80	348.16
202304	167	114	43,489.68	381.49
202305	152	113	45,413.74	401.89
202306	184	118	28,325.87	240.05
202307	131	98	33,056.88	337.32
202308	752	603	152,680.43	253.20
202309	565	409	111,340.27	272.23
202310	429	293	156,248.05	533.27

OCA 05-008_Attachment

Wastewater Only

Month-Year	a.number of new Bill Discount Program enrollees	b. number of new Bill Discount Program enrollees with pre-program arrears	c. sum of pre-program arrears for new Bill Discount Program enrollees	d. average pre-program arrears for new Bill Discount Program enrollees (of new enrollees having pre-program arrears).
202111	2	2	$945.48	$472.74
202112	2	1	232.78	232.78
202201	4	2	800.66	400.33
202202	7	5	6,237.41	1247.48
202203	51	46	25,952.32	564.18
202204	91	75	28,672.74	382.30
202205	41	37	13,703.44	370.36
202206	80	69	35,290.38	511.45
202207	60	53	13,695.81	258.41
202208	39	34	11,452.40	336.84
202209	21	18	4,300.51	238.92
202210	35	25	7,232.89	289.32
202211	24	12	5,761.44	480.12
202212	8	7	1,878.93	268.42
202301	11	9	3,485.60	387.29
202302	6	4	2,679.56	669.89
202303	9	4	2,527.66	631.92
202304	8	6	3,349.34	558.22
202305	30	17	11,854.43	697.32
202306	22	15	8,935.82	595.72
202307	29	19	6,217.46	327.23
202308	84	70	36,945.71	527.80
202309	58	47	18,525.11	394.15
202310	8	4	2,502.61	625.65

OCA 05-008_Attachment

Combined

Month-Year	a.number of new Bill Discount Program enrollees	b. number of new Bill Discount Program enrollees with pre-program arrears	c. sum of pre-program arrears for new Bill Discount Program enrollees	d. average pre-program arrears for new Bill Discount Program enrollees (of new enrollees having pre-program arrears).
202111	46	68	$45,471.83	$668.70
202112	36	55	29,744.58	540.81
202201	20	36	14,593.18	405.37
202202	20	34	18,519.99	544.71
202203	248	360	168,727.15	468.69
202204	253	397	161,969.94	407.98
202205	147	224	81,426.75	363.51
202206	169	276	90,993.23	329.69
202207	120	200	62,607.50	313.04
202208	121	167	36,803.06	220.38
202209	96	138	26,328.08	190.78
202210	125	173	43,018.79	248.66
202211	67	95	24,979.16	262.94
202212	14	19	6,348.91	334.15
202301	22	36	16,225.71	450.71
202302	45	50	13,832.52	276.65
202303	50	76	38,346.09	504.55
202304	45	73	35,123.14	481.14
202305	47	68	35,340.17	519.71
202306	37	56	32,394.72	578.48
202307	33	47	22,100.04	470.21
202308	208	322	105,793.50	328.55
202309	162	239	92,829.81	388.41
202310	123	186	90,772.67	488.03

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 8

OCA 08-010

Responsible Witness: Deb Degillio, VP, Customer Service

Question:

Reference PAWC Statement No. 9 (Degillio):

Reference, page 9, Table 1: Please provide the monthly results relied upon to provide the annual averages reflected in the Table 1 in native electronic spreadsheet format. Please update this information during the pendency of this proceeding.

Response:

Please see OCA 08-010_Attachment.

Month/Year	Percentage of Calls Answered in 60 seconds	First Contact Resolution	Average Speed of Answer (Minutes)	Abandonment Rate
Jan 2020	49%		00:03:39	13%
Feb 2020	80%		00:01:19	6%
Mar 2020	83%		00:00:54	4%
Apr 2020	92%		00:00:16	2%
May 2020	87%		00:00:37	4%
Jun 2020	72%		00:01:52	7%
Jul 2020	42%		00:08:28	21%
Aug 2020	51%		00:11:25	24%
Sep 2020	56%		00:09:20	15%
Oct 2020	46%		00:09:45	22%
Nov 2020	53%		00:13:33	29%
Dec 2020	48%		00:13:16	27%
Jan 2021	44%		00:19:50	37%
Feb 2021	48%		00:17:00	31%
Mar 2021	40%		00:20:43	33%
Apr 2021	43%		00:15:02	26%
May 2021	55%		00:04:29	12%
Jun 2021	37%		00:07:16	16%
Jul 2021	38%		00:10:47	24%
Aug 2021	33%		00:08:01	17%
Sep 2021	39%		00:08:41	19%
Oct 2021	34%		00:13:00	25%
Nov 2021	42%		00:09:53	22%
Dec 2021	57%	50%	00:04:36	20%
Jan 2022	39%	50%	00:09:55	32%
Feb 2022	60%	55%	00:03:28	12%
Mar 2022	41%	58%	00:08:57	20%
Apr 2022	47%	48%	00:06:34	18%
May 2022	34%	53%	00:09:32	23%
Jun 2022	27%	51%	00:14:09	29%
Jul 2022	30%	52%	00:12:03	27%
Aug 2022	43%	51%	00:11:06	28%
Sep 2022	45%	54%	00:07:10	19%
Oct 2022	44%	54%	00:06:08	16%
Nov 2022	61%	62%	00:03:00	10%
Dec 2022	60%	54%	00:04:28	13%
Jan 2023	57%	57%	00:02:40	8%
Feb 2023	53%	59%	00:05:46	18%
Mar 2023	62%	54%	00:03:52	13%
Apr 2023	68%	53%	00:02:28	7%
May 2023	76%	53%	00:01:22	5%
Jun 2023	79%	56%	00:01:18	4%
Jul 2023	68%	56%	00:02:24	9%
Aug 2023	67%	54%	00:02:19	8%
Sep 2023	64%	56%	00:02:38	8%
Oct 2023	61%	57%	00:03:56	13%

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 8

OCA 08-038

Responsible Witness: Jim Runzer, Vice President of Operations for PAWC

Question:

Reference PAWC Statement No. 4 (Gress):

Provide the termination notice issued to a PAWC customer for disconnection of water service as a result of nonpayment of wastewater service to a "non-Company" entity.

Response:

PAWC only issues termination notices to "non-Company" Landlord/Ratepayer customers as outlined in the company's Commission-approved form of shut off agreement (Please refer to OCA 08-038_Attachment). Refer to Exhibit A for a copy of said termination notice. The "non-Company" entity is responsible for providing termination notices to all non-Landlord/Ratepayer customers for disconnection of water service as a result of nonpayment of wastewater services, pursuant to the attached shut off agreement.

SHUT-OFF AGREEMENT

THIS AGREEMENT, made this day of , 20___, by and between the _____, a municipal _____ of the Commonwealth of Pennsylvania, having an office for the transaction of business at _____ (hereinafter called the "Municipality") and PENNSYLVANIA-AMERICAN WATER COMPANY, a public utility corporation of the Commonwealth of Pennsylvania, with its principal place of business at 852 Wesley Drive, Mechanicsburg, Pennsylvania 17055, (hereinafter called the "Water Company").

W I T N E S S E T H

THAT WHEREAS, the Municipality is engaged in supplying sewage service to the citizens and residents of the _____, _____ County, Pennsylvania; and

WHEREAS, the Water Company, a corporation as aforesaid, is the owner and operator of a water distribution system serving the customers in the aforesaid area, under the applicable Rules and Regulations of the Pennsylvania Public Utility Commission; and

WHEREAS, the Water Company is authorized and required at the request and direction of the Municipality pursuant to the provisions of the Act of April 14, 2006, P.L. 85, 53 P.S. Sections 3102.501 et. seq., to shut-off the supply of water from its system to any premises in which the rentals, rates and charges for sewer, sewage or sewage treatment service supplied by the Municipality are unpaid and the claim or lien for such service has been assigned to the Municipality.

WHEREAS, certain notice requirements relating to the shut-off of the supply of water are set forth therein and the Utility Service Tenants Rights Act of November 26, 1978, P.L. 1255, No. 299, 68 P.S. Sections 399.1 et seq. ("USTRA"); and

WHEREAS, both parties believe that they should enter into a written agreement specifically setting forth the duties, obligations, responsibilities and liabilities of each party to each other and such agreement is specifically authorized by the Act of April 14, 2006, P.L. 85, 53 P.S. Section 3102.501 et seq.

NOW THEREFORE, in consideration of the sum of ONE DOLLAR ($1.00) and other good and valuable consideration, and the covenants hereinafter expressed, the parties hereto do mutually agree as follows:

1. Upon written request by the Municipality specifying a premises in the Municipality's service area with regard to which the rentals, rates and charges for sewer, sewage or sewage treatment service shall not have been paid for a period of at least thirty days from the due date thereof, the Water Company shall proceed to shut-off the supply of water to such premises until it is advised in writing by the Municipality that all such overdue rentals, rates and charges, together with any interest thereon, have been paid or the Municipality directs otherwise; PROVIDED HOWEVER:

A. For any premises other than a residential building for which the landlord is the party responsible for the payment of sewer service, said written request must be accompanied by a statement in writing by a responsible officer of the Municipality setting forth:

i. that the Municipality has given ten (10) days' written notice of its intention to request the Water Company to shut-off the supply of water from its system to such premises has been mailed to the person liable for the payment of such rentals and charges and the owner of the property or property manager,

ii. that the Municipality has posted, at least ten days, a written notice to this effect at the main entrance to the premises, and

iii. that the Municipality has not received, during the ten day period, a written statement under oath or affirmation from the person liable for the payment of the said rentals and charges stating that the said owner has a just defense to the claim or part thereof;

B. For any residential building for which the landlord is responsible for the payment of sewer service, said written request must:

i. Be provided to an agent of the Water Company at least 45 days in advance of the proposed date for service to be shut-off;

ii. Be accompanied by a 37-day notice and 30-day notice in the form attached hereto as Exhibit A on the Municipality's letterhead for each customer for which shut-off of service is being requested to be posted by the Water Company;

iii. Be accompanied by a copy of the bill for the prior billing period for each customer for which shut-off of service is being requested; and

iv. Provide the agency names, addresses and phone numbers for: (i) the Department of Licenses and Inspections of any city of the first class; (ii) the Department of Public Safety of any city of the second class, second class A, or third class; and (iii) the city or county Public Health Department or in the event that such a department does not exist, the Department of Health office responsible for that county.

AND FURTHER PROVIDED that no occupant of said premises has produced a medical certification by a physician to be seriously ill or affected with a medical condition which will be aggravated by a cessation of water service or failure to restore water service, as provided for in 52 Pa. Code §§56.111-56.118, as amended.

2. The Water Company shall invoice the Municipality on a monthly basis for each of the premises for which shut-off was requested in the previous month and the Municipality shall pay to the Water Company the invoiced amount within thirty (30) days of receipt. Shut-off of service to any premises other than a residential building for which the landlord is the party responsible for the payment of sewer service under Section 1.A, above, shall be charged the sum

of Thirty Dollars ($30.00). Shut-off of service to a residential building for which the landlord is responsible for the payment of sewer service under Section 1.B, above, shall be charged the sum of One Hundred and Twenty Dollars ($120.00) each for multi-dwellings and Seventy- Five Dollars ($75.00) for single dwellings, provided that such request for shut-off of service is completed. For shut-off requests that are not able to be completed because the 37-day notice sent by certified mail is unclaimed, the sum of Seventy-Five Dollars ($75.00) will be charged. All of the aforementioned amounts are intended to cover the Water Company's cost of providing required notice, where applicable, and shutting off the water supply to each premises listed in such request. The Municipality shall also pay to the Water Company, upon its request therefore, the further sum of Thirty Dollars ($30.00) to cover the Water Company's cost of restoring water service to each such premises. In the event that the actual cost incurred by the Water Company in discontinuing and restoring water service to any such premises is more than the charges described above, the Municipality shall remit the actual cost thereof to the Water Company based on time, material, transportation and other fixed charges. The fees fixed hereunder may be amended from time to time as agreed by the parties hereto.

3. The Water Company shall not be liable for any loss, damage or other claim asserted by the owner, person or corporation based on or arising out of the shutting off of such supply of water. The Municipality shall indemnify and save harmless the Water Company, its agents, officers, servants or employees from any such loss, damage or other claim arising out of said activity pursuant to the terms of the Agreement. Notwithstanding the aforementioned language, the Municipality shall not be responsible for any loss, damage or claim asserted by said owner, person or corporation due to negligence on the part of the Water Company, its agents, officers, servants or employees, while performing any services for the Municipality pursuant to this agreement.

4. If a dispute shall arise between the parties hereto regarding any of the provisions of this Agreement, such dispute may be submitted by either of the parties to the Pennsylvania Public Utility Commission whose decision, unless reversed on appeal, shall be final.

5. This Agreement may be terminated by either of the parties hereto by ten (10) days' written notice given to the other party at its principal place of business.

6. This Agreement shall become effective thirty (30) days after the Water Company has filed a copy thereof with the Pennsylvania Public Utility Commission or, in the event that the said Commission institutes an investigation, at such time as the said Commission grants its approval thereof.

7. The Water Company shall have the right to increase the charged amounts in Section 2, above, from time to time, in the event that the cost to the Water Company for performing the service hereunder increases, upon sixty (60) days' written notice to the Municipality. It is further understood and agreed that the aforesaid amount of Thirty Dollars ($30.00) for the shutting off and restoring of water service under the provisions of this Agreement shall be automatically increased to coincide with the charges for shutting off water service and restoring water service contained in the Company's tariff as on file with and approved by the Pennsylvania Public Utility Commission from time to time.

8. Notwithstanding the provisions of this Agreement, it is understood and agreed by the parties hereto that the Water Company shall be required to comply with any existing regulations of the Pennsylvania Public Utility Commission, including but not limited to those

relating to notice before termination, and in addition to providing any notice that might otherwise be required under this contract or any applicable law or ordinance.

9. This Agreement supersedes and repeals any prior agreement, contracts, and understanding, written or oral, by or among the parties hereto with respect to the subject matter contained herein. This Agreement contains the entire agreement among the parties hereto, and no oral statements or representations or prior written matter not contained in this instrument shall have any force and effect.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be signed and attested by their proper officers and their respective seals to be hereto affixed the day and year first above written.

This Agreement will be effective on the _____ day of _____, 20__.

ATTEST: _____

_____ BY: _____
Secretary _____
(SEAL) (Title)

ATTEST: PENNSYLVANIA-AMERICAN WATER COMPANY

_____ BY: _____
Secretary (Vice) President
(SEAL)

Rev. 02/21

EXHIBIT A
Form of Notices

Today's Date _____ (PAWC to fill in)

Landlord Ratepayer Name: _____

Landlord Ratepayer Address: _____

City, State, Zip _____

For Service to Property Located at:

_____

Sewer Account Number _____

Pay Before _____ (PAWC to fill in)

Pay This Amount: $_____

IMPORTANT: 37 DAY SHUT OFF NOTICE

Please read and take the steps needed to prevent your water service from being shut off. Payment on your sewer account is overdue. If payment is not received, your water service may be shut off on or after _____ (PAWC to fill in). You can prevent discontinuation of water service by paying the amount printed above.

TO STOP THE SHUT OFF, YOU MUST PAY THE AMOUNT OVERDUE OR YOU MUST CALL US AT _____. You may also contact us for payment options.

YOUR TENANTS WILL BE NOTIFIED. We will notify your tenants on or after _____ (PAWC to fill in) that service will be shut off. At that time, we will also inform them of their rights under the Utility Service Tenants Rights Act ("USTRA"). USTRA states that within seven (7) days of the date you receive this notice, you must give us the names and addresses of the affected tenants, unless you pay the total past due amount or make satisfactory payment arrangements with us. You may have to pay liquidated damages of not less than $500 for each day you do not give us this tenant information. To provide the names and addresses of the affected tenants, call us at _____ or write to us at _____. To avoid the notification of your tenants, you may file a petition in court to dispute the right to discontinue service.

If we shut off your tenants' service, you will have to pay the past due amount and a Turn-On Charge of $_____.

Please Note: We may not be able to restore your service until 5:00 p.m. the next business day after receiving payment. If you have questions about this notice or your bill, please call us at the number listed above.

Sincerely,
Sewer Municipal Entity's Name

Today's Date: _____ (PAWC to fill in)

For Service to Property Located at _____

City, State, Zip _____

Sewer Account Number _____

30 DAY SHUT OFF NOTICE TO OCCUPANT

Please read and take the steps needed to prevent your water service from being shut off.

IMPORTANT NOTICE TO TENANTS WARNING: YOUR WATER SERVICE MAY BE SHUT OFF ON OR AFTER _____ (PAWC to fill in) BECAUSE OF NON-PAYMENT OF SEWER CHARGES.

TO STOP THE SHUTOFF OF YOUR UTILITY SERVICE, YOU MUST DO ONE OF THE FOLLOWING THINGS:

1. You can join with the other tenants to apply to have service continued or resumed. Service will not be discontinued or will be resumed if the tenants pay the amount equal to your landlord's sewer bill for the 30-day period preceding this notice. A copy of that bill is enclosed. Payments may be made only by check or money order payable to: _____.

2. By law, you may deduct the amount that you made for the sewer bill from your rent due now or in the future. We will tell your landlord how much you paid for the utility service. Your landlord may not retaliate against you for exercising your right to make payment to prevent the shut-off. You have the right to recover monetary damages from the landlord for any retaliation that the landlord takes against you for exercising your rights as a result of this notice.

ADDITIONAL INFORMATION:

1. The amount of the bill which must be paid to continue service is $_____.
2. Your landlord cannot punish you if you pay the utility bill. Your landlord cannot raise your rent, cannot evict you and cannot retaliate against you in any other way for paying the utility bill and deducting it from your rent.
3. You have the right to dispute the accuracy of the bill and have certain other rights.

FOR MORE INFORMATION

If you have any questions about this notice or bill, please call us at _____.

Sincerely,

Sewer Municipal Entity's Name

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 11

OCA 11-018

Responsible Witnesses:
Ashley E. Everette, Senior Director of Rates and Regulatory for PAWC (parts A-D and G-H)
Tawana Dean, Senior Manager, Customer Compliance (parts E and F)

Question:

Reference: Everette, p. 25: By year for the most recent four years, please provide:

a. The total gallons of water usage reduced through the implementation of PAWC residential water conservation investments;
b. The average gallons of water usage per household reduced through the implementation of PAWC residential water conservation investments;
c. The total gallons of water usage reduced through the implementation of PAWC income-qualified water conservation investments;
d. The average gallons of usage reduced per household through the implementation of PAWC income-qualified water conservation investments;
e. The number of residential customers served through a PAWC water conservation program;
f. The number of Bill Discount Program customers served through a PAWC water conservation program;
g. The average water conservation investment in a residential customer's home;
h. The average water conservation investment in a Bill Discount Program participant's home.

Response:

A-D. The Company does not have the requested information; however, please refer to OCA 11-018_Attachment for the booklet (also available in Spanish) which is sent with the water conservation kit, which states that replacing a showerhead with a water-saving model can save 2,900 gallons of water per year and a fill cycle diverter can save 0.5 to 1.5 gallons of water per flush.

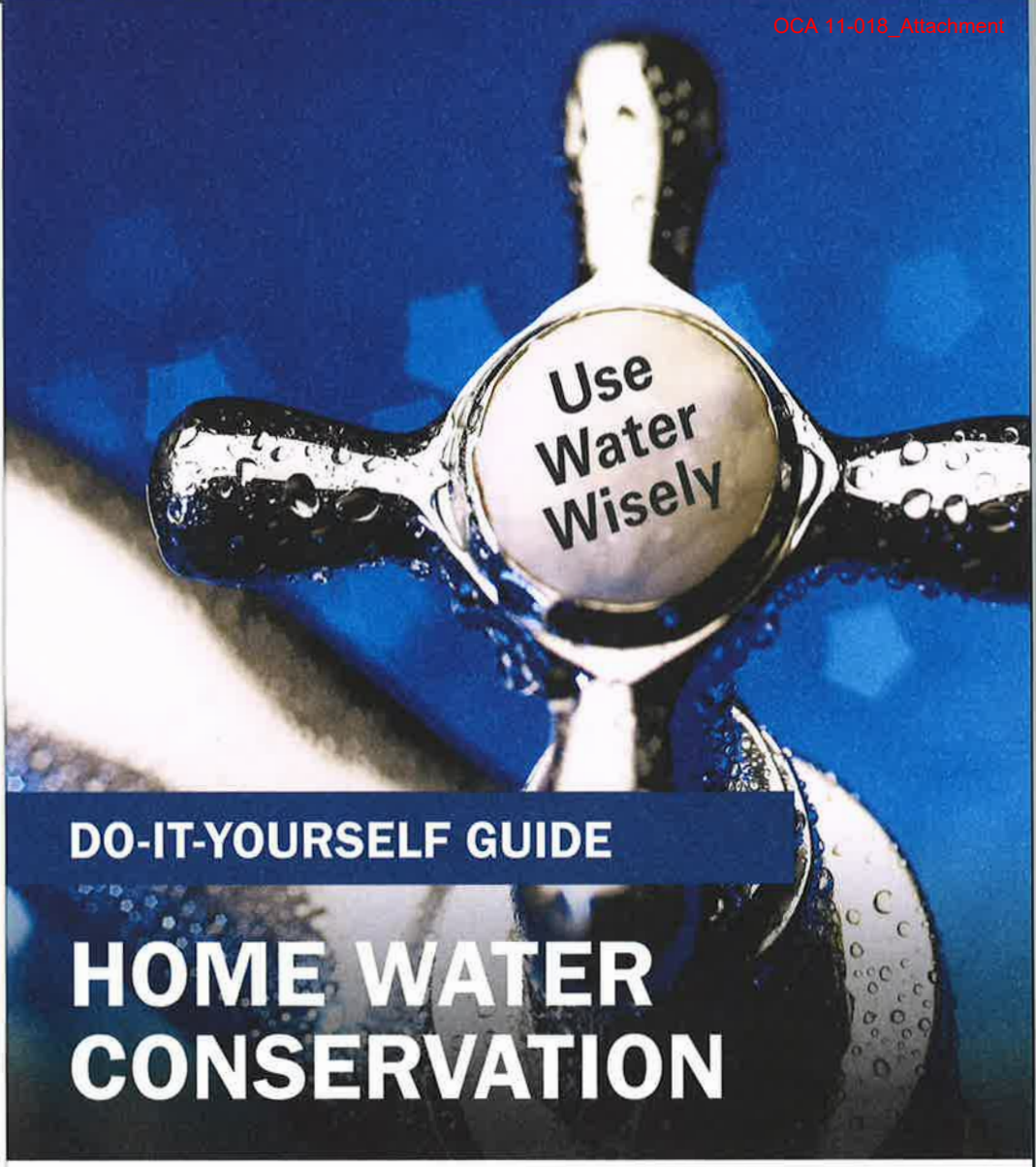
E. The water conservation program is only offered to Bill Discount customers. Please refer to the response to Part F.

F. Number of Low-Income Customers Receiving Conservation Kits

Year	Number of Conservation Kits
2020	1,639
2021	1,556
2022	1,788
2023-YTD	959

G-H. The Company does not have information responsive to these requests.

OCA 11-018_Attachment



DO-IT-YOURSELF GUIDE

HOME WATER CONSERVATION

PENNSYLVANIA
AMERICAN WATER

WE KEEP LIFE FLOWING™

WELCOME

As you know, you are currently enrolled in Pennsylvania American Water's monthly Service Charge Discount Program based on your financial qualifications. The discount is part of the company's **H2O Help to Others Program®** , designed to lend a hand of support to customers in need during difficult times.

We are pleased to introduce you to another benefit of Pennsylvania American Water's program provided to eligible customers—a wise water use kit.

This kit helps you to control the cost of your water bill through conservation. Your kit has valuable products to save hot and cold water in showers and sinks, to conserve water with every flush and to find silent and costly toilet leaks. These products, along with wise water use tips, can help you save gallons of water every month.

If you are a renter and have plumbing leaks, contact your landlord immediately.

Your monthly water bills can be affordable when you know how to use water wisely, because the more water you save, the lower your bills will be.

Steps to saving water and money

- **Read this booklet and find out how the H2O Help to Others Program® can help you save money on your water bills.**
- **Install the water-saving products supplied in this kit.** Complete instructions are printed in this pamphlet.
- **Kit installation assistance:** If you are having difficulty with installing any of the products in the conservation kit, a local Pennsylvania American Water team member can provide assistance by phone. Please call (717) 550-1606 between the hours of 9 a.m. and 5 p.m., Monday through Friday. If unavailable, please leave a message.
- **Include the whole family in changing water-wasting habits into daily water-saving habits** by using the tips provided in this booklet.
- **Pay your Pennsylvania American Water bill every month.**

STEP 1: INSTALL THE WATER-SAVER KIT

WHAT YOUR WATER-SAVER KIT INCLUDES

- WaterSense showerhead and Teflon thread sealing tape
- Two water-saving faucet aerators (one kitchen; one bath)
- Fill cycle diverter
- Leak-detecting, non-toxic dye tablets for the toilet

HOW TO INSTALL YOUR WATER-SAVING DEVICES

WaterSense Showerhead

1. Unscrew old showerhead (turn counter-clockwise).
2. Clean shower arm threads.
3. Apply Teflon thread-sealing tape, wrapping clockwise.
4. Screw on showerhead. Do not over-tighten.
5. Run water to test for leaks. If needed, gently tighten with wrench.
6. Turn face of showerhead to select preferred spray option.

According to the EPA, replacing one showerhead with a WaterSense model can save the average family as much as **2,900 gallons** of water a year — or **more than $70 in energy and water costs every year.**

Water-Saving Faucet Aerators

This kit features two aerators: a 2.2 size for the kitchen and a 1.5 size for the bath. Read the numbers on the side before installing.

1. Unscrew old faucet attachment. For an inside-threaded faucet, install aerator as is. For an outside-threaded faucet, first remove the top washer to expose inside threads and then install.
2. Hand tighten, but do not over-tighten. If a wrench is used, protect finish with a cloth.

Fill Cycle Diverter

The Fill Master Fill Cycle Diverter saves 0.5 to 1.5 gallons of water per flush, by diverting the majority of water that would normally flow down the toilet overflow tube back into your toilet tank during the toilet's filling cycle.

1. Pull hose loose from overflow tube.
2. Remove clip or holder from hose.
3. Insert Fill Master into end of hose.
4. Push Fill Master onto overflow tube with nozzle #1 inside the tube and nozzle #2 and #3 outside the tube. NOTE: Hose may need to be cut shorter for proper fit.
5. Position nozzle #2 or #3 into the tube as needed if the bowl does not fill to its normal level when flushed.

Leak Detecting Non-Toxic Dye Tablets for the Toilet

1. Remove lid from toilet tank.
2. Drop one dye tablet into water in tank.
3. Wait 15 minutes. If blue color appears in the bowl, your toilet has a silent leak and repairs need to be made.

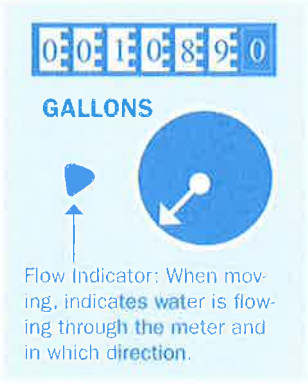
STEP 2: FINDING WATER LEAKS

Your meter can be a great tool to check for household leaks

Not fixing a leaky toilet or faucet is like throwing money down the drain. If your water meter is in your home, you can use it to check for leaks. Start by making sure that no one is using water and that all water-using appliances are turned off, including automatic ice makers. Then, check to see what type of water meter you have (dial or digital), and follow these simple steps.

Dial Meter: Check the flow indicator on your meter. If it is moving, it means that water is passing through the meter and there is a leak(s). If your meter does not have a low flow indicator, write down the meter reading shown on the dial and take note of the sweep hand's position. Check the meter in an hour. If the reading or the position of the sweep hand has changed, it may indicate that you have a leak(s).

DIAL METER



Digital Meter: First, activate the screen on the digital meter by shining a light on the face of the meter. If the flow arrow appears on the screen or if the meter reading calculates, and the number is increases, that means water is moving through the meter. NOTE: The direction of the flow arrow should match the direction of the arrow that appears on the base of the meter itself. If it does not, this means water is flowing in the opposite direction. This should be addressed immediately by installing a dual check valve on your service line or having your current dual check valve serviced.

10% of homes have leaks that waste 90 gallons or more per day.
Check and fix all household plumbing leaks or you could be throwing money down the drain (literally).

Check for faucet leaks

Faucet leaks are easy to detect. If your faucet drips, or worse, continues to keep running after you shut it off, it needs to be fixed. If the dripping water is hot, it is also costing you money to heat the water. Water dripping from the showerhead when the shower is off, or running out of the spout when the shower is on, is usually caused by bad washers or seats which need to be replaced.

Check for toilet leaks

Toilet leaks, which can often go unnoticed, are often caused by worn or damaged parts in the toilet flush tank, such as a bad flapper valve, flapper valve seat, ballcock valve, float arm or overflow tube. Use the dye tablets included with this kit to check for toilet leaks. Once you have used the tablets in the kit, you can continue to regularly check for leaks by pouring a cup of weak tea or coffee into your toilet tank. Using food coloring may permanently discolor your toilet bowl, if it has scratches or cracks.

STEP 3: PRACTICE WISE WATER USE

In the Bathroom

- The toilet is the biggest water waster in your house. By inserting the enclosed Fill Master Fill Cycle Diverter, you can prevent excess water from needlessly flowing down the drain. The fill cycle diverter saves water and money by making your toilet more efficient.
- Install water-saving showerheads and faucet aerators in your sinks.
- Shorten your shower to 7-10 minutes. Even shortening your shower by one or two minutes can save up to 150 gallons a month.
- Turn off the water when brushing your teeth. Saves one to two gallons each day.
- Rinse your razor with short blasts of water or by swishing it in a partially filled sink instead of running the water while you shave.
- Put bathroom trash and feminine hygiene products in the waste basket instead of flushing them down the toilet.

(More tips on the back panel)

In the Kitchen

- Run only full loads in the dishwasher.
- Before washing dishes by hand or in the dishwasher, scrape them; don't rinse first.
- If you wash dishes by hand, use two basins: one for washing and one for rinsing. Don't let the water run.
- Keep a bottle of drinking water in the refrigerator instead of running the tap for a cold glass.
- Rinse vegetables and fruit in a basin rather than under running water.
- Defrost frozen foods without running water over the packages. Plan ahead and place frozen items in the refrigerator overnight or defrost them in the microwave.

In the Laundry

- Washing machines use 15-40 gallons of water per load. If you have a machine with adjustable load controls, always adjust the water level to match the size of each load. If your machine doesn't adjust to different size loads, always wash full loads.
- The major cost in washing clothes is the hot water used. The more you wash and rinse with cold water, the more energy you will save.

Outside the Home

- Wash your car at a car wash that recycles its water. If washing at home, don't let the hose run continuously. Use a sprayer attachment on the hose that can easily be shut off.
- Drive your car onto the lawn before washing so that the rinse water can help water the lawn.
- Water the lawn only when it needs it, in the early morning or evening when there is less evaporation. Don't water on windy days. If the grass springs up when you walk on it, it doesn't need watering.
- Sweep driveways, patios and sidewalks with a broom instead of using the hose.

LEARN MORE

For more water-saving tips, check these sites out online:

- **WaterSense:** www.epa.gov/watersense
- **Alliance for Water Efficiency Home Water Works:** www.home-water-works.org
- **Pennsylvania American Water:** www.pennsylvaniaamwater.com

11-2021

Pennsylvania American Water is a proud member of the US EPA's WaterSense Program. We are committed to conserving our most precious natural resource – water, so it is available to meet the needs of future generations.

EPA WaterSense PARTNER

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 11

OCA 11-021

Responsible Witness: Charles Rea, Senior Director of Rates and Regulatory and
Cas Swiz, Senior Director of Rates and Regulatory

Question:

Reference: Swiz, p. 29: Please provide a detailed explanation of whether the proposed Environmental Compliance Investment Charge (ECIC) will be applied before or after the bill or a Bill Discount Program participant's discount has been applied to the bill.

Response:

The ECIC will be applied after the Bill Discount Program ("BDP") discount has been applied to the bill. In other words, a customer eligible for the BDP will have the discount applied to all base charges (Service Charge per Month and Consumption Charge) before the ECIC would be applied. This will result in a reduced ECIC charge (in dollars) compared to the ECIC absent the BDP. This is consistent with how the current DSIC and BDP operates.

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Office of Consumer Advocate Set 16

OCA 16-001

Responsible Witness: Charles Rea, Senior Director of Rates and Regulatory

Question:

Reference PAWC Statement No. 10 (Rea), page 42, line 20 through page 45, line 10, and Table 5 on page 47.

a. Please separately identify the extent to which the Company expects (a) confirmed low-income customers (as that term was defined in response to OCA-05-001), (b) Bill Discount Program participants, (c) high-income customers, and (d) residential customers generally, to benefit, if at all, from winter averaging;

b. Please separately identify the extent to which the Company expects (a) tenants, and (b) homeowners, to benefit, if at all, from winter averaging;

c. Page 44, lines 4-5. Please explain why the Company selected these three months to determine a customer's average winter consumption. Please identify all other alternatives evaluated and provided copies of the Company's analysis evaluating each alternative;

d. Page 44, lines 4-5: Please provide in active Excel format, all empirical data used by the Company to reach the conclusion that these three months are the appropriate months to use to determine a customer's average winter consumption; and

e. Please explain in detail how the wastewater reallocation to water service presented in Table 5 would change if the Company's proposal for winter averaging is not approved by the Commission. Provide a revised Table 5 for the wastewater reallocation in the event that winter averaging is not approved and the supporting calculations and workpapers.

Response:

a. The Company does not expect winter averaging to specifically affect confirmed low-income customers or Bill Discount Program participants. The Company expects that winter averaging will benefit any residential customer that uses significant amounts of water in non-winter months over and above their winter average, which may include both higher and lower income customers.

b. Regardless of whether the PAWC customer is a tenant or homeowner, the customer will benefit to the extent they use significant amounts of water in non-winter months over and above their winter average and are directly billed by the Company.

c. The Company's three-month winter average period was proposed to more closely align wastewater bills in the summertime with cost-causation rate design principles. Under the

Company's current rate structure, customers are charged for wastewater service based on metered water usage. During summer months, there is a greater likelihood that water may be used for outdoor purposes that does not go through the Company's wastewater system. The Company selected January, February and March since these winter months are not generally subject to seasonal use. In addition, as noted in PAWC Statement No. 10 (pp. 43:17– 44:2) this methodology is aligned with approaches taken by other wastewater utilities.

d. See response to c). The Company did not evaluate alternative definitions for winter averaging periods, but the months selected were used because they're not generally subject to seasonal use.

e. The reallocation amounts in Table 5 at p. 47 of PAWC Statement No. 10 are not related to the Company's proposed winter averaging rate design and will not be affected if the Company's proposal is rejected by the Commission.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:		
	:		
v.	:	Docket Nos.	R-2023-3043189
	:		R-2023-3043190
Pennsylvania-American Water Company	:		

REBUTTAL TESTIMONY OF HARRY S. GELLER, ESQ.

ON BEHALF OF

THE COALITION FOR AFFORDABLE UTILITY SERVICES AND ENERGY EFFICIENCY IN PENNSYLVANIA ("CAUSE-PA")

February 21, 2024

Topics Addressed:

Recovery of Low Income Assistance Program Costs

PREPARED REBUTTAL TESTIMONY OF HARRY S. GELLER, ESQ.

I. INTRODUCTION

Q: Please state your name, occupation, and business address.

A: My name is Harry Geller. I am an attorney. I am the former Director of the Pennsylvania Utility Law Project. I am currently retired but serve as Senior Counsel to the Pennsylvania Utility Law Project (PULP) and as a consultant to legal aid programs and their clients. I maintain an office at 118 Locust St., Harrisburg, PA 17101.

Q: Did you previously submit testimony in this proceeding?

A: Yes. I submitted direct testimony that is pre-marked as CAUSE-PA Statement 1.

Q: What is the purpose of your rebuttal testimony?

A: My rebuttal testimony responds to the direct testimony of Office of Small Business Advocate (OSBA) Expert Witness, Kevin Higgins (OSBA St. 1). Specifically, my rebuttal will respond to Mr. Higgins recommendation that all costs associated with PAWC's proposed residential Arrearage Management Plan/Program (AMP) and certain costs associated with PAWC's low income assistance programs are assigned solely to the residential class.[1]

This rebuttal testimony is not intended to address every issue raised or otherwise discussed by other parties' witnesses in direct testimony. Absence of a response to any specific recommendation or position of any witness does not indicate my agreement. Unless required for context in providing a further response to direct testimony, I will not reiterate the extensive arguments and evidence that I provided in my direct testimony. To the extent an argument raised

[1] OSBA St. 1 at 30.

by any party in direct testimony is already sufficiently addressed in my direct testimony, I do not intend to respond, and stand on the evaluation, analysis, and recommendations contained in my direct testimony.

II. RESPONSE TO OSBA EXPERT WITNESS

Q: Please summarize how costs associated with PAWC's low income assistance programs are currently recovered.

A: Currently, PAWC recovers costs for bill discounts offered under its Help to Others (H2O) Bill Discount Program (BDP) from its residential customers.[2] However, PAWC allocates approximately $3,180,090 in AMP costs, as well as administrative costs associated with its H2O Hardship Fund grants, the BDP, and Dollar Energy Fund (DEF), among both residential and nonresidential customer classes in its cost-of-service studies.[3]

Q: Please summarize Mr. Higgins's direct testimony related to the allocation of low income assistance program costs to which you wish to respond.

A: Mr. Higgins recommends that costs associated with PAWC's AMP and low income assistance program costs – including administrative costs – are assigned solely to the residential class.[4] In support of this recommendation, Mr. Higgins argues that these programs are designed to benefit residential customers.[5]

I note that Mr. Higgins argues in his direct testimony that, in PAWC's last base rate proceeding, PAWC accepted OSBA's recommendation that AMP expenses should be directly assigned to the residential class.[6] However, as Mr. Higgins correctly points out, the Settlement

[2] OSBA St. 1 at 31: 1-5.
[3] OSBA St. 1 at 31: 1-18.
[4] OSBA St. 1 at 32: 3-6.
[5] OSBA St. 1 at 32: 3-6.
[6] OSBA St. 1 at 32: 15-20.

approved by the Commission in that matter did not adopt OSBA's recommendation that these costs are allocated solely to the residential class.[7]

Q: Has the Commission given any directives on this issue?

A: Yes. In its recent Final CAP Policy Statement and Order, the Commission addressed recovery of universal service program costs.[8] The Commission did not specifically order utilities to propose a specific allocation, but indicated that it is appropriate to consider recovery of the costs of customer assistance programs from all ratepayer classes because "poverty, poor housing stock, and other factors that contribute to households struggling to afford utility service are not just 'residential class' problems." The Commission explained that the provision of universal services to help low income families maintain service to their homes is "a benefit to the economic climate of a community."[9] The Commission directed that utilities and stakeholders should be prepared to address CAP cost recovery in utility-specific rate cases and stated that "the Commission will no longer routinely exempt non-residential classes from universal service obligations."[10]

To be clear, in noting the policy guidance set forth in the Commission's recent Final CAP Policy Statement and Order, I am not arguing a legal position on universal service cost recovery or the applicability of the Commission's CAP Policy Statement to PAWC – though I am advised by counsel that these legal aspects of the issue will be thoroughly addressed in briefing. Rather, my testimony on this issue is focused on the policy reasons why cross-class recovery of universal service programs is appropriate, as I will explain in further detail below.

Q: How do you respond to Mr. Higgin's assertion that PAWC's low income assistance program costs should be recovered solely from the residential customer class?

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[7] OSBA St. 1 at 32: 15-20.
[8] Final CAP Policy Statement and Order at 97; see also 52 Pa. Code §§ 69.625(1), 69.266(b).
[9] Final CAP Policy Statement and Order at 7, 94-96, 107.
[10] Id; see also 66 Pa. C.S. § 69.266(b).

A: I disagree. It is inappropriate to require the residential class to solely shoulder the burden of universal service programs meant to remediate the impacts of utility insecurity, the effects of which impact all customer classes. Utility insecurity is a broad social problem, affecting all customers and requiring holistic societal solutions. Utility insecurity is a pervasive problem with long-term and far-ranging consequences for low income households and the surrounding communities in which they live and work.[11] Families who are unable to afford critical utility services are more prone to a variety of adverse consequences, including increased rates of health complications and hospitalization, eviction, and food insecurity.[12] For children in low income households, utility insecurity has been linked to long-term health consequences and developmental delays.[13] Moreover, communities of color continue to experience utility insecurity at disproportionately higher levels.[14]

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[11] NRDC, Water Affordability Toolkit, Section 1, available at: https://www.nrdc.org/resources/water-affordability-advocacy-toolkit (Water Affordability Toolkit); Legal Defense Fund, Water/Color Report, available at: https://www.naacpldf.org/wp-content/uploads/Water_Report_FULL_5_31_19_FINAL_OPT.pdf; Diana Hernández, Energy Insecurity And Health: America's Hidden Hardship, Health Affairs, available at: https://www.healthaffairs.org/do/10.1377/hpb20230518.472953/; Nina Lakhani, Revealed: millions of Americans can't afford water as bills rise 80% in a decade (June 23, 2020), available at https://www.theguardian.com/us-news/2020/jun/23/millions-of-americans-cant-afford-water-bills-rise; Nina Lakhani and Juweek Adolphe, Key findings: the Guardian's water poverty investigation in 12 US cities (June 26, 2020), available at https://www.theguardian.com/us-news/2020/jun/26/running-drinking-water-poverty-us-cities.

[12] Water Affordability Toolkit at Background, 11-13; Final Report, Recommendations for Implementation of a Statewide Low-Income Water Rate Assistance Program (Feb. 2020) at pp 15-17 (when water is unaffordable, families consume less than is healthy or sacrifice other necessities), available at https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/assistance/docs/ab401_report.pdf; Dahlia Rockowitz, Chris Askew-Merwin, Malavika Sahai *et al*, Household Water Security in Metropolitan Detroit: Measuring the Affordability Gap, University of Michigan Poverty Solutions (Aug. 2018) at 3 (low-income households make untenable trade-offs to pay water bills), available at https://poverty.umich.edu/10/files/2018/08/PovertySolutions-PolicyBrief-0818-r2.pdf; Environmental and Climate Justice Program, NAACP, Lights Out In The Cold: Reforming Utility Shut-Off Policies as If Human Rights Matter (March 2017), available at https://naacp.org/resources/lights-out-cold.

[13] Water Affordability Toolkit at Background, 11-13; See Diana Hernández, Energy Insecurity And Health: America's Hidden Hardship, Health Affairs, available at: https://www.healthaffairs.org/do/10.1377/hpb20230518.472953/.
Diana Hernández, Yumiko Aratani, and Yang Jiang, Energy Insecurity Among Families with Children (January 2014), available at http://www.nccp.org/publications/pdf/text_1086.pdf.

[14] Water/Color Report at 31; Lillian Holmes, Morgan Shimabuku, Laura Feinstein *et.al.,* Water and the COVID-19 Pandemic Equity Dimensions of Utility Disconnections in the U.S., Pacific Institute (July 2020), available at https://pacinst.org/publication/equity-dimensions-of-disconnections/; Environmental and Climate Justice Program,

While universal service program participants may derive the most direct and easily quantifiable benefits from universal service programs, these programs provide important societal benefits that are also enjoyed by non-residential ratepayers which should not be ignored. Many universal service program participants are employed – yet do not receive a wage that is adequate to afford basic household needs.[15] Many others are retired Seniors or individuals with a disability that do not receive enough in Social Security, disability, or retirement benefits to afford basic life necessities, such as utility services. Moreover, low income customers faced with utility insecurity often struggle to cope with heightened levels of stress, anxiety, and depression, and must take time away from work to arrange payments, locate or apply for assistance programs, and arrange for reconnections[16] – all of which significantly undermine worker productivity, impacting businesses, non-profits, government entities, schools, and other non-residential customer groups. Universal service programs also help utility companies to control uncollectible expenses, helping to bridge the gap in these circumstances, which benefits all customers. Thus, each of us, regardless of rate class, receives the benefits derived by a healthy and productive community – making it sound

NAACP, Lights Out In The Cold: Reforming Utility Shut-Off Policies as If Human Rights Matter (March 2017), available at https://naacp.org/resources/lights-out-cold.

[15] See, e.g., MIT's Living Wage Calculator for Pennsylvania (a one adult, one child household would need to earn $34.45/hour to earn a wage that could cover basic expenses in PA, but the average wage for the federal poverty threshold is $8.80/hour, and the minimum wage in PA is $7.25/hour), available at: https://livingwage.mit.edu/states/42.

[16] See Dahlia Rockowitz, Chris Askew-Merwin, Malavika Sahai *et al*, Household Water Security in Metropolitan Detroit: Measuring the Affordability Gap, University of Michigan Poverty Solutions (Aug. 2018) at 4 (correlation between water insecurity and psychological distress), available at: https://poverty.umich.edu/research-publications/policy-briefs/household-water-security-in-metropolitan-detroit-measuring-the-affordability-gap/; see also, Diana Hernadez, Understanding 'energy insecurity' and why it matters to health, Social Science & Medicine, Volume 167, October 2016 (similar utility insecurity stress with energy), available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5114037/; Ariel Drebohl & Lauren Ross, ACEEE, Lifting the High Energy Burden in America's Largest Cities: How Energy Efficiency Can Improve Low-income and Underserved Communities, at 13 (April 2016), https://www.aceee.org/sites/default/files/publications/researchreports/u1602.pdf. Diana Hernández, Energy Insecurity And Health: America's Hidden Hardship, Health Affairs, available at: https://www.healthaffairs.org/do/10.1377/hpb20230518.472953/.

policy for all customers to share in the cost of providing universal access to our most vulnerable residents.

Universal service programs provide not only a safety net for at-need residential customers but also broad societal benefits for all customer classes (industry, business, commerce, educational institutions, hospitals, local and state governments, and other residential customers) in specific and identifiable ways. In turn, the responsibility to provide universal access to life-sustaining utility services should be shared by all utility consumers – not simply residential customers.

Q: Do practices in other states provide any guidance related to the recovery of low income assistance program costs across classes?

A: Yes. Cross-class recovery for universal service costs is the "norm" across much of the country, where state utility commissions and legislatures have expressly recognized that universally available utility services benefit the community as a whole. To my knowledge, Pennsylvania is the only state with a history of generally limiting cost recovery of universal service programming to the residential class. As noted above, the Commission has recently indicated that it will no longer routinely exempt non-residential classes from universal service obligations. Other states which operate universal service programming, including, for example, Colorado, New Jersey, Maine, New Hampshire, New York, Washington, Oregon, Illinois, and California, recover the costs of that programming from every rate class. [17]

[17] Roger D. Colton, Best Practices: Low Income Rate Affordability Programs (Nov. 2007), available at: http://www.fsconline.com/downloads/Papers/2007%2011%20BestPractice_RateAffordability.pdf ("With the exception of Pennsylvania, whose utility commission has chosen to limit cost recovery exclusively to the residential class, low-income rate affordability programs recover their costs from all customer classes."); see, e.g., 4 CCR 723-3, § 3412(g) (Colorado); Amendments to Consumer Protections Standards for Electric and Gas Transmission and Distribution Utilities (Chapter 815) and Statewide Low Income Assistance Plan (Chapter 314), No. 2013-00228, Order (Me P.U.C. July 17, 2013); Re Statewide Low-Income Electric Assistance Program, 87 NH PUC 349, 218 P.U.R.4th 442 (N.H. PUC 2002); Order Adopting Low Income Program Modifications and Directing Utility Filings, NY Pub. Service Comm'n Docket No. 14-M-0565 (May 20, 2016); 2015 ORS § 757.612(7); Or. Admin. R. 860-100-0100; Illinois Energy Assistance Act (the "IEAA"), 305 ILCS 20/18; Cal. Pub. Util. Code § 382. I note that,

Q: What is your recommendation regarding the cost allocation of PAWC's low income assistance programs?

A: I recommend that PAWC continue its current practice of recovering costs associated with PAWC's AMP, and administrative costs associated with the H2O program and DEF, amongst both residential and nonresidential customers, as outlined above.

Q: Does this conclude your rebuttal testimony?

A: Yes.

while most other states use a statewide line-item charge to fund their respective universal service and energy conservation programming, Pennsylvania's legislature has chosen to fund these programs on an individual utility basis. This does not negate the need for cross-class recovery of low income assistance programming costs, but rather highlights the need to address equitable recovery of these program costs within the context of proceedings such as the present rate filing.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:		
	:		
v.	:	Docket Nos.	R-2023-3043189
	:		R-2023-3043190
Pennsylvania-American Water Company	:		

SURREBUTTAL TESTIMONY OF HARRY S. GELLER, ESQ.

ON BEHALF OF

THE COALITION FOR AFFORDABLE UTILITY SERVICES AND ENERGY EFFICIENCY IN PENNSYLVANIA ("CAUSE-PA")

March 4, 2024

Topics Addressed:

Rate Affordability / Rate Impact on Low Income Consumers

Low Income Programming

DSLPA/USTRA Policies and Procedures

Recovery of Low Income Assistance Program Costs

PREPARED SURREBUTTAL TESTIMONY OF HARRY S. GELLER, ESQ.

I. INTRODUCTION

Q: Please state your name, occupation, and business address.

A: My name is Harry Geller. I am an attorney. I am the former Director of the Pennsylvania Utility Law Project. I am currently retired but serve as Senior Counsel to the Pennsylvania Utility Law Project (PULP) and as a consultant to legal aid programs and their clients. I maintain an office at 118 Locust St., Harrisburg, PA 17101.

Q: Did you previously submit testimony in this proceeding?

A: Yes. I submitted direct testimony that is pre-marked as CAUSE-PA Statement 1, and rebuttal testimony that is pre-marked as CAUSE-PA Statement 1-R.

Q: What is the purpose of your surrebuttal testimony?

A: My surrebuttal testimony responds to the rebuttal testimonies provided by expert witnesses for the Pennsylvania-American Water Company (PAWC or the Company) and Bureau of Investigation and Enforcement (I&E).

This surrebuttal testimony is not intended to address every issue raised or otherwise discussed by other parties' witnesses in rebuttal testimony. Absence of a response to any specific recommendation or position of any witness does not indicate my agreement. Unless required for context in providing a further response to rebuttal testimony, I will not reiterate the extensive arguments and evidence that I provided in my direct and rebuttal testimonies. To the extent an argument raised by any party in rebuttal testimony is already sufficiently addressed in my direct and/or rebuttal testimony, I do not intend to respond, and stand on the evaluation, analysis, and recommendations contained in my direct and rebuttal testimonies.

Q: How is your surrebuttal testimony organized?

A: My surrebuttal testimony is divided into 5 sections as follows:

In Section I, I introduce my surrebuttal testimony. In Section II, I respond to rebuttal testimony of the exert witness for the Commission's Bureau of Investigation and Enforcement, Vanessa Okum (I&E St. 1-R), related to my recommended improvements to hardship funding and my recommendation that PAWC implement a comprehensive conservation and line repair/replacement program. In Section III, I respond to the rebuttal testimony of PAWC's expert witnesses regarding areas of agreement between CAUSE-PA and PAWC.

In Section IV, I respond to areas of disagreement between myself and other parties' expert witnesses in the following order:

- PAWC St. 1-R, Ashley E. Everette, related to my recommended funding improvements to PAWC's Hardship Fund.
- PAWC St. 9-R, Deborah A. Degillio, related to my recommended enhancements to customer screening protocols for low income assistance programs.
- PAWC St. 10-R, Charles B. Rea, related to my concerns that PAWC's Affordability Analyses did not adequately assess low income customer needs or widespread rate unaffordability for these customers across its service territory.
- PAWC St. 14-R, Tawana Dean, related to my recommended improvements to PAWC's customer outreach and enrollment in assistance programs; submission of a universal service plan; administration of its low income assistance programs; Hardship Fund; and policies and procedures pursuant to the Discontinuance of Service to Leased Premises Act (DSLPA) and Utility Service Tenants Rights Act (USTRA).

In Section V, I conclude my surrebuttal testimony.

II. RESPONSE TO I&E EXPERT WITNESS VANESSA OKUM (I&E ST. 1-R)

Q: Please summarize the rebuttal testimony of I&E's expert witness, Ms. Vanessa Okum (I&E St. 1-R), related to your recommended expansions to PAWC's Hardship Fund to which you wish to respond.

A: In my direct testimony, I explained that PAWC's Hardship Fund is extremely undersubscribed compared to the need amongst PAWC's low income customers for grant assistance.[1]

Ms. Okum raises concerns with my recommended expansion of funding for PAWC's Hardship Fund.[2] Ms. Okum argues that I do not explicitly state how this proposed increase is to be funded.[3] She notes that PAWC's current Hardship Fund is entirely funded by shareholders and not recovered by ratepayers.[4] As a result, Ms. Okum recommends that this practice should continue and that any increase to funding of hardship grants continue to be funded entirely through shareholders rather than recovered from ratepayers.[5]

Q: What is your response to Ms. Okum's rebuttal testimony related to how your recommended increases to PAWC's Hardship Fund should be funded?

A: I support Ms. Okum's recommendation that the $1,000,000 increase to PAWC's Hardship Fund be funded through shareholders rather than recovered through rates.

Q: Please summarize Ms. Okum's testimony related to your recommendation that PAWC implement a comprehensive conservation and line repair program to which you wish to respond.

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[1] CAUSE-PA St. 1 at 50-51.
[2] I&E St. 1-R at 3: 7-14.
[3] Id.
[4] Id.
[5] Id.

A: In my direct testimony, I recommend that PAWC develop and implement a comprehensive conservation and line repair/replacement program available to all customers at or below 200% FPL within 6 months of the final order in this proceeding.[6]

Ms. Okum argues in her rebuttal testimony that I do not indicate how this proposed program should be funded, or present any budget or cap for this proposals.[7] Ms. Okum recommends that, if ultimately approved, this program should be funded entirely by shareholders and not recovered from ratepayers.[8] As the program focuses on water conservation efforts and repair assistance, Ms. Okum argues that it would be inappropriate to add this expense to customer rates who do not participate in this program – particularly given PAWC's ever-increasing utility bills.[9]

Q: What is your response to Ms. Okum's concerns related to your proposal that PAWC implement a comprehensive conservation and line repair/replacement program?

A: I disagree to the extent that Ms. Okum's testimony relies on the implicit premise that it is inappropriate to fund water conservation and line repair assistance programs through rates because these programs benefit individual consumers. As I discussed extensively in my rebuttal testimony, low income assistance programs have tangible benefits for all ratepayers and the communities in which they live and work.[10] Importantly, water conservation and line repair programs help to control usage levels and corresponding high monthly bills resulting from homes in need of repairs and enhancements. Assisting low income customers to better control high usage ultimately helps to reduce universal service program costs. Similarly, assisting low income customers to control high usage levels through conservation and line repair/replacement assistance will help to lower

[6] CAUSE-PA St. 1 at 63-64.
[7] I&E St. 1-R at 4: 1-17.
[8] Id.
[9] Id.
[10] CAUSE-PA St. 1-R.

bills inflated as a result of these issues and keep participating customers connected to services – thus reducing uncollectible expenses and termination costs that affect all ratepayers.

III. AREAS OF AGREEMENT WITH PAWC'S EXPERT WITNESSES

Q: Are there areas in which PAWC witness Rebuttal provides the basis for agreement?

A: Yes. There are specific areas of PAWC's expert witness rebuttal regarding low income water and wastewater burdens for its Bill Discount Program (BDP), Percentage of Income Payment (PIP) structure, program oversight, education, and outreach which indicate the basis for agreement.

Q: Please describe PAWC's expert witness rebuttal testimony which indicates agreement regarding implementation of BDP affordability burdens.

A: In my direct testimony, I pointed out that PAWC's proposed discount tiers failed to produce consistent, equitable levels of affordability – falling hardest on households with the lowest income and larger households, with correspondingly higher usage.[11] I proposed adjustments to PAWC's proposed discount tiers to improve the distribution of assistance and affordability achieved for those most in need.[12] In his rebuttal testimony, PAWC expert witness Charles Rea indicates that the Company does not oppose either my proposal or that of the Office of Consumer Advocate (OCA) witness Roger Colton to provide greater levels of affordability at lower income levels.[13] He indicates, ultimate approval rests with the Commission.[14]

Q: Does Mr. Rea's rebuttal testimony provide support for application of a maximum 2% water and wastewater burden, respectively, and therefore reason for Commission approval?

[11] CAUSE-PA St. 1 at 43-44.
[12] Id. at 45.
[13] PAWC St. 10- R at 30: 1-5.
[14] Id.

A: Yes. Mr. Rea indicates support for water and wastewater burdens not exceeding 2% of income, respectively, for low income customers. He indicates that the 2% standard is the generally accepted burden level for household affordability and is supported by the United States Environmental Protection Agency and the Teodoro study cited to in his testimony.[15] Further, he explains that affordability depends on whether a robust sustainable tariff program such as BDP is in place to provide affordable rates such as at 2% individual household income.[16]

Q: Is there a basis in the rebuttal testimony of PAWC's expert witnesses to indicate that the conditions allow for implementation of a Percentage of Income (PIP) BDP structure?

A: Yes. In my direct testimony, I indicated that a PIP structure is the optimal way to structure BDP toward the goal of achieving consistent, equitable, and targeted levels of affordability for low income households.[17] In response, PAWC witness Ms. Tawana Dean stated that PAWC is unable to implement a PIP at this time because PAWC does not have a verification of income process in place.[18] However, she also states that the BDP will not be implemented in isolation and that the Company's Arrearage Management Program (AMP) will be implemented by the end of the year.[19] She further states that the Company will be requiring income verification for AMP and BDP.[20] Since PAWC is presently acting to implement AMP, to coordinate AMP and BDP, and to implement a low income customer income verification process, the impediment it cites to a PIP will be removed. It would appear that PIP implementation planning may now take place concurrently with the AMP rollout, verification implementation, and AMP/BDP coordination.

[15] PAWC St. 10-R at 8: 1-7; PAWC St 10 at 10.
[16] PAWC St. 10-R at 9: 14-17.
[17] CAUSE-PA St. 1 at 44-45.
[18] PAWC St. 14-R at 5.
[19] Id. at 5: 2-4.
[20] Id. at 10: 1-3.

Q: What is your recommendation based on this analysis related to the structure and discounts under PAWC's BDP?

A: Based on the foregoing analysis, I modify my initial recommended improvements to the structure and discount levels provided under the BDP.[21] The improved BDP structure and discounts I recommend in my direct testimony should be viewed as a floor – or minimum – to necessary improvements to the BDP. I further recommend that the Commission require PAWC to transition its BDP to a percentage of income program (PIP), which targets affordability based on an individual's income level. I recommend that PAWC be required to submit a Petition no later than 6 months of the date of the final order in this proceeding seeking approval of a PIP-structure for its BDP, and in line with the affordability discussion I have set forth in my testimony in this proceeding.

Transitioning PAWC's BDP to a PIP-structure would ensure that those at the lowest levels of the Federal Poverty Level (FPL) and/or with larger families are not paying a disproportionate level of their income for critical water and wastewater services and would improve the ability of low income families to stay connected to water and wastewater services in their homes. As discussed in my direct testimony, rates for water and wastewater services are likely to continue to rise in the coming years, and are already unaffordable for PAWC's low income customers.[22] It is important that PAWC have a program structure in place capable of delivering accessible, consistent, and equitable levels of affordability to economically vulnerable households.

[21] CAUSE-PA St. 1 at 45, Table 12.
[22] Id. at 45: 1-17.

IV. AREAS OF DISAGREEMENT WITH PAWC'S EXPERT WITNESSES

A. *Response to PAWC expert witness Ashley E. Everette (PAWC St. 1-R)*

Q: Please summarize the rebuttal testimony of PAWC expert witness Ms. Everette (PAWC St. 1-R) to which you wish to respond.

A: Ms. Everette disagrees with the recommendation set forth in my direct testimony that PAWC increase annual funding for its Hardship Fund by $1,000,000 over and above existing funding levels.[23] Ms. Everette argues that utility payments to PAWC's Dollar Energy Hardship Fund are voluntary shareholder contributions, and that the Commission has previously held that it cannot order a utility to increase its contributions.[24]

Q: What is your response to Ms. Everette's rebuttal testimony related to Hardship Fund contributions you outline above?

A: As a threshold matter, counsel for CAUSE-PA has advised me that issues related to the precedence and weight of past Commission orders as they related to increasing funding of PAWC's Hardship Fund are legal issues that counsel for CAUSE-PA reserves for briefing.

That said, I have outlined the extensive need for increased hardship funding in my direct testimony.[25] The costs of acquisitions and related system costs have served to exacerbate rate unaffordability and rate increases. While PAWC's ratepayers have borne these costs, the underlying transactions that result in these acquisitions have resulted in present gains for the acquired entities. [26] It is just, reasonable, and in the public interest to require PAWC to invest and

[23] PAWC St. 1-R at 24; CAUSE-PA St. 1 at 52.
[24] Id. at 25: 1-3.
[25] CAUSE-PA St. 1 at 49-52.
[26] For example, it was reported that, in May 2016, PAWC's purchase of the New Cumberland Wastewater System was for approximately $23 million. Reuters, Pennsylvania American Water to buy New Cumberland Wastewater System (May 5, 2016), available at: https://www.reuters.com/article/idCNASC08NCN/. At the Harrisburg public input hearing, two residents from New Cumberland celebrated the sale, noting New Cumberland still has over $7 million to spend on local initiatives. Ratepayers across the service territory – including in New Cumberland – are paying for that windfall through rates.

provide sufficient assistance for its own financially vulnerable customers who are impacted from these transactions and resulting system costs. Thus, I stand by the analyses contained in my direct testimony.

B. ***Response to PAWC expert witness Deborah A. Degillio's Rebuttal Testimony (PAWC St. 9-R)***

Q: Please summarize Ms. Degillio's rebuttal testimony regarding screening for eligibility for PAWC's Help to Others (H2O) program to which you wish to respond.

A: Ms. Degillio disagrees with the recommendations set forth in my direct testimony that PAWC implement screening at the time of move-in and during non-emergency calls for eligibility in PAWC's low income assistance programs.[27] Ms. Degillio argues that customers often consider their income information to be confidential and may not want to share this information when discussing issues other than billing.[28]

Ms. Degillio also disagrees with my recommendation that eligible payment troubled customers should be assessed for enrollment in PAWC's BDP prior to being placed in a Company payment arrangement.[29] In my direct testimony, I raised concerns that PAWC was not directing potentially-qualified low income customers to its BDP and Hardship Fund prior to being placed in payment arrangements.[30] As I explained, while payment arrangements can be an important tool to manage arrears, they can also serve to exacerbate unaffordability when terms do not result in affordable monthly bills.[31] It is essential that low income customers are provided with the most

[27] PAWC St. 9-R at 10-11.
[28] Id. at 11: 14-22.
[29] PAWC St. 9-R at 10-11.
[30] CAUSE-PA St. 1 at 58-59.
[31] Id.

affordable options available so that they can stay afford and stay connected to water/wastewater services.

Ms. Degillio agrees that eligible payment-troubled customers should be enrolled in PAWC's H2O as early as possible.[32] However, Ms. Degillio argues that PAWC should not decide on behalf of customers whether to apply for the H2O program or enter into a payment arrangement.[33] She alleges that PAWC's customer service representatives offer both options so that customers can make a decision themselves.[34]

Q: What is your response to Ms. Degillio's rebuttal testimony related to your recommendation to implement regular screening for eligibility in PAWC's low income assistance programs?

A: I continue to assert that it is both necessary and appropriate to enhance screening of low income assistance programs, as I recommend in my direct testimony.

As discussed in my direct testimony, PAWC's enrollment rates for its low income assistance programs are inadequate. PAWC must be more proactive in identifying and enrolling low income customers to actively prevent the unnecessary accrual of arrears, and help low income customers qualify for assistance programs. Being more proactive in enrolling customers in available assistance programs will help reduce the number of arrearages held by low income customers. I firmly disagree that regularly screening for eligibility in low income assistance programs will lead to customer offense – so long as PAWC makes clear the purpose of the inquiry (i.e. to determine if customers are eligible for assistance) and that customers may choose not to disclose this information. There is a significant difference in a customer's perception when they are informed

[32] PAWC St. 9-R at 11: 3-13.
[33] Id.
[34] Id.

they may be eligible for a discount on their bill if they provide household income information – as opposed to when they are coldly asked their income without further context for why information is being requested. Thus, I stand by my recommendation set forth more fully in my direct testimony that PAWC should be required to routinely screen for eligibility in its low income assistance programs.

Q: What is your response to Ms. Degillio's testimony related to screening for eligibility in the H2O program prior to placing customers in payment arrangements?

A: First, Ms. Degillio does not contradict my concern that low income customers are unable to access hardship funding prior to being placed in potentially unaffordable payment arrangements that exacerbate arrearage levels and termination issues.

As discussed more fully in my direct testimony, low income assistance programs are designed in recognition of the fact that payment arrangements may exacerbate payment troubles for low income customers.[35] It is essential that eligibility in PAWC's low income assistance programs are assessed before low income customers are placed in potentially unaffordable payment arrangements.

While I agree with Ms. Degillio that low income customers should have the choice whether to enroll in the H2O or accept a payment arrangement, customers should be given the opportunity to make a fully informed choice, with clear information about the option that will provide the greatest level of affordability. In turn, consumers must be given the option to enroll in low income assistance programs prior to being placed in potentially-unaffordable payment arrangements. This is not only my opinion, such requirements are also enshrined in statute – a fact which counsel for CAUSE-PA will explore further in briefing.[36] I therefore stand by the recommendations in my

[35] CAUSE-PA St. 1 at 58-59.
[36] 66 Pa. C.S. § 1410.1 (Public Utility Duties).

direct testimony related to screening for low income customers and related to eligibility in PAWC's H2O.

C. ***Response to PAWC expert witness Charles B. Rea (PAWC St. 10-R)***

Q: Please describe Mr. Rea's rebuttal testimony related to PAWC's Affordability Analyses to which you wish to respond.

A: Mr. Rea raises several criticisms of my investigation of PAWC's Affordability Analyses. I continue to rely on my prior testimony regarding my analysis and respond here only to those of greatest concern to PAWC's lowest income customers.

First, in response to my arguments that Median Household Income (MHI) is not an appropriate standard and masks unaffordability amongst low income customers, Mr. Rea argues that MHI was utilized in the Enterprise-Level Analysis to provide a high-level historical perspective on affordability – while the Company's Community Level Analysis (which does not rely on MHI) was used to address the debt and breadth of low income affordability.[37]

Second, in response to my concerns that PAWC's Affordability Index does not address the extent of affordability for low income customers, Mr. Rea argues that PAWC's Affordability Index was meant to show the percent of customers for whom basic water service is less than 2% of household income. He notes that PAWC's provided analyses provides "bill to income" (BTI) ratios at various household income levels.[38]

Finally, Mr. Rea takes issue with my concerns that PAWC's Affordability Analyses found roughly one-third of PAWC's customers will receive water bills that exceed accepted affordability standards under its BDP proposal, and his conclusion that this is an acceptable outcome.[39] Mr. Rea

[37] PAWC St. 10-R at 23: 1-12.
[38] Id. at 23: 12-23.
[39] Id. at 24-25.

argues that he did not say or imply the number of customers whose bills are expected to be more than 2% of household income is an acceptable level of unaffordability.[40]

As a whole Mr. Rea argues that, despite the criticisms of PAWC's analyses lodged by myself and OCA's expert witness, Roger Colton, we nevertheless rely on information provided through these analyses – an alleged testament to the robustness and usefulness of the analyses.[41]

Q: What is your response to Mr. Rea's criticism of your scrutiny of his Affordability Analyses?

A: I continue to have serious concerns that PAWC's Affordability Analyses do not appropriately account for PAWC's low income customers – and their need for improved affordability. In particular, PAWC's analyses do not include an assessment of its estimated low income customer base to determine the scope of likely need. Further, as discussed in detail in my direct testimony, it appears that PAWC's current estimates of its low income customers do not provide sufficient level of detail as to the methodology or sources of calculation.[42] Indeed, Mr. Rea implicitly acknowledges that PAWC's Analyses was not specific to PAWC's low income customers. In defending his analyses, Mr. Rea indicates that "[n]owhere in my direct testimony did I say or otherwise imply that the number of customers whose bills are expected to be more than 2% of household income is an acceptable level of unaffordability."[43] Taken together, these deficiencies beg for more detailed analyses related to the extent of unaffordability faced by low income customers – including updates to PAWC's estimated low income customer count, which I recommend in my direct testimony.[44]

[40] Id. at 25: 1-5.
[41] PAWC St. 10-R at 27: 17-23.
[42] CAUSE-PA St. 1 at 47.
[43] PAWC St. 10-R at 25: 1-5.
[44] CAUSE-PA St. 1 at 47.

I also note that any limited use in my direct testimony of PAWC's Affordability Analyses should not lead to the conclusion related to the efficacy or appropriateness of these analyses. Rather, my reliance on PAWC's Affordability Analyses stands testament to the scant data provided by PAWC related to its low income customers in response to discovery. Again, these deficiencies beg for additional analyses and reporting related to PAWC's low income customers, as I have outlined throughout my direct testimony.

D. ***Response to PAWC expert witness Tawana Dean (PAWC St. 14-R).***

1. Outreach and Enrollment in Low Income Assistance Programs

Q: Please summarize Ms. Dean's testimony related to low income assistance program outreach and enrollment to which you wish to respond.

A: Ms. Dean disagrees with several of my recommendations to enhance outreach and enrollment related to PAWC's low income assistance programs. In my direct testimony, I explained that PAWC's low income assistance programs were woefully undersubscribed, and recommended that the Commission require PAWC to establish quantitative outreach goals and set enrollment benchmarks for the BDP at 20% per year of its estimated low income customer count until 75% of enrollment is reached.[45]

Ms. Dean disagrees with these recommendations, and alleges that the Company is making significant progress in reaching out to customers without formalizing benchmarks or quantitative goals.[46] Ms. Dean argues that PAWC engages in outreach events related to its low income assistance programs.[47] Ms. Dean also argues that PAWC has increased its BDP enrollment – including between December 2020 and November 2023, when PAWC increased its BDP

[45] Id. at 54; 48: 1-5.
[46] PAWC 14-R at 8-9.
[47] Id. at 7: 18-21.

participation by over 30%.[48] Ms. Dean also explains that the Company will be adding three new full-time employees whose primary job responsibilities will be low income customer outreach and to assist customers with accessing PAWC's low income assistance programs.[49] Ms. Dean also describes certain expansions to PAWC's myWater portal to highlight availability of low income assistance programs, and expanded outreach to communities based on updates to analytic processes.[50]

Ms. Dean similarly argues that establishing the enrollment benchmarks and quantitative goals which I recommend are inappropriate because the number of PAWC's confirmed low income customers is likely to fluctuate with the launch of the AMP and implementation of income verification for AMP and BDP customers.[51] Ms. Dean argues that it is unreasonable to establish enrollment benchmarks when enrollment levels are expected to fluctuate over the next year.[52]

Q: What is your response to Ms. Dean's rebuttal testimony concerning your recommendations to improve PAWC's low income assistance program outreach and enrollment?

A: I appreciate PAWC's efforts in recent years to improve its outreach efforts and enrollment in its BDP. I also support PAWC's plans to add three new full-time staff whose primary job responsibilities are related to customer outreach and assistance for PAWC's low income assistance program. As discussed in my direct testimony, PAWC's low income assistance programs only have a small number of dedicated staff.[53] This limits PAWC's ability to provide robust outreach, education, and enrollment assistance related to these programs.[54]

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[48] Id. at 8: 1-11.
[49] Id. at 8: 1-11.
[50] Id. at 8.
[51] Id. at 9: 14-23.
[52] Id. at 9-10.
[53] CAUSE-PA St. 1 at 65: 13-21.
[54] Id.

Notwithstanding PAWC's recent efforts, I stand by my recommendations in my direct testimony that the Commission must require PAWC to meet certain quantitative goals and benchmarks related to enrollment in its low income assistance programs. These goals and benchmarks complement PAWC's efforts related to outreach and program enrollment for its low income assistance programs, and provide important metrics by which to gauge success in expanding access to these programs. Without these quantitative goals and benchmarks, it is difficult to determine which activities are most successful and whether PAWC's efforts have improved the ability of low income customers to maintain affordable service across its vast service territory.

While I recommend that PAWC establish certain quantitative goals related to affirmative customer outreach for the purposes of BDP enrollment, I also do not believe that changes to PAWC's income verification procedures preclude establishing benchmarks related to outreach and enrollment in low income assistance programs. [55] Many of the benchmarks that I recommend in my direct testimony are not dependent on PAWC's confirmed low income count.[56] In conjunction with my recommendations that PAWC update its estimated low income count in coordination with BCS,[57] I recommended that PAWC set target enrollment levels for its BDP which increase by 20% per year of PAWC's *estimated* low income customer count, until 75% enrollment of this estimated group is met.[58]

I further recommend that PAWC work with its Customer Assistance Advisory Group (CAAG) to design benchmarks that account for any changes in processes related to PAWC's tracking of its low income customers. PAWC should be required to implement the quantitative

[56] CAUSE-PA St. 1 at 47-48.
[57] Id. at 54.
[58] Id. at 48: 1-13.

goals related to affirmative customer outreach for the purposes of BDP enrollment in coordination with implementation of its AMP later this year. This will allow PAWC to better tailor these quantitative goals to account for changes in income qualification occurring in conjunction with AMP implementation.

2. Submission of a Universal Service Plan.

Q: Please summarize Ms. Dean's rebuttal testimony regarding your recommendation that PAWC be required to adopt a universal service plan to which you wish to respond.

A: Ms. Dean disagrees with my recommendation that PAWC develop a comprehensive universal service plan, filed with the Commission, to improve program transparency and Commission oversight.[59]

In my direct testimony, I recommended that PAWC be required to file a universal service plan and accompanying petition within one year of the final order in this proceeding.[60] Similarly, OCA expert witness, Mr. Colton, recommended that PAWC develop a written universal service plan to be filed with BCS.[61]

Ms. Dean argues that PAWC should not be required to adopt a universal service plan unless Pennsylvania law is modified to expand this requirement to water/wastewater utilities in the Commonwealth.[62] Ms. Dean argues that maintaining a universal service plan requires significant time, resources, and costs, and often requires establishing a new department focused on these plans.[63] Ms. Dean notes that EDCs and NGDCs staff 10 or more full-time employees, compared to PAWC who has 1.5 full-time employees to support its low income assistance programs.[64]

[59] PAWC St. 14-R at 11-12.
[60] CAUSE-PA St. 1 at 56.
[61] PAWC St. 14-R at 11-12.
[62] PAWC St. 14-R at 12: 4-19.
[63] Id.
[64] PAWC St. 14-R at 12-13.

Q: What is your response to Ms. Dean's rebuttal testimony related to PAWC establishing a universal service plan.

A: I do not believe that Ms. Dean's stated concerns preclude the need for PAWC to submit a Universal Service Plan for the Commission's review and approval. As discussed in my direct testimony, PAWC is not currently required to submit plans related to its low income assistance programs.[65] This leaves substantial gaps for the Commission, consumers, and utility advocates who must rely on PAWC's tariffs, settlements, orders, discovery requests, and information pieced together from websites and outreach materials to determine the full scope of rules, polices, and procedures related to these programs.[66] While I understand that submitting a Universal Service Plan may require additional time and resource commitments, it is essential that Commission staff, consumers and advocates can learn about the details underlying PAWC's low income assistance programs through a transparent Universal Service Plan. Indeed, while Ms. Dean touts PAWC's oversight of the administration of its low income assistance programs, it becomes difficult – if not impossible – to assess whether these programs are being administered in accordance with PAWC's and the Commission's requirements without a base understanding of the rules, policies, and procedures for these programs.

Ms. Dean's argument that PAWC currently only has 1.5 full-time employees dedicated to its low income assistance programs supports the need for PAWC to develop and submit a Universal Service Plan. The current small number of PAWC employees dedicated to these programs – as compared to the vast unmet need for assistance - limits the ability to provide robust outreach and services related to these programs. With these limitations, it is all the more essential that the Commission, consumers, and advocates are not required to unearth information related to these

[65] CAUSE-PA St. 1 at 56.
[66] Id.

low income assistance programs. Further, if Ms. Dean is serious that PAWC intends to add three additional dedicated full time staff to USECP, these staff may be treated as a resource to bring together the currently separate USECP information into one plan.

Finally, I question the validity of Ms. Dean's assertion that other EDCs and NGDCs often have more than 10 universal service program staff. It appears that many regulated utilities in Pennsylvania operate with fewer dedicated universal staff. For example, Duquesne indicates that it has 3 dedicated staff for its universal service programs.[67] While it appears that PECO maintains 10 full time employees in its Universal Service Department,[68] it does not appear that it is the norm for NGDCs and EDCs who maintain universal service programs to maintain 10 staff dedicated to universal service programming.

3. Administration of PAWC's low income assistance programs.

Q: Please summarize Ms. Dean's rebuttal testimony discussing your recommendations related to administration of PAWC's low income assistance programs to which you wish to respond.

A: In my direct testimony, I recommend that the Commission require PAWC to establish performance metrics and routinely audit applications handled or otherwise processed by Dollar Energy Fund (DEF), PAWC's low income assistance program administrator.[69] I recommend in my direct testimony that these performance metrics are implemented within 6 months of the final order in this proceeding, and that metric data and auditing reports are reviewed by PAWC on a monthly basis. I also recommend through my direct testimony that PAWC conduct and submit 6-year

[67] DLC Universal Services and Energy Conservation Plan, 2020-2025 at 23 (June 28, 2022).
[68] PECO Energy Company Universal Service and Energy Conservation Plan, 2019 to 2028, at 61 (Oct. 20, 2023).
[69] CAUSE-PA St. 1 at 66-67.

program evaluations related to its low income assistance programs, in line with the 6-year evaluations conducted by EDCs and NGDCs.[70]

Ms. Dean disagrees with these recommendations, which she classifies as costly.[71] Ms. Dean argues that PAWC has an excellent working relationship with DEF as its program administrator.[72] Ms. Dean argues that PAWC regularly meets with DEF, and addresses issues as they arise.[73] Ms. Dean also describes how PAWC has access to certain information related to DEF's administration of its low income assistance programs, including standard reports through DEF's Grant Management System – including standard reports of applications and grant activities.[74] Ms. Dean argues that the Company does not believe that a formal auditing process is needed, which would allegedly require PAWC to adopt a rider recovery mechanism to collected increased costs related to overseeing performance of its program administrator.[75]

Q: What is your response to Ms. Dean's testimony related to administration of PAWC's low income assistance programs you outline above?

A: I strongly disagree that the availability of reports and meetings "as issues arise", as described by Ms. Dean, are a reasonable substitute for routinized auditing and oversight that I have recommended in my direct testimony. As described in my direct testimony, it does not appear that PAWC has procedures in place to appropriately monitor DEF's administration of its low income assistance programs.[76] DEF providing certain standard reports and maintaining open channels of communication when issues arise or when PAWC raises questions is not equivalent to PAWC conducting regular evaluations of DEF's administration based on developed metrics. As discussed

[70] Id.
[71] PAWC St. 14-R at 14: 1-13.
[72] Id.
[73] Id.
[74] Id.
[75] Id.
[76] CAUSE-PA St. 1 at 65.

in detail in my direct testimony, without this systematic and regular assessment, it is impossible to accurately determine whether PAWC's low income assistance programs are being administered in a manner that is compliant with program rules and parameters developed by PAWC and approved by the Commission.[77]

I note that if DEF is performing at the level claimed by Ms. Dean, then routinized oversight should be easily incorporated into existing work flow and should not pose a significant cost. As previously mentioned, PAWC intends to add three new employees to its universal service program staff. Reviewing reports on a monthly basis to identify and resolve issues should necessarily be part of the job duties of PAWC's expanded universal service program staff.

I also disagree with Ms. Dean that any increase in costs as a result of these important enhancements to PAWC's oversight of DEF's administration will necessarily require a rider recovery mechanism to recover any increased costs related to this auditing. DEF's administration of PAWC's low income assistance programs are already recovered through rates.[78] Any costs associated with appropriate oversight of DEF's administration should be recovered in the same manner as other program costs and does not require a separate rider recovery mechanism.

[77] Id.
[78] CAUSE-PA St. 1-R at 3.

4. Hardship Fund Improvements

Q: Please summarize Ms. Dean's rebuttal testimony related to your recommended improvements to PAWC's Hardship Fund to which you wish to respond.

A: In her rebuttal testimony, Ms. Dean disagrees with my recommendations that PAWC increase the maximum grant amount for its Hardship Fund to $600 for water and wastewater customers, respectively.[79] Ms. Dean argues that DEF is developing enhancements expected to deploy at the start of the 2024-2025 program year so that customers will be able to apply for multiple Hardship Fund grants per program year.[80] In light of this expansion, implementation of its Arrearage Management Program (AMP), and its proposed expansion of its BDP, Ms. Dean argues that it is premature to consider increasing the Hardship Fund maximums to $600.[81]

Ms. Dean also disagrees with my recommendation that PAWC eliminate its upfront payment requirement for its Hardship Fund.[82] As discussed in fuller detail in my direct testimony, I recommend that PAWC eliminate its upfront (or good faith) payment requirements for its Hardship Fund - so that, if a customer meets all required eligibility criteria for the Hardship Fund, they should be able to access a Hardship Fund grant without upfront payment.[83] Ms. Dean argues that PAWC's Hardship Fund includes this upfront payment requirement to ensure that eligible customers are making a "sincere" effort to pay their utility bills.[84]

Q: What is your response to Ms. Dean's arguments against expanding the maximum grant amounts of PAWC's Hardship Fund to $600?

[79] PAWC St. 14-R at 16: 1-18.
[80] Id.
[81] Id.
[82] PAWC St. 14-R at 15-16.
[83] CAUSE-PA St. 1 at 53.
[84] PAWC St. 14-R at 15-16.

A: It is in no way premature to increase the maximum Hardship Fund grant amounts for water and wastewater customers to $600, respectively, especially in light of PAWC's proposal to exponentially increase rates. As described in my direct testimony, PAWC's low income customers already consistently carry average arrearage levels higher than PAWC's current maximum for its Hardship Fund grants of $500.[85] This current unmet need must be more adequately addressed through increased availability of a meaningful level of Hardship Fund grants. PAWC's projected enhancements to its low income assistance programs may result in more low income customers coming forward to access needed assistance. However, this increased identification of need, should not detract from customers receiving adequate Hardship Fund grant assistance to address high arrearages accrued as a result of unaffordable monthly bills.

It is certainly true that PAWC's Hardship Fund may have increased uptake, especially if PAWC's staggering proposed rate increase is approved. My recommendation that PAWC increase its hardship funding to more appropriately proportionate levels will help to account for the increased need. Thus, I stand by my recommendation set forth more fully in my direct testimony that PAWC be required to increase its maximum grant amounts to $600 for its water and wastewater customers, respectively.

Q: What is your response to Ms. Dean's rebuttal testimony regarding your recommendation that PAWC eliminate the upfront payment requirement for its Hardship Fund?

A: I continue to stand by my recommendation that the Commission require PAWC to eliminate its upfront payment requirements to access assistance through its Hardship Fund. From my experience working with low income utility consumers, these subjective and arbitrary

[85] CAUSE-PA St. 1 at 53.

preconditions pose an insurmountable barrier to receiving grant assistance for the most at-need low income customers. With such requirements, if customers are not able to make payments for a number of months due to financial hardships, they would be categorically disqualified from receiving critical grant assistance – precisely when grant assistance is most needed. Hardship funding should neither be delayed nor denied due to imposition of a subjective, burdensome, and unproven values system. In my experience working with low income families, most have exhausted their meager resources, including obtaining support from family and friends, before applying for grant assistance programs. This is especially true of uniquely vulnerable households, such as victims of domestic violence and families with medical needs or disabilities, as well as Seniors and others with low fixed income. A single crisis or unexpected event can destabilize the precarious financial stability of a vulnerable household. Indeed, I have personally assisted clients facing similar up-front payment requirements, who have resorted to borrowing from predatory payday lenders to make them eligible to receive grant assistance to prevent termination – compounding financial insecurity and further destabilizing the household. A customer facing a financial hardship should not need to turn to high-cost lenders as a condition to obtaining grant assistance.

Ultimately, up-front payment requirements are not a test of how sincere a customer is in paying their bills, but rather are significant obstacles and barriers which penalize low income families who are most unable to afford their monthly bills. These requirements push families closer to bankruptcy – which only serves to further increase uncollectible expenses. PAWC's current and proposed rates of service are unaffordable for low income families. Demanding a showing of "good faith" payments fails to account for this continued unaffordability and the realities that low

income families face on a daily basis. Families experiencing an acute financial hardship should not be required to make an up-front financial payment in order to secure financial assistance.

5. PAWC's Policies and Procedures related to the DSLPA/USTRA

Q: Please summarize Ms. Dean's direct testimony related to your recommended enhancements to PAWC's polices and procedures pursuant to the DSLPA and USTRA?

A: Ms. Dean disagrees with my recommendation to improve PAWC's policies and procedures related to the DSLPA and USTRA.[86] In my direct testimony, I raised concerns that PAWC does not have adequate policies, procedures, and processes to monitor its compliance with the DSLPA and USTRA.[87] I recommend through my direct testimony that PAWC track and report on the number of notices, dates of notices, numbers of tenants contacted, and payments made in response to notices for service termination conducted pursuant to the DSLPA.[88]

Ms. Dean argues that PAWC fully complies with the DSLPA and USTRA, where a municipal wastewater utility requests water service termination.[89] Ms. Dean argues that my recommendations are not required by the DSLPA or USTRA.[90] Ms. Dean notes that the DSLPA does not require a utility to investigate each property in its service territory to determine if a landlord ratepayer property is tenant occupied.[91] Ms. Dean describes how PAWC relies on information from tenants, landlords, and tenant/field representatives to determine if a property is reasonably likely to be tenant occupied – and provides required notices pursuant to the DSLPA.[92]

[86] PAWC St. 14-R at 17-18.
[87] CAUSE-PA St. 1 at 70-72.
[88] Id. at 71-73.
[89] PAWC St. 14-R at 18.
[90] Id.
[91] PAWC St. 14-R at 18: 1-9.
[92] Id. at 18.

Ms. Dean argues that there is no indication that PAWC's steps to determine whether service addresses are coded as landlord-ratepayer/tenant occupied are deficient.[93]

Q: What is your response to Ms. Dean's criticisms related to your recommended improvements to PAWC's policies and procedures pursuant to the DSLPA and USTRA?

A: I disagree with Ms. Dean's responses that my recommended enhancements to PAWC's policies and procedures pursuant to the DSLPA/USTRA are unnecessary. In my direct testimony, I outline significant concerns that PAWC is not adequately tracking its compliance with a number of crucial aspects of the DSLPA/USTRA. [94] These deficiencies include: (1) the number of DSLPA notices provided to tenant-occupied accounts related to voluntary discontinuance of services or involuntary terminations for nonpayment; (2) issues related to coding of tenant-occupied accounts; and (3) management of partial payment by tenants seeking to exercise rights pursuant to the DSLPA.[95]

While Ms. Dean argues that there is no evidence that impingement of DSLPA/USTRA requirements is occurring, it is impossible to determine whether, or the extent to which, DSLPA/USTRA compliance issues are occurring without the additional data tracking and reporting I have outlined in my direct testimony. Indeed, lack of data tracking and reporting related to PAWC's compliance with the DSLPA/USTRA may mask significant compliance issues that require review and remediation. As I previously explained, there are strong data indicators suggesting this is likely the case. I therefore stand by the recommendations set forth more fully in my direct testimony that PAWC improve its data tracking and reporting related to DSLPA/USTRA.[96]

[93] Id.
[94] CAUSE-PA St. 1 at 71-73.
[95] Id.
[96] Id.

V. CONCLUSION

Q: Does this conclude your surrebuttal testimony?

A: Yes.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:		
	:		
v.	:	Docket Nos.	R-2023-3043189
	:		R-2023-3043190
Pennsylvania-American Water Company	:		

DIRECT TESTIMONY OF CHAIR JOHN "JACK" PIHO ON BEHALF OF EXETER TOWNSHIP, INTERVENOR

January 31, 2024

. DIRECT TESTIMONY OF JOHN "JACK" PIHO

INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jack Piho. I am the Chair of the Board of Supervisors ("Board") of Exeter Township ("Township"), a township of the second class located within Berks County with an address of 4975 DeMoss Road, Reading, PA 19606.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I graduated from John Hopkins University with a Bachelor of Science in Mechanical Engineering. I also have a degree in Engineering Management and have taken numerous master-level courses in finance, human relations, labor management and business practices. I am the owner of Piho Engineering, an engineering and construction firm doing business in the food and beverage industry worldwide and locally with Sweet Street, Lehigh Dairy and Wawa. I am a registered Professional Engineer in multiple states and have been recognized as an expert for engineering design, code issues and construction review.

I was previously appointed as a member of the Exeter Township Board of Supervisors in March of 2021 and served until the end of that year. In the 2023 General Election, I was elected as a member of the Exeter Township Board of Supervisors and began serving on the Board earlier this month. On January 2, 2024, I was appointed as the Chair of the Exeter Township Board of Supervisors.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY PROCEEDINGS ON UTILITY RATES?

A. No.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The Township, on behalf of itself and its residents, is extremely concerned about the impact of the water and wastewater rate increases proposed by Pennsylvania-American Water Company ("PAWC"). PAWC's rate proposal would substantially increase residential rates for residential customers and for the Township as a municipality.

The Township is home to over 25,000 residents, and approximately 17.1% of Township residents are at least 65 years of age or older. Many elderly residents survive on fixed incomes, and, especially given recent rampant inflation across all sectors of the economy, the rate increase imposed by PAWC will only serve to further strain the limited resources of Township residents.

With respect to residential water, my understanding is that PAWC's proposals would generally increase a residential water bill for a typical customer using approximately 3,201 gallons per month from $70.65 to $88.24 per month, or by 24.9%. (Volume I, Notice of Proposed Water and Wastewater Rate Changes).

With respect to Township residents, I understand that PAWC's proposal would increase the per 100 gallon water charge for residential customers in Exeter Township from $1.6108 to $2.1319, an increase of 32.4%. *Compare* Supplement No. 45 to Tariff Water-PA P.U.C. No. 5, Fourth Revised Page 16 (setting forth a residential usage charge per 100 gallons of $1.7276 in Rate Zone 1), with Supplement No. 40 to Tariff Water-PA P.U.C. No. 5, Third Revised Page 16 (setting forth a residential usage charge per 100 gallons of $1.6108 in Rate Zone 1).

It is my further understanding that PAWC's proposal would increase the per 100 gallon water charge for municipal customers (including Exeter Township) from $1.6700 (for

the first 16,000 gallons) to $1.9984, an increase of nearly 19.7%. *Compare* Supplement No. 45 to Tariff Water-PA P.U.C. No. 5, Sixth Revised Page 16.1 (setting forth a municipal consumption charge per 100 gallons of $1.9984), *with* Supplement No. 40 to Tariff Water-PA P.U.C. No. 5, Fifth Revised Page 16.1 (setting forth a municipal consumption charge of $1.6700 per 100 gallons for the first 16,000 gallons).

. The steep increases in rates for water as proposed by PAWC will have a disproportionate harmful impact on the Township's elderly residents on fixed incomes. By increasing municipal water rates, Township residents face a "double-whammy," as the Township derives tax revenue from residents and may have to increase its mileage in order to accommodate PAWC's proposed increase.

Q. DOES THE TOWNSHIP SUPPORT PAWC'S PROPOSED RATE INCREASE?

A. No. For the reasons previously stated, the rate increases will disproportionally impact Township residents and dramatically increase rates applied to the Township itself.

Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A. Yes.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:		
	:		
v.	:	Docket Nos.	R-2023-3043189
	:		R-2023-3043190
Pennsylvania-American Water Company	:		

VERIFICATION

I, John "Jack" Piho, verify that the testimony submitted on behalf of Exeter Township on January 31, 2024 is true and correct to the best of my knowledge, information and belief and that the statements contained therein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

/s/ John "Jack" Piho

John "Jack" Piho

Dated: March 6, 2024

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	: Docket No. R-2023-3043189 : Docket No. R-2023-3043190
vs.	:
PENNSYLVANIA AMERICAN WATER COMPANY	:

SUPPLEMENTAL TESTIMONY AND EXHIBITS OF ROBERT J. MAY ON BEHALF OF THE BOROUGH OF ST. LAWRENCE, BERKS COUNTY, PENNSYLVANIA

KOZLOFF STOUDT
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Solicitors for the Borough of
St. Lawrence, Berks County

DIRECT TESTIMONY OF ROBERT J. MAY

Q. Please state your full name.

A. Robert J May

Q. Do you currently hold any offices in the Borough of St. Lawrence?

A. I am the current Borough of St. Lawrence Council President.

Q. How long have you served on Borough Council?

A. I've served on Borough Council since 1991.

Q. Do you hold any professional licenses or certifications?

A. Yes. I am a Professional Engineer in Pennsylvania (#043392R), and a Pennsylvania Department of Environment Protection (PADEP) Wastewater Operator (#S12382, A, E, 1, 2, 3,). I am also a licensed wastewater operator in New Jersey, Maryland, and Texas.

Q. Are you aware of a public hearing held on February 5, 2024 in Exeter Township?

A. Yes.

Q. And are you aware that there was resident opposition to the proposed wastewater rates increase for public sewer?

A. Yes.

Q. Is Borough Council taking a position on the proposed rate increase?

A. Yes.

Q. Could you explain the reasoning for that?

A. The Borough owns the collection system in the Borough conveys the wastewater to the PA American wastewater treatment plant, which also was formerly owned by Exeter Township. Since the 1960s until the time of the sale of the system, the Borough had agreements in place with Exeter Township for the manner of billing and formula for charges, based upon the Borough's contributions to the plant's and system's construction and expansion over time, and we now have an agreement with PA-American. The Borough is classified as a bulk user of the PA American wastewater system and plant. The Borough is billed monthly and directly pays PA-American. The Borough then, in turn, invoices Borough property owners connected to the system.

The Borough collection system has a length of approximately 45,566 linear feet. A portion of the Borough collection system, approximately 2,463 linear feet, also conveys a portion of the PA-American wastewater from a section of Exeter Township and a portion of Alsace Township.

Q. I have what we will mark as Borough of St. Lawrence Exhibit 1. Could you please identify this for us?

A. Borough of St. Lawrence Exhibit 1 is a map which shows the collection system, including sewer lines and mains, and manhole locations. It shows that nearly all of the properties in the Borough are connected to the public sanitary sewer system, so nearly all of the properties would be impacted by a rate increase. It also shows areas where the Borough has performed recent maintenance work on the collection system.

Q. Does PA American use any part of the collection system of the Borough?

A. Yes, approximately 2,463 linear feet.

Q. Does the Borough charge PA-American for the use of the 2,463 linear feet in the Borough's collection system.

A. No. The Borough does not charge any fee to PA American for their wastewater that is conveyed by the Borough collection system.

Q. I would like to discuss further with you the maintenance work that the Borough has performed, that is shown in Borough Exhibit 1. Could you tell us what was done, and the reasons for this work?

A. Since 2009, the Borough has a performed an extensive program to identify and rectify infiltration and inflow, which I will refer to as "I&I." This program was developed to prevent stormwater or groundwater from entering the Borough collection system. The program utilized portable wastewater flow meters. The meters were used to calculate wastewater flows in sectionalized portions of the collection system, especially during rain events. Any I&I wastewater is additional wastewater that is not measured as the wastewater quantity calculated by water meter readings on the buildings in the Borough. The Borough paid an additional fee for the I&I wastewater entering the Exeter system, as it would do now if I & I entered the PA American wastewater system. The Borough has a fiduciary responsibility to minimize I&I since this a controllable cost which also reduces the wastewater quantity processed by the wastewater treatment plan. The Borough wastewater I&I program was

developed in response to historic concerns of I&I within the Borough wastewater system and the previous Exeter Township wastewater system. The program was developed as a 20 year plan where the Borough wastewater collection system would be televised and any defective collection pipes or manholes would be repaired. Work was performed in 2010 where the entire system was televised and corrections such as new pipe epoxy liner installations were performed. The system was televised a second time in 2021 and additional repairs, including new piping epoxy liner installations, were performed. It should be noted that any piping repairs in 2010 were not in need of repair in 2021. This program will be repeated in 2030, where it is anticipated that the televising will present any piping segments that were not repaired in 2010 and 2021, may be in need of repair. In 2030, it is anticipated the entire Borough wastewater collection system will have been relined.

Q. What do you believe will be the result of the Borough's program to reduce I & I in its collection system?

A. The Borough's I&I program will have rehabilitated the entire wastewater collection system, essentially presenting a completely rehabilitated collection system in 2030. The rehabilitation program in 2030 will have extended the wastewater collection system life by a minimum of 30 years.

Q. On behalf of the Borough, what is the Borough's position on the fairness of this rate increase for Borough rate payers?

A. The current PA American rate increase is presented as a requirement for the collection system upgrades due to I&I issues and wastewater plant upgrades. From the perspective of the Borough, this rate increase incorporates costs for the PA American collection system for PA American I&I, formerly Exeter I & I, that is not the burden of the Borough. The Borough wastewater flows through one main PA American collection pipe from the Borough collection system endpoint to the wastewater treatment plant. The total length of travel is estimated at 26,100 linear feet which is approximately 3.75% of the entire approximate 660,000 linear feet and 3,108 manholes of the PA American collection system. **Borough citizens should not have to contribute to the maintenance and upgrade of the entire PA American collection system that was the previous Exeter Township wastewater collection system. The Borough requests the PUC to intervene and advocate for proper fees that reflects the information presented.**

Q. I have what we will mark as Borough Exhibit 2. Could you identify that for us?

A. This is a summary of the composition of the Borough's collection system, including the types of pipe, and the work we have done on the system, and the three phases of lining projects that the Borough has done for both manholes and lines. The Borough has lined nearly half of the manholes and pipe in the system.

Q. Why do you believe that the Borough's history of system maintenance should bear on the rate increase impacting Borough residents.

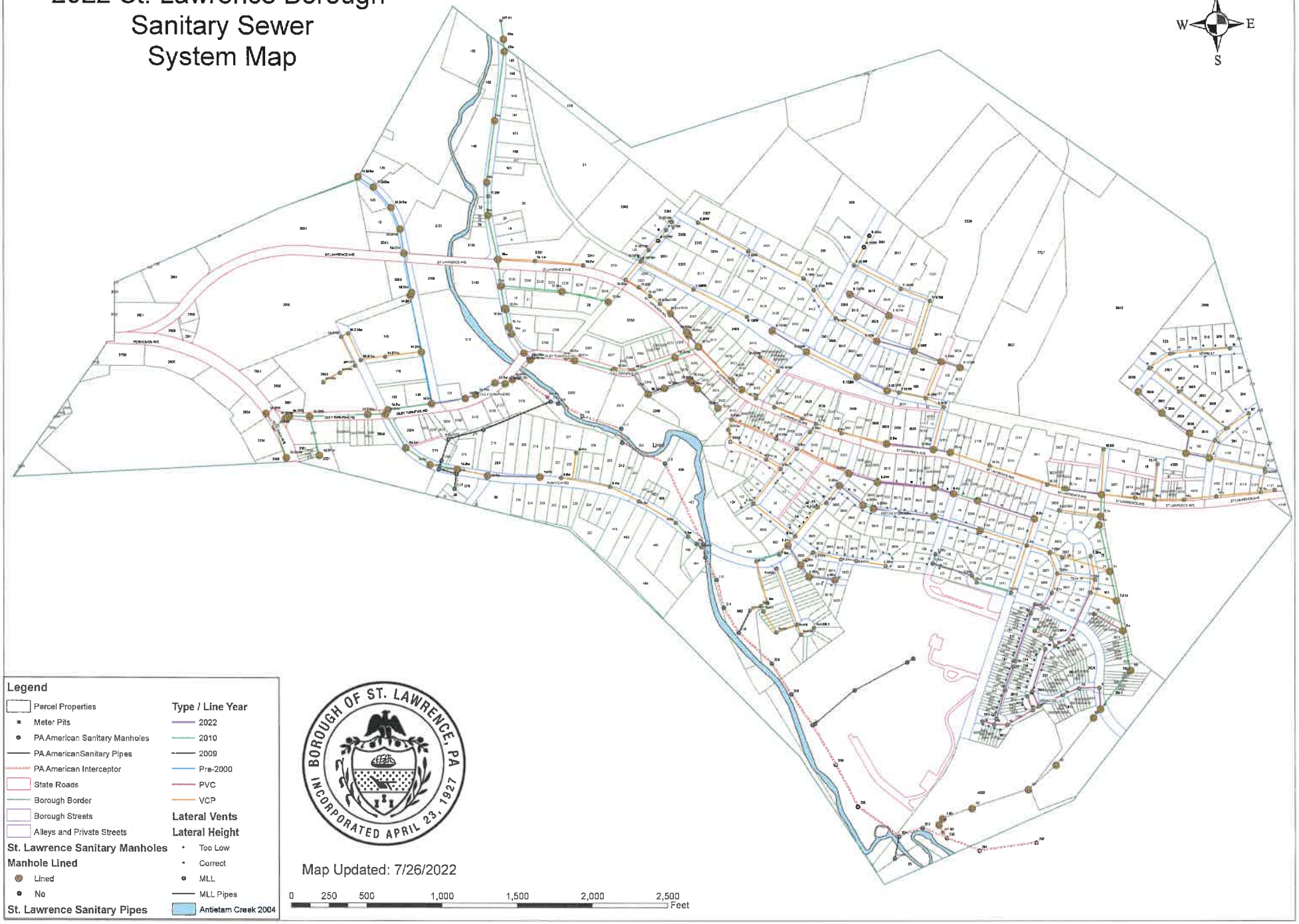
A. The rate increase does not differentiate any charges for the costs of upgrades to the PA American wastewater plant that was previously owned by Exeter Township. The Borough and Exeter Township, since 1961, had a wastewater plant operation agreement, where the Borough was a minority financing partner. The Borough contributed 6% of all capital costs for the wastewater treatment plant, including the initial build and subsequent upgrades. This agreement also incorporated wastewater treatment plant operational costs, where the Borough paid a proportion fee, based on a percentage of wastewater treated. This agreement became moot when Exeter Township sold the wastewater collection system and wastewater treatment plant to PA American in 2019.

Q. Is there a course of action that you are requesting from the PUC on behalf of St. Lawrence residents?

A. The Borough requests the PUC to require PA American to disclose the individual items that comprise the rate increase so that the items specific to the maintenance and upgrade to the wastewater treatment can be presented. Borough citizens should contribute only a proportional amount of the wastewater plant upgrade costs referencing the quantity of Borough wastewater treated compared to the total quantity of wastewater treatment. Specifically, the Borough requests the PUC to intervene and advocate for proper fees that reflects the information presented.

Borough Exhibit 1

2022 St. Lawrence Borough Sanitary Sewer System Map



Legend

- Parcel Properties
- Meter Pits
- PA American Sanitary Manholes
- PA AmericanSanitary Pipes
- PA American Interceptor
- State Roads
- Borough Border
- Borough Streets
- Alleys and Private Streets

St. Lawrence Sanitary Manholes

Manhole Lined

- Lined
- No

St. Lawrence Sanitary Pipes

Type / Line Year

- 2022
- 2010
- 2009
- Pre-2000
- PVC
- VCP

Lateral Vents

Lateral Height

- Too Low
- Correct

- MLL
- MLL Pipes
- Antietam Creek 2004

BOROUGH OF ST. LAWRENCE, PA
INCORPORATED APRIL 23, 1927

Map Updated: 7/26/2022

0 250 500 1,000 1,500 2,000 2,500 Feet

TOWNSHIP OF EXETER
BERKS COUNTY PENNSYLVANIA

1 inch = 1,000 feet

SANITARY SEWERS

Issue 7, 2017

Borough Exhibit 2

St. Lawrence Borough Sanitary Sewer System

Total Linear Footage of System: 45,566 Linear Feet

8" Pipe : 39,500 Linear Feet

10" Pipe: 3,603 Linear Feet

12" Pipe: 2,463 Linear Feet

Pipe Types:

VCP (Clay): 41,231 Linear Feet (90.5%)

PVC: 4,335 Linear Feet (9.5%)

Lining Projects:

Pre-2000: 2,254 Linear Feet (4.9%)

2009-2010: 10,461 Linear Feet (22.9%)

2022: 6,978 Linear Feet (15.3%)

Total Lined: 19,963 Linear Feet (43.2%)

Total Number of Manholes: 243

Manholes Lined: 109 (44.8% Lined)

Other System Notes:

Entire System (45,566 Linear Feet) was cleaned and televised in Summer of 2021 by CO-STARS contractor Mr. Rehab. 50 Manholes received inspections.

Exeter System Travels: 2,463ft in our system

Furthest Travel in Exeter from our System to Sewer Plant: ~ 26,100 Feet

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the Supplemental Testimony and Exhibits of Robert J. May on Behalf of the borough of St. Lawrence, Berks County, Pennsylvania has been served via email upon the following this 13th day of February 2024.

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BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

ELECTED OFFICIAL KYLE T DONAHUE

Docket Nos. R-2023-3043189 and R-2023-3043190

DIRECT TESTIMONY
OF
KYLE T DONAHUE
STATE REPRESENTATIVE
113TH DISTRICT

January 31, 2024

Q. PLEASE STATE YOUR NAME AND ADDRESS FOR THE RECORD.

A. Kyle Donahue 621 Gibbons St. Scranton, Pa 18505

Q. WHERE ARE YOU EMPLOYED?

A. I am a State Representative in the Pennsylvania General Assembly.

Q. ARE YOU A WATER AND/OR WASTEWATER RATEPAYER OF PENNSYLAVNIA AMERICAN WATER COMPANY?

A. Both

Q. ARE YOU TESTIFYING ON BEHALF OF YOURSELF AND/OR OTHERS TODAY?

A. I am testifying on behalf of my constituents and myself.

Q. WANT TO ADD BACKGROUND INFORMATION AND PRIOR EXPERIENCES? ANYTHING ABOUT UTILITIES AND/OR MUNICIPAL FINANCE IN PARTICULAR?

A. This will be a repetitive answer throughout this questionnaire that PAWC ratepayers received a 70% increase in their sewer/water bills last year.

Q. WHAT IS YOUR UNDERSTANDING OF PAWC'S RATE INCREASE REQUESTS?

A. The 28% increase proposed by the company right now is outrageous for water customers and my constituents. Again, we received a 70% increase last year. Our seniors and working families are on a fixed income and can't afford it. This will have an adverse effect on small business.

Q. HOW MANY RESIDENTS, WHO WOULD BE AFFECTED BY THESE RATE INCREASES, ARE WITHIN YOUR CONSTITUENCY?

A. Sixty-Five Thousand

Q. WHY DID YOU INTERVENE AS AN ACTIVE PARTY IN THIS PROCEEDING?

A. As a State Representative my office was flooded with calls regarding last year's 70 percent increase. My constituents which consist of mostly seniors and blue-collar workers just can't afford it.

Q. WHY ARE YOU CONCERNED WITH WATER RATE HIKES FOR YOUR CONSTIUTENTS?

A. The average ratepayer age is 62 and most are on fixed incomes. Twenty percent of my district is rated below the poverty level.

Q. WHY, IF AT ALL, WOULD THE RATE INCREASE BE SO DETRIMENTAL TO YOUR CONSTITUENTS IN THE CITY OF SCRANTON?

A. My answer to this question is the same as the two previous questions.

(See Lines 22 thru 29)

Q. WHO ARE THE WATER AND WATSEWATER UTILITY PROVIDERS IN THE CITY OF SCRANTON?

A. All wastewater customers referred to in the Asset Purchase Agreement are residents of the City of Scranton. There are no other water or wastewater providers operating within city limits. The City is at the mercy of the PAWC.

Q. WHY IS THE CITY OF SCRANTON CONCERNED WITH WASTEWATER RATES IF PAWC IS ONLY REQUESTING 2.5% INCREASE ON WASTEWATER RATES AS OF TODAY?

A. Scranton's position is particularly unique in this matter in that the Scranton Sewer Authority, a municipal authority of the City of Scranton incorporated and existing pursuant to the Municipal Authorities Act, as amended, 53 Pa. Cons. Stat. Ann. §§ 5601-5623, sold its combined sewer system to the Water Company on or about March 29, 2016. We are formally entering into this record a true and accurate copy of the Asset Purchase Agreement (also referred to as "the APA" or "APA") as Exhibit A.

This APA contains reference to and material terms in relation to a Consent Decree issued in the matter of U.S.A. v. Scranton Sewer Authority, Civil Action No. 3:09–cv–1873, (M.D. Pa. December 13, 2012), a copy of which we are also formally entering into the record as Exhibit B.

While the City of Scranton and Dunmore were not a party to the APA, residents and ratepayers will feel the effects of an increase, particularly if the PUC determines that wastewater rates should increase even more.

While the City of Scranton appreciates the majority of the challenges that the Office of the Consumer Advocate has articulated and put forward against the PAWC, the City of Scranton (along with the Borough of Dunmore) does not support shifting the burden of a rate hike onto wastewater consumers due to the deleterious and devastating effects it would have on our City's ratepayers.

Q. CAN YOU EXPLAIN WHY THE CITY OF SCRANTON HAS CONCERN ABOUT AN INCREASE OF WASTEWATER RATES IN THE CONTEXT OF THE OCA'S ARGUMENTS?

For example, paragraph J on p. 6 states "However, the OCA submits that shifting so much of its wastewater revenue requirement to water customers is unfair to PAWC water customers, most of whom are not PAWC wastewater customers and receive no benefit from PAWC's wastewater service."

Scranton and its residents are located within the PAWC's service territory and will be directly affected by the outcome of this proceeding. Particularly, this proceeding will impact the price that Scranton and its residents pay for water and wastewater, as well as the reliability and quality of those services.

Scranton will be disproportionately and negatively affected if the PUC is so persuaded by the arguments in line with paragraph J on page 6 of OCA's complaint due to its contractual relationships and positions from the APA Sewer Sale. [Also applies to Dunmore]

Q. HAS PAWC RAISED RATES BEFORE?

Yes, last year the PAWC shocked the ratepayers of Dunmore and Scranton with a 70% increase for the water and sewer with no advanced notice. The City of Scranton and Borough of Dunmore were not even informed by PAWC or the PUC of this horrible settlement agreement which disproportionately hurt our ratepayers.

Q. WHAT WAS PAWC'S RATIONALE FOR LAST YEAR'S INCREASE?

It is my understanding that in April 2022, the PAWC requested a rate increase because they said was necessary and that the company needed $1 billion in system investments needed to address aging water and wastewater infrastructure.

Q. TO YOUR KNOWLEDGE, HOW DID THIS AFFECT RATEPAYERS IN THE CITY OF SCRANTON/YOUR CONSTITUENCY?

A. The massive 70% water-sewer rate increase was devasting not only to my residents but to my small businesses.

Q. HOW DOES LAST YEAR'S RATE INCREASE FACTOR INTO YOUR POSITION ON THE PENDING REQUEST FOR INCREASE BEFORE THE PUC TODAY?

A. It is ridiculous. My constituents are barely getting by day to day with their expenses. Ratepayers currently pay more to dispose of their wastewater then they do for their water. Last year's 70% increase had a devasting effect on my constituents. They simply cannot afford to pay PWAC's request to increase rates to appease their shareholders and provide bonuses to corporate executives. PAWC has monopoly on water and sewer in my district it's time the 30-billion-dollar company invest some of their profits into the infrastructure work and stop burdening the ratepayers.

Q. DO YOU HAVE A POSITION AS TO THE PAWC'S PROPOSAL FOR RATE DECOUPLING?

A. Yes, I strongly oppose a surcharge for residents who conserve water and try to minimize their bills. **THIS IS PURE INSANTIY**. Shame on the PAWC for even asking for such surcharge. In essence PAWC wants to collect ratepayer money for conserving water. How does this help our environment? It doesn't.

Q. ARE THERE ANY OTHER MUNICIPALITIES OR PARTIES THAT YOU AGREE WITH IN THIS CASE?

Yes, I join with the City of Scranton and the Borough of Dunmore in their positions, evidence, exhibits and testimony that was presented at the January 30th public hearing. I also believe that the Borough of Dunmore is also an affected party by and through the APA and it is our understanding and position that we have the same position as the Borough of Dunmore.

Q. HAVE ANY SMALL BUSINESSES RAISED CONCERNS TO YOU REGARDING THE PROPOSED INCREASE?

A. Numerous restaurants, gas stations, car washes and landlords etc. were outraged by the purposed increase. Furthermore, they believed that they had no right to speak at the January 30th meeting in Scranton because the PUC complaint form states if a business owner wants to testify at the public meeting, they would need to hire a lawyer to represent them at the proceeding. The PUC needs to address the concerns of small business owners without forcing them to hire an attorney.

Q. HOW WOULD YOU DESCRIBE THE QUALITY OF SERVICE FROM THE PAWC TO DATE?

A. **TERRIBLE!** It's obvious that dirty water is a problem in my district. Ratepayers constantly flood our office with complaints regarding the quality of water. The testimony at the public hearing by several residents confirms the problem. Ratepayers with (protection plans) are billed by PAWC but they sub-contract to repair service to a third party. The sub-contractors take days to respond to customer complaints. This is unacceptable. Finally, billing issues are constantly brought up in discussions with my constituents. As related by the testimony at the hearing billing issues and late fees are a major concern.

Q. DO YOU HAVE ANY IDEAS OR RECOMMENDATIONS AS TO HOW THE PAWC MIGHT BE ABLE TO FIND FUNDING ANOTHER WAY?

A. I am by no means a municipal finance expert, but I was disheartened to learn that PAWC chose to seek revenue from its ratepayers instead of taking advantage of programs like Pennvest. The fact that they can add 10.8% to all infrastructure work is a huge revenue source for PAWC. They would lose revenue if they took advantage of Pennvest. The fact is the PUC never informs ratepayers that they receive this additional revenue from infrastructure work. Its time for the shareholders in the company to re-invest their own money into infrastructure work.

Q. WHAT ARE YOU ASKING OF THE PUC AT THIS TIME?

A. As a ratepayer and State Representative serving over 65 thousand constituents, I am imploring the Public Utility Commission **NOT** to approve this rate increase after the 70% increase last year. My constituents have had it.

ENOUGH IS ENOUGH!

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission v. Pennsylvania-American Water Company	Docket Nos. R-2023-3043189 (Water) R-2023-3043190 (Wastewater)

VERIFICATION

I, Kyle T. Donahue, State Representative, hereby state that the facts set forth in my Direct Testimony, KTD St. 1, in the above-captioned proceedings are true and correct to the best of my knowledge, information and belief. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to sworn falsification to authorities).

Date: 02/01/2024

Kyle T. Donahue,

PA State Representative

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	)	
	)	R-2023-3043189 (Water)
v.	)	
	)	R-2023-3043190 (Wasterwater)
Pennsylvania-American Water Company	)	

REDACTED – PUBLIC VERSION

Direct Testimony and Exhibits

of

BILLIE S. LACONTE

On Behalf of

Pennsylvania-American Water Large Users Group

February 1, 2024

J. POLLOCK
INCORPORATED

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	)	
	)	R-2023-3043189 (Water)
v.	)	
	)	R-2023-3043190 (Wasterwater)
Pennsylvania-American Water Company	)	

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GLOSSARY OF ACRONYMS

Term	Definition
DSIC	Distribution System Improvement Charge
ECIC	Environmental Compliance Investment Charge
[Begin Confidential] [redacted]	[redacted] **[End Confidential]**
OPEB	Other Post-Employment Benefits
PAWC	Pennsylvania-American Water Company
PAWLUG	Pennsylvania-American Water Large Users Group
RDM	Revenue Decoupling Mechanism
RROR	Relative Rate of Return
RSM	Revenue Stabilization Mechanism
ROE	Return on Equity

DIRECT TESTIMONY OF BILLIE S. LACONTE

Introduction and Qualifications

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Billie S. LaConte; 14323 South Outer 40 Dr., Suite 206N, St. Louis, MO 63017.

Q WHAT IS YOUR OCCUPATION AND WHERE ARE YOU EMPLOYED?

A I am an energy advisor and Associate Consultant at J. Pollock, Incorporated.

Q PLEASE DESCRIBE YOUR EDUCATION AND EXPERIENCE.

A I have a Bachelor of Arts degree in Mathematics from Boston University and a Master's degree in Business Administration from Washington University. Since graduating in 1995, I have been engaged in a variety of consulting assignments, including energy procurement and regulatory matters in both the United States and several Canadian provinces. **Exhibit___(BSL-1)** to this testimony provides more details regarding my education and experience. **Exhibit___(BSL-2)** to this testimony contains a list of my appearances.

Q FOR WHOM DO YOU TESTIFY IN THIS PROCEEDING?

A I am testifying on behalf of Pennsylvania-American Water Large Users Group (PAWLUG). PAWLUG is an ad hoc association of large volume customers receiving water utility service from Pennsylvania-American Water Company (PAWC).

Q WHAT ISSUES ARE YOU ADDRESSING IN YOUR TESTIMONY?

A I am addressing the following:

- Return on equity (ROE);
- Incentive compensation;
- Adjustment clauses and deferral mechanisms;

- Class cost-of-service study;
- The wastewater subsidy and allocation of the subsidy;
- Rate design; and
- Revenue requirement scale back.

Q DO YOU ACCEPT PAWC'S POSITIONS ON THE ISSUES NOT ADDRESSED IN YOUR DIRECT TESTIMONY?

A No. One should not interpret the fact that I do not address every issue raised by PAWC as an endorsement of PAWC's proposals.

Q YOU USE PAWC'S PROPOSED REVENUE REQUIREMENT IN YOUR TESTIMONY. SHOULD THAT BE INTERPRETED AS AN ENDORSEMENT OF PAWC'S PROPOSALS?

A No. Throughout my testimony I use PAWC's proposed revenue requirement to illustrate various concepts. This should not be interpreted as an endorsement of PAWC's proposed revenue requirement. The findings and recommendations in my testimony also apply if the Commission approves a lower revenue requirement.

Q ARE YOU SPONSORING ANY EXHIBITS WITH YOUR TESTIMONY?

A Yes. I am sponsoring **Exhibit___(BSL-1)** through **Exhibit__(BSL-4).**[1]

Water Utility Revenue Requirement Issues

Q WHAT IS PAWC'S PROPOSED REVENUE REQUIREMENT INCREASE?

A PAWC is requesting a $203.9 million increase in annual revenues (20.2%) for its water

[1] **Exhibit___(BSL-4)** contains the relevant portion of each document cited herein, excluding documents which were provided by PAWC and are included in this record.

and wastewater operations.[2] According to PAWC, the increase is driven by capital investments, increasing production expenses, employee-related expenses, and costs of providing service to additional customers *via* acquisitions. The increase for the water utility is $199.2 million (24.2%), of which $71.1 million is attributed to the re-allocation of the wastewater revenue shortfall.[3] The re-allocation of the wastewater revenue requirement increases the water utility's revenue requirement by 8.6%, thus accounting for nearly 1/3 of the total 24.2% proposed increase for water customers. Without the re-allocation, the water utility's revenue requirement would increase by 15.5%.

Q DO YOU HAVE ANY GENERAL CONCERNS WITH PAWC'S PROPOSED INCREASE?

A Yes. PAWC filed another substantial rate increase on November 8, 2023, less than 12 months after the effective date of the rate increase from its prior filing.[4] The pace and amount of PAWC's rate increases are a burden to customers and outpace inflation. As discussed below, PAWC's customers have experienced significant rate increases since 2017, with rates increasing by 41% from 2017 to 2023.

Q WHAT ARE PAWC'S HISTORICAL REVENUE INCREASES FOR THE PAST THREE RATE CASES?

A From 2017 until the conclusion of PAWC's last rate case on December 8, 2022, PAWC's revenue requirement increased by $269.9 million (or 41%), total utility. If

[2] PAWC Statement No.1, Testimony of Ashley E. Everette at 7.

[3] Exhibit 3-A Combined Water and Wastewater Revenue Requirement – Summary.

[4] *Pennsylvania Public Utility Commission v. Pennsylvania-American Water Company*; Docket Nos. R-2022-3031672 and R-2022-3031673, Supplement No. 40, effective Jan. 28, 2023. (Jan. 26, 2023).

PAWC's current proposed increase is approved, its revenue requirement will have increased by $473.8 million ($269.9 million plus $203.9 million), or 72%. Table 1 shows the approved rate increase for each of PAWC's last three rate cases, as well as the current proposed increase.

Table 1
Historical and Proposed Rate Increases
($Millions)

Description	R-2017-2595853	R-2020-3019369	R-2022-3031672	R-2023-3043190 (Proposed)
Base Revenues	$657.7	$716.3	$831.6	$1,011.9
Increase	$61.9	$70.0	$138.0	$203.9
% Increase	9.4%	9.8%	16.6%	20.2%
Cumulative Increase $	$61.9	$131.9	$269.9	$473.8
Cumulative Increase %		20.0%	41.0%	72.0%

The rate of inflation between 2017 and 2023 was 24%, compared to PAWC's 41% increase.[5] PAWC's proposed increase in the current rate case is also significantly above the current inflation rate (3.4% for December 2023).[6] The pace of PAWC's rate filings, as well as the current proposed increase, is excessive and puts additional financial pressure on customers at time when they are, and have been, experiencing significant inflation (and will continue to do so for the foreseeable future).

Return on Equity

Q WHAT RETURN ON EQUITY IS PAWC REQUESTING?

A PAWC calculated a range of ROE from 10.00% to 11.25% and is seeking an ROE of 10.95%.[7]

[5] CoinNews Media Group Company, Inflation Calculator, *Average Inflation Rates in the United States*: **https://www.usinflationcalculator.com/inflation/annual-averages-for-rate-of-inflation/**

[6] *Id.*

[7] PAWC Statement No. 13, Testimony of Ann E. Bulkley at 8.

Q IS PAWC'S REQUESTED RETURN ON EQUITY EXCESSIVE?

A Yes. First, PAWC's requested ROE is significantly higher than the average authorized ROE for water utilities. As of October 9, 2023, the average authorized ROE for a domestic water utility was 9.45%, or 150 basis points lower than PAWC's requested ROE.[8] Similarly, the most recent ROE determined by this Commission in a water and sewer utility rate case was a 10% ROE approved for Aqua Pennsylvania Inc. and Aqua Pennsylvania Wastewater, Inc. in 2022.[9] Second, PAWC is requesting two alternative ratemaking mechanism adjustment clauses, a Revenue Decoupling Mechanism (RDM) and an Environmental Compliance Investment Charge (ECIC), in addition to its proposal for two deferral mechanisms. Adjustment clauses reduce regulatory lag and PAWC's financial volatility, ensuring PAWC will recover its projected revenues. PAWC's proposed RDM combined with its ECIC create a low risk profile for PAWC, which lowers its financial risk. In addition, PAWC's two proposed deferral mechanisms, described in more detail below, further reduce its financial risk.

Q IS THERE ANOTHER REASON PAWC'S REQUESTED RETURN ON EQUITY IS OVERSTATED?

A Yes. The Commission recently approved a proxy ROE of 9.65%.[10] This proxy ROE, which is 130 basis points lower than PAWC's requested ROE, is used by jurisdictional utilities, including PAWC, for calculating the quarterly adjustments for Distribution

[8] S&P Capital IQ, RRA Regulatory Focus, Decision in California, North Carolina Drive 2023 Water Utility ROE Average

[9] *Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc., et al*., R-2021-3027385, Opinion and Order at 173 (May 12, 2022).

[10] Bureau of Technical Utility Services Report on Quarterly Earnings of Jurisdictional Utility for the Year Ended Sept. 30, 2023, Docket No. M-2023-3044811, Attachment D for Quarters 1, 2 and 3 of 2023.

System Improvement Charges (DSIC).[11] While calculated for DSIC purposes, it provides another indicator that PAWC's proposed ROE is excessive.

Q DO CREDIT RATING AGENCIES LOOK FAVORABLY UPON ALTERNATIVE RATEMAKING MECHANISMS SUCH AS DECOUPLING AND ADJUSTMENT CLAUSES, AS WELL AS DEFERRAL MECHANISMS?

A Yes. Moody's favorably considers a utility's ability to recover costs and earn returns when assigning a credit rating. Specifically, Moody's states:

> The criteria we consider include provisions and cost recovery mechanisms for operating costs, mechanisms that allow actual operating and/or capital expenditures to be true-up periodically into rates without having to file a rate case (this may include formula rates, rider[s] and trackers, or the ability to periodically adjust rates for construction work in progress)…[12]

PAWC's proposed adjustment clauses and deferral mechanisms, if approved, would improve PAWC's timeliness in recovering costs, thus reducing its financial risk. Therefore, if the Commission accepts PAWC's proposals, a downward adjustment to PAWC's requested 10.95% ROE would be appropriate and necessary to reflect the resulting further reduced risk.

Q PLEASE SUMMARIZE YOUR CONCERNS REGARDING PAWC'S REQUESTED RETURN ON EQUITY.

A PAWC's requested 10.95% ROE is overstated. First, it is significantly above the recently authorized 9.65% ROE for its DSIC. Second, it is significantly above the

[11] *Pennsylvania Public Utility Commission v. Pennsylvania-American Water Company*, Docket Nos. R-2022-3031672, R-2022-3031673, Joint Petition for Settlement of Rate Investigation at 6 (Oct. 11, 2022); along with Order Approving Settlement (Dec. 8, 2022).

[12] Moody's Investor Service, Rating Methodology, *Regulated Electric and Gas Utilities* at 12-13 (Jun. 23, 2017).

9.45% average authorized ROE for water utilities in 2023 and the 10% ROE authorized by the Commission in 2022. Finally, PAWC makes no adjustment to recognize its reduced financial risk from the implementation of its proposed RDM, ECIC, Pension/Other Post-Employment Benefits (OPEB) deferral mechanism and production expense deferral. At minimum, consideration of the extraordinary timing of this rate increase, as well as the proposed RDM, ECIC, and deferral mechanisms, warrants approval of an ROE at the lower end of the Commission's deemed range of reasonableness.

Incentive Compensation

Q WHAT IS INCENTIVE COMPENSATION?

A Incentive compensation is the additional payment to employees to reward certain behavior and/or results. The reward is contingent upon achieving pre-established goals and objectives. PAWC is seeking recovery of $4.1 million of incentive compensation costs.[13]

Q WHY IS INCENTIVE COMPENSATION AN ISSUE WHEN SETTING RATES?

A Not all incentive compensation benefits customers. Incentive compensation based on achieving certain operational goals may be a reasonable expense that may benefit customers. However, incentive compensation targeted to achieve certain financial goals is for the benefit of shareholders and provides little, if any, benefit to customers. Thus, this type of incentive compensation should not be charged to customers. Recovering some incentive compensation from ratepayers may be reasonable; however, the amount PAWC is requesting is too high due to inclusion of inappropriate portions of the expense as discussed below.

[13] PAWC Response to OCA 09-010, Attachment.

Q WHY IS THE AMOUNT OF INCENTIVE COMPENSATION PROPOSED FOR RECOVERY THROUGH BASE RATES TOO HIGH?

A The amount is too high because PAWC seeks to recover a portion of its incentive compensation that is based on meeting financial targets, as well as operational targets. Specifically, approximately **[Begin Confidential]** [redacted] **[End Confidential]** of PAWC's incentive compensation is based on meeting an **[Begin Confidential]** [redacted] **[End Confidential]** target range.[14] In fact, **[Begin Confidential]** [redacted] **[End Confidential]** of the target range, no incentive compensation would be paid out to its employees.[15] The remaining **[Begin Confidential]** [redacted] **[End Confidential]** is based on operational goals, such as **[Begin Confidential]** [redacted] **[End Confidential]**.[16]

Q DOES PAWC'S [BEGIN CONFIDENTIAL] EARNINGS PER SHARE [END CONFIDENTIAL] TARGET INCENT EMPLOYEES TO ACHIEVE FINANCIAL TARGETS FOR THE COMPANY?

A Yes. Before employees are awarded any incentive compensation for performance targets that benefit the company's operating goals, the company must achieve its **[Begin Confidential]** [redacted] **[End Confidential]** target. Thus, employees are incented to first achieve **[Begin Confidential]** [redacted] **[End Confidential]** targets since meeting **[Begin Confidential]** [redacted] **[End Confidential]** is required before receiving any incentive compensation. The financial target benefits shareholders, not customers.

[14] FR III. 22 Attachment Confidential and Proprietary at 106.

[15] *Id.* at 107.

[16] *Id.* at 106.

Q SHOULD PAWC RECOVER INCENTIVE COMPENSATION COSTS THAT ARE BASED ON MEETING FINANCIAL TARGETS?

A No. It is reasonable to allow recovery of expenses associated with the operational goals of customer satisfaction, safety, and other operational metrics since cost containment provides a customer benefit and is properly recovered through rates. However, the portion of annual incentive payouts associated with meeting financial goals in the test year should be disallowed. Disallowing the financial portion of these expenses properly places the costs of these incentives with the beneficiaries of these programs, namely the shareholders. To be clear, I am not opining on PAWC's decision to award incentive compensation based on financial targets or the merit of the applicable employees, which are matters within PAWC's managerial discretion. I am only testifying that these expenses should be borne by shareholders rather than recovered through base rates.

Q WHAT DO YOU RECOMMEND REGARDING RECOVERY OF INCENTIVE COMPENSATION COSTS?

A I recommend that the Commission disallow 100% of the proposed incentive compensation costs tied to meeting financial targets. These costs account for $2 million of expenses in the proposed test year. Disallowing these expenses properly places the costs of these incentives with the beneficiaries of these programs, namely the shareholders.

Alternative Ratemaking Mechanisms

Q PLEASE DESCRIBE PAWC'S PROPOSED ALTERNATIVE RATEMAKING MECHANISMS.

A As previously stated, PAWC is requesting two alternative ratemaking mechanisms, an RDM and an ECIC. These adjustment mechanisms would allow PAWC to contemporaneously adjust rates outside of a general rate case to recover changes in revenues or targeted costs.

Q DO YOU HAVE ANY GENERAL COMMENTS REGARDING PAWC'S PROPOSED ALTERNATIVE RATEMAKING MECHANISMS?

A Yes. While, I oppose both of the proposed mechanisms, I want to clarify that my testimony should not be perceived as general opposition to alternative ratemaking mechanisms. Rather, I am opposing the specific measures proposed by PAWC under the present circumstances. It is important to remember that PAWC already has numerous alternative ratemaking mechanisms at its disposal to manage regulatory lag and rate stability, including its water and wastewater DSICs, use of a Fully Projected Future Test Year, and authority to re-allocate a portion of its wastewater revenue requirement to the water customers. Water customers are particularly burdened by PAWC's current use of alternative ratemaking mechanisms, as they are required to pay for substantial portions of the wastewater revenue requirement, despite the vast majority (92%) of these customers receiving no services for the service they are required to pay, as discussed more later. In addition to my more specific observations below, I think the present availability of multiple alternative ratemaking mechanisms and PAWC's substantial use of the wastewater re-allocation mechanism warrant rejection of PAWC's additional proposals at this time.

Revenue Decoupling Mechanism

Q PLEASE DESCRIBE THE PROPOSED REVENUE DECOUPLING MECHANISM.

A The RDM would track changes in net revenues (water revenues less production costs) between the authorized revenues for all customers in the residential, commercial, industrial, municipal, and sales for resale classes, excluding customers taking service under contract rates. Production costs, which include power, chemicals, purchased water and waste disposal, would be removed. Any positive (negative) difference would be refunded (surcharged) to customers. The RDM would apply to water operations and wastewater operations.

Q WILL THE REVENUE DECOUPLING MECHANISM COMPARE PAWC'S ACTUAL REVENUES TO THOSE APPROVED IN THE RATE CASE?

A No. The RDM would use straight-fixed variable rates that are applied to actual sales to determine the revenues it should have recovered. The straight-fixed variable method is a form of revenue decoupling.

Q WHY WOULD PAWC'S REVENUE VARY FROM THE AMOUNT CALCULATED USING THE STRAIGHT-FIXED VARIABLE RATE?

A Actual revenues may vary as a result of variations in weather-sensitive water usage, participation in energy efficiency programs, deviations in economic activity, or customer rate migrations. The RDM may remove the disincentive for utilities to promote energy efficiency programs.

Q HOW DOES PAWC PROPOSE TO ACCOUNT FOR THE VARIANCE IN REVENUES?

A PAWC will track the variance in its revenues accrued over a year. If PAWC over-collects revenues, it will issue a volumetric credit. If PAWC under-collects revenues, it will implement a volumetric surcharge for each rate class. The credit/surcharge will be refunded/charged in the following year.

Q DOES THE REVENUE DECOUPLING MECHANISM IMPOSE ANY ADMINISTRATIVE BURDENS ON PAWC'S CUSTOMERS?

A Yes. PAWC proposes to adjust the RDM on an annual basis through a filing made by the 31st of January each year. The filing would be subject to a 60-day review period, which creates a new administrative burden for PAWC's customers.

Q HAS PAWC APPLIED THE FACTORS DEVELOPED BY THE COMMISSION TO EVALUATE ALTERNATIVE RATEMAKING MEASURES TO THE REVENUE DECOUPLING MECHANISM?

A Yes. PAWC Exhibit CBR-10 contains PAWC's assessment of the Commission's alternative ratemaking factors for the RDM.

Q DO YOU AGREE WITH PAWC'S ASSESSMENT?

A No. I am particularly concerned with PAWC's comments regarding interclass cost shifting and efficiency measures. PAWC represents that the proposed RDM will not affect interclass or intraclass cost shifting between residential and non-residential customer classes.[17] However, by treating all nonresidential customers uniformly, the

[17] PAWC Statement No. 10, Direct Testimony of Charles Rea, Exhibit CBR-10 at 1-2.

RDM will impact interclass cost shifting between the various non-residential customer classes, including commercial, industrial and municipal water customers. This is not a reasonable outcome.

With regard to efficiency, PAWC claims that the proposed RDM encourages water efficiency by reducing PAWC's throughput incentive.[18] The consumer is impacted quite differently as the RDM can result in additional collections from consumers following declines in usage. Even if the additional surcharge collected through the RDM amounts to a fraction of the consumers' monthly savings from reduced usage, it still erodes the benefit of conservation and sends a weaker signal to the customers.

Q SHOULD THE REVENUE DECOUPLING MECHANISM BE APPROVED?

A No. The RDM should be rejected. This decoupling mechanism shifts PAWC's risk of recovering its costs and meeting earnings targets onto customers.

Q HOW DOES THE REVENUE DECOUPLING MECHANISM SHIFT RISK ONTO CUSTOMERS?

A The RDM shifts risk onto customers because it "constrains" PAWC's revenues to the straight-fixed variable revenues. PAWC's business and weather risk conveyed in rates for fixed costs is eliminated entirely. By guaranteeing revenue recovery, PAWC is reducing its risk by ensuring that its revenues and return on investment remain stable. Implementing a decoupling mechanism provides PAWC with the guarantee of

[18] *Id*. at 2.

cost recovery and a significant advantage of achieving its earnings targets for shareholders. Customers should not be required to ensure shareholder earnings.

Q DO YOU HAVE ANY RECOMMENDATION IF THE COMMISSION APPROVES PAWC'S REVENUE DECOUPLING MECHANISM?

A Yes. If the RDM is approved, notwithstanding my prior objections, I recommend that an earnings test should apply. Specifically, if earnings that reflect actual decoupled revenues result in PAWC earning above its authorized rate of return by more than 50 basis points, then 50% of the excess earnings should be returned to customers through adjustments to the decoupling surcharge or refund balance. In addition, any increase in the surcharge should be limited to a 3% cap on an annual basis, with any remaining balance carried forward. Capping the RDM is a critical customer protection because the cap provides customers with a range of impacts for their own annual budgeting. While I believe the RDM should be denied entirely, conditional approval on implementation of these recommendations would provide a measure of revenue decoupling while offering reasonable consumer protections.

Q IS THE PROPOSED CAP SYMMETRICAL?

A No. Because PAWC reserves the authority to file a base rate case, it is not necessary to implement a symmetrical cap. If PAWC's actual earnings are significantly below its authorized rate of return, then the company may file a base rate case and request a rate increase.

Q ARE YOU AWARE OF ANY OTHER UTILITIES THAT USE AN EARNINGS TEST?

A Yes. Avista Utilities has a revenue decoupling mechanism that includes an earnings test and a 3% adjustment cap for both its electric and gas operations.[19] Furthermore, a report by the Regulatory Assistance Project notes:

> Some commissions have imposed an earnings cap, or an earnings collar, as part of a decoupling mechanism. These ensure that, if earnings are too high above a baseline (or too low below the baseline), the decoupling mechanism is automatically subject to review. Because decoupling reduces earnings volatility, it should be unlikely for earnings to vary outside a range of reasonableness. Therefore such a cap or collar, while unlikely to be triggered, may provide greater comfort with the change represented by decoupling.[20]

Environmental Compliance Investment Charge

Q PLEASE DESCRIBE PAWC'S PROPOSED ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE.

A PAWC's proposed ECIC is a rate adjustment clause that will recover costs, between rate cases, related to government-mandated environmental standards. PAWC proposes to set forth an environmental compliance plan that is subject to Commission review which determines the environmental costs that would be recovered in the ECIC. The ECIC would be updated quarterly and subject to an earnings evaluation.

[19] Avista Corporation dba Avista Utilities, Schedule 75E, Decoupling Mechanism – Electric, Substitute Second Revision Sheet 75E (Issued 3-26-2020) and Schedule 175E, Decoupling Mechanism – Natural Gas, Substitute Second Revision Sheet 175E (Issued 3-26-2020).

[20] The Regulatory Assistance Project, *Revenue Regulation and Decoupling: A Guide to Theory and Application* at 40 (Jun. 2011).

Q ARE YOU AWARE OF ANY OTHER WATER UTILITIES IN PENNSYLVANIA THAT HAVE AN ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE?

A No. Further, although PAWC witness, Ms. Bulkley, claims that the proposed DSIC and ECIC "…have become quite commonplace in utility regulation" none of the water utilities in her proxy group have an environmental cost recovery mechanism.[21]

Q DO YOU HAVE ANY CONCERNS WITH PAWC'S PROPOSED ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE?

A Yes. First, PAWC has not incurred, nor has it included, any pending environmental costs that would apply to the ECIC. The cost projections referenced by PAWC are largely speculative estimates based on proposed Environmental Protection Agency regulations that have yet to be finalized.[22] Therefore, because the environmental costs are speculative and unknown, the ECIC is premature. Second, the proposed ECIC is another example of single-issue or piecemeal ratemaking, which removes PAWC's incentive to control costs and shifts the risk of cost recovery from shareholders to ratepayers.

Q HAS PAWC APPLIED THE FACTORS DEVELOPED BY THE COMMISSION TO EVALUATE ALTERNATIVE RATEMAKING MEASURES TO THE ECIC?

A Yes. Exhibit JCS-1 contains PAWC's assessment of the Commission's alternative ratemaking factors for the ECIC.

[21] PAWC Statement No. 13, Direct Testimony of Ann E. Bulkley at 51.

[22] PAWC Statement No. 8, Direct Testimony of J. Cas Swiz at 24-25.

Q DO YOU AGREE WITH PAWC'S ASSESSMENT?

A No. I am most concerned with PAWC's comments regarding rate stability. PAWC addresses the rate stability impact by suggesting that the quarterly adjustments to the ECIC allow for more gradual rate changes than the more significant increases that result from base rate cases.[23] I find this to be misleading because the ECIC would increase the frequency of rate adjustments by implementing quarterly rate adjustments for recovery of capital costs that PAWC would have otherwise rolled into its next base rate case. Rate stability would be better preserved by avoiding multiple surcharges so customers can rely on steady base rates between rate cases.

Q WHAT DO YOU RECOMMEND?

A I recommend that the proposed ECIC be rejected. If it is approved, I recommend that the Commission implement a 3% cap on annual ECIC revenue that would operate as a cap on *total* annual revenue recovered through the ECIC.

Deferral Mechanisms

Q WHAT IS A DEFERRAL MECHANISM?

A A deferral mechanism is a cost recovery mechanism that allows a utility to track the difference between the actual cost incurred and the amount allowed in base rates. Deferral mechanisms, thus, provide guaranteed dollar-for-dollar cost recovery and could allow a utility to earn in excess of its authorized return. Guaranteed cost recovery reduces both regulatory and financial risks. Thus, deferral mechanisms are an especially pernicious form of piecemeal ratemaking.

[23] *Id*., JCS-1 at 2.

Q HOW IS A DEFERRAL MECHANISM PIECEMEAL RATEMAKING?

A A deferral mechanism is piecemeal or single-issue ratemaking because it tracks one cost separately from all of PAWC's other costs. This ignores the impact of any offsetting over recovery for other costs, which, thereby, negates the need for the deferral mechanism.

Q IS PAWC REQUESTING ANY DEFERRAL MECHANISMS?

A Yes. PAWC is requesting new deferral mechanisms for:

- Pension/OPEB expense; and
- Production expense.

Q PLEASE DESCRIBE THE PENSION/OPEB EXPENSE DEFERRAL MECHANISM.

A The pension/OPEB expense mechanism would allow PAWC to defer the difference between pension/OPEB expense recovered in base rates versus the actual expense recorded by the company. Any deferred amounts would be recovered or refunded in a future rate case.

Q WHY IS PAWC REQUESTING A DEFERRAL MECHANISM FOR ITS PENSION/OPEB EXPENSE?

A PAWC states that its actual pension/OPEB expenses may fluctuate and exhibit volatility and are difficult to forecast.[24]

[24] *Id.,* Direct Testimony of J. Cas Swiz at 13.

Q PLEASE DESCRIBE PAWC'S REQUESTED PRODUCTION EXPENSE DEFERRAL MECHANISM.

A PAWC has requested an additional deferral mechanism for its production expenses. The deferral account would track production expenses and create separate regulatory liability/asset accounts for each production expense. Each month, PAWC would track the actual production expenses and compare them to the amount included in base rates. The difference would accumulate in a regulatory asset or liability, and be recovered or refunded to customers in a future base rate case.

Q WHY IS PAWC REQUESTING A DEFERRAL MECHANISM FOR ITS PRODUCTION EXPENSES?

A PAWC claims that production expenses do not vary solely due to changes in usage and may also vary due to changes in costs charged by suppliers.[25]

Q SHOULD THE COMMISSION APPROVE A DEFERRAL MECHANISM FOR PAWC'S PENSION/OPEB AND PRODUCTION EXPENSES?

A No. Creating a separate tracking mechanism for these expenses is single-issue or piecemeal ratemaking. A deferral mechanism is piecemeal ratemaking because it tracks one cost separately from all PAWC's other costs. This ignores the impact of any offsetting over recovery for other costs, which, thereby, negates the need for the deferral mechanism.

[25] *Id.* at 18.

Q DOES A DEFERRAL MECHANISM AFFECT PAWC'S FINANCIAL RISK?

A Yes. A deferral mechanism eliminates utility risk and guarantees full cost recovery. This defies the regulatory compact. A utility should have an *opportunity*, not a *guarantee*, to earn a reasonable return on its used and useful investments and to recover reasonable and necessary operating expenses. In addition, the guarantee of cost recovery removes any incentive for PAWC to control its costs and shifts all risk of over-spending onto customers. For these reasons, the pension/OPEB and the production expense deferral mechanisms should be rejected.

Q WHAT DO YOU RECOMMEND IF THE COMMISSION APPROVES THE PROPOSED DEFERRAL MECHANISMS?

A If, notwithstanding my objections herein, the Commission approves the proposed mechanisms, I recommend that the Commission account for the shift of risk onto customers when considering an appropriate ROE for PAWC. Such consideration is necessary to counter the piecemeal recovery of these deferral mechanisms and properly reflect PAWC's lower financial risk.

Class Cost-of-Service Study

Q DO YOU HAVE ANY CONCERNS WITH PAWC'S CLASS COST-OF-SERVICE STUDY FOR THE WATER UTILITY?

A Yes. While I do not disagree with PAWC's class cost-of-service methodology, which uses the base extra capacity methodology, I disagree with the demand statistics used to allocate certain costs in the study.

Q WHY DO YOU DISAGREE WITH THE DEMAND STATISTICS?

A I disagree for two reasons. First, the demand study statistics are based on data that is almost a decade old. Water customers' consumption patterns may have changed since the last demand study; for example, post pandemic, residential demand has increased due to more people working remotely. This change in usage and demand affects how costs are incurred on PAWC's system. Second, as explained more in-depth later, PAWC used the incorrect maximum demand hour ratio for the residential customer class, resulting in less costs being allocated to residential customers and overstating the costs to other customer classes.

Q WHAT DOES A DEMAND STUDY MEASURE?

A A demand study measures each customer class's usage on the system, including their maximum day demand and maximum hour demand. The maximum day demand and maximum hour demand are used to allocate costs between the customer classes. If the residential class has a higher maximum hour demand ratio, then the costs that are incurred due to maximum hour demand should be allocated to that class.

Q HOW HAVE USAGE PATTERNS CHANGED?

A Prior to the pandemic, residential customers' share of the total usage on the system was lower. Post pandemic, however, there is a significant increase in remote work which results in an on-gong increase in residential usage affecting their demands on the system.[26]

[26] *Survey: Remote Work Isn't Going Anywhere – And Executives Know It*, Harvard Business Journal, Bloom, Barreo, Davis, Meyer and Mihaylov (Aug 28,2023).

Q WHY IS THE MAXIMUM DAY DEMAND RATIO FOR THE RESIDENTIAL CLASS INCORRECT?

A PAWC provided the results of its demand study that was conducted over the period 2013-2015.[27] Although the maximum hour demand ratio during the study was 6 for the residential class, PAWC opted to use 5, as it claimed that there were certain anomalies in the hourly monitoring data for the residential class. PAWC should use the actual data, which reflects actual usage of the system. Modifying the data results in distorted rates which causes certain customers to pay more than the cost to serve them.

Q HAVE YOU REVISED THE WATER UTILITY'S CLASS COST-OF-SERVICE STUDY TO REFLECT THE REVISED MAXIMUM HOUR DEMAND RATIO FOR THE RESIDENTIAL CLASS?

A Yes. **Exhibit__(BSL-3)** shows the revised cost of service for each customer class using the actual maximum hour demand ratio. This change appropriately increases the cost of service to the residential class by $7.6 million, or 1.3% and decreases the increase to the other classes by between 0.7% and 6%.

Q WHAT DO YOU RECOMMEND?

A For the current case, I recommend that PAWC modify its class cost-of-service to reflect the actual maximum hour demand ratio for the residential class. After the conclusion of this rate case, and prior to its next base rate case, PAWC should conduct a new demand study to properly reflect current usage and demand patterns.

[27] PAWC Response to PAWLUG 01-002 Attachment at 10.

Wastewater Subsidy and Allocation of the Subsidy

Q WHAT IS PAWC'S PROPOSED WASTEWATER SUBSIDY?

A PAWC's wastewater subsidy is approximately $71.1 million.[28] It represents the portion of its wastewater operations cost of service that is allocated to the water utility.

Q WHAT IS THE BASIS FOR PAWC'S REVENUE ALLOCATION PROPOSAL?

A PAWC cites Act 11 of 2012 and Pennsylvania Code Section 1311(c), which states "The commission, when setting base rates, after notice and an opportunity to be heard, may allocate a portion of the wastewater revenue requirement to the combined water and wastewater customer base if in the public interest."[29]

Q WHY IS PAWC PROPOSING TO ALLOCATE A PORTION OF THE WASTEWATER OPERATIONS COST OF SERVICE TO THE WATER OPERATIONS?

A PAWC states it is seeking to recover a portion of its wastewater operations cost of service from its water operations to:

> …mitigate the increases that wastewater customers in certain service areas would experience if their rates were established on a stand-alone basis. The Company's proposed rates would also make meaningful progress in moving the rates of its separate wastewater rate zones closer to a single consolidated wastewater rate design for all of the Company's wastewater operations.[30]

Q DO YOU HAVE ANY CONCERNS WITH THE WASTEWATER SUBSIDY?

A Yes, for two reasons. First, the amount of the subsidy, $71.1 million, is overstated and should be reduced. Second, the allocation of the subsidy among the water customer classes is incorrect.

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[28] PAWC Statement No. 1, Testimony of Ashley E. Everette at 20.

[29] *Id.* at 21.

[30] *Id*. at 20.

Q WHAT IS THE TOTAL INCREASE FOR WATER OPERATIONS?

A The total increase for water operations is $199.2 million or 24.2%.[31] The wastewater subsidy is $71.1 million, which accounts for 36% of the total increase to water operations. Excluding the wastewater subsidy, the increase to water customers rates would decrease by 8.7%, resulting in an increase of 15.5%.[32]

Q DO ALL OF PAWC'S WATER CUSTOMERS USE PAWC FOR WASTEWATER SERVICE?

A No. PAWC indicated that out of its 780,000 water customers, only 66,103 are also Zone 1 wastewater customers.[33]

Q SHOULD WATER CUSTOMERS SUBSIDIZE ALL OF THE ALLOCATED $71.1 MILLION WASTEWATER REVENUE REQUIREMENT AS PROPOSED BY PAWC?

A No. The re-allocation of the wastewater subsidy is inequitable. PAWC is requesting that 92% of its water customers (1 – (66,103/780,000)) pay $71.1 million of the wastewater revenue requirement, despite the fact that these customers receive no benefit from the additional costs. The wastewater subsidy requires customers who do not receive wastewater service from PAWC to pay for a service they do not receive from PAWC. The water customers' cost of service is being increased by 8.6% solely for the benefit of wastewater customers. Because these water customers would not benefit from the increased cost, the subsidy should be reduced.

[31] Exhibit 3-A Combined Water and Wastewater Revenue Requirement – Summary.

[32] *Id.* ($1,023,354,270 – 71,087,394) / 824,117,186.

[33] PAWC Response to OCA 04-004; PAWC Statement No. 1, Testimony of Ashley E. Everette at 21-22.

Furthermore, PAWC chose to acquire several wastewater utilities and agreed to set rates at a certain level for those utilities. The wastewater subsidy should be reduced because water customers should not shoulder all of the burden of insufficient rates due to these acquisitions. While the Pennsylvania General Assembly authorized the re-allocation of some portion of wastewater revenue requirements to water customers for combined water and sewer utilities, it is not inevitable that water customers should offset all of PAWC's revenue requirement shortfall due to its acquisitions.

Q DO YOU HAVE ANY OTHER CONCERNS WITH THE WASTEWATER SUBSIDY?

A Yes. The allocation of the wastewater subsidy is incorrect because it assigns a portion of the wastewater water subsidy based on the total cost of service for each of the water utility's customer classes, rather than by the class that caused the subsidy. For example, if the wastewater residential customers are responsible for $50 million of the subsidy, then that amount should be allocated to residential water customers. By allocating more of the subsidy to customers that do not cause the subsidy, PAWC is further adding to inequitable rates.

Q HAS THE COMMISSION COMMENTED ON THE REASONABLENESS OF WATER CUSTOMERS PAYING FOR WASTEWATER SERVICES FROM WHICH THEY RECEIVE NO BENEFIT?

A Yes. In PAWC's last base rate case, the Commission noted that the provision of the settlement that reduced the wastewater subsidy to the water customers:

> …is in the public interest because it helps to ensure that customers more accurately bear the burden of the cost of the service provided to them. PAWC's water customers should not be required to bear the burden of the cost to provide service to PAWC's wastewater customers.[34]

Q WHAT DO YOU PROPOSE?

A I propose that any reduction in the wastewater cost of service be applied solely to the wastewater subsidy paid by water customers. I anticipate that this adjustment will significantly reduce the burden of the subsidy on water customers. Water customers are already facing a significant increase absent the subsidy. I also propose that water customer classes should pay their share of the subsidy based on the wastewater class that causes the subsidy.

Q PLEASE DESCRIBE PAWC'S METHODOLOGY FOR ALLOCATING THE WASTEWATER SUBSIDY TO THE WATER UTILITY'S CUSTOMER CLASSES.

A PAWC directly assigned the combined sewer system's wastewater subsidy to the residential, commercial, industrial and municipal customer classes. For the portion of the subsidy attributable to the sanitary sewer system, Butler and Brentwood, PAWC allocated the non-residential subsidy to the commercial, industrial, municipal and fire service customer classes based on their total water cost of service. The portion of the subsidy caused by other customer classes (such as bulk customers) is allocated to all customer classes, including the residential class, based on their total water cost of service.

[34] Docket No. R-2022-3031672, *Recommended Decision* at 78 (Nov. 8, 2022).

Q DO YOU HAVE AN EXAMPLE OF HOW THE WASTEWATER SUBSIDY SHOULD BE ALLOCATED TO THE WATER UTILITY CUSTOMER CLASSES?

A Yes. Table 2 provides the recommended re-allocation of the wastewater subsidy.

Table 2
Proposed Re-allocation of Wastewater Subsidy
($Millions)

	PAWC Proposed Re-allocation		PAWLUG Proposed Re-allocation	
Customer Class	**$**	**%**	**$**	**%**
Residential	$46.5	65.7%	$46.5	65.7%
Commercial	$18.3	25.9%	$19.9	28.1%
Large Industrial	$3.9	5.6%	$3.1	4.4%
Municipal	$1.6	2.3%	$1.1	1.6%
Fire	$0.3	0.5%	$0.09	0.1%
Total	$70.7	100.0%	$70.7	100.0%

My re-allocation uses a combination of PAWC's directly assigned portion of the combined sewer system subsidy, the allocation of the subsidy caused by the "Other" wastewater customer classes, and a re-allocation of the non-residential portion of the subsidy. The non-residential re-allocation is based on the present revenues for the non-residential wastewater customers (commercial, industrial and municipal), as identified by PAWC, to the corresponding water customer classes. My re-allocation more closely aligns with assigning the subsidy to the water customer classes based on the wastewater customer classes who caused the subsidy.

Rate Design

Q DO YOU HAVE ANY RECOMMENDATIONS REGARDING PAWC'S RATE DESIGN FOR THE INDUSTRIAL CLASS?

A Yes. I recommend that PAWC decrease the volumetric rate and increase the customer charge for industrial customers. A higher customer charge will reduce revenue volatility. Similar to straight-fixed variable pricing, which has higher fixed charges and lower volumetric charges, a higher customer charge for the industrial class will provide "a stable and reliable revenue stream for the utility..."[35] Furthermore, the proposed industrial customer charge in this proceeding is unchanged from that approved by the Commission in the company's last base rate case.[36] Therefore, the industrial customer charge should be increased and the volumetric increase lowered. Shifting a portion of the rate increase for the industrial class from the volumetric rate to the customer charge is reasonable and reduces revenue volatility for PAWC.

Q PLEASE PROVIDE AN EXAMPLE OF YOUR RECOMMENDED ADJUSTMENTS TO THE INDUSTRIAL CUSTOMER CLASS RATE DESIGN.

A Table 3 shows an example of the revised rate design for the industrial customers.

Table 3
Revised Industrial Rate Design

Description	Current	PAWC	PAWLUG
Customer Charge			
6" Meter	$1,401	$1,401	$2,802
8" Meter	$2,243	$2,243	$4,486
10" Meter	$3,223	$3,223	$6,446

[35] PAWC Statement No. 10, Direct Testimony of Charles Rea at 90.

[36] PAWC Response to PAWLUG 01-006(a).

Table 3 Revised Industrial Rate Design			
Description	**Current**	**PAWC**	**PAWLUG**
Volumetric Charge			
First 16,000 Gal	$1.4200	$1.9128	$2.8565
Next 584,000 Gal	$1.0804	$1.4824	$1.4083
All Over 600,000 Gal	$0.8499	$1.1477	$1.0329
Above 15,000,000*	$0.5110	$0.6852	$0.6167
*Curtailment rate **Source**: Exhibit 10-A Water Operations.			

PAWLUG's proposed rate design doubles the customer charge and reduces the volumetric rate to industrial customers. As noted by PAWC witness Charles Rea, approximately 95% of PAWC's costs are fixed.[37] Under PAWC's proposal, only 8% percent of fixed costs are recovered by customer charges. The redesigned rates will recover 17% of fixed costs through the customer charges. Recovering more of its costs through a fixed charge provides a more stable revenue stream for PAWC and reduces the possibility of the industrial class paying more than its cost to serve if sales are higher than projected.

Revenue Requirement Scale Back

Q WHAT DO YOU RECOMMEND IF PAWC'S REQUESTED REVENUE REQUIRMENT IS REDUCED?

A If the requested revenue requirement is reduced, the reduction should apply to the wastewater subsidy first. In addition, I recommend that any decrease allocated to industrial and municipal customers apply to volumetric rates only and PAWLUG's

[37] PAWC Statement No.10, Direct Testimony of Charles Rea at 86-87.

proposed increase to the fixed monthly charges for these rate classes remain the same (after allowing for the adjustment described above).

Q WHY DO YOU RECOMMEND A SCALEBACK OF VOLUMETRIC RATES FOR THESE CUSTOMER CLASSES?

A For both the industrial and municipal classes, scaling back the volumetric rates recognizes that a higher proportion of total class revenues is derived from volumetric rates for these classes as compared to the residential customer class.[38] Furthermore, recovering more of the revenue requirement from fixed costs rather than volumetric costs reduces PAWC's risk because it is more likely that PAWC will recover its revenues *via* higher fixed charge. Similar to PAWC's straight-fixed variable rates, a higher fixed charge reduces variability in income because volumes sold tend to be more volatile over time than the number of meters billed.

Conclusion

Q PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

A My findings and recommendations are as follows:

- PAWC's requested ROE is overstated and should be reduced to reflect recently authorized ROEs by the Commission and in other jurisdictions.
- PAWC's ROE should be reduced further if its proposed alternative ratemaking mechanisms and deferral mechanisms are approved.
- Incentive compensation should be reduced by $2 million.
- The RDM, ECIC and proposed deferral mechanisms should be rejected.
- If approved, the RDM and/or ECIC should be conditioned on the customer protections described above.

[38] Exhibit 10-A, Residential and Industrial.

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	)	
	)	R-2023-3043189 (Water)
v.	)	
	)	R-2023-3043190 (Wasterwater)
Pennsylvania-American Water Company	)	

Direct Exhibits

of

BILLIE S. LACONTE

On Behalf of

Pennsylvania-American Water Large Users Group

February 1, 2024

J. POLLOCK
INCORPORATED

Qualifications of Billie S. LaConte

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Billie S. LaConte. My business mailing address is 14323 South Outer 40 Rd., Suite 206N, St. Louis, Missouri 63017.

Q WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU EMPLOYED?

A I am an energy advisor and am currently employed by J. Pollock, Incorporated as Associate Consultant.

Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A I have a Bachelor of Arts Degree in Mathematics from Boston University and a Master's degree in Business Administration from Washington University.

Upon graduation in May 1995, I joined Drazen Consulting Group, Inc. (DCGI). DCGI was incorporated in 1995 assuming the utility rate and economic consulting activities of Drazen Associates, Inc., active since 1937. I joined J.Pollock in May 2015.

During my tenure at DCGI and J.Pollock my work has focused on revenue requirement issues, cost of capital (return on equity and capital structure), cost allocation, rate design, sales and price forecasts, power cost forecasting, electric restructuring issues, integrated resource plans, formula rate plans, asset management agreements and contract interpretation.

I have been engaged in a wide range of consulting assignments including energy and regulatory matters in both the United States and several Canadian provinces. This has included advising clients on economic and strategic issues concerning the natural gas pipeline, oil pipeline, electric, wastewater and water utilities. I have testified on cost of capital issues, including return on equity, cost of debt, and capital structure, as well as revenue requirement issues. I have prepared

cost allocation and rate design studies to provide timely support to clients engaged in settlement negotiations in electric and gas utilities, provided power cost forecasting studies to assist clients in project planning and negotiated contracts with electric utilities for standby services and interruptible rates. I have also prepared studies on electric and gas utilities' performance-based rates (PBR) and benchmarking programs to evaluate their success and to provide recommendations on methods to be used. I worked on contract interpretation to resolve contract disputes for several clients. I have provided financial and cost of service analysis for natural gas pipelines certificate approval from the Federal Energy and Regulatory Commission (FERC) and the Canadian National Energy Board (NEB). Additionally, I completed the Corporate Credit Rating Analysis course presented by Moody's Analytics.

I have worked on various projects located in many states and several Canadian provinces including Alberta, British Columbia, Saskatchewan, Nova Scotia and Quebec. I have testified before the state regulatory commissions of Arkansas, Florida, Georgia, Iowa, Louisiana, Michigan, Minnesota, Missouri, New Mexico, Pennsylvania, Texas and South Carolina, and the provincial regulatory boards of Alberta and Nova Scotia. I similarly have appeared before the St. Louis Metropolitan Sewer District Commission and the City of Philadelphia Water, Sewer and Storm Water Rate Board.

Q PLEASE DESCRIBE J. POLLOCK, INCORPORATED.

A J. Pollock assists clients to procure and manage energy in both regulated and competitive markets. The J. Pollock team also advises clients on energy and regulatory issues. Our clients include commercial, industrial and institutional energy consumers. J. Pollock is a registered Class I aggregator in the State of Texas.

Testimony Filed in Regulatory Proceedings
by Billie S. LaConte

UTILITY	ON BEHALF OF	DOCKET	TYPE	REGULATORY JURISDICTION	SUBJECT	DATE
ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Settlement Support	AR	Support of Settlement	10/31/2023
ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Direct	AR	Projected Year FLIP Investment; Solar Plant Capital Additions; Power Through Program; Legal Fees	10/4/2023
DUKE ENERGY CAROLINAS, LLC	Carolina Utility Customers Assocation, Inc.	E-7, Sub 1276	Direct	NC	Return on Equity; Capital Structure; Performance Incentive Mechanisms	7/19/2023
PHILADELPHIA GAS WORKS	Philadelphia Industrial and Commercial Gas Users Group PICGUG	2023-3037933	Surrebuttal	PA	Class Cost-of-Service Study; Class Revenue Allocation; Universal Service Plan Costs	7/7/2023
PHILADELPHIA GAS WORKS	Philadelphia Industrial and Commercial Gas Users Group PICGUG	2023-3037933	Rebuttal	PA	Class Cost-of-Service Study; Class Revenue Allocation; Universal Service Plan Costs	6/26/2023
PHILADELPHIA GAS WORKS	Philadelphia Industrial and Commercial Gas Users Group PICGUG	2023-3037933	Direct	PA	Class Cost-of-Service Study; Class Revenue Allocation	6/2/2023
SOUTHWESTERN PUBLIC SERVICE COMPANY	Texas Industrial Energy Consumers	22-00286-UT	Settlement Support	NM	Support of Settlement	5/26/2023
PHILADELPHIA WATER DEPARTMENT	Philadelphia Large Users Group	2023 General Rate Proceeding	Rebuttal	Philadelphia Rate Board	Class Cost-of-Service Study; Stormwater Incentive Program; Late Payment Fee Allocation; TAP Enrollment; Retroactive Arrearage Forgiveness	4/27/2023
SOUTHWESTERN PUBLIC SERVICE COMPANY	Texas Industrial Energy Consumers	22-00286-UT	Direct	NM	Future Test Year; Revenue Requirement Issues	4/21/2023
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-21308	Direct	MI	Projected Test-Year Adjustments; Proposed Trackers; Return on Equity; Capital Structure	4/17/2023
PHILADELPHIA WATER DEPARTMENT	Philadelphia Large Users Group	2023 General Rate Proceeding	Direct	Philadelphia Rate Board	Class Cost-of-Service Study	4/12/2023
DUKE ENERGY PROGRESS, LLC	Nucor Steel - South Carolina	2022-254-E	Surrebuttal	SC	Regulatory Asset Amortization Periods	12/22/2022
NORTHERN STATES POWER	Xcel Large Industrials	E002/GR-21-630	Surrebuttal	MN	Return on Equity; Prepaid Pension Asset; Incentive Compensation; Coal Plant Amortization	12/6/2022
DUKE ENERGY PROGRESS, LLC	Nucor Steel - South Carolina	2022-254-E	Direct	SC	Coal Combustion Residual Amortization; Other Regulatory Asset Amortization	12/1/2022
NORTHERN STATES POWER	Xcel Large Industrials	E002/GR-21-630	Rebuttal	MN	Incentive Compensation; Prepaid Pension Asset	11/8/2022
ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Settlement Support	AR	Support of Settlement	11/2/2022
GEORGIA POWER COMPANY	Georgia Association of Manufacturers	44280	Direct	GA	Return on Equity; Capital Structure	10/20/2022
ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Direct	AR	Projected Year Feeder Level Investment Plan; Power Through Program	10/5/2022
NORTHERN STATES POWER	Xcel Large Industrials	E002/GR-21-630	Direct	MN	Return on Equity; Incentive Compensation; Pre-Paid Pension Asset	10/3/2022
PENNSYLVANIA-AMERICAN WATER COMPANY	Pennsylvania-American Large Water Users Group	R-2022-3031672/73	Rejoinder	PA	Class Cost-of-Service Study	9/6/2022
PENNSYLVANIA-AMERICAN WATER COMPANY	Pennsylvania-American Large Water Users Group	R-2022-3031672/73	Surrebuttal	PA	Wastewater Subsidy Allocation; Revenue Stabilization Mechanism; Customer Reclassification	9/1/2022

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UTILITY	ON BEHALF OF	DOCKET	TYPE	REGULATORY JURISDICTION	SUBJECT	DATE
ONCOR ELECTRIC DELIVERY COMPANY LLC	Texas Industrial Energy Consumers	53601	Direct	TX	Self-Insurance Reserve; Annual Storm Expense; Regulatory Asset Amortization	8/26/2022
PENNSYLVANIA-AMERICAN WATER COMPANY	Pennsylvania-American Large Water Users Group	R-2022-3031672/73	Rebuttal	PA	Revenue Requirement Allocation; Class Cost-of-Service Study	8/19/2022
PECO ENERGY COMPANY	Philadelphia Area Industrial Energy Users Group	R-2022-3031113	Surrebuttal	PA	Design Day Demand; Rate Differentials	8/4/2022
PENNSYLVANIA-AMERICAN WATER COMPANY	Pennsylvania-American Large Water Users Group	R-2022-3031672/73	Direct	PA	Wasterwater Subsidy and Allocation; Revenue Stabilization Mechanism; Customer Classification; Revenue Requirement Scale Back	7/29/2022
PECO ENERGY COMPANY	Philadelphia Area Industrial Energy Users Group	R-2022-3031113	Rebuttal	PA	Class Cost-of-Service Study; Scale Back of Rates; Design Day Demand; Rate Differentials; Universal Service Programs	7/21/2022
PECO ENERGY COMPANY	Philadelphia Area Industrial Energy Users Group	R-2022-3031113	Direct	PA	Class Cost-of-Service Study; Class Revenue Allocation	6/22/2022
AUSTIN ENERGY	Texas Industrial Energy Consumers	None	Direct	TX	Cash Flow Method; Financial Metrics; General Fund Transfer; Internally Generated Funds	6/22/2022
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-21148	Rebuttal	MI	Uncollectible Expense; Rate Stability Target	4/29/2022
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-21148	Direct	MI	Return on Equity, Capital Structure; Renewable Natural Gas Plant; Incentive Compensation; Transportation Demand Charge; Gas Curtailment and Requirements for Plant Protection; Unauthorized Gas Usage Charge	4/8/2022
SEMCO ENERGY GAS COMPANY	Association of Businesses Advocating Tariff Equity	U-21169	Direct	MI	Facilities Improvement Demand Surcharge	3/18/2022
ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Settlement Support	AR	Support of Settlement	10/27/2021
EL PASO ELECTRIC COMPANY	Freeport-McMoRan Copper & Gold, Inc.	52195	Direct	TX	Return on Equity; Nuclear Non-Fuel Operation and Maintenance; Rate Case Expense; Retiring Generating Units	10/22/2021
ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Direct	AR	Projected Year Capital Additions; Projected Year O&M expense	10/5/2021
PECO ENERGY COMPANY	Philadelphia Area Industrial Energy Users Group	R-2021-3024601	Surrebuttal	PA	Return on Equity; Post-Test Year Adjustment	8/5/2021
CENTERPOINT ENERGY ARKANSAS GAS	Arkansas Gas Consumers, Inc.	21-044-U	Direct	AR	Formula Rate Plan Extension; Return on Equity; Class Cost-of-Service Study	7/19/2021
PECO ENERGY COMPANY	Philadelphia Area Industrial Energy Users Group	R-2021-3024601	Direct	PA	Return on Equity; Post-Test Year Adjustment	6/28/2021
FLORIDA LIGHT & POWER COMPANY	Florida Inudstrial Power Users Group	20210015-EI	Direct	FL	Cost of Capital; Early Plant Retirement; Rate Case Expense Amortization; Income Tax Change Mechanism	6/21/2021
DTE GAS COMPANY	Association of Businesses Advocating Tariff Equity	U-20940	Direct	MI	Return on Equity; Operation and Maintenance Expenses; Incentive Compensation	6/3/2021
SOUTHWESTERN PUBLIC SERVICE COMPANY	Occidental Permian Ltd.	20-00238-UT	Direct	NM	Rate Design, Retired Plant, Expense Amortization	5/17/2021

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UTILITY	ON BEHALF OF	DOCKET	TYPE	REGULATORY JURISDICTION	SUBJECT	DATE
PHILADELPHIA WATER DEPARTMENT	Philadelphia Large Users Group	Fiscal Years 2022-2023	Rebuttal	Philadelphia Rate Board	Class Cost-of-Service Study; Stormwater Incentive Program	4/7/2021
SOUTHWESTERN ELECTRIC POWER COMPANY	Texas Industrial Energy Consumers	51415	Direct	TX	Early Plant Retirement; Excess Accumulated Deferred Federal Income Taxes; Self-Insurance Reserve; Imputed Capacity	3/31/2021
SHARYLAND UTILITIES, L.L.C.	Texas Industrial Energy Consumers	51611	Direct	TX	Rate-Case Expenses; Operation and Maintenance Expense; Transmission Cost of Service Refund Rider	3/8/2021
PECO ENERGY COMPANY	Philadelphia Area Industrial Energy Users Group	2020-3018929	Surrebuttal	PA	Revenue Allocation; Rate Design	2/9/2021
PECO ENERGY COMPANY	Philadelphia Area Industrial Energy Users Group	2020-3018929	Rebuttal	PA	Allocation of Distribution Mains; Revenue Allocation; Rate Design; Universal Service Fund Charge	1/19/2021
PECO ENERGY COMPANY	Philadelphia Area Industrial Energy Users Group	2020-3018929	Direct	PA	Class Cost-of-Service Study; Class Revenue Allocation	12/22/2020
ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Surrebuttal (FRP Extension)	AR	FRP Extension; Return on Equity; Capital Structure; Class Cost-of-Service Study; Industrial Rate Design	11/17/2020
PENNSYLVANIA-AMERICAN WATER COMPANY	Pennsylvania-American Large Water Users Group	2020-3019369 2020-3019371	Surrebuttal	PA	Rate Design; Regionalization and Consolidation Surcharge; Return on Equity	10/20/2020
ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Direct (FRP Extension)	AR	FRP Extension; Return on Equity; Capital Structure; Class Cost-of-Service Study; Industrial Rate Design	10/19/2020
ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Direct (2020 Eval. Report)	AR	Historical Year Netting Adjustment; :Long-Term Debt Costs	10/5/2020
PENNSYLVANIA-AMERICAN WATER COMPANY	Pennsylvania-American Large Water Users Group	2020-3019369 2020-3019371	Rebuttal	PA	Rate Design	9/29/2020
PENNSYLVANIA-AMERICAN WATER COMPANY	Pennsylvania-American Large Water Users Group	2020-3019369 2020-3019371	Direct	PA	Regionalization and Consolidation Surcharges; Commercial Rate Design	9/8/2020
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-20697	Rebuttal	MI	Financial Compensation Mechanism; Deferred Capital Spending Recovery Mechanism; Karn 1 & 2 Retention and Separation costs, return on equity, storm restoration deferral; PowerMIFleet Pilot Foundational Infrastructure Program; Conservation Voltage Reduction	7/14/2020
CENTERPOINT ENERGY RESOURCES CORP	Arkansas Gas Consumers, Inc.	17-010-FR	Direct	AR	Projected Year Capital Expenditures; Capitalization Policy; Projected Year Adjustments	7/2/2020
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-20697	Direct	MI	Return on Equity; Capital Structure; Debt Cost; Additional Surcharges and Deferred Regulatory Accounts	6/24/2020
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-20650	Rebuttal	MI	Return on Equity; Statistical Analysis of Distribution Mains Allocation	5/5/2020
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-20650	Direct	MI	Return on Equity; Capital Structure; Long-Term Debt Cost	4/14/2020
DTE GAS COMPANY	Association of Businesses Advocating Tariff Equity	U-20642	Rebuttal	MI	Return on Equity	4/14/2020
DTE GAS COMPANY	Association of Businesses Advocating Tariff Equity	U-20642	Direct	MI	Return on Equity; Operation and Maintenance Expenses	3/24/2020
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-20618	Direct	MI	Certificate of Convenience and Necessity	1/17/2020

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UTILITY	ON BEHALF OF	DOCKET	TYPE	REGULATORY JURISDICTION	SUBJECT	DATE
ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Settlement Support	AR	Support of Settlement	10/30/2019
GEORGIA POWER COMPANY	Georgia Association of Manufacturers and Georgia Industrial Group	42516	Direct	GA	Alternate Rate Plan; Coal Combustion Residual Cost Recovery; Amortization of Retired Plant	10/17/2019
ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Direct	AR	Tax Cuts and Jobs Act Impact; Projected Year Revenues; Projected Year BRORB; Grid Modernization; Advanced Metering Infrastructure Expense	10/4/2019
SOUTHWESTERN ELECTRIC POWER COMPANY	Western Arkansas Large Energy Consumers	19-008-U	Surrebuttal	AR	SWEPCO's Formula Rate Review; Energy Cost Recovery Rider; Distribution Reliability Rider	9/24/2019
CENTERPOINT ENERGY RESOURCES CORP	Arkansas Gas Consumers, Inc.	17-010-FR	Settlement Support	AR	Support of Settlement	7/31/2019
SOUTHWESTERN ELECTRIC POWER COMPANY	Western Arkansas Large Energy Consumers	19-008-U	Direct	AR	SWEPCO's Formula Rate Review; Capital Structure; Distribution Reliability Rider; Arkansas Formula Rate Plans	7/16/2019
CENTERPOINT ENERGY RESOURCES CORP	Arkansas Gas Consumers, Inc.	17-010-FR	Direct	AR	Formula Rate Plan, Capital Additions, Operation and Maintenance Expenses	7/2/2019
ENTERGY LOUISIANA, LLC	Occidential Chemical Corporation	U-35130	Cross-Answering	LA	Fuel Tracking Mechanism	7/1/2019
CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC	Texas Industrial Energy Consumers	49421	Direct	TX	Unprotected Excess Deferred Income Tax Rider; Incentive Compensation	6/6/2019
ENTERGY LOUISIANA, LLC	Occidential Chemical Corporation	U-35130	Direct	LA	Fuel Tracking Mechanism	5/10/2019
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-20322	Rebuttal	MI	Return on Equity	4/29/2019
CENTERPOINT ENERGY RESOURCES CORP	Arkansas Gas Consumers, Inc.	18-057	Supplemental Surrebuttal	AR	Gas Distribution Uprstream Services Contracting Process	4/23/2019
CENTERPOINT ENERGY RESOURCES CORP	Arkansas Gas Consumers, Inc.	18-057	Surrebuttal	AR	Gas Distribution Uprstream Services Contracting Process	4/12/2019
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-20322	Direct	MI	Return on Equity; Capital Structure; Project vs. Historical Test Year; Earnings Sharing Mechanism	4/5/2019
DUKE ENERGY PROGRESS, LLC	Nucor Steel - South Carolina	2018-318-E	Direct	SC	Excess Deferred Income Tax Rider; Post-Test Year Adjustments; Coal Ash Pond Closure Expense; End-of-Life Nuclear Costs; Regulatory Assets; Return on Equity and Equity Ratio	3/4/2019
CENTERPOINT ENERGY RESOURCES CORP	Arkansas Gas Consumers, Inc.	18-057	Direct	AR	Gas Distribution Uprstream Services Contracting Process	2/12/2019
ENTERGY ARKANSAS, INC.	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Settlement Support	AR	Support of Settlement	10/30/2018
ENTERGY ARKANSAS, INC.	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Direct	AR	Formula Rate Plan Tariff; Long-Term Debt Cost and Preferred Equity; Projeced Year Capital Additions; Historical Year Capital Additions	10/4/2018
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-20134	Rebuttal	MI	Return on Equity	10/1/2018
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-20134	Direct	MI	Return on Equity, Capital Structure and Long-Term Debt Cost, Investment Recovery Mechanism Excess Sharing Mechanism	9/10/2018

Testimony Filed in Regulatory Proceedings
by Billie S. LaConte

UTILITY	ON BEHALF OF	DOCKET	TYPE	REGULATORY JURISDICTION	SUBJECT	DATE
CENTERPOINT ENERGY RESOURCES CORP	Arkansas Gas Consumers, Inc.	17-010-FR	Opposition	AR	Opposition to Settlement Agreement	8/3/2018
CENTERPOINT ENERGY RESOURCES CORP	Arkansas Gas Consumers, Inc.	17-010-FR	Direct	AR	Impact of Tax Cuts and Jobs Act of 2017; Forecast Revenues; Uncollectible Expense; Pipeline Integrity Assessment and Remediation Expense	7/2/2018
ENTERGY ARKANSAS, INC.	Arkansas Electric Energy Consumers, Inc.	17-052	Surrebuttal	AR	Utility Restructuring Costs and Tax Effects	5/31/2018
PUBLIC SERVICE COMPANY OF NEW MEXICO	City of Farmington, New Mexico; Board of County Commissioners for San Juan County	17-00174	Direct	NM	Integrated Resource Plan; Future of San Juan Generation Station	5/4/2018
ENTERGY ARKANSAS, INC. and CENTERPOINT ENERGY ARKANSAS GAS	Arkansas Electric Energy Consumers, Inc. and Arkansas Gas Consumers, Inc.	18-006	Direct	AR	Effect on Revenue Requirement due to 2017 Tax Cuts and Jobs Act	3/29/2018
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U18424	Rebuttal	MI	Rate of Return	3/21/2018
ENTERGY ARKANSAS, INC.	Arkansas Electric Energy Consumers, Inc.	18-014-TF	Direct	AR	Impact of Tax Cuts and Jobs Act of 2017 and Tax Adjustment Rider	3/19/2018
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-18424	Direct	MI	Rate of Return, Capital Structure	2/28/2018
CENTERPOINT ENERGY ARKANSAS GAS	Arkansas Gas Consumers, Inc.	17-050-U	Surrebuttal	AR	Asset Management Agreement Proposal	1/12/2018
CENTERPOINT ENERGY ARKANSAS GAS	Arkansas Gas Consumers, Inc.	17-050-U	Direct	AR	Asset Management Agreement Proposal	12/8/2017
ENTERGY ARKANSAS, INC.	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Settlement Support	AR	Support of Settlement	10/31/2017
ENTERGY ARKANSAS, INC.	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Direct	AR	Forecast Revenues, Cost of Debt, Revenue Requirement and Capital Additions	10/4/2017
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-18322	Rebuttal	MI	Return on Equity	9/7/2017
CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-18322	Direct	MI	Return on Equity, Capital Structure	8/10/2017
CENTERPOINT ENERGY RESOURCES CORP	Arkansas Gas Consumers, Inc.	17-010-FR	Settlement Support	AR	Support of Settlement	7/31/2017
CENTERPOINT ENERGY RESOURCES CORP	Arkansas Gas Consumers, Inc.	17-010-FR	Direct	AR	Rate of Return, Capital Structure, Labor Expense	7/3/2017
ENTERGY ARKANSAS, INC.	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Settlement Support	AR	Support of Settlement	10/24/2016
ENTERGY ARKANSAS, INC.	Arkansas Electric Energy Consumers, Inc.	16-036-FR	Direct	AR	Rate of Return, Forecast Revenue, Capitalization	9/30/2016
METROPOLITAN EDISON COMPANY; PENNSYLVANIA ELECTRIC COMPANY AND WEST PENN POWER	MEIUG, PICA and WPPII	2016-2537349, 2016-2537352, 2016-2537359	Surrebuttal	PA	Return on Equity	8/31/2016
METROPOLITAN EDISON COMPANY; PENNSYLVANIA ELECTRIC COMPANY AND WEST PENN POWER	MEIUG, PICA and WPPII	2016-2537349, 2016-2537352, 2016-2537359	Direct	PA	Return on Equity	7/22/2016
NORTHERN STATES POWER	Xcel Large Industrials	15-826	Direct	MN	Return on Equity, Multi-Year Rate Plan	6/14/2016

Testimony Filed in Regulatory Proceedings
by Billie S. LaConte

UTILITY	ON BEHALF OF	DOCKET	TYPE	REGULATORY JURISDICTION	SUBJECT	DATE
CENTERPOINT ENERGY RESOURCES CORP	Arkansas Electric Energy Consumers, Inc.	15-098-U	Surrebuttal	AR	Return on Equity, Formula Rate Plan, Capital Structure	6/7/2016
CENTERPOINT ENERGY RESOURCES CORP	Arkansas Electric Energy Consumers, Inc.	15-098-U	Direct	AR	Return on Equity, Captial Structure	4/14/2016
MISSOURI-AMERICAN WATER COMPANY	BJC Healthcare	WR-2011-0337	Rebuttal	MO	Return on Equity	1/19/2012
MISSOURI-AMERICAN WATER COMPANY	BJC Healthcare	WR-2011-0337	Direct	MO	Return on Equity	11/17/2011
METROPOLITAN ST. LOUIS SEWER DISTRICT	Barnes-Jewish Hospital	N/A	Supplemental	MO	Rate Model	9/16/2011
METROPOLITAN ST. LOUIS SEWER DISTRICT	Barnes-Jewish Hospital	N/A	Surrebuttal	MO	Rate Increase, CIRP, Consent Decree	8/19/2011
METROPOLITAN ST. LOUIS SEWER DISTRICT	Barnes-Jewish Hospital	N/A	Rebuttal	MO	Rate Increase, CIRP, Consent Decree	7/18/2011
AMEREN UE	Missouri Energy Group	ER-2011-0028	Surrebuttal	MO	Return on Equity, Energy Efficiency Cost Recovery	4/15/2011
AMEREN UE	Missouri Energy Group	ER-2011-0028	Rebuttal	MO	Return on Equity, Energy Efficiency Cost Recovery	3/25/2011
AMEREN UE	Missouri Energy Group	ER-2011-0028	Direct	MO	Return on Equity	2/8/2011
AMEREN UE	Missouri Energy Group	EO-2010-0255	Direct	MO	Prudence Audit of FAC Periods 1 and 2	11/22/2010
ENTERGY ARKANSAS, INC.	Arkansas Electric Energy Consumers, Inc.	09-084-U	Direct - In Support	AR	Supporting the Proposed Settlement Agreement	5/11/2010
ENTERGY ARKANSAS, INC.	Arkansas Electric Energy Consumers, Inc.	09-084-U	Surrebuttal	AR	Return on Equity	4/14/2010
ENTERGY ARKANSAS, INC.	Arkansas Electric Energy Consumers, Inc.	09-084-U	Direct	AR	Return on Equity	2/26/2010
AMEREN UE	Missouri Energy Group	ER-2010-0036	Direct	MO	Energy Efficiency Costs	12/18/2009
AMEREN UE	Missouri Energy Group	ER-2008-0318	Surrebuttal	MO	Return on Equity	11/5/2008
AMEREN UE	Missouri Energy Group	ER-2008-0318	Direct	MO	Return on Equity, Off-System Sales	8/28/2008
METROPOLITAN ST. LOUIS SEWER DISTRICT	Missouri Energy Group	N/A	Rebuttal	MO	Long-Term Financial Plan, Capital Financing	5/2/2007
AMEREN UE	Missouri Energy Group	ER-2007-0002	Surrebuttal	MO	Return on Equity, Interruptible Demand, Response Pilot	2/27/2007
AMEREN UE	Missouri Energy Group	ER-2007-0002	Direct	MO	Interruptible Rate	12/29/2006
AMEREN UE	Missouri Energy Group	ER-2007-0002	Direct	MO	Return on Equity, Off-System Sales, Sharing Mechanism, 10% Cap on Residentials	12/15/2006
AMEREN UE	Missouri Energy Group	EA-2005-0180	Rebuttal	MO	Economic Analysis	1/31/2005
NOVA SCOTIA POWER INC.	Avon Valley Greenhouses	NSUARB-P-881	Direct	NS	Cost of Capital	10/12/2004

Testimony Filed in Regulatory Proceedings
by Billie S. LaConte

UTILITY	ON BEHALF OF	DOCKET	TYPE	REGULATORY JURISDICTION	SUBJECT	DATE
MISSOURI-AMERICAN WATER COMPANY	Missouri Energy Group	WR-2003-0500	Surrebuttal	MO	Working Capital, Return on Equity, Cost Allocation	12/5/2003
MISSOURI-AMERICAN WATER COMPANY	Missouri Energy Group	WR-2003-0500	Rebuttal	MO	Rate Design	11/10/2003
MISSOURI-AMERICAN WATER COMPANY	Missouri Energy Group	WR-2003-0500	Direct	MO	Return on Equity, Acquisition Adjustment, Cash Working Capital	10/3/2003
METROPOLITAN ST. LOUIS SEWER DISTRICT	Missouri Energy Group	N/A	Direct	MO	Revenue Requirement, Financial Planning	4/22/2003
INTERSTATE POWER AND LIGHT COMPANY	Lee County Energy Users Group- Direct	RPU-02-3	Surrebuttal	IA	Revenue Requirement, Return on Equity	9/19/2002
METROPOLITAN ST. LOUIS SEWER DISTRICT	Missouri Energy Group	N/A	Surrebuttal	MO	Revenue Requirement, Capital Financing	8/13/2002
METROPOLITAN ST. LOUIS SEWER DISTRICT	Missouri Energy Group	N/A	Surrebuttal	MO	Revenue Requirement, Captial Financiaing, Cost Allocation	7/28/2002
INTERSTATE POWER AND LIGHT COMPANY	Lee County Energy Users Group- Direct	RPU-02-3	Direct	IA	Revenue Requirement, Return on Equity	7/26/2002
METROPOLITAN ST. LOUIS SEWER DISTRICT	Missouri Energy Group	N/A	Rebuttal	MO	Revenue Requirement, Capital Financing	7/10/2002

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

COMPARISON OF PRO FORMA COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

	Revised Pro Forma Cost of Service, as of June 30, 2025				As Filed Pro Forma Cost of Service, as of June 30, 2025				Change in Cost of Service	
Customer Classification	Cost of Service	Allocation of Other COS*	Total Amount	Percent of Total	Cost of Service	Allocation of Other COS*	Total Amount	Percent of Total	$	%
(1)	(2)	(3)	(4)	(5)	(2)	(3)	(4)	(5)		
Residential	$611,385,366	$ 46,505,573	$ 657,890,939	65.5%	$ 603,782,117	$ 46,505,573	$ 650,287,690	64.7%	$ 7,603,248	1.3%
Commercial	225,613,481	18,320,153	243,933,634	24.3%	232,462,967	18,320,153	250,783,120	25.0%	$ (6,849,485)	-2.9%
Industrial	43,765,156	3,939,176	47,704,332	4.7%	44,092,705	3,939,176	48,031,881	4.8%	$ (327,549)	-0.7%
Public (Municipal)	34,803,599	1,635,240	36,438,839	3.6%	35,192,089	1,635,240	36,827,329	3.7%	$ (388,490)	-1.1%
Other Water Utilities - Group A	11,103		11,103	0.0%	11,343		11,343	0.0%	$ (240)	-2.1%
Other Water Utilities - Group B	589,519		589,519	0.1%	627,003		627,003	0.1%	$ (37,484)	-6.0%
Private Fire Protection	5,777,625	341,990	6,119,615	0.6%	5,777,625	341,990	6,119,615	0.6%	$ -	0.0%
Public Fire Protection	11,847,471	-	11,847,471	1.2%	11,847,471	-	11,847,471	1.2%	$ -	0.0%
Total Sales of Water	$933,793,321	$ 70,742,132	$1,004,535,453	100.0%	$ 933,793,321	$ 70,742,132	$1,004,535,453	100.0%	$ -	0.0%
Other Water Revenues	$ 10,675,369	345,262	11,020,631		$ 10,675,369	345,262	11,020,631		$ -	0.0%
Contract Sales - Industrial	4,482,099		4,482,099		4,482,099		4,482,099		$ -	0.0%
Contract Sales - Resale	3,316,086		3,316,086		3,316,086		3,316,086		$ -	0.0%
Total	$952,266,876	$ 71,087,394	$1,023,354,270		$ 952,266,876	$ 71,087,394	$1,023,354,270		$ -	0.0%

* Includes unrecovered Wastewater Cost of Service.

Sources Cited Outside of Current Case Documents

Source Name Summary	Footnote No.	Exhibit Page No.
Docket Nos. R-2022-3031672/73: Supplement No. 40 to Tariff	Footnote 4	3
US Inflation Calculator	Footnotes 5, 6	5, 6
RRA Focus Notes (Oct. 9, 2023)	Footnote 8	8
Docket No. R-2021-3027385 *et al*.: Opinion and Order	Footnote 9	13
Bureau of Technical Utility Services Report on the Quarterly Earnings	Footnote 10	15
Docket Nos. R-2022-3031672/73: Joint Petition for Settlement and Order	Footnote 11	18, 21
Moody's Investors Service (Jun. 23, 2017)	Footnote 12	23, 24
Avista Corporation dba Avista Utilities: Schedule 75E – Decoupling Mechanism (Elec.) Avista Corporation dba Avista Utilities: Schedule 175E – Decoupling Mechanism (Gas)	Footnote 19	25, 26
Regulatory Assistance Project (Jun. 2011)	Footnote 20	28
Harvard Business Review Summary (Aug. 28, 2023)	Footnote 26	29-34
Docket Nos. R-2022-3031672/73: Recommended Decision	Footnote 34	38

PENNSYLVANIA AMERICAN WATER

Elizabeth Rose Triscari
Director, Corporate Counsel
852 Wesley Drive | Mechanicsburg, PA 17055
Phone: 717-550-1574 | Fax: 717-550-1255
elizabeth.triscari@amwater.com

VIA eFiling

January 26, 2023

Rosemary Chiavetta, Secretary
Commonwealth of Pennsylvania
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

(Utility Code: 212285)

Re: Pennsylvania Public Utility Commission v.
Pennsylvania-American Water Company
Docket Nos. R-2022-3031672 and R-2022-3031673

Dear Secretary Chiavetta:

Attached please find Supplement No. 40 to Tariff Water-PA P.U.C. No. 5. This supplement replaces and supersedes all pages filed in Supplement No. 35 to Tariff Water-PA P.U.C. No. 5. By Order entered December 8, 2022 in the above-captioned proceeding, the Commission approved the Joint Petition for Settlement ("Joint Petition"). The tariff changes contained in Supplement No. 40 conform to the tariff supplement provided as Appendix A to the Joint Petition. The proof of revenues for the water rates was provided as Appendix C to the Joint Petition.

Copy of Supplement No. 40 to Tariff Water-PA P.U.C. No. 5 is being served as evidenced in the attached Certificate of Service.

If you have any questions, please contact me.

Sincerely,

Elizabeth Rose Triscari

eth

Attachments

cc: Certificate of Service
Bureau of Technical Utility Services w/Attachments
Marissa Boyle (Bureau of Technical Utility Services) w/Attachment

PENNSYLVANIA-AMERICAN WATER COMPANY
(hereinafter referred to as the "Company")
D/B/A
Pennsylvania American Water

RATES, RULES AND REGULATIONS

GOVERNING THE DISTRIBUTION AND SALE OF

WATER SERVICE

IN CERTAIN MUNICIPALITIES AND TERRITORIES LOCATED ADJACENT THERETO IN:

ADAMS, ALLEGHENY, ARMSTRONG, BEAVER, BERKS, BUCKS,

BUTLER, CENTRE, CHESTER, CLARION, CLEARFIELD, CLINTON, COLUMBIA,

CUMBERLAND, DAUPHIN, FAYETTE, INDIANA, JEFFERSON, LACKAWANNA,

LANCASTER, LAWRENCE, LEBANON, LUZERNE, MCKEAN, MONROE, MONTGOMERY,

NORTHAMPTON, NORTHUMBERLAND, PIKE, SCHUYLKILL, SUSQUEHANNA,

UNION, WARREN, WASHINGTON, WAYNE, WYOMING, AND YORK COUNTIES.

Issued: January 26, 2023 **Effective: January 28, 2023**

Issued by:
Justin Ladner, President
Pennsylvania American Water
852 Wesley Drive
Mechanicsburg, PA 17055

https://www.amwater.com/paaw/

NOTICE

This tariff proposes increases in rates and changes in rules and regulations of service. (Refer to pages 2, 3, 4, 5, 6, 7, 9, 10, 11, 16, 16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7, 16.8, 16.9, 17, 20, 21, 23, 24, 29, 30, 31, 32, 35, 40, 40.1, 43, 46, 47, 47.1, 47.2, 49, 51, 53, 54, 56, 58, 61, 69, 73, and 84.)

US INFLATION CALCULATOR
a CoinNews Media Group Company

Average Inflation Rates

The chart and table display the average rates of inflation in the United States on a yearly basis from 2012 to 2023. This information is provided by the U.S. Bureau of Labor Statistics and is published every month in the Consumer Price Index. The chart and table were last updated on Jan. 11 with BLS data for December. The next update is scheduled for Feb. 13, which will offer the first reading for 2024.

Generally, more interest is directed toward current inflation rates, at least in terms of what you hear or read from news media, rather than these average rates.

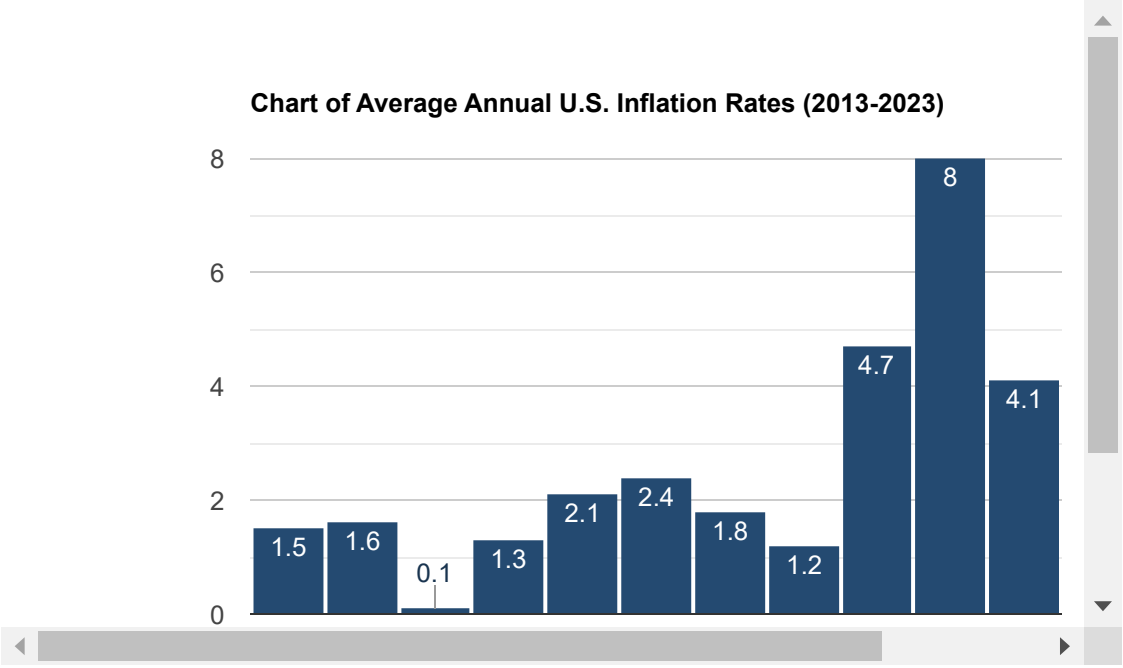

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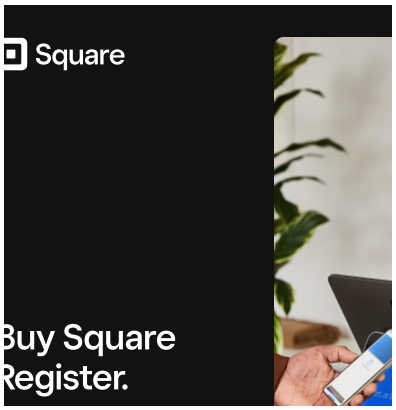
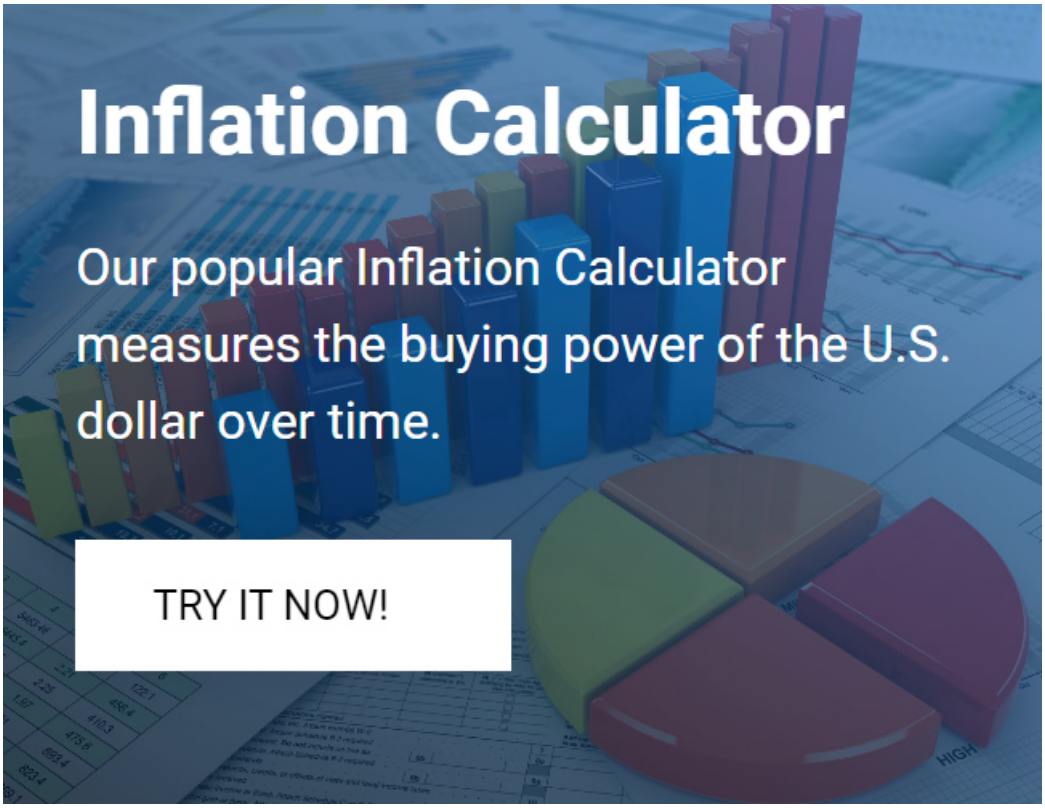
Table: Average Annual U.S. Inflation Rates

Year	CPI (Annual Average)	Inflation Rate (Annual Average)
2023	**304.702**	**4.1%**
2022	292.655	8.0%
2021	270.970	4.7%
2020	258.811	1.2%
2019	255.657	1.8%
2018	251.107	2.4%
2017	245.120	2.1%
2016	240.007	1.3%
2015	237.017	0.1%
2014	236.736	1.6%
2013	232.957	1.5%
2012	229.594	2.1%

Data Source: U.S. Bureau of Labor Statistics: All items in U.S. city average, all urban consumers, not seasonally adjusted.

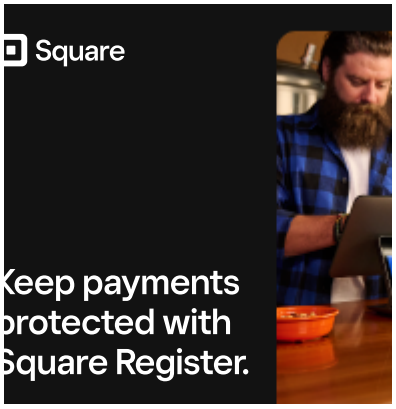




Inflation Rate 3.4%

Consumer Price Index (CPI) 306.746

Released on Jan. 11 for December 2023. Next release on Feb. 13 for January 2024.



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Regulatory Research Associates

Focus Notes

Monday
October 9, 2023

MULTI-JURISDICTIONAL

US energy utilities seek almost $24B in pending rate cases

by Lisa Fontanella

Spurred on by inflation, rising interest rates and expanding capital spending plans, the pace of state-level rate case activity remains robust across the US.

There were 63 electric and 52 gas rate cases, as well as one steam rate proceeding, pending in 37 states and the District of Columbia as of Sept. 28. Continuing the recent dramatic rise in the level of requested rate increases across the country, the rate increases sought in these proceedings aggregate to $23.7 billion, excluding the later-year steps of multiyear rate requests.

The returns on equity (ROE) requested in the pending electric, gas and steam rate cases range from 9.30% to 12.95%, averaging 10.32% in the vertically integrated electric rate cases, 10.40% in the electric distribution rate cases, 9.63% in the electric limited-issue rate proceedings where an ROE is specified, 10.32% for gas base rate cases and 9.68% in the gas limited-issue rate proceedings where an ROE is specified.

Over the last several weeks, Regulatory Research Associates surveyed large electric and gas companies and state utility commissions concerning pending rate cases. An overview of key trends and statistics observed in the pending proceedings is provided below. The related spreadsheet provides a tabular listing of state-level, company-specific rate cases that were pending for companies included in RRA's coverage universe as of Sept. 28. Detailed profiles of these cases can be found on RRA's Pending Rate Cases page. In addition, the related spreadsheet contains a tabular listing of the next major event in each pending major rate case, for which an agenda was available, as listed on the RRA Events page.

CONTINUED ON PAGE 23

Jurisdictions Included

Click on jurisdiction to advance to story(s)

Alaska	Idaho	New Mexico
Colorado	Kansas	South Carolina
Connecticut	Kentucky	Wyoming

September filings volume highest in 5 years for month, reaching $334M

by Brian Collins

September utility rate case initial filings were at their highest level in the last five years for that month, with 10 submissions, compared with the September average tracked from 2019 through 2023 of 7.4 filings. September 2023 filings registered aggregate rate increase requests of about $334 million, with no rate reduction requests noted. While there were four notices of intent to advise of pending rate increase requests, none included a projected rate change amount.

The Take

➤ Rate case filings in September were at their highest volume for that month in five years. September applications and notices of intent rose by one case to 10 compared with August, in which nine initial proceedings were logged. September filings equaled $334 million in potential rate increases compared with approximately $295 million of rate increase requests in August.

➤ Four of the 10 initial filings from September disclosed return on equity (ROE) data, with those utilities requesting ROEs ranging from 9.65% to 10.5%.

CONTINUED ON PAGE 24

Wildfire-driven insurance premium hike focus of new PacifiCorp deferral requests

by Jason Lehmann

PacifiCorp is seeking authorization in several jurisdictions to defer, for later ratemaking treatment, estimated costs associated with higher commercial insurance premiums that the utility says result from elevated wildfire liability risk. The deferral applications were filed with the Public Service Commission of Utah (Docket No. 23-035-40), Washington Utilities and Transportation Commission (Docket No. UE-230673), Oregon Public Utility Commission (Docket No. UM 2301) and the Idaho Public Utilities Commission (Case No. PAC-E-23-18).

CONTINUED ON NEXT PAGE

STATE JURISDICTION NEWS *continued*

The company's five-year capital spending plan shows investment of over $590 million during the period, with spending peaking at $148.1 million in 2025. The years 2023 and 2024 were included in the company's five-year forecast for the previous rate proceeding Dec. 30, 2020. Investments for both of these years in the current plan are at higher levels than were budgeted in 2020. The 2023 budget increased from $70.9 million to $87.4 million, and the 2024 budget increased from $63.2 million to $93.4 million. Given comments from the chair in AWC-CT's rate proceeding, this could be an area of contention.

The company attributed inflation associated with rising operating expenses as the largest driver of the rate proceeding. The largest operating expense increases stemmed from employee expenses, purchased power, purchased water, increased chemical costs and expenses associated with the rate case proceeding.

Acknowledging the impact of inflation on its customers, the company stated that it "realizes our customers are also facing economic challenges related to inflation and increased interest rates. ... [A]lthough inflation from the test year in the Company's last case to the test year in this case has gone up 13.5%, the Company was able to manage Operating and Maintenance expenses so they only rose by 6%, less than half of the overall average because of our constant pursuit of operating efficiencies, notwithstanding the variability of the impacts of inflation on certain costs."

Additionally, to mitigate the impact of the proposed increase, the company is proposing to expand its Water Rate Assistance Program through expanded income-eligibility levels and tiered discounts.

The company's rate design proposal further consolidates the basic service charges across 11 operating divisions. Additionally, the rate case includes a proposed third residential usage price tier, building upon the inclining block residential rates introduced in the company's most recent proceeding.

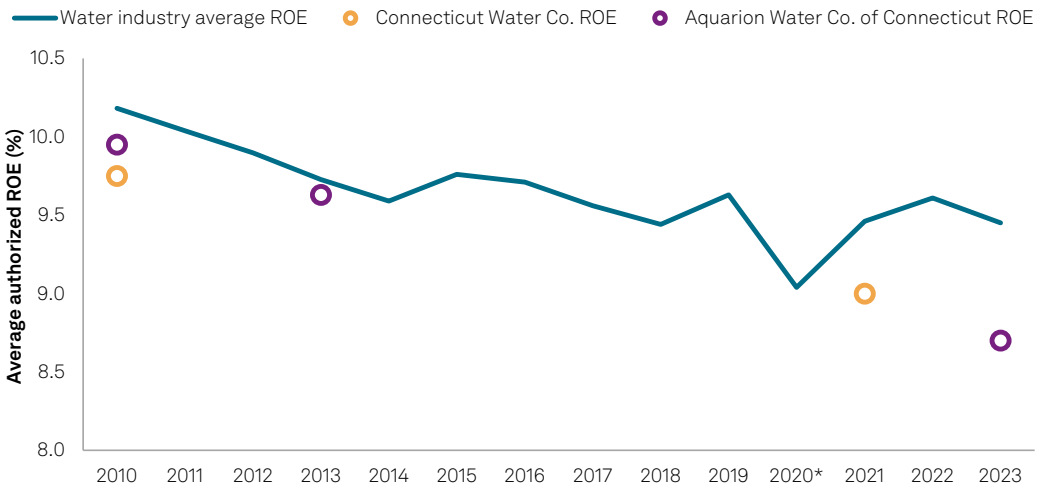
Comparing Conn. ROEs to national averages

The ROEs approved in water utility rate decisions in Connecticut historically have been below the national average at the time established, even more so in the most recent decision. The 8.70% ROE authorized for AWC-CT is the lowest nonpunitive return authorized for a water utility since 2010, as tracked by RRA.

In a dissenting opinion, Commissioner John "Jack" Betkoski stated, "ROE calculations are not an exact science ... but an over 80 basis point reduction is substantially lower than the OCC's, and I think it should be higher as interest rates are projected to continue their increase. By reducing the ROE below usual standards — a massive signal to discourage vital investment in water infrastructure and protection for public health, environment, and safety." Betkoski is former president of the National Association of Regulatory Utility Commissioners and former chair of its water committee.

Year to date, 12 water utility rate proceedings have been completed across seven states, with cost-of-capital parameters provided in 10 proceedings. The authorized ROEs averaged 9.45%, compared to an average of 9.61% in 2022, when 10 water utility rate cases were completed nationwide.

Water utility authorized ROE comparison: Connecticut water utilities vs. national average



As of Oct. 4, 2023.
ROE = return on equity.
* 2020 national average ROE includes a punitive ROE in a South Carolina proceeding. Excluding this case, the national average would be 9.36%.
Source: Regulatory Research Associates, a group within S&P Global Commodity Insights.
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PENNSYLVANIA
PUBLIC UTILITY COMMISSION
Harrisburg, PA 17120

Public Meeting held May 12, 2022

Commissioners Present:

Gladys Brown Dutrieuille, Chairman, Statement
John F. Coleman, Jr., Vice Chairman
Ralph V. Yanora

Pennsylvania Public Utility Commission	R-2021-3027385
Bureau of Investigation and Enforcement	
Office of Consumer Advocate	C-2021-3028466
Office of Small Business Advocate	C-2021-3028509
Martha Bronson	C-2021-3028132
Neil Kugelman	C-2021-3028139
Geoffrey Rhine	C-2021-3028170
Theodore Voltolina	C-2021-3028194
Aaron Brown	C-2021-3028279
Darren Distasio	C-2021-3028285
Deena Denesowicz	C-2021-3028288
Vivian George	C-2021-3028310
Nick Panaccio	C-2021-3028331
Richard Regnier	C-2021-3028332
Gerald DiNunzio Jr.	C-2021-3028362
Nancy Reedman	C-2021-3028405
Michael McCall	C-2021-3028413
Raymond Cavalieri	C-2021-3028448
Byron Goldstein	C-2021-3028463
John Grassie	C-2021-3028663
Kyle Brophy	C-2021-3028712
Daniel Savino	C-2021-3028758
Michael Roberts	C-2021-3028869
Treasure Lake Property Owners Association Inc.	C-2021-3029004
Gerardo Giannattasio	C-2021-3029066
Aqua Large Users Group	C-2021-3029089

Erik McElwain	C-2021-3029135
Judy Burton	C-2021-3029152
Brian Edwards	C-2021-3029159
Richard Gage	C-2021-3029393
Joanne Smyth	C-2021-3029411
Jane O'Donovan	C-2021-3029532

v.

Aqua Pennsylvania, Inc.

Pennsylvania Public Utility Commission	R-2021-3027386
Bureau of Investigation and Enforcement	
Office of Consumer Advocate	C-2021-3028467
Office of Small Business Advocate	C-2021-3028511
Camp Stead Property Owners Association	C-2021-3028928
Dale Markowitz	C-2021-3028280
Keith Anthony	C-2021-3028444
Stephanie Boris	C-2021-3028443
Jennifer Buckley	C-2021-3028160
Carl Martinson	C-2021-3028312
Elizabeth O'Neill	C-2021-3028333
Erik and Ilisha Smith	C-2021-3028334
Curtis and Michele Tabor	C-2021-3028335
Gregory Valerio	C-2021-3028336
Jerome Perch	C-2021-3028356
Michael Brull	C-2021-3028361
James Blessing	C-2021-3028402
Elizabeth Yost	C-2021-3028407
Timothy Nicholl	C-2021-3028471
Alyssa Reinhart	C-2021-3028493
James Kolb	C-2021-3028497
Ronald Schneck	C-2021-3028547
Matthew Cicalese	C-2021-3028566
Ronald and Lora	C-2021-3028568
Kelly Frich	C-2021-3028665
Adam Anders	C-2021-3028670
Charleen Falsone	C-2021-3028760
Stephen Grugeon	C-2021-3028892

Lynne Germscheid	C-2021-3028860
Deborah and James Popson	C-2021-3028868
Masthope Mountain Community Association	C-2021-3028996
Treasure Lake Property Owners Association Inc.	C-2021-3029006
East Norriton Township	C-2021-3029019
Kevin Amerman	C-2021-3029063
James Wharton Jr.	C-2021-3029065
Peter and Kim Ginopolas	C-2021-3029096
Yefim Shnayder	C-2021-3029134
Andrea and Matthew Rivera	C-2021-3029154
Judy Burton	C-2021-3029139
Brian Edwards	C-2021-3029161
Edward Coccia	C-2021-3028870
John Day	C-2021-3028734
Robert Dolan	C-2021-3028798
Anthony Giovannone	C-2021-3028794
	C-2021-3028803
	C-2021-3028802
Sheila Gutzait	C-2021-3028634
Rudolph Hofbauer	C-2021-3028666
Ronald and Alexis Koenig	C-2021-3028483
Joan Lipski	C-2021-3028475
William and Ana Loftus	C-2021-3028617
Stephen and Teresa Mason	C-2021-3028576
David Monroe	C-2021-3028567
Lisa Rampone	C-2021-3028804
Lorraine Rocci	C-2021-3028499
David Ross	C-2021-3028479
Carolyn Sica	C-2021-3028446
Dean Swink	C-2021-3028604
Francine Weiner	C-2021-3028639
Tom Woodward	C-2021-3028927
Joseph Torello	C-2021-3029180
Donald Osinski	C-2021-3029413
Lake Associates LLC	C-2021-3029425
	C-2021-3029422
	C-2021-3029419
29 Estates LLC	C-2021-3029417

David Bowers C-2021-3029466
Joanne Smyth C-2021-3029411

v.

Aqua Pennsylvania Wastewater, Inc.

OPINION AND ORDER

utilities exhaust employees or financial resources because of emergencies occasioned by others.

Section 523 of Code, *supra,* permits the Commission to award a management performance adjustment based on "[a]ny other relevant and material evidence of efficiency, effectiveness and adequacy of service." 66 Pa. C.S. § 523(b)(7). Aqua's consistent willingness to answer calls for aid to other water and wastewater providers shows it is doing more than required under Section 1501 of the Code. The examples discussed above indicate that Aqua carries a roster of large and complex emergency aid matters unlike any other Pennsylvania utility. As stated in its direct testimony, operating troubled systems requires significant time, commitment, and involvement from many departments within Aqua. Aqua St. 1 at 20. As such, Aqua management is exceeding the expectations placed upon it not only by its existing customers, but also the Commonwealth. For this reason, we find that Aqua should receive a management efficiency award commensurate with the emergency service described herein. Therefore, to reflect the extraordinary effort exhibited by Aqua to aid and protect Pennsylvania water and wastewater customers and the environment, we shall award Aqua an additional twenty-five basis points to its ROE for management performance. As discussed in Section X.D.3, *infra,* this will result in a total ROE for the Company of 10.00%.[65] Accordingly, we shall grant Aqua's Exception No. 1.6.

[65] As previously noted, in the *2008 Aqua Order,* the Commission awarded Aqua a management performance adjustment of twenty-two basis points for a total ROE of 11.00%.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Public Meeting held January 18, 2024

Docket Number: M-2023-3044811

BUREAU OF TECHNICAL UTILITY SERVICES

REPORT ON THE QUARTERLY EARNINGS

OF JURISDICTIONAL UTILITIES

FOR THE YEAR ENDED

September 30, 2023

Stephen M. DeFrank, Chairman
Kimberly Barrow, Vice Chair, Abstaining
Ralph V. Yanora
Kathryn L. Zerfuss
John F. Coleman, Jr.

Attachment D

Distribution System Improvement Charge (DSIC) Eligible Utilities
Return on Equity (ROE) Summary

	Utility Adjusted ROE[3] (%)	Commission Approved ROE[4] (%)
ELECTRIC		
PECO Energy – Electric Operations	5.48	9.75
PPL Electric Utilities Corp.	8.12	9.75
Duquesne Light Company	8.89	9.75
West Penn Power Company	5.96	9.75
Pennsylvania Power Company	5.76	9.75
Pennsylvania Electric Company	7.79	9.75
Metropolitan Edison Company	8.60	9.75
UGI Utilities, Inc.- Electric Division*		9.75
Pike County Light & Power Co.	9.16	9.75
GAS		
Columbia Gas of PA, Inc.	10.72	10.15
Peoples Natural Gas Company LLC	8.17	10.15
PECO Energy – Gas Operations	6.01	10.15
Peoples Gas Company, LLC	14.22	10.15
UGI Utilities, Inc. – Gas Division	8.27	10.15
Pike County Light & Power Co.	-7.69	10.15
WATER		
PA American Water Company	8.93	9.65
PA American – Wastewater	8.93	9.65
AQUA Pennsylvania[5]	8.39	10.00
AQUA Pennsylvania – Wastewater[6]	8.39	10.00
York Water Company	12.23	9.65
Veolia Water Pennsylvania, Inc.	8.42	9.65
Columbia Water Company	1.64	9.65
Newtown Artesian Water	7.13	9.65

* UGI Utilities, Inc. – Electric Division has a rate filing at Docket No. R-2022-3037368 and filed a letter with the Secretary in place of a report in accordance with 52 Pa. Code § 71.4.

3 Each utility lists adjustments on Schedule B of their quarterly financial report.
4 The ROE is approved in a utility's most recent fully litigated base rate proceeding for which a final order was entered not more than two years prior to the effective date of the DSIC. If more than two years have elapsed between the entry of a final order and the DSIC effective date, the ROE is from this report. If the base rate proceeding is settled, without a stipulated ROE, the ROE is from this report.
5 The Commission approved ROE of Aqua Pennsylvania, Inc. includes an additional adjustment of 0.25% for management effectiveness.
6 The Commission approved ROE of Aqua Pennsylvania Wastewater, Inc. includes an additional adjustment of 0.25% for management effectiveness.

Morgan Lewis

Kenneth M. Kulak
Partner
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ken.kulak@morganlewis.com

October 11, 2022

VIA eFILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

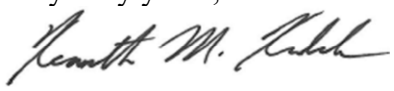
Re: Pennsylvania Public Utility Commission v.
Pennsylvania-American Water Company
Docket Nos. R-2022-3031672 and R-2022-3031673

Dear Secretary Chiavetta:

Enclosed for filing is the **Joint Petition for Settlement of Rate Investigation** ("Joint Petition"), in the above-captioned proceedings. As evidenced by the Certificate of Service, copies of the Joint Petition are being served upon Deputy Chief Administrative Law Judge Joel H. Cheskis and all parties of record.

If you have any questions, please do not hesitate to contact me at 215.963.5384.

Very truly yours,



Kenneth M. Kulak

KMK/tp
Enclosures

c: Per Certificate of Service (w/encls.)

Morgan, Lewis & Bockius LLP

1701 Market Street
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United States

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F +1.215.963.5001

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	**DOCKET NOS. R-2022-3031672**
	:	**R-2022-3031673**
	:	
v.	:	
	:	
PENNSYLVANIA-AMERICAN WATER COMPANY	:	
	:	

CERTIFICATE OF SERVICE

I hereby certify and affirm that I have this day served a copy of the **Joint Petition for Settlement of Rate Investigation** on the persons below in the manner specified in accordance with the requirements of 52 Pa. Code § 1.54:

VIA ELECTRONIC MAIL AND FEDERAL EXPRESS

The Honorable Joel H. Cheskis
Deputy Chief Administrative Law Judge
Pennsylvania Public Utility Commission
400 North Street, Second Floor
Harrisburg, PA 17120
jcheskis@pa.gov

VIA ELECTRONIC MAIL

Steven C. Gray
Office of Small Business Advocate
555 Walnut Street
Forum Place – First Floor
Harrisburg, PA 17101
sgray@pa.gov

Gina L. Miller
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120
ginmiller@pa.gov

and February 2024. The baseline of gross plant balances that must be achieved to restart charges under the Company's DSIC rider are reflected in Appendix E.

20. The Joint Petitioners agree and hereby stipulate that the Company shall use the rate of return on equity ("ROE") as calculated for water utilities and published in the "Bureau of Technical Utilities Services Report on the Quarterly Earnings of Jurisdictional Utilities" for the most recent quarter for purposes of calculating the ROE component of the Company's DSIC.

21. Within 90 days after entry of a final order in this proceeding, PAWC will file an amendment to its wastewater Long Term Infrastructure Improvement Plan ("LTIIP") to include systems acquired under Section 1329 of the Public Utility Code,[1] which does not re-prioritize other existing commitments in other service areas. The Company agrees to reevaluate the timeline for future water and wastewater LTIIP revisions as part of future base rate filings based on the number of water and/or wastewater customers acquired since the prior base rate case and the period since the Company's last LTIIP amendment. No later than the next quarterly DSIC filing following the Commission's approval of the amended LTIIP, as may be modified within the discretion of the Commission, PAWC will file a compliance tariff supplement that incorporates the acquired systems into PAWC's DSIC tariff, including all customer safeguards applicable thereto.

22. For systems not acquired under Section 1329, PAWC will apply the DSIC to those customers no later than in the first base rate case in which the system is included.

23. As shown in Appendices A and B, water customers acquired from the Creekside Homeowners Association and SLIBCO and wastewater customers acquired from Foster Township ("Foster") and Turbotville Borough are not exempt from the Company's DSIC.

[1] 66 Pa.C.S. § 1329. Hereafter all references to a "Section" are to the Pennsylvania Public Utility Code ("Code"), 66 Pa.C.S. §§ 101 *et seq*., unless indicated otherwise

PENNSYLVANIA
PUBLIC UTILTY COMMISSION
Harrisburg, PA 17105-3265

Public Meeting held December 8, 2022

Commissioners Present:

Gladys Brown Dutrieuille, Chairman
Stephen M. DeFrank, Vice Chairman, Statement, Conflict
Ralph V. Yanora
Kathryn L. Zerfuss
John F. Coleman, Jr., Statement

Pennsylvania Public Utility Commission	:	R-2022-3031672
Office of Consumer Advocate	:	C-2022-3032485
Office of Small Business Advocate	:	C-2022-3032331
Pennsylvania-American Large Users Group	:	C-2022-3033215
Keith Saur	:	C-2022-3032345
Ivan Figueroa	:	C-2022-3032376
Carl E. Meyer	:	C-2022-3032384
Darlene Nychey	:	C-2022-3033046
Hao Tang	:	C-2022-3033043
James Pagel	:	C-2022-3032486
William H. Rissmiller	:	C-2022-3032500
Ramkrishna Sen	:	C-2022-3032501
Barbara Cetnarowski	:	C-2022-3032659
Simon Dobrev & Poli Iordanova	:	C-2022-3032511
Jerome & Sheryl Rodzinak	:	C-2022-3032623
Zachary O'Brien	:	C-2022-3032547
Maria Elena Selznick	:	C-2022-3032569
Earl Knight	:	C-2022-3032620
Meade Buffington	:	C-2022-3032670
Michael Pope	:	C-2022-3032969
Samantha Maize	:	C-2022-3032970
Kathleen Jeffries	:	C-2022-3032988
Tracy M. Rutherford	:	C-2022-3032662
Bridget L. Salkowski	:	C-2022-3032652
Sabatini Montesti	:	C-2022-3032657
Sean Seidel	:	C-2022-3032730
Trish E. Luberda	:	C-2022-3032722
Jorge Salazar	:	C-2022-3033085
Frank Piccola	:	C-2022-3033110
Amanda Barto-Ealy	:	C-2022-3032771
Judith Ann Garofolo	:	C-2022-3033211
Leroy Waters III	:	C-2022-3032999

Latrese Laporte	:	C-2022-3032830
John Palermo	:	C-2022-3032963
Paul Walaski	:	C-2022-3033057
Jessica Weiss	:	C-2022-3033080
Ellen Katz	:	C-2022-3033231
Walter J. Yourkavitch	:	C-2022-3033212
Diane Michalowski	:	C-2022-3033222
Victory Brewing Company	:	C-2022-3033275
Samantha J. Wesner	:	C-2022-3033256
West Norriton Township	:	C-2022-3033271
Xin Xu	:	C-2022-3033360
Carla Seidel	:	C-2022-3033316
Christine Nicholson	:	C-2022-3033377
James Jackson	:	C-2022-3033593
Jeff Henry	:	C-2022-3032313
Lisa Tunzi	:	C-2022-3032317
	:	
v.	:	
	:	
Pennsylvania-American Water Company	:	

Pennsylvania Public Utility Commission	:	R-2022-3031673
Office of Consumer Advocate	:	C-2022-3032487
Office of Small Business Advocate	:	C-2022-3032346
Darlene Nichey	:	C-2022-3033048
James Pagel	:	C-2022-3032489
Carla Seidel	:	C-2022-3032744
Nathan Woodford	:	C-2022-3032693
Stephen Nardi	:	C-2022-3032497
Lisa Inmon	:	C-2022-3033119
Karla Haynes	:	C-2022-3033586
Mark Henderson	:	C-2022-3032315
William H. Rissmiller	:	C-2022-3032499
Simeon Dobrev & Poli Iordanova	:	C-2022-3032513
Maria Elena Selznick	:	C-2022-3032578
Sabatini Monatesti	:	C-2022-3032658
Trisha E. Luberda	:	C-2022-3032723
Jorge Salazar	:	C-2022-3033206
Frank Piccola	:	C-2022-3033111
Judith Anne Garofolo	:	C-2022-3033213
Latrese Laporte	:	C-2022-3032819
Walter J. Yourkavitch	:	C-2022-3033217
Diane Michalowski	:	C-2022-3033218
Victory Brewing Company	:	C-2022-3033282

James Jackson	:	C-2022-3033594
	:	
v.	:	
	:	
Pennsylvania-American Water Company – (Wastewater)	:	
	:	

ORDER

BY THE COMMISSION:

We adopt as our action the Recommended Decision of Deputy Chief Administrative Law Judge Joel H. Cheskis dated November 8, 2022;

THEREFORE,

IT IS ORDERED:

1. That Pennsylvania-American Water Company and Pennsylvania-American Water Company (Wastewater) shall not place into effect the rates, rules, and regulations contained in Water Tariff Supplement No. 35 and Wastewater Tariff Supplement No. 34 regarding its cost recovery base rates for water and wastewater service revenues within its service territory filed on April 29, 2022 at the above referenced docket.

2. That the Joint Petition for Settlement of Rate Investigation filed on October 11, 2022 at the above referenced docket is granted and the Settlement is approved, without modification.

3. That Pennsylvania-American Water Company and Pennsylvania-American Water Company (Wastewater) are authorized to file tariffs or tariff supplements containing rates, rules and regulations, consistent with the findings herein, and Appendices attached to the Joint Petition for Settlement, to produce, on a total Company basis, an annual increase in revenues of $138 million for service rendered on and after January 28, 2023.

MOODY'S INVESTORS SERVICE

RATING METHODOLOGY

Regulated Electric and Gas Utilities

Table of Contents:

SUMMARY 1
ABOUT THE RATED UNIVERSE 3
ABOUT THIS RATING METHODOLOGY 4
DISCUSSION OF THE SCORECARD FACTORS 6
APPENDIX A: REGULATED ELECTRIC AND GAS UTILITIES METHODOLOGY FACTOR SCORECARD 29
APPENDIX B: APPROACH TO RATINGS WITHIN A UTILITY FAMILY 35
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MOODY'S RELATED PUBLICATIONS 45

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» contacts continued on the last page

This rating methodology replaces "Regulated Electric and Gas Utilities" last revised on December 23, 2013. We have updated some outdated links and removed certain issuer-specific information.

Summary

This rating methodology explains our approach to assessing credit risk for regulated electric and gas utilities globally. This document does not include an exhaustive treatment of all factors that are reflected in our ratings but should enable the reader to understand the qualitative considerations and financial information and ratios that are usually most important for ratings in this sector.[1]

This report includes a detailed scorecard which is a reference tool that can be used to approximate credit profiles within the regulated electric and gas utility sector in most cases. The scorecard provides summarized guidance for the factors that are generally most important in assigning ratings to companies in the regulated electric and gas utility industry. However, the scorecard is a summary that does not include every rating consideration. The weights shown for each factor in the scorecard represent an approximation of their importance for rating decisions but actual importance may vary substantially. In addition, the scorecard uses historical results while ratings are based on our forward-looking expectations. As a result, the scorecard-indicated outcome is not expected to match the actual rating of each company.

THIS METHODOLOGY WAS UPDATED ON THE DATES LISTED AS NOTED: ON SEPTEMBER 10, 2020, WE REMOVED POINT-IN-TIME REFERENCES AND ALSO MADE MINOR FORMATTING CHANGES; ON NOVEMBER 4, 2019, WE UPDATED SOME OUTDATED REFERENCES AND ALSO MADE MINOR FORMATTING CHANGES; ON FEBRUARY 22, 2019, WE AMENDED A REFERENCE TO A METHODOLOGY IN APPENDIX E AND REMOVED OUTDATED TEXT; ON AUGUST 2, 2018, WE MADE MINOR FORMATTING CHANGES THROUGHOUT THE METHODOLOGY; ON FEBRUARY 15, 2018, WE CORRECTED THE FORMATTING OF THE FACTOR 4: FINANCIAL STRENGTH TABLE ON PAGE 34; AND ON SEPTEMBER 27, 2017, WE REMOVED A DUPLICATE FOOTNOTE THAT WAS PLACED IN THE MIDDLE OF THE TEXT ON PAGE 7.

[1] This update may not be effective in some jurisdictions until certain requirements are met.

Factor 2: Ability to Recover Costs and Earn Returns (25%)

Why It Matters

This scorecard factor examines the ability of a utility to recover its costs and earn a return over a period of time, including during differing market and economic conditions. While the Regulatory Framework looks at the transparency and predictability of the rules that govern the decision-making process with respect to utilities, the Ability to Recover Costs and Earn Returns evaluates the regulatory elements that directly impact the ability of the utility to generate cash flow and service its debt over time. The ability to recover prudently incurred costs on a timely basis and to attract debt and equity capital are crucial credit considerations. The inability to recover costs, for instance if fuel or purchased power costs ballooned during a rate freeze period, has been one of the greatest drivers of financial stress in this sector, as well as the cause of some utility defaults. In a sector that is typically free cash flow negative (due to large capital expenditures and dividends) and that routinely needs to refinance very large maturities of long-term debt, investor concerns about a lack of timely cost recovery or the sufficiency of rates can, in an extreme scenario, strain access to capital markets and potentially lead to insolvency of the utility. While our scoring for the Ability to Recover Costs and Earn Returns may primarily be influenced by our assessment of the regulatory relationship, it can also be highly impacted by the management and business decisions of the utility.

How We Assess Ability to Recover Costs and Earn Returns

The timeliness and sufficiency of rates are scored as separate sub-factors; however, they are interrelated. Timeliness can have an impact on our view of what constitutes sufficient returns, because a strong assurance of timely cost recovery reduces risk. Conversely, utilities may have a strong assurance that they will earn a full return on certain deferred costs until they are able to collect them, or their generally strong returns may allow them to weather some rate lag on recovery of construction-related capital expenditures. The timeliness of cost recovery is particularly important in a period of rapidly rising costs. Utilities have benefitted from low interest rates and generally decreasing fuel costs and purchased power costs, but these market conditions could easily reverse. For example, fuel is a large component of total costs for vertically integrated utilities and for natural gas utilities, and fuel prices are highly volatile, so the timeliness of fuel and purchased power cost recovery is especially important.

While Factors 1 and 2 are closely inter-related, scoring of these factors will not necessarily be the same. We have observed jurisdictions where the Regulatory Framework caused considerable credit concerns – perhaps it was untested or going through a transition to de-regulation, but where the track record of rate case outcomes was quite positive, leading to a higher score in the Ability to Recover Costs and Earn Returns. Conversely, there have been instances of strong Legislative and Judicial Underpinnings of the Regulatory Framework where the commission has ignored the framework (which would affect Consistency and Predictability of Regulation as well as Ability to Recover Costs and Earn Returns) or has used extraordinary measures to prevent or defer an increase that might have been justifiable from a cost perspective but would have caused rate shock.

One might surmise that Factors 2 and 4 should be strongly correlated, since a good Ability to Recover Costs and Earn Returns would normally lead to good financial metrics. However, the scoring for the Ability to Recover Costs and Earn Returns sub-factor places more emphasis on our expectation of timeliness and sufficiency of rates over time; whereas financial metrics may be impacted by one-time events, market conditions or construction cycles - trends that we believe could normalize or even reverse.

How We Assess Timeliness of Recovery of Operating and Capital Costs for the Scorecard

The criteria we consider include provisions and cost recovery mechanisms for operating costs, mechanisms that allow actual operating and/or capital expenditures to be trued-up periodically into rates without having to file a rate case (this may include formula rates, rider and trackers, or the ability to periodically adjust rates

for construction work in progress) as well as the process and timeframe of general tariff/base rate cases – those that are fully reviewed by the regulator, generally in a public format that includes testimony of the utility and other stakeholders and interest groups. We also look at the track record of the utility and regulator for timeliness. For instance, having a formula rate plan is positive, but if the actual process has included reviews that are delayed for long periods, it may dampen the benefit to the utility. In addition, we seek to estimate the lag between the time that a utility incurs a major construction expenditures and the time that the utility will start to recover and/or earn a return on that expenditure.

How We Assess Sufficiency of Rates and Returns for the Scorecard

The criteria we consider include statutory protections that assure full cost recovery and a reasonable return for the utility on its investments, the regulatory mechanisms used to determine what a reasonable return should be, and the track record of the utility in actually recovering costs and earning returns. We examine outcomes of rate cases/tariff reviews and compare them to the request submitted by the utility, to prior rate cases/tariff reviews for the same utility and to recent rate/tariff decisions for a peer group of comparable utilities. In this context, comparable utilities are typically utilities in the same or similar jurisdiction. In cases where the utility is unique or nearly unique in its jurisdiction, comparison will be made to other peers with an adjustment for local differences, including prevailing rates of interest and returns on capital, as well as the timeliness of rate-setting. We look at regulatory disallowances of costs or investments, with a focus on their financial severity and also on the reasons given by the regulator, in order to assess the likelihood that such disallowances will be repeated in the future.

Substitute Second Revision Sheet 75E
canceling
WN U-28 First Revision Sheet 75E

AVISTA CORPORATION
dba Avista Utilities

SCHEDULE 75E

DECOUPLING MECHANISM – ELECTRIC (continued)

3% ANNUAL RATE INCREASE LIMITATION:

Following the application of the Earnings Test described above, the amount of the incremental proposed rate adjustment under this Schedule cannot reflect more than a 3% rate increase. This will be determined by dividing the incremental annual revenue to be collected (proposed surcharge revenue less present surcharge revenue) under this Schedule by the total "normalized" revenue for the two Rate Groups for the most recent January through December time period. Normalized revenue is determined by multiplying the weather-corrected usage for the period by the present rates in effect. If the incremental amount of the proposed surcharge exceeds 3%, only a 3% incremental rate increase will be proposed and any remaining deferred revenue will be carried over to the following year. There is no limit to the level of the decoupling rebate, and the reversal of any rebate rate would not be included in the 3% incremental surcharge test.

OTHER CONDITIONS:

The Decoupling Mechanism will last until March 31, 2025, unless otherwise extended by the Commission. (C) (C)

(D) (D)

Issued March 26, 2020 Effective April 1, 2020

Issued by Avista Corporation
By Patrick Ehrbar, Director of Regulatory Affairs

Substitute Second Revision Sheet 175E
canceling
WN U-29 First Revision Sheet 175E

AVISTA CORPORATION
dba Avista Utilities

SCHEDULE 175E
DECOUPLING MECHANISM – NATURAL GAS

3% ANNUAL RATE INCREASE LIMITATION:

Following the application of the Earnings Test described above, the amount of the incremental proposed rate adjustment under this Schedule cannot reflect more than a 3% rate increase. This will be determined by dividing the incremental annual revenue to be collected (proposed surcharge revenue less present surcharge revenue) under this Schedule by the total "normalized" revenue for the two Rate Groups for the most recent January through December time period. Normalized revenue is determined by multiplying the weather-corrected usage for the period by the present rates in effect. If the incremental amount of the proposed surcharge exceeds 3%, only a 3% incremental rate increase will be proposed and any remaining deferred revenue will be carried over to the following year. There is no limit to the level of the decoupling rebate, and the reversal of any rebate rate would not be included in the 3% incremental surcharge test.

OTHER CONDITIONS:

The Decoupling Mechanism will last until March 31, 2025, unless otherwise extended by the Commission. (C) (C)

(D) (D)

Issued March 26, 2020 Effective April 1, 2020

Issued by Avista Corporation
By Patrick Ehrbar, Director of Regulatory Affairs

RAP Energy solutions for a changing world

Revenue Regulation and Decoupling:

A Guide to Theory and Application

June 2011

The Regulatory Assistance Project

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10.4 Consumer-Owned Utilities

Consumer-owned utilities (COUs) do not pay cash dividends, but they do need to maintain a sound bond rating to support future investments. The rating agencies look at the TIER (times interest earned ratio) of COUs.[32] Typical bond covenants for COUs obligate the utility to maintain its TIER above a minimum defined level, so they might be required to raise rates if they suffered severe earnings attrition (from any cause).

A loss of revenue due to conservation, weather, or other factors can impair the TIER, and therefore the borrowing capacity of a COU. A decoupling mechanism will provide the same stability of earnings for a COU as for an investor-owned utility (IOU). However, there is a smaller body of research on whether decoupling will actually have a meaningful effect on the borrowing costs of COUs, assuming that their TIER remains within a range in which they are able to borrow.

Without decoupling, COUs tend to set rates at levels that provide 75%-90% assurance that the TIER will remain at an acceptable level. It is clear that a decoupling mechanism will ensure that the TIER remains in an acceptable range, and that the COU will be able to borrow. A decoupling mechanism may thus allow a COU to set rates at a slightly lower level, without fear that a variation in weather or sales will cause it to fall to a level that would trigger a larger rate adjustment.

10.5 Earnings Caps or Collars

Some commissions have imposed an earnings cap, or an earnings collar, as part of a decoupling mechanism. These ensure that, if earnings are too high above a baseline (or too low below the baseline), the decoupling mechanism is automatically subject to review. Because decoupling reduces earnings volatility, it should be unlikely for earnings to vary outside a range of reasonableness. Therefore such a cap or collar, while unlikely to be triggered, may provide greater comfort with the change represented by decoupling.

Even so, in practical application, it is simpler to impose a cap on the variability in prices than in earnings, because the calculation of earnings for regulatory purposes can be significantly different than earnings reporting under generally accepted accounting principles and may invite disputes over methodology.

attempt to measure the change in probability that a utility would exhaust its ability to pay dividends from cash earnings, which is reduced if the utility is protected from variations in earnings driven by weather and economic cycles. These are factors that lead RAP to believe that adjusting the capital structure is more appropriate than adjusting the allowed return on equity when decoupling is implemented on a permanent basis. See Brattle Group, The Impact of Decoupling on the Cost of Capital, March, 2011.

32 TIER is a measure of the extent of which earnings are available to meet interest payments. Mathematically it is defined by this formula: TIER = (net income + interest) / (interest).

Harvard Business Review

Hybrid Work

Survey: Remote Work Isn't Going Away — and Executives Know It

by Nicholas Bloom, Jose Maria Barrero, Steven Davis, Brent Meyer, and Emil Mihaylov

August 28, 2023

ER Productions Limited/Getty Images

Summary. Many CEOs are publicly gearing up for yet another return-to-office push. Privately, though, executives expect remote work to keep on growing, according to a new survey. That makes sense: Employees like it, the technology is improving, and — at least for hybrid... **more**

Remote work spiked during the pandemic, from about 6% of full workdays in the U.S. to more than 50% in the spring of 2020. Since then, it's steadily decreased and since early 2023 has hovered

around 28%. Many executives believe it's time to come back to the office: Jamie Dimon, CEO of JPMorgan, has declared himself a remote-work skeptic; Mark Zuckerberg has declared that engineers "get more done" in the office; and Google's chief people officer recently told employees that office attendance would factor into performance reviews. Even Zoom's leadership wants employees back in person two days a week.

The only problem? Not even senior management expects this return-to-office push to work.

The Survey of Business Uncertainty is jointly run by the Atlanta Federal Reserve Bank, the University of Chicago, and Stanford. It surveys senior executives at roughly 500 U.S. businesses across industries and regions each month.

The most recent iteration of the survey, conducted in July 2023, asks:

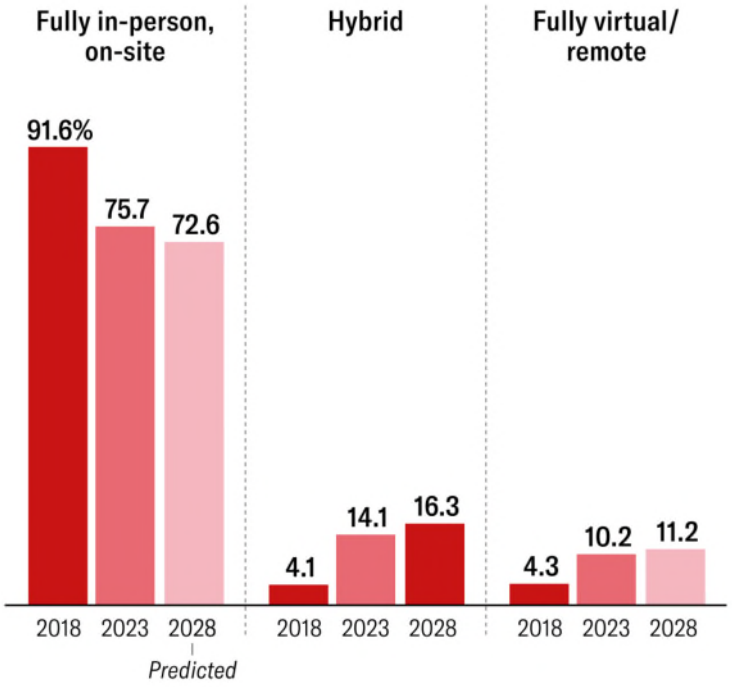
> "Looking forward to five years from now, what share of your firm's full-time employees do you expect to be in each category [fully in person, hybrid, fully remote] in 2028?"

As the chart below illustrates, executives expect both fully remote and hybrid work to continue to grow.

U.S. Executives Expect Remote Work to Keep Increasing

Management doesn't expect a return to pre-pandemic office life.

What share of your firm's full-time employees are in each category?



Source: Survey of Business Uncertainty

HBR

See more HBR charts in Data & Visuals >

They're right to expect remote and hybrid work to increase, for four reasons.

First, as remote-working technology improves, the share of people working remotely increases. In the 1960s, offices were entirely paper-based, and working from home was very inconvenient. By the 1980s, personal computers began to become more widespread and remote work became easier. By the 2000s, the internet and nascent video calls made it easier still. The response followed basic economic logic: As the "costs" of remote work fell (lower inconvenience, for example), more people chose to do it. Work-from-home rates grew steadily over the half-century leading up to

the pandemic, albeit from a very low starting point. And this trend will continue: The pandemic significantly increased the amount of research and patenting happening in technologies that support remote interactions.

Second, remote work will increase because startups born since the pandemic are more likely to use it. As these younger firms grow, the share of jobs offering remote work will increase.

Third, and perhaps least obvious, the U.S. is well positioned for remote work. Already, the U.S. has one of the highest rates of remote work of any country, behind only New Zealand and Canada among the 34 countries we surveyed. That makes sense. Remote work is a form of decentralization and personal autonomy: It gives employees more discretion over how and when they work. Management researchers have long known that for decentralized decision making to succeed, a company must be especially well managed. Separate research by our colleagues consistently finds that U.S. firms have better management practices, on average, than firms in other countries. Those better practices enable U.S. firms to more effectively manage remote work. It also helps that Americans have larger residences, which makes it easier to create a dedicated workspace at home.

Finally, remote work will increase because employees like it. The evidence suggests that working from home is valued by employees about the same as an 8% pay increase, on average. It's a huge amenity and helps reduce turnover — in one recent, large study, by as much as 35%.

What about worries that remote work lowers productivity? Research suggests that fully remote work is up to 10% less productive than onsite work, on average. But it's also much cheaper, because it cuts space needs and enables hiring from anywhere. Productivity in hybrid mode differs across jobs and

people and with management practices. On average, however, hybrid work seems to have little net effect on productivity and may increase it. Hybrid arrangements also save on the costs — in time and money — of commuting. If employees accomplish the same amount of work whether they commute into the office two or five days a week, they're actually spending their time more efficiently in the hybrid arrangement.

Companies and their leaders should seriously consider the merits of working from home, at least a couple of days a week. Managed hybrid, where teams all gather in the office the same day or two each week, may well be the best of both worlds. It can be profitable for companies, popular with employees, and better for the planet due to less energy consumption.

While the future extent of remote work remains uncertain, there's little chance we will see a big return to the office. Remote technologies will only get better, and employees will gravitate to firms with more flexible policies. The biggest clue that the return-to-office push won't work, though, is the fact that executives themselves privately predict that remote work will keep increasing.

Nicholas Bloom is a professor of economics at Stanford University.

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SD

Steven Davis is a senior fellow at the Hoover Institution.

BM

Brent Meyer is an assistant vice president and economist in the research department at the Federal Reserve Bank of Atlanta.

EM

Emil Mihaylov is a Senior Economic Research Analyst at the Federal Reserve Bank of Atlanta.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	R-2022-3031672
Office of Consumer Advocate	:	C-2022-3032485
Office of Small Business Advocate	:	C-2022-3032331
Pennsylvania-American Large Users Group	:	C-2022-3033215
Keith Saur	:	C-2022-3032345
Ivan Figueroa	:	C-2022-3032376
Carl E. Meyer	:	C-2022-3032384
Darlene Nychey	:	C-2022-3032046
Hao Tang	:	C-2022-3033043
James Pagel	:	C-2022-3032486
William H. Rissmiller	:	C-2022-3032500
Ramkrishna Sen	:	C-2022-3032501
Barbara Cetnarowski	:	C-2022-3032659
Simon Dobrev & Poli Iordanova	:	C-2022-3032511
Jerome & Sheryl Rodzinak	:	C-2022-3032623
Zachary O'Brien	:	C-2022-3032547
Maria Elena Selznick	:	C-2022-3032569
Earl Knight	:	C-2022-3032620
Meade Buffington	:	C-2022-3032670
Michael Pope	:	C-2022-3032969
Samantha Maize	:	C-2022-3032970
Kathleen Jeffries	:	C-2022-3032988
Tracy M. Rutherford	:	C-2022-3032662
Bridget L. Salkowski	:	C-2022-3032652
Sabatini Montesti	:	C-2022-3032657
Sean Seidel	:	C-2022-3032730
Trish E. Luberda	:	C-2022-3032722
Jorge Salazar	:	C-2022-3033085
Frank Piccola	:	C-2022-3033110
Amanda Barto-Ealy	:	C-2022-3032771
Judith Ann Garofolo	:	C-2022-3033211
Leroy Waters III	:	C-2022-3032999
Latrese Laporte	:	C-2022-3032830
John Palermo	:	C-2022-3032963
Paul Walaski	:	C-2022-3033057
Jessica Weiss	:	C-2022-3033080
Ellen Katz	:	C-2022-3033231
Walter J. Yourkavitch	:	C-2022-3033212
Diane Michalowski	:	C-2022-3033222
Victory Brewing Company	:	C-2022-3033275
Samantha J. Wesner	:	C-2022-3033256

West Norriton Township	:	C-2022-3033271
Xin Xu	:	C-2022-3033360
Carla Seidel	:	C-2022-3033316
Christine Nicholson	:	C-2022-3033377
James Jackson	:	C-2022-3033593
Jeff Henry	:	C-2022-3032313
Lisa Tunzi	:	C-2022-3032317
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Pennsylvania-American Water Company	:	

Pennsylvania Public Utility Commission	:	R-2022-3031673
Office of Consumer Advocate	:	C-2022-3032487
Office of Small Business Advocate	:	C-2022-3032346
Darlene Nichey	:	C-2022-3033048
James Pagel	:	C-2022-3032489
Carla Seidel	:	C-2022-3032744
Nathan Woodford	:	C-2022-3032693
Stephen Nardi	:	C-2022-3032497
Lisa Inmon	:	C-2022-3033119
Karla Haynes	:	C-2022-3033586
Mark Henderson	:	C-2022-3032315
William H. Rissmiller	:	C-2022-3032499
Simeon Dobrev & Poli Iordanova	:	C-2022-3032513
Maria Elena Selznick	:	C-2022-3032578
Sabatini Monatesti	:	C-2022-3032658
Trisha E. Luberda	:	C-2022-3032723
Jorge Salazar	:	C-2022-3033206
Frank Piccola	:	C-2022-3033111
Judith Anne Garofolo	:	C-2022-3033213
Latrese Laporte	:	C-2022-3032819
Walter J. Yourkavitch	:	C-2022-3033217
Diane Michalowski	:	C-2022-3033218
Victory Brewing Company	:	C-2022-3033282
James Jackson	:	C-2022-3033594
	:	
v.	:	
	:	
Pennsylvania-American Water Company – (Wastewater)	:	

RECOMMENDED DECISION

Before
Joel H. Cheskis
Deputy Chief Administrative Law Judge

like revenue requirement and related issues, cost allocation, revenue allocation and rate design determine the specific portion of the overall revenue increase any given party will be required to bear. That is, to the extent the overall revenue requirement, for example, is set at a certain level, if a party is paying a reasonable share, or less, of the ultimate dollar value, the overall revenue requirement may be less significant to that party. In this case, the parties are commended for reaching agreement on a contentious issue contested by multiple parties.

As an initial matter, and as noted above regarding revenue requirement, the agreement in the settlement reduces the subsidy that PAWC's water customers provide to PAWC's wastewater customers. For the reasons discussed above regarding revenue requirement, this provision of the settlement is in the public interest because it helps to ensure that customers more accurately bear the burden of the cost of the service provided to them. PAWC's water customers should not be required to bear the burden of the cost to provide service to PAWC's wastewater customers.

In that vein, the provisions in the settlement that, for example, require the submission of a cost of service study in the next base rate proceeding, are in the public interest because they will also help ensure that customers more accurately bear the burden of the cost of the service provided to them and do not undertake the cost of service provided to other customers. This also includes the agreement in the settlement that PAWC agrees to create a separate tariff group for current and future CSS customers in its next base rate proceeding. These provisions help ensure accurate rates and are therefore in the public interest going forward. As I&E noted, customers should be moved either to or towards their full cost of service. As the Commonwealth Court has noted, cost of service is the "polestar" of ratemaking. Lloyd v. Pa. Pub. Util. Comm'n, 904 A.2d 1010 (Pa. Cmwth 2006).

Similarly, the provisions in the settlement adjusting the service charges for varying customer classes also is in the public interest because it helps to ensure that customers pay for the cost to provide them with the services they use.

- The actual maximum hour demand ratio for the residential class from PAWC's most recent demand study should be used.

- PAWC should conduct a new demand study upon conclusion of this proceeding and prior to filing its next rate case.

- Any scale back of the wastewater revenue requirement should be applied first to the wastewater subsidy.

- The wastewater subsidy should be re-allocated to the water customers based on the wastewater class that is responsible for the subsidy.

- Industrial class customer charges should be increased and volumetric rates decreased.

- Volumetric rates for industrial and municipal customers should be further reduced if the Commission approves a lower revenue requirement for PAWC.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A Yes.

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March 4, 2024

VIA E-MAIL

Honorable Christopher P. Pell
Honorable John Coogan
Administrative Law Judges
Pennsylvania Public Utility Commission
801 Market Street, Suite 4063
Philadelphia, PA 19107

RE: Pennsylvania Public Utility Commission v. Pennsylvania-American Water Company; Docket Nos. R-2023-3043189 (Water) and R-2023-3043190 (Wastewater)

Your Honors:

Attached please find the following Surrebuttal Testimony on behalf of the Pennsylvania-American Water Large Users Group ("PAWLUG"):

PAWLUG Statement No. 1S – Surrebuttal Testimony and Exhibits of Billie S. LaConte

As evidenced by the attached Certificate of Service, all parties to this proceeding are being duly served with a copy of this document. Thank you.

Very truly yours,

Adeolu A. Bakare
MCNEES WALLACE & NURICK LLC

c: Rosemary Chiavetta, Secretary (Transmittal Letter and Certificate of Service only)
Pamela McNeal, Legal Assistant to ALJ
Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that I am this day serving a true copy of the foregoing document upon the participants listed below in accordance with the requirements of 52 Pa. Code Section 1.54 (relating to service by a participant).

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Counsel to the Pennsylvania-American Water Large Users Group

Dated this 4th day of March, 2024, at Harrisburg, Pennsylvania.

PAWLUG Statement No. 1S

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	)	
	)	
v.	)	R-2023-3043189 (Water)
	)	R-2023-3043190 (Wastewater)
Pennsylvania-American Water Company	)	

Surrebuttal Testimony and Exhibit

of

BILLIE S. LACONTE

On Behalf of

Pennsylvania-American Water Large Users Group

March 4, 2024

J. POLLOCK
INCORPORATED

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	)	
	)	
v.	)	R-2023-3043189 (Water)
	)	R-2023-3043190 (Wastewater)
Pennsylvania-American Water Company	)	

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GLOSSARY OF ACRONYMS

Term	Definition
AMP	Arrearage Management Plan
CAP	Customer Assistance Program
CAUSE-PA	Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania
CCOSS	Class Cost-of-Service Study
Cleveland-Cliffs	Cleveland-Cliffs Steel
CAP	Customer Assistance Program
ECIC	Environmental Compliance Investment Charge
OCA	Office of Consumer Advocate
OSBA	Office of Small Business Advocate
OPEB	Other Post-Employment Benefits
PAWC	Pennsylvania-American Water Company
PAWLUG	Pennsylvania-American Water Large Users Group
RDM	Revenue Decoupling Mechanism
ROE	Return on Equity

SURREBUTTAL TESTIMONY OF BILLIE S. LACONTE

Introduction and Qualifications

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Billie S. LaConte; 14323 South Outer 40 Dr., Suite 206N, St. Louis, MO 63017.

Q ARE YOU THE SAME BILLIE S. LACONTE WHO PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING ON BEHALF OF THE PENNSYLVANIA-AMERICAN WATER LARGE USERS GROUP (PAWLUG)?

A Yes.

Q WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A I am addressing certain issues raised in the rebuttal testimonies of Pennsylvania-American Water Company (PAWC), Office of Consumer Advocate (OCA), Cleveland-Cliffs Steel (Clevland-Cliffs), and The Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA) witnesses as follows:

- Class Cost-of-Service Study (CCOSS): PAWC witness, Constance E. Heppenstall, and OCA witness, Jerome D. Mierzwa;
- Allocation of Wastewater Subsidy: OCA witness, Jerome D. Mierzwa, and Cleveland Cliffs witness, Richard A. Baudino;
- Environmental Compliance Investment Charge (ECIC): PAWC witness, J. Cas Swiz;
- Revenue Decoupling Mechanism (RDM) and Return on Equity (ROE): PAWC witnesses Charles Rea and Ann E. Bulkley, and OCA witness, Jerome D. Mierzwa;
- Industrial Rate Design: PAWC witness, Charles Rea;
- Deferral Mechanisms: PAWC witness, J. Cas Swiz;
- Scale back of rates: PAWC witness, Charles Rea; and
- Arrearage Management Plan (AMP): CAUSE-PA witness, Harry S. Geller, Esq.

Q DOES THE FACT THAT YOU ARE NOT ADDRESSING EVERY ISSUE RAISED BY THESE AND OTHER PARTIES CONSTITUTE AN ENDORSEMENT OF THEIR RECOMMENDATIONS?

A No.

Water Class Cost-of Service Study

Q HAS PAWC CHANGED ITS POSITION REGARDING THE WATER CLASS COST-OF-SERVICE STUDY?

A No. PAWC continues to support the 5.0 maximum hour demand statistic for the Residential class. Ms. Heppenstall maintains that because data for a certain area was not available for one year of the survey and the peak hour demand for another area (Shire Oaks) occurred in the winter, that the results should not be used.[1] However, Shire Oaks' maximum hour demand in 2013 occurred in November, not in the summer, and Ridge Road Booster's maximum hour demand in 2014 occurred in February, indicating winter peaks are not anomalous, as PAWC claims.[2] PAWC included those results in determining the maximum peak hour demand for those years. As a result, PAWC's support for which data should be included is inconsistent. Rather than selectively excluding one winter peak while including others, the results for Shire Oaks in 2015 should be included, which supports a 6.0 maximum hour demand ratio for the Residential class, as recommended in my direct testimony.

[1] PAWC Statement No. 12-R, Rebuttal Testimony of Constance E. Heppenstall at 8-9.

[2] *Id*., Exhibit CEH-3R at 1-2.

Q WILL PAWC'S PROPOSED MAXIMUM HOUR DEMAND RATIO FOR THE RESIDENTIAL CLASS RESULT IN JUST AND REASONABLE RATES FOR THE WATER UTILITY CUSTOMERS?

A No. As discussed in my direct testimony, using the incorrect maximum hour demand ratio for the Residential class would result in distorted rates causing certain customers to pay more than their cost to serve them. Cost-based rates send proper price signals which promotes efficiency as well as just and reasonable rates.

Q DOES OCA WITNESS, MR. MIERZWA, ALSO DISAGREE WITH YOUR PROPOSAL TO SET THE PEAK MAXIMUM HOUR DEMAND FOR THE RESIDENTIAL CLASS AT 6.0?

A Yes. Mr. Mierzwa agrees with PAWC's claim that because some of the high readings from PAWC's demand study were anomalous, they should be disregarded. However, the higher readings were consistent for the location. For example, in 2013, the maximum hour demand for Sandy Ridge was 11.14 and in 2015 it was 11.98.[3] Therefore, including these readings when determining the maximum hour demand ratio for the Residential class is appropriate.

Q DOES MR. MIERZWA SUPPORT YOUR RECOMMENDATION THAT PAWC SHOULD CONDUCT A NEW SYSTEM DEMAND STUDY PRIOR TO ITS NEXT BASE RATE PROCEEDING?

A Yes. However, Mr. Mierzwa disagrees with my observation that residential usage has increased due to more customers working from home, claiming that "the days and

[3] *Id.* at 3.

number of hours that water can be used increases significantly."[4] Therefore, Mr. Mierzwa speculates that "the maximum day and maximum hour demands of Residential customers are likely to decrease."[5] Mr. Mierzwa's observation is conjecture and he provides no support for his claim. Therefore, it is even more important that the Commission direct PAWC to conduct a feasibility study prior to its next base rate case as discussed more later.

Q DOES PAWC AGREE THAT IT SHOULD CONDUCT A NEW CUSTOMER CLASS DEMAND STUDY PRIOR TO ITS NEXT BASE RATE PROCEEDING?

A No. PAWC witness, Ms. Heppenstall, states that a demand study is:

> …a substantial undertaking and would require significant Company and outside consultant resources…[and] would require the Company to incur unnecessary expense.[6]

A new demand study should be undertaken to ensure that PAWC's costs are allocated correctly to each customer class. PAWC has completed these studies in the past and should do so now, to ensure accurate rates. To deny a study because of the time and expense required is short-sighted because a proper demand study would ensure that PAWC is properly recovering its costs from each customer class.

Q DID PAWC PROPOSE AN ALTERNATIVE IF THE COMMISSION DIRECTS IT TO CONDUCT A DEMAND STUDY?

A Yes. PAWC proposes a feasibility study for conducting a demand study be done first.[7] The proposed feasibility study is a positive incremental step. However, rather than

[4] OCA Statement No. 4R, Rebuttal Testimony of Jerome D. Mierzwa at 15.

[5] *Id*.

[6] PAWC Statement No. 12-R, Rebuttal Testimony of Constance E. Heppenstall at 9.

[7] *Id.*

create an additional proceeding between base rate cases, the feasibility study should be completed and filed with PAWC's next base rate case. This would unfortunately push introduction of a demand study to the subsequent base rate case, but I think this is necessary to avoid tying up the resources of PAWC's stakeholders with successive regulatory proceedings.

Q DOES PAWC SUPPORT A SYSTEM WIDE MAXIMUM DEMAND ANALYSIS?

A No. PAWC states that a system demand study is a large, multi-year undertaking and that the Company faces challenges in accurately measuring maximum hour demand in districts with multiple groundwater sources due to several factors.[8] However, as with the customer class demand study, the intensity of the study and possible challenges should not deter the Company from undertaking the study. The benefits of using accurate data to allocate costs outweigh any purported challenges of the study. PAWC should attempt to correct the issues regarding the potential for inaccurate measurements of water. In fact, the inaccurate measurements should encourage PAWC to undertake another study to obtain accurate measurements.

Q WHAT DO YOU RECOMMEND?

A I recommend that PAWC modify its CCOSS to incorporate my revised maximum demand hour ratio (6.0) for the Residential class. Prior to its next base rate case, I recommend that PAWC be required to conduct a feasibility study.

[8] *Id.* at 10.

Q DO YOU HAVE ANY ADDITIONAL COMMENTS ABOUT MR. MIERZWA'S PROPOSED CLASS COST-OF-SERVICE STUDY?

A Yes. In discovery response to PAWLUG, PAWC revised its CCOSS correcting the Municipal class's cost of service, as well as removing the interruptible class's usage from the Industrial class.[9] Therefore, Mr. Mierzwa's proposed CCOSS is dated and inaccurate and should not be relied upon.

Allocation of Wastewater Subsidy

Q DOES MR. MIERZWA OBJECT TO YOUR POSITION REGARDING THE ALLOCATION OF THE WASTEWATER SUBSIDY?

A Yes. Mr. Mierzwa states that the allocation of the wastewater subsidy is a public policy determination and not a cost causation determination.[10] While it is true that water customers do not "cause" the wastewater revenue requirement, as many PAWC water customers do not receive wastewater service from PAWC, the allocation of the Act 11 subsidy costs to each class should be based as much as possible on the class that caused the subsidy. For the Residential customer class, customers' water usage profile determines the wastewater cost allocation, therefore, the subsidized wastewater costs caused by Residential customers should be allocated to the Residential water customer class, as closely as possible. For wastewater costs that are not directly assignable, I recommend that those costs be allocated using the total cost of service for each customer class based on PAWC's corrected CCOSS results, including the removal of Industrial curtailment usage from the Industrial class.

[9] PAWC Response to PAWLUG 5-1, the relevant portion of which is provided in **Exhibit ___(BSL-1S)**.

[10] OCA Statement No. 4R, Rebuttal Testimony of Jerome D. Mierzwa at 10.

Q PLEASE RESPOND TO MR. BAUDINO'S COMMENTS REGARDING THE ALLOCATION OF THE WASTEWATER SUBSIDY.

A Mr. Baudino notes my proposed allocation of the wastewater subsidy as set forth in my direct testimony was incorrect because I relied on incorrect information provided by PAWC. However, prior to filing rebuttal testimony, in a discovery response PAWC partially corrected the error by modifying the directly assigned portion of the wastewater subsidy, which I addressed in my rebuttal testimony.[11] I am now revising my proposed re-allocation based on additional corrected information which has been provided by PAWC in discovery. The results are shown in Table 1.

Table 1
Revised Re-allocation of Wastewater Subsidy
($Millions)[12]

	PAWC Proposed Re-allocation		PAWLUG Proposed Re-allocation	
Customer Class	**$**	**%**	**$**	**%**
Residential	$45.9	64.5%	$46.0	64.8%
Commercial	$17.6	24.7%	$19.6	27.6%
Large Industrial	$4.5	6.4%	$4.3	6.0%
Municipal	$2.7	3.8%	$1.1	1.5%
Fire	$0.4	0.6%	$0.07	0.1%
Total	$71.1	100.0%	$71.1	100.0%

My revisions update the direct allocation, as well as reflect my recommended changes to the water residential maximum demand hour ratio and reflect the removal of the interruptible usage from the Industrial class.

[11] PAWC Response to the Office of Small Business Advocate (OSBA) 3-1, a copy of which was submitted in my rebuttal testimony as **Exhibit ___(BSL-4R).**

[12] *Id.*

Environmental Compliance Investment Charge

Q WHAT IS THE POSITION OF PAWC WITNESS, J. CAS SWIZ, REGARDING A CAP ON THE ENVIRONMENTAL COMPLIANCE INVESTMENT CHARGE?

A Mr. Swiz rejects my proposal to assign a cap to the ECIC if it is approved. Mr. Swiz claims that the costs related to the ECIC may be large and incurred over a short time period. Mr. Swiz offers an alternative proposal stating:

> An option that could be considered is a limitation on the Environmental Plan and ECIC recovery that requires a base rate proceeding to be filed within a certain time period.[13]

Q IS MR. SWIZ'S ALTERNATE PROPOSAL REASONABLE?

A No. Mr. Swiz's proposal demonstrates that the ECIC is not necessary. Environmental policy is developed through a deliberative process that may take years to finalize. PAWC would have adequate time to plan for potential environmental expenses and seek approval for these costs through a base rate case prior to incurring the costs.

Q WHAT DO YOU RECOMMEND?

A My recommendation remains that the proposed ECIC should be rejected. However, as discussed in my direct testimony, if the ECIC is approved by the Commission, limiting the cost of the ECIC to 3% of the total annual revenues and requiring a base rate proceeding would serve to protect customers from excessive and frequent rate changes. Furthermore, I continue to recommend that PAWC's ROE should be set at the lower end of the Commission's deemed range of reasonableness if the ECIC is approved.

[13] PAWC Statement No. 8-R, Rebuttal Testimony of J. Cas Swiz at 15.

Revenue Decoupling Mechanism and Return on Equity

Q DOES PAWC CONTINUE TO ADVOCATE FOR THE REVENUE DECOUPLING MECHANISM?

A Yes. Mr. Rea states "Adoption of the Company's proposed RDM is in the long-term best interest of the Company and its customers.[14]

Q WOULD THE REVENUE DECOUPLING MECHANISM BENEFIT BOTH PAWC AND ITS CUSTOMERS?

A No. The RDM would benefit only PAWC because it shifts PAWC's risk of recovering its costs and meeting earnings targets to customers. The increased risk to customers is not a benefit.

Q DOES THE PROPOSED REVENUE DECOUPLING MECHANISM REDUCE PAWC'S RISK?

A Yes. As discussed in my direct testimony, because the RDM shifts the risk of recovery of the revenue requirement to customers, PAWC's financial risk is reduced. Therefore, to recognize the reduction in risk, if the RDM is approved, PAWC's ROE should be reduced.

Q PAWC WITNESS, MS. BULKLEY, CLAIMS IF PAWC RECEIVES APPROVAL FOR ITS PROPOSED RDM AND ECIC, THAT PAWC WOULD NOT HAVE REDUCED RISK IN COMPARISON TO THE COMPARABLE COMPANIES IN HER RETURN ON EQUITY ANALYSIS. DO YOU AGREE?

A No. As shown in Exhibit 13-A, Schedule 9, of Ms. Bulkley's direct testimony, of the 23 *water* utility subsidiaries included in her proxy group, only five have revenue

[14] PAWC Statement No. 10-R, Charles Rea at 77.

decoupling mechanisms. Ms. Bulkley notes that 59% of the utility companies in her proxy group have some form of revenue stabilization mechanism. However, this includes gas utilities, which are not comparable to water utilities, as well as weather normalization adjustment mechanisms, which are limited in scope and not comparable to the broader revenue decoupling mechanism proposed by PAWC.[15] For example, weather normalization adjustment mechanisms are generally limited to Residential customers and only adjust revenue for weather variation. Further, Ms. Bulkley did not identify any water utilities that had an ECIC. Therefore, if the RDM and ECIC are approved, PAWC's ROE should be set at the lower end of the Commission's deemed range of reasonableness.

Q WHAT IS THE POSITION OF OCA WITNESS, MR. MIERZWA, REGARDING THE REVENUE DECOUPLING MECHANISM?

A Mr. Mierzwa agrees that the RDM should be rejected.[16] However, he disagrees with the recommendation that, if approved, the RDM should be applied to only to the Residential and Commercial classes, and not to the Industrial class. Mr. Mierzwa claims the Industrial rate class is weather sensitive and, therefore, PAWC risks base rate recovery from the Industrial class due to the variation in revenues.[17]

[15] See OCA Set 3, No. 1, Attachment 5 showing that the majority of revenue decoupling mechanisms classified as "partial" in Ms. Bulkley's Exhibit 13-A, Schedule 9 (including the "revenue decoupling" mechanism associated with NiSource's PA subsidiary, Columbia Gas of Pennsylvania) are weather normalization adjustment mechanisms.

[16] OCA Statement 4R, Rebuttal Testimony of Jerome D. Mierzwa at 14-15.

[17] *Id*. at 21.

Q DO YOU AGREE THAT THE INDUSTRIAL CLASS'S LOAD IS WEATHER SENSITIVE?

A No. When PAWC forecasts the load for Industrial customers it does not use the same methodology as it uses for Commercial and Municipal classes. For those classes PAWC uses statistical modeling which takes into account the effects of weather when forecasting usage. For the Industrial class usage, PAWC developed a "simple multi-year average."[18]

Q SHOULD THE RDM APPLY TO THE MUNICIPAL CLASS?

A No. Although PAWC forecasts the Municipal class's usage using weather-sensitive metrics, the Municipal class, as explained by PAWC, is characterized by the concentration of consumption among a small number of very large customers.[19] Therefore, the usage profile for the Municipal class is very similar to the Industrial class and the RDM should not apply to this class.

Q WHAT DO YOU RECOMMEND?

A As set forth more fully in my direct testimony, I recommend the RDM be rejected. However, if the RDM is approved, I recommend:

- PAWC's authorized ROE be reduced to the lower end of the Commission's deemed range of reasonableness for all customer classes;
- A 3% revenue cap should apply to the RDM; and
- The RDM should not apply to Industrial or Municipal classes.

[18] PAWC Statement No. 10, Direct Testimony of Charles Rea at 63.

[19] PAWC Response to PAWLUG 1-2, Attachment at 6, a copy of which is provided in my rebuttal testimony as **Exhibit ___(BSL-3R)**.

Industrial Rate Design

Q DOES PAWC OBJECT TO YOUR PROPOSAL TO INCREASE THE FIXED CHARGE FOR THE INDUSTRIAL CLASS?

A Yes. PAWC witness, Mr. Rea, claims that my proposal artificially doubles the meter charges for Industrial customers with meters that are 6" or above. Further, he claims that the Industrial meter charges would be more than four times the Residential and Commercial charges with "no apparent basis in cost."[20] However, Mr. Rea ignores the fact that increasing the fixed charge for the Industrial class would be beneficial to PAWC by increasing its fixed revenue stream. Further, PAWC admits that 95% of its costs are fixed. Therefore, recovering more costs in a fixed charge rather than a volumetric charge more closely follows cost causation and reduces fluctuations in Industrial class revenues.

Q WHAT DO YOU RECOMMEND?

A I recommend that PAWC double the fixed monthly charge for Industrial customers with meters that are 6" or larger and reduce the increase to the volumetric charge for these customers.

Deferral Mechanisms

Q WHAT IS PAWC'S POSITION REGARDING ITS PROPOSED DEFERRAL MECHANISMS FOR PENSION AND OTHER POST-EMPLOYMENT BENEFIT (OPEB) EXPENSE AND PRODUCTION EXPENSE?

A PAWC witness, Mr. Swiz, continues to advocate for both deferral mechanisms, claiming "[t]he Commission regularly authorizes utilities to defer costs for accounting

[20] PAWC Statement No. 10-R, Rebuttal Testimony of Charles Rea at 45.

purposes arising from events that are unanticipated and outside the utility's control…"[21] Mr. Swiz further claims that the deferral mechanisms will not remove PAWC's incentive to control costs and denies that they are single-issue ratemaking.[22]

Q DO THE PROPOSED DEFERRAL MECHANISMS REMOVE INCENTIVES FOR PAWC TO CONTROL COSTS AND AFFECT PAWC'S FINANCIAL RISK?

A Yes. If PAWC is guaranteed recovery of these costs, it has no incentive to reduce them, as it will pass the costs through to customers. As stated in my direct testimony, a utility should have an opportunity, not a guarantee, to earn a reasonable return on its used and useful investments, and to recover reasonable and necessary operating expenses. By guaranteeing recovery, PAWC's risk of recovering these costs is removed.

Q ARE THE PROPOSED DEFERRAL MECHANISMS EXAMPLES OF SINGLE-ISSUE RATEMAKING?

A Yes. As stated in my direct testimony, each of the proposed deferral mechanisms is single-issue or piecemeal ratemaking because it tracks one cost separately from all of PAWC's other costs, thereby, ignoring offsetting over recovery for other costs. The offsetting over recovery negates the need for a deferral mechanism.

Q WHAT DO YOU RECOMMEND?

A I recommend that the Commission reject PAWC's proposed deferral mechanisms. If the Commission approves the proposed deferral mechanisms, PAWC's ROE should be at the lower end of the Commission's deemed range of reasonableness.

[21] PAWC Statement No. 8-R, Rebuttal Testimony of J. Cas Swiz at 4.

[22] *Id. at 5.*

Scale Back

Q DOES MR. REA DISAGREE WITH YOUR PROPOSAL REGARDING THE SCALE BACK OF RATES?

A Yes. Mr. Rea objects to my position that any reduction in the revenue requirement should be applied to the Act 11 subsidy first. Mr. Rea states:

> …the same relative percentages to the total of water service revenue requirement, wastewater service revenue requirement, and Act 11 reallocation amounts be maintained at proposed levels and that the levels of rates for water service and wastewater service relative to each other should be maintained as proposed in the event that a lower revenue requirement is approved by the Commission...[23]

If a lower revenue requirement is approved, water customers should benefit first by reducing the Act 11 subsidy. While Act 11 allows for some degree of cost shifting, the subsidy is an exception to the general cost-based ratemaking and, therefore, it should be reduced as much as possible before applying any scale back reduction to wastewater rates. Wastewater customers should not benefit from a reduction if water customers are still paying a subsidy for the wastewater customers.

Q WHAT DO YOU RECOMMEND?

A. For the reasons set forth in my direct testimony, I recommend that the Commission approve my recommendation to scale back the Act 11 subsidy first before reducing wastewater rates. In addition, I continue to support a reduction in the volumetric rates for Industrial and Municipal customers if the Commission authorizes a lower revenue requirement for PAWC.

[23] PAWC Statement No. 10-R, Rebuttal Testimony of Charles Rea at 41.

Arrearage Management Plan Cost Allocation

Q WHAT IS MR. GELLER'S POSITION REGARDING THE ALLOCATION OF THE ARREARAGE MANAGEMENT PLAN COSTS?

A Mr. Geller opposes the recommendation of OSBA witness, Mr. Higgins, that the AMP costs be allocated to only the Residential class. Instead, Mr. Geller recommends that PAWC recover the AMP costs from both Residential and non-residential customers. He refers to the Commission's Final Policy Statement and Order regarding the Customer Assistance Program (CAP) which amended the CAP policy, whereupon the Commission discusses the recovery of universal service program costs from utility ratepayers, both Residential and non-residential.

Q DO YOU AGREE WITH MR. GELLER'S RECOMMENDATION?

A No. First, I am advised by Counsel that the Commission's Final Policy Statement and Order regarding CAP is applicable to only electric and gas utilities, where customer assistance programs are mandated. If the Commission intended for any findings or directives in the Final CAP Policy Statement and Order to apply to a broader group of utilities, it would have said so. Second, PAWC witness, Ms. Heppenstall, agrees with Mr. Higgins' proposal to allocate the AMP costs to only the Residential class.[24] Third, Mr. Geller's proposal is contrary to the principles of cost causation. Under this long-standing and widely accepted regulatory principle, costs should be allocated to the customer classes in a manner that reflects the degree in which each class causes the utility to incur each cost. There is no dispute that the Residential class causes PAWC to incur the AMP expense.

[24] PAWC Statement No. 12-R Rebuttal Testimony of Constance E. Heppenstall at 10-11.

Q WHAT DO YOU RECOMMEND?

A The Commission should reject Mr. Geller's proposal to allocate AMP expense to Residential and non-residential classes and approve PAWC's proposal to recover these expenses from the Residential class.

Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A Yes.

PAWLUG Statement No. 1S

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	)	
	)	
v.	)	R-2023-3043189 (Water)
	)	R-2023-3043190 (Wastewater)
Pennsylvania-American Water Company	)	

Surrebuttal Exhibit

of

BILLIE S. LACONTE

On Behalf of

Pennsylvania-American Water Large Users Group

March 4, 2024

J. POLLOCK
INCORPORATED

Pennsylvania-American Water Company
Docket Nos. R-2023-3043189 (Water)
R-2023-3043190 (Wastewater)
Pennsylvania-American Water Large Users Group Set 5

PAWLUG 05-001

Responsible Witness: Connie Heppenstall, Senior Project Manager, Gannett Fleming

Question:

Referring to PAWC's Response to OSBA 3-1 and OCA 4-12, provide a revised Schedule 12-A showing the proposed rate increase for each customer class.

Response:

Please see PAWLUG 05-001_Attachment for the revised Exhibit 12-A which incorporates the changes from OSBA 3-1 and OCA 4-12 as well as other changes that were identified during discovery and in reviewing non-Company direct testimony. These include the following:

1. Correction to the Public Authority meter count due to a linking error.
2. Arrearage Management Plant ("AMP") costs being directly allocated to the Residential class.

Revised Exhibit 12-A

PAWLUG 05-001_Attachment

PENNSYLVANIA AMERICAN WATER COMPANY - WATER OPERATIONS

COMPARISON OF PRO FORMA COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED JUNE 30, 2025

	Pro Forma Cost of Service, as of June 30, 2025				Pro Forma Revenues Under Present Rates		Pro Forma Revenues Under Proposed Rates		Proposed Increase	
Customer Classification	Cost of Service	Allocation of Other COS*	Total Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Residential	$ 612,997,598	$ 45,864,399	$ 658,861,997	65.6%	$ 528,290,043	65.5%	$ 657,085,231	65.4%	$ 128,795,188	24.4%
Commercial	233,858,828	17,571,738	251,430,566	25.0%	202,779,636	25.1%	254,604,000	25.3%	51,824,364	25.6%
Industrial	44,198,427	4,547,070	48,745,497	4.9%	37,580,738	4.7%	48,143,784	4.8%	10,563,046	28.1%
Public (Municipal)	24,425,618	2,664,710	27,090,328	2.7%	22,559,539	2.8%	26,209,929	2.6%	3,650,390	16.2%
Other Water Utilities - Group A	11,845		11,845	0.0%	51,822	0.0%	53,666	0.0%	1,844	3.6%
Other Water Utilities - Group B	628,455		628,455	0.1%	202,436	0.0%	277,021	0.0%	74,585	36.8%
Private Fire Protection	5,808,618	439,468	6,248,085	0.6%	5,301,032	0.7%	6,304,285	0.6%	1,003,253	18.9%
Public Fire Protection	11,863,933	-	11,863,933	1.2%	9,519,368	1.2%	11,847,068	1.2%	2,327,700	24.5%
Total Sales of Water	$ 933,793,321	$ 71,087,384	$ 1,004,880,705	100.0%	$ 806,284,614	100.0%	$ 1,004,524,984	100.0%	$ 198,240,370	24.6%
Other Water Revenues	$ 10,675,369		10,675,369		10,034,383		11,031,091		996,708	9.9%
Contract Sales - Industrial	4,482,099		4,482,099		4,482,099		4,482,099		-	0.0%
Contract Sales - Resale	3,316,086		3,316,086		3,316,086		3,316,086		0	0.0%
Total	$ 952,266,876	$ 71,087,384	$ 1,023,354,260		$ 824,117,182		$ 1,023,354,261		$ 199,237,079	24.2%

* Includes unrecovered Wastewater Cost of Service.